

Level 2 Categorical Exclusion Evaluation

SR0080 Section 352

I-80 Nescopeck Creek Bridges Project

Black Creek Township, Luzerne County

October 2022

Prepared by:
District 4-0
55 Keystone Industrial Park
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LEVEL 2 CATEGORICAL EXCLUSION EVALUATION
for the
SR 0080 SECTION 352 LUZERNE COUNTY
INTERSTATE 80 NESCOPECK CREEK BRIDGES PROJECT

MPMS #111769

Prepared by:
US Department of Transportation
Federal Highway Administration
and
Pennsylvania Department of Transportation
Engineering District 4-0

Pursuant to 42 U.S.C. 4332(2)(c) and, as applicable:
Executive Order 11990, Protection of Wetlands; Executive Order 11988, Floodplain Management;
Executive Order 12898, Environmental Justice; and 49 U.S.C. Section 303(c), Section 4(f)

Level 2 CE Approval

As supported by the attached Categorical Exclusion, this project qualifies for a Level 2 Categorical Exclusion in accordance with 23 CFR 771.117(d), Item Number 13. Furthermore, the project will not result in any of the four circumstances cited in 23 CFR 771.117(b).

County: Luzerne **SR/Sec:** 0080/352 **MPMS:** 111769 **Project:** I-80 Nescopeck Creek Bridges

Prepared By: Diane Nulton, HDR

Title: Senior Environmental Project Manager **Date:** 10/14/2022

Approved By: JONATHAN P CRUM **Date:** Digitally signed by JONATHAN P CRUM
Date: 2022.10.19 10:50:51 -04'00'

Title:

The following individuals concurred with the statement above.

Environmental Manager: *Drew Ames* **Date:** 10/14/22

Bureau Director: *Christine Norris* **Date:** 10/14/22

HDTS: Eastern Region: Brian Shunk **Date:** 10/17/22
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ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
ALPP	Agricultural Land Preservation Policy
APE	Area of Potential Effect
ATON	Aids to Navigation
BMPs	Best Management Practices
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CRPs	Cultural Resource Professionals
CWF	Cold Water Fishes
DCNR	Department of Conservation & Natural Resources
DEP	Department of Environmental Protection
E&S	Erosion & Sedimentation
EA	Environmental Assessment
EB	Eastbound
ECMTS	Environmental Commitments & Mitigation Tracking System
EDD	Environmental Due Diligence
ESA	Environmental Site Assessment
ESF	Environmental Stewardship Fund Act
EV	Exceptional Value
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
GG2	Growing Greener Bond Fund
H&H	Hydrology and Hydraulics
HOV	High Occupancy Vehicle
HQ	High Quality
HQ-CWF	High Quality-Cold Water Fishes
I-80	Interstate 80
I-81	Interstate 81
I-180	Interstate 180

Key 93	Keystone Recreation, Park and Conservation Fund
LOD	Limits of Disturbance
LWCF	Land and Water Conservation Fund
MeB	Meckesville channery silk loam 3 to 8 percent slopes
MeC	Meckesville channery silk loam 8 to 15 percent slopes
MF	Migratory Fishes
MIT	Massachusetts Institute of Technology
MPMS	Multimodal Project Management System
MPO	Metropolitan Planning Organization
MSATs	Mobile Source Air Toxics
NAC	Noise Abatement Criteria
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	The National Register of Historic Places
NSAs	Noise Sensitive Areas
OHWM	Ordinary High Water Mark
OSHA	Occupational Safety and Health Administration
P3	Public Private Partnership
PADEP	Pennsylvania Department of Environmental Protection
PAGWIS	Pennsylvania Groundwater Information System
PASPGP	Pennsylvania State Programmatic General Permit
PCSM	Post Construction Stormwater Management
PEL	Alternative Funding Planning and Environmental Linkages Study
PEM	Palustrine Emergent
PennDOT	Pennsylvania Department of Transportation
PFBC	Pennsylvania Fish and Boat Commission
PFO	Palustrine Forested
PNDI	Pennsylvania Natural Diversity Inventory

PSA	Project Study Area
PSS	Palustrine Scrub Shrub
RFFAs	Reasonably Foreseeable Future Actions
RIRA	Recreational Improvement and Rehabilitation Act
ROW	Right-of-Way
RPW	Relatively Permanent Waters
S1 – S6	Stream 1 – Stream 6
SB	Southbound
SR	State Route
TCE	Temporary Construction Easement
TIP	Transportation Improvement Program
TNM	Traffic Noise Model
TNW	Traditional Navigable Waters
TSF	Trout Stocked Fishes
TYP	Twelve Year Program
US 11	U.S. Route 11
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UNT	Unnamed Tributary
VMT	Vehicle Miles Traveled
WB	Westbound
WSE	Water Surface Elevation
WUS	Waters of the United States
WWF	Warm Water Fishes

1.0 INTRODUCTION

This Level 2 Categorical Exclusion (CE) Evaluation has been prepared to replace the Environmental Assessment (EA) previously made available on April 27, 2022, because PennDOT is no longer going to toll the Interstate 80 (I-80) Nescopeck Creek Bridges. This CE compares the effects of the Build Alternative without tolling to the No Build (or do nothing) Alternative.

Supporting documentation for Chapter 1 includes:

- *Alternative Funding: Planning and Environmental Linkages Study (September 2021)*

Project History

In fall of 2020, PennDOT began a statewide Planning and Environmental Linkages (PEL) study to identify potential funding options to fill an \$8.1 billion (and growing) funding gap for maintaining and improving the State's highways and bridges. The *Alternative Funding PEL Study* identified near-term and long-term potential funding solutions that could be implemented. Tolling major bridges and using the toll money to cover the costs of rehabilitating or replacing and maintaining the bridge over a period of time was identified as a near-term solution that could be implemented relatively quickly. In February 2021, PennDOT identified nine candidate bridges for tolling, one of which was the I-80 Nescopeck Creek Bridges project.

Upon identification as a candidate bridge, the effects of tolling the I-80 Nescopeck Creek Bridges were evaluated, including: effects on low-income persons using the bridges, effects associated with constructing toll equipment, and effects associated with people choosing to divert onto local roadways to avoid paying the toll. A low-income program was adopted to off-set effects on low-income persons and improvements along diversion routes were incorporated into the project to off-set the effects on local roadways. Diversion route improvements included:

- Install a traffic signal at the intersection of SR 93/WB Off Ramp (Exit 256), including realignment of the WB Off Ramp to intersect SR 93 directly opposite Old Berwick Road. Additionally, install a signal ahead sign on the southbound (SB) approach of SR 93, timed to flash RED when the traffic signal is to turn red for that approach.
- Construct a WB acceleration lane along SR 93 extending from the access to the Barletta Quarry for a distance of approximately 1,000 feet to allow for quarry trucks to accelerate before merging with SR 93 traffic.
- Review the overall signal coordination of traffic signals along U.S. Route 11 (US 11) within Berwick and provide updates/improvements.
- Review directional signing to I-80 and truck restriction signage for the local roadways south of Nescopeck Borough.

An EA comparing the effects of the No Build Alternative and the Build Alternative with bridge tolling was prepared and was made available for official public review and comment on April 27, 2022. A Public Hearing was held on May 12, 2022.

On May 18, 2022, as a result of a lawsuit, the court issued an injunction and all work related to the Major Bridge Public Private Partnership (MBP3) initiative ceased. Other litigation resulted in a ruling on the viability of the MBP3 as a Public-Private Transportation Project (P3). Subsequently, Act 84 of 2022 amended the P3 law and revoked PennDOT's ability to implement mandatory tolls such as the proposed bridge tolling under the MBP3, but preserved the contract resulting from the MBP3.

As a result of the lawsuits and the subsequent enactment of Act 84 of 2022, **PennDOT is moving the I-80 Nescopeck Creek Bridges project forward, but without tolling. Since tolling will not be initiated, diversion of**

traffic onto local roads to avoid the tolls will not occur; therefore, the proposed improvements along the diversion routes will no longer be included in the project.

The PennDOT MBP3 was established to accelerate the replacement or rehabilitation of major bridges. Under MBP3, PennDOT entered into an agreement with a Development Entity to design, build, finance, and maintain (DBFM) a “package” (or group) of PennDOT bridges – including the I-80 Nescopeck Creek Bridges. PennDOT will repay the amounts financed by the Development Entity through recurring availability payments over 30 years. Act 84 of 2022 authorizes the bridges identified in the MBP3 to be carried out via DBFM by the Development Entity, without mandatory tolling.

Funding to make the availability payments will consist of a blend of federal and state funds that could have been used on other projects. PennDOT will take advantage of additional funding opportunities arising out of the federal Infrastructure Investment Jobs Act (“IIJA”), also known as the Bipartisan Infrastructure Law (“BIL”) and potentially supplemented by funds that are currently included in the outer years of the Twelve Year Program (TYP) or by the deferral or elimination of some other (TYP) projects. NOTE: IIJA (BIL) funding was not available at the start of MBP3, but those additional funding sources will provide additional opportunities for PennDOT to pursue the Build Alternative without tolling with less effect to other projects.

This CE documents and compares the effects associated with the No Build Alternative and the Build Alternative without tolling. Effects associated with constructing tolling equipment, improving diversion routes, and paying tolls have been removed from the document.

The comments received during the EA comment period (April 27 to May 27, 2022) have been reviewed and considered. The overwhelming majority of comments received during the EA comment period were related to tolling and diversion of traffic and are no longer applicable to the project since tolling is no longer being implemented. Comments received on the EA relevant to the project without tolling were considered and additional information incorporated into the respective sections within this document as appropriate.

2.0 I-80 NESCOPECK CREEK BRIDGES PROJECT OVERVIEW

2.1 Project Bridges

PennDOT, in cooperation with the FHWA, is advancing the replacement of the two bridges carrying I-80 eastbound (EB) and westbound (WB) over Nescopeck Creek in Black Creek Township, Luzerne County, PA. The existing I-80 EB and WB structures are 507-foot long, four-span continuous welded steel girder bridges on concrete abutments and hammerhead piers built in 1965. Each bridge carries two lanes of traffic in one direction over Nescopeck Creek, and both are currently in poor condition. **Figure 1 – Project Location Map** shows the location of the I-80 Nescopeck Creek bridges and the Project Study Area (PSA).

2.2 Project Purpose and Needs

Purpose: The purpose of the project is to provide a sustainable travel way/crossing that accommodates interstate highway freight and mobility and to provide a safe and efficient highway for system motorists over Nescopeck Creek.

Need: The bridges are nearly 60 years old and approaching the end of their serviceable lifespan. This means that in the near future, wear and tear on the bridges will cause the need for more frequent and costly repairs.

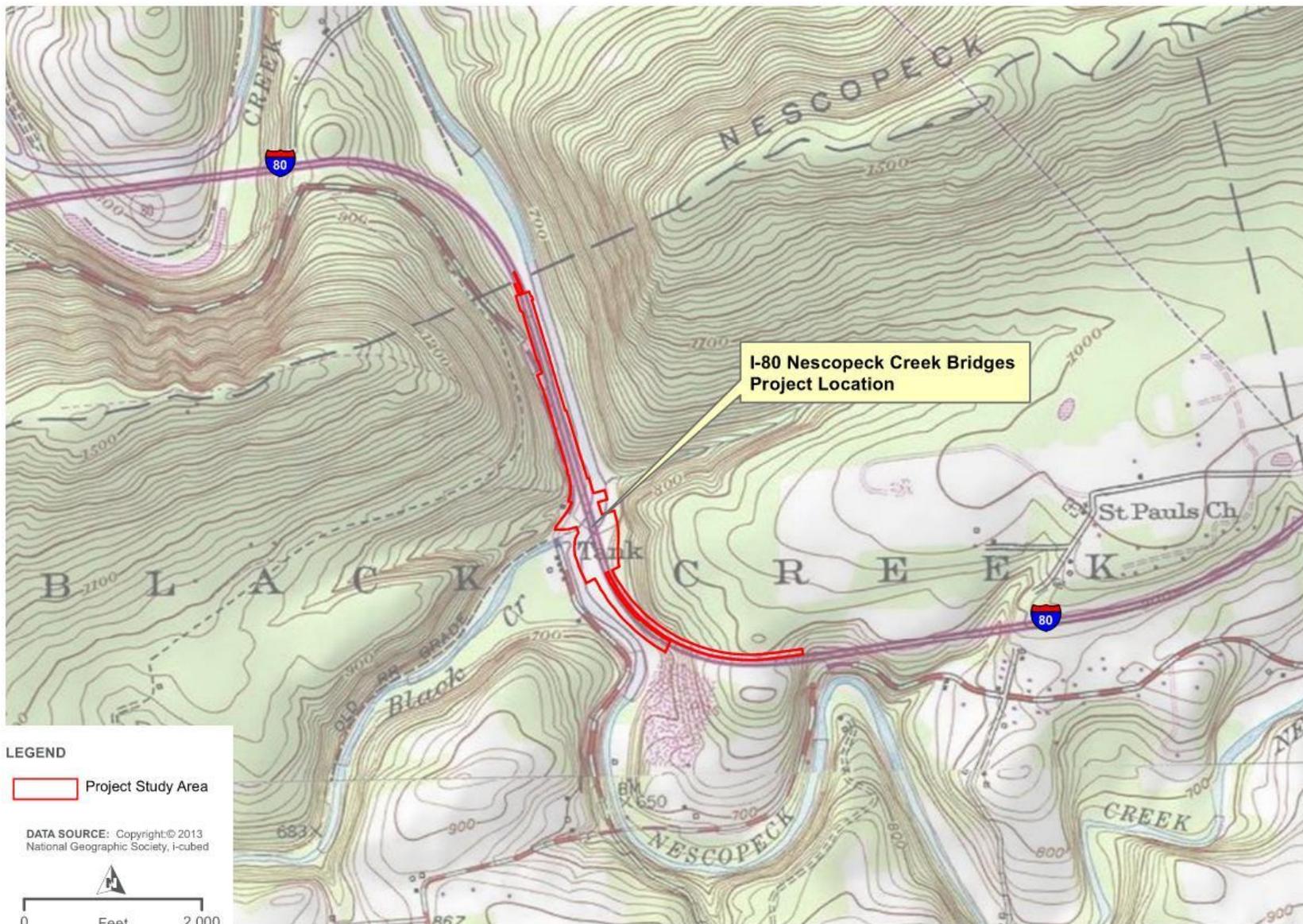
- I-80 WB (40-0080-2505-1492): The deck has heavy wear with exposed polished aggregate, hairline transverse, longitudinal and diagonal cracks. The steel X-bracing has areas of rust, and the end diaphragm connection plates/bearing stiffeners have advanced section loss and are bowed due to rust. The girders have heavy rust with section loss. The substructure piers have hairline vertical cracks, broken and missing tiles. The abutment and backwalls have hairline transverse cracks and minor edge spalling.
- I-80 EB (40-0080-2504-1425): The deck has heavy wear with exposed polished aggregate, hairline transverse, longitudinal and diagonal cracks. There are spalls with exposed reinforcing steel. The superstructure cross bracing has section loss and holes in the connection plates. The connection plates have advanced section loss and are bowed due to pack rust. The girders have rust and are pitting along the bottom flanges. The fascia girders have rust, section loss and pitting. The abutments and backwall have scaling and vertical cracks. The piers have vertical cracks, minor pop out spalls with reinforcing steel. The piers have loose and missing tiles.

2.3 Project Setting and Distinct Project Features

The overall project area is surrounded by vast forested, rolling terrain with small communities throughout the corridor. The bridge replacements project is located within the Nescopeck Creek gorge. The features at the site include Nescopeck Creek, I-80, the adjacent State Route (SR) 3016 (Tank Road), and mountainous terrain on either side of the bridge structures.

Describe the involvement with utilities with this project:

Relocation of one pole for overhead utilities (including overhead electric and communications lines) is required. It is anticipated that this will be done prior to the replacement of the structures. Final coordination will be completed by the P3 Development Entity.



LEGEND

Project Study Area

DATA SOURCE: Copyright: © 2013
National Geographic Society, i-cubed

0 Feet 2,000

**I-80 NESCOPECK CREEK BRIDGES REPLACEMENT PROJECT
PROJECT LOCATION MAP**



Describe the involvement with any railroad (active or inactive) including all rail lines, crossings, bridges, or signals:

There would be no involvement with active or inactive railroads.

Describe changes to access control:

No changes to access control are needed.

3.0 ALTERNATIVES

3.1 No-Build Alternative

Under the no-build alternative, regular maintenance would be assumed to occur. This alternative would fail to address other project needs such as addressing the identified bridge deterioration. The I-80 Nescopeck Creek Bridges are nearing the end of their useful life. Currently, both the EB and WB bridges are in poor condition with heavy wear on the decks, and rust, section loss and cracks in structure elements. Without replacement, these bridge structures will need more frequent maintenance and repairs. However, such maintenance can only extend the service life of these bridges for so long before they are at risk of failure.

I-80 is the longest east-west interstate in the Commonwealth of Pennsylvania. Within Pennsylvania, I-80 extends 311 miles across the northern tier of Pennsylvania, providing access to New Jersey, the New York City Metropolitan Area and New England to the east and Ohio and Midwestern states to the west. In the project area, the I-80 corridor is a vital link between two north-south interstates, I-180 to the west and I-81 to the east and is critical for the movement of people and goods through the northern tier of Pennsylvania and beyond. As a critical link in the regional and national highway network, allowing the deterioration of the I-80 Nescopeck Creek Bridges to reach a level of failure is not reasonable; therefore, due to the project needs, the no-build alternative would not be a reasonable alternative.

The no-build alternative is presented in this CE as a baseline for comparison purposes only.

3.2 Proposed Action

The project will consist of replacement of the two bridges carrying I-80 EB and WB over Nescopeck Creek, in Black Creek Township, Luzerne County, PA. The existing structures are proposed to be replaced with four-span continuous composite prestressed bulb-tee beam bridges with reinforced concrete integral abutments and wingwalls, and reinforced concrete multi-column pier bents on spread footings. The proposed bridges will be widened to accommodate traffic control and future bridge maintenance but will only be striped for two lanes. The proposed structures will be on the same alignment as existing. Roadway work on I-80 is limited to minimal full depth paving replacement (less than 100") on each approach to the interstate bridges. Also includes widening of the I-80 EB shoulder to accommodate the wider bridge. Guide rail will also be replaced and upgraded to the current standards throughout the length of the project.

The project also includes reconstructing a portion of SR 3016 (Tank Road) and a portion of the existing retaining wall along I-80 EB due to the widened I-80 EB structure. Roadway work on SR 3016 includes 747' of full depth paving and cross pipe replacement due to reconstruction of a portion of the wall between I-80 and SR 3016 and replacement of guide rail within the Limits of Work along SR 3016 to upgrade to current standards.

Phased construction, utilizing temporary lane shifts and temporary cross overs, will be implemented to maintain two lanes of traffic in each direction along I-80 during construction. No detour of I-80 will be needed for the reconstruction of the bridge. A temporary local detour of the adjacent SR 3016 will be required to accommodate the widening of I-80 EB.

Additional information is provided in **Table 1 – Construction Station and Length**, Appendix A – Engineering Information and Appendix B – Preliminary Design Plans.

**Table 1
Construction Station and Length**

Limits of Work (Segment/Offset)		Construction Stations	
Start:	End:	Start:	End:
2501/1313 (WB)	2511/2309 (WB)	850+25.00 (WB)	914+50.00 (WB)
2500/1325 (EB)	2510/1891 (EB)	549+50.00 (EB)	610+00.00 (EB)
Total Length:			
6,195 ft			

As designed, the project will be constructed within existing Commonwealth-owned Right-of-Way (ROW). No temporary or permanent property acquisition will be required.

3.3 Impact Summary Table

**Table 2
Impact Summary Table**

Environmental Resource Category	No-Build Alternative¹	Proposed Action	Mitigation for Proposed Action
Aquatic Resources			
Streams, Rivers, & Watercourses	No Impact	Streams: TSF, MF, stocked trout 444 linear feet permanent impact 732 linear feet temporary impact	No work will be permitted in streams from February 15 to June 1. Vitrified clay liner plates are to be installed to protect piers from corrosion. P3 Development Entity will complete final design of the project and determine appropriate mitigation measures. Mitigation measures will be entered into the Environmental Commitments & Mitigation Tracking System (ECMTS).
Wild & Scenic Rivers and Streams	Not Present	Not Present	None
Navigable Waterways	No Impact	Recreational Boating Waterway – kayak/canoeing: No permanent impacts to stream navigability. Temporary impacts during construction.	Nescopeck Creek will remain open for boaters per the Aids to Navigation (ATON) plan, to be implemented during construction.
Groundwater	Not Present	Not Present	None
Wetlands	No Impact	Wetlands: 0.049 acre permanent impact 0.118 acre temporary impact	To be determined in Final Design. Mitigation measures will be entered into ECMTS.

Environmental Resource Category	No-Build Alternative¹	Proposed Action	Mitigation for Proposed Action
Floodplains	No Impact	No significant floodplain encroachment would occur.	None
Soil Erosion and Sedimentation	No Impact	Erosion and Sediment (E&S) Control Plan will be implemented during construction.	<p>Conceptual E&S and Stormwater Plans prepared. The P3 Development Entity will complete the Final Design, update plans, prepare permit applications for submission, and secure necessary permit authorizations prior to construction.</p> <p>All disturbed areas will be stabilized upon completion of the project.</p> <p>Post Construction Stormwater Management (PCSM) controls will be evaluated in final design and included in the National Pollutant Discharge Elimination System (NPDES) permit application, if required.</p>
Land Use			
Agricultural Resources	No Impact	No Impact	None
Vegetation	No Impact	Minor impacts to forest land and roadside vegetation.	<p>Care will be taken not to transplant roots or seeds of noted invasive, non-native plants during earth moving operations.</p> <p>All disturbed areas will be restored and revegetated with non-invasive vegetation as part of construction.</p>
Geologic Resources	Not Present	Not Present	None

Environmental Resource Category	No-Build Alternative¹	Proposed Action	Mitigation for Proposed Action
Parks and Recreation Facilities	Not Present	Not Present	None
State Forest and Gamelands	Not Present	Not Present	None
Wilderness, Natural, & Wild Areas	Not Present	Not Present	None
Hazardous or Residual Waste Sites	No Impact	Not Present	None
Wildlife			
Wildlife Refuges & Critical Habitat	Not Present	Not Present	None
Threatened & Endangered Species	Not Present	Potential impact to tri-colored bat	<u>USFWS coordination for tri-colored bat:</u> During final design, the project team will initiate conferencing with USFWS regarding the project's potential effects to the tri-colored bat and measures to avoid and minimize harm.
Cultural Resources			
Archaeological Resources	Not Present	Not Present	None
Historic Resources	Not Present	Not Present	None
Section 4(f) Resources	Not Present	Not Present	None

Environmental Resource Category	No-Build Alternative¹	Proposed Action	Mitigation for Proposed Action
Air Quality and Noise			
Air Quality	No Impact	Exempt; no impact	None
Noise	No Impact	Type III Project; Noise analysis not required	None
Socioeconomic Areas			
Regional & Community Growth	No Impact	No Impact	None
Public Facilities & Services	No Impact	Positive Impacts: Access for public facilities and services will be improved due to design improvements resulting from the project.	None
Community Cohesion	No Impact	No impact	None
Right-of-Way Acquisitions	No Impact	No impact	None
Displacements	No Impact	No relocation of people, businesses or farms	None
Aesthetics	No Impact	No impact	None
Environmental Justice	No Impact	No disproportionately high and adverse effects on low-income or minority populations have been identified.	None

Footnote:

¹ While the No-Build Alternative would not directly affect resources, should the bridge deteriorate to the point where it would have to be weight-posted, closed, or should it experience a partial collapse, there would be impacts to the resources below the bridge. A full or partial closure would have a profound effect on commerce reliant on I-80 and would detour vehicles onto local roads.

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4.1 Aquatic Resources

	PRESENCE	IMPACTS
STREAMS, RIVERS & WATERCOURSES	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	
Intermittent (streams only)	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes
Perennial	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes
Wild trout streams	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Stocked trout streams	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes

Identify all streams and their classifications per Chapter 93 of 25 PA Code (e.g. CWF, WWF, HQ, EV)

Six streams were identified and delineated during the August 1 and 30, 2019 and the May 24, 2021, Aquatic Resources field investigations within the study area associated with the structure replacements. The streams are identified as streams S1-S6 and are described below:

- Stream 1 (S1) is an intermittent watercourse that is an unnamed tributary (UNT) to Nescopeck Creek that generally flows in a northeasterly direction in the northwest quadrant of the study area. This stream flows beneath the I-80 EB bridge and reaches its direct confluence with Stream 2 (S2) beneath the I-80 WB bridge. Stream S1 is classified as a Trout Stocked Fishes (TSF) and Migratory Fishes (MF) stream in the Pennsylvania Department of Environmental Protection's (PADEP), PA Code Title 25, Chapter 93 Water Quality Standards.
- Stream 2 (S2) is a perennial watercourse that is an oxbow channel of Nescopeck Creek, flowing underneath the I-80 bridges and continuing through the northeast quadrant of the study area before draining back into the main stream channel. Stream S2 is classified as a TSF and MF stream in the PADEP's, PA Code Title 25, Chapter 93 Water Quality Standards.
- Stream 3 (S3) is a perennial watercourse known as Nescopeck Creek that generally flows in a northeasterly direction in the study area. Stream S3 is classified as a TSF and MF stream in the PADEP's, PA Code Title 25, Chapter 93 Water Quality Standards.
- Stream 4 (S4) is a perennial watercourse that is an unnamed tributary (UNT) to Nescopeck Creek that generally flows in a northeasterly direction in the southwest quadrant of the study area. This stream reaches its confluence with Nescopeck Creek just west of the I-80 EB bridge. Stream S4 is classified as a TSF and MF stream in the PADEP's, PA Code Title 25, Chapter 93 Water Quality Standards.
- Stream 5 (S5) is an intermittent watercourse that is an UNT to Nescopeck Creek that generally flows in a northwesterly direction in the southeast quadrant of the study area. This stream is situated in a man-made roadside drainage that was created when rock was blasted to allow for the original

Supporting documentation for Chapter 4.1 includes:

- I-80 Nescopeck Creek Bridges Conceptual Aids to Navigation Plan* (December 2021)
- I-80 Nescopeck Creek Bridge Stormwater Coordination Meeting Minutes* (May 2021)
- I-80 Nescopeck Creek Bridges Wetland Identification & Delineation Report* (June 2021)
- I-80 Nescopeck Creek Bridges DEP Pre-Application Meeting Minutes* (December 2021)
- I-80 Nescopeck Creek Bridges Revised Hydrologic & Hydraulic Report* (February 2022)

construction of I-80. Although the channel does convey roadway runoff, the primary hydrology in S5 is supplied by groundwater that discharges from the adjacent rock face at several locations alongside the stream. Flow from S5 enters stormwater inlets and appears to be piped beneath I-80 WB and EB before daylighting outside of the study area. Stream S5 is classified as a TSF and MF stream in the PADEP's, PA Code Title 25, Chapter 93 Water Quality Standards.

- Stream 6 (S6) is a perennial watercourse known as Black Creek that flows in a northeasterly direction in the northwest quadrant of the study area, where it discharges into Nescopeck Creek. Black Creek (S6) is listed as Cold Water Fishes (CWF) and MF in the PADEP's, PA Code Title 25, Chapter 93 Water Quality Standards.

According to the Pennsylvania Fish and Boat Commission (PFBC), the section of Nescopeck Creek (Stream S3) in the project vicinity is listed as Approved Trout Waters and is actively stocked with trout. No streams classified as natural trout reproducing streams or Class A wild trout streams occur within the study area, and no natural trout reproducing streams are located downstream of the study area. Based on the active trout stocking, an in-stream work restriction period of February 15 to June 1 will be required for this project (based on PFBC Time-of-Year Restrictions issued in January 2022).

In light of the ruling on Pascua Yaqui Tribe vs. U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers (USACE) has halted implementation of the Navigable Waters Protection Rule and is defining "waters of the United States" (WUS) consistent with the pre- 2015 regulatory regime until a new rule is issued. Because all of the identified streams (S1-S6) are either Relatively Permanent Waters (RPW) tributaries to a Traditional Navigable Waters (TNW, (Susquehanna River)), or have surface water connections to these tributaries, they would all be federally regulated as WUS under the pre-2015 WUS rules and regulations. In addition, all six streams would also be considered jurisdictional watercourses by the PADEP.

Linear feet of Streams permanently impacted: 444

Describe Any Permanent Impacts

Per the current preliminary design of the bridge replacements, a total of 444 linear feet of Nescopeck Creek (Stream S3) and two tributaries to Nescopeck Creek (Streams S1 and S2) will be permanently impacted due to bridge reconstruction activities and placement of the piers.

Describe Any Temporary Impacts

Per the current preliminary design of the bridge replacements, a total 732 linear feet of streams will be temporarily disturbed for placement of the temporary partial width causeway and associated stream diversion activities necessary to construct the piers. This includes impacts to three tributaries to Nescopeck Creek (S1, S2, and S4), as well as impacts to Nescopeck Creek (S3).

Is mitigation incorporated? No Yes

Mitigation Remarks

Nescopeck Creek is listed as Approved Trout Waters and is actively stocked with trout; therefore, in-stream work will be prohibited from February 15 to June 1. There is evidence of Acid Mine Drainage in Nescopeck Creek and vitrified clay liner plates are on the existing piers. Vitrified clay liner plates are to be installed on the proposed piers to help protect the piers from early corrosion as a result of low stream pH due to acid mine drainage.

The P3 Development Entity will complete the final design of the project, will complete the permit applications and plans as needed, and will determine the appropriate mitigation measures in coordination with PennDOT,

PADEP, and the U.S. Army Corps of Engineers (USACE). Mitigation measures will be entered into the Environmental Commitments & Mitigation Tracking System (ECMTS). ECMTS is a computer application for tracking mitigation commitments from inception during preliminary design through construction, to be used by construction inspectors to ensure mitigation measures are completed as intended for protection of environmental resources.

	PRESENCE	IMPACTS
FEDERAL WILD & SCENIC RIVERS & STREAMS	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

Remarks

A review of the National Wild and Scenic Rivers System and eMapPA did not identify any Federal Wild or Scenic Rivers or Streams in the project area.

	PRESENCE	IMPACTS
STATE SCENIC RIVERS & STREAMS	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

Remarks

A review of the National Wild and Scenic Rivers System and eMapPA did not identify any State Scenic Rivers or Streams in the project area.

	PRESENCE	IMPACTS
NAVIGABLE WATERWAYS	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	
Coast Guard Navigable	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
PFBC Water Trail	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Recreational Boating Waterway	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes

Documentation

- PFBC ATON Plan
- Coast Guard Coordination

Describe Any Permanent Impacts

No permanent impacts to the navigability of the stream are anticipated as a result of the construction of the proposed structures. Temporary impacts are anticipated during construction and an Aids to Navigation (ATON) plan is needed to help navigate boaters through the area during construction.

Mitigation Remarks

A review of the PFBC Water Trails mapping did not identify any water trails within the project area; however, Nescopeck Creek is navigable according to the Keystone Canoeing Guidebook. As such, Nescopeck Creek will remain open to canoe/kayak traffic during construction, and an ATON plan is required. The Conceptual ATON is in the project technical files; however, the P3 Development Entity will complete the Final Design, adjust the ATON plan as needed to fit their proposed means and methods of construction and construction phasing, and submit and obtain the required approval from PFBC.

	PRESENCE	IMPACTS
OTHER SURFACE WATERS	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

Remarks

Based on the results of the aquatic resources fieldwork, no other surface waters are present within the project area.

	PRESENCE	IMPACTS
GROUNDWATER RESOURCES	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	

Remarks

A review of eMapPA for PAGWIS well water inventory identified one residential groundwater well southwest of and outside the limits of the proposed bridge replacements. Impacts to wells are not anticipated as a result of this project, all work associated with project will occur within existing Commonwealth-owned Right-of-Way (ROW).

	PRESENCE	IMPACTS
WETLANDS	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	
Open Water	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Vegetated		
Emergent	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes
Scrub Shrub	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Forested	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Exceptional Value	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

Documentation

- Data Forms
- Wetland Identification and Delineation Report
- Conceptual Mitigation Plan
- 404 (b)(1) Alternative Analysis
- Jurisdictional Determination Functional
- Assessment Analysis

Methodology

Wetlands were delineated using a combination of secondary data analysis and field verification. Fieldwork was conducted in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual (1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (2012), and the PennDOT Wetland Resources Handbook (Publication No. 325, 2015).

Number of Wetlands permanently impacted: 1

Acreage of Wetlands permanently impacted: 0.049

Describe Any Permanent Impacts

Permanent impacts to wetlands are anticipated due to bridge reconstruction activities and placement of the piers. Per the current preliminary design of the bridge and assumptions based on an estimated footing size, impacts to wetlands would total 0.049 acres (2,159 SF) to one project area wetland; Wetland W1, a Palustrine Emergent (PEM) wetland located in the southwest and southeast quadrants of the study area. Impacts to wetlands will need to be re-evaluated by the P3 design entity as they complete the final design details.

Describe Any Temporary Impacts

Per the current preliminary design of the bridge, a total of 0.118 acres (5,123 Sq. ft.) of temporary impacts to two project area wetlands is anticipated during construction. These impacts include 390 SF/0.009 acres of temporary impacts to Wetland W1, a PEM located in the southwest and southeast quadrants of the study area, and 4,733 SF/0.109 acre of temporary impacts Wetland W3, a Palustrine Forested (PFO) wetland located in the southwest quadrant of the study area. All areas of temporarily impacted wetlands will be returned to original condition and revegetated per any permit conditions. Temporary impacts to wetlands will need to be re-evaluated by the P3 Development Entity as they complete the final design details.

Is mitigation incorporated? No Yes

Mitigation Remarks

Mitigation will be determined for this project during final design. The P3 Development Entity will be responsible for final design of the project and will ultimately determine the impacts to wetlands associated with the project, permitting requirements, and appropriate mitigation measures, in coordination with PennDOT, PADEP, and the USACE. Possible mitigation for wetland impacts could include debiting credits from an approved wetland mitigation bank, performing wetland mitigation on-site, or working with the PADEP to pay a fee in lieu of other mitigation options. Mitigation measures will be entered into ECMTS.

Remarks

Three palustrine wetlands were identified and delineated during the August 1 and 30, 2019 and the May 24, 2021 Aquatic Resources field investigations within the study area associated with the structure replacements. The wetlands are identified as wetlands W1 – W3 and are described below:

- Wetland 1 (W1) is a PEM wetland located in the southwest and southeast quadrants of the study area. This low-lying wetland is situated in a ravine located between Nescopeck Creek and the hillslope beneath the southern approach of the I-80 bridges.
- Wetland 2 (W2) is a PEM wetland located in the southeast quadrant of the study area. This wetland is situated in a man-made roadside drainage that was created when rock was blasted to allow for the original construction of I-80.
- Wetland 3 (W3) is a PFO wetland located in the southwest quadrant of the study area and is located in the floodplain of Nescopeck Creek that drains into Stream 4 at its northern end.

In light of the ruling on Pascua Yaqui Tribe vs. U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers (USACE) has halted implementation of the Navigable Waters Protection Rule and is defining “waters of the United States” (WUS) consistent with the pre- 2015 regulatory regime until a new rule is issued. Because W1 and W3 have surface water connections to a RPW tributary (S3, Nescopeck Creek) of a TNW (Susquehanna River), these wetlands would be federally regulated as WUS under the pre-2015 WUS rules and regulations. W2 is an isolated wetland that does not feature a direct connection to any TNWs or RPW tributaries thereof; thus, W2 would not be federally regulated as a WUS under the pre-2015 WUS rules and regulations. All three wetlands (W1-W3) would be considered jurisdictional wetlands by the PADEP.

Executive Order 11990 Compliance

Compliance requires the determination that there is no practicable alternative to the proposed construction in wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

Options/design modifications were investigated to avoid impacts to wetlands: Yes No N/A
 There are no practicable alternatives to construction within the wetlands: Yes No N/A
 Alternative chosen (proposed project) includes all practicable measures to minimize harm to wetlands:
 Yes No N/A

	PRESENCE	IMPACTS
COASTAL ZONE	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

Remarks

There are no coastal zones located within PennDOT District 4-0.

	PRESENCE	IMPACTS
FLOODPLAINS	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

No significant floodplain encroachment would occur.

Describe Any Permanent and Temporary Impacts

Based on the Hydrology and Hydraulics (H&H) analysis conducted for the project, the proposed bridges have no increase to the 100-year water surface elevation. The proposed bridges have over 25 feet of freeboard from low chord to 100-year WSE. Increases to the 2-year and 10-year storms will remain within the overall Nescopeck Creek channel. Increases to the 100-year storm under temporary conditions will not create any additional impacts.

Based on the H&H analysis conducted for the project, the project will have no significant floodplain encroachment, as defined in 23 CFR Part 650, Subpart A, Section 650.105(q), since the project will not: (1) Have a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route, (2) Have a significant risk, (3) Have a significant adverse impact on natural and beneficial flood plain values. The H&H report is in the project technical files.

Is mitigation incorporated? No Yes

Remarks

The project area is located within a detailed FEMA study area.

SOIL EROSION & SEDIMENTATION

Are there activities that could cause erosion or sedimentation and would require E&S Controls?

Yes No N/A

Documentation

- Coordination w/County Conservation
- District E&S Control Plan
- NPDES Stormwater Construction Permit

Is mitigation incorporated? No Yes

Mitigation

The design team has prepared Conceptual Erosion & Sedimentation (E&S) and Stormwater Plans, but this design team will not be submitting or obtaining the required permits or coordination. The P3 Development Entity will

complete the Final Design, update plans, prepare permit applications for submission, and secure necessary permit authorizations prior to construction.

All disturbed areas will be stabilized upon completion of the project.

Post Construction Stormwater Management (PCSM) controls will be evaluated in final design and included in the National Pollutant Discharge Elimination System (NPDES) permit application, if required.

4.2 Land

	PRESENCE	IMPACTS
AGRICULTURAL RESOURCES	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	
Productive Agricultural Land	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Agricultural Security Areas	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Prime Agricultural Land	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Agricultural Conservation Easements	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Farmland Enrolled in Preferential Tax Assessments	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Agricultural Zoning	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Soil Capability Classes I, II, III, IV	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Prime or Unique Soil	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Statewide or Locally Important Soils	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes

Describe Any Permanent and Temporary Impacts

No impacts to agricultural resources will occur as a result of this project.

Is mitigation incorporated? No Yes

Remarks

Per the NRCS Web Soil Survey website, Meckesville channery silt loam, 3 to 8 percent slopes (MeB) soils are classified as Prime farmland and are identified as soil capability class III, and Meckesville channery silt loam, 8 to 15 percent slopes (MeC) soils are classified as farmland of statewide importance and are identified as soil capability class IV. While these agricultural soils exist within the project area, no productive agricultural land is present within the project area. Also, all work will occur along the interstate system within the Commonwealth-owned ROW and the majority of the work will occur within previously disturbed cut and fill areas. Therefore, no impacts to agricultural land will occur as a result of this project.

	PRESENCE	IMPACTS
VEGETATION	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	
Landscaped	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Agricultural	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Forest Land	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes
Rangeland	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	<input checked="" type="radio"/> No <input type="radio"/> Yes
Other (describe in remarks)	<input type="radio"/> Not Present <input checked="" type="radio"/> Present	<input type="radio"/> No <input checked="" type="radio"/> Yes

Describe Any Permanent and Temporary Impacts

Typical roadside vegetation (including grasses, trees, and shrubs) and wooded areas can be found within the project area and will be impacted. All work associated with the bridge replacements will occur within the Commonwealth-owned ROW.

Invasive Non-Native Plants are Present

Mitigation:

Are measures being taken to minimize movement of invasive plant parts (roots, tubers, seeds)? Yes No

Will native plants be used in project landscaping or mitigation? Yes No

Other? Yes No

Describe Mitigation

In accordance with PennDOT’s invasive species guidance (Publication 756, 2014), care will be taken not to transplant roots or seeds of noted invasive, non-native plants during earth moving operations. Re-vegetation of impacted areas will be implemented through the E&S plan. Prior to completion of construction, all remaining areas of earth disturbance will be restored by re-seeding with standard PennDOT seed formulas. These seed formulas may contain native plant species; but per Executive Order 13112, will avoid those plant species that are listed on the Noxious Weed Control List.

	PRESENCE	IMPACTS
GEOLOGIC RESOURCES	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	

Remarks

A review of the Pennsylvania Department of Conservation & Natural Resources (PA DCNR) Topographic and Geological Survey mapping indicated that there are no unique geologic resources within or in close proximity of the project limits.

	PRESENCE	IMPACTS
PARKS & RECREATION FACILITIES	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	

Remarks

Based on project mapping and field views, no parks or recreation facilities are present within the project area.

	PRESENCE	IMPACTS
FOREST & GAMELANDS	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	

Remarks

A review of the PA State Gamelands Mapping Center did not identify any Federal or State Forest or Gamelands.

	PRESENCE	IMPACTS
WILDERNESS, NATURAL & WILD AREAS	<input checked="" type="radio"/> Not Present <input type="radio"/> Present	

Remarks

A review of Wilderness Connect did not identify any Wilderness or Natural and Wild Areas.

PRESENCE

IMPACTS

NATIONAL NATURAL LANDMARKS Not Present Present

No Yes

Remarks

A review of the National Park Service website did not identify any National Natural Landmarks.

PRESENCE

IMPACTS

HAZARDOUS OR RESIDUAL WASTE SITES Not Present Present

No Yes

Documentation

- Phase I
- Phase II
- Phase III
- Other
- No Documentation Required

Describe Any Permanent and Temporary Impacts

None

Is remediation/mitigation incorporated? No Yes Unknown at this time

Remarks

The area within the Limits of Disturbance (LOD) of the structure replacements were inspected during a field investigation on May 24, 2021, with no signs of hazardous releases (e.g., stressed vegetation, stained soils, detectable odors) and no indications of historic fill observed. An Environmental Due Diligence (EDD) form was completed for the project and can be found in the project technical files.

As part of the tolling action, a Phase I ESA was completed on January 10, 2022 for the entire PSA (including both the bridge replacement project and the additional study area for tolling facility and signs). This Phase I ESA included record reviews, site reconnaissance, compilation of data, data evaluation, and recommendations in accordance with the scope and limitations of the PennDOT Publication 281. A regulatory records file review from the Northcentral Regional Department of Environmental Protection (DEP) Office in Williamsport and the Northeast Regional DEP Office in Wilkes-Barre was conducted in September 2021. Field reconnaissance also was conducted to identify existing conditions and land uses at proposed signage locations on May 19, 2021.

Along I-80 mainline, the Phase I ESA did not identify any waste sites that have AOCs which would require further investigation beyond this Phase I ESA. One Area of Concern (AOC) was identified at the intersection of SR 93 and Old Berwick Road in Drums, PA. This retail fueling station is no longer a concern for the project since toll diversion route improvements have been removed from the project.

Supporting documentation for Chapter 4.2 includes:

- *Phase I Environmental Site Assessment Report - S.R. 0080, Section 352 Open Road Cashless Tolling Facility, Associated Electrical and Communication Services, and Signing Improvements Project (January 2022)*
- *Environmental Due Diligence (EDD) Phase I Visual Inspection Form – ECMS Project # 31854 (November 2021)*

4.3 Wildlife

PRESENCE

IMPACTS

WILDLIFE & HABITAT

Not Present Present

Remarks

According to the US Fish and Wildlife Service National Wildlife Refuge System, no sanctuaries, refuges, or resources meriting compensation are located within the project area.

