

INDEX OF SHEETS:

TITLE SHEET SCHEMA TYPICAL GENERA MAINTE GENERA NOT USE SUBSUN PROJECT PLAN -PLAN AN PLAN AN PLAN AN CROSS S CROSS S CROSS SE SUPEREI INTERCH SPLITTEF INTERSE DRIVE D SIDEWA DRAINA CULVERT

LATITUDE: 41°42'55" N LONGITUDE: 83°41'18" W

N

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

DESIGN DESIGNATION

DESIGN DESIGNATION		CR 4 - SR 51 (WEST OF	SR 51 (EAST OF
	US 23	US 23)	US 23)
CURRENT ADT (2026)	_ 68,030	45,650	27,430
DESIGN YEAR ADT (2046)	_ 72,790	46,920	28,460
DESIGN HOURLY VOLUME (2046)	_ 4030	4,880	3,040
DIRECTIONAL DISTRIBUTION	_ 0.50	0.54	0.62
TRUCKS (24 HOUR B&C)	_ 21%	3%	3%
DESIGN SPEED	_ 70 MPH	40 MPH	40 MPH
LEGAL SPEED	_ 65 MPH	35 MPH	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:			
US-23: URBAN FREEWAY SR 51: URBAN PRINCIPAL ARTERIAL			
NHS PROJECT	_ YES		

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED



PLAN PREPARED BY:

ARCADIS

ENGINEER'S SEAL		SUPPLEMENTAL	SPECIAL	ENGINEE
BRIDGE NO. LUC-51-1285	SIANDARD CONSTRUCTION DRAWINGS	SPECIFICATIONS		BRID RAMPS
FRANK J.	BP-2.1 1/21/22 MGS-1.1 7/16/21 HL-30.11 7/21/23 MT-98.28 1/17/20 TC 22.20 1/17/14 TC-74.10 7/21/23 & BP-2.2 1/15/21 MGS-2.1 1/19/18 HL-30.21 4/17/20 MT-98.29 1/17/20 TC 41.10 7/19/13 TC-81.22 7/21/23 &	304 1/19/2 <mark>4</mark>	WATERWAY 2/4/25	JULIA
★ GETZ E-66992	BP-2.5 7/19/24 MGS-3.1 1/19/18 HL-30.22 1/15/21 MT-98.30 1/17/20 TC 41.20 10/18/13 TC-83.20 1/19/24 BP-3.1 1/19/24 MGS-3.2 1/18/13 HL-30.31 7/21/23 MT-99.20 4/19/19 TC 41.30 4/21/23 TC-85.10 1/19/24 BP-3.2 1/18/19 MGS-4.2 1/18/13 HL-40.20 1/19/24 MT-99.30 1/17/20 TC 41.40 10/18/13 TC-85.20 4/21/23 B	307 1/21/22		3 * E-69
SS/ONAL ENG		313 7/21/23		ESSIONA
SIGNED: DATE:	BP-6.1 7/19/23 MGS-6.1 1/19/18 HL-60.12 7/21/23 MT-101.70 4/21/23 TC-42.10 10/18/13 AS-2-15 1/20/23 E BP-7.1 1/19/24 MGS-6.2 7/19/19 HL-60.31 7/21/23 MT-101.75 7/21/23 TC-42.20 10/18/13 CPA-1-08 7/18/08 E	328 1/19/18		SIGNED: DATE:
ENGINEER'S SEAL ROADWAY & DRAINAGE	BP-8.2 1/18/19 HW-2.1 7/15/22 ITS-11.10 1/20/23 MT-101.90 7/17/20 TC 51.10 10/18/13 CS-1-08 1/15/21 E CB-2-2ABC 1/20/23 HW-2.2 7/20/18 ITS-14.10 4/21/23 MT-110.10 7/19/13 TC 51.11 1/15/16 SBR-1-20 1/20/23 E	336 1/19/24		ENGINEE MAINTENANC
RAMPS - US-23		378 1/21/22		
SHANE M.	CB-6 1/21/22 RM-4.3 1/21/22 MT-95.30 7/19/19 MT-104.10 1/19/24 TC 61.10 4/21/23	394 4/16/21 902 7/19/19 905 4/17/20		ERIC
★ GAULT E-67241	DM-1.1 7/17/20 RM-5.2 7/21/23 MT-95.32 4/19/19 TC-9.31 7/21/23 TP-64.10 7/21/23	908 10/20/17 909 1/19/24		★ THEL ► 80:
S/ONAL ENG	DM-4.4 1/15/16 HL-10.12 7/21/23 MT-95.60 4/19/19 TC-16.22 7/21/23 TC-65.11 1/19/24	9134/16/249217/19/24		ESS/ONA
SIGNED: DATE:	F-3.3 7/19/13 HL-20.11 7/21/28 MT-98.20 4/19/19 TC-21.21 1/20/23 TC-72.20 7/21/23 Second Secon	928 1/19/18		SIGNED: DATE:
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STATE OF OHIO DEPARTMENT OF TRANSPORTATION *LUC-23-11.75*

PART 1

CITY OF SYLVANIA

LUCAS COUNTY

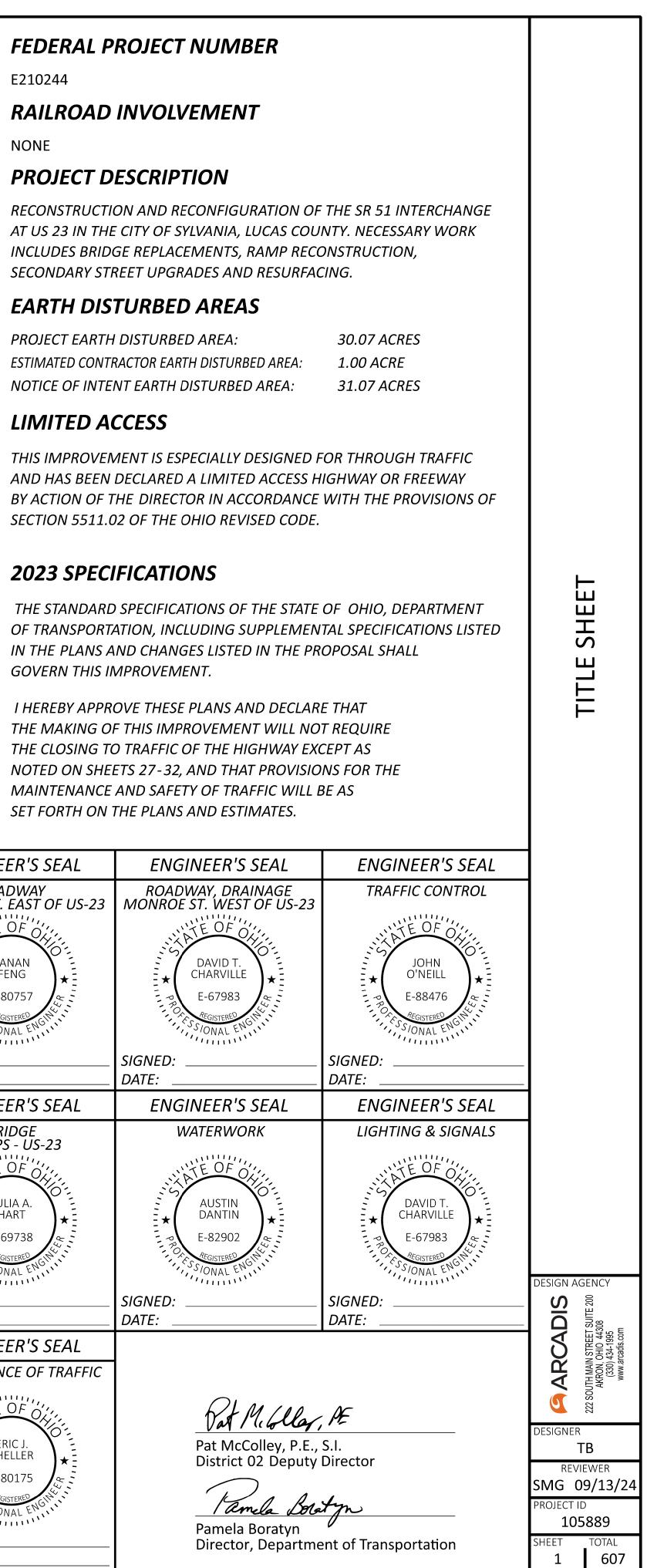
FOR PART 2, SEE LUC-51-11.08

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		XIANA FEN
	- PROX	XIANA FEN E-807 SS/ONA
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	SIGNED: DATE:	
	ENG	INEEF
NS	RA	BRID MPS -
07/22		ATEO
/4/25		JULIA HAR
	3	E-697



FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

ITEM 607 - FENCE REBUILT, TYPE CL

CAREFULLY RECONDITION AND RE-ERECT FENCE AND COMPONENT PARTS AS DETAILED ON THE PLANS. DO NOT DAMAGE THE FENCE OR COMPONENT PARTS. ANY NEW PARTS WHICH ARE NEEDED. AS DETERMINED BY THE ENGINEER, WILL BE SUPPLIED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

THE AMOUNT OF REBUILT FENCE TO BE PAID FOR WILL BE THE NUMBER OF FEET REBUILT, COMPLETE IN PLACE, AND MEASURED AS PROVIDED FOR IN SECTION 607.09 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS)

PAYMENT FOR THE ABOVE WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 607, FENCE REBUILT, TYPE CL.

ITEM 607 - FENCE, MISC.: WOOD FENCE, WITH 5' RAILS

CONSTRUCT A WOOD BIKEWAY RAILING PER SCD RM-5.2, EXCEPT PROVIDE A MAXIMUM RAIL LENGTH OF 5'-0" TO ALLOW FOR THE CONSTRUCTION OF THE RAILING ALONG THE ADJACENT CURVED SIDEWALK.

BENCHING OF FOUNDATION SLOPES

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

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO PERFORM THE SPECIAL BENCHING.

ITEM 203 - EXCAVATION

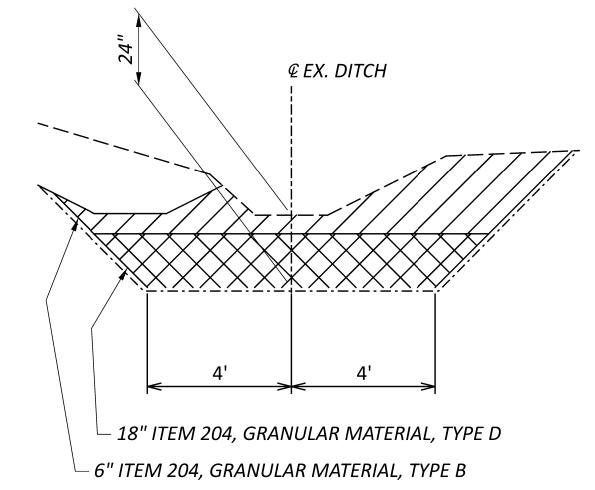
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781 CY

ITEM 203 - EMBANKMENT

SHALLOW EMBANKMENT OVER EXISTING DITCHES

IN AREAS NOTED IN THE CROSS SECTIONS WHERE SHALLOW EMBANKMENT IS BEING PLACED OVER AN EXISTING DITCH BOTTOM THE SOIL REMIDIATION SHOWN BELOW WILL BE PERFORMED PRIOR TO PLACEMENT OF THE EMBANKMENT:



ITEM 204 - PROOF ROLLING

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

ITEM 204 – PROOF ROLLING 20 HOUR.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

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

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

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

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

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

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

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

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ITEM 202 - REMOVAL MISC.: DECORATIVE WALL

THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING DECORATIVE BRICK WALL ALONG THE SOUTH SIDE OF MONROE STREET FROM STA. 171+91 TO STA. 172+37 AS WELL AS THE DECORATIVE CONCRETE WALL IN THE MONROE ST MEDIAN FROM STA. 186+55 TO STA. 187+81. THE CONTRACTOR SHALL REMOVE ALL PORTIONS OF THE WALLS INCLUDING BUT NOT LIMITED TO CONCRETE SLABS, BRICK PILASTERS, BRICK WALL, AND ALL PORTIONS OF THE WALL THAT ARE BELOW GRADE INCLUDING THE FOUNDATION.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 202 - REMOVAL MISC.: DECORATIVE WALL, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, DISPOSAL, AND OTHER INCIDENTALS NECESSARY TO REMOVE THE EXISTING DECORATIVE BRICK WALL.

ITEM SPECIAL - GROUND WATER MONITORING WELL ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING TO GRADE AND PROTECTING AN EXISTING ENVIRONMENTAL MONITORING WELL. THE EXISTING MONITORING WELLS LOCATED ON THE SOUTH SIDE OF MONROE STREET AT STA. 171+46 AND STA. 171+74 SHALL NOT BE IMPACTED DURING CONSTRUCTION ACTIVITIES. THE MONITORING WELLS SHALL BE ADJUSTED TO MATCH THE PROPOSED PAVEMENT ELEVATION OF THE DRIVEWAY AND RETAIN ALL FUNCTIONS OF THE WELL THAT WERE PRESENT PRIOR TO THE START OF CONSTRUCTION.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM SPECIAL - GROUND WATER MONITORING WELL ADJUSTED TO GRADE, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS AND OTHER INCIDENTALS NECESSARY TO ADJUST AND PROTECT EACH GROUND WATER MONITORING WELL

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED. AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 202 - REMOVAL MISC.: SPRINKLER HEAD, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, DISPOSAL, AND OTHER INCIDENTALS NECESSARY TO REMOVE THE EXISTING SPRINKLER HEADS.

ITEM 202 - REMOVAL MISC.: SPRINKLER HEAD

THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING SPRINKLER HEADS WITHIN THE BELOW LOCATIONS:

MONROE ST STA. 176+68 TO STA. 178+07 LT MONROE ST STA. 177+35 TO STA. 178+06 RT MONROE ST STA. 187+07 TO STA. 187+48 LT ALEXIS RD STA. 38+72 TO STA. 38+98 LT

WITHIN THE SPECIFIED RANGES ABOVE. THE CONTRACTOR SHALL REMOVE ALL PORTIONS OF THE SPRINKLERS INCLUDING BUT NOT LIMITED TO SPRINKLER HEADS, FITTINGS, WATER SUPPLY PIPE, VALVES, VALVE BOX, AND ANY SPRINKLER HEADS NOT SHOWN ON THE PLANS.

> ES NOTI ENERAL **()**

DESIGN A	AGENCY								
SIQADIS	1111 SUPERIOR AVENUE SUITE 1300 CLEVELAND, OHIO 44114 (216) 781-6177 www.arcadis.com								
DESIGNE	DESIGNER								
	ТВ								
RE	/IEWER								
	09/13/24								
PROJECT	ID								
10	5889								
SHEET	TOTAL								
18	607								

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)). LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER ODOT AUTHORITY. ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS. ORIGINAL POSTED SPEED LIMIT. INSTALLATION AND/OR REMOVAL OF ALL MAINTENANCE OF TRAFFIC **OPERATIONS, PHASE SWITCHES, PAVEMENT MARKING** INSTALLATION/REMOVAL, INCLUDING TRAFFIC SIGNAL AND SIGN WORK SHALL BE LIMITED TO OVERNIGHT HOURS OF 8 PM TO 6 AM. EARTHWORK FOR MAINTAINING TRAFFIC THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY. ORIGINAL POSTED WORKERS EMBANKMENT FOR MAINTAINING TRAFFIC 237 CY SPEED PRESENT LIMIT 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 70 60 UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED 65 55 TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG 60 55 THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED. 55 50 THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE GENERAL SUMMARY. MAINTENANCE OF TRAFFIC. ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY ITEM 615, ROADS FOR MAINTAINING TRAFFIC LUMP SUM ASSUMING 2 DSL SIGN ASSEMBLIES FOR 24 MONTHS WORK ZONE SPEED ZONES (WZSZS) THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISIONS HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW: SPECIFIED HEREIN. WZSZ REVISION NUMBERS COUNTY-ROUTE-SECTIONS DIRECTION WZ-15246 LUC-23-(10.81-12.20) NB/SB SEASON SHALL CONFORM TO 621. POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH THROUGH APRIL 1. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM ENGINEER, AT THE CONTRACTOR'S EXPENSE. TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK. AS PER C&MS 621.08. IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME. THE ENGINEER. C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE PAID FOR WITH THE FOLLOWING BID ITEMS: HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH *TYPE A (446)* OTHER. ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED WORK ZONE INCREASED PENALTIES SIGN (R11-H5a) LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ. WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10. ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED CURRENT SAFETY CRITERIA. LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

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WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE- CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THÉ SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MÜLTI-LÄNE HIGHWAYS

SITIVE WITHOUT POSITIVE TION PROTECTION							
WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT					
65	55	65					
60	50	60					
60	50	60					
55	45	55					

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE

48 SIGN MNTH

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

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

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

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15

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

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

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT, AS DETERMINED BY

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5") 8955 SY

ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM,

373 CY

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

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

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

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

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

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 4 EACH

US-23 RUMBLE STRIP REMOVAL

PRIOR TO MAINTENANCE OF TRAFFIC PHASE 5A, WHEN THE INSIDE NORTHBOUND US-23 LANE IS SHIFTED ONTO THE EXISTING SHOULDER, THE EXISTING RUMBLE STRIPS SHALL BE REMOVED AND FILLED IN WITH ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22. THE CONTRACTOR SHALL PLANE OFF 1.5" OF PAVEMENT AND REPLACE WITH ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 THE ENTIRE LENGTH THAT THE LANES ARE SHIFTED TOWARDS THE MEDIAN, INCLUDING THE TAPER AREAS.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, AND REMOVAL, AND REHABILITATION OF THE EXISTING RUMBLE STRIPS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 254, PAVEMENT PLANING, AS PER PLAN (T=1.5")

ITEM 441, ASPHALT CONCRETE SURFACE COURSE,

TYPE 1, (449), PG64-22

529 SY

22 CY

642-32 APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES

APPROVED MOT EXCEPTION(S) INCLUDE:

PERMITTED LANE CLOSURE EXCEPTION FOR US-23 SB INSIDE LANE CLOSURE DURING PHASE 1 FOR 1 WEEKEND (9PM FRIDAY TO 5 AM MONDAY)

PERMITTED LANE CLOSURE EXCEPTION FOR US-23 SB INSIDE LANE CLOSURE DURING PHASE 2 FOR 1 WEEKEND (9PM FRIDAY TO 5 AM MONDAY)

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

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 07/25/24 FOR PID 105889" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

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

THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

DESIGN	AGENCY
ARCADIS	1111 SUPERIOR AVENUE SUITE 1300 CLEVELAND, OHIO 44114 (216) 781-6177 www.arcadis.com
DESIGNE	R
	EJT
RE	VIEWER
TJR	09/13/24
PROJECT	ID
10)5889
SHEET	TOTAL
24	607

SEQUENCE OF CONSTRUCTION

SEASON 1

<u>PREPHASE</u>

OVER A PERIOD OF ONE WEEKEND FROM 9 PM FRIDAY TO 5 AM MONDAY, THE CONTRACTOR SHALL CLOSE THE INSIDE LANE OF SOUTHBOUND US-23. THIS LANE CLOSURE WILL ALLOW FOR THE INSTALLATION OF TEMPORARY PAVEMENT THAT IS REQUIRED DURING PHASE 1 AND 2. THE LANE CLOSURE SHALL BE INSTALLED AS PER SCD MT-95.30.

<u>PHASE 1</u>

DURING THE FIRST PHASE OF CONSTRUCTION, US-23 SOUTHBOUND MAINLINE TRAFFIC SHALL BE SHIFTED EAST TOWARDS THE MEDIAN ONTO TEMPORARY PAVEMENT. THE US-23 SOUTHBOUND ON-RAMP 2 SHALL BE CONSTRUCTED, INCLUDING THE PROPOSED STRUCTURE (SFN: 4805137). THE SOUTHBOUND RAMRS SHALL BE SHIETED TO THE NORTH AND EAST ON EXISTING AND TEMPORARY PAVEMENT TO ALLOW SPACE FOR CONSTRUCTION. AS MUCHOF THE NORTHBOUND OFF-RAMP AS POSSIBLE SHALL BE CONSTRUCTED THAT IS OUTSIDE OF THE EXISTING PAVEMENT AREAS. THIS INCLUDES THE PROPOSED NORTHBOUND US-23 OFF-RAMP STRUCTURE (SFN: 4805136). PEDESTRIANS FROM THE RIVER TRAIL SHALL BE DETOURED AS SHOWN ON SHEET 27. NO DAYTIME LANE CLOSURES ARE ALLOWED ALONG MONROE STREET OR ALEXIS ROAD DURING THIS PHASE. SINGLE LANE OVERNIGHT LANE CLOSURES ALLOWED FROM 8 PM TO 6 AM ALONG MONROE STREET AND ALEXIS ROAD. DURING THIS TIME FRAME, THE OUTSIDE WESTBOUND LANE OF ALEXIS ROAD SHALL BE CLOSED IN THE VICINITY OF ELLIOTT DRIVE. CONSTRUCT THE PROPOSED PAVEMENT ON THE NORTH SIDE OF ALEXIS ROAD (ROUGHLY STA. 46+00 TO STA. 47+50). THIS WILL ALLOW FOR U-TURNS IN FUTURE MOT PHASES. CLOSE THE OUTSIDE AND INSIDE SHOULDERS OF US-23 IN THE VICINITY OF THE MONROE STREET BRIDGE. THESE SHOULDER CLOSURES SHALL REMAIN IN PLACE THROUGHOUT THE PROJECT DURATION. THESE SHOULDER CLOSURES WILL ALLOW FOR A MAXIMUM AMOUNT OF SPACE FOR THE CONTRACTOR TO WORK ON THE BRIDGE.

<u>PHASE 2</u>

DURING THE SECOND PHASE OF CONSTRUCTION, US-23 SOUTHBOUND MAINLINE TRAFFIC SHALL BE IN THE SAME LOCATION AS PHASE 1 UNTIL IT CROSSES THE OTTAWA RIVER BRIDGE WHERE IT WILL SHIFT BACK TO THE ORIGINAL LOCATION. THE EASTERN PORTION OF THE US-23 SOUTHBOUND RAMP SHALL BE CONSTRUCTED. WORK ON THE NORTHBOUND RAMPS AND PROPOSED NORTHBOUND US-23 OFF-RAMP STRUCTURE (SFN: 4805136) SHALL CONTINUE FROM PHASE 1. THE PEDESTRIAN DETOUR FROM PHASE 1 SHALL REMAIN IN PLACE. NO DAYTIME LANE CLOSURES ARE ALLOWED ALONG MONROE STREET OR ALEXIS ROAD DURING THIS PHASE. SINGLE LANE OVERNIGHT LANE CLOSURES ALLOWED FROM 8 PM TO 6 AM ALONG MONROE STREET AND ALEXIS ROAD. WHEN SOUTHBOUND US-23 WORK IS COMPLETE, THE CONTRACTOR SHALL CLOSE THE INSIDE LANE OVER THE COURSE OF ONE WEEKEND FROM 9 PM FRIDAY TO 5 AM MONDAY TO REMOVE THE TEMPORARY PAVEMENT THAT WAS USED PHASE 1 AND 2. THE LANE CLOSURE SHALL BE AS PER SCD MT-95.30.

<u>SEASON 2</u>

<u>PHASE 3</u>

DURING THE THIRD PHASE OF CONSTRUCTION, MONROE STREET BETWEEN HARROUN ROAD AND GLASGOW ROAD SHALL BE SHIFTED TO THE NORTH. THE SOUTHERN HALF OF MONROE STREET INCLUDING ALL ROADWAY LAYERS EXCEPT FOR THE SURFACE COURSE, CURB AND GUTTER. SIDEWALKS. AND DRIVES SHALL BE CONSTRUCTED. PROPOSED WATERLINE WORK ON THE NORTH SIDE OF MONROE STREET BETWEEN GLASGOW ROAD TO THE EAST SIDE OF US-23 SHALL BE INSTALLED. WATERLINE WORK ALONG ACRES ROAD TO THE SOUTHWEST CORNER OF MONROE STREET AND THE EXISTING NORTHBOUND RAMPS SHALL ALSO BE INSTALLED. MONROE STREET IS TO BE CLOSED FROM GLASGOW ROAD TO ACRES ROAD. THE PROPOSED STRUCTURE (SFN:4805224) SHALL BE CONSTRUCTED. ALEXIS ROAD IS TO BE CLOSED FROM MONROE STREET TO ACRES ROAD. MONROE STREET TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 31 THE SOUTH HALF OF ALEXIS ROAD, FROM ACRES ROAD TO THE END OF THE PROJECT, SHALL BE CONSTRUCTED DURING THIS PHASE. MONROE STREET AND ALEXIS ROAD PEDESTRIAN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 28 . RAMP B SHALL BE CONSTRUCTED.

<u>PHASE 3A</u>

US-23 SOUTHBOUND ON-RAMP TRAFFIC SHALL BE SHIFTED ONTO THE FINISHED PAVEMENT AREA ON MONROE STREET BEGINNING AT STATION 170+00. THE FINISHED RAMP CURVE SHALL BE IMPLEMENTED. ALL OTHER WORK AREAS AND TRAFFIC LANE LOCATIONS REMAIN UNCHANGED FROM PHASE 3. THE CONTRACTOR SHALL MOVE TO PHASE 3A WITHIN 21 DAYS OF ESTABLISHING PHASE 3 MOT WEST OF GLASGOW INTERSECTION.

