

2025 D12 HYDRO/LATEX BRIDGE DECK PRESERVATION

SCOPE OF WORK

The scope of this job is to install latex modified concrete overlays after performing hydrodemolition to the deteriorated bridge decks. This process is calibrated at each work site to remove a prescribed depth of the concrete and any damaged areas, latex modified concrete overlays will then be installed at each site to restore the decks and provide a new surface. Beyond a new ride surface, latex modified concrete also has lower permeability, greater flexibility, higher bond strength, and more durability compared to traditional concrete. This process has been successful in our district and other States. Other various repairs including approach slabs, concrete repairs, and other miscellaneous construction will also take place. Work will be conducted at six locations listed below, to extend the life of the structures.

Locations are as follows:

- Route 119, SECTION 17M, in Westmoreland County, New Stanton Borough
- Route 119, SECTION 18M, in Westmoreland County, New Stanton Borough
- Route 217, SECTION 01M, in Westmoreland County, Derry Township
- Route 993, SECTION 05M, in Westmoreland County, Irwin Borough
- Route 2020, SECTION 07M, in Washington County, West Bethlehem Township
- Route 4051, SECTION 01M, in Washington County, South Strabane Township

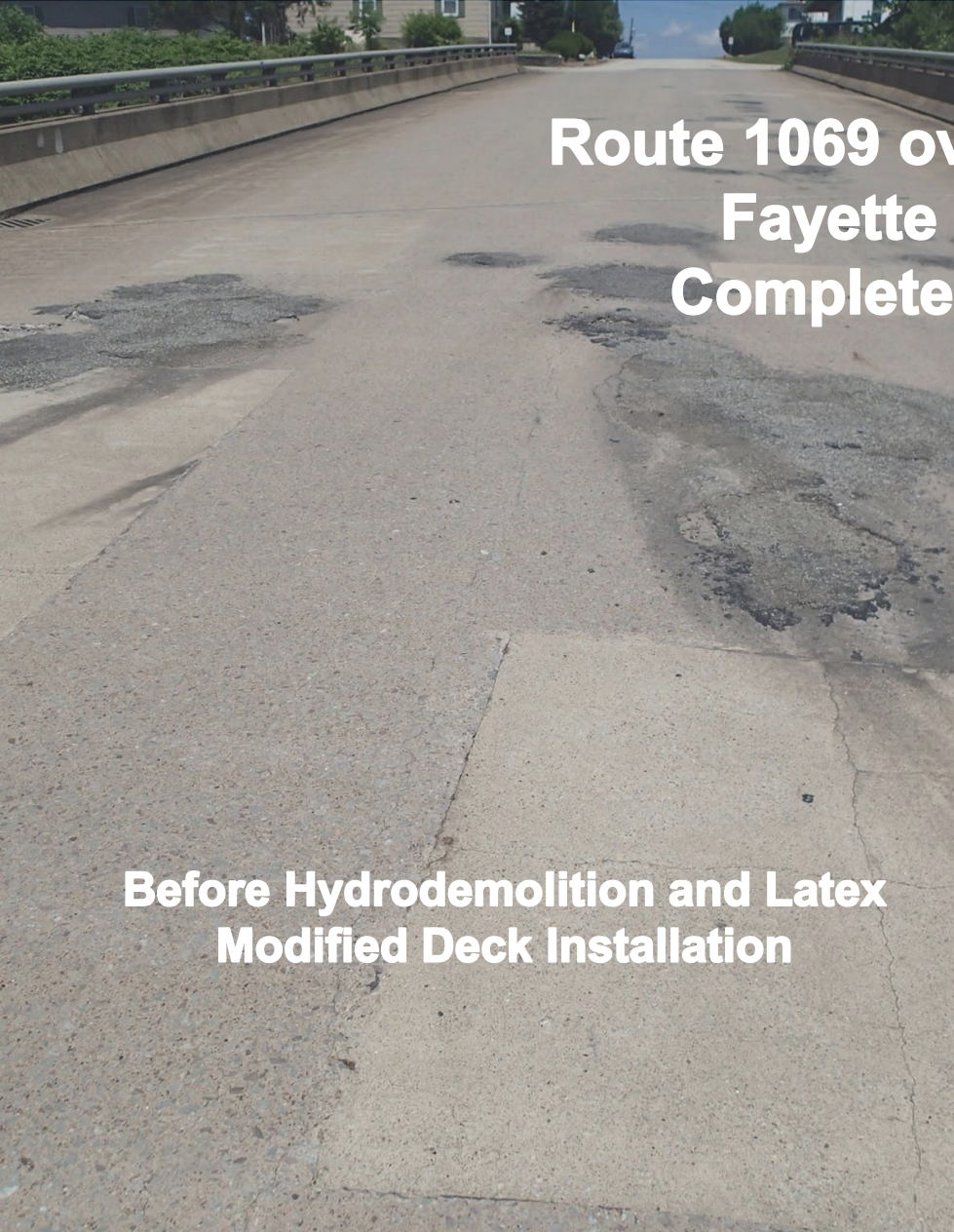
A combination of short-term detours and single lane closures will be used to complete this work. Roadside notifications will be provided a minimum of 14 days prior to the implementation of any detour. When possible, structures will remain open to traffic under single lane closure.

