

# INDEX OF SHEETS

1	TITLE SHEET
2	GENERAL SUMMARY AND GENERAL NOTES
3A-3B	TRAFFIC, TOWNSHIP, PLANS
4	PLAN AND QUANTITIES, BRIDGE #1 - WEST APPROACH ROADWAYS
5	PLAN AND QUANTITIES, BRIDGE #1 - EAST APPROACH ROADWAYS
5A	CONCRETE BARRIER PLAN AND DETAILS, BRIDGE #1
6	ROADWAY SECTIONS, BRIDGE #1
6A-6B	PAVEMENT ELEVATIONS AND SEWER PROFILES, BRIDGE #1
7	CROSS SECTIONS, BRIDGE #1
8	PLAN AND QUANTITIES, BRIDGE #2 - WEST APPROACH ROADWAYS
9	PLAN AND QUANTITIES, BRIDGE #2 - EAST APPROACH ROADWAYS
10	CONCRETE BARRIER PLAN AND DETAILS, BRIDGE #2
11	ROADWAY SECTIONS, BRIDGE #2
12	PAVEMENT ELEVATIONS AND SEWER PROFILES, BRIDGE #2
12A-12B	CROSS SECTIONS, BRIDGE #2
13	PLAN AND QUANTITIES, BRIDGE #3 - WEST APPROACH ROADWAYS
14	PLAN AND QUANTITIES, BRIDGE #3 - EAST APPROACH ROADWAYS
15	CONCRETE BARRIER PLAN AND DETAILS, BRIDGE #3
16	ROADWAY SECTIONS, BRIDGE #3
17	PAVEMENT ELEVATIONS AND SEWER PROFILES, BRIDGE #3
17A-17B	CROSS SECTIONS, BRIDGE #3
18	PLAN AND QUANTITIES, BRIDGE #4 - WEST APPROACH ROADWAYS
19	PLAN AND QUANTITIES, BRIDGE #4 - EAST APPROACH ROADWAYS
20	CONCRETE BARRIER PLAN AND DETAILS, BRIDGE #4
21	ROADWAY SECTIONS, BRIDGE #4
22	PAVEMENT ELEVATIONS AND CROSS SECTIONS, BRIDGE #4
22A-22B	CROSS SECTIONS, BRIDGE #4
24	CATCH BASIN, SLOPE DRAIN AND BENCHING DETAILS
25	CRACK AND JOINT DETAILS
26	REINFORCED CONCRETE APPROACH SLABS
27	GENERAL NOTES
28	GENERAL PLAN, BRIDGE #1, ELEVATION AND ESTIMATED QUANTITIES
29	ABUTMENT MODIFICATION PLANS AND ELEVATIONS, BRIDGE #1
30	ABUTMENT MODIFICATION SECTIONS AND DETAILS, BRIDGE #1
31	ABUTMENT SLAB PLANS AND DETAILS, BRIDGE #1
32	ABUTMENT SLAB SECTIONS, BRIDGE #1
33	FIELD MODIFICATION PLANS AND SECTIONS, BRIDGE #1
34	PARTIAL FRAMING PLANS AND SECTIONS, BRIDGE #1
35	DECK PLANS, BRIDGE #1
36	PAVEMENT ELEVATIONS AND TYPICAL SECTIONS, BRIDGE #1
37A-37B	REINFORCEMENT SCHEDULE, BRIDGE #1
38	GENERAL PLAN, BRIDGE #2, ELEVATION AND ESTIMATED QUANTITIES
39A-39B	ABUTMENT MODIFICATION PLANS AND ELEVATIONS, BRIDGE #2
40	ABUTMENT MODIFICATION SECTIONS AND DETAILS, BRIDGE #2
41	ABUTMENT SLAB PLANS AND DETAILS, BRIDGE #2
42	ABUTMENT SLAB SECTIONS, BRIDGE #2
43	FIELD MODIFICATION PLANS AND SECTIONS, BRIDGE #2
44	PARTIAL FRAMING PLANS AND SECTIONS, BRIDGE #2
45	DECK PLANS, BRIDGE #2
46	PAVEMENT ELEVATIONS AND TYPICAL SECTIONS, BRIDGE #2
46A-46B	REINFORCEMENT SCHEDULE, BRIDGE #2
47	GENERAL PLAN, BRIDGE #3, ELEVATION AND ESTIMATED QUANTITIES
48	ABUTMENT MODIFICATION PLANS AND ELEVATIONS, BRIDGE #3
49	ABUTMENT MODIFICATION SECTIONS AND DETAILS, BRIDGE #3
50	ABUTMENT SLAB PLANS AND DETAILS, BRIDGE #3
51	ABUTMENT SLAB SECTIONS, BRIDGE #3
52	FIELD MODIFICATION PLANS AND SECTIONS, BRIDGE #3
53	PARTIAL FRAMING PLANS AND SECTIONS, BRIDGE #3
54	DECK PLANS, BRIDGE #3
55	PAVEMENT ELEVATIONS AND TYPICAL SECTIONS, BRIDGE #3
56A-56B	REINFORCEMENT SCHEDULE, BRIDGE #3
57	GENERAL PLAN, BRIDGE #4, ELEVATION AND ESTIMATED QUANTITIES
58	ABUTMENT SLAB PLANS AND DETAILS, BRIDGE #4
59	DECK PLANS AND DETAILS, BRIDGE #4
60	PAVEMENT ELEVATIONS AND TYPICAL SECTIONS, BRIDGE #4
61	REINFORCEMENT SCHEDULE, BRIDGE #4
62	DECK JOINT DETAILS
63	DEMOLITION PLANS AND SECTIONS

# OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT CIP 43-86-01

## DECK REPLACEMENT AND WIDENING C28

FOR THE FOLLOWING BRIDGES IN ORIGINAL CONTRACT SECTION

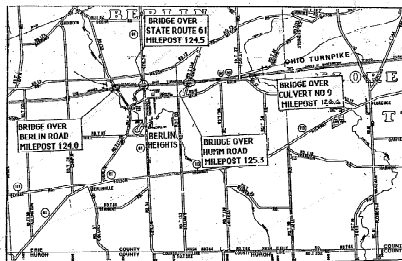
OVER BERLIN ROAD (BRIDGE NO. 1) MILEPOST 124.0

OVER STATE ROUTE 61 (BRIDGE NO. 2) MILEPOST 124.5

OVER HUMM ROAD (BRIDGE NO. 3) MILEPOST 125.3

OVER CULVERT NO.9 (BRIDGE NO. 4) MILEPOST 126.6

## ERIE COUNTY



LOCATION PLAN

SCALE IN MILES



### OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

BD-1	SUBGRADE UPDATES	06-01-83
BD-2	PAVEMENT REINFORCING	01-11-85
BD-3	LONGITUDINAL PAVEMENT JOINTS	12-06-76
BD-5	RESURFACING	01-11-85
BD-7	CONCRETE CURBS AND COMBINED CURB & GUTTER	12-06-76
BD-11	STANDARD BRIDGE RAILING - DEFLECTOR	
BD-12	RAILINGS	05-29-79
BD-4	TRANSVERSE PAVEMENT JOINTS	01-11-85
F-2	WOODEN WIRE FENCE	05-01-76
F-3	FENCE DETAILS AT BRIDGES	09-01-76
FB-1-82	FIXED BEARINGS FOR STEEL BEAM AND GIRDER BRIDGES	05-16-82
GB-1	GUARDRAIL DETAILS	01-11-85
GB-2	GUARDRAIL TYPE 5	02-05-82
GB-3	BRIDGE TERMINAL ASSEMBLIES	01-21-85
GB-4	TYPE A ANCHOR ASSEMBLY	02-05-82
HC-2	BARBICUTED AND RATES	06-01-73
HC-4	GRADE AND SEWER	07-26-76
HC-11	TEMPORARY EROSION CONTROL	06-01-78
HC-15	ROCKS AND SLOTTED	03-01-83
BD-1-86	SUBSTRUCTURE DETAILS (SHEET 3.1 OF 4)	05-12-86
TC-75	FLASHING ARROW PANEL	06-26-84

APPROVED FOR  
THE OHIO TURNPIKE COMMISSION

BY  
*James W. Shocknessy*

CHIEF ENGINEER

2-3-86

DATE

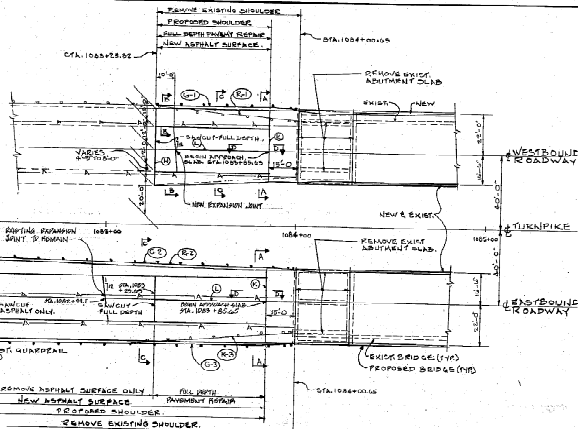
Plan Prepared By:

ORDER

ARCHITECTS - ENGINEERS  
CLEVELAND, OHIO

*R.M. Nathan, P.E.*  
R.M. NATHAN, P.E.





PLAN - WEST APPROACH ROADWAYS.

ITEM SP-11 REINFORCED CONCRETE APPROACH SLAB (1-19")					
STATION			LENGTH	WIDTH	AREA
FROM	TO	ROADWAY	FT.	FT.	S. Y.
1003+85.65	1008+00.00	WESTBOUND	15	39.00	585
1003+85.65	1008+00.00	EASTBOUND	15	39.00	585
		TOTAL			1170

CORROPHIL									
PES. NO	CENTRALING STATION		TIME	HOURS	292	3706	606	606	606
					CORROPHIL TYPE 8 REUSE	CORROPHIL TYPE 1 REUSE	BRIDGE TERMINAL REUSE TYPE B	CORROPHIL TYPE 5 STEEL POSTS	ANCHOR ASSEMBLY TYPE B
	FROM	TO			LINE. FT.	LINE. FT.	LINE	LINE. FT.	FROM
6-1	350 (15.45)	1000 (30.00)	N	1000	15	1			
6-2	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-3	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-4	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-5	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-6	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-7	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-8	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-9	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-10	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-11	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-12	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-13	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-14	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-15	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-16	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-17	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-18	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-19	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-20	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-21	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-22	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-23	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-24	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-25	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-26	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-27	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-28	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-29	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-30	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-31	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-32	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-33	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-34	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-35	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-36	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-37	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-38	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-39	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-40	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-41	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-42	1000 (30.00)	1000 (30.00)	E	1000	15	1			
6-43	100								
TOTAL				450	152	3			

REMOVAL QUANTITIES					
STATIONS		ROADWAY	LENGTH	202 RIBB PROVIDED REMOVED SQ. YDS.	202 WEARING SURFACE SQ. YDS.
FROM	TO		FT.	FT.	
1083+35.65	1084+00.65	N/A	A	64	40
1084+35.65	1084+100.65	E.B.	A	64	40
1084+75.65	1084+35.65	E.B.	B	64	40
TOTAL				80	293.3

$$A = 15.0^\circ$$

$$B = 110.0^\circ$$
[illegible]

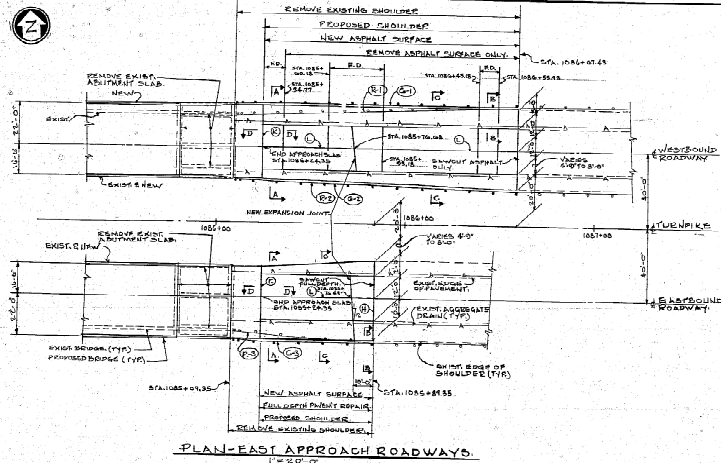
SP 605 AGGREGATE DRAINS				
STATION		TYPE	NOVY.	TYPE II LIN. FT.
FROM	TO			
1054+75.0	1054+80.0	N	W.B.	28
1054+80.0	1054+85.0	S	W.S.	34
1054+85.0	1054+90.0	N	S.D.	54
1054+90.0	1054+95.0	S	S.D.	26
TOTAL				142

**NOTES:**

- FOR SECTIONS A-A, B-B, C-C AND D-D, SEE SHEET # 24.  
 -FOR PAVEMENT ELEVATIONS AND SEWER PROFILES, SEE SHEET # 23.  
 -FOR GRASS SECTIONS, SEE SHEETS # 25 & 26.  
 -FOR PAVEMENT JOINTS AND AGGREGATE DRAIN DETAILS, SEE SHEET # 25.  
 -FOR CATCH BASIN AND SLOPE DRAIN DETAILS, SEE SHEET # 26.  
 -EXISTING BRIDGE DRAINAGE WILL BE REMOVED DURING BRIDGE RENOVATION.  
 \*\*NEW TYPE 1 DRAIN: SHALL BE IN ACCORDANCE WITH: SP 451.

**LEGEND:**

1	REVISED AS-BUILT	DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE MAINTENANCE BRIDGES OVER		
CULVERT NO 9 (BRIDGE #4), MILEPOST 125.6		
PLAN AND QUANTITIES - WEST APPROACH ROADWAY		
THE OSBORN ENGINEERING COMPANY		
CONSULTING ENGINEERS		
506 EUGLEDALE AVE.		CLEVELAND, OHIO 44114
DESIGNED BY: S.E. BRADSHAW L.E.	CHECKED BY: W. L. CHAMBERLAIN	
DATE: 11/4/85	SCALE: AS SHOWN	
CIP: 43-00-01	SHEET 19 OF 64	



PLAN-EAST APPROACH ROADWAYS.

ITEM SP611 REINFORCED CONCRETE APPROACH SLAB (T-10)				
SECTION		LENGTH	WIDTH	AREA
FROM	TO	FT.	FT.	S. Y.
1085+09.35	1085+24.35	WESTBOUND	15	20.00
1085+09.35	1085+24.35	EASTBOUND	15	20.00
TOTAL				40.00

\*INCLUDING TYPE 2B CORD AT LOCATIONS SHOWN ON PLAN

[illegible]

REMOVAL QUANTITIES						
STATIONS		ROCKWORTH	LEWIS	JOHN	202 RIGID POLYMER REMOVING 100 VOL.	202 WARMING CORROS REMOVING 50 VOL.
FROM	TO		FT.	FL.		
1055+07.35	1055+24.35	W/S	14	14	40	
1055+24.35	1056+60.35	W/S	6	24		226.7
1056+09.35	1056+24.35	E.S.	14	24		
TOTAL					40	226.7

A = 15.0'

B = 35.0'

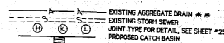
[illegible]

SP 605 RECCARE DRAIN				
STATION		SIB	ADDP.	TYPE II
FROM	TO			
10+50.00	10+54.50	N	W.D.	LIN. FT.
10+54.50	10+58.50	N	W.D.	36.
10+58.50	10+63.50	A	W.D.	27
10+63.50	10+68.50	N	W.D.	24
10+68.50	10+73.50	S	W.D.	36
TOTAL				190

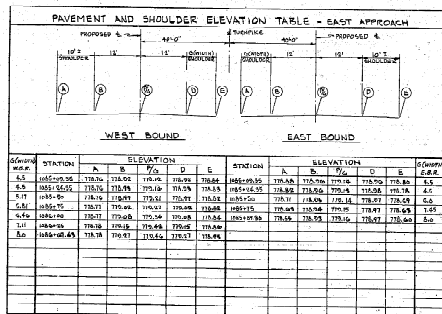
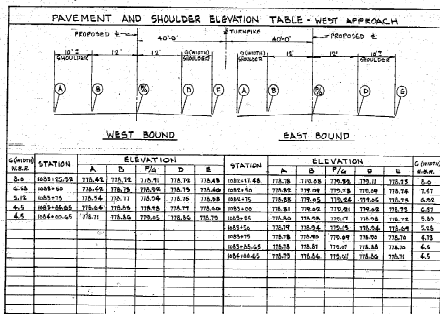
## Methods

\*FOR SECTIONS A-A, B-B, C-C AND D-D, SEE SHEET # 24.  
 \*FOR PAVEMENT ELEVATIONS AND SEWER PROFILES, SEE SHEET # 27.  
 \*FOR CROSS SECTIONS, SEE SHEETS # 23 & 25 C.  
 \*FOR PAVEMENT JOINTS AND AGGREGATE DRAIN DETAILS, SEE SHEET # 25.  
 \*FOR CATCH BASIN AND SLOPE DRAIN DETAILS, SEE SHEET # 24.  
 \*EXISTING BRIDGE DRAINAGE WILL BE REMOVED DURING BRIDGE RENOVATION.  
 \*\*NEW TYPE I DRAINS SHALL BE IN ACCORDANCE WITH SD 481.

**LEGEND:**



REVISED AS-BUILT		22-10-80
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE MAINLINE BRIDGES OVER		
CULVERT NO. 9 (BRIDGE #4), MILEPOST 126.6		
PLAN & QUANTITIES-EAST APPROACH ROADWAY		
THE OSORN ENGINEERING COMPANY		
CONSULTING ENGINEERS		
666 FORT 10 AVENUE		CLEVELAND, OHIO 44114
DESIGNED BY: J. CHAMBERS, E.C.	SCALE: AS SHOWN	
DATE: 11/3/75	SHEET: 20 OF 64	
CIP: 43-06-01		



1 REVISION AS-BUILT 05/12/00

**OHIO TURNPIKE COMMISSION**

OHIO TURNPIKE MAINLINE BRIDGES OVER  
CULVERT NO. 4 BRIDGE NO. 43, RILEYPOST 126.6  
PAVEMENT ELEVATIONS

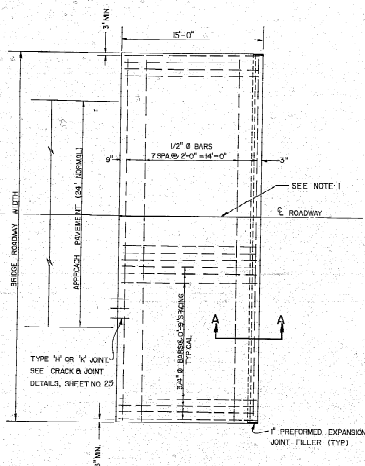
THE OSBORN ENGINEERING COMPANY  
CONSULTING ENGINEERS  
365 DELAWARE CLEVELAND, OHIO 44114

DESIGNED BY: [Signature] CHECKED BY: [Signature] IN CHARGE: [Signature]

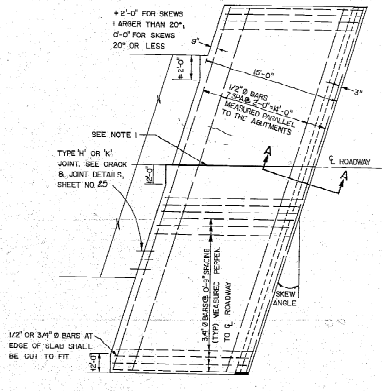
DATE: 12/11/05 SCALE: AS SHOWN

CIP: 42-86-01 SHEET: 22 OF 64

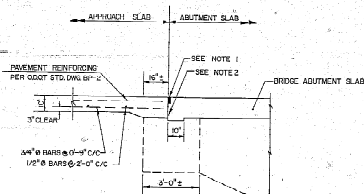




PLAN



APPROACH SLAB FOR SKEWED BRIDGE



SECTION A-A

NOTE 1: GROOVE AND SEAL AS PER D.O.D. STD. CONGT. DWG. NO. 3.

NOTE 2: TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.

NOTE 3: REPAIR OF BROKEN APPROACH SLAB SEAT SHALL BE CONSTRUCTED BY THE CONTRACTOR AS PER DETAIL OR AS DIRECTED BY THE ENGINEER. REPAIRMENT WILL BE MADE ON THE BASIS OF "BIDDER COST" PLUS 15% FOR OVERTIME AND PROFIT. "BIDDER COST" SHALL BE DEFINED UNDER SECTION 5-3.02(2) OF THE GENERAL CONDITIONS.

GENERAL: THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, CURBS (IF ANY), ESTIMATED QUANTITY (SQ. YDS.), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY, FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.

#### DESIGN DATA

CONCRETE: CLASS 3 USING SHRINKAGE COMPENSATING CEMENT.  
REINFORCING STEEL: A.S.T.M. A616 OR A617 GRADE 60 MIN. YIELD STRENGTH 60,000 P.S.I.

PREFORMED EXPANSION JOINT: FILLER AND SEALED AT THE CORNERS AND ENDS OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

GROOVE AND JOINT SEAL SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

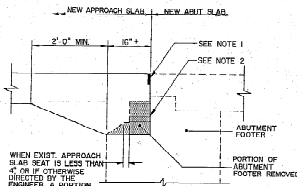
TYPE A WATERPROOFING SHOWN AT THE ABUTMENT REAR SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR SLAB CONSTRUCTION SHALL BE AS PER BIDS.

CURBS, BRIDGES WITH SIDEWALKS FOR DRIVERS CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT IN LENGTH AS FOLLOWS: WHERE WINDOW WALL EXTENDS BEYOND END OF APPROACH SLAB, USE A MINIMUM LENGTH OF 10 FT. BEYOND END OF WINDOW WALL WHERE THE APPROACH SLAB EXTENDS BEYOND THE END OF WINDOW WALL. IN THIS LENGTH, HOWEVER, THE TRANSITION LENGTH SHALL NOT BE LESS THAN 10 FT. AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB IF NECESSARY CURB PLACEMENT SHALL BE IN ACCORDANCE WITH D.O.D. STANDARD CONSTRUCTION DRAWING BR-1.

APPROACH SLAB WIDTH: APPROACH SLAB RUN 36" 1" BROAD WIDTH SHALL BE 39'-0" WIDE WHEN CURBS ARE NOT INCLUDED; 39'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY; 39'-6" WHEN CURBS ARE INCLUDED ON BOTH SIDES. SLOPES SHALL CONFORM TO 1/4" OF THE APPROACH PAVEMENT AND BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED WITHIN THE LIMITS OF THE APPROACH SLAB.

TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE EITHER TYPE "X" OR "Y" AS DETAILED ON THE PLANS. PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER LIN. F.T. FOR THE TYPE OF JOINT FURNISHED.



APPROACH SLAB SEAT REPAIR DETAIL

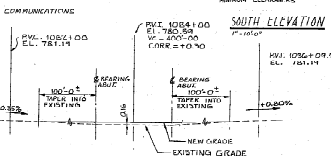
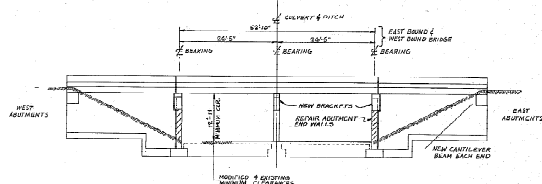
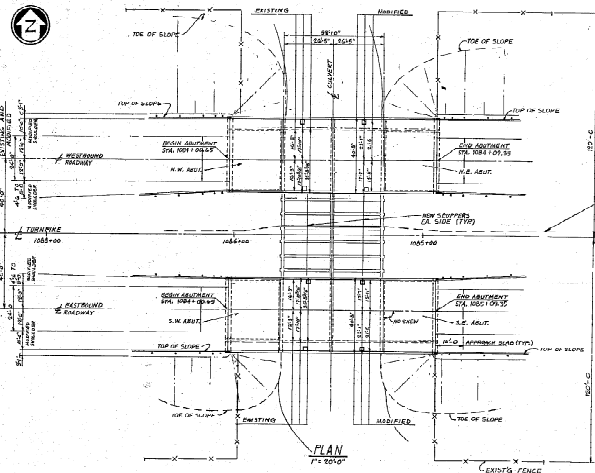
1	Revised As-Built	12/1/84
2	ADDED IMPROVED JOINT & CHANGED TYPE OF CEMENT	DFC 10/28/84
3	ADDED SLAB REPAIR DETAIL	DFC 10/28/84
4	REVISION	BY DATE

#### OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE  
APPROACH SLABS

DATE: OCTOBER 1983  
SHEET 42 OF 41  
SHEET 70 OF 40





ORIGINAL AND PROPOSED  
PROFILE GRADES

EXISTING STRUCTURE	
TYPE:	CONTINUOUS SPAN REINFORCED CONCRETE DECK
SPANS:	28'-0" AND 25'-0" SEE ELEVATION
ROADWAY:	33'-0" FACE TO FACE OF PARABOLIC CONCRETE PARAPETS AND METAL RAILING
LOADING:	LC 2000
SPREAD:	NO SPREAD, SEE PLAN
WEARING SURFACE:	1" POLYOLITHIC CONCRETE
APPROACH SLAB:	15'-0" LONG
ALIGNMENT:	TANGENT

MODIFIED STRUCTURE	
ALL DATA IS THE SAME AS THE EXISTING STRUCTURE, EXCEPT AS NOTED BELOW	
ROADWAY:	36'-0" FACE TO FACE OF PARABOLIC CONCRETE PARAPETS
LOADING:	LC 2000 AND THE ALTERNATE MILITARY LOADING (CASE II)
WEARING SURFACE:	1" POLYOLITHIC CONCRETE
APPROACH SLAB:	15'-0" LONG PER SHEET 26

NOTES:  
ITEM 90902, PORTIONS OF STRUCTURES REMOVED, INCLUDING BUT NOT LIMITED TO, THE FOLLOWING APPROXIMATE QUANTITIES:

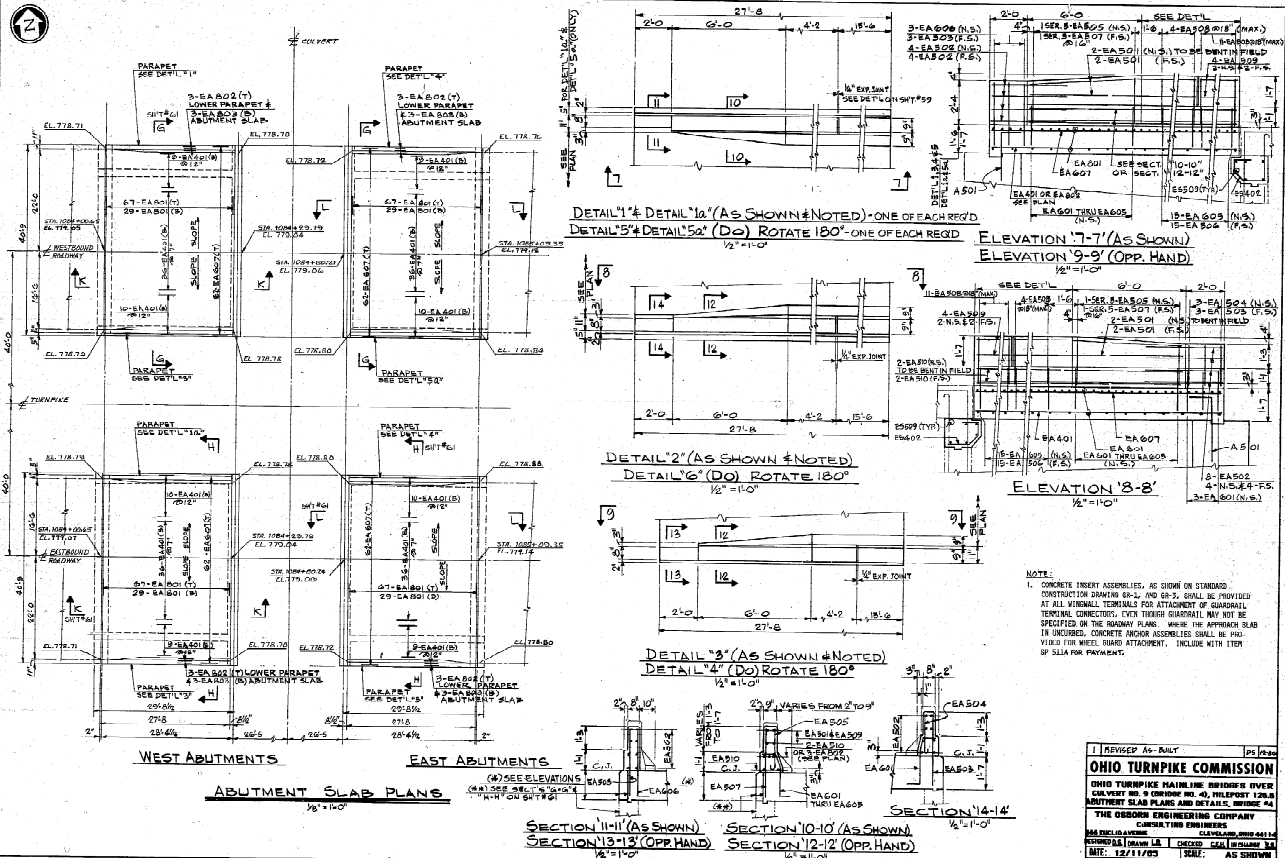
	WESTBOUND	EASTBOUND
CONCRETE (SUPERSTRUCTURES)	131 CY	131 CY
CONCRETE (ABUTMENTS)	80 CY	80 CY
RAILING	225 LF	225 LF

BENCH MARK	
PERMANENT MARKER	
STA 126+00 CL 0+00	
TURNTOWER	
ELEV. 75.62	

## ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	EASTBOUND BRIDGE				WESTBOUND BRIDGE			
				ABUTMENTS	SUPSTRUCT.	GENERAL	TOTAL	ABUTMENTS	SUPSTRUCT.	GENERAL	TOTAL
SP 20P	LUMP SUM	LUMP SUM	PORTIONS OF STRUCTURES REMOVED								
503	78	C.Y.	EMBANKMENT, AS PER 303.10	39			39	39			39
505	150	C.Y.	UNCLASSIFIED EXCAVATION	60			60	60			60
506	10145	L.T.	REINFORCING STEEL GRADE 60	5575			5575	5575			5575
510	0	EACH	DOWEL BOLTS, USING SP 855 GROUT ANCHORING	33			33	33			33
SP 511A	312	C.Y.	CLASS 5 CONCRETE, SUPERSTRUCTURE SLOK AND BARRIERS USING SHORNLAGE COMPENSATING CEMENT.		156		156		156		156
SP 511A	306	C.Y.	CLASS 5 CONCRETE, ABUTMENT SLABS AND BARRIERS USING SHORNLAGE COMPENSATING CEMENT.	153			153	153			153
515	0	EA	SCUPPERS INCLUDING SUPPORTS, AS PER PLAN								
SP 511	75	C.Y.	CLASS 0 CONCRETE ABUTMENTS INCLUDING ALL BRACKETS	38			38	38			38
516	255	S.F.	1" PREFORMED EXPANSION JOINT FILLER W/ JOINT SEALER	144			144	144			144
SP 510	50	BF	REPAIR OF ABUTMENT WALLS AT ENDS	50			50	50			50
SP 527	LUMP SUM	LUMP SUM	FALSEWORK, TEMPORARY BRACINGS & PROTECTIVE STRUCTURES								
SP 538	1462	S.Y.	CONCRETE WEATHERPROOFING	731			731	731			731
SP 524	50808	L.B.	EPOXY COATED REINFORCING STEEL	30404			30404	30404			30404

1	REVISED AS-BUILT	25	PER
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE RAILING, BRIDGES OVER			
CULVERT NO. 9 (BRIDGE NO. 43), MILEPOST 126.0			
GENERAL PLAN, ELEVATION AND ESTIMATED QUANTITIES			
THE OGDEN ENGINEERING COMPANY			
CONSULTING ENGINEERS			
800 CLEVELAND AVENUE CLEVELAND, OHIO 44114			
CHANGES: (BY) (DATE) (BY) (DATE) (BY) (DATE)			
DATE: 12/3/02 SCALE: AS SHOWN			
CIP: 43-06-01 SHEET: 27 OF 54			



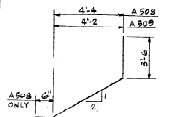






WESTBOUND BRIDGEEASTBOUND BRIDGE

SUPERSTRUCTURE										EAST BOUND BRIDGE																	
MARK	NO.	LENGTH	TYPE	SEER INC. (LBS)	MARK	NO.	LENGTH	TYPE	SEER INC. (LBS)	MARK	NO.	LENGTH	TYPE	SEER INC. (LBS)	MARK	NO.	LENGTH	TYPE	SEER INC. (LBS)	MARK	NO.	LENGTH	TYPE	SEER INC. (LBS)			
CS601	25	6'0"	STR.	1670	EA801	55	27'-4"	STR.	1094	EA901	55	27'-4"	STR.	1094	CS602	46	4'-0"	STR.	1470	EA902	55	27'-4"	STR.	1094			
CS602	64	3'1"	STR.	95						EA902	46	3'2"	STR.	93	EA903	8	10'-0"	STR.	83	EA904	16	4'-0"	STR.	67			
ES502	8	4'0"	STR.	481	EA801	8	10'-0"	STR.	83	EA901	8	10'-0"	STR.	83	EA902	16	4'-0"	STR.	67	EA903	8	10'-0"	STR.	83			
ES503	8	16'-0"	STR.	206	EA802	16	4'-0"	STR.	67	EA902	16	4'-0"	STR.	67	EA903	8	10'-0"	STR.	83	EA904	16	4'-0"	STR.	67			
ES504	10	0'-0"	STR.	100	EA803	6	3'-3"	STR.	20	EA903	10	0'-0"	STR.	100	EA904	16	4'-0"	STR.	67	EA905	3	2'-7"	STR.	101			
ES505	52	102	STR.	889	EA804	3	2'-7"	STR.	101					EA905	3	2'-7"	STR.	101	EA906	3	2'-7"	STR.	101				
ES506	74	2'-6"	STR.	115	EA805	25	2'-11"	STR.	111	1"	EA805	25	2'-11"	STR.	111	1"	EA805	25	2'-11"	STR.	111	1"	EA805	25	2'-11"	STR.	111
ES507	74	5'-6"	STR.	844	EA806	30	2'-6"	STR.	102	7"	EA806	30	2'-6"	STR.	102	7"	EA806	30	2'-6"	STR.	102	7"	EA806	30	2'-6"	STR.	102
ES508	14	2'-3"	STR.	140	EA807	32	2'-3"	STR.	118	1"	EA807	32	2'-3"	STR.	118	1"	EA807	32	2'-3"	STR.	118	1"	EA807	32	2'-3"	STR.	118
ES509	12	3'-0"	STR.	409	EA808	30	2'-3"	STR.	104	14	EA808	30	2'-3"	STR.	104	14	EA808	30	2'-3"	STR.	104	14	EA808	30	2'-3"	STR.	104
ES510	65	4'-0"	STR.	8904	EA809	6	2'-5"	STR.	156	15	EA809	6	2'-5"	STR.	156	15	EA809	6	2'-5"	STR.	156	15	EA809	6	2'-5"	STR.	156
ES511	82	9'-6"	STR.	2080	EA802	2	2'-11"	STR.	106	9	EA802	2	2'-11"	STR.	106	9	EA802	2	2'-11"	STR.	106	9	EA802	2	2'-11"	STR.	106
ES512	8	14'-0"	STR.	350	EA803	2	2'-10"	STR.	106	9	EA803	2	2'-10"	STR.	106	9	EA803	2	2'-10"	STR.	106	9	EA803	2	2'-10"	STR.	106
ES513	8	25'-0"	STR.	4009	EA804	2	2'-10"	STR.	106	9	EA804	2	2'-10"	STR.	106	9	EA804	2	2'-10"	STR.	106	9	EA804	2	2'-10"	STR.	106
ES514	98	17'-6"	STR.	4009	EA805	3	3'-7"	STR.	102	192	EA805	3	3'-7"	STR.	102	192	EA805	3	3'-7"	STR.	102	192	EA805	3	3'-7"	STR.	102
ES515	58	2'-9"	STR.	7933	EA806	3	3'-7"	STR.	102	192	EA806	3	3'-7"	STR.	102	192	EA806	3	3'-7"	STR.	102	192	EA806	3	3'-7"	STR.	102
EA807	62	27'-4"	STR.	2450	EA807	62	27'-4"	STR.	2450						EA807	62	27'-4"	STR.	2450								
TOTAL					EA801	56	40'-0"	STR.	10,239	EA801	56	40'-0"	STR.	10,239	TOTAL	27100	EA801	56	40'-0"	STR.	10,239	EA801	56	40'-0"	STR.	10,239	
					EA802	3	25'-4"	STR.	203	EA802	3	25'-4"	STR.	203		219	EA802	3	25'-4"	STR.	203	EA802	3	25'-4"	STR.	203	
					EA803	3	27'-6"	STR.	15,800	EA803	3	27'-6"	STR.	15,800		210	EA803	3	27'-6"	STR.	203	EA803	3	27'-6"	STR.	203	



11

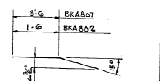
WESTBOUND BRIDGE

EASTBOUND BRIDGE

MARK		ALL BRACKETS AT ABUTMENT		TYPE		INC. (LBS)		MARK		NO. LENGTH		TYPE		INC. (LBS)		MARK		NO. LENGTH		TYPE		INC. (LBS)		MARK		NO. LENGTH		TYPE		INC. (LBS)																														
ALL BRACKETS AT ABUTMENT		TYPE		INC. (LBS)		MARK		NO. LENGTH		TYPE		INC. (LBS)		MARK		NO. LENGTH		TYPE		INC. (LBS)		MARK		NO. LENGTH		TYPE		INC. (LBS)																																
BKA 502	109	5	15'-9"	110	115	46601	57	15'-2	109	501	NORTHWEST ABUTMENT BEAM										NORTHEAST ABUTMENT BEAM										ALL BRACKETS AT CENTERLINE										SOUTHWEST ABUTMENT BEAM										SOUTHEAST ABUTMENT BEAM									
BKA 503	5	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 504	5	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 505	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 506	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 507	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 508	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 509	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 510	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 511	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 512	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 513	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 514	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 515	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 516	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 517	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 518	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 519	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 520	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 521	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 522	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 523	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 524	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 525	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 526	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 527	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 528	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 529	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 530	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 531	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 532	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 533	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 534	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 535	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 536	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 537	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 538	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 539	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 540	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 541	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 542	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 543	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 544	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 545	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 546	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-2	109	501	BKA 503	2	5'-3	109	101	5	5'-3	CA 501	57	15'-2	109	501	BKA 504	57	15'-2	109	501																													
BKA 547	4	15'-9"	110	115	46601	57	15'-2	109	501	BKA 501	57	15'-																																																

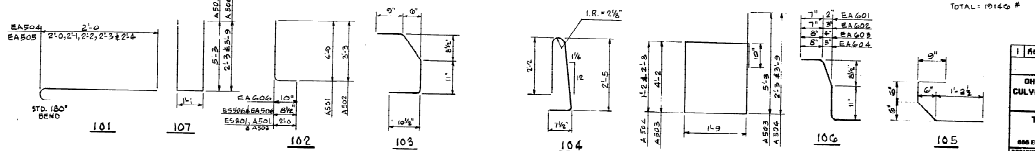


109

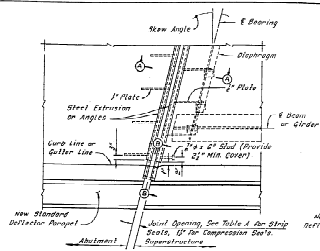


108

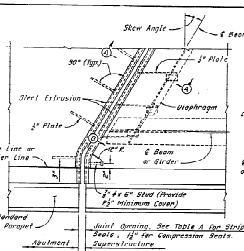
TOTAL = 191450



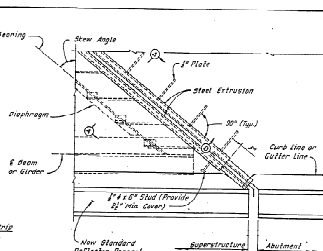




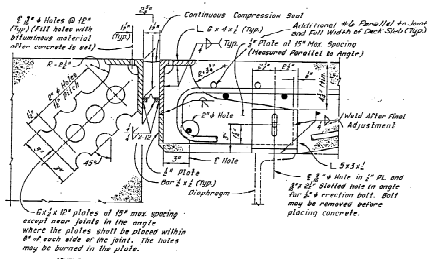
PLAN - SKEW ANGLE < 20°  
(Strip Seal Shown, Compression Seal Similar)  
Scale: 1/4" = 1'-0"



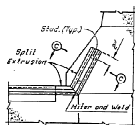
PLAN - SKEW ANGLE 20° TO 45°  
(Strip Seal Shown, Compression Seal Similar)  
Scale: 1/4" = 1'-0"



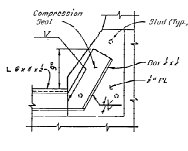
PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)  
Scale: 1/4" = 1'-0"



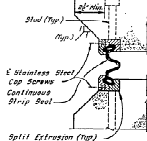
SECTION A-A (COMPRESSION SEAL)  
Scale: 3/4" = 1'-0"



SECTION B-B (STRIP SEAL)  
Scale: 1/2" = 1'-0"

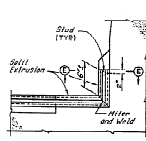


SECTION C-C (COMPRESSION SEAL)  
Scale: 1/2" = 1'-0"

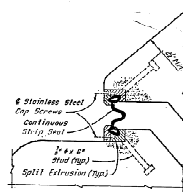


SECTION D-D  
No Scale

SECTION A-A (STRIP SEAL)  
Scale: 3/4" = 1'-0"



SECTION E-E  
Scale: 1/2" = 1'-0"



SECTION F-F  
No Scale

# GENERAL NOTES:

ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.

STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-108.

ALL WELDING SHALL CONFORM WITH A-5.5, AND ASHST SPECIFICATIONS FOR WELDED HIGHWAY AND RAILROAD BRIDGES.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

ELASTOMERIC COMPRESSION SEAL SHALL BE WABO-ACME 4-200, D.S. BROWN, D.S. 200 OR APPROVED EQUIV.

CONTINUOUS STRIP SEAL SHALL BE AS MANUFACTURED BY WABO-ACME, D.S. BROWN, GENERAL TIRE OR APPROVED EQUIV. AND SHALL BE THE SIZE AS SPECIFIED.

DETAILS AT DIAPHRAGMS SHOWN. DETAILS AT HEADS OR RIBBERS SIMILAR.

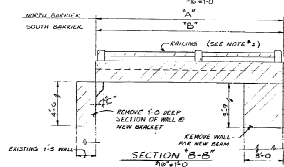
TABLE A

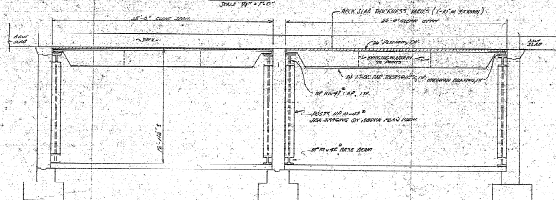
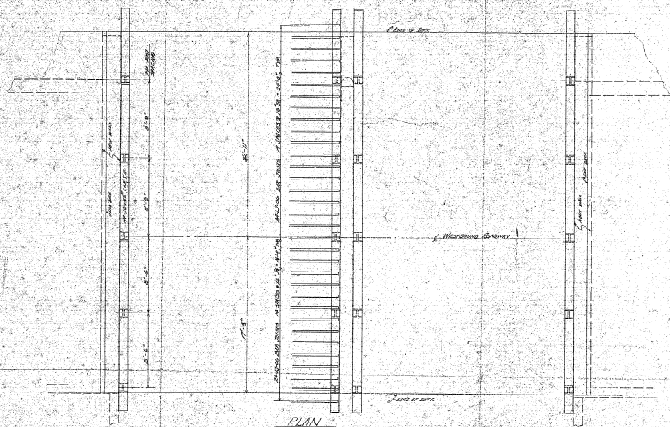
STRIP SEAL	STRIP SEAL JOINT SPACING INSTALLATION CHART							
	TEMPERATURE °F							
	40	50	60	70	80	90	100	110
5"	2-1/4"	2-1/8"	2"	1-7/8"	1-3/4"	1-5/8"	1-1/2"	
4"	2-5/8"	2-1/2"	2-1/8"	2-3/8"	2-1/4"	2-1/8"	2"	
3"	2-7/8"	2-3/4"	2-3/8"	2-1/2"	2-1/8"	2-1/8"	2-1/8"	

REVISED AS-BUILT PL 1224  
OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

DATE: JANUARY 1985 SCALE: AS NOTED  
FIG. 43-86-01 SHEET 63 OF 64





ELEVATION  
Scale 1/4" = 1'-0"

SEE PLAN FOR DETAILS OF CONSTRUCTION.




