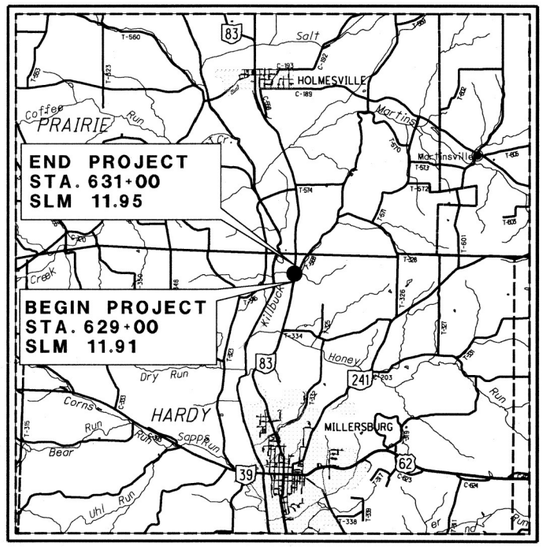

LOCATION MAP

LATITUDE: 40°35'35" LONGITUDE: 81°54'50"

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED

INTERSTATE HIGHWAY

FEDERAL ROUTES

STATE ROUTES

COUNTY & TOWNSHIP ROADS

OTHER ROADS

DESIGN DESIGNATION

CURRENT ADT (2024)	5,400
DESIGN YEAR ADT (2044)	5,500
DESIGN HOURLY VOLUME (2044)	500
DIRECTIONAL DISTRIBUTION	52%
TRUCKS (24 HOUR B&C)	15%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION: 04 MINOR RURAL ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS	APPROVAL DATE	SHEET NO.
SUPERELEVATION RATE	2-3-22	19
SHOULDER WIDTH	2-3-22	2-3
STOPPING SIGHT DISTANCE	2-3-22	19

ADA DESIGN WAIVER: NONE REQUIRED

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:
ODOT DISTRICT 11
ENGINEERING
NEW PHILADELPHIA, OHIO

ENGINEER'S SEAL:

SIGNED:
DATE:

ENGINEER'S SEAL:

SIGNED:
DATE:

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HOL-83-11.91

HARDY TOWNSHIP

HOLMES COUNTY

INDEX OF SHEETS:

STAGE 2 PLANS
SUBMITTED: 5/9/22

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
		WATERWAY PERMITS CONDITIONS 5/5/22

PROJECT DESCRIPTION

IMPROVEMENT OF 350 FEET (0.07 MILES) OF S.R. 83 AND 96 FEET (0.02 MILES) OF T.R. 568 IN HARDY TOWNSHIP OF HOLMES COUNTY BY REHABILITATING EXISTING BRIDGE NO. HOL-00083-11.960 OVER COLLIERS RUN. PROPOSED WORK INCLUDES SUPERSTRUCTURE REPLACEMENT, BREASTWALL AND WINGWALL RECONSTRUCTION ON EXISTING FOOTINGS, ROCK CHANNEL PROTECTION, NEW APPROACH SLABS, CHANNEL CLEANOUT FOR COLLIERS RUN, CULVERT REPLACEMENT, AND ASSOCIATED ROADWAY ITEMS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA = 0.2 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 0.5 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA = N/A (NOI NOT REQUIRED)*
* ROUTINE MAINTENANCE PROJECT

2019 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 FOR THE SIDE ROAD T.R. 568 AS DESCRIBED ON SHEET 10 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

ATTENTION
Contact the Ohio Department of Transportation for current Plans of Record

APPROVED
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E191(549)

PID NO. 108525

CONSTRUCTION PROJECT NO. -

RAILROAD INVOLVEMENT NONE

HOL-83-11.91

1
60

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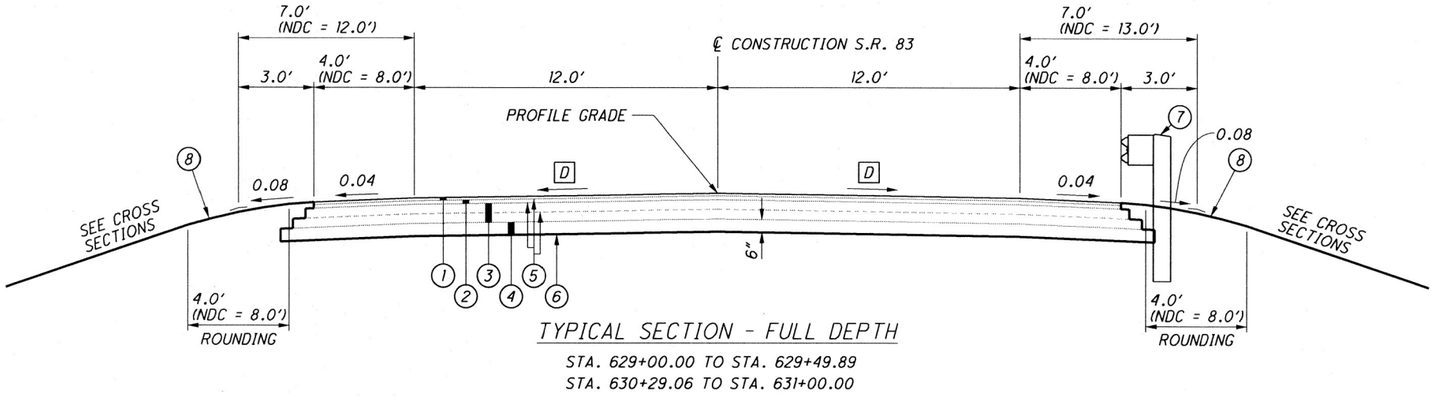
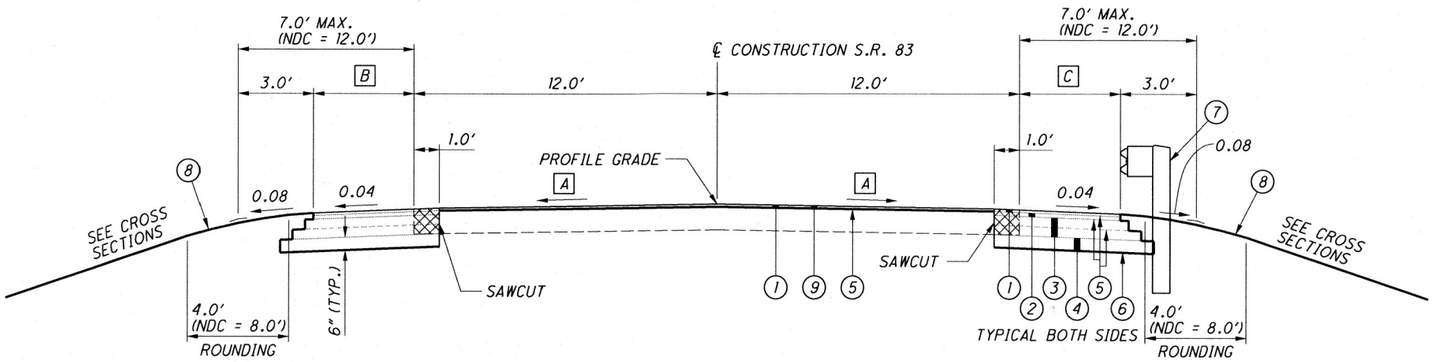


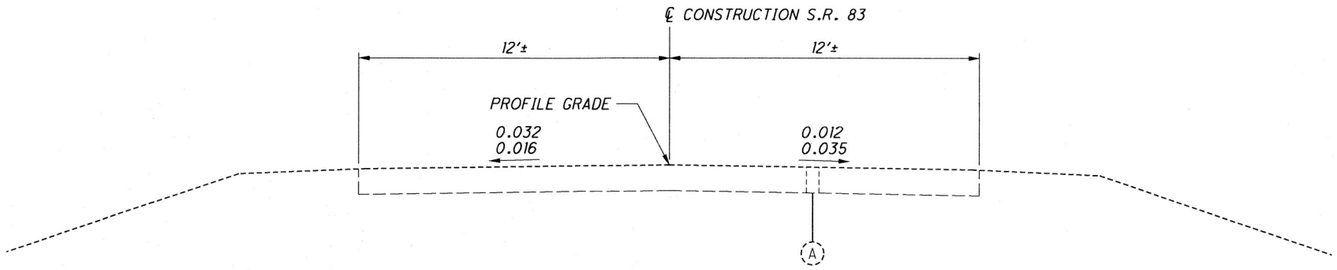
TYPICAL SECTION - FULL DEPTH

STA. 629+00.00 TO STA. 629+49.89
STA. 630+29.06 TO STA. 631+00.00



TYPICAL SECTION - SHOULDER WIDENING AND RESURFACING

STA. 628+25 TO STA. 629+00
STA. 631+00 TO STA. 631+75



ADJOINING TYPICAL SECTION

STA. 628+25 (TOP)
STA. 631+75 (BOTTOM)

A MATCH EXISTING

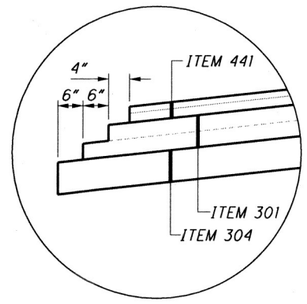
B VARIES 1.0' TO 4.0' STA. 628+25 TO STA. 629+00
4.0' STA. 631+00 TO STA. 631+60
VARIES 4.0' TO 1.0' STA. 631+60 TO STA. 631+75

C VARIES 1.0' TO 4.0', STA. 628+25 TO STA. 628+40
4.0', STA. 628+40 TO 629+00
VARIES 4.0' TO 1.0', STA. 631+00 TO STA. 631+75

D 0.016 OR AS SHOWN IN THE PAVEMENT TRANSITION TABLE ON SHEET 3

LEGEND

ITEM 202 - PAVEMENT REMOVED



STEP DETAIL

(TYPICAL EXCEPT AT APPROACH SLABS)

LEGEND

(1) ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG70-22M
(2) ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
(3) ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22, (449)
(4) ITEM 304 - AGGREGATE BASE
(5) ITEM 407 - TACK COAT
(6) ITEM 204 - SUBGRADE COMPACTION
(7) ITEM 606 - GUARDRAIL, TYPE MGS (REAR ONLY)
(8) ITEM 659 - SEEDING AND MULCHING
(9) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4")
(10) ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN
(11) ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, OR
ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, AS PER PLAN

(A) EXISTING PAVEMENT BUILDUP (12"± ASPHALT)

TYPICAL SECTIONS - S.R. 83

HOL-83-11.91

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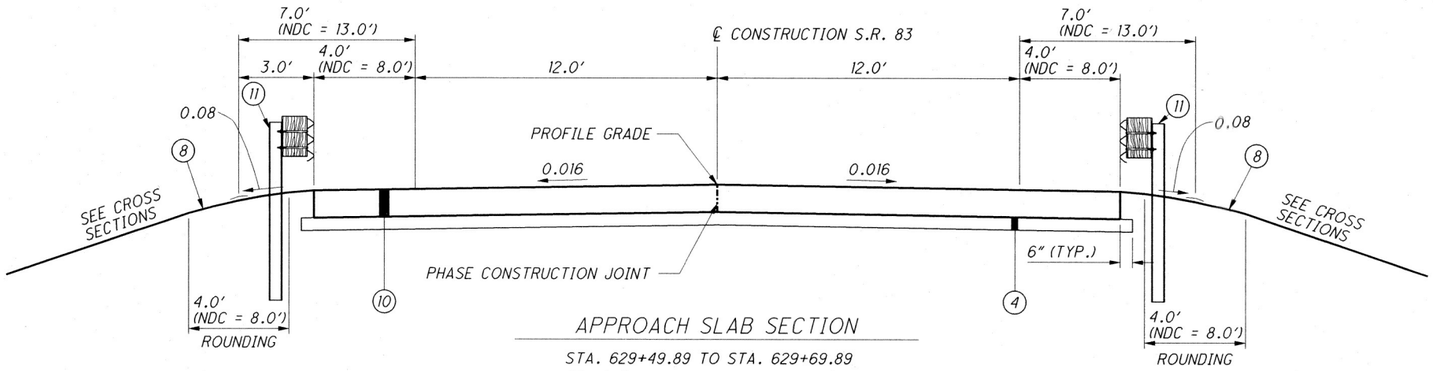

APPROACH SLAB SECTION

STA. 629+49.89 TO STA. 629+69.89
STA. 630+09.06 TO STA. 630+29.06

NOTE:

FOR PROPOSED LEGEND, SEE SHEET 2

PAVEMENT TRANSITION TABLE - S.R. 83

LEFT SIDE					PROFILE CONTROL		RIGHT SIDE					
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE (NDC 0.053)	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE (NDC 0.053)	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS
833.61	231 :1	-0.30	-0.025	12	629+00.00	833.91	12	-0.016	-0.19		833.72	MATCH EXISTING
834.21		-0.19	-0.016	12	629+25.00	834.40	12	-0.016	-0.19		834.21	
834.59		-0.19	-0.016	12	629+49.89	834.78	12	-0.016	-0.19		834.59	BEGIN APPROACH SLAB
834.80		-0.19	-0.016	12	629+69.89	834.99	12	-0.016	-0.19		834.80	END APPROACH SLAB
BRIDGE LIMITS												
834.98		-0.19	-0.016	12	630+09.06	835.17	12	-0.016	-0.19		834.98	BEGIN APPROACH SLAB
834.97		-0.19	-0.016	12	630+25.00	835.16	12	-0.016	-0.19		834.97	
834.95		-0.19	-0.016	12	630+29.06	835.14	12	-0.016	-0.19		834.95	END APPROACH SLAB
834.84		-0.19	-0.016	12	630+50.00	835.03	12	-0.016	-0.19		834.84	
834.59	694 :1	-0.19	-0.016	12	630+75.00	834.78	12	-0.016	-0.19	2083 :1	834.59	BEGIN TRANSITION TO EXISTING
834.26		-0.15	-0.013	12	631+00.00	834.41	12	-0.015	-0.18		834.23	MATCH EXISTING

TYPICAL SECTIONS - S.R. 83

HOL-83-11.91

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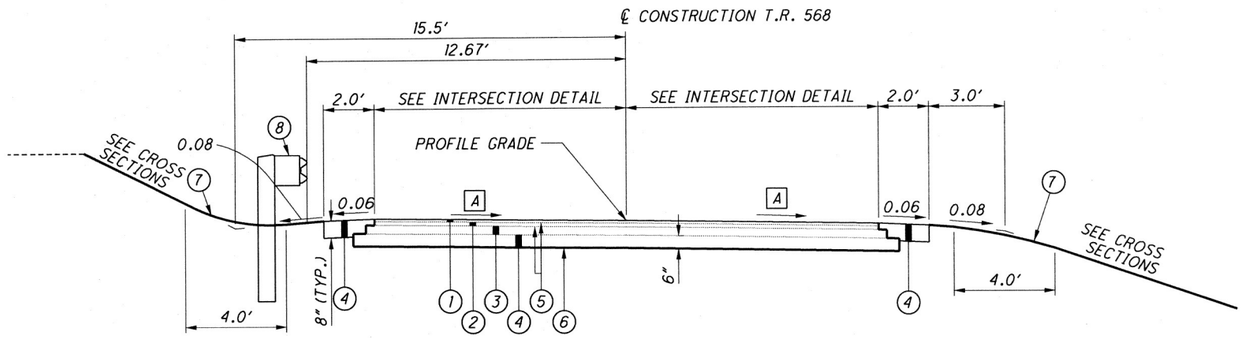
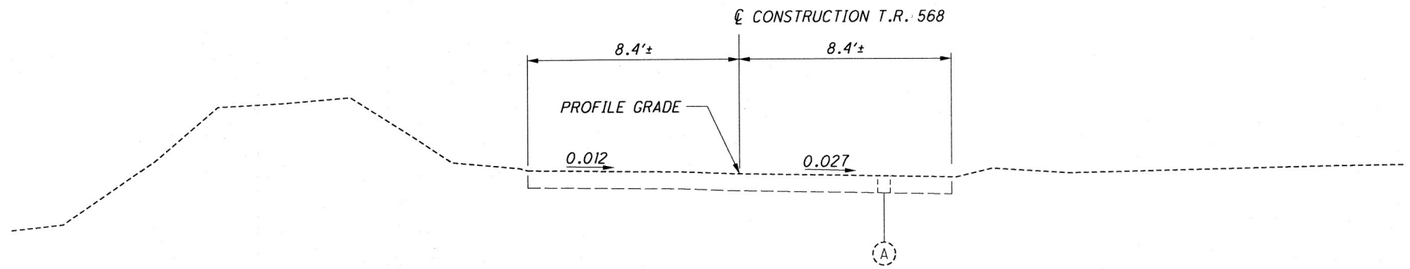


TYPICAL SECTION - FULL DEPTH

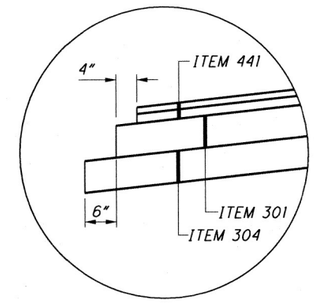
STA. 10+05.00 TO STA. 10+88.61

A SEE INTERSECTION DETAIL AND PAVEMENT TRANSITION TABLE BELOW



ADJOINING TYPICAL SECTION

STA. 10+05



STEP DETAIL

(TYPICAL EXCEPT AT APPROACH SLABS)

LEGEND

1. ITEM 441 - 1 ¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG70-22M
2. ITEM 441 - 1 ¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
3. ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22, (449)
4. ITEM 304 - AGGREGATE BASE
5. ITEM 407 - TACK COAT
6. ITEM 204 - SUBGRADE COMPACTION
7. ITEM 659 - SEEDING AND MULCHING
8. ITEM 606 - GUARDRAIL, TYPE MGS

(A) EXISTING PAVEMENT BUILDUP (8"± ASPHALT)

PAVEMENT TRANSITION TABLE - T.R. 568

LEFT SIDE					PROFILE CONTROL		RIGHT SIDE					
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS
833.80		0.10	0.012	8.40	10+05.00	833.70	8.4	-0.027	-0.23		833.47	BEGIN FULL DEPTH PAVEMENT; MATCH EXISTING
833.99		0.09	0.010	9.11	10+25.00	833.90	9.11	-0.022	-0.20		833.70	
834.35		0.07	0.007	10.00	10+50.00	834.28	10	-0.016	-0.16		834.12	END PAVEMENT TAPER
834.53	231 :1	0.05	0.005	10.00	10+61.50	834.48	10	-0.013	-0.13	148 :1	834.35	
834.69		0.04	0.004	10.00	10+71.68	834.65	10	-0.011	-0.11		834.54	BEGIN RADIUS RETURN RT.
834.75		0.04	0.004	10.05	10+75.00	834.71	10.28	-0.010	-0.10		834.61	
834.98		0.05	0.002	23.63	10+88.61	834.93	28.17	-0.007	-0.20		834.73	END TRANSITION, MEET E.O.P. S.R. 83

TYPICAL SECTIONS - T.R. 568

HOL-83-11.91

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UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CENTURYLINK CORPORATION
ATTN: JEFFREY SCHOONOVER
2025 AKRON ROAD
WOOSTER, OHIO 44691
OFFICE: 330-262-1128

COBRA PIPELINE COMKPANY, LTD.
ATTN: ELLIOT DULY
3511 LOST NATION ROAD, SUIT 213
WILLOUGHBY, OHIO 44094
440-255-1945

DIVERSIFIED OIL AND GAS
ATTN: JOHN RABER
1026 COODSON AVENUE SE
NEW PHILADELPHIA, OHIO 44663
440-840-0459

KNOX ENEREGY COOPERATIVE
ASSOCIATION, INC.
ATTN: KYLE UNDERWOOD
4100 HOLIDAY STREET NW
SUITE 201
CANTON, OHIO 44718
OFFICE: 330-498-9130

HOLMES-WAYNE ELECTRIC
COOPERATIVE
ATTN: TIM VICKERS
6060 STATE ROUTE 83
MILLERSBURG, OHIO 44654
OFFICE: 330-674-1055

NORTHEAST OHIO NATURAL GAS
ATTN: MARK L. WETZEL
9081 STATE ROUTE 250
STRASBURG, OHIO 44680
330-878-5589

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ROUNDING

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

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (PG70-22M)

FOLLOW SPECIFICATION 703.05 EXCEPT DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

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.

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.

SEEDING AND MULCHING

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.

SURVEYING PARAMETERS

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

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

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID 12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 1980
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 1.0000613901
ORIGIN OF COORDINATE SYSTEM: N 337871.436 E 2131182.080

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.

ASBESTOS NOTIFICATION

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

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE AND SUBMIT THE FORMS VIA OHIO EPA'S WEBSITE OR MAIL HARD COPIES TO THE ADDRESS BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER. INFORMATION REQUIRED ON THE FORM WILL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 11 OFFICE, 2201 REISER AVENUE, NEW PHILADELPHIA, OHIO 44663.

BASIS FOR PAYMENT THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

RAISED PAVEMENT MARKERS (RPM'S)

THE CONTRACTOR SHALL OMIT PLACING RAISED PAVEMENT MARKERS ACROSS THE CONCRETE DECK AND APPROACH SLABS.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

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

PROJECT CONTROL INFORMATION

POINT ID	NAME	NORTHING	EASTING	ELEVATION	CODE	DESCRIPTION	STATION	OFFSET
CP01		337439.6440	2131129.1230	830.04	IPINS	IRON PIN	OFF CHAIN	OFF CHAIN
S600	BM#1	337871.4360	2131182.0800	834.42	IPINS	IRON PIN	629+63.27	19.06' RT.
S601	BM#2	337930.5050	2131141.0000	834.41	IPINS	IRON PIN	630+22.26	22.08' LT.

CALCULATED MVC
CHECKED DJL

GENERAL NOTES

HOL-83-11.91

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ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, (MASH 2016)

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 THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE J, ASTM D4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

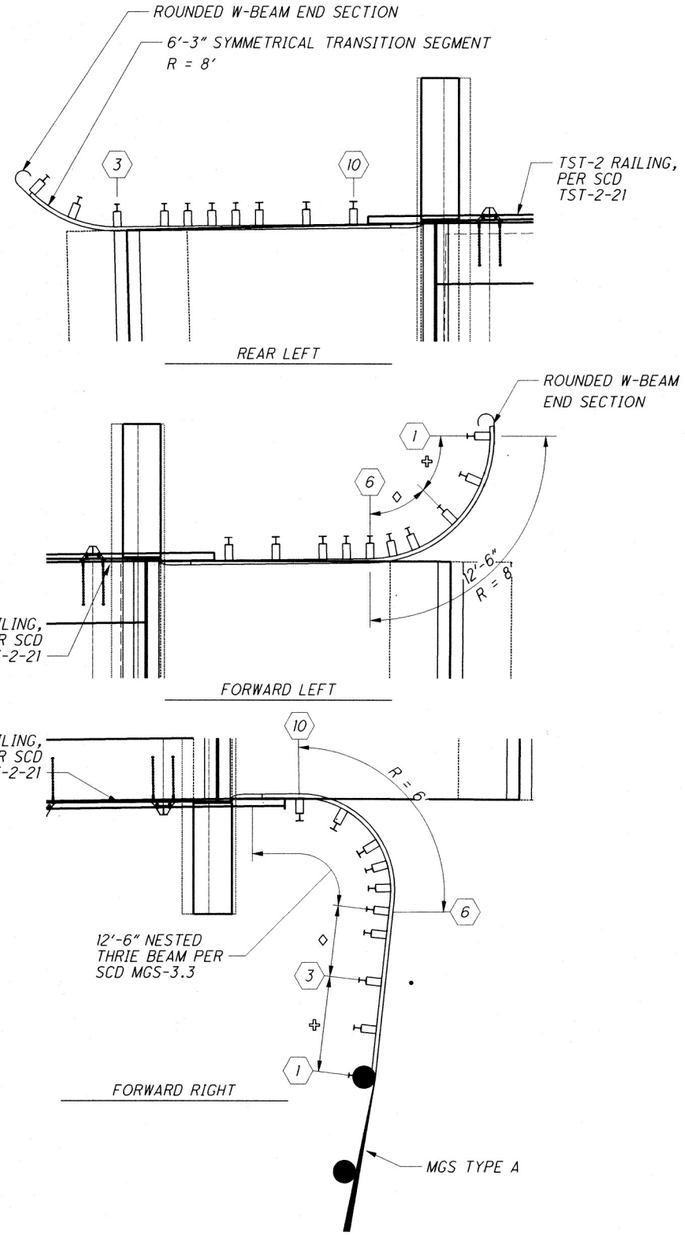
REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE 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 THE GROUND LINE.

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 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.

ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO INSTALL THE BRIDGE TERMINAL ASSEMBLIES PER SCD MGS-3.3 EXCEPT AS MODIFIED BELOW.



◊ SECTION OF THRIE BEAM (NOT NESTED)

✣ SYMMETRICAL TRANSITION SECTION

(#) POST NUMBER PER SCD MGS-3.3

CALCULATED MVC
CHECKED DJL

GENERAL NOTES

HOL-83-11.91

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ITEM 614 - MAINTAINING TRAFFIC

THE CONTRACTOR SHALL MAINTAIN TRAFFIC ON S.R. 83 AT ALL TIMES AND IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 614 AND THE SEQUENCE OF CONSTRUCTION DESCRIBED ON THIS SHEET. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, PAVEMENT FOR MAINTAINING TRAFFIC, AND THE EXISTING AND PROPOSED BRIDGE.

ACCESS SHALL BE MAINTAINED TO T.R. 568 ROAD AT ALL TIMES EXCEPT DURING PHASE I CONSTRUCTION, IN WHICH T.R. 568 TRAFFIC SHALL BE DETOURED.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC, INCLUDING ANY PAVEMENT WEDGES NECESSARY TO ENSURE SMOOTH TRANSITIONS FOR TRAFFIC DURING CONSTRUCTION.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC - - - - - - - - - - - - XX CU. YD.

FULLY-ACTUATED, ALTERNATING ONE-WAY TRAFFIC SHALL BE MAINTAINED DURING PHASE 1 AND PHASE 2 BY USE OF WORK ZONE TRAFFIC SIGNALS AS SHOWN ON SHEETS X-X. TRAFFIC SHALL BE SEPARATED FROM THE WORK AREA BY MEANS OF ITEM 622, PORTABLE BARRIER, 32" AND DRUMS.

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION THAT WILL REQUIRE THE CLOSURE OF EXISTING LANES TO TRAFFIC, ALL WORK ZONE SIGNALS, PAVEMENT, SIGNS, LIGHTS, PORTABLE BARRIER AND WORK ZONE PAVEMENT MARKINGS SHALL BE FURNISHED AND INSTALLED AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-96.11, MT-96.20 AND SHEETS X-X. WORK ZONE PAVEMENT MARKINGS AND PORTABLE BARRIER INSTALLATION SHALL BE ACCOMPLISHED IN ONE DAY, WITH FLAGGERS BEING UTILIZED FOR THE PROTECTION OF TRAFFIC DURING THE INSTALLATION OF THESE ITEMS. WHEN THE ABOVE REQUIREMENTS HAVE BEEN SATISFIED, SIGNAL CONTROLLED ALTERNATING ONE-WAY TRAFFIC MAY BEGIN.

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.

OVERHEAD-MOUNTED WORK ZONE SIGNALS

SIGNALS SHALL BE OVERHEAD MOUNTED IN ACCORDANCE WITH THE DETAILS SHOWN ON TRAFFIC SCD MT-96.20.

LIGHTING

LIGHTING SHALL BE PROVIDED AT EACH END OF THE LANE CLOSURE FOR THE CLOSING OF ONE LANE OF A TWO LANE HIGHWAY.

LIGHTING SHALL BE BY CONVENTIONAL METHODS, WITH LUMINAIRE ARMS ATTACHED TO THE SIGNAL SUPPORTS. AREA ILLUMINATION SHALL BE PROVIDED BY USING 150 WATT MINIMUM HIGH PRESSURE SODIUM LUMINARIES OR 250 WATT MINIMUM MERCURY LUMINARIES. THE MINIMUM HEIGHT OF THE LUMINAIRE SHALL BE 27 FT FROM THE GROUND SURFACE.

PAYMENT FOR LIGHTING SHALL INCLUDE DELIVERY, ERECTION, MAINTENANCE, AND REMOVAL AS CALLED FOR IN THE PLANS. PAYMENT SHALL BE PER EACH.

ITEM 614, WORK ZONE LIGHTING SYSTEM 2 EACH

WORK ZONE TRAFFIC SIGNALS

ALL WORK ZONE TRAFFIC SIGNALS SHALL HAVE A UPS SYSTEM CONFORMING TO CMS 633.18 AND 733.09, EXCEPT THAT A SEPARATE UPS ENCLOSURE IS NOT REQUIRED IF THE WORK ZONE TRAFFIC SIGNAL CONTROL EQUIPMENT IS TRAILER-MOUNTED. ALL SIGNAL HEADS SHALL BE LED CONFORMING TO CMS 732.04. IN ADDITION TO THE REQUIREMENTS OF CMS 614.10, THE CONTRACTOR SHALL INSTALL FRESH BATTERIES OR A PORTABLE GENERATOR WITHIN TWO HOURS OF A REPORTED DARK SIGNAL DUE TO AN EXTENDED POWER OUTAGE. ALL COSTS FOR MATERIALS, EQUIPMENT AND LABOR SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 622 - PORTABLE BARRIER

IT IS ANTICIPATED THAT THE SAME BARRIER WILL BE USED IN VARIOUS PHASES OF CONSTRUCTION. MOVEMENT OF THE BARRIER BETWEEN PHASES WILL BE ACCOMPLISHED IN ONE WORKING DAY. FLAGGERS SHALL BE UTILIZED FOR PROTECTION OF VEHICULAR TRAFFIC UNTIL MOVEMENT OF THE BARRIER IS COMPLETE.

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.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO 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.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND SHOWN ON SHEET 14:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL), EACH

ITEM 614, OBJECT MARKER, TWO-WAY, EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING 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 BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

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.

CALCULATED MVC
CHECKED DJL

MAINTENANCE OF TRAFFIC GENERAL NOTES

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TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING FOR PAVEMENT FOR MAINTAINING TRAFFIC SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

IN AREAS NOT BEHIND BARRIER, THE BASE WIDENING FOR PAVEMENT FOR MAINTAINING TRAFFIC SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

ITEM 615 - ROADS FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC -------- XX CU. YD.
EMBANKMENT FOR MAINTAINING TRAFFIC --------- XX CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

ALL WORK SHALL FOLLOW SPECIFICATION 615. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 615 - ROADS FOR MAINTAINING TRAFFIC.

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 ---------- **10 M. GAL**

SEQUENCE OF CONSTRUCTION

THE INTENT OF THE FOLLOWING SEQUENCE OF CONSTRUCTION IS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH SAFE FOR THE TRAVELING PUBLIC; THEREFORE, ALL PHASES SHALL HAVE STRICT ADHERENCE. COMPLETE EACH PHASE PRIOR TO ADVANCING TO THE NEXT CONSTRUCTION PHASE.

PRE-PHASE 1:
CONSTRUCT THIS PHASE WITH FLAGGERS UTILIZING SCD MT-97.10. ALL WORK COMPLETED SHALL BE SUBJECT TO THE "TRENCH FOR WIDENING" AND "OVERNIGHT TRENCH CLOSING" NOTES.

CONSTRUCT THE PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN ON THE LEFT SIDE OF THE ROADWAY.

PHASE 1:
INSTALL TRAFFIC CONTROL DEVICES AS PER PLAN PAGES 11-12. CONSTRUCT THE RIGHT SIDE OF THE STRUCTURE, APPROACH SLABS, FULL-DEPTH PAVEMENT (EXCEPT FOR THE SURFACE COURSE) AND GUARDRAIL AS SHOWN ON SHEETS 11-12. CONSTRUCT THE REMAINING PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN ON THE RIGHT SIDE OF ROADWAY.

PHASE 2:
INSTALL TRAFFIC CONTROL DEVICES AS PER PLAN PAGES 13-14. REMOVE THE PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN WITHIN AREAS NOT INCLUDED IN THE MILL AND FILL LIMITS AND BACKFILL WITH 304 AGGREGATE BASE.

CONSTRUCT THE LEFT SIDE OF THE STRUCTURE, APPROACH SLABS, FULL-DEPTH PAVEMENT (EXCEPT FOR THE SURFACE COURSE) AND GUARDRAIL AS SHOWN ON SHEETS 13-14.

PHASE 3:
CONSTRUCT THIS PHASE WITH FLAGGERS UTILIZING SCD MT-97.10. ALL WORK COMPLETED SHALL BE SUBJECT TO THE "TRENCH FOR WIDENING" AND "OVERNIGHT TRENCH CLOSING" NOTES.

