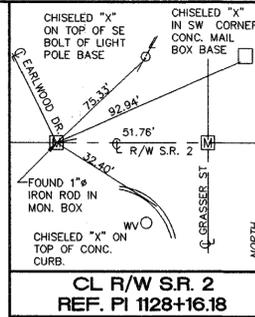


BENCH MARK No. 65

TOP OF TOP STEM OF FIRE HYDRANT
STA. 1125+43, 45' RT.
ELEV. 608.07

BENCH MARK No. 66

CHISELED "I" ON NE CORNER OF A CONCRETE LIGHT POLE BASE
STA. 1121+42, 45' RT.
ELEV. 607.81



PROPOSED WORK

1. REMOVE THE EXISTING REINFORCED CONCRETE DECK AND REPLACE WITH A COMPOSITE REINFORCED CONCRETE DECK.
2. REPLACE THE EXISTING METAL RAILING WITH CONCRETE RAILING.
3. REMOVE AND REPLACE THE ABUTMENT BACKWALLS.
4. PROVIDE ELASTOMERIC STRIP SEALS AT THE ABUTMENTS & NEW END CROSS FRAMES.
5. REMOVE ALL SCUPPERS AND PROVIDE CATCH BASINS OFF THE END OF THE BRIDGE TO COLLECT THE DRAINAGE. REMOVE AND PLUG DRAIN LEADERS AND DRAIN CONDUIT.
6. SEAL CONCRETE SURFACES.
7. PROVIDE VANDAL PROTECTION FENCING.
8. PAINT EXISTING STEEL.
9. REPLACE THE APPROACH SLABS.
10. PROVIDE NEW GUARDRAIL BRIDGE TERMINAL ASSEMBLIES.

CURRENT YEAR ADT (1999) = 32720
DESIGN YEAR ADT (2019) = 44490
DESIGN YEAR ADTT (2019) = 3560

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS ROLLED STEEL BEAM SUPERSTRUCTURE WITH REINFORCED CONCRETE SLAB. SUBSTRUCTURES ARE REINFORCED CONCRETE CAP AND COLUMN PIER AND FULL HEIGHT CANTILEVERED ABUTMENTS.

SPAN: 65'-0"± & 53'-3"± C/C BRG.

ROADWAY: 56'-0"± F/F SIDEWALK CURBS, 5'-2"± SIDEWALKS EACH SIDE

LOADING: CF-400

SKEW: 31°35'22" R.F.

ALIGNMENT: TANGENT

SUPERELEVATION: NONE

WEARING SURFACE: ASPHALT CONCRETE

APPROACH SLABS: 15'-0"± LONG

CROWN: NORMAL

YEAR BUILT: 1956

STRUCTURE FILE NUMBER: 4800397

CONDITION: FAIR

LONGITUDE: 83°29'30" LATITUDE: 40°38'10"

PROPOSED STRUCTURE REHABILITATION

PROPOSED WORK: NEW COMPOSITE REINFORCED CONCRETE DECK SLAB & NEW ABUTMENT BACKWALLS.

ROADWAY: 56'-0" F/F SIDEWALK CURBS, 5'-0" SIDEWALKS EACH SIDE

LOADING: HS20-44 CASE II & ALTERNATE MILITARY LOAD

ALIGNMENT: TANGENT

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLAB: AS-1-81 (25'-0" LONG)

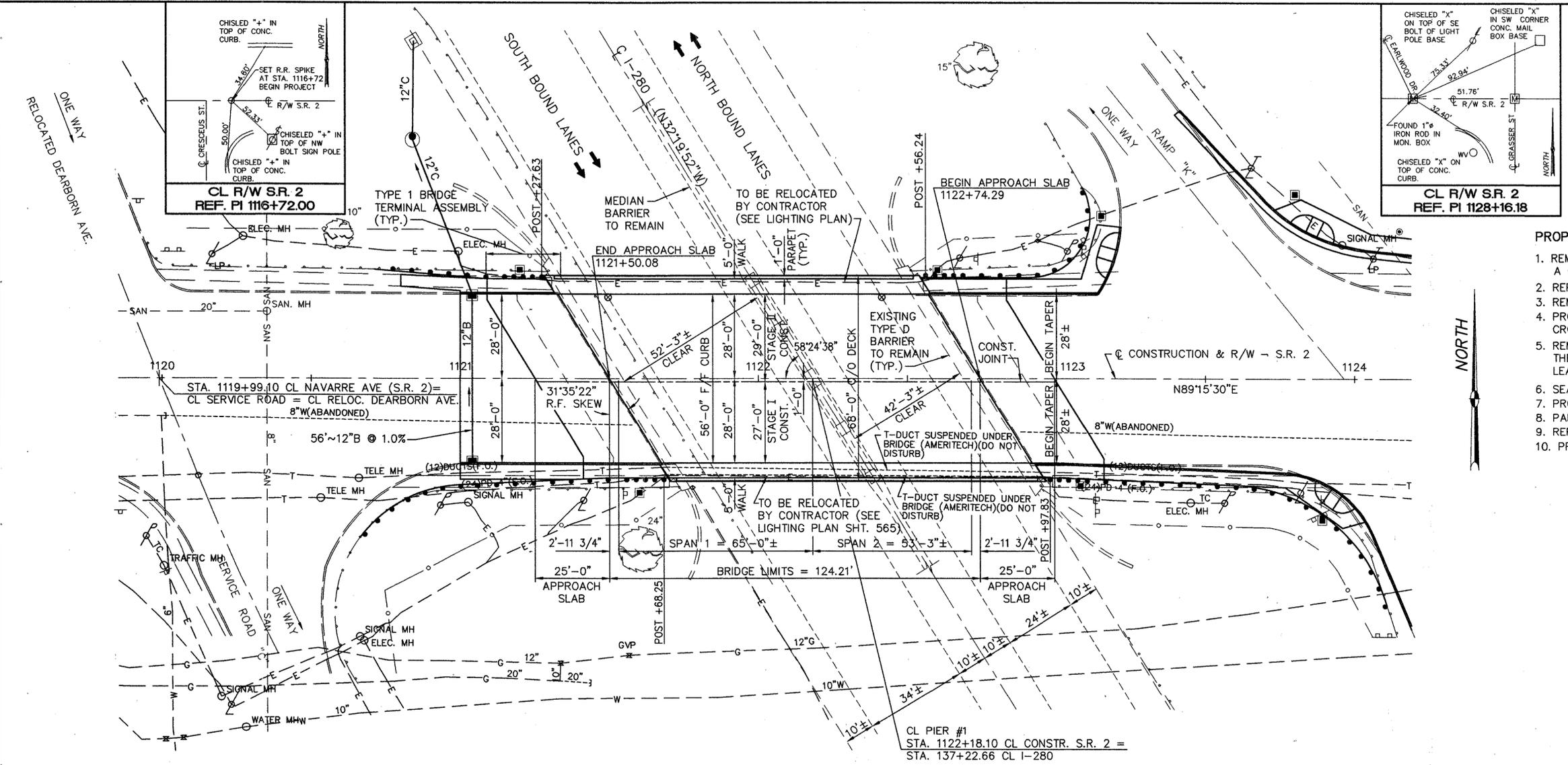
CROWN: 3/16" PER FT.

POGGEMEYER DESIGN GROUP
ARCHITECTS-ENGINEERS-PLANNERS
1168 NORTH MAIN STREET
BOWLING GREEN, OHIO 43402

GENERAL PLAN and ELEVATION

BRIDGE NO. LUC-2-2124
OVER EXISTING I-280
LUCAS COUNTY STA. 1121+50.03 TO STA. 1122+74.33

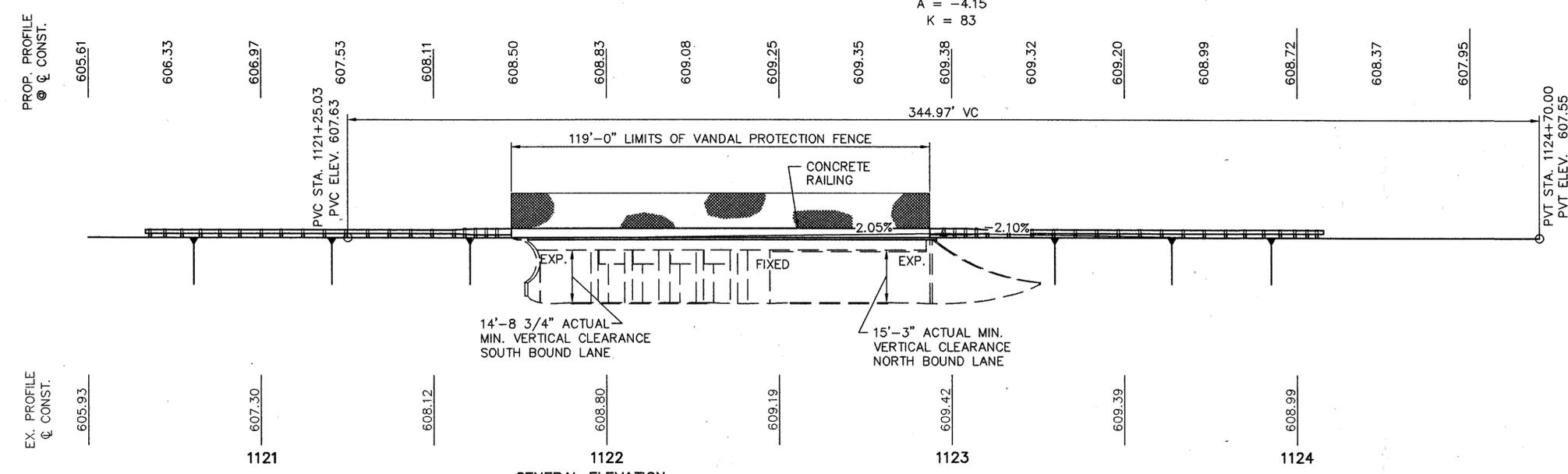
DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED S.A.B. 12-97	REVISED
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GENERAL PLAN

