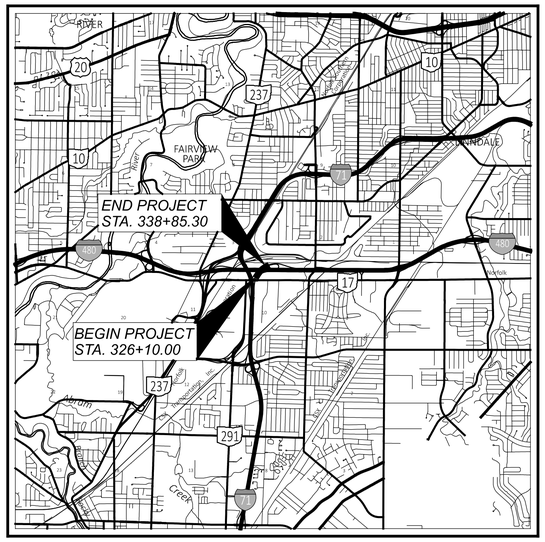
# STATE OF OHIO
# DEPARTMENT OF TRANSPORTATION

# CUY-71-10.07 SW

## CITY OF CLEVELAND & CITY OF BROOKPARK

## CUYAHOGA COUNTY




**LOCATION MAP**

LATITUDE: 41°25'14" LONGITUDE: 81°48'56"

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

### DESIGN DESIGNATION

| | |
|---|---|
| CURRENT ADT (2023) | 11497 |
| DESIGN YEAR ADT (2043) | 11497 |
| DESIGN HOURLY VOLUME (2043) | 1098 |
| DIRECTIONAL DISTRIBUTION | 100% |
| TRUCKS (24 HOUR B&C) | 2% |
| DESIGN SPEED | 60 MPH |
| LEGAL SPEED | 60 MPH |
| DESIGN FUNCTIONAL CLASSIFICATION: URBAN INTERSTATE | |
| NHS PROJECT | YES |

### DESIGN EXCEPTIONS

NONE

### ADA DESIGN WAIVERS

NONE

### INDEX OF SHEETS:


| | |
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### FEDERAL PROJECT NUMBER

E241001

### RAILROAD INVOLVEMENT

NONE

### PROJECT DESCRIPTION

THIS IS A BRIDGE REPLACEMENT OF THE STRUCTURE CARRYING NB IR-71 TO WB IR-480 TRAFFIC ("RAMP T"), SFN 1814258 OVER IR-480 EB & WB MAINLINE. THE PROJECT INCLUDES ROADWAY RECONSTRUCTION AND SHOULDER WIDENING. PROJECT INCLUDES PAINTING OF SFN 1814258 AND SFN 1814249.

### EARTH DISTURBED AREAS

| | |
|---|---|
| PROJECT EARTH DISTURBED AREA: | 1.24 ACRES |
| ESTIMATED CONTRACTOR EARTH DISTURBED AREA: | 0.25 ACRES |
| NOTICE OF INTENT EARTH DISTURBED AREA: | N/A<br>ROUTINE MAINTENANCE |

### LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

### 2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS DESCRIBED ON SHEET P.9 & P.10 AND AS SHOWN ON SHEETS P.17 TO P.20, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John Picuri, P.E., P.S.
District 12 Deputy Director

Pamela Boratyn
Director, Department of Transportation

| ENGINEER'S SEAL | ENGINEER'S SEAL | ENGINEER'S SEAL |
|---|---|---|
| FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20' | FOR STRUCTURES OVER 20' (SFN 1814258) | FOR STRUCTURES OVER 20' (SFN 1814249) |
| STATE OF OHIO<br>SCOTT J PIAZZA<br>E-72277<br>REGISTERED PROFESSIONAL ENGINEER | STATE OF OHIO<br>SAMET KARATAS<br>E-90513<br>REGISTERED PROFESSIONAL ENGINEER | STATE OF OHIO<br>PATRICK A TOMAN<br>E-67624<br>REGISTERED PROFESSIONAL ENGINEER |

### STANDARD CONSTRUCTION DRAWINGS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BP-1.1 | 7/28/00 | MGS-2.1 | 7/18/25 | HL-10.11 | 7/21/23 | MT-95.30 | 7/18/25 | TC-42.20 | 10/18/13 | 800-2023 | 7/16/25 |
| BP-2.1 | 1/21/22 | MGS-3.1 | 7/18/25 | HL-10.12 | 7/21/23 | MT-95.40 | 7/18/25 | TC-61.10 | 4/21/23 | 807 | 1/17/25 |
| BP-2.2 | 1/15/21 | MGS-3.2 | 7/18/25 | HL-10.13 | 1/20/23 | MT-95.45 | 7/21/23 | TC-61.30 | 7/19/24 | 808 | 7/19/24 |
| | | MGS-4.2 | 7/18/25 | HL-20.11 | 7/18/25 | MT-95.50 | 7/21/17 | TC-72.20 | 7/18/25 | 832 | 7/18/25 |
| | | MGS-4.3 | 7/18/25 | HL-20.14 | 4/17/20 | MT-98.11 | 1/17/20 | | | 869 | 10/17/14 |
| | | MGS-6.1 | 1/19/18 | HL-30.11 | 7/21/23 | MT-98.21 | 7/21/23 | A-1-20 | 7/19/24 | 873 | 4/16/21 |
| CB-3A | 7/19/24 | | | HL-30.21 | 4/17/20 | MT-98.29 | 1/17/20 | AS-1-15 | 1/20/23 | 908 | 1/17/25 |
| DM-1.1 | 1/17/25 | RM-4.2 | 7/18/25 | HL-30.22 | 1/17/25 | MT-99.30 | 1/17/20 | AS-2-15 | 7/21/23 | | |
| DM-1.2 | 1/17/25 | RM-4.3 | 7/18/25 | HL-30.31 | 7/18/25 | MT-99.60 | 7/19/24 | EXJ-4-87 | 1/19/24 | | |
| DM-4.1 | 7/17/20 | RM-4.4 | 1/17/25 | HL-30.41 | 1/17/25 | MT-101.70 | 7/19/24 | GSD-1-19 | 7/19/24 | | |
| DM-4.2 | 7/20/12 | RM-4.5 | 7/18/25 | HL-50.11 | 1/16/15 | MT-101.75 | 7/21/23 | HW-2.2 | 7/20/18 | | |
| DM-4.3 | 1/15/16 | RM-4.6 | 7/18/25 | HL-50.21 | 7/15/22 | MT-101.80 | 1/17/20 | PCB-91 | 7/17/20 | | |
| DM-4.4 | 1/15/16 | | | HL-60.11 | 7/21/17 | MT-101.90 | 7/17/20 | SBR-1-20 | 7/19/24 | | |
| | | | | | | MT-102.10 | 7/21/23 | | | | |

**SUPPLEMENTAL SPECIFICATIONS**

**SPECIAL PROVISIONS**

**UNDERGROUND UTILITIES**
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
MOTT MACDONALD
20445 EMERALD PARKWAY, SUITE 100, CLEVELAND, OHIO 44135
PHONE: (216)-535-3640
FAX: (216)-265-2816

TITLE SHEET

DESIGN AGENCY: MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.1 TOTAL: 167

CUY-71-10.07 SW


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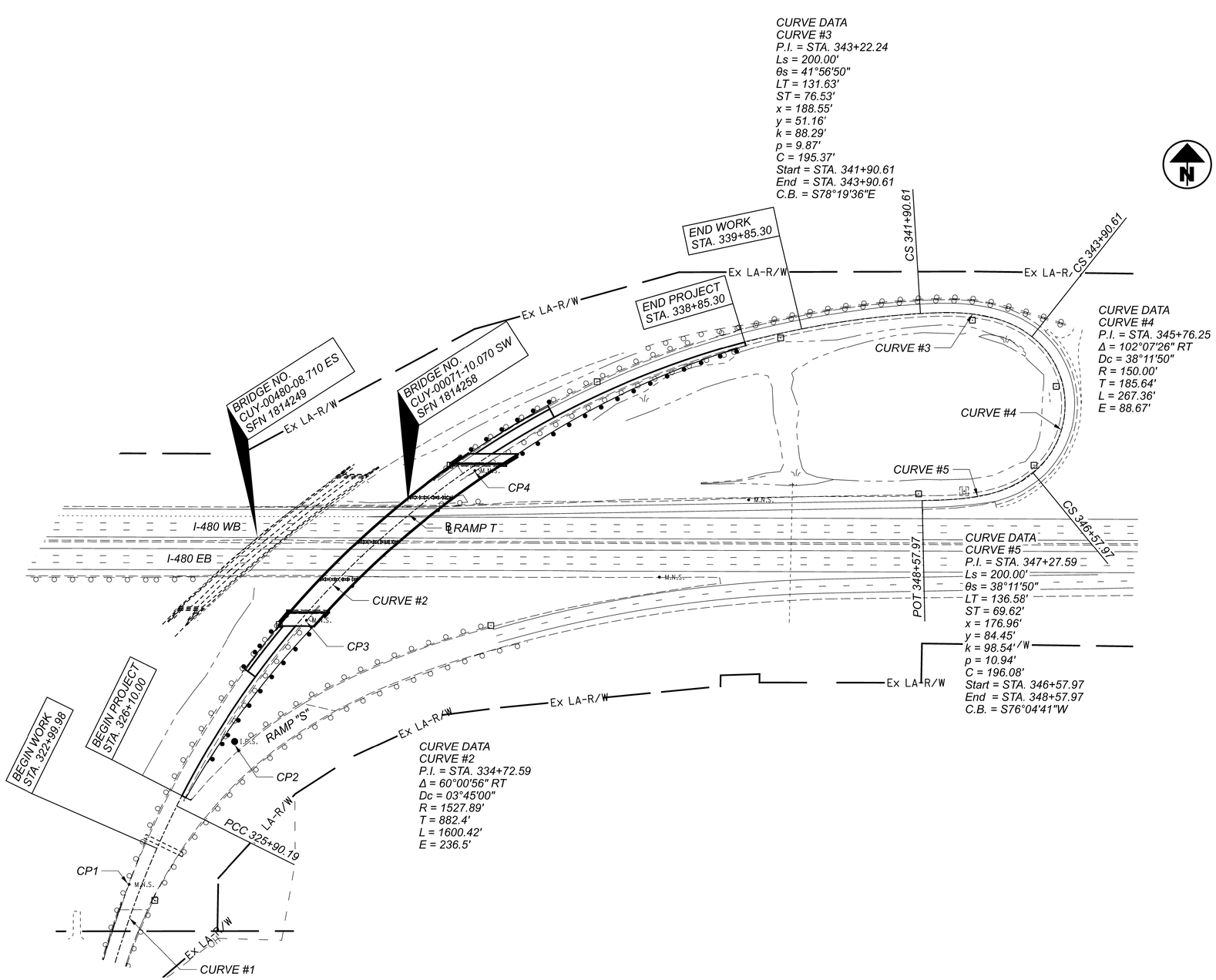


| PRIMARY PROJECT CONTROL INFORMATION | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | GRID COORDINATES (U.S. SURVEY FEET) | | ROADWAY INFORMATION | | ORTHOMETRIC HEIGHT (ELEVATION) | REMARKS |
| | NORTHING | EASTING | STATION | OFFSET | | |
| CP1 | 639147.500' | 2155881.863' | 324+35.46 | 20.37' LT | 807.49' | MAGNETIC NEEDLE SET |
| CP2 | 639392.630' | 2156062.720' | 327+37.21 | 32.67' RT | 806.57' | IRON PIN SET |
| CP3 | 639600.240' | 2156185.630' | 329+80.70 | 7.67' RT | 812.47' | MAGNETIC NEEDLE SET |
| CP4 | 639856.670' | 2156474.420' | 333+69.89 | 7.55' RT | 807.33' | MAGNETIC NEEDLE SET |

HORIZONTAL SCALE IN FEET
0 50 100 200

# SCHEMATIC PLAN

CUY-71-10.07 SW

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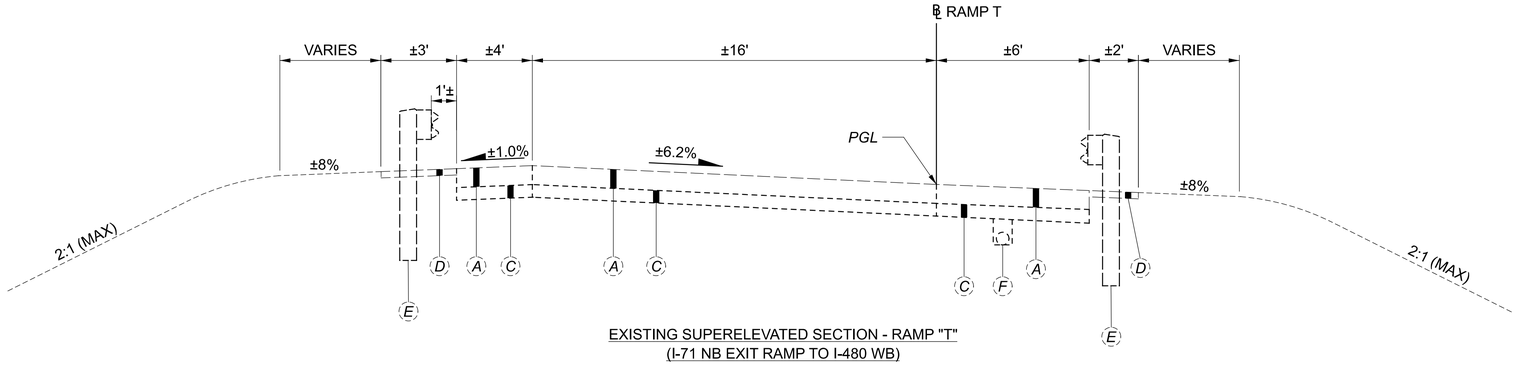
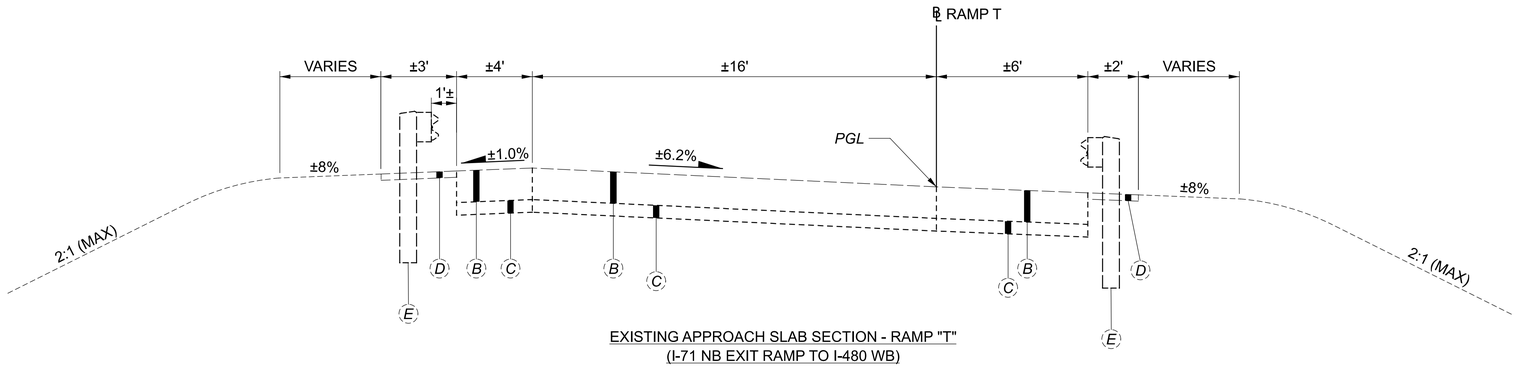
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.2 TOTAL 167




EXISTING SUPERELEVATED SECTION - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)
*STA. 326+10.00 TO STA. 329+79.28*
*STA. 333+54.05 TO STA. 338+85.30*




EXISTING APPROACH SLAB SECTION - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)
*STA. 329+79.28 TO STA. 330+06.78*
*STA. 333+28.23 TO STA. 333+54.05*

## LEGEND

- (A) ±9" REINFORCED CONCRETE PAVEMENT
- (B) ±15" REINFORCED CONCRETE PAVEMENT
- (C) ±6" SUBBASE
- (D) ±3" BITUMINOUS AGGREGATE BASE
- (E) GUARDRAIL, TYPE 5
- (F) 6" UNDERDRAIN

# EXISTING TYPICAL SECTIONS

CUY-71-10.07 SW

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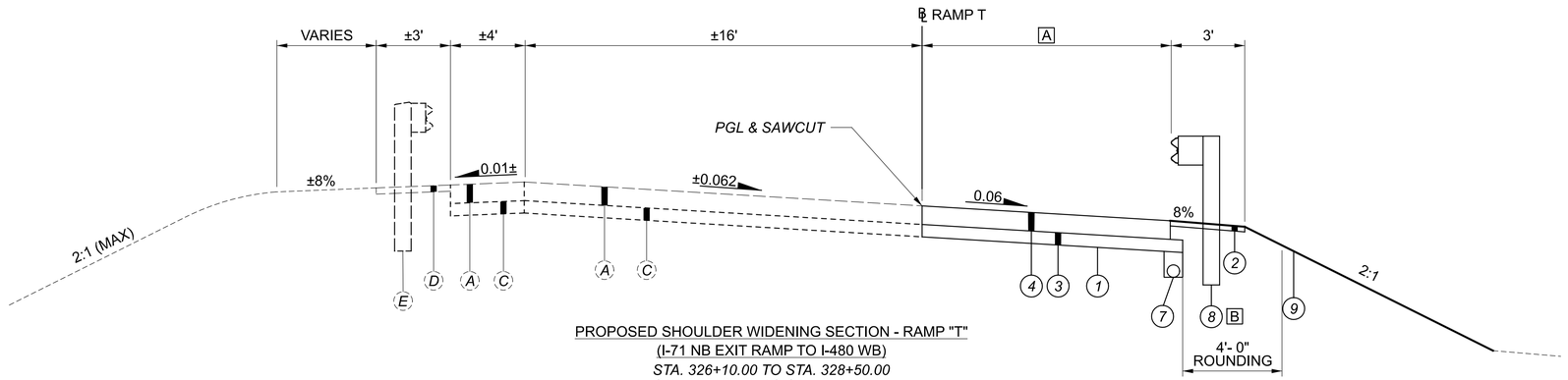
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.3 | TOTAL 167



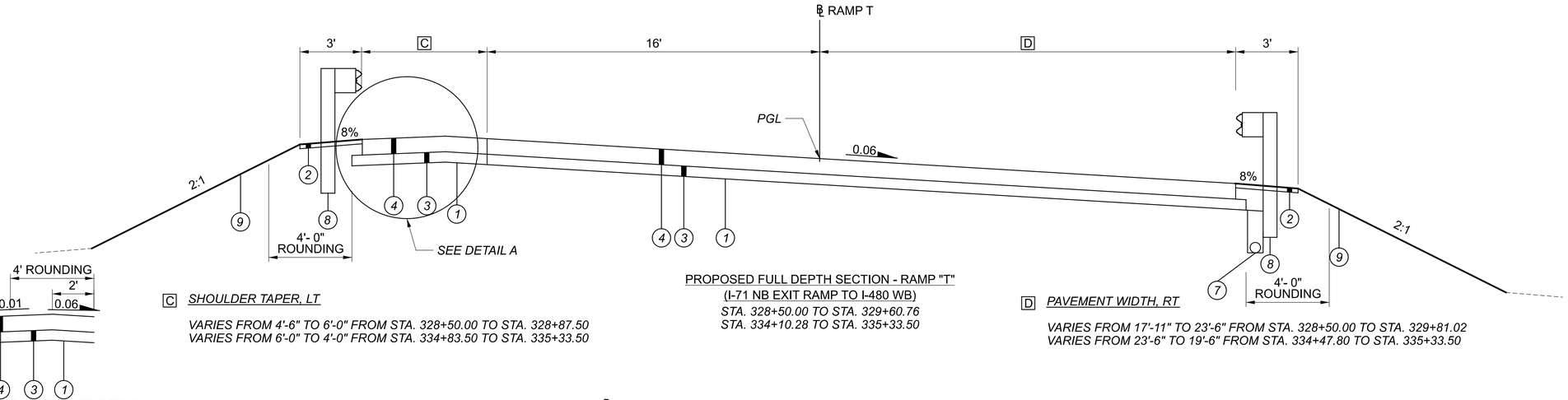

PROPOSED SHOULDER WIDENING SECTION - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)
*STA. 326+10.00 TO STA. 328+50.00*
*STA. 335+33.50 TO STA. 338+85.30*

A *SHOULDER WIDENING, RT*

*VARIES FROM 7'-9" TO 17'-11" FROM STA. 326+10.00 TO STA. 328+50.00*
*VARIES FROM 19'-6" TO 6'-0" FROM STA. 335+33.50 TO STA. 338+85.30*

B *GUARDRAIL, RT*

*FROM STA. 326+81.25 TO STA. 328+50.00*
*FROM STA. 335+33.50 TO STA. 338+70.80*




PROPOSED FULL DEPTH SECTION - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)
*STA. 328+50.00 TO STA. 329+60.76*
*STA. 334+10.28 TO STA. 335+33.50*

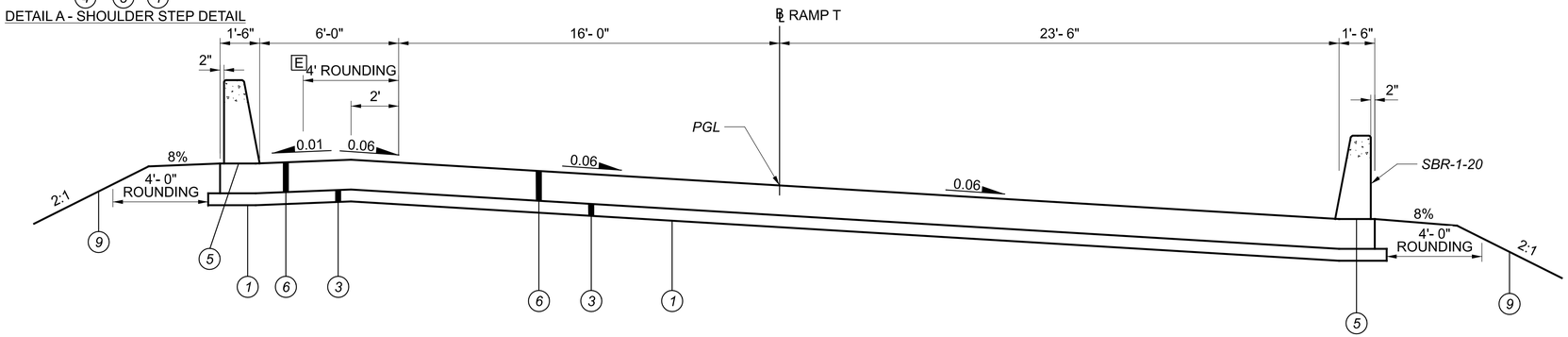
C *SHOULDER TAPER, LT*

*VARIES FROM 4'-6" TO 6'-0" FROM STA. 328+50.00 TO STA. 328+87.50*
*VARIES FROM 6'-0" TO 4'-0" FROM STA. 334+83.50 TO STA. 335+33.50*

D *PAVEMENT WIDTH, RT*

*VARIES FROM 17'-11" TO 23'-6" FROM STA. 328+50.00 TO STA. 329+81.02*
*VARIES FROM 23'-6" TO 19'-6" FROM STA. 334+47.80 TO STA. 335+33.50*

DETAIL A - SHOULDER STEP DETAIL




PROPOSED APPROACH SLAB SECTION - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)
*STA. 329+60.76 TO STA. 329+90.76*
*STA. 333+80.28 TO STA. 334+10.28*

E *TRANSITION FROM 4' ROUNDING TO FULL, 6%, SUPERELEVATED SHOULDER FROM STA. 329+42.54 TO STA. 330+11.87*
*TRANSITION FROM FULL, 6%, SUPERELEVATED SHOULDER TO 4' ROUNDING FROM STA. 333+08.05 TO STA. 334+47.80*

## PROPOSED LEGEND

1. ITEM 204 - SUBGRADE COMPACTION
2. ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN
3. ITEM 304 - 6" AGGREGATE BASE
4. ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
5. ITEM 517 - RAILING, CONCRETE
6. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=17"), AS PER PLAN
7. ITEM 605 - 6" BASE PIPE UNDERDRAINS, WITH FILTER FABRIC
8. ITEM 609 - GUARDRAIL, TYPE MGS
9. ITEM 659 - SEEDING AND MULCHING

*NOTE:*

*SEE SHEET P.3 FOR EXISTING LEGEND.*

PROPOSED TYPICAL SECTIONS

CUY-71-10.07 SW

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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.4 TOTAL 167

## PROPOSED LEGEND

(1) ITEM 304 - AGGREGATE BASE (THICKNESS AS DIMENSIONED)

(2) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN

(3) ITEM 622 - BARRIER, MISC.: CONCRETE BARRIER, TYPE B50

## EXISTING LEGEND

(A) UNDERDRAIN

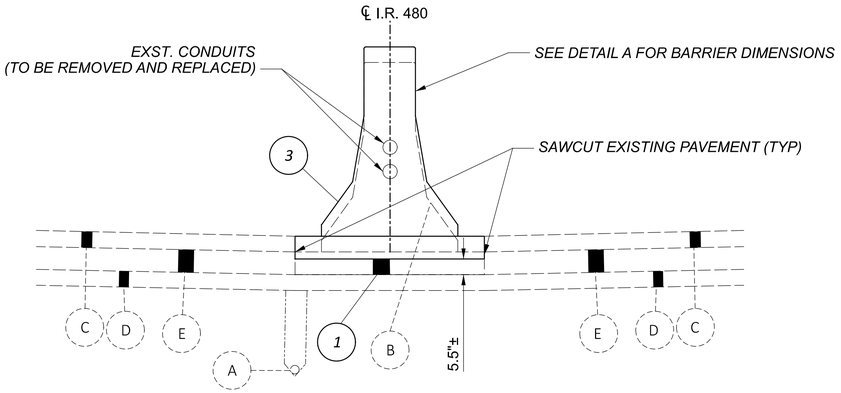
(B) CONCRETE BARRIER, TYPE B50

(C) 5 ½" ASPHALT OVERLAY

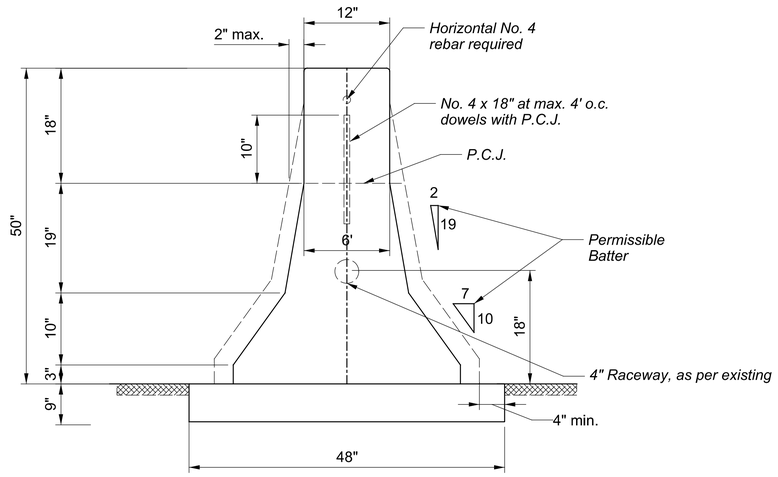
(D) SUBBASE

(E) 9" PLAIN CONCRETE PAVEMENT

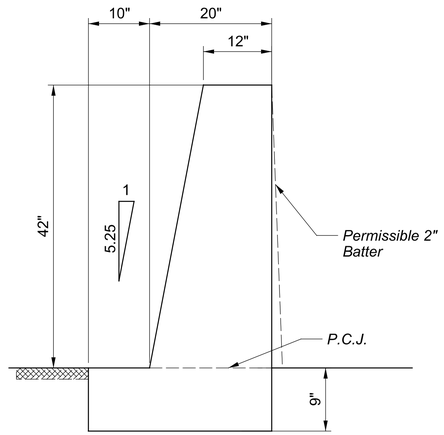
(F) CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN



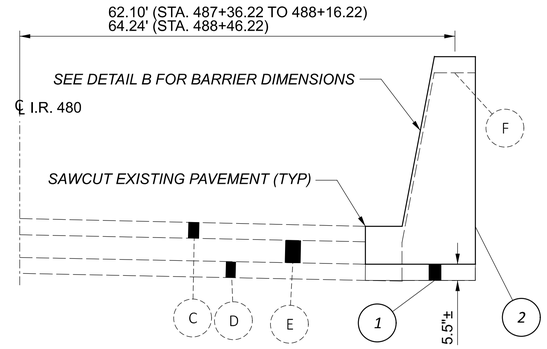

PROPOSED CONCRETE BARRIER, TYPE B50
I-480
*STA. 486+56.00 TO STA. 487+76.00*



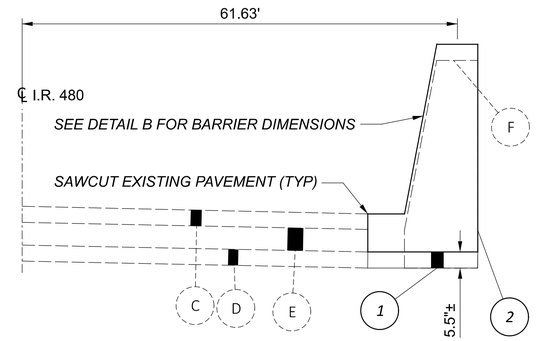

DETAIL A- BARRIER, MISC.: CONCRETE BARRIER, TYPE B50




DETAIL B- CONCRETE BARRIER, SINGLE SLOPE TYPE D, AS PER PLAN




PROPOSED CONCRETE BARRIER, TYPE D
WB I-480
*STA. 487+36.22 TO STA. 488+16.22*




PROPOSED CONCRETE BARRIER, TYPE D
EB I-480
*STA. 486+00.00 TO STA. 487+15.00*

PROPOSED TYPICAL SECTIONS


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER RKC

REVIEWER SJP 09/17/25

PROJECT ID 114536

SHEET P.5 TOTAL 167

CUY-71-10.07 SW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## UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER, OR ADJACENT TO, THE WORK AREA.

## WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

## ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

## BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

## SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

| | |
|---|---|
| 659, SOIL ANALYSIS TEST | 2 EACH |
| 659, TOPSOIL | 248 CU. YD. |
| 659, REPAIR SEEDING AND MULCHING | 112 SQ. YD. |
| 659, INTER-SEEDING | 112 SQ. YD. |
| 659, COMMERCIAL FERTILIZER | 0.31 TON |
| 659, LIME | 0.46 ACRES |
| 659, WATER | 12.1 M. GAL. |
| 659, MOWING | 15 M. SQ.FT. |

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

## CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

## CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

## SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 FOR TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: GPS
MONUMENT TYPE: CONCRETE MONUMENT SET WITH ODOT DISC

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: Lambert Conformal Conic
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 0.99989686
PROJECT ADJUSTMENT FACTOR: 1.00010315
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

## PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED.THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THECONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

## ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE BRIDGE SCHEDULED FOR DEMOLITION WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUTION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE.

THE BRIDGE WHICH WAS SURVEYED AND CONTAINED NO ASBESTOS IS: SFN 1814257

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL COMPLETE THE FORM AND RETURN IT TO THE DISTRICT CONSTRUCTION ENGINEER ALONG WITH THE PERMIT FEE IF APPLICABLE. THE COMPLETION OF THIS FORM MAY BE PERFORMED AT THE PRECONSTRUCTION MEETING. THE DISTRICT CONSTRUCTION ENGINEER SHALL SUBMIT THE FORM AND CONTRACTORS FEE TO THE OEPA NORTHWEST DISTRICT OFFICE AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF THE DEMOLITION OF THE BRIDGE. THE DISTRICT CONSTRUCTION ENGINEER SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE CONTRACTOR. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OF THE STRUCTURE UNTIL THE ABOVE REQUIREMENTS ARE MET.

INFORMATION ON THE FORM WILL INCLUDE:
-THE CONTRACTORS NAME AND ADDRESS.
-THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL.
- A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT, DISTRICT 12 OFFICE, AT 5500 TRANSPORTATION BLVD, GARFIELD HEIGHTS, OH 44125

BASIS FOR PAYMENT

THE CONTRACTORS SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE BID ITEM 202 FOR **STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN**.

## REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

## AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 99-FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177
FAX: (817) 222-5920
http://ceaaa.faa.go

Ohio Department of Transportation
Office of Aviation
2829 West Dublin-Granville Road
Columbus, Ohio 43235
Ohio.airport.protections@dot.ohio.gov

## STAGING AREAS

THERE ARE NO SPECIFIC AREAS GIVEN IN THE PLANS FOR THE CONTRACTOR TO USE AS A STAGING AREA(S). IF THE CONTRACTOR WANTS TO USE AN AREA(S) FOR STAGING, REGARDLESS IF IT FALLS WITHIN THE PROJECT LIMITS OR NOT, THE CONTRACTOR IS TO USE THE RIGHT OF WAY E-PERMITTING SYSTEM AT https://odhcp.bemcorp.net/Accounts/Account IN ORDER TO APPLY FOR A PERMIT PER SECTION 107.02 OF THE CMS. FOR SPECIFIC PERMITTING QUESTIONS, THE CONTRACTOR CAN CONTACT THE DISTRICT PERMITTING OFFICE, (MELVIN SAFFORD) AT 216-584-2137, (ANDREW TOMKO) AT 216-584-2195 OR AT DISTRICT12PERMITS@DOT.OHIO.GOV.

IF A PERMIT IS GRANTED, ALL CONDITIONS OF THE PERMIT SHALL BE MET IN ADDITION TO THE REQUIREMENTS OF 104.04 OF THE CMS, AT NOADDITIONAL COST TO THE STATE. IF THE PROJECT ENGINEER DEEMS THAT ALL THE CONDITIONS OF THE PERMIT WERE NOT MET, THEN 10% OF THE CONTRACT BID AMOUNT FOR MOBILIZATION SHALL BE WITHHELD UNTIL ALL THE CONDITIONS OF THE PERMIT ARE SATISFIED.

## ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

ALL REQUIREMENTS OF C&MS 619 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

THE FIELD OFFICE SHALL BE A SUITE TYPE OFFICE (NO TRAILER OR MODULAR OFFICE) WITH A MINIMUM OF 1,600 SQUARE FEET. THE FLOOR SPACE WILL BE DIVIDED INTO ONE GENERAL OFFICE AREA, NOT LESS THAN FOUR INDIVIDUAL OFFICE AS SEPARATE ENCLOSED ROOMS (NO CUBICLE DIVIDERS WILL BE ACCEPTED).

GENERAL NOTES

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER
SMS
REVIEWER
SJP 09/17/25
PROJECT ID
114536
SHEET P.6 TOTAL 167

CUY-71-10.07 SW
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 12/29/2025 TIME: 10:14:43 AM USER: KC1112955
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**ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN (CONT.)**

THE CONTRACTOR SHALL FURNISH AND MAINTAIN A BROADBAND INTERNET CONNECTION CAPABLE OF MINIMUM DOWNLOAD SPEEDS OF 1.0 GB/S ALONG WITH A WIRELESS ROUTER THAT SUPPORTS WI-FI STANDARD 802.11AX (WIFI 6) AND A MINIMUM WIRELESS DATA TRANSFER RATE OF 4000 MB/S – ALL FOR THE EXCLUSIVE USE OF THE DEPARTMENT. PROVIDE PRE-WIRED ETHERNET ACCESS FOR ALL INDIVIDUAL OFFICES AND THE GENERAL OFFICE AREA.

REQUESTS FOR ADDITIONAL OFFICE SUPPLIES, PAPER SUPPLIES, COPIER SUPPLIES, AND MAINTENANCE OF COPIER SHALL BE ACCOMODATED IN A TIMELY MANNER AT ANY POINT DURING THE OCCUPANCY OF THE FIELD OFFICE.

THE FIELD OFFICE WILL BE APPROVED IN ADVANCE BY THE ENGINEER AND FULLY OPERATIONAL WITHIN 30 DAYS AFTER THE SIGNING AND EXECUTION OF THE CONTRACT OR PRIOR TO THE START OF ANY CONSTRUCTION WORK, WHICHEVER COMES FIRST.

THE DEPARTMENT WILL MEASURE FIELD OFFICE, TYPE C, AS PER PLAN BY THE NUMBER OF MONTHS THE OFFICE IS MAINTAINED. A PARTIAL MONTH AT THE END OF THE PROJECT WILL BE PAID AS A FULL MONTH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM 619 – FIELD OFFICE, TYPE C, AS PER PLAN …. 36 MONTHS

**ROADWAY**

**ITEM 622 – BARRIER, MISC.: CONCRETE BARRIER, TYPE B50**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING TYPE B50 CONCRETE BARRIER ACCORDING TO THE DETAILS SHOWN ON P.5 OF THIS PLAN WITH THE FOLLOWING MODIFICATIONS:

1. INSTALL THE NO. 8 DOWEL BARS BETWEEN THE CONCRETE FOUNDATION AND THE CONCRETE BARRIER. THE SIZE, LENGTH AND PLACEMENT OF THE DOWEL BARS SHALL FOLLOW THE DOWELING DETAILS SHOWN FOR THE 32" NORMAL SECTIONS.

2. THE COST OF THE MIN. 9" THICK, 4' WIDE FOUNDATION SHALL BE INCLUDED IN THIS PAY ITEM. ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING OF EXISTING SHOULDER ASPHALT, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR:
ITEM 622 - BARRIER, MISC.: CONCRETE BARRIER, TYPE B50.

**ITEM 622 – CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING TYPE D CONCRETE BARRIER ACCORDING TO THE CMS AND STANDARD CONSTRUCTION DRAWING RM-4.5 WITH THE FOLLOWING MODIFICATIONS:

1. PROVIDE A 9" THICK CONCRETE FOUNDATION WITH AN APPROXIMATE WIDTH OF 2.5' AS SHOWN IN THE TYPICAL SECTIONS.

ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING OF EXISTING SHOULDER ASPHALT, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN.

**ITEM 202 – CONCRETE BARRIER REMOVED, AS PER PLAN**

REMOVAL OF THE EXISTING CONCRETE BARRIER FOUNDATION SHALL BE INCLUDED IN THIS ITEM OF WORK. THE CONTRACTOR MAY ELECT TO SAWCUT THE PAVEMENT AT THE BARRIER FOUNDATION EDGE PRIOR TO THE CONCRETE BARRIER AND CONCRETE BARRIER FOUNDATION REMOVAL AS TO PREVENT ADJACENT PAVEMENT FROM BEING DISTURBED. REMOVAL OF THE EXISTING CONDUIT AND DISTRIBUTION CABLE SHALL ALSO BE INCLUDED IN THIS ITEM.

ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202 - CONCRETE BARRIER REMOVED, AS PER PLAN.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH MANUFACTERER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE GROUND.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL

RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**PAVEMENT**

**ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN**

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1,(449), (UNDER GUARDRAIL), AS PER PLAN.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO A DEPTH OF 3" AND A MAXIMUM WIDTH OF 4' USING ONE OF THE FOLLOWING METHODS:

METHOD A:
1.SET GUARDRAIL POSTS
2.PLACE ITEM 441

METHOD B:
1.PLACE ITEM 441
2.BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3.SET GUARDRAIL POSTS
4.PATCH AROUND POSTS.

THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN.
THE FOLLOWING ESTIMATED QTY'S ARE CARRIED TO GENERAL SUMMARY:

| | |
|---|---|
| ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN | 25 CY |

**ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN**

THIS ITEM OF WORK SHALL BE USED TO PREPARE PROPOSED AND EXISTING GUARDRAIL RUNS FOR PAVING UNDER GUARDRAIL, INCLUDING THE REMOVAL AND DISPOSAL OF EXISTING ASPHALT UNDER GUARDRAIL.

A SAWCUT WILL BE PERFORMED, WHEN APPLICABLE, TO ASSIST THE REMOVAL OF EXISTING ASPHALT UNDER GUARDRAIL AND MINIMIZE DAMAGE TO EXISTING SHOULDER ASPHALT. PAYMENT FOR SAWCUTTING WILL BE INCLUDED IN THE BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN.

FILL ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND ANCHOR ASSEMBLIES WITH GRANULAR MATERIAL. DO NOT USE FILL MATERIAL CONTAINING SOD. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER AND SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE IS INCLUDED IN THE APPLICABLE GUARDRAIL ITEM.

RESHAPE AND COMPACT SUBGRADE TO ENSURE POSITIVE DRAINAGE. ESTABLISH A CROSS-SLOPE OF 0.042 (HALF INCH PER FOOT). GRADE TO A MAXIMUM WIDTH OF 6' TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE TRAVEL LANES.

ALL COLLECTED DEBRIS AND TOPSOIL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.17 OF THE CMS.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN 9 STA

**SHOULDER RESTORATION ON IR-480**

THE REMOVAL AND CONSTRUCTION OF PIER 2 MAY REQUIRE THE MEDIAN/ADJACENT SHOULDERS TO BE REBUILT. CONTRACTOR MAY ELECT TO SAWCUT THE PAVEMENT AT THE EDGE OF PAVEMENT PRIOR TO THE PIER REMOVAL AS TO PREVENT ADJACENT PAVEMENT FROM BEING DISTURBED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

| | |
|---|---|
| ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22 (THICKNESS = 1.5") | 7 CY |
| ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448), (THICKNESS = 1.75") | 8 CY |
| ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, (449) (THICKNESS = 8.5", 2 LIFTS REQUIRED) | 40 CY |
| ITEM 304 - AGGREGATE BASE (THICKNESS = 10") | 48 CY |
| ITEM 202 - PAVEMENT REMOVED | 164 SY |
| ITEM 605 - 6" UNDERDRAIN | 184 LF |
| ITEM 204 - SUBGRADE COMPACTION | 164 SY |
| ITEM 407 - NON-TRACKING TACK COAT | 13 GAL |

GENERAL NOTES

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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.7 TOTAL 167

**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

   IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

   PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE FOLLOWING ESTIMATED QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE PROVIDED:

| | |
|---|---|
| ITEM 204 - EXCAVATION OF SUBGRADE | 100 CY |
| ITEM 204 - GRANULAR MATERIAL, TYPE B | 100 CY |
| ITEM 204 - GEOTEXTILE FABRIC | 300 SY |
| ITEM 204 - PROOF ROLLING | 1 HOUR |

**TEMPORARY MINIMUM VERTICAL CLEARANCE**

THE TEMPORARY MINIMUM VERTICAL CLEARANCE OVER ROADWAYS AND SHOULDERS SHALL NOT BE LESS THAN 15'-0" FOR STRUCTURE CUY-71-10.07 SW, SFN 1814258 AND NOT LESS THAN 16'-6" FOR STRUCTURE CUY-480-08.71 ES, SFN 1814249.

**NOTIFICATION OF MINIMUM VERTICAL CLEARANCE REDUCTION**

THE CONTRACTOR SHALL NOTIFY THE SPECIAL HAULING PERMITS SECTION OF THE OHIO DEPARTMENT OF TRANSPORTATION AT HAULING.PERMITS@DOT.OHIO.GOV AND THE ENGINEER OF ANY TEMPORARY REDUCTION OF VERTICAL CLEARANCE. THE NOTIFICATION SHALL BE GIVEN AT LEAST 14 DAYS PRIOR TO REDUCING THE VERTICAL CLEARANCE OF A BRIDGE AND SHALL INCLUDE THE FOLLOWING INFORMATION:

1. STATE PROJECT NUMBER
2. PID
3. SFN
4. BRIDGE NUMBER
5. LOCATION MAP
6. DIRECTION OF REDUCED VERTICAL CLEARANCE. FOR EXAMPLE:
   - BIDIRECTIONAL
   - CARDINAL (NORTH OR EAST)
   - NON-CARDINAL (SOUTH OR WEST)
7. TEMPORARY VERTICAL CLEARANCE
8. ESTIMATED/ACTUAL START AND END DATES OF THE REDUCTION
9. CONTRACTOR'S CONTACT NAME AND TELEPHONE NUMBER
10. ENGINEER'S NAME AND TELEPHONE NUMBER
11. ANY OTHER INFORMATION REQUESTED BY THE SPECIAL HAULING PERMITS SECTION

THE CONTRACTOR SHALL INFORM THE SPECIAL HAULING PERMITS SECTION OF THE OHIO DEPARTMENT OF TRANSPORTATION AND THE ENGINEER WITHIN 14 DAYS AFTER RESTORING THE VERTICAL CLEARANCE OF A BRIDGE TO ITS ORIGINAL VERTICAL CLEARANCE.

THE ABOVE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK THAT CAUSES THE REDUCTION IN THE VERTICAL CLEARANCE.

**ITEM 204 - PROOF ROLLING**

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

| | |
|---|---|
| ITEM 204 - PROOF ROLLING | 4 HOURS |

**ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN**

PER CMS 623.04 AND 623.05, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING MONUMENT ASSEMBLIES, SURVEY CORNERS AND SURVEY CONTROL PRIOR TO BEGINNING ANY WORK AND AFTER PROJECT COMPLETION (IF APPLICABLE). A PRE-INSPECTION REPORT IS TO BE SUBMITTED PRIOR COMMENCEMENT OF WORK AND POST-CONSTRUCTION REPORT SUBMITTED PRIOR TO OR IN CONJUCTION WITH THE FINAL INSPECTION TO THE DISTRICT SURVEY OPERATIONS MANAGER. EXISTING MONUMENTATION SHALL BE PRESERVED AND PERPETUATED THROUGHOUT THE PROJECT.

THE DEPARTMENT'S STANDARDIZED VERIFICATION REPORT TEMPLATE CAN BE FOUND AT THE FOLLOWING LOCATION: HTTPS://WWW.DOT.STATE.OH.US/DIVISIONS/CONSTRUCTIONMGT/DOCUMENTS

AFTER COMPLETION OF ALL WORK, BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, AN OHIO PROFESSIONAL SURVEYOR SHALL DETERMINE THE MINIMUM VERTICAL CLEARANCES OF ALL EXISTING AND NEW BRIDGES WITHIN THE PROJECT LIMITS. AT A MINIMUM, MEASUREMENTS SHALL BE TAKEN ALONG EACH FASCIA BEAM AT THE EDGE OF SHOULDERS, EDGE LINES, LANE LINES, AND CROWN OF THE ROADWAY BELOW. THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM SHALL BE USED, WHERE APPLICABLE, TO DOCUMENT THE MEASUREMENTS. WHERE THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM IS NOT APPLICABLE, THE MEASUREMENTS SHALL BE DOCUMENTED ON A CONTRACTOR-DEVELOPED FORM THAT CLOSELY RESEMBLES THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM AND ACCURATELY DEPICTS THE BRIDGE AND THE LANE AND SHOULDER CONFIGURATION OF THE ROADWAY THAT PASSES BELOW THE BRIDGE. THE COMPLETED FORM SHALL BEAR THE STAMP OR SEAL OF THE OHIO PROFESSIONAL SURVEYOR WHO HAS TAKEN THE MEASUREMENTS AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM CAN BE DOWNLOADED FROM THE FOLLOWING FTP SITE:
https://ftp.dot.state.oh.us/pub/Contracts/Attach/CTY-XXXXXX

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

GENERAL NOTES

CUY-71-10.07 SW
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/5/2026 TIME: 1:42:37 PM USER: KC112955
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.8 TOTAL 167

## SUGGESTED SEQUENCE OF CONSTRUCTION

### PHASE 1 CONSTRUCTION

PHASE 1 SHALL CONSIST OF THE REMOVAL OF PORTIONS OF THE BRIDGE, CONSTRUCTION OF THE SUPPORT STRUCTURES FOR THE WIDENED BRIDGE DECK TO THE EAST OF THE EXISTING SUPPORT STRUCTURES, PLACEMENT OF NEW STEEL BEAMS AND CONSTRUCTION OF THE BRIDGE DECK FOR THE WIDENED INSIDE SHOULDER.

### PHASE 1 TRAFFIC; IR-71

RAMP TRAFFIC WILL BE MAINTAINED ON THE EXISTING PAVEMENT, SHIFTED TO THE WEST (OUTSIDE) SHOULDER OF THE EXISTING STRUCTURE AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. DURING THE REMOVAL AND PLACEMENT OF BEAMS AND DURING THE CONCRETE DECK POUR, IR-71 RAMP TO BE CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE PLANS.

### PHASE 1A TRAFFIC; IR-480

ALL LANES OF BOTH EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL BE SHIFTED TO THE INSIDE SHOULDER(S) TO ALLOW FOR THE SUBSTRUCTURE WORK TO PIERS 1 AND 3, AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. LANE SHIFTS PER SCD MT-102.10 MAY BE UTILIZED TO PROVIDE LATERAL CLEARANCE FROM THESE SUBSTRUCTURE ELEMENTS.

### PHASE 1 TRAFFIC; IR-480 CLOSURES

IR-480 TO BE CLOSED OVERNIGHT, 10:00 PM TO 5:00 AM, DURING BEAM REMOVAL AND BEAM PLACEMENT OPERATIONS AS SHOWN IN THE PLANS. EASTBOUND AND WESTBOUND CLOSURES OF IR-480 SHOULD NOT COINCIDE.

### PHASE 1B TRAFFIC; IR-480

ALL LANES OF BOTH EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL BE SHIFTED TO THE OUTSIDE SHOULDER(S) TO ALLOW FOR THE SUBSTRUCTURE WORK TO PIER 2, AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. LANE SHIFTS PER SCD MT-102.10 MAY BE UTILIZED TO PROVIDE LATERAL CLEARANCE FROM THE SUBSTRUCTURE ELEMENTS.
CONTRACTOR TO UTILIZE IR-480 PHASE 1B TRAFFIC CONFIGURATION ON IR-480 REQUIRED DURING WINTER MONTHS, OCTOBER 15 THROUGH APRIL 1.

### PHASE 2 CONSTRUCTION

PHASE 2 SHALL CONSIST OF THE REMOVAL OF THE REMAINDER OF THE EXISTING BRIDGE, PLACEMENT OF NEW STEEL BEAMS AND CONSTRUCTION OF THE BRIDGE DECK, INCLUDING THE CLOSURE POUR. IR-480 MEDIAN WALL AND CONCRETE BARRICADE REPLACEMENT WILL ALSO BE COMPLETED DURING THIS TIME.

### PHASE 2 TRAFFIC; IR-71

RAMP TRAFFIC WILL BE SHIFTED TO THE NEWLY CONSTRUCTED INSIDE SHOULDER OF THE BRIDGE AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. DURING THE REMOVAL AND PLACEMENT OF BEAMS AND DURING THE CONCRETE DECK POUR, IR-71 RAMP TO BE CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE PLANS.

### PHASE 2A TRAFFIC; IR-480

EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL **REMAIN IN THE SAME LOCATION AS PHASE 1B**, WITH ALL LANES SHIFTED TO THE OUTSIDE SHOULDER(S) TO ALLOW FOR COMPLETION OF THE WORK AT PIER 2 AND MEDIAN WALL.

### PHASE 2B TRAFFIC; IR-480

EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL **RETURN TO THE SAME LOCATION AS PHASE 1A** WITH ALL LANES SHIFTED TO THE INSIDE SHOULDER(S) TO ALLOW FOR COMPLETION OF SUBSTRUCTURE WORK TO PIERS 1 AND 3.

### PHASE 2 TRAFFIC; IR-480 CLOSURES

IR-480 TO BE CLOSED OVERNIGHT, 10:00 PM TO 5:00 AM, DURING BEAM REMOVAL AND BEAM PLACEMENT OPERATIONS AS SHOWN IN THE PLANS. EASTBOUND AND WESTBOUND CLOSURES OF IR-480 SHOULD NOT COINCIDE.

### PHASE 3 CONSTRUCTION

PHASE 3 SHALL CONSIST OF PAINTING THE BRIDGE STEEL SUPERSTRUCTURES SFN 1814258 AND SFN 1814249 ON PORTIONS SHOWN ON THE MAINTENANACE OF TRAFFIC TYPICAL SECTIONS.

### PHASE 3 TRAFFIC; IR-480

TRAFFIC TO REMAIN IN PLACE FOLLOWING PHASE 2B. SHORT TERM LANE CLOSURES, AS PER THE PLCS, MAY BE ENACTED TO COMPLETE PAINTING OPERATIONS. LANE CLOSURES PER SCD MT-95.30 AND MT-98.11. CONTRACTOR TO VERIFY PLCS SCHEDULE PRIOR TO SUBMITTING TRAFFIC CONTROL PLAN.

### PHASE 4 CONSTRUCTION

PHASE 4 SHALL CONSIST OF PAINTING THE BRIDGE STEEL SUPERSTRUCTURES ON THE REMAINING PORTIONS SHOWN ON THE MAINTENANACE OF TRAFFIC TYPICAL SECTIONS.

### PHASE 4 TRAFFIC; IR-480

TRAFFIC TO BE RESET TO PERMANENT STRIPING LOCATIONS. SHORT TERM LANE CLOSURES, AS PER THE PLCS, MAY BE ENACTED TO COMPLETE PAINTING OPERATIONS. LANE CLOSURES PER SCD MT-95.30 AND MT-98.11. CONTRACTOR TO VERIFY PLCS SCHEDULE PRIOR TO SUBMITTING TRAFFIC CONTROL PLAN.

### NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTICE OF CLOSURE SIGN TIME TABLE

| ITEM | DURATION OF CLOSURE | NOTICE DUE TO PERMITS & PIO |
|---|---|---|
| START OF CONSTRUCTION | N/A | 14 CALENDAR DAYS PRIOR TO TRAFFIC PATTERN CHANGES IMPLEMENTATION. |

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

### ITEM 614 - MAINTAINING TRAFFIC

ON THE IR-71 RAMP TO WESTBOUND IR-480, A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES - EXCEPT AS NOTED IN THE DETOUR PLANS - BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 502 STRUCTURE FOR MAINTAINING TRAFFIC, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

ON IR-480, A MINIMUM OF 3 LANES EASTBOUND AND 4 LANES WESTBOUND SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT; WITH THE EXCEPTION OF THE DETOUR PLANS AND SHORT TERM AND PAINTING OPERATIONS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

NOTICE OF CLOSURE SIGN TIME TABLE

| ITEM | DURATION OF CLOSURE | SIGN DISPLAYED TO PUBLIC |
|---|---|---|
| RAMP & ROAD CLOSURES | ≥ 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | >12 HOURS & <2 WEEKS | 7 CALENDAR DAYS PRIOR TO CLOSURE |
| | ≤ 12 HOURS | 2 BUSINESS DAYS PRIOR TO CLOSURE |

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

### DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

| | |
|---|---|
| ITEM 616, WATER | 5 M. GAL. |
| ITEM 616, CALCIUM CHLORIDE | 0.5 TON |

### ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)
THANKSGIVING
CHRISTMAS (OBSERVED)
LABOR DAY
GENERAL/REGULAR ELECTION DAY
MEMORIAL DAY
FOURTH OF JULY (OBSERVED)

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

| DAY OF HOLIDAY OR SPECIAL EVENT | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|---|---|
| SUNDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |
| MONDAY | 12:00N FRIDAY THROUGH 6:00 AM TUESDAY |
| TUESDAY | 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY |
| TUESDAY (GEN./REG. ELECTION) | 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY |
| WEDNESDAY | 12:00N TUESDAY THROUGH 6:00 AM THURSDAY |
| THURSDAY | 12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY |
| THURSDAY (THANKSGIVING ONLY) | 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY |
| FRIDAY | 12:00N THURSDAY THROUGH 6:00 AM MONDAY |
| SATURDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |

NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

### PERMITTED LANE CLOSURE SCHEDULE (PLCS)

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE AT: HTTPS://WWW.TRANSPORTATION.OHIO.GOV/WPS/PORTAL/GOV/ODOT/WORKING/DATA-TOOLS/RESOURCES/PERMITTED-LANE-

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURE(S) SHALL MATCH MONTH OF PLCS USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.

# MAINTENANCE OF TRAFFIC GENERAL NOTES

DESIGN AGENCY
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MOTT MACDONALD
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SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.9 TOTAL 167

CUY-71-10.07 SW
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 12/29/2025 TIME: 10:48:50 AM USER: KC112955
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**PERMITTED LANE CLOSURE SCHEDULE (PLCS) CONTD.**

(FOR EXAMPLE: IF THE SALE DATE FOR THE PROJECT WAS MARCH OF 2021, THE MONTHLY PUBLISHED SCHEDULES FOR EACH APPLICABLE PLCS SEGMENT WOULD BE DECEMBER 2019 TO NOVEMBER 2020. IF THIS WAS A THREE-YEAR PROJECT, YEAR THREE WOULD STILL BE USING THE DECEMBER 2019 TO NOVEMBER 2020 MONTHLY SCHEDULES. IF THE PROJECT DESIRED TO CLOSE TWO LANES IN JUNE 2021, REFERENCE WOULD BE MADE TO THE JUNE 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S). IF THE SAME TWO LANES WERE DESIRED TO BE CLOSED AGAIN IN JULY 2021, REFERENCE WOULD BE MADE TO THE JULY 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S).)

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER ODOT AUTHORITY. EXISTING MOT EXCEPTIONS THAT HAVE ALREADY BEEN APPROVED IN ACCORDANCE TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY AND STANDARD PROCEDURE ARE DETAILED IN THE APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PLAN NOTE.

ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

LANE VALUE CONTRACT TABLE

| DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED | RESTRICTED TIME PERIOD | TIME UNIT | DISINCENTIVE $ PER TIME UNIT |
|---|---|---|---|
| LANES OF EB IR-480 FROM MM7.59 TO MM9.44 | PER PLCS | EACH MINUTE | $300 |
| LANES OF WB IR-480 FROM MM7.93 TO MM9.45 | PER PLCS | EACH MINUTE | $300 |

DISINCENTIVES SHOWN IN THE ABOVE TABLE ARE BASED ON PN 127.

**APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)**

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:

| MOT EXCEPTIONS | APPROVED TIME PERIOD | ADDITIONAL IMPACTED TRAFFIC DUE TO EXCEPTION |
|---|---|---|
| FULL CLOSURE OF I-480 EB MAINLINE | 8 NIGHTS (10:00 PM - 5:00 AM) | FULL CLOSURE OF RAMP (SR-237 NB TO I-480 EB) |
| FULL CLOSURE OF I-480 WB MAINLINE | 8 NIGHTS (10:00 PM - 5:00 AM) | FULL CLOSURE OF RAMP (I-71 NB TO I-480 WB) |

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 09/05/2025 FOR PID 114536 IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED, THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

**WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**REPLACEMENT SIGN**

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER. QUALITY STANDARDS FOR TEMPORARY TRAFFIC CONTROL DEVICES CAN BE FOUND HERE:
https://www.transportation.ohio.gov/working/engineering/roadway/manuals-standards/quality-standards-ttcds/quality-standards-ttcds

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF **12 EACH** HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

**FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) P.17-P.34 OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN XX HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN — 30 SIGN MNTH
(ASSUMING 3 PCMS SIGN(S) FOR 10 MONTH(S)

**ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN**

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15TH THROUGH APRIL 1ST.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

# MAINTENANCE OF TRAFFIC GENERAL NOTES

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.10 TOTAL 167

CUY-71-10.07 SW

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**ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN CONTD.**

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE INCIDENTAL TO WOK ZONE RAISED PAVEMENT MARKER. FOR THE WORK REQUIRED, AS PROVIDED FOR IN THE PLANS.

**RUMBLE STRIP REMOVAL AND REPLACEMENT**

ALL EXISTING RUMBLE STRIPS THAT ARE IN CONFLICT WITH THE PROPOSED MOVEMENT OF TRAFFIC DURING THE MOT OPERATIONS SHALL BE REMOVED BY PAVEMENT PLANING. THE REMOVED RUMBLE STRIP AREAS SHALL BE FILLED WITH ASPHALT CONCRETE SURFACE COURSE. THE RUMBLE STRIP REMOVAL AND REPLACEMENT AREA SHALL BE 2.5 FEET WIDE AND 1.5 INCHES DEEP, CENTERED ON THE RUMBLE STRIP. THE PAVEMENT PLANING AND PLACEMENT OF ASPHALT CONCRETE SURFACE COURSE SHOULD BE COMPLETED IN THE SAME OPERATION. THE ESTIMATED REMOVAL AND REPLACEMENT LENGTH IS 6000 FT.

IMMEDIATELY FOLLOWING COMPLETION OF MOT OPERATIONS AND RESTORING THE TRAFFIC TO ITS ORIGINAL POSITION, NEW RUMBLE STRIPS SHALL BE INSTALLED AT THE LOCATION WHERE THE EXISTING RUMBLE STRIPS WERE REMOVED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

| | |
|---|---|
| ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE 1.5" DEPTH | 1667 SY |
| ITEM 407 - NON-TRACKING TACK COAT | 125 GAL |
| ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22, 1-1/2" | 70 CY |
| ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) | 1.14 MILE |

**ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22**

THE COARSE VIRGIN AGGREGATE AND AT LEAST 50% OF FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE DO NOT EXCEED 63 IN PRODUCTION.

IN ADDITION TO THE JOINT SEALING REQUIREMENTS SPECIFIED IN 401.17, THE CONTRACTOR SHALL SEAL THE PERIMETER OF ALL RUMBLE STRIP PAVEMENT REPLACEMENT AREAS. THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

PAYMENT FOR ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22.

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:
- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:
- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

| | |
|---|---|
| ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | 160 HOURS |

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

**WORK ZONE INCREASED PENALTIES SIGN (R11-H5a)**

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

(THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.) THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

| | |
|---|---|
| ITEM 614 - WORK ZONE INCREASED PENALTIES SIGN | 6 EACH |

**WORKSITE TRAFFIC SUPERVISOR**

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER, THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEERâ??S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

MAINTENANCE OF TRAFFIC GENERAL NOTES

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SUITE 100
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DESIGNER: SMS
REVIEWER: SJP 09/17/25
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**WORKSITE TRAFFIC SUPERVISOR CONTD.**

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE

WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.

2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF, AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.

3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.

4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.

5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.
6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.

7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TTC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.

8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.

9. ON A CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.

10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.

11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:

A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).

B. DAILY TTC SETUP AND REMOVAL.

C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.

D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.

E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.

F. ALL OTHER EMERGENCY TTC NEEDS.

12. COMPLETE THE DEPARTMENT APPROVED (CA-D-8) WITHIN GOFORMZ AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER BY THE END OF THE WORKDAY IN WHICH THE INSPECTION OCCURRED. THE CA-D-8 INCLUDES A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. CONTACT GOFORMZ.HELP@DOT.OHIO.GOV TO OBTAIN A USER ACCOUNT. ANY DEFICIENCIES OBSERVED SHALL BE NOTED ON THE CA-D-8, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATIONâ??S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.

B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A FAILURE TO PERFORM WTS DUTIES REOCCURS OR A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.

C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS (AND ANY ALTERNATE WTS, IF APPLICABLE) SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AT THE PROJECT LEVEL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS (AND ALTERNATE WTS, IF APPLICABLE). ACCUMULATION OF THREE PROJECT LEVEL REMOVALS (FROM ANY PROJECTS STATEWIDE) SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY FORMERLY PREQUALIFIED WTS. A WTS (AND ALTERNATE WTS, IF APPLICABLE) MAY BE IMMEDIATELY AND CONCURRENTLY REMOVED FROM THE WORK AT THE PROJECT LEVEL IN ACCORDANCE WITH C&MS 108.05 AND DISQUALIFIED STATEWIDE FROM THE ODOT PREQUALIFIED WTS ROSTER (REGARDLESS OF THE NUMBER OF PROJECT LEVEL REMOVALS), AS WELL AS BEING SUBJECT TO OTHER POTENTIAL CONSEQUENCES, IN CASES OF FALSIFIED, DISHONEST OR OTHERWISE UNETHICAL ACTIVITY OR DOCUMENTATION.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

**TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT**

OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1. SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.

2. SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.

3. PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.

4. SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

A. COLLABORATE WITH ODOT AND SAFETY FORCES;

B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND

C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.

5. CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6. CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:

I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL

II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN

III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN

IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN

V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN

VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE

B. FOLLOWING AN INCIDENT/CRASH:

I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

II. RECOMMEND ROADWAY REPAIR NEEDS.

III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

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REVIEWER SJP 09/17/25
PROJECT ID 114536

| ITEM NO. | | | | | | | | 614 | | 614 | 614 | | 614 | 614 | | 614 | | 614 | 614 | | 614 | | 622 | 622 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SHEET NO. | REFERENCE NO. | PHASE | LOCATION | STATION | | SIDE | LENGTH | WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL), 24" | | WORK ZONE RAISED PAVEMENT MARKER, WHITE, AS PER PLAN | WORK ZONE RAISED PAVEMENT MARKER, YELLOW, AS PER PLAN | | WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) | WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) | | WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT | | WORK ZONE EDGE LINE, CLASS I, 6", 873 (WHITE) | WORK ZONE EDGE LINE, CLASS I, 6", 873 (YELLOW) | | WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873 | | PORTABLE BARRIER, ANCHORED | PORTABLE BARRIER, UNANCHORED | |
| | | | | FROM | TO | | FT | EACH | | EACH | EACH | | MILE | MILE | | FT | | MILE | MILE | | FT | | FT | FT | |
| 21 | WDL-1 | 1 | RAMP T | 323+10.25 | 324+60.00 | LT | 149.75 | | | 8 | | | | | | 150 | | | | | | | | | |
| 21-24 | WEY-1 | 1 | RAMP T | 323+10.25 | 338+28.89 | LT | 1518.64 | | | | 36 | | | 0.29 | | | | | | | | | | | |
| 21-24 | WEW-1 | 1 | RAMP T | 324+60.00 | 338+28.89 | RT | 1368.89 | | | 28 | | | 0.26 | | | | | | | | | | | | |
| 21 | IA-1 | 1 | RAMP T | 325+70.21 | | RT | | 1 | | | | | | | | | | | | | | | | | |
| 21-24 | PB-1 | 1 | RAMP T | 325+70.21 | 338+28.89 | LT/RT | 1258.68 | | | | | | | | | | | | | | | | 450 | 809 | |
| 25 | WDL-2 | 2 | RAMP T | 323+75.28 | 324+92.00 | LT/RT | 116.72 | | | 6 | | | | | | 117 | | | | | | | | | |
| 25-28 | WEY-2 | 2 | RAMP T | 323+75.28 | 339+22.56 | LT | 1547.28 | | | | 44 | | | 0.29 | | | | | | | | | | | |
| 25-28 | WEW-2 | 2 | RAMP T | 324+92.00 | 339+22.56 | LT/RT | 1430.56 | | | 38 | | | 0.27 | | | | | | | | | | | | |
| 26 | IA-2 | 2 | RAMP T | 327+66.36 | | RT | | 1 | | | | | | | | | | | | | | | | | |
| 26-27 | PB-2 | 2 | RAMP T | 327+66.36 | 335+58.50 | RT | 792.14 | | | | | | | | | | | | | | | | 450 | 343 | |
| 29-32 | WCH-1 | 1A, 2B,3 | IR-480 | 479+05.00 | 493+60.00 | RT | 1455.00 | | | 108 | | | | | | | | | | | 2910 | | | | |
| 29-32 | WCH-2 | 1A, 2B,3 | IR-480 | 479+05.00 | 493+60.00 | RT | 1455.00 | | | 108 | | | | | | | | | | | 2910 | | | | |
| 29-32 | WEW-3 | 1A, 2B,3 | IR-480 | 479+05.00 | 493+60.00 | RT | 1455.00 | | | 100 | | | | | | | | 0.55 | | | | | | | |
| 29-32 | WEY-3 | 1A, 2B,3 | IR-480 | 479+05.00 | 493+60.00 | RT | 1455.00 | | | | 100 | | | | | | | | 0.55 | | | | | | |
| 29-31 | PB-3 | 1A, 2B,3 | IR-480 | 482+90.00 | 488+12.11 | RT | 522.11 | | | | | | | | | | | | | | | | | 1046 | |
| 30 | IA-3 | 1A, 2B,3 | IR-480 | 482+90.00 | | RT | | 2 | | | | | | | | | | | | | | | | | |
| 30-33 | WCH-3 | 1A, 2B,3 | IR-480 | 496+00.00 | 482+85.00 | LT | 1315.00 | | | 62 | | | | | | | | | | | 2630 | | | | |
| 30-33 | WCH-4 | 1A, 2B,3 | IR-480 | 496+00.00 | 482+85.00 | LT | 1315.00 | | | 62 | | | | | | | | | | | 2630 | | | | |
| 30-33 | WCH-5 | 1A, 2B,3 | IR-480 | 496+00.00 | 482+85.00 | LT | 1315.00 | | | 62 | | | | | | | | | | | 2630 | | | | |
| 30-33 | WEW-4 | 1A, 2B,3 | IR-480 | 494+87.00 | 482+85.00 | LT | 1202.00 | | | 22 | | | | | | | | 0.46 | | | | | | | |
| 30-33 | WEY-4 | 1A, 2B,3 | IR-480 | 496+00.00 | 482+85.00 | LT | 1315.00 | | | | 44 | | | | | | | | 0.50 | | | | | | |
| 31-32 | PB-4 | 1A, 2B,3 | IR-480 | 489+60.00 | 485+45.00 | LT | 415.00 | | | | | | | | | | | | | | | | | 830 | |
| 32 | IA-4 | 1A, 2B,3 | IR-480 | 489+60.00 | | LT | | 2 | | | | | | | | | | | | | | | | | |
| 32 | WEY-5 | 1A, 2B,3 | IR-480 | 493+37.00 | 494+87.00 | LT | 150.00 | | | | | | | | | | | | 0.06 | | | | | | |
| 32 | WCH-6 | 1A, 2B,3 | IR-480 | 490+80.00 | 493+37.00 | LT | 257.00 | | | | | | | | | | | | | | 514 | | | | |
| 34 | IA-5 | 1B, 2A | IR-480 | 474+90.00 | | RT | | 1 | | | | | | | | | | | | | | | | | |
| 34-37 | PB-5 | 1B, 2A | IR-480 | 475+00.00 | 489+00.00 | RT | 1400.00 | | | | | | | | | | | | | | | | | 1400 | |
| 34-37 | WEW-5 | 1B, 2A | IR-480 | 477+50.00 | 494+52.00 | RT | 1702.00 | | | 66 | | | | | | | | 0.32 | | | | | | | |
| 34-37 | WEY-6 | 1B, 2A | IR-480 | 477+50.00 | 494+52.00 | RT | 1702.00 | | | | 66 | | | | | | | | 0.32 | | | | | | |
| 34-37 | WCH-7 | 1B, 2A | IR-480 | 477+50.00 | 494+52.00 | RT | 1702.00 | | | 70 | | | | | | | | | | | 1702 | | | | |
| 34-36 | WCH-8 | 1B, 2A | IR-480 | 477+50.00 | 494+52.00 | RT | 1702.00 | | | 70 | | | | | | | | | | | 1702 | | | | |
| 35-38 | WEW-6 | 1B, 2A | IR-480 | 495+34.00 | 480+65.00 | LT | 1469.00 | | | 20 | | | | | | | | 0.28 | | | | | | | |
| 35-38 | WEY-7 | 1B, 2A | IR-480 | 496+00.00 | 480+65.00 | LT | 1535.00 | | | | 40 | | | | | | | | 0.29 | | | | | | |
| 35-38 | WCH-9 | 1B, 2A | IR-480 | 496+00.00 | 480+65.00 | LT | 1535.00 | | | 47 | | | | | | | | | | | 1535 | | | | |
| 35-38 | WCH-10 | 1B, 2A | IR-480 | 496+00.00 | 480+65.00 | LT | 1535.00 | | | 47 | | | | | | | | | | | 1535 | | | | |
| 35-38 | WCH-11 | 1B, 2A | IR-480 | 496+00.00 | 480+65.00 | LT | 1535.00 | | | 47 | | | | | | | | | | | 1535 | | | | |
| 37 | WCH-12 | 1B, 2A | IR-480 | 491+00.00 | 492+00.00 | LT | 100.00 | | | | | | | | | | | | | | 100 | | | | |
| 37-38 | WEY-8 | 1B, 2A | IR-480 | 492+00.00 | 495+34.00 | LT | 334.00 | | | | | | | | | | | | 0.06 | | | | | | |
| 36-38 | PB-6 | 1B, 2A | IR-480 | 498+00.00 | 485+30.00 | LT | 1270.00 | | | | | | | | | | | | | | | | | 1270 | |
| 34 | IA-6 | 1B, 2A | IR-480 | 498+00.00 | | LT | | 1 | | | | | | | | | | | | | | | | | |
| **TOTALS CARRIED TO GENERAL SUMMARY** | | | | | | | | 8 | | 1301 | | | 1.11 | | | 266 | | 3.39 | | | 22333 | | 900 | 5698 | |

MAINTENANCE OF TRAFFIC SUBSUMMARY

CUY-71-10.07 SW

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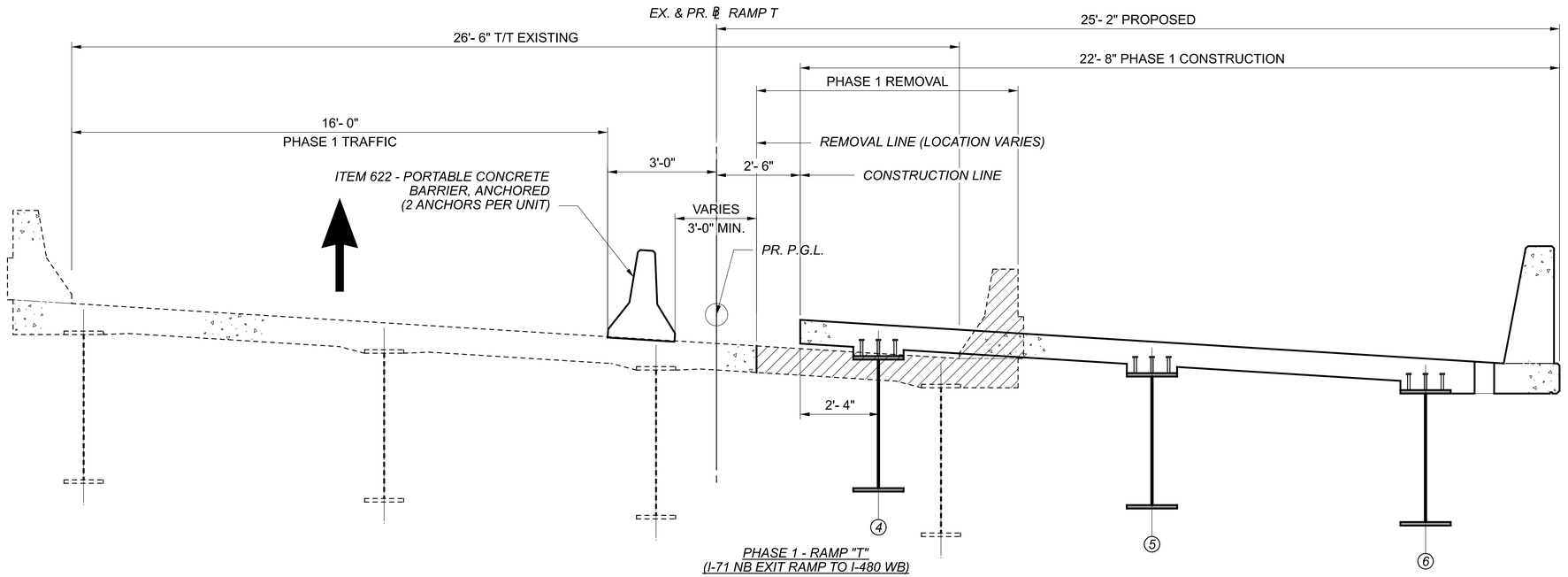
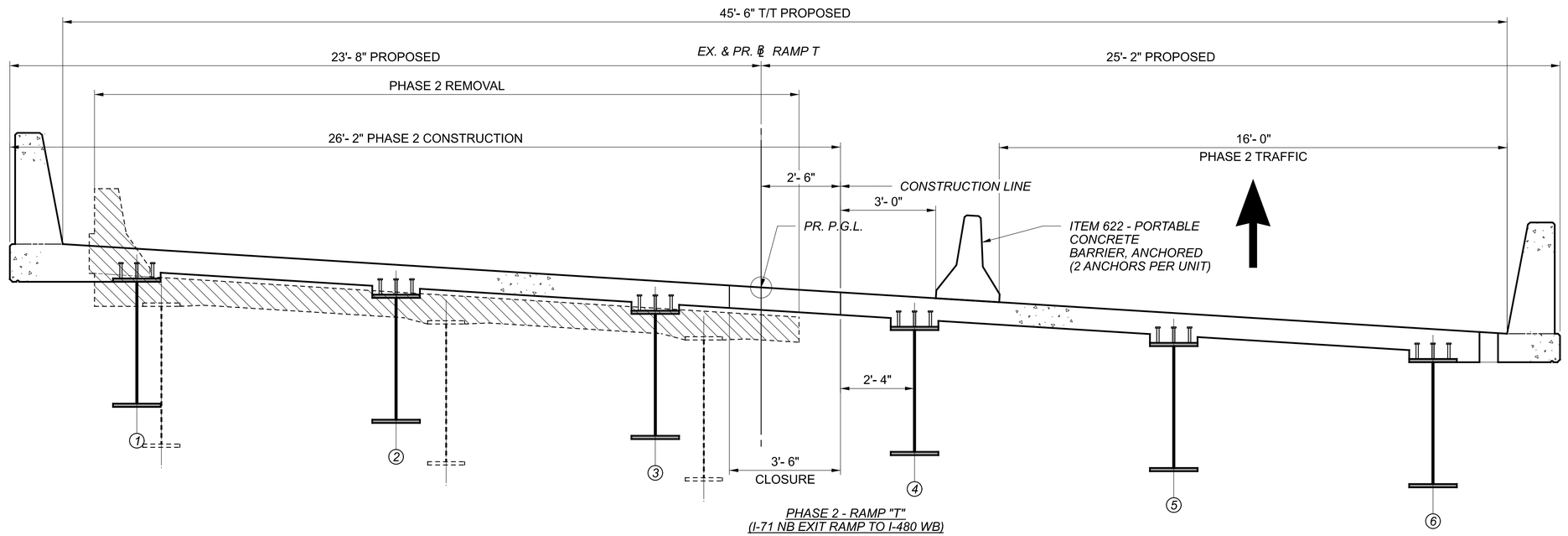
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.13 TOTAL 167

# MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS




PHASE 1 - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)




PHASE 2 - RAMP "T"
(I-71 NB EXIT RAMP TO I-480 WB)

LEGEND

STAGE 1 REMOVALS

STAGE 2 REMOVALS

PCB - PORTABLE CONCRETE BARRIER

CUY-71-10.07 SW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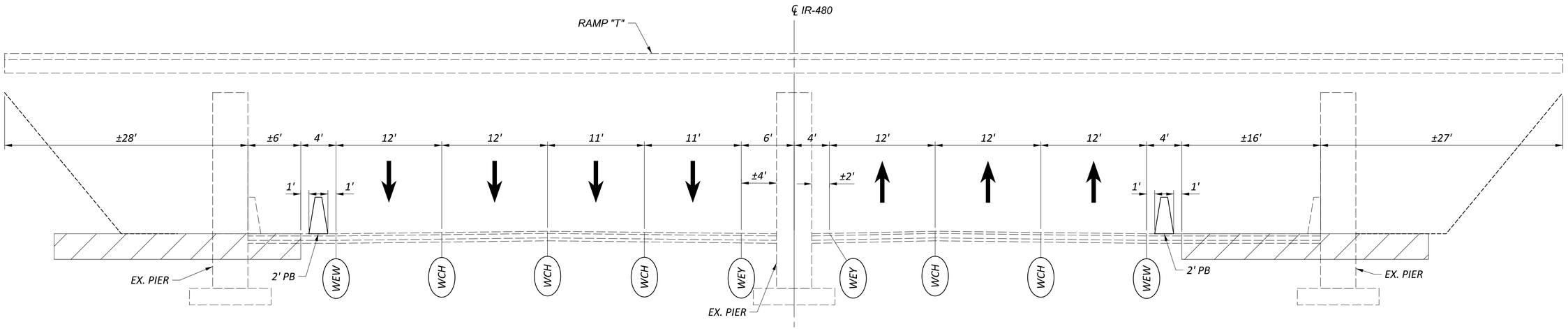
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

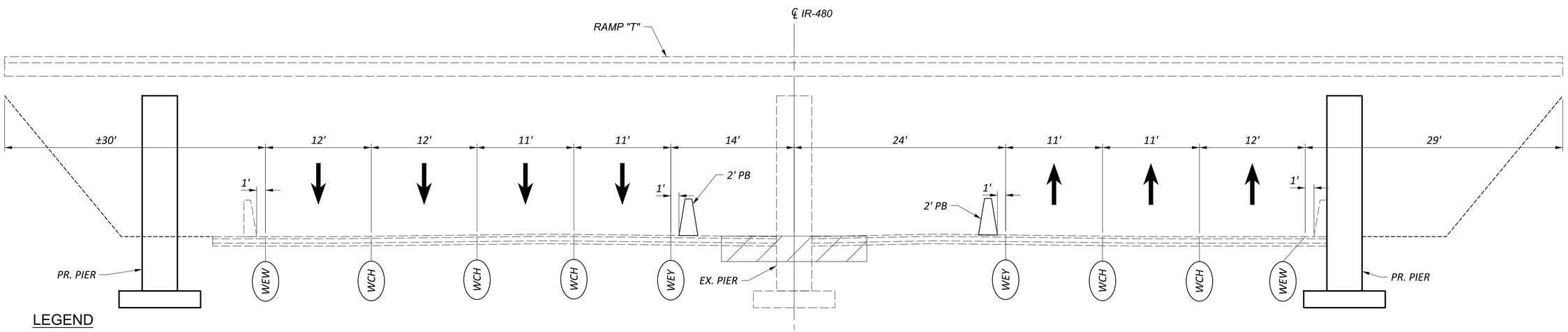

DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536




IR-480
PHASE 1A, 2B




IR-480
PHASE 1B, 2A

## LEGEND

- AREA TO BE CONSTRUCTED
- DIRECTION OF TRAFFIC
- WEW - WORK ZONE EDGE LINE, 6" (WHITE)
- WEY - WORK ZONE EDGE LINE, 6" (YELLOW)
- WCH - WORK ZONE CHANNELIZING LINE, 12" (WHITE)

*NOTE:*

*ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1*

# MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS

CUY-71-10.07 SW

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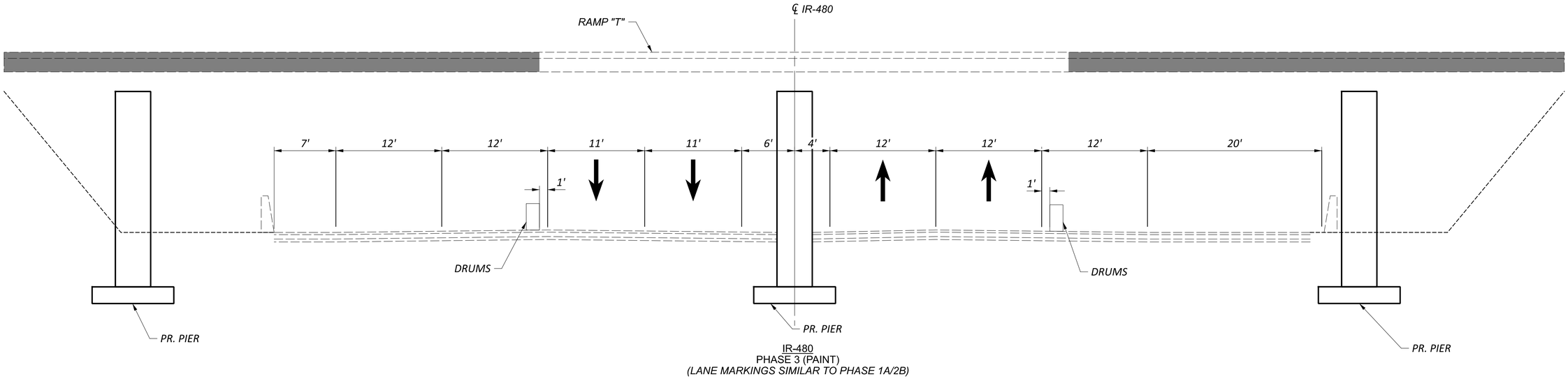
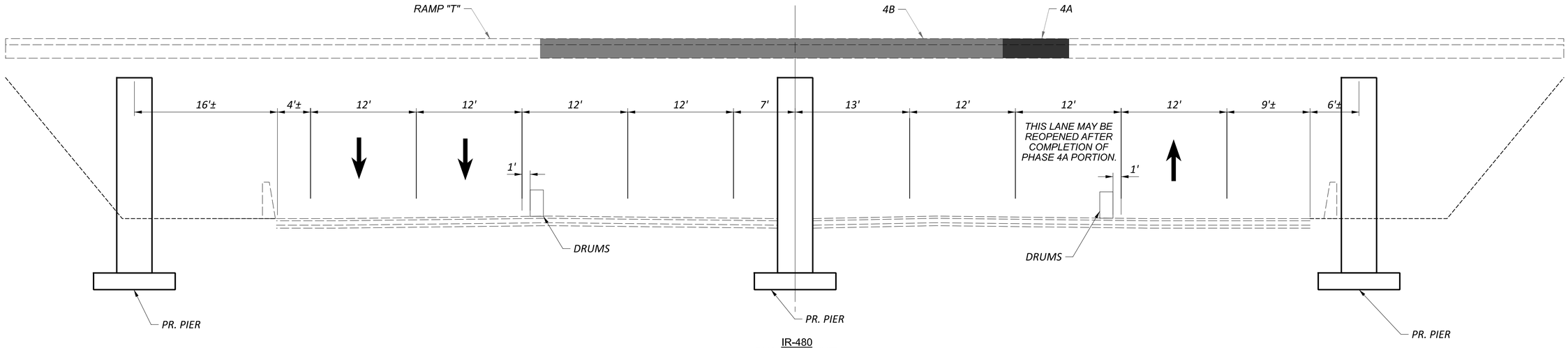
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.15 TOTAL: 167




IR-480
PHASE 3 (PAINT)
*(LANE MARKINGS SIMILAR TO PHASE 1A/2B)*




IR-480
PHASE 4 (PAINT)
*(LANE MARKINGS SIMILAR TO THE PROPOSED PAVEMENT MARKINGS)*

LEGEND

- AREA TO BE PAINTED

- DIRECTION OF TRAFFIC

*NOTES:*

1. *THE WORK IN PHASE 3 AND 4 CONSISTS OF PAINTING THE STEEL SUPERSTRUCTURE FOR SFN. 1814258 AND SFN 1814249.*

2. *SINGLE AND DOUBLE LANE CLOSURES ON IR-480 DURING PLC ONLY TO COMPLETE WORK.*
   *WB IR-480 MAY BE REDUCED TO 2-LANES FROM 6:30 PM UNTIL 6:30 AM DAILY.*
   *EB IR-480 MAY BE REDUCED TO 1-LANE FROM 10:30 PM UNTIL 4:30 AM DAILY.*
   *EB IR-480 MAY BE REDUCED TO 2-LANES FROM 6:30 PM UNTIL 5:30 AM DAILY.*

3. *TYPICALS REPRESENT CLOSURES PER PLC.*

4. *LANE CLOSURES PER SCD MT 95.30.*

MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 12/29/2025 TIME: 10:49:06 AM USER: KC112955
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
RKC

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.16 | TOTAL 167

LEGEND

- DETOUR ROUTE
- EX. GUIDE SIGN
- DETOUR SIGN
- TYPE III BARRICADE
- PCMS
- DIRECTION OF TRAFFIC

*NOTES:*

1. *DETOUR PROVIDED FOR I-480 EB TRAFFIC. (DETOUR LENGTH = 4.8 MILES) (UNDETOURED THROUGH DISTANCE = 1.7 MILES)*
2. *DETOUR SIGNS TO BE GROUND MOUNTED NEAR THE EXISTING OVERHEAD AND GUIDE SIGNS.*
3. *SIGN LOCATIONS AND DISTANCES ARE NOT SHOWN TO SCALE. FOR ADDITIONAL SIGNAGE AND LAYOUT DETAILS, SEE PIS 209565.*

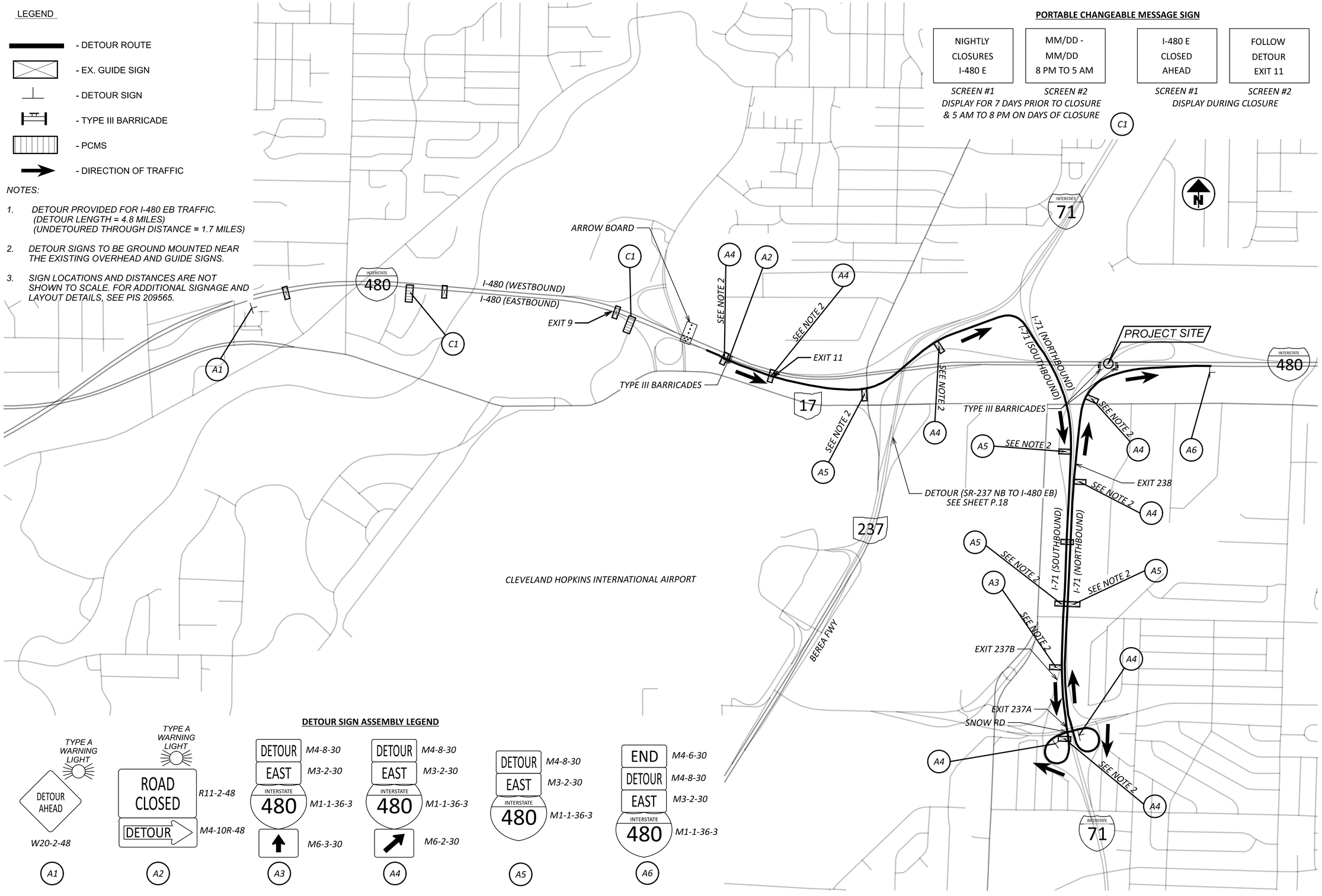
**PORTABLE CHANGEABLE MESSAGE SIGN**

| NIGHTLY CLOSURES I-480 E | MM/DD - MM/DD 8 PM TO 5 AM | I-480 E CLOSED AHEAD | FOLLOW DETOUR EXIT 11 |
|---|---|---|---|
| *SCREEN #1* | *SCREEN #2* | *SCREEN #1* | *SCREEN #2* |

*DISPLAY FOR 7 DAYS PRIOR TO CLOSURE & 5 AM TO 8 PM ON DAYS OF CLOSURE*

*DISPLAY DURING CLOSURE*

HORIZONTAL SCALE IN FEET
0 400 800 1600




**DETOUR SIGN ASSEMBLY LEGEND**




# MAINTENANCE OF TRAFFIC - DETOUR PLANS I-480 EB CLOSURE

| | |
|---|---|
| DESIGN AGENCY | MOTT MACDONALD, 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| DESIGNER | RKC |
| REVIEWER | SJP 09/17/25 |
| PROJECT ID | 114536 |
| SHEET / TOTAL | P.17 / 167 |

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 3:28:04 PM USER: KC112955
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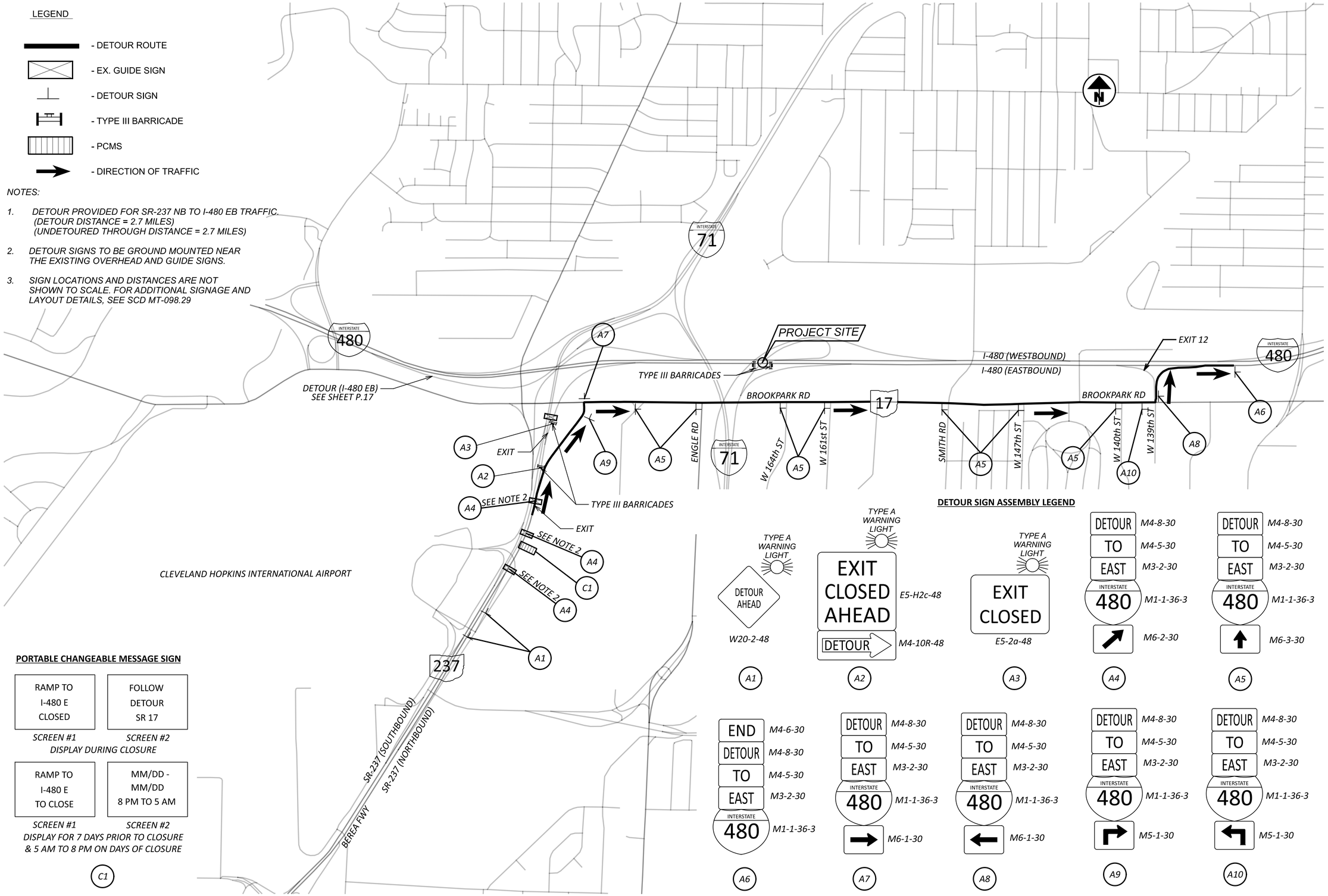
LEGEND

- DETOUR ROUTE
- EX. GUIDE SIGN
- DETOUR SIGN
- TYPE III BARRICADE
- PCMS
- DIRECTION OF TRAFFIC

*NOTES:*

1. *DETOUR PROVIDED FOR SR-237 NB TO I-480 EB TRAFFIC.*
   *(DETOUR DISTANCE = 2.7 MILES)*
   *(UNDETOURED THROUGH DISTANCE = 2.7 MILES)*
2. *DETOUR SIGNS TO BE GROUND MOUNTED NEAR THE EXISTING OVERHEAD AND GUIDE SIGNS.*
3. *SIGN LOCATIONS AND DISTANCES ARE NOT SHOWN TO SCALE. FOR ADDITIONAL SIGNAGE AND LAYOUT DETAILS, SEE SCD MT-098.29*




**PORTABLE CHANGEABLE MESSAGE SIGN**

| SCREEN #1 | SCREEN #2 |
|---|---|
| RAMP TO I-480 E CLOSED | FOLLOW DETOUR SR 17 |

*DISPLAY DURING CLOSURE*

| SCREEN #1 | SCREEN #2 |
|---|---|
| RAMP TO I-480 E TO CLOSE | MM/DD - MM/DD 8 PM TO 5 AM |

*DISPLAY FOR 7 DAYS PRIOR TO CLOSURE & 5 AM TO 8 PM ON DAYS OF CLOSURE*

C1

**DETOUR SIGN ASSEMBLY LEGEND**




HORIZONTAL SCALE IN FEET
0 400 800 1600

# MAINTENANCE OF TRAFFIC - DETOUR PLANS
## SR-237 NB TO I-480 EB RAMP CLOSURE

CUY-71-10.07 SW


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 3:28:12 PM USER: KC112955
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

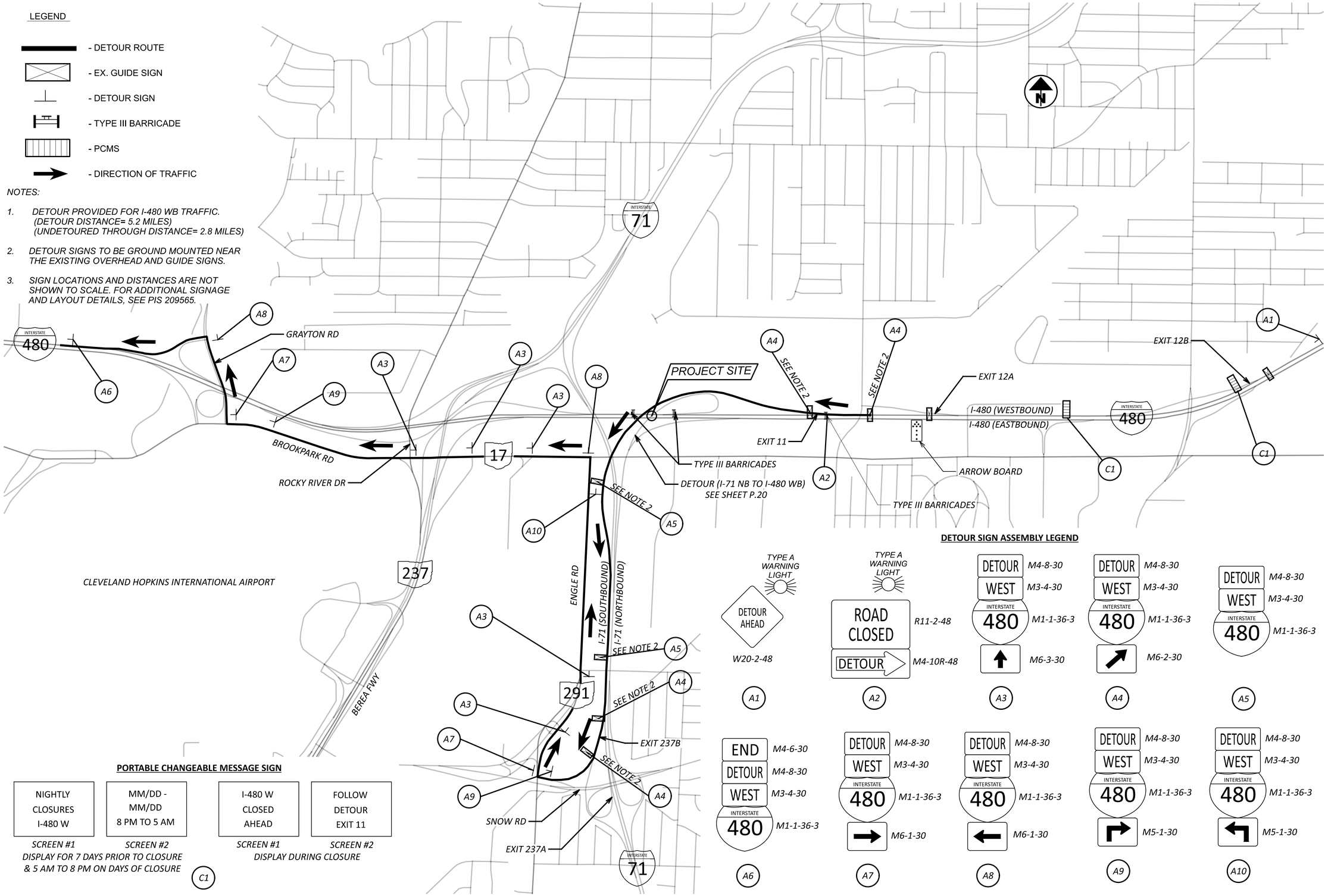

DESIGNER RKC
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.18 TOTAL 167

LEGEND

- DETOUR ROUTE
- EX. GUIDE SIGN
- DETOUR SIGN
- TYPE III BARRICADE
- PCMS
- DIRECTION OF TRAFFIC

*NOTES:*

1. *DETOUR PROVIDED FOR I-480 WB TRAFFIC. (DETOUR DISTANCE= 5.2 MILES) (UNDETOURED THROUGH DISTANCE= 2.8 MILES)*
2. *DETOUR SIGNS TO BE GROUND MOUNTED NEAR THE EXISTING OVERHEAD AND GUIDE SIGNS.*
3. *SIGN LOCATIONS AND DISTANCES ARE NOT SHOWN TO SCALE. FOR ADDITIONAL SIGNAGE AND LAYOUT DETAILS, SEE PIS 209565.*




**PORTABLE CHANGEABLE MESSAGE SIGN**

| NIGHTLY CLOSURES I-480 W | MM/DD - MM/DD 8 PM TO 5 AM | I-480 W CLOSED AHEAD | FOLLOW DETOUR EXIT 11 |
|---|---|---|---|
| *SCREEN #1* | *SCREEN #2* | *SCREEN #1* | *SCREEN #2* |
| *DISPLAY FOR 7 DAYS PRIOR TO CLOSURE & 5 AM TO 8 PM ON DAYS OF CLOSURE* | | *DISPLAY DURING CLOSURE* | |

C1

**DETOUR SIGN ASSEMBLY LEGEND**

A1 — TYPE A WARNING LIGHT; DETOUR AHEAD; W20-2-48

A2 — TYPE A WARNING LIGHT; ROAD CLOSED (R11-2-48); DETOUR (M4-10R-48)

A3 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); ↑ (M6-3-30)

A4 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); ↗ (M6-2-30)

A5 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3)

A6 — END (M4-6-30); DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); → (M6-1-30)

A7 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); → (M6-1-30)

A8 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); ← (M6-1-30)

A9 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); ↱ (M5-1-30)

A10 — DETOUR (M4-8-30); WEST (M3-4-30); INTERSTATE 480 (M1-1-36-3); ↰ (M5-1-30)

HORIZONTAL SCALE IN FEET
0 400 800 1600

# MAINTENANCE OF TRAFFIC - DETOUR PLANS
## I-480 WB CLOSURE

CUY-71-10.07 SW


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 3:28:20 PM USER: KC112955
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER RKC

REVIEWER SJP 09/17/25

PROJECT ID 114536

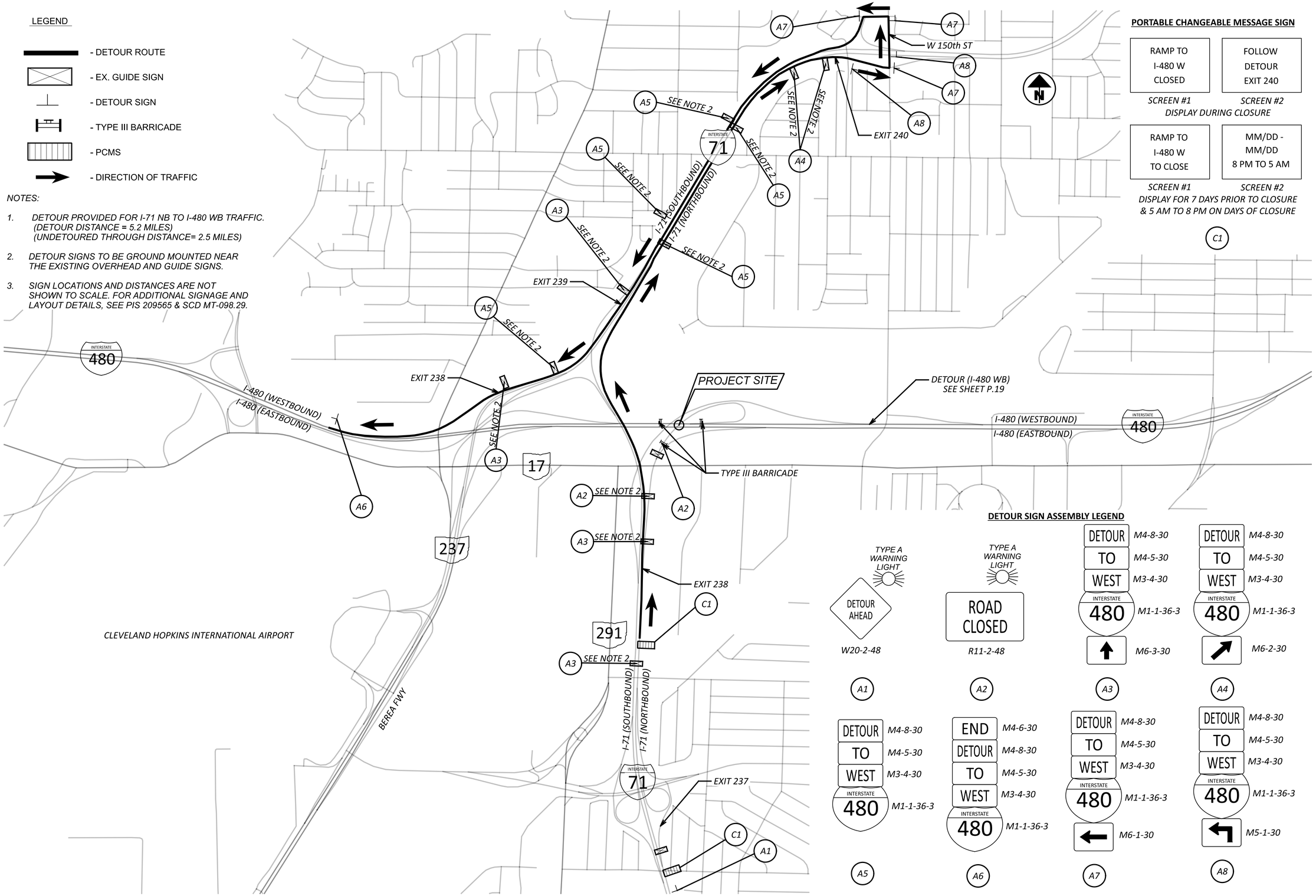
SHEET P.19 | TOTAL 167

LEGEND

- DETOUR ROUTE
- EX. GUIDE SIGN
- DETOUR SIGN
- TYPE III BARRICADE
- PCMS
- DIRECTION OF TRAFFIC

*NOTES:*

1. *DETOUR PROVIDED FOR I-71 NB TO I-480 WB TRAFFIC. (DETOUR DISTANCE = 5.2 MILES) (UNDETOURED THROUGH DISTANCE= 2.5 MILES)*
2. *DETOUR SIGNS TO BE GROUND MOUNTED NEAR THE EXISTING OVERHEAD AND GUIDE SIGNS.*
3. *SIGN LOCATIONS AND DISTANCES ARE NOT SHOWN TO SCALE. FOR ADDITIONAL SIGNAGE AND LAYOUT DETAILS, SEE PIS 209565 & SCD MT-098.29.*




**PORTABLE CHANGEABLE MESSAGE SIGN**

| RAMP TO I-480 W CLOSED | FOLLOW DETOUR EXIT 240 |
|---|---|
| *SCREEN #1* | *SCREEN #2* |

*DISPLAY DURING CLOSURE*

| RAMP TO I-480 W TO CLOSE | MM/DD - MM/DD 8 PM TO 5 AM |
|---|---|
| *SCREEN #1* | *SCREEN #2* |

*DISPLAY FOR 7 DAYS PRIOR TO CLOSURE & 5 AM TO 8 PM ON DAYS OF CLOSURE*

**DETOUR SIGN ASSEMBLY LEGEND**




HORIZONTAL SCALE IN FEET
0 400 800 1600

# MAINTENANCE OF TRAFFIC - DETOUR PLANS
## I-71 NB TO I-480 WB RAMP CLOSURE

CUY-71-10.07 SW


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 3:28:27 PM USER: KC112955
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\MOT\Sheets\114536_MD004.dgn

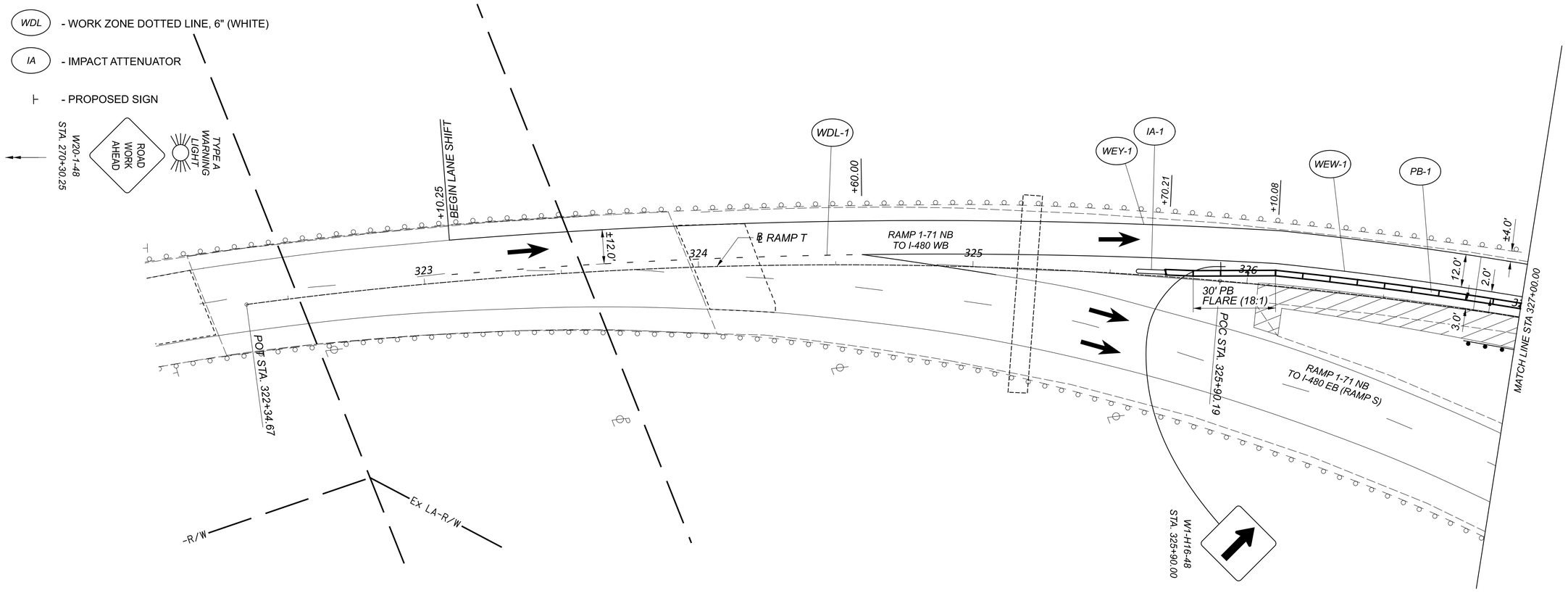


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER RKC
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.20 TOTAL 167

## LEGEND

- PORTABLE BARRIER, UNANCHORED
- PORTABLE BARRIER, ANCHORED
- WORKZONE
- DIRECTION OF TRAFFIC
- WEW - WORK ZONE EDGE LINE, 6" (WHITE)
- WEY - WORK ZONE EDGE LINE, 6" (YELLOW)
- WDL - WORK ZONE DOTTED LINE, 6" (WHITE)
- IA - IMPACT ATTENUATOR
- PROPOSED SIGN




*NOTE:*

*CONTRACTOR TO REMOVE ALL CONFLICTING PAVEMENT MARKINGS.*

HORIZONTAL SCALE IN FEET
0 10 20 40

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 1
## BEGIN PROJECT TO STA 327+00.00

CUY-71-10.07 SW


MODEL: MOT Ramp Phase 1 - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:51:10 PM USER: SAT89729
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.21 TOTAL: 167

MODEL: MOT Ramp Phase 1 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:51:19 PM USER: SAT89729
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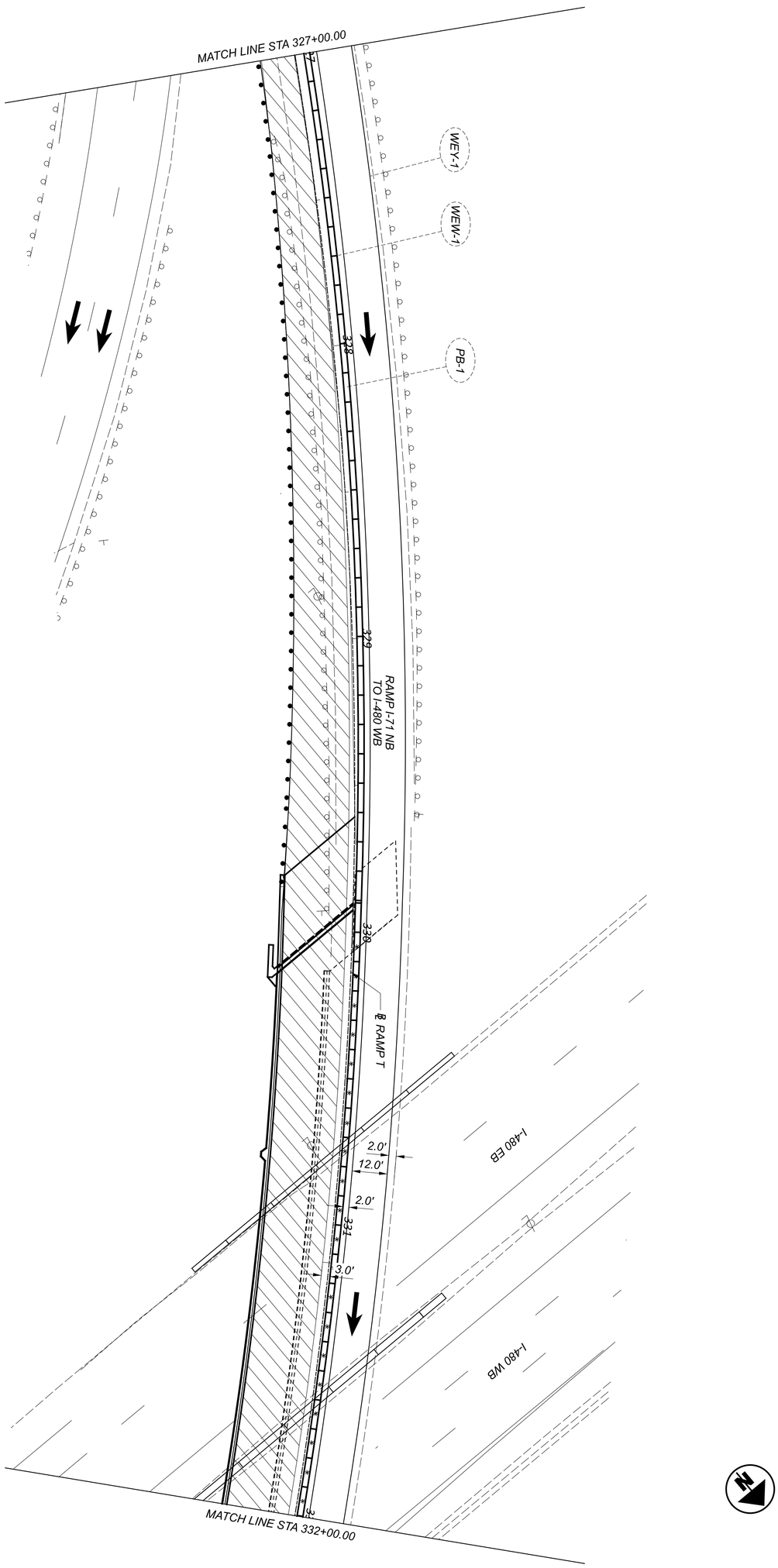
NOTES:

1. FOR MOT LEGEND, SEE SHEET P.21
2. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.




| | | | |
|---|---|---|---|
| SHEET P.22 TOTAL 167 | PROJECT ID 114536 | REVIEWER SJP 09/17/25 | DESIGNER SMS |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 1
# STA 327+00.00 TO STA 332+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: MOT Ramp Phase 1 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:51:29 PM USER: SAT89729
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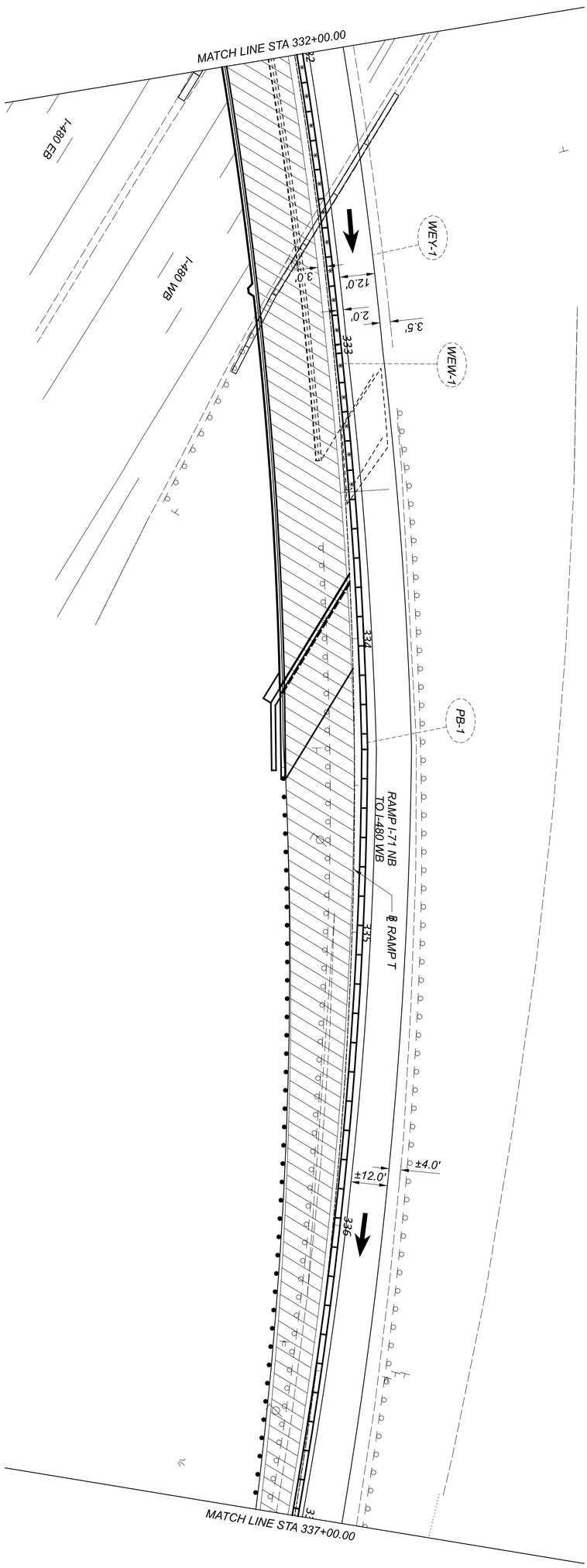
NOTES:

1. FOR MOT LEGEND, SEE SHEET P.21
2. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.




DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 210
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.23 TOTAL 167

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 1
# STA 332+00.00 TO STA 337+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: MOT Ramp Phase 1 - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:51:38 PM USER: SAT89729
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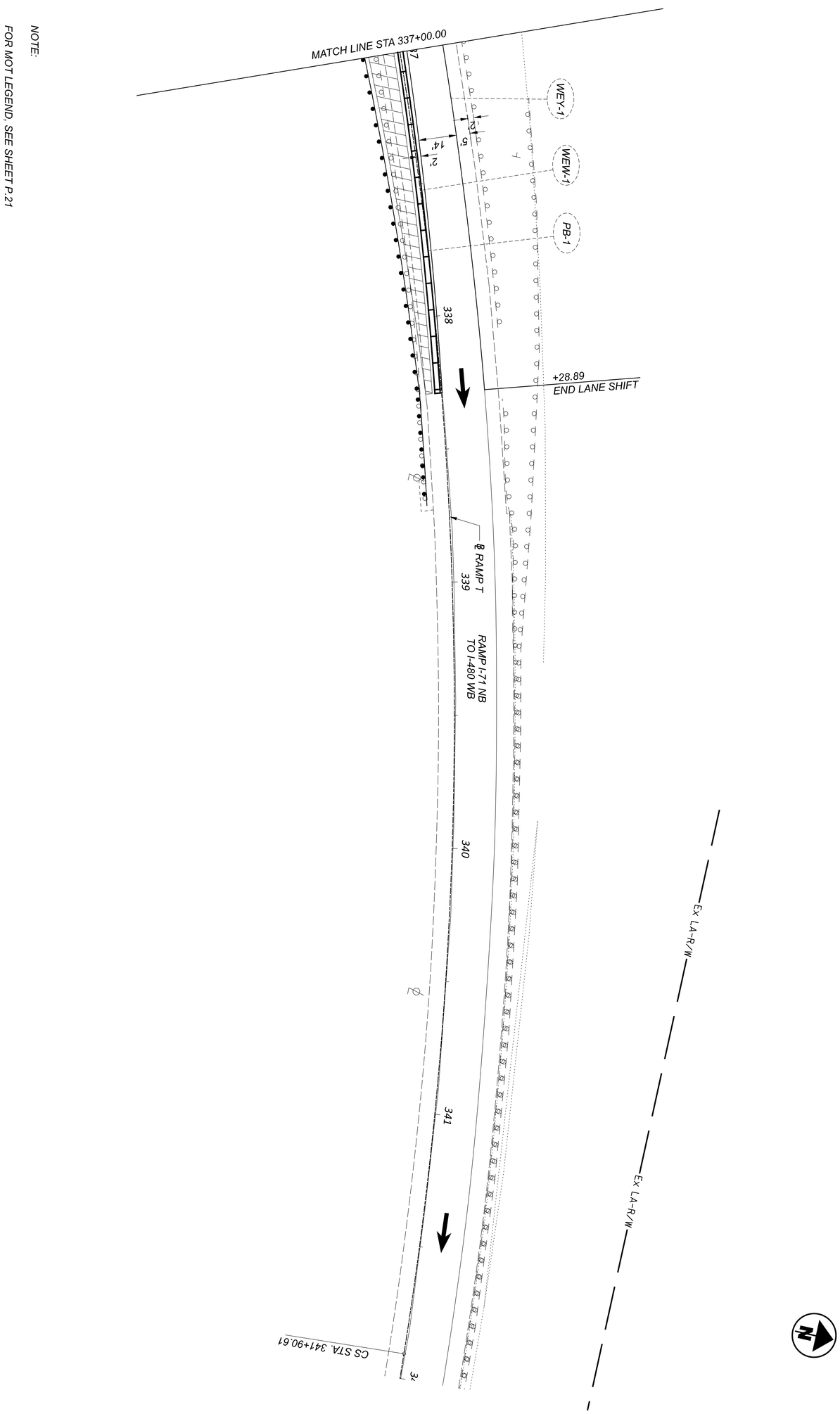


NOTE:
FOR MOT LEGEND, SEE SHEET P.21

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 1
# STA 337+00.00 TO END PROJECT

HORIZONTAL SCALE IN FEET
0 20
10 40

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.24 TOTAL 167

MODEL: MOT Ramp Phase 2 - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:51:47 PM USER: SAT89729
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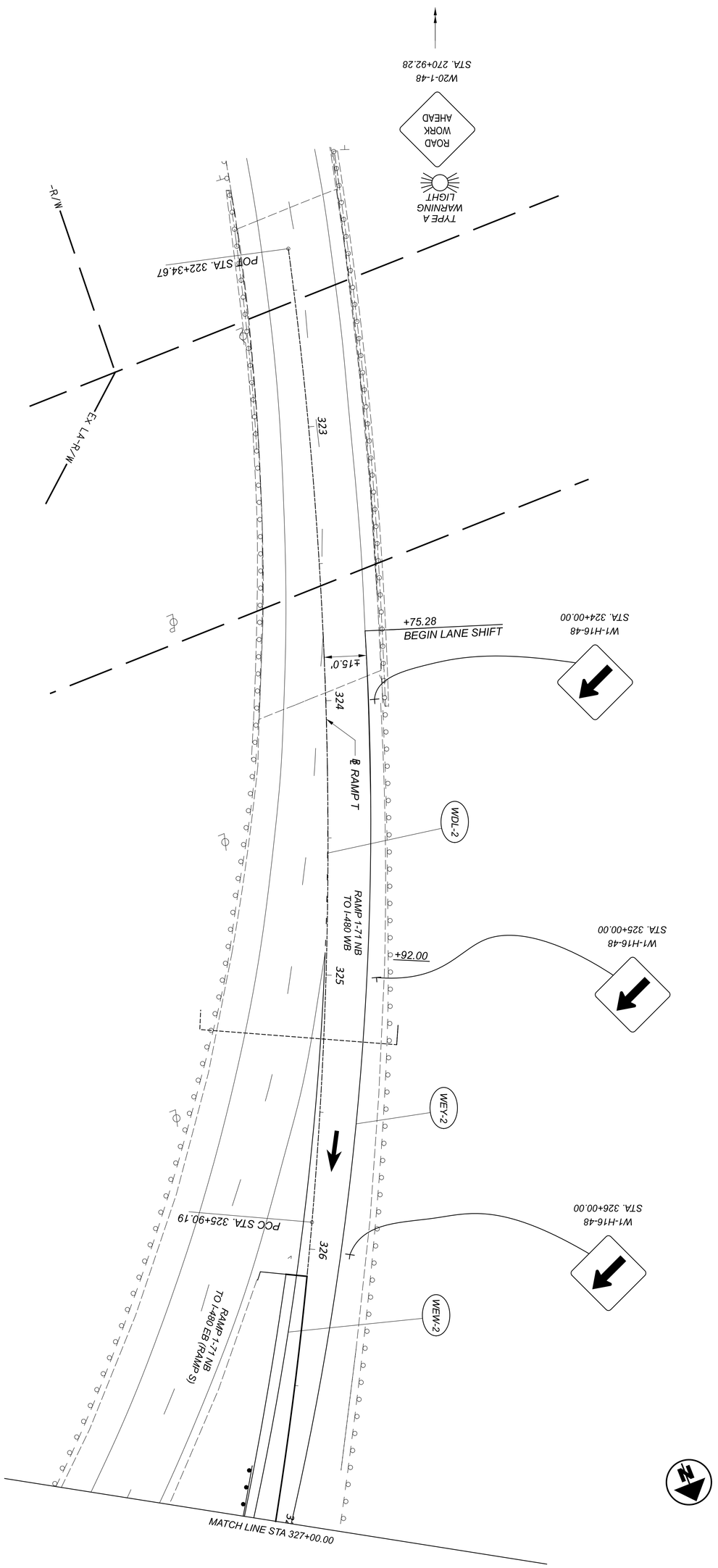


NOTE:
FOR MOT LEGEND, SEE SHEET P.21

| | | | | | |
|---|---|---|---|---|---|
| SHEET P.25 | TOTAL 167 | PROJECT ID 114536 | REVIEWER SJP 09/17/25 | DESIGNER SMS | DESIGN AGENCY MOTT MACDONALD 2guest EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 2
## BEGIN PROJECT TO STA 327+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: MOT Ramp Phase 2 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:51:56 PM USER: SAT89729
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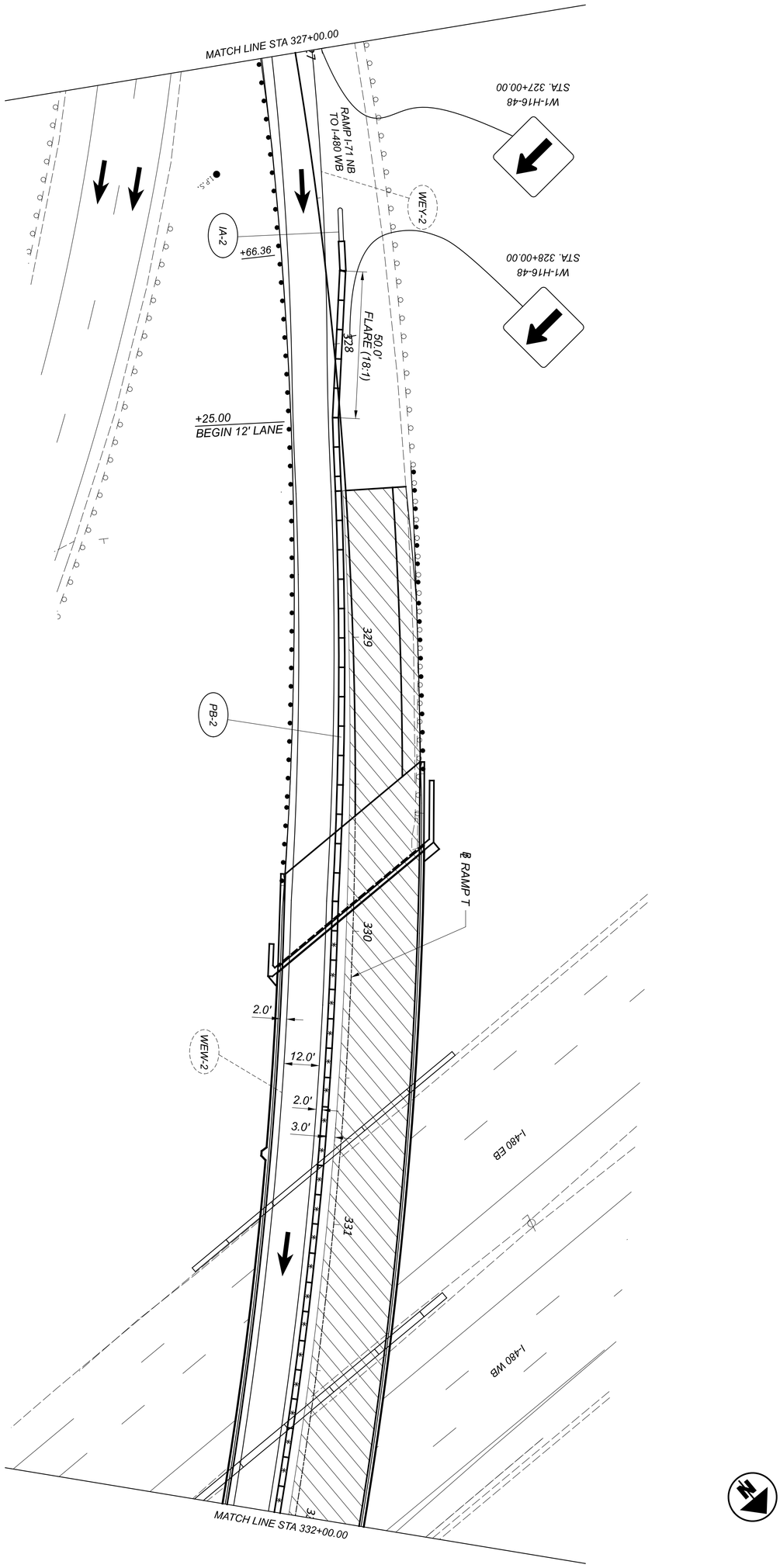
NOTES:

1. FOR MOT LEGEND, SEE SHEET P 21
2. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION




DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.26 TOTAL 167

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 2
## STA 327+00.00 TO STA 332+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: MOT Ramp Phase 2 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:52:05 PM USER: SAT89729
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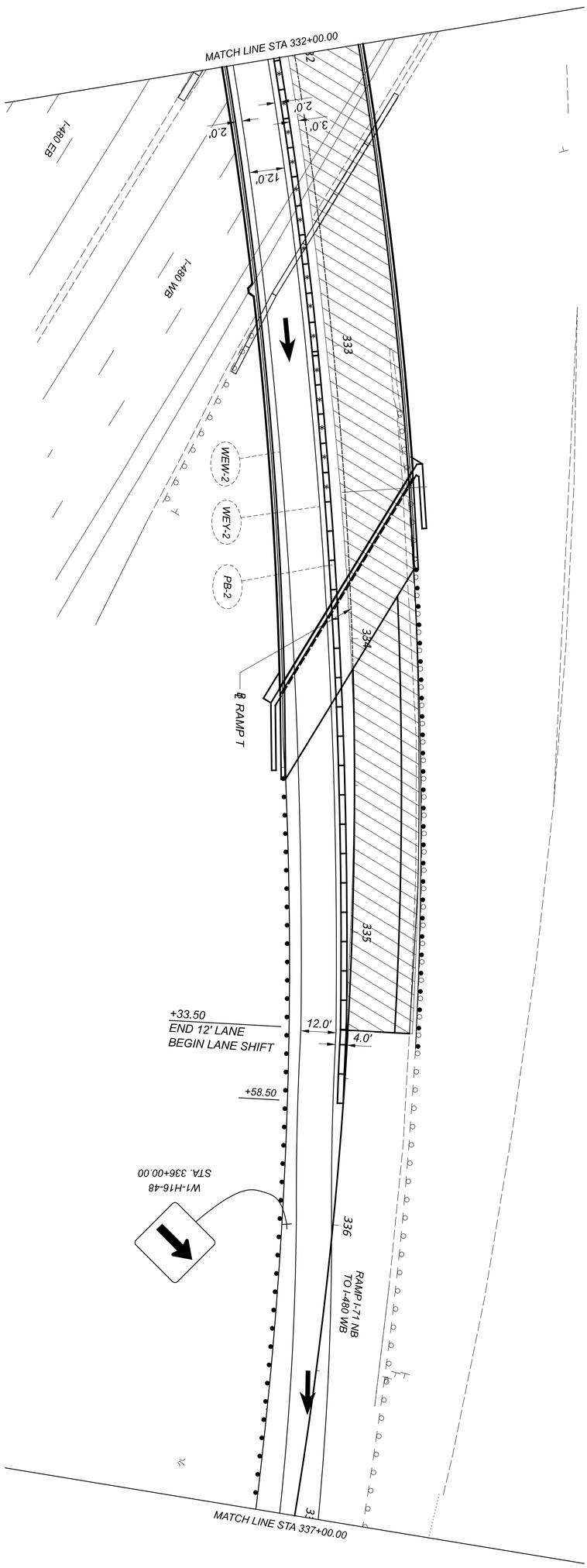
NOTES:

1. FOR MOT LEGEND, SEE SHEET P 21
2. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION

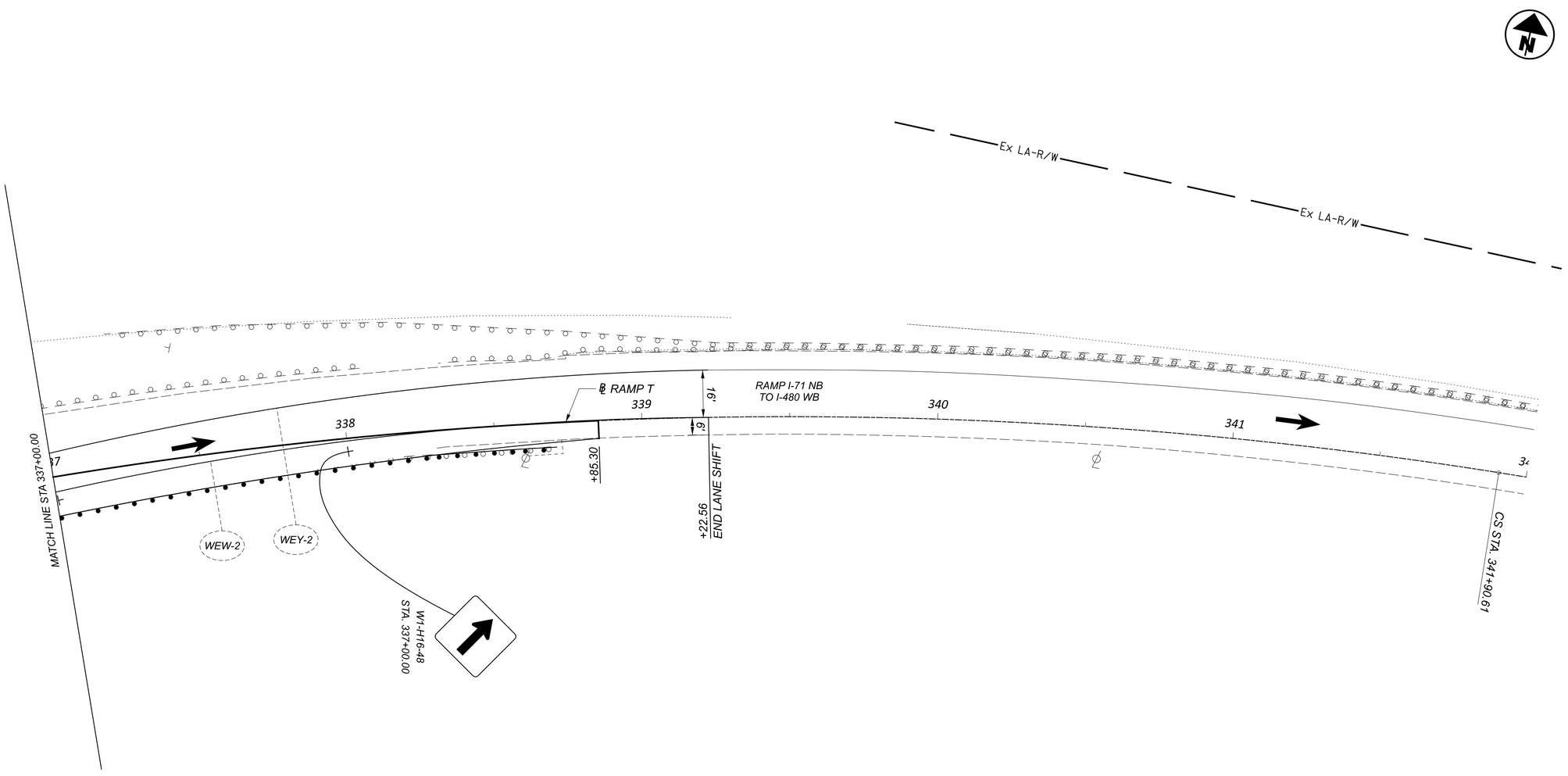



MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 2
STA 332+00.00 TO STA 337+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.27 TOTAL 167




NOTE:

FOR MOT LEGEND, SEE SHEET P.21

HORIZONTAL SCALE IN FEET
0 10 20 40

# MAINTENANCE OF TRAFFIC - I-71 RAMP - PHASE 2
## STA 337+00.00 TO END PROJECT


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.28 TOTAL: 167

CUY-71-10.07 SW


MODEL: MOT Ramp Phase 2 - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:52:21 PM USER: SAT89729
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MODEL: I-480 1A2A - Plan 5 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:52:32 PM USER: SAT89729
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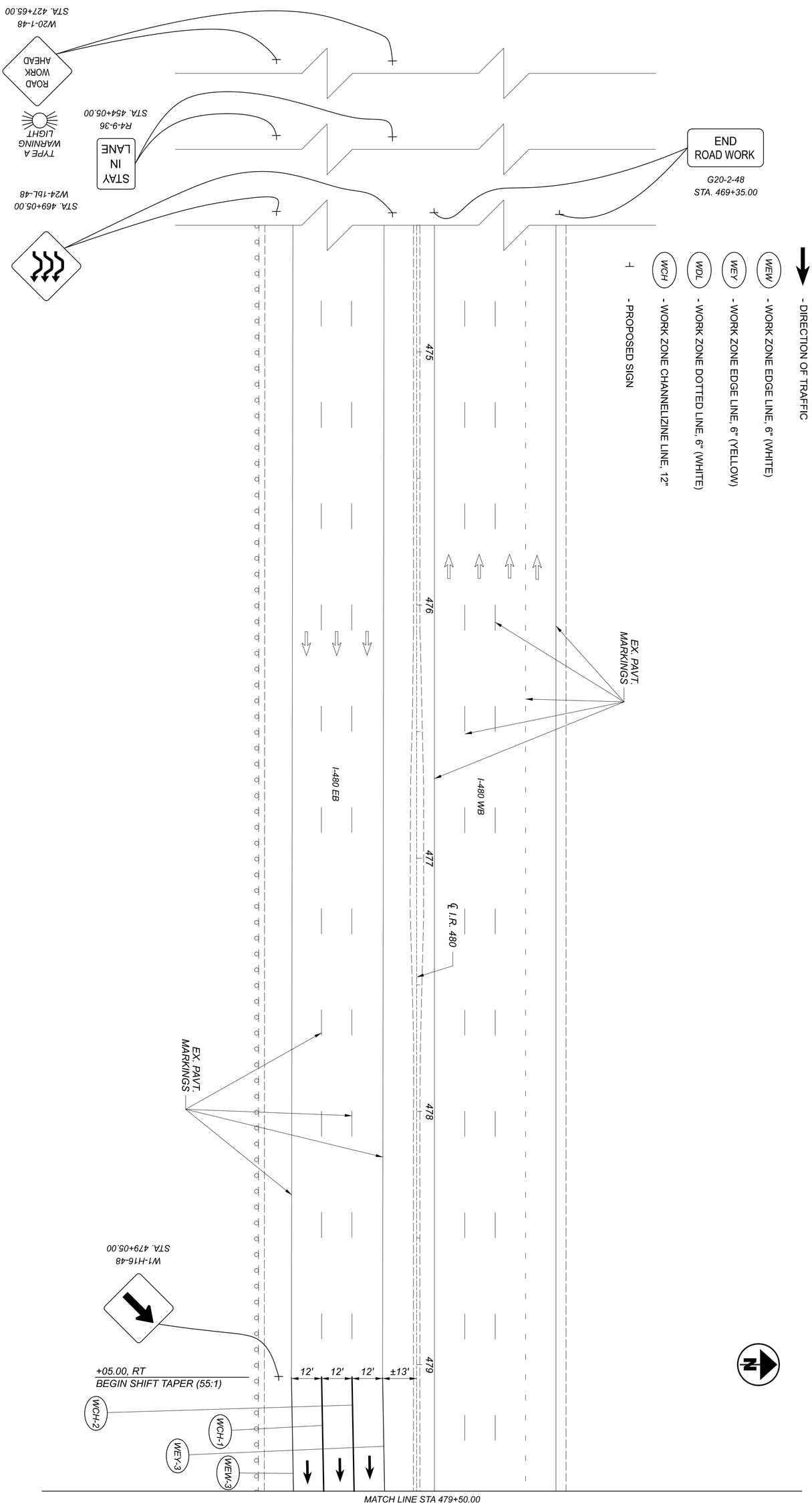



NOTES:

1. FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28
2. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.
3. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1

# MAINTENANCE OF TRAFFIC - I-480 - PHASE 1A,2B
# STA 474+50 TO STA 479+50

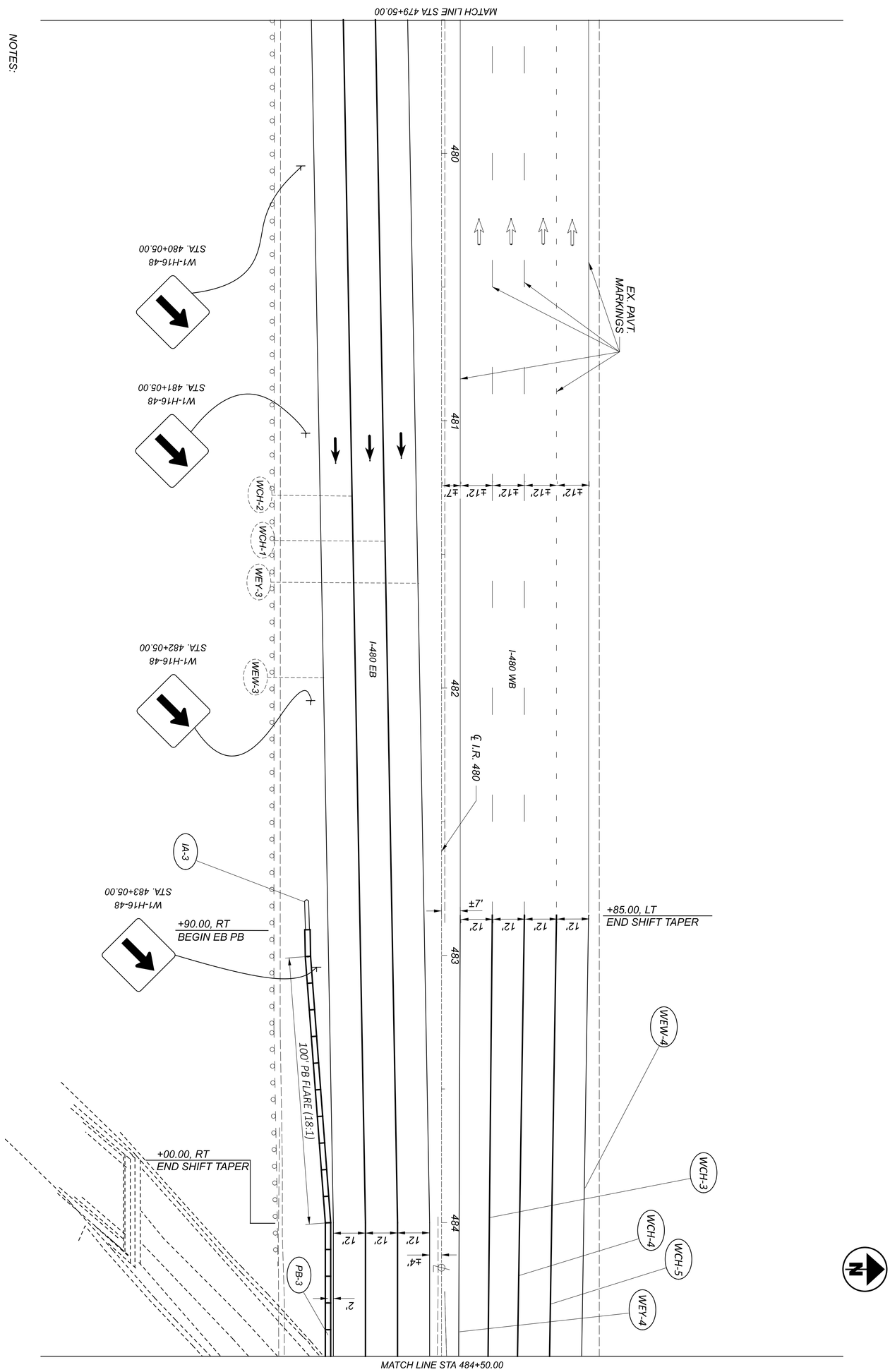
HORIZONTAL SCALE IN FEET
0 20
10 40

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.29 TOTAL 167

NOTES:

1. FOR LEGEND SEE SHEET P 29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P 21 TO P 28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM), SECTION 605-11.11.1






# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1A, 2B
# STA 479+50.00 TO STA 484+50.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: I-480 1A2A - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:52:52 PM USER: SAT89729
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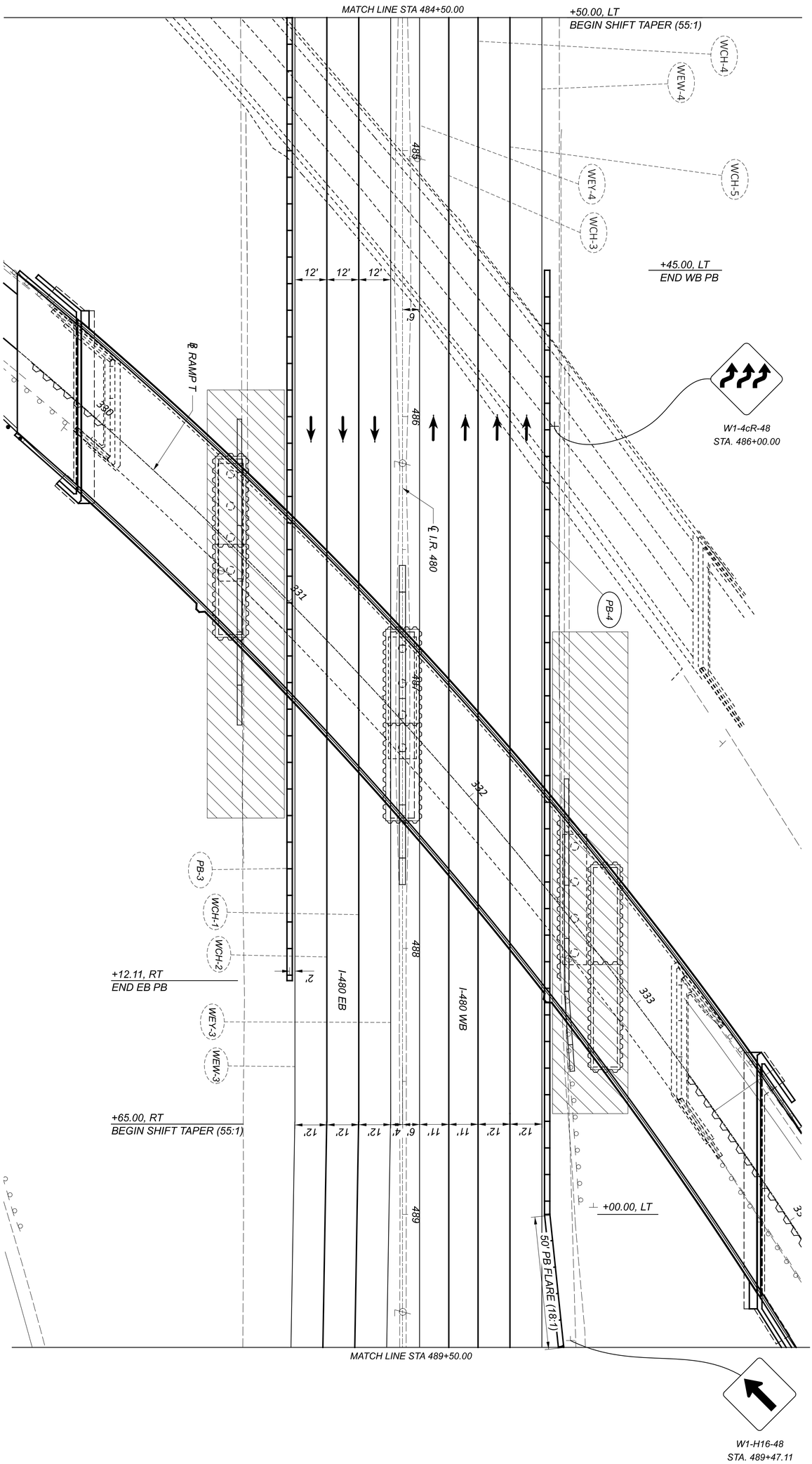


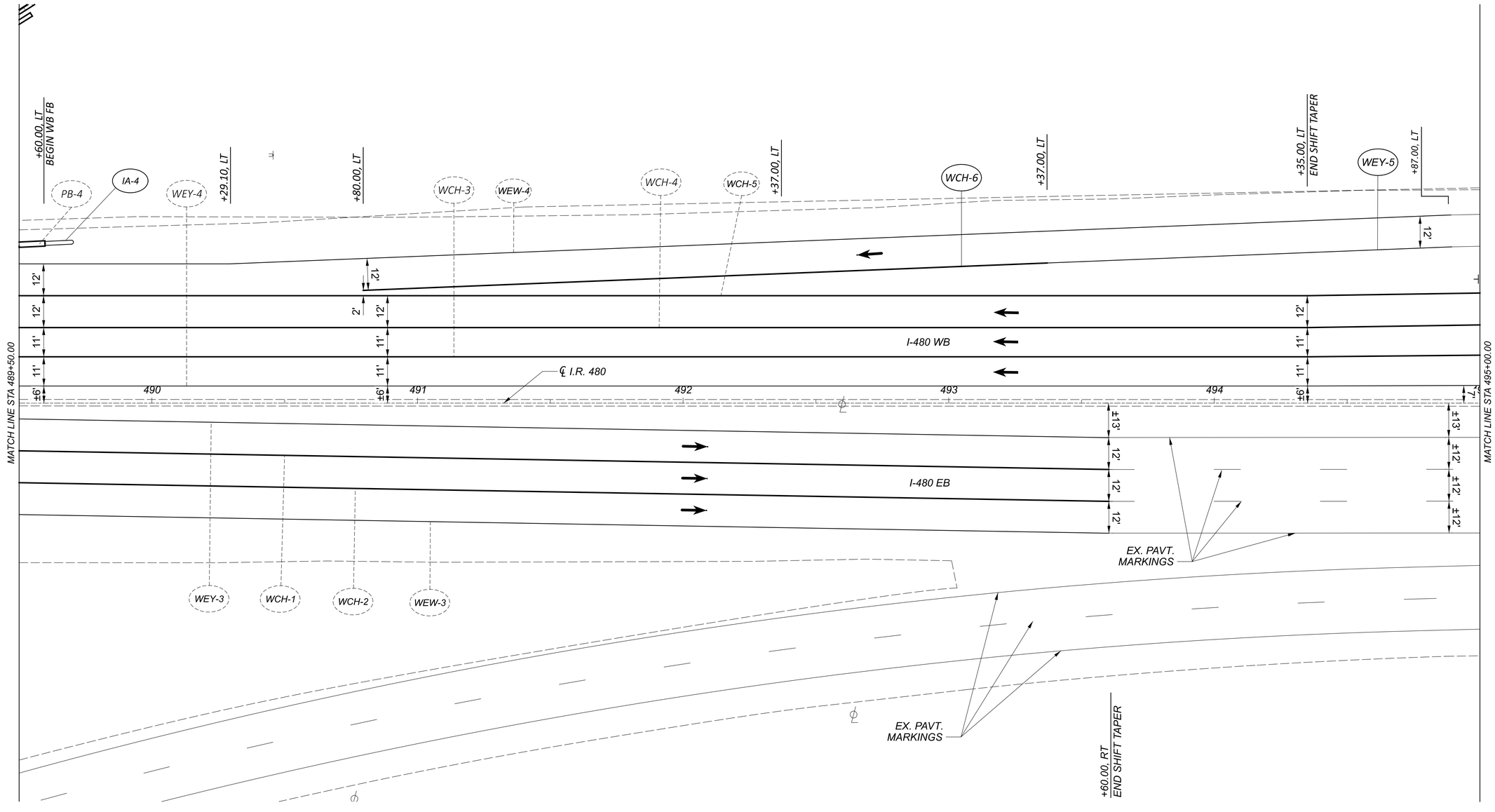

NOTES:

1. FOR LEGEND SEE SHEET P 29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P 21 TO P 28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7 14WB CONFIGURATION.
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.31 TOTAL 167

# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1A, 2B
# STA 484+50.00 TO STA 489+50.00

HORIZONTAL SCALE IN FEET
0 20
10 40




*NOTES:*

1. *FOR LEGEND SEE SHEET P.29*
2. *FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28*
3. *I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.*
4. *ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1*

HORIZONTAL SCALE IN FEET
0 10 20 40

# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1A, 2B
## STA 489+50.00 TO STA. 495+00.00


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.32 TOTAL: 167

CUY-71-10.07 SW


MODEL: I-480 1A2A - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:53:04 PM USER: SAT89729
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MODEL: I-480 1A2A - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:53:18 PM USER: SAT89729
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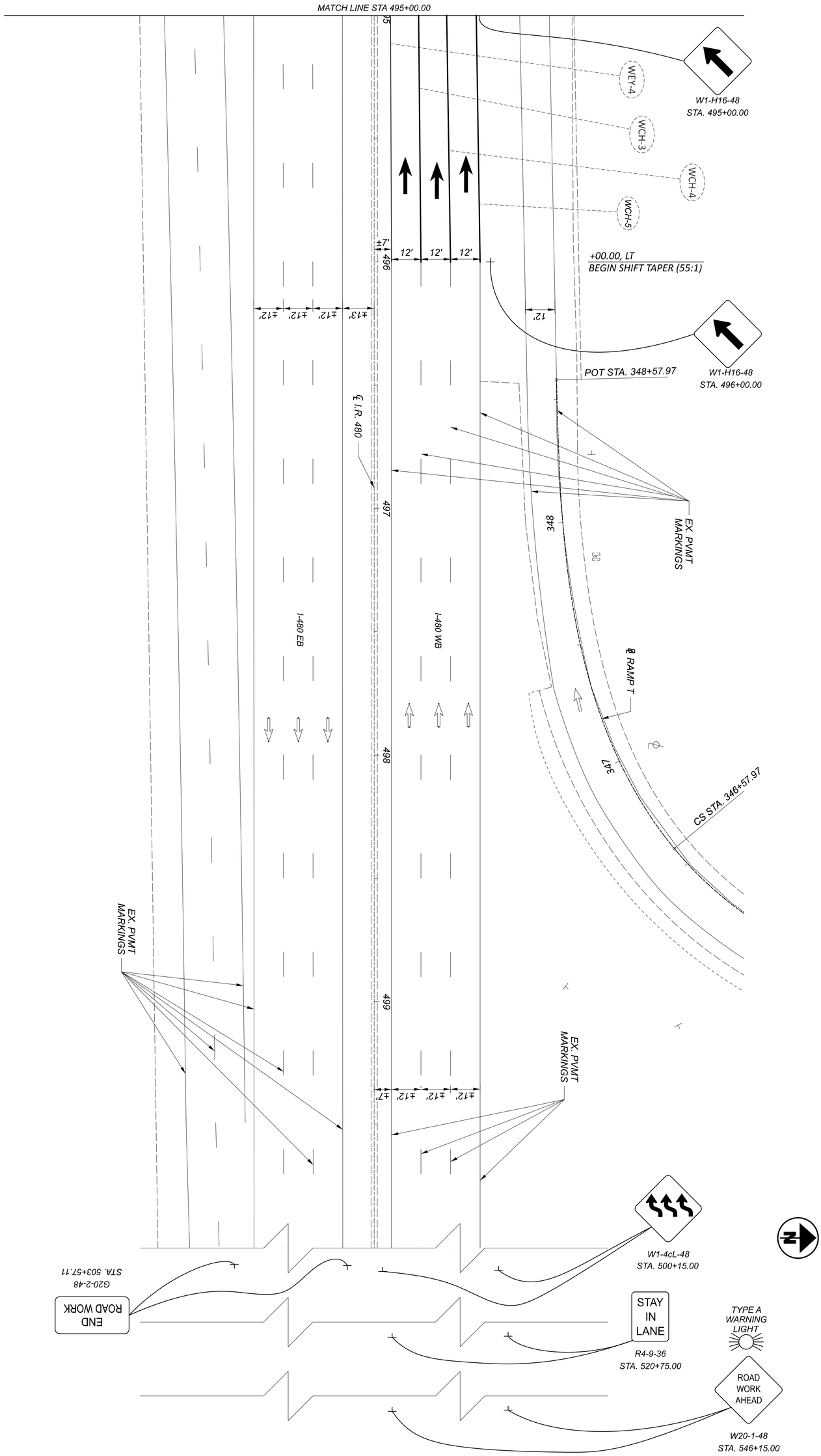


NOTES:

1. FOR LEGEND SEE SHEET P 29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P 21 TO P 28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE. 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.33 TOTAL 167

# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1A, 2B
# STA 495+00.00 TO STA 500+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: I-480 1B2B - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 12/29/2025 TIME: 10:16:48 AM USER: KC112955
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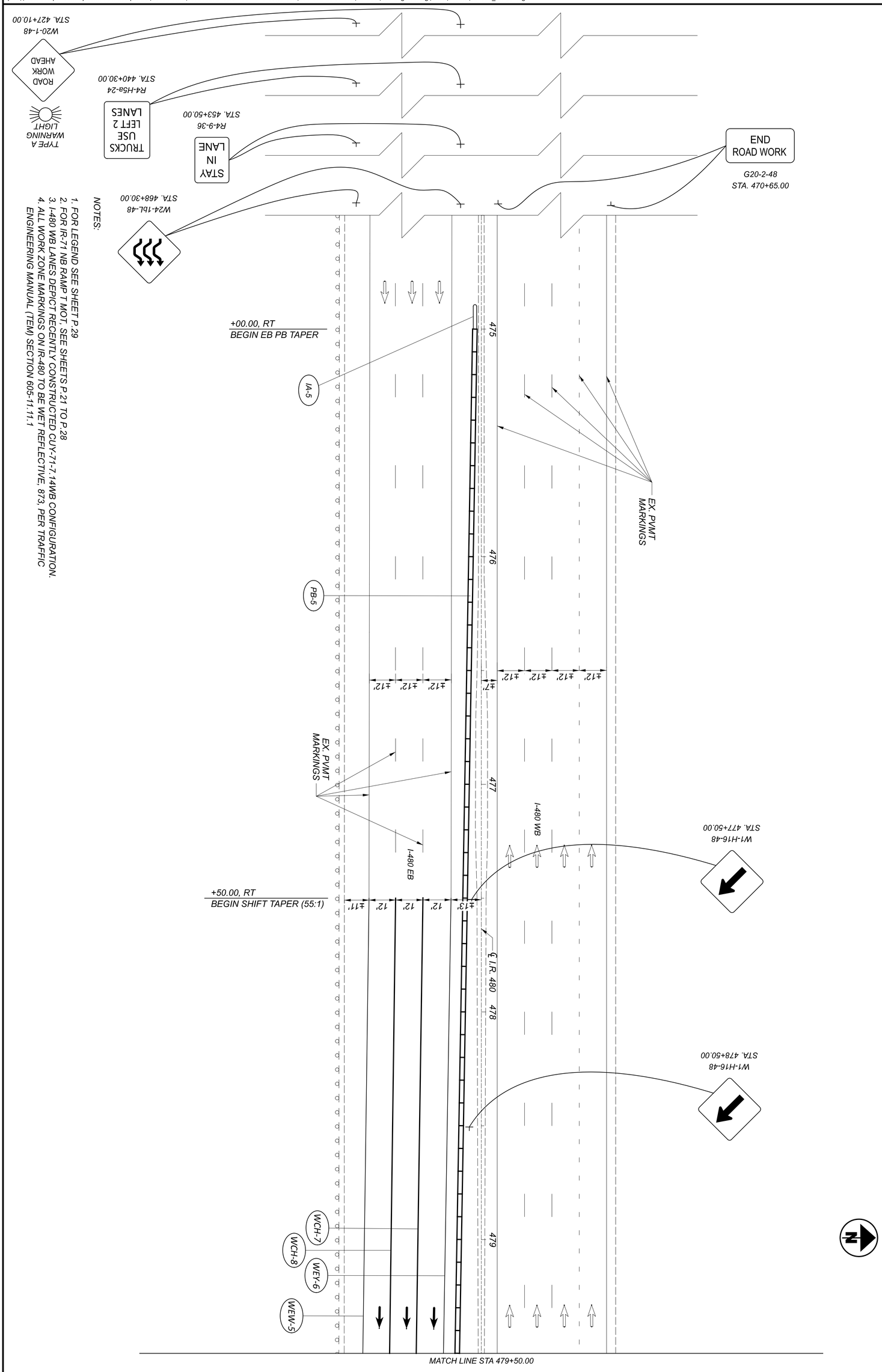



| | | | |
|---|---|---|---|
| SHEET P.34 TOTAL 167 | PROJECT ID 114536 | REVIEWER SJP 09/17/25 | DESIGNER SMS |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

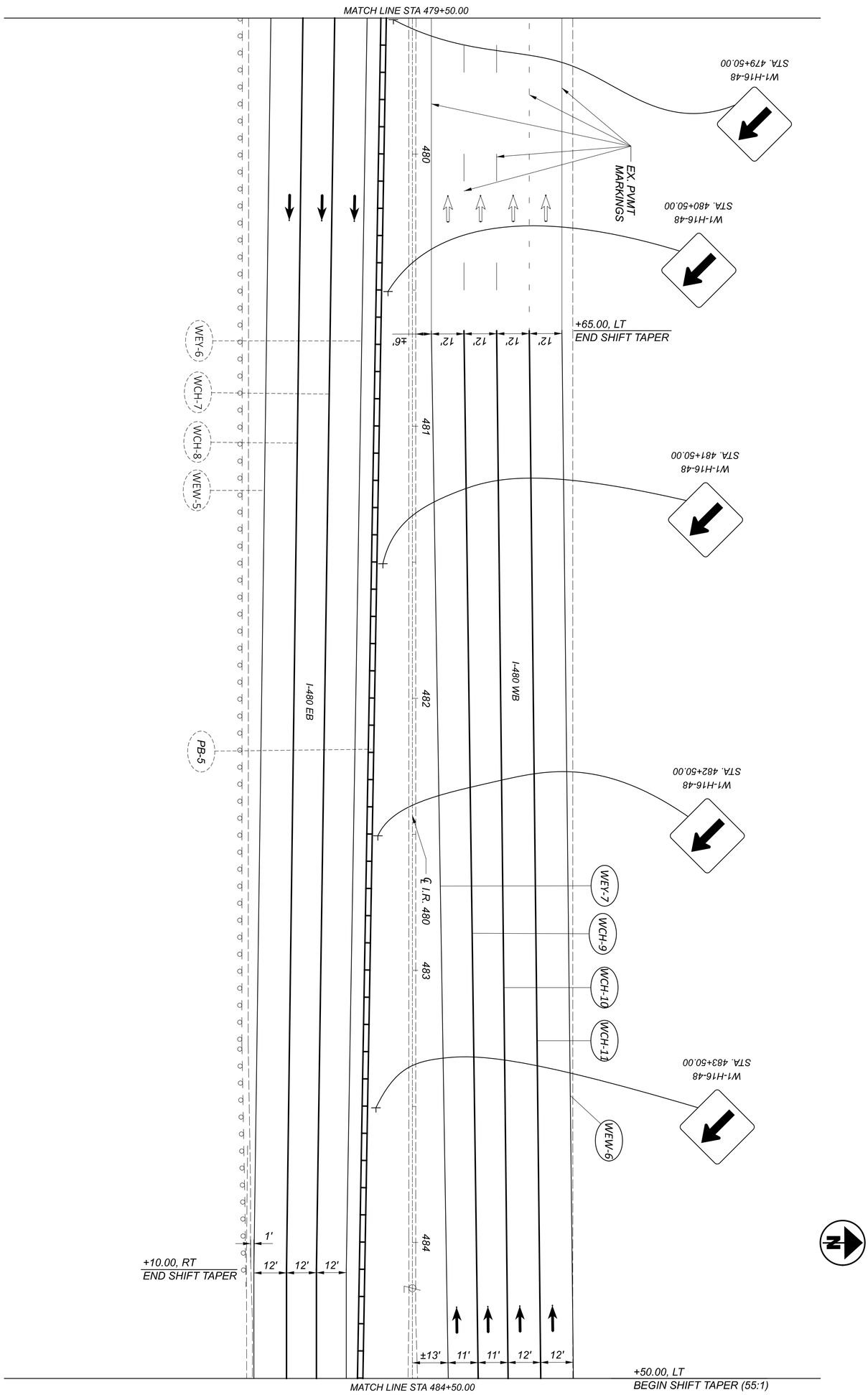
# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A
# STA 474+50.00 TO STA 479+50.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: I-480 1B2B - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:53:39 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\MOT\Sheets\114536_MP015.dgn

NOTES:

1. FOR LEGEND, SEE SHEET P.29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, B73, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1
5. IR-71 SB RAMP R NOT SHOWN FOR CLARITY.




DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.35 TOTAL 167

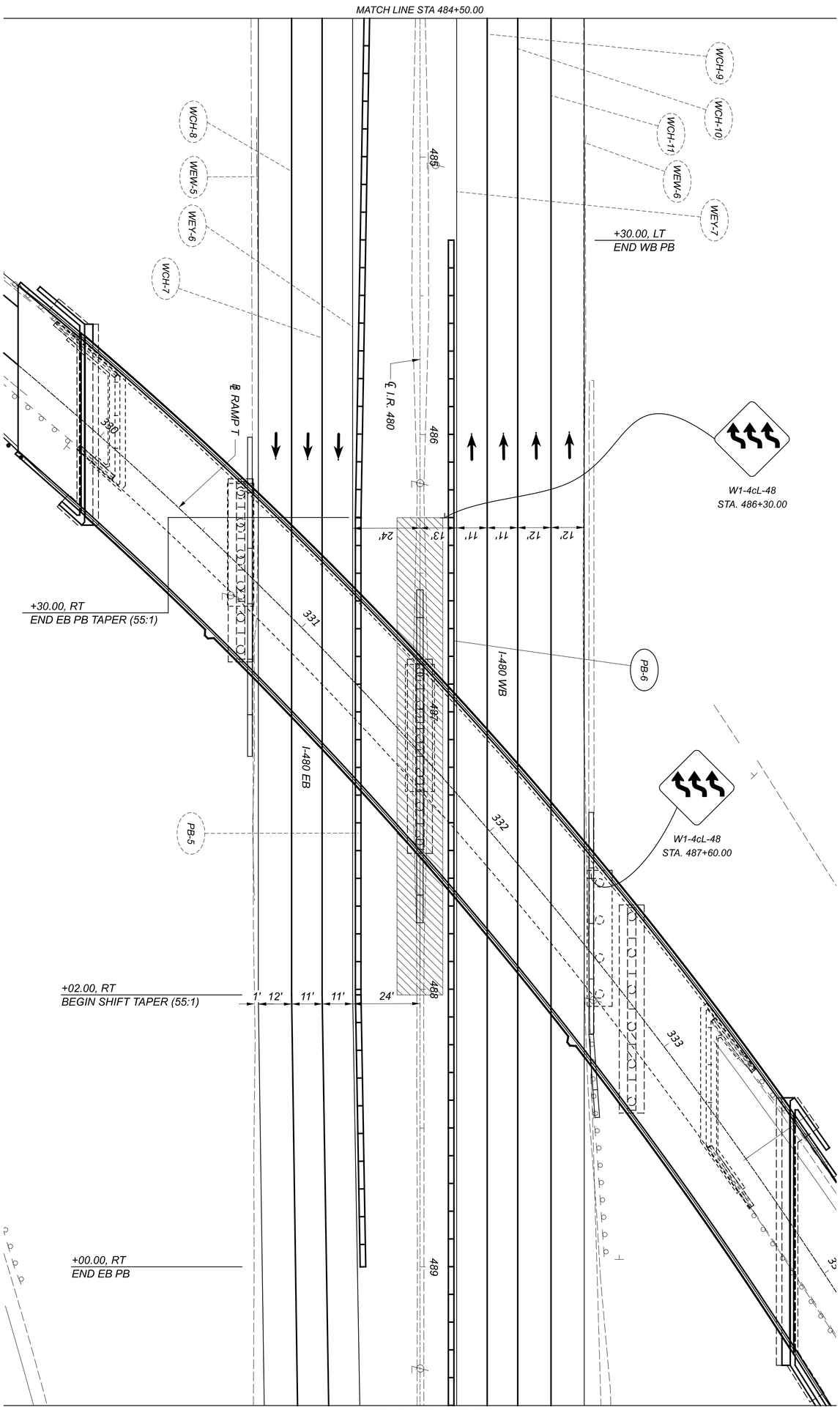
# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A
# STA 479+50.00 TO STA 484+50.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: I-480 1B2B - Plan 5 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:53:48 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\MOT\Sheets\114536_MP016.dgn

NOTES:

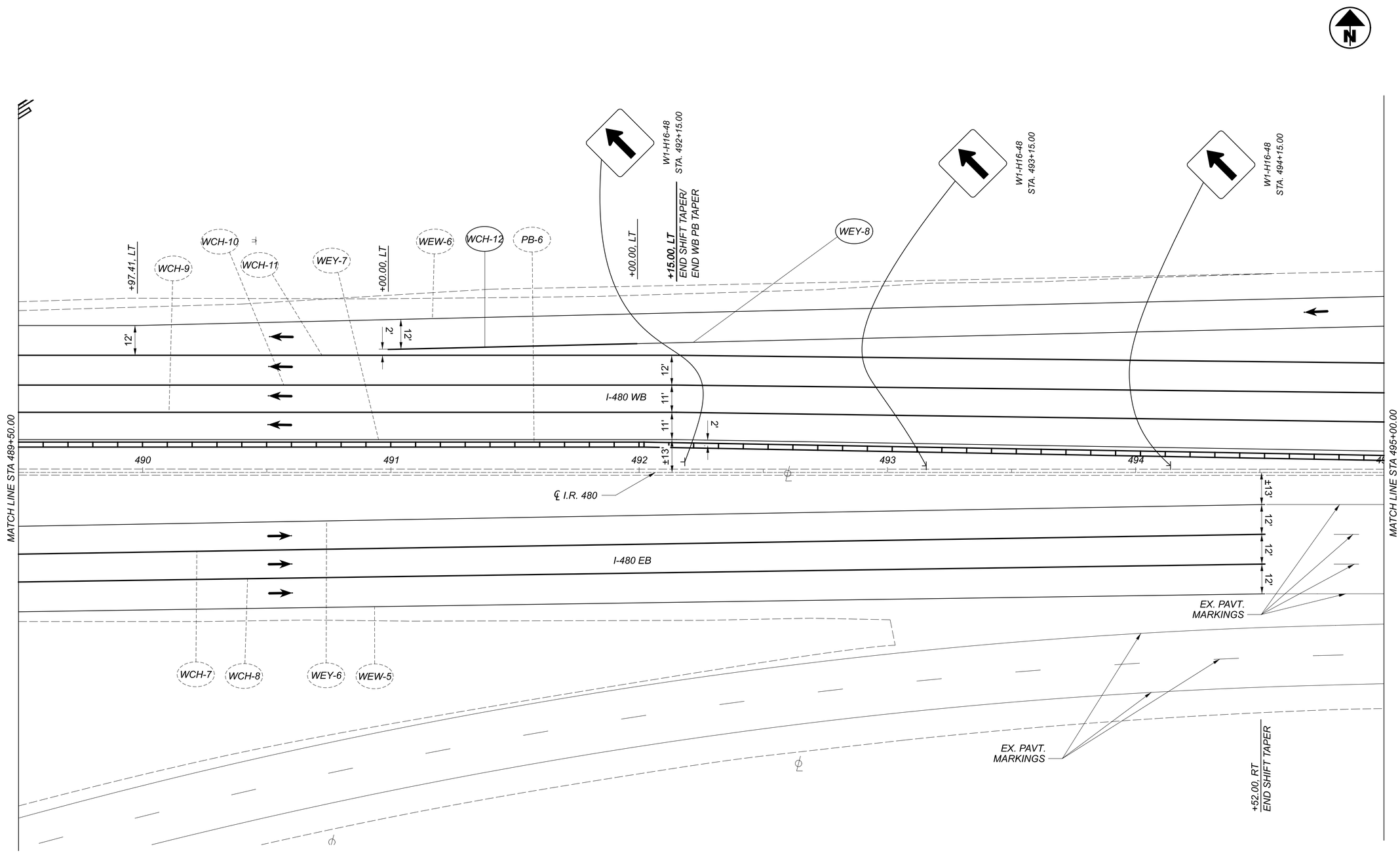
1. FOR LEGEND, SEE SHEET P.29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1
5. IR-71 SB RAMP R NOT SHOWN FOR CLARITY.




DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.36 TOTAL 167

# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A
## STA 484+50.00 TO STA 489+50.00

HORIZONTAL SCALE IN FEET
0 20
10 40




NOTES:

1. FOR LEGEND, SEE SHEET P.29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1

HORIZONTAL SCALE IN FEET
0 10 20 40

# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A
## STA 489+50.00 TO STA 495+00.00

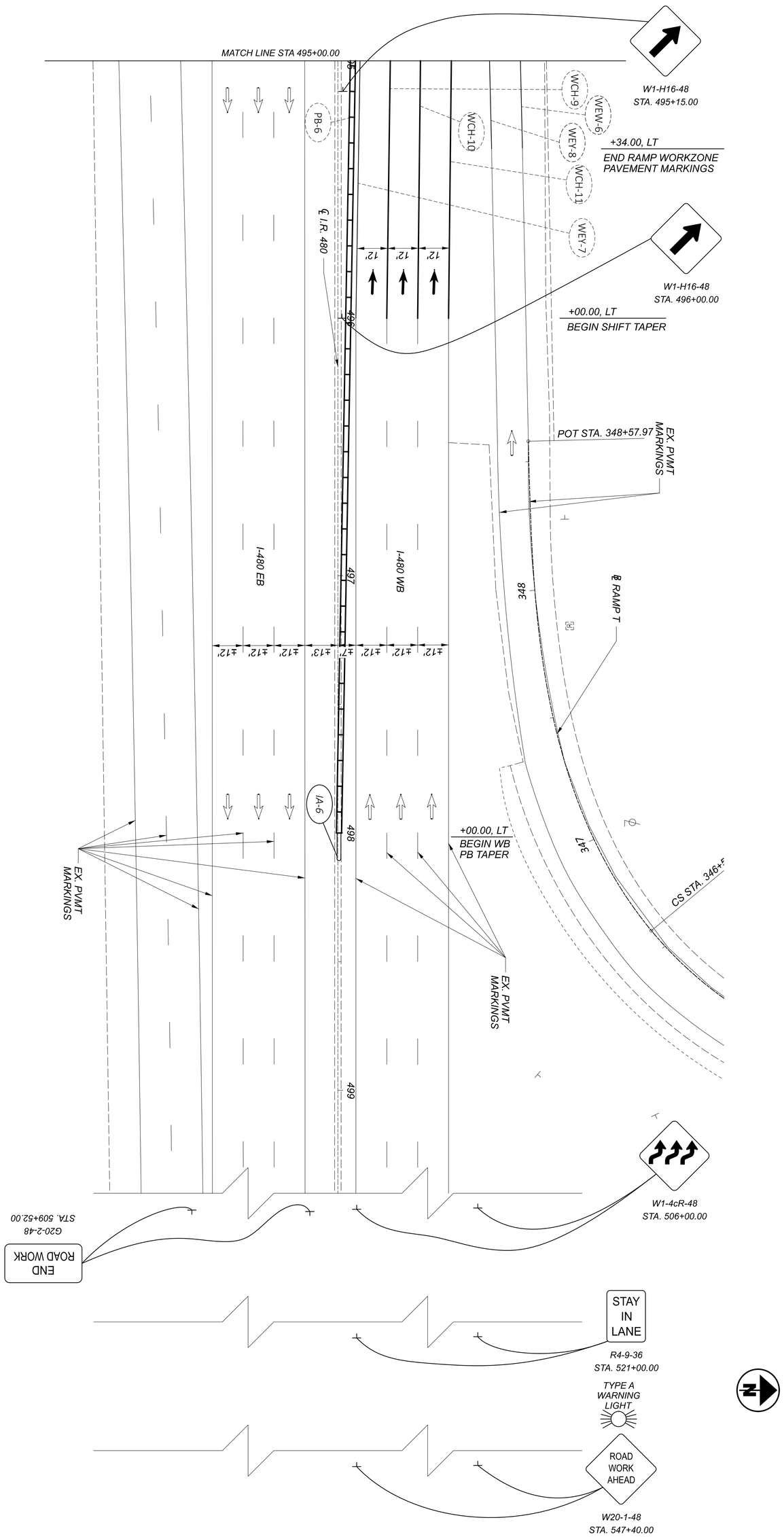

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.37 TOTAL: 167

CUY-71-10.07 SW


MODEL: I-480 1B2B - Plan 6 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:53:58 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\S07106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\MOT\Sheets\114536_MP017.dgn

MODEL: I-480 1B2B - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 12/29/2025 TIME: 10:16:57 AM USER: KC112955
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\MOT\Sheets\114536_MP018.dgn




NOTES:

1. FOR LEGEND, SEE SHEET P 29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P 21 TO P 28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE. 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.38 TOTAL 167

# MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A
# STA 495+00.00 TO STA 499+40.00

HORIZONTAL SCALE IN FEET
0 20
10 40

| SHEET NUM. | | | | | | | | PART. | | ITEM | ITEM EXT | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 8 | 11 | 42 | 43 | 44 | 45 | 01/BRO | 02/IMS | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **ROADWAY** | |
| LS | | | | | | | | LS | | 201 | 11000 | LS | | CLEARING AND GRUBBING | |
| | 164 | | | | 1,355 | | | 1,519 | | 202 | 23000 | 1,519 | SY | PAVEMENT REMOVED | |
| | | | | 282 | | | | 282 | | 202 | 30701 | 282 | FT | CONCRETE BARRIER REMOVED, AS PER PLAN | 7 |
| | | | | 1,104 | | | | 1,104 | | 202 | 38000 | 1,104 | FT | GUARDRAIL REMOVED | |
| | | | | 2 | | | | 2 | | 202 | 42206 | 2 | EACH | ANCHOR ASSEMBLY REMOVED | |
| | | | | | | | | | | | | | | | |
| | | | | 4 | | | | 4 | | 202 | 47000 | 4 | EACH | BRIDGE TERMINAL ASSEMBLY REMOVED | |
| | | | | | | 4,494 | | 4,494 | | 203 | 10000 | 4,494 | CY | EXCAVATION | |
| | | | | | | 3,826 | | 3,826 | | 203 | 20000 | 3,826 | CY | EMBANKMENT | |
| | 164 | | | | 2,357 | | | 2,521 | | 204 | 10000 | 2,521 | SY | SUBGRADE COMPACTION | |
| | | 100 | | | | | | 100 | | 204 | 13000 | 100 | CY | EXCAVATION OF SUBGRADE | |
| | | | | | | | | | | | | | | | |
| | | 100 | | | | | | 100 | | 204 | 30010 | 100 | CY | GRANULAR MATERIAL, TYPE B | |
| | | 5 | | | | | | 5 | | 204 | 45000 | 5 | HOUR | PROOF ROLLING | |
| | | 300 | | | | | | 300 | | 204 | 50000 | 300 | SY | GEOTEXTILE FABRIC | |
| | 9 | | | | | | | 9 | | 209 | 15001 | 9 | STA | RESHAPING UNDER GUARDRAIL, AS PER PLAN | 7 |
| | | | | 875 | | | | 875 | | 606 | 15050 | 875 | FT | GUARDRAIL, TYPE MGS | |
| | | | | | | | | | | | | | | | |
| | | | | 1 | | | | 1 | | 606 | 26150 | 1 | EACH | ANCHOR ASSEMBLY, MGS TYPE E | |
| | | | | 1 | | | | 1 | | 606 | 26550 | 1 | EACH | ANCHOR ASSEMBLY, MGS TYPE T | 7 |
| | | | | 2 | | | | 2 | | 606 | 35002 | 2 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 | |
| | | | | 2 | | | | 2 | | 606 | 35102 | 2 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 | |
| | | | | 210 | | | | 210 | | 622 | 10161 | 210 | FT | CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN | 7 |
| | | | | | | | | | | | | | | | |
| | | | | 1 | | | | 1 | | 622 | 25050 | 1 | EACH | CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D | |
| | | | | 120 | | | | 120 | | 622 | 90000 | 120 | FT | BARRIER, MISC.: CONCRETE BARRIER, TYPE B50 | 7 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **EROSION CONTROL** | |
| 2 | | | | | | | | 2 | | 659 | 00100 | 2 | EACH | SOIL ANALYSIS TEST | |
| 248 | | | | | | | | 248 | | 659 | 00300 | 248 | CY | TOPSOIL | |
| | | | | | | 2,233 | | 2,233 | | 659 | 10000 | 2,233 | SY | SEEDING AND MULCHING | |
| 112 | | | | | | | | 112 | | 659 | 14000 | 112 | SY | REPAIR SEEDING AND MULCHING | |
| 112 | | | | | | | | 112 | | 659 | 15000 | 112 | SY | INTER-SEEDING | |
| | | | | | | | | | | | | | | | |
| 0.31 | | | | | | | | 0.31 | | 659 | 20000 | 0.31 | TON | COMMERCIAL FERTILIZER | |
| 0.46 | | | | | | | | 0.46 | | 659 | 31000 | 0.46 | ACRE | LIME | |
| 12.1 | | | | | | | | 12.1 | | 659 | 35000 | 12.1 | MGAL | WATER | |
| 15 | | | | | | | | 15 | | 659 | 40000 | 15 | MSF | MOWING | |
| | | | | | | | | 10,000 | | 832 | 30000 | 10,000 | EACH | EROSION CONTROL | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **DRAINAGE** | |
| | | | | | | | 0.25 | 0.25 | | 511 | 46610 | 0.25 | CY | CLASS QC1 CONCRETE, HEADWALL | |
| | | | | | | | 34 | 34 | | 601 | 21060 | 34 | SY | TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT | |
| | 184 | | | | | | 734 | 918 | | 605 | 14020 | 918 | FT | 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC | |
| | | | | | | | 40 | 40 | | 611 | 00510 | 40 | FT | 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS | |
| | | | | | | | 43 | 43 | | 611 | 06700 | 43 | FT | 15" CONDUIT, TYPE F | |
| | | | | | | | | | | | | | | | |
| | | | | | | | 1 | 1 | | 611 | 98180 | 1 | EACH | CATCH BASIN, NO. 3A | |
| | | | | | | | 4 | 4 | | 611 | 99710 | 4 | EACH | PRECAST REINFORCED CONCRETE OUTLET | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **PAVEMENT** | |
| | | | 1,667 | | | | | 1,667 | | 254 | 01000 | 1,667 | SY | PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" DEPTH | |
| | 40 | | | | | | | 40 | | 302 | 56000 | 40 | CY | ASPHALT CONCRETE BASE, PG64-22, (449) | |
| | 48 | | | | 396 | | | 444 | | 304 | 20000 | 444 | CY | AGGREGATE BASE | |
| | 13 | | 125 | | | | | 138 | | 407 | 20000 | 138 | GAL | NON-TRACKING TACK COAT | |
| | 25 | | | | | | | 25 | | 441 | 70801 | 25 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN | 7 |
| | | | | | | | | | | | | | | | |
| | 8 | | | | | | | 8 | | 442 | 20200 | 8 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448) | |
| | 7 | | 70 | | | | | 77 | | 442 | 22101 | 77 | CY | ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22 | 11 |
| | | | | | 1,920 | | | 1,920 | | 451 | 14010 | 1,920 | SY | 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | |
| | | | | 26 | | | | 26 | | 609 | 24510 | 26 | FT | CURB, TYPE 4-C | |
| | | | 1.14 | | | | | 1.14 | | 618 | 40600 | 1.14 | MILE | RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

GENERAL SUMMARY

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 7:41:34 AM USER: PIA81677
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_GG001.dgn

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.39 | TOTAL 167

| SHEET NUM. | | | | | | | | PART. | | ITEM | ITEM EXT | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42 | | 76 | | 86 | | 99 | | 01/BRO | 02/IMS | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **LIGHTING** | |
| | | | | 10 | | | | 10 | | 625 | 00450 | 10 | EACH | CONNECTION, FUSED PULL APART | |
| | | | | 15 | | | | 15 | | 625 | 00480 | 15 | EACH | CONNECTION, UNFUSED PERMANENT | |
| | | | | 2 | | | | 2 | | 625 | 10490 | 2 | EACH | LIGHT POLE, CONVENTIONAL, DESIGN A15B40 | |
| | | | | 3 | | | | 3 | | 625 | 10490 | 3 | EACH | LIGHT POLE, CONVENTIONAL, DESIGN AT15B40 | |
| | | | | 2 | | | | 2 | | 625 | 10614 | 2 | EACH | LIGHT POLE ANCHOR BOLTS ON STRUCTURE | 86 |
| | | | | | | | | | | | | | | | |
| | | | | 3 | | | | 3 | | 625 | 14000 | 3 | EACH | LIGHT POLE FOUNDATION, 24" X 6' DEEP | |
| | | | | 5 | | | | 5 | | 625 | 18200 | 5 | EACH | BRACKET ARM, 15' | |
| | | | | 3,834 | | | | 3,834 | | 625 | 23302 | 3,834 | FT | NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE | |
| | | | | 750 | | | | 750 | | 625 | 23400 | 750 | FT | NO. 10 AWG POLE AND BRACKET CABLE | |
| | | | | 668 | | | | 668 | | 625 | 25400 | 668 | FT | CONDUIT, 2", 725.04 | |
| | | | | | | | | | | | | | | | |
| | | | | 580 | | | | 580 | | 625 | 25402 | 580 | FT | CONDUIT, 2", 725.05 | |
| | | | | 5 | | | | 5 | | 625 | 26252 | 5 | EACH | LUMINAIRE, CONVENTIONAL, SOLID STATE (LED) TYPE II, 125W | |
| | | | | 768 | | | | 768 | | 625 | 29002 | 768 | FT | TRENCH, 24" DEEP | |
| | | | | 2 | | | | 2 | | 625 | 29900 | 2 | EACH | JUNCTION BOX, HL-30.31 | |
| | | | | 2 | | | | 2 | | 625 | 29920 | 2 | EACH | STRUCTURE JUNCTION BOX | |
| | | | | | | | | | | | | | | | |
| | | | | 3 | | | | 3 | | 625 | 30700 | 3 | EACH | PULL BOX, 725.08, 18" | |
| | | | | 2 | | | | 2 | | 625 | 31510 | 2 | EACH | PULL BOX REMOVED | |
| | | | | 5 | | | | 5 | | 625 | 32000 | 5 | EACH | GROUND ROD | |
| | | | | 768 | | | | 768 | | 625 | 36010 | 768 | FT | UNDERGROUND WARNING/MARKING TAPE | |
| | | | | 1 | | | | 1 | | 625 | 39520 | 1 | EACH | PULL BOX CLEANED | 86 |
| | | | | | | | | | | | | | | | |
| | | | | LS | | | | LS | | SPECIAL | 62540000 | LS | | MAINTAIN EXISTING LIGHTING | 86 |
| | | | | 5 | | | | 5 | | 625 | 75400 | 5 | EACH | LIGHT POLE REMOVED | |
| | | | | 3 | | | | 3 | | 625 | 75500 | 3 | EACH | LIGHT POLE FOUNDATION REMOVED | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **TRAFFIC CONTROL** | |
| 26 | | | | | | | | 26 | | 626 | 00110 | 26 | EACH | BARRIER REFLECTOR, TYPE 2, (BI-DIRECTIONAL) | |
| | | 40 | | | | | | 40 | | 630 | 02100 | 40 | FT | GROUND MOUNTED SUPPORT, NO. 2 POST | |
| | | 29 | | | | | | 29 | | 630 | 03100 | 29 | FT | GROUND MOUNTED SUPPORT, NO. 3 POST | |
| | | 35 | | | | | | 35 | | 630 | 80100 | 35 | SF | SIGN, FLAT SHEET | |
| | | 5 | | | | | | 5 | | 630 | 86002 | 5 | EACH | REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | |
| | | | | | | | | | | | | | | | |
| | | 0.38 | | | | | | 0.38 | | 646 | 10010 | 0.38 | MILE | EDGE LINE, 6" | |
| | | 123 | | | | | | 123 | | 646 | 10310 | 123 | FT | CHANNELIZING LINE, 12" | |
| | | 715 | | | | | | 715 | | 646 | 10620 | 715 | FT | CHEVRON MARKING | |
| | | 1.21 | | | | | | 1.21 | | 807 | 12010 | 1.21 | MILE | WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" | |
| | | 1.23 | | | | | | 1.23 | | 807 | 12110 | 1.23 | MILE | WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" | |
| | | | | | | | | | | | | | | | |
| | | 1,738 | | | | | | 1,738 | | 807 | 12310 | 1,738 | FT | WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" | |
| | | 633 | | | | | | 633 | | 807 | 12430 | 633 | FT | WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | **STRUCTURE OVER 20 FOOT SPAN (SFN 1814258)** | |
| | | | | | | LS | | LS | | 202 | 11003 | LS | | STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN | 96 |
| | | | | | | 87 | | 87 | | 202 | 22900 | 87 | SY | APPROACH SLAB REMOVED | |
| | | | | | | LS | | LS | | 503 | 11101 | LS | | COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN | 96 |
| | | | | | | 1,540 | | 1,540 | | 503 | 21100 | 1,540 | CY | UNCLASSIFIED EXCAVATION | |
| | | | | | | LS | | LS | | 505 | 11100 | LS | | PILE DRIVING EQUIPMENT MOBILIZATION | |
| | | | | | | | | | | | | | | | |
| | | | | | | 6,705 | | 6,705 | | 507 | 00100 | 6,705 | FT | STEEL PILES HP10X42, FURNISHED | |
| | | | | | | 6,100 | | 6,100 | | 507 | 00150 | 6,100 | FT | STEEL PILES HP10X42, DRIVEN | |
| | | | | | | 555 | | 555 | | 507 | 92201 | 555 | FT | PREBORED HOLES, AS PER PLAN | 97 |
| | | | | | | 287,336 | | 287,336 | | 509 | 10000 | 287,336 | LB | EPOXY COATED STEEL REINFORCEMENT | |
| | | | | | | 14,644 | | 14,644 | | 509 | 30020 | 14,644 | FT | NO. 4 DEFORMED GFRP REINFORCEMENT | |
| | | | | | | | | | | | | | | | |
| | | | | | | 564 | | 564 | | 511 | 34447 | 564 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN | 97 |
| | | | | | | 137 | | 137 | | 511 | 34450 | 137 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) | |
| | | | | | | 177 | | 177 | | 511 | 41012 | 177 | CY | CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS | |
| | | | | | | 253 | | 253 | | 511 | 44112 | 253 | CY | CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING | |
| | | | | | | 422 | | 422 | | 511 | 46512 | 422 | CY | CLASS QC1 CONCRETE WITH QC/QA, FOOTING | |
| | | | | | | | | | | | | | | | |
| | | | | | | 1,647 | | 1,647 | | 512 | 10100 | 1,647 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) | |
| | | | | | | 70 | | 70 | | 512 | 10300 | 70 | SY | SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN | |
| | | | | | | 91 | | 91 | | 512 | 33000 | 91 | SY | TYPE 2 WATERPROOFING | |
| | | | | | | 771,146 | | 771,146 | | 513 | 10300 | 771,146 | LB | STRUCTURAL STEEL MEMBERS, LEVEL 5 | |
| | | | | | | 9,048 | | 9,048 | | 513 | 20000 | 9,048 | EACH | WELDED STUD SHEAR CONNECTORS | |

GENERAL SUMMARY

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 7:45:09 AM USER: PIA81677
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106221-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\1145360400-Engineering\Roadway\Sheets\1145360400-Engineering\Roadway\Sheets\1114536_GG002.dgn

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS

REVIEWER: SJP 09/17/25

PROJECT ID: 114536

SHEET: P.40 TOTAL: 167

| SHEET NUM. | | | | | | | | PART. | | ITEM | ITEM EXT | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | | 9 | 10 | 11 | 13 | 99 | 145 | 01/BRO | 02/IMS | | | | | | |
| | | | | | | | | | | | | | | **STRUCTURE OVER 20 FOOT SPAN (SFN 1814258) (CONT.)** | |
| | | | | | | 34,727 | | 34,727 | | 514 | 00060 | 34,727 | SF | FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT | |
| | | | | | | 34,727 | | 34,727 | | 514 | 00066 | 34,727 | SF | FIELD PAINTING STRUCTURAL STEEL, FINISH COAT | |
| | | | | | | 153 | | 153 | | 516 | 11210 | 153 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL | |
| | | | | | | 6 | | 6 | | 516 | 44100 | 6 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)(15 IN x 24 IN x 2.7784 IN) | |
| | | | | | | 6 | | 6 | | 516 | 44100 | 6 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)(16 IN x 24 IN x 2.9084 IN) | |
| | | | | | | 12 | | 12 | | 516 | 44101 | 12 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN(11 IN x 18 IN x 2.1284 IN) (PTFE) | 97 |
| | | | | | | 6 | | 6 | | 516 | 44200 | 6 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)(17 IN x 26 IN x 3.0884 IN) | |
| | | | | | | 226 | | 226 | | 518 | 20000 | 226 | SY | PREFABRICATED GEOCOMPOSITE DRAIN | |
| | | | | | | 38 | | 38 | | 518 | 21200 | 38 | CY | POROUS BACKFILL WITH GEOTEXTILE FABRIC | |
| | | | | | | 202 | | 202 | | 518 | 40000 | 202 | FT | 6" PERFORATED CORRUGATED PLASTIC PIPE | |
| | | | | | | 98 | | 98 | | 518 | 40010 | 98 | FT | 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS | |
| | | | | | | 327 | | 327 | | 526 | 30010 | 327 | SY | REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17") | |
| | | | | | | 154 | | 154 | | 526 | 90010 | 154 | FT | TYPE A INSTALLATION | |
| | | | | | | 656 | | 656 | | 601 | 20000 | 656 | SY | CRUSHED AGGREGATE SLOPE PROTECTION | |
| | | | | | | | | | | | | | | **STRUCTURE OVER 20 FOOT SPAN (SFN 1814249)** | |
| | | | | | | | 31,400 | | 31,400 | 514 | 00050 | 31,400 | SF | SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL | |
| | | | | | | | 31,400 | | 31,400 | 514 | 00056 | 31,400 | SF | FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT | |
| | | | | | | | 31,900 | | 31,900 | 514 | 00060 | 31,900 | SF | FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT | |
| | | | | | | | 31,900 | | 31,900 | 514 | 00066 | 31,900 | SF | FIELD PAINTING STRUCTURAL STEEL, FINISH COAT | |
| | | | | | | | 29 | | 29 | 514 | 00504 | 29 | MNHR | GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL | |
| | | | | | | | 21 | | 21 | 514 | 10000 | 21 | EACH | FINAL INSPECTION REPAIR | |
| | | | | | | | | | | | | | | **MAINTENANCE OF TRAFFIC** | |
| | | | | 160 | | | | 160 | | 614 | 11110 | 160 | HOUR | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | |
| | | | | | 8 | | | 8 | | 614 | 12380 | 8 | EACH | WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) | 10 |
| | | | | | | | | LS | | 614 | 12420 | LS | | DETOUR SIGNING | |
| | | | | 6 | | | | 6 | | 614 | 12484 | 6 | EACH | WORK ZONE INCREASED PENALTIES SIGN | |
| | | | 12 | | | | | 12 | | 614 | 12500 | 12 | EACH | REPLACEMENT SIGN | |
| | | | | | 1,301 | | | 1,301 | | 614 | 12801 | 1,301 | EACH | WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN | 10 |
| | | | 30 | | | | | 30 | | 614 | 18601 | 30 | SNMT | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN | 10 |
| | | | | | 1.11 | | | 1.11 | | 614 | 22110 | 1.11 | MILE | WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT | |
| | | | | | 3.39 | | | 3.39 | | 614 | 22326 | 3.39 | MILE | WORK ZONE EDGE LINE, CLASS I, 6", 873 | |
| | | | | | 22,333 | | | 22,333 | | 614 | 23130 | 22,333 | FT | WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873 | |
| | | | | | 266 | | | 266 | | 614 | 24202 | 266 | FT | WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT | |
| | | 5 | | | | | | 5 | | 616 | 10000 | 5 | MGAL | WATER | |
| | | 0.5 | | | | | | 0.5 | | 616 | 20000 | 0.5 | TON | CALCIUM CHLORIDE | |
| | | | | | 5,698 | | | 5,698 | | 622 | 41100 | 5,698 | FT | PORTABLE BARRIER, UNANCHORED | |
| | | | | | 900 | | | 900 | | 622 | 41110 | 900 | FT | PORTABLE BARRIER, ANCHORED | |
| | | | | | | | | | | | | | | **INCIDENTALS** | |
| | | | | | | | | LS | | 614 | 11000 | LS | | MAINTAINING TRAFFIC | 9 |
| 36 | | | | | | | | 36 | | 619 | 16021 | 36 | MNTH | FIELD OFFICE, TYPE C, AS PER PLAN | 6 |
| | | | | | | | | LS | | 623 | 10001 | LS | | CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN | 8 |
| | | | | | | | | LS | | 624 | 10000 | LS | | MOBILIZATION | |

GENERAL SUMMARY

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 7:43:10 AM USER: PIA81677
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_GG003.dgn

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.41 TOTAL 167

# ROADWAY SUBSUMMARY

| SHEET NO. | REFERENCE NO. | LOCATION | STATION FROM | STATION TO | SIDE | 202 GUARDRAIL REMOVED (FT) | 202 ANCHOR ASSEMBLY REMOVED (EACH) | 202 BRIDGE TERMINAL ASSEMBLY REMOVED (EACH) | 202 CONCRETE BARRIER REMOVED, AS PER PLAN (FT) | 606 GUARDRAIL, TYPE MGS (FT) | 606 ANCHOR ASSEMBLY, MGS TYPE E (EACH) | 606 ANCHOR ASSEMBLY, MGS TYPE T (EACH) | 606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (EACH) | 606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 (EACH) | 609 CURB, TYPE 4-C (FT) | 622 BARRIER MISC. CONCRETE BARRIER TYPE B50 (FT) | 622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN (FT) | 622 CONCRETE BARRIER END ANCHORAGE,REINFORCED, TYPE D (EA) | 626 BARRIER REFLECTOR, TYPE 2, (BI-DIRECTIONAL) (EACH) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42-43 | GR-1 | RAMP T | 326+81.25 | 329+83.15 | RT | | | | | 225 | 1 | | 1 | | | | | | 4 |
| 43 | GR-2 | RAMP T | 328+43.50 | 329+45.40 | LT | | | | | 75 | | | 1 | | | | | | 2 |
| 43 | R-1 | RAMP T | 327+26.31 | 329+96.31 | RT | 270 | 1 | 1 | | | | | | | | | | | |
| 43 | R-2 | RAMP T | 328+43.50 | 329+74.00 | LT | 131 | | 1 | | | | | | | | | | | |
| 43 | C-1 | RAMP T | 329+62.88 | 329+81.02 | RT | | | | | | | | | | 18 | | | | |
| 44 | GR-3 | RAMP T | 333+75.83 | 335+38.33 | LT | | | | | 162.5 | | | | 1 | | | | | 3 |
| 44-45 | GR-4 | RAMP T | 334+45.80 | 338+58.30 | RT | | | | | 412.5 | | 1 | | 1 | | | | | 6 |
| 44 | C-2 | RAMP T | 334+47.80 | 334+55.30 | RT | | | | | | | | | | 8 | | | | |
| 44 | R-3 | RAMP T | 333+21.50 | 335+38.33 | LT | 217 | | 1 | | | | | | | | | | | |
| 44-45 | R-4 | RAMP T | 333+81.79 | 338+68.79 | RT | 487 | 1 | 1 | | | | | | | | | | | |
| 46 | B-1 | IR-480 | 486+00.00 | 487+15.00 | RT | | | | | | | | | | | | 100 | 1 | 2 |
| 46 | B-2 | IR-480 | 486+56.00 | 487+76.00 | CL | | | | | | | | | | | 120 | | | 6 |
| 46 | B-3 | IR-480 | 487+36.22 | 488+46.22 | LT | | | | | | | | | | | | 110 | | 3 |
| 46 | R-5 | IR-480 | 486+00.00 | 487+15.00 | RT | | | | 60 | | | | | | | | | | |
| 46 | R-6 | IR-480 | 486+56.00 | 487+76.00 | CL | | | | 120 | | | | | | | | | | |
| 46 | R-7 | IR-480 | 487+36.22 | 488+46.22 | LT | | | | 102 | | | | | | | | | | |
| **TOTALS CARRIED TO GENERAL SUMMARY** | | | | | | 1104 | 2 | 4 | 282 | 875 | 1 | 1 | 2 | 2 | 26 | 120 | 210 | 1 | 26 |

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:54:50 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW1114536\400-Engineering\Roadway\Sheets\1114536_GS001.dgn

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.42 TOTAL: 167

| LOCATION | STATION FROM | STATION TO | SIDE | LENGTH | WIDTH | AREA | 202 PAVEMENT REMOVED | | 204 SUBGRADE COMPACTION | | 304 6" AGGREGATE BASE | | 451 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FT | FT | SQ FT | SY | | SY | | CY | | SY |
| RAMP T | REAR APPROACH | | BOTH | CADD | | 5005.5 | 557 | | | | | | |
| RAMP T | 326+10.00 | 328+50.00 | RT | CADD | | 3083.9 | | | 360 | | 60 | | 343 |
| RAMP T | 328+50.00 | 329+42.54 | BOTH | CADD | | 3879.3 | | | 453 | | 76 | | 432 |
| APPROACH SLAB | 329+42.54 | 329+81.02 | BOTH | CADD | | 826.8 | | | 97 | | 17 | | 92 |
| RAMP T | 329+42.54 | 330+13.24 | BOTH | CADD | | 1455.9 | | | 170 | | 29 | | |
| RAMP T | FWD APPROACH | | BOTH | CADD | | 7174.5 | 798 | | | | | | |
| APPROACH SLAB | 333+80.28 | 334+47.80 | BOTH | CADD | | 1457.8 | | | 171 | | 29 | | |
| RAMP T | 333+77.38 | 334+47.80 | BOTH | CADD | | 1644.2 | | | 192 | | 32 | | 183 |
| RAMP T | 334+47.80 | 335+33.50 | BOTH | CADD | | 3720.4 | | | 435 | | 73 | | 414 |
| RAMP T | 335+33.50 | 338+85.30 | RT | CADD | | 4097.7 | | | 479 | | 80 | | 456 |
| **TOTAL CARRIED TO GENERAL SUMMARY** | | | | | | | 1355 | | 2357 | | 396 | | 1920 |

# PAVEMENT SUBSUMMARY

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:54:58 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\50710627-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\1145364\00-Engineering\Roadway\Sheets\1145364_GS002.dgn

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536

## EARTHWORK QUANTITIES

| STA | CUT | FILL | ADD'L CUT FOR BENCHING | ADD'L FILL FOR BENCHING | TOTAL CUT | TOTAL FILL | 203 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | EXCAVATION | EMBANKMENT |
| | SQ FT | SQ FT | SQ FT | SQ FT | SQ FT | SQ FT | CU YD | CU YD |
| 326+00.00 | 0 | 0 | | | **0** | **0** | | |
| 326+10.00 | 3 | 1 | | | **3** | **1** | 1 | 0 |
| 326+25.00 | 3 | 1 | | | **3** | **1** | 2 | 1 |
| 326+50.00 | 5 | 1 | | | **5** | **1** | 4 | 1 |
| 326+75.00 | 6 | 1 | | | **6** | **1** | 5 | 1 |
| 327+00.00 | 7 | 1 | | | **7** | **1** | 6 | 1 |
| 327+25.00 | 7 | 2 | | | **7** | **2** | 6 | 1 |
| 327+50.00 | 9 | 2 | | | **9** | **2** | 7 | 2 |
| 327+75.00 | 10 | 3 | | | **10** | **3** | 9 | 2 |
| 328+00.00 | 12 | 5 | | | **12** | **5** | 10 | 4 |
| 328+25.00 | 8 | 20 | 95 | 92 | **103** | **112** | 53 | 54 |
| 328+50.00 | 1 | 25 | 87 | 77 | **88** | **102** | 89 | 99 |
| 328+75.00 | 0 | 35 | 104 | 91 | **104** | **126** | 89 | 106 |
| 329+00.00 | 6 | 55 | 114 | 109 | **120** | **164** | 104 | 134 |
| 329+25.00 | 5 | 109 | 241 | 234 | **246** | **343** | 170 | 235 |
| 329+42.45 | 8 | 153 | 176 | 172 | **184** | **325** | 139 | 216 |
| 329+60.76 | 3 | 272 | 317 | 311 | **320** | **583** | 171 | 308 |
| 329+81.00 | 2 | 310 | 271 | 263 | **273** | **573** | 222 | 433 |
| 333+80.28 | 4 | 6 | | | **4** | **6** | | |
| 334+10.28 | 15 | 6 | | | **15** | **6** | 11 | 7 |
| 334+47.80 | 6 | 120 | 185 | 182 | **191** | **302** | 143 | 214 |
| 334+75.00 | 8 | 151 | 183 | 181 | **191** | **332** | 192 | 319 |
| 335+00.00 | 7 | 99 | 152 | 150 | **159** | **249** | 162 | 269 |
| 335+25.00 | 8 | 83 | 87 | 86 | **95** | **169** | 118 | 193 |
| 335+33.40 | 8 | 92 | 72 | 71 | **80** | **163** | 27 | 52 |
| 335+50.00 | 5 | 64 | 57 | 52 | **62** | **116** | 44 | 86 |
| 335+75.00 | 2 | 73 | 94 | 88 | **96** | **161** | 73 | 128 |
| 336+00.00 | 1 | 78 | 93 | 86 | **94** | **164** | 88 | 150 |
| 336+25.00 | 0 | 71 | 116 | 108 | **116** | **179** | 97 | 159 |
| 336+50.00 | 0 | 61 | 112 | 104 | **112** | **165** | 105 | 159 |
| 336+75.00 | 0 | 49 | 77 | 71 | **77** | **120** | 88 | 132 |
| 337+00.00 | 2 | 38 | 81 | 78 | **83** | **116** | 74 | 109 |
| 337+25.00 | 0 | 17 | 58 | 53 | **58** | **70** | 65 | 86 |
| 337+50.00 | 3 | 16 | 74 | 71 | **77** | **87** | 62 | 73 |
| 337+75.00 | 5 | 11 | 43 | 43 | **48** | **54** | 58 | 65 |
| 338+00.00 | 5 | 2 | | | **5** | **2** | 24 | 26 |
| 338+28.89 | 3 | 0 | | | **3** | **0** | 4 | 1 |
| 338+50.00 | 2 | 0 | | | **2** | **0** | 2 | 0 |
| 338+75.00 | 1 | 0 | | | **1** | **0** | 1 | 0 |
| 338+85.30 | 0 | 0 | | | **0** | **0** | 1 | 0 |
| 339+00.00 | 0 | 0 | | | **0** | **0** | 0 | 0 |
| 339+25.00 | 0 | 0 | | | **0** | **0** | 0 | 0 |
| Slope Between Rear Abutment to Pier 1 | | | | | | | 386 | 0 |
| Slope Between Pier 3 to Forward Abutment | | | | | | | 1581 | 0 |
| **TOTALS CARRIED TO GENERAL SUMMARY** | | | | | | | **4494** | **3826** |

## SEEDING QUANTITIES

| STA | WIDTH | SF | SY |
|---|---|---|---|
| 326+00.00 | 0 | | |
| 326+10.00 | 6 | 30 | 3 |
| 326+25.00 | 6 | 90 | 10 |
| 326+50.00 | 6 | 150 | 17 |
| 326+75.00 | 6 | 150 | 17 |
| 327+00.00 | 6 | 150 | 17 |
| 327+25.00 | 7 | 163 | 18 |
| 327+50.00 | 8 | 188 | 21 |
| 327+75.00 | 10 | 225 | 25 |
| 328+00.00 | 13 | 288 | 32 |
| 328+25.00 | 25 | 475 | 53 |
| 328+50.00 | 27 | 650 | 72 |
| 328+75.00 | 28 | 688 | 76 |
| 329+00.00 | 36 | 800 | 89 |
| 329+25.00 | 52 | 1100 | 122 |
| 329+42.45 | 60 | 977 | 109 |
| 329+60.76 | 82 | 1300 | 144 |
| 329+81.00 | 54 | 1376 | 153 |
| 333+80.28 | 9 | | |
| 334+10.28 | 7 | 240 | 27 |
| 334+47.80 | 37 | 825 | 92 |
| 334+75.00 | 44 | 1102 | 122 |
| 335+00.00 | 39 | 1038 | 115 |
| 335+25.00 | 33 | 900 | 100 |
| 335+33.50 | 31 | 272 | 30 |
| 335+50.00 | 24 | 454 | 50 |
| 335+75.00 | 27 | 638 | 71 |
| 336+00.00 | 29 | 700 | 78 |
| 336+25.00 | 31 | 750 | 83 |
| 336+50.00 | 29 | 750 | 83 |
| 336+75.00 | 25 | 675 | 75 |
| 337+00.00 | 23 | 600 | 67 |
| 337+25.00 | 16 | 488 | 54 |
| 337+50.00 | 23 | 488 | 54 |
| 337+75.00 | 20 | 538 | 60 |
| 338+00.00 | 10 | 375 | 42 |
| 338+28.89 | 6 | 231 | 26 |
| 338+50.00 | 5 | 116 | 13 |
| 338+75.00 | 5 | 125 | 14 |
| 338+85.30 | 0 | 0 | 0 |
| 339+00.00 | 0 | 0 | 0 |
| 339+25.00 | 0 | 0 | 0 |
| **TOTALS CARRIED TO GENERAL SUMMARY** | | | **2233** |

EARTHWORK SUBSUMMARY


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536

SHEET P.44 | TOTAL 167

CUY-71-10.07 SW


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:08:45 PM USER: PIA81677
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\1145360400-Engineering\Roadway\Sheets\1145360400-Engineering\Roadway\Sheets\1114536_GS003.dgn

# DRAINAGE SUBSUMMARY

| SHEET NO. | REFERENCE NO. | LOCATION | STATION FROM | STATION TO | SIDE | 511 CLASS QC1 CONCRETE, HEADWALL CY | | 601 TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT SY | | 605 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FT | 611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS FT | 611 12" CONDUIT, TYPE F FT | | 611 CATCH BASIN, NO. 3A EACH | | 611 PRECAST REINFORCED CONCRETE OUTLET EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42-43 | UD-1 | | 326+49.43 | 328+50.00 | RT | | | | | 201 | 10 | | | | | 1 |
| 43 | UD-2 | | 328+50.00 | 329+81.00 | RT | | | | | 131 | 10 | | | | | 1 |
| 43 | D-1 | | 329+73.95 | | RT | | | 34 | | | | | | | | |
| 44 | UD-3 | | 334+48.00 | 336+50.00 | RT | | | | | 202 | 10 | | | | | 1 |
| 44-45 | UD-4 | | 336+50.00 | 338+50.00 | RT | | | | | 200 | 10 | | | | | 1 |
| 44 | D-2 | | 334+52.11 | | | 0.25 | | | | | | 43 | | 1 | | |
| **TOTALS CARRIED TO GENERAL SUMMARY** | | | | | | 0.25 | | 34 | | 734 | 40 | 43 | | 1 | | 4 |

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:55:16 PM USER: SAT89729
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

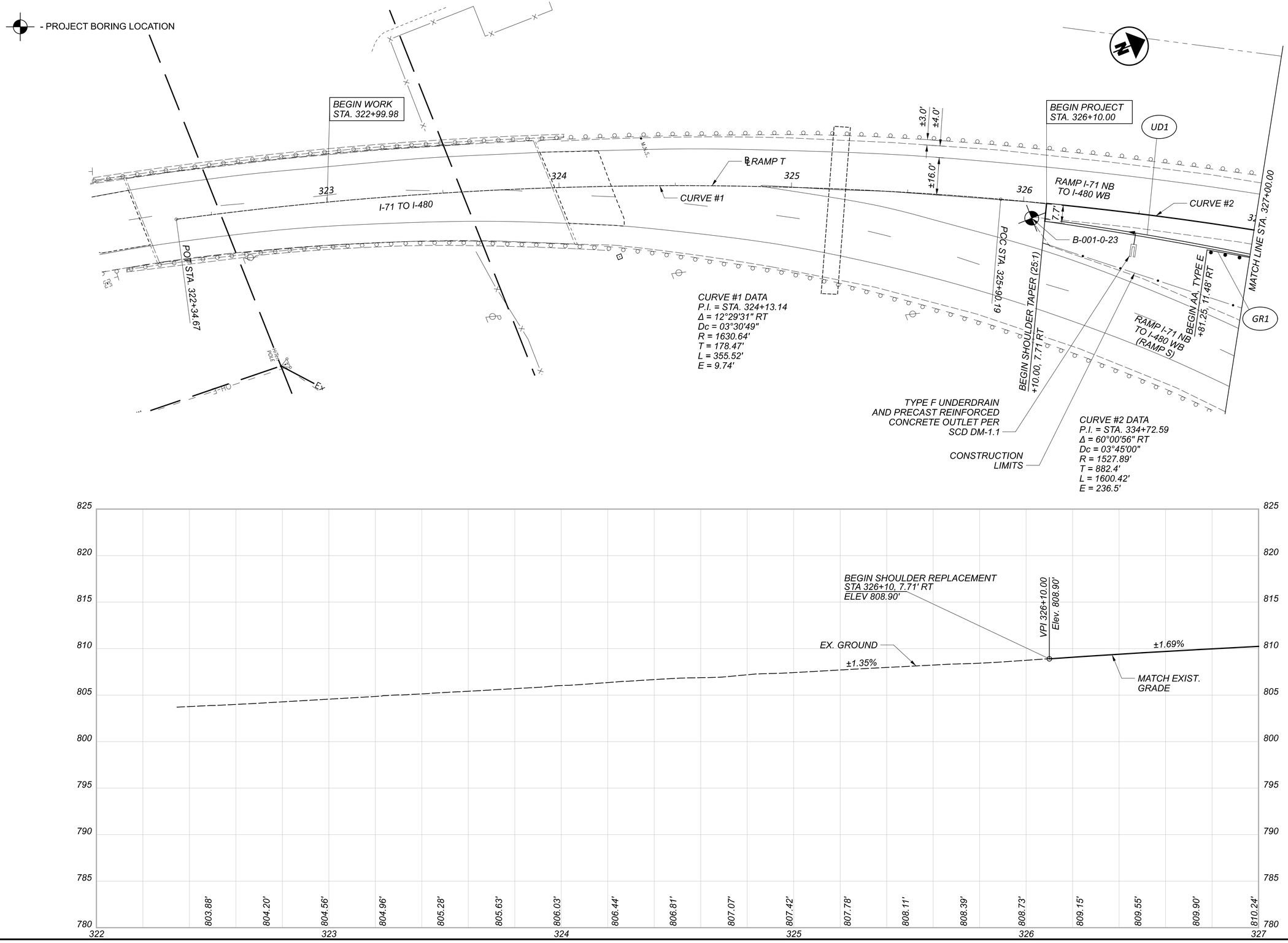
DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536

LEGEND

- PROJECT BORING LOCATION




HORIZONTAL
SCALE IN FEET
0 10 20 40

# PLAN AND PROFILE - RAMP I-71 NB TO I-480 WB
## STA. 322+00.00 TO STA. 327+00.00

CUY-71-10.07 SW


MODEL: CLP_3_Option3 - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:55:31 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_GP001.dgn



DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER SMS

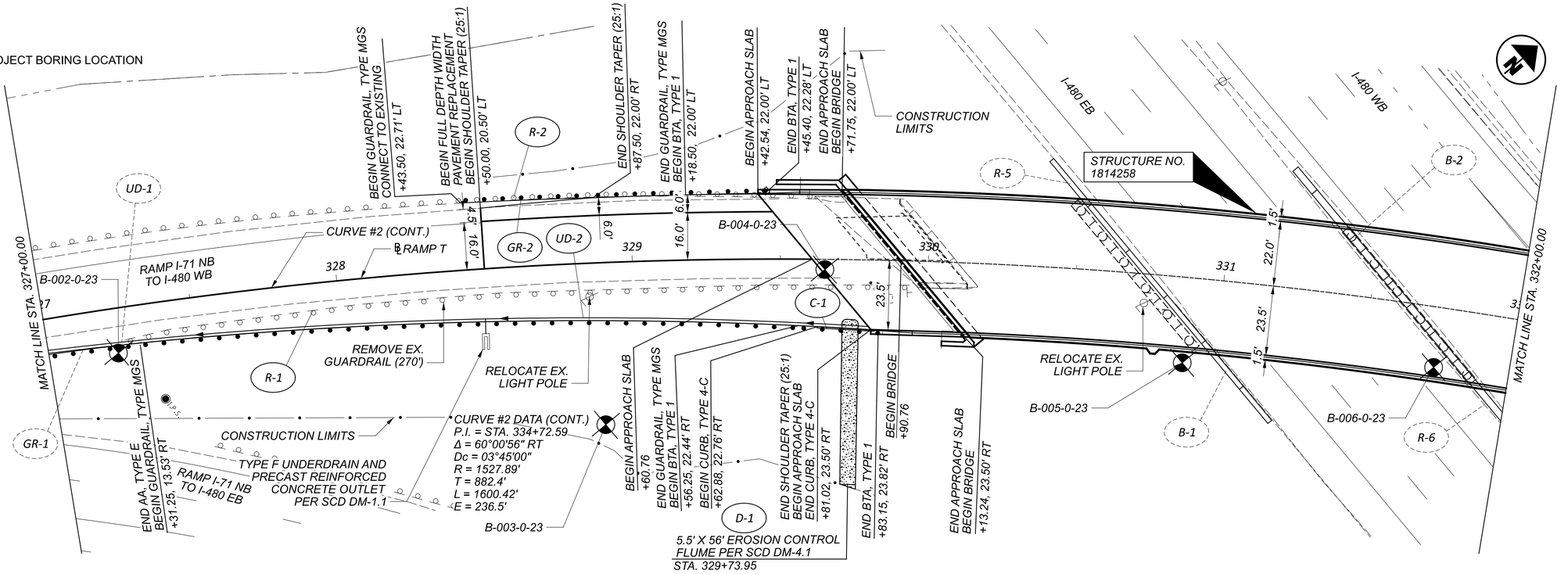
REVIEWER SJP 09/17/25

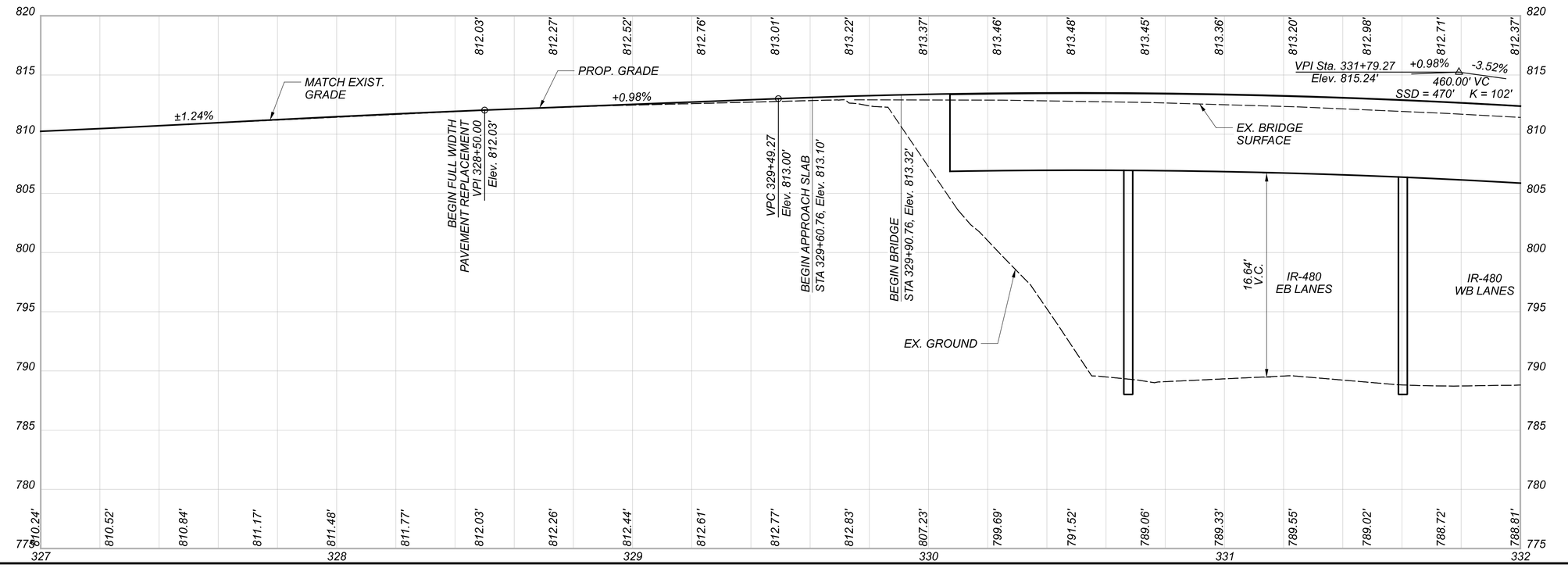
PROJECT ID 114536

SHEET P.46 TOTAL 167

## LEGEND

- PROJECT BORING LOCATION




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN AND PROFILE - RAMP I-71 NB TO I-480 WB
# STA. 327+00.00 TO STA. 332+00.00

CUY-71-10.07 SW


MODEL: CLP_3_Option3 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:55:42 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_GP002.dgn



DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.47 TOTAL 167

LEGEND

- PROJECT BORING LOCATION

CURVE #2 DATA (CONT.)
P.I. = STA. 334+72.59
Δ = 60°00'56" RT
Dc = 03°45'00"
R = 1527.89'
T = 882.4'
L = 1600.42'
E = 236.5'

STRUCTURE NO. 1814258

BEGIN GUARDRAIL, TYPE MGS BTA, TYPE 2, +75.83, 21.98' LT

BEGIN FULL DEPTH BEGIN SHOULDER +77.38, 22.00' LT

END APPROACH SLAB +10.28

GR-3

CONSTRUCTION LIMITS

R-3

BEGIN SHOULDER TAPER (25:1) +83.50, 22.00' LT

END SHOULDER TAPER (25:1) END FULL WIDTH PAVEMENT REPLACEMENT +33.50, 20.00' LT

END GUARDRAIL, TYPE MGS CONNECT TO EXISTING +38.33, 23.39' LT

B-3

R-7

B-007-0-23

D2

C2

B-008-0-23

RELOCATE EX. LIGHT POLE

UD-3

R-4

GR-4

TYPE F UNDERDRAIN AND PRECAST REINFORCED CONCRETE OUTLET PER SCD DM-1.1

UD-4

RELOCATE EX. LIGHT POLE

B-009-0-23

CONSTRUCTION LIMITS

HW-2.2
STA. 334+52.11, 62.83' RT
INV. 784.77'

12" STM

END CURB, TYPE 4-C +55.30, 23.71' RT

END BRIDGE BEGIN APPROACH SLAB +18.66, 23.50' RT

BEGIN GUARDRAIL, TYPE MGS BTA TYPE 2 +45.80, 23.52' RT

END APPROACH SLAB BEGIN SHOULDER TAPER (25:1) BEGIN CURB, TYPE 4-C +47.80, 23.50' RT

END BRIDGE +80.28

RAMP T

RAMP I-71 NB TO I-480 WB

CURVE #2 (CONT.)

MATCH LINE STA. 332+00.00

MATCH LINE STA. 337+00.00

I-480 WB

I-480 EB

22.0'

23.5'

16.0'

4.0'

7.5'

7.5'

332

333

334

335

336

337

EX. BRIDGE SURFACE

EX. GROUND

IR-480 WB LANES 16.64' V.C.

