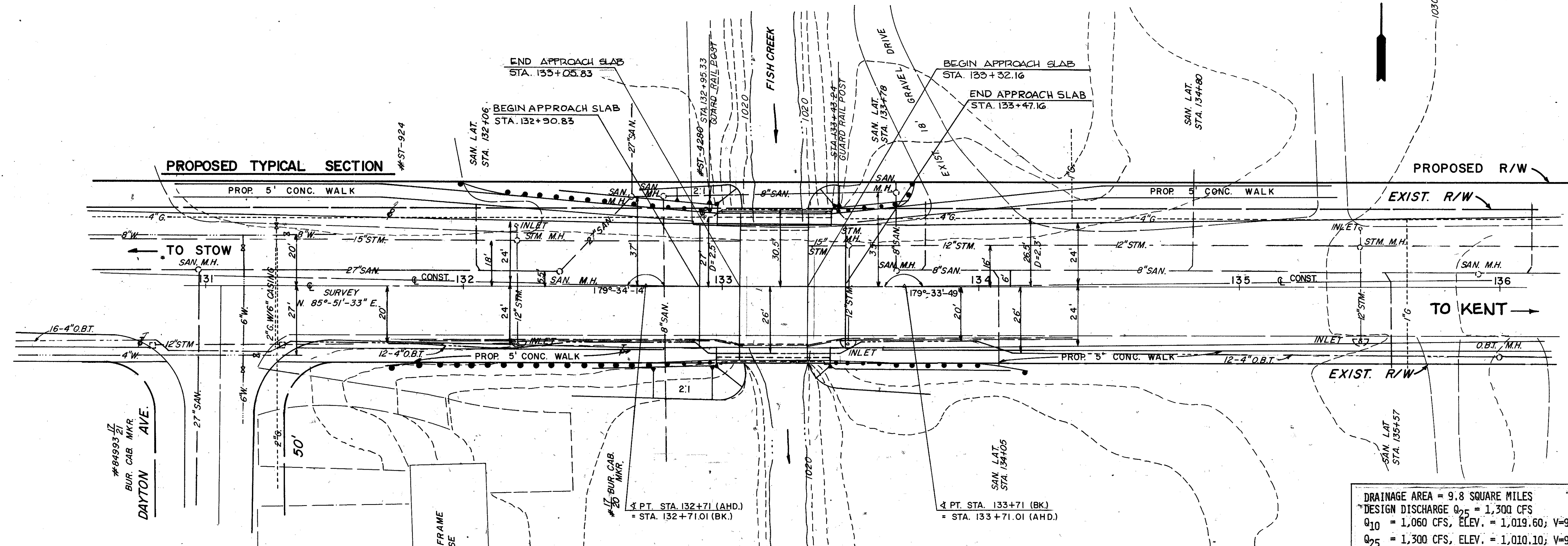


F. H. W. A. REGION	STATE	PROJECT
5	OHIO	

77
105

SUM-59-8.64
SUMMIT COUNTY



DRAINAGE AREA = 9.8 SQUARE MILES

DESIGN DISCHARGE $Q_{25} = 1,300$ CFS

$Q_{10} = 1,060$ CFS, ELEV. = 1,019.60; $V = 9.0$ FT./SEC.

$Q_{25} = 1,300$ CFS, ELEV. = 1,010.10; $V = 9.8$ FT./SEC.

$Q_{50} = 1,530$ CFS, ELEV. = 1,020.60; $V = 10.8$ FT./SEC.

$Q_{100} = 1,720$ CFS, ELEV. = 1,021.00; $V = 11.3$ FT./SEC.

PROPOSED STRUCTURE

TYPE: PRESTRESSED CONCRETE BOX BEAMS ON REHABILITATED ABUTMENTS.

SPAN: 24'-0" FACE TO FACE OF ABUTMENTS

ROADWAY: 48'-0" FACE TO FACE OF CURBS W/2'-5'-0" WIDE SIDEWALKS.

LOADINGS: HS 20-44 AND ALT. MILITARY LOADING

SKEW: NONE

WEARING SURFACE: 2 1/2" MIN. ASPHALT CONCRETE.

APPROACH SLABS: 15'-0" LONG (AS-1-81).

ALIGNMENT: TANGENT

UTILITIES: 12-4" DUCTS IN STEEL BOX GIRDER; 4" - ϕ GAS MAIN. (NORTH SIDE)

EXISTING STRUCTURE

FILE NO.

TYPE: REINFORCED CONCRETE BEAM BRIDGE

SPAN LENGTH: SINGLE SPAN - 24'-0" FACE TO FACE OF ABUTMENTS

ROADWAY: 48'-0" FACE TO FACE OF CURBS; 5' SIDEWALKS

LOAD CAPACITY: H-15

ALIGNMENT: TANGENT

SKEW: NONE

BUILT: 1920 AND 1932

UTILITIES: 12-4" DUCTS IN STEEL BOX GIRDER; 4" - ϕ GAS MAIN

JOHN DAVID JONES & ASSOC., INC. 1/7
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

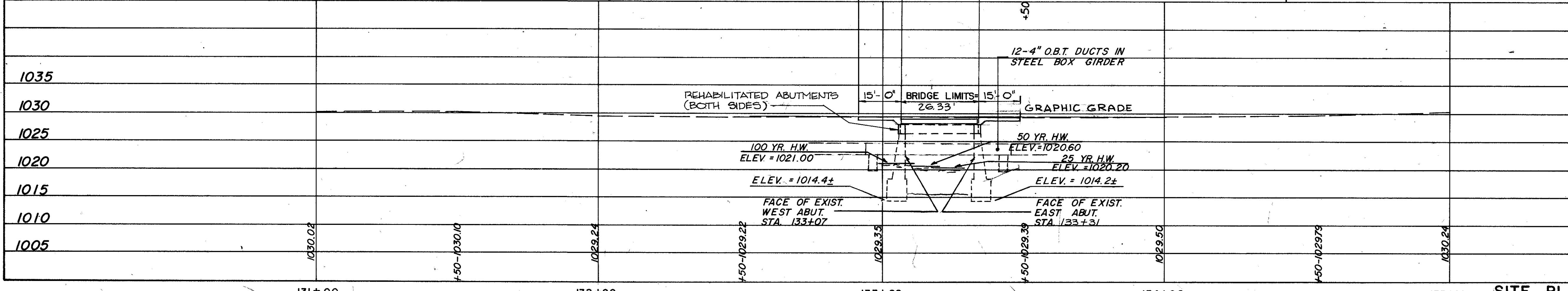
SITE PLAN

BRIDGE NO. SUM-59-09 27

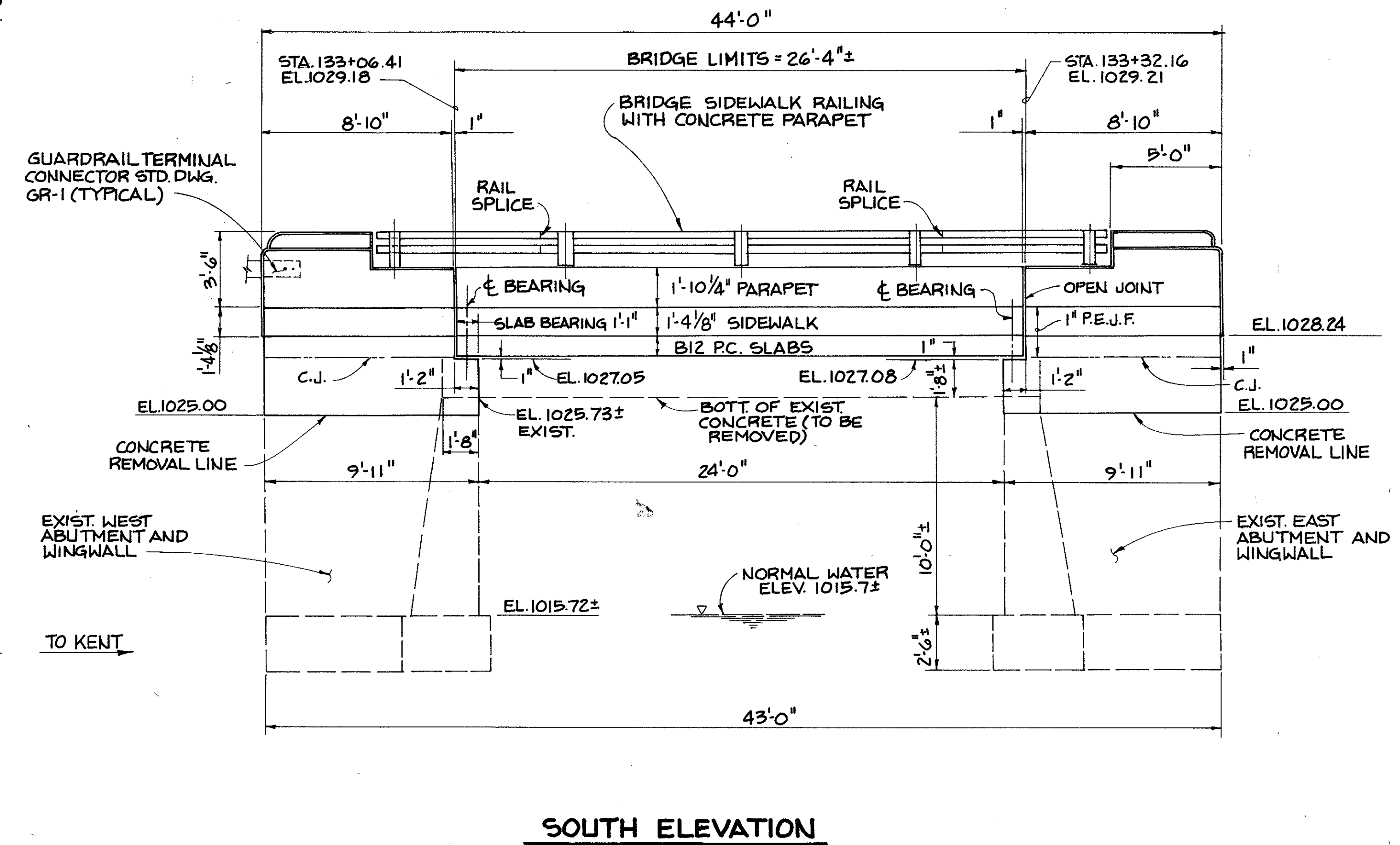
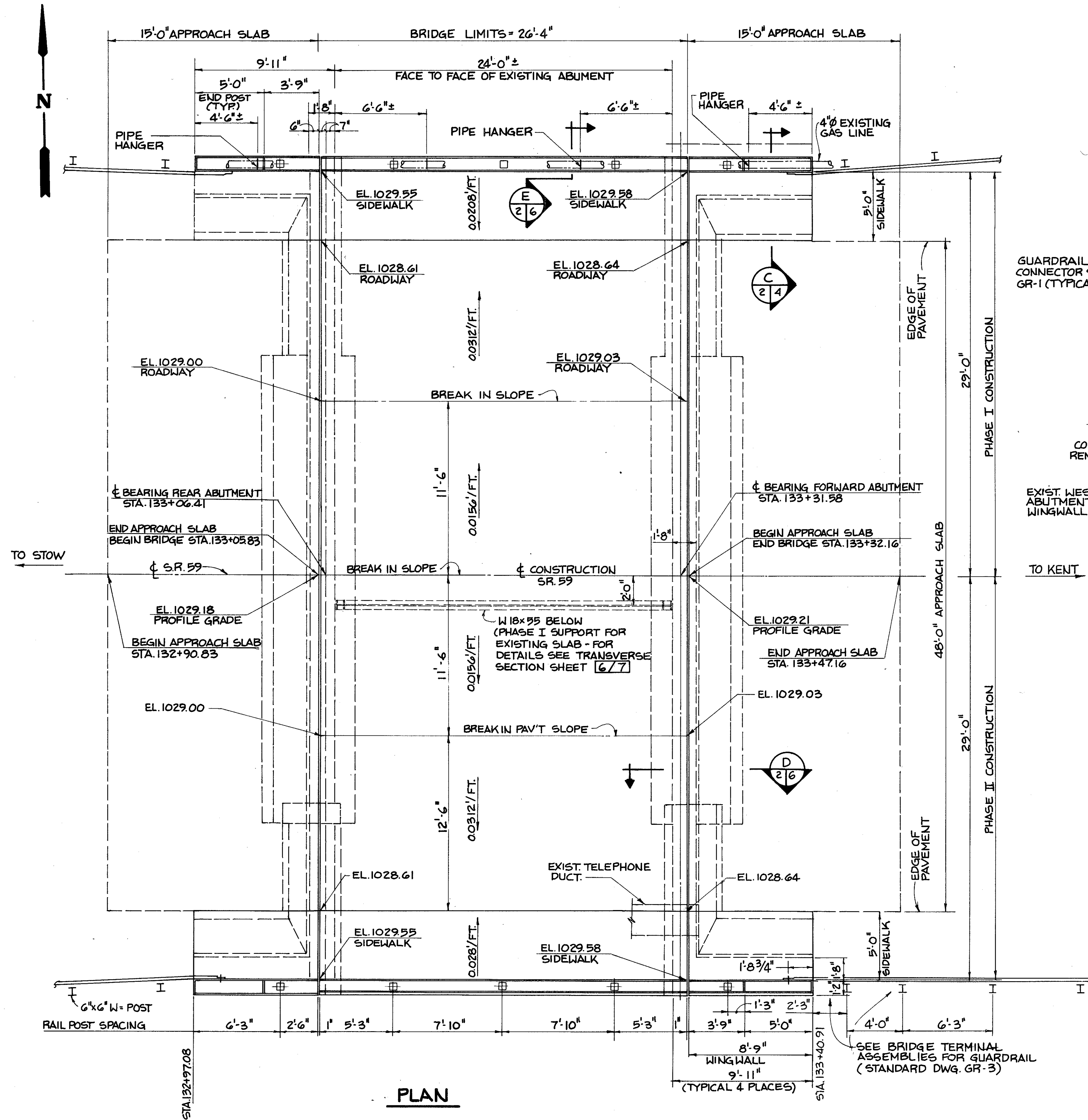
OVER FISH CREEK