<u>PHASE 4</u>

DURING THE FOURTH PHASE OF CONSTRUCTION, MONROE STREET BETWEEN HARROUN ROAD AND GLASGOW ROAD SHALL BE SHIFTED TO THE SOUTH. THE NORTHERN HALF OF MONROE STREET INCLUDING ALL ROADWAY LAYERS EXCEPT FOR THE SURFACE COURSE, CURB AND GUTTER, SIDEWALKS, AND DRIVES SHALL BE CONSTRUCTED. MONROE STREET IS TO REMAIN CLOSED FROM GLASGOW ROAD TO ACRES ROAD. WORK ON THE PROPOSED STRUCTURE (SFN:4805224) SHALL CONTINUE. ALEXIS ROAD IS TO REMAIN CLOSED FROM MONROE STREET TO ACRES ROAD. THE NORTH HALF OF ALEXIS ROAD, FROM ACRES ROAD TO THE END OF THE PROJECT, SHALL BE CONSTRUCTED DURING THIS PHASE. THE NORTH LEG OF THE ACRES ROAD AND ALEXIS ROAD INTERSECTION SHALL BE CLOSED. ACRES ROAD SHALL BE DETOURED AS SHOWN ON SHEET 31. THE PEDESTRIAN DETOUR FROM PHASE 3 SHALL REMAIN IN PLACE. THE NORTHERN-MOST SECTION OF THE US-23 SOUTHBOUND OFF-RAMP SHALL BE CONSTRUCTED. PROPOSED TRAFFIC SIGNAL POLES, HEADS, AND CORRESPONDING SIGNAL ITEMS WILL BE ERECTED AND UTILIZED FOR THIS PHASE OF CONSTRUCTION. THE PHASE 4 MAINTENANCE OF TRAFFIC TEMPORARY SIGNAL MODIFICATIONS FOR GLASGOW ROAD AND MONROE STREET ARE SHOWN ON SHEET 106 THE CONTRACTOR WILL ENSURE THE PROPOSED TRAFFIC SIGNAL INSTALLATION IS CONSTRUCTED AS PER THE CURRENT ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE EAST DRIVE TO THE CEMETARY OFF OF MONROE STREET SHALL BE CLOSED. ALL CEMETARY TRAFFIC SHALL ENTER AND EXIT AT THE SIGNAL AT THE INTERSECTION OF MONROE STREET AND HARROUN ROAD.

<u>PHASE 4A</u>

DURING THIS SUBPHASE, TRAFFIC ON MONROE STREET WILL REMAIN UNCHANGED. RAMP C AND RAMP D LANES ARE TO BE SHIFTED TO THE EAST ONCE THE PROPOSED RAMP WORK IS COMPLETE IN PHASE 4. THE TRAFFIC OPERATION TO AND FROM GLASGOW ROAD SHALL BE CHANGED TO A ONE LANE TWO WAY FLOW.

<u>PHASE 5A</u>

PHASE 5A IS A SUBPHASE OF PHASE 4. MONROE STREET BETWEEN HARROUN ROAD AND GLASGOW ROAD IS MOSTLY UNCHANGED, HOWEVER THE NORTHERN INTERSECTION AREA OF MONROE STREET AND GLASGOW ROAD SHALL BE CONSTRUCTED WHILE ALLOWING A SINGLE TWO-WAY LANE TO TRAVEL TO AND FROM GLASGOW ROAD. THE TWO-WAY SINGLE LANE OPERATION SHALL BE IN PLACE FOR A MAXIMUM OF 10 DAYS. MONROE STREET IS TO REMAIN CLOSED FROM GLASGOW ROAD TO ACRES ROAD. WORK ON THE PROPOSED STRUCTURE (SFN: 4805224) SHALL CONTINUE. PROPOSED RAMP B IS TO BE OPENED TO TRAFFIC. THE NORTHERN HALF OF THE MONROE STREET AND ACRES ROAD INTERSECTION AREA SHALL BE CONSTRUCTED. THE SOUTHERN HALF OF THE ALEXIS ROAD AND ACRES ROAD INTERSECTION AREA SHALL BE CONSTRUCTED. ACRES ROAD BETWEEN ALEXIS ROAD AND MONROE STREET SHALL BE REMOVED. THE PROPOSED US-23 SOUTHBOUND RAMP CONCRETE MEDIAN SEPARATING THE ON AND OFF-RAMP SHALL BE CONSTRUCTED. THE US-23 NORTHBOUND OFF-RAMP IS TO BE CLOSED DURING THIS PHASE AS PER MT-98.29 AND ALL OVERLAPPING PROPOSED PAVEMENT AREAS WITH EXISTING PAVEMENT AREAS ARE TO BE CONSTRUCTED AND COMPLETED BEFORE IMPLEMENTING THE NEXT PHASE. THE PEDESTRIAN DETOUR FROM PHASE 3 SHALL REMAIN IN PLACE. THE PHASE 5A MAINTENANCE OF TRAFFIC TEMPORARY SIGNAL MODIFICATIONS FOR US-23 OFF RAMP AND MONROE STREET ARE SHOWN ON SHEET 106 THE CONTRACTOR WILL ENSURE THE PROPOSED TRAFFIC SIGNAL INSTALLATION IS CONSTRUCTED AS PER THE CURRENT ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS. PHASE 5B

PHASE 5B IS A SUBPHASE OF PHASE 4. MONROE STREET BETWEEN HARROUN ROAD AND GLASGOW ROAD IS MOSTLY UNCHANGED FROM PHASE 5A, THE ONLY EXCEPTION BEING THAT THE NORTH LEG OF GLASGOW IS ALLOWED TO HAVE TWO LANE TWO WAY TRAFFIC. THE PROPOSED RAISED MEDIAN ON MONROE STREET FROM ROUGHLY STATION 170+42 TO STATION 175+18 SHALL BE INSTALLED DURING THIS PHASE. TRAFFIC SHALL BE MAINTAINED BY LANE CLOSURES AS PER MT-95.32. MONROE STREET IS TO REMAIN CLOSED FROM GLASGOW ROAD TO ACRES ROAD. WORK ON THE PROPOSED STRUCTURE (SFN: 4805224) SHALL CONTINUE. THE SOUTHERN HALF OF MONROE STREET FROM THE EXISTING US-23 NORTHBOUND RAMP INTERSECTION TO THE END OF THE PROJECT SHALL BE CONSTRUCTED. THE RAISED MEDIAN ALONG ALEXIS ROAD SHALL BE CONSTRUCTED. THE US-23 NORTHBOUND MAINLINE SHOULDER SHALL BE RECONSTRUCTED AND TRAFFIC SHALL BE SHIFTED ONTO THE EXISTING SHOULDER. THE PEDESTRIAN DETOUR FROM PHASE 3 SHALL REMAIN IN PLACE. THE WATERLINE WORK STARTED IN PHASE 3 IN THE SOUTHWEST QUADRANT OF MONROE STREET AND THE OLD US-23 NORTHBOUND RAMPS SHALL BE FINISHED. THE SECTION THAT IS TO BE COMPLETED CROSSES THROUGHTHE AREA OF WHERE THE NOW CLOSED AND DEMOLISHED US-23 NORTHBOUND RAMPS WERE PREVIOUSLY LOCATED.

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POST PHASE

THE WORK TO BE PERFORMED DURING THIS PHASE WILL INCLUDE THE FOLLOWING: CONSTRUCTION OF THE REMAINING SURFACE COURSE OF PAVEMENT, FINAL PAVEMENT MARKINGS, FINAL SIGNAGE, LIGHTING, AND LANDSCAPING ITEMS. ALL MAINTENANCE OF TRAFFIC ITEMS THAT WERE PREVIOUSLY PLACED SHALL BE REMOVED. AT THE COMPLETION OF THE 180 DAY BRIDGE CLOSURE PERIOD ALL LANES OF TRAFFIC ON MONROE, ALEXIS, US-23, AND ALL RAMPS SHALL BE OPEN TO TRAFFIC. ANY REMAINING WORK SHALL BE COMPLETED WITH OVERNIGHT LANE CLOSURES FROM 8 PM TO 6 AM. EXISTING STRUCTURE SFN 4805135 LUC 00184-00.030R CANNOT BE DEMOLISHED UNTIL PEDESTRIAN TRAFFIC CAN SAFELY TRAVERSE ACROSS THE NEWLY CONSTRUCTED MONROE STREET BRIDGE. THE PEDESTRIAN DETOUR FROM PHASES 1 & 2 SHALL BE IN EFFECT WHILE THE EXISTING STRUCTURE IS DEMOLISHED.

CONSTRUCTION COORDINATION KROGER PARCEL

CONTRACTOR IS TO COORDINATE OPERATIONS AND SCHEDULE WITH A KROGER STORE MANAGER (419-885-5027), RELATED TO THE WORK AT THE DRIVEWAY FOR KROGER ON MONROE STREET. CONTRACTOR IS TO PERFORM WORK SO AS NOT TO INTERFERE WITH THE OPERATIONS OF THE KROGER PHARMACY DRIVE-THRU. WORK THAT WILL TEMPORARILY IMPACT THE PHARMACY DRIVE-THRU MAY ONLY BE PERFORMED WHEN THE PHARMACY IS CLOSED AND IN COORDINATION WITH KROGER.

	ALLOV
LOCATION	
SHORT TERM CLOSURES OF US-23 FOR MONROE ST BRIDGE WORK AS PER MT-99.60	REET
	2
OVERNIGHT RAMP CLOSURES	
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US-23 SB INSIDE LANE CLOSURE FOR TEMPORARY P. INSTALLATION	AVEMEN
ALEXIS ROAD U-TURN AT ELLIOTT DRIVE RIGHT LAN CLOSURE	E
US-23 SB INSIDE LANE CLOSURE FOR TEMPORARY P. REMOVAL	AVEMEN
MONROE STREET & ALEXIS ROAD BETWEEN GLASGO AND ACRES ROAD	OW ROA
ACRES ROAD NORTH OF ALEXIS ROAD	
RAMP CLOSURE US-23 NB	
EAST CEMETARY DRIVE NORTH OF MONROE STREET	-
GLASGOW ROAD ONE LANE TWO WAY	
LANE CLOSURES ON MONROE/ ALEXIS	
US 23 SINGLE LANE CLOSURES	\sim

PHASE 1-2 AND 8 PM TO 6 AM \$1000/15 MIN PROJECT ID ROST PHASE 8 PM TO 6 AM \$1000/15 MIN 105889					MAINTENANCE OF TRAFFIC GENERAL NOTES
AM 2 PHASE CHANGES & TEMP. PAVEMENT 9PM FRI - 5AM MON \$1000/15 MIN WORK 9PM FRI - 5AM MON \$1000/15 MIN AS APPROVED 9PM - 5AM \$1000/15 MIN MENT PREPHASE ONE WEEKEND FROM 9 PM FRIDAY TO 5 AM MONDAY \$1000/15 MIN MENT PHASE 1 10 DAYS \$1000/15 MIN MENT PHASE 2 ONE WEEKEND FROM 9 PM FRIDAY TO 5 AM MONDAY \$1000/15 MIN ROAD PHASE 3 14 DAYS \$1000/15 MIN PHASE 5A 14 DAYS \$1000/15 MIN PHASE 5A 14 DAYS \$1000/15 MIN PHASE 4 14 DAYS \$1000/DAY PHASE 4A 10 DAYS \$3000/DAY PHASE 4A 10 DAYS \$3000/DAY PHASE 1-2 AND ROST, PHASE 8 PM TO 6 AM \$1000/15 MIN	LOWA				
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ALL PLCS REQUIREMENTS \$150/MIN 25 607	• •		PLCS REQUIREMENTS	\$150/MIN	

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		2									2		202	20010	2	EACH	HEADWALL REMOVED
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		21,917 11									11,740 6	10,177 5	202 202	30000 30200	21,917 11	SF FT	WALK REMOVED STEPS REMOVED
		278									246	32	202	30600	278	SY	CONCRETE MEDIAN REMOVED
		490									490		202	30700	490	FT	CONCRETE BARRIER REMOVED
		7,071				125					490	3,114	202	32000	7,196	FT	CURB REMOVED
		112									112		202	32800	112	SY	CONCRETE SLOPE PROTECTION REMOVED
		2,379 630									1,345 160	1,034 470	202 202	35100 35200	2,379 630	FT FT	PIPE REMOVED, 24" AND UNDER PIPE REMOVED, OVER 24"
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		4,346									4,346		202	38000	4,346	FT	GUARDRAIL REMOVED
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		12									4	8	202	58000	12	EACH	MANHOLE REMOVED
		29									15	14	202	58100	29	EACH	CATCH BASIN REMOVED
		22										22	SPECIAL	20270000	22	FT	FILL AND PLUG EXISTING CONDUIT, 10"
		124	1,367								1,367	124	SPECIAL 202	20270000 75000	124 1,367	FT FT	FILL AND PLUG EXISTING CONDUIT, 12" FENCE REMOVED
			2									2	202	98100	2	EACH	REMOVAL MISC.: BOLLARD
			22								14	8	202	98100	22	EACH	REMOVAL MISC.: SPRINKLER HEAD
	701		191	70.050							~145~		~~202~~	98200			REMOVAL MISC .: DECORATIVE WALL
	781 781			73,650 82,491						<u> </u>	70,462 82,316	3,969 956	203 203	10000 20000	74,431 83,272	CY CY	EXCAVATION) EMBANKMENT
610	,01			02,431							9,610						EMBANKMENT, AS PER PLAN
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										33		33	203	98000	33	CY	ROADWAY, MISC.:SOIL MIX B
						451				27,435	13,221	14,665	204	10000	27,886	SY	SUBGRADE COMPACTION
				4,388 1,464				411 411		1,880	4,799 1,875	1,880	204 204	13000 30010	6,679 1,875	CY CY	EXCAVATION OF SUBGRADE GRANULAR MATERIAL, TYPE B
				1,404				411			1,875		204	50010	1,075		GRANOLAN WATLINAL, THE B
				2,926							2,926		204	30030	2,926	CY	GRANULAR MATERIAL, TYPE D
	20									1,880 10	28	1,880	204 204	30020 45000	1,880 30	CY HOUR	GRANULAR MATERIAL, TYPE C
	20							827		2,819		2,819	204	50000	3,646	SY	PROOF ROLLING GEOTEXTILE FABRIC
										2,819		2,819	204	51000	2,819	SY	GEOGRID
										789	789		206	10500	789	TON	CEMENT
										30,490	30,490		206	11000	30,490	SY	CURING COAT
								827		30,490 LS	31,317 LS		206 206	15010 30000	31,317 LS	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS
					3,434						3,434		606	15050	3,434	FT	GUARDRAIL, TYPE MGS
					1,000 3						1,000 3		606 606	15150 26050	1,000 3	FT EACH	GUARDRAIL, TYPE MGS HALF POST SPACING ANCHOR ASSEMBLY, MGS TYPE B
					8						8		606	26150	8	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016
					7						7		606	26550	7	EACH	ANCHOR ASSEMBLY, MGS TYPE T
					11						11		606	35002	11	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1
					3						3		606	35102	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2
					1						1		606	60022	1	EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) (70
					2		530				2 530		606 607	60040 23000	2 530	EACH FT	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL (70 m FENCE, TYPE CLT
							311				311		607	23000	311	FT	FENCE, TYPE CLT, AS PER PLAN
							841				841		607	70000	841	FT	FENCELINE SEEDING AND MULCHING
				40								40	607	98000	40	FT	FENCE, MISC.:WOOD FENCE, WITH 5' RAILS
				16,209							4,096	12,113	608	10000	16,209	SF	4" CONCRETE WALK
				14,013							14,013	1.000	608	13000	14,013	SF	6" CONCRETE WALK
				1,639 1,145	152	173					571 1,297	1,068 173	608 609	52000 24000	1,639 1,470	SF FT	CURB RAMP CURB, TYPE 4-A
	=		1	, <u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		±, 5					-,,	±, 5			±,,,,,		

DESCRIPTION	SEE SHEET NO.	3
ROADWAY		
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	18	GENERAL SUMMARY
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LS		
		5
	17 17	
70 mph) (28" WIDE)	17	DESIGN AGENCY
) mph) (90" WIDE)	17	7575 HUNTINGTON PARK DR, STE 130 COLUMBUS, OHIO 43235 (614) 985-9100 www.arcadis.com
	17	INGTON PARK MBUS, OHIO (614) 985-910 ww.arcadis.co
	18	75751
		DESIGNER TT REVIEWER
		SM6 09/13/24 PROJECT ID
· · · · · · · · · · · · · · · · · · ·		105889 SHEET TOTAL 108 607

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19	20	127	128	129	134	135	138	139	140	
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		5,880 941						56		-
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			413							
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8,920									2,610	╞
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				PART.			ITEM	GRAND		
2	313		01/NHS/21	02/S>2/04	05/NHS/13	ITEM	EXT	TOTAL	UNIT	
			2,672	3,264		609	26000	5,936	FT	CURB, TYPE 6
				941 237		609 609	26001 70000	941 237	FT SY	CURB, TYPE 6, 4" CONCRETE
			413			622	10100	413	FT	CONCRETE BA
			225			622	10160	225	FT	CONCRETE BA
			1 4			622 622	24850 25000	1 4	EACH EACH	CONCRETE BA
			1			622	25006	1	EACH	CONCRETE BA
			2			622	25050	2	EACH	CONCRETE BA
			45			622	90000	45	FT	BARRIER, MISC
				2		623 SPECIAL	39500	2	EACH EACH	MONUMENT AS
				2		SPECIAL	69098000	۷	EACH	GROUND WATE
			56			601	21050	56	SY	
			303			601	21050	303	SY	TIED CONCRET
			8			601	32100	8	CY	ROCK CHANNE
	4		36	4		601	32200	40	CY	ROCK CHANNE
			10,638	892		659	00300	11,530	CY	TOPSOIL
			72,319	8,036		659	10000	80,355	SY	SEEDING AND
			3,616	402		659	14000	4,018	SY	REPAIR SEEDIN
			3,616 9.76	402 1.08		659 659	15000 20000	4,018 10.84	SY TON	INTER-SEEDIN
			14.9	1.7		659	31000	16.6	ACRE	LIME
			410	46		659	35000	456	MGAL	WATER
			163	18		659	40000	181	MSF	MOWING
			23,494			670	00500	23,494	SY	SLOPE EROSIC
			1,918 1,144			670 671	00710 14000	1,918 1,144	SY SY	DITCH EROSIO EROSION CON
			LS	LS		832	15000	LS		STORM WATER
			LS	LS		832	15002	LS		STORM WATER
			LS 240,000	LS 80,000		832 832	15010 30000	LS 320,000	EACH	STORM WATER
			710			836	10000	710	SY	SEEDING AND
				50	LS	SPECIAL SPECIAL	69065016 69098400	50 LS	TON	WORK INVOLVI WORK INVOLVI
	2		7	1		602	20000	8	CY	
			13,057 75	3,432 64		605 605	11110 13300	16,489 139	FT FT	6" SHALLOW PI 6" UNCLASSIFI
			10,937	1,796		605	14020	12,733	FT	6" BASE PIPE U
			1,198	478		611	00510	1,676	FT	6" CONDUIT, T
			75	25		611	01500	100	FT	6" CONDUIT, T
				40		611	03700	40	FT	10" CONDUIT, 1
			411 623 459	400 400		611 611 611	04400 04600 06100	1,449 1,023 430	FT FT FT	12" CONDUIT, 1 12" CONDUIT, 1 15" CONDUIT, 1
			279	44	\cdots	611 611	10400	323	FT TFT	24" CONDUIT, 1 27" CONDUIT, 1
				43		611	13400	43	FT	30" CONDUIT, 1
-	181		355		$\sim \sim $	611	16200	355		36" CONDUIT, 1
				× 133 × ×	****	``611`` ~~~~~~	* 16400 ***	133 [×] ×	Ý Ý ĚT ^Ý Ý	36" CONDUIT, 1
			74	145		611	19400	219	FT	42" CONDUIT, 1
		┤───┤───	2	13		611	98150	15	EACH	42 ¹ CONDUIT, 1 CATCH BASIN,
			12	2		611	98150	15	EACH	CATCH BASIN, CATCH BASIN,
				3		611	98370	3	EACH	CATCH BASIN,

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DESCRIPTION	SEE SHEET NO.	$\left\{ \right\}$
ROADWAY (CONT.)		15
6		1
6, AS PER PLAN	6	<
EMEDIAN		
ARRIER, SINGLE SLOPE, TYPE B1		
ARRIER, SINGLE SLOPE, TYPE D		
ARRIER END SECTION, TYPE B1		1
ARRIER END SECTION, TYPE D		1
ARRIER, END ANCHORAGE, REINFORCED, TYPE B1		3
ARRIER, END ANCHORAGE, REINFORCED, TYPE D] Ś
SC.:MUP BARRIER	308	<
ASSEMBLY ADJUSTED TO GRADE		
TER MONITORING WELL ADJUSTED TO GRADE	18	
EROSION CONTROL TE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
TE BLOCK MAT WITH TYPE 2 UNDERLAYMENT		<
IEL PROTECTION, TYPE B WITH FILTER		
IEL PROTECTION, TYPE C WITH FILTER		
) MULCHING		
DING AND MULCHING		
NG		GENERAL SUMMARY
FERTILIZER		
ION PROTECTION		1 Z
ON PROTECTION MAT, TYPE A		
NTROL MAT		
R POLLUTION PREVENTION PLAN		
R POLLUTION PREVENTION INSPECTIONS]
R POLLUTION PREVENTION INSPECTION SOFTWARE		<
NTROL		
D EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1		$\langle \rangle$
ENVIRONMENTAL / REMEDIATION		
VING PETROLEUM CONTAMINATED SOIL	20	
VING ASBESTOS CONTAINING MATERIALS	20	5
		<
IASONRY		
PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FIED PIPE UNDERDRAINS, 707.31		1)
UNDERDRAINS WITH GEOTEXTILE FABRIC		1
TYPE F FOR UNDERDRAIN OUTLETS		1
		1
TYPE F		
TYPE F		
TYPE B		\
TYPEC		- \
TYPE C		
ТҮРЕ В		
TYPEB		DESIGN AGENCY 은
		S STE - 235
TYPEA		INGTON PARK DR, STE 130 JMBUS, OHIO 43235 (614) 985-9100 www.arcadis.com
TYPEB		INGTON PARK DI UMBUS, OHIO 43 (614) 985-9100 www.arcadis.com
Y Y Y Y		
TYPE B		v 2575 HUNTI
TYPEC		DES GNER
I, NO. 3		
I, NO. 3A		REVIEWER
I, NO. 6		SMG 09/13/24
		PROJECT ID 105889
		SHEET TOTAL
		109 607

