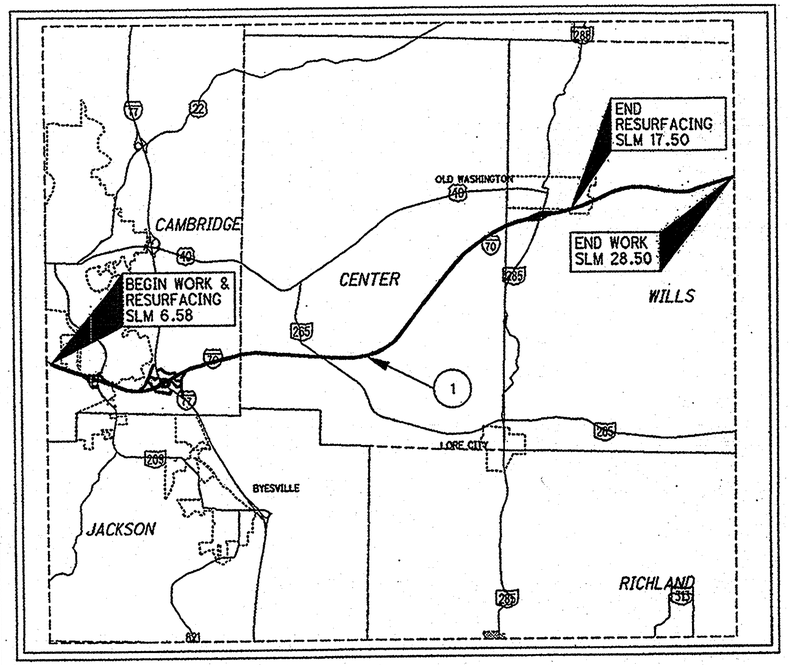

LOCATION MAP

LON/LAT: 81° 32' 17" / 40° 00' 13"

PORTION TO BE IMPROVED

DESIGN DESIGNATION	GUE-70 6.58-28.50	
Functional Classification	INTERSTATE	
Opening Year ADT (2012)	32000	
Design Year ADT (2024)	39100	
Design Hourly Volume (2024)	3500	
Directional Distribution	50%	
Trucks (24 Hour B&C)	40%	
Design Speed	75mph	
Legal Speed	65mph	

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 5 PLANNING AND ENGINEERING

ENGINEERS SEAL: ROADWAY

STATE OF OHIO
DOUGLAS N. MORGAN
E-63839
REGISTERED
PROFESSIONAL ENGINEER

SIGNED:
DATE: 2/15/2012

ENGINEERS SEAL: STRUCTURE

STATE OF OHIO
Tracy Allen Greenwald
E-71857
REGISTERED
PROFESSIONAL ENGINEER

SIGNED:
DATE: 2/15/2012

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GUE-70-6.55

VILLAGE OF OLD WASHINGTON

CAMBRIDGE, CENTER AND WILLS TOWNSHIPS

GUERNSEY COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION:

4 LANE DIVIDED ASPHALT CONCRETE RESURFACING, BRIDGE DECK OVERLAYS AND RELATED WORK ON IR 70 IN GUERNSEY COUNTY.

EARTH DISTURBED AREAS (MAINTENANCE PROJECT):

PROJECT EARTH DISTURBED AREA = N/A
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A
NOTICE OF INTENT EARTH DISTURBED AREA = N/A

LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	VILLAGE
1	GUE	I.R. 70	6.58	28.50	21.92	OLD WASHINGTON

LIMITED ACCESS

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

2010 SPECIFICATIONS

THE STANDARD 2010 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-2.5	7-18-08	MT-98.29	7-17-09	800	1-20-12
BP-3.1	1-20-12	MT-99.20	1-16-09	817	4-15-11
BP-9.1	4-15-05	MT-101.70	4-15-11	823	7-15-11
GR-3.1	10-16-09	MT-101.90	10-21-11	832	5-5-09
GR-3.2	10-16-09	MT-105.10	1-16-09	848	10-21-11
RM-4.2	10-15-10	MT-95.50	4-17-09		
MT-35.10	4-20-01	MT-101.60	4-17-09		
MT-95.30	7-17-09	PCB-91	7-19-02		
MT-95.40	7-17-09	TC-65.10	1-21-05		
MT-98.10	7-17-09	TC-65.11	1-21-05	SPECIAL PROVISIONS	
MT-98.11	7-17-09	TC-71.10	1-16-09		
MT-98.20	7-17-09	TC-72.20	1-21-05		
MT-98.22	7-17-09	TC-73.10	1-19-01		
MT-98.28	7-17-09	TC-82.10	1-21-11		

APPROVED _____
DATE 2/16/12 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 2-29-12 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E100(028)
PID NO. 21494
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT Columbus & Ohio River Railroad
GUE-70-6.55
1/58

UTILITIES

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

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING THE DISTRICT 5 CONSTRUCTION ENGINEER WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:
DISTRICT 5 CONTRUCTION ENGINEER
P.O. BOX 306
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

CONTINGENCY QUANTITIES

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

PAVEMENT MARKING

STOP LINES. CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS.

COOPERATION BETWEEN CONTRACTORS

THE STATE OF OHIO HAS CONTRACTED A TOWER LIGHTING PROJECT, GUE-70/77-9.10/7.08, MUS-70-11.10 PID #78791, WHICH MAY BE CONTRUCTED CONCURRENTLY WITH THIS PROJECT. IT IS IMPARATIVE THAT THE CONTRACTORS COOPERATE FULLY WITH EACH OTHER AS OUTLINED IN SECTION 105.07 OF THE CMS MANUAL.

THE ROADWAY CONTRACTOR SHALL PERFORM THE PROPOSED WORK ON RAMP "A" BRIDGE (SEGMENT 5 AS LISTED ON SHEET 6) FIRST, SO THAT THE LIGHTING CONTRACTOR CAN PRECEDE WITH HIS/HER WORK. SEE PLAN SHEETS 53-58 FOR DETAILS OF PROPOSED WORK FOR RAMP "A" BRIDGE.

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

ITEM 209 LINEAR GRADING

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

AREAS WITH GUARDRAIL SHALL NOT BE EXCLUDED FROM LINEAR GRADING.

ALL LINEAR GRADING WORK SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSES AND TO REPAIR EXISTING AGGREGATE SHOULDERS AS DIRECTED BY THE ENGINEER.

ITEM 209 LINEAR GRADING - 40 MILE

ITEM 251 PARTIAL DEPTH REPAIR, MISC.: LANE LINE JOINT REPAIR

AN ESTIMATED QUANTITY FOR PARTIAL DEPTH PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED BETWEEN SLM 17.50 AND SLM 28.50 EAST BOUND. THIS WORK SHALL BE INTERMITTENT THROUGHOUT THE ABOVE MENTIONED SECTION, APPROXIMATELY 60% OF LENGTH, AS DIRECTED BY THE ENGINEER. THE ROADWAY SHALL BE EXCAVATED 4.5" IN DEPTH AND 2' (FEET) WIDE CENTERED ABOUT THE LANE LINE CONSTRUCTION JOINT. AFTER 4.5" EXCAVATION, THE CONTRACTOR SHALL PLACE AND COMPACT 3" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 AND 1.5" ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A TO BE FLUSH WITH EXISTING ROADWAY SURFACE. THE ROADWAY SHALL NOT BE OPENED TO UNRESTRICTED TRAFFIC UNLESS BOTH COURSES OF ASPHALT ARE IN PLACE AND NO DROPOFF EXISTS.

ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 251 PARTIAL DEPTH REPAIR, MISC.: LANE LINE JOINT REPAIR.

ITEM 251 PARTIAL DEPTH REPAIR, MISC.: LANE LINE JOINT REPAIR LOCATION 1 - 968 CU.YD

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING SHALL BE 1.75" FULL WIDTH OF PAVEMENT FOR MAINLINE AND 1.75" FULL WIDTH FOR RAMPS, INCLUDING PAVED SHOULDERS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE LANE LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 621 RAISED PAVEMENT MARKER REMOVED

RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM 253 PAVEMENT REPAIR

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED, AS DIRECTED BY THE ENGINEER, FROM SLM 17.50 TO SLM 28.50. QUANTITY MAY BE USED ON MAINLINE, RAMPS OR SHOULDERS. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE 8.5". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL SHALL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED IN 2 LIFTS AS DIRECTED) AND 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A.

ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR
LOCATION 1 - 100 CU.YD.

ITEM 407 TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 516 2" DEEP JOINT SEALER, AS PER PLAN

THE CONTRACTOR SHALL PLACE A 1" X 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

ITEM 638 WATER WORK, MISC.: INSPECTION HOLES

LOCATED AT SLM 14.10 WESTBOUND, THERE EXISTS APPROXIMATELY 48 INSPECTION HOLES WITH 4" GALVANIZED PIPE THAT EXTENDS APPROXIMATELY 8" INTO THE PAVEMENT. THESE PIPE SECTIONS WILL NEED TO BE REMOVED BEFORE PLANING OF THE ROADWAY. AFTER PLANING AND PAVING OF THE ROADWAY, THE INSPECTION HOLES SHALL BE CLEANED OF ALL DEBRIS AND THE PIPES RESET SO THAT THE COVER SHALL BE 1/4" BELOW PROPOSED FINISHED GRADE AND SHALL BE ABLE TO BE SCREWED ON/OFF SO AS TO ALLOW INSPECTION. TOTAL HOLE DEPTH IS APPROXIMATELY 22" (APPROXIMATELY 8" OF ASPHALT ABOVE CONCRETE SLAB IN THIS AREA).

ALL MATERIAL, LABOR, AND EQUIPMENT REQUIRED TO ACCOMPLISH THE ABOVE WORK SHALL BE COVERED UNDER ITEM 638 WATER WORK, MISC.: INSPECTION HOLES, LUMP.

NOTE: EXTREME CARE SHALL BE UTILIZED WHILE MOVING EQUIPMENT IN THIS AREA SO AS NOT TO DAMAGE EXISTING PIEZOMETER MONITORS. ENGINEER SHALL CLEARLY MARK EACH MONITOR WITH A DELINEATOR BEFORE CONTRACTOR ENTERS THE AREA.

CALCULATED LME CHECKED DNM

GENERAL NOTES

GUE-70-6.55

G070_MGN_001.dgn 2-7-12

GENERAL NOTES

ITEM SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

THIS ITEM SHALL BE USED TO REINFORCE TRANSVERSE JOINT CRACKS. PLACE REINFORCING MESH ON PLANED SURFACE, 5.0' WIDE FROM EDGE LINE TO EDGE LINE (24' LENGTH) CENTERED OVER TRANSVERSE JOINT CRACK. THE ENTIRE ROADWAY SHALL BE OVERLAYED WITH 3.25" ASPHALT CONCRETE AFTER PLACING OF THE REINFORCING MESH. THIS WORK SHALL BE PERFORMED ON APPROXIMATELY 75% OF JOINTS THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER SHALL SELECT TRANSVERSE JOINT CRACKS UNTIL ALL OF THE MATERIAL SHOWN BELOW HAS BEEN UTILIZED. REINFORCING MATERIAL SHALL BE GLASGRID CG100 OR EQUIVALENT AND SHALL BE PLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND THIS NOTE.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS.

4 LANE - SLM 6.58 TO SLM 17.50 = 57,658' / 60' SPACING = 961 JOINTS
961 X 75% = 721 JOINTS X 48' X 5' WIDE = 19,227 SQ.YD.

ITEM 690 SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS
LOCATION 1 - 19,227 SQ.YD.

DROPOFFS IN WORK ZONES

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614 WORK ZONE MARKING SIGNS

IN ACCORDANCE WITH CMS SECTION 614.04, A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES) - 16 EACH

ITEM 614 WORK ZONE MARKING SIGN - LOCATION 1 - 16 EACH

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET (75M) IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS ON EACH ENTRANCE RAMP AND AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

ITEM 614 WORK ZONE PAVEMENT MARKINGS

THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS IN ACCORDANCE WITH THE CURRENT CMS MANUAL AND STANDARD CONSTRUCTION DRAWINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

WORK ZONE PAVEMENT MARKINGS HAVE NOT BEEN ITEMIZED IN THE PLAN AND SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 MAINTAINING TRAFFIC

ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED ON I.R. 70 AT ALL TIMES EXCEPT THAT THE WEST BOUND OFF RAMP "A" FROM I.R. 77 SOUTH TO I.R. 70 WEST SHALL BE CLOSED IN ORDER TO PERFORM PROPOSED WORK ON RAMP "A" BRIDGE AS NOTED ON SHEET 12.

THE CONTRACTOR SHALL NOT PLACE THE ASPHALT SURFACE COURSE IN THE AREAS WHERE PROPOSED BRIDGE WORK REQUIRES WORK ZONE PAVEMENT MARKINGS UNTIL ALL OF THE BRIDGE WORK IS COMPLETED AND THE WORK ZONE PAVEMENT MARKINGS ARE NO LONGER REQUIRED. THESE AREAS ARE SHOWN ON PLAN SHEETS 8-11.

THE WORK ZONE CLOSURES SHALL BE NO LONGER THAN 2 MILES OR AS DIRECTED BY THE ENGINEER IN CONSIDERATION OF THE TRAFFIC FLOW.

WHEN NECESSARY, LANE CLOSURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD DRAWINGS AND MAINTENANCE OF TRAFFIC PLAN SHEETS. IT IS THE INTENT TO RESTRICT LANE CLOSURES TO THE MINIMUM AMOUNT OF TIME NECESSARY TO PERFORM THE WORK AS DESCRIBED IN THE PLANS.

THERE SHALL BE NO LANE CLOSURES ON HOLIDAYS OR HOLIDAY WEEKENDS. THE FOLLOWING ARE CONSIDERED HOLIDAYS:

MEMORIAL DAY, FOURTH OF JULY, LABOR DAY, THANKSGIVING, CHRISTMAS , NEW YEARS, EASTER.

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

DAY OF THE WEEK	TIMES ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N FRIDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

AREAS THAT ARE PLANED SHALL NOT BE OPENED TO TRAFFIC. ALL PLANED AREAS MUST BE INLAID WITH A PROPOSED COURSE OF ITEM 442 ASPHALT CONCRETE PRIOR TO BEING OPENED TO TRAFFIC.

OVERNIGHT CLOSURES MUST MEET SPECIFICATIONS AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. ROADWAY SHALL NOT BE OPENED TO TRAFFIC WITHOUT EITHER THE PERMANENT OR WORK ZONE MARKINGS IN PLACE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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.

ITEM 614 REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 60 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS.

MINIMUM 10' WEDGE LENGTH FOR ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC AT ALL BUTT JOINTS.

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD.
1	I.R. 70	BEGIN WORK	6.58	1.9
1	I.R. 70	GUS-70-0901 RT	9.01	1.9
		GUS-70-0901 LT	9.01	1.9
1	I.R. 70	GUS-70-0943A	RAMP	1.4
		GUS-70-0943 RT	9.43	1.9
		GUS-70-0943 LT	9.43	1.9
1	I.R. 70	GUS-70-0994 RT	9.94	3.0
		GUS-70-0994 LT	9.94	1.9
1	I.R. 70/77	RAMP A AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP B AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP C AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP D AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP E AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP F AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP G AT I.R. 77	GORE	0.6
1	I.R. 70/77	RAMP H AT I.R. 77	GORE	0.8
1	I.R. 70	GUS-70-1232 RT	12.32	1.9
		GUS-70-1232 LT	12.32	1.9
1	I.R. 70	GUS-70-1275 RT	12.75	1.9
		GUS-70-1275 LT	12.75	1.9
1	I.R. 70	GUS-70-1656 RT	16.56	1.9
		GUS-70-1656 LT	16.56	1.9
1	I.R. 70	END WORK	17.39	1.9
1	**I.R. 70**	**TOTAL**		**34.1**

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, FOUR CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN LICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

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

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

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

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

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS. INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (cont'd)

NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

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

A TOTAL OF 4 PCMS SHALL BE REQUIRED FOR THIS PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO GENERAL SUMMARY:

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 360 DAY

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT, SHALL EXCEED A HEIGHT OF 40FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION.

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

EXPRESS PROCESSING CENTER
THE FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
AIR TRAFFIC AIRSPACE BRANCH ASW-520
2601 MEACHAN BLVD.
FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
614-387-2346

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER AND OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS WILL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 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 CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.
- WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

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 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. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF THE APPROPRIATE LAW ENFORCEMENT AGENCY(S), INCLUDING ADDRESS AND TELEPHONE NUMBER.

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF THE SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHOULD 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 THE SHIFT.

LAW ENFORCEMENT OFFICERS (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). **THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:**

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE - 750 HOURS

THE HOURS PAID SHALL INCLUDE 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.

CALCULATED LME | CHECKED DNM

GENERAL NOTES

GUE-70-6.55

G070_MGN_003.DGN 2-7-12

ITEM 614, WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (55 SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE(S). THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK THAT CAUSES THE WARRANTING CONDITION(S) TO OCCUR. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING REMOVAL OF THE WARRANTING CONDITION(S), OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY REMOVAL OF WARRANTING CONDITION(S) SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE.

CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT THE TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED REDUCTION IN THE OPPOSITE DIRECTION. A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF THE WARRANTING CONDITION, AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF THE LANE REDUCTION, SHIFT TAPER, OR OTHER ROADWAY OR SHOULDER RESTRICTION THAT WARRANTED THE WORK ZONE SPEED ZONE. ON UNDIVIDED HIGHWAYS THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, APPROXIMATELY 250 FEET IN ADVANCE OF SUCH RESTRICTIONS. THE SIGN SHALL BE REPEATED EVERY 1 MILE FOR 55 MPH ZONES AND EVERY ONE-HALF MILE FOR 50 MPH AND 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE.

THE SPEED LIMIT REDUCTION SHALL BE LIMITED TO ONLY THE PORTION OF THE PROJECT AND THE WORK THAT WARRANTED THE WORK ZONE SPEED LIMIT REDUCTION.

SPEED REDUCTION (SPEED ZONE AHEAD SYMBOL) SIGNS (W3-5) SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1250 FEET ON MULTI-LANE HIGHWAYS AND 500 FEET ON TWO LANE HIGHWAYS.

A SIGN(S) TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. 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 CMS 730.19.

WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS, UNLESS MOUNTED ON A TEMPORARY SIGN SUPPORT PER SCD MT 105.10.

WORK ZONE SPEED LIMIT AND RELATED SIGN SIZES, PLACEMENT, SUPPORTS, ETC SHALL BE PER THE OMUTCD, WITH TWO EXCEPTIONS: 1) EXPRESSWAY SIZE SPEED LIMIT SIGNS MAY BE USED ON FREEWAYS AND EXPRESSWAYS, IF NECESSARY; 2) THE HEIGHT OF SIGNS MOUNTED ON PORTABLE SUPPORTS SHOULD BE THE HEIGHT REQUIRED FOR

GROUND-MOUNTED SIGNS BUT SHALL NOT BE MORE THAN 1 FOOT LOWER THAN THE HEIGHT REQUIRED BY THE OMUTCD, OR AS DIRECTED BY THE ENGINEER. PORTABLE SUPPORTS SHOULD NOT BE USED FOR A DURATION OF MORE THAN 3 DAYS.

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND RE-ERECTED AT ANOTHER LOCATION WITHIN THE

ITEM 614, WORK ZONE SPEED LIMIT SIGN, CONTINUED

PROJECT DUE TO CHANGES IN THE SPEED ZONE AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE, WILL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS. SPEED LIMIT SIGNING FOR THE POINT OF RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE PAID FOR AS WORK ZONE SPEED LIMIT SIGNS.

THE FOLLOWING PROVIDES DETAILS ON WORK ZONE SPEED ZONES APPROVED FOR USE ON THIS PROJECT:

WZSZ REVISION NUMBER: WZ30398

COUNTY-ROUTE: GUE-70

SLM FROM / TO: 6.55 TO 28.50

PHASE/PART & DIRECTION: ALL PHASES

APPROVED SPEED LIMIT (MPH): 55

SPECIFIC WARRANTING CONDITIONS AND FACTORS:
UNPROTECTED WORKERS WILL BE PRESENT FOR EXTENDED PERIODS (MORE THAN THREE HOURS) IN THE CLOSED LANE DURING PAVEMENT PLANNING, PAVEMENT RESURFACING AND PAVEMENT MARKING OPERATIONS.

Ohio Department of Transportation

Work Zone Speed Zone Tracking Report

District: _____ Project Number: _____ PID: _____
Location (include County, Route and Section): _____
_____
Contractor: _____ Project. Engineer/County Manager: _____
Reporting From Date: _____ To Date: _____ Work Zone Speed Limit _____ mph

Location (Route, Direction & Log Points)	Begin DATE (MM/DD/YY)	Begin TIME (Note AM or PM)	End DATE (MM/DD/YY)	End TIME (Note AM or PM)	Person Reporting (Printed Name and Signature)

For construction projects, this report is to be filled out by the Project Engineer or designee and submitted to the District Work Zone Traffic Manager (DWZTM) monthly for long-term projects and weekly for all others. The DWZTM forwards a copy of the form to the District Speed Zoning Coordinator.

For operations/maintenance work, this form is filled out by the County Manager or designee and forwarded to the District Speed Zoning Coordinator at least weekly.

CALCULATED LME CHECKED DNM

GENERAL NOTES

GUE-70-6.55

G070_MGN_007.dgn 2-6-12

GENERAL NOTES

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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

1. THE QUADGUARD CZ, (24 INCHES WIDE SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

   THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE APPROVED SHOP DRAWINGS:

DRAWING NUMBER: QSCZCVR-T4
DRAWING NAME: QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES
REVISION DATE: 5/13/99 REV. J
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-10
DRAWING NAME: QUADGUARD SYSTEM CONCRETE PAD, CZ, QG
REVISION DATE: 11/19/97 REV. D
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-16
DRAWING NAME: QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG
REVISION DATE: 7/30/99 REV. F
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 354051Z
DRAWING NAME: QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, QG, 24, 30, 36
REVISION DATE: 5/17/99
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-18
DRAWING NAME: TRANSITION ASSEMBLY, 4 OFFSET, QG
REVISION DATE: 6/25/99 REV. F
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35400260
DRAWING NAME: QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY
REVISION DATE: 11/19/97 REV. C
ODOT APPROVAL DATE: 8/27/99

2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

   THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: SS450
DRAWING NAME: CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS
REVISION DATE: 3/12/99 REV. 1
ODOT APPROVAL DATE: 8/27/99

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

DRAWING NUMBER: SS455
DRAWING NAME: TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION & SECTIONS
REVISION DATE: 2/18/99
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS461
DRAWING NAME: TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, ELEVATION & SECTIONS
REVISION DATE: 6/30/99 REV. 1
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS462
DRAWING NAME: TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION & SECTIONS
REVISION DATE: 6/30/99
ODOT APPROVAL DATE: 8/27/99

3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515, (TELEPHONE 330-799-9291)

   THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT (24' LONG AND 35" WIDE). INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIEDIN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: A040416
DRAWING NAME: UNIVERSAL TAU-II PARTS LIST
REVISION DATE: 4/22/04
ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040420
DRAWING NAME: UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP
REVISION DATE: 4/28/04
ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040105
DRAWING NAME: UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERENCED ON A04020)
REVISION DATE: 1/07/04
ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: BO40239
DRAWING NAME: APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)
REVISION DATE: 4/21/04
ODOT APPROVAL DATE: 10/16/04

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. 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.

A+B BIDDING WITH MULTIPLE SECTIONS CONTRACT TABLE

USE THE FOLLOWING INFORMATION IN COMBINATION WITH THE PROPOSAL NOTE A+B BIDDING WITH MULTIPLE SECTIONS: THE CONTRACTOR WILL BID THE NUMBER OF CALENDAR DAYS TO COMPLETE EACH CONTRACT SEGMENT AS LISTED IN THE PROPOSAL.

CONTRACT SEGMENT - LOCATION OF CRITICAL WORK	MIN. DAYS	MAX. DAYS	INCENTIVE/ DISINCENTIVE $ PER DAY	MAXIMUM INCENTIVE $
SEGMENT 1 - PHASE 1 BRIDGE PARAPET REPLACE., HYDRO. DEMO.'S & OVERLAYS	24	32	5,000	10,000
SEGMENT 2 - PHASE 2 BRIDGE PARAPET REPLACE., HYDRO. DEMO.'S & OVERLAYS	24	32	5,000	10,000
SEGMENT 3 - PHASE 3 BRIDGE PARAPET REPLACE., HYDRO. DEMO.'S & OVERLAYS	24	32	5,000	10,000
SEGMENT 4 - PHASE 4 BRIDGE PARAPET REPLACE., HYDRO. DEMO.'S & OVERLAYS	24	32	5,000	10,000
SEGMENT 5 - PHASE 5 BRIDGE PARAPET REPLACE., HYDRO. DEMO.'S & OVERLAYS	24	32	5,000	10,000

CALCULATED CPS
CHECKED JDR

GENERAL NOTES

GUE-70-6.55

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SEQUENCE OF OPERATIONS FOR RESURFACING:

PHASE 1: BEGIN PROJECT TO END PROJECT

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER.
(2) FILL IN RUMBLE STRIPS ON OUTSIDE SHOULDER WITH ITEM 448 INTERMEDIATE COURSE TO ALLOW FOR MAINTAINING TRAFFIC ON SHOULDER.
(3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 2: BEGIN PROJECT TO END PROJECT

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER.
(2) PLANE INSIDE LANE AND SHOULDER, 1.75" DEEP AS DETAILED.
(3) PLACE REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS
(4) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR INSIDE LANE AND SHOULDER. COMPLETE ALL OTHER RELATED WORK AS PER TYPICAL SECTION.
(5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 3: BEGIN PROJECT TO END PROJECT

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER.
(2) PLANE OUTSIDE LANE AND SHOULDER, RAMP AREAS WHERE APPLICABLE, 1.75" DEEP AS DETAILED.
(3) PLACE REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS
(4) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR OUTSIDE LANE AND SHOULDER, RAMP AREAS WHERE APPLICABLE, COMPLETE ALL OTHER RELATED WORK AS PER TYPICAL SECTION.
(5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 4: BEGIN PROJECT TO END PROJECT

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER.
(2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON INSIDE LANE AND SHOULDER AS PER TYPICAL SECTION.
(3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 5: BEGIN PROJECT TO END PROJECT

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER.
(2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON OUTSIDE LANE, 10.0' WIDE PAVED SHOULDER AND RAMP AREAS, WHERE APPLICABLE, AS PER TYPICAL SECTION.
(3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 6: BEGIN PROJECT TO END PROJECT

(1) INSTALL RUMBLE STRIPS, PLACE ALL PERMANENT PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS. OPEN ROADWAY TO UNRESTRICTED TRAFFIC.

GENERAL:

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC (REFER TO MAINTAINING TRAFFIC NOTE ON SHEET 3 FOR RESTRICTIONS). IT WILL BE NECESSARY FOR THE CONTRACTOR TO ALTERNATE BETWEEN PHASES TO MEET WORK RESTRICTIONS AND TO ALLOW FOR THE BRIDGE WORK AS SHOWN ON SHEETS 26-58. AS NOTED ON SHEET 2, THE WORK ON RAMP "A" BRIDGE SHALL BE COMPLETED FIRST. THE MAXIMUM WORK ZONE LENGTH SHALL BE 2 MILES FOR RESURFACING ACTIVITIES.

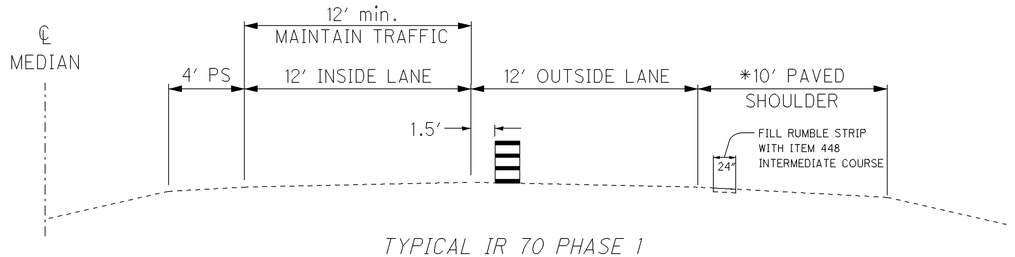
IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE ENGINEER.

ALL TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE ANY PAVEMENT IS OPENED TO TRAFFIC.

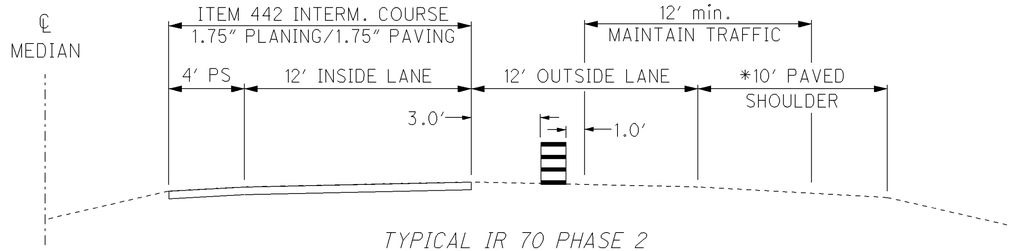
ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22

THIS ITEM SHALL BE USED TO FILL IN RUMBLE STRIPS FOR MAINTAINING TRAFFIC AS DESCRIBED IN PHASE 1 ABOVE. AVERAGE THICKNESS FOR CALCULATION PURPOSES IS 0.75". THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

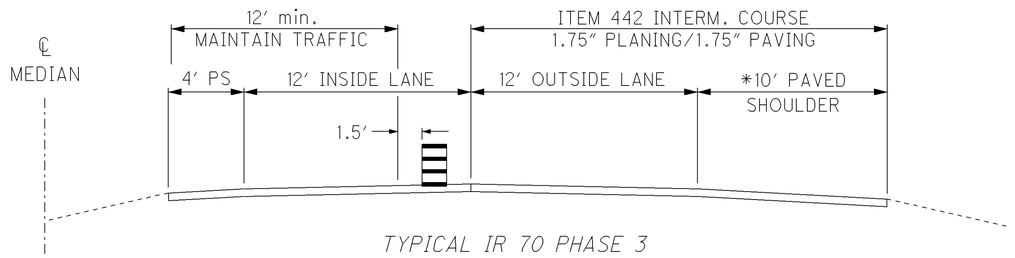
ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1: (6.58 - 17.50) X 5280 = 57658 FT - (2(57658 X 2.0' X (0.75"/12)))/27 = 533.9 CU.YD.



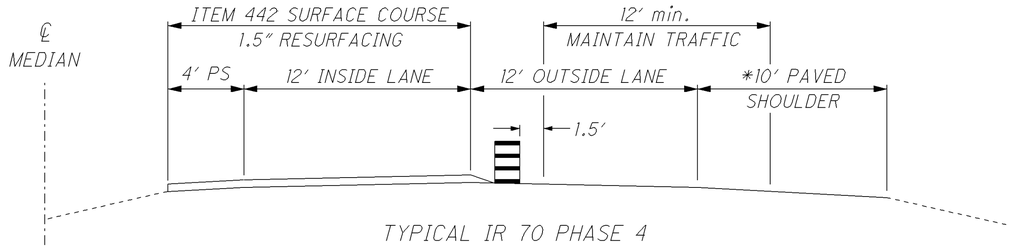
TYPICAL IR 70 PHASE 1



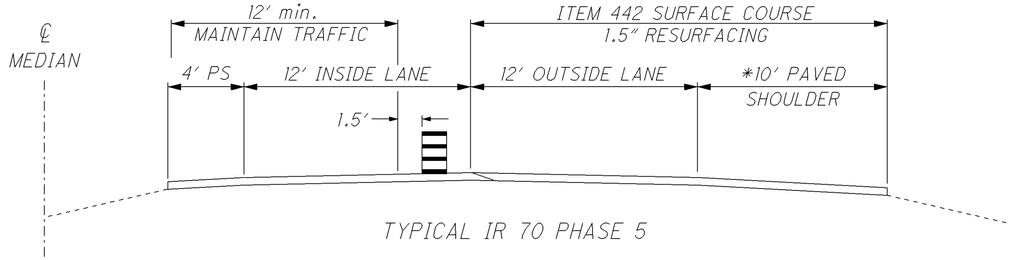
TYPICAL IR 70 PHASE 2



TYPICAL IR 70 PHASE 3



TYPICAL IR 70 PHASE 4



TYPICAL IR 70 PHASE 5

* SHOULDER WIDTH VARIES IN RAMP AREAS

CALCULATED LME
CHECKED DNM

SEQUENCE OF OPERATIONS - RESURFACING

GUE-70-6.55

G070_MGN_004.dgn 2-3-12

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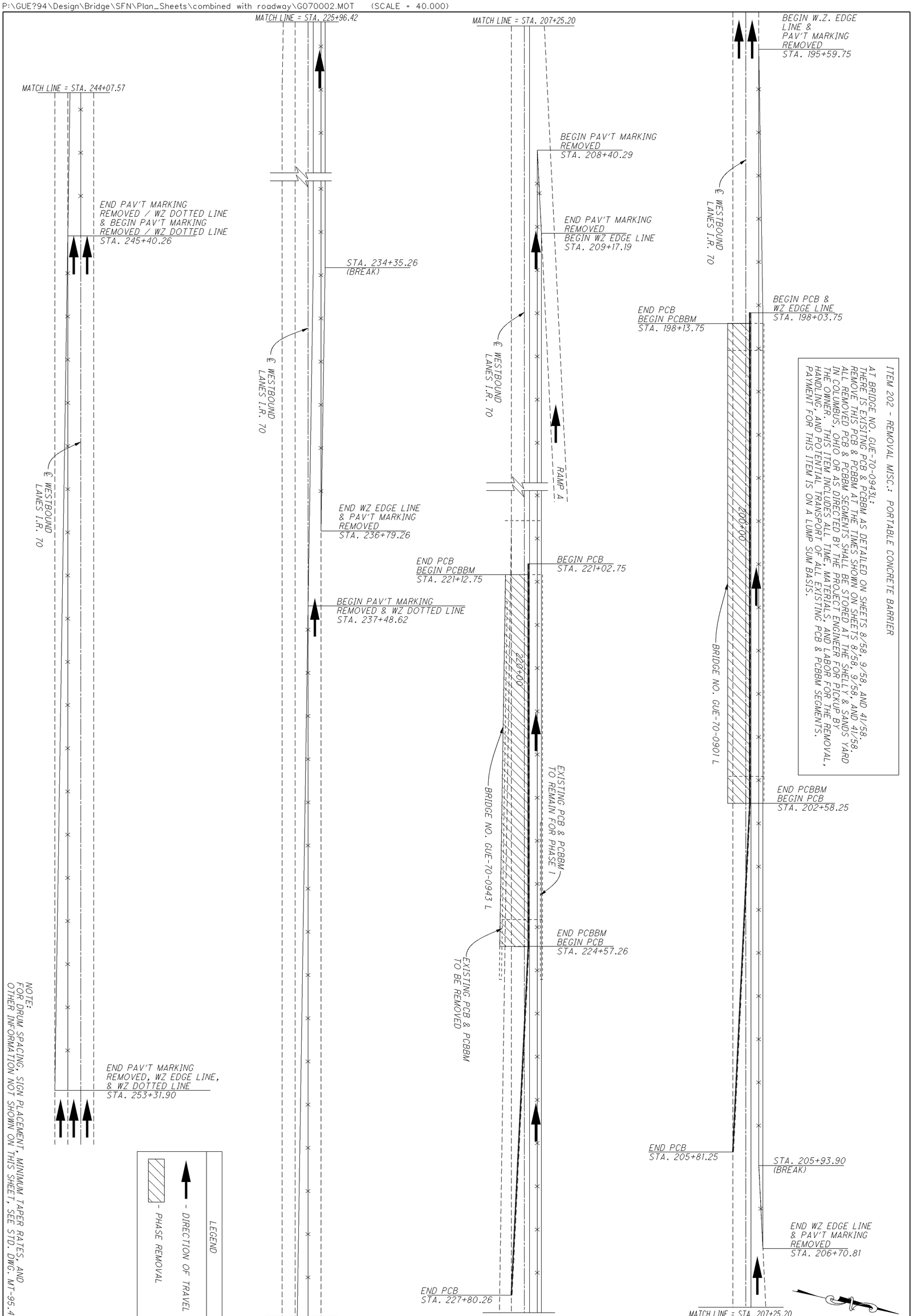

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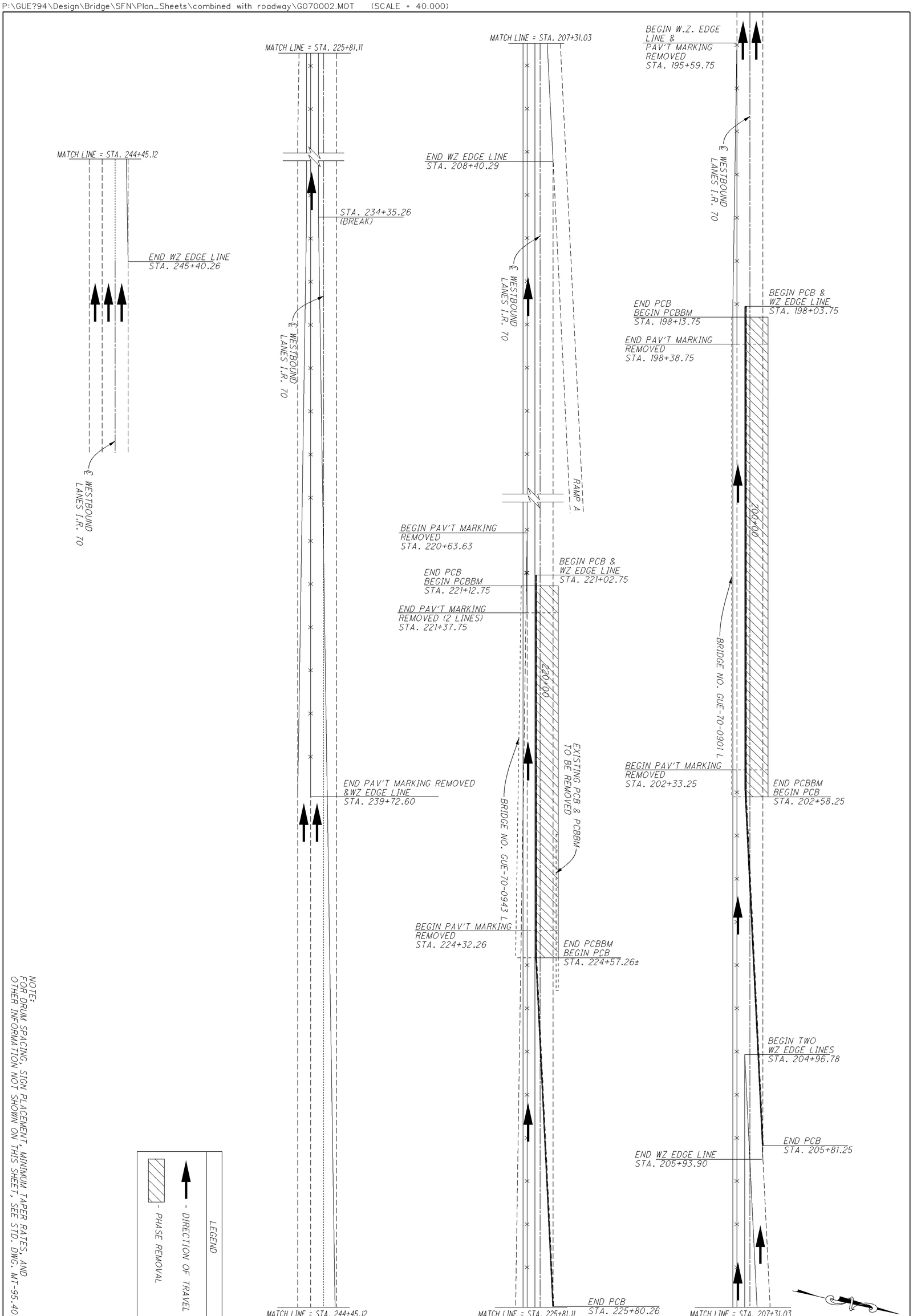

NOTE:
FOR DRUM SPACING, SIGN PLACEMENT, MINIMUM TAPER RATES, AND OTHER INFORMATION NOT SHOWN ON THIS SHEET, SEE STD. DWG. MT-95.40.