**MCM**  
MCMER  
CONSTRUCTION  
INC.

122 NORTH WILSON STREET  
CHICAGO, ILL. 60642  
410-514-5851

PROJECT  
CHICAGO TURNPIKE  
CHICAGO, ILL.  
L&N CO., INC.

NET 3/65 1/4" = 1'-0"

NOTES  
1) NOTED AND BEING SHOWN  
2) NOTED AND BEING SHOWN

APPROVED

J. B. B. B.

ENGINEER

RECEIVED

APR 10 1965

OSBORN

DRAWN: 1/4" = 1'-0"

CHECKED: 1/4" = 1'-0"

APPROVED: 1/4" = 1'-0"

PROJECT: 1/4" = 1'-0"

1/4" = 1'-0"

1/4" = 1'-0"

1/4" = 1'-0"

1/4" = 1'-0"



## INDEX OF SHEETS

TITLE SHEET  
SURVEY CONTROL PLAN  
SCHEMATIC PLAN  
TYPICAL SECTIONS  
GENERAL NOTES  
MAINTENANCE OF TRAFFIC SIDEROADS  
GENERAL SUMMARY  
CALCULATIONS & SUBSUMMARIES  
STORM WATER POLLUTION PREVENTION PLAN  
PLAN & PROFILE  
PAVEMENT ELEVATION TABLE  
MEDIAN WALL PLAN AND ELEVATION  
CROSS SECTIONS  
DRAINAGE DETAILS  
APPROACH SLAB DETAILS  
WATER WORK PLAN S.R. 61 UNDER OHIO TURNPIKE  
TRAFFIC CONTROL  
STRUCTURE GENERAL NOTES AND COMMON DETAILS  
STRUCTURE OVER BERLIN ROAD  
STRUCTURE OVER S.R. 61  
STRUCTURE OVER HUMM ROAD  
STRUCTURE OVER CHAPPEL CREEK  
OTC STANDARD DRAWINGS

B1  
B2-B3  
B4  
B5-B7  
B8-B10  
B11-B12  
B13-B15  
B16-B23  
B24-B32  
B33-B49  
B50-B62  
B63-B74  
B75-B128  
B129-BB131  
B132-B135  
B135A  
B136-B145  
B146-B156  
B157-B169  
B170-B179  
B180-B191  
B192-B202  
B203-B231

# OHIO TURNPIKE COMMISSION

## THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT 77-97-01 PART B  
THIRD LANE CONSTRUCTION  
M.P. 123.50 TO M.P. 127.23

STATION 922+00 TO STATION 1119+25  
ERIE COUNTY

## OHIO TURNPIKE COMMISSION STANDARD DRAWINGS

AS-1	B203	GR-1R	B213	MW-3	B223
AS-2	B204	GR-2	B214	MW-4	B224
CB-MW	B205	IB-1	B215	MW-5	B225
CBR-3R	B206	I-3B50	B216	RPM-1R	B226
CBR-30H	B207	JB-1	B217	TC-1	B227
CJ-2	B208	MBC-1	B218	TC-2	B228
DKJ-1	B209	MCC-1	B219	TCR-13R	B229
DKJ-2	B210	MCC-2	B220	UD-1	B230
DR-1	B211	MW-1	B221	XOV-3	B231
EPA-1	B212	MW-2	B222		

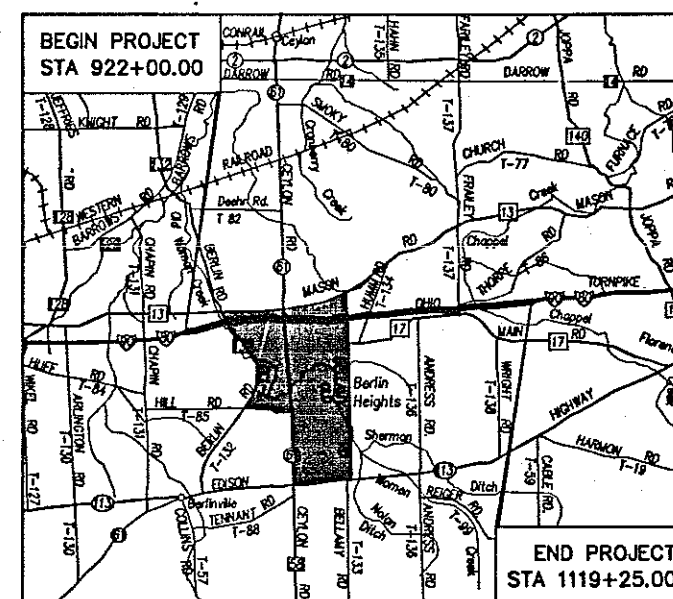
## FIBER OPTIC CABLE AS-BUILT DRAWINGS

SHEET 121 TO SHEET 124

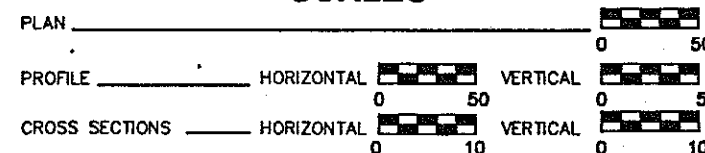
## OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

BP-2.1	10-28-94	I-3A & B	4-1-80	TC-42.10	8-19-77
BP-5.1	10-28-94	MC-1	6-13-69	TC-42.20	3-26-79
CB-5	11-10-83	MC-4	7-26-76		
GR-1.1	5-6-91	MC-9.3	10-30-92		
GR-1.2	10-30-92	MC-11	8-1-78		
GR-2.1	5-6-91	MH-1	12-18-84	BS-1-93	12-19-94
GR-2.2	10-30-92	MH-3	12-18-84	FB-1-82	5-10-82
GR-3.1	5-6-91	TC-7.65	3-1-79	ICD-1-82	8-1-84
GR-3.2	5-6-91	TC-21.10	9-1-92	PCB-91	4-24-92
GR-4.2	5-6-91	TC-22.20	9-1-92	RB-1-55	2-2-59
GR-5.3	10-30-92	TC-41.10	8-29-84	SD-1-69	6-12-69
GR-8.1	1-31-94	TC-41.20	6-21-94		

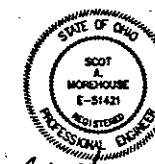
2 WORKING DAYS  
BEFORE YOU DIG  
Call 800-362-2764 (Toll Free)  
OHIO UTILITIES PROTECTION SERVICE  
CALL JAYTEL - (419) 884-0400  
(LCI FIBER OPTIC CABLE)  
OHIO TURNPIKE DIVISION SUPERINTENDENT  
(419) 862-2922  
(ROADWAY LIGHTING CABLE)



## SCALES



*Russell W. Grohne*

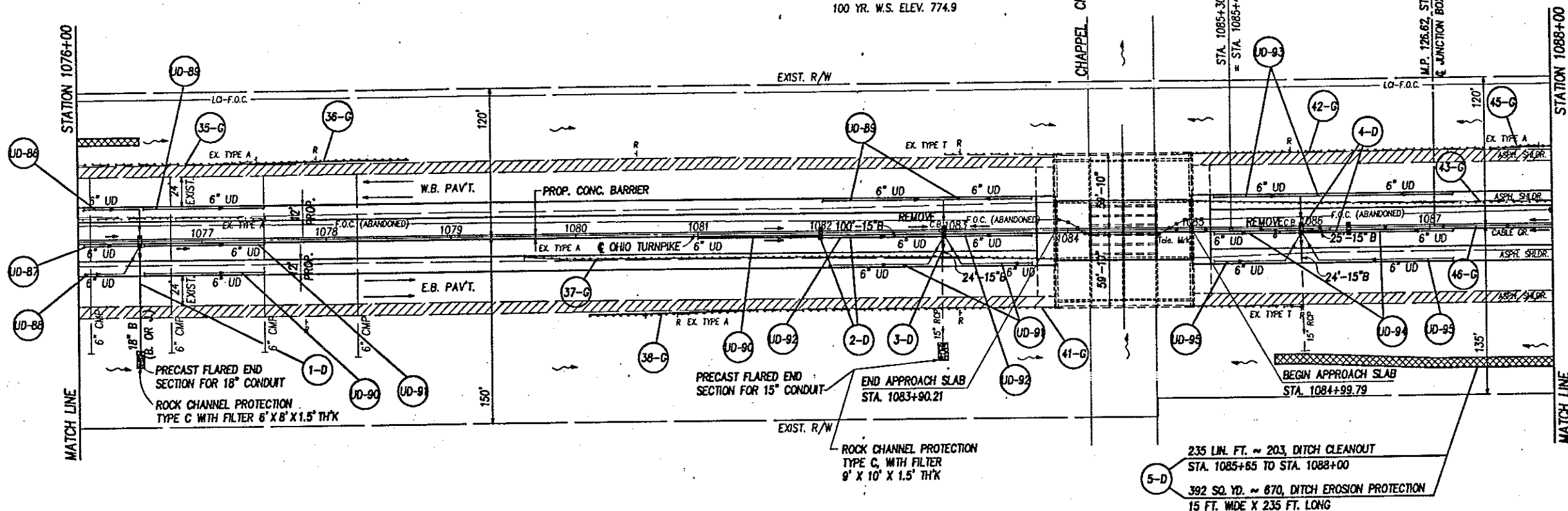


*Scott A. Workhouse*

PLANS PREPARED BY  
**DANSARD GROHNE LONG, Limited**  
Toledo, Ohio

DESIGN CONTRACT NO. 71-05-29

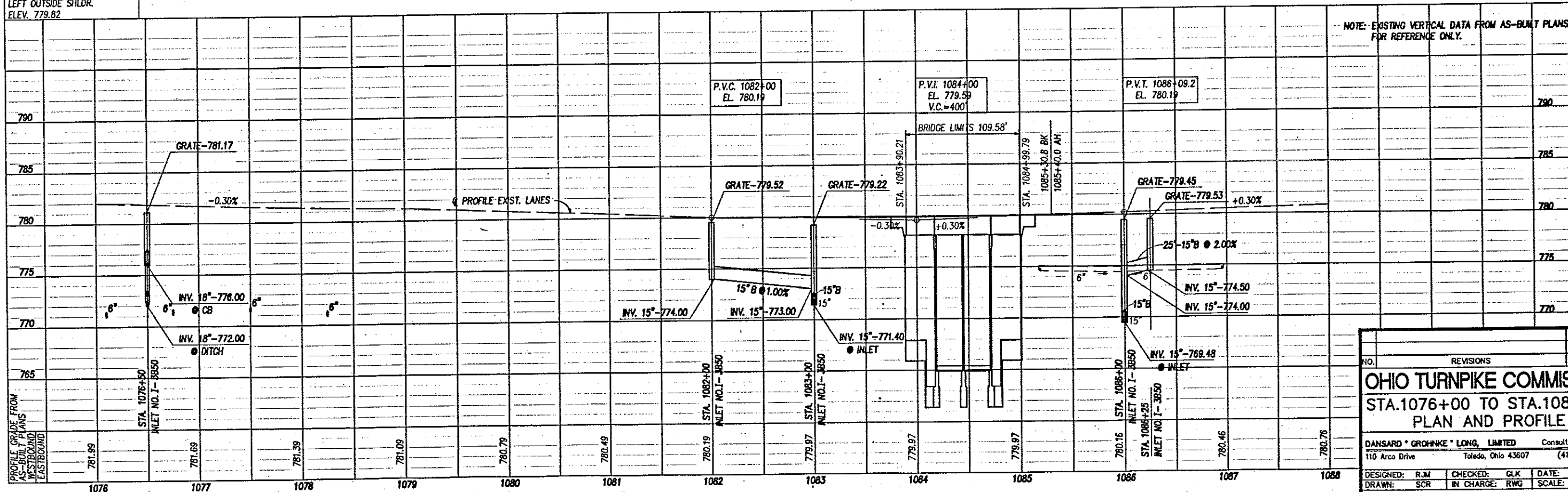
MP 126.58  
STA. 1084+44.58  
DOUBLE 25'X12.7' CONC. BOX CULVERT  
DRAINAGE AREA = 11,130 AC.  
100 YR. DESIGN DISCHARGE = 1980 CFS  
100 YR. W.S. ELEV. 774.9



NOTES

- FOR TYPICAL SECTIONS, SEE SHEETS B5, B6 & B7.
- FOR GUARDRAIL BALLOON QUANTITIES, SEE SUB-SUMMARY SHEET B19.
- FOR DRAINAGE BALLOON QUANTITIES, SEE DRAINAGE SUMMARY SHEET B21.
- FOR UNDERDRAIN BALLOON QUANTITIES, SEE SUB-SUMMARY SHEET B23.
- FOR PAVEMENT ELEVATIONS, SEE SHEET B60 & B61.
- FOR JUNCTION BOX DETAILS, SEE OTC STD. DWGS. JB-1 SHEET B217 & MCC-1 SHEET B219.
- FOR DRAINAGE PROFILES, SEE SHEET B119-B121.
- FOR UNDERDRAIN DETAILS, SEE SHEET B123.
- FOR TRAFFIC CONTROL DETAILS, SEE SHEET B143.
- SEE GENERAL NOTES AND CROSS SECTIONS FOR ADDITIONAL DITCH CLEANOUT INFORMATION.

SITE B.M. 137  
FENO MONUMENT, STA. 1082+13  
LEFT OUTSIDE SHLDR.  
ELEV. 779.82



NOTE: EXISTING VERTICAL DATA FROM AS-BUILT PLANS, FOR REFERENCE ONLY.

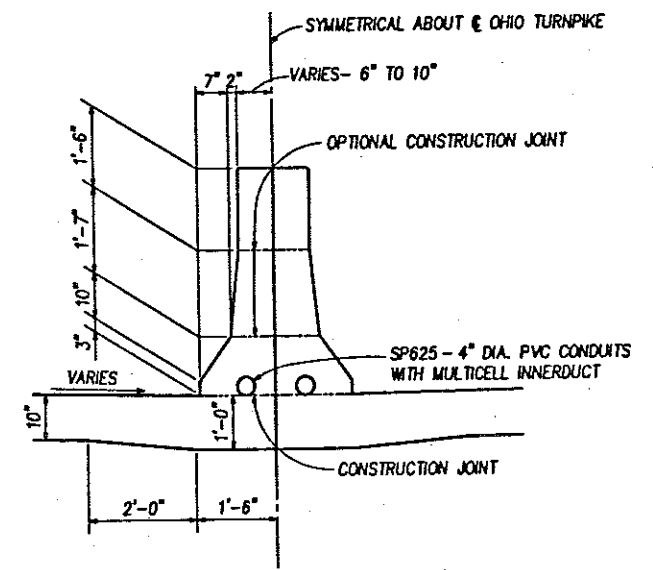
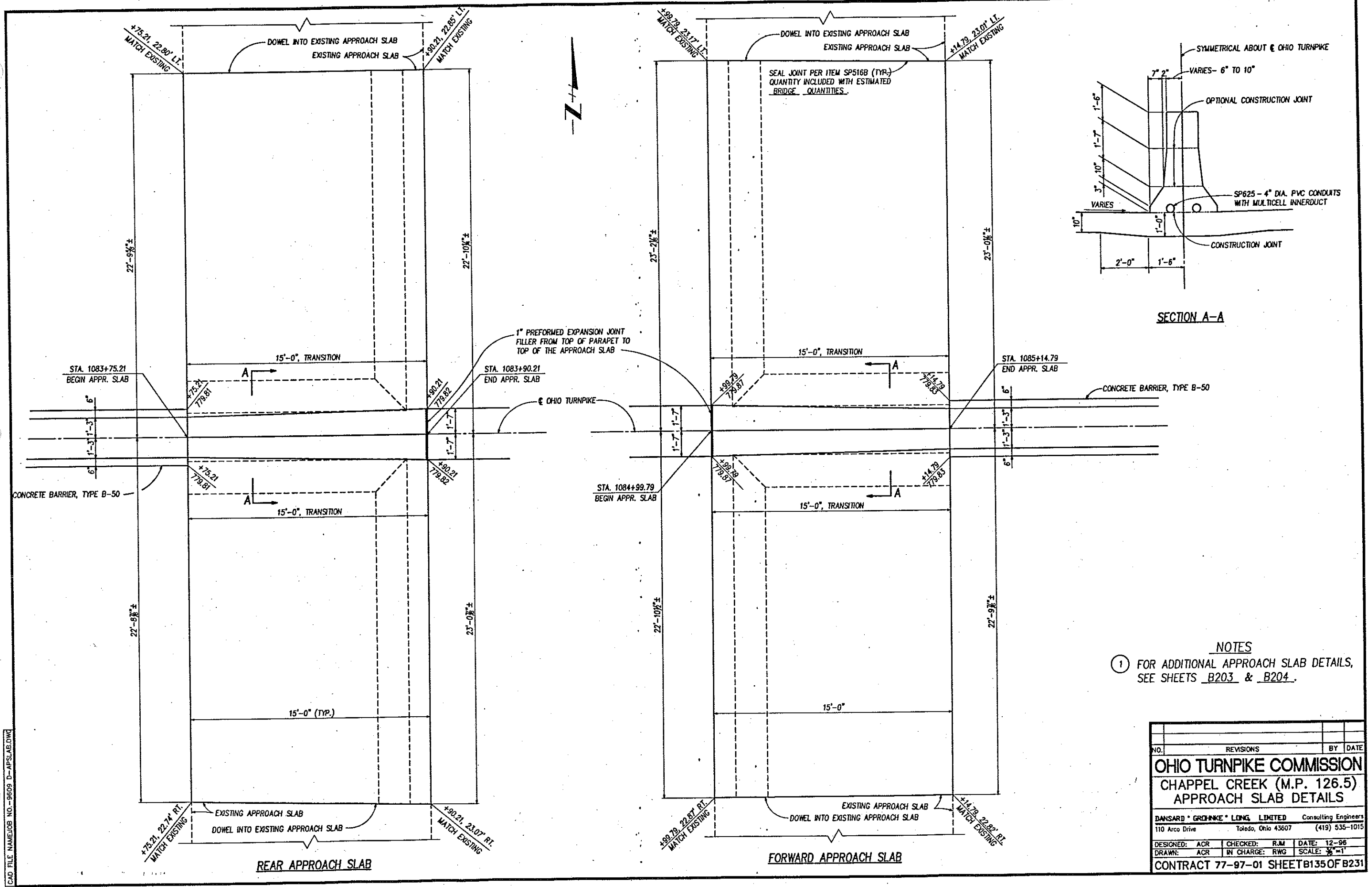
NO. REVISIONS BY DATE

OHIO TURNPIKE COMMISSION  
STA.1076+00 TO STA.1088+00  
PLAN AND PROFILE

DANSARD \* GROHNKE \* LONG, LIMITED Consulting Engineers  
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: RJM CHECKED: GLK DATE: 12-96  
DRAWN: SCR IN CHARGE: RWG SCALE: 1"=50'

CONTRACT 77-97-01 SHEET B46 OF B231



**NOTES**  
 ① FOR ADDITIONAL APPROACH SLAB DETAILS, SEE SHEETS B203 & B204.

NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
<b>CHAPPEL CREEK (M.P. 126.5)</b>			
<b>APPROACH SLAB DETAILS</b>			
DANSARD • GROHME • LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: ACR	CHECKED: RJM	DATE: 12-96	
DRAWN: ACR	IN CHARGE: RWG	SCALE: 3/8"=1'	
CONTRACT 77-97-01 SHEET B135 OF B231			

## STRUCTURE - GENERAL NOTES

### DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1992 INCLUDING THE 1993, 1994 AND 1995 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

### DESIGN LOADING

HS20-44 CASE I, THE ALTERNATE MILITARY LOADING, AND A 30 P.S.F. FUTURE WEARING SURFACE.

### DESIGN STRESSES

- 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, A617  
GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.  
SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615
- EXISTING STRUCTURAL STEEL ASTM A7 (ASSUMED) - YIELD STRENGTH 33,000 P.S.I.
- NEW STRUCTURAL STEEL ASTM A36 - YIELD STRENGTH 36,000 P.S.I.  
ASTM A572 - YIELD STRENGTH 50,000 P.S.I.

### ODOT STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS:

BS-1-93 DATED 12-19-94  
BP-2.1 REVISED 10-28-94  
FB-1-82 DATED 5-10-82  
GR-3.1 DATED 5-6-91  
RB-1-55 REVISED 2-2-59  
PCB-91 DATED 4-24-92  
ICD-1-2 DATED 8-1-84  
SD-1-69 DATED 6-12-69

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS:

944 DATED 2-29-96

### UTILITIES LINES

THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO PROTECT THE EXISTING UTILITY LINES IN THE VICINITY OF THE STRUCTURE WHILE PERFORMING ANY WORK. THE CONTRACTOR AND UTILITY COMPANY(IES) ARE REQUESTED TO COOPERATE BY ARRANGING WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER BE HELD TO A MINIMUM. ALL EXPENSE INVOLVED IN RELOCATION (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY COMPANY(IES).

REFER TO SHEET B8/B231 FOR FURTHER INFORMATION.

### EXISTING ELECTRICAL CONDUIT, HUMM ROAD - MP 125.3

ELECTRICAL SERVICE IN THE OHIO TURNPIKE COMMISSION LINE ATTACHED TO THE REAR ABUTMENT MAY BE DISRUPTED FOR UP TO 60 DAYS TO ACCOMMODATE CONSTRUCTION OF THE PROPOSED ABUTMENT WIDENING. THE COMMISSION SHALL BE GIVEN 48 HOURS NOTICE BEFORE INTERRUPTION OF SERVICE.

THE LINE SHALL BE REPLACED ON THE FACE OF THE PROPOSED ABUTMENT IN CONDUIT SIMILAR TO THE EXISTING ABUTMENT. CONDUIT AND WIRE SHALL BE SIMILAR TO THE EXISTING AND BE APPROVED BY THE COMMISSION. PULL BOXES SHALL BE PROVIDED ON THE EXISTING ABUTMENT AT THE POINTS OF WIRE SPLICE.

PAYMENT FOR ALL WORK ASSOCIATED WITH REMOVING AND REPLACING THE ELECTRICAL SERVICE LINE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD OF CLASS C CONCRETE, ABUTMENTS.

### EXISTING STRUCTURE PLANS

THE ORIGINAL CONSTRUCTION PLANS OR THE DECK REPLACEMENT DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE OFFICES OF URS CONSULTANTS, 564-A WHITE POND DRIVE, AKRON, OHIO 44320, TELEPHONE: (330) 836-9111.

