

SPECIAL PROVISIONS

WATERWAY PERMITS CONDITIONS

C-R-S: SUM-8-1.75

PID: 91710

Date: May 13, 2020

1. Waterway Permits Time Restrictions:

Regional General Permit (RGP) A (Linear Transportation Projects) is authorized for SUM-8-1.75, PID 91710. A copy of the RGP and authorization letter (LRH-2018-00668-CUY) shall be kept at the work site at all times and made available to all contractors and subcontractors. The permit is effective starting: May 13, 2020. The permit expires: October 24, 2024.

For authorized work in aquatic resources (including streams, wetlands, jurisdictional ditches, captured streams, lakes, ponds), the Department will consider the Contractor’s submission of a reauthorization to the waterway permit expiration date based on project constraints. If more than one permit is authorized for the project, then all permits become invalid once the first permit expires. In order for the request to be considered, the Contractor must submit a justification to the Engineer at least 90 days prior to the waterway permit expiration date. The Engineer will submit the request for a time extension to the Ohio Department of Transportation, Office of Environmental Services, Waterway Permits Unit (ODOT-OES-WPU) for consideration and coordination with the U.S. Army Corps of Engineers (USACE), Ohio Environmental Protection Agency (OEPA), U.S. Coast Guard (USCG), U.S. Fish and Wildlife Service (USFWS), and Ohio Department of Natural Resources (ODNR) as appropriate.

2. Deviations From Permitted Construction Activities:

No deviation from the requirements for work in aquatic resources depicted in the plans, Special Provisions, and/or Working Drawings may be made unless a modification has been submitted to ODOT-OES-WPU and approved by the appropriate agencies (i.e., USACE, OEPA, USCG, ODNR, and USFWS).

NOTE: Plan sheets submitted with the Pre-Construction Notification (and/or other applicable waterway permit applications) were approved by the USACE/OEPA in accordance with Section 404 Pre-Construction Notification and are included in these Special Provisions.

For emergency situations resulting in unanticipated impacts to aquatic resources, provide notification (verbal or written) to the Engineer as soon as possible following discovery of the situation. Written notification to the Engineer and notification to the ODOT-OES-WPU (614-466-7100) must be made within 24 hours.

For non-emergency situations, notify the Engineer in writing for submission to the ODOT-OES-WPU (614-466-7100) for consideration and coordination with the appropriate agencies. Notification must be made at least 90 days prior to planned, non-permitted activities. Consideration of the requested deviation is at the discretion of the Director and must be coordinated with the appropriate regulatory agencies.

3. In-Stream Work Restrictions:

Work in the following aquatic resources is further restricted as follows:

Stream Name /Description	Location	Work restriction dates (No in-stream work permitted)
Little Cuyahoga River	STA 531+80 40L to STA 531+80 60R	April 15 - June 30*
Stream 6	STA 38+10 to STA 38+50	None

*Restriction dates do not apply if the stream has been dewatered prior to April 15.

In-stream work has been defined as the placement and/or removal of fill materials (temporary or permanent) below ordinary high water of a stream. Examples of “fill” include, but are not limited to: bridge piers, abutments, culverts, rock channel protection, scour protection, and temporary access fills.

Fills placed within a stream identified in the above table (outside of the work restriction dates) can continue to be worked from during the work restriction dates, but cannot be expanded, removed, or otherwise modified (below ordinary high water) until once again outside of the work restriction dates.

4. Materials:

Materials utilized in or adjacent to aquatic resources for temporary or permanent fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded. Chromated Copper Arsenate (CCA), creosote, and other pressure treated lumber shall not be used in structures that are placed in aquatic resources.

5. Cultural Resources:

Per CMS 107.10, if archeological sites, historical sites, or human remains are discovered, cease all work in the immediate area and notify the Engineer who will immediately contact the ODOT-District Environmental Coordinator and ODOT-OES-Cultural Resource Section at 614-466-7100. In the event of human remains are identified by OES-Cultural Resources Section, the Engineer shall also contact the Summit County Sheriff’s Office at (330) 643-2122.

6. Aquatic Resource Demarcation:

The table below or attached includes detailed fill quantities authorized within the aquatic resources. Aquatic resources not authorized for impact by these Special Provisions shall be demarcated in the field as per SS 832 prior to site disturbance. The fence shall remain in place and be maintained throughout the construction process. Following the completion of the project, the fence and posts shall be removed.

Table D is attached and includes detailed fill quantities that are authorized within the aquatic resources.

7. Spill containment:

Provide and Maintain an Oil Spill Kit with a minimum capacity of 65 gallons. The Spill Kit shall contain:

- 6 - 3 in. X 8 ft. Oil only socks
- 4 - 18 in. X18 in. Oil only pillows
- 2 - 5 in. X 10ft. Booms
- 50 - 16in. X 20 in. Oil only pads
- 10- Disposable Bags
- 1 - 65 Gallon drum with lid
- 25 pounds of Granular Oil Absorbent

The Oil Spill Kit shall be located within 150 feet of any equipment working in a stream or wetland. The oil Spill Kit shall be maintained for the life of the contract. Any materials utilized during the project will be replaced within 48 hours. All costs associated with furnishing and maintaining the above referenced spill containment kit is incidental to work.

8. Blasting:

State law requires notification to the Ohio Department of Natural Resources should blasting be required within or near stream channels (See ORC 1533.58 & CMS 107.09). Notify the Engineer, in writing, a minimum of 30 days in advance of blasting, for submission to ODOT-OES-WPU (614-466-7100) for coordination with ODNR.

9. Project Inspection:

Inspection of Work may include inspection by representatives of other government agencies or railroad corporations that pay a portion of the cost of the Work or regulate the Work through State and Federal law. Comments from the representatives of these agencies shall be directed to the Engineer. Please forward a copy to ODOT-OES-WPU (614-466-7100).

10. Temporary Access Fills (Stream 6):**Special Provisions Notes:****Definitions:****Normal Flow**

Normal flow is the flow necessary to maintain chemical, physical, and biological integrity of the waterway. Normal flows for this type of waterway may vary during the year. It is anticipated that the Normal Flow is less than the flow producing an elevation equal to the OHWM but greater than zero. The Contractor's means and methods may vary depending on the time of year the work is active.

Temporary Access Fills (TAFs)

Include, but are not limited to, dewatering fills, causeways, cofferdams, access pads, and temporary bridges below the OHWM.

Requirements

7 calendar days prior to the initiation of any in-stream work, provide the Engineer with a written plan that includes the following:

- Plan view drawing showing the location of all TAFs proposed for use on the project.
- A description of all temporary material to be placed below the OHWM elevation.
- A description of the installation and staging of all temporary fill over the life of the contract.
- Volume of temporary fill below the OHWM elevation.
- A description of the diversion ditches, equipment, conduits or means for maintaining normal flows in the waterway.
- A description of the removal of all temporary fill and restoration of the channel and all areas impacted by the TAFs.
- A schedule outlining the timing of the placement and removal of all TAFs.

Do not begin in-stream work until the Engineer has accepted the written plan. Submit any changes to the planned TAF to the Engineer for acceptance a minimum of 7 days prior to performing any instream work.

The design of the Contractor's TAF must minimize impacts to water bodies, stream banks, stream beds, and riparian zones to the maximum extent practicable.