GUE-70-6.55

MAINTAINANCE OF TRAFFIC (PHASE 2 - LEFT BRIDGES)

CALCULATED JDR
CHECKED TAG

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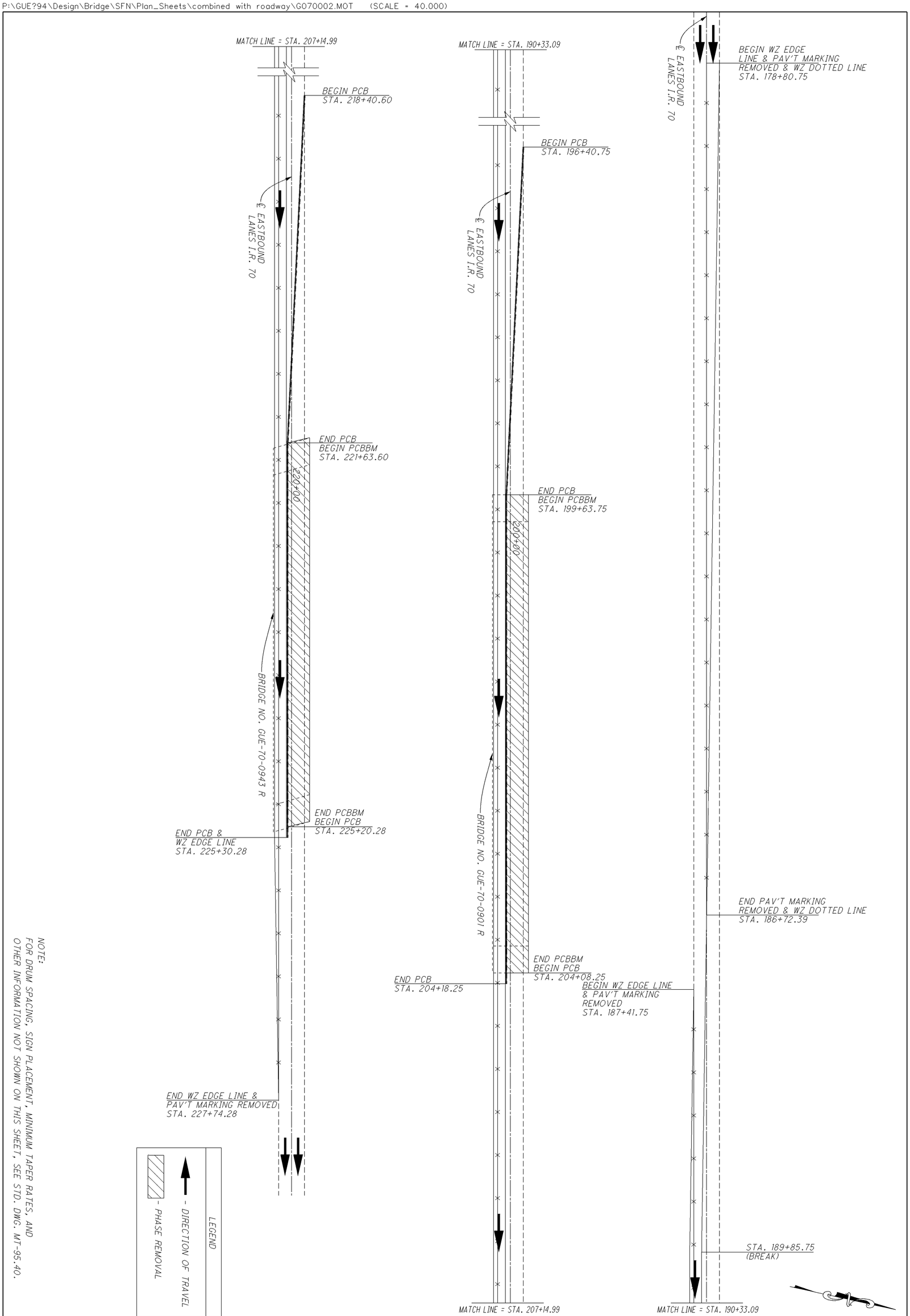


NOTE:
FOR DRUM SPACING, SIGN PLACEMENT, MINIMUM TAPER RATES, AND OTHER INFORMATION NOT SHOWN ON THIS SHEET, SEE STD. DWG. MT-95.40.

GUE-70-6.55

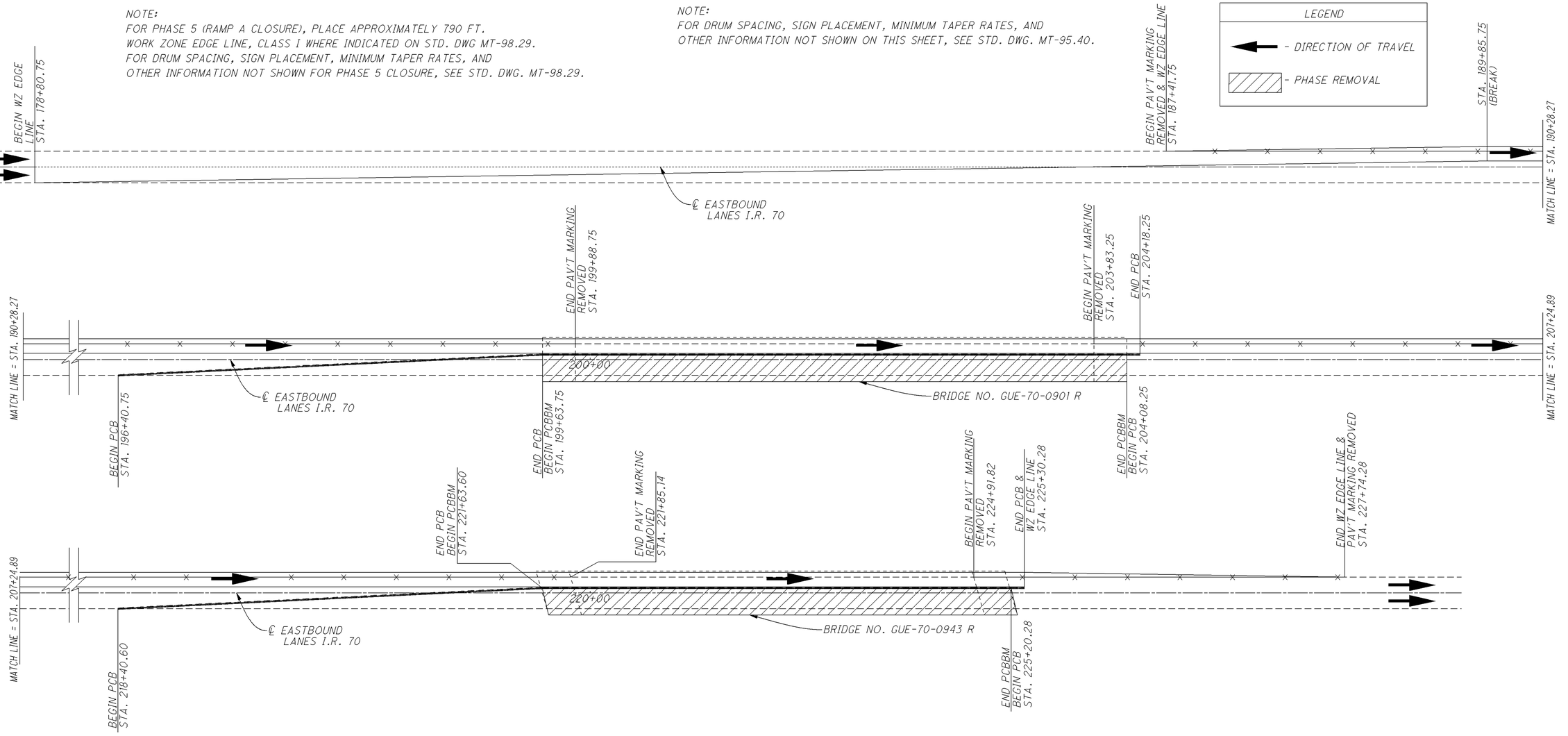
MAINTAINANCE OF TRAFFIC (PHASE 3 - RIGHT BRIDGES)

CALCULATED JDR
CHECKED TAG

NOTE:
FOR PHASE 5 (RAMP A CLOSURE), PLACE APPROXIMATELY 790 FT.
WORK ZONE EDGE LINE, CLASS I WHERE INDICATED ON STD. DWG MT-98.29.
FOR DRUM SPACING, SIGN PLACEMENT, MINIMUM TAPER RATES, AND
OTHER INFORMATION NOT SHOWN FOR PHASE 5 CLOSURE, SEE STD. DWG. MT-98.29.

NOTE:
FOR DRUM SPACING, SIGN PLACEMENT, MINIMUM TAPER RATES, AND
OTHER INFORMATION NOT SHOWN ON THIS SHEET, SEE STD. DWG. MT-95.40.

LEGEND
- DIRECTION OF TRAVEL
- PHASE REMOVAL



ITEM 614 - WORK ZONE EDGE LINE
PHASE 1
STA 195+59.75 TO 206+70.81 = 1111.06 FT
STA 198+03.75 TO 253+31.90 = 5528.15 FT
STA 209+17.19 TO 236+79.26 = 2762.07 FT

PHASE 2
STA 195+59.75 TO 239+72.60 = 4413.6 FT
STA 198+03.75 TO 205+93.90 = 790.15 FT
STA 204+96.78 TO 208+40.29 = 343.51 FT
STA 204+96.78 TO 245+40.26 = 4043.48 FT

PHASE 3
STA 178+80.75 TO 225+30.28 = 4649.53 FT
STA 187+41.75 TO 227+74.28 = 4032.53 FT

PHASE 4
STA 178+80.75 TO 225+30.28 = 4649.53 FT
STA 187+41.75 TO 227+74.28 = 4032.53 FT

PHASE 5
AS PER STD. DWG. MT-98.29 = 790 FT

TOTAL = 37146 FT / 5280 FT/MILE = 7.03 MILES

ITEM 622 - PORTABLE CONCRETE BARRIER, 32"
PHASE 1
STA 198+03.75 TO 198+13.75 = 10 FT
STA 202+58.25 TO 205+81.25 = 323.4 FT
STA 221+02.75 TO 221+12.75 = 10 FT
STA 224+57.26 TO 227+80.26 = 323.4 FT

PHASE 2
SAME STATIONING AS PHASE 1 = 666.8 FT

PHASE 3
STA 196+40.75 TO 199+63.75 = 323.4 FT
STA 204+08.25 TO 204+18.25 = 10 FT
STA 218+40.60 TO 221+63.6 = 323.4 FT
STA 225+20.28 TO 225+30.28 = 10 FT

PHASE 4
SAME STATIONING AS PHASE 3 = 666.8 FT

TOTAL = 2,667.2 FT

ITEM 614 - WORK ZONE IMPACT ATTENUATOR
(UNIDIRECTIONAL)

PHASE 1 - 4 EACH PHASE 2 - 4 EACH
PHASE 3 - 4 EACH PHASE 4 - 4 EACH

TOTAL = 16 EACH

BRIDGE M.O.T. CACLULATIONS

ITEM 622 - PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED
PHASE 1
STA 198+13.75 TO 202+58.25 = 444.50 FT
STA 221+12.75 TO 224+57.26 = 344.51 FT

PHASE 2
SAME STATIONING AS PHASE 1 = 789.01 FT

PHASE 3
STA 199+63.75 TO 204+08.25 = 444.50 FT
STA 221+63.60 TO 225+20.28 = 356.68 FT

PHASE 4
SAME STATIONING AS PHASE 3 = 789.01 FT

TOTAL = 3180.38 FT

ITEM 614 - WORK ZONE DOTTED LINE
PHASE 1
STA 237+48.62 TO 253+31.90 = 1583.28 FT

PHASE 3
STA 178+80.75 TO 186+72.39 = 791.64 FT

TOTAL = 2,374.9 FT

QUANTITIES CARRIED TO GENERAL SUMMARY.

ITEM 644 - REMOVAL OF PAVEMENT MARKING
PHASE 1
STA 195+59.75 TO 206+70.81 = 1111.06 FT
STA 208+40.29 TO 209+17.19 = 76.90 FT
STA 208+40.29 TO 236+79.26 = 2838.97 FT
STA 237+48.62 TO 245+40.26 = 791.64 FT
STA 245+40.26 TO 253+31.90 = 791.64 FT

PHASE 2
STA 195+59.75 TO 198+38.75 = 279 FT
STA 202+33.25 TO 221+37.75 = 1904.5 FT
STA 220+63.63 TO 221+37.75 = 74.12 FT
STA 224+32.26 TO 239+72.60 = 1540.34 FT

PHASE 3
STA 178+80.75 TO 186+72.39 = 791.64 FT
STA 187+41.75 TO 227+74.28 = 4032.53 FT

PHASE 4
STA 187+41.75 TO 199+88.75 = 1247 FT
STA 203+83.25 TO 221+85.14 = 1801 FT
STA 224+91.82 TO 227+74.28 = 282.46 FT

TOTAL = 17,563.69 FT

ITEM 614 - BARRIER REFLECTOR, TYPE B
PHASE 1
STA 198+03.75 TO 205+81.25 = 777.5 FT / 50 FT SPACING =
15.55 SPACES = 16 SPACES = 17 EACH
STA 221+02.75 TO 227+80.26 = 677.5 FT / 50 FT SPACING =
13.55 SPACES = 14 SPACES = 15 EACH

PHASE 2
SAME STATIONING AS PHASE 1 = 32 EACH

PHASE 3
STA 196+40.75 TO 204+18.25 = 777.5 FT / 50 FT SPACING =
15.55 SPACES = 16 SPACES = 17 EACH
STA 218+40.60 TO 225+30.28 = 689.68 FT / 50 FT SPACING =
13.79 SPACES = 14 SPACES = 15 EACH

PHASE 4
SAME STATIONING AS PHASE 1 = 32 EACH

TOTAL = 128 EACH

ITEM 614 - OBJECT MARKER, ONE WAY
SAME LAYOUT AS ITEM 614 - BARRIER REFLECTOR,
TYPE B

TOTAL = 128 EACH

CALCULATED JDR
CHECKED TAG

MAINTAINANCE OF TRAFFIC (PHASE 4 - RIGHT BRIDGES)

GUE-70-6.55

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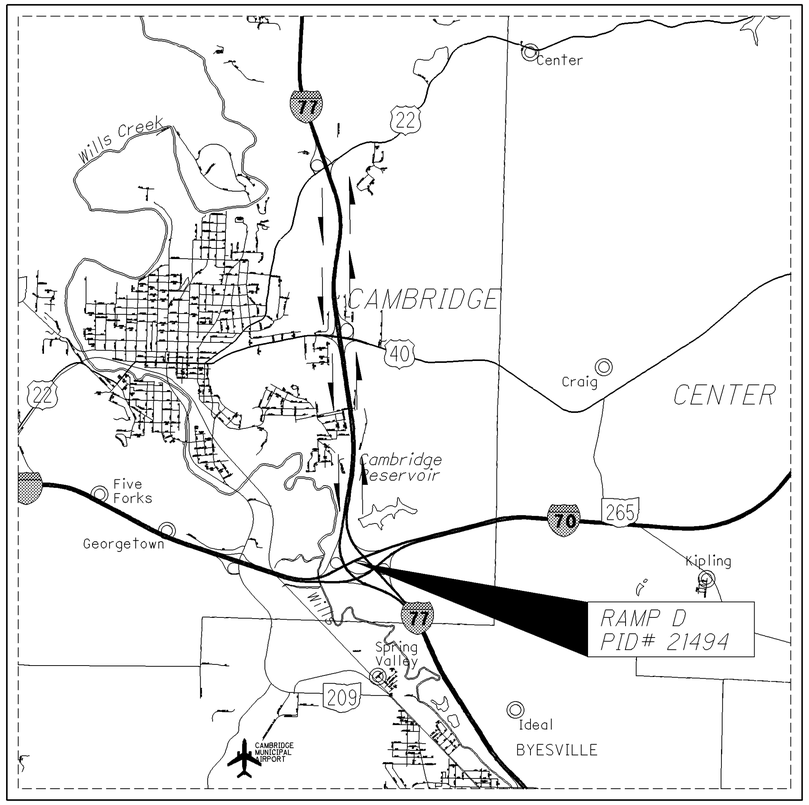
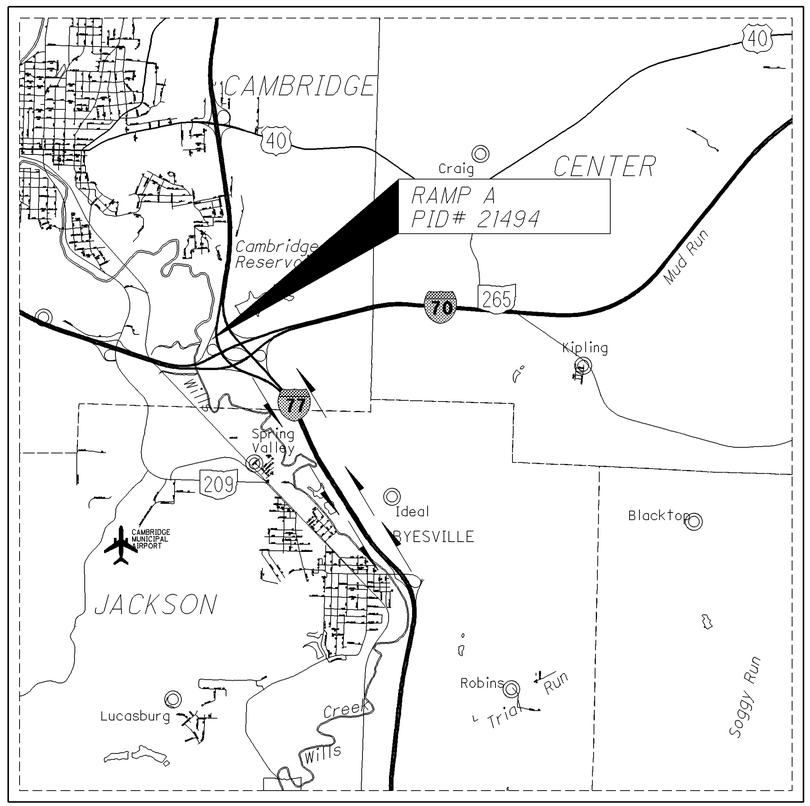
MAINTENANCE OF TRAFFIC NOTES



STATE DETOUR MAP (RAMP D DETOUR)

SCALE IN MILES

0 1 2 3 4



STATE DETOUR MAP (RAMP A DETOUR)

SCALE IN MILES

0 1 2 3 4

ITEM 614 MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION ON I.R. 70 SHALL BE MAINTAINED AT ALL TIMES. AT I.R. 77 NORTHBOUND TO I.R. 70 WESTBOUND (RAMP D), THROUGH TRAFFIC SHALL BE DETOURED AS PER PROPOSAL NOTE 125 (SEGMENT 1) AND ALSO, AT I.R.77 SOUTHBOUND TO I.R. 70 WESTBOUND (RAMP A), THROUGH TRAFFIC SHALL BE DETOURED AS PER PROPOSAL NOTE 125 (SEGMENT 5). THROUGH TRAFFIC SHALL NOT BE DETOURED AT RAMP D AND RAMP A SIMULTANEOUSLY. DETOURS SHALL BE AS SHOWN ABOVE. DAMAGES SHALL BE AS PER PROPOSAL NOTE 125 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED TIME. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48x30 INCHES ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES, GATES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

I.R. 77 SOUTHBOUND, JUST NORTH OF I.R. 70 WESTBOUND EXIT RAMP.
I.R. 77 SOUTHBOUND, JUST SOUTH OF U.S. 40 INTERCHANGE RAMP SYSTEM.
I.R. 77 NORTHBOUND, JUST SOUTH OF I.R. 70 WESTBOUND EXIT RAMP.
I.R. 77 NORTHBOUND, JUST NORTH OF S.R. 209 INTERCHANGE RAMP SYSTEM.

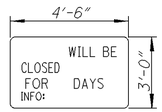
THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS FOLLOWS:

SEE STD. DWG. MT-98.29

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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.

NOTICE OF CLOSURE SIGNS

NOTICE OF CLOSURE SIGNS, AS DETAILED BELOW, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHTHAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE.



OC-60A-60

SEQUENCE OF OPERATIONS

WITH REFERENCE TO SHEET 6/58 (A+B BIDDING WITH MULTIPLE SECTIONS CONTRACT TABLE), SEGMENT 1 SHALL OCCUR FIRST IN CHRONOLOGICAL ORDER AND PRIOR TO SEGMENTS 2 AND 5. SEGMENTS 2 AND 5 SHALL COMMENCE SIMULTANEOUSLY. SEGMENTS 3 AND 4 MAY BE PERFORMED AT ANY TIME AND IN ANY ORDER PROVIDING THAT ONE LANE IN EACH DIRECTION ON MAINLINE I.R. 70 REMAINS OPEN.

IN ADDITION TO THESE RESTRICTIONS, PROPOSAL NOTE 125, AND THE A+B BIDDING WITH MULTIPLE SECTIONS CONTRACT TABLE SHOWN IN THE GENERAL NOTES OF THIS PLAN, ALL PROPOSED BRIDGE WORK SHALL BE COMPLETED BY THE COMPLETION DATE AS SET FORTH IN THE AWARDED CONTRACT DOCUMENT.

CALCULATED JDR
CHECKED TAG

M.O.T. NOTES

GUE-70-6.55

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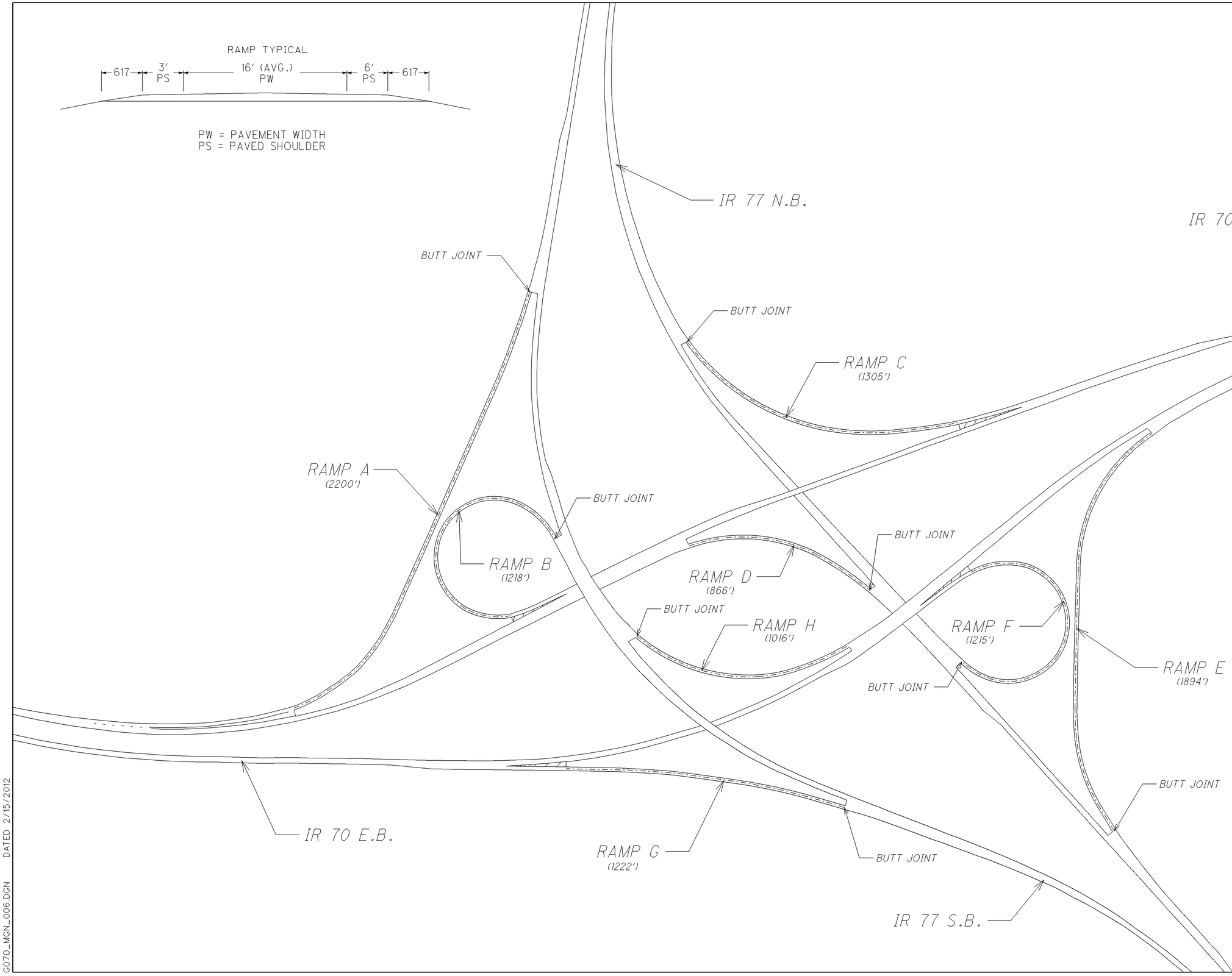
RAMP TYPICAL

PW = PAVEMENT WIDTH
PS = PAVED SHOULDER



N

HORIZONTAL SCALE IN FEET
0 100 200 400

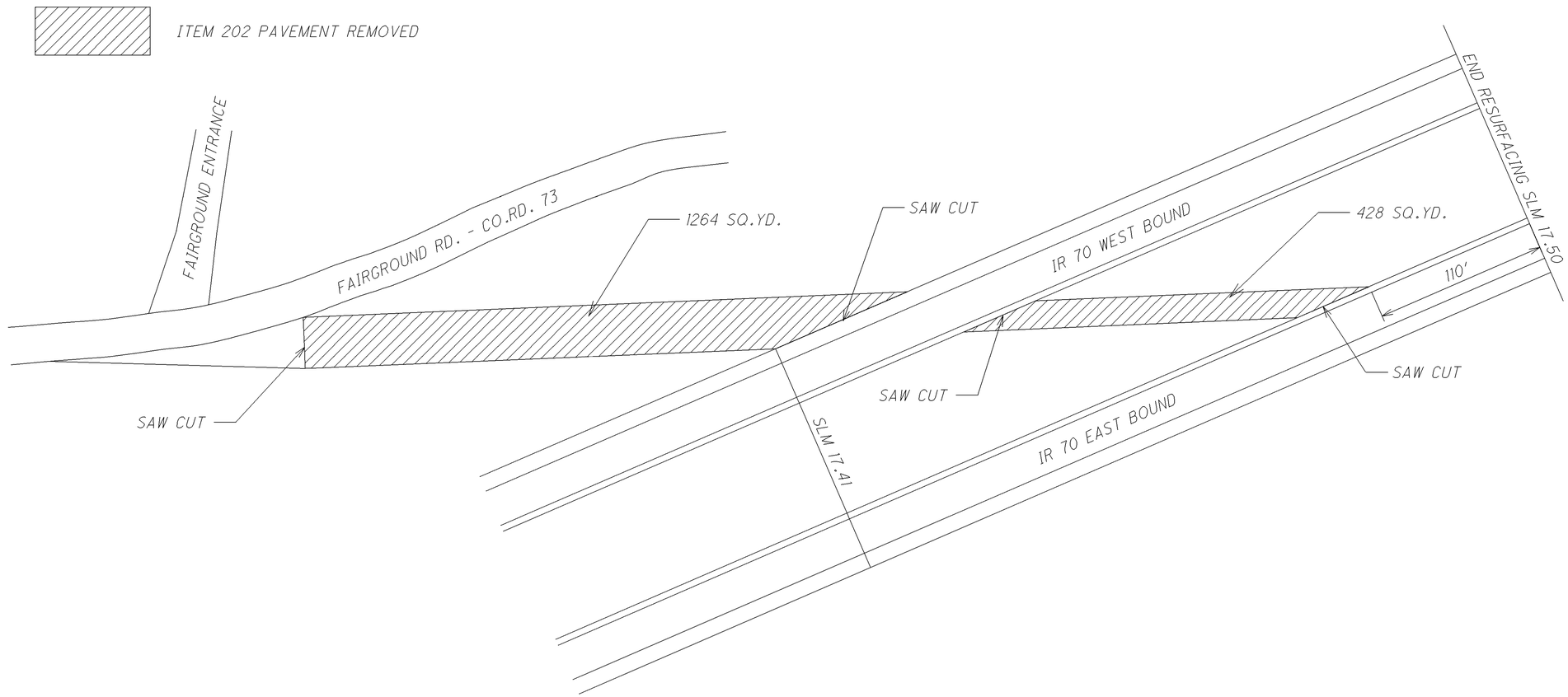
CALCULATED LME
CHECKED DNM

IR 70 / 77 INTERCHANGE DETAIL

GUE-70-6.55

13
58

G070_MGN_006.DGN DATED 2/15/2012



QUANTITIES

ITEM 202 PAVEMENT REMOVED:
1264 S.Y. + 428 S.Y. = 1692 SQ.YD

ITEM 203 EMBANKMENT:
1692 SQ.YD. X 12"/36 = 564 CU.YD.

ITEM 659 SEEDING AND MULCHING:
1692 SQ.YD.

ITEM 659 LIME:
0.35 ACRE

ITEM 659 COMMERCIAL FERTILIZER:
0.2 TON

ITEM 659 WATER:
5 M GAL.

QUANTITIES CARRIED TO GENERAL SUMMARY SHEETS 24-25.

NOTE:
THIS WORK SHALL CONSIST OF REMOVING AN OLD RAMP AND CROSSOVER LOCATED AT THE EAST END OF THE PROJECT. AS SHOWN IN THE DETAIL, THE LIMITS OF THE REMOVAL AREA SHALL BE SAW CUT SO AS NOT TO DAMAGE ADJACENT SHOULDERS AND PAVEMENT. SAW CUTS SHALL BE FULL DEPTH OF PAVEMENT, APPROXIMATELY 12", AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 202 PAVEMENT REMOVED.

HORIZONTAL SCALE IN FEET
0 40 80

CALCULATED LME
CHECKED DNM

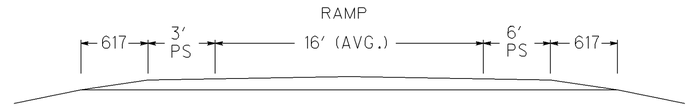
PAVEMENT REMOVAL DETAIL

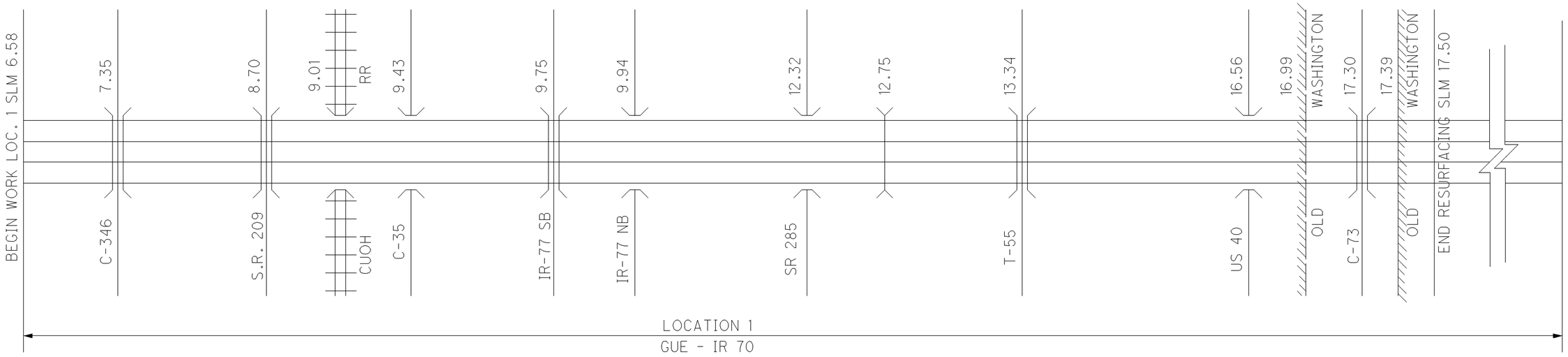
GUE-70-6.55

G070_MGN_005.DGN DATED 2/15/2012

PW = PAVEMENT WIDTH
PS = PAVED SHOULDER

TYPICAL 1





PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254	407		442 ASPHALT CONCRETE			
					MILES	LIN. FT.					PAVEMENT PLANING, ASPHALT CONCRETE (1.75")	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, 19 MM, TYPE A (446)	THICKNESS	SURFACE COURSE, 12.5 MM, TYPE A (446)
										SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.
1	GUE	I.R. 70 E.B.	6.58	17.50	10.92	57,657.60	24.0	1	446	153,753.6	153,753.6	11,531.6	7,687.7	1.75	7,474.2	1.50	6,406.4
1	GUE	I.R. 70 W.B.	6.58	17.50	10.92	57,657.60	24.0	1	446	153,753.6	153,753.6	11,531.6	7,687.7	1.75	7,474.2	1.50	6,406.4
	BRIDGE DEDUCTIONS (FROM SHEET 19)									(10,902.3)	(10,902.3)	(817.7)	(545.2)	1.75	(530.0)	1.50	(454.2)
LOCATION 1 (TOTALS CARRIED TO SHEET 24)											**296,604.9**	**22,245.5**	**14,830.2**		**14,418.4**		**12,358.6**

CALCULATED LME
CHECKED DNM

ASPHALT CONCRETE DATA

GUE-70-6.55

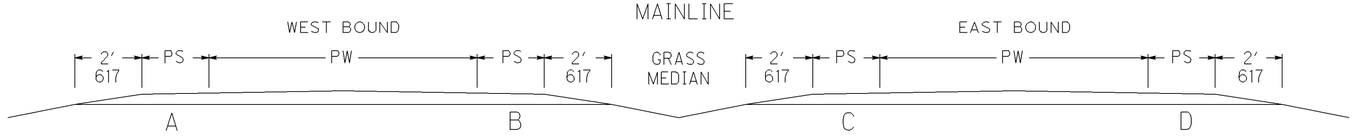
GO70_MAC_001.DGN 2-7-12

PW = PAVEMENT WIDTH

PS = PAVED SHOULDER

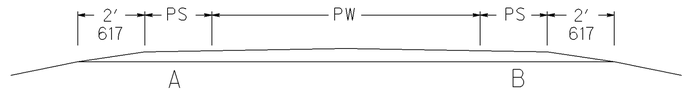
TYPICAL 1

MAINLINE



TYPICAL 2

RAMP



SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)				SHOULDER AREA	254	407		442 ASPHALT CONCRETE				617			618
					MILES	LIN. FT.		A	B	C	D		PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, 19 MM TYPE A (446)	THICKNESS	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2' AVG. WIDTH)	SHOULDER PREPARATION (2' AVG. WIDTH)	RUMBLE STRIPS (ASPHALT CONCRETE)
												SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.	MILE
1	GUE	I.R. 70 E.B.	6.58	17.50	10.92	57657.6	1			4	10	89,689.6	89,689.6	6,726.8	4,484.5	1.75	4,360.0	1.50	3,737.1	1.50	1,067.8	25,625.6	21.84
S.W. RAMP TO S.R. 209						1577.0	2	3	6			1,577.0	1,577.0	118.3	78.9	1.75	76.7	1.50	65.8	1.50	29.3	700.9	
S.W. RAMP (LOOP) FROM S.R. 209						1453.0	2	3	6			1,453.0	1,453.0	109.0	72.7	1.75	70.7	1.50	60.6	1.50	27.0	645.8	
RAMP G						1222.0	2	3	6			1,222.0	1,222.0	91.7	61.1	1.75	59.5	1.50	51.0	1.50	22.7	543.2	
RAMP F						1215.0	2	3	6			1,215.0	1,215.0	91.2	60.8	1.75	59.1	1.50	50.7	1.50	22.5	540.0	
RAMP H						1016.0	2	3	6			1,016.0	1,016.0	76.2	50.8	1.75	49.4	1.50	42.4	1.50	18.9	451.6	
RAMP E						1894.0	2	3	6			1,894.0	1,894.0	142.1	94.7	1.75	92.1	1.50	79.0	1.50	35.1	841.8	
OFF RAMP TO S.R. 285						746.0	2	3	6			746.0	746.0	56.0	37.3	1.75	36.3	1.50	31.1	1.50	13.9	331.6	
ON RAMP FROM S.R. 285						661.0	2	3	6			661.0	661.0	49.6	33.1	1.75	32.2	1.50	27.6	1.50	12.3	293.8	
1	GUE	I.R. 70 W.B.	6.58	17.50	10.92	57657.6	1	10	4			89,689.6	89,689.6	6,726.8	4,484.5	1.75	4,360.0	1.50	3,737.1	1.50	1,067.8	25,625.6	21.84
OFF RAMP TO S.R. 285						798.0	2	3	6			798.0	798.0	59.9	39.9	1.75	38.8	1.50	33.3	1.50	14.8	354.7	
ON RAMP FROM S.R. 285						763.0	2	3	6			763.0	763.0	57.3	38.2	1.75	37.1	1.50	31.8	1.50	14.2	339.2	
RAMP C						1305.0	2	3	6			1,305.0	1,305.0	97.9	65.3	1.75	63.5	1.50	54.4	1.50	24.2	580.0	
RAMP B						1218.0	2	3	6			1,218.0	1,218.0	91.4	60.9	1.75	59.3	1.50	50.8	1.50	22.6	541.4	
RAMP D						866.0	2	3	6			866.0	866.0	65.0	43.3	1.75	42.1	1.50	36.1	1.50	16.1	384.9	
RAMP A						2200.0	2	3	6			2,200.0	2,200.0	165.0	110.0	1.75	107.0	1.50	91.7	1.50	40.8	977.8	
N.E. RAMP TO S.R. 209						721.0	2	3	6			721.0	721.0	54.1	36.1	1.75	35.1	1.50	30.1	1.50	13.4	320.5	
N.W. RAMP FROM S.R. 209						900.0	2	3	6			900.0	900.0	67.5	45.0	1.75	43.8	1.50	37.5	1.50	16.7	400.0	
DEDUCT FOR BRIDGES (FROM SHEET 19)						(4088.4)						(6,359.6)	(6,359.6)	(477.0)	(318.0)	1.75	(309.2)	1.50	(265.0)	1.50	(75.8)	(1,817.1)	(1.26)
LOCATION 1 (TOTALS CARRIED TO SHEET 24)													**191,574.6**	**14,368.8**	**9,579.1**		**9,313.5**		**7,983.1**		**2,404.3**	**57,681.3**	**42.42**