HIGH POINT ELEV = 609.38
HIGH POINT STA = 1122+95.59
PVI STA = 1122+97.52
PVI ELEV = 611.17
A = -4.15
K = 83

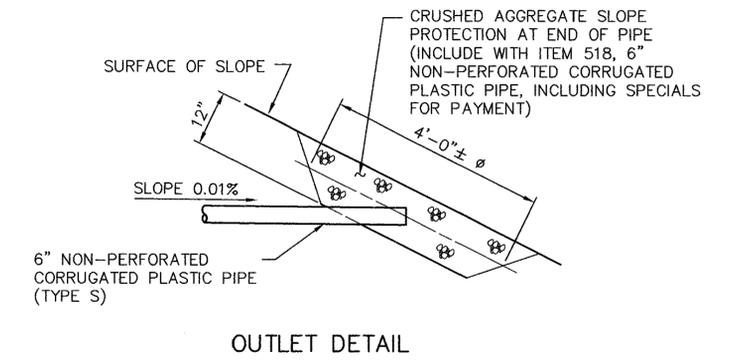
⊙ DENOTES CRITICAL POINT FOR VERTICAL CLEARANCE
STA. 1121+49.6, 27' LT. & STA. 1122+41.4, 27' LT.



GENERAL ELEVATION

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	CALCULATED BY:		JTY	DATE:	
					CHECKED BY:		MEM	Apr-98	
					AS PER PLAN	ABUTMENTS			
					SHEET # OF 11	REAR	FWD.	SUPER	GENERAL
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	3				LUMP
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING					LUMP
503	21101	98	CU YD	UNCLASSIFIED EXCAVATION, AS PER PLAN	3	49	49		
511	31504	310	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE				310	
511	45700	54	CU YD	CLASS C CONCRETE, ABUTMENT		27	27		
512	33000	6	SQ YD	TYPE 2 WATERPROOFING		3	3		
SPECIAL	51267500	940	SQ YD	SEALING OF CONCRETE SURFACES (SEE PROPOSAL NOTE)		270	270	400	
513	21001	10	EACH	TRIMMING OF BEAM END, AS PER PLAN	3			10	
516	11210	160	LIN FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL		80	80		
516	13600	4	SQ FT	1" PREFORMED EXPANSION JOINT FILLER		2	2		
518	21200	40	CU YD	POROUS BACKFILL WITH FILTER FABRIC		20	20		
518	40000	164	LIN FT	6" PERFORATED CORRUGATED PLASTIC PIPE		82	82		
518	40010	48	LIN FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		24	24		
519	11101	20	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	3				20
SPECIAL	60739930	238	LIN FT	VANDAL PROTECTION FENCE, 12 FEET CURVED, COATED FABRIC				238	
815	00050	1584	SQ FT	SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU				1584	
815	00056	1584	SQ FT	FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU				1584	
815	00060	1584	SQ FT	FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU				1584	
815	00066	1584	SQ FT	FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU				1584	
815	00402	LUMP		FIELD PAINTING OF NEW STEEL, SYSTEM OZEU				LUMP	
846	73000	39	SQ YD	TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN				27	12
863	10201	3000	POUND	STRUCTURAL STEEL MEMBERS, MISCELLANEOUS LEVEL FABRICATION, AS PER PLAN	3			3000	
863	20000	2520	EACH	WELDED STUD SHEAR CONNECTORS				2520	



FILE NAME: I:\5032\011\TRAN\BRIDGE\2-2124\EST-QUAN

POGGEMEYER DESIGN GROUP 2 / 11				
ARCHITECTS-ENGINEERS-PLANNERS 1168 NORTH MAIN STREET BOWLING GREEN, OHIO 43402				
ESTIMATED QUANTITIES				
BRIDGE NO. LUC-2-2124 OVER EXISTING I-280				
DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 12-97	REVISED

CALC.
BY J.T.Y.
DATE 12-97
CHECKED
BY M.E.M.
DATE 1-98

LUCAS COUNTY
LUC-2-21.24

OHIO
FHWA
REGION 5

573
712

REFERENCE SHALL BE MADE TO STANDARD DRAWING(S):

AS-1-81 DATED REVISED 9-15-94
EXJ-4-87 DATED REVISED 2-14-97
GSD-1-96 DATED 2-12-97
VPF-1-90 DATED REVISED 3-24-93
GR-3.1M DATED 10-21-97

AND TO SUPPLEMENTAL SPECIFICATION(S):

815 DATED 5-30-96
846 DATED 9-9-97
910 DATED 4-21-97
954 DATED 9-9-97

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, INCLUDING THE 1997 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING: HS20-44, CASE II AND THE ALTERNATE MILITARY LOADING.

DESIGN DATA:

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I.(SUPERSTRUCTURE)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I. (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615, A616, OR A617 GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.

STRUCTURAL STEEL
A36 - YIELD STRENGTH 36,000 P.S.I.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL.

2-1/2" CONCRETE COVER

SEALING OF CONCRETE SURFACES

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

PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

DESCRIPTION: THIS WORK SHALL CONSIST OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS, END CROSS FRAMES AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). CARE SHALL BE TAKEN 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 OF EQUIPMENT IS PROHIBITED.

PROTECTION OF TRAFFIC: PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING SUPERSTRUCTURE, THE CONTRACTOR SHALL SUBMIT HIS PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR, PEDESTRIAN) ADJACENT TO AND/OR UNDER THE STRUCTURE TO THE DIRECTOR FOR APPROVAL. THESE PLANS SHALL INCLUDE PROVISIONS FOR ANY DEVICES AND STRUCTURES THAT MAY BE NECESSARY TO ENSURE SUCH PROTECTION; TEMPORARY VERTICAL CLEARANCES SPECIFIED ON THE PLANS OR IN THE PROPOSAL SHALL BE MAINTAINED AT ALL TIMES EXCEPT AS OTHERWISE APPROVED BY THE DIRECTOR. NO MOVING TRAFFIC WILL BE ALLOWED DIRECTLY UNDER ANY PORTION OF THE SUPERSTRUCTURE WHICH IS UNDERGOING DEMOLITION.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK SHALL BE DRAWN ON THE SURFACE OF DECK. SMALL DIAMETER PILOT HOLES SHALL BE DRILLED 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. DURING CUTTING OF THE DECK SLAB, CARE SHALL BE TAKEN NOT TO DAMAGE STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE.

REMOVAL METHODS: CONCRETE MAY BE REMOVED BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS, EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS ABOVE STEEL MEMBERS, A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS MAY BE USED AT THE APPROVAL OF THE ENGINEER, TO ENSURE ADEQUATE DEPTH CONTROL AND TO PREVENT NICKING OR GOUGING THE PRIMARY STEEL MEMBERS.

DECK REMOVALS: DUE TO THE POSSIBLE PRESENCE OF WELDED ATTACHMENTS TO EXISTING STRUCTURAL STEEL (FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.), CARE SHALL BE TAKEN DURING DECK REMOVAL TO AVOID DAMAGING STRINGERS WHICH ARE TO REMAIN. STRINGERS DAMAGED BY THE CONTRACTOR'S REMOVAL OPERATIONS SHALL, AT NO COST TO THE PROJECT, BE REPLACED OR REPAIRED. PROPOSED REPAIRS, DEVELOPED BY A REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED IN WRITING FOR REVIEW AND APPROVAL BY THE DIRECTOR.

EXTRANEIOUS MEMBERS: EXISTING EXTRANEIOUS MEMBERS (I.E., FINISHING MACHINE AND FORM SUPPORTS, ETC., AND THE SUPPORT FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) ATTACHED BY WELDED CONNECTIONS TO PORTIONS OF THE TOP FLANGES DESIGNATED "TENSION" SHALL BE REMOVED AND THE FLANGE SURFACES GROUND SMOOTH. GRINDING SHALL BE CAREFULLY DONE AND PARALLEL TO THE FLANGES.