Fording of waterways and other aquatic resources is prohibited.

Construct TAFs in such a manner that will maintain flows, minimize upstream flooding, and avoid overtopping the TAF on a regular basis.

Installation of any temporary fill without appropriate authorization is strictly prohibited. All direct coordination with the USACE and/or OEPA will be performed through OES.

TAFs Construction and Payment

The Contractor must make every attempt to minimize disturbance to waterbodies, stream banks, stream beds and riparian zones during the construction, maintenance, and removal of the TAF. Minimize clearing, grubbing, and excavation of waterway banks, and approach sections. Construct the TAFs as to not cause erosion or allow sediment deposits in the waterway.

Prior to the installation of any work in the waterway, establish a visual monument upstream of the proposed TAF. Maintain the monument throughout the project. Provide a visual mark on the monument that identifies the elevation of the OHWM.

Construct the TAFs to a water elevation at least 1 foot (0.3 m) above the OHWM. Use TAFs to dewater sections of the waterway for accessing proposed work areas only. Provide diversion ditches, conduits, pumps or other methods to maintain normal flows to the downstream waterway. Passing normal flows through active work areas of the waterway is prohibited. Ensure that any ponding of water behind the TAFs will not damage property, flood roadways, or threaten human health and safety.

All TAFs must be constructed of suitable materials. Causeways and access fills must be encapsulated with clean, non-erodible, nontoxic Dumped Rock Fill, Type A, B, C, or D, as specified in C&MS 703.19.B.

When the work requiring TAF is complete, all portions of the TAF (including all rock and temporary diversions) will be removed in its entirety. Do not dispose of TAF material in other aquatic resources or where erosion into another aquatic resource is possible. The waterway bottom affected by the TAFs will be restored to its pre-construction elevations. The TAFs will not be paid as a separate item but will be included by the Contractor as part of the total project cost.

Unless specific TAF compensation is included in the plans, all environmental protection and control associated with the authorized activities, are incidental to the work within the boundaries of the aquatic resources.

11. Temporary Access Fills (Little Cuyahoga River):

Special Provisions Notes:

Definitions:

Hydraulic Opening

The cross-sectional area allowing an unimpeded discharge equal to twice the highest monthly flow without producing a rise in the backwater above the Ordinary High Water Mark (OHWM).

Standard Temporary Discharge

Discharge equal to twice the *highest monthly flow* without producing a rise in the backwater above the OHWM. The U.S. Geologic Service publication "Techniques for estimating Selected Streamflow Characteristics of Rural Unregulated Streams in Ohio" provides equations that estimate monthly flow for Ohio Waterways. These flows are also available in a web application by USGS StreamStats, (<https://water.usgs.gov/osw/streamstats/ohio.html>).

Average Monthly Flow

The average monthly flow represents the estimated “normal” flow.

Temporary Access Fills (TAFs)

Include, but are not limited to, dewatering fills, causeways, cofferdams, access pads, temporary bridges, etc. below the OHWM.

Requirements

21 calendar days prior to the initiation of any in-stream work, provide the Engineer with Working Drawings that include:

- Plan view drawing (50 scale or less) showing the location of all TAFs proposed for use on the project
- Scaled cross section and profile drawing showing the OHWM and the proposed hydraulic opening.
- Calculations analyzing the hydraulic impacts of the TAF on the waterway. Include in the calculations an analysis of the hydraulic opening sized adequately to pass the Standard Temporary Discharge without producing a rise in backwater above the OHWM. Include, in the analysis, calculated channel velocities adjacent to the TAF, culvert exit velocities, calculated headwater and tailwater elevations, and any additional appropriate calculations to assess potential impacts to the waterway during normal and anticipated high flow (twice the highest monthly flow) events.
- A description of all temporary material to be placed below the OHWM elevation.
- A description of the installation and staging of all temporary fill over the life of the contract.
- Volume of temporary fill below the OHWM elevation.
- A description of the diversion ditches, equipment, conduits or means for maintaining normal flows in the waterway.
- A description of the removal of all temporary fill and restoration of the channel and all areas impacted by the TAFs.
- A schedule outlining the timing of the placement and removal of all temporary fill.
- Have competent individuals prepare and check the Working Drawings and hydraulic calculations. Provide a cover sheet containing the preparer(s) and checker(s): First Name, Last Name and Initials. The preparer(s) and checker(s) shall not be the same individual. Have an Ohio Registered Engineer review, approve, sign, seal and date the Working Drawings and hydraulic calculations according to ORC 4733 and OAC 4733-35. Include the following statement on the Working Drawings: “These Working Drawings were prepared in compliance with the terms of these Special Provisions and all contract documents.”

Do not begin in-stream work until the Engineer has accepted the Working Drawings and hydraulic calculations.

The design of the Contractor’s TAF must minimize impacts to water bodies, stream banks, stream beds, and riparian zones to the maximum extent practicable.

Fording of waterways and other aquatic resources is prohibited.

Construct TAFs in such a manner that will maintain flows, minimize upstream flooding, and avoid overtopping the TAF on a regular basis. ***TAFs shall be designed and constructed so that the hydraulic opening provides capacity for a discharge equal to twice the highest monthly flow without producing a rise in the backwater above the (OHWM).***

If the Contractor proposes a TAF which does not meet all the requirements of these Special Provisions, the Contractor must submit a request in writing for a modified TAF to the Engineer. The request must include all Working Drawings and hydraulic calculations required by these Special Provisions. The

Department makes no guarantee to grant the request. The Contractor's proposed TAF request will be coordinated by OES with the USACE and the OEPA, as appropriate. The time frame allowed for the coordination of the contractor's proposed TAF will be a minimum of 60 days.

Installation of any temporary fill without appropriate authorization is strictly prohibited. All direct coordination with the USACE and/or OEPA will be performed through OES.

TAFs Construction and Payment

Begin planning and installing causeways and access fills as early in construction as possible to avoid conflicts with these Special Provisions or other environmental commitments that have been included in the construction plans.

TAFs in Streams and Rivers may include, but are not limited to, causeways, cofferdams, access pads, sheet piling, temporary bridges, etc. The Contractor must make every attempt to minimize disturbance to waterbodies, stream banks, stream beds and riparian zones during the construction, maintenance, and removal of the TAF. Construct the TAFs as narrow as practical. Install in-stream conduits parallel to the stream banks. Make the TAFs in shallow areas rather than deep pools where possible. Minimize clearing, grubbing, and excavation of stream banks, and approach sections. Construct the TAFs as to not cause erosion or allow sediment deposits in the waterway.

Prior to the initiation of any in-stream work, establish a monument upstream of the proposed TAF to visually monitor the water elevation in the waterway where the fill is permitted. Maintain the monument throughout the project. Provide a visual mark on the monument that identifies the elevation 1 foot above the OHWM. Ensure that the monument can be read from the bank of the waterway. Have this elevation set and certified by an Ohio Registered Surveyor. All costs associated with furnishing and maintaining the above referenced monument is incidental to the work.

Should the surface water elevation exceed the elevation 1 foot above OHWM, the Department will compensate the Contractor for repair of any resulting damage to the TAF up to the elevation of 1 foot above the OHWM, except as noted. The Department will recognize this event as an excusable, non-compensable delay in accordance with Section 108.06 B. of the Construction & Materials Specifications.