CALCULATED LME CHECKED DNM

PAVED SHOULDER DATA

GUE-70-6.55

G070_MPS_001.dgn 1-30-12

RAMP DATA

LOCATION	COUNTY	ROUTE	DESCRIPTION	RAMP LENGTH	RAMP WIDTH	AREA	254	407		442 ASPHALT CONCRETE			
							PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./SQ. YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ. YD.	THICKNESS	INTERMEDIATE COURSE, 19 MM, TYPE A (446)	THICKNESS	SURFACE COURSE, 12.5 MM, TYPE A (446)
				FEET	FEET	SQ. YD.	SQ. YD.	GAL.	GAL.	INCH	CU. YD.	INCH	CU. YD.
1	GUE	I.R. 70 E.B.	DECELERATION LANE TO S.R. 209			2197	2197	165	110	1.75	106.8	1.50	91.6
1	GUE	I.R. 70 E.B.	S.W. RAMP TO S.R. 209	1577	16.0 (AVG.)	2804	2804	211	141	1.75	136.4	1.50	116.9
1	GUE	I.R. 70 E.B.	ACCELERATION LANE FROM S.R. 209			2411	2411	181	121	1.75	117.3	1.50	100.5
1	GUE	I.R. 70 E.B.	S.W. RAMP (LOOP) FROM S.R. 209	1453	16.0 (AVG.)	2583	2583	194	130	1.75	125.6	1.50	107.7
1	GUE	I.R. 70 E.B.	DECELERATION LANE TO I.R. 77 S.B.			1310	1310	99	66	1.75	63.7	1.50	54.6
1	GUE	I.R. 70 E.B.	RAMP G	1222	16.0 (AVG.)	2172	2172	163	109	1.75	105.6	1.50	90.5
1	GUE	I.R. 70 E.B.	DECELERATION LANE TO I.R. 77 N.B.			1418	1418	107	71	1.75	69.0	1.50	59.1
1	GUE	I.R. 70 E.B.	RAMP F	1215	16.0 (AVG.)	2160	2160	162	108	1.75	105.0	1.50	90.0
1	GUE	I.R. 70 E.B.	RAMP H	1016	16.0 (AVG.)	1806	1806	136	91	1.75	87.8	1.50	75.3
1	GUE	I.R. 70 E.B.	ACCELERATION LANE FROM I.R. 77 S.B.			3209	3209	241	161	1.75	156.0	1.50	133.8
1	GUE	I.R. 70 E.B.	RAMP E	1894	16.0 (AVG.)	3367	3367	253	169	1.75	163.7	1.50	140.3
1	GUE	I.R. 70 E.B.	ACCELERATION LANE FROM I.R. 77 N.B.			2850	2850	214	143	1.75	138.6	1.50	118.8
1	GUE	I.R. 70 E.B.	DECELERATION LANE TO S.R. 285			1970	1970	148	99	1.75	95.8	1.50	82.1
1	GUE	I.R. 70 E.B.	OFF RAMP TO S.R. 285	746.0	16.0 (AVG.)	1326	1326	100	67	1.75	64.5	1.50	55.3
1	GUE	I.R. 70 E.B.	ON RAMP FROM S.R. 285	661.0	16.0 (AVG.)	1175	1175	89	59	1.75	57.2	1.50	49.0
1	GUE	I.R. 70 E.B.	ACCELERATION LANE FROM S.R. 285			2537	2537	191	127	1.75	123.4	1.50	105.8
1	GUE	I.R. 70 W.B.	DECELERATION LANE TO S.R. 285			1614	1614	122	81	1.75	78.5	1.50	67.3
1	GUE	I.R. 70 W.B.	OFF RAMP TO S.R. 285	798.0	16.0 (AVG.)	1419	1419	107	71	1.75	69.0	1.50	59.2
1	GUE	I.R. 70 W.B.	ON RAMP FROM S.R. 285	763.0	16.0 (AVG.)	1356	1356	102	68	1.75	66.0	1.50	56.5
1	GUE	I.R. 70 W.B.	ACCELERATION LANE FROM S.R. 285			2222	2222	167	112	1.75	108.1	1.50	92.6
1	GUE	I.R. 70 W.B.	DECELERATION LANE TO I.R. 77 N.B.			1939	1939	146	97	1.75	94.3	1.50	80.8
1	GUE	I.R. 70 W.B.	RAMP C	1305	16.0 (AVG.)	2320	2320	174	116	1.75	112.8	1.50	96.7
1	GUE	I.R. 70 W.B.	DECELERATION LANE TO I.R. 77 S.B.			1999	1999	150	100	1.75	97.2	1.50	83.3
1	GUE	I.R. 70 W.B.	RAMP B	1218	16.0 (AVG.)	2165	2165	163	109	1.75	105.3	1.50	90.3
1	GUE	I.R. 70 W.B.	RAMP D	866	16.0 (AVG.)	1540	1540	116	77	1.75	74.9	1.50	64.2
1	GUE	I.R. 70 W.B.	ACCELERATION LANE FROM I.R. 77 N.B.			3273	3273	246	164	1.75	159.2	1.50	136.4
1	GUE	I.R. 70 W.B.	RAMP A	2200	16.0 (AVG.)	3911	3911	294	196	1.75	190.2	1.50	163.0
1	GUE	I.R. 70 W.B.	ACCELERATION LANE FROM I.R. 77 S.B.			3559	3559	267	178	1.75	173.1	1.50	148.3
1	GUE	I.R. 70 W.B.	DECELERATION LANE TO S.R. 209			1346	1346	101	68	1.75	65.5	1.50	56.1
1	GUE	I.R. 70 W.B.	N.E. RAMP TO S.R. 209	721	16.0 (AVG.)	2236	2236	168	112	1.75	108.7	1.50	93.2
1	GUE	I.R. 70 W.B.	N.W. RAMP FROM S.R. 209	900	16.0 (AVG.)	2569	2569	193	129	1.75	124.9	1.50	107.1
1	GUE	I.R. 70 W.B.	ACCELERATION LANE FROM S.R. 209			2702	2702	203	136	1.75	131.4	1.50	112.6
1			**TOTALS (CARRIED TO SHEET 24)**				**71,465.0**	**5,373.0**	**3,586.0**		**3,475.5**		**2,978.9**

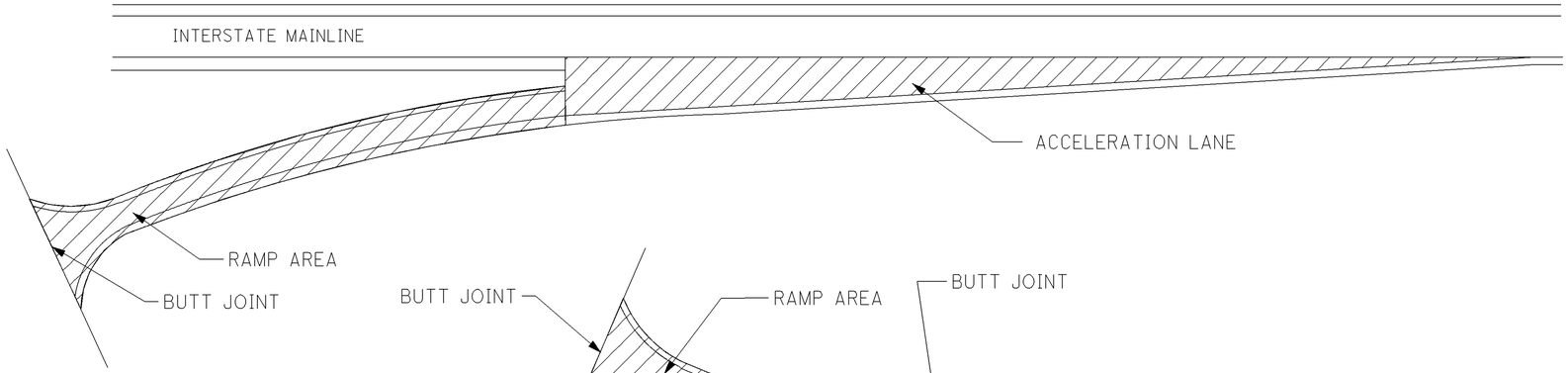
CALCULATED LME
CHECKED DNM

GORE AND RAMP DATA

GUE-70-6.55

GO70_MEA_001.dgn 2-7-12

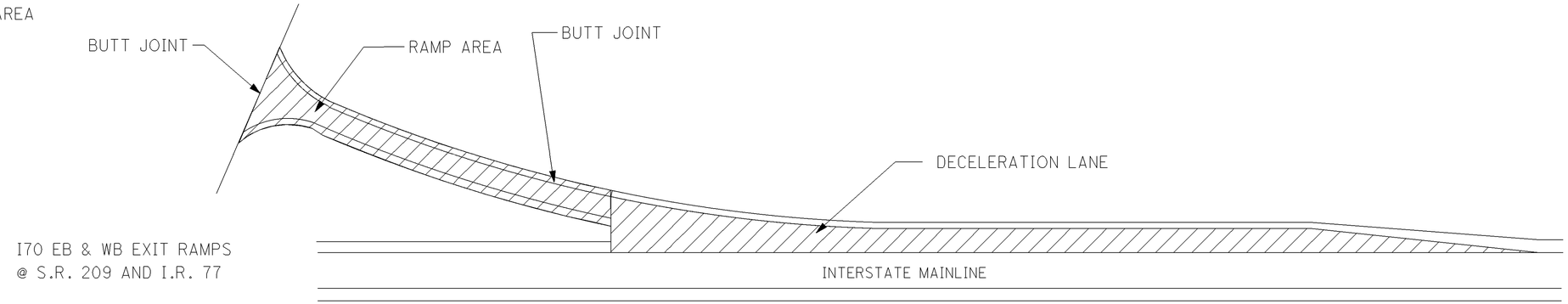
* PAVED SHOULDER QUANTITIES ARE INCLUDED WITH MAINLINE FOR ACCEL/DECEL LANES



I70 EB & WB ENTRANCE RAMPS
@ S.R. 209 AND I.R. 77

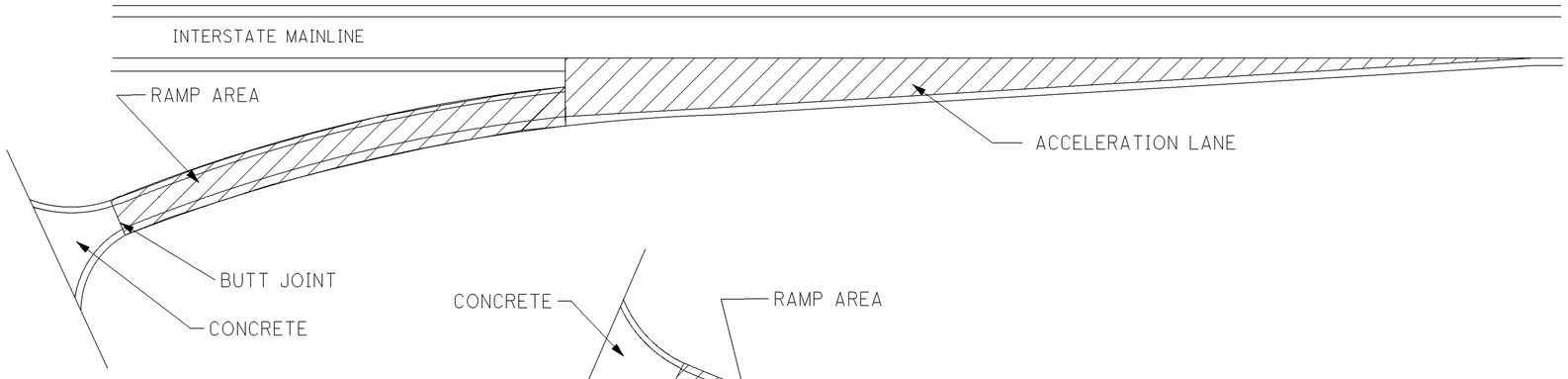
ITEM 254 PAVEMENT PLANING,
ASPHALT CONCRETE, AS PER PLAN

1.75" PAVEMENT PLANING AND 3.25" RESURFACING
ON S.R. 209 & IR 77 RAMPS



I70 EB & WB EXIT RAMPS
@ S.R. 209 AND I.R. 77

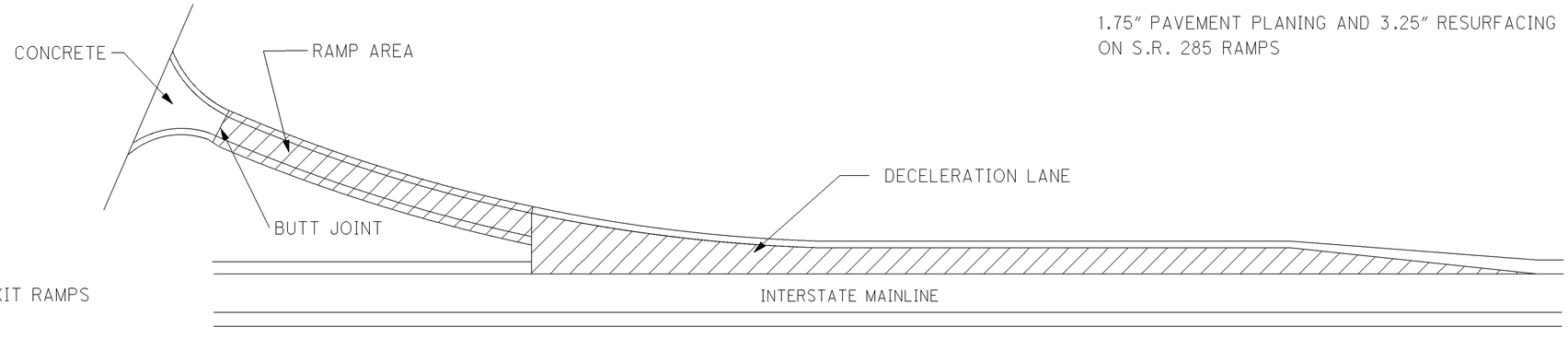
* PAVED SHOULDER QUANTITIES ARE INCLUDED WITH MAINLINE FOR ACCEL/DECEL LANES



I70 EB & WB ENTRANCE RAMPS
@ S.R. 285

ITEM 254 PAVEMENT PLANING,
ASPHALT CONCRETE, AS PER PLAN

1.75" PAVEMENT PLANING AND 3.25" RESURFACING
ON S.R. 285 RAMPS



I70 EB & WB EXIT RAMPS
@ S.R. 285

CALCULATED LME
CHECKED DNM

GORE AND RAMP DETAILS

GUE-70-6.55

G070_MEA_001.dgn 2-7-12

GUE-70-0735: OVERHEAD (MILL & FILL MAINLINE)
GUE-70-0870: OVERHEAD (MILL & FILL MAINLINE)
GUE-70-0901R: CONCRETE OVERLAY
GUE-70-0901L: CONCRETE OVERLAY
GUE-70-0943R: CONCRETE OVERLAY
GUE-70-0943L: CONCRETE OVERLAY
GUE-70-0975: OVERHEAD (MILL & FILL MAINLINE)
GUE-70-0994R: BUTT JOINT @ BRIDGE DECK
GUE-70-0994L: BUTT JOINT @ BRIDGE DECK
GUE-70-1232R: BUTT JOINT @ BRIDGE DECK
GUE-70-1232L: BUTT JOINT @ BRIDGE DECK

BRIDGE TREATMENT

LOCATION 1:

GUE-70-1275R: MILL & FILL APP. SLABS THEN OVERLAY WITH 3" ASPHALT CONCRETE
GUE-70-1275L: MILL & FILL APP. SLABS THEN OVERLAY WITH 3" ASPHALT CONCRETE
GUE-70-1334: OVERHEAD (MILL & FILL MAINLINE)
GUE-70-1656R: MILL & FILL APP. SLABS THEN OVERLAY WITH 3" ASPHALT CONCRETE
GUE-70-1656L: MILL & FILL APP. SLABS THEN OVERLAY WITH 3" ASPHALT CONCRETE
GUE-70-1730: OVERHEAD (MILL & FILL MAINLINE)

BRIDGE DATA																						
											202	254	407		442					516	
LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAIL (SEE SHEET 20)	MAINLINE DEDUCTIONS (CARRIED TO SHEET 15)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 16)	WEARING COURSE REMOVED	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, 19 MM, TYPE A (446)	THICKNESS	SURFACE COURSE, 12.5 MM, TYPE A (446)	2" DEEP JOINT SEALER, AS PER PLAN
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.		SQ.YD.	SQ.YD.	SQ.YD.	SQ.YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	FEET
1	GUE-70-0735R&L	OVERHEAD						4											
1	GUE-70-0870R&L	OVERHEAD						4											
1	GUE-70-0901R	392.5	37.0	1,613.7	25	37.0	205.6	1	1,180.0	688.3									74.0
1	GUE-70-0901L	392.5	37.0	1,613.7	25	37.0	205.6	1	1,180.0	688.3									74.0
1	GUE-70-0943A	304.3	30.3	1,024.5	25	30.3	168.4	1	944.8	551.1									60.6
1	GUE-70-0943R	304.6	37.0	1,252.3	25	37.0	205.6	1 & 2	945.6	551.6	102.8		7.7				1.50	8.6	74.0
1	GUE-70-0943L	292.5	40.5	1,316.3	25	40.5	225.0	1 & 2	913.3	532.8		112.5	8.4				1.50	9.4	81.0
1	GUE-70-0975R&L	OVERHEAD						4											
1	GUE-70-0994R	99	82.2	904.2	25	83.0	461.2	2	397.3	231.8	461.2		34.6				1.50	19.2	166.0
1	GUE-70-0994L	159	44.3	782.7	25	44.3	246.2	2	557.3	325.1	246.2		18.5				1.50	10.3	88.6
1	GUE-70-1232R	442	33.5	1,645.3	25	28.0	155.6	2	1,312.0	765.3	155.6		11.7	A3			1.50	6.5	56.0
1	GUE-70-1232L	442	33.5	1,645.3	25	26.0	144.5	2	1,312.0	765.3	144.5		10.8				1.50	6.0	52.0
1	GUE-70-1275R	172	41.0	783.6	25	41.0	227.8	3	592.0	345.3	227.8		75.9	62.0	1.50	51.6	1.50	42.1	
1	GUE-70-1275L	172	41.0	783.6	25	41.0	227.8	3	592.0	345.3	227.8		75.9	62.0	1.50	51.6	1.50	42.1	
1	GUE-70-1334R&L	OVERHEAD						4											
1	GUE-70-1656R	133	41.0	605.9	25	41.0	227.8	3	488.0	284.7	227.8		62.5	41.7	1.50	44.2	1.50	34.7	
1	GUE-70-1656L	133	41.0	605.9	25	41.0	227.8	3	488.0	284.7	227.8		62.5	41.7	1.50	44.2	1.50	34.7	
1	GUE-70-1730R&L	OVERHEAD						4											
	TOTALS	3438.4			325				**10,902.3**	**6,359.6**									
	LOCATION 1 (TOTALS CARRIED TO GENERAL SUMMARY)										**2,021.5**	**112.5**	**368.5**	**207.4**		**191.6**		**213.6**	**726.2**

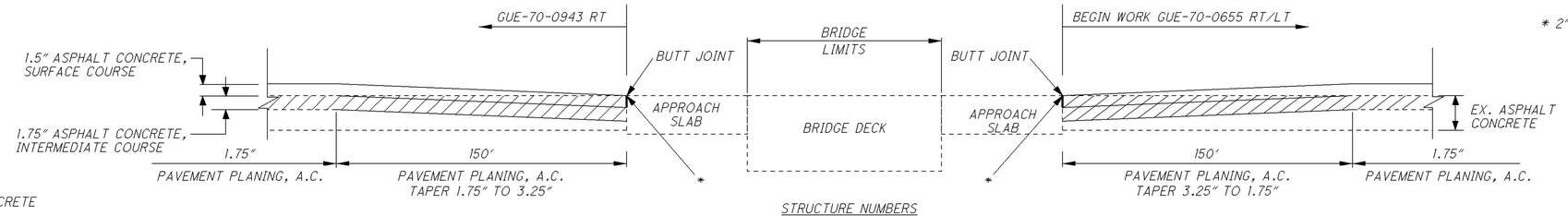
CALCULATED LME CHECKED DNM

BRIDGE TREATMENT DATA

GUE-70-6.55

G070_MBT_001.dgn 2-7-12

DETAIL 1



* 2" DEEP JOINT SEALER, AS PER PLAN (SEE NOTE ON SHEET 2)

BUTT JOINT TAPERS INCLUDED WITH 254 PAVEMENT PLANING, ASPHALT CONCRETE

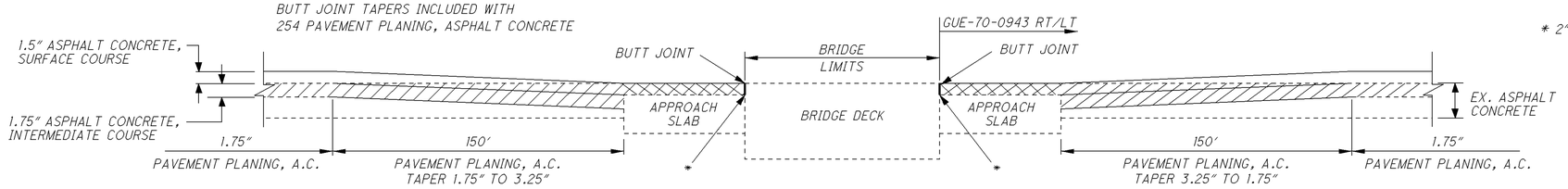
- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

STRUCTURE NUMBERS

GUE-70-0655 RT (BEGIN WORK EAST APPROACH), GUE-70-0655 LT (BEGIN WORK EAST APPROACH)
GUE-70-0901 RT, GUE-70-0901 LT
GUE-70-0943 RT (REAR APPROACH ONLY), GUE-70-0943 LT (REAR APPROACH ONLY)
GUE-70-0943A

BUTT JOINT @ APPROACH SLABS

DETAIL 2



* 2" DEEP JOINT SEALER, AS PER PLAN (SEE NOTE ON SHEET 2)

- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 202 WEARING COURSE REMOVED
- ** ITEM 254 PAVEMENT PLANING, PORTLAND CEMENT CONCRETE

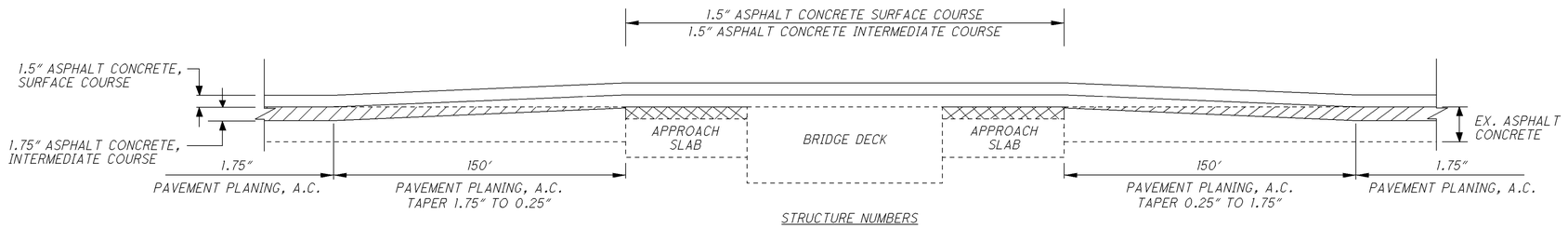
STRUCTURE NUMBERS

GUE-70-0943 RT (FORWARD APPROACH ONLY)
**GUE-70-0943 LT (FORWARD APPROACH ONLY)
GUE-70-0994 RT, GUE-70-0994 LT
GUE-70-1232 RT, GUE-70-1232 LT

BUTT JOINT SURFACE COURSE @ BRIDGE DECK

NOTE: THE APPROACH SLAB AT THE FORWARD APPROACH OF BRIDGE GUE-70-0943 LT HAS SETTLED. THE CONTRACTOR SHALL PLANE 1.5" OFF OF THIS APPROACH SLAB. THE CONTRACTOR SHALL EXTEND THE INTERMEDIATE COURSE ONTO THE APPROACH SLAB AS NEEDED TO REMOVE THE EXISTING DIP LOCATED WHERE THE APPROACH SLAB MEETS THE ASPAHLT PAVEMENT. THE SURFACE COURSE WILL EXTEND OVER THE ENTIRE APPROACH SLAB.

DETAIL 3



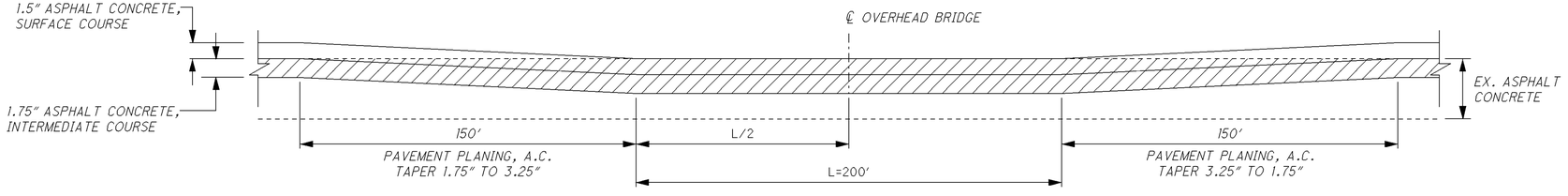
- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 202 WEARING COURSE REMOVED (REPLACE WITH 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE)

STRUCTURE NUMBERS

GUE-70-1275 RT, GUE-70-1275 LT
GUE-70-1656 RT, GUE-70-1656 LT

OVERLAY BRIDGE DECK AND APPROACH SLABS WITH 3.00"

DETAIL 4



- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

STRUCTURE NUMBERS

GUE-70-0735, GUE-70-0870, GUE-70-0975
GUE-70-1334, GUE-70-1730

MILL AND FILL MAINLINE 3.25"

CALCULATED LME CHECKED DNM

BRIDGE TREATMENT DETAILS

GUE-70-6.55

G070_MBT_002.DGN DATED 2/15/2012

ITEM 817 EDGE LINE DATA

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	TOTAL LENGTH (MILES)	INFORMATION ONLY: WHITE 6" EDGE LINE QUANTITIES TOTAL MILES	WHITE 6" EDGE LINE QUANTITIES HIGHWAY MILES	WHITE 6" EDGE LINE QUANTITIES RAMP MILES	YELLOW 6" EDGE LINE QUANTITIES TOTAL MILES	YELLOW 6" EDGE LINE QUANTITIES HIGHWAY MILES	YELLOW 6" EDGE LINE QUANTITIES RAMP MILES	TOTAL EDGE LINE MILES	REMARKS
1	GUE	I.R. 70 E.B.	6.58	17.50	10.92	10.92	10.92		10.92	10.92		21.84	4-LANE DIVIDED
	S.W. RAMP TO SR 209					0.30		0.30	0.30		0.30	0.60	
	S.W. LOOP RAMP FROM SR 209					0.28		0.28	0.28		0.28	0.56	
	RAMP G					0.23		0.23	0.23		0.23	0.46	
	RAMP F					0.23		0.23	0.23		0.23	0.46	
	RAMP H					0.19		0.19	0.19		0.19	0.38	
	RAMP E					0.36		0.36	0.36		0.36	0.72	
	OFF RAMP TO SR 285					0.14		0.14	0.14		0.14	0.28	
	ON RAMP FROM SR 285					0.13		0.13	0.13		0.13	0.26	
1	GUE	I.R. 70 W.B.	6.58	17.50	10.92	10.92	10.92		10.92	10.92		21.84	4-LANE DIVIDED
	N.E. RAMP TO SR 209					0.14		0.14	0.14		0.14	0.28	
	N.W. RAMP FROM SR 209					0.17		0.17	0.17		0.17	0.34	
	RAMP C					0.25		0.25	0.25		0.25	0.50	
	RAMP B					0.23		0.23	0.23		0.23	0.46	
	RAMP D					0.16		0.16	0.16		0.16	0.32	
	RAMP A					0.42		0.42	0.42		0.42	0.84	
	OFF RAMP TO SR 285					0.15		0.15	0.15		0.15	0.30	
	ON RAMP FROM SR 285					0.14		0.14	0.14		0.14	0.28	
LOCATION 1 (TOTAL CARRIED TO SHEET 25)						**25.36**			**25.36**			**50.72**	

CALCULATED LME CHECKED DNM

PAVEMENT MARKING DATA

GUE-70-6.55

ITEM 817 LANE LINE / ITEM 644 AUXILARY SUB-SUMMARY

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	ITEM 817 6" LANE LINE QUANTITIES: TOTAL LANE LINE	DASHED	SOLID	ITEM 644 AUXILARY MARKING QUANTITIES: CHANNELIZING LINE 12"	TRANSVERSE/ DIAGONAL LINE	LANE ARROW: LEFT	RIGHT	THRU	STOP LINE	REMARKS
					MILE	MILE	MILE	FEET	FEET	EACH	EACH	EACH	EACH	
1	GUE	I.R. 70 E.B.	6.58	17.50	10.92	10.92								4-LANE DIVIDED
		OFF RAMP TO S.R. 209			0.05	0.05		550				1	30	
		ON RAMP FROM S.R. 209			0.04	0.04		425						ACCELERATION LANE
		OFF RAMP TO I.R. 77 S.B.			0.03	0.03		540	106					DECELERATION LANE
		OFF RAMP TO I.R. 77 N.B.			0.04	0.04		560	82					DECELERATION LANE
		ON RAMP FROM I.R. 77 S.B.			0.05	0.05		680						ACCELERATION LANE
		ON RAMP FROM I.R. 77 N.B.			0.04	0.04		580						ACCELERATION LANE
		OFF RAMP TO S.R. 285			0.05	0.05		608				1		DECELERATION LANE
		ON RAMP FROM S.R. 285			0.05	0.05		753						ACCELERATION LANE
1	GUE	I.R. 70 W.B.	6.58	17.50	10.92	10.92								4-LANE DIVIDED
		OFF RAMP TO S.R. 285			0.04	0.04		748				1		DECELERATION LANE
		ON RAMP FROM S.R. 285			0.06	0.06		487						ACCELERATION LANE
		OFF RAMP TO I.R. 77 N.B.			0.07	0.07		570	114					DECELERATION LANE
		OFF RAMP TO I.R. 77 S.B.			0.08	0.08		580	87					DECELERATION LANE
		ON RAMP FROM I.R. 77 N.B.			0.06	0.06		550						ACCELERATION LANE
		ON RAMP FROM I.R. 77 S.B.			0.07	0.07		550						ACCELERATION LANE
		OFF RAMP TO S.R. 209			0.03	0.03		645		1	1	1	64	DECELERATION LANE, 65' CHANNELIZING AT SR 209
		ON RAMP FROM S.R. 209			0.05	0.05		540						
SUB TOTALS										**1**	**1**	**4**		
LOCATION 1 (TOTAL CARRIED TO SHEET 25)					**22.65**			**9,366**	**389**		**6**		**94**	

CALCULATED LME CHECKED DNM

PAVEMENT MARKING DATA

GUE-70-6.55

GOTO_TLL_001.DGN 2-7-12

DETAIL	SEE STD. DWG. TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	SEE STD. DWG. TC-65.11
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH
9	TWO WAY LEFT TURN LANE

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

ITEM 621 RPM SUB-SUMMARY

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621 RAISED PAVEMENT MARKER REMOVED	621 RPM	PRISMATIC RETRO-REFLECTOR COLORS INFORMATION ONLY					REMARKS
										ONE-WAY		TWO-WAY			
					MILES	LIN.FT.		EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	WHITE/RED	YELLOW/RED	
1	GUE	I.R. 70 E.B.	6.58	17.50	10.92	57,658	3		481	481					120' SPACING ON LANE LINE
	OFF RAMP TO S.R. 209						2		47	16			11	20	GORE AREA AND RAMP
	ON RAMP FROM S.R. 209						1		29				11	18	GORE AREA AND RAMP
	OFF RAMP TO I.R. 77 S.B.						2		29				14	15	GORE AREA AND RAMP
	OFF RAMP TO I.R. 77 N.B.						2		29				14	15	GORE AREA AND RAMP
	ON RAMP FROM I.R. 77 S.B.						1		30				17	13	GORE AREA AND RAMP
	ON RAMP FROM I.R. 77 N.B.						1		39				15	24	GORE AREA AND RAMP
	OFF RAMP TO S.R. 285						2		43	16			15	12	GORE AREA AND RAMP
	ON RAMP FROM S.R. 285						1		30				19	11	GORE AREA AND RAMP
EXTRA RPMS FOR LANE LINE REPAIR					6.60	34,848	3		291	291					120' SPACING ON LANE LINE
1	GUE	I.R. 70 W.B.	6.58	17.50	10.92	57,658	3		481	481					120' SPACING ON LANE LINE
	OFF RAMP TO S.R. 285						2		46	16			19	11	GORE AREA AND RAMP
	ON RAMP FROM S.R. 285						1		23				12	11	GORE AREA AND RAMP
	OFF RAMP TO I.R. 77 N.B.						2		31				15	16	GORE AREA AND RAMP
	OFF RAMP TO I.R. 77 S.B.						2		30				15	15	GORE AREA AND RAMP
	ON RAMP FROM I.R. 77 N.B.						1		25				14	11	GORE AREA AND RAMP
	ON RAMP FROM I.R. 77 S.B.						1		37				14	23	GORE AREA AND RAMP
	OFF RAMP TO S.R. 209						2		41	16			15	10	GORE AREA AND RAMP
	ON RAMP FROM S.R. 209						1		23				11	12	GORE AREA AND RAMP
	SUB-TOTALS (INFORMATION ONLY)									**1,317**			**231**	**237**	
LOCATION 1 (TOTAL CARRIED TO SHEET 24)								**1,785**	**1,785**						

CALCULATED LME CHECKED DNM

RAISED PAVEMENT MARKER DATA

GUE-70-6.55

SHEET TOTALS													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
2	3	4	7	11	14	15	16	17	19	23	26	28						
					1,692								202	23000	1,692	SQ YD	PAVEMENT REMOVED	
									2,022				202	23500	2,022	SQ YD	WEARING COURSE REMOVED	
											812.50		202	38000	812.50	FT	GUARDRAIL REMOVED	
											14		202	47000	14	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
													202	98000	LUMP		REMOVAL MISC.: PORTABLE CONCRETE BARRIER	8/58
											10		203	10001	10	CU YD	EXCAVATION, AS PER PLAN	26
					564							10	203	20000	574	CU YD	EMBANKMENT	
40													209	60500	40	MILE	LINEAR GRADING	
968													251	98000	968	CU YD	PARTIAL DEPTH REPAIR, MISC.: LANE LINE JOINT REPAIR	2
100													253	02000	100	CU YD	PAVEMENT REPAIR	
						296,605	191,575	71,465					254	01000	559,645	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
									113				254	01010	113	SQ YD	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE	
						22,246	14,369	5,373	369				407	10000	42,357	GALLON	TACK COAT	
						14,831	9,580	3,586	208				407	14000	28,205	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
						12,359	7,984	2,979	214				442	10000	23,536	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
						14,419	9,314	3,476	192				442	10100	27,401	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)	
			534										448	46020	534	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	
									727				516	31011	727	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
											10		601	32301	10	CU YD	ROCK CHANNEL PROTECTION, TYPE D WITH FILTER, AS PER PLAN	26
											812.50		606	13000	812.50	FT	GUARDRAIL, TYPE 5	
											1		606	26000	1	EACH	ANCHOR ASSEMBLY, TYPE B	
											10		606	35000	10	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
											4		606	35100	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
		750											614	11110	750	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
				16									614	12336	16	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
	16												614	12460	16	EACH	WORK ZONE MARKING SIGN	
	60												614	12600	60	EACH	REPLACEMENT DRUM	
	35												614	13000	35	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
				128									614	13300	128	EACH	BARRIER REFLECTOR, TYPE B	
				128									614	13350	128	EACH	OBJECT MARKER, ONE WAY	
		360											614	18401	360	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
				7.03									614	22000	7.03	MILE	WORK ZONE EDGE LINE, CLASS I	
				2,375									614	24000	2,375	FT	WORK ZONE DOTTED LINE, CLASS I	
							2,405						617	10101	2,405	CU YD	COMPACTED AGGREGATE, AS PER PLAN	2
							57,682						617	20000	57,682	SQ YD	SHOULDER PREPARATION	
							42.42						618	40600	42.42	MILE	RUMBLE STRIPS, (ASPHALT CONCRETE)	
										1,785			621	00100	1,785	EACH	RPM	
										1,785			621	54000	1,785	EACH	RAISED PAVEMENT MARKER REMOVED	
				2,667									622	40020	2,667	FT	PORTABLE CONCRETE BARRIER, 32"	
				3,180									622	40040	3,180	FT	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED	

CALCULATED LME CHECKED DNM

GENERAL SUMMARY

GUE-70-6.55

SHEET TOTALS													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
2	3	11	14	21	22	28												
						1356							625	23201	1,356	FT	NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE, AS PER PLAN	28/58
						8,230							625	25400	8,230	FT	CONDUIT, 2", 725.04	
						20							625	29920	20	EACH	STRUCTURE JUNCTION BOX	
						20							625	30701	20	EACH	PULL BOX, 725.08, 18", AS PER PLAN	28/58
						4							625	31510	4	EACH	PULL BOX REMOVED	
						5							625	33000	5	EACH	STRUCTURE GROUNDING SYSTEM	
LUMP													638	98100	LUMP		WATER WORK, MISC.: INSPECTION HOLES	2
					9,366								644	00404	9,366	FT	CHANNELIZING LINE, 12"	
					94								644	00500	94	FT	STOP LINE	
					389								644	00700	389	FT	TRANSVERSE/DIAGONAL LINE	
					6								644	01300	6	EACH	LANE ARROW	
		17,564											644	30000	17,564	FT	REMOVAL OF PAVEMENT MARKING	
			1,692										659	10000	1,692	SQ YD	SEEDING AND MULCHING	
			0.2										659	20000	0.2	TON	COMMERCIAL FERTILIZER	
			0.35										659	31000	0.35	ACRE	LIME	
			5										659	35000	5	M GAL	WATER	
	19,227												690	12050	19,227	SQ YD	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	3
				50.72									817	00104	50.72	MILE	EDGE LINE, 6"	
					22.65								817	00204	LUMP		LANE LINE, 6"	
																	SEE SHEET 27 FOR STRUCTURE QUANTITIES	
													103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
	LUMP												614	11000	LUMP		MAINTAINING TRAFFIC	
													624	10000	LUMP		MOBILIZATION	
													823	10000	LUMP		CONSTRUCTION LAYOUT STAKES	

CALCULATED LME
CHECKED DNM

GENERAL SUMMARY

GUE-70-6.55

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

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

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

DESIGN LOADING

DESIGN LOADING: CF-2000 (1957)

EXISTING PLANS

EXISTING PLANS ENTITLED GUE-40-8.93 MAY BE INSPECTED IN THE ODOT DISTRICT 5 OFFICE IN JACKSONTOWN, OHIO.