### EXISTING STRUCTURE VERIFICATION

DETAILS, DIMENSIONS, AND ELEVATIONS 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 SECTION 513.02 OF THE SPECIFICATIONS AND O.T.C. GENERAL CONDITIONS G-2.04 AND G-5.02.

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, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES WHICH HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR. THE STRUCTURAL STEEL AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL THE ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR.

ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT OVER THE UNIT PRICE BID WILL BE AWARDED BY THE COMMISSION.

### DIMENSIONS

DIMENSIONS GIVEN ARE MEASURED HORIZONTALLY AND AT SIXTY (60) DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED.

### DECK PROTECTIVE METHOD

THE DECK PROTECTIVE METHODS FOR THE SUPERSTRUCTURE DECK AND ABUTMENT SLAB ARE EPOXY COATED REINFORCING STEEL IN THE TOP AND BOTTOM MATS, THREE (3) INCH CONCRETE COVER AND CONCRETE WEATHERPROOFING SEALER ON THE TOP SURFACE.

### MONOLITHIC WEARING SURFACE

THE THICKNESS OF THE MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE ONE-HALF (0.5) INCH.

### COFFERDAMS, CRIBS AND SHEETING

TEMPORARY SHEETING SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF OHIO AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 503, COFFERDAMS, CRIBS AND SHEETING.

### CONCRETE WEATHERPROOFING

ITEM SP 536-CONCRETE WEATHERPROOFING SHALL BE APPLIED TO THE FOLLOWING EXPOSED NEW CONCRETE SURFACES OF THE BRIDGE:

- THE TOPS OF NEW ABUTMENT AND NEW SUPERSTRUCTURE SLABS.
- ALL NEW PARAPET SURFACES AND SLAB SIDE EDGES.
- THE BOTTOM SURFACE OF THE NEW SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRINGER FLANGE.
- NEW APPROACH SLABS AND MEDIAN BARRIERS ON THE APPROACH SLABS.
- NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES, SURFACES TO RECEIVE JOINT SEALER OR FASCIA BEAM PAINT.

### ABUTMENT BACKFILL

BACKFILL BETWEEN THE EXISTING MEDIAN WINGWALLS AND EXTENDING FROM THE EXISTING GROUND LINE TO THE BOTTOM OF THE DECK SLAB SHALL BE PLACED IN ACCORDANCE WITH SECTION 503 OF THE SPECIFICATION AND SHALL BE INCLUDED WITH ITEM 503, ABUTMENT BACKFILL, AS PER 503.10, FOR PAYMENT.

### EPOXY COATED REINFORCING STEEL SUPPORT

IN ACCORDANCE WITH THE REQUIREMENTS OF SP 509 AND SECTION 509.09, OF THE SPECIFICATIONS THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING THREE (3) FOOT CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF REINFORCING STEEL.

### PILE DRIVING

IF EQUIPMENT FOR PILE DRIVING OPERATIONS OCCUPIES ANY PORTION OF THE EXISTING STRUCTURE, STRESS CALCULATIONS BY A REGISTERED STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH SECTION 501.09 OF THE SPECIFICATIONS.

### PILE DESIGN LOADS (SAFE BEARING CAPACITY)

BERLIN ROAD - MP 124.0 (HP10X42 STEEL PILES)

THE DESIGN LOAD FOR THE ABUTMENT PILES IS 31 TONS PER PILE

HUMM ROAD - MP 125.3 (HP10X42 STEEL PILES)

THE DESIGN LOAD FOR THE ABUTMENT PILES IS 30 TONS PER PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 39 TONS PER PILE.

CHAPPEL CREEK - MP 126.5 (HP10X42 STEEL PILES)

THE DESIGN LOAD FOR THE ABUTMENT PILES IS 42 TONS PER PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 24 TONS PER PILE.

### FOUNDATION BEARING PRESSURE

STATE ROUTE 61 - MP 124.5

ABUTMENT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM BEARING PRESSURE OF 3.0 TONS PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 3.5 TONS PER SQUARE FOOT.

### BRIDGE DECK ELEVATIONS, SLAB THICKNESS, AND APPROACH PROFILES, STEEL BEAM STRUCTURES

IN ORDER TO MEET ROADWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS, AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL IN THE DECK SLABS, THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF THE NEW AND EXISTING STEEL BEAMS AFTER THE REMOVAL OF THE PORTIONS OF EXISTING DECK SLAB, DELINEATED IN THE PLANS AT THE LOCATIONS SHOWN IN THE FINISH PAVEMENT ELEVATION TABLES FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK SCREED ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THE CONTRACTOR SHALL THEN CALCULATE THE DECK THICKNESS OVER THE BEAMS USING THE DECK SCREED ELEVATIONS AND THE TOP OF BEAM ELEVATIONS. THE CONTRACTOR SHALL FURNISH THE ELEVATIONS TO THE ENGINEER FOR FINAL CHECKING. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN THE MINIMUM THICKNESS REQUIRED, THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. FORM WORK SHALL NOT PROCEED UNTIL A CHECK OF THE FINAL ELEVATIONS HAS BEEN PERFORMED BY THE ENGINEER.

FINISH PAVEMENT ELEVATION TABLES ARE AT THE FOLLOWING LOCATIONS:

MP 124.0 - BERLIN ROAD	SHEET B167/B231
MP 124.5 - STATE ROUTE 61	SHEET B178/B231
MP 125.3 - HUMM ROAD	SHEET B189/B231

THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON 8% THICK CONCRETE OUTSIDE THE HAUNCH AREAS, AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE EXISTING OR PROPOSED BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF NINE (9) INCHES SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN SIX (6) AND TWELVE (12) INCHES, PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN NINE (9) INCHES IN WIDTH.

PLACEMENT OF THE ABUTMENT SLAB PRIOR TO THE DECK SLAB SHALL NOT BE PERMITTED. HOWEVER, THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME, UPON THE COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH SLABS, THE ENGINEER SHALL PROVIDE THE CONTRACTOR WITH FINISH GRADES AND ELEVATIONS REQUIRED TO PROVIDE A SMOOTH TRANSITION FROM THE ROADWAY PAVEMENT AND APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

PRIOR TO PLACING THE APPROACH SLABS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE EDGE OF NEW AND EXISTING PAVEMENT ELEVATIONS AND EDGE OF SHOULDER ELEVATIONS AT 25 FOOT INTERVALS FOR A DISTANCE OF 200 FEET BEYOND THE END OF THE APPROACH SLAB, AND AS BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS. AFTER RECEIPT OF THESE ELEVATIONS, THE ENGINEER SHALL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE APPROACH SLABS AND APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL PAVING COMMENCE UNTIL RECEIPT OF THESE FINAL ELEVATIONS.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM PRICE BID FOR ITEM SP 623-CONSTRUCTION LAYOUT SURVEY.

### BRIDGE DECK ELEVATIONS AND APPROACH PROFILES, CHAPPEL CREEK - MP 126.5

THE DECK SLAB FORMS SHALL BE CAMBERED TO COMPENSATE FOR THE DEAD LOAD DEFLECTION OF THE SLAB IN ADDITION TO ANY CAMBER REQUIRED FOR CONFORMANCE WITH THE PROFILE OF THE ROADWAY. ALLOWANCE SHALL ALSO BE MADE FOR THE DEFLECTION OF ANY FALSEWORK MEMBERS SUPPORTING THE PROPOSED CONCRETE DURING PLACEMENT. THE FINISHED GRADE ELEVATIONS AND CONCRETE SLAB DEAD LOAD DEFLECTION INFORMATION IS SHOWN ON SHEET B200/B231. THE CONTRACTOR SHALL CALCULATE ANY ADDITIONAL DATE REQUIRED AND SUBMIT THE CONCRETE DECK SLAB SCREED ELEVATIONS TO THE ENGINEER FOR APPROVAL. THE CONSTRUCTION OF FALSEWORK SHALL NOT BEGIN UNTIL DECK SCREED ELEVATIONS HAVE BEEN APPROVED BY THE ENGINEER.

PLACEMENT OF THE ABUTMENT SLAB PRIOR TO THE DECK SLAB SHALL NOT BE PERMITTED. HOWEVER, THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME, UPON COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH SLABS, THE ENGINEER SHALL PROVIDE THE CONTRACTOR WITH FINISH GRADES AND ELEVATIONS REQUIRED TO PROVIDE A SMOOTH TRANSITION FROM THE ROADWAY PAVEMENT AND APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

PRIOR TO PLACING THE APPROACH SLABS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE EDGE OF NEW AND EXISTING PAVEMENT ELEVATIONS AND EDGE OF SHOULDER ELEVATIONS AT 25 FOOT INTERVALS FOR A DISTANCE OF 200 FEET BEYOND THE END OF THE APPROACH SLAB, AND AS BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS. AFTER RECEIPT OF THESE ELEVATIONS, THE ENGINEER SHALL CALCULATE AND PROVIDE THE CONTRACTOR FINAL ELEVATIONS FOR THE APPROACH SLABS AND APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL PAVING COMMENCE UNTIL RECEIPT OF THESE FINAL ELEVATIONS.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM PRICE BID FOR ITEM SP623 - CONSTRUCTION LAYOUT SURVEY.

### 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 CONCRETE REMOVAL OPERATIONS OF THE CONTRACTOR SHALL BE REPLACED WITH NEW STEEL AT THE EXPENSE OF THE CONTRACTOR. DRILLING DOWEL HOLES, FURNISHING AND PLACING SP 956 NONSHRINKING EPOXY MORTAR, AND REINFORCING BAR DOWELS, WHERE NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION, SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE HAS BEEN INCLUDED IN THE QUANTITIES FOR ITEM SP 509 FOR THIS PURPOSE.

### CUTTING OR BENDING OF REINFORCING BARS

ANY CUTTING OR BENDING OF BARS NECESSARY TO ACCOMMODATE ANY ESSENTIAL ELEMENT OF WORK RELATED TO THE PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 509 REINFORCING STEEL, GRADE 60 AND/OR ITEM SP 509 EPOXY COATED REINFORCING STEEL, GRADE 60 AND/OR ITEM SP 825 GALVANIZED REINFORCING STEEL, GRADE 60 UNLESS OTHERWISE NOTED.

### PATCHING CONCRETE STRUCTURES

A CONTINGENCY QUANTITY OF 20 SQ. FT. OF SP 519 PATCHING CONCRETE STRUCTURES HAS BEEN INCLUDED ON THE SUMMARY OF QUANTITIES FOR EACH STRUCTURE FOR USE AS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
<b>STRUCTURE GENERAL NOTES</b>			
<b>OHIO TURNPIKE MP 124.0,</b>			
<b>MP 124.5, MP 125.3, MP 126.5</b>			
DANSARD * GROHNKE * LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJW	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	
G1 / G11 CONTRACT 77-97-01 SHEET B146 OF B231			



STRUCTURE - GENERAL NOTES

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE ESTIMATED QUANTITIES 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 AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION JOINTS

CONSTRUCTION JOINT SURFACES SHALL BE FREE FROM OIL, LAITANCE, FORM RELEASE AGENT, OR ANY OTHER MATERIAL THAT WOULD PREVENT BONDING TO THE CONCRETE SURFACE. ALL LAITANCE AND OTHER CONTAMINANTS SHALL BE REMOVED BY HIGH PRESSURE WATER BLASTING WITH A MINIMUM PRESSURE OF 5,000 P.S.I. HOWEVER, WATER BLASTING SHALL NOT BE REQUIRED WHERE EXISTING CONCRETE HAS BEEN ROUGHENED BY JACKHAMMERS DURING CONCRETE REMOVAL OPERATIONS. SURFACES SHALL BE THOROUGHLY DRENCHED WITH CLEAN WATER AND ALLOWED TO DRY TO A DAMP CONDITION FREE OF STANDING WATER BEFORE PLACING CONCRETE. PREPARATION OF CONSTRUCTION JOINT SURFACES SHALL NOT BE MEASURED FOR PAYMENT. THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT PRICE ON THE PERTINENT CONCRETE ITEMS.

ABBREVIATIONS

E.S. - EACH SIDE  
F.S. - FAR SIDE  
N.S. - NEAR SIDE  
R.A. - REAR ABUTMENT  
F.A. - FORWARD ABUTMENT  
TYP. - TYPICAL  
BOT. - BOTTOM  
BRG. - BEARING  
PL. - PLATE  
O.C. - ON CENTER  
SPA. - SPACES  
U.N. - UNLESS NOTED  
C.P.P. - CORRUGATED PLASTIC PIPE  
E.B. - EASTBOUND  
W.B. - WESTBOUND

ITEM 518 - 6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE SIX (6) INCH DIAMETER, PLASTIC CORRUGATED PIPE AS PER ODOT SUPPLEMENTAL SPECIFICATION 944, AASHTO M294, TYPE SP.

ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE SIX (6) INCH DIAMETER, PLASTIC CORRUGATED PIPE AS PER ODOT SUPPLEMENTAL SPECIFICATION 944, AASHTO M294, TYPE S. THIS ITEM SHALL INCLUDE ALL ELBOWS, TEES AND END CAPS REQUIRED TO COMPLETE THE ABUTMENT DRAINAGE SYSTEM.

CONCRETE PARAPETS

DEFLECTION JOINTS SHALL BE CONSTRUCTED BY SAWING THE CONCRETE AFTER IT HAS TAKEN ITS INITIAL SET AND BEFORE ANY CRACKS DEVELOP. THE USE OF AN EDGE GUIDE, FENCE OR JIG SHALL BE USED TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE AND ALIGNED ON BOTH FACES OF THE PARAPET. THE JOINT SHALL BE THE WIDTH OF THE SAW BLADE, NOT TO EXCEED ONE QUARTER (0.25) INCH, AND SHALL BE ONE AND ONE-HALF (1.5) INCHES DEEP. THE SAW CUT SHALL BE MADE IN THE COMPLETE CIRCUMFERENCE OF THE PARAPET, STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK, EXCEPT AS NOTED ON THE PLANS AND SHALL BE CAULKED WITH A ONE (1) INCH THICKNESS OF MATERIAL CONFORMING TO FEDERAL SPECIFICATION TT-S-00227E. THE BOTTOM ONE HALF (0.5) INCH OF THE SAWED JOINT AT THE OUTSIDE FACE OF THE PARAPET SHALL BE LEFT UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

GROUT CLEANING

ALL BARRIER SURFACES AND DECK EDGES SHALL BE GROUT CLEANED IN ACCORDANCE WITH SECTION 511.15 OF THE SPECIFICATIONS USING WHITE PORTLAND CEMENT.

PARAPET FORMS

FORMS FOR THE BRIDGE PARAPETS AND SLAB SIDE EDGES SHALL BE IN ACCORDANCE WITH SECTION 508.027 OF THE SPECIFICATIONS AND THE FOLLOWING:

WHEN WOOD FORMS ARE USED THEY SHALL PRODUCE A SMOOTH SURFACE OF UNIFORM TEXTURE AND COLOR SUBSTANTIALLY EQUAL TO THAT WHICH WOULD BE OBTAINED WITH THE USE OF NEW PLYWOOD CONFORMING TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY PRODUCT STANDARD PSI FOR EXTERIOR B-B CLASS I PLYWOOD.

FORMS SHALL BE OF A CONSTRUCTION WHICH WOULD ALLOW FOR THEIR REMOVAL WITHIN 24 HOURS OF THE CONCRETE PLACEMENT WITHOUT CAUSING DAMAGE TO THE CONCRETE.

FIBER OPTIC CABLE

EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THE FIBER OPTIC CABLE DURING ALL PHASES OF CONSTRUCTION. SPECIAL CARE SHALL BE EXERCISED DURING EXCAVATION AND CONSTRUCTION. THE LITEL CABLE IS LOCATED IN THE RIGHT OF WAY NORTH OF THE TURNPIKE NEAR THE RIGHT OF WAY FENCE AS INDICATED ON THE PLANS AND AS-BUILT DRAWINGS.

ANY EXCAVATION IN THIS AREA FOR ANY REASON SHALL NOT BE PERFORMED WITHOUT THE OWNER FIRST LOCATING THE CABLE. AFTER THE CABLE IS LOCATED BY THE OWNER, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12" OF THE CABLE DEPTH PROVIDED. CABLE COMPANY REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE CABLE.

AN ABANDONED UNDERGROUND FIBER OPTIC CABLE IS BURIED IN THE MEDIAN. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ANY PORTION OF THE ABANDONED FIBER OPTIC CABLE THAT MUST BE REMOVED TO COMPLETE THE WORK AS PER PLAN.

THE COST OF THE ABOVE WORK SHALL BE INCLUDED IN THE COST OF ITEM SP202.

ITEM 503 - COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 503.03, THE CONTRACTOR SHALL DESIGN AND CONSTRUCT COFFERDAMS, CRIBS AND SHEETING TO ACCOMMODATE A WATER ELEVATION 5 FEET ABOVE THE NORMAL WATER ELEVATION AS SPECIFIED IN THE PLANS. THE CONTRACTOR, AT HIS OPTION, MAY ELECT TO DESIGN AND CONSTRUCT THE COFFERDAM TO ACCOMMODATE A LOWER WATER ELEVATION; HOWEVER, CONSTRUCTION TO THE LOWER WATER ELEVATION WOULD NEGATE THE PROSPECT OF CLAIMING A CHANGED CONDITION DUE TO HIGH WATER OR FLOODING OF THE COFFERDAM. ANY REQUEST CITING A CHANGED CONDITION MUST BE SUBMITTED, IN WRITING, TO THE ENGINEER WITH SUPPORTING CALCULATIONS AND DRAWINGS SUBSTANTIATING THAT THE ITEM AS CONSTRUCTED WOULD HAVE ACCOMMODATED A WATER ELEVATION 5 FEET ABOVE THE NORMAL ELEVATION AS SPECIFIED IN THE PLANS.

ITEM 202 - STRUCTURE REMOVED OR ITEM SP 202 - PORTIONS OF STRUCTURE REMOVED

ALL DEMOLITION OPERATIONS PERFORMED UNDER ITEM 202 AND ITEM SP 202 SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF THE OTC SPECIAL PROVISION SP 525A LEAD PAINT REMOVAL, WORKER/ENVIRONMENTAL PROTECTION AND WASTE HANDLING.

COATING ASSESSMENT REPORT

THE BIDDERS ATTENTION IS CALLED TO THE EXISTENCE OF A "COATING ASSESSMENT REPORT" FOR THE MAINLINE BRIDGE STRUCTURES INCLUDED IN THIS CONSTRUCTION CONTRACT:

THE BRIDGES ARE AS FOLLOWS:

BERLIN ROAD - MP 124.0  
STATE ROUTE 61 - MP 124.5  
HUMM ROAD - MP 125.3

THE PURPOSE OF THE INVESTIGATION WAS TO ASSESS THE CONDITION OF THE PROTECTIVE COATINGS (PAINT) FOUND ON THE EXISTING BRIDGES AND TO MAKE REPAIR OR REPLACEMENT RECOMMENDATIONS.

THIS INVESTIGATION WAS CONDUCTED BY KTA/SET ENVIRONMENTAL (KVA/SET) OF PITTSBURGH PENNSYLVANIA, PROVIDING COMPREHENSIVE ENGINEERING AND CONSULTING SERVICES FOR HAZARDOUS (LEAD) PAINT MANAGEMENT. THE REPORT INCLUDES FIELD OBSERVATIONS, FIELD TEST RESULTS, LABORATORY ANALYSIS AND A DISCUSSION OF THE FINDINGS AND RECOMMENDATIONS OF KTA/SET.

THESE RECOMMENDATIONS WERE USED AS A GUIDE TO DETERMINE WHICH OF THE EXISTING STRUCTURES WERE TO HAVE THE EXISTING STEEL PAINTED.

THE REPORT IS AVAILABLE FOR REVIEW BY EACH PROSPECTIVE BIDDER AT THE OFFICE OF THE COMMISSION OR AT THE OFFICE OF URS GREINER, INC., 564 WHITE POND DRIVE, AKRON, OHIO 44320: (330) 836-9111.

PAINTING OF STRUCTURAL STEEL

STATE ROUTE 61 - M.P. 124.5

THE NEW STRUCTURAL STEEL SHALL BE TOTALLY SHOP PAINTED WITH ALL COATS IN ACCORDANCE WITH SPECIAL PROVISION "SP 514A, TOTAL SHOP PAINTING - SYSTEM IZEU". THE THREE COAT SHOP APPLICATION OF THE PAINT IS INCLUDED FOR PAYMENT UNDER "ITEM SP 513, STRUCTURAL STEEL, AISC CATEGORY I AS PER PLAN".

ANY FIELD TOUCH UP OF DAMAGED AREAS SHALL BE INCIDENTAL TO THE COST OF ITEM 513.

SURFACE PREPARATION OF STEEL PRIOR TO PAINTING

STATE ROUTE 61 - M.P. 124.5

THE CONTRACTOR'S ATTENTION IS CALLED TO SPECIAL PROVISION SP 514A PART 3 - EXECUTION, SECTION II SURFACE PREPARATION, SPECIFICALLY PARAGRAPH A, WHICH ADDRESSES SURFACE PREPARATION.

ALL SHARP EDGES SUCH AS THOSE CREATED BY FLAME CUTTING AND SHEARING OF STEEL SHALL BE ADDRESSED ACCORDING TO THESE SPECIFICATION IN ORDER TO ENSURE A PROPER PAINT SYSTEM. BREAKING THE EDGE CAN BE ACCOMPLISHED BY A SINGLE PASS OF A GRINDER IN ORDER TO FLATTEN THE EDGE. HOWEVER, CARE SHALL BE TAKEN TO ENSURE THAT DURING THE REMOVAL OPERATION NEW SHARP EDGES ARE NOT CREATED. THIS REQUIREMENT IS APPLICABLE TO ALL STRUCTURES WHETHER OR NOT IT IS SPECIFICALLY ADDRESSED IN THE CONTRACT DRAWINGS.

NO SEPARATE PAYMENT FOR ANY GRINDING REQUIRED TO CONFORM TO THE SPECIFICATIONS WILL BE MADE UNDER SP514A. PAYMENT FOR THE SHOP APPLIED COATING SYSTEM IS INCLUDED IN THE COMPLETED WORK OF ITEM 513 - STRUCTURAL STEEL, AISC CATEGORY I, AS PER PLAN, PER PART 4 - MEASUREMENT AND PAYMENT OF SPECIAL PROVISION SP 514A.