COMPLETE THE MILL AND FILL ON BOTH THE LEFT AND RIGHT SIDE OF THE ROADWAY AND PLACE SURFACE COURSE ON ENTIRE PROJECT. PLACE PERMANENT PAVEMENT MARKINGS AND RPM'S AND PERFORM CONCRETE SEALING.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT ..... **0.32 MILE**

ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT ..... **0.16 MILE**

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

FOLLOW SPECIFICATION 615. UPON COMPLETION OF THE PROJECT, THE WORK ZONE PAVEMENT NOT AFFECTED BY PERMANENT IMPROVEMENTS SHALL REMAIN IN PLACE. THE COMPOSITION OF THE PAVEMENT SHALL BE FLEXIBLE AS DETAILED BELOW.

SAWCUT AS DIRECTED BY THE ENGINEER TO PROVIDE A NEAT JOINT TO ACCEPT THE TEMPORARY PAVEMENT PER CMS 202.05. THE MAXIMUM ACCEPTABLE ELEVATION DIFFERENCE AT THE SAW CUT LINE BETWEEN THE EXISTING PAVEMENT AND THE PAVEMENT FOR MAINTAINING TRAFFIC SHALL BE 0.25." A QUANTITY FOR ITEM 202 - PAVEMENT REMOVED, ASPHALT FROM THE M.O.T. OFFICE CALCULATIONS IS PROVIDED BELOW.

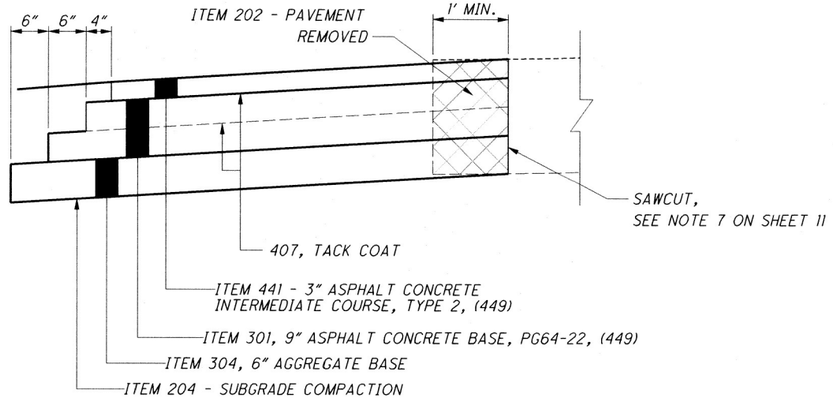
SEE M.O.T. PLAN SHEETS FOR LOCATIONS OF THIS PAVEMENT.

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

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN ---------- **XXX SQ. YD.**

ITEM 202 - PAVEMENT REMOVED ---------- **XX SQ. YD.**

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS, AND EQUIPMENT NECESSARY FOR INSTALLING THE ABOVE ITEMS.



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MAINTENANCE OF TRAFFIC GENERAL NOTES

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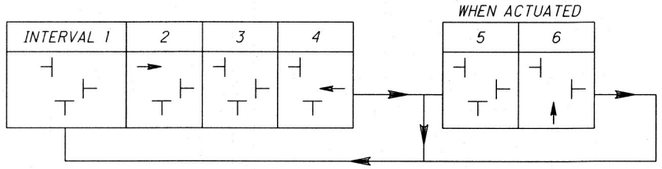
FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEET XX AND STANDARD CONSTRUCTION DRAWINGS MT-96.11, MT-96.20, AND MT-96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

	ALL PHASES					
	1	2	3	4	5	6
	ALL RED	S.R. 83 (NORTHBOUND)	ALL RED	S.R. 83 (SOUTHBOUND)	ALL RED	T.R. 568 AND DRIVES (WHEN ACTUATED)
MIN. GREEN	--	10	--	10	--	10
EXTENSION	--	4	--	4	--	4
MAX. GREEN	--	30	--	30	--	30
YELLOW	--	4	--	4	--	4
ALL RED	26	--	26	--	26	--
RECALL	ON	OFF	OFF	OFF	OFF	OFF

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.



CONTRACTOR SHALL DETERMINE THE TYPE OF DETECTOR TO BE INSTALLED AT EACH STOP BAR AS PER MT-96.20 AND MT-96.26.

WORK ZONE TRAFFIC SIGNAL TIMING AND PHASING

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 A 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).

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 THE 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

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

THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH 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 20 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.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL AND ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626.

THE FOLLOWING ESTIMATED QUANTITIES ARE CARRIED ON SHEET 15:

ITEM 614, BARRIER REFLECTOR, TYPE 2, (BIDIRECTIONAL), EACH

ITEM 614, OBJECT MARKER, TWO-WAY, EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEMS.

CALCULATED MVC
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MAINTENANCE OF TRAFFIC GENERAL NOTES

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DETOUR SIGNING

DETOUR SIGNS SHALL BE ERECTED ALONG THE OFFICIAL DETOUR ROUTE AND SHALL BE ASSEMBLED AS SHOWN. ALL DETOUR SIGNING SHALL BE INSTALLED BEFORE COMMENCING ANY OF THE PROPOSED WORK. PAYMENT FOR ALL LABOR, EQUIPMENT & MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, DETOUR SIGNING, UNLESS SEPERATELY ITEMIZED IN THE PLAN.

(1) x2

HARDY 568 TOWNSHIP

M1-H6b-24-3

ROAD CLOSED
1.13 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3A-60

DETOUR

M4-10L-48
ON TYPE 3
BARRICADE
(ONE EACH SIDE OF ROAD
PER LOCATION)

(2) x3

DETOUR

M4-8-24

HARDY 568 TOWNSHIP

M1-H6b-24-3

M5-1L-21

(3) x2

DETOUR

M4-8-24

HARDY 568 TOWNSHIP

M1-H6b-24-3

M6-1L-21

(4) x5

DETOUR

M4-8-24

HARDY 568 TOWNSHIP

M1-H6b-24-3

M5-1R-21

(5) x5

DETOUR

M4-8-24

HARDY 568 TOWNSHIP

M1-H6b-24-3

M6-1R-21

(6) x3

DETOUR

M4-8-24

HARDY 568 TOWNSHIP

M1-H6b-24-3

M6-3-21

(7) x2

END DETOUR

M4-8A-24

HARDY 568 TOWNSHIP

M1-H6b-24-3

(8) x3

DETOUR AHEAD

W20-2-36

HARDY 568 TOWNSHIP

M1-H6b-24-3

(9) x4

TYPE B
WARNING LIGHTS

ROAD CLOSED

R11-2-48
ON TYPE 3
BARRICADE
(TWO PER LOCATION)

(10) x2

HARDY 568 TOWNSHIP

M1-H6b-24-3

ROAD CLOSED
1.43 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3A-60

DETOUR

M4-10R-48
ON TYPE 3
BARRICADE
(ONE EACH SIDE OF
ROAD PER LOCATION)

(11) x2

HARDY 568 TOWNSHIP

M1-H6b-24-3

ROAD CLOSED
0.96 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3A-60

DETOUR

M4-10R-48
ON TYPE 3
BARRICADE
(ONE EACH SIDE OF
ROAD PER LOCATION)

(12) x1

TYPE A FLASHING
WARNING LIGHT

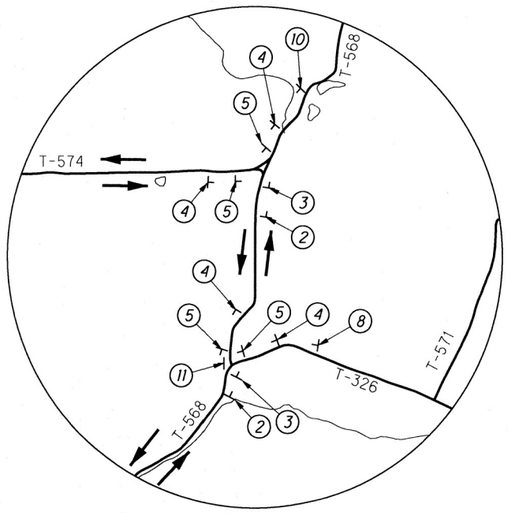
ROAD CLOSED
1000 FT

W20-3-36

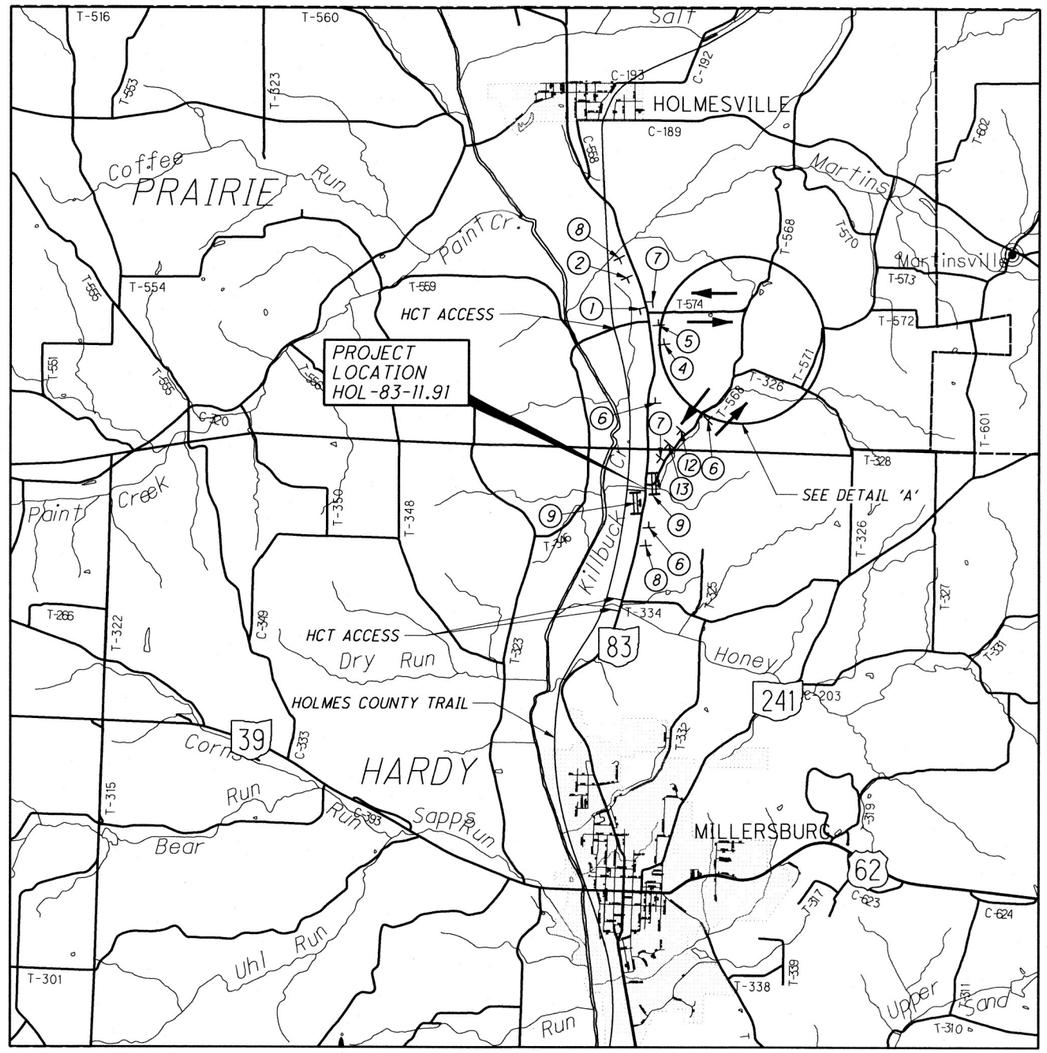
(13) x1

ROAD CLOSED
500 FT

W20-3-36



DETAIL 'A'



OFFICIAL DETOUR ROUTE

NOTE:

1. FOR ADDITIONAL SIGNING DETAILS, SEE STD. DWG. MT-101.60.
2. PLACE SIGNS PER SCD TC-42.20.
3. HCT = HOLMES COUNTY TRAIL
4. THE ACCESS TO THE HOLMES COUNTY TRAIL LOCATED WITHIN THE PROJECT LIMITS SHALL BE CLOSED FOR THE DURATION OF THE PROJECT. THE TRAIL CAN BE ACCESSED AT THE POINTS DEPICTED ON THE DETOUR MAP.

CALCULATED MVC
CHECKED DJL

DETOUR PLAN - T.R. 568

HOL-83-11.91

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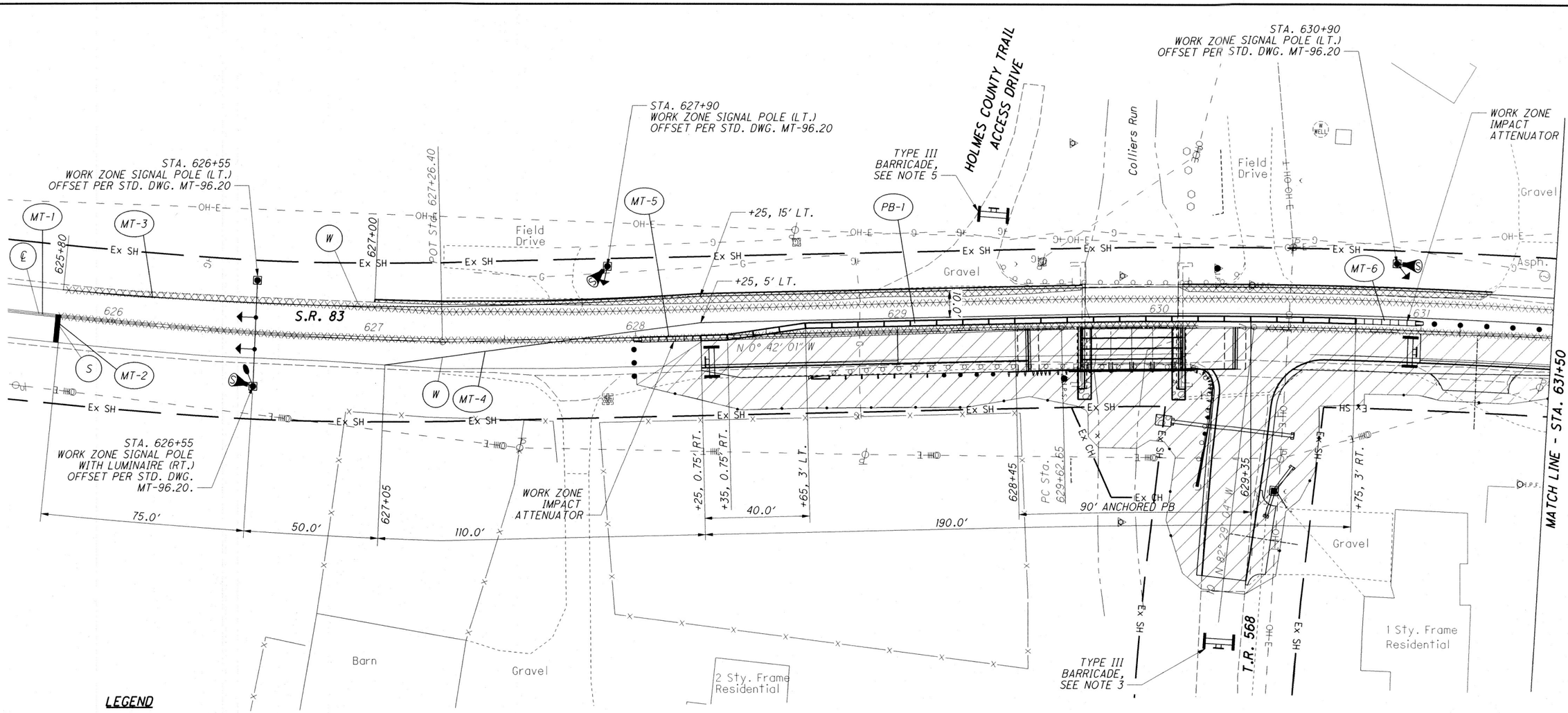
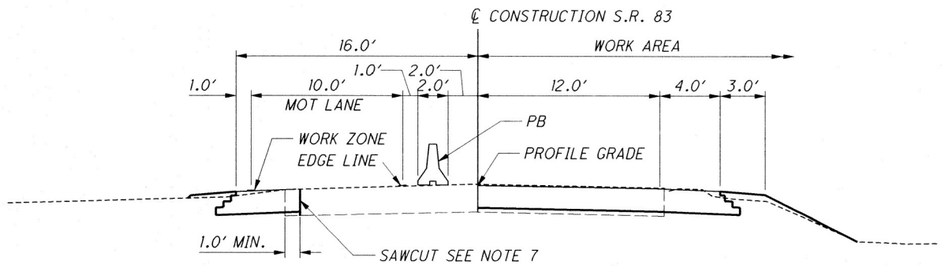


LEGEND

- XXXXXXX REMOVE EXISTING PAVEMENT MARKING
- WORK ZONE SIGNAL HEAD
- WORK ZONE LUMINAIRE
- WORK ZONE SIGNAL POLE
- WORK ZONE IMPACT ATTENUATOR
- DRUMS
- TYPE III BARRICADE
- DETECTOR UNIT
- WORK AREA
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- ℄ WORK ZONE CENTER LINE
- S WORK ZONE STOP LINE
- W WORK ZONE WHITE EDGE LINE



PHASE 1 - S.R. 83

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE MAINTENANCE OF TRAFFIC GENERAL NOTES SHEETS 7-9 AND M.O.T. STD. DWG'S MT-96.11 AND MT-96.20.
2. FOR PHASE CONSTRUCTION SEQUENCE, SEE SHEET NO. 8.
3. FOR THE DURATION OF PHASE 1, T.R. 568 AT S.R. 83 SHALL BE CLOSED TO TRAFFIC AND DETOURED TO RECONSTRUCT THE T.R. 568/S.R. 83 INTERSECTION. SEE DETOUR PLAN ON SHEET 10.
4. FOR PHASE 1 WORK ZONE TRAFFIC SIGNAL TIMING AND PHASING, SEE SHEET NO. 9.
5. ACCESS TO THE HOLMES COUNTY TRAIL WITHIN THE PROJECT LIMITS AT SLM 11.91 SHALL BE CLOSED FOR THE DURATION OF THE PROJECT. THE HOLMES COUNTY TRAIL CAN BE ACCESSED NEAR T.R. 334 AT SLM 11.16 AND T.R. 346 AT SLM 13.01.
6. CONTRACTOR TO ENSURE ACCESS FOR PROPERTY OWNERS AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AND COMMUNICATE TIME FRAMES WHEN CONSTRUCTION ACTIVITIES MAY TEMPORARILY PREVENT ACCESS BETWEEN S.R. 83 AND THEIR RESIDENCES.
7. THE PLAN PERMITS THE WORK ZONE PAVEMENT TO REMAIN IN PLACE AND BE USED AS PART OF THE PERMANENT IMPROVEMENT. FROM STA. 628+25 TO STA. 631+75, THE CONTRACTOR SHALL SAW CUT THE PAVEMENT AT THE LOCATION SHOWN IN THE TYPICAL SECTIONS.

HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED MVC
CHECKED DJL

MAINTENANCE OF TRAFFIC - PHASE 1
STA. 625+80 TO STA. 631+50

HOL-83-11.91

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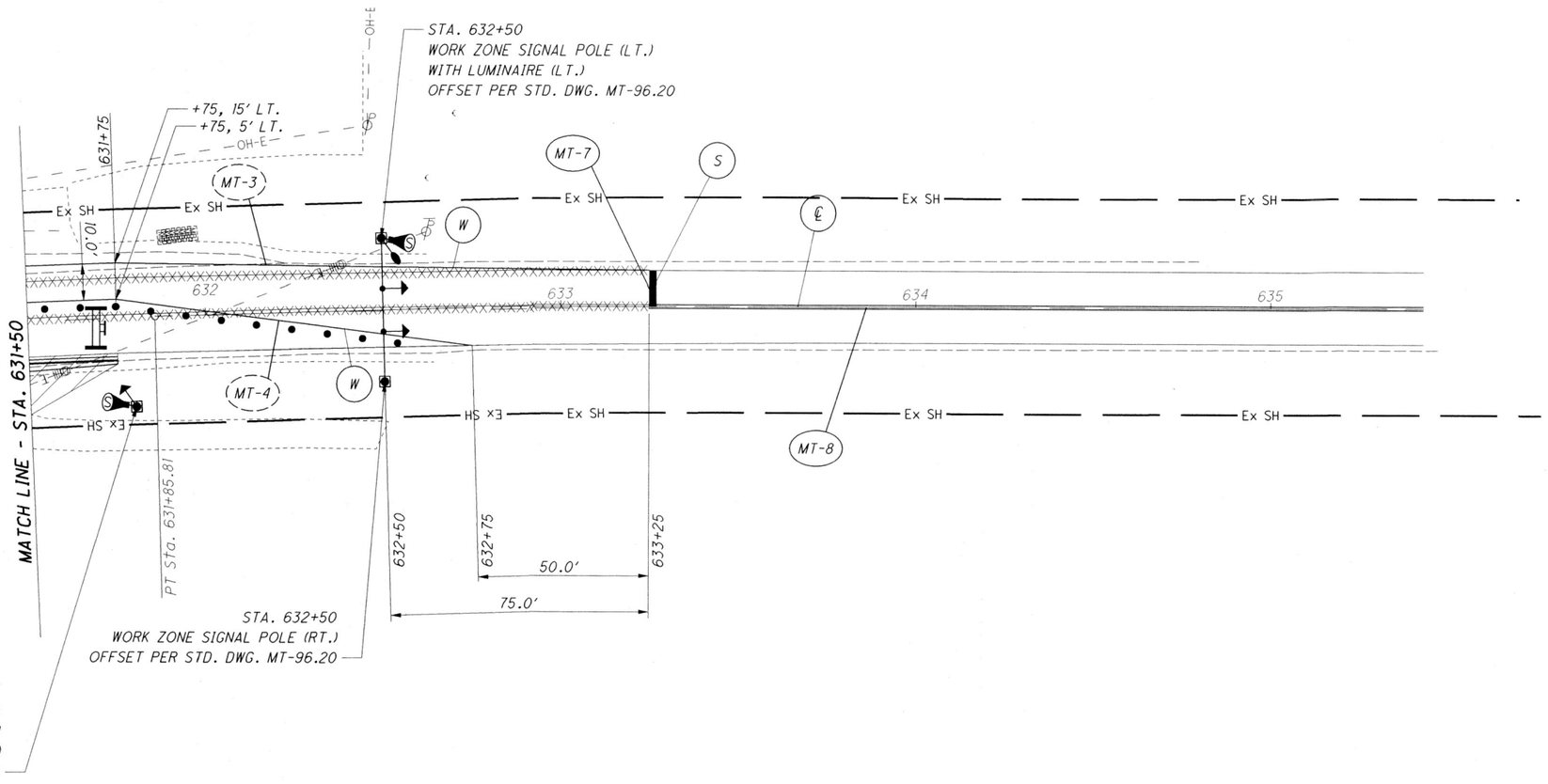

LEGEND

- XXXXXXX — REMOVE EXISTING PAVEMENT MARKING
- WORK ZONE SIGNAL HEAD
- WORK ZONE LUMINAIRE
- WORK ZONE SIGNAL POLE
- WORK ZONE IMPACT ATTENUATOR
- DRUMS
- TYPE III BARRICADE
- DETECTOR UNIT
- WORK AREA
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- (℄) WORK ZONE CENTER LINE
- (S) WORK ZONE STOP LINE
- (W) WORK ZONE WHITE EDGE LINE

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE MAINTENANCE OF TRAFFIC GENERAL NOTES SHEETS 7-9 AND M.O.T. STD. DWG'S MT-96.11 AND MT-96.20.
2. FOR PHASE CONSTRUCTION SEQUENCE, SEE SHEET NO. 8.
3. FOR PHASE 1 WORK ZONE TRAFFIC SIGNAL TIMING AND PHASING, SEE SHEET NO. 9.
4. FOR PHASE 1 WORK ZONE TYPICAL SECTION, SEE SHEET 11.

N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MVC
CHECKED DJL

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 631+50 TO STA. 635+00

HOL-83-11.91

12
60

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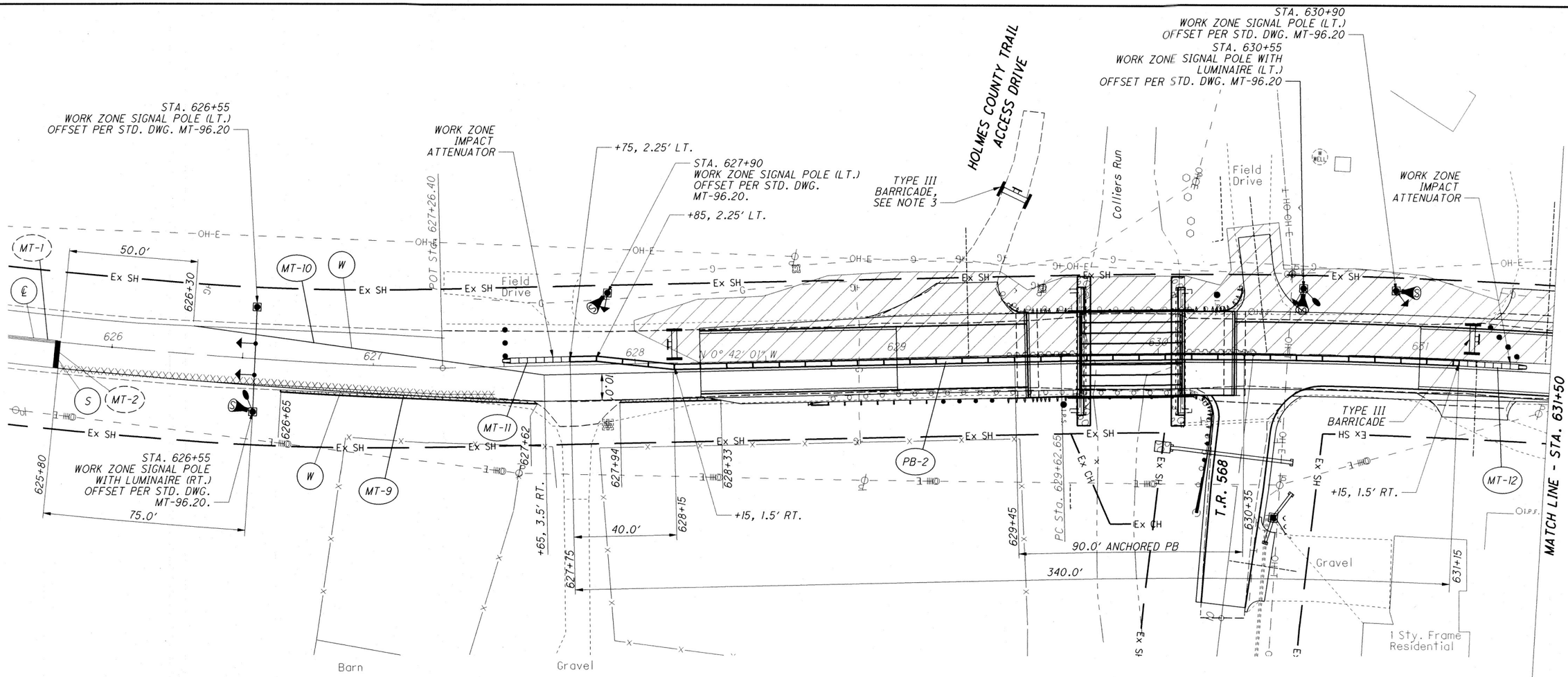
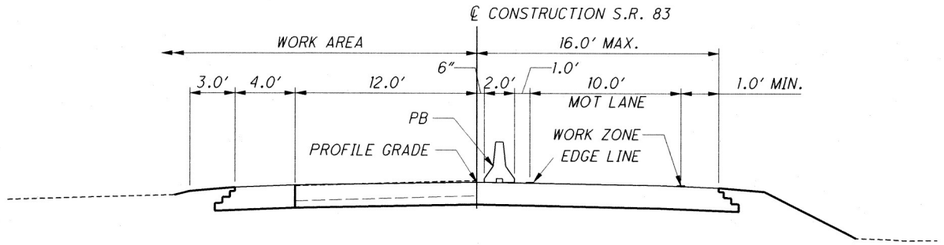


LEGEND

- XXXXXXX REMOVE EXISTING PAVEMENT MARKING
- WORK ZONE SIGNAL HEAD
- WORK ZONE LUMINAIRE
- WORK ZONE SIGNAL POLE
- WORK ZONE IMPACT ATTENUATOR
- DRUMS
- TYPE III BARRICADE
- DETECTOR UNIT
- WORK AREA
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- (℄) WORK ZONE CENTER LINE
- (S) WORK ZONE STOP LINE
- (W) WORK ZONE WHITE EDGE LINE



PHASE 2 - S.R. 83

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE MAINTENANCE OF TRAFFIC GENERAL NOTES SHEETS 7-9 AND M.O.T. STD. DWG'S MT-96.11 AND MT-96.20.
2. FOR PHASE CONSTRUCTION SEQUENCE, SEE SHEET NO. 8.
3. ACCESS TO THE HOLMES COUNTY TRAIL WITHIN THE PROJECT LIMITS AT SLM 11.91 SHALL BE CLOSED FOR THE DURATION OF THE PROJECT. THE HOLMES COUNTY TRAIL CAN BE ACCESSED NEAR T.R. 334 AT SLM 11.16 AND T.R. 346 AT SLM 13.01.
4. FOR PHASE 2 WORK ZONE TRAFFIC SIGNAL TIMING AND PHASING, SEE SHEET NO. 9.
5. CONTRACTOR TO ENSURE ACCESS FOR PROPERTY OWNERS AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AND COMMUNICATE TIME FRAMES WHEN CONSTRUCTION ACTIVITIES MAY TEMPORARILY PREVENT ACCESS BETWEEN S.R. 83 AND THEIR RESIDENCES.
6. THE PLAN PERMITS THE WORK ZONE PAVEMENT TO REMAIN IN PLACE AND BE USED AS PART OF THE PERMANENT IMPROVEMENT. FROM STA. 628+25 TO STA. 631+75, THE CONTRACTOR SHALL SAW CUT THE PAVEMENT AT THE LOCATION SHOWN IN THE TYPICAL SECTIONS.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MVC
CHECKED DJL

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 625+80 TO STA. 631+50

HOL-83-11.91

13
60

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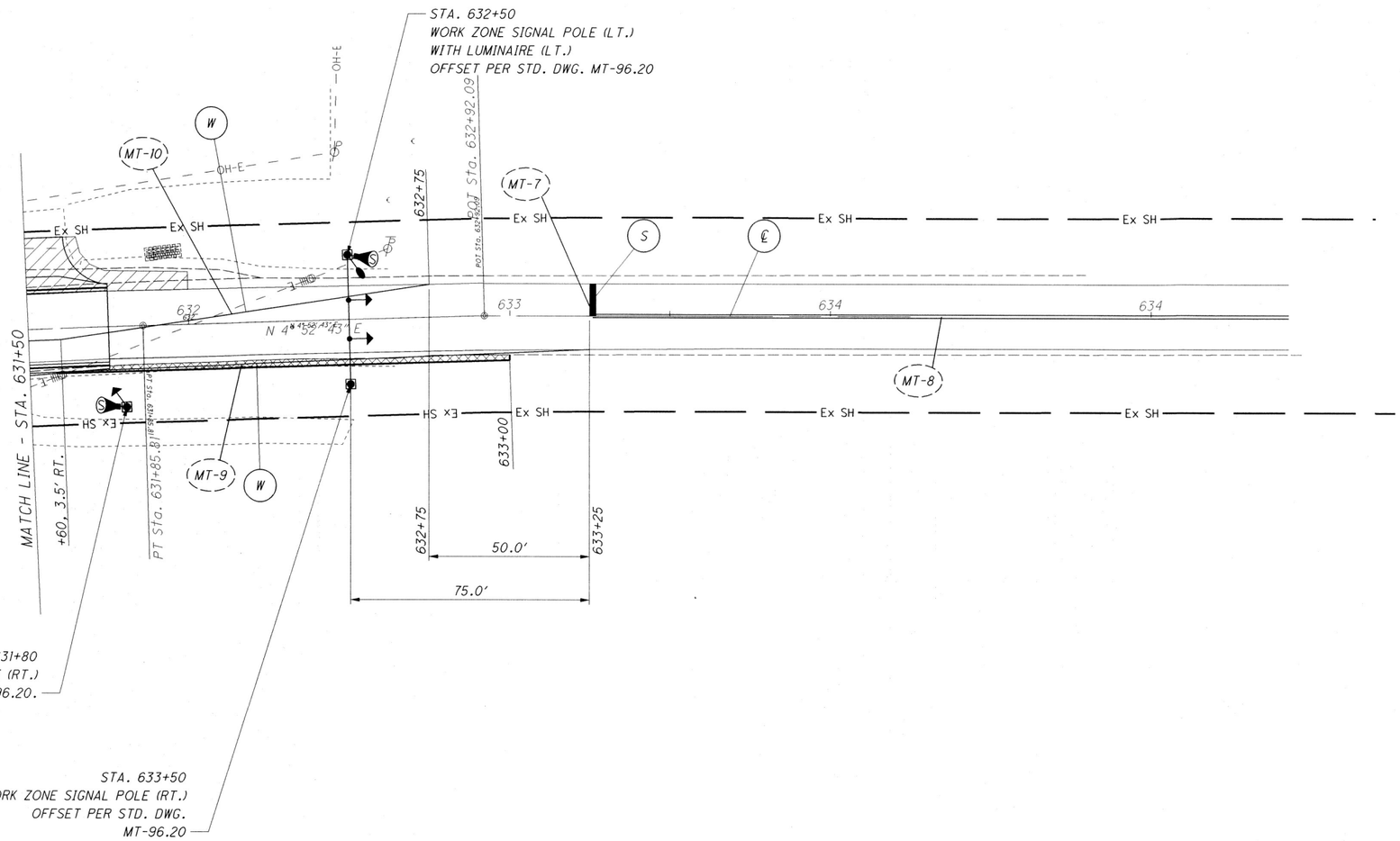

LEGEND

- XXXXXXX — REMOVE EXISTING PAVEMENT MARKING
- WORK ZONE SIGNAL HEAD
- WORK ZONE LUMINAIRE
- WORK ZONE SIGNAL POLE
- WORK ZONE IMPACT ATTENUATOR
- (W) — WHITE EDGE LINE
- TYPE III BARRICADE
- (S) — DETECTOR UNIT
- WORK AREA
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- - CADD AREA

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE MAINTENANCE OF TRAFFIC GENERAL NOTES SHEETS 7-9 AND M.O.T. STD. DWG'S MT-96.11 AND MT-96.20.
2. FOR PHASE CONSTRUCTION SEQUENCE, SEE SHEET NO. 8.
3. FOR PHASE 2 WORK ZONE TRAFFIC SIGNAL TIMING AND PHASING, SEE SHEET NO. 9.
4. CONTRACTOR TO ENSURE ACCESS FOR PROPERTY OWNERS AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AND COMMUNICATE TIME FRAMES WHEN CONSTRUCTION ACTIVITIES MAY TEMPORARILY PREVENT ACCESS BETWEEN S.R. 83 AND THEIR RESIDENCES.
5. FOR PHASE 2 WORK ZONE TYPICAL SECTION, SEE SHEET 13.
6. THE PLAN PERMITS THE WORK ZONE PAVEMENT TO REMAIN IN PLACE AND BE USED AS PART OF THE PERMANENT IMPROVEMENT. FROM STA. 628+25 TO STA. 631+75, THE CONTRACTOR SHALL SAW CUT THE PAVEMENT AT THE LOCATION SHOWN IN THE TYPICAL SECTIONS.