PRESENCE

IMPACTS

THREATENED & ENDANGERED

PLANTS & ANIMALS

Not Present

Present

No Coordination
Needed

No Potential Impacts

Potential Impacts with Avoidance Measures

Potential Impacts with Conservation Measures

Potential Impacts

Documentation

PNDI ER Receipt

The Pennsylvania Natural Diversity Inventory (PNDI) environmental review was obtained for the project on December 13, 2021. The PNDI review indicated no known impacts to threatened, endangered, and/or special concern species within the project area. Therefore, no further coordination with threatened and endangered jurisdictional agencies is required. The PNDI receipt is included in Appendix C.

Although not addressed in the PNDI review, a decision is expected in 2023 to list the tri-colored bat as Endangered. A mitigation commitment is added to Chapter 7.0: During final design, the project team will initiate conferencing with USFWS regarding the project's potential effects to the tri-colored bat and measures to avoid and minimize harm.

4.4 Cultural Resources

Were Cultural Resource Professionals (CRPs) needed for project scoping? Yes No

Was a Project Early Notification / Scoping Results Form completed? Yes No

Is the project exempted from review by the District Designee or CRP as per Appendix C of the Statewide Section 106 Programmatic Agreement? Yes No

Exempt Project Activity(s): A.1.a, B.1

Individual Making Exemption: Kevin Mock and Heather Gerling, District 4-0 CRPs

Date of Exemption: 11/29/21

Exemption Comments: Project is exempt, no ROW is required. All work will occur within the existing Commonwealth-owned ROW.

Section 106 documents are posted to Project Path at <https://path.penndot.gov/ProjectDetails.aspx?ProjectID=59796> and included in the project technical files.

Is the project exempted from review by the District Designee or CRP as per Stipulation III of the Emergency Relief Projects Programmatic Agreement (2005)? Yes No

<u>PRESENCE</u>				
	Not Present	Potentially Eligible Resource Present	Eligible Resource Present	Listed Resource Present
CULTURAL RESOURCES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Archaeology</u>				
Pre-Contact:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact Native American:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Above-Ground Historic Properties</u>				
Structure/Building:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
District:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe Any Permanent and Temporary Impacts

None

Are mitigation and/or standard treatments required? No Yes

4.5 Section 4(f) Resources

SECTION 4(f) RESOURCES **PRESENCE** **USE**
 Not Present Present No Yes

Remarks

Based on project mapping and field reconnaissance, no Section 4(f) resources are present within the project area.

4.6 Air Quality and Noise

AIR QUALITY

Is the project exempt from regional ozone conformity analysis and a CO, PM10 & PM2.5 Hot-Spot analysis? Yes No

Is the project exempt from an analysis for MSATs based on Pub #321? Yes No

Remarks

Per PennDOT Publication 321, the project is exempt from regional conformity analysis and project-level air

quality analysis. Also per Publication 321, projects with No Meaningful Potential Mobile Source Air Toxics (MSATs) Effects include projects with no meaningful impacts on traffic volume or vehicle mix. Because this project does not impact the traffic volume or composition, no MSATs analysis or documentation is required for the project. Temporary impacts may occur as a result of construction.

NOISE

Is the project a:

A. **Type I Project?** Yes No

B. **Type II Project?** Yes No

C. **Type III Project?** Yes No

The project meets the criteria for a Type III project established in 23 CFR 772. Therefore, the project requires no analysis for highway traffic noise impacts. Type III projects do not involve added capacity, construction of new through lanes or auxiliary lanes, changes in the horizontal or vertical alignment of the roadway or exposure of noise sensitive land uses to a new or existing highway noise source. PennDOT acknowledges that a noise analysis is required if changes to the proposed project result in reclassification to a Type I project.

4.7 Socioeconomic Areas

REGIONAL & COMMUNITY GROWTH

Will the project induce impacts (positive and negative) on planned growth, land use, or development patterns for the area? Yes No

Is the project consistent with planned growth? Yes No

Basis of this determination:

The project is programmed on the 2023-2026 Interstate Transportation Improvement Program (TIP) The project replaces existing infrastructure and is not anticipated to induce growth.

Will the project induce secondary growth? Yes No

PUBLIC FACILITIES & SERVICES

Will the project induce negative impacts on health and educational facilities; public utilities; fire, police, and emergency services; civil defense; religious institutions; or public transportation? Yes No

Does the project incorporate bicycle or pedestrian facilities into the overall design or operations (including construction)? Yes No

No bike or pedestrian facilities occur within the interstate system.

Will the project have a positive impact to the public facilities and services listed above? Yes No

The project upgrades the existing transportation system providing current design standards.

COMMUNITY COHESION

- Will the project induce impacts to community cohesion? Yes No
- Will the project induce impacts to the local tax base or property values? Yes No

ENVIRONMENTAL JUSTICE (see Chapter 6.0 of this CE)

RIGHT-OF-WAY ACQUISITIONS OR DISPLACEMENTS OF PEOPLE, BUSINESSES OR FARMS

- How many parcels require right-of-way acquisition, either partial or total? None
- Describe the extent and locations of acquisitions. Indicate for each acquisition whether it is temporary or permanent. None
- Will the project require the relocation of people, businesses, or farms? Yes No
- Will the project induce impacts to economic activity, including employment gains and losses? Yes No

MAINTENANCE AND OPERATING COSTS OF THE PROJECT AND RELATED FACILITIES

- Will the project induce increases of operating or maintenance costs? Yes No

AESTHETIC AND OTHER VALUES

- Will the project be visually intrusive to the surrounding environment? Yes No
- Will the project include "multiple use" opportunities? Yes No
- Will the project involve "joint development" activities? Yes No

4.8 Permits Checklist

- No Permits Required
- United States Army Corps of Engineers Section 404 and/or Section 10 Permit
 - Individual Nationwide PASPGP
- DEP Waterway Encroachment (105) Permit
 - Standard Small Project General Other
- DEP 401 Water Quality Certification
- Coast Guard Permit
- NPDES Permit
 - General Individual Exempt
- Other Permits

Supporting documentation for Chapter 4.8 includes:

- PADEP Pre-Application Meeting (November 2021, meeting minutes December 2021)

Remarks, Footnotes, Supplemental Data

A PA DEP Pre-Application Meeting was held virtually on November 2, 2021, to discuss the proposed bridge replacement project. The purpose of the Pre-Application Meeting was to gain an understanding of the permits that may be required. The November 2, 2021 DEP Pre-Application Meeting minutes are in the project technical

files.

This project will be completed as part of the PennDOT Major Bridge P3 initiative. The preliminary design team prepared conceptual design plans and conceptual E&S and Stormwater Plans. The P3 Development Entity will complete Final Design, update plans, prepare permit applications for submission, and secure necessary permit authorizations prior to construction. The NPDES and waterway permit conditions will be added to ECMTS as mitigation commitments.

5.0 PUBLIC INVOLVEMENT

	#	Comments
<input checked="" type="checkbox"/> Plans Display	1	See Remarks
<input checked="" type="checkbox"/> Public Officials Meetings	1	See Remarks
<input checked="" type="checkbox"/> Public Meetings	1	See Remarks
<input checked="" type="checkbox"/> Public Hearing	1	EA Public Hearing 5/12/2022 See Remarks
<input checked="" type="checkbox"/> Special Purpose Meetings (specify)	1	Diversion Route Workshop 7/28/2021 and follow-up briefing 11/15/2021 See Remarks
<input type="checkbox"/> Section 106 Public Involvement / Consulting Parties (specify)		
<input checked="" type="checkbox"/> Section 106 Tribal Consultation (specify Tribe(s) contacted and Tribal response)		Absentee-Shawnee Tribe of Indians of Oklahoma Delaware Nation, Oklahoma Delaware Tribe of Indians Eastern Shawnee Tribe of Oklahoma Oneida Indian Nation Onondaga Nation Seneca-Cayuga Nation Shawnee Tribe Stockbridge-Munsee Community, Wisconsin Tuscarora Nation
<input checked="" type="checkbox"/> Environmental Justice Community Involvement (if applicable)		Knowledgeable Parties Outreach, See Remarks
<input checked="" type="checkbox"/> Other information dissemination activities (specify)		See Remarks
<input checked="" type="checkbox"/> Commitment for Further Public Involvement		The contractor will continue to coordinate with local municipalities and the public.

Remarks

Public outreach activities were conducted beginning in November 2020 for the PennDOT Pathways program under an Alternative Funding PEL Study. Since the I-80 Nescopeck Creek Bridges project was identified as a candidate for bridge tolling through PennDOT Pathways Program's Major Bridge P3 Initiative in February 2021, additional public outreach effort was conducted specific to the I-80 Nescopeck Creek Bridges project.

- Project information was posted on a project-specific website in February 2021 at <https://www.penndot.pa.gov/RegionalOffices/district-10/ConstructionsProjectsAndRoadwork/Pages/I-80-Nescopeck.aspx>
- A diversion route workshop was conducted on July 28, 2021, to gather additional information on potential issues along the diversion routes (mainly SR 93, US 11) and its secondary diversion routes (SR 339).
- The diversion route workshop attendees were invited to attend a follow-up briefing on November 15, 2021, to review the proposed diversion route improvements included in the public meeting materials.
- A project-specific virtual public meeting was held from November 15 through December 15, 2021. The online meeting was comprised of text, graphics and videos that provided a project overview and explained the project purpose and need, project design, proposed funding, traffic studies and associated diversion improvements, environmental studies, comment process and next steps. The online meeting website provided a comment form that allowed individuals to submit their comments directly within the virtual public meeting. The website also noted other ways in which comments could be submitted, including the comment form on the general project website, project phone number, project email and a physical mailing address.
- An in-person public open house was held on Tuesday December 7, 2021, at 4 p.m. at the Nescopeck Social Hall in Nescopeck, PA. Display boards were provided for project purpose and need, project design, proposed funding, traffic studies and associated diversion improvements, environmental studies, and schedule. Comment forms were provided for individuals to submit their comment while in attendance or at their convenience. While the comment period for the public meeting has closed, the online meeting materials are available for reference via the project website. In-person meeting materials were printed versions of the online content.

Supporting documentation for Chapter 5 includes:

- *I-80 Nescopeck Creek Bridges Project Virtual Public Meeting (November 15 to December 15, 2021)*
- *I-80 Nescopeck Creek Public Meeting Summary (December 2021)*

Prior to and during the public comment period for the second public meeting, the project team executed several outreach strategies to maximize public participation at the public meeting or online consultation of the Virtual Public Meeting on the project website. The outreach activities are listed in **Table 3**.

**Table 3
Public Outreach Activities**

Outreach Type	Number of Recipients	Type of Recipients	Date Sent
Virtual Public Meeting Website	N/A	-General Public via https://www.penndot.pa.gov/RegionalOffices/district-4/ConstructionsProjectsAndRoadwork/Pages/I-80-Nescopeck-VPM.aspx	Launched 11/15/21
Postcard	15,910	- General public - Mailed via Every Door Direct Mail Service - Sent to all postal routes within the direct project area and along the diversion route.	Mailed week of 11/8/21
Legal Ad	Print circulation approx. 12,000	- General public - Placed in <i>The Times Leader</i>	Ran 11/7/21
Stakeholder & Public Mailing List Email	236	- Key stakeholders, legislators and those who requested to be put on the project's mailing list. - Email with information about the virtual public meeting and in-person open house.	11/15
Knowledgeable Parties Email & Flyer	13	- Knowledgeable parties identified in environmental justice analysis - Email with information about virtual and in-person meetings, along with a flyer to be distributed in the community and copies of social media art for sharing	11/15 /21
News Releases	N/A	- Sent to area media to distribute via news stories and calendars of events for the general public.	11/15/21, 12/7/21
Public Officials Briefing	N/A	- Invited public officials to a pre-launch briefing to get a first look at the materials to launch in the virtual public meeting	11/15/21 at 9:30 a.m.
Social Media Posts	30,795 people reached	- Social media posts on PennDOT social media regarding how to participate in the public meeting and comment period - 238 engagements across three posts	11/15/21, 12/7/21, 12/13/21

An EA comparing the effects of the No Build Alternative and the Build Alternative with bridge tolling was prepared and was made available for official public review and comment on April 27, 2022. A Public Hearing was held on May 12, 2022. The comments received during the EA comment period (April 27 to May 27, 2022), including testimony and comments received at the public hearing, have been reviewed, considered, and where appropriate, additional information was incorporated into this CE. During the public comment period for the EA, the project team executed several outreach strategies to maximize public participation as listed in **Table 4**.

**Table 4
Public Outreach Activities for the EA**

Outreach Type	Number of Recipients	Type of Recipients	Date Sent
Virtual Public Hearing Website	N/A	<ul style="list-style-type: none"> General public via https://www.penndot.pa.gov/RegionalOffices/district-10/ConstructionsProjectsAndRoadwork/Pages/I-80-Nescopeck.aspx 	4/27/2022
Postcard	4,640	<ul style="list-style-type: none"> General Public Mailed via Every Door Direct Mail Service Sent to all postal routes within the direct project area and along the diversion route. 	Mailed week of 4/25/2022
Legal Ad	Print circulation approx. 12,000	<ul style="list-style-type: none"> General public Placed in the <i>Times Leader</i> 	4/27/2022
Stakeholder & Public Mailing List Email	201	<ul style="list-style-type: none"> Key stakeholders, legislators and those who requested to be put on the project's mailing list. Email with information about the Virtual Open House and in-person Public Hearing. 	4/27/2022
Knowledgeable Parties Email & Flyer	8	<ul style="list-style-type: none"> Knowledgeable parties identified in environmental justice analysis Email with information about virtual open house and in-person hearing, along with a flyer to be distributed in the community and copies of social media art for sharing 	4/27/2022
News Release	N/A	<ul style="list-style-type: none"> Sent to area media to distribute via news stories and calendars of events for the general public. 	4/27/2022
Social Media Posts	5,021	<ul style="list-style-type: none"> Social media posts on PennDOT social media regarding how to participate in the public hearing and comment period 	4/27/2022
Elected Official Notification	Key Elected Officials List	<ul style="list-style-type: none"> Elected officials (State and Local) Direct reach out by PennDOT District 4-0 	4/26/2022

On May 18, 2022, as a result of a lawsuit, the court issued an injunction and all work related to the MBP3 initiative ceased. Subsequently, Act 84 of 2022 amended the P3 law and revoked PennDOT's ability to implement mandatory tolls such as the proposed bridge tolling under the MBP3 initiative. As a result of the lawsuits and the subsequent enactment of Act 84 of 2022, PennDOT is moving the I-80 Nescopeck Creek Bridges project forward, but without tolling.

As the project is reverting back to a bridge replacement with associated approach roadway work, this CE was prepared to document the current effects of the Build Alternative without tolling. The project team completed

outreach in September 2022 to educate and inform the public about the CE with the removal of tolling. Outreach activities are summarized in **Table 5**.

Table 5
Public Outreach Activities for the CE

Outreach	Audience & Subject
News Releases	Two news releases to media: <ol style="list-style-type: none"> 1. Statewide release regarding removal of tolling from MBP3 program. 2. I-80 Nescopeck Creek Bridges project specific release with information on the CE.
Email Blasts	Two email blasts to mailing list sign-ups: <ol style="list-style-type: none"> 1. Statewide email blast regarding removal of tolling from MBP3 program. 2. I-80 Nescopeck Creek Bridges Project specific email blast with information on the CE.
Social Posts	Two social posts on Facebook and Twitter. <ol style="list-style-type: none"> 1. Statewide social post regarding removal of tolling from MBP3 program. 2. I-80 Nescopeck Creek Bridges Project specific social post with information on the CE.
Bridge Website Update & Online Educational Resource	The bridge project website was updated to include information on the project’s current status, description and history. An online educational resource about the CE and potential impacts was also developed to provide information to the public on what is presented in the CE. A comment form was available on the website for those who wished to provide feedback on the project. Comments were considered as the CE was finalized.

Public involvement documentation covering the NEPA process for the project is located in the project technical files.

6.0 ENVIRONMENTAL JUSTICE

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* (February 11, 1994), directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority and low-income populations. To achieve effective and equitable decision-making, the U.S.

Department of Transportation (USDOT) identifies three fundamental principles of environmental justice to consider in all USDOT programs, policies, and activities:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on environmental justice communities of concern.
- To ensure the opportunity for full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or substantial delay in the receipt of benefits by any environmental justice community of concern.

The *I-80 Nescopeck Creek Environmental Justice Analysis*, February 2022, was prepared to address the effects of bridge tolling and associated traffic diversion to avoid tolls on low-income and minority populations; a copy is included in the project technical files. While bridge tolling is no longer under consideration, the report contains relevant background information describing low income and minority populations in the vicinity of the proposed project.

The Environmental Justice analysis for the project was performed by completing the following process:

- **Step 1: Define the Study Area.** Consistent with NEPA practices, identify the reasonable and logical boundaries by considering the potential for direct and indirect impacts related to the project.

The project study area includes approximately 1.2 miles of I-80 between the SR 339 Exit 242 Mifflinville interchange and the SR 93 Exit 256 Nescopeck interchange. The project will replace two bridges carrying I-80 over Nescopeck Creek with minimal approach roadway work. The project also includes reconstructing a portion of SR 3016 (Tank Road).

- **Step 2: Identify Low-income and Minority Populations.** Collect recent data on race, color, national origin, income, tribal governments, and seasonal and migrant workers in the study area, and apply FHWA and PennDOT methodology to identify low-income and minority populations.

Low-income and minority populations are identified in the *I-80 Nescopeck Creek Environmental Justice Analysis*, February 2022.

- **Step 3: Solicit Input from Low-income and Minority Populations.** Using PennDOT's *Public Involvement Handbook* and other environmental justice outreach guidance, identify appropriate outreach techniques. Through targeted outreach to potentially affected low-income and minority populations, identify transportation needs and concerns about the project to inform Steps 4, 5, and 6.

Public outreach was conducted throughout the development of the project including plans display/public meetings and additional stakeholder outreach targeted to parties knowledgeable about environmental justice issues (see Chapter 5.0 of this CE).

Supporting documentation for Chapter 6 includes:

- *I-80 Nescopeck Creek Environmental Justice Analysis* (February 2022)

- **Step 4: Evaluate Adverse and Beneficial Effects.** Analyze whether the project would create impacts to communities or populations in the near, medium, or long term. Then, with input from the community, assess whether the impacts are adverse, beneficial, or both.

Since the project involves on-location reconstruction of existing roadway and replacement of an existing bridge in a rural setting, the effects on the local community are minimal. During construction, some diversion through the community may occur as some travelers may opt to avoid the construction zone even with two lanes largely being retained in each direction; however, once the project is completed the reconstructed roadway and replaced bridges would provide improved service along the I-80 corridor.

- **Step 5: Identify Disproportionately High and Adverse Effects.** Determine whether adverse effects are predominately borne by low-income persons and minorities, and if these effects are more or greater than those effects borne by the general population.

As a result of this analysis and associated outreach effort, no disproportionately high and adverse effects on low-income or minority populations have been identified for the I-80 Nescopeck Creek Bridges project since adverse effects to these populations are not anticipated as a result of the project.

- **Step 6. Evaluate Mitigation Measures.** If adverse effects would be predominately borne by low-income and minority populations and are more or greater in magnitude than the adverse effect that would be suffered by the general population, consult with the community to identify measures to avoid, minimize, or mitigate the impacts. Determine whether the mitigation measures are practical. Practical mitigation measures are those that are: effective and do not create other adverse effects that are more severe; feasible in terms of implementation and operation; and cost effective, while maintaining the financial viability of the project.

As no disproportionately high and adverse effects on low-income or minority populations are anticipated to occur, evaluation of mitigation measures was not necessary.

- **Step 7: Re-evaluate Disproportionately High and Adverse Effects and Document Decision.** If practical mitigation measures have been identified, re-evaluate whether adverse effects borne by low-income and minority populations are appreciably more severe or greater than those effects borne by non-environmental justice populations.

Re-evaluation of effects on low-income and minority populations was not necessary.

7.0 ENVIRONMENTAL COMMITMENTS AND MITIGATION

The mitigation measures summarized in this section shall be incorporated into the project's design documents. In order to track and transfer mitigation commitments through the project development process, Environmental Commitments & Mitigation Tracking System (ECMTS) documentation shall be prepared and submitted through the appropriate channels, as the project moves through Final Design and Construction.

Impacts and mitigation commitments are based on Preliminary Design and may change as the project moves through Final Design and Construction. Final design information and final mitigation commitments will be included in the ECMTS documentation.

STREAMS

Permanent Stream Impacts: *444 linear feet*

Mitigation Remarks:

Nescopeck Creek is listed as Approved Trout Waters and is actively stocked with trout; therefore, in-stream work will be prohibited from February 15 to June 1. There is evidence of Acid Mine Drainage in Nescopeck Creek and vitrified clay liner plates are on the existing piers. Vitrified clay liner plates are to be installed on the proposed piers to help protect the piers from early corrosion as a result of low stream pH due to acid mine drainage.

The P3 Development Entity will complete the final design of the project, will complete the permit applications and plans as needed, and will determine the appropriate mitigation measures in coordination with PennDOT, PADEP, and the USACE. Mitigation measures will be entered into ECMTS.

NAVIGABLE WATERWAYS

Nescopeck Creek will remain open for boaters. An Aids to Navigation (ATON) Plan, to be approved by the PFBC, will be developed during final design in conjunction with the waterway permit and implemented during construction to alert boaters of temporary construction measures. This plan will be in place throughout construction.

WETLANDS

Permanent Wetland Impacts: *0.049 acre*

Mitigation Remarks:

Mitigation will be determined for this project during final design. The P3 Development Entity will be responsible for final design of the project and will ultimately determine the impacts to wetlands associated with the project, permitting requirements, and appropriate mitigation measures, in coordination with PennDOT, PADEP, and the USACE. Mitigation measures will be entered into ECMTS.

COMMITMENTS FOR FURTHER PUBLIC INVOLVEMENT

The contractor will continue to coordinate with local municipalities and the public.

SOIL EROSION AND SEDIMENTATION

The design team has prepared Conceptual E&S and Stormwater Plans, but this design team will not be submitting or obtaining the required permit applications or coordination. The P3 Development Entity will complete the Final Design, update plans, prepare permit applications for submission, and secure

necessary permit authorizations prior to construction.

All disturbed areas will be stabilized upon completion of the project.

PCSM controls will be evaluated in final design and included in the NPDES permit application, if required.

VEGETATION

In accordance with PennDOT's invasive species guidance (Publication 756, 2014), care will be taken not to transplant roots or seeds of noted invasive, non-native plants during earth moving operations. Re-vegetation of impacted areas will be implemented through the E&S plan. Prior to completion of construction, all remaining areas of earth disturbance will be restored by re-seeding with standard PennDOT seed formulas. These seed formulas may contain native plant species; but per Executive Order 13112, will avoid those plant species that are listed on the Noxious Weed Control List.

THREATENED & ENDANGERED PLANTS & ANIMALS

USFWS coordination for tri-colored bat:

During final design, the project team will initiate conferencing with USFWS regarding the project's potential effects to the tri-colored bat and measures to avoid and minimize harm.

NON-RESOURCE SPECIFIC MITIGATION COMMITMENTS

- The NPDES and waterway permit conditions will be added to ECMTS as mitigation commitments.
- If the P3 Development Entity requires area outside of the PSA delineated in this CE, the P3 Development Entity is required to coordinate with PennDOT to determine necessary NEPA Reevaluation studies and documentation.

This NEPA Reevaluation may include but not be limited to:

- Delineation of aquatic resources in accordance with USACE protocol;
 - Phase I ESA or Environmental Due Diligence (EDD) statement;
 - PNDI review and coordination with resource protection agencies;
 - Section 106 Consultation; and
 - Public outreach.
-

Appendix A
Engineering Information

Project Identification

Originating Office: 04 **Date:** 12/20/21
Federal Project Number: TBD
Township/Municipality: Black Creek Township, Nescopeck Township, Sugarloaf Township
Local Name: I-80 EB/WB over Nescopeck Creek
Date of First Federal Authorization for Preliminary Engineering: N/A
Date of Federal Authorization Time Extension(s) for Preliminary Engineering(if applicable): N/A

Design Criteria

Roadway Description: I-80, Seg 2504, Offset 1425 (EB) I-80, Seg 2505, Offset 1492 (WB)

Functional Classification: Freeways/Interstates Urban Rural

Current ADT: 16,944(EB) / 16,755(WB)

Design Year No-Build ADT: N/A

Current LOS: N/A

Design Year Build ADT: 27,281 (EB) / 26,967 (WB)

Design Year Build LOS: N/A

DHV: 2,183 (EB)/2,159 (WB)

Truck %: 35 (EB) / 37 (WB)

D (Directional Distribution) %: 100% (EB & WB)

Design Speed: 70 mi/h

Posted Speed: 65 mi/h

Required Minimum Widths

Lane Width: 12 ft

Shoulder Width: 12'RT/8'LT (4' LT with Median Barrier) ft

Bridge Curb-to-Curb: 44' EB & WB ft

Design Exception Required? Yes No

Typology: Limited Access Freeway – Rural Interstate

Topography: Level Rolling Mountainous

Proposed Design Criteria: Bridge Projects

Traffic Control Measures

The following traffic control measures will be implemented:

- Temporary Bridge(s)
- Temporary Roadway
- Detour
- Ramp Closure
- Other (specify)
- None

Provisions for access by local traffic will be made and so posted. True False

Through-traffic dependent business will not be adversely affected. True False

There will be no interference with any local special event or festival. True False

There will be no substantial environmental consequences associated with the traffic control measure(s). True False

There is no substantial controversy associated with the traffic control measure(s). True False

There are no substantial impacts to bicycle or pedestrian routes. True False

If the answer to any of the above questions was "False", please explain.

Approximate length of planned detour: 8 miles Detour Map

Make the selection that best describes the planned detour:

- Detour will use local roads with no improvements.
- Detour will involve improvements to local roads with no resulting impacts on safety or the environment.
- Detour will involve improvements to local roads and will impact safety and/or the environment.
- Detour will use only state owned roads.

Describe impacts

Replacement of the EB/WB Structures: A detour will be required for SR 3016 (ADT=146) to allow reconstruction of the wall between I-80 and SR 3016. The proposed detour will use local roads as SR 3016 does not connect to another state route at its southern end.

Phased construction on I-80 will utilize temporary roadway consisting of temporary lane shifts and temporary cross overs.

Estimated Costs

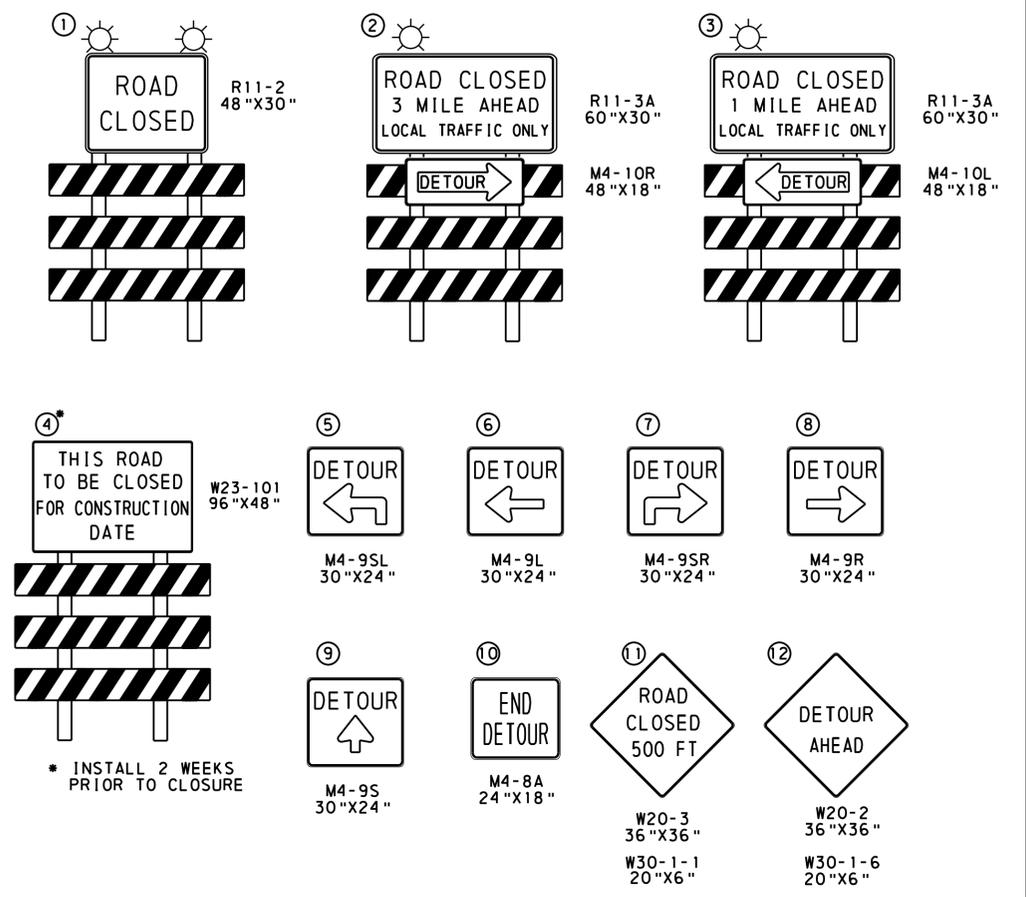
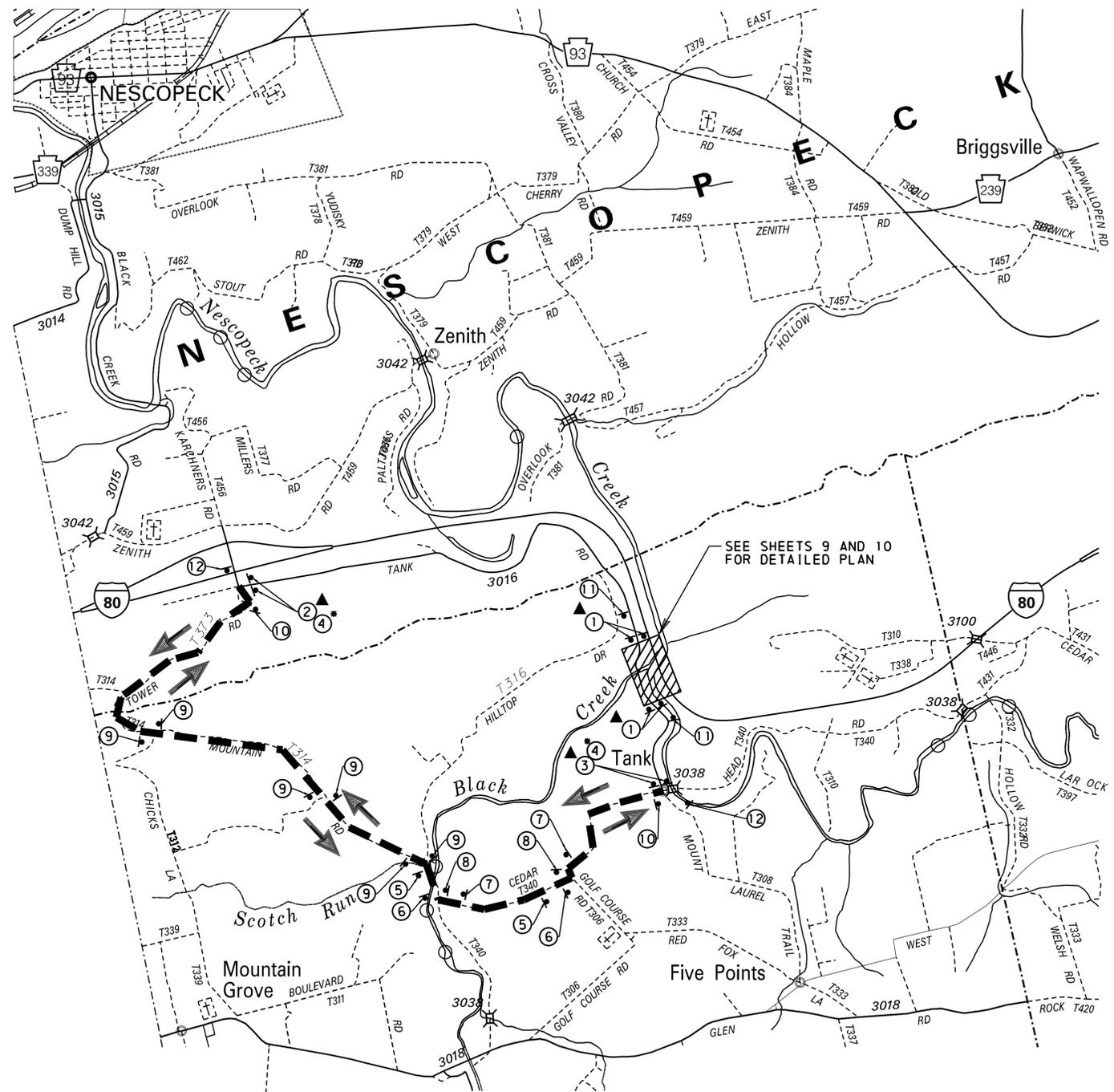
Engineering: \$ 1,885,000

Right-of-Way: \$ 0

Construction: \$ 41,693,000

Utilities: \$ 0

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	4 OF 47
NESCOPECK AND BLACK CREEK TOWNSHIPS				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED



NOTES:

INSTALL TRAFFIC CONTROL DEVICES AND ADVANCE WARNING SIGNS FOR SR 3016 DETOUR IN ACCORDANCE WITH PATA 215 AND AS INDICATED ON THE PLAN.

COVER ANY SIGNS THAT CONFLICT WITH DETOUR.

HAVE ADDITIONAL ROUTE MARKERS AND DETOUR SIGNS AVAILABLE IN CASE PROBLEM AREAS ARISE.

NOTIFY EMERGENCY SERVICES WHEN DETOUR IS IN EFFECT.

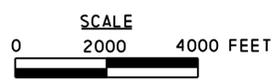
COVER TEMPORARY DETOUR SIGNS WHEN NOT IN USE.

TOTAL DETOUR LENGTH FOR SR 3016 IS 4.8 MILES.

SR 3016 DETOUR MAP
PHASE 1

LEGEND

- TOWNSHIP ROAD
- TOWNSHIP LINE
- STATE HIGHWAY
- ==== RAILROAD
- ==== DETOUR ROUTE
- //// WORK ZONE
- ← TRAFFIC FLOW ARROW
- ⊠ CHANGEABLE MESSAGE SIGN
- ① SIGN DESIGNATION
- ▲ TRAFFIC CONTROL SIGN ON TYPE III BARRICADE
- ▲ EXTEND TYPE III BARRICADE ACROSS ENTIRE ROADWAY



TABULATION OF TRAFFIC CONTROL DEVICES
FOR SR 3016 DETOUR
(FOR INFORMATION ONLY)

STD NO	SIZE	DESCRIPTION	QTY
M4-8A	24 "X18 "	END DETOUR	2
M4-9R	30 "X24 "	DETOUR, RIGHT	2
M4-9L	30 "X24 "	DETOUR, LEFT	2
M4-9S	30 "X24 "	DETOUR, STRAIGHT	6
M4-9SR	30 "X24 "	RIGHT ADVANCED DETOUR	2
M4-9SL	30 "X24 "	LEFT ADVANCED DETOUR	2
M4-10L	48 "X18 "	DETOUR ARROW, LEFT	1
M4-10R	48 "X18 "	DETOUR ARROW, RIGHT	1
R11-2	48 "X30 "	ROAD CLOSED	4
R11-3A	60 "X30 "	ROAD CLOSED - LOCAL TRAFFIC ONLY (3)	2
R11-3A	60 "X30 "	ROAD CLOSED - LOCAL TRAFFIC ONLY (1)	2
W20-2	36 "X36 "	ADVANCE DETOUR	3
W20-3	36 "X36 "	ADVANCE ROAD CLOSED	2
W23-101	96 "X48 "	THIS ROAD TO BE CLOSED	4
W30-1-1	20 "X6 "	500 FT	2
W30-1-6	20 "X6 "	AHEAD PANEL	3
	EACH	TYPE III BARRICADE	12
	EACH	TYPE B WARNING LIGHT (YELLOW)	12

THE SIZES SHOWN ARE MINIMUM REQUIREMENTS.

**PRELIMINARY
DRAWING
OR
INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

CONCEPTUAL TRAFFIC CONTROL PLAN

PLOTTED: 0-9012 CADD (02-90) REVISED (10-04) OPERATOR: FILE NAME: sdesignfl1.ees

Roadway

Roadway Description

I-80 (SR 0080) /352

	Existing	Proposed
Number of Lanes:	2	2
Lane Width:	12 ft	12 ft
Shoulder Width:	4.33 ft	8' LT, 12' RT ft
Median Width:	36 ft	36 ft
Sidewalk Width:	N/A ft	N/A ft
Bicycle Lane Width:	N/A ft	N/A ft
Clear Zone Width:	30 ft	30 ft

Remarks, Footnotes, Supplemental Data

Roadway work on I-80 is limited to minimal full depth paving replacement (less than 100') on each approach to the interstate bridges. Also includes widening of the I-80 EB shoulder to accommodate the wider bridge. Guide rail will also be replaced and upgraded to the current standards throughout the length of the project. The roadway work also includes 150' of full depth pavement replacement and guide rail upgrades in the area of the tolling gantry above the I-80 WB roadway.

Roadway

Roadway Description

SR 3016 (Tank Road)

	Existing	Proposed
Number of Lanes:	2	2
Lane Width:	10 ft	10 ft
Shoulder Width:	2 ft	2 ft
Median Width:	N/A ft	N/A ft
Sidewalk Width:	N/A ft	N/A ft
Bicycle Lane Width:	N/A ft	N/A ft
Clear Zone Width:	7 ft	7 ft

Remarks, Footnotes, Supplemental Data

Roadway works includes 747' of full depth paving and cross pipe replacement due to reconstruction of a portion of the wall between I-80 and SR 3016. Also includes replacement of guide rail within the Limits of Work along SR 3016 to upgrade to current standards.

Structure

BMS Number: 40-0080-2505-1492

BRKEY: 23646

Description:

I-80 WB over Nescopeck Creek

	Existing	Proposed
Structure Type:	Steel Stringer	Prestressed Concrete PA Bulb Tee Beams
Weight Restrictions:	None ton	None ton
Height Restrictions:	None ft	None ft
Curb to Curb Width:	32'-8" ft	54 ft
Lane Width:	Two 12' lanes ft	Two 12' lanes ft
Shoulder Width:	4'-4" LT & RT ft	8' LT, 12' RT ft
Sidewalk Width:	N/A ft	N/A ft
Total Bridge Width*:	37'-6" Out to Out ft	57'-4 1/2" Out to Out ft

***Total Bridge Width is measured from outside of barrier to outside of barrier, which should include sidewalks, when present.**

Under Clearance:	37.64 ft	36.96 ft
Lateral Clearance:	NA ft	N/A ft
Sufficiency Rating:	77.4	
Structure Length:	507 ft	521.2 ft

Remarks, Footnotes, Supplemental Data

The work includes the complete replacement of the existing bridge with a new bridge on new substructures. The I-80 WB bridge is anticipated to be replaced in one phase with traffic diverted onto the new I-80 EB bridge. The I-80 WB bridge curb to curb is proposed as 54' per request from the District to accommodate future deck replacement and maintenance activities.

Structure

BMS Number: 40-0080-2504-1425

BRKEY: 23645

Description: (provide name of waterway or facility structure crosses)

I-80 EB over Nescopeck Creek

	Existing	Proposed
Structure Type:	Steel Stringer	Prestressed Concrete PA Bulb Tee Beams
Weight Restrictions:	None ton	None ton
Height Restrictions:	None ft	None ft
Curb to Curb Width:	32'-8" ft	70 ft
Lane Width:	Two 12' lanes ft	Two 12' lanes ft
Shoulder Width:	4'-4" LT & RT ft	8' LT, 12' RT ft
Sidewalk Width:	N/A ft	N/A ft
Total Bridge Width*:	37'-6" Out to Out ft	73'-4-1/2" Out to Out ft

***Total Bridge Width is measured from outside of barrier to outside of barrier, which should include sidewalks, when present.**

Under Clearance:	37.94 ft	36.56 ft
Lateral Clearance:	NA ft	N/A ft
Sufficiency Rating:	77.4	
Structure Length:	507 ft	521.2 ft

Remarks, Footnotes, Supplemental Data

The work includes the complete replacement of the existing bridge with a new bridge on new substructures. The I-80 EB bridge is anticipated to be replaced via half-width construction. The I-80 EB bridge curb to curb is proposed at 70' to accommodate half width construction on the I-80 EB bridge while maintaining 2 lanes of traffic in the EB direction and keeping the baseline of I-80 EB in the same location.

Appendix B
Preliminary Design Plans

D-9012 CADD (02-90) REVISION (10-04) PLOTTED: 8:58:00 AM 8/28/2023

PLAN PREPARATION
PENNDOT PROJECT MANAGER: KELLEY SARTORI, P.E.
(CONSULTANT PROJECT MANAGER - PENNONI ASSOCIATES INC.)

DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
4-0	LUZERNE	**	----	0080	352	27

** NESCOPECK, BLACK CREEK AND SUGARLOAF TOWNSHIPS MPMS/ECMS NO. 111769
SR 0080 PREVIOUSLY KNOWN AS LR 1009
SR 3016 PREVIOUSLY KNOWN AS LR 40015

COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF TRANSPORTATION

CONCEPTUAL DRAWINGS

FOR DESIGN FIELD VIEW

OF

STATE ROUTE 0080 SECTION 352
IN LUZERNE COUNTY

FROM STA 549+50.00 TO STA 610+00.00 EASTBOUND LENGTH 6195.00 FT 1.173 MI
 FROM SEG 2500 OFFSET 1325 TO SEG 2510 OFFSET 1891
 FROM STA 850+25.00 TO STA 914+50.00 WESTBOUND
 FROM SEG 2501 OFFSET 1313 TO SEG 2511 OFFSET 2309

ALSO

STATE ROUTE 3016

FROM STA 49+74.00 TO STA 61+49.00
 FROM SEG 0060 OFFSET 2616 TO SEG 0070 OFFSET 0972

AND

LIMITS OF SIGNING

STATE ROUTE 0093

FROM SEG 0250 OFFSET 0675 TO SEG 0250 OFFSET 0802
 FROM SEG 0240 OFFSET 0042 TO SEG 0240 OFFSET 1246 NORTHBOUND
 FROM SEG 0241 OFFSET 1198 TO SEG 0241 OFFSET 1360 SOUTHBOUND

IN LUZERNE COUNTY

STATE ROUTE 0080

FROM SEG 2472 OFFSET 0000 TO SEG 2490 OFFSET 2393 EASTBOUND
 FROM SEG 2511 OFFSET 2659 TO SEG 2581 OFFSET 1872 WESTBOUND

IN LUZERNE COUNTY

ALSO INCLUDED:

CONCEPTUAL TRAFFIC CONTROL PLAN	47	SHEETS
CONCEPTUAL SIGNING PLAN	11	SHEETS
CONCEPTUAL PAVEMENT MARKING PLAN	12	SHEETS
CONCEPTUAL EROSION AND SEDIMENT POLLUTION CONTROL PLAN	53	SHEETS
CONCEPTUAL POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	17	SHEETS
CONCEPTUAL STRUCTURE PLANS		
S-40358D	4	SHEETS
S-40356D	3	SHEETS
S-40357D	3	SHEETS
CONCEPTUAL CROSS SECTIONS	71	SHEETS
CONCEPTUAL TEMPORARY ROAD CROSS SECTIONS	101	SHEETS
EXISTING STRUCTURE PLANS		
S-5359	9	SHEETS
S-13765	3	SHEETS
OPEN ROAD CASHLESS TOLLING:		
SITE DEVELOPMENT PLAN	10	SHEETS
SIGNING AND PAVEMENT MARKING PLAN	36	SHEETS
UTILITY BUILDING PLAN	15	SHEETS
STRUCTURE PLANS	14	SHEETS
S-XXXX		

SR 0080 ESTABLISHED AS A LIMITED ACCESS HIGHWAY FROM STATION 115+45.00 TO STATION 366+16.00 EASTBOUND & STATION 116+76.00 TO STATION 366+16.00 WESTBOUND BY PLAN FOR LEGISLATIVE ROUTE 1009 SECTION 89-R/W APPROVED BY THE GOVERNOR ON SEPTEMBER 25, 1962.