PROTECTION OF PAINTED STEEL DURING ERECTION

STATE ROUTE 61 - MP 124.5

THE NEW STRUCTURAL STEEL THAT IS TOTALLY PAINTED IN THE SHOP SHALL CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF SP 514A, TOTAL SHOP PAINTING - SYSTEM IZEU AND SPECIFICALLY TO PART 3 - EXECUTION, SECTION V "SHIPPING, STORAGE AND HANDLING OF SHOP PAINTED STEEL".

IN ADDITION TO THESE REQUIREMENTS THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT THE FINISHED PAINTED SURFACE FROM DAMAGE DURING THE ERECTION OF THE STEEL, THE INSTALLATION OF THE FALSEWORK AND FORMWORK AND THE POURING OF THE CONCRETE DECK AND PARAPETS. THIS PROTECTION SHALL INCLUDE USE OF PADDING ON BRACKETS AND FORMWORK SUPPORTS, CONSTRUCTION OF TIGHT FITTING FORMS AND OTHER PROTECTIVE METHODS THE CONTRACTOR MAY DEEM NECESSARY FOR PROTECTING THE NEWLY PAINTED SURFACE.

THE CHIEF ENGINEER SHALL HAVE THE AUTHORITY TO INSTRUCT THE CONTRACTOR TO DELAY THE START OF HIS OPERATIONS OR SUSPEND HIS OPERATIONS IN WHOLE OR IN PART IF HE DOES NOT UTILIZE PROPER CARE OR MEANS TO PROTECT THE NEWLY PAINTED STEEL DURING ERECTION OR HIS FORMING OPERATIONS.

PAINTING OF STRUCTURAL STEEL

BERLIN ROAD - M.P. 124.0  
HUMM ROAD - M.P. 125.3

THE NEW STRUCTURAL STEEL SHALL BE SHOP PRIMED AND FIELD CLEANED IN ACCORDANCE WITH SPECIAL PROVISION "SP 514B, SHOP PRIMING/FIELD PAINTING - SYSTEM IZEU".

THE NEW STRUCTURAL STEEL SHALL BE FIELD PAINTED WITH THE INTERMEDIATE AND FINISH COATS IN ACCORDANCE WITH SPECIAL PROVISION "SP 514, LOCALIZED OR TOTAL REMOVAL OF EXISTING COATINGS - SYSTEMS OZEU AND UZU".

THE EXISTING STEEL SHALL BE TOTALLY CLEANED AND PRIMED PER SP 514. THE INTERMEDIATE AND FINISH COATS SHALL COMPLY WITH SP 514 AND BE APPLIED TO BOTH THE EXISTING AND NEW STEEL AT THE SAME TIME. DISPOSAL OF THE WASTE MATERIAL/HAZARDOUS WASTE RESULTING FROM THE CLEANING OPERATION SHALL BE PAID FOR UNDER SP 525A.

SURFACE PREPARATION OF STEEL PRIOR TO PAINTING

BERLIN ROAD - M.P. 124.0  
HUMM ROAD - M.P. 125.3

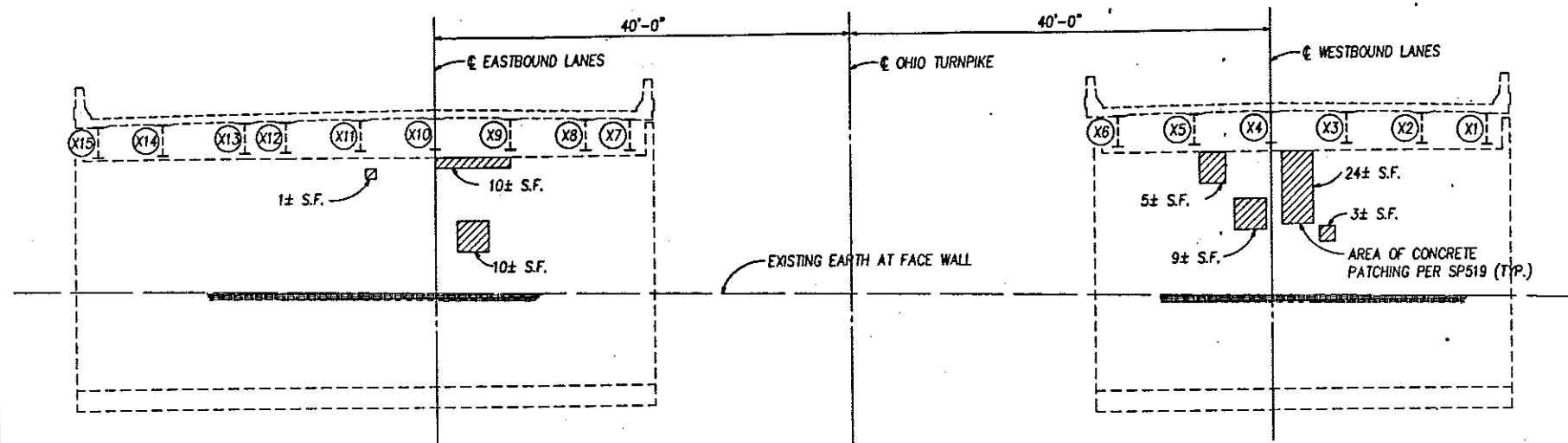
THE CONTRACTOR'S ATTENTION IS CALLED TO SPECIAL PROVISION SP 514B PART 3 - EXECUTION, SECTION II SURFACE PREPARATION, SPECIFICALLY PARAGRAPH A, WHICH ADDRESSES SURFACE PREPARATION.

ALL SHARP EDGES SUCH AS THOSE CREATED BY FLAME CUTTING AND SHEARING OF STEEL SHALL BE ADDRESSED ACCORDING TO THESE SPECIFICATIONS IN ORDER TO ENSURE A PROPER PAINT SYSTEM. BREAKING THE EDGE CAN BE ACCOMPLISHED BY A SINGLE PASS OF A GRINDER IN ORDER TO FLATTEN THE EDGE. HOWEVER, CARE SHALL BE TAKEN TO ENSURE THAT DURING THE REMOVAL OPERATION NEW SHARP EDGES ARE NOT CREATED. THIS REQUIREMENT IS APPLICABLE TO ALL STRUCTURES WHETHER OR NOT IT IS SPECIFICALLY ADDRESSED IN THE CONTRACT DRAWINGS.

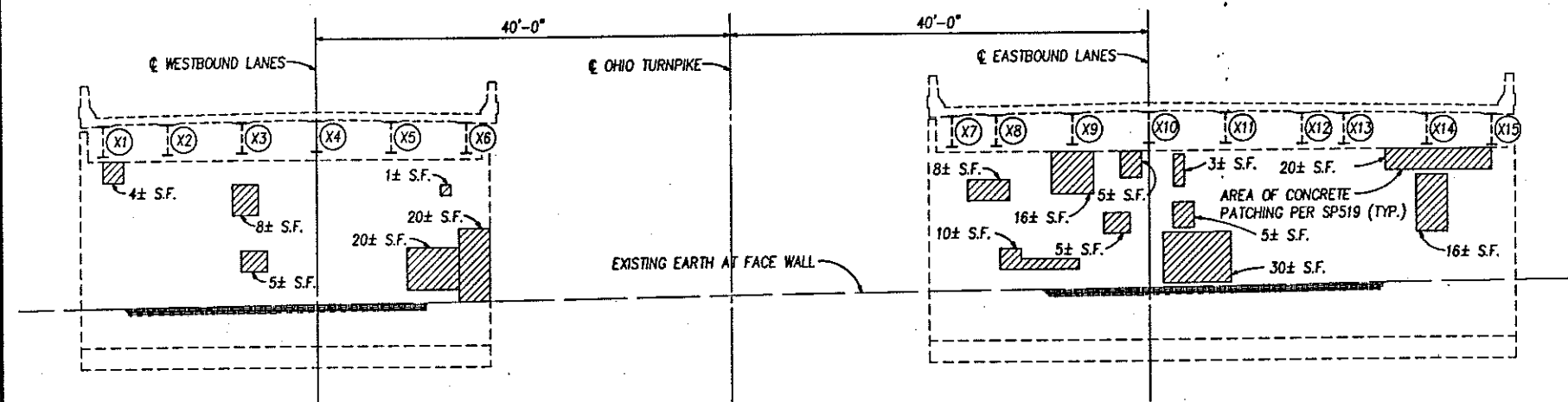
NO SEPARATE PAYMENT FOR THE PREPARATION OF THE STRUCTURAL STEEL TO CONFORM TO THE ABOVE REQUIREMENTS WILL BE MADE UNDER SP 514B. PAYMENT FOR THE APPLICATION OF THE SHOP PRIMER IS INCLUDED WITH THE WORK OF ITEM 513 - STRUCTURAL STEEL, AISC CATEGORY I. THEREFORE, ALL WORK ASSOCIATED WITH PREPARATION OF THE STEEL PRIOR TO PAINTING IS ALSO INCLUDED IN ITEM 513.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
STRUCTURE GENERAL NOTES			
OHIO TURNPIKE MP 124.0,			
MP 124.5, MP 125.3, MP 126.5			
DANSARD * GROHME * LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/98	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	
G2 / G11 CONTRACT 77-97-01 SHEET B147 OF B231			

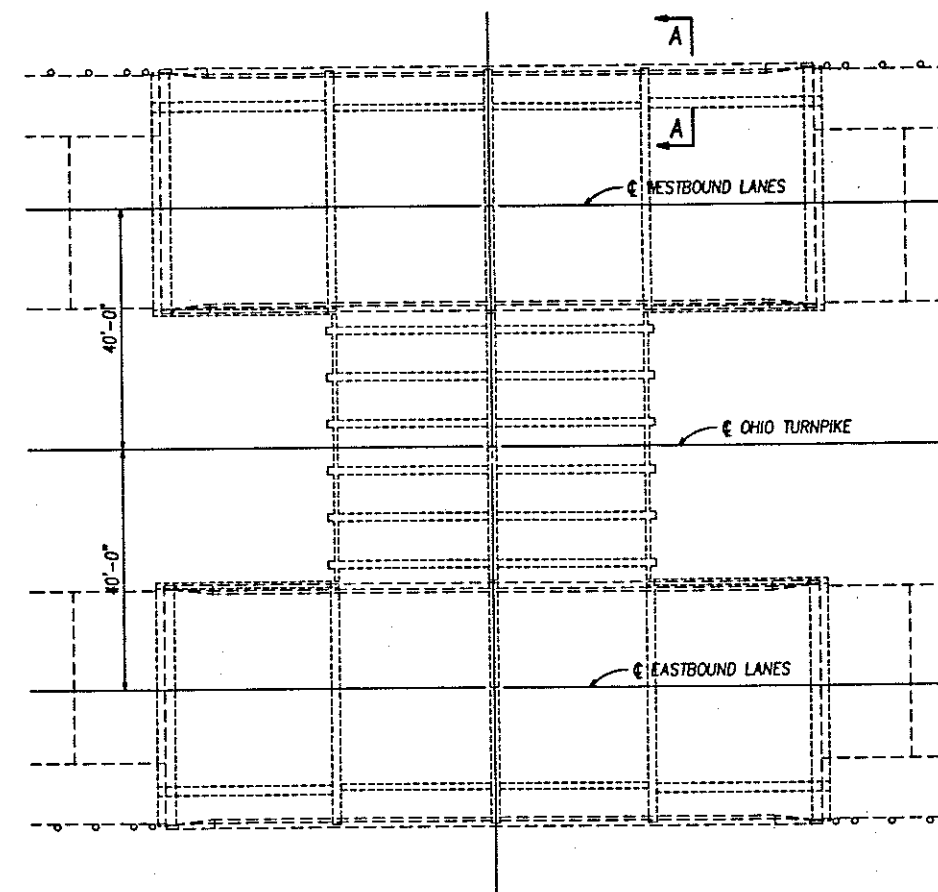




CONCRETE PATCHING LOCATIONS - STATE ROUTE 61, MP 124.5 - REAR ABUTMENT

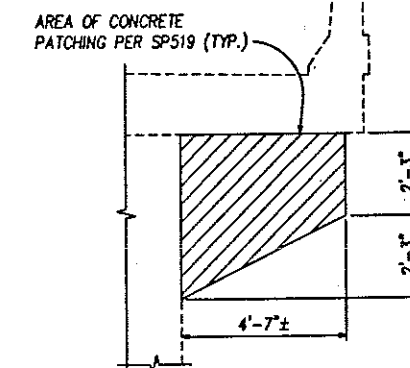


CONCRETE PATCHING LOCATIONS - STATE ROUTE 61, MP 124.5 - FORWARD ABUTMENT



PLAN - CHAPPEL CREEK MP 126.5

PATCHING CONCRETE STRUCTURES SUMMARY				
	ABUTMENT	ESTIMATE	CONTINGENT	TOTAL
MP 124.5 OVER STATE ROUTE 61	LEFT REAR	41	20	61
	RIGHT REAR	21	10	31
	LEFT FORWARD	58	29	87
	RIGHT FORWARD	118	59	177
	TOTAL (SQ. FT.)			356
MP 126.5 OVER CHAPPEL CR.	LEFT REAR			
	RIGHT REAR			
	LEFT FORWARD	16	8	24
	RIGHT FORWARD			
	TOTAL (SQ. FT.)			24



SECTION A-A  
SHOWING CONCRETE PATCHING

# NOTES

- ITEM SP 519 - PATCHING CONCRETE STRUCTURES: PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETEIORATION WAS PERFORMED IN APRIL, 1996.
- ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETEIORATION. SEE NOTE ④ FOR ADDITIONAL INFORMATION.
- EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.
- SURFACE UNDER EXISTING BEARING TO REMAIN. IF THE BRIDGE SEAT AREA UNDER THE BEARING IS FOUND TO BE DETEIORATED, AN AREA 3" (MIN.) LARGER IN EACH DIRECTION THAN THE BEARING SHALL BE REMOVED IN ACCORDANCE WITH 519.03. THE MINIMUM DEPTH OF PATCH SHALL BE 3". THE AREA SHALL THEN BE RESTORED IN ACCORDANCE WITH SP519. SPECIAL CARE SHALL BE TAKEN TO FINISH THE SURFACE TO A SMOOTH LEVEL FLAT PLANE. INCLUDE FOR PAYMENT WITH ITEM SP519 - PATCHING CONCRETE STRUCTURES.

JACKING AND BLOCKING OF THE BEAM AND CLEANING, PAINTING AND RESETING OF THE BEARING SHALL BE ACCORDING TO ITEM SP523 - RESET BEARING ASSEMBLY. BEAMS SHALL NOT BE RAISED MORE THAN THE AMOUNT NECESSARY TO TAKE THE LOAD OFF THE BEARING.

EXPANSION BEARINGS ONLY MAY BE REMOVED AND REINSTALLED, AT THE CONTRACTORS OPTION, TO FACILITATE PATCHING BENEATH THE BEARING, WITH THEIR ANCHOR BOLTS CUT OFF AND NOT SUBSEQUENTLY REPLACED. NO SEPARATE PAYMENT WILL BE MADE FOR EXPANSION BEARING REMOVAL, WITH THE COST THEREOF INCLUDED IN ITEM SP523. FIXED BEARINGS MUST REMAIN ATTACHED TO BEAMS WITH ANCHOR BOLTS NOT CUT OFF.

AS A CONTINGENCY AN ADDITIONAL QUANTITY OF ITEM SP519 AND 5 EACH OF ITEM SP523 HAVE BEEN INCLUDED IN THE ESTIMATED QUANTITIES TABLE FOR THE MP 124.5 BRIDGE OVER S.R. 61, TO BE USED AS DIRECTED BY THE ENGINEER.

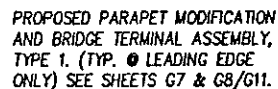
## ⑤ ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN:

STATE ROUTE 61 - MP 124.5

AS A CONTINGENCY, 11 CU. YD. OF UNCLASSIFIED EXCAVATION HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR EXPOSING AND SUBSEQUENTLY BACKFILLING PORTIONS OF EXISTING ABUTMENT FACES WHERE CONCRETE PATCHING MAY EXTEND BELOW GRADE, AS DIRECTED BY THE ENGINEER. ALL APPLICABLE PROVISIONS OF ITEM 503 SHALL APPLY, EXCEPT THAT THE METHOD OF MEASUREMENT SHALL BE TO THE LIMITS SHOWN ON THE PLAN. THE COST FOR ALL LABOR, EQUIPMENT AND MATERIALS TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE CUBIC YARD PRICE BID FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
CONCRETE PATCHING LOCATIONS, STRUCTURES @ MP 124.5 & MP 126.5			
DANSARD * GROHKE * LONG, LIMITED Consulting Engineers 110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/98	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	

INTERSECTION @ CHAPPEL CREEK &  
@ TURNPIKE, STA. 1084+45.00



BRIDGE LIMITS = 109.58'±



1. PLACE TEMPORARY SHEET PILING
2. EXCAVATE BEHIND BOTH ABUTMENTS TO REMOVE STRESS BEFORE REMOVING BEAMS IN MEDIAN.
3. REMOVE THE EXISTING 6" CONCRETE SLAB CULVERT BOTTOM.
4. REMOVE AND REPLACE THE PIER USING COFFERDAMS IN CHAPPEL CREEK.
5. DIVERT THE FLOW OF CHAPPEL CREEK THROUGH SPAN 1.
6. REMOVE AND REPLACE THE FORWARD ABUTMENT AND REPLACE THE 6" CONCRETE SLAB IN SPAN 2.
7. DIVERT THE FLOW OF CHAPPEL CREEK THROUGH SPAN 2.
8. REMOVE AND REPLACE THE FORWARD ABUTMENT AND REPLACE THE 6" CONCRETE SLAB IN SPAN 1.
9. WIDEN THE SUPERSTURCTURE.

TYPE: TWO SPAN CONTINUOUS CONCRETE SLAB ON WALL TYPE  
ABUTMENTS AND PIERS.  
SPANS: 26'-6" $\pm$ , 26'-6" $\pm$  FACE ABUTMENT TO CENTER PIER  
ROADWAY: 37'-4" WESTBOUND & EASTBOUND  
LIVE LOAD: CF 2000  
SKEW: NONE  
WEARING SURFACE: MONOLITHIC CONCRETE  
ALIGNMENT: TANGENT  
APPROACH SLABS: 15'-0"  
CROWN: 0.0156  
STRUCTURE FILE NO.: 2229846 W.B. & 2229838 E.B.  
ODOT BRIDGE NO.: ERI-0080K-2047L W.B.  
ERI-0080K-2047R E.B.

PROPOSED WORK:  
MEDIAN WIDENING OF THE EXISTING REINFORCED CONCRETE  
ABUTMENTS, ABUTMENT SLABS, PIERS AND DECK SLABS  
AND CONSTRUCT MEDIAN BARRIERS.

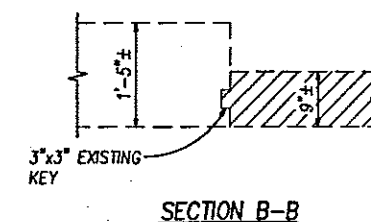
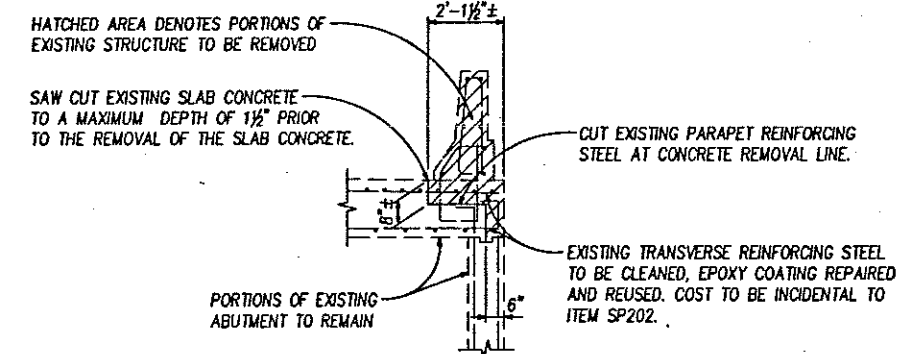
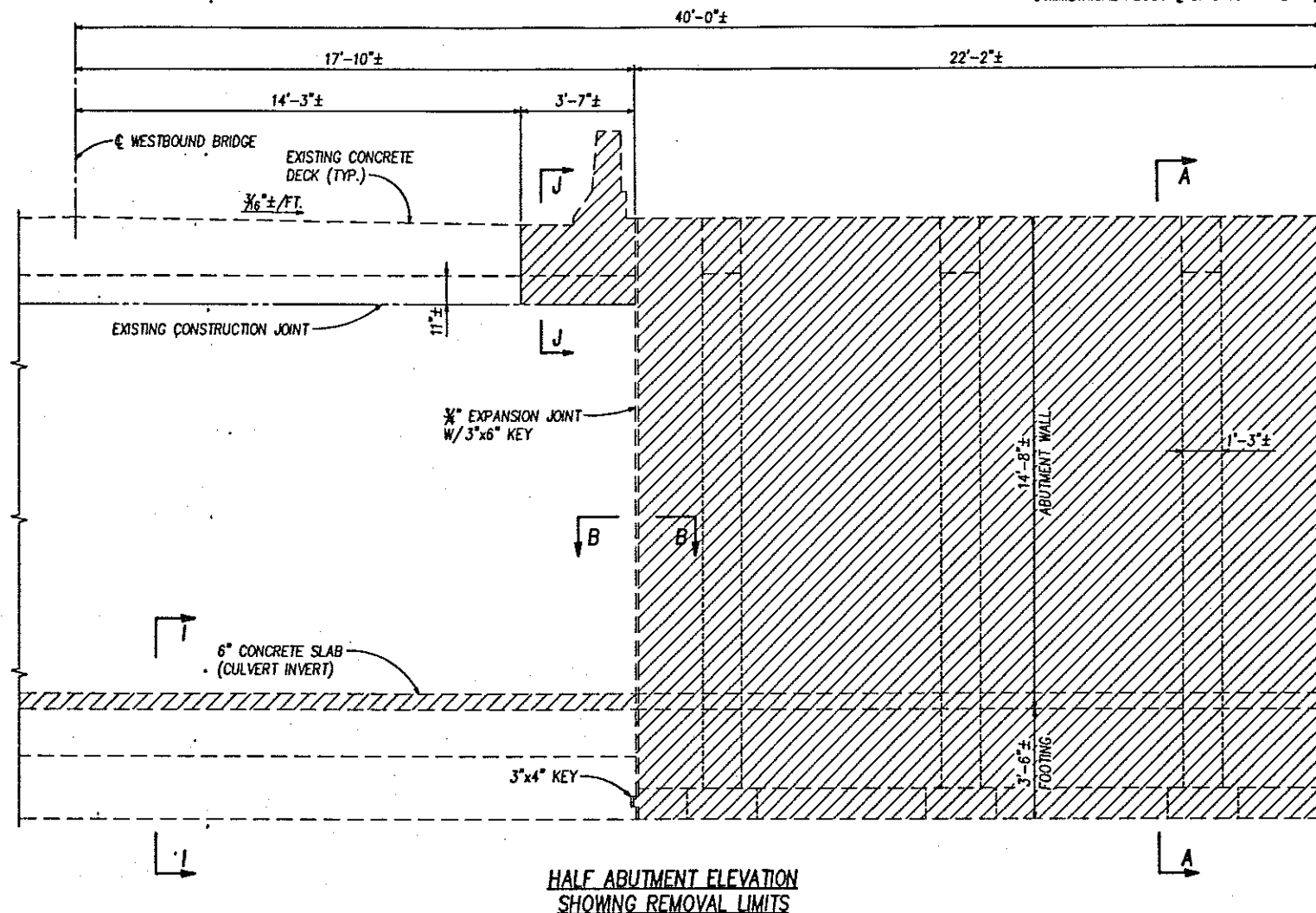
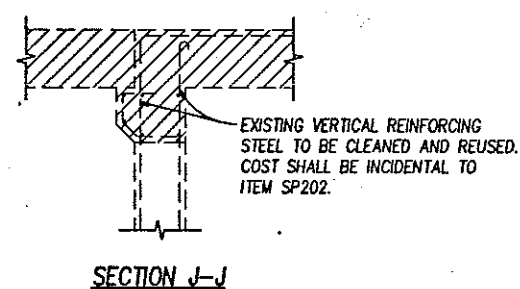
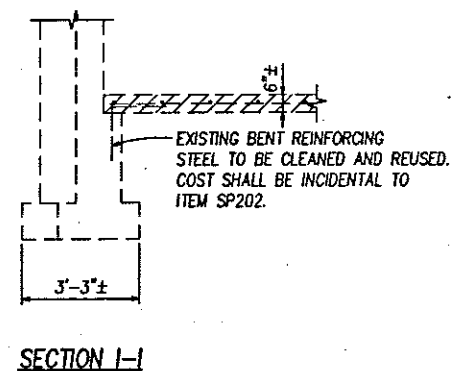
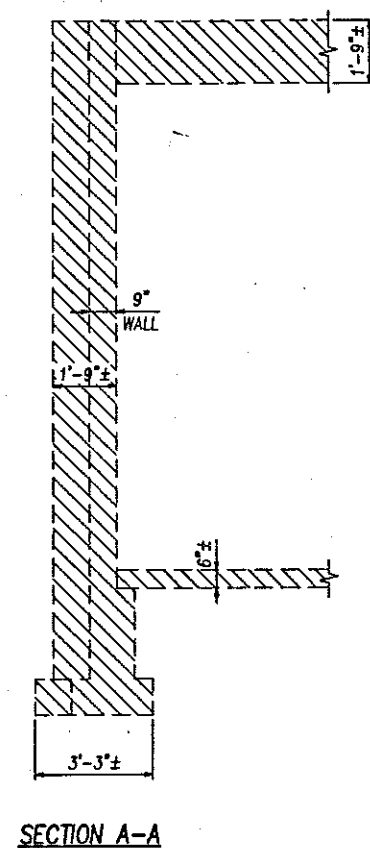
TYPE: TWO SPAN CONTINUOUS CONCRETE SLAB ON WALL TYPE  
ABUTMENTS AND PIERS.  
SPANS: 26'-6" $\pm$ , 26'-6" $\pm$  FACE ABUTMENT TO CENTER PIER  
ROADWAY: 59'-10" WESTBOUND & EASTBOUND  
LIVE LOAD: HS20-44 & ALTERNATE MILITARY  
SKEW: NONE  
WEARING SURFACE: MONOLITHIC CONCRETE  
ALIGNMENT: TANGENT  
APPROACH SLABS: 15'-0"  
CROWN: 0.0156


REAR ABUTMENT:  
REAR PILES = 35'  
FORWARD PILES = 20'  
PIER = 20'  
FORWARD ABUTMENT:  
REAR PILES = 20'  
FORWARD PILES = 35'

- ① F.O.C. DENOTES FIBER OPTIC CABLE
- ② FOR APPROACH SLAB DETAILS SEE SHEET B135/B231.
- ③ EXISTING ELEVATIONS SHOWN IN THE PROFILE VIEW ARE FOR THE SLAB OUTLINE WITHIN THE BRIDGE LIMITS AND FOR EDGE OF PAVEMENT ON THE MEDIAN SIDE OUTSIDE OF THE BRIDGE LIMITS. SEE SHEET G3/G11 FOR ADDITIONAL INFORMATION.

- ✦ - SOIL BORING LOCATIONS
- TEMPORARY SHEETING (AT THE CONTRACTOR'S OPTION SHEETING MAY BE LEFT IN PLACE).
- \* - MATCH EXISTING

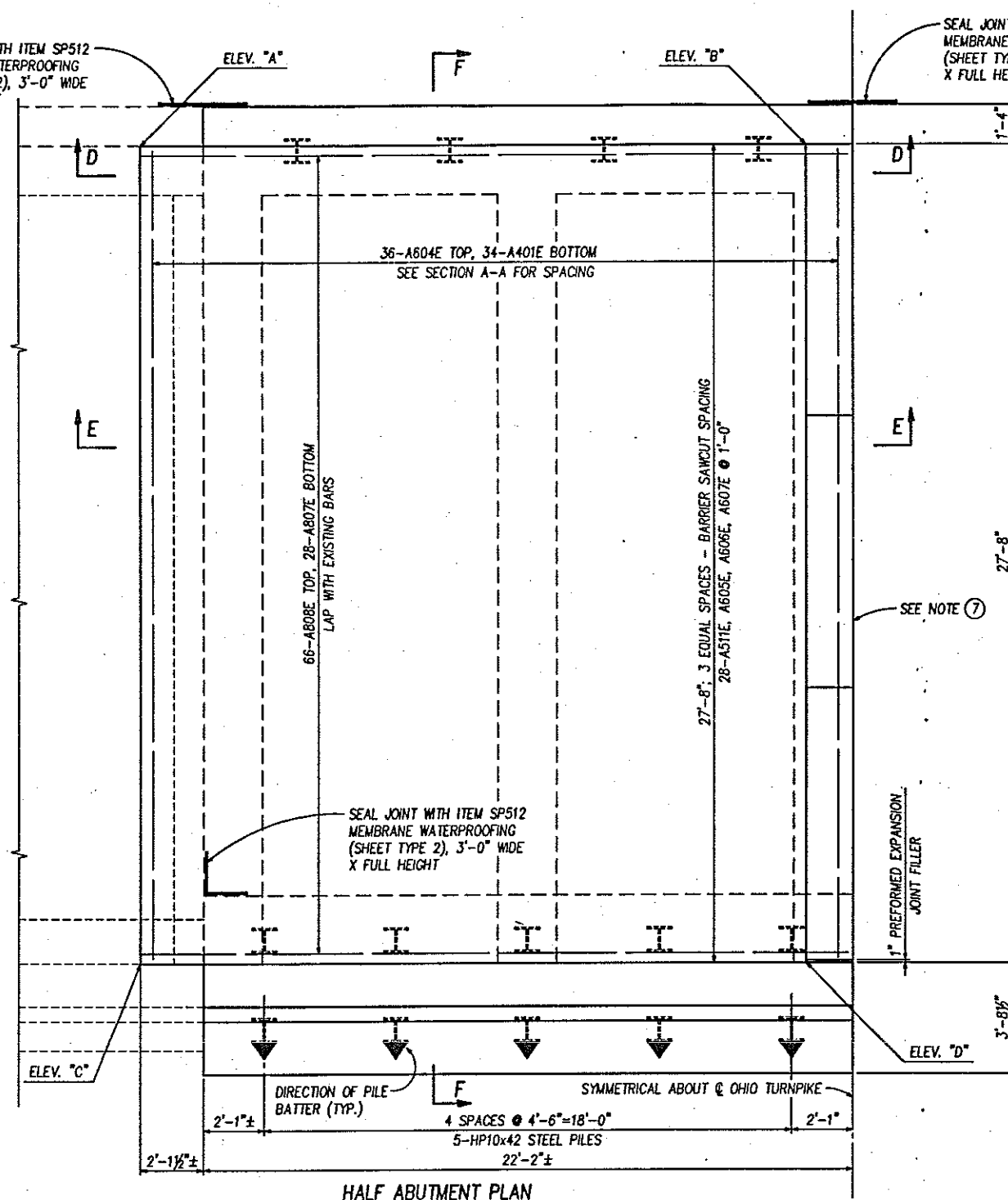
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
GENERAL PLAN & ELEVATION			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD * GROHNKE * LONG, LIMITED		Consulting Engineers	
110 Arco Drive	Toledo, Ohio 43607	(419) 535-1015	
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: EWK	IN CHARGE: RWG	SCALE: NTS	
CONTRACT 77-97-01 SHEET B192 OF B231			



- LEGEND
-  INDICATES PORTIONS OF EXISTING STRUCTURE TO BE REMOVED PER ITEM 202.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
ABUTMENT REMOVAL DETAILS			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD * GROHNKE * LONG, LIMITED		Consulting Engineers	
110 Arco Drive		Toledo, Ohio 43607	(419) 535-1015
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	
CONTRACT 77-97-01 SHEET B195 OF B231			

SEAL JOINT WITH ITEM SP512  
MEMBRANE WATERPROOFING  
(SHEET TYPE 2), 3'-0" WIDE  
X FULL HEIGHT

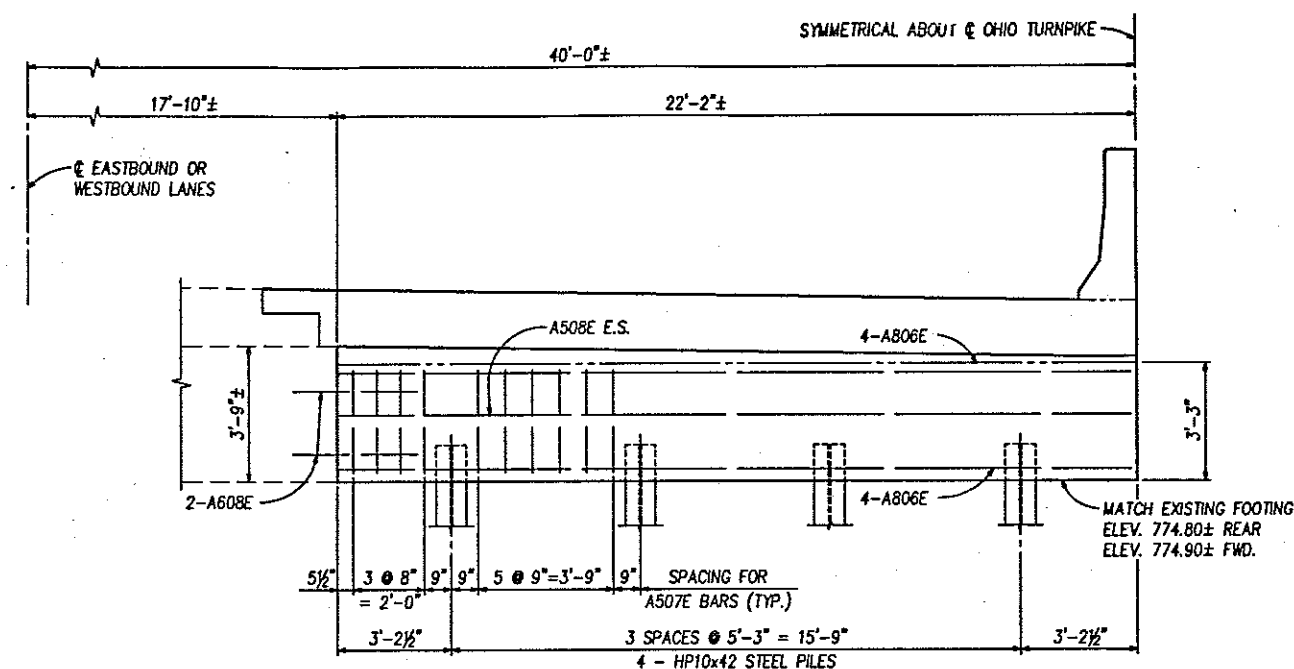


HALF ABUTMENT PLAN

NOTES:

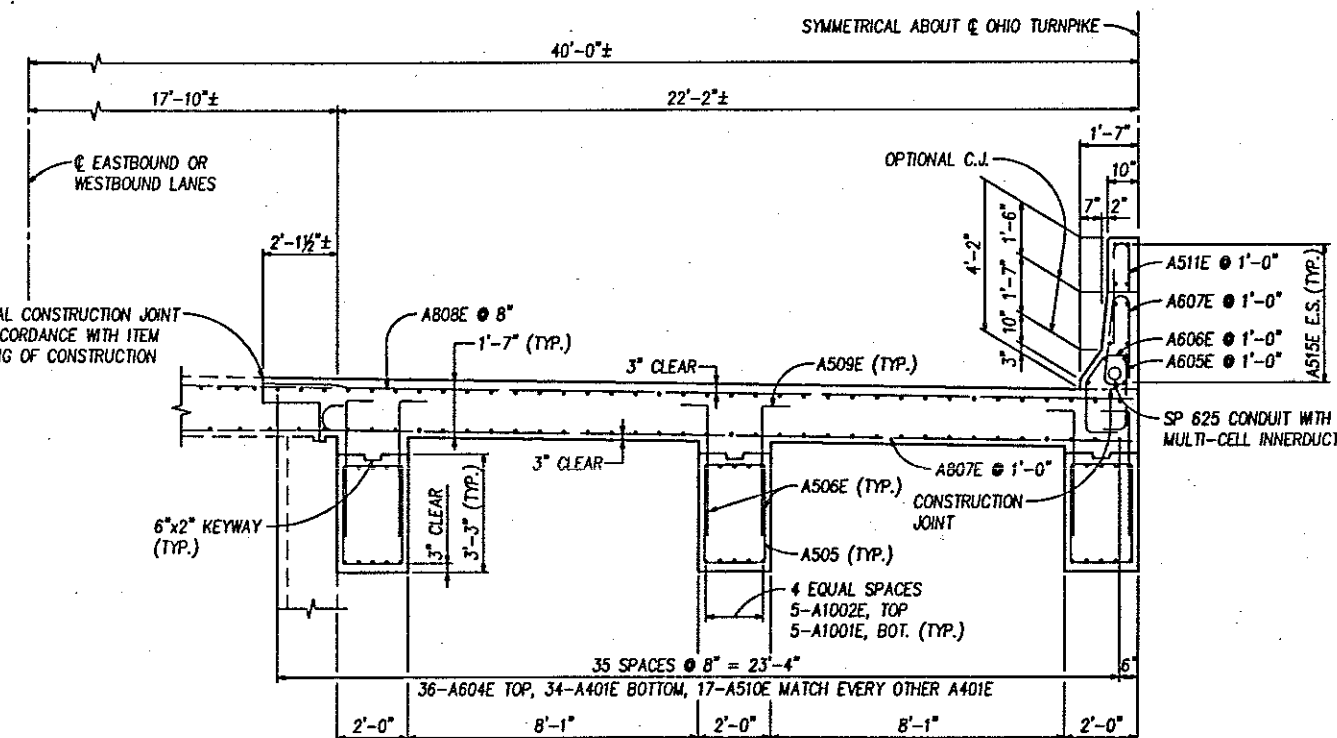
- ALL PILES ARE HP10x42 STEEL PILES.
- ALL BATTERED PILES ARE BATTERED 1 ON 4.
- REINFORCING SPLICE LENGTHS SHALL BE 5'-0" FOR #8 BARS AND 2'-5" FOR #5 BARS.
- FOR ADDITIONAL ABUTMENT DETAILS SEE SHEETS 4 & 6/11.
- THE BAR MARK PREFIX "A" DENOTES ABUTMENT BARS.
- THE BAR MARK SUFFIX "E" DENOTES EPOXY COATED BARS.
- GROOVE AND SEAL WITH 705.04 AS SHOWN ON ODOT STANDARD DRAWING BP-2.1 AT THE TOP OF THE BARRIERS. COST TO BE INCLUDED WITH THE COST OF THE ABUTMENT CONCRETE.
- SEE SHEET 6/11 FOR SECTION F-F.

SEAL JOINT WITH ITEM SP512  
MEMBRANE WATERPROOFING  
(SHEET TYPE 2), 3'-0" WIDE  
X FULL HEIGHT



SECTION D-D  
(ABUTMENT SLAB REINFORCING NOT SHOWN)

THE LONGITUDINAL CONSTRUCTION JOINT  
SHALL BE IN ACCORDANCE WITH ITEM  
SP 516B, SEALING OF CONSTRUCTION  
JOINTS.



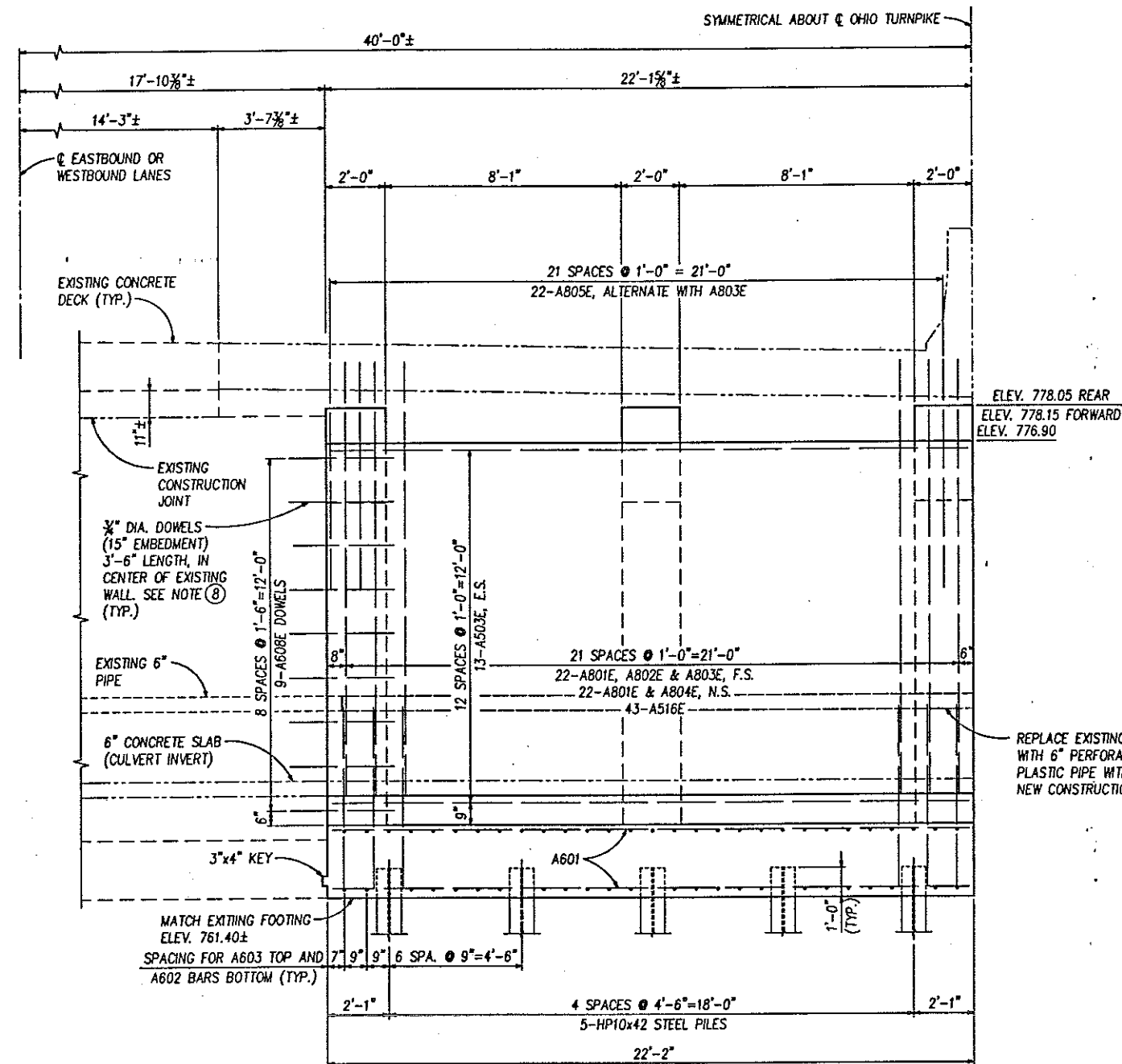
SECTION E-E

ABUTMENT SLAB ELEVATIONS

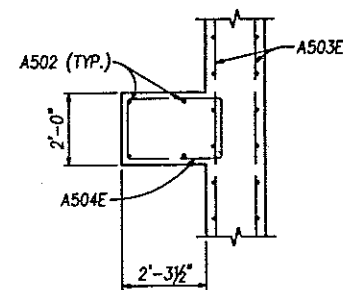
	REAR ABUTMENT	FORWARD ABUTMENT
ELEV. "A"*	780.15	780.24
ELEV. "B"	779.82	779.87
ELEV. "C"	780.17	780.20
ELEV. "D"*	779.83	779.85

\* - MATCH EXISTING

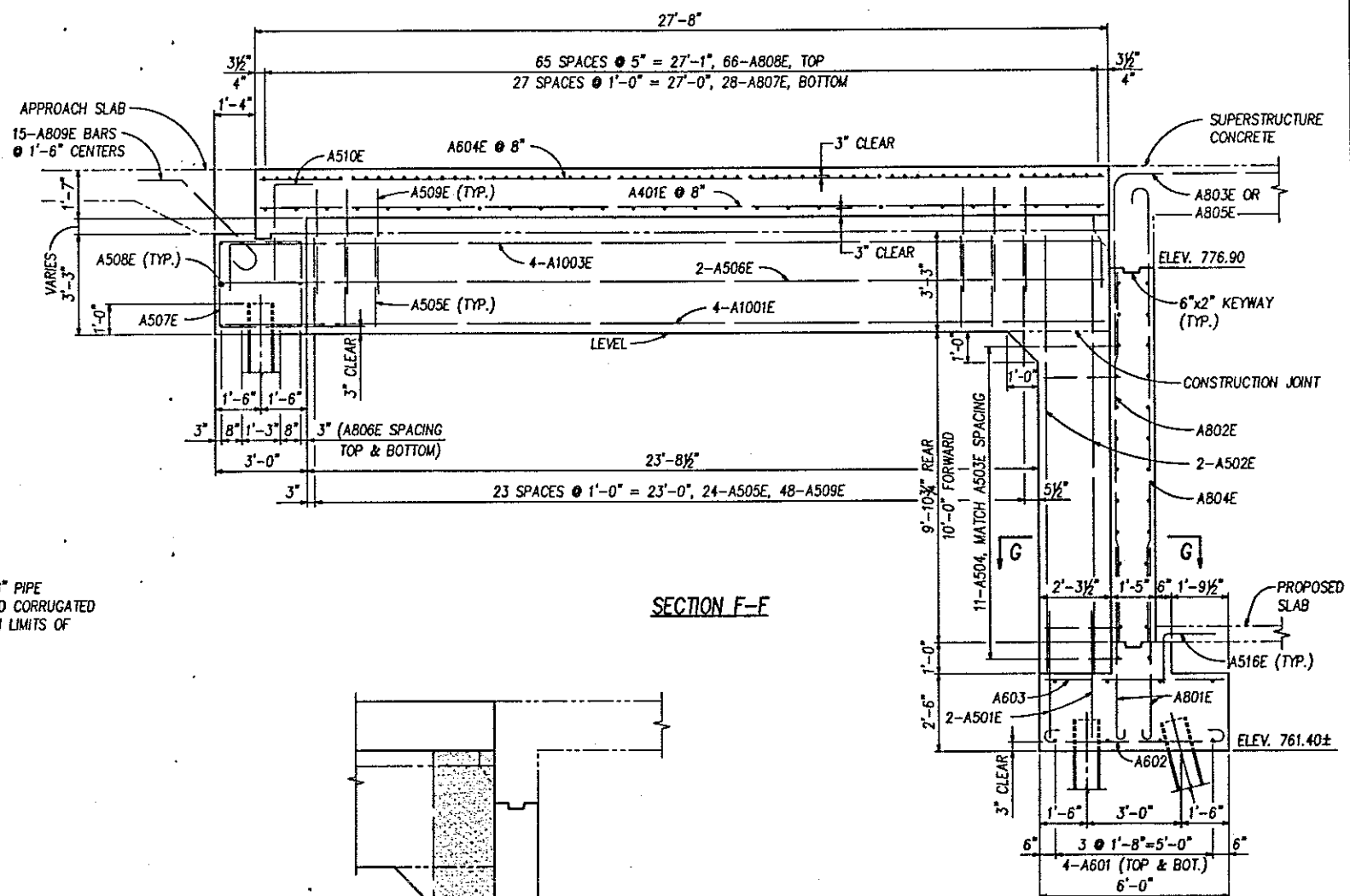
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
ABUTMENT DETAILS			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD * GROHNE * LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	



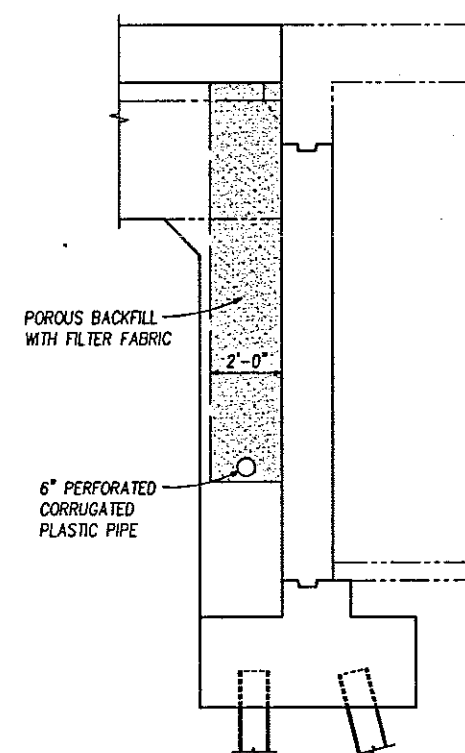
HALF ABUTMENT ELEVATION  
(SHOWN PRIOR TO SUPERSTRUCTURE PLACEMENT)



SECTION G-G



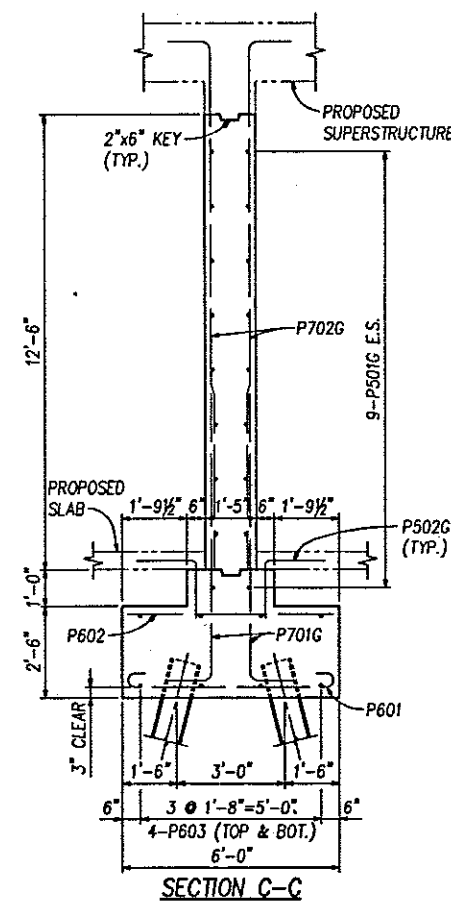
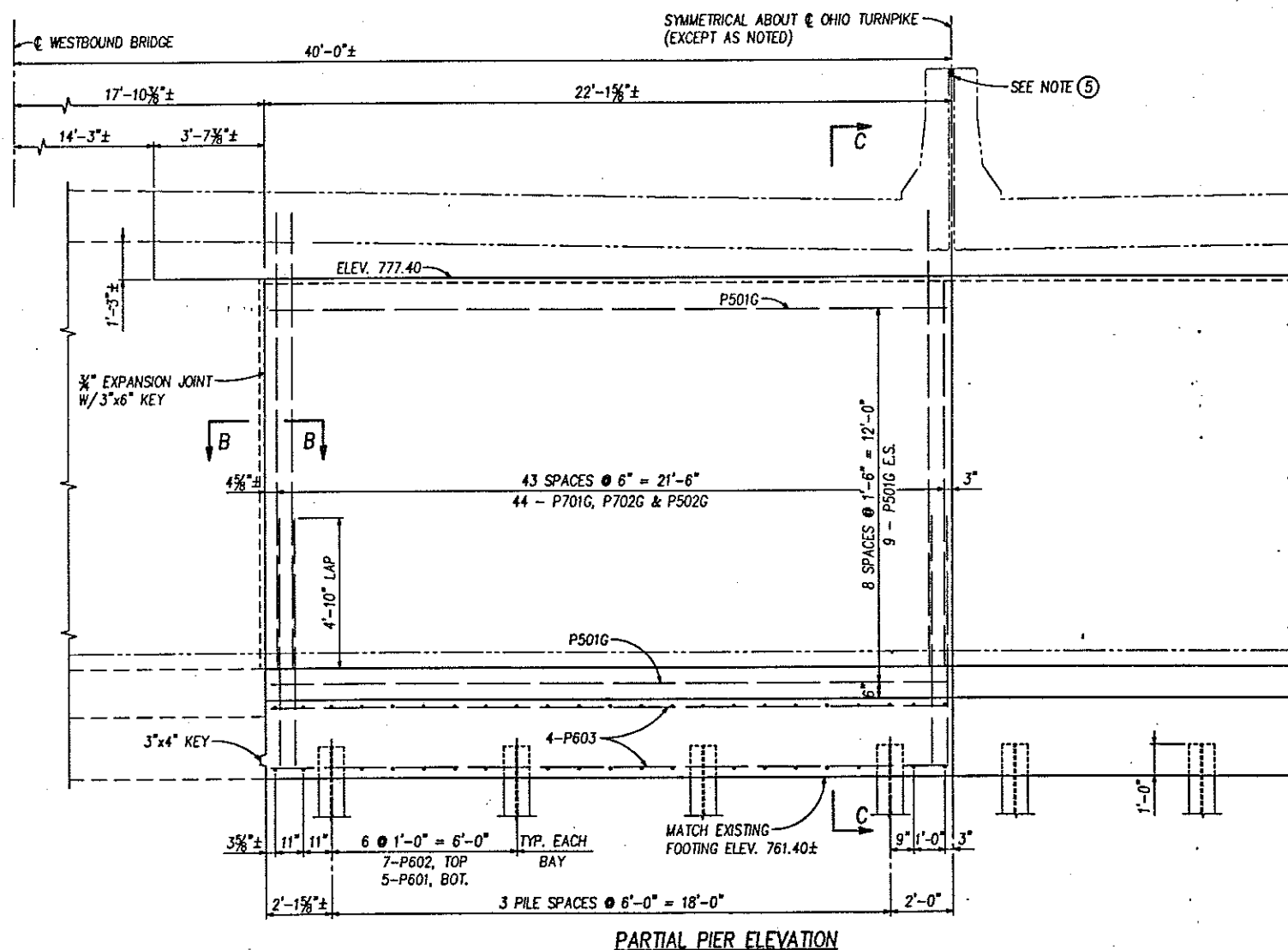
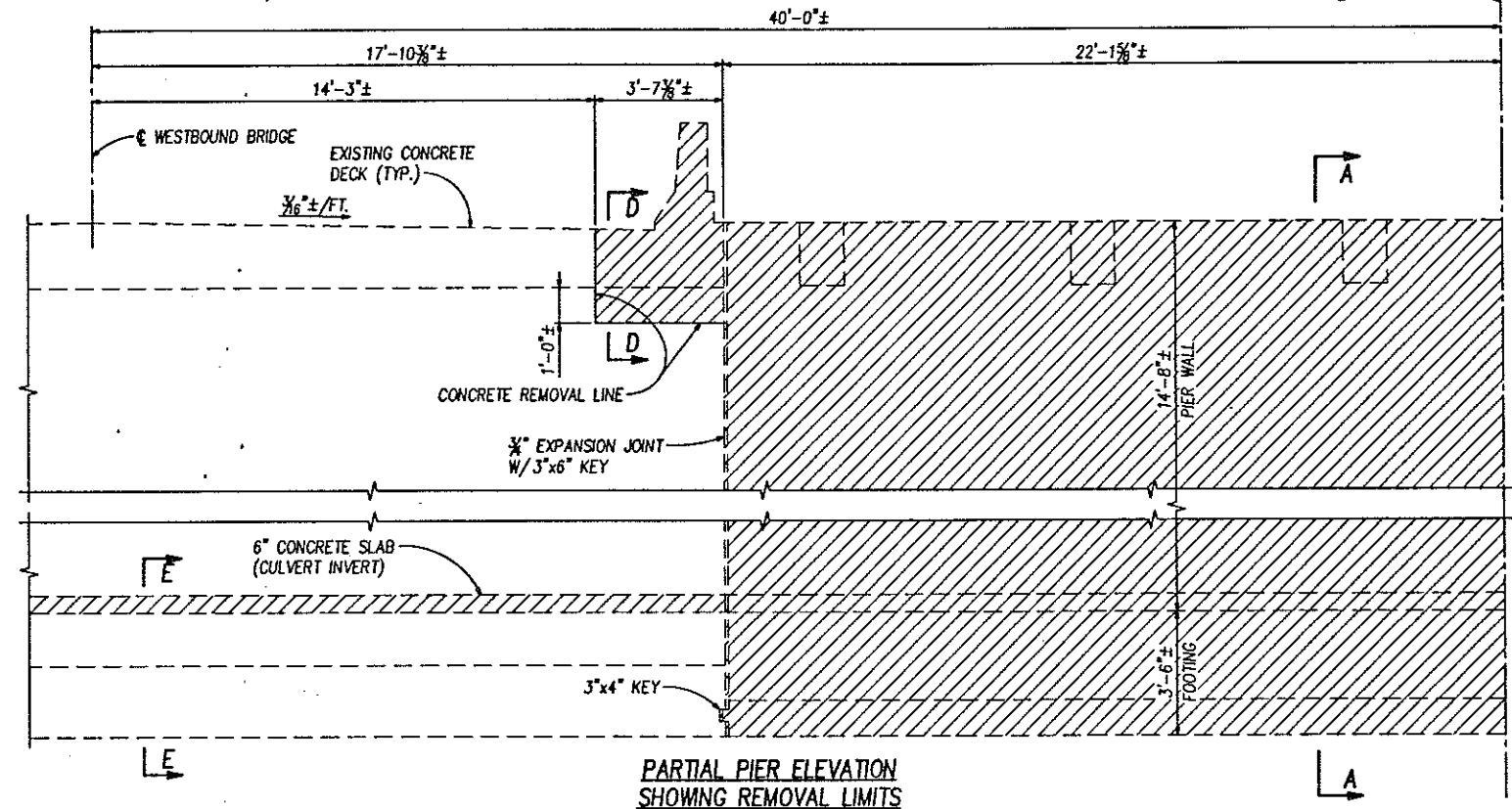
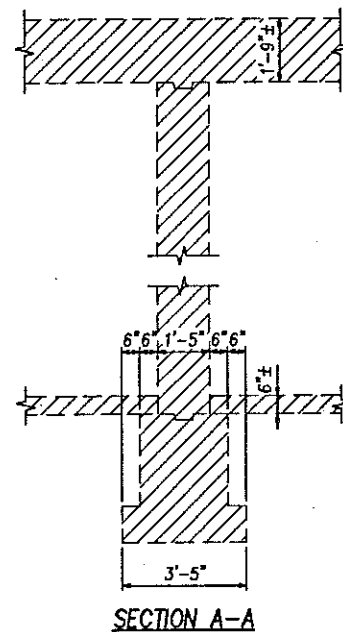
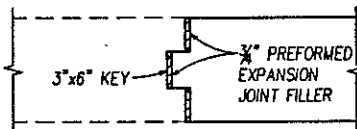
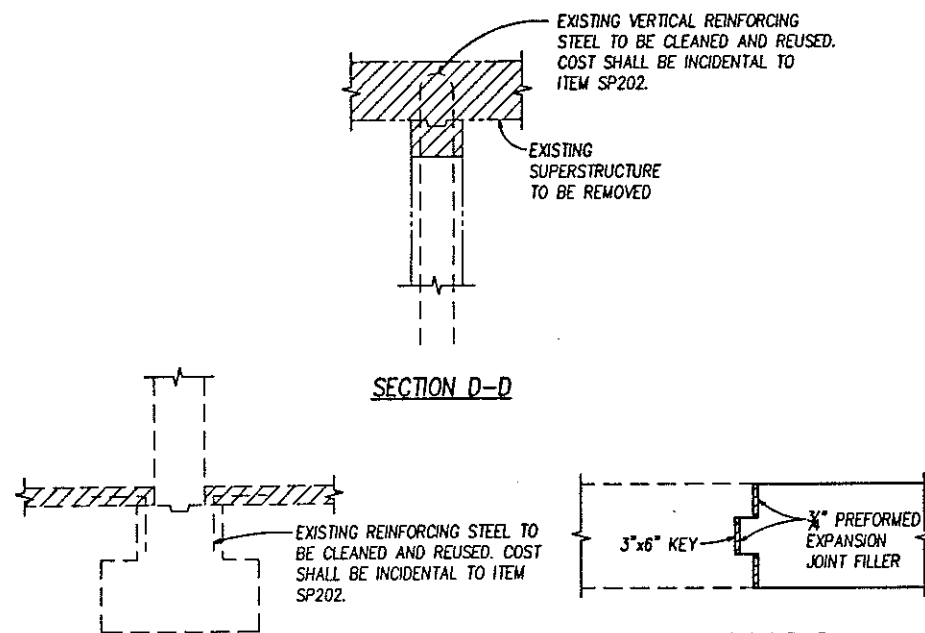
SECTION F-F



ABUTMENT DRAINAGE DETAIL

- NOTES:
- 1) ALL PILES ARE HP10x42 STEEL PILES.
  - 2) ALL BATTERED PILES ARE BATTERED 1 ON 4.
  - 3) REINFORCING SPLICE LENGTHS SHALL BE 5'-0" FOR #8 BARS AND 2'-5" FOR #5 BARS.
  - 4) FOR ADDITIONAL ABUTMENT DETAILS SEE SHEETS 4 & 5/11.
  - 5) THE BAR MARK PREFIX "A" DENOTES ABUTMENT BARS.
  - 6) THE BAR MARK SUFFIX "E" DENOTES EPOXY COATED BARS.
  - 7) SEE SHEET 5/11 FOR THE LOCATION OF SECTION F-F.
  - 8) DOWEL BARS SHALL BE DRILLED AND GROUTED IN THE EXISTING ABUTMENT IN ACCORDANCE WITH ITEM 510 AND SP853, GROUT ANCHORING WITH NONSHRINKING EPOXY MORTAR.
  - 9) POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK, SHALL EXTEND FROM THE LOWER LIMITS SHOWN ON THE PLANS UP TO THE BOTTOM OF THE ABUTMENT SLAB AND Laterally AS SHOWN ON THE PLANS.

NO.	REVISONS	BY	DATE
OHIO TURNPIKE COMMISSION			
ABUTMENT DETAILS			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD * GROHNKE * LONG, LIMITED		Consulting Engineers	
110 Arco Drive	Toledo, Ohio 43607	(419) 535-1015	
DESIGNED: SAM	CHECKED: R.J.	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWJ	SCALE: NTS	
CONTRACT 77-97-01 SHEET B197 OF B231			



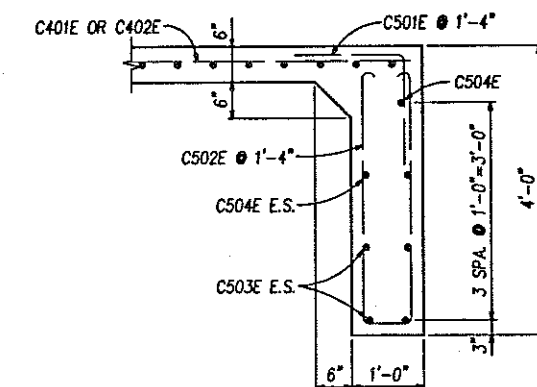
#### NOTES:

- ALL PILES ARE HP10x42 STEEL PILES.
- ALL BATTERED PILES ARE BATTERED 1 ON 4.
- THE BAR MARK PREFIX "P" DENOTES PIER BARS.
- THE BAR MARK SUFFIX "G" DENOTES GALVANIZED BARS.
- PROVIDE AN ELASTOMERIC COMPRESSION SEAL 20' LONG CENTERED OVER THE PIER. COMPRESSION SEAL SHALL BE D.S. BROWN CV-2500 OR APPROVED EQUAL. PAYMENT FOR COMPRESSION SEAL AND THE INSTALLATION OF THE COMPRESSION SEAL SHALL BE INCLUDED WITH ITEM SP511A FOR PAYMENT.

#### LEGEND

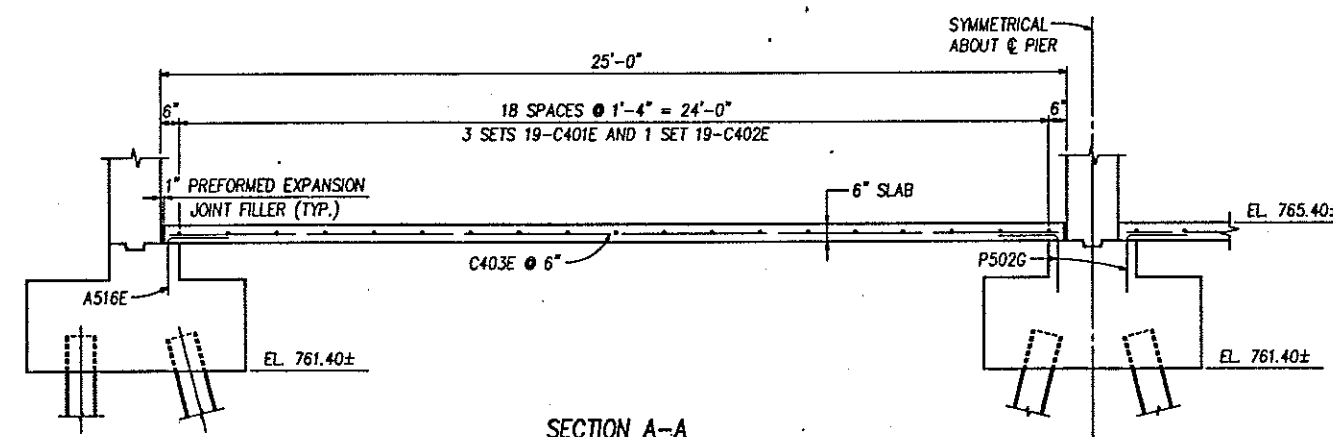
INDICATES PORTIONS OF EXISTING STRUCTURE TO BE REMOVED PER ITEM SP 202.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
PIER DETAILS			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD • GROHNKE • LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	
CONTRACT 77-97-01 SHEET B198 OF B231			



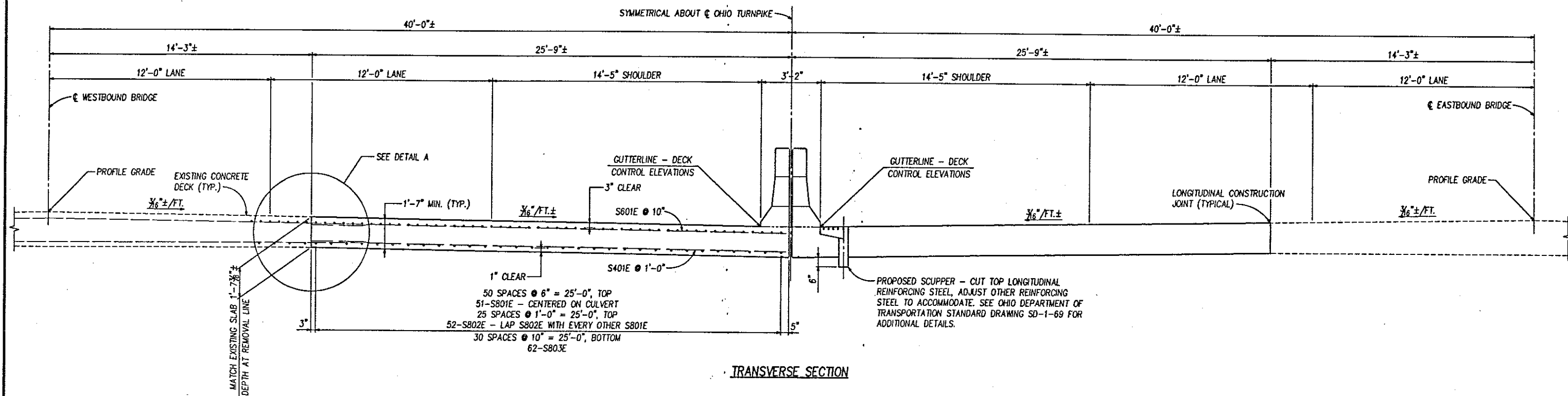
NOTES:

- ① SEE SHEET 4 & 7/11 FOR REMOVAL DETAILS.
- ② THE BAR MARK PREFIX "C" DENOTES CULVERT INVERT SLAB BARS.
- ③ THE BAR MARK SUFFIX "G" DENOTES GALVANIZED BARS.
- ④ REINFORCING SPLICE LENGTHS SHALL BE 1'-8" FOR #4 BARS.

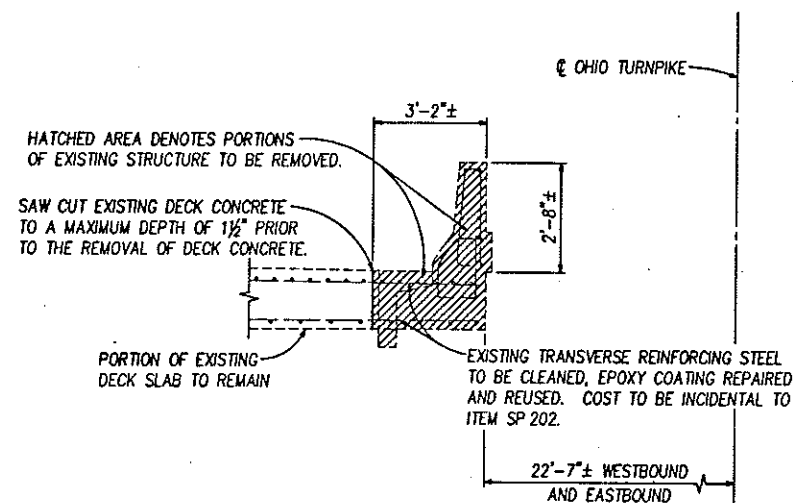


SECTION A-A

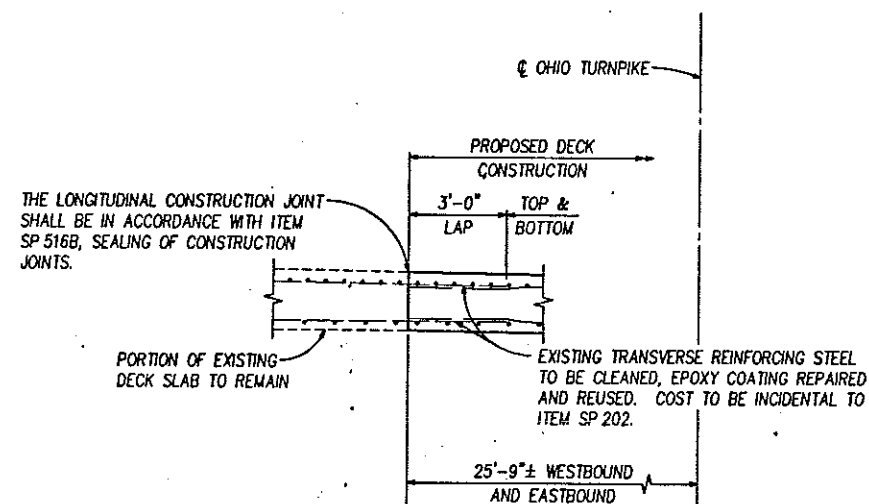
NO.	REVISIONS			BY DATE
<b>OHIO TURNPIKE COMMISSION</b>				
<p align="center"><b>CULVERT INVERT SLAB</b>  <b>OHIO TURNPIKE MP 126.5</b>  <b>OVER CHAPPEL CREEK</b></p>				
<b>DANSARD * GROHNKE * LONG, LIMITED</b>			Consulting Engineers	
110 Arco Drive		Toledo, Ohio 43607	(419) 535-1015	
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96		
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS		



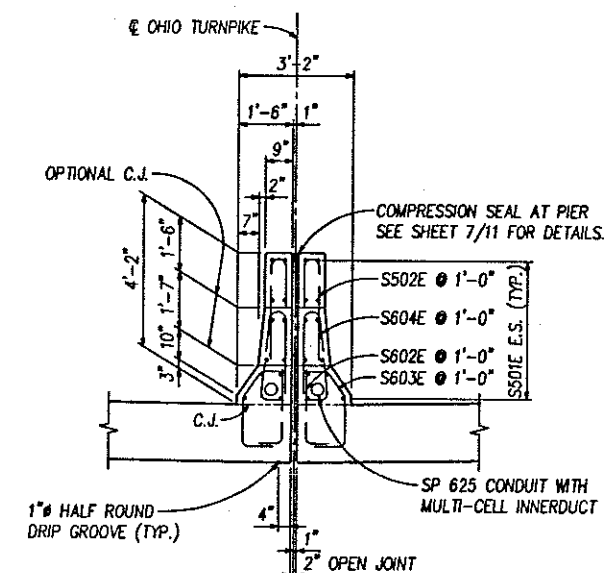
TRANSVERSE SECTION



DETAIL A  
SHOWING REMOVAL LIMITS



DETAIL A  
SHOWING CONSTRUCTION JOINT



MEDIAN DETAIL  
(DIMENSIONS & BARS SYMMETRICAL ABOUT @ OHIO TURNPIKE)

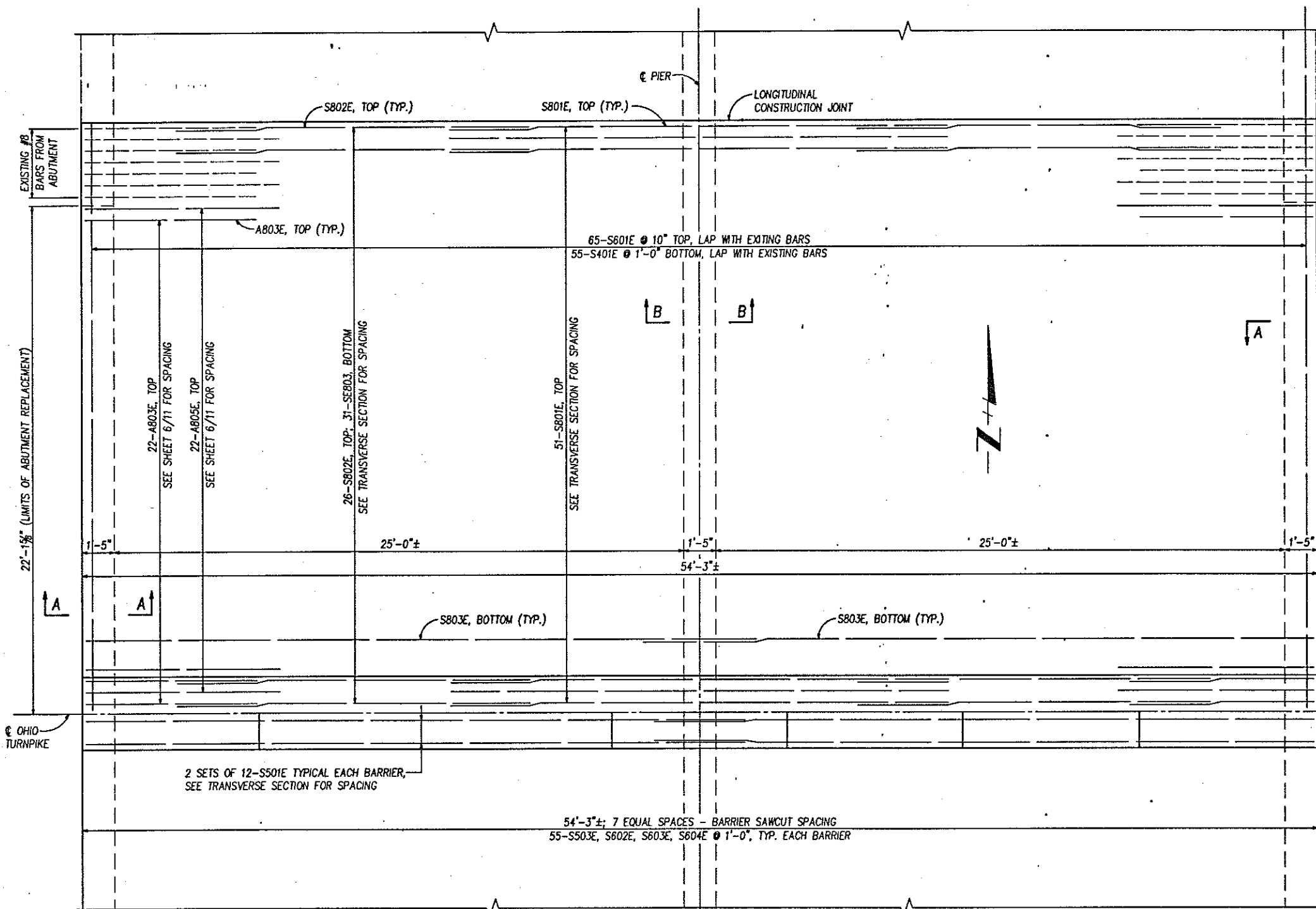
FINISH PAVEMENT ELEVATIONS			
SIDE	LOCATION	EDGE OF PAVEMENT	GUTTER LINE
WESTBOUND	FACE REAR ABUTMENT	780.19	779.83
	1/2 SPAN 1	780.20	779.84
	PIER 1	780.21	779.85
	1/2 SPAN 2	780.21	779.85
	FACE FORWARD ABUTMENT	780.22	779.85
EASTBOUND	FACE REAR ABUTMENT	780.20	779.83
	1/2 SPAN 1	780.20	779.84
	PIER 1	780.20	779.85
	1/2 SPAN 2	780.21	779.85
	FACE FORWARD ABUTMENT	780.22	779.85

NOTES:

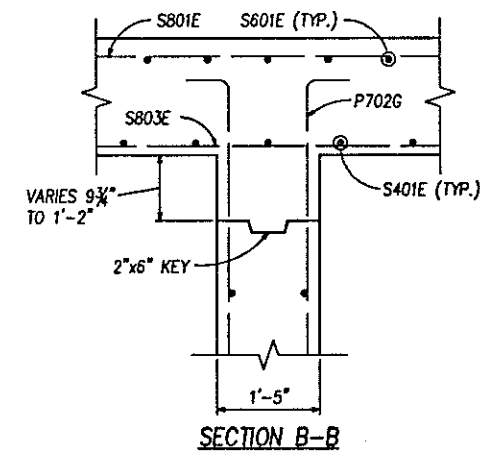
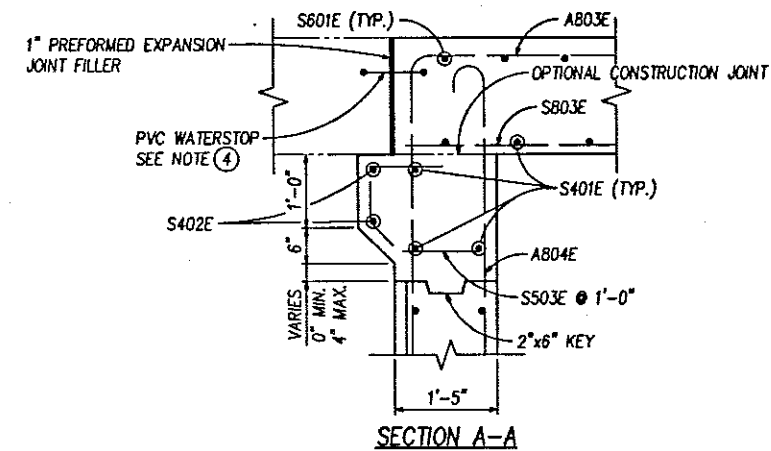
- DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENTS AND PIERS.
- LONGITUDINAL CONSTRUCTION JOINT SHALL BE TREATED IN ACCORDANCE WITH ITEM SP 516B - SEALING OF CONSTRUCTION JOINT.
- FINISH PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ARE THE FINISHED PAVEMENT ELEVATIONS. PROPER ALLOWANCE SHALL BE MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE WEIGHT OF THE FALSEWORK. DEAD LOAD DEFLECTION DUE TO THE WEIGHT OF THE CONCRETE IS 0" AT MID-SPAN.
- THE BAR MARK PREFIX "S" DENOTES SUPERSTRUCTURE BARS.
- THE BAR MARK SUFFIX "E" DENOTES EPOXY COATED BARS.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
DECK TRANSVERSE SECTION			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD GROHNEK LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	





**SLAB PLAN**  
(REINFORCING IS SYMMETRICAL AROUND  
BOTH  $\phi$  OHIO TURNPIKE AND  $\phi$  PIER)



**NOTES:**

- ① REINFORCING SPLICE LENGTHS SHALL BE 5'-10" FOR TOP #8 BARS, 4'-0" FOR BOTTOM #8 BARS AND 3'-7" FOR #5 BARS.
- ② TRANSVERSE REINFORCING STEEL SHALL BE FIELD BENT AS REQUIRED. ANY DAMAGE TO THE EPOXY COATING SHALL BE REPAIRED PER SP 509.10. PAYMENT SHALL BE INCLUDED WITH ITEM SP 509 - EPOXY COATED REINFORCING STEEL, GRADE 60.
- ③ TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN THE DECK SLAB.
- ④ SEE OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING ICD-1-82 FOR PVC WATERSTOP DETAILS.
- ⑤ THE BAR MARK PREFIX "S" DENOTES SUPERSTRUCTURE BARS.
- ⑥ THE BAR MARK PREFIX "A" DENOTES ABUTMENT BARS.
- ⑦ THE BAR MARK PREFIX "P" DENOTES PIER BARS.
- ⑧ THE BAR MARK SUFFIX "E" DENOTES EPOXY COATED BARS.
- ⑨ THE BAR MARK SUFFIX "G" DENOTES GALVANIZED BARS.

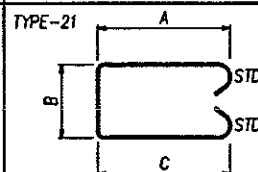
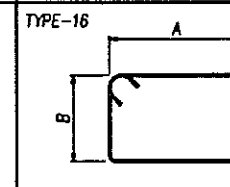
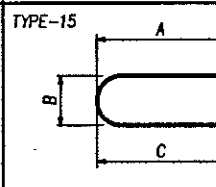
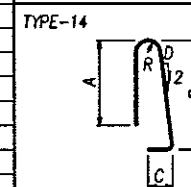
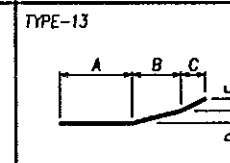
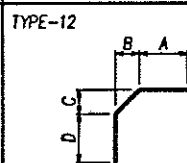
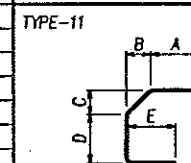
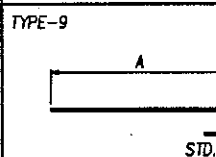
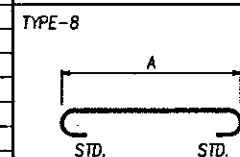
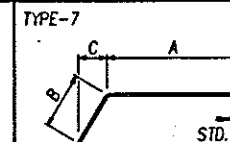
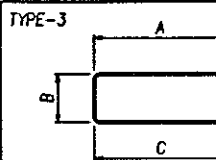
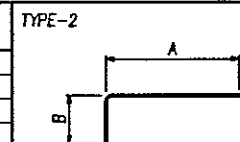
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
<b>SLAB PLAN</b>			
<b>OHIO TURNPIKE MP 126.5</b>			
<b>OVER CHAPPEL CREEK</b>			
DANSARD * GROHKE * LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	

# REINFORCEMENT SCHEDULE

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	REAR	FWD	TOTAL				A	B	C	D	E	R	INC.		REAR	FWD	TOTAL				A	B	C	D	E	R	INC.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
ABUTMENTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
A1001E	30	30	60	28'-6"	7358	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A1002E	30	30	60	31'-9"	8197	3	2'-0"	28'-6"	2'-0"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
A801E	88	88	176	9'-2"	4308	9	8'-3"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
A802E	44	44	88	11'-10"	2780	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A803E	44	44	88	16'-10"	3955	2	8'-6"	8'-6"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
A804E	44	44	88	15'-8"	3681	9	14'-9"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
A805E	44	44	88	18'-10"	4425	2	9'-6"	9'-6"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
A806E	16	16	32	22'-0"	1880	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A807E	56	56	112	23'-3"	6953	9	23'-4"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
A808E	132	132	264	24'-0"	16917	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A809E	30	30	60	6'-1"	975	7	3'-9"	1'-5"	1'-0"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
A601E	10	10	20	2'-1"	63	12	8"	6"	8 1/2"	8 1/2"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
A602E	8	8	16	1'-4"	32	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A603E	15	15	30	2'-5"	109	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A604E	72	72	144	27'-4"	5912	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A605E	56	56	112	1'-11"	322	2	1'-6"	7 1/2"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
A606E	56	56	112	2'-9"	463	11	7"	6"	8 1/2"	9 1/2"	10"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
A607E	56	56	112	5'-4"	897	14	2'-3"	2'-5"	7 1/2"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
A608E	26	26	52	3'-6"	273	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
SUPERSTRUCTURE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
S801E																102	22'-0"	5991	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S802E																104	19'-6"	5415	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S803E																124	29'-0"	9601	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S601E																130	25'-6"	4979	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S602E																110	1'-11"	317	2	1'-6"	7 1/2"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
S603E																110	2'-9"	454	11	7"	6"	8 1/2"	9 1/2"	10"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
S604E																110	5'-4"	881	14	2'-3"	2'-5"	7 1/2"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
S501E																48	28'-9"	1439	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S502E																110	5'-9"	660	15	2'-9"	5"	2'-9"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
S503E																104	3'-5"	371	11	1'-1"	6 3/4"	6 3/4"	9"	1'-0"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
S401E																122	25'-6"	2078	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S402E																16	7'-9"	83	STR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TOTAL SUPERSTRUCTURE (EPOXY)																	32269																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

## NOTES

- 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.
- IN ACCORDANCE WITH THE REQUIREMENTS OF SP509, OF THE SPECIFICATIONS THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING THREE (3) FOOT CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF REINFORCING STEEL.
- REINFORCING STEEL SAMPLES: REFER TO OTC GENERAL CONDITIONS G-6.02 AND CMS SECTION 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING FOR EACH BRIDGE. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL SPLICED IN ACCORDANCE WITH 509.08.
- SEE SHEET G7 & G8/G11 FOR PARAPET TRANSITION REINFORCING.

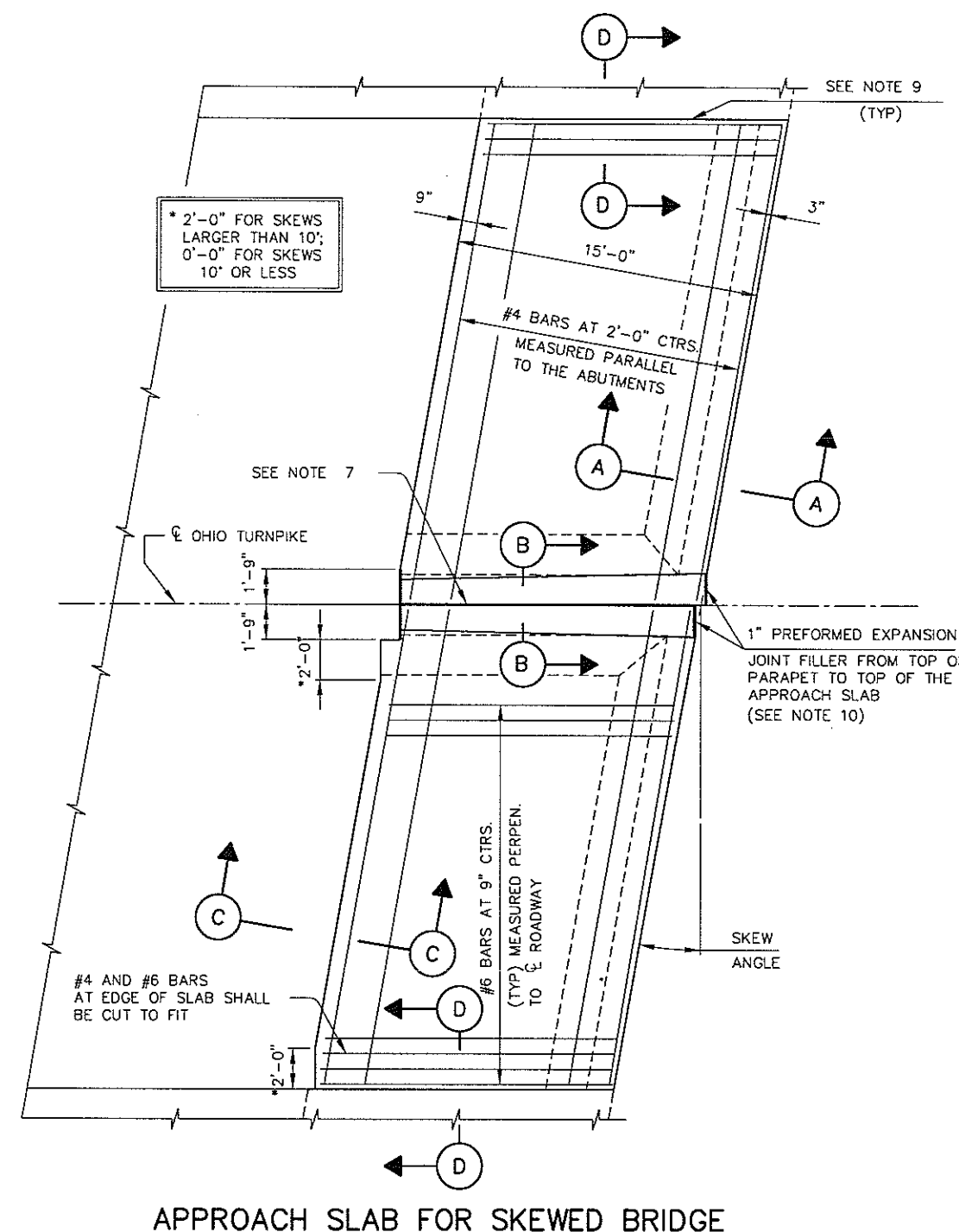