GENERAL PROVISIONS

THE CONTRACTOR'S ATTENTION IS CALLED TO ALL OF SECTION 100 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION.

REMOVED MATERIALS

ALL REMOVED MATERIALS EXCEPT AS NOTED ELSEWHERE IN THE PLANS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY HIM FROM THE JOB SITE.

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

MAINTENANCE OF TRAFFIC

MAINTENANCE OF TRAFFIC QUANTITIES FOR AREAS OF WORK AT BRIDGES ON THIS PROJECT ARE INCLUDED IN THE GENERAL SUMMARY. SEE GENERAL SUMMARY, SHEET $^{24}/_{58}$.

PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, SUPERSTRUCTURE

DESCRIPTION: THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF THE CONCRETE DECK INCLUDING BRIDGE PARAPET RAILING AS DETAILED IN THE PLANS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. IN THIS RESPECT, THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05. ANY ELECTRICAL AND/OR SIGNAL WIRING AND/OR CONDUIT ENCOUNTERED IS INCLUDED FOR PAYMENT WITH THIS ITEM.

PROTECTION OF TRAFFIC: PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING SUPERSTRUCTURE, SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR, PEDESTRIAN, BOAT, ETC.) ADJACENT TO AND/OR UNDER THE STRUCTURE TO THE DIRECTOR AT LEAST 7 DAYS BEFORE CONSTRUCTION BEGINS. THESE PLANS SHALL INCLUDE PROVISIONS FOR ANY DEVICES AND STRUCTURES THAT MAY BE NECESSARY TO ENSURE SUCH PROTECTION. MAINTAIN EXISTING VERTICAL CLEARANCES AT ALL TIMES EXCEPT AS OTHERWISE APPROVED BY THE DIRECTOR.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS AND REINFORCING STEELTHAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER BRIDGE MEMBERS (STEEL BEAM), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER BRIDGE MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STEEL MEMBERS AND REINFORCING STEEL THAT IS TO BE PRESERVED IN PLACE.

DECK REMOVALS: DUE TO THE POSSIBLE PRESENCE OF WELDED ATTACHMENTS TO EXISTING STRUCTURAL STEEL (FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.), PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING GIRDERS WHICH ARE TO REMAIN. REPLACE OR REPAIR GIRDERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. SUBMIT PROPOSED REPAIRS, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, IN WRITING TO THE DIRECTOR AT LEAST 3 DAYS BEFORE PERFORMING REPAIR WORK.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A CU. YD. BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, SUPERSTRUCTURE.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

A 2" DEEP X 1" WIDE STRIP SHALL BE SAWCUT OUT OF ALL EXISTING APPROACH SLAB MATERIALS ABUTTING BACKWALLS AFTER ALL NECESSARY BACKWALL REPAIRS HAVE BEEN MADE AND CURED. IF AN EXISTING COMPRESSION SEAL IS IN PLACE, IT SHALL BE REMOVED PRIOR TO OR DURING THE SAWCUTTING OPERATION NECESSARY FOR THIS ITEM. JOINT SEALER AS PER 705.04 SHALL BE USED TO SEAL THE JOINT CREATED.

ALSO, A 2" DEEP X 1" WIDE VOID SHALL BE CREATED AS SHOWN IN THE PARAPET DETAILS OF THIS PLAN AND JOINT SEALER AS PER 705.04 SHALL BE USED TO SEAL THE JOINT CREATED.

PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, SUBSTRUCTURE

THERE SHALL BE NO SAWCUTS BELOW THE REMOVAL LINES AS DETAILED IN THE PLAN. IF SAWCUTTING IS NOT IMPLIMENTED, ALL CONCRETE REMOVED DOWN TO THE SAWCUT SHALL BE REMOVED 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 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN

ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN: THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE PARAPET CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

ALL TIME, LABOR, MATERIALS, AND MISC. ITEMS REQUIRED TO DRILL AND SEAL HOLES IN AND TO EXISTING BACKWALLS OR WINGWALLS IS INCIDENTAL TO THIS ITEM. SEE PARAPET DETAIL SHEETS WITHIN PLAN FOR DETAILS.

ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN

CONCRETE PARAPETS: AS SOON AS A CONCRETE SAW CAN BE OPERATED WITHOUT DAMAGING THE FRESHLY PLACED CONCRETE, SAWCUT 1 1/4" DEEP CONTROL JOINTS INTO THE PERIMETER OF THE CONCRETE PARAPET STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK. PLACE THE SAWCUTS AT A MINIMUM OF 6 FEET AND A MAXIMUM OF 10 FEET CENTERS. USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4 INCH. SEAL THE PERIMETER OF THE DEFLECTION CONTROL JOINT TO A MINIMUM DEPTH OF 1 INCH WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM 1/2 INCH OF THE INSIDE AND OUTSIDE FACE UNSEALED TO ALLOW WATER TO ESCAPE.

DEMOLITION ON RAILROAD PROPERTY

THE CONTRACTOR SHALL SUBMIT TO THE RAILROAD A DETAILED DEMOLITION AND ERECTION PROCEDURE FOR THE EXISTING STRUCTURE, WHICH SHOULD CLEARLY INDICATE THE CAPACITY OF CRANES, AND THE LOCATION OF CRANES WITH RESPECT TO THE EXISTING TRACK. THIS PROCEDURE MUST BE SUBMITTED AND APPROVED BY THE RAILROAD PRIOR TO STARTING WORK.

THE CONTRACTOR SHALL PROVIDE A BALLAST AND TRACK PROTECTION SYSTEM ACCEPTABLE TO THE RAILROAD WHICH SHALL KEEP THE EXISTING RAIL, BALLAST AND RAILROAD RIGHT-OF-WAY CLEAN AND PROTECTED FROM DEMOLISHED MATERIAL, AND WILL NOT INTERFERE WITH PASSING TRAIN OPERATIONS. THIS SYSTEM MUST BE SUBMITTED AND APPROVED BY THE RAILROAD PRIOR TO STARTING WORK. LARGE PIECES OVER 50 POUNDS PER SQUARE FOOT SHALL NOT BE ALLOWED TO FALL ON THE BALLAST AND TRACK PROTECTION SYSTEM UNLESS OTHERWISE APPROVED IN ADVANCE BY THE RAILROAD.

SEE SPECIAL CLAUSES IN THE BID PROPOSAL FOR OTHER RAILROAD AND NOTIFICATION REQUIREMENTS.

ITEM 518 - SCUPPER, MISC.: 4" CONDUIT

THE CONTRACTOR SHALL PROVIDE MATERIAL FOR THIS ITEM CONFORMING TO THE C.M.S. REQUIREMENTS OF ITEM 625 - CODUIT, 4", 725.051. IN ADDITION, THE CONTRACTOR SHALL FIELD CUT / BEVEL, CUT/BORE HOLES FOR, PLACE, AND SEAL A 4" CONDUIT, AT EACH LOCATION, AS SHOWN IN THE PARAPET DETAILS ON SHEET 11/33.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF ON AN EACH LOCATION BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITY OF SCUPPERS CONDUIT AT THE CONTRACT PRICE FOR ITEM 518 - SCUPPER MISC.: 4" CONDUIT.

ITEM 848 - SURFACE PREP. USING HYDRO-DEMOLITION

IN ORDER TO MEET THE REQUIREMENTS OF SS 848, SECTION 848.20, LAND APPLICATION OF HYDRO-DEMOLITION WASTEWATER MAY BE UTILIZED FOR THIS PROJECT. INFIELD AREAS OF THE INTERCHANGES AND OTHER STATE OF OHIO RIGHT OF WAYS NEAR THIS PROJECT MAY BE PERMITTED FOR USE BY THE O.E.P.A. FOR THE CONTRACTOR'S USE IN THIS PROCESS AS DIRECTED BY THE PROJECT ENGINEER.

ITEM 202 - EXCAVATION, AS PER PLAN

PERFORM WORK ACCORDING TO DETAILS SHOWN ON SHEET 11/33 OF THE BRIDGE PARPAET DETAILS. AN ESTIMATED AMOUNT OF 10 C.Y. HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR BIDDING PURPOSES, BUT FINAL PAYMENT SHALL BE FOR THE ACTUAL AMOUNT USED AS DIRECTED BY THE ENGINEER.

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE D WITH FILTER, AS PER PLAN

PERFORM WORK ACCORDING TO DETAILS SHOWN ON SHEET 11/33 OF THE BRIDGE PARPAET DETAILS. AN ESTIMATED AMOUNT OF 10 C.Y. HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR BIDDING PURPOSES, BUT FINAL PAYMENT SHALL BE FOR THE ACTUAL AMOUNT USED AS DIRECTED BY THE ENGINEER.

ITEM 202 - BRIDGE TERMINAL ASSEMBLY REMOVED

PERFORM REMOVAL WORK TOTALING A QUANTITY OF:
202- BRIDGE TERMINAL ASSEMB'Y REM'D....14 EACH
202 - GUARDRAIL REMOVED.....812.5 FEET

PERFORM REMOVALS OF LENGTHS REQUIRED TO PLACE PROPOSED BRIDGE TERMINAL ASSEMBLIES AND GUARDRAIL AT BRIDGE PARAPET ENDS AT THE FOLLOWING LOCATIONS (SEE ITEM 606 NOTES FOR SPECIFIC LENGTHS):

BRIDGE NO. GUE-70-0901 L: LEFT REAR, LEFT FWD, & RIGHT FWD
BRIDGE NO. GUE-70-0901 R: LEFT REAR, RIGHT REAR, & RIGHT FWD
BRIDGE NO. GUE-70-0943 A: LEFT REAR, RIGHT REAR, & RIGHT FWD
BRIDGE NO. GUE-70-0943 L: LEFT FWD & RIGHT FWD
BRIDGE NO. GUE-70-0943 R: LEFT REAR, RIGHT REAR, & RIGHT FWD
BRIDGE NO. GUE-70-0943 L: LT FWD: ADDITIONAL 43.75 FT.
BRIDGE NO. GUE-70-0943 L: RT FWD: ADDITIONAL 356.25 FT.
THE TOTAL QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR PAYMENT.

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 1

PERFORM WORK TOTALING A QUANTITY OF:

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 1.....10 EACH
ITEM 606 - GUARDRAIL, TYPE 5.....712.5 FEET

PLACE A QUANTITY OF BRIDGE TERMINAL ASSEMBLY, TYPE 1 = 1 EACH AND GUARDRAIL, TYPE 5 = 31.25 FT AT EACH BRIDGE PARAPET ENDS AT THE FOLLOWING LOCATIONS:

BRIDGE NO. GUE-70-0901 L: LEFT FWD & RIGHT FWD
BRIDGE NO. GUE-70-0901 R: LEFT REAR & RIGHT REAR
BRIDGE NO. GUE-70-0943 A: LEFT REAR & RIGHT REAR
BRIDGE NO. GUE-70-0943 L: LEFT FWD & RIGHT FWD
BRIDGE NO. GUE-70-0943 R: LEFT REAR & RIGHT REAR
BRIDGE NO. GUE-70-0943 L: LT FWD: ADDITIONAL 43.75 FT.
BRIDGE NO. GUE-70-0943 L: RT FWD: ADDITIONAL 356.25 FT.
THE TOTAL QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR PAYMENT.

ITEM 606 - ANCHOR ASSEMBLY, TYPE B

PERFORM WORK TOTALING A QUANTITY OF:
ITEM 606 - ANCHOR ASSEMBLY, TYPE B.....1 EACH
PLACE A QUANTITY OF ANCHOR ASSEMBLY, TYPE B = 1 EACH AT THE FOLLOWING LOCATIONS:
BRIDGE NO. GUE-70-0943 L: FORWARD RIGHT END OF PROPOSED G-RAIL TERMINATION. THE TOTAL QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR PAYMENT.

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 2

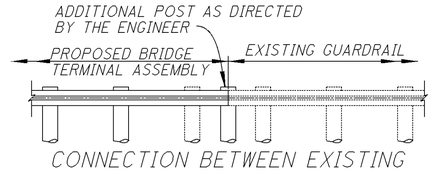
PERFORM WORK TOTALING A QUANTITY OF:

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 2.....4 EACH
ITEM 606 - GUARDRAIL, TYPE 5.....100 FEET

PLACE A QUANTITY OF BRIDGE TERMINAL ASSEMBLY, TYPE 2 = 1 EACH AND GUARDRAIL, TYPE 5 = 25.0 FT AT EACH BRIDGE PARAPET ENDS AT THE FOLLOWING LOCATIONS:

BRIDGE NO. GUE-70-0901 L: LEFT REAR
BRIDGE NO. GUE-70-0901 R: RIGHT FWD
BRIDGE NO. GUE-70-0943 A: RIGHT FWD
BRIDGE NO. GUE-70-0943 L: NONE
BRIDGE NO. GUE-70-0943 R: RIGHT FWD

THE TOTAL QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR PAYMENT.



CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL SECTIONS

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD			

BRIDGE NOTES
BRIDGE NO. GUE-70-0901 L&R, GUE-70-0943 L,R,&A
I.R. 70 OVER CUOH RAILROAD (0901) WILLS CREEK & C.R. 35 (0943)

GUE-70-6.55

1 / 33

26 / 58

P:\GUE\ 21494\Design\Bridge SFN\Plan_Sheets\combined with roadway\GENERAL BRIDGE\G070001.BGN (SCALE = 1.000)

	GUE-70-0901 L	GUE-70-0901 R	GUE-70-0943 L	GUE-70-0943 R	GUE-70-0943 A		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SHEET
											STRUCTURES 20 FOOT AND OVER	
	32	32	7	14			202	11301	85	CU. YD.	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, SUBSTRUCTURE	1/33
	145	145	104	113	97		202	11301	604	CU. YD.	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, SUPERSTRUCTURE	1/33
					10		202	32000	10	FT.	CURB REMOVED	
	32,790	32,790	21,392	23,722	19,642		509	10000	130,336	POUND	EPOXY COATED REINFORCING STEEL	*
	108	108	44	88			516	13600	348	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	
	248	248	75	115	58		516	31011	744	FT.	2" DEEP JOINT SEALER, AS PER PLAN	1/33
	12	12					518	12500	24	EACH	SCUPPER, MISC.: 4" CONDUIT	1/33 & 11/33
	1458	1458	1196	1130	916		848	10200	6,158	SQ. YD.	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION	
											(2" THICKNESS)	
	1367	1367	1161	1057	905		848	20000	5,857	SQ. YD.	SURFACE PREPARATION USING HYDRODEMOLITION	1/33
	53	53	41	38	32		848	30200	217	CU. YD.	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS),	
											MATERIAL ONLY	
	89	89	70	65	54		848	50000	367	SQ. YD.	HAND CHIPPING	
	LUMP	LUMP	LUMP	LUMP	LUMP		848	50100	LUMP		TEST SLAB	
	10	10	3	6	2		848	50200	31	CU. YD.	FULL-DEPTH REPAIR	
	1367	1367	1161	1057	905		848	50320	5,857	SQ. YD.	EXISTING CONCRETE OVERLAY REMOVED (1¾" THICKNESS)	
	806	806	632	584	485		848	50340	3,313	SQ. YD.	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS	
											CONCRETE OVERLAY	
	66	66	43	53	33		898	10201	261	CU. YD.	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN	1/33
	165	165	100	114	95		898	11001	639	CU. YD.	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN	1/33

* - SEE SHEET 1/33 FOR INDIVIDUAL BRIDGE RE-STEEL BAR COUNTS.

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

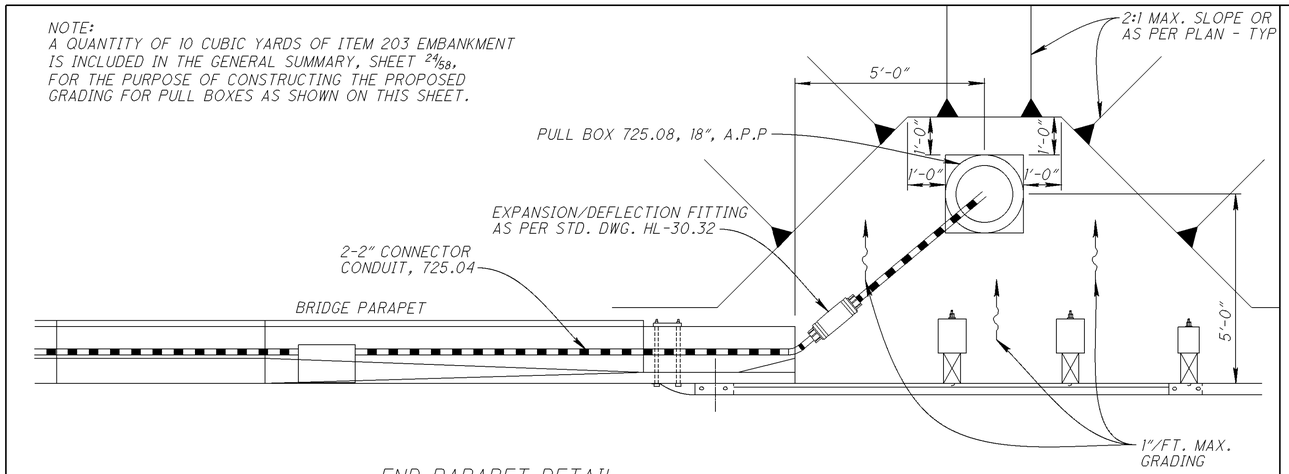
DESIGNED JDR | DRAWN JDR | REVIEWED TAG | DATE 2/1/12 | STRUCTURE FILE NUMBER | CHECKED RSD | REVISED

BRIDGE SUMMARY

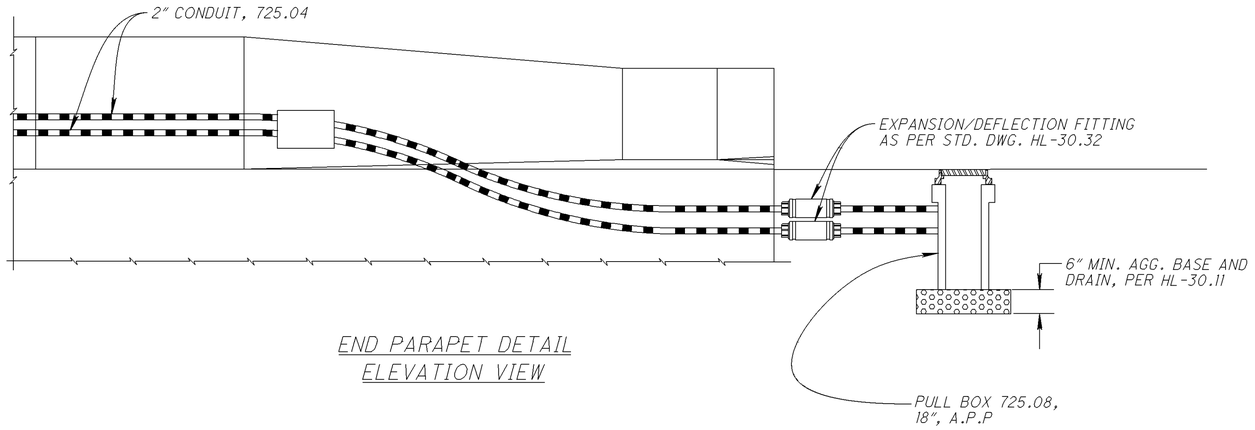
BRIDGE NO. GUE-70-0901 L&R, GUE-70-0943 L,R,&A
I.R. 70 OVER CUOH RAILROAD (0901) WILLS CREEK & C.R. 35 (0943)

GUE-70-6.55

NOTE:
A QUANTITY OF 10 CUBIC YARDS OF ITEM 203 EMBANKMENT IS INCLUDED IN THE GENERAL SUMMARY, SHEET 24/58, FOR THE PURPOSE OF CONSTRUCTING THE PROPOSED GRADING FOR PULL BOXES AS SHOWN ON THIS SHEET.

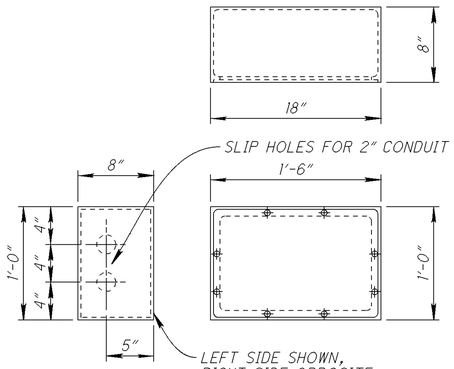


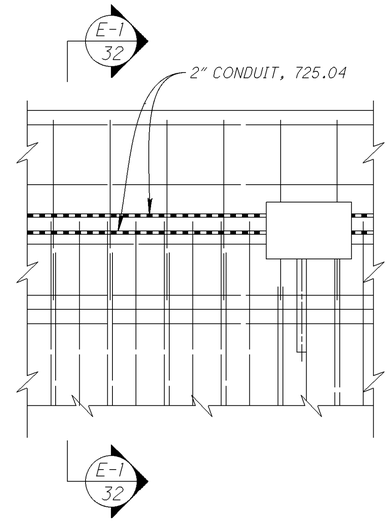
END PARAPET DETAIL
PLAN VIEW



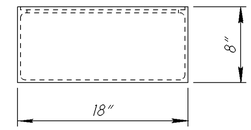
END PARAPET DETAIL
ELEVATION VIEW

TYPICAL CONDUIT TREATMENT
AT END OF BRIDGE PARAPET

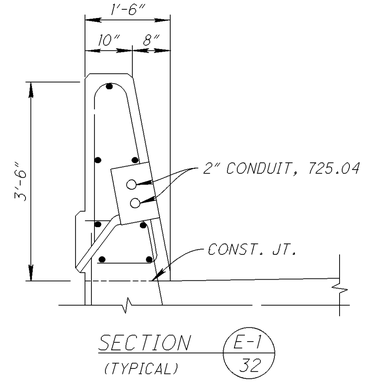




JUNCTION BOX DETAILS



STRUCTURE JUNCTION
BOX DETAILS



SECTION (E-1 / 32)
(TYPICAL)

ITEM 625 - NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE, A.P.P. PLACE TWO RUNS IN EITHER 2" CONDUIT IN THE DESIGNATED PAPAPETS (FIELD SPLICE @ EACH PULL BOX).

ALL NECESSARY DISCONNECTS, CABLE SPLICING KITS, RECONNECTIONS, TIME, OTHER MATERIALS, & LABOR REQUIRED TO INSTALL THE NO. 4 WIRE ARE INCIDENTAL TO ITEM 625 - NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE, A.P.P.

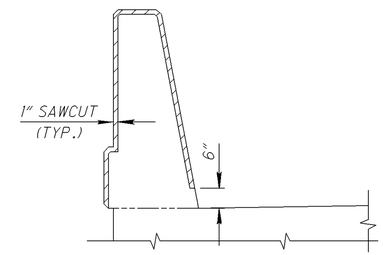
PLACE ITEM 625 - NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE, AS PER PLAN IN EACH OF THE FOLLOWING CONDUIT RUNS:
BRIDGE NO. GUE-70-0943 A: LEFT PARPET - 660 FT.
BRIDGE NO. GUE-70-0943 L: LEFT PARPET - 675 FT.

PERFORM ITEM 625 - PULL BOX REMOVED AT EACH OF THE FOLLOWING LOCATIONS:
BRIDGE NO. GUE-70-0943 A: LEFT PARPET (REAR END) - 1 EACH
BRIDGE NO. GUE-70-0943 A: LEFT PARPET (FWD. END) - 1 EACH
BRIDGE NO. GUE-70-0943 L: LEFT PARPET (REAR END) - 1 EACH
BRIDGE NO. GUE-70-0943 L: LEFT PARPET (FWD. END) - 1 EACH

LIGHTING SUB-SUMMARY

ITEM	QUANTITIES (BRIDGE NO.)					TOTAL QUANTITY	UNIT	DESCRIPTION
	GUE-70-0901L	GUE-70-0901LR	GUE-70-0943L	GUE-70-0943R	GUE-70-0943A			
625			686		670	1356	FT.	NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE, AS PER PLAN
625	2038	2038	1350	1484	1320	8230	FT.	CONDUIT, 2", 725.04
625	4	4	4	4	4	20	EACH	STRUCTURE JUNCTION BOX, TYPE 2
625	4	4	4	4	4	20	EACH	PULL BOX 725.08, 18", A.P.P
625			2		2	4	EACH	PULL BOX REMOVED
625	1	1	1	1	1	5	EACH	STRUCTURE GROUNDING SYSTEM

TOTAL QUANTITIES CARRIED TO THE GENERAL SUMMARY



DETAIL A
(SECTION THROUGH SAWCUT)
SAWCUT PERIMETER = 7'-6"

ITEM 625 CONDUIT, 2" 725.04

AS PER CMS 625.12 AFTER INSTALLATION OF THE CONDUIT AND PRIOR TO INSTALLION OF THE CABLES, CHECK EACH CONDUIT RUN BY RODDING OR BY PUSHING A MANDREL THROUGH THE CONDUIT RUN AND REMOVING ANY OBSTRUCTION FOUND.

IF A CONDUIT IS TO REMAIN EMPTY UPON COMPLETION OF THE PROJECT, LEAVE A NO. 10 AWG COPPER CLAD, ALUMINUM CLAD OR GALVANIZED PULL WIRE IN THE CONDUIT AND CAP THE ENDS IN AN APPROVED MANNER.

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD			

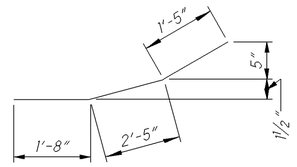
BRIDGE PARAPET DETAILS
BRIDGE NO. GUE-70-0901 L&R, GUE-70-0943 L,R,&A
I.R. 70 OVER CUOH RAILROAD (0901) WILLS CREEK & C.R. 35 (0943)

GUE-70-6.55

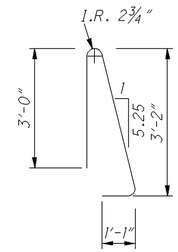
P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GENERAL BRIDGE\G070002.BPD (SCALE = 1.000)

REINFORCING STEEL SCHEDULE

MARK	NO. REQ'D. (BRIDGE NO.)					TOTAL NO. REQ'D	SHAPE	LENGTH	WEIGHT
	GUE-70-0901L	GUE-70-0901R	GUE-70-0943L	GUE-70-0943R	GUE-70-0943A				
R501	32	32	32	32	32	160	ST.	10'-0"	1,669
R502	12	12	12	12	12	60	BT.	5'-6"	344
R503	20	20	20	20	20	100	ST.	5'-6"	574
R504	6	6				12	ST.	42'-6"	532
R505	12	12				24	ST.	19'-3"	482
R506	6	6				12	ST.	52'-9"	660
R507	930	930	571	644	556	3,631	BT.	7'-5"	28,088
R508	284	284	196	224	180	1,168	ST.	40'-0"	48,729
R509	40	40				80	ST.	1'-5"	118
R510	4	4				8	ST.	53'-5"	446
R511	8	8				16	ST.	30'-2"	503
R512					12	12	ST.	24'-1"	301
R513	14	14				28	ST.	7'-9"	226
R514	4	4				8	ST.	26'-7"	222
R515			16			16	ST.	31'-7"	527
R516			12			12	ST.	20'-8"	259
R517			6			6	ST.	9'-5"	59
R518			4			4	ST.	20'-6"	86
R519			6			6	ST.	10'-9"	67
R520			4			4	ST.	21'-8"	90
R521				28		28	ST.	6'-7"	192
R522				12		12	ST.	9'-2"	115
R523				12		12	ST.	11'-5"	143
R524				8		8	ST.	19'-10"	163
R525				8		8	ST.	22'-4"	186
R526					12	12	ST.	8'-10"	111
R601	792	792	556	612	556	3,308	BT.	3'-7"	17,804
R602	792	792	556	612	556	3,308	BT.	2'-7"	12,836
R603	138	138	15	32		323	BT.	4'-2"	2,021
R604	138	138	15	32		323	BT.	5'-0"	2,426
R605	32	32	16	32		112	BT.	4'-9"	799
R606	20	20	14	16	16	86	ST.	40'-0"	5,167
R607	4	4				8	ST.	5'-0"	60
R608	2	2				4	ST.	14'-7"	88
R609	4	4				8	ST.	1'-5"	17
R610	1	1				2	ST.	43'-0"	129
R611	2	2				4	ST.	19'-9"	119
R612	1	1				2	ST.	53'-3"	160
R613			2			2	ST.	24'-8"	74
R614			1			1	ST.	10'-1"	15
	8	8	4	8		28		4'-9"	
R615	SERIES OF	SERIES OF	SERIES OF	SERIES OF		SERIES OF	BT.	TO	2,390
	11	11	11	11		11		5'-7"	
R616			1			1	ST.	11'-3"	17
R617				2		2	ST.	10'-9"	32
R618				2		2	ST.	11'-11"	36
R619				2		2	ST.	9'-8"	29
R620			2			2	ST.	12'-10"	39
			4		8	12		4'-1"	
R621			SERIES OF		SERIES OF	SERIES OF	BT.	TO	892
			11		11	11		4'-11"	
R622			16		32	48	BT.	4'-1"	294
								TOTAL (CARRIED TO BRIDGE SUMMARY)	130,336



R502



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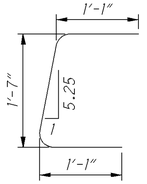

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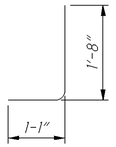

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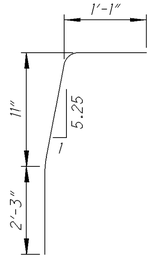

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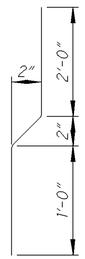

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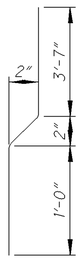

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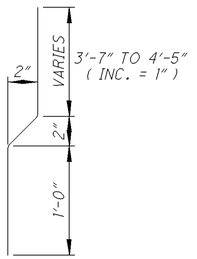
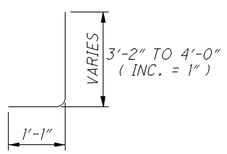


R615
(SERIES OF 11)



R621
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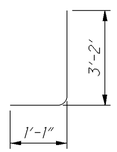


R622

BENDING DIAGRAMS

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD			

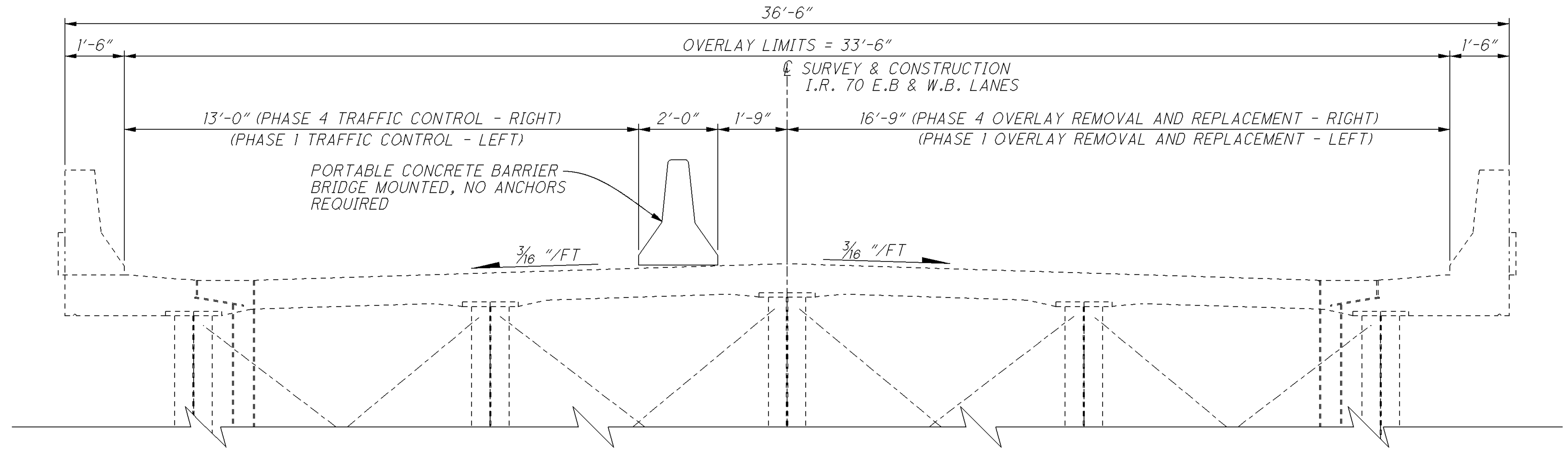
REINFORCING STEEL SUMMARY
BRIDGE NO. GUE-70-0901 L&R, GUE-70-0943 L,R,&A
I.R. 70 OVER CUOH RAILROAD (0901) WILLS CREEK & C.R. 35 (0943)

GUE-70-6.55

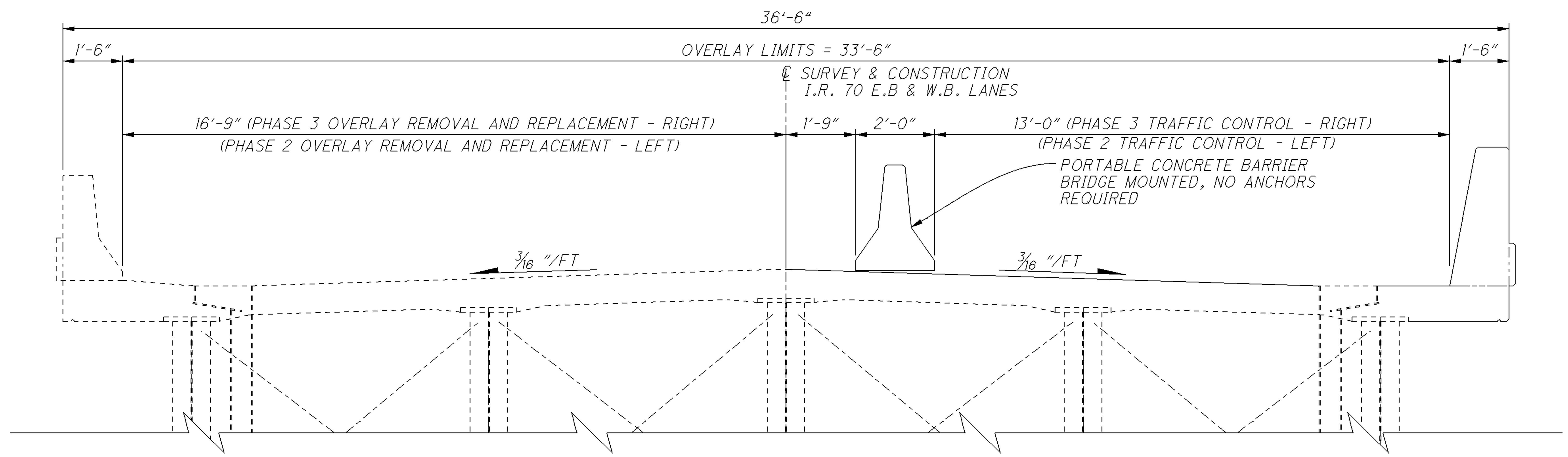
4 / 33

29 / 58

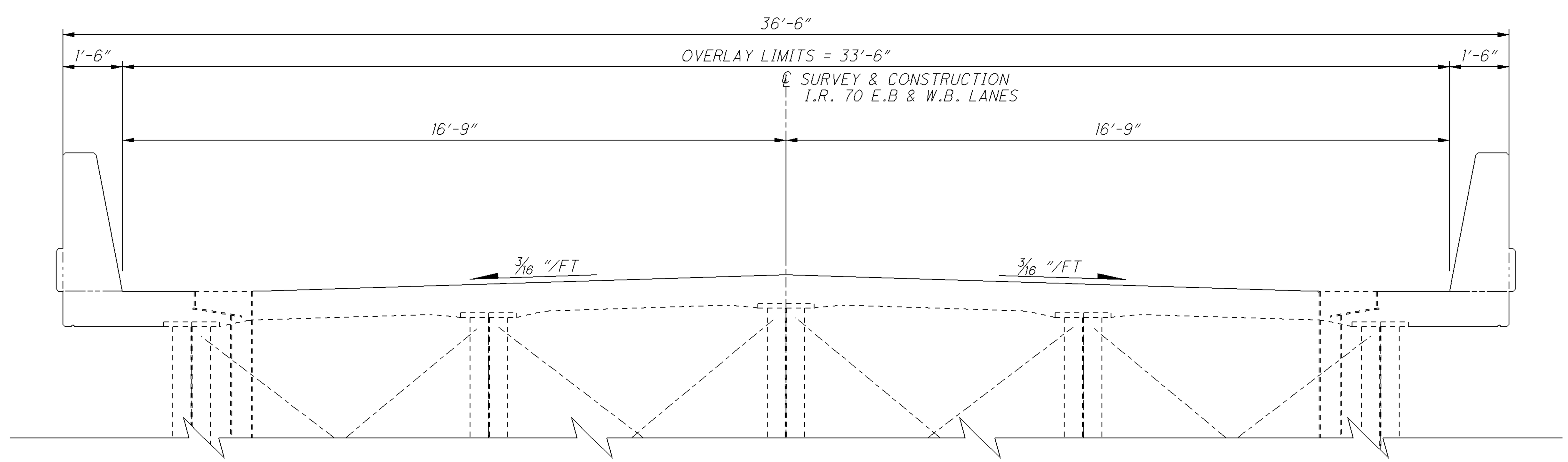
P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GENERAL BRIDGE\G070001.BRL (SCALE = 1.000)