LOADING LIMITATIONS: NO PART OF THE STRUCTURE SHALL BE SUBJECTED TO UNIT STRESSES THAT EXCEED 136.5% OF THE ALLOWABLE UNIT STRESSES GIVEN IN THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES DUE EITHER TO DEMOLITION OR ERECTION EQUIPMENT ON OR ACROSS THE STRUCTURE. STRUCTURAL ANALYSIS COMPUTATIONS, BY A REGISTERED PROFESSIONAL ENGINEER, SHOWING THE ALLOWABLE STRESSES AND THE MAXIMUM STRESSES PRODUCED BY THE CONTRACTOR'S METHODS OR EQUIPMENT SHALL BE SUBMITTED TO THE DIRECTOR FOR REVIEW AND APPROVAL AT LEAST TWO WEEKS PRIOR TO THE START OF THE WORK.

PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 202, AND TO THE SATISFACTION OF THE ENGINEER.

ITEM 503. UNCLASSIFIED EXCAVATION, AS PER PLAN:

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE 304 GRANULAR MATERIAL PLACED IN LIFTS NOT TO EXCEED A THICKNESS OF SIX (6) INCHES.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITIES. THE CONTRACTOR AND UTILITIES ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

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 513.02. CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

REPLACEMENT OF EXISTING REINFORCING STEEL: ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT THEIR COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL AND INCLUDED WITH ITEM 511 FOR PAYMENT.

ITEM 863. STRUCTURAL STEEL MEMBERS, MISCELLANEOUS LEVEL FABRICATION, AS PER PLAN STEEL MEMBERS TO BE FABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. THE CONTRACTOR SHALL MAKE NECESSARY MEASUREMENTS AND PREPARE SKETCHES, DRAWINGS, TABLES, ETC. THE ENGINEER SHALL HAVE AUTHORITY AND RESPONSIBILITY FOR ENSURING THAT THE FABRICATED STEEL IS ACCEPTABLE. TECHNICAL ASSISTANCE WILL BE PROVIDED ON REQUEST BY THE BUREAU OF BRIDGES. MILL TEST REPORTS AND SHIPPING DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INCORPORATING STEEL ITEMS INTO THE WORK, AS REQUIRED BY 501.07. AFTER FABRICATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL TO ENSURE THAT THE DRAWINGS DEPICT THE STEEL AS ACTUALLY INCORPORATED INTO THE WORK. THE ENGINEER WILL THEN SEND ONE APPROVED SET TO THE BUREAU OF BRIDGES FOR INFORMATION. PAY WEIGHTS SHALL BE COMPUTED IN COMPLIANCE WITH 513 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUBMITTED TO THE ENGINEER FOR HIS REVIEW AND APPROVAL. THE FABRICATOR SHALL FURNISH A 35 MILLIMETER MICROFILM COPY OF EACH SHOP DRAWING, WHICH SHALL BE MOUNTED ON AN APERTURE CARD AS SPECIFIED IN 501.05.

STEEL MEMBERS INCLUDED IN THIS ITEM INCLUDE END CROSS FRAMES.

INSPECTION OF STRUCTURAL STEEL: THE ENGINEER SHALL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THAT THE ARE FREE OF DEFECTS. THE DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS SHALL NOT BE ERECTED UNTIL AFTER THE ENGINEER HAS COMPLETED THIS INSPECTION. THIS INSPECTION SHALL NOT TAKE PLACE UNTIL AFTER THE TOP FLANGES ARE CLEANED AS SPECIFIED IN 511.08, BUT IT SHALL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE COST ASSOCIATED WITH THIS INSPECTION SHALL BE INCLUDED WITH ITEM 511, SUPERSTRUCTURE CONCRETE FOR PAYMENT.

CONCRETE PARAPETS: AS SOON AS THE CONCRETE SAW CAN BE OPERATED WITHOUT DAMAGING THE FRESHLY PLACED CONCRETE, 1 INCH DEEP CONTROL JOINTS SHALL BE SAWED INTO THE PERIMETER OF THE CONCRETE PARAPET. THE SAW CUT SHALL BE MADE IN THE COMPLETE CIRCUMFERENCE OF THE PARAPET, STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK. THE SAW CUTS SHALL BE PLACED AT A MINIMUM OF 8 FEET AND A MAXIMUM OF 10 FEET CENTERS. THE USE OF AN EDGE GUIDE, FENCE OR JIG IS REQUIRED TO ENSURE THAT THE CUT 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. THE PERIMETER OF THE DEFLECTION CONTROL JOINT SHALL BE SEALED TO A MINIMUM DEPTH OF 1 INCH WITH A CAULKING MATERIAL CONFORMING TO FEDERAL SPECIFICATION TT-S-00227E TO A MINIMUM DEPTH OF 1 INCH.

ITEM 519. PATCHING CONCRETE SURFACES, AS PER PLAN.

A CONTINGENCY QUANTITY OF 20 SQ. FT. FOR PATCHING EXISTING CONCRETE SURFACES WHICH ARE TO REMAIN SHALL BE USED AS DIRECTED BY THE ENGINEER.

ITEM 513. TRIMMING OF BEAM END: THIS WORK SHALL CONSIST OF TRIMMING THE ENDS OF THE STEEL BEAMS AT THE ABUTMENTS TO OBTAIN A NOMINAL CLEARANCE OF 3" FROM THE BACKWALL. ALL TRIMMING OF BEAM ENDS SHALL BE AS DIRECTED BY THE ENGINEER. A CONTINGENCY QUANTITY OF 10 EACH FOR TRIMMING BEAM ENDS SHALL BE USED BY THE ENGINEER.

SUBSTRUCTURE CONCRETE REMOVAL SHALL BE 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, A HAMMER HEAVIER THAN 35 POUNDS, BUT NOT TO EXCEED 90 POUNDS, MAY BE USED AT THE APPROVAL OF THE ENGINEER. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

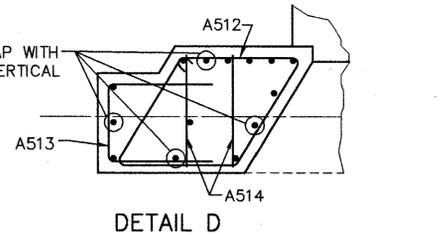
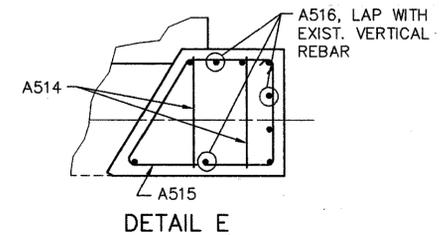
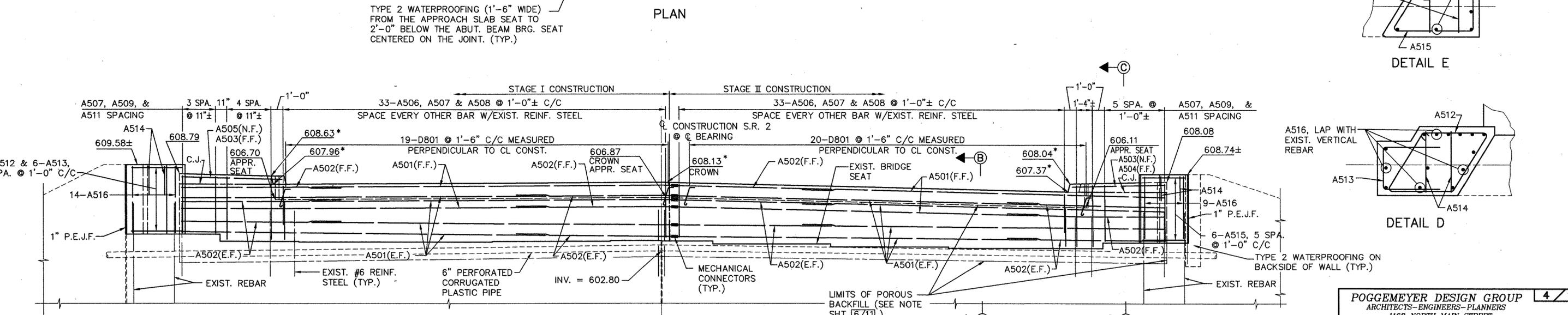
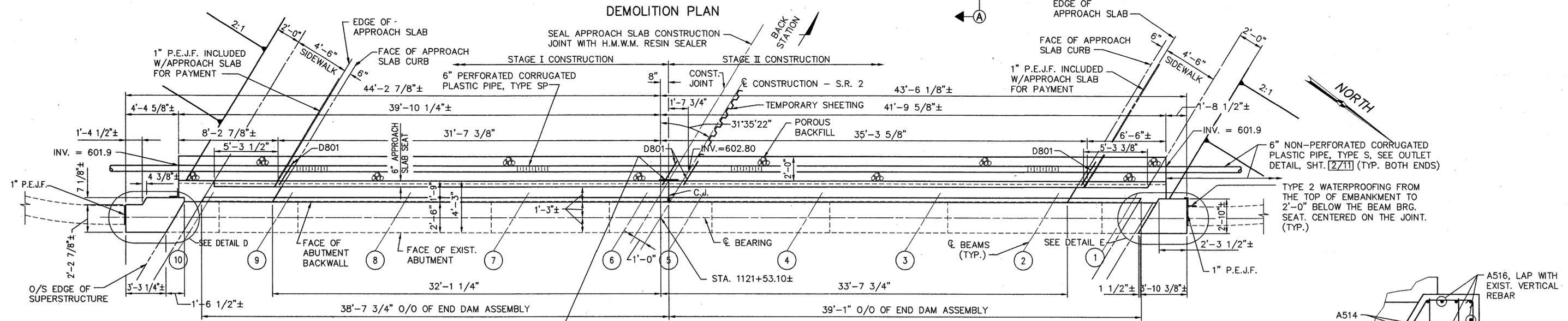
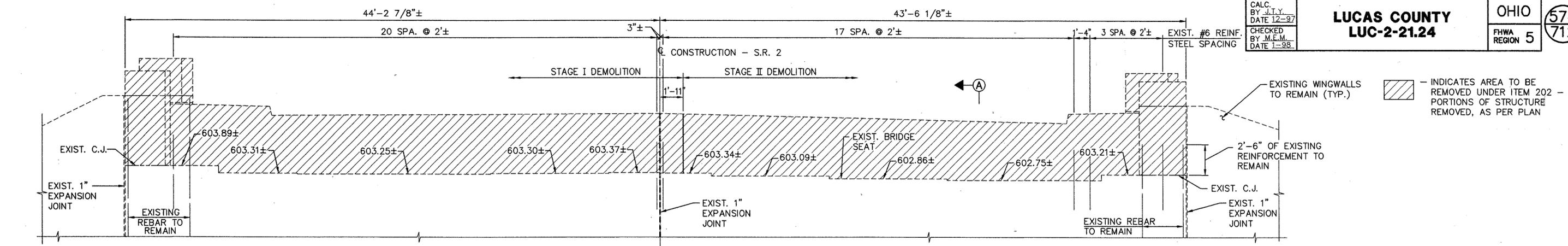
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RAN