Before Hydrodemolition and Latex
Modified Deck Installation

Route 1069 over Route 119 Fayette
County
Completed in 2023

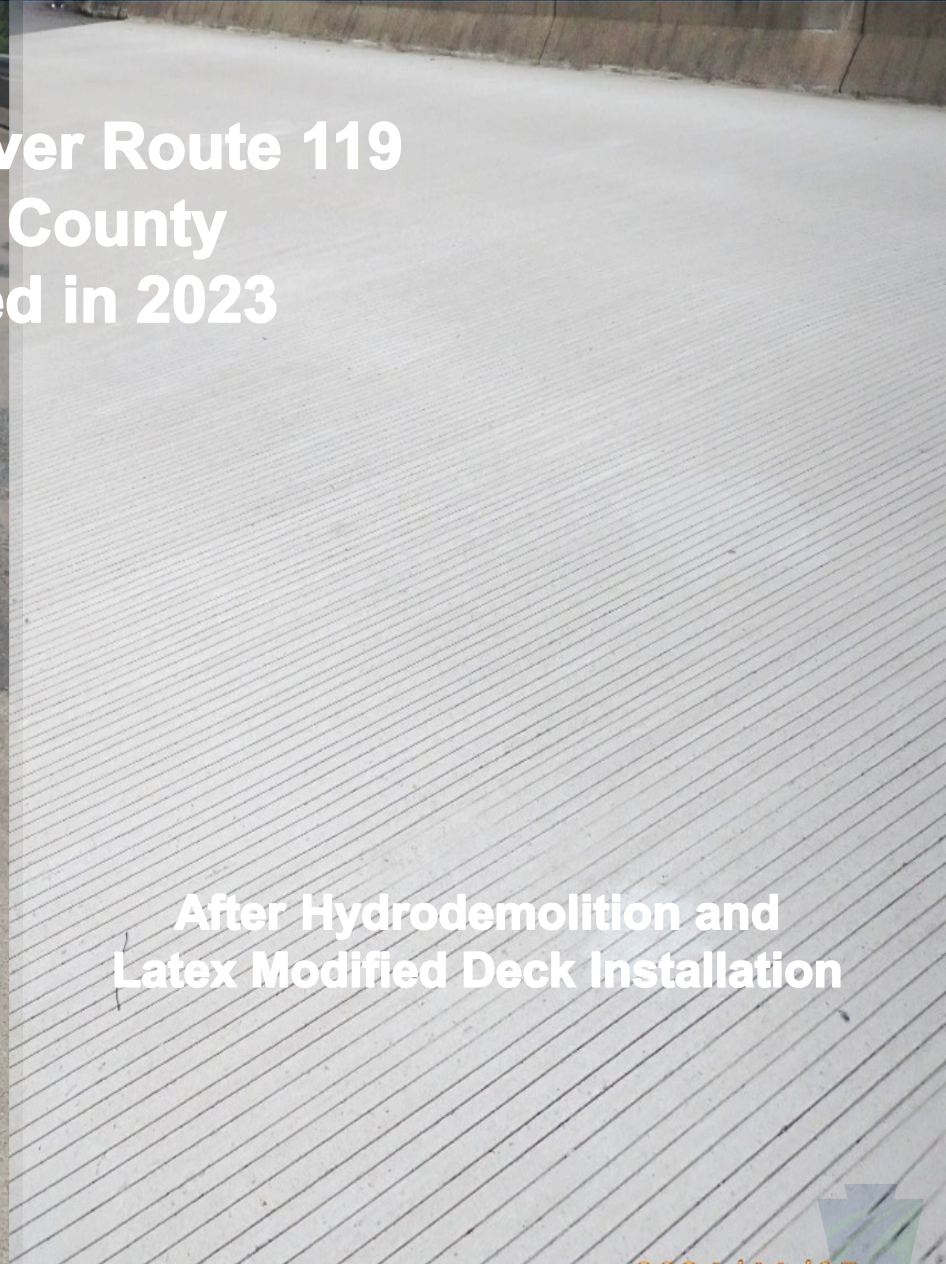
After Hydrodemolition and Latex
Modified Deck Installation