PHASE 4 TRAFFIC CONTROL (RIGHT = GUE-70-0901R)
PHASE 1 TRAFFIC CONTROL (LEFT = GUE-70-0901L)



PHASE 3 TRAFFIC CONTROL (RIGHT = GUE-70-0901R)
PHASE 2 TRAFFIC CONTROL (LEFT = GUE-70-0901L)



PROPOSED TRANSVERSE SECTION (LEFT & RIGHT)

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 5

REVIEWED	DATE	DRAWN	DESIGNED
TAG	2/1/12	JDR	JDR
STRUCTURE FILE NUMBER 3001148 LT & 3001172 RT		REVISED	CHECKED RSD

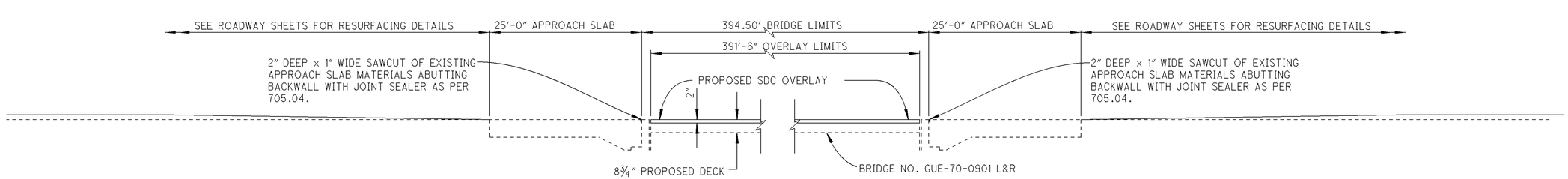
MAINTENANCE OF TRAFFIC - PHASE DIAGRAM
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

GUE-70-6.55

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0901L&R\G070001.BTS (SCALE = 2.000)

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0901L/G070001.BPS.DGN (SCALE = 4.000)

EXISTING PROFILE SECTION



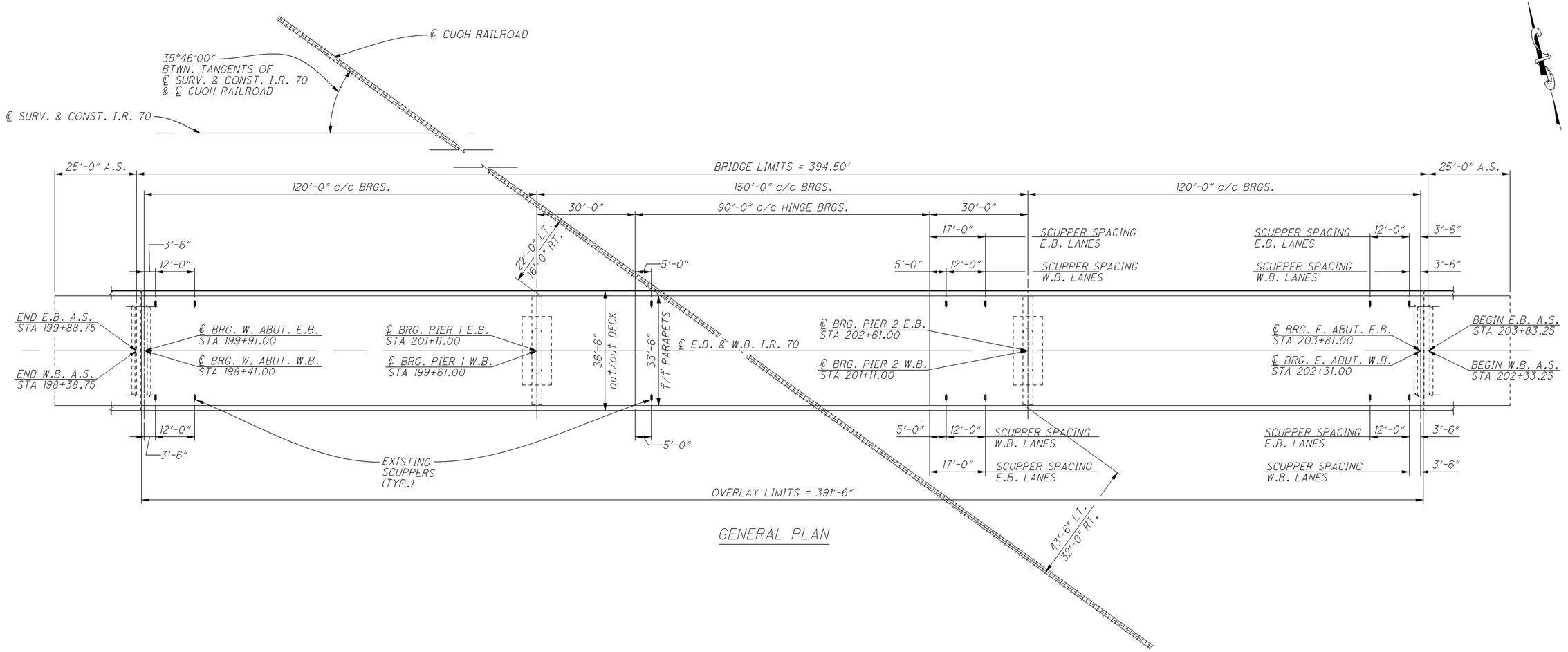
PROPOSED PROFILE SECTION

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3002418 & 3001172	

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

PROFILE SECTIONS
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

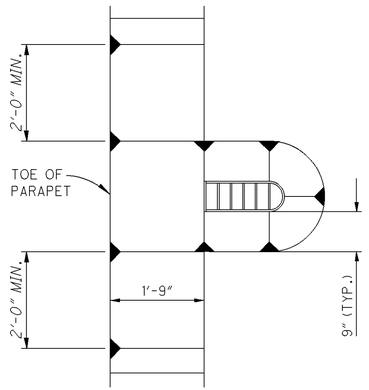
GUE-70-6.55



GENERAL PLAN

EXISTING STRUCTURE

TYPE: WELDED STEEL GIRDER WITH SUSPENDED COMPOSITE SPAN WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 120'-0", 150'-0", AND 120'-0" C/C BEARINGS
ROADWAY: 33'-6" F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: NONE
WEARING SURFACE: 1 3/4" S.D.C. OVERLAY
ALIGNMENT: TANGENT
APPROACH SLAB: AS-1-81 (25'-0" LONG)

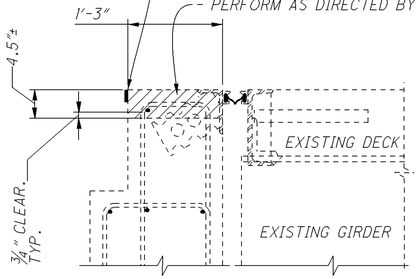


SLOPE DETAIL AT EXISTING SCUPPERS

2" DEEP x 1" WIDE SAWCUT OF EXISTING APPROACH SLAB MATERIALS ABUTTING BACKWALL WITH JOINT SEALER AS PER 705.04.

REMOVAL & REPLACEMENT WORK INCIDENTAL TO ITEM 848 - REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY & ITEM 848 - SDC CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY.
- PERFORM AS DIRECTED BY ENGINEER

REMOVALS -



SECTION @ ℄ ABUTMENTS (TYPICAL)

REHABILITATED STRUCTURE

TYPE: WELDED STEEL GIRDER WITH SUSPENDED COMPOSITE SPAN WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 120'-0", 150'-0", AND 120'-0" C/C BEARINGS
ROADWAY: 33'-6" F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: NONE
WEARING SURFACE: 2" S.D.C. OVERLAY
ALIGNMENT: TANGENT
APPROACH SLAB: AS-1-81 (25'-0" LONG)

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		300172 & 300172 RT	

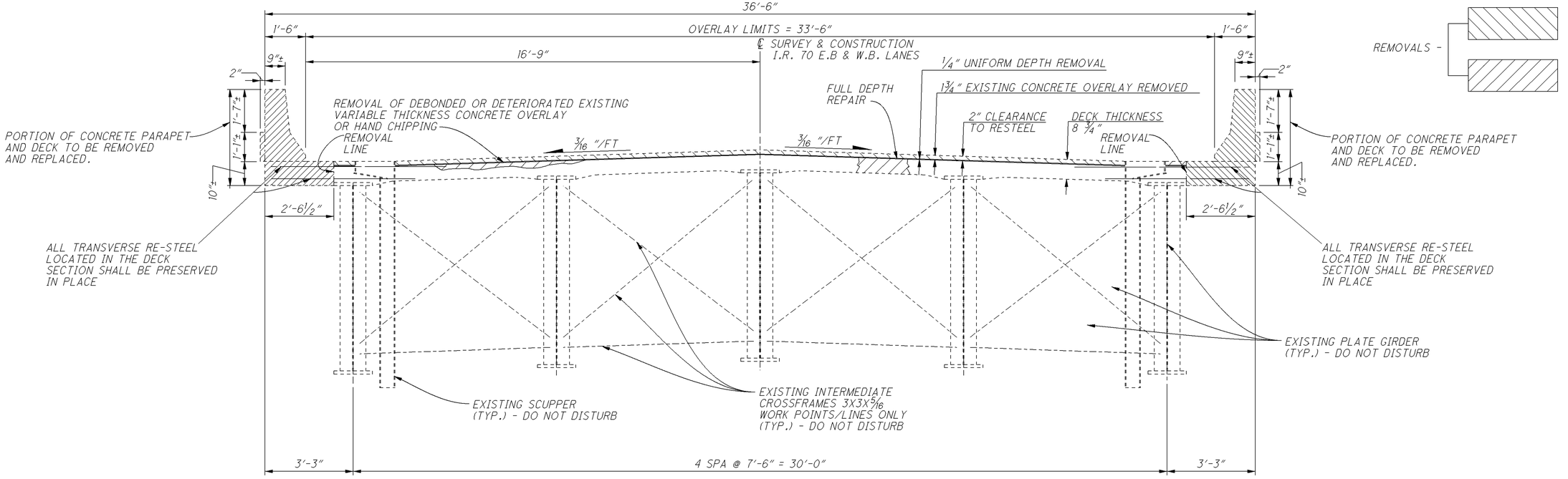
GENERAL PLAN
BRIDGE NO. GUE-70-0901 L & R
I.R. 70 OVER CUOH RAILROAD

GUE-70-6.55

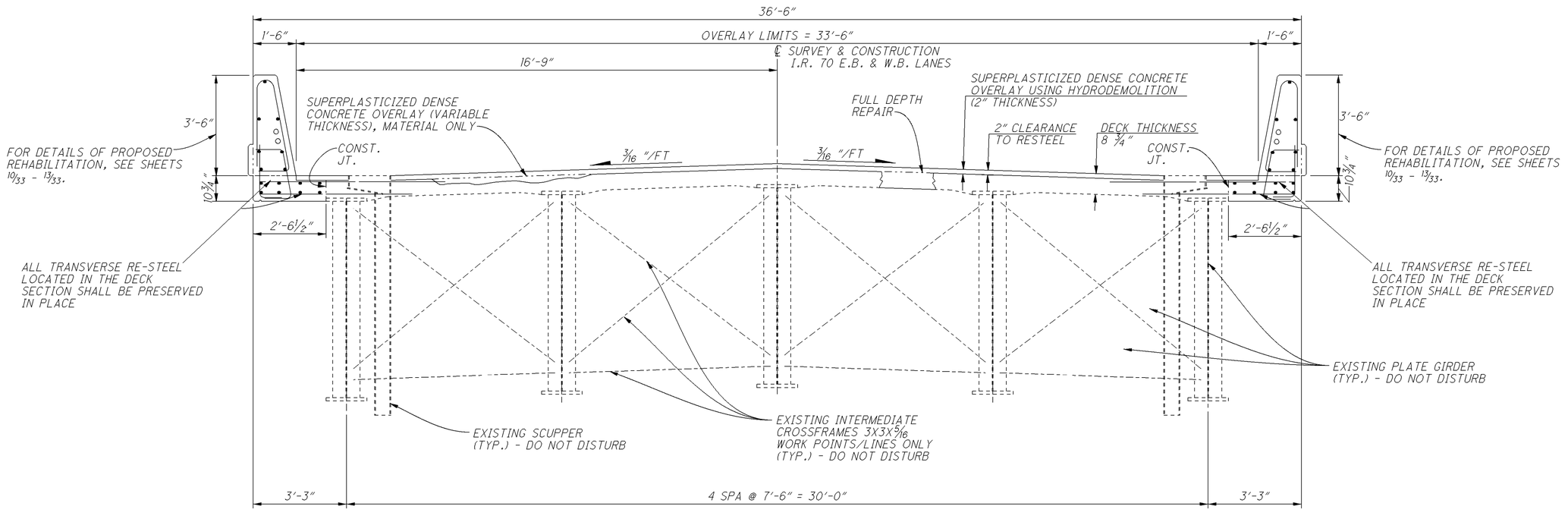
7 / 33

32 / 58

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0901 L&R\G070001.BPE (SCALE = 16.000)



EXISTNG TRANSVERSE SECTION



PROPOSED TRANSVERSE SECTION

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0901L&R\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3000172 & 3000172 RT	

TRANSVERSE SECTION
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

GUE-70-6.55

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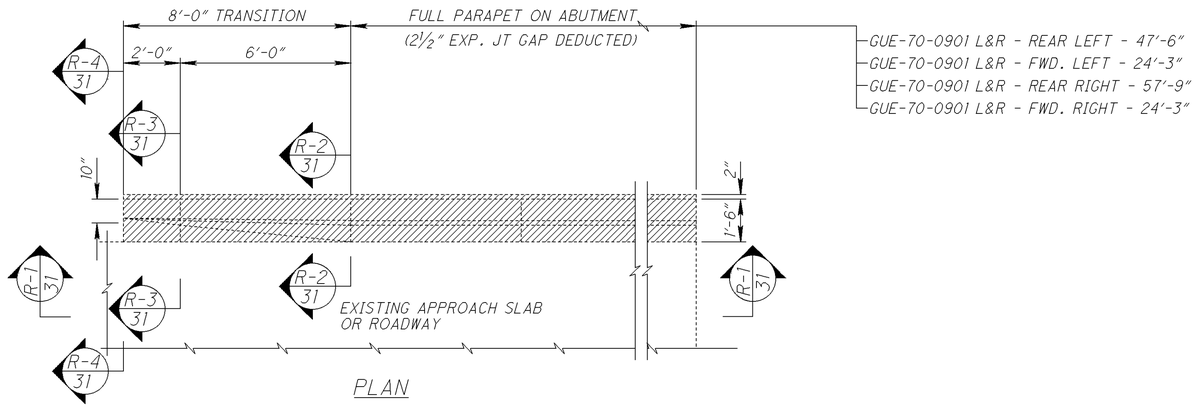
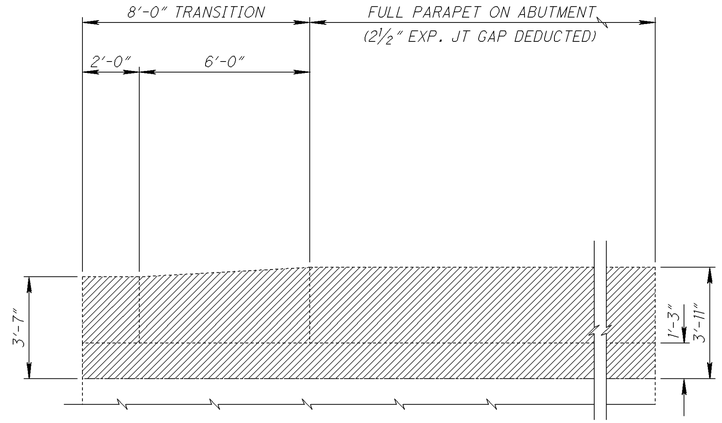
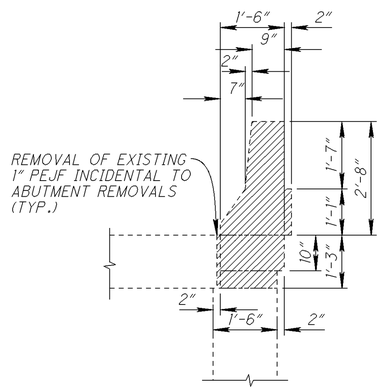
33 / 58



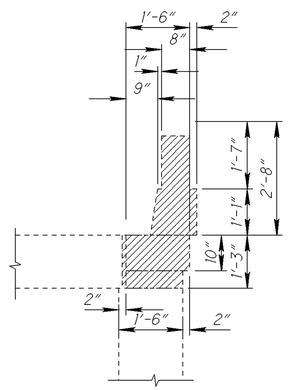
PLAN



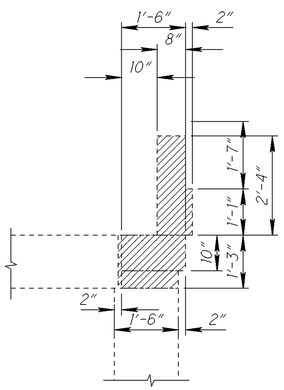
SECTION R-1 31



SECTION R-2 31



SECTION R-3 31



SECTION R-4 31

- REMOVALS

EXISTING ABUTMENTS & PARAPETS
BRIDGE NO. GUE-70-0901L&R
I.R. 70 OVER CUOH RAILROAD

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001672 LT & 3001172 RT	

GUE-70-6.55

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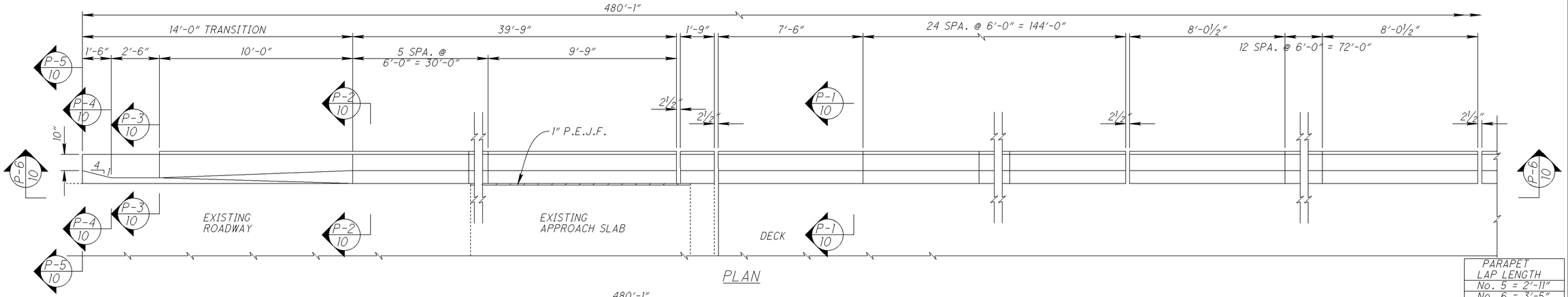
34 / 58

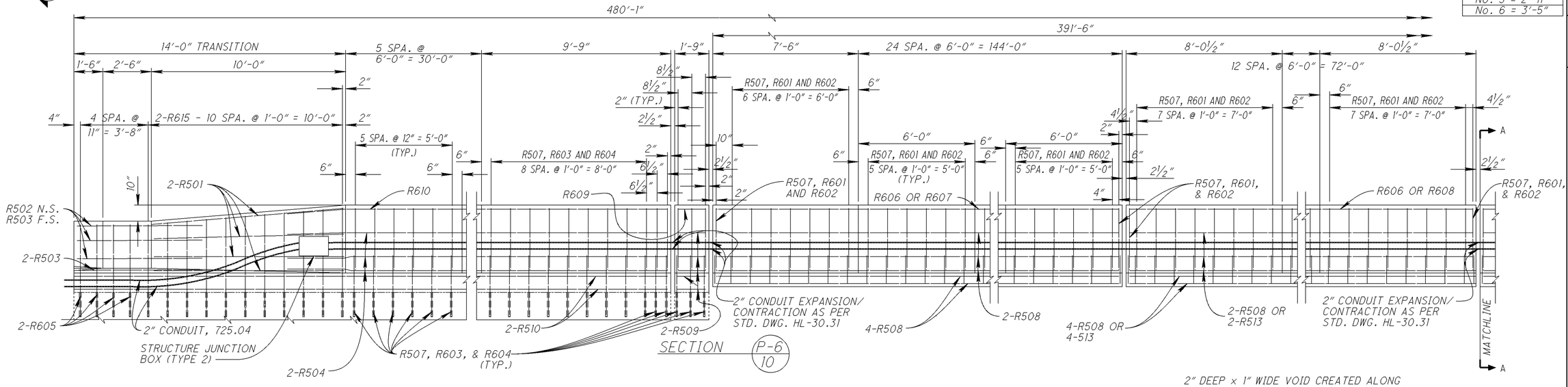
SCALE - 2.667

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0901L&R/G070001.BPD.DGN

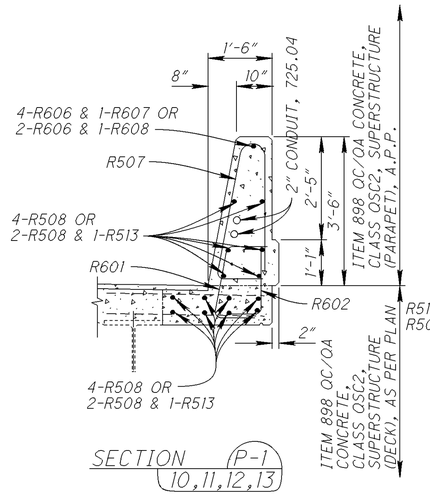


PLAN

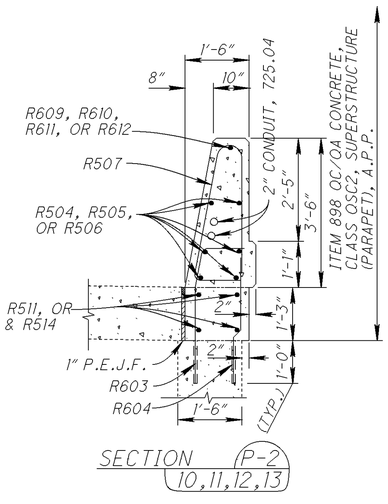
PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"



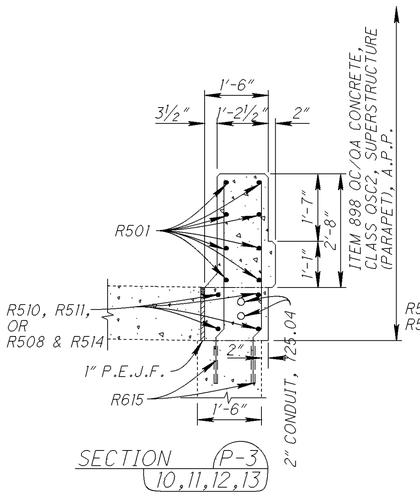
SECTION P-6 10



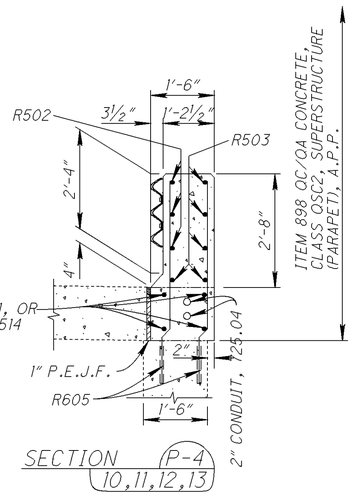
SECTION P-1 10,11,12,13



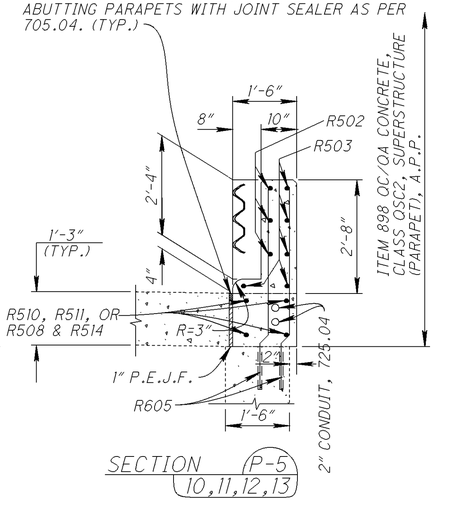
SECTION P-2 10,11,12,13



SECTION P-3 10,11,12,13



SECTION P-4 10,11,12,13



SECTION P-5 10,11,12,13

SCALE: ⅜" = 1'-0"

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0901L&R/G070001.BPD.DGN

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12

CHECKED	REVISED
RSD	

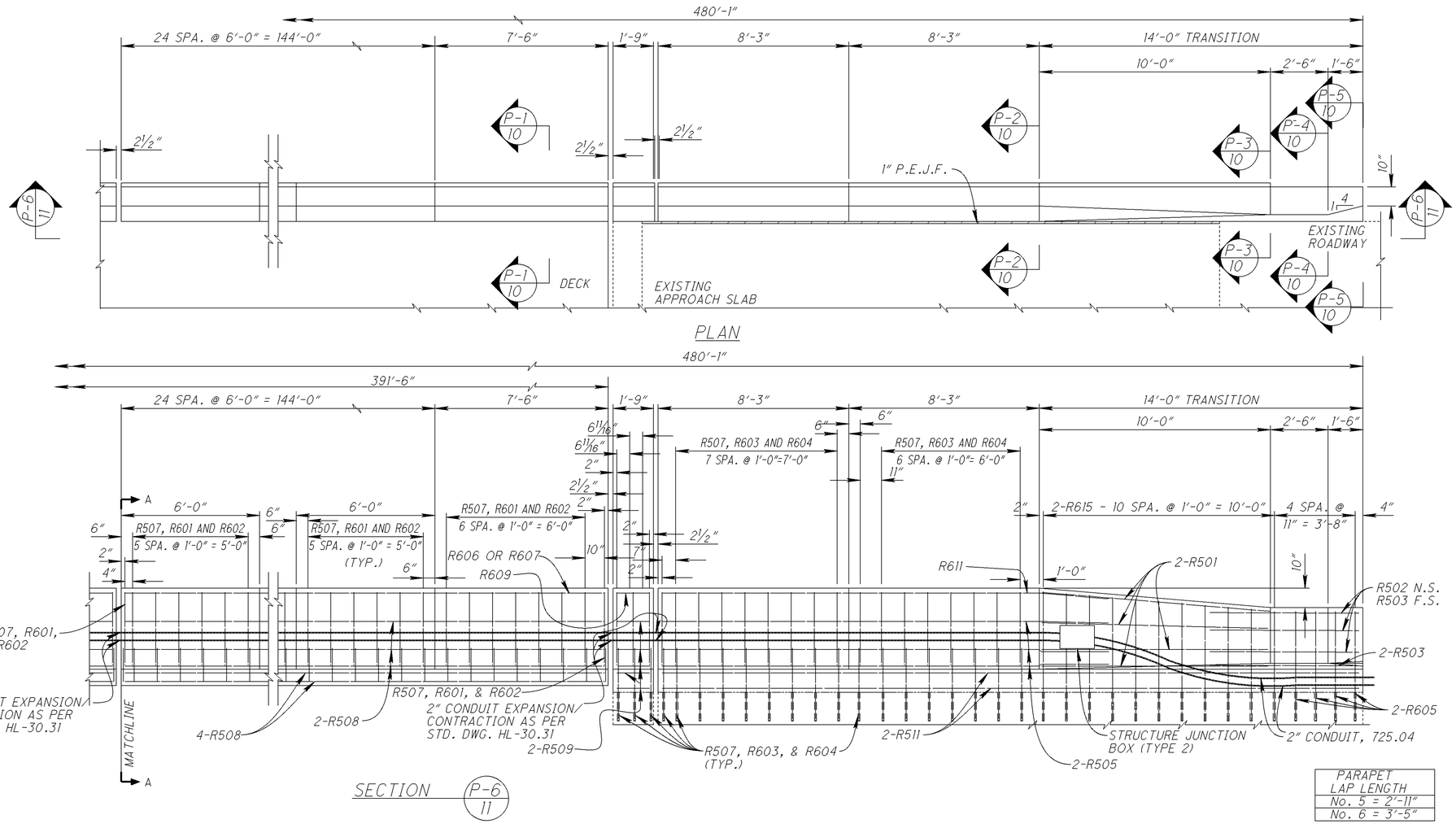
STRUCTURE FILE NUMBER
3001172 RT

LEFT PARAPET DETAILS
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

GUE-70-6.55

10 / 33

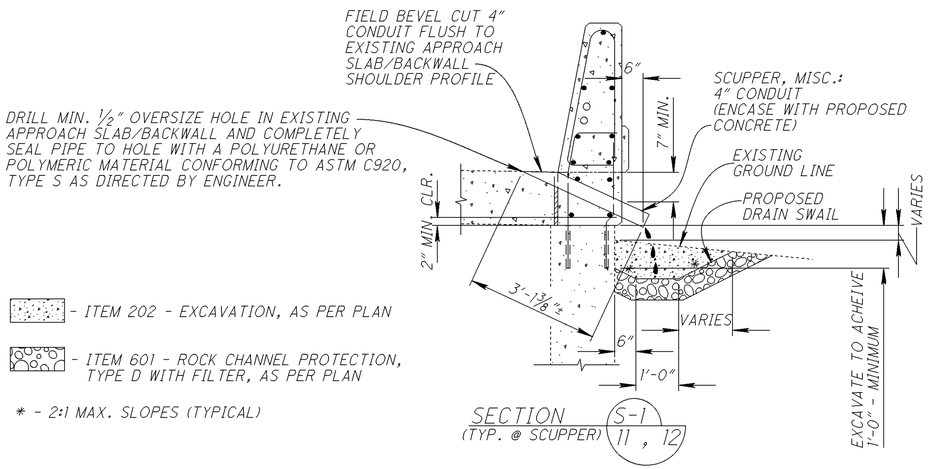
35 / 58



PLAN

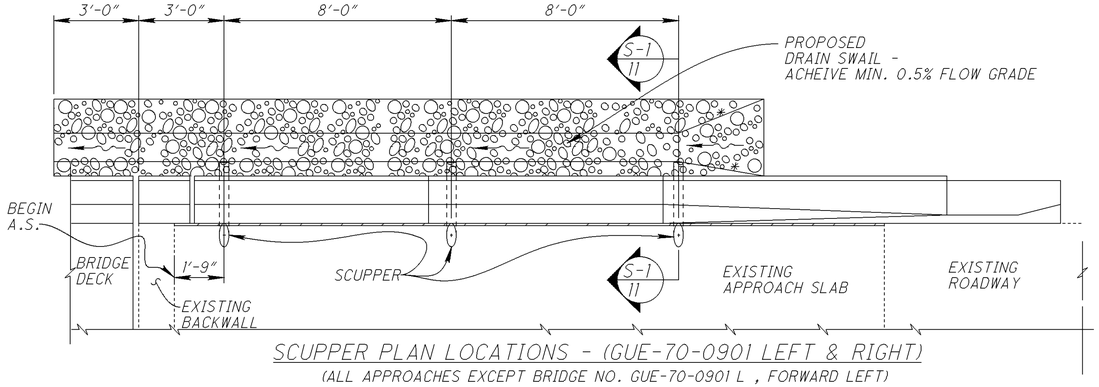
SECTION P-6 / 11

PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"



SECTION S-1 / 11 , 12 (TYP. @ SCUPPER)

NOTE: SEE SHEET 12/33 FOR SCUPPER LOCATIONS AT BRIDGE NO. GUE-70-0901 L , FORWARD LEFT APPROACH SLAB



SCUPPER PLAN LOCATIONS - (GUE-70-0901 LEFT & RIGHT)

(ALL APPROACHES EXCEPT BRIDGE NO. GUE-70-0901 L , FORWARD LEFT)

SCALE: 3/8" = 1'-0"

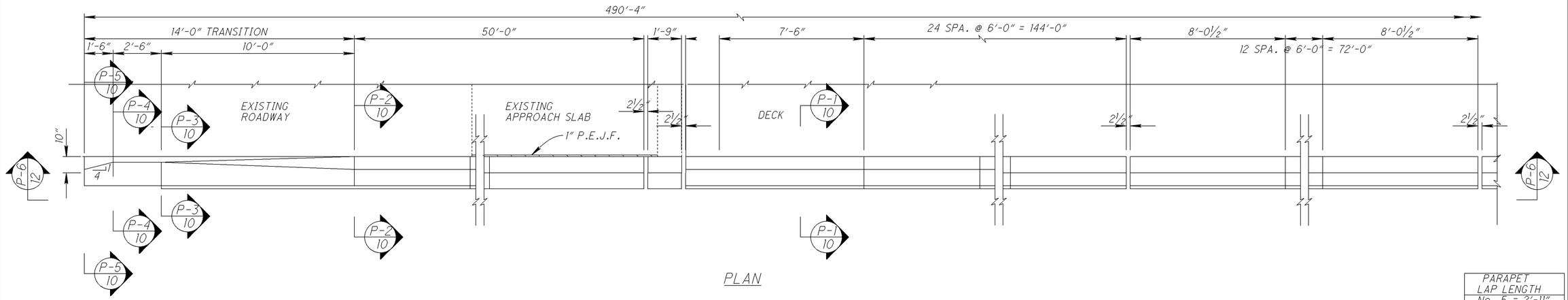
P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0901L&R/G070001.BPD.DGN

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED JDR | DRAWN JDR | REVIEWED TAG | DATE 2/1/12
CHECKED RSD | REVISED | STRUCTURE FILE NUMBER 3001172 RT

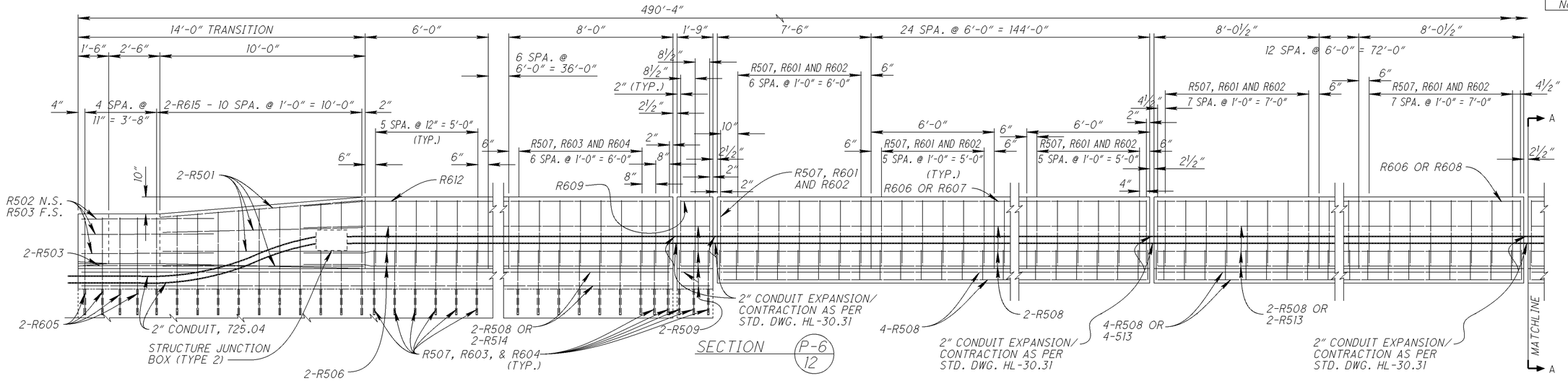
LEFT PARAPET DETAILS
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

GUE-70-6.55



PLAN

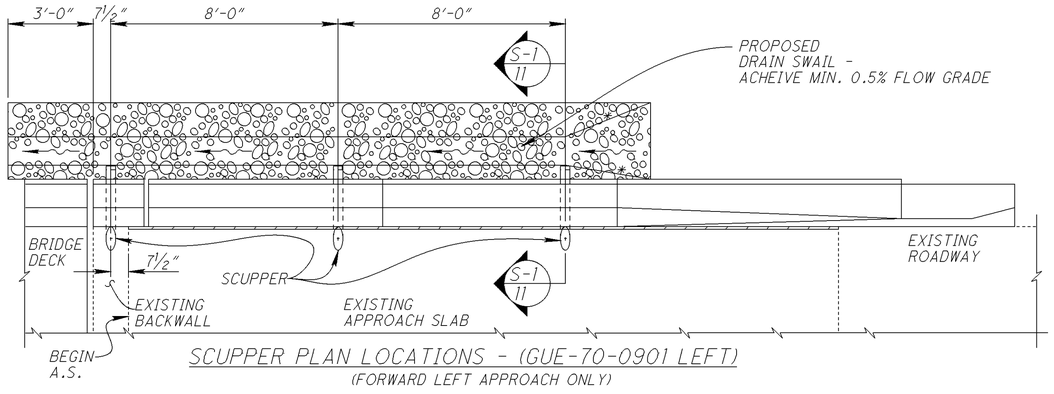
PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"



SECTION P-6 12

- ITEM 601 - ROCK CHANNEL PROTECTION, TYPE D WITH FILTER, AS PER PLAN

* - 2:1 MAX. SLOPES (TYPICAL)