STA. 131+00 TO STA. 135+00

PRESENT SURVEYED	TOPOGRAPHY DRAWN	PROPOSED DESIGNED	WORK DRAWN	CHECKED	REVIEWED
		R.L.A.	A.A.	P.A.K.	T.M.D.



SITE PLAN STA. 131+00 TO STA. 135+00



JOHN DAVID JONES & ASSOC., INC. 2/7					
2162 FRONT STREET CUYAHOGA FALLS, OHIO 44221 ENGINEERS ARCHITECTS PLANNERS					
GENERAL PLAN & ELEVATION					
BRIDGE No. SUM-59-09 27 OVER FISH CREEK					
DESIGNED	DRAWN	TRACED	CHECKER	REVIEWED	DATE
GFD	EMB		PAK	12/4/87	

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUT- MENTS	SUPER STRUC.	GENERAL
202	LUMP	LUMP SUM	PORTIONS OF STRUCTURE REMOVED			LUMP
403	6	CU.YD.	ASPHALT CONCRETE (AC-20)		6	
404	8	CU.YD.	ASPHALT CONCRETE (AC-20)		8	
509	4,254	LB.	REINFORCING STEEL, GRADE 60	4,254		
510	212	EACH	DOWEL HOLES	212		
511	21	CU.YD.	CLASS C CONCRETE, ABUTMENT CAPS AND WINGWALLS ABOVE FOOTINGS	21		
511	31	CU.YD.	CLASS S CONCRETE, SUPERSTRUCTURE		31	
512	140	SQ.YD.	TYPE D WATERPROOFING		140	
515	6	EACH	PRESTRESSED CONCRETE BRIDGE MEMBERS (B12-36) (SEE PROPOSAL NOTE)		6	
515	10	EACH	PRESTRESSED CONCRETE BRIDGE MEMBERS (B12-48)(SEE PROPOSAL NOTE)		10	
516	40	EACH	1"x6"x12" ELASTOMERIC BEARING PADS (60 DUROMETER)			40
516	24	EACH	1"x5"x12" ELASTOMERIC BEARING PADS (60 DUROMETER)			24
516	77.83	SQ.FT.	1" PREFORMED EXPANSION JOINT FILLER			77.83
517	87.33	LIN.FT.	RAILING (CONCRETE PARAPET WITH DOUBLE PIPE RAILING)			87.33
518	21	CU.YD.	POROUS BACKFILL, AS PER PLAN	21		
509	1,362	LB.	EPOXY COATING REINFORCING STEEL, GRADE 60		1,362	
516	96	LIN.FT.	2" DEEP JOINT SEALER, AS PER PLAN (See Note on Sht. 82A)			
SPECIAL	96	LIN.FT.	SAWING & SEALING BITUMINOUS CONCRETE JOINTS (See Note on Sht. 82A)			
SPECIAL	130	SQ.YD.	SEALING OF CONCRETE SURFACES; NON-EPOXY, (SEE PROPOSAL NOTE)			

CALC.	BY	DATE
CHECKED		

F.H.W.A. REGION	STATE	REGION
5	OHIO	

79
105

GENERAL NOTES

**SUMMIT COUNTY
SUM-59-8.64**

1. DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING 1984, 1985 & 1986 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.
2. DESIGN LOADING:
DESIGN LOADING - HS20-44 AND THE ALTERNATE MILITARY LOADING.
3. DESIGN STRESSES:
CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I.
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.
REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I. (REINFORCING STEEL IN PRESTRESSED BOX BEAMS PER CHS 515).
CONCRETE FOR PRESTRESSED BEAMS - UNIT STRESS 2200 P.S.I. COMPRESSION 444 P.S.I. TENSION.
PRESTRESSING STRAND ASTM A416 - F'S = 270,000 P.S.I.
INITIAL STRESS = 0.70 F'S.
4. DECK PROTECTION METHOD:
TYPE D WATERPROOFING AND ASPHALT CONCRETE OVERLAY, EPOXY COATED REINFORCING STEEL SIDEWALKS AND PARAPETS.
5. REFERENCE SHALL BE MADE TO STANDARD DRAWING(S):
AS-1-81 DATED 11-27-81
BR-2-82 DATED 11-01-82
PSBD -1-81 DATED 09-18-81

AND TO SUPPLEMENTAL SPECIFICATION(S):
836 DATED 11-12-85
6. EXISTING STRUCTURE VERIFICATION:
DETAILS AND DIMENSION SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR 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 CHS SECTIONS 102.05 AND 105.02
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.
7. REMOVAL OF EXISTING STRUCTURE:
WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE EXISTING STRUCTURE SHALL BE REMOVED AS PER PLAN. ABUTMENTS AND WINGWALLS SHALL BE REMOVED TO ELEVATION 1025.02. DEMOLITION OF THE SPECIFIED PORTIONS OF THE ABUTMENTS SHALL BE DONE WITH SUFFICIENT CARE AND EFFORT TO MINIMIZE DAMAGE TO CONCRETE THAT IS TO REMAIN. DEMOLITION OF THE SPECIFIED PORTIONS OF THE ABUTMENTS SHALL BE AS PER SPECIFIED IN, AND PAID FOR, AS PER ITEM 202.
8. UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.
9. REFER TO MAINTENANCE TO TRAFFIC PLANS AND/OR ROADWAY GENERAL NOTES.
10. ITEM 622, TEMPORARY CONCRETE BARRIER, BRIDGE * AS PER PLAN, IS CARRIED IN THE ROADWAY QUANTITIES.

* MOUNTED

JOHN DAVID JONES & ASSOC., INC. 3 / 7 2162 FRONT STREET CUYAHOGA FALLS, OHIO 44221		
ENGINEERS	ARCHITECTS	PLANNERS
ESTIMATED QUANTITIES		
BRIDGE No. SUM-59-09 27 OVER FISH CREEK		
DESIGNED	DRAWN	TRACED
CHECKED	REVIEWED	DATE
GFD	EMB	JRO
		PAK 12/4/87