N

0 20 40
HORIZONTAL SCALE IN FEET

CALCULATED MVC
CHECKED DJL

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 631+50 TO STA. 635+00

HOL-83-11.91

14
60

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MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES

CALCULATED: MVC
CHECKED: DJL

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE EDGE LINE, CLASS 1,6",740.06, TYPE 1 MILE	614 WORK ZONE CENTER LINE, CLASS 1,6",740.06, TYPE 1 MILE		614 WORK ZONE STOP LINE, CLASS 1,6",740.06, TYPE 1 FT.		614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH					614 OBJECT MARKER, TWO WAY EACH	614 BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL EACH					622 PORTABLE BARRIER, 32", UNANCHORED FT.	622 PORTABLE BARRIER, 32", ANCHORED FT.
11	MT-1	620+80.00	625+80.00	℄		0.09																
11	MT-2	625+80.00		RT.				10														
11, 12	MT-3	625+80.00	633+25.00	LT.	0.14																	
11, 12	MT-4	627+05.00	632+75.00	RT.&LT.	0.11																	
11	MT-5	628+25.00		RT.						1												
11	MT-6	630+75.00		RT.						1												
12	MT-7	633+25.00		LT.				10														
12	MT-8	633+25.00	638+25.00	℄		0.09																
13, 14	MT-9	625+80.00	633+25.00	RT.	0.14																	
13, 14	MT-10	626+30.00	632+75.00	RT.&LT.	0.12																	
13	MT-11	627+75.00		LT.						1												
13	MT-12	631+15.00		RT.						1												
11	PB-1	628+25.00	630+75.00	RT.&LT.											6	6					160	90
13	PB-2	627+75.00	631+15.00	RT.&LT.											8	8					250	90
TOTALS CARRIED TO GENERAL SUMMARY					**0.51**	**0.18**		**20**		**4**					**14**	**14**					**410**	**180**

HOL-83-11.91

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SEEDING AND MULCHING CALCULATIONS

ITEM 659 - SOIL ANALYSIS TEST 2 EACH

ITEM 659 - TOPSOIL
1137 YD. x 111 CU. YD./1000 SQ. YD. = 126.21 CU. YD.
(USE 126 CU. YD.)

ITEM 659 - REPAIR SEEDING AND MULCHING
1137 SQ. YD. x 0.05 = 56.85 SQ. YD.
(USE 57 SQ. YD.)

ITEM 659 - COMMERCIAL FERTILIZER
1137 SQ. YD. X 9 X 30 LB/1000 SQ. FT. ÷ 2000 = 0.15 TON
(USE 0.15 TON)

ITEM 659 - LIME
1137 SQ. YD. X 9 X 1 AC./43560 SQ. FT. = 0.23 ACRE
(USE 0.323 ACRE)

ITEM 659 - WATER
1137 SQ. YD. X 9 X 300 GAL/1000/1000 X 2 APP. = 6.14 M. GAL.
(USE 10 M. GAL.)

ROCK CHANNEL PROTECTION CALCULATIONS

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER

RCP-1

[(56.5' x 2.5') + (4' x 2.5') + (4' x 2.5')] x 2' DEEP ÷ 27 = 11.94 CU. YD.

RCP-2

[(56.5' x 2.5') + (4' x 2.5') + (4' x 2.5')] x 2' DEEP ÷ 27 = 11.94 CU. YD.

TOTAL = 23.88 CU. YD.
(USE 24 CU. YD.)

CALCULATED MVC
CHECKED XXX

CALCULATIONS

HOL-83-11.91

18
60

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BEGIN WORK
STA. 628+00

BEGIN PROJECT
STA. 629+00
SLM 11.91
E191(549)

END PROJECT
STA. 631+00
SLM 11.95
E191(549)

HOLMES COUNTY TRAIL
ACCESS DRIVE

BEGIN MILL AND FILL
STA. 628+25
BUTT END JOINT

℄ CONST. S.R. 83

CONST. LIMITS

END SHOULDER TRANSITION LT. +00

END FULL DEPTH PAVEMENT REPLACEMENT
BEGIN MILL AND FILL +00

BEGIN SHOULDER TRANSITION LT. +60

END MILL AND FILL
STA. 631+75
BUTT END JOINT

Field Drive

Collier's Run

Billboard

Gravel

Asph.

Wire Fence

S.R. 83
N 0° 42' 01" W

T.R. 568
N 82° 29' 04" W

N 4° 52' 43" E

SAWCUT

Ex. 12" CMP

Ex. 12" CPP

Ex. 8" PVC

1 STY. FRAME RES.

BM#1

BM#2

BRIDGE NO. HOL-00083-11.960

℄ CONST. T.R. 568

PC Sta. 629+62.65

PT Sta. 631+85.81

STA. 630+36.21, S.R. 83 =
STA. 11+00.68, T.R. 568

BEGIN SHOULDER TRANSITION LT. & RT. +25

END SHOULDER WIDENING RT. +40

BEGIN FULL DEPTH PAVEMENT REPLACEMENT +00

END SHOULDER TRANSITION LT. & RT. +75

BEGIN SHOULDER TRANSITION RT. +00

ANCHOR ASSEMBLY, MGS TYPE E

END WORK
STA. 632+00

S.R. 83 CURVE DATA

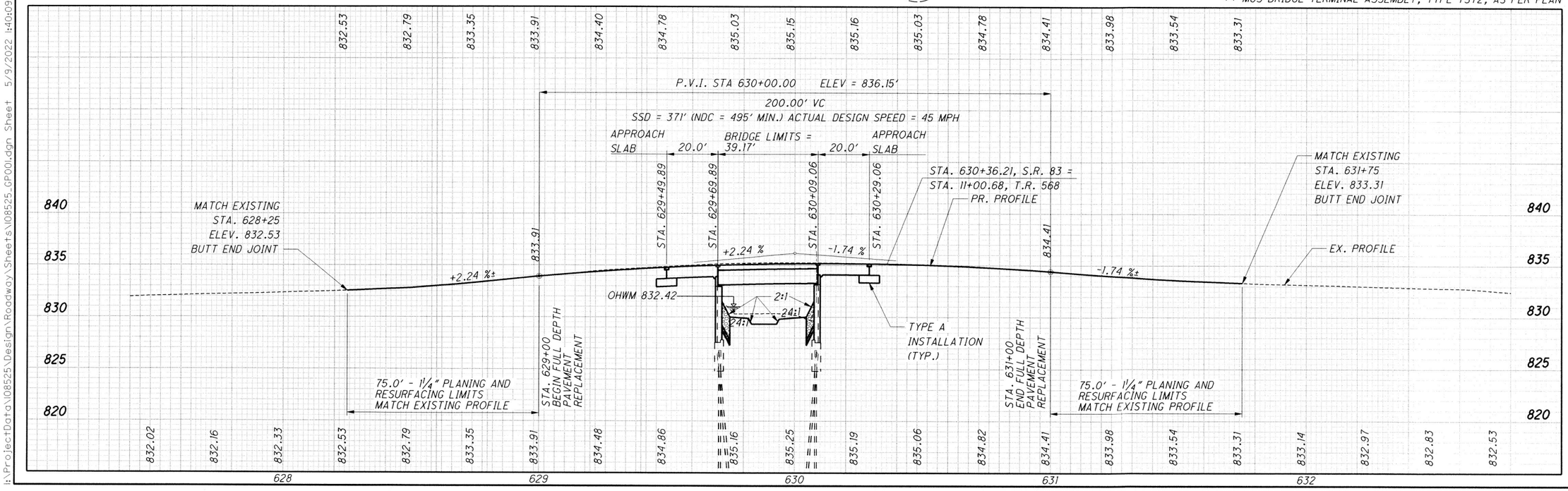
P.I. Sta. 630+74.32
Δ = 5° 34' 44" (RT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 111.67'
L = 223.16'
E = 2.72'
eMAX = 0.016 (NDC 0.053)

LEGEND

PAVEMENT PLANING & RESURFACING

NOTES:
1. FOR T.R. 568 PLAN AND PROFILE, SEE SHEET 27
2. FOR T.R. 568 INTERSECTION DETAIL, SEE SHEET 32
3. FOR ESTIMATED QUANTITIES, SEE SHEET 20
4. FOR DRIVE DETAILS & QUANTITIES, SEE SHEETS 33-34
5. FOR CALCULATIONS, SEE SHEET 18
6. FOR CHANNEL PLAN AND PROFILE, SEE SHEET 37

✡ 15' RADIUS
◪ 83°35'40" TO LOCAL TANGENT
◕ MGS TYPE A ANCHOR ASSEMBLY
* MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST2
** MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST2, AS PER PLAN



CALCULATED MVC
CHECKED D.JL

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - S.R. 83
STA. 627+50 TO STA. 632+50

HOL-83-11.91

19
60

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SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	202 GUARDRAIL REMOVED		203 EXCAVATION	203 EMBANKMENT		606 GUARDRAIL, TYPE MGS	606 ANCHOR ASSEMBLY, MGS TYPE E	606 ANCHOR ASSEMBLY, MGS TYPE A	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, AS PER PLAN								626 BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL		659 SEEDING AND MULCHING
		FROM	TO		FT.		CU. YD.	CU. YD.		FT.	EACH	EACH	EACH	EACH									EACH		SQ. YD.
19	GR-1	628+67.27	629+68.73	RT.						25	1		1									3		
19	GR-2	629+42.73	629+69.37	LT.										1								3		
19	GR-3	630+09.86	10+38.33 (T.R. 568)	RT.								1		1								3		
19	GR-4	630+09.96	630+31.82	LT.										1								3		
19	R-1	628+74	629+70	RT.	96																			
19	R-2	629+40	629+71	LT.	31																			
19	R-3	630+08	10+47 (T.R. 568)	RT.	43																			
19	R-4	630+08	630+32	LT.	24																			
21		628+00.00	628+40.00				12	6																95
22		628+50.00	629+00.00				51	14																240
23		629+25.00	629+69.89				45	6																137
24		630+09.06	630+50.00				60	22																152
25		630+75.00	631+25.00				45	17																190
26		631+50.00	632+00.00				13	1																88
38		20+60.00	21+30.00				76	1																22
39		21+40.00	21+60.00				4																	
TOTALS CARRIED TO GENERAL SUMMARY					194		306	67		25	1	1	1	3								12		924

CALCULATED MVC
CHECKED DJL

ESTIMATED QUANTITIES - S.R. 83

HOL-83-11.91

20
60

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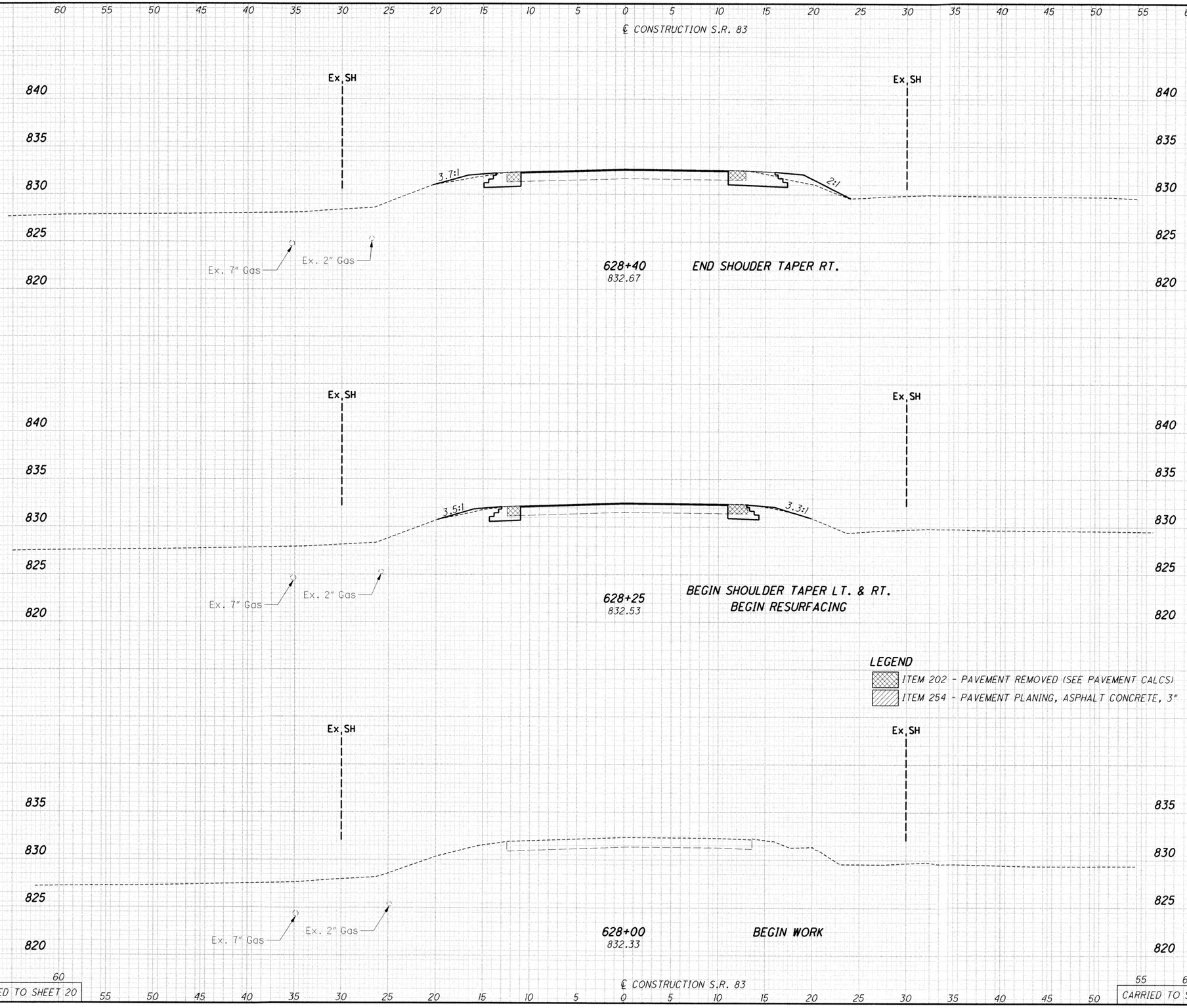
SEEDING END WIDTH	SEEDING SQ. YDS.
	26
24	
	38
22	
	31
0	
	95



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		4	2
11	6		
		5	3
6	3		
		3	1
0	0		
		12	6

CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - S.R. 83
STA. 628+00 TO STA. 628+40

HOL-83-11.91

21
60

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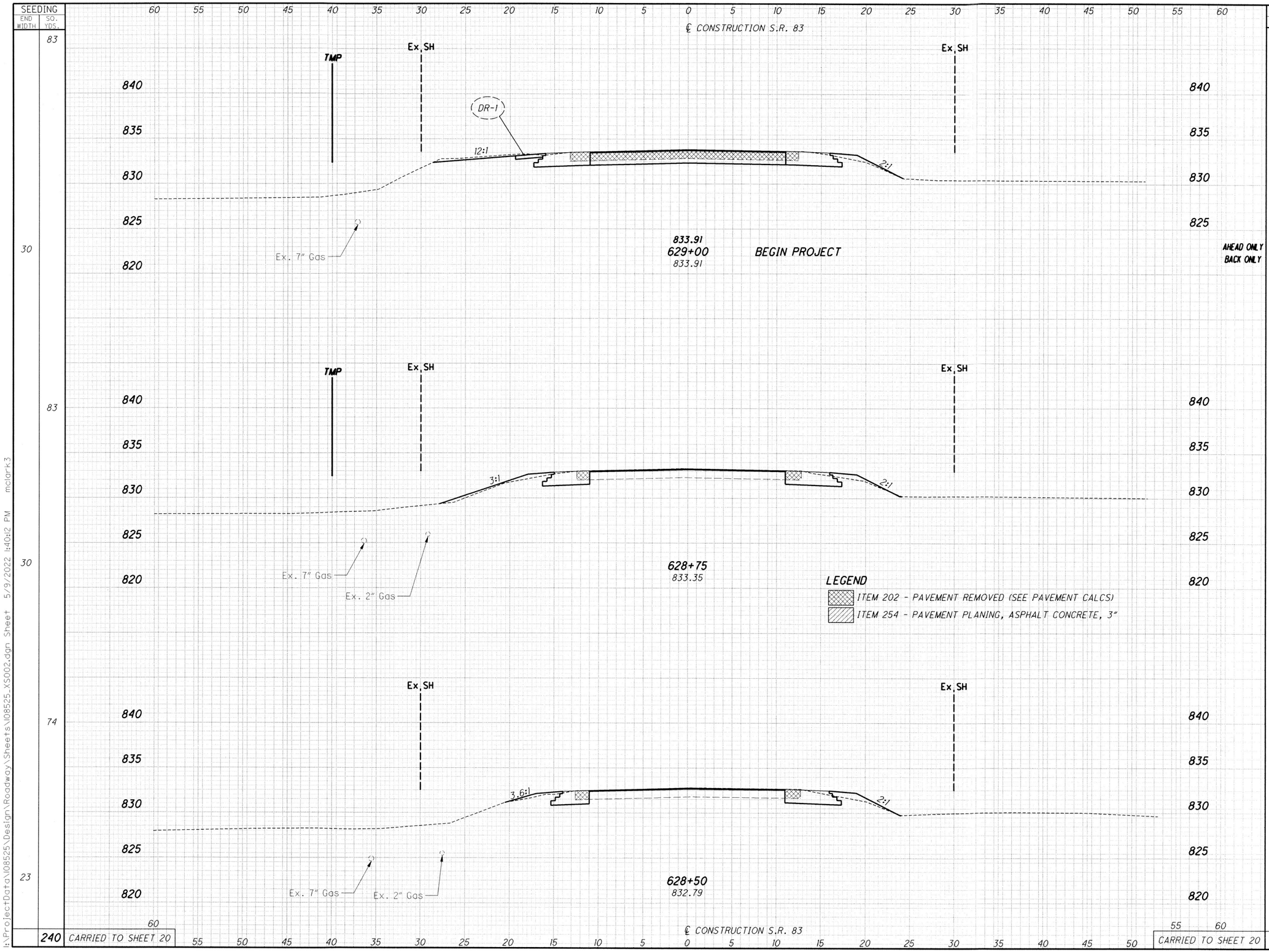
SEEDING END WIDTH	SEEDING SQ. YDS.
	83
30	
	83
30	
	74
23	
	240



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		26	3
28	3		
17	3		
		14	5
13	7		
		11	6
11	5		
		51	14

CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - S.R. 83
STA. 628+50 TO STA. 629+00

HOL-83-11.91

22
60

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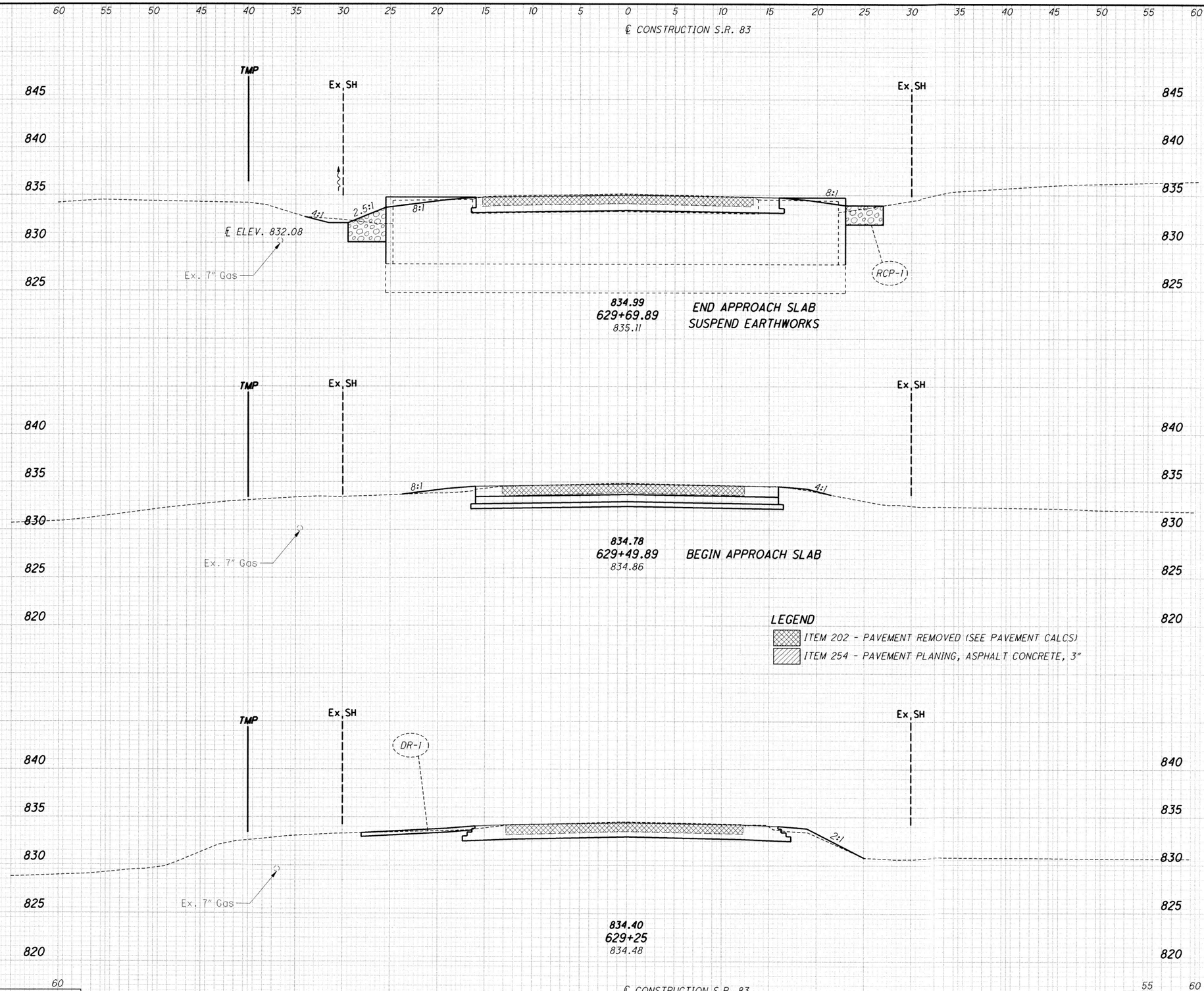
SEEDING END WIDTH	SEEDING SQ. YDS.
	0
38	
	66
21	
	71
30	
137	CARRIED TO SHEET 20



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		0	0
27	4		
		20	3
27	4		
		25	3
28	3		
		45	6

CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - S.R. 83
STA. 629+25 TO STA. 629+69.89

HOL-83-11.91

23
60

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SEEDING END WIDTH	SEEDING SQ. YDS.
	60
17	
	31
10	
	61
45	
	152

60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60

℄ CONSTRUCTION S.R. 83

TMP

Ex. SH

CARRIED WITH T.R. 568 CROSS SECTIONS

840 835 830 825 820

3:1

835.03
630+50
835.06

D-2 D-1

Ex. 7" Gas

TMP

Ex. SH

CARRIED WITH T.R. 568 CROSS SECTIONS

840 835 830 825 820

5:1

835.14
630+29.06
835.18

END APPROACH SLAB

R-5 D-2

EX. 12" CMP
(TO BE REMOVED)

Ex. 7" Gas

LEGEND
ITEM 202 - PAVEMENT REMOVED (SEE PAVEMENT CALCS)
ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 3"

TMP

Ex. SH

CARRIED WITH T.R. 568 CROSS SECTIONS

840 835 830 825 820

RCP-2

3.25:1

2.5:1

R-5

11.4:1

6.6:1

16.4:1

D-2

EX. 12" CMP
(TO BE REMOVED)

Ex. 7" Gas

835.17
630+09.06
835.24

BEGIN APPROACH SLAB
RESUME EARTHWORKS

60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60

℄ CONSTRUCTION S.R. 83

CARRIED TO SHEET 20

CARRIED TO SHEET 20

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		23	10
24	9		
		19	5
26	4		
		18	7
22	16		
		60	22

CALCULATED MVC
CHECKED DJL

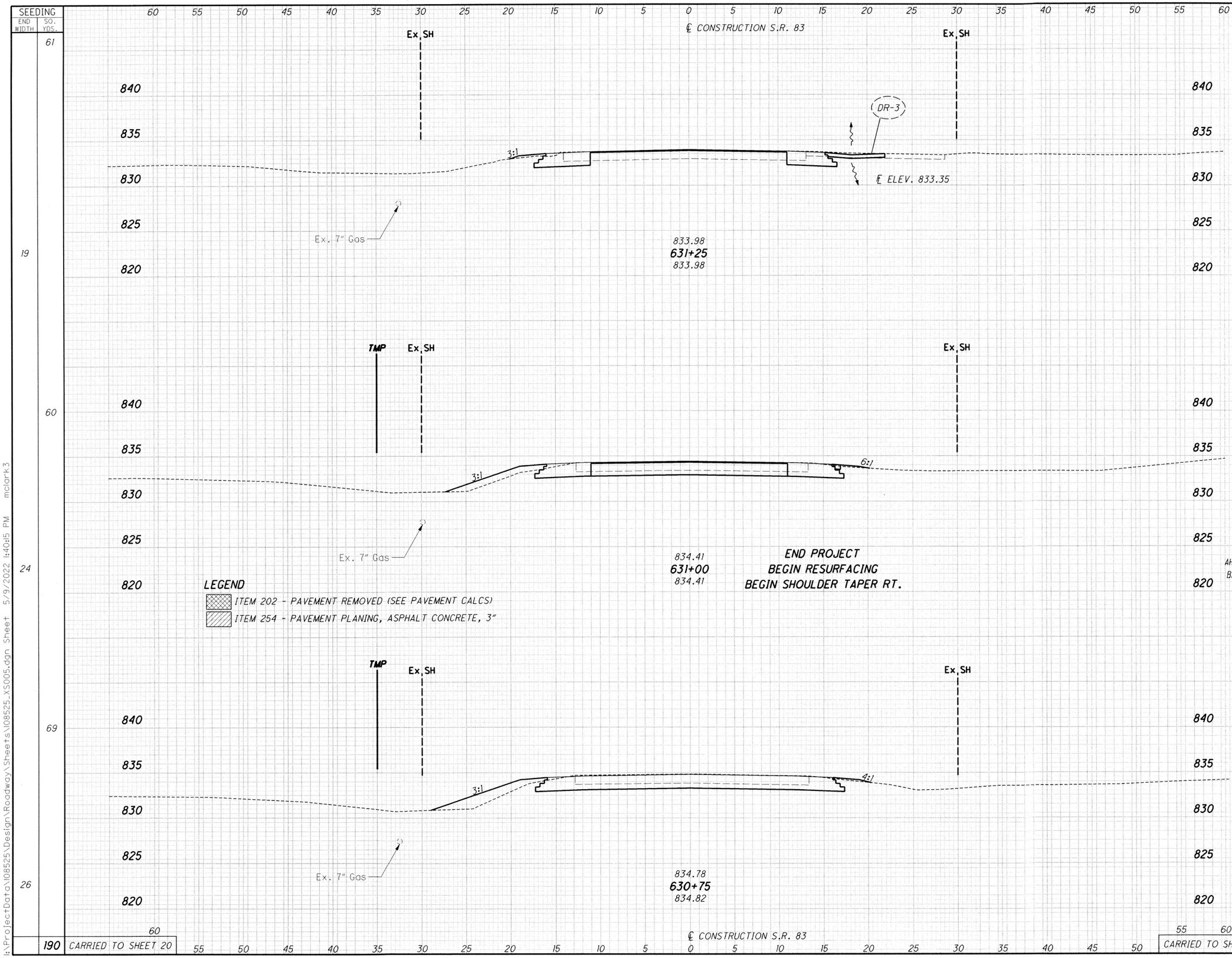
CROSS SECTIONS - S.R. 83
STA. 630+09.06 TO STA. 630+50

HOL-83-11.91

24
60

I:\ProjectData\108525\Design\Roadway\Sheets\108525_XS004.dgn Sheet 5/9/2022 1:40:14 PM mclark3

SEEDING END WIDTH	SEEDING SQ. YDS.
	61
19	
	60
24	
	69
26	
	190



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		11	2
11	2		
		11	5
AHEAD ONLY	13	8	
BACK ONLY	24	8	
		23	10
		26	13
		45	17

CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - S.R. 83
STA. 630+75 TO STA. 631+25

HOL-83-11.91

25
60

I:\ProjectData\10852S\Design\Roadway\Sheets\108525_XS005.dgn Sheet 5/9/2022 1:40:15 PM mclark3

SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	24
17	
	36
26	
	28
25	
	88

60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60

℄ CONSTRUCTION S.R. 83

845 840 835 830 825

Ex. SH

℄ ELEV. 832.58

Ex. 7" Gas

632+00
833.14
END WORK

℄ ELEV. 832.6

3:1

833.31
631+75
833.31
END SHOULDER TAPER LT. & RT.

LEGEND

ITEM 202 - PAVEMENT REMOVED (SEE PAVEMENT CALCS)

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 3"

DR-4

℄ ELEV. 832.7

833.45
631+60
833.45
BEGIN SHOULDER TAPER LT.