SCUPPER PLAN LOCATIONS - (GUE-70-0901 LEFT)
(FORWARD LEFT APPROACH ONLY)

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001172	

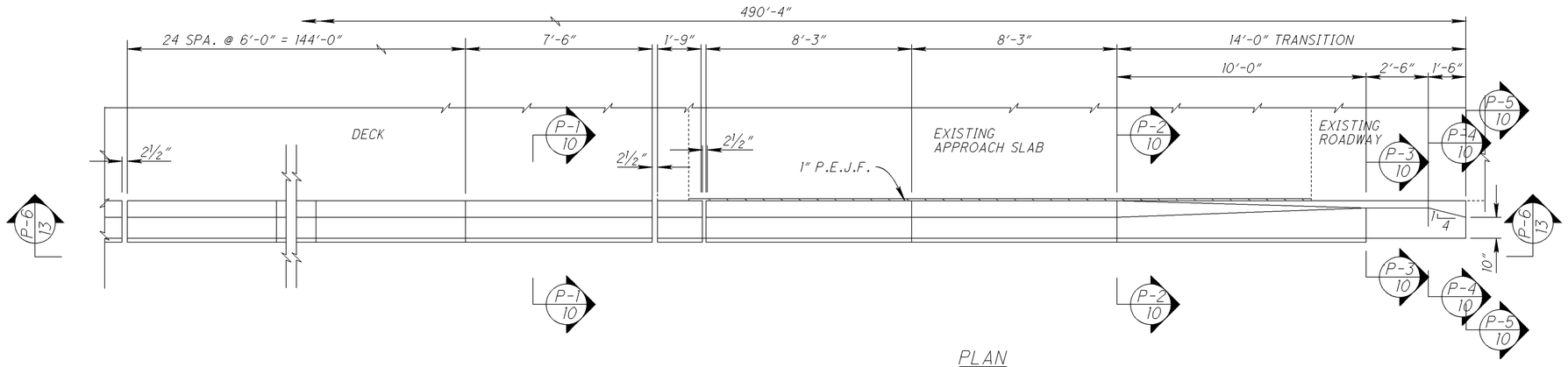
RIGHT PARAPET DETAILS
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

GUE-70-6.55

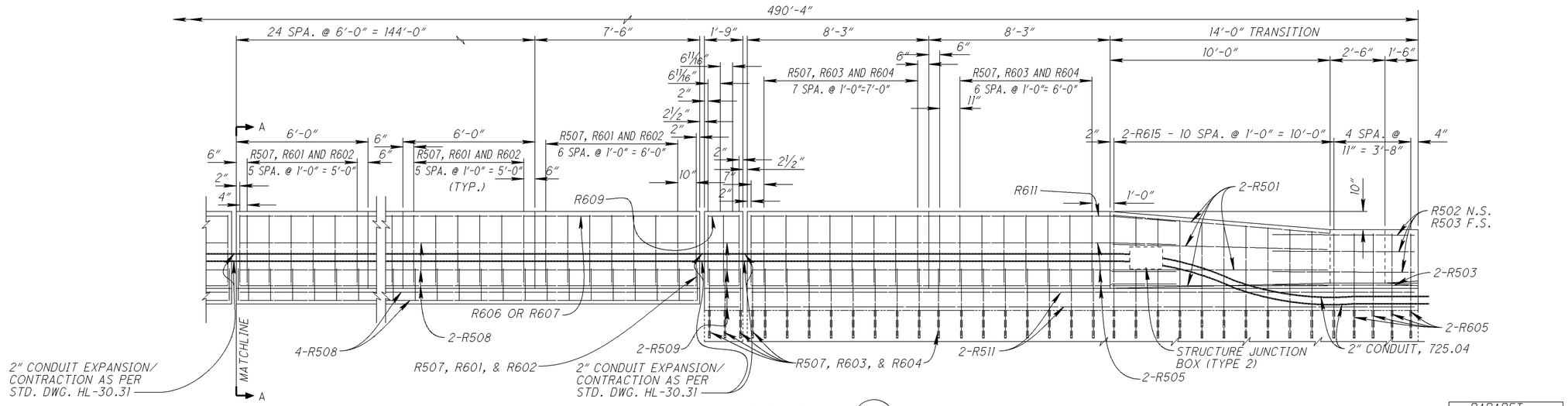
12 / 33

37
58

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0901L&R/G070001.BPD.DGN SCALE: 3/8" = 1'-0"



PLAN



SECTION P-6 / 13

PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"

SCALE: 3/8" = 1'-0"

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0901L&R/G070001.BPD.DGN

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

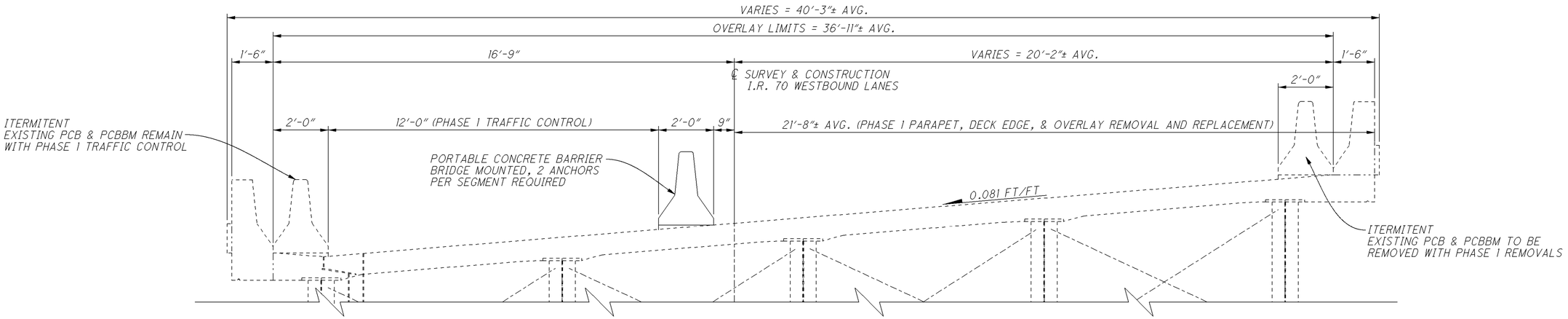
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001472 & 3001172	

RIGHT PARAPET DETAILS
BRIDGE NO. GUE-70-0901 L&R
I.R. 70 OVER CUOH RAILROAD

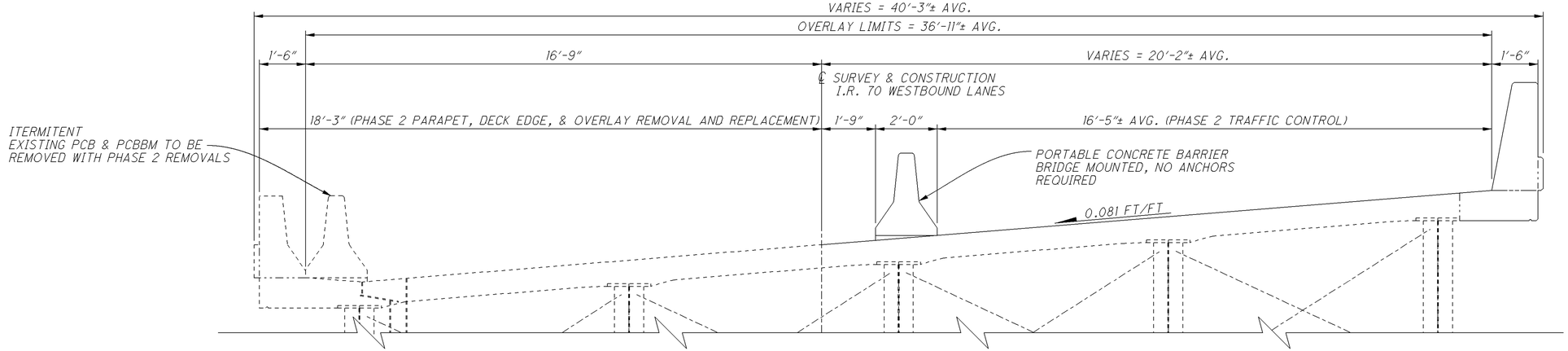
GUE-70-6.55

13 / 33

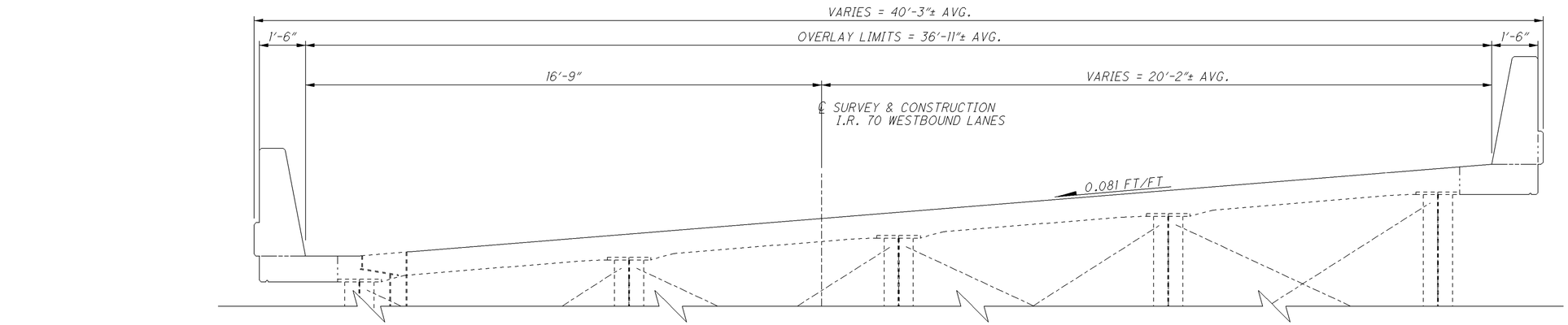
38
58



PHASE 1 TRAFFIC CONTROL



PHASE 2 TRAFFIC CONTROL



PROPOSED TRANSVERSE SECTION

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943L\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 5

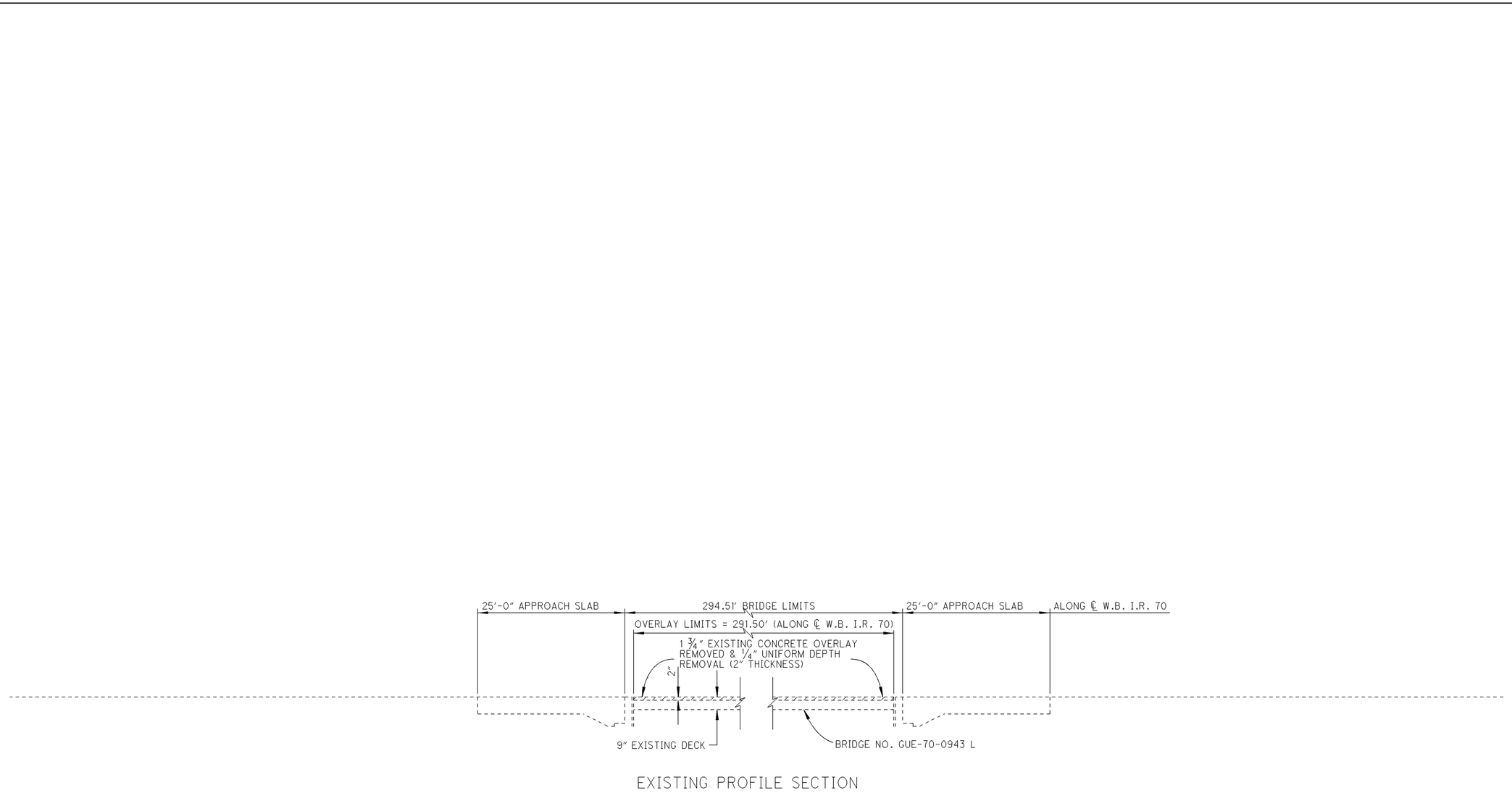
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001237	

MAINTENANCE OF TRAFFIC - PHASE DIAGRAM
BRIDGE NO. GUE-70-0943 L
I.R. 70 OVER WILLS CREEK & C.R. 35

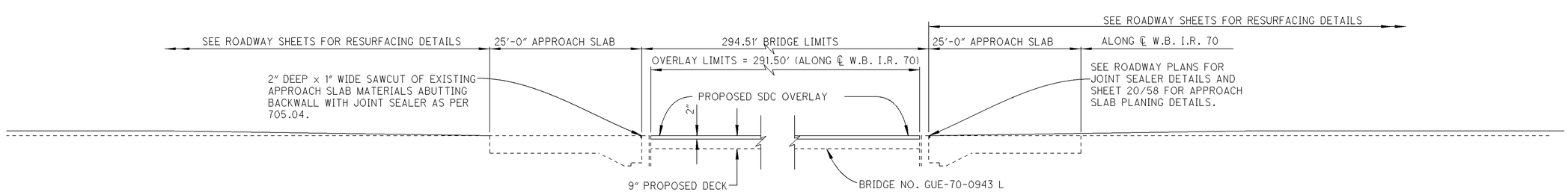
GUE-70-6.55

14 / 33

39
58



EXISTING PROFILE SECTION



PROPOSED PROFILE SECTION

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943L/G070001.BPS.DGN (SCALE = 4.000)

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001237	

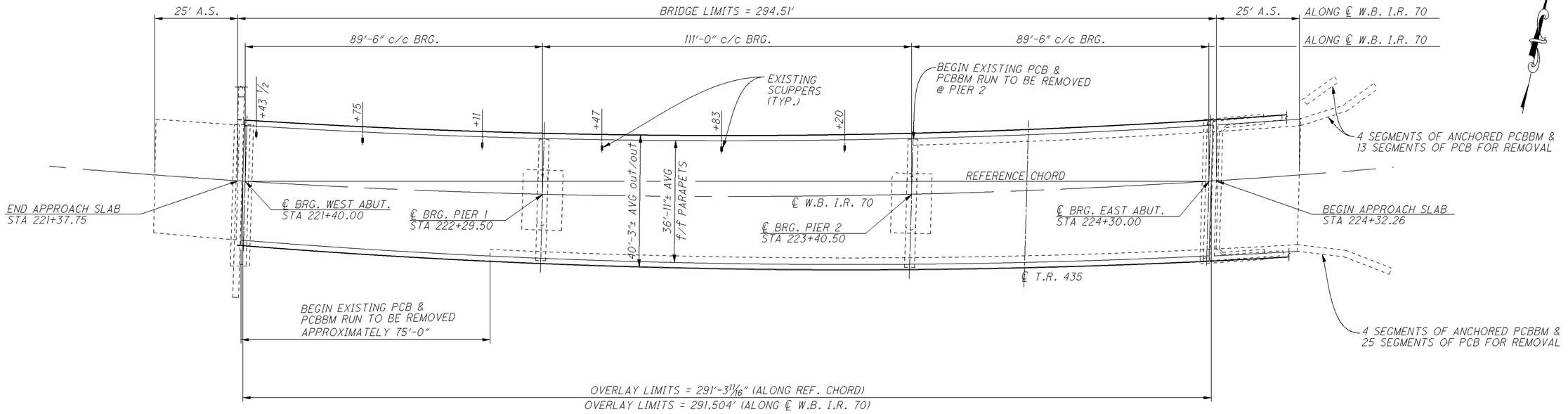
DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

PROFILE SECTIONS
BRIDGE NO. GUE-70-0943 L
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

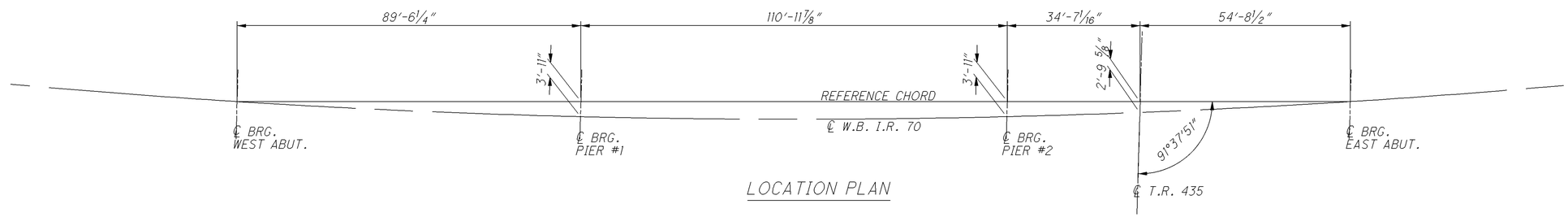
15 / 33

40
58



GENERAL PLAN

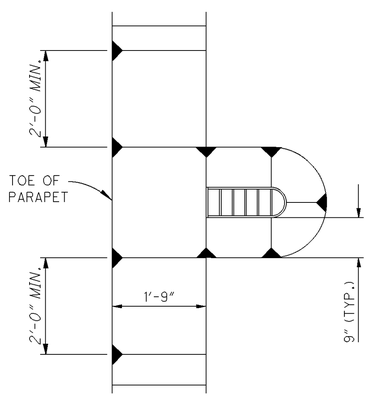
NOTE:
REFERENCE CHORDS ARE LINE BETWEEN ℄BRGS. @ ABUTMENTS.



LOCATION PLAN

HORIZONTAL CURVE DATA:

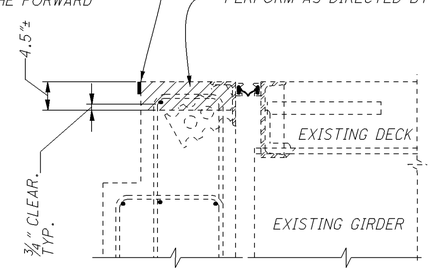
P.I. = STA. 220+80.95
Δ = 33°-33'-00"
Dc = 2°-30'-00"
R = 2291.8312'
Lc = 1195.00'
Ls = 250'
P.V.I. = STA. 219+50.00
V.C. = 800'
ELEV. = 803.18'
CORR. = 4.44'
PROF. GR. = 807.62'
g1 = -1.48%, g2 = +2.96%



SLOPE DETAIL AT EXISTING SCUPPERS

2" DEEP x 1" WIDE SAWCUT OF EXISTING APPROACH SLAB MATERIALS ABUTTING BACKWALL WITH JOINT SEALER AS PER 705.04 @ REAR ABUTMENT ONLY. -(SEE ROADWAY PLANS, SHEET 20/58 FOR TREATMENT AT THE FORWARD ABUTMENT)

REMOVAL & REPLACEMENT WORK INCIDENTAL TO ITEM 848 - REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY & ITEM 848 - SDC CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY.
- PERFORM AS DIRECTED BY ENGINEER



SECTION @ ℄ ABUTMENTS (TYPICAL)

REMOVALS -

EXISTING STRUCTURE

TYPE: CONTINUOUS WELDED STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 89'-6", 111'-0", AND 89'-6" C/C BEARINGS
ROADWAY: 36'-11"± (AVG.) F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: 1°-37'-51" LEFT FORWARD W/ RESPECT TO REF. CHORD
WEARING SURFACE: 1 3/4" S.D.C. OVERLAY
ALIGNMENT: 2°-30'-00" CURVE LEFT
APPROACH SLAB: AS-1-81 (25'-0" LONG)
BRIDGE RAILING: CONCRETE PARAPET

REHABILITATED STRUCTURE

TYPE: CONTINUOUS WELDED STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 89'-6", 111'-0", AND 89'-6" C/C BEARINGS
ROADWAY: 36'-11"± (AVG.) F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: 1°-37'-51" LEFT FORWARD W/ RESPECT TO REF. CHORD
WEARING SURFACE: 2" S.D.C. OVERLAY
ALIGNMENT: 2°-30'-00" CURVE LEFT
APPROACH SLAB: AS-1-81 (25'-0" LONG)
BRIDGE RAILING: REPAIRED CONCRETE PARAPET

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001237	

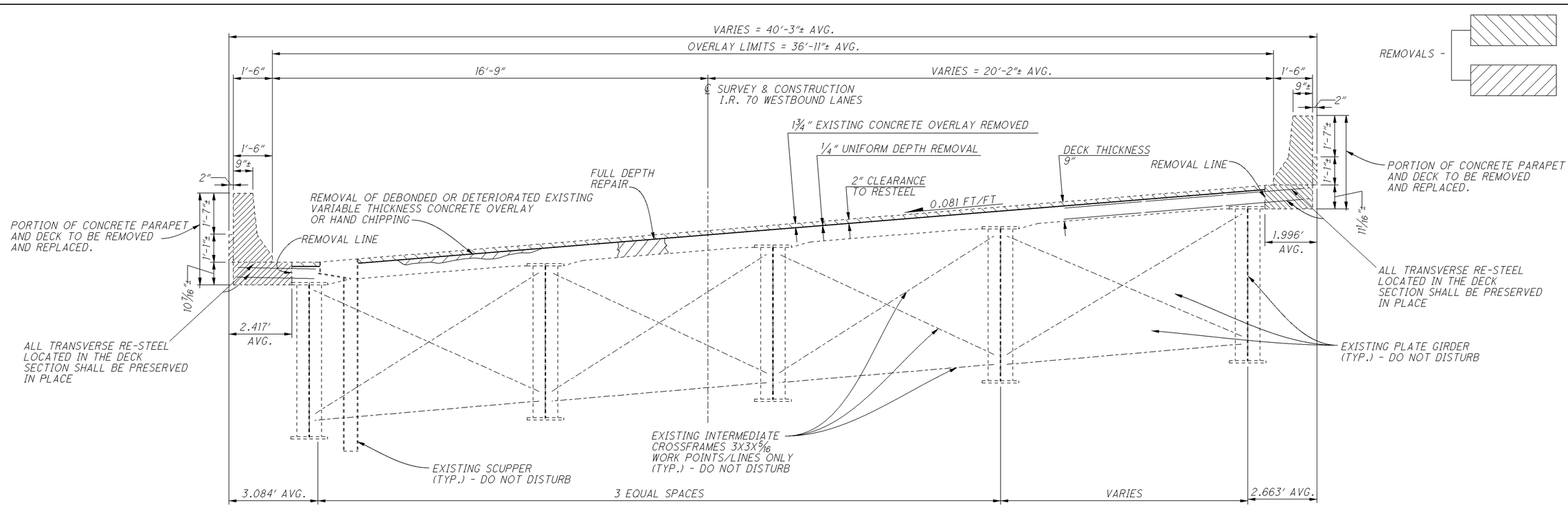
GENERAL PLAN
BRIDGE NO. GUE-70-0943 L
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

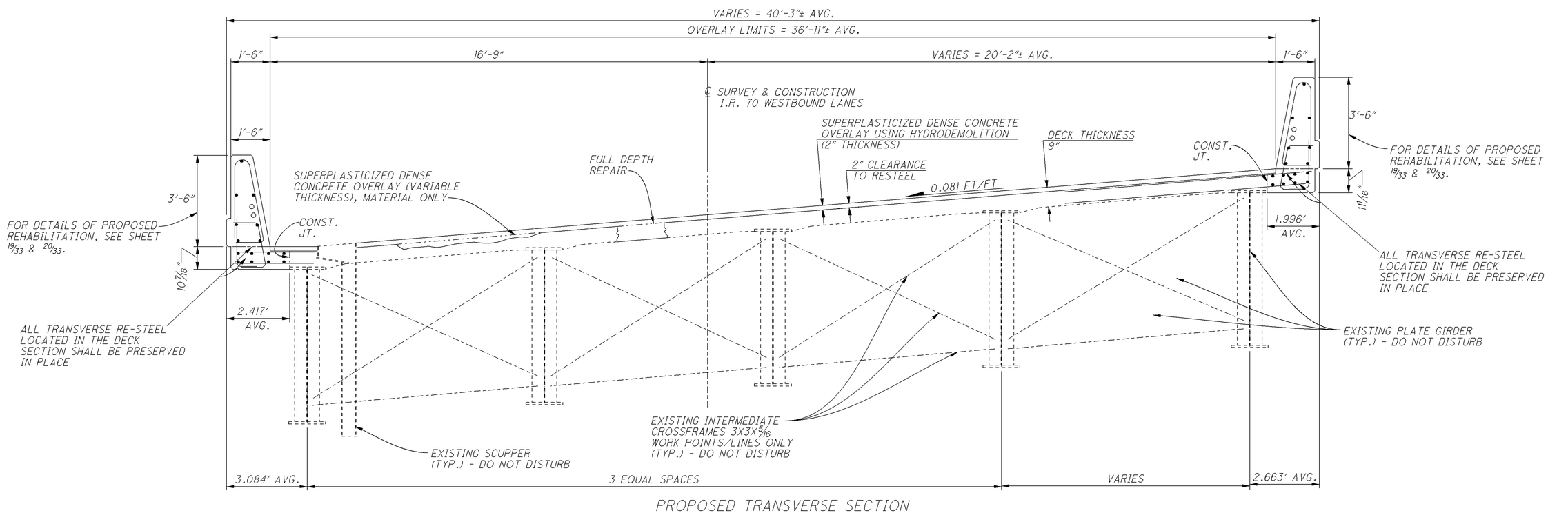
16 / 33

41 / 58

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\General\GUE_70_0943L\G070001.BPE (SCALE = 16.000)



EXISTNG TRANSVERSE SECTION



PROPOSED TRANSVERSE SECTION

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943L\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 5

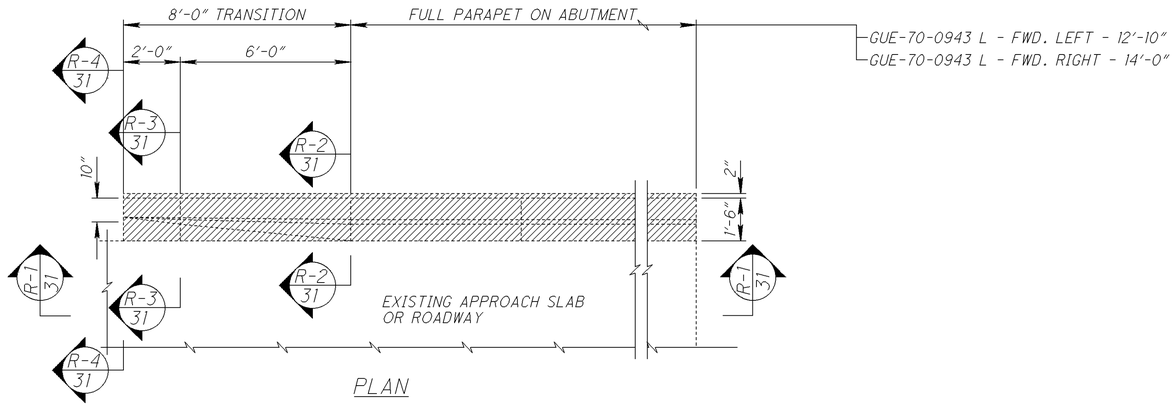
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001237	

TRANSVERSE SECTION
BRIDGE NO. GUE-70-0943 L
I.R. 70 OVER WILLS CREEK & C.R. 35

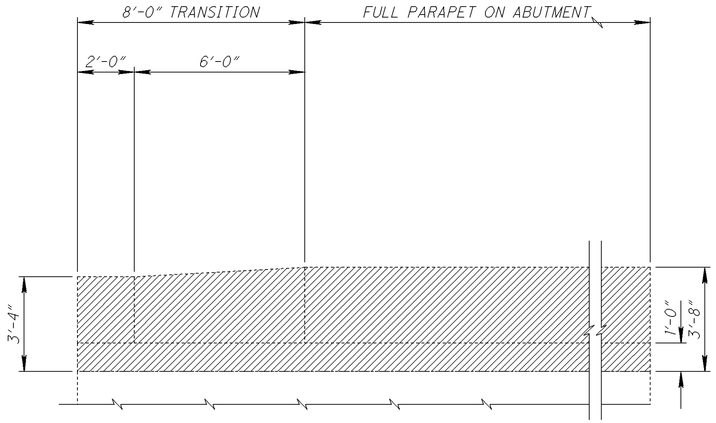
GUE-70-6.55

17 / 33

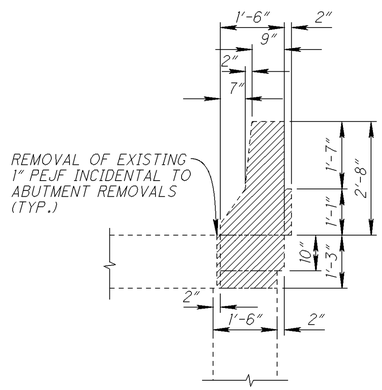
42
58



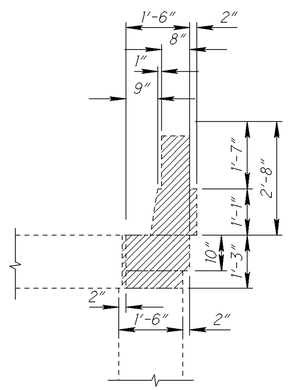
PLAN



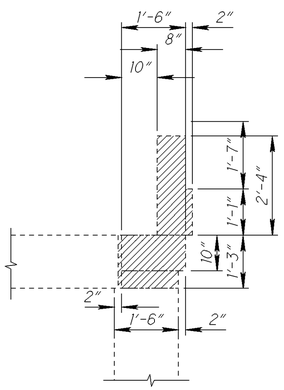
SECTION R-1 31



SECTION R-2 31



SECTION R-3 31



SECTION R-4 31

- REMOVALS

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED JDR | DRAWN JDR | REVIEWED TAG | DATE 2/1/12
CHECKED RSD | REVISED | STRUCTURE FILE NUMBER 3001237

EXISTING ABUTMENTS & PARAPETS
BRIDGE NO. GUE-70-0943L
I.R. 70 OVER WILLS CREEK & C.R. 35

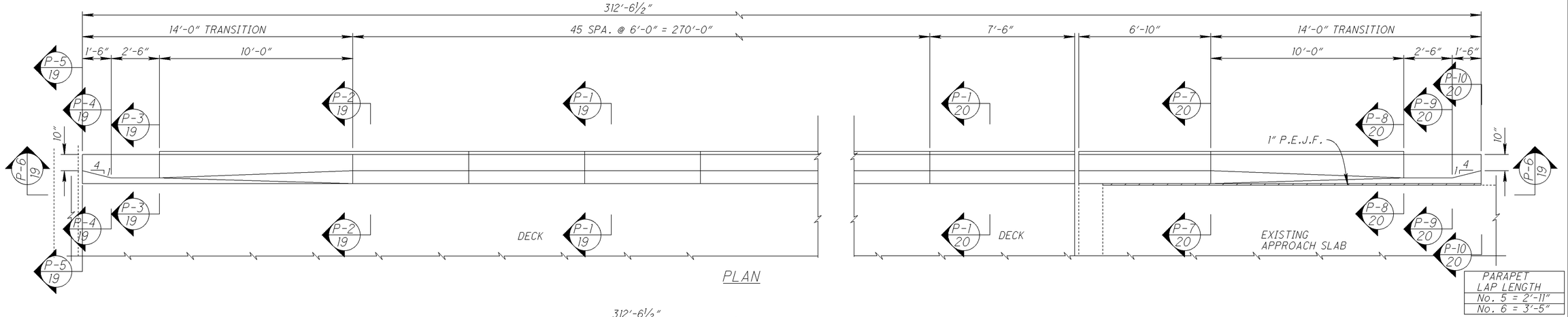
GUE-70-6.55

18 / 33

43 / 58

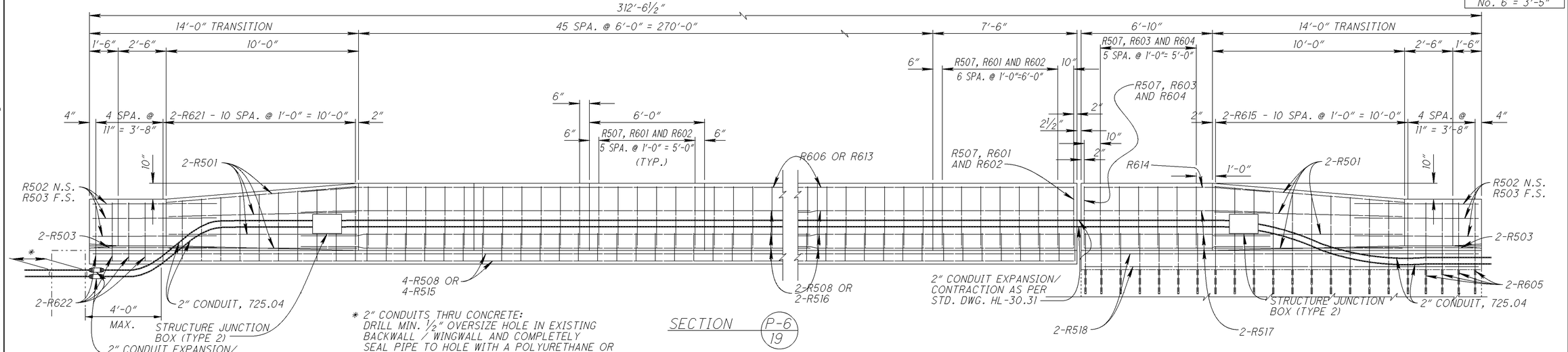
SCALE = 2.667

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943R/G070001.BPD.DGN



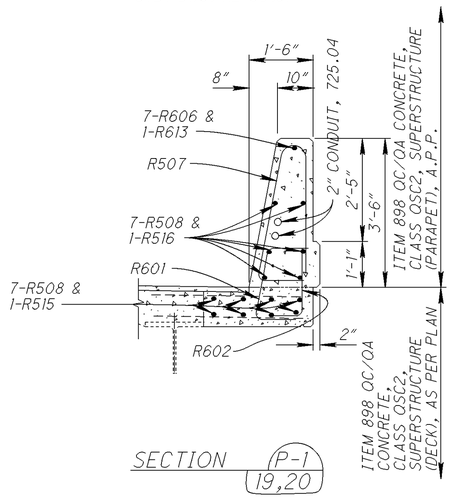
PLAN

PARAPET LAP LENGTH
No. 5 = 2′-11″
No. 6 = 3′-5″

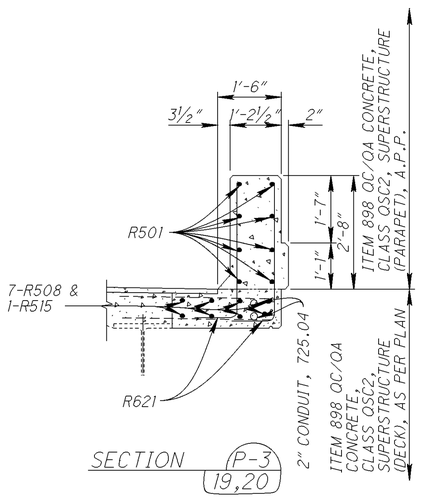


* 2″ CONDUITS THRU CONCRETE: DRILL MIN. ½″ OVERSIZE HOLE IN EXISTING BACKWALL / WINGWALL AND COMPLETELY SEAL PIPE TO HOLE WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S AS DIRECTED BY ENGINEER.

