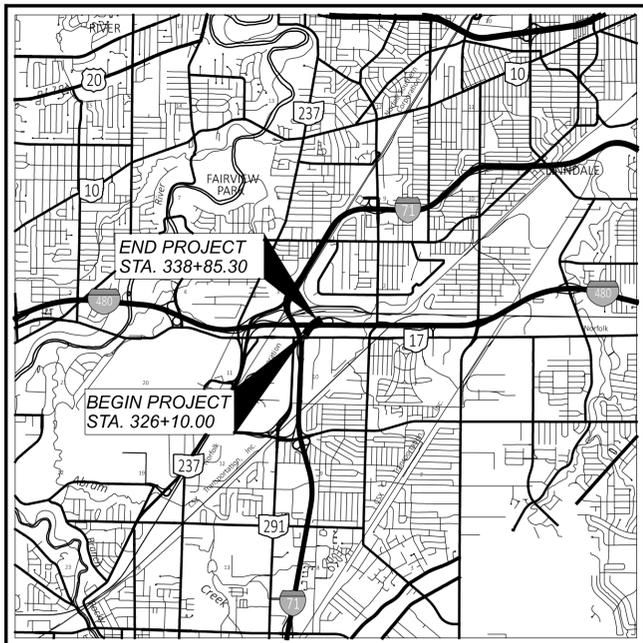


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

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 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

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

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

| | | |
|---|--|--|
| <p>ENGINEER'S SEAL FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20'</p> | <p>ENGINEER'S SEAL FOR STRUCTURES OVER 20' (SFN 1814258)</p> | <p>ENGINEER'S SEAL FOR STRUCTURES OVER 20' (SFN 1814249)</p> |
|---|--|--|

| STANDARD CONSTRUCTION DRAWINGS | | | | | | | | | | SUPPLEMENTAL SPECIFICATIONS | SPECIAL PROVISIONS | |
|--------------------------------|---------|---------|---------|----------|---------|-----------|---------|----------|----------|-----------------------------|--------------------|--|
| 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 | 808 | 7/19/24 | |
| 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 | 832 | 7/18/25 | |
| | | MGS-4.2 | 7/18/25 | HL-20.11 | 7/18/25 | MT-95.50 | 7/21/17 | TC-72.20 | 7/18/25 | 869 | 10/17/14 | |
| | | MGS-4.3 | 7/18/25 | HL-20.14 | 4/17/20 | MT-98.11 | 1/17/20 | | | 873 | 4/16/21 | |
| | | MGS-6.1 | 1/19/18 | HL-30.11 | 7/21/23 | MT-98.21 | 7/21/23 | A-1-20 | 7/19/24 | 908 | 1/17/25 | |
| CB-3A | 7/19/24 | | | HL-30.21 | 4/17/20 | MT-98.29 | 1/17/20 | AS-1-15 | 1/20/23 | | | |
| 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 | | | | | |

TITLE SHEET

DESIGN AGENCY

M M

MOTT MACDONALD
20445 EMERALD PKWY
SUITE 100
CLEVELAND, OH 44135

DESIGNER
SMS

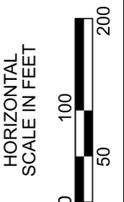
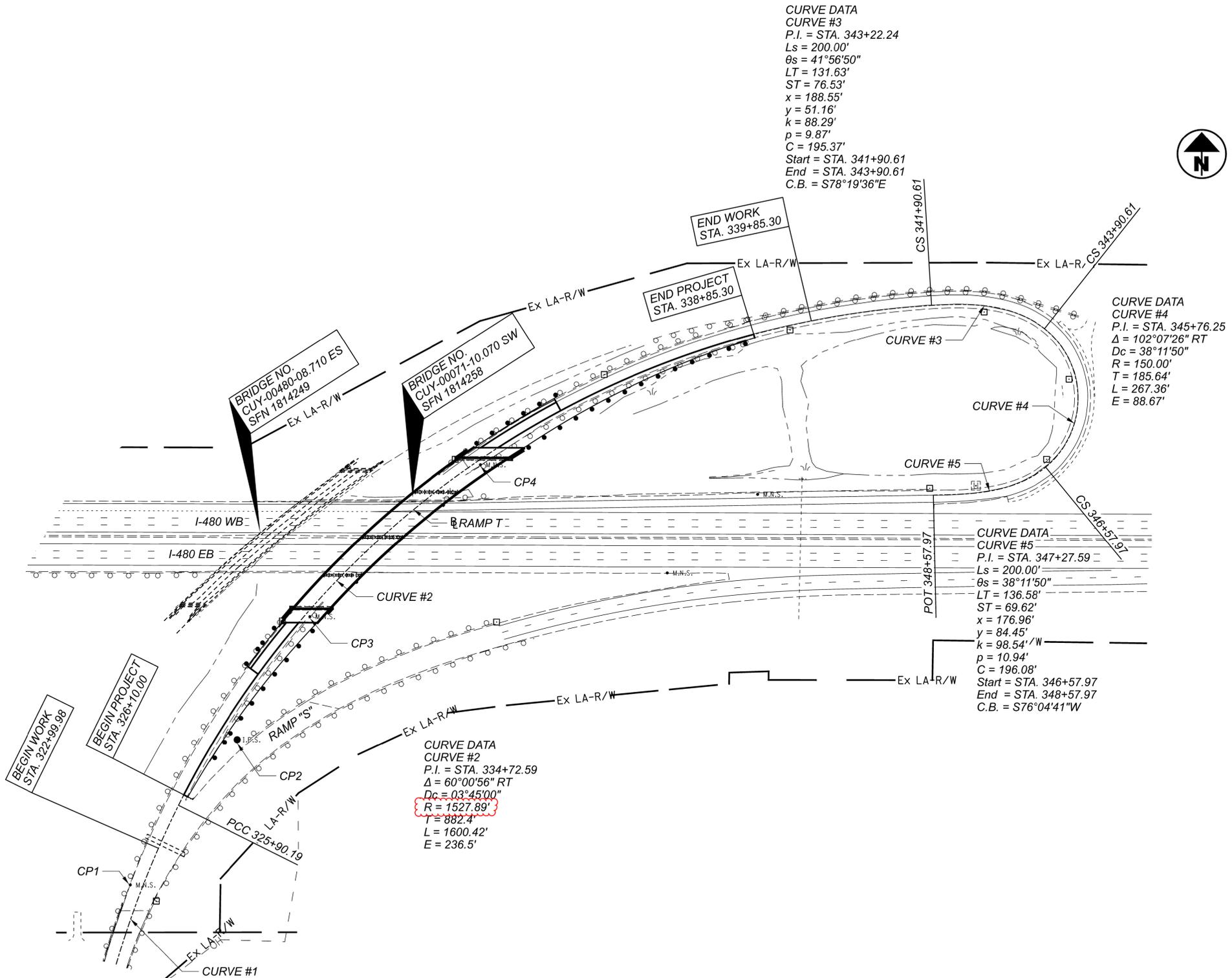
REVIEWER
SJP 09/17/25

PROJECT ID
114536

SHEET TOTAL
P.1 | 167

CUY-71-10.07 SW

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/8/2026 TIME: 12:23:51 PM USER: KC112965
p:\mott-use-pw-bentley.com\mott-use-pw-20\Documents\507106271-ODOT_CUY-071-10.07_SW\CUY-071-10.07_SW\CUY-071-10.07_SW\Engineering\Roadway\Sheets\114536_GT001.dgn



SCHEMATIC PLAN

| 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 |

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

DESIGNER
 SMS

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

SHEET TOTAL
 P.2 | 167

LEGEND

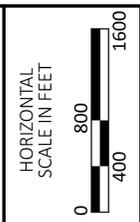
- DETOUR ROUTE
- EX. GUIDE SIGN
- DETOUR SIGN
- TYPE III BARRICADE
- PCMS
- DIRECTION OF TRAFFIC

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.

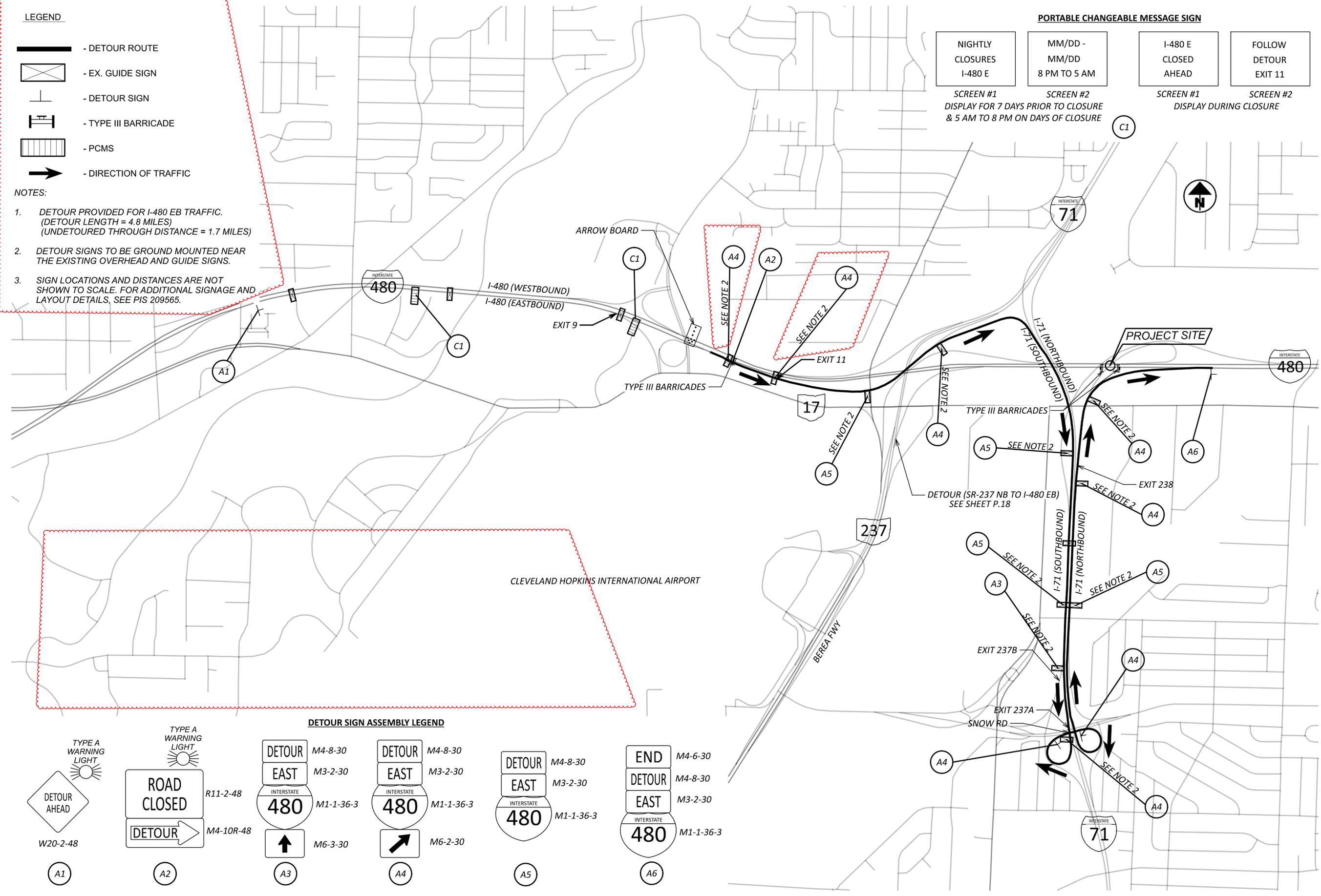
PORTABLE CHANGEABLE MESSAGE SIGN

| | | | |
|---|----------------------------------|-------------------------------------|-----------------------------|
| 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 DISPLAY FOR 7 DAYS PRIOR TO CLOSURE & 5 AM TO 8 PM ON DAYS OF CLOSURE | SCREEN #2 | SCREEN #1 DISPLAY DURING CLOSURE | SCREEN #2 |

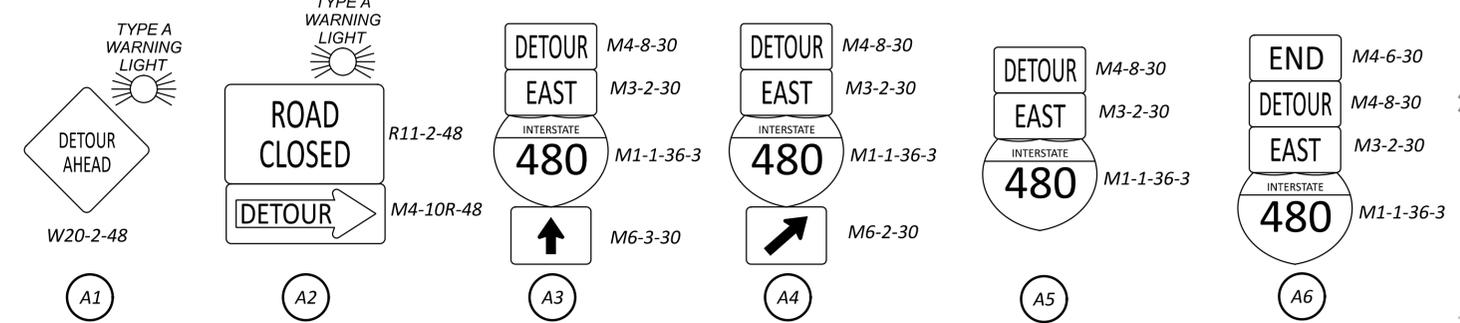


MAINTENANCE OF TRAFFIC - DETOUR PLANS
I-480 EB CLOSURE

| | |
|---------------|--------------|
| DESIGN AGENCY | M M |
| DESIGNER | RKC |
| REVIEWER | SJP 09/17/25 |
| PROJECT ID | 114536 |
| SHEET | TOTAL |
| P.17 | 167 |



DETOUR SIGN ASSEMBLY LEGEND

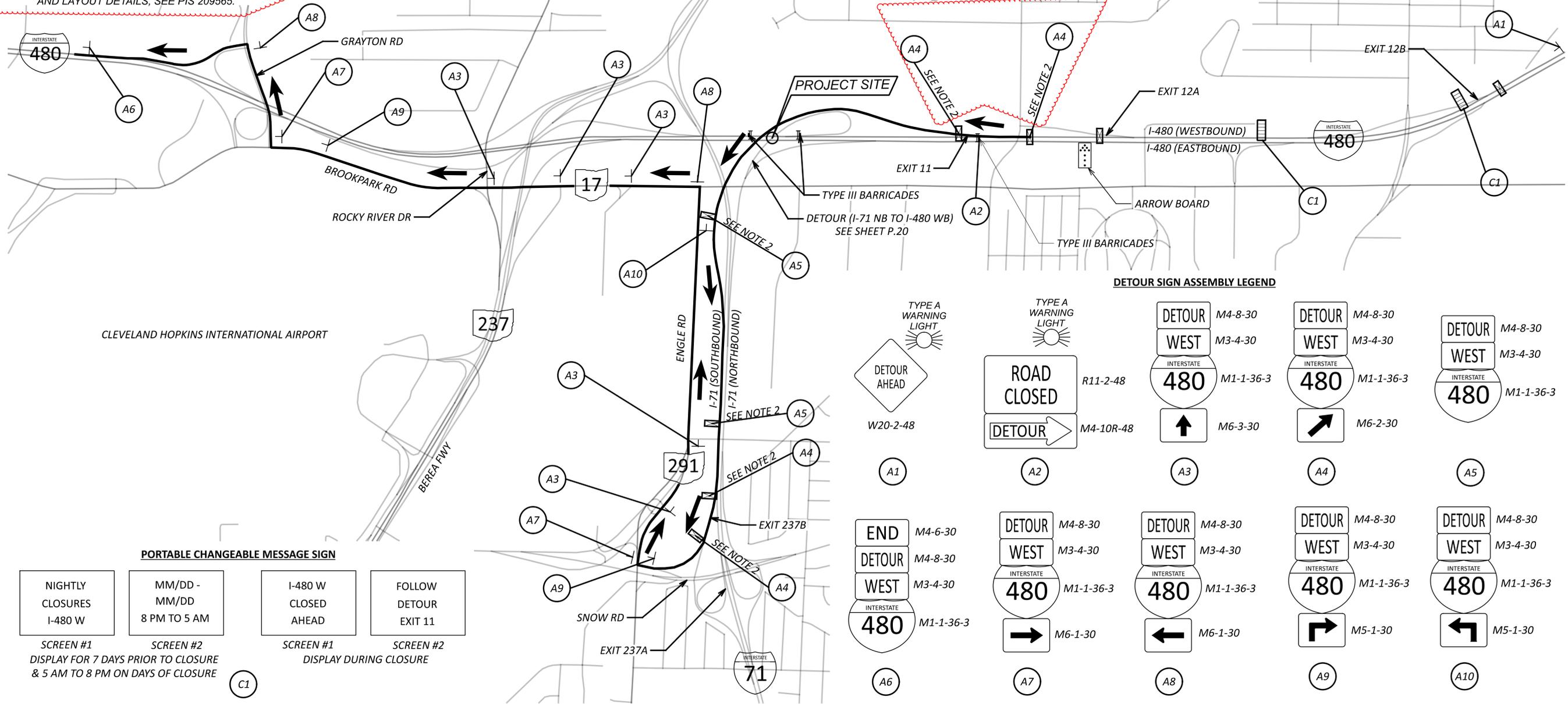


LEGEND

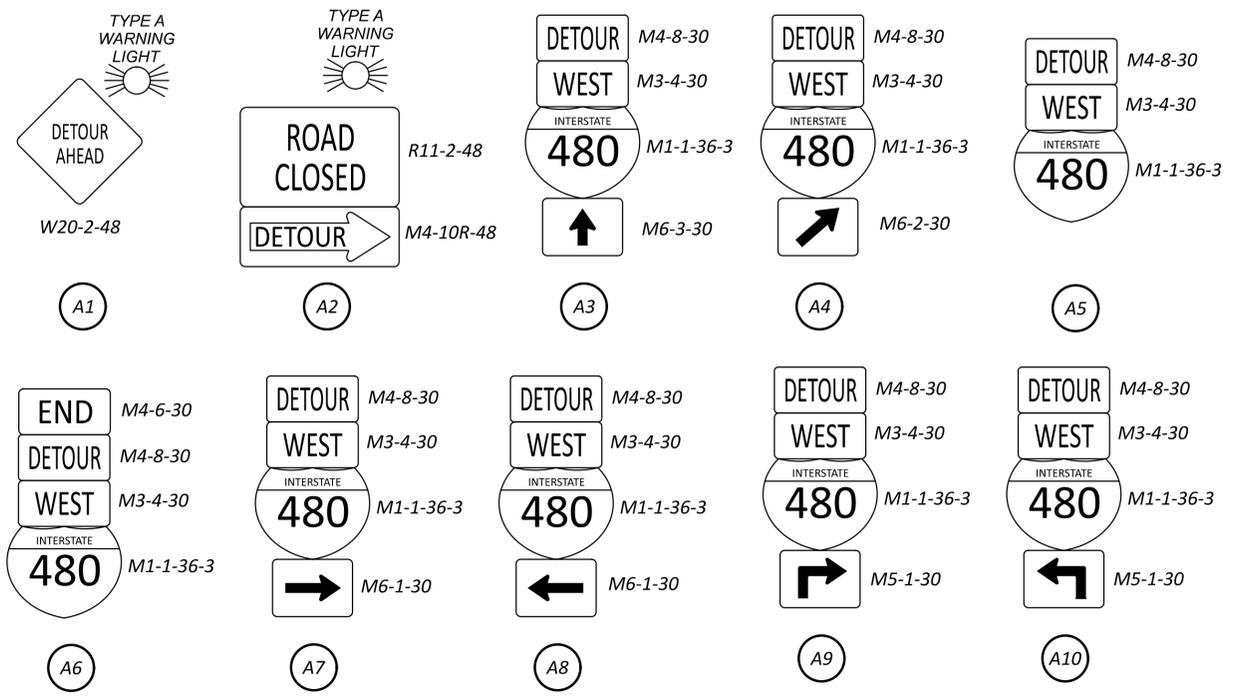
- DETOUR ROUTE
- EX. GUIDE SIGN
- DETOUR SIGN
- TYPE III BARRICADE
- PCMS
- DIRECTION OF TRAFFIC

NOTES:

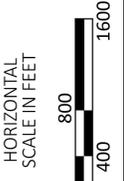
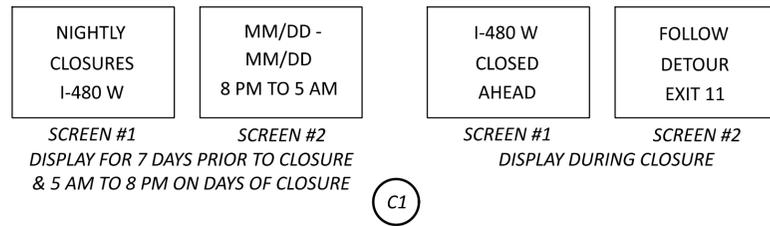
- DETOUR PROVIDED FOR I-480 WB TRAFFIC.
(DETOUR DISTANCE= 5.2 MILES)
(UNDETOURED THROUGH DISTANCE= 2.8 MILES)
- DETOUR SIGNS TO BE GROUND MOUNTED NEAR THE EXISTING OVERHEAD AND GUIDE SIGNS.
- SIGN LOCATIONS AND DISTANCES ARE NOT SHOWN TO SCALE. FOR ADDITIONAL SIGNAGE AND LAYOUT DETAILS, SEE PIS 209565.