END BRIDGE BEGIN APPROACH SLAB STA 333+80.28, Elev. 808.13'

END APPROACH SLAB STA 334+10.28, Elev. 807.12'

VPT 334+09.27 Elev. 807.15'

PROP. GRADE

-3.52%

D-2

STA 334+52.11, 23.34' RT
CB-3A, GRATE ELEV 803.36'
12" (S) = 799.36'

END FULL WIDTH PAVEMENT REPLACEMENT VPI 335+33.50 Elev. 802.78'

MATCH EXIST. GRADE

±3.56%

812.37' 811.97' 811.51' 810.99' 810.41' 809.77' 809.06' 808.30' 807.47' 806.60' 805.72' 804.84' 803.96' 803.08'

788.81' 788.58' 788.27' 791.19' 794.85' 800.36' 807.68' 807.71' 807.24' 806.38' 805.62' 804.77' 803.86' 803.02' 802.12' 801.21' 800.32' 799.50' 798.63' 797.73' 796.84'

820 815 810 805 800 795 790 785 780 775

HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN AND PROFILE - RAMP I-71 NB TO I-480 WB
# STA. 332+00.00 TO STA. 337+00.00

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:55:54 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_GP003.dgn

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS

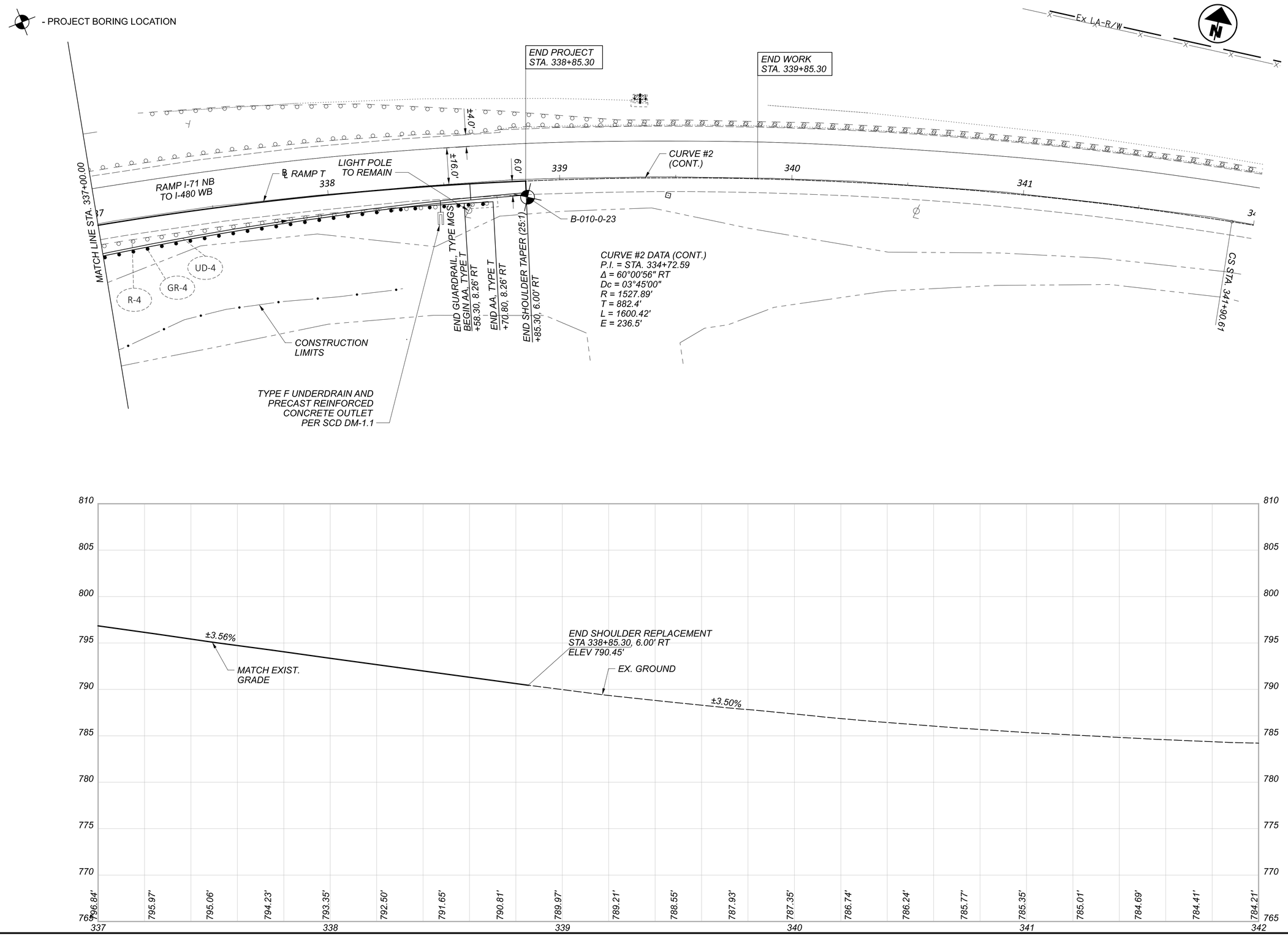
REVIEWER SJP 09/17/25

PROJECT ID 114536

SHEET P.48 TOTAL 167

## LEGEND

- PROJECT BORING LOCATION




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN AND PROFILE - RAMP I-71 NB TO I-480 WB
# STA. 337+00.00 TO STA. 342+00.00

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.49 TOTAL: 167

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:56:04 PM USER: SAT89729
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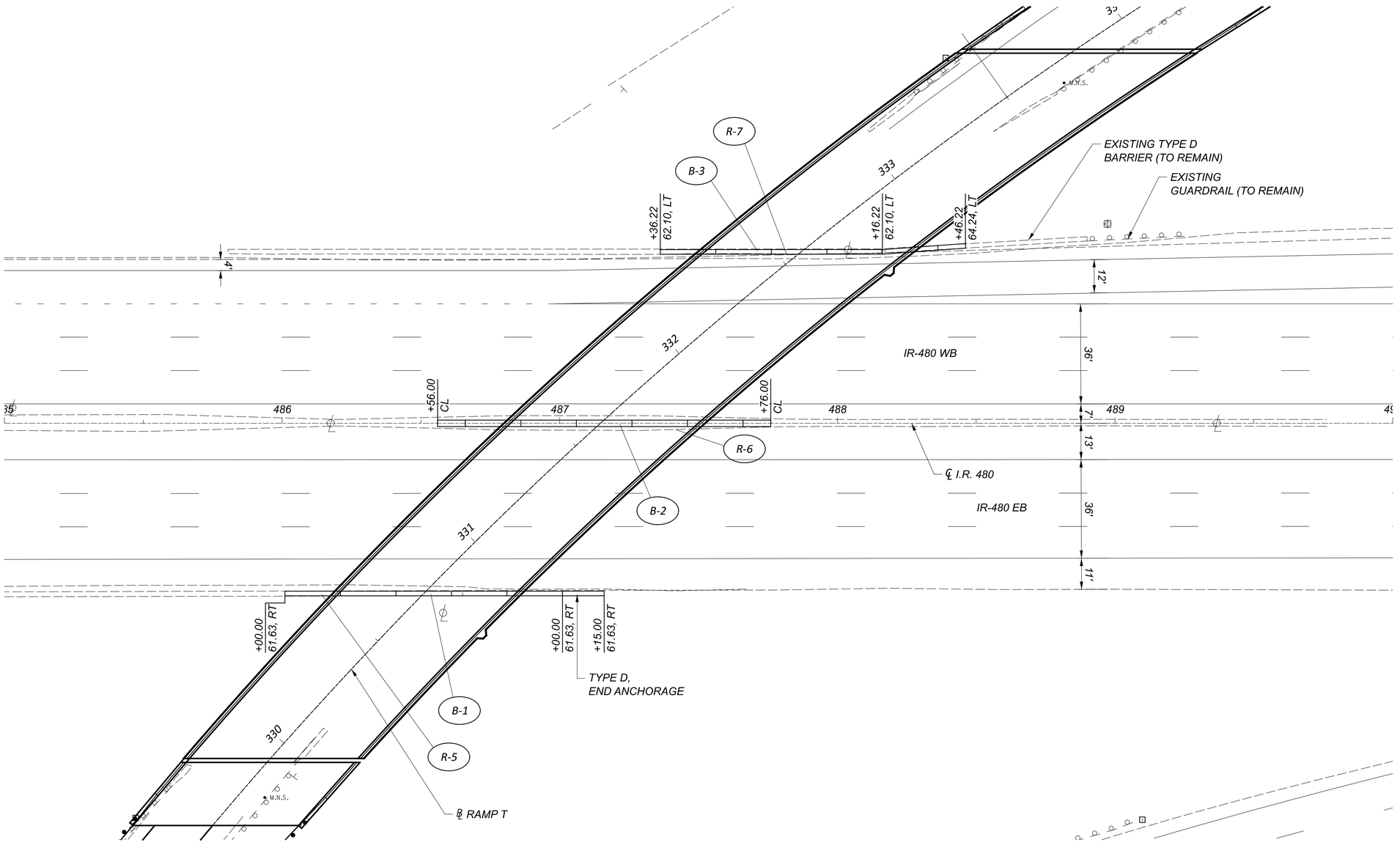


NOTE:

FOR CONCRETE BARRIER DETAILS, SEE SHEET P.5

HORIZONTAL
SCALE IN FEET
0 10 20 40

# PLAN
# IR-480

CUY-71-10.07 SW

MODEL: I-480 PLAN - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:56:14 PM USER: SAT89729
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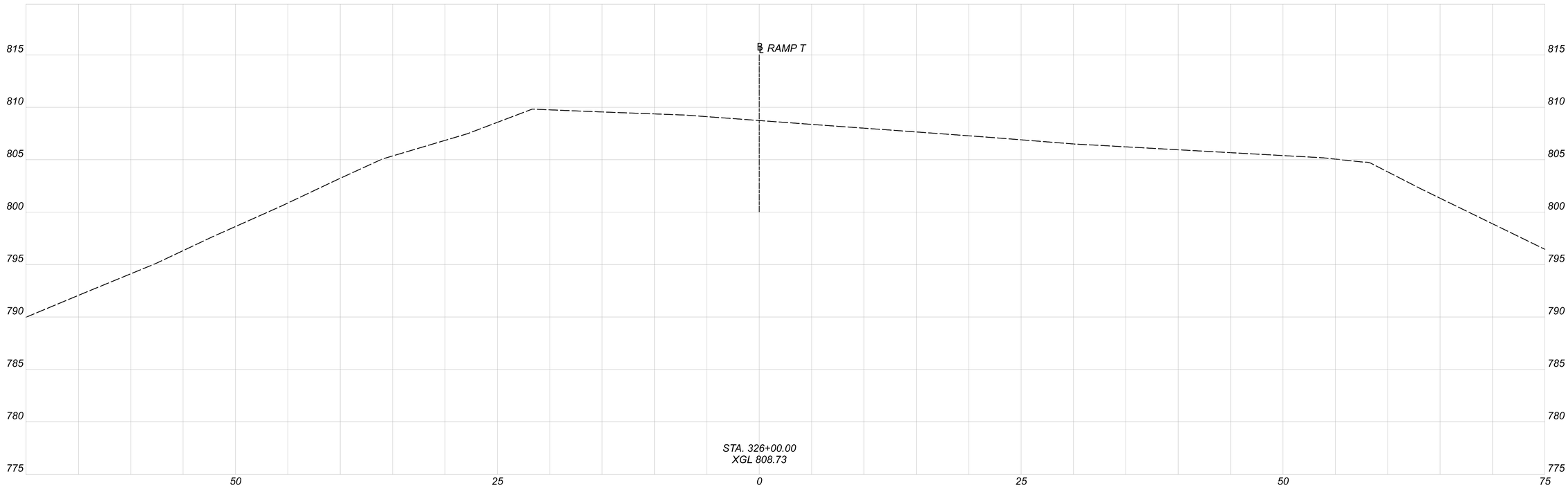
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

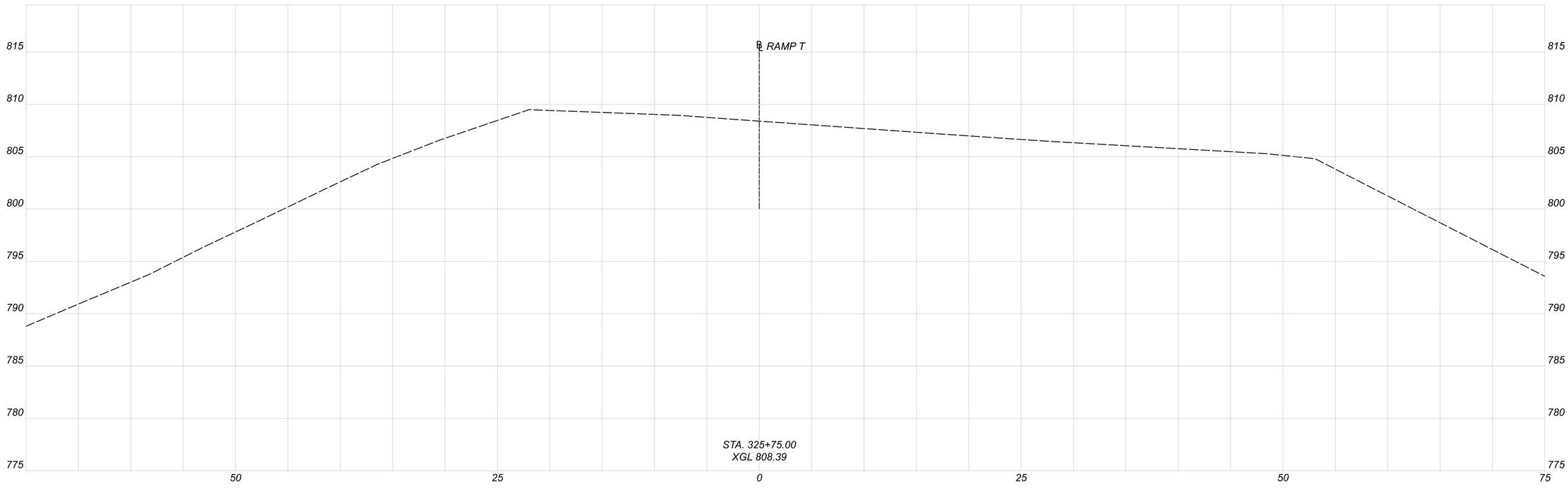
DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.50 | TOTAL 167




CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 325+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:56:27 PM USER: SAT89729
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# CROSS SECTIONS
# STA. 325+75.00 TO STA. 326+00.00

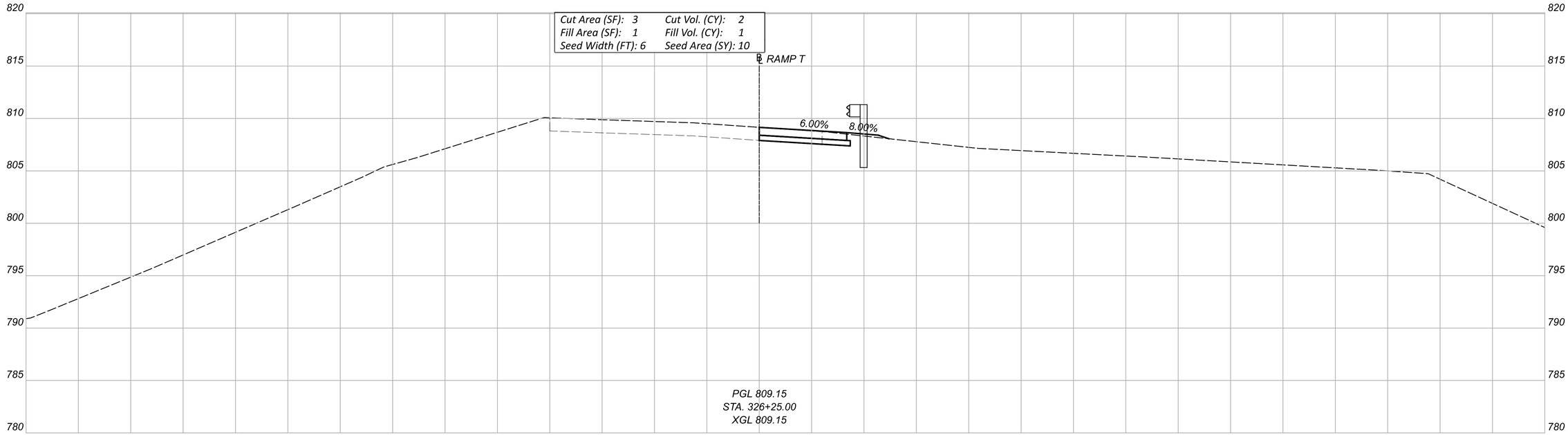
| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| - | - | - |

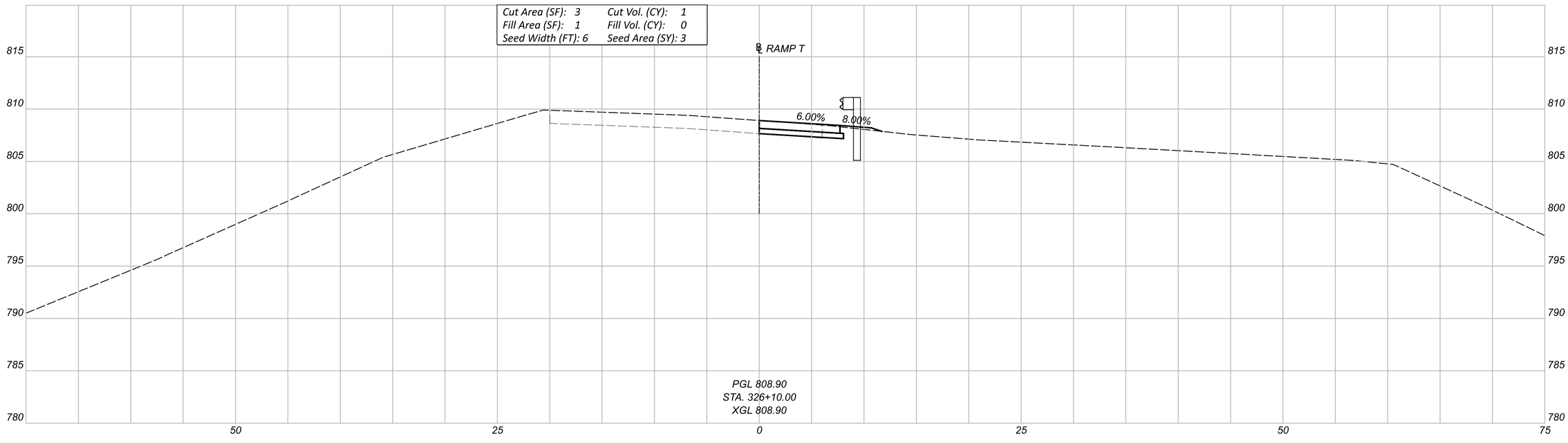
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536




# CROSS SECTIONS
## STA. 326+10.00 TO STA. 326+25.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 13 | 3 | 1 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.52 TOTAL: 167

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 326+10.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:11 PM USER: KC112955
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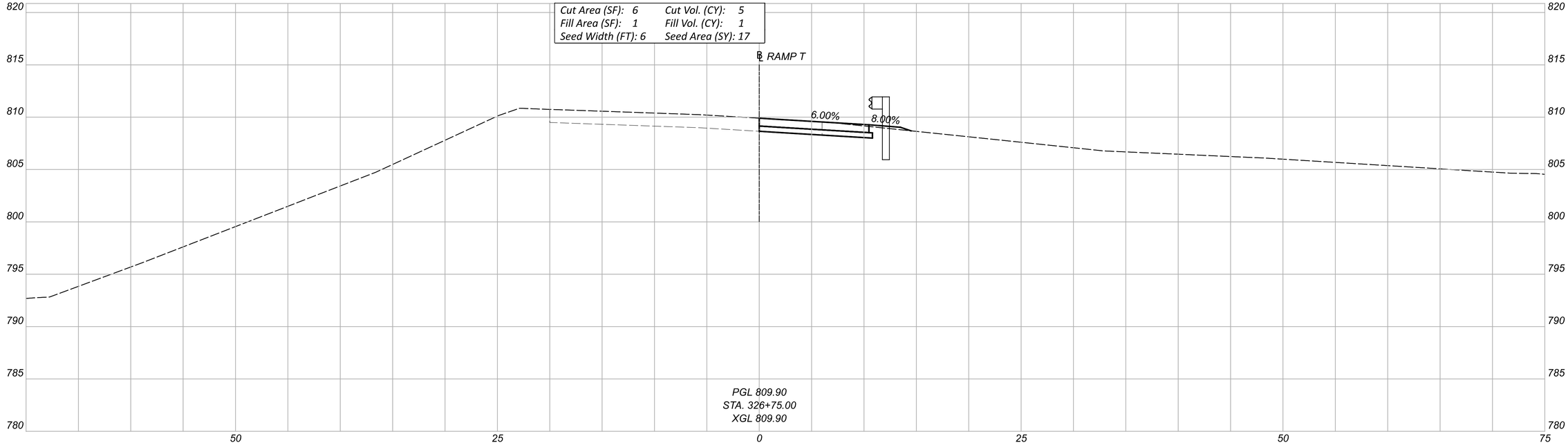


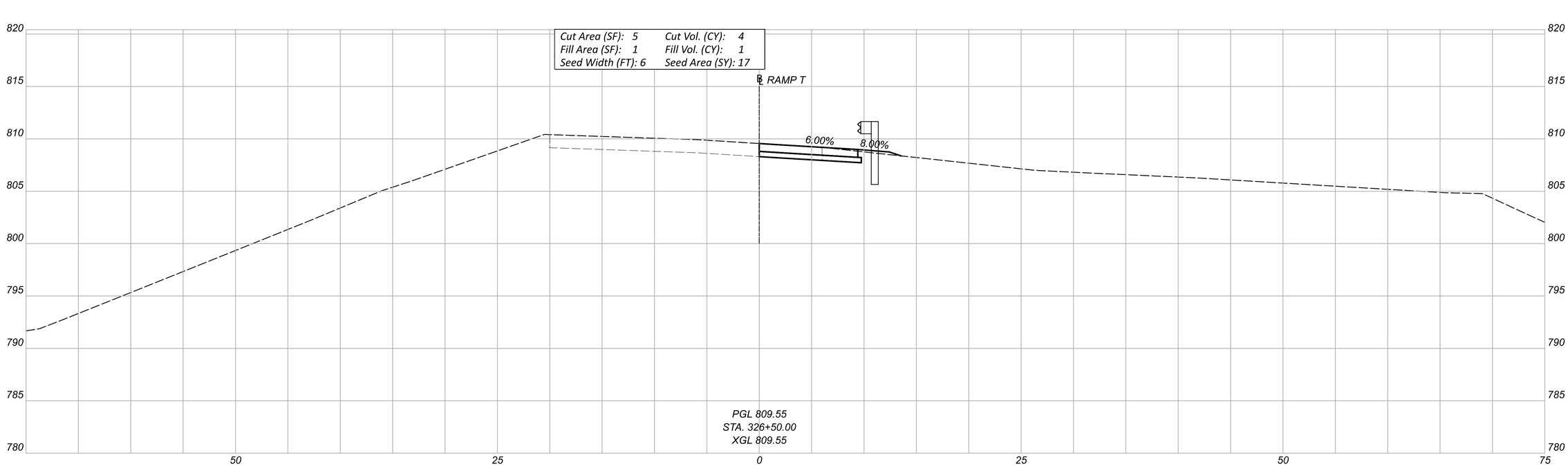


CROSS SECTIONS
STA. 326+50.00 TO STA. 326+75.00

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 326+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:13 PM USER: KC112955
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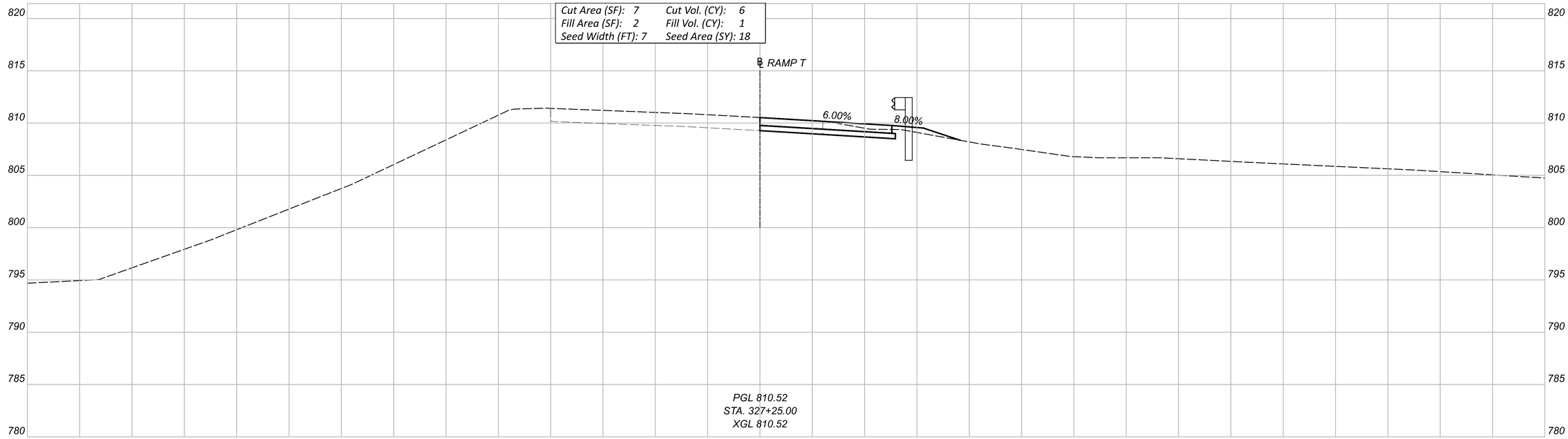
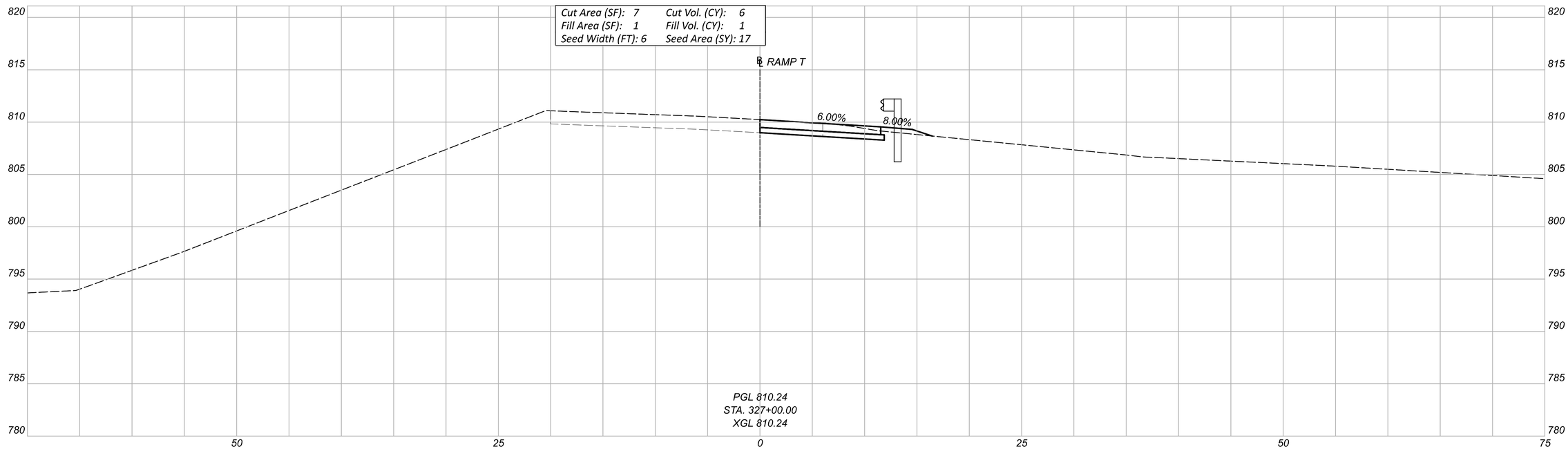
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.53 TOTAL: 167

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| ~~34~~ | 9 | 2 |




CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 327+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:14 PM USER: KC112955
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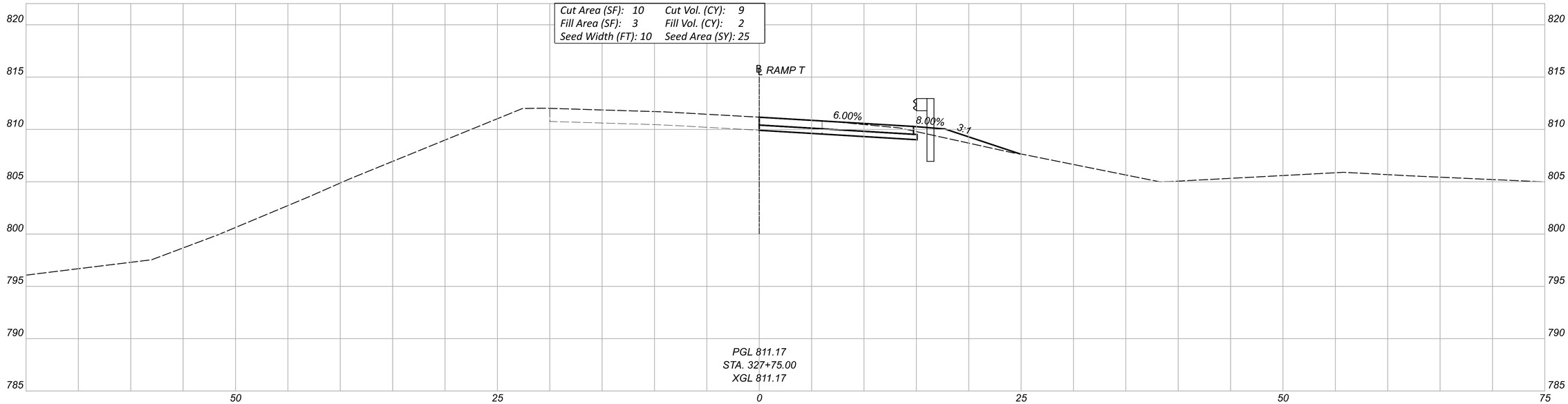
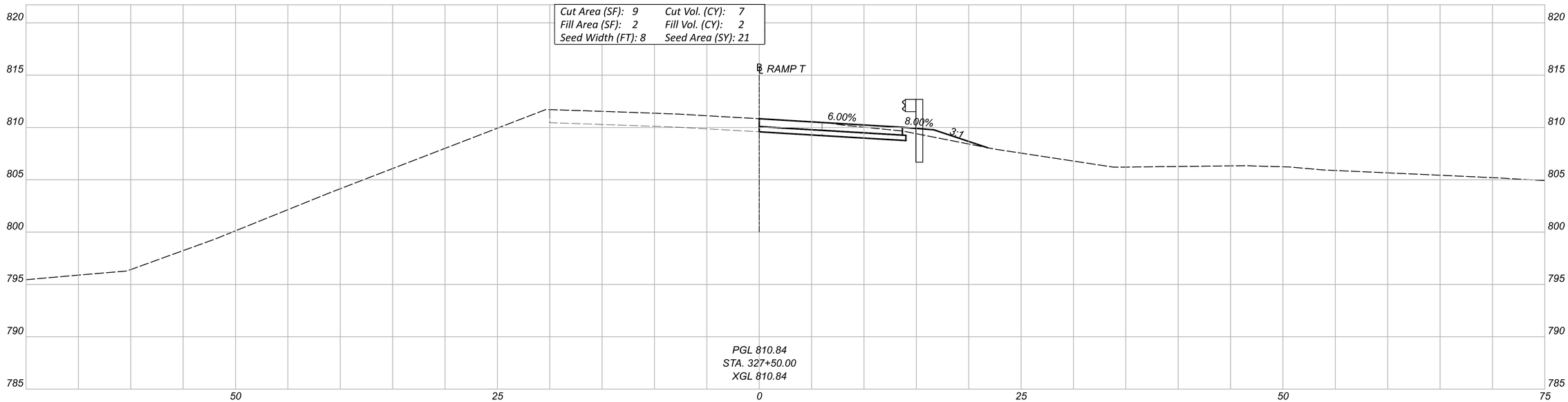
# CROSS SECTIONS
## STA. 327+00.00 TO STA. 327+25.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| ~~35~~ | ~~12~~ | ~~2~~ |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.54 TOTAL: 167




CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 327+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:15 PM USER: KC112955
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# CROSS SECTIONS
# STA. 327+50.00 TO STA. 327+75.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 46 | 16 | 4 |

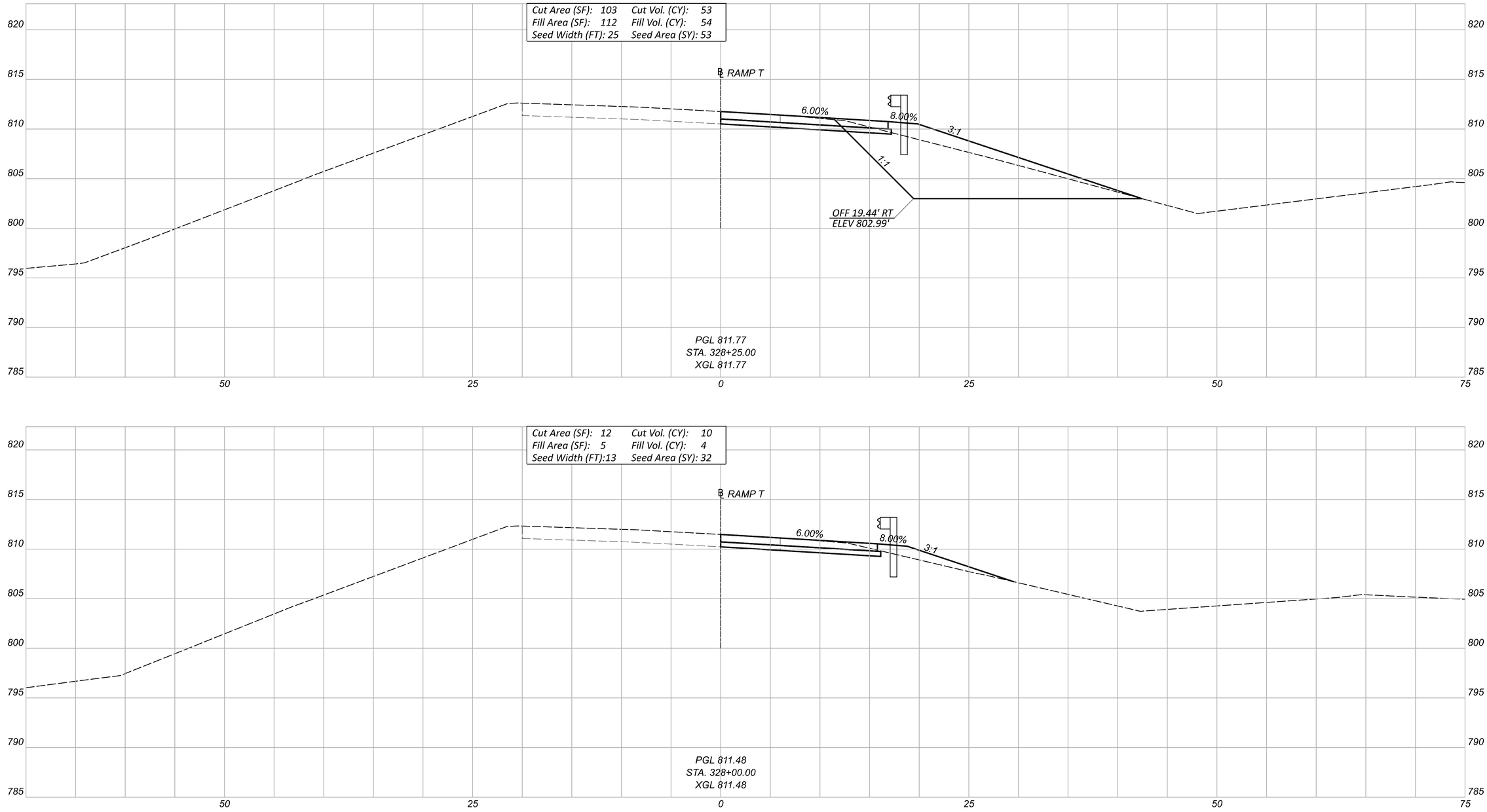
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS

REVIEWER: SJP 09/17/25

PROJECT ID: 114536

SHEET: P.55 TOTAL: 167




CROSS SECTIONS
STA. 328+00.00 TO STA. 328+25.00

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 328+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:16 PM USER: KC112955
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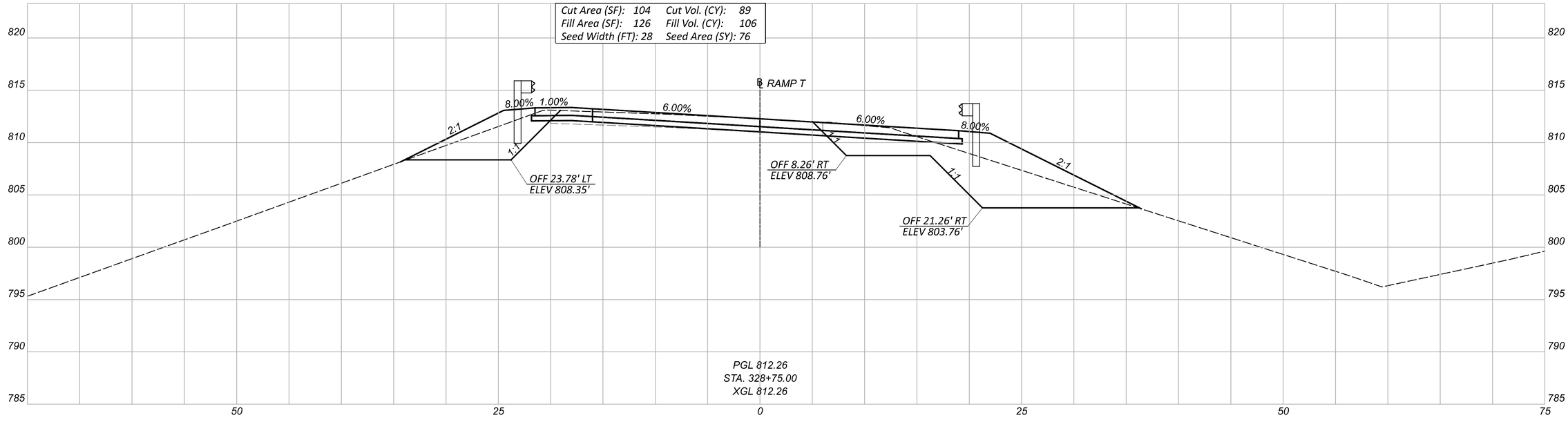
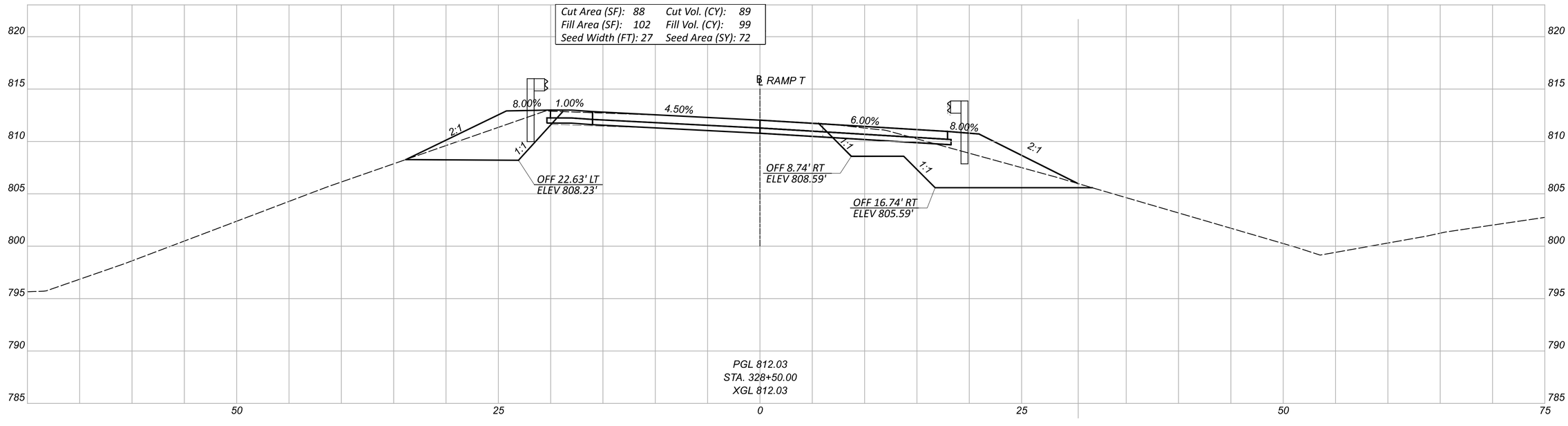
| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 85 | 63 | 58 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.56
TOTAL: 167




CROSS SECTIONS
STA. 328+50.00 TO STA. 328+75.00

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 328+50.10 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:16 PM USER: KC112955
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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

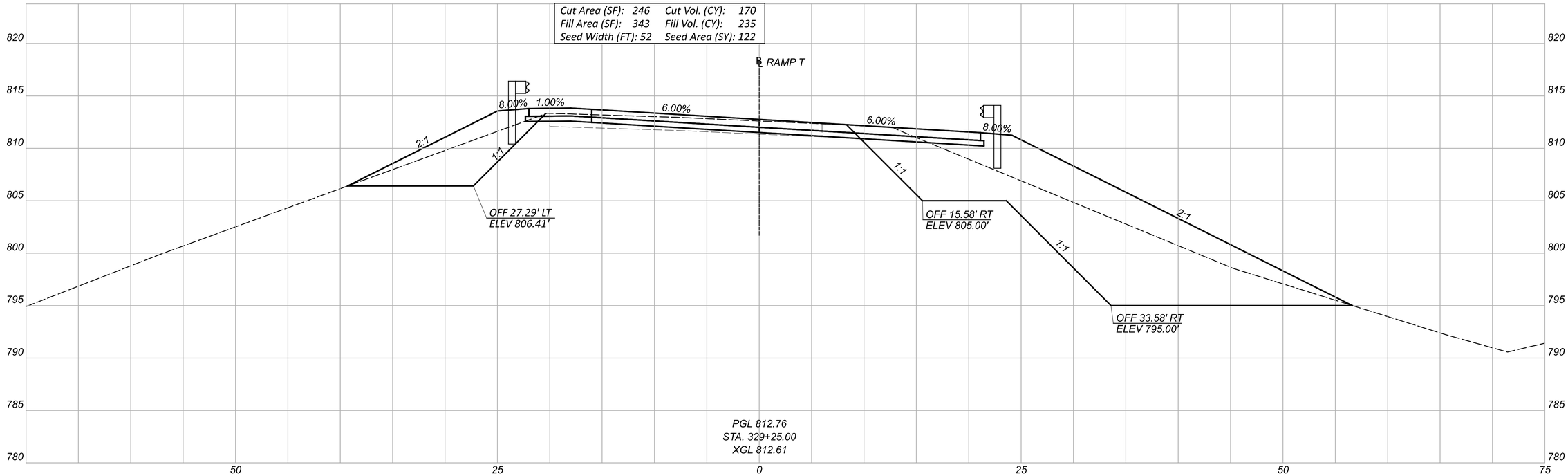
DESIGNER
SMS

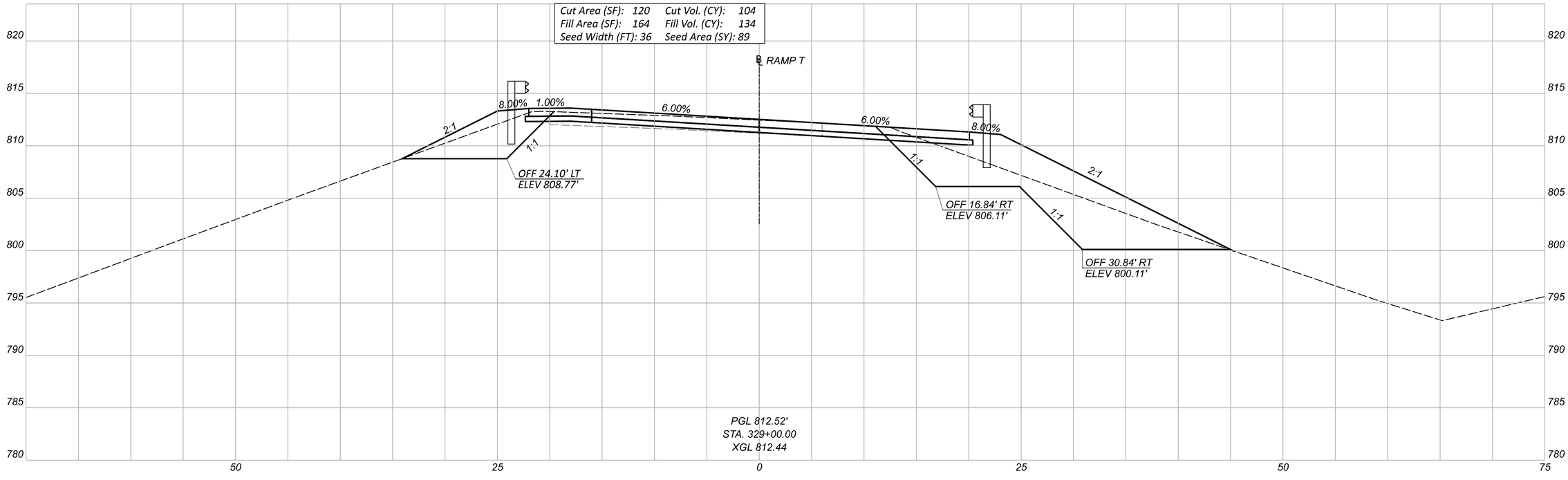
REVIEWER
SJP 09/17/25

PROJECT ID
114536

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 148 | 178 | 205 |

SHEET P.57 TOTAL 167




CROSS SECTIONS
STA. 329+00.00 TO STA. 329+25.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 241 | 274 | 369 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.58 TOTAL: 167

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 329+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:17 PM USER: KC112955
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CUY-71-10.07 SW

MODEL: CLP_3_Option3 - 329+42.45 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:18 PM USER: KC112955
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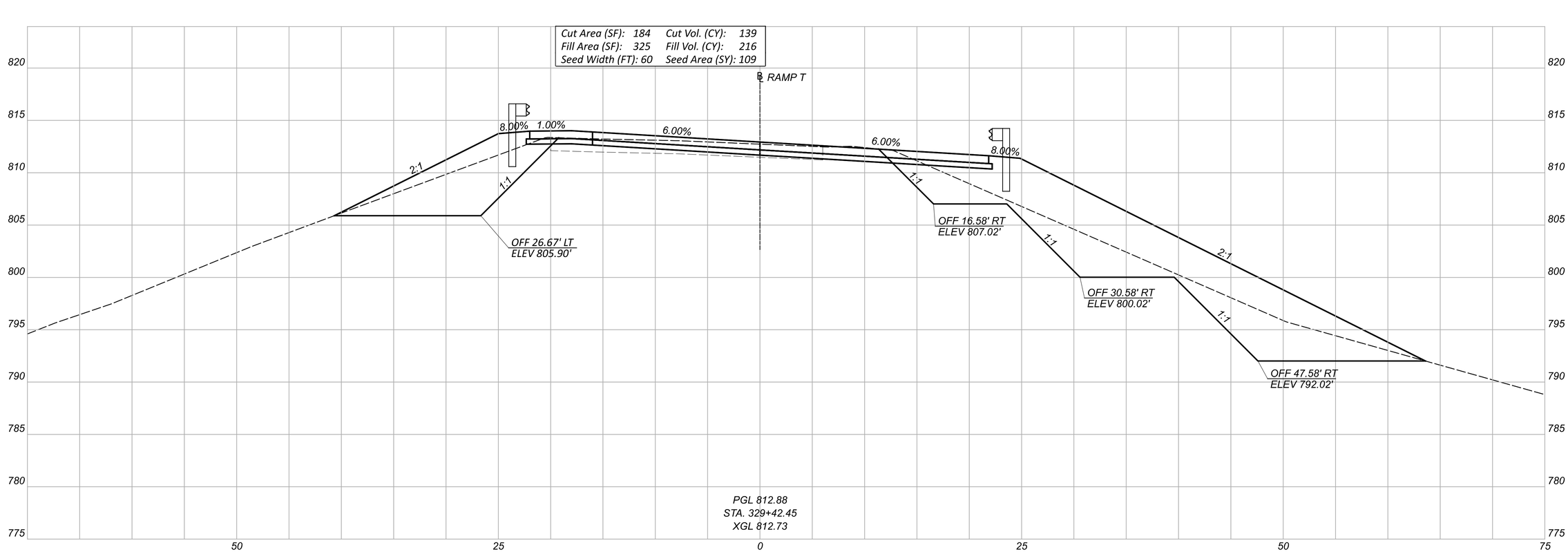
# CROSS SECTIONS
# STA. 329+42.45




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 109 | 139 | 216 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS

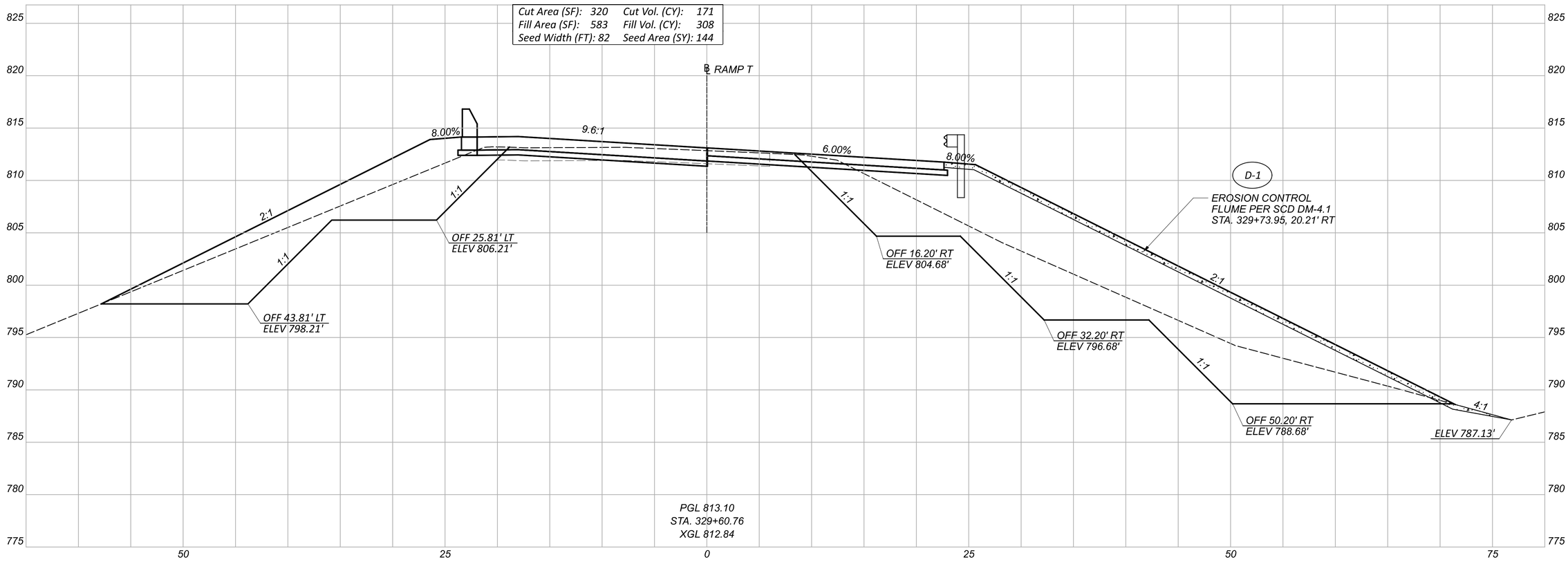
REVIEWER SJP 09/17/25

PROJECT ID 114536

MODEL: CLP_3_Option3 - 329+60.81 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:19 PM USER: KC112955
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_XS001.dgn

CUY-71-10.07 SW

# CROSS SECTIONS
# STA. 329+60.76




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 144 | 171 | 308 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536

SHEET P.60 TOTAL 167

MODEL: CLP_3_Option3 - 329+81.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:20 PM USER: KC112955
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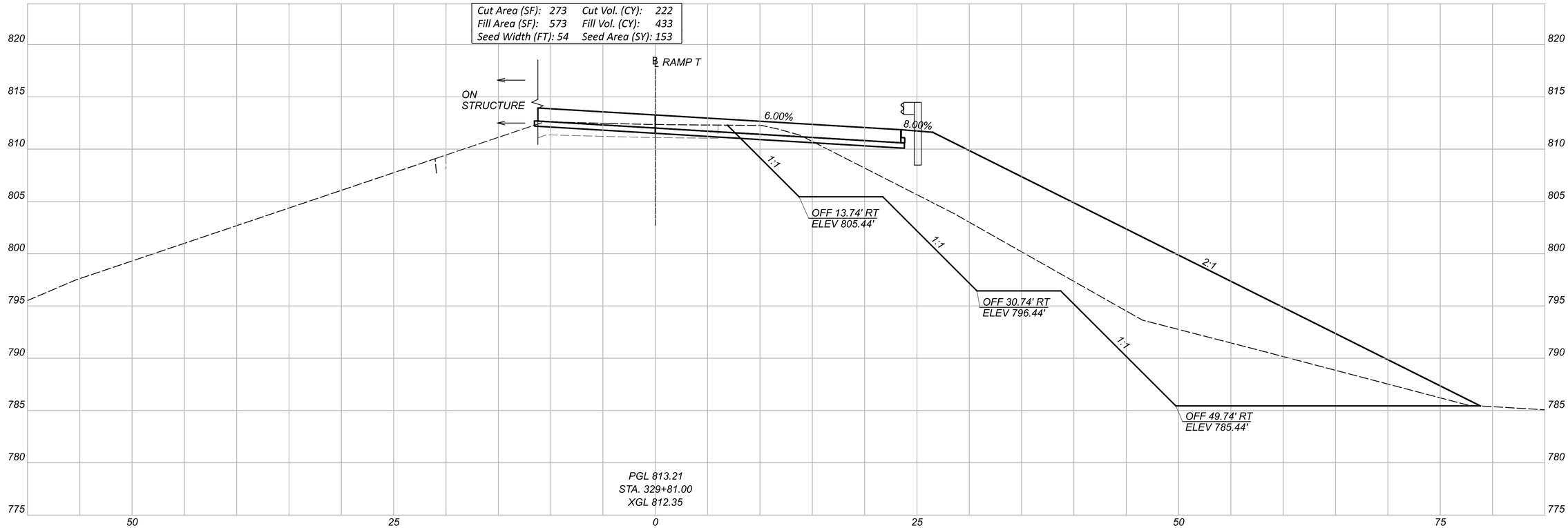
CUY-71-10.07 SW

# CROSS SECTIONS
# STA. 329+81.00




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 153 | 222 | 433 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS

REVIEWER: SJP 09/17/25

PROJECT ID: 114536

SHEET: P.61 TOTAL: 167

MODEL: CLP_3_Option4 - 333+77.30 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 10:09:01 AM USER: PIA81677
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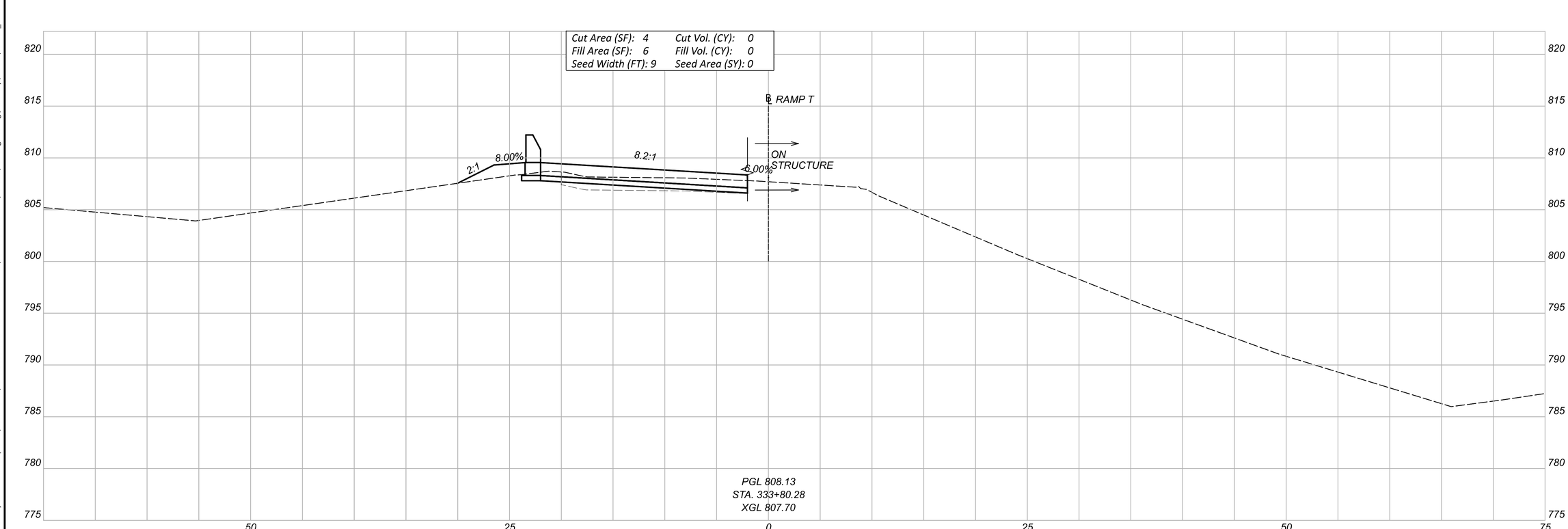
CUY-71-10.07 SW

# CROSS SECTIONS
# STA. 333+80.28




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 0 | 0 | 0 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS

REVIEWER SJP 09/17/25

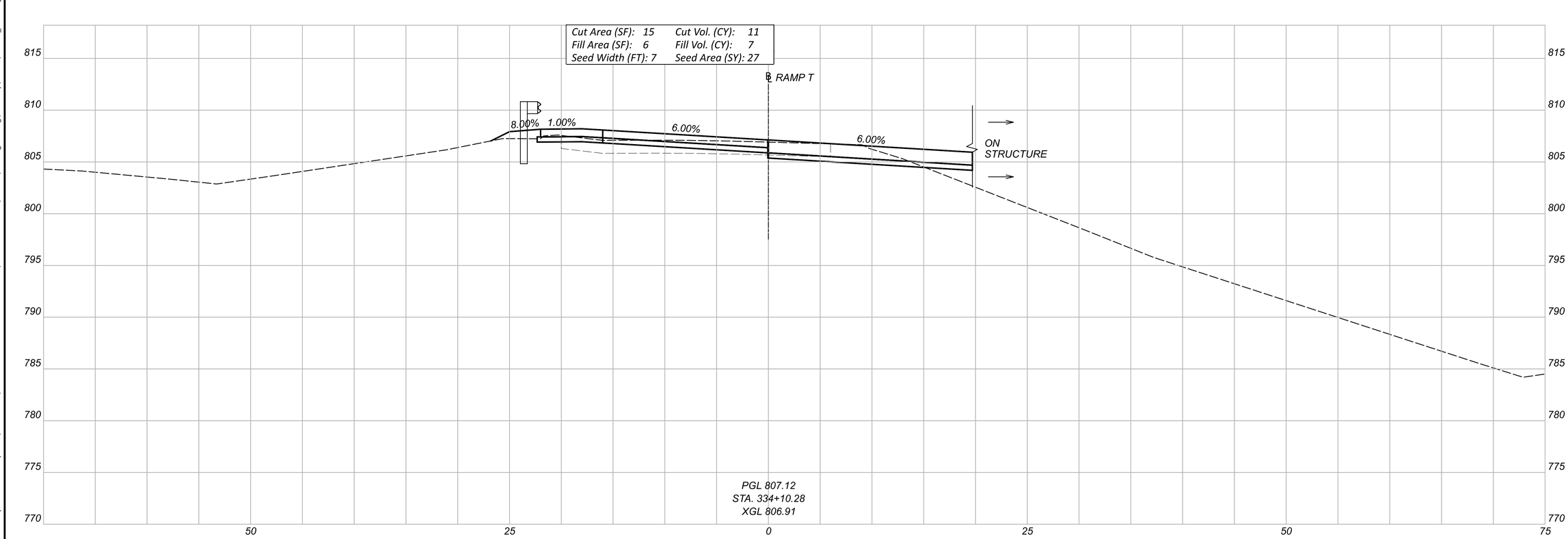
PROJECT ID 114536

SHEET P.62 TOTAL 167

MODEL: CLP_3_Option4 - 334+10.20 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:22 PM USER: KC1129S5
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\S07106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Roadway\Sheets\114536_XS001.dgn

CUY-71-10.07 SW

CROSS SECTIONS
STA. 334+10.28




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 27 | 11 | 7 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

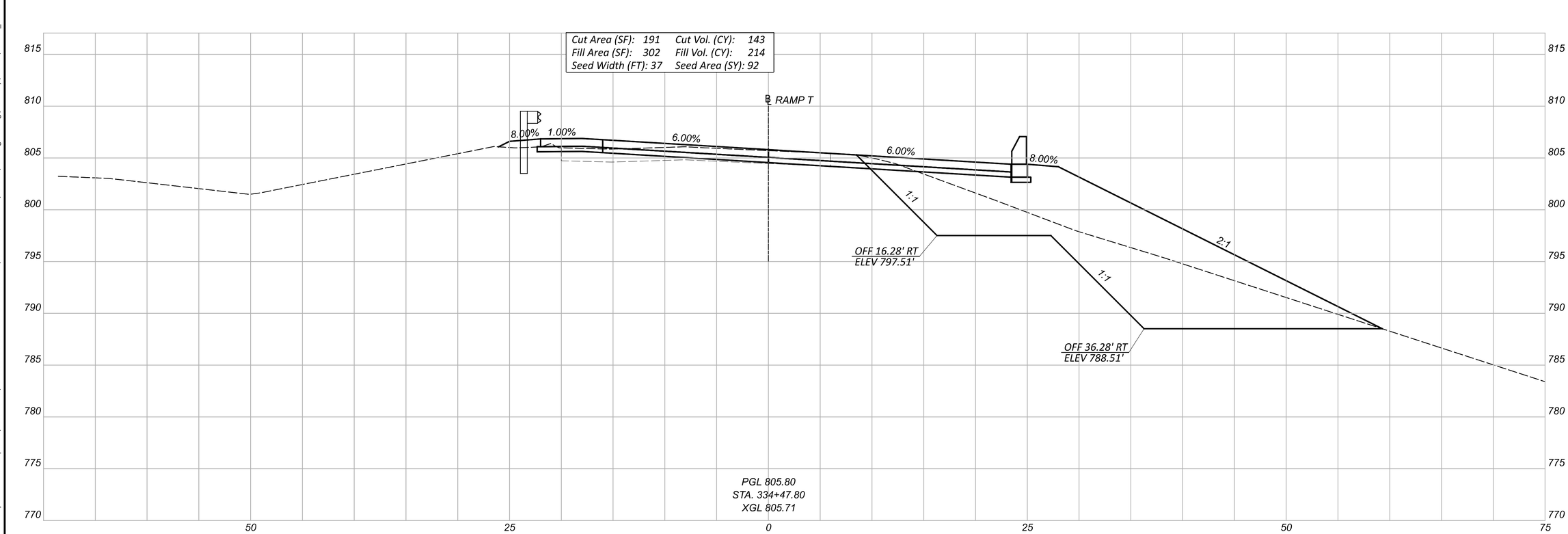
DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.63 TOTAL 167

# CROSS SECTIONS
# STA. 334+47.80




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 92 | 143 | 214 |


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.64 TOTAL: 167

CUY-71-10.07 SW


MODEL: CLP_3_Option4 - 334+47.70 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:23 PM USER: KC112955
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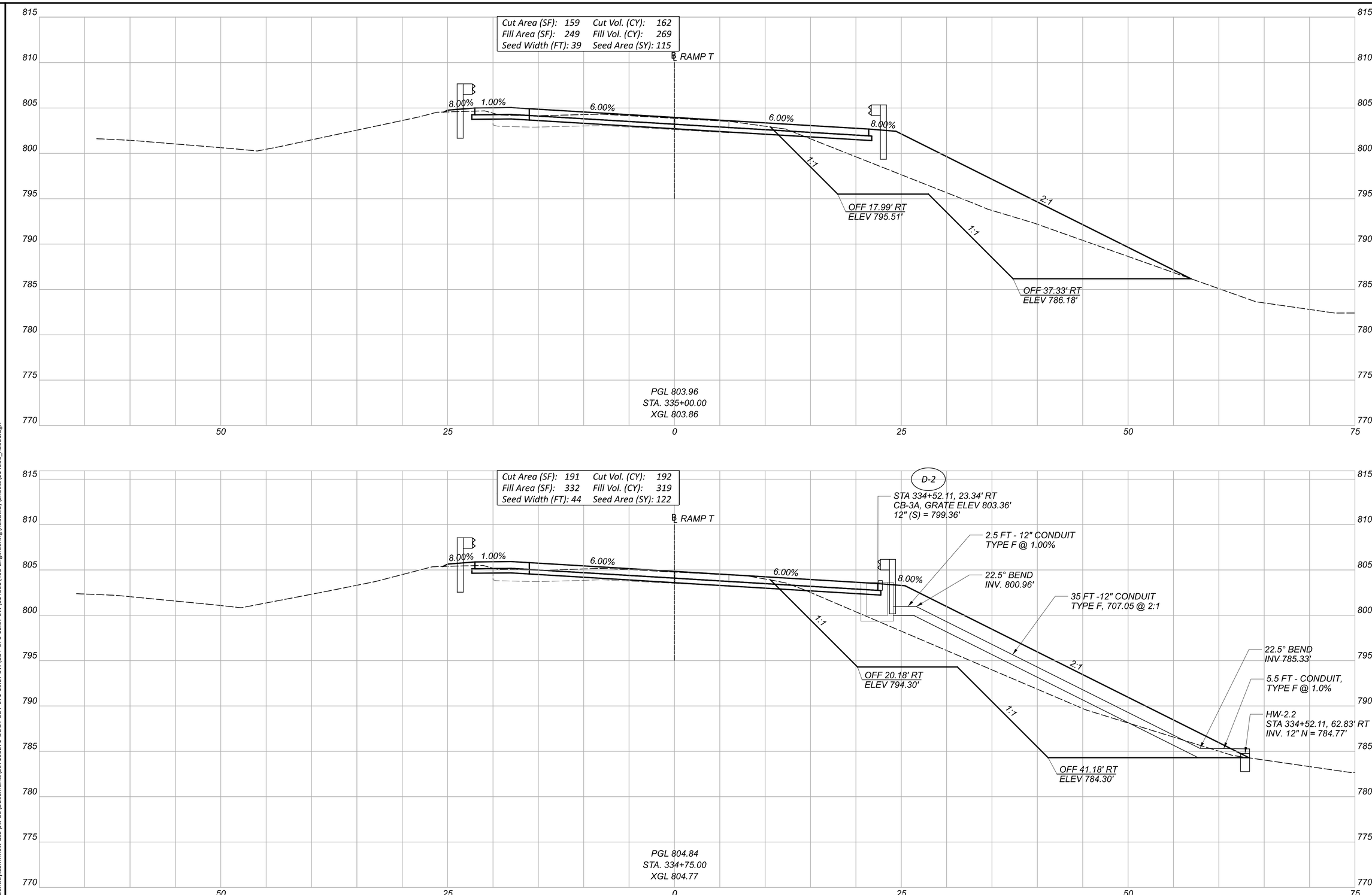


CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 334+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 10:09:54 AM USER: PIA81677
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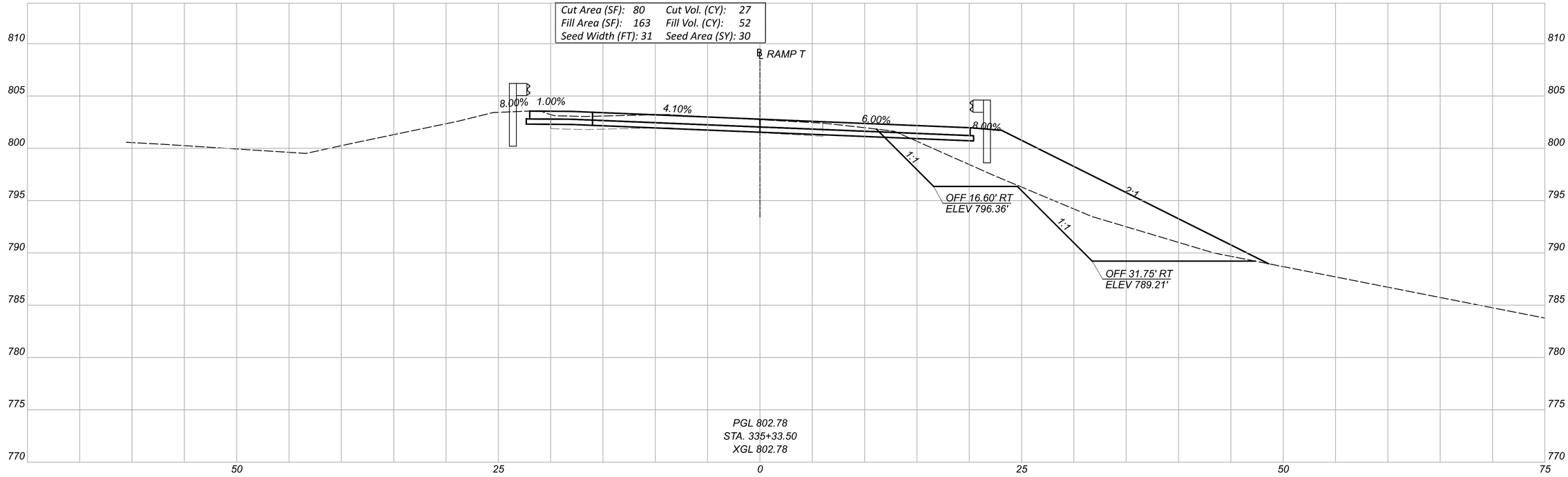
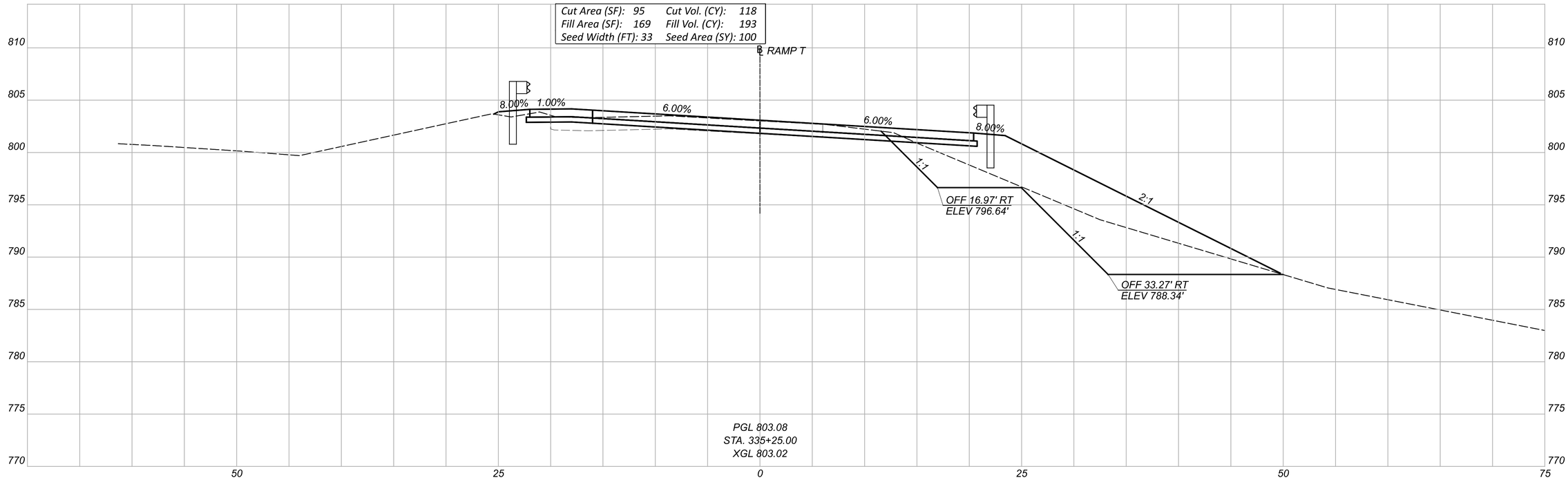
# CROSS SECTIONS
## STA. 334+75.00 TO STA. 335+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 237 | 354 | 588 |


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.65 TOTAL: 167




CROSS SECTIONS
STA. 335+25.00 TO STA. 335+33.50

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 130 | 145 | 245 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.66 TOTAL: 167

CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 335+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 10:10:35 AM USER: PIA81677
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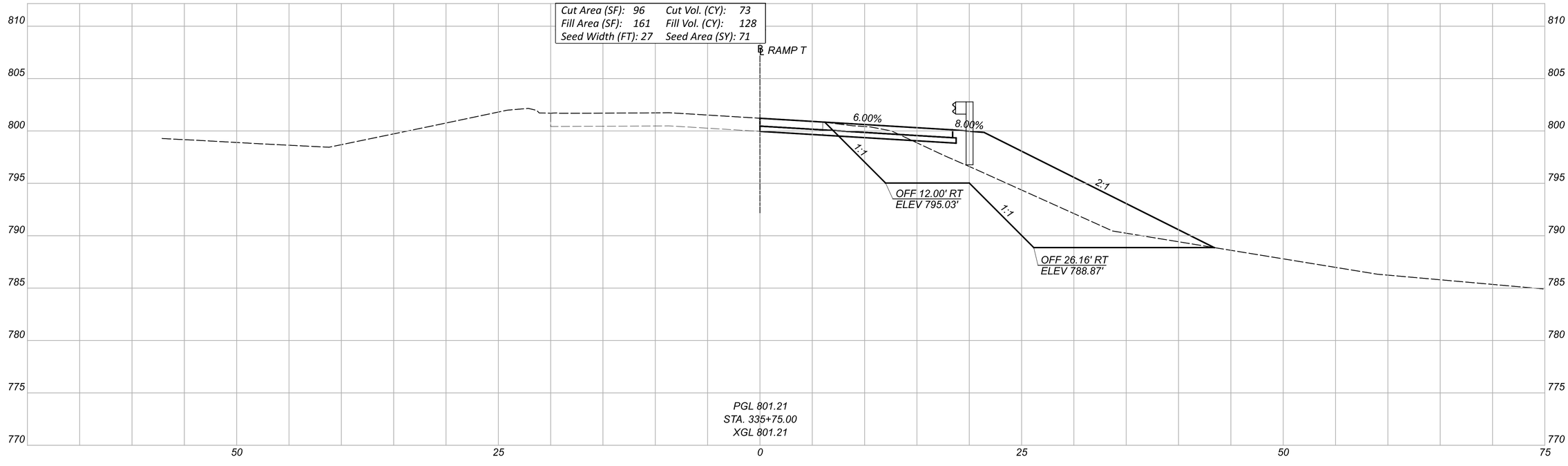


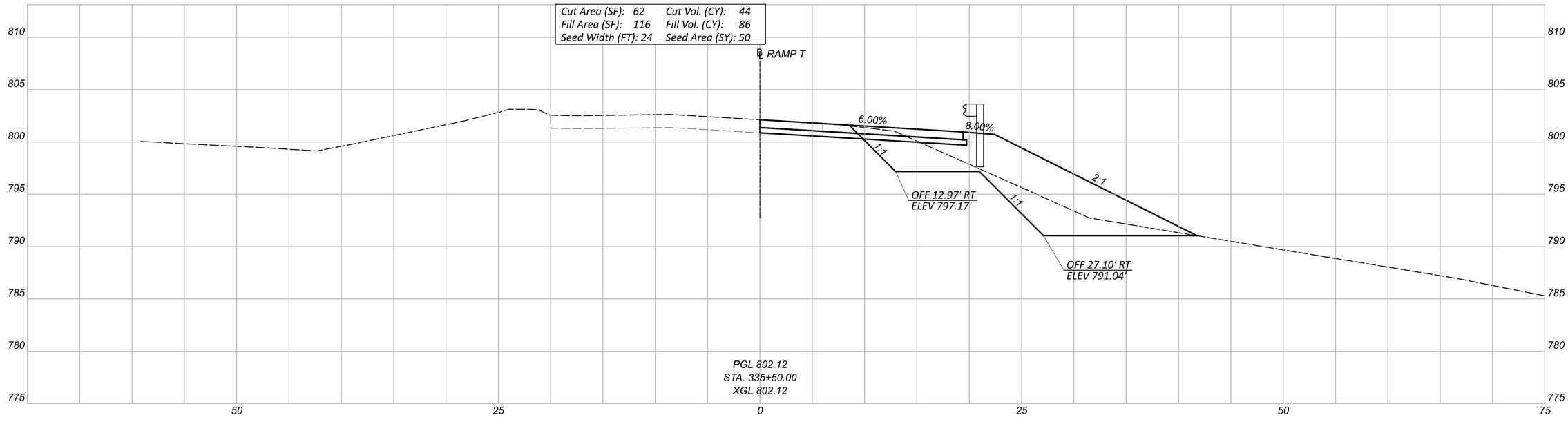


CROSS SECTIONS
STA. 335+50.00 TO STA. 335+75.00

CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 335+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:26 PM USER: KC112955
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 121 | 117 | 214 |

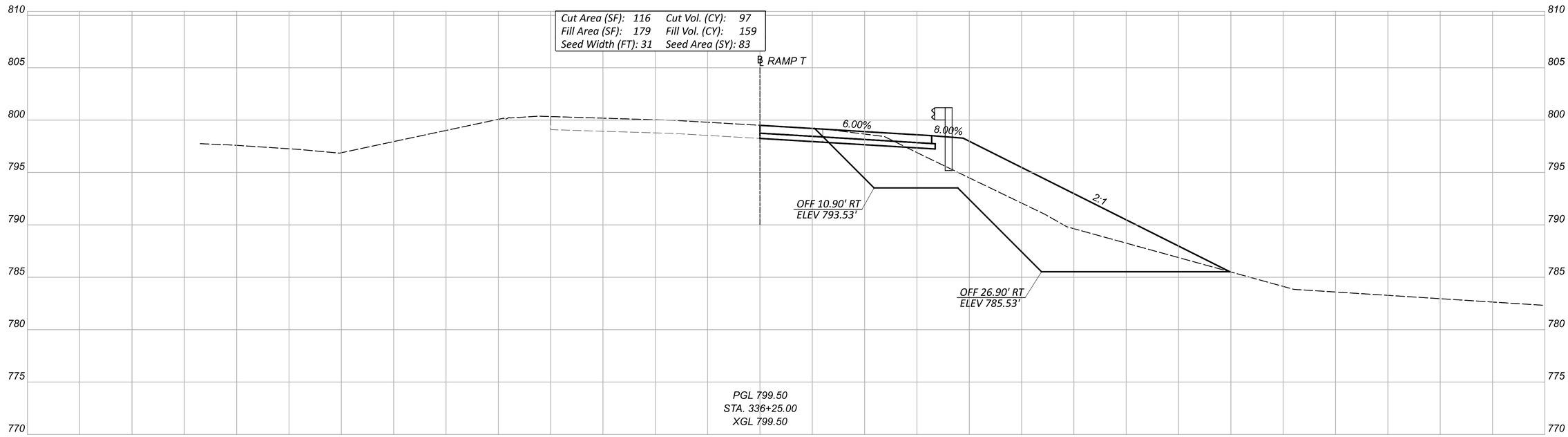
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

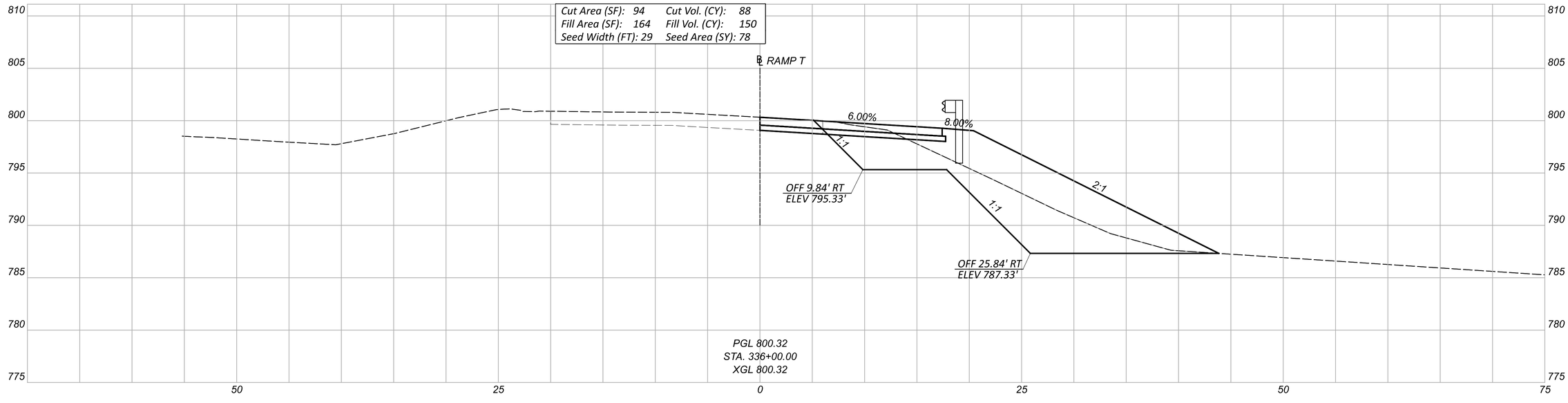
DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.67 TOTAL 167




CUY-71-10.07 SW

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# CROSS SECTIONS
# STA. 336+00.00 TO STA. 336+25.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 161 | 185 | 309 |

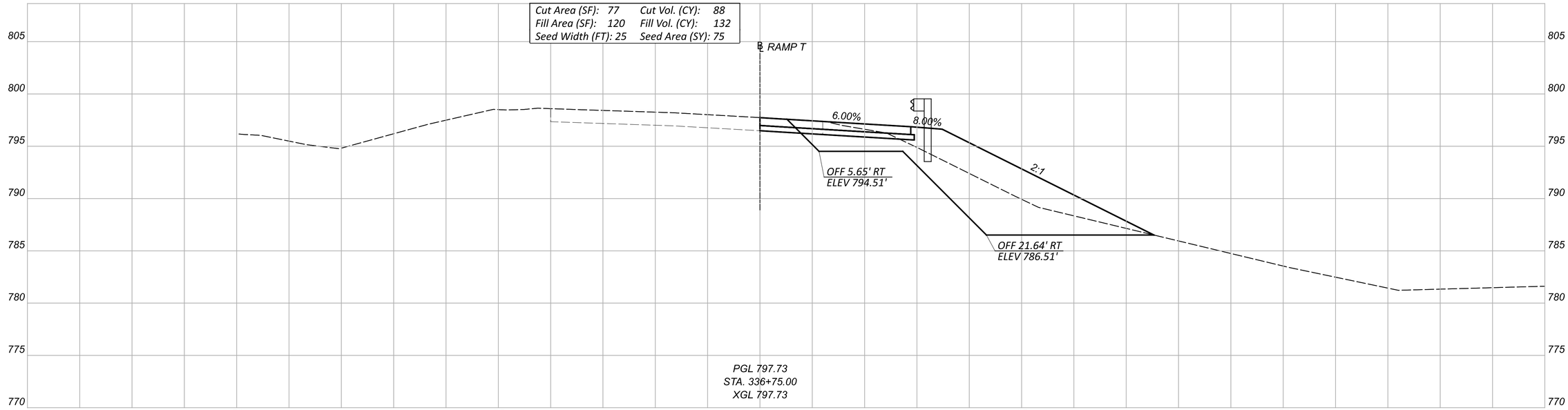
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

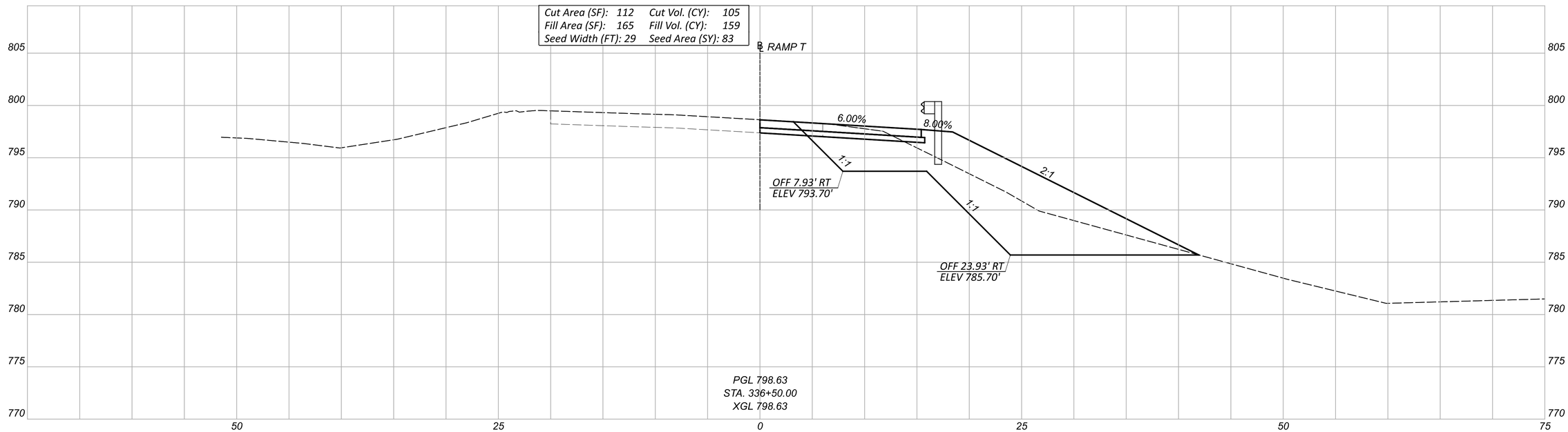
DESIGNER: SMS

REVIEWER: SJP 09/17/25

PROJECT ID: 114536

SHEET: P.68 TOTAL: 167




CROSS SECTIONS
STA. 336+50.00 TO STA. 336+75.00

CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 336+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:28 PM USER: KC112955
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 158 | 193 | 291 |

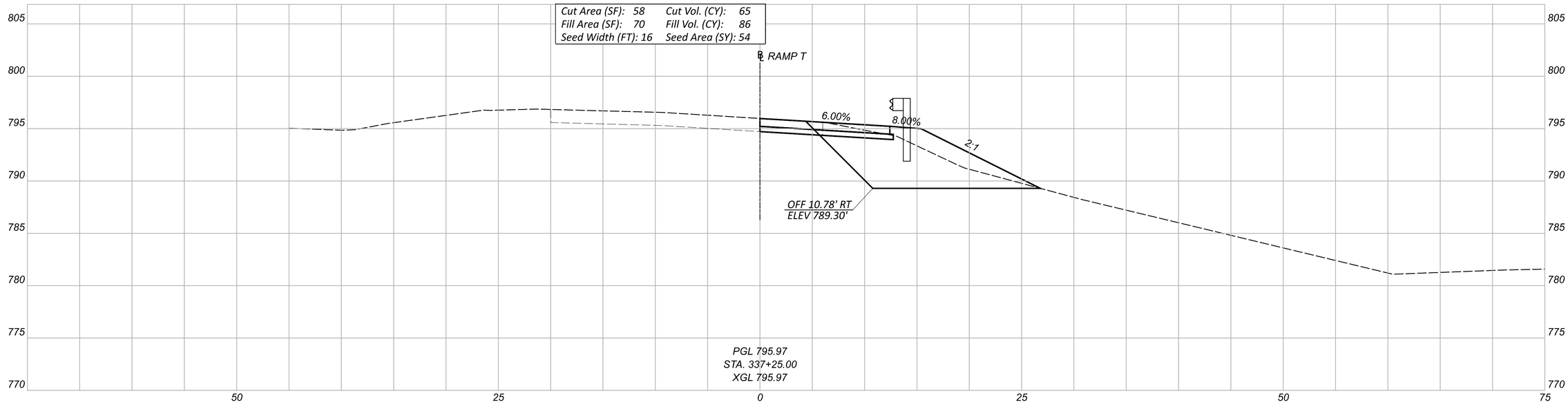
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

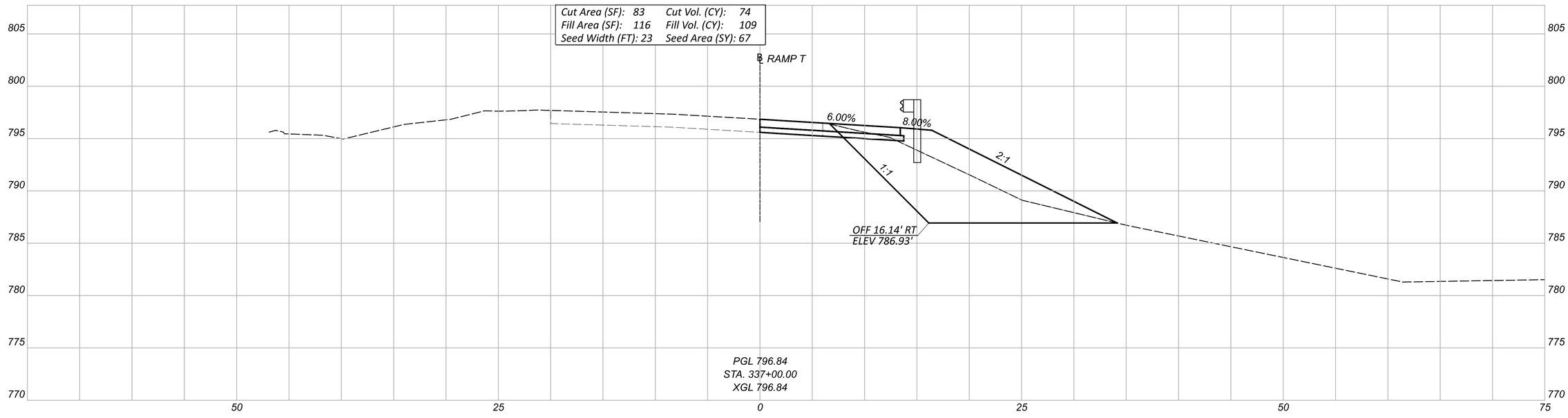
DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.69 TOTAL 167




CROSS SECTIONS
STA. 337+00.00 TO STA. 337+25.00

CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 337+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:29 PM USER: KC112955
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 121 | 139 | 195 |

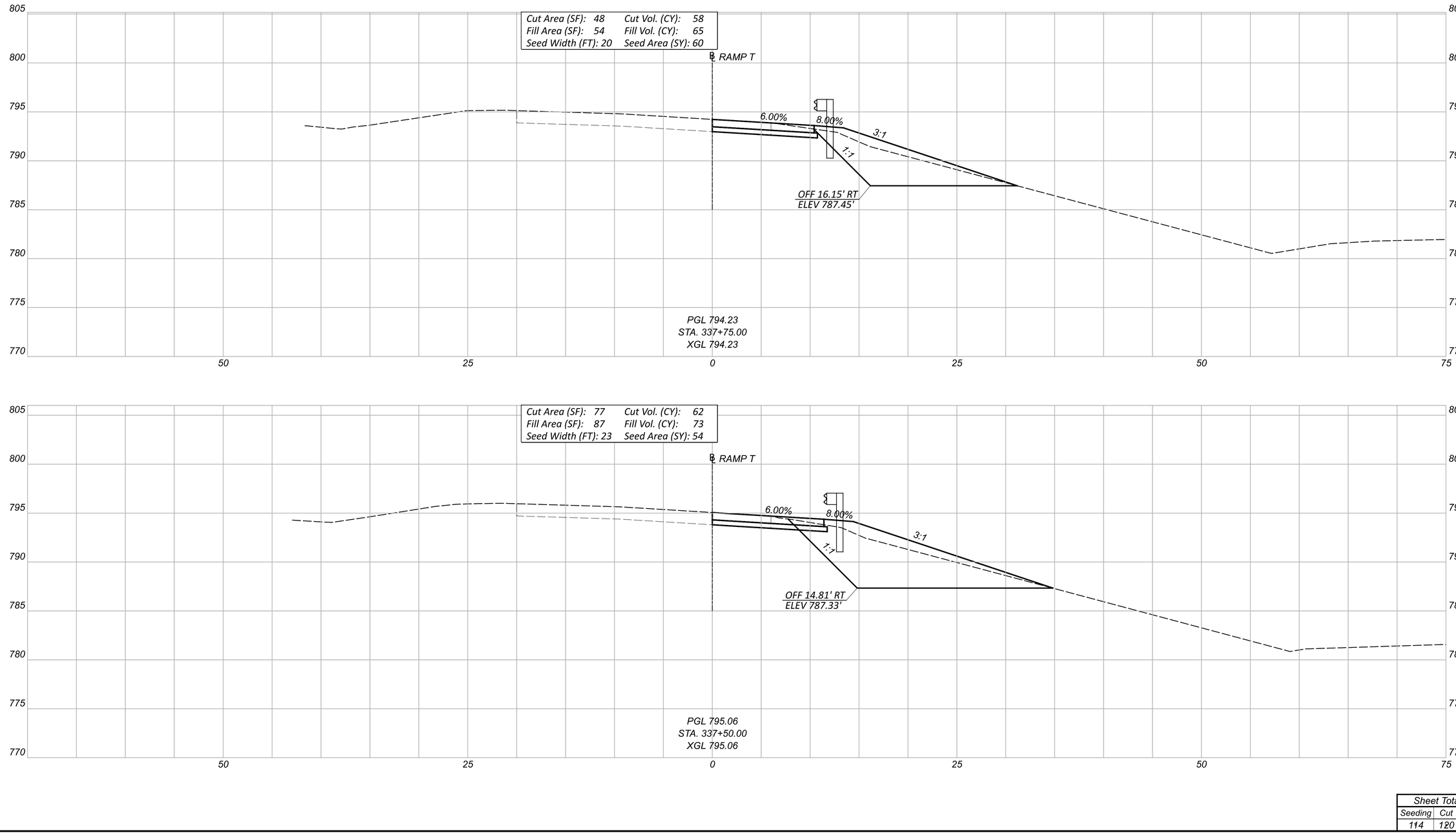
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.70 TOTAL 167




CUY-71-10.07 SW

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# CROSS SECTIONS
## STA. 337+50.00 TO STA. 337+75.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 114 | 120 | 138 |

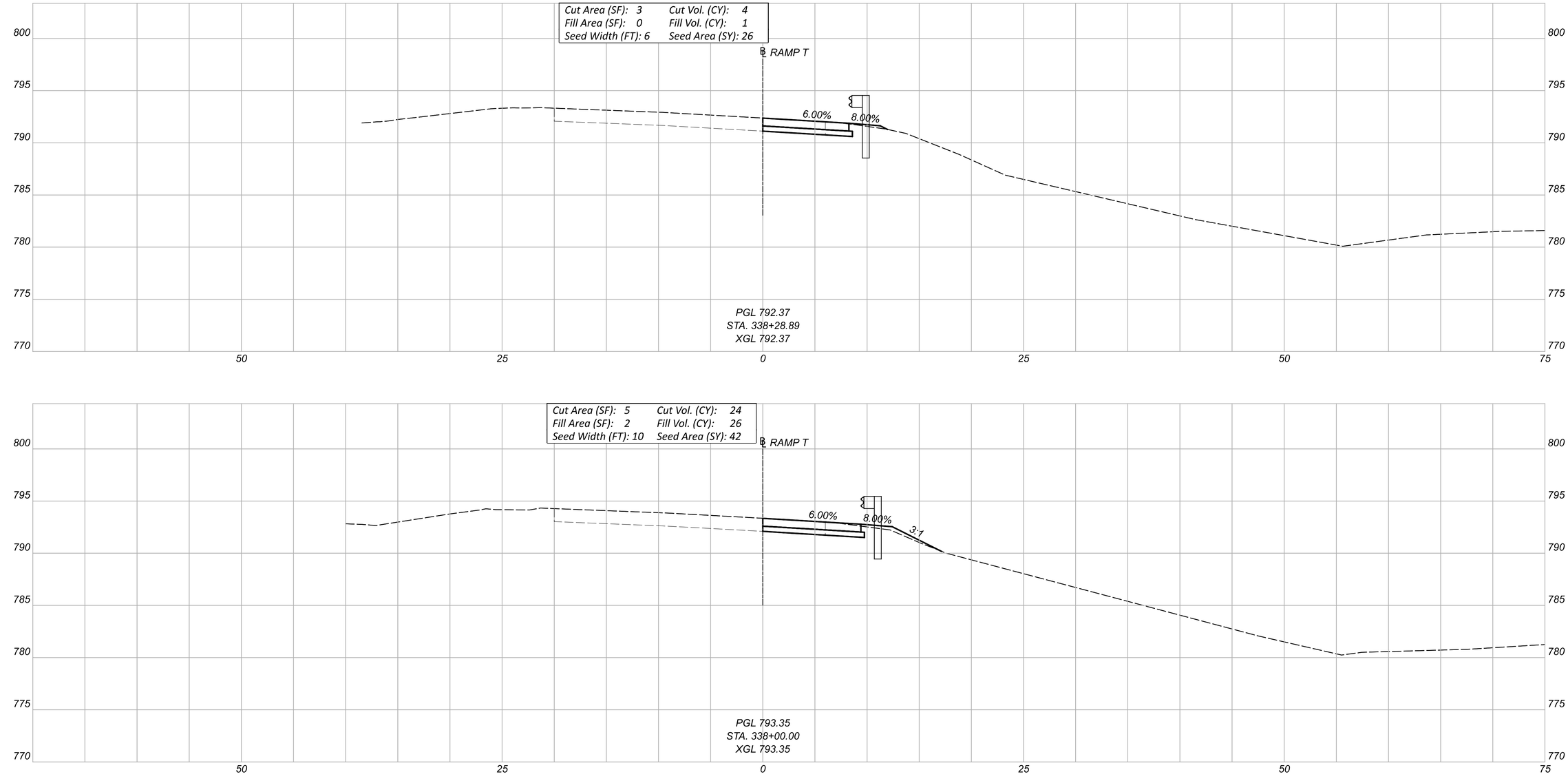
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS

REVIEWER: SJP 09/17/25

PROJECT ID: 114536

SHEET: P.71 TOTAL: 167




CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 338+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/7/2026 TIME: 2:09:31 PM USER: KC112955
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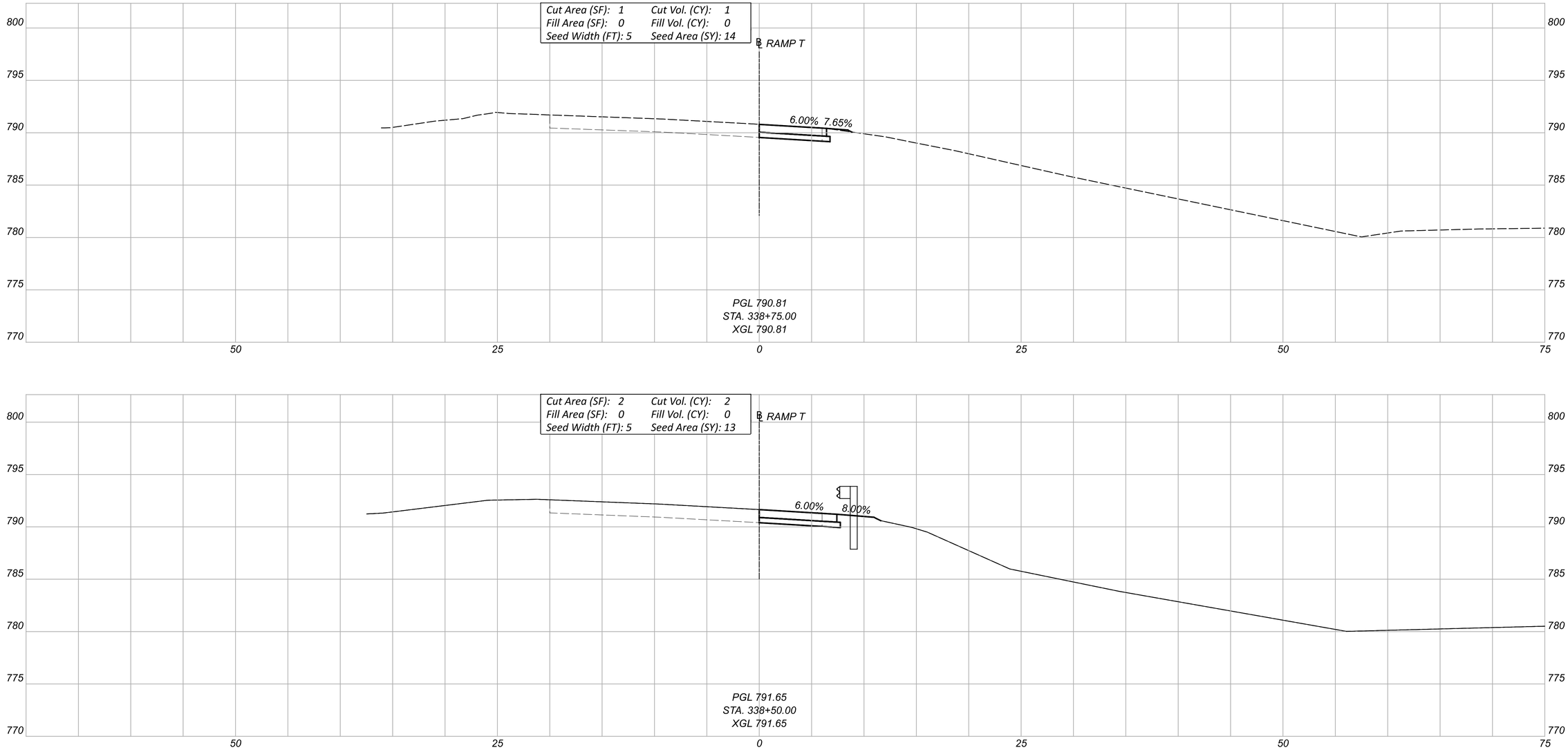
# CROSS SECTIONS
## STA. 338+00.00 TO STA. 338+28.89

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 68 | 28 | 27 |

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.72
TOTAL: 167




CROSS SECTIONS
STA. 338+50.00 TO STA. 338+75.00

CUY-71-10.07 SW

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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| 27 | 3 | 0 |

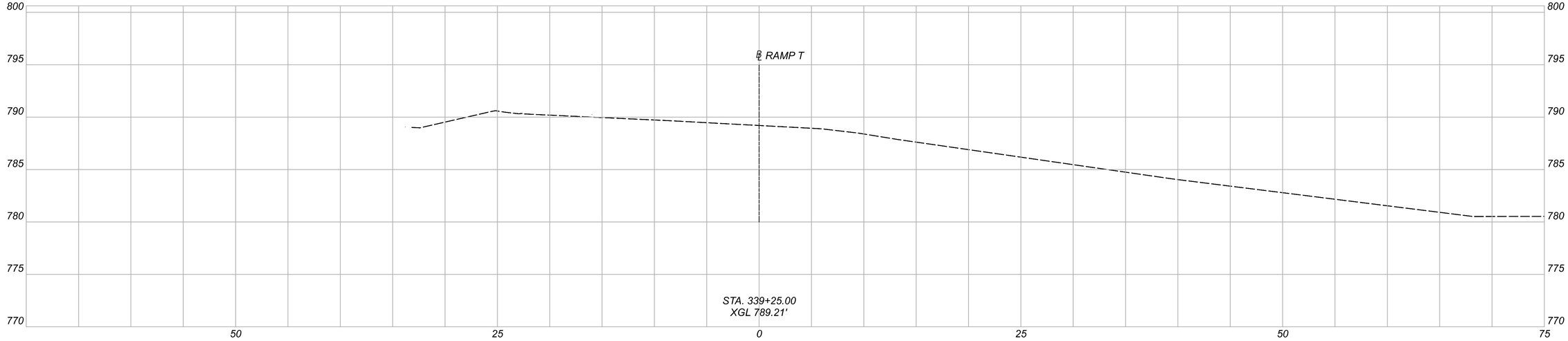
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

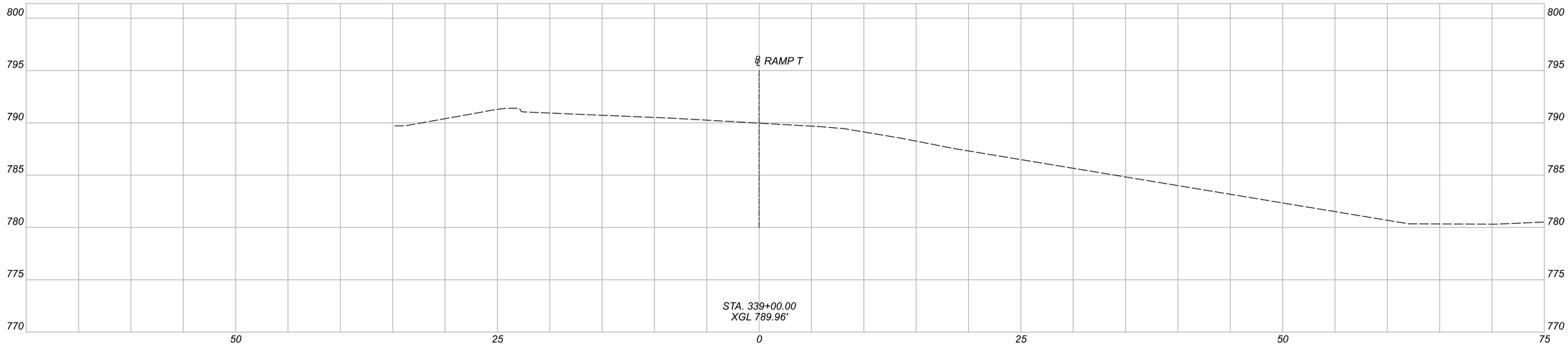
DESIGNER
SMS

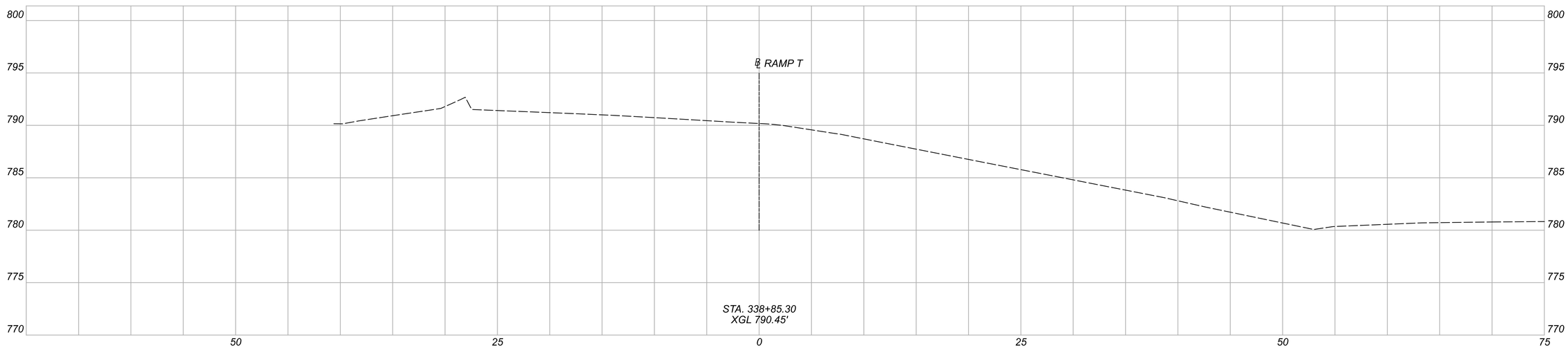
REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET P.73 TOTAL 167




# CROSS SECTIONS
# STA. 338+85.30 TO STA. 339+25.00

CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 339+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:56:50 PM USER: SAT89729
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

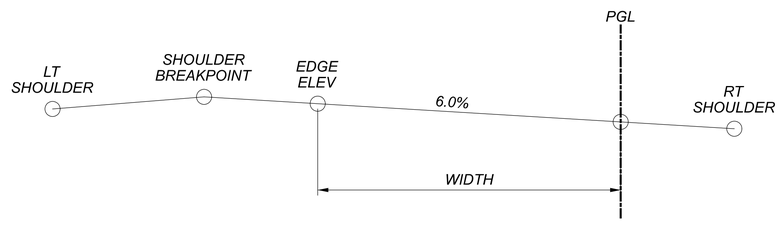
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536

| SUPERELEVATION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| P.I. STA = 334+72.59 | | | | | | Dc = 03°45'00" | |
| LEFT SIDE | | | | | BASELINE CONTROL | | |
| EDGE ELEVATION | TRANSITION RATE | ELEVATION CORRECTION | CROSS SLOPE | WIDTH | STATION | PROFILE GRADE | REMARKS |
| (812.75) | 0.0030 | 0.724 ↓ | 0.045 | 16.0' | 328+50.00 | (812.03') | BEGIN FULL WIDTH PAVEMENT |
| 813.06' | | 0.960 ↓ | 0.06 | 16.0' | 328+65.00 | 812.10' | |
| 813.16' | | 0.960 | 0.06 | 16.0' | 328+75.00 | 812.20' | |
| 813.41' | | 0.960 | 0.06 | 16.0' | 329+00.00 | 812.45' | |
| 813.66' | | 0.960 | 0.06 | 16.0' | 329+25.00 | 812.70' | |
| 813.89' | | 0.960 | 0.06 | 16.0' | 329+47.44 | 812.93' | |
| 813.91' | | 0.960 | 0.06 | 16.0' | 329+50.00 | 812.95' | |
| 814.06' | | 0.960 | 0.06 | 16.0' | 329+60.76 | 813.10' | BEGIN APPROACH SLAB |
| 814.13' | | 0.960 | 0.06 | 16.0' | 329+75.00 | 813.17' | |
| 814.28' | | 0.960 | 0.06 | 16.0' | 329+90.76 | 813.32' | END APPROACH SLAB/BEGIN BRIDGE |
| | | | | | | | |
| 809.09' | | 0.960 | 0.06 | 16.0' | 333+80.28 | 808.13' | END BRIDGE/BEGIN APPROACH SLAB |
| 808.08' | | 0.960 | 0.06 | 16.0' | 334+10.28 | 807.12' | END APPROACH SLAB |
| 809.56' | | 0.960 | 0.06 | 16.0' | 334+25.00 | 808.60' | |
| 806.68' | | 0.960 | 0.06 | 16.0' | 334+50.00 | 805.72' | |
| 805.80' | | 0.960 | 0.06 | 16.0' | 334+75.00 | 804.84' | |
| 805.50' | | 0.960 | 0.06 | 16.0' | 334+83.50 | 804.54' | |
| 804.92' | | 0.960 | 0.06 | 16.0' | 335+00.00 | 803.96' | |
| 804.04' | | 0.960 ↑ | 0.06 | 16.0' | 335+25.00 | 803.08' | |
| (803.44) | 0.0012 | 0.660 ↑ | 0.041 | 16.0' | 335+33.50 | (802.78') | END FULL WIDTH PAVEMENT |




NOTE:

SHOULDER TRANSITIONS AND ELEVATIONS PER TYP SECTIONS

SUPERELEVATION TABLE


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER SMS

REVIEWER SJP 09/17/25

PROJECT ID 114536

SHEET P.75 TOTAL 167

CUY-71-10.07 SW


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:57:02 PM USER: SAT89729
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# PAVEMENT MARKING SUBSUMMARY

| SHEET NO. | REFERENCE NO. | STATION | | SIDE | CODE | SIZE INCHES | | | | 630 GROUND MOUNTED SUPPORT, NO. 2 POST | 630 GROUND MOUNTED SUPPORT, NO. 3 POST | 630 SIGN, FLAT SHEET | 630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | 646 EDGE LINE, 6" (WHITE) | 646 EDGE LINE, 6" (YELLOW) | 646 CHEVRON MARKING | 646 CHANNELIZING LINE, 12" | 807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (WHITE) | 807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (YELLOW) | 807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" | 807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" | 807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W | x | H | | FT | FT | SQ FT | EACH | MILE | MILE | FT | FT | MILE | MILE | MILE | FT | FT |
| 74 | S-1 | 329+42.54 | | LT | OM-3L-12 | 12" | x | 36" | | 13.5 | | 3 | | | | | | | | | | |
| | | 329+59.64 | | LT | | | | | | | | | 1 | | | | | | | | | |
| 74 | S-2 | 329+81.03 | | RT | OM-3R-12 | 12" | x | 36" | | 13.5 | | 3 | | | | | | | | | | |
| | | 329+93.12 | | RT | | | | | | | | | 1 | | | | | | | | | |
| 75 | S-3 | 334+37.15 | | RT | | | | | | | | | 1 | | | | | | | | | |
| | | 334+50.00 | | RT | D10-H5a-30 | 30" | x | 30" | | 13 | | 6.25 | | | | | | | | | | |
| 75 | S-4 | 336+41.53 | | RT | W13-1P-30 | 30" | x | 30" | | | 29 | 6.25 | | | | | | | | | | |
| | | 336+41.53 | | RT | W1-11-48 | 48" | x | 48" | | | | 16 | | | | | | | | | | |
| | | 336+41.53 | | RT | | | | | | | | | 2 | | | | | | | | | |
| | | FROM | TO | | | | | | | | | | | | | | | | | | | |
| 73 | CH-1 | 324+86.85 | 326+10.00 | RT | | | | | | | | | | | | | 123 | | | | | |
| 73 | CV-1 | 324+86.85 | 325+34.85 | RT | | | | | | | | | | | | 15 | | | | | | |
| 73 | CV-2 | 325+34.85 | 326+10.00 | RT | | | | | | | | | | | | 50 | | | | | | |
| 73-76 | CV-3 | 326+10.00 | 338+85.30 | RT | | | | | | | | | | | | 650 | | | | | | |
| 73-76 | EW-1 | 326+10.00 | 338+85.30 | RT | | | | | | | | | | 0.25 | | | | | | | | |
| 74-75 | EY-1 | 328+50.00 | 335+33.50 | LT | | | | | | | | | | | 0.13 | | | | | | | |
| | | **IR-480** | | | | | | | | | | | | | | | | | | | | |
| 77-80 | EW-1 | 477+50.00 | 494+52.00 | RT | | | | | | | | | | | | | | 0.32 | | | | |
| 77-80 | EY-1 | 477+50.00 | 494+52.00 | RT | | | | | | | | | | | | | | | 0.32 | | | |
| 77-80 | LL-1 | 477+50.00 | 494+52.00 | RT | | | | | | | | | | | | | | | | 0.32 | | |
| 77-80 | LL-2 | 477+50.00 | 494+52.00 | RT | | | | | | | | | | | | | | | | 0.32 | | |
| 77-80 | EW-2 | 480+65.00 | 495+34.00 | LT | | | | | | | | | | | | | | 0.28 | | | | |
| 77-80 | LL-3 | 480+65.00 | 496+00.00 | LT | | | | | | | | | | | | | | | | 0.29 | | |
| 77-80 | LL-4 | 480+65.00 | 496+00.00 | LT | | | | | | | | | | | | | | | | 0.29 | | |
| 77-80 | EY-2 | 480+65.00 | 496+00.00 | LT | | | | | | | | | | | | | | | 0.29 | | | |
| 77-78 | DL-1 | 480+65.00 | 486+98.00 | LT | | | | | | | | | | | | | | | | | | 633 |
| 78-80 | CH-1 | 486+98.00 | 495+34.00 | LT | | | | | | | | | | | | | | | | | 836 | |
| 78-80 | CH-2 | 486+98.00 | 496+00.00 | LT | | | | | | | | | | | | | | | | | 902 | |
| **TOTALS CARRIED TO GENERAL SUMMARY** | | | | | | | | | | 40 | 29 | 35 | 5 | 0.38 | | 715 | 123 | 1.21 | | 1.23 | 1738 | 633 |

CUY-71-10.07 SW

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DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.76 TOTAL 167

## PAVEMENT MARKING LEGEND

- CV1 - CHEVRON MARKINGS, 24" WIDE (WHITE), 12' ON CENTER
- CV2 - CHEVRON MARKINGS, 24" WIDE (WHITE), 24' ON CENTER
- CV3 - CHEVRON MARKINGS, 24" WIDE (WHITE), 48' ON CENTER
- EW - EDGE LINE (WHITE), 6"
- EY - EDGE LINE (YELLOW), 6"
- CH - CHANNELIZING LINE, 12"

## SIGINING LEGEND

- EXISTING GROUND MOUNTED SIGN SUPPORT
- PROPOSED GROUND MOUNTED SIGN SUPPORT
- EXISTING GROUND MOUNTED SIGN WITH 2 SUPPORTS
- PROPOSED GROUND MOUNTED SIGN WITH 2 SUPPORTS
- PROPOSED SIGN
- EXISTING SIGN, TO REMAIN
- EXISTING SIGN, TO BE REMOVED




HORIZONTAL SCALE IN FEET
0 10 20 40

# TRAFFIC CONTROL PLAN SHEET
# STA. 322+00.00 TO STA. 327+00.00


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.77 TOTAL: 167

CUY-71-10.07 SW


MODEL: CLP_3_Option3 - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:57:27 PM USER: SAT89729
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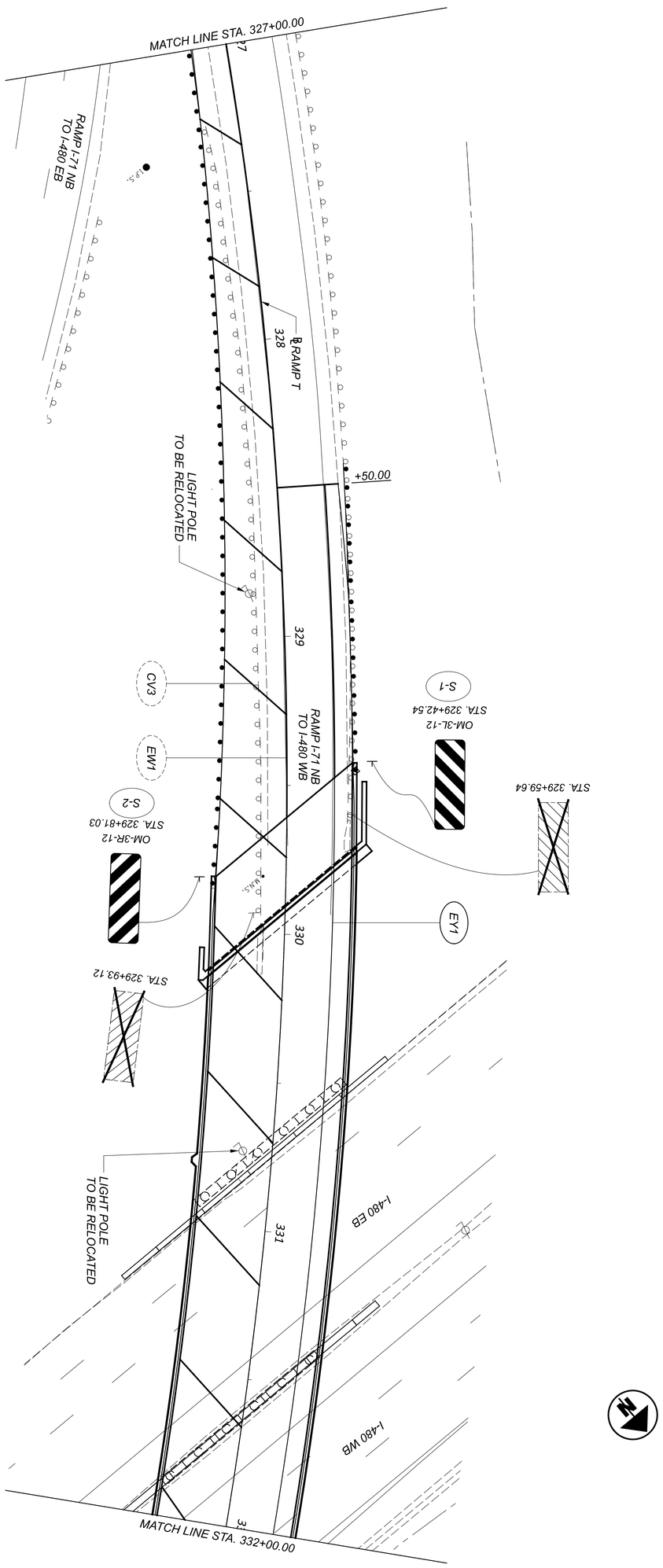
NOTE:

FOR LEGEND, SEE SHEET P.77




| | | | |
|---|---|---|---|
| SHEET P.78 | TOTAL 167 | DESIGN AGENCY | MOTT MACDONALD |
| PROJECT ID 114536 | | REVIEWER SJP 09/17/25 | 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| | | DESIGNER SMS | |

# TRAFFIC CONTROL PLAN SHEET
# STA. 327+00.00 TO STA. 332+00.00

HORIZONTAL SCALE IN FEET

0 20 10 40

MODEL: CLP_3_Option3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:57:48 PM USER: SAT89729
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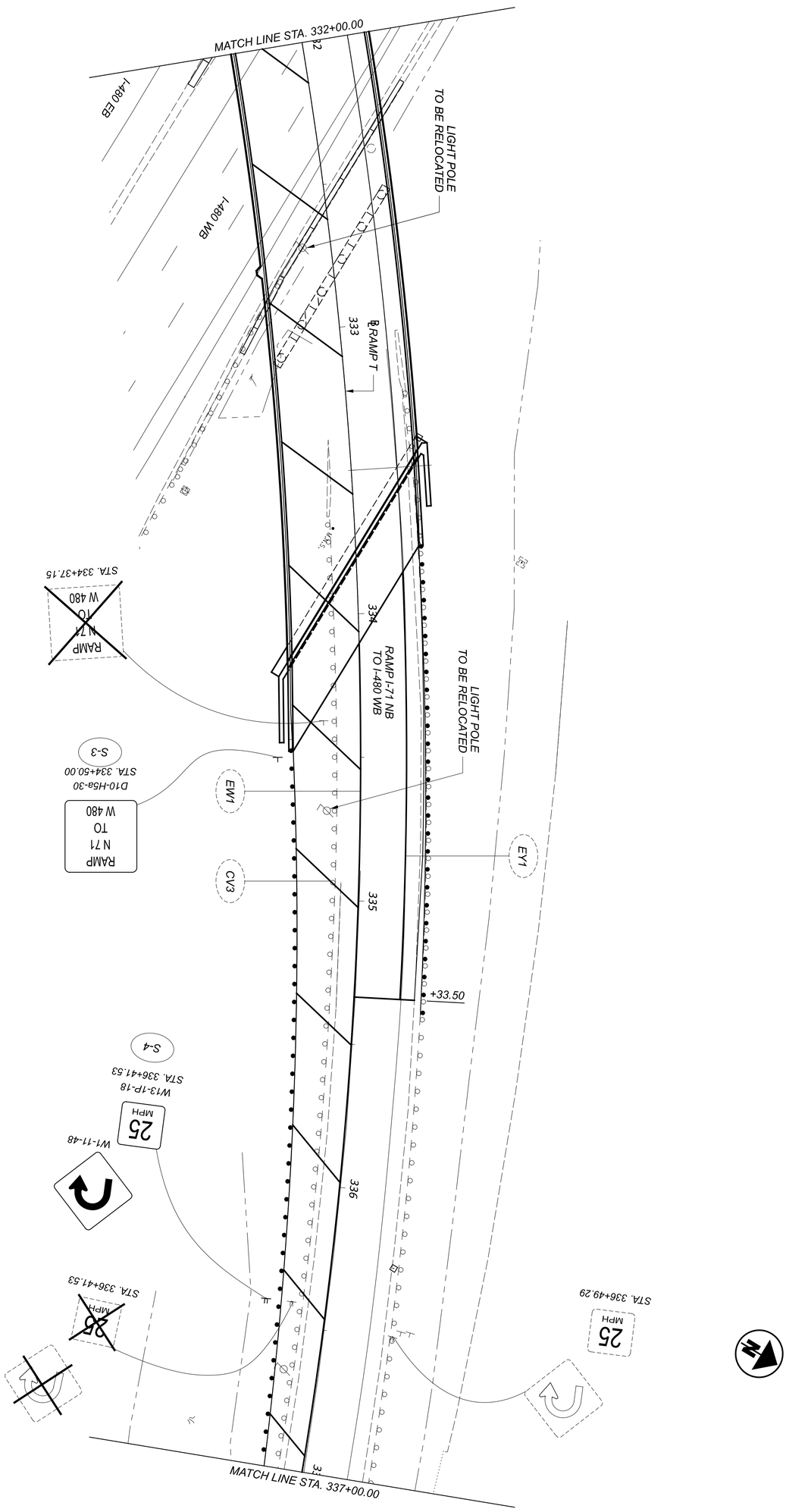
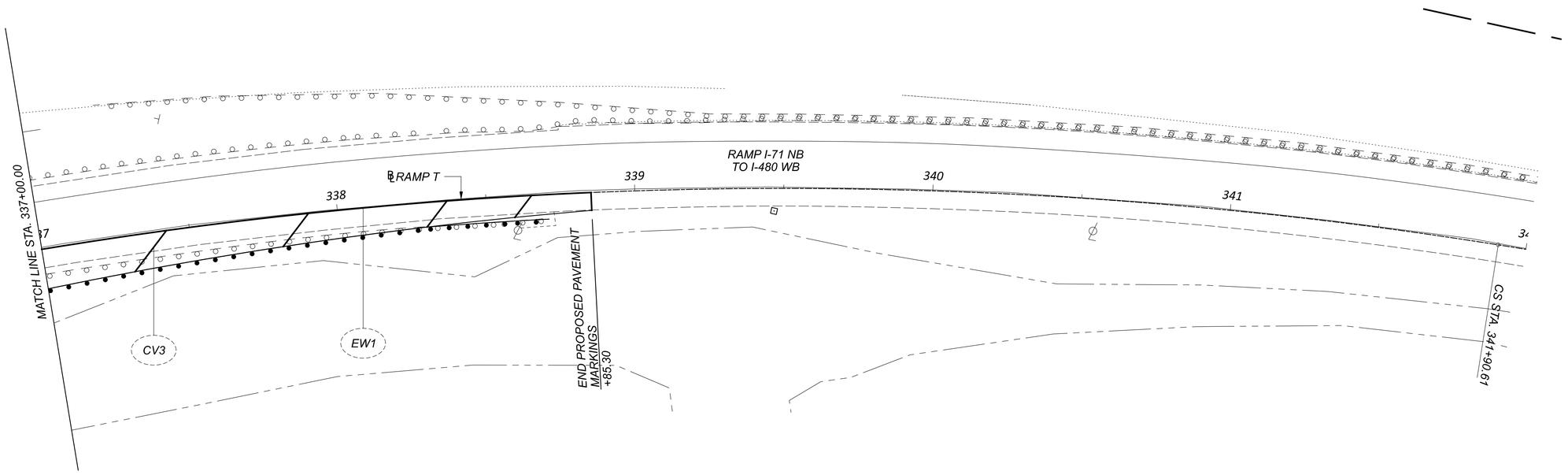
NOTE:
FOR LEGEND, SEE SHEET P.77




DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER
SMS
REVIEWER
SJP 09/17/25
PROJECT ID
114536
SHEET
P.79
TOTAL
167

TRAFFIC CONTROL PLAN SHEET
STA. 332+00.00 TO STA. 337+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40




NOTE:

FOR LEGEND, SEE SHEET 77

HORIZONTAL SCALE IN FEET
0 10 20 40

# TRAFFIC CONTROL PLAN SHEET
# STA. 337+00.00 TO STA. 342+00.00


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.80 TOTAL: 167

CUY-71-10.07 SW


MODEL: CLP_3_Option3 - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:57:57 PM USER: SAT89729
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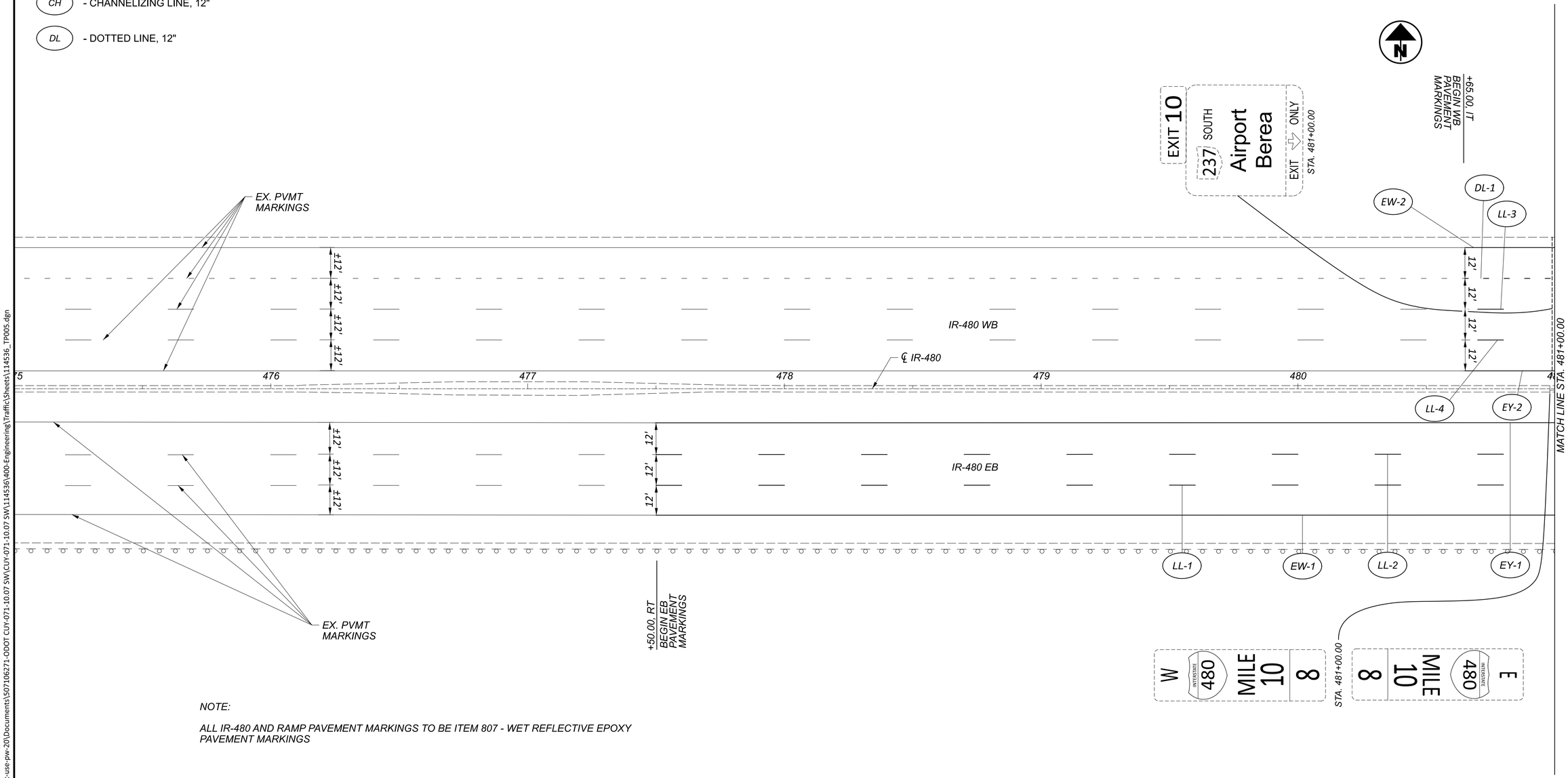
## PAVEMENT MARKING LEGEND

- EW - EDGE LINE, 6" (WHITE)
- EY - EDGE LINE, 6" (YELLOW)
- LL - LANE LINE, 6"
- CH - CHANNELIZING LINE, 12"
- DL - DOTTED LINE, 12"

## SIGNING LEGEND

- EXISTING GROUND MOUNTED SIGN SUPPORT
- EXISTING GROUND MOUNTED SIGN WITH 2 SUPPORTS
- EXISTING SIGN TO REMAIN




NOTE:

ALL IR-480 AND RAMP PAVEMENT MARKINGS TO BE ITEM 807 - WET REFLECTIVE EPOXY PAVEMENT MARKINGS

HORIZONTAL SCALE IN FEET
0 10 20 40

# TRAFFIC CONTROL PLAN SHEET - IR 480
# STA. 475+00.00 TO STA. 481+00.00

CUY-71-10.07 SW


MODEL: IR-480 TC - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:58:09 PM USER: SAT89729
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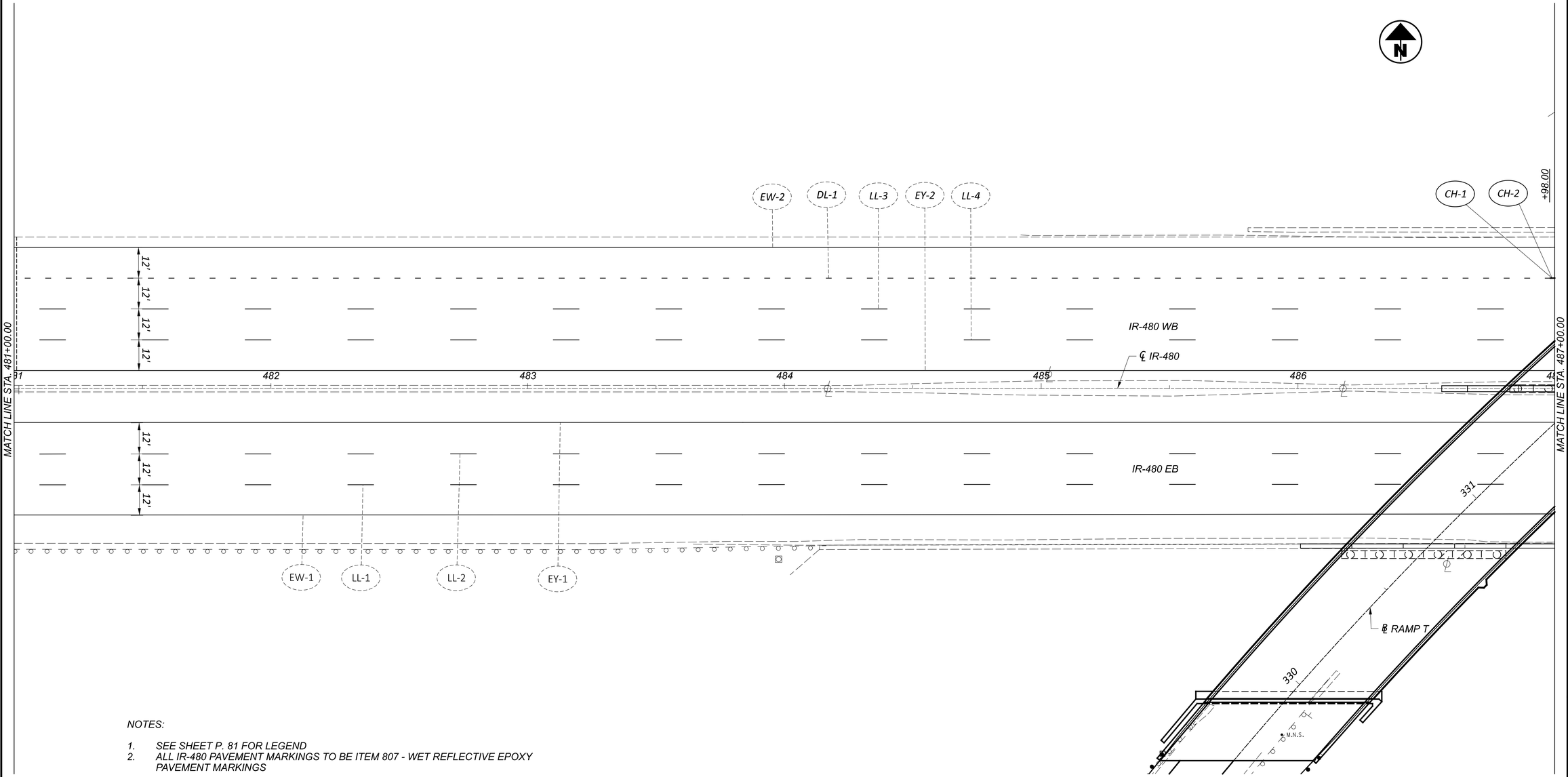
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


| | |
|---|---|
| DESIGNER | SMS |
| REVIEWER | SJP 09/17/25 |
| PROJECT ID | 114536 |
| SHEET | P.81 |
| TOTAL | 167 |




NOTES:

1. SEE SHEET P. 81 FOR LEGEND
2. ALL IR-480 PAVEMENT MARKINGS TO BE ITEM 807 - WET REFLECTIVE EPOXY PAVEMENT MARKINGS

HORIZONTAL SCALE IN FEET
0 10 20 40

# TRAFFIC CONTROL PLAN SHEET - IR 480
# STA. 481+00.00 TO STA. 487+00.00


DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135


DESIGNER: SMS
REVIEWER: SJP 09/17/25
PROJECT ID: 114536
SHEET: P.82 TOTAL: 167

CUY-71-10.07 SW


MODEL: IR-480 TC - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:58:19 PM USER: SAT89729
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MODEL: IR-480 TC - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:58:36 PM USER: SAT89729
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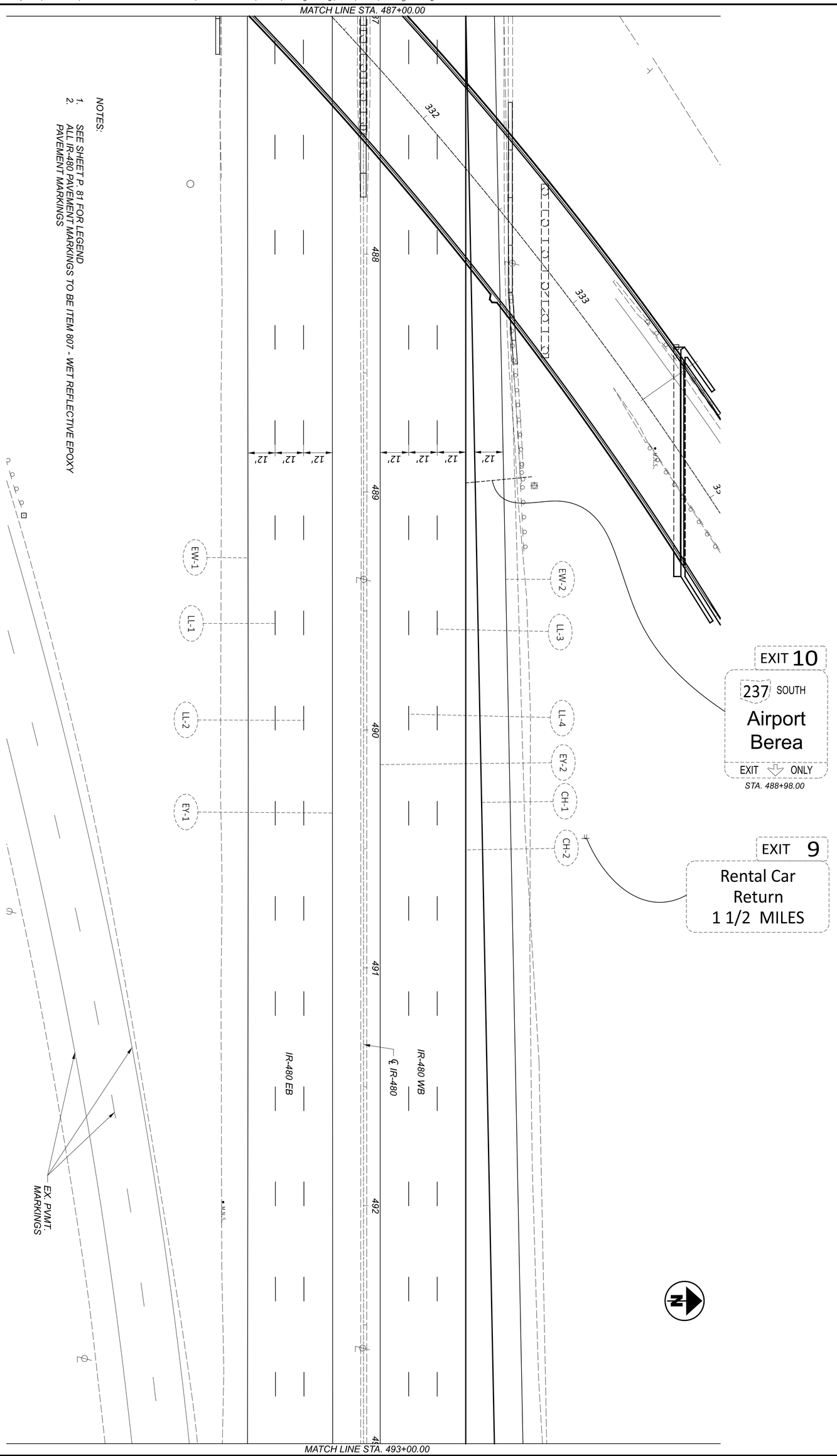
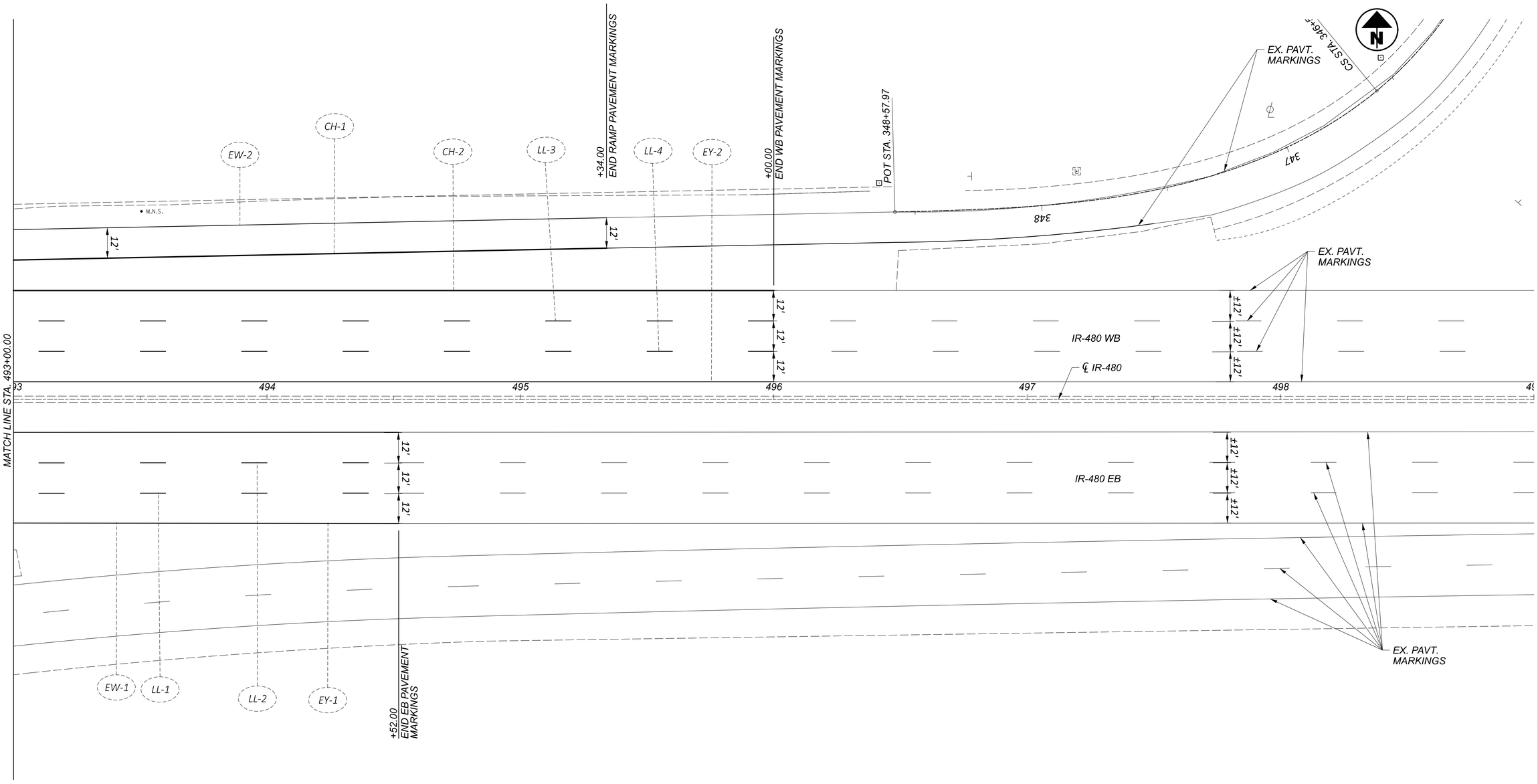



| | | | |
|---|---|---|---|
| SHEET P. 83 | TOTAL 167 | DESIGN AGENCY | TRAFFIC CONTROL PLAN SHEET - IR 480<br>STA. 487+00.00 TO STA. 493+00.00 |
| PROJECT ID 114536 | REVIEWER SJP 09/17/25 | MOTT MACDONALD<br>2044 E EMERALD PKWY<br>SUITE 100<br>CLEVELAND, OH 44135 | HORIZONTAL SCALE IN FEET<br>0 20<br>10 40 |
| | DESIGNER SMS | | |




NOTES:

1. SEE SHEET P. 81 FOR LEGEND
2. ALL IR-480 PAVEMENT MARKINGS TO BE ITEM 807 - WET REFLECTIVE EPOXY PAVEMENT MARKINGS

HORIZONTAL SCALE IN FEET
0 10 20 40

# TRAFFIC CONTROL PLAN SHEET - IR 480
# STA. 493+00.00 TO STA. 499+00.00

CUY-71-10.07 SW

MODEL: IR-480 TC - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 12:58:45 PM USER: SKT89729
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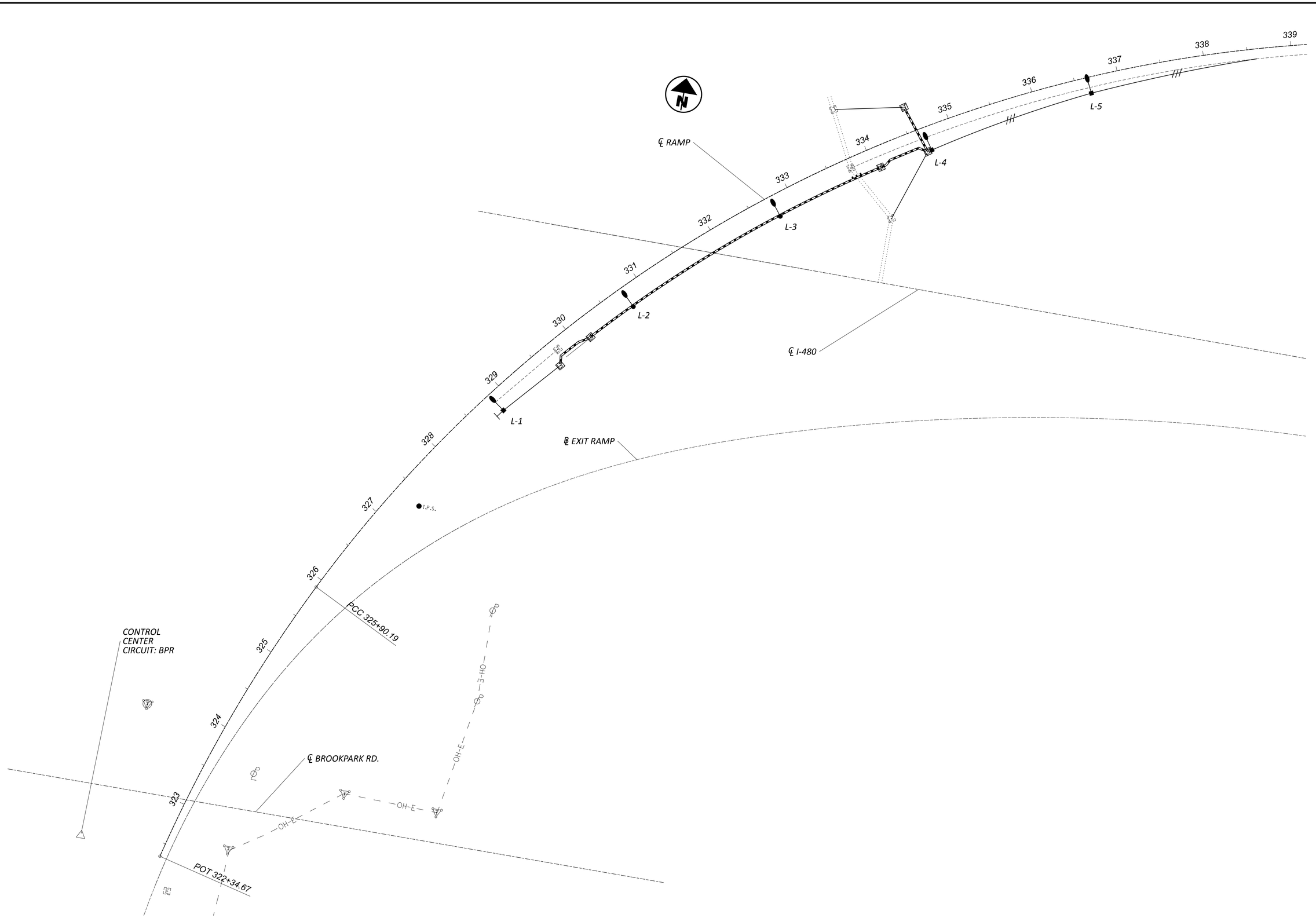
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER SMS
REVIEWER SJP 09/17/25
PROJECT ID 114536
SHEET P.84 TOTAL 167




HORIZONTAL
SCALE IN FEET
0 25 50 100

# LIGHTING PLAN
# CIRCUIT SCHEMATIC PLAN

CUY-71-10.07 SW

MODEL: 114536_LB001 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:45:32 AM USER: jschnipke
N:\Jobs\2022\220037-01-30-01-Mott MacDonald - CUY-071-10.07.SW\114536\400-Engineering\Lighting\Sheets\114536_LB001.dgn

DESIGN AGENCY
DYNOTEC

| | |
|---|---|
| DESIGNER | JLS |
| REVIEWER | SMM 04/07/25 |
| PROJECT ID | 114536 |
| SHEET | P.85 |
| TOTAL | 167 |

| REF NO. | SHEET NO. | STATION TO STATION | | | | | | 625 LIGHT POLE FOUNDATION REMOVED EACH | 625 LIGHT POLE REMOVED EACH | 625 PULL BOX REMOVED EACH | 625 PULL BOX, 725.08, 18" EACH | 625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED) Type II, 125 W EACH | 625 BRACKET ARM 15' LENGTH EACH | 625 LIGHT POLE FOUNDATION, 24" X 6' DEEP EACH | 625 LIGHT POLE, CONVENTIONAL Design AT15B40 EACH | 625 LIGHT POLE, CONVENTIONAL Design A15B40 EACH | 625 JUNCTION BOX HL-30.31 EACH | 625 CONDUIT, 2" , 725.04 FT | 625 CONDUIT, 2" , 725.05 FT | 625 TRENCH, 24" DEEP FT | 625 CONNECTION, FUSED PULL APART EACH | SPECIAL , UNFUSED PERMANENT EACH | 625 NO. 10 AWG POLE AND BRACKET CABLE FT | 625 GROUND ROD EACH | 625 NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE FT | 625 PULL BOX CLEANED EACH | 625 LIGHT POLE ANCHOR BOLTS ON STRUCTURE EACH | 625 UNDERGROUND WARNING/MARKING TAPE FT | 625 STRUCTURE JUNCTION BOX EA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EX. L-1 | P.87 | 328+85.11 | RT | TO | | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| EPB-1 | P.87 | 329+78.84 | RT | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| EX. L-2 | P.87 | 330+73.67 | RT | | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| EX. L-3 | P.87 | 332+71.01 | RT | | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| EPB-2 | P.88 | 333+75.75 | RT | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| EX. L-4 | P.88 | 334+68.71 | RT | | | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| EX. L-5 | P.88 | 336+65.40 | RT | | | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| L-1 | P.89 | 328+85.25 | RT | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | 2 | | 150 | 1 | | | | | |
| | P.89 | 328+85.25 | RT | | 329+69.16 | RT | | | | | | | | | | | | 87 | | 87 | | | | | 276 | | | 87 | |
| | P.89-P.90 | 329+69.16 | RT | | 334+64.81 | RT | | | | | | | | | | | | | 520 | 100 | | | | | 1575 | | | 100 | |
| PPB-1 | P.89 | 329+69.16 | RT | | | | | | | | 1 | | | | | | | | | | | 3 | | | | | | | |
| JB-1 | P.89 | 329+69.16 | RT | | | | | | | | | | | | | | 1 | | | | | 3 | | | | | | | |
| L-2 | P.89 | 330+78.00 | RT | | | | | | | | | 1 | 1 | | | 1 | | | | | 2 | | 150 | 1 | | | 1 | | 1 |
| L-3 | P.89 | 332+78.00 | RT | | | | | | | | | 1 | 1 | | | 1 | | | | | 2 | | 150 | 1 | | | 1 | | 1 |
| JB-2 | P.90 | 334+07.84 | RT | | | | | | | | | | | | | | 1 | | | | | 3 | | | | | | | |
| | P.90 | 333+84.59 | LT | | 334+57.66 | LT | | | | | | | | | | | | 82 | | 82 | | | | | 261 | | | 82 | |
| | P.90 | 334+57.66 | LT | | 334+64.81 | RT | | | | | | | | | | | | | 60 | | | | | | 195 | | | | |
| | P.90 | 333+95.11 | RT | | 334+64.81 | RT | | | | | | | | | | | | 90 | | 90 | | | | | 285 | 1 | | 90 | |
| PPB-2 | P.90 | 334+64.81 | RT | | | | | | | | 1 | | | | | | | | | | | 3 | | | | | | | |
| PPP-3 | P.90 | 334+57.66 | LT | | | | | | | | 1 | | | | | | | | | | | 3 | | | | | | | |
| L-4 | P.90 | 334+69.90 | RT | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | 2 | | 150 | 1 | | | | | |
| L-5 | P.90 | 336+65.80 | RT | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | 2 | | 150 | 1 | | | | | |
| | | 334+64.81 | RT | | 338+60 | RT | | | | | | | | | | | | 409 | | 409 | | | | | 1242 | | | 409 | |
| TOTALS CARRIED TO GENERAL SUMMARY | | | | | | | | 3 | 5 | 2 | 3 | 5 | 5 | 3 | 3 | 2 | 2 | 668 | 580 | 768 | 10 | 15 | 750 | 5 | 3834 | 1 | 2 | 768 | 2 |

***625, PULL BOX CLEANED***

*THIS ITEM OF WORK SHALL CONSIST OF CLEANING AN EXISTING PULL BOX BY REMOVING ANY EXISTING CABLES NOT BEING RECONNECTED, AND DEBRIS SO THAT NEW CABLES CAN BE INSTALLED. ANY UNUSED OPENINGS SHALL BE CLOSED. DISTURBED AREAS NEAR THE PULL BOX SHALL BE CLEARED OF WEEDS OR DEBRIS AND SHALL BE FULLY RESTORED. MATERIAL REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF OF THE PROJECT SITE.*

*PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "PULL BOX CLEANED" FOR EACH PULL BOX CLEANED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.*

***LIGHT POLE ANCHOR BOLTS ON STRUCTURES***

*WHEN A LIGHT POLE IS MOUNTED ON A PILASTER ON A BRIDGE PARAPET OR ON A RETAINING WALL, THE REQUIRED ANCHOR BOLTS MAY DIFFER IN LENGTH AND/OR SHAPE FROM THOSE REQUIRED WHEN THE POLE IS MOUNTED ON A CAST-IN-PLACE DRILLED SHAFT FOUNDATION. THE COST DIFFERENTIAL FOR FURNISHING SUCH BOLTS IS INCLUDED HEREIN.*

*IN ADDITION, THERE IS NO FOUNDATION CONSTRUCTION ITEM IN WHICH TO INCLUDE THE SETTING OF THE ANCHOR BOLTS. THUS, THE SETTING OF THE ANCHOR BOLTS INTO THE PILASTER IS ALSO PART OF THIS WORK.*

*PAYMENT WILL BE MADE AT EACH SUCH POLE LOCATION AT THE UNIT PRICE BID FOR EACH C&MS ITEM 625, "LIGHT POLE ANCHOR BOLTS ON STRUCTURE" AND SHALL BE FULL COMPENSATION FOR FURNISHING AND PLACING THE SET OF ANCHOR BOLTS REQUIRED.*

***ITEM SPECIAL- MAINTAIN EXISTING LIGHTING***

*EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.*

*BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.*

*IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.*

*WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.*

*REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS. BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.*

*WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY. TEMPORARY LIGHTING TO MAINTAIN EXISTING LIGHTING IS NOT REQUIRED PROVIDED THAT SERVICE IS ONLY INTERRUPTED FOR A MAXIMUM OF TWENTY-ONE (21) DAYS OR LESS.*

*PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.*

*THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.*

*ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.*

*THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.*

*THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.*

*THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.*

# LIGHTING PLAN QUANTITIES & NOTES

CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 3:51:05 PM USER: jschnipke
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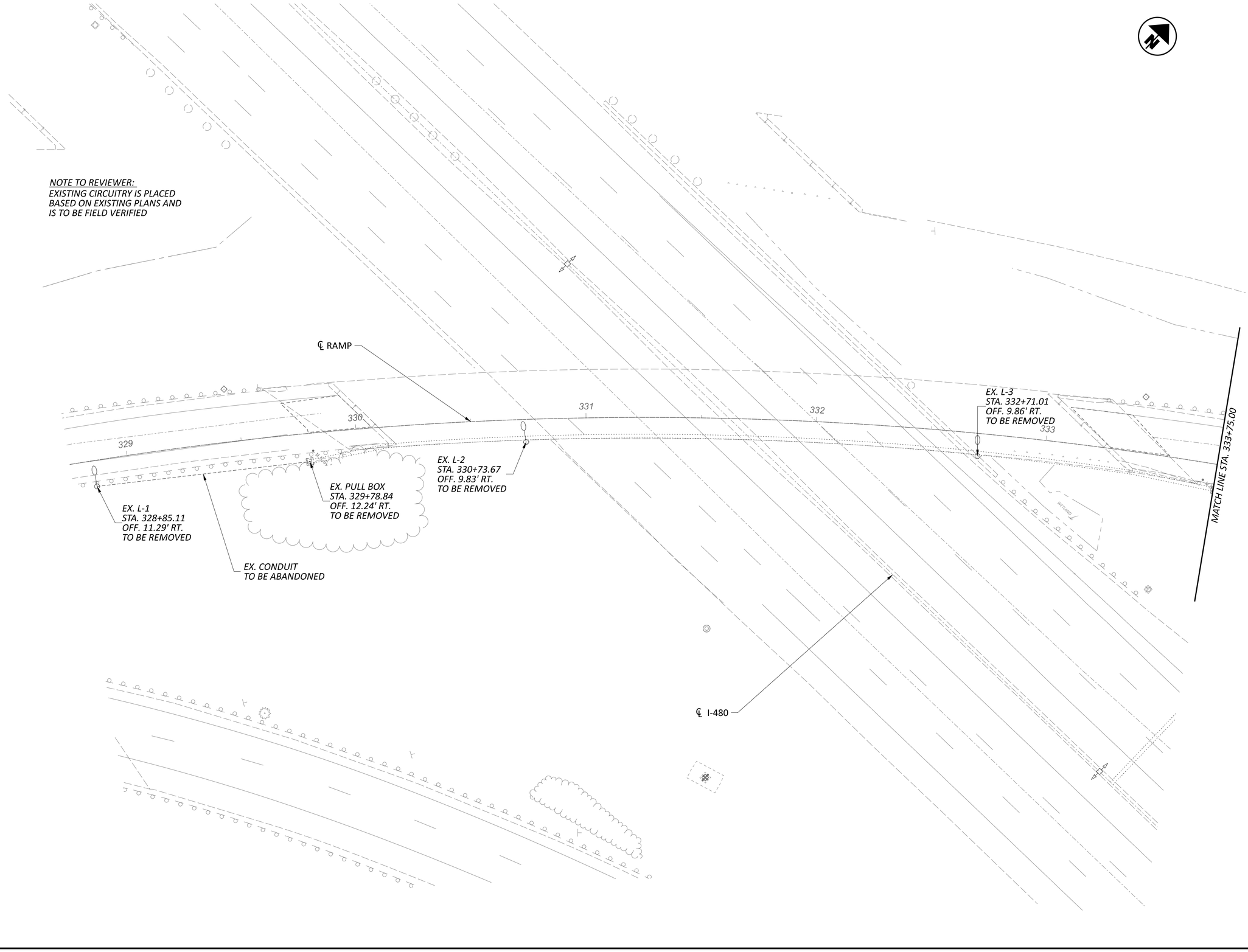
DESIGN AGENCY
DYNOTEC

DESIGNER
JLS

REVIEWER
SMM 04/07/25

PROJECT ID
114536

SHEET P.86 | TOTAL 167




HORIZONTAL SCALE IN FEET
0 10 20 40

# LIGHTING REMOVAL PLAN
# STA. 328+75 TO STA. 333+75

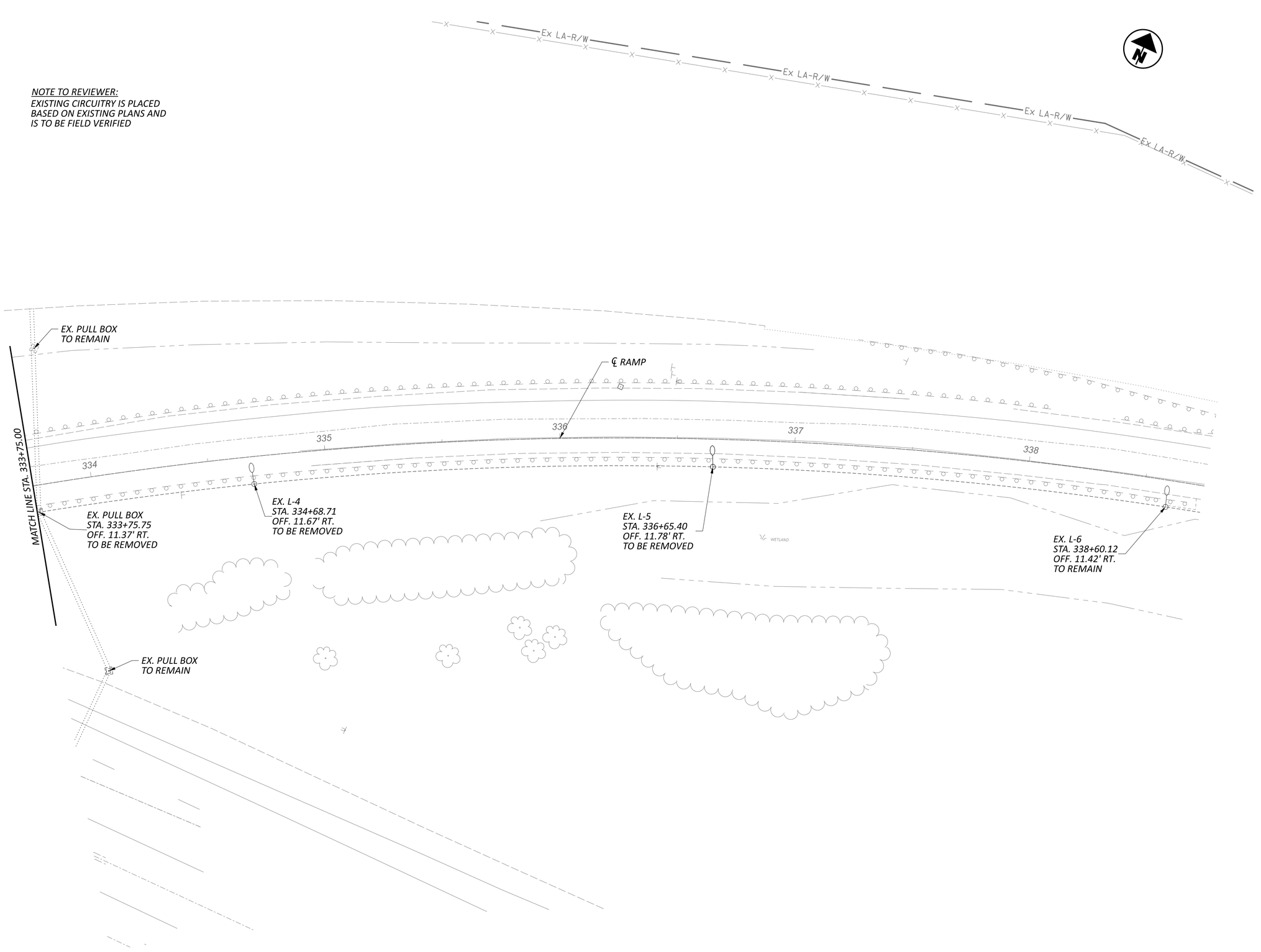
DESIGN AGENCY
DYNOTEC

| | |
|---|---|
| DESIGNER | JLS |
| REVIEWER | MPB 04/07/25 |
| PROJECT ID | 114536 |
| SHEET | P.87 |
| TOTAL | 167 |

CUY-71-10.07 SW

MODEL: Lighting Removal Plan 1 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:45:50 AM USER: jschnipke
N:\Jobs\2022\220037-01-30-01-Mott MacDonald - CUY-071-10.07 SW\114536\400-Engineering\Lighting\Sheets\114536_LP001.dgn

NOTE TO REVIEWER:
EXISTING CIRCUITRY IS PLACED BASED ON EXISTING PLANS AND IS TO BE FIELD VERIFIED




HORIZONTAL SCALE IN FEET
0 10 20 40

# LIGHTING REMOVAL PLAN
# STA. 333+75 TO STA. 338+75

DESIGN AGENCY
DYNOTEC

DESIGNER
JLS

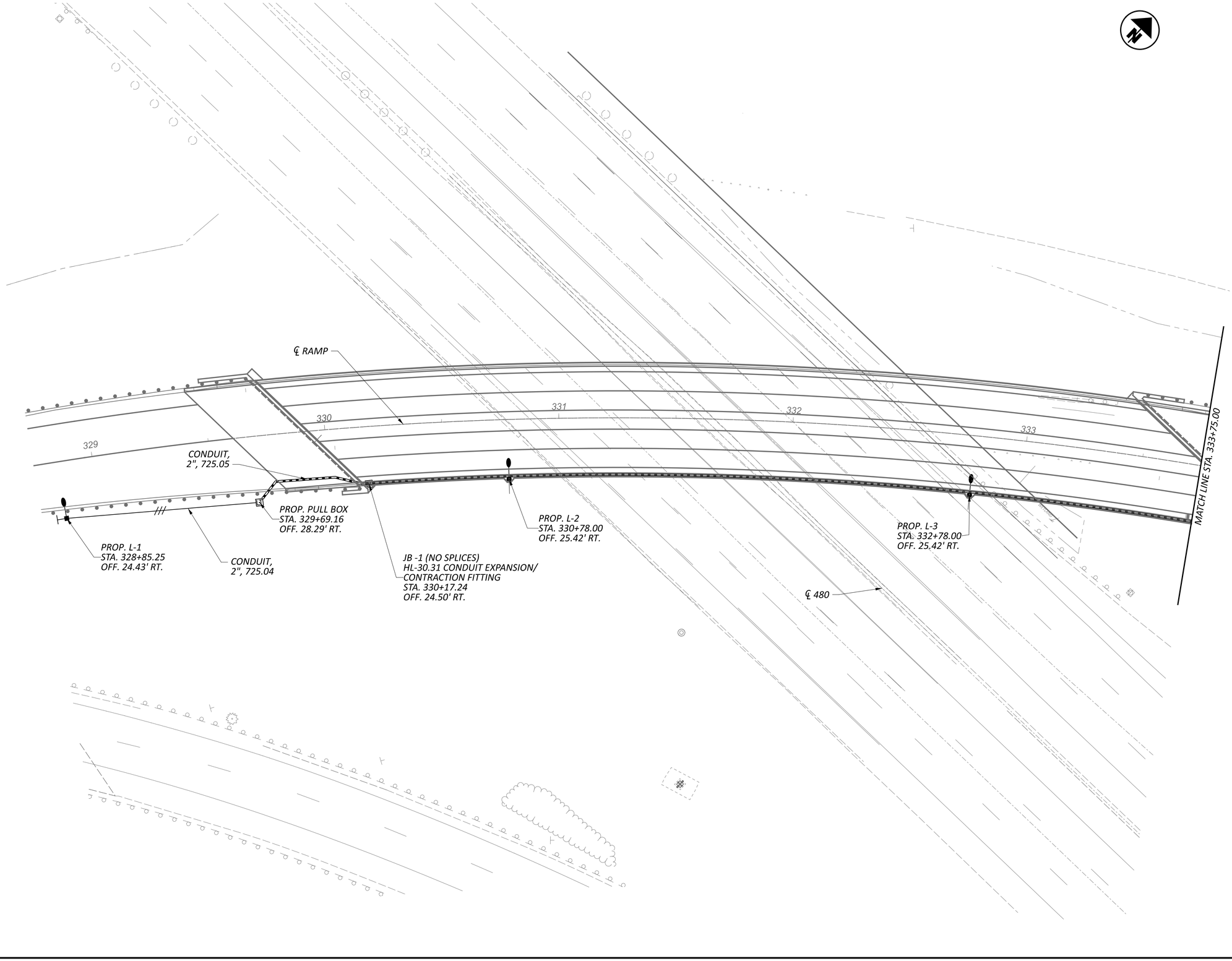
REVIEWER
MPB 04/07/25

PROJECT ID
114536

SHEET P.88 | TOTAL 167

CUY-71-10.07 SW

MODEL: Lighting Removal Plan 2 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:45:53 AM USER: jschnipke
N:\Jobs\2022\220037-01-30-01-Mott MacDonald - CUY-071-10.07.SW\114536\400-Engineering\Lighting\Sheets\114536_LP002.dgn




HORIZONTAL SCALE IN FEET
0 10 20 40

# LIGHTING PLAN
## STA. 328+75 TO STA. 333+75

CUY-71-10.07 SW

MODEL: Lighting Plan 1 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:45:55 AM USER: jschnipke
N:\Jobs\2022\220037-01-30-01-Mott MacDonald - CUY-071-10.07.SW\114536\400-Engineering\Lighting\Sheets\114536_LP101.dgn

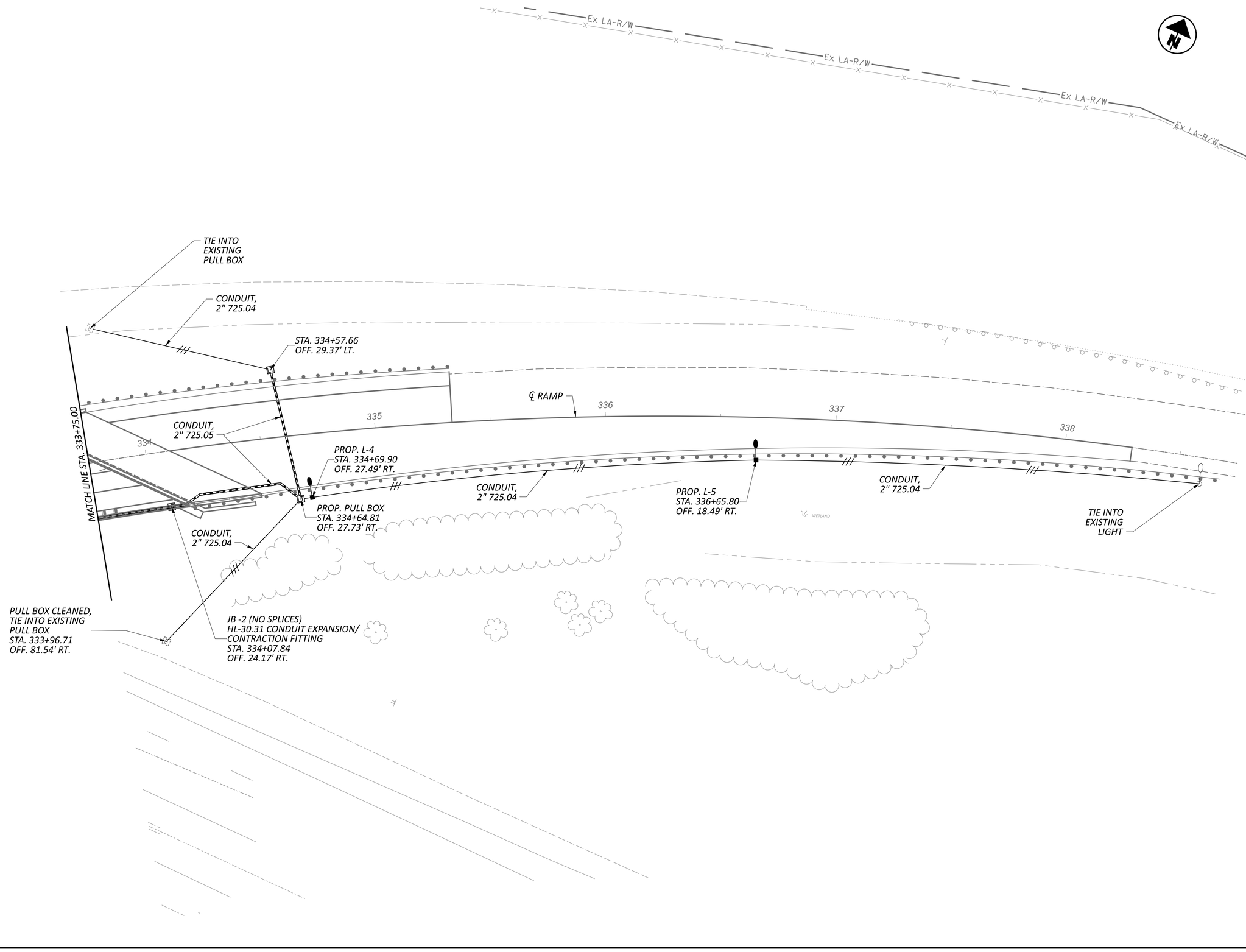
DESIGN AGENCY
DYNOTEC

DESIGNER
JLS

REVIEWER
MPB 04/07/25

PROJECT ID
114536

SHEET P.89 TOTAL 167




HORIZONTAL SCALE IN FEET
0 10 20 40

# LIGHTING PLAN
## STA. 333+75 TO STA. 338+75

CUY-71-10.07 SW

MODEL: Lighting Plan 2 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:45:58 AM USER: jschnipke
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DESIGN AGENCY
DYNOTEC

DESIGNER JLS
REVIEWER MPB 04/07/25
PROJECT ID 114536
SHEET P.90 TOTAL 167

MODEL: CLP_3_Option3 - Plan 1 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:46:00 AM USER: jschnipke
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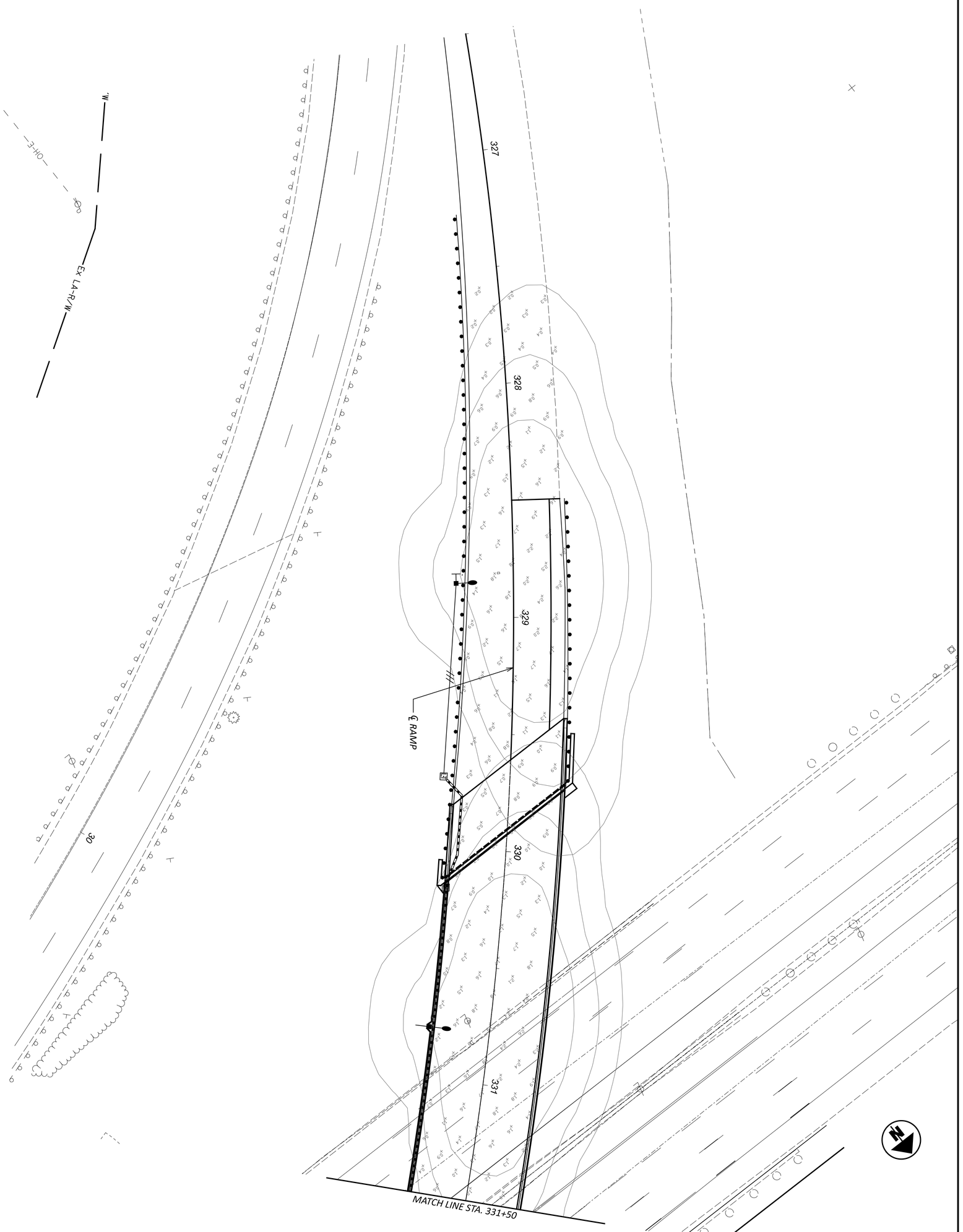



| | | | | |
|---|---|---|---|---|
| SHEET P.91 TOTAL 167 | PROJECT ID 114536 | REVIEWER MPB 04/07/25 | DESIGNER JLS | DESIGN AGENCY DYNOTEC |

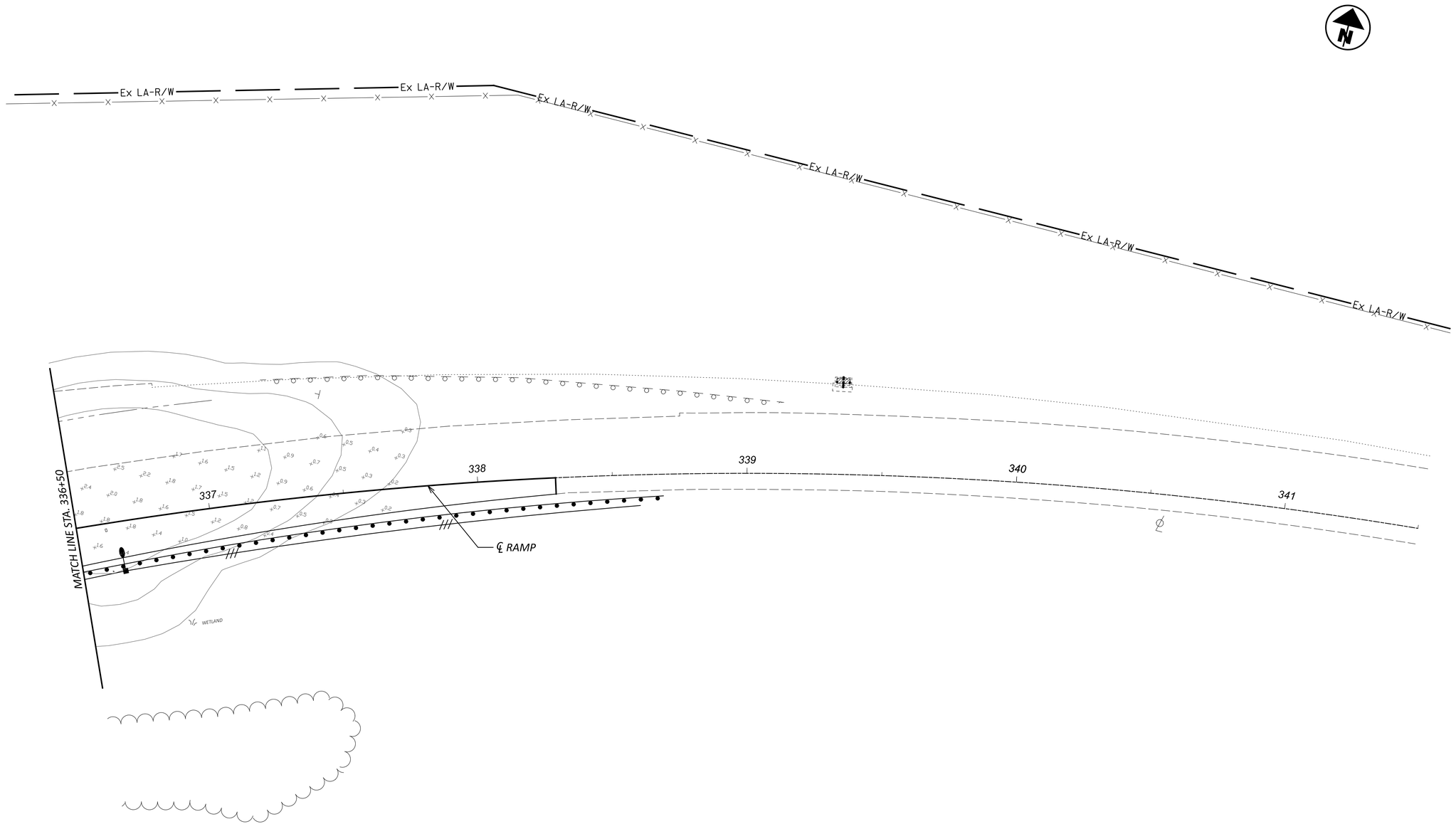
LIGHTING ANALYSIS
STA. 326+50 TO STA. 331+50

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: CLP_3_Option3 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:46:02 AM USER: jschnipke
N:\Jobs\2022\220037-01-30-01-Mott MacDonald - CUY-071-10.07.SW\114536\400-Engineering\Lighting\Sheets\114536_LM002.dgn

| | | | | | |
|---|---|---|---|---|---|
| SHEET P.92 \| TOTAL 167 | PROJECT ID 114536 | REVIEWER MPB 04/07/25 | DESIGNER JLS | DESIGN AGENCY DYNOTEC | LIGHTING ANALYSIS<br>STA. 331+50 TO STA. 336+50 |

HORIZONTAL SCALE IN FEET
0 20
10 40




HORIZONTAL SCALE IN FEET
0 10 20 40

# LIGHTING ANALYSIS
# STA. 336+50 TO STA. 341+50

DESIGN AGENCY
DYNOTEC

| | |
|---|---|
| DESIGNER | JLS |
| REVIEWER | MPB 04/07/25 |
| PROJECT ID | 114536 |
| SHEET | P.93 |
| TOTAL | 167 |

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 8/19/2025 TIME: 10:46:03 AM USER: jschnipke
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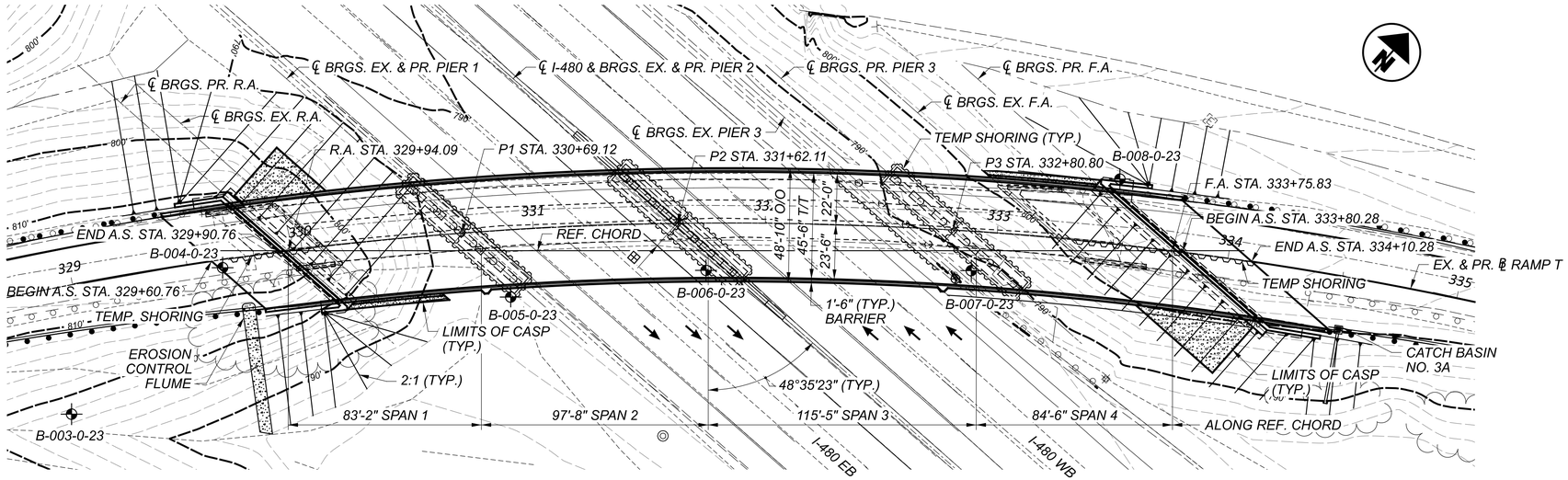



## SITE PLAN

## FOUNDATION DATA:

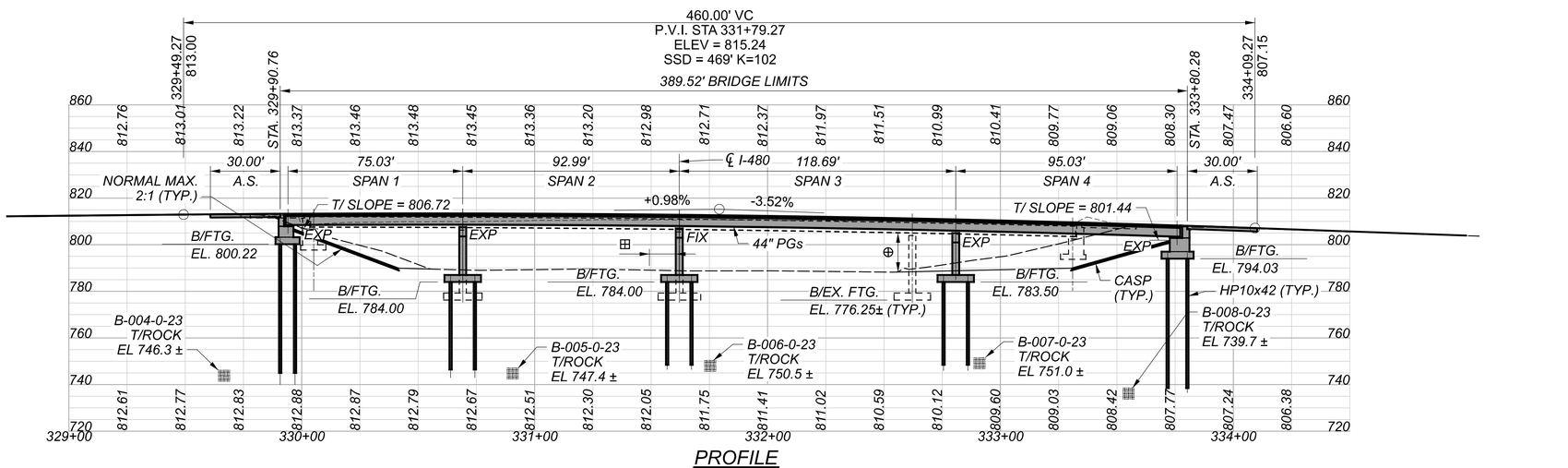
*ABUTMENTS:*
STEEL PILES, HP 10x42, DRIVEN TO REFUSAL
ESTIMATED LENGTH: 60 FEET R.A.

STEEL PILES, HP 10x42, DRIVEN TO REFUSAL
ESTIMATED LENGTH: 60 FEET F.A.

*PIERS:*
STEEL PILES, HP 10x42, DRIVEN TO REFUSAL
ESTIMATED LENGTH: 40 FEET PIER 1
ESTIMATED LENGTH: 40 FEET PIER 2
ESTIMATED LENGTH: 40 FEET PIER 3

*APPROXIMATE TOP OF ROCK ELEVATIONS:*

| | |
|---|---|
| R.A. | 746.3 |
| PIER 1 | 747.4 |
| PIER 2 | 750.5 |
| PIER 3 | 751.0 |
| F.A. | 739.7 |




## PROFILE

ALONG ℄ RAMP

## BENCHMARK DATA

| |
|---|
| CP1 STA. 324+35.46, 20.37' RT, EL. 807.49 |
| CP2 STA. 327+37.21, 32.67' RT, EL. 806.57 |
| CP3 STA. 329+80.70, 07.67' RT, EL. 812.47 |
| CP4 STA. 333+69.89, 07.55' RT, EL. 807.33 |

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEETS.

*NOTES:*

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. PLAN DIMENSIONS ARE RADIAL TO THE RAMP ℄ UNLESS NOTED.
3. FOR ADDITIONAL ABBREVIATIONS, SEE SHEET 05/51.

*DESIGN TRAFFIC:*

| | |
|---|---|
| 2023 ADT: 11,497 | 2043 ADT: 11,497 |
| 2025 ADTT: 460 | 2043 ADTT: 460 |
| DISTRIBUTION: 1.0 | |

*LOCATIONS OF FIRST GUARDRAIL POST:*

| | |
|---|---|
| LT REAR: STA. 329+41.59 | LT FWD: STA. 333+78.32 |
| RT REAR: STA. 329+80.06 | RT FWD: STA. 334+48.78 |

*CONTROLLING VERTICAL & HORIZONTAL CLEARANCES:*

| VERTICAL | | HORIZONTAL | |
|---|---|---|---|
| EXIST: | 16.3'± | EXIST: | 11.3'± |
| PROP: | 16.64' | PROP: | 11.3' |
| REQ'D: | 15.5' | REQ'D: | 10.0' |

*LEGEND:*

- ⌖ - BORING LOCATION
- ▭ - AGGREGATE SLOPE PROTECTION
- ⊕ - POINT OF MINIMUM VERTICAL CLEARANCE
- ⊞ - POINT OF MINIMUM HORIZONTAL CLEARANCE

## EXISTING STRUCTURE

TYPE: NON-COMPOSITE REINFORCED CONCRETE DECK SLAB ON FOUR-SPAN CONTINUOUS STEEL PLATE GIRDERS WITH REINFORCED CONCRETE SUBSTRUCTURE ON SPREAD FOOTINGS

SPANS: 61'-0"±, 93'-0"±, 100'-0"±, AND 65'-0"± C/C BEARINGS ALONG ℄
ROADWAY: 26'-6"± T/T OF BARRIERS
LOADING: CF-2000 (1957)
SKEW: 47°56'21"± R.F. TO REF. CHORD
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: 25'-0", 15" THICK (AS-1-72)
ALIGNMENT: 3°45'00"± RT
SUPERELEVATION: 6.2%± PER FOOT
STRUCTURE FILE NUMBER: 1814257
DATE BUILT: 1980
DISPOSITION: TO BE REMOVED AND REPLACED

## PROPOSED STRUCTURE

PROPOSED WORK: EXISTING BRIDGE REPLACED WITH NEW COMPOSITE CONCRETE DECK WITH STEEL PLATE GIRDERS ON REINFORCED CONCRETE SUBSTRUCTURE WITH PILE FOUNDATIONS
TYPE: REINFORCED CONCRETE DECK SLAB ON FOUR-SPAN CONTINUOUS A588/A709 GR 50 STEEL PLATE GIRDERS WITH REINFORCED CONCRETE SUBSTRUCTURE AND PILE FOUNDATIONS

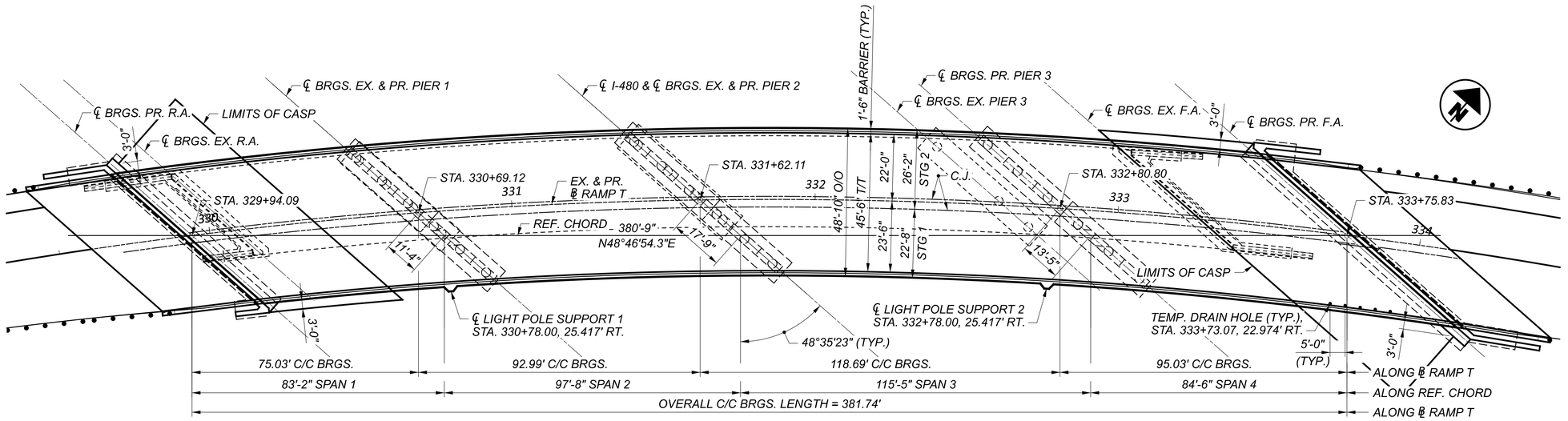
SPANS: 75.03', 92.99', 118.69', AND 95.03' C/C BEARINGS ALONG ℄ (83'-2", 97'-8", 115-5", AND 84'-6" C/C BEARINGS ALONG REF. CHORD)
ROADWAY: 45'-6" T/T OF BARRIERS
LOADING: HL-93 AND 60 PSF FUTURE WEARING SURFACE
SKEW: 48°35'23" R.F. TO REFERENCE CHORD
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: 30'-0", 17" THICK (AS-1-15 & AS-2-15)
ALIGNMENT: 3°45'00" RT
SUPERELEVATION: 6.0% PER FOOT
DECK AREA: 18,761 SQUARE FEET
COORDINATES: LATITUDE: 41°25'13.70"N
LONGITUDE: 81°48'55.64"W

SITE PLAN
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

| | |
|---|---|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| | 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| DESIGNER / CHECKER | RLD / JMR |
| REVIEWER | SK 09/17/25 |
| PROJECT ID | 114536 |
| SUBSET / TOTAL | 1 / 51 |
| SHEET / TOTAL | P.94 / 167 |

CUY-71-10.07 SW

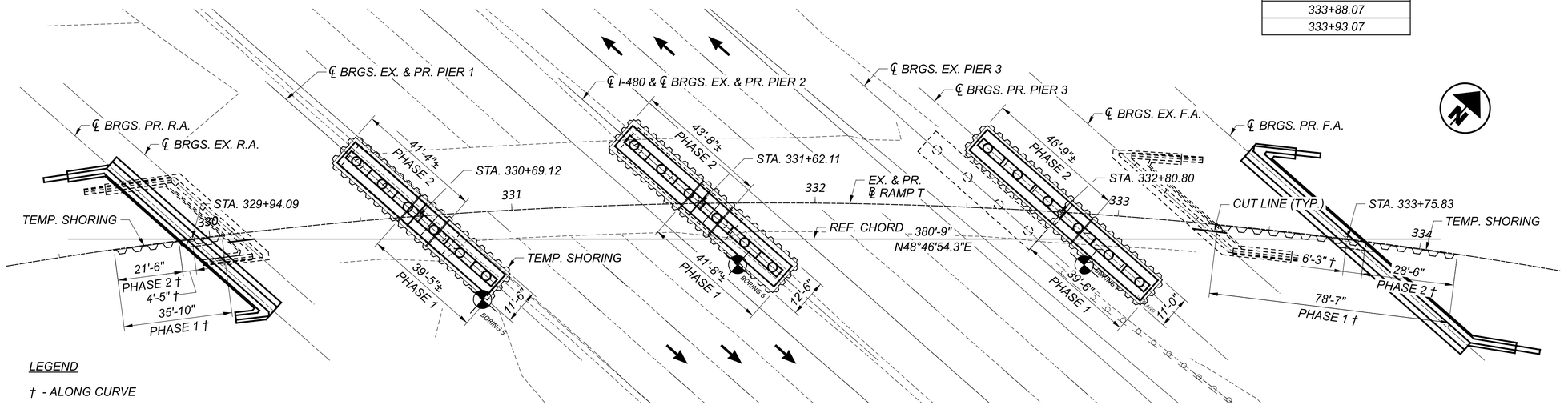
MODEL: Site Plan PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:07:55 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SP001.dgn




## GENERAL PLAN

*(TRANSVERSE DIMENSIONS ARE RADIAL TO THE RAMP T ℄)*

| TEMP. DRAIN HOLE STA. |
|---|
| 333+73.07 |
| 333+78.07 |
| 333+83.07 |
| 333+88.07 |
| 333+93.07 |




**LEGEND**

† - ALONG CURVE

## PLAN - TEMPORARY SHORING

**NOTES:**

1. FOR LEGEND IN GENERAL NOTES, SEE SHEET 05/51.
2. FOR PHASE CONSTRUCTION DETAILS, SEE SHEETS 07/51 THROUGH 12/51.
3. FOR ERECTION PLANS, SEE SHEETS 13/51 AND 14/51.
4. FOR TRANSVERSE SECTION, SEE SHEET 31/51.
5. FOR FRAMING PLAN, SEE SHEET 32/51.
6. FOR TEMPORARY DRAIN HOLE DETAILS, SEE SHEET 39/51.
7. TEMPORARY SHORING AT REAR AND FORWARD ABUTMENT SHALL FOLLOW BASELINE ALONG CURVE OFFSET 3" TO THE RIGHT.

GENERAL PLAN
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER NKK | CHECKER LAG
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 2 | TOTAL 51
SHEET P.95 | TOTAL 167

CUY-71-10.07 SW

MODEL: General Plan PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 10:35:06 PM USER: WIL57077
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\SFN18142257_SG001.dgn

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFITIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

| | | |
|---|---|---|
| A-1-20 | REVISED | 7/19/2024 |
| AS-1-15 | REVISED | 1/20/2023 |
| AS-2-15 | REVISED | 7/21/2023 |
| EXJ-4-87 | REVISED | 1/19/2024 |
| GSD-1-19 | REVISED | 7/19/2024 |
| PCB-91 | REVISED | 7/17/2020 |
| SBR-1-20 | REVISED | 7/19/2024 |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

869 DATED 10/17/2014

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020. EXCEPT AS NOTED ELSEWHERE IN PLANS.

SPECIAL DESIGN SPECIFICATIONS:

THIS BRIDGE REQUIRED THE USE OF A THREE-DIMENSIONAL MODEL USING THE GRILLAGE ANALYSIS DESIGN METHOD TO ANALYZE THE STRUCTURE. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS LEAP BRIDGE STEEL.

DEAD LOAD DISTRIBUTION: WEIGHT OF DECK AND STEEL GIRDERS WERE USED FOR THE NON-COMPOSITE DEAD LOAD BASED ON TRIBUTARY AREA. THE WEIGHT OF THE PARAPETS AND FUTURE WEARING SURFACE WERE DIVIDED EQUALLY AMONG THE GIRDERS FOR THE COMPOSITE DEAD LOAD.

LIVE LOAD DISTRIBUTION: THE DESIGN ANALYSIS WAS CARRIED OUT BY APPLYING TRUCK AND LANE LOADS DIRECTLY TO THE GRILLAGE MODEL, RATHER THAN BY USING CALCULATED DISTRIBUTION FACTORS.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD B RIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING:

DESIGN LOADING: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF.

SEISMIC DESIGN DATA:

| | | | |
|---|---|---|---|
| $PGA$ = | 0.073 g | $A_{0.5}^{S}$ = | 0.122 g |
| $S_1$ = | 0.136 g | $S_{DS}$ = | 0.227 g |
| $S_S$ = | 0.050 g | $S_{D1}$ = | 0.117 g |

SITE CLASS: E

SEISMIC ZONE: 1

OPERATIONAL CATEGORY: OTHER

DESIGN DATA:

CONCRETE CLASS QC2 WITH QC/QA - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 WITH QC/QA - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

STEEL H-PILES - ASTM A572 - YIELD STRENGTH 50 KSI

ALL REINFORCING STEEL SHALL BE EPOXY COATED PER C&MS 709.00.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2 ½"CONCRETE COVER

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

SUGGESTED SEQUENCE OF WORK:

PHASE 1

1. SHIFT TRAFFIC ON EXISTING RAMP AND INSTALL TEMPORARY TRAFFIC CONTROL.
2. REMOVE PORTIONS OF EXISTING STRUCTURE (SFN 1814257). CONSTRUCT BUILD OUT PORTION OF NEW BRIDGE DEPICTED AS PHASE 1 CONSTRUCTION
   - 2.1 SAWCUT PORTIONS OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE ABOVE EXISTING GRADE.
   - 2.2 INSTALL PHASE 1 TEMPORARY SHORING.
   - 2.3 EXCAVATE AND REMOVE PORTIONS OF EXISTING BELOW GRADE SUBSTRUCTURE.
   - 2.4 DRIVE PILES AS INDICATED
   - 2.5 CONSTRUCT PORTIONS OF PROPOSED SUBSTRUCTURE; ABUTMENTS, WINGWALLS, PIER PILE CAPS, COLUMNS, AND BEARING SEATS.
   - 2.6 REMOVE TEMPORARY SHORING AND BACKFILL EXCAVATED AREAS.
   - 2.7 ERECT STEEL GIRDERS FROM SOUTH TO NORTH.
   - 2.8 CONSTRUCT PORTIONS OF NEW DECK AND BARRIER RAILS
   - 2.9 INSTALL TEMPORARY TRAFFIC CONTROL MEASURES ON NEWLY CONSTRUCTED DECK AND SHIFT TRAFFIC.

PHASE 2

3. REMOVE REMAINING PORTIONS OF EXISTING STRUCTURE (SFN 1814257). CONSTRUCT REMAINING PORTION OF NEW BRIDGE DEPICTED AS PHASE 2 CONSTRUCTION.
   - 3.1 REMOVE REMAINING PORTIONS OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE ABOVE EXISTING GRADE.
   - 3.2 INSTALL PHASE 2 TEMPORARY SHORING.
   - 3.3 EXCAVATE AND REMOVE REMAINING PORTIONS OF EXISTING BELOW GRADE SUBSTRUCTURE.
   - 3.4 DRIVE PILES AS INDICATED
   - 3.5 CONSTRUCT REMAINING PORTIONS OF PROPOSED SUBSTRUCTURE; ABUTMENTS, WINGWALLS, PIER PILE CAPS, COLUMNS, AND BEARING SEATS.
   - 3.6 REMOVE TEMPORARY SHORING AND BACKFILL EXCAVATED AREAS. INSTALL SLOPE PROTECTION AT ABUTMENTS.
   - 3.7 ERECT STEEL GIRDERS FROM SOUTH TO NORTH
   - 3.8 CONSTRUCT REMAINING PORTIONS OF NEW DECK AND BARRIER.
   - 3.9 PERFORM DECK CLOSURE POUR AND PLUG TEMPORARY SCUPPERS.
4. REMOVE TEMPORARY TRAFFIC CONTROL AND OPEN RAMP T TO TRAFFIC.

OTHER ITEMS OF WORK NOT LISTED MAY BE PERFORMED AT THE CONTRACTOR'S CONVENIENCE.

MAINTENANCE OF TRAFFIC:

TRAFFIC ON RAMP T IS TO BE MAINTAINED THROUGH ALL PHASES OF CONSTRUCTION WITH THE USE OF PHASED CONSTRUCTION.

REFER TO THE MAINTENANCE OF TRAFFIC PLANS FOR DETAILS, OTHER REQUIREMENTS AND PAYMENT PROVISIONS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.34 KIPS FOR A TOTAL MACHINE LOAD OF 27.8 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

FINISH COLORS:

THE CONCRETE SURFACES SHALL BE SEALED WITH EPOXY-URETHANE SEALER PER ITEM 512 SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) PER THE LOCATIONS SPECIFIED IN THE PLANS. FINISH COLOR FOR SEALED CONCRETE SURFACES SHALL BE PER C&MS 512.

FINISH COLOR FOR PAINTED STEEL SURFACES SHALL BE "LIGHT GRAY, GLOSS", NUMBER 16440 PER AMS-STD-595A AND PAY FOR UNDER ITEM 514 FIELD PAINTING STRUCTURAL STEEL, FINISH COAT.

ITEM 202 STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS WORK CONSISTS OF FULL REMOVAL OF THE SUPERSTRUCTURE AND REMOVAL OF THE SUBSTRUCTURE LISTED BELOW. THE EXISTING STRUCTURE SHALL BE REMOVED IN PHASES AS PER PLAN AS SHOWN IN THE PHASE CONSTRUCTION SHEETS. THE EXISTING REAR AND FORWARD ABUTMENT, PIER 1 AND PIER 2, SHALL BE REMOVED IN THEIR ENTIRETY, DURING PHASE 1 AND PHASE 2 REMOVAL AS SHOWN IN THE PLANS. THE EXISTING PIER 3 COLUMNS SHALL BE REMOVED TO 2'-0" BELOW THE FINAL GRADE OF I-480 DURING PHASE 1 AND PHASE 2 REMOVAL AS SHOWN IN THE PLANS.

COORDINATION BETWEEN REMOVAL AND CONSTRUCTION ACTIVITIES WILL BE NEEDED FOR ALL TEMPORARY SHORING INSTALLATION AND REMOVAL. IT IS EXPECTED THAT SPECIAL SHORING TECHNIQUES WILL BE REQUIRED IN ORDER TO PERFORM WORK FOR THE NON-STANDARD TEMPORARY SHORING.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:

TEMPORARY SHORING SHOWN CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS", AND THE 2ND EDITION OF THE "GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.

FURNISH STEEL SHEET PILING PER AASHTO M 202 (ASTM A328) (MINIMUM YIELD POINT 39 KSI) WITH MINIMUM SECTION MODULUS OF 45 CUBIC INCHES PER FOOT FOR THE LOCATIONS OF TEMPORARY SHORING.

THE NON-STANDARD TEMPORARY SHORING SHOWN ON THE PLANS IS A METHOD FOR TEMPORARY EXCAVATION SUPPORT. THE SECTION AND ELEVATIONS CORRESPOND WITH THE ANTICIPATED GRADING PLAN AND WORK LIMITS.

THE CONTRACTOR SHALL DESIGN THE NON-STANDARD TEMPORARY SHORING PER THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS", AND THE 2ND EDITION OF THE "GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS. REFERENCE THE GEOTECHNICAL REPORT DATED SEPTEMBER 17, 2024, WHICH WAS PREPARED BY CTL ENGINEERING, INC. SOIL EARTH PRESSURE PARAMETERS ARE PROVIDED ON PDF PAGE 12/108.

THE DESIGN SHOWN ON THE PLANS FOR THE TEMPORARY SHORING IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR THE TEMPORARY SHORING, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.

STRUCTURE NOTES (1 OF 3)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| RLD | JMR |

REVIEWER: SK 04/14/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 3 | 51 |

| SHEET | TOTAL |
|---|---|
| P.96 | 167 |

CUY-71-10.07 SW

MODEL: Structure Notes 1 of 3 PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 4:58:44 PM USER: WILS7077
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SN001.dgn

PILES DRIVEN TO BEDROCK

DRIVE PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED WHEN THE PILE PENETRATION IS AN INCH OR LESS AFTER RECEIVNG AT LEAST 20 BLOWS FROM THE PILE HAMMER. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

THE TOTAL FACTORED LOAD IS:
173 KIPS PER PILE FOR THE REAR ABUTMENT PILES, AND
154 KIPS PER PILE FOR THE FORWARD ABUTMENT PILES.
220 KIPS FOR THE PIER PILES

ABUTMENT PILES:
HP10X42 PILES 65 FEET LONG, ORDER LENGTH

PIER PILES:
HP10X42 PILES 45 FEET LONG, ORDER LENGTH

PILE SPLICES:

IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN C&MS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED HPILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION
8 WOOD HOLLOW RD. PLAZA 1
PARSIPPANY, NJ 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

ITEM 507 PREBORED HOLES, AS PER PLAN

AT THE FORWARD ABUTMENT, PREBORE HOLES FOR DRIVEN PILES TO ELEVATION 779.03, IN ACCORDANCE WITH C&MS 507.11. A 3-FOOT-THICK ZONE OF COBBLES, BOULDER, OR CONSTRUCTION DEBRIS AS NOTED IN BORING B-008 FROM 25 TO 28 FEET DEEP BELOW GRADE (ABOUT ELEVATIONS 782.7 TO 779.7 FEET) WHICH IS ABOUT 12 TO 15 FEET BELOW PILE CAP.

ITEM 511 CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN

TEMPORARY DRAIN HOLES ARE REQUIRED FOR PHASE 1 CONSTRUCTION AND TRAFFIC PATTERN. THESE HOLES SHALL BE PLUGGED PER DETAILS FOUND IN THE PLANS. COST FOR THIS WORK SHALL BE INCLUDED IN THE ITEM 511 PAY ITEM.

ITEM 516 ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE):

1. DESCRIPTION

THIS WORK CONSISTS OF PREPARING SHOP DRAWINGS AND FURNISHING ALL MATERIALS SERVICES, LABOR, TOOLS EQUIPMENT AND INCIDENTALS NECESSARY TO FABRICATE, TEST AND INSTALL ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES, STEEL LOAD PLATES AND PTFE (POLYTETRAFLOURETHYLENE) IN ACCORDANCE WITH ITEM 516, THE PROJECT PLANS AND THIS SPECIFICATION. UNLESS MODIFIED BY THIS SPECIFICATION, THE REQUIREMENTS OF ITEM 516 AND THE PROJECT PLANS SHALL APPLY.

2. MATERIAL REQUIREMENTS

MATERIAL REQUIREMENTS SHALL BE GOVERNED BY ITEM 516, SPECIFIC REFERENCES TO RELATED SECTION OF ODOT SUPPLEMENTAL SPECIFICATIONS (SS), THE PROJECT PLANS, THESE SPECIFICATIONS (SS), THE PROJECT PLANS, THESE SPECIFCIATIONS AND ALL APPLICABLE SECTIONS OF AASHTO BRIDGE DESIGN SPECIFICATIONS.

PTFE FINISHED UNFILLED PTFE SHEET SHALL BE MADE FROM 100 PERCENT VIRGIN PTFE RESIN AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

A. PTFE SHALL BE DIMPLED LUBRICATED TYPE IN ACCORDANCE WITH SS 869.10.

B. PTFE THICKNESS SHALL BE 1/4 INCH. RECESS SHEET 1/8 INCH AND BOND INTO STEEL SUBSTRATE (BACKING PLATE).

C. LUBRICANT FOR PTFE SHALL BE SILICON GREASE IN ACCORDANCE WITH SS 869.10.

D. STAINLESS STEEL SHALL BE IN ACCORDANCE WITH SS 869.10. SURFACES IN CONTACT WITH PTFE SHALL HAVE A #8 MIRROR FINISH OR BETTER. MATERIAL AND FINISH SHALL ENSURE THAT ALL TESTING REQUIREMENTS ARE MET.

E. ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES, LOAD PLACES, BACKING PLATES, GUIDE ANGLE ASSEMBLIES, AND ANCHORAGE SEE ITEM 516.

3. FABRICATION

A. ATTACHMENT OF SHEET PTFE TO SUBSTRATE.

1. RECESS PTFE SHEET 1/8 INTO AND FACTORY BOND INTO A STEEL SUBSTRATE (BACKING PLATE).
2. ATTACH PTFE TO SUBSTRATE IN ACCORDANCE WITH SS 869.11.
3. AFTER COMPLETION OF THE BONDING OPERATION, THE PTFE SURFACE SHALL BE SMOOTH AND FREE FROM BUBBLES.

B. LUBRICATION

DIMPLES SHALL BE COMPLETELY FILLED WITH LUBRICANT. LUBRICANT SHALL ALSO BE APPLIED TO ENTIRE SLIDING SURFACE OF THE PTFE.

C. ATTACHMENT OF SHEET STAINLESS STEEL

ATTACH STAINLESS STEEL TO ITS STEEL SUBSTRATE (LOAD PLATE) BY USING A CONTINUOUS SEAL (FILLET) WELD AROUND ITS ENTIRE PERIMETER. WELDS SHALL CONFORM TO THE AWS REQUIREMENTS FOR STAINLESS STEEL. AFTER WELDING, THE STAINLESS STEEL SHALL BE FLAT, FREE FROM WRINKLES AND IN CONTINOUS CONTACT WITH ITS BACKING PLATE. NO ROUGHNESS FROM THE WELD PROTRUDING ABOVE THE SURFACE OF THE STAINLESS STEEL WILL BE PERMITTED.

D. CORROSION PROTECTION

GALVANIZE ACCORDING TO CMS 711.02 ALL STEEL SURFACES (INCLUDING ANCHOR RODS), EXCEPT STAINLESS STEEL SURFACES. LOAD PLATES SHALL BE GALVANIZED PRIOR TO ATTACHING STAINLESS STEEL PLATES. DAMAGED GALVANIZED AREAS AT SHOP AND FIELD WELDS SHALL BE REPAIRED ACCORDING TO CMS 711.02.

E. WELDING

WELDING AS A MEANS OF ATTACHMENT SHALL BE DONE IN A CONTROLLED MANNER AND SHALL CONFORM TO CMS 513. CONTROL WELDING SO THAT THE PLATE TEMPERATURES AT THE ELASTOMER BONDED SURFACE AND THE PTFE BONDED SURFACE DO NOT EXCEED 300 DEGREES FARENHEIGHT AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

F. TOLERANCES

CHECK ALL BEARINGS FOR TOLERANCES. ACCORDING TO AASHTO LRFD BRIDGE CONSTRUCTION SPECIFCIATIONS SECTION 18 AND SS 869.15.

4. TESTING

A. GENERAL

TEST BEARINGS IN ACCORDANCE WITH SS 869.16 AND AS LISTED BELOW. THE TESTS LISTED BELOW SHALL BE PERFORMED IN ADDITION TO THOSE REQUIRED BY CMS 516.

B. SAMPLING

RANDOMLY SAMPLE BEARINGS IN ACCORDANCE WITH SS 869.17.

C. FRICTION TESTS

PERFORM FRICTION TESTS ON BEARING SAMPLES CHOSEN AS DESCRIBED IN SECTION 4.B ABOVE. THE TESTS SHALL CONFORM TO AASHTO LRFD BRIDGE CONSTRUCTION SPECFICATIONS SECTION 18 THE DESIGN COEFFICIENT OF FRICTION FOR PTFE SURFACES IS BASED ON THE FOLLOWING TABLE:

| COEFFICIENT OF FRICTION | | | | | |
|---|---|---|---|---|---|
| TYPE PTFE | TEMP. (°F) | PRESSURE (KSI) | | | |
| | | 0.5 | 1.0 | 2.0 | >3.0 |
| DIMPLED LUBRICATED | 68 | 0.04 | 0.03 | 0.025 | 0.02 |
| | -13 | 0.06 | 0.045 | 0.04 | 0.03 |
| | -49 | 0.10 | 0.075 | 0.06 | 0.05 |

LINEAR INTERPOLATION SHALL BE USED TO OBTAIN THE DESIGN COEFFICIENT OF FRICTION BASED ON THE VERTICAL PRESSURE DUE TO 100% OF THE SERVICE DEAD PLUS LIVE LOAD.

D. ADHESION TESTS

ADHESION BETWEEN THE PTFE AND SUBSTRATE SHALL BE TESTED ON BEARING SAMPLES, CHOSEN IN ACCORDANCE WITH SECTION 4.B ABOVE AND TESTED IN ACCORDANCE WITH ASTM D429, METHOD B. THE MINIMUM STEEL STRENGTH SHALL BE 20 POUNDS PER INCH. THIS TEST IS IN ADDITION TO ADHESION DETERMINED UNDER SECTION 4.C ABOVE.

E. TEST RESULT

PRESENT TEST RESULTS IN A QUALITY CONTROL REPORT SHOWING RAW TEST DATA, REDUCED TEST DATA, SAMPLE CALCULATIONS, MEASURED TOLERANCES AND FINAL RESULTS ALONG WITH PHOTOGRAPHS AND CONCLUSIONS. INCLUDE A STATEMENT OF COMPLIANCE.

5. SHIPPING AND PACKING

TO PREVENT CONTAMINATION OF THE SLIDING SURFACE, ALL BEARINGS SHALL BE SEALED BY THE MANUFACTURER PRIOR TO SHIPPING AND SHALL NOT BE DISASSEMBLED DURING SHIPPING OR AT THE CONSTRUCTION SITE.

TAKE CARE TO ENSURE THAT BEARINGS AT THE JOB SITE ARE STORED IN A DRY, SHELTERED AREA FREE FROM DIRT OR DUST UNTIL INSTALLATION.

MARK CENTERLINES ON APPROPRIATE BEARING PARTS FOR CHECKING ALIGNMENT IN THE FIELD AND SHOW THE CENTERLINE IN THE SHOP DRAWINGS.

ASSIGN A MARK NUMBER TO EACH BEARING COMPONENT AND SHOW THE MARK NUMBER AND PLACEMENT LOCATION ON THE SHOP DRAWINGS. MARK ALL BEARINGS PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION (I.E. REAR ABUTMENT OR FORWARD ABUTMENT), GIRDER NUMBER, AND A DIRECTION ARROW THAT POINTS UPSTATION. ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.

6. INSTALLATION

FIELD WELDING OF BEARING ASSEMBLIES TO GIRDER BOTTOM FLANGE SHALL MEET THE REQUIREMENTS OF ITEM 516, THE PROJECT PLANS, SS 869.17 AND SECTION 3.E OF THIS SPECIFICATION.

ALIGN THE CENTERLINE OF THE BEARING ASSEMBLY WITH THOSE OF THE SUBSTRUCTURE AND SUPERSTRUCTURE. THE BEARING SHOULD BE ALIGNED, TAKING INTO CONSIDERATION THE AMBIENT TEMPERATURE (TO ALLOW FOR THE DESIGN EXPANSION AND CONTRACTION OF THE STRUCTURE). UPPER AND LOWER BEARING PARTS SHALL BE OFFSET TO COMPENSATE FOR AMBIENT TEMPERATURE.

THE CONCRETE BEARING SEAT SHALL BE AT THE CORRECT ELEVATION AND SHALL BE LEVEL WITHIN 0.03125 IN/FT.

FIELD REPAIR GALVANIZED COATING IN ACCORDANCE WITH CMS 711.02.

IF THE BEARING HAS BEEN UNSEALED FOR ANY REASON, THE CONTRACTOR MAY BE REQUIRED TO SHIP THE BEARING BACK TO THE MANUFACTUERER FOR RESEALING AT THE DISCRETION OF THE ENGINEER.

7. METHOD OF MEASUREMENT

THE QUANTITY SHALL BE THE ACTUAL NUMBER OF BEARINGS FURNISHED AND INSTALLED. A COMPLETE AND ACCEPTABLE BEARING SYSTEM FURNISHED AND INSTALLED INCLUDING LAMINATED ELASTOMERIC BEARINGS, STEEL LOAD PLATES, STEEL BACKING PLATES, STAINLESS STEEL PLATES, PTFE, STEEL GUIDE ANGLE ASSEMBLIES, ANCHOR RODS AND ASSOCIATED HARDWARE, GALVANIZING, TESTING AND FIELD WELDING WILL BE MEASURED ON AN EACH BASIS.

8. BASIS OF PAYMENT

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

| ITEM | UNIT | DESCRIPTION |
|---|---|---|
| 516 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE) |

NO SEPARATE PAYMENT WILL BE MADE FOR TESTING BEARINGS AS DESCRIBED IN SECTION 4 OF THIS SPECIFICATION. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BEARINGS.

STRUCTURE NOTES (2 OF 3)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| RLD | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 4 | 51 |

| SHEET | TOTAL |
|---|---|
| P.97 | 167 |

CUY-71-10.07 SW

MODEL: Structure Notes 2 of 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:08:33 PM USER: SAT89729
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## STRUCTURE GROUNDING

FOR STRUCTURE GROUNDING REQUIREMENTS AND DETAILS, SEE LIGHTING PLANS.

## REINFORCEMENT COVER AND SPACING:

MINIMUM CLEAR COVER TO REINFORCING BARS SHALL BE PER THE FOLLOWING TABLE, UNLESS NOTED:

| | |
|---|---|
| 3" | TO FACES OF FOOTINGS PLACED AGAINST ROCK OR EARTH. |
| 2½" | TO TOP OF CAST-IN-PLACE DECK SLABS AND SIDEWALKS. |
| 1½" | TO BOTTOM OF CAST-IN-PLACE DECK SLABS. |
| 3" | TO TOP AND BOTTOM FACES OF APPROACH SLABS. |
| 2" | ALL OTHER CASES. |

HORIZONTAL CLEAR DISTANCE BETWEEN BARS IN A LAYER, INCLUDING THE PRESENCE OF LAP-SPLICES, SHALL NOT BE LESS THAN THE LARGER OF: 1.5 BAR DIAMETERS OR 1½", EXCEPT FOR THE BARS IN A CONTACT LAP SPLICE.

VERTICAL CLEAR DISTANCE BETWEEN LAYERS, INCLUDING THE PRESENCE OF LAP-SPLICES, SHALL NOT BE LESS THAN 1".

## ABBREVIATIONS:

THE FOLLOWING ARE USED THROUGHOUT THE PLANS:

| | | | |
|---|---|---|---|
| A.P.P. | - AS PER PLAN | LEB | - LAMINATED ELASTOMERIC BEARING |
| A.S. | - APPROACH SLAB | LT | - LEFT |
| ABUT. | - ABUTMENT | MAX. | - MAXIMUM |
| B.F. | - BACK FACE | MIN. | - MINIMUM |
| B/ | - BOTTOM OF | N.F. | - NEAR FACE |
| BOTT. | - BOTTOM | NPCPP | - NON-PERFORATED CORRUGATED PLASTIC PIPE |
| BRGS. | - BEARINGS | O.D. | - OUTSIDE DIAMETER |
| C.J. | - CONSTRUCTION JOINT | O.F. | - OUTSIDE FACE |
| C/C | - CENTER-TO-CENTER | O/O | - OUT-TO-OUT |
| CASP | - CRUSHED AGGREGATE SLOPE PROTECTION | OHW | - ORDNARY HIGH WATER |
| CFRP | - CARBON FIBER REINFORCED POLYMER | P.G. | - PROFILE GRADE |
| CLR. | - CLEAR | PCPP | - PERFORATED CORRUGATED PLASTIC PIPE |
| CONC. | - CONCRETE | PEJF | - PREFORMED EXPANSION JOINT FILLER |
| CONST. | - CONSTRUCTION | PR. | - PROPOSED |
| D&G | - DRILL AND GROUT | PVMT. | - PAVEMENT |
| DIA. | - DIAMETER | R.A. | - REAR ABUTMENT |
| DIM. | - DIMENSION | RCP | - ROCK CHANNEL PROTECTION |
| E.E. | - EACH END | REF. | - REFERENCE |
| E.F. | - EACH FACE | REQ'D. | - REQUIRED |
| E.S. | - EACH SIDE | RET. | - RETAINING |
| E.W. | - EACH WAY | RT | - RIGHT |
| EL. | - ELEVATION | S.O. | - SERIES OF |
| ELEV. | - ELEVATION | SPA. | - SPACED OR SPACES |
| EQ. | - EQUAL | STA. | - STATION |
| EX. | - EXISTING | SYMM. | - SYMMETRICAL |
| EXP | - EXPANSION | T/ | - TOP OF |
| F.A. | - FORWARD ABUTMENT | T/B | - TOP AND BOTTOM |
| F.F. | - FAR FACE | T/T | - TOE-TO-TOE |
| F.S. | - FIELD SPLICE | TEMP. | - TEMPORARY |
| F/ | - FACE OF | TYP. | - TYPICAL |
| F/F | - FACE-TO-FACE | VAR. | - VARIES |
| FIX | - FIXED | VERT. | - VERTICAL |
| FTG. | - FOOTING | W.P. | - WORK POINT |
| FWD. | - FORWARD | W.S. | - WEARING SURFACE |
| GALV. | - GALVANIZED | W/ | - WITH |
| GFRP | - GLASS FIBER REINFORCED POLYMER | W/O | - WITHOUT |
| HORIZ. | - HORIZONTAL | | |
| HW | - HIGH WATER | | |
| I.D. | - INSIDE DIAMETER | | |
| I.F. | - INSIDE FACE | | |
| JT | - JOINT | | |

NOT ALL ABBREVIATIONS MAY BE USED.

STRUCTURE NOTES (3 OF 3)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| RLD | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 5 | 51 |

| SHEET | TOTAL |
|---|---|
| P.98 | 167 |

CUY-71-10.07 SW

MODEL: Structure Notes 3 of 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:08:43 PM USER: SAT89729
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## ESTIMATED QUANTITIES

| ITEM | ITEM EXT. | TOTAL | UNIT | DESCRIPTION | ABUT. | PIERS | SUPER. | GENERAL | SHEET REF. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | CALC. JMR | DATE 04/2025 | CHK'D LAG | DATE 04/2025 | |
| 202 | 11003 | LS | LS | STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN | | | | | 3/51 |
| 202 | 22900 | 87 | SY | APPROACH SLAB REMOVED | | | 87 | | |
| | | | | | | | | | |
| 503 | 11101 | LS | LS | COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN | | | | | 3/51 |
| 503 | 21100 | 1,540 | CY | UNCLASSIFIED EXCAVATION | 1,160 | 380 | | | |
| | | | | | | | | | |
| 505 | 11100 | LS | LS | PILE DRIVING EQUIPMENT MOBILIZATION | | | | | |
| | | | | | | | | | |
| 507 | 00100 | 6,705 | FT | STEEL PILES HP10X42, FURNISHED | 4,095 | 2,610 | | | |
| 507 | 00150 | 6,100 | FT | STEEL PILES HP10X42, DRIVEN | 3,780 | 2,320 | | | |
| 507 | 92201 | 555 | FT | PREBORED HOLES, AS PER PLAN | 555 | | | | 4/51 |
| | | | | | | | | | |
| 509 | 10000 | 287,336 | LB | EPOXY COATED STEEL REINFORCEMENT | 46,284 | 73,433 | 167,619 | | |
| 509 | 30020 | 14,644 | FT | NO. 4 DEFORMED GFRP REINFORCEMENT | | | 14,644 | | |
| | | | | | | | | | |
| 511 | 34447 | 564 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN | | | 564 | | 4/51 |
| 511 | 34450 | 137 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) | | | 137 | | |
| 511 | 41012 | 177 | CY | CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS | | 177 | | | |
| 511 | 44112 | 253 | CY | CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING | 253 | | | | |
| 511 | 46512 | 422 | CY | CLASS QC1 CONCRETE WITH QC/QA, FOOTING | 247 | 175 | | | |
| | | | | | | | | | |
| 512 | 10100 | 1,647 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) | 210 | 510 | 927 | | |
| 512 | 10300 | 70 | SY | SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN | | | | 70 | |
| 512 | 33000 | 91 | SY | TYPE 2 WATERPROOFING | 91 | | | | |
| | | | | | | | | | |
| 513 | 10300 | 771,146 | LB | STRUCTURAL STEEL MEMBERS, LEVEL 5 | | | 771,146 | | |
| 513 | 20000 | 9,048 | EACH | WELDED STUD SHEAR CONNECTORS | | | 9,048 | | |
| | | | | | | | | | |
| 514 | 00060 | 34,727 | SF | FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT | | | 34,727 | | |
| 514 | 00066 | 34,727 | SF | FIELD PAINTING STRUCTURAL STEEL, FINISH COAT | | | 34,727 | | |
| | | | | | | | | | |
| 516 | 11210 | 153 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL | | | | 153 | |
| 516 | 44101 | 12 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE) | 12 | | | | 4/51 |
| 516 | 44100 | 6 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15 IN x 24 IN x 2.7784 IN) | | 6 | | | |
| 516 | 44100 | 6 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16 IN x 24 IN x 2.9084 IN) | | 6 | | | |
| 516 | 44200 | 6 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (17 IN x 26 IN x 3.0884 IN) | | 6 | | | |
| | | | | | | | | | |
| 518 | 20000 | 226 | SY | PREFABRICATED GEOCOMPOSITE DRAIN | 226 | | | | |
| 518 | 21200 | 38 | CY | POROUS BACKFILL WITH GEOTEXTILE FABRIC | 38 | | | | |
| 518 | 40000 | 202 | FT | 6" PERFORATED CORRUGATED PLASTIC PIPE | 202 | | | | |
| 518 | 40010 | 98 | FT | 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS | 98 | | | | |
| | | | | | | | | | |
| 526 | 30010 | 327 | SY | REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17") | | | | 327 | |
| 526 | 90010 | 154 | FT | TYPE A INSTALLATION | | | | 154 | |
| | | | | | | | | | |
| 601 | 20000 | 656 | SY | CRUSHED AGGREGATE SLOPE PROTECTION | | | | 656 | |

ESTIMATED QUANTITIES
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER LLB | CHECKER SK
REVIEWER JMR 09/17/25
PROJECT ID 114536
SUBSET 6 | TOTAL 51
SHEET P.99 | TOTAL 167

CUY-71-10.07 SW

MODEL: Estimated Quantities PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 3:35:26 PM USER: PIA81677
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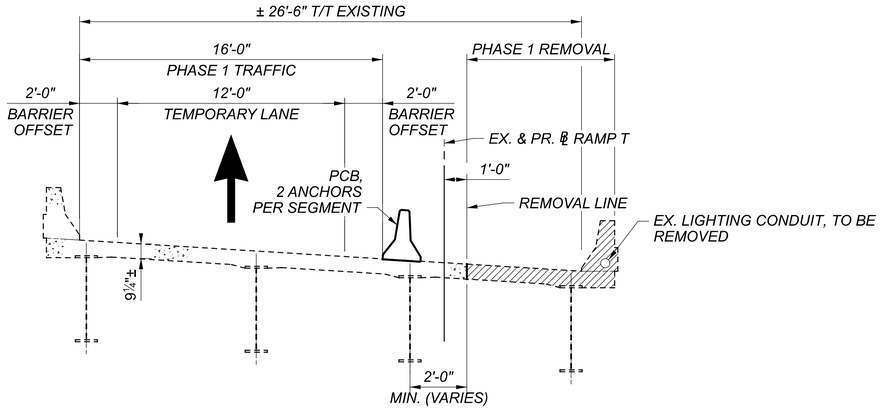
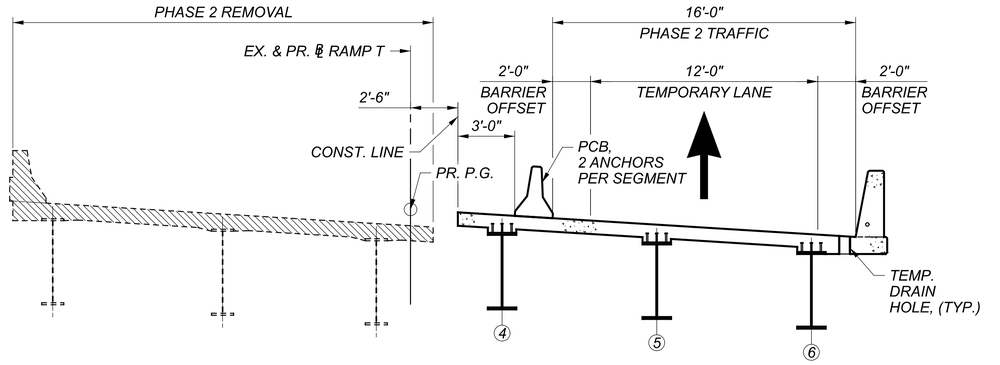
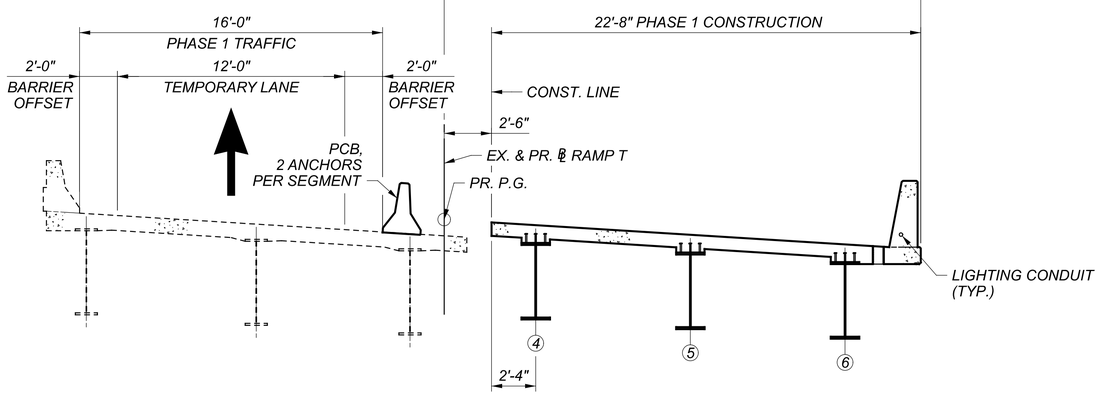


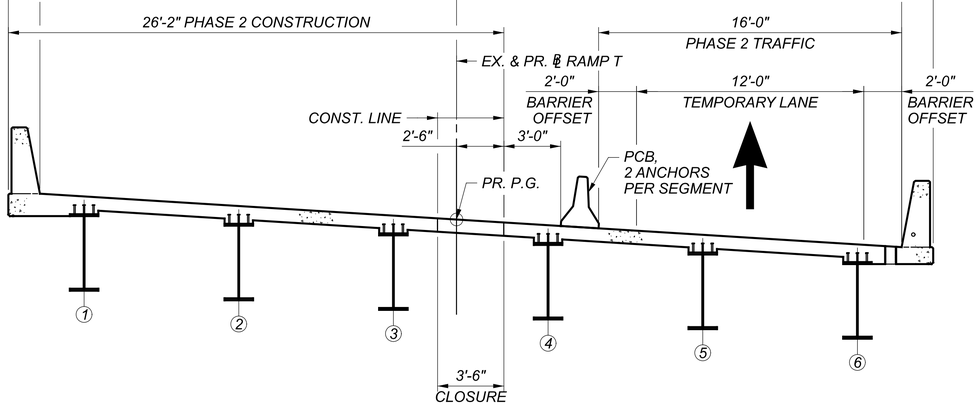

PHASE 1 - REMOVALS




PHASE 2 - REMOVALS




PHASE 1 - CONSTRUCTION




PHASE 2 - CONSTRUCTION

NOTES:

1. DIMENSIONS ARE RADIAL TO THE RAMP ℄.
2. SEE SHEETS 08/51 THROUGH 12/51 FOR ADDITIONAL REMOVAL DETAILS.
3. FOR SUGGESTED CONSTRUCTION SEQUENCE, SEE SHEET 13/51 THROUGH 14/51.
4. SEE SHEET 05/51 FOR LEGEND IN GENERAL NOTES.
5. FOR PORTABLE CONCRETE BARRIER DETAILS, SEE STD. DWG. PCB-91 (2 ANCHORS PER SEGMENT) AND ROADWAY PLANS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MAINTENANCE OF TRAFFIC SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC FOR PAYMENT.
6. BRIDGE MOUNTED BARRIER SHALL BE CONSTRUCTED AS PER STANDARD DRAWING PCB-91 (2 ANCHORS PER SEGMENT).

LEGEND

- PHASE 1 REMOVALS - ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
- PHASE 2 REMOVALS - ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

# PHASE CONSTRUCTION - TRANSVERSE SECTION(S)

BRIDGE NO. CUY-71-10.07 SW

IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY

MOTT MACDONALD

20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 7 | 51 |

| SHEET | TOTAL |
|---|---|
| P.100 | 167 |

CUY-71-10.07 SW

MODEL: Phase Construction Transverse Sections PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:09:03 PM USER: SAT89729
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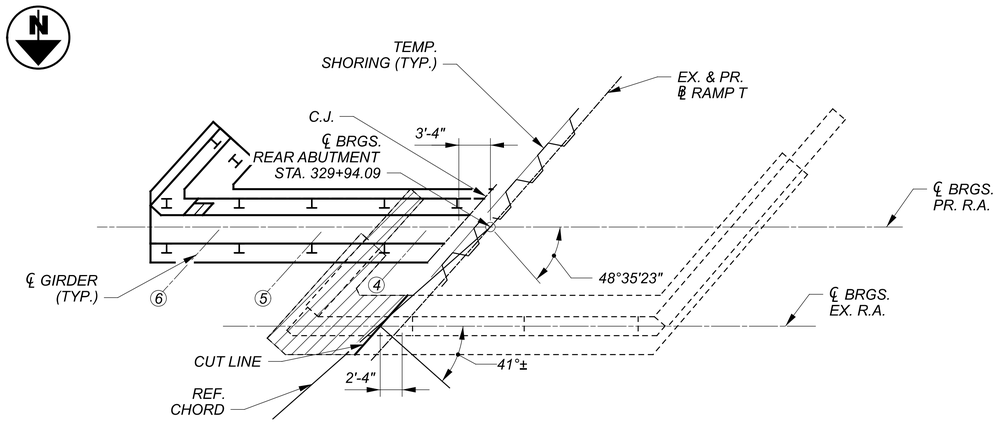
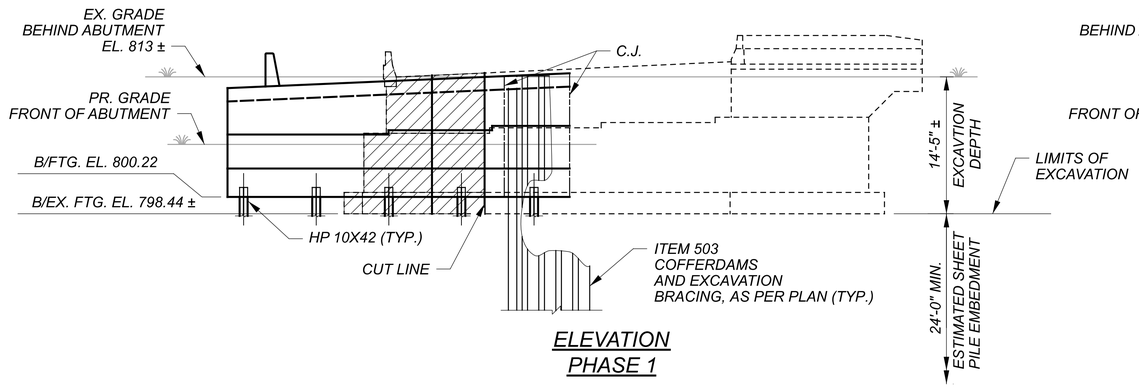
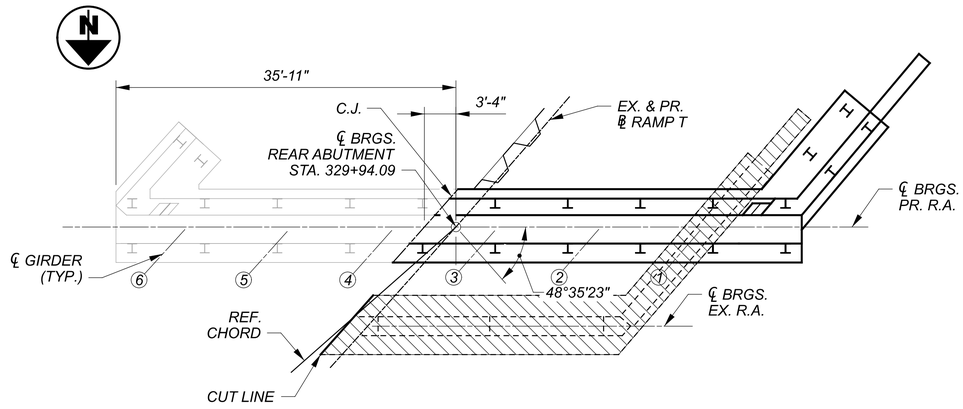


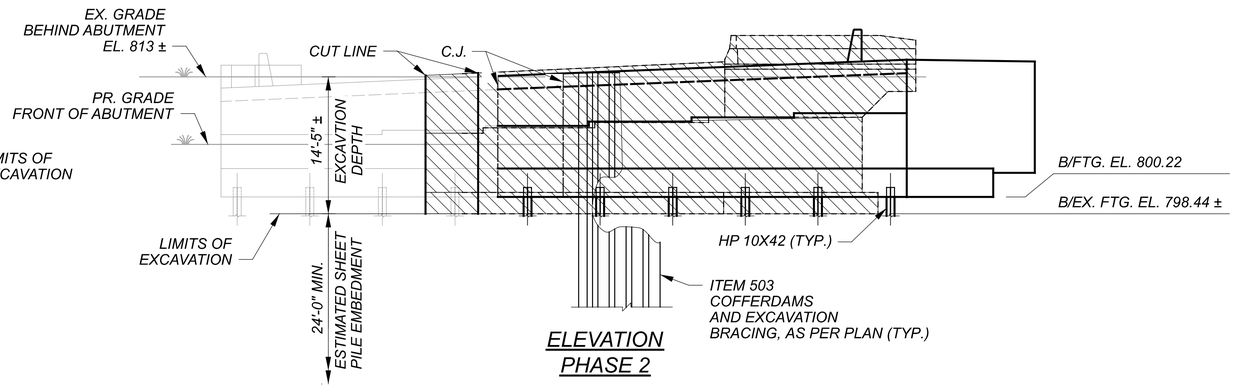

PLAN




ELEVATION
PHASE 1




PLAN




ELEVATION
PHASE 2

NOTES:

1. ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
2. REMOVE TEMPORARY SHORING AND COMPLETE BACKFILLING TO FINAL GRADE. THE CONTRACTOR MAY ELECT TO LEAVE SHEET PILES IN PLACE AND CUT TOPS TO 2 FEET BELOW FINAL GRADE AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.

SHEET REFERENCES:

1. SEE SHEET 07/51 FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET 10/51 FOR PIER 1 PHASE CONSTRUCTION DETAILS.
3. SEE SHEET 11/51 FOR PIER 2 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET 12/51 FOR PIER 3 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET 2/51 FOR INFORMATION REGARDING PLACEMENT OF TEMPORARY SHORING.

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

# PHASE CONSTRUCTION - REAR ABUTMENT PLAN, ELEVATION & DETAILS
## BRIDGE NO. CUY-71-10.07 SW
## IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| VN | JMR |

REVIEWER
SK 09/17/25

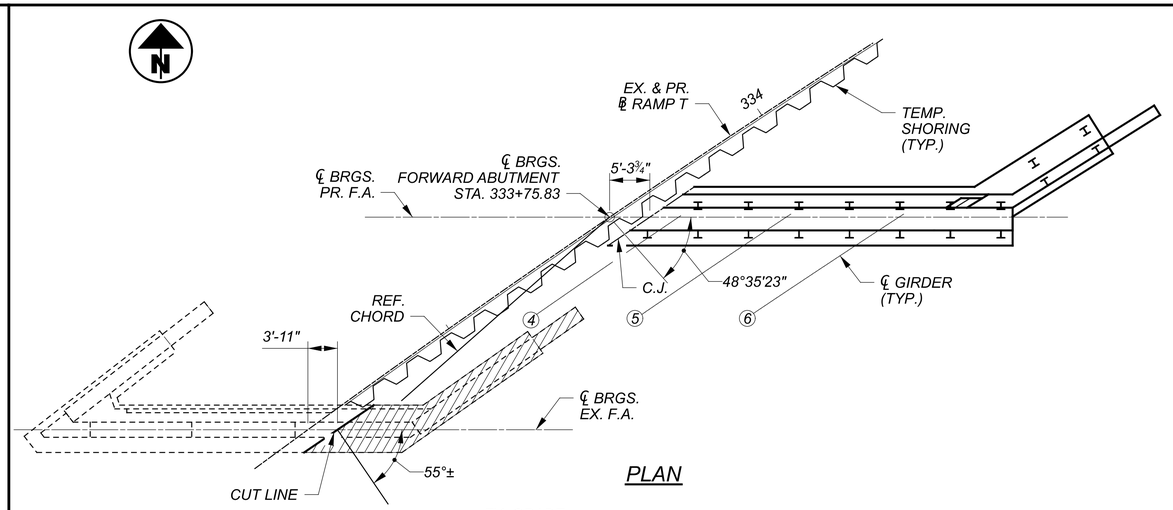
PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 8 | 51 |

| SHEET | TOTAL |
|---|---|
| P.101 | 167 |

CUY-71-10.07 SW

MODEL: Phase Construction Rear Abutment PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 10:35:50 PM USER: WIL57077
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SC002.dgn

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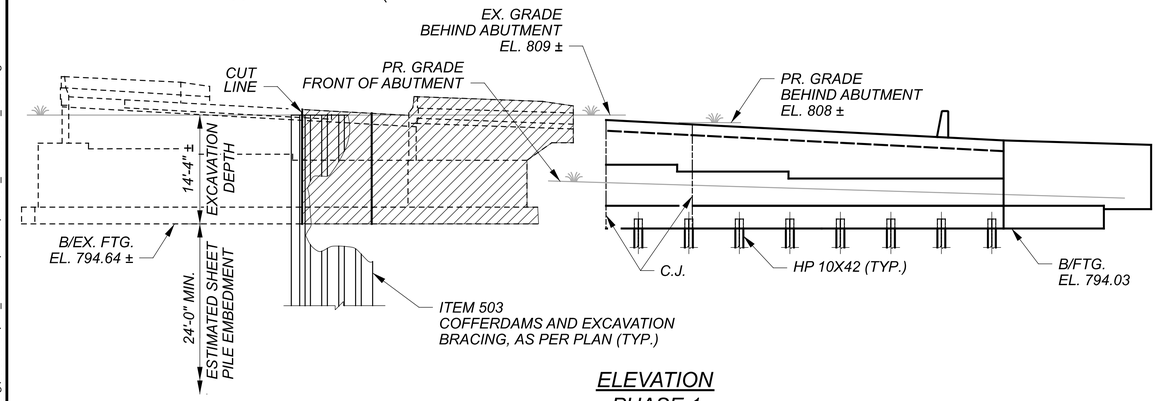
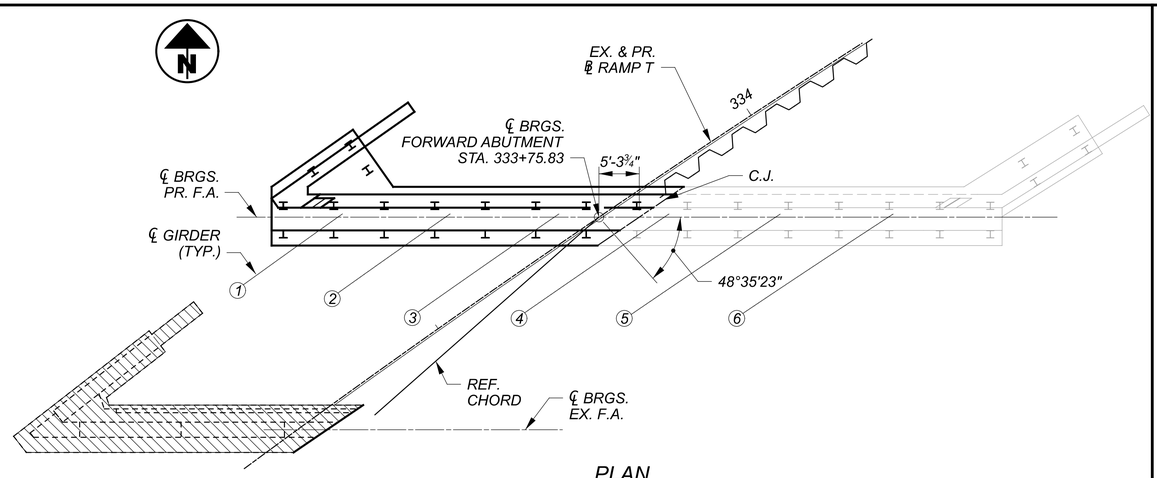
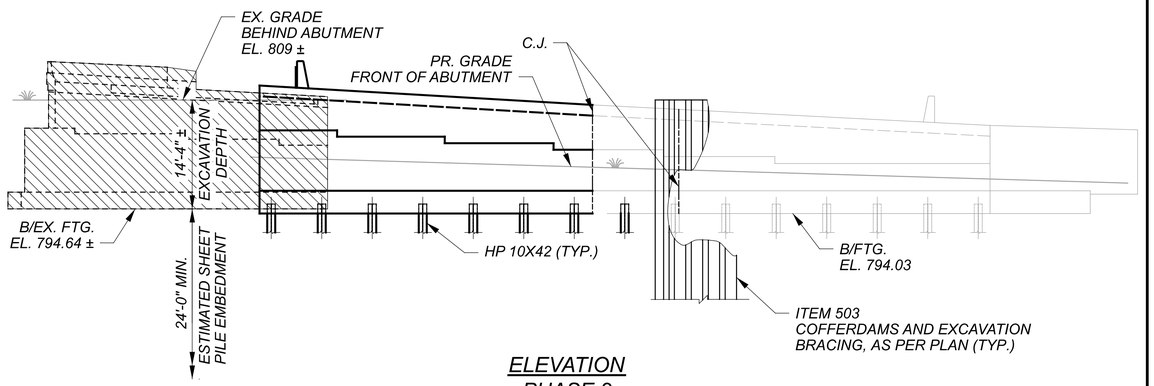



ELEVATION
PHASE 1




PLAN




ELEVATION
PHASE 2

NOTES:

1. ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
2. REMOVE TEMPORARY SHORING AND COMPLETE BACKFILLING TO FINAL GRADE. THE CONTRACTOR MAY ELECT TO LEAVE SHEET PILES IN PLACE AND CUT TOPS OF SHEET PILES TO 2 FEET BELOW FINAL GRADE AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.