Follow the requirements in Item 502 for Structures for Maintaining Traffic and in Item 503 for Cofferdams and Excavation Bracing and any modifications to these items as shown in the plans. The Department will not pay for repair and maintenance of TAFs associated with Items 502 and 503 as a result of surface water elevation exceeding 1 foot above the OHWM. Compensation for damages associated with waterway flows will be provided as described in Items 502 and 503.

Construct the TAFs, not including Items 502 and 503, to a water elevation at least 1 foot (0.3 m) above the OHWM. If more than one-third the width of the stream is filled, then use culvert pipes to allow the movement of aquatic life. Ensure that any ponding of water behind the TAF will not damage property, flood roadways, or threaten human health and safety.

The following minimum requirements apply to TAFs where culverts are used.

- A. Furnish culverts on the existing stream bottom.
- B. Avoid a drop in water elevation at the downstream end of the culvert that would result in an adverse impact to the waterway.
- C. Furnish a sufficient number of culverts in addition to stream openings to provide a discharge equal to twice the highest monthly flow without producing a rise in the backwater above the OHWM.
- D. Furnish culverts with a minimum diameter of 18 inches (0.5 m).

All TAFs must be constructed of suitable materials. Causeways and access fills must be encapsulated with clean, non-erodible, nontoxic Dumped Rock Fill, Type A, B, C, or D, as specified in C&MS 703.19.B. Extend rock fill up the slope from original stream bank for 50 feet (10 m) to catch and remove erodible

material from equipment.

When the work requiring TAF is complete, all portions of the TAF (including all rock and culverts) will be removed in its entirety. Do not dispose of TAF material in other aquatic resources or where erosion into another aquatic resource is possible. The stream bottom affected by the TAFs will be restored to its pre-construction elevations. The TAFs will not be paid as a separate item but will be included by the Contractor as part of the total project cost.

Unless specific TAF compensation is included in the plans, all environmental protection and control associated with the authorized activities, are incidental to the work within the boundaries of the aquatic resources.

12. Excavation Activities:

Excavated material will be placed at an upland site and disposed of in such a manner that sediment and runoff to streams and other aquatic resources is controlled and minimized. Additionally, no more than incidental fallback into jurisdictional waters of the U.S. is permitted during the excavation process. If any changes to the proposed work are deemed necessary, you must notify and coordinate with the ODOT-OES-WPU (614-466-7100).

13. Construction Completion Certification:

Upon completion of the work, notify the Engineer. The USACE Construction Completion Certification must be completed and signed by the Engineer then provided via US mail or email to:

Waterway Permits Program Manager
ODOT - Office of Environmental Services
1980 West Broad Street, Mail Stop 4170
Columbus, Ohio 43223
Adrienne.Earley@dot.ohio.gov

A copy of the certification has been attached to these Special Provisions.

14. Demolition Debris:

The temporary discharge of demolition debris into aquatic resources (including but not limited to bridges, culverts, abutments, wing walls, piers) is conditionally authorized for this project. Perform demolition activities in a manner to prevent the discharge of fine (erodible) debris into aquatic resources. Utilize TAF or other catchment methods accepted by the Engineer and authorized by these Special Provisions to prevent erodible demolition debris from entering aquatic resources. Demolition debris may not remain in the waterway for more than 72 hours and must be removed in its entirety. If removal of debris material cannot be achieved within 72 hours, notify the Engineer in writing and contact ODOT-OES-WPU at 614-466-7100.

Section 404 Permit Package and PCN
 SUM-8-1.75, PID 91710
 August 2019

TABLE D: DISCHARGE AND FILL QUANTITIES

Streams						Temporary Fill Within/Below OHWM			Permanent Fill Within/Below OHWM			Total Permanent Fill Within OHWM			Total Temp Impact	Total Permanent Impact	Total Project Impact
Aquatic Resource ID	Impact Location Station	Impact Type	Total Length Within Study Area (LF)	Stream Width (LF)	Stream Depth (LF)	Demolition Debris (Concrete & Steel)			Earthen Fill			Total Permanent Fill Within OHWM			Length (LF)	Length (LF)	Length (LF)
						Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)			
Little Cuyahoga River	STA 531+80 40L to STA 531+80 60R	Bridge Demolition Debris	737	32	2	100	0.07	75	-	-	-	-	-	-	100	0	100
Stream 6	STA 38+10 to STA 38+50	Access Road Grading Earthen Fill	186	2	1	-	-	-	37	0.002	1.5	37	0.002	1.5	0	37	37
Total						100	0.07	75	37	0.002	1.5	37	0.002	1.5	100	37	137

LF = linear feet; AC = acres; CY = cubic yards; SM = square miles; NA = Not Applicable