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5						21 8					
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/IODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 10:30:08 AM USER: TBuniak w:\\arc <mark>adts.ds-pw.benthey.com.arcadis-us.g1\Db.cumewts\01.kctive.Projeots\300933322400_CAD.401-Evgines.fng_Accadts\Roatway\S</mark>										16 5	
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					SHEE	T NUM.					PA	RT.		ITEM	GRAND		
24	19	127	139	134	135	138	317	406	409	Office Ca	lc 01/NHS/21	02/S>2/04	ITEM	EXT	TOTAL	UNIT	D
																	DR.
				2							2		611	98390	2	EACH	CATCH BASIN, NO. 7
				3							2	1	611 611	98470 98540	3	EACH EACH	CATCH BASIN, NO. 2-2B CATCH BASIN, NO. 2-4
				7							1	6	611	98630	7	EACH	CATCH BASIN, NO. 2-4 CATCH BASIN ADJUSTED TO GRADE
				1								1	611	98635	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS
					21						8	13	611	99574	21	EACH	MANHOLE, NO. 3
	2				8	26					28	/	611 611	99654 99710	8 28	EACH EACH	MANHOLE ADJUSTED TO GRADE PRECAST REINFORCED CONCRETE OUTLET
						20					20			33710	20	LAON	
9,151										9,201		9,201					RAVEMENT, PLANING, ASPHALT, GONGRETE, 1,5"
529										7,436	529 5,197	2,239	254 301	01001 56000	529 7,436	SY CY	PAVEMENT PLANING, ASPHALT CONCRETE, AS ASPHALT CONCRETE BASE, PG64-22, (449)
		284	46							12,530	,	2,239	304	20000	12,860	CY	AGGREGATE BASE
			10							4,410		2,219	407	20000	4,420	GAL	NON-TRACKING TACK COAT
22										(22		441	70000	22	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE
			6							(LLL	لللللم	nên	<u>441</u>	70500	men	ucku	ASPHALT CONCRETE SURFACE COURSE, TYPE
			10									10	1/1	70700	10		
373			10							1,996	1,409	960	442	10000	2,369	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, ASPHALT CONCRETE SURFACE COURSE, 12.5 M
										2,392	1,554	838	442	10100	2 392	CY	ASPHALT CONCRETE INTERMEDIATE COURSE,
		6	260							18,46	18,465	266	452	12010	18,731	SYL	8"NON-REINFORCED CONCRETE PAVEMENT, C
							0					4	202	75040			
							6 1,763				2	4	202	75610	6	EACH	VALVE BOX REMOVED
							106				106		503	31100	106	CY	ROCK EXCAVATION
							20				20		638	01720	20	FT	8" WATER MAIN POLYVINYL CHLORIDE PIPE AND
							366				344	22	638	02504	366	FT	12" WATER MAIN DUCTILE IRON PIPE ANSI CLAS
							1,087				698	389	638	02730	1,087	FT	12" WATER MAIN POLYVINYL CHLORIDE PIPE AN
							213				213		638	07310	213	FT	24" STEEL PIPE ENCASEMENT, BORED OR JACK
							1					1	638	07900	1	EACH	8" GATE VALVE AND VALVE BOX
							1				1		638	08100	1	EACH	12" GATE VALVE AND VALVE BOX
							2				1	1	638	09800	2	EACH	12" X 12" TAPPING SLEEVE, VALVE AND VALVE B
							1				1		638	09908	1	EACH	16" X 12" TAPPING SLEEVE, VALVE AND VALVE B
							4				4		638	10201	4	EACH	6" FIRE HYDRANT, AS PER PLAN
							5				1	4	638	10800	5	EACH	VALVE BOX ADJUSTED TO GRADE
							3					3	SPECIAL	63820752	3	EACH	FIRE HYDRANT REMOVED FOR STORAGE, CITY
							6				3	3	SPECIAL	63820880	6	EACH	CUT AND PLUG EXISTING 8" WATER LINE, CITY C
							3				2	1	638	98000	3	EACH	WATER WORK, MISC.: 2." BLOWOFF VALVE
							2				1	1	638	98000	2	EACH	WATER WORK, MISC.: 2.5" BLOWOFF VALVE
							4				3	1	638	98000	4	EACH	WATER WORK, MISC.: CONNECT TO EXISTING W
					15						3	12	611	99654	15	EACH	SA MANHOLE ADJUSTED TO GRADE (SANITARY)
					10							12		55004	10	L/(Off	
									57		57		625	00450	57	EACH	CONNECTION, FUSED PULL APART
									5		5		625	00460	5	EACH	CONNECTION, UNFUSED PULL APART
						-	1	l	52		52		625	00480	52	EACH	CONNECTION, UNFUSED PERMANENT
													-	-			
									5		5		625	10481	5	EACH	LIGHT POLE, AESTHETIC, AS PER PLAN, POST-T
									5 5		5 5		625 625	10481 10481	5 5	EACH EACH	
									5 9		5 5 9		625 625	10481 10490		EACH EACH	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40
									5		5 5 9 7		625	10481	5	EACH	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16
									5 9 7		5 5 9 7 6 062		625 625 625	10481 10490 10490	5 9 7	EACH EACH EACH	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40 LIGHT POLE, CONVENTIONAL, AT20B40
								400	5 9		5 5 9 7 6,062 400		625 625	10481 10490	5	EACH EACH	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40
								400	5 9 7				625 625 625 625	10481 10490 10490 23200	5 9 7 6,062	EACH EACH EACH FT	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40 LIGHT POLE, CONVENTIONAL, AT20B40 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE
								400	5 9 7 6,062		400		625 625 625 625 625 625	10481 10490 10490 23200 23306	5 9 7 6,062 400	EACH EACH EACH FT FT	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40 LIGHT POLE, CONVENTIONAL, AT20B40 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE NO. 10 AWG 600 VOLT DISTRIBUTION CABLE NO. 10 AWG POLE AND BRACKET CABLE
									5 9 7 6,062 3,333 5,755		400 3,333 5,755		625 625 625 625 625 625 625 625	10481 10490 10490 23200 23306 23400 24320	5 9 7 6,062 400 3,333 5,755	EACH EACH EACH FT FT FT FT FT	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40 LIGHT POLE, CONVENTIONAL, AT20B40 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE NO. 10 AWG 600 VOLT DISTRIBUTION CABLE NO. 10 AWG POLE AND BRACKET CABLE 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 240
		92						100	5 9 7 6,062 3,333 5,755 122		400 3,333 5,755 222	92	625 625 625 625 625 625 625 625	10481 10490 10490 23200 23306 23400 24320 25408	5 9 7 6,062 400 3,333 5,755 314	EACH EACH EACH FT FT FT FT FT	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40 LIGHT POLE, CONVENTIONAL, AT20B40 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE NO. 10 AWG 600 VOLT DISTRIBUTION CABLE NO. 10 AWG POLE AND BRACKET CABLE 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 CONDUIT, 2", 725.051
		92							5 9 7 6,062 3,333 5,755		400 3,333 5,755	92	625 625 625 625 625 625 625 625	10481 10490 10490 23200 23306 23400 24320	5 9 7 6,062 400 3,333 5,755	EACH EACH EACH FT FT FT FT FT	LIGHT POLE, AESTHETIC, AS PER PLAN, A04B16 LIGHT POLE, CONVENTIONAL, AT15B40 LIGHT POLE, CONVENTIONAL, AT20B40 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE NO. 10 AWG 600 VOLT DISTRIBUTION CABLE NO. 10 AWG POLE AND BRACKET CABLE 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 CONDUIT, 2", 725.051 CONDUIT, 3", 725.051
		92						100	5 9 7 6,062 3,333 5,755 122 323		400 3,333 5,755 222 423	92	625 625 625 625 625 625 625 625 625 625	10481 10490 10490 23200 23306 23400 24320 24320 25504	5 9 7 6,062 400 3,333 5,755 314 423	EACH EACH EACH FT FT FT FT FT FT FT	LIGHT POLE, CONVENTIONAL, AT20B40 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE NO. 10 AWG 600 VOLT DISTRIBUTION CABLE NO. 10 AWG POLE AND BRACKET CABLE 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 CONDUIT, 2", 725.051

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DESCRIPTION	SEE SHEET NO.	
DRAINAGE (CONT.)		
		5
AS PER PLAN	19	5
PAVEMENT		
5" S PER PLAN, 1.5"	22	
PE 1, (449), PG64-22		· 〈
E, TYPE 2, (449), (DRIVEWAYS) 5 MM, TYPE A (446) E, 19 MM, TYPE A (446) CLASS QC 1P WATER WORK		GENERAL SUMMARY
ND FITTINGS, AWWA C900, DR18 ASS 53, MECHANICAL JOINTS AND FITTINGS	316 314 314	SAL SI
AND FITTINGS, AWWA C900, DR18 CKED	314 314 314	GEN
BOX	314 314	· <
	514	
BOX	314 314	$\left\{ \right\}$
TY OF SYLVANIA	314	
Y OF SYLVANIA	314	
	314 314	
	314	
SANITARY SEWER		
LIGHTING		
T-TOP, WITH ENHANCED AESTHETIC FEATURES 16, WITH ENHANCED AESTHETIC FEATURES	406 406	
		7575 HUNTINGTON PARK DR, STE 130 COLUMBUS, OHIO 43235 (614) 985-9100 www.arcadis.com
400 VOLT CABLES		DESIGNER
ED), AS PER PLAN, IES-II, 13,700-16,400 LUMENS T TOP, WITH BASELINE AESTHETIC FEATURES	406 406	REVIEWER SMG 09/13/24 PROJECT ID 105889
		SHEET TOTAL 110 607

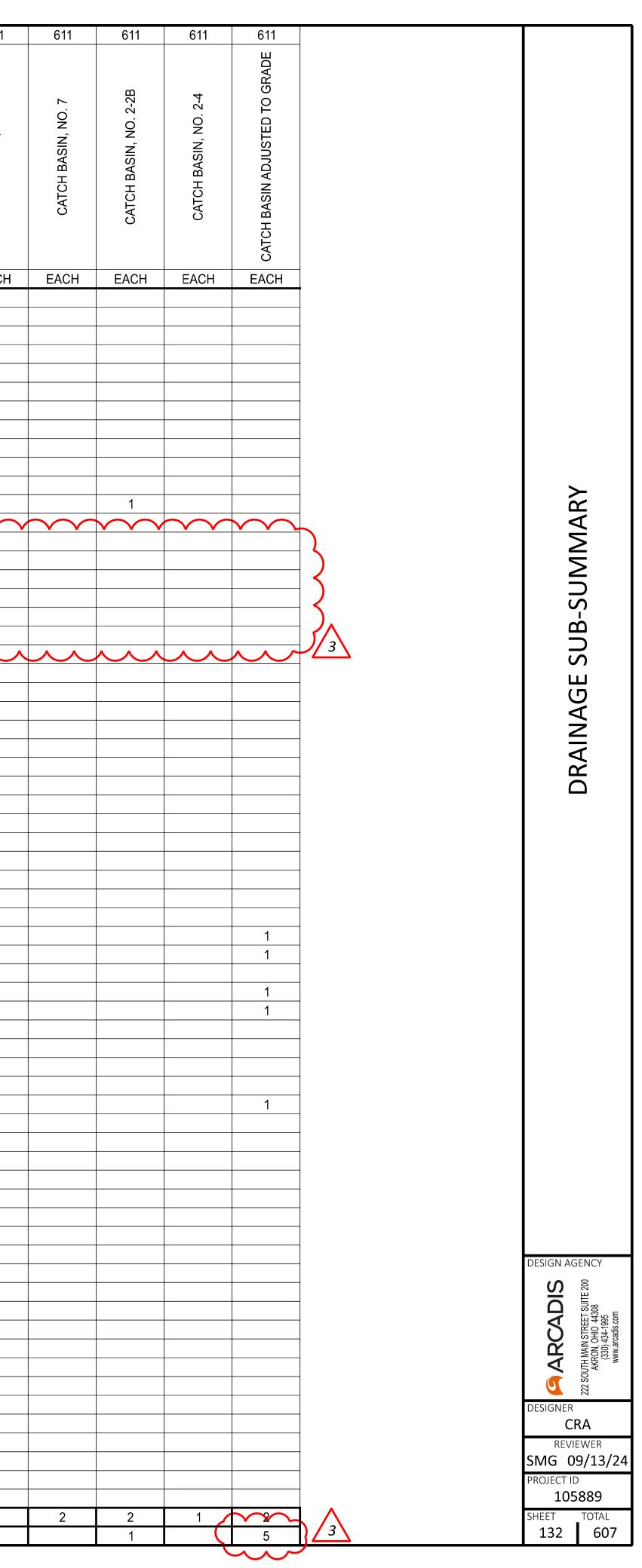
				S	HEET NU	M.		
22	23	24	46					
	300		4,230					
			18					
100)		1,021					
	10		1,021					
20			784					
39			268					
192	2							
			1.52					
			1.51					
			11.1 17,051					
			4,345					
			828					
			406					
			118					
		LS	6,207					
0.74								9
672	2		13,332					
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023

		GRAND	ITEM		RT.	PA	
DESC	UNIT			ITEM			
		TOTAL	EXT		02/S>2/04	01/NHS/21	
MAINTENAN							
LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR AS	HOUR	300	11110	614	150	150	
INCREASED BARRIER DELINEATION	FT	4,230	11630	614		4,230	
WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UREPLACEMENT DRUM	EACH EACH	18 100	12380 12600	614 614	50	18 50	
WORK ZONE RAISED PAVEMENT MARKER	EACH	1,021	12800	614	226	795	
ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	CY	10	13000	614	5	5	
BARRIER REFLECTOR, TYPE 1, ONE WAY	EACH	784	13310	614		784	
BARRIER REFLECTOR, TYPE 2, ONE WAY	EACH	39	13312	614	19	20	
OBJECT MARKER, ONE WAY PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	EACH SNMT	268 192	13350 18601	614 614	96	268 96	
FOR TABLE CHAINGEABLE MESSAGE SIGN, AS PER PLAN		192	10001	014	90	90	
WORK ZONE LANE LINE, CLASS I, 6"	MILE	1.52	20010	614	0.29	1.23	
WORK ZONE CENTER LINE, CLASS I	MILE	1.51	21000	614	1.15	0.36	
WORK ZONE EDGE LINE, CLASS I, 6"	MILE	11.1	22010	614	2.14	8.96	
WORK ZONE CHANNELIZING LINE, CLASS I, 12"	FT	17,051	23010	614	2,854	14,197	
WORK ZONE DOTTED LINE, CLASS I	FT	4,345	24000	614	1,294	3,051	
WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I	FT	828	25000	614	828		
WORK ZONE STOP LINE, CLASS I	FT	406	26000	614	217	189	
WORK ZONE ARROW, CLASS I	EACH	118	30000	614	77	41	
ROADS FOR MAINTAINING TRAFFIC	\sim	<u>LS</u>	10000	615	LS	LS	
PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	SY	6,207	20000	615	860	5,347	كرير
WATER	MGAL	672	10000	616	336	336	
PORTABLE BARRIER, UNANCHORED	FT	13,332	41100	622	000	13,332	
DUAL PORTABLE BARRIER TRANSITION/TERMINATION	EACH	1	41060	622		1	
INCIE							
CPM PROGRESS SCHEDULE		LS	10000	108	LS	LS	
MAINTAINING TRAFFIC		LS	11000	614	LS	LS	
FIELD OFFICE, TYPE C, AS PER PLAN	MNTH	18	16021	619	9	9	
CONSTRUCTION LAYOUT STAKES AND SURVEYING		LS	10000	623	LS	LS	
MOBILIZATION		LS	10000	624	LS	LS	
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		PROJECT ID 105889
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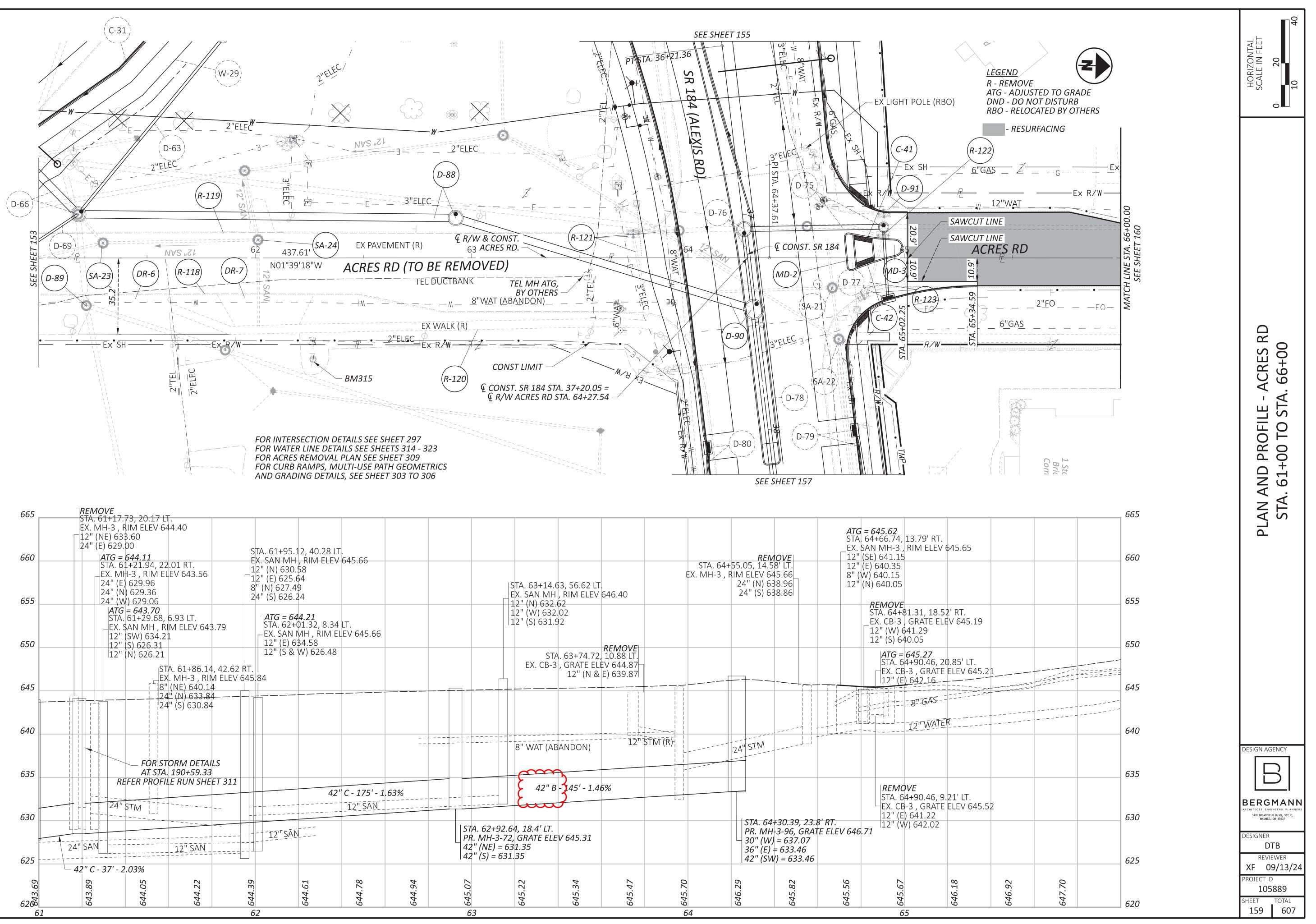


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		SHEET NO.	REFERENCE NO.	LOCATION	STATION	I TO STATION	SIDE	SIDE	CONCRETE MASONRY	10" CONDUIT, TYPE F
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	_ كر		SA-19	Not Used					3	
		155 155	SA-20 SA-21	ALEXIS RD ALEXIS RD	34+15.37 37+38.42		RT	02/S>2/04 02/S>2/04		
		157	SA-22	ALEXIS RD	37+62.38		LT	02/S>2/04		
		159 159	SA-23 SA-24	ACRES RD ACRES RD	61+29.68 62+01.32		LT LT	02/S>2/04 02/S>2/04		
		159	5A-24		02+01.32			02/5>2/04		
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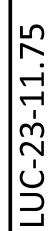
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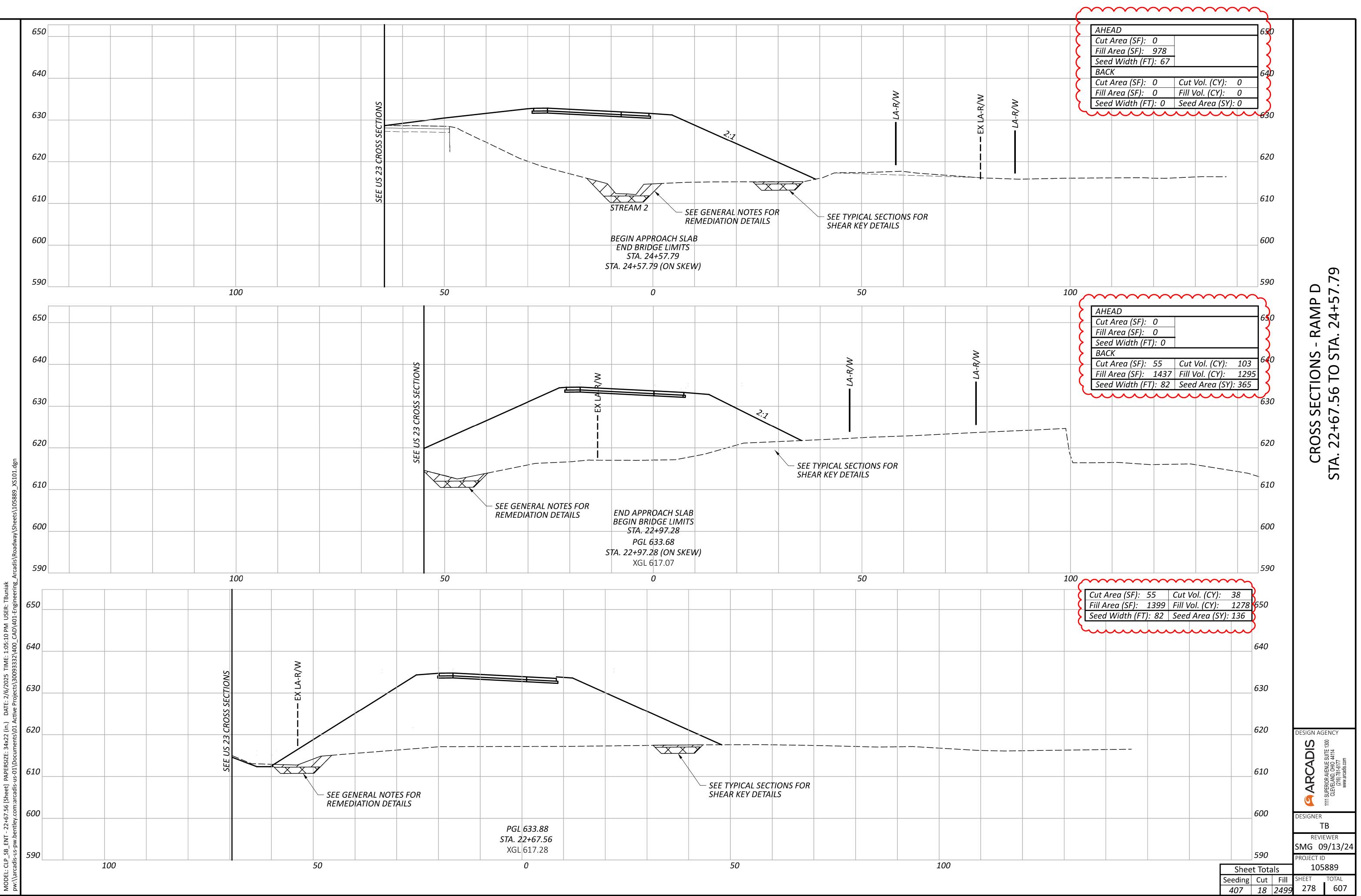
sydr 04-Er USER: CAD\4C 34x22 (in.) DATE: 2/5/2025 TIME: 11:46:48 AM 11\Documents\01 Active Projects\30093332\400 RSIZE: 9



69.548 628	643.89	644	644.	644.	645.	645	645.	645.	646	645.	545	
69	$ \begin{array}{c c} -42'' C - 37' - 2.03\% \\ \hline 68 $	39	61	<i>78</i> 94	07	34	47	20	29	82	56	
625		12" SAN	<u>1</u> 2" <u>\$</u> Ā <u>N</u>			72, GRATE ELEV 645.31 631.35						
630						2.64, 18.4' LT.				-30.39, 23.8' i 3-96, GRATE	RT. 12" (I	E) 641.22 W) 642.02
	24" STM		42"	C - 175' - 1.63%		42" B - 145' - 1	1.46%					9VE 54+90.46, 9 B-3 <i>,</i> GRATE
635	AT STA. 1	RM DETAILS 90+59.33 RUN SHEET 311				- Early						
640						8" WAT (ABANDON)	 	<u> </u>				<u>12</u> "WATE
043	<u></u>	$\frac{(N) 633.84}{(S) 630.84}$										- 8" GAS -
645	STA.	61+86.14, 42.62 RT. MH-3 , RIM ELEV 645 NE) 640.14				EX. CB-3, GRATE	72, 10.88 LT.				STA. 6	645.27 54+90.46, 2 B-3 , GRATE) 642.16
650	ATG = 643.70 STA. 61+29.68, 6. EX. SAN MH , RIM 12" (SW) 634.21 12" (S) 626.31		ATG = 644.21 STA. 62+01.32, 8.34 EX. SAN MH , RIM EL 12" (E) 634.58			12" (W) 632.02 12" (S) 631.92	REMOVE				STA. 64+	81.31, 18.5 , GRATE EL 641.29
655	EX. MH-3 , RIM ELE 24" (E) 629.96 24" (N) 629.36 24" (W) 629.06	v 043.30	2" (E) 625.64 " (N) 627.49 4" (S) 626.24			STA. 63+14.63, 56.62 EX. SAN MH , RIM ELE 12" (N) 632.62		±X. №H-3 ,	RIM ELEV 64 24" (N) 63 24" (S) 63	8.96	8" (Ŵ) 640.15 12" (N) 640.05	
660	24" (E) 629.00 <i>ATG = 644.11</i> STA. 61+21.94, 22.0	01 RT. E	TA. 61+95.12, 40.28 LT X. SAN MH , RIM ELEV 2" (N) 630.58					STA. 64+	<i>REM</i> -55.05, 14.58	<i>OVE</i> 3' LT.	EX. SAN MH-3 12" (SE) 641.1 12" (E) 640.35	, RIM ELEV 5
665	REMOVE STA: 61+17.73, 20.17 LT. EX. MH-3 , RIM ELEV 644 12" (NE) 633.60	.40									ATG = 645.62 STA. 64+66.74	, 13.79' RT.