℄ ELEV. 832.9

833.54
631+50
833.54

CARRIED TO SHEET 20

℄ CONSTRUCTION S.R. 83

CARRIED TO SHEET 20

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
		3	0
6	1		
		5	1
13	1		
		5	0
13	1		
		13	1

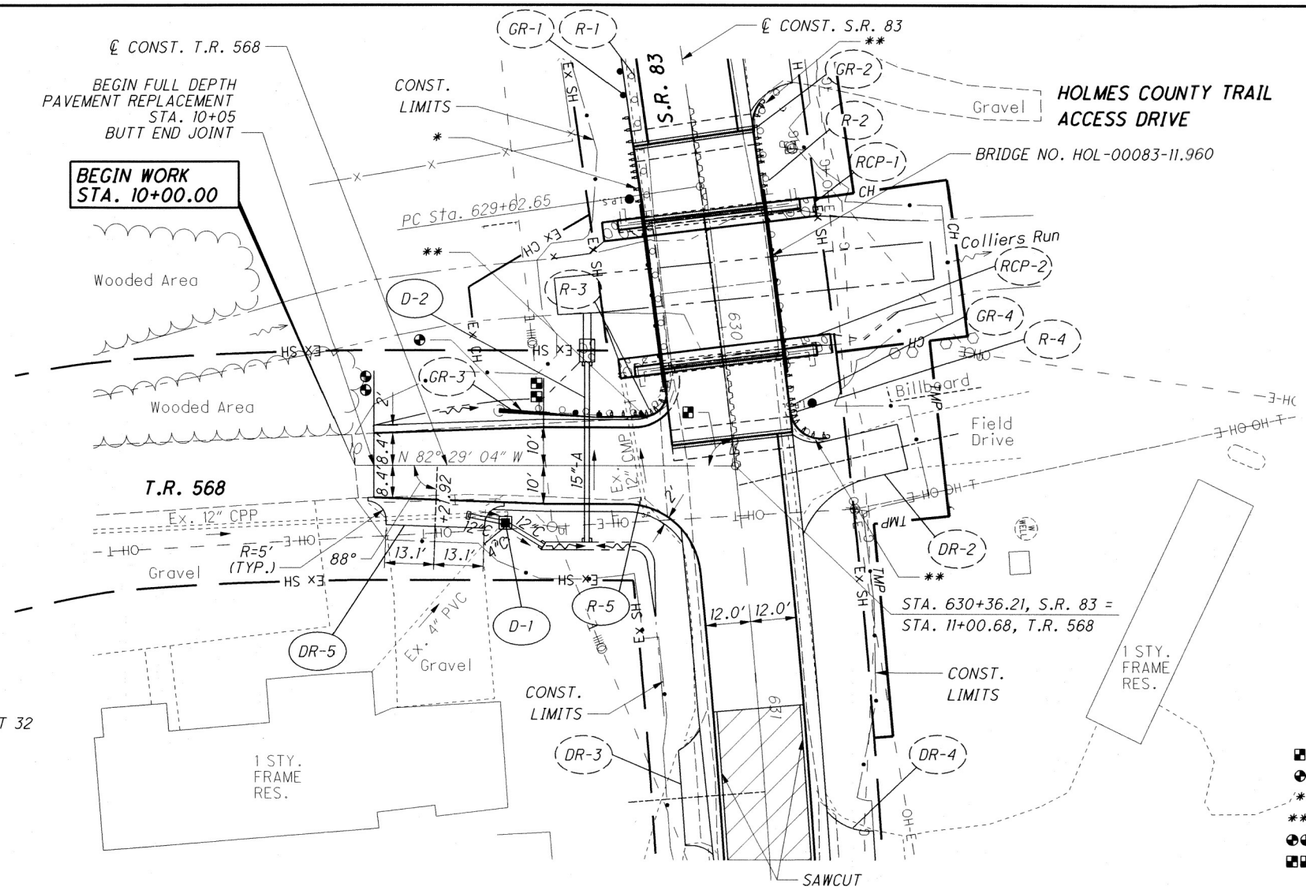
CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - S.R. 83
STA. 631+50 TO STA. 632+00

HOL-83-11.91

26
60

I:\ProjectData\108525\Design\Roadway\Sheets\108525_XS006.dgn Sheet 5/9/2022 1:40:16 PM mclark3



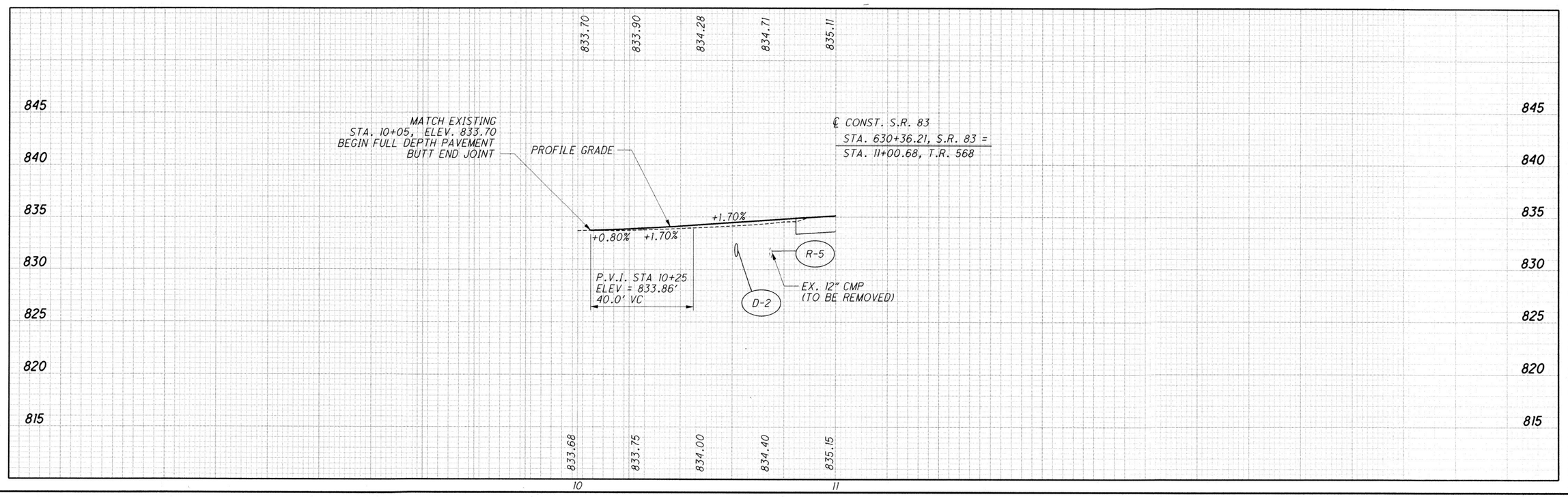
LEGEND

PAVEMENT PLANING & RESURFACING

NOTES:

1. FOR S.R. 83 PLAN AND PROFILE, SEE SHEET 19
2. FOR S.R. 83/T.R. 568 INTERSECTION DETAIL, SEE SHEET 32
3. FOR ESTIMATED QUANTITIES, SEE SHEET 28
4. FOR DRIVE DETAILS & QUANTITIES, SEE SHEETS 33-34
5. FOR CALCULATIONS, SEE SHEET 18
6. FOR DRAINAGE PROFILES, SEE SHEET 35
7. FOR CULVERT PLAN AND PROFILE, SEE SHEET 36

■ 83°35'40" TO LOCAL TANGENT
◓ MGS TYPE A ANCHOR ASSEMBLY
* MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST2
** MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST2, AS PER PLAN
◓◓ BEGIN PAVEMENT TAPER LT. & RT. STA. 10+05
■■ END PAVEMENT TAPER LT. & RT. STA. 10+50



CALCULATED MVC
CHECKED DJL

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - T.R. 568
STA. 10+00 TO STA. 11+00.68

HOL-83-11.91

I:\ProjectData\108525\Design\Roadway\Sheets\108525_GP002.dgn Sheet 5/9/2022 1:40:20 PM mclark3

ESTIMATED QUANTITIES - T.R. 568

CALCULATED MVC
CHECKED DJL

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, 24" AND UNDER	202 HEADWALL REMOVED	203 EXCAVATION	203 EMBANKMENT	601 ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER	602 CONCRETE MASONRY	611 4" CONDUIT, TYPE C	611 12" CONDUIT, TYPE C	611 15" CONDUIT, TYPE A, 706.02	611 CATCH BASIN, NO. 2-2B	659 SEEDING AND MULCHING
					FT.	EACH	CU. YD.	CU. YD.	CU. YD.	CU. YD.	FT.	FT.	FT.	EACH	SQ. YD.
27	D-1	10+30.20	10+50.00	RT.	21					0.2	8	22		1	
27, 36	D-2	10+61.50		LT.&RT.					1.3	0.5			47		
27	R-5	10+71	10+77	LT.&RT.	38	2									
29		10+00.00	10+25.00				24	1							68
30		10+40.00	10+71.68				21	9							117
31		10+73.94	10+88.61				8	4							28
TOTALS CARRIED TO GENERAL SUMMARY					59	2	53	14	1	0.70	8	22	47	1	213

HOL-83-11.91

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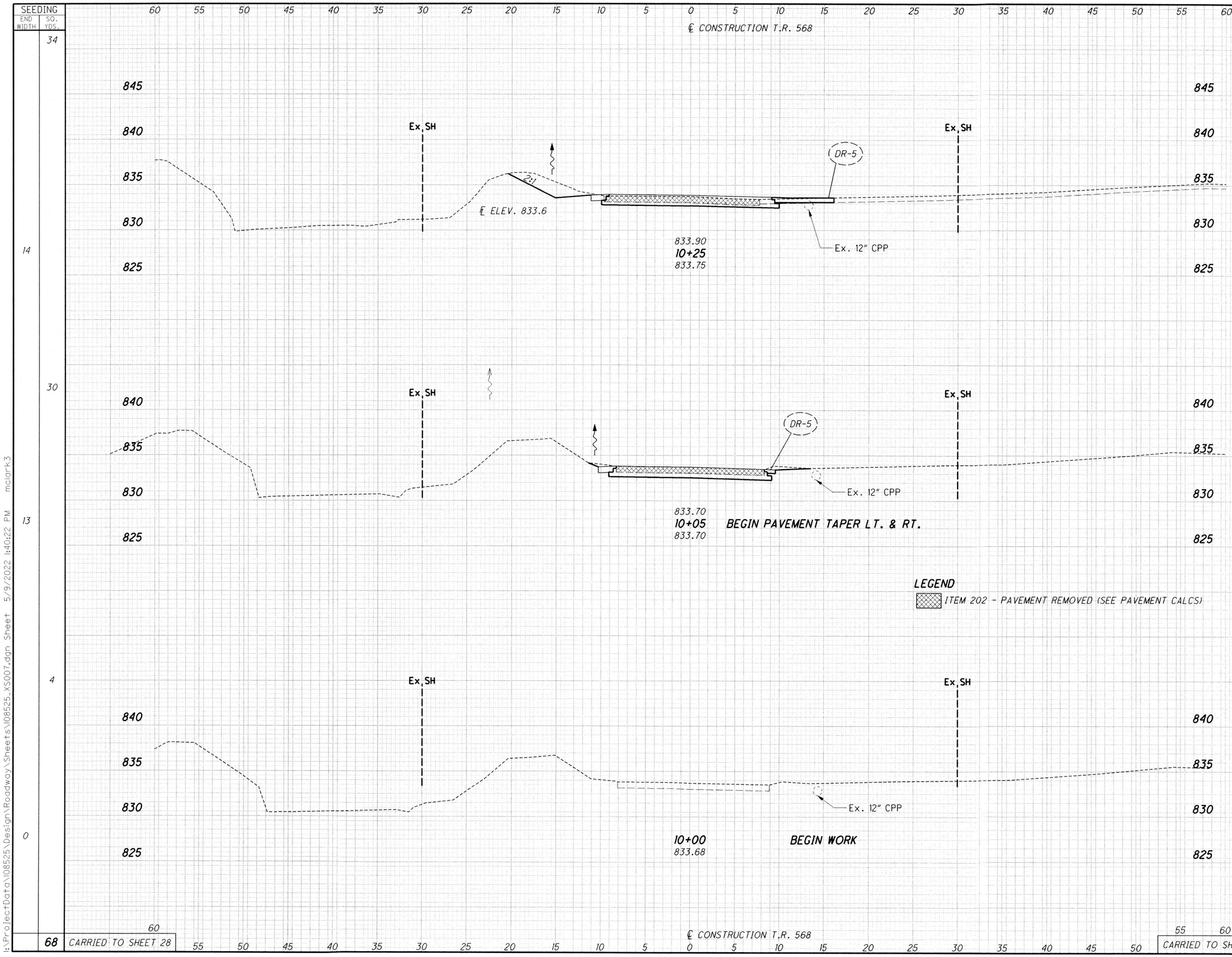
SEEDING END WIDTH	SEEDING SQ. YDS.
	34
14	
	30
13	
	4
0	
	68



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		10	1
21	0		
		13	0
13	0		
		1	0
0	0		
24	1		

CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - T.R. 568
STA. 10+00 TO STA. 10+25

HOL-83-11.91

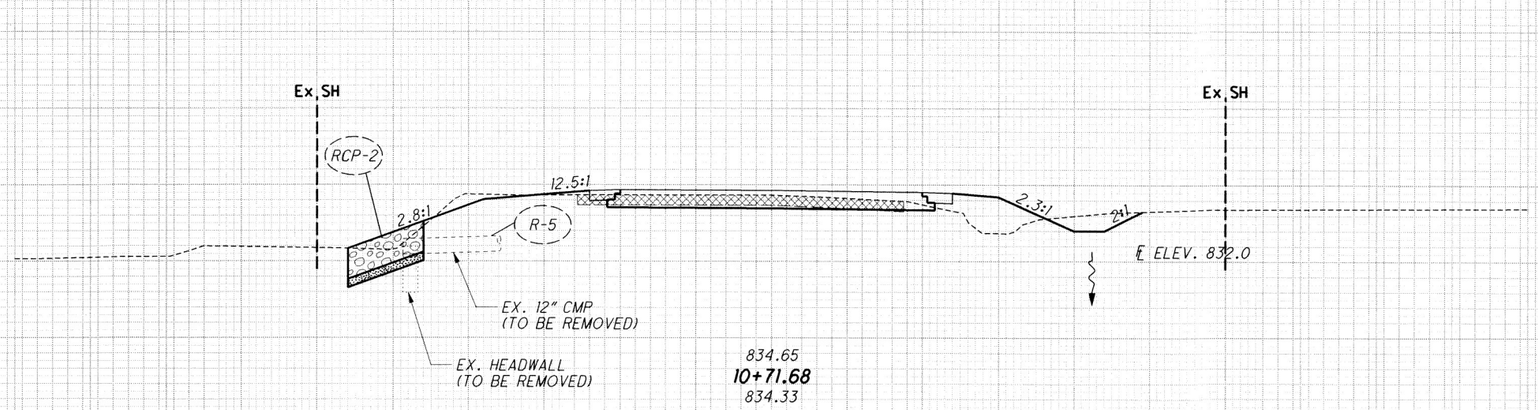
29
60

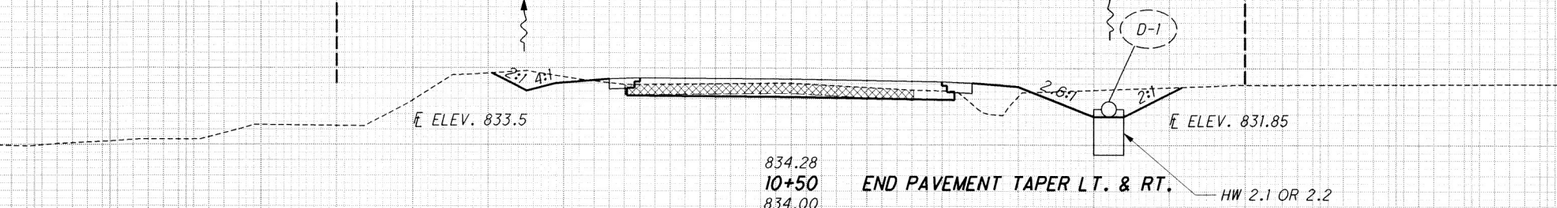
I:\ProjectData\08525\Design\Roadway\Sheets\08525_XS007.dgn Sheet 5/9/2022 1:40:22 PM mclark3

SEEDING END WIDTH	SEEDING SQ. YDS.
	8
33	
	77
31	
	32
27	
	117

60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60

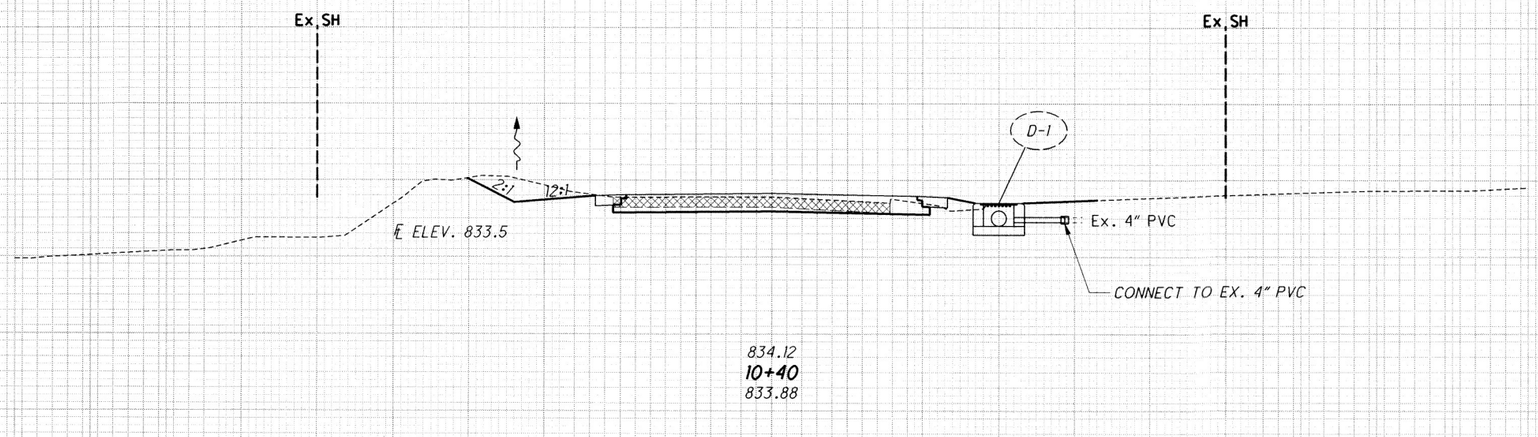
℄ CONSTRUCTION T.R. 568





LEGEND

ITEM 202 - PAVEMENT REMOVED (SEE PAVEMENT CALCS)



60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60

℄ CONSTRUCTION T.R. 568

CARRIED TO SHEET 28

CARRIED TO SHEET 28

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		1	1
17	12		
		14	7
18	6		
		6	1
14	1		
		21	9

CALCULATED MVC

CHECKED DJL

CROSS SECTIONS - T.R. 568
STA. 10+40 TO STA. 10+71.68

HOL-83-11.91

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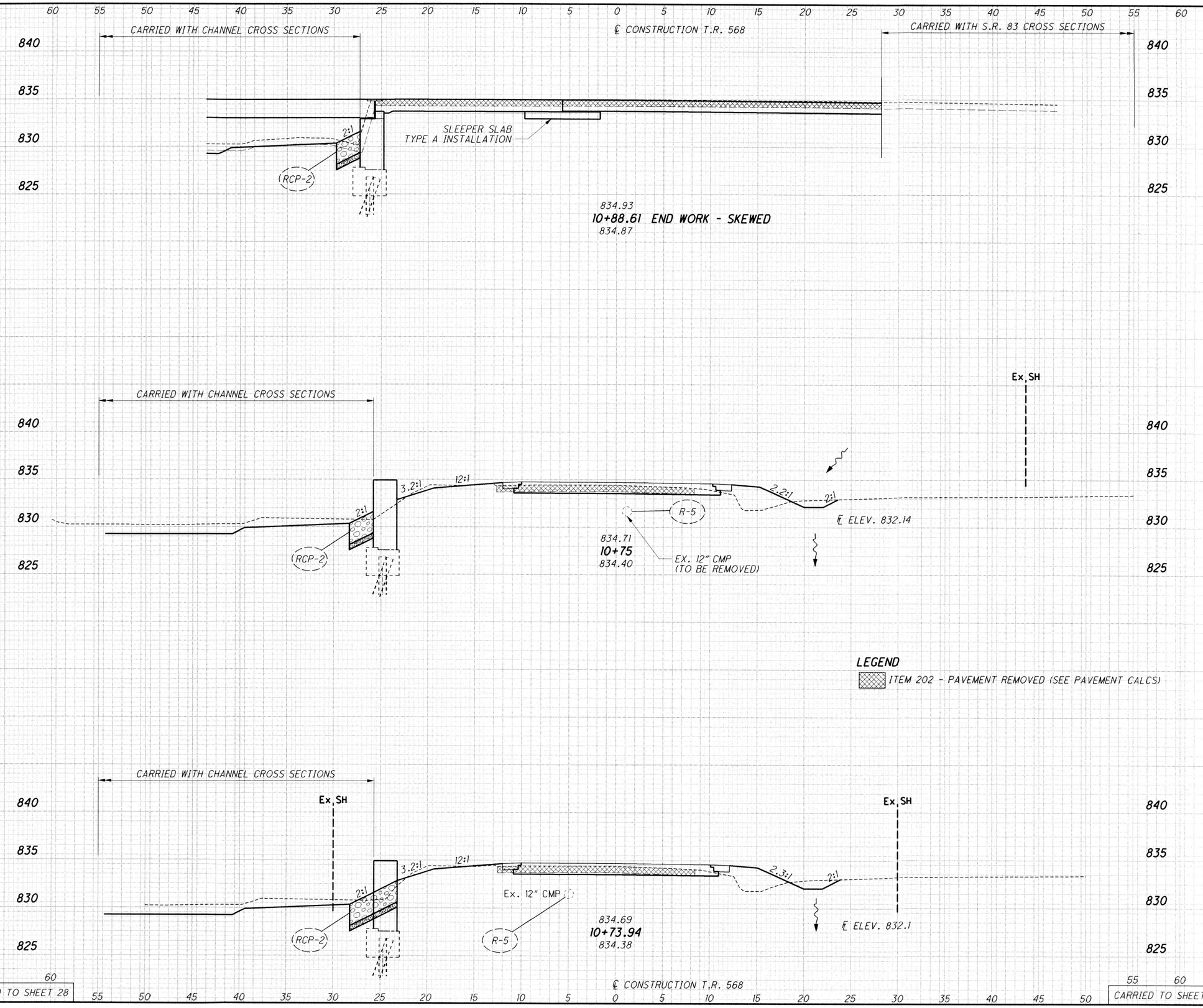
SEEDING END WIDTH	SEEDING SQ. YDS.
0	24
32	4
32	28



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
19	0	7	3
8	12		
9	12	1	1
		8	4

CALCULATED MVC
CHECKED DJL

CROSS SECTIONS - T.R. 568
STA. 10+73.94 TO STA. 10+88.61

HOL-83-11.91

31
60

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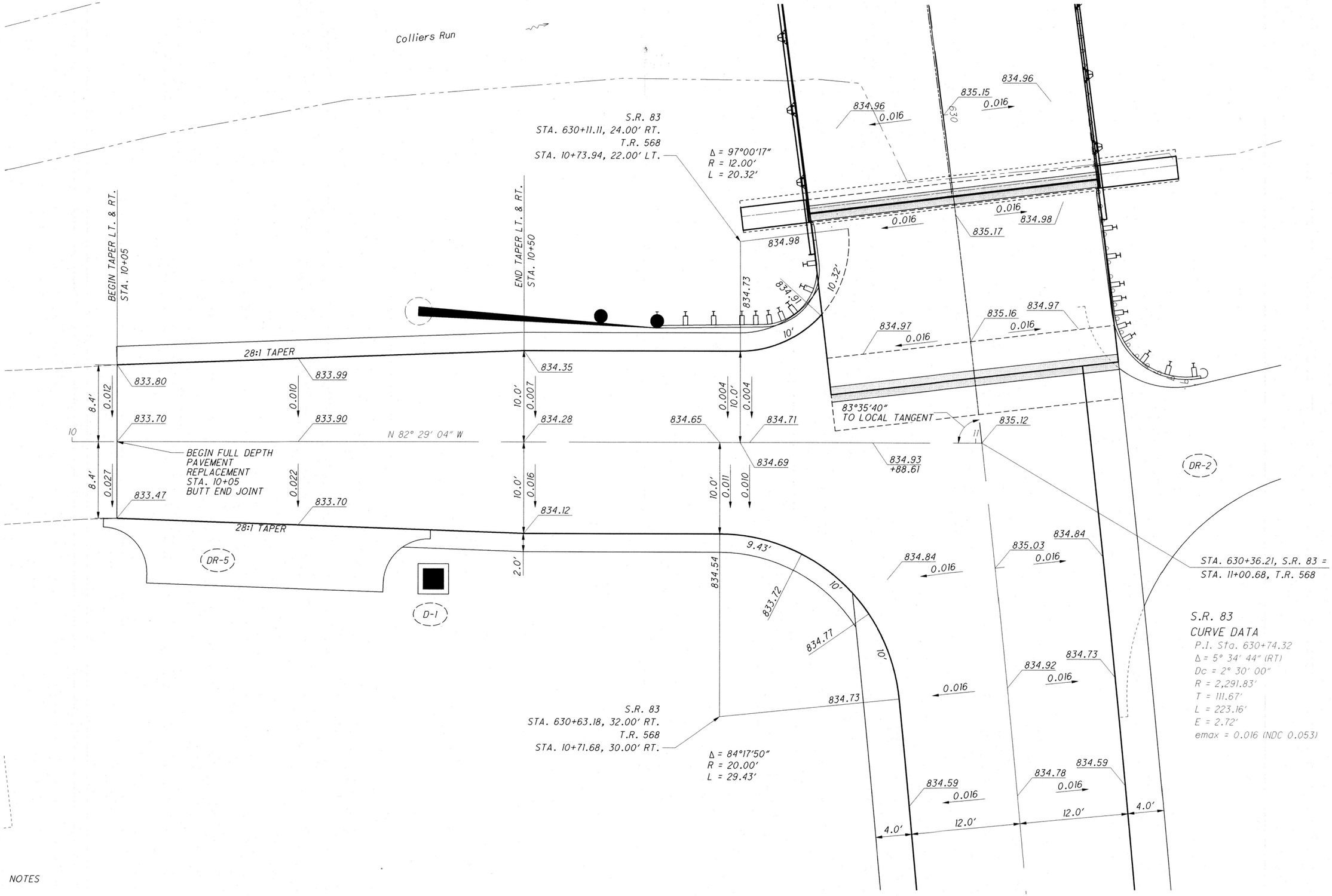

S.R. 83
CURVE DATA
P.I. Sta. 630+74.32
Δ = 5° 34' 44" (RT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 111.67'
L = 223.16'
E = 2.72'
emax = 0.016 (NDC 0.053)

NOTES

1. PAVEMENT ELEVATIONS ARE SHOWN EVERY 25' UNLESS OTHERWISE NOTED.

CALCULATED MVC
CHECKED DJL

0 5 10
2.5
HORIZONTAL
SCALE IN FEET

INTERSECTION DETAIL
S.R. 83 AND T.R. 568

HOL-83-11.91

32
60

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NOTES:

1. FOR ADDITIONAL DETAILS, SEE SCD BP-4.1.

2. FOR DIMENSIONS "L1", "L2", RADII, AND "W," SEE SHEET PLAN SHEETS 19 AND 27, AND DRIVE SUBSUMMARY BELOW.

3. FOR DRIVEWAY QUANTITIES, SEE DRIVEWAY SUBSUMMARY BELOW.

RESIDENTIAL DRIVES

EXISTING ASPHALT APRON

ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS), AS PER PLAN
ITEM 407 - TACK COAT
ITEM 302 - 3 1/2" ASPHALT CONCRETE BASE, PG64-22, (449)

EXISTING AGGREGATE APRON

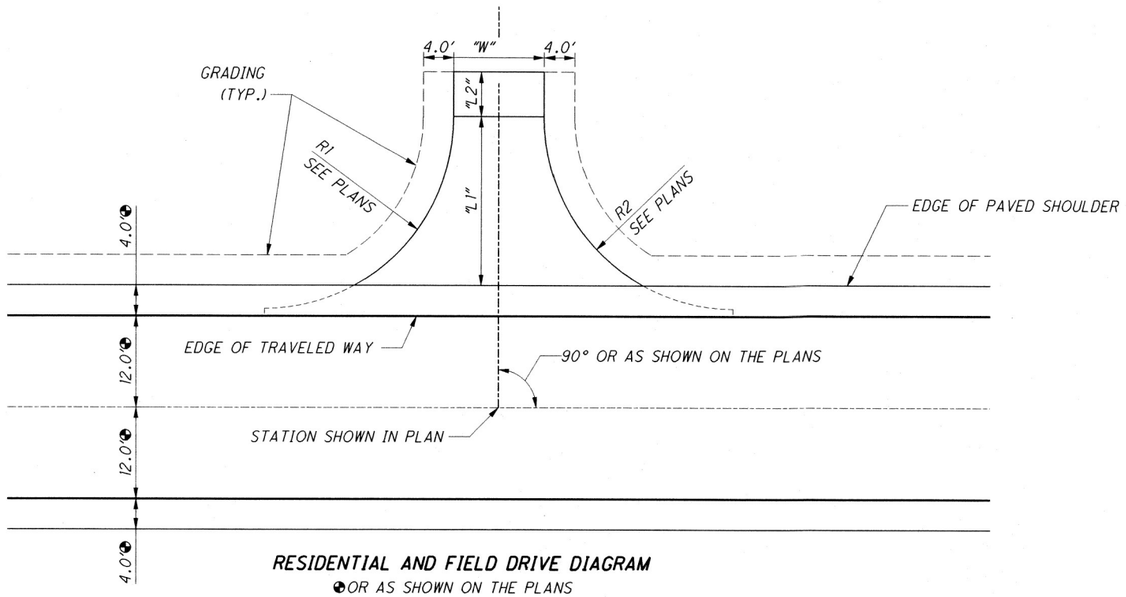
ITEM 304 - 8" AGGREGATE BASE

FIELD DRIVES

ITEM 660 - SODDING REINFORCED

NOTE:

FOR DRIVE (DR-2), THE CONTRACTOR SHALL CONSTRUCT THIS DRIVE AS PER THE PLANS AND THE DETAILS REFERRED TO ON THIS SHEET EXCEPT THE CONTRACTOR SHALL PROVIDE ITEM 660 - SODDING REINFORCED AS THE TREATED SURFACE IN LIEU OF AGGREGATE TO MATCH EXISTING CONDITIONS.