BEFORE AND AFTER



**Route 1069 over Route 119
Fayette County
Completed in 2023**

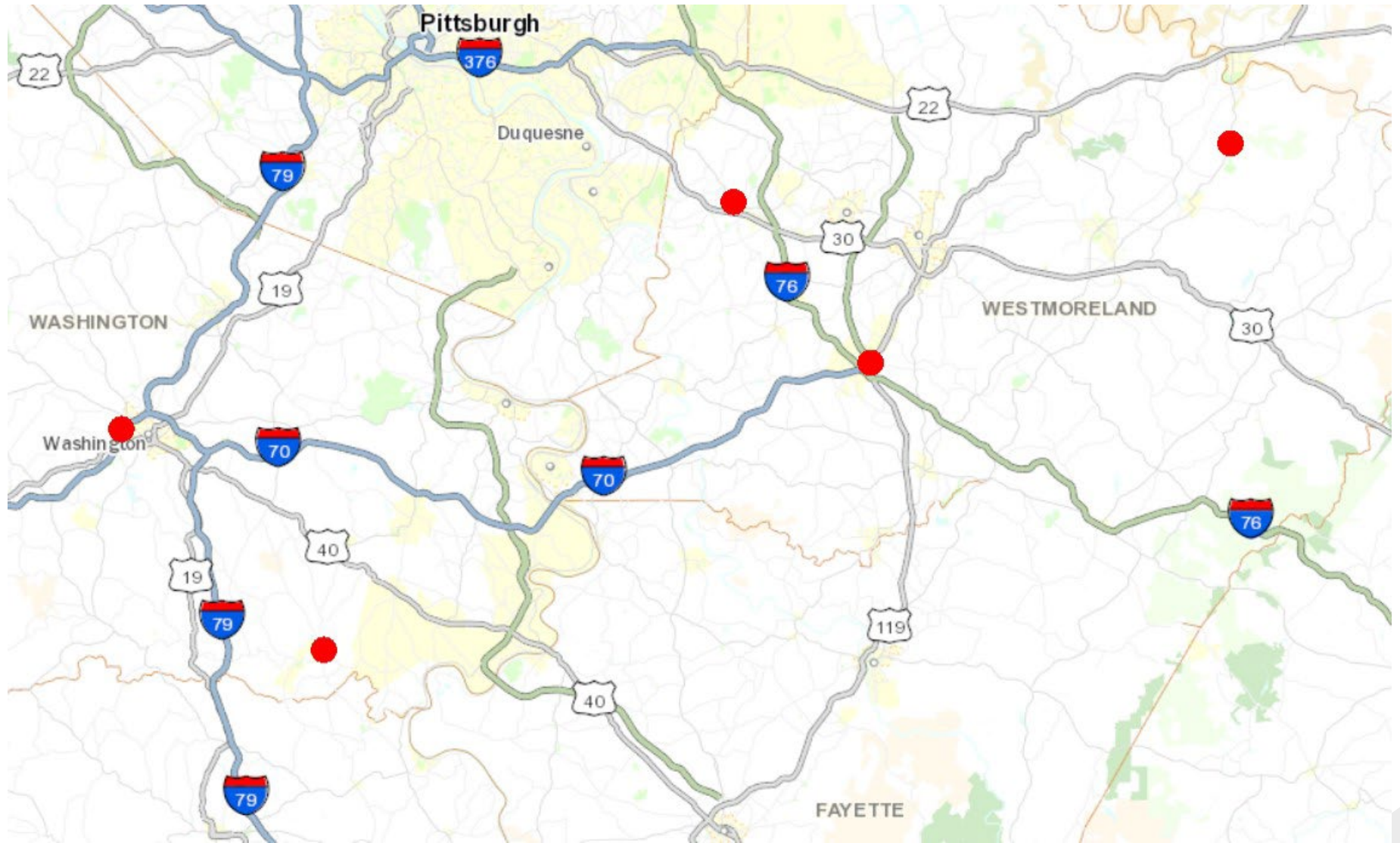
**Before Hydrodemolition and Latex
Modified Deck Installation**



**After Hydrodemolition and
Latex Modified Deck Installation**



PROJECT LOCATION MAP

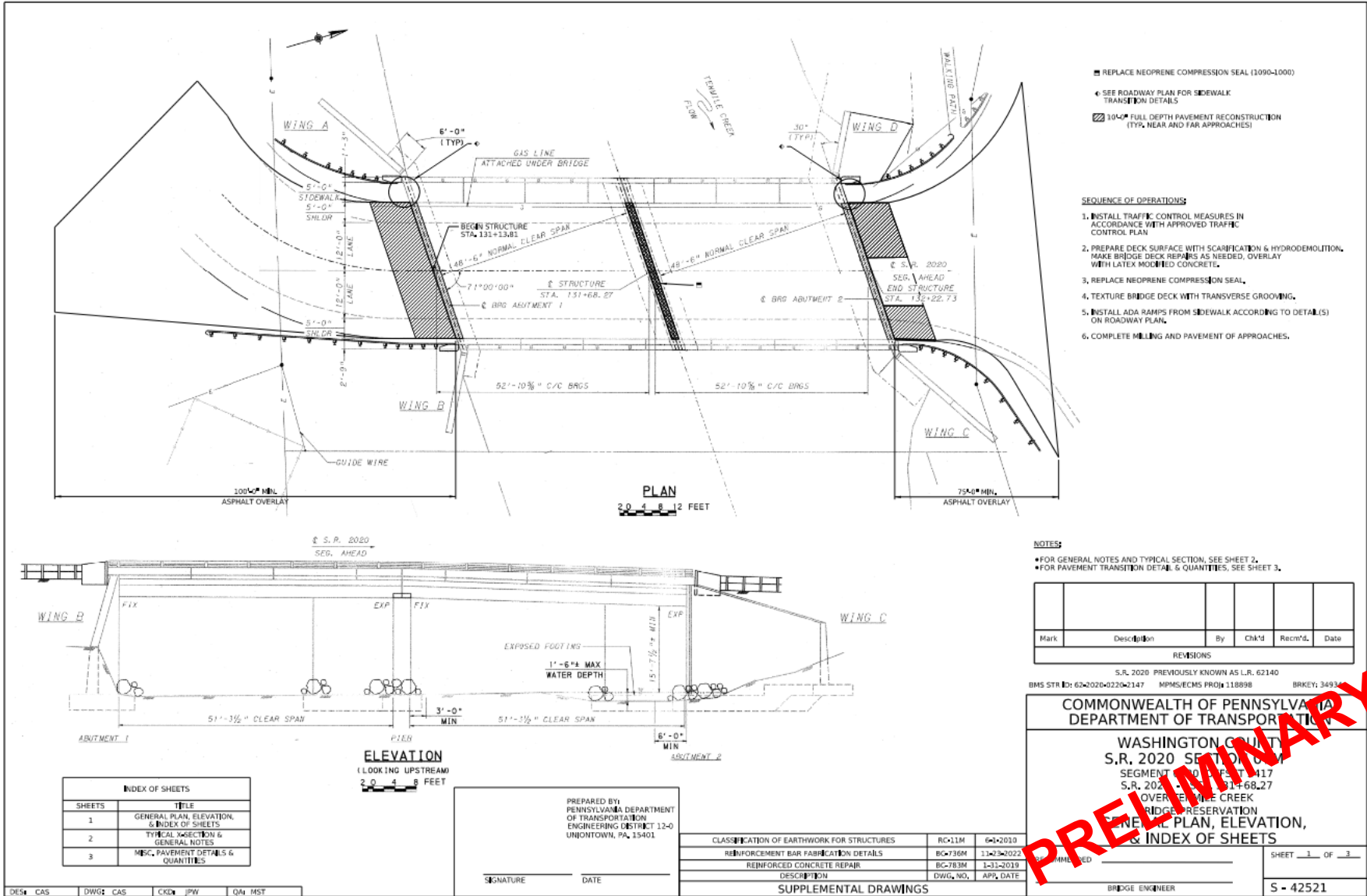


ROUTE 2020

Route 2020 over Little
Ten Mile Creek,
Marianna



PRELIMINARY ROUTE 2020



- REPLACE NEOPRENE COMPRESSION SEAL (1090-1000)
- ◀ SEE ROADWAY PLAN FOR SIDEWALK TRANSITION DETAILS
- ▨ 10% FULL DEPTH PAVEMENT RECONSTRUCTION (TYP. NEAR AND FAR APPROACHES)