SHEET REFERENCES:

1. SEE SHEET 07/51 FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET 10/51 FOR PIER 1 PHASE CONSTRUCTION DETAILS.
3. SEE SHEET 11/51 FOR PIER 2 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET 12/51 FOR PIER 3 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET 02/51 FOR INFORMATION REGARDING PLACEMENT OF TEMPORARY SHORING.

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

# PHASE CONSTRUCTION - FORWARD ABUTMENT PLAN, ELEVATION & DETAILS
## BRIDGE NO. CUY-71-10.07 SW
## IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| VN | JMR |

REVIEWER
SK 09/17/25

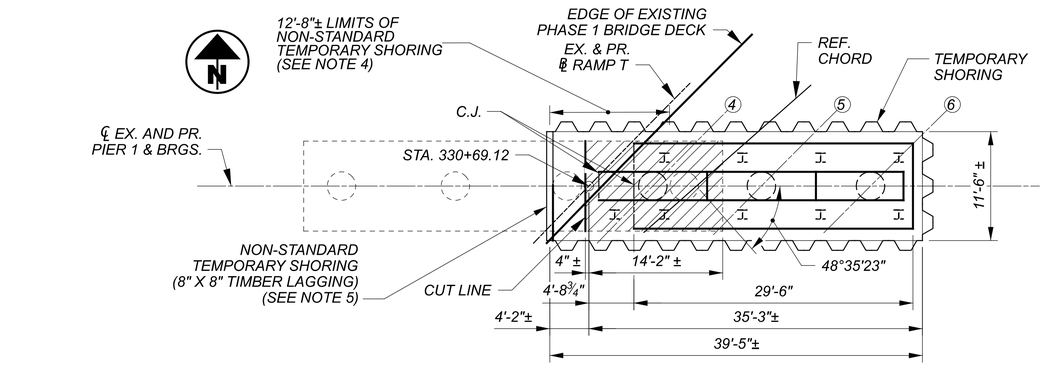
PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 9 | 51 |

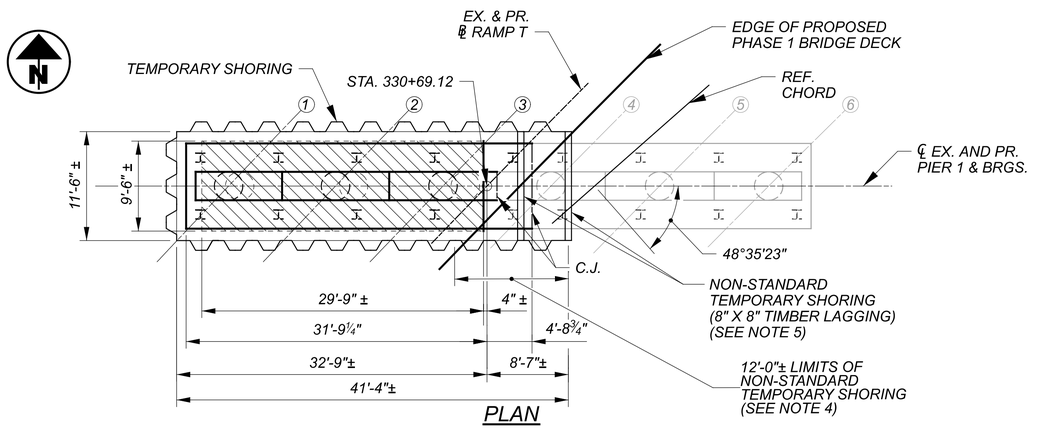
| SHEET | TOTAL |
|---|---|
| P.102 | 167 |

CUY-71-10.07 SW

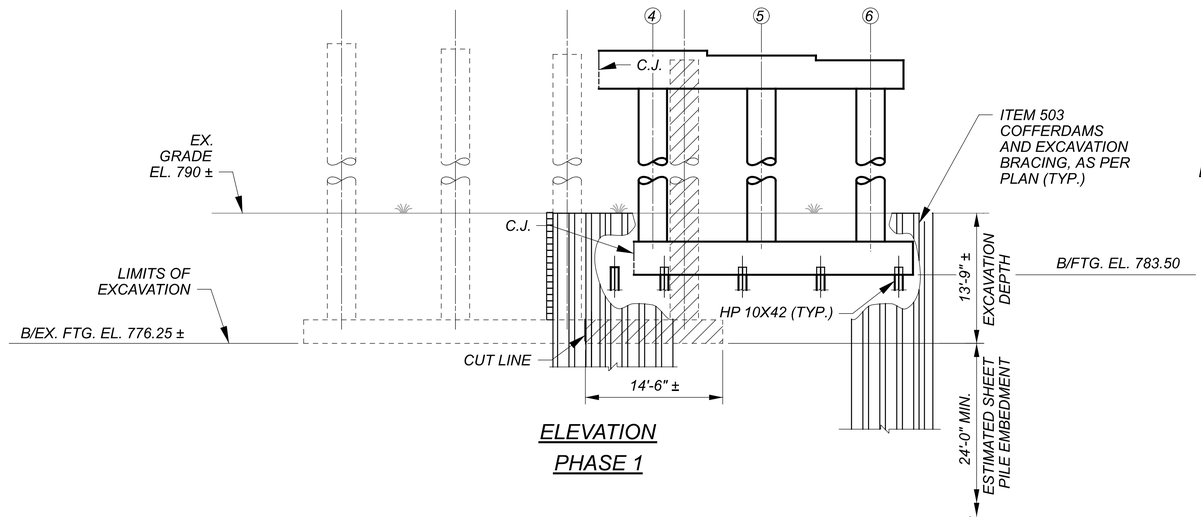
MODEL: Phase Construction Forward Abutment PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 10:35:58 PM USER: WIL57077
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SC003.dgn



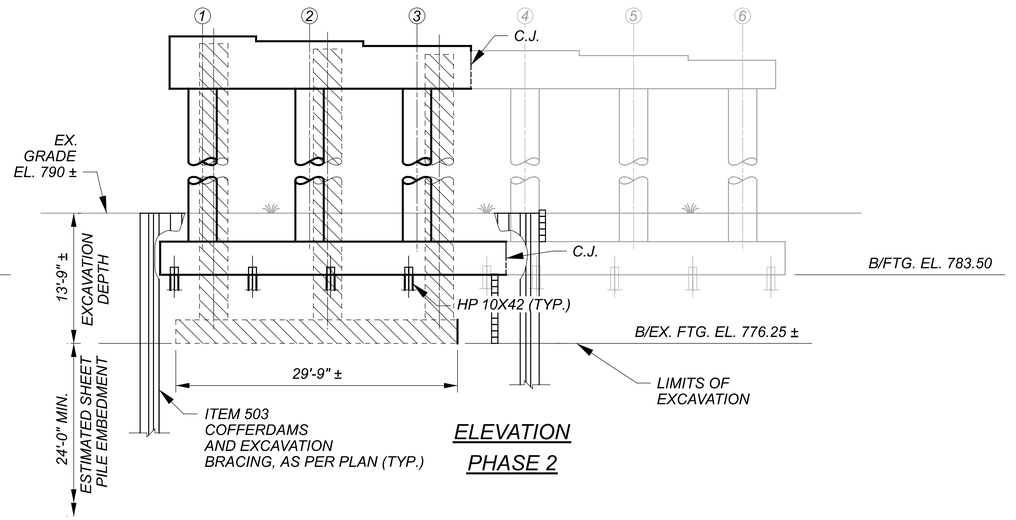

PLAN




PLAN




ELEVATION
PHASE 1




ELEVATION
PHASE 2

NOTES:

1. ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
2. REMOVE TEMPORARY SHORING AND COMPLETE BACKFILLING TO FINAL GRADE. THE CONTRACTOR MAY ELECT TO LEAVE SHEET PILES IN PLACE AND CUT TOPS TO 2 FEET BELOW FINAL GRADE AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.
4. NON-STANDARD TEMPORARY SHORING NEAR AND UNDER BRIDGE DECK SHALL BE SHEET PILES INSTALLED IN 4 FOOT SEGMENTS TO BE DRIVEN AND WELDED.
5. 8" X 8" TIMBER LAGGING TO BEAR ON TEMPORARY SHEETING, COLUMNS OR PILES.

SHEET REFERENCES:

1. SEE SHEET 07/51 FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET 08/51 & 09/51 FOR PHASE CONSTRUCTION OF ABUTMENTS.
3. SEE SHEET 11/51 FOR PIER 2 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET 12/51 FOR PIER 3 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET 03/51 FOR INFORMATION REGARDING NON-STANDARD TEMPORARY SHORING.

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

# PHASE CONSTRUCTION - PIER 1 PLAN, ELEVATION & DETAILS
## BRIDGE NO. CUY-71-10.07 SW
## IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| VN | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 10 | 51 |

| SHEET | TOTAL |
|---|---|
| P.103 | 167 |

CUY-71-10.07 SW

MODEL: Phase Construction Pier 1 PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 6:45:30 PM USER: PIA81677
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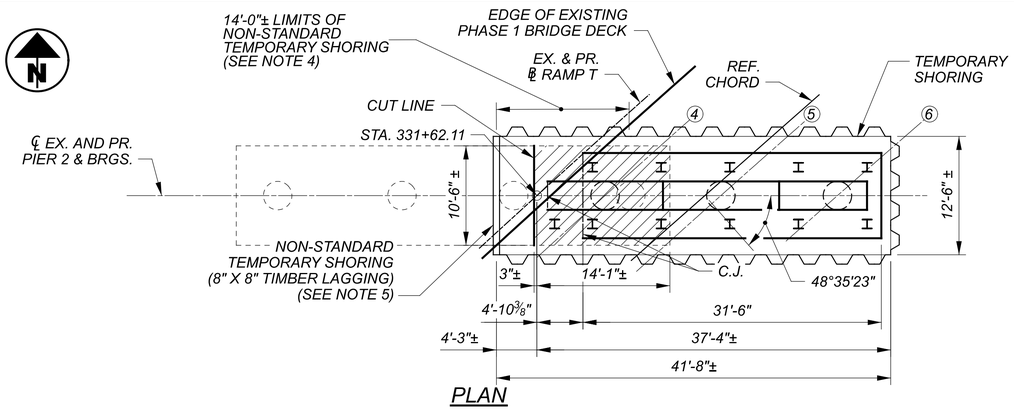
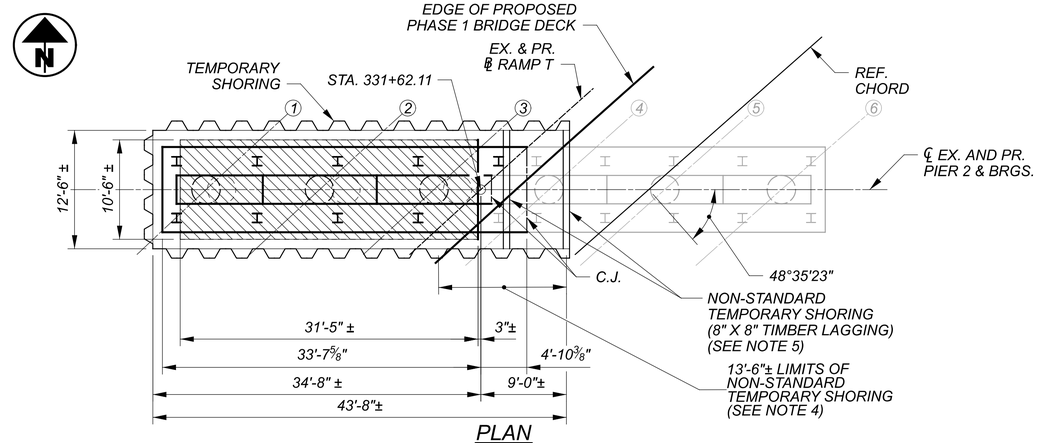
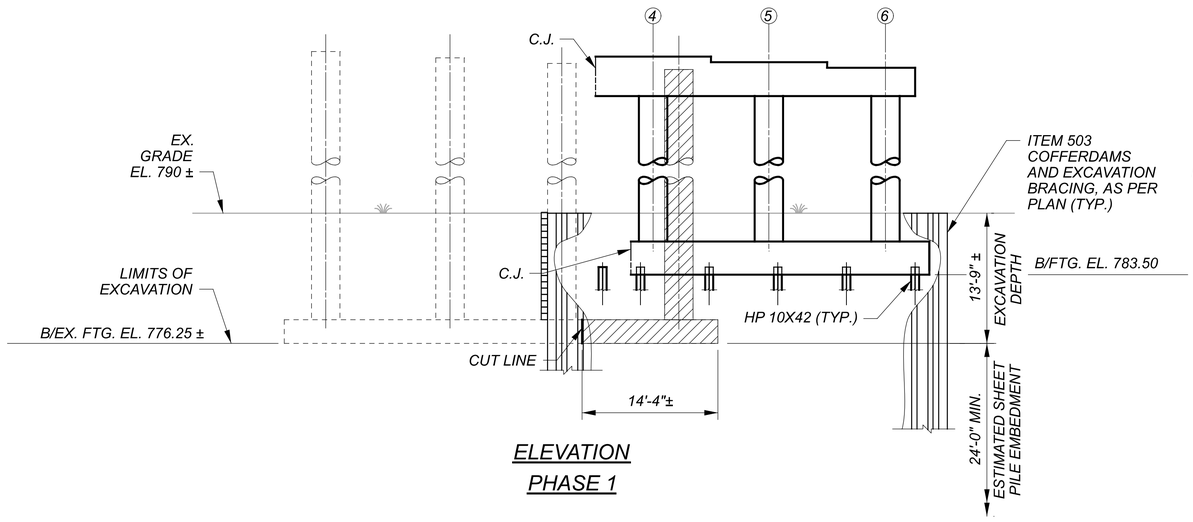
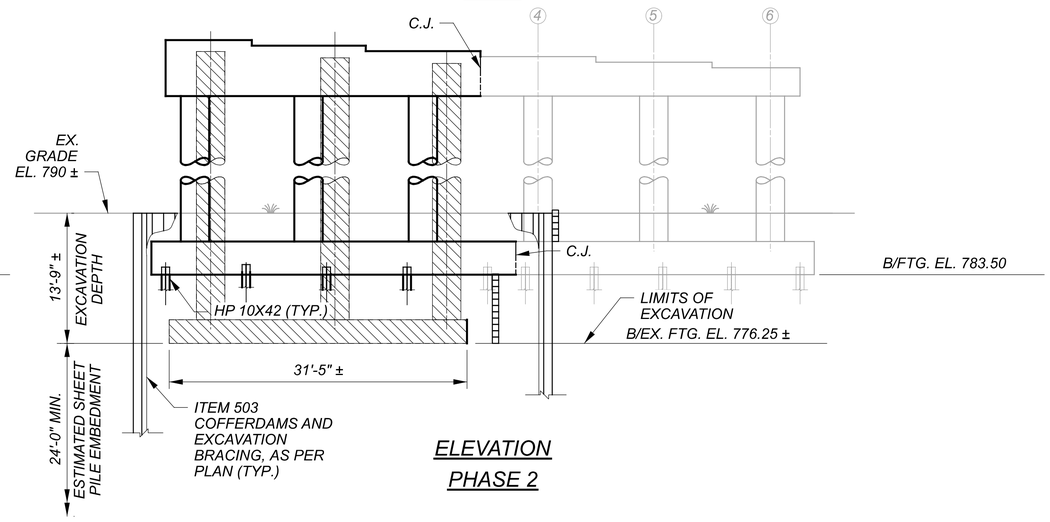



NOTES:

1. ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
2. REMOVE TEMPORARY SHORING AND COMPLETE BACKFILLING TO FINAL GRADE. THE CONTRACTOR MAY ELECT TO LEAVE SHEET PILES IN PLACE AND CUT TOPS TO 2 FEET BELOW FINAL GRADE AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.
4. NON-STANDARD TEMPORARY SHORING NEAR AND UNDER BRIDGE DECK SHALL BE SHEET PILES INSTALLED IN 4 FOOT SEGMENTS TO BE DRIVEN AND WELDED.
5. 8" X 8" TIMBER LAGGING TO BEAR ON TEMPORARY SHEETING, COLUMNS OR PILES.

SHEET REFERENCES:

1. SEE SHEET 07/51 FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET 08/51 & 09/51 FOR PHASE CONSTRUCTION OF ABUTMENTS.
3. SEE SHEET 10/51 FOR PIER 1 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET 12/51 FOR PIER 3 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET 03/51 FOR INFORMATION REGARDING NON-STANDARD TEMPORARY SHORING.

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

# PHASE CONSTRUCTION - PIER 2 PLAN, ELEVATION & DETAILS
## BRIDGE NO. CUY-71-10.07 SW
## IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| VN | JMR |

REVIEWER: SK 09/17/25

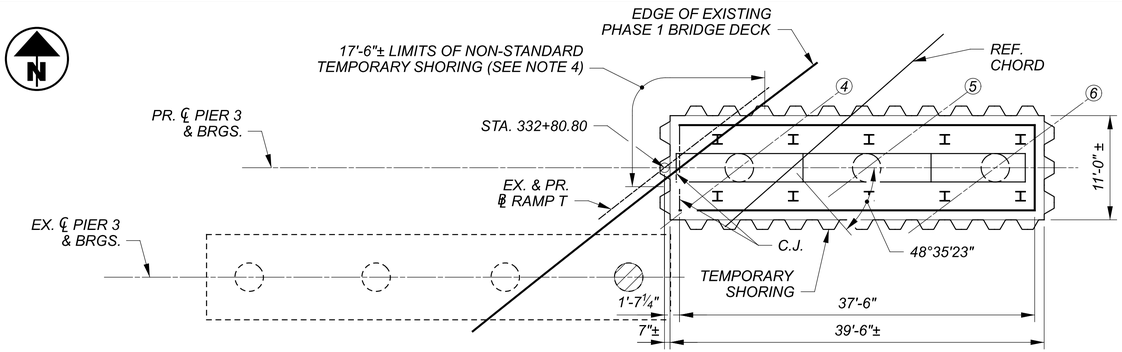
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 11 | 51 |

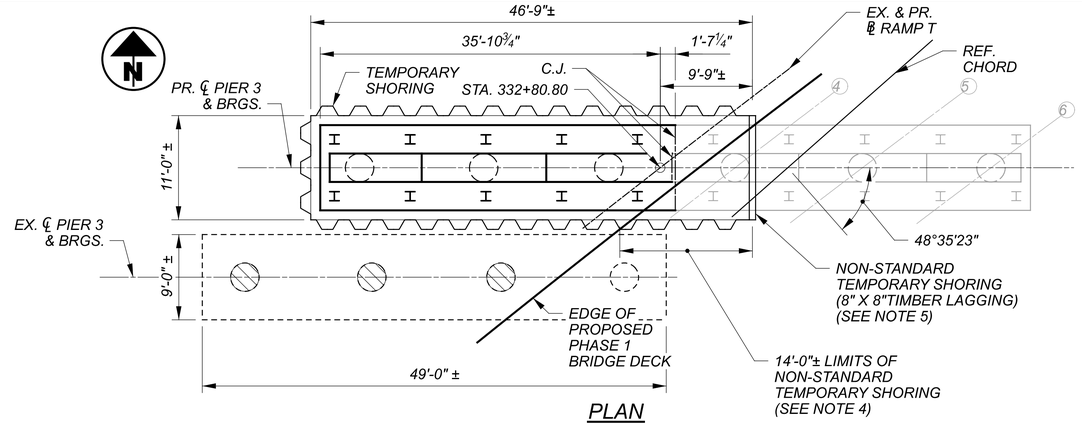
| SHEET | TOTAL |
|---|---|
| P.104 | 167 |

CUY-71-10.07 SW

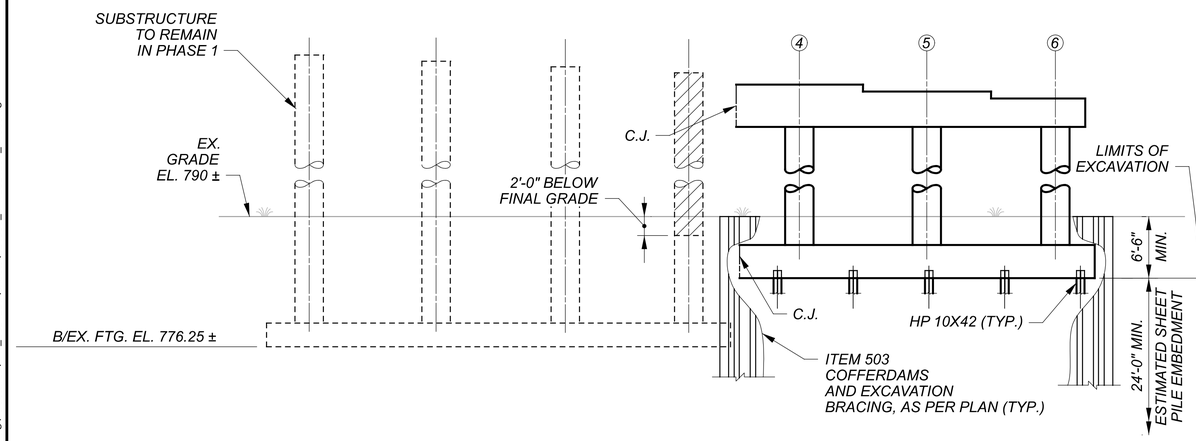
MODEL: Phase Construction Pier 2 PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 6:48:06 PM USER: PIA81677
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SC005.dgn



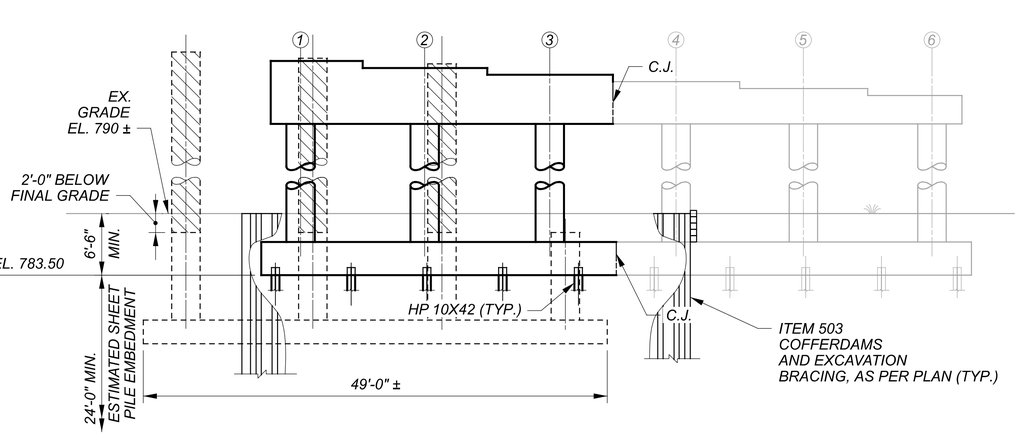

PLAN




PLAN




ELEVATION
PHASE 1




ELEVATION
PHASE 2

NOTES:

1. ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
2. REMOVE ALL TEMPORARY SHORING AND COMPLETE BACKFILLING TO FINAL GRADE. THE CONTRACTOR MAY ELECT TO LEAVE SHEET PILES IN PLACE AND CUT TOPS TO 2 FEET BELOW FINAL GRADE AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.
4. NON-STANDARD TEMPORARY SHORING NEAR AND UNDER BRIDGE DECK SHALL BE SHEET PILES INSTALLED IN 4 FOOT SEGMENTS TO BE DRIVEN AND WELDED.
5. 8" X 8" TIMBER LAGGING TO BEAR ON TEMPORARY SHEETING, COLUMNS OR PILES.

SHEET REFERENCES:

1. SEE SHEET 07/51 FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET 08/51 & 09/51 FOR PHASE CONSTRUCTION OF ABUTMENTS.
3. SEE SHEET 10/51 FOR PIER 1 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET 11/51 FOR PIER 2 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET 03/51 FOR INFORMATION REGARDING NON-STANDARD TEMPORARY SHORING.

LEGEND

PHASE 1 REMOVALS

PHASE 2 REMOVALS

PHASE CONSTRUCTION - PIER 3 PLAN, ELEVATION & DETAILS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER VN | CHECKER JMR
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 12 | TOTAL 51
SHEET P.105 | TOTAL 167

CUY-71-10.07 SW

MODEL: Phase Construction Pier 3 PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 6:50:17 PM USER: PIA81677
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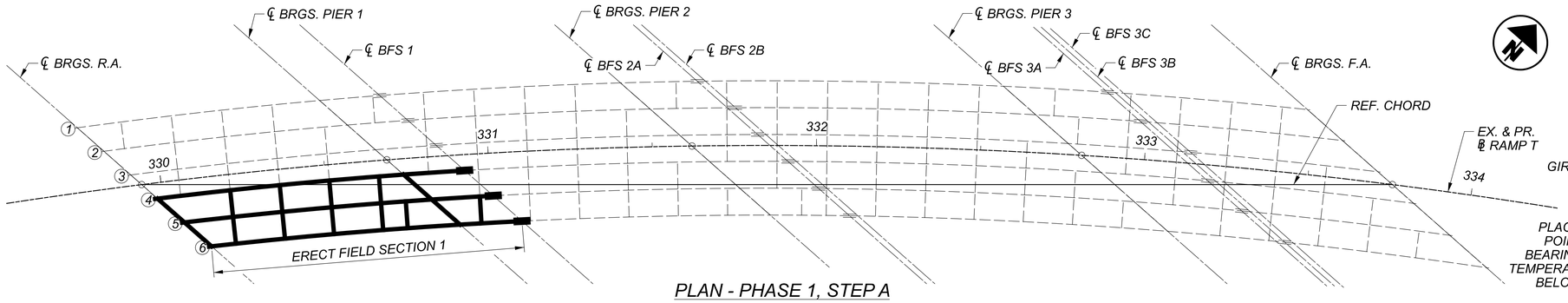
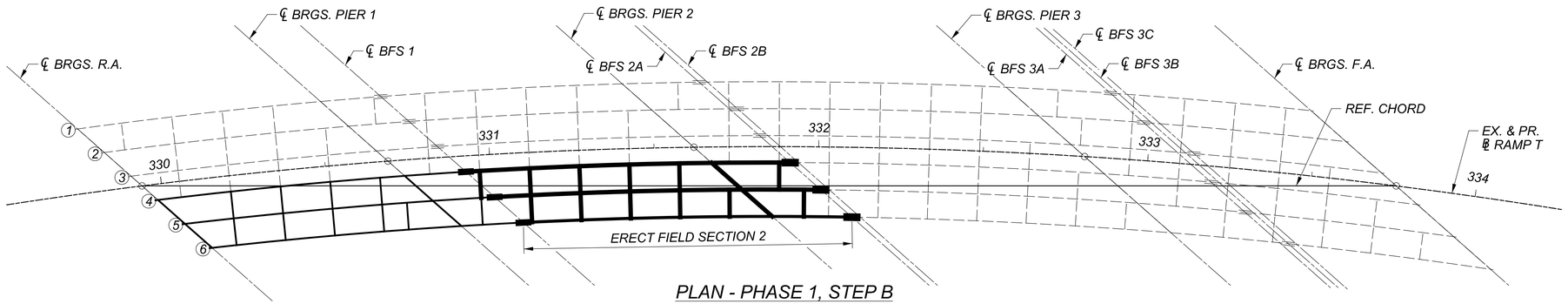
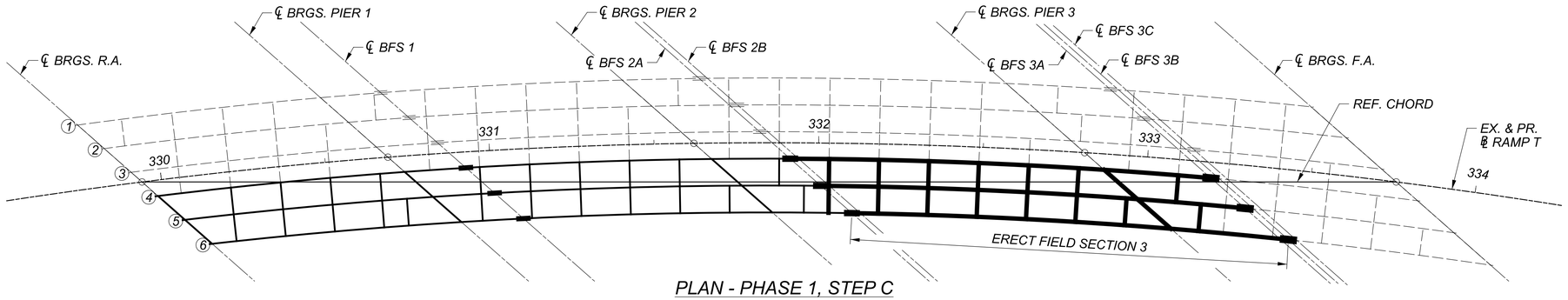


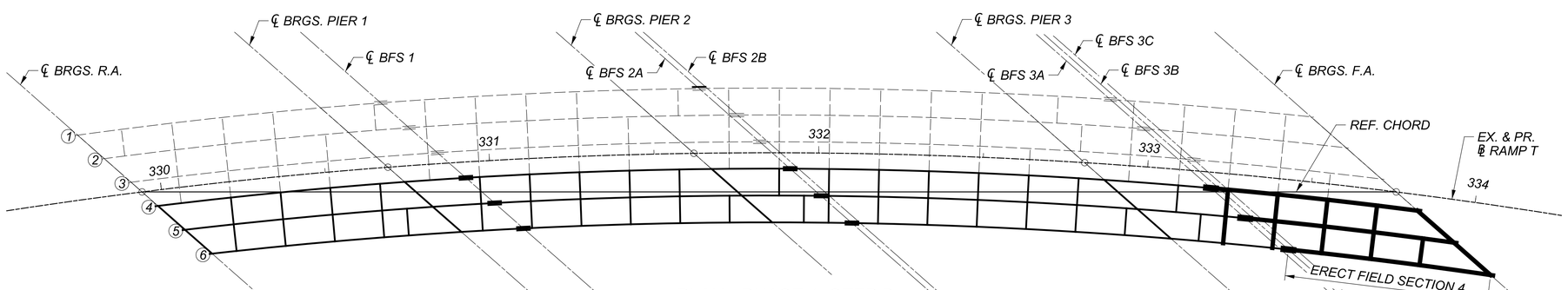

PLAN - PHASE 1, STEP A



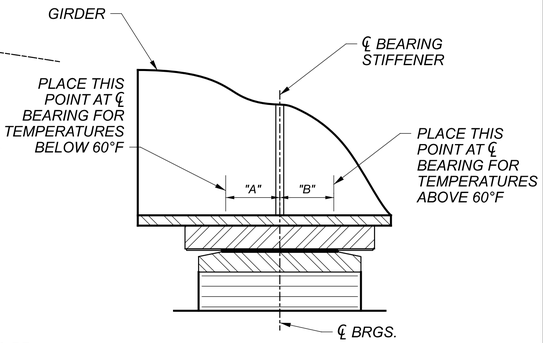

PLAN - PHASE 1, STEP B




PLAN - PHASE 1, STEP C




PLAN - PHASE 1, STEP D




| | STEEL TEMPERATURE (°F) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OFFSET DIMENSION | 20° | 30° | 40° | 50° | 60° | 70° | 80° | 90° | 100° |
| "A" | ½" | ⅜" | ¼" | ⅛" | – | | | | |
| "B" | | | | | – | ⅛" | ¼" | ⅜" | ½" |

NOTES:

1. PLAN PROVIDED SHOWS THE SUGGESTED SEQUENCE OF ERECTION OF STEEL GIRDER AND CROSSFRAME MEMBERS IN ORDER TO CONSTRUCT THE COMPLETE FRAMING SYSTEM. THE INTENT IS TO SHOW THE ALIGNING AND SECURING OF THESE STRUCTURAL ELEMENTS TO ACHIEVE STABILITY DURING ASSEMBLY.

2. SET DIMENSION "A" OR "B" TO THE NEAREST 10 DEGREE INTERVAL. DIMENSION SHOWN IN THE TABLE (SEE NOTE ABOVE) BASED ON THE STEEL TEMPERATURE DURING PHASE 1, STEP B. RECORD STEEL TEMPERATURES USING AN INFARED THERMOMETER. TAKE THREE READINGS WHILE MAINTAINING A CONSISTENT DISTANCE BETWEEN THE THERMOMETER AND STEEL AND AVERAGE THE RESULTS. CLAMP OR PERMANENTLY ATTACH BEARING LOAD PLATE AT PIER 2 ONCE PHASE 1, STEP B STEEL IS POSITIONED CORRECTLY. IF A DIFFERENT SEQUENCE IS UTILIZED FOR CONSTRUCTION, THE ERECTION PLAN REQUIRED BY C&MS 501.05.B.4 SHALL INCLUDE MEANS AND METHODS TO MAINTAIN GEOMETRIC CONTROL OF STEEL SUPERSTRUCTURE THAT ACCOUNTS FOR THERMAL CHANGES OF THE STEEL.

LEGEND

- FS ERECTED THIS PHASE
- FS TO BE ERECTED
- FS ALREADY ERECTED

# PHASE CONSTRUCTION - ERECTION PLANS (1 OF 2)
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | LAG |

REVIEWER: SK 09/17/25

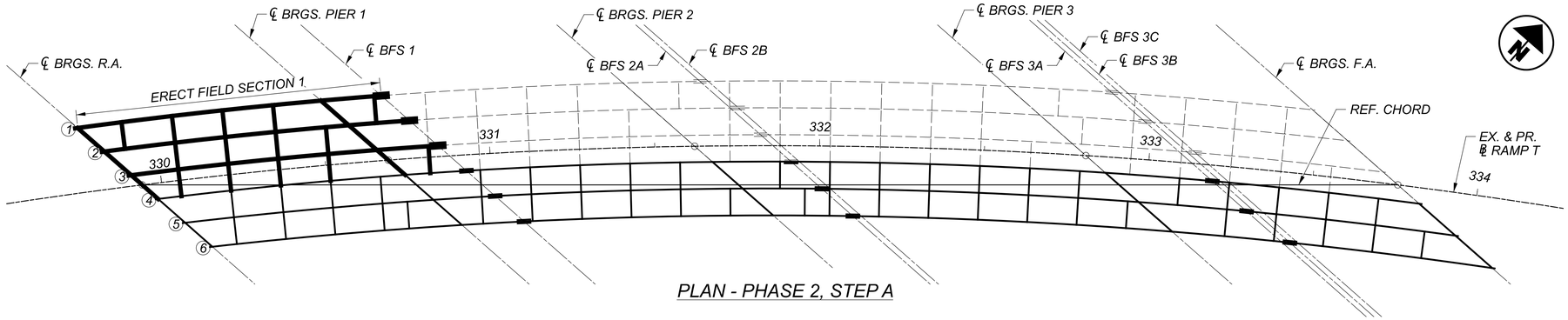
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 13 | 51 |

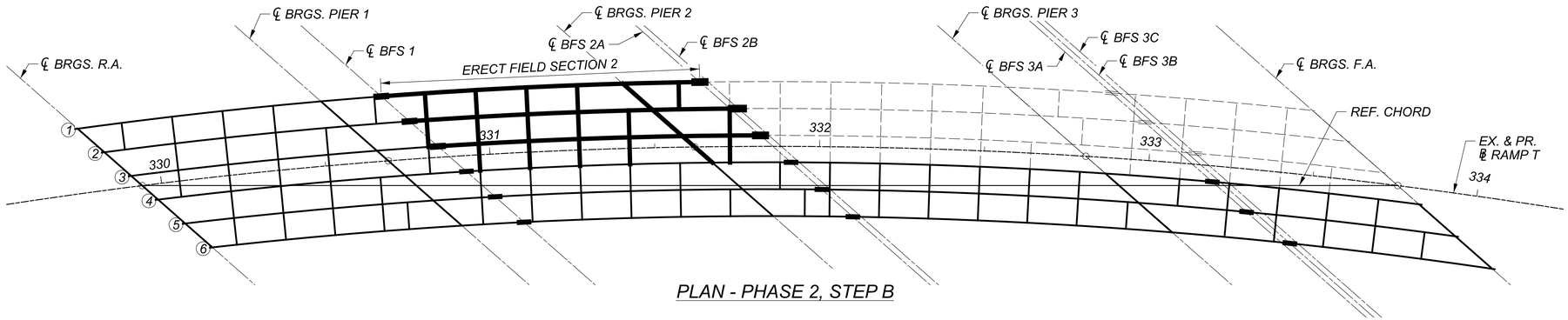
| SHEET | TOTAL |
|---|---|
| P.106 | 167 |

CUY-71-10.07 SW

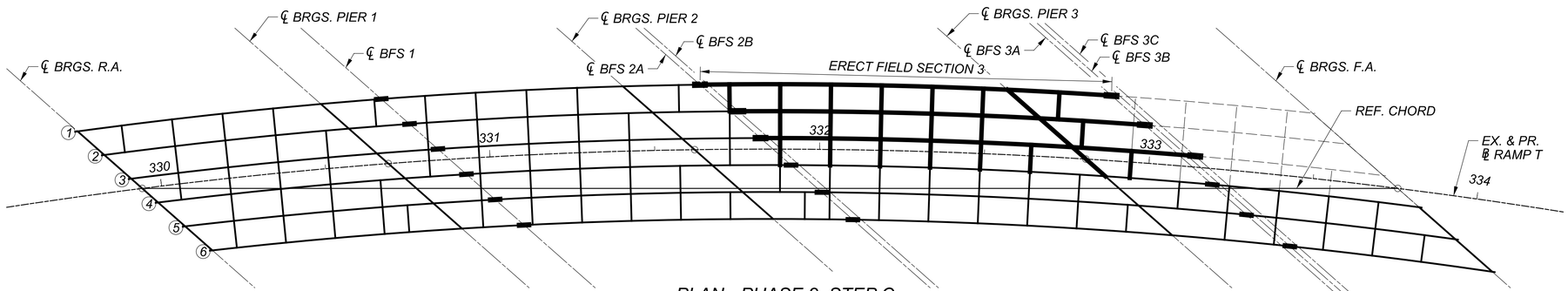
MODEL: Phase Construction Erection Plans 1 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:10:04 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257_SC007.dgn



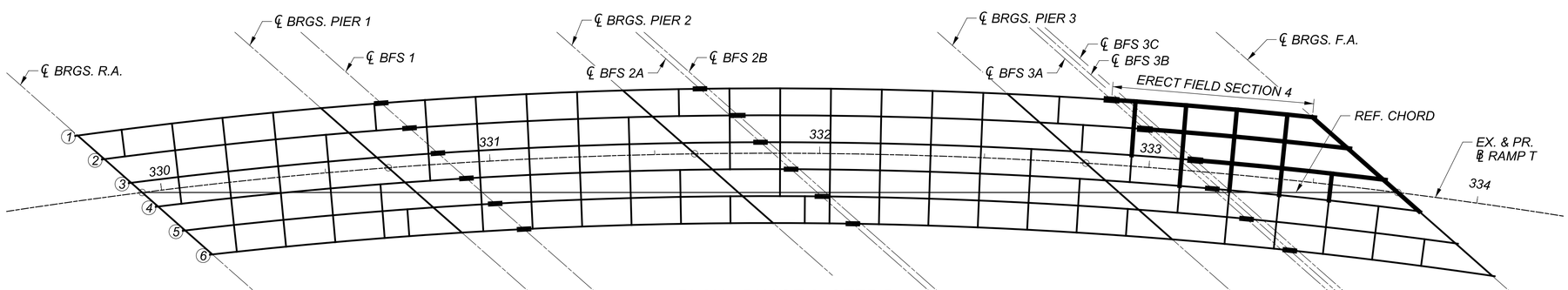

PLAN - PHASE 2, STEP A




PLAN - PHASE 2, STEP B




PLAN - PHASE 2, STEP C




PLAN - PHASE 2, STEP D

*NOTES:*

1. *PLAN PROVIDED SHOWS THE SUGGESTED SEQUENCE OF ERECTION OF STEEL GIRDER AND CROSSFRAME MEMBERS IN ORDER TO CONSTRUCT THE COMPLETE FRAMING SYSTEM. THE INTENT IS TO SHOW THE ALIGNING AND SECURING OF THESE STRUCTURAL ELEMENTS TO ACHIEVE STABILITY DURING ASSEMBLY.*
2. *CROSSFRAMES BETWEEN STRINGERS 3 AND 4 TO BE INSTALLED AFTER THE PHASE 2 DECK IS PLACED AND BEFORE THE CLOSURE.*

*LEGEND*

- *FS ERECTED THIS PHASE*
- *FS TO BE ERECTED*
- *FS ALREADY ERECTED*

# PHASE CONSTRUCTION - ERECTION PLANS (2 OF 2)
## BRIDGE NO. CUY-71-10.07 SW
## IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | LAG |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 14 | 51 |

| SHEET | TOTAL |
|---|---|
| P.107 | 167 |

CUY-71-10.07 SW

MODEL: Phase Construction Erection Plans 2 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:10:13 PM USER: SAT89729
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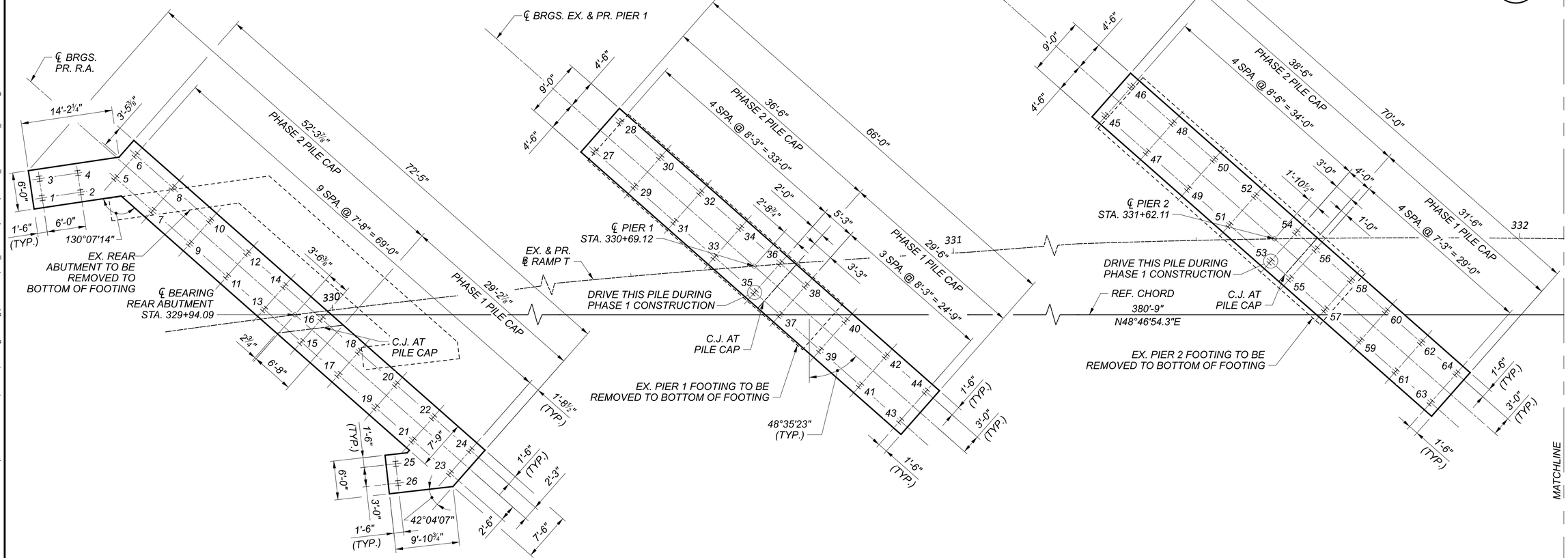
LEGEND

⌶ - VERTICAL PILE

# - PROPOSED PILE DESIGNATION

NOTES:

1. REFER TO GENERAL NOTES FOR PILE TOTAL FACTORED LOAD.




REAR ABUTMENT

PIER 1

PIER 2

## FOUNDATION LAYOUT PLAN

(TEMPORARY SHORING NOT SHOWN FOR CLARITY)

FOUNDATION PLAN (1 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| VN | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 15 | 51 |

| SHEET | TOTAL |
|---|---|
| P.108 | 167 |

CUY-71-10.07 SW

MODEL: Foundation Plan 1 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:10:26 PM USER: SAT89729
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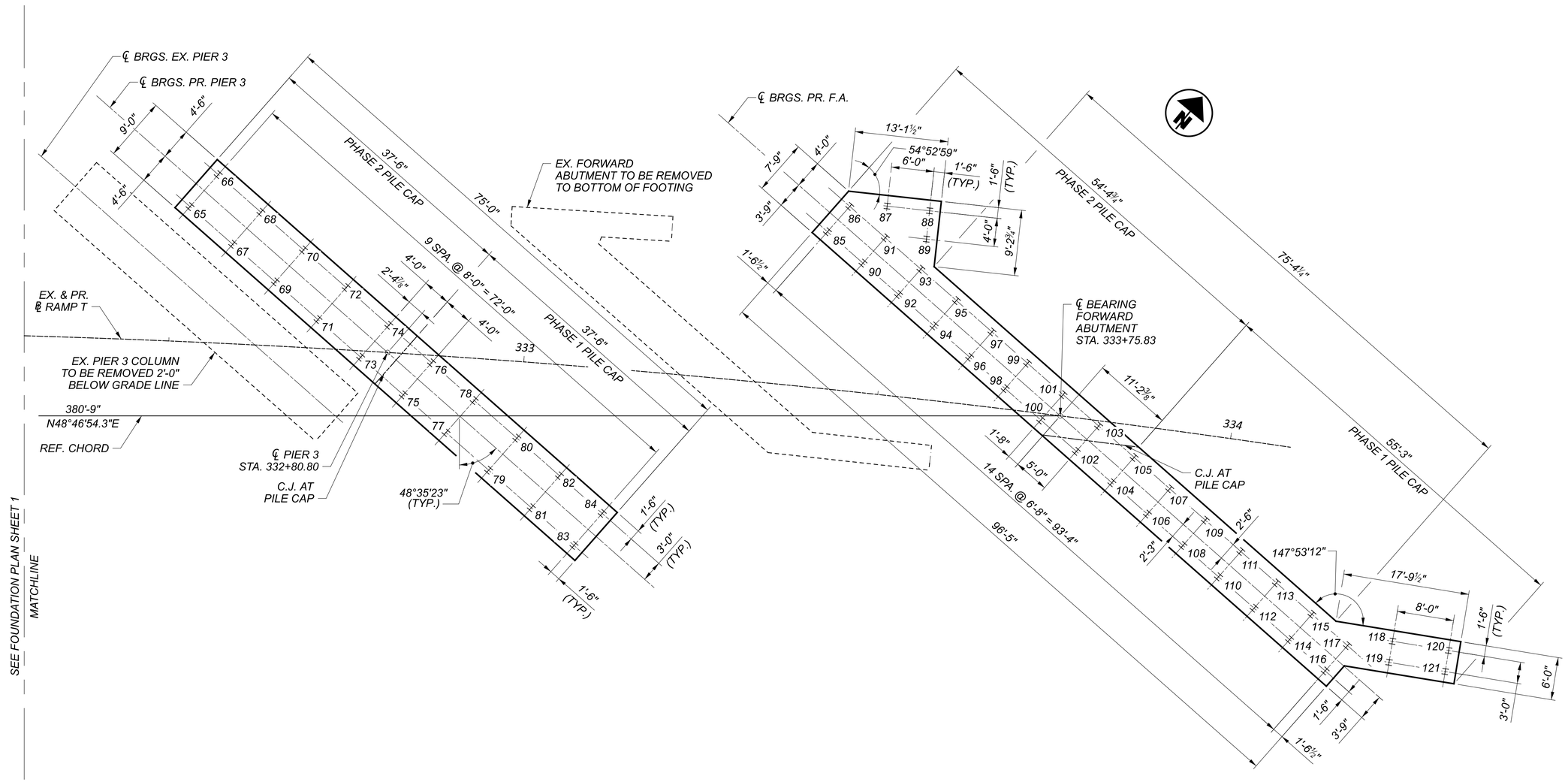
LEGEND

⌶ - VERTICAL PILE

# - PROPOSED PILE DESIGNATION

NOTES:

1. REFER TO GENERAL NOTES FOR PILE TOTAL FACTORED LOAD.




PIER 3

FORWARD ABUTMENT

FOUNDATION LAYOUT PLAN

(TEMPORARY SHORING NOT SHOWN FOR CLARITY)

FOUNDATION PLAN (2 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

CUY-71-10.07 SW


MODEL: Foundation Plan 2 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:10:48 PM USER: SAT89729
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SFN 1814258

DESIGN AGENCY


MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

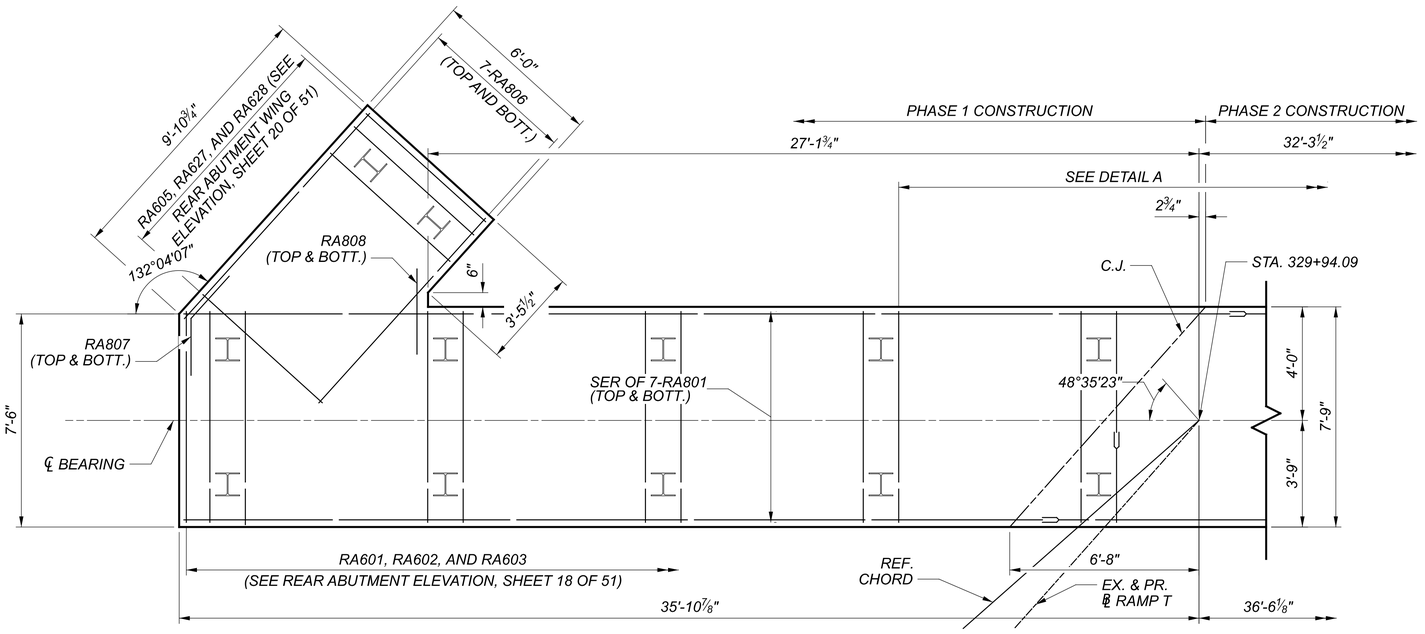

| DESIGNER | CHECKER |
|---|---|
| VN | JMR |

REVIEWER: SK 09/17/25

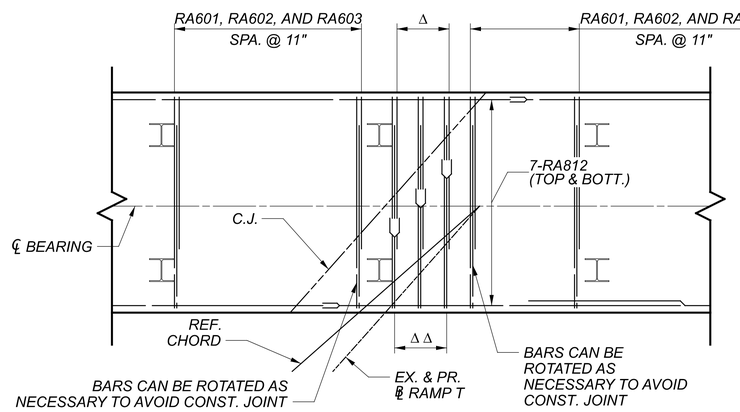
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 16 | 51 |

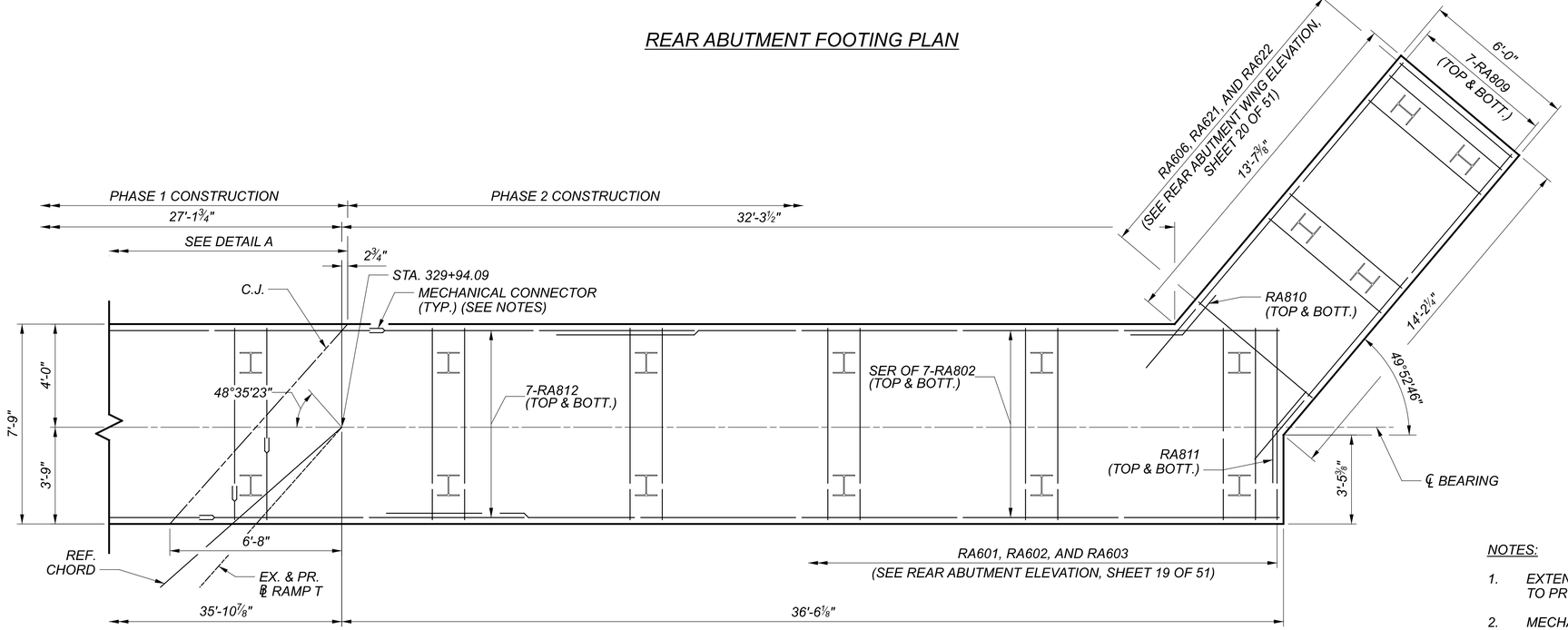
| SHEET | TOTAL |
|---|---|
| P.109 | 167 |




REAR ABUTMENT FOOTING PLAN




DETAIL A




REAR ABUTMENT FOOTING PLAN

| | PHASE PLACEMENT | SIMILAR TO: | | | |
|---|---|---|---|---|---|
| | | RA601 | RA602 | RA603 | RA604 |
| Δ | 1 | 3-RA611 (SERIES) | 3-RA613 (SERIES) | 3-RA615 (SERIES) | 3-RA617 (SERIES) |
| Δ Δ | 2 | 3-RA612 (SERIES) | 3-RA614 (SERIES) | 3-RA616 (SERIES) | 3-RA618 (SERIES) |

NOTES:

1. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
2. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509 - EPOXY COATED REINFORCING STEEL.

| | REQ'D LAP LENGTH | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |

REAR ABUTMENT FOOTING PLAN
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER NKK | CHECKER JMR
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 17 | TOTAL 51
SHEET P.110 | TOTAL 167

CUY-71-10.07 SW

MODEL: Rear Abutment Footing Plan PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:10:58 PM USER: SAT89729
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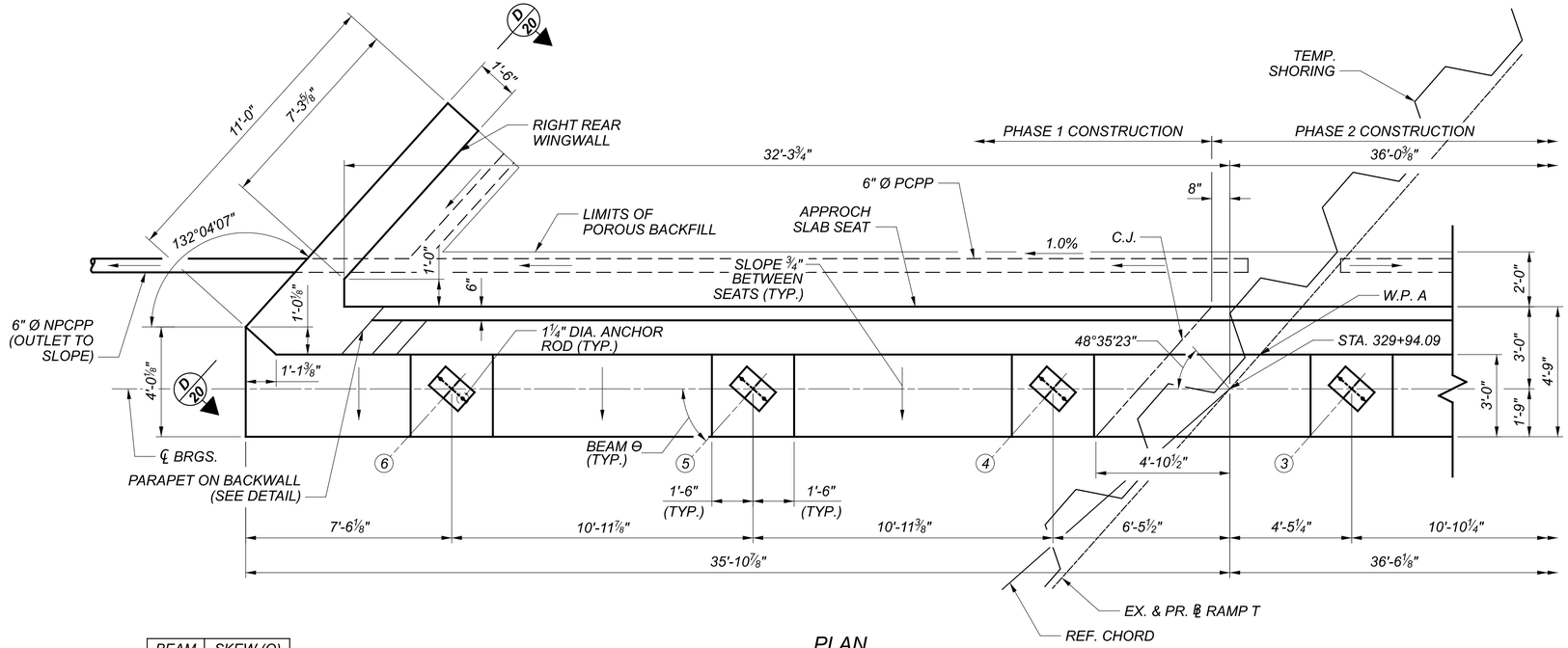
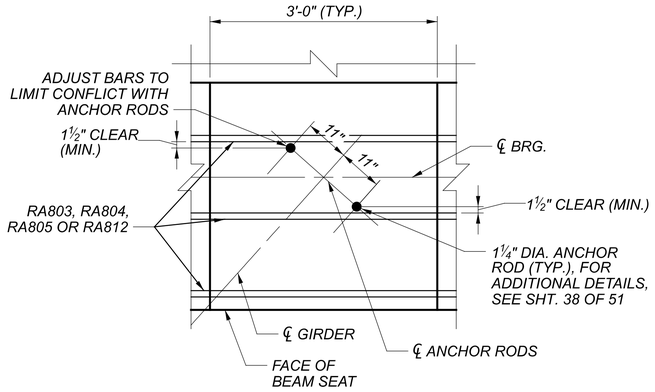



## PLAN

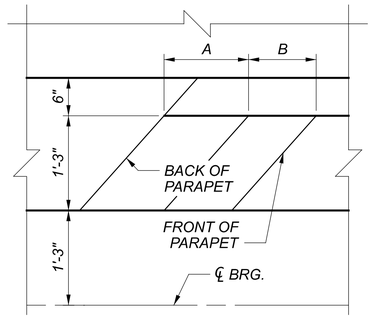
(FOUNDATION NOT SHOWN FOR CLARITY)

| BEAM | SKEW (Θ) |
|---|---|
| 6 | 47°51'12" |
| 5 | 48°07'57" |
| 4 | 48°24'26" |




## REAR ABUTMENT BEARING ANCHOR PLAN

(LOAD PLATE NOT SHOWN FOR CLARITY)

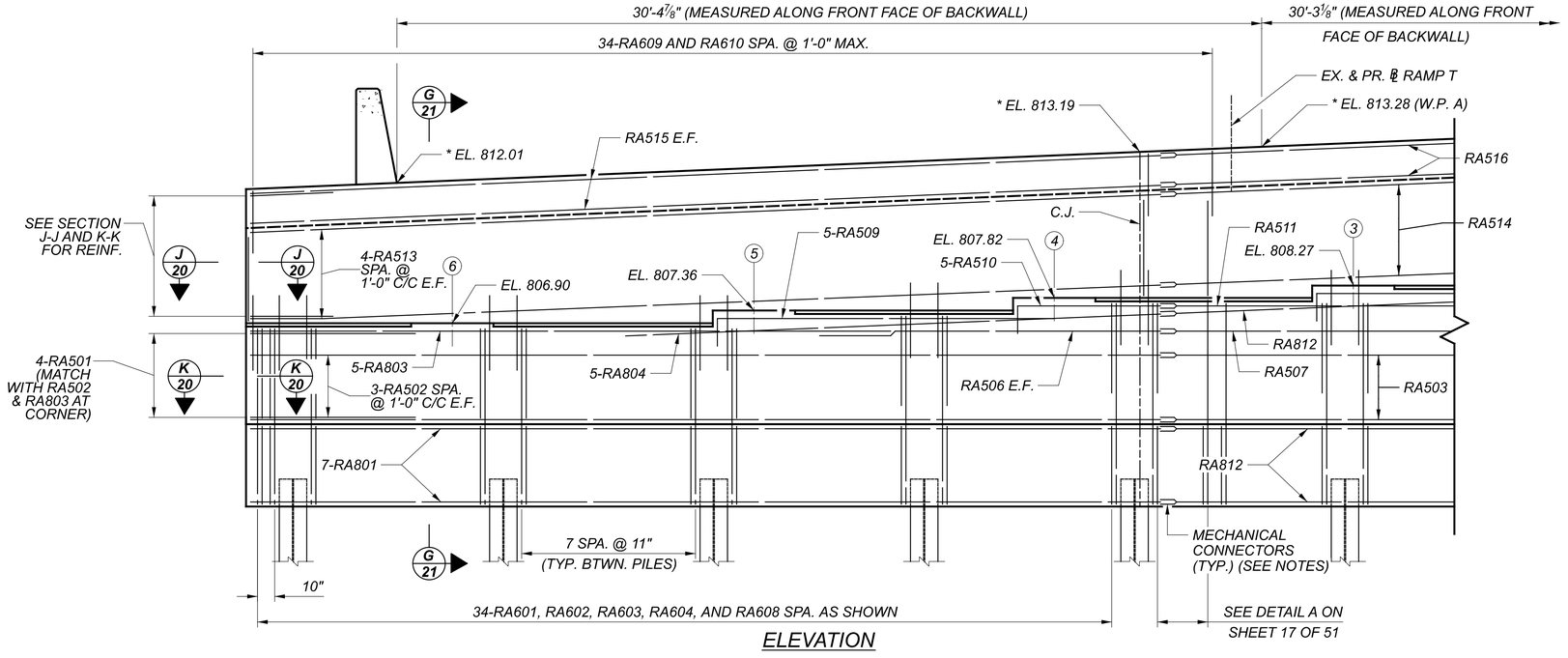



| | A | B |
|---|---|---|
| RIGHT | 1'-1⅜" | 10¾" |
| LEFT | 1'-1⅛" | 10½" |

(MEASURED ALONG FRONT FACE OF BACKWALL)

## PARAPET ON BACKWALL DETAIL

(RIGHT SIDE SHOWN, LEFT SIDE SIMILAR)




## ELEVATION

(SECTION TAKEN AT STA. 329+94.09)

* - ELEVATION IS ALONG FRONT FACE OF BACKWALL (TYP.)

NOTES:

1. FOR DRAIN PIPE OUTLET DETAILS, SEE SHEET 21/51. DRAINAGE SYSTEM IS DETAILED AS PER SCD A-1-20.
2. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
3. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.
4. FOR SECTIONS J-J, K-K AND D-D, SEE SHEET 20/51.
5. ACCURATELY PLACE CONCRETE REINFORCEMENT IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.

| | REQ'D LAP LENGTH | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |

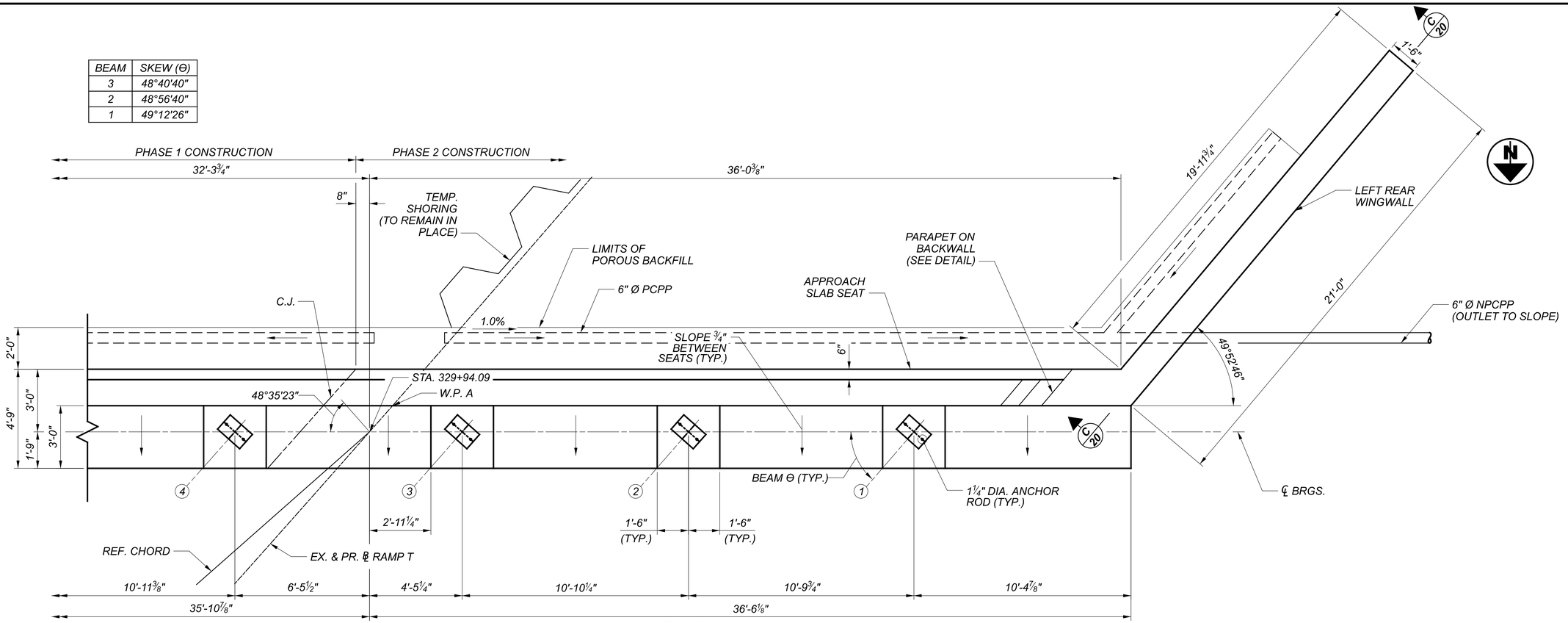
REAR ABUTMENT PLAN & ELEVATION (1 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY MOTT MACDONALD
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135
DESIGNER NKK | CHECKER JMR
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 18 | TOTAL 51
SHEET P.111 | TOTAL 167

CUY-71-10.07 SW

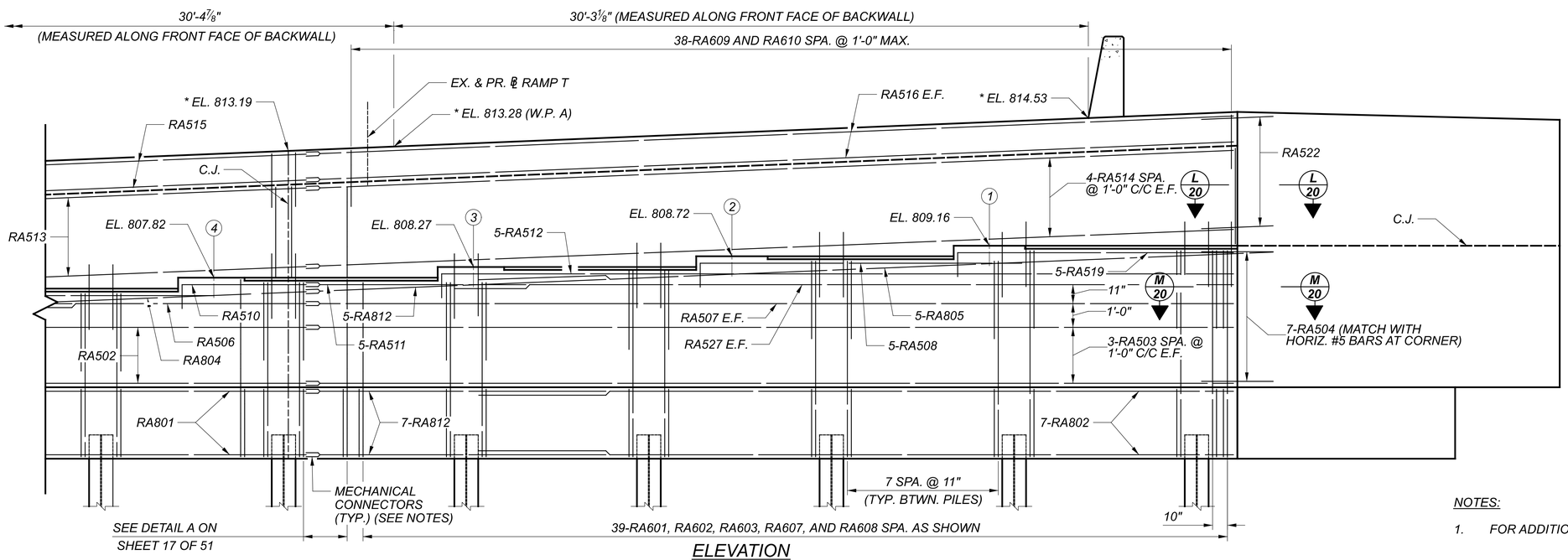
MODEL: Rear Abutment Plan and Elevation Sheet 1 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:11:07 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SR002.dgn

| BEAM | SKEW (Θ) |
|---|---|
| 3 | 48°40'40" |
| 2 | 48°56'40" |
| 1 | 49°12'26" |




## PLAN

(FOUNDATION NOT SHOWN FOR CLARITY)




## ELEVATION

(SECTION TAKEN AT STA. 329+94.09)

* - ELEVATION IS ALONG FRONT FACE OF BACKWALL (TYP.)

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 18/51.

REAR ABUTMENT PLAN & ELEVATION (2 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 19 | 51 |

| SHEET | TOTAL |
|---|---|
| P.112 | 167 |

CUY-71-10.07 SW

MODEL: Rear Abutment Plan and Elevation Sheet 2 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:11:18 PM USER: SAT89729
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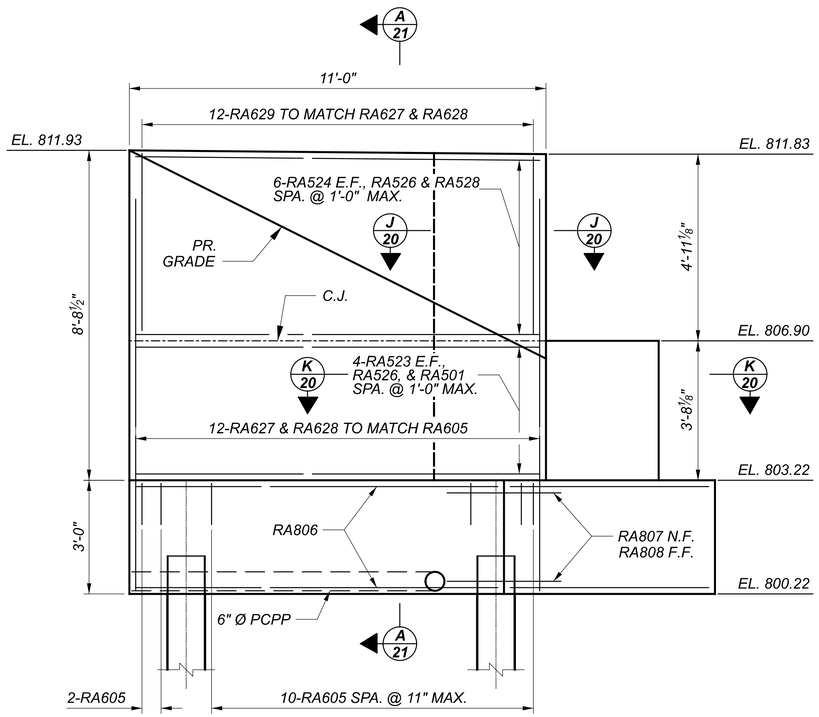
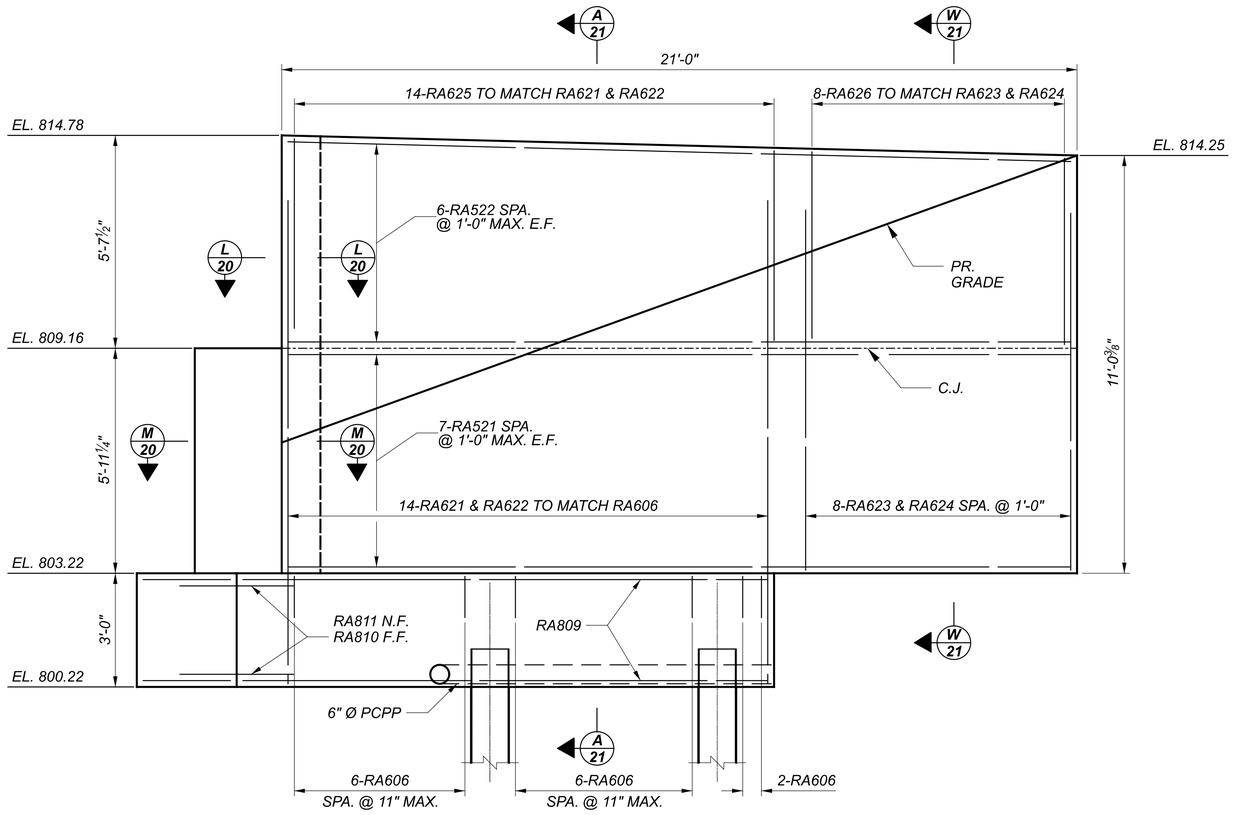
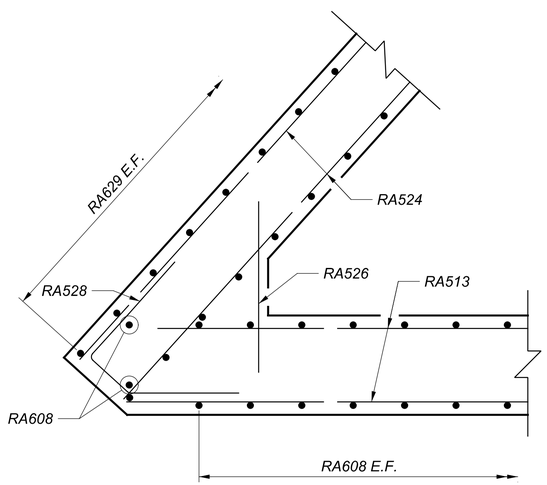


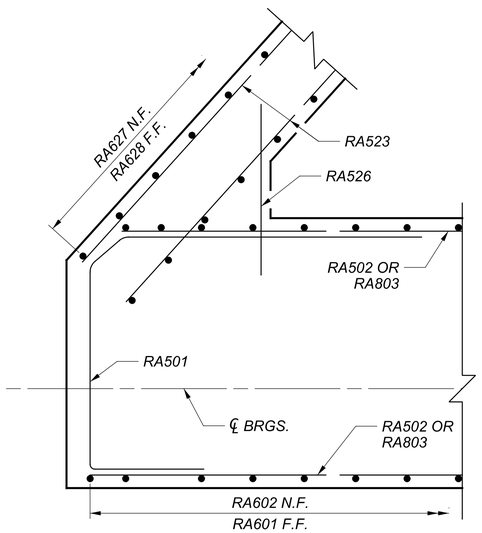

SECTION D-D



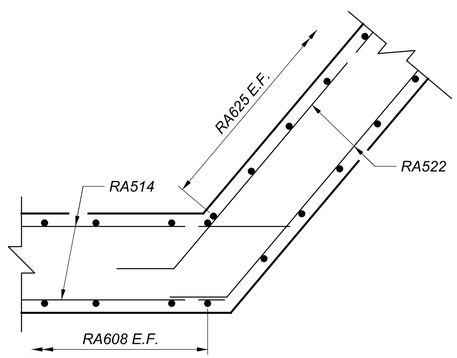

SECTION C-C



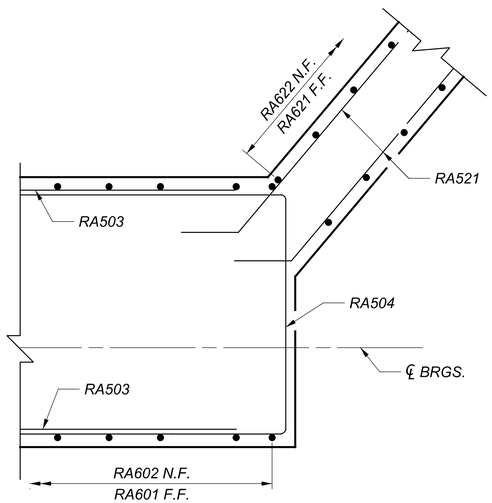

SECTION J-J




SECTION K-K




SECTION L-L




SECTION M-M

REAR ABUTMENT WINGWALLS ELEVATIONS & DETAILS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

| | |
|---|---|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| | 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| DESIGNER / CHECKER | NKK / JMR |
| REVIEWER | SK 09/17/25 |
| PROJECT ID | 114536 |
| SUBSET / TOTAL | 20 / 51 |
| SHEET / TOTAL | P.113 / 167 |

CUY-71-10.07 SW

MODEL: Rear Abutment Wingwalls Elevations and Details PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:11:28 PM USER: SAT89729
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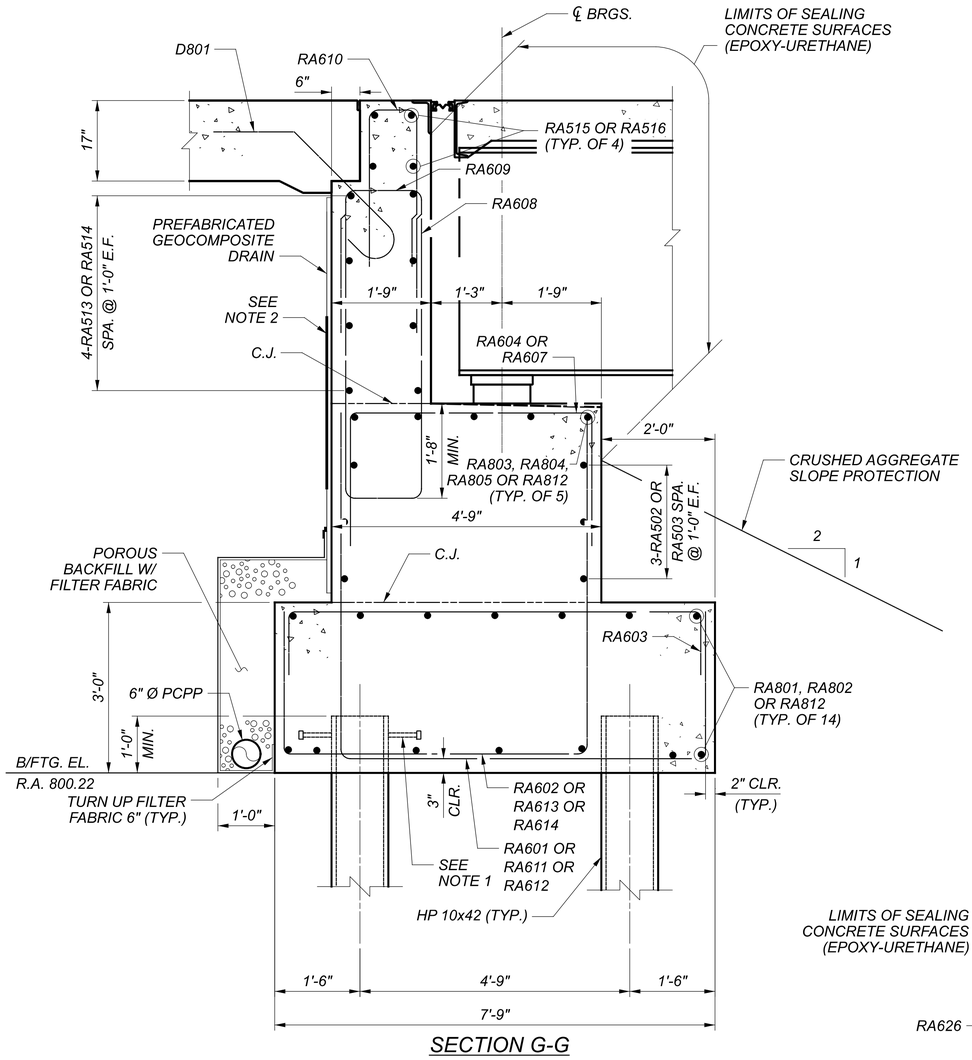
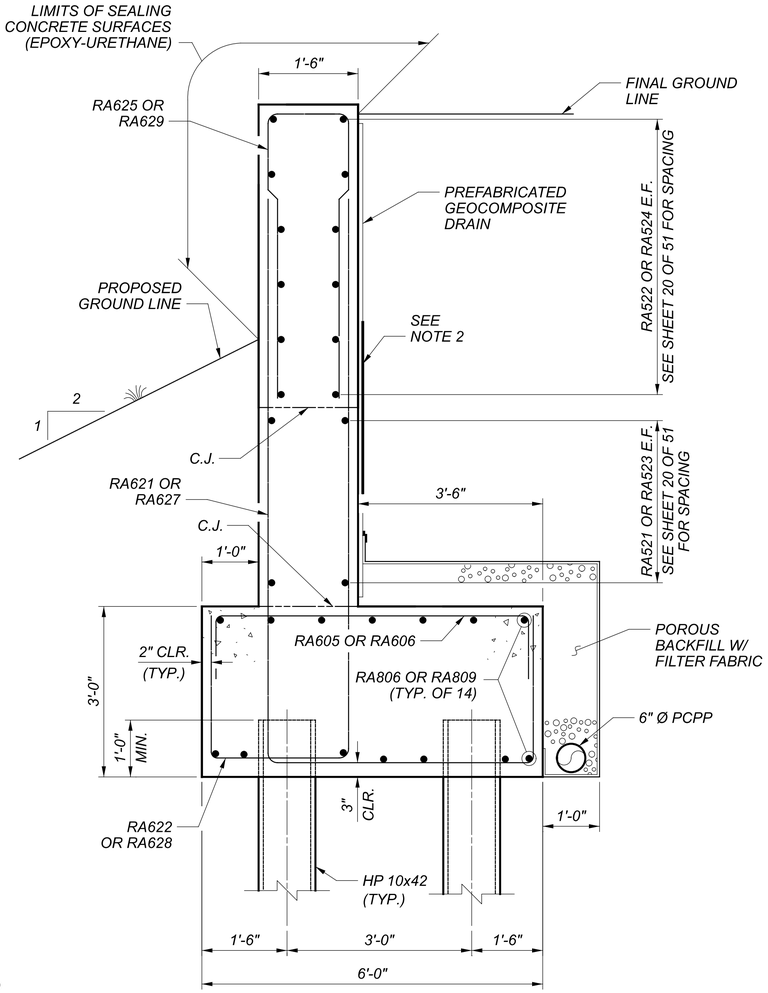
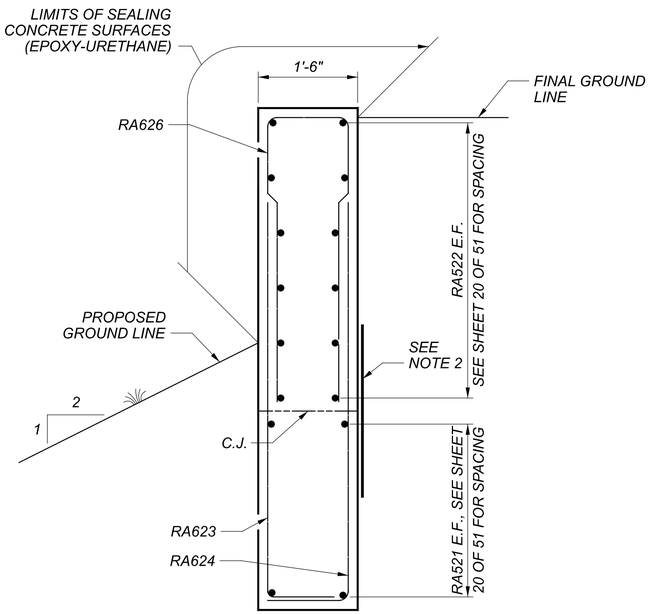



SECTION G-G




SECTION A-A




SECTION W-W

NOTES:

1. PROVIDE 4 -½" Ø STUDS AT TOP OF REAR PILES (2 EA. SIDE OF PILE - 6" LONG), MAY BE FIELD WELDED AFTER PILING IS IN PLACE. STUDS SHALL BE INCIDENTAL TO ITEM 507 STEEL PILES HP 10x42, FURNISHED.
2. INSTALL ITEM 512 - TYPE 2 WATERPROOFING, 3'-0" WIDE, CENTERED ON THE CONSTRUCTION JOINT ON THE INSIDE FACE OF EACH ABUTMENT AND WINGWALL.
3. FOR EXPANSION JOINT DETAILS, SEE SHEET 44/51.

REAR ABUTMENT SECTIONS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 21 | 51 |

| SHEET | TOTAL |
|---|---|
| P.114 | 167 |

CUY-71-10.07 SW

MODEL: Abutment Details PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 10:36:47 PM USER: WILS7077
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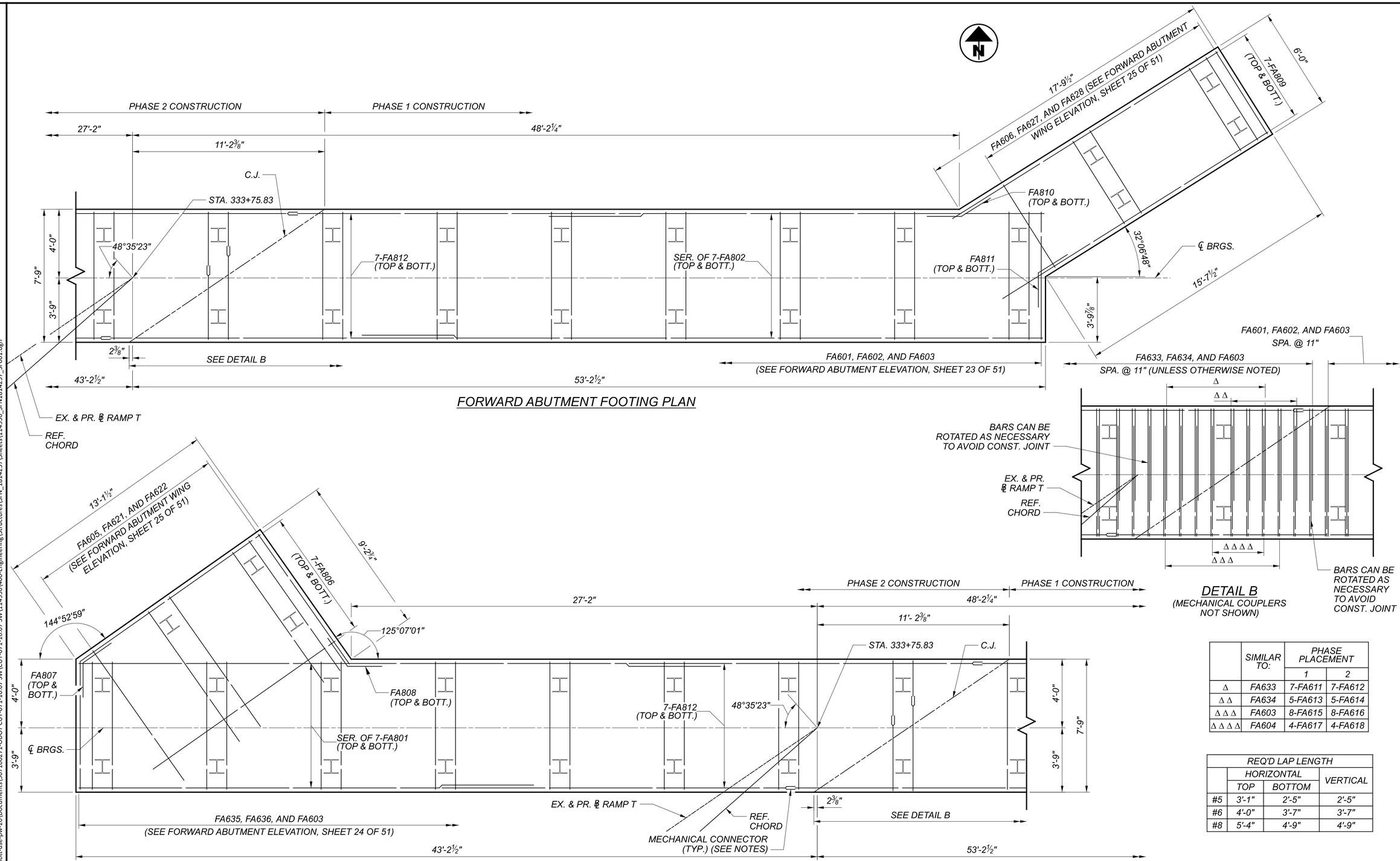



## FORWARD ABUTMENT FOOTING PLAN

## DETAIL B
(MECHANICAL COUPLERS NOT SHOWN)

| | SIMILAR TO: | PHASE PLACEMENT | |
|---|---|---|---|
| | | 1 | 2 |
| Δ | FA633 | 7-FA611 | 7-FA612 |
| Δ Δ | FA634 | 5-FA613 | 5-FA614 |
| Δ Δ Δ | FA603 | 8-FA615 | 8-FA616 |
| Δ Δ Δ Δ | FA604 | 4-FA617 | 4-FA618 |

| | REQ'D LAP LENGTH | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |

NOTES:

1. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
2. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

# FORWARD ABUTMENT FOOTING PLAN
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

CUY-71-10.07 SW

MODEL: Forward Abutment Footing Plan PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:11:47 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SF001.dgn

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

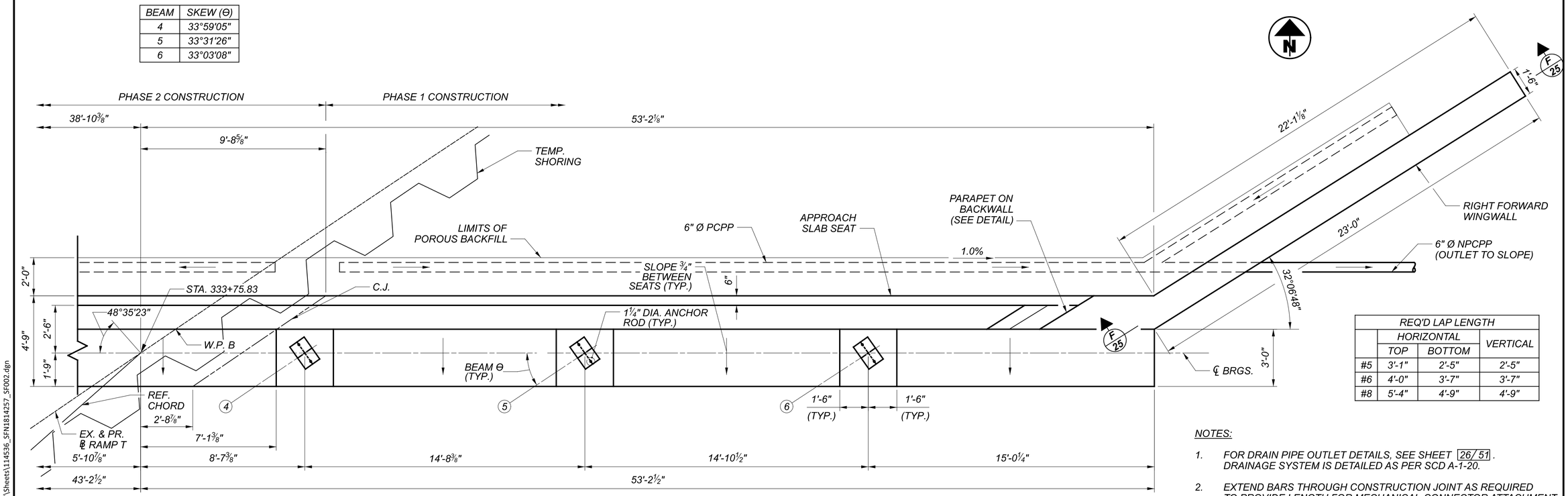
REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 22 | 51 |

| SHEET | TOTAL |
|---|---|
| P.115 | 167 |

| BEAM | SKEW (Θ) |
|---|---|
| 4 | 33°59'05" |
| 5 | 33°31'26" |
| 6 | 33°03'08" |



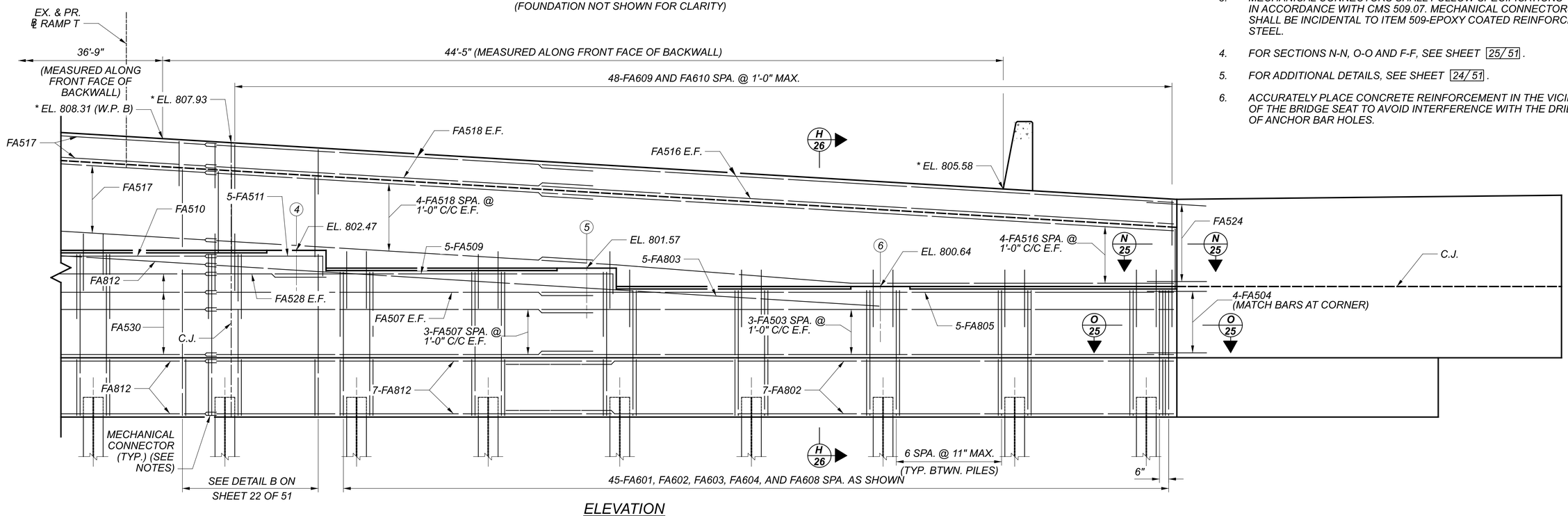

## PLAN

(FOUNDATION NOT SHOWN FOR CLARITY)

| REQ'D LAP LENGTH | | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |

NOTES:

1. FOR DRAIN PIPE OUTLET DETAILS, SEE SHEET 26/51 . DRAINAGE SYSTEM IS DETAILED AS PER SCD A-1-20.
2. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
3. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.
4. FOR SECTIONS N-N, O-O AND F-F, SEE SHEET 25/51 .
5. FOR ADDITIONAL DETAILS, SEE SHEET 24/51 .
6. ACCURATELY PLACE CONCRETE REINFORCEMENT IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.




## ELEVATION

(SECTION TAKEN AT STA. 333+75.83)

* - ELEVATION IS ALONG FRONT FACE OF BACKWALL (TYP.)

# FORWARD ABUTMENT PLAN AND ELEVATION (1 OF 2)

BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

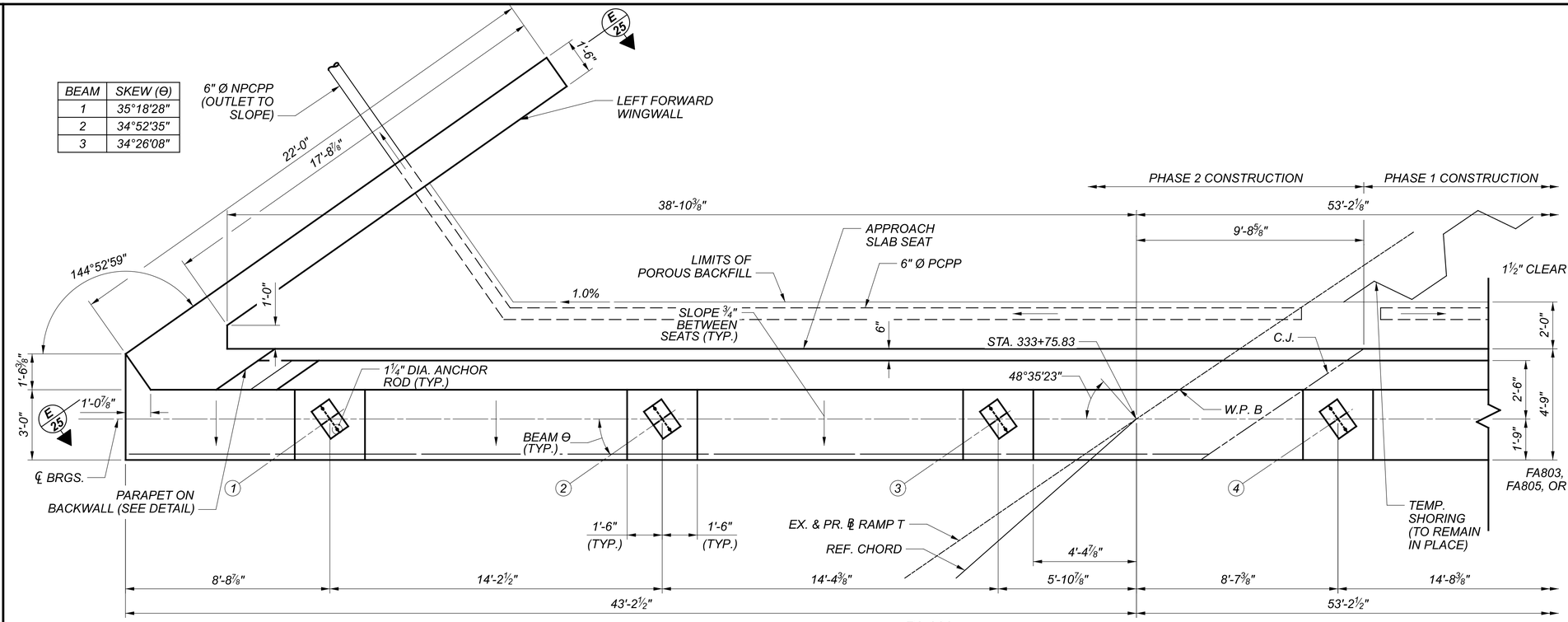
| SUBSET | TOTAL |
|---|---|
| 23 | 51 |

| SHEET | TOTAL |
|---|---|
| P.116 | 167 |

CUY-71-10.07 SW

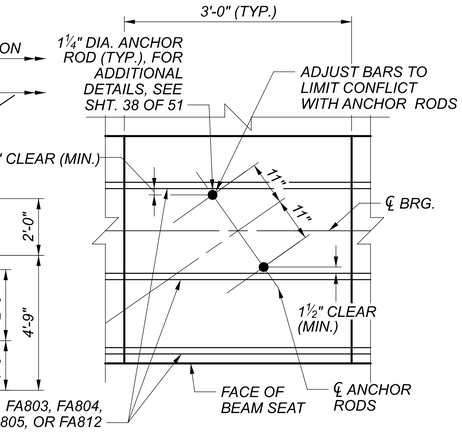
MODEL: Forward Abutment Plan and Elevation Sheet 1 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:11:57 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SF002.dgn

| BEAM | SKEW (Θ) |
|---|---|
| 1 | 35°18'28" |
| 2 | 34°52'35" |
| 3 | 34°26'08" |



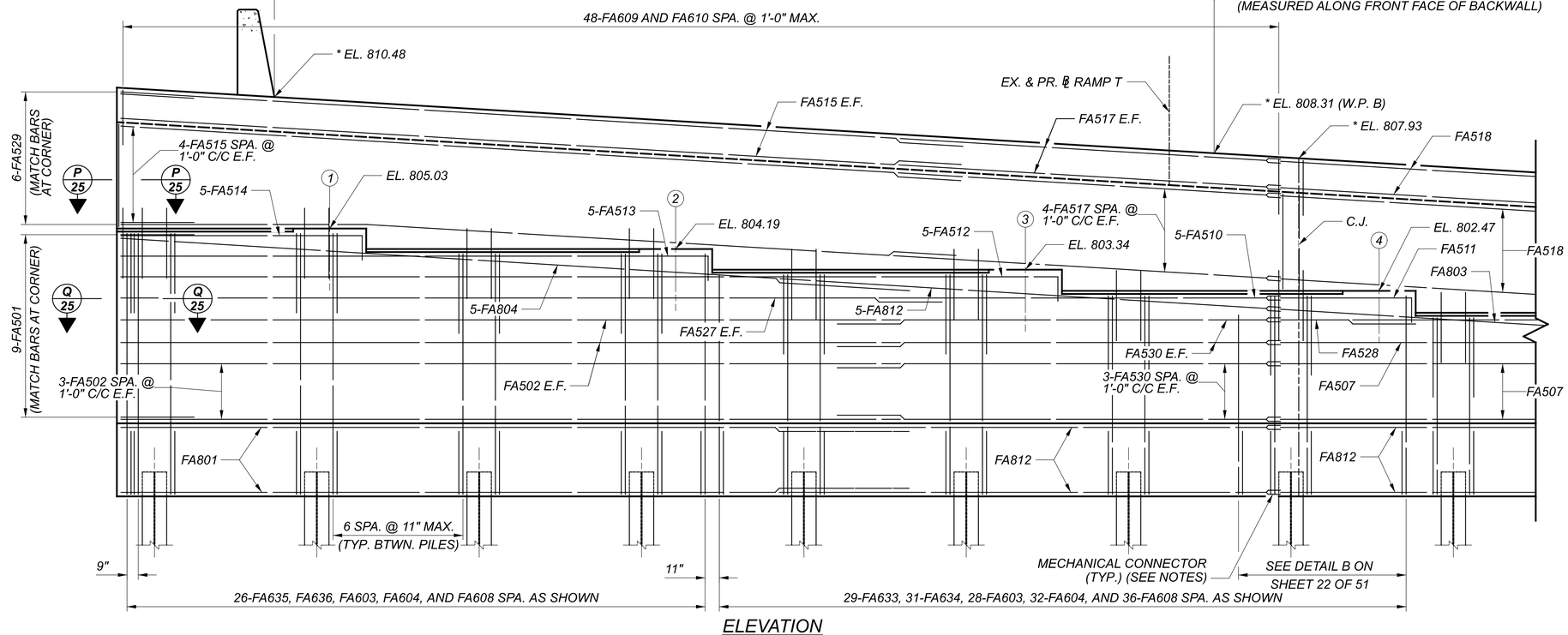

## PLAN

(FOUNDATION NOT SHOWN FOR CLARITY)




## FORWARD ABUTMENT BEARING ANCHOR PLAN

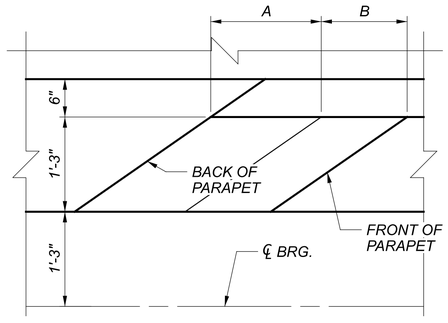
(LOAD PLATE NOT SHOWN FOR CLARITY)




## ELEVATION

(SECTION TAKEN AT STA. 333+75.83)

* - ELEVATION IS ALONG FRONT FACE OF BACKWALL (TYP.)




| | A | B |
|---|---|---|
| RIGHT | 1'-7⅛" | 1-2¾" |
| LEFT | 1-5½" | 1'-1⅝" |

## PARAPET ON BACKWALL DETAIL

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 23/51 .