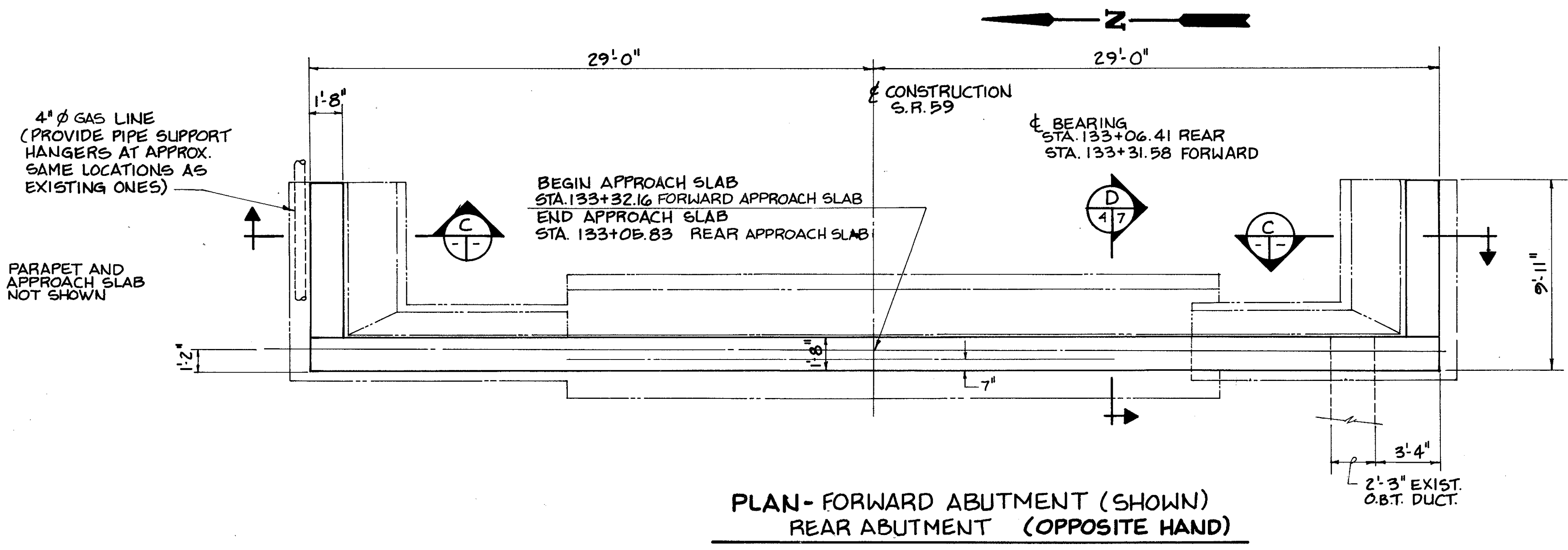
Revised 7/25/89

SUMMIT COUNTY
SUM-59-8.64

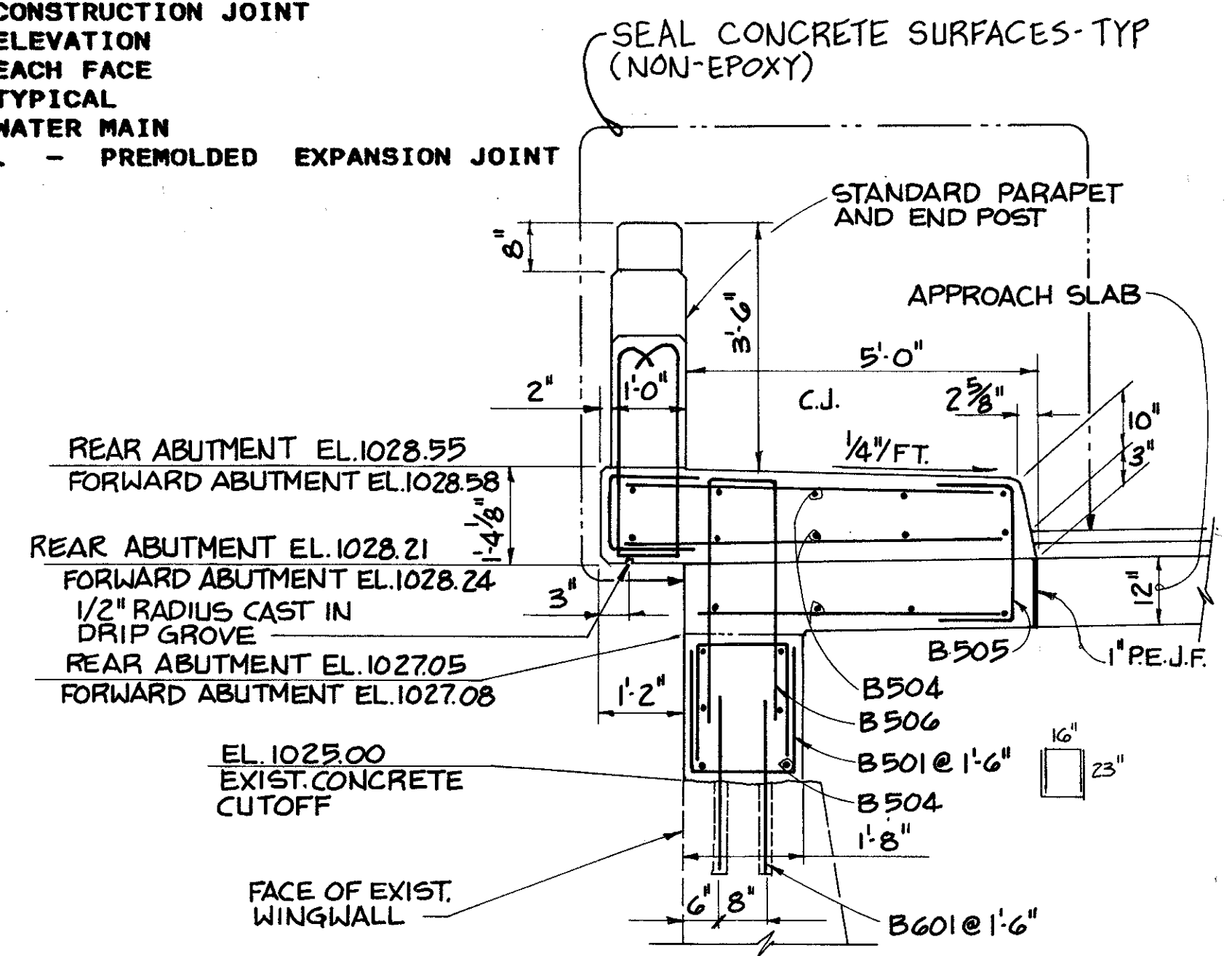
- NOTES:**
- TOP PORTIONS OF EXISTING REAR AND FORWARD ABUTMENTS AND WING WALLS SHALL BE REMOVED TO ELEVATION 1025.00±
 -
 - REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.
 - POROUS BACKFILL, 2'-0" THICK, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE AND Laterally TO THE ENDS OF THE WING WALLS.
 - REINFORCING STEEL BAR MARKS SHALL BE PREFIXED "A" FOR REAR ABUTMENT AND "B" FOR FORWARD ABUTMENT.

ABBREVIATIONS

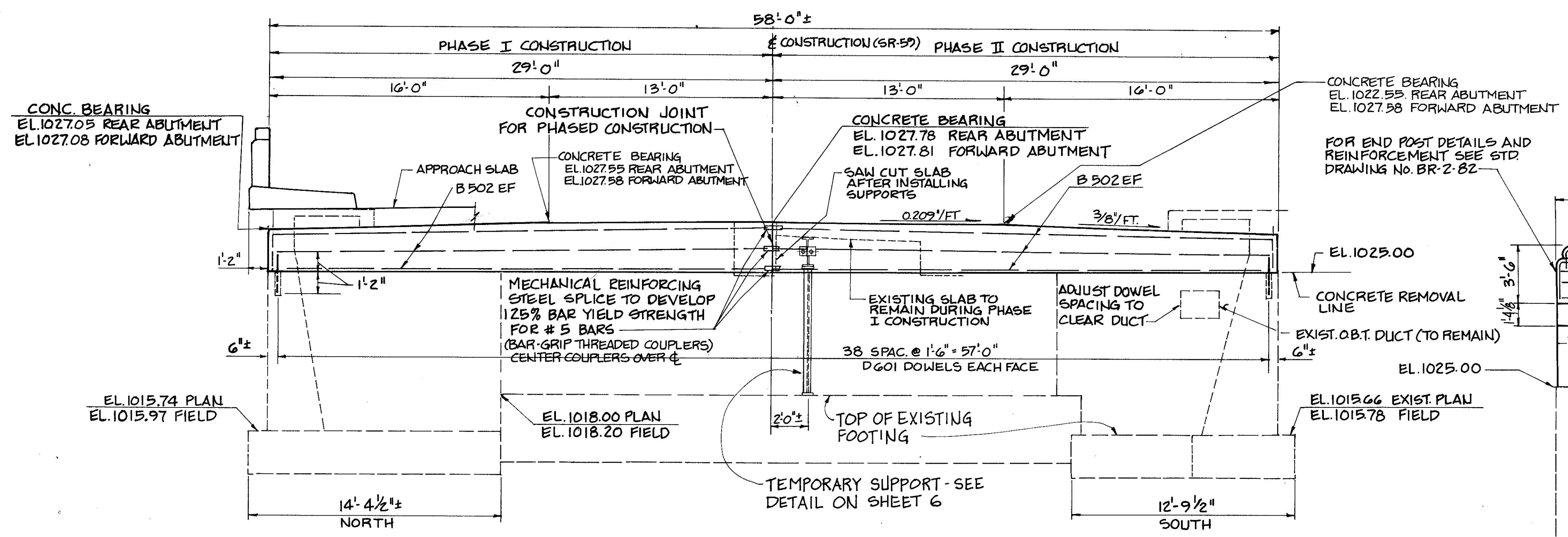
- C.J. - CONSTRUCTION JOINT
 EL. - ELEVATION
 E.F. - EACH FACE
 TYP. - TYPICAL
 W.M. - WATER MAIN
 P.E.J.F. - PREMOLDED EXPANSION JOINT FILLER