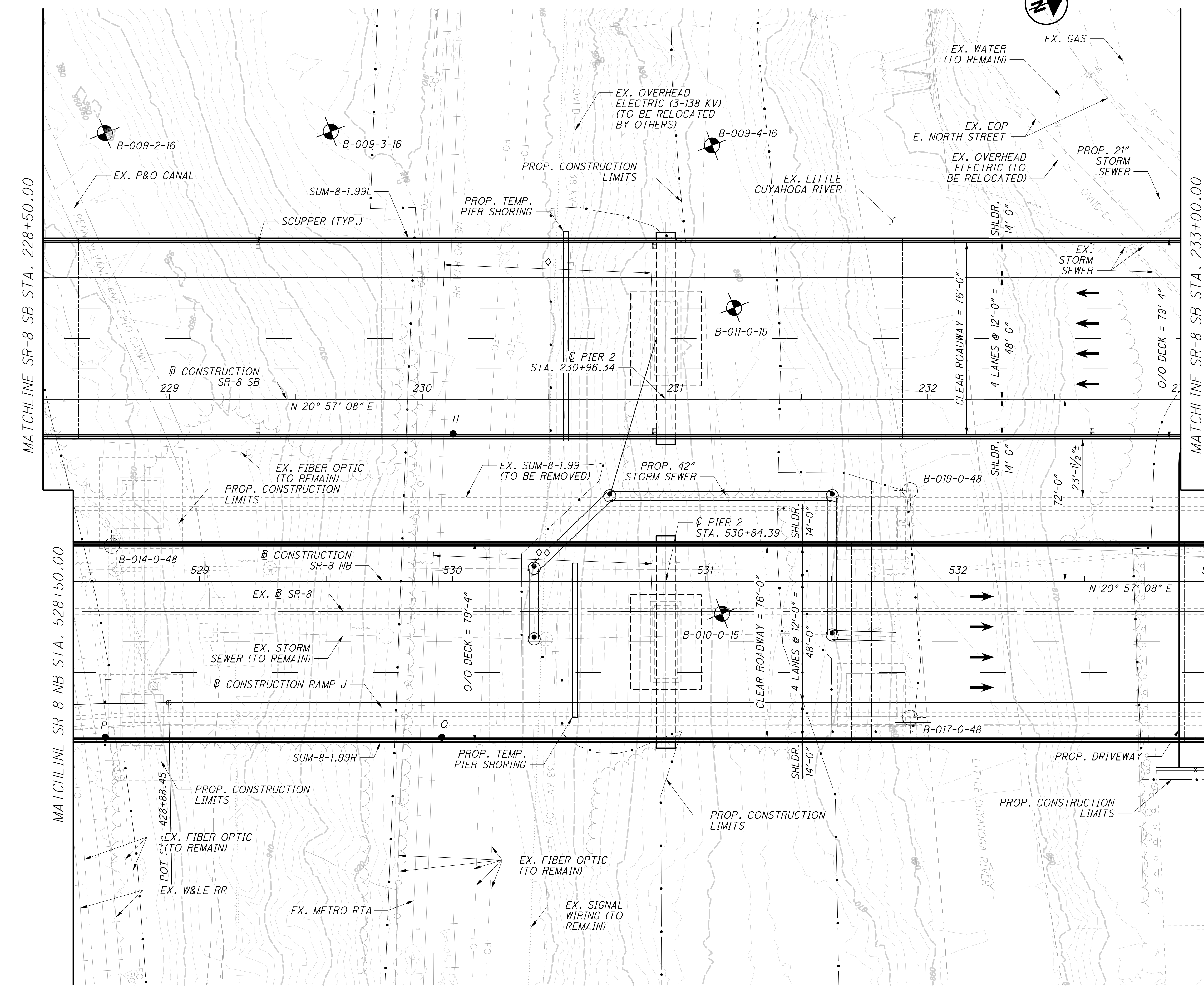
Wetlands					Permanent Fill Within/Below OHWM						Total Permanent Fill Within OHWM			Total Permanent Impact
Aquatic Resource ID	Impact Location Station	Impact Type	Total Area Within Study Area (AC)	Total Wetland Size (AC)	Plastic Pipe			Earthen Fill			Total Permanent Fill Within OHWM			Area (AC)
					Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	
Wetland E	STA 41+76 to STA 41+91	Access Road Grading Earthen Fill	0.02	0.02	-	-	-	-	0.001	2	-	0.001	2	0.001
Wetland F	STA 38+85 to STA 39+50, STA 39+87 to STA 40+47, STA 44+24 to STA 44+60	Access Road Grading Earthen Fill	0.67	0.67	-	-	-	-	0.1	162	-	0.1	162	0.1
Wetland H	STA 32+20 to STA 32+60	Access Road Grading Earthen Fill	0.19	0.19	-	-	-	-	0.003	5	-	0.003	5	0.003
Wetland J	STA 34+14 to STA 34+46, STA 34+70 to STA 35+50, STA 35+60 to STA 36+21	Access Road Grading Earthen Fill	0.29	0.29	-	-	-	-	0.07	113	-	0.07	113	0.07
Total					NA	NA	NA	NA	0.174	282	NA	0.174	282	0.174

LF = linear feet; AC = acres; CY = cubic yards; SM = square miles; NA = Not Applicable

Other Jurisdictional Waters					Permanent Fill Within/Below OHWM						Total Permanent Fill Within OHWM			Total Permanent Impact
Aquatic Resource ID	Impact Location Station	Impact Type	Total Area Within Study Area (AC)	Total Wetland Size (AC)	Plastic Pipe (2 24" pipes)			Earthen Fill			Total Permanent Fill Within OHWM			Area (AC)
					Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	
P&O Canal	STA 38+42 to STA 38+76, STA 48+80 to 52+18	Access Road Grading Earthen Fill & Plastic Pipe	0.2	0.2	372	0.01	3	-	0.11	191	372	0.12	194	0.12
Total					372	0.01	3	NA	0.11	191	372	0.12	194	0.12

LF = linear feet; AC = acres; CY = cubic yards; SM = square miles; NA = Not Applicable

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- ### LEGEND
- Δ = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
57'-1 3/8" = ACTUAL HORIZONTAL CLEARANCE
 - ΔΔ = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
60'-0 3/8" = ACTUAL HORIZONTAL CLEARANCE
 - = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
47'-5" = ACTUAL HORIZONTAL CLEARANCE
 - = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
52'-11 3/8" = ACTUAL HORIZONTAL CLEARANCE
 - ⊗ = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
41'-6 3/8" = ACTUAL HORIZONTAL CLEARANCE
 - ⊗⊗ = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
39'-10 3/4" = ACTUAL HORIZONTAL CLEARANCE
 - ◇ = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
82'-0 7/8" = ACTUAL HORIZONTAL CLEARANCE
 - ◇◇ = 25'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE (BASED ON CRASH WALL CRITERIA)
86'-2 1/4" = ACTUAL HORIZONTAL CLEARANCE
 - (with crosshair) = PROJECT BORING LOCATION
 - (with dot) = HISTORIC BORING LOCATION

- ### NOTES:
1. FOR ADDITIONAL INFORMATION, SEE SHEET 2/48.
 2. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
 3. DESIGN TRAFFIC:
SR-8 (BETWEEN PERKINS AND GLENWOOD):
2020 ADT = 121,740 2020 ADTT = 9,740
2040 ADT = 132,880 2040 ADTT = 10,630
DIRECTIONAL DISTRIBUTION = 0.58
 4. FOR HORIZONTAL CLEARANCES Δ, ΔΔ, □, □□, ⊗, ⊗⊗, AND ◇, ◇◇, SEE SHEET [3/59]. FOR VERTICAL CLEARANCES A THRU G, SEE SHEET [6/59]. FOR VERTICAL CLEARANCE H, SEE SHEET [7/59]. FOR VERTICAL CLEARANCES J THRU Q, SEE SHEET [10/59]. FOR VERTICAL CLEARANCES P THRU Q, SEE SHEET [11/59].
 5. FOR SR-8 SOUTHBOUND BRIDGE PROFILE, SEE SHEETS [6/59] THRU [9/59].
 6. FOR SR-8 NORTHBOUND BRIDGE PROFILE, SEE SHEETS [10/59] THRU [13/59].
 7. FOR SCUPPER LOCATIONS TABLE, SEE SHEET [5/59].
 8. FOR TOP OF BEDROCK ELEVATIONS TABLE, SEE SHEET [6/59].
 9. UTILITY DISPOSITIONS NOT SHOWN TO BE DETERMINED, UNLESS NOTED OTHERWISE.
 10. FOR SR-8 NORTHBOUND BRIDGE PROFILE, SEE SHEETS [6/59] THRU [9/59].
 11. FOR SR-8 SOUTHBOUND BRIDGE PROFILE, SEE SHEETS [10/59] THRU [13/59].
 12. FOR SCUPPER LOCATIONS TABLE, SEE SHEET [5/59].
 13. FOR TOP OF BEDROCK ELEVATIONS TABLE, SEE SHEET [6/59].