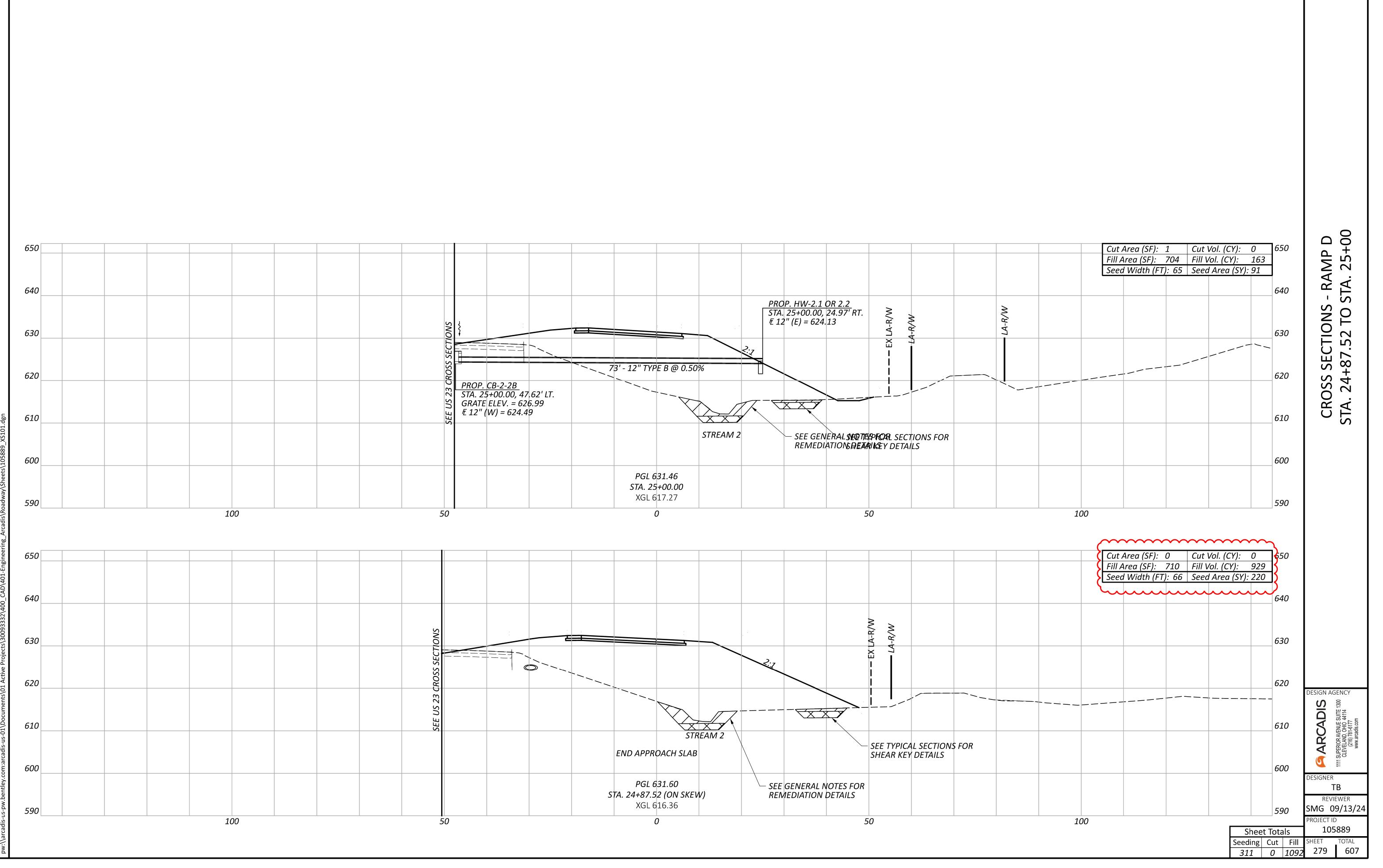


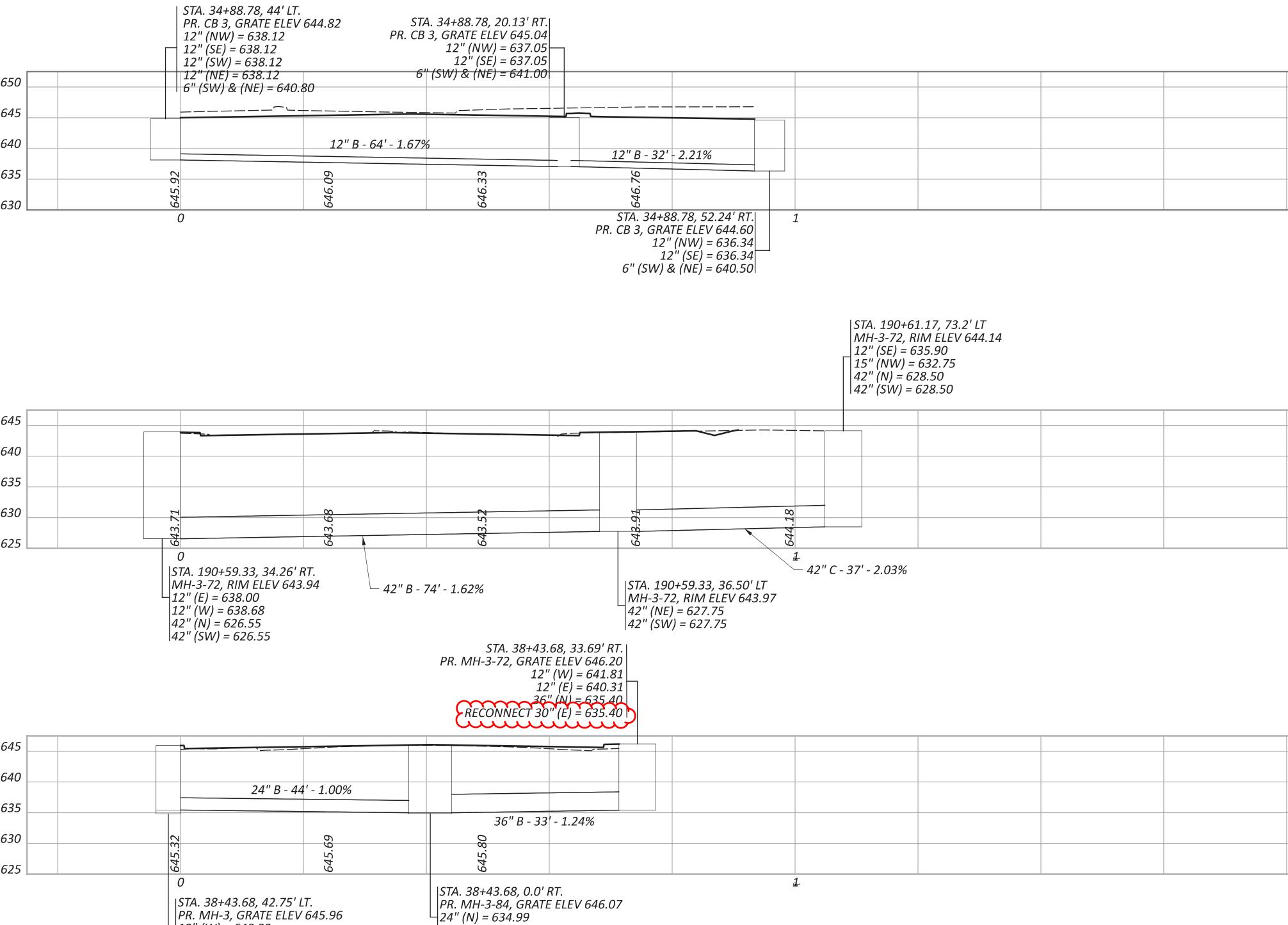
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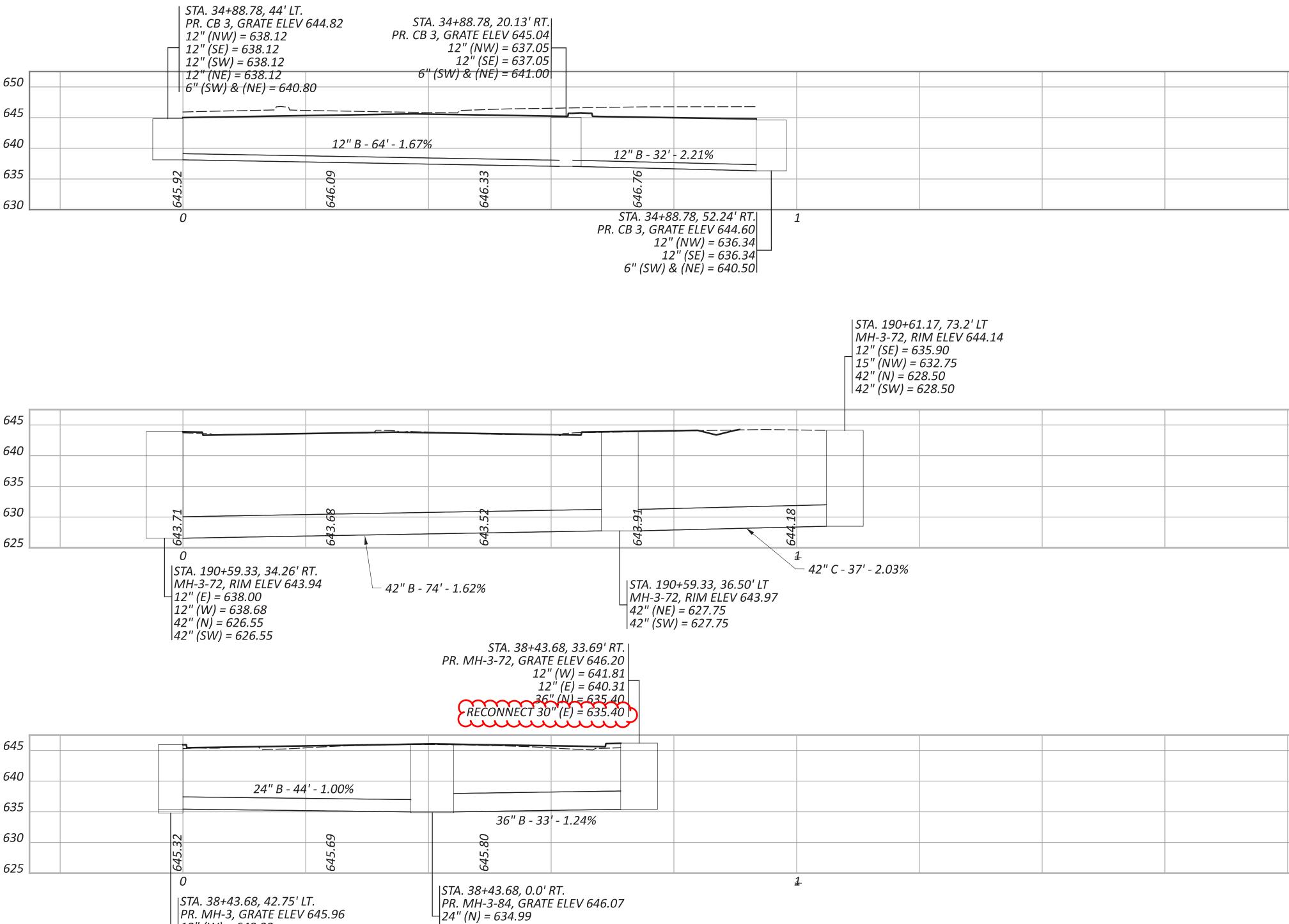


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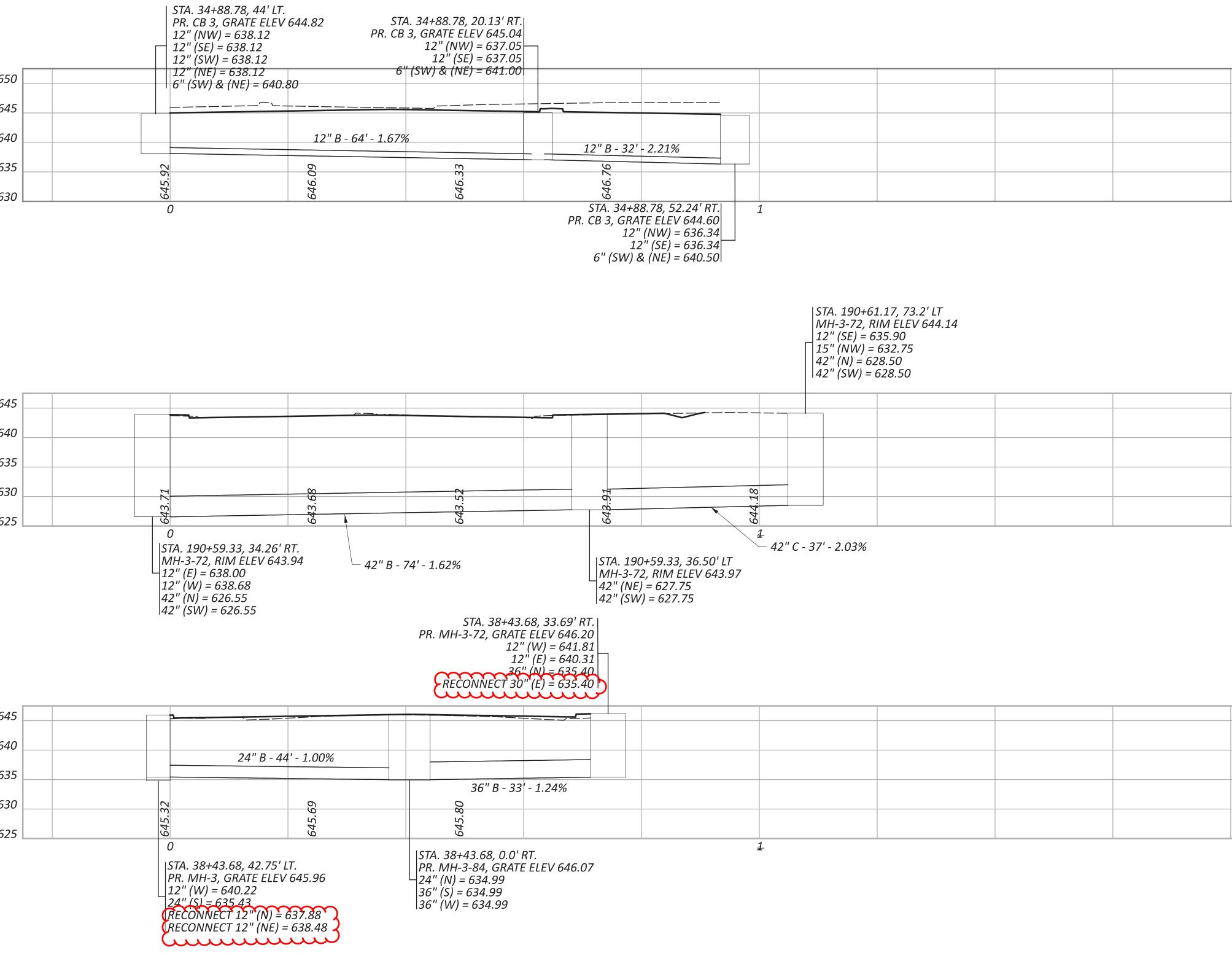
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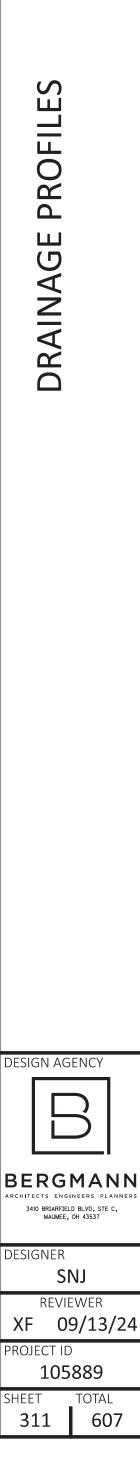


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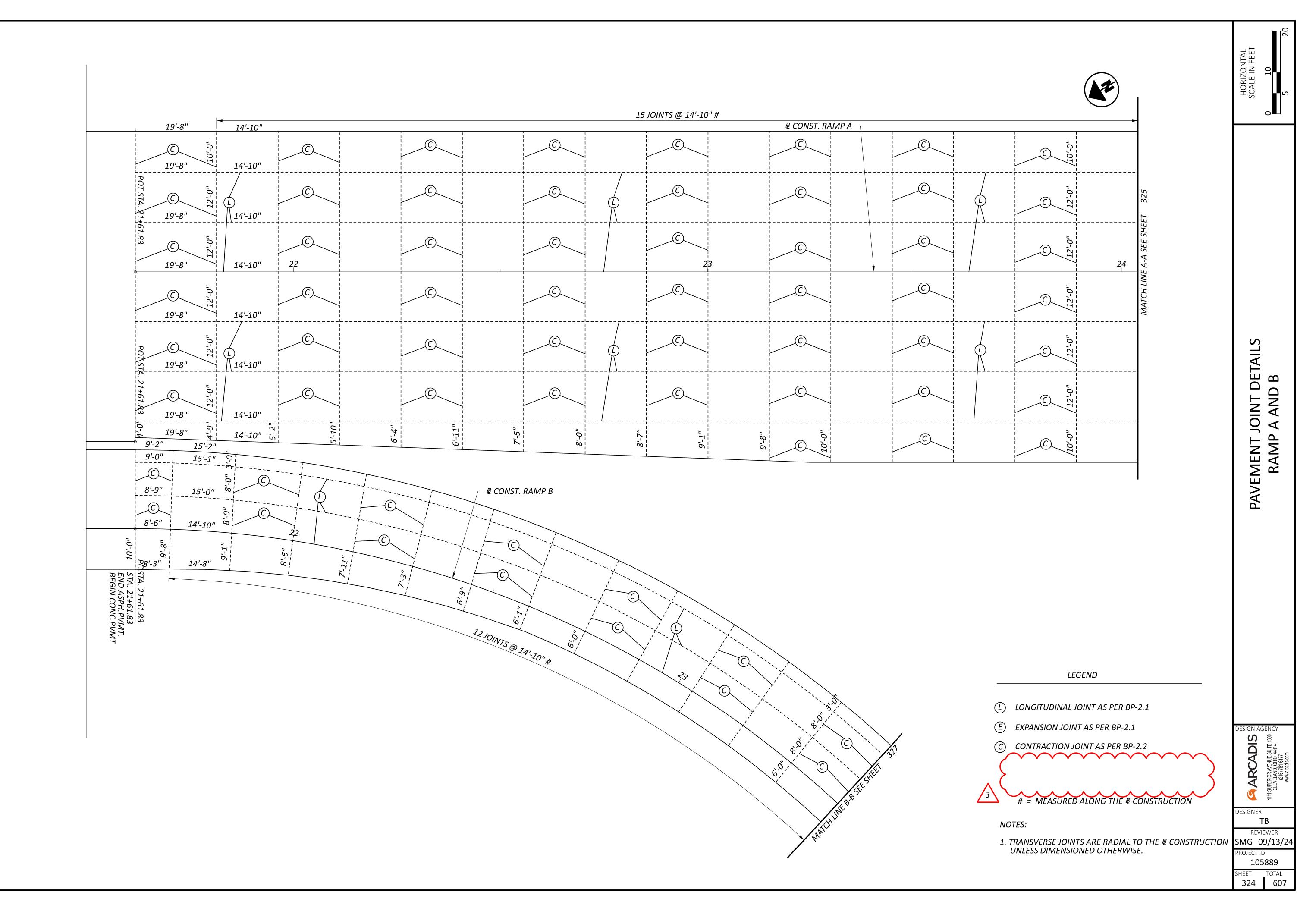
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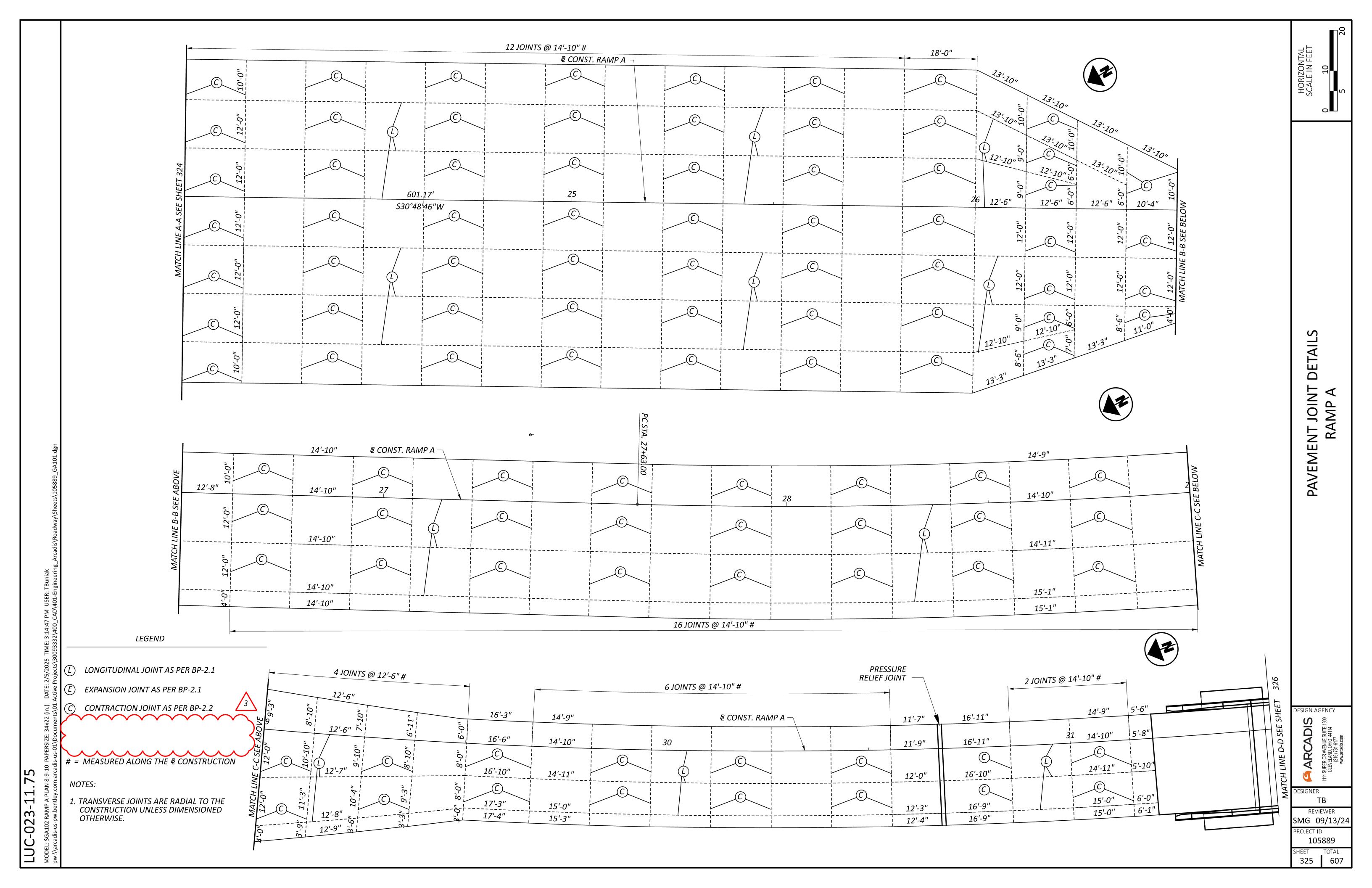
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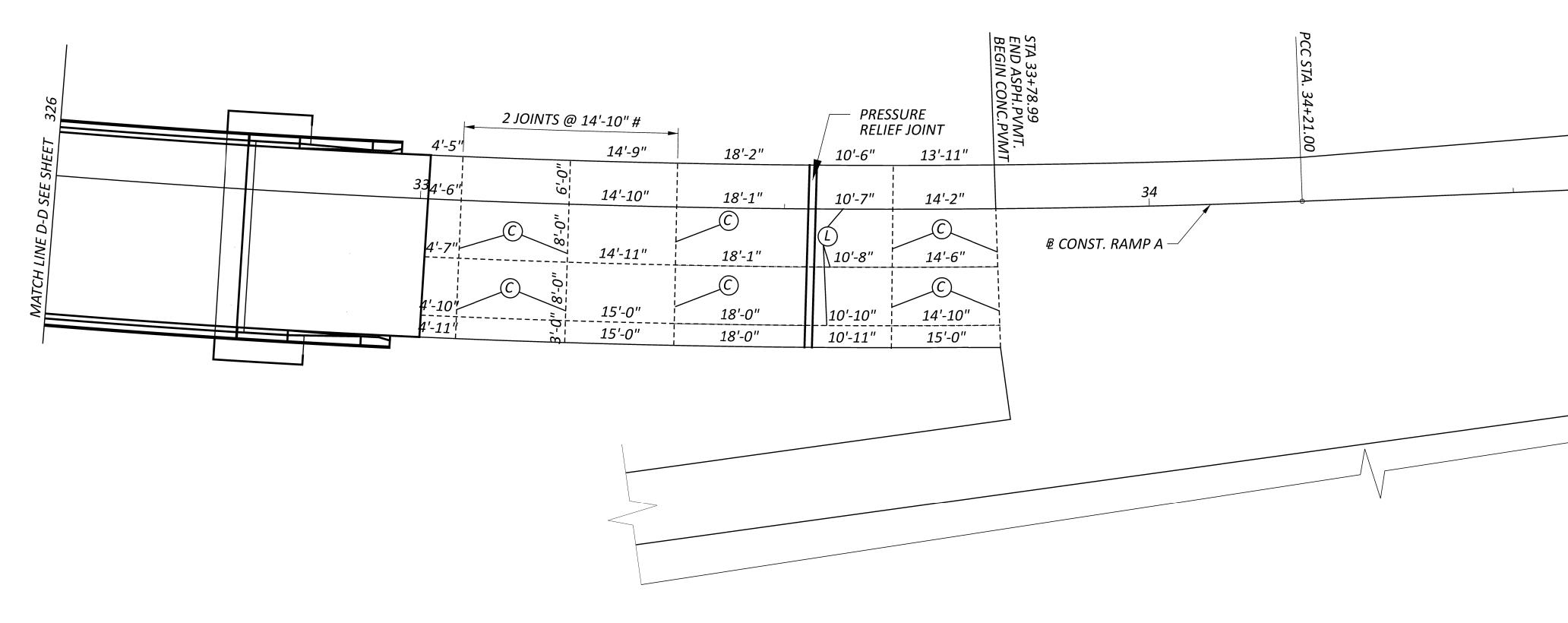
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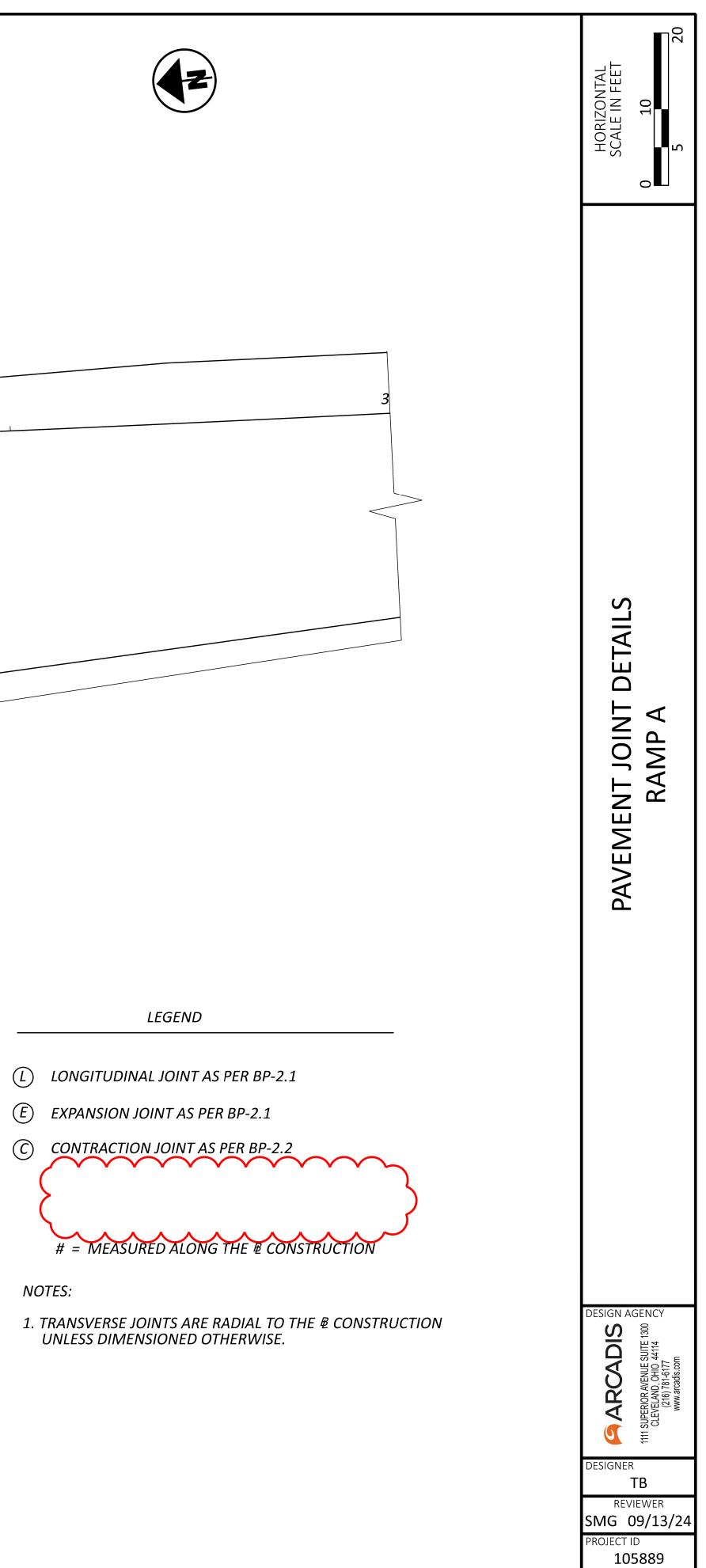