SEQUENCE OF OPERATIONS:

1. INSTALL TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN
2. PREPARE DECK SURFACE WITH SCARIFICATION & HYDRODEMOLITION. MAKE BRIDGE DECK REPAIRS AS NEEDED, OVERLAY WITH LATEX MODIFIED CONCRETE.
3. REPLACE NEOPRENE COMPRESSION SEAL.
4. TEXTURE BRIDGE DECK WITH TRANSVERSE GROOVING.
5. INSTALL ADA RAMPS FROM SIDEWALK ACCORDING TO DETAIL(S) ON ROADWAY PLAN.
6. COMPLETE MILLING AND PAVEMENT OF APPROACHES.

NOTES:

- FOR GENERAL NOTES AND TYPICAL SECTION, SEE SHEET 2.
- FOR PAVEMENT TRANSITION DETAIL & QUANTITIES, SEE SHEET 3.

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

S.R. 2020 PREVIOUSLY KNOWN AS L.R. 62140
 BMS STR ID: 62-2020-0220-2147 MPMS/ECHS PROJ# 118898 BRKEY: 34934

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
 S.R. 2020 SEPTON
 SEGMENT 100 FEET 117
 S.R. 2020 STA. 114+68.27
 OVER SEPTON CREEK
 BRIDGE RESERVATION
**GENERAL PLAN, ELEVATION,
 & INDEX OF SHEETS**

SHEET 1 OF 3
 S - 42521

INDEX OF SHEETS	
SHEETS	TITLE
1	GENERAL PLAN, ELEVATION, & INDEX OF SHEETS
2	TYPICAL SECTION & GENERAL NOTES
3	MISC. PAVEMENT DETAILS & QUANTITIES

PREPARED BY:
 PENNSYLVANIA DEPARTMENT
 OF TRANSPORTATION
 ENGINEERING DISTRICT 12-0
 UNIONTOWN, PA, 15401

CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6-1-2010
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11-23-2022
REINFORCED CONCRETE REPAIR	BC-783M	1-31-2019
DESCRIPTION	DWG. NO.	APP. DATE

SUPPLEMENTAL DRAWINGS

BRIDGE ENGINEER

DES: CAS DWG: CAS CKD: JPW QA: MST

ROUTE 4051

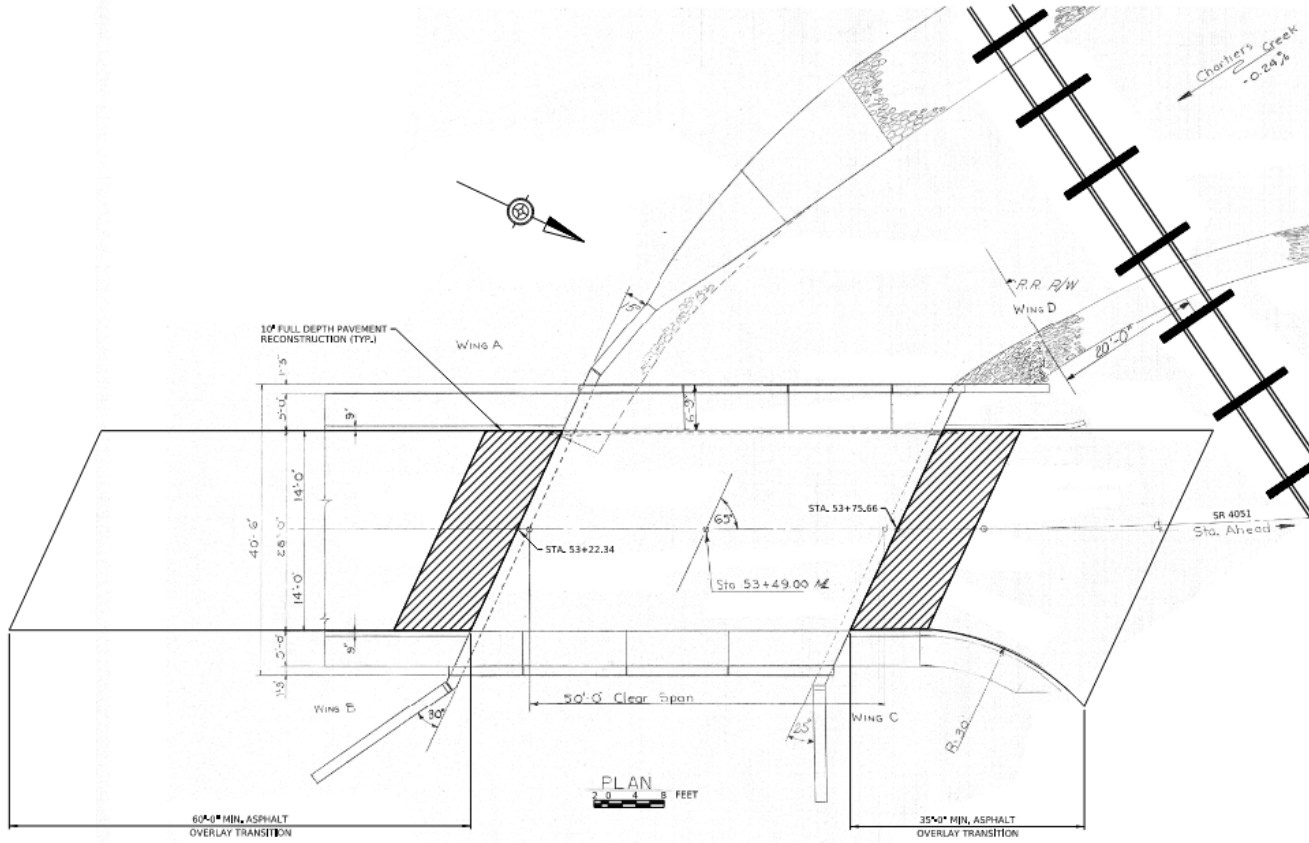
Route 4051 Over
Chartiers Creek, Canton
Township