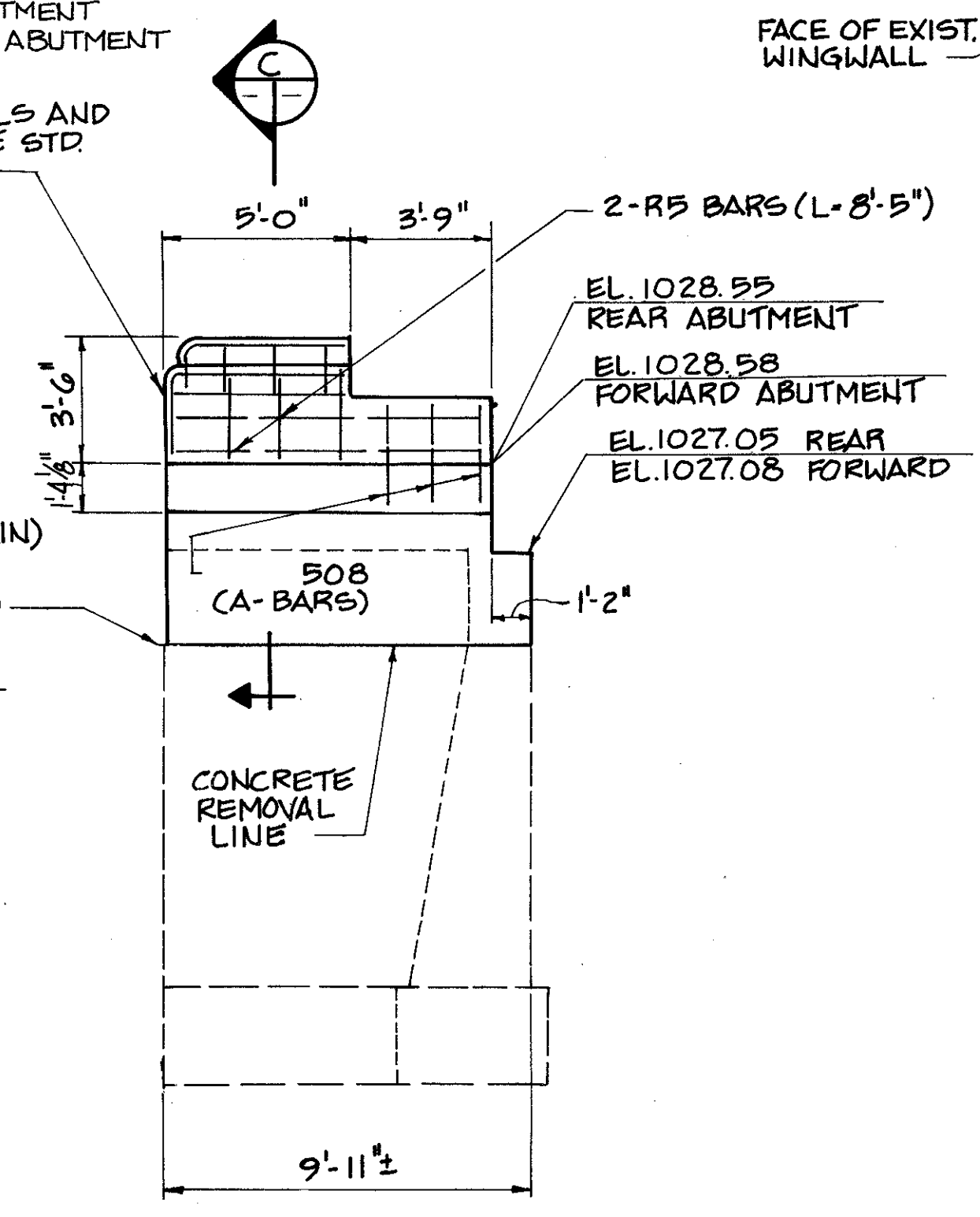
**PLAN - FORWARD ABUTMENT (SHOWN)
REAR ABUTMENT (OPPOSITE HAND)**



SECTION C



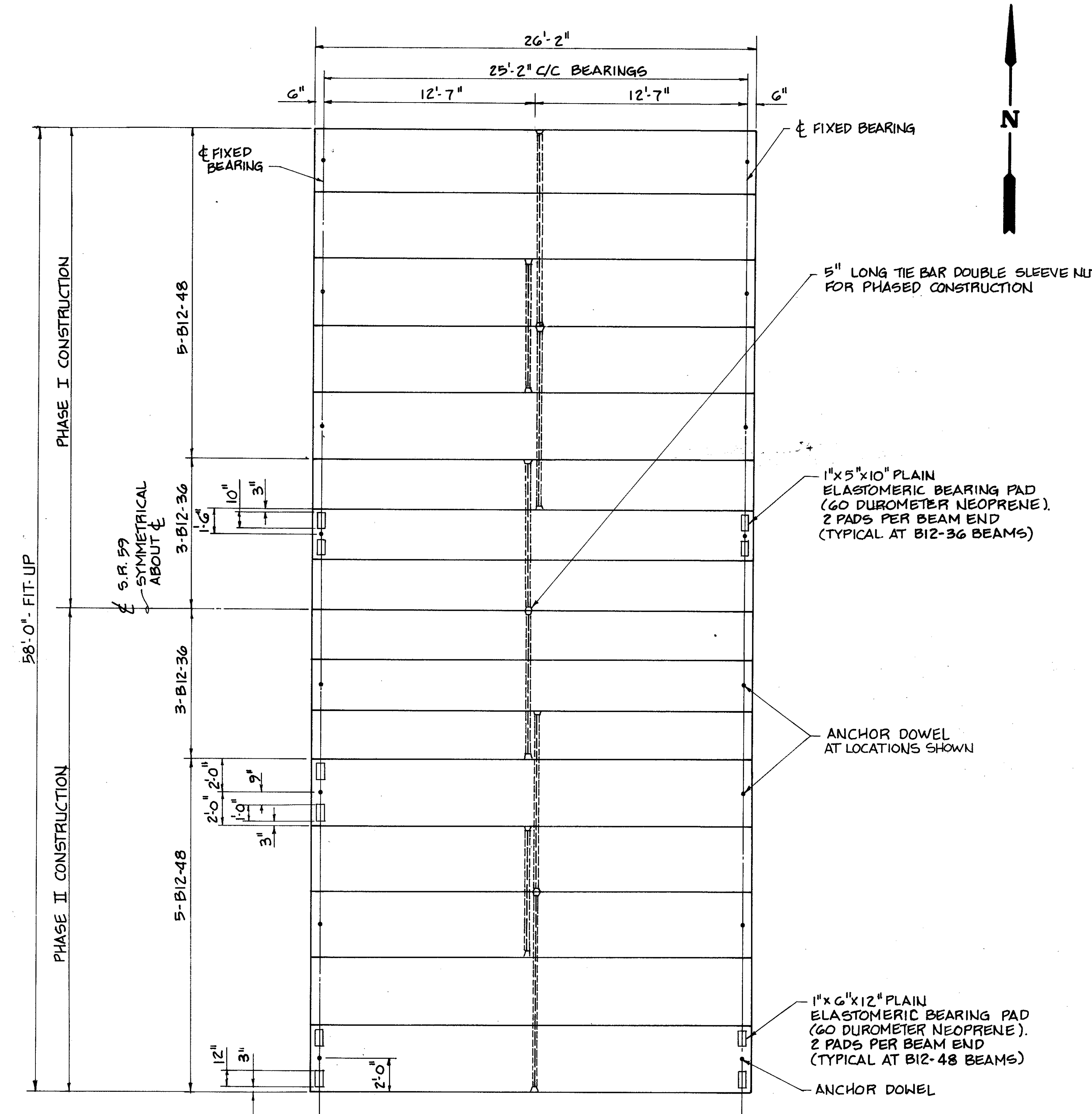
**ELEVATION - FORWARD ABUTMENT (SHOWN)
REAR ABUTMENT (OPPOSITE HAND)**



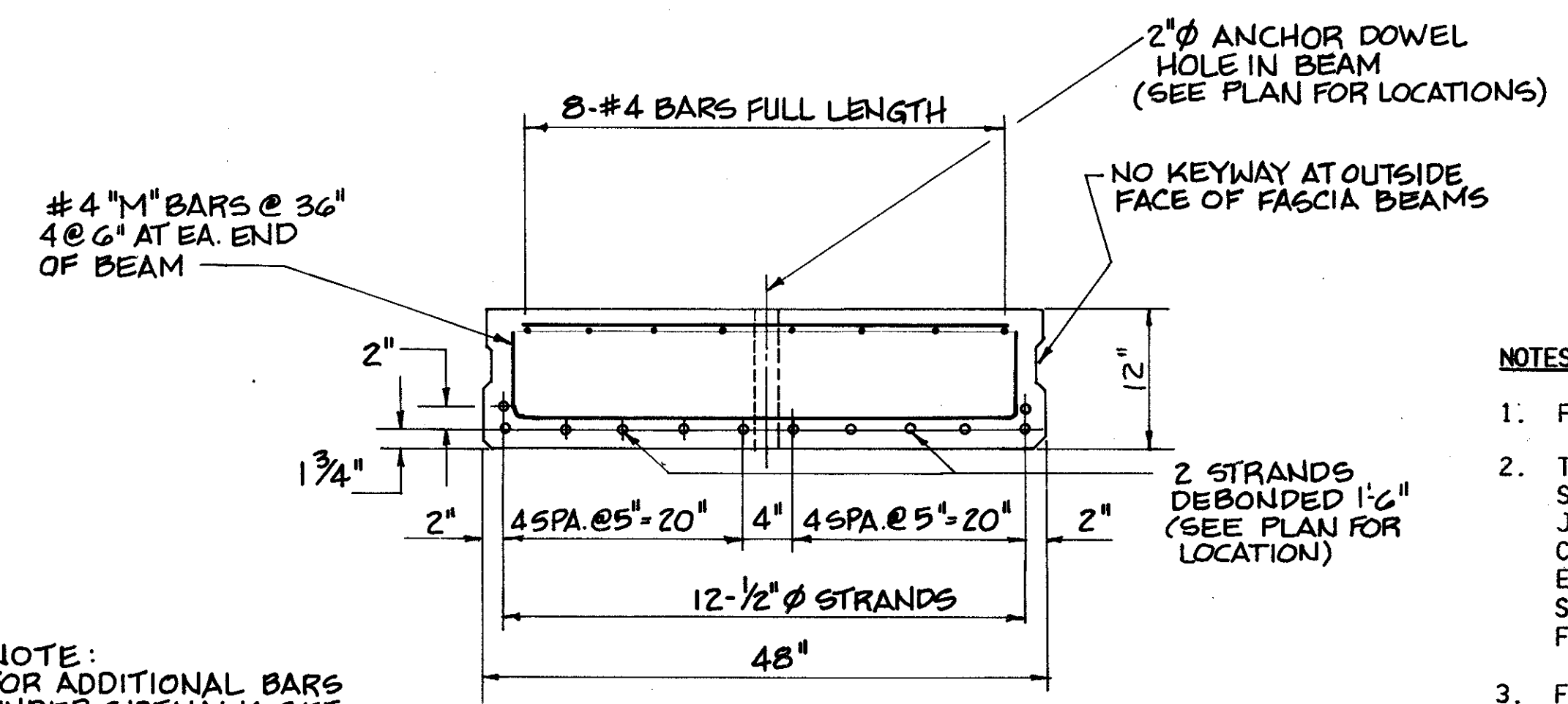
TYPICAL WINGWALL ELEVATION
SOUTHWEST AND NORTHEAST SHOWN
NORTHWEST AND SOUTHEAST (OPPOSITE HAND)

JOHN DAVID JONES & ASSOC., INC.		4/7
2162 FRONT STREET		
CUYAHOGA FALLS, OHIO 44221		
ENGINEERS	ARCHITECTS	PLANNERS
FORWARD ABUTMENT & REAR ABUTMENT		
BRIDGE No. SUM-59-09 27 OVER FISHCREEK		
DESIGNED	DRAWN	TRACED
GFD	EMB	PAK
CHECKED	REVIEWED	DATE
	PAK	12/4/87
REVIS		

Revised 7/23/89

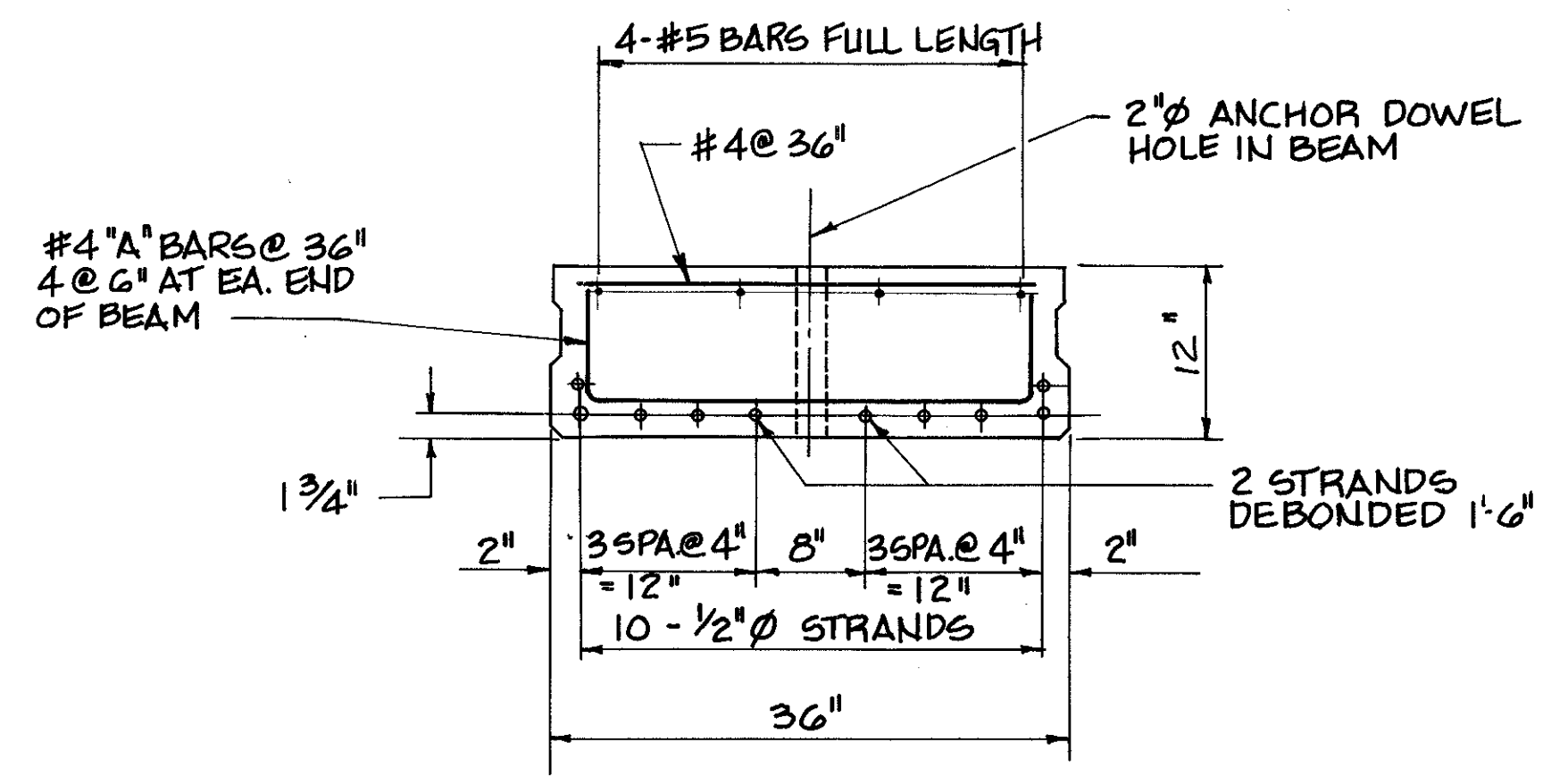


BEAM LAYOUT PLAN



TYPICAL BOX BEAM B12-48

NOTE:
FOR ADDITIONAL BARS
UNDER SIDEWALK SEE
PLAN SHEET. 19



TYPICAL BOX BEAM B12-36

NOTES:

- FOR GAS LINE SUPPORT DETAILS SEE CONSTRUCTION DETAIL SHEET.
- THE FABRICATOR MAY PROPOSE A DIFFERENT WIDTH OF BEAM THAN SHOWN. HOWEVER, THE BRIDGE WIDTH MUST REMAIN THE SAME. A JOINT BETWEEN BEAMS WILL NOT BE ALLOWED AT THE FACE OF CURBS, BEARINGS MUST BE REDESIGNED BY A PROFESSIONAL ENGINEER, AND THERE WILL BE NO ADDITIONAL COST TO THE STATE. THE REVISED PLANS SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL.
- FABRICATOR'S SHOP DRAWINGS SHALL SHOW COMPLETE DETAILS OF BEAM REINFORCING.
- FIXED ANCHOR DOWELS SHALL BE PLAIN ROUND BARS WITH BOND BREAKER APPLIED ABOVE BRIDGE SEAT.
- NON-SHRINKING MORTAR: MORTAR OR GROUT FOR KEYWAYS BETWEEN PRESTRESSED CONCRETE BOX BEAMS, FOR TIE ROD RECESSES AND FOR ANCHOR DOWEL HOLES SHALL BE A NON-SHRINKING NON-METALLIC MORTAR HAVING A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 P.S.I. ACCORDING TO THE CORPS OF ENGINEERS SPECIFICATION CRD-C621-83 WHEN PREPARED TO A MODERATE FLUIDITY (124-145% FLOW TABLE FLOW). THE MORTAR OR GROUT SHALL ALSO MEET ALL OTHER REQUIREMENTS OF SPECIFICATION CRD-C621-83. THE MORTAR SHALL BE PREPARED, PLACED AND CURED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AGAINST SURFACES AS SPECIFIED BELOW.