FORWARD ABUTMENT PLAN AND ELEVATION (2 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

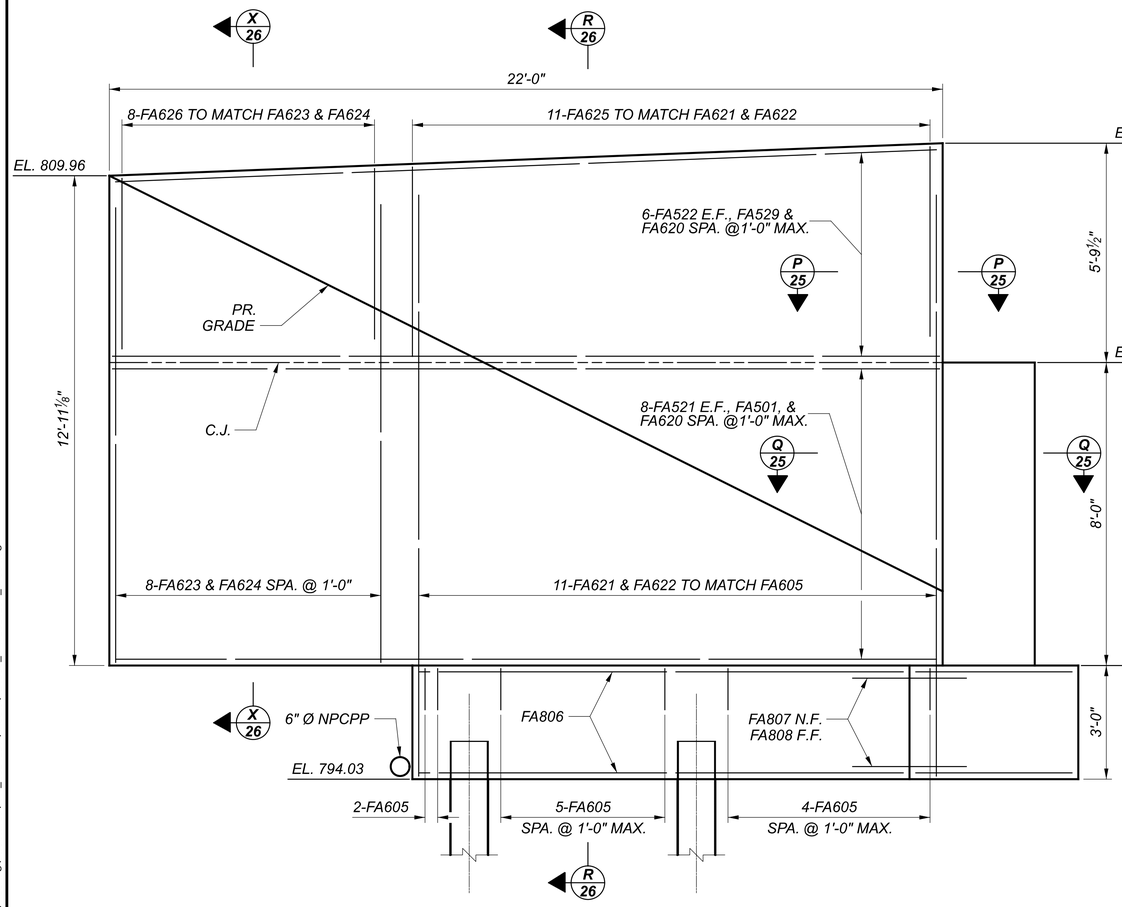
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 24 | 51 |

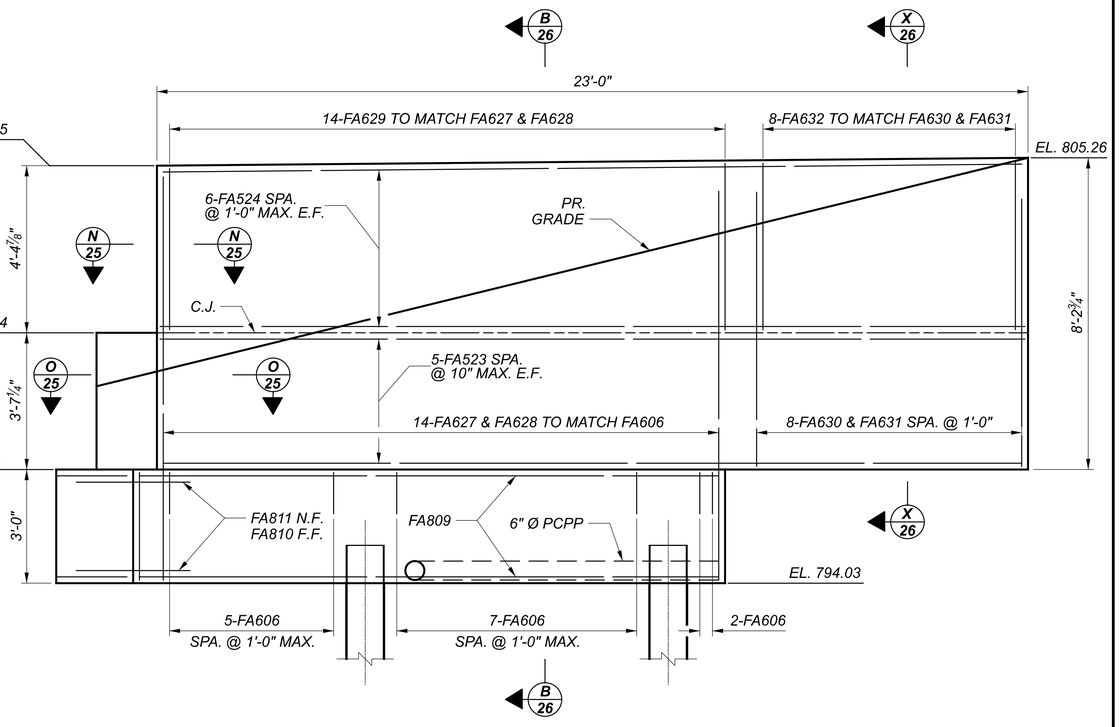
| SHEET | TOTAL |
|---|---|
| P.117 | 167 |

CUY-71-10.07 SW

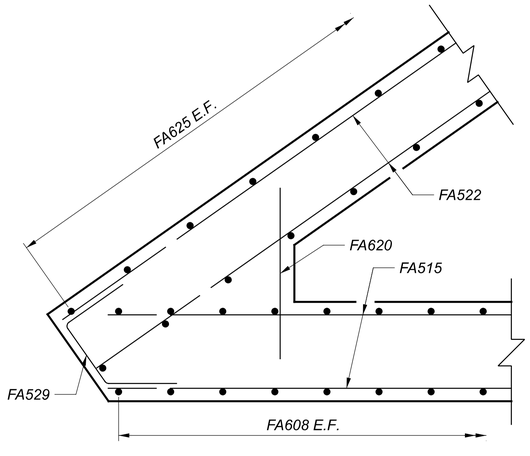
MODEL: Forward Abutment Plan and Elevation Sheet 2 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:12:07 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SF003.dgn



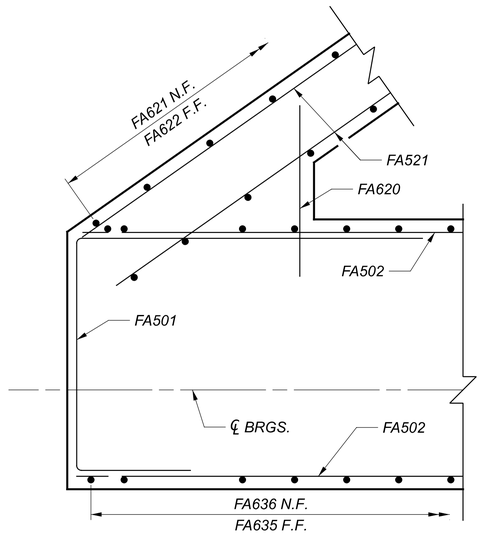

SECTION E-E



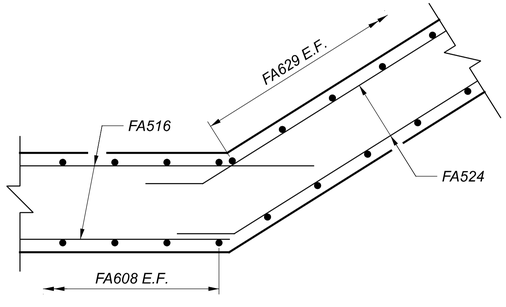

SECTION F-F



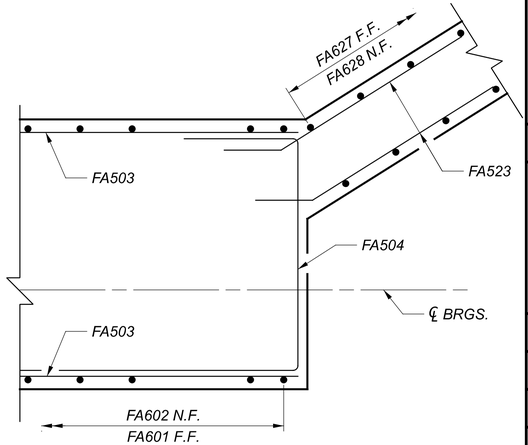

SECTION P-P




SECTION Q-Q




SECTION N-N



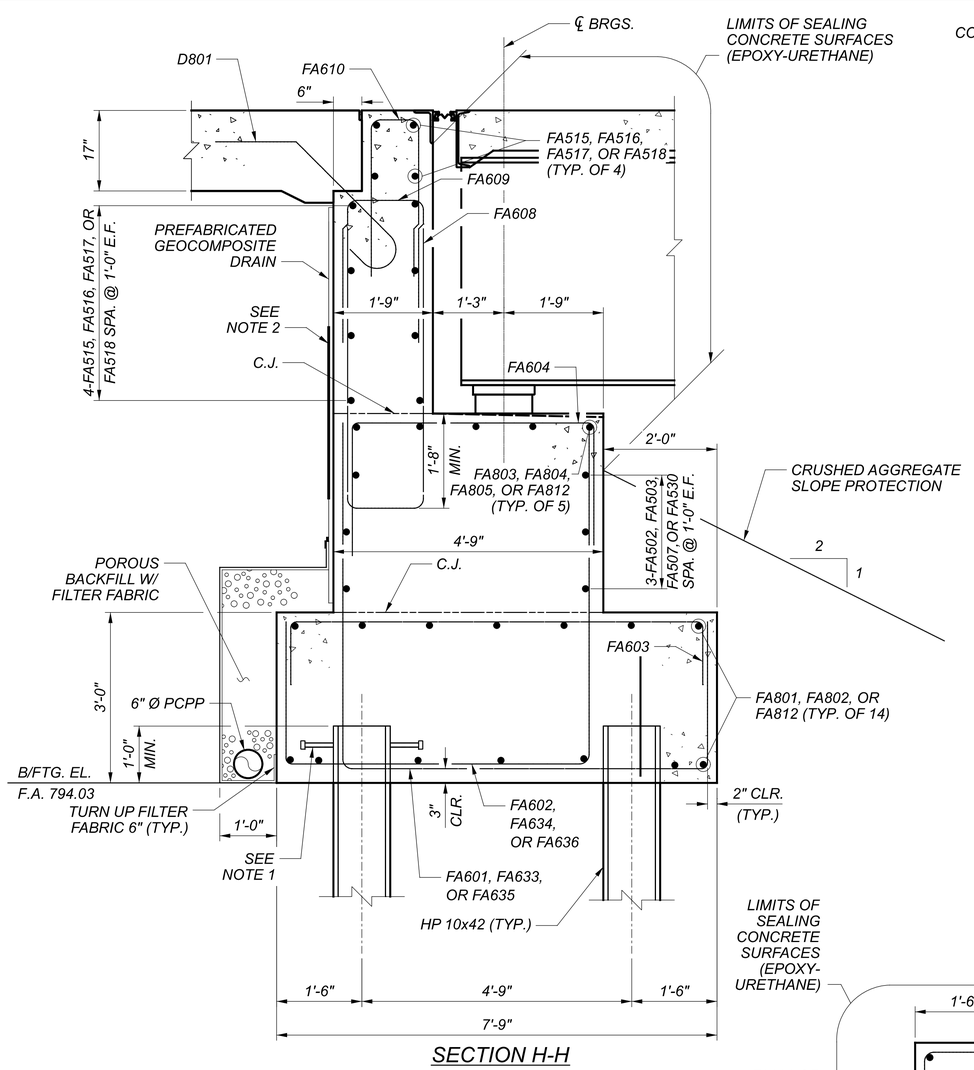

SECTION O-O

# FORWARD ABUTMENT WINGWALLS ELEVATIONS & DETAILS
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

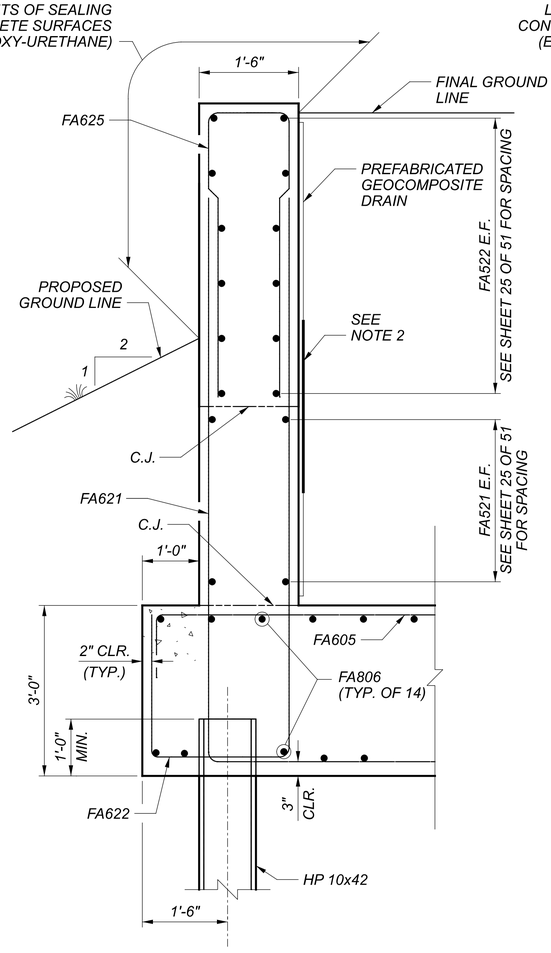
CUY-71-10.07 SW

MODEL: Forward Abutment Wingwalls Elevations and Details PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:12:17 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\S07106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SF004.dgn

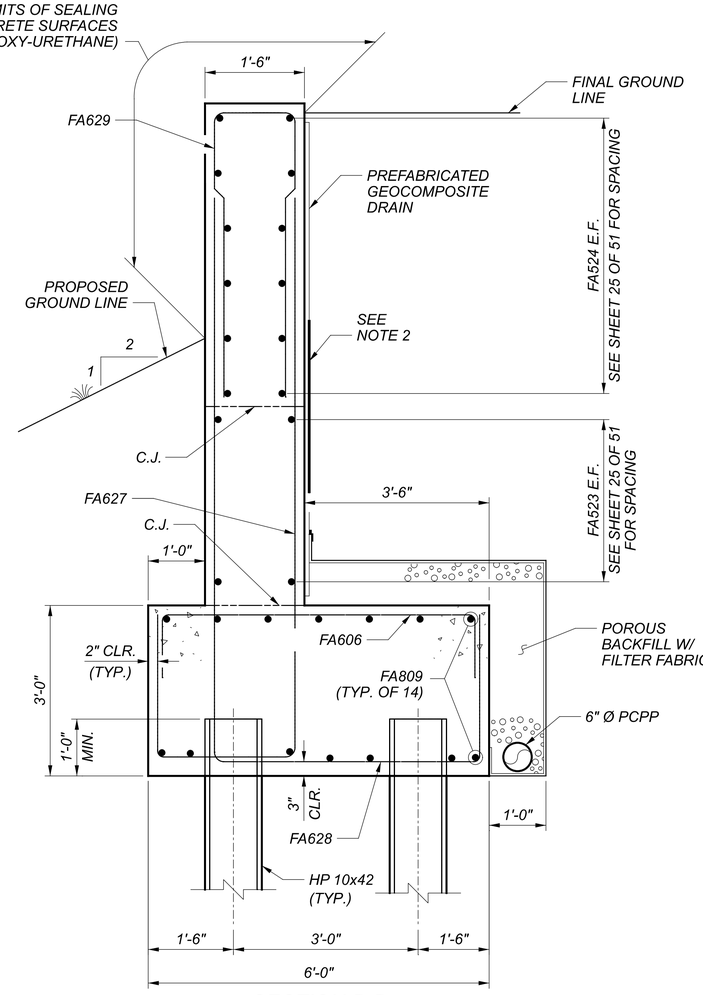
| | |
|---|---|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| | 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| DESIGNER / CHECKER | NKK / JMR |
| REVIEWER | SK 09/17/25 |
| PROJECT ID | 114536 |
| SUBSET / TOTAL | 25 / 51 |
| SHEET / TOTAL | P.118 / 167 |



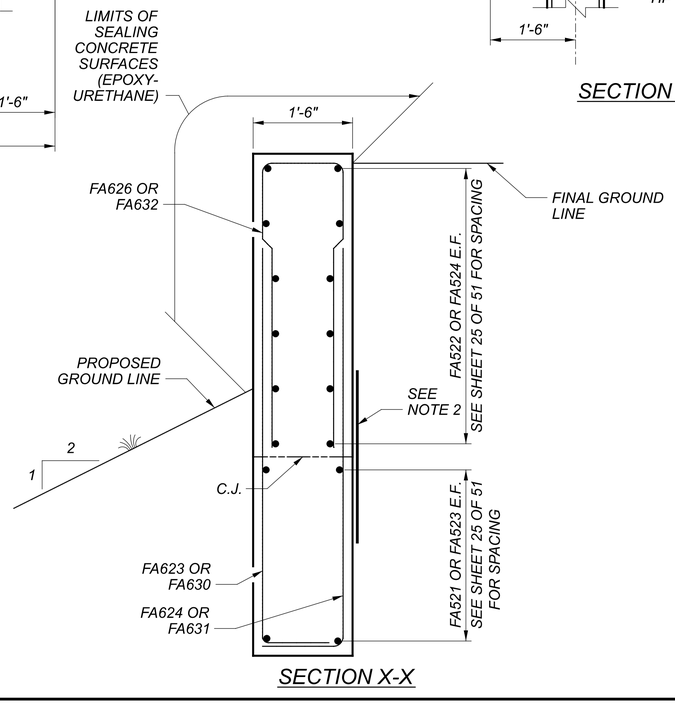

SECTION H-H




SECTION R-R




SECTION B-B




SECTION X-X

NOTES:

1. PROVIDE 4 -½" Ø STUDS AT TOP OF REAR PILES (2 EA. SIDE OF PILE - 6" LONG), MAY BE FIELD WELDED AFTER PILING IS IN PLACE. STUDS SHALL BE INCIDENTAL TO ITEM 507 STEEL PILES HP 10x42, FURNISHED.
2. INSTALL ITEM 512 - TYPE 2 WATERPROOFING, 3'-0" WIDE, CENTERED ON THE CONSTRUCTION JOINT ON THE INSIDE FACE OF EACH ABUTMENT AND WINGWALL.
3. FOR EXPANSION JOINT DETAILS, SEE SHEET 44/51.

# FORWARD ABUTMENT SECTIONS
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

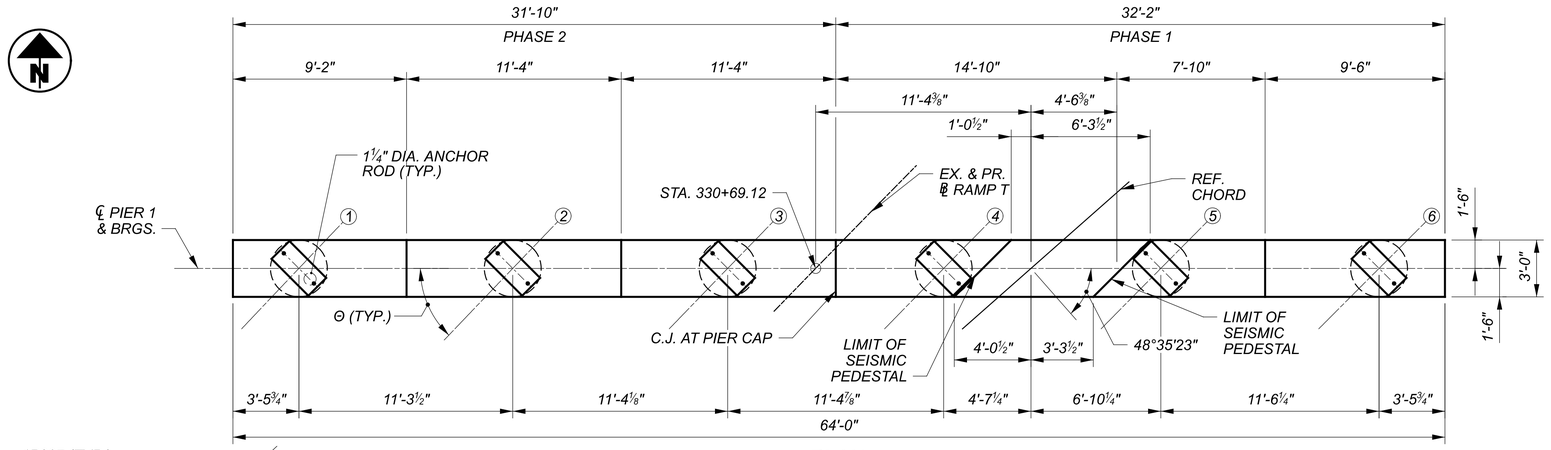
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 26 | 51 |

| SHEET | TOTAL |
|---|---|
| P.119 | 167 |

CUY-71-10.07 SW

MODEL: Abutment Details PAPERSIZE: 34x22 (in.) DATE: 1/8/2026 TIME: 10:37:14 PM USER: WIL57077
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SR006.dgn

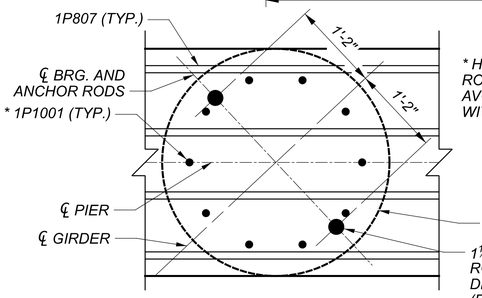



## PLAN

(FOOTING AND PILES NOT SHOWN FOR CLARITY)

NOTES:

1. TOP OF COLUMN SPIRAL REINFORCEMENT SHALL BE EMBEDED A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.
2. FOR REINFORCEMENT SCHEDULE, SEE SHEET 49/51.
3. FOR FOUNDATION LAYOUT, SEE SHEET 15/51 & 16/51.
4. FOR FRAMING PLAN DETAILS, SEE SHEET 32/51.
5. FOR BEARING DETAILS, SEE SHEET 37/51 & 38/51.
6. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.
7. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 30/51.



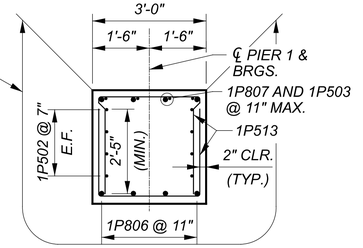

* HOOKS SHALL BE ROTATED IN FIELD TO AVOID CONFLICTS WITH ANCHOR RODS

## BEARING ANCHOR PLAN

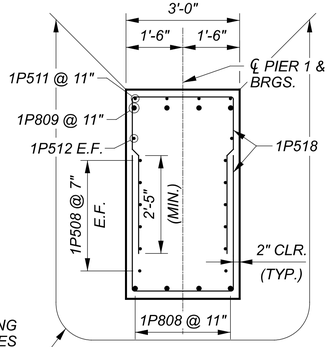
| REQ'D LAP LENGTH | | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |
| #10 | 8'-2" | 7'-2" | 7'-2" |

| LEGEND | BAR MARK | NO. OF SETS | SPACING |
|---|---|---|---|
| "A" | 2-1P513 | 3 | 9" |
| "B" | 2-1P513 | 6 | 9" |
| "C" | 2-1P514 | 6 | 9" |
| "D" | 2-1P515 | 6 | 9" |
| "E" | 2-1P516 | 6 | 9" |
| "F" | 2-1P517 | 6 | 9" |
| "G" | 2-1P518 | 6 | 9" |
| "H" | 2-1P518 | 3 | 9" |

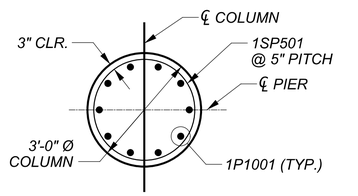
| GIRDER ANGLES (Θ) | |
|---|---|
| GIRDER 1 | 46°27'34" |
| GIRDER 2 | 46°10'11" |
| GIRDER 3 | 45°52'33" |
| GIRDER 4 | 45°34'37" |
| GIRDER 5 | 45°16'24" |
| GIRDER 6 | 44°57'54" |



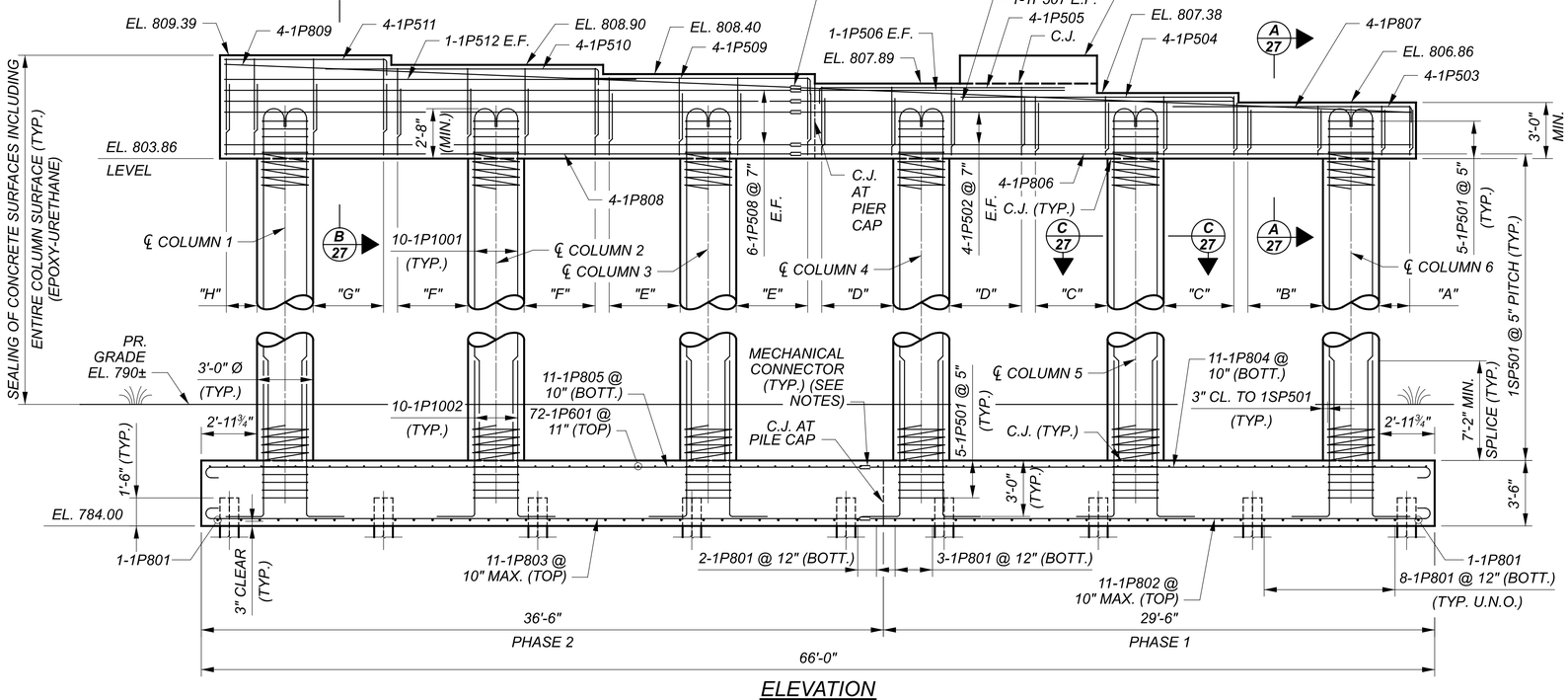

## SECTION A-A



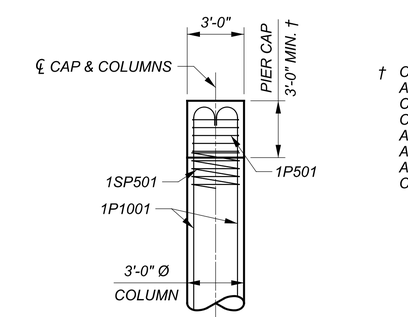

## SECTION B-B




## SECTION C-C




## ELEVATION




## END ELEVATION

† CONTRACTOR SHALL BE AWARE OF POTENTIAL CONFLICTS ABOVE COLUMNS (SEE BEARING ANCHOR PLAN) AND MAKE APPROPRIATE ADJUSTMENTS PRIOR TO CONCRETE PLACEMENT.

PIER 1 PLAN, ELEVATION & DETAILS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

CUY-71-10.07 SW


MODEL: Pier 1 Plan and Elevation PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:12:38 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SI001.dgn


SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

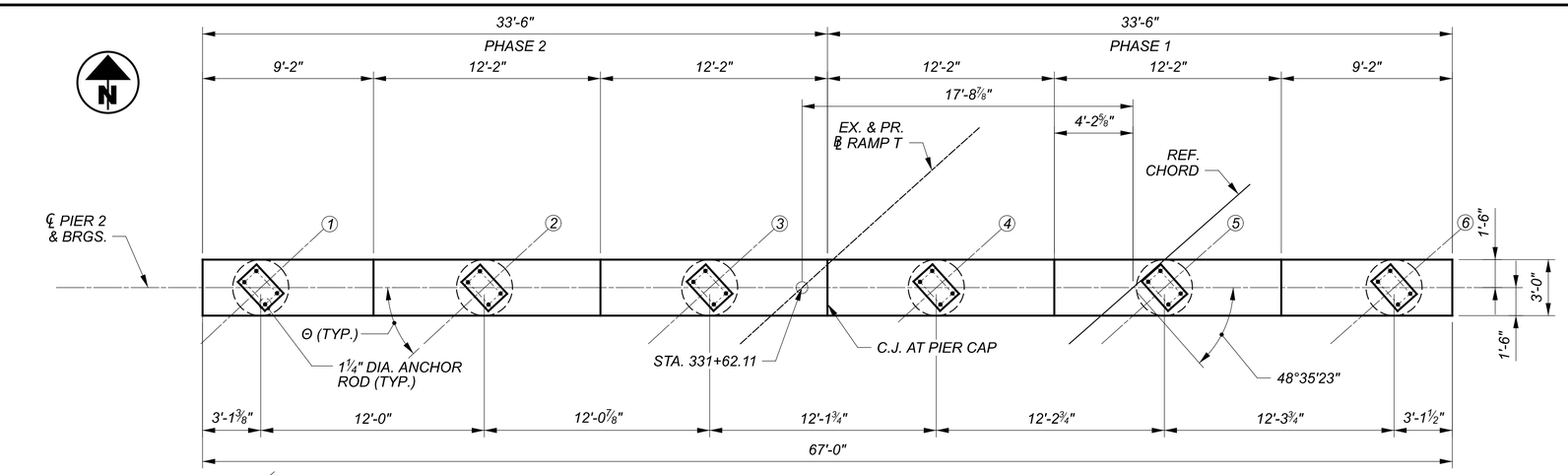
| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

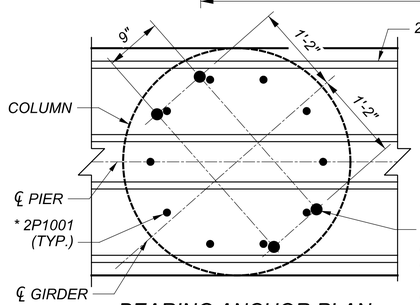
| SUBSET | TOTAL |
|---|---|
| 27 | 51 |

| SHEET | TOTAL |
|---|---|
| P.120 | 167 |




## PLAN

(FOOTING AND PILES NOT SHOWN FOR CLARITY)




## BEARING ANCHOR PLAN

* HOOKS SHALL BE ROTATED IN FIELD TO AVOID CONFLICTS WITH ANCHOR RODS

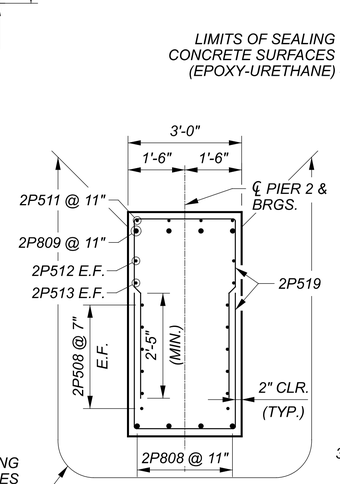
| REQ'D LAP LENGTH | | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |
| #10 | 8'-2" | 7'-2" | 7'-2" |

| LEGEND | BAR MARK | NO. OF SETS | SPACING |
|---|---|---|---|
| "A" | 2-2P514 | 3 | 7" |
| "B" | 2-2P514 | 8 | 8" MAX. |
| "C" | 2-2P515 | 8 | 8" MAX. |
| "D" | 2-2P516 | 8 | 8" MAX. |
| "E" | 2-2P517 | 8 | 8" MAX. |
| "F" | 2-2P518 | 8 | 8" MAX. |
| "G" | 2-2P519 | 8 | 8" MAX. |
| "H" | 2-2P519 | 3 | 7" |

| GIRDER ANGLES (Θ) | |
|---|---|
| GIRDER 1 | 43°03'44" |
| GIRDER 2 | 42°44'09" |
| GIRDER 3 | 42°24'15" |
| GIRDER 4 | 42°04'00" |
| GIRDER 5 | 41°43'24" |
| GIRDER 6 | 41°22'26" |

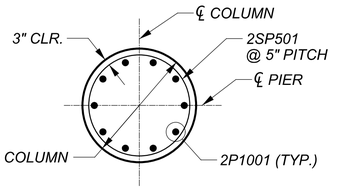
NOTES:

1. TOP OF COLUMN SPIRAL REINFORCEMENT SHALL BE EMBEDED A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.
2. FOR REINFORCEMENT SCHEDULE, SEE SHEET 49/51.
3. FOR FOUNDATION LAYOUT, SEE SHEET 15/51 & 16/51.
4. FOR FRAMING PLAN DETAILS, SEE SHEET 32/51.
5. FOR BEARING DETAILS, SEE SHEET 37/51 & 38/51.
6. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

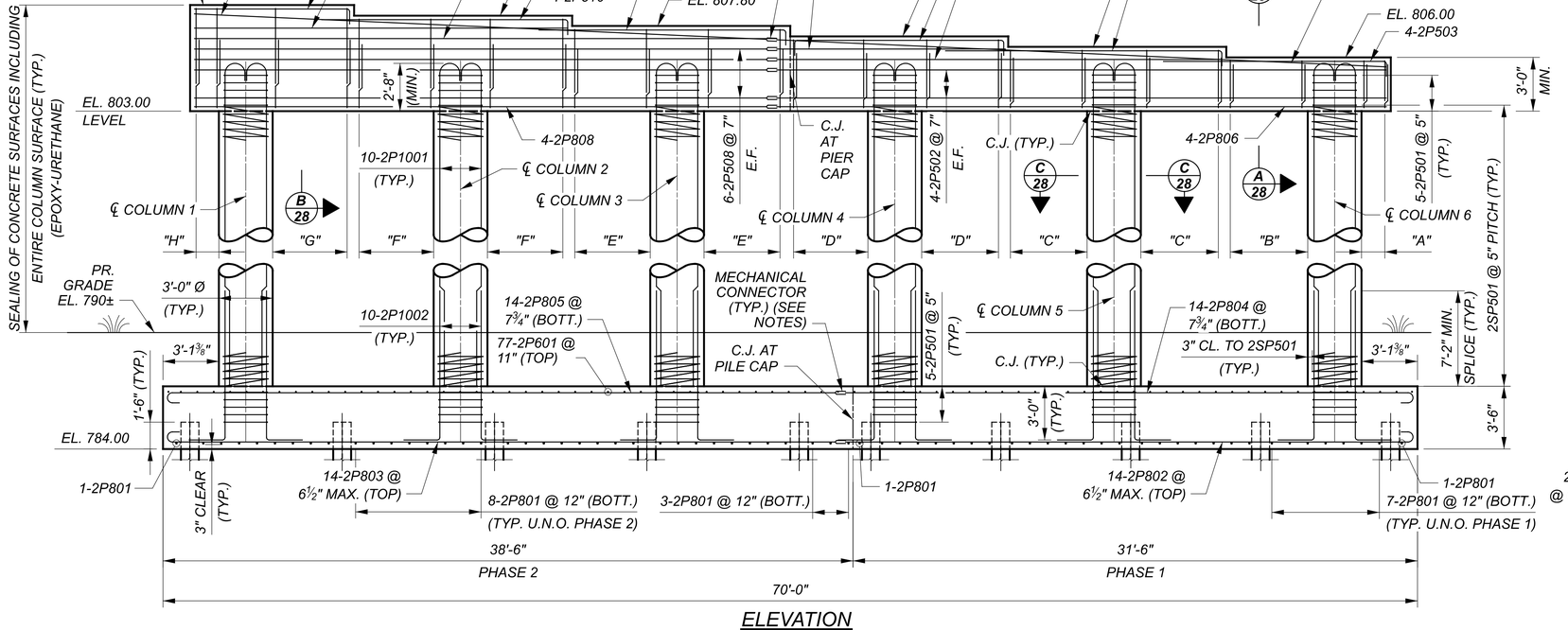



## SECTION A-A

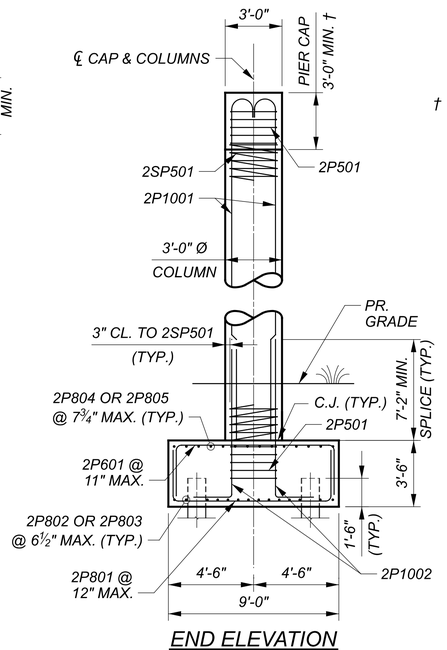
## SECTION B-B




## SECTION C-C




## ELEVATION




## END ELEVATION

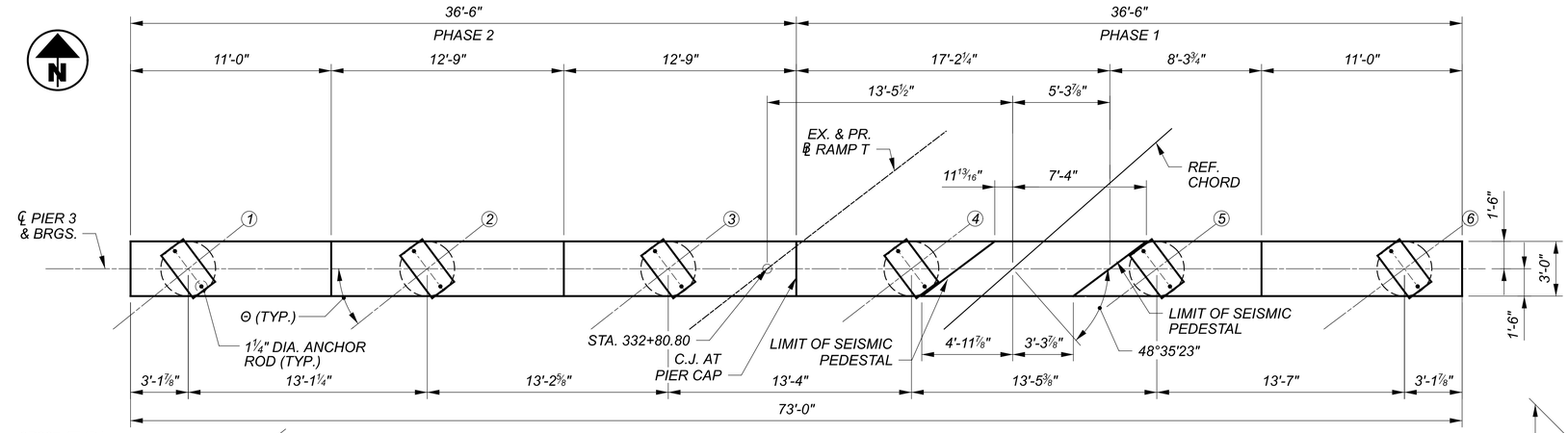
† CONTRACTOR SHALL BE AWARE OF POTENTIAL CONFLICTS ABOVE COLUMNS (SEE BEARING ANCHOR PLAN) AND MAKE APPROPRIATE ADJUSTMENTS PRIOR TO CONCRETE PLACEMENT.

PIER 2 PLAN, ELEVATION & DETAILS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

CUY-71-10.07 SW

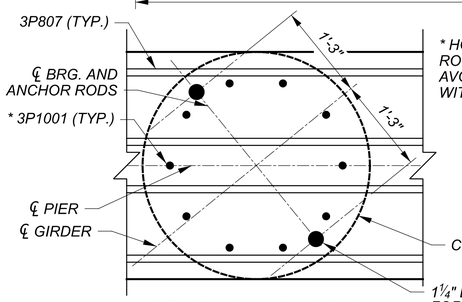
MODEL: Pier 2 Plan And Elevation PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:12:47 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SI002.dgn

| | |
|---|---|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| | 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| DESIGNER | NKK |
| CHECKER | JMR |
| REVIEWER | SK 09/17/25 |
| PROJECT ID | 114536 |
| SUBSET | 28 |
| TOTAL | 51 |
| SHEET | P.121 |
| TOTAL | 167 |




## PLAN

(FOOTING AND PILES NOT SHOWN FOR CLARITY)




* HOOKS SHALL BE ROTATED IN FIELD TO AVOID CONFLICTS WITH ANCHOR RODS

## BEARING ANCHOR PLAN

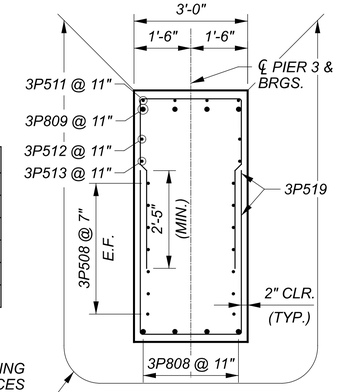
| LEGEND | BAR MARK | NO. OF SETS | SPACING |
|---|---|---|---|
| "A" | 2-3P514 | 3 | 7" |
| "B" | 2-3P514 | 10 | 8" |
| "C" | 2-3P515 | 7 | 8" |
| "D" | 2-3P515 | 9 | 8" |
| "E" | 2-3P516 | 8 | 8" |
| "F" | 2-3P516 | 7 | 8" |

| LEGEND | BAR MARK | NO. OF SETS | SPACING |
|---|---|---|---|
| "G" | 2-3P517 | 9 | 8" |
| "H" | 2-3P517 | 7 | 8" |
| "I" | 2-3P518 | 9 | 8" |
| "J" | 2-3P518 | 6 | 8" |
| "K" | 2-3P519 | 10 | 8" |
| "L" | 2-3P519 | 3 | 7" |

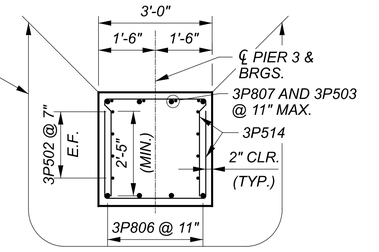
| GIRDER ANGLES (Θ) | |
|---|---|
| GIRDER 1 | 38°44'41" |
| GIRDER 2 | 38°21'52" |
| GIRDER 3 | 37°58'36" |
| GIRDER 4 | 37°34'53" |
| GIRDER 5 | 37°10'41" |
| GIRDER 6 | 36°46'00" |

*NOTES:*

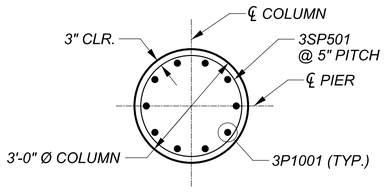
1. *TOP OF COLUMN SPIRAL REINFORCEMENT SHALL BE EMBEDED A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.*
2. *FOR REINFORCEMENT SCHEDULE, SEE SHEET 50/51.*
3. *FOR FOUNDATION LAYOUT, SEE SHEET 15/51 & 16/51.*
4. *FOR FRAMING PLAN DETAILS, SEE SHEET 32/51.*
5. *FOR BEARING DETAILS, SEE SHEET 37/51 & 38/51.*
6. *MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.*
7. *FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 30/51.*



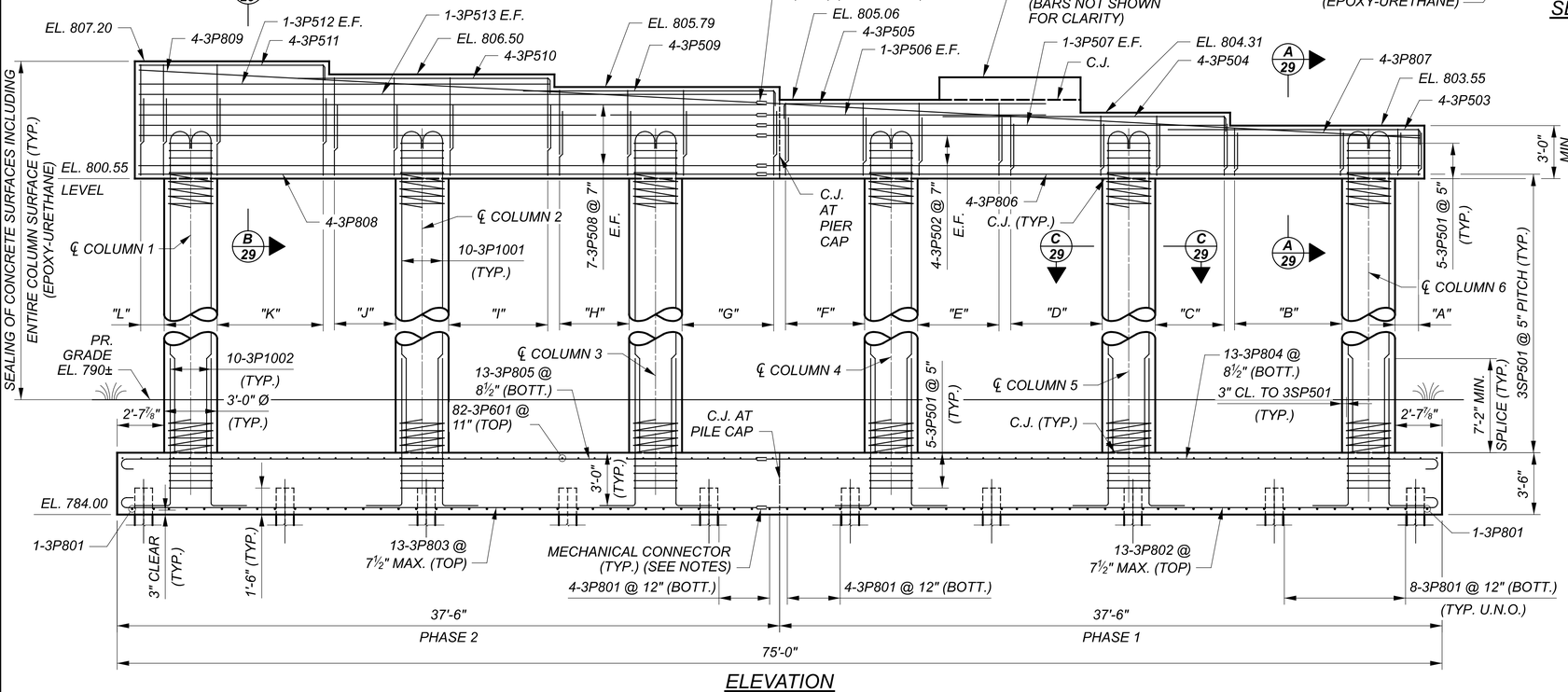

## SECTION B-B



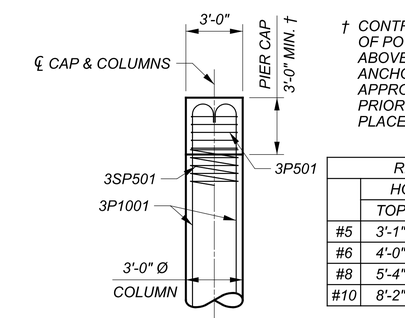

## SECTION A-A




## SECTION C-C




## ELEVATION




## END ELEVATION

† *CONTRACTOR SHALL BE AWARE OF POTENTIAL CONFLICTS ABOVE COLUMNS (SEE BEARING ANCHOR PLAN) AND MAKE APPROPRIATE ADJUSTMENTS PRIOR TO CONCRETE PLACEMENT.*

| REQ'D LAP LENGTH | | | |
|---|---|---|---|
| | HORIZONTAL | | VERTICAL |
| | TOP | BOTTOM | |
| #5 | 3'-1" | 2'-5" | 2'-5" |
| #6 | 4'-0" | 3'-7" | 3'-7" |
| #8 | 5'-4" | 4'-9" | 4'-9" |
| #10 | 8'-2" | 7'-2" | 7'-2" |

PIER 3 PLAN, ELEVATION & DETAILS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

CUY-71-10.07 SW


MODEL: Pier 3 Plan And Elevation PAPERSIZE: 34x22 (in.) DATE: 9/25/2025 TIME: 9:04:47 AM USER: KAV106794
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SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

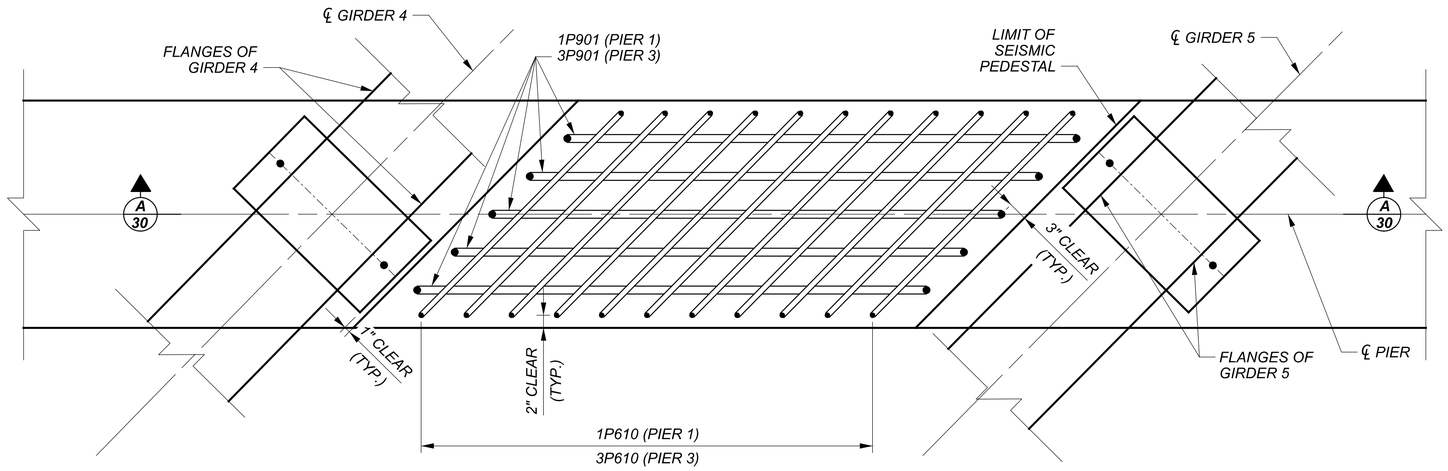
| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 29 | 51 |

| SHEET | TOTAL |
|---|---|
| P.122 | 167 |

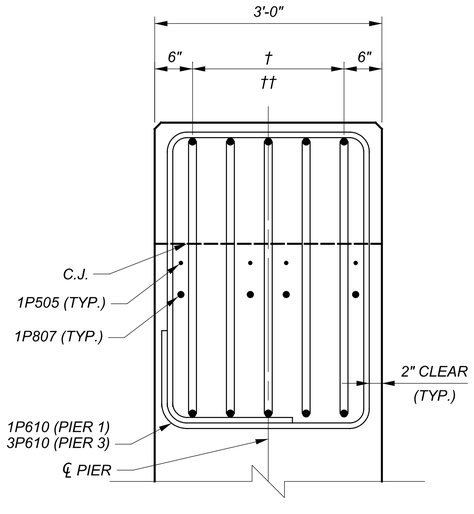



## PLAN VIEW OF SEISMIC PEDESTAL
(PIER 1 SHOWN, PIER 3 SIMILAR)

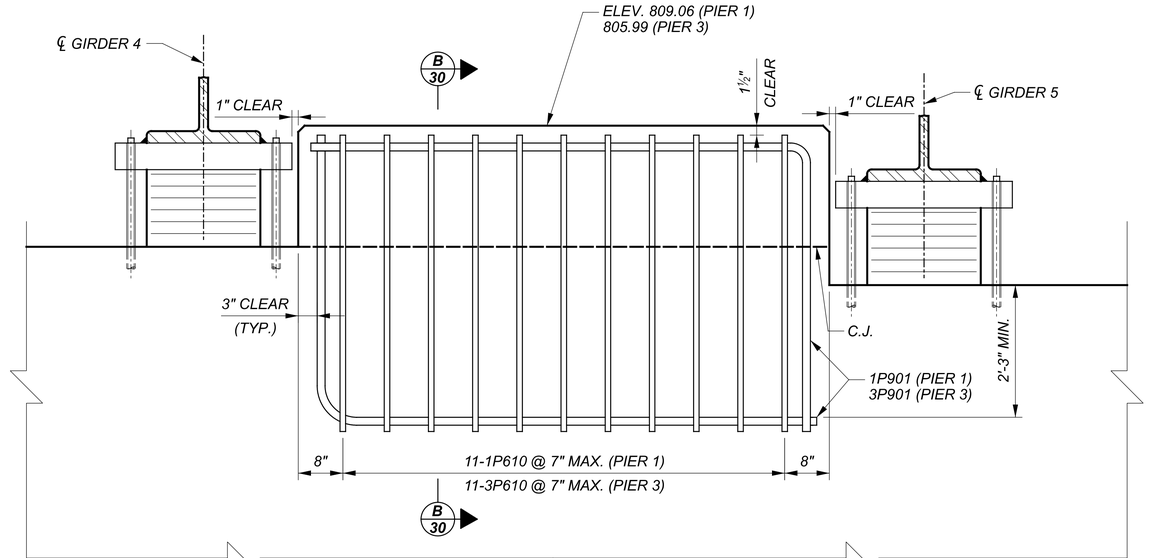
NOTES:

1. THE 1P610 AND 3P610 BARS SHALL BE PLACED PARALLEL TO THE CENTERLINE OF GIRDER.
2. THE 1P901 AND 3P901 BARS SHALL BE PLACED PARALLEL TO THE CENTERLINE OF CAP.
3. THE LOCATION OF THE MAIN REINFORCEMENT IN THE BEAM SEAT MAY BE ADJUSTED HORIZONTALLY ±1" TO ACCOMMODATE THE 1P901 AND 3P901 BARS.
4. FOR PIER 1 DETAILS, SEE SHEET 27/51.
5. FOR PIER 3 DETAILS, SEE SHEET 29/51.

† - 5 SETS OF 2-1P901 @ 6" MAX.
†† - 5 SETS OF 2-3P901 @ 6" MAX.




## SECTION B-B
(SOME PIER REINFORCING NOT SHOWN FOR CLARITY, SEE NOTES 4 & 5)




## SECTION A-A

SEISMIC PEDESTAL DETAIL
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

| | |
|---|---|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| | 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 |
| DESIGNER | NKK |
| CHECKER | JMR |
| REVIEWER | SK 09/17/25 |
| PROJECT ID | 114536 |
| SUBSET | 30 |
| TOTAL | 51 |
| SHEET | P.123 |
| TOTAL | 167 |

CUY-71-10.07 SW

MODEL: Seismic Pedestal Detail PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:13:05 PM USER: SAT89729
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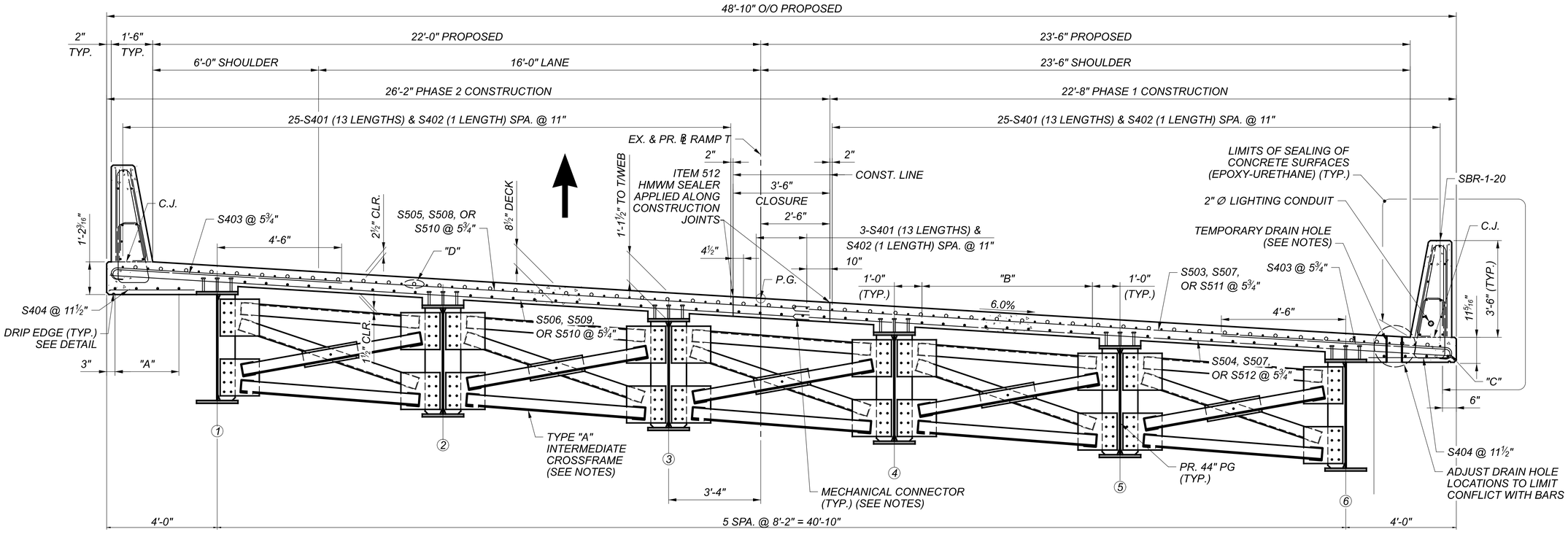



## TRANSVERSE SECTION

| REQ'D LAP LENGTH | |
|---|---|
| | HORIZONTAL |
| #4 | 1'-11" |
| #5 | 2'-5" |
| #6 | 3'-7" |

*FINISH COLORS:*

*FINISH COLOR FOR PAINTED STEEL SURFACES OF THE STRINGERS AND ALL INTERIOR STEEL ELEMENTS SHALL BE AMS-STD-595A COLOR NO. 16440 (LIGHT GRAY, GLOSS).*

| LEGEND | BAR MARK | LOCATION | NO. OF SETS | SPACING |
|---|---|---|---|---|
| "A" | S501 (13 LENGTHS) S502 (1 LENGTH) | BOTTOM | 4 | 9¼" |
| "B" | S501 (13 LENGTHS) S502 (1 LENGTH) | BOTTOM | 9 | 9¼" |
| "C" | S403 BUNDLED W/ S503, S505, S508 & S511 | TOP (E.S.) | 1 | 5¾" |
| "D"' | S601, S602, S603, S604, OR S605 | TOP | 1 | 11" |

*STANDARD CONSTRUCTION DRAWINGS:*

*REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:*

*SBR-1-20*
*GSD-1-19*
*HL-20.14*

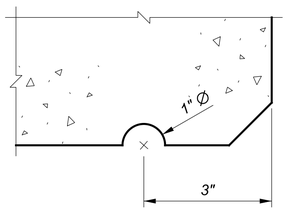
*SHEET REFERENCES:*

1. *FOR LEGEND IN GENERAL NOTES, SEE SHEET 05/51.*
2. *FOR FRAMING PLAN, SEE SHEET 32/51.*
3. *FOR CROSS FRAME DETAILS, SEE SHEET 36/51.*
4. *FOR DECK PLAN, SEE SHEET 39/51.*
5. *FOR BARRIER ELEVATIONS, SEE SHEET 42/51.*
6. *FOR EXPANSION JOINT DETAILS, SEE SHEET 44/51.*

*NOTES:*

1. *DIMENSIONS ARE RADIAL TO THE RAMP ℄ UNLESS NOTED.*
2. *TYPE A CROSSFRAMES SHOWN. TYPE A OR TYPE C TO BE USED AT ALL INTERMEDIATE CROSSFRAME LOCATIONS EXCEPT AT PIER DIAPHRAGM LOCATIONS, WHICH SHALL USE TYPE A ONLY.*
3. *TEMPORARY DRAIN HOLES TO BE INSTALLED AS INDICATED DURING PHASE 1 CONSTRUCTION. TEMPORARY DRAIN HOLES TO BE PLUGGED IN FINAL CONDITION.*
4. *DECK SLAB CONCRETE QUANTITY:*
   *THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4" AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.*

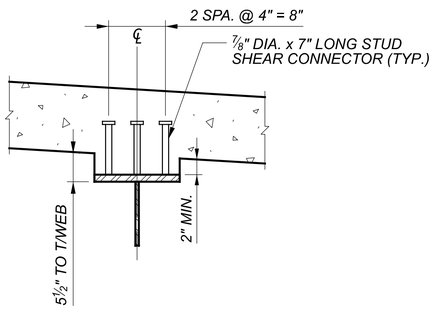
   *THE HAUNCH THICKNESS IS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.*
5. *EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTATCHMENT. THE BAR SCHEDULE ASSUMES 8".*
6. *MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.*
7. *CONCRETE WORK:*
   *SEE THE STRUCTURE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPEMENT LENGTHS.*




## DETAIL - DRIP EDGE

*NOTES:*

*AT THE CONTRACTOR'S OPTION, THE 1" DIAMETER HALF-ROUND SECTION MAY BE REPLACED WITH A TRIANGULAR NOTCH USING 1x1 STOCK CUT DIAGONALLY.*




## DETAIL - HAUNCH AND SHEAR CONNECTORS

# TRANSVERSE SECTION
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| LLB | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 31 | 51 |

| SHEET | TOTAL |
|---|---|
| P.124 | 167 |

CUY-71-10.07 SW

MODEL: Proposed Transverse Section PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:13:14 PM USER: SAT89729
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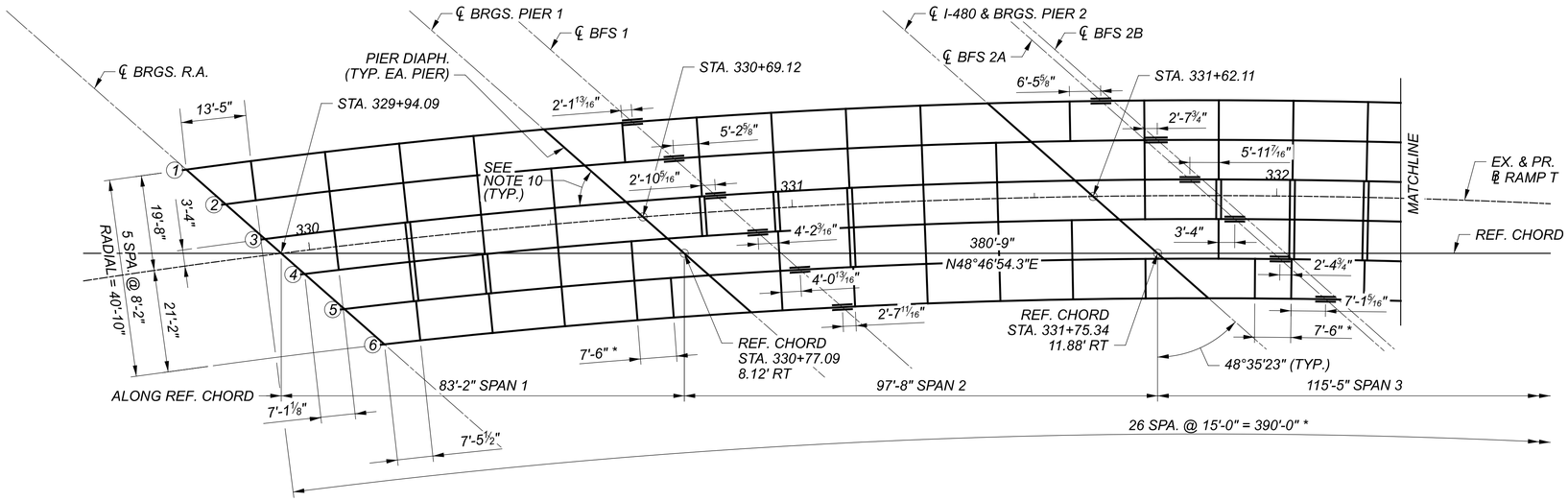
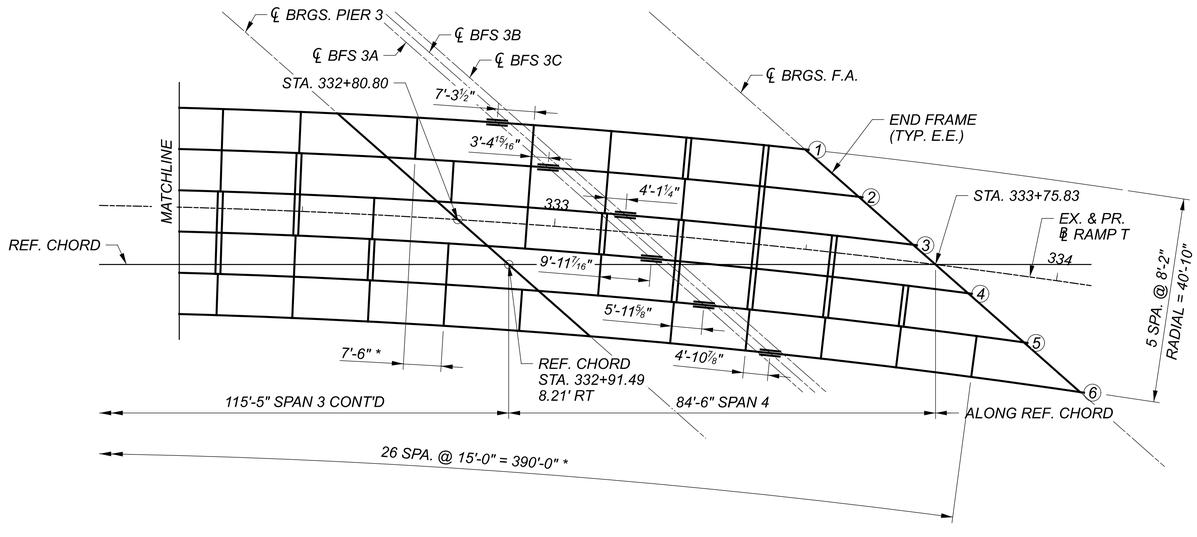



FRAMING PLAN




FRAMING PLAN

*CURVE DATA:*

*P.I. = STA 334+72.59*
*Δ = 60°00'56" RT*
*Dc = 03°45'00"*
*R = 1,527.89'*
*T = 882.40'*
*L = 1600.42'*
*E = 236.5'*

*NOTES:*

1. *ALL DIMENSIONS SHOWN ARE HORIZONTAL.*
2. *GIRDER SPACING ARE MEASURED, AND CROSS-FRAMES ARE PLACED, RADIAL TO THE RAMP ℄.*
3. ** MEASURED ALONG STRINGER 6*

*CROSS-FRAMES:*

1. *FOR TYPE 1 AND TYPE 2 CROSS-FRAMES, SEE SHEET 36/51 .*
2. *TYPES "A" & "C" CROSS-FRAMES ARE CONFIGURED AS PER SCD GSD-1-19.*
3. *TYPE "B" CROSS-FRAMES PER GSD-1-19 SHALL NOT BE USED.*
4. *CENTERLINES OF BOLTED FIELD SPLICES ARE PARALLEL TO ALL SUBSTRUCTURE UNITS.*
5. *FOR ERECTION PLANS, SEE SHEET 13/51 AND 14/51 .*
6. *FOR TRANSVERSE SECTION, SEE SHEET 31/51 .*
7. *FOR GIRDER ELEVATION TABLES AND DETAILS, SEE SHEET 33/51 .*
8. *FOR CAMBER TABLES, SEE SHEET 34/51 .*
9. *FOR SPLICE DETAILS, SEE SHEET 35/51 .*
10. *SEE ABUTMENT AND PIER SHEETS FOR GIRDER ANGLE.*

*LEGEND*

——— *- TYPE 1 CROSS-FRAME*

═══ *- TYPE 2 CROSS-FRAME*

FRAMING PLAN
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER LLB | CHECKER LAG
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 32 | TOTAL 51
SHEET P.125 | TOTAL 167

CUY-71-10.07 SW

MODEL: Framing Plan PAPERSIZE: 34x22 (in.) DATE: 1/9/2026 TIME: 3:01:49 PM USER: PIA81677
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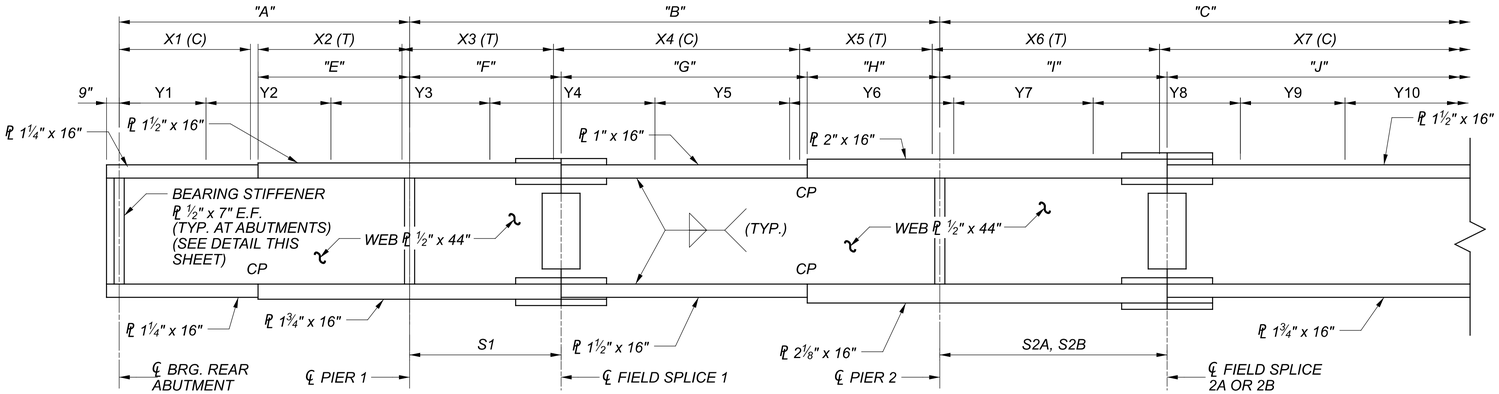
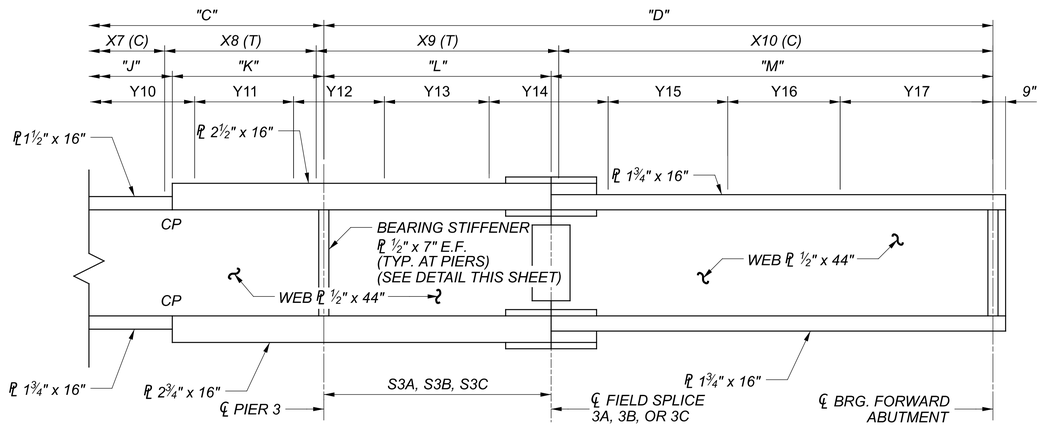
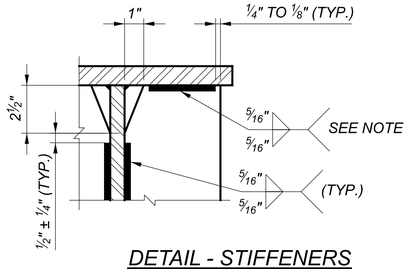



## TYPICAL GIRDER ELEVATION




## TYPICAL GIRDER ELEVATION




## DETAIL - STIFFENERS

NOTES:

1. BEARING STIFFENERS SHALL HAVE THE BOTTOM EDGE MILLED TO BEAR. THE TOP EDGE SHALL BE A TIGHT FIT.

NOTES:

1. ALL FLANGE AND WEB PLATES SHALL BE DESIGNED "CVN".
2. WHERE A SHAPE OR PLATE IS DESIGNATED "CVN", FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. FOR CAMBER AND DEFLECTIONS, SEE SHEET 34/51.
4. FOR ADDITIONAL BOLTED FIELD SPLICE DETAILS AND STRUCTURAL STEEL NOTES, SEE SHEET 35/51.
5. FOR BEARING DETAILS, SEE SHEET 37/51 AND 38/51.
6. CP - INDICATES COMPLETE JOINT PENETRATION WELD.
7. CS - INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESSES ONLY.

### TABLE OF DIMENSIONS

| DIMENSION | GIRDER 1 | GIRDER 2 | GIRDER 3 | GIRDER 4 | GIRDER 5 | GIRDER 6 |
|---|---|---|---|---|---|---|
| "A" | 74'-2 1/16" | 74'-6 5/8" | 74'-10 5/8" | 75'-2 13/16" | 75'-7 1/16" | 75'-11 1/2" |
| "B" | 91'-9 1/16" | 92'-3 1/16" | 92'-9 9/16" | 93'-3 3/4" | 93'-10 3/8" | 94'-5 1/4" |
| "C" | 116'-7 3/8" | 117'-5 7/16" | 118'-3 15/16" | 119'-2 13/16" | 120'-2 1/16" | 121'-1 7/8" |
| "D" | 92'-9 15/16" | 93'-8 9/16" | 94'-7 5/8" | 95'-7 1/4" | 96'-7 7/16" | 97'-8 3/16" |
| "E" | 18'-6 3/4" | 18'-7 11/16" | 18'-8 3/4" | 18'-9 11/16" | 18'-10 3/4" | 18'-11 7/8" |
| "F" | 18'-4 1/2" | 18'-5 5/8" | 18'-6 3/4" | 18'-7 7/8" | 18'-9 1/16" | 18'-11 5/16" |
| "G" | 55'-0 3/8" | 55'-4" | 55'-7 7/8" | 55'-11 15/16" | 55'-1 5/16" | 56'-7 5/16" |
| "H" | 18'-4 3/16" | 18'-5 1/16" | 18'-6 11/16" | 18'-7 15/16" | 20'-0" | 18'-10 5/8" |
| "I" | 23'-4 1/2" | 26'-0 1/4" | 23'-8 1/8" | 23'-9 15/16" | 24'-0" | 24'-2 1/16" |
| "J" | 69'-1" | 67'-1 5/16" | 70'-1 13/16" | 70'-8 11/16" | 71'-3 5/8" | 71'-11 1/16" |
| "K" | 23'-8 7/8" | 23'-10 7/8" | 24'-1" | 24'-3 3/16" | 24'-5 7/16" | 24'-7 3/4" |
| "L" | 31'-7 15/16" | 31'-11 1/4" | 37'-4 9/16" | 32'-6 5/16" | 32'-10 1/16" | 35'-9 3/4" |
| "M" | 61'-2" | 61'-9 5/16" | 57'-3 5/16" | 63'-0 15/16" | 63'-9 3/8" | 61'-10 7/16" |

### TABLE OF TENSION (T) & COMPRESSION (C) AREAS

| DIMENSION | GIRDER 1 | GIRDER 2 | GIRDER 3 | GIRDER 4 | GIRDER 5 | GIRDER 6 |
|---|---|---|---|---|---|---|
| X1 | 51'-11 1/2" | 52'-2 1/4" | 52'-5 1/16" | 52'-8" | 52'-11" | 53'-2 1/16" |
| X2 | 22'-3 3/16" | 22'-4 3/8" | 22'-5 9/16" | 22'-6 13/16" | 22'-8 1/16" | 22'-9 7/16" |
| X3 | 27'-6 3/8" | 27'-8 1/8" | 27'-10 1/16" | 27'-11 15/16" | 28'-2" | 28'-4" |
| X4 | 27'-6 5/16" | 27'-8 1/8" | 27'-10" | 27'-11 15/16" | 28'-1 15/16" | 28'-4" |
| X5 | 36'-8 3/8" | 36'-10 13/16" | 37'-1 5/16" | 37'-3 7/8" | 37'-6 1/2" | 37'-9 1/4" |
| X6 | 23'-3 7/8" | 23'-5 15/16" | 23'-8" | 23'-10 1/8" | 24'-0 7/16" | 24'-2 13/16" |
| X7 | 69'-11 5/8" | 70'-5 11/16" | 70'-11 15/16" | 71'-6 7/16" | 72'-1 1/4" | 72'-8 5/16" |
| X8 | 23'-3 7/8" | 23'-5 7/8" | 23'-8" | 23'-10 3/16" | 24'-0 3/8" | 24'-2 3/4" |
| X9 | 37'-1 5/8" | 37'-5 7/8" | 37'-10 1/8" | 38'-2 7/8" | 38'-7 7/8" | 39'-0 7/8" |
| X10 | 55'-8 5/16" | 56'-2 11/16" | 56'-9 3/8" | 57'-4 3/8" | 57'-11 9/16" | 58'-7 5/16" |

### TABLE OF SHEAR STUD SPACING

| DIMENSION | GIRDER 1 | GIRDER 2 | GIRDER 3 | GIRDER 4 | GIRDER 5 | GIRDER 6 |
|---|---|---|---|---|---|---|
| Y1 | 25 SPA. @ 15" = 30'-3" | 81 SPA. @ 9" = 60'-9" | 81 SPA. @ 9" = 60'-9" | 75 SPA. @ 9" = 56'-3" | 101 SPA. @ 8" = 67'-4" | 10 SPA. @ 9" = 7'-6" |
| Y2 | 60 SPA. @ 12" = 60'-0" | 40 SPA. @ 7" = 23'-4" | 53 SPA. @ 7" = 30'-10" | 61 SPA. @ 7" = 35'-7" | 50 SPA. @ 6" = 25'-0" | 53 SPA. @ 12" = 53'-0" |
| Y3 | N/A | 9 SPA. @ 9" = 6'-9" | N/A | N/A | N/A | 48 SPA. @ 8" = 32'-0" |
| Y4 | 4'-8 3/8" | 4'-4 7/16" | 3'-8 3/4" | 4'-1 3/8" | 4'-0 5/16" | 4'-7 5/8" |
| Y5 | 20 SPA. @ 15" = 25'-0" | 83 SPA. @ 9" = 62'-3" | 76 SPA. @ 9" = 57'-0" | 75 SPA. @ 9" = 55'-9" | 93 SPA. @ 8" = 62'-0" | 60 SPA. @ 12" = 60'-0" |
| Y6 | 58 SPA. @ 12" = 58'-0" | 46 SPA. @ 7" = 26'-10" | 40 SPA. @ 7" = 23'-4" | 39 SPA. @ 7" = 22'-9" | 46 SPA. @ 6" = 23'-0" | 47 SPA. @ 9" = 35'-3" |
| Y7 | 7 SPA. @ 15" = 8'-9" | 8 SPA. @ 9" = 6'-0" | 18 SPA. @ 9" = 13'-6" | 21 SPA. @ 9" = 15'-9" | 15 SPA. @ 8" = 10'-0" | N/A |
| Y8 | 5'-3 11/16" | 5'-1 1/8" | 4'-4 11/16" | 4'-4 3/8" | 4'-2 1/4" | 4'-4 5/16" |
| Y9 | 53 SPA. @ 15" = 66'-3" | 25 SPA. @ 9" = 18'-6" | 13 SPA. @ 9" = 9'-9" | 29 SPA. @ 9" = 21'-9" | 15 SPA. @ 8" = 10'-0" | 80 SPA. @ 12" = 80'-0" |
| Y10 | 49 SPA. @ 10" = 40'-10" | 40 SPA. @ 7" = 23'-4" | 70 SPA. @ 7" = 40'-10" | 62 SPA. @ 7" = 36'-2" | 41 SPA. @ 6" = 20'-6" | 41 SPA. @ 9" = 30'-9" |
| Y11 | 10 SPA. @ 15" = 12'-6" | 46 SPA. @ 9" = 34'-6" | 40 SPA. @ 9" = 30'-0" | 27 SPA. @ 9" = 20'-3" | 77 SPA. @ 8" = 51'-4" | 18 SPA. @ 12" = 18'-0" |
| Y12 | N/A | 31 SPA. @ 7" = 18'-1" | 37 SPA. @ 7" = 21'-7" | 33 SPA. @ 7" = 19'-3" | 37 SPA. @ 6" = 18'-6" | N/A |
| Y13 | N/A | 32 SPA. @ 9" = 24'-0" | 34 SPA. @ 9" = 25'-6" | 35 SPA. @ 9" = 26'-3" | 37 SPA. @ 8" = 24'-8" | N/A |
| Y14 | 5'-3 15/16" | 4'-3 11/16" | 4'-3 9/16" | 4'-1 3/4" | 3'-10 1/16" | 3'-8 7/8" |
| Y15 | 34 SPA. @ 15" = 42'-6" | 17 SPA. @ 9" = 12'-9" | 44 SPA. @ 7" = 25'-8" | 59 SPA. @ 7" = 34'-4" | 47 SPA. @ 6" = 23'-6" | 60 SPA. @ 12" = 60'-0" |
| Y16 | 16 SPA. @ 12" = 16'-0" | 32 SPA. @ 7" = 18'-8" | 40 SPA. @ 9" = 29'-5 9/16" | 36 SPA. @ 9" = 26'-8" | 58 SPA. @ 8" = 38'-4 5/16" | N/A |
| Y17 | N/A | 38 SPA. @ 9" = 28'-2 1/2" | N/A | N/A | N/A | N/A |

### TABLE OF FIELD SPLICE LOCATIONS

| SPLICE | GIRDER 1 | GIRDER 2 | GIRDER 3 | GIRDER 4 | GIRDER 5 | GIRDER 6 |
|---|---|---|---|---|---|---|
| S1 | 18'-4 1/2" | 18'-5 5/8" | 18'-6 3/4" | 18'-7 7/8" | 18'-9 1/16" | 18'-10 5/16" |
| S2A | 23'-4 1/2" | - | 23'-8 1/8" | 23'-9 15/16" | 24'-0" | 24'-2 1/16" |
| S2B | - | 26'-0 1/4" | - | - | - | - |
| S3A | 31'-7 15/16" | 31'-11 1/4" | - | 32'-6 5/16" | 32'-10 1/16" | - |
| S3B | - | - | - | - | - | 35'-9 3/4" |
| S3C | - | - | 37'-4 5/16" | - | - | - |

GIRDER ELEVATION & TABLES
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER LLB | CHECKER LAG
REVIEWER JMR 04-14-25
PROJECT ID 114536
SUBSET 33 | TOTAL 51
SHEET P.126 | TOTAL 167

CUY-71-10.07 SW

MODEL: Stringer Elevation and Tables PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:13:33 PM USER: SAT89729
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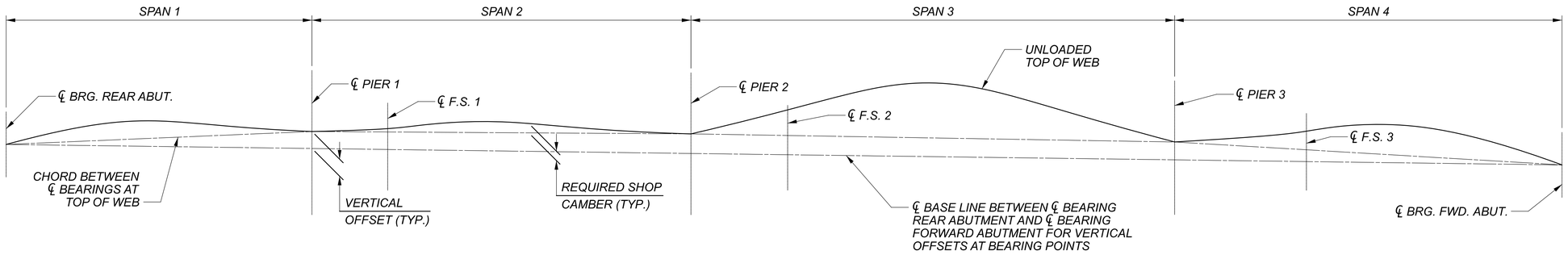


## CAMBER DIAGRAM

| | VERTICAL OFFSET |
|---|---|
| PIER 1 | 1'-1⅝" |
| PIER 2 | 1'-9¼" |
| PIER 3 | 1'-4⅛" |

| | | SPAN 1 | | | SPAN 2 | | | | SPAN 3 | | | | | | | | SPAN 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ¼ | ½ | ¾ | F.S. 1 | ¼ | ½ | ¾ | ⅛ | F.S. 2 | ¼ | ⅜ | ½ | ⅝ | ¾ | ⅞ | F.S. 3 | ¼ | ½ | ¾ |
| GIRDER 1 | ADJUST. FOR STEEL WEIGHT | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 3/16" | 1/4" | 5/16" | 5/16" | 1/4" | 1/8" | 0" | 1/16" | 1/8" | 3/16" |
| | ADJUST. FOR SLAB | 5/16" | 7/16" | 5/16" | 1/16" | 1/16" | 3/16" | 1/16" | 3/16" | 5/16" | 1/2" | 7/8" | 1" | 1" | 3/4" | 7/16" | 1/16" | 3/16" | 3/8" | 1/2" |
| | ADJUST. FOR PARAPET & UTILITIES | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/16" | 1/8" | 1/4" | 1/4" | 1/4" | 3/16" | 1/8" | 0" | 1/16" | 1/16" | 1/8" |
| | ADJUST. FOR PROFILE GRADE | 9/16" | 13/16" | 9/16" | 3/4" | 7/8" | 1 3/16" | 7/8" | 7/8" | 1 1/4" | 1 7/16" | 1 13/16" | 1 15/16" | 1 13/16" | 1 7/16" | 7/8" | 15/16" | 1 1/8" | 1 1/4" | 15/16" |
| | TOTAL CAMBER | 1 1/16" | 1 1/2" | 1" | 13/16" | 15/16" | 1 1/2" | 1" | 1 3/16" | 1 3/4" | 2 1/4" | 3 3/16" | 3 9/16" | 3 3/8" | 2 9/16" | 1 9/16" | 1 1/16" | 1 7/16" | 1 13/16" | 1 11/16" |
| GIRDER 2 | ADJUST. FOR STEEL WEIGHT | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 1/8" | 1/4" | 5/16" | 1/4" | 3/16" | 1/16" | 1/16" | 1/16" | 1/8" | 1/8" |
| | ADJUST. FOR SLAB | 1/4" | 3/8" | 1/4" | 1/16" | 1/16" | 3/16" | 1/16" | 3/16" | 7/16" | 7/16" | 3/4" | 7/8" | 13/16" | 9/16" | 1/4" | 1/8" | 3/16" | 3/8" | 3/8" |
| | ADJUST. FOR PARAPET & UTILITIES | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 1/8" | 3/16" | 1/4" | 1/4" | 3/16" | 1/16" | 0" | 1/16" | 1/8" | 1/8" |
| | ADJUST. FOR PROFILE GRADE | 5/8" | 13/16" | 5/8" | 13/16" | 15/16" | 1 1/4" | 15/16" | 7/8" | 1 3/8" | 1 1/2" | 1 7/8" | 2" | 1 7/8" | 1 1/2" | 7/8" | 15/16" | 1 1/8" | 1 1/4" | 15/16" |
| | TOTAL CAMBER | 1 1/16" | 1 3/8" | 1" | 7/8" | 1" | 1 1/2" | 1" | 1 3/16" | 2 1/16" | 2 3/16" | 3 1/16" | 3 7/16" | 3 3/16" | 2 3/8" | 1 1/4" | 1 1/8" | 1 7/16" | 1 7/8" | 1 9/16" |
| GIRDER 3 | ADJUST. FOR STEEL WEIGHT | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 1/8" | 1/4" | 5/16" | 1/4" | 1/4" | 1/16" | 1/16" | 1/8" | 1/8" | 1/8" |
| | ADJUST. FOR SLAB | 1/4" | 3/8" | 1/4" | 1/16" | 1/16" | 1/8" | 0" | 1/4" | 3/8" | 7/16" | 11/16" | 13/16" | 3/4" | 11/16" | 1/4" | 1/16" | 1/4" | 5/16" | 3/8" |
| | ADJUST. FOR PARAPET & UTILITIES | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 1/8" | 3/16" | 1/4" | 3/16" | 3/16" | 1/16" | 0" | 1/16" | 1/8" | 1/8" |
| | ADJUST. FOR PROFILE GRADE | 5/8" | 13/16" | 5/8" | 13/16" | 15/16" | 1 1/4" | 15/16" | 7/8" | 1 5/16" | 1 9/16" | 1 15/16" | 2 1/16" | 1 15/16" | 1 15/16" | 7/8" | 1" | 1 1/4" | 1 5/16" | 1" |
| | TOTAL CAMBER | 1" | 1 3/8" | 1" | 7/8" | 1" | 1 1/2" | 1" | 1 1/4" | 1 15/16" | 2 1/4" | 3" | 3 3/8" | 3 1/8" | 3" | 1 5/16" | 1 3/16" | 1 11/16" | 1 7/8" | 1 11/16" |
| GIRDER 4 | ADJUST. FOR STEEL WEIGHT | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 3/16" | 1/4" | 5/16" | 1/4" | 3/16" | 1/16" | 1/16" | 1/8" | 3/16" | 3/16" |
| | ADJUST. FOR SLAB | 1/4" | 3/8" | 3/16" | 1/16" | 1/16" | 3/16" | 1/16" | 3/16" | 7/16" | 1/2" | 3/4" | 13/16" | 3/4" | 1/2" | 3/16" | 1/8" | 5/16" | 7/16" | 7/16" |
| | ADJUST. FOR PARAPET & UTILITIES | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 1/8" | 3/16" | 1/4" | 3/16" | 1/8" | 1/16" | 1/16" | 1/16" | 1/8" | 1/8" |
| | ADJUST. FOR PROFILE GRADE | 5/8" | 13/16" | 5/8" | 13/16" | 15/16" | 1 5/16" | 15/16" | 15/16" | 1 5/16" | 1 9/16" | 1 15/16" | 2 1/8" | 1 15/16" | 1 9/16" | 15/16" | 1" | 1 3/16" | 1 3/8" | 1" |
| | TOTAL CAMBER | 1" | 1 3/8" | 15/16" | 7/8" | 1 1/16" | 1 9/16" | 1" | 1 1/4" | 2" | 2 3/8" | 3 3/16" | 3 1/2" | 3 1/8" | 2 5/16" | 1 1/4" | 1 1/4" | 1 11/16" | 2 1/8" | 1 11/16" |
| GIRDER 5 | ADJUST. FOR STEEL WEIGHT | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 3/16" | 3/16" | 1/4" | 5/16" | 1/4" | 3/16" | 1/16" | 1/8" | 1/8" | 3/16" | 3/16" |
| | ADJUST. FOR SLAB | 1/4" | 3/8" | 3/16" | 1/16" | 1/8" | 3/16" | 1/16" | 1/4" | 7/16" | 1/2" | 13/16" | 15/16" | 13/16" | 9/16" | 1/4" | 1/4" | 3/8" | 9/16" | 1/2" |
| | ADJUST. FOR PARAPET & UTILITIES | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/16" | 1/8" | 1/8" | 1/4" | 1/4" | 1/4" | 1/8" | 1/16" | 1/16" | 1/8" | 1/8" | 1/8" |
| | ADJUST. FOR PROFILE GRADE | 5/8" | 7/8" | 5/8" | 13/16" | 1" | 1 5/16" | 1" | 15/16" | 1 3/8" | 1 5/8" | 2" | 2 1/8" | 2" | 1 5/8" | 15/16" | 1 1/16" | 1 1/4" | 1 3/8" | 1 1/16" |
| | TOTAL CAMBER | 1 1/16" | 1 7/16" | 15/16" | 15/16" | 1 1/8" | 1 9/16" | 1 1/16" | 1 3/8" | 2 1/8" | 2 7/16" | 3 1/4" | 3 9/16" | 3 5/16" | 2 1/2" | 1 5/16" | 1 1/2" | 1 7/8" | 2 1/4" | 1 7/8" |
| GIRDER 6 | ADJUST. FOR STEEL WEIGHT | 1/16" | 1/8" | 1/16" | 0" | 0" | 1/16" | 0" | 1/8" | 3/16" | 1/4" | 5/16" | 5/16" | 1/4" | 1/8" | 0" | 1/8" | 3/16" | 1/4" | 3/16" |
| | ADJUST. FOR SLAB | 5/16" | 7/16" | 3/16" | 1/8" | 1/8" | 1/4" | 1/16" | 3/8" | 9/16" | 3/4" | 1" | 1" | 13/16" | 7/16" | 1/8" | 5/16" | 5/8" | 3/4" | 1/2" |
| | ADJUST. FOR PARAPET & UTILITIES | 1/16" | 1/8" | 1/16" | 0" | 1/16" | 1/16" | 0" | 1/8" | 1/8" | 3/16" | 1/4" | 1/4" | 3/16" | 1/8" | 0" | 1/16" | 3/16" | 3/16" | 1/8" |
| | ADJUST. FOR PROFILE GRADE | 5/8" | 7/8" | 5/8" | 7/8" | 1" | 1 3/8" | 1" | 15/16" | 1 7/16" | 1 11/16" | 2 1/16" | 2 3/16" | 2 1/16" | 1 11/16" | 15/16" | 1 1/16" | 1 5/16" | 1 7/16" | 1 1/16" |
| | TOTAL CAMBER | 1 1/8" | 1 9/16" | 15/16" | 1" | 1 3/16" | 1 11/16" | 1 1/16" | 1 1/2" | 2 5/16" | 2 7/8" | 3 11/16" | 3 13/16" | 3 5/16" | 2 7/16" | 1 1/8" | 1 9/16" | 2 5/16" | 2 5/8" | 1 7/8" |

NOTES:

1. DEFLECTIONS AND CAMBER ARE GIVEN TO THE NEAREST 1/16".
2. NO ADJUSTMENT IS REQUIRED FOR HORIZONTAL CURVE AND HEAT CURVING AND THEREFORE IS NOT SHOWN IN TABLES.
3. CAMBER IS MEASURED ALONG THE BOTTOM OF THE GIRDER WEB.
4. GIRDER MAY BE HEAT CURVED PER CMS 513.15. IF HEAT CURVING IS USED, THE FABRICATOR SHALL ACCOUNT FOR EXPECTED LOSS OF CAMBER PER THE "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS", CURRENT EDITION. CAMBER ADDED TO ACCOUNT FOR EXPECTED LOSS OF CAMBER DUE TO HEAT CURVING SHALL BE ADDED TO THE SCREED AND TOP OF HAUNCH TABLES.

CAMBER DIAGRAM
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| LLB | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 34 | 51 |

| SHEET | TOTAL |
|---|---|
| P.127 | 167 |

CUY-71-10.07 SW

MODEL: Camber Diagram PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:13:44 PM USER: SAT89729
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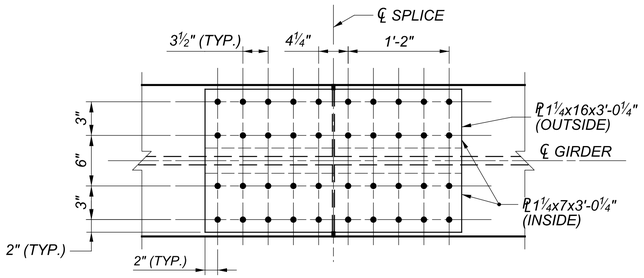
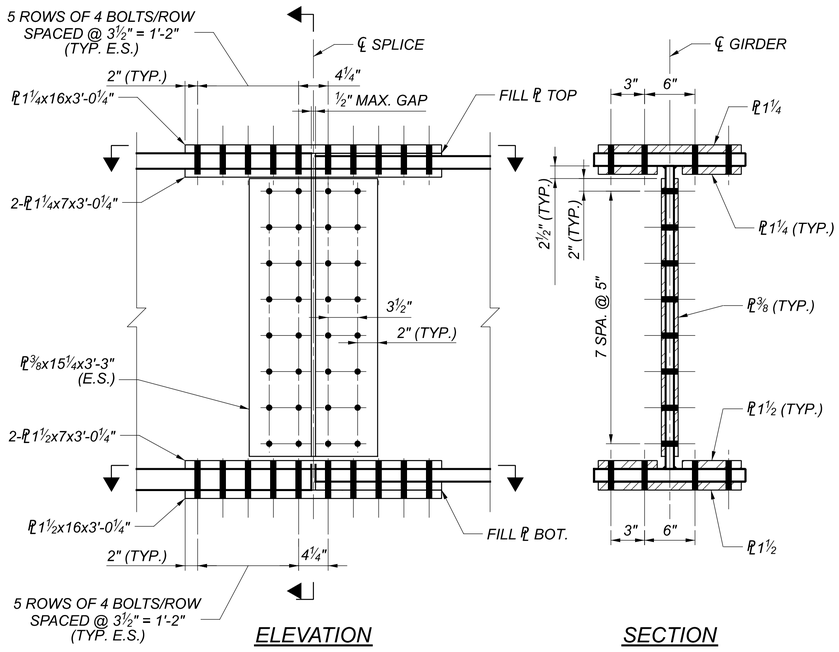
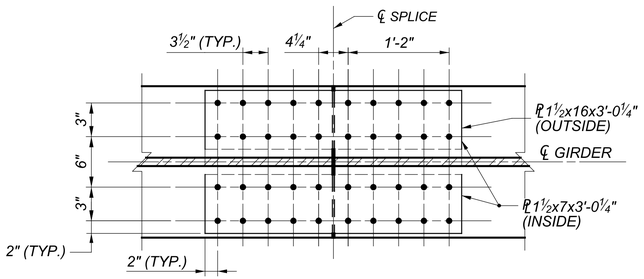



PLAN - TOP FLANGE




ELEVATION

SECTION




PLAN - BOTTOM FLANGE

DETAIL - BOLTED FIELD SPLICE
(NOT TO SCALE)

| FIELD SPLICE | TOP | BOTTOM |
|---|---|---|
| FS 1 | ½x16x17⅞ | ¼x16x17⅞ |
| FS 2 | ½x16x17⅞ | ⅜x16x17⅞ |
| FS 3 | ¾x16x17⅞ | 1x16x17⅞ |

FILL PLATE TABLE

STRUCTURAL STEEL NOTES:

1. ALL DIMENSIONS SHOWN ARE HORIZONTAL.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50. YIELD STRENGTH 50 KSI.
3. THE FOLLOWING MEMBERS SHALL BE DESIGNATED (CVN): ALL GIRDER WEB AND FLANGE PLATES; FIELD SPLICE PLATES; CROSS FRAME MEMBERS; INTERMEDIATE STIFFENERS; CROSSFRAME CONNECTION PLATES, CROSSFRAME CONNECTION GUSSET PLATES.
4. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENT AS SPECIFIED IN CMS 711.01.
5. ALL BOLTED CONNECTIONS SHALL BE SLIP CRITICAL USING 1" DIAMETER ASTM A325 TYPE III BOLTS, UNLESS OTHERWISE NOTED. HOLES IN CROSSFRAME CONNECTIONS MAY BE OVERSIZED AT 1 3/16" DIAMETER IN ONE PLY ONLY.
6. EXCLUDE BOLT THREADS FROM THE SHEAR PLANE FOR ALL CONNECTIONS.
7. AT ALL FIELD SPLICES CONNECTIONS, BOLT HEADS SHALL BE PLACED ON THE OUTSIDE FACE OF THE EXTERIOR BEAMS, ON THE BOTTOM OF THE BOTTOM FLANGE SPLICE PLATES, AND ON THE TOP OF THE TOP FLANGE SPLICE PLATES.
8. BUTT WELDS AT SHOP SPLICES SHALL BE COMPLETE PENETRATION WELDS. WELD REINFORCEMENT SHALL BE REMOVED BY GRINDING IN THE DIRECTION OF THE MAIN STRESS.
9. SHEAR STUD CONNECTORS COINCIDING WITH WELDED SHOP SPLICES SHALL BE REPOSITIONED TO CLEAR SPLICE LOCATIONS BY 3" MINIMUM.
10. BEARING STIFFENERS AND END DIAPHRAGMS SHALL BE VERTICAL UNDER FULL DEAD LOAD. ALL INTERMEDIATE STIFFENERS, INTERIOR CROSSFRAMES, AND FIELD SPLICES, MAY BE NORMAL TO GRADE.
11. GIRDERS AND CROSSFRAMES SHALL BE FABRICATED SUCH THAT WEBS ARE PLUMB UNDER THE STEEL DEAD LOAD CONDITION.
12. GIRDER ENDS AT THE ABUTMENTS SHALL BE VERTICAL (PARALLEL TO ABUTMENT BACKWALL) UNDER FULL DEAD LOAD ROTATION, EXCLUDING FUTURE WEARING SURFACE LOADING.
13. WELD ATTACHMENTS OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSIONS". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG AND BE AT LEAST ¼" FOR THICKNESS UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.
14. FOR STEEL ERECTION, TWO OR MORE ADJACENT GIRDERS SHALL BE ERECTED WITH GIRDER SPLICE PLATES POPULATED WITH BOLTS OR PINS ACCORDING TO C&MS 513.20.C AND BRACED WITH FULLY INSTALLED CROSS FRAMES BEFORE RELEASING FROM HOISTING EQUIPMENT. HOISTING EQUIPMENT SHALL BE RELEASED BEFORE TRAFFIC CAN BE OPENED UNDER ANY ERECTED STEEL MEMBER.

NOTES:

1. ALL FIELD SPLICE PLATES ARE DESIGNATED "CVN".
2. ALL BOLTS ARE 1" DIAMETER GRADE A325-SC IN STANDARD HOLES, WITH CLASS A FAYING SURFACES, UNLESS NOTED.
3. SEE SHEET 32/51 FOR THE FRAMING PLAN AND ADDITIONAL NOTES.
4. FOR ABBREVIATIONS, SEE SHEET 05/51 .

BOLTED FIELD SPLICE
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| LLB | LAG |

REVIEWER: JMR 04/14/25

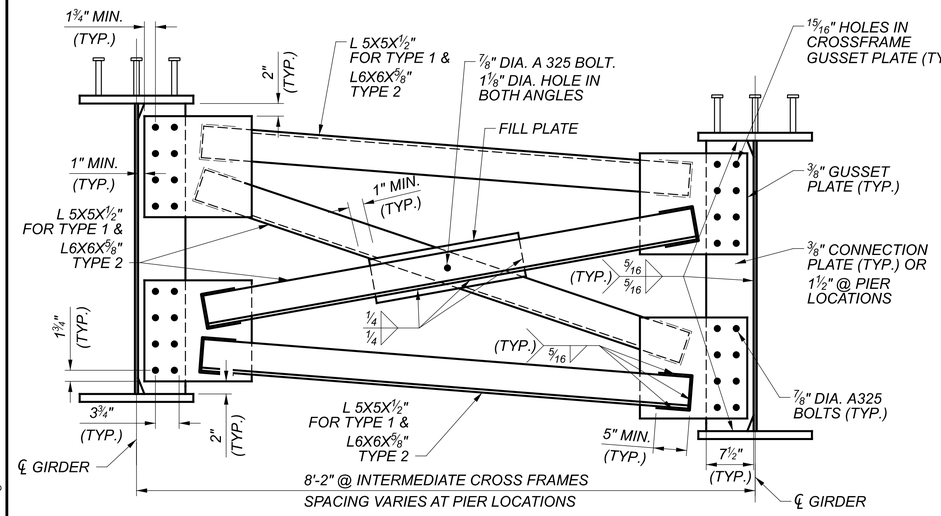
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 35 | 51 |

| SHEET | TOTAL |
|---|---|
| P.128 | 167 |

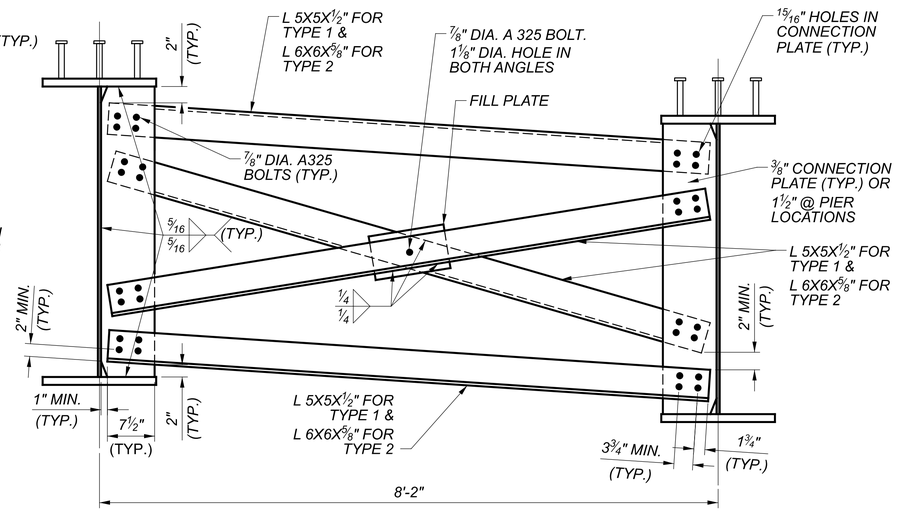
CUY-71-10.07 SW

MODEL: Bolted Field Splice PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:13:55 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_S5006.dgn



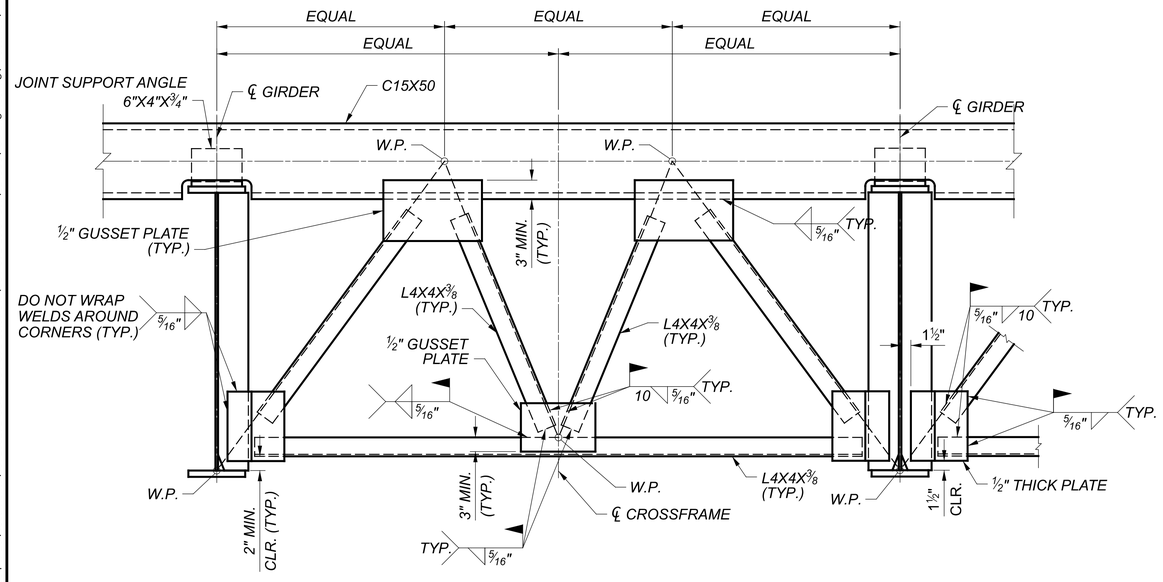

## TYPE A PIER AND INTERMEDIATE CROSS FRAME DETAIL

(PIER CAP AND BEARING NOT SHOWN FOR CLARITY)




## TYPE C INTERMEDIATE CROSS FRAME DETAIL

| LOCATION | BEARING STIFFNER PLATE | |
|---|---|---|
| | WIDTH | THICKNESS |
| R.A. | 7½" | ⅝" |
| P1 | 9" | 1½' |
| P2 | 9" | 1½" |
| P3 | 9" | 1½" |
| F.A. | 7½" | ⅝" |




## DETAIL - PROPOSED ENDFRAME

(NOT TO SCALE)

*STANDARD CONSTRUCTION DRAWINGS:*

*REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:*

*GSD-1-19*

*SHEET REFERENCES:*

1. *FOR FRAMING PLAN, SEE SHEET 32/51.*
2. *FOR GIRDER ELEVATION AND TABLES AND BEARING STIFFENER DETAILS, SEE SHEET 33/51.*
3. *FOR TRANSVERSE SECTION AND ADDITIONAL NOTES AND DETAILS, SEE SHEET 31/51.*
4. *FOR STRUCTURAL STEEL NOTES, SEE SHEETS 33/51 AND 35/51 .*

*NOTES:*

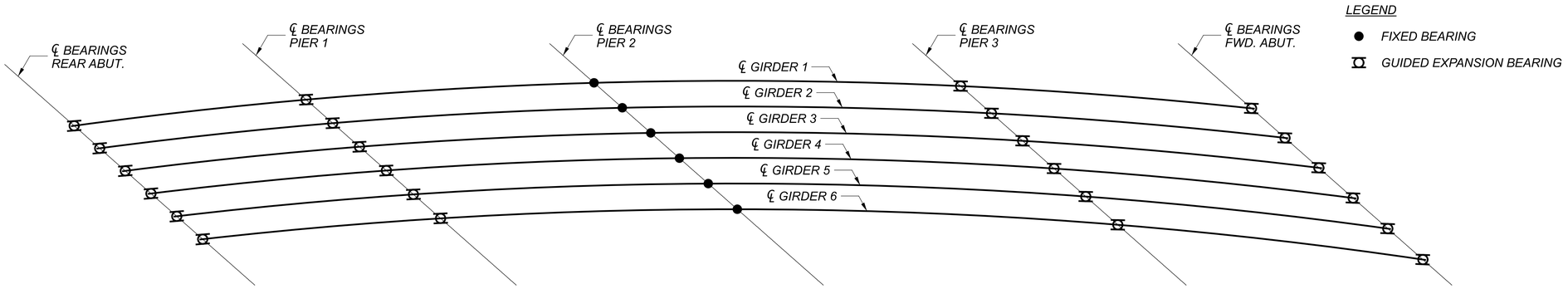
1. *ALL CROSSFRAME MATERIAL SHALL BE A709 GRADE 50.*
2. *HIGH STRENGTH BOLTS SHALL BE ⅞" DIAMETER A325 BOLTS, WITH THREADS EXCLUDED FROM THE SHEAR PLANE UNLESS OTHERWISE NOTED.*
3. *ALL CROSSFRAME AND ENDFRAME MEMBERS, CONNECTION STIFFENERS AND GUSSET PLATES SHALL BE DESIGNATED AS CVN.*

# CROSS FRAME DETAILS
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

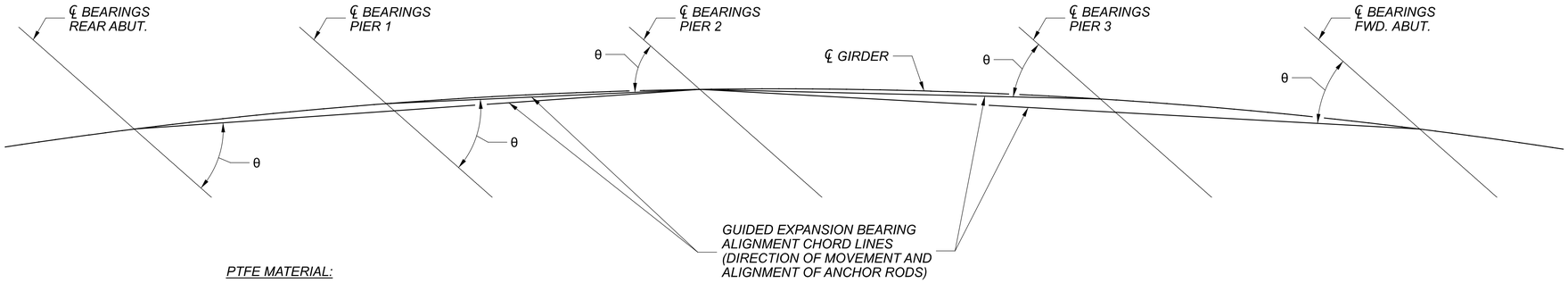
SFN 1814258
DESIGN AGENCY MOTT MACDONALD
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135
DESIGNER MKM | CHECKER RLD
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 36 | TOTAL 51
SHEET P.129 | TOTAL 167

CUY-71-10.07 SW

MODEL: Cross Frame Details PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:14:06 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_55007.dgn




## BRIDGE BEARING PLAN




## BEARING ORIENTATION PLAN

**ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE):**

MATERIAL PROPERTIES:
ELASTOMER: 50 DUROMETER WITH SHEAR MODULI OF 0.095 KSI MIN. AND 0.130 KSI MAX.

STEEL PLATES TO BE GRADE 50, AND FINISH/COATING(S) TO MATCH THE STRINGER.

DESIGN:
BEARINGS ARE DESIGNED USING "METHOD A" PER SECTION 14.7.6 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

TESTING:
THE LONG TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.

WELDING:
WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300° F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

**PTFE MATERIAL:**

PTFE (POLYTETRAFLUOROETHYLENE) RESIN SHALL BE 100 PERCENT VIRGIN MATERIAL, PREMIUM GRADE, MEETING THE REQUIREMENTS OF ASTM D4895. THE PTFE SHEET SHALL BE PURE PTFE RESIN, COMPRESSION MOLDED AND SKIVED INTO SHEETS OF THE REQUIRED THICKNESS.

THE FINISHED SHEET SHALL BE ACCORDING TO THE FOLLOWING:

| ASTM | TEST | LIMIT |
|---|---|---|
| D638 | TENSILE STRENGTH | 2800 PSI MIN. |
| D638 | ELONGATION | 200 % MIN. |
| D792 | SPECIFIC GRAVITY | 2.15 - 2.20 |
| D2240 | HARDNESS, DUROMETER | D50 - D65 |
| ---- | DEFORMATION UNDER LOAD<br>73°F / 100 PSI / 24 HRS<br>122°F / 1200 PSI / 24 HRS<br>73°F / 2000 PSI / 24 HRS | <br>2 - 3%<br>4 - 8%<br>15% MAX. |
| D570 | WATER ABSORPTION | 0.01% MAX. |
| ---- | STATIC COEFFICIENT OF FRICTION AT 500 PSI BEARING PRESSURE ON STAINLESS STEEL | 0.07 MAX. |
| D429 | METHOD B, ADHESION TO STEEL PEEL STRENGTH | 25 LB/IN. |

**PTFE MATERIAL (CONTINUED):**

THE PTFE SHEET SHALL BE BONDED DIRECTLY TO THE TOP STEEL PLATE WITH A TWO-COMPONENT, MEDIUM VISCOSITY EPOXY RESIN, CONFORMING TO THE REQUIREMENTS OF THE FEDERAL SPECIFICATION MMM-A-134, TYPE I. THE BOND AGENT SHALL BE APPLIED ON THE FULL AREA OF THE CONTACT SURFACES.

BONDING OF PTFE SHEET DURING VULCANIZING PROCESS WILL BE PERMITTED PROVIDED THE PROCESS AND METHOD OF ADJUSTING ASSEMBLY HEIGHT IS APPROVED BY THE ENGINEER.

PTFE SHEET, AND ASSOCIATED WORK, IS INCLUDED IN ITEM 516 FOR PAYMENT.

**STAINLESS STEEL SHEET:**

STAINLESS STEEL SHEET SHALL BE OF THE THICKNESS SPECIFIED AND SHALL BE ACCORDING TO ASTM A 240, TYPE 304. THE SLIDING SURFACE SHALL HAVE A TYPE 2B FINISH OR SMOOTHER AS PER THE AMERICAN SOCIETY OF METALS.

STAINLESS STEEL SHEET, AND ASSOCIATED WORK, IS INCLUDED IN ITEM 516 FOR PAYMENT.

**NOTES:**

1. ALL WORK ON THIS SHEET IS INCLUDED IN ITEM 516 FOR PAYMENT.
2. ELASTOMERIC BEARING: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
3. ALL BEARING ASSEMBLIES SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
4. SEE SHEET 32/51 FOR THE FRAMING PLAN AND ADDITIONAL NOTES.
5. SEE SHEET 38/51 FOR ADDITIONAL NOTES AND DETAILS.
6. FOR ABBREVIATIONS, SEE GENERAL NOTES SHEET 05/51.
7. A BEARING ORIENTATION ANGLE IS PROVIDED FOR PROPER ALIGNMENT OF THE BEARINGS. THIS INFORMATION IS PROVIDED IN THE TABLE, AS SHOWN IN THE BEARING ORIENTATION PLAN. THE ALIGNMENT CHORD LINE IS DEFINED AS A STRAIGHT LINE FROM THE GIRDER BEARING AT PIER 2, TO THE APPROPRIATE SUBSTRUCTURE UNIT.

## ELASTOMERIC BEARING DETAILS

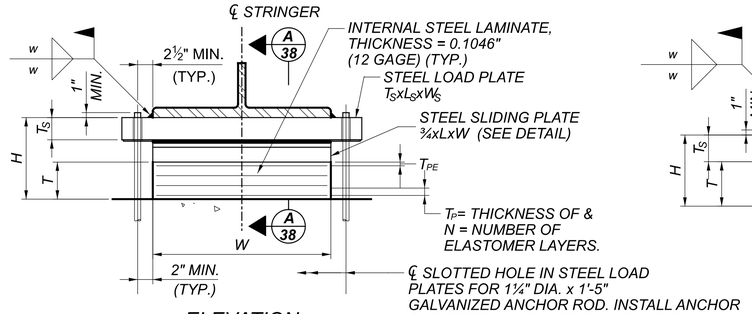
| SUBSTRUCTURE UNIT | TYPE | BEARING | | | | | | | LOAD PLATE | | | | | SLIDING PLATE | | | SERVICE REACTIONS | | | | | BEARING ORIENTATION (Θ) (DEGREES) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | W | $T_P$ | $T_{PE}$ | N | T | H | $T_S$ | $L_S$ | $W_S$ | w | BEVEL | $T_{SL}$ | $L_{SL}$ | $W_{SL}$ | $R_{DL}$ (KIP.) | $R_{LL}^{MAX.}$ (KIP.) | $R_{LL}^{MIN.}$ (KIP.) | $R^{DES.}$ (KIP.) | LL ROTATION (RAD.) | G1 | G2 | G3 | G4 | G5 | G6 |
| REAR ABUT. | EXP | 11″ | 18″ | 0.3900″ | 0.2700″ | 3 | 2.1284″ | 4.3159″ | 1¼″ | 12″ | 27″ | 5/16″ | +0.50% | ¾″ | 11″ | 18″ | 61 | 92 | -17 | 154 | 0.002029 | 46°8'5" | 45°50'25" | 45°32'28" | 45°14'13" | 44°54'40" | 44°36'49" |
| PIER 1 | EXP | 15″ | 24″ | 0.5400″ | 0.3700″ | 3 | 2.7784″ | 4.0284″ | 1¼″ | 16″ | 33″ | 5/16″ | -0.25% | NA | NA | NA | 164 | 157 | -29 | 320 | 0.003010 | 44°45'39" | 44°27'10" | 44°8'24" | 43°49'19" | 43°29'54" | 43°10'10" |
| PIER 2 | FIX | 16″ | 24″ | 0.5700″ | 0.3900″ | 3 | 2.9084″ | 4.4084″ | 1½″ | 17″ | 33″ | 5/16″ | -2.25% | NA | NA | NA | 212 | 170 | -38 | 382 | 0.004040 | 43°3'44" | 42°44'9" | 42°24'15" | 42°4'0" | 41°43'24" | 41°22'26" |
| PIER 3 | EXP | 17″ | 26″ | 0.6100″ | 0.4200″ | 3 | 3.0884″ | 4.5884″ | 1½″ | 18″ | 35″ | 5/16″ | -2.25% | NA | NA | NA | 255 | 174 | -38 | 429 | 0.004040 | 40°54'12" | 40°33'1" | 40°11'26" | 39°49'26" | 39°27'3" | 39°4'13" |
| FWD. ABUT. | EXP | 11″ | 18″ | 0.3900″ | 0.2700″ | 3 | 2.1284″ | 4.5659″ | 1½″ | 12″ | 27″ | 5/16″ | -3.25% | ¾″ | 11″ | 18″ | 77 | 107 | -22 | 184 | -0.002846 | 39°11'6" | 38°48'22" | 38°25'11" | 38°1'33" | 37°37'25" | 37°12'47" |

BEARING DETAILS (1 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

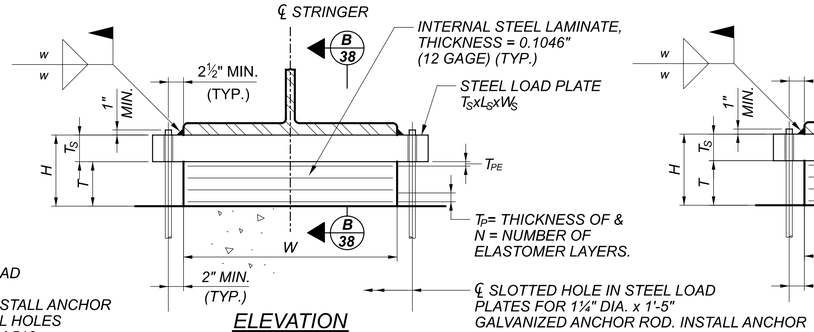
SFN 1814258
DESIGN AGENCY: MOTT MACDONALD, 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135
DESIGNER MKM | CHECKER JMR
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 37 | TOTAL 51
SHEET P.130 | TOTAL 167

CUY-71-10.07 SW

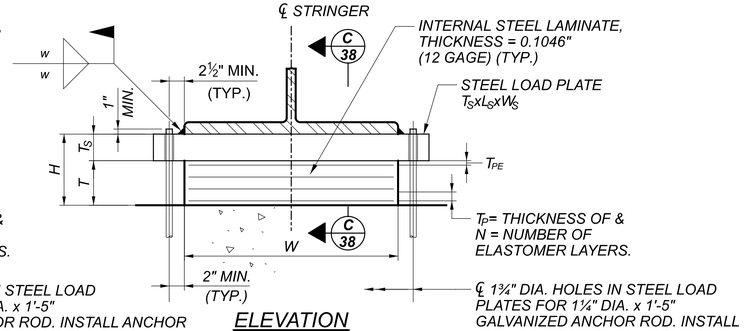
MODEL: Bearing Details 1 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:14:15 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SB001.dgn



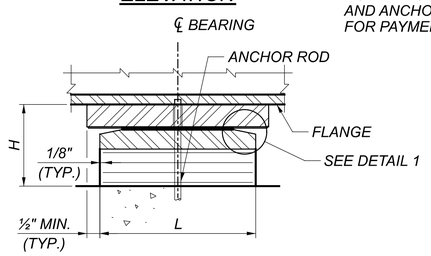

ELEVATION



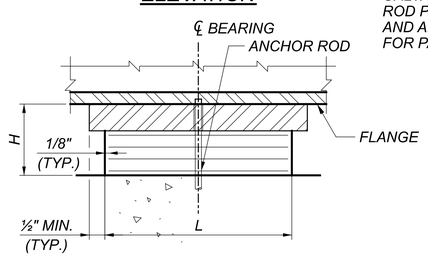

ELEVATION



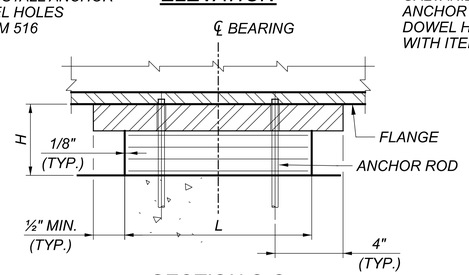

ELEVATION




SECTION A-A




SECTION B-B




SECTION C-C

## LAMINATED ELASTOMERIC EXPANSION BEARING WITH PTFE

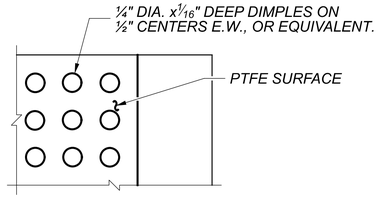
*ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE). SEE NOTES THIS SHEET. INSTALLED AT REAR AND FORWARD ABUTMENTS. SEE BEARING DETAILS TABLE FOR ADDITIONAL INFORMATION.*

## LAMINATED ELASTOMERIC EXPANSION BEARING

*ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) INSTALLED AT PIERS 1 AND 3. SEE BEARING DETAILS TABLE FOR ADDITIONAL INFORMATION.*

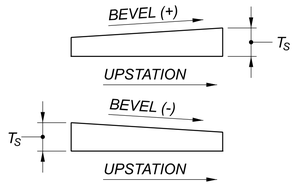
## LAMINATED ELASTOMERIC FIXED BEARING

*ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) INSTALLED AT PIER 2. SEE BEARING DETAILS TABLE FOR ADDITIONAL INFORMATION.*



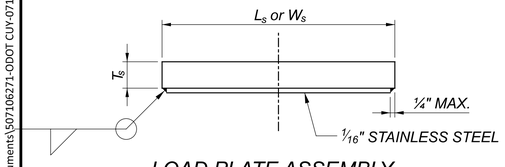

PLAN - PTFE SURFACE

NOT TO SCALE



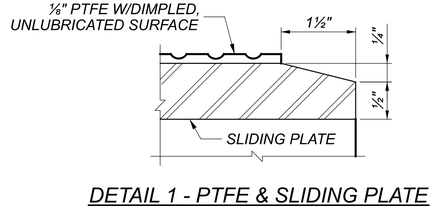

DETAIL - PLATE BEVEL

$T_S$ IS THE MAXIMUM THICKNESS ON BEVELED PLATES



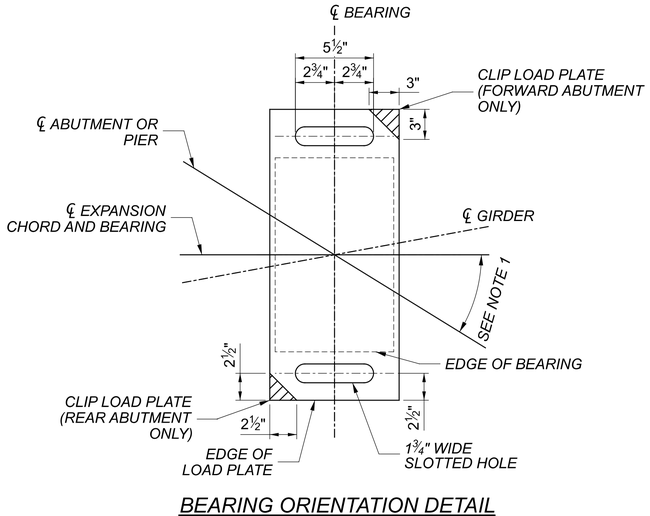

LOAD PLATE ASSEMBLY

NOT TO SCALE




DETAIL 1 - PTFE & SLIDING PLATE

NOT TO SCALE




BEARING ORIENTATION DETAIL

NOT TO SCALE

NOTES:

1. SEE SHEET 37/51 FOR DEFINITION AND VALUES OF Θ.
2. POSITION ALL LOAD PLATES DURING ERECTION ALONG THE CENTERLINE OF EXPANSION BY ALIGNING MATCH MARKS ON THE LOAD PLATE WITH CENTERLINE BEARING MATCH MARKS ON THE BOTTOM FLANGE. CLAMP AND PERMANENTLY ATTACH LOAD PLATE TO BOTTOM FLANGE WITH ALIGNING MATCH MARKS. RAISE THE GIRDERS TO RESET BEARINGS ACCORDING TO 516.07.B AS NECESSARY.