Sep 19, 2024 at 9:46:29 AM
1020 Jessop Pl
Washington PA 15301
United States



PRELIMINARY ROUTE 4051

INDEX OF SHEETS	
SHEETS	TITLE
1	GENERAL PLAN & INDEX OF SHEETS
2	TYPICAL X-SECTION, ELEVATION, & MISC. PAVEMENT DETAILS
3	GENERAL NOTES & QUANTITIES



NOTES:
 • FOR GENERAL NOTES AND QUANTITIES, SEE SHEET 3.
 • FOR TYPICAL X-SECTION, ELEVATION & PAVEMENT TRANSITION DETAIL, SEE SHEET 2.

Mark	Description	By	Ch'd	Rec'd	Date
REVISIONS					

SR, 4051 PREVIOUSLY KNOWN AS LA, 62159
 BMS STR ID# 624051-0020-2072 MPMS/ECMS PROJ# 11898 BRKEY# 35219

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
 S.R. 4051 SECTION 01M
 SEGMENT 02 STATION 53+22.34 TO 53+75.66
 S.R. 4051 STA. 53+49.00
 CHARLES CREEK
 BRIDGE PRESERVATION
 GENERAL PLAN & INDEX OF SHEETS

SHEET 1 OF 3
 BRIDGE ENGINEER
 S - 42585

- SEQUENCE OF OPERATIONS**
1. INSTALL TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN.
 2. PREPARE DECK SURFACE WITH SCARIFICATION & HYDRODEMOLITION. MAKE BRIDGE DECK REPAIRS AS NEEDED, OVERLAY WITH LATEX MODIFIED CONCRETE.
 3. TEXTURE BRIDGE DECK WITH TRANSVERSE GROOVING.
 4. COMPLETE MILLING AND PAVEMENT OF APPROACHES.

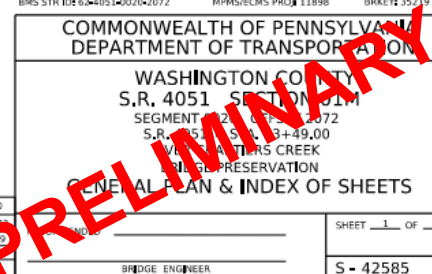
PREPARED BY:
 PENNSYLVANIA DEPARTMENT
 OF TRANSPORTATION
 ENGINEERING DISTRICT 12-0
 HUNTSTOWN, PA, 15401

SIGNATURE _____ DATE _____

CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-4.1M	6-2010
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11-2-2010
REINFORCED CONCRETE REPAIR	BC-783M	1-5-2010
DESCRIPTION	DWG. NO.	APP.