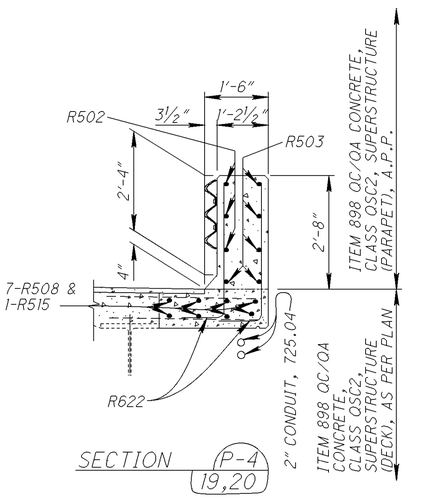
SECTION P-6 19



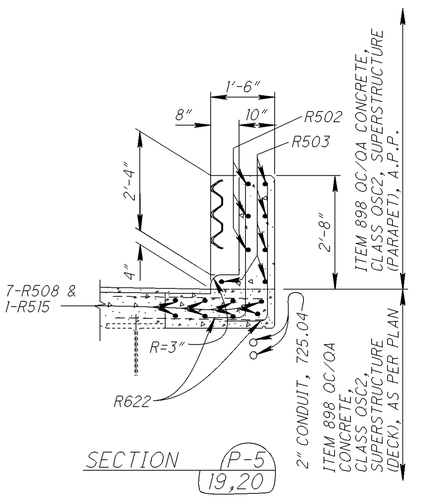
SECTION P-1 19,20



SECTION P-3 19,20



SECTION P-4 19,20



SECTION P-5 19,20

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001172 RT	

LEFT PARAPET DETAILS
BRIDGE NO. GUE-70-0943 L
I.R. 70 OVER WILLS CREEK & C.R. 35

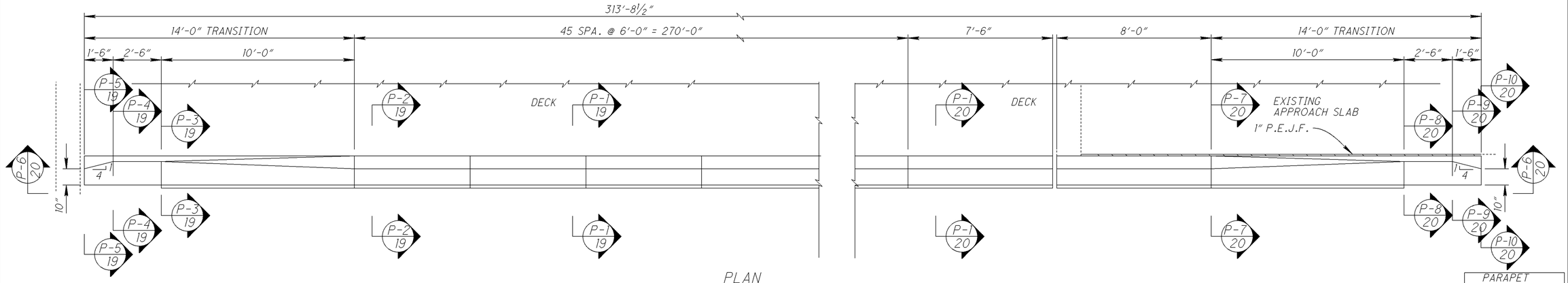
GUE-70-6.55

19 / 33

44 / 58

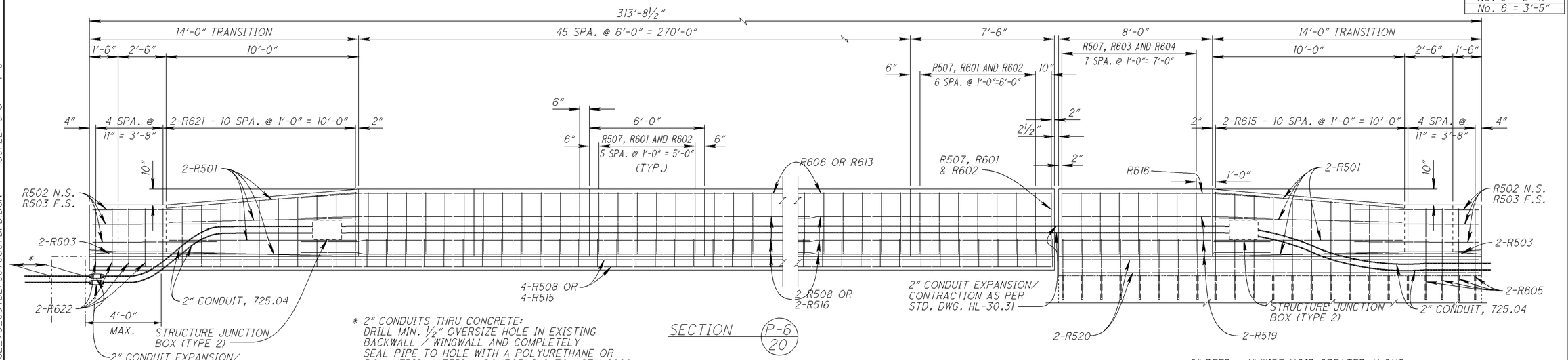
SCALE: ⅜″ = 1′-0″

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943L/G070001.BPD.DGN



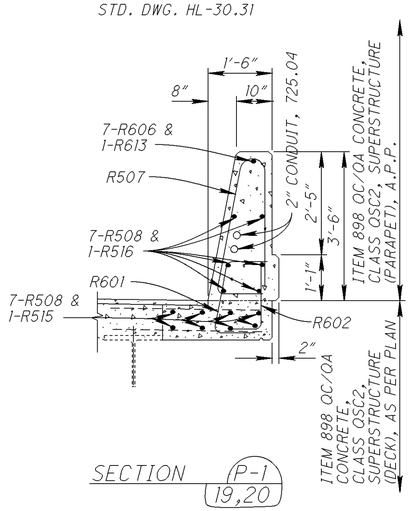
PLAN

PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"

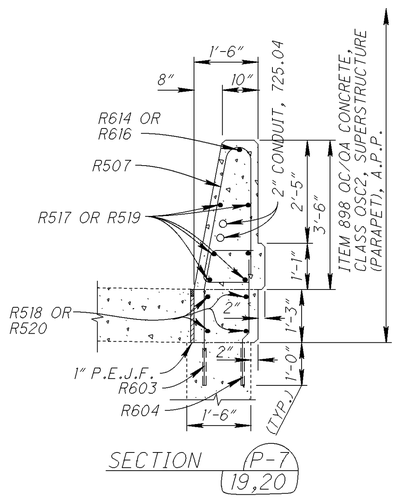


* 2" CONDUITS THRU CONCRETE: DRILL MIN. ½" OVERSIZE HOLE IN EXISTING BACKWALL / WINGWALL AND COMPLETELY SEAL PIPE TO HOLE WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S AS DIRECTED BY ENGINEER.

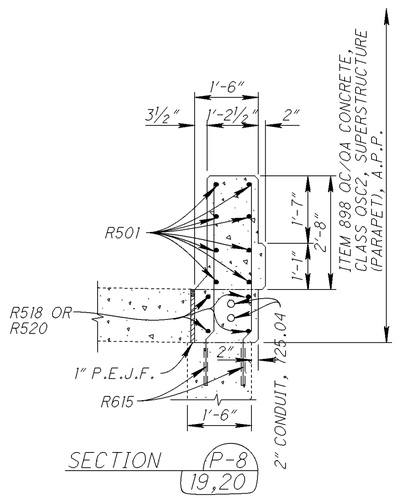
SECTION P-6 20



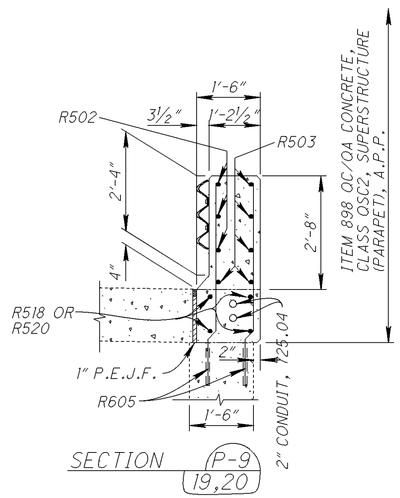
SECTION P-1 19,20



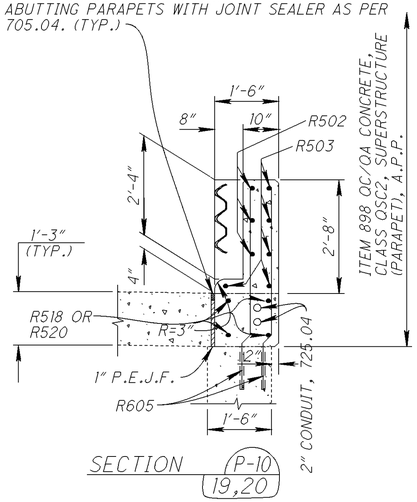
SECTION P-7 19,20



SECTION P-8 19,20



SECTION P-9 19,20



SECTION P-10 19,20

SCALE: 3"=8" = 1'-0"

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943L/G070001.BPD.DGN

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

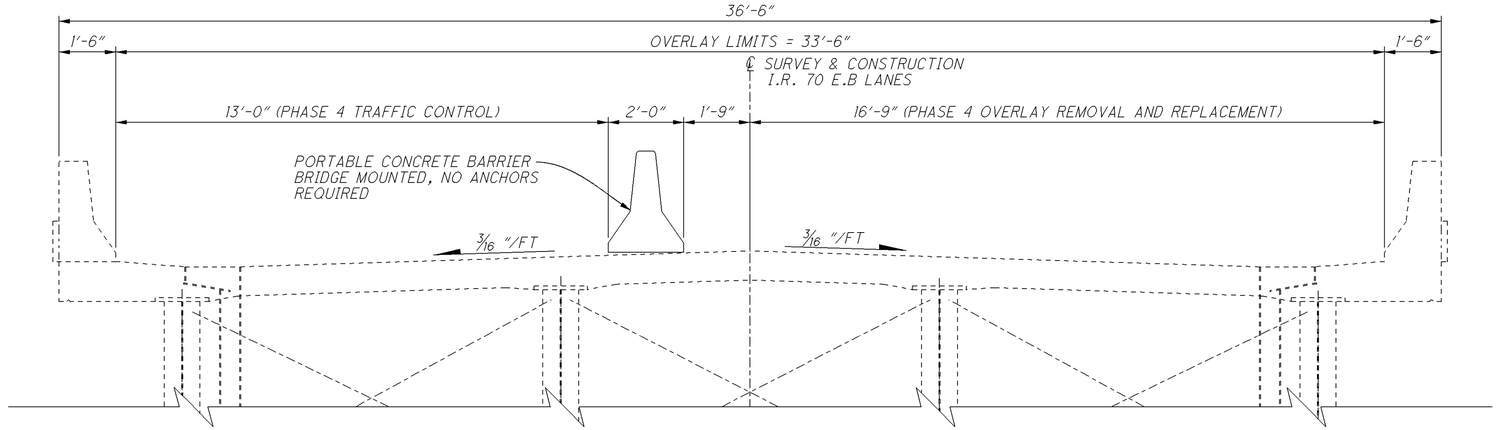
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001172 RT	

RIGHT PARAPET DETAILS
BRIDGE NO. GUE-70-0943 L
I.R. 70 OVER WILLS CREEK & C.R. 35

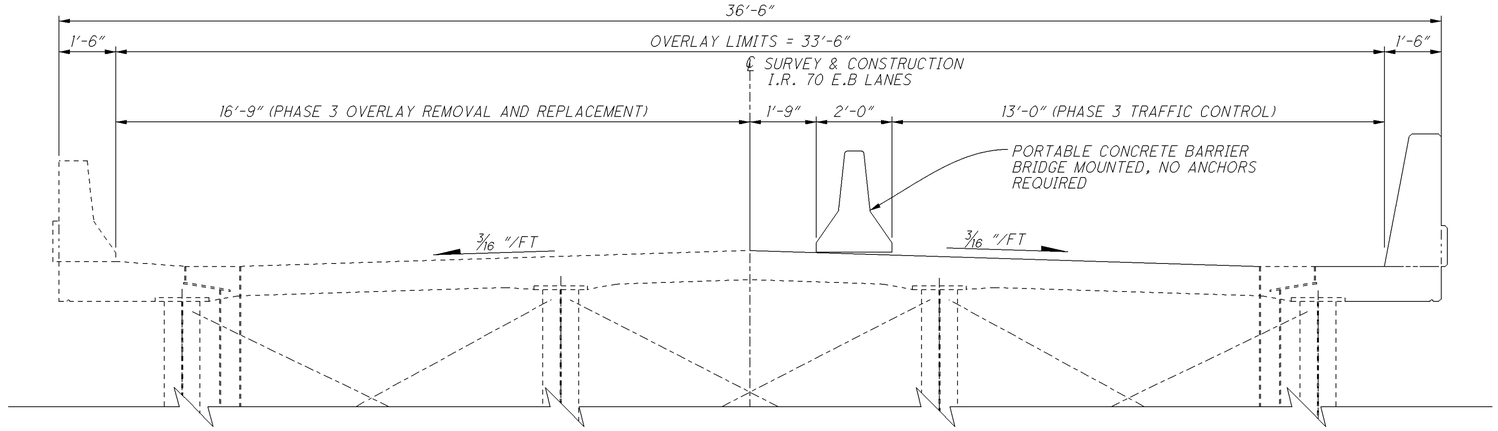
GUE-70-6.55

20 / 33

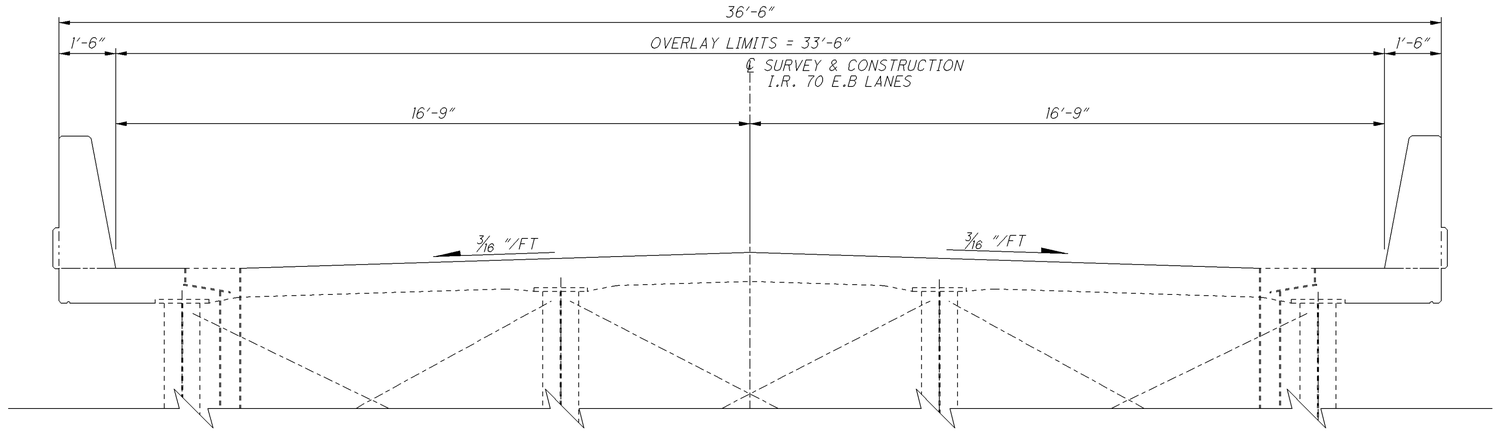
45 / 58



PHASE 4 TRAFFIC CONTROL



PHASE 3 TRAFFIC CONTROL



PROPOSED TRANSVERSE SECTION

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943R\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 5

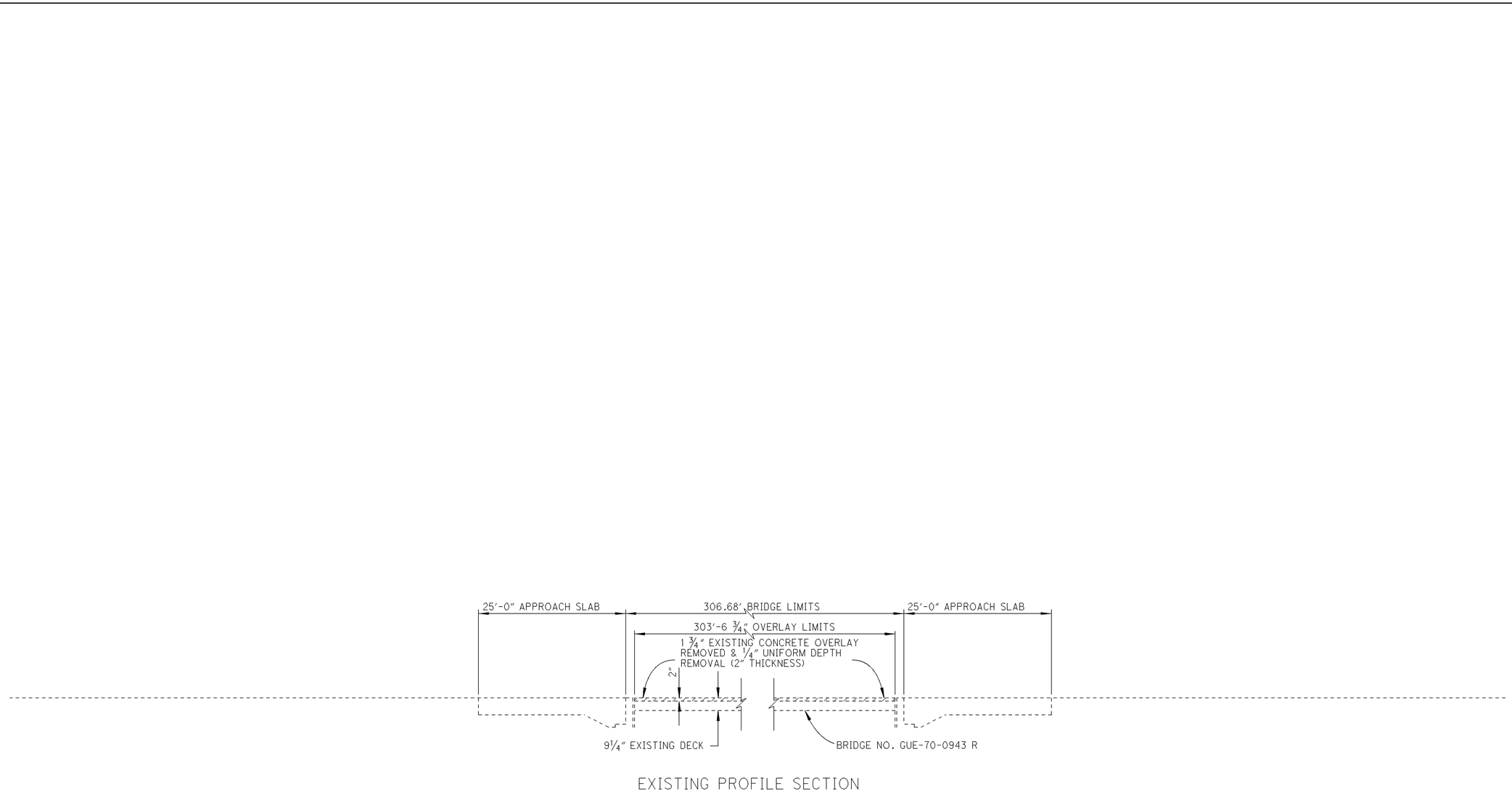
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		30012161	

MAINTENANCE OF TRAFFIC - PHASE DIAGRAM
BRIDGE NO. GUE-70-0943 R
I.R. 70 OVER WILLS CREEK & C.R. 35

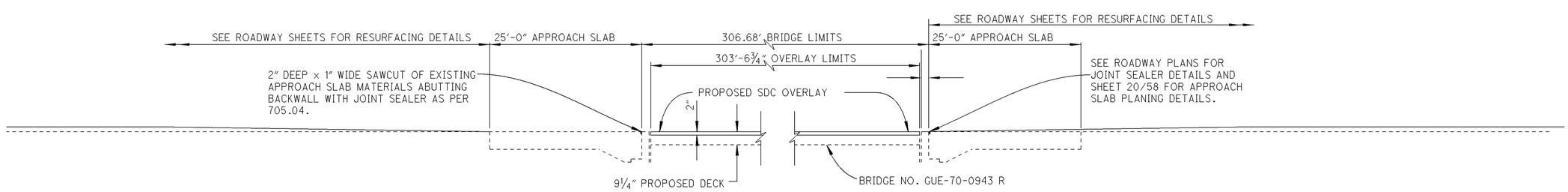
GUE-70-6.55

21 / 33

46
58



EXISTING PROFILE SECTION



PROPOSED PROFILE SECTION

DESIGNED JDR
DRAWN JDR
REVIEWED TAG
DATE 2/1/12
CHECKED RSD
REVISED
STRUCTURE FILE NUMBER 3001261

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

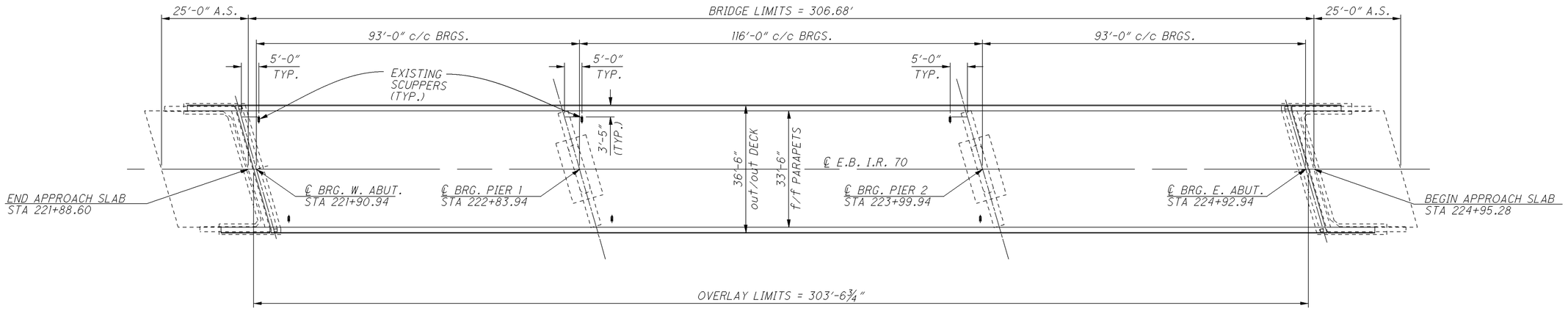
PROFILE SECTIONS
BRIDGE NO. GUE-70-0943 R
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

22 / 33

47 / 58

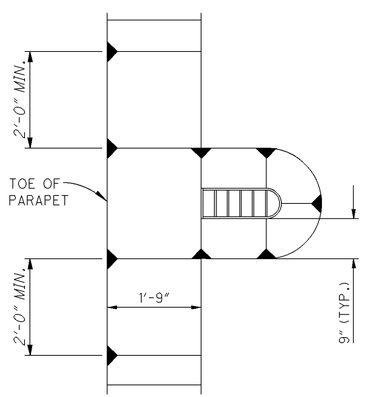
P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943R/G070001.BPS.DGN (SCALE = 4.000)



GENERAL PLAN

EXISTING STRUCTURE

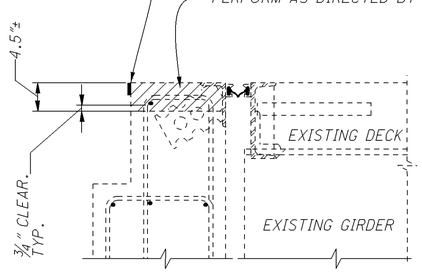
TYPE: CONTINUOUS WELDED STEEL GIRDER
WITH REINFORCED CONCRETE DECK
AND SUBSTRUCTURE
SPAN: 93'-0", 116'-0", AND 93'-0"
C/C BEARINGS
ROADWAY: 33'-6" F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: 16°-05'-44" RIGHT FORWARD
WEARING SURFACE: 1 3/4" S.D.C. OVERLAY
ALIGNMENT: TANGENT
APPROACH SLAB: AS-1-81 (25'-0" LONG)



SLOPE DETAIL
AT EXISTING SCUPPERS

2" DEEP x 1" WIDE SAWCUT OF EXISTING APPROACH SLAB MATERIALS ABUTTING BACKWALL WITH JOINT SEALER AS PER 705.04 @ REAR ABUTMENT ONLY. -(SEE ROADWAY PLANS, SHEET 20/58 FOR TREATMENT AT THE FORWARD ABUTMENT)

REMOVAL & REPLACEMENT WORK INCIDENTAL TO ITEM 848 - REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY & ITEM 848 - SDC CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY. - PERFORM AS DIRECTED BY ENGINEER



SECTION @ ℄ ABUTMENTS
(TYPICAL)

REMOVALS -

REHABILITATED STRUCTURE

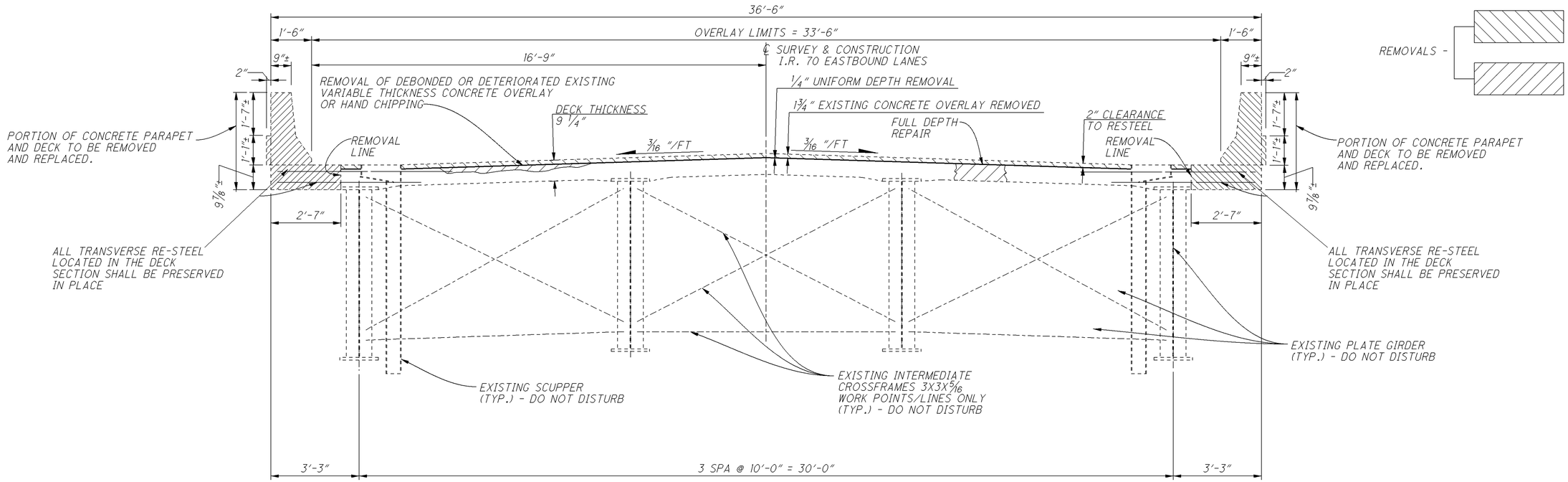
TYPE: CONTINUOUS WELDED STEEL GIRDER
WITH REINFORCED CONCRETE DECK
AND SUBSTRUCTURE
SPAN: 93'-0", 116'-0", AND 93'-0"
C/C BEARINGS
ROADWAY: 33'-6" F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: 16°-05'-44" RIGHT FORWARD
WEARING SURFACE: 2" S.D.C. OVERLAY
ALIGNMENT: TANGENT
APPROACH SLAB: AS-1-81 (25'-0" LONG)

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

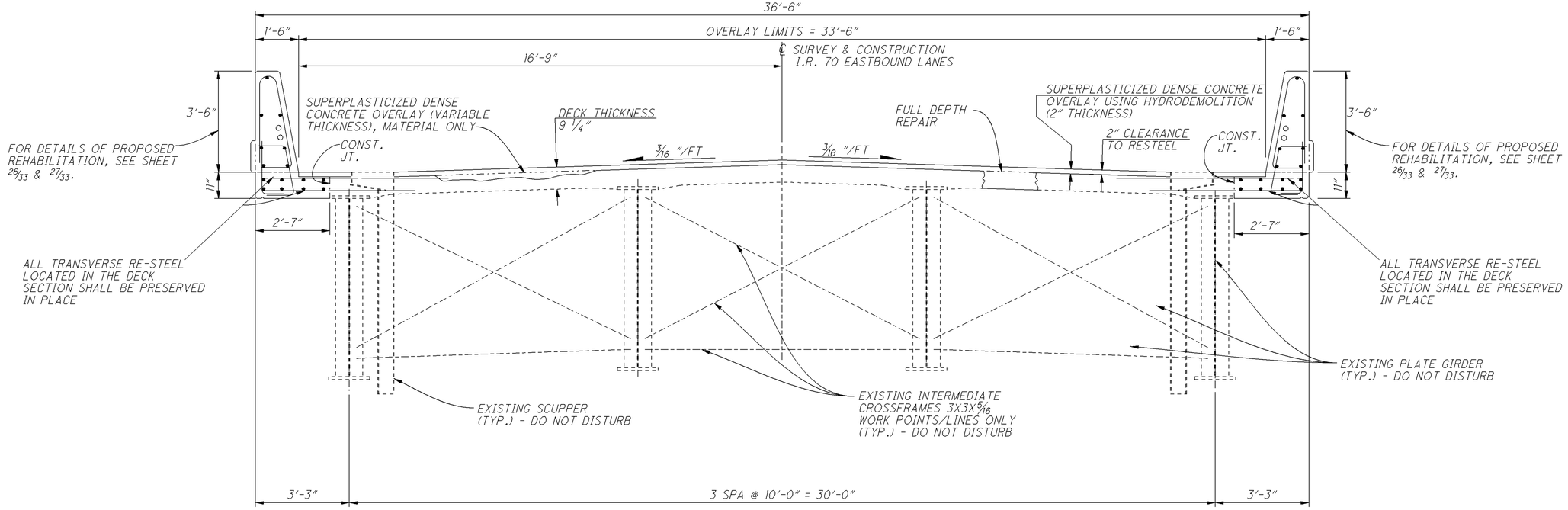
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001261	

GENERAL PLAN
BRIDGE NO. GUE-70-0943 R
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55



EXISTNG TRANSVERSE SECTION



PROPOSED TRANSVERSE SECTION

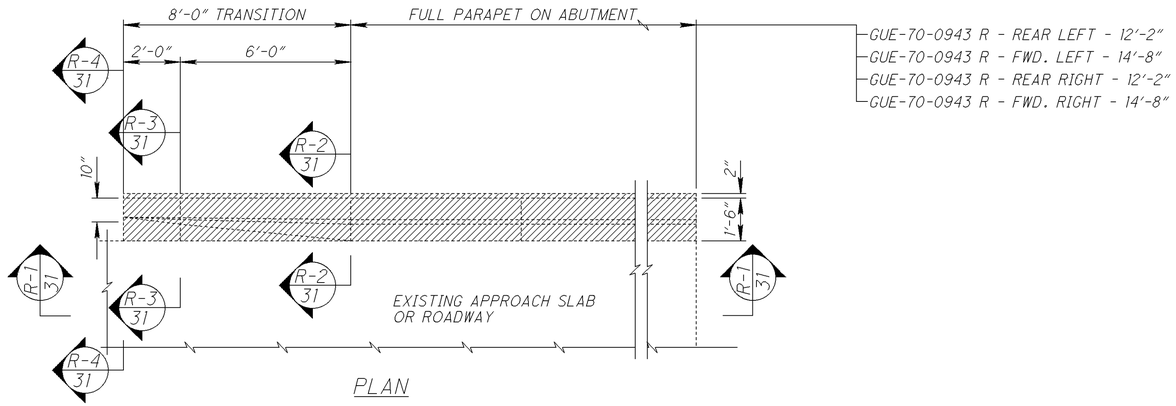
P:\GUE794\Design\Bridge\SFN - Route Name\Plan_Sheets\General\GUE_70_0943R\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

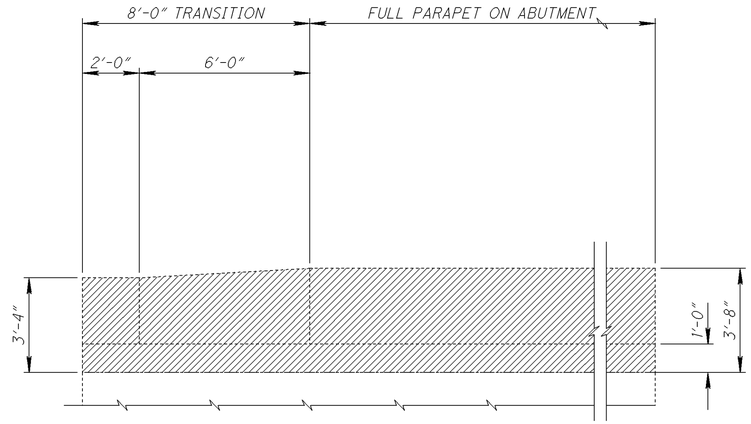
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001261	

TRANSVERSE SECTION
BRIDGE NO. GUE-70-0943 R
I.R. 70 OVER WILLS CREEK & C.R. 35

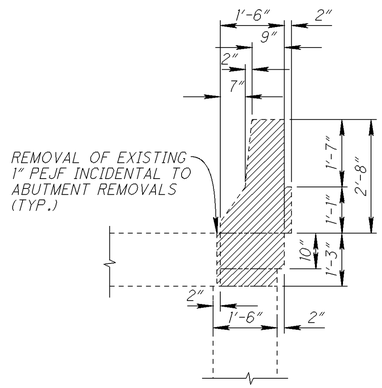
GUE-70-6.55



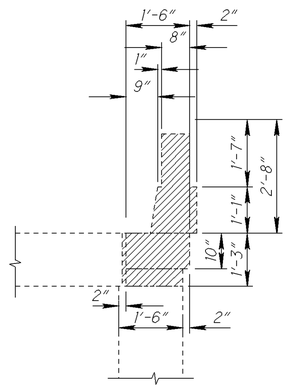
PLAN



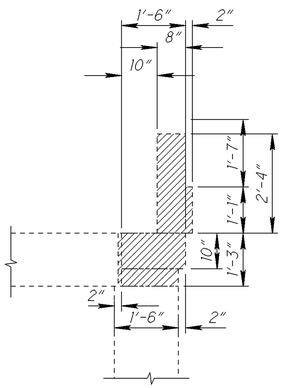
SECTION R-1 31



SECTION R-2 31



SECTION R-3 31



SECTION R-4 31

- REMOVALS

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001261	

EXISTING ABUTMENTS & PARAPETS
BRIDGE NO. GUE-70-0943R
I.R. 70 OVER WILLS CREEK & C.R. 35

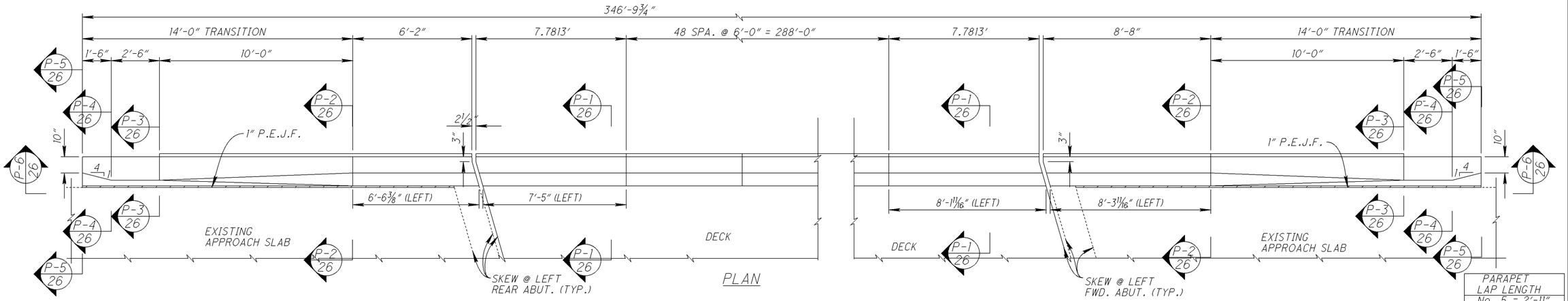
GUE-70-6.55

25 / 33

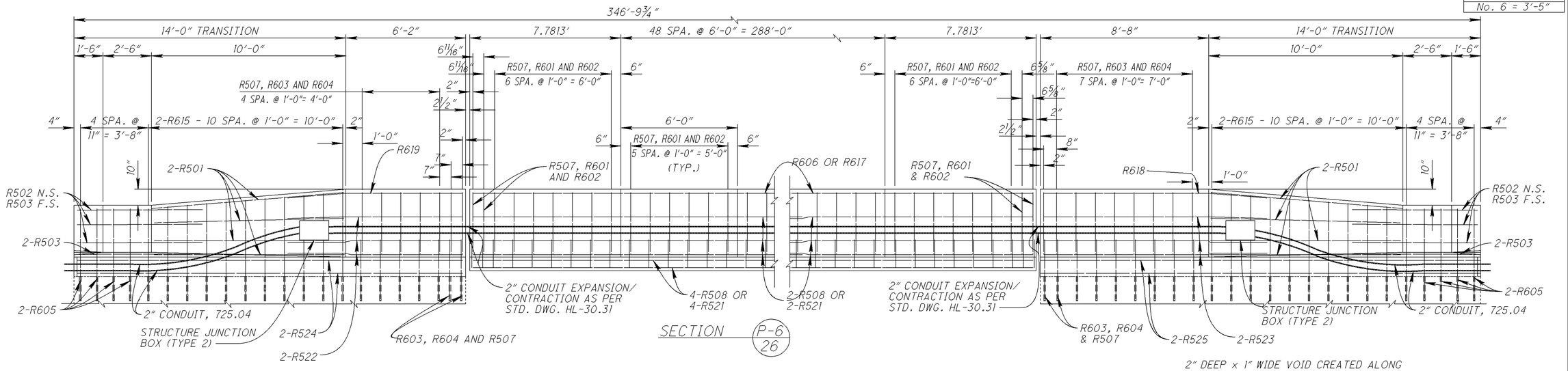
50 / 58

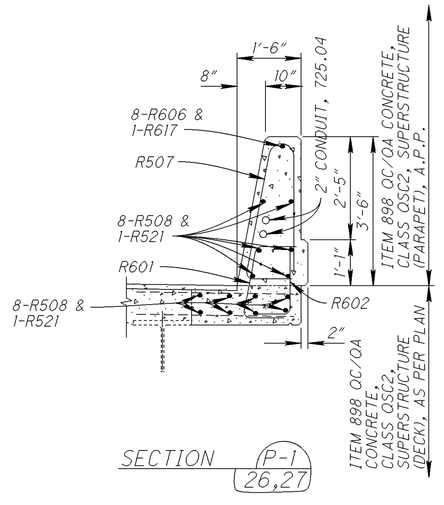
SCALE = 2.667

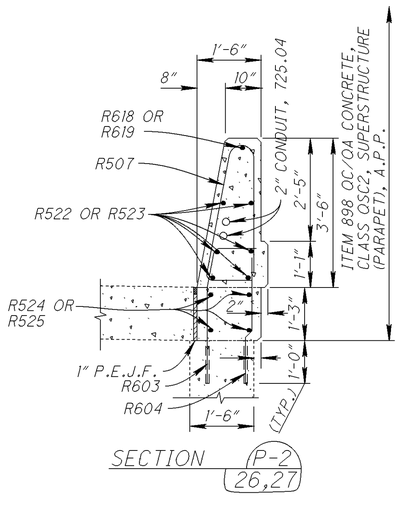
P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943R/G070001BPD.DGN