SCALE

HORIZONTAL 0 25 50 FEET

VERTICAL 0 5 10 FEET

DESIGN DESIGNATION

SR 0080 EASTBOUND TRAFFIC DATA

CURRENT A. D. T. - 16944 (2023)
 DESIGN YEAR A. D. T. - 27281 (2043)
 D. H. V. - 2183
 D - 100%
 T - 35%
 HIGHWAY CLASSIFICATION - RURAL INTERSTATE
 DESIGN SPEED - 70 M. P. H.
 PAVEMENT WIDTH - 24'-0" (2-12' LANES)
 SHOULDER WIDTH - 8'-0" LT & 12'-0" RT
 MEDIAN WIDTH - 36'-0"

SR 0080 WESTBOUND TRAFFIC DATA

CURRENT A. D. T. - 16755 (2023)
 DESIGN YEAR A. D. T. - 26976 (2043)
 D. H. V. - 2159
 D - 100%
 T - 37%
 HIGHWAY CLASSIFICATION - RURAL INTERSTATE
 DESIGN SPEED - 70 M. P. H.
 PAVEMENT WIDTH - 24'-0" (2-12' LANES)
 SHOULDER WIDTH - 8'-0" LT & 12'-0" RT
 MEDIAN WIDTH - 36'-0"

SR 3016 TRAFFIC DATA

CURRENT A. D. T. - 133 (2023)
 DESIGN YEAR A. D. T. - 146 (2043)
 D. H. V. - 16
 D - 60%
 T - 3%
 HIGHWAY CLASSIFICATION - RURAL LOCAL ROAD
 DESIGN SPEED - 35 MPH
 PAVEMENT WIDTH - 20'-0"
 SHOULDER WIDTH - 2'-0" LT & RT
 MEDIAN WIDTH - N/A

PREPARED BY
LARSON DESIGN GROUP
1000 COMMERCE PARK DRIVE
WILLIAMSPORT, PA 17701

**PRELIMINARY
DRAWING
OR
INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

REG PROF ENGINEER

DATE:

RECOMMENDED	DATE:	_____
	DISTRICT PLANS ENGINEER	_____
RECOMMENDED	DATE:	_____
	DISTRICT EXECUTIVE	_____
RECOMMENDED	DATE:	_____
	ACTING DEPUTY SECRETARY	_____
APPROVED	DATE:	_____
	SECRETARY OF TRANSPORTATION (ON BEHALF OF THE GOVERNOR AS WELL AS THE SECRETARY)	_____

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	2 OF 27
NESCOPECK AND BLACK CREEK TOWNSHIPS				
REV NO	REVISIONS	DATE	BY	APPD

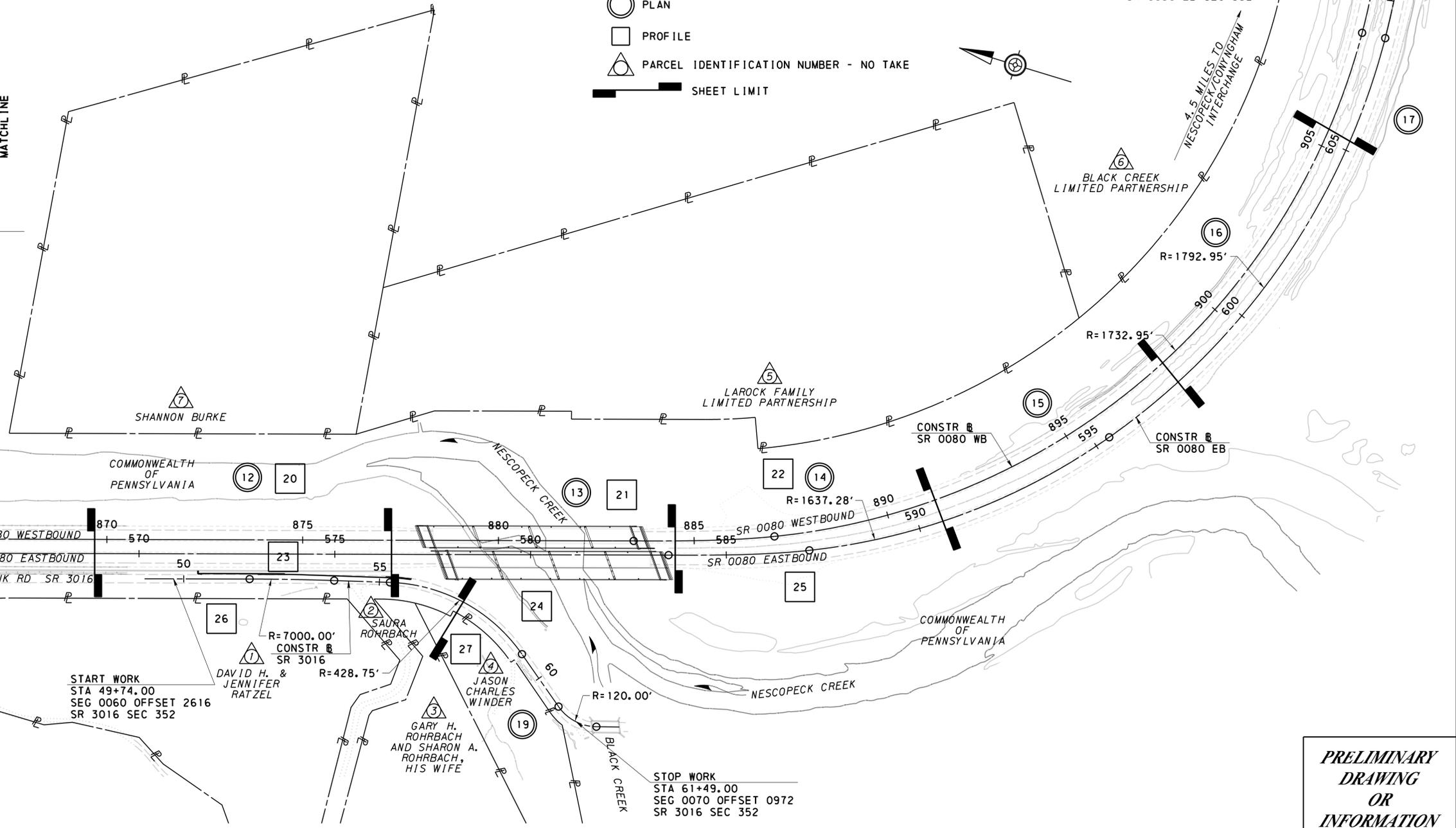
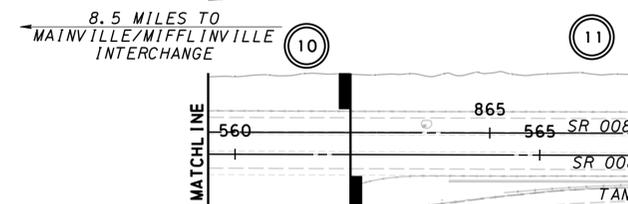
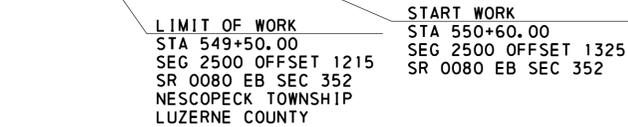
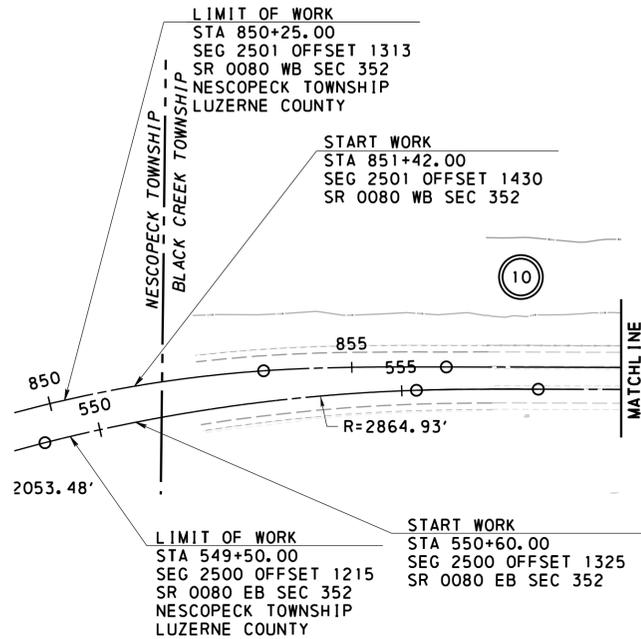
SHEET INDEX BLOCK	
DESCRIPTION	SHEET
TITLE SHEET	1
INDEX MAP	2
RECORD OF EXISTING ROAD TYPES	3
LOCATION MAP & GENERAL NOTES	4
TYPICAL SECTIONS	5 TO 9
PLAN SHEETS	10 TO 19
PROFILE SHEETS	20 TO 27

TABULATION OF SEGMENT EQUALITIES

SR 0080 EB
 SEGMENT 2500 OFFSET 0000 = STA 537+35.12
 SEGMENT 2500 OFFSET 2640 = SEGMENT 2504 OFFSET 0000 = STA 563+75.12
 SEGMENT 2504 OFFSET 2734 = SEGMENT 2510 OFFSET 0000 = STA 591+09.12

SR 0080 WB
 SEGMENT 2495 OFFSET 0000 = STA 810+22.40
 SEGMENT 2495 OFFSET 2688 = SEGMENT 2501 OFFSET 0000 = STA 837+11.78
 SEGMENT 2501 OFFSET 2628 = SEGMENT 2505 OFFSET 0000 = STA 863+39.78
 SEGMENT 2505 OFFSET 2801 = SEGMENT 2511 OFFSET 0000 = STA 891+40.78

SR 3016
 SEGMENT 0060 OFFSET 2642 = STA 50+00.00
 SEGMENT 0060 OFFSET 2819 = SEGMENT 0070 OFFSET 0000 = STA 51+77.37



INDEX MAP LEGEND

- PLAN
- PROFILE
- PARCEL IDENTIFICATION NUMBER - NO TAKE
- SHEET LIMIT

LIMIT OF WORK
 STA 914+50.00
 SEG 2511 OFFSET 2309
 SR 0080 WB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY

STOP WORK
 STA 913+37.00
 SEG 2511 OFFSET 2196
 SR 0080 WB SEC 352

LIMIT OF WORK
 STA 610+00.00
 SEG 2510 OFFSET 1891
 SR 0080 EB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY

STOP WORK
 STA 609+00.00
 SEG 2510 OFFSET 1791
 SR 0080 EB SEC 352

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

OPERATOR: FILE NAME: sdesignr1 less
 PLOTTED: D:\9012 CADD (02-90) REVISED (10-04) \$\$\$DATE\$\$\$

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	3 OF 27
NESCOPECK AND BLACK CREEK TOWNSHIPS				
REV NO	REVISIONS	DATE	BY	APPD

RECORD OF EXISTING ROAD TYPES

SR_0080_EB

LIMIT OF WORK
 ADJACENT TO SEG 2500 OFFSET 1215

SEG 2500 OFFSET 1215 TO
 SEG 2500 OFFSET 2640

SEG 2500 OFFSET 2640 TO
 SEG 2504 OFFSET 0596

SEG 2504 OFFSET 0596 TO
 SEG 2504 OFFSET 1425

SEG 2504 OFFSET 1425 TO
 SEG 2504 OFFSET 1932

SEG 2504 OFFSET 1932 TO
 SEG 2504 OFFSET 2646

SEG 2504 OFFSET 2646 TO
 SEG 2510 OFFSET 1891

SR_3016

LIMIT OF WORK
 ADJACENT TO SEG 2510 OFFSET 1891

START WORK
 ADJACENT TO SEG 0060 OFFSET 2616

SEG 0060 OFFSET 2616 TO
 SEG 0070 OFFSET 0972

STOP WORK
 ADJACENT TO SEG 0070 OFFSET 0972

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" RUBBLIZING TYPE 1-12" MAX

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" RUBBLIZING TYPE 1-12" MAX

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" CAS10

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-4" OGS SUBBASE
 1991 24'-8" 2A SUBBASE

EXISTING STRUCTURE

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-4" OGS SUBBASE
 1991 24'-8" 2A SUBBASE

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" CAS10

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" CAS10

SR_0080_WB

LIMIT OF WORK
 ADJACENT TO SEG 2501 OFFSET 1313

SEG 2501 OFFSET 1313 TO
 SEG 2501 OFFSET 2628

SEG 2501 OFFSET 2628 TO
 SEG 2505 OFFSET 0600

SEG 2505 OFFSET 0600 TO
 SEG 2505 OFFSET 1492

SEG 2505 OFFSET 1492 TO
 SEG 2505 OFFSET 1999

SEG 2505 OFFSET 1999 TO
 SEG 2511 OFFSET 0015

SEG 2511 OFFSET 0015 TO
 SEG 2511 OFFSET 2309

LIMIT OF WORK
 ADJACENT TO SEG 2511 OFFSET 2309

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" RUBBLIZING TYPE 1-12" MAX

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" RUBBLIZING TYPE 1-12" MAX

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" CAS10

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-4" OGS SUBBASE
 1991 24'-8" 2A SUBBASE

EXISTING STRUCTURE

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-4" OGS SUBBASE
 1991 24'-8" 2A SUBBASE

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" CAS10

1991 24'-13" PLAIN CEMENT CONCRETE PAVEMENT
 1991 24'-1" LEVEL BITUM WEARING CRSE ID2
 1991 24'-10" CAS10

2017 24'-0.25" SURFACE TREATMENT-SEAL COAT
 2006 24'-1.0" SUPERPAVE, HMA WRG,64-22,9.5MM,L
 2006 24'-2.0" LEVEL BITUM WEARING CRSE ID2
 2000 4'(EACH SIDE)-4.0" BITUM CONCRETE BASE COURSE (WIDENING)
 1991 16'-0.25" SURFACE TREATMENT-SCRATCH-SEAL
 1964 16'-2.50" BITUM SURFACE COURSE, ID2
 1964 16'-8.0" CRUSHED AGGREGATE BASE COURSE

2017 24'-0.25" SURFACE TREATMENT-SEAL COAT
 2006 24'-1.0" SUPERPAVE, HMA WRG,64-22,9.5MM,L
 2006 24'-2.0" LEVEL BITUM WEARING CRSE ID2
 2000 4'(EACH SIDE)-4.0" BITUM CONCRETE BASE COURSE (WIDENING)
 1991 16'-0.25" SURFACE TREATMENT-SCRATCH-SEAL
 1964 16'-2.50" BITUM SURFACE COURSE, ID2
 1964 16'-8.0" CRUSHED AGGREGATE BASE COURSE

2017 24'-0.25" SURFACE TREATMENT-SEAL COAT
 2006 24'-1.0" SUPERPAVE, HMA WRG,64-22,9.5MM,L
 2006 24'-2.0" LEVEL BITUM WEARING CRSE ID2
 2000 4'(EACH SIDE)-4.0" BITUM CONCRETE BASE COURSE (WIDENING)
 1991 16'-0.25" SURFACE TREATMENT-SCRATCH-SEAL
 1964 16'-2.50" BITUM SURFACE COURSE, ID2
 1964 16'-8.0" CRUSHED AGGREGATE BASE COURSE

NOTE: THE DEPTHS OF MATERIAL SHOWN ARE FOR DESIGN PURPOSES ONLY. ANY RISK OF UNANTICIPATED COSTS ASSOCIATED WITH DIFFERENCES BETWEEN THE LISTED DEPTHS AND THE ACTUAL DEPTHS SHALL BE ACCEPTED BY THE CONTRACTOR.

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

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OPERATOR: FILE_NAME: \$des\$ignf\$le\$\$
 PLOTTED: D:\9012 CADD (02-90) REVISED (10-04) \$\$\$DATE\$\$\$

PLOTTED:

D:\9012 CAD\102-900 REVISED (10-04)

OPERATOR: FILE NAME: \$des\$ignf1 less

TABULATION OF OVERALL LENGTH

SR 0080 EB
 STA 549+50.00 TO STA 610+00.00 = 6050.00 FEET = 1.146 MILES
 SR 0080 WB
 STA 850+25.00 TO STA 914+50.00 = 6425.00 FEET = 1.217 MILES

TABULATION OF CONSTRUCTION LENGTH

SR 0080 EB
 STA 550+60.00 TO STA 609+00.00 = 5840.00 FEET = 1.106 MILES
 SR 0080 WB
 STA 851+42.00 TO STA 913+37.00 = 6195.00 FEET = 1.173 MILES
 SR 3016
 STA 49+74.00 TO STA 61+49.00 = 1175.00 FEET = 0.223 MILES

LIST OF STATIONING EQUALITIES

- NONE -

SUMMARY OF PROJECT COORDINATES

BASED ON PA STATE PLANE COORDINATE SYSTEM (NORTH ZONE)
 AVERAGE COMBINED SCALE FACTOR: 1.000

ROUTE	STATION	POINT	COORDINATES		BEARING
			NORTH	EAST	
R/W @ SR 0080	230+96.23	PC/BEGIN STA	314587.2426	2402705.2896	N82°50'07"E
	248+55.41	PI	314806.6536	2404450.7370	
	260+18.12	PT	313122.6662	2404959.5727	S16°48'46"E
	290+42.18	PC	310227.8696	2405834.2679	
	305+57.96	PI	308776.8823	2406272.7000	N81°48'34"E
	315+46.11	PT	308992.8293	2407773.0179	
	353+17.48	END STA	309530.1215	2411505.9188	
69+00.00	POT/BEGIN STA	312247.2104	2405117.0410	S23°50'46"E	
70+47.93	PC	312111.9083	2405176.8460		
71+65.30	PI	312004.5599	2405224.2953	S16°48'46"E	
72+82.37	PT	311892.2094	2405258.2432		
82+13.44	PC	311000.9379	2405527.5509	S38°31'13"W	
84+44.50	PI	310779.7505	2405594.3852		
86+39.08	PT	310598.9689	2405450.4799	S15°57'53"E	
88+01.57	PC	310471.8390	2405349.2822		
88+60.57	PI	310425.6785	2405312.5376		
89+10.54	PT/END STA	310368.9545	2405328.7651		

SUMMARY OF PROJECT COORDINATES

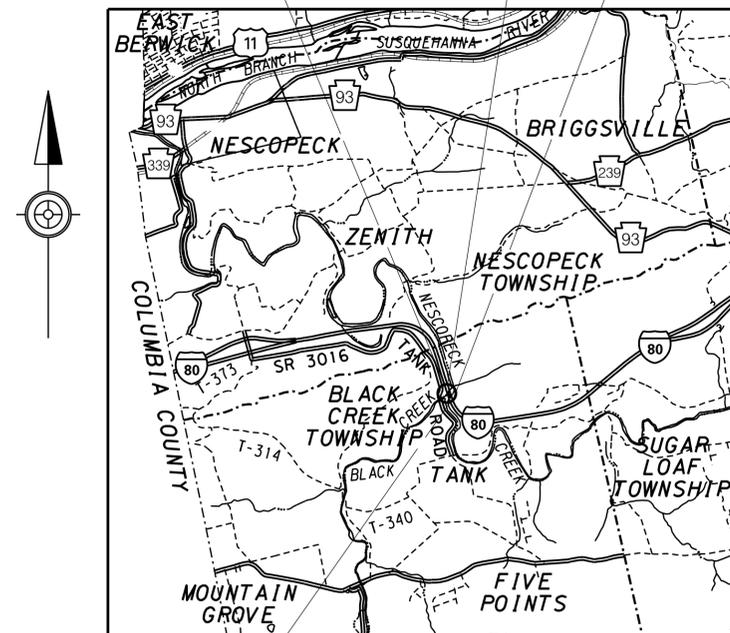
BASED ON PA STATE PLANE COORDINATE SYSTEM (NORTH ZONE)
 AVERAGE COMBINED SCALE FACTOR: 1.000

ROUTE	STATION	POINT	COORDINATES		BEARING
			NORTH	EAST	
CONSTR @ SR 0080 EB	400+00.00	POT/BEGIN STA	312993.0887	2390264.0889	N82°50'07"E
	523+91.34	TS	314538.5764	2402558.6750	
	525+91.40	SPI	314563.5280	2402757.1689	
	526+91.34	SC	314568.7285	2402857.0844	
	543+01.08	PI	314776.7649	2404453.5003	
	549+07.33	PCC	313580.2340	2404721.2319	S16°48'46"E
	555+24.20	CS	313022.1523	2404981.2455	
	555+90.88	SPI	312959.0398	2405002.7463	
	557+24.20	ST	312831.3976	2405041.3148	
	583+52.47	TS	310315.4720	2405801.5300	
	585+92.62	SPI	310085.5852	2405870.9929	N81°48'34"E
	587+12.47	SC	309975.0891	2405918.1503	
	595+39.66	PCC	309326.5380	2406417.3361	
	599+91.01	PI	308746.9718	2406275.4699	
	608+03.25	CS	308949.2066	2407596.0190	
609+23.37	SPI	308954.3170	2407716.0255	N82°50'07"E	
611+63.25	ST	308988.5269	2407953.7030		
712+35.57	POT/END STA	310423.4899	2417923.2787		
700+00.00	POT/BEGIN STA	313052.6202	2390256.6055		
823+91.41	TS	314598.1165	2402551.2604		
825+91.47	SPI	314623.0678	2402749.7512	S16°48'46"E	
826+91.41	SC	314628.4753	2402849.6529		
843+27.40	PI	314839.5787	2404472.1279		
853+55.37	CS	313271.3276	2404938.5810		
854+55.42	SPI	313177.8495	2404974.2380		
856+55.37	ST	312986.3479	2405032.1024	N81°48'34"E	
883+45.35	TS	310411.3546	2405810.1655		
885+85.48	SPI	310181.4834	2405879.6237		
887+05.35	SC	310070.7169	2405926.1039		
900+17.95	PI	308810.2510	2406293.9569		
908+06.67	CS	309009.6348	2407591.7767	S16°50'09"E	
909+26.79	SPI	309014.3284	2407711.8084		
911+66.67	ST	309048.5396	2407949.4947		
1012+34.60	POT/END STA	310482.8779	2417914.7307		
49+00.00	POT/BEGIN STA	311577.9843	2405353.2069		
51+68.32	PC	311321.1663	2405430.9200	S15°04'00"E	
52+76.40	PI	311217.7216	2405462.2223		
53+84.46	PT	311113.3600	2405490.3162	S38°04'37"W	
55+26.92	PC	310975.7941	2405527.3485		
57+41.36	PI	310768.7271	2405583.0904	S16°07'53"E	
59+24.60	PT	310599.9248	2405450.8419		
60+87.72	PC	310471.5190	2405350.2422	S16°07'53"E	
61+49.14	PI	310423.1718	2405312.3645		
62+01.25	PT	310364.1719	2405329.4288		
62+59.97	POT/END STA	310307.7682	2405345.7423		

LIMIT OF WORK
 STA 549+50.00
 SEG 2500 OFFSET 1215
 SR 0080 EB SEC 352
 NESCOPECK TOWNSHIP
 LUZERNE COUNTY

LIMIT OF WORK
 STA 850+25.00
 SEG 2501 OFFSET 1313
 SR 0080 WB SEC 352
 NESCOPECK TOWNSHIP
 LUZERNE COUNTY

LIMIT OF WORK
 STA 914+50.00
 SEG 2511 OFFSET 2309
 SR 0080 WB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY



LIMIT OF WORK
 STA 610+00.00
 SEG 2510 OFFSET 1891
 SR 0080 EB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY

MAP LEGEND

- MUNICIPAL BOUNDARY
- COUNTY LINE
- == STATE HIGHWAY
- LOCAL ROAD
- STREAM
- PROJECT

PUBLIC UTILITIES

PENNSYLVANIA ONE CALL SYSTEM 1-800-242-1776
 SERIAL NO. 20192031904, 20192031982,
 20192031864, 20193042730 BLACK CREEK TOWNSHIP

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 REGIONAL TRANSPORTATION MANAGEMENT CENTER
 55 KEYSTONE INDUSTRIAL PARK
 DUNMORE, PA 18512
 (570) 963-4056
 ATTN: DAN FOX
 DAFOX@PA.GOV

PPL ELECTRIC UTILITIES CORPORATION
 503 NEW MARKET STREET
 WILKES-BARRE, PA 18702
 (570) 847-8167
 ATTN: MARK SANTAYANA
 MCSANTAYANA@PPLWEB.COM

FRONTIER COMMUNICATIONS OF PA INCORPORATED
 93 OLD BERWICK ROAD
 DRUMS, PA 18222
 (570) 788-1200
 ATTN: ROBERT JANUSZKO
 ROBERT.JANUSZKO@FTR.COM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	4 OF 27

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON SR 0080 FROM STA 549+50.00 TO STA 610+00.00 EASTBOUND AND STA 850+25.00 TO STA 914+50.00 WESTBOUND VARIES IN WIDTH BASED ON PLAN FOR LR 1009, SECTION NO 89-R/W SIGNED BY THE GOVERNOR ON FEBRUARY 7, 1963 AND RECORDED IN THE LUZERNE COUNTY OFFICE FOR RECORDING OF DEEDS ON MARCH 17, 1966 IN MAP BOOK 20, PAGE 2A.

THE LEGAL RIGHT-OF-WAY ON SR 3016 FROM STA 49+74.00 TO STA 61+49.00 VARIES IN WIDTH BASED ON PLAN FOR LR 1009, SECTION NO 89-R/W SIGNED BY THE GOVERNOR ON FEBRUARY 7, 1963 AND RECORDED IN THE LUZERNE COUNTY OFFICE FOR RECORDING OF DEEDS ON MARCH 17, 1966 IN MAP BOOK 20, PAGE 2A.

DETAILS, OTHER THAN THOSE INDICATED, ARE ON THE FOLLOWING STANDARD DRAWINGS:

RC-10M JUNE 1, 2010	RC-73M FEB 8, 2019
RC-11M JUNE 1, 2010	RC-75M JUNE 1, 2010
RC-12M FEB 8, 2019	RC-77M DEC 17, 2019
RC-13M JUNE 1, 2010	RC-92M JUNE 1, 2010
RC-20M DEC 17, 2019	BC-701M FEB 19, 2021
RC-22M FEB 8, 2019	BC-719M JANUARY 31, 2019
RC-23M FEB 8, 2019	BC-732M JANUARY 31, 2019
RC-25M FEB 8, 2019	BC-734M FEB 19, 2021
RC-26M DEC 17, 2019	BC-735M SEPTEMBER 30, 2016
RC-27M JUNE 1, 2010	BC-736M JANUARY 31, 2019
RC-30M DEC 17, 2019	BC-751M JANUARY 31, 2019
RC-31M JUNE 1, 2010	BC-752M FEB 19, 2021
RC-32M JUNE 1, 2010	BC-755M JANUARY 31, 2019
RC-33M JUNE 1, 2010	BC-757M SEPTEMBER 30, 2016
RC-35M JUNE 1, 2010	BC-767M FEB 19, 2021
RC-39M FEB 19, 2021	BC-770M JANUARY 31, 2019
RC-40M FEB 8, 2019	BC-772M SEPTEMBER 30, 2016
RC-45M FEB 19, 2021	BC-775M SEPTEMBER 30, 2016
RC-46M FEB 19, 2021	BC-788M JANUARY 31, 2019
RC-50M FEB 19, 2021	TC-8600 JUNE 13, 2013
RC-51M FEB 19, 2021	TC-8602 JUNE 13, 2013
RC-53M DEC 17, 2019	TC-8604 AUGUST 17, 2021
RC-54M DEC 17, 2019	TC-8700C JUNE 13, 2013
RC-61M JUNE 1, 2010	TC-8702B JUNE 13, 2013
RC-60M JUNE 1, 2010	TC-8702C JUNE 13, 2013
RC-64M FEB 19, 2021	TC-8702D JUNE 13, 2013
RC-70M FEB 8, 2019	TC-8710 JUNE 13, 2013
RC-72M FEB 8, 2019	

THREE TO TEN WORKING DAYS PRIOR TO EXCAVATION BASED ON THE COMPLEXITY OF THE PROJECT, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC., PHONE 1-800-242-1776, SERIAL NO. ----- FOR BLACK CREEK TOWNSHIP. ADDITIONAL INFORMATION IS AVAILABLE AT <https://www.pa1call.org/PA811/Public/>.

THE CONTRACTOR IS REQUIRED TO NOTIFY THE DEPARTMENT AND SUBMIT AN ALLEGED VIOLATION REPORT (AVR) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, WWW.PA1CALL.ORG, WITHIN TEN (10) BUSINESS DAYS AFTER A UTILITY LINE IS STRUCK, DAMAGED, OR PREVIOUS DAMAGE IS DISCOVERED AS REQUIRED BY PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION LAW ACT 50 (P.L. 852, NO. 287 AMENDED OCT. 30, 2017).

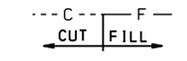
HORIZONTAL CONTROL IS TIED TO PA STATE PLANE COORDINATE SYSTEM (NORTH ZONE), NORTH AMERICAN DATUM (NAD) 1983 (2011) ESTABLISHED BY GPS (OBSERVATION). AVERAGE COMBINED SCALE FACTOR: 1.000.

VERTICAL CONTROL IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) (GEOID 12B).

ALL CURVE DATA IS BASED ON THE ARC DEFINITION UNLESS OTHERWISE INDICATED.

BEARINGS ARE BASED ON GRID NORTH.
 SR 0080 PREVIOUSLY KNOWN AS LR 1009.
 SR 3016 PREVIOUSLY KNOWN AS LR 40015.

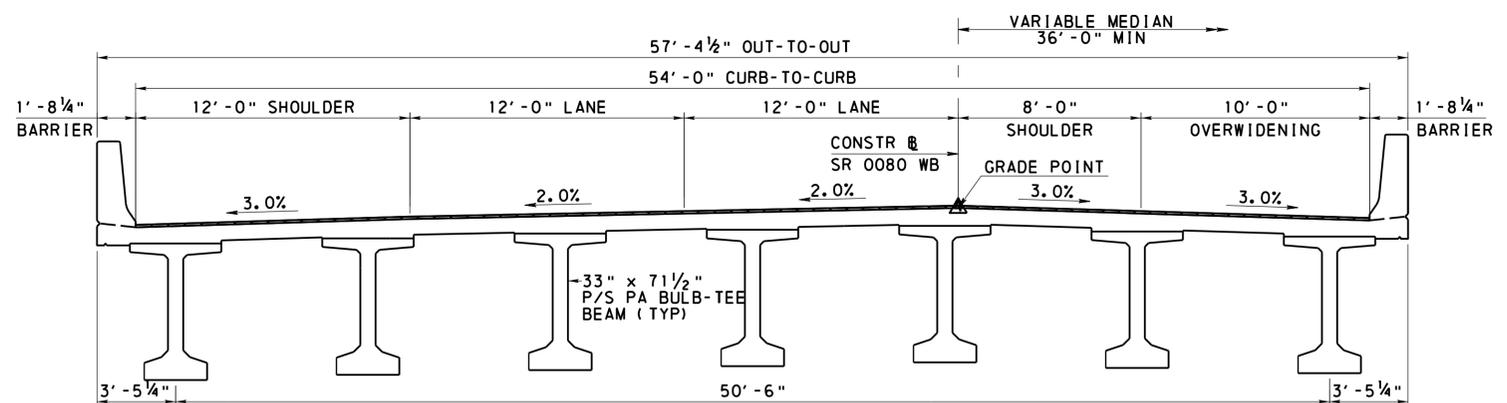
THE FOLLOWING SYMBOLS ARE USED TO DEPICT THE SLOPE LIMITS:



**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

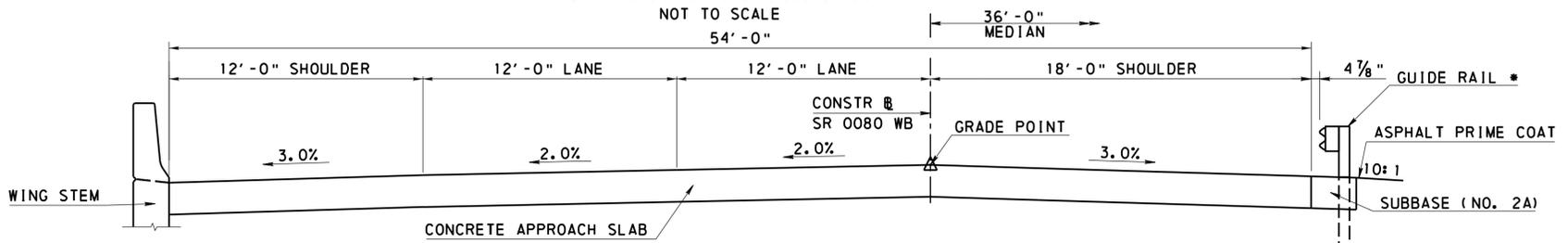
This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	5 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



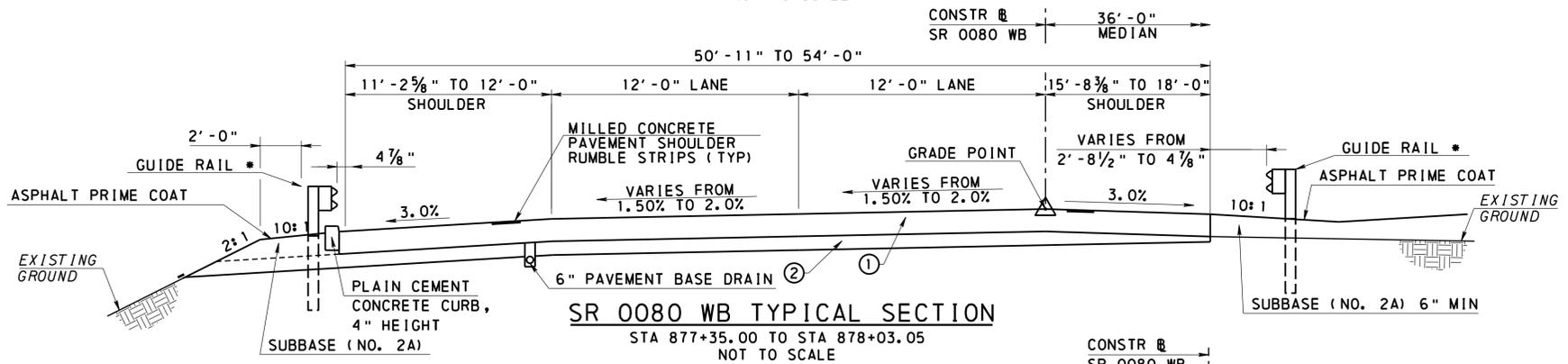
SR 0080 WB BRIDGE TYPICAL SECTION

STA 878+30.40 TO STA 883+51.59
NOT TO SCALE



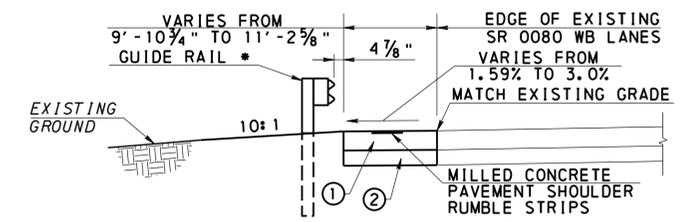
SR 0080 WB APPROACH SLAB TYPICAL SECTION

STA 878+03.05 TO STA 878+30.40
NOT TO SCALE



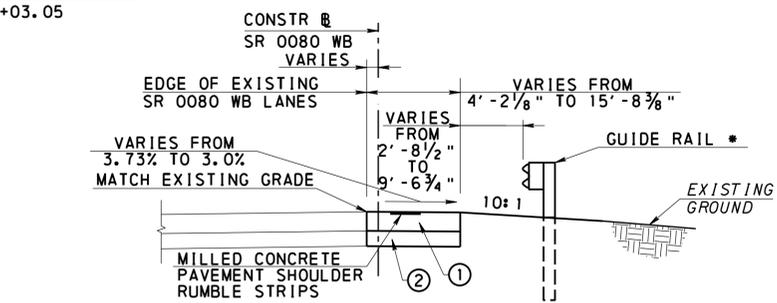
SR 0080 WB TYPICAL SECTION

STA 877+35.00 TO STA 878+03.05
NOT TO SCALE



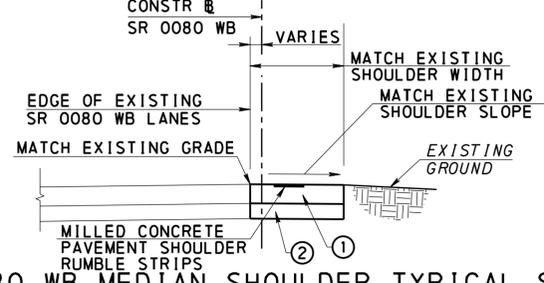
SR 0080 WB OUTSIDE SHOULDER TYPICAL SECTION

STA 877+03.00 TO STA 877+35.00
NOT TO SCALE



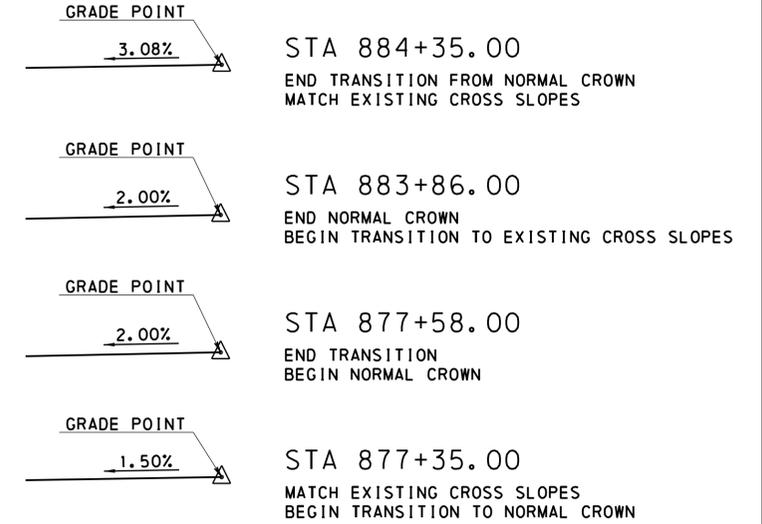
SR 0080 WB MEDIAN SHOULDER TYPICAL SECTION

STA 874+65.00 TO STA 877+35.00
NOT TO SCALE



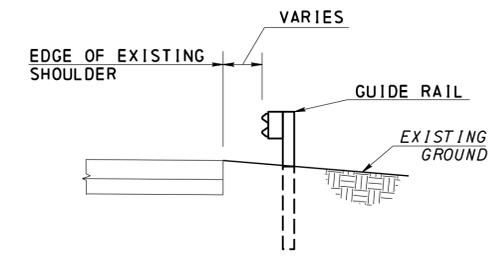
SR 0080 WB MEDIAN SHOULDER TYPICAL SECTION

STA 862+95.00 TO STA 871+00.00
NOT TO SCALE



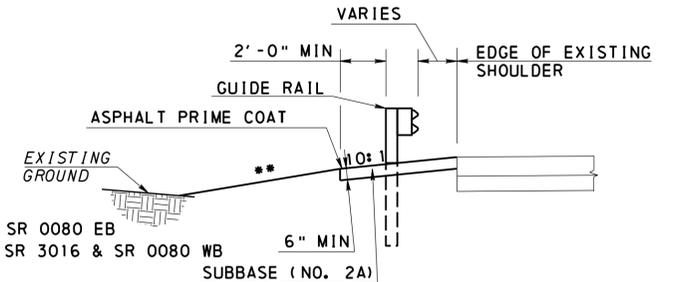
SR 0080 WB SUPERELEVATION TRANSITION SKETCH

NOT TO SCALE
NOTE: ALL ROTATION OCCURS ABOUT THE ROADWAY BASELINE



TYPICAL GUIDE RAIL PLACEMENT SECTION

STA 857+16.00 TO STA 877+03.00 LT (SR 0080 WB)
STA 885+45.45 TO STA 886+69.00 LT (SR 0080 WB)
STA 887+10.00 TO STA 907+00.00 RT (SR 0080 WB)
STA 912+82.00 TO STA 913+37.00 RT (SR 0080 WB)
STA 561+80.00 TO STA 565+74.58 RT (SR 0080 EB)
NOT TO SCALE



TYPICAL GUIDE RAIL PLACEMENT SECTION

STA 592+83.00 TO STA 609+00.00 LT (SR 0080 EB)
STA 49+74.00 TO STA 50+20.00 LT (SR 3016)
STA 57+67.00 TO STA 61+49.00 LT (SR 3016)
NOT TO SCALE