DES: CAS DWG: CAS CKD: JPW QA: MST

SUPPLEMENTAL DRAWINGS

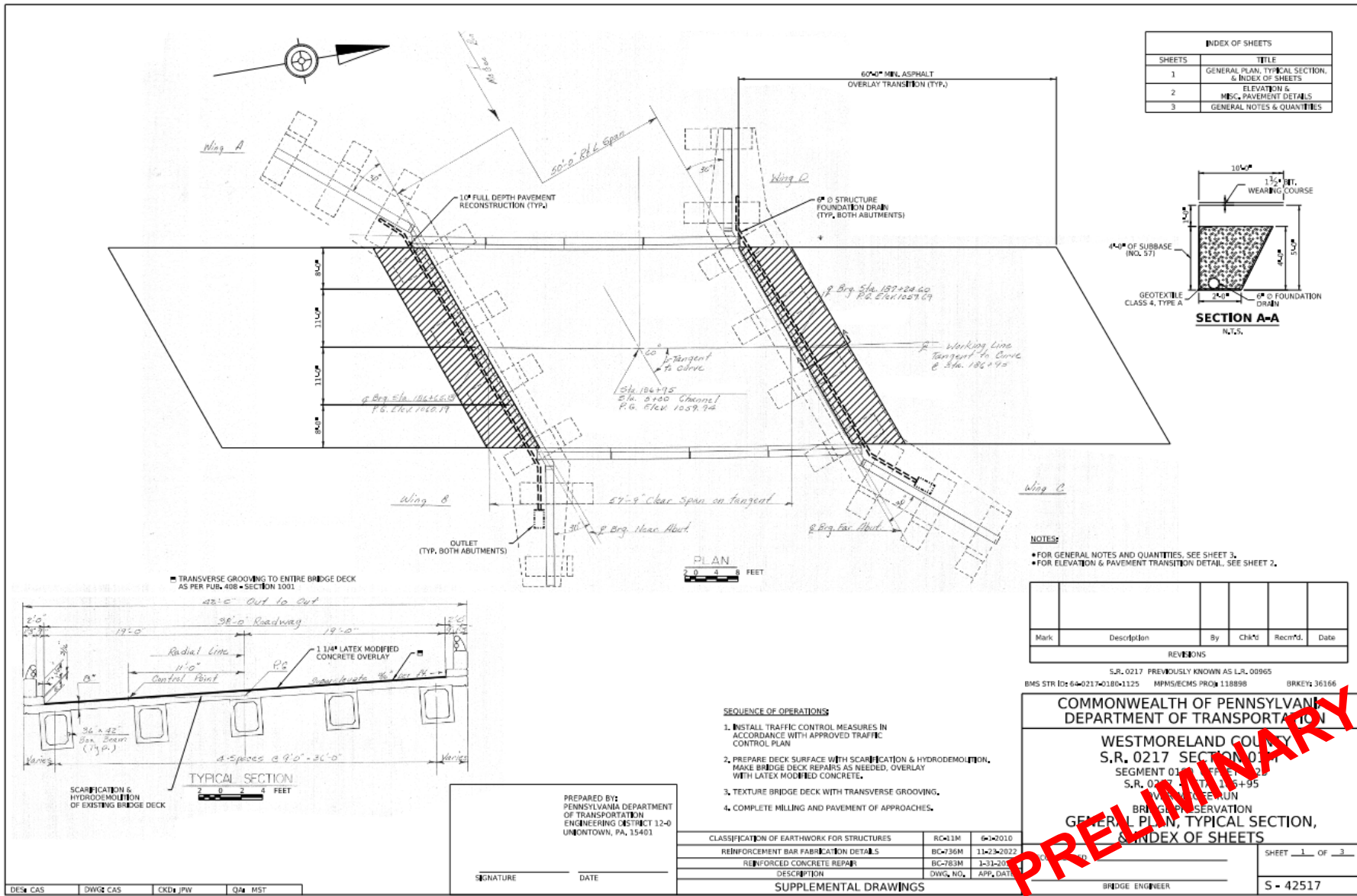


ROUTE 217

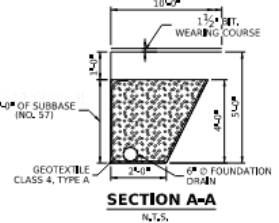
Route 217 Over McGee Run,
Derry Township



PRELIMINARY ROUTE 217



INDEX OF SHEETS	
SHEETS	TITLE
1	GENERAL PLAN, TYPICAL SECTION, & INDEX OF SHEETS
2	ELEVATION & MISC. PAVEMENT DETAILS
3	GENERAL NOTES & QUANTITIES



NOTES:

- FOR GENERAL NOTES AND QUANTITIES, SEE SHEET 3.
- FOR ELEVATION & PAVEMENT TRANSITION DETAIL, SEE SHEET 2.

Mark	Description	By	CHK'd	Rec'd.	Date
REVISIONS					

S.R. 0217 PREVIOUSLY KNOWN AS L.R. 00965
 BMS STR ID: 64-0217-0180-1125 MPM/ECMS PROJ: 118898 BRKEY: 36166

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WESTMORELAND COUNTY
 S.R. 0217 SECTION 01
 SEGMENT 01
 S.R. 0217 FROM 1995 TO 1995
 BRIDGE PRESERVATION

GENERAL PLAN, TYPICAL SECTION, & INDEX OF SHEETS

CLASSIFICATION OF EARTHWORK FOR STRUCTURES RC-11M 6/2010 REINFORCEMENT BAR FABRICATION DETAILS BC-736M 11/23/2022 REINFORCED CONCRETE REPAIR BC-783M 1-31-20 DESCRIPTION DWG. NO. APP. DATE	SHEET <u>1</u> OF <u>3</u>
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BRIDGE ENGINEER

- SEQUENCE OF OPERATIONS:**
1. INSTALL TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN.
 2. PREPARE DECK SURFACE WITH SCARIFICATION & HYDRODEMOLITION, MAKE BRIDGE DECK REPAIRS AS NEEDED, OVERLAY WITH LATEX MODIFIED CONCRETE.
 3. TEXTURE BRIDGE DECK WITH TRANSVERSE GROOVING.
 4. COMPLETE MILLING AND PAVEMENT OF APPROACHES.

PREPARED BY:
 PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 12-0
 UNIONTOWN, PA, 15401