BEARING DETAILS (2 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| MKM | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 38 | 51 |

| SHEET | TOTAL |
|---|---|
| P.131 | 167 |

CUY-71-10.07 SW

MODEL: Bearing Details 2 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:14:25 PM USER: SAT89729
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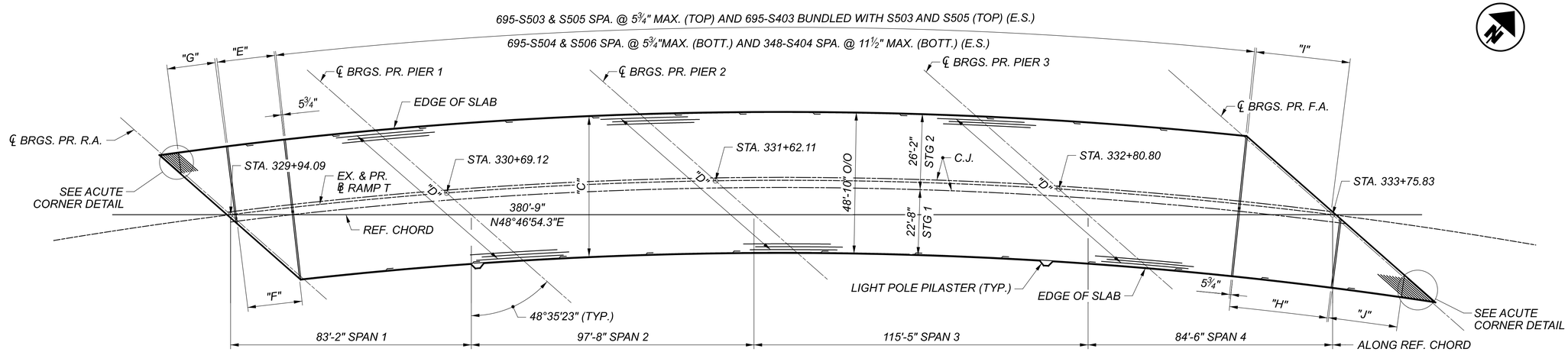
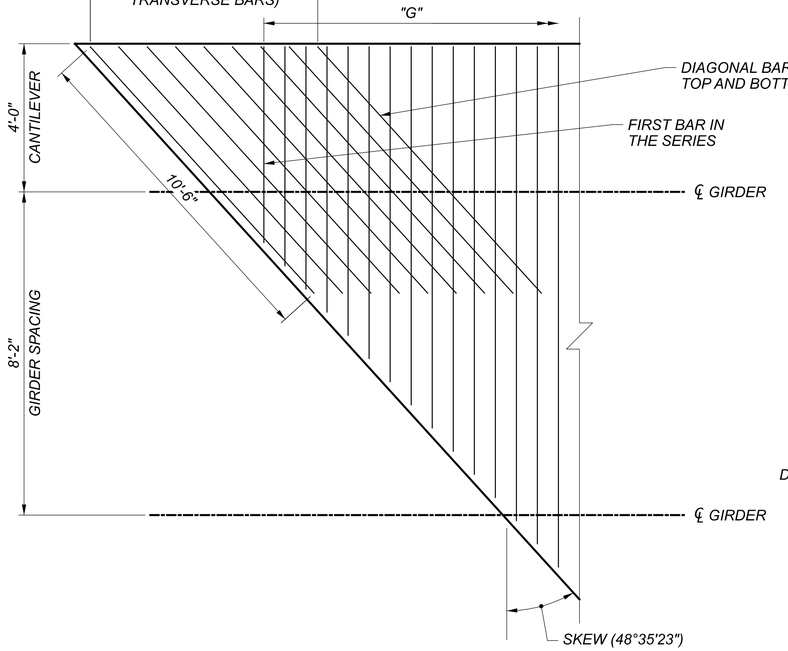


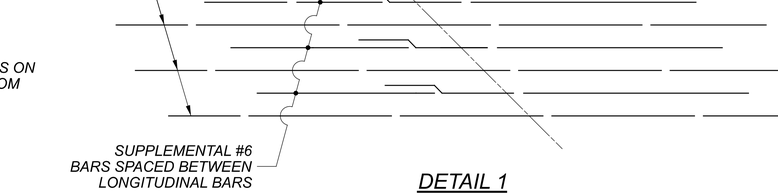

## GENERAL PLAN

*TRANSVERSE DIMENSIONS ARE RADIAL TO THE RAMP ℄*




## ACUTE CORNER DETAIL

*REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR*

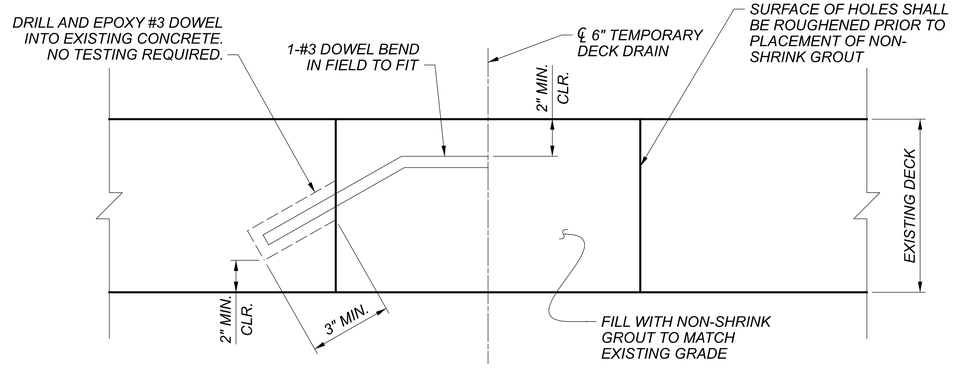



## DETAIL 1

| REQ'D LAP LENGTH | |
|---|---|
| | HORIZONTAL |
| #4 | 1'-11" |
| #5 | 2'-5" |
| #6 | 3'-7" |

| PIER | DIM. A | DIM. B | BAR MARK |
|---|---|---|---|
| 1 | 15'-0" | 25'-0" | S601 |
| 2 | 30'-0" | 25'-0" | S602 & S603 |
| 3 | 30'-0" | 35'-0" | S604 & S605 |

## SUPPLEMENTAL #6 BAR TABLE




## PLUG DETAIL FOR TEMPORARY DRAIN HOLE

| LEGEND | BAR MARK | LOCATION | NO. OF SETS | SPACING |
|---|---|---|---|---|
| "C" | S401 (13 LENGTHS) OR S402 (1 LENGTH) | TOP | 53 | 11" |
| | S501 (13 LENGTHS) OR S502 (1 LENGTH) | BOTTOM | 53 | 9¼" |
| | S402 & S502 BARS TO BE PLACED AT FORWARD ABUTMENT | | | |
| "D" | SEE SUPPLEMENTAL #6 BAR TABLE | | | |
| "E" | S505 | TOP | 42 | 5¾" |
| | S506 | BOTTOM | 42 | 5¾" |
| | S403 | TOP | 42 | 5¾" |
| | S404 | BOTTOM | 21 | 11½" |
| "F" | S507 | TOP & BOTTOM | 42 | 5¾" |
| "G" | S508 | TOP | 40 | 5¾" |
| | S509 | BOTTOM | 40 | 5¾" |
| | S403 | TOP | 40 | 5¾" |
| | S404 | BOTTOM | 20 | 11½" |
| "H" | S503 | TOP | 78 | 5¾" |
| | S504 | BOTTOM | 78 | 5¾" |
| | S403 | TOP | 78 | 5¾" |
| | S404 | BOTTOM | 39 | 11½" |
| "I" | S510 | TOP & BOTTOM | 66 | 5¾" |
| "J" | S511 | TOP | 63 | 5¾" |
| | S512 | BOTTOM | 63 | 5¾" |
| | S403 | TOP | 63 | 5¾" |
| | S404 | BOTTOM | 31 | 11½" |
| "K" | S513 | TOP & BOTTOM | 9 | 5¾" |

NOTES:

1. OTHER REINFORCEMENT NOT SHOWN FOR CLARITY.
2. SEE SHEET 05/51 FOR LEGEND IN GENERAL NOTES.
3. SEE SHEET 31/51 FOR THE TRANSVERSE SECTION AND ADDITIONAL NOTES.
4. SEE SHEET 44/51 FOR DETAILS OF THE EXPANSION JOINT.
5. SEE SHEET 42/51 FOR THE BARRIER ELEVATIONS, LIGHT POLE PILASTER DETAILS, AND ADDITIONAL NOTES.
6. SEE SHEET 40/51 & 41/51 FOR THE SCREED ELEVATIONS.
7. TEMPORARY DRAIN HOLES SHALL BE CAST INTO THE DECK. SEE SHEET 02/51 & 31/51 FOR DRAIN HOLE LOCATIONS AND REBAR/LOCATION ADJUSTMENTS.
8. PLACE TRANSVERSE REINFORCEMENT NORMAL TO THE RAMP BASELINE, MEASURED ALONG THE LEFT EDGE OF DECK.

# DECK PLAN
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

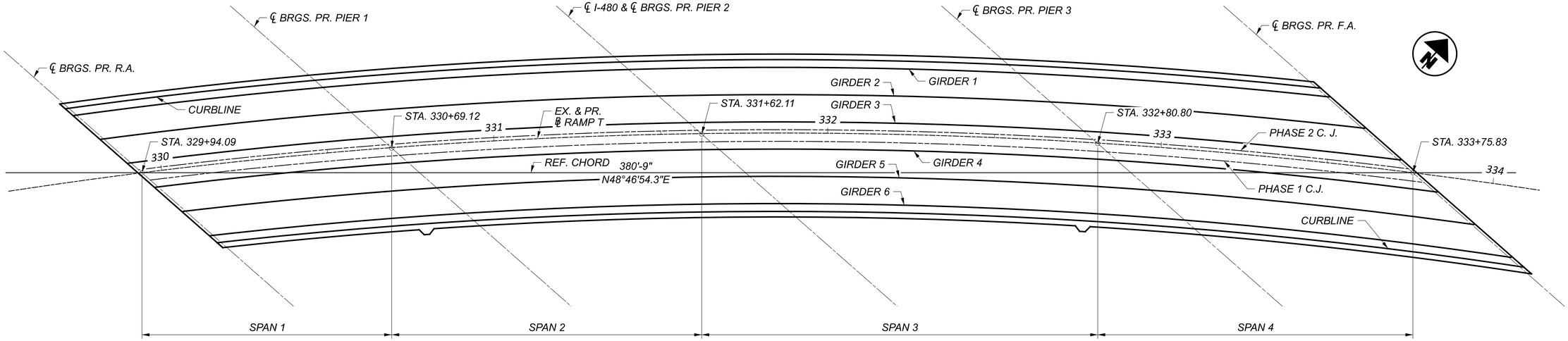
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 39 | 51 |

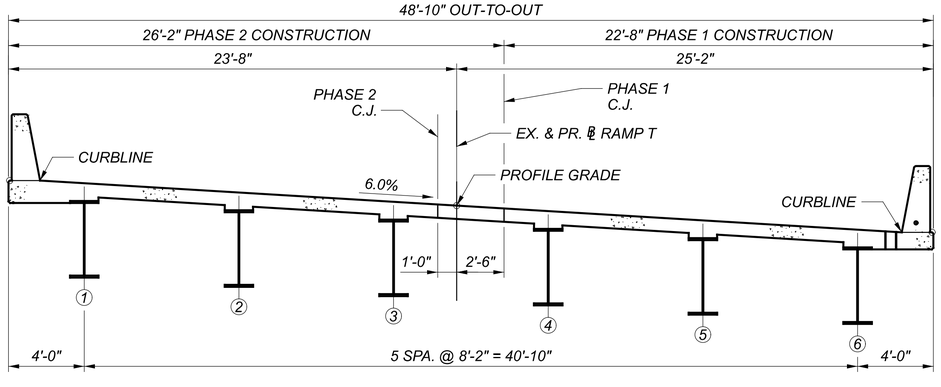
| SHEET | TOTAL |
|---|---|
| P.132 | 167 |

CUY-71-10.07 SW

MODEL: Deck Plan PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:14:34 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\SFN_1814257_SD001.dgn




DECK PLAN




TYPICAL SECTION

NOTES:

1. FOR SCREED ELEVATIONS, FINAL DECK SURFACE ELEVATIONS AND TOP OF HAUNCH ELEVATIONS, SEE SHEET 41/51.

SCREED DATA (1 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 40 | 51 |

| SHEET | TOTAL |
|---|---|
| P.133 | 167 |

CUY-71-10.07 SW

MODEL: Screed Data 1 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:14:43 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SS008.dgn

## FINAL DECK SURFACE ELEVATIONS

| LOCATION | | REAR ABUT. | 1/4 SPAN 1 | 1/2 SPAN 1 | 3/4 SPAN 1 | PIER 1 | FIELD SPLICE 1 | 1/4 SPAN 2 | 1/2 SPAN 2 | 3/4 SPAN 2 | PIER 2 | 1/8 SPAN 3 | FIELD SPLICE 2 | 1/4 SPAN 3 | 3/8 SPAN 3 | 1/2 SPAN 3 | 5/8 SPAN 3 | 3/4 SPAN 3 | 7/8 SPAN 3 | PIER 3 | 1/4 SPAN 4 | FIELD SPLICE 3 | 1/2 SPAN 4 | 3/4 SPAN 4 | FWD. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LEFT CURBLINE | STATION | 329+75.05 | 329+93.32 | 330+11.59 | 330+29.86 | 330+48.13 | - | 330+70.71 | 330+93.29 | 331+15.87 | 331+38.45 | 331+52.79 | - | 331+67.13 | 331+81.47 | 331+95.81 | 332+10.15 | 332+24.50 | 332+38.84 | 332+53.18 | 332+76.00 | - | 332+98.81 | 333+21.63 | 333+44.45 |
| | ELEVATION | 814.54 | 814.65 | 814.74 | 814.79 | 814.80 | - | 814.78 | 814.71 | 814.59 | 814.41 | 814.28 | - | 814.12 | 813.95 | 813.75 | 813.54 | 813.30 | 813.05 | 812.77 | 812.29 | - | 811.76 | 811.18 | 810.54 |
| GIRDER 1 | STATION | 329+77.04 | 329+95.36 | 330+13.68 | 330+32.00 | 330+50.32 | 330+68.46 | 330+72.97 | 330+95.61 | 331+18.26 | 331+40.91 | 331+55.30 | 331+63.99 | 331+69.69 | 331+84.08 | 331+98.47 | 332+12.87 | 332+27.26 | 332+41.65 | 332+56.04 | 332+78.95 | 332+87.30 | 333+01.87 | 333+24.78 | 333+47.69 |
| | ELEVATION | 814.41 | 814.52 | 814.60 | 814.65 | 814.66 | 814.65 | 814.64 | 814.56 | 814.43 | 814.25 | 814.11 | 814.02 | 813.95 | 813.77 | 813.57 | 813.35 | 813.11 | 812.85 | 812.57 | 812.08 | 811.89 | 811.54 | 810.95 | 810.31 |
| GIRDER 2 | STATION | 329+84.05 | 330+02.54 | 330+21.04 | 330+39.54 | 330+58.04 | 330+76.37 | 330+80.93 | 331+03.82 | 331+26.72 | 331+49.61 | 331+64.18 | 331+75.44 | 331+78.75 | 331+93.32 | 332+07.90 | 332+22.47 | 332+37.04 | 332+51.61 | 332+66.19 | 332+89.44 | 332+97.88 | 333+12.69 | 333+35.95 | 333+59.20 |
| | ELEVATION | 813.97 | 814.07 | 814.14 | 814.17 | 814.17 | 814.14 | 814.12 | 814.03 | 813.88 | 813.68 | 813.53 | 813.39 | 813.35 | 813.16 | 812.94 | 812.71 | 812.45 | 812.17 | 811.87 | 811.35 | 811.15 | 810.78 | 810.16 | 809.48 |
| GIRDER 3 | STATION | 329+91.16 | 330+09.84 | 330+28.52 | 330+47.20 | 330+65.88 | 330+84.40 | 330+89.02 | 331+12.17 | 331+35.31 | 331+58.46 | 331+73.21 | 331+82.08 | 331+87.97 | 332+02.73 | 332+17.49 | 332+32.25 | 332+47.01 | 332+61.77 | 332+76.52 | 333+00.13 | 333+13.80 | 333+23.74 | 333+47.35 | 333+70.95 |
| | ELEVATION | 813.52 | 813.61 | 813.66 | 813.68 | 813.67 | 813.62 | 813.61 | 813.49 | 813.32 | 813.10 | 812.93 | 812.82 | 812.74 | 812.53 | 812.30 | 812.05 | 811.77 | 811.48 | 811.16 | 810.61 | 810.26 | 810.00 | 809.34 | 808.63 |
| PHASE 2 C.J. | STATION | 329+93.21 | 330+11.95 | 330+30.68 | 330+49.42 | 330+68.15 | - | 330+91.37 | 331+14.58 | 331+37.80 | 331+61.01 | 331+75.82 | - | 331+90.64 | 332+05.45 | 332+20.26 | 332+35.07 | 332+49.89 | 332+64.70 | 332+79.51 | 333+03.22 | - | 333+26.94 | 333+50.65 | 333+74.36 |
| | ELEVATION | 813.39 | 813.48 | 813.53 | 813.54 | 813.53 | - | 813.46 | 813.33 | 813.16 | 812.93 | 812.76 | - | 812.57 | 812.35 | 812.11 | 811.86 | 811.58 | 811.27 | 810.95 | 810.39 | - | 809.77 | 809.10 | 808.38 |
| PROFILE GRADE | STATION | 329+94.09 | 330+12.85 | 330+31.61 | 330+50.36 | 330+69.12 | 330+87.72 | 330+92.37 | 331+15.62 | 331+38.86 | 331+62.11 | 331+76.95 | 331+85.85 | 331+91.78 | 332+06.62 | 332+21.46 | 332+36.29 | 332+51.13 | 332+65.96 | 332+80.80 | 333+04.56 | 333+15.15 | 333+28.32 | 333+52.07 | 333+75.83 |
| | ELEVATION | 813.34 | 813.42 | 813.47 | 813.48 | 813.46 | 813.41 | 813.39 | 813.27 | 813.09 | 812.86 | 812.66 | 812.57 | 812.49 | 812.27 | 812.03 | 811.77 | 811.49 | 811.19 | 810.86 | 810.30 | 810.03 | 809.68 | 809.00 | 808.27 |
| PHASE 1 C.J. | STATION | 329+96.30 | 330+15.12 | 330+33.93 | 330+52.74 | 330+71.56 | - | 330+94.89 | 331+18.21 | 331+41.54 | 331+64.87 | 331+79.76 | - | 331+94.66 | 332+09.55 | 332+24.45 | 332+39.35 | 332+54.24 | 332+69.14 | 332+84.03 | 333+07.90 | - | 333+31.77 | 333+55.64 | 333+79.51 |
| | ELEVATION | 813.20 | 813.28 | 813.32 | 813.33 | 813.31 | - | 813.23 | 813.10 | 812.92 | 812.68 | 812.50 | - | 812.30 | 812.08 | 811.83 | 811.57 | 811.28 | 810.97 | 810.64 | 810.06 | - | 809.43 | 808.75 | 808.00 |
| GIRDER 4 | STATION | 329+98.38 | 330+17.24 | 330+36.11 | 330+54.98 | 330+73.85 | 330+92.56 | 330+97.25 | 331+20.65 | 331+44.05 | 331+67.45 | 331+82.41 | 331+91.37 | 331+97.36 | 332+12.31 | 332+27.26 | 332+42.21 | 332+57.16 | 332+72.11 | 332+87.07 | 333+11.04 | 333+19.69 | 333+35.02 | 333+59.00 | 333+82.97 |
| | ELEVATION | 813.07 | 813.14 | 813.19 | 813.19 | 813.16 | 813.10 | 813.08 | 812.94 | 812.75 | 812.51 | 812.33 | 812.21 | 812.12 | 811.89 | 811.64 | 811.37 | 811.08 | 810.77 | 810.43 | 809.84 | 809.62 | 809.20 | 808.50 | 807.75 |
| GIRDER 5 | STATION | 330+05.70 | 330+24.76 | 330+43.82 | 330+62.88 | 330+81.94 | 331+00.86 | 331+05.61 | 331+29.28 | 331+52.94 | 331+76.61 | 331+91.76 | 332+00.82 | 332+06.91 | 332+22.06 | 332+37.21 | 332+52.37 | 332+67.52 | 332+82.67 | 332+97.82 | 333+22.18 | 333+30.94 | 333+46.54 | 333+70.90 | 333+95.27 |
| | ELEVATION | 812.61 | 812.68 | 812.70 | 812.70 | 812.65 | 812.57 | 812.55 | 812.39 | 812.18 | 811.91 | 811.71 | 811.58 | 811.49 | 811.24 | 810.98 | 810.69 | 810.37 | 810.04 | 809.68 | 809.06 | 808.83 | 808.38 | 807.65 | 806.85 |
| GIRDER 6 | STATION | 330+13.14 | 330+32.40 | 330+51.65 | 330+70.91 | 330+90.17 | 331+09.29 | 331+14.12 | 331+38.07 | 331+62.02 | 331+85.97 | 332+01.32 | 332+10.44 | 332+16.67 | 332+32.03 | 332+47.38 | 332+62.73 | 332+78.08 | 332+93.44 | 333+08.79 | 333+33.55 | 333+45.11 | 333+58.32 | 333+83.08 | 334+07.84 |
| | ELEVATION | 812.15 | 812.20 | 812.21 | 812.19 | 812.13 | 812.04 | 812.01 | 811.83 | 811.59 | 811.30 | 811.08 | 810.94 | 810.84 | 810.58 | 810.29 | 809.99 | 809.65 | 809.30 | 808.92 | 808.26 | 807.94 | 807.55 | 806.77 | 805.93 |
| REAR CURBLINE | STATION | 330+15.29 | 330+34.60 | 330+53.91 | 330+73.23 | 330+92.54 | - | 331+16.56 | 331+40.58 | 331+64.60 | 331+88.62 | 332+04.04 | - | 332+19.46 | 332+34.88 | 332+50.29 | 332+65.71 | 332+81.13 | 332+96.55 | 333+11.96 | 333+36.85 | - | 333+61.73 | 333+86.61 | 334+11.49 |
| | ELEVATION | 812.02 | 812.06 | 812.07 | 812.05 | 811.98 | - | 811.85 | 811.67 | 811.42 | 811.12 | 810.90 | - | 810.66 | 810.39 | 810.10 | 809.78 | 809.45 | 809.08 | 808.70 | 808.03 | - | 807.30 | 806.51 | 805.66 |

## SCREED ELEVATIONS

| LOCATION | | REAR ABUT. | 1/4 SPAN 1 | 1/2 SPAN 1 | 3/4 SPAN 1 | PIER 1 | FIELD SPLICE 1 | 1/4 SPAN 2 | 1/2 SPAN 2 | 3/4 SPAN 2 | PIER 2 | 1/8 SPAN 3 | FIELD SPLICE 2 | 1/4 SPAN 3 | 3/8 SPAN 3 | 1/2 SPAN 3 | 5/8 SPAN 3 | 3/4 SPAN 3 | 7/8 SPAN 3 | PIER 3 | 1/4 SPAN 4 | FIELD SPLICE 3 | 1/2 SPAN 4 | 3/4 SPAN 4 | FWD. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LEFT CURBLINE | STATION | 329+75.05 | 329+93.32 | 330+11.59 | 330+29.86 | 330+48.13 | - | 330+70.71 | 330+93.29 | 331+15.87 | 331+38.45 | 331+52.79 | - | 331+67.13 | 331+81.47 | 331+95.81 | 332+10.15 | 332+24.50 | 332+38.84 | 332+53.18 | 332+76.00 | - | 332+98.81 | 333+21.63 | 333+44.45 |
| | ELEVATION | 814.54 | 814.69 | 814.79 | 814.82 | 814.80 | - | 814.79 | 814.74 | 814.60 | 814.41 | 814.31 | - | 814.19 | 814.06 | 813.89 | 813.67 | 813.40 | 813.10 | 812.77 | 812.30 | - | 811.81 | 811.24 | 810.54 |
| PHASE 2 C.J. | STATION | 329+93.21 | 330+11.95 | 330+30.68 | 330+49.42 | 330+68.15 | - | 330+91.37 | 331+14.58 | 331+37.80 | 331+61.01 | 331+75.82 | - | 331+90.64 | 332+05.45 | 332+20.26 | 332+35.07 | 332+49.89 | 332+64.70 | 332+79.51 | 333+03.22 | - | 333+26.94 | 333+50.65 | 333+74.36 |
| | ELEVATION | 813.39 | 813.51 | 813.57 | 813.57 | 813.53 | - | 813.46 | 813.36 | 813.17 | 812.93 | 812.79 | - | 812.63 | 812.45 | 812.23 | 811.95 | 811.65 | 811.31 | 810.95 | 810.41 | - | 809.83 | 809.16 | 808.38 |
| PROFILE GRADE | STATION | 329+94.09 | 330+12.85 | 330+31.61 | 330+50.36 | 330+69.12 | 330+87.72 | 330+92.37 | 331+15.62 | 331+38.86 | 331+62.11 | 331+76.95 | 331+85.85 | 331+91.78 | 332+06.62 | 332+21.46 | 332+36.29 | 332+51.13 | 332+65.96 | 332+80.80 | 333+04.56 | 333+15.15 | 333+28.32 | 333+52.07 | 333+75.83 |
| | ELEVATION | 813.34 | 813.45 | 813.52 | 813.51 | 813.46 | 813.42 | 813.40 | 813.29 | 813.10 | 812.86 | 812.71 | 812.63 | 812.55 | 812.37 | 812.15 | 811.87 | 811.57 | 811.22 | 810.86 | 810.32 | 810.07 | 809.73 | 809.06 | 808.27 |
| PHASE 1 C.J. | STATION | 329+96.30 | 330+15.12 | 330+33.93 | 330+52.74 | 330+71.56 | - | 330+94.89 | 331+18.21 | 331+41.54 | 331+64.87 | 331+79.76 | - | 331+94.66 | 332+09.55 | 332+24.45 | 332+39.35 | 332+54.24 | 332+69.14 | 332+84.03 | 333+07.90 | - | 333+31.77 | 333+55.64 | 333+79.51 |
| | ELEVATION | 813.20 | 813.31 | 813.37 | 813.36 | 813.31 | - | 813.24 | 813.12 | 812.92 | 812.68 | 812.53 | - | 812.36 | 812.17 | 811.94 | 811.67 | 811.35 | 811.00 | 810.64 | 810.08 | - | 809.49 | 808.80 | 808.00 |
| RIGHT CURBLINE | STATION | 330+15.29 | 330+34.60 | 330+53.91 | 330+73.23 | 330+92.54 | - | 331+16.56 | 331+40.58 | 331+64.60 | 331+88.62 | 332+04.04 | - | 332+19.46 | 332+34.88 | 332+50.29 | 332+65.71 | 332+81.13 | 332+96.55 | 333+11.96 | 333+36.85 | - | 333+61.73 | 333+86.61 | 334+11.49 |
| | ELEVATION | 812.02 | 812.11 | 812.13 | 812.07 | 811.98 | - | 811.87 | 811.69 | 811.43 | 811.12 | 810.95 | - | 810.76 | 810.52 | 810.23 | 809.89 | 809.51 | 809.10 | 808.70 | 808.07 | - | 807.40 | 806.58 | 805.66 |

## TOP OF HAUNCH ELEVATIONS

| LOCATION | | REAR ABUT. | 1/4 SPAN 1 | 1/2 SPAN 1 | 3/4 SPAN 1 | PIER 1 | FIELD SPLICE 1 | 1/4 SPAN 2 | 1/2 SPAN 2 | 3/4 SPAN 2 | PIER 2 | 1/8 SPAN 3 | FIELD SPLICE 2 | 1/4 SPAN 3 | 3/8 SPAN 3 | 1/2 SPAN 3 | 5/8 SPAN 3 | 3/4 SPAN 3 | 7/8 SPAN 3 | PIER 3 | 1/4 SPAN 4 | FIELD SPLICE 3 | 1/2 SPAN 4 | 3/4 SPAN 4 | FWD. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GIRDER 1 | STATION | 329+77.04 | 329+95.36 | 330+13.68 | 330+32.00 | 330+50.32 | 330+68.46 | 330+72.97 | 330+95.61 | 331+18.26 | 331+40.91 | 331+55.30 | 331+63.99 | 331+69.69 | 331+84.08 | 331+98.47 | 332+12.87 | 332+27.26 | 332+41.65 | 332+56.04 | 332+78.95 | 332+87.30 | 333+01.87 | 333+24.78 | 333+47.69 |
| | ELEVATION | 813.70 | 813.86 | 813.95 | 813.98 | 813.96 | 813.94 | 813.93 | 813.88 | 813.73 | 813.54 | 813.43 | 813.35 | 813.31 | 813.18 | 813.00 | 812.78 | 812.50 | 812.20 | 811.86 | 811.39 | 811.21 | 810.88 | 810.31 | 809.60 |
| GIRDER 2 | STATION | 329+84.05 | 330+02.54 | 330+21.04 | 330+39.54 | 330+58.04 | 330+76.37 | 330+80.93 | 331+03.82 | 331+26.72 | 331+49.61 | 331+64.18 | 331+75.44 | 331+78.75 | 331+93.32 | 332+07.90 | 332+22.47 | 332+37.04 | 332+51.61 | 332+66.19 | 332+89.44 | 332+97.88 | 333+12.69 | 333+35.95 | 333+59.20 |
| | ELEVATION | 813.26 | 813.40 | 813.47 | 813.49 | 813.46 | 813.43 | 813.42 | 813.34 | 813.18 | 812.97 | 812.85 | 812.74 | 812.70 | 812.55 | 812.35 | 812.11 | 811.81 | 811.49 | 811.16 | 810.66 | 810.47 | 810.13 | 809.50 | 808.77 |
| GIRDER 3 | STATION | 329+91.16 | 330+09.84 | 330+28.52 | 330+47.20 | 330+65.88 | 330+84.40 | 330+89.02 | 331+12.17 | 331+35.31 | 331+58.46 | 331+73.21 | 331+82.08 | 331+87.97 | 332+02.73 | 332+17.49 | 332+32.25 | 332+47.01 | 332+61.77 | 332+76.52 | 333+00.13 | 333+13.80 | 333+23.74 | 333+47.35 | 333+70.95 |
| | ELEVATION | 812.81 | 812.93 | 813.00 | 813.01 | 812.96 | 812.92 | 812.90 | 812.80 | 812.62 | 812.39 | 812.26 | 812.16 | 812.09 | 811.91 | 811.70 | 811.44 | 811.15 | 810.80 | 810.45 | 809.91 | 809.59 | 809.34 | 808.69 | 807.92 |
| GIRDER 4 | STATION | 329+98.38 | 330+17.24 | 330+36.11 | 330+54.98 | 330+73.85 | 330+92.56 | 330+97.25 | 331+20.65 | 331+44.05 | 331+67.45 | 331+82.41 | 331+91.37 | 331+97.36 | 332+12.31 | 332+27.26 | 332+42.21 | 332+57.16 | 332+72.11 | 332+87.07 | 333+11.04 | 333+19.69 | 333+35.02 | 333+59.00 | 333+82.97 |
| | ELEVATION | 812.36 | 812.47 | 812.52 | 812.51 | 812.46 | 812.40 | 812.38 | 812.26 | 812.05 | 811.80 | 811.64 | 811.55 | 811.48 | 811.29 | 811.05 | 810.76 | 810.43 | 810.08 | 809.72 | 809.16 | 808.95 | 808.56 | 807.85 | 807.04 |
| GIRDER 5 | STATION | 330+05.70 | 330+24.76 | 330+43.82 | 330+62.88 | 330+81.94 | 331+00.86 | 331+05.61 | 331+29.28 | 331+52.94 | 331+76.61 | 331+91.76 | 332+00.82 | 332+06.91 | 332+22.06 | 332+37.21 | 332+52.37 | 332+67.52 | 332+82.67 | 332+97.82 | 333+22.18 | 333+30.94 | 333+46.54 | 333+70.90 | 333+95.27 |
| | ELEVATION | 811.90 | 812.00 | 812.04 | 812.01 | 811.94 | 811.88 | 811.85 | 811.70 | 811.47 | 811.20 | 811.04 | 810.93 | 810.85 | 810.64 | 810.39 | 810.09 | 809.74 | 809.36 | 808.98 | 808.39 | 808.17 | 807.75 | 807.01 | 806.14 |
| GIRDER 6 | STATION | 330+13.14 | 330+32.40 | 330+51.65 | 330+70.91 | 330+90.17 | 331+09.29 | 331+14.12 | 331+38.07 | 331+62.02 | 331+85.97 | 332+01.32 | 332+10.44 | 332+16.67 | 332+32.03 | 332+47.38 | 332+62.73 | 332+78.08 | 332+93.44 | 333+08.79 | 333+33.55 | 333+45.11 | 333+58.32 | 333+83.08 | 334+07.84 |
| | ELEVATION | 811.44 | 811.53 | 811.56 | 811.51 | 811.42 | 811.34 | 811.32 | 811.15 | 810.89 | 810.59 | 810.42 | 810.31 | 810.23 | 810.01 | 809.72 | 809.38 | 809.01 | 808.61 | 808.21 | 807.60 | 807.31 | 806.94 | 806.13 | 805.22 |

NOTES:

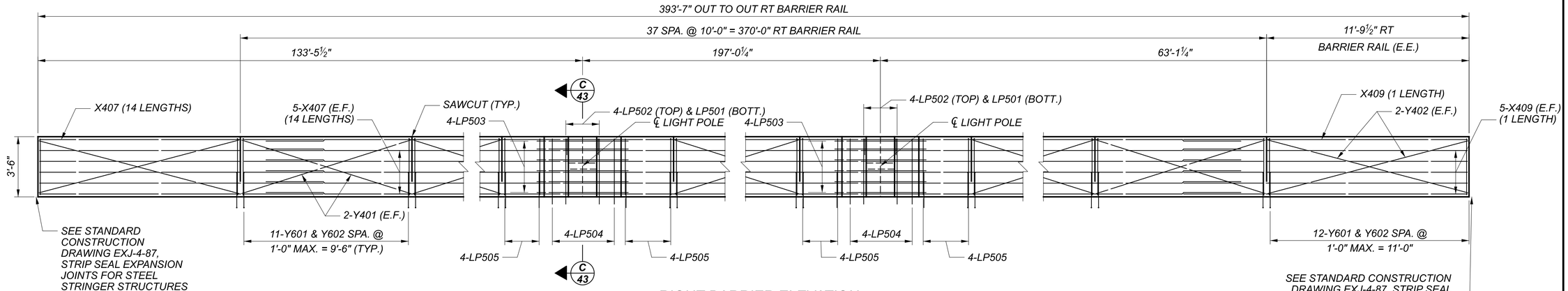
1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE BEAM/GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED EXCEPT FOR FUTURE WEARING SURFACE.
3. FOR PLAN AND TRANSVERSE VIEWS, SEE SHEET 40/51 .

SCREED DATA (2 OF 2)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER NKK | CHECKER JMR
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 41 | TOTAL 51
SHEET P.134 | TOTAL 167

CUY-71-10.07 SW

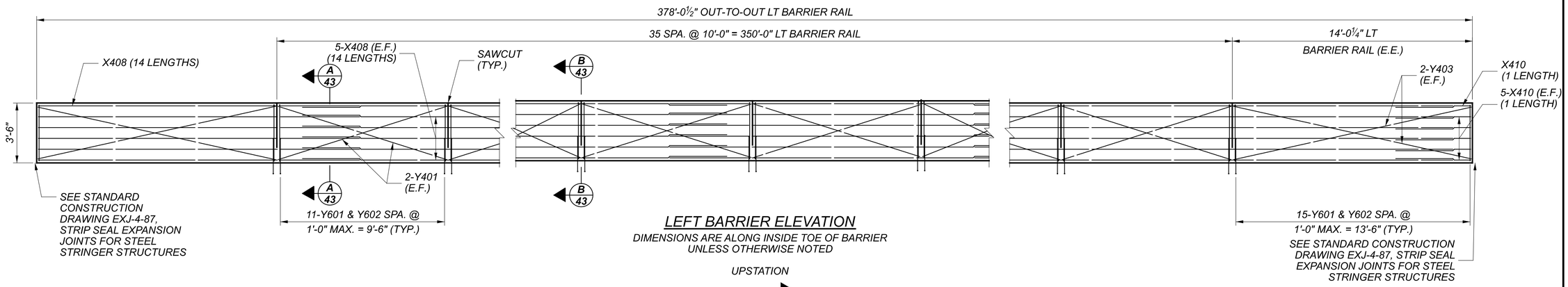
MODEL: Screed Data 2 of 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:14:52 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SS009.dgn




## RIGHT BARRIER ELEVATION

DIMENSIONS ARE ALONG INSIDE TOE OF BARRIER UNLESS OTHERWISE NOTED

UPSTATION




## LEFT BARRIER ELEVATION

DIMENSIONS ARE ALONG INSIDE TOE OF BARRIER UNLESS OTHERWISE NOTED

UPSTATION

| REQ'D LAP LENGTH | |
|---|---|
| | HORIZONTAL |
| #4 | 1'-11" |
| #5 | 2'-5" |
| #6 | 3'-7" |
| GFRP | 3'-5" |

**SHEET REFERENCES:**

1. FOR THE SECTION CUTS AND NOTES, SEE SHEET 43/51 .
2. FOR THE DECK PLAN, SEE SHEET 39/51.

**STANDARD CONSTRUCTION DRAWINGS:**

3. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:

   SBR-1-20
   EXJ-4-87

# BARRIER PLAN & ELEVATIONS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| MKM | JMR |

REVIEWER: SK 09/17/25

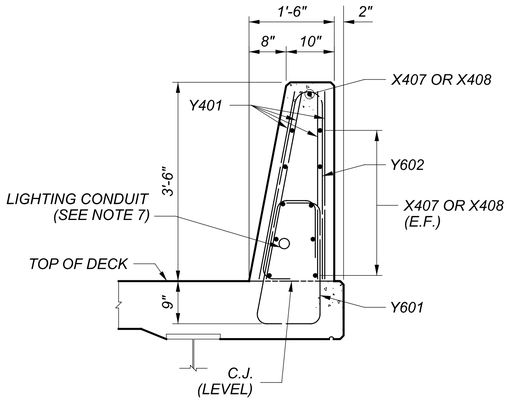
PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 42 | 51 |

| SHEET | TOTAL |
|---|---|
| P.135 | 167 |

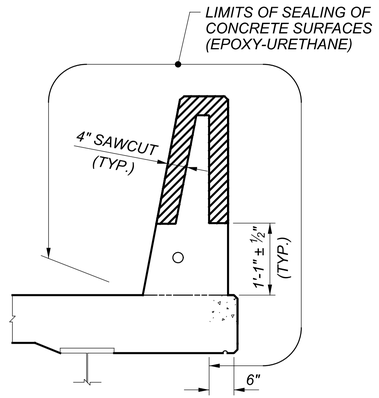
CUY-71-10.07 SW

MODEL: Barrier Elevations PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:15:02 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SA001.dgn



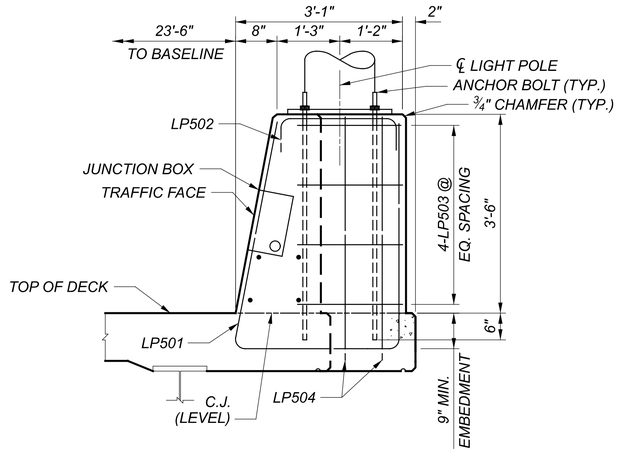

## SECTION A-A

(DECK REINFORCING STEEL NOT SHOWN)



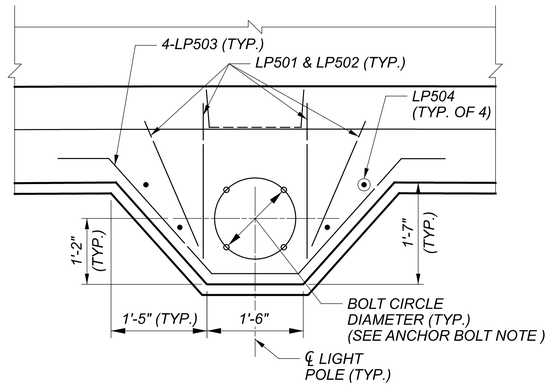

## SECTION B-B

(SECTION THROUGH DEFLECTION JOINT)
(SEE SECTION A-A FOR REINFORCING DETAILS)



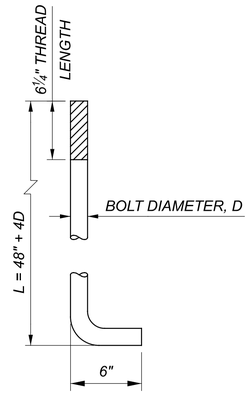

## SECTION C-C

(DECK REINFORCING STEEL NOT SHOWN)

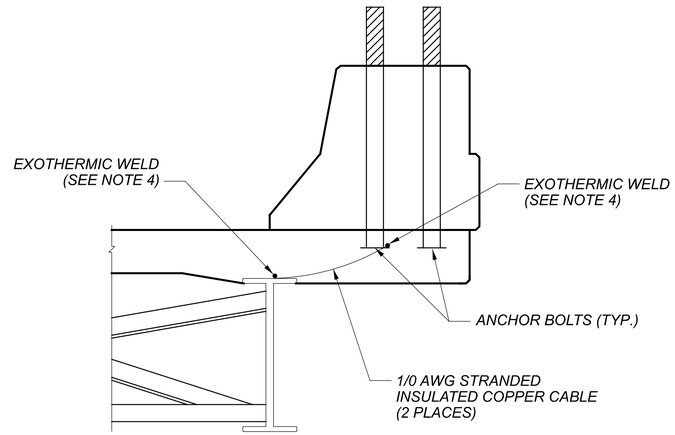



## RIGHT BARRIER LIGHT POLE PLAN

(LONGITUDINAL STEEL NOT SHOWN, SEE ELEVATION FOR REINFORCING DETAILS, TYPICAL FOR LIGHT POLE LOCATIONS)




## LIGHT POLE
## ANCHOR BOLT DETAIL




## LIGHT POLE PARAPET (ELEV. VIEW) AND ANCHOR BOLT GROUNDING (TYP.)

### NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 42/51.
2. PLACE ALL DIAGONAL GFRP STIFFENING BARS ON THE INSIDE OF THE HORIZONTAL BARS.
3. TIE DIAGONAL STIFFENING BARS TO EACH HORIZONTAL BAR.
4. DO NOT SLIPFORM PANELS SHOWN WITHOUT DIAGONAL GFRP STIFFENING BAR.
5. DO NOT OMIT DIAGONAL STIFFENING BARS FOR CONVENTIONALLY FORMED CONSTRUCTION.
6. ADJUST BAR SPACING AS NEEDED TO AVOID INTERFERENCE WITH SHEAR STUD CONNECTORS.
7. SEE LIGHTING PLAN FOR DETAILS AND PAYMENT.
8. MINIMUM LAP FOR GFRP BARS IS 3'-5" UNLESS NOTED.
9. MEASUREMENTS ARE TAKEN ALONG INSIDE TOE OF BARRIER.
10. ALL CONNECTIONS AND BARE COPPER STRANDS OF THE I/O AWG CABLE EXPOSED TO CONCRETE SHALL BE COVERED WITH MASTIC TO PREVENT CONTACT WITH THE CONCRETE.
11. USE UL-LISTED EXOTHERMIC WELD DEVICES FOR ALL STRUCTURE GROUNDING CONNECTIONS, EXCEPT FOR GROUNDING PLATES, WHICH MAY BE UL-LISTED COMMERCIAL PRODUCTS OR THE FABRICATED DESIGN SHOWN BELOW.

### SHEET REFERENCES:

1. FOR THE TRANSVERSE SECTION AND ADDITIONAL NOTES, SEE SHEET 31/51 .
2. FOR THE DECK PLAN, SEE SHEET 39/51.

### STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:

   SBR-1-20

### ANCHOR BOLT:

1. ANCHOR BOLT SIZE AND LOCATIONS (BOLT CIRCLE DIAMETER) TO BE DETERMINED BY THE MANUFACTURER. BASE PLATES, ANCHOR BOLTS, AND JUNCTION BOXES SHALL BE GALVANIZED ACCORDING TO 711.02 AND SHALL BE INCLUDED WITH ITEM 625 FOR PAYMENT. PLACE VERTICAL BARS AROUND JUNCTION BOX AND FIELD CUT HORIZONTAL BARS IF NECESSARY.

### CONCRETE WORK:

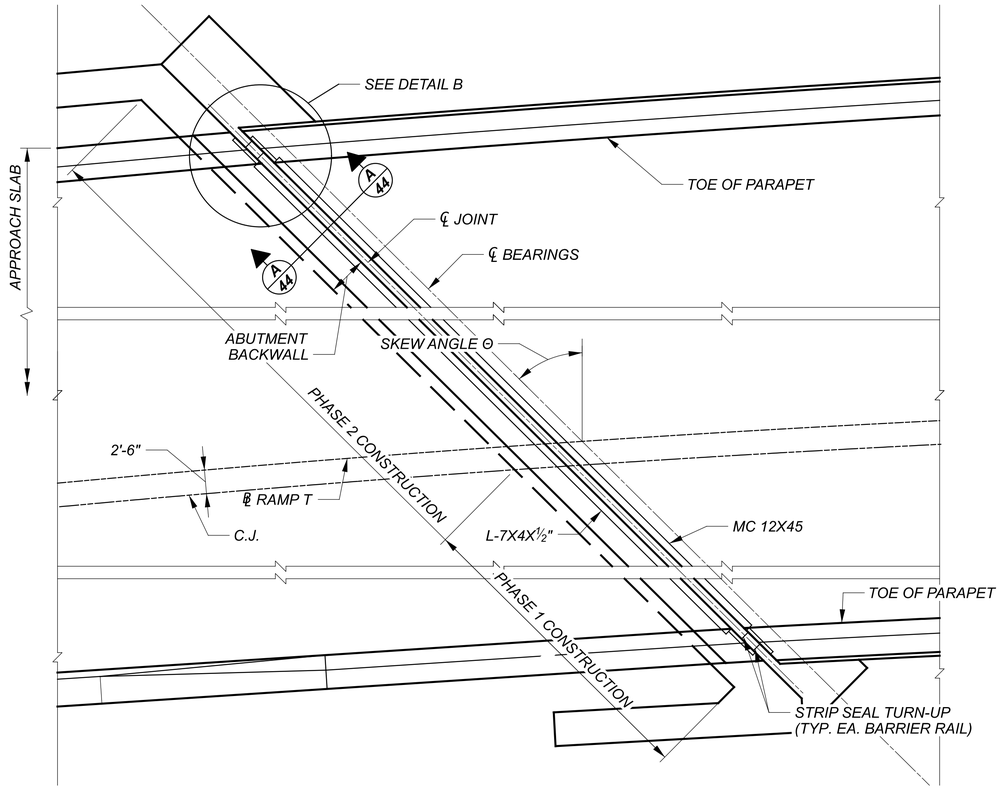
1. SEE THE STRUCTURE GENERAL NOTES FOR ADDITIONAL CONCRETE REQUIREMENTS.

BARRIER DETAILS
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258
DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135
DESIGNER MKM | CHECKER JMR
REVIEWER SK 09/17/25
PROJECT ID 114536
SUBSET 43 | TOTAL 51
SHEET P.136 | TOTAL 167

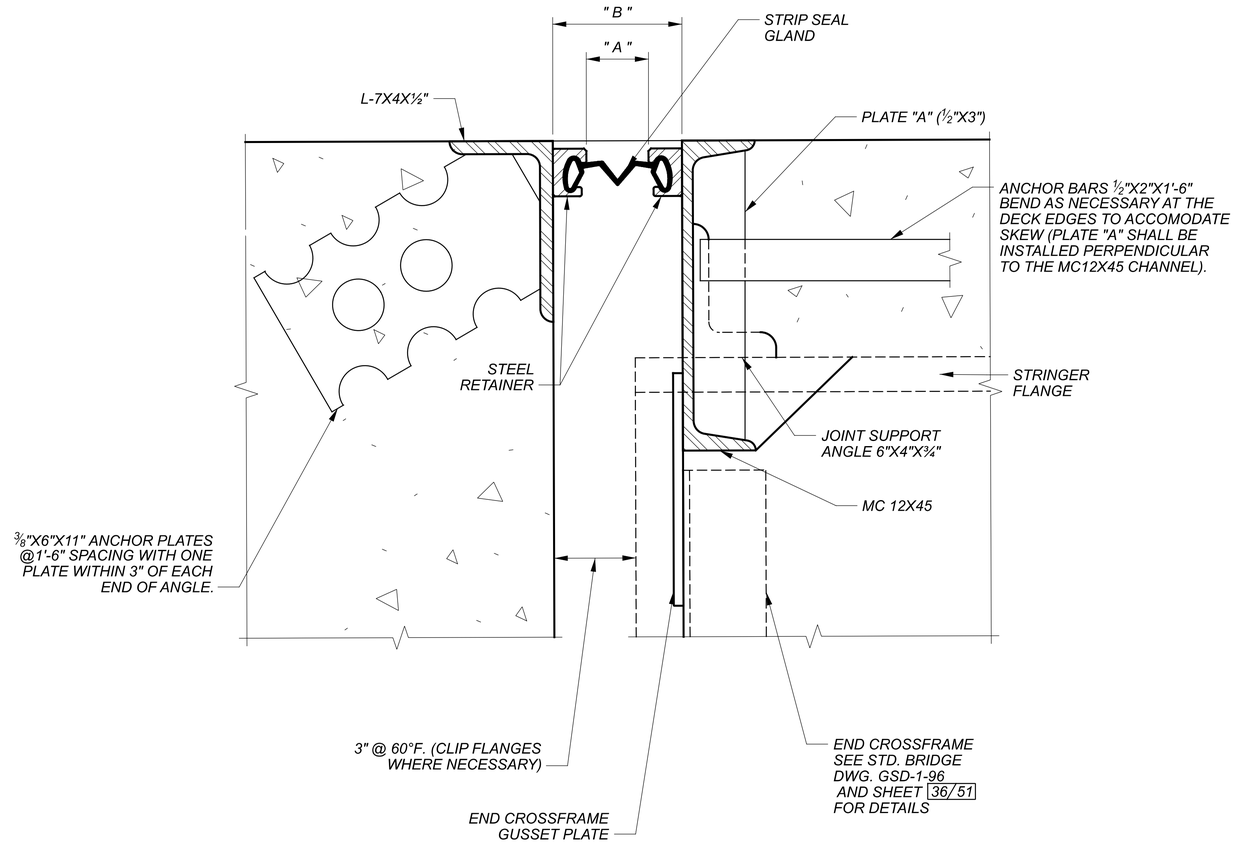
CUY-71-10.07 SW

MODEL: Barrier Details PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:15:11 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SA002.dgn

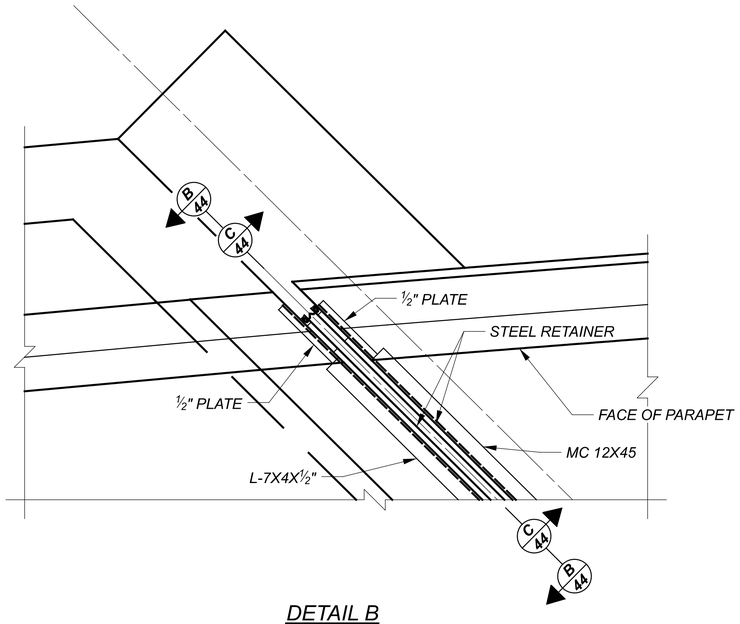



## PART PLAN AT ABUTMENT

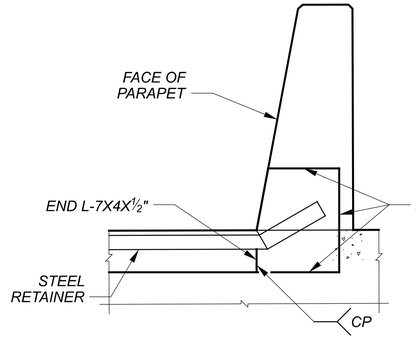
REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR



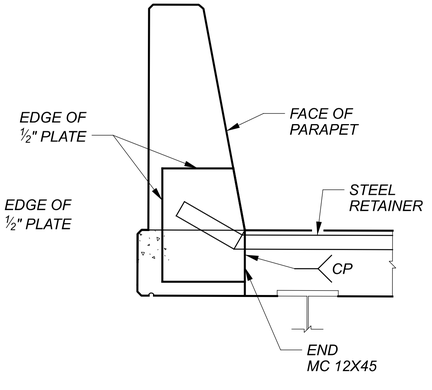

## SECTION A-A




## DETAIL B




## SECTION B-B




## SECTION C-C

NOTES:

1. REFER TO STANDARD CONSTRUCTION DRAWINGS EXJ-4-87 AND GSD-1-19 FOR DETAILS NOT SHOWN.
2. DISTANCE "B" EQUALS DIMENSION "A" PLUS THE WIDTH OF TWO RETAINERS.
3. ELASTOMERIC STRIP SEAL SHALL BE ONE PIECE ACROSS THE ENTIRE WIDTH OF THE STRUCTURE. NO SPLICES ARACCEPTABLE. THE STRIP SEAL SHALL BE INSTALLED DURING PHASE 1 CONSTRUCTION. THE REMAINING PORTION OF THE STRIP SEAL SHALL BE COILED UP AND PROTECTED FROM DAMAGE IN PHASE 2 AREA WHEN PHASE 1 IS OPEN TO TRAFFIC.
4. THE MINIMUM TOTAL RANGE OF MOVEMENT IS 1⅜" FOR THE REAR ABUTMENT AND 1½" FOR THE FORWARD ABUTMENT, MEASURED PERPENDICULAR TO THE JOINT.

# EXPANSION JOINT DETAILS
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| MKM | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 44 | 51 |

| SHEET | TOTAL |
|---|---|
| P.137 | 167 |

CUY-71-10.07 SW

MODEL: Expansion Joint Details PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:15:21 PM USER: SAT89729
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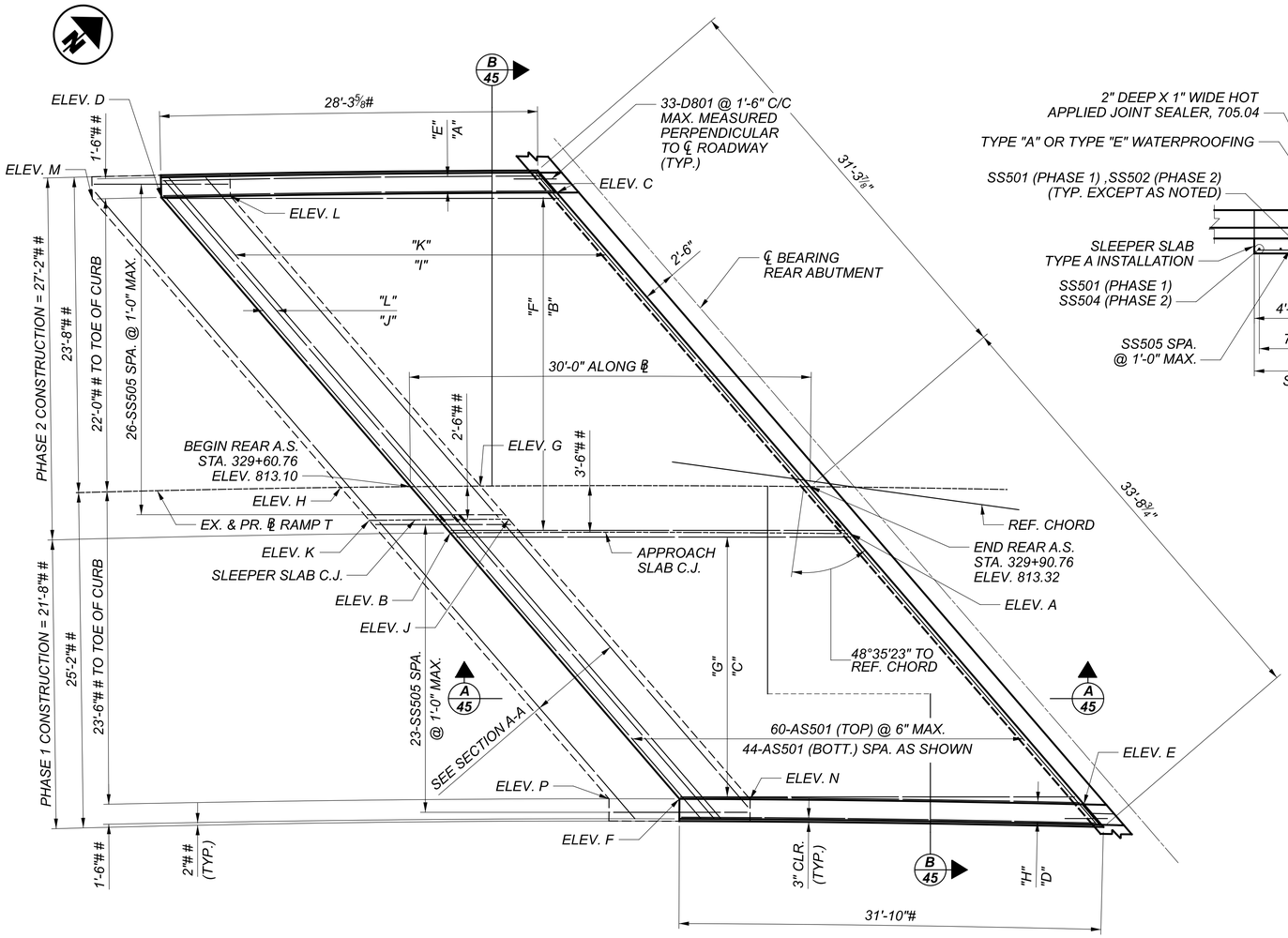
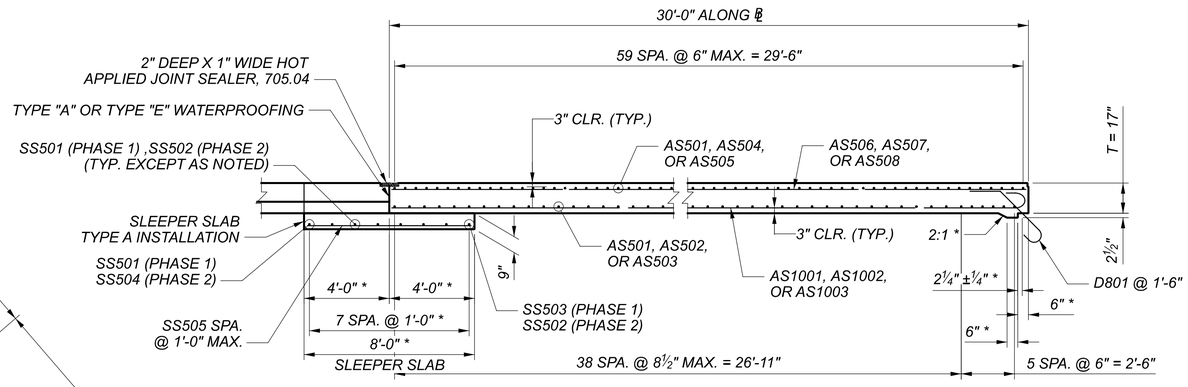



## REAR APPROACH SLAB PLAN




## SECTION A-A

LEGEND:

# - DIMENSION MEASURED ALONG THE LEFT OR RIGHT EDGE OF APPROACH SLAB

## - DIMENSION MEASURED RADIALLY

* - NORMAL TO JOINT

| ELEVATIONS | |
|---|---|
| MARK | ELEV. |
| T/ APPROACH SLAB | |
| ELEV. A | 813.13 |
| ELEV. B | 812.92 |
| ELEV. C | 814.51 |
| ELEV. D | 814.25 |
| ELEV. E | 812.01 |
| ELEV. F | 811.85 |
| T/ SLEEPER SLAB | |
| ELEV. G | 811.73 |
| ELEV. H | 811.63 |
| ELEV. J | 811.59 |
| ELEV. K | 811.50 |
| ELEV. L | 812.87 |
| ELEV. M | 812.77 |
| ELEV. N | 810.38 |
| ELEV. P | 810.46 |

NOTES:

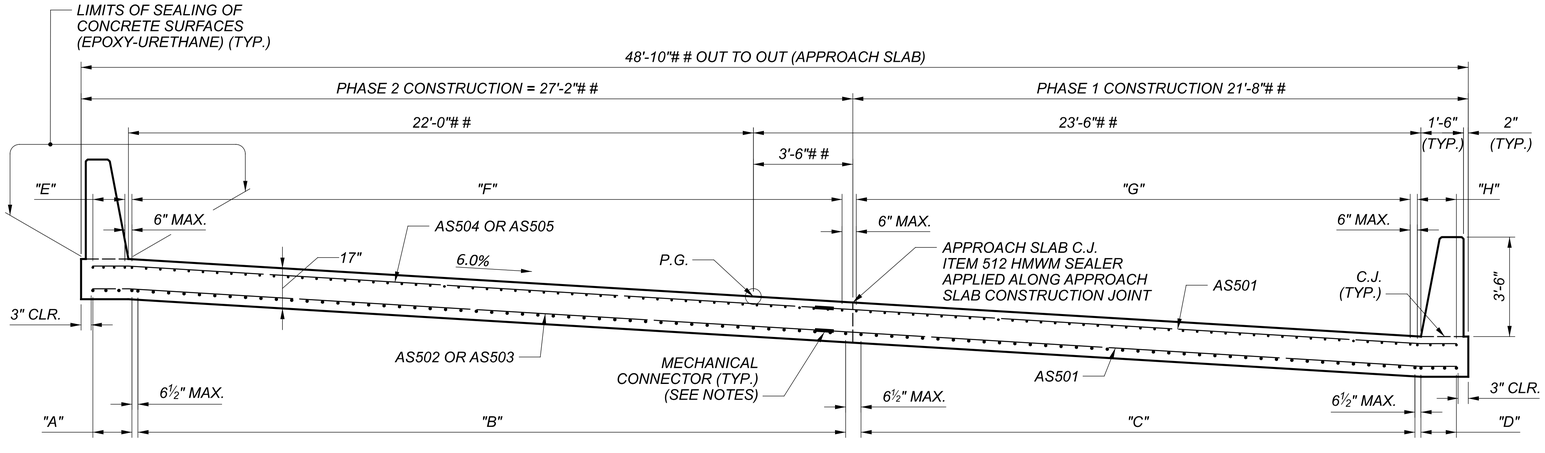
1. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL COUPLER ATTACHMENT.
2. SEE STRUCTURE NOTES FOR REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPMENT LENGTHS.
3. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

SHEET REFERENCES:

1. SEE SHEET 47/51 FOR THE BARRIER ELEVATIONS AND DETAILS.

STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:
   - AS-1-15
   - AS-2-15
   - SBR-1-20




## SECTION B-B

(OTHER REINFORCEMENT NOT SHOWN FOR CLARITY)

| LEGEND | BAR MARK | LOCATION | NO. OF SETS | SPACING |
|---|---|---|---|---|
| "A" | AS1003 (SERIES) | BOTTOM | 4 | 6½" MAX. |
| "B" | AS1001 | BOTTOM | 47 | 6½" MAX. |
| "C" | AS1001 | BOTTOM | 37 | 6½" MAX. |
| "D" | AS1002 (SERIES) | BOTTOM | 4 | 6½" MAX. |
| "E" | AS508 (SERIES) | TOP | 4 | 6" MAX. |
| "F" | AS506 | TOP | 51 | 6" MAX. |
| "G" | AS506 | TOP | 40 | 6" MAX. |
| "H" | AS507 (SERIES) | TOP | 4 | 6" MAX. |
| "I" | AS502 (SERIES) | BOTTOM | 42 | AS SHOWN |
| "J" | AS503 (SERIES) | BOTTOM | 2 | AS SHOWN |
| "K" | AS504 (SERIES) | TOP | 57 | 6" MAX. |
| "L" | AS505 (SERIES) | TOP | 3 | 6" MAX. |

# REAR APPROACH SLAB PLAN & SECTIONS
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| JTW | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 45 | 51 |

| SHEET | TOTAL |
|---|---|
| P.138 | 167 |

CUY-71-10.07 SW

MODEL: Rear Abutment Approach Slab Plan PAPERSIZE: 34x22 (in.) DATE: 1/6/2026 TIME: 11:03:33 AM USER: KC112955
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\Structures\SFN_1814257\Sheets\114536_SFN1814257_SM001.dgn

NOTES:

1. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
2. SEE STRUCTURE NOTES FOR REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPMENT LENGTHS.
3. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

SHEET REFERENCES:

1. SEE SHEET 47/51 FOR THE BARRIER ELEVATIONS AND DETAILS.

STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:
   - AS-1-15
   - AS-2-15
   - SBR-1-20

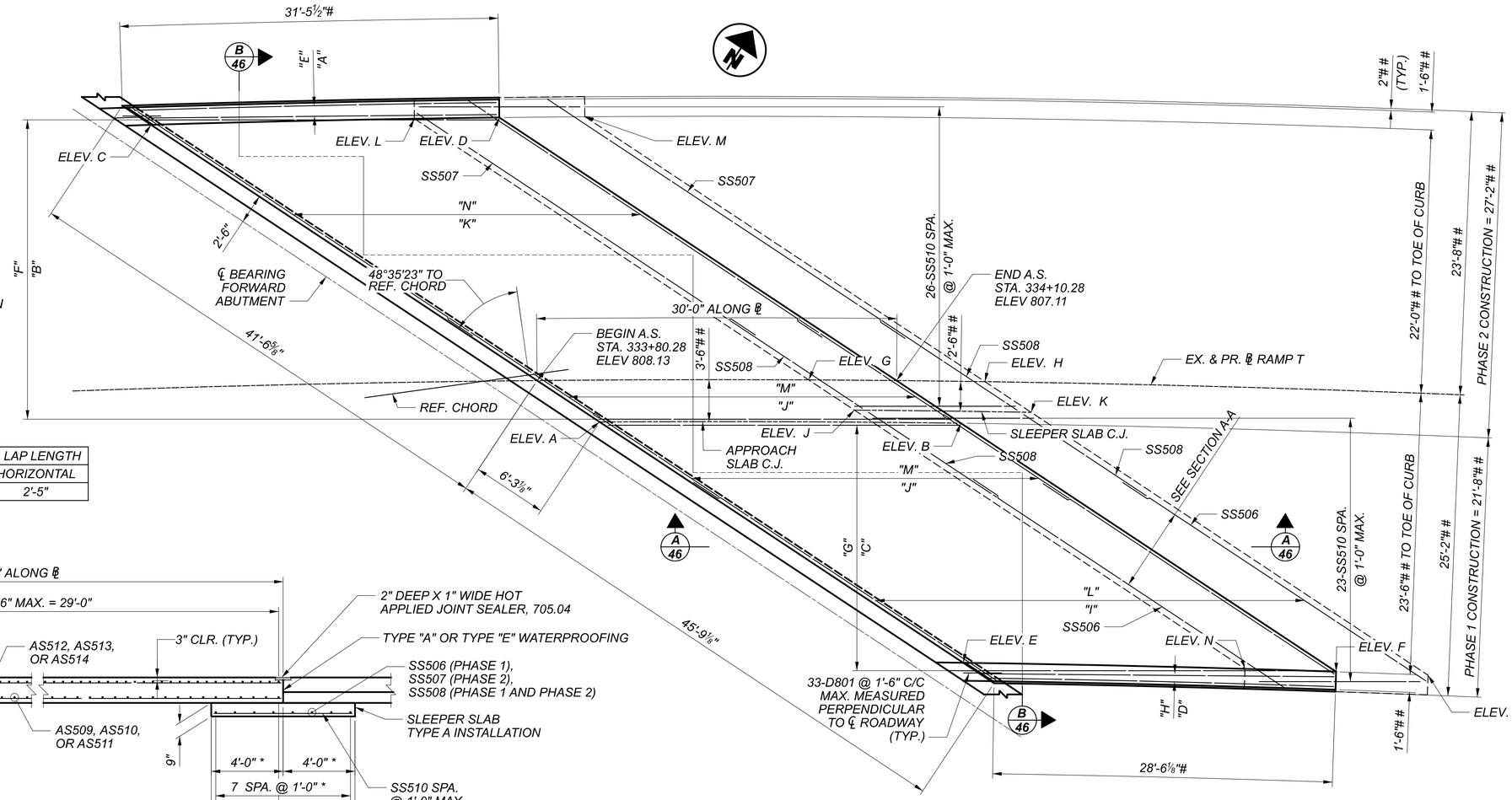
LEGEND:

# - DIMENSION MEASURED ALONG THE LEFT OR RIGHT EDGE OF APPROACH SLAB

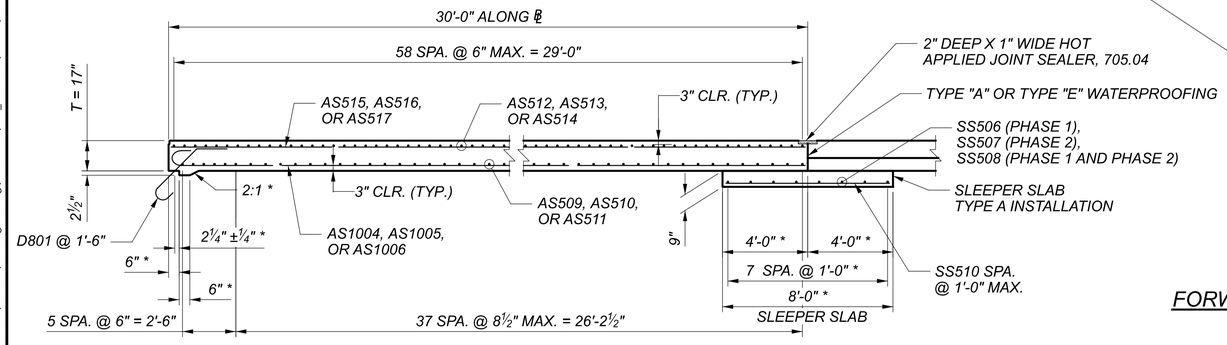
## - DIMENSION MEASURED RADIALLY

* - NORMAL TO JOINT

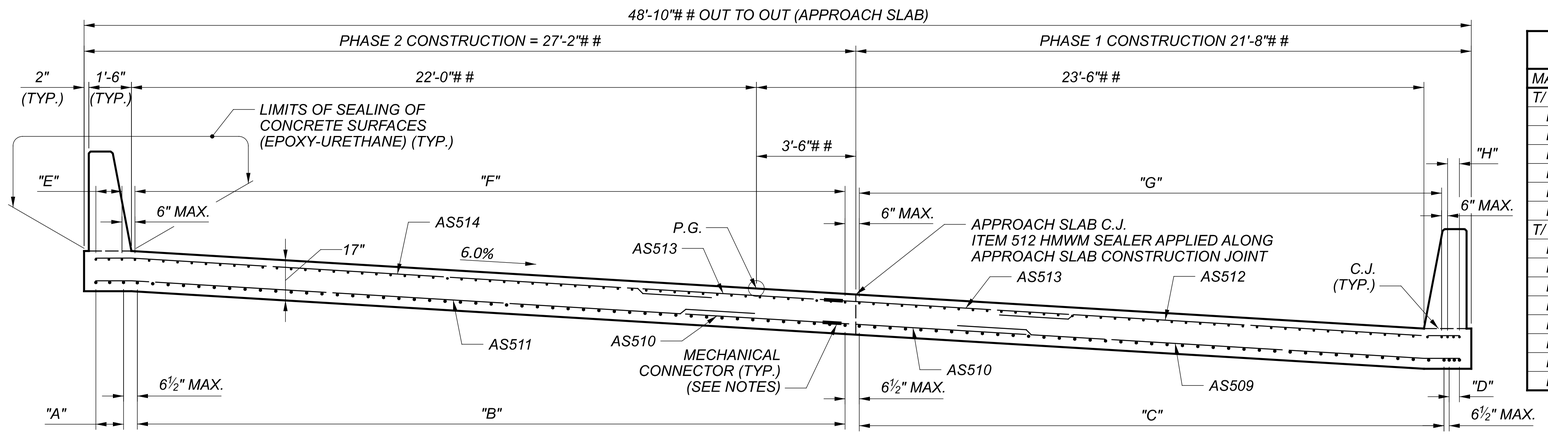
| REQ'D LAP LENGTH | |
|---|---|
| | HORIZONTAL |
| #5 | 2'-5" |




FORWARD APPROACH SLAB PLAN




SECTION A-A




SECTION B-B

(OTHER REINFORCEMENT NOT SHOWN FOR CLARITY)

| ELEVATIONS | |
|---|---|
| MARK | ELEV. |
| T/ APPROACH SLAB | |
| ELEV. A | 807.75 |
| ELEV. B | 806.71 |
| ELEV. C | 810.42 |
| ELEV. D | 809.54 |
| ELEV. E | 805.50 |
| ELEV. F | 804.38 |
| T/ SLEEPER SLAB | |
| ELEV. G | 805.95 |
| ELEV. H | 805.43 |
| ELEV. J | 805.67 |
| ELEV. K | 805.14 |
| ELEV. L | 808.34 |
| ELEV. M | 807.89 |
| ELEV. N | 803.23 |
| ELEV. P | 802.69 |

| LEGEND | BAR MARK | LOCATION | NO. OF SETS | SPACING |
|---|---|---|---|---|
| "A" | AS1006 (SERIES) | BOTTOM | 3 | 6½" MAX. |
| "B" | AS1004 | BOTTOM | 47 | 6½" MAX. |
| "C" | AS1004 | BOTTOM | 39 | 6½" MAX. |
| "D" | AS1005 (SERIES) | BOTTOM | 3 | 6½" MAX. |
| "E" | AS515 (SERIES) | TOP | 3 | 6" MAX. |
| "F" | AS516 | TOP | 51 | 6" MAX. |
| "G" | AS516 | TOP | 42 | 6" MAX. |
| "H" | AS517 (SERIES) | TOP | 3 | 6" MAX. |
| "I" | AS509 | BOTTOM | 43 | AS SHOWN |
| "J" | AS510 | BOTTOM | 43 | AS SHOWN |
| "K" | AS511 | BOTTOM | 43 | AS SHOWN |
| "L" | AS512 | TOP | 58 | 6" MAX. |
| "M" | AS513 | TOP | 59 | 6" MAX. |
| "N" | AS514 | TOP | 59 | 6" MAX. |

# FORWARD APPROACH SLAB PLAN & SECTIONS
## BRIDGE NO. CUY-71-10.07 SW
## IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MM MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| JTW | JMR |

REVIEWER
SK 09/17/25

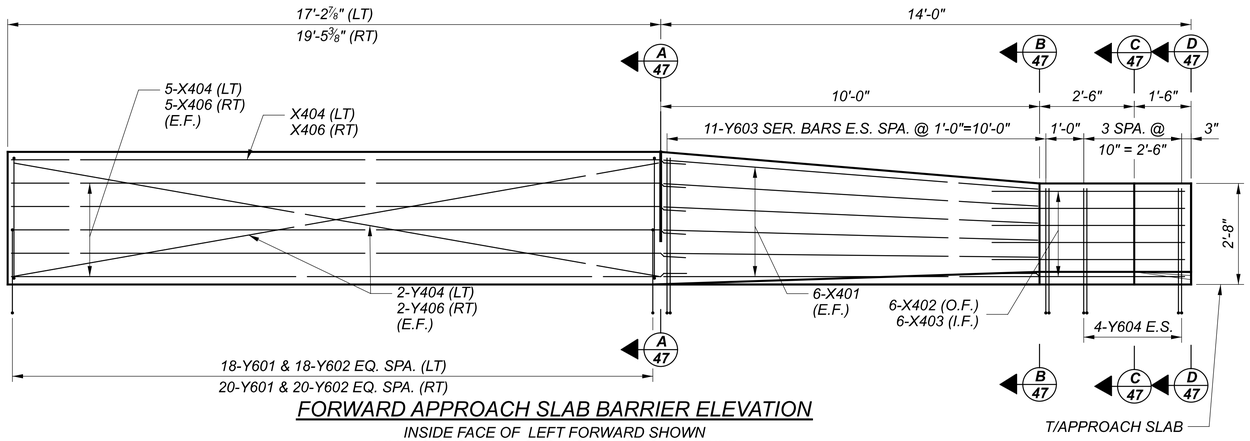
PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 46 | 51 |

| SHEET | TOTAL |
|---|---|
| P.139 | 167 |

CUY-71-10.07 SW

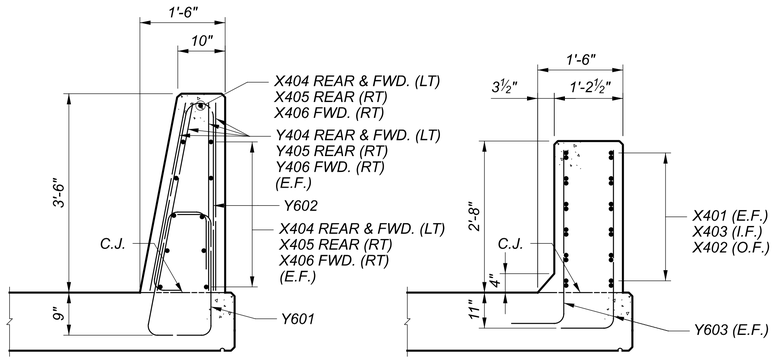
MODEL: Forward Abutment Approach Slab Plan PAPERSIZE: 34x22 (in.) DATE: 1/6/2026 TIME: 11:12:04 AM USER: KC112955
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257_SM002.dgn




## FORWARD APPROACH SLAB BARRIER ELEVATION

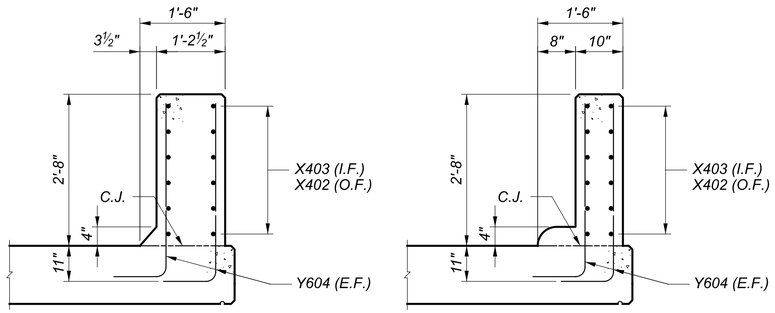
*INSIDE FACE OF LEFT FORWARD SHOWN*
*DIMENSIONS ARE ALONG INSIDE TOE OF BARRIER*
*UNLESS OTHERWISE NOTED*

UPSTATION →



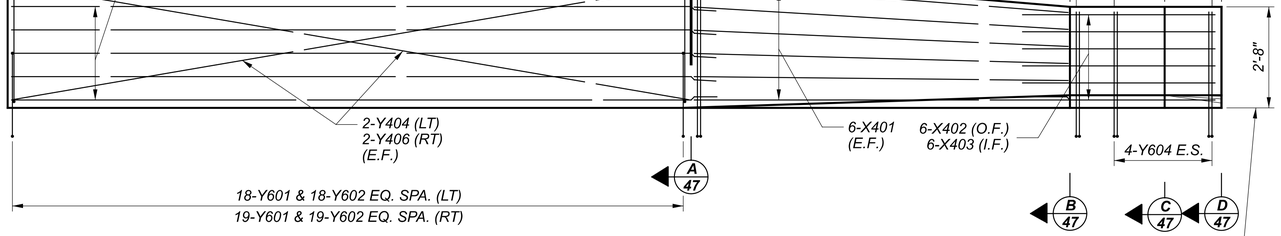

## SECTION A-A

## SECTION B-B




## SECTION C-C

## SECTION D-D




## REAR APPROACH SLAB BARRIER ELEVATION

*INSIDE FACE OF RIGHT REAR SHOWN*
*OTHER CORNERS OPPOSITE HAND*
*DIMENSIONS ARE ALONG INSIDE TOE OF BARRIER*
*UNLESS OTHERWISE NOTED*

UPSTATION ←

NOTES:

1. MINIMUM LAP FOR GFRP BARS IS 3'-5" UNLESS NOTED.
2. MEASUREMENTS ARE TAKEN ALONG INSIDE TOE OF BARRIER.
3. FOR DETAILS AND PAYMENT PROVISIONS FOR BRIDGE TERMINAL ASSEMBLY, SEE ROADWAY PLANS.

CONCRETE WORK:

1. SEE THE STRUCTURE GENERAL NOTES FOR ADDITIONAL CONCRETE REQUIREMENTS.

STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:

   SBR-1-20

# APPROACH SLAB BARRIER DETAILS
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| MKM | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 47 | 51 |

| SHEET | TOTAL |
|---|---|
| P.140 | 167 |

CUY-71-10.07 SW

MODEL: Approach Slab Barrier Details PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:15:49 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SM004.dgn

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| REAR ABUTMENT | | | | | | | | | | | | | |
| RA501 | 4 | | 4 | 12'- 11" | 54 | 14 | 2'- 0" | 3'- 8" | 0'- 9" | 0'- 8" | 6'- 5" | | |
| *RA502 | 6 | | 6 | 31'- 8" | 198 | STR | | | | | | | |
| *RA503 | | 6 | 6 | 36'- 4" | 227 | STR | | | | | | | |
| RA504 | | 7 | 7 | 13'- 7" | 99 | 2 | 7'- 5" | 4'- 5" | 2'- 0" | | | | |
| *RA506 | 2 | | 2 | 12'- 5" | 26 | STR | | | | | | | |
| *RA507 | | 2 | 2 | 36'- 4" | 76 | STR | | | | | | | |
| RA508 | | 5 | 5 | 14'- 5" | 75 | 1 | 1'- 0" | 13'- 6" | | | | | |
| RA509 | 5 | | 5 | 14'- 5" | 75 | 1 | 1'- 0" | 13'- 6" | | | | | |
| | 1 | | 1 | 4'- 7" | - | | 1'- 0" | 3'- 8" | | | | | |
| *RA510 | S.O. | | S.O. | T O | 34 | 1 | T O | T O | | | | | 1'-0" |
| | 5 | | 5 | 8'- 7" | - | | 1'- 0" | 7'- 8" | | | | | |
| *RA511 | | 5 | 5 | 9'- 5" | 49 | STR | | | | | | | |
| RA512 | | 5 | 5 | 33'- 11" | 177 | 1 | 1'- 0" | 33'- 0" | | | | | |
| *RA513 | 8 | | 8 | 33'- 2" | 277 | STR | | | | | | | |
| *RA514 | | 8 | 8 | 37'- 8" | 314 | STR | | | | | | | |
| *RA515 | 4 | | 4 | 33'- 2" | 138 | STR | | | | | | | |
| *RA516 | | 4 | 4 | 37'- 8" | 157 | STR | | | | | | | |
| RA519 | | 5 | 5 | 12'- 5" | 65 | 1 | 1'- 0" | 11'- 6" | | | | | |
| RA521 | | 14 | 14 | 22'- 0" | 321 | 10 | 1'- 0" | 1'- 1" | 20'- 8" | 0'- 0" | | | |
| RA522 | | 12 | 12 | 22'- 0" | 275 | 10 | 1'- 0" | 1'- 1" | 20'- 8" | 0'- 0" | | | |
| RA523 | 8 | | 8 | 10'- 8" | 89 | STR | | | | | | | |
| RA524 | 12 | | 12 | 10'- 8" | 134 | STR | | | | | | | |
| RA526 | 10 | | 10 | 3'- 0" | 31 | STR | | | | | | | |
| RA527 | | 2 | 2 | 33'- 0" | 69 | STR | | | | | | | |
| RA528 | 6 | | 6 | 5'- 1" | 32 | 10 | 1'- 6" | 1'- 4" | 1'- 3" | 2'- 0" | | | |
| | | | | | | | | | | | | | |
| RA601 | 34 | 39 | 73 | 14'- 9" | 1,617 | 2 | 6'- 1" | 6'- 5" | 2'- 7" | | | | |
| RA602 | 34 | 39 | 73 | 13'- 7" | 1,489 | 2 | 2'- 7" | 5'- 5" | 5'- 11" | | | | |
| RA603 | 34 | 39 | 73 | 9'- 3" | 1,014 | 2 | 1'- 1" | 7'- 5" | 1'- 1" | | | | |
| RA604 | 34 | | 34 | 10'- 7" | 540 | 2 | 3'- 3" | 4'- 5" | 3'- 3" | | | | |
| RA605 | 12 | | 12 | 7'- 6" | 135 | 2 | 1'- 1" | 5'- 8" | 1'- 1" | | | | |
| RA606 | | 14 | 14 | 7'- 4" | 154 | 2 | 1'- 1" | 5'- 8" | 1'- 1" | | | | |
| RA607 | | 39 | 39 | 12'- 7" | 737 | 2 | 4'- 3" | 4'- 5" | 4'- 3" | | | | |
| RA608 | 34 | 39 | 73 | 13'- 9" | 1,508 | 2 | 6'- 4" | 1'- 5" | 6'- 4" | | | | |
| RA609 | 34 | 38 | 72 | 6'- 1" | 658 | 2 | 2'- 6" | 1'- 5" | 2'- 6" | | | | |
| RA610 | 34 | 38 | 72 | 6'- 1" | 658 | 2 | 2'- 9" | 0'- 11" | 2'- 9" | | | | |
| | 1 | | 1 | 7'- 1" | - | | 1'- 2" | 6'- 1" | | | | | |
| *RA611 | S.O. | | S.O. | T O | 37 | 1 | T O | T O | | | | | 1'-0 ½" |
| | 3 | | 3 | 9'- 2" | - | | 3'- 3" | 6'- 1" | | | | | |
| | | 1 | 1 | 5'- 7" | - | | 3'- 2" | 2'- 7" | | | | | |
| *RA612 | | S.O. | S.O. | T O | 30 | 1 | T O | T O | | | | | 1'-0 ½" |
| | | 3 | 3 | 7'- 8" | - | | 5'- 3" | 2'- 7" | | | | | |
| | 1 | | 1 | 4'- 6" | - | | 2'- 6" | 2'- 2" | | | | | |
| *RA613 | S.O. | | S.O. | T O | 25 | 1 | T O | T O | | | | | 1'-0 ½" |
| | 3 | | 3 | 6'- 7" | - | | 2'- 6" | 4'- 3" | | | | | |
| | | 1 | 1 | 7'- 3" | - | | 1'- 6" | 5'- 11" | | | | | |
| *RA614 | | S.O. | S.O. | T O | 37 | 1 | T O | T O | | | | | 1'-0 ½" |
| | | 3 | 3 | 9'- 0" | - | | 3'- 3" | 5'- 11" | | | | | |
| | 1 | | 1 | 3'- 0" | - | | 1'- 1" | 2'- 1" | | | | | |
| *RA615 | S.O. | | S.O. | T O | 18 | 1 | T O | T O | | | | | 1'-0 ½" |
| | 3 | | 3 | 5'- 1" | - | | 1'- 1" | 4'- 2" | | | | | |
| | | 1 | 1 | 4'- 2" | - | | 3'- 3" | 1'- 1" | | | | | |
| *RA616 | | S.O. | S.O. | T O | 23 | 1 | T O | T O | | | | | 1'-0" |
| | | 3 | 3 | 6'- 3" | - | | 5'- 4" | 1'- 1" | | | | | |
| | 1 | | 1 | 4'- 1" | - | | 1'- 0" | 3'- 3" | | | | | |
| *RA617 | S.O. | | S.O. | T O | 23 | 1 | T O | T O | | | | | 1'-0 ½" |
| | 3 | | 3 | 6'- 2" | - | | 3'- 1" | 3'- 3" | | | | | |
| | | 1 | 1 | 4'- 5" | - | | 1'- 4" | 3'- 3" | | | | | |
| *RA618 | | S.O. | S.O. | T O | 27 | 1 | T O | T O | | | | | 1'-0" |
| | | 3 | 3 | 7'- 8" | - | | 3'- 5" | 3'- 3" | | | | | |
| RA621 | | 14 | 14 | 19'- 8" | 414 | 2 | 12'- 9" | 4'- 8" | 2'- 7" | | | | |
| RA622 | | 14 | 14 | 17'- 1" | 359 | 2 | 2'- 6" | 2'- 2" | 12'- 9" | | | | |
| RA623 | | 8 | 8 | 10'- 6" | 126 | 1 | 1'- 2" | 9'- 6" | | | | | |
| RA624 | | 8 | 8 | 10'- 6" | 126 | 1 | 1'- 2" | 9'- 6" | | | | | |
| RA625 | | 14 | 14 | 10'- 10" | 228 | 2 | 5'- 0" | 1'- 2" | 5'- 0" | | | | |
| RA626 | | 8 | 8 | 10'- 10" | 130 | 2 | 4'- 11" | 1'- 4" | 4'- 11" | | | | |
| RA627 | 12 | | 12 | 17'- 3" | 311 | 2 | 10'- 4" | 4'- 8" | 2'- 7" | | | | |
| RA628 | 12 | | 12 | 14'- 8" | 264 | 2 | 2'- 6" | 2'- 2" | 10'- 4" | | | | |
| RA629 | 12 | | 12 | 10'- 2" | 183 | 2 | 4'- 8" | 1'- 2" | 4'- 8" | | | | |

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| REAR ABUTMENT | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 2 | | 2 | 30'- 4" | - | | | | | | | | |
| *RA801 | S.O. | | S.O. | T O | 1,255 | STR | | | | | | | 1'-1" |
| | 7 | | 7 | 36'- 10" | - | | | | | | | | |
| | | 2 | 2 | 28'- 7" | - | | | | | | | | |
| *RA802 | | S.O. | S.O. | T O | 1,190 | STR | | | | | | | 1'-1 ½" |
| | | 7 | 7 | 35'- 1" | - | | | | | | | | |
| RA803 | 5 | | 5 | 23'- 4" | 312 | STR | | | | | | | |
| RA804 | 5 | | 5 | 19'- 6" | 260 | STR | | | | | | | |
| | | 1 | 1 | 29'- 9" | - | | | | | | | | |
| RA805 | | S.O. | S.O. | T O | 423 | STR | | | | | | | 11 3/4" |
| | | 5 | 5 | 33'- 8" | - | | | | | | | | |
| RA806 | 14 | | 14 | 9'- 8" | 361 | STR | | | | | | | |
| RA807 | 2 | | 2 | 3'- 9" | 20 | 10 | 1'- 6" | 1'- 4" | 2'- 0" | 0'- 0" | | | |
| RA808 | 2 | | 2 | 4'- 0" | 21 | STR | | | | | | | |
| RA809 | | 14 | 14 | 15'- 7" | 583 | STR | | | | | | | |
| RA810 | | 2 | 2 | 3'- 9" | 20 | 10 | 1'- 6" | 1'- 4" | 2'- 0" | 0'- 0" | | | |
| RA811 | | 2 | 2 | 3'- 9" | 20 | 10 | 1'- 6" | 1'- 4" | 2'- 0" | 0'- 0" | | | |
| *RA812 | | 19 | 19 | 12'- 0" | 609 | STR | | | | | | | |
| | | | . | | | | | | | | | | |
| D801 | 15 | 18 | 33 | 6'- 1" | 536 | 18 | 3'- 10" | 1'- 0" | 1'- 0" | | | | |
| | | | . | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | 19,473 | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | | |

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| FORWARD ABUTMENT | | | | | | | | | | | | | |
| FA501 | | 9 | 9 | 14'- 4" | 135 | 2 | 8'- 4" | 4'- 3" | 2'- 0" | | | | |
| FA502 | | 10 | 10 | 30'- 0" | 313 | STR | | | | | | | |
| FA503 | 6 | | 6 | 32'- 0" | 200 | STR | | | | | | | |
| FA504 | 4 | | 4 | 14'- 4" | 60 | 2 | 2'- 0" | 4'- 3" | 8'- 4" | | | | |
| *FA507 | 8 | | 8 | 21'- 8" | 181 | STR | | | | | | | |
| FA509 | 5 | | 5 | 15'- 8" | 82 | 1 | 1'- 0" | 14'- 9" | | | | | |
| *FA510 | | 5 | 5 | 15'- 0" | 78 | STR | | | | | | | |
| | 1 | | 1 | 2'- 2" | - | | 1'- 0" | 1'- 3" | | | | | |
| *FA511 | S.O. | | S.O. | T O | 28 | 1 | T O | T O | | | | | 1'-6 ¾" |
| | 5 | | 5 | 8'- 5" | - | | 1'- 0" | 7'- 6" | | | | | |
| FA512 | | 5 | 5 | 39'- 3" | 205 | 1 | 1'- 0" | 38'- 4" | | | | | |
| FA513 | | 5 | 5 | 24'- 10" | 130 | 1 | 1'- 0" | 23'- 11" | | | | | |
| FA514 | | 5 | 5 | 10'- 8" | 56 | 1 | 1'- 0" | 9'- 9" | | | | | |
| FA515 | | 12 | 12 | 40'- 0" | 501 | STR | | | | | | | |
| FA516 | 12 | | 12 | 39'- 6" | 494 | STR | | | | | | | |
| *FA517 | | 12 | 12 | 15'- 0" | 188 | STR | | | | | | | |
| *FA518 | 12 | | 12 | 10'- 0" | 125 | STR | | | | | | | |
| FA521 | | 16 | 16 | 21'- 8" | 362 | STR | | | | | | | |
| FA522 | | 12 | 12 | 21'- 8" | 271 | STR | | | | | | | |
| FA523 | 10 | | 10 | 23'- 6" | 245 | 10 | 1'- 0" | 0'- 6" | 22'- 6" | 0'- 0" | | | |
| FA524 | 12 | | 12 | 23'- 6" | 294 | 10 | 1'- 0" | 0'- 6" | 22'- 6" | 0'- 0" | | | |
| FA527 | | 2 | 2 | 40'- 0" | 83 | STR | | | | | | | |
| FA528 | 2 | | 2 | 10'- 8" | 22 | STR | | | | | | | |
| FA529 | | 6 | 6 | 5'- 6" | 34 | 10 | 1'- 2" | 1'- 8" | 1'- 7" | 2'- 0" | | | |

NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BARS SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED EXCEPT WHERE NOTED.
3. MECHANICAL SPLICE CONNECTOR SHALL BE INCIDENTAL TO THE COST OF ITEM 509, EPOXY COATED REINFORCING STEEL.

* DENOTES BAR REQUIRING MECHANICAL CONNECTOR. BAR DIMENSIONS GIVEN ARE TO THE CENTER OF MECHANICAL CONNECTOR.

# REINFORCING SCHEDULE (1 OF 4)
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER: SK 09/17/25

PROJECT ID: 114536

| SUBSET | TOTAL |
|---|---|
| 48 | 51 |

| SHEET | TOTAL |
|---|---|
| P.141 | 167 |

CUY-71-10.07 SW

MODEL: Reinforcing Schedule 1 of 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:15:58 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SL001.dgn

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| FORWARD ABUTMENT (CONT'D) | | | | | | | | | | | | | |
| *FA530 | | 10 | 10 | 24'- 10" | 259 | STR | | | | | | | |
| | | | . | | . | | | | | | | | |
| FA601 | 45 | | 45 | 14'- 9" | 997 | 2 | 2'- 7" | 6'- 5" | 6'- 1" | | | | |
| FA602 | 45 | | 45 | 13'- 9" | 929 | 2 | 6'- 1" | 5'- 5" | 2'- 7" | | | | |
| FA603 | 45 | 54 | 99 | 9'- 3" | 1,375 | 2 | 1'- 1" | 7'- 5" | 1'- 1" | | | | |
| FA604 | 45 | 58 | 103 | 10'- 7" | 1,637 | 2 | 3'- 3" | 4'- 5" | 3'- 3" | | | | |
| FA605 | | 11 | 11 | 10'- 11" | 180 | 1 | 1'- 1" | 10'- 0" | | | | | |
| FA606 | 14 | | 14 | 7'- 6" | 158 | 2 | 1'- 1" | 5'- 8" | 1'- 1" | | | | |
| FA608 | 45 | 62 | 107 | 13'- 9" | 2,210 | 2 | 6'- 4" | 1'- 5" | 6'- 4" | | | | |
| FA609 | 48 | 48 | 96 | 6'- 1" | 877 | 2 | 2'- 6" | 1'- 5" | 2'- 6" | | | | |
| FA610 | 48 | 48 | 96 | 6'- 1" | 877 | 2 | 2'- 9" | 0'- 11" | 2'- 9" | | | | |
| | 1 | | 1 | 4'- 2" | - | | 2'- 7" | 1'- 9" | | | | | |
| *FA611 | S.O. | | S.O. | T O | 64 | 1 | T O | T O | | | | | 8" |
| | 7 | | 7 | 8'- 0" | - | | 2'- 7" | 5'- 7" | | | | | |
| | | 1 | 1 | 8'- 6" | - | | 0'- 10" | 7'- 10" | | | | | |
| *FA612 | | S.O. | S.O. | T O | 110 | 1 | T O | T O | | | | | 8" |
| | | 7 | 7 | 12'- 4" | - | | 4'- 8" | 7'- 10" | | | | | |
| | 1 | | 1 | 9'- 4" | - | | 7'- 10" | 1'- 8" | | | | | |
| *FA613 | S.O. | | S.O. | T O | 79 | 1 | T O | T O | | | | | 7 1/2" |
| | 5 | | 5 | 11'- 10" | - | | 7'- 10" | 4'- 2" | | | | | |
| | | 1 | 1 | 3'- 8" | - | | 1'- 3" | 2'- 7" | | | | | |
| *FA614 | | S.O. | S.O. | T O | 37 | 1 | T O | T O | | | | | 7 1/2" |
| | | 5 | 5 | 6'- 2" | - | | 3'- 9" | 2'- 7" | | | | | |
| | 1 | | 1 | 2'- 7" | - | | 1'- 1" | 1'- 8" | | | | | |
| *FA615 | S.O. | | S.O. | T O | 58 | 1 | T O | T O | | | | | 8" |
| | 8 | | 8 | 7'- 1" | - | | 1'- 1" | 6'- 2" | | | | | |
| | | 1 | 1 | 2'- 2" | - | | 1'- 3" | 1'- 1" | | | | | |
| *FA616 | | S.O. | S.O. | T O | 53 | 1 | T O | T O | | | | | 8" |
| | | 8 | 8 | 6'- 8" | - | | 5'- 9" | 1'- 1" | | | | | |
| | 1 | | 1 | 4'- 9" | - | | 3'- 3" | 1'- 8" | | | | | |
| *FA617 | S.O. | | S.O. | T O | 35 | 1 | T O | T O | | | | | 8" |
| | 4 | | 4 | 6'- 9" | - | | 3'- 3" | 3'- 8" | | | | | |
| | | 1 | 1 | 3'- 10" | - | | 0'- 9" | 3'- 3" | | | | | |
| *FA618 | | S.O. | S.O. | T O | 29 | 1 | T O | T O | | | | | 8" |
| | | 4 | 4 | 5'- 10" | - | | 2'- 9" | 3'- 3" | | | | | |
| FA620 | | 14 | 14 | 3'- 0" | 63 | STR | | | | | | | |
| FA621 | | 11 | 11 | 23'- 9" | 392 | 1 | 15'- 4" | 8'- 7" | | | | | |
| FA622 | | 11 | 11 | 19'- 8" | 325 | 2 | 2'- 6" | 2'- 2" | 15'- 4" | | | | |
| FA623 | | 8 | 8 | 13'- 0" | 156 | 1 | 1'- 2" | 12'- 0" | | | | | |
| FA624 | | 8 | 8 | 13'- 1" | 157 | 1 | 1'- 2" | 12'- 1" | | | | | |
| FA625 | | 11 | 11 | 10'- 10" | 179 | 2 | 5'- 0" | 1'- 2" | 5'- 0" | | | | |
| FA626 | | 8 | 8 | 9'- 10" | 118 | 2 | 4'- 6" | 1'- 2" | 4'- 6" | | | | |
| FA627 | 14 | | 14 | 16'- 10" | 354 | 2 | 9'- 11" | 4'- 8" | 2'- 7" | | | | |
| FA628 | 14 | | 14 | 14'- 2" | 298 | 2 | 2'- 6" | 2'- 2" | 9'- 10" | | | | |
| FA629 | 14 | | 14 | 9'- 2" | 193 | 2 | 4'- 2" | 1'- 2" | 4'- 2" | | | | |
| FA630 | 8 | | 8 | 8'- 5" | 101 | 1 | 1'- 2" | 7'- 5" | | | | | |
| FA631 | 8 | | 8 | 8'- 6" | 102 | 1 | 1'- 2" | 7'- 6" | | | | | |
| FA632 | 8 | | 8 | 9'- 6" | 114 | 2 | 4'- 4" | 1'- 2" | 4'- 4" | | | | |
| FA633 | | 29 | 29 | 16'- 6" | 719 | 2 | 2'- 7" | 6'- 5" | 7'- 10" | | | | |
| FA634 | | 31 | 31 | 15'- 6" | 722 | 2 | 7'- 10" | 5'- 5" | 2'- 7" | | | | |
| FA635 | | 26 | 26 | 18'- 2" | 709 | 2 | 2'- 7" | 6'- 5" | 9'- 6" | | | | |
| FA636 | | 26 | 26 | 17'- 2" | 670 | 2 | 9'- 6" | 5'- 5" | 2'- 7" | | | | |
| | | | . | | . | | | | | | | | |
| | | 2 | 2 | 28'- 2" | - | | | | | | | | |
| FA801 | | S.O. | S.O. | T O | 1,258 | STR | | | | | | | 1'-10" |
| | | 7 | 7 | 39'- 2" | - | | | | | | | | |
| | 2 | | 2 | 27'- 10" | - | | | | | | | | |
| FA802 | S.O. | | S.O. | T O | 1,246 | STR | | | | | | | 1'-10" |
| | 7 | | 7 | 38'- 10" | - | | | | | | | | |
| *FA803 | 5 | | 5 | 33'- 8" | 449 | STR | | | | | | | |
| | | 1 | 1 | 30'- 9" | - | STR | | | | | | | |
| FA804 | | S.O. | S.O. | T O | 452 | STR | | | | | | | 1'-6 3/4" |
| | | 5 | 5 | 37'- 0" | - | STR | | | | | | | |
| FA805 | 5 | | 5 | 32'- 0" | 427 | STR | | | | | | | |
| FA806 | | 14 | 14 | 13'- 1" | 489 | STR | | | | | | | |
| FA807 | | 2 | 2 | 4'- 0" | 21 | 10 | 1'- 5" | 1'- 5" | 2'- 0" | 0'- 0" | | | |
| FA808 | | 2 | 2 | 4'- 0" | 21 | 10 | 1'- 6" | 1'- 4" | 2'- 0" | 0'- 0" | | | |
| FA809 | 14 | | 14 | 18'- 4" | 685 | STR | | | | | | | |
| FA810 | 2 | | 2 | 4'- 0" | 21 | 10 | 1'- 9" | 1'- 0" | 2'- 0" | 0'- 0" | | | |
| FA811 | 2 | | 2 | 4'- 0" | 21 | 10 | 1'- 0" | 1'- 9" | 2'- 0" | 0'- 0" | | | |
| *FA812 | 14 | 19 | 33 | 20'- 0" | 1,762 | STR | | | | | | | |
| | | | . | | . | | | | | | | | |
| D801 | 15 | 18 | 33 | 6'- 1" | 536 | 18 | 3'- 10" | 1'- 0" | 1'- 0" | | | | |
| | | | . | | . | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | 26,811 | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | | |

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| PIER 1 | | | | | | | | | | | | | |
| 1P501 | 30 | 30 | 60 | 9'- 9" | 610 | 51 | | | | 2'- 6" | | | |
| *1P502 | 8 | | 8 | 32'- 8" | 273 | STR | | | | | | | |
| 1P503 | 4 | | 4 | 13'- 6" | 56 | 1 | 0'- 10" | 12'- 9" | | | | | |
| 1P504 | 4 | | 4 | 15'- 4" | 64 | 1 | 0'- 10" | 14'- 7" | | | | | |
| 1P505 | 4 | | 4 | 15'- 1" | 63 | 1 | 0'- 10" | 14'- 4" | | | | | |
| *1P506 | 2 | | 2 | 15'- 4" | 32 | STR | | | | | | | |
| *1P507 | 2 | | 2 | 23'- 2" | 48 | STR | | | | | | | |
| *1P508 | | 12 | 12 | 31'- 0" | 388 | STR | | | | | | | |
| 1P509 | | 4 | 4 | 13'- 7" | 57 | 1 | 0'- 10" | 12'- 10" | | | | | |
| 1P510 | | 4 | 4 | 15'- 4" | 64 | 1 | 0'- 10" | 14'- 7" | | | | | |
| 1P511 | | 4 | 4 | 9'- 5" | 39 | 1 | 0'- 10" | 8'- 8" | | | | | |
| 1P512 | | 2 | 2 | 22'- 0" | 46 | STR | | | | | | | |
| 1P513 | 18 | | 18 | 7'- 9" | 145 | 2 | 2'- 8" | 2'- 8" | 2'- 8" | | | | |
| 1P514 | 24 | | 24 | 8'- 1" | 202 | 2 | 2'- 10" | 2'- 8" | 2'- 10" | | | | |
| 1P515 | 24 | | 24 | 8'- 7" | 215 | 2 | 3'- 1" | 2'- 8" | 3'- 1" | | | | |
| 1P516 | | 24 | 24 | 9'- 1" | 227 | 2 | 3'- 4" | 2'- 8" | 3'- 4" | | | | |
| 1P517 | | 24 | 24 | 9'- 7" | 240 | 2 | 3'- 7" | 2'- 8" | 3'- 7" | | | | |
| 1P518 | | 18 | 18 | 10'- 1" | 189 | 2 | 3'- 10" | 2'- 8" | 3'- 10" | | | | |
| | | | | | | | | | | | | | |
| 1P601 | 32 | 40 | 72 | 14'- 2" | 1,532 | 2 | 3'- 0" | 8'- 6" | 3'- 0" | | | | |
| 1P610 | 11 | | 11 | 16'- 4" | 270 | 33 | 3'- 10" | 3'- 7" | | | | | |
| | | | | | | | | | | | | | |
| 1P801 | 28 | 35 | 63 | 14'- 1" | 2,369 | 2 | 3'- 0" | 8'- 6" | 3'- 0" | | | | |
| *1P802 | 11 | | 11 | 30'- 11" | 908 | 16 | 30'- 0" | | | | | | |
| *1P803 | | 11 | 11 | 36'- 6" | 1,072 | 16 | 35'- 7" | | | | | | |
| *1P804 | 11 | | 11 | 30'- 11" | 908 | 16 | 30'- 0" | | | | | | |
| *1P805 | | 11 | 11 | 36'- 6" | 1,072 | 16 | 35'- 7" | | | | | | |
| *1P806 | 4 | | 4 | 32'- 8" | 349 | STR | | | | | | | |
| *1P807 | 4 | | 4 | 32'- 8" | 349 | STR | | | | | | | |
| *1P808 | | 4 | 4 | 31'- 0" | 331 | STR | | | | | | | |
| *1P809 | | 4 | 4 | 31'- 0" | 331 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| 1P901 | 10 | | 10 | 10'- 1" | 343 | 1 | 6'- 6" | 3'- 10" | | | | | |
| | | | | | | | | | | | | | |
| 1P1001 | 30 | 30 | 60 | 24'- 1" | 6,218 | 16 | 22'- 8" | | | | | | |
| 1P1002 | 30 | 30 | 60 | 11'- 10" | 3,055 | 1 | 2'- 0" | 10'- 2" | | | | | |
| | | | | | | | | | | | | | |
| 1SP501 | 3 | 3 | 6 | 332'- 11" | 2,083 | 27 | 0'- 5" | 2'- 6" | 16'- 9" | | | | |
| | | | | | | | | | | | | | |
| | | | | | 24,148 | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | | |

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| PIER 2 | | | | | | | | | | | | | |
| 2P501 | 30 | 30 | 60 | 9'- 9" | 610 | 51 | | | | 2'- 6" | | | |
| *2P502 | 8 | | 8 | 34'- 0" | 284 | STR | | | | | | | |
| 2P503 | 4 | | 4 | 13'- 2" | 55 | 1 | 0'- 10" | 12'- 5" | | | | | |
| 2P504 | 4 | | 4 | 16'- 2" | 67 | 1 | 0'- 10" | 15'- 5" | | | | | |
| 2P505 | 4 | | 4 | 13'- 1" | 55 | 2 | 0'- 10" | 11'- 8" | 0'- 10" | | | | |
| *2P506 | 2 | | 2 | 12'- 9" | 27 | STR | | | | | | | |
| *2P507 | 2 | | 2 | 24'- 9" | 52 | STR | | | | | | | |
| 2P508 | | 12 | 12 | 32'- 6" | 407 | STR | | | | | | | |
| 2P509 | | 4 | 4 | 14'- 6" | 60 | 1 | 0'- 10" | 13'- 9" | | | | | |
| 2P510 | | 4 | 4 | 14'- 6" | 60 | 1 | 0'- 10" | 13'- 9" | | | | | |
| 2P511 | | 4 | 4 | 9'- 5" | 39 | 1 | 0'- 10" | 8'- 8" | | | | | |
| 2P512 | | 2 | 2 | 20'- 10" | 43 | STR | | | | | | | |
| 2P513 | | 2 | 2 | 32'- 6" | 68 | STR | | | | | | | |
| 2P514 | 22 | | 22 | 7'- 9" | 178 | 2 | 2'- 8" | 2'- 8" | 2'- 8" | | | | |
| 2P515 | 32 | | 32 | 8'- 1" | 270 | 2 | 2'- 10" | 2'- 8" | 2'- 10" | | | | |
| 2P516 | 32 | | 32 | 8'- 9" | 292 | 2 | 3'- 2" | 2'- 8" | 3'- 2" | | | | |
| 2P517 | | 32 | 32 | 9'- 3" | 309 | 2 | 3'- 5" | 2'- 8" | 3'- 5" | | | | |
| 2P518 | | 32 | 32 | 9'- 11" | 331 | 2 | 3'- 9" | 2'- 8" | 3'- 9" | | | | |
| 2P519 | | 22 | 22 | 10'- 5" | 239 | 2 | 4'- 0" | 2'- 8" | 4'- 0" | | | | |
| | | | | | | | | | | | | | |
| 2P601 | 35 | 42 | 77 | 14'- 2" | 1,638 | 2 | 3'- 0" | 8'- 6" | 3'- 0" | | | | |
| | | | | | | | | | | | | | |
| 2P801 | 30 | 36 | 66 | 14'- 1" | 2,482 | 2 | 3'- 0" | 8'- 6" | 3'- 0" | | | | |
| *2P802 | 14 | | 14 | 32'- 7" | 1,218 | 16 | 31'- 8" | | | | | | |
| *2P803 | | 14 | 14 | 38'- 9" | 1,448 | 16 | 37'- 10" | | | | | | |
| *2P804 | 14 | | 14 | 32'- 7" | 1,218 | 16 | 31'- 8" | | | | | | |
| *2P805 | | 14 | 14 | 38'- 9" | 1,448 | 16 | 37'- 10" | | | | | | |
| *2P806 | 4 | | 4 | 34'- 0" | 363 | STR | | | | | | | |
| *2P807 | 4 | | 4 | 34'- 1" | 364 | STR | | | | | | | |
| *2P808 | | 4 | 4 | 32'- 6" | 347 | STR | | | | | | | |
| *2P809 | | 4 | 4 | 32'- 7" | 348 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| 2P1001 | 30 | 30 | 60 | 19'- 8" | 5,078 | 16 | 18'- 3" | | | | | | |
| 2P1002 | 30 | 30 | 60 | 11'- 10" | 3,055 | 1 | 2'- 0" | 10'- 2" | | | | | |
| | | | | | | | | | | | | | |
| 2SP501 | 3 | 3 | 6 | 305'- 7" | 1,912 | 27 | 0'- 5" | 2'- 6" | 15'- 10" | | | | |
| | | | | | | | | | | | | | |
| | | | | | 24,365 | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | | |

* DENOTES BAR REQUIRING MECHANICAL CONNECTOR. BAR DIMENSIONS GIVEN ARE TO THE CENTER OF MECHANICAL CONNECTOR.