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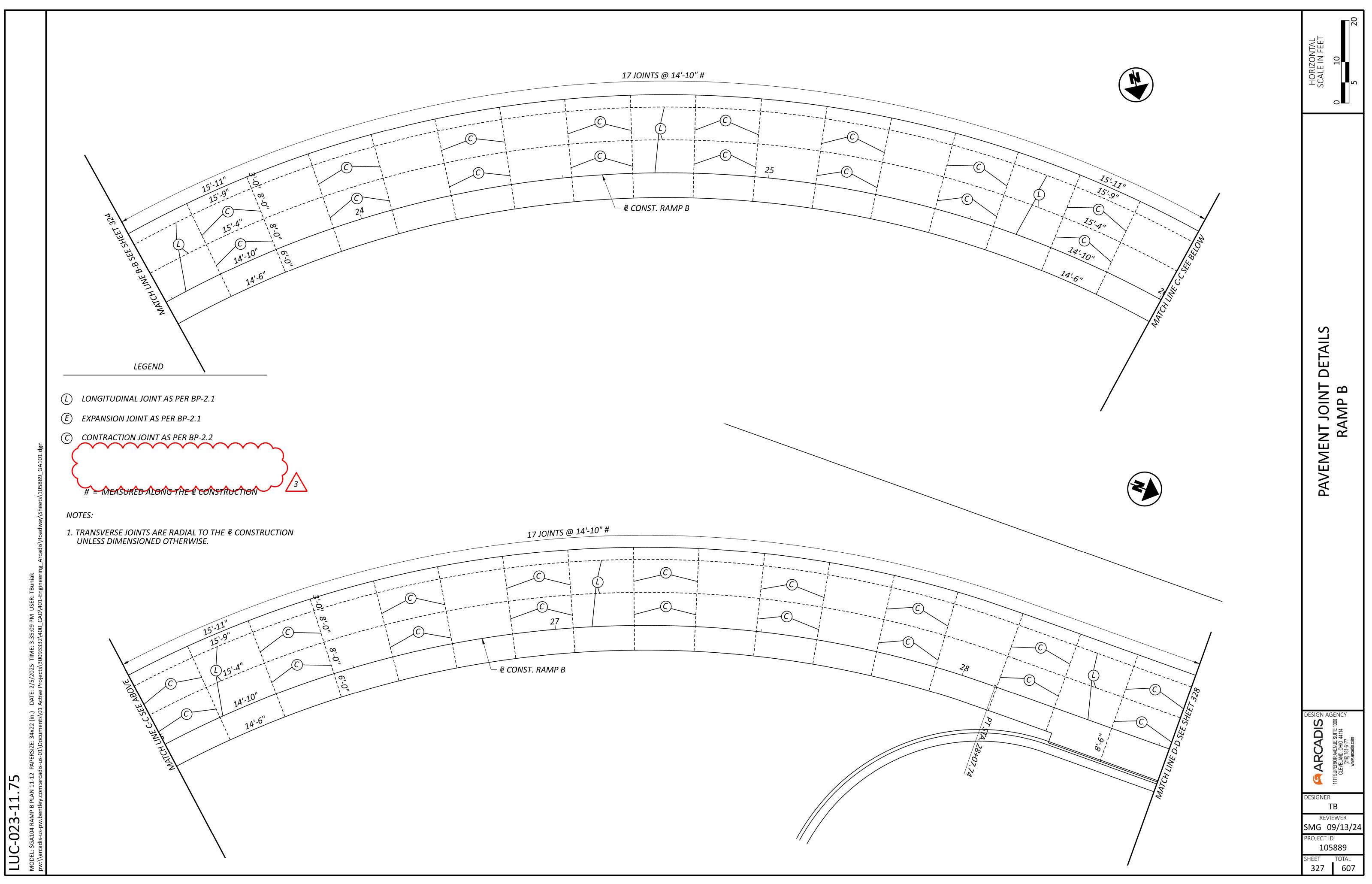


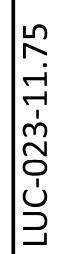
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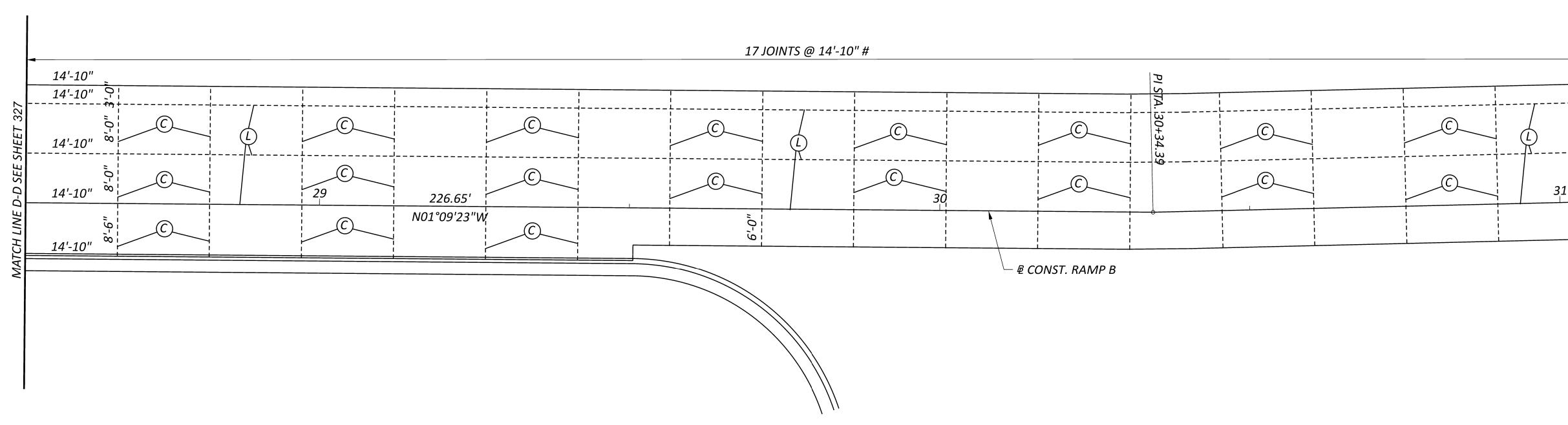
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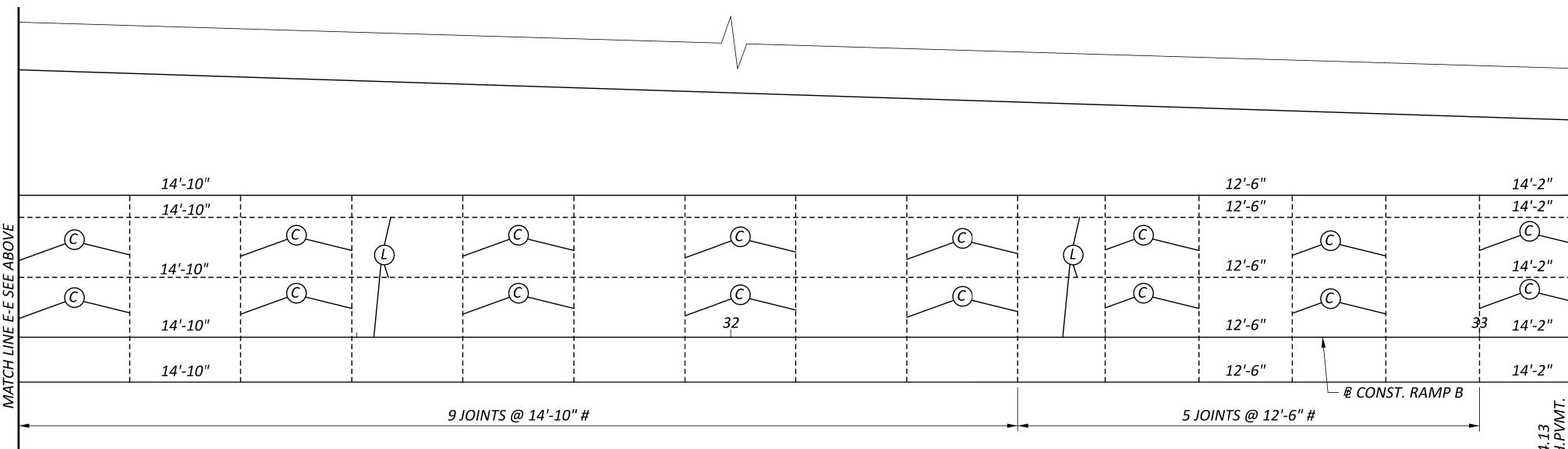
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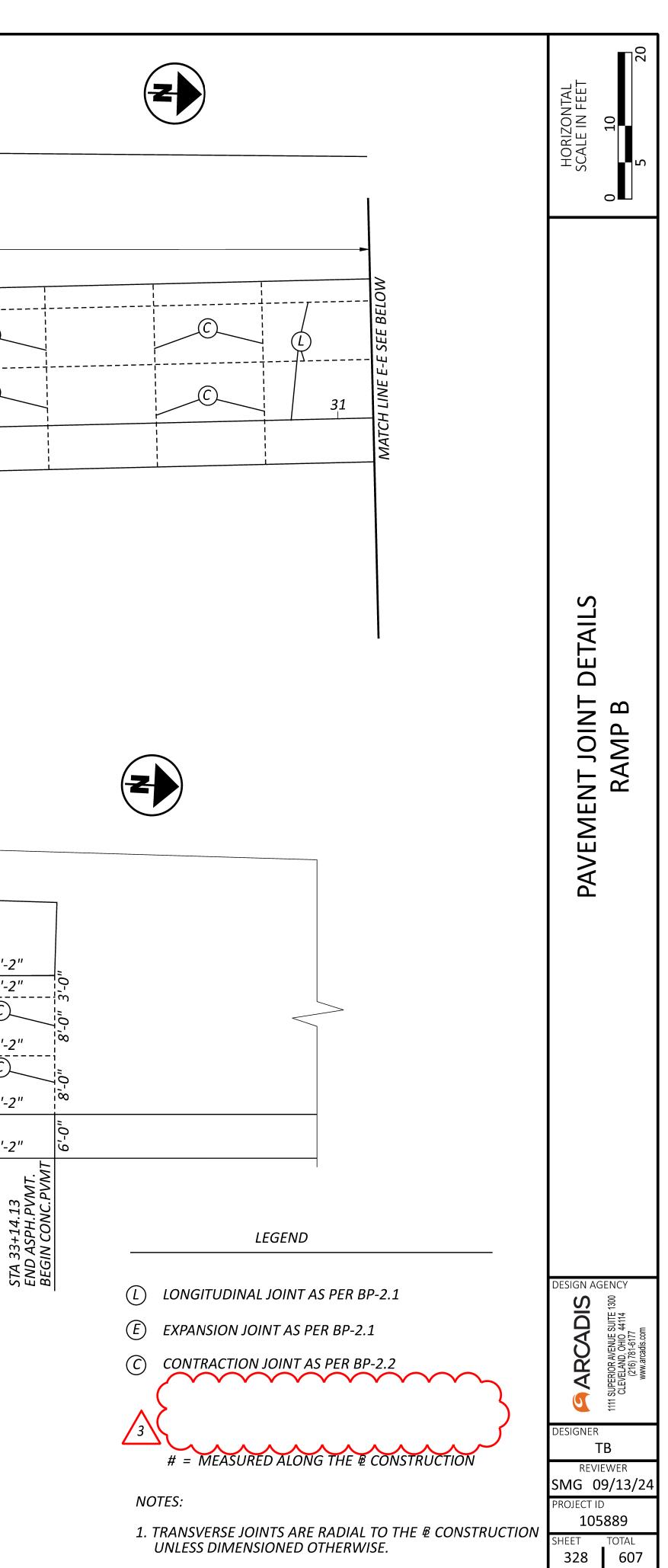


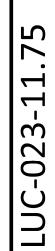
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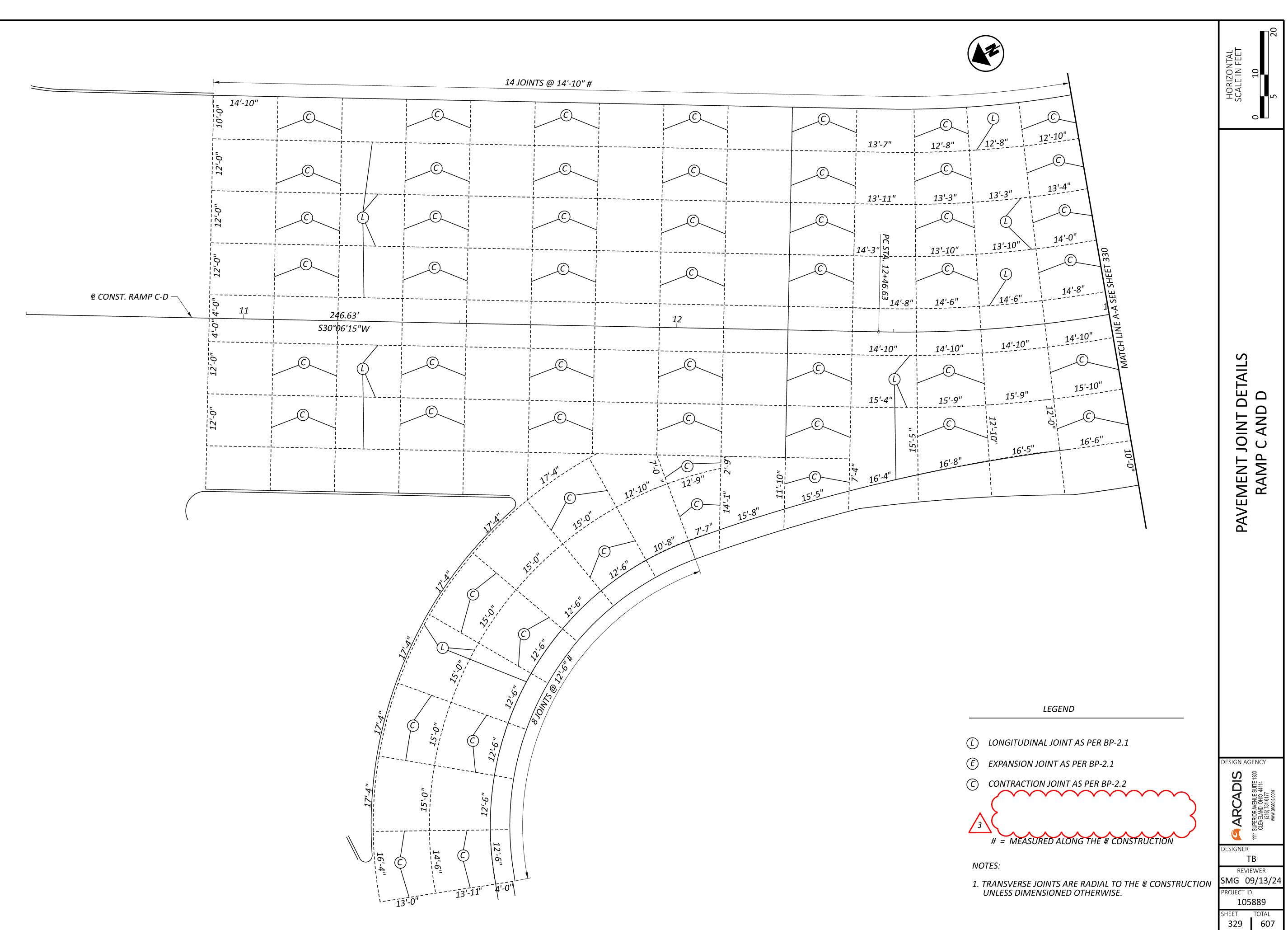


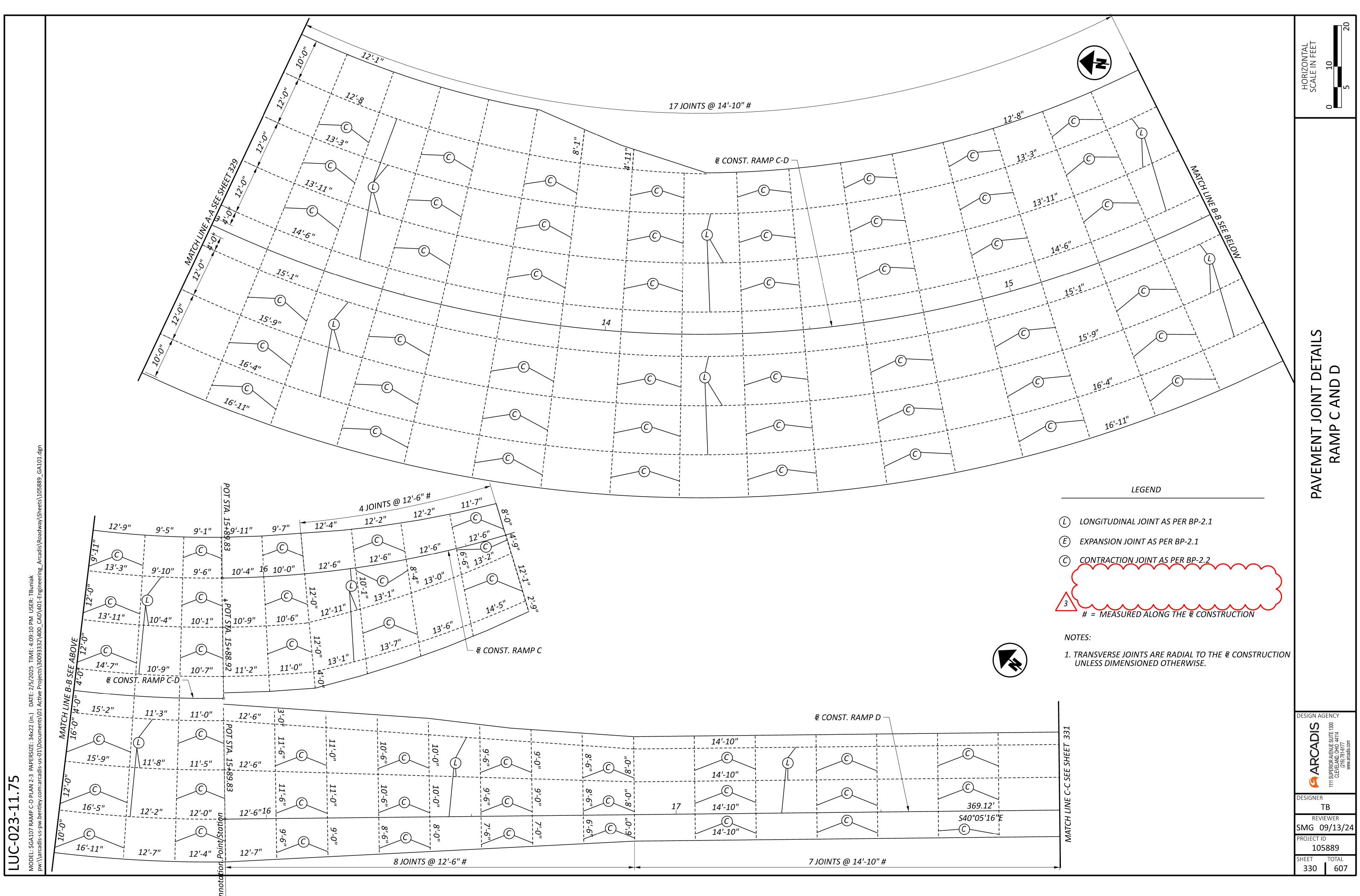
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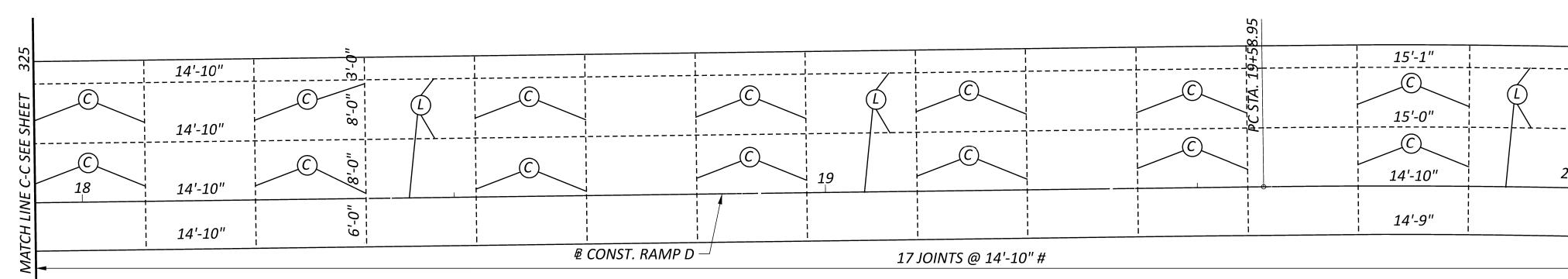