POGGEMEYER DESIGN GROUP 3/11 ARCHITECTS-ENGINEERS-PLANNERS 1168 NORTH MAIN STREET BOWLING GREEN, OHIO				
GENERAL NOTES BRIDGE NO. LUC-2-2124 OVER EXISTING I-280				
DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 12-97	REVISED

CALC. BY J.T.Y. DATE 12-97
 CHECKED BY M.E.M. DATE 1-98

LUCAS COUNTY
LUC-2-21.24

OHIO 574
 FHWA REGION 5 712



NOTE: LAP #5 BARS 2'-5" UNLESS OTHERWISE NOTED
 SEE SHEET [6/11] FOR SECTIONS

REINFORCING STEEL: NEW REINFORCING STEEL MAY REQUIRE FIELD CUTTING OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL BE INCLUDED IN 511.

* - ELEVATIONS AT FACE OF BACKWALL
 LEGEND
 N.F. = NEAR FACE
 F.F. = FAR FACE
 E.F. = EACH FACE
 C.J. = CONSTRUCTION JOINT
 P.E.J.F. = PREFORMED EXPANSION JOINT FILLER

POGEMEYER DESIGN GROUP ARCHITECTS-ENGINEERS-PLANNERS
 1168 NORTH MAIN STREET
 BOWLING GREEN, OHIO 43402

REAR ABUTMENT REHABILITATION
 BRIDGE NO. LUC-2-2124
 OVER EXISTING I-280

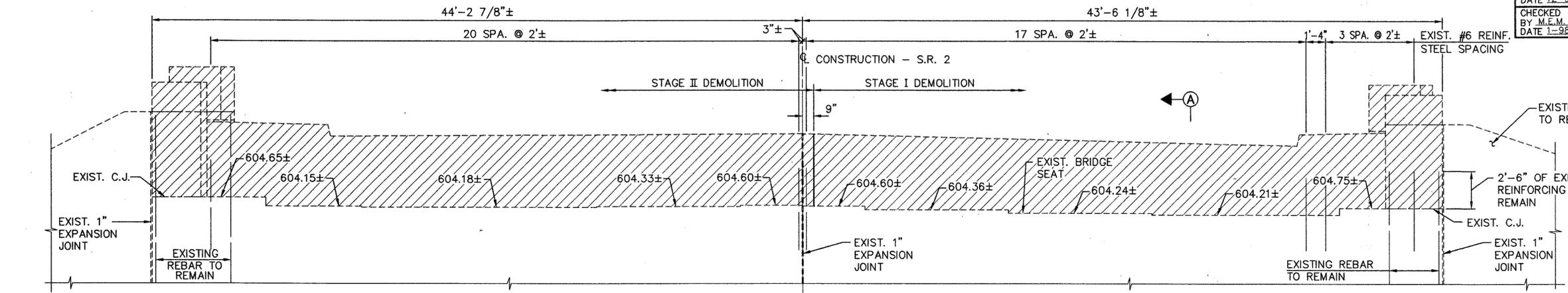
DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED S.A.B. 12-97	REVISED
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CALC. BY J.T.Y. DATE 12-97
 CHECKED BY M.E.M. DATE 1-98

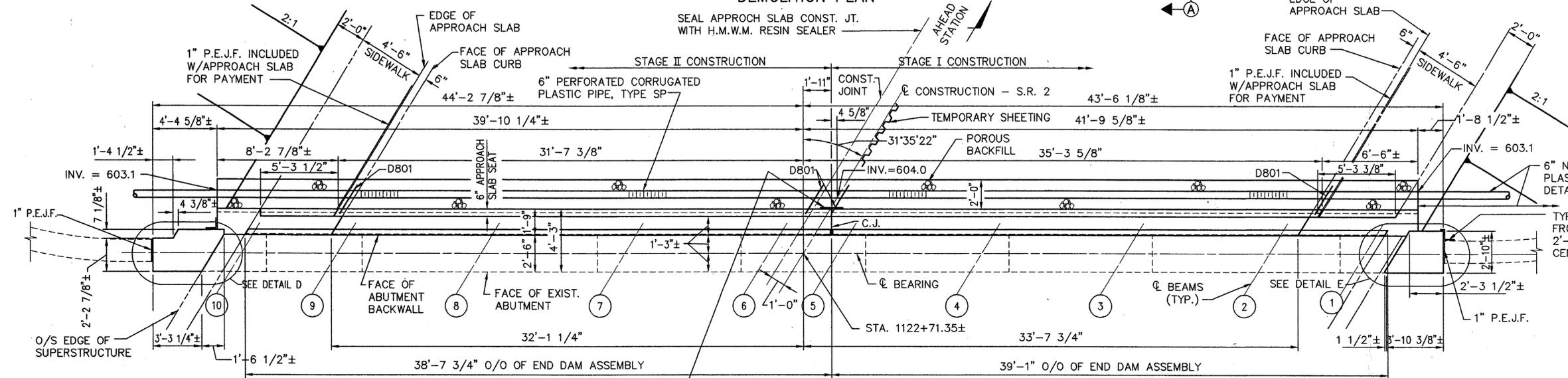
LUCAS COUNTY
 LUC-2-21.24

OHIO
 FHWA REGION 5
 575
 712

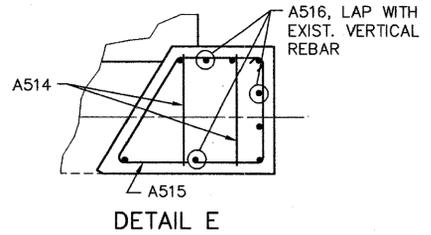
INDICATES AREA TO BE REMOVED UNDER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN



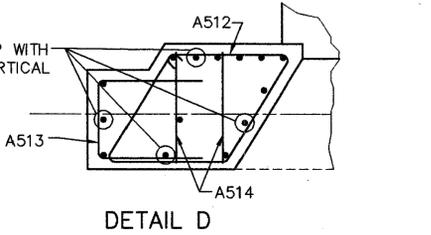
DEMOLITION PLAN



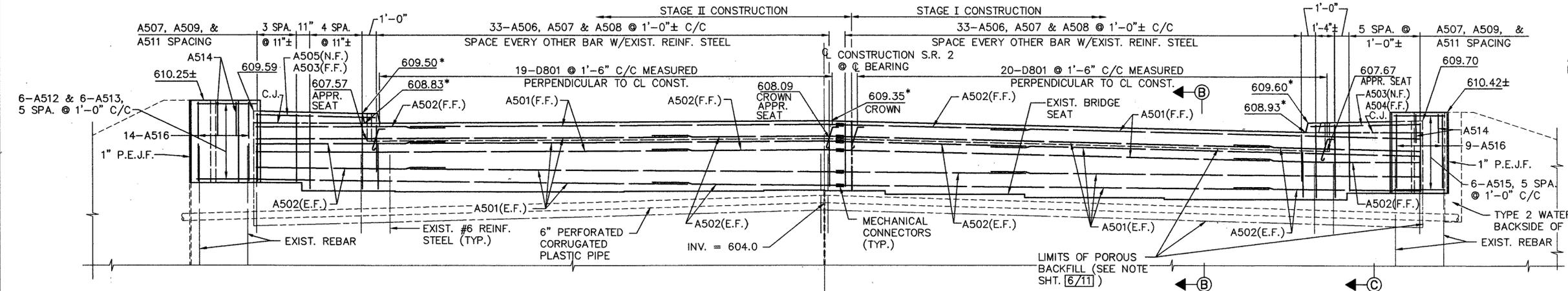
PLAN



DETAIL E



DETAIL D



ELEVATION

NOTE: LAP #5 BARS 2'-5" UNLESS OTHERWISE NOTED

SEE SHEET [6/11] FOR SECTIONS

REINFORCING STEEL: NEW REINFORCING STEEL MAY REQUIRE FIELD CUTTING OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL BE INCLUDED IN 511.