LEGEND

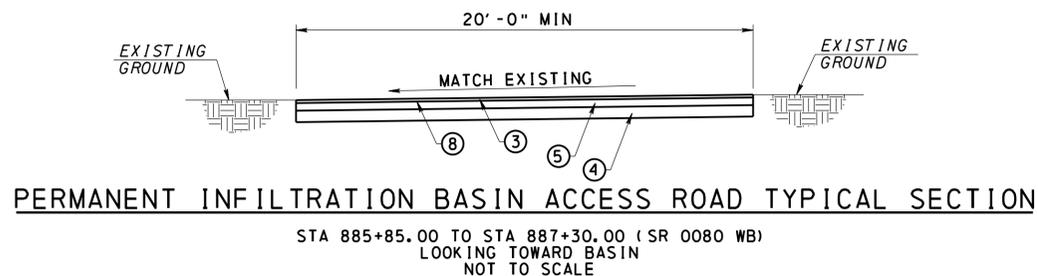
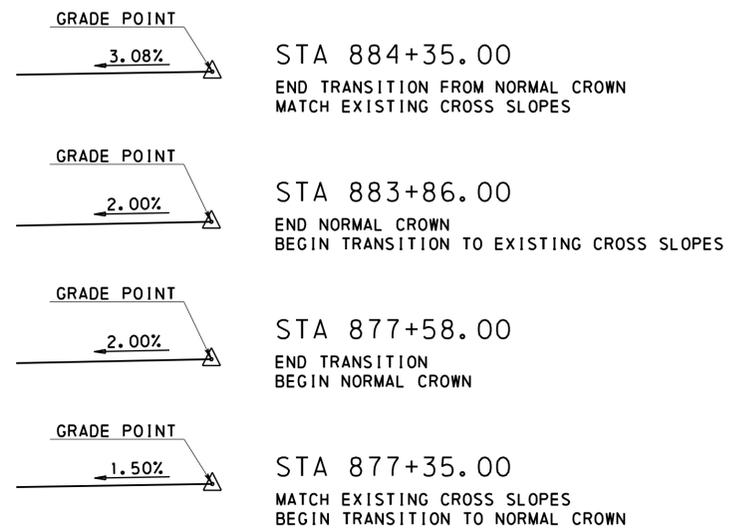
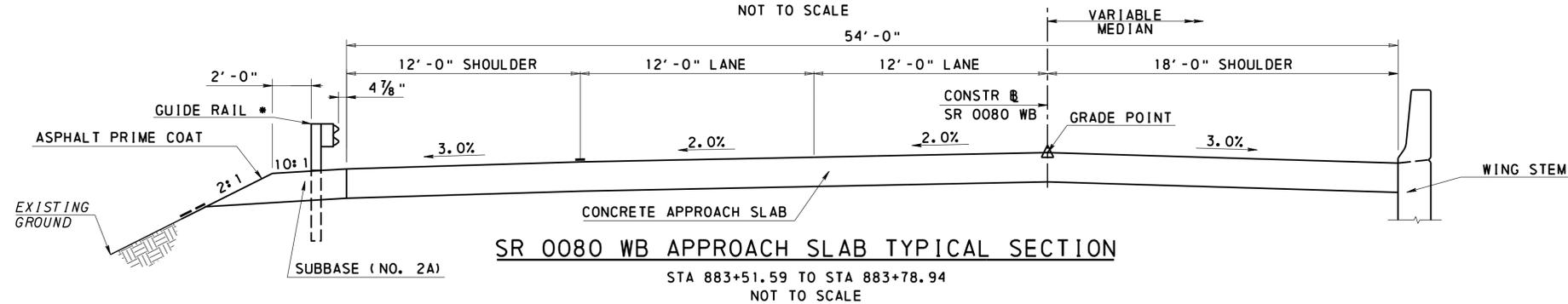
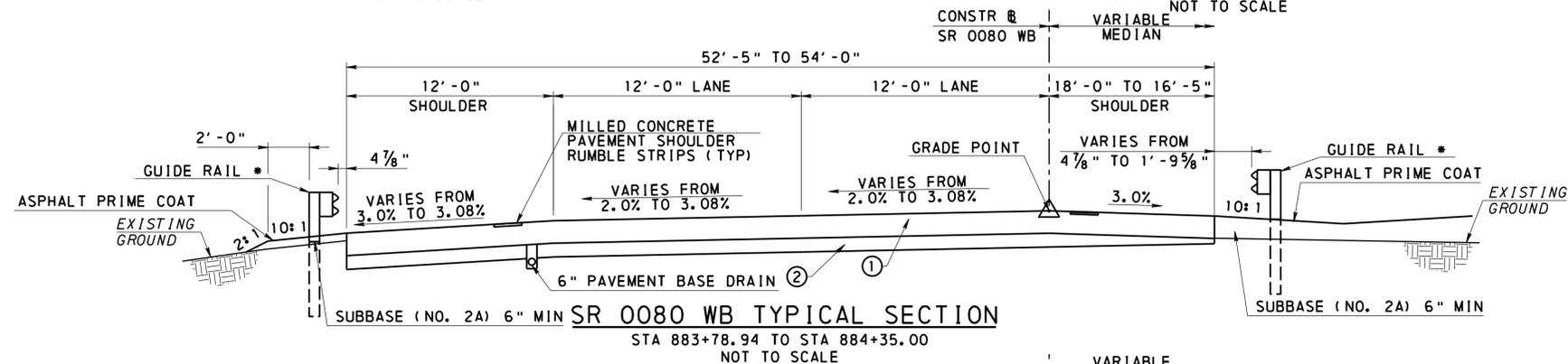
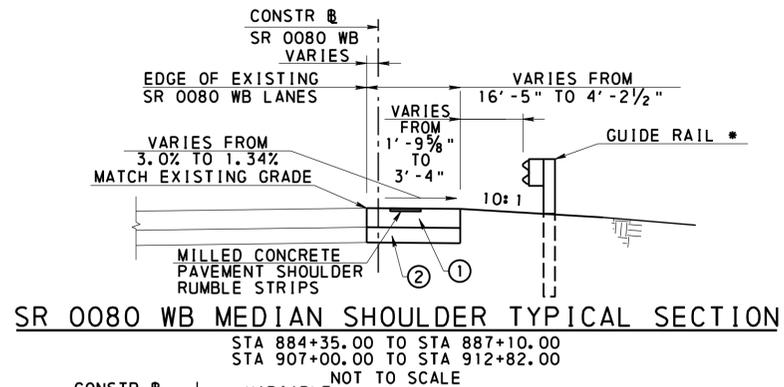
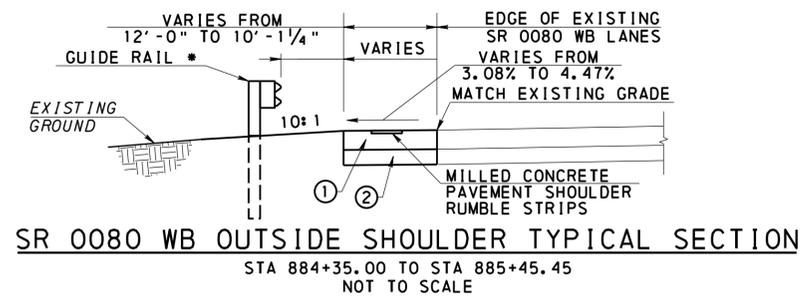
- - LIMITS OF SEEDING AND SOIL SUPPLEMENTS
- ① - PLAIN CEMENT CONCRETE PAVEMENT, 13" DEPTH
- ② - SUBBASE 12" DEPTH (NO. 2A)
- * - SEE PLAN FOR LIMITS OF GUIDE RAIL

**PRELIMINARY
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OR
INFORMATION**

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OPERATOR: FILE NAME: \$\$\$designfl1e\$\$
 PLOTTED: \$\$\$DATE\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	6 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



LEGEND

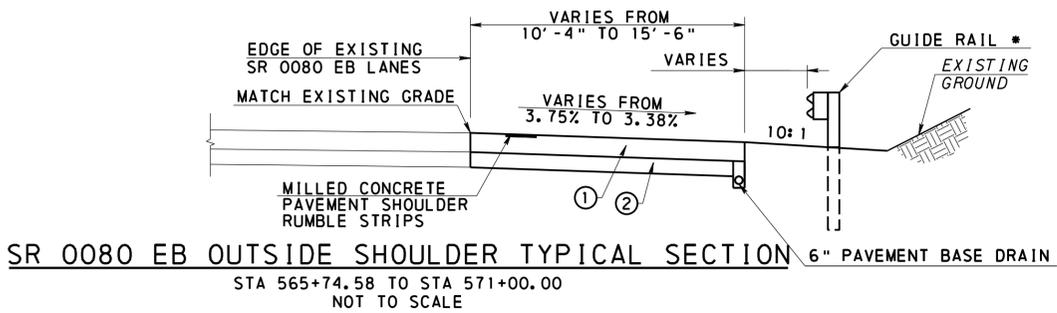
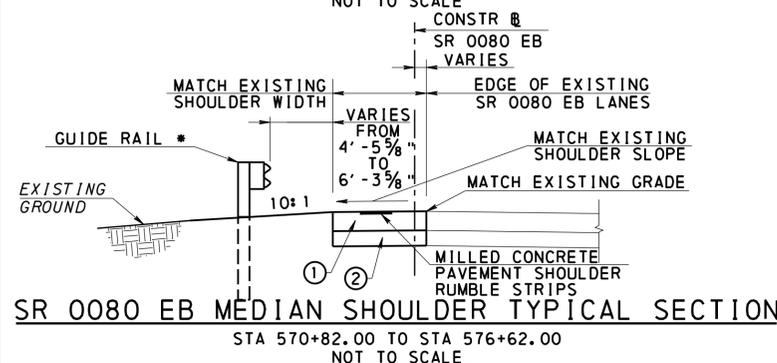
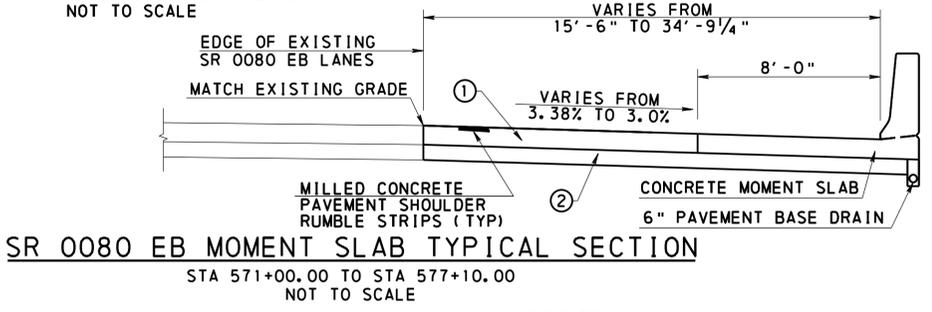
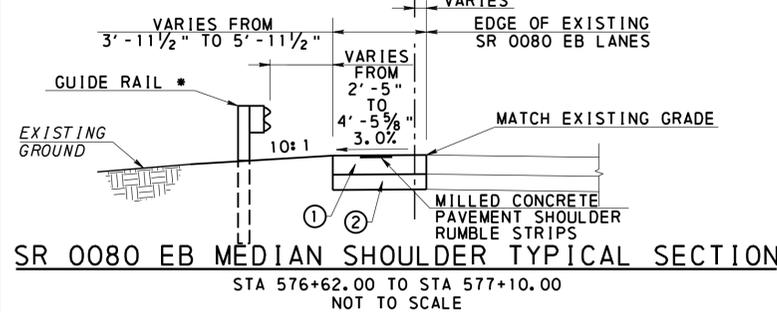
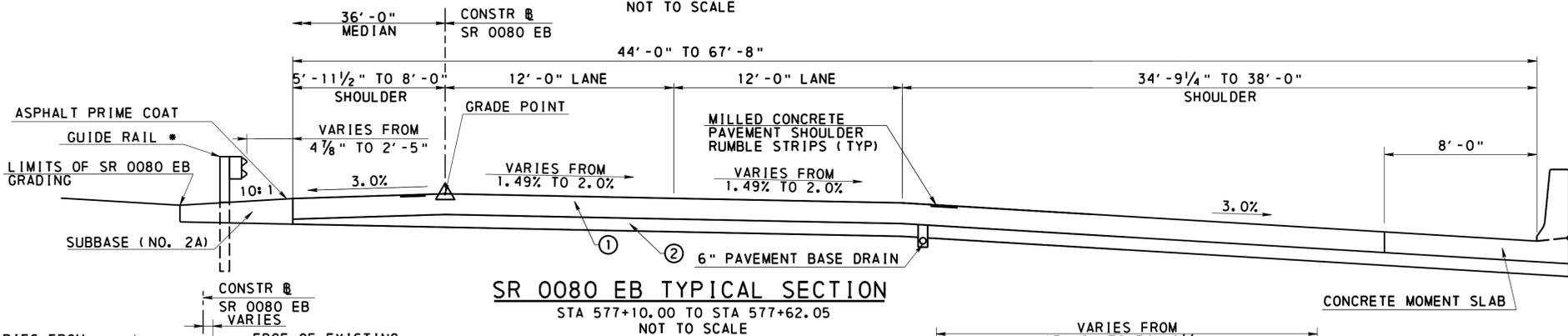
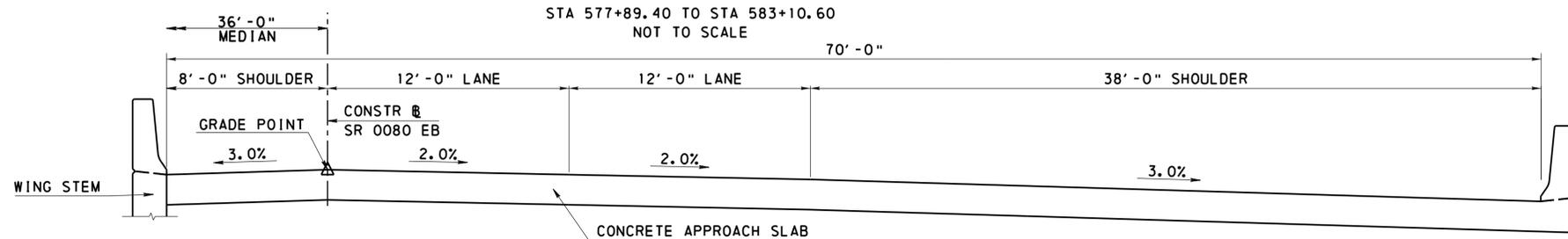
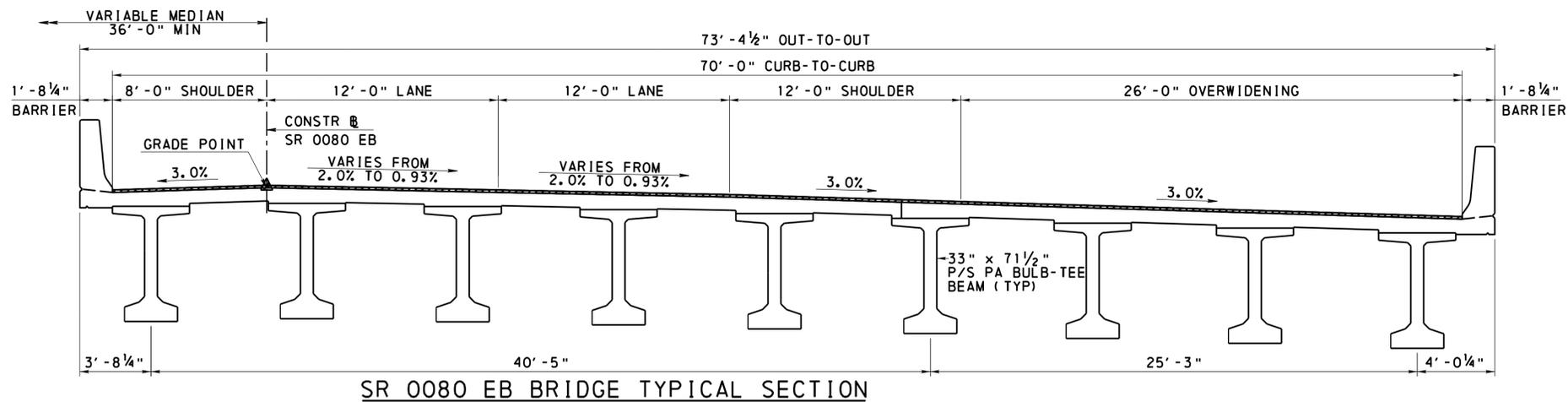
- LIMITS OF SEEDING AND SOIL SUPPLEMENTS
- ① - PLAIN CEMENT CONCRETE PAVEMENT, 13" DEPTH
- ② - SUBBASE 12" DEPTH (NO. 2A)
- * - SEE PLAN FOR LIMITS OF GUIDE RAIL
- ③ - SUPERPAVE ASPHALT MIXTURE DESIGN, WMA WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H
- ④ - SUBBASE 6" DEPTH (NO. 2A)
- ⑤ - SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH
- ⑧ - ASPHALT TACK COAT

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OPERATOR: FILE NAME: \$\$\$designfil le\$\$\$
 PLOTTED: \$\$\$DATE\$\$\$
 D:\9012 CADD (02-90) REVISED (10-04)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	7 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



- GRADE POINT
0.52%
STA 584+00.00
END TRANSITION FROM NORMAL CROWN
MATCH EXISTING CROSS SLOPES
- GRADE POINT
0.07%
STA 583+49.34
END TRANSITION TO REVERSE CROWN
BEGIN TRANSITION TO EXISTING CROSS SLOPES
- GRADE POINT
2.00%
STA 582+62.47
END NORMAL CROWN
BEGIN TRANSITION TO REVERSE CROWN
- GRADE POINT
2.00%
STA 577+33.00
END TRANSITION
BEGIN NORMAL CROWN
- GRADE POINT
1.49%
STA 577+10.00
MATCH EXISTING CROSS SLOPES
BEGIN TRANSITION TO NORMAL CROWN

SR 0080 EB SUPERELEVATION TRANSITION SKETCH
NOT TO SCALE

NOTE: ALL ROTATION OCCURS ABOUT THE ROADWAY BASELINE

LEGEND

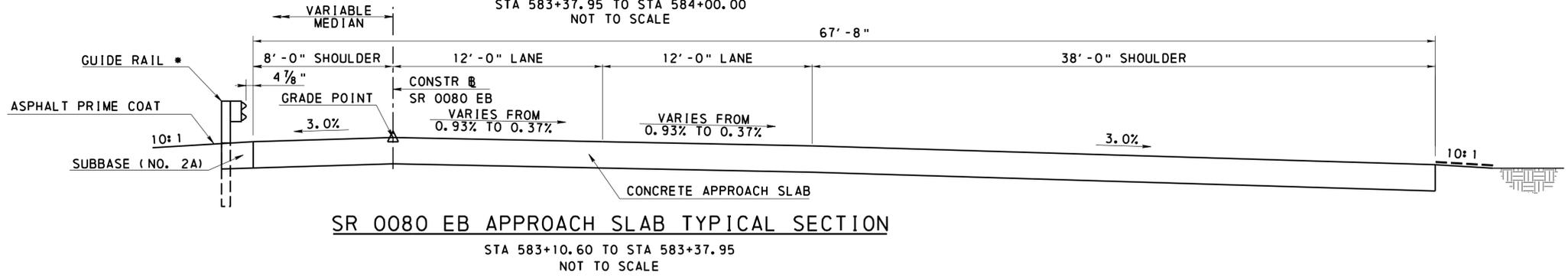
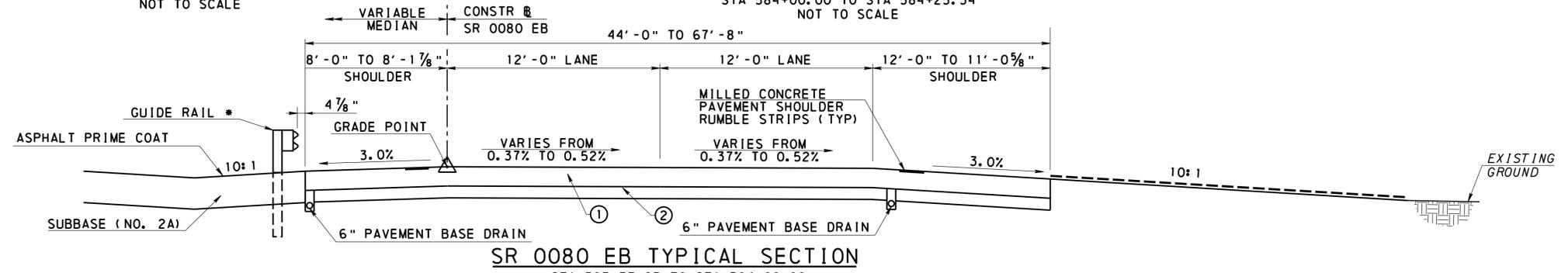
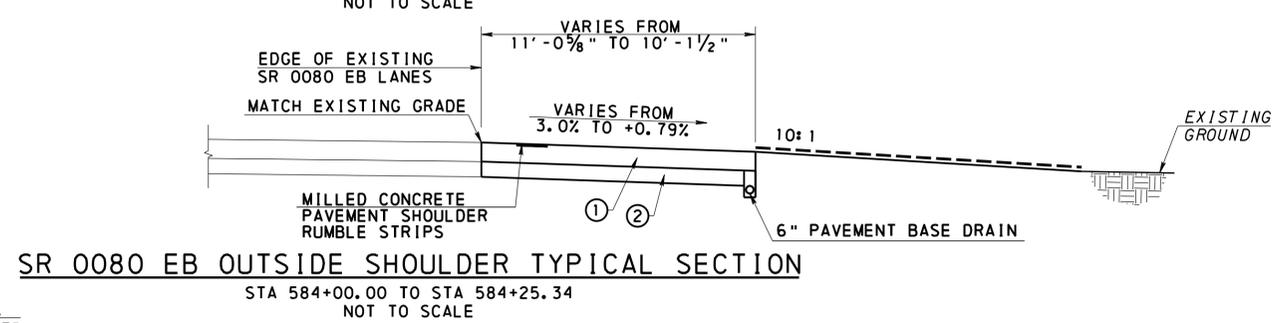
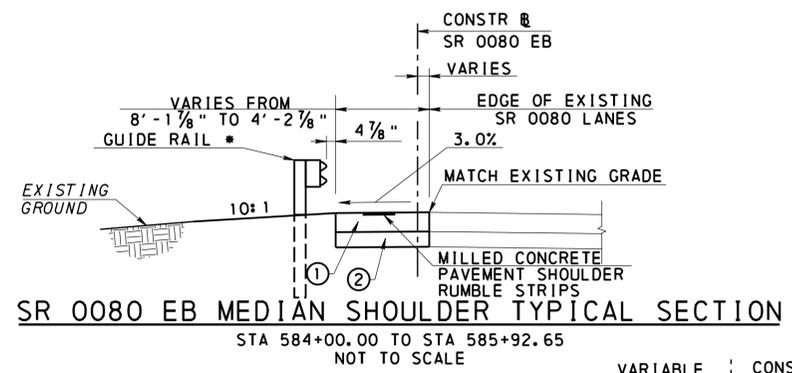
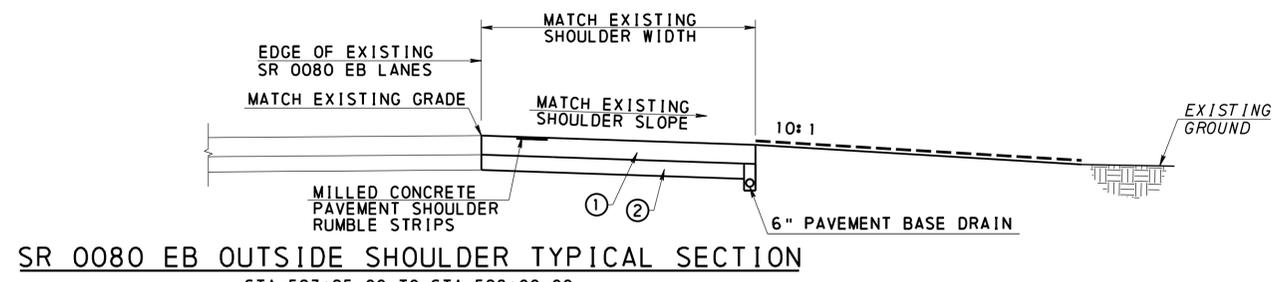
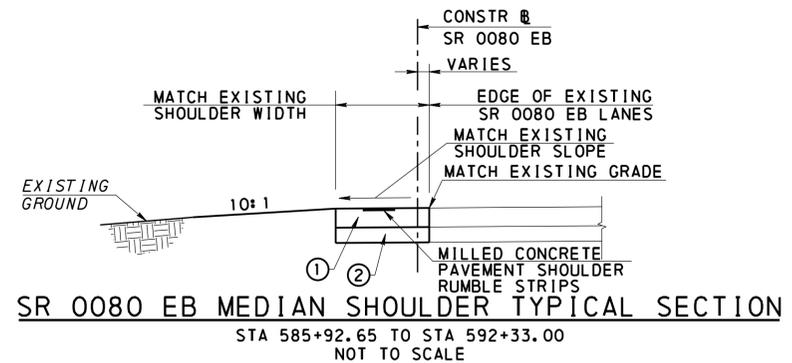
- LIMITS OF SEEDING AND SOIL SUPPLEMENTS
- ① - PLAIN CEMENT CONCRETE PAVEMENT, 13" DEPTH
- ② - SUBBASE 12" DEPTH (NO. 2A)
- * - SEE PLAN FOR LIMITS OF GUIDE RAIL

**PRELIMINARY
DRAWING
OR
INFORMATION**

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OPERATOR: FILE NAME: sdesignfl less
 PLOTTED: 0-9012 CADD (02-90) REVISED (10-04)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	8 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



GRADE POINT	0.52%	STA 584+00.00	END TRANSITION FROM NORMAL CROWN MATCH EXISTING CROSS SLOPES
GRADE POINT	0.07%	STA 583+49.34	END TRANSITION TO REVERSE CROWN BEGIN TRANSITION TO EXISTING CROSS SLOPES
GRADE POINT	2.00%	STA 582+62.47	END NORMAL CROWN BEGIN TRANSITION TO REVERSE CROWN
GRADE POINT	2.00%	STA 577+33.00	END TRANSITION BEGIN NORMAL CROWN
GRADE POINT	1.49%	STA 577+10.00	MATCH EXISTING CROSS SLOPES BEGIN TRANSITION TO NORMAL CROWN

SUPERELEVATION TRANSITION SKETCH
 NOT TO SCALE
 NOTE: ALL ROTATION OCCURS ABOUT THE ROADWAY BASELINE

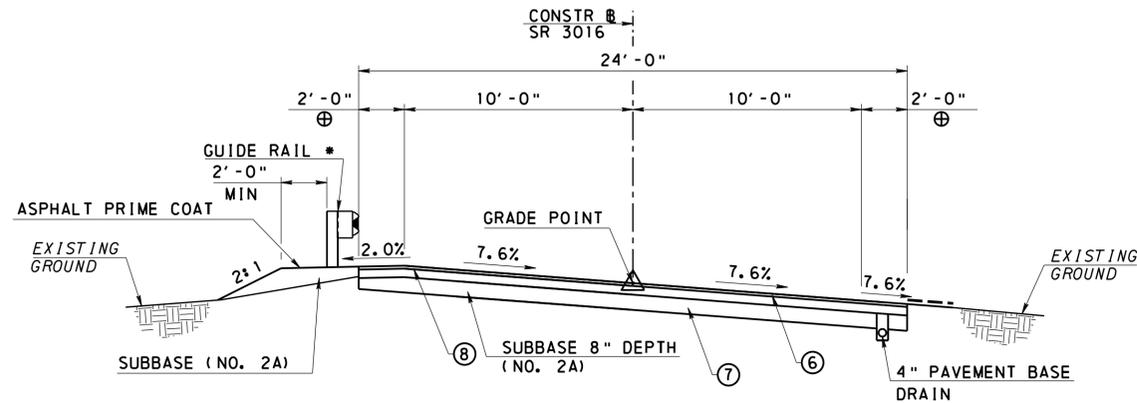
- LEGEND**
- LIMITS OF SEEDING AND SOIL SUPPLEMENTS
 - ⊕ - EFFECTIVE SHOULDER
 - ① - PLAIN CEMENT CONCRETE PAVEMENT, 13" DEPTH
 - ② - SUBBASE 12" DEPTH (NO. 2A)
 - * - SEE PLAN FOR LIMITS OF GUIDE RAIL

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

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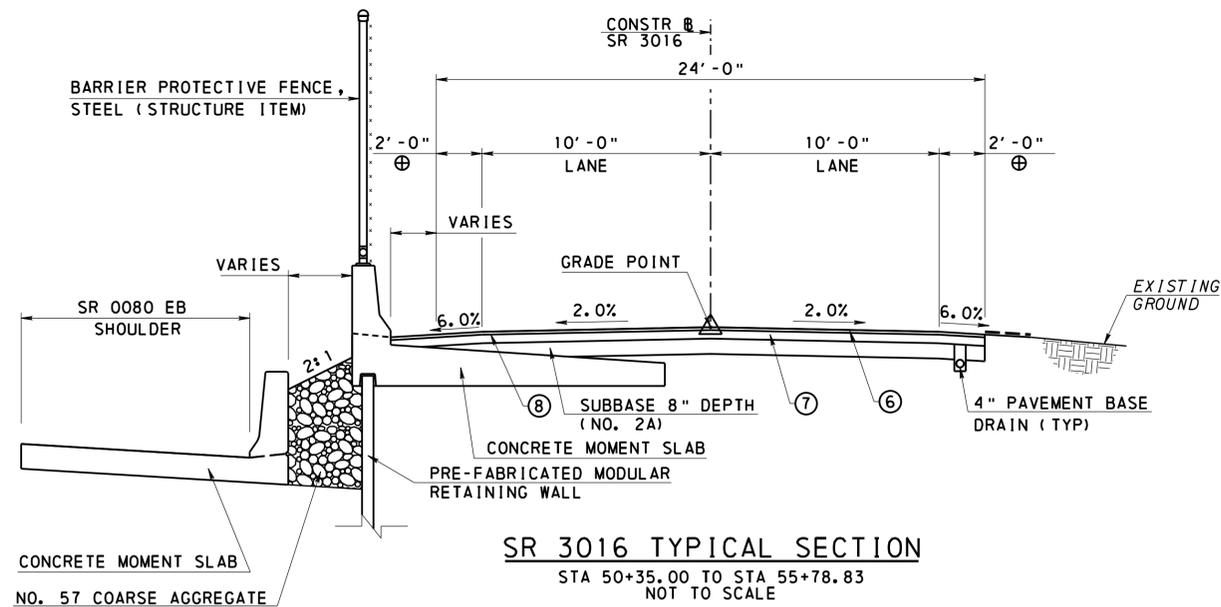
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	9 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



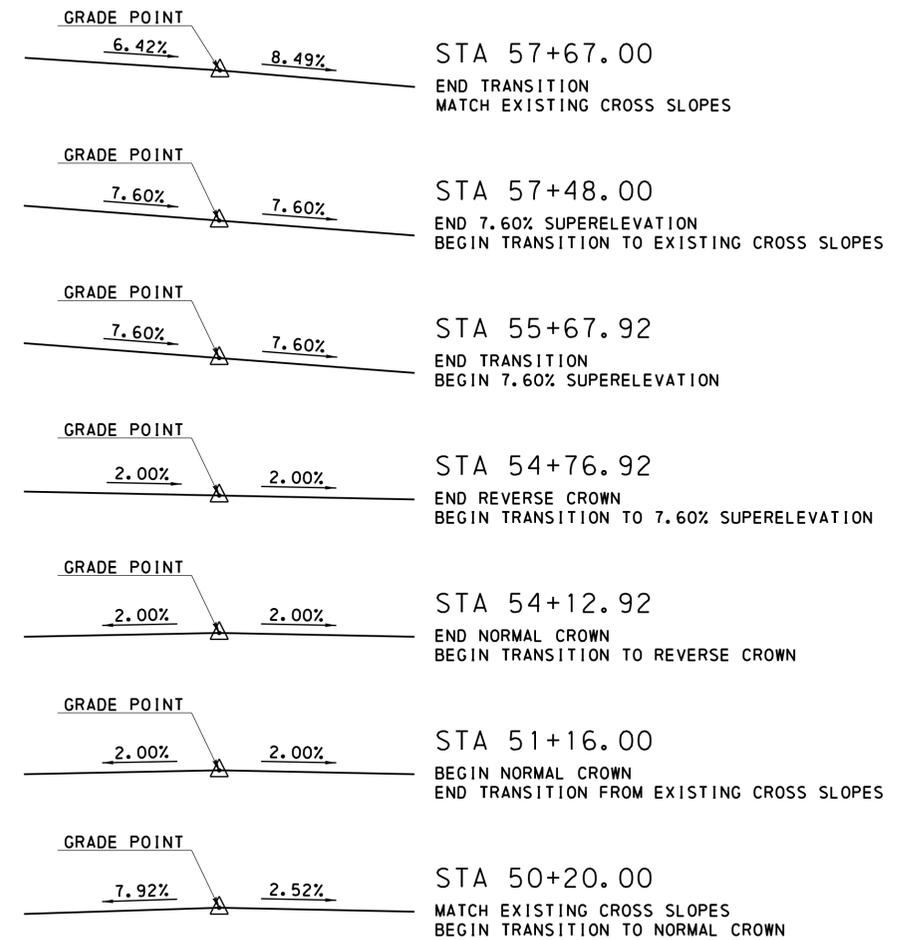
SR 3016 TYPICAL SUPERELEVATED SECTION

STA 50+20.00 TO STA 50+35.00
 STA 55+78.83 TO STA 57+67.00
 NOT TO SCALE



SR 3016 TYPICAL SECTION

STA 50+35.00 TO STA 55+78.83
 NOT TO SCALE



LEGEND

- - LIMITS OF SEEDING AND SOIL SUPPLEMENTS
- ⊕ - EFFECTIVE SHOULDER
- ⑥ - SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, < 0.3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-L
- ⑦ - SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, < 0.3 MILLION ESALS, 25.0 MM MIX, 4 1/2" DEPTH
- ⑧ - ASPHALT TACK COAT
- * - SEE PLAN FOR LIMITS OF GUIDE RAIL

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

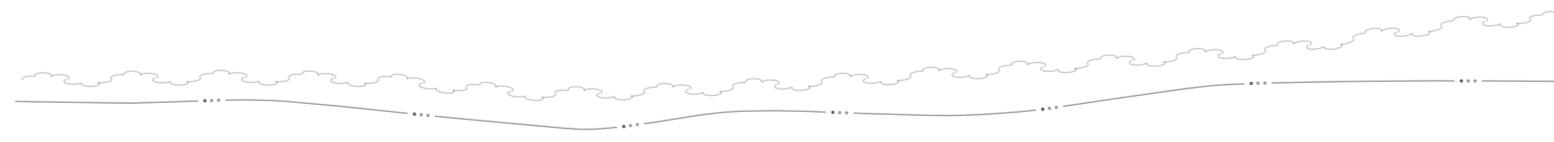
This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

OPERATOR: FILE NAME: \$designfile\$\$
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	10 OF 27
NESCOPECK AND BLACK CREEK TOWNSHIPS				
REV NO	REVISIONS	DATE	BY	APPD

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 WB**

PI STA 843+27.40 Es = 654.94'
 $\Delta = 80^\circ 21' 07''$ RT K = 149.97'
 $\Delta c = 72^\circ 13' 09''$ RT p = 1.77'
 $\Delta c = 2^\circ 42' 39''$ (ARC) Xc = 299.85'
Rc = 2113.48' Yc = 7.09'
Lc = 2663.96' LT = 200.05'
 $\theta s = 4^\circ 03' 59''$ RT ST = 100.05'
Ls = 300.00' LC = 299.93'
Ts = 1935.98' SE = N/A
TS STA 823+91.41 CS STA 853+55.37
SC STA 826+91.41



COMMONWEALTH OF PENNSYLVANIA
LEGAL R/W LINE FOR LIMITED ACCESS

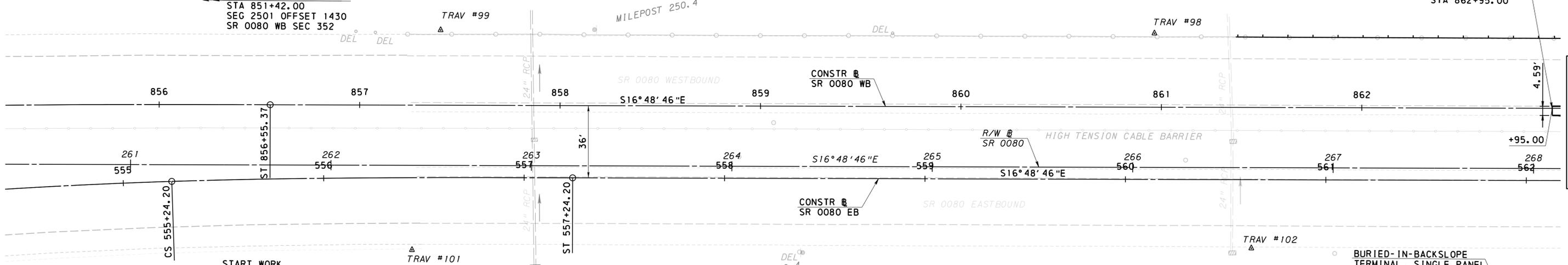


NESCOPECK CREEK

LIMIT OF WORK
STA 850+25.00
SEG 2501 OFFSET 1313
SR 0080 WB SEC 352
NESCOPECK TOWNSHIP
LUZERNE COUNTY

START WORK
STA 851+42.00
SEG 2501 OFFSET 1430
SR 0080 WB SEC 352

**BEGIN FULL DEPTH
RIGHT SHOULDER
STA 862+95.00**



LIMIT OF WORK
STA 549+50.00
SEG 2500 OFFSET 1215
SR 0080 EB SEC 352
NESCOPECK TOWNSHIP
LUZERNE COUNTY

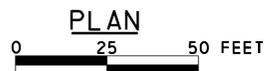
START WORK
STA 550+60.00
SEG 2500 OFFSET 1325
SR 0080 EB SEC 352

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 EB**

PI STA 543+01.08 Es = 652.26'
 $\Delta = 80^\circ 21' 07''$ RT K = 100.00'
 $\Delta c = 12^\circ 20' 13''$ RT p = 0.58'
 $\Delta c = 2^\circ 00' 00''$ (ARC) Xc = 199.98'
Rc = 2864.93' Yc = 2.33'
Lc = 616.87' LT = 133.34'
 $\theta s = 2^\circ 00' 00''$ RT ST = 66.67'
Ls = 200.00' LC = 199.99'
Ts = 2032.24' SE = N/A
PCC STA 549+07.33
TS STA 523+91.34
SC STA 526+91.34

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 EB**

PI STA 543+01.08 Es = 652.26'
 $\Delta = 80^\circ 21' 07''$ RT K = 149.97'
 $\Delta c = 61^\circ 49' 48''$ RT p = 1.83'
 $\Delta c = 2^\circ 47' 25''$ (ARC) Xc = 299.84'
Rc = 2053.48' Yc = 7.30'
Lc = 2215.99' LT = 200.06'
 $\theta s = 4^\circ 11' 07''$ RT ST = 100.05'
Ls = 300.00' LC = 299.93'
Ts = 1909.74' SE = N/A



**PRELIMINARY
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SURVEY BOOK NO. E04268

OPERATOR: \$designfilless
PLOTTED: \$\$\$DATE\$\$\$
D:\9012 CAD\102-901 REVISED (10-04)

SEE SHEET 11

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	11 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

CJS 017 ELEV. 652.60
 37.77' RT, STA 566+10.99 SR 0080 EB
 CAPPED REBAR

COMMONWEALTH
 OF
 PENNSYLVANIA



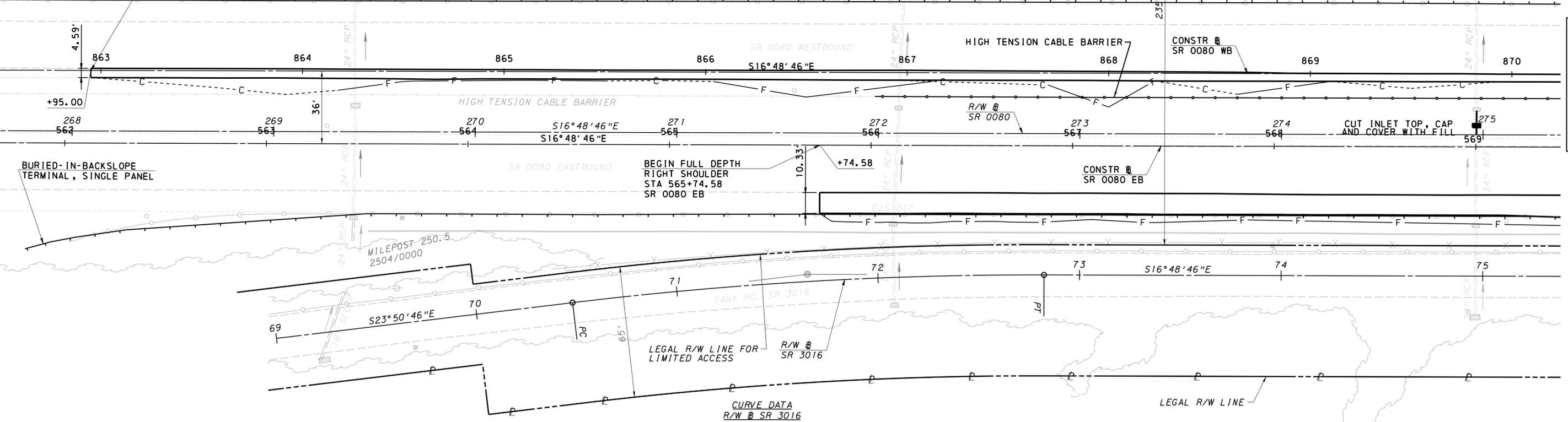
LEGAL R/W LINE FOR
 LIMITED ACCESS

← NESCOPECK CREEK

BEGIN FULL DEPTH
 RIGHT SHOULDER
 STA 862+95.00
 MILEPOST 250.5
 2505/0000

SEE SHEET 10

SEE SHEET 12



BURIED-IN-BACKSLOPE
 TERMINAL, SINGLE PANEL

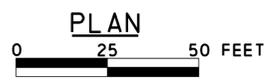
BEGIN FULL DEPTH
 RIGHT SHOULDER
 STA 565+74.58
 SR 0080 EB

CURVE DATA
 R/W # SR 3016
 PI STA 71+65.30
 $\Delta = 7^{\circ}02'00''$ RT
 T = 117.37'
 L = 234.44'
 R = 1909.86'
 E = 3.60'
 PC STA 70+47.93
 PT STA 72+82.37