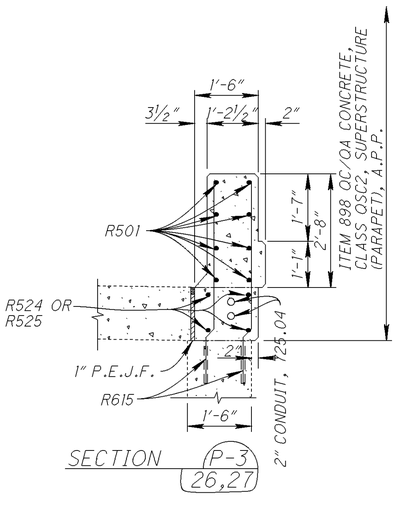


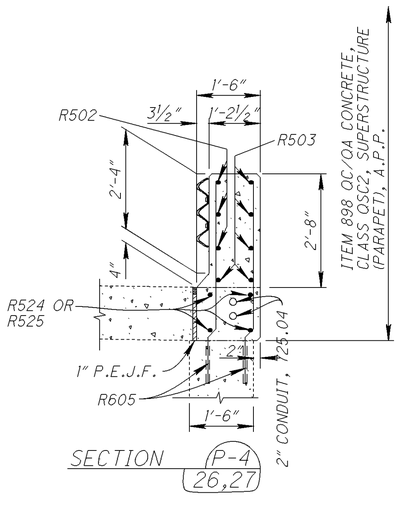
PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"

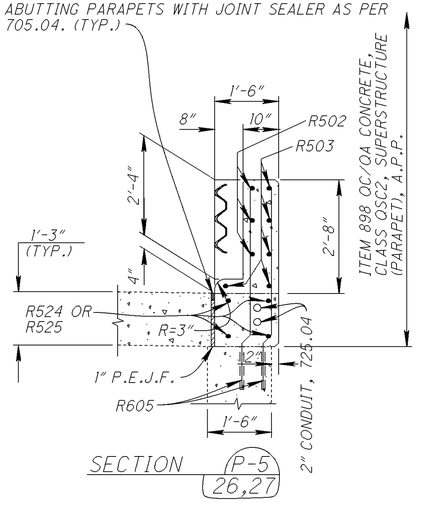












DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001261	

LEFT PARAPET DETAILS
BRIDGE NO. GUE-70-0943 R
I.R. 70 OVER WILLS CREEK & C.R. 35

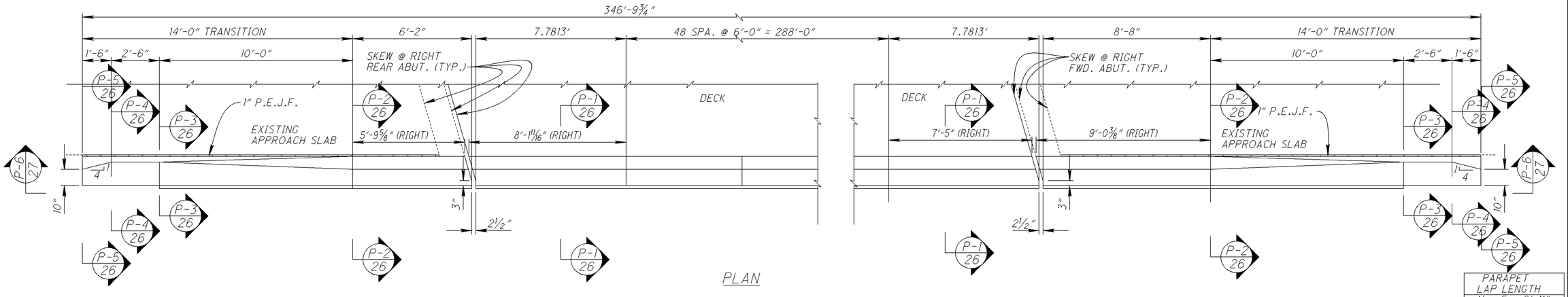
GUE-70-6.55

26 / 33

51 / 58

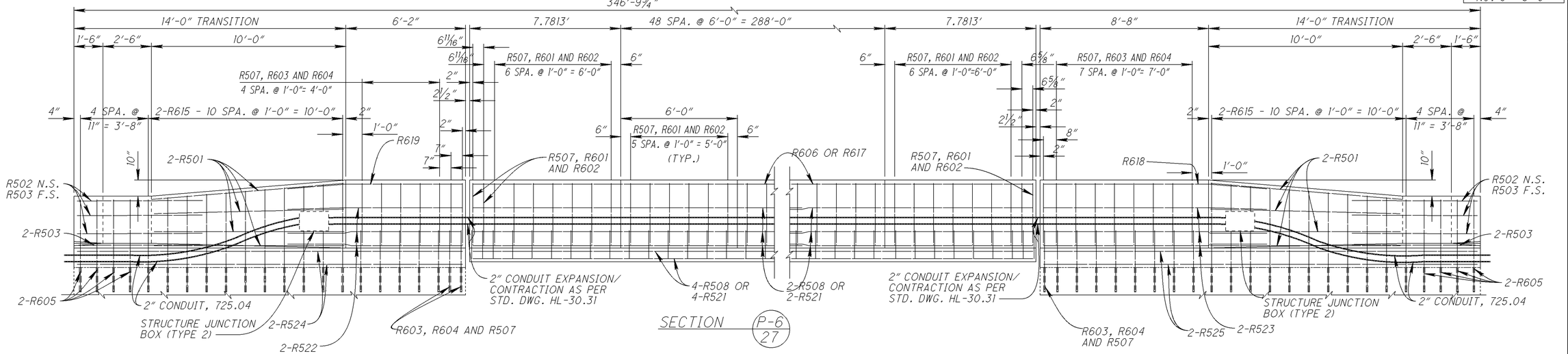
SCALE: ⅜" = 1'-0"

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943R/G070001.BPD.DGN



PLAN

PARAPET LAP LENGTH
No. 5 = 2′-11″
No. 6 = 3′-5″



SECTION P-6 27

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0901L&R/G070001.BPD.DGN SCALE: ⅜″ = 1′-0″

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

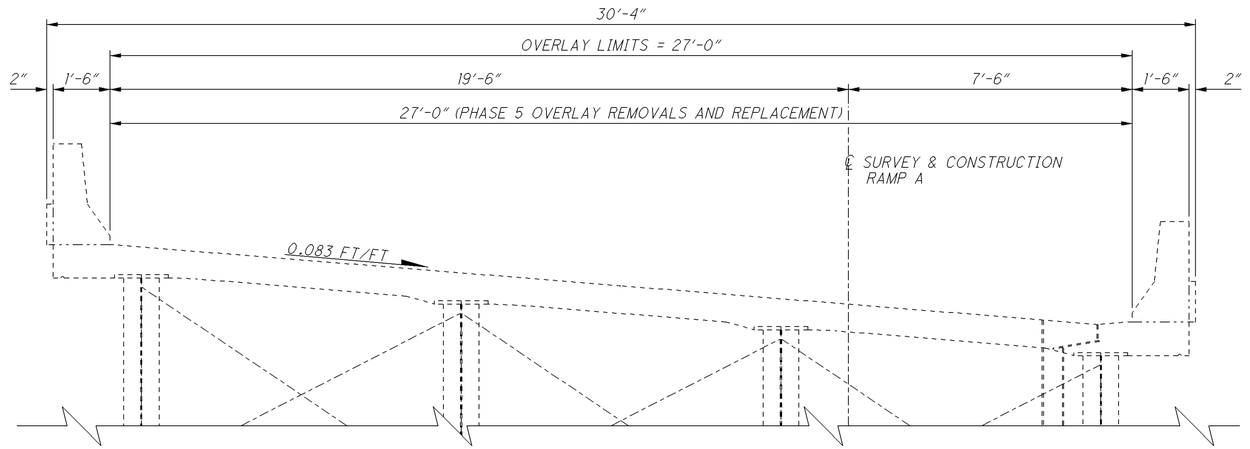
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001261	

RIGHT PARAPET DETAILS
BRIDGE NO. GUE-70-0943 R
I.R. 70 OVER WILLS CREEK & C.R. 35

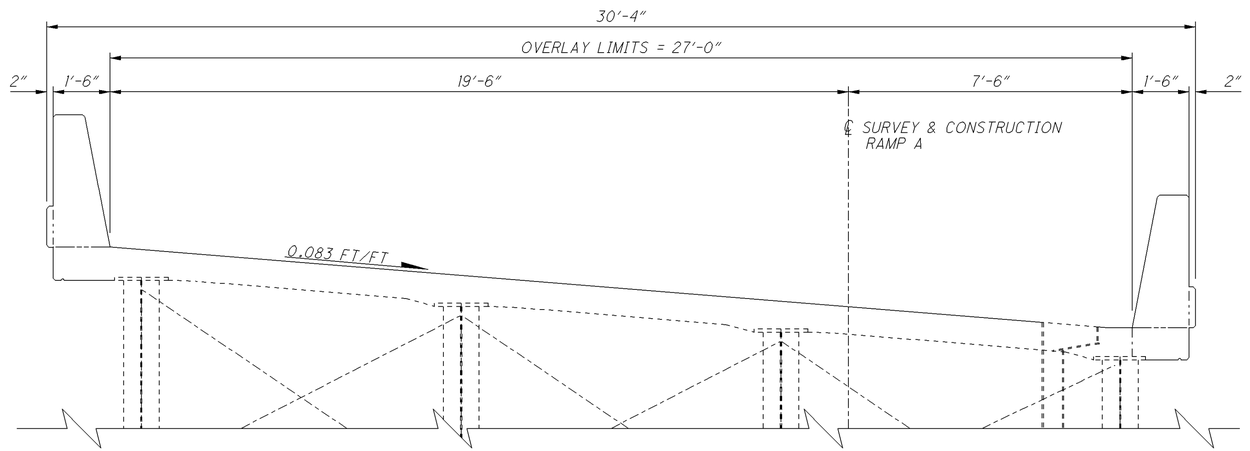
GUE-70-6.55

27 / 33

52 / 58



PHASE 5 (RAMP A CLOSED)



PROPOSED TRANSVERSE SECTION

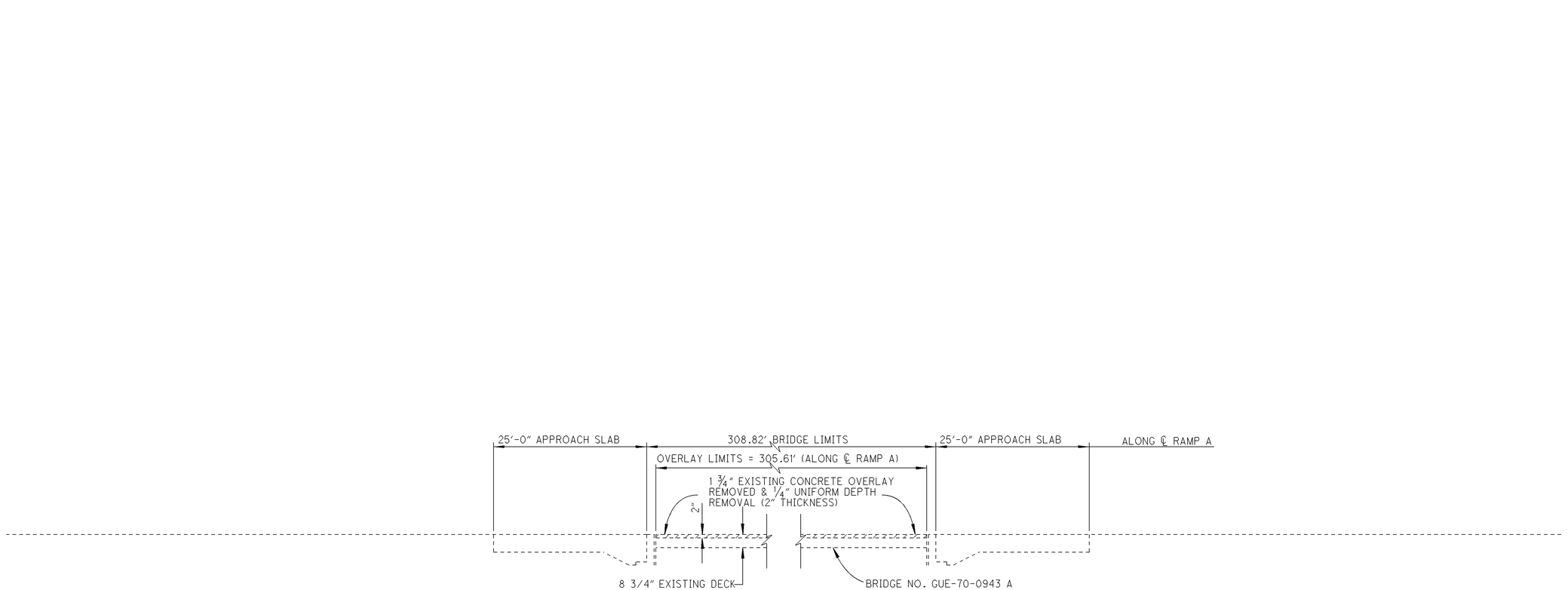
P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943A\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 5

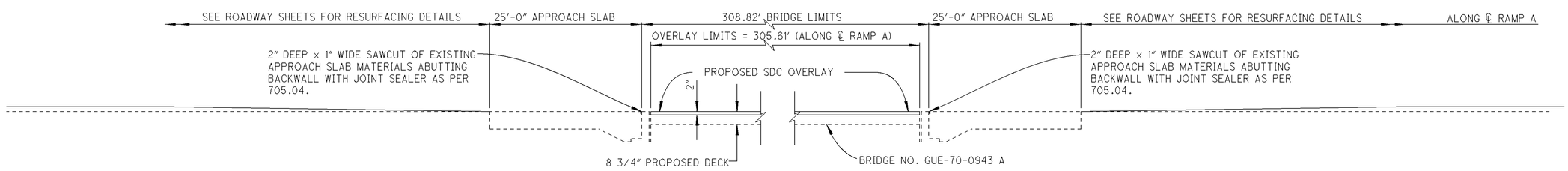
DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001202	

MAINTENANCE OF TRAFFIC - TEMPORARY CLOSURE
BRIDGE NO. GUE-70-0943 A (RAMP)
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55



EXISTING PROFILE SECTION



PROPOSED PROFILE SECTION

DESIGNED JDR
CHECKED RSD
DRAWN JDR
REVISED
REVIEWED TAG
DATE 2/1/12
STRUCTURE FILE NUMBER 3001202

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

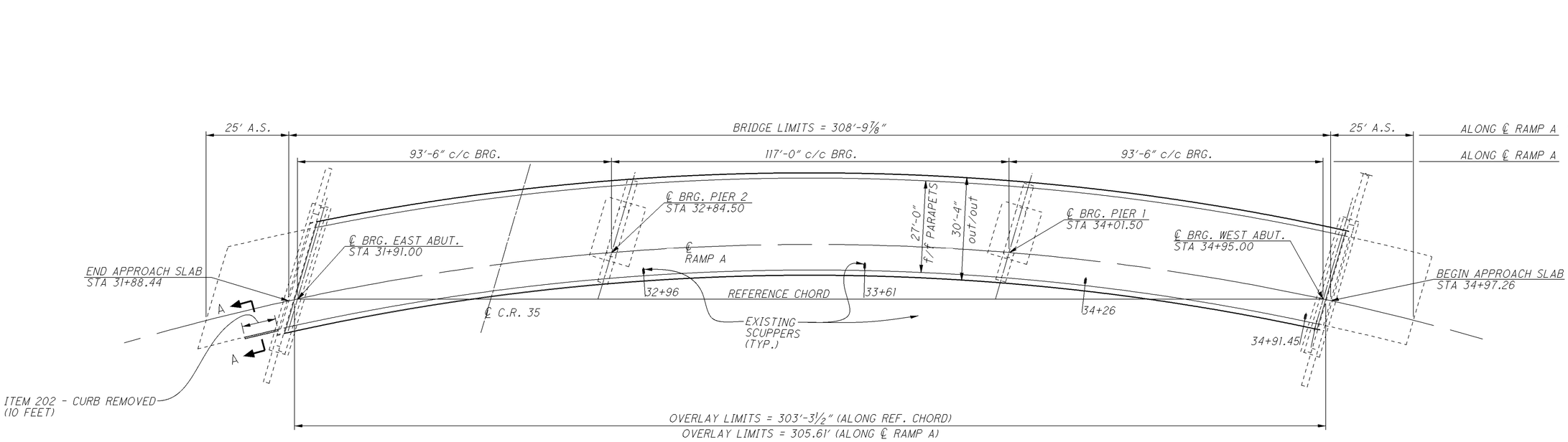
PROFILE SECTIONS
BRIDGE NO. GUE-70-0943 A (RAMP)
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

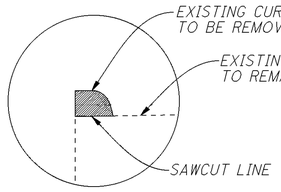
29 / 33

54 / 58

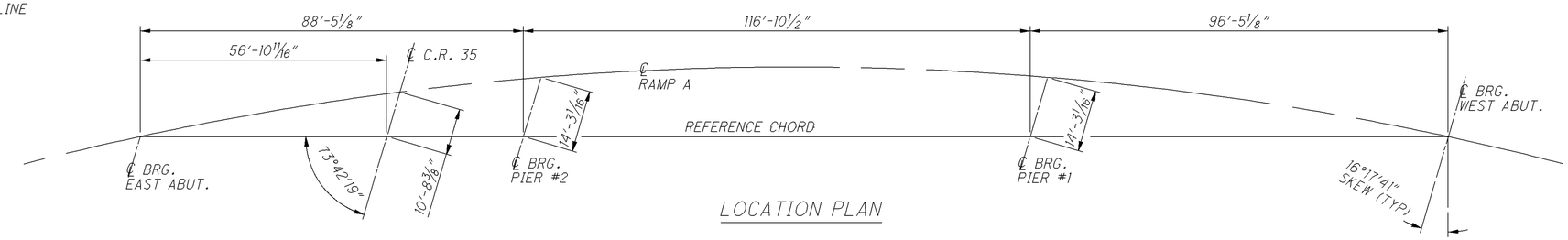
P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943A/G070001.BPS.DGN (SCALE = 4.000)



GENERAL PLAN



SECTION A-A

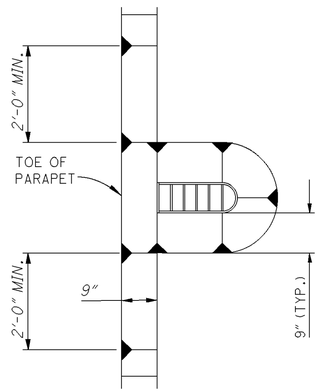


LOCATION PLAN

NOTE:
REFERENCE CHORDS ARE LINE BETWEEN ℄BRGS. @ ABUTMENTS.

HORIZONTAL CURVE DATA:

P.I. = STA. 32+19.72
Δ = 47°-10'-02"
Dc = 8°-00'-00"
R = 716.1973'
Lc = 489.59'
Ls = 200'
P.V.I. = STA. 34+50.00
V.C. = 250'
ELEV. = 805.92'
CORR. = 1.10'
PROF. GR. = 807.02'
g1 = -4.20%, g2 = -0.68%

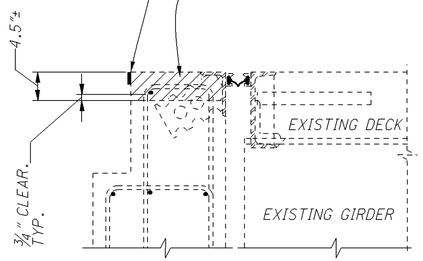


SLOPE DETAIL AT EXISTING SCUPPERS

2" DEEP x 1" WIDE SAWCUT OF EXISTING APPROACH SLAB MATERIALS ABUTTING BACKWALL WITH JOINT SEALER AS PER 705.04.

REMOVAL & REPLACEMENT WORK INCIDENTAL TO ITEM 848 - REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY & ITEM 848 - SDC CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY.
- PERFORM AS DIRECTED BY ENGINEER

REMOVALS -



SECTION @ ℄ ABUTMENTS (TYPICAL)

EXISTING STRUCTURE

TYPE: CONTINUOUS WELDED STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 93'-6", 117'-0", AND 93'-6" C/C BEARINGS ALONG ℄ RAMP A
ROADWAY: 27'-0" F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: 16°-17'-41" LEFT FORWARD W/ RESPECT TO REF. CHORD
WEARING SURFACE: 1 3/4" S.D.C. OVERLAY
ALIGNMENT: 8°-00'-00" CURVE RIGHT
APPROACH SLAB: AS-1-81 (25'-0" LONG)
BRIDGE RAILING: CONCRETE PARAPET

REHABILITATED STRUCTURE

TYPE: CONTINUOUS WELDED STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 93'-6", 117'-0", AND 93'-6" C/C BEARINGS ALONG ℄ RAMP A
ROADWAY: 27'-0" F/F CONCRETE PARAPETS
LOADING: CF-2000 (1957)
SKEW: 16°-17'-41" LEFT FORWARD W/ RESPECT TO REF. CHORD
WEARING SURFACE: 2" S.D.C. OVERLAY
ALIGNMENT: 8°-00'-00" CURVE RIGHT
APPROACH SLAB: AS-1-81 (25'-0" LONG)
BRIDGE RAILING: CONCRETE PARAPET

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED JDR | DRAWN JDR | REVIEWED TAG | DATE 2/1/12
CHECKED RSD | REVISED | STRUCTURE FILE NUMBER 3001202

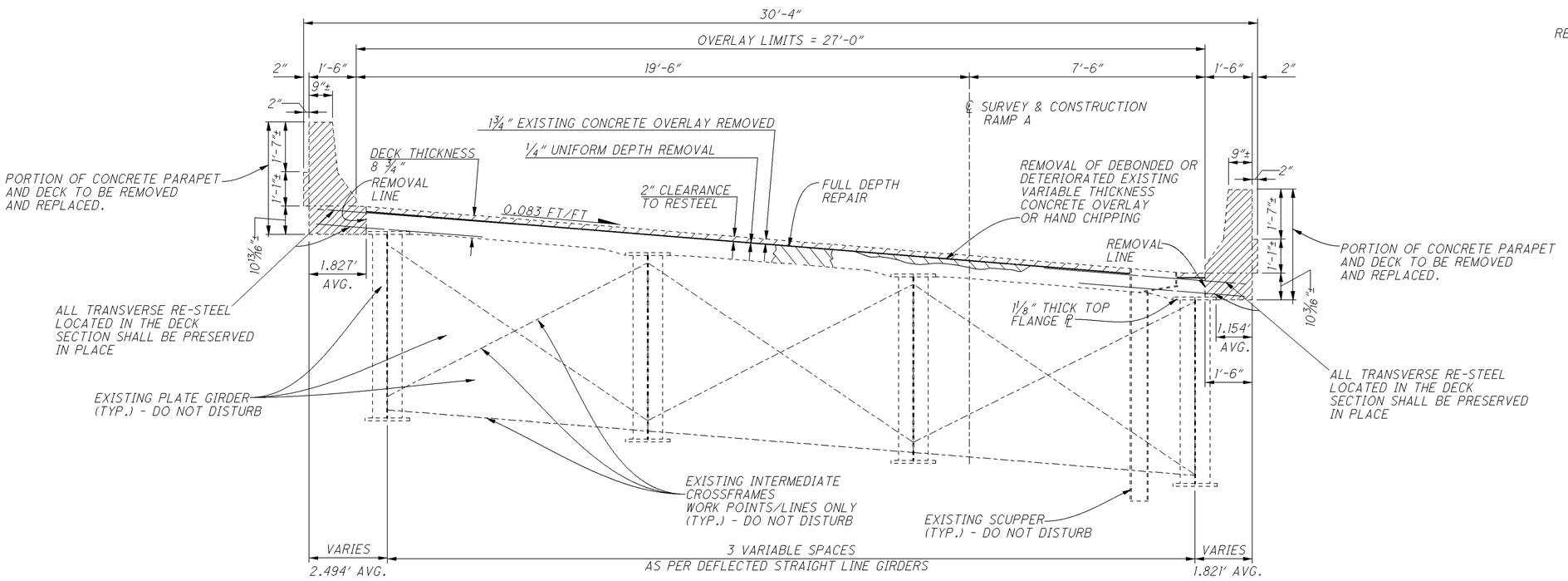
GENERAL PLAN
BRIDGE NO. GUE-70-0943 A (RAMP)
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

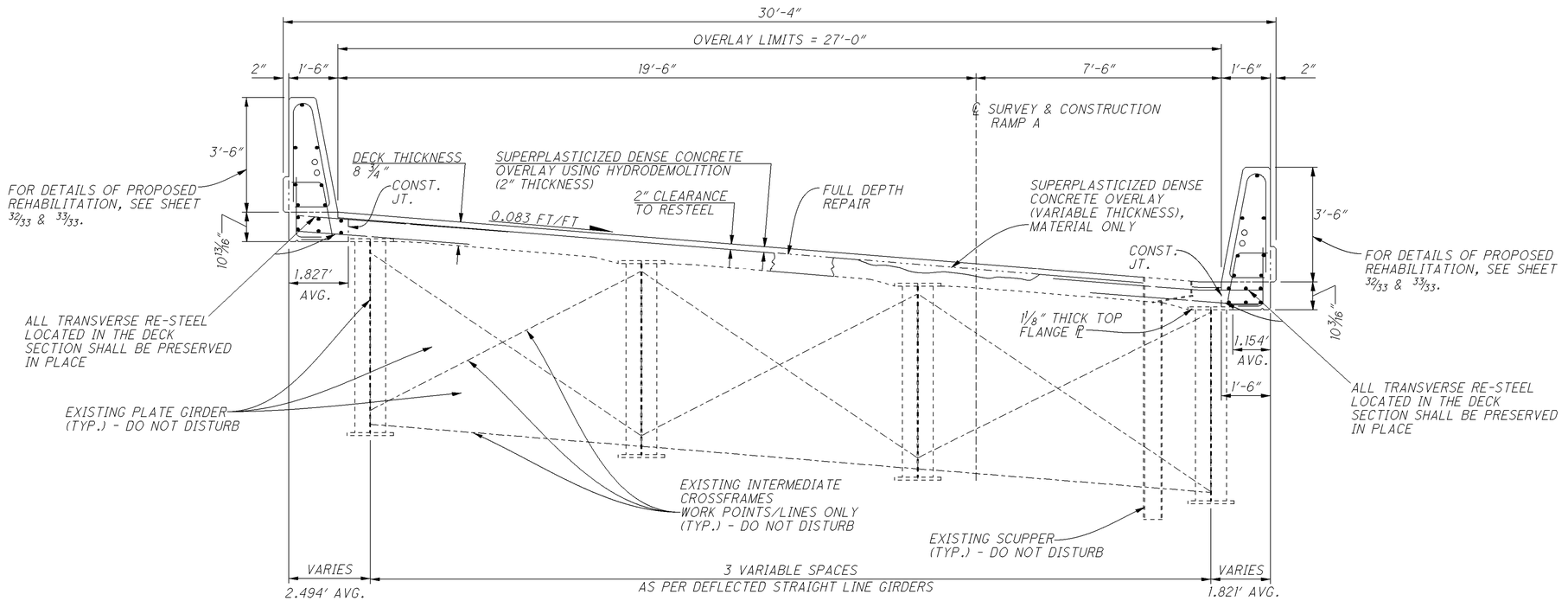
30/33

55/58

P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943A\G070001.BPE (SCALE = 16.000)



EXISTNG TRANSVERSE SECTION



PROPOSED TRANSVERSE SECTION

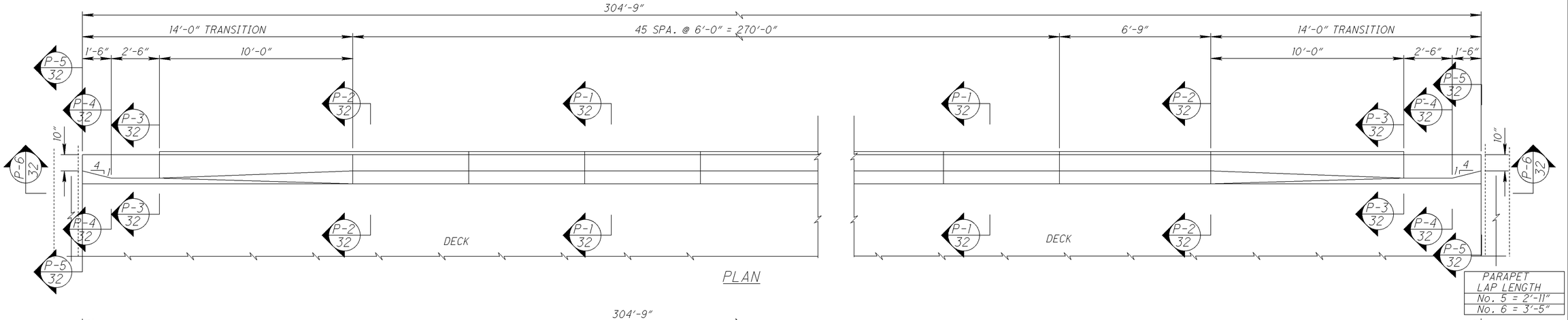
P:\GUE\ 21494\Design\Bridge\SFN\Plan_Sheets\combined with roadway\GUE_70_0943A\G070001.BTS (SCALE = 2.000)

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001202	

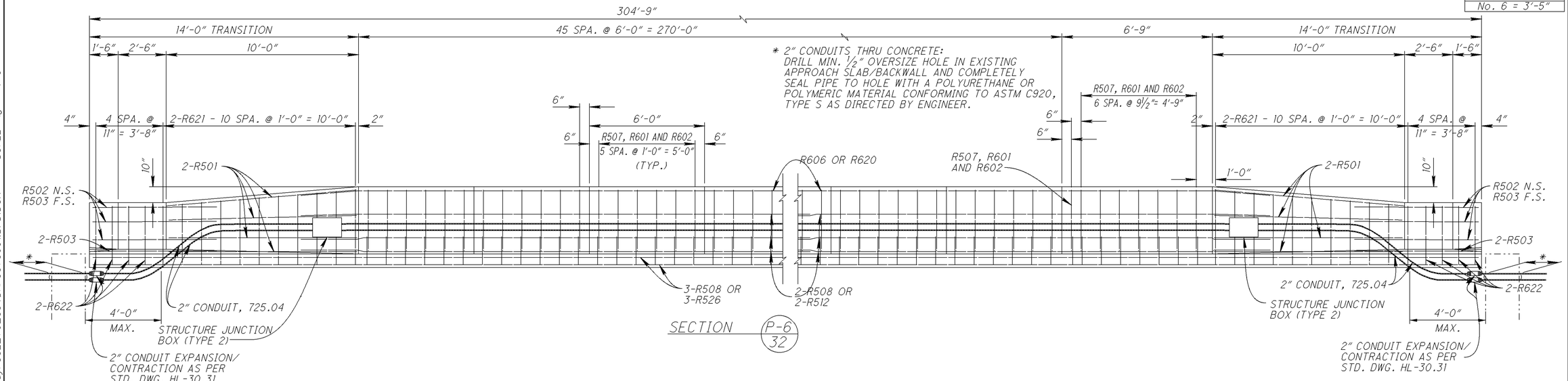
TRANSVERSE SECTION
BRIDGE NO. GUE-70-0943 A (RAMP)
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

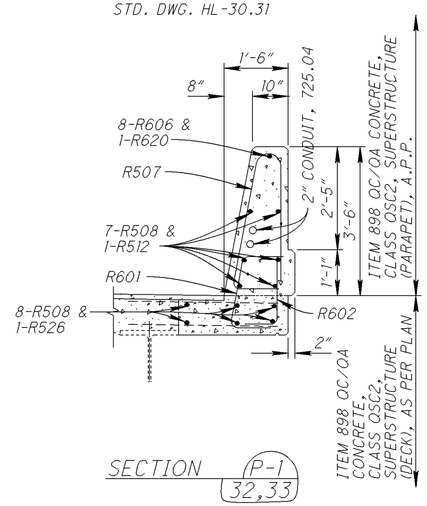


PLAN

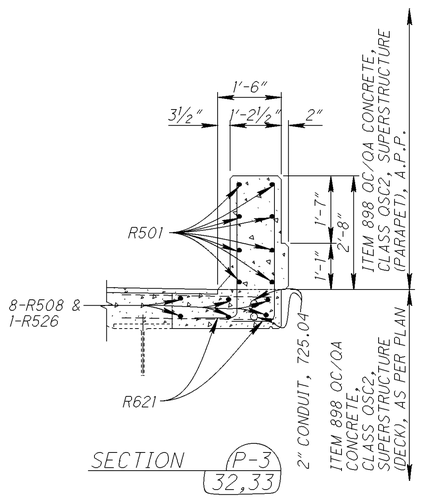
PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"



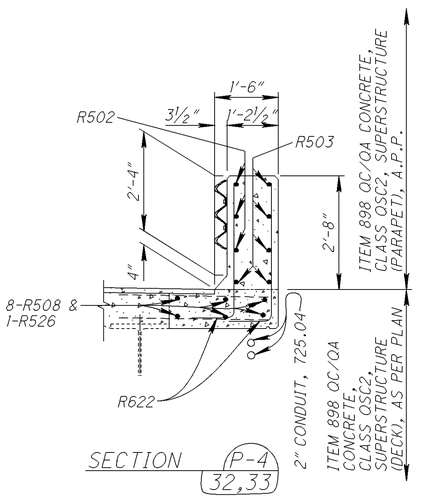
SECTION P-6 32



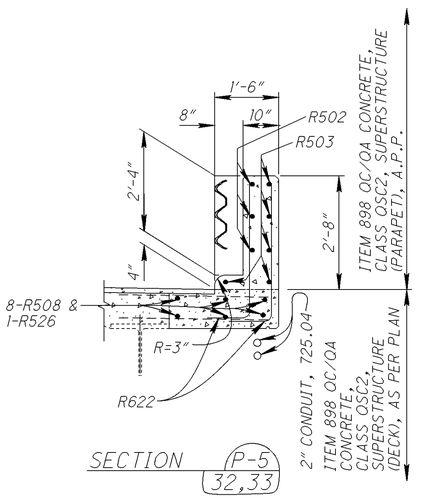
SECTION P-1 32,33



SECTION P-3 32,33



SECTION P-4 32,33



SECTION P-5 32,33

SCALE: 3/8" = 1'-0"

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943A/G070001.BPD.DGN

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12

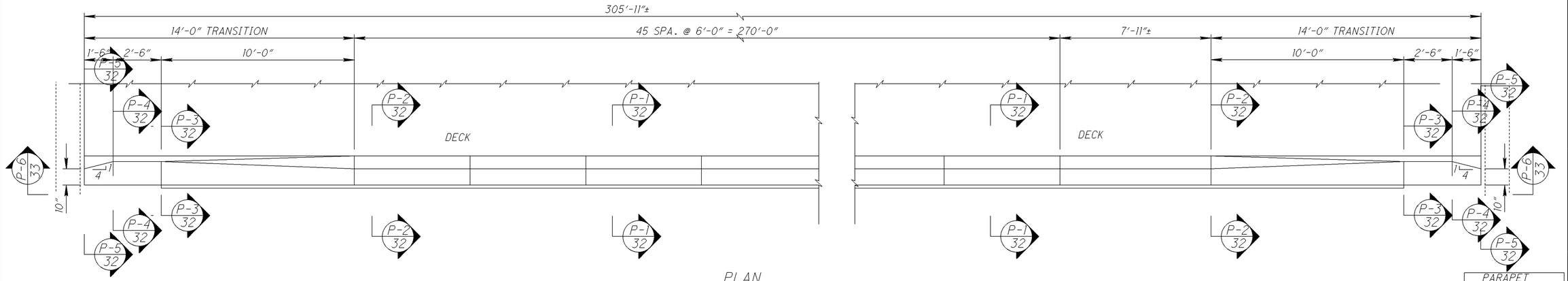
CHECKED	REVISED	STRUCTURE FILE NUMBER
RSD		3001172 RT

LEFT PARAPET DETAILS
BRIDGE NO. GUE-70-0943 A
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

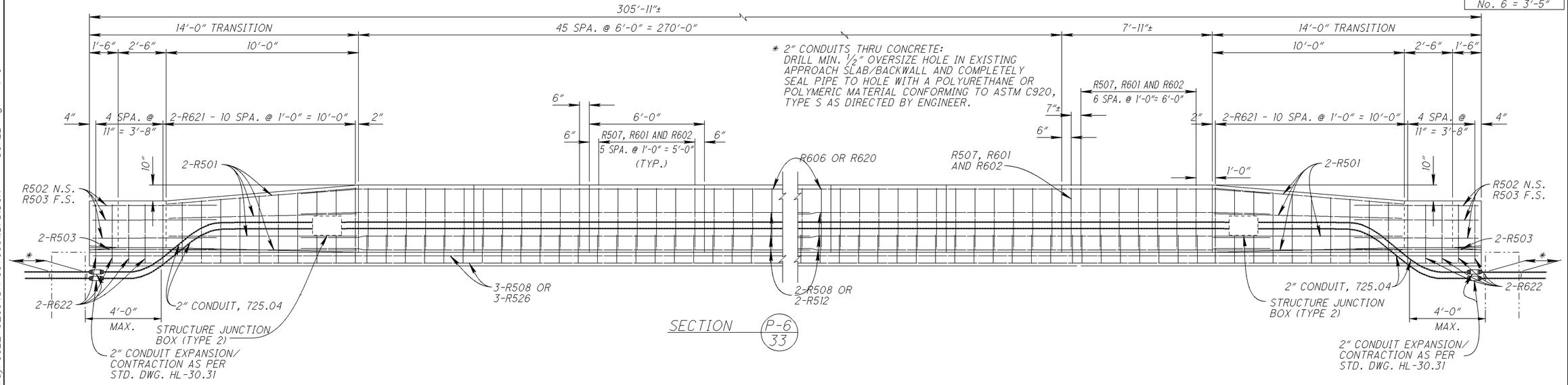
32 / 33

57 / 58



PLAN

PARAPET LAP LENGTH
No. 5 = 2'-11"
No. 6 = 3'-5"



SECTION P-6 / 33

P:/GUE/21494/DESIGN/BRIDGE/SFN/PLAN_SHEETS/combined with roadway/GUE_70_0943A/G070001.BPD.DGN SCALE: 3/8" = 1'-0"

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
JDR	JDR	TAG	2/1/12
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RSD		3001172 RT	

RIGHT PARAPET DETAILS
BRIDGE NO. GUE-70-0943 A
I.R. 70 OVER WILLS CREEK & C.R. 35

GUE-70-6.55

33 / 33

58 / 58