PREPARATION OF CONCRETE SURFACES IN CONTACT WITH NON-SHRINKING MORTAR: THE KEYWAY SURFACES SHALL BE GIVEN A MEDIUM SANDBLAST AT THE PLANT WITHIN FOUR DAYS BEFORE THE BEAMS LEAVE THE PLANT. BEFORE MORTARING, THE KEYWAYS SHALL BE THOROUGHLY CLEANED OF ALL DIRT, DUST AND OTHER FOREIGN MATTER. THE KEYWAY SURFACES SHALL BE WETTED, BUT NO FREE WATER SHALL BE ALLOWED TO REMAIN IN THE KEYWAYS.

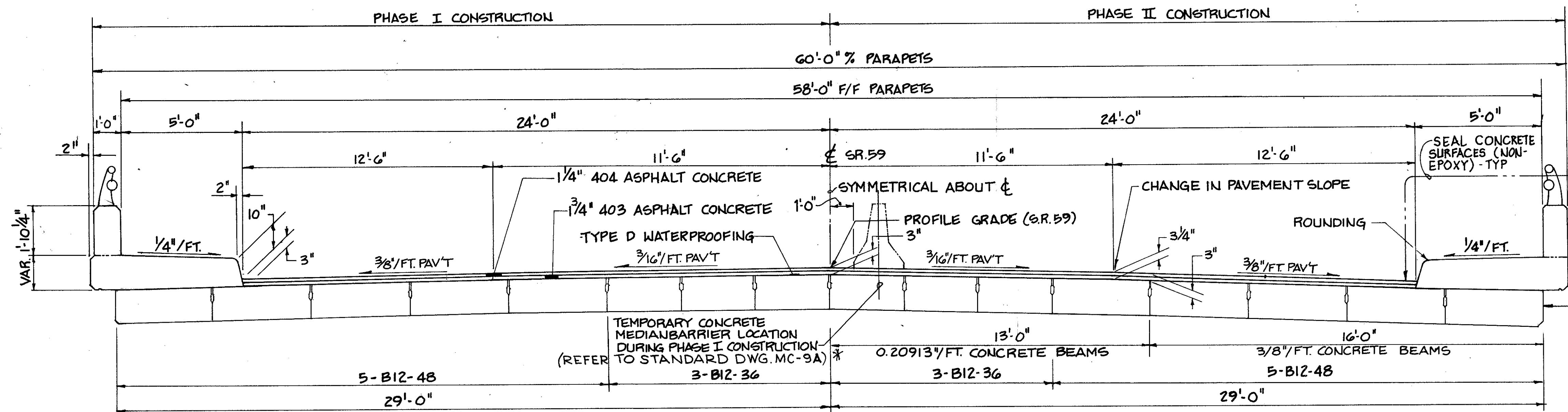
JOHN DAVID JONES & ASSOC., INC. 5/7
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

DECK PLAN & SECTION

BRIDGE No. SUM-59-09 27
OVER FISHCREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GFD	EMB			PAK	12/4/37	

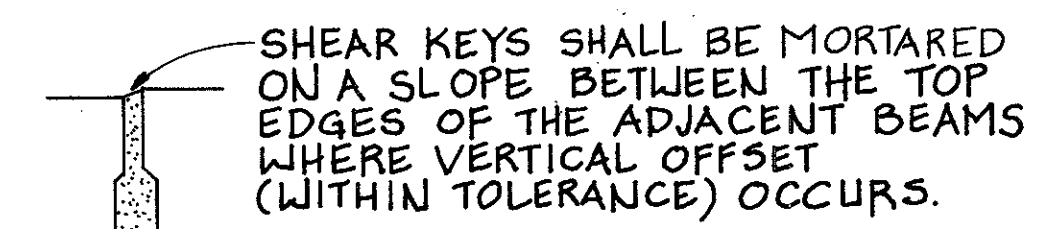
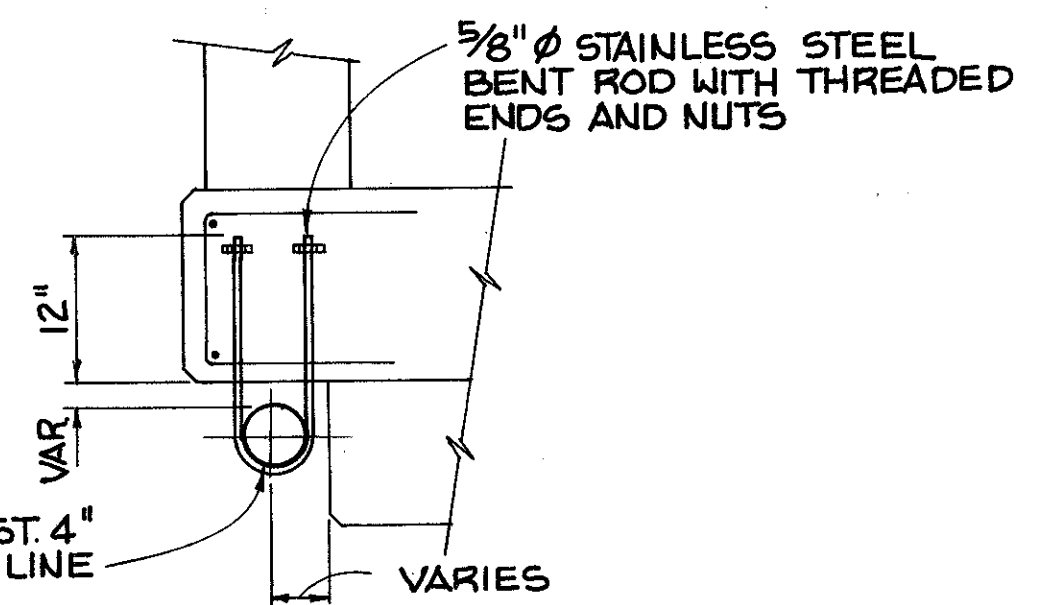
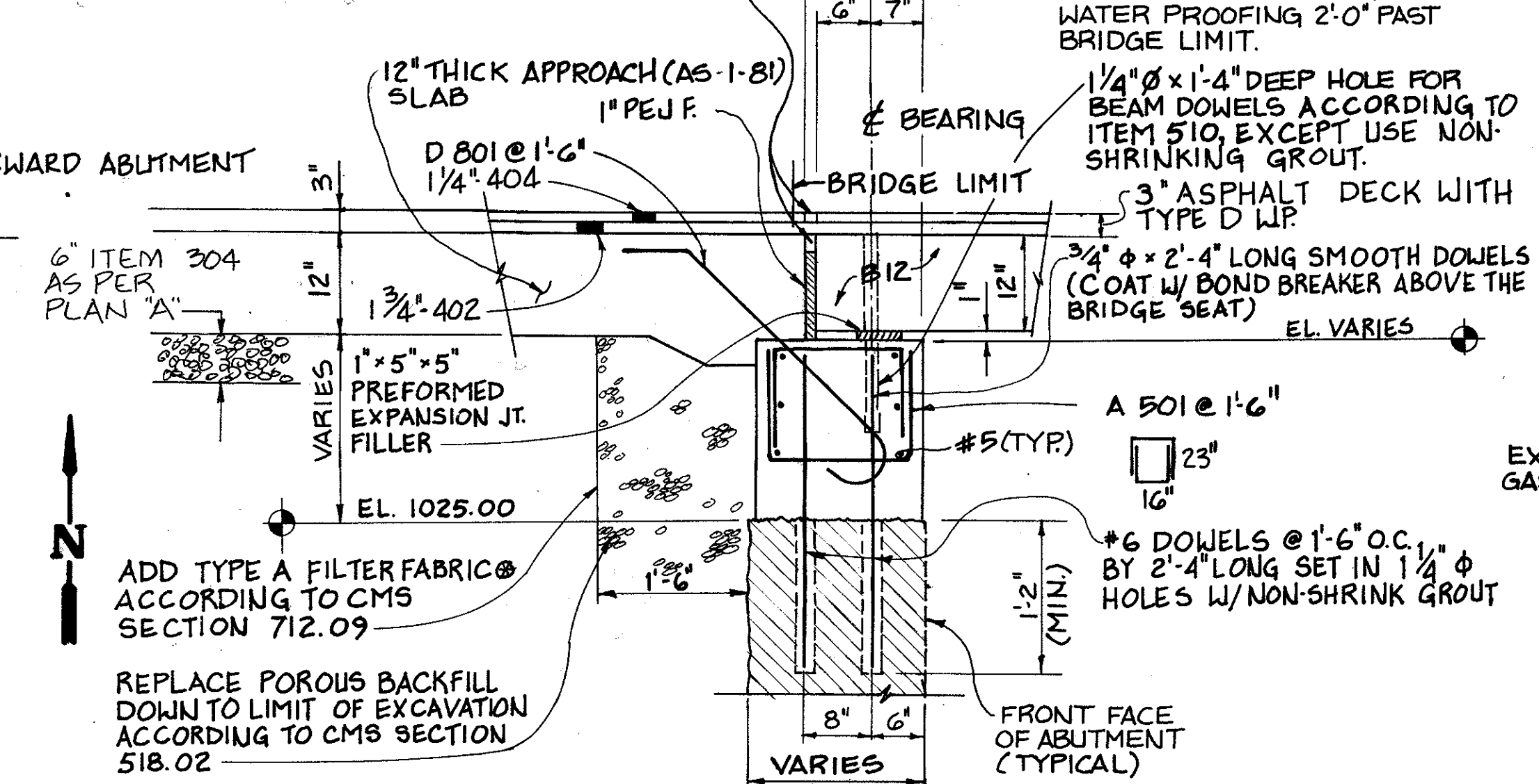
SUMMIT COUNTY
SUM-59-8.64