DAVID H. & JENNIFER RATZEL

LEGEND

- PARCEL IDENTIFICATION NUMBER - NO TAKE



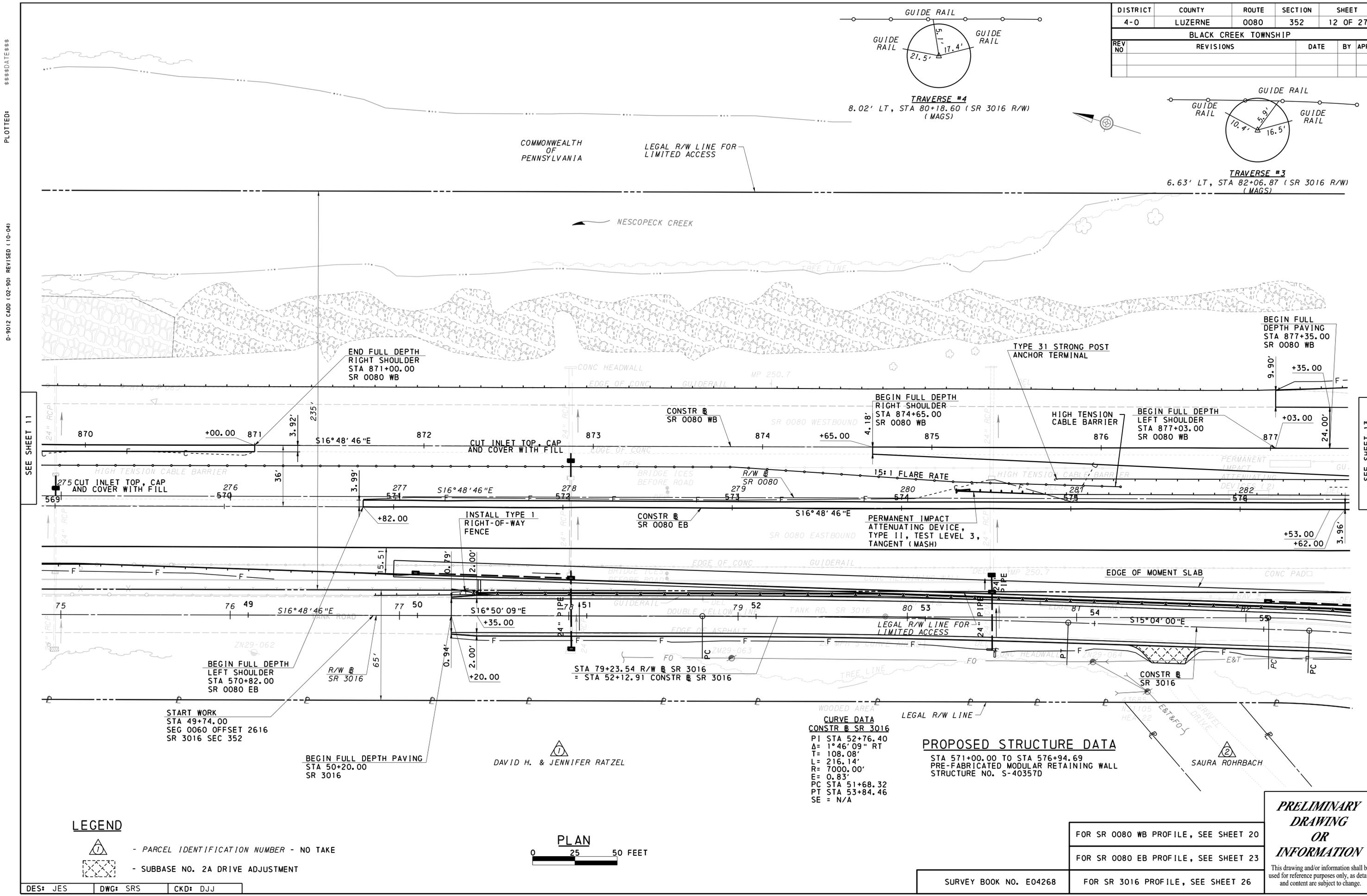
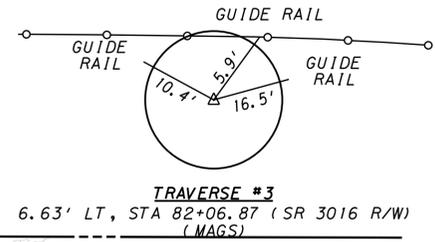
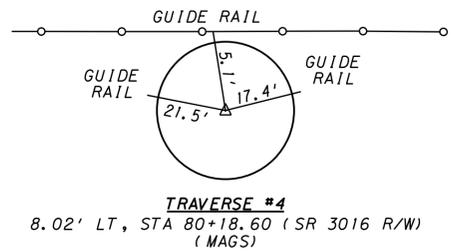
**PRELIMINARY
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SURVEY BOOK NO. E04268

OPERATOR: \$designrfl less
 FILE NAME: \$designrfl less
 PLOTTED: \$DATE\$\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	12 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



PLOTTED: D:\9012 CADD (02-90) REVISED (10-04) OPERATOR: FILE NAME: sdesign\flless

SEE SHEET 11

SEE SHEET 13

DAVID H. & JENNIFER RATZEL

CURVE DATA
 CONSTR # SR 3016
 PI STA 52+76.40
 Δ = 1°46'09" RT
 T = 108.08'
 L = 216.14'
 R = 7000.00'
 E = 0.83'
 PC STA 51+68.32
 PT STA 53+84.46
 SE = N/A

PROPOSED STRUCTURE DATA
 STA 571+00.00 TO STA 576+94.69
 PRE-FABRICATED MODULAR RETAINING WALL
 STRUCTURE NO. S-40357D

LEGEND

- PARCEL IDENTIFICATION NUMBER - NO TAKE
- SUBBASE NO. 2A DRIVE ADJUSTMENT



DES: JES DWG: SRS CKD: DJJ

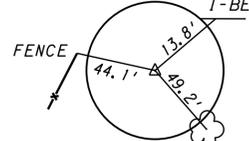
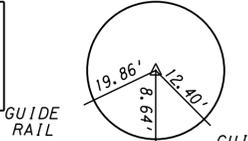
SURVEY BOOK NO. E04268

FOR SR 0080 WB PROFILE, SEE SHEET 20
FOR SR 0080 EB PROFILE, SEE SHEET 23
FOR SR 3016 PROFILE, SEE SHEET 26

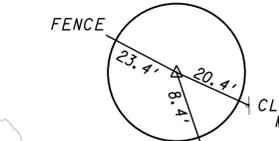
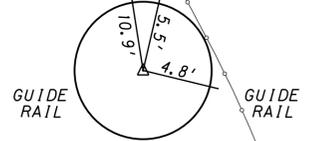
PRELIMINARY DRAWING OR INFORMATION
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	13 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

BM A ELEV 660.99
38.57' RT, STA 577+05.21
SR 0080 EB
SQUARE CUT ON CONC BASE
OF DIGITAL TRAVEL SIGN



SR 0080 EB
I-BEAM
BM #2 ELEV 646.36
7.49' LT, STA 85+23.97
SR 3016 R/W
MAG NAIL



TRAVERSE #25
RAIL
13.86' LT, STA 577+72.79
41.87' RT, STA 578+43.71
(SR 0080 EB)
(MAGS)

TRAVERSE #2
(MAGS)
7.49' LT, STA 85+23.97 (SR 3016 R/W)

TRAVERSE #23
(MAGS)
39.19' LT, STA 883+50.11
(SR 0080 WB)



HYDRAULIC DATA

DRAINAGE AREA = 156.0 SQ MI
DEP DESIGN FLOOD
FREQUENCY = 25 YEARS
MAGNITUDE = 14561 CFS
VELOCITY = 9.48 FPS
PERT WS ELEV = 626.04
PENNDOT DESIGN FLOOD
FREQUENCY = 50 YEARS
MAGNITUDE = 17456 CFS
VELOCITY = 9.61 FPS
PERT WS ELEV = 627.43
100 YEAR FLOOD RISK ASSESSMENT
MAGNITUDE = 20837 CFS
VELOCITY = 9.76 FPS
PERT WS ELEV = 628.97
FLOOD OF RECORD = UNKNOWN

EXISTING STRUCTURE DATA

STA 880+85.34
FOUR SPAN CONT WELDED PLATE GIRDER BRIDGE
CLEAR SPAN = 2 @ 112' & 2 @ 140'
UNDERCLEAR = 38.16'
CLEAR ROADWAY WIDTH = 32'
SKEW = 90°

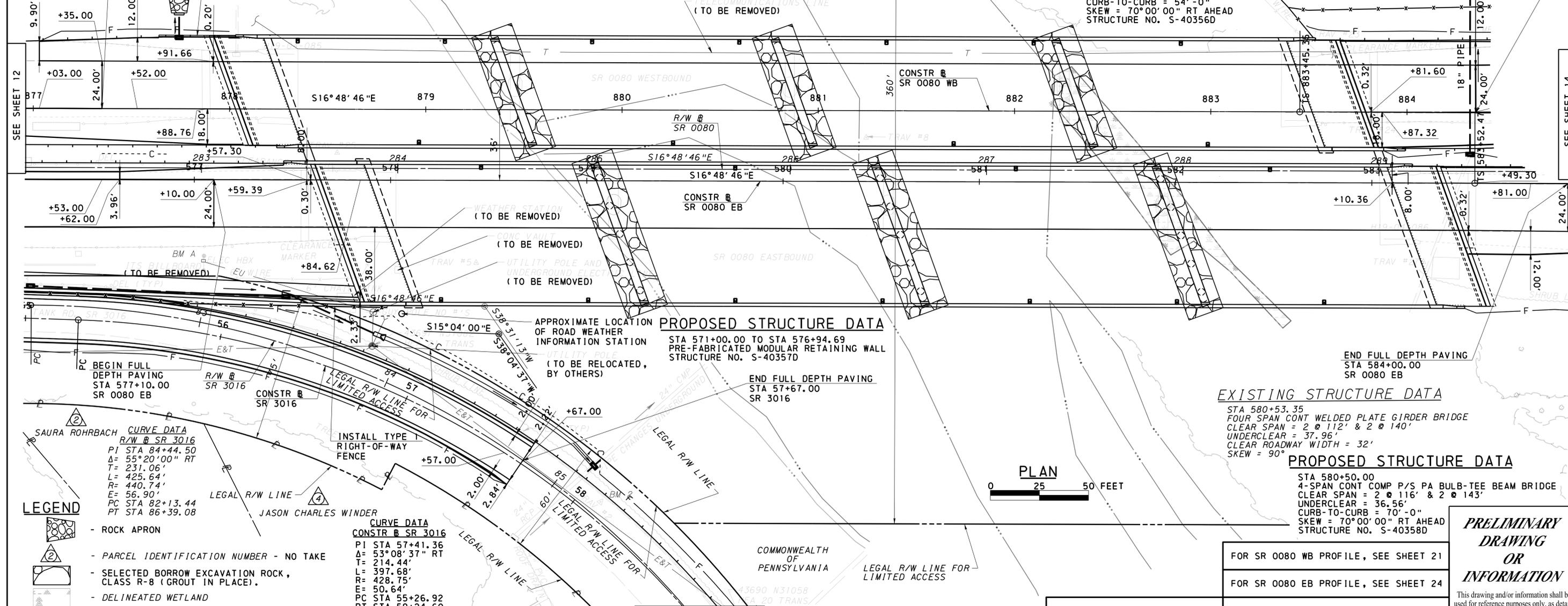
PROPOSED STRUCTURE DATA

STA 880+91.00
4-SPAN CONT COMP P/S PA BULB-TEE BEAM BRIDGE
CLEAR SPAN = 2 @ 116' & 2 @ 143'
UNDERCLEAR = 36.96'
CURB-TO-CURB = 54'-0"
SKEW = 70°00'00" RT AHEAD
STRUCTURE NO. S-40356D

D:\9012 CAD\102-900 REVISED (10-04)

SEE SHEET 12

SEE SHEET 14



LEGEND

- ROCK APRON
- PARCEL IDENTIFICATION NUMBER - NO TAKE
- SELECTED BORROW EXCAVATION ROCK, CLASS R-8 (GROUT IN PLACE).
- DELINEATED WETLAND

CURVE DATA
CONSTR @ SR 3016
PI STA 57+41.36
Δ = 53°08'37" RT
T = 214.44'
L = 397.68'
R = 428.75'
E = 50.64'
PC STA 55+26.92
PT STA 59+24.60
SE = 7.6%

PRELIMINARY DRAWING OR INFORMATION

FOR SR 0080 WB PROFILE, SEE SHEET 21
FOR SR 0080 EB PROFILE, SEE SHEET 24
FOR SR 3016 PROFILE, SEE SHEET 27

DES: JES

DWG: SRS

CKD: DJJ

SEE SHEET 18

SURVEY BOOK NO. E04268

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	14 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 WB**

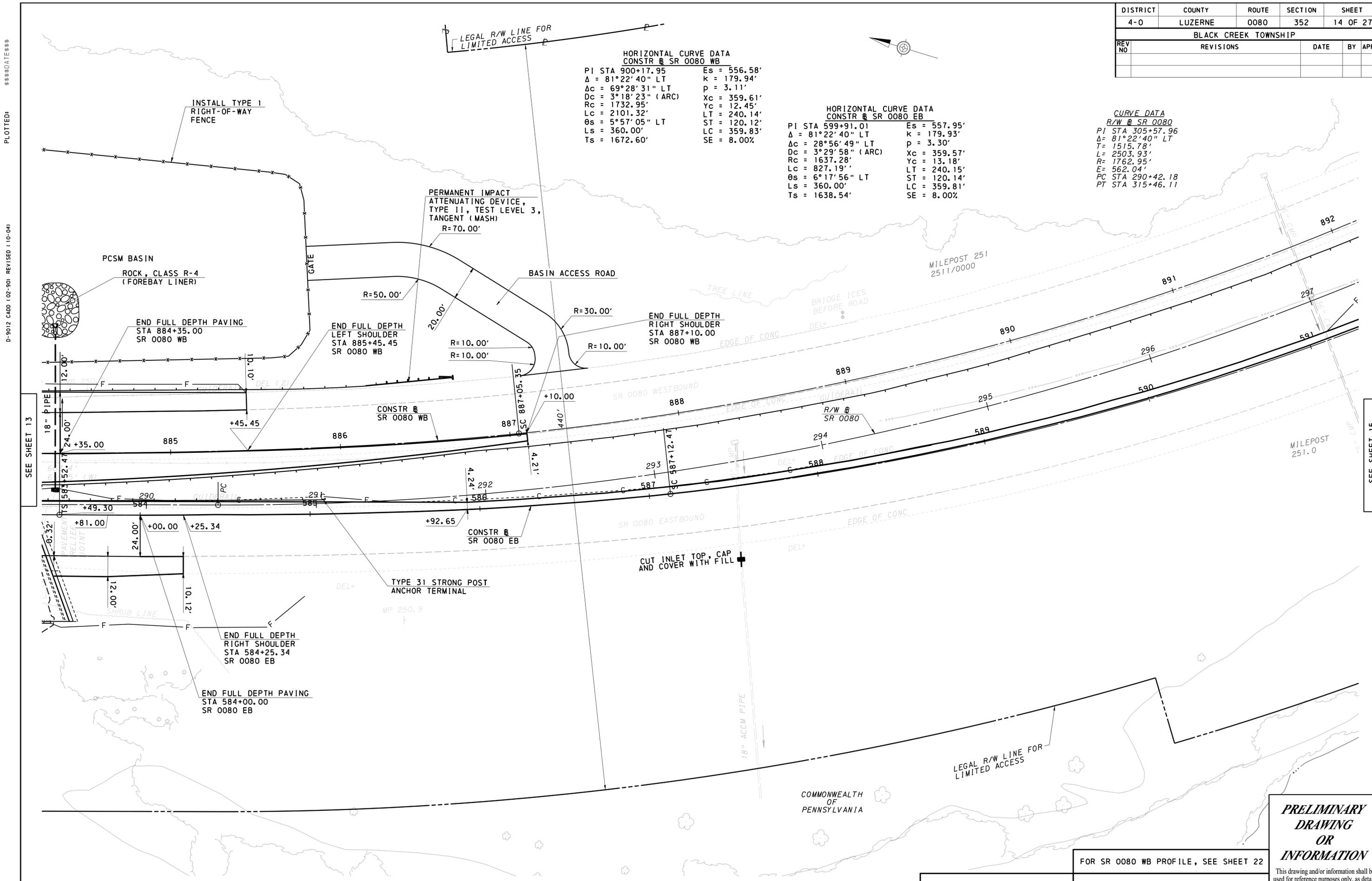
PI STA 900+17.95 Es = 556.58'
 $\Delta = 81^{\circ}22'40''$ LT k = 179.94'
 $\Delta c = 69^{\circ}28'31''$ LT p = 3.11'
Dc = $3^{\circ}18'23''$ (ARC) Xc = 359.61'
Rc = 1732.95' Yc = 12.45'
Lc = 2101.32' LT = 240.14'
 $\theta s = 5^{\circ}57'05''$ LT ST = 120.12'
Ls = 360.00' LC = 359.83'
Ts = 1672.60' SE = 8.00%

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 EB**

PI STA 599+91.01 Es = 557.95'
 $\Delta = 81^{\circ}22'40''$ LT k = 179.93'
 $\Delta c = 28^{\circ}56'49''$ LT p = 3.30'
Dc = $3^{\circ}29'58''$ (ARC) Xc = 359.57'
Rc = 1637.28' Yc = 13.18'
Lc = 827.19' LT = 240.15'
 $\theta s = 6^{\circ}17'56''$ LT ST = 120.14'
Ls = 360.00' LC = 359.81'
Ts = 1638.54' SE = 8.00%

**CURVE DATA
R/W @ SR 0080**

PI STA 305+57.96
 $\Delta = 81^{\circ}22'40''$ LT
T = 1515.78'
L = 2503.93'
R = 1762.95'
E = 562.04'
PC STA 290+42.18
PT STA 315+46.11



PLOTTED: D:\9012 CADD (02-90) REVISED (10-04) \$\$\$DATE\$\$\$

SEE SHEET 13

SEE SHEET 15

OPERATOR: FILE NAME: sdesignr1 less

DES: JES DWG: SRS CKD: DJJ

SURVEY BOOK NO. E04268

FOR SR 0080 WB PROFILE, SEE SHEET 22
 FOR SR 0080 EB PROFILE, SEE SHEET 25

**PRELIMINARY
DRAWING
OR
INFORMATION**

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	15 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 WB**

PI STA 900+17.95 Es = 556.58'
 $\Delta = 81^{\circ}22'40''$ LT k = 179.94'
 $\Delta c = 69^{\circ}28'31''$ LT p = 3.11'
Dc = $3^{\circ}18'23''$ (ARC) Xc = 359.61'
Rc = 1732.95' Yc = 12.45'
Lc = 2101.32' LT = 240.14'
 $\theta s = 5^{\circ}57'05''$ LT ST = 120.12'
Ls = 360.00' LC = 359.83'
Ts = 1672.60' SE = 8.00%

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 EB**

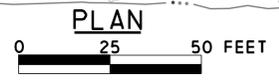
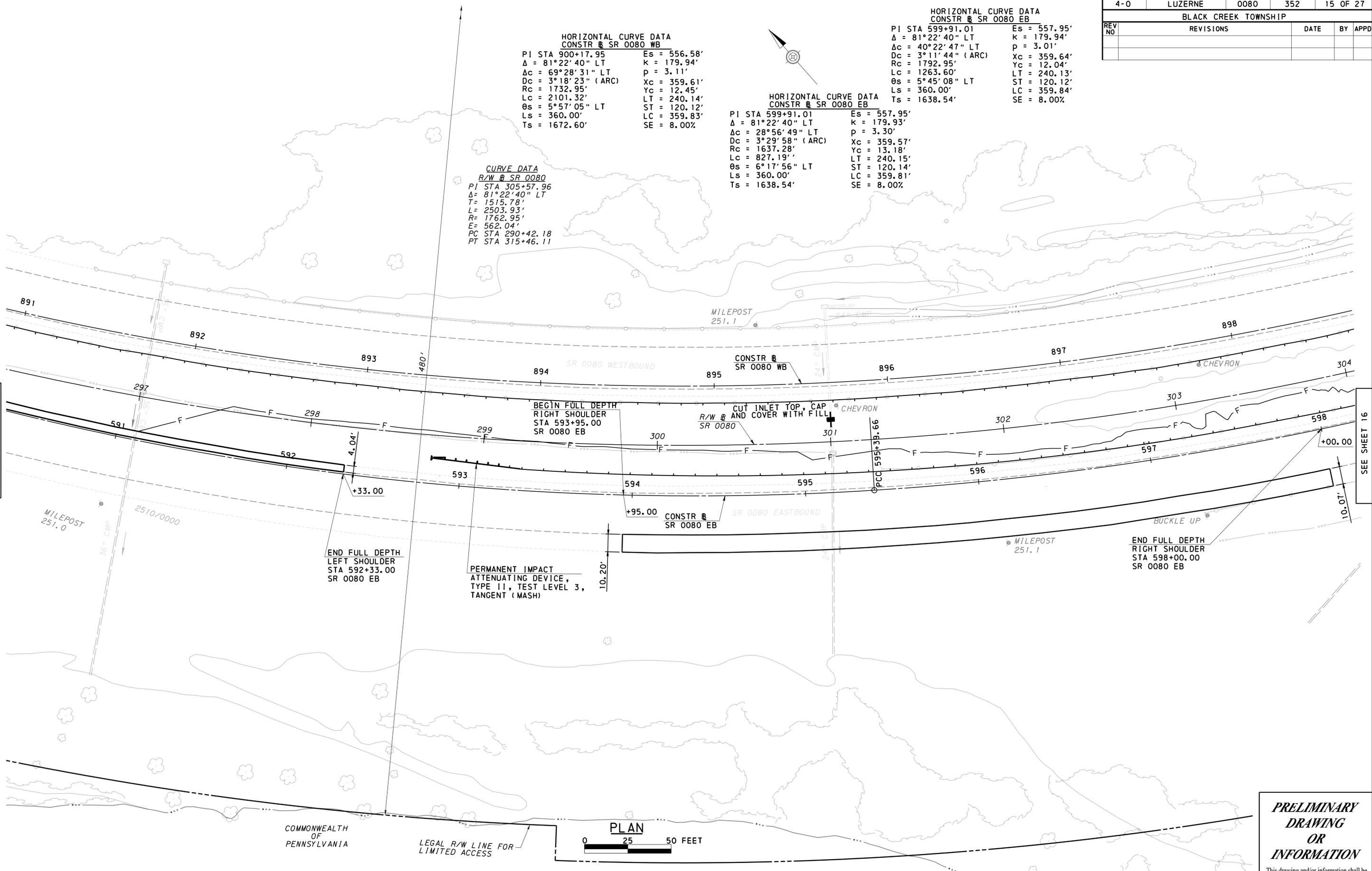
PI STA 599+91.01 Es = 557.95'
 $\Delta = 81^{\circ}22'40''$ LT k = 179.94'
 $\Delta c = 40^{\circ}22'47''$ LT p = 3.01'
Dc = $3^{\circ}11'44''$ (ARC) Xc = 359.64'
Rc = 1792.95' Yc = 12.04'
Lc = 1263.60' LT = 240.13'
 $\theta s = 5^{\circ}45'08''$ LT ST = 120.12'
Ls = 360.00' LC = 359.84'
Ts = 1638.54' SE = 8.00%

**HORIZONTAL CURVE DATA
CONSTR @ SR 0080 EB**

PI STA 599+91.01 Es = 557.95'
 $\Delta = 81^{\circ}22'40''$ LT k = 179.93'
 $\Delta c = 28^{\circ}56'49''$ LT p = 3.30'
Dc = $3^{\circ}29'58''$ (ARC) Xc = 359.57'
Rc = 1637.28' Yc = 13.18'
Lc = 827.19' LT = 240.15'
 $\theta s = 6^{\circ}17'56''$ LT ST = 120.14'
Ls = 360.00' LC = 359.81'
Ts = 1638.54' SE = 8.00%

**CURVE DATA
R/W @ SR 0080**

PI STA 305+57.96
 $\Delta = 81^{\circ}22'40''$ LT
T = 1515.78'
L = 2503.93'
R = 1762.95'
E = 562.04'
PC STA 290+42.18
PT STA 315+46.11



**PRELIMINARY
DRAWING
OR
INFORMATION**

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SURVEY BOOK NO. E04268

DES: JES DWG: SRS CKD: DJJ

OPERATOR: \$designr\less
 FILE NAME: \$designr\less
 PLOTTED: \$DATE\$
 D:\9012 CADD (02-90) REVISED (10-04)

SEE SHEET 14

SEE SHEET 16

COMMONWEALTH OF PENNSYLVANIA
 LEGAL R/W LINE FOR LIMITED ACCESS

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	16 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

LEGAL R/W LINE FOR LIMITED ACCESS
 BLACK CREEK LIMITED PARTNERSHIP

PLOTTED: \$\$\$DATE\$\$\$

D-9012 CADD (02-90) REVISED (10-04)

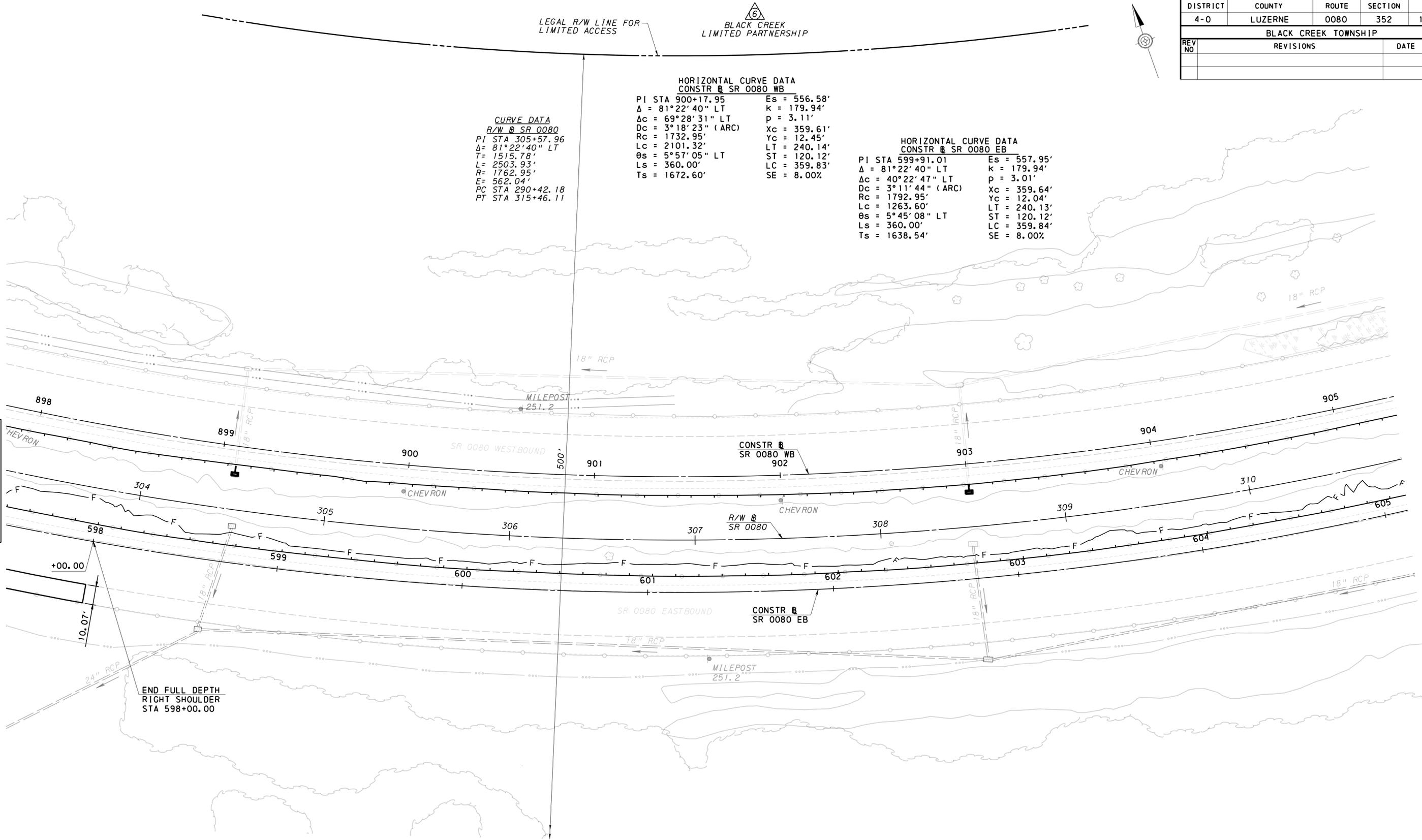
SEE SHEET 15

SEE SHEET 17

CURVE DATA
 R/W @ SR 0080
 PI STA 305+57.96
 $\Delta = 81^{\circ}22'40''$ LT
 T = 1515.78'
 L = 2503.93'
 R = 1762.95'
 E = 562.04'
 PC STA 290+42.18
 PT STA 315+46.11

HORIZONTAL CURVE DATA
 CONSTR @ SR 0080 WB
 PI STA 900+17.95 Es = 556.58'
 $\Delta = 81^{\circ}22'40''$ LT K = 179.94'
 $\Delta c = 69^{\circ}28'31''$ LT p = 3.11'
 $\Delta c = 3^{\circ}18'23''$ (ARC) Xc = 359.61'
 Rc = 1732.95' Yc = 12.45'
 Lc = 2101.32' LT = 240.14'
 $\theta_s = 5^{\circ}57'05''$ LT ST = 120.12'
 Ls = 360.00' LC = 359.83'
 Ts = 1672.60' SE = 8.00%

HORIZONTAL CURVE DATA
 CONSTR @ SR 0080 EB
 PI STA 599+91.01 Es = 557.95'
 $\Delta = 81^{\circ}22'40''$ LT K = 179.94'
 $\Delta c = 40^{\circ}22'47''$ LT p = 3.01'
 $\Delta c = 3^{\circ}11'44''$ (ARC) Xc = 359.64'
 Rc = 1792.95' Yc = 12.04'
 Lc = 1263.60' LT = 240.13'
 $\theta_s = 5^{\circ}45'08''$ LT ST = 120.12'
 Ls = 360.00' LC = 359.84'
 Ts = 1638.54' SE = 8.00%



END FULL DEPTH
 RIGHT SHOULDER
 STA 598+00.00

LEGEND

- PARCEL IDENTIFICATION NUMBER - NO TAKE
- DELINEATED WETLAND



**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	17 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

HORIZONTAL CURVE DATA
CONSTR @ SR 0080 WB
 PI STA 900+17.95 Es = 556.58'
 $\Delta = 81^{\circ}22'40''$ LT K = 179.94'
 $\Delta c = 69^{\circ}28'31''$ LT p = 3.11'
 Dc = $3^{\circ}18'23''$ (ARC) Xc = 359.61'
 Rc = 1732.95' Yc = 12.45'
 Lc = 2101.32' LT = 240.14'
 $\theta s = 5^{\circ}57'05''$ LT ST = 120.12'
 Ls = 360.00' LC = 359.83'
 Ts = 1672.60' SE = 8.00%

HORIZONTAL CURVE DATA
CONSTR @ SR 0080 EB
 PI STA 599+91.01 Es = 557.95'
 $\Delta = 81^{\circ}22'40''$ LT K = 179.94'
 $\Delta c = 40^{\circ}22'47''$ LT p = 3.01'
 Dc = $3^{\circ}11'44''$ (ARC) Xc = 359.64'
 Rc = 1792.95' Yc = 12.04'
 Lc = 1263.60' LT = 240.13'
 $\theta s = 5^{\circ}45'08''$ LT ST = 120.12'
 Ls = 360.00' LC = 359.84'
 Ts = 1638.54' SE = 8.00%

CURVE DATA
R/W @ SR 0080
 PI STA 305+57.96
 $\Delta = 81^{\circ}22'40''$ LT
 T = 1515.78'
 L = 2503.93'
 R = 1762.95'
 E = 562.04'
 PC STA 290+42.18
 PT STA 315+46.11

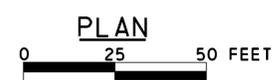
BEGIN FULL DEPTH
RIGHT SHOULDER
STA 907+00.00
SR 0080 WB

CONSTR @
SR 0080 WB

CONSTR @
SR 0080 EB

STOP WORK
 STA 609+00.00
 SEG 2510 OFFSET 1791
 SR 0080 SEC 352

LIMIT OF WORK
 STA 610+00.00
 SEG 2510 OFFSET 1891
 SR 0080 EB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY



LEGEND

- DELINEATED WETLAND

DES: JES DWG: SRS CKD: DJJ

PRELIMINARY
DRAWING
OR
INFORMATION

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SURVEY BOOK NO. E04268

OPERATOR: FILE NAME: sdesignr1 less
 D:\9012 CADD (02-90) REVISED (10-04)
 PLOTTED: \$\$\$DATE\$\$\$
 SEE SHEET 16
 SEE SHEET 18

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	18 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

BLACK CREEK LIMITED PARTNERSHIP

LEGAL R/W LINE FOR LIMITED ACCESS



LIMIT OF WORK
 STA 914+50.00
 SEC 2511 OFFSET 2309
 SR 0080 SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY

END FULL DEPTH
 RIGHT SHOULDER
 STA 912+82.00
 SR 0080 WB

STOP WORK
 STA 913+37.00
 SEC 2511 OFFSET 2196
 SR 0080 SEC 352

TRUCK ROLLOVER RIGHT CURVE
 MILEPOST 251.5

MILEPOST
 251.4

ST 911+66.67

+82.00

4.00'

CONSTR @
 SR 0080 WB

SEE SHEET 17

SR 0080 WESTBOUND

N81°48'34"E

R/W @
 SR 0080

TRUCK ROLLOVER RIGHT CURVE

420'

N81°48'34"E

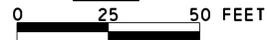
SR 0080 EASTBOUND

CONSTR @
 SR 0080 EB

4.5 MILES TO
 NESCOPECK/CONYNGHAM
 INTERCHANGE

MILEPOST
 251.4

PLAN



LEGEND



- PARCEL IDENTIFICATION NUMBER - NO TAKE

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

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SURVEY BOOK NO. E04268

DES: JES DWG: SRS CKD: DJJ

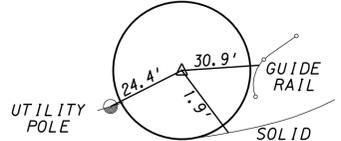
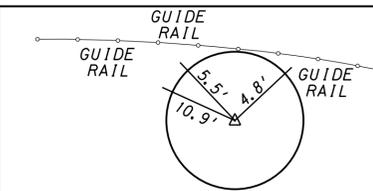
PLOTTED: \$\$\$DATE\$\$\$

D-9012 CADD (02-90) REVISED (10-04)

OPERATOR: FILE NAME: sdesignr1 less

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	19 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

PDH DISC U 227 ELEV 634.45
 15.01' LT, STA 62+56.11 (SR 3016 CONSTR @)
 SE CORNER WINGWALL
 BRIDGE OVER BLACK CREEK
 ON SR 3016



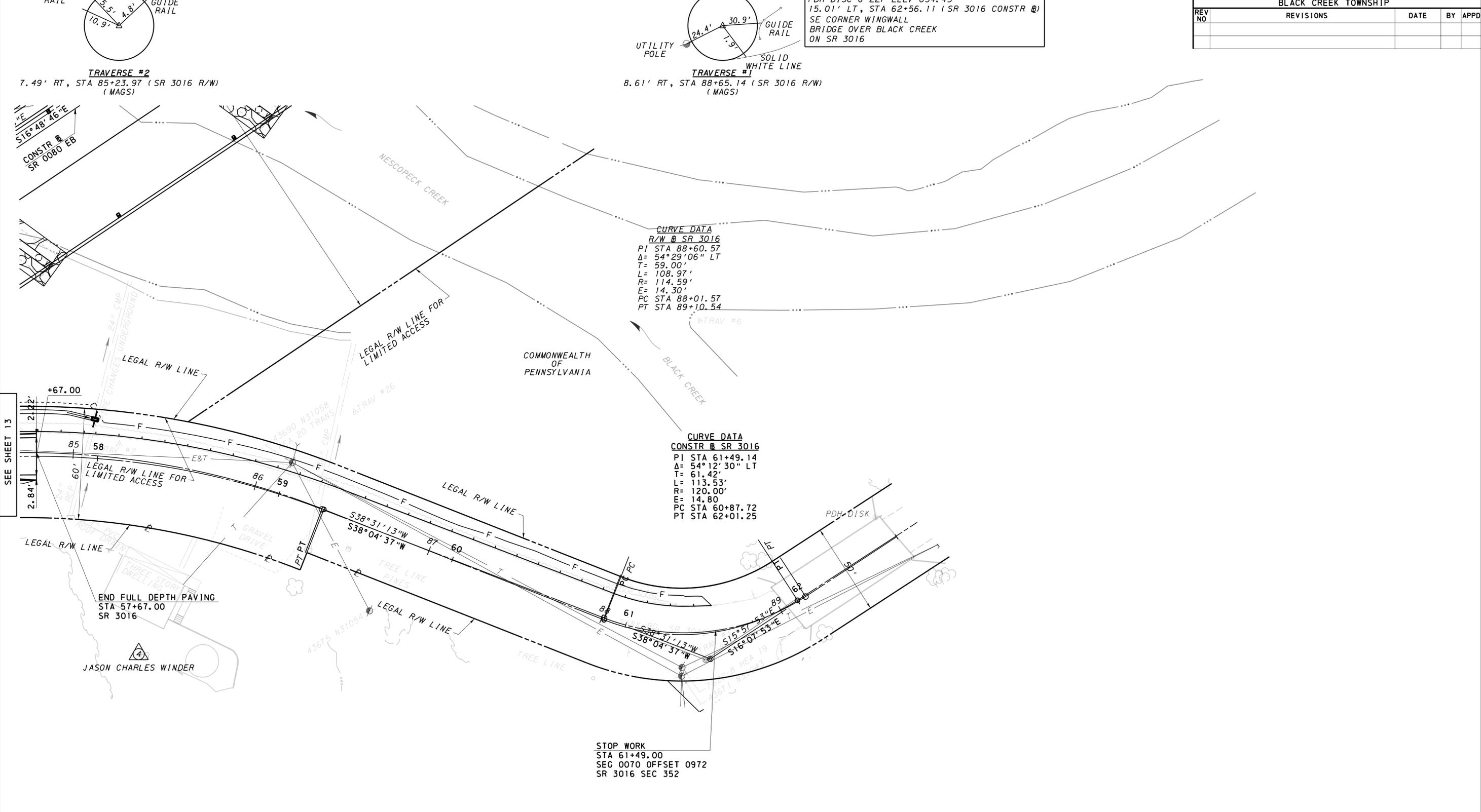
TRAVERSE #2
 7.49' RT, STA 85+23.97 (SR 3016 R/W)
 (MAGS)

TRAVERSE #1
 8.61' RT, STA 88+65.14 (SR 3016 R/W)
 (MAGS)

CONSTR @
 SR 0080 EB
 S16°48'46"E

D-9012 CADD (02-90) REVISED (10-04)

SEE SHEET 13



LEGEND

- PARCEL IDENTIFICATION NUMBER - NO TAKE
- SELECTED BORROW EXCAVATION ROCK, CLASS R-8 (GROUT IN PLACE).