RESIDENTIAL AND FIELD DRIVE DIAGRAM
◐OR AS SHOWN ON THE PLANS

DRIVE SUBSUMMARY

REFERENCE NO.	SHEET NO.	STATION	SIDE	DRIVE TYPE	APRON LENGTH "L1"	DRIVEWAY LENGTH "L2"	WIDTH "W"	R1 (LEFT SIDE RADIUS OF DRIVE LOOKING FROM ℄)	R2 (RIGHT SIDE RADIUS OF DRIVE LOOKING FROM ℄)	202		203	302	304		407	441			660				
										PAVEMENT REMOVED (CADD AREA)		EXCAVATION	3 1/2" ASPHALT CONCRETE BASE, PG64-22, (449)	8" AGGREGATE BASE		TACK COAT ● 0.055 GAL./SQ. YD.	1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS), AS PER PLAN			SODDING REINFORCED				
					FT.	FT.	FT.	FT.	FT.	SQ. YD.		CU. YD.	CU. YD.	CU. YD.		GAL.	CU. YD.			SQ. YD.				
DR-1	19	629+27.57	LT.	R	12.0		23.5	85	15			8	4.76			2.70	1.70							
DR-2	19	630+41.41	LT.	F	18.2	10.7	12.0	10	25											46.11				
DR-3	19	631+21.82	RT.	R	6.6		25.0	8	15	20			2.05			1.16	0.73							
DR-4	19	631+47.86	LT.	R	12.0		28.0	15	25	47			4.26			2.41	1.52							
DR-5	27	10+21.92	RT.	R	7.0		26.2	5	15					5.01										
SUB-TOTALS CARRIED TO GENERAL SUMMARY										67		8	11	5		6	4			46				

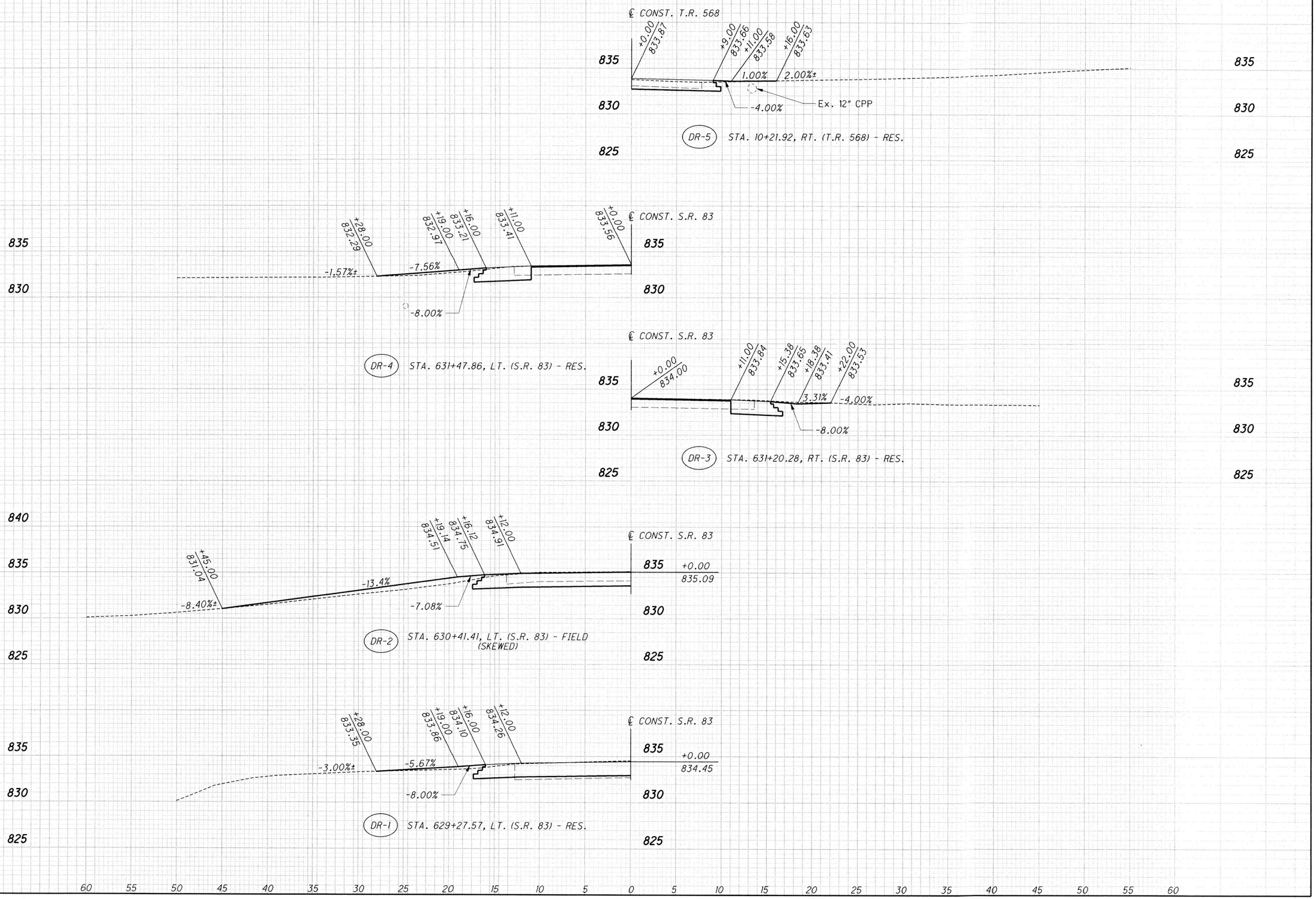
ESTIMATED QUANTITIES ARE OBTAINED FROM CADD GENERATED AREAS

CALCULATED MVC
CHECKED DJL

DRIVE DETAILS AND SUBSUMMARY

HOL-83-11.91

I:\ProjectData\08525\Design\Roadway\Sheets\08525_GS001.dgn Sheet 5/9/2022 1:40:29 PM mclark3

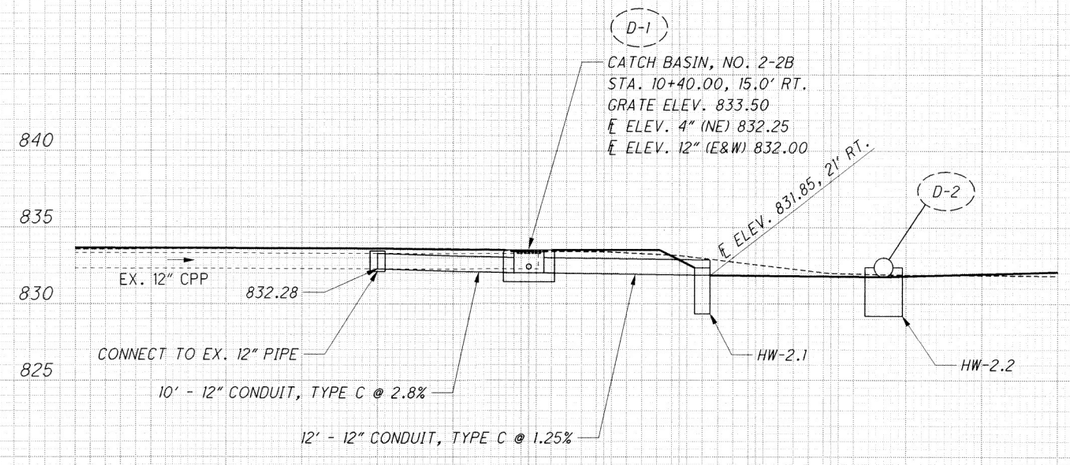


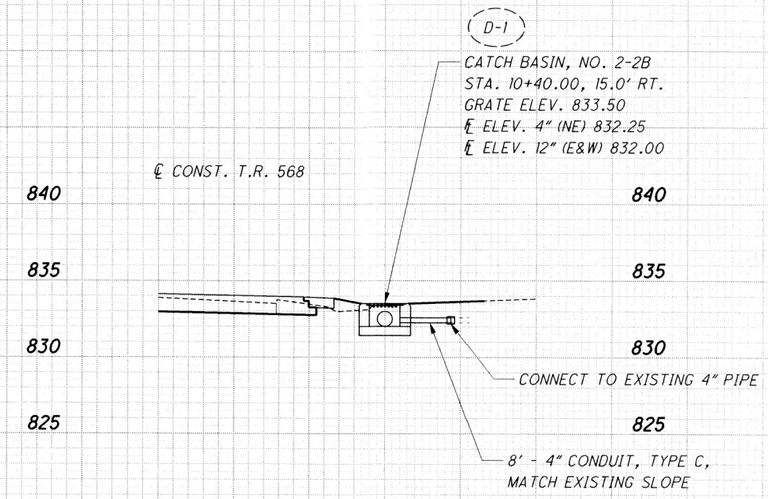
CALCULATED MVC
CHECKED DJL

DRIVEWAY PROFILES

HOL-83-11.91

I:\ProjectData\108525\Design\Roadway\Sheets\108525_GF002.dgn Sheet 5/9/2022 1:40:31PM mclark3





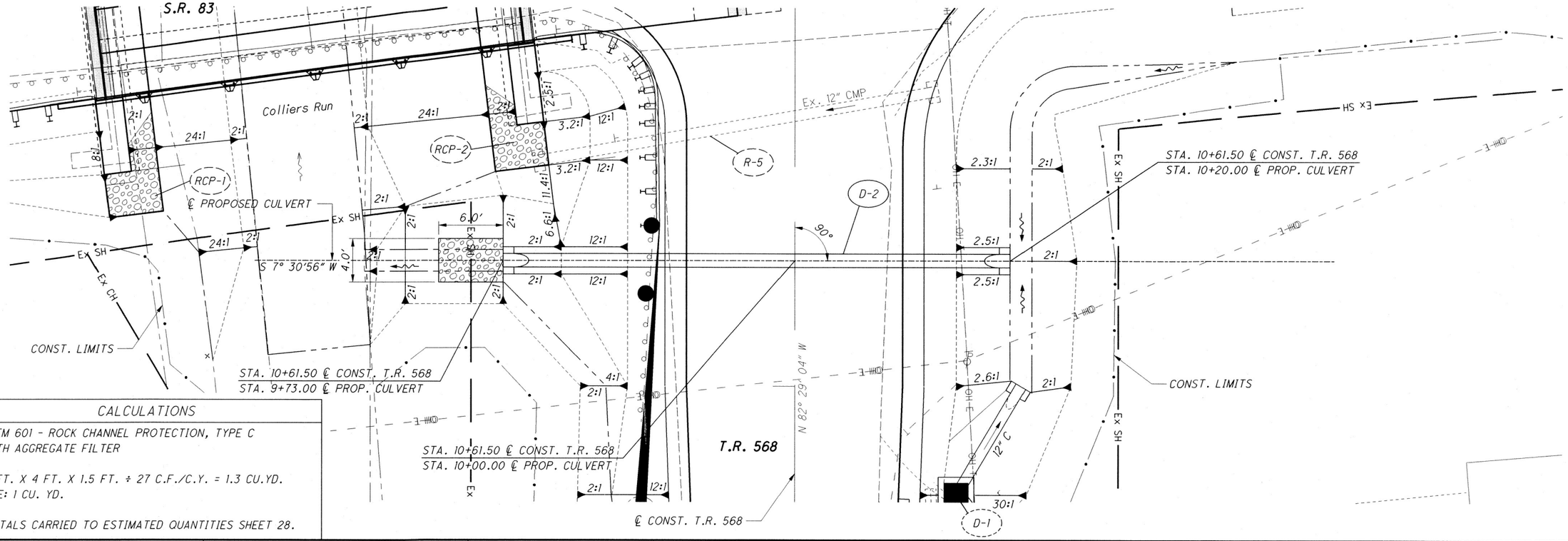
FOR D-2 CULVERT PLAN AND PROFILE, SEE SHEET 36

DRAINAGE PROFILES

CALCULATED MVC
CHECKED DJL

HOL-83-11.91

I:\ProjectData\108525\Design\Roadway\Sheets\108525_DF001.dgn Sheet 5/9/2022 1:40:32 PM mclark3



CALCULATIONS

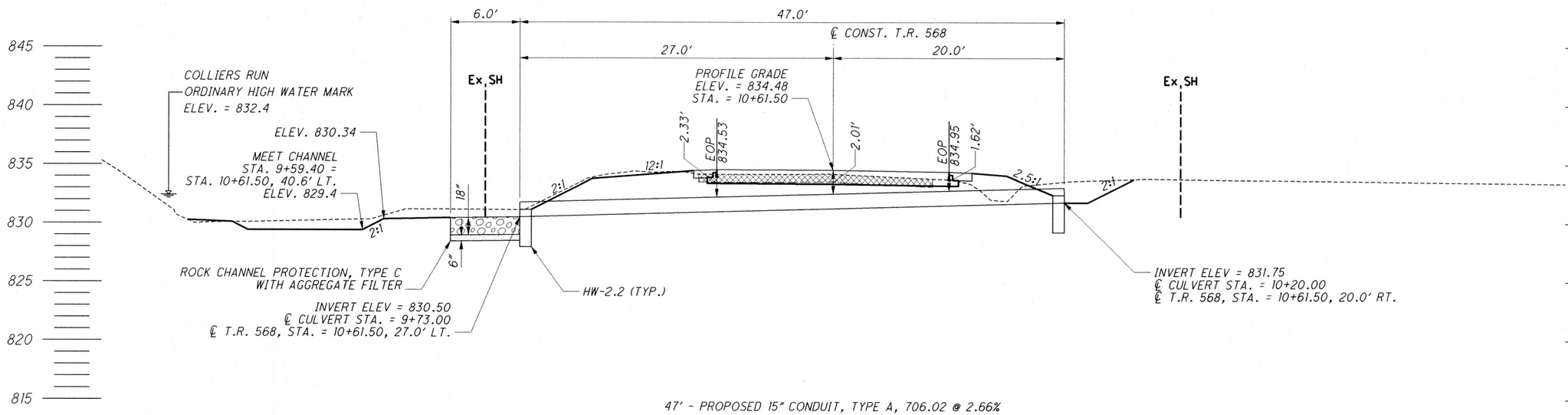
ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER

6 FT. X 4 FT. X 1.5 FT. ÷ 27 C.F./C.Y. = 1.3 CU.YD.
USE: 1 CU. YD.

TOTALS CARRIED TO ESTIMATED QUANTITIES SHEET 28.

EXISTING STRUCTURE	PROPOSED STRUCTURE
TYPE: CIRCULAR CORRUGATED SIZE: 12" SKEW: 9° 55'38" R.F. ALIGNMENT: TANGENT DATE BUILT: 1973	TYPE: TYPE A, 706.02 SIZE: 15" SKEW: NONE ALIGNMENT: TANGENT pH: 6.7 ABRASION LEVEL: LEVEL 1 DESIGN SERVICE LIFE: 75 YEARS

HYDRAULIC DATA	
DRAINAGE AREA = 1.64 ACRES (0.0026 SQ. MILES)	
DISCHARGE	VELOCITY
Q_{25} = 2.7 CFS	V_{25} = 7.6 FT/S
Q_{100} = 3.7 CFS	V_{100} = 8.3 FT/S



47' - PROPOSED 15" CONDUIT, TYPE A, 706.02 @ 2.66%

PROFILE ALONG ℄ OF CULVERT

CALCULATED MVC
CHECKED DJL

HORIZONTAL SCALE IN FEET
0 2.5 5 10

CULVERT PLAN AND PROFILE STA. 10+61.50

HOL-83-11.91

36
60

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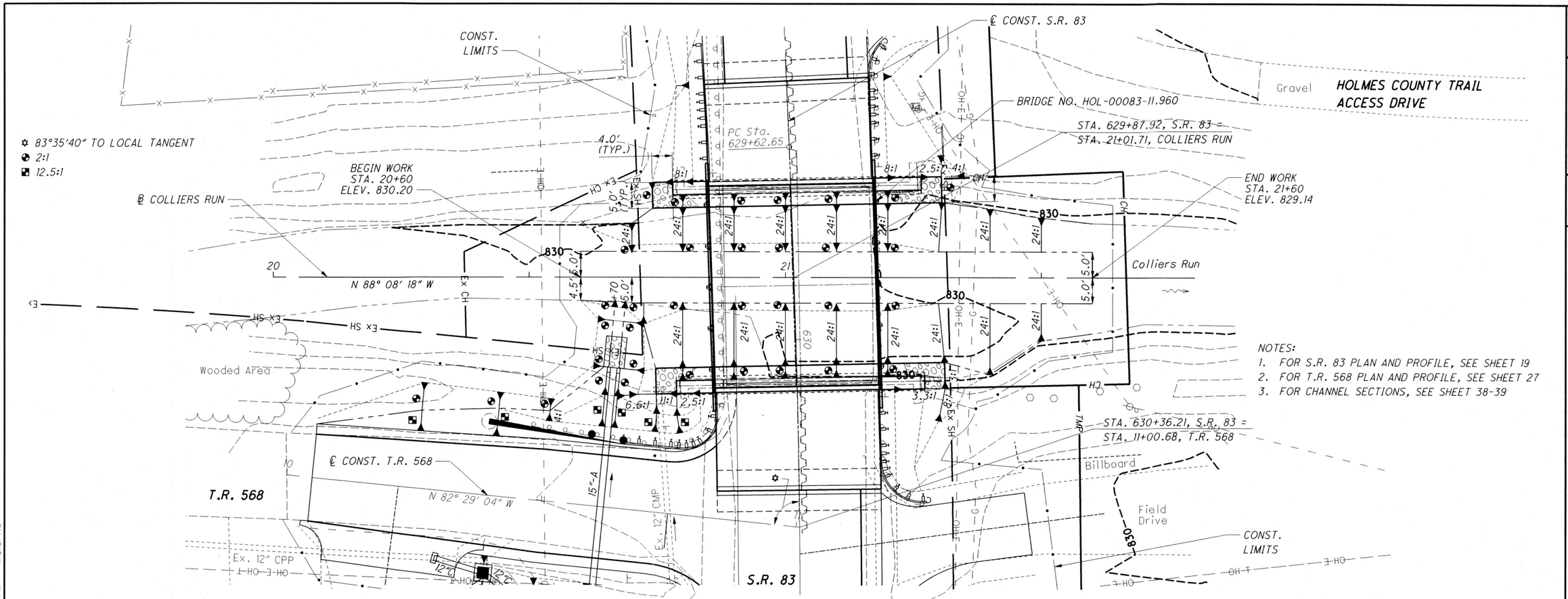
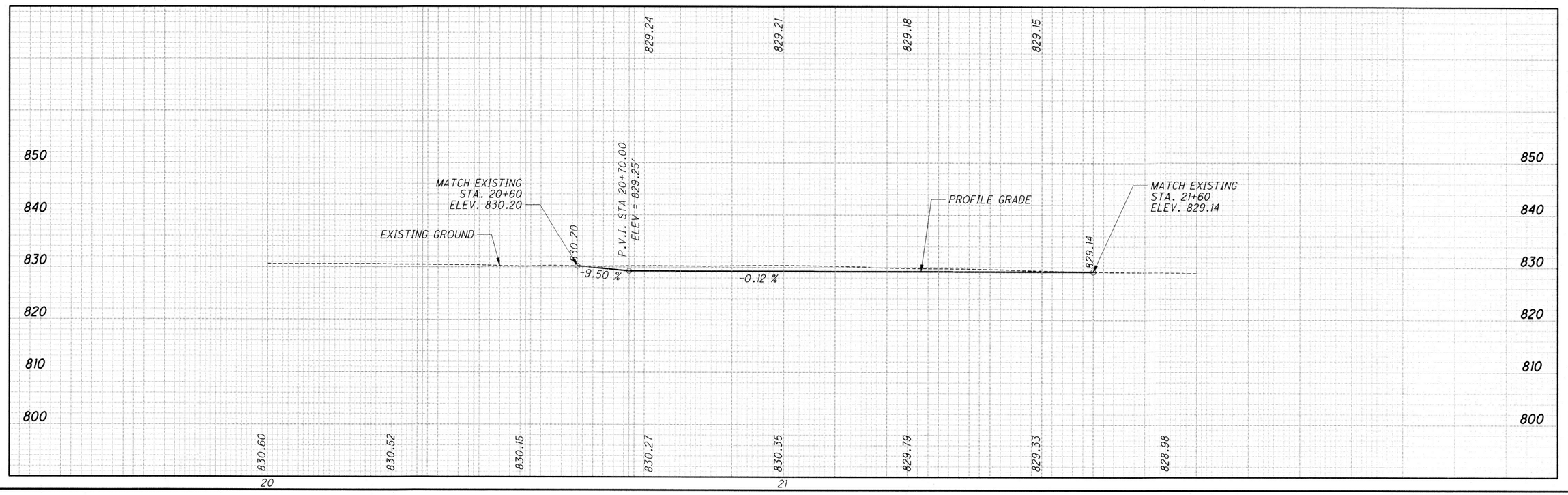




CHANNEL PLAN AND PROFILE
STA. 20+00 TO STA. 20+80

CALCULATED MVC
CHECKED DJL

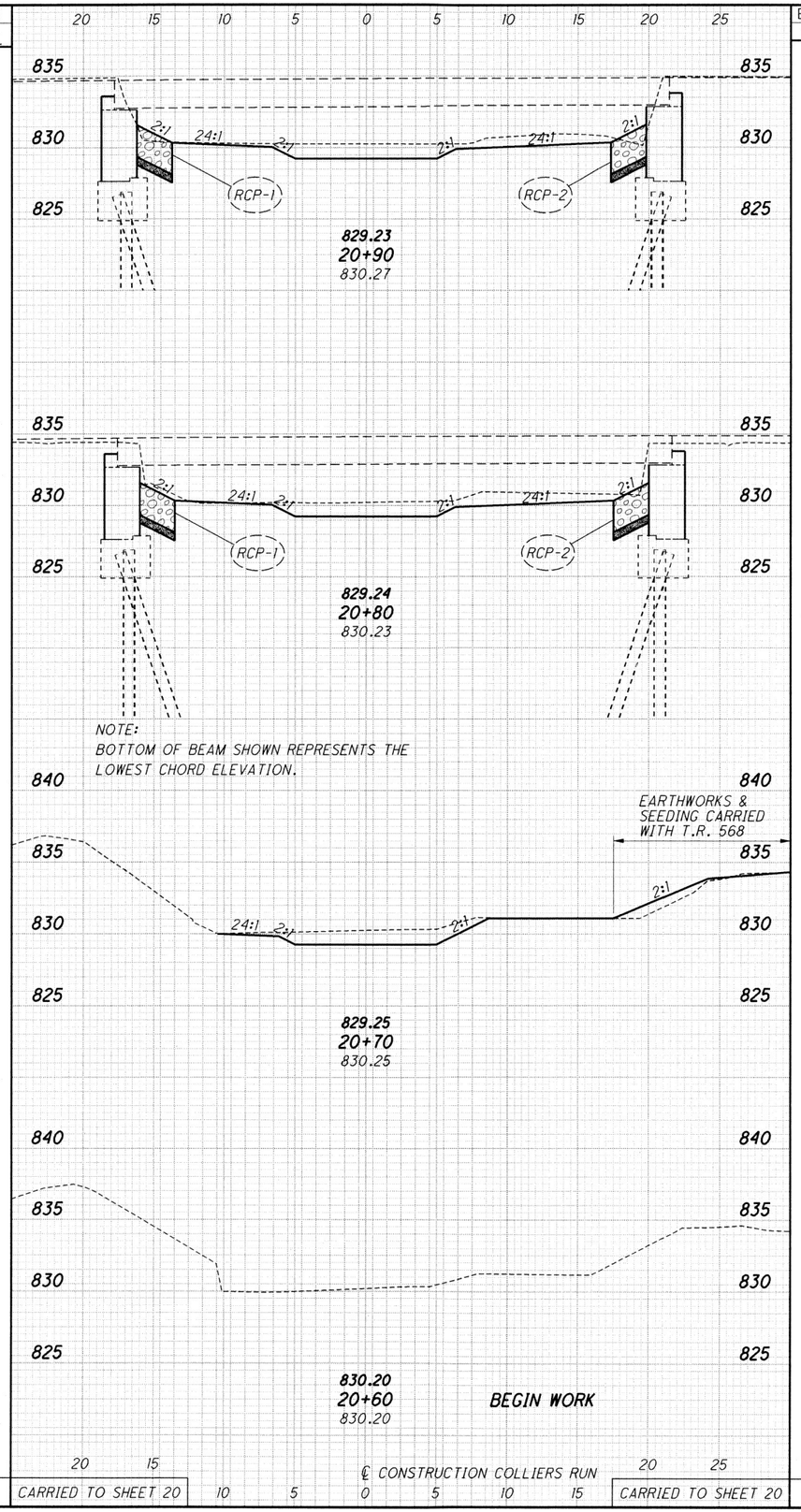
HORIZONTAL SCALE IN FEET
0 5 10 20

HOL-83-11.91

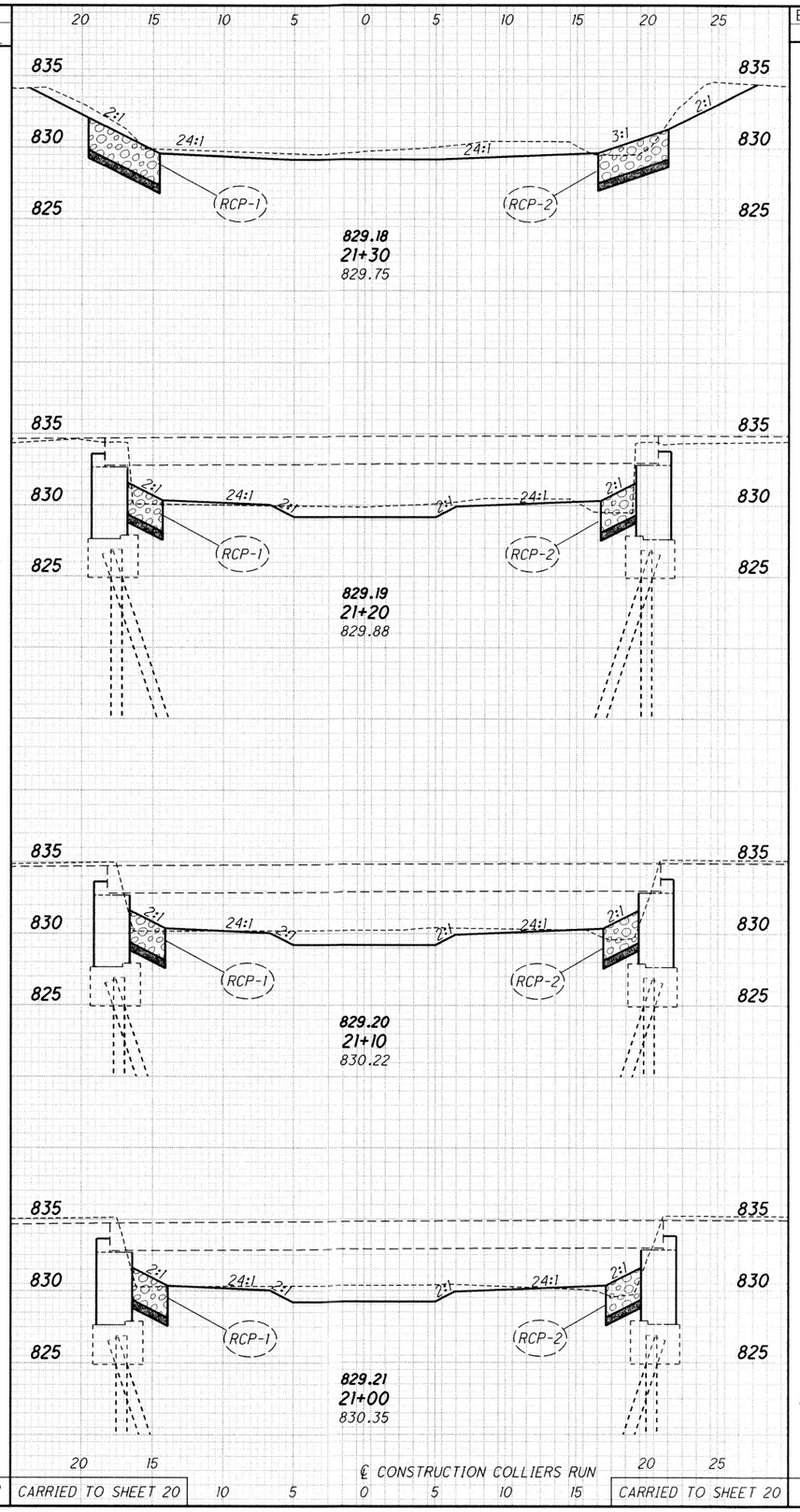
37
60

I:\ProjectData\108525\Design\Roadway\Sheets\108525_DP002.dgn Sheet 5/9/2022 1:40:39 PM mclark3

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0			11	0
0	0	32	0	12	0
0	0	35	0	9	0
0	0	14	0	3	0
0	0	0	0	35	0
0	CARRIED TO SHEET 20				



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
20	11	55	3	13	0
0	11	21	2	14	0
0	0	23	1	8	1
0	31	26	1	9	0
0	22			44	1
	CARRIED TO SHEET 20				



CALCULATED M.V.C.
CHECKED XXX

CHANNEL CROSS SECTIONS STA. 20+60 TO STA. 21+30

HOL-83-11.91

38
60

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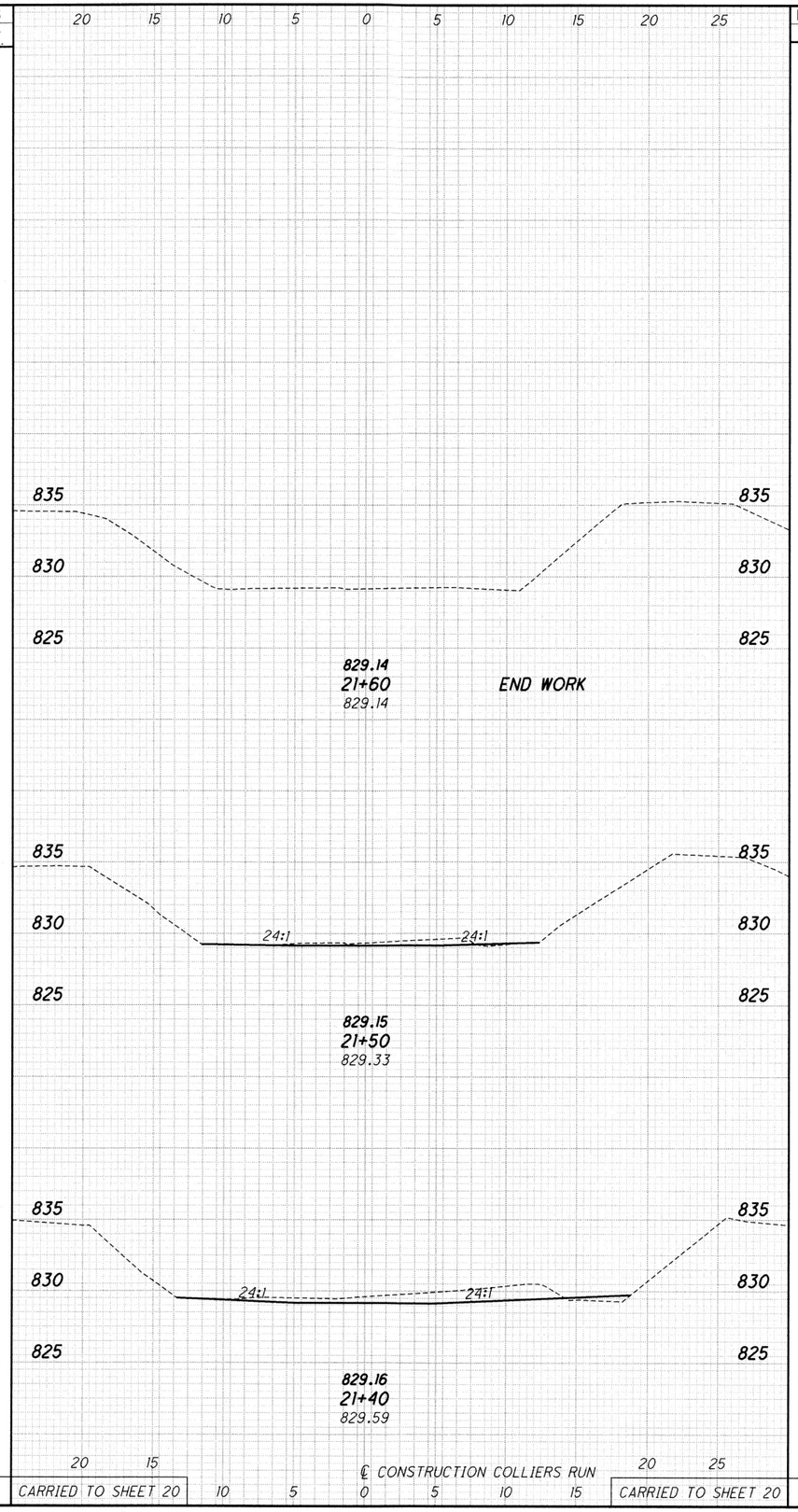
SEEDING			END AREA		VOLUME	
STA	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
21+60	0		0	0		
21+50	0	0	4	1	1	0
21+40	0	0	14	1	3	0
CARRIED TO SHEET 20		0			4	0



SEEDING			END AREA		VOLUME	
STA	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED MVC
CHECKED XXX

CHANNEL CROSS SECTIONS
STA. 21+40 TO STA. 21+60

HOL-83-11.91

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SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 2 POST FT.	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT.	630 STREET NAME SIGN SUPPORT, NO. 2 POST FT.	630 SIGN, FLAT SHEET SQ. FT.	630 SIGN POST REFLECTOR EACH		630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	646 EDGE LINE, 6" MILE	646 CENTER LINE MILE	
41	EL-1	S.R. 83	628+25.00	631+75.00	LT.											0.07		
41	EL-2	S.R. 83	628+25.00	631+75.00	RT.											0.07		
41	CL-1	S.R. 83	628+25.00	631+75.00	℄												0.07	
41	S-1	S.R. 83	629+65.00		RT.	I-H25b-12	12" X 12"	10			1							
41	S-2	S.R. 83	629+67.00		RT.	REMOVAL								1	1			
41	S-3	S.R. 83	629+67.00		LT.	REMOVAL								1	1			
41	S-4	S.R. 83	630+11.00		LT.	REMOVAL								1	1			
41	S-5	S.R. 83	630+12.00		RT.	REMOVAL								1	1			
41	S-6	S.R. 83	630+15.00		LT.	I-H25b-12	12" X 12"	10			1							
41	S-7	T.R. 568	10+75.00		LT.	MI-H6b-18	18" X 18"			10	2.25			1	1			
						MI-H6b-18	18" X 18"				2.25							
41	S-8	T.R. 568	10+75.00		RT.	R1-1-30	30" X 30"		12.5		6.25	1		1	1			
TOTALS CARRIED TO GENERAL SUMMARY								20	12.5	10	12.75	1		6	6	0.14	0.07	

TRAFFIC CONTROL CALCULATIONS (CARRIED TO GENERAL SUMMARY)

ITEM 621 - RAISED PAVEMENT MARKER REMOVED
STA. 628+25.00 TO. STA. 631+75.00
(350 FT ÷ 40 FT SPACING) + 1 EACH = 10 EACH
(USE 10 EACH)

ITEM 621 - RPM
STA. 628+25.00 TO. STA. 631+75.00
[(350 FT - 79 FT (BRIDGE AND APPROACH SLAB LIMITS) ÷ 40 FT SPACING] + 1 EACH = 8 EACH
(USE 8 EACH)