DETOUR SIGN ASSEMBLY LEGEND



PORTABLE CHANGEABLE MESSAGE SIGN



MAINTENANCE OF TRAFFIC - DETOUR PLANS
I-480 WB CLOSURE

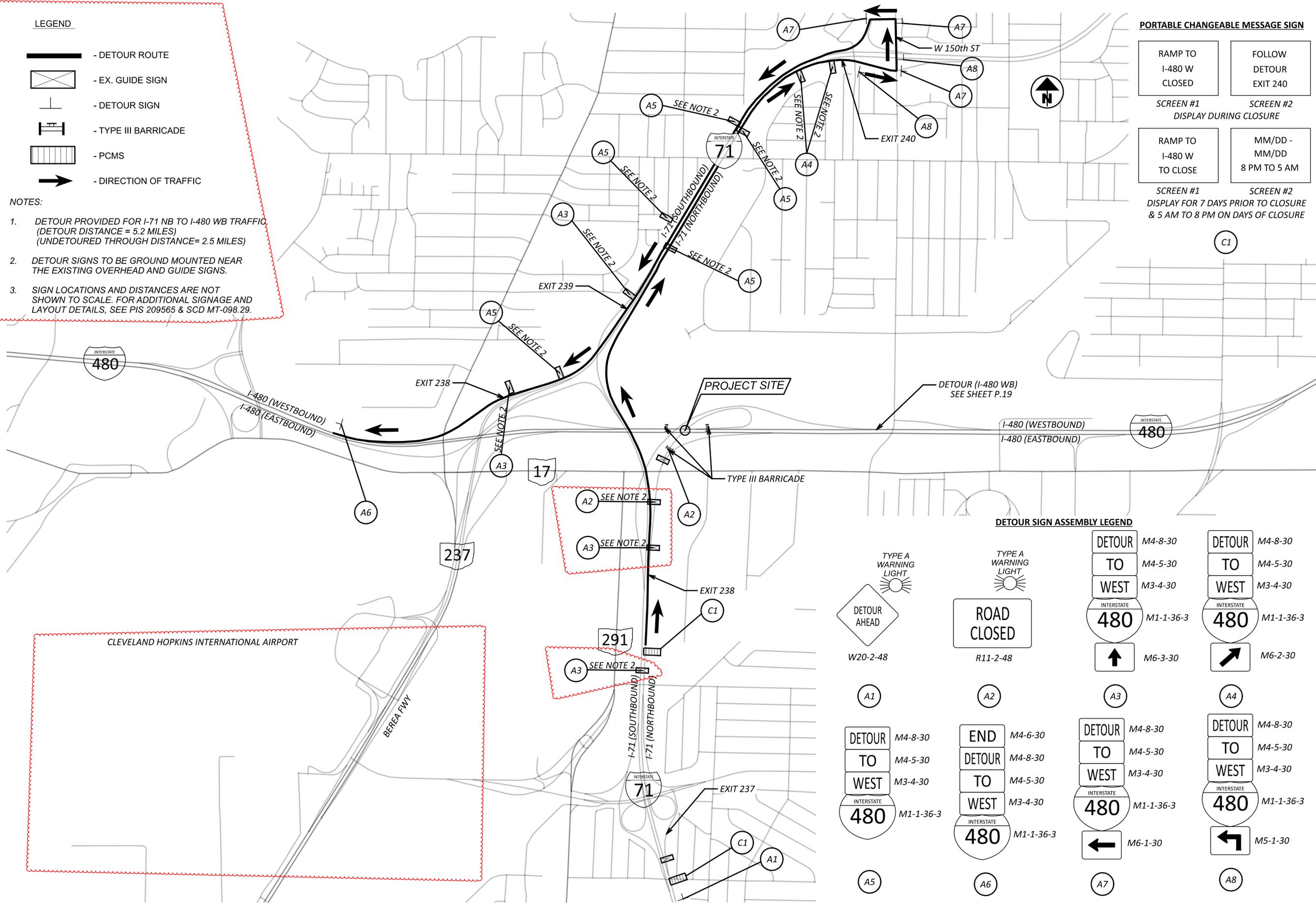
| | |
|--|----------------|
| DESIGN AGENCY | MOTT MACDONALD |
| 20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135 | |
| DESIGNER | RKC |
| REVIEWER | SJP 09/17/25 |
| PROJECT ID | 114536 |
| SHEET | TOTAL |
| P.19 | 167 |

LEGEND

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

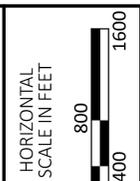
NOTES:

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

| | | | |
|----------|----------|--|--|
| | | | |
| W20-2-48 | R11-2-48 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 |
| | | | |
| A1 | A2 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 |
| | | | |
| A5 | A6 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 |
| | | | |
| A7 | A8 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 | M4-8-30 M4-5-30 M3-4-30 M1-1-36-3 |

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

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

DESIGNER
RKC

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

SHEET TOTAL
 P.20 167

| 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 | 164 | | | | | | | LS | | 201 | 11000 | LS | CLEARING AND GRUBBING | | |
| | | | | | 1,355 | | | 1,519 | | 202 | 23000 | 1,519 | SY | PAVEMENT REMOVED | |
| | | | | 282 | | | | 282 | | 202 | 30701 | 282 | FT | CONCRETE BARRIER REMOVED, AS PER PLAN | |
| | | | | 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 | |
| | | | | 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 | |
| | | | | 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 | |
| | | | | 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 | |
| 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 | |
| | 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 | |
| | | | | 26 | 1,920 | | | 1,920 | | 451 | 14010 | 1,920 | SY | 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | |
| | | | | | | | | 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

DESIGN AGENCY

MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135

DESIGNER
SMS

REVIEWER
SJP 09/17/25

PROJECT ID
114536

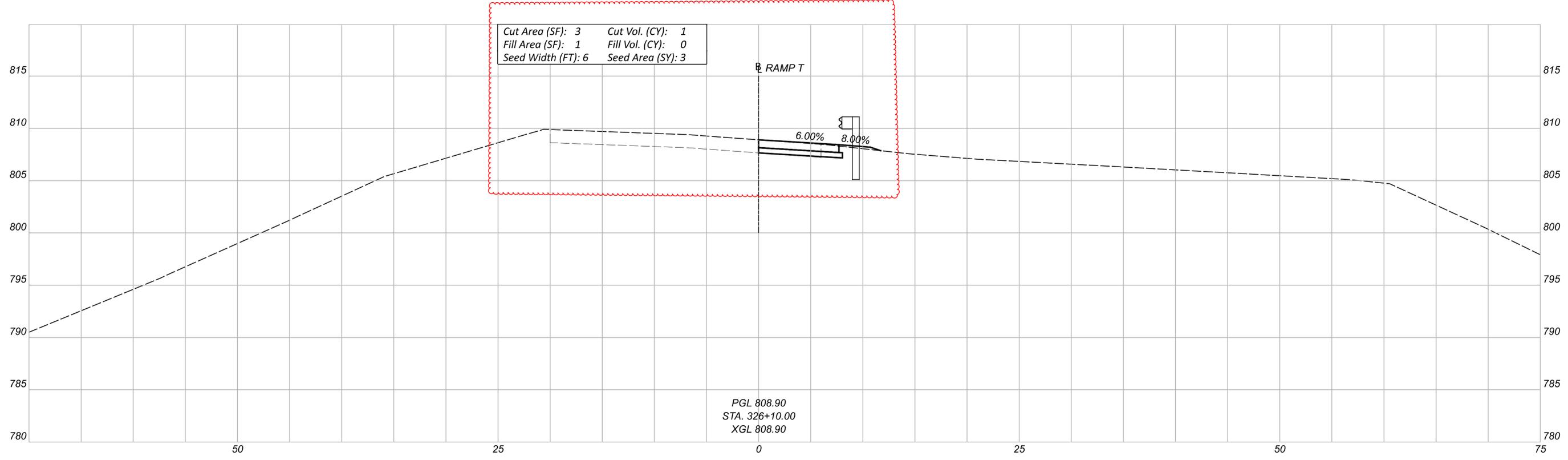
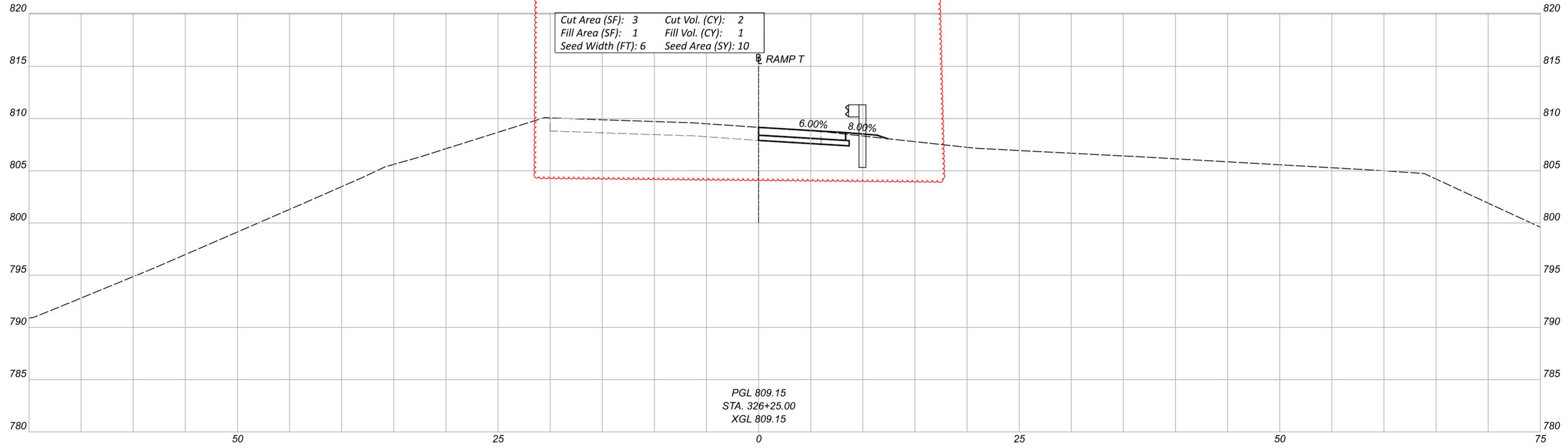
SHEET TOTAL
P.39 | 167

| 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 |
| 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

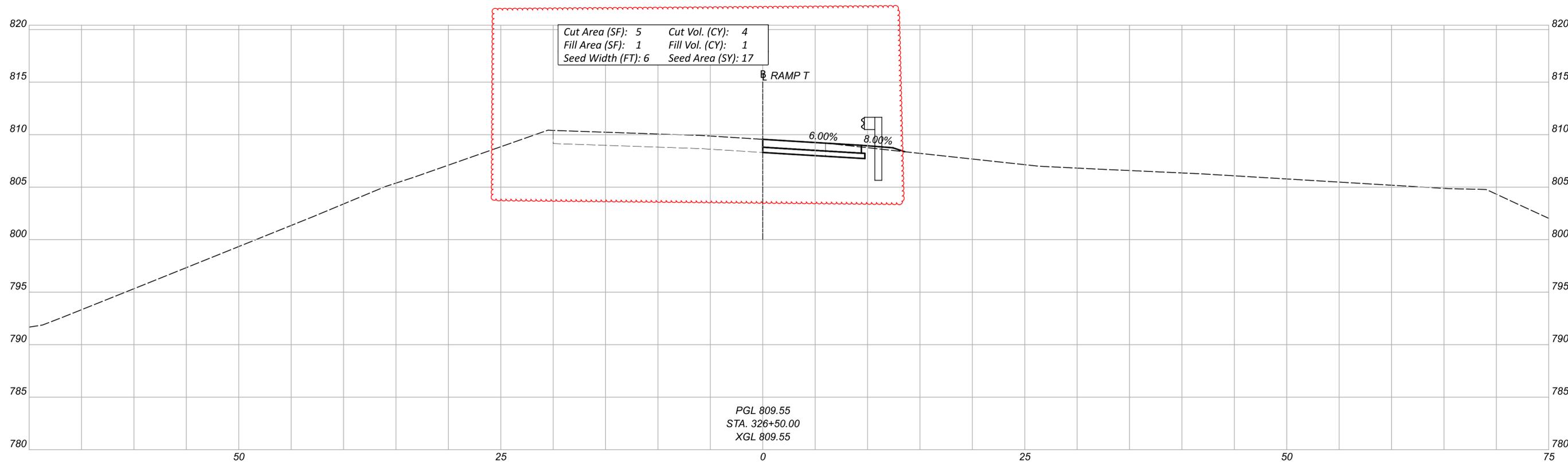
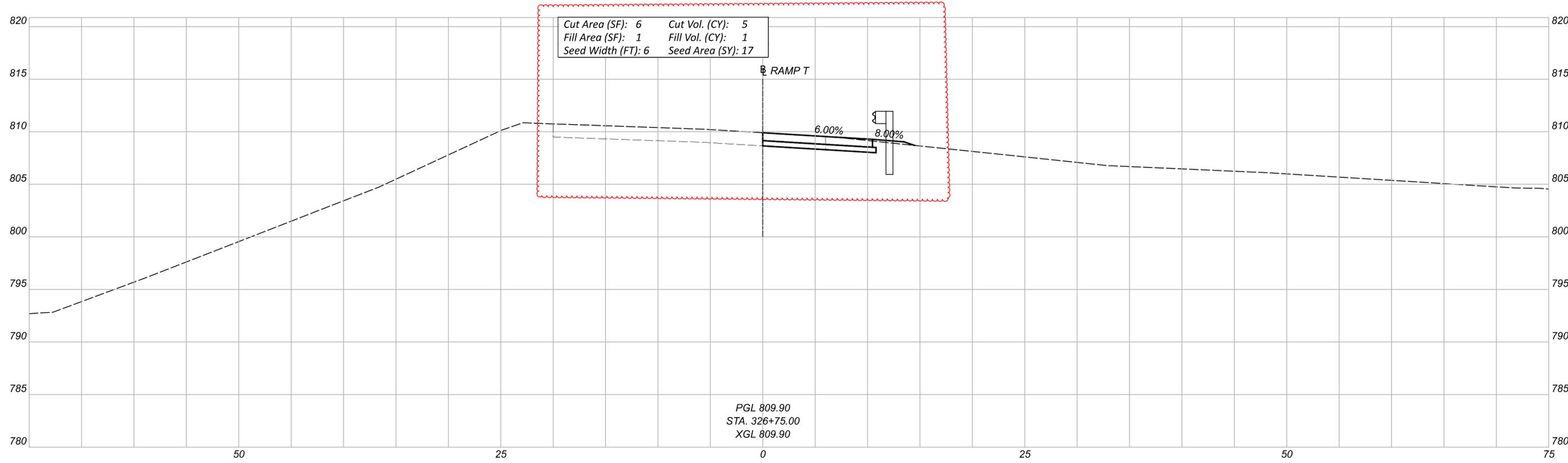
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536
 SHEET TOTAL
 P.44 | 167



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

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

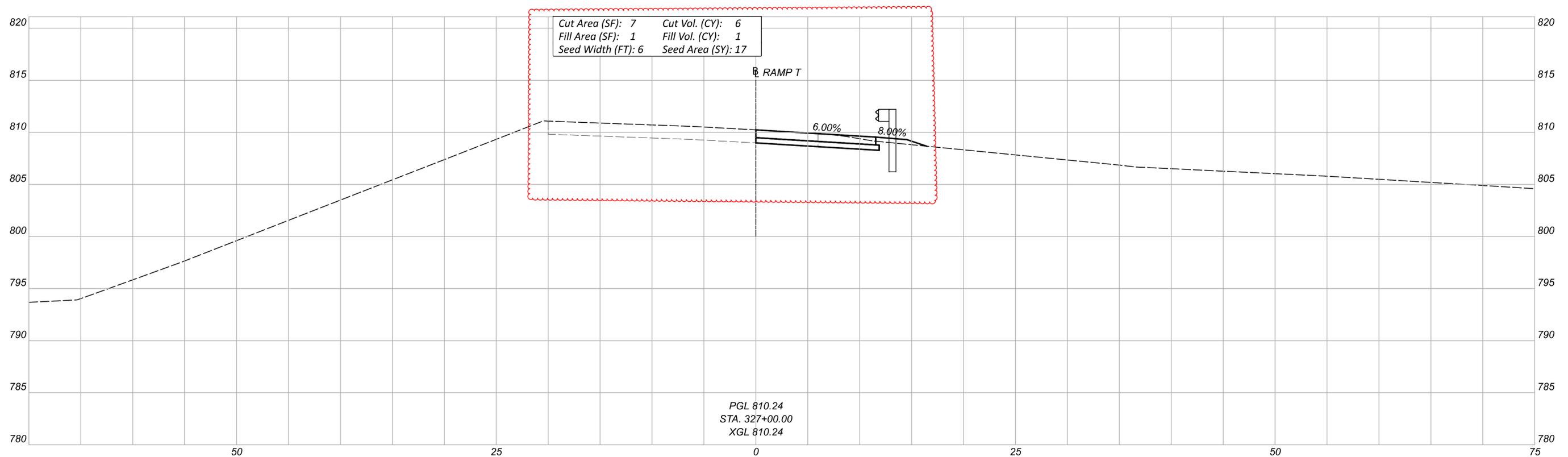
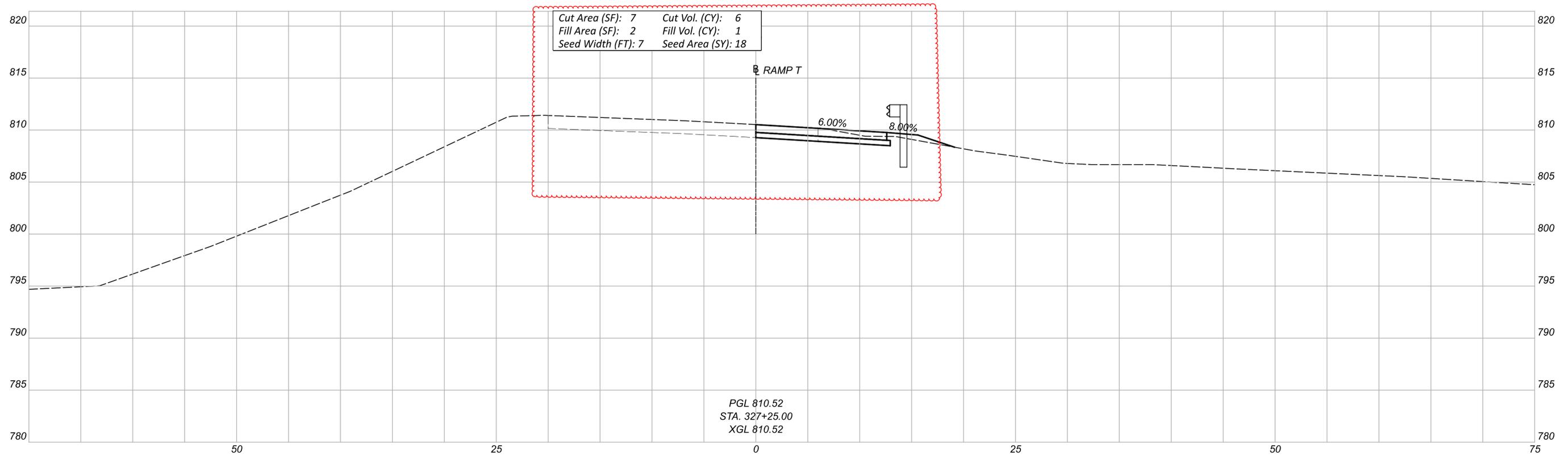
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|--------------|-----|------|-------------|
| Seeding | Cut | Fill | SHEET TOTAL |
| 13 | 3 | 1 | P.52 167 |



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

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

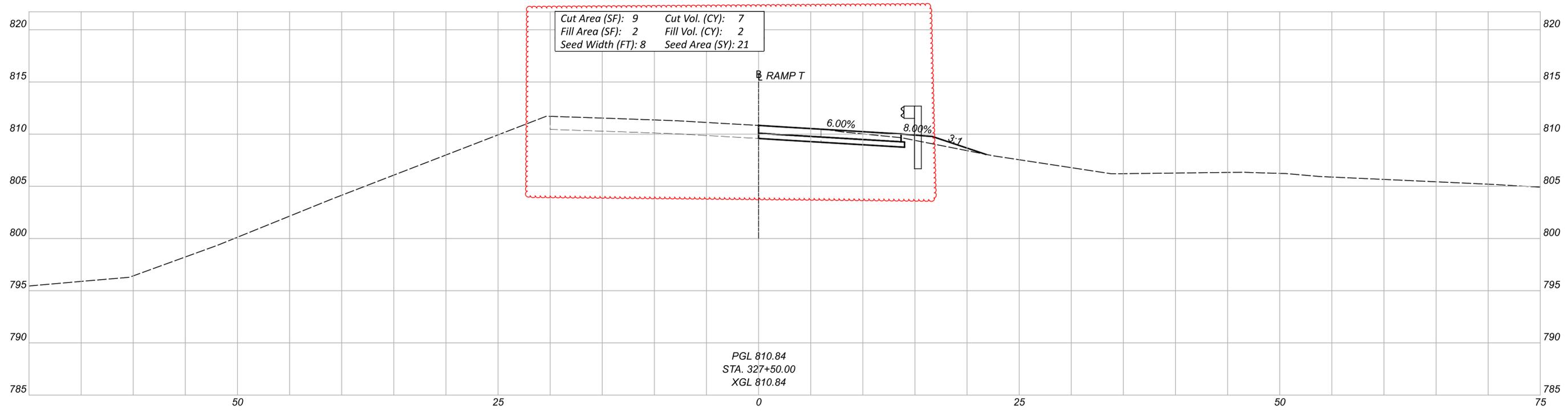
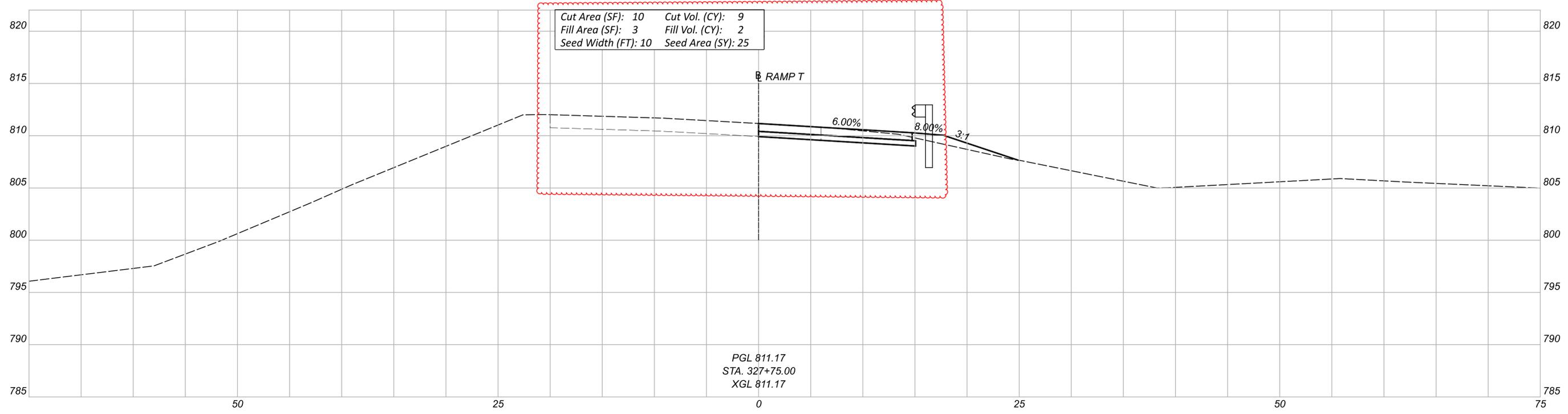
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|--------------|-----|------|-------|-------|
| Seeding | Cut | Fill | SHEET | TOTAL |
| 34 | 9 | 2 | P.53 | 167 |



CROSS SECTIONS
 STA. 327+00.00 TO STA. 327+25.00

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

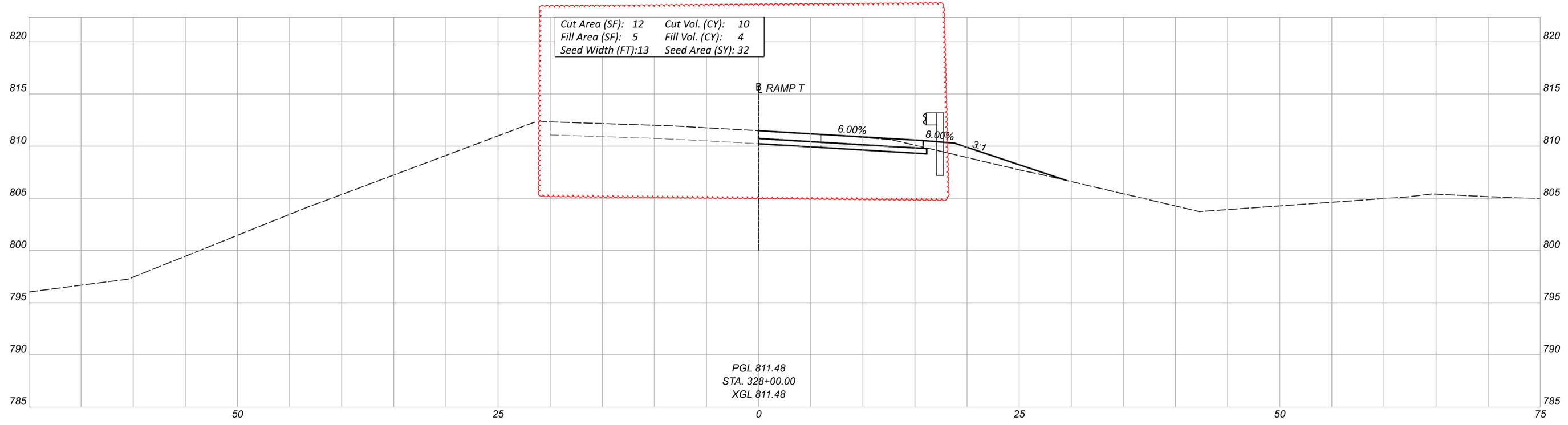
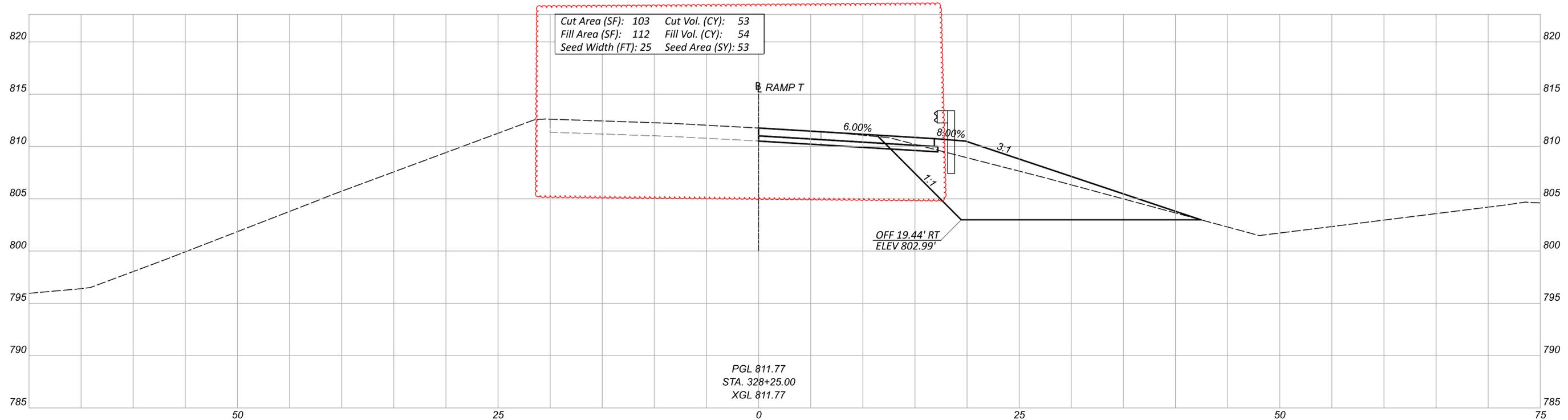
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|--------------|-----|------|--------|-------|
| Seeding | Cut | Fill | SHEET | TOTAL |
| 35 | 72 | 2 | P.54 | 167 |