SIGNATURE _____ DATE _____

DES: CAS DWG: CAS CKD: JMW QA: MST

PRELIMINARY



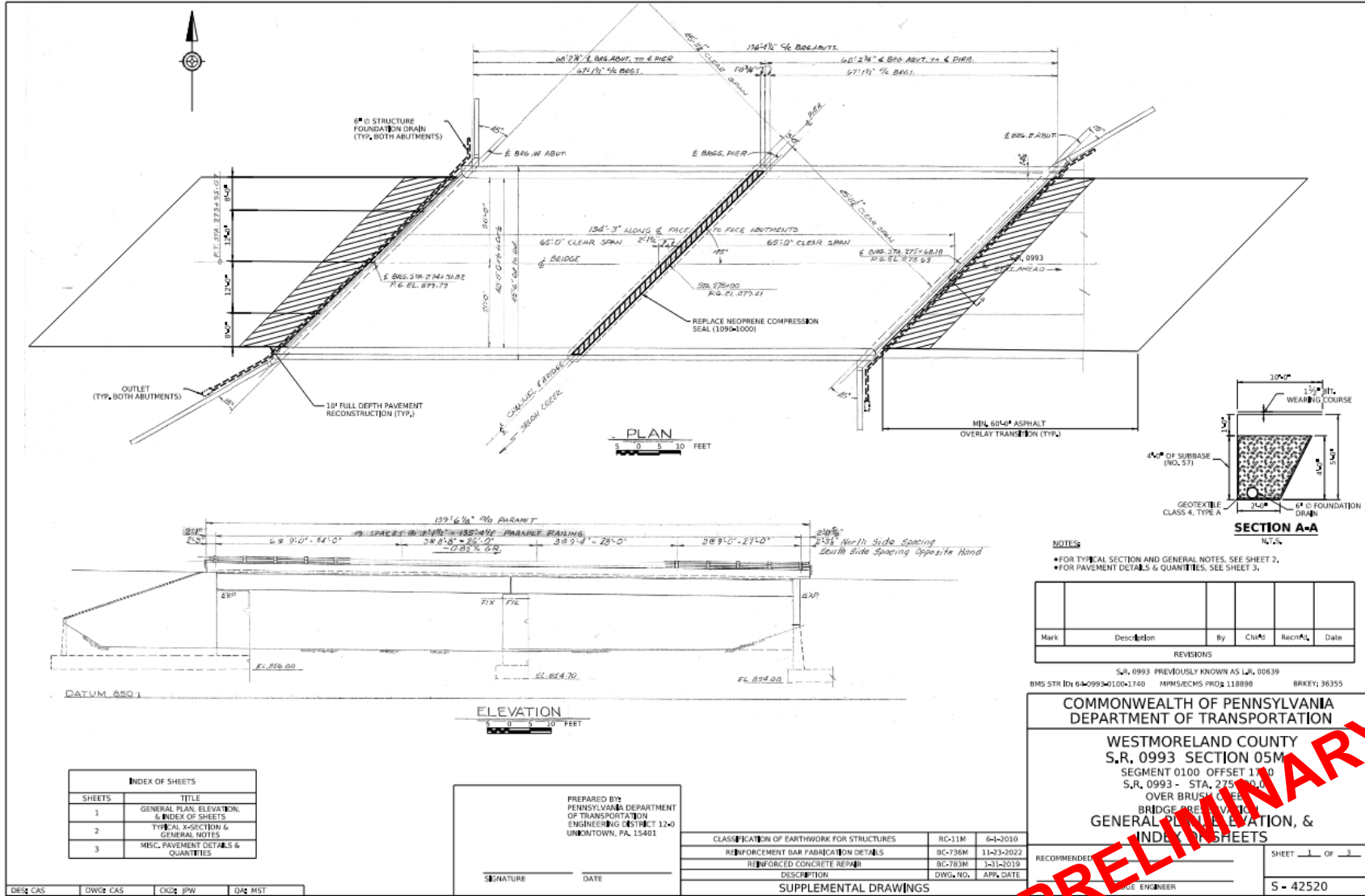
ROUTE 993



Route 993 Over
Brush Creek,
North Huntington



PRELIMINARY ROUTE 993



NOTES
 • FOR TYPICAL SECTION AND GENERAL NOTES, SEE SHEET 2.
 • FOR PAVEMENT DETAILS & QUANTITIES, SEE SHEET 3.

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

S.R. 0993 PREVIOUSLY KNOWN AS LR, 00639
 BMS STR ID: 64-0993-0100-1740 MPMS/ECMS PROJ 118898 BRKEY: 36355

**COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION**

**WESTMORELAND COUNTY
 S.R. 0993 SECTION 05M
 SEGMENT 0100 OFFSET 1100
 S.R. 0993 - STA. 275+00 TO 275+00
 OVER BRUSH CREEK
 BRIDGE REPAIR
 GENERAL PLAN, ELEVATION, &
 INDEX SHEETS**

RECOMMENDED BY	SHEET 1 OF 1
DATE	S - 42520

INDEX OF SHEETS	
SHEETS	TITLE
1	GENERAL PLAN, ELEVATION, & INDEX OF SHEETS
2	TYPICAL X-SECTION & GENERAL NOTES
3	MISC. PAVEMENT DETAILS & QUANTITIES

PREPARED BY:
 PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 12-0
 UNIONTOWN, PA 15401

SIGNATURE _____ DATE _____

CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6-1-2010
REINFORCEMENT BAR FABRICATION DETAILS	RC-736M	11-23-2022
REINFORCED CONCRETE REPAIR	RC-783M	1-31-2019
DESCRIPTION	DIWG. NO.	APP. DATE