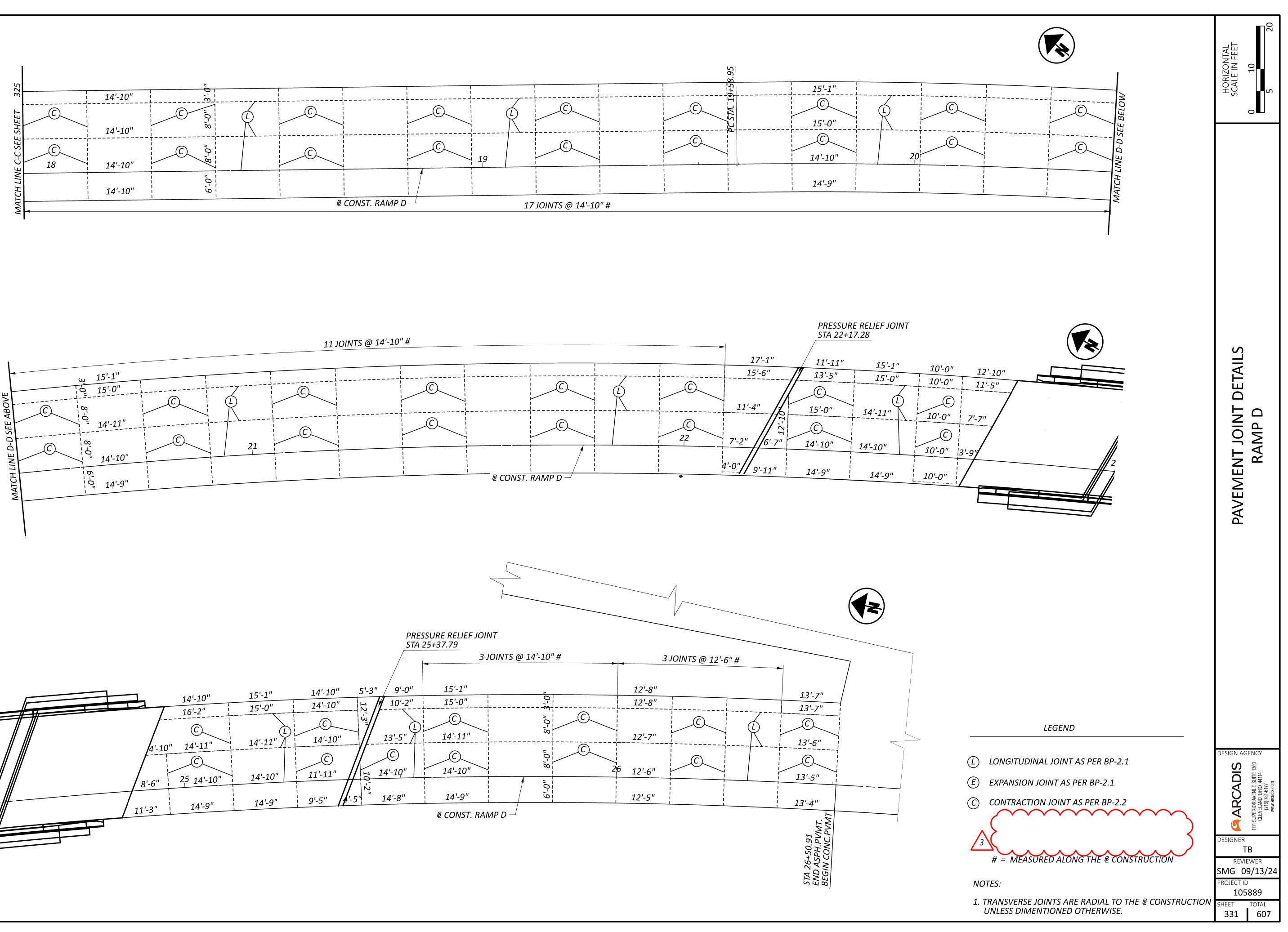
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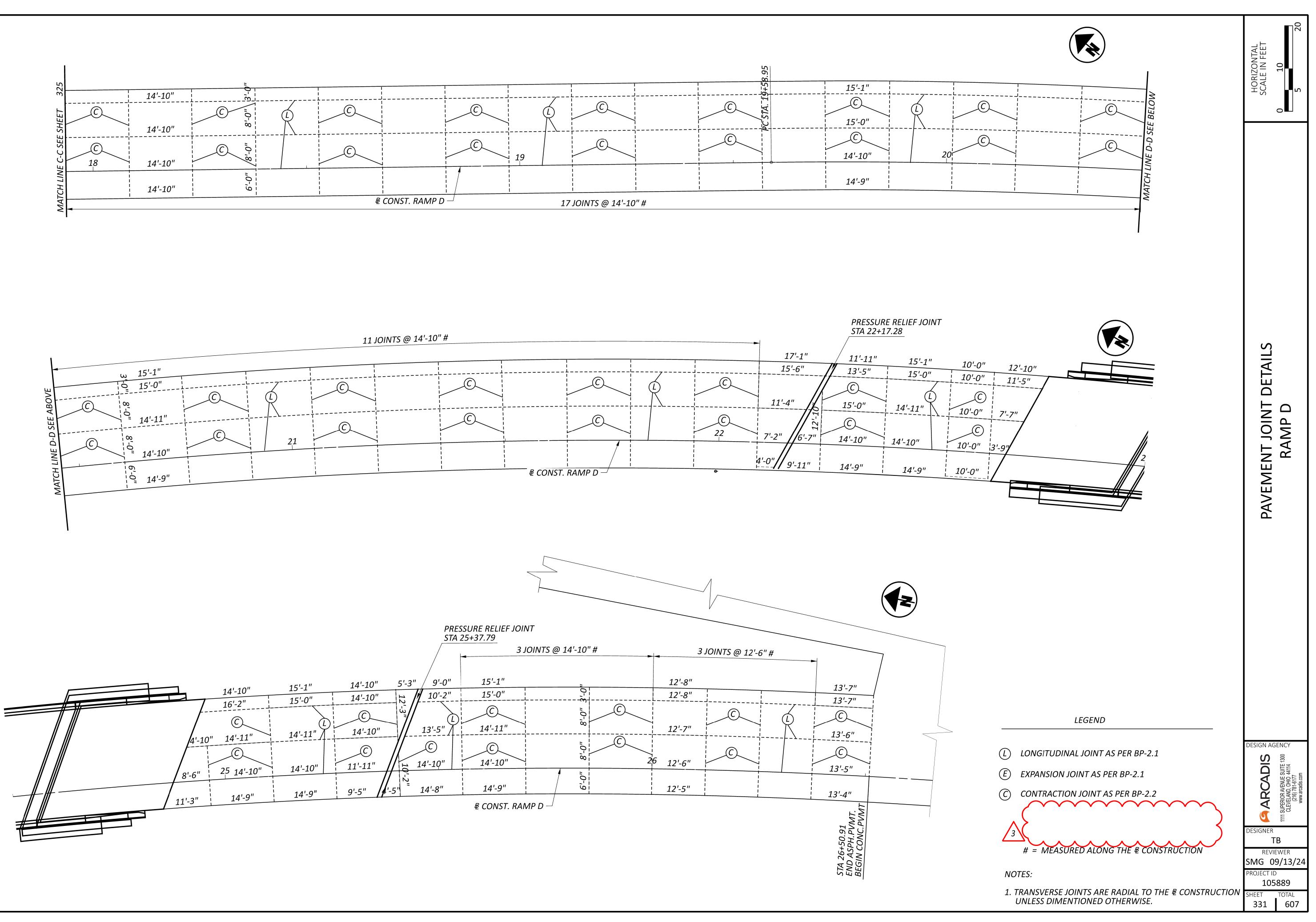




	 			14'-10"			I		!
C				C 14'-10"		C		C	 1
C	9'-0"	8'-6"	17	C 14'-10"		C		C 369.12'	
C	7'-0"	09		<u>C</u> 14'-10"		C		S40°05'16"	Ë
	7				7	7 JOINTS @ 14'-10	"#		



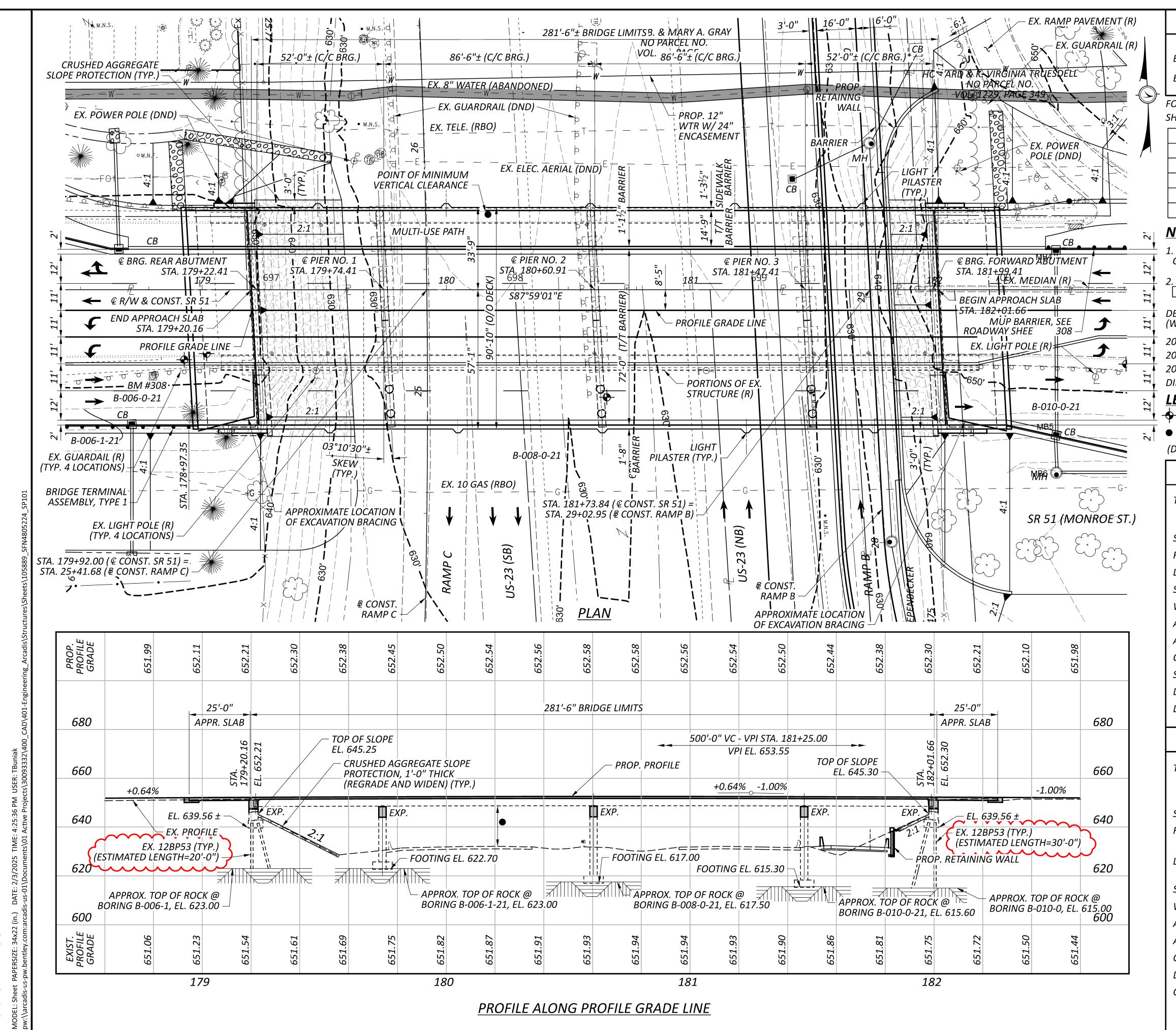




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	BENCI	HMARK DAT	A		
∉ R/W (SR 51) N	MONROE ST.				1
BM #308 STA.	696+52.6 ELEV	7. 651.83 OFF.	34.8' RT.	NE BOLT LANE DIR SIGN	
BM #309 STA.	701+23.5 ELEV	. 650.01 OFF.	52.9' RT.	NW COR CONC SIGN FOUNDATION	
OR ADDITIONAL	BENCHMARK IN	FORMATION. SEL	ROADW	AY PLAN	
GHEET 21 .					
	BORING LOCATI				
BBORING -006-0-21	STATION 179+01.83	OFF 26.24' RT			
B-006-1-21	179+01.83	28.72' RT			
B-008-0-21	180+65.81	44.10' RT			
-010-0-21	182+78.79	30.53' RT			
<u>NOTES</u>					
	IMITS SHOWN AI LAN CROSS SECT	RE APPROXIMATE IONS.	. ACTUA	L SLOPES SHALL	
2. FOR LIGHT PILA [38/66] AND [E STATIONS, SEE	DECK PLA	AN ON SHEETS	<u>ь</u>
DESIGN TRAFFIC: WEST OF US 23)		DESIGN TH (EAST OF U			00
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	5,920	2046 ADT	_ 28,4		
2046 ADTT= 15	-	2046 ADT			S C A
DIRECTIONAL DIS	IRIBUTION = 0.5	4 DIRECTION	NAL DISTI	<i>RIBUTION = 0.54</i>	PLAN LUC-5 US 23
BORING LOCA	TION				Щ с щ
F		ACTUAL MIN.) / 1	5'-6" (REC	QUIRED MIN.)	
		-	-	CATED BY OTHERS	DGE S
	EXISTIN	G STRUCTU	RE		
TYPE: CONTII	NI IOLIS STEEL BE	AM WITH NONCO			BRII
CONCR	RETE DECK ON RE	INFORCED CONC	RETE CAP	PAND COLUMN	
		TINGS AND STUB '±, 52'-0"± C/CBR		NTS ON PILES	
	'-0"± F/F SIDEWA	, .	0.		
	400				
SKEW: 3°10'3	80"± R.F.				
WEARING SURF.	ACE: 1.3"± MC	NOLITHIC CONCI	RETE		
APPROACH SLA	BS: AS-1-54 (2	25'-0"± LONG) WI	TH CURB	S (T=13"±)	
ALIGNMENT: 1	TANGENT				
CROWN: 0.016					
STRUCTURE FILE	E NUMBER: 48	05224			
DATE BUILT: 1					
DISPOSITION:		ATED AND WIDEN			
	PROPOS	ED STRUCT	JRE		
REINFO	DRCED CONCRET	S STEEL BEAM W E DECK ON MODI E CAP AND COLUI	FIED/WIL MN PIERS	DENED S AND	SEN
	-	EMI-INTEGRAL AE '±, 52'-0"± C/C BF		IS UN PILES	4805224
ROADWAY: 72	-0" T/T BARRIER				
LOADING: HL-	.93 (NEW SUPERS	STRUCTURE, WID	ENED AB		RAAL AIN STREET SI 30) 434-1995 w.arcadis.com
SKEW: 3°10'3	80"± R.F.				SOUTH A AKRC (3 ww
WEARING SURF.	ACE: 1" MONO	DLITHIC CONCRET	E		
APPROACH SLAI	BS: 25'-0" LONG	G 15" THICK (AS-1	15, AS-2	2-15)	DESIGNER CHECKER
ALIGNMENT: 7					REVIEWER FJG 09-13-24
CROWN: 0.016					PROJECT ID
DECK AREA: 2		NI 11º 10' 51 01"			105889 SUBSET TOTAL
COORDINATES:		N 41° 42' 54.91" W 83° 41' 20.03'	ı.		1 66
	U	+1 20.03			SHEET TOTAL 416 607



PILES TO BEDROCK

DRIVE PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED WHEN THE PILE PENETRATION IS AN INCH OR LESS AFTER RECEIVING AT LEAST 20 BLOWS FROM THE PILE HAMMER. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL THE TOTAL FACTORED LOAD IS 68.0 KIPS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES.

REAR ABUTMENT PILES: HP 12X53 PILES, 25 FEET LONG ORDER LENGTH

FORWARD ABUTMENT PILES: HP 12X53 PILES, 35 FEET LONG ORDER LENGTH

ROCK SOCKETED DRILLED SHAFTS

THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 435 KIPS AT THE PIERS. THIS LOAD IS RESISTED BY TIP RESISTANCE. AT THE PIERS, THE FACTORED TIP RESISTANCE IS 3,200 KIPS.

SOIL NAIL RETAINING WALL

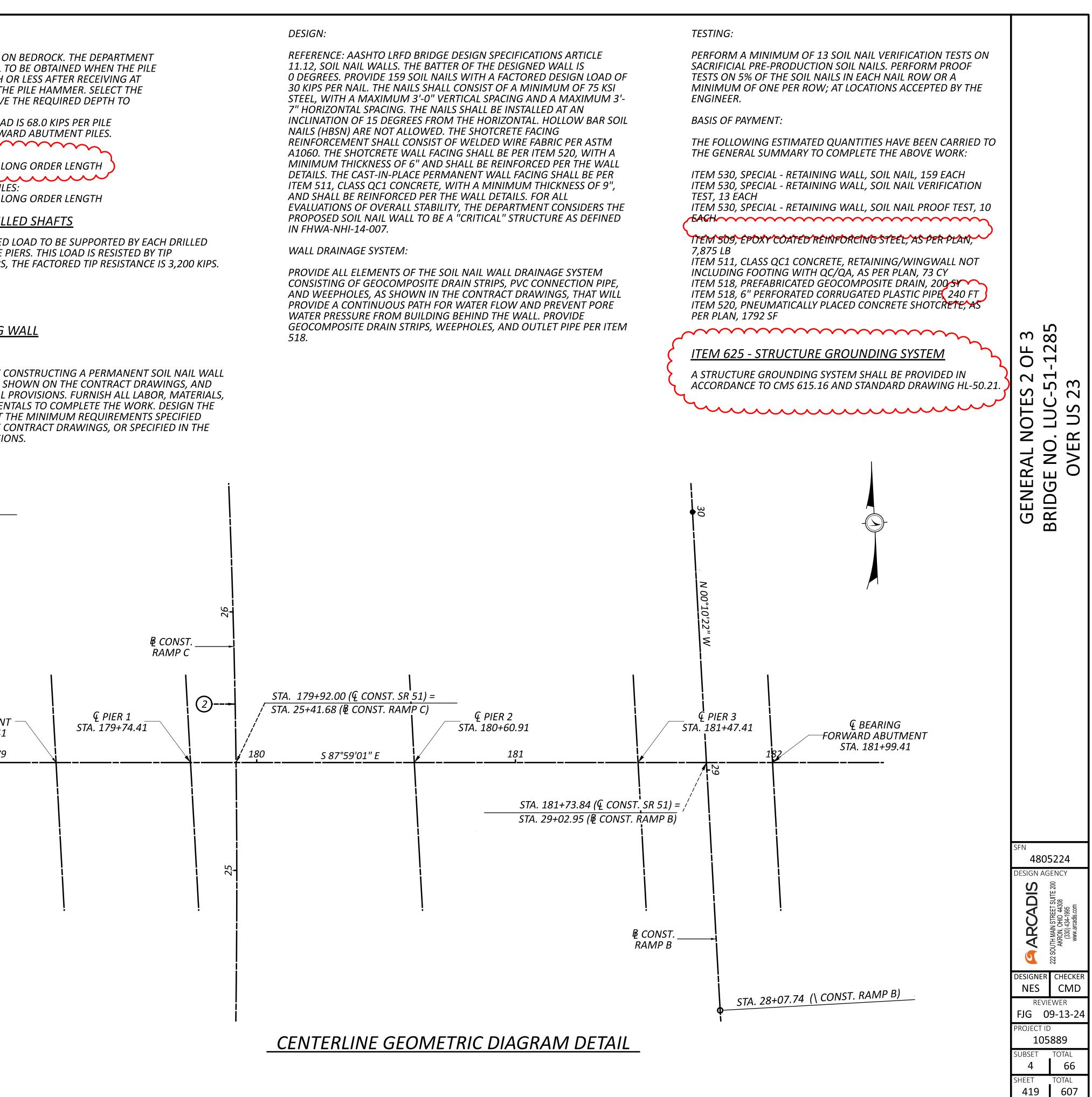
DESCRIPTION OF WORK:

THIS WORK CONSISTS OF CONSTRUCTING A PERMANENT SOIL NAIL WALL AS SPECIFIED HEREIN, AS SHOWN ON THE CONTRACT DRAWINGS, AND PER THE PROJECT SPÉCIAL PROVISIONS. FURNISH ALL LABOR, MÁTERIALS, EQUIPMENT, AND INCIDENTALS TO COMPLETE THE WORK. DESIGN THE SOIL NAIL WALL TO MEET THE MINIMUM REQUIREMENTS SPECIFIED HEREIN, SHOWN ON THE CONTRACT DRAWINGS, OR SPECIFIED IN THE **PROJECT SPECIAL PROVISIONS.**

CURVE DATA *P.I. Sta.* 24+81.14 $\Delta = 6^{\circ} 46' 06'' (LT)$ $Dc = 1^{\circ} 30' 00''$ *R* = 3,819.72' *T* = 225.87' *L* = 451.22 E = 6.67' C = 385.13' *C.B.* = *N* 29° 23′ 50″ *E*

> *Q* BEARING REAR ABUTMENT STA. 179+22.41

> > 179



P	ARTICIPATION						ESTIMATED QUANTITIES					AS P	ER PLAN
06/NHS/13	07/NHS/31	05/NHS/13	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT'S	PIER	S GENERA	AL STR.	SHT. NO.
		1	202	11203	1	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1		3
		300	202	22900	300	SY	APPROACH SLAB REMOVED	300					
			500	11100	4	10							
		279	503	21100	279	CY	UNCLASSIFIED EXCAVATION BRACING		+	$\gamma \gamma $	279	$\gamma \gamma \gamma \gamma$	\sim
	L							h	$+\cdots$		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		····
		1	505	11100	1	LS	PILE DRIVING EQUIPMENT MOBILIZATION				1		
		\sim	\sim	\sim				\sim	~~~~~	\sim	\sim	\sim	
	}	600	507	00200	600	FT	STEEL PILES HP12X53, FURNISHED		600				
	\	500	507	00250	500	FT	STEEL PILES HP12X53, DRIVEN		500			_	
		234.148	509	10001	234,148	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	185,385	19,935	20,95	53 7,875	3	4
	\sim	500		20001			CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN				× 1,010		5
	\sim	~~~~~	~~~~			~~~~~							
	<u> </u>	304	510	10001	304				304				4
								\dots					
		4	511 511	33500	4	EACH		100	4				5
		725		34413 34446	123 735	CY CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	123 735					5
	\frown	165	511	42012	165	СҮ	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	\sim		165			
		119	511	43512	119	СҮ	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING		119		}		
		73	511	46013	73	CŶ	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	\cdots	73				4,23
	3659		511	71200	3,659	SF	CONCRETE, MISC.: MOLDED BRICK SURFACE	3,659					5
	3659		511	71200	3,659	SF	CONCRETE, MISC.: STAINING CONCRETE SURFACES	3,659					5
	6		511	81300	6	EACH	CONCRETE, MISC.: MOCKUP, MOLDED BRICK SURFACE	6					5
		407	512	10051	407	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN	407					5
		1340	512	10101	1,340	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	1340					5
		50	512	10601	50	FT	CONCRETE REPAIR BY EPOXY INJECTION, AS PER PLAN				50		3
		16	512	33000	16	SY	TYPE 2 WATERPROOFING		16				
		230855	513	10260	230,855	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3	230,855					
		14070	513	20000	14,070	EACH	WELDED STUD SHEAR CONNECTORS	14,070					
		31451	514	00050	31,451	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	31,451					
		31451	514	00056	31,451	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	31,451					
		45773	514	00060	45,773	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	45,773					
		45773	514	00067	45,773	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN	45,773					4
		69	514	00504	69	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	69					
		25	514	10000	25	EACH	FINAL INSPECTION REPAIR	25					
		764	514	27700	764	SF	FIELD PAINTING, MISC.: COATING OF BEAM ENDS	764					4
		182	516	10010	182	FT	ARMORLESS PREFORMED JOINT SEAL	182					
		102	516	13600	11	SF	1" PREFORMED EXPANSION JOINT FILLER	102					
		145	516	13900	145	SF	2" PREFORMED EXPANSION JOINT FILLER		145				
		184	516	14020	184	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		184				
		42	516	44100	42	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (13" x 20" x 2.773" BEARING WITH 14" x 21' x 1.5" LOAD PLATE)	42					
		20	516	44101	28	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN, (12" x 15" x 2.773" BEARING	28					27
		28			20		WITH 13" x 16" x 1.5" LOAD PLATES AND HP10x42 PEDESTAL)	20					21
		1	516	47001	1	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	1					3
96			517	70001	996	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING), AS PER PLAN	996					5
90				10001									•
		200	518	20000	200	SY	PREFABRICATED GEOCOMPOSITE DRAIN		200				
		116	518	21200	116	СҮ	POROUS BACKFILL WITH GEOTEXTILE FABRIC		116				
		440	518	40000	440	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		440				
		55	518	40010	55	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		55				
		100	519	11101	100	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN				100		3
		1792	520	10001	1,792	SF	PNEUMATICALLY PLACED CONCRETE SHOTCRETE, AS PER PLAN		1,792				4,23
		1192	520	10001	1,732	01			1,732				+, 20
		75	524	94802	75	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK			75			
		40	524	94804	40	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK			40			
		506	526	25010	506	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")				506		
		182	526	90030	182	FT	TYPE C INSTALLATION				182		
		150	530	00400	159	EACH	SPECIAL - STRUCTURES - RETAINING WALL, SOIL NAIL		159				4
		159 13	530	00400	13	EACH			13				4
		10	530	00400	10	EACH	SPECIAL - STRUCTURES - RETAINING WALL, SOIL NAIL PROOF TEST		10				4

APERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 8:18:27 AM USER: cferrell w.bentley.com:arcadis-us-01\Documents\01 Active Projects\30093332\ Ъ MODEL:

LUC-51-1285

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PARTICIPATION	N					ESTIMATED QUANTITIES			AS PER PLAN
NHS/13 07/NHS/31	05/NHS/13 184	ITEM 601	ITEM EXT. 20000	TOTAL 184	UNIT SY	DESCRIPTION CRUSHED AGGREGATE SLOPE PROTECTION	SUPER ABUT'S PIERS	GENERAL	STR. SHT. NO.
	184	007			51			104	
506		607	39901	606	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN	606		5
	663	625	25400	663		CONDUIT, 2", 725.04		663	
	10 1	625 625	29941 33000	10 1		BARRIER JUNCTION BOX, AS PER PLAN STRUCTURE GROUNDING SYSTEM		10 1	5