CROSS SECTIONS
 STA. 327+50.00 TO STA. 327+75.00

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

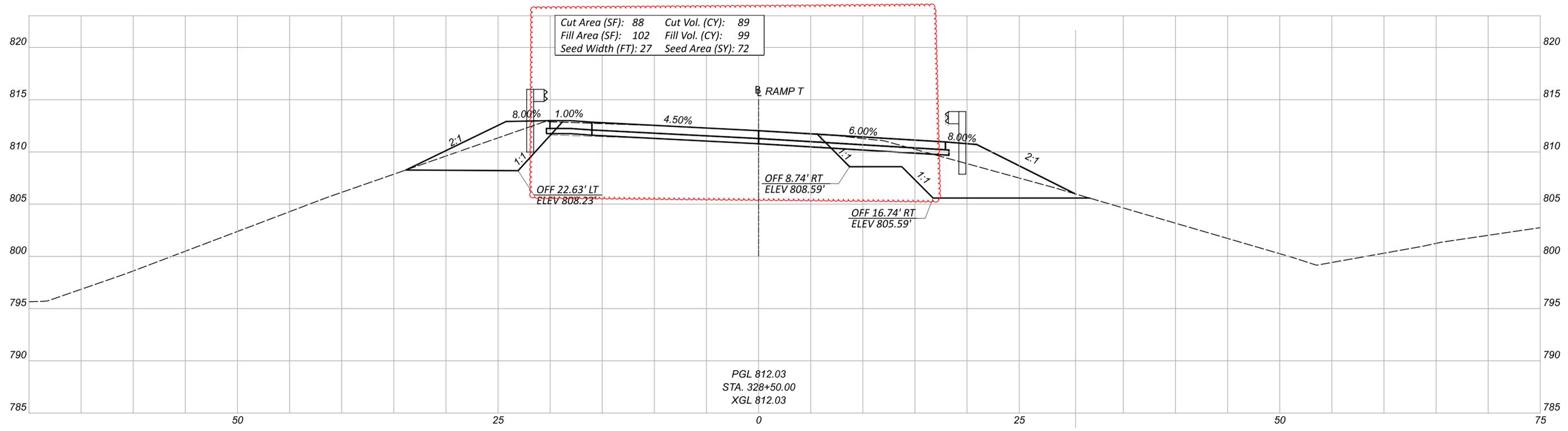
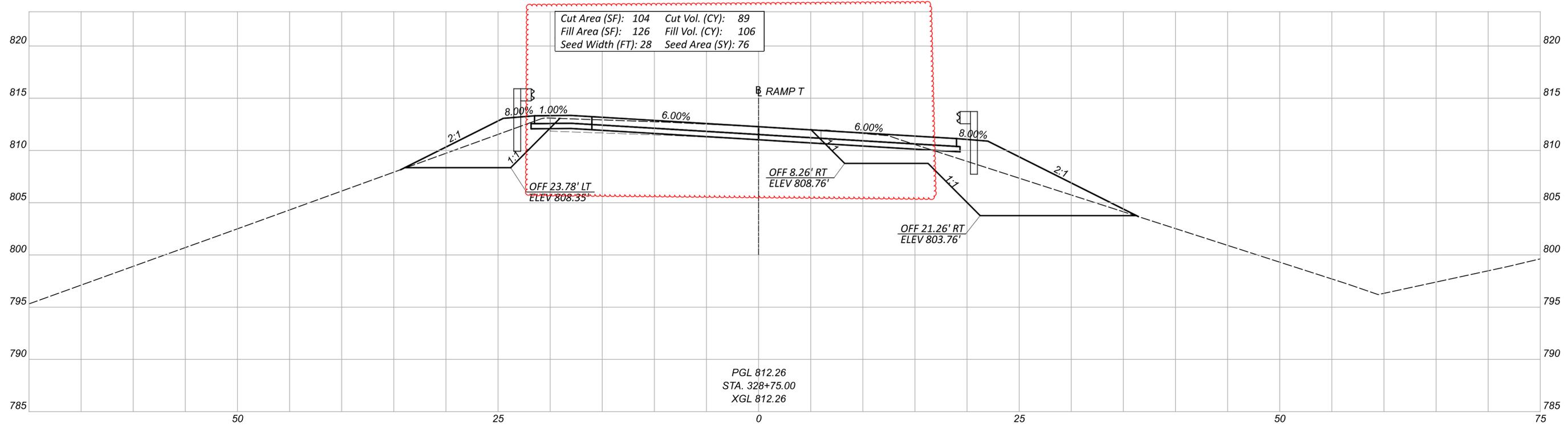
| Sheet Totals | | | 114536 |
|--------------|-----|------|--------|
| Seeding | Cut | Fill | TOTAL |
| 46 | 16 | 4 | 167 |



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

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID

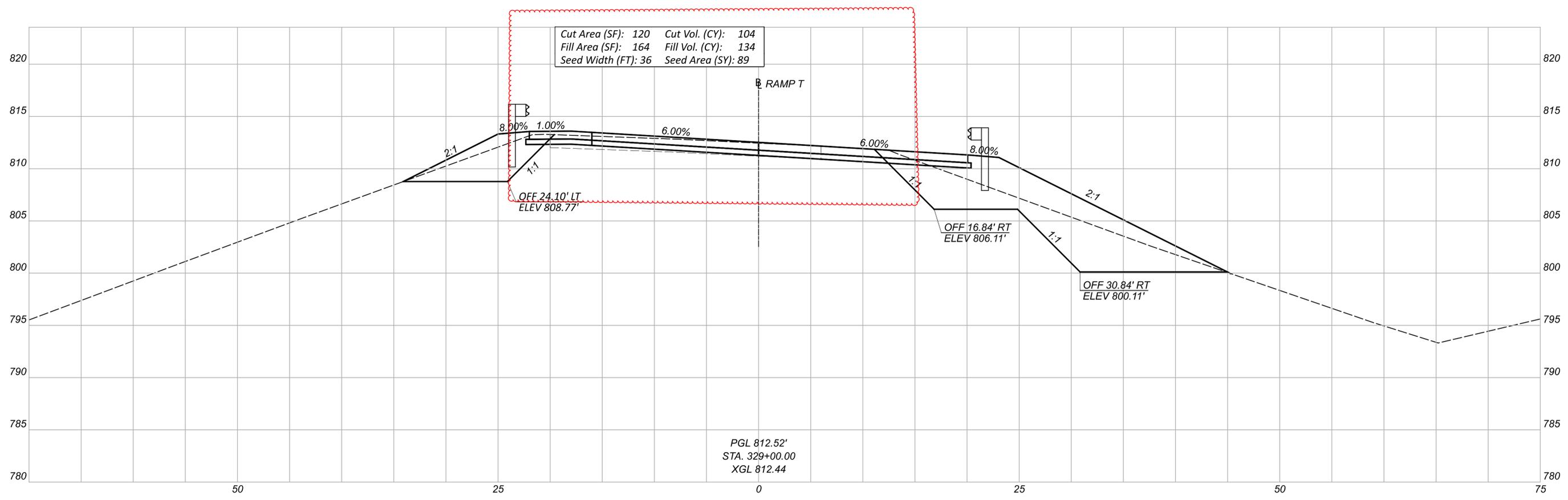
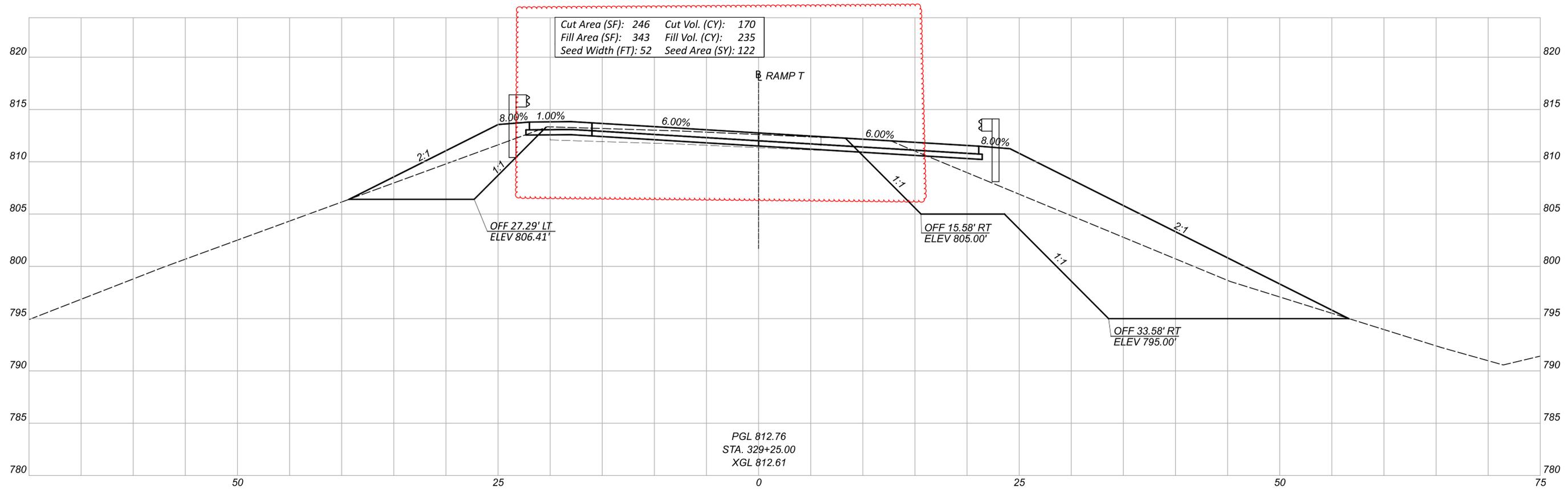
| Sheet Totals | | | 114536 |
|--------------|-----|------|------------|
| Seeding | Cut | Fill | TOTAL |
| 85 | 63 | 58 | P.56 167 |



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

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

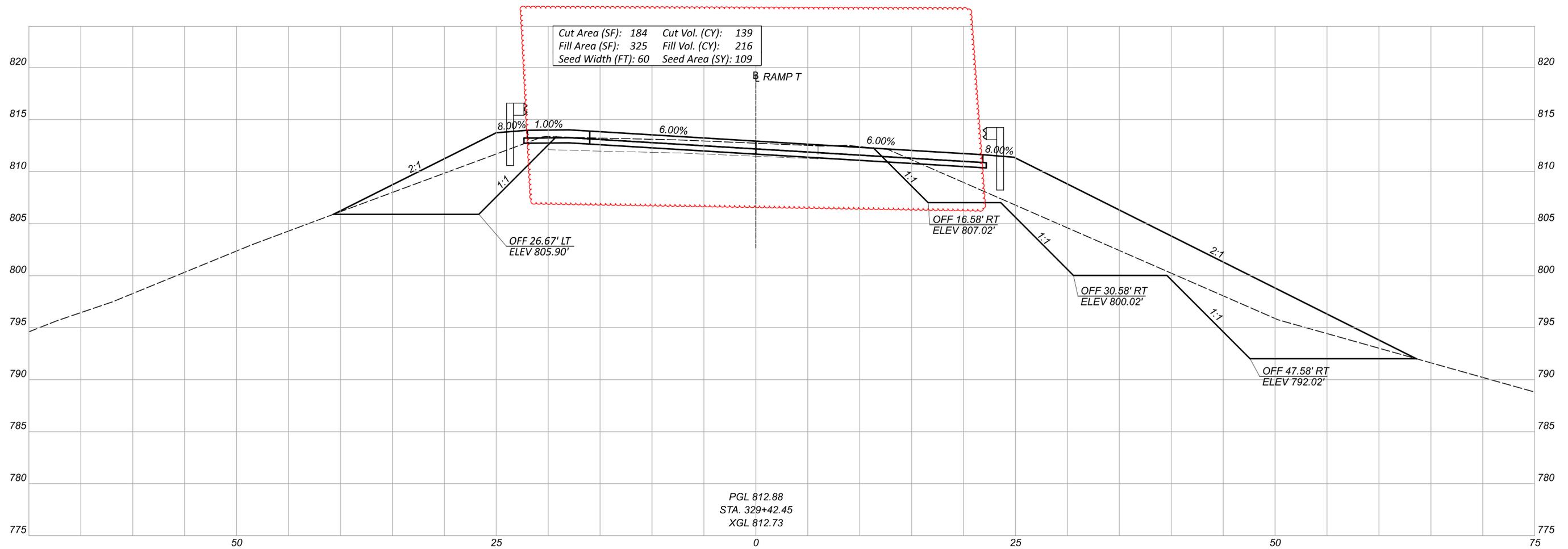
| Sheet Totals | | | TOTAL | |
|--------------|-----|------|-------|-------|
| Seeding | Cut | Fill | SHEET | TOTAL |
| 148 | 178 | 205 | P.57 | 167 |



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

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID

| Sheet Totals | | | 114536 | |
|--------------|-----|------|--------|-------|
| Seeding | Cut | Fill | SHEET | TOTAL |
| 241 | 274 | 369 | P.58 | 167 |



PGL 812.88
 STA. 329+42.45
 XGL 812.73

CROSS SECTIONS
 STA. 329+42.45

DESIGN AGENCY



DESIGNER

SMS

REVIEWER

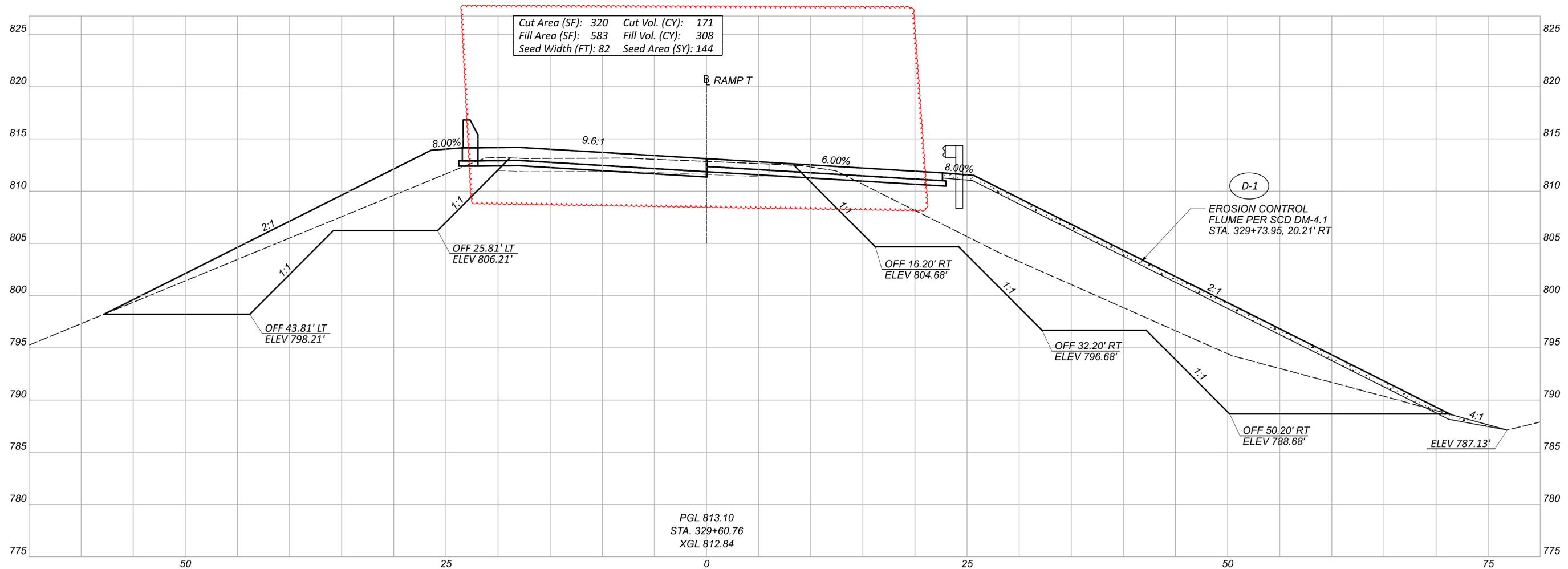
SJP 09/17/25

PROJECT ID

114536

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

| SHEET | TOTAL |
|-------|-------|
| P.59 | 167 |



PGL 813.10
 STA. 329+60.76
 XGL 812.84

CROSS SECTIONS
 STA. 329+60.76

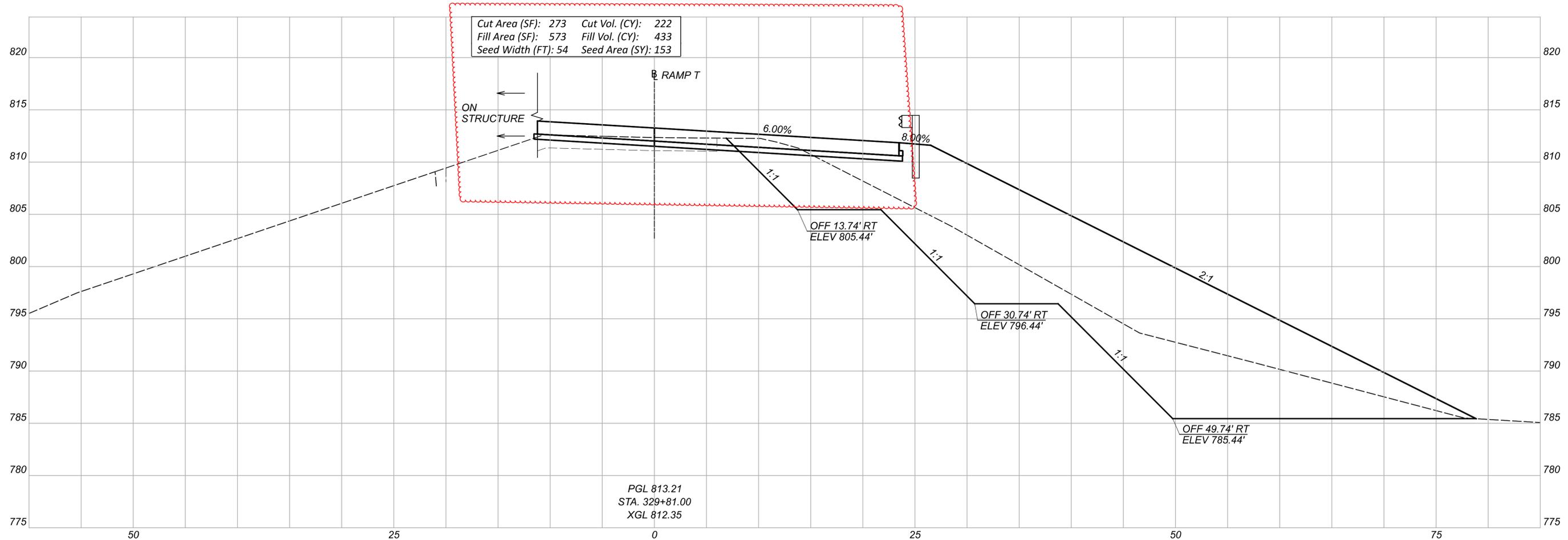
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135

DESIGNER
 SMS

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

| Sheet Totals | | | SHEET TOTAL |
|--------------|-----|------|-------------|
| Seeding | Cut | Fill | |
| 144 | 171 | 308 | P.60 167 |



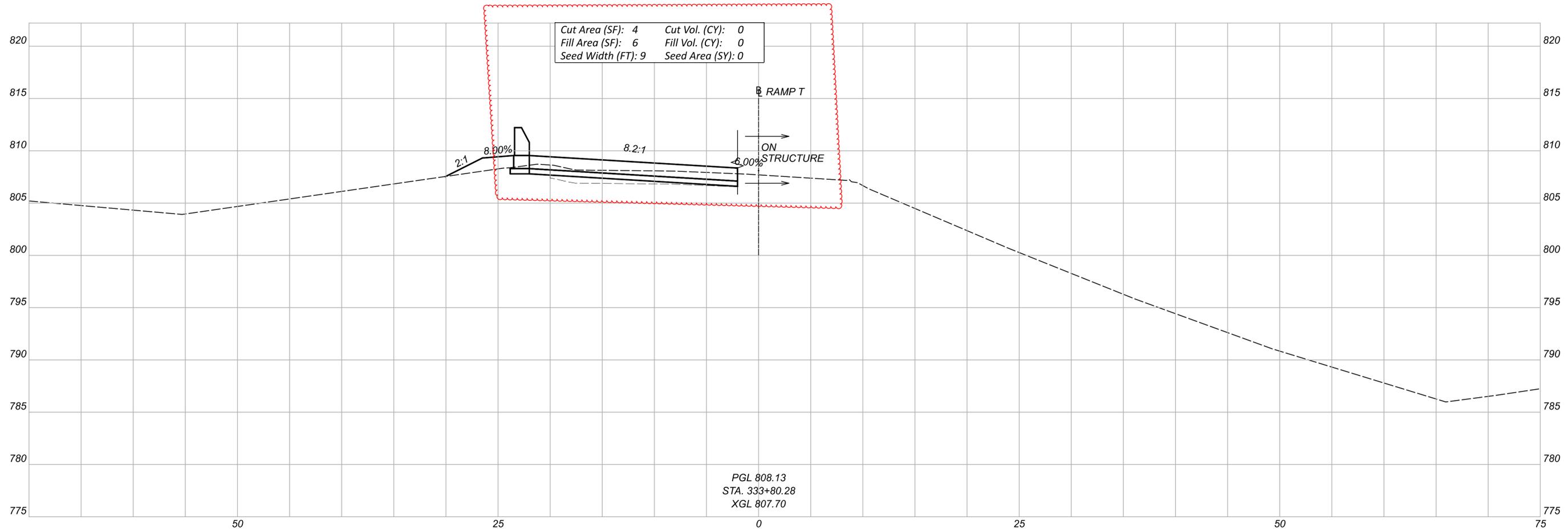
| | |
|---------------------|---------------------|
| Cut Area (SF): 273 | Cut Vol. (CY): 222 |
| Fill Area (SF): 573 | Fill Vol. (CY): 433 |
| Seed Width (FT): 54 | Seed Area (SY): 153 |

PGL 813.21
 STA. 329+81.00
 XGL 812.35

CROSS SECTIONS
 STA. 329+81.00

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

| Sheet Totals | | | SHEET TOTAL |
|--------------|-----|------|-------------|
| Seeding | Cut | Fill | |
| 153 | 222 | 433 | P.61 167 |



PGL 808.13
 STA. 333+80.28
 XGL 807.70

CROSS SECTIONS
 STA. 333+80.28

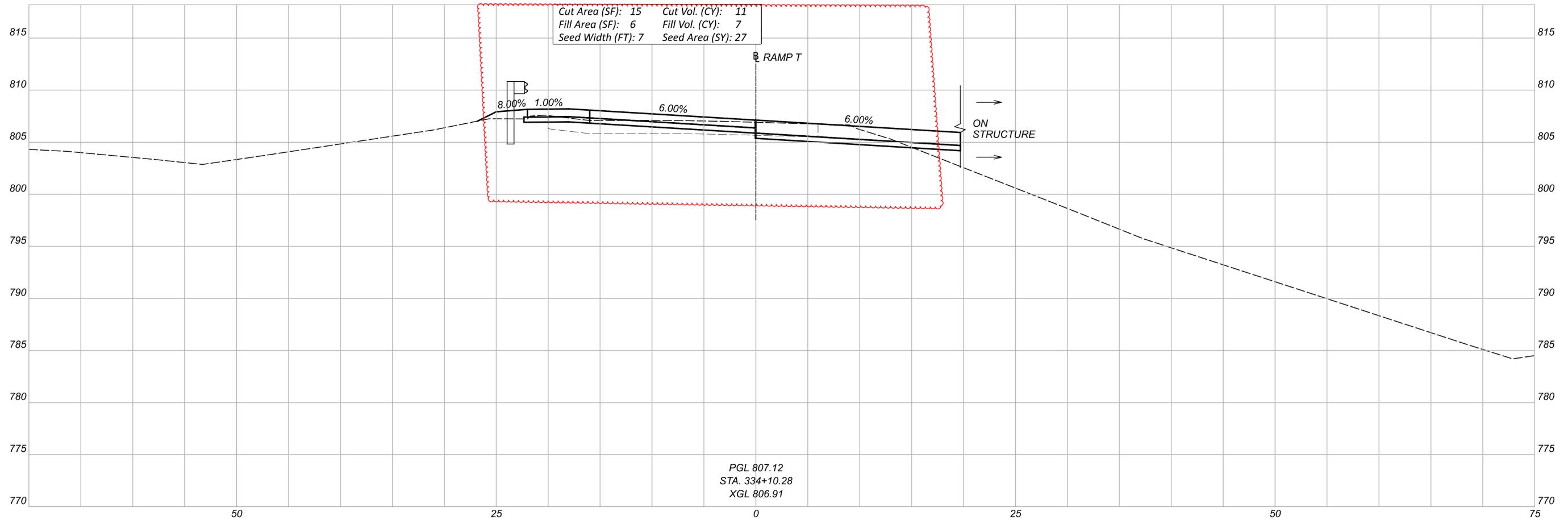
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135

DESIGNER
 SMS

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

| Sheet Totals | | | 114536 |
|--------------|-----|------|------------|
| Seeding | Cut | Fill | TOTAL |
| 0 | 0 | 0 | P.62 167 |