CALCULATED MVC
CHECKED XXX

TRAFFIC CONTROL SUBSUMMARY

HOL-83-11.91

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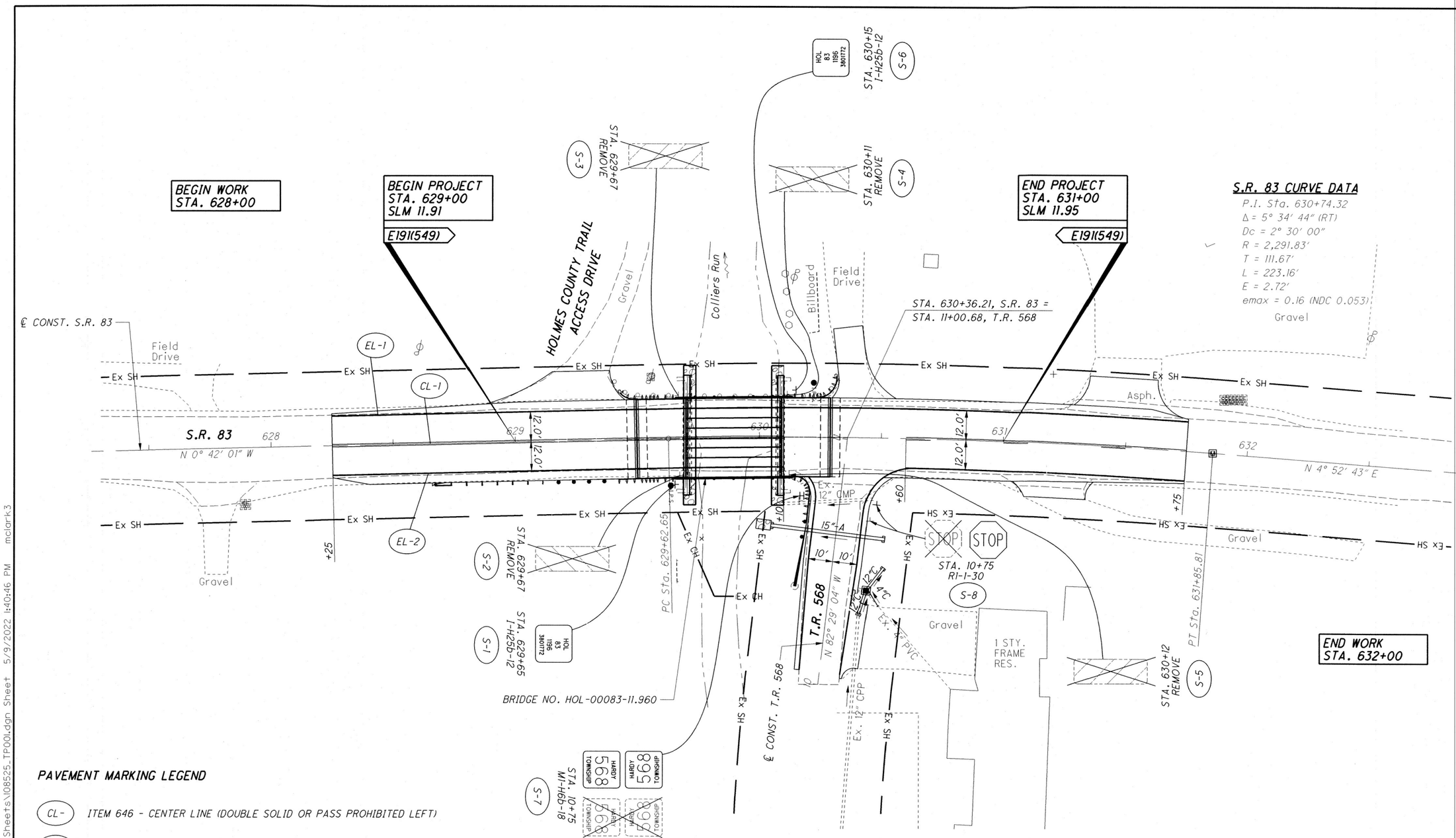

PAVEMENT MARKING LEGEND

(CL-) ITEM 646 - CENTER LINE (DOUBLE SOLID OR PASS PROHIBITED LEFT)

(EL-) ITEM 646 - EDGE LINE

SIGNING LEGEND

EXISTING SIGN SUPPORT

PROPOSED SIGN SUPPORT

PROPOSED SIGN

EXISTING SIGN TO BE REMOVED FOR DISPOSAL

NOTES:

1. FOR TRAFFIC CONTROL QUANTITIES, SEE SHEET 40
2. FOR SIGN DETAILS NOT SHOWN, SEE SCD'S TC-41.20, TC-42.20, TC-52.10, AND TC-52.20.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MVC
CHECKED DJL

TRAFFIC CONTROL PLAN
S.R. 83 & T.R. 568

HOL-83-11.91

41
60

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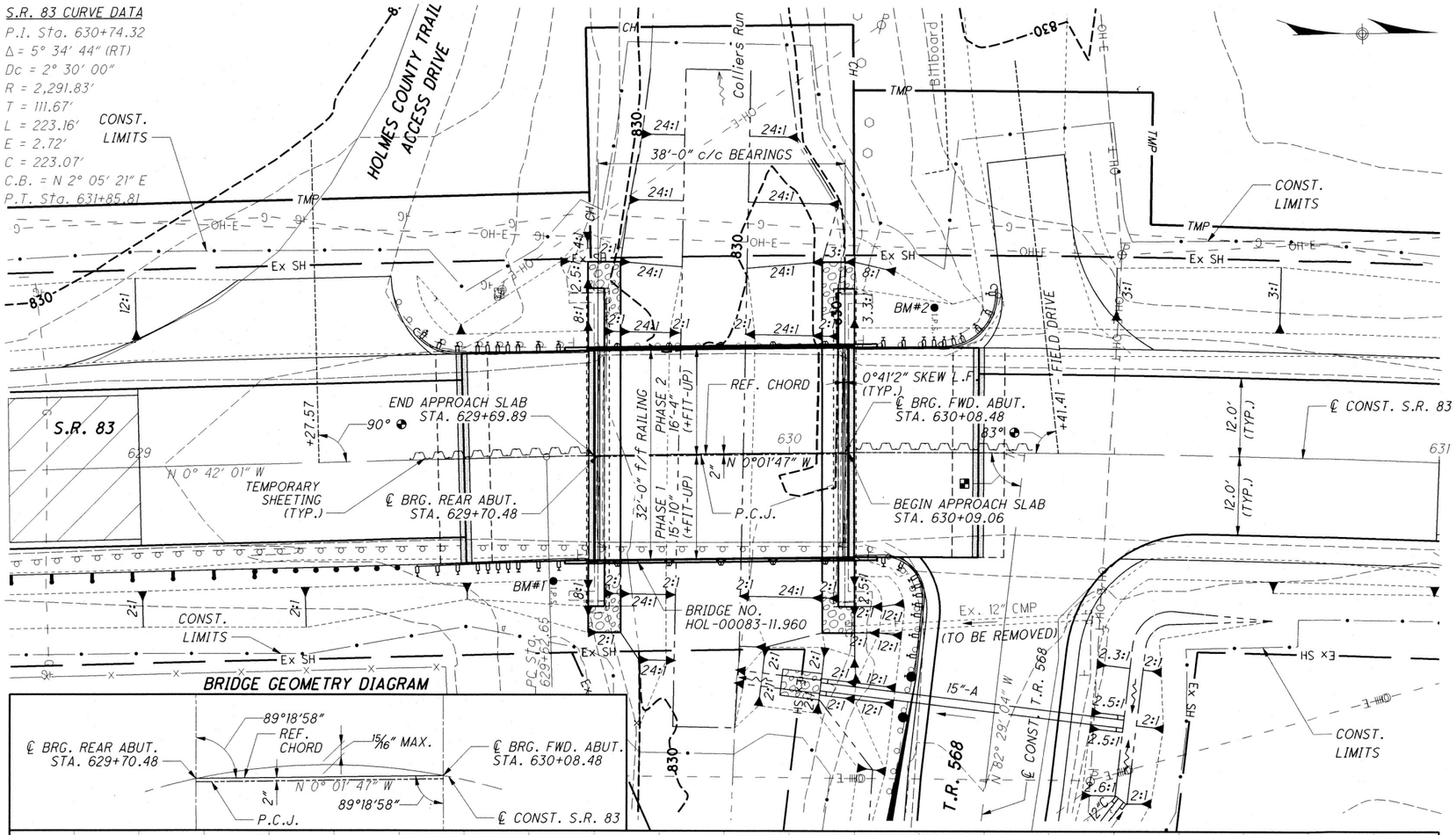
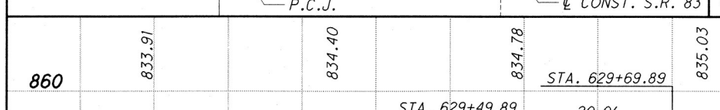
S.R. 83 CURVE DATA
P.I. Sta. 630+74.32
Δ = 5° 34' 44" (RT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 111.67'
L = 223.16'
E = 2.72'
C = 223.07'
C.B. = N 2° 05' 21" E
P.T. Sta. 631+85.81



BRIDGE GEOMETRY DIAGRAM



PROFILE ALONG ℄ CONSTRUCTION S.R. 83

BENCHMARK DATA

BM #1 STA. 629+63.27, ELEV. 834.42, OFFSET 19.06, RT.
BM #2 STA. 630+22.26, ELEV. 834.41, OFFSET 22.08, LT.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET (5/60)

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
2024 ADT = 5,400 2024 ADTT = 810
2044 ADT = 5,500 2044 ADTT = 825
DIRECTIONAL DISTRIBUTION = 52%

LEGEND

ROCK CHANNEL PROTECTION, TYPE C WITH AGGREGATE FILTER (1'-6" OR 2'-0" THICK)

PAVEMENT PLANING & RESURFACING

83°35'40" TO LOCAL TANGENT
TO LOCAL TANGENT

FIRST POST ON BRIDGE

LT. REAR: STA. 629+73.79
RT. REAR: STA. 629+73.16
LT. FWD.: STA. 630+05.56
RT. FWD.: STA. 630+05.39

BTA-TST-2 POST #10

LT. REAR: STA. 629+64.82
RT. REAR: STA. 629+64.19
LT. FWD.: STA. 630+14.53
RT. FWD.: STA. 630+14.36

HYDRAULIC DATA (OBTAINED FROM EX. PLANS)

DRAINAGE AREA = 1.65± SQ. MILES
Q (25) = 710± CFS

EXISTING STRUCTURE

TYPE: SINGLE-SPAN NON-COMPOSITE PRESTRESSED BOX BEAMS SUPPORTED BY CAPPED PILE ABUTMENTS

SPAN: 38'-0"± C/C BEARINGS
ROADWAY: 30'-0"± F/F RAILING
LOADING: HS-20
SKEW: NONE
WEARING SURFACE: 6"± ASPHALT
APPROACH SLABS: NONE
ALIGNMENT: 2° 30' 00" CURVE RT.
CROWN: NORMAL
STRUCTURAL FILE NUMBER: 3801772
DATE BUILT: 1973
DISPOSITION: TO BE REHABILITATED

PROPOSED STRUCTURE

TYPE: SINGLE-SPAN COMPOSITE PRESTRESSED BOX BEAMS SUPPORTED BY CAPPED PILE ABUTMENTS

SPAN: 38'-0" C/C BEARINGS (ALONG REFERENCE CHORD)
ROADWAY: 32'-0" F/F RAILING
LOADING: HL-93 (FWS = 60 PSF)
SKEW: 0°41'02" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: 20'-0" LONG (AS-1-15 & AS-2-15) (TYPE A INSTALLATION)
ALIGNMENT: 2° 30' 00" CURVE RT.
CROWN: 0.016 FT/FT
COORDINATES: LATITUDE 40°35'33.30"
LONGITUDE 81°54'51.47"

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801772	

HOLMES COUNTY
STA. 629+69.89
STA. 630+09.06

SITE PLAN
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

1 / 15

42 / 60

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	07-17-15
AS-2-15	REVISED	01-18-19
PCB-91	REVISED	07-17-20
PSBD-2-07	REVISED	07-20-18
TST-2-21	DATED	07-16-21

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

846	DATED	04-17-15

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.

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:
VEHICULAR LIVE LOAD HL-93 (PROPOSED BRIDGE ELEMENTS)
VEHICULAR LIVE LOAD HS-20 (EXISTING BRIDGE ELEMENTS)

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS PER SQUARE FOOT.

DESIGN DATA:
CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 5.5 KSI
COMPRESSIVE STRENGTH (RELEASE) - 4.0 KSI

PRESTRESSING STRAND:
AREA = 0.167 SQUARE INCHES
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER

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

PROPOSED WORK

1. REMOVE EXISTING SUPERSTRUCTURE, BREASTWALLS, AND WINGWALLS.
2. CONSTRUCT NEW BREASTWALLS AND WINGWALLS.
3. PLACE NEW BEARINGS AND BOX BEAMS.
4. CONSTRUCT NEW COMPOSITE CONCRETE DECK.
5. CONSTRUCT NEW APPROACH SLABS AND EXPANSION JOINTS.
6. SEAL CONCRETE SURFACES AND PHASE CONSTRUCTION JOINT.

EXISTING PLANS

THE FOLLOWING EXISTING PLANS ARE AVAILABLE FOR REFERENCE AT THE DISTRICT 11 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, 2201 REISER AVE. S.E., NEW PHILADELPHIA, OHIO, 44663:

ORIGINAL CONSTRUCTION:
HOL-76-10.02 - 1972
(STRUCTURE ORIGINALLY BUILT AS HOL-76-1196
IN ADDITION, THE EXISTING PLANS CAN BE FOUND ON THE DEPARTMENT'S WEBSITE AT THE FOLLOWING ADDRESS:

http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Pages/designfiles.aspx

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 AND 105.02.

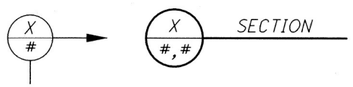
BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

BEARING PAD SHIMS

PLACE ⅛" THICK PREFORMED BEARING PAD SHIMS, PLAN AREA 6" x 9", UNDER THE ELASTOMERIC BEARINGS WHERE REQUIRED FOR PROPER BEARING. FURNISH TWO SHIMS PER BEAM. THE DEPARTMENT WILL MEASURE THIS ITEM BY THE TOTAL NUMBER SUPPLIED. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, ⅛" PREFORMED BEARING PADS. ANY UNUSED SHIMS WILL BECOME THE PROPERTY OF THE STATE.

SECTION REFERENCES

THE SYMBOLS BELOW DESIGNATE THE NAMES AND LOCATIONS OF THE SECTION DETAILS THROUGHOUT THE STRUCTURE PLANS. THE TOP LETTER DESIGNATES THE SECTION NAME. THE BOTTOM NUMBER(S) SHOW WHICH STRUCTURE SHEET NUMBER IS BEING CROSS REFERENCED.



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

DESCRIPTION:
THIS WORK CONSISTS OF THE REMOVAL OF THE ABUTMENT BREASTWALLS AND WINGWALLS TO FOOTING, RAILING, NON-COMPOSITE PRESTRESSED BOX BEAMS, BOX BEAM SHEAR KEYS, WATERPROOFING AND EXISTING STEEL DRIP STRIPS AS DETAILED IN THE PLANS.

THIS ITEM SHALL INCLUDE REMOVAL OF OTHER APPURTENANCES (BEARING PADS, P.E.J.F., ANCHOR BARS, ETC.). PERFORM WORK CAREFULLY DURING BOX BEAM REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE BEING USED TO MAINTAIN TRAFFIC OR LABELED TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE.

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL.

ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER.

THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION:
SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (CONTINUED)

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ABBREVIATIONS

THE FOLLOWING STANDARD ABBREVIATIONS ARE USED THROUGHOUT THE PLANS:

ABUT. - ABUTMENT
BRG. - BEARING
C.J. - CONSTRUCTION JOINT
CLR. - CLEARANCE
CONST. - CONSTRUCTION
E.F. - EACH FACE
EL. OR ELEV. - ELEVATION
EX. - EXISTING
EXP. - EXPANSION
F.A. - FORWARD ABUTMENT
F.F. - FAR FACE
FIX. - FIXED
JT. - JOINT
MIN. - MINIMUM
MAX. - MAXIMUM
NDC - NORMAL DESIGN CRITERIA
N.F. - NEAR FACE
O.H.W.M. - ORDINARY HIGH WATER MARK
P.C.J. - PHASE CONSTRUCTION JOINT
P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
P/G - PROFILE GRADE
PR. - PROPOSED
R.A. - REAR ABUTMENT
R.C.P. - ROCK CHANNEL PROTECTION
SPA. - SPACE(D) OR SPACING
STA. - STATION
STD. DWG. OR SCD - STANDARD CONSTRUCTION DRAWING
T.O.S. - TOP OF SLOPE
TYP. - TYPICAL

STRUCTURE IDENTIFICATION SIGNS

A STRUCTURE IDENTIFICATION SIGN (I-H25b) SHALL BE PLACED AT EACH APPROACH TO THE STRUCTURE, ON THE RIGHT SHOULDER, FACING TRAFFIC. THESE SIGNS ARE MAINTENANCE MARKERS, AND SHALL UTILIZE SCD TC-52.20 SIGN BLANK DETAIL SQ-I-3 FOR MOUNTING HOLE LOCATIONS, EXCEPT THE INTERIOR (THIRD) HOLE SHALL BE NON-PERFORMED. ADDITIONALLY, THE SIGNS SHALL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

MOUNT SIGNS ON NEW NO. 2 POSTS AND INSTALL PER SCD TC-41.20. FOR SIGN LOCATIONS, SEE THE TRAFFIC CONTROL PLAN ON SHEET XX. FOR SIGN QUANTITIES, SEE ESTIMATED QUANTITIES SHEET NO. XX.

HOL
83
11.96
3801772

I-H25b (12" x 12")

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801772	

STRUCTURE NOTES
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

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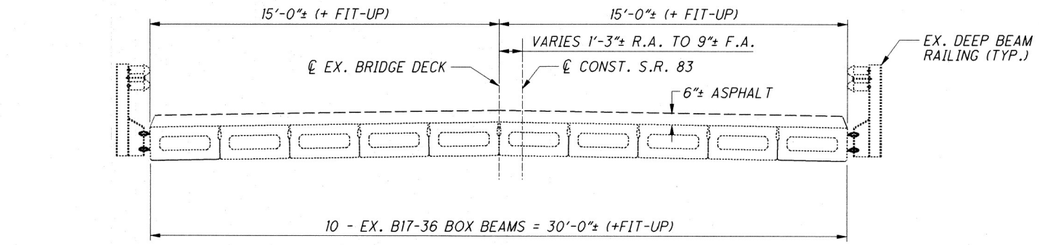
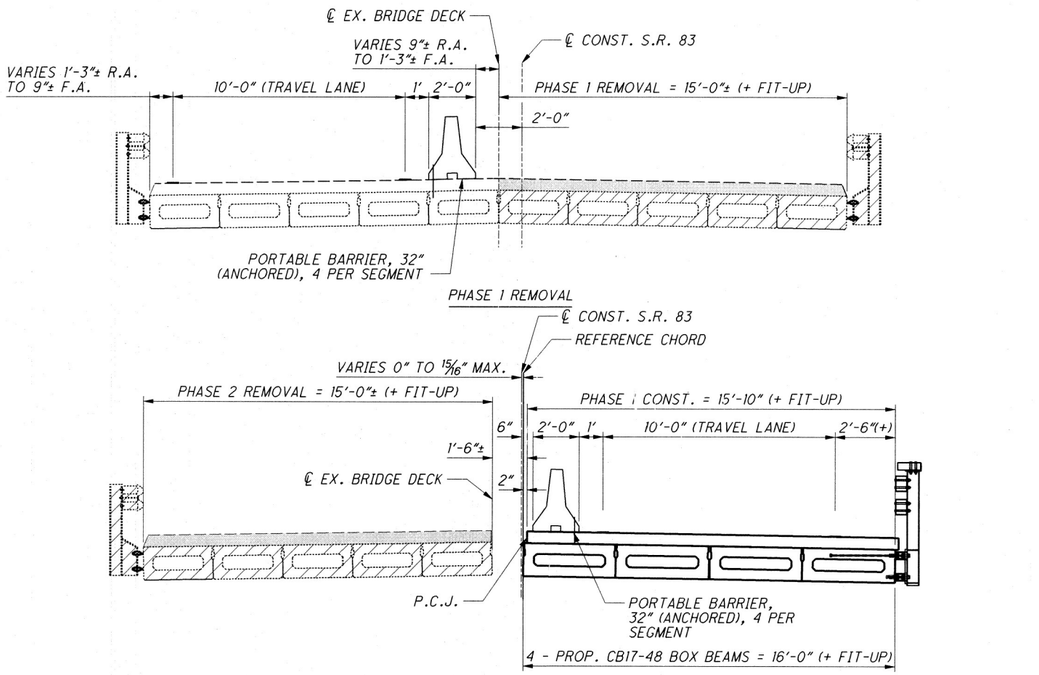
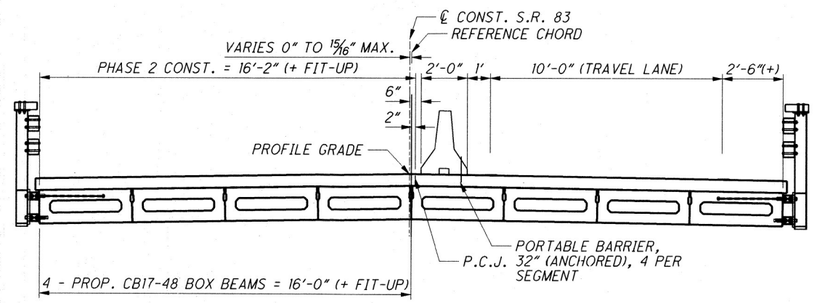


EXISTING TRANSVERSE SECTION



PHASE 1 CONSTRUCTION AND PHASE 2 REMOVAL



PHASE 2 CONSTRUCTION

PHASE 1 REMOVAL

1. INSTALL AND MAINTAIN CONSTRUCTION SIGNS AND SIGNALS AS SHOWN ON SHEETS 11-12 AND AS PER SCD MT-96.11.
2. ERECT BRIDGE MOUNTED PORTABLE BARRIER (4-ANCHORS PER SEGMENT) ON THE LEFT PORTION OF THE EXISTING STRUCTURE AS SHOWN AND AS PER SCD PCB-91. REMOVE CONFLICTING PAVEMENT MARKINGS, AND INSTALL WORK ZONE PAVEMENT MARKINGS AS SHOWN ON SHEETS 11-12. PROVIDE ALL MAINTENANCE OF TRAFFIC DEVICES.
3. USE SIGNALS TO MAINTAIN ALTERNATING ONE-WAY TRAFFIC ON THE LEFT PORTION OF S.R. 83 AS PER THE DETAILS SHOWN ON SHEETS 11-12.
4. SAW CUT BETWEEN THE EXISTING BOX BEAMS AS SHOWN.
5. REMOVE THE RIGHT PORTION OF THE EXISTING SUPERSTRUCTURE, BREASTWALLS, WINGWALLS, AND APPROACH SLABS AS SHOWN. CONSTRUCT TEMPORARY SHORING AS NEEDED.

PHASE 1 CONSTRUCTION & PHASE 2 REMOVAL

6. CONSTRUCT THE RIGHT PORTION OF THE BRIDGE AND APPROACH SLABS.
7. ERECT BRIDGE MOUNTED PORTABLE BARRIER (4 ANCHORS PER SEGMENT) ON THE NEWLY CONSTRUCTED RIGHT PORTION OF THE DECK AS SHOWN AND AS PER SCD PCB-91. CARE SHALL BE TAKEN NOT TO DRILL INTO OR DAMAGE THE PRESTRESSED CONCRETE BOX BEAMS. REMOVE CONFLICTING PAVEMENT MARKINGS, AND INSTALL WORK ZONE PAVEMENT MARKINGS AS SHOWN ON SHEETS 13-14. PROVIDE ALL MAINTENANCE OF TRAFFIC DEVICES.
9. USE SIGNALS TO MAINTAIN ALTERNATING ONE-WAY TRAFFIC ON THE RIGHT PORTION OF S.R. 83 AS PER THE DETAILS SHOWN ON SHEETS 13-14.
10. REMOVE THE LEFT PORTION OF THE EXISTING SUPERSTRUCTURE, BREASTWALLS, WINGWALLS, AND APPROACH SLABS AS SHOWN. CONSTRUCT TEMPORARY SHORING AS NEEDED.

PHASE 2 CONSTRUCTION

11. CONSTRUCT THE LEFT PORTION OF THE BRIDGE AND APPROACH SLABS.
12. IN ONE CONTINUOUS OPERATION, UTILIZING FLAGGERS, REMOVE THE PORTABLE BARRIER, SEAL THE PORTABLE BARRIER ANCHOR HOLES WITH NON-SHRINK NON-METALLIC GROUT, AND REMOVE TRAFFIC SIGNALS AND CONFLICTING PAVEMENT MARKINGS.
13. SAW CUT GROOVES INTO THE DECK SURFACE UTILIZING FLAGGERS AS PER SCD MT-97.10.
14. OPEN THE ROAD TO TWO-LANE, TWO-WAY TRAFFIC.

LEGEND:

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

ITEM 202 - WEARING COURSE REMOVED (6"± ASPHALT)

DESIGN AGENCY: O.D.O.T. DISTRICT 11 ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801772	

PHASE CONSTRUCTION DETAILS

BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

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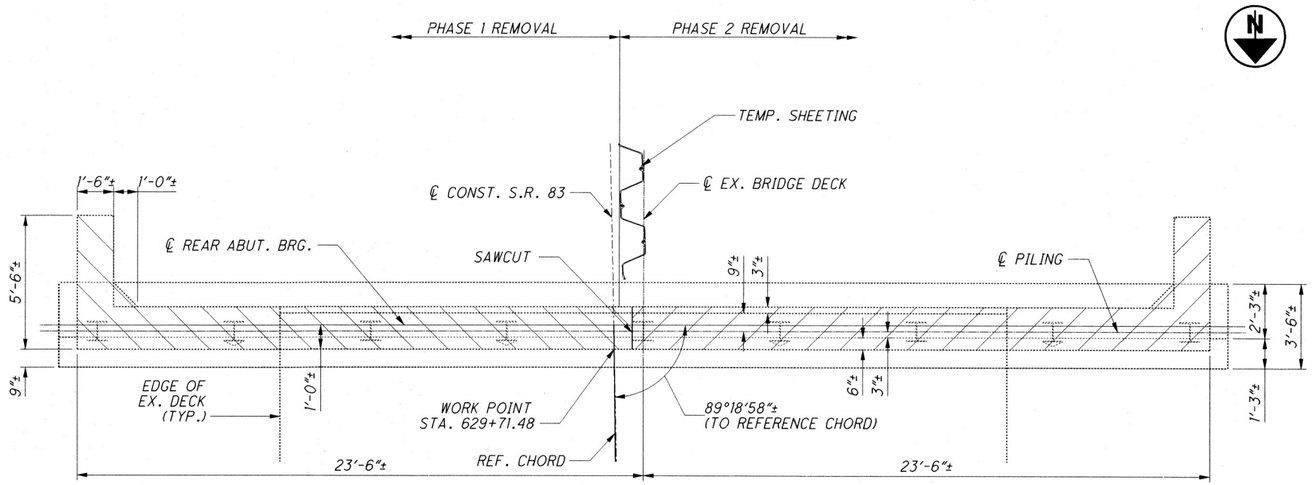
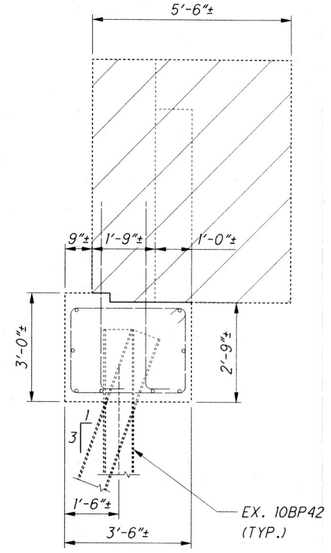


PLAN VIEW



VIEW B-B

LEGEND

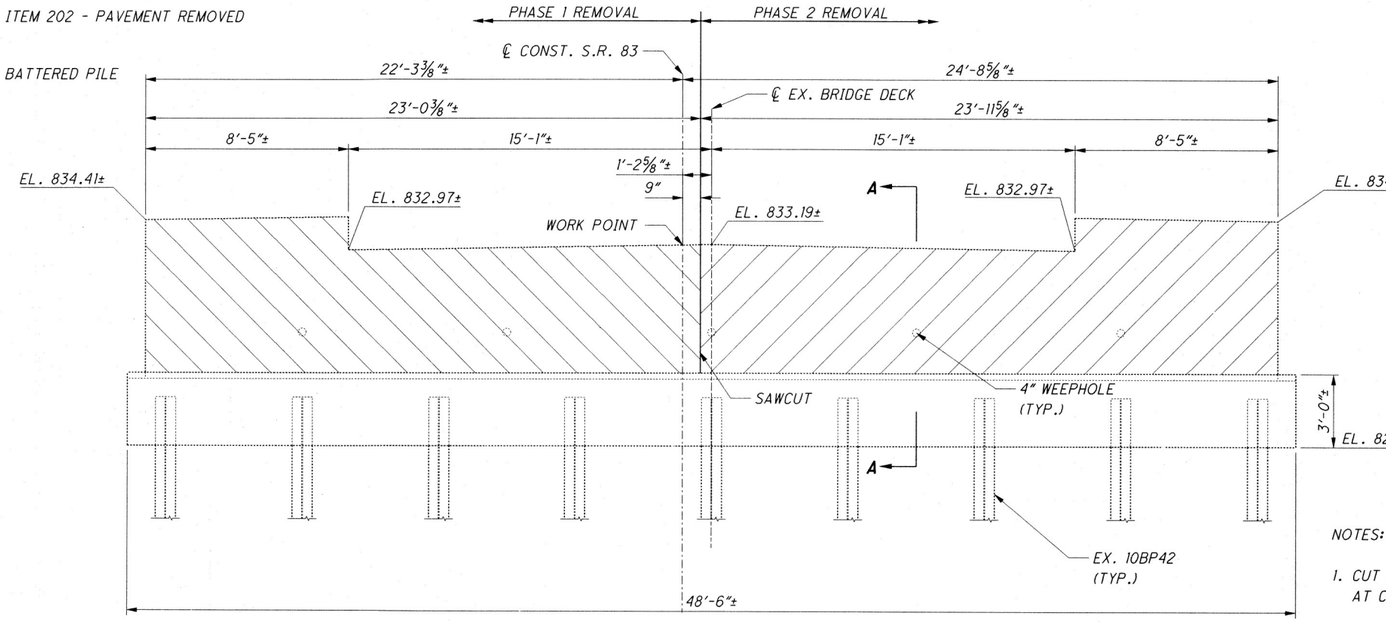
ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (PHASE 1)

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (PHASE 2)

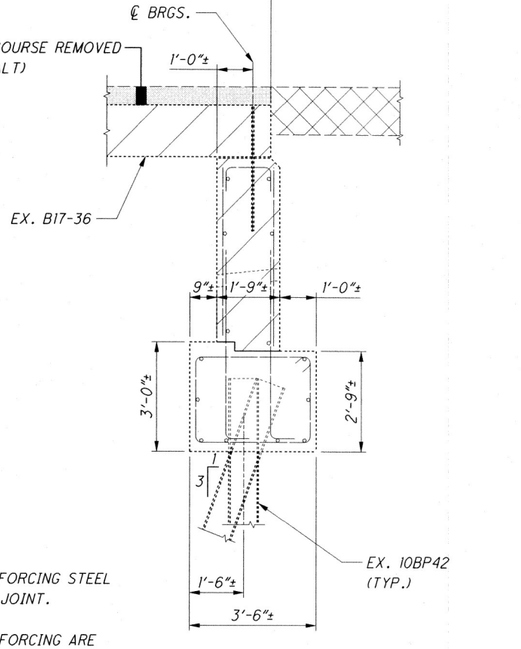
ITEM 202 - WEARING COURSE REMOVED

ITEM 202 - PAVEMENT REMOVED

BATTERED PILE



ELEVATION VIEW



SECTION A-A

NOTES:

1. CUT EXISTING REINFORCING STEEL AT CONSTRUCTION JOINT.
2. ALL EXISTING REINFORCING ARE NO. 5 BARS.
3. VIEW B-B WINGWALL REINFORCING NOT SHOWN.