**PRELIMINARY
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	20 OF 27
NESCOPECK AND BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

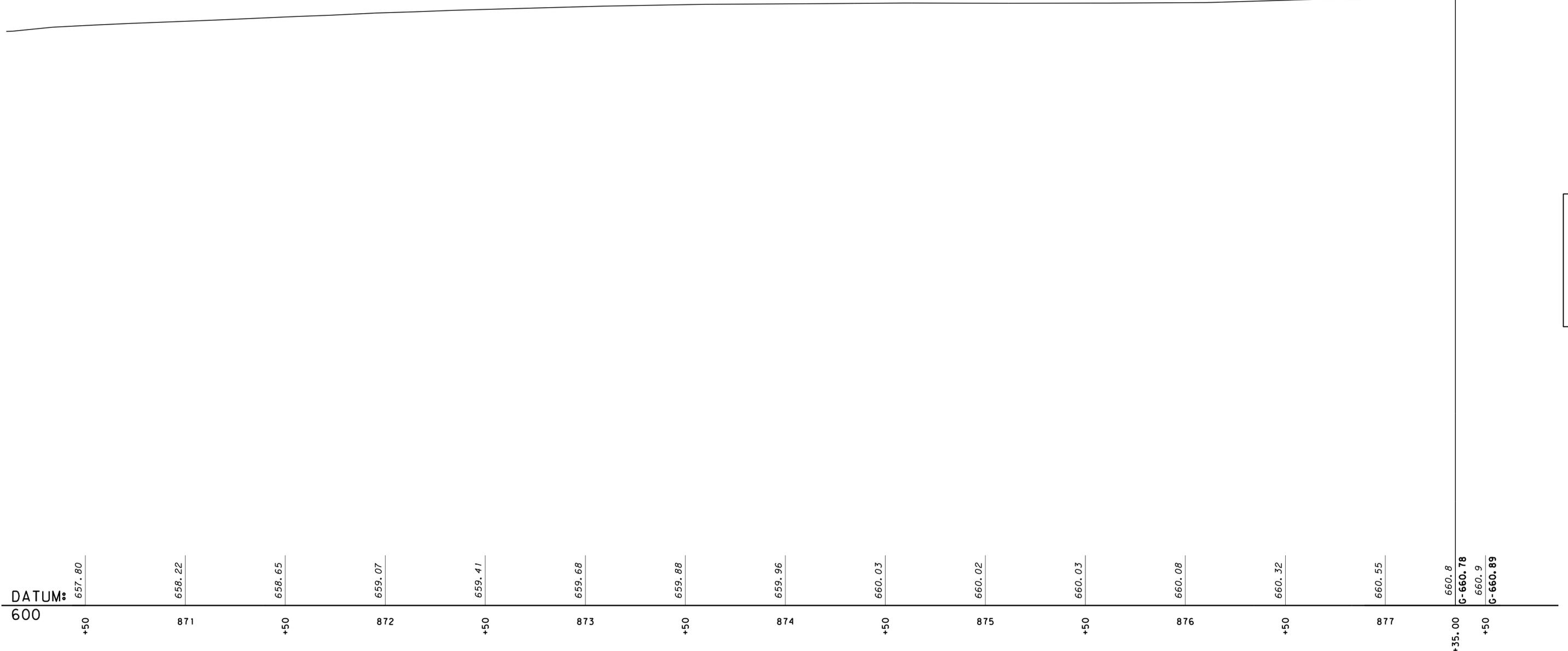
← LIMIT OF WORK
 STA 850+25.00
 SEC 2501 OFFSET 1313
 SR 0080 WB SEC 352
 NESCOPECK TOWNSHIP
 LUZERNE COUNTY

← START WORK
 STA 851+42.00
 SEC 2501 OFFSET 1430
 SR 0080 WB SEC 352

PVI STA 878+40.00
 ELEV 661.61
 VC 210.00'
 MO -0.07'
 SSD 4123'

BEGIN FULL DEPTH PAVING
 STA 877+35.00
 SR 0080 WB

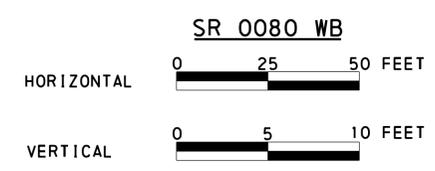
EXISTING GROUND
 PROPOSED GRADE
 +0.8% +0.79%



PLOTTED: \$\$\$DATE\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)

OPERATOR: \$\$\$designfil\$\$\$
 FILE NAME: \$\$\$designfil\$\$\$

SEE SHEET 21



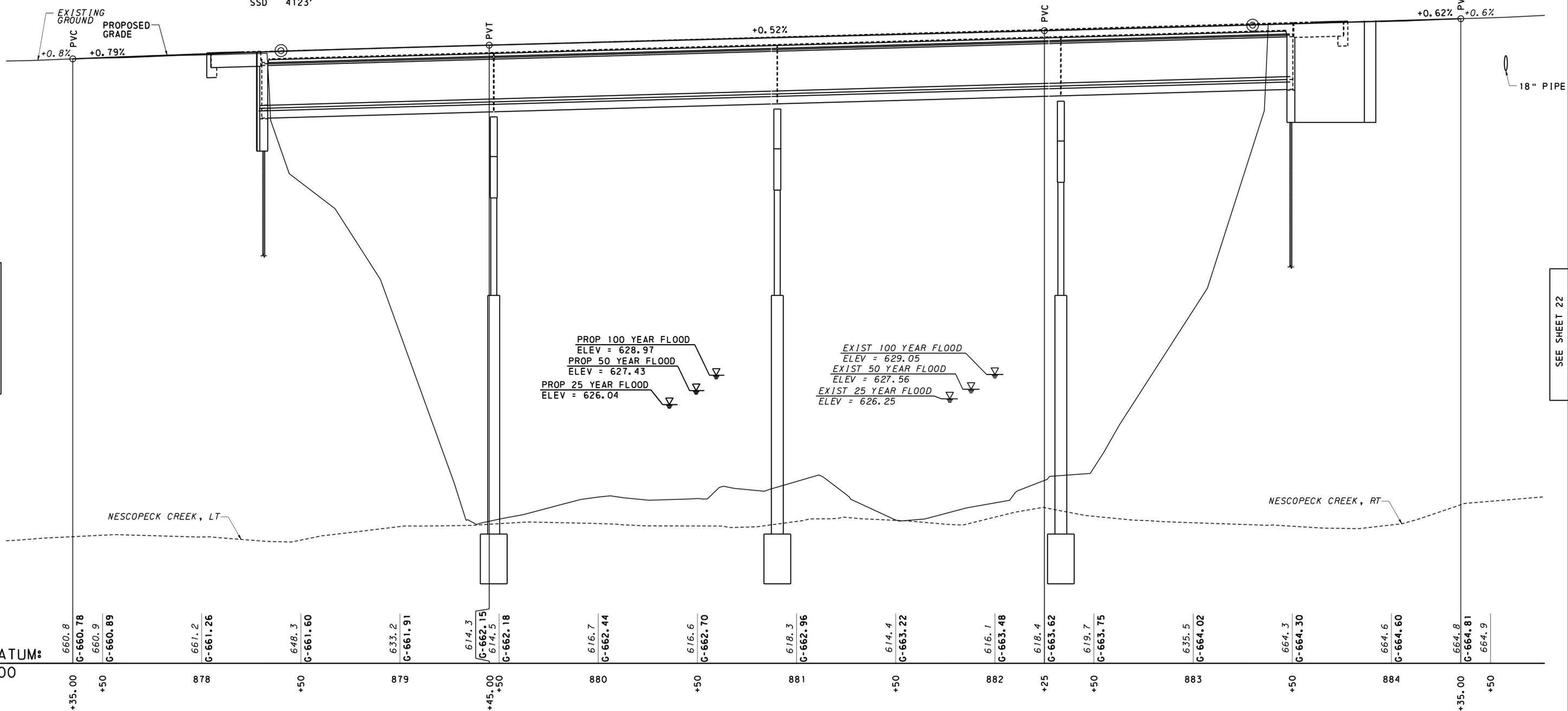
**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	21 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

PVI STA 883+30.00 END FULL DEPTH PAVING
 ELEV 664.16 STA 884+35.00
 VC 210.00' SR 0080 WB
 MO 0.03'
 HLSD UNLIMITED

BEGIN FULL DEPTH PAVING PVI STA 878+40.00
 STA 877+35.00 ELEV 661.61
 SR 0080 WB VC 210.00'
 MO -0.07'
 SSD 4123'



PROP 100 YEAR FLOOD
 ELEV = 628.97
 PROP 50 YEAR FLOOD
 ELEV = 627.43
 PROP 25 YEAR FLOOD
 ELEV = 626.04

EXIST 100 YEAR FLOOD
 ELEV = 629.05
 EXIST 50 YEAR FLOOD
 ELEV = 627.56
 EXIST 25 YEAR FLOOD
 ELEV = 626.25

DATUM:
600

DES: JES DWG: SRS CKD: DJJ

SR 0080 WB

HORIZONTAL

VERTICAL

**PRELIMINARY
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SURVEY BOOK E04268 FOR SR 0080 WB PLAN, SEE SHEET 13

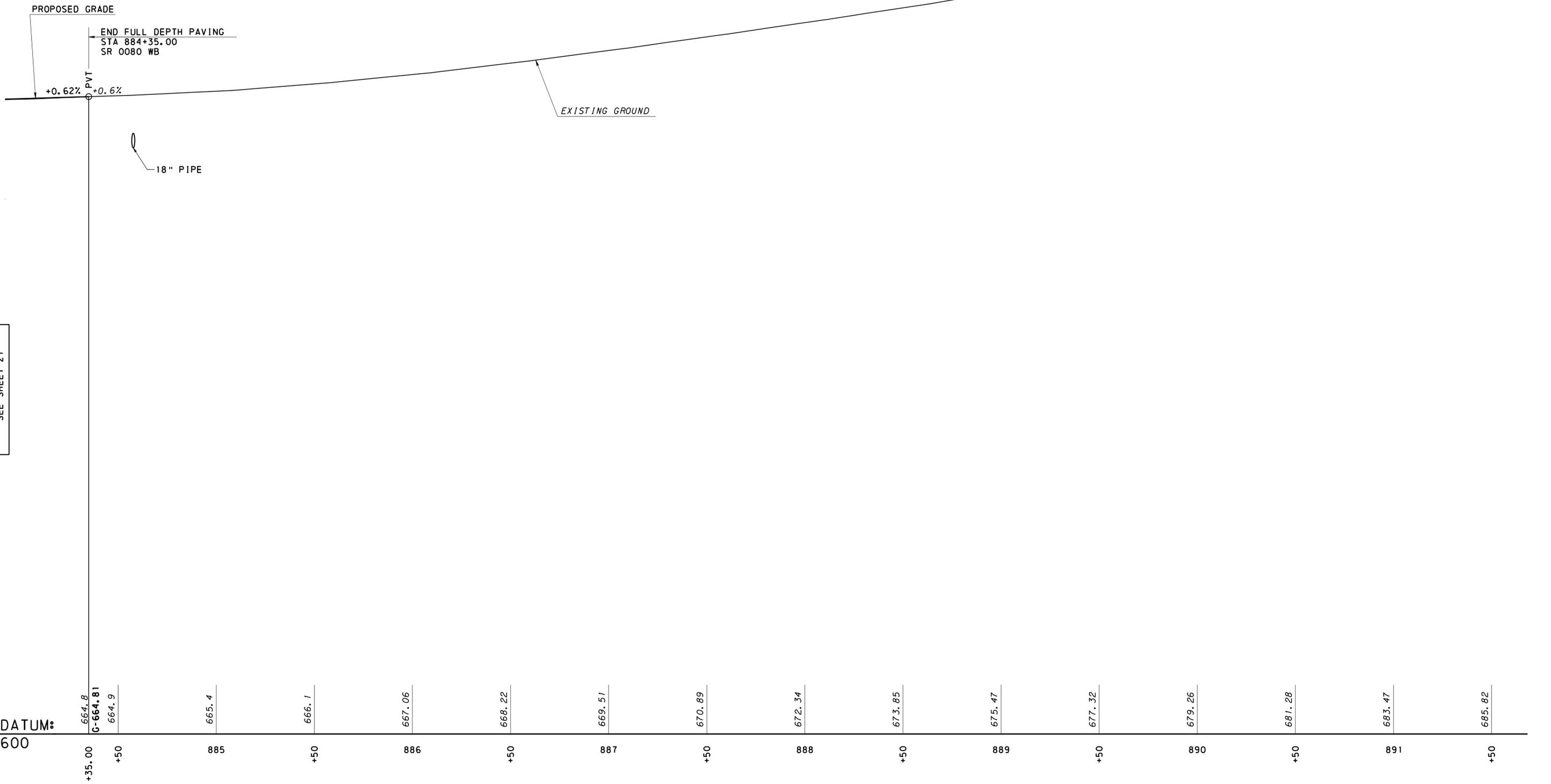
OPERATOR: FILE NAME: \$\$\$designfil\$\$\$
 PLOTTED: \$\$\$DATE\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)
 SEE SHEET 20
 SEE SHEET 22

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	22 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

STOP WORK
 STA 913+37.00
 SEG 2511 OFFSET 2196
 SR 0080 WB SEC 352

LIMIT OF WORK
 STA 914+50.00
 SEG 2511 OFFSET 2309
 SR 0080 WB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY

PVI STA 883+30.00
 ELEV 664.16
 VC 210.00'
 MO 0.03'
 HLSD UNLIMITED



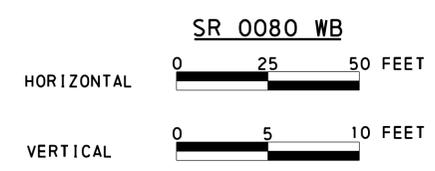
PLOTTED: \$\$\$DATE\$\$\$

D-9012 CADD (02-90) REVISED (10-04)

SEE SHEET 21

OPERATOR: \$\$\$designfil\$\$\$
 FILE NAME: \$\$\$designfil\$\$\$

DATUM:	664.8	664.9	665.4	666.1	667.06	668.22	669.51	670.89	672.34	673.85	675.47	677.32	679.26	681.28	683.47	685.82
+35.00	+50	885	+50	886	+50	887	+50	888	+50	889	+50	890	+50	891	+50	



**PRELIMINARY
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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	23 OF 27
NESCOPECK AND BLACK CREEK TOWNSHIPS				
REV NO	REVISIONS	DATE	BY	APPD

← LIMIT OF WORK
 STA 549+50.00
 SEG 2500 OFFSET 1215
 SR 0080 EB SEC 352
 NESCOPECK TOWNSHIP
 LUZERNE COUNTY

← START WORK
 STA 550+60.00
 SEG 2500 OFFSET 1325
 SR 0080 EB SEC 352

PVI STA 578+15.00
 ELEV 661.79
 VC 210.00'
 MO -0.03'
 SSD 9638'

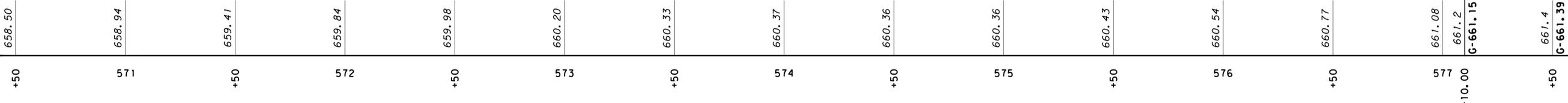
BEGIN FULL DEPTH PAVING
 STA 577+10.00
 SR 0080 EB

EXISTING GROUND
 +0.7%

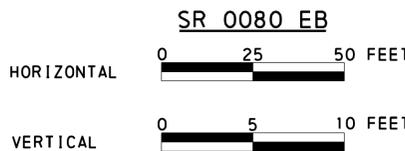
PROPOSED GRADE
 +0.61%



DATUM: 600



SEE SHEET 24



**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

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OPERATOR: FILE NAME: \$des\$ignf\$le\$\$

D:\9012 CADD (02-90) REVISED (10-04)

PLOTTED: \$\$\$DATE\$\$\$

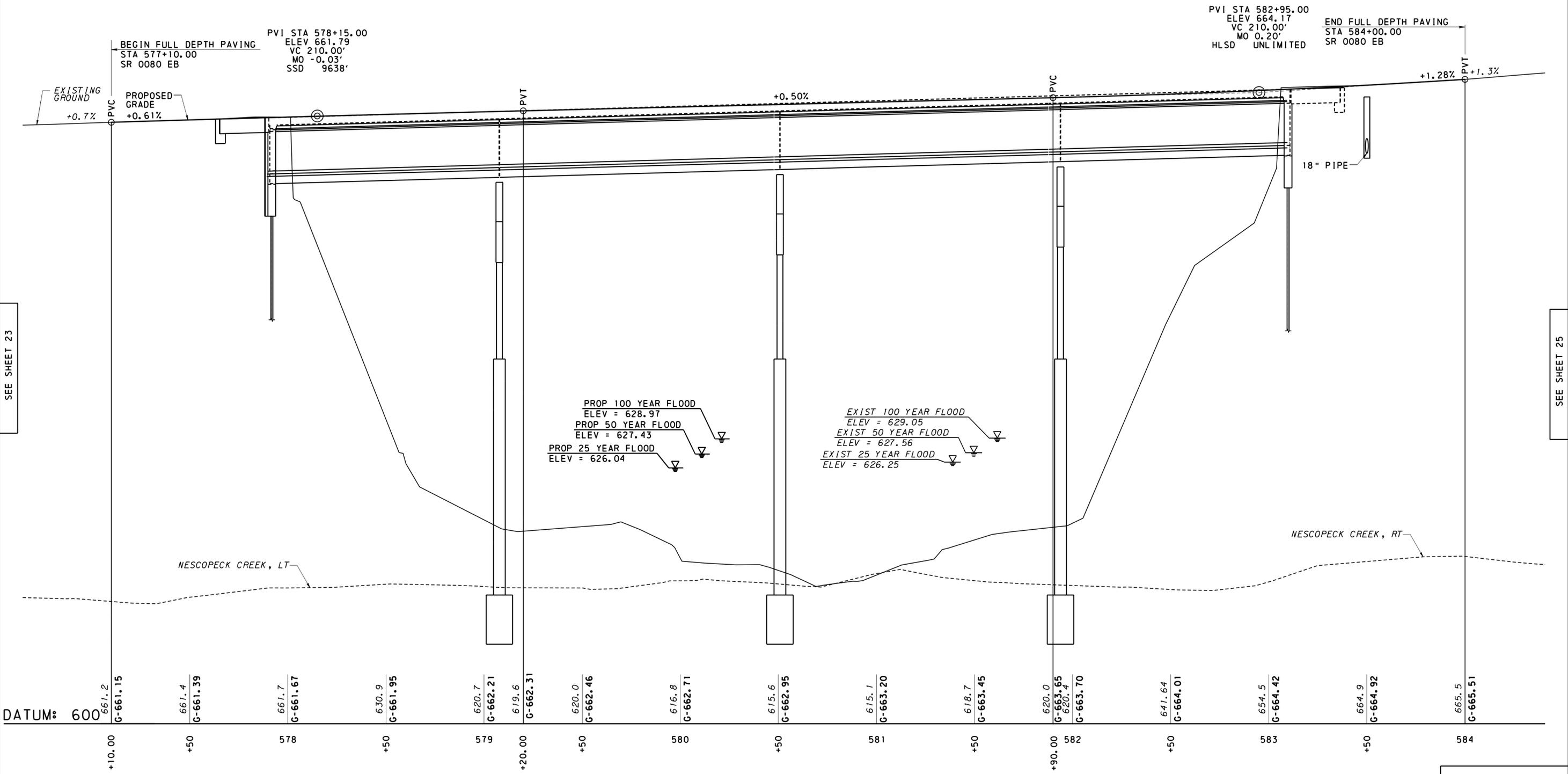
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	24 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

PLOTTED: \$\$\$DATE\$\$\$

D-9012 CADD (02-90) REVISED (10-04)

SEE SHEET 23

SEE SHEET 25



DATUM: 600



**PRELIMINARY
DRAWING
OR
INFORMATION**

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DES: JES DWG: SRS CKD: DJJ

SURVEY BOOK E04268 FOR SR 0080 EB PLAN, SEE SHEET 13

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	25 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

STOP WORK
 STA 609+00.00
 SEG 2510 OFFSET 1791
 SR 0080 EB SEC 352

LIMIT OF WORK
 STA 610+00.00
 SEG 2510 OFFSET 1891
 SR 0080 EB SEC 352
 BLACK CREEK TOWNSHIP
 LUZERNE COUNTY

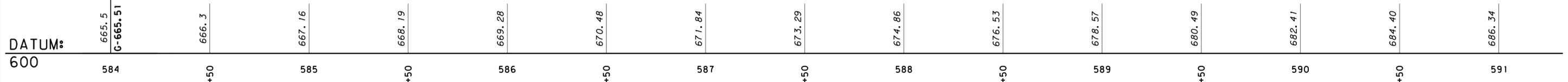
PVI STA 582+95.00
 ELEV 664.17
 VC 210.00'
 MO 0.20'
 HLSD UNLIMITED

PROPOSED GRADE
 END FULL DEPTH PAVING
 STA 584+00.00
 SR 0080 EB

+1.28% PVT +1.3%

EXISTING GROUND

SEE SHEET 24



DATUM: 600



**PRELIMINARY
 DRAWING
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 INFORMATION**

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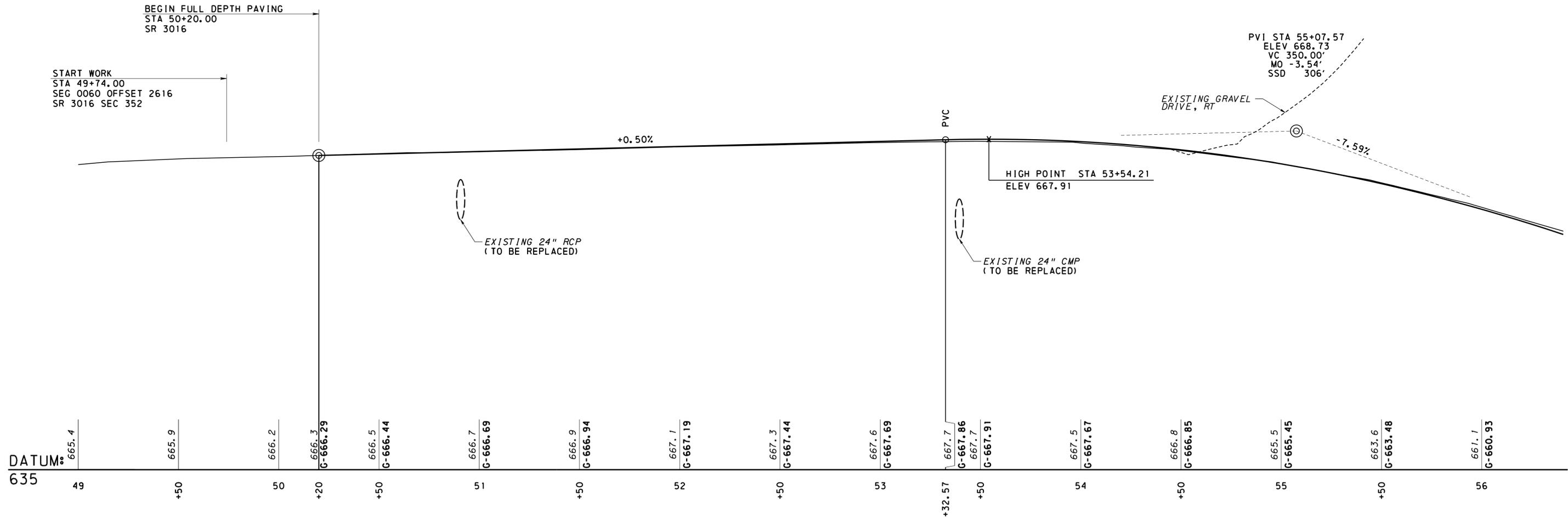
OPERATOR: FILE NAME: \$\$\$designfil\$\$\$
 PLOTTED: \$\$\$DATE\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	26 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

#####

PLOTTED:

D:\9012 CADD (02-90) REVISED (10-04)



OPERATOR: FILE NAME: sdesignfiles

DATUM: 635



SEE SHEET 27

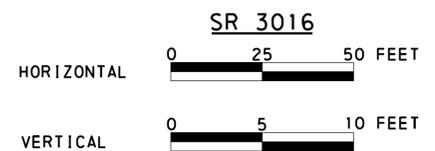
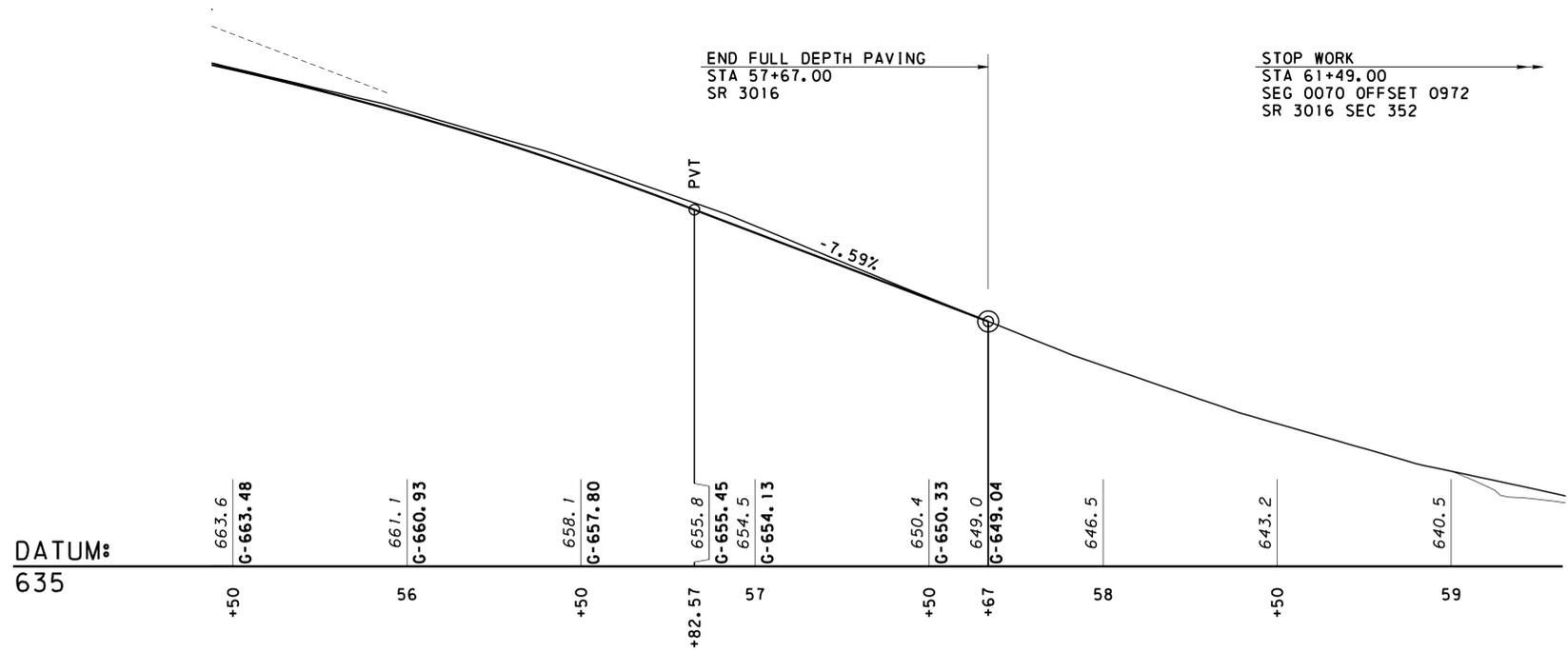
**PRELIMINARY
DRAWING
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INFORMATION**

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	27 OF 27
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

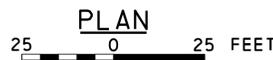
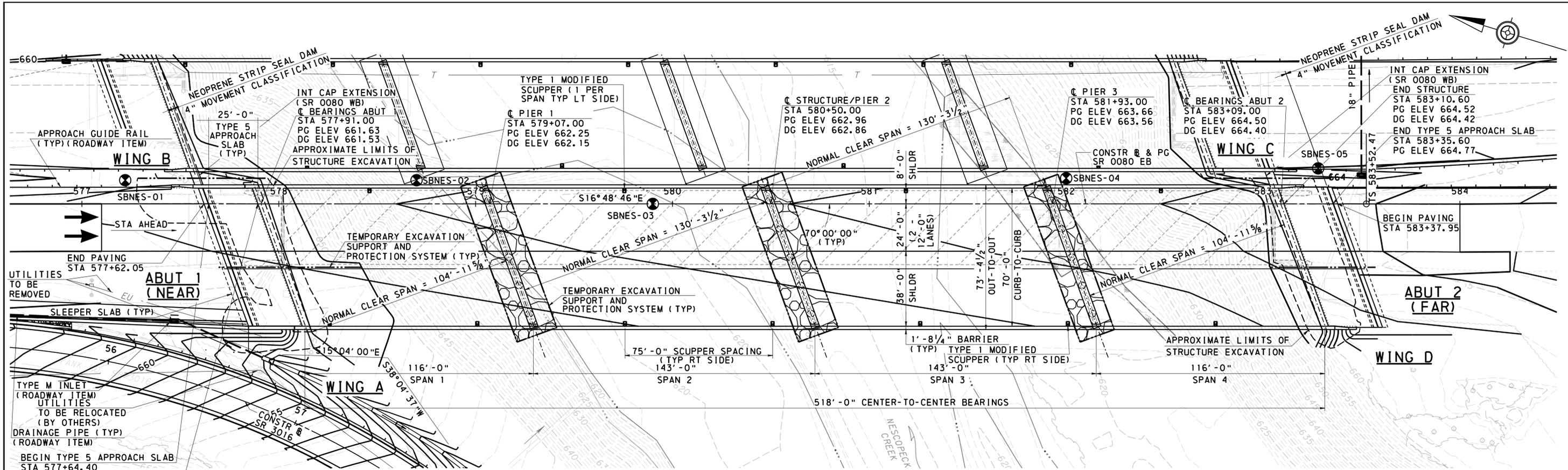
OPERATOR: \$\$\$DESIGNFILES
 FILE NAME: \$\$\$DESIGNFILES
 PLOTTED: \$\$\$DATE\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)

SEE SHEET 26



**PRELIMINARY
DRAWING
OR
INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.



HORIZONTAL CURVE DATA

CONSTR @ SR 0080 EB	
PI STA 599+91.01	Es = 557.95'
Δ = 81°22'40" LT	k = 179.93'
Δc = 28°56'49" LT	p = 3.30'
Dc = 3°29'58" (ARC)	Xc = 359.57'
Rc = 1637.28'	Yc = 13.18'
Lc = 827.19'	LT = 240.15'
Os = 6°17'56" LT	ST = 120.14'
Ls = 360.00'	LC = 359.81'
Ts = 1638.54'	SE = 8.00%
TS STA = 583+52.47	CS STA = 608+03.25
SC STA = 587+12.47	ST STA = 611+63.25

PROPOSED SOIL BORING INFORMATION

BORING	APPROX LOCATION
SBNES-01	STA 577+22.00, 12.0' LT
SBNES-02	STA 578+70.00, 12.0' LT
SBNES-03	STA 579+90.00, @
SBNES-04	STA 582+00.00, 13.0' LT
SBNES-05	STA 583+28.00, 18.0' LT

EXISTING STRUCTURE DATA

STA 580+53.35
 FOUR SPAN CONT WELDED PLATE GIRDER BRIDGE
 CLEAR SPAN = 2 @ 112' & 2 @ 140'
 UNDERCLEAR = 37.96'
 CLEAR ROADWAY WIDTH = 32'
 SKEW = 90°

LEGEND

- EXISTING STRUCTURE (TO BE REMOVED) (ROADWAY ITEM)
- NO. 57 COARSE AGGREGATE (ROADWAY ITEM)
- SELECTED BORROW EXCAVATION ROCK, CLASS R-8 (GROUT IN PLACE)
- DELINEATED WETLAND
- EXISTING CONTOUR
- PROPOSED CONTOUR
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM
- DIRECTION OF TRAFFIC
- PROFILE GRADE
- DECK GRADE
- PROPOSED BORING LOCATION

DES: MBM DWG: MBM CKD: JES

DESIGN REVIEWED BY:

PENNONI ASSOCIATES INC.
 672 SOUTH RIVER STREET,
 SUITE 313
 PLAINS, PA 18705

Signature and Date: _____

PREPARED BY:

LARSON DESIGN GROUP
 1000 COMMERCE PARK DRIVE
 WILLIAMSPORT, PA 17701

Signature and Date: _____

**PRELIMINARY
DRAWING
OR
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SEAL

**PRELIMINARY
DRAWING
OR
INFORMATION**

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SEAL

DESCRIPTION	DWG. NO.	APP. DATE
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06-01-2010
BACKFILL AT STRUCTURES	RC-12M	02-08-2019
CONCRETE PAVEMENT JOINTS	RC-20M	12-17-2019
SUBSURFACE DRAINS	RC-30M	12-17-2019
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	02-19-2021
TYPE 31 STRONG POST GUIDE RAIL	RC-51M	02-19-2021
PERMANENT METAL DECK FORMS	BC-732M	01-31-2019
ANCHOR SYSTEMS	BC-734M	02-19-2021
WALL CONSTRUCTION & EXPANSION JOINT DETAILS	BC-735M	09-30-2016
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	01-31-2019
BRIDGE DRAINAGE	BC-751M	01-31-2019
CONCRETE DECK SLAB DETAILS	BC-752M	02-19-2021
BEARINGS	BC-755M	01-31-2019
STEEL PILE TIP REINFORCEMENT AND SPLICES	BC-757M	09-30-2016
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	02-19-2021
STEEL MIDSPAN DIAPHRAGMS FOR P/S CONCRETE AASHTO I-BEAMS AND PA BULB-TEE BEAM BRIDGES	BC-770M	01-31-2019
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	09-30-2016
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	09-30-2016
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	01-31-2019
DESCRIPTION	DWG. NO.	APP. DATE

SUPPLEMENTAL DRAWINGS

- PHASE 1 CONSTRUCTION SEQUENCE**
- INSTALL TEMPORARY SUPPORT AND EXCAVATION PROTECTION SYSTEM, AS SHOWN.
 - CONSTRUCT PHASE 1 STRUCTURE.
 - RELOCATE SR 3016 (TANK ROAD) AND CONSTRUCT WALL.
 - CONSTRUCT MOMENT SLAB AND PROPOSED SHOULDER ALONG SR 0080 EB.
 - COMPLETE PAVING OPERATIONS.

- PHASE 2 CONSTRUCTION SEQUENCE**
- INSTALL TEMPORARY BARRIER ON NEWLY CONSTRUCTED STRUCTURE.
 - SHIFT EASTBOUND TRAFFIC ONTO NEWLY CONSTRUCTED ROADWAY AND STRUCTURE.
 - CONSTRUCT PHASE 2 STRUCTURE.
 - REMOVE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM.
 - COMPLETE PAVING OPERATIONS.

NOTE: PROFILE GRADE (PG) IS MEASURED AT TOP OF BRIDGE DECK OVERLAY AND CONCRETE APPROACH SLAB. DECK GRADE (DG) IS MEASURED AT THE TOP OF 8" CONCRETE DECK (AFTER ANY MECHANICAL GRINDING, IF NEEDED.)

INDEX OF STRUCTURE DRAWINGS

SHEET NO.	TITLE
1	CONCEPTUAL GENERAL PLAN
2	CONCEPTUAL ELEVATION
3	CONCEPTUAL TYPICAL SECTION
4	CONCEPTUAL PHASED CONSTRUCTION TYPICAL SECTIONS

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					
	SR 0080 EB				PREVIOUSLY KNOWN AS L.R. 1009
	BMS# 40-0080-2504-1414				ECMS#111769 BRKEYXXXX

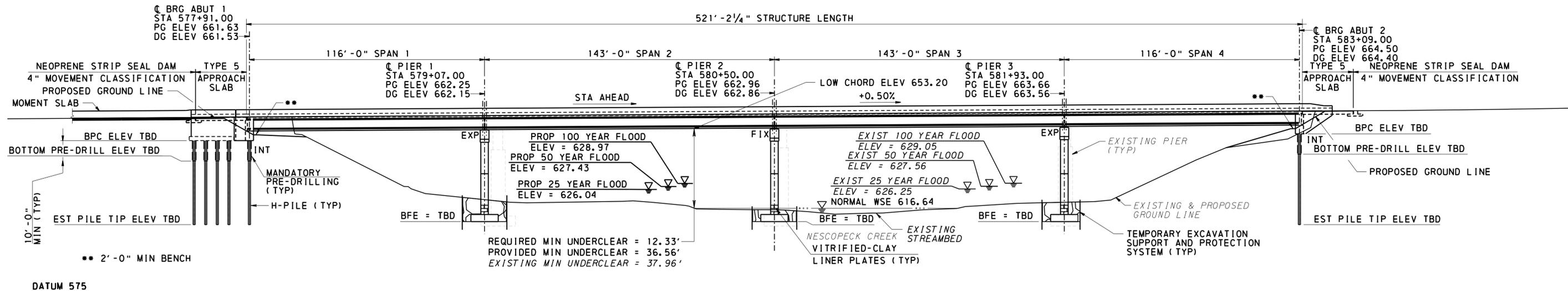
**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION**

**LUZERNE COUNTY
SR 0080 EB SEC 352
SEGMENT 2504 OFFSET 1414
SR 0080 EB STA 580+50.00
OVER NESCOPECK CREEK
4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
BRIDGE REPLACEMENT
CONCEPTUAL GENERAL PLAN**

RECOMMENDED _____

SHEET 1 OF 4
& SUPPLEMENTAL
DRAWINGS
S - 40358D

DISTRICT BRIDGE ENGINEER



DATUM 575

- USE PLAIN NEOPRENE BEARING PADS AT ABUTMENTS.
- USE LAMINATED NEOPRENE BEARING PADS AT THE PIERS
- PROVIDE CONTINUITY DIAPHRAGMS AT PIERS.

GENERAL NOTES:

1. DESIGN IS IN ACCORDANCE WITH THE AASHTO LRFD DESIGN SPECIFICATIONS, 2017, 8TH EDITION AND SUPPLEMENTED BY PENNDOT DESIGN MANUAL PART 4, 2019.
2. LIVE LOAD DISTRIBUTION TO BEAM IS BASED ON DM-4 DISTRIBUTION FACTORS.
3. DESIGN LIVE LOAD IS PHL-93, ML-80, TK527, P-82 PERMIT LOAD AND P2016-13 PERMIT LOAD.
4. DEAD LOAD INCLUDES 30 PSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB AND 15 PSF FOR PERMANENT METAL STAY IN PLACE FORMS, WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.
5. BEAMS DESIGNED USING 10 ksi CONCRETE AND 0.6" DIA STRANDS.
6. EXISTING ABUTMENTS AND PIERS TO BE REMOVED 3'-0" BELOW PROPOSED FINISHED GRADE OR AS NECESSARY TO CONSTRUCT NEW SUBSTRUCTURE.
7. THE NUMBER OF FIXED PIERS SHALL BE ESTABLISHED BY THE CONTRACTOR'S LEAD DESIGN ENGINEER SUBJECT TO THE DESIGN REQUIREMENTS IN PENNDOT DESIGN MANUAL PART 4, 2019, AND THE CONTRACT SPECIAL PROVISIONS.

NOTE: PROFILE GRADE (PG) IS MEASURED AT TOP OF BRIDGE DECK OVERLAY AND CONCRETE APPROACH SLAB. DECK GRADE (DG) IS MEASURED AT THE TOP OF 8" CONCRETE DECK (AFTER ANY MECHANICAL GRINDING, IF NEEDED.)



SCOUR INFORMATION

	ABUT 1	PIER 1	PIER 2	PIER 3	ABUT 2
ESTIMATED BOTTOM OF FOOTING ELEVATION	TBD	TBD	TBD	TBD	TBD
TOP OF ROCK ELEVATION	TBD	TBD	TBD	TBD	TBD
SCOUR DESIGN ELEVATION	TBD	TBD	TBD	TBD	TBD

1. SCOUR DEPTHS TO BE CALCULATED AFTER TOP OF ROCK ELEVATIONS DETERMINED FROM BORINGS.
2. BOTTOM OF FOOTING ASSUMED 6'-0" BELOW STREAM BED ELEVATION.
3. BORINGS NOT YET PERFORMED.

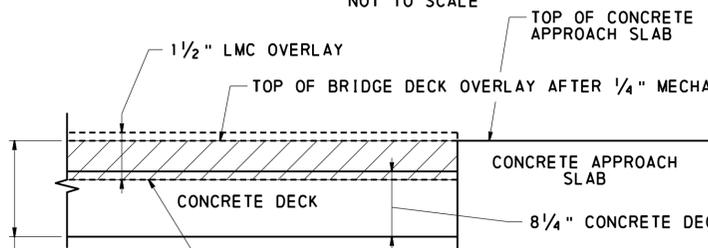
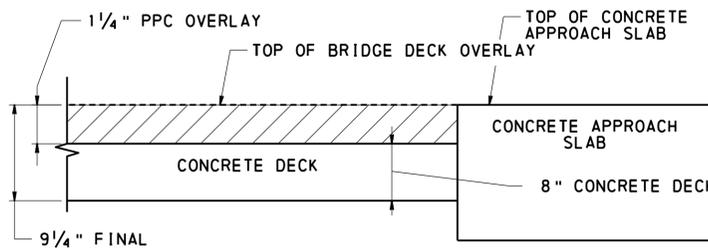
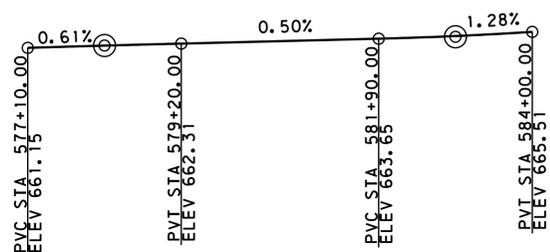
HYDRAULIC DATA

DRAINAGE AREA = 156.0 SQ MI
 DEP DESIGN FLOOD
 FREQUENCY = 25 YEARS
 MAGNITUDE = 14561 CFS
 VELOCITY = 9.48 FPS
 PERT WS ELEV = 626.04
 PENNDOT DESIGN FLOOD
 FREQUENCY = 50 YEARS
 MAGNITUDE = 17456 CFS
 VELOCITY = 9.61 FPS
 PERT WS ELEV = 627.43
 100 YEAR FLOOD RISK ASSESSMENT
 MAGNITUDE = 20837 CFS
 VELOCITY = 9.76 FPS
 PERT WS ELEV = 628.97
 FLOOD OF RECORD = UNKNOWN

VERTICAL CURVE DATA

CONSTR & SR 0080 EB

PVI STA 578+15.00 ELEV 661.79 VC 210.00' MO -0.03' SSD 9638'	PVI STA 582+95.00 ELEV 664.17 VC 210.00' MO 0.20' HLSD UNLIMITED
--	--



**PRELIMINARY
DRAWING
OR
INFORMATION**

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Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

SR 0080 EB PREVIOUSLY KNOWN AS L.R. 1009
 BMS# 40-0080-2504-1414 ECMS# 111769 BRKEYXXXX

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION**

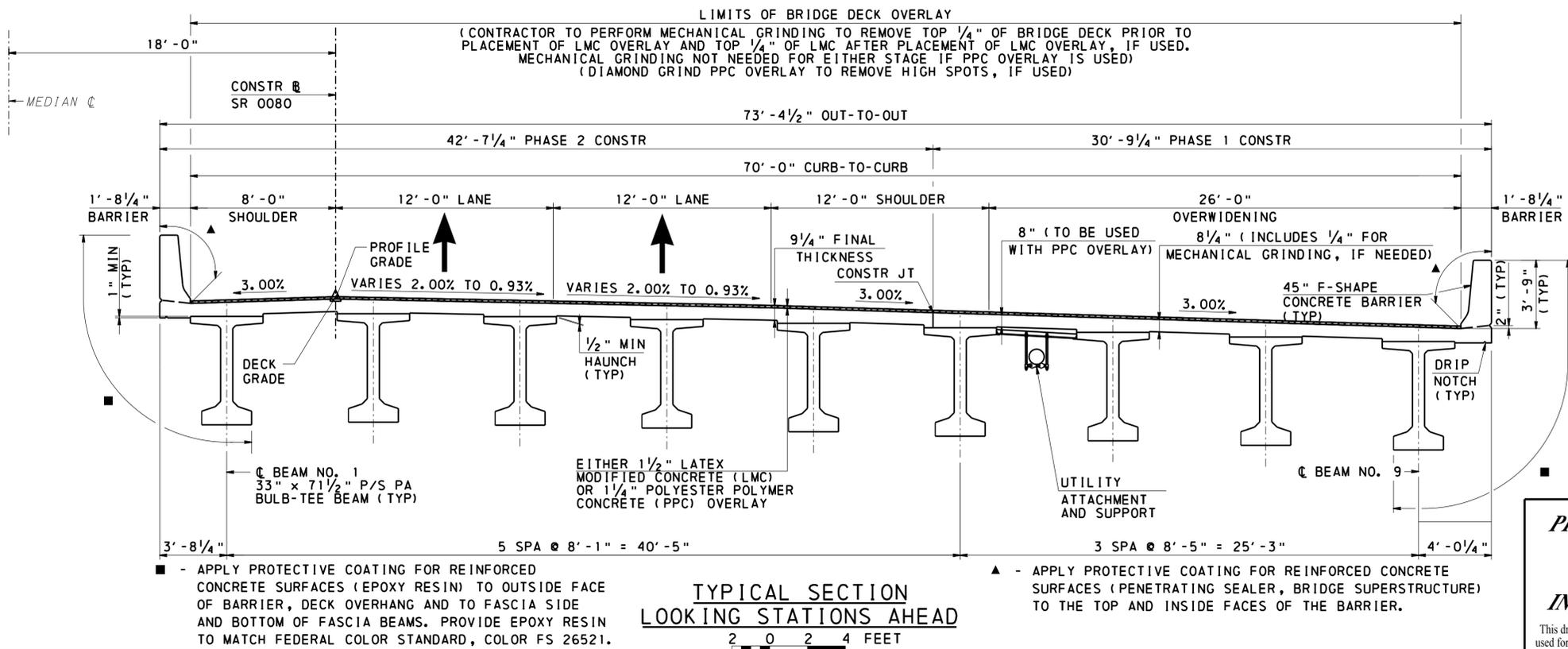
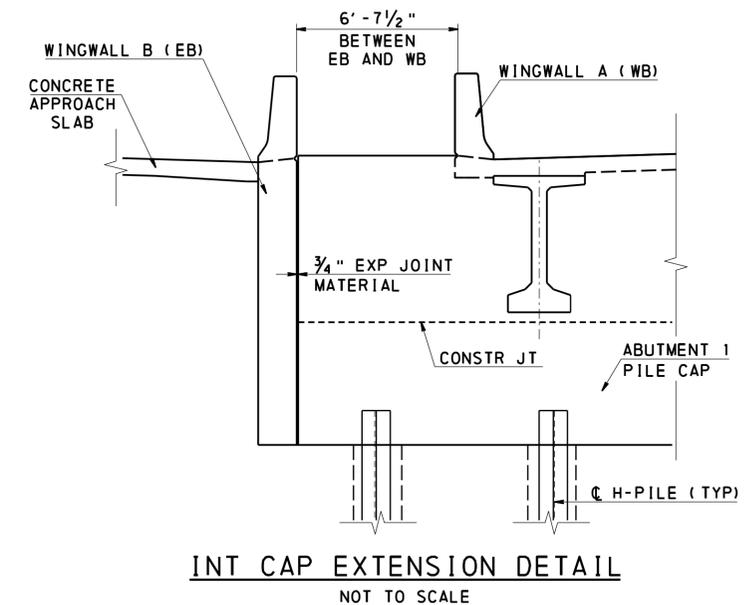
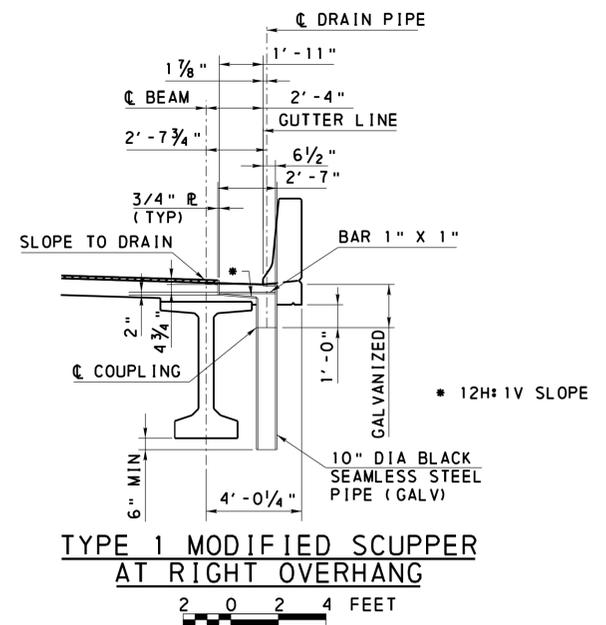
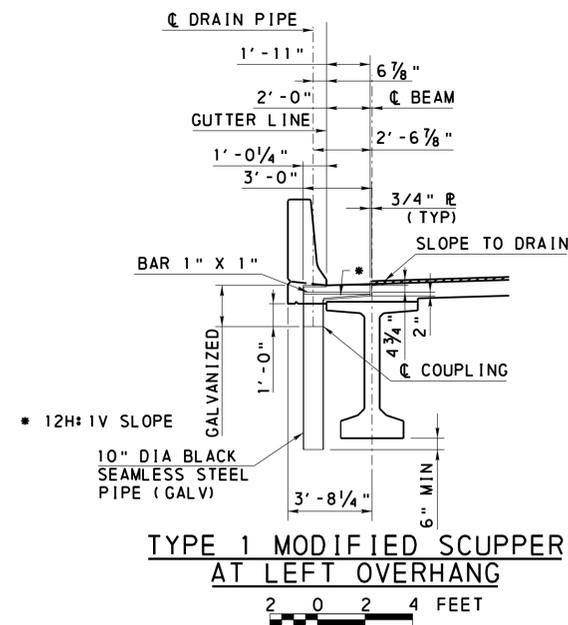
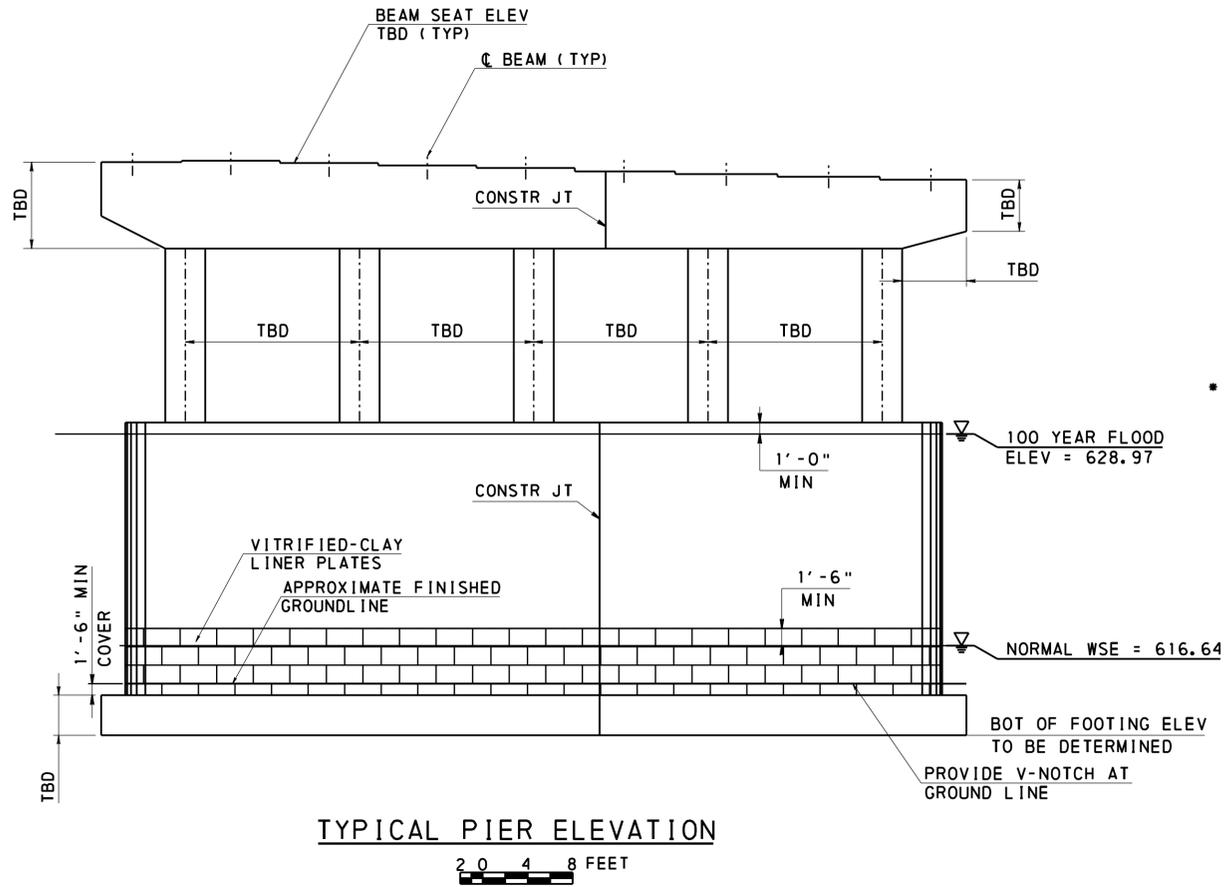
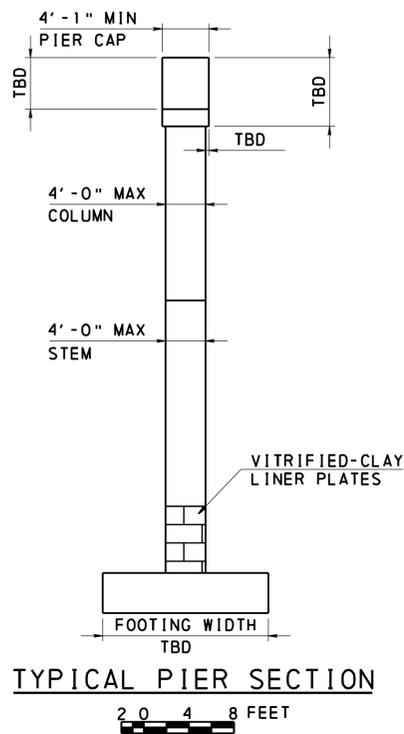
**LUZERNE COUNTY
SR 0080 EB SEC 352**