DESIGN AGENCY: **ms consultants, inc.**
2221 Schrock Road
Columbus, Ohio 43229

DATE: APR 18

REVIEWED: GLG
STRUCTURE FILE NUMBER: 7700370/7700371

DRAWN: CMA
REVISOR: PEG

DESIGNED: CMA
CHECKED: PEG

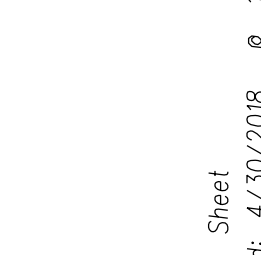
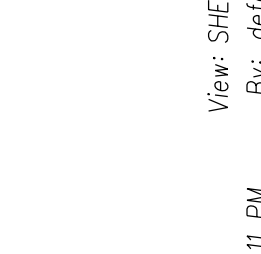
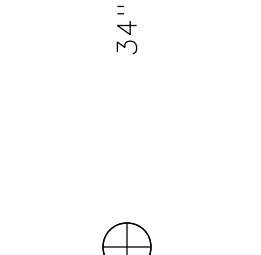
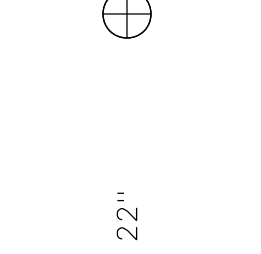
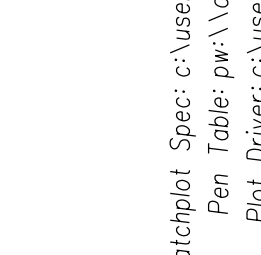
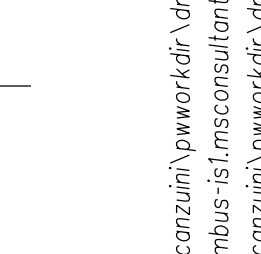
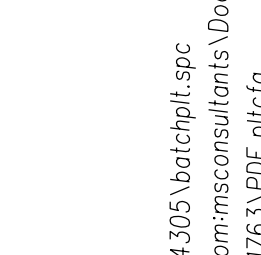
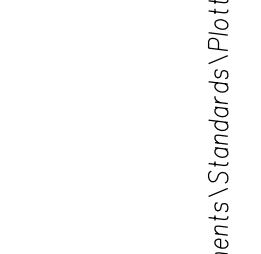
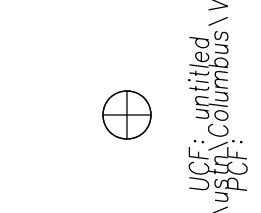
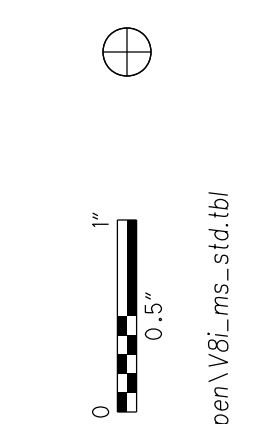
SUMMIT COUNTY
STA. 525+14.39
STA. 540+98.89

SUMMIT COUNTY
STA. 224+94.84
STA. 241+10.84

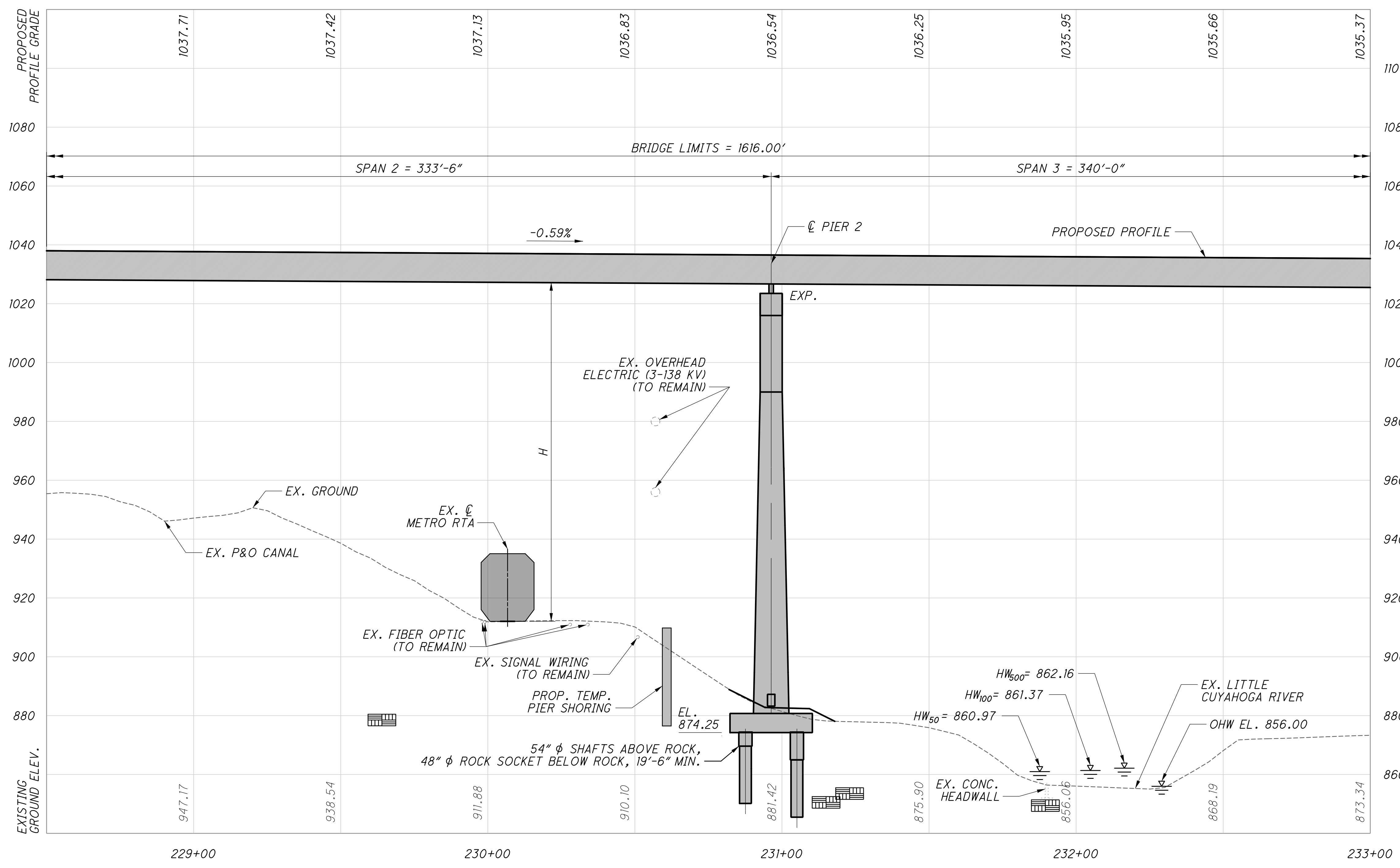
SITE PLAN (2 OF 4)
BRIDGE NO. SUM-8-0199L/R
SR-8 OVER LITTLE CUYAHOGA RIVER

SUM-8-1.75
PID No. 91710

3/59



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LEGEND

- 23'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
- PT. H = 111.84' ACTUAL VERTICAL CLEARANCE
- ▬ - TOP OF BEDROCK

BORING	TOP OF BEDROCK EL.
B-009-2-16	N/A
B-009-3-16	880.50
B-009-4-16	852.50
B-011-0-15	855.50
B-019-0-48	851.40

PROFILE ALONG \varnothing CONSTRUCTION SR-8 SB

NOTES:

- FOR PLAN VIEW AND FOR LOCATIONS OF VERTICAL CLEARANCE H, SEE SHEET 3/59.