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801772	

REAR ABUTMENT REMOVAL DETAILS

BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

4 / 15

45 / 60

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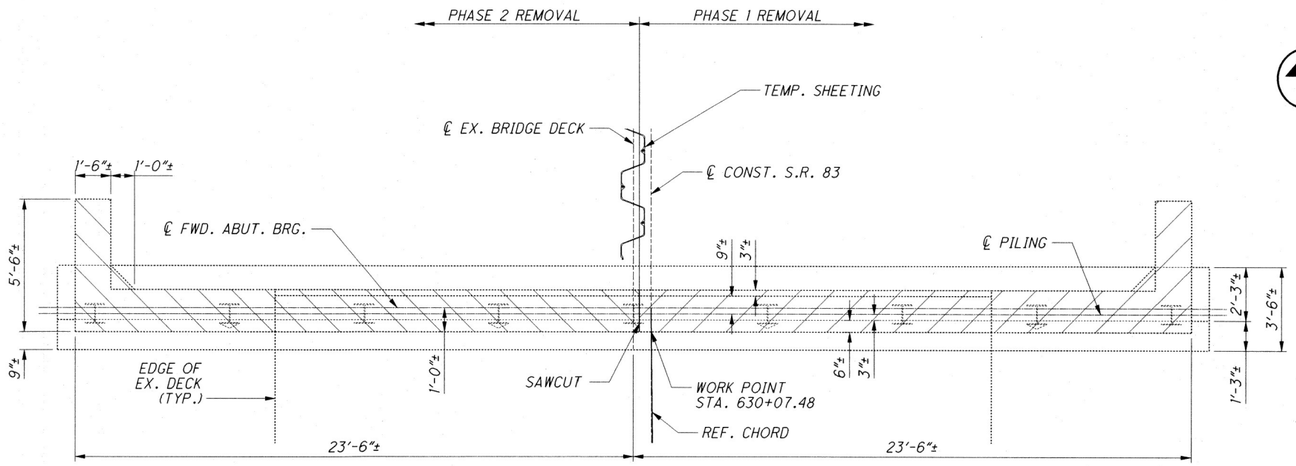
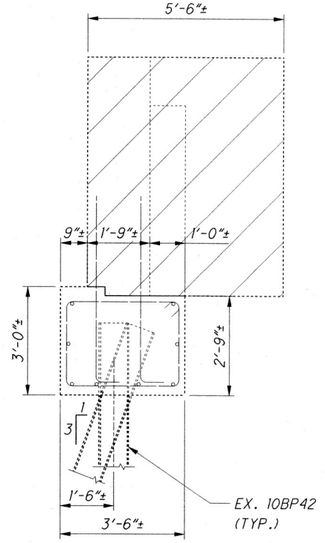


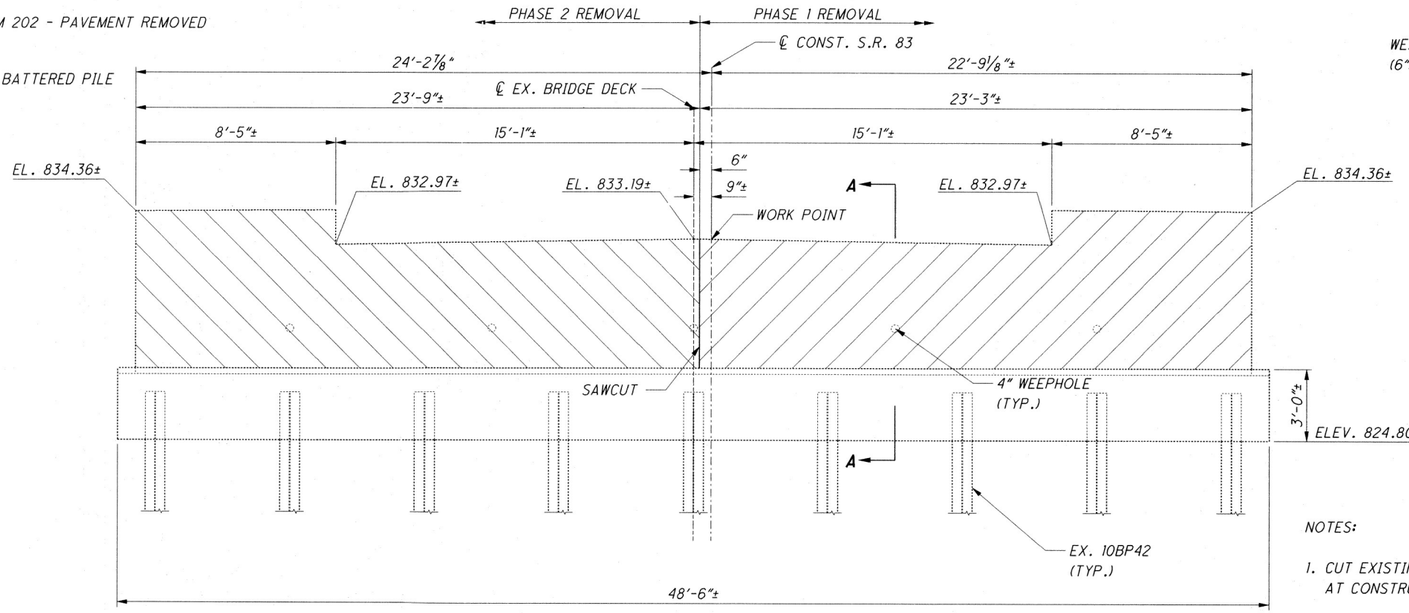
PLAN VIEW



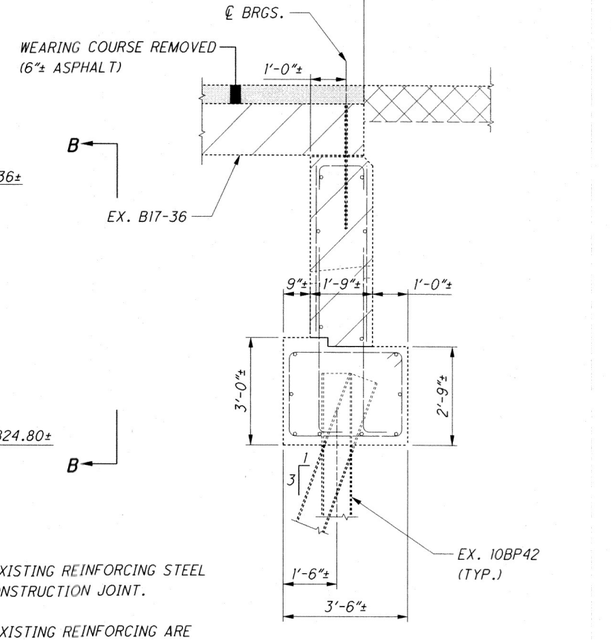
VIEW B-B

LEGEND

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (PHASE 1)
- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (PHASE 2)
- ITEM 202 - WEARING COURSE REMOVED
- ITEM 202 - PAVEMENT REMOVED
- EX. BATTERED PILE



ELEVATION VIEW



SECTION A-A

NOTES:

1. CUT EXISTING REINFORCING STEEL AT CONSTRUCTION JOINT.
2. ALL EXISTING REINFORCING ARE NO. 5 BARS.
3. VIEW B-B WINGWALL REINFORCING NOT SHOWN.

FORWARD ABUTMENT REMOVAL DETAILS

BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801772	

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

HOL-83-11.91
PID No. 108525

5 / 15

46 / 60

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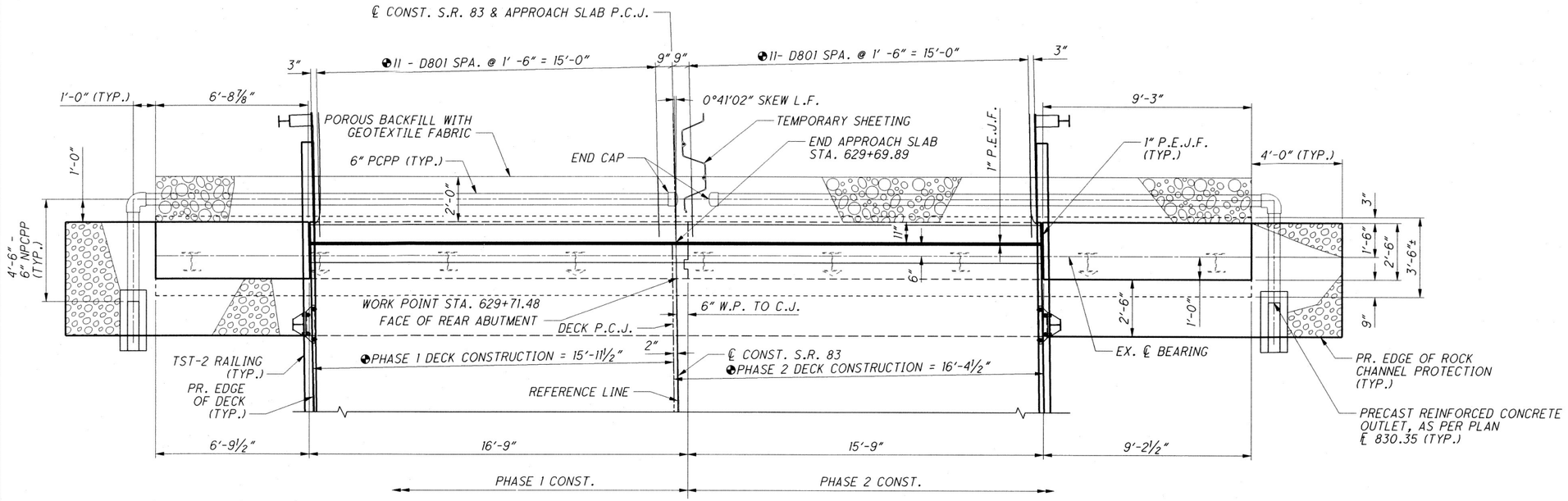
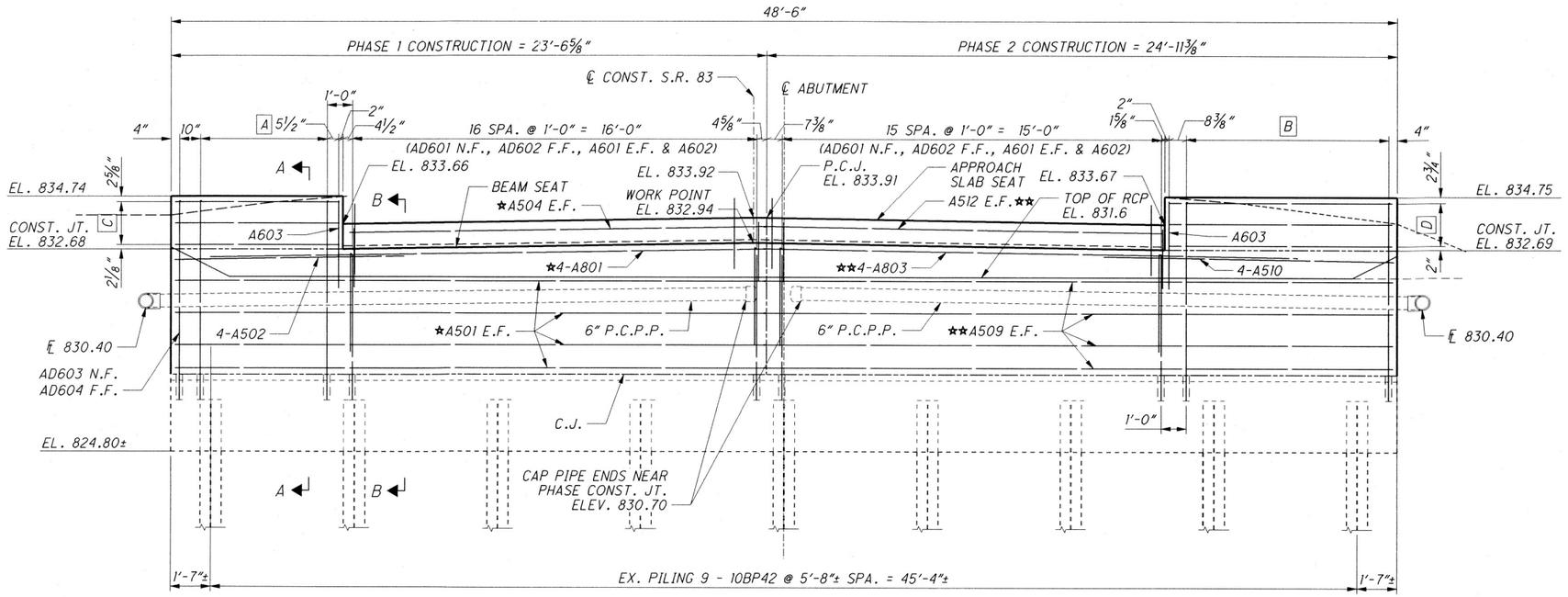


PLAN VIEW

◒PARALLEL TO ℄ CONST.



ELEVATION VIEW

(SLAB AND APPROACH SLAB NOT SHOWN)

LEGEND

- A - 6-AD603 N.F. & 6-AD604 F.F. @ 1'-0" SPA. = 5'-0"
- B - 9-AD603 N.F. & 9-AD604 F.F. @ 1'-0" SPA. = 8'-0"
- C - A503 E.F. @ 10" SPA. = 1'-8"
- D - A511 E.F. @ 10" SPA. = 1'-8"

DOWEL DEPTHS

NO. 6 BARS = 12"

NOTES:

1. FOR EXISTING ABUTMENT REMOVALS, SEE SHEET 4/15
2. FOR SECTIONS A-A & B-B, SEE SHEET 8/15
3. FOR REINFORCING STEEL LIST, SEE SHEET 15/15
4. ★ MECHANICAL CONNECTOR (FEMALE END)
   ★★ MECHANICAL CONNECTOR (MALE END)
5. 2" CLEARANCE FOR REINFORCING UNLESS OTHERWISE SHOWN.
6. ABUTMENT CONCRETE: DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE PRESTRESSED CONCRETE BOX BEAMS HAVE BEEN ERECTED.

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
XXX	XXX	3801772	

REAR ABUTMENT DETAILS
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

6 / 15

47
60

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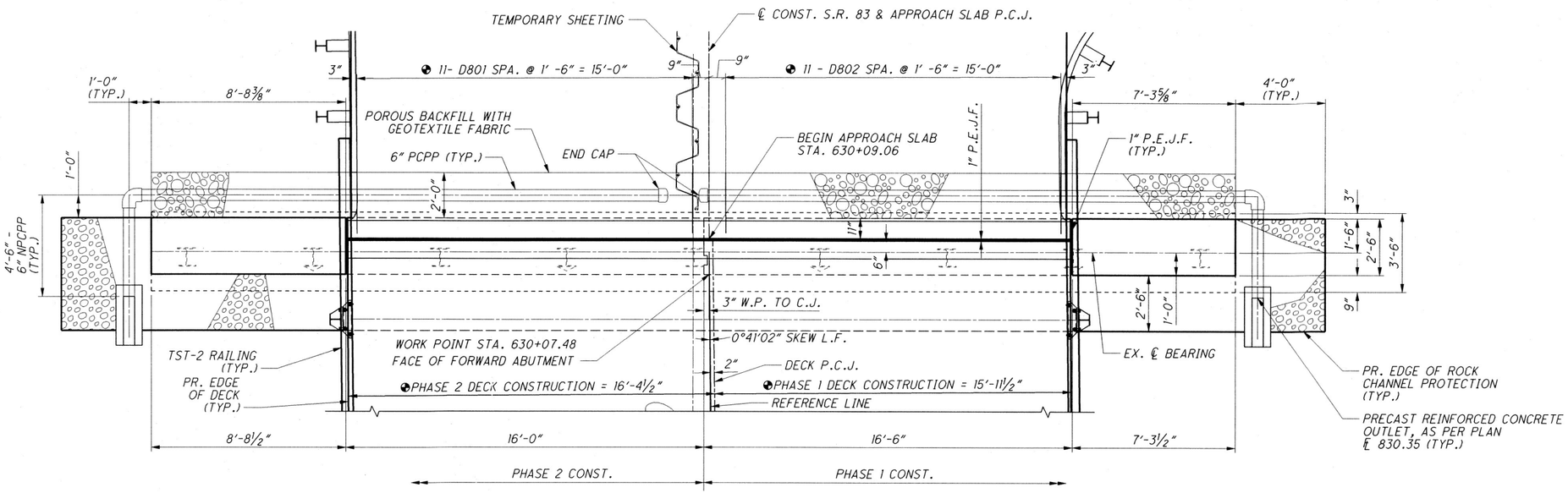
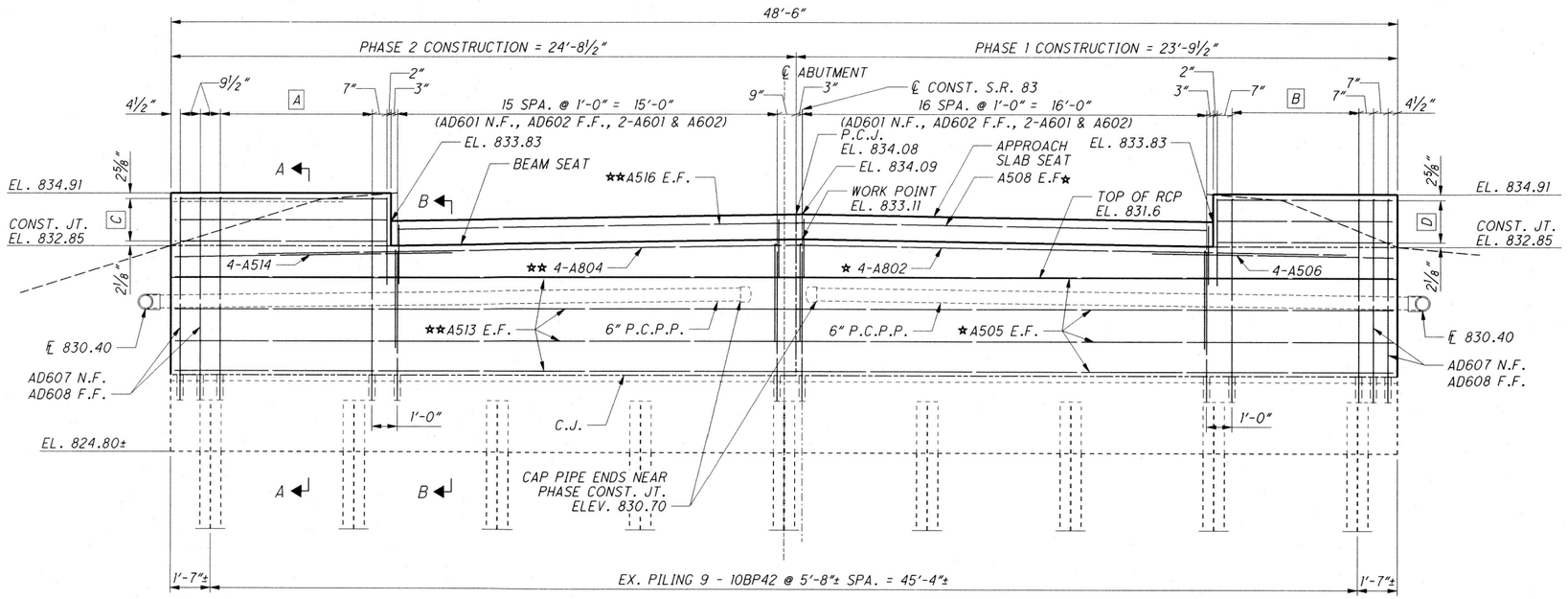


PLAN VIEW

PARALLEL TO ℄ CONST.



ELEVATION VIEW

(SLAB AND APPROACH SLAB NOT SHOWN)

LEGEND

- A - 7-AD607 N.F. & 7-AD608 F.F. @ 1'-0" SPA. = 6'-0"
- B - 6-AD607 N.F. & 6-AD608 F.F. @ 1'-0" SPA. = 5'-0"
- C - A515 E.F. @ 10" SPA. = 1'-8"
- D - A507 E.F. @ 10" SPA. = 1'-8"

DOWEL DEPTHS

NO. 6 BARS = 12"

NOTES:

1. FOR EXISTING ABUTMENT REMOVALS, SEE SHEET 5/15
2. FOR SECTIONS A-A & B-B, SEE SHEET 8/15
3. FOR REINFORCING STEEL LIST, SEE SHEET 15/15
4. ★ MECHANICAL CONNECTOR (FEMALE END)
   ★★ MECHANICAL CONNECTOR (MALE END)
5. 2" CLEARANCE FOR REINFORCING UNLESS OTHERWISE SHOWN.
6. ABUTMENT CONCRETE: DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE PRESTRESSED CONCRETE BOX BEAMS HAVE BEEN ERECTED.

DESIGNED MYC | DRAWN MYC | REVIEWED XXX | DATE MM/DD/YY
CHECKED XXX | REVISED XXX | STRUCTURE FILE NUMBER 3801772

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

FORWARD ABUTMENT DETAILS

BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

7 / 15

48 / 60

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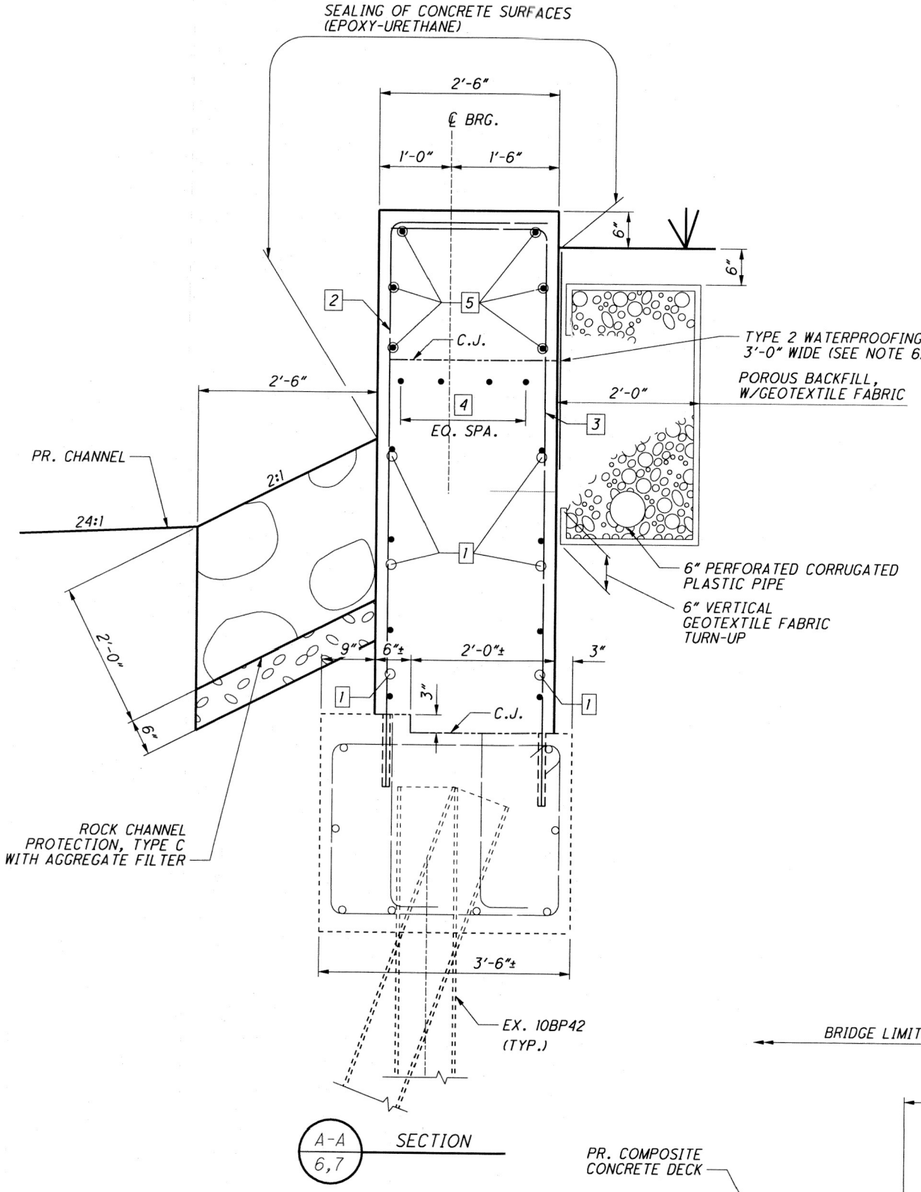
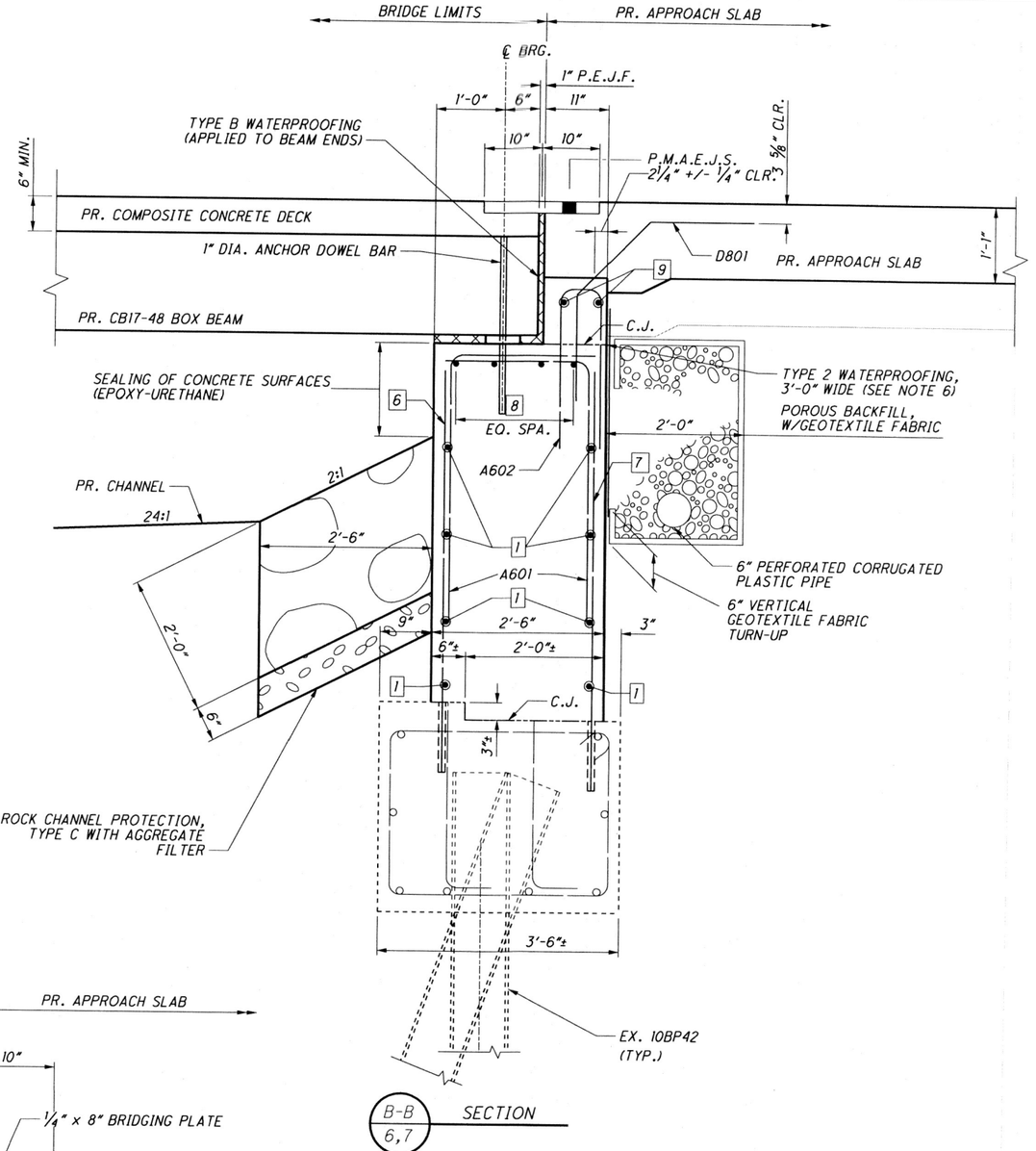
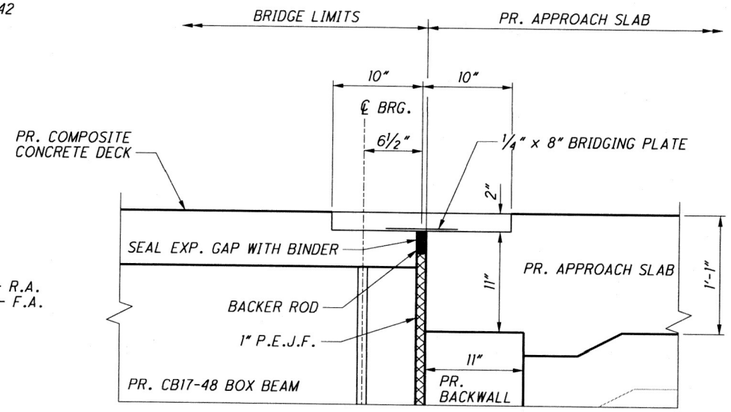


A-A
6,7 SECTION



B-B
6,7 SECTION



P.M.A.E.J.S. DETAIL

1	A501★, A509★★ - R.A. A505★, A513★★ - F.A.	7	AD602 - R.A. AD606 - F.A.
2	AD603 - R.A. AD607 - F.A.	8	4-A1001★, 4-A1004★★ - R.A. 4-A1002★, 4-A1003★★ - F.A.
3	AD604 - R.A. AD608 - F.A.	9	A504★, A512★★ - R.A. A508★, A516★★ - F.A.
4	4-A502 LAPS 4-A1001, 4-A514 LAPS 4-A1004 - R.A. 4-A506 LAPS 4-1002, 4-A510 LAPS 4-A1003 - F.A.		
5	A503, A511 - R.A. A507, A515 - F.A.		
6	AD601 - R.A. AD605 - F.A.		

NOTES:

1. FOR EXISTING ABUTMENT REMOVALS, SEE SHEETS 4/15 AND 5/15
2. FOR REINFORCING STEEL LIST, SEE SHEET 15/15
3. ★ MECHANICAL CONNECTOR (FEMALE END)
   ★★ MECHANICAL CONNECTOR (MALE END)
4. 2" CLEARANCE FOR REINFORCING UNLESS OTHERWISE SHOWN.
5. FOR DETAILS NOT SHOWN, SEE SCDS PSBD-2-07 & AS-1-15.
6. SEAL THE BEAM SEAT AND WINGWALL HORIZONTAL CONST. JOINT AND THE BREASTWALL VERTICAL PHASE CONST. JOINT, 3'-0" WIDE.

DESIGNED MVC
DRAWN MVC
CHECKED DJL
REVIEWED XXX
DATE MM/DD/YY
REVISED XXX
DESIGN AGENCY O.D.O.T. DISTRICT 11 ENGINEERING
STRUCTURE FILE NUMBER 3801772

ABUTMENT DETAILS
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

8 / 15

49 / 60

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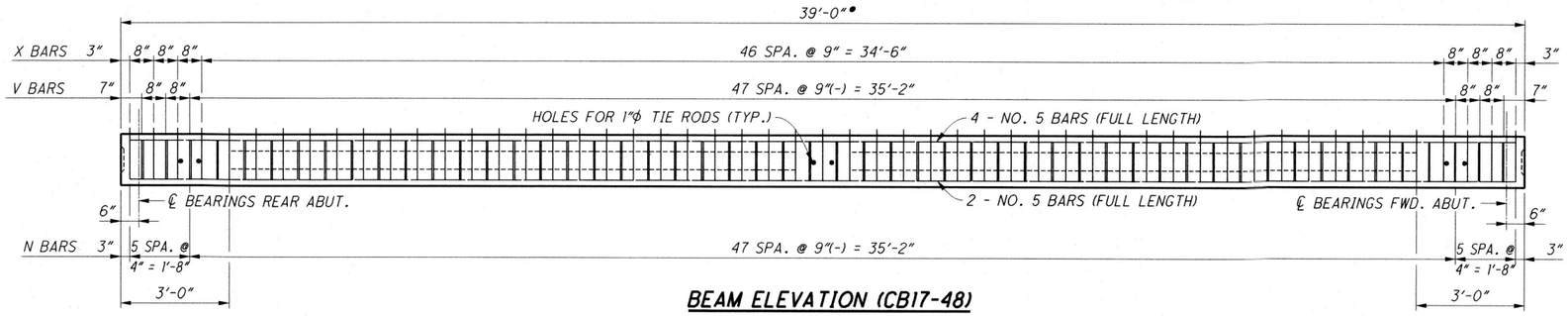
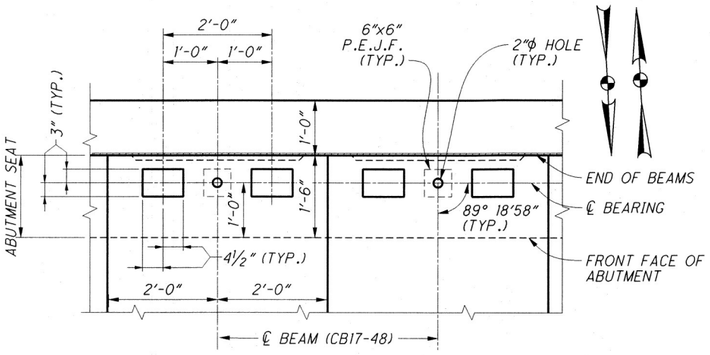


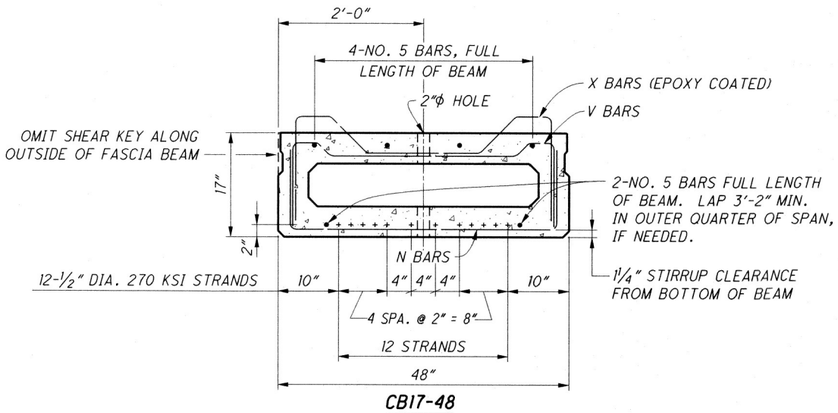
BEAM ELEVATION (CB17-48)
SHEAR REINFORCING SPACING

NOTE: X BARS ARE EPOXY COATED

A-A / 10 SECTION

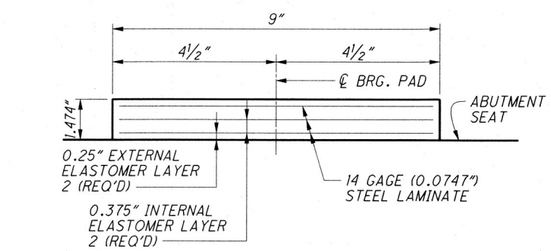


BEARING PAD LAYOUT PLAN

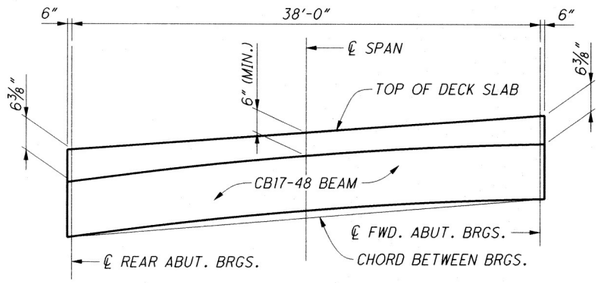


CB17-48

BEAM SECTION



ELASTOMERIC BEARING DETAIL



TOPPING THICKNESS DIAGRAM
(SEE NOTE 9)

LAMINATED ELASTOMERIC BEARINGS

LOCATION	NO. REQ'D.	BEARING DIMENSIONS						REACTIONS PER BEARING (UNFACTORED SERVICE LOADS)		MAXIMUM DESIGN LOAD
		L	W	ti	te	T	N	DL	LL (w/out Impact)	
REAR ABUTMENT	32	6	9	0.375"	0.25"	1.474"	3	12.03	13.23	25.26
FORWARD ABUTMENT	32	6	9	0.375"	0.25"	1.474"	3	12.03	13.23	25.26

ENGINEERS SEAL:

STATE OF OHIO
ANDREW C. BAKER
E-82958
REGISTERED PROFESSIONAL ENGINEER

SIGNED:_____
DATE:_____

NOTES

1. CONCRETE FOR PRESTRESSED BEAMS:
   COMPRESSIVE STRENGTH (FINAL) - 5500 PSI
   COMPRESSIVE STRENGTH (RELEASE) - 4000 PSI
2. PRESTRESSING STRAND:
   AREA = 0.167 SQ. IN.
   ULTIMATE STRENGTH = 270 KSI
   INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)
3. SEE STANDARD DRAWING PSBD-2-07, SHEETS 1 THROUGH 3 OF 4 FOR BEAM LIFTING INSERTS, DIMENSIONS AND REINFORCEMENT OF BEAMS, PLAN OF DIAPHRAGMS AND TIE RODS, TIE ROD ANCHORAGE, NORMAL CROWN TREATMENT AT CENTERLINE OF ROADWAY, AND BEAM DIMENSIONAL TOLERANCES.
4. SEE STANDARD DRAWING PSBD-2-07, SHEET 1 OF 4 FOR NOTES ON TRANSVERSE TIE RODS, BEAM ENDS, ELASTOMERIC BEARING REPLACEMENT, PREPARATION OF CONCRETE SURFACES IN CONTACT WITH MORTAR, AND MORTARING OF SHEAR KEYS.
5. NOTE TO FABRICATOR: THE DIMENSIONS MEASURED ALONG THE LENGTH OF THE BEAM, MARKED WITH A *, DO NOT CONTAIN AN ALLOWANCE FOR THE EFFECT OF THE LONGITUDINAL GRADE. INCLUDE THE PROPER ALLOWANCE FOR THESE DIMENSIONS IN THE SHOP DRAWINGS.
6. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
7. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.
8. FURNISHING AND PLACING ANCHOR BARS SHALL BE INCLUDED WITH ITEM 516 ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN FOR PAYMENT.
9. CAMBER (ALL BEAMS):

   ESTIMATED CAMBER AT DAY 0 (D_0) IS ½ INCHES.