*- ELEVATIONS AT FACE OF BACKWALL

LEGEND
 N.F. = NEAR FACE
 F.F. = FAR FACE
 E.F. = EACH FACE
 C.J. = CONSTRUCTION JOINT
 P.E.J.F. = PREFORMED EXPANSION JOINT FILLER

POGGEMEYER DESIGN GROUP 5/11
 ARCHITECTS-ENGINEERS-PLANNERS
 1168 NORTH MAIN STREET
 BOWLING GREEN, OHIO 43402

FORWARD ABUTMENT REHABILITATION
 BRIDGE NO. LUC-2-2124
 OVER EXISTING I-280

DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 12-97	REVISED
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FILE NAME: I:\5032\011\TRAN\BRIDGE\2124\ABT_FWD

CALC.
BY J.T.Y.
DATE 11-97
CHECKED
BY M.E.M.
DATE 1-98

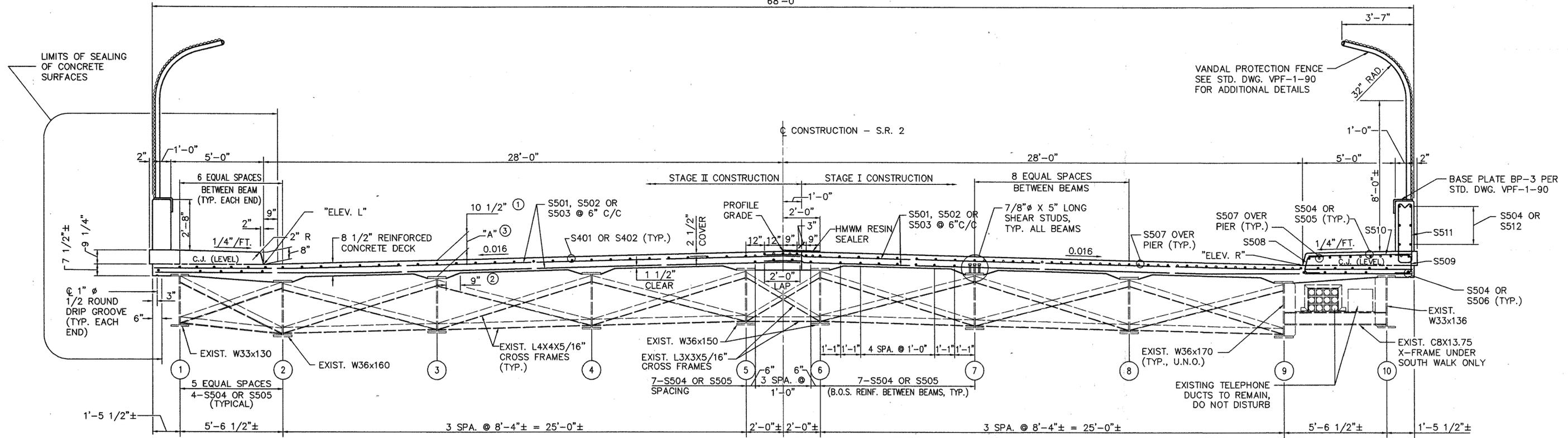
LUCAS COUNTY
LUC-2-21.24

OHIO
FHWA
REGION 5

577
712

- DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE THEORETICAL DESIGN DIMENSION INCLUDING THE DESIGN HAUNCH THICKNESS OF 10 1/2 INCHES. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, MINUS THE DESIGN HAUNCH THICKNESS, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.
- A HAUNCH WIDTH OF 9 INCHES SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 AND 12 INCHES.
- CONTRACTOR TO VERIFY BEAM PROFILES WITH PROFILE GRADE TO VERIFY DECK SLAB DEPTH (DIMENSION "A"). THE TABLE ON THIS SHEET IS PROVIDED TO RECORD DIMENSION "A". IF DIMENSION "A" IS LESS THAN 8 1/2", THE ENGINEER SHALL PROVIDE THE CONTRACTOR WITH A ADJUSTED PROFILE.

68'-0"



TRANSVERSE SECTION

DIMENSION "A"

BEAM #1	TOP OF BEAM	R. ABUT.	1/2 PT.	CL PIER #1	1/2 PT.	F. ABUT
BEAM #1	TOP OF BEAM					
BEAM #2	TOP OF BEAM					
BEAM #3	TOP OF BEAM					
BEAM #4	TOP OF BEAM					
BEAM #5	TOP OF BEAM					
BEAM #6	TOP OF BEAM					
BEAM #7	TOP OF BEAM					
BEAM #8	TOP OF BEAM					
BEAM #9	TOP OF BEAM					
BEAM #10	TOP OF BEAM					

SCREED TABLE BEFORE PLACEMENT OF CONCRETE

	R. ABUT.	1/4 PT.	1/2 PT.	3/4 PT.	CL PIER #1	1/4 PT.	1/2 PT.	3/4 PT.	F. ABUT
BEAM #1	607.27	607.62	607.90	608.11	608.29	608.44	608.57	608.67	608.74
BEAM #2	607.40	607.74	608.01	608.22	608.39	608.54	608.67	608.76	608.83
BEAM #3	607.43	607.76	608.04	608.25	608.42	608.56	608.69	608.78	608.85
BEAM #4	607.66	607.98	608.25	608.45	608.61	608.74	608.86	608.95	609.01
BEAM #5	607.89	608.20	608.45	608.64	608.79	608.92	609.03	609.11	609.16
BEAM #6	608.11	608.41	608.66	608.84	608.98	609.09	609.20	609.27	609.31
BEAM #7	608.16	608.46	608.71	608.88	609.02	609.13	609.24	609.31	609.35
BEAM #8	608.15	608.45	608.69	608.87	609.00	609.11	609.21	609.28	609.32
BEAM #9	608.10	608.39	608.62	608.79	608.91	609.02	609.11	609.17	609.20
BEAM #10	608.05	608.33	608.55	608.71	608.82	608.92	609.00	609.05	609.07
CURB LINE - "ELEV. L"	608.00	608.27	608.48	608.62	608.73	608.81	608.89	608.93	608.95
CURB LINE - "ELEV. R"	607.99	608.26	608.47	608.61	608.72	608.80	608.88	608.92	608.93
CL OF CONTS. & PROFILE	607.96	608.22	608.42	608.56	608.66	608.74	608.81	608.85	608.86

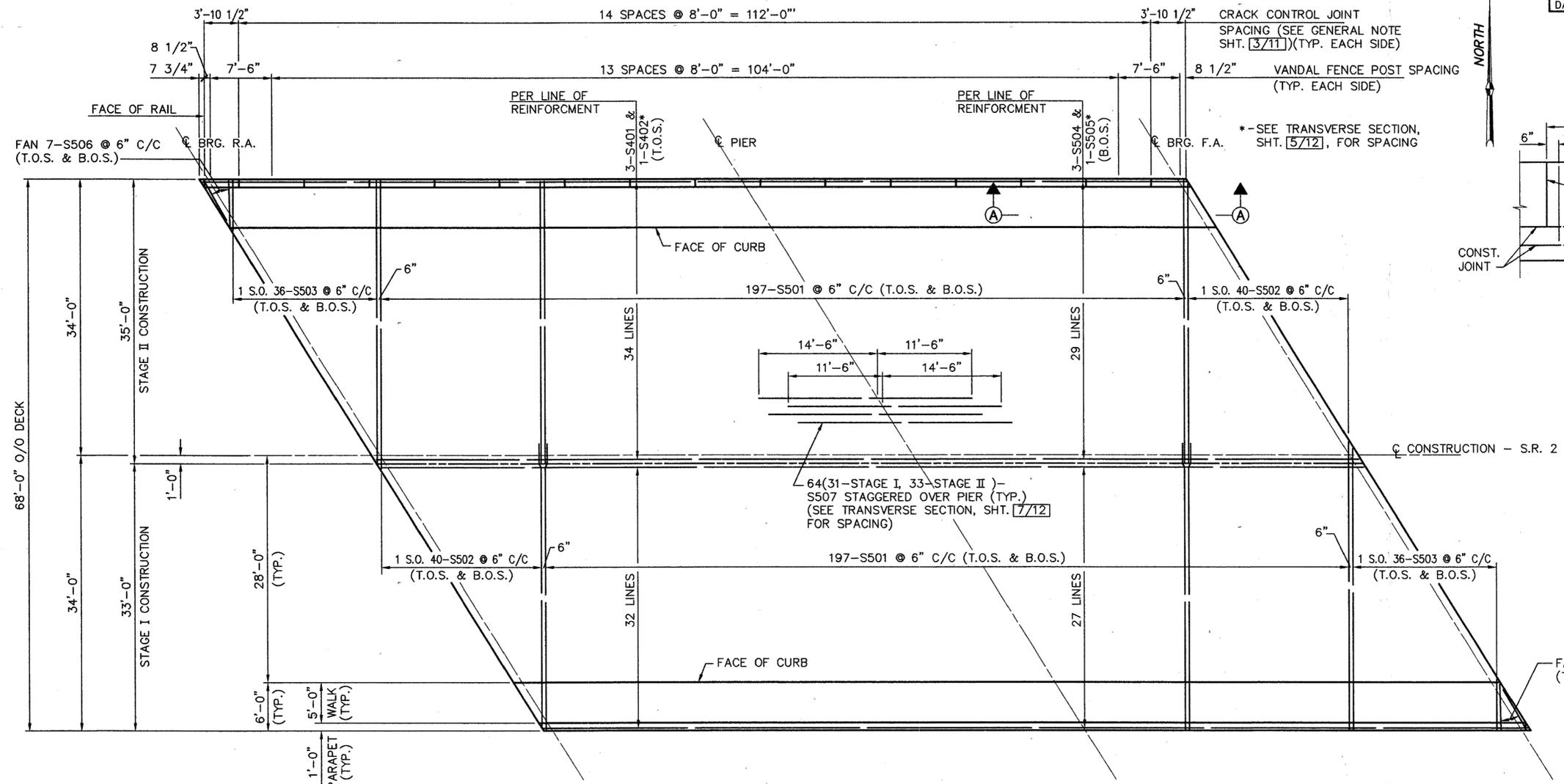
SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