DESIGN AGENCY: ms consultants, inc.
 2221 Schrock Road
 Columbus, Ohio 43229

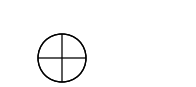
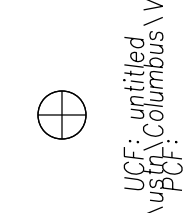
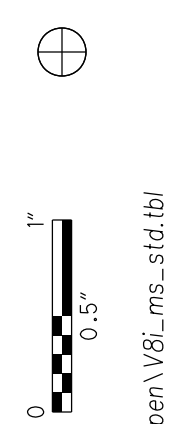
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 DRAWN: CMA
 DESIGNED: CMA
 CHECKED: PEG
 STRUCTURE FILE NUMBER: 7700370

SUMMIT COUNTY
 STA. 224+94.84
 STA. 241+10.84

SOUTHBOUND BRIDGE PROFILE (2 OF 4)
 BRIDGE NO. SUM-8-0199L
 SR-8 OVER LITTLE CUYAHOGA RIVER

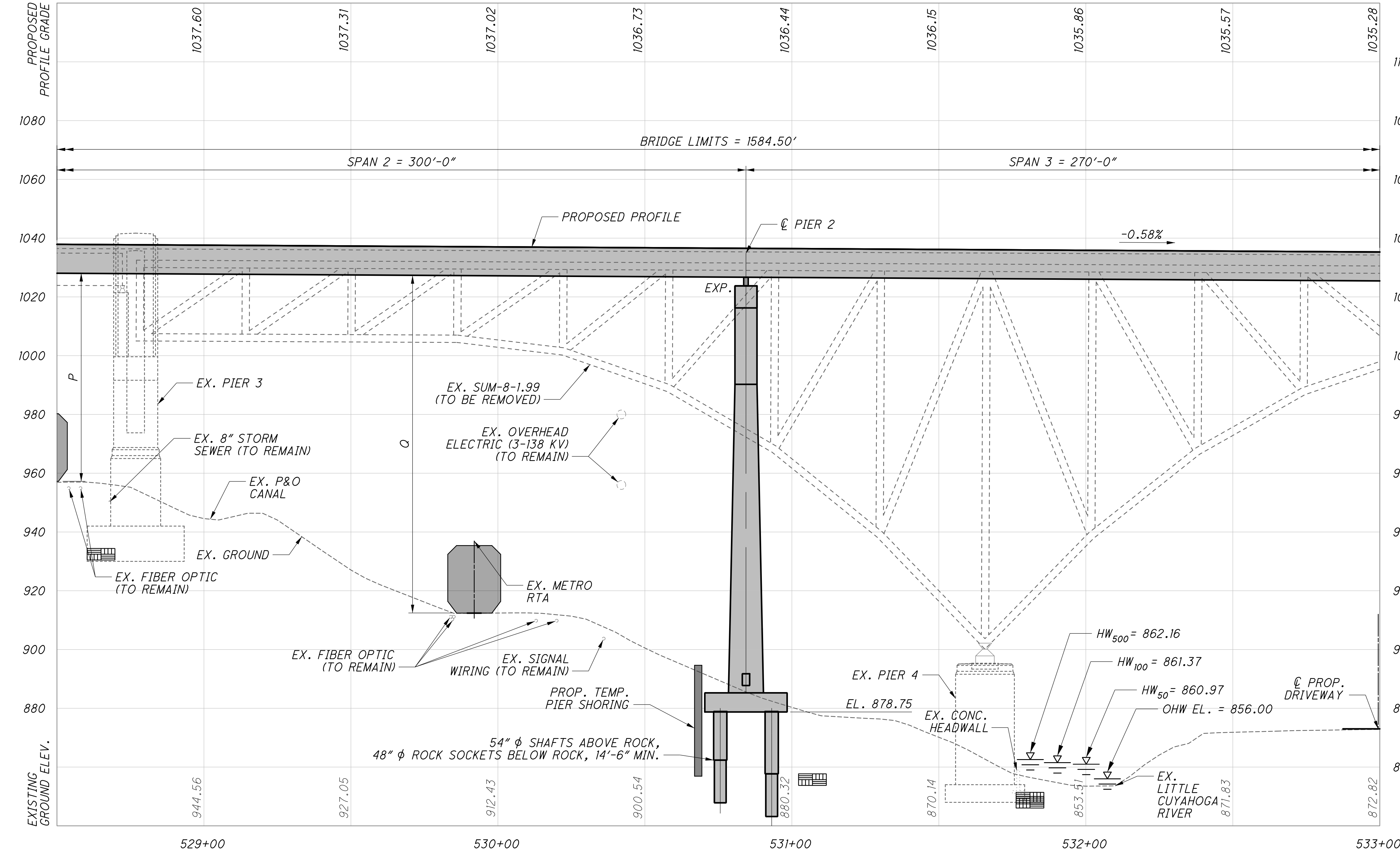
SUM-8-1.75
 PID No. 91710

7/59



3.4" x 22"

www.mscconsultants.com



LEGEND

- 23'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
- PT. P = 68.18' ACTUAL VERTICAL CLEARANCE
- PT. Q = 111.35' ACTUAL VERTICAL CLEARANCE
- ▒ - TOP OF BEDROCK

BORING	TOP OF BEDROCK EL.
B-014-0-48	934.40
B-010-0-15	857.70
B-019-0-48	851.40
B-017-0-48	850.00

PROFILE ALONG CONSTRUCTION SR-8 NB

NOTES:

- FOR PLAN VIEW AND LOCATIONS OF VERTICAL CLEARANCES P THRU Q, SEE SHEET 3759.