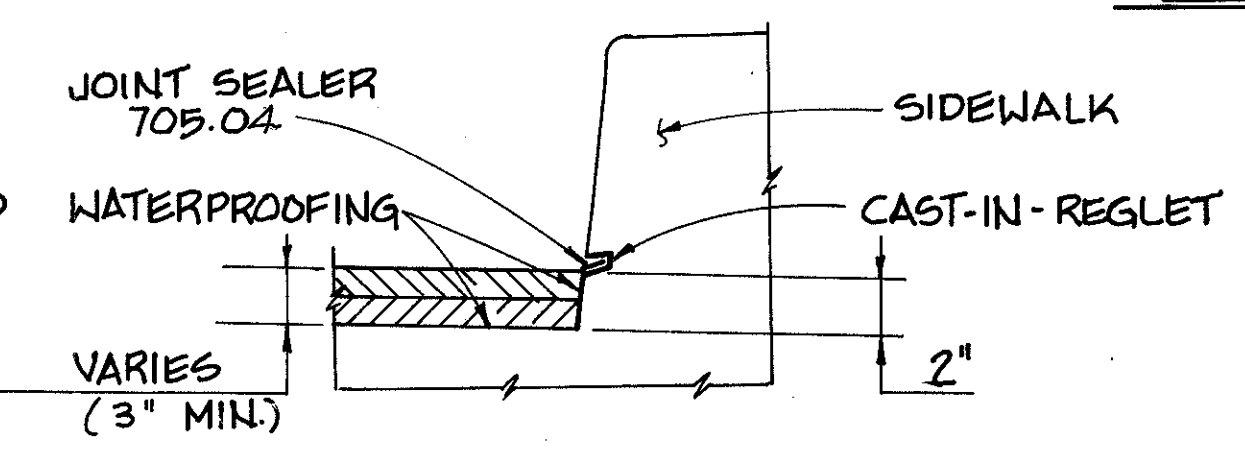
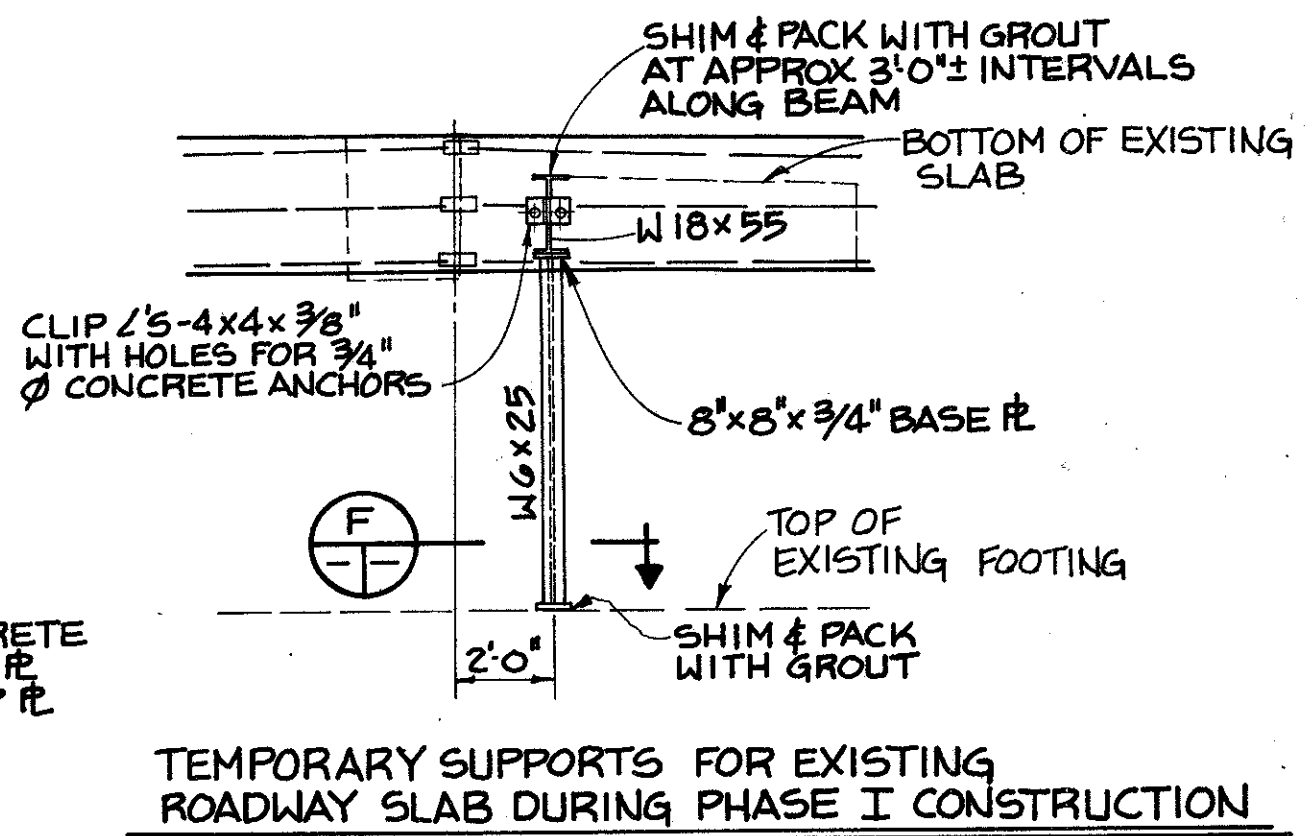
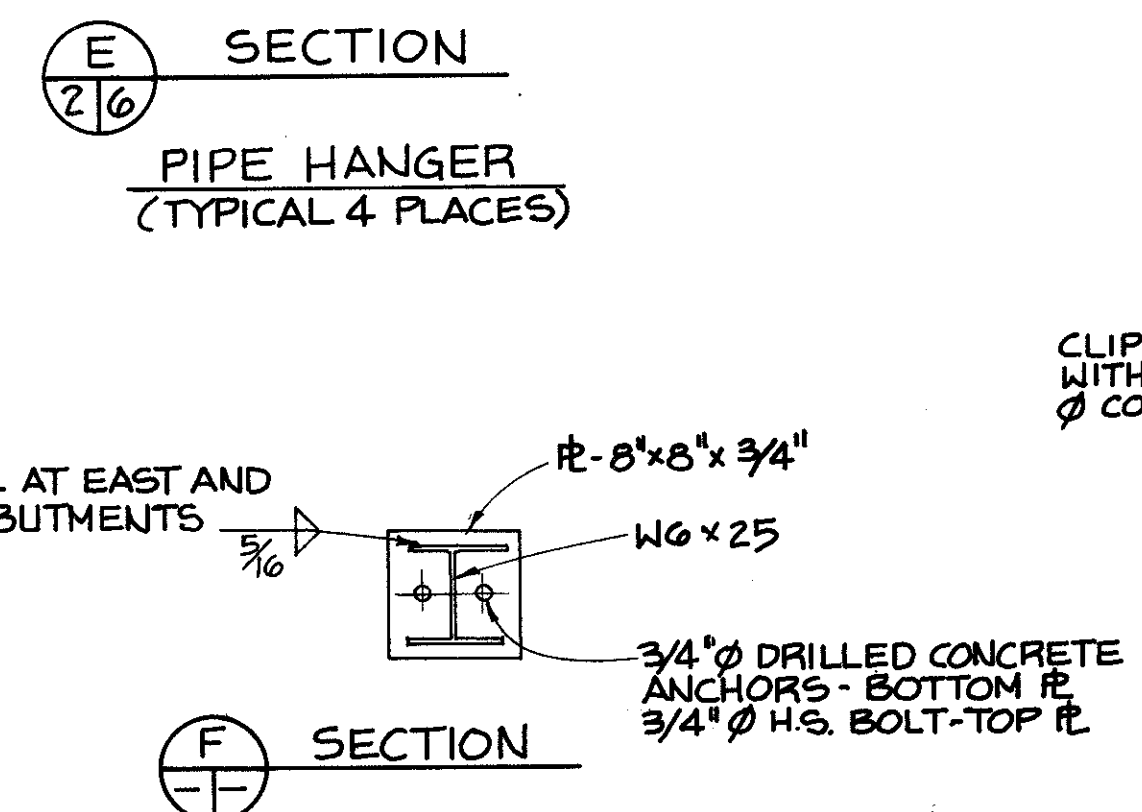
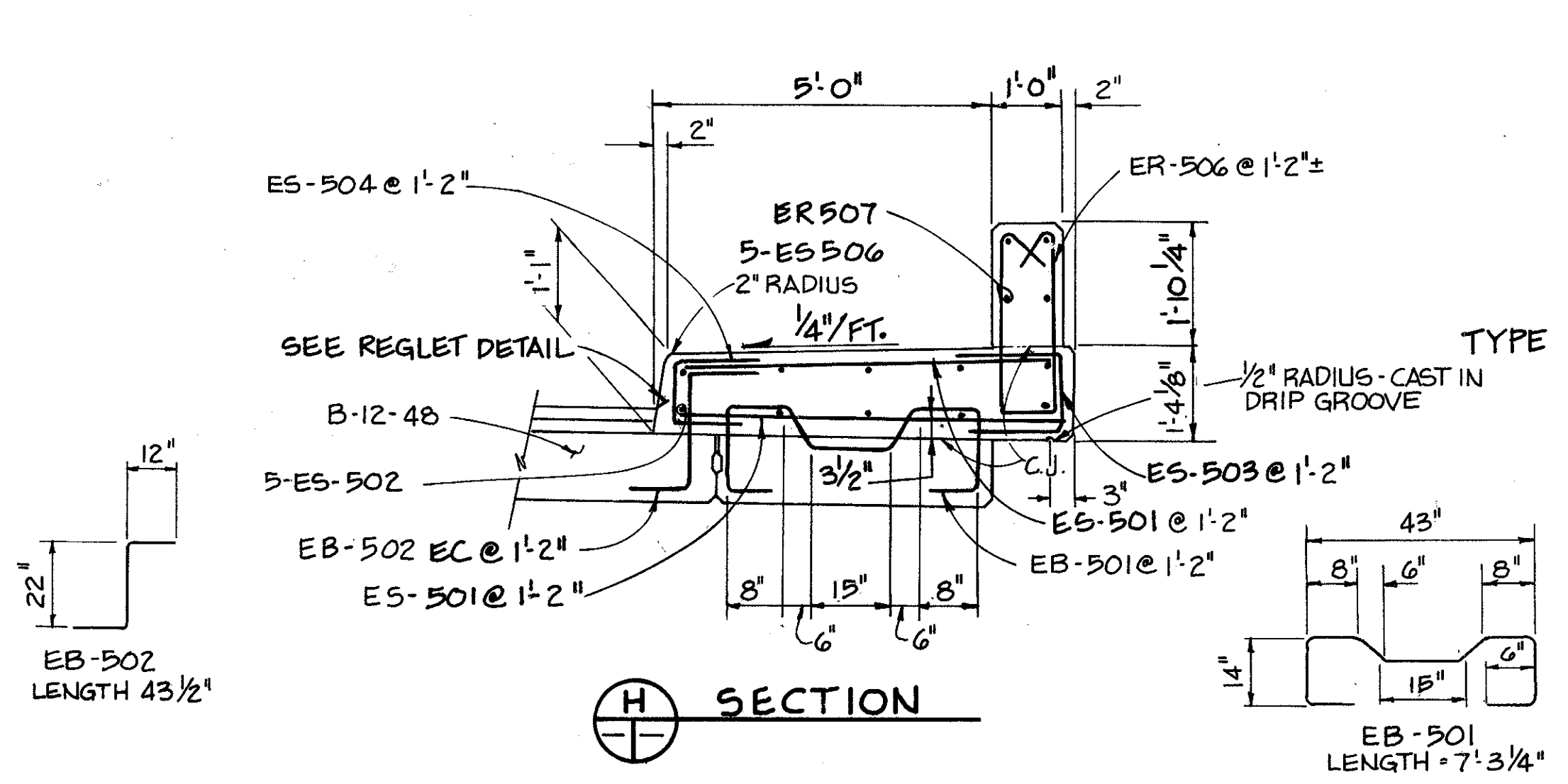
NOTES:

- WORK THIS DRAWING WITH THE "GENERAL PLAN" FOR BEAM LAYOUT AND RAILING POST PLACEMENT.
- CALCULATED CAMBER AT TIME OF PAVING, INCLUDING ALLOWANCE FOR CAMBER GROWTH DUE TO CREEP, IS CALCULATED DEFLECTION DUE TO WEIGHT OF SURFACE COURSE, RAILING, DEFLECTOR PARAPETS, SIDEWALKS, ETC. IS 1/8".
NET FINAL CAMBER OF BEAMS IS 3/4". THIS IS 3/4" IN EXCESS OF THE AMOUNT REQUIRED TO PLACE THE TOP OF THE BEAM PARALLEL TO PROFILE GRADE. THIS EXCESS AMOUNT SHALL BE COMPENSATED FOR BY THICKENING THE 403 LEVELING COURSE FROM 1-3/4" AT CENTER OF SPANS TO 2-1/2" AT ENDS OF SPANS.
- ASPHALT CONCRETE SURFACE COURSE SHALL CONSIST OF A VARIABLE THICKNESS OF 403 AND 1-1/4" THICKNESS OF 404. THE 403 SHALL BE PLACED IN TWO OPERATIONS. THE FIRST COURSE SHALL BE OF 1-1/4" UNIFORM THICKNESS. THE SECOND COURSE SHALL BE FEATHERED TO PLACE THE SURFACE PARALLEL TO AND 1-1/4" BELOW THE FINAL PAVEMENT SURFACE ELEVATION.
- CONCRETE IN PARAPET ABOVE SIDEWALK SURFACE CONSTRUCTION JOINT IS INCLUDED WITH ITEM 517 FOR PAYMENT.
- BAR MARKS PREFIXED "E" DENOTE EPOXY COATING IS REQUIRED.