POGGEMEYER DESIGN GROUP ARCHITECTS-ENGINEERS-PLANNERS 1168 NORTH MAIN STREET BOWLING GREEN, OHIO 43402

SUPERSTRUCTURE SECTION
BRIDGE NO. LUC-2-2124
OVER EXISTING I-280

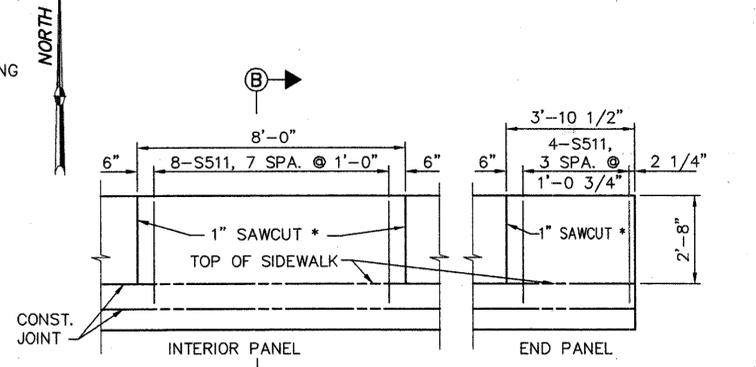
DESIGNED J.T.Y. DRAWN RAN CHECKED M.E.M. REVIEWED G.A.B. 11-97 REVISED

FILE NAME: I:\5032\011\TRAN\BRIDGE\2124\SUPERSCCT



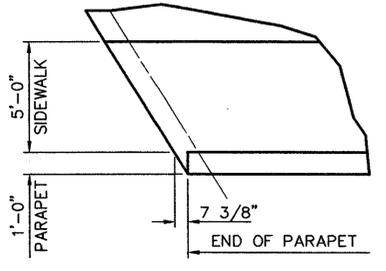
DECK SLAB REINFORCING PLAN

NOTE:
LAP #4 BARS 1'-11"
LAP #5 BARS 2'-5"
UNLESS OTHERWISE NOTED
S.O. = SERIES OF

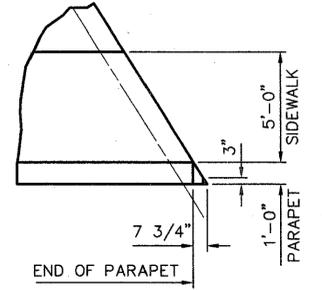


RAILING ELEVATION A-A
(HORIZONTAL REINFORCING NOT SHOWN)

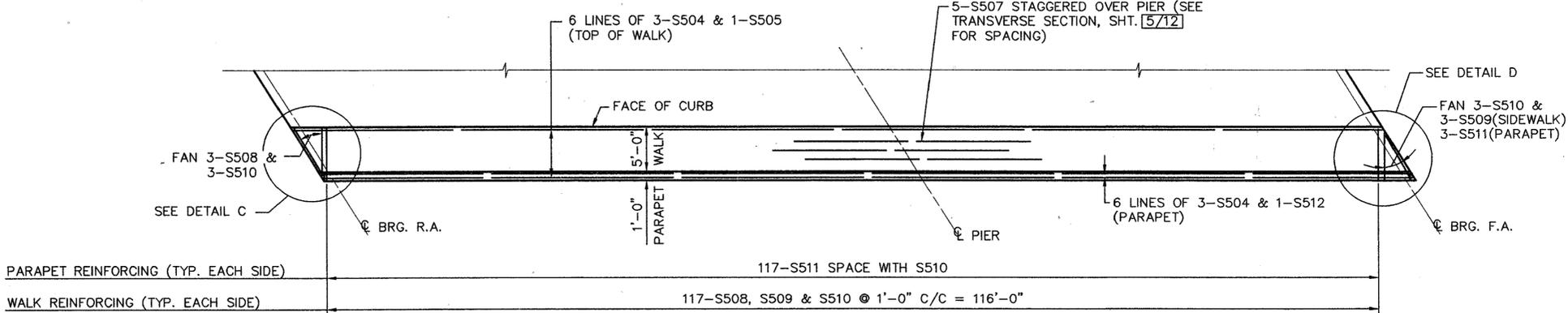
SECTION B-B
(SECTION THRU SAWCUT)



DETAIL C



DETAIL D



SIDEWALK REINFORCING PLAN

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1168 NORTH MAIN STREET
BOWLING GREEN, OHIO 43402

SUPERSTRUCTURE PLAN
BRIDGE NO. LUC-2-2124
OVER EXISTING I-280

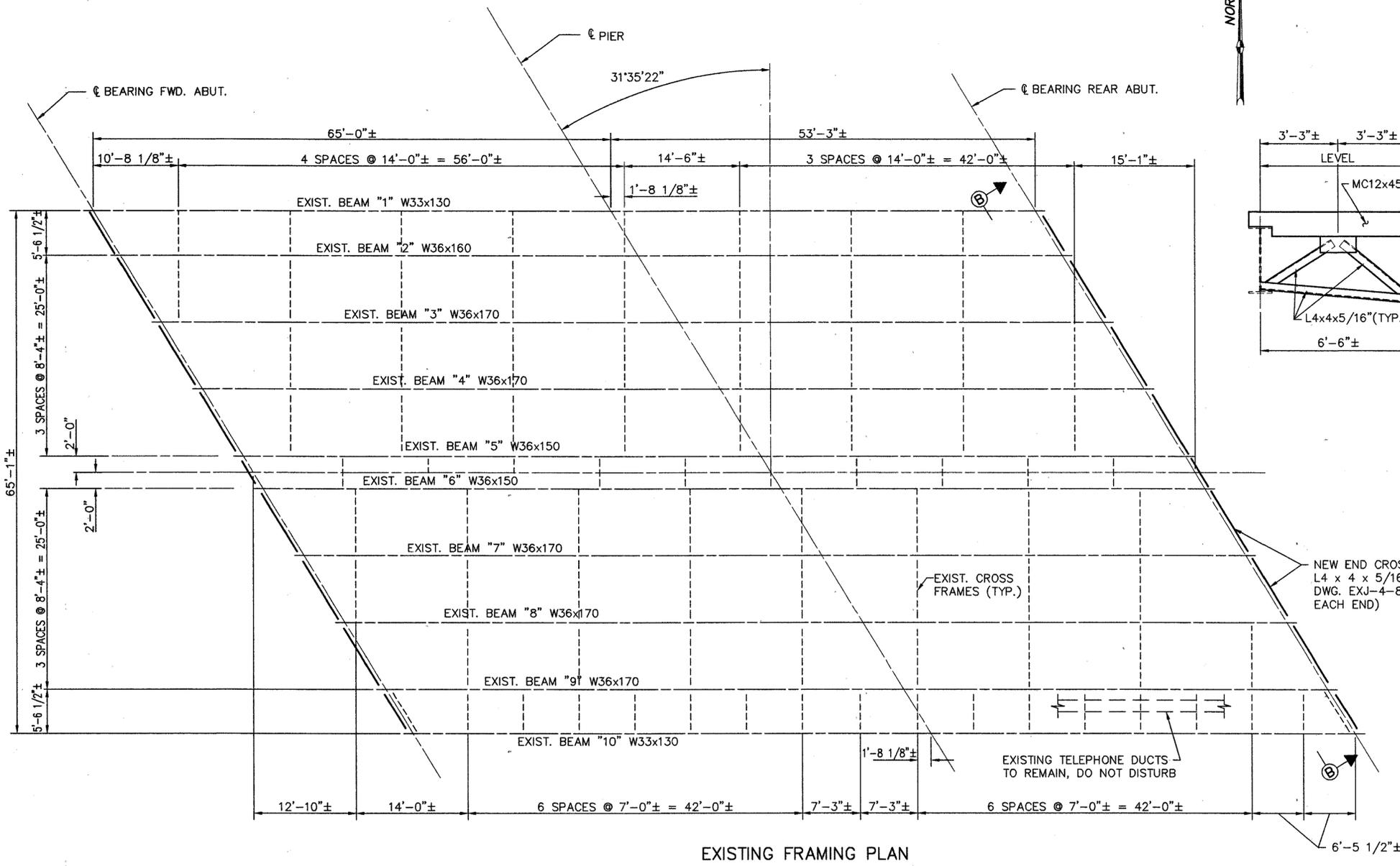
DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 1-98	REVISED
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FILE NAME: I:\5032\011\TRAN BRIDGE\2124\SD1