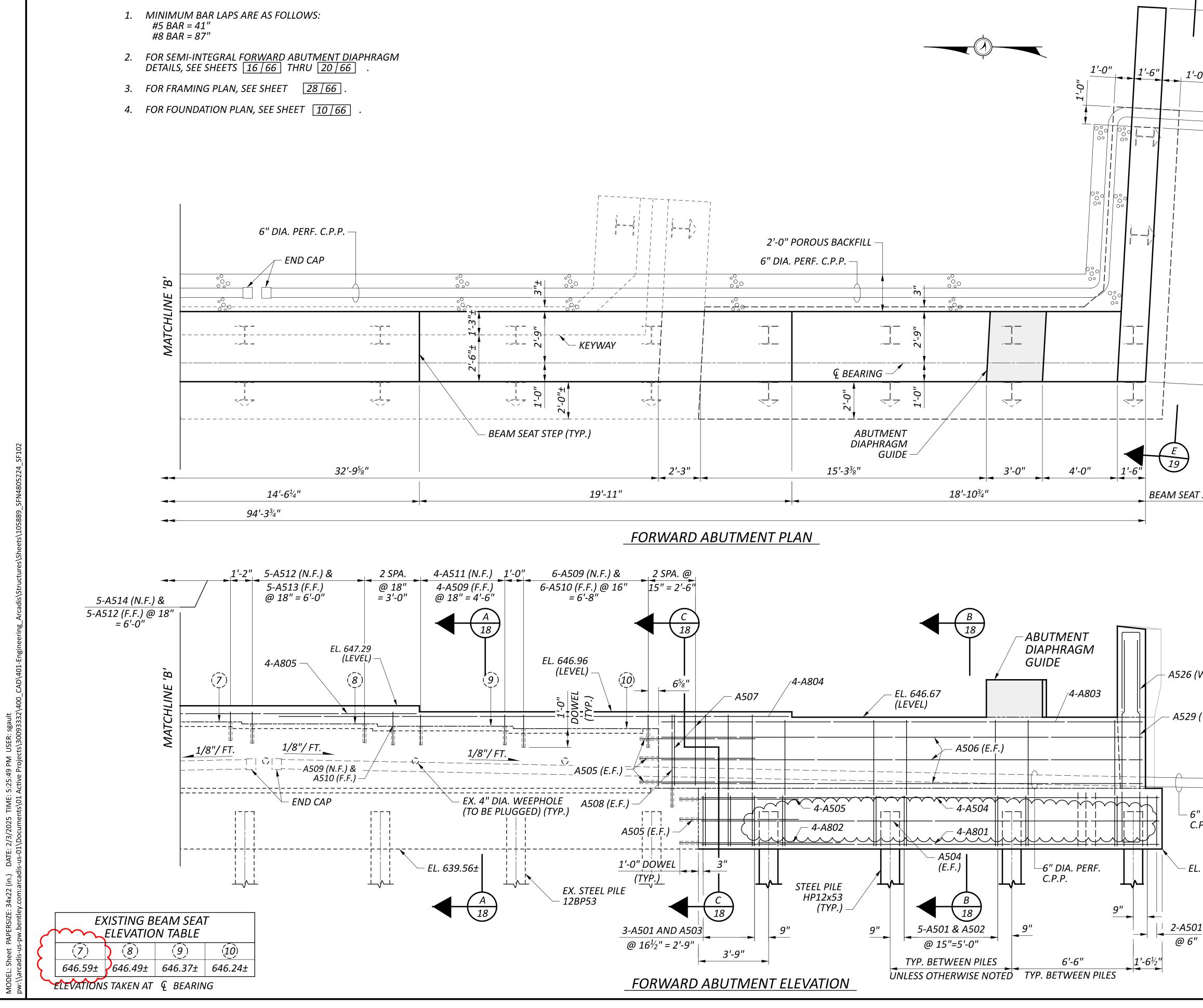


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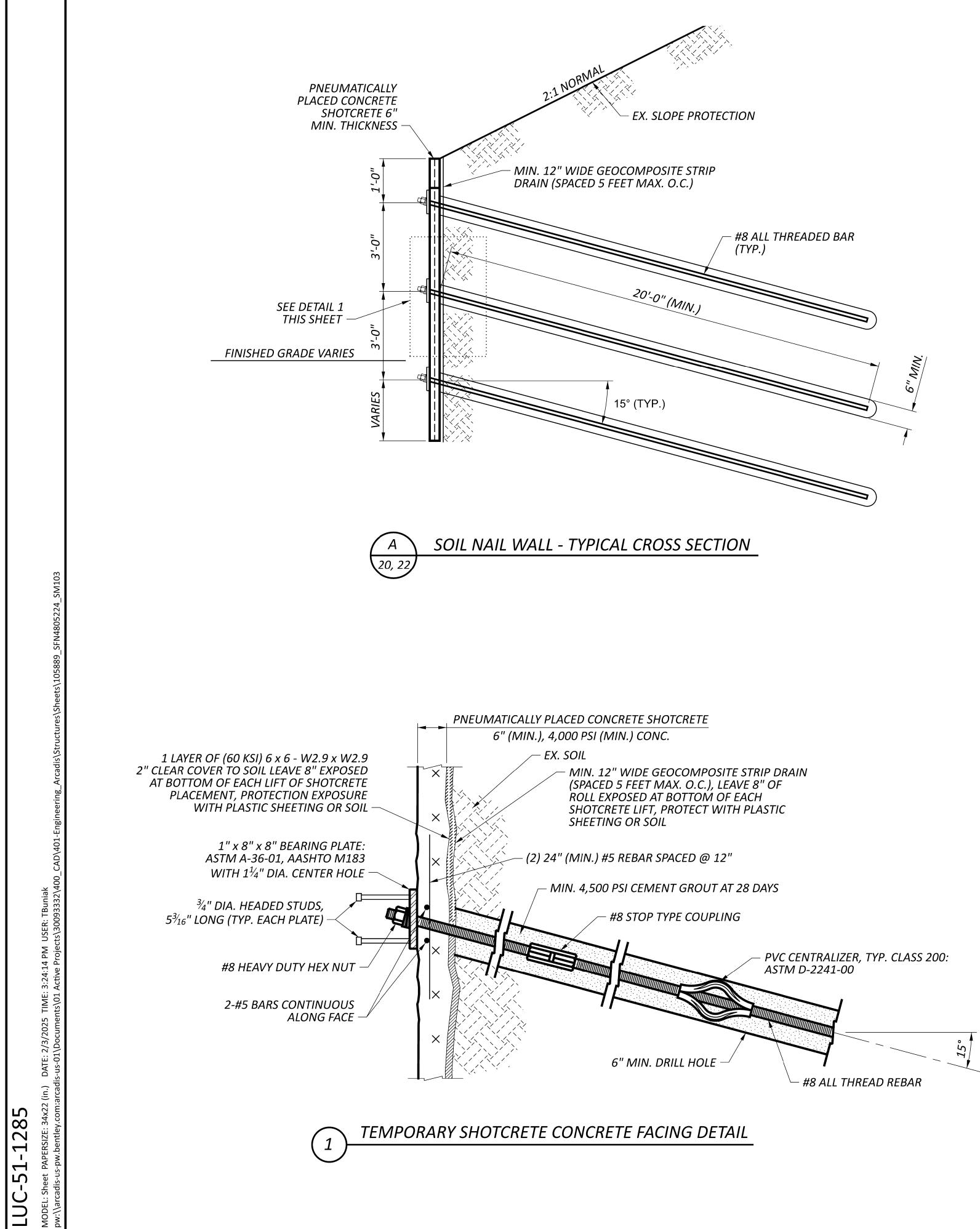
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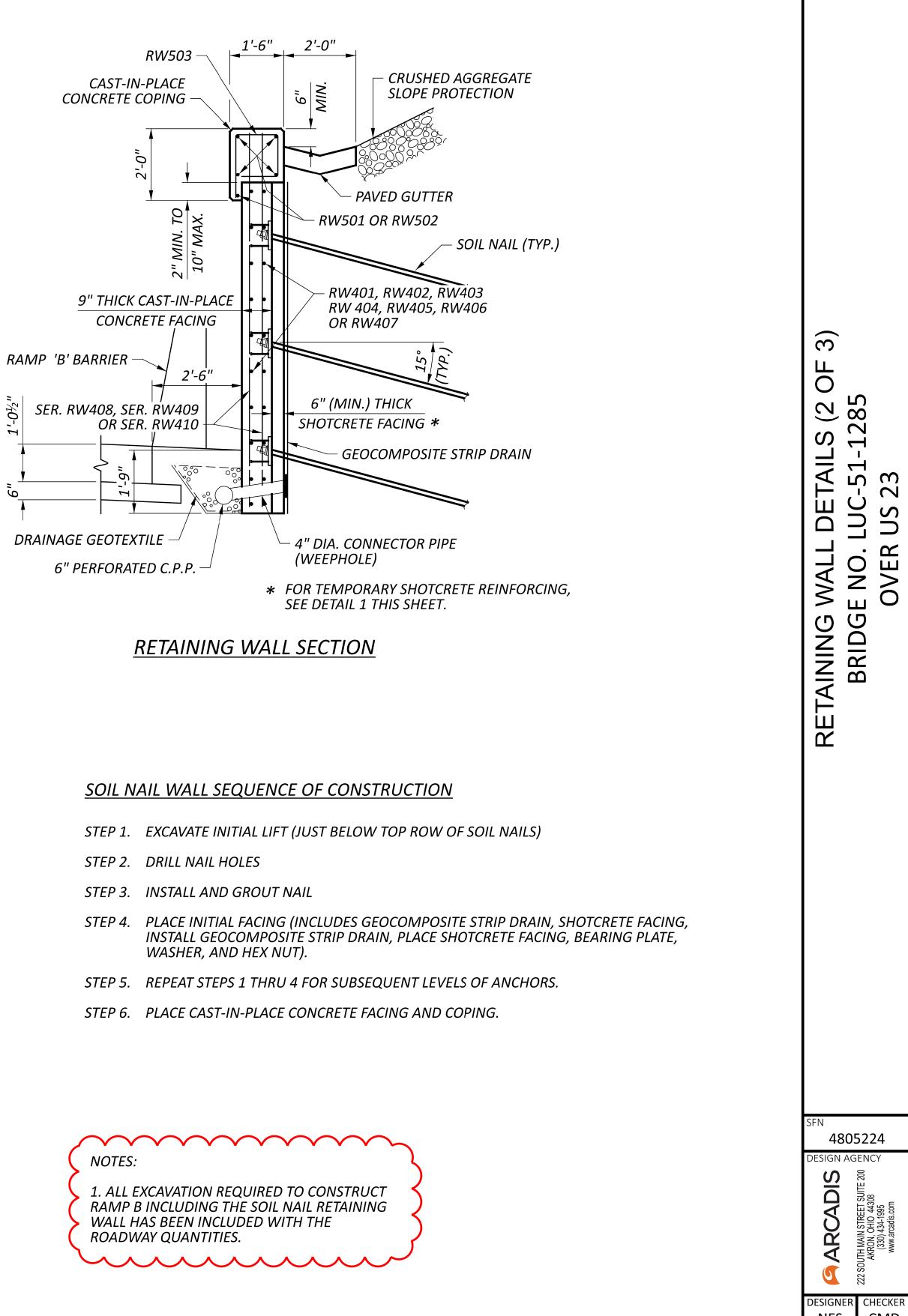
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- #5 BAR = 41"

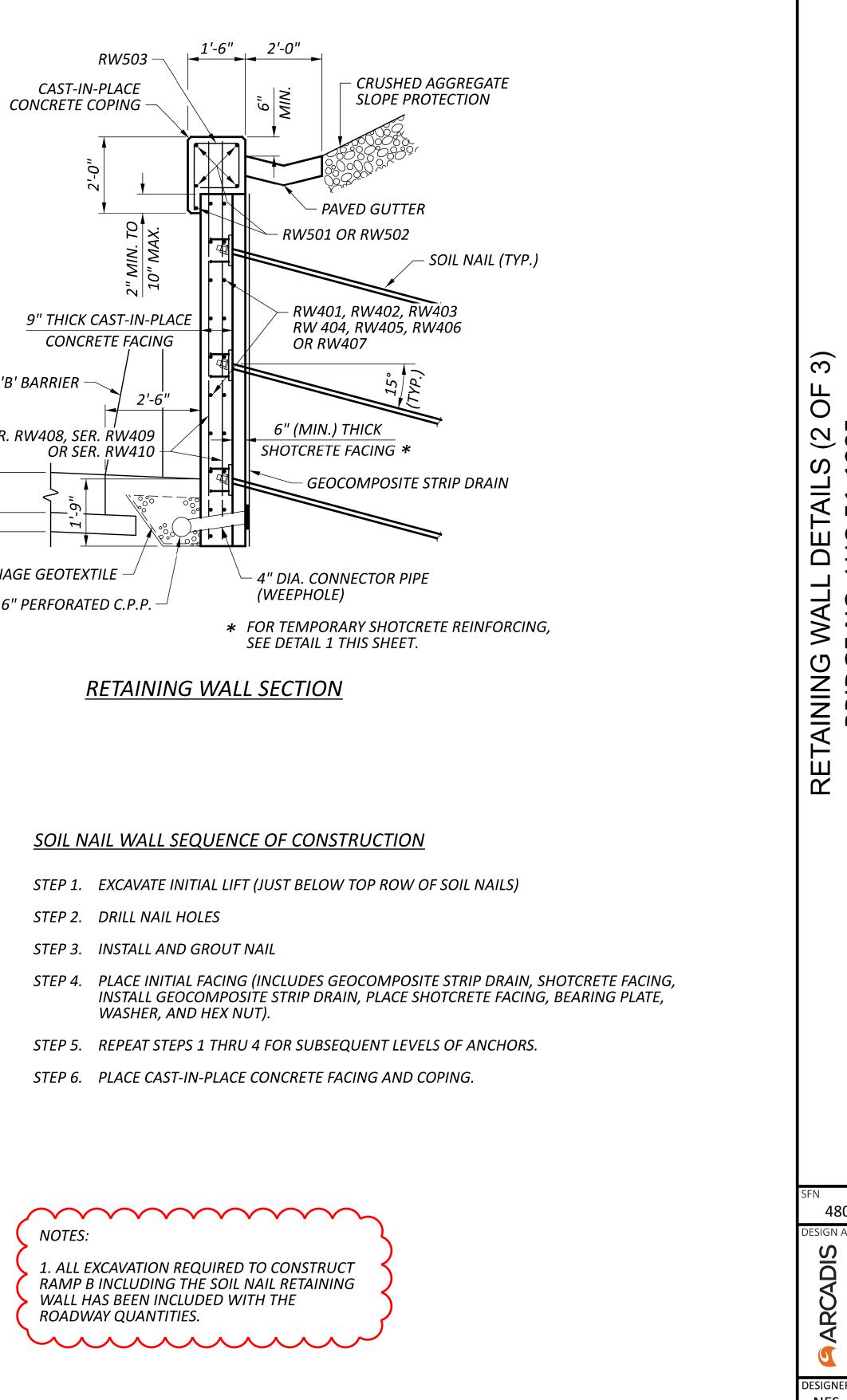


WINGWALL)	FORWARD ABUTMENT PLAN AND ELEVATION 2 OF 2 BRIDGE NO. LUC-51-1285 OVER US 23
	SFN 4805224 DESIGN AGENCY
" DIA. NON-PERF. .P.P.	ADIS ID 44308 41995 dis.com
	222 SOUTH MAIN STREET SUITE 200 AKRON, OHIO 44308 (330) 434-1995 www.arcadis.com
639.56±	DESIGNER CHECKER NES CMD
	REVIEWER FJG 09-13-24 PROJECT ID 105889
	subset total
	SHEET TOTAL 432 607

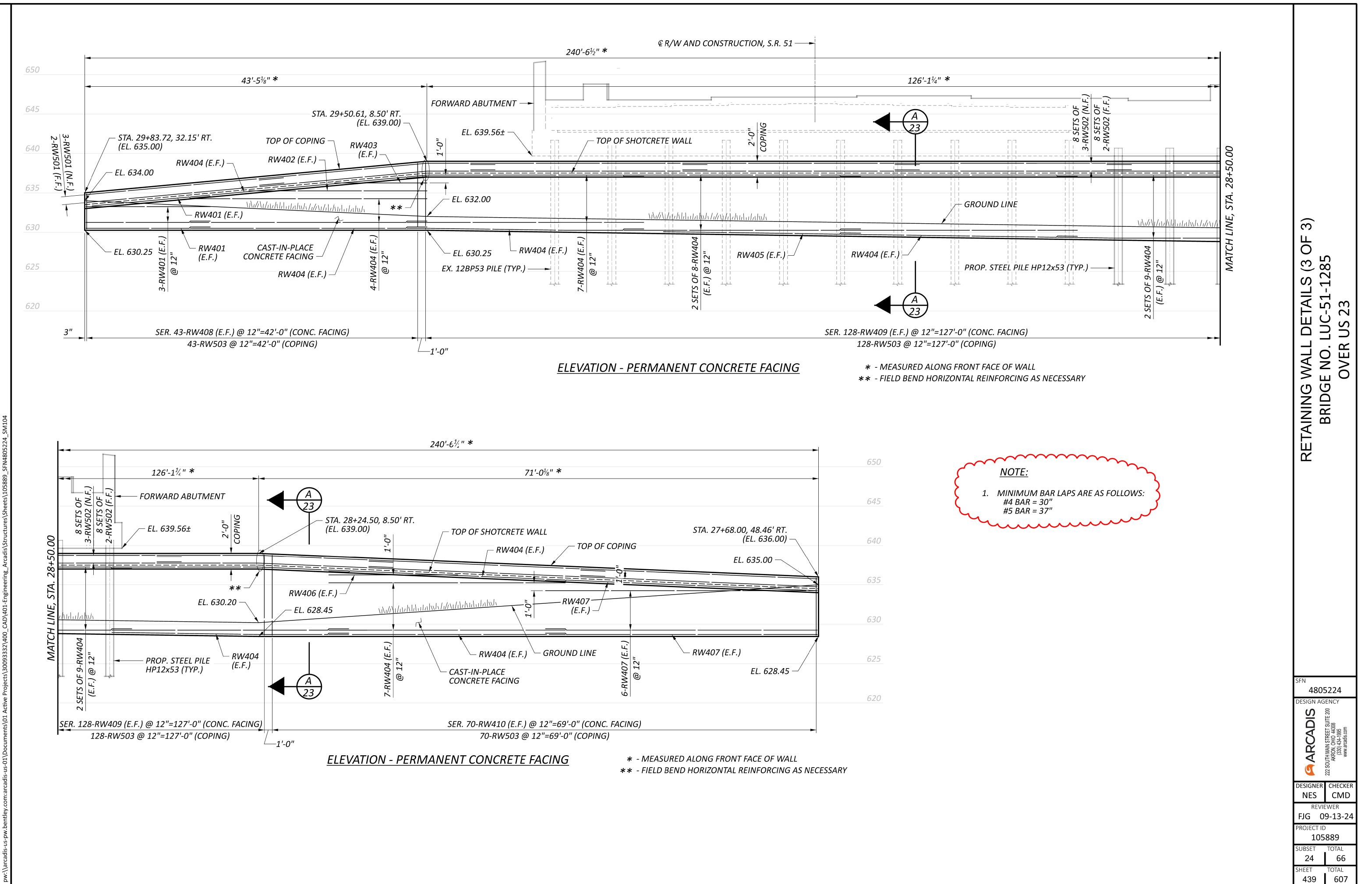




STEP 1.	EXCAVATE INITIAL LIFT (J
STEP 2.	DRILL NAIL HOLES
STEP 3.	INSTALL AND GROUT NA
STEP 4.	PLACE INITIAL FACING (II INSTALL GEOCOMPOSITE WASHER, AND HEX NUT)
STEP 5.	REPEAT STEPS 1 THRU 4
STEP 6.	PLACE CAST-IN-PLACE CO

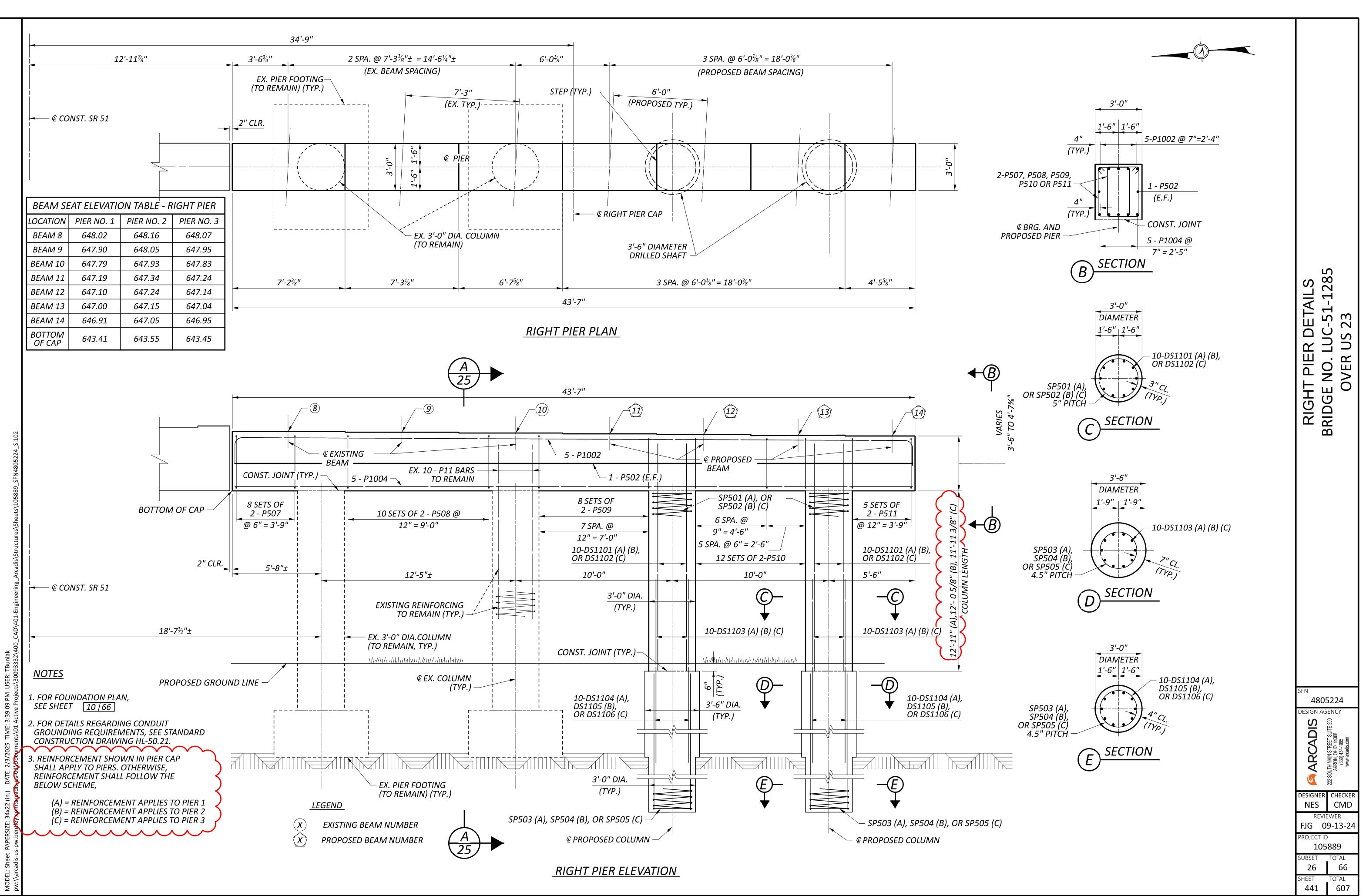


RETAINING WALL	BRIDGE NO.	OVER
	80522	
	222 SOUTH MAIN STREET SUITE 200 AKRON OHIO 44308	(330) 434-1995 www.arcadis.com
DESIGN NES		HECKER CMD ER
FJG PROJEC	ΓID	L3-24
1 SUBSET 23	0588 TO	9 TAL 66
SHEET 438		TAL 607



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		NUMBER							DI	ME
MARK	REAR	FORWARD	TOTAL	LENGTH	WEIGHT	TYPE	A	В	С	
		ABUTME	ENT FOOTI	+ NG (EPOXY	COATED ST	±± TEEL F	REINFOR	+ CEMENT -	- ECSR)	
A501	20	20	40	17'-8"	737	3	5'-8"	2'-10"	,	
A502	15	15	30	20'-10"	652	3	3'-5"	6'-8"		
A503	3	3	6	21'-4"	134	3	3'-5"	6'-11"		
A504	6	6	12	24'-5"	306	STR				
A505	12	12	24	6'-0"	150	STR				
A506	6	6	12	25'-9"	322	STR				
A507	2	2	4	15'-0"	63	3	3'-5"	3'-9"		
A508	2	2	4	7'-9"	32	1	3'-0"	4'-11"		
A509	11	11	22	4'-9"	109	1	3'-2"	1'-9"		
A510	7	7	14	4'-11"	72	1	3'-2"	1'-11"		
A511	14~	14~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4'-7"	134	1	3'-2"	1'-7"		
A512	20	20	40	4'-8"	195	1	3'-2"	1'-8"		
A513	6	6	12	4'-10"	60	1	3'-2"	1'-10"		
A514	<u></u>	14		4'6'	131	1	3'-2"	1'-6"		
A515	14	14	28	4'-5"	129	1	3'-2"	1'-5"		
A516	4	4	8	4'-3"	35	1	3'-2"	1'-3"		
A517	1	1	2	6'-9"	14	1	3'-5"	3'-6"		
A518	6	6	12	3'-0"	38	STR				
A801	4	4	8	24'-5"	522	STR				
A802	4	4	8	8'-6"	182	STR				
A803	4	4	8	25'-10"	552	STR				
A804	4	4	8	27'-3"	582	STR				
A805	4	4	8	32'-8"	698	STR				
A806	4	4	8	30'-3"	646	STR				
					\sim					
	A	BUTMENT FO			6,495	\square				
		RETA	AINING W/	ALL (EPOXY	COATED ST	EEL F	REINFOR	CEMENT -	ECSR)	
RW401		10	10	15'-9"	105	STR				
RW402		2	2	22'-6"	30	STR				
RW403		2	2	11'-8"	16	STR				
RW404		118	118	30'-0"	2,365	STR				
RW405		2	2	25'-0"	33	STR				
RW406		2	2	16'-6"	22	STR				
RW407		16	16	34'-6"	369	STR				
		2 SER.	2 SER.	4'-5"						
CEDIEC		OF	OF	то	366	STR				
SERIES				1	1					
SERIES RW408		43	43	8'-4"						
RW408		43 2 SER.	43 2 SER.	8'-4" 8'-5"						
RW408 SERIES		4			1,589	STR				
RW408		2 SER.	2 SER.	8'-5"	1,589	STR				
RW408 SERIES RW409		2 SER. OF	2 SER. OF	8'-5" TO	1,589	STR				
RW408 SERIES RW409 SERIES		2 SER. OF 128	2 SER. OF 128	8'-5" TO 10'-2" 7'-3" TO	1,589 811	STR STR				
RW408 SERIES RW409		2 SER. OF 128 2 SER.	2 SER. OF 128 2 SER.	8'-5" TO 10'-2" 7'-3"						
RW408 SERIES RW409 SERIES		2 SER. OF 128 2 SER. OF	2 SER. OF 128 2 SER. OF	8'-5" TO 10'-2" 7'-3" TO						
RW408 SERIES RW409 SERIES RW410		2 SER. OF 128 2 SER. OF 70	2 SER. OF 128 2 SER. OF 70	8'-5" TO 10'-2" 7'-3" TO 10'-1"	811	STR				
RW408 SERIES RW409 SERIES RW410 RW501		2 SER. OF 128 2 SER. OF 70 5	2 SER. OF 128 2 SER. OF 70 5	8'-5" TO 10'-2" 7'-3" TO 10'-1" 25'-2"	811 131	STR STR	1'-8"	1'-2"	1'-2"	
RW408 SERIES RW409 SERIES RW410 RW501 RW502		2 SER. OF 128 2 SER. OF 70 5 40	2 SER. OF 128 2 SER. OF 70 5 40	8'-5" TO 10'-2" 7'-3" TO 10'-1" 25'-2" 30'-0"	811 131 1,252	STR STR STR STR	1'-8"	1'-2"	1'-2"	
RW408 SERIES RW409 SERIES RW410 RW501 RW502		2 SER. OF 128 2 SER. OF 70 5 40	2 SER. OF 128 2 SER. OF 70 5 40	8'-5" TO 10'-2" 7'-3" TO 10'-1" 25'-2" 30'-0"	811 131 1,252	STR STR STR STR	1'-8"	1'-2"	1'-2"	

<u>REINFORCING NOTES</u>

1. PAYMENT FOR REINFORCING SHALL BE MADE WITH ITEM 509 - EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN.

2. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS.

3. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

4. ALL REINFORCING STEEL BARS SHALL BE A MINIMUM 2" CLEAR FROM FACE OF CONCRETE UNLESS NOTED OTHERWISE.

5. FOR REINFORCING GENERAL NOTES AND BEND DIAGRAMS, SEE SHEET 66/66

6. DIAPHRAGM GUIDE REINFORCING IS PROVIDED FOR INFORMATION ONLY. IT IS INCLUDING WITH THE DIAPHRAGM GUIDE FOR PAYMENT. mmmmmm

<u>BAR MARK LEGEND</u>

A = ABUTMENT P = PIERR = RAILING S = SUPERSTRUCTURE D = ABUTMENT DIAPHRAGM

DATE: 2/3/ s-lis-01\Dog (in.) tx22

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ISIONS			MARK		NUMBER		LENGTH	WEIGHT	TYPE		DIMENSIONS					
D E	INC			REAR	FORWARD	TOTAL			F	Α	В	С	D	Ε	INC	
					1	ABUTME	ENT STEM (I	EPOXY COA	TED S	STEEL REI	NFORCEN	I AENT - EC	SR)			
			A519	4	4	8	19'-8"	164	STR							
			A520	2	2	4 4	9'-7" 18'-7"	40 78	19 STR	3'-5"	5'-11"	1'-9"				
			A521 A522	2	2 2	4	18 -7	57	STR							
			A523	8	8	16	13'-3"	221	STR							
			A524	6	6	12	16'-3"	203	STR	- 4 - 4						
			SERIES	1 SER. OF	1 SER. OF	2 SER.	3'-8" TO	47	1	2'-8" TO	1'-2"	2'-8" TO			0'-5"	
			A525	5	5	OF 5	5'-4"	47	1	10 4'-4"	1-2	4'-4"			0-5	
			A526			22	9'-9"	224	2	4'-5"	1'-2"	4'-5"				
			A527	1	1	2	18'-7"	39	2	8'-10"	1'-2"	8'-10"				
			A528	-	<u>NSN</u>	26	12'-8"	343	3	3'-2"	2'-10"					5)
			A529	10	10	20	22'-11"	478	2 570	11'-0"	1'-2"	11'-0"				ЦО
			A530 A531	4	0 0	<u>4</u> 2	16'-3" 15'-4"	68 32	STR STR						├ ─── │	(1 (
		1	A532	2	0	2	11'-4"	24	STR							
			A533	2	2	4	9'-10"	41	19	7'-11"	0'-8"	1'-10"				IST [-1
			A534	2	2	4	8'-3"	34	19	3'-5"	4'-7"	1'-7"				51 51
			A535	8	07	8	8'-3"	69	STR	4'-4"	1'-2"					
			A536 A537	14	14	<u>14</u> 28	9'-7" 8'-10"	140 258	2 STR	4 -4	1-2	4'-4"				
				1 SER.	1 SER.	2 SER.	6'-1"		0111	2'-7"		2'-7"				
			SERIES A538	OF	OF	OF	то	108	2	ТО	1'-2"	то			0'-6 ¼"	
				6	6	6	11'-3"			5'-2"		5'-2"				
			A539	0	4	4	15'-8"	65	STR							M M
			A540	0	2 2	2 2	14'-9" 10'-9"	31 22	STR STR							
			A542	0	8	8	7'-8"	64	STR							REINFORCING S BRIDGE NO.
			A807	4	4	8	16'-3"	347	STR							
					ABUTMENT	T STEM ECSR	SUBTOTAL	3,197								
					SEM	II-INTEGRA	AL DIAPHRA	GM (EPOX	Υ COA	ATED STEE	EL REINFC	DRCEMEN	T - ECSR)			
	0'-1 ¹ ⁄/ ₈ "		D501	60	60	120	7'-2"	897	2	2'-5"	2'-7"	2'-5"				
			D502 D503	120 4	120 4	<u>240</u> 8	8'-6" 6'-10"	<i>2,128</i> 57	2	2'-8" 2'-3"	3'-5" 2'-7"	2'-8" 2'-3"			<u> </u>]	
	0'-0 ¹ ⁄8"		D503	8	4 8	<u>8</u> 16	5'-10" 5'-6"	92	2 2	<u>2'-3"</u> <u>1'-2"</u>	<u>2'-/"</u> 3'-5"	<u>2'-3"</u> <u>1'-2"</u>				
			D801	4	4	8	40'-0"	854	STR							
	0'-0 ¹ / ₂ "		D802	2	2	4	32'-8"	349	STR							
		1	D803 D804	8	8	<u> </u>	25'-8" 3'-4"	1,097 107	STR STR							
			D804 D805	6	6	<u>12</u> 8	<u> </u>	208	STR STR						<u> </u>	
		1	D805	4	4	8	28'-6"	609	STR							
'-0''			D807	6	6	12	37'-11"	1,215	STR							
			D808	4	4	8	23'-3"	497	STR							SFN 4805224
		•	D809	2	2	4	15'-5"	165	STR							DESIGN AGENCY
		1	D810 D811	4 6	4 6	<u> </u>	12'-4" 4'-1"	263 131	STR STR							IE 200
		۱ ۲	D812					1,574		2'-8"	1'-0"	1'-0"				ARCADIS 2 SOUTH MAIN STREET SUITE 200 (330) 434-1995 (330) 434-1995
		(EGRAL DIAPHI			10,243)							N STRE 00100.
		λ.	D0601	<u>~~</u> 5~	<u> </u>		<u>9'9"</u>			3'-6"	3'-1"	3'-6"				ARO, OHIO (330) 434-11
			DG602	5	5	10	14'-6"	218	3	3'-1"	3'-9"				 	222 SOU
			DG801	7	7	14	8'-11"	333	2	3'-5"	2'-6"	3'-5"				
END.						1 1	101 10"	400			ייד ור	21 0"				DESIGNER CHFC
<u>SEND:</u> NT			DG802	7	7	14	12'-10"	480	5	2'-6"	3'-7"	2'-0"				DESIGNER CHEC NES CM

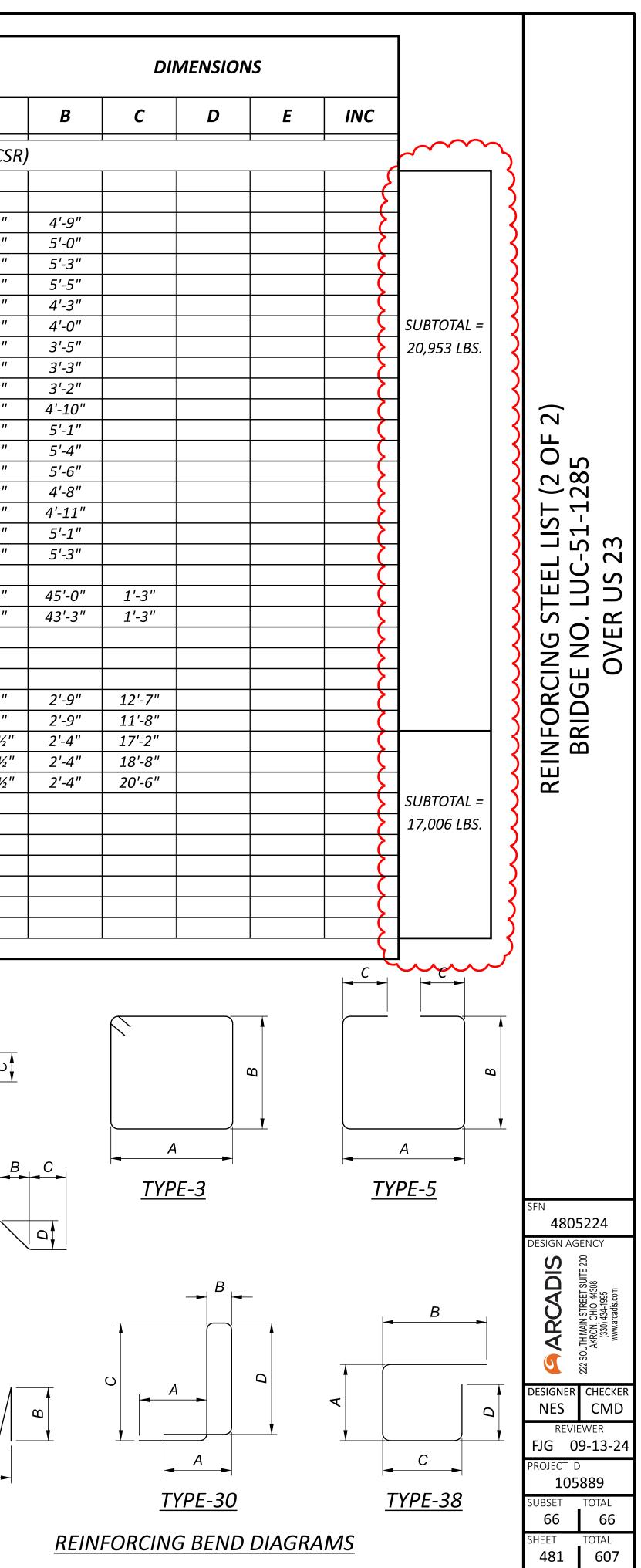
PROJECT ID 105889 UBSET TOTAL 65 66 SHEET TOTAL 480 607

MARK	NUMBER	LENGTH	WEIGHT	ТҮРЕ			DII	MENSION	S		
	TOTAL			Ţ	А	В	С	D	E	R	INC
		DE	СК (ЕРОХҮ	COAT	TED STEEL	REINFO	RCEMENT	- ECSR)			
S401	792	30'-0"	15,872	STR							
S402	88	31'-5"	1,847	STR							
<i>S501</i>	882	30'-0"	27,598	STR							
S502	98	38'-11"	3,978	STR							
<i>S503</i>	2204	30'-0"	68,963	STR							
<i>S504</i>	522	24'-9"	13,475	STR							
<i>S505</i>	551	6'-10"	3,927	16	6'-3"						
<i>S506</i>	551	7'-3"	4,167	16	6'-8"						_
S507	1102	36'-10"	42,335	STR							
S508	550	1'-6"	860	STR							
6001	24	201.01	4.000	CTD							
<u>5801</u>	24	30'-0"	1,922	STR							
<i>S802</i>	<u>8</u>	20'-8"		STR							
	DECK ECSR		185,385								
	BRID	GE RAILINO	TEPOXY	COAT					EE NOTE	5)	
R501	10	11'-5"	119	30	1'-6"	1'-4"	3'-11"	3'-9"			
R502	96	13'-0"	1302	2	6'-4"	0'-7"	6'-4"				
R503	38	8'-5"	334	30	1'-6"	1'-4"	2'-5"	2'-3"			
R504	96	6'-4"	634	2	3'-0"	0'-7"	3'-0"				
R505	386	8'-3"	3288	30	1'-6"	1'-1"	2'-5"	2'-3"			
R506	48	6'-11"	346	STR							
R507	24	24'-7"	615	STR							
R508	16	16'-0"	267	STR							
R509	8	9'-2"	76	STR							
R510	16	10'-1"	168	STR							
R511	16	5'-3"	88	STR							
R512	8	5'-6"	46	STR							
R513	64	5'-4"	356	STR							
R514	16	9'-0"	150	STR							_
R515	32	11'-0"	367	STR							-
R516	16	10'-9"	179	STR							
R517	128	6'-2"	823	STR							
R518	152	5'-8"	898	2	2'-8"	0'-7"	2'-8"				
R519	48	6'-5"	321	2	2'-8"	1'-4"	2'-8"				-
R520	56	10'-6"	613	2	5'-1"	0'-7"	5'-1"				
R521	12	11'-3"	141	2 570	5'-1"	1'-4"	5'-1"				
R522 R523	40 152	4'-3" 5'-9"	177 912	STR STR							
R525 R524	8	<u> </u>	<u>912</u> 78	STR							
R524 R525	<i>10</i>	<u> </u>	116	30	1'-6"	0'-11"	3'-11"	3'-9"			
R525 R526	48	5'-8"	284	2	2'-6"	0'-11"	2'-6"	5-5			
R527	38	8'-1"	320	30	1'-6"	0'-11"	2'-5"	2'-3"			
R528	12	10'-10"	136	2	5'-1"	0'-11"	5'-1"				
R529	766	7'-10"	6258	30	1'-6"	0'-8"	2'-5"	2'-3"			
R530	108	30'-0"	3,379	STR							
R531	8	10'-4"	86	STR							
R532	8	9'-11"	83	STR							
R533	16	5'-2"	86	STR							
R534	8	5'-5"	45	STR						1	
R535	8	18'-1"	151	STR							
R536	24	10'-5"	261	STR							
R537	40	12'-8"	529	STR							
R538	40	9'-8"	403	3	2'-1"	2'-5"					
R539	40	2'-7"	108	STR							
R540	60	8'-1"	506	21	1'-4"	2'-1"	0'-6"	2'-1"			
R541	8	3'-1"	26	STR							
BDIDCE	RAILINGS FCS	R SUBTOTAL	25,075								

L: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/3/2025 TIME: 4:00:41 PM USER: TBuniak Ircadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30093332\400_CAD\401-Engineering_Arcadis\Structures\Sheets\105889 SFN4805224 S

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			NUMBER					ы	
	MARK	PIER NO. 1	PIER NO. 2	PIER NO. 3	TOTAL	LENGTH	WEIGHT	ТҮРЕ	A
			1 1	PIER (EPOXY COA	TED STEEL	REINFORC	EMEN	IT - ECSI
	P501	2	2	2	6	45'-0"	282	STR	
	P502 P503	2 20	2 0	2 0	6 20	43'-3" 15'-6"	271 323	STR 3	2'-8"
	P504	20	0	0	20	16'-0"	334	3	2'-8"
	P505	20	0	0	20	16'-6"	344	3	2'-8"
	P506	12	0	0	12	16'-10"	211	3	2'-8"
	P507 P508	16 20	16 20	<u>16</u> 20	48 60	14'-6" 14'-0"	726 876	3	2'-8" 2'-8"
	P509	16	16	16	48	12'-10"	642	3	2'-8"
	P510	24	24	24	72	12'-6"	939	3	2'-8"
	P511 P512	10 0	10 20	<u> </u>	30 20	12'-4" 15'-8"	386 327	3	2'-8" 2'-8"
	P513	0	20	0	20	16'-2"	337	3	2'-8"
	P514	0	20	0	20	16'-8"	348	3	2'-8"
	P515	0	12	0	12	17'-0"	213	3	2'-8"
	P516 P517	0 0	0 0	20 20	20 20	15'-4" 15'-10"	320 330	3	2'-8" 2'-8"
	P518	0	0	20	20	16'-2"	337	3	2'-8"
	P519	0	0	12	12	16'-6"	207	3	2'-8"
	P1001	5	5	5	15	45'-11"	2964	1	1'-3"
	P1001 P1002	5	5	5	15	45 -11	2964	1	1-3 1'-3"
	P1003	5	5	5	15	45'-0"	2905	STR	
	P1004	5	5	5	15	43'-3"	2792	STR	
	SP501	2	0	0	2	282'-2"	589	27	0'-5"
	SP502	0	2	2	4	263'-5"	1,099	27	0'-5"
	SP503	2	0	0	2	350'-8"	731	27	0'-4 ½"
	SP504 SP505	0 0	2 0	<u> </u>	2	379'-0" 414'-0"	791 864	27 27	0'-4 ½" 0'-4 ½"
	37303	0		Ζ	2	414-0	004	27	0 -4 /2
	DS1101	20	0	0	20	16'-0"	1,700	STR	
	DS1102	0	20	20	40	15'-1"	3,206	STR	
	DS1103 DS1104	20 20	20 0	20 0	60 20	11'-8" 17'-2"	3,720 1,824	STR STR	
	DS1104	0	20	0	20	18'-8"	1,984	STR	
	DS1106	0	0	20	20	20'-7"	2,186	STR	
					PIER ECSR	SUBTOTAL	37,959		
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<u>TYPE</u>	<u>-1</u>	<u>TYP</u>	<u>PE-2</u>					٨	F
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RFIN	FORCING NOTE	S							
	ENT FOR REINFORG	_		l					
ITEM S	509 - EPOXY COATE								
PER PI					TYPE-19		-	TYPE	<u>-21</u>
2. "STR"	IN THE TYPE COLUI	MN INDICATE	S STRAIGHT B	ARS.					
	R TO C.M.S. SECTIO NSIONS.	N 509.05 FOF	R STANDARD B	END			_ → A	PITC	CH
	EINFORCING STELL FROM FACE OF CC			IVI 2''			N/	$ \land \land$	$\wedge \wedge \wedge$
OTHE	RWISE.					IECENID.		\bigvee	$' \vee \vee $
	GE RAILING REINFO MATION ONLY. IT I				<u>BAR MARK</u> A = ABUT				
WITH	ITEM 517 - RAILING	G (CONCRETE	PARAPET WIT		P=PI	ER		C = LEI	
	STEEL TUBE RAILIN	GLAS PER P	LAN.	\sim	R = RAI S = SUPERST		-	<u>TYPE</u>	-27
				-					



STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS BRIDGE DRAWINGS

REFER TO T	HE FOLLOWII	NG STANDARD
AS-1-15	REVISED	1/20/2023
AS-2-15	REVISED	7/21/2023
CPA-1-08	DATED	1/19/2024
CS-1-08	REVISED	1/15/2021
HL-20.14	REVISED	4/17/2020
HL-30.31	REVISED	1/19/2024
HL-50.21	REVISED	7/15/2022
SBR-1-20	REVISED	7/21/2023

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS DATED 4/16/2021 894

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPOR-TATION OFFICIALS, 9TH EDITION AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

DESIGN LOADING INCLUDES: VEHICULAR LIVE LOAD: HL-93 FUTURE WEARING SURFACE (FWS) OF 0.06KIPS/SQ.FT

DESIGN DATA

CONCRETE CLASS QC2: COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1: COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE CLASS QC5, WITH 0.75-INCH MAX AGGREGATE SIZE: COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT)

CONCRETE REINFORCEMENT:

EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI - SLAB, ABUTMENTS, PIERS AND RAILINGS

GFRP REINFORCEMENT - RAILINGS

MONOTHILIC WEARING SURFACE

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

SCOUR ELEVATIONS

THE DESIGN FLOOD AND CHECK FLOOD SCOUR ELEVATIONS ARE PROVIDED **BELOW**:

	REAR ABUTMENT	PIER 1	PIER 2	FORWARD ABUTMENT
DESIGN FLOOD	607.30	606.85	606.61	604.50
CHECK FLOOD	607.30	606.85	606.52	604.50

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 30+45.50 TO 31+45.50 AND 32+76.50 TO 33+76.50. THIS ITEM IS INCLUDED FOR PAYMENT UNDER THE ROADWAY QUANTITIES.

SHAFT DRILLING CONSTRAINTS PRIOR TO DRILLING SHAFTS, CONSTRUCT THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE LEVEL OF THE SUBGRADE ELEVATIONS FOR A MINIMUM DISTANCE OF 200-FT BEHIND THE FORWARD ABUTMENT AND FROM THE PROPOSED REAR ABUMENT TO THE TOE OF SLOPE OF THE EXISTING RAMP B FOR THE REAR ABUTMENT (*€* CONSTRUCTION NORTHBOUND RAMP A STA. 30+64). DO NOT BEGIN THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE DRILLING OF THE ABUTMENT SHAFTS UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND A 14 CALENDAR DAY WAITING PERIOD HAS ELAPSED.

ROCK-SOCKETED DRILLED SHAFTS

AT THE REAR ABUTMENT, THE FACTORED TIP RESISTANCE IS 21,735 KIPS. AT PIER 1, THE FACTORED TIP RESISTANCE IS 24,705 KIPS. AT PIER 2, THE FACTORED TIP RESISTANCE IS 22,405 KIPS. AT THE FORWARD ABUTMENT, THE FACTORED TIP RESISTANCE IS 17,600 KIPS.

CONTRACTOR IS REQUIRED TO HAVE ON-HAND DURING DRILLED SHAFT INSTALLATION A STEEL CASING TO PREVENT BOREHOLE COLLAPSE AND FOR GROUNDWATER CONTROL DURING DRILLED SHAFT INSTALLATION THROUGH SOIL.

ITEM 511 CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN

INCLUDED WITH THIS ITEM IS THE FOLLOWING: COAT PORTIONS OF THE ABUTMENT WALLS AND WINGWALLS THAT ARE ABOVE EXISTING GRADE WITH LOW VISCOSITY BITUMINOUS ASPHALT AND THEN COVER OR WRAP THOSE COMPONENTS WITH A DURABLE THICK PLASTIC VISQUEEN TO AVOID ADDITIONAL DOWNDRAG LOADS ON THESE EXPOSED ELEMENTS. ALTERNATIVE METHODS TO AVOID DOWNDRAG ON THE WALLS AND FOOTINGS MAY BE IMPLEMENTED WITH THE APPROVAL OF THE ENGINEER. ALL LABOR AND MATERIALS TO INSTALL THE BITUMINOUS ASPHALT AND VISQUEEN SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511 CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN.

ITEM 894 - THERMAL INTEGRITY PROFILER (T.I.P.) TEST

PERFORM INTEGRITY TESTING ON ONE (1) OF THE DRILLED SHAFTS AT EACH SUBSTRUCTURE LOCATION: REAR ABUTMENT, FORWARD ABUTMENT PIER 1 AND PIER 2 BY THERMAL INTEGRITY PROFILING (TIP). PERFORM TIP TESTING PER ASTM D7949, "STANDARD TEST METHODS FOR THERMAL INTEGRITY PROFILING OF CONCRETE DEEP FOUNDATIONS," METHOD B, AND SUPPLEMENTAL SPECIFICATION 894.

SHARE USE PATH PROTECTION DURING CONSTRUCTION:

THE CONTRACTOR SHALL ENSURE PRESERVATION OF EXISTING SHARED-USE PATH FACILITIES, PAVEMENT, RAISED BOARDWALK, LANDSCAPING (INCLUDING BUT NOT LIMITED TO, ORNAMENTAL PLANTS, MULCHING, DECORATIVE STONE, OR FENCING) AND RETAINING WALLS DURING THE CONSTRUCTION OF THE PROPOSED RAMP BRIDGE. ACCESS TO THE CONSTRUCTION AREA VIA THE SHARED-USED PATH IS PERMITTED HOWEVER THE CONTRACTOR MUST LIMIT DAMAGE AS MUCH AS POSSIBLE TO ALL EXISTING SHARED-USE PATH FACILITIES. ANY DAMAGE OCCURRING AS A **RESULT OF CONTRACTOR OPERATIONS TO THE AFOREMENTIONED SHARED-USE** PATH ITEMS DURING CONSTRUCTION BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

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THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 294.92 KIPS AT THE REAR ABUTMENT, 480.99 KIPS AT PIER 1, 480.99 KIPS AT PIER 2, AND 287.57 KIPS AT THE FORWARD ABUTMENT. THIS LOAD IS THEORETICALLY RESISTED ENTIRELY BY TIP RESISTANCE.

ITEM 516 - ELASTOMERIC BEARING PAD, MISC.: 1.5" THICK STRIP BEARING: A 1.5" THICK UNREINFORCED ELASTOMERIC BEARING PAD STRIP SHALL BE INSTALLED IN THE ABUTMENT STEM UNDER THE SUPERSTRUCTURE WITHIN THE LOCATION SHOWN IN THESE PLANS.

THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER SECTION 14.6.7 (METHOD A) OF THE AASHTO LRFD DESIGN SPECIFICATION. THE LONG TERM COMPRESSION PROOF LOAD TEST IS NOT REQUIRED.

ALL LABOR, MATERIALS AND INCIDENTALS TO FURNISH AND INSTALL THIS BEARING STRIP ARE INCLUDED WITH PAYMENT FOR ITEM 516 - ELASTOMERIC BEARING PAD, MISC.: 1.5" THICK STRIP BEARING AT THE UNIT COST.