REINFORCING SCHEDULE (2 OF 4)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 49 | 51 |

| SHEET | TOTAL |
|---|---|
| P.142 | 167 |

CUY-71-10.07 SW

MODEL: Reinforcing Schedule 2 of 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:16:09 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257_SL002.dgn

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| PIER 3 | | | | | | | | | | | | | |
| 3P501 | 30 | 30 | 60 | 9'- 9" | 610 | 51 | | | | 2'- 6" | | | |
| *3P502 | 8 | | 8 | 37'- 0" | 309 | STR | | | | | | | |
| 3P503 | 4 | | 4 | 15'- 0" | 63 | 1 | 0'- 10" | 14'- 3" | | | | | |
| 3P504 | 4 | | 4 | 16'- 9" | 70 | 1 | 0'- 10" | 16'- 0" | | | | | |
| 3P505 | 4 | | 4 | 15'- 7" | 65 | 1 | 0'- 10" | 14'- 10" | | | | | |
| *3P506 | 2 | | 2 | 15'- 10" | 33 | STR | | | | | | | |
| *3P507 | 2 | | 2 | 26'- 0" | 54 | STR | | | | | | | |
| *3P508 | | 14 | 14 | 35'- 6" | 518 | STR | | | | | | | |
| 3P509 | | 4 | 4 | 15'- 0" | 63 | 1 | 0'- 10" | 14'- 3" | | | | | |
| 3P510 | | 4 | 4 | 15'- 0" | 63 | 1 | 0'- 10" | 14'- 3" | | | | | |
| 3P511 | | 4 | 4 | 11'- 3" | 47 | 1 | 0'- 10" | 10'- 6" | | | | | |
| 3P512 | | 2 | 2 | 23'- 3" | 48 | STR | | | | | | | |
| 3P513 | | 2 | 2 | 35'- 6" | 74 | STR | | | | | | | |
| 3P514 | 26 | | 26 | 7'- 9" | 210 | 2 | 2'- 8" | 2'- 8" | 2'- 8" | | | | |
| 3P515 | 32 | | 32 | 8'- 3" | 275 | 2 | 2'- 11" | 2'- 8" | 2'- 11" | | | | |
| 3P516 | 30 | | 30 | 8'- 11" | 279 | 2 | 3'- 3" | 2'- 8" | 3'- 3" | | | | |
| 3P517 | | 32 | 32 | 9'- 9" | 325 | 2 | 3'- 8" | 2'- 8" | 3'- 8" | | | | |
| 3P518 | | 30 | 30 | 10'- 5" | 326 | 2 | 4'- 0" | 2'- 8" | 4'- 0" | | | | |
| 3P519 | | 26 | 26 | 11'- 1" | 301 | 2 | 4'- 4" | 2'- 8" | 4'- 4" | | | | |
| | | | | | | | | | | | | | |
| 3P601 | 41 | 41 | 82 | 14'- 2" | 1,745 | 2 | 3'- 0" | 8'- 6" | 3'- 0" | | | | |
| 3P610 | 11 | | 11 | 17'- 0" | 281 | 33 | 3'- 10" | 3'- 11" | | | | | |
| | | | | | | | | | | | | | |
| 3P801 | 37 | 37 | 74 | 14'- 1" | 2,783 | 2 | 3'- 0" | 8'- 6" | 3'- 0" | | | | |
| *3P802 | 13 | | 13 | 38'- 11" | 1,351 | 16 | 38'- 0" | | | | | | |
| *3P803 | | 13 | 13 | 37'- 5" | 1,299 | 16 | 36'- 6" | | | | | | |
| *3P804 | 13 | | 13 | 38'- 11" | 1,351 | 16 | 38'- 0" | | | | | | |
| *3P805 | | 13 | 13 | 37'- 5" | 1,299 | 16 | 36'- 6" | | | | | | |
| *3P806 | 4 | | 4 | 37'- 0" | 395 | STR | | | | | | | |
| *3P807 | 4 | | 4 | 37'- 1" | 396 | STR | | | | | | | |
| *3P808 | | 4 | 4 | 35'- 6" | 379 | STR | | | | | | | |
| *3P809 | | 4 | 4 | 35'- 7" | 380 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| 3P901 | 10 | | 10 | 11'- 4" | 385 | 1 | 7'- 9" | 3'- 10" | | | | | |
| | | | | | | | | | | | | | |
| 3P1001 | 30 | 30 | 60 | 17'- 3" | 4,454 | 16 | 15'- 10" | | | | | | |
| 3P1002 | 30 | 30 | 60 | 11'- 10" | 3,055 | 1 | 2'- 0" | 10'- 2" | | | | | |
| | | | | | | | | | | | | | |
| 3SP501 | 3 | 3 | 6 | 261'- 1" | 1,634 | 27 | 0'- 5" | 2'- 6" | 13'- 5" | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | 24,920 | | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | |

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| DECK | | | | | | | | | | | | | |
| S401 | 325 | 364 | 689 | 30'- 0" | 13,808 | STR | | | | | | | |
| | 1 | 1 | 1 | 12'- 1" | | | | | | | | | |
| S402 | S.O. | S.O. | S.O. | T O | 717 | STR | | | | | | | 3 3/4" |
| | 25 | 28 | 53 | 28'- 5" | | | | | | | | | |
| S403 | 836 | 777 | 1613 | 8'- 10" | 9,518 | 16 | 8'- 3" | | | | | | |
| S404 | 418 | 389 | 807 | 3'- 0" | 1,617 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| S501 | 312 | 377 | 689 | 30'- 0" | 21,559 | STR | | | | | | | |
| | 1 | 1 | 1 | 12'- 1" | | | | | | | | | |
| S502 | S.O. | S.O. | S.O. | T O | 1,119 | STR | | | | | | | 3 3/4" |
| | 24 | 29 | 53 | 28'- 5" | | | | | | | | | |
| *S503 | 773 | | 773 | 23'- 10" | 19,215 | 16 | 23'- 3" | | | | | | |
| *S504 | 773 | | 773 | 23'- 3" | 18,745 | STR | | | | | | | |
| *S505 | | 737 | 737 | 25'- 10" | 19,858 | 16 | 25'- 3" | | | | | | |
| *S506 | | 737 | 737 | 25'- 3" | 19,409 | STR | | | | | | | |
| | 1 | | 1 | 1'- 5" | | | | | | | | | |
| *S507 | S.O. | | S.O. | T O | 1,059 | STR | | | | | | | 3 1/16" |
| | 84 | | 84 | 22'- 9" | | | | | | | | | |
| | | 1 | 1 | 6'- 2" | | | 5'- 7" | | | | | | |
| S508 | | S.O. | S.O. | T O | 685 | 16 | T O | | | | | | 6 5/16" |
| | | 40 | 40 | 26'- 8" | | | 26'- 1" | | | | | | |
| | | 1 | 1 | 5'- 7" | | | | | | | | | |
| S509 | | S.O. | S.O. | T O | 661 | STR | | | | | | | 6 5/16" |
| | | 40 | 40 | 26'- 1" | | | | | | | | | |
| | | 1 | 1 | 2'- 10" | | | | | | | | | |
| S510 | | S.O. | S.O. | T O | 1,916 | STR | | | | | | | 2" |
| | | 132 | 132 | 25'- 0" | | | | | | | | | |
| | 1 | | 1 | 2'- 10" | | | 3'- 5" | | | | | | |
| S511 | S.O. | | S.O. | T O | 862 | 16 | T O | | | | | | 4" |
| | 63 | | 63 | 23'- 5" | | | 22'- 7" | | | | | | |
| | 1 | | 1 | 4'- 3" | | | | | | | | | |
| S512 | S.O. | | S.O. | T O | 882 | STR | | | | | | | 3 9/16" |
| | 63 | | 63 | 22'- 7" | | | | | | | | | |
| S513 | 18 | 18 | 36 | 10'- 6" | 394 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| S601 | 24 | 28 | 52 | 40'- 0" | 3,124 | STR | | | | | | | |
| S602 | 24 | 28 | 52 | 40'- 0" | 3,124 | STR | | | | | | | |
| S603 | 24 | 28 | 52 | 18'- 7" | 1,451 | STR | | | | | | | |
| S604 | 24 | 28 | 52 | 40'- 0" | 3,124 | STR | | | | | | | |
| S605 | 24 | 28 | 52 | 28'- 7" | 2,232 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | 145,079 | | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | |

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| BARRIER | | | | | | | | | | | | | |
| Y601 | 470 | 451 | 921 | 7'- 1" | 9,799 | 40 | 0'- 7" | 2'- 2" | 0'-9 ½" | 1'- 0" | | | |
| Y602 | 470 | 451 | 921 | 7'- 0" | 9,683 | 23 | 0'- 6" | 3'- 3" | 3'- 3" | | | 0'- 2" | |
| | 4 | 4 | 8 | 4'- 3" | - | | 1'- 0" | 3'- 3" | | | | | |
| Y603 | S.O. | S.O. | S.O. | T O | 2,467 | 1 | T O | T O | | | | | 1" |
| | 11 | 11 | 11 | 5'- 1" | - | | 1'- 0" | 4'- 1" | | | | | |
| Y604 | 16 | 16 | 32 | 4'- 3" | 204 | 1 | 1'- 0" | 3'- 3" | | | | | |
| | | | | | | | | | | | | | |
| LP501 | 8 | | 8 | 11'- 11" | 99 | 9 | 0'- 9" | 4'- 1" | 3'- 9" | 4'- 1" | | | |
| LP502 | 8 | | 8 | 4'- 0" | 33 | 2 | 1'- 0" | 2'- 0" | 1'- 0" | | | | |
| LP503 | 8 | | 8 | 7'- 3" | 60 | 21 | 1'- 4" | 1'- 8" | 0'- 6" | 1'- 0" | | | |
| LP504 | 8 | | 8 | 4'- 1" | 34 | STR | | | | | | | |
| LP505 | 16 | | 16 | 9'- 8" | 161 | 9 | 0'- 9" | 4'- 1" | 1'- 6" | 4'- 1" | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | 22,540 | | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL | | | | | | |

| MARK | NUMBER | | | LENGTH | LENGTH | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | TOTAL | | A | B | C | D | E | R | INC. |
| BARRIER (GFRP) | | | | | | | | | | | | | |
| Y401 | 148 | 140 | 288 | 10'- 2" | 2928' - 0" | STR | | | | | | | |
| Y402 | 8 | | 8 | 11'- 10" | 94' - 8" | STR | | | | | | | |
| Y403 | | 8 | 8 | 14'- 0" | 112' - 0" | STR | | | | | | | |
| Y404 | | 8 | 8 | 17'- 3" | 138' - 0" | STR | | | | | | | |
| Y405 | 4 | | 4 | 18'- 0" | 72' - 0" | STR | | | | | | | |
| Y406 | 4 | | 4 | 19'- 4" | 77' - 4" | STR | | | | | | | |
| | | | | | | | | | | | | | |
| X401 | 24 | 24 | 48 | 10'- 0" | 480' - 0" | STR | | | | | | | |
| X402 | 12 | 12 | 24 | 6'- 4" | 152' - 0" | 25 | 2'- 6" | 2'- 5" | 1'- 5" | 0'-1 ½" | 0'- 5" | | |
| X403 | 12 | 12 | 24 | 5'- 1" | 122' - 0" | STR | | | | | | | |
| X404 | | 22 | 22 | 20'- 6" | 451' - 0" | STR | | | | | | | |
| X405 | 11 | | 11 | 21'- 4" | 234' - 8" | STR | | | | | | | |
| X406 | 11 | | 11 | 22'- 9" | 250' - 3" | STR | | | | | | | |
| X407 | 154 | | 154 | 30'- 0" | 4620' - 0" | STR | | | | | | | |
| X408 | | 154 | 154 | 30'- 0" | 4620' - 0" | STR | | | | | | | |
| X409 | 11 | | 11 | 21'- 1" | 231' - 11" | STR | | | | | | | |
| X410 | | 11 | 11 | 5'- 5" | 59' - 7" | STR | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | 14644' | | TOTAL ITEM 509E30020 - NO. 4 DEFORMED GFRP REINFORCEMENT | | | | | | |

* DENOTES BAR REQUIRING MECHANICAL CONNECTOR. BAR DIMENSIONS GIVEN ARE TO THE CENTER OF MECHANICAL CONNECTOR.

REINFORCING SCHEDULE (3 OF 4)
BRIDGE NO. CUY-71-10.07 SW
IR-71 NB RAMP TO IR-480 WB

SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

| DESIGNER | CHECKER |
|---|---|
| NKK | JMR |

REVIEWER
SK 09/17/25

PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 50 | 51 |

| SHEET | TOTAL |
|---|---|
| P.143 | 167 |

CUY-71-10.07 SW

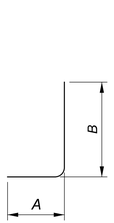
MODEL: Reinforcing Schedule 3 of 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2025 TIME: 1:16:21 PM USER: SAT89729
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SL003.dgn

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| REAR APPROACH SLAB (FOR REFERENCE ONLY) | | | | | | | | | | | | | |
| *AS501 | 104 | | 104 | 29'- 6" | 3,200 | STR | | | | | | | |
| | | 1 | 1 | 34'- 0" | | | | | | | | | |
| *AS502 | | S.O. | S.O. | T O | 1,513 | STR | | | | | | | 5/16" |
| | | 42 | 42 | 35'- 1" | | | | | | | | | |
| | | 1 | 1 | 32'- 2" | | | | | | | | | |
| *AS503 | | S.O. | S.O. | T O | 68 | STR | | | | | | | 1'-2" |
| | | 2 | 2 | 33'- 4" | | | | | | | | | |
| | | 1 | 1 | 34'- 0" | | | | | | | | | |
| *AS504 | | S.O. | S.O. | T O | 2,054 | STR | | | | | | | 1/4" |
| | | 57 | 57 | 35'- 1" | | | | | | | | | |
| | | 1 | 1 | 32'- 2" | | | | | | | | | |
| *AS505 | | S.O. | S.O. | T O | 103 | STR | | | | | | | 9 1/2" |
| | | 3 | 3 | 33'- 9" | | | | | | | | | |
| AS506 | 40 | 51 | 91 | 29'- 6" | 2,800 | STR | | | | | | | |
| | 1 | | 1 | 29'- 7" | | | | | | | | | |
| AS507 | S.O. | | S.O. | T O | 127 | STR | | | | | | | 6 5/16" |
| | 4 | | 4 | 31'- 2" | | | | | | | | | |
| | | 1 | 1 | 28'- 1" | | | | | | | | | |
| AS508 | | S.O. | S.O. | T O | 120 | STR | | | | | | | 4 11/16" |
| | | 4 | 4 | 29'- 3" | | | | | | | | | |
| | | | | | | | | | | | | | |
| AS1001 | 37 | 47 | 84 | 30'- 11" | 11,175 | 16 | 29'- 6" | | | | | | |
| | 1 | | 1 | 31'- 3" | | | 29'- 10" | | | | | | |
| AS1002 | S.O. | | S.O. | T O | 549 | 16 | T O | | | | | | 5 5/16" |
| | 4 | | 4 | 32'- 7" | | | 31'- 2" | | | | | | |
| | | 1 | 1 | 29'- 6" | | | 28'- 1" | | | | | | |
| AS1003 | | S.O. | S.O. | T O | 518 | 16 | T O | | | | | | 4 11/16" |
| | | 4 | 4 | 30'- 8" | | | 29'- 3" | | | | | | |
| | | | | | | | | | | | | | |
| SS501 | 7 | | 7 | 29'- 4" | 214 | STR | | | | | | | |
| SS502 | | 7 | 7 | 33'- 7" | 245 | STR | | | | | | | |
| SS503 | 1 | | 1 | 28'- 3" | 29 | STR | | | | | | | |
| SS504 | | 1 | 1 | 32'- 3" | 34 | STR | | | | | | | |
| SS505 | 23 | 26 | 49 | 10'- 0" | 511 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| 23,260 | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL |
|---|---|

| MARK | NUMBER | | | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PHASE 1 | PHASE 2 | TOTAL | | LBS. | | A | B | C | D | E | R | INC. |
| FORWARD APPROACH SLAB (FOR REFERENCE ONLY) | | | | | | | | | | | | | |
| AS509 | 43 | | 43 | 31'- 6" | 1,413 | STR | | | | | | | |
| *AS510 | 43 | 43 | 86 | 12'- 0" | 1,076 | STR | | | | | | | |
| AS511 | | 43 | 43 | 38'- 7" | 1,730 | STR | | | | | | | |
| AS512 | 59 | | 59 | 28'- 4" | 1,744 | STR | | | | | | | |
| *AS513 | 59 | 59 | 118 | 15'- 0" | 1,846 | STR | | | | | | | |
| AS514 | | 59 | 59 | 35'- 8" | 2,195 | STR | | | | | | | |
| | | 1 | 1 | 29'- 7" | | | | | | | | | |
| AS515 | | S.O. | S.O. | T O | 94 | STR | | | | | | | 6" |
| | | 3 | 3 | 30'- 7" | | | | | | | | | |
| AS516 | 42 | 51 | 93 | 29'- 4" | 2,845 | STR | | | | | | | |
| | 1 | | 1 | 28'- 5" | | | | | | | | | |
| AS517 | S.O. | | S.O. | T O | 92 | STR | | | | | | | 1'-1" |
| | 3 | | 3 | 30'- 7" | | | | | | | | | |
| | | | | | | | | | | | | | |
| AS1004 | 39 | 47 | 86 | 30'- 9" | 11,379 | 16 | 29'- 4" | | | | | | |
| | 1 | | 1 | 29'- 10" | | | 28'- 5" | | | | | | |
| AS1005 | S.O. | | S.O. | T O | 390 | 16 | T O | | | | | | 4 1/2" |
| | 3 | | 3 | 30'- 7" | | | 29'- 2" | | | | | | |
| | | 1 | 1 | 31'- 0" | | | 29'- 7" | | | | | | |
| AS1006 | | S.O. | S.O. | T O | 407 | 16 | T O | | | | | | 6" |
| | | 3 | 3 | 32'- 0" | | | 30'- 7" | | | | | | |
| | | | | | | | | | | | | | |
| SS506 | 8 | | 8 | 34'- 6" | 288 | STR | | | | | | | |
| SS507 | | 8 | 8 | 39'- 6" | 330 | STR | | | | | | | |
| SS508 | 8 | 8 | 16 | 10'- 0" | 167 | STR | | | | | | | |
| SS510 | 23 | 26 | 49 | 13'- 5" | 686 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| 26,682 | TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL |
|---|---|

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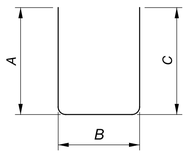


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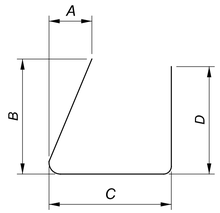


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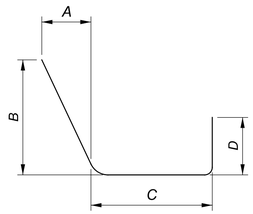


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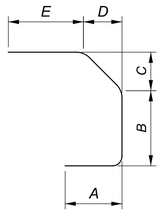


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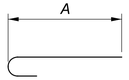


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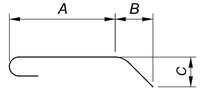


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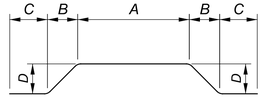


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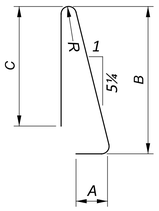


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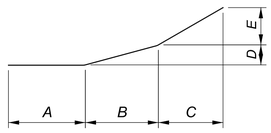


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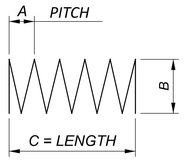


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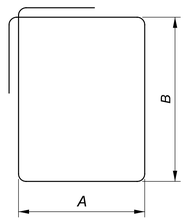
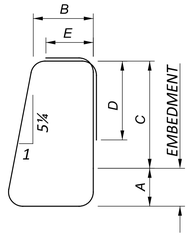
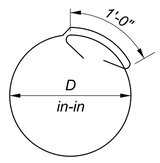



TYPE-33




TYPE-40




TYPE-51

* *DENOTES BAR REQUIRING MECHANICAL CONNECTOR. BAR DIMENSIONS GIVEN ARE TO THE CENTER OF MECHANICAL CONNECTOR.*

# REINFORCING SCHEDULE (4 OF 4)
# BRIDGE NO. CUY-71-10.07 SW
# IR-71 NB RAMP TO IR-480 WB

CUY-71-10.07 SW


MODEL: Reinforcing Schedule 4 of 4 PAPERSIZE: 34x22 (in.) DATE: 12/29/2025 TIME: 10:31:39 AM USER: KC112955
pw:\\mott-use-pw.bentley.com:mott-use-pw-20\Documents\507106271-ODOT CUY-071-10.07 SW\CUY-071-10.07 SW\114536\400-Engineering\Structures\SFN_1814257\Sheets\114536_SFN1814257_SL004.dgn


SFN 1814258

DESIGN AGENCY
MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

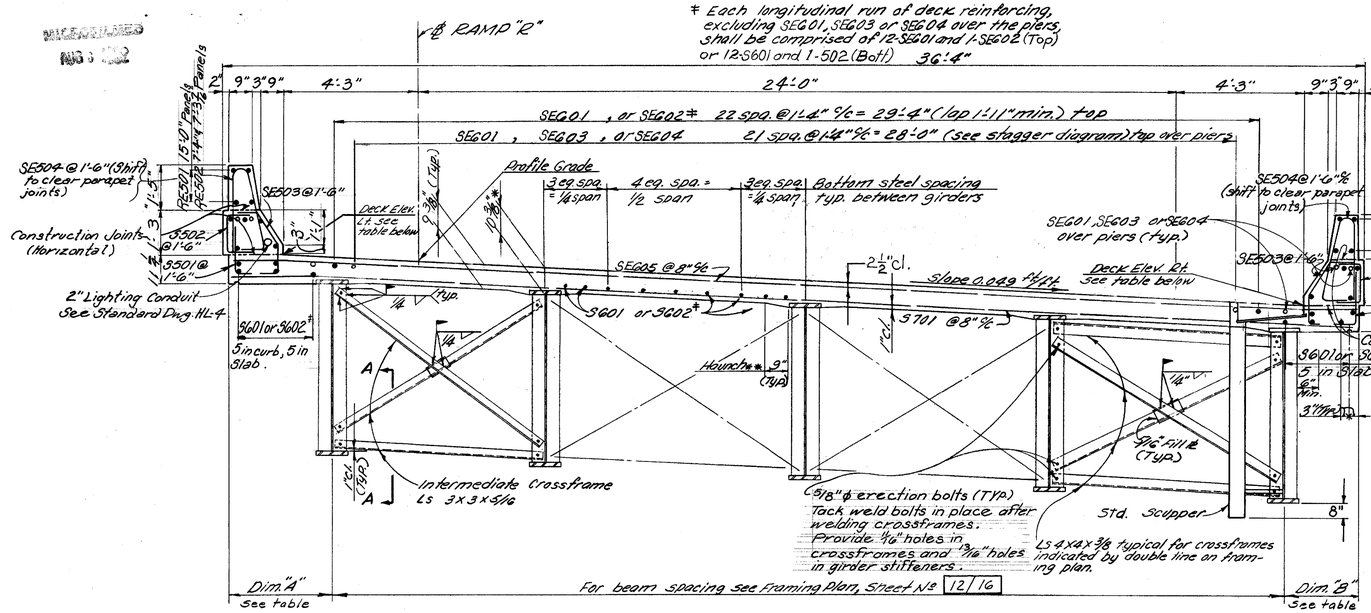
| DESIGNER | CHECKER |
|---|---|
| JMR | LLB |

REVIEWER
SK 09/17/25

PROJECT ID
114536

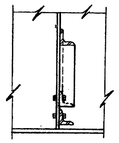
| SUBSET | TOTAL |
|---|---|
| 51 | 51 |

| SHEET | TOTAL |
|---|---|
| P.144 | 167 |




## TRANSVERSE SECTION

(All transverse dimensions shown in Transverse Section are normal to the ℄ of Ramp "R")



SECTION "A-A"

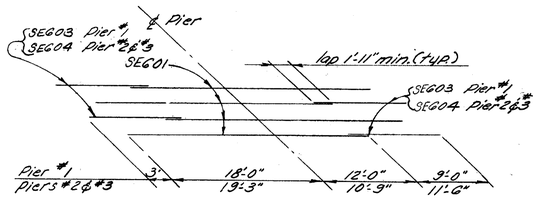



DIAGRAM SHOWING STAGGER OF SEG01, SEG03, ϕ SEG04 BARS OVER PIERS

### SLAB CANTILEVERS

| LOCATION | DIM "A" | DIM "B" |
|---|---|---|
| ℄ Brg. S. Abut. | 2'-0" | 1'-10 7/8" |
| Span #1 1/4 Pt. | 2'-4 3/4" | 1'-9 3/4" |
| 1/2 Pt. | 2'-7 1/8" | 1'-10 3/4" |
| 3/4 Pt. | 2'-8 1/8" | 2'-1 7/8" |
| Pier #1 | 2'-6 3/4" | 2'-7 1/4" |
| Span #2, Splice Pt. | 2'-3" | 3'-3" |
| 1/2 Pt. | 3'-0 1/4" | 2'-6 3/4" |
| 3/4 Pt. | 3'-3 5/8" | 2'-4 1/4" |
| Pier #2 | 3'-3 1/4" | 2'-5 3/4" |
| Span #3, Splice Pt. | 3'-0" | 2'-10 1/8" |
| 1/2 Pt. | 3'-3" | 2'-7 1/2" |
| Splice Pt. | 3'-0" | 2'-11" |
| Pier #3 | 3'-2 1/2" | 2'-6 1/2" |
| Span #4, 1/4 Pt. | 3'-2 3/8" | 2'-5" |
| 1/2 Pt. | 3'-0 3/8" | 2'-5 1/2" |
| 3/4 Pt. | 2'-9 1/8" | 2'-7 3/4" |
| ℄ Brg. N. Abut. | 2'-4" | 3'-0" |

### NOTES

*This dimension is from the top of the slab to the top of the web of the girder and is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or cambering required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per Sec. 511.19 of the construction and materials specifications.

**A typical haunch width of 9" shall be used for computing quantities of concrete. However the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

Longitudinal reinforcing steel shall be field cut as necessary to avoid interference with scuppers.

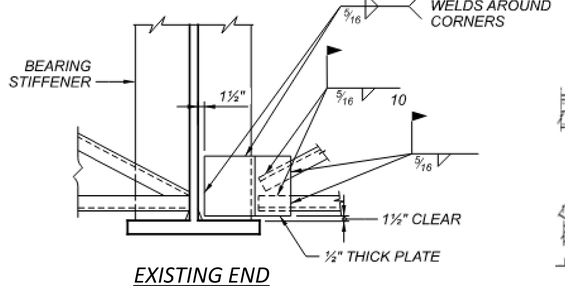
Transverse slab bars shall be field bent below safety curb as required. Cost of field bending shall be included in Item 509 for Payment.

Scuppers shall be in accordance with Standard Drawing SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

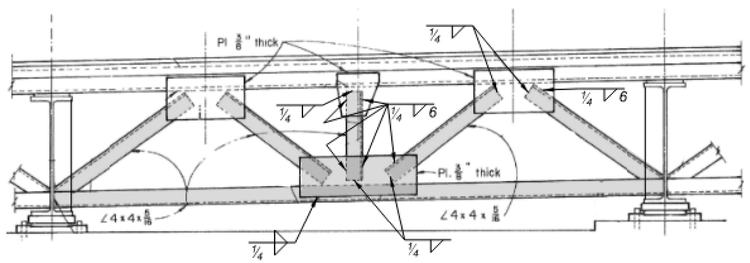
For Scupper Details see Standard Drawing SD-1-69.

For additional Railing Details see Standard Drawing BR1-67.

For details of pilaster anchor bolts and pilaster see Standard Drawings HL-3 & HL-4.




EXISTING END CROSSFRAME AT STIFFENER




EXISTING END CROSSFRAME

## STRUCTURE GENERAL NOTES:

***STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:***

*REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:*
*800 DATED 7-16-21*

***BRIDGE NO. CUY-480-09.69***

***PROPOSED WORK:***

*CLEAN AND PAINT THE STRUCTURAL STEEL.*

***ITEM 514- FIELD PAINTING***

*THE CONTRACTOR SHALL NOT OVERSPRAY ONTO THE CONCRETE SUPERSTRUCTURE COMPONENTS OR CONCRETE SUBSTRUCTURE COMPONENTS (E.G. DECK, RAILING, BACKWALLS, ABUTMENT, AND PIERS). THE PAINTING SHALL BE CONFINED TO THE STRUCTURAL STEEL COMPONENTS.*

*CUY-480-08.69, SFN 181249:*
*THE COLOR OF THE FINISH COAT SHALL BE AMS-STD-595A COLOR NO. 16440 (LIGHT GRAY, GLOSS) FOR ALL STEEL SURFACES.*

*THE CONTRACTOR SHALL PROVIDE A DRAWDOWN CARD AS SPECIFIED IN CMS 708.02 FOR EACH OF THE URETHANE FINISH COAT COLORS.*

*ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE APPROPRIATE 514 ITEM BID PRICES.*

## STRUCTURE ESTIMATED QUANTITES:

**CUY-480-08.69; RAMP "R" OVER I-480; SFN 1814249**

| ITEMS | QTY | UNIT | DESCRIPTION |
|---|---|---|---|
| | | | |
| 514 | 31,400 | SQ FT | SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL |
| 514 | 31,400 | SQ FT | FIELD PAINTING OF EXISTING STRUCTURAL STEEL (PRIME COAT) |
| 514 | 31,900 | SQ FT | FIELD PAINTING OF EXISTING STRUCTURAL STEEL (INTERMEDIATE COAT) |
| 514 | 31,900 | SQ FT | FIELD PAINTING OF EXISTING STRUCTURAL STEEL (FINISH COAT) |
| 514 | 29 | MAN HOUR | GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL |
| 514 | 21 | EACH | FINAL INSPECTION REPAIR |
| | | | |

| | | |
|---|---|---|
| CALCULATED: | TSR | 7/10/2024 |
| CHECKED: | RHC | 7/15/2024 |

*ALL QUANTITIES CARRIED TO GENERAL SUMMARY.*

***EXISTING VERTICAL CLEARANCE:***

*THE EXISTING MINIMUM VERTICAL CLEARANCES OF SFN 1814129 ARE 19.7' FOR IR-480EB AND 17.6' FOR IR-480-WB.*

### NOTES

1. *DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.*
2. *PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT, ESTIMATED QUANTITES AND/OR AS DESCRIBED IN THE GENERAL NOTES.*

TRANSVERSE SECTION AND ESTIMATED QUANTITIES
CUY-480-08.71 ES
RAMP "R" OVER I-480

SFN 1814249
DESIGN AGENCY

| DESIGNER | CHECKER |
|---|---|
| TSR | RHC |

REVIEWER: PAT 07-18-24
PROJECT ID: 114536
SUBSET 1 / TOTAL 3
SHEET P.145 / TOTAL 167

CUY-71-10.07 SW

MODEL: Sheet_Survfit PAPERSIZE: 34x22 (in.) DATE: 12/31/2025 TIME: 11:12:00 AM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: Thomas.Ritter@dot.ohio.gov WORKSPACE: OHDOTCEv02 WORKSET: 114536 PRODUCT: OpenRoadsDesigner 24.00.00.205
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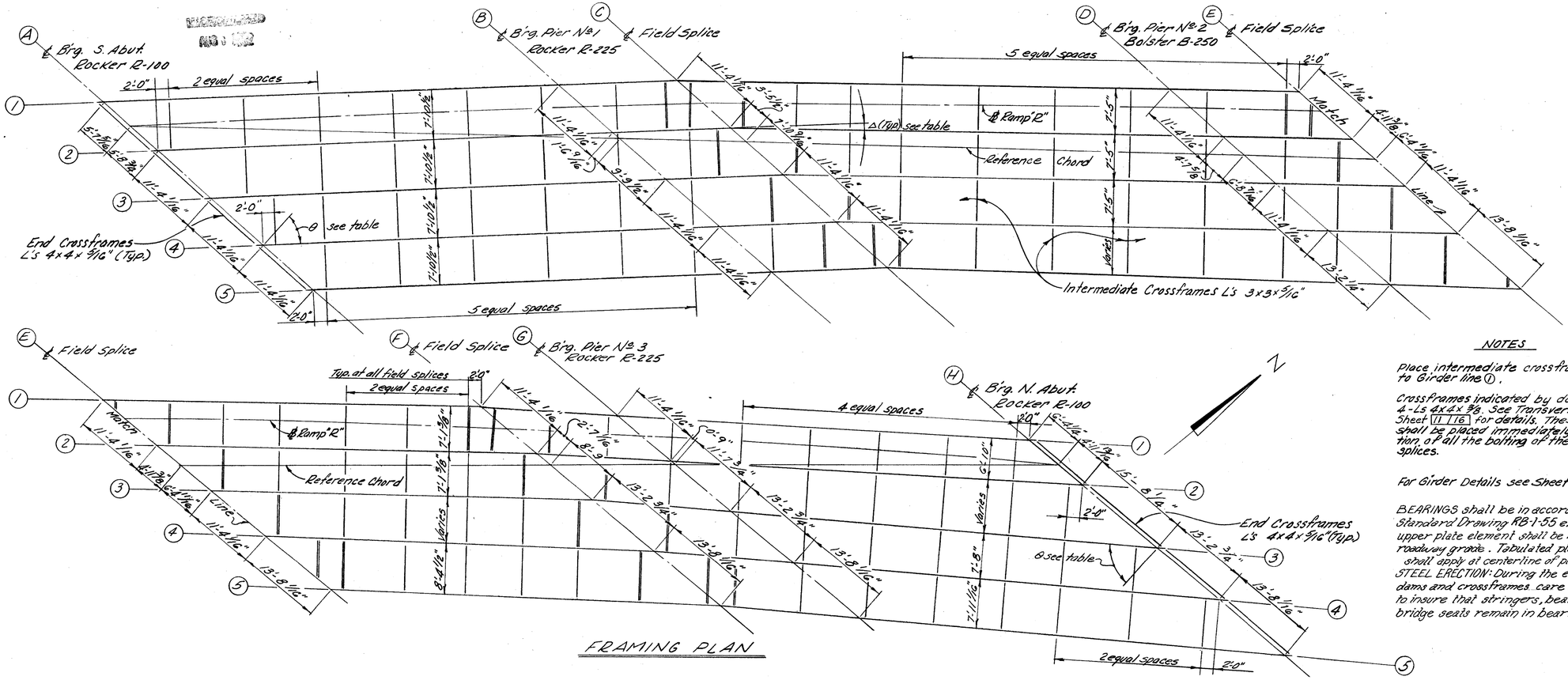


## NOTES

Place intermediate crossframes normal to Girder line Ⓘ.

Crossframes indicated by double line are 4-Ls 4x4x 5/16. See Transverse Section Sheet 11/16 for details. These Crossframes shall be placed immediately upon completion of all the bolting of the adjacent field splices.

For Girder Details see Sheet No. 13/16.

BEARINGS shall be in accordance with Standard Drawing RB-1.55 except that upper plate element shall be beveled to match roadway grade. Tabulated plate thickness C shall apply at centerline of plate.

STEEL ERECTION: During the erection of end dams and crossframes care shall be taken to insure that stringers, bearing parts and bridge seats remain in bearing contact.

TABLE OF DEFLECTION ANGLES & GIRDER LENGTHS

| Bearing Point or Splice Point | | Girder Row Ⓘ | Girder Row Ⓒ | Girder Row Ⓓ | Girder Row Ⓔ | Girder Row Ⓕ |
|---|---|---|---|---|---|---|
| Ⓐ | θ | 46°-00'-52" | 46°-00'-52" | 46°-00'-52" | 46°-00'-52" | 46°-00'-52" |
| | Length Ⓐ Ⓑ | 72'-11 1/8" | 72'-11 1/8" | 72'-11 1/8" | 72'-11 1/8" | 72'-11 1/8" |
| Ⓑ | Δ | 0 | 0 | 0 | 0 | 0 |
| | Length Ⓑ Ⓒ | 19'-1 1/2" | 19'-1 1/2" | 19'-1 1/2" | 19'-1 1/2" | 19'-1 1/2" |
| Ⓒ | Δ | 3°-08'-44" | 3°-08'-44" | 3°-08'-44" | 3°-08'-44" | 4°-00'-26" |
| | Length Ⓒ Ⓓ | 78'-11 13/16" | 78'-11 13/16" | 78'-11 13/16" | 78'-11 13/16" | 80'-4 11/16" |
| Ⓓ | Δ | 0 | 0 | 0 | 0 | 0 |
| | Length Ⓓ Ⓔ | 20'-7 5/8" | 20'-7 5/8" | 20'-7 5/8" | 20'-7 5/8" | 21'-0 1/16" |
| Ⓔ | Δ | 1°-58'-46" | 1°-58'-46" | 1°-58'-46" | 3°-03'-39" | 2°-11'-57" |
| | Length Ⓔ Ⓕ | 61'-4 3/16" | 61'-4 3/16" | 61'-4 3/16" | 62'-10" | 62'-10" |
| Ⓕ | Δ | 1°-47'-20" | 1°-47'-20" | 3°-26'-33" | 2°-21'-40" | 2°-21'-40" |
| | Length Ⓕ Ⓖ | 21'-2 9/16" | 21'-2 9/16" | 22'-0 3/4" | 22'-0 3/4" | 22'-0 3/4" |
| Ⓖ | Δ | 0 | 0 | 0 | 0 | 0 |
| | Length Ⓖ Ⓗ | 66'-1 1/4 | 66'-1 1/4" | 68'-3 1/8" | 68'-3 1/8" | 68'-3 1/8" |
| Ⓗ | θ | 52°-55'-41" | 52°-55'-41" | 54°-34'-54" | 54°-34'-54" | 54°-34'-54" |

## NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT, ESTIMATED QUANTITES AND/OR AS DESCRIBED IN THE GENERAL NOTES.

FRAMING PLAN
CUY-480-08.71 ES
RAMP "R" OVER I-480

SFN 1814249
DESIGN AGENCY
DESIGNER TSR | CHECKER RHC
REVIEWER PAT 07-18-24
PROJECT ID 114536
SUBSET 2 | TOTAL 3
SHEET P.146 | TOTAL 167

CUY-71-10.07 SW

MODEL: Sheet_Surv ft PAPERSIZE: 34x22 (in.) DATE: 9/10/2025 TIME: 4:05:06 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: Thomas.Ritter@dot.ohio.gov WORKSPACE: OHDOTCivil02 WORKSET: 114536 PRODUCT: OpenRoadsDesigner 24.00.00.205
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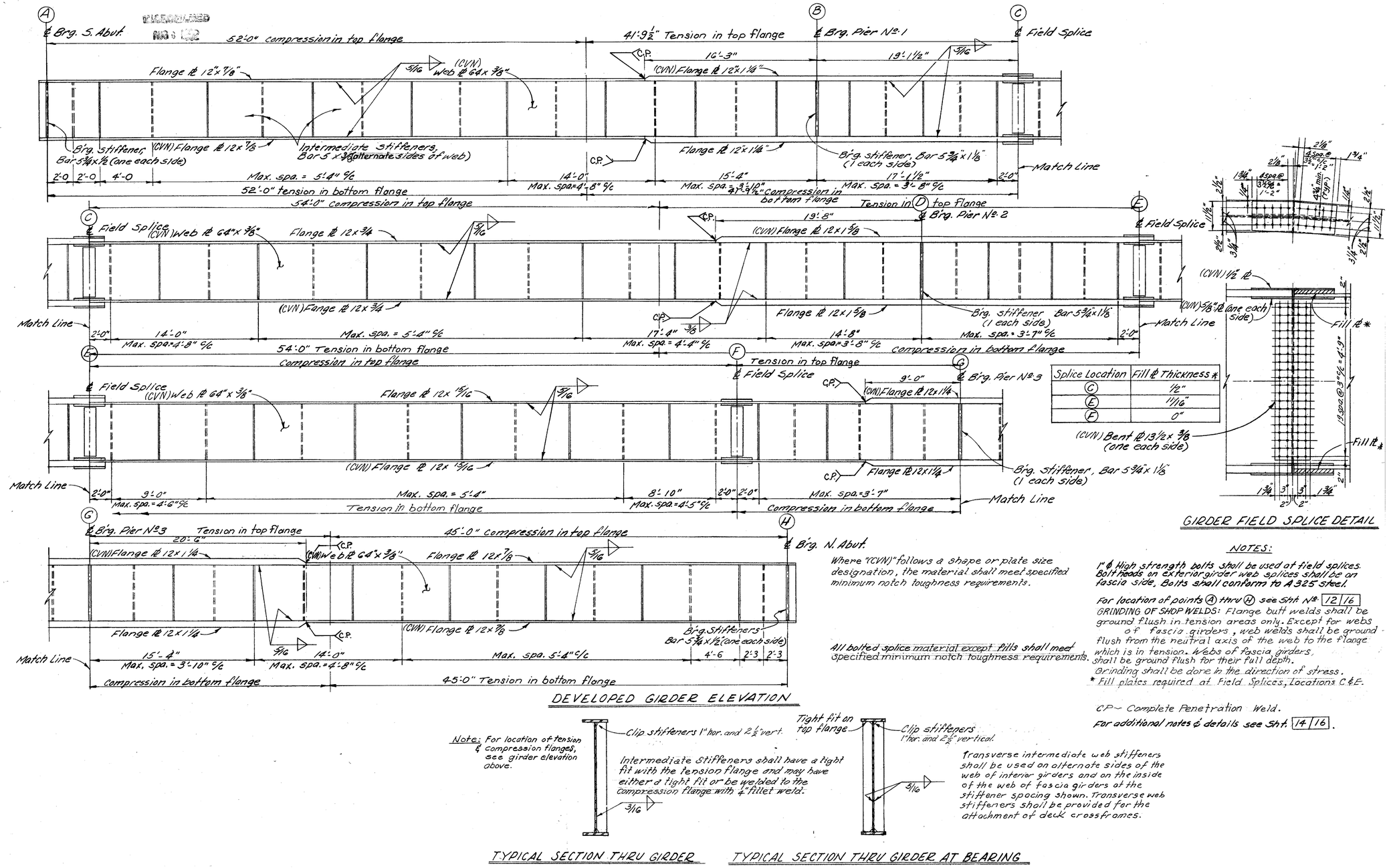


DEVELOPED GIRDER ELEVATION




| Splice Location | Fill ℄ Thickness * |
|---|---|
| G | ½" |
| E | 1 1/16" |
| F | 0" |

(CVN) Bent ℄ 13½"x ⅜" (one each side)

GIRDER FIELD SPLICE DETAIL

Where "(CVN)" follows a shape or plate size designation, the material shall meet specified minimum notch toughness requirements.

All bolted splice material except fills shall meet specified minimum notch toughness requirements.

NOTES:

1" ∅ High strength bolts shall be used at field splices. Bolt heads on exterior girder web splices shall be on fascia side. Bolts shall conform to A 325 steel.

For location of points Ⓐ thru Ⓗ see Sht No. 12/16

GRINDING OF SHOP WELDS: Flange butt welds shall be ground flush in tension areas only. Except for webs of fascia girders, web welds shall be ground flush from the neutral axis of the web to the flange which is in tension. Webs of fascia girders, shall be ground flush for their full depth. Grinding shall be done in the direction of stress.

* Fill plates required at field Splices, Locations C & E.

CP – Complete Penetration Weld.

For additional notes & details see Sht. 14/16.

Note: For location of tension & compression flanges, see girder elevation above.




TYPICAL SECTION THRU GIRDER




TYPICAL SECTION THRU GIRDER AT BEARING

## NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT, ESTIMATED QUANTITES AND/OR AS DESCRIBED IN THE GENERAL NOTES.

BEAM ELEVATION
CUY-480-08.71 ES
RAMP "R" OVER I-480

| | |
|---|---|
| SFN | 1814249 |
| DESIGN AGENCY | |
| DESIGNER | TSR |
| CHECKER | RHC |
| REVIEWER | PAT 07-18-24 |
| PROJECT ID | 114536 |
| SUBSET | 3 |
| TOTAL | 3 |
| SHEET | P.147 |
| TOTAL | 167 |

CUY-71-10.07 SW

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## PROJECT DESCRIPTION

CUY-71-10.07 SW IS THE I-71 NB EXIT RAMP TO I-480 WB. THIS RAMP IS KNOWN AS RAMP T. RAMP T INCLUDES ROADWAY EMBANKMENT AND A 4-SPAN SINGLE LANE BRIDGE OVER I-480. THE PROJECT CONSISTS OF WIDENING THE EXISTING BRIDGE AND REPLACING ITS DECK IN ADDITION TO WIDENING THE EXITING ROADWAY EARTHEN EMBANKMENT. THE WIDENING OF THE ROADWAY WILL REQUIRE SLIVER FILL TO BE CONSTRUCTED AT A GRADE OF 2H: 1V OVER THE EXISTING SLOPES.

## HISTORIC RECORDS

HISTORICAL GEOTECHNICAL RECORDS WERE OBTAINED FROM ODOT'S TRANSPORTATION INFORMATION MAPPING SYSTEM (TIMS) FOR CUY-480-8.72 COMPLETED IN 1965 FOR THE CURRENT ROADWAY ALIGNMENT. RESULTS OF THESE EXPLORATIONS INDICATED THAT THE SUBSURFACE MATERIAL CONSISTED OF ALTERNATING LAYERS OF VERY STIFF TO HARD SILT AND CLAY (A-6A) AND SANDY SILT (A-4A). THESE RESULTS WERE UTILIZED DURING THE CURRENT DESIGN. ONE HISTORIC BORING B-010-0-65 WAS INCLUDED.

## GEOLOGY

ACCORDING TO THE OHIO DEPARTMENT OF NATURAL RESOURCES' DIVISION OF GEOLOGICAL SURVEY, THE PROJECT SITE IS LOCATED WITHIN LAVERY TILL OF DARK GRAY TO DARK BROWN SILTY TO CLAYEY STRONGLY CALCAREOUS COHESIVE DEPOSITS AND WITHIN FINITE MADE LAND AREAS OF RECLAIMED LAND, CUT AND FILL, DUMPS, AND URBAN COVER. THE BEDROCK GEOLOGY OF THE PROJECT SITE IS MISSISSIPPIAN- AGE BEREA SANDSTONE, AND OHIO SHALE.

## SUBSURFACE EXPLORATION

DURING THE PERIOD OF JULY 20 TO JULY 27, 2023 CTL ENGINEERING ADVANCED TEN (10) SOIL BORINGS IDENTIFIED AS B-001-0-23 TO B-010-0-23 TO DEPTHS RANGING FROM 7.5 TO ABOUT 70 FEET BELOW EXISTING GRADES. THE DRILLERS OBTAINED SPLIT SPOON SOIL SAMPLES AT 2.5-FOOT INTERVAL IN THE UPPER 20 FEET AND AT 5-FOOT INTERVAL THEREAFTER. THE DRILLING CREW OBTAINED 10-FOOT NQ ROCK CORE SAMPLES FROM BORINGS B-005-0-23 THROUGH B-007-0-23. THE SPLIT SPOON SAMPLES WERE OBTAINED IN ACCORDANCE WITH STANDARD PENETRATION (SPT) PROCEDURE. THE SPT CONSISTS OF DRIVING A 2.0-INCH OUTSIDE DIAMETER (OD) SPLIT-SPOON SAMPLER 18 INCHES INTO THE SOIL WITH AN AUTOMATIC 140-POUND HAMMER FALLING 30 INCHES. THE SPT HAMMER USED FOR THIS PROJECT WAS CALIBRATED IN JUNE 30, 2023 AND HAD ENERGY RATIO OF 84.7 PERCENT IN OBTAINING INDUSTRY STANDARD N-VALUES ($N_{60}$-VALUES).

THE DRILLING CREW VISUALLY CLASSIFIED THE SOIL SAMPLES THEN SECURED THEM IN GLASS JARS AND CARD BOARD BOXES AND DELIVERED THEM TO ACCREDITED CTL LABORATORY FOR FURTHER TESTING AND ANALYSIS. A CTL GEOLOGIST RECLASSIFIED THE SOIL AND ROCK SAMPLES AND PERFORMED LABORATORY TESTING ON REPRESENTATIVE SAMPLES UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. THE LABORATORY TESTING INCLUDED HAND PENETROMETER, MOISTURE CONTENT, GRAIN SIZE DISTRIBUTION, AND ATTERBERG LIMITS.

## EXPLORATION FINDINGS

THE PAVEMENT SECTION AT SOIL BORINGS B-004 AND B-006 CONSISTED OF 12 INCHES OF CONCRETE AND 12 INCHES OF ASPHALT RESPECTIVELY. THE SURFACE MATERIAL AT THE REMAINING BORINGS CONSISTED OF ABOUT 12 INCHES OF TOPSOIL AND/OR TOPSOIL/GRAVEL MIX.

THE SUBSURFACE MATERIALS CONSISTED OF EMBANKMENT FILL MATERIAL EXTENDING TO DEPTHS VARYING FROM ABOUT 3 TO 22 FEET BELOW EXISTING GRADES. THE FILL CONSISTED OF VARIABLE MATERIAL GENERALLY OF MEDIUM DENSE GRAVEL WITH SAND AND SILT (A-2-4), MEDIUM DENSE TO DENSE ISOLATED SILT POCKETS (A-4B), STIFF TO VERY STIFF TO HARD SILT AND CLAY (A-6A), AND SANDY SILT (A-4A). THE NATURAL SOIL CONSISTED OF VERY STIFF TO HARD CLAY (A-7-6), SANDY SILT (A-4A), SILT AND CLAY (A-6A), OR MEDIUM DENSE TO DENSE GRAVEL WITH SAND AND SILT (A-2-4), ISOLATED SILT POCKETS (A-4B), AND GRAVEL WITH SAND, SILT AND CLAY (A-2-6).

SEVERELY WEATHERED, VERY WEAK GREY SHALE AND ISOLATED FINE-GRAINED SANDSTONE WAS NOTED AT BORINGS B-004 TO B-008 AT DEPTHS RANGING FROM 37 TO 68 FEET BELOW EXISTING GRADES (ABOUT ELEVATIONS RANGING FROM 751 FEET TO 740 FEET).

THE STANDARD PENETRATION TEST (SPT, $N_{60}$) VALUES AND MOISTURE CONTENT IN THE UPPER 10 FEET RANGED FROM 7 TO OVER 50 BLOWS PER FOOT (BPF) AND FROM 8 TO 31 PERCENT, RESPECTIVELY. THE SPT AND MOISTURE CONTENT OF THE OVERBURDEN SOIL BELOW 10 FEET RANGED FROM 10 TO OVER 50 BLOWS PER FOOT (BPF) AND FROM 7 TO 20 PERCENT RESPECTIVELY. THE LIQUID LIMITS AND PLASTICITY INDEX OF THE COHESIVE SOILS RANGED FROM 20 TO 47 PERCENT AND FROM 4 TO 23 PERCENT RESPECTIVELY.

## LEGEND

| DESCRIPTION | ODOT CLASS | CLASSIFIED MECH./VISUAL | |
|---|---|---|---|
| GRAVEL AND/OR STONE FRAGMENTS WITH SAND | A-1-b (0) | 2 | 0 |
| GRAVEL AND/OR STONE FRAGMENTS W/SAND AND SILT | A-2-4 (0) | 4 | 2 |
| GRAVEL AND/OR STONE FRAGMENTS W/SAND, SILT AND CLAY | A-2-6 (0) | 3 | 1 |
| COARSE AND FINE SAND | A-3a (0) | 2 | 1 |
| SANDY SILT | A-4a (5) | 14 | 13 |
| SILT | A-4b (7) | 4 | 3 |
| SILT AND CLAY | A-6a (6) | 11 | 16 |
| SILTY CLAY | A-6b (12) | 2 | 6 |
| CLAY | A-7-6 (10) | 5 | 17 |
| | TOTAL | 47 | 59 |
| SANDSTONE | VISUAL | | |
| SHALE | VISUAL | | |
| PAVEMENT OR BASE = X = APPROXIMATE THICKNESS | VISUAL | | |
| SOD AND TOPSOIL = X = APPROXIMATE THICKNESS | VISUAL | | |

BORING LOCATION - PLAN VIEW

DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.

WC — INDICATES WATER CONTENT IN PERCENT.

$N_{60}$ — INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.

W— — INDICATES FREE WATER ELEVATION.

● — INDICATES A PLASTIC MATERIAL WITH MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.

SS — INDICATES A SPLIT-SPOON SAMPLE.

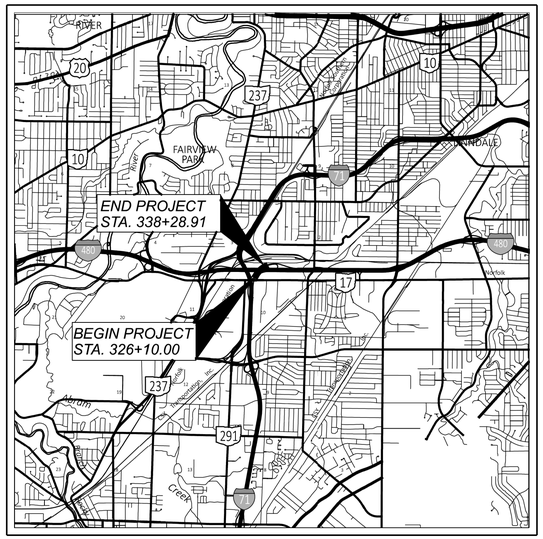
TR — INDICATES TOP OF ROCK.

## SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2023.

## AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE SOIL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.




LOCATION MAP

SCALE : NOT TO SCALE

N

## PARTICLE SIZE DEFINITIONS

| 12" | 3" | 2.0 mm | 0.42 mm | 0.074 mm | 0.005 mm |
|---|---|---|---|---|---|
| BOULDERS | COBBLES | GRAVEL | COARSE SAND | FINE SAND | SILT | CLAY |
| | | No. 10 SIEVE | No. 40 SIEVE | No. 200 SIEVE | | |

### INDEX OF SHEETS


| | | | | | |
|---|---|---|---|---|---|
| SUMMARY OF SOIL TEST DATA 2 | | | | | |
| LOCATION FROM STA. TO STA. | PLAN VIEW SHEET | PROFILE SHEET | CROSS-SECTION SHEET | CUT MAX. | FILL EMB. MAX. |
| RAMP T | | | | | |
| 322+00 334+50 | 3 | 3 | - | - | - |
| 334+50 342+00 | 4 | 4 | - | - | - |
| RAMP T | | | | | |
| 329+00 334+50 | 5 | 5 | - | - | 0.4 |
| CROSS SECTION | | | | | |
| 329+60.81 | - | - | 6 | - | 6.0 |
| 335+00.00 | - | - | 7 | - | 4.0 |
| BORING LOGS / ROCK CORE PHOTOS SHEETS 8 TO 20 | | | | | |


**RECON. - HMK 07/10/2023**

**DRILLING - ADAM/CTL (D-50 TRACK) 07/20/2023 - 07/27/2023**

**DRAWN - NKS 09/07/2023**

**REVIEWED - HMK 09/07/2023**

GEOTECHNICAL PROFILE - ROADWAY


DESIGN AGENCY

CTL ENGINEERING

6777 ENGLE RD, BLDG.111
CLEVELAND, OHIO 44130
PHONE: (440)239-9526
FAX: (440)239-9529


DESIGNER N.K.S

REVIEWER HMK 09-07-23

PROJECT ID 114536

SUBSET 1 TOTAL 20

SHEET 148 TOTAL 167

CUY-71-10.07


MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 12:57:33 USER: hp
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SUMMARY OF SOIL TEST DATA

I-71

| EXPLORATION NO., STATION & OFFSET | FROM TO | SAMPLE ID | $N_{60}$ | % REC | HP tsf | % GR | % CS | % FS | % SILT | % CLAY | LL | PL | PI | % WC | ODOT CLASS (GI) | ppm $SO_4$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-001-0-23 | 01.00-02.50 | SS-1 | 17 | 100 | - | 49 | 6 | 9 | 27 | 9 | 28 | 24 | 4 | 25 | A-4a (0) | - |
| STA. 326+04, 7' RT. | 03.50-05.00 | SS-2 | 24 | 100 | - | 11 | 10 | 10 | 53 | 16 | 22 | 18 | 4 | 10 | A-4b (7) | - |
| LATITUDE = 41.419366 | | | | | | | | | | | | | | | | |
| LONGITUDE = -81.816436 | 06.00-07.50 | SS-3 | 21 | 100 | - | | | | SAME AS SS-2 | | | | | 16 | A-4b (VISUAL) | - |
| B-002-0-23 | 01.00-02.50 | SS-1 | 13 | 100 | 4.50 | 0 | 12 | 15 | 51 | 22 | 31 | 20 | 11 | 12 | A-6a (8) | - |
| STA. 327+23, 15' RT. | 03.50-05.00 | SS-2 | 20 | 100 | - | 57 | 4 | 5 | 18 | 16 | 36 | 20 | 16 | 9 | A-2-6 (1) | - |
| LATITUDE = 41.419637 | | | | | | | | | | | | | | | | |
| LONGITUDE = -81.816197 | 06.00-07.50 | SS-3 | 13 | 100 | - | | | | SAME AS SS-2 | | | | | 12 | A-2-6 (VISUAL) | - |
| | 08.50-10.00 | SS-4 | 45 | 100 | - | 3 | 32 | 31 | 31 | 3 | NP | NP | NP | 11 | A-3a (0) | - |

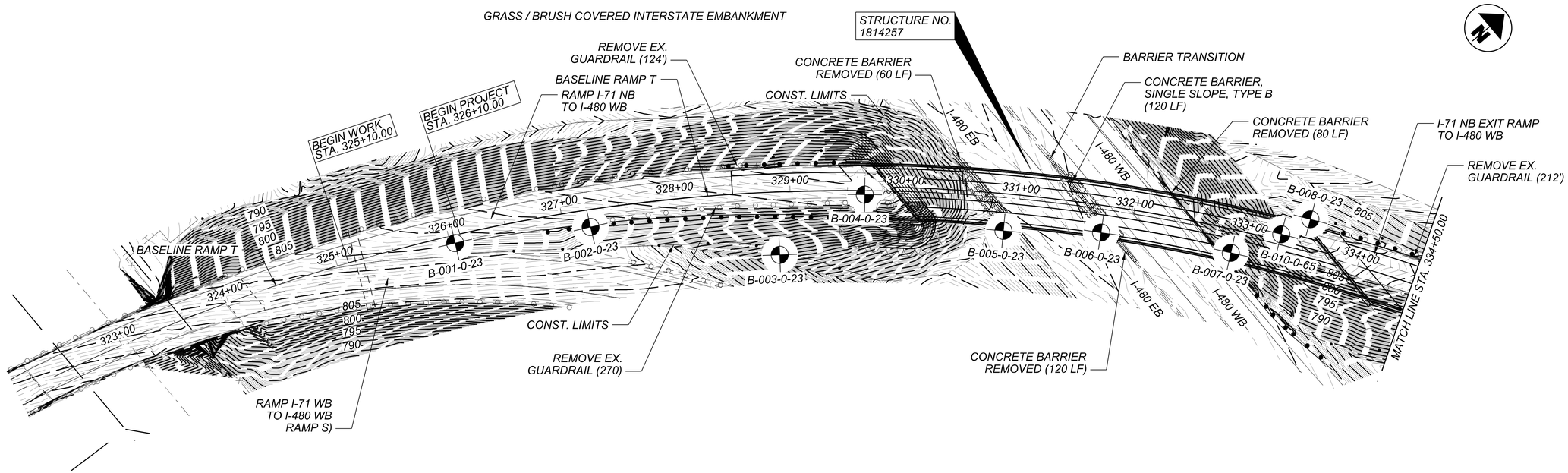
FOR STRUCTURE AND EMBANKMENT BORINGS B-003-0-23 TO B-009-0-23 AND B-010-0-65 SEE BORING LOGS ON SHEETS 8 TO 15 AND 17 TO 23 RESPECTIVELY.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-010-0-23 | 01.00-02.50 | SS-1 | 13 | 100 | 2.25 | 40 | 9 | 9 | 34 | 8 | 42 | 24 | 18 | 14 | A-7-6 (4) | - |
| STA. 338+86, 7' RT. | 03.50-05.00 | SS-2 | 25 | 100 | - | 44 | 10 | 7 | 31 | 8 | 34 | 26 | 8 | 18 | A-4a (1) | - |
| LATITUDE = 41.421482 | | | | | | | | | | | | | | | | |
| LONGITUDE = -81.812902 | 06.00-07.50 | SS-3 | 37 | 100 | - | | | | SAME AS SS-2 | | | | | 11 | A-4a (VISUAL) | - |

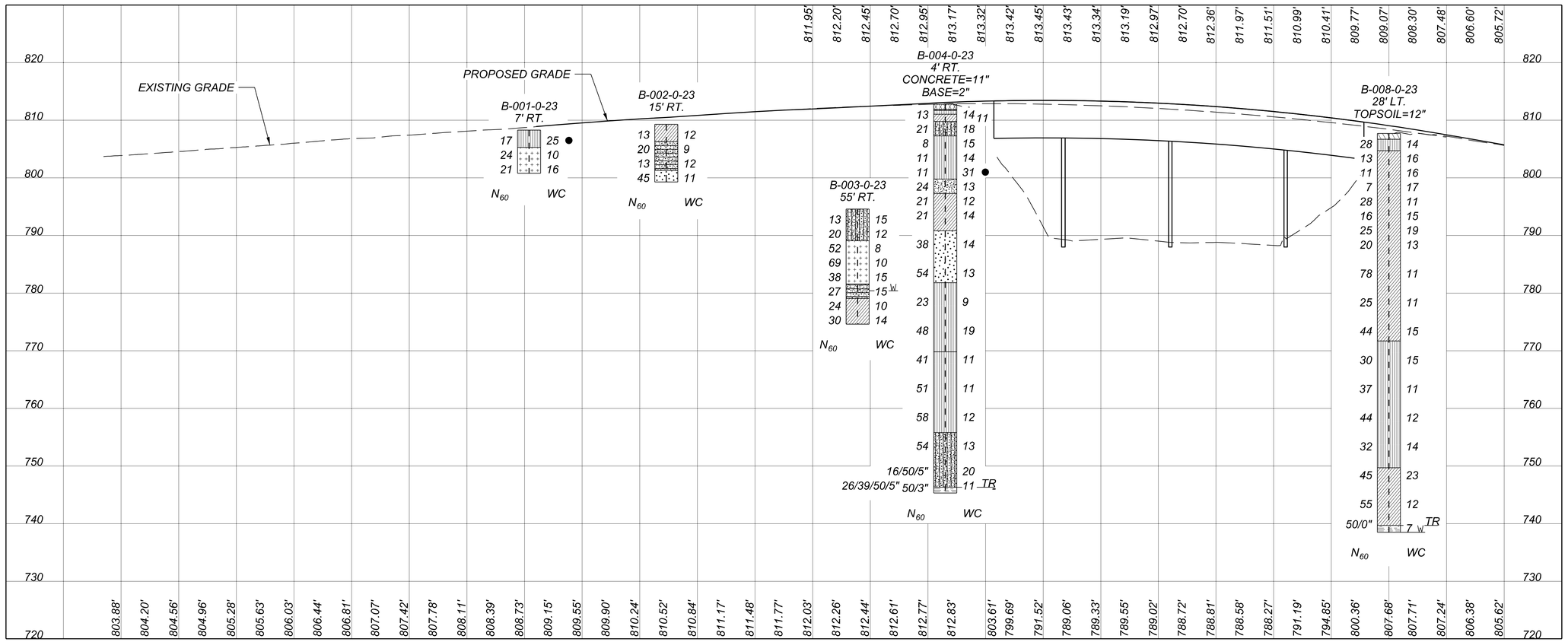
| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| 149 TOTAL 167 | 2 TOTAL 20 | 114536 | HMK 09-07-23 | N.K.S | CTL ENGINEERING, INC. |

6777 ENGLE RD. BLDG.111
CLEVELAND, OHIO 44130
PHONE: (440)238-4650
FAX: (440)238-4629

GEOTECHNICAL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA




NOTE: SEE SHEET 05 OF 23 FOR BORINGS B-005-0-23, B-006-0-23, B-007-0-23 & B-010-0-65 SOIL PROFILE.




CUY-71-10.07 SW

MODEL: CLP_3_Option3 - Plan 2 [Drawing] PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:05:22 USER: hp
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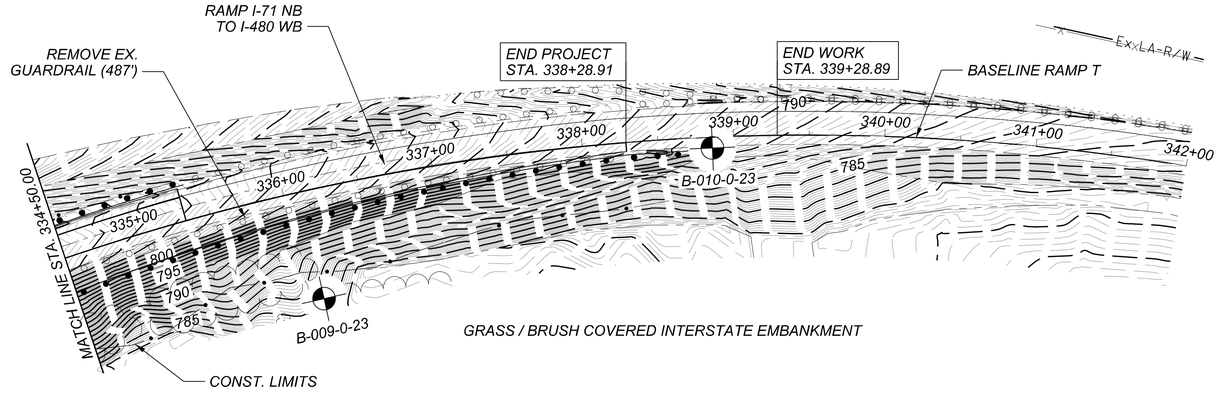
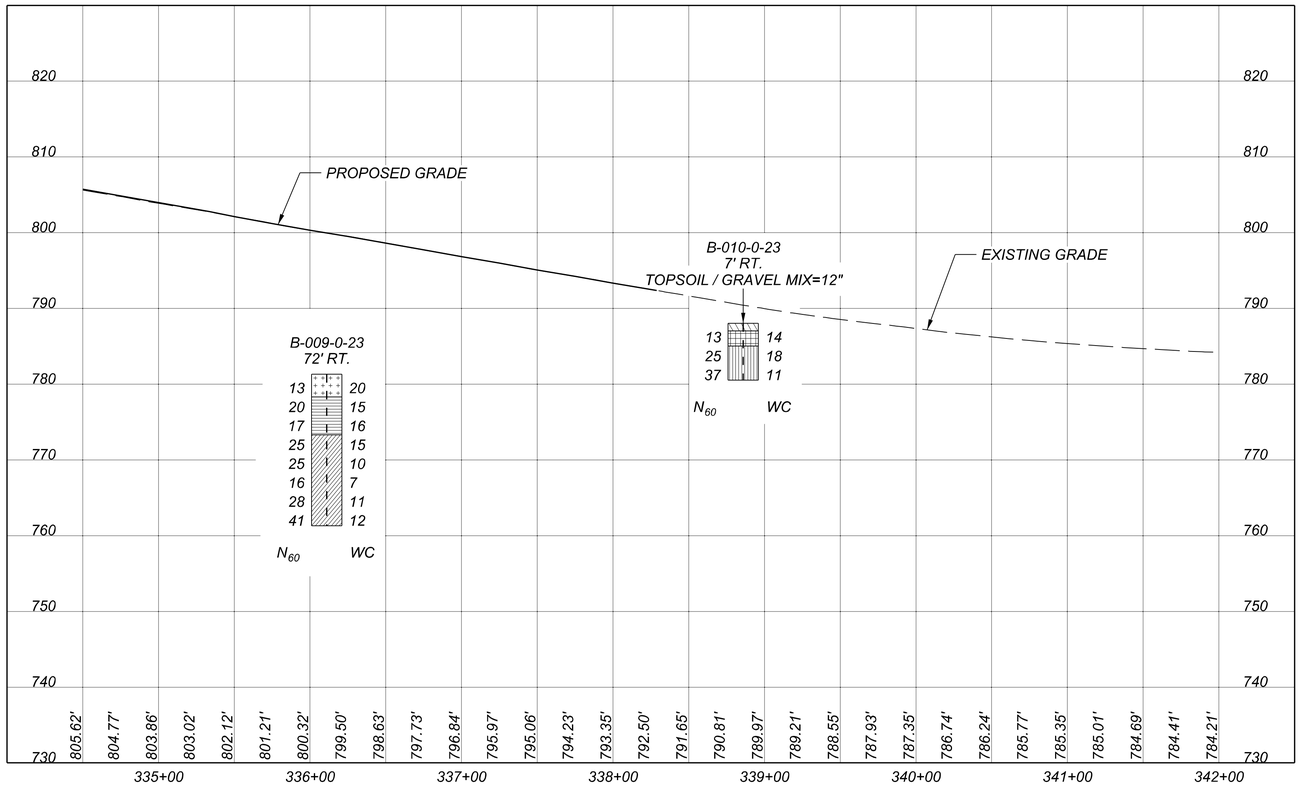
# GEOTECHNICAL PROFILE - ROADWAY
## STA. 322+00.00 TO STA. 334+50.00

DESIGN AGENCY
CTL ENGINEERING
6777 ENGLE RD, BLDG 111
CLEVELAND, OHIO 44130
PHONE: (440)239-9526
FAX: (440)239-9529

| | |
|---|---|
| DESIGNER | N.K.S |
| REVIEWER | HMK 09-07-23 |
| PROJECT ID | 114536 |
| SUBSET | 3 |
| TOTAL | 20 |
| SHEET | 150 |
| TOTAL | 167 |




HORIZONTAL SCALE IN FEET
0 25 50 100

# GEOTECHNICAL PROFILE - ROADWAY
## STA. 334+50.00 TO STA. 342+00.00

CUY-71-10.07 SW

MODEL: CLP_3_Option3 - Plan 4 [Drawing] PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:07:49 USER: hp
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DESIGN AGENCY
CTL ENGINEERING
6777 ENGLE RD, BLDG.111
CLEVELAND, OHIO 44130
PHONE: (440)239-9526
FAX: (440)239-9529

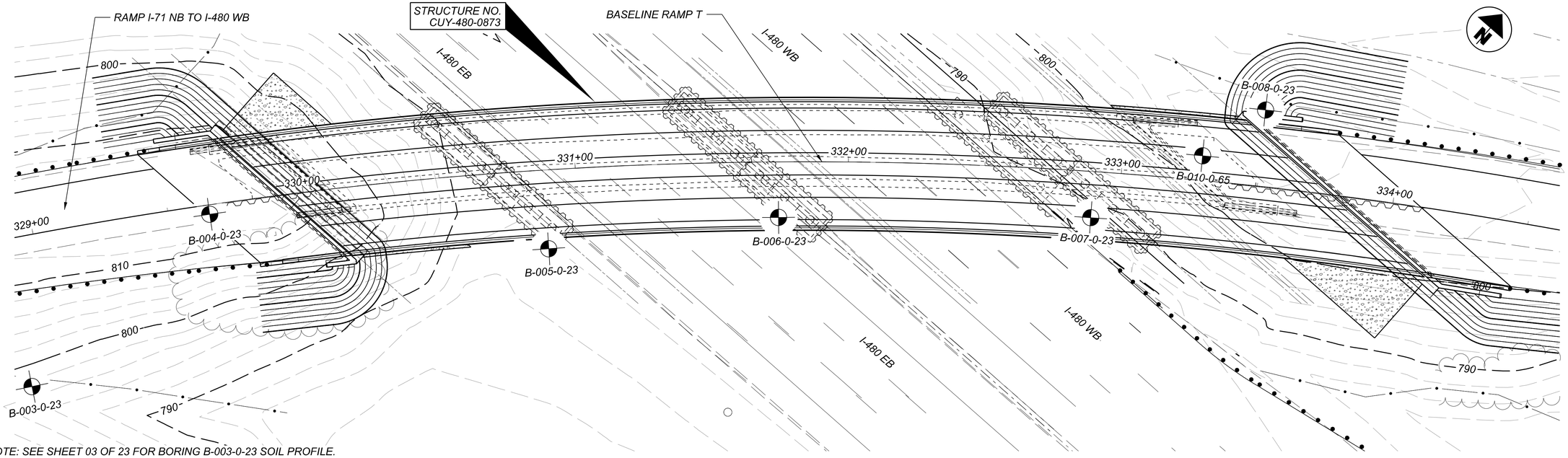
DESIGNER
N.K.S

REVIEWER
HMK 09-07-23

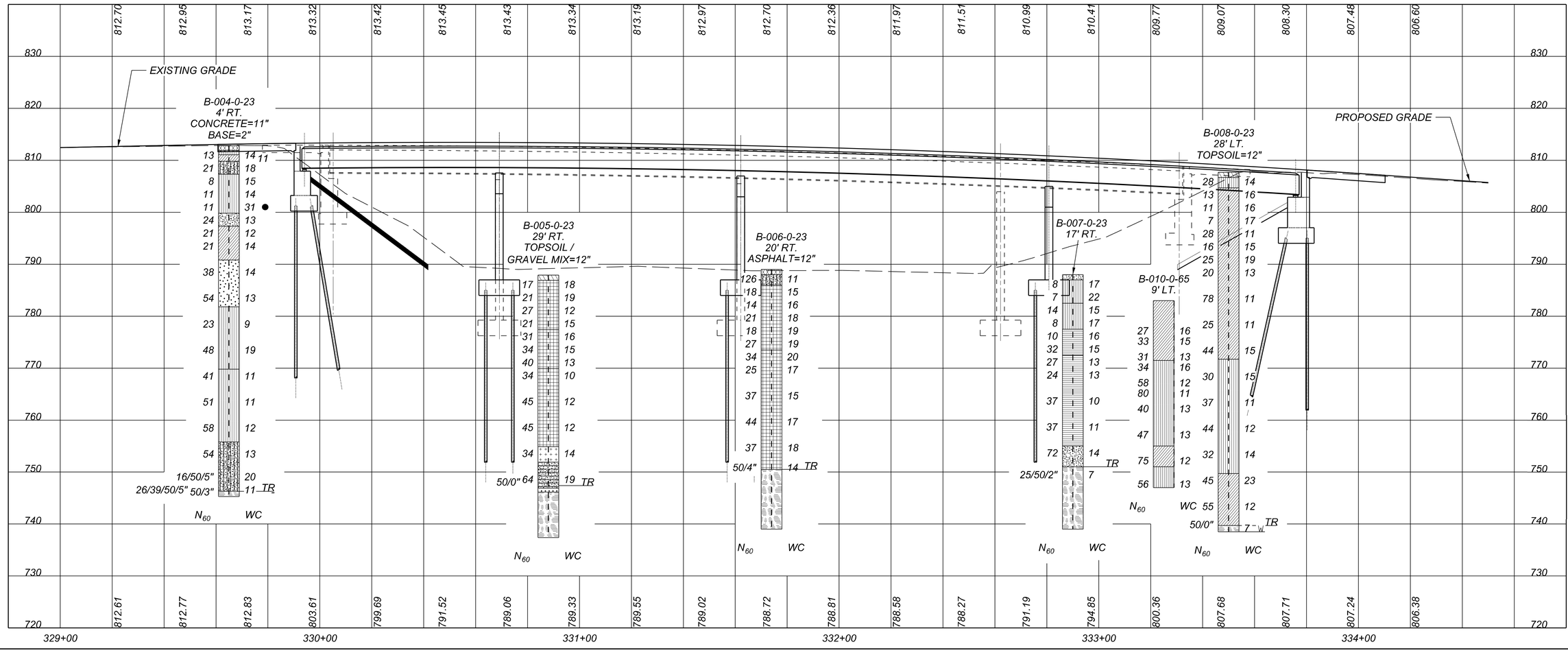
PROJECT ID
114536

| SUBSET | TOTAL |
|---|---|
| 4 | 20 |

| SHEET | TOTAL |
|---|---|
| 151 | 167 |




NOTE: SEE SHEET 03 OF 23 FOR BORING B-003-0-23 SOIL PROFILE.




HORIZONTAL
SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - ROADWAY
## BRIDGE NO. - CUY-480-0873
## RAMP I-71 NB TO I-480 WB

DESIGN AGENCY

CTL ENGINEERING
2860 FISHER ROAD
COLUMBUS, OHIO 43204
PHONE: (614)276-8123
FAX: (614)276-6377

| | |
|---|---|
| DESIGNER | N.K.S |
| REVIEWER | SM 09-07-23 |
| PROJECT ID | 114536 |
| SUBSET | TOTAL 5 \| 20 |
| SHEET | TOTAL 152 \| 167 |

CUY-71-10.07 SW

MODEL: Design PAPERSIZE: 17x11(in.) DATE: 07-09-2023 TIME: 13:01:15 USER: hp
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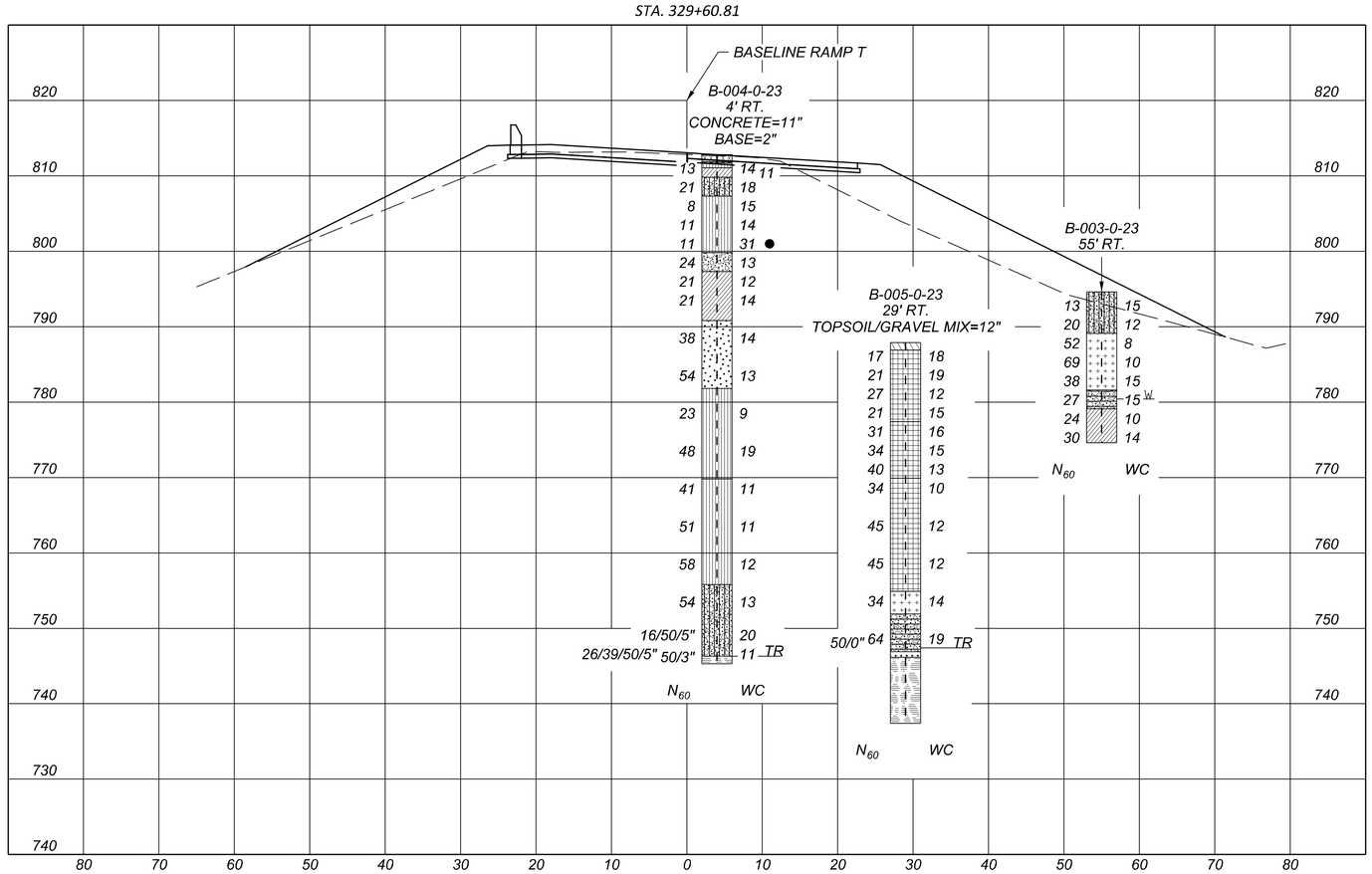



HORIZONTAL
SCALE IN FEET
0 5 10 20

# GEOTECHNICAL PROFILE - ROADWAY
# CROSS SECTION STA. 329+60.81

DESIGN AGENCY
GTL ENGINEERING
2960 FISHER ROAD
COLUMBUS, OHIO 43204
PHONE: (614)276-8123
FAX: (614)276-6377

DESIGNER
N.K.S

REVIEWER
HMK 09-07-23

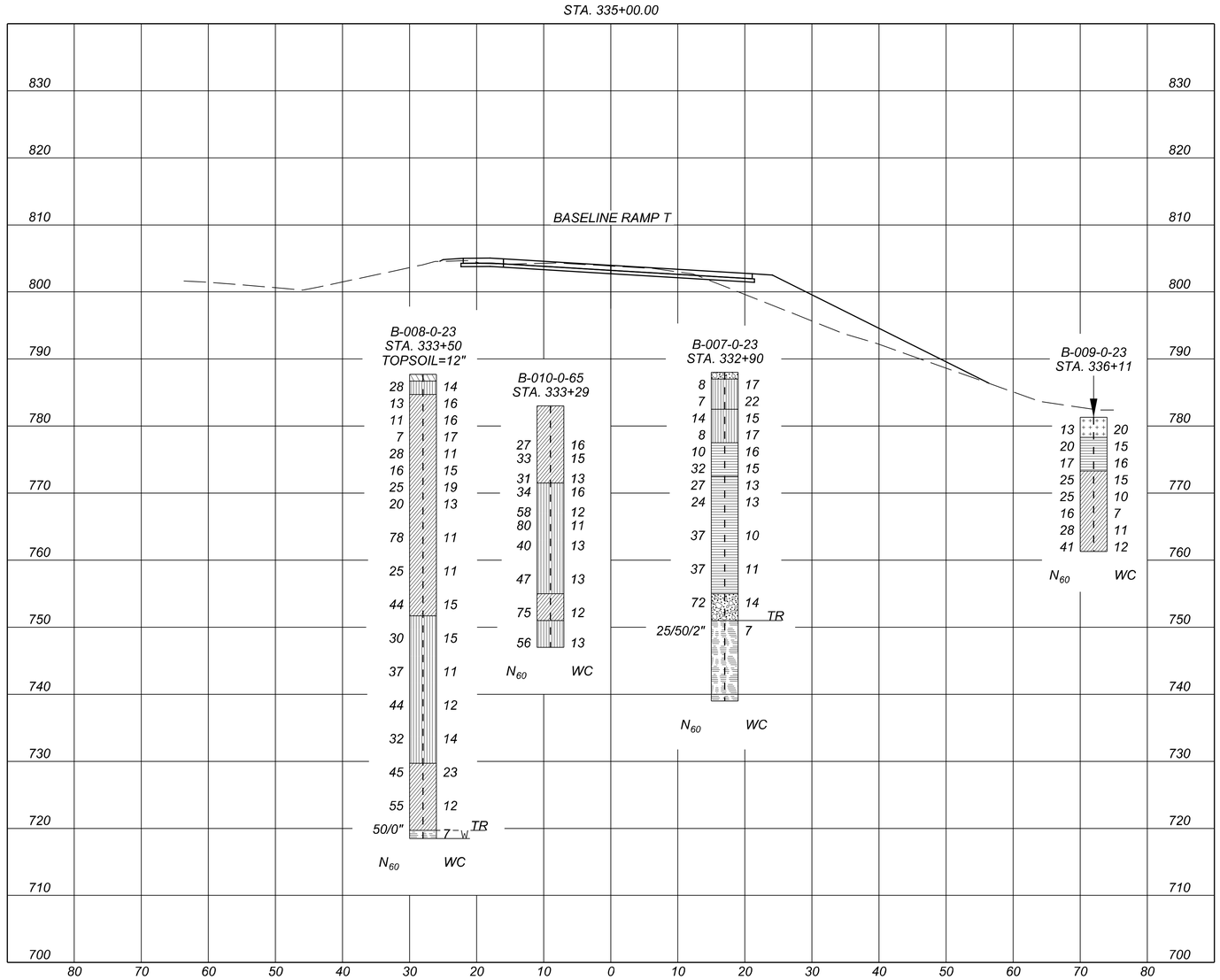
PROJECT ID
114536

SUBSET 6 | TOTAL 20

SHEET 153 | TOTAL 167

CUY-71-10.07 SW

MODEL: I42+00.00 Drawing Model PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:12:18 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Mat+\2305003CLE.ODOT\Mod_06.09.23\I4536XS001.dgn




HORIZONTAL SCALE IN FEET
0 5 10 20

# GEOTECHNICAL PROFILE - ROADWAY CROSS SECTION STA. 335+00.00

CUY-71-10.07 SW

MODEL: CLP_3_Option4 - 335+00.00 PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:18:05 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Mat+\2305003CLE.ODOT\Mod_06.09.23\1#4536XS002.dgn

DESIGN AGENCY
CTL ENGINEERING
2860 FISHER ROAD
COLUMBUS, OHIO 43204
PHONE: (614)276-8123
FAX: (614)276-6377

| | |
|---|---|
| DESIGNER | N.K.S |
| REVIEWER | HMK 09-01-23 |
| PROJECT ID | 114536 |
| SUBSET / TOTAL | 7 / 20 |
| SHEET / TOTAL | 154 / 167 |

# CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:21:01 USER: hp
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| | | | |
|---|---|---|---|
| PROJECT: CUY-71-10.07 SW | DRILLING FIRM / OPERATOR: CTL / ADAM | DRILL RIG: D-50 TRACK CTL | STATION / OFFSET: 328+89, 55' RT. |
| TYPE: ROADWAY | SAMPLING FIRM / LOGGER: CTL / ADAM | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP T |
| PID: 114536 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 6-30-23 | ELEVATION: 794.6 (MSL) EOB: 20.0 ft. |
| START: 7-24-23 END: 7-24-23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 84.7 | LAT / LONG: 41.419937, -81.815740 |

EXPLORATION ID: B-003-0-23
PAGE: 1 OF 1

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | SO4 ppm | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEDIUM DENSE, BROWNISH GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, MOIST (FILL) | 794.6 | | 3 4 5 | 13 | 100 | SS-1 | - | 44 | 18 | 18 | 18 | 2 | 29 | 22 | 7 | 15 | A-2-4 (0) | - | |
| | 789.1 | | 6 7 7 | 20 | 100 | SS-2 | - | - | - | - | - | - | - | - | - | 12 | A-2-4 (V) | - | |
| DENSE TO VERY DENSE, BLACK, **SILT**, LITTLE SAND, GRAVEL, MOIST | | | 16 17 20 | 52 | 100 | SS-3 | - | 20 | 9 | 6 | 62 | 3 | NP | NP | NP | 8 | A-4b (6) | - | |
| | | | 12 17 32 | 69 | 100 | SS-4 | - | - | - | - | - | - | - | - | - | 10 | A-4b (V) | - | |
| | | | 9 13 14 | 38 | 100 | SS-5 | - | - | - | - | - | - | - | - | - | 15 | A-4b (V) | - | |
| | 781.6 | | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, GREY, **GRAVEL WITH SAND, SILT, AND CLAY**, WET | | W 780.4 | 5 8 11 | 27 | 100 | SS-6 | - | 71 | 4 | 4 | 13 | 8 | 35 | 24 | 11 | 15 | A-2-6 (0) | - | |
| | 779.1 | | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN, **SILT AND CLAY**, WITH SAND, WET | | | 8 8 9 | 24 | 100 | SS-7 | - | - | - | - | - | - | - | - | - | 10 | A-6a (V) | - | |
| | | | 6 9 12 | 30 | 100 | SS-8 | 4.50 | 0 | 33 | 31 | 32 | 4 | 24 | 13 | 11 | 14 | A-6a (0) | - | |
| | 774.6 | EOB | | | | | | | | | | | | | | | | | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (11 X 17) - OH DOT.GDT - 31-8-23 19:08 - G:\2023\AUG\GUST\23023050013CLE\23020013CLE.GPJ

| | | | | | |
|---|---|---|---|---|---|
| SHEET 155 | SUBSET 8 | PROJECT ID 114536 | REVIEWER HMK 09-07-23 | DESIGNER N.K.S | DESIGN AGENCY |
| TOTAL 167 | TOTAL 20 | | | | |

6777 ENGLE RD. BLDG.111
CLEVELAND, OH 44130
PHONE: (440)238-9530
FAX: (440)238-9629

GEOTECHNICAL PROFILE - ROADWAY

BORING LOG B-003-0-23

# CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:24:11 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL002.dgn

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: CUY-71-10.07 SW | DRILLING FIRM / OPERATOR: CTL / ADAM | DRILL RIG: D-50 TRACK CTL | STATION / OFFSET: 329+65, 4' RT. | EXPLORATION ID B-004-0-23 |
| TYPE: BRIDGE | SAMPLING FIRM / LOGGER: CTL / ADAM | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP T | |
| PID: 114536 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 6-30-23 | ELEVATION: 812.8 (MSL) EOB: 67.5 ft. | PAGE 1 OF 2 |
| START: 7-27-23 END: 7-27-23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 84.7 | LAT / LONG: 41.420185, -81.815711 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONCRETE (11") | 812.8 | | | | | | | | | | | | | | | | | |
| BASE (2") | 811.9 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, GREY, **SANDY SILT**, AND GRAVEL, TRACE CLAY, MOIST (FILL) | 811.7 | | 8 4 5 | 13 | 100 | SS-1A | - | 51 | 8 | 5 | 28 | 8 | NP | NP | NP | 14 | A-4a (0) | |
| | 811.1 | | | | | SS-1B | 4.50 | 0 | 6 | 6 | 71 | 17 | 29 | 18 | 11 | 11 | A-6a (8) | |
| HARD, GREY, **SILT AND CLAY**, LITTLE SAND, MOIST (FILL) | 809.8 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, MOIST (FILL) | 807.3 | | 6 7 8 | 21 | 67 | SS-2 | - | 57 | 4 | 6 | 21 | 12 | 34 | 25 | 9 | 18 | A-2-4 (0) | |
| STIFF, GREY, **SANDY SILT**, SOME GRAVEL, CLAY, MOIST (FILL) | | | 4 4 2 | 8 | 100 | SS-3 | 2.00 | 34 | 6 | 9 | 30 | 21 | 24 | 16 | 8 | 15 | A-4a (3) | |
| | | | 3 4 4 | 11 | 100 | SS-4 | 2.00 | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | | | 3 3 5 | 11 | 100 | SS-5 | 2.00 | - | - | - | - | - | - | - | - | 31 | A-4a (V) | |
| MEDIUM DENSE, GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND**, TRACE SILT, CLAY, MOIST (FILL) | 799.8 | | 5 9 8 | 24 | 100 | SS-6 | - | 44 | 14 | 23 | 9 | 10 | 24 | 18 | 6 | 13 | A-1-b (0) | |
| VERY STIFF TO HARD, GREY, **SILT AND CLAY**, SOME GRAVEL, LITTLE CLAY, MOIST (FILL) | 797.3 | | 7 7 8 | 21 | 100 | SS-7 | 4.50 | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | | 6 7 8 | 21 | 100 | SS-8 | 3.75 | 24 | 8 | 8 | 31 | 29 | 38 | 24 | 14 | 14 | A-6a (7) | |
| DENSE TO VERY DENSE, DARK GREY, **COARSE AND FINE SAND**, SOME SILT, LITTLE GRAVEL, MOIST | 790.8 | | 8 10 17 | 38 | 100 | SS-9 | - | 19 | 19 | 32 | 27 | 3 | NP | NP | NP | 14 | A-3a (0) | |
| | | | 9 22 16 | 54 | 100 | SS-10 | - | - | - | - | - | - | - | - | - | 13 | A-3a (V) | |
| MEDIUM DENSE TO DENSE, BROWNISH GREY, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, MOIST | 781.8 | | 6 8 8 | 23 | 100 | SS-11 | - | - | - | - | - | - | - | - | - | 9 | A-4a (V) | |
| | | | 9 17 17 | 48 | 100 | SS-12 | - | 25 | 9 | 6 | 43 | 17 | 32 | 24 | 8 | 19 | A-4a (5) | |
| HARD, GREY, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, MOIST | 769.8 | | 10 13 16 | 41 | 100 | SS-13 | - | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | | 13 14 22 | 51 | 100 | SS-14 | - | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | | 13 16 25 | 58 | 100 | SS-15 | - | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| DENSE, GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, MOIST | 755.8 | | 15 15 23 | 54 | 100 | SS-16 | - | 3 | 21 | 45 | 27 | 4 | 27 | 18 | 9 | 13 | A-2-4 (0) | |

STANDARD ODOT SOIL BORING LOG (11 X 17) - CH DOT.GDT - 6-9-23 23:28 - G:\2023\AUGUST\23023050013CLE\23020013CLE.GPJ

| SHEET | TOTAL | SUBSET | TOTAL | PROJECT ID | REVIEWER | DESIGNER |
|---|---|---|---|---|---|---|
| 156 | 167 | 9 | 20 | 114536 | HMK 09-07-23 | N.K.S |

DESIGN AGENCY
ENGINEERING SERVICES
6777 ENGLE RD. BLDG.111
CLEVELAND, OHIO 44130
PHONE: (440)238-0630
FAX: (440)238-0629

## GEOTECHNICAL PROFILE - ROADWAY

## BORING LOG B-004-0-23

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:27:28 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL003.dgn

PID: 114536 | SFN: | PROJECT: CUY-71-10.07 SW | STATION / OFFSET: 329+65, 4' RT. | START: 7-27-23 | END: 7-27-23 | PG 2 OF 2 | B-004-0-23

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GR | CS | FS | SI | CL | LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DENSE, GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, MOIST *(continued)* | 752.8 | 61 | | | | | | | | | | | | | | | | |
| | | 62 | | | | | | | | | | | | | | | | |
| | | 63 | | | | | | | | | | | | | | | | |
| | | 64 | 16 50/5" | - | 100 | SS-17 | - | - | - | - | - | - | - | - | - | 20 | A-2-4 (V) | |
| | | 65 | | | | | | | | | | | | | | | | |
| | 746.3 | 66 | 26 39 50/5" | - | 100 | SS-18 | - | - | - | - | - | - | - | - | - | 11 | Rock (V) | |
| **SHALE**, GREY, SEVERELY WEATHERED, VERY WEAK. | 745.3 | TR 67 | 50/3" | - | 100 | | - | - | - | - | - | - | - | - | - | - | | |
| | | EOB | | | | | | | | | | | | | | | | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 9-8-23 23:28 - G:\2023\AUGUST\08\23050013CLE\23020013CLE.GPJ



GEOTECHNICAL PROFILE - ROADWAY

BORING LOG B-004-0-23 CONTINUED

# CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:29:43 USER: hp
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| | | | | | |
|---|---|---|---|---|---|
| PROJECT: CUY-71-10.07 SW | DRILLING FIRM / OPERATOR: CTL / ADAM | DRILL RIG: D-50 TRACK CTL | STATION / OFFSET: 330+88, 29' RT. | EXPLORATION ID B-005-0-23 |
| TYPE: BRIDGE | SAMPLING FIRM / LOGGER: CTL / ADAM | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP T | |
| PID: 114536 SFN: | DRILLING METHOD: 3.25" HSA / NX | CALIBRATION DATE: 6-30-23 | ELEVATION: 787.9 (MSL) EOB: 50.5 ft. | PAGE 1 OF 1 |
| START: 7-25-23 END: 7-25-23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 84.7 | LAT / LONG: 41.420381, -81.815338 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOPSOIL/GRAVEL MIX (12") | 787.9 / 786.9 | | | | | | | | | | | | | | | | | |
| STIFF TO VERY STIFF, BROWN, **CLAY**, SOME GRAVEL, SAND, SILT, MOIST | | 1–2 | 4 6 6 | 17 | 100 | SS-1 | 1.00 | - | - | - | - | - | - | - | - | 18 | A-7-6 (V) | |
| | | 3–4 | 3 4 11 | 21 | 100 | SS-2 | 2.00 | 22 | 11 | 10 | 32 | 25 | 47 | 24 | 23 | 19 | A-7-6 (10) | |
| | | 6–7 | 8 11 8 | 27 | 100 | SS-3 | 2.00 | - | - | - | - | - | - | - | - | 12 | A-7-6 (V) | |
| | | 9–10 | 6 7 8 | 21 | 100 | SS-4 | 3.50 | - | - | - | - | - | - | - | - | 15 | A-7-6 (V) | |
| | 777.4 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN, **CLAY**, SOME SILT, SAND, MOIST | | 11–12 | 7 10 12 | 31 | 100 | SS-5 | 3.50 | 0 | 12 | 9 | 34 | 45 | 43 | 20 | 23 | 16 | A-7-6 (14) | |
| | | 14–15 | 8 11 13 | 34 | 100 | SS-6 | 4.50 | - | - | - | - | - | - | - | - | 15 | A-7-6 (V) | |
| | | 16–17 | 7 12 16 | 40 | 100 | SS-7 | 4.50 | - | - | - | - | - | - | - | - | 13 | A-7-6 (V) | |
| | 769.9 | | | | | | | | | | | | | | | | | |
| HARD, GREY, **CLAY**, SOME ROCK FRAGMENTS, MOIST | | 19–20 | 8 9 15 | 34 | 100 | SS-8 | 4.50 | - | - | - | - | - | - | - | - | 10 | A-7-6 (V) | |
| | | 24–25 | 8 14 18 | 45 | 100 | SS-9 | 4.50 | - | - | - | - | - | - | - | - | 12 | A-7-6 (V) | |
| | | 29–30 | 21 17 15 | 45 | 100 | SS-10 | 4.50 | - | - | - | - | - | - | - | - | 12 | A-7-6 (V) | |
| | 754.9 | | | | | | | | | | | | | | | | | |
| DENSE, GREY, **SILT**, AND SAND, TRACE CLAY, MOIST | | 34–35 | 12 12 12 | 34 | 100 | SS-11 | - | 0 | 5 | 34 | 51 | 10 | 27 | 18 | 9 | 14 | A-4b (5) | |
| | 751.9 | | | | | | | | | | | | | | | | | |
| VERY DENSE, GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND, SILT, AND CLAY**, MOIST | | 39–40 | 14 14 31 | 64 | 100 | SS-12 | - | 31 | 28 | 10 | 29 | 2 | 25 | 14 | 11 | 19 | A-2-6 (0) | |
| | 746.9 | TR | | | | | | | | | | | | | | | | |
| **SANDSTONE**, LIGHT GREY, MODERATELY WEATHERED, SLIGHTLY STRONG, FINE GRAINED. | 746.2 | 40–41 | 50/0" | - | | | - | - | - | - | - | - | - | - | - | - | | |
| **SHALE**, GREY, SEVERELY WEATHERED, WEAK. | | 42–43 | 44 | | 70 | NQ-1 | | | | | | | | | | | Rock (V) CORE | |
| | | 47–48 | 0 | | 76 | NQ-2 | | | | | | | | | | | Rock (V) CORE | |
| | 737.4 | EOB | | | | | | | | | | | | | | | | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (11) X (7) - OHDOT.GDT - 9-8-23 23:21 - G:\2023\AUGUST\08\23050013CLE\23020013CLE.GPJ

| | | | | |
|---|---|---|---|---|
| SHEET 158 / TOTAL 167 | SUBSET 11 / TOTAL 20 | PROJECT ID 114536 | REVIEWER HMK 09-07-23 | DESIGNER N.K.S |

DESIGN AGENCY

GTL ENGINEERING LLC
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GEOTECHNICAL PROFILE - ROADWAY

BORING LOG B-005-0-23

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:33:59 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL005.dgn

## B-005-0-23

| Run #: | Depth | | Recovery | | RQD | |
|---|---|---|---|---|---|---|
| NQ2-1 | 40.5' | 45.5' | 42/60 | 70% | /60 | 44% |
| NQ2-2 | 45.5' | 50.5' | 45.6/60 | 76% | 0/60 | 0% |
| CUY-71-10.07SW PID 114536 | | | | | | |

DESIGN AGENCY
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DESIGNER N.K.S
REVIEWER HMK 09-07-23
PROJECT ID 114536
SUBSET 12 TOTAL 20
SHEET 159 TOTAL 167

GEOTECHNICAL PROFILE - ROADWAY

ROCK CORE PHOTO FOR B-005-0-23

# CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:38:43 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL006.dgn

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: CUY-71-10.07 SW | DRILLING FIRM / OPERATOR: CTL / ADAM | DRILL RIG: D-50 TRACK CTL | STATION / OFFSET: 331+74, 20' RT. | EXPLORATION ID B-006-0-23 |
| TYPE: BRIDGE | SAMPLING FIRM / LOGGER: CTL / ADAM | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP T | |
| PID: 114536 SFN: | DRILLING METHOD: 3.25" HSA / NX | CALIBRATION DATE: 6-30-23 | ELEVATION: 789.0 (MSL) EOB: 50.0 ft. | PAGE 1 OF 1 |
| START: 8-2-23 END: 8-2-23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 84.7 | LAT / LONG: 41.420556, -81.815134 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GR | CS | FS | SI | CL | LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ASPHALT (12") | 789.0 / 788.0 | | | | | | | | | | | | | | | | | |
| VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, SOME CINDERS, MOIST (FILL) | 786.0 | | 10 43 46 | 126 | 100 | SS-1 | - | 55 | 6 | 4 | 25 | 10 | NP | NP | NP | 11 | A-2-4 (0) | |
| HARD, BROWNISH-GREY, **CLAY**, SOME SAND, MOIST | | | 9 6 7 | 18 | 100 | SS-2 | 4.50 | - | - | - | - | - | - | - | - | 15 | A-7-6 (V) | |
| | | | 3 5 5 | 14 | 100 | SS-3 | 4.50 | - | - | - | - | - | - | - | - | 16 | A-7-6 (V) | |
| | | | 3 7 8 | 21 | 100 | SS-4 | 4.50 | - | - | - | - | - | - | - | - | 18 | A-7-6 (V) | |
| | | | 5 6 7 | 18 | 100 | SS-5 | 4.50 | 0 | 15 | 10 | 37 | 38 | 41 | 19 | 22 | 19 | A-7-6 (13) | |
| | | | 6 8 11 | 27 | 100 | SS-6 | 4.50 | - | - | - | - | - | - | - | - | 19 | A-7-6 (V) | |
| HARD, GREY, **CLAY**, WITH SAND, MOIST | 773.5 | | 7 11 13 | 34 | 100 | SS-7 | 4.50 | 0 | 19 | 14 | 39 | 28 | 42 | 22 | 20 | 20 | A-7-6 (11) | |
| | | | 7 7 11 | 25 | 100 | SS-8 | 4.50 | - | - | - | - | - | - | - | - | 17 | A-7-6 (V) | |
| | | | 8 11 15 | 37 | 100 | SS-9 | 4.50 | - | - | - | - | - | - | - | - | 15 | A-7-6 (V) | |
| | | | 11 14 17 | 44 | 100 | SS-10 | 4.50 | - | - | - | - | - | - | - | - | 17 | A-7-6 (V) | |
| | | | 7 11 15 | 37 | 100 | SS-11 | 4.50 | - | - | - | - | - | - | - | - | 18 | A-7-6 (V) | |
| **SHALE**, BLACK, MODERATELY WEATHERED, WEAK. | 750.5 | TR | 50/4" | - | 100 | SS-12 | 4.50 | - | - | - | - | - | - | - | - | 14 | A-7-6 (V) | |
| @ 40.0' ANGULAR FRACTURE | | | 8 | | 100 | NQ-1 | | | | | | | | | | | Rock (V) CORE | |
| @ 45.5' ANGULAR FRACTURE | | | 18 | | 100 | NQ-2 | | | | | | | | | | | Rock (V) CORE | |
| @ 49' ANGULAR FRACTURE | 739.0 | EOB | | | | | | | | | | | | | | | | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (11) X (7) - OH DOT.GDT - 9-8-23 23:21 - G:\2023\AUGUST\08\23050013CLE\23020013CLE.GPJ

| | | | | |
|---|---|---|---|---|
| SHEET 160 / TOTAL 167 | SUBSET 13 / TOTAL 20 | PROJECT ID 114536 | REVIEWER HMK 09-07-23 | DESIGNER N.K.S |

DESIGN AGENCY
ENGINEERING LLC
6777 ENGLE RD. BLDG.111
CLEVELAND, OHIO 44130
PHONE: (440)238-9529
FAX: (440)238-9529

## GEOTECHNICAL PROFILE - ROADWAY

## BORING LOG B-006-0-23

## B-006-0-23

| Run #: | Depth | | Recovery | | RQD | |
|---|---|---|---|---|---|---|
| NQ2-1 | 40.0' | 45.0' | 60/60 | 100% | 4.8/60 | 8% |
| CUY-71-10.07SW PID 114536 | | | | | | |

## B-006-0-23

| Run #: | Depth | | Recovery | | RQD | |
|---|---|---|---|---|---|---|
| NQ2-2 | 45.0' | 50.0' | 60/60 | 100% | 10.8/60 | 18% |
| CUY-71-10.07SW PID 114536 | | | | | | |



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GEOTECHNICAL PROFILE - ROADWAY

ROCK CORE PHOTOS FOR BORING B-006-0-23

# CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:46:18 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL008.dgn

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: CUY-71-10.07 SW | DRILLING FIRM / OPERATOR: CTL / ADAM | DRILL RIG: D-50 TRACK CTL | STATION / OFFSET: 332+90, 17' RT. | EXPLORATION ID B-007-0-23 |
| TYPE: BRIDGE | SAMPLING FIRM / LOGGER: CTL / ADAM | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP T | |
| PID: 114536 SFN: | DRILLING METHOD: 3.25" HSA / NX | CALIBRATION DATE: 6-30-23 | ELEVATION: 788.0 (MSL) EOB: 49.0 ft. | PAGE 1 OF 1 |
| START: 7-20-23 END: 7-20-23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 84.7 | LAT / LONG: 41.420760, -81.814818 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GR | CS | FS | SI | CL | LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 788.0 | | | | | | | GRADATION (%) | | | | | ATTERBERG | | | | | |
| Gravel and stone fragments Base (12") | 787.0 | | | | | | | | | | | | | | | | | |
| MEDIUM STIFF, GREY, **SANDY SILT**, SOME ROCK FRAGMENTS, CINDERS, MOIST (FILL) | | | 3 3 3 | 8 | 100 | SS-1 | - | - | - | - | - | - | - | - | - | 17 | A-4a (V) | |
| | | | 1 1 4 | 7 | 100 | SS-2 | - | 20 | 14 | 12 | 38 | 16 | 31 | 22 | 9 | 22 | A-4a (4) | |
| | 782.5 | | | | | | | | | | | | | | | | | |
| VERY STIFF, GREY, **SANDY SILT**, SOME ROCK FRAGMENTS, LITTLE CLAY, MOIST | | | 3 4 6 | 14 | 100 | SS-3 | 3.00 | - | - | - | - | - | - | - | - | 15 | A-4a (V) | |
| | | | 3 3 3 | 8 | 100 | SS-4 | 2.50 | - | - | - | - | - | - | - | - | 17 | A-4a (V) | |
| | 777.5 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN, **SILTY CLAY**, SOME SAND, MOIST | | | 2 2 5 | 10 | 100 | SS-5 | 3.00 | 0 | 15 | 14 | 44 | 27 | 37 | 16 | 21 | 16 | A-6b (12) | |
| | | | 7 10 13 | 32 | 100 | SS-6 | 4.50 | - | - | - | - | - | - | - | - | 15 | A-6b (V) | |
| | 772.5 | | | | | | | | | | | | | | | | | |
| HARD, GREY, **SILTY CLAY**, SOME SAND, MOIST | | | 5 8 11 | 27 | 100 | SS-7 | 4.50 | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | | | 5 7 10 | 24 | 100 | SS-8 | 4.50 | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | | | 7 12 14 | 37 | 100 | SS-9 | 4.50 | - | - | - | - | - | - | - | - | 10 | A-6b (V) | |
| | | | 8 12 14 | 37 | 100 | SS-10 | 4.50 | - | - | - | - | - | - | - | - | 11 | A-6b (V) | |
| | 755.0 | | | | | | | | | | | | | | | | | |
| VERY DENSE, GREY, **GRAVEL AND STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST | | | 7 11 40 | 72 | 100 | SS-11 | - | 67 | 4 | 5 | 16 | 8 | 20 | 17 | 3 | 14 | A-1-b (0) | |
| | 751.0 | TR | | | | | | | | | | | | | | | | |
| **SHALE**, GREY, SEVERELY WEATHERED, VERY WEAK. | | | 25 50/2" | - | 0 | SS-12 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| @40.0' VERTICAL FRACTURE | | | 0 | | 70 | NQ-1 | | | | | | | | | | | Rock (V) CORE | |
| | | | 70 | | 98 | NQ-2 | | | | | | | | | | | Rock (V) CORE | |
| @48' ANGULAR FRACTURE | 739.0 | EOB | | | | | | | | | | | | | | | | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 6-9-23 23:21 - G:\2023\AUGUST\06\23050013CLE\23020013CLE.GPJ

| | | | |
|---|---|---|---|
| SHEET 162 / TOTAL 167 | SUBSET 15 / TOTAL 20 | PROJECT ID 114536 | REVIEWER HMK 09-07-23 |
| DESIGNER N.K.S | DESIGN AGENCY | | |


CTL ENGINEERING, INC.
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## GEOTECHNICAL PROFILE - ROADWAY

## BORING LOG B-007-0-23

# B-007-0-23

| Run #: | Depth | | Recovery | | RQD | |
|---|---|---|---|---|---|---|
| NQ2-1 | 39.0' | 44.0' | 42/60 | 70% | 0.0/60 | 0.0% |
| NQ2-2 | 44.0' | 49.0' | 58.8/60 | 98% | 42/60 | 70% |
| CUY-71-10.07SW PID 114536 | | | | | | |



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GEOTECHNICAL PROFILE - ROADWAY

ROCK CORE PHOTO FOR B-007-0-23

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:51:09 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL010.dgn

PROJECT: CUY-71-10.07 SW
TYPE: BRIDGE
PID: 114536 SFN:
START: 7-26-23 END: 7-26-23

DRILLING FIRM / OPERATOR: CTL / ADAM
SAMPLING FIRM / LOGGER: CTL / ADAM
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: D-50 TRACK CTL
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 6-30-23
ENERGY RATIO (%): 84.7

STATION / OFFSET: 333+50, 28' LT.
ALIGNMENT: RAMP T
ELEVATION: 807.7 (MSL) EOB: 69.2 ft.
LAT / LONG: 41.420922, -81.814806

EXPLORATION ID B-008-0-23
PAGE 1 OF 2

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOPSOIL (12") | 807.7<br>806.7 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, BROWNISH GREY, **SANDY SILT**, SOME ROCK FRAGMENTS, CLAY, MOIST (FILL) | 804.7 | 1-2 | 7<br>14<br>6 | 28 | 100 | SS-1 | - | 25 | 13 | 11 | 29 | 22 | 24 | 18 | 6 | 14 | A-4a (3) | |
| VERY STIFF, BROWNISH GREY, **SILT AND CLAY**, SOME GRAVEL, SAND, MOIST | | 3-4 | 5<br>5<br>4 | 13 | 100 | SS-2 | 3.75 | 22 | 17 | 7 | 40 | 14 | 30 | 18 | 12 | 16 | A-6a (5) | |
| | | 5-6 | 4<br>3<br>5 | 11 | 100 | SS-3 | 2.00 | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | 7-8 | 2<br>2<br>3 | 7 | 100 | SS-4 | 3.50 | - | - | - | - | - | - | - | - | 17 | A-6a (V) | |
| | | 9-10 | 7<br>9<br>11 | 28 | 100 | SS-5 | 4.00 | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 11-12 | 4<br>4<br>7 | 16 | 100 | SS-6 | 4.00 | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | | 13-14 | 4<br>6<br>12 | 25 | 100 | SS-7 | 2.50 | - | - | - | - | - | - | - | - | 19 | A-6a (V) | |
| | | 15-16 | 6<br>7<br>7 | 20 | 100 | SS-8 | 2.00 | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 17-18 | 15<br>18<br>37 | 78 | 100 | SS-9 | - | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| Encountered cobble zone from 25-28 ft. | | 19-20 | 7<br>8<br>10 | 25 | 67 | SS-10 | - | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 21-22 | 10<br>13<br>18 | 44 | 100 | SS-11 | 2.00 | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | 771.7 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, BROWNISH GREY, **SANDY SILT**, SOME CLAY, MOIST | | 23-24 | 7<br>7<br>14 | 30 | 100 | SS-12 | - | 0 | 19 | 11 | 47 | 23 | 35 | 28 | 7 | 15 | A-4a (7) | |
| | | 25-26 | 10<br>12<br>14 | 37 | 100 | SS-13 | 4.50 | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 27-28 | 11<br>13<br>18 | 44 | 100 | SS-14 | 4.50 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 29-30 | 8<br>10<br>13 | 32 | 100 | SS-15 | 4.50 | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | 749.7 | | | | | | | | | | | | | | | | | |
| HARD, GREY, **SILT AND CLAY**, LITTLE SAND, MOIST | | 31-32 | 13<br>13<br>19 | 45 | 100 | SS-16 | 4.50 | 0 | 9 | 10 | 50 | 31 | 40 | 27 | 13 | 23 | A-6a (9) | |

STANDARD ODOT SOIL BORING LOG (11) X (7) - CHI DOT.GDT - 9-8-23 23:29 - G:\2023\AUGUST\06\23050013CLE\23020013CLE.GPJ

DESIGNER N.K.S
REVIEWER HMK 09-07-23
PROJECT ID 114536
SUBSET 17 TOTAL 20
SHEET 164 TOTAL 167

DESIGN AGENCY
GTL ENGINEERING LLC
6777 ENGLE RD. BLDG.111
CLEVELAND, OHIO 44130
PHONE: (440)238-4050
FAX: (440)238-4529

# GEOTECHNICAL PROFILE - ROADWAY

# BORING LOG B-008-0-23

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 13:53:29 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL011.dgn

PID: 114536 | SFN: | PROJECT: CUY-71-10.07 SW | STATION / OFFSET: 333+50, 28' LT. | START: 7-26-23 | END: 7-26-23 | PG 2 OF 2 | B-008-0-23

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HARD, GREY, **SILT AND CLAY**, LITTLE SAND, MOIST *(continued)* | 747.7 | 61 | | | | | | | | | | | | | | | | |
| | | 62 | | | | | | | | | | | | | | | | |
| | | 63 | | | | | | | | | | | | | | | | |
| | | 64 | 12 16 23 | 55 | 100 | SS-17 | - | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | 65 | | | | | | | | | | | | | | | | |
| | | 66 | | | | | | | | | | | | | | | | |
| | | 67 | | | | | | | | | | | | | | | | |
| | 739.7 | 68 | | | | | | | | | | | | | | | | |
| **SHALE**, GRAY, SEVERELY WEATHERED, VERY WEAK. | 738.5 | TR 738.5 EOB 69 | 50/0" | - | | SS-18 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 9-8-23 23:29 - G:\2023\AUGUST\23050013CLE\23050013CLE.GPJ

| SHEET | TOTAL |
|---|---|
| 165 | 167 |

| SUBSET | TOTAL |
|---|---|
| 18 | 20 |

PROJECT ID: 114536

REVIEWER: HMK 09-07-23

DESIGNER: N.K.S

CTL ENGINEERING, INC.
6777 ENGLE RD. BLDG.111
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DESIGN AGENCY

GEOTECHNICAL PROFILE - ROADWAY

BORING LOG B-008-0-23 CONTINUED

# CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 14:01:15 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL012.dgn

| | | | |
|---|---|---|---|
| PROJECT: CUY-71-10.07 SW | DRILLING FIRM / OPERATOR: CTL / ADAM | DRILL RIG: D-50 TRACK CTL | STATION / OFFSET: 336+11, 72' RT. |
| TYPE: ROADWAY | SAMPLING FIRM / LOGGER: CTL / ADAM | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP T |
| PID: 114536 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 6-30-23 | ELEVATION: 781.3 (MSL) EOB: 20.0 ft. |
| START: 7-20-23 END: 7-20-23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 84.7 | LAT / LONG: 41.421068, -81.813740 |

EXPLORATION ID B-009-0-23

PAGE 1 OF 1

| MATERIAL DESCRIPTION AND NOTES | ELEV. 781.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | SO4 ppm | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEDIUM DENSE, BROWN, **SILT**, SOME SAND, LITTLE CLAY, MOIST (FILL) | | 1 | 3 4 5 | 13 | 100 | SS-1 | - | 0 | 13 | 12 | 63 | 12 | 26 | 18 | 8 | 20 | A-4b (8) | - | |
| | 778.3 | 2 | | | | | | | | | | | | | | | | | |
| VERY STIFF, BROWN, **SILTY CLAY**, SOME SAND | | 3 | | | | | | | | | | | | | | | | | |
| | | 4 | 4 6 8 | 20 | 100 | SS-2 | 3.00 | - | - | - | - | - | - | - | - | 15 | A-6b (V) | - | |
| | | 5 | | | | | | | | | | | | | | | | | |
| | | 6 | 4 6 6 | 17 | 100 | SS-3 | 3.00 | 0 | 15 | 13 | 47 | 25 | 36 | 16 | 20 | 16 | A-6b (11) | - | |
| | 773.3 | 7 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, GREY, **SILT AND CLAY**, WITH SAND, MOIST | | 8 | | | | | | | | | | | | | | | | | |
| | | 9 | 4 7 11 | 25 | 100 | SS-4 | 3.00 | 0 | 19 | 23 | 41 | 17 | 37 | 25 | 12 | 15 | A-6a (5) | - | |
| | | 10 | | | | | | | | | | | | | | | | | |
| | | 11 | 6 7 11 | 25 | 100 | SS-5 | 3.00 | - | - | - | - | - | - | - | - | 10 | A-6a (V) | - | |
| | | 12 | | | | | | | | | | | | | | | | | |
| | | 13 | | | | | | | | | | | | | | | | | |
| | | 14 | 3 5 6 | 16 | 100 | SS-6 | 4.50 | - | - | - | - | - | - | - | - | 7 | A-6a (V) | - | |
| | | 15 | | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | | |
| | | 17 | 7 9 11 | 28 | 100 | SS-7 | 4.50 | - | - | - | - | - | - | - | - | 11 | A-6a (V) | - | |
| | | 18 | | | | | | | | | | | | | | | | | |
| | | 19 | 9 12 17 | 41 | 100 | SS-8 | 4.50 | - | - | - | - | - | - | - | - | 12 | A-6a (V) | - | |
| | 761.3 | EOB 20 | | | | | | | | | | | | | | | | | |

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

STANDARD ODOT LOG W/ SILFATES (11 X 17) - OH DOT.GDT - 3/1-8-23 16:08 - G:\2023\AUG\DIST\26\23050013CLE\23020013CLE.GPJ

| | | | | |
|---|---|---|---|---|
| SHEET 166 | SUBSET 19 | PROJECT ID 114536 | REVIEWER HMK 09-07-23 | DESIGNER N.K.S |
| TOTAL SHEET 167 | TOTAL 20 | | | |

GTL ENGINEERING LLC
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DESIGN AGENCY

GEOTECHNICAL PROFILE - ROADWAY

BORING LOG B-009-0-23

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 07-09-2023 TIME: 14:02:50 USER: hp
D:\Drop Box\CTL 2023\August\Dept 05\CLE\Matt\23050013CLE_ODOT\Mod_06.09.23\114536ZL013.dgn

B-010-0-65

NAVD88 ELV. ELV = NGVD29 ELV -.502 ft

LOG OF BORING

Date Started 6-3-65
Date Completed 6-8-65
Boring No. B-10 Kamp. "F"
Sampler Type SS Dia. 1 3/8"
Casing: Length ____ Dia. ____
Station & Offset 33+29, 09' Lt. (Forward Abutment)
Water Elev. ____
Surface Elev. 783.5'

| Elev. | Depth | Std. Pen. (N) | Rec. ft. | Loss ft. | Description | Sample No. | Physical Characteristics % Agg. | % C.S. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | SHTL Class. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 783.5 | 0 | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | |
| | 4 | | | | | | | | | | | | | | |
| 778.5 | 6 | 10/17 | | | Brownish-Gray Sandy Clay | 1 | 8 | 5 | 8 | 39 | 40 | 34 | 15 | 16 | |
| 776.0 | 8 | 12/21 | | | Brown and Gray Gravelly Sandy Clay | 2 | 15 | 9 | 9 | 33 | 34 | 32 | 12 | 15 | |
| 773.5 | 10 | 13/18 | | | Gray Gravelly Clay | 3 | 16 | 6 | 9 | 33 | 36 | 28 | 11 | 13 | |
| 771.0 | 12 | 15/19 | | | Gray Sandy Silt | 4 | 12 | 6 | 9 | 36 | 37 | 27 | 10 | 16 | |
| 768.5 | 14 | 24/34 | | | Gray Sandy Silt | 5 | 12 | 8 | 10 | 39 | 31 | 21 | 5 | 12 | |
| 766.0 | 16 | 30/50 | | | Gray Gravelly Sandy Silt | 6 | 17 | 8 | 10 | 36 | 29 | 22 | 5 | 11 | |
| 763.5 | 18 | 17/23 | | | Gray Sandy Silt | 7 | 10 | 9 | 8 | 36 | 37 | 25 | 8 | 13 | |
| | 20 | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | |
| 758.5 | 24 | | | | | | | | | | | | | | |
| | 26 | 20/27 | | | Gray Cravelly Silt | 8 | 18 | 5 | 6 | 35 | 36 | 25 | 8 | 13 | |
| | 28 | | | | | | | | | | | | | | |
| 753.5 | 30 | | | | | | | | | | | | | | |
| | 32 | 30/45 | | | Gray Sandy Gravelly Clay | 9 | 27 | 9 | 7 | 25 | 32 | 28 | 11 | 12 | |
| | 34 | | | | | | | | | | | | | | |
| 748.5 | | | | | BOTTOM OF BORING | | | | | | | | | | |
| 747.5 | 36 | 20/36 | | | Gray Clayey Silt | 10 | 0 | 1 | 11 | 49 | 39 | 23 | 8 | 13 | |

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DESIGN AGENCY

DESIGNER N.K.S

REVIEWER HMK 09-07-23

PROJECT ID 114536

SUBSET 20 TOTAL 20

SHEET 167 TOTAL 167

GEOTECHNICAL PROFILE - ROADWAY

HISTORIC BORING LOG B-010-0-65