DESIGN AGENCY: ms consultants, inc.
2221 Schrock Road, Columbus, Ohio 43229

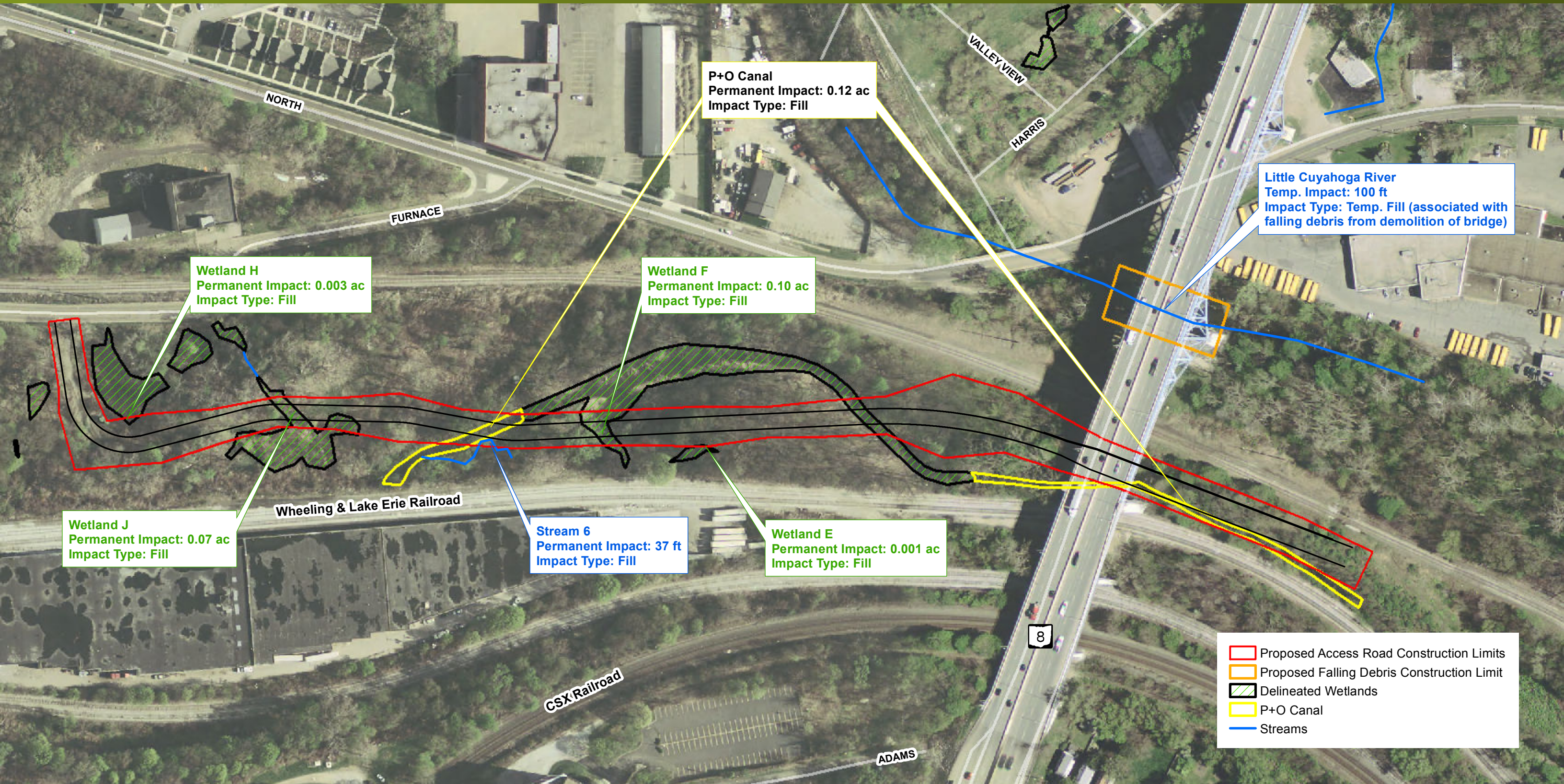
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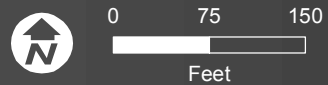
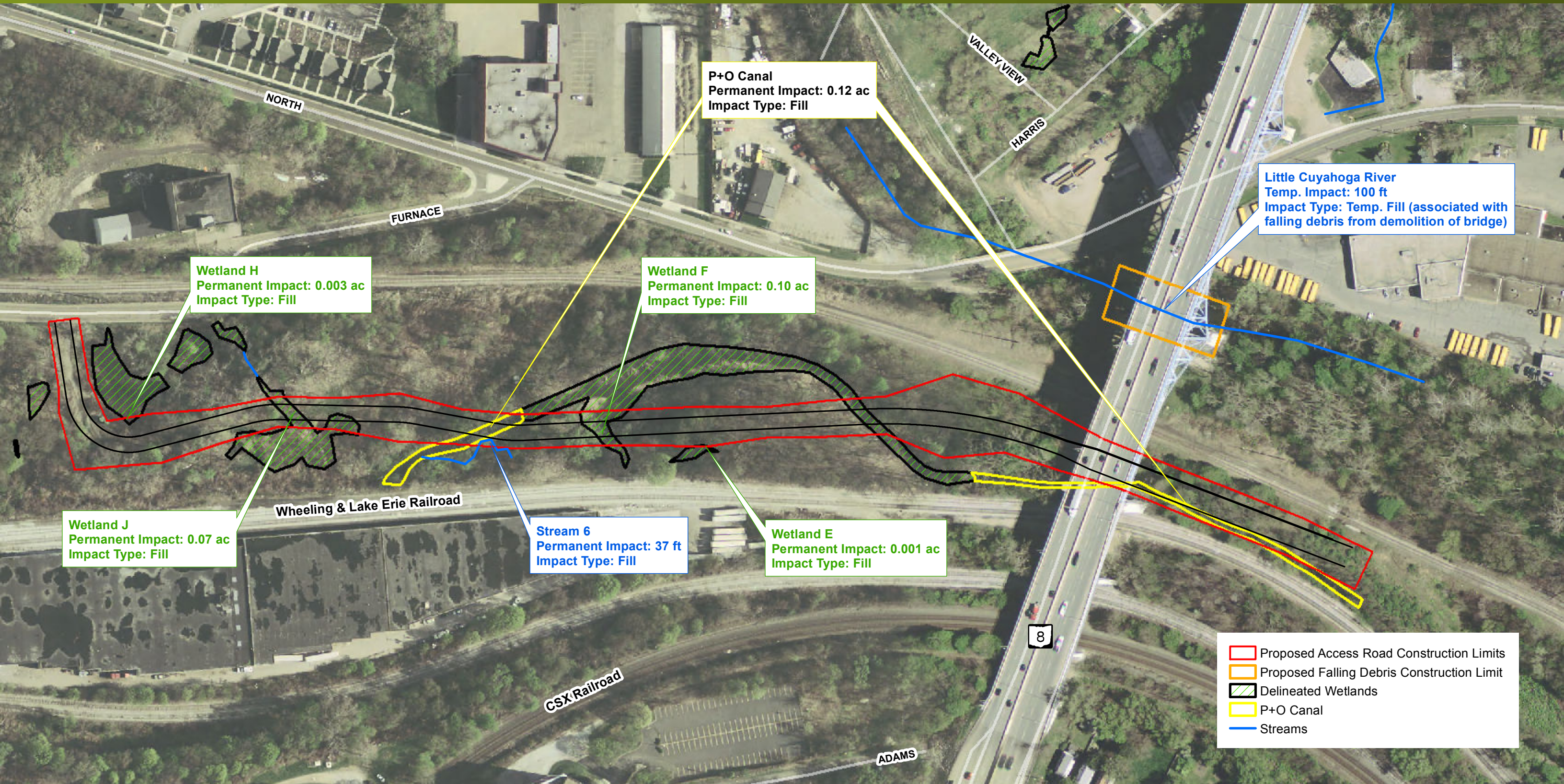
SUMMIT COUNTY
STA. 525+14.39
STA. 540+98.89