   ESTIMATED CAMBER AT DAY 30 (D_{30}) IS ⅞ INCHES.

   DEFLECTION DUE TO REMAINING DEAD LOAD (E.G. CONCRETE DECK, DIAPHRAMS, BARRIERS, UTILITIES ECT.) IS 3/16 INCHES.

DESIGN AGENCY
ENGINEERING ASSOCIATES, INC.

WEST PARK PLACE
WOOSTER, OHIO 44691
TELEPHONE (330) 345-9595
FAX: (330) 345-8977

DESIGNED	DRAWN	REVIEWED	DATE
ACB	TAC	SDS	12-8-21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
HK		3801772	

ELASTOMERIC BEARING AND BEAM DETAILS
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

9 / 15

50 / 60

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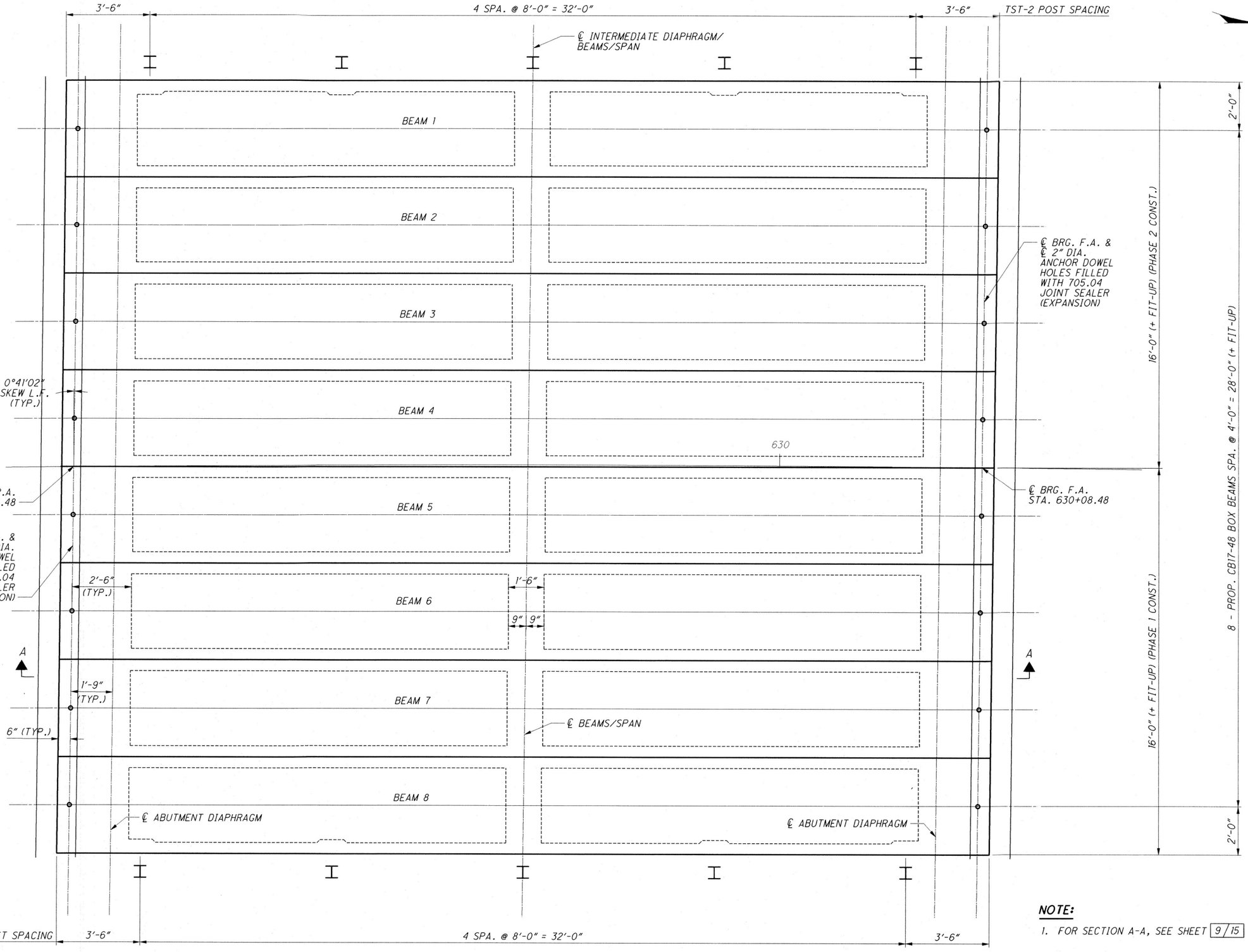

BEAM LAYOUT PLAN

NOTE:

1. FOR SECTION A-A, SEE SHEET 9/15
2. FOR DETAILS NOT SHOWN, SEE SCD PSBD-2-07.

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DJL	XXX	3801772	

BEAM LAYOUT PLAN
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

10 / 15

51
60

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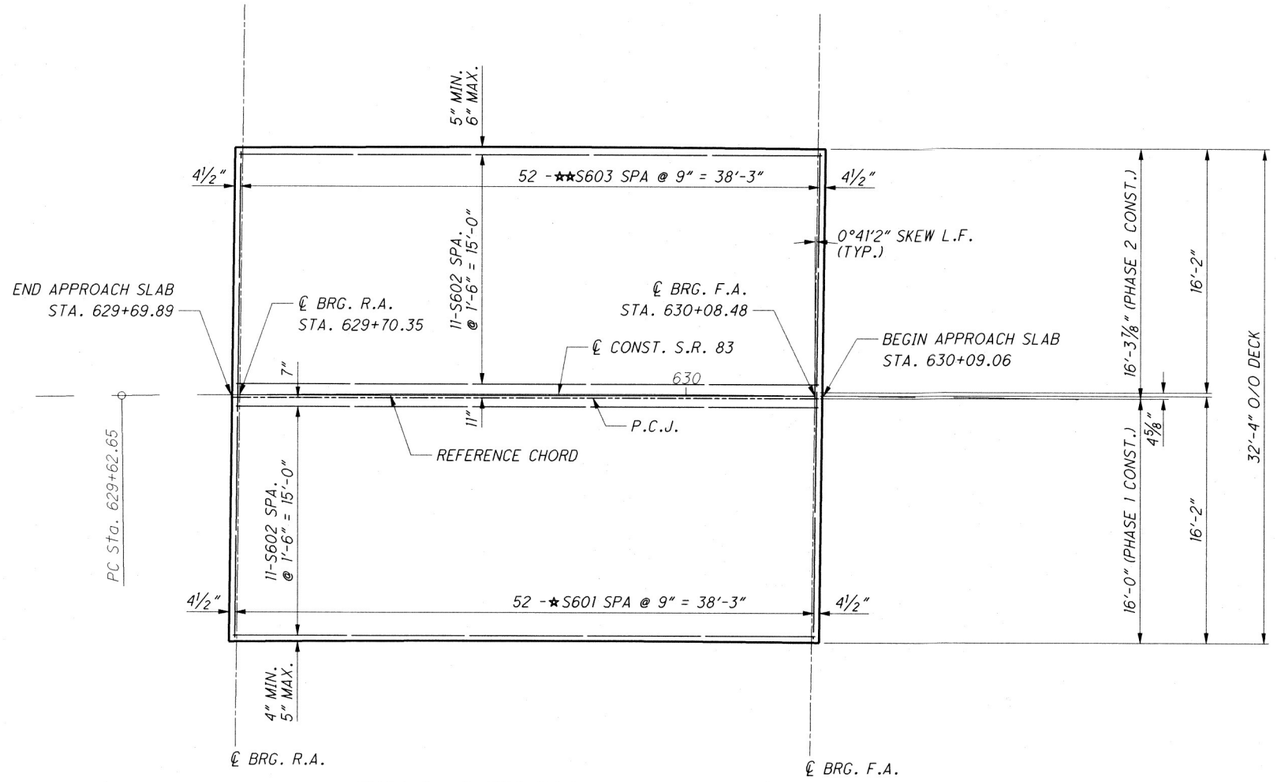
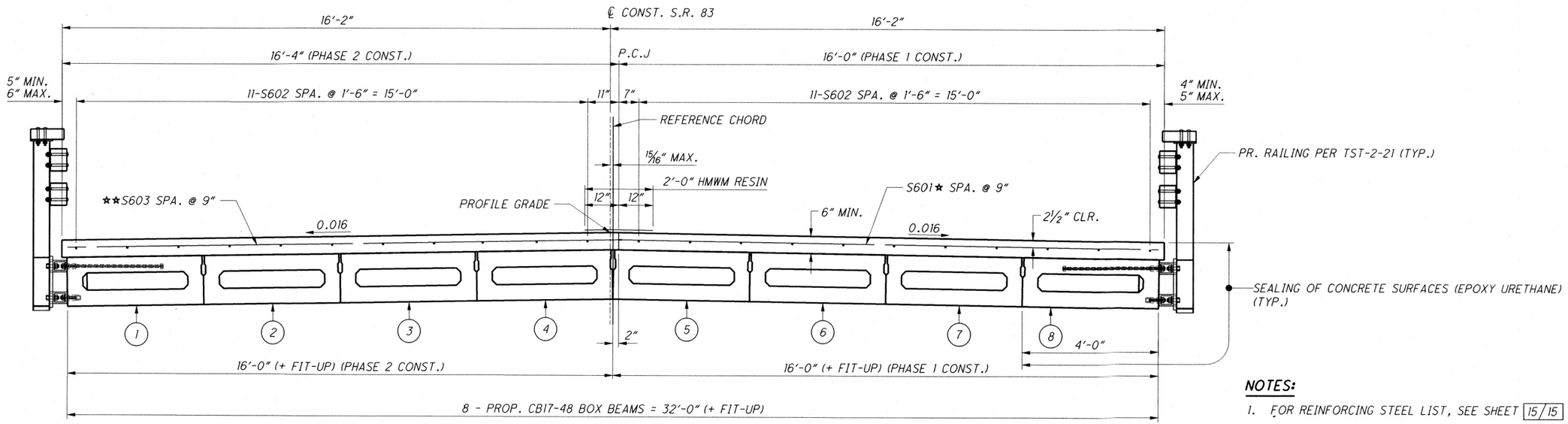
CURVE DATA
S.R. 83
P.I. Sta. 630+74.32
Δ = 5° 34' 44" (RT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 111.67'
L = 223.16'
E = 2.72'
P.T. STA. 631+85.81



DECK SLAB REINFORCING PLAN



TRANSVERSE SECTION

NOTES:

1. FOR REINFORCING STEEL LIST, SEE SHEET 15/15
2. ★ MECHANICAL CONNECTOR (FEMALE END)
   ★★ MECHANICAL CONNECTOR (MALE END)
3. (#) BEAM NUMBER

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ENGINEERING

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801712	

SLAB PLAN AND TRANSVERSE SECTION
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

11 / 15

52
60

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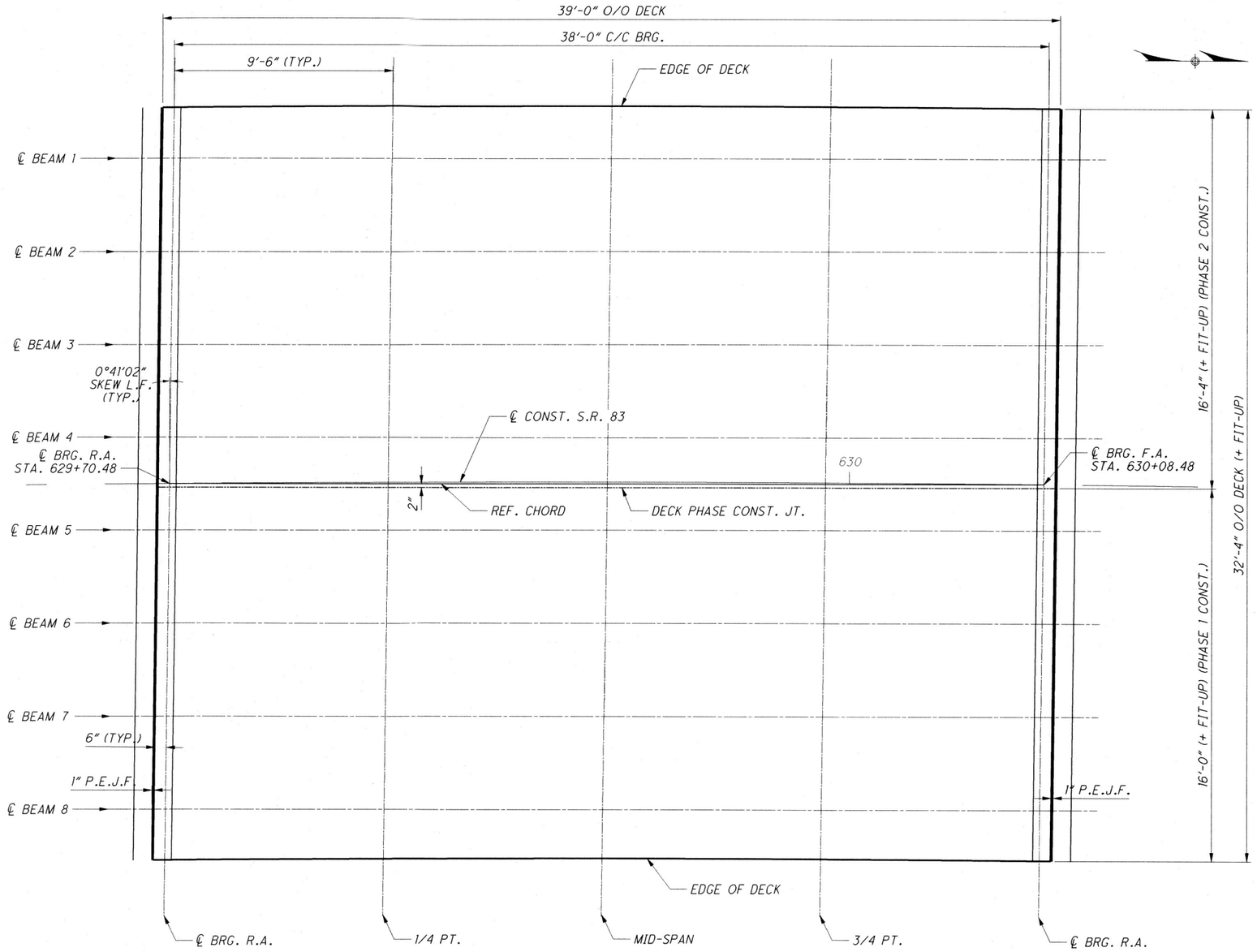
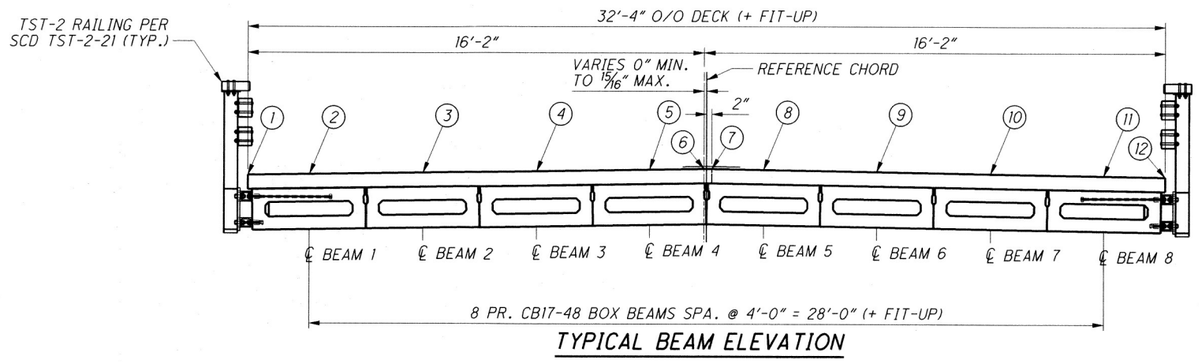


ELEVATION PLAN



TYPICAL BEAM ELEVATION

NOTES:

1. FOR FINAL DECK SURFACE ELEVATION TABLE, SEE SHEET 13/15
2. FOR SCREED ELEVATION TABLE, SEE SHEET 13/15

LEGEND FOR CHARTS ON SHEET 13/15

1. LEFT DECK EDGE
2. ℄ BEAM 1
3. ℄ BEAM 2
4. ℄ BEAM 3
5. ℄ BEAM 4
6. PROFILE GRADE LINE
7. PHASE CONSTRUCTION JOINT
8. ℄ BEAM 5
9. ℄ BEAM 6
10. ℄ BEAM 7
11. ℄ BEAM 8
12. RIGHT DECK EDGE

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801772	

DECK ELEVATION LOCATION REFERENCE

BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

12 / 15

53
60

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FINAL DECK SURFACE ELEVATIONS

LOCATION	℄ BRG. R.A.		1/4 SPAN		1/2 SPAN		3/4 SPAN		℄ BRG. F.A.	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
LEFT DECK EDGE	629+70.80	834.74	629+80.23	834.81	629+89.67	834.86	629+99.10	834.89	630+08.54	834.91
CL BEAM 1	629+70.76	834.77	629+80.20	834.84	629+89.64	834.89	629+99.09	834.93	630+08.53	834.94
CL BEAM 2	629+70.68	834.83	629+80.13	834.91	629+89.60	834.96	629+99.05	834.99	630+08.51	835.01
CL BEAM 3	629+70.60	834.90	629+80.07	834.97	629+89.55	835.02	629+99.02	835.06	630+08.50	835.07
CL BEAM 4	629+70.52	834.96	629+80.01	835.03	629+89.50	835.09	629+98.99	835.12	630+08.49	835.14
P.G.	629+70.48	834.99	629+79.97	835.06	629+89.48	835.12	629+98.98	835.15	630+08.48	835.17
PHASE CONST. JOINT	629+70.47	834.99	629+79.97	835.06	629+89.47	835.11	629+98.98	835.15	630+08.48	835.17
CL BEAM 5	629+70.43	834.96	629+79.94	835.03	629+89.45	835.08	629+98.96	835.12	630+08.47	835.14
CL BEAM 6	629+70.35	834.90	629+79.88	834.97	629+89.40	835.02	629.98.93	835.05	630+08.46	835.07
CL BEAM 7	629+70.27	834.83	629+79.81	834.90	629+89.36	834.96	629+98.90	834.99	630+08.44	835.01
CL BEAM 8	629+70.19	834.77	629+79.75	834.84	629+89.31	834.89	629+98.87	834.93	630+08.43	834.94
RIGHT DECK EDGE	629+70.15	834.73	629+79.71	834.80	629+89.28	834.86	629+98.85	834.89	630+08.42	834.91

SCREED ELEVATIONS

LOCATION	℄ BRG. R.A.		1/4 SPAN		1/2 SPAN		3/4 SPAN		℄ BRG. F.A.	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
LEFT DECK EDGE	629+70.80	834.74	629+80.23	834.82	629+89.67	834.87	629+99.10	834.90	630+08.54	834.91
P.G.	629+70.48	834.99	629+79.97	835.07	629+89.48	835.13	629+98.98	835.16	630+08.48	835.17
PHASE CONST. JOINT	629+70.47	834.99	629+79.97	835.07	629+89.47	835.12	629+98.98	835.16	630+08.48	835.17
RIGHT DECK EDGE	629+70.15	834.73	629+79.71	834.81	629+89.28	834.87	629+98.85	834.90	630+08.42	834.91

NOTES

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.
2. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FOR DECK ELEVATION LOCATION REFERENCE, SEE SHEET 12/15
4. DECK SLAB THICKNESS FOR CONCRETE QUANTITY:
   THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT AND BEAM CAMBER.
5. FOR CAMBER DETAILS AND NOTES SEE SHEET 9/15

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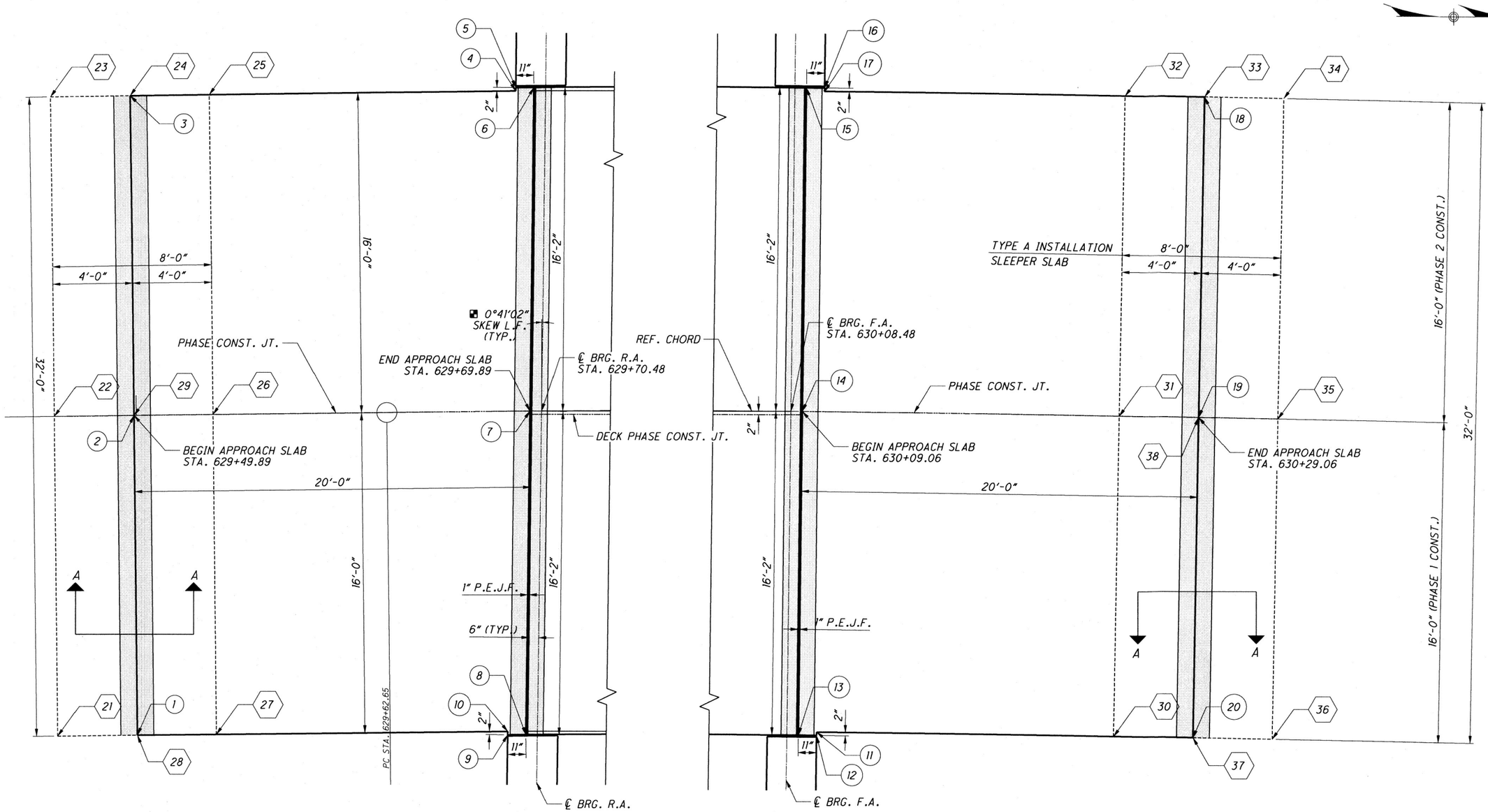
DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED MVC | DRAWN MVC | REVIEWED XXX | DATE MM/DD/YY
CHECKED DJL | REVISED XXX | STRUCTURE FILE NUMBER 3801772

FINAL DECK SURFACE AND SCREED ELEVATIONS
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525



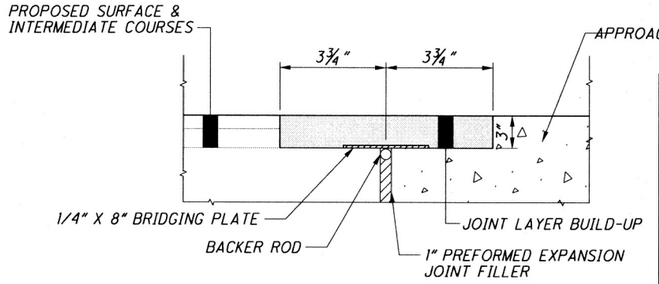
LEGEND

(1) APPROACH SLAB ELEVATION (SURFACE)

(23) SLEEPER SLAB ELEVATION (13" BELOW SURFACE)

NOTES:

1. HOT APPLIED JOINT SEALER (CMS 705.04) SHALL BE INCLUDED WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=13"), AS PER PLAN FOR PAYMENT.
2. FOR DETAILS NOT SHOWN, SEE SCD AS-1-15 AND SCD AS-2-15.
3. ■ FROM REFERENCE CHORD



ITEM 846 - POLYMER MODIFIED ASPAHLT EXPANSION JOINT SYSTEM SECTION A-A

APPROACH SLAB SURFACE ELEVATION AND SLEEPER SLAB TOP SURFACE ELEVATION

REAR APPROACH SLAB		REAR SLEEPER SLAB		FORWARD APPROACH SLAB		FORWARD SLEEPER SLAB	
POINT	ELEV.	POINT	ELEV.	POINT	ELEV.	POINT	ELEV.
1	834.52	21	833.39	11	834.91	30	833.82
2	834.78	22	833.64	12	834.91	31	834.07
3	834.52	23	833.39	13	834.91	32	833.82
4	834.73	24	833.44	14	835.17	33	832.80
5	834.72	25	833.49	15	834.91	34	833.79
6	834.73	26	833.74	16	834.91	35	834.05
7	834.99	27	833.49	17	834.91	36	833.79
8	834.73	28	833.44	18	833.89	37	832.80
9	834.72	29	833.69	19	833.89	38	833.06
10	834.72			20	834.14		

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
MVC	MVC	XXX	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	XXX	3801712	

APPROACH SLAB DETAILS
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

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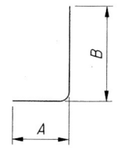
MARK	NUMBER				TOTAL	LENGTH	WEIGHT	TYPE	DIMENSION						
	PHASE 1		PHASE 2						A	B	C	D	E	R	INC.
	SUBSTRUCTURE														
	REAR	FORWARD	REAR	FORWARD											
*A501	8				8	23' - 4"	195	STR.							
A502	4				4	9' - 1"	38	STR.							
A503	6				6	6' - 6"	41	STR.							
*A504	2				2	16' - 6"	34	STR.							
*A505		8			8	23' - 7"	197	STR.							
A506		4			4	9' - 6"	40	STR.							
A507		6			6	6' - 11"	43	STR.							
*A508		2			2	16' - 3"	34	STR.							
**A509			8		8	24' - 9"	207	STR.							
A510			4		4	11' - 6"	48	STR.							
A511			6		6	8' - 10"	55	STR.							
**A512			2		2	15' - 8"	33	STR.							
**A513				8	8	24' - 6"	204	STR.							
A514				4	4	11' - 0"	46	STR.							
A515				6	6	8' - 4"	52	STR.							
**A516				2	2	15' - 9"	33	STR.							
A601	34	34	32	32	132	5' - 10"	1157	1	2' - 2"	3' - 10"					
A602	17	17	16	16	66	4' - 11"	487	2	2' - 4"	7"	2' - 4"				
A603	1	1	1	1	4	12' - 0"	72	3	2' - 2"	3' - 5"					
AD601	17		16		33	5' - 8"	281	STR.							
AD602	17		16		33	5' - 11"	293	STR.							
AD603	7		9		16	9' - 9"	234	1	2' - 2"	7' - 9"					
AD604	6		8		14	10' - 0"	210	1	2' - 2"	8' - 0"					
AD605		17		16	33	5' - 10"	289	STR.							
AD606		17		16	33	6' - 1"	302	STR.							
AD607		6		9	15	9' - 11"	223	1	2' - 2"	7' - 11"					
AD608		8		9	17	10' - 2"	260	1	2' - 2"	8' - 2"					
*A801	4				4	22' - 0"	235	STR.							
*A802		4			4	21' - 9"	232	STR.							
**A803			4		4	21' - 0"	224	STR.							
**A804				4	4	21' - 3"	227	STR.							
D801	11	11	11	11	44	4' - 7"	538	13	1' -6"	1' - 2 5/8"	1' - 2 5/8"	1' -6"			
SUB-TOTAL FOR SUBSTRUCTURE							6,564								

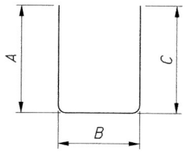
MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSION						
	PHASE 1	PHASE 2	TOTAL				A	B	C	D	E		INC.
	SUPERSTRUCTURE												
*S601	52		52	15' - 10"	1237	STR.							
S602	11	11	22	38' - 6"	1272	STR.							
**S603		52	52	16' - 2"	1263	STR.							
SUB-TOTAL FOR SUPERSTRUCTURE					3,772								
TOTAL WEIGHT CARRIED TO THE GENERAL SUMMARY					10,336								

REINFORCING STEEL NOTES:

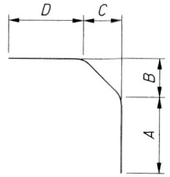
1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
4. REFER TO CMS SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. * MECHANICAL CONNECTOR (FEMALE)
   ** MECHANICAL CONNECTOR (MALE)



TYPE-1



TYPE-2



TYPE-13

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED MVC | DRAWN MVC | CHECKED XXX | REVISED XXX | REVIEWED XXX | DATE MM/DD/YY | STRUCTURE FILE NUMBER 3801772

REINFORCING STEEL LIST
BRIDGE NO. HOL-00083-11.960
OVER COLLIERS RUN

HOL-83-11.91
PID No. 108525

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