SEGMENT 2504 OFFSET 1414
 SR 0080 EB STA 580+50.00

OVER NESCOPECK CREEK
 4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
 BRIDGE REPLACEMENT
CONCEPTUAL ELEVATION

RECOMMENDED _____ SHEET 2 OF 4

S - 40358D



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

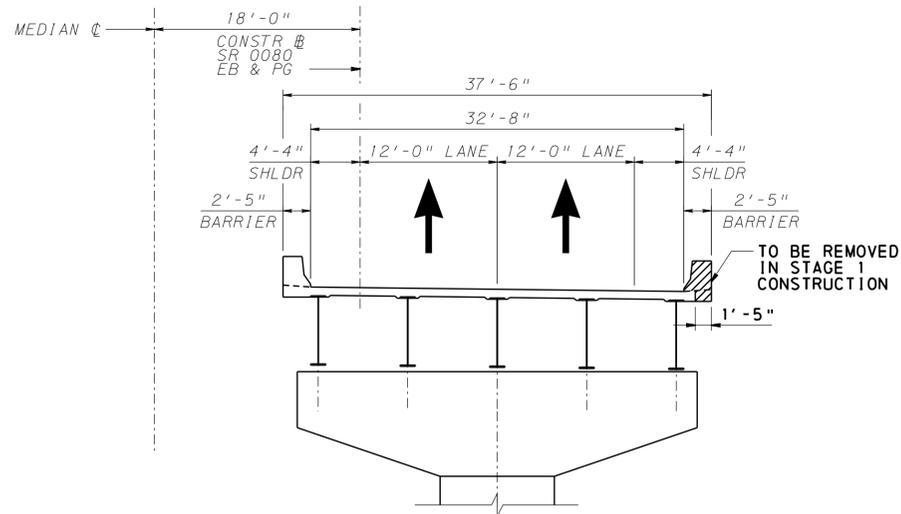
SR 0080 EB PREVIOUSLY KNOWN AS L.R. 1009
 BMS# 40-0080-2504-1414 ECMS# 111769 BRKEYXXXX

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

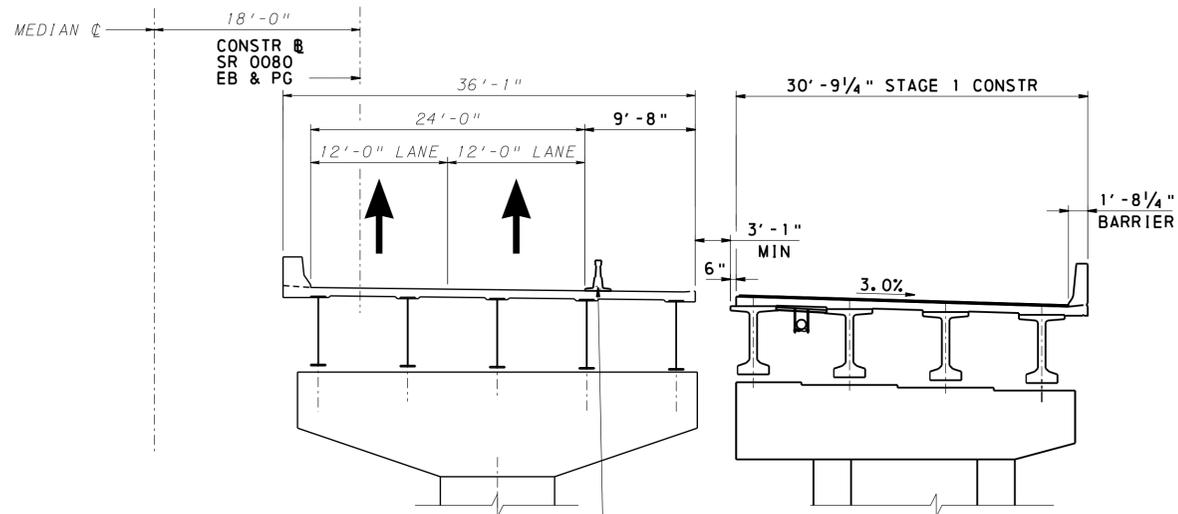
LUZERNE COUNTY
 SR 0080 EB SEC 352
 SEGMENT 2504 OFFSET 1414
 SR 0080 EB STA 580+50.00
 OVER NESCOPECK CREEK
 4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
 BRIDGE REPLACEMENT
CONCEPTUAL TYPICAL SECTION

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

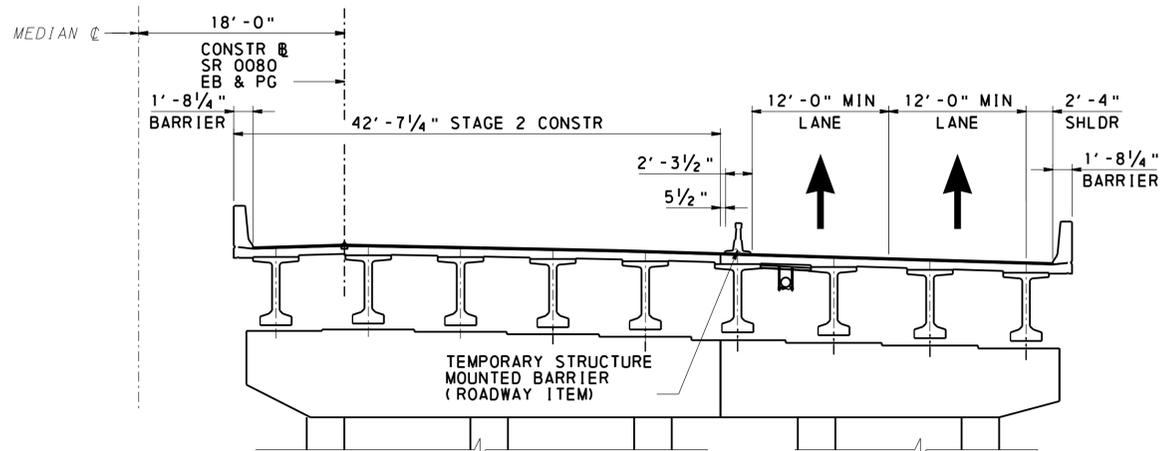
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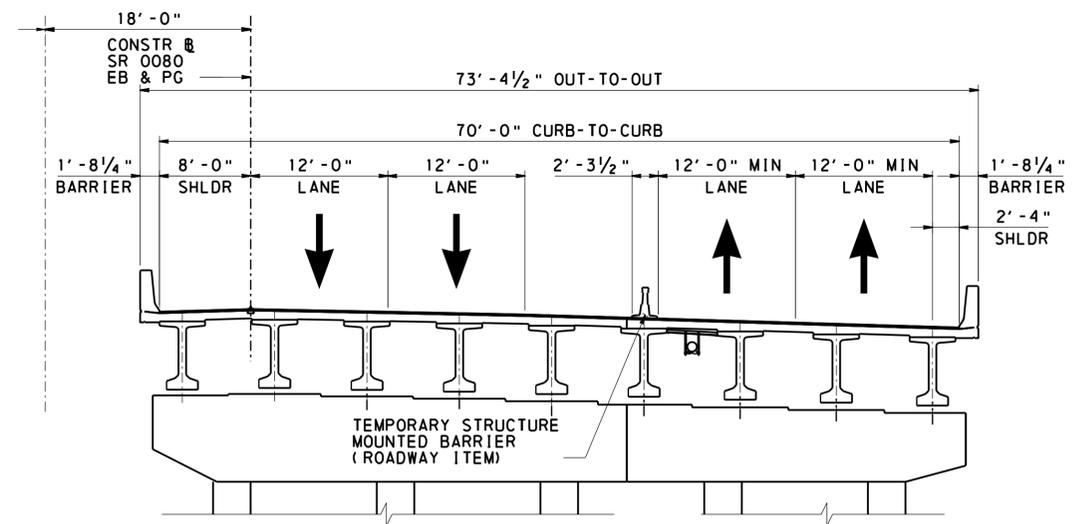
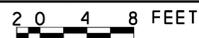
EXISTING SR 0080 EB TYPICAL SECTION



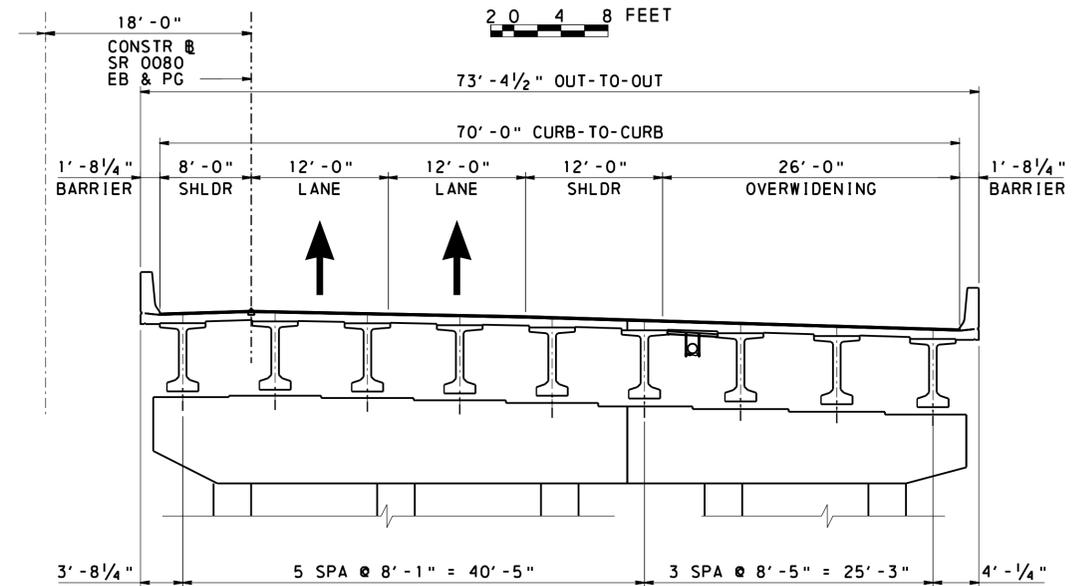
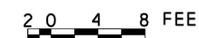
PHASE 1 SR 0080 EB TYPICAL SECTION



PHASE 2 SR 0080 EB TYPICAL SECTION



PHASE 3 SR 0080 EB & WB TYPICAL SECTION



PROPOSED SR 0080 EB TYPICAL SECTION



Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 0080 EB PREVIOUSLY KNOWN AS L.R. 1009
 BMS# 40-0080-2504-1414 ECMS# 111769 BRKEYXXXX

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

LUZERNE COUNTY
SR 0080 EB SEC 352
 SEGMENT 2504 OFFSET 1414
 SR 0080 EB STA 580+50.00
 OVER NESCOPECK CREEK
 4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
 BRIDGE

CONCEPTUAL PHASED CONSTR TYPICAL SECTIONS

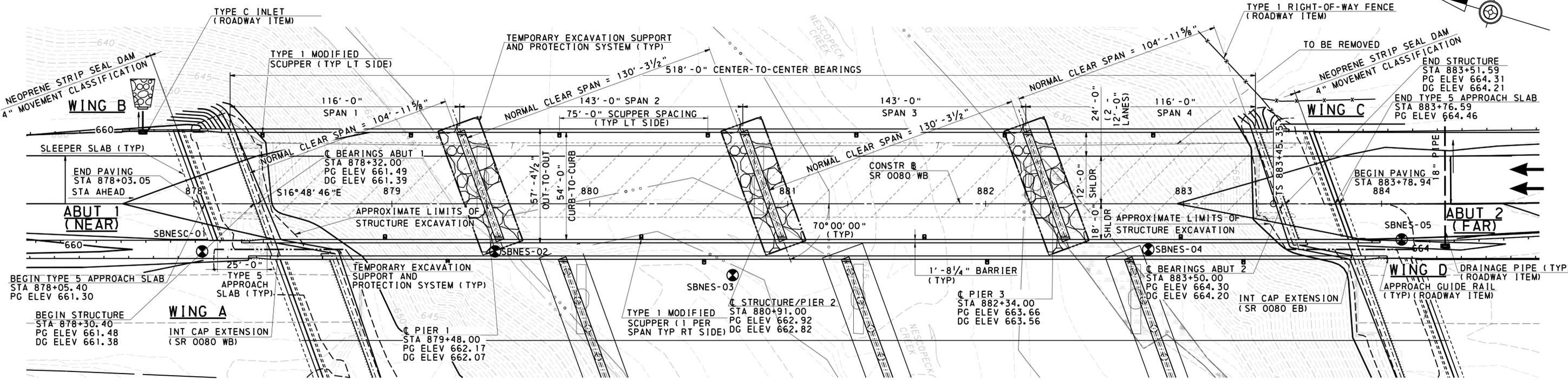
RECOMMENDED _____ SHEET 4 OF 4

S - 40358D

NOTE: CONTRACTOR TO VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.

*PRELIMINARY
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NOTE: PROFILE GRADE (PG) IS MEASURED AT TOP OF BRIDGE DECK OVERLAY AND CONCRETE APPROACH SLAB. DECK GRADE (DG) IS MEASURED AT THE TOP OF 8" CONCRETE DECK (AFTER ANY MECHANICAL GRINDING, IF NEEDED.)

HORIZONTAL CURVE DATA

CONSTR @ SR 0080 WB	
PI STA 900+17.95	Es = 556.58'
Δ = 81°22'40" LT	k = 179.94'
Δc = 69°28'31" LT	p = 3.11'
Dc = 3°18'23" (ARC)	Xc = 359.61'
Rc = 1732.95'	Yc = 12.45'
Lc = 2101.32'	LT = 240.14'
θs = 5°57'05" LT	ST = 120.12'
Ls = 360.00'	LC = 359.83'
Ts = 1672.60'	SE = 8.00%
TS STA = 883+45.35	CS STA = 908+06.67
SC STA = 887+05.35	ST STA = 911+66.67

PROPOSED SOIL BORING INFORMATION

BORING	APPROX LOCATION
SBNES-01	STA 878+04.16, 24.0' RT (WB) = 577+22.00, 12.0' LT (EB)
SBNES-02	STA 879+52.16, 24.0' RT (WB) = 578+70.00, 12.0' LT (EB)
SBNES-03	STA 880+72.16, 36.0' RT (WB) = 579+90.00, @ (EB)
SBNES-04	STA 882+82.16, 23.0' RT (WB) = 582+00.00, 13.0' LT (EB)
SBNES-05	STA 884+10.10, 18.1' RT (WB) = 583+28.00, 18.0' LT (EB)

INDEX OF STRUCTURE DRAWINGS

SHEET NO.	TITLE
1	CONCEPTUAL GENERAL PLAN
2	CONCEPTUAL ELEVATION
3	CONCEPTUAL TYPICAL SECTION

EXISTING STRUCTURE DATA

STA 880+85.34
FOUR SPAN CONT WELDED PLATE GIRDER BRIDGE
CLEAR SPAN = 2 @ 112' & 2 @ 140'
UNDERCLEAR = 38.16'
CLEAR ROADWAY WIDTH = 32'
SKEW = 90°

LEGEND

- EXISTING STRUCTURE (TO BE REMOVED) (ROADWAY ITEM)
- SELECTED BORROW EXCAVATION ROCK, CLASS R-8 (GROUT IN PLACE)
- ROCK APRON (ROADWAY ITEM)
- DELINEATED WETLAND
- EXISTING CONTOUR
- PROPOSED CONTOUR
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM
- DIRECTION OF TRAFFIC
- PROFILE GRADE
- DECK GRADE
- PROPOSED BORING LOCATION

DESIGN REVIEWED BY:

PENNONI ASSOCIATES INC.
672 SOUTH RIVER STREET,
SUITE 313
PLAINS, PA 18705

Signature and Date: _____

PRELIMINARY DRAWING OR INFORMATION

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SEAL

PREPARED BY:

LARSON DESIGN GROUP
1000 COMMERCE PARK DRIVE
WILLIAMSPORT, PA 17701

Signature and Date: _____

PRELIMINARY DRAWING OR INFORMATION

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SEAL

CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06-01-2010
BACKFILL AT STRUCTURES	RC-12M	02-08-2019
CONCRETE PAVEMENT JOINTS	RC-20M	12-17-2019
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STEEL MID-SPAN DIAPHRAGMS FOR P/S CONCRETE AASHTO I-BEAMS AND PA BULB-TEE BEAM BRIDGES	BC-770M	01-31-2019
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	09-30-2016
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	09-30-2016
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	01-31-2019
DESCRIPTION	DWG. NO.	APP. DATE

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					
	SR 0080 WB				PREVIOUSLY KNOWN AS L.R. 1009
	BMS# 40-0080-2505-1491				ECMS#111769 BRKEYXXXX

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

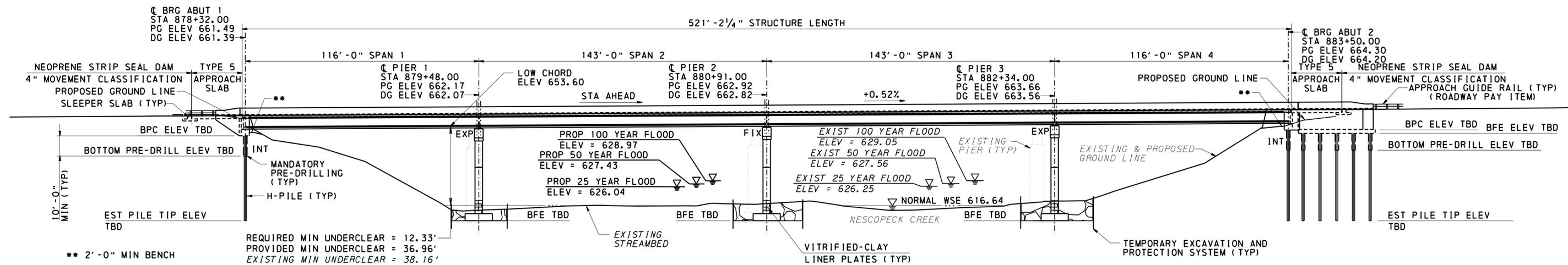
LUZERNE COUNTY
SR 0080 WB SEC 352
SEGMENT 2505 OFFSET 1491
SR 0080 WB STA 880+91.00
OVER NESCOPECK CREEK
4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
BRIDGE REPLACEMENT
CONCEPTUAL GENERAL PLAN

RECOMMENDED _____

SHEET 1 OF 3
& SUPPLEMENTAL
DRAWINGS
S - 40356D

DISTRICT BRIDGE ENGINEER

D-9002 CADD (02-90) REVISED (10-04) PLOTTED: \$\$\$DATE\$\$\$



DATUM 575

- USE PLAIN NEOPRENE BEARING PADS AT ABUTMENTS
- USE LAMINATED NEOPRENE BEARING PADS AT THE PIERS
- PROVIDE CONTINUITY DIAPHRAGMS AT PIERS

GENERAL NOTES:

1. DESIGN IS IN ACCORDANCE WITH THE AASHTO LRFD DESIGN SPECIFICATIONS, 2017, 8TH EDITION AND SUPPLEMENTED BY PENNDOT DESIGN MANUAL PART 4, 2019.
2. LIVE LOAD DISTRIBUTION TO BEAM IS BASED ON DM-4 DISTRIBUTION FACTORS.
3. DESIGN LIVE LOAD IS PHL-93, ML-80, TK527, P-82 PERMIT LOAD AND P2016-13 PERMIT LOAD.
4. DEAD LOAD INCLUDES 30 PSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB AND 15 PSF FOR PERMANENT METAL STAY IN PLACE FORMS, WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.
5. BEAMS DESIGNED USING 10 KSI CONCRETE AND 0.6" DIA STRANDS.
6. EXISTING ABUTMENTS AND PIERS TO BE REMOVED 3'-0" BELOW PROPOSED FINISHED GRADE OR AS NECESSARY TO CONSTRUCT NEW SUBSTRUCTURE.
7. THE NUMBER OF FIXED PIERS SHALL BE ESTABLISHED BY THE CONTRACTOR'S LEAD DESIGN ENGINEER SUBJECT TO THE DESIGN REQUIREMENTS IN PENNDOT DESIGN MANUAL PART 4, 2019, AND THE CONTRACT SPECIAL PROVISIONS.



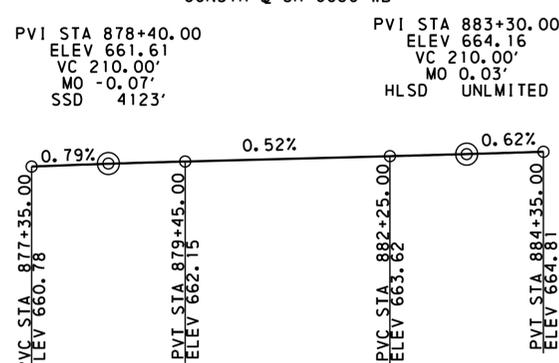
NOTE: PROFILE GRADE (PG) IS MEASURED AT TOP OF BRIDGE DECK OVERLAY AND CONCRETE APPROACH SLAB. DECK GRADE (DG) IS MEASURED AT THE TOP OF 8" CONCRETE DECK (AFTER ANY MECHANICAL GRINDING, IF NEEDED.)

SCOUR INFORMATION

	ABUT 1	PIER 1	PIER 2	PIER 3	ABUT 2
ESTIMATED BOTTOM OF FOOTING ELEVATION	TBD	TBD	TBD	TBD	TBD
TOP OF ROCK ELEVATION	TBD	TBD	TBD	TBD	TBD
SCOUR DESIGN ELEVATION	TBD	TBD	TBD	TBD	TBD

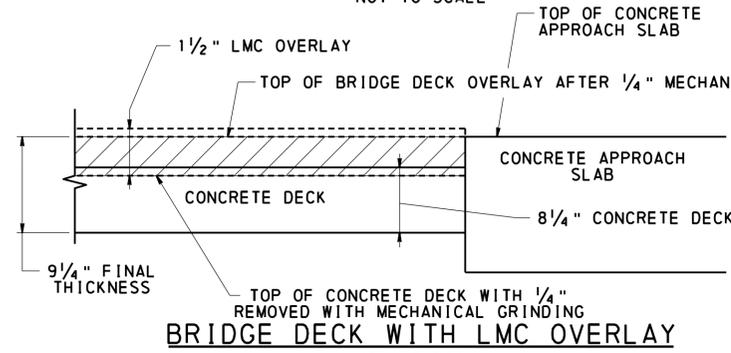
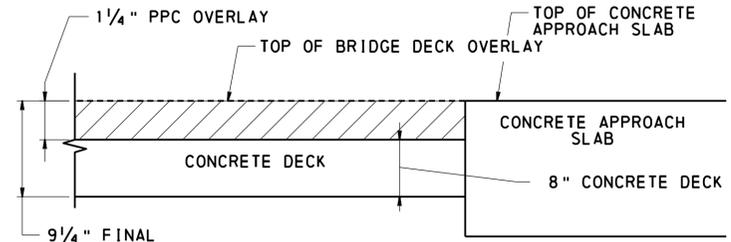
1. SCOUR DEPTHS TO BE CALCULATED AFTER TOP OF ROCK ELEVATIONS DETERMINED FROM BORINGS.
2. BOTTOM OF FOOTING ASSUMED 6'-0" BELOW STREAM BED ELEVATION.
3. BORINGS NOT YET PERFORMED.

VERTICAL CURVE DATA



HYDRAULIC DATA

DRAINAGE AREA = 156.0 SQ MI
 DEP DESIGN FLOOD
 FREQUENCY = 25 YEARS
 MAGNITUDE = 14561 CFS
 VELOCITY = 9.48 FPS
 PERT WS ELEV = 626.04
 PENNDOT DESIGN FLOOD
 FREQUENCY = 50 YEARS
 MAGNITUDE = 17456 CFS
 VELOCITY = 9.61 FPS
 PERT WS ELEV = 627.43
 100 YEAR FLOOD RISK ASSESSMENT
 MAGNITUDE = 20837 CFS
 VELOCITY = 9.76 FPS
 PERT WS ELEV = 628.97
 FLOOD OF RECORD = UNKNOWN



LEGEND

- SELECTED BORROW EXCAVATION ROCK, CLASS R-8 (4'-0" MIN) (GROUT IN PLACE)
- BPC - BOTTOM OF PILE CAP
- BFE - BOTTOM OF FOOTING ELEVATION
- PG - PROFILE GRADE
- DG - DECK GRADE
- TBD - TO BE DETERMINED
- WSE - WATER SURFACE ELEVATION
- INT - INTEGRAL ABUTMENT
- EXP - EXPANSION

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

SR 0080 WB PREVIOUSLY KNOWN AS L.R. 1009
 BMS# 40-0080-2505-1491 ECMS# 111769 BRKEYXXXX

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

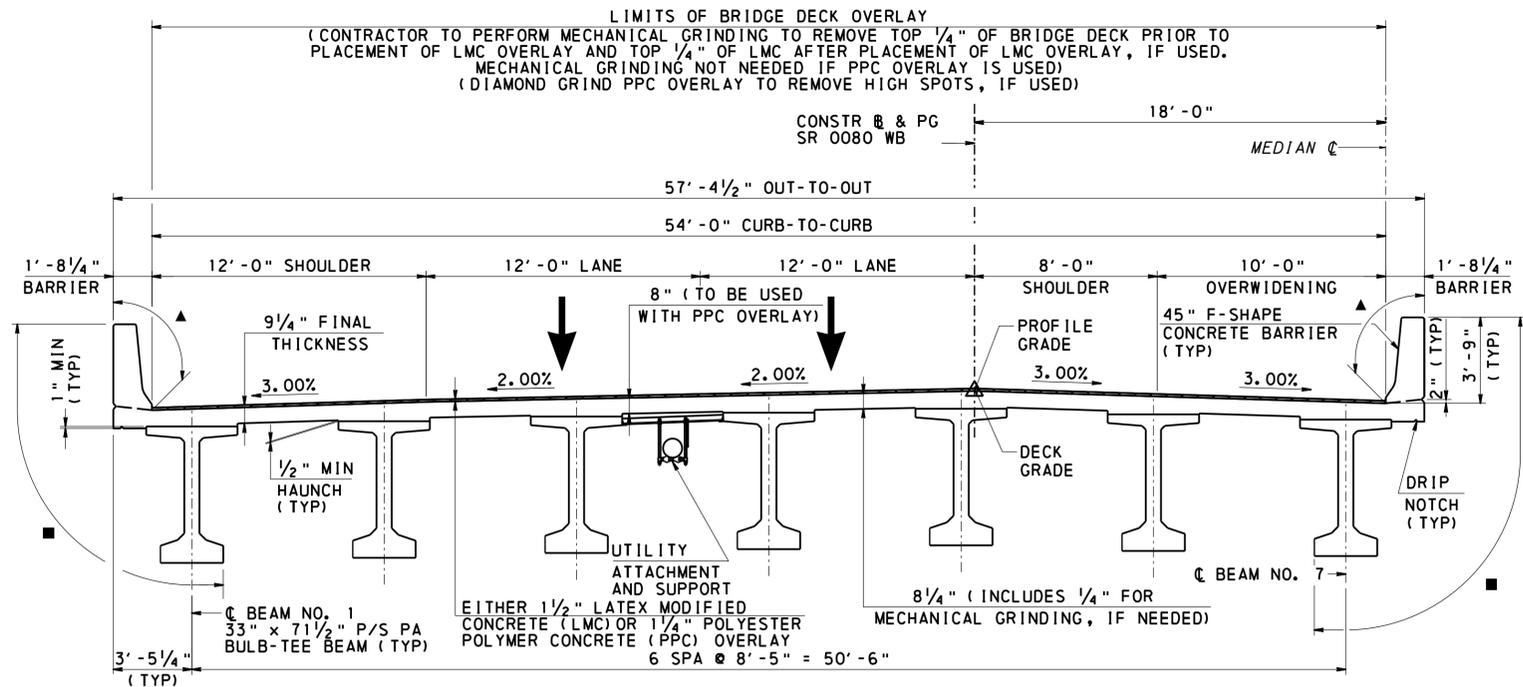
LUZERNE COUNTY
SR 0080 WB SEC 352
 SEGMENT 2505 OFFSET 1491
 SR 0080 WB STA 880+91.00
 OVER NESCOPECK CREEK
 4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
 BRIDGE REPLACEMENT
CONCEPTUAL ELEVATION

**PRELIMINARY
 DRAWING
 OR
 INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

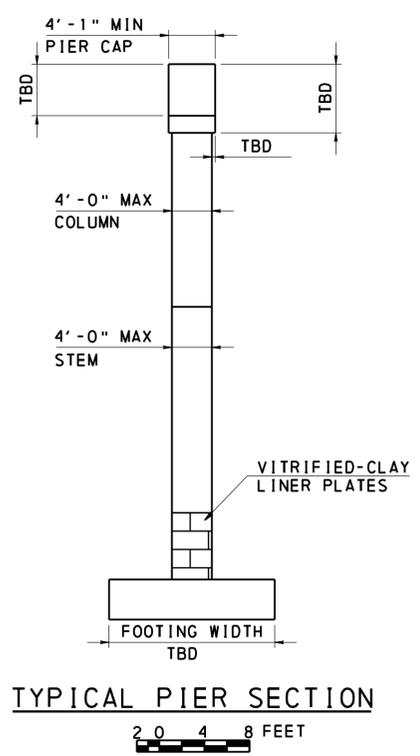
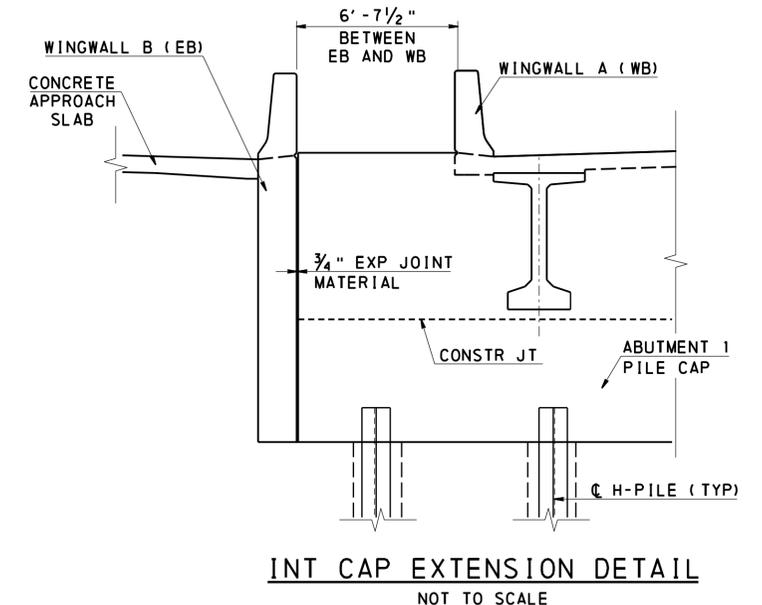
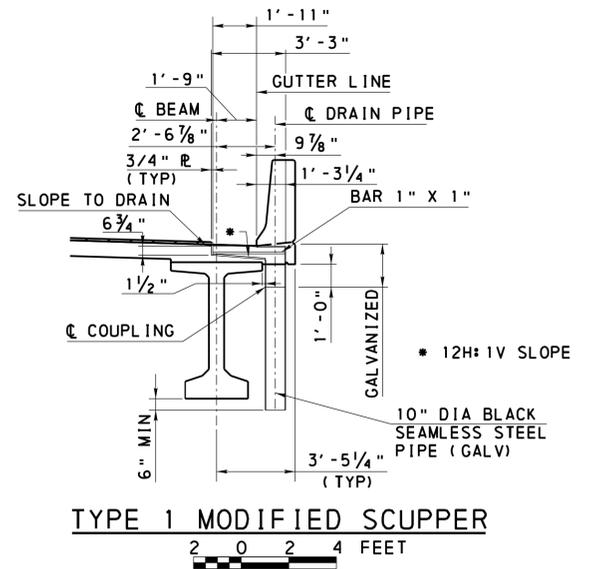
RECOMMENDED _____ SHEET 2 OF 3

S - 40356D

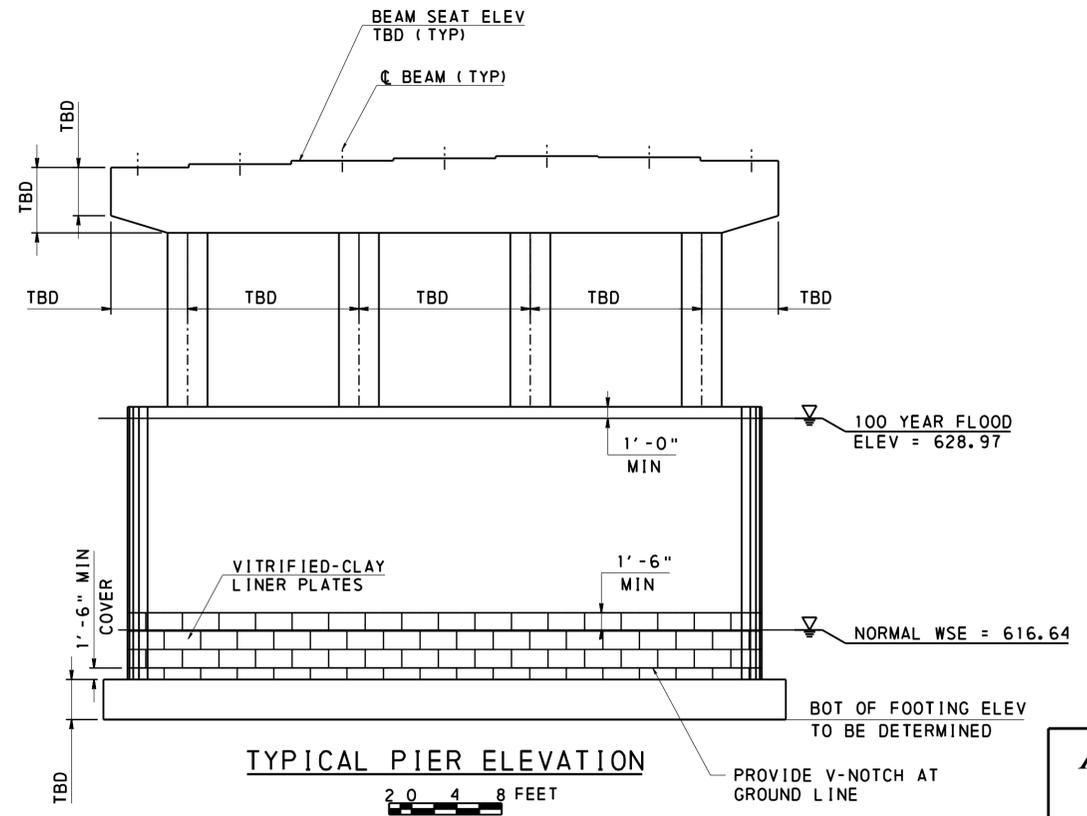


**TYPICAL SECTION
LOOKING STATIONS AHEAD**
2 0 2 4 FEET

- - APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (EPOXY RESIN) TO OUTSIDE FACE OF BARRIER, DECK OVERHANG AND TO FASCIA SIDE AND BOTTOM OF FASCIA BEAMS. PROVIDE EPOXY RESIN TO MATCH FEDERAL COLOR STANDARD, COLOR FS 26521.
- ▲ - APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALER, BRIDGE SUPERSTRUCTURE) TO THE TOP AND INSIDE FACES OF THE BARRIER.



TYPICAL PIER SECTION
2 0 4 8 FEET



TYPICAL PIER ELEVATION
2 0 4 8 FEET

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 0080 WB PREVIOUSLY KNOWN AS L.R. 1009
BMS# 40-0080-2505-1491 ECMS# 111769 BRKEYXXXX

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

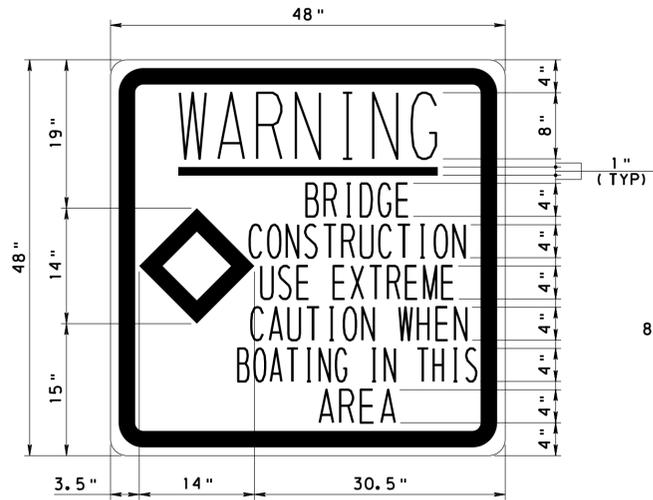
LUZERNE COUNTY
SR 0080 WB SEC 352
SEGMENT 2505 OFFSET 1491
SR 0080 WB STA 880+91.00
OVER NESCOPECK CREEK
4-SP CONT COMP P/S PA BULB-TEE BEAM BRIDGE
BRIDGE REPLACEMENT
CONCEPTUAL TYPICAL SECTION

**PRELIMINARY
DRAWING
OR
INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

RECOMMENDED _____ SHEET 3 OF 3

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	46 OF 47
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD



2" ORANGE BORDER WITH 2" RADIUS.
BLACK LEGEND ON WHITE BACKGROUND
2" ORANGE DIAMOND AND
1" ORANGE UNDERLINE

8" SERIES B CAPITOLS

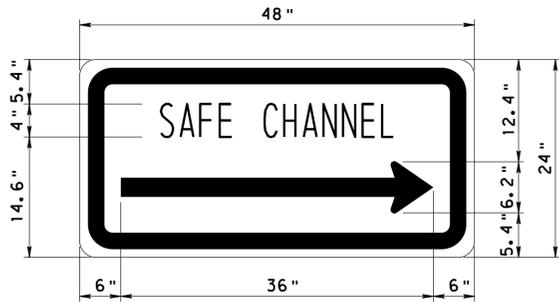
SPACE	8.25"
W	8.25"
A	4.40"
R	4.40"
N	2.00"
I	4.40"
C	3.40"
SPACE	8.25"
TOTAL	48.0"

(SP1) SPECIAL SIGN (48"X48")

NOTE: PLACE SIGN 200' UPSTREAM AND DOWNSTREAM OF PROJECT SITE.