NORTHBOUND BRIDGE PROFILE (2 OF 4)
BRIDGE NO. SUM-8-0199R
SR-8 OVER LITTLE CUYAHOCA RIVER

SUM-8-1.75
PID No. 91710

11/59





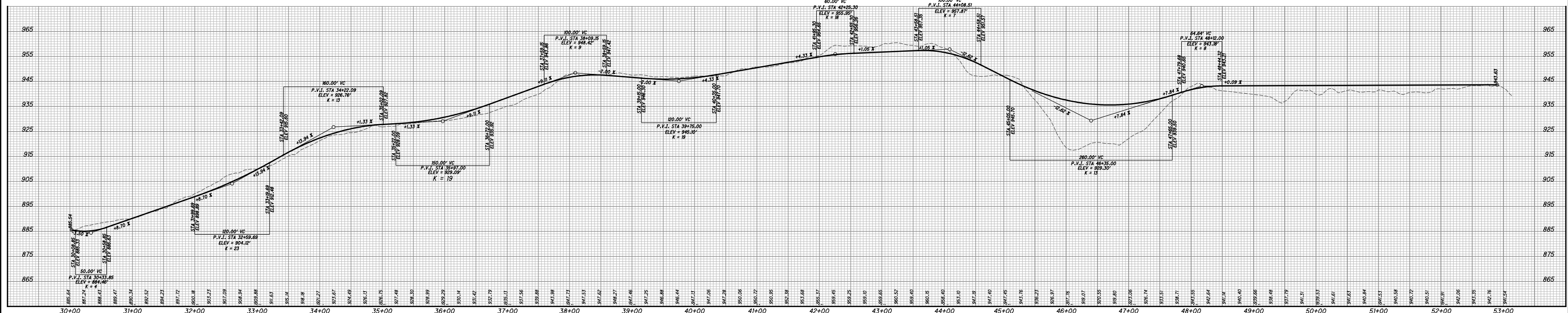
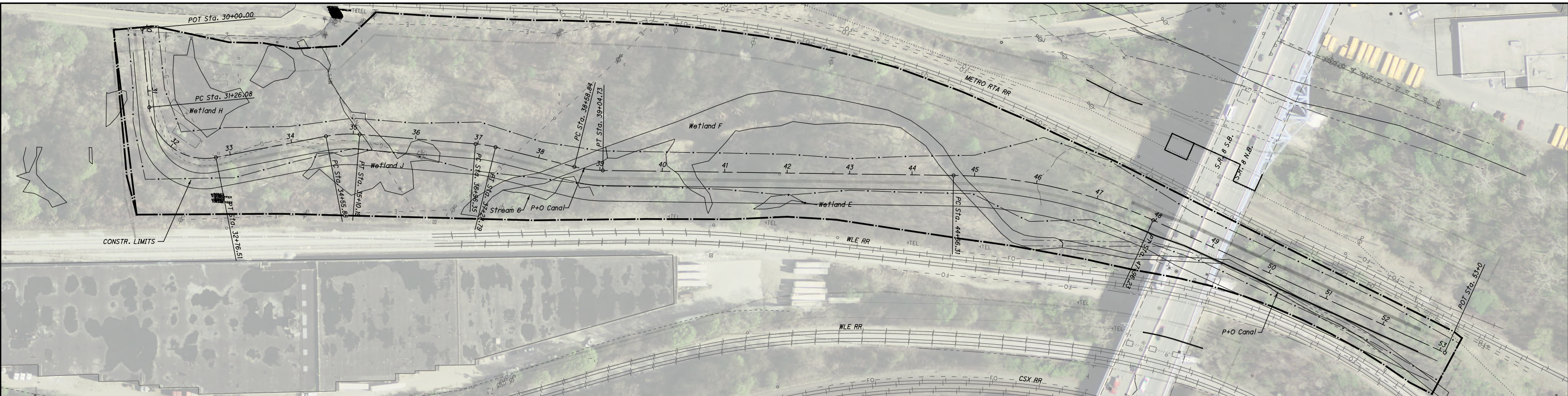


Exhibit 6 - ACCESS ROAD - 2A

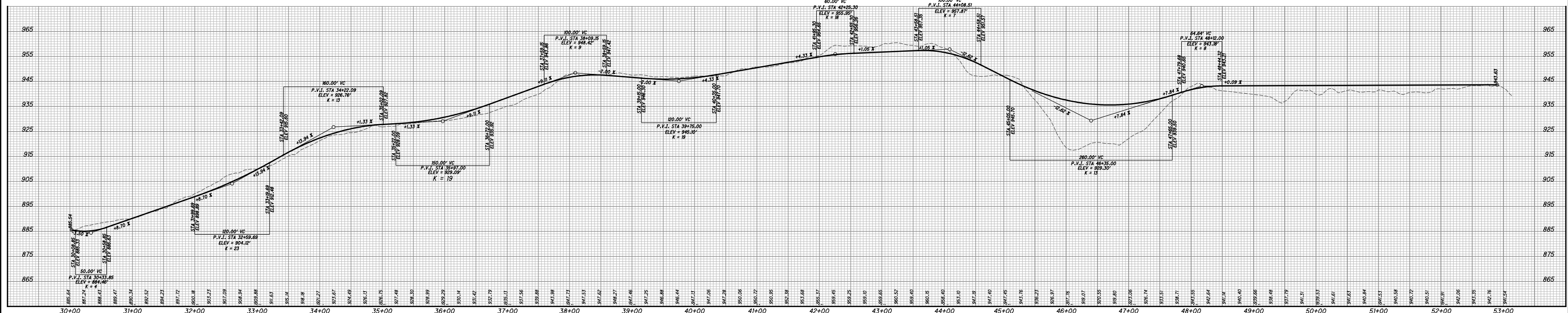
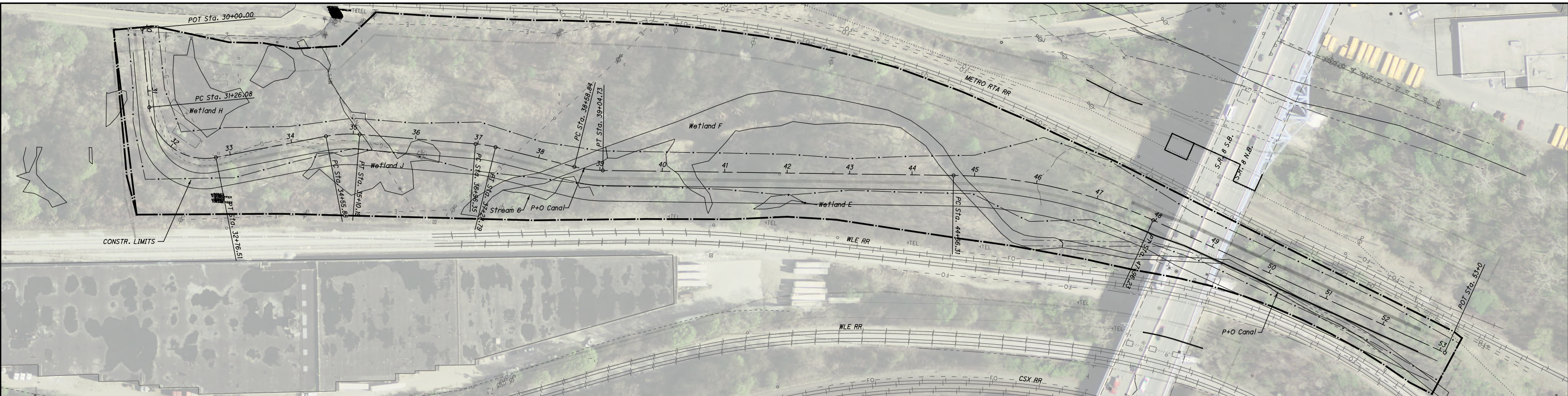


Exhibit 6 - ACCESS ROAD - 2A



**U.S. Army Corps of Engineers
Huntington District**

Permit Number: LRH-2018-00668-CUY

Name of Permittee: The Ohio Department of Transportation

Date of Issuance: 12 May 2020

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers
Huntington District
Ohio Regulatory Transportation Office
Building 10 / Section 10
PO Box 3990
Columbus, Ohio 43218-3990

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date