SEE SHEET 6A/7 FOR DETAILS
TRANSVERSE SECTION
(AT CENTER OF SPAN)

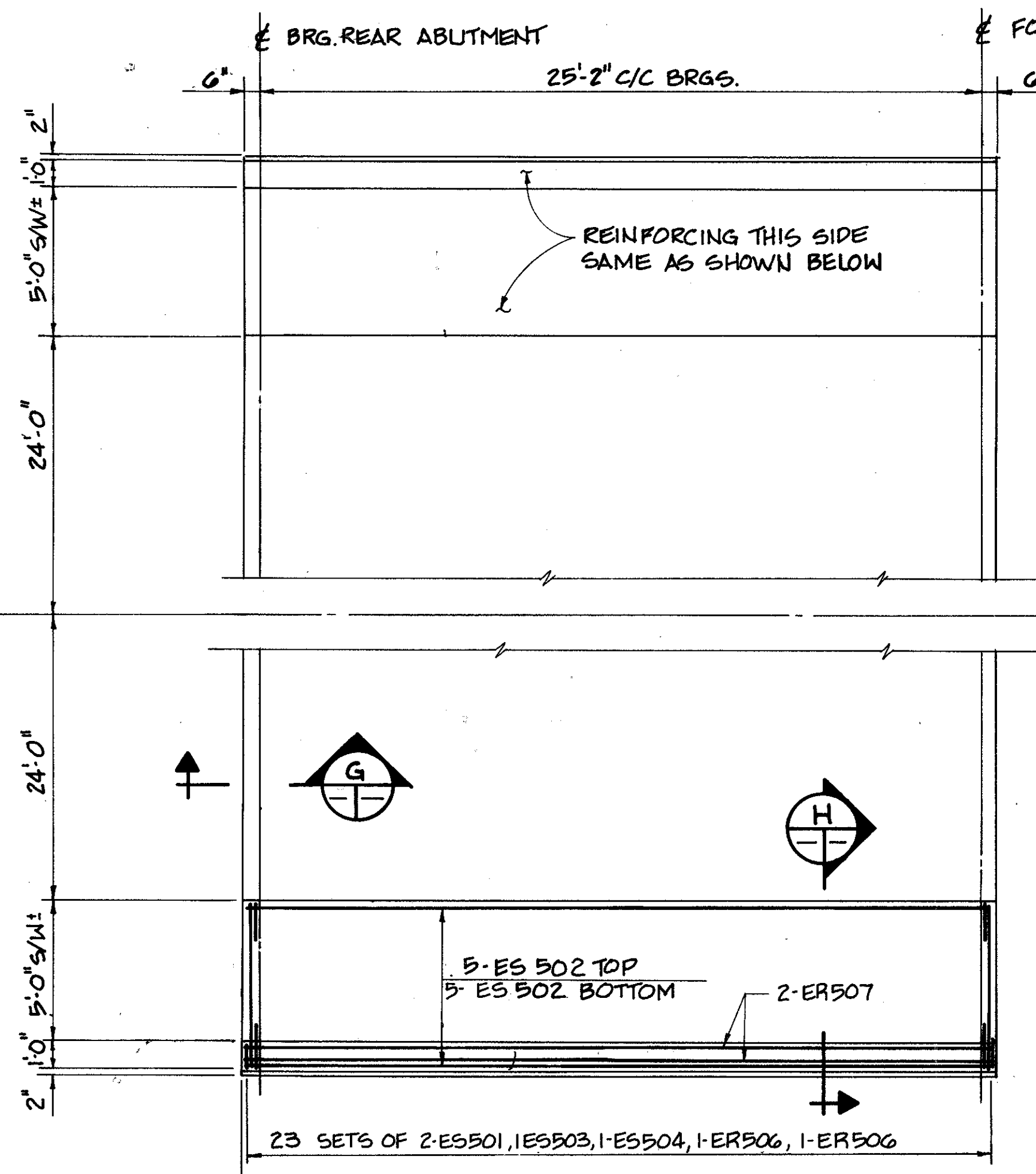


D SECTION
2/6
FIXED JOINT
(TYP. BOTH BEAM ENDS)



PAYMENT FOR CAST-IN REGLET INSTALLATION AND MATERIAL IS INCLUDED WITH ITEM 511 CLASS "S" CONCRETE - SUPERSTRUCTURE

PLAN OF SIDEWALK & PARAPET REINFORCING



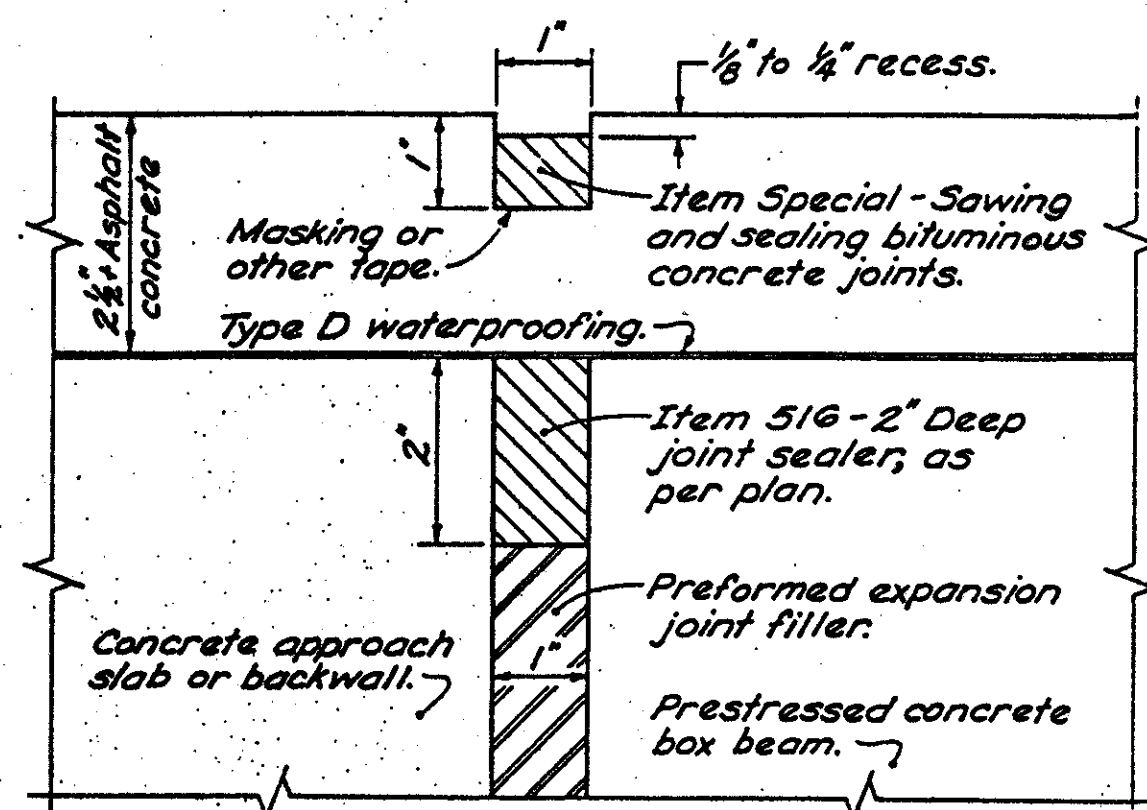
JOHN DAVID JONES & ASSOC., INC. G/7
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

TRANSVERSE SECTION AND PLAN OF SIDEWALK & PARAPET REINFORCING

BRIDGE No. SUM-59-09 27
OVER FISH CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GFD	EMB		PAK	12/4/87		

Revised 7/25/89



SEALING OF JOINTS AT ABUTMENTS

ITEM SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS

1. DESCRIPTION

THIS WORK SHALL CONSIST OF CUTTING AND SEALING TRANSVERSE JOINTS ON THE NEW BITUMINOUS CONCRETE OVERLAY OF BOX BEAM BRIDGES. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE ABUTMENT JOINT OF THE BOX BEAMS.

2. MATERIALS

THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D3405, JOINT SEALANTS, HOT-POURED, FOR CONCRETE AND ASPHALT PAVEMENTS. ACCEPTABLE ALTERNATE MATERIALS ARE:

ROOF-FLEX 176, POLYURETHANE, AS PRODUCED BY THE CARBOLINE COMPANY, 350 HANLEY INDUSTRIAL COURT, ST. LOUIS, MISSOURI 63144 (ROGER ZUBAL, 614-877-3406); A SILICONE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-001543A CLASS A (ONE-PART SILICONE SEALANTS), SUCH AS THOSE MANUFACTURED BY GENERAL ELECTRIC, SILICONE PRODUCTS DIVISION, 6155 ROCKSIDE RD., ROCKSIDE SQUARE I, INDEPENDENCE, OHIO 44131 (JOHN FROMHOLTZ, 216-447-1750) OR DOW CORNING, 3737 PARK EAST, BEACHWOOD, OHIO 44122 (ROBERT RUPPEL, 216-464-2330); OR SOF-SEAL, A COLD-APPLIED, LOW-MODULUS, TWO-COMPONENT POLYMERIC COMPOUND HORIZONTAL SEALANT AS MANUFACTURED BY W.R. MEADOWS, INC., P.O. BOX 543, ELGIN, ILLINOIS 60121 (ROBERT CAMERON, 312-683-4500). SEALANT WILL BE ACCEPTED ON THE BASIS OF THE MANUFACTURER'S CERTIFICATION THAT IT CONFORMS TO THE REQUIREMENTS OF THESE SPECIFICATIONS.

3. CONSTRUCTION DETAILS

A. GENERAL: THE CONTRACTOR SHALL CONDUCT HIS OPERATION SO THAT THE CUTTING, CLEANING AND SEALING OF TRANSVERSE JOINTS IS A CONTINUOUS OPERATION THAT WILL BE PERFORMED AS SOON AS PRACTICAL AFTER THE PAVING, BUT NO LATER THAN FOUR (4) DAYS AFTER PLACEMENT OF THE ASPHALT CONCRETE SURFACE COURSE. TRAFFIC SHALL NOT BE ALLOWED TO KNEAD TOGETHER OR DAMAGE THE JOINT CUT PRIOR TO SEALING.