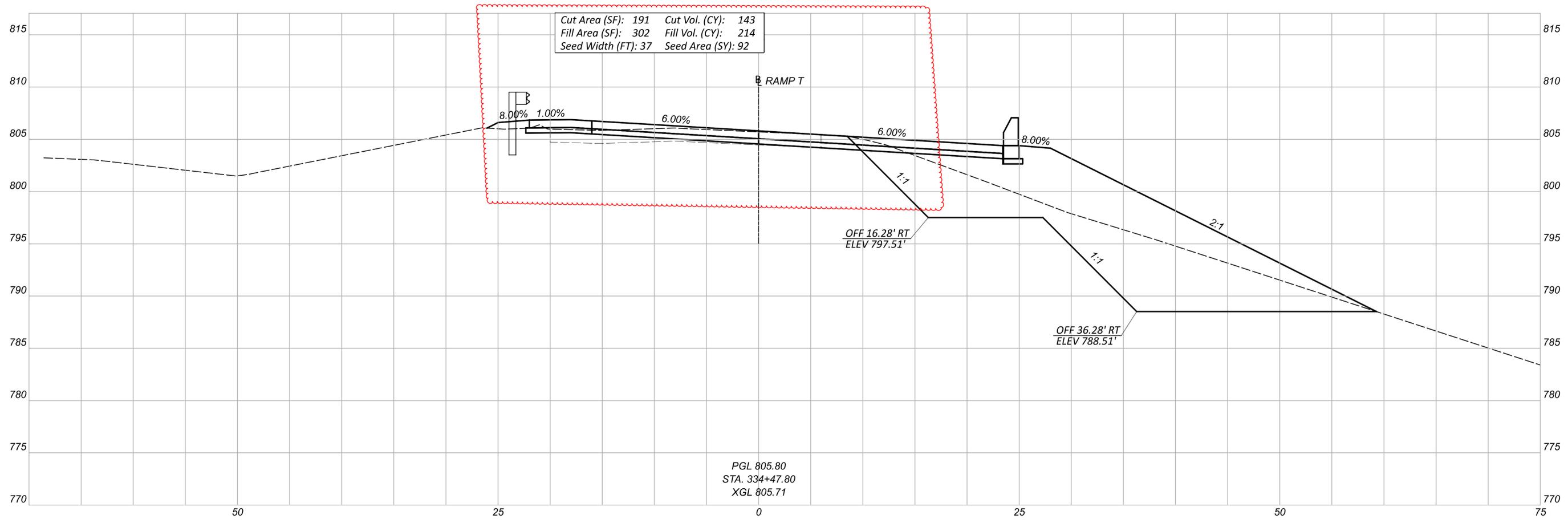


CROSS SECTIONS
 STA. 334+10.28

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

| Sheet Totals | | | SHEET | TOTAL |
|--------------|-----|------|-------|-------|
| Seeding | Cut | Fill | | |
| 27 | 11 | 7 | P.63 | 167 |



CROSS SECTIONS
 STA. 334+47.80

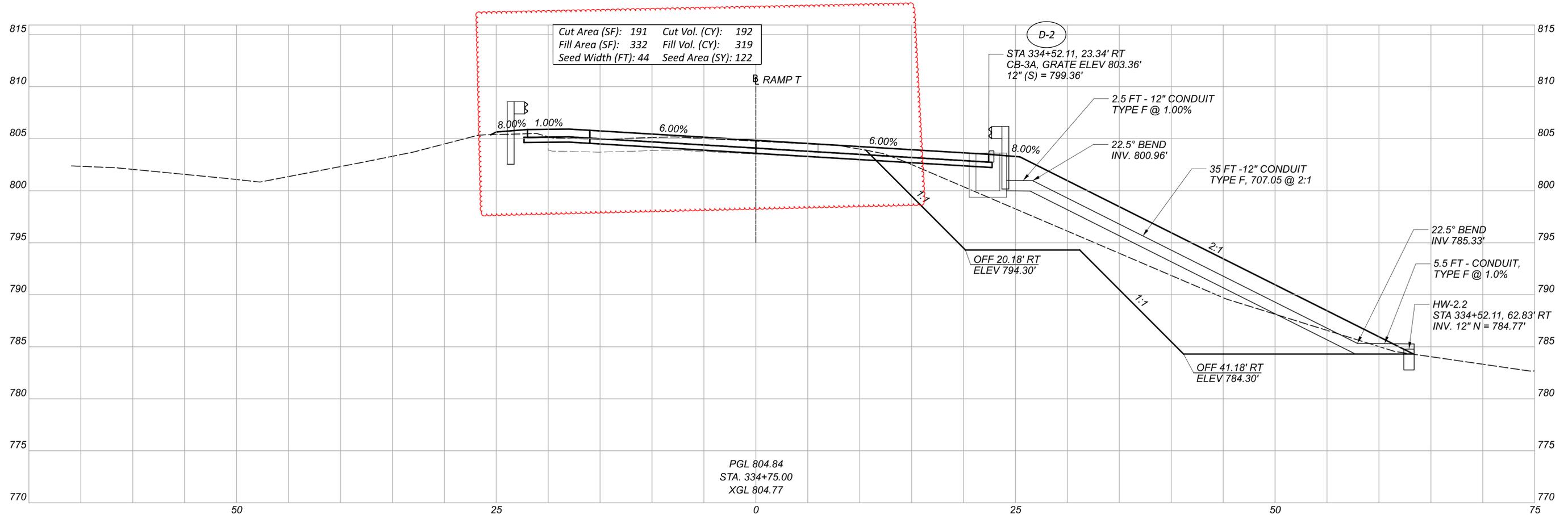
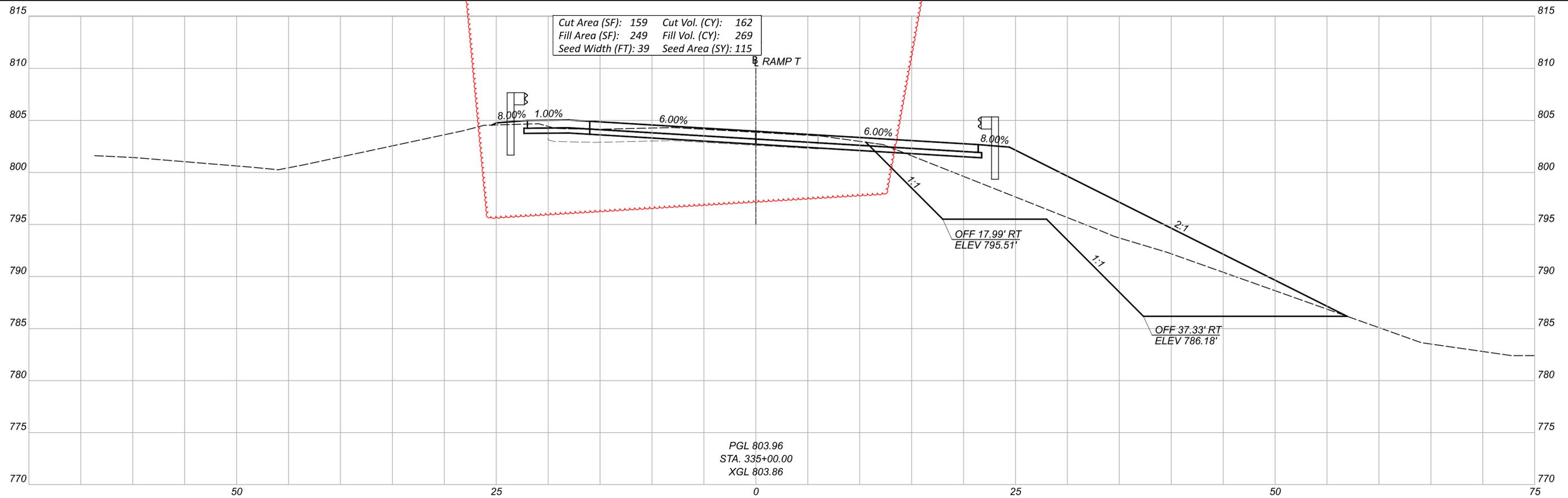
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135

DESIGNER
 SMS

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

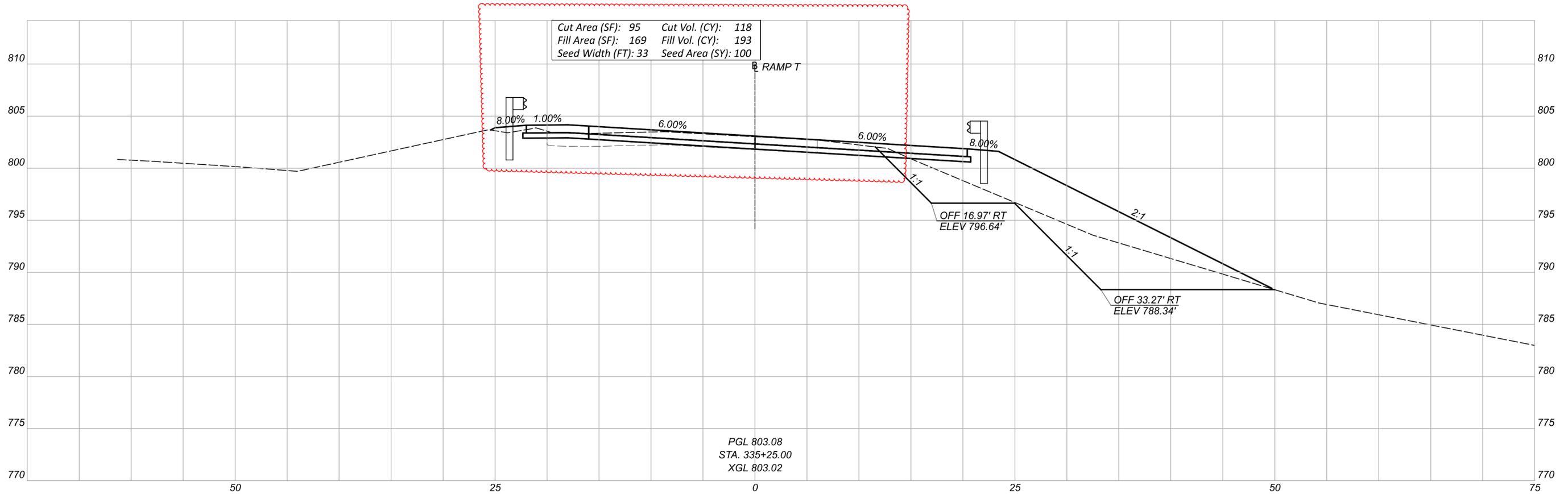
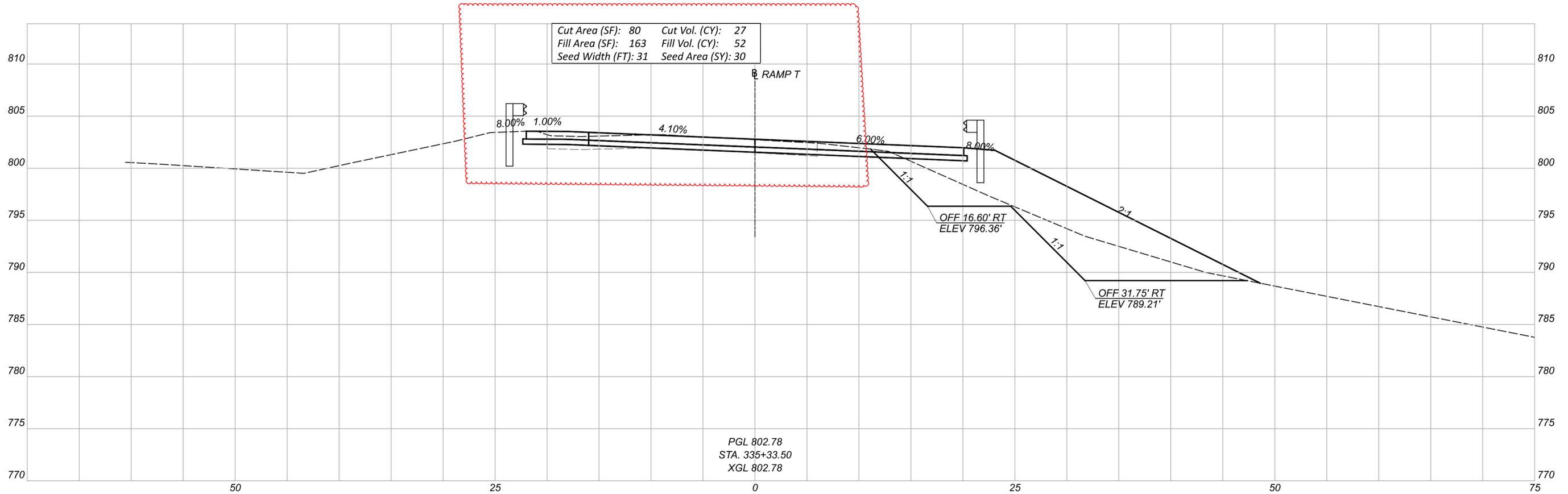
| Sheet Totals | | | SHEET TOTAL |
|--------------|-----|------|-------------|
| Seeding | Cut | Fill | |
| 92 | 143 | 214 | P.64 167 |



CROSS SECTIONS
 STA. 334+75.00 TO STA. 335+00.00

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

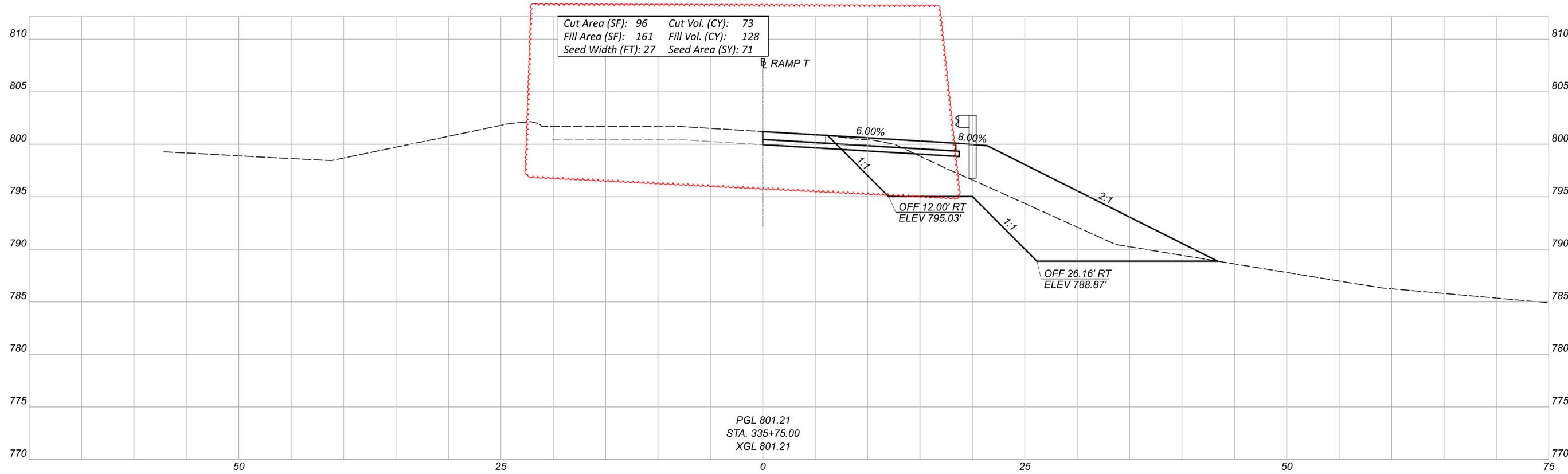
| Sheet Totals | | | SHEET TOTAL | |
|--------------|-----|------|-------------|-----|
| Seeding | Cut | Fill | P.65 | 167 |
| 237 | 354 | 588 | | |



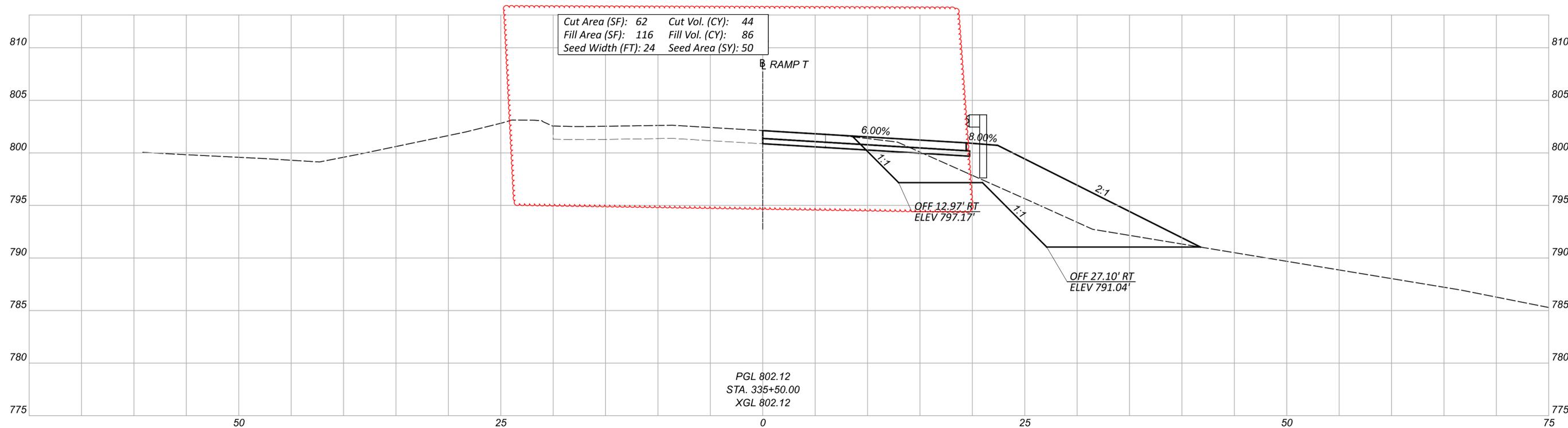
CROSS SECTIONS
 STA. 335+25.00 TO STA. 335+33.50

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

| | | | |
|---------------------|-----|------|-------------|
| Sheet Totals | | | 114536 |
| Seeding | Cut | Fill | SHEET TOTAL |
| 130 | 145 | 245 | P.66 167 |



PGL 801.21
 STA. 335+75.00
 XGL 801.21

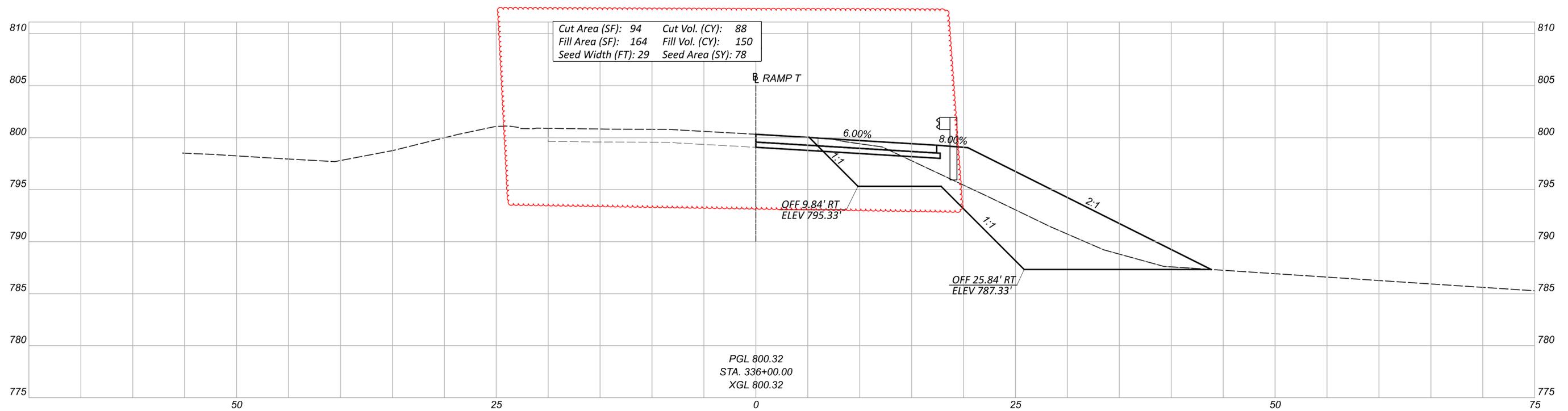
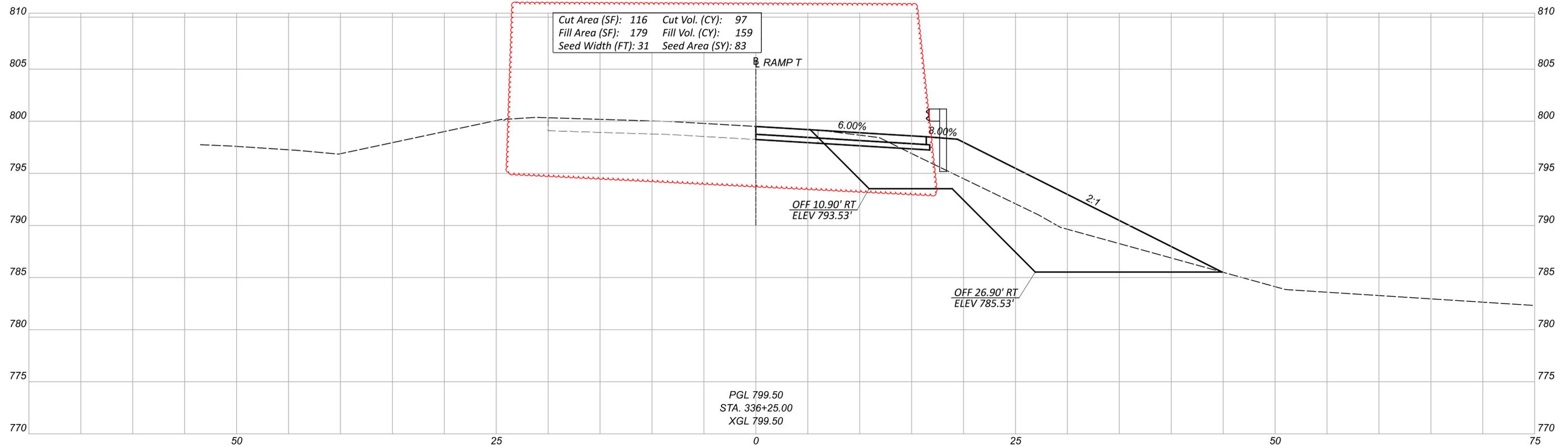


PGL 802.12
 STA. 335+50.00
 XGL 802.12

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

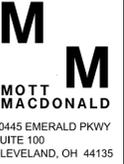
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

| Sheet Totals | | | SHEET TOTAL |
|--------------|-----|------|-------------|
| Seeding | Cut | Fill | |
| 121 | 117 | 244 | P.67 167 |



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

DESIGN AGENCY



DESIGNER

SMS

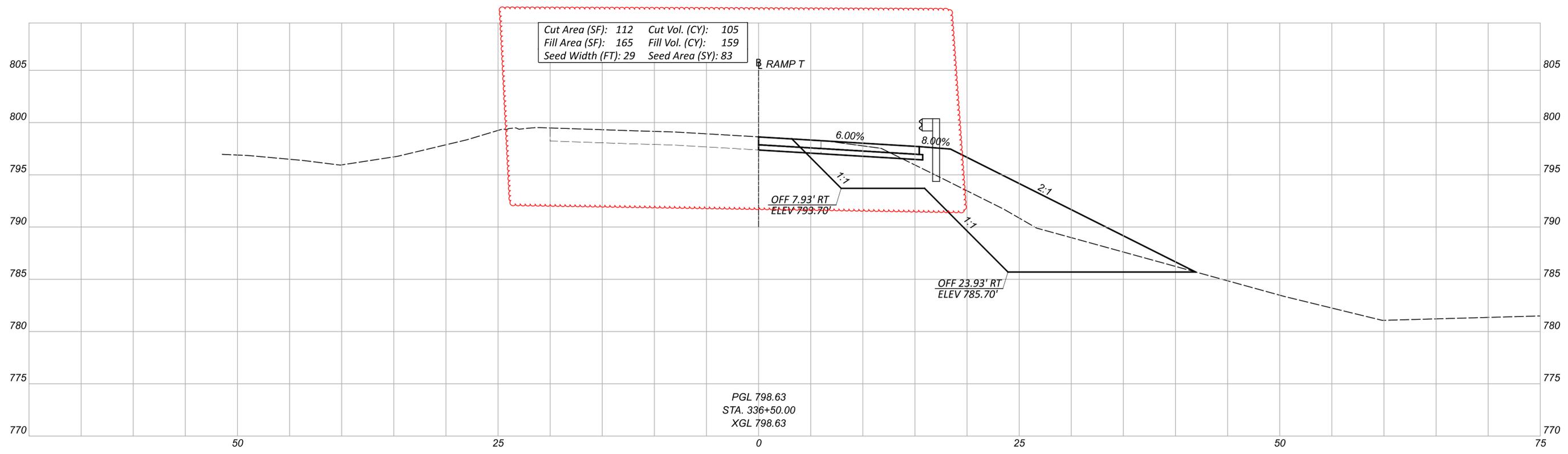
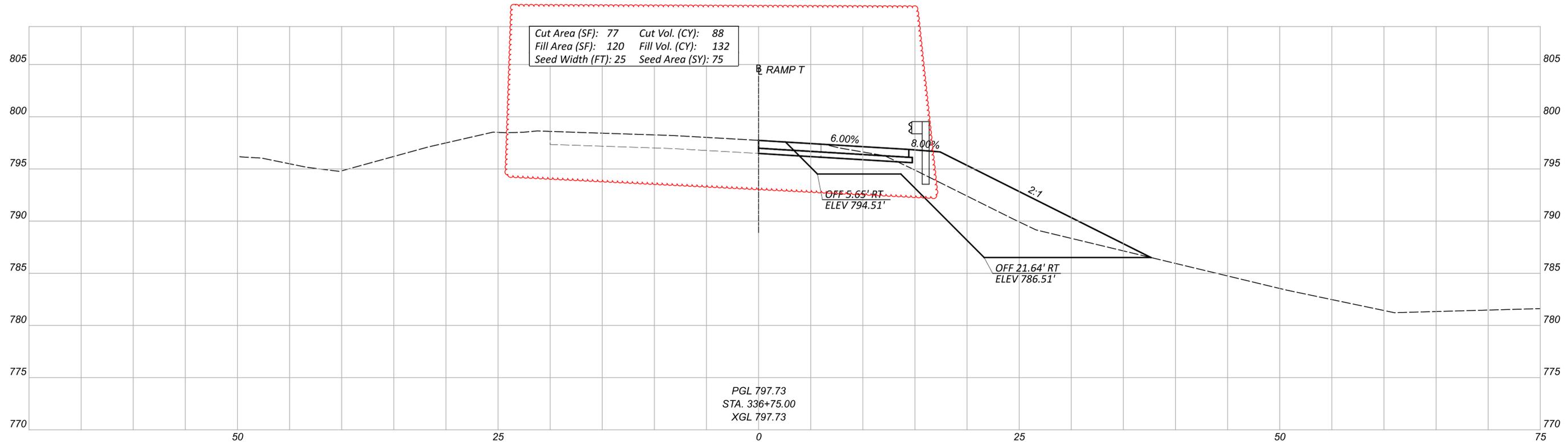
REVIEWER