4" SERIES B CAPITOLS

SPACE	23.85"	SPACE	16.85"	SPACE	18.3"	SPACE	17.15"	SPACE	15.5"	SPACE	25.45"
W	2.4"	W	2.3"	U	2.4"	C	2.1"	B	2.3"	A	2.7"
A	1.3"	O	2.8"	S	1.5"	A	2.3"	T	2.4"	R	2.4"
D	2.3"	N	2.3"	SPACE	2.0"	T	2.1"	A	1.9"	E	2.1"
SPACE	2.4"	SPACE	2.1"	SPACE	2.1"	SPACE	1.3"	SPACE	1.3"	SPACE	13.45"
SPACE	1.5"	SPACE	2.4"	SPACE	2.2"	SPACE	2.6"	SPACE	2.0"	TOTAL	48.0"
TOTAL	48.0"	TOTAL	48.0"	TOTAL	48.0"	TOTAL	48.0"	TOTAL	48.0"		



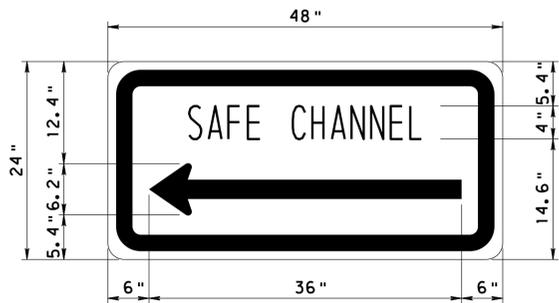
2" ORANGE BORDER WITH 2" RADIUS.
BLACK LEGEND ON WHITE BACKGROUND

4" SERIES B CAPITOLS

SPACE	9.85"
S	2.7"
A	2.1"
F	1.5"
SPACE	4.1"
C	2.3"
H	2.3"
A	2.7"
N	2.4"
N	2.4"
E	2.1"
SPACE	9.85"
TOTAL	48.0"

(SP2) SPECIAL SIGN (48"X24")

NOTE: PLACE SIGN 100' UPSTREAM AND DOWNSTREAM OF CAUSEWAY ALONG CHANNEL BANK.



2" ORANGE BORDER WITH 2" RADIUS.
BLACK LEGEND ON WHITE BACKGROUND

4" SERIES B CAPITOLS

SPACE	9.85"
S	2.7"
A	2.1"
F	1.5"
SPACE	4.1"
C	2.3"
H	2.3"
A	2.7"
N	2.4"
N	2.4"
E	2.1"
SPACE	9.85"
TOTAL	48.0"

(SP3) SPECIAL SIGN (48"X24")

NOTE: PLACE SIGN 100' UPSTREAM AND DOWNSTREAM OF CAUSEWAY ALONG CHANNEL BANK.

**PRELIMINARY
DRAWING
OR
INFORMATION**

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

**CONCEPTUAL AIDS TO NAVIGATION PLAN
CONCEPTUAL TRAFFIC CONTROL PLAN**

OPERATOR: FILE NAME: sdesignfiles
 PLOTTED: D:\9012 CADD (02-90) REVISED (10-04) \$\$\$DATE\$\$\$

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
4-0	LUZERNE	0080	352	47 OF 47
BLACK CREEK TOWNSHIP				
REV NO	REVISIONS	DATE	BY	APPD

GENERAL NOTES

THIS WORK CONSISTS OF THE INSTALLATION AND MAINTENANCE OF SIGNAGE FOR SAFE NAVIGATION OF THE WATERWAY BY BOAT TRAFFIC.

INSTALL SIGNS AND DEVICES AT THE LOCATIONS SHOWN ON THE AIDS TO NAVIGATION MAP.

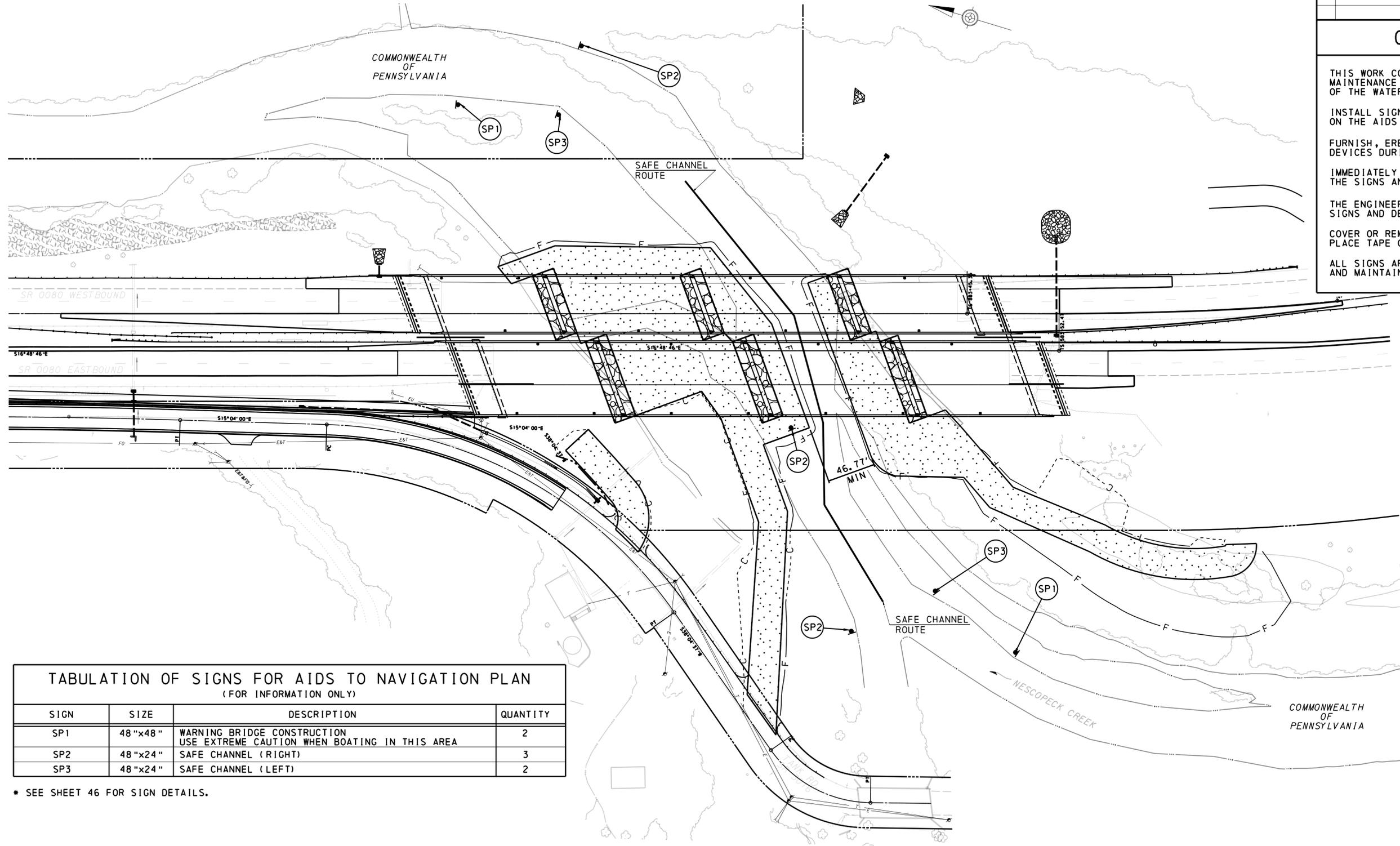
FURNISH, ERECT, PLACE AND MAINTAIN SIGNS AND DEVICES DURING IN-STREAM CONSTRUCTION.

IMMEDIATELY UPON REMOVAL OF CAUSEWAY, REMOVE THE SIGNS AND DEVICES.

THE ENGINEER IS RESPONSIBLE TO INSPECT ALL SIGNS AND DEVICES PRIOR TO THE START OF WORK.

COVER OR REMOVE ALL SIGNS NOT IN USE. DO NOT PLACE TAPE ON THE FACE OF ANY SIGN.

ALL SIGNS ARE TO BE IN NEW OR LIKE NEW CONDITION AND MAINTAINED AS SUCH.

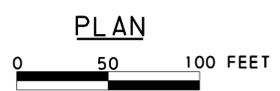


TABULATION OF SIGNS FOR AIDS TO NAVIGATION PLAN (FOR INFORMATION ONLY)			
SIGN	SIZE	DESCRIPTION	QUANTITY
SP1	48"x48"	WARNING BRIDGE CONSTRUCTION USE EXTREME CAUTION WHEN BOATING IN THIS AREA	2
SP2	48"x24"	SAFE CHANNEL (RIGHT)	3
SP3	48"x24"	SAFE CHANNEL (LEFT)	2

* SEE SHEET 46 FOR SIGN DETAILS.

LEGEND

- TEMPORARY CAUSEWAY
- SIGN DESIGNATION
- SIGN



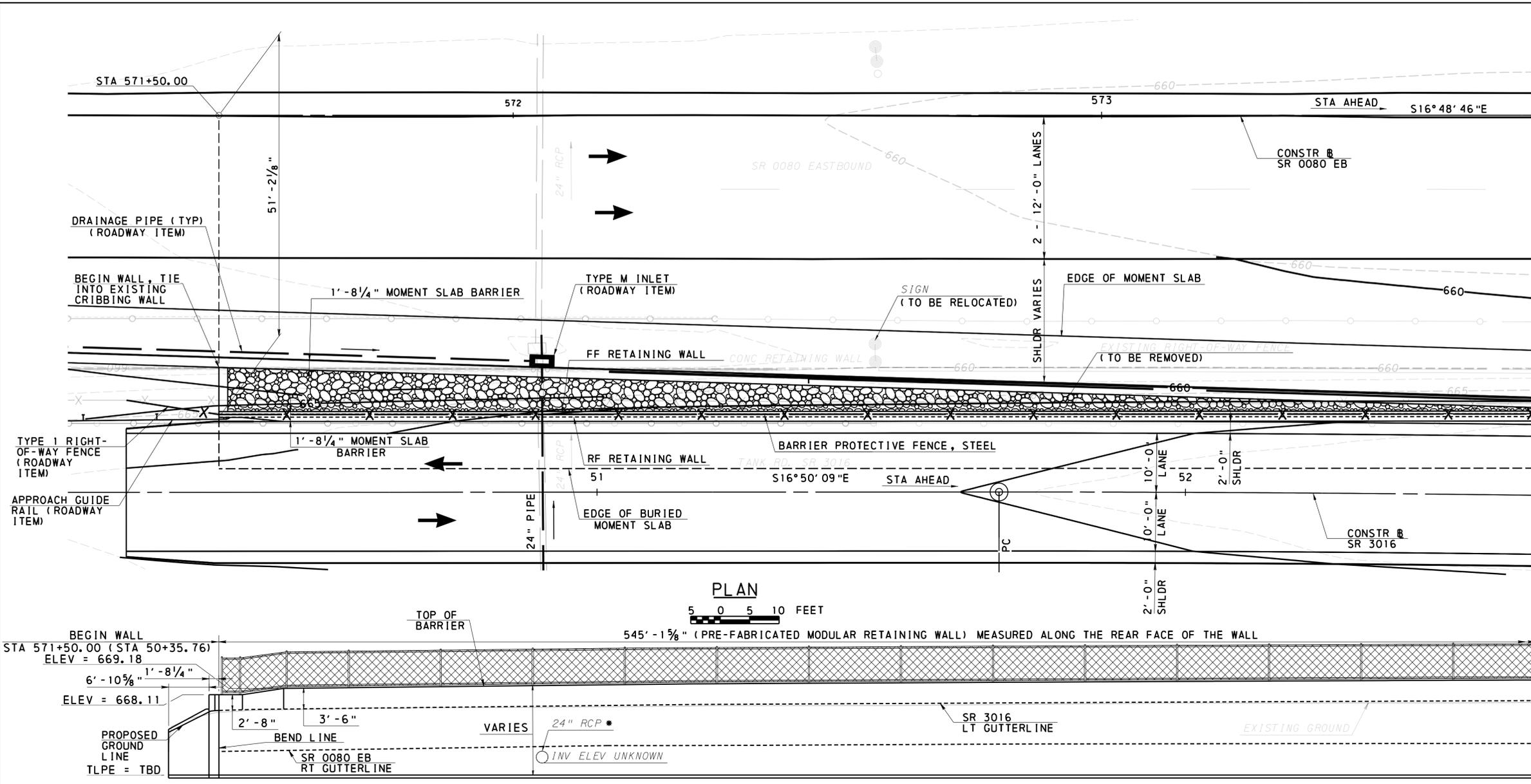
NOTE:
CONTRACTOR TO PROVIDE SAFE CHANNEL ROUTE FOR BOATERS AS SHOWN ON THIS PLAN, AT ALL TIMES. SHOULD THE CONTRACTOR PROPOSE AN ALTERNATE ROUTE OTHER THAN WHAT IS SHOWN, IT MUST BE APPROVED BY THE PA FISH AND BOAT COMMISSION.

**PRELIMINARY
DRAWING
OR
INFORMATION**

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**CONCEPTUAL AIDS TO NAVIGATION PLAN
CONCEPTUAL TRAFFIC CONTROL PLAN**

OPERATOR: FILE NAME: \$\$\$designfil\$\$\$
 PLOTTED: \$\$\$DATE\$\$\$
 D-9012 CADD (02-90) REVISED (10-04)



HORIZONTAL CURVE DATA

CONSTR @ SR 0080 EB	
NO CURVE	
CONSTR @ SR 3016	
PI STA 52+76.40	PI STA 57+41.36
Δ = 1°46'09" RT	Δ = 53°08'37" RT
T = 108.08'	T = 214.44'
L = 216.14'	L = 397.68'
R = 7000.00'	R = 428.75'
E = 0.83'	E = 50.64'
PC STA 51+68.32	PC STA 55+26.92
PT STA 53+84.46	PT STA 59+24.60

VERTICAL CURVE DATA

CONSTR @ SR 0080 EB

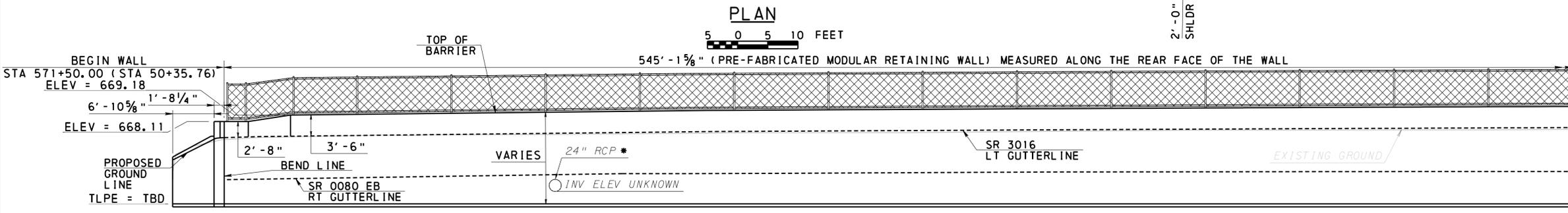
GRAPHIC GRADE

PVI STA 571+00.00
ELEV 666.94

PVI STA 577+10.00
ELEV 661.15

CONSTR @ SR 3016

PVI STA 55+07.57
ELEV 668.73
VC 350.00'
MO -3.54'
SSD 306'



0.50%

PVI STA 50+20.00
ELEV 666.29

PVC STA 53+32.57
ELEV 667.86

PVI STA 56+82.57
ELEV 655.45

-7.59%

PVI STA 57+67.00
ELEV 649.04

DATUM: 645

NOTE: (STA XX+XX.XX) REFERENCES SR 3016.
* - PIPE TO BE REPLACED THROUGH RETAINING WALL. SEE SR 3016 CROSS SECTIONS. PIPE LOCATION AND DETAILS TO BE DETERMINED BY THE CONTRACTOR.

LEGEND

- NO. 57 COARSE AGGREGATE (ROADWAY ITEM)
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF TRAFFIC
- FF - FRONT FACE
- RF - REAR FACE

DES: SRS DWG: SRS CKD: JES

DESIGN REVIEWED BY:
PENNONI ASSOCIATES INC.
672 SOUTH RIVER STREET,
SUITE 313
PLAINS, PA 18705
Signature and Date: _____

PRELIMINARY DRAWING OR INFORMATION

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.
SEAL

PREPARED BY:
LARSON DESIGN GROUP
1000 COMMERCE PARK DRIVE
WILLIAMSPORT, PA 17701
Signature and Date: _____

PRELIMINARY DRAWING OR INFORMATION

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.
SEAL



INDEX OF STRUCTURE DRAWINGS

SHEET NO.	TITLE
1	CONCEPTUAL GENERAL PLAN AND ELEV - 1 OF 2
2	CONCEPTUAL GENERAL PLAN AND ELEV - 2 OF 2
3	CONCEPTUAL TYPICAL WALL SECTION

DESCRIPTION	DWG. NO.	APP. DATE
PRE-FABRICATED T-WALL SYSTEM	87-402PE	04-13-2017
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06-01-2010
BACKFILL AT STRUCTURES	RC-12M	02-08-2019
SUBSURFACE DRAINS	RC-30M	12-17-2019
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	02-19-2021
TYPE 31 STRONG POST GUIDE RAIL	RC-51M	02-19-2021
RIGHT-OF-WAY FENCE	RC-60M	06-01-2010
PROTECTIVE FENCE	BC-701M	02-19-2021
ANCHOR SYSTEMS	BC-734M	02-19-2021
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	01-31-2019
BRIDGE DRAINAGE	BC-751M	01-31-2019

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

SR 0080 EB PREVIOUSLY KNOWN AS L.R. 1009
BMS# XX-XXXX-XXXX-XXXX ECMS# 111769 BRKEYXXXX

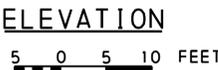
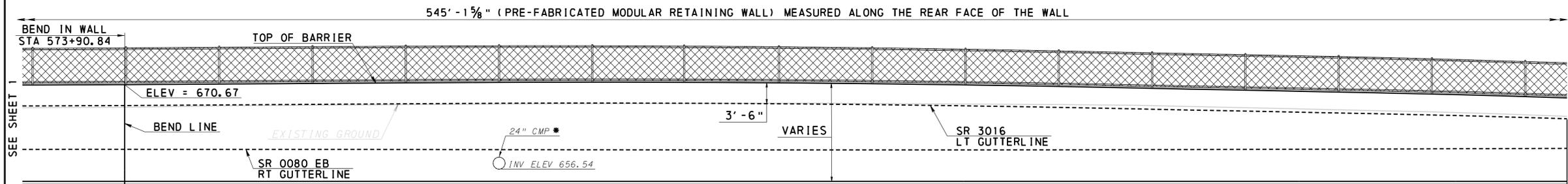
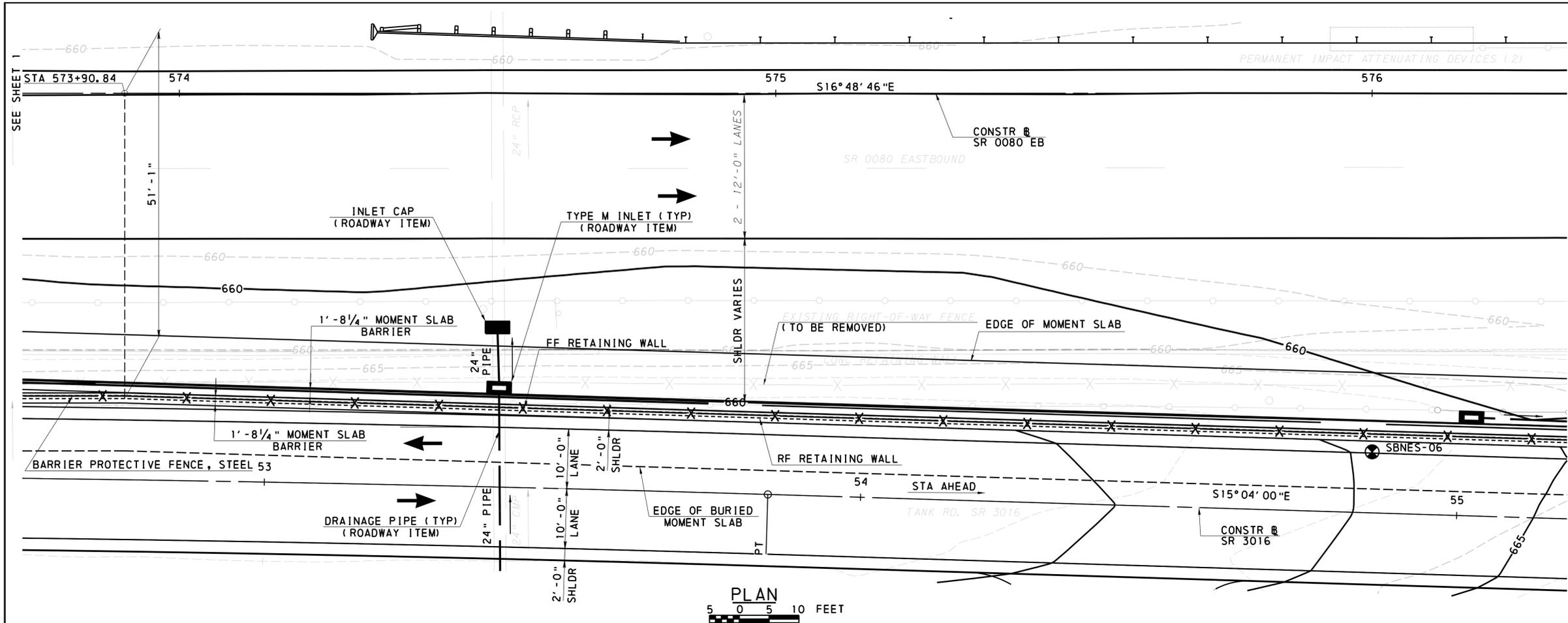
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

LUZERNE COUNTY
SR 0080 EB SEC 352
SEGMENT 2504 OFFSET 0775
SR 0080 EB STA 571+50.00 TO STA 576+94.69

PRE-FABRICATED MODULAR RETAINING WALL
CONCEPTUAL GENERAL PLAN AND ELEV - 1 OF 2

RECOMMENDED _____
DISTRICT BRIDGE ENGINEER

SHEET 1 OF 3
& SUPPLEMENTAL DRAWINGS
S - 40357D



DATUM: 645

* - PIPE TO BE REPLACED THROUGH RETAINING WALL. SEE SR 3016 CROSS SECTIONS. PIPE LOCATION AND DETAILS TO BE DETERMINED BY THE CONTRACTOR.

PROPOSED SOIL BORING INFORMATION

BORING	APPROX LOCATION
SBNES-06	STA 576+00.00, 60.0' RT

- LEGEND**
- - - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - ➔ DIRECTION OF TRAFFIC
 - FF - FRONT FACE
 - RF - REAR FACE
 - ⊗ PROPOSED BORING LOCATION

PRELIMINARY DRAWING OR INFORMATION

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 0080 EB PREVIOUSLY KNOWN AS L.R. 1009
 BMS# XX-XXXX-XXXX-XXXX ECMS# 111769 BRKEYXXXX

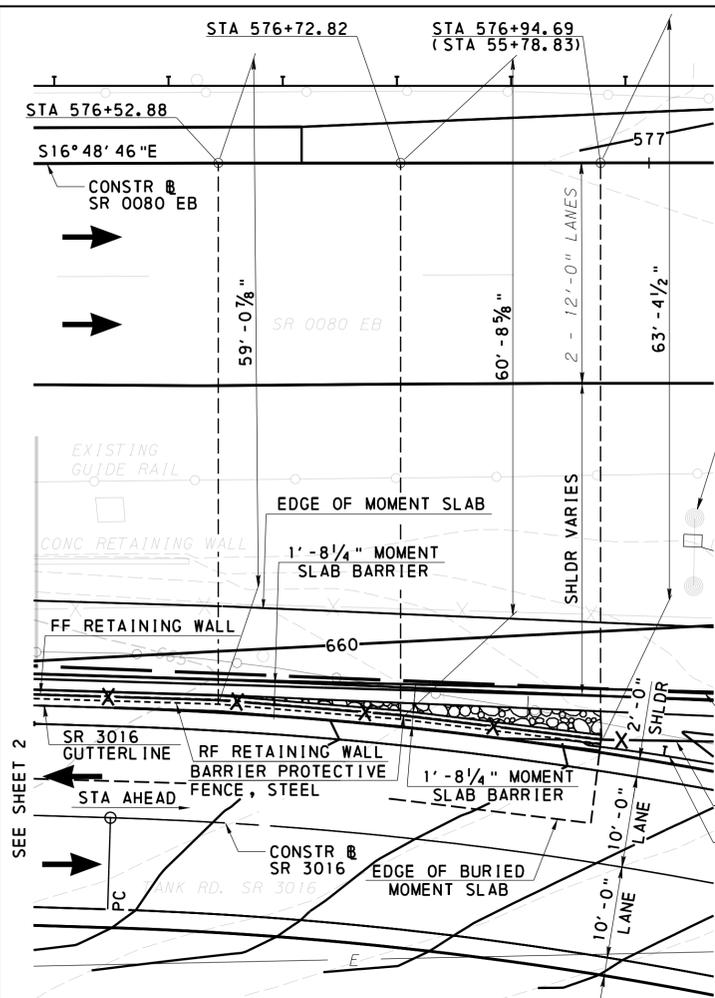
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

LUZERNE COUNTY
SR 0080 EB SEC 352
 SEGMENT 2504 OFFSET 0775
 SR 0080 EB STA 571+50.00 TO STA 576+94.69

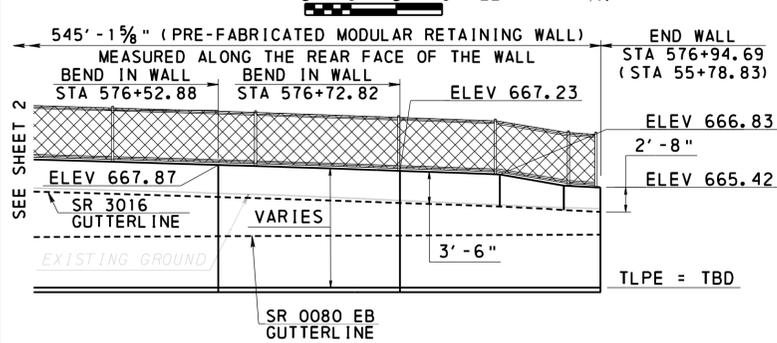
PRE-FABRICATED MODULAR RETAINING WALL
 CONCEPTUAL GENERAL PLAN AND ELEV - 2 OF 2

RECOMMENDED _____ SHEET 2 OF 3

S - 40357D



PLAN
5 0 5 10 FEET



ELEVATION
5 0 5 10 FEET

NOTE: (STA XX+XX.XX) REFERENCES SR 3016.

- LEGEND**
- NO. 57 COARSE AGGREGATE (ROADWAY ITEM)
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - DIRECTION OF TRAFFIC
 - FRONT FACE
 - REAR FACE

SIGN (TO BE REMOVED)

CONSTR SR 0080 EB

2 - 12'-0" LANES

SHLDR VARIES

1'-8 1/4" MOMENT SLAB BARRIER

FF RETAINING WALL

SR 3016 GUTTERLINE

RF RETAINING WALL BARRIER PROTECTIVE FENCE, STEEL

1'-8 1/4" MOMENT SLAB BARRIER

CONSTR SR 3016

EDGE OF BURIED MOMENT SLAB

10'-0" LANE

2'-0" SHLDR

DRAINAGE PIPE (ROADWAY ITEM)

TYPE 1 RIGHT-OF-WAY FENCE (ROADWAY ITEM)

APPROACH GUIDE RAIL (ROADWAY ITEM)

CONSTR SR 0080 EB

EDGE OF BURIED MOMENT SLAB

10'-0" LANE

2'-0" SHLDR

SR 3016 GUTTERLINE

RF RETAINING WALL BARRIER PROTECTIVE FENCE, STEEL

1'-8 1/4" MOMENT SLAB BARRIER

SR 0080 EB GUTTERLINE

CONSTR SR 0080 EB

EDGE OF BURIED MOMENT SLAB

10'-0" LANE

2'-0" SHLDR

VARIES

SHLDR VARIES

CONCRETE PAVEMENT VARIES

MATCH EXISTING EDGE OF CONCRETE PAVEMENT

PAVEMENT SECTION SEE RDWY PLANS (ROADWAY ITEMS)

SR 0080 EB GUTTERLINE VARIES

42" F-SHAPE CONCRETE BARRIER. NO OVERLAY ALLOWED ON THE SHOULDER TO MAINTAIN TL-5 DESIGNATION OF 42" BARRIER.

6" PAVEMENT BASE DRAIN BELOW MOMENT SLAB (ROADWAY ITEM)

NO. 57 COARSE AGGREGATE (ROADWAY ITEM)

LEVELING PAD

NO. 57 COARSE AGGREGATE (ROADWAY ITEM)

ELEV = TBD

6" MIN

1'-8 1/4"

8'-0"

3'-6"

2'-8"

3'-6"

TOP OF ASPHALT PAVEMENT

2" CLR

2" CLR

1'-1 1/2"

1'-0"

0"

5" (OUT-TO-OUT)

0"

2'-4" MIN

1" CLOSED CELL NEOPRENE SPONGE CONTINUOUS

NOTE: ALL BARRIER AND MOMENT SLAB REINFORCEMENT TO BE EPOXY COATED.

MOMENT SLAB SECTION
1 0 1 2 3 FEET

BARRIER PROTECTIVE FENCE, STEEL

1'-8 1/4" BARRIER

VARIES

42" F-SHAPE CONCRETE BARRIER

FF PRECAST PANEL

CONCRETE PAVEMENT VARIES

8'-0" MOMENT SLAB

SR 0080 EB GUTTERLINE VARIES

ELEV = TBD

6" PAVEMENT BASE DRAIN BELOW MOMENT SLAB (ROADWAY ITEM)

NO. 57 COARSE AGGREGATE (ROADWAY ITEM)

LEVELING PAD

NO. 57 COARSE AGGREGATE (ROADWAY ITEM)

ELEV = TBD

6" MIN

1'-8 1/4"

8'-0"

3'-6"

2'-8"

3'-6"

TOP OF ASPHALT PAVEMENT

2" CLR

2" CLR

1'-1 1/2"

1'-0"

0"

5" (OUT-TO-OUT)

0"

2'-4" MIN

1" CLOSED CELL NEOPRENE SPONGE CONTINUOUS

TYPICAL PRE-FABRICATED MODULAR RETAINING WALL SECTION

STA 571+50.00 TO STA 576+94.69

2 0 2 4 FEET

- * - PREFORMED CELLULAR POLYSTYRENE (REMOVE AT FF WALL AFTER CONCRETE IS CURED, RF WALL TO REMAIN IN PLACE). GLUE TO PANEL AS REQUIRED TO KEEP PREFORMED CELLULAR POLYSTYRENE IN PLACE DURING PLACEMENT OF CONCRETE.
- ** - APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALER, BRIDGE SUPERSTRUCTURE) TO INSIDE FACE AND TOP OF BARRIER.
- *** - ASPHALT RUBBER SEALING COMPOUND PER PUB. 408, SECTION 705.4(g)
- - APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (EPOXY RESIN) TO OUTSIDE FACE OF BARRIER. PROVIDE EPOXY RESIN TO MATCH FEDERAL COLOR STANDARD, COLOR FS 26521.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 0080 EB PREVIOUSLY KNOWN AS L.R. 1009
BMS# XX-XXXX-XXXX-XXXX ECMS#111769 BRKEYXXXX

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

LUZERNE COUNTY
SR 0080 EB SEC 352
SEGMENT 2504 OFFSET 0775
SR 0080 EB STA 571+50.00 TO STA 576+94.69

PRE-FABRICATED MODULAR RETAINING WALL
CONCEPTUAL TYPICAL WALL SECTION

RECOMMENDED _____ SHEET 3 OF 3

S - 40357D

*PRELIMINARY
DRAWING
OR
INFORMATION*

This drawing and/or information shall be used for reference purposes only, as details and content are subject to change.

Appendix C
Threatened and Endangered Species

1. PROJECT INFORMATION

Project Name: **PennDOT: I-80 Tolling Station over Nescopeck Creek**

Date of Review: **12/13/2021 11:52:30 AM**

Project Category: **Transportation, Other**

Project Area: **287.74 acres**

County(s): **Luzerne**

Township/Municipality(s): **BLACK CREEK TOWNSHIP; BUTLER TOWNSHIP; NESCOPECK TOWNSHIP; SUGARLOAF TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **BERWICK; SYBERTSVILLE**

Watersheds HUC 8: **Upper Susquehanna-Lackawanna**

Watersheds HUC 12: **Nescopeck Creek-Susquehanna River**

Decimal Degrees: **41.022058, -76.105592**

Degrees Minutes Seconds: **41° 1' 19.4095" N, 76° 6' 20.1312" W**

2. SEARCH RESULTS

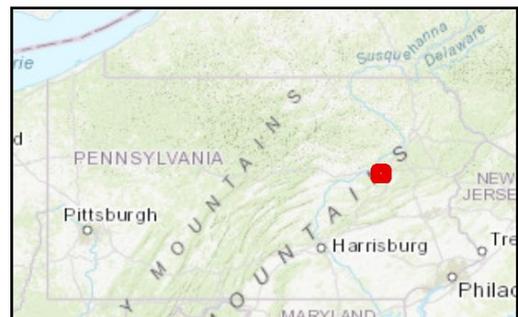
Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

PennDOT: I-80 Tolling Station over Nescopeck Creek

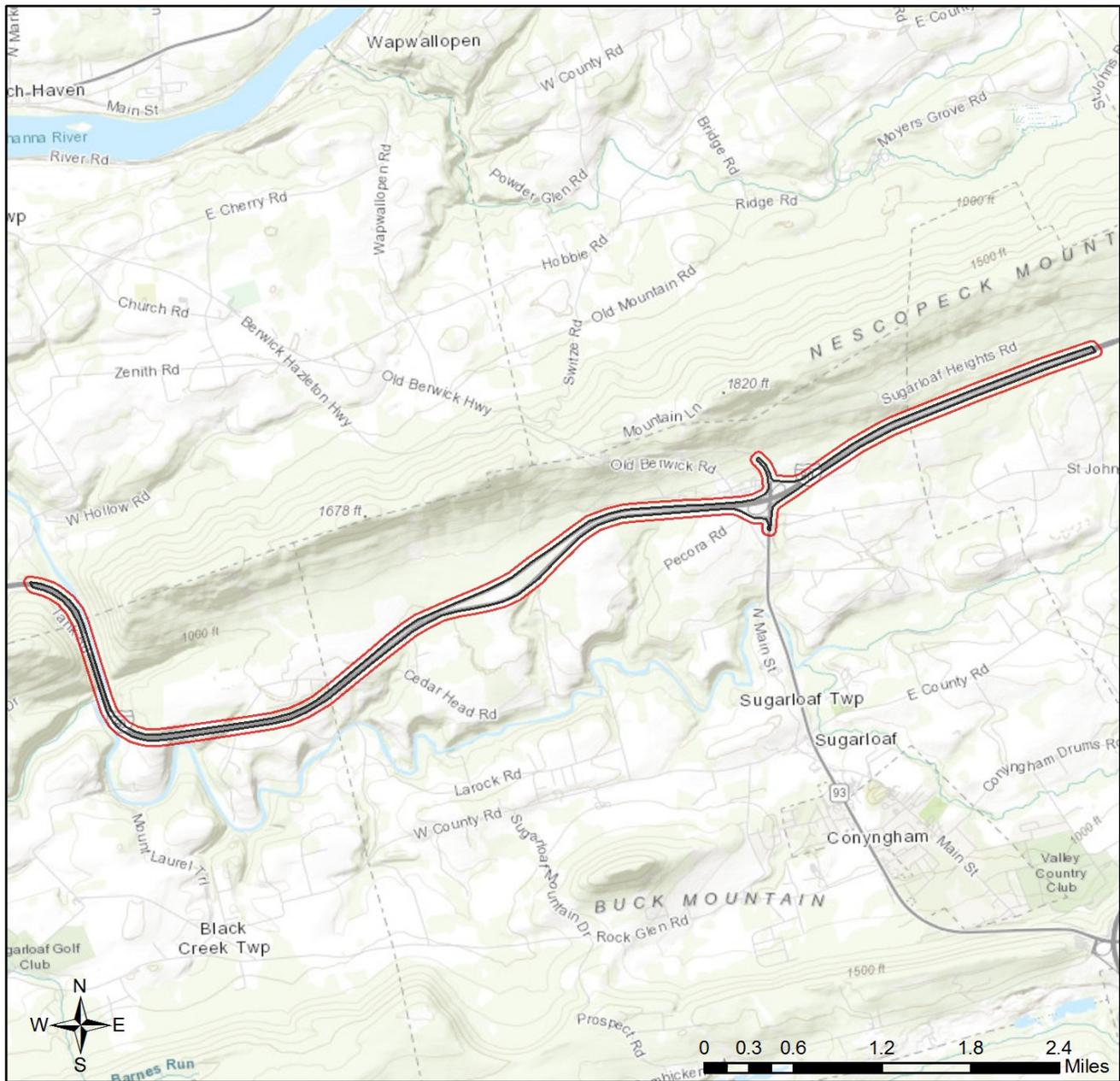


- Project Boundary
- Buffered Project Boundary



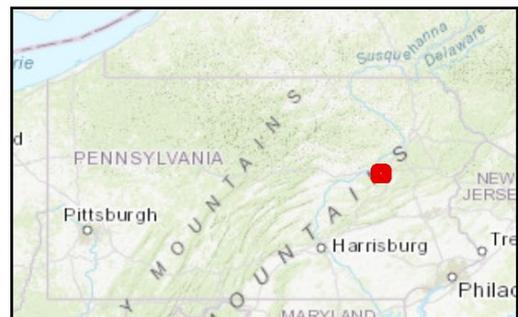
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China

PennDOT: I-80 Tolling Station over Nescopeck Creek



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, Garmin, Intemap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



RESPONSE TO QUESTION(S) ASKED

Q1: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: The project will affect 1 to 39 acres of forests, woodlots and trees.

Q2: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

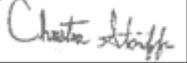
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Christina Stouffer
Company/Business Name: Navarro & Wright Consulting Engineers, Inc.
Address: 151 Reno Avenue
City, State, Zip: New Cumberland, PA 17070
Phone: (717) 441-2216 Fax: (717) 659-7449
Email: cstouffer@navarrowright.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.



applicant/project proponent signature

12/13/21

date

Appendix D
List of Preparers

Name	Organization	EA Role	Education	Years
Camille Otto Director of Planning, Environment, and Finance	FHWA PA Division	FHWA Approver	B.S. Biology	25
Jon Crum Senior Environmental Specialist	FHWA PA Division	FHWA Environmental Reviewer	B.S. Biology M.S. Environmental Science and Management	17
Sarah Cordek Transportation Engineer	FHWA PA Division	FHWA Engineering Reviewer	B. S. Civil Engineering Technology	9
Kelley Sartori Consultant Project Manager	PennDOT District 4-0/Pennoni	Consultant Project Manager	B.S. Civil Engineering Certificate Transportation Engineering	22
Greg Augustine, PE District Environmental Manager	PennDOT District 4-0	Environmental Reviewer	B.S. Environmental Engineering Technology	30
Julianne Lawson, PE District 4 Portfolio Manager	PennDOT District 4-0	Project Manager	B.S. Civil Engineering M.B.A Operations	19
Heather Gerling Architectural Historian	PennDOT Districts 3-0 & 4- 0	Above Ground Cultural Properties	B.S. History M.A. Historic Preservation	5
Drew Ames Environmental Planning Manager	PennDOT Central Office	Environmental Reviewer	B.H Communications M.S. Community and Regional Planning	26
Kenda Gardner Deputy Chief Counsel	PennDOT Office of Chief Counsel	Legal Review	B.S. Chemistry J.D.	28
Neal Brofee Environmental Counsel	PennDOT Office of Chief Counsel	Legal Review	B.A. Mathematics J.D.	24
Kristine Thompson Architectural Historian	PennDOT Central Office	Above-Ground Cultural Resources	B.S. Historic Preservation; M.A. Anthropology	28
Kevin Mock Archeology Supervisor and District 4-0 Archaeologist	PennDOT Central Office	Archaeology	B.A. Anthropology M.A. History	28
Ryan Shiffler, PE Project Development Engineer	PennDOT Central Office	Engineering Reviewer	B.S Civil Engineering	18
Diane Nulton Environmental Project Manager	HDR	EA Project Manager	B.S. Biology/Ecology	35
Jean-Philippe (JP) Magron Environmental Planning Manager	HDR	Environmental Lead	M.S. Coastal Zone Management B.S. Biological/Chemical Oceanography	25
Kathleen Krommes, ENV SP Environmental Project Manager	HDR	EA Technical Writer/Editor	B.S. Chemical Engineering	35
Katherine Markowitz Environmental Scientist	HDR	EA Technical Writer/Editor	B.S. Marine and Environmental Biology and Policy	8
John McPherson, AICP Environmental Services Director	HDR	EA, Cumulative Impacts	B.A. Math/Economics; M.U.P.	30
Jenn Walsh, PE Traffic & Planning Section Manager	HDR	Traffic Diversion Analysis	B.S. Civil Engineering; M.S. Civil Engineering	28
Ken O'Brien, PE Senior Project Manager	HDR	Traffic Diversion Analysis	B.S. Civil Engineering;	27

Name	Organization	EA Role	Education	Years
Audrey Heffernan Senior Environmental Planner	HDR	Environmental Justice	B.A. Math; M.A. Math; M.S. City & Regional Planning	28
Connie Eskin Administrative Coordinator	HDR	Technical Editor	Pennsylvania State University	25
Tina Adair Technical Editor	HDR	Technical Editor	B.S. Communications	35
Frank Brilhante GIS Manager	HDR	GIS Analysis	B.S. Engineering; M.S Environmental Engineering	28
Matthew Nulton, P.E. PA Surface Transportation Lead	JMT	I-80/-181 Bridge Program Project Manager	B.S. Civil Engineering Technology	32
Amy Altimare Senior Associate Natural & Cultural Resources	JMT	I-80 Nescopeck Environmental Analysis and Technical Writer/Review	B.S. Environmental Science M.S. Environmental Management	25
David Johnson, P.E. Senior Project Manager - Bridge	Larson Design Group	LDG I-80 Nescopeck Project Manager/Bridge Design	Bachelor of Science - Civil Engineering; Master of Science - Civil Engineering	20
Terri Slack National Discipline Lead,Trans. Revenue Systems & Operations	CDM Smith	Traffic Forecasting	BA Economics; BA Political Science M.B.A Management	33
Tarannum Rima Travel Demand Modeler	CDM Smith	Traffic Forecasting	B.S. Civil Engineering M.S Transportation Engineering M.S. Computer Systems Engineering	16
Nathaniel Weinstock Air Quality and Acoustical Group Leader, Sr. Air Quality and Acoustical Scientist	Navarro & Wright	Diversion Route Noise Analysis	B.S. Public Service	22
Kyle Brubaker SR. Environmental Specialist, TD Environmental Task Leader	Navarro & Wright	Hazardous Materials	B.S. Environmental Science	13
Robert C. Kolmansberger Director of Environmental Services, Sr. Air Quality & Acoustical Scientist	Navarro & Wright	Diversion Route Noise Analysis, QA/QC	B.A. Geography & Environmental Planning	30

Appendix E

References

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