B. CUTTING OF TRANSVERSE JOINTS: THE CONTRACTOR SHALL SAW OR ROUT TRANSVERSE JOINTS TO THE DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET. THE CUT JOINTS SHALL LIE DIRECTLY ABOVE EACH BOX BEAM ABUTMENT JOINT. THE JOINT LOCATION SHALL BE MARKED ON THE NEW ASPHALT SURFACE WITH A CHALK LINE, OR BY SOME OTHER ACCEPTABLE METHOD, BEFORE CUTTING. DETAILS OF THE METHOD FOR LOCATING AND ACCURATELY MARKING THE PROPOSED CUTS SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER PRIOR TO STARTING ANY SURFACING OR PAVING OPERATIONS.

THE BLADE OR BLADES SHALL BE OF SUCH SIZE THAT THE FULL WIDTH AND DEPTH OF THE CUT CAN BE MADE WITH ONE PASS. DRY OR WET CUTTING WILL BE ALLOWED. JOINTS SHALL EXTEND THE FULL WIDTH OF THE BRIDGE.

C. CLEANING JOINTS: DRY SAWED JOINTS SHALL BE THOROUGHLY CLEANED WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT, DUST, OR DELETERIOUS MATTER. WET SAWED JOINTS SHALL BE WASHED CLEAN OF ALL CUTTINGS BY FLUSHING WITH A JET OF WATER AND WITH OTHER TOOLS AS NECESSARY. AFTER FLUSHING, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR. WHEN THE SURFACES ARE THOROUGHLY CLEAN AND DRY, AND JUST PRIOR TO PLACING THE JOINT SEALER, COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 P.S.I. SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

IN THE EVENT FRESHLY CUT JOINTS BECOME CONTAMINATED BEFORE THEY ARE SEALED, THEY SHALL BE RECLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D. SEALING JOINTS: THE JOINT SHALL BE THOROUGHLY DRIED BEFORE THE SEALANT IS PLACED. AFTER CLEANING AND DRYING, A BOND-BREAKER (TAPE) SHALL BE APPLIED TO THE BOTTOM OF THE GROOVE.

HOT-POURED JOINT SEALANT MATERIAL SHALL BE HEATED IN A KETTLE OR MELTER CONSTRUCTED AS A DOUBLE BOILER, WITH THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR OTHER HEAT TRANSFER MEDIUM. POSITIVE TEMPERATURE CONTROL AND MECHANICAL AGITATION SHALL BE PROVIDED. HEATING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. JOINT SEALER MATERIAL SHALL NEVER BE KEPT HEATED AT THE POURING TEMPERATURE FOR MORE THAN FOUR (4) HOURS AND SHALL NEVER BE REHEATED. SEALER LEFT IN THE APPLICATOR AT THE END OF A DAY'S WORK SHALL BE REMOVED AND DISCARDED.

HOT-POURED SEALANT SHALL BE APPLIED IMMEDIATELY THROUGH A NOZZLE, WHICH MUST PROJECT INTO THE SAWED JOINT, FILLING FROM THE BOTTOM UP. THE SEAL SHALL COMPLETELY FILL THE JOINT IN SUCH A MANNER THAT, AFTER COOLING, THE LEVEL OF THE SEALER WILL NOT BE HIGHER THAN 1/8" BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN 3/16" SHALL BE BROUGHT UP TO THE SPECIFIED LIMIT BY FURTHER ADDITION OF HOT-POURED SEALANT. CARE SHALL BE TAKEN IN THE SEALING OF THE JOINTS SO THAT THE FINAL APPEARANCE WILL PRESENT A NEAT FINE LINE.

THE COLD APPLIED SEALANT MATERIALS (POLYURETHANE, SILICONE, AND POLYMERIC COMPOUNDS) SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 40 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR ONE HOUR AFTER APPLICATION OF THE SEALANT.

4. METHOD OF MEASUREMENT

THE QUANTITY TO BE PAID FOR UNDER THIS ITEM WILL BE THE NUMBER OF LINEAR FEET OF JOINTS SAWED AND SEALED AS PER THE ABOVE REQUIREMENTS.

5. BASIS OF PAYMENT

THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL - "SAWING AND SEALING BITUMINOUS CONCRETE JOINTS" SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, INCLUDING THE FURNISHING AND PLACING OF THE JOINT SEALER MATERIAL.

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

THIS ITEM SHALL MEET THE MATERIAL (PARA. 2) AND SEALING (PARA. 3D) SPECIFICATIONS OF ITEM SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS.

REVISIONS		STATE OF OHIO		6A/7	
2-8-84		DEPARTMENT OF TRANSPORTATION			
3-10-87		BUREAU OF BRIDGES AND STRUCTURAL DESIGN			
4-14-87					
6-16-87					
ABUTMENT JOINTS IN BITUMINOUS CONCRETE, BOX BEAM BRIDGES, BRIDGE NO. SUM-59-0927 OVER FISHCREEK					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
JEB	MJB		WTF	WJ	2-2-84

MARK	TOTAL NO.	LENGTH	WEIGHT	SHP. TYPE	SER. INCR.	A	B	C	D
FORWARD ABUTMENT									
B801	39	5'-0"	203	13		36"			
B601	106	2'-4"	258	STR	1'-6"	DOWELS			
B501	106	5'-0"	553	1	1'-6"	16"	23"		
B502	12	28'-9"	360	STR					
B503	18	2'-11"	55	1	1'-2"	13"	12"		
B504	40	9'-7"	400	STR	2	WINGWALLS			
B505	16	4'-9"	80	1		22"	16"		
B506	18	8'-1"	152	1		16"	42"		
B507	6	4'-4"	27	2		18"	18"		
TOTAL UNCOATED BARS = 2088									
REAR ABUTMENT									
A801	39	5'-0"	203	13		36"			
A601	106	2'-4"	258	STR	1'-6"				
A501	106	5'-0"	553	1	1'-6"	16"	23"		
A502	12	28'-9"	360	STR					
A503	18	3'-2"	55	1	1'-2"	13"	12"		
A504	40	9'-7"	400	STR	2	WINGWALLS			
A505	16	4'-9"	80	1		22"	16"		
A506	18	8'-1"	152	1		16"	42"		
A507	6	4'-4"	27	2		18"	18"		
TOTAL UNCOATED BARS = 2088									
RAILING- FORWARD ABUTMENT									
EB508	6	6'-2"	39	11	1'-2"±	8	2'-10"		
TOTAL = 39									
RAILING- REAR ABUTMENT									
EB508	6	6'-2"	39	11	1'-2"±	8	2'-10"		
TOTAL = 39									

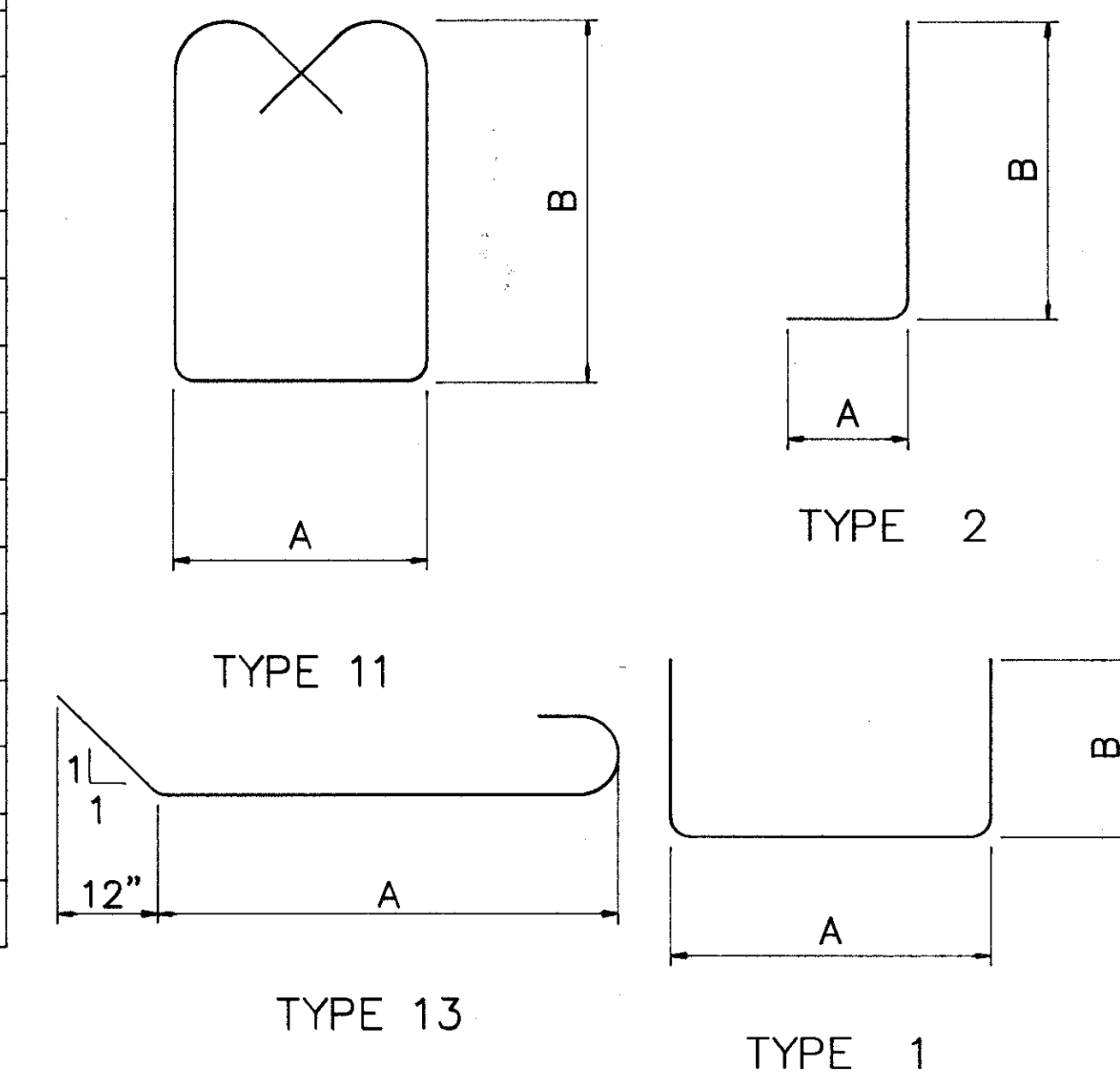
MARK	TOTAL NO.	LENGTH	WEIGHT	SHP. TYPE	SER. INCR.	A	B	C	D
SUPER STRUCTURE SIDEWALK & RAILING									
ES501	92	5'-9"	552	STR	1'-2"±				
ES502	20	25'-11"	541	STR.					
ES503	46	2'-11"	140	1	1'-2"±	13'	12'		
ES504	46	2'-8"	129	1	1'-2"±	10'	12'		
TOTAL COATED BARS = 1362									
RAILING									
ER506	46	6'-2"	284	11	1'-2"±	8	2'-10"		
ER507	8	25'-11"	217	STR					
TOTAL 501									

*
*

* PAYMENT FOR THESE BARS INCLUDED IN ITEM 517(RAILING)

CALC. CHECKED	BY	DATE	F.H.W.A. REGION	STATE	PROJECT	83 105
			5	OHIO		

SUMMIT COUNTY
SUM-59-8.64



REINFORCING STEEL SAMPLES :
REFER TO CMS SECTIONS 106.03 , 700 , 709.01 THROUGH 709.05 AND 709.08.
SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR
SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE
ADDITIONAL STEEL , SPLICED IN ACCORDANCE WITH 509.08.

JOHN DAVID JONES & ASSOC., INC. 7/7					
2162 FRONT STREET CUYAHOGA FALLS, OHIO 44221 ENGINEERS ARCHITECTS PLANNERS					
REINFORCING STEEL LIST					
BRIDGE No. SUM-59-0927 OVER FISHCREEK					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
G.F.D.	E.M.B.		J.R.D.	P.A.K.	12/4/87