SJP 09/17/25

PROJECT ID

114536

| Sheet Totals | | | SHEET | TOTAL |
|--------------|-----|------|-------|-------|
| Seeding | Cut | Fill | P.68 | 167 |
| 161 | 185 | 309 | | |



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

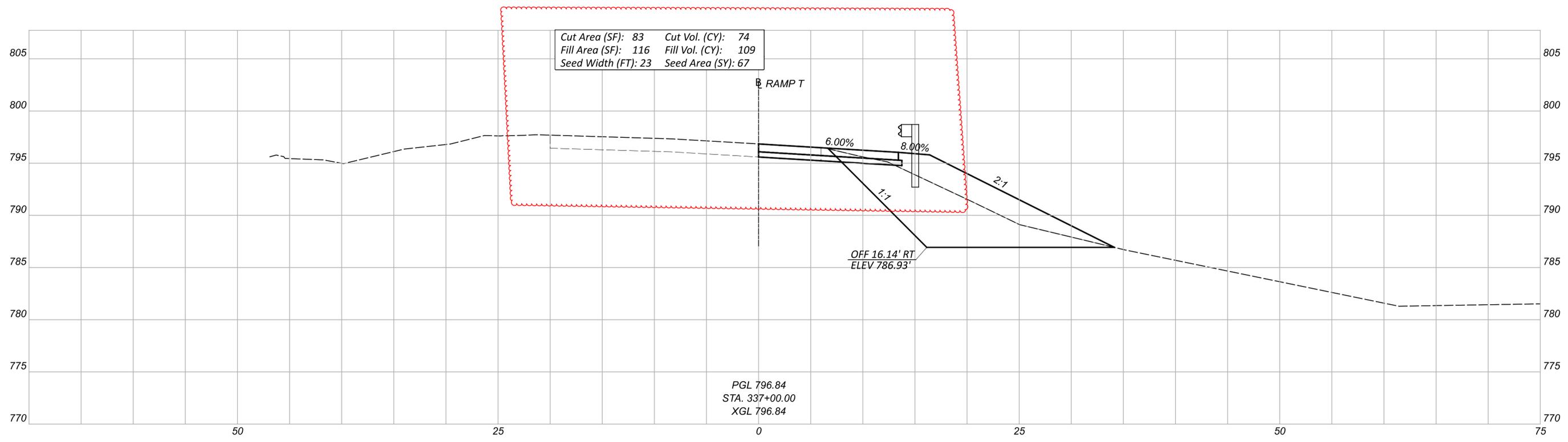
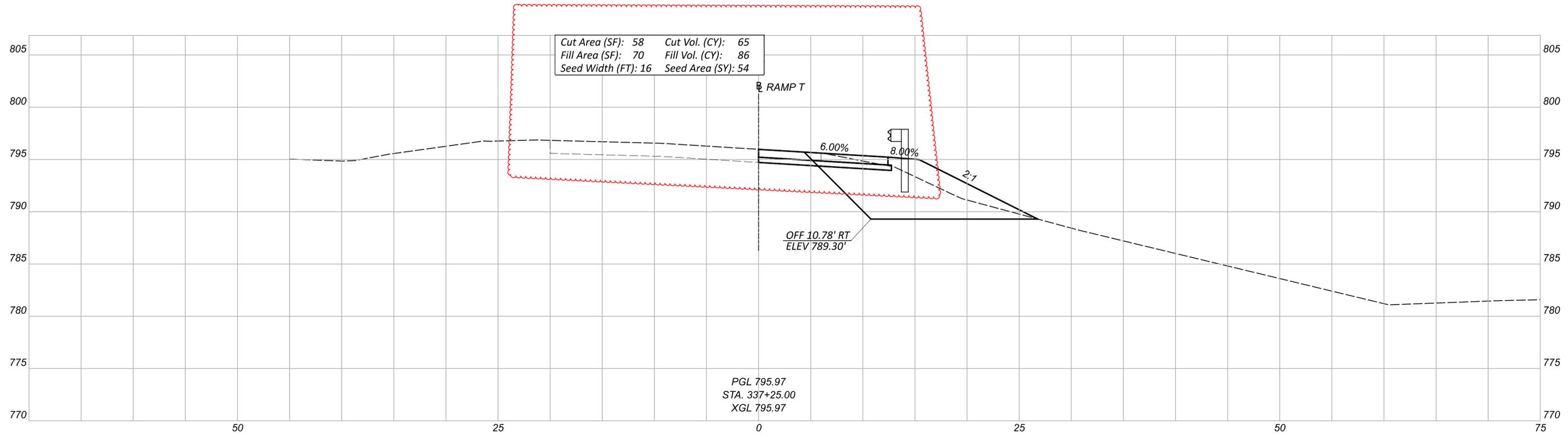
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135

DESIGNER
 SMS

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

| Sheet Totals | | | SHEET TOTAL |
|--------------|-----|------|-------------|
| Seeding | Cut | Fill | |
| 158 | 193 | 291 | P.69 167 |



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

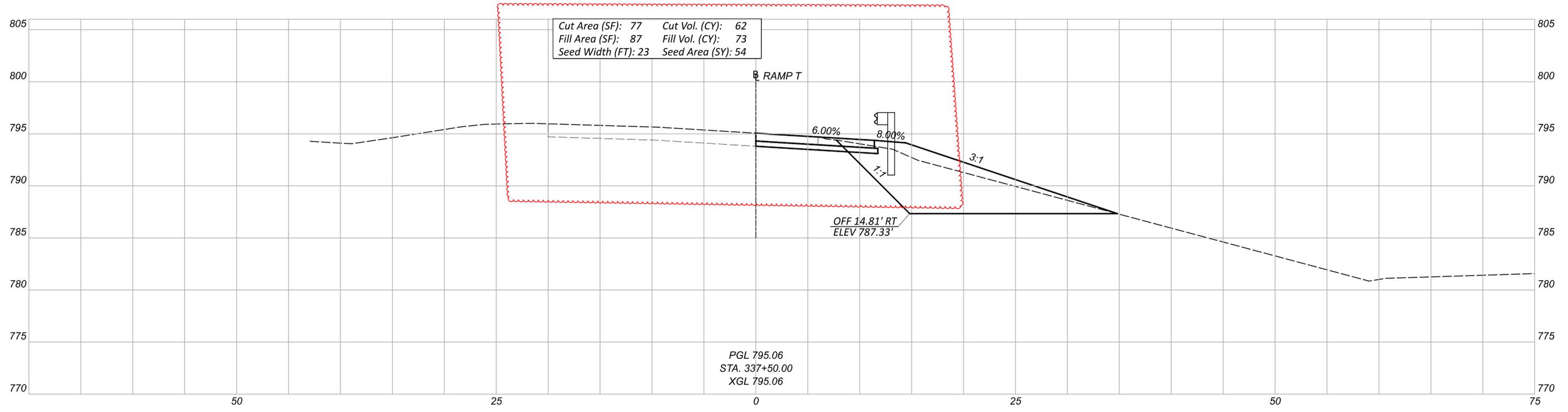
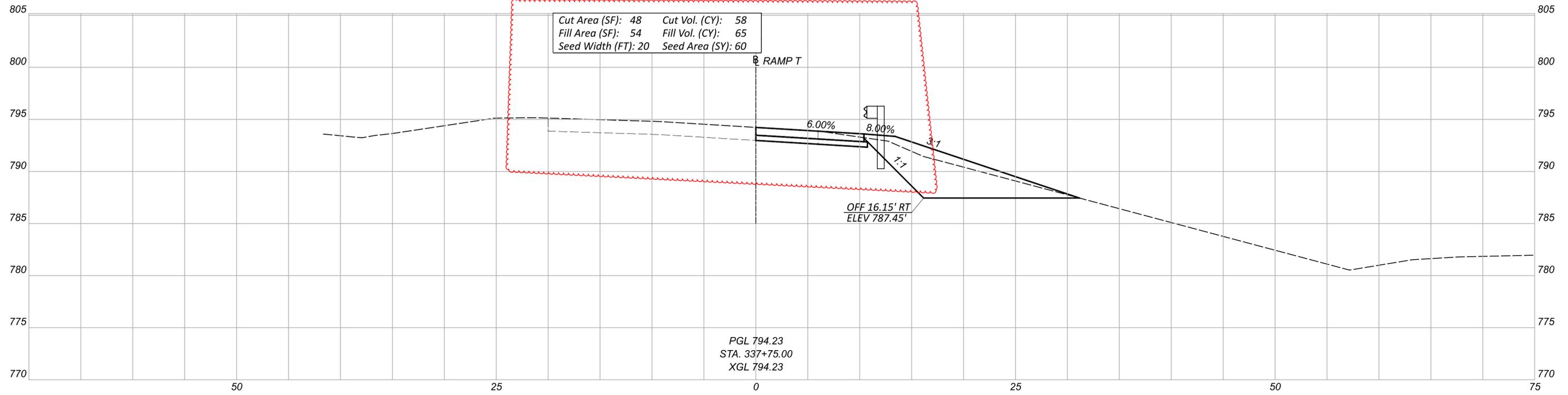
DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135

DESIGNER
 SMS

REVIEWER
 SJP 09/17/25

PROJECT ID
 114536

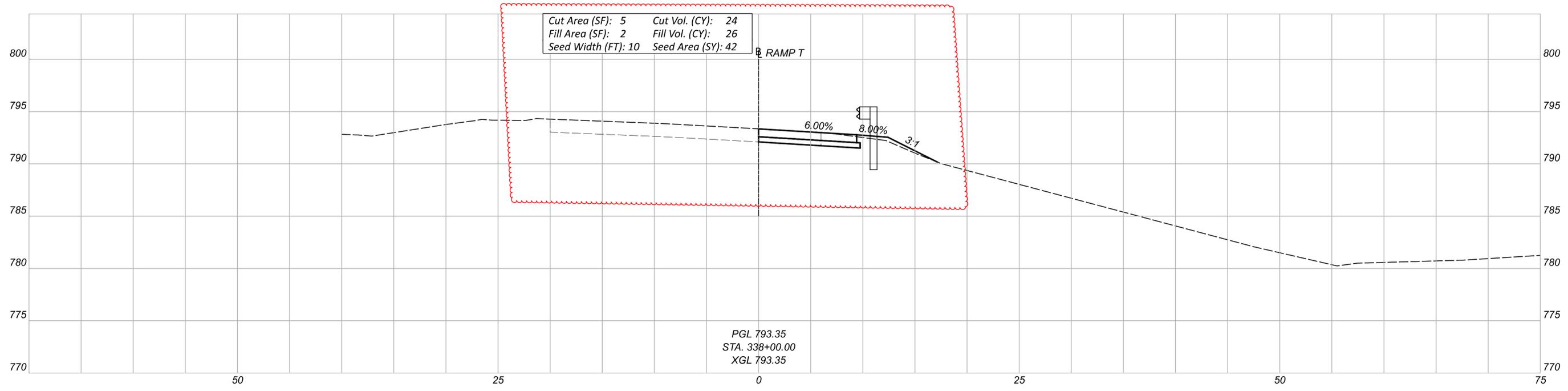
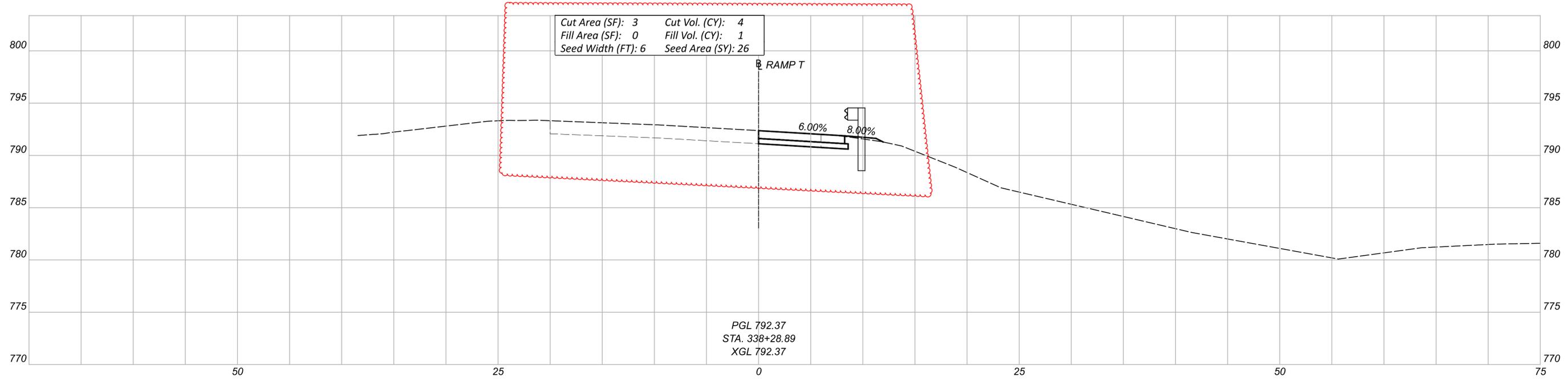
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| Seeding | Cut | Fill | SHEET | TOTAL |
| 121 | 139 | 195 | P.70 | 167 |



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

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

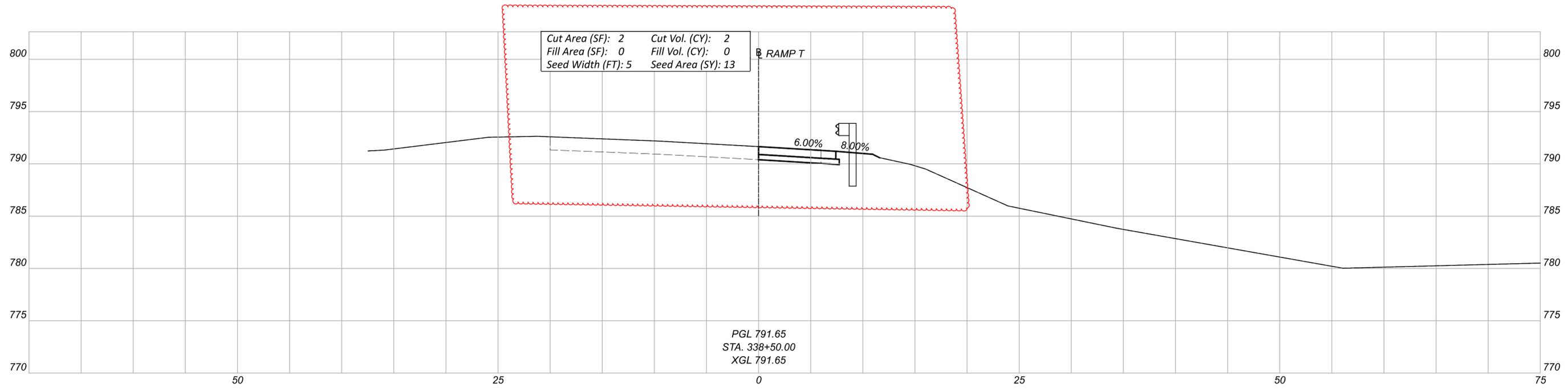
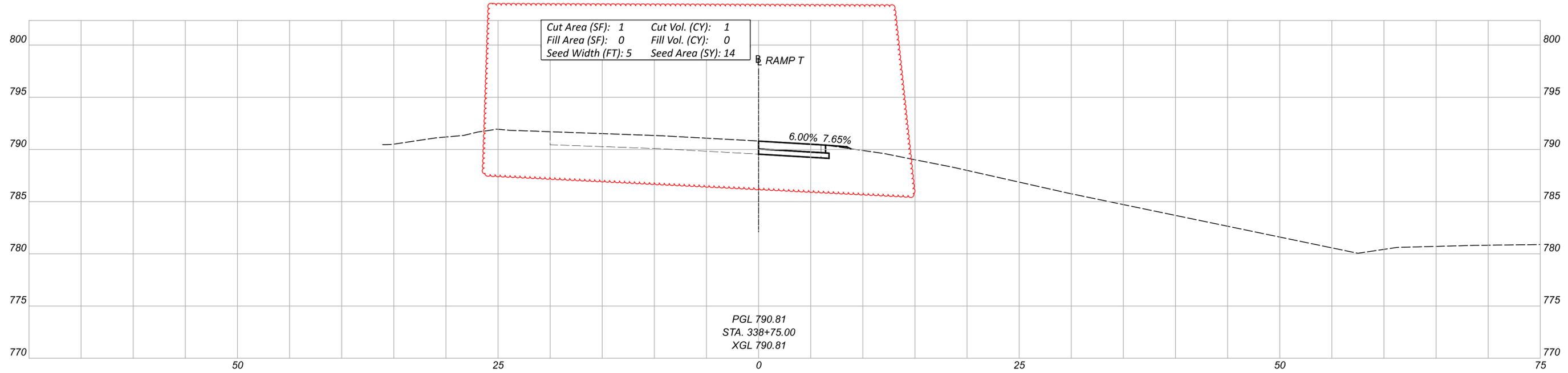
| Sheet Totals | | | TOTAL | |
|--------------|-----|------|-------|-------|
| Seeding | Cut | Fill | SHEET | TOTAL |
| 114 | 120 | 138 | P.71 | 167 |



CROSS SECTIONS
 STA. 338+00.00 TO STA. 338+28.89

DESIGN AGENCY
M M
MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER
 SMS
 REVIEWER
 SJP 09/17/25
 PROJECT ID
 114536

| Sheet Totals | | | SHEET TOTAL |
|--------------|-----|------|-------------|
| Seeding | Cut | Fill | |
| 68 | 28 | 27 | P.72 167 |



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

DESIGN AGENCY
M M
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 |
| 27 | 3 | 0 |

| SHEET | TOTAL |
|-------|-------|
| P.73 | 167 |

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

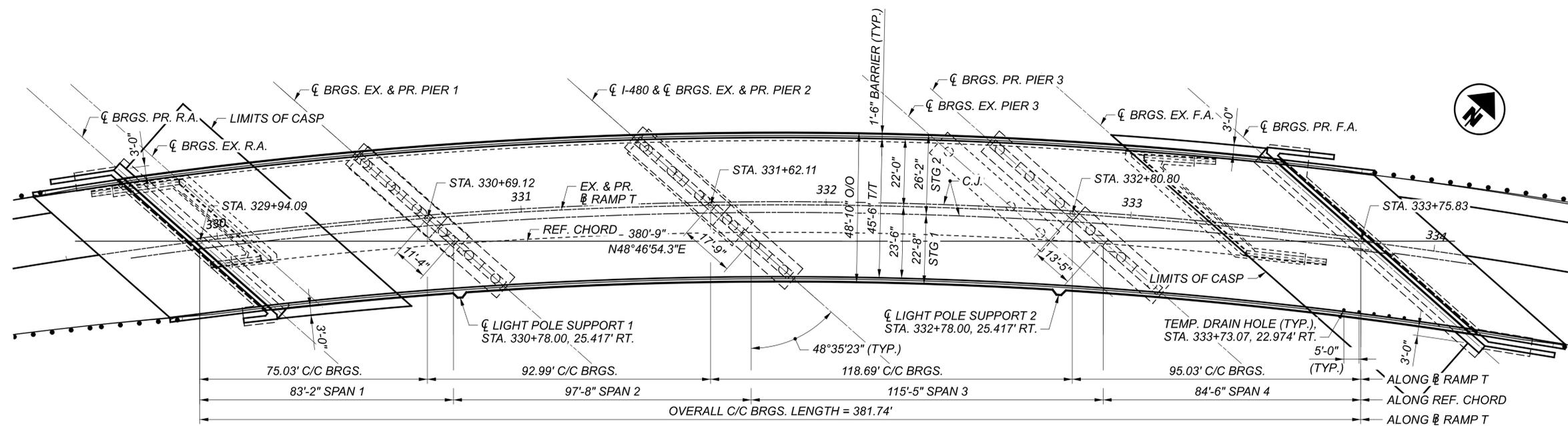
ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

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 METHODS AND OTHER PERTINENT INFORMATION. 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.

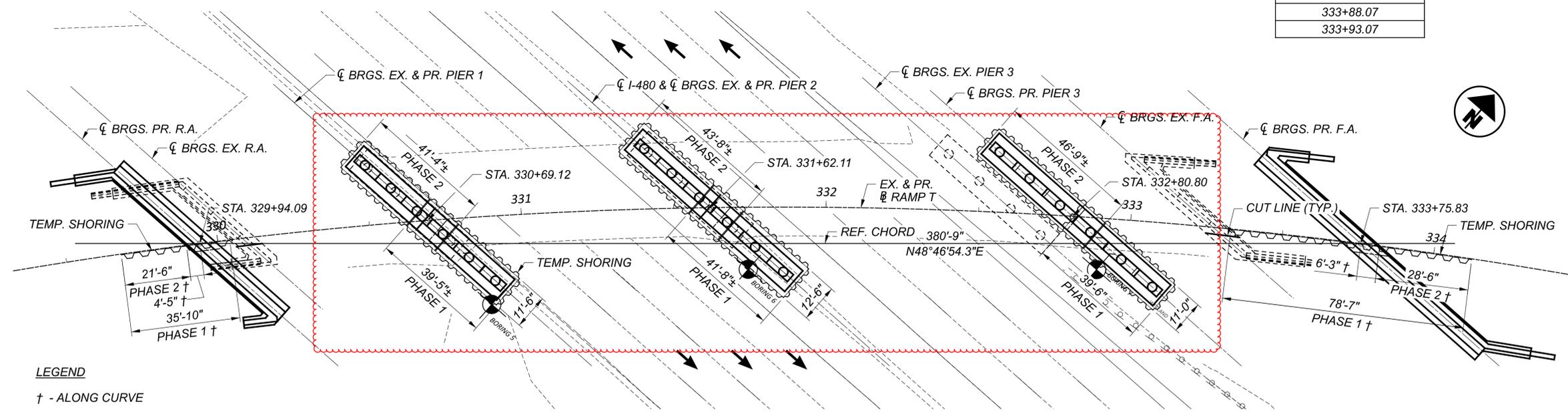
THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT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





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:

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

| | |
|---------------|------------|
| SFN | 1814258 |
| DESIGN AGENCY | M M |
| DESIGNER | NKK |
| CHECKER | LAG |
| REVIEWER | SK |
| PROJECT ID | 114536 |
| SUBSET | TOTAL |
| 2 | 51 |
| SHEET | TOTAL |
| P.95 | 167 |

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

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 BRIDGE 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 _v = | 0.136 g | S _{0.5} ^s = | 0.227 g |
| S _w = | 0.050 g | S = | 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

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

PHASE 2

- REMOVE REMAINING PORTIONS OF EXISTING STRUCTURE (SFN 1814257). CONSTRUCT REMAINING PORTION OF NEW BRIDGE DEPICTED AS PHASE 2 CONSTRUCTION.
 - REMOVE REMAINING PORTIONS OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE ABOVE EXISTING GRADE.
 - INSTALL PHASE 2 TEMPORARY SHORING.
 - 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 (EXPOXY-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.