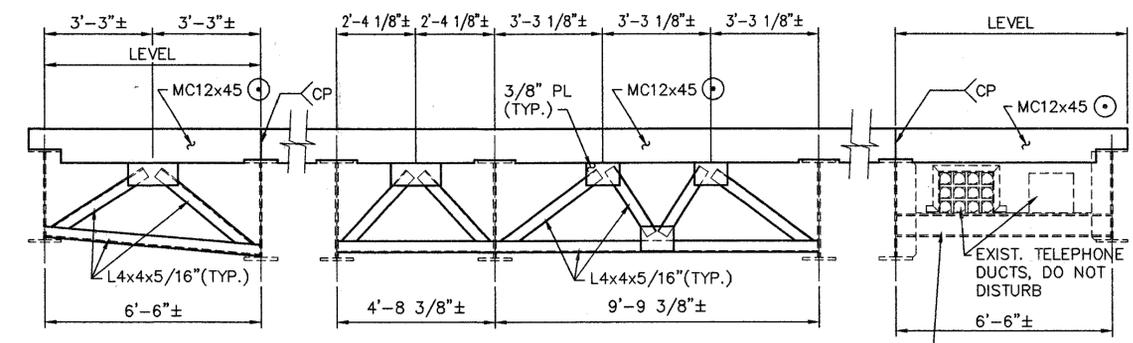
CALC.
BY J.T.Y.
DATE 12-97
CHECKED
BY G.A.B.
DATE 1-98

LUAS COUNTY
LUC-2-21.24

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FHWA
REGION 5
579
712



EXISTING FRAMING PLAN

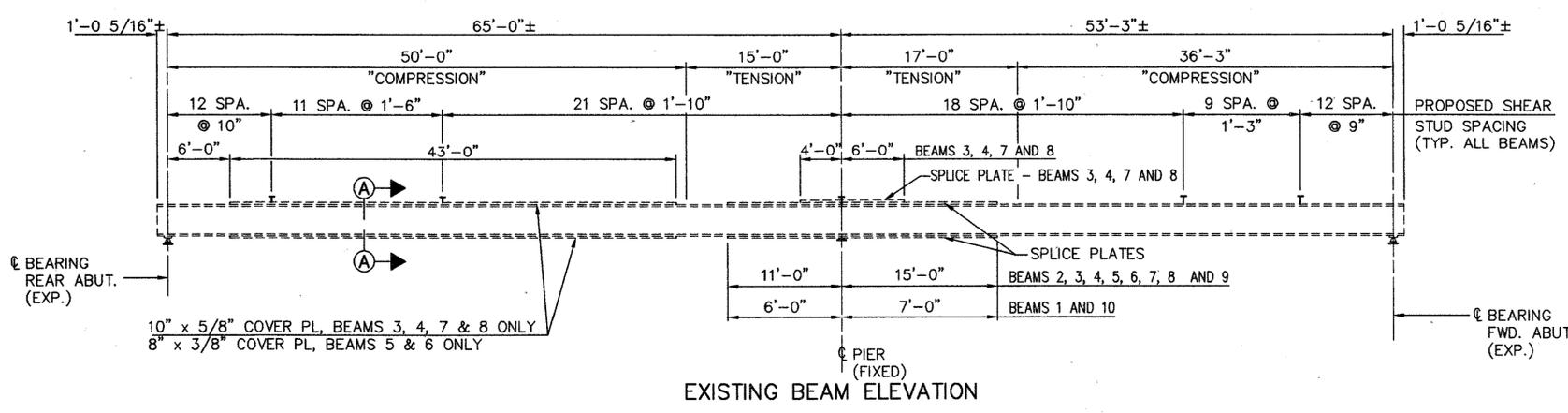


SECTION B-B
(END CROSS FRAME)

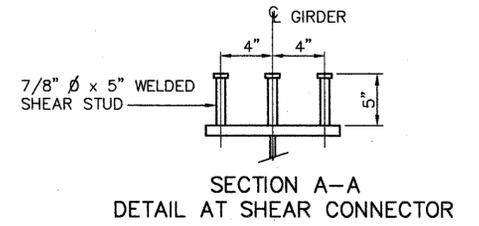
SEE STD. DWG. EXJ-4-87 AND
GSD-1-96 FOR ADDITIONAL DETAILS
⊙ INCLUDED WITH ITEM 516, STRUCTURAL
EXPANSION JOINT FOR PAYMENT

NEW END CROSS FRAMES,
L4 x 4 x 5/16'S PER STD.
DWG. EXJ-4-87 (TYP.)
EACH END

WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE
MAY BE MADE TO AREAS OF THE FACIA STRINGER FLANGES DESIGNATED
"COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED
"TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER
THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT
SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.



EXISTING BEAM ELEVATION



SECTION A-A
DETAIL AT SHEAR CONNECTOR

POGEMEYER DESIGN GROUP 9/11
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BOWLING GREEN, OHIO 43402

**SUPERSTRUCTURE
DETAILS**

BRIDGE NO. LUC-2-2124
OVER EXISTING I-280

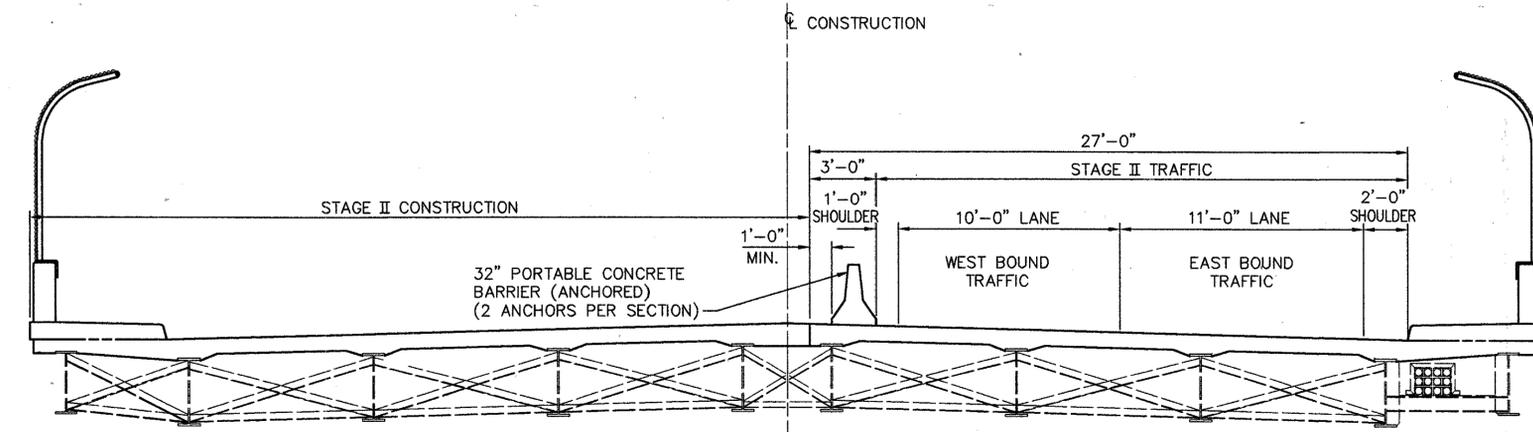
DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 12-97	REVISED
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FILE NAME: I:\5032\011\TRAIN\BRIDGE\2-2124\SD2