SUPPLEMENTAL DRAWINGS

PRELIMINARY

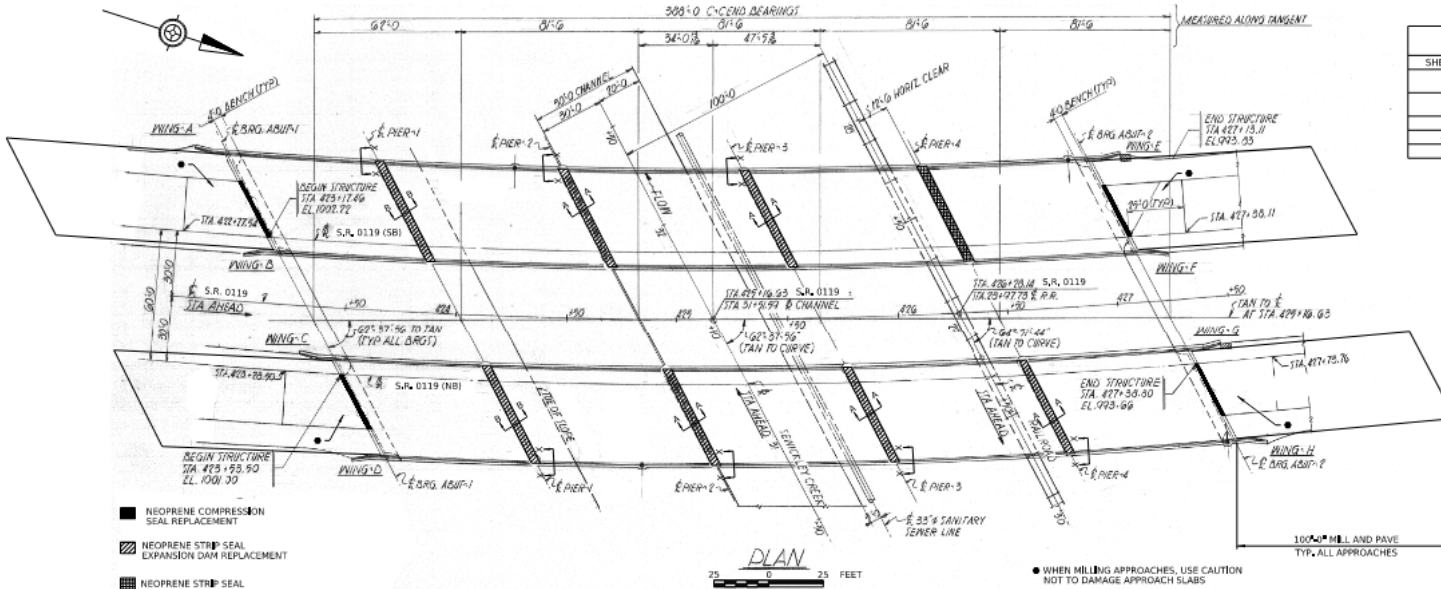


ROUTE 119

Route 119 over
Sewickley Creek,
New Stanton Borough

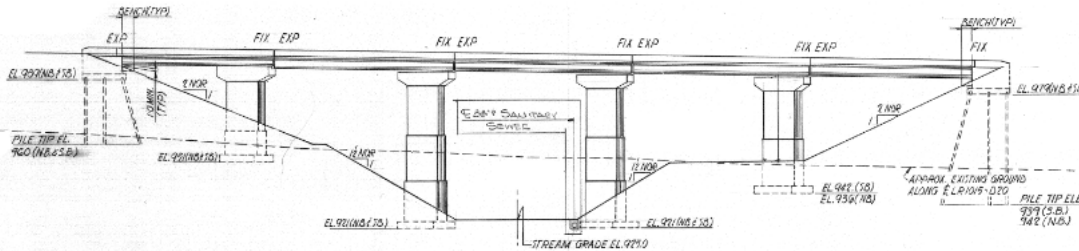


PRELIMINARY ROUTE 119



INDEX OF SHEETS	
SHEETS	TITLE
1	GENERAL PLAN, ELEVATION, & INDEX OF SHEETS
2	TYPICAL SECTION & GENERAL NOTES
3	MISC. DETAILS & QUANTITIES
4	STRIP SEAL DETAILS - 1
5	STRIP SEAL DETAILS - 2

- NEOPRENE COMPRESSION SEAL REPLACEMENT
- ▨ NEOPRENE STRIP SEAL EXPANSION DAM REPLACEMENT
- ▩ NEOPRENE STRIP SEAL GLAND REPLACEMENT



- NOTES:**
- FOR GENERAL NOTES AND TYPICAL SECTION, SEE SHEET 2.
 - FOR PHASING DETAILS, SEE SHEET 3.
 - FOR SECTIONS A-A, B-B, & C-C SEE SHEETS 4 & 5.

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

S.R. 0119 PREVIOUSLY KNOWN AS L.R. 01015 NPM/ECMS PROJ 118898
 BMS STR ID# 64-0119-0160-1112 & 64-0119-0161-1152 BRKEY: 36083 & 36085

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

WESTMORELAND COUNTY
 S.R. 0119 SECTION 17M & 18M
 SEGMENT 0160 & 0161 OF DIST. 1112 & 1152
 S.R. 0119 - OVER SEWICKLE CREEK SW PA RR
 BRIDGE RECONSTRUCTION
 GENERAL PLAN, ELEVATION,
 & INDEX OF SHEETS

SEQUENCE OF OPERATIONS FOR EACH PHASE:

1. INSTALL TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN.
2. PREPARE DECK SURFACE WITH HYDRODEMOLITION. MAKE BRIDGE DECK REPAIRS AS NEEDED, OVERLAY WITH LATEX MODIFIED CONCRETE.
3. COMPLETE WORK NECESSARY TO INSTALL NEW NEOPRENE STRIP SEAL EXPANSION DAMS.
4. REPLACE NEOPRENE COMPRESSION SEALS AND NEOPRENE STRIP SEAL GLAND.
5. TEXTURE BRIDGE DECK WITH LONGITUDINAL GROOVING.
6. COMPLETE MILLING AND PAVEMENT OF APPROACHES.

PREPARED BY
 PENNSYLVANIA DEPARTMENT
 OF TRANSPORTATION
 ENGINEERING DISTRICT 12-0
 UNKINTOWN, PA, 15401

SIGNATURE _____ DATE _____

DESCRIPTION	DWG. NO.	APP. DATE
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11-23-2022
PREFORMED NEOPRENE COMPRESSION SEAL JOINT FOR APPROACH SLABS	BC-766M	11-23-2022
NEOPRENE STRIP SEAL DAM	BC-767M	11-23-2022
REINFORCED CONCRETE REPAIR	BC-783M	01-31-2019
DESCRIPTION	DWG. NO.	APP. DATE

SUPPLEMENTAL DRAWINGS

REVISIONS: _____
 SHEET 1 OF 5
 BRIDGE ENGINEER _____
 S - 42516

DES: CAS DWG: CAS CKD: JPW QM: MST



CONTACT INFORMATION

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