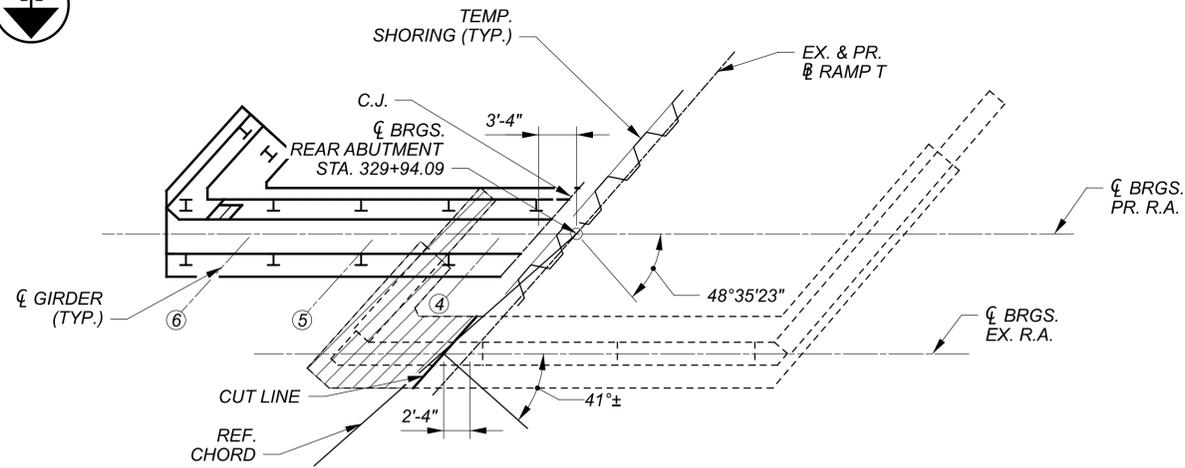
THE CONTRACTOR SHALL DESIGN THE NON-STANDARD TEMPORARY SHORING PER THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS", AND THE 2ND EDITION OF THE "GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS. REFERENCE 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.

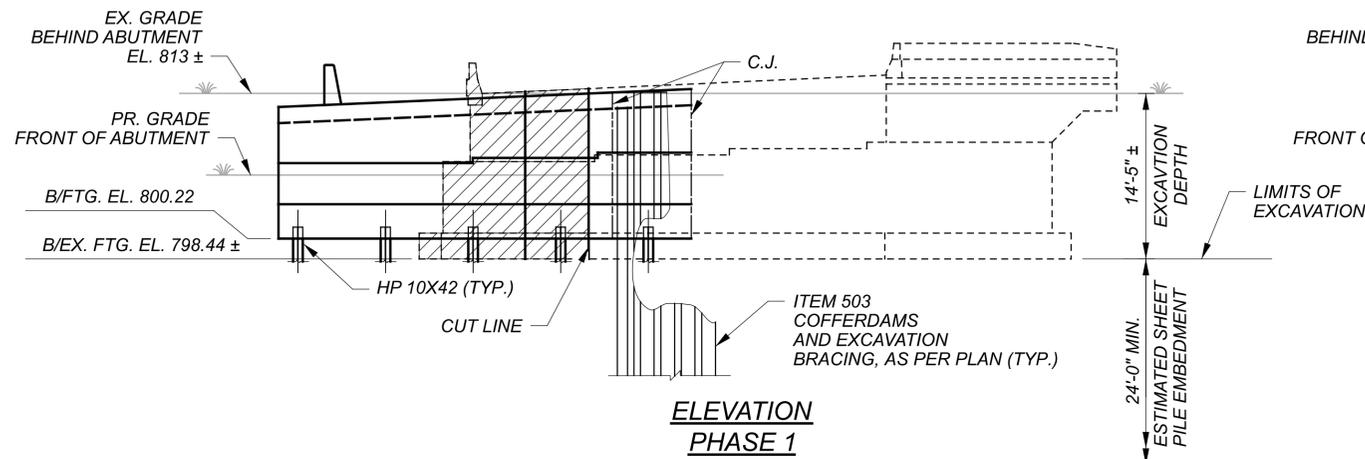
| ESTIMATED QUANTITIES | | | | | | | CALC. | DATE | CHK'D | DATE |
|----------------------|-----------|---------|------|---|--------|--------|---------|---------|------------|---------|
| | | | | | | | JMR | 04/2025 | LAG | 04/2025 |
| ITEM | ITEM EXT. | TOTAL | UNIT | DESCRIPTION | ABUT. | PIERS | SUPER. | GENERAL | SHEET REF. | |
| 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

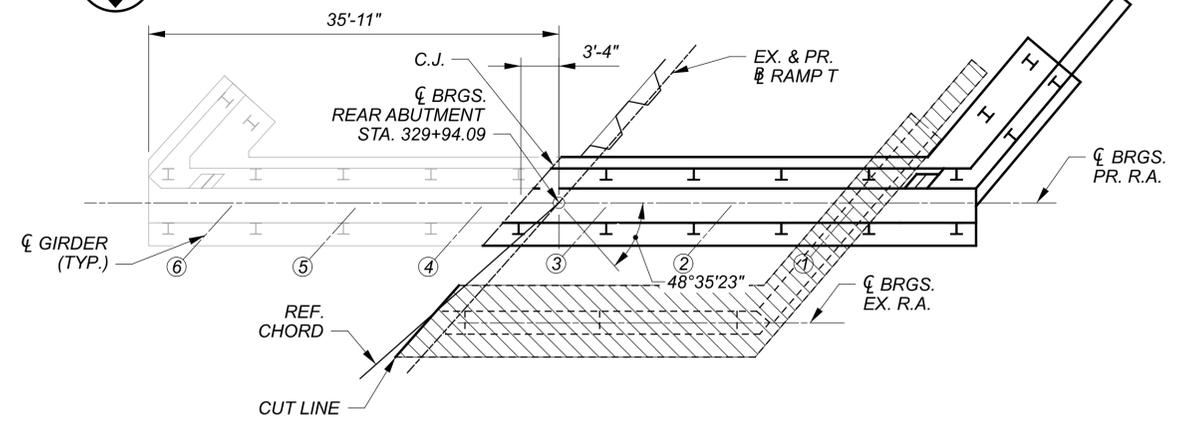
SFN 1814258
 DESIGN AGENCY
M M
 MOTT MACDONALD
 20445 EMERALD PKWY
 SUITE 100
 CLEVELAND, OH 44135
 DESIGNER: LLB CHECKER: SK
 REVIEWER: JMR 09/17/25
 PROJECT ID: 114536
 SUBSET TOTAL: 6 | 51
 SHEET TOTAL: P.99 | 167



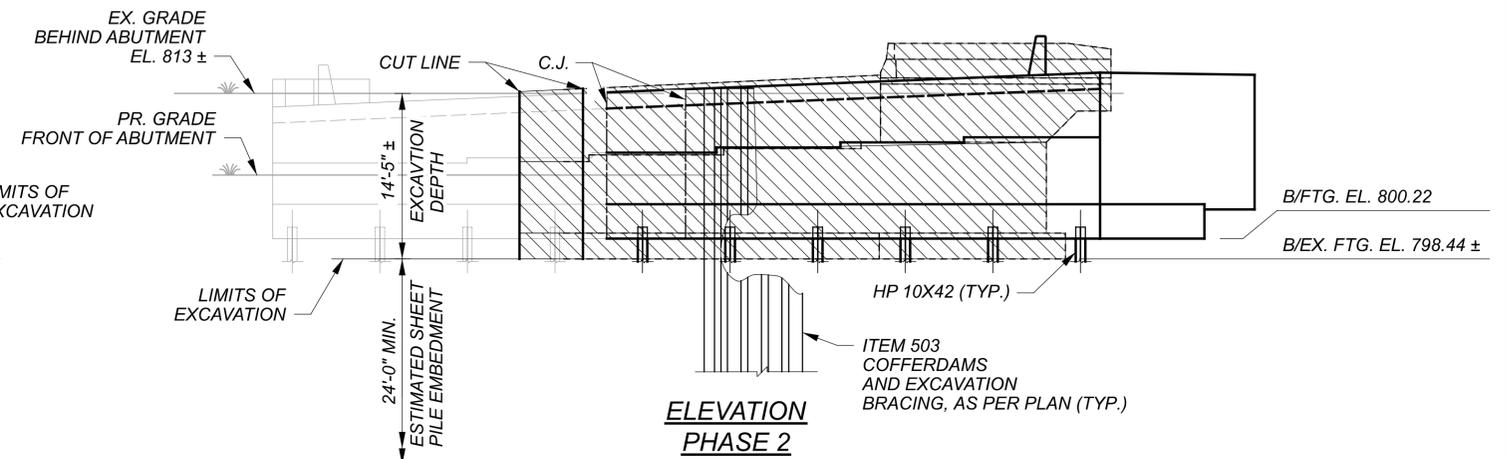
PLAN



ELEVATION
PHASE 1



PLAN



ELEVATION
PHASE 2

NOTES:

- ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
- 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.
- SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.

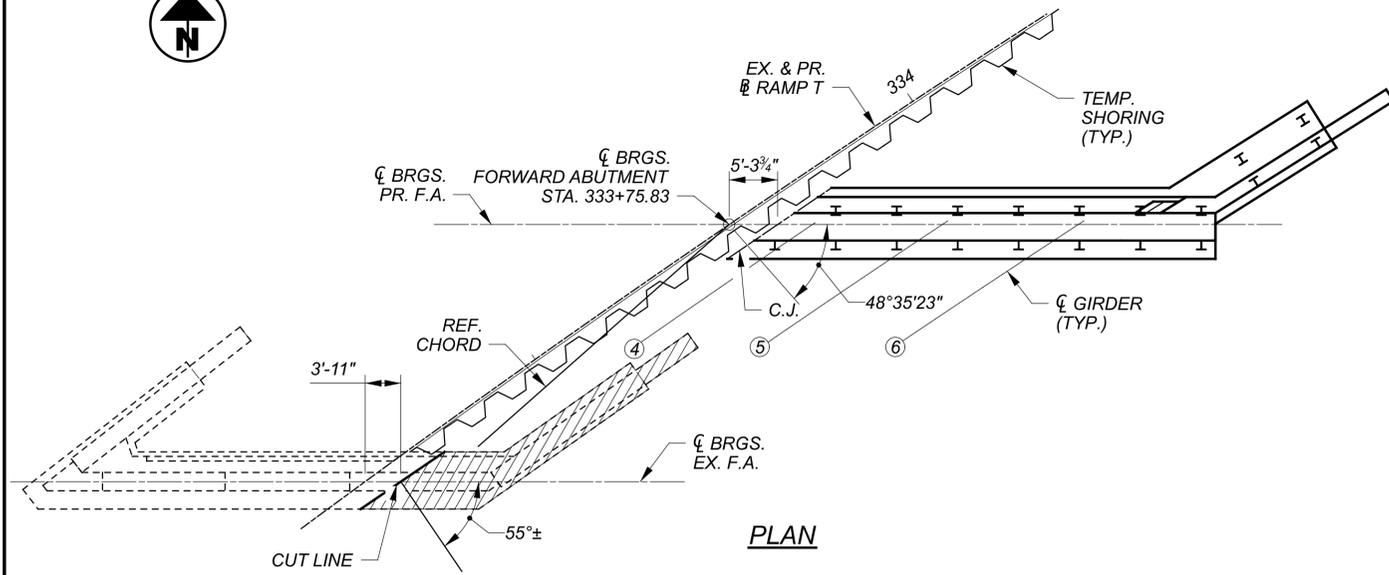
SHEET REFERENCES:

- SEE SHEET [07/51] FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
- SEE SHEET [10/51] FOR PIER 1 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [11/51] FOR PIER 2 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [12/51] FOR PIER 3 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [2/51] FOR INFORMATION REGARDING PLACEMENT OF TEMPORARY SHORING.

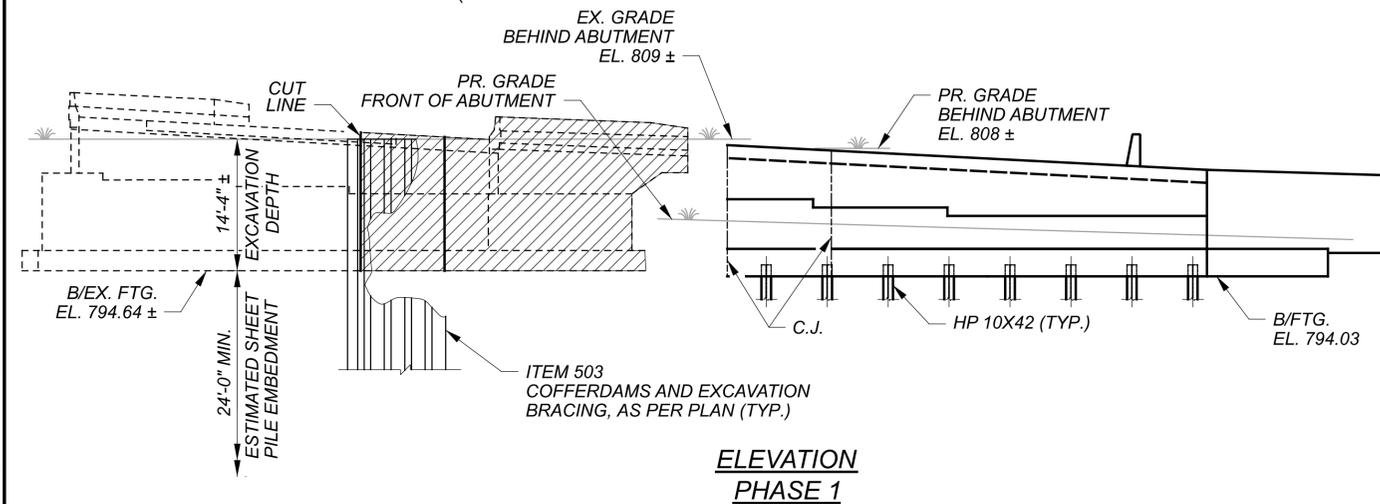
LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS

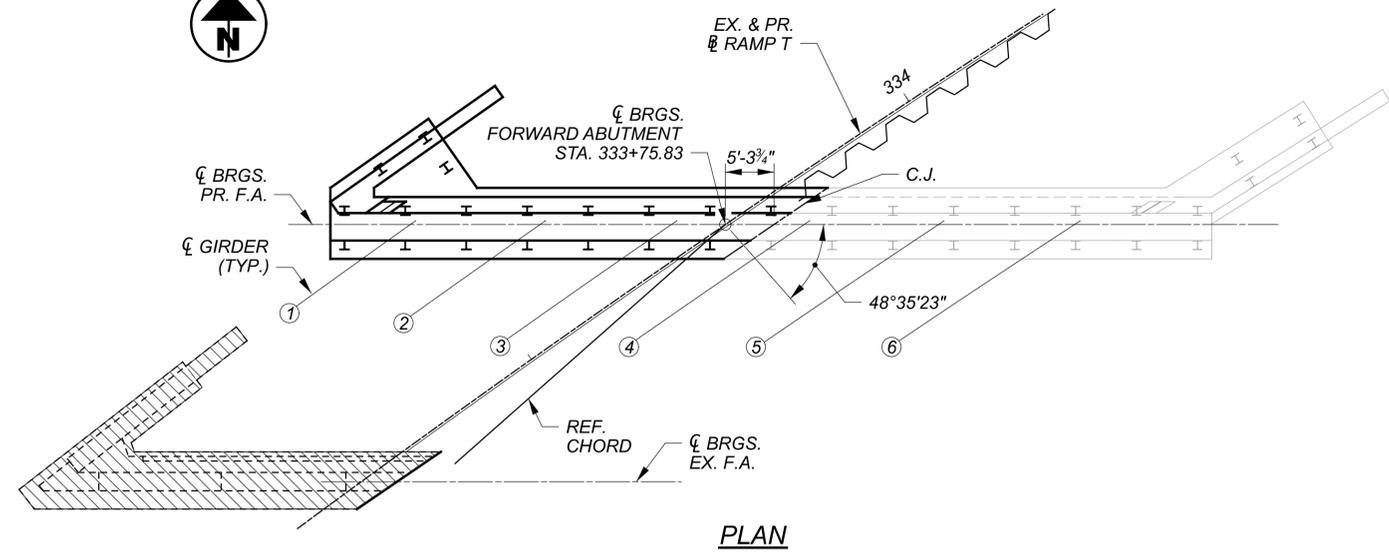
| | |
|---------------|----------------|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| DESIGNER | VN |
| CHECKER | JMR |
| REVIEWER | SK |
| PROJECT ID | 114536 |
| SUBSET | 8 |
| TOTAL | 51 |
| SHEET | P.101 |
| TOTAL | 167 |



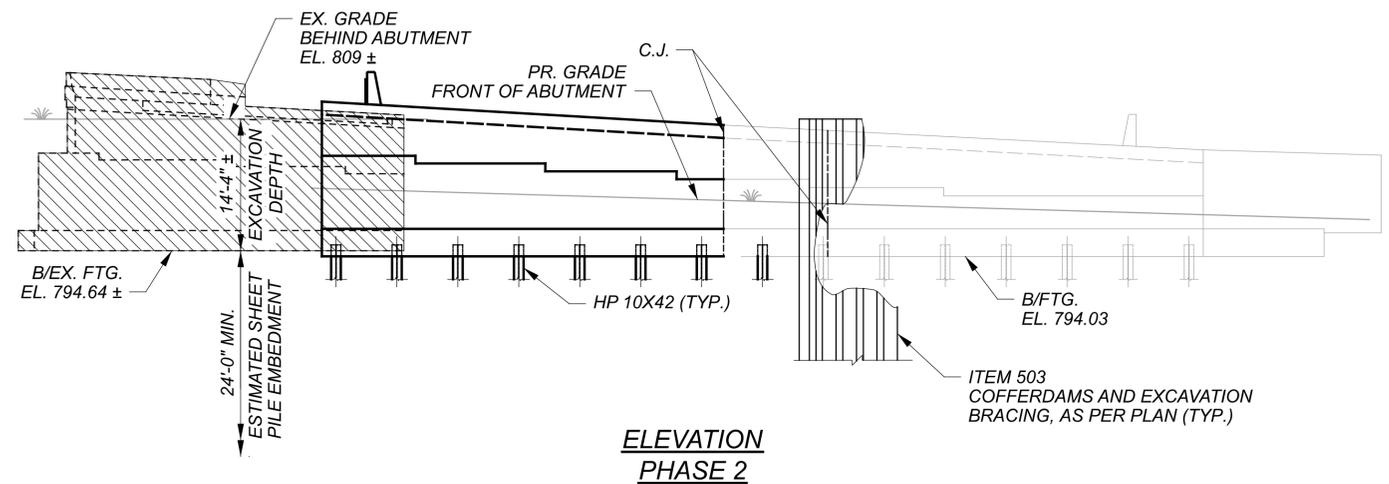
PLAN



ELEVATION
PHASE 1



PLAN



ELEVATION
PHASE 2

NOTES:

- ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
- 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.
- SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.

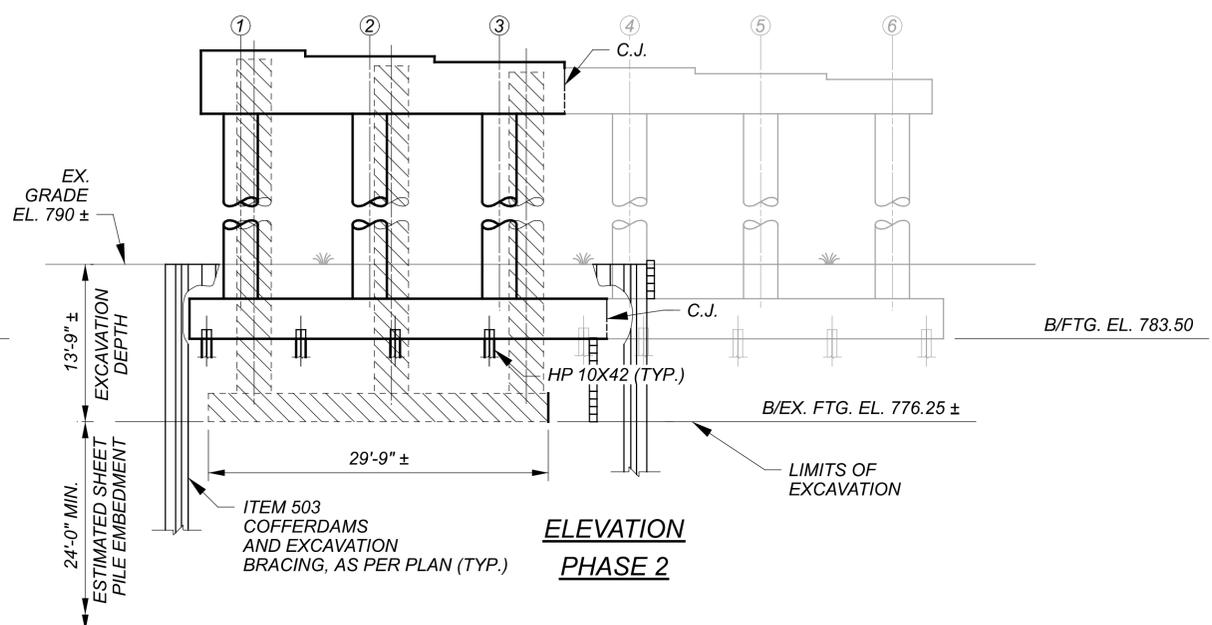
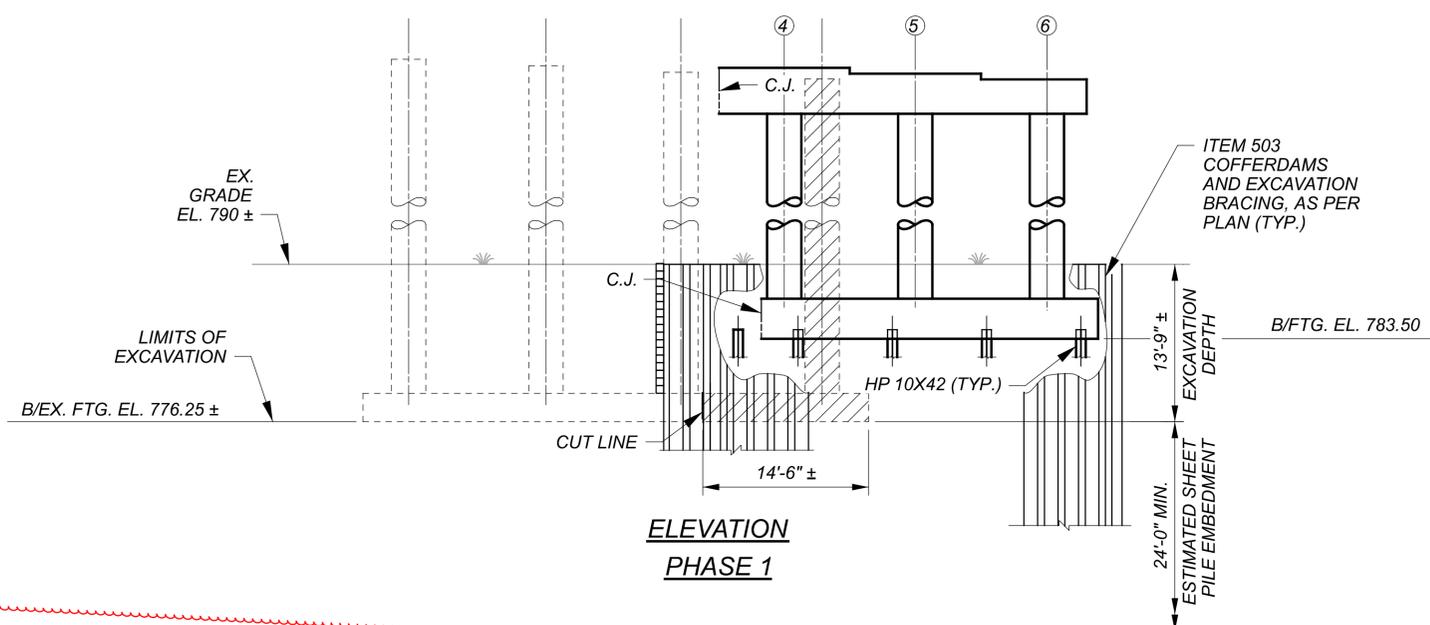
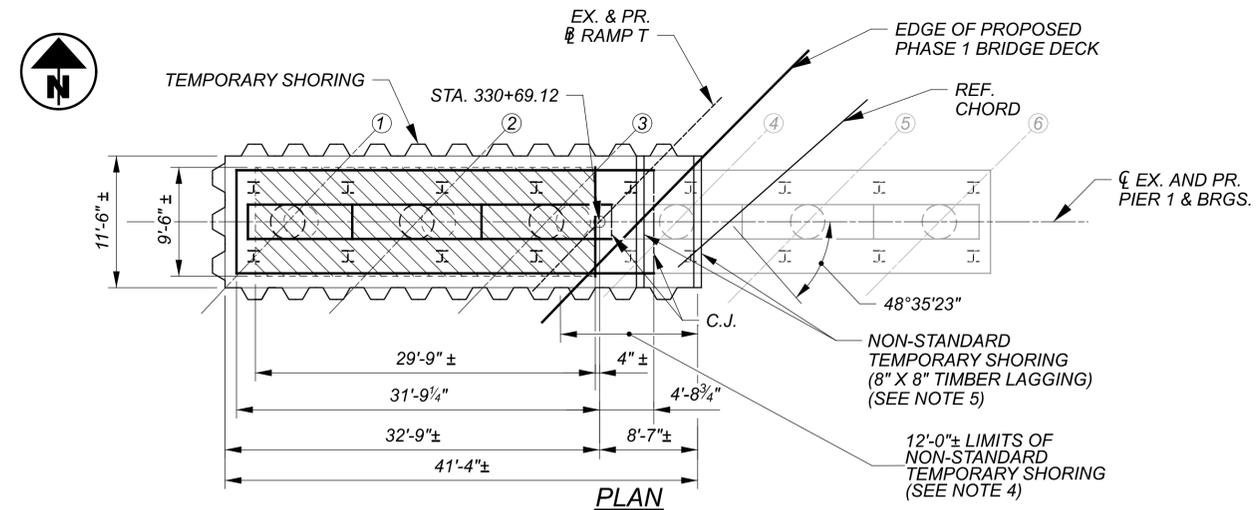
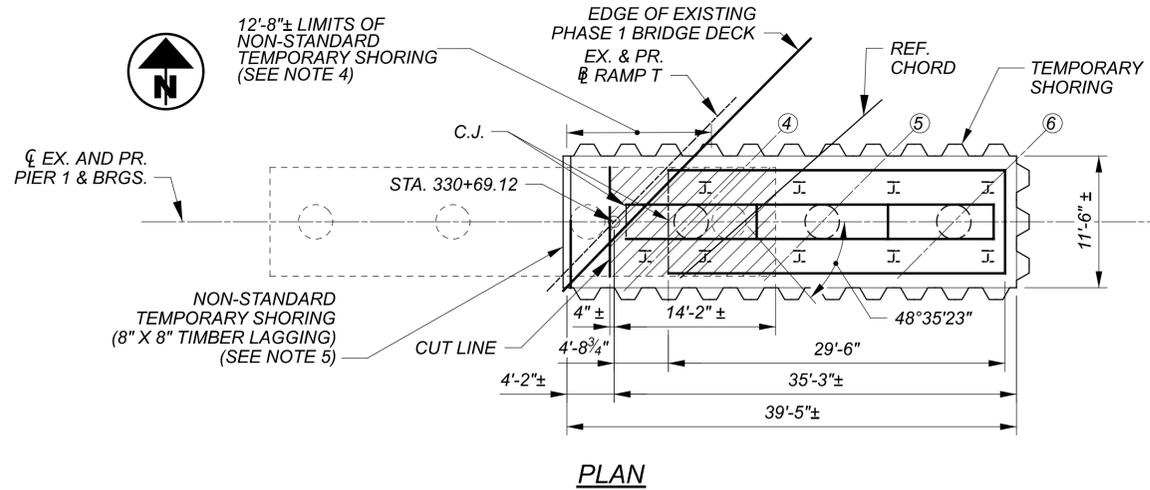
SHEET REFERENCES:

- SEE SHEET [07/51] FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
- SEE SHEET [10/51] FOR PIER 1 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [11/51] FOR PIER 2 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [12/51] FOR PIER 3 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [02/51] FOR INFORMATION REGARDING PLACEMENT OF TEMPORARY SHORING.

LEGEND

- PHASE 1 REMOVALS
- PHASE 2 REMOVALS

| | |
|---------------|----------------|
| SFN | 1814258 |
| DESIGN AGENCY | MOTT MACDONALD |
| DESIGNER | VN |
| CHECKER | JMR |
| REVIEWER | SK |
| DATE | 09/17/25 |
| PROJECT ID | 114536 |
| SUBSET | 9 |
| TOTAL | 51 |
| SHEET | P.102 |
| TOTAL | 167 |



NOTES:

- ALL REMOVALS ON THIS SHEET ARE INCLUDED WITH PAY ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
- 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.
- SHEET PILES IN CONFLICT WITH PERMANENT STRUCTURE MUST BE REMOVED.
- NON-STANDARD TEMPORARY SHORING NEAR AND UNDER BRIDGE DECK SHALL BE SHEET PILES INSTALLED IN 4 FOOT SEGMENTS TO BE DRIVEN AND WELDED.
- 8" X 8" TIMBER LAGGING TO BEAR ON TEMPORARY SHEETING, COLUMNS OR PILES.

SHEET REFERENCES:

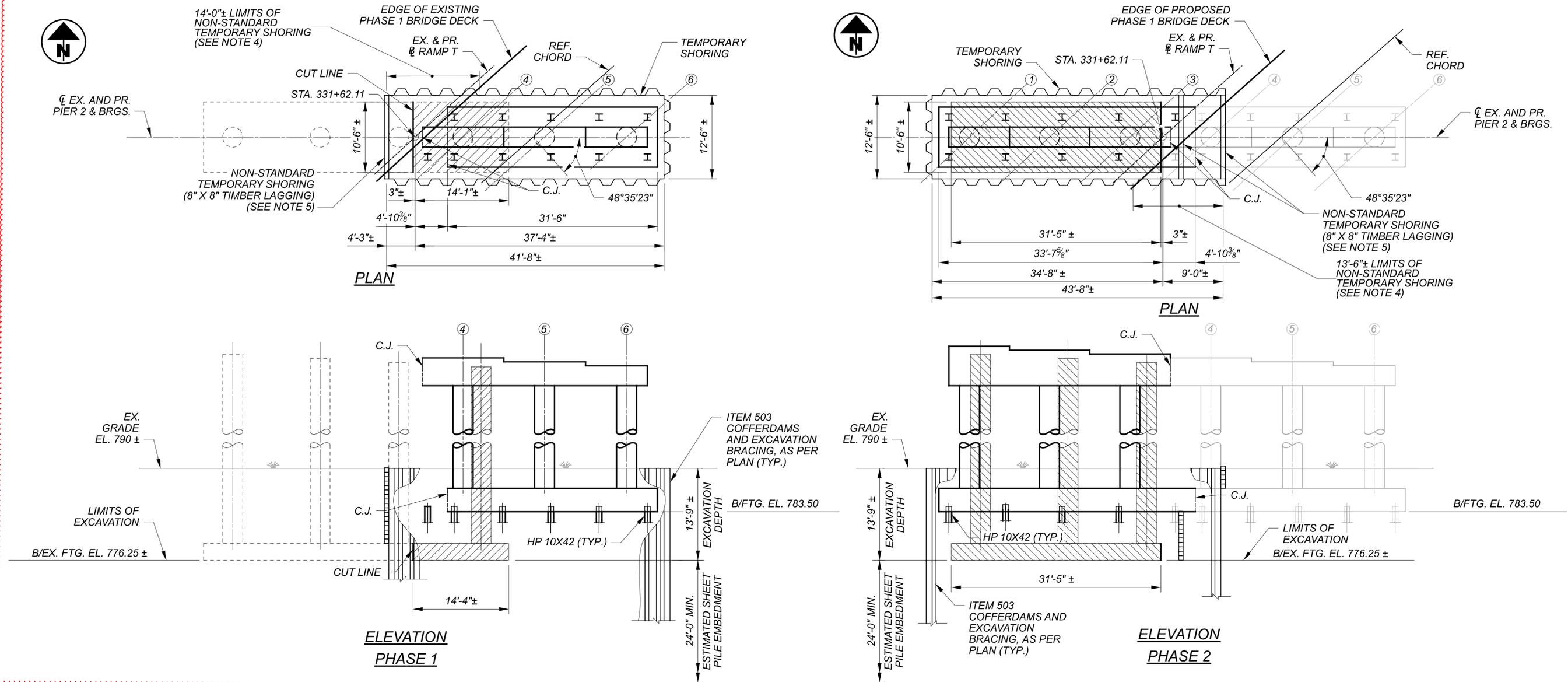
- SEE SHEET [07/51] FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
- SEE SHEET [08/51] & [09/51] FOR PHASE CONSTRUCTION OF ABUTMENTS.
- SEE SHEET [11/51] FOR PIER 2 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [12/51] FOR PIER 3 PHASE CONSTRUCTION DETAILS.
- SEE SHEET [03/51] FOR INFORMATION REGARDING NON-STANDARD 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 |
| DESIGNER | VN |
| CHECKER | JMR |
| REVIEWER | SK |
| PROJECT ID | 114536 |
| SUBSET | 10 |
| TOTAL | 51 |
| SHEET | P.103 |
| TOTAL | 167 |



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:

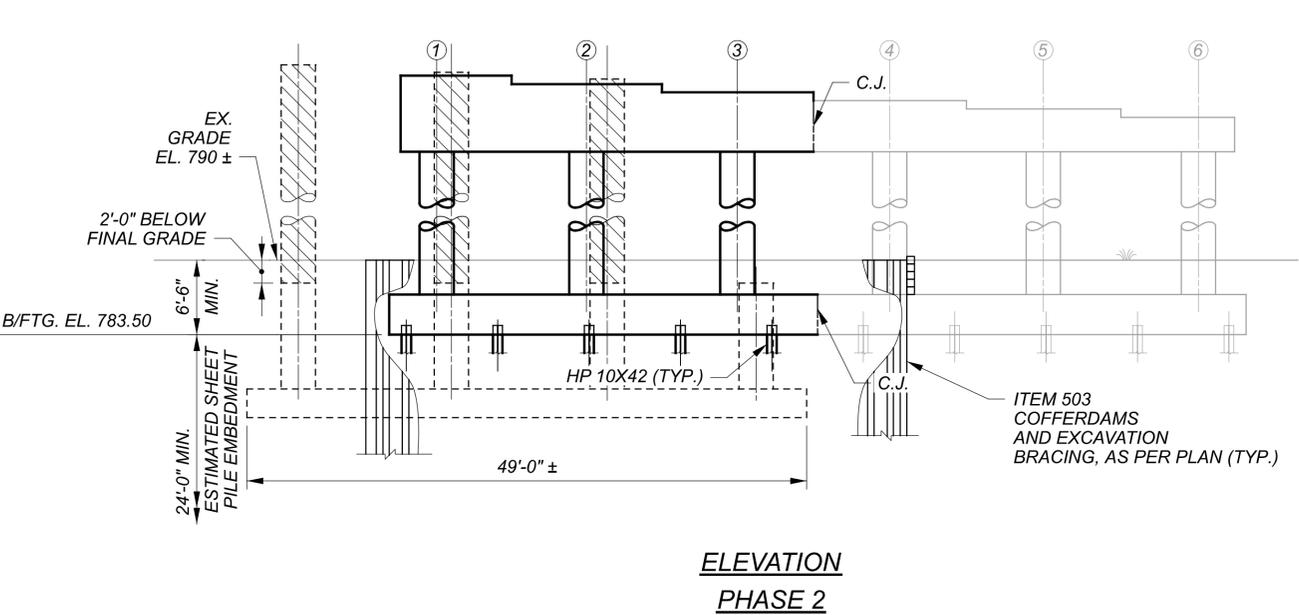
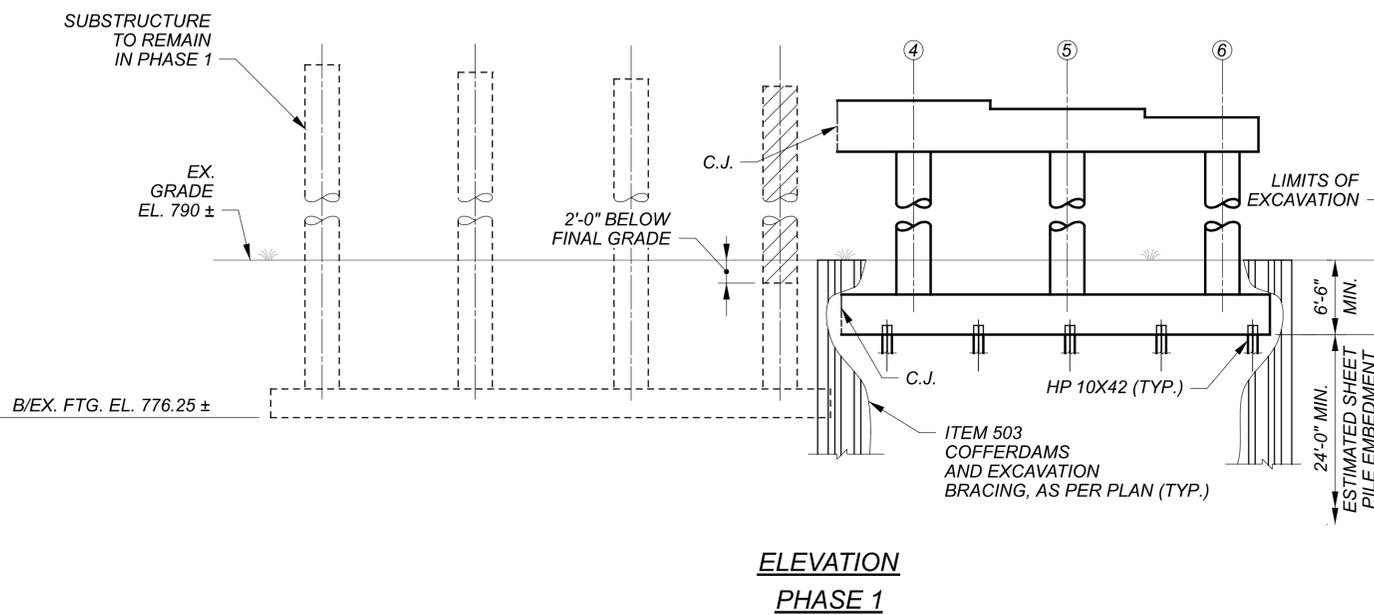
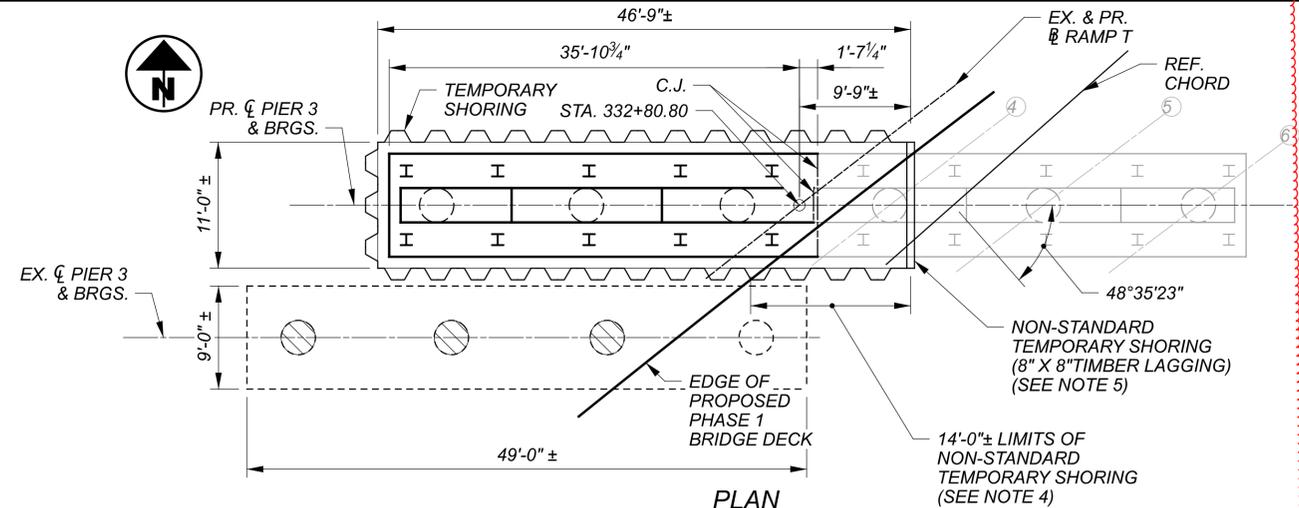
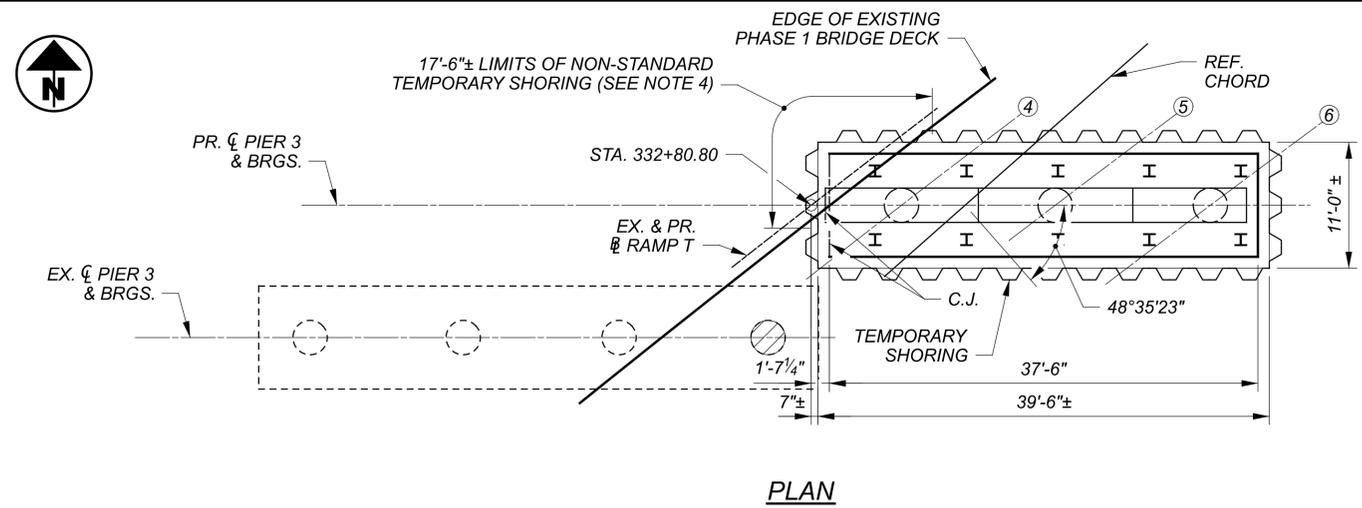
1. SEE SHEET [07/51] FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET [08/51] & [09/51] FOR PHASE CONSTRUCTION OF ABUTMENTS.
3. SEE SHEET [10/51] FOR PIER 1 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET [12/51] FOR PIER 3 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET [03/51] FOR INFORMATION REGARDING NON-STANDARD 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 | | M M |
| DESIGNER | | VN |
| CHECKER | | JMR |
| REVIEWER | | SK |
| PROJECT ID | | 114536 |
| SUBSET | TOTAL | |
| 11 | 51 | |
| SHEET | TOTAL | |
| P.104 | 167 | |



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:

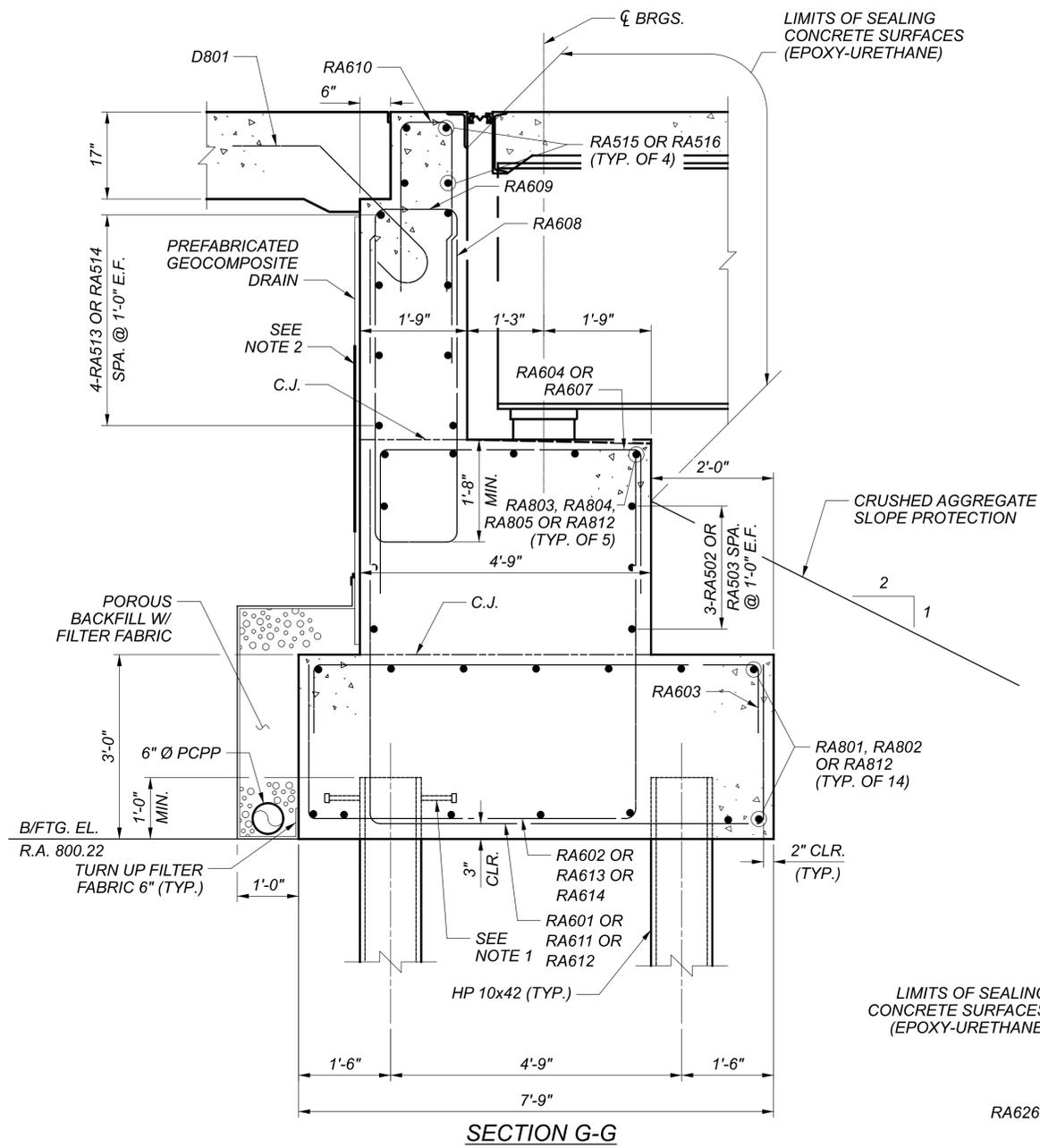
1. SEE SHEET [07/51] FOR PHASE CONSTRUCTION OF SUPERSTRUCTURE.
2. SEE SHEET [08/51] & [09/51] FOR PHASE CONSTRUCTION OF ABUTMENTS.
3. SEE SHEET [10/51] FOR PIER 1 PHASE CONSTRUCTION DETAILS.
4. SEE SHEET [11/51] FOR PIER 2 PHASE CONSTRUCTION DETAILS.
5. SEE SHEET [03/51] FOR INFORMATION REGARDING NON-STANDARD TEMPORARY SHORING.

LEGEND

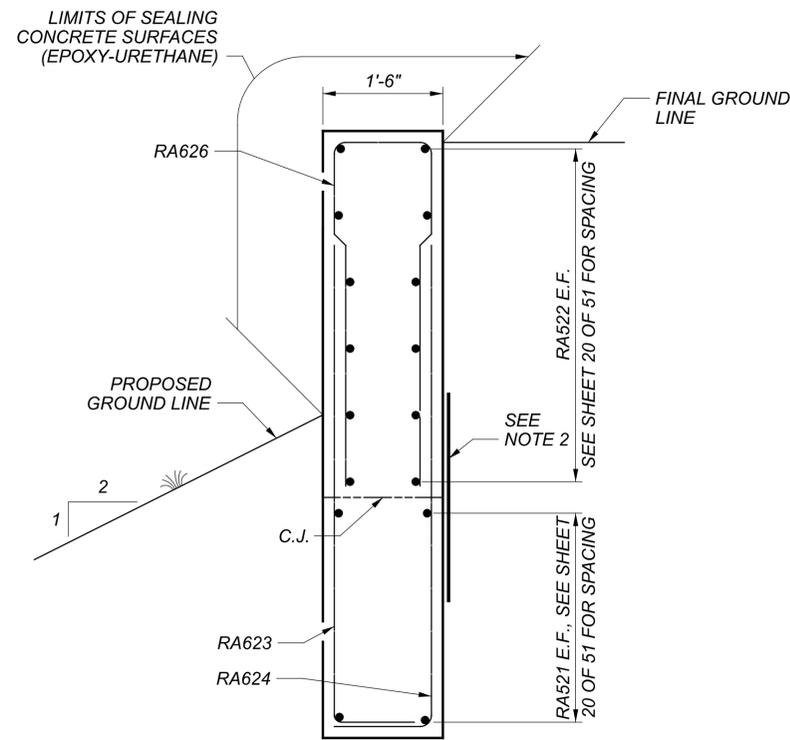
- PHASE 1 REMOVALS
- PHASE 2 REMOVALS

PHASE CONSTRUCTION - PIER 3 PLAN, ELEVATION & DETAILS
 BRIDGE NO. CUY-71-10.07 SW
 IR-71 NB RAMP TO IR-480 WB

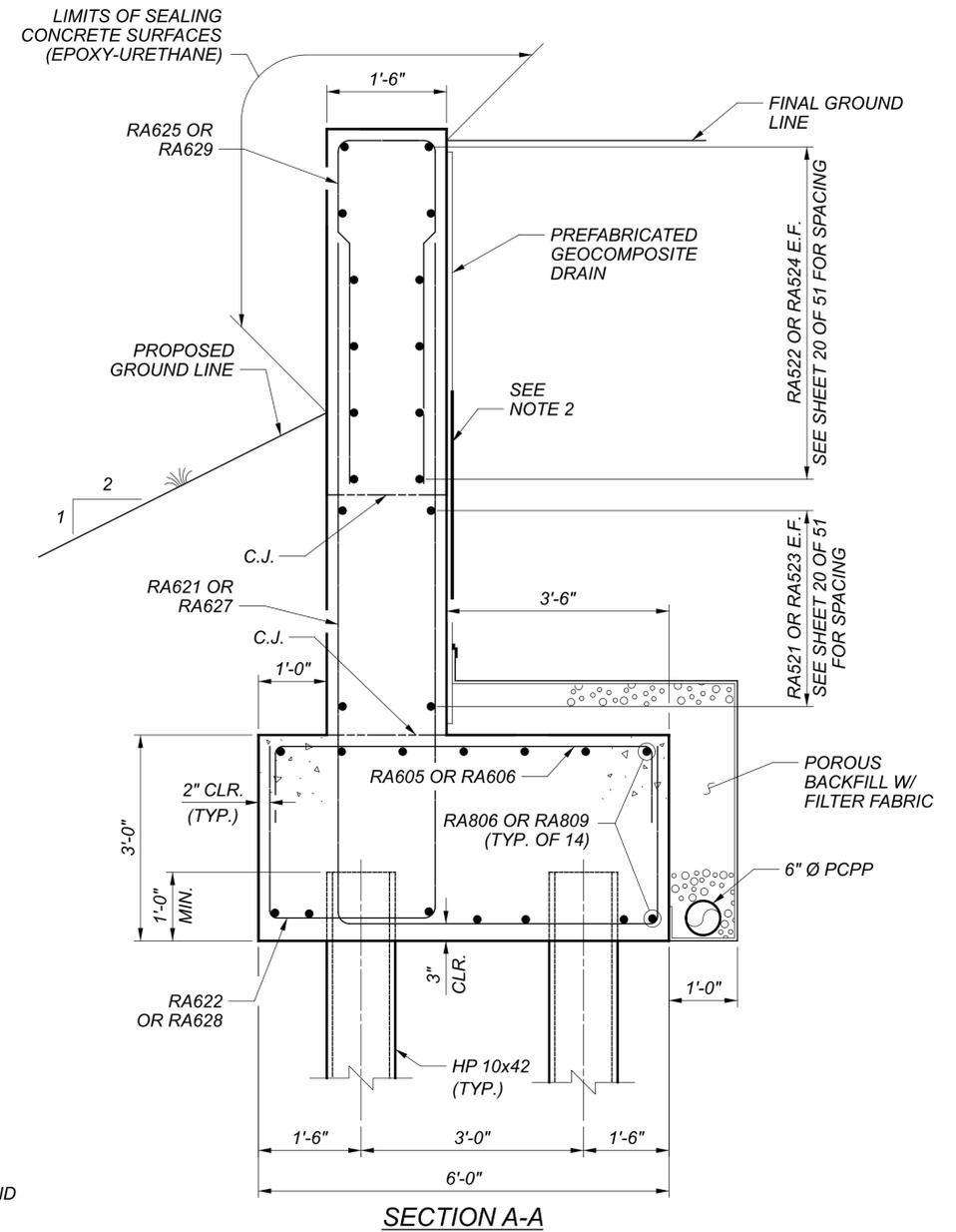
| | | |
|---------------|-------|-------------|
| SFN | | 1814258 |
| DESIGN AGENCY | | M M |
| DESIGNER | | VN |
| CHECKER | | JMR |
| REVIEWER | | SK 09/17/25 |
| PROJECT ID | | 114536 |
| SUBSET | TOTAL | |
| 12 | 51 | |
| SHEET | TOTAL | |
| P.105 | 167 | |



SECTION G-G



SECTION W-W



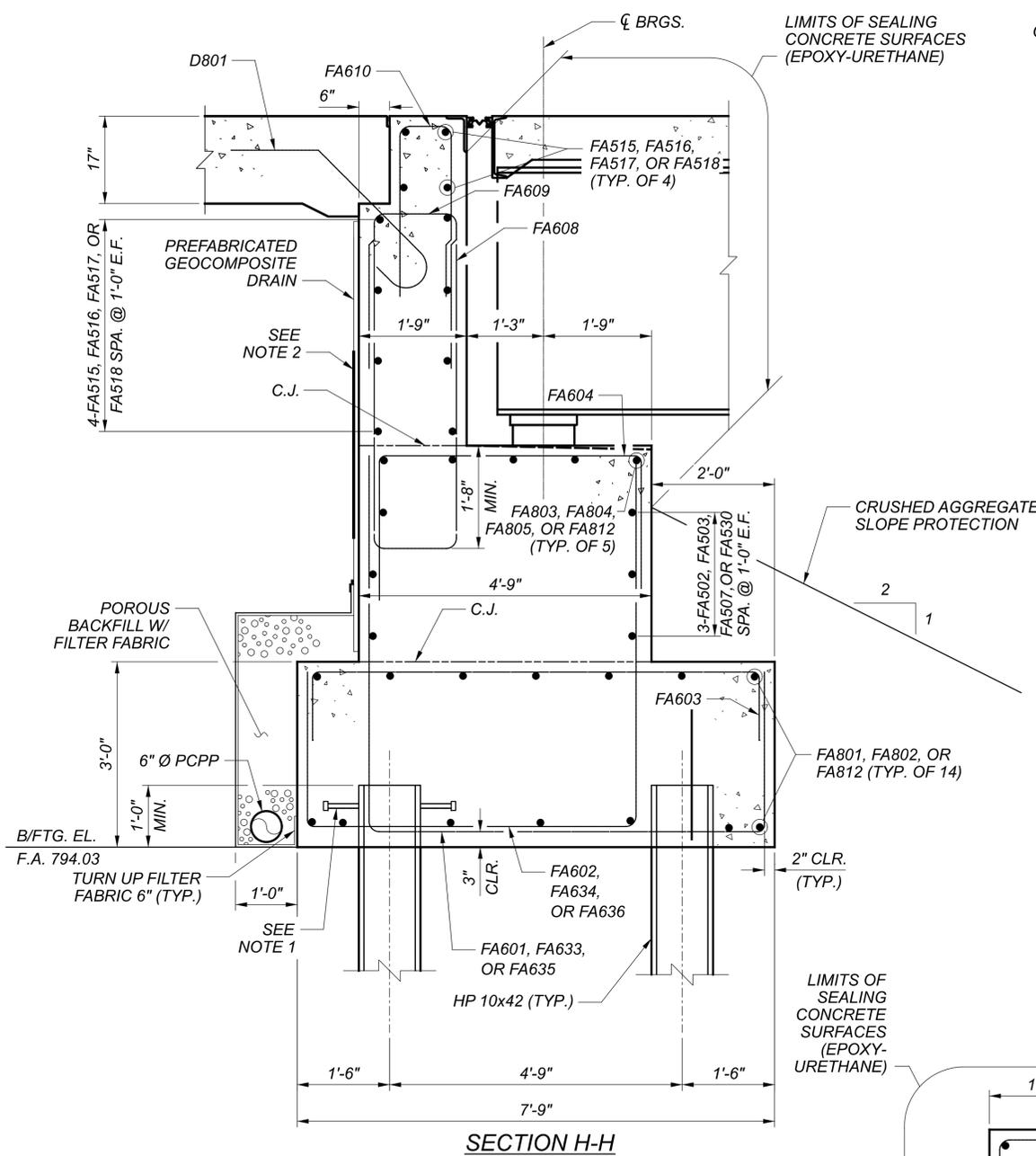
SECTION A-A

NOTES:

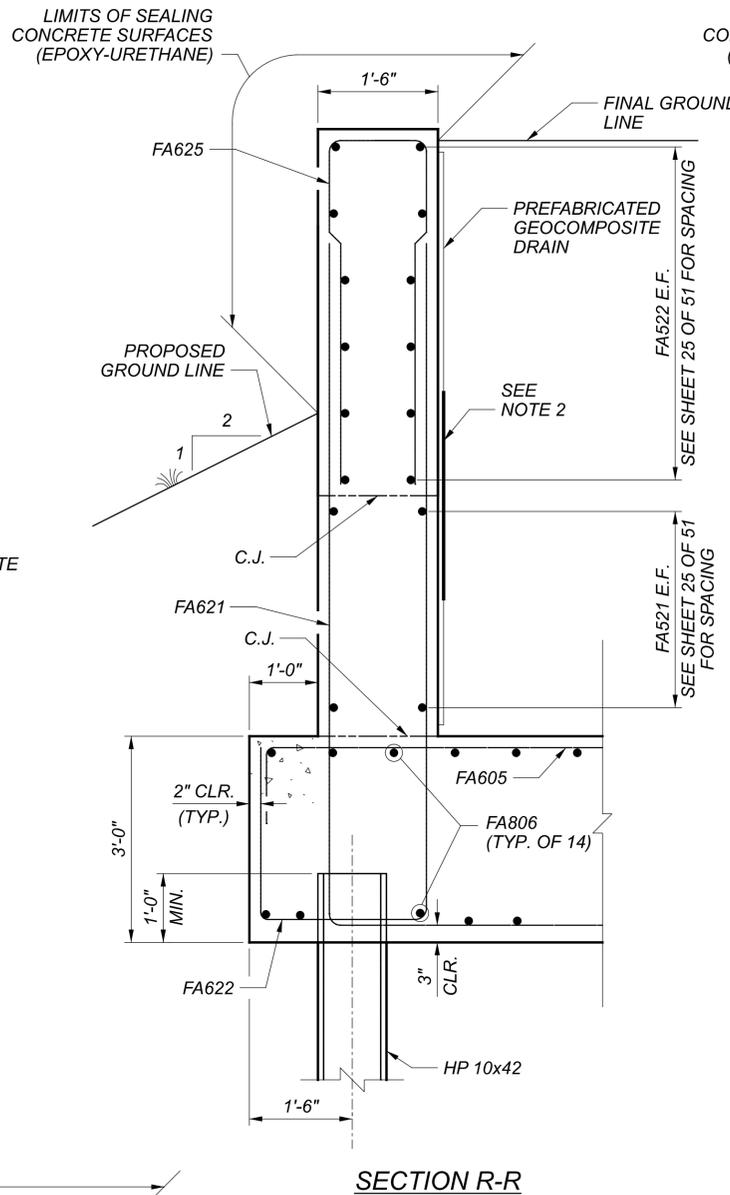
1. PROVIDE 4 - 1/2" Ø STUDS AT TOP OF REAR PILES (2 EA. SIDE OF PILE - 6" LONG), MAY BE FIELD WELDED AFTER PILING IS IN PLACE. STUDS SHALL BE INCIDENTAL TO ITEM 507 STEEL PILES HP 10x42, FURNISHED.
2. INSTALL ITEM 512 - TYPE 2 WATERPROOFING, 3'-0" WIDE, CENTERED ON THE CONSTRUCTION JOINT ON THE INSIDE 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

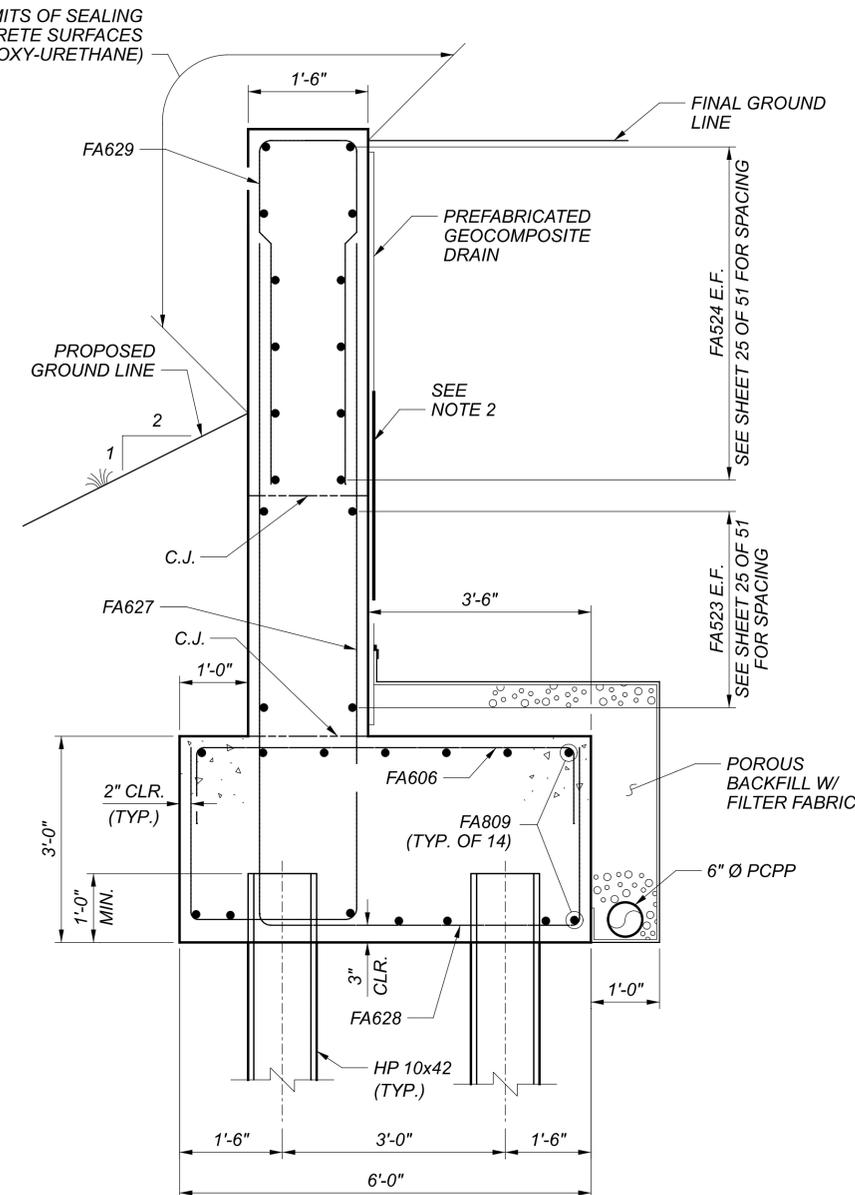
| | |
|---------------|---------|
| SFN | 1814258 |
| DESIGN AGENCY | M M |
| DESIGNER | NKK |
| CHECKER | JMR |
| REVIEWER | SK |
| PROJECT ID | 114536 |
| SUBSET | 21 |
| TOTAL | 51 |
| SHEET | P.114 |
| TOTAL | 167 |



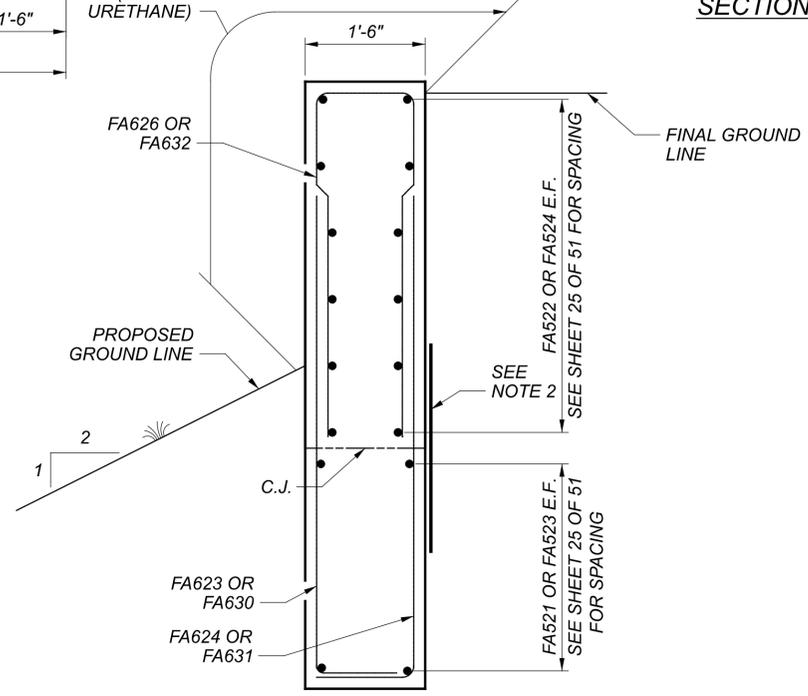
SECTION H-H



SECTION R-R



SECTION B-B

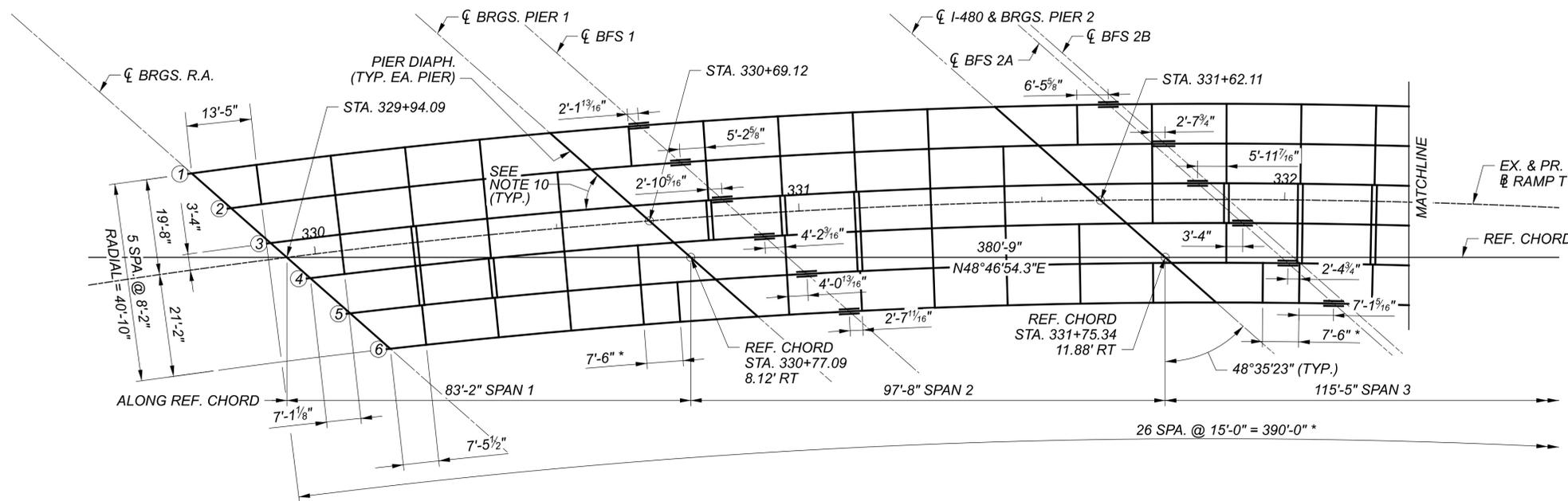


SECTION X-X

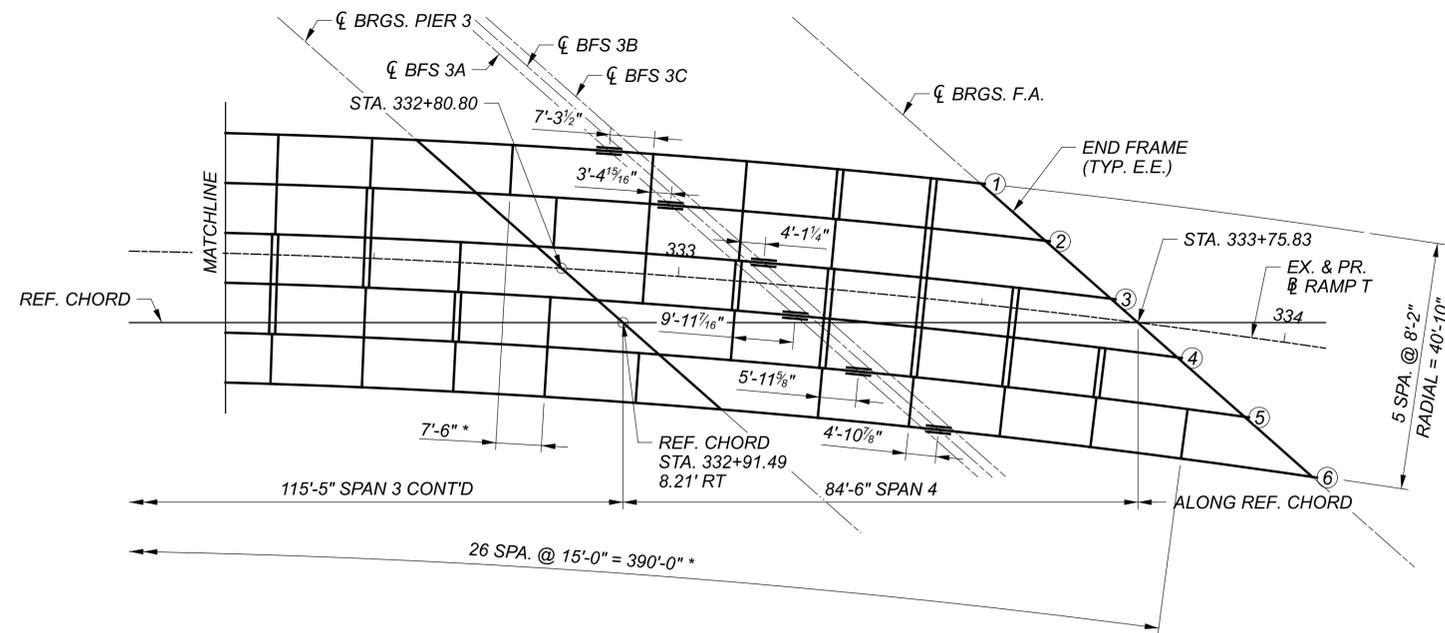
- NOTES:**
1. PROVIDE 4 - 1/2" Ø STUDS AT TOP OF REAR PILES (2 EA. SIDE OF PILE - 6" LONG), MAY BE FIELD WELDED AFTER PILING IS IN PLACE. STUDS SHALL BE INCIDENTAL TO ITEM 507 STEEL PILES HP 10x42, FURNISHED.
 2. INSTALL ITEM 512 - TYPE 2 WATERPROOFING, 3'-0" WIDE, CENTERED ON THE CONSTRUCTION JOINT 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 | M M |
| DESIGNER | NKK |
| CHECKER | JMR |
| REVIEWER | SK |
| PROJECT ID | 114536 |
| SUBSET | 26 |
| TOTAL | 51 |
| SHEET | P.119 |
| TOTAL | 167 |



FRAMING PLAN



FRAMING PLAN

CURVE DATA:

P.I. = STA 334+72.59
 $\Delta = 60^{\circ}00'56''$ RT
 $Dc = 03^{\circ}45'00''$
 $R = 1,527.89'$
 $T = 882.40'$
 $L = 1600.42'$
 $E = 236.5'$

NOTES:

- ALL DIMENSIONS SHOWN ARE HORIZONTAL.
- GIRDER SPACING ARE MEASURED, AND CROSS-FRAMES ARE PLACED, RADIAL TO THE RAMP \square .
- * MEASURED ALONG STRINGER 6

CROSS-FRAMES:

- FOR TYPE 1 AND TYPE 2 CROSS-FRAMES, SEE SHEET [36/51].
- TYPES "A" & "C" CROSS-FRAMES ARE CONFIGURED AS PER SCD GSD-1-19.
- TYPE "B" CROSS-FRAMES PER GSD-1-19 SHALL NOT BE USED.
- CENTERLINES OF BOLTED FIELD SPLICES ARE PARALLEL TO ALL SUBSTRUCTURE UNITS.
- FOR ERECTION PLANS, SEE SHEET [13/51] AND [14/51].
- FOR TRANSVERSE SECTION, SEE SHEET [31/51].
- FOR GIRDER ELEVATION TABLES AND DETAILS, SEE SHEET [33/51].
- FOR CAMBER TABLES, SEE SHEET [34/51].
- FOR SPLICE DETAILS, SEE SHEET [35/51].
- SEE ABUTMENT AND PIER SHEETS FOR GIRDER ANGLE.

LEGEND

- - TYPE 1 CROSS-FRAME
- ==== - TYPE 2 CROSS-FRAME



| | |
|---------------|---------|
| SFN | 1814258 |
| DESIGN AGENCY | M M |
| DESIGNER | LLB |
| CHECKER | LAG |
| REVIEWER | SK |
| PROJECT ID | 114536 |
| SUBSET | 32 |
| TOTAL | 51 |
| SHEET | P.125 |
| TOTAL | 167 |