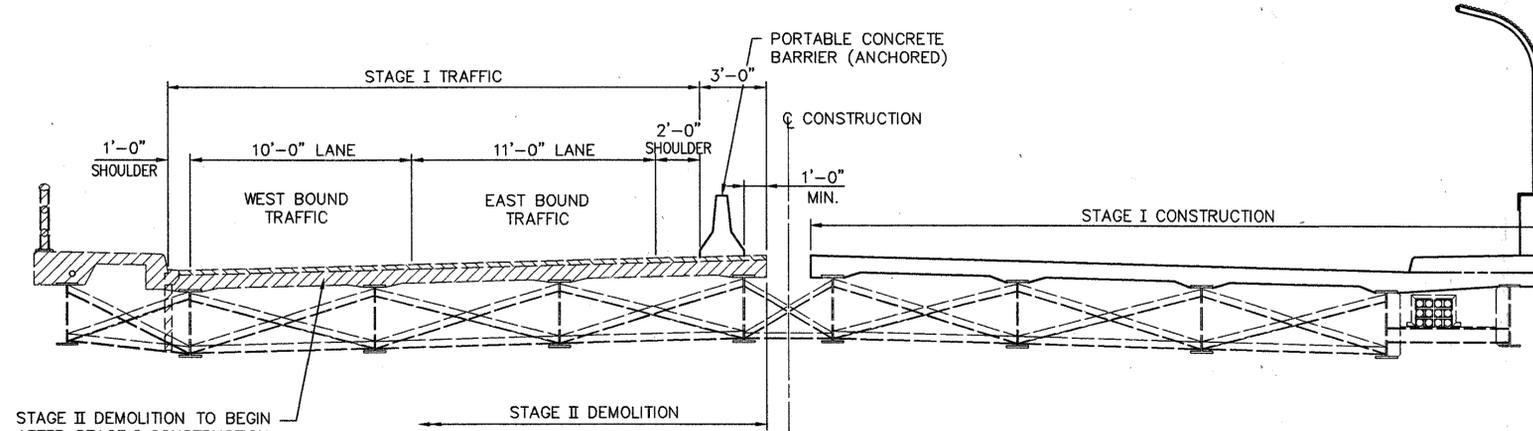
CALC.
BY J.T.Y.
DATE 11-97
CHECKED
BY M.E.M.
DATE 1-98

LUCAS COUNTY
LUC-2-21.24

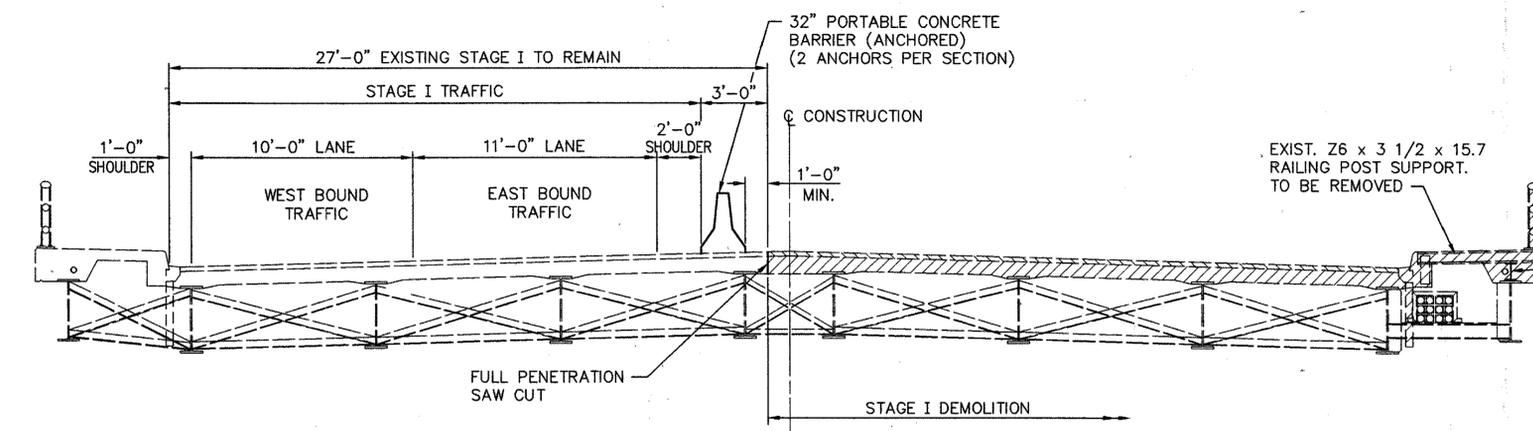
OHIO
FHWA
REGION 5
580
712



STAGE II CONSTRUCTION



STAGE I CONSTRUCTION
STAGE II DEMOLITION



STAGE I DEMOLITION

— INDICATES AREA TO BE REMOVED
UNDER ITEM 202 - PORTIONS OF
STRUCTURE REMOVED, AS PER PLAN

FILE NAME: I:\5032\011\TRAN\BRIDGE\2-2124\STAGE

POGEMEYER DESIGN GROUP 10/11
ARCHITECTS-ENGINEERS-PLANNERS
1168 NORTH MAIN STREET
BOWLING GREEN, OHIO 43402

STAGED CONSTRUCTION
SEQUENCE
BRIDGE NO. LUC-2-2124
OVER EXISTING I-280

DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 11-97	REVISED
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CALC.
BY J.T.Y.
DATE 12-97
CHECKED
BY G.A.B.
DATE 1-98

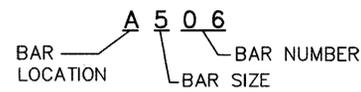
LUCAS COUNTY
LUC-2-21.24

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FHWA
REGION 5

581
712

MARK	TOTAL	SUPER	ABUTMENTS		LENGTH	TYPE	A	B	C	D	E	INCR
			REAR	FWD.								
A501	40		20	20	30-0	S	30-0					
A502	40		20	20	13-1	S	13-1					
A503	4		2	2	7-9	S	7-9					
A504	2		1	1	6-2	S	6-2					
A505	2		1	1	7-4	S	7-4					
A506	132		66	66	6-0	S	3-2	1-5	0-9	0-8		
A507	166		83	83	3-2	S	3-2					
A508	132		66	66	6-2	1	2-9	0-11	2-9			
A509	34		17	17	8-0	S	3-11	1-5	2-0	0-8		
A510	NOT USED											
A511	34		17	17	5-6	1	2-2	0-11	2-2			
A512	12		6	6	11-5	14	2-6	2-9	0-7 3/8			
A513	12		6	6	4-8	1	1-6	1-11	1-6			
A514	8		4	4	7-1	1	2-5	2-6	2-5			
A515	12		6	6	10-6	11	0-7 3/8	2-2	2-6			
A516	46		23	23	5-4	S	5-4					
D801	78		39	39	4-11	12	2-7	1-0				
S401	198	198			40-0	S	40-0					
S402	66	66			5-9	S	5-9					
S501	394	394			34-10	S	34-10					
S502	2	2			2-7 3/4	S	2-7 3/4					
S503	SER. OF	SER. OF			TO		TO					0-9 3/4
S504	40	40			34-4	S	34-4					
S505	2	2			6-2 1/4	S	6-2 1/4					
S506	SER. OF	SER. OF			TO		TO					0-9 3/4
S507	36	36			34-7 1/2	S	34-7 1/2					
S508	240	240			40-0	S	40-0					
S509	68	68			7-3	S	7-3					
S510	14	14			5-8	S	5-8					
S511	64	64			26-0	S	26-0					
S512	240	240			2-3	4	0-10	0-10	0-2	0-10		
S513	240	240			2-4	1	0-10	0-11	0-10			
S514	246	246			5-6	S	5-6					
S515	240	240			7-10	6	3-3	0-8				
S516	12	12			10-6	S	10-6					

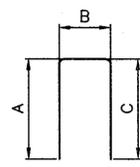
BAR LEGEND



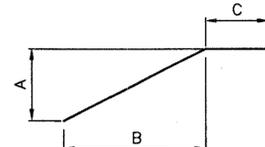
- A - ABUTMENT
- DS - DRILLED SHAFT
- P - PIER
- S - SUPERSTRUCTURE
- D - APPROACH SLAB
- SP - SPIRAL BAR

BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. "R" INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

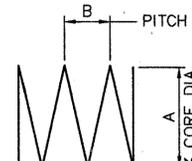
ALL REINFORCING STEEL TO BE EPOXY COATED.



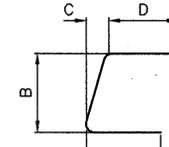
TYPE 1



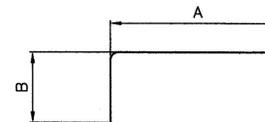
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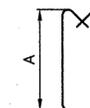
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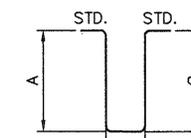
TYPE 4



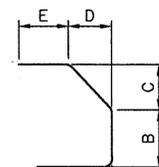
TYPE 5



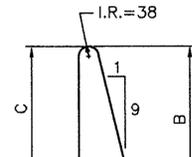
TYPE 6



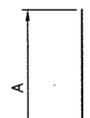
TYPE 7



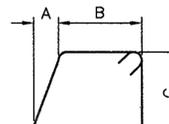
TYPE 8



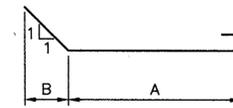
TYPE 9



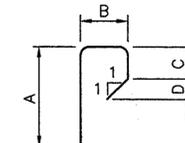
TYPE 10



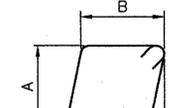
TYPE 11



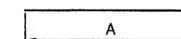
TYPE 12



TYPE 13



TYPE 14



TYPE S

POGGEMEYER DESIGN GROUP 11/11
ARCHITECTS-ENGINEERS-PLANNERS
1168 NORTH MAIN STREET
BOWLING GREEN, OHIO 43402

REINFORCING STEEL LIST

BRIDGE NO. LUC-2-2124
OVER EXISTING I-280

DESIGNED J.T.Y.	DRAWN RAN	CHECKED M.E.M.	REVIEWED G.A.B. 12-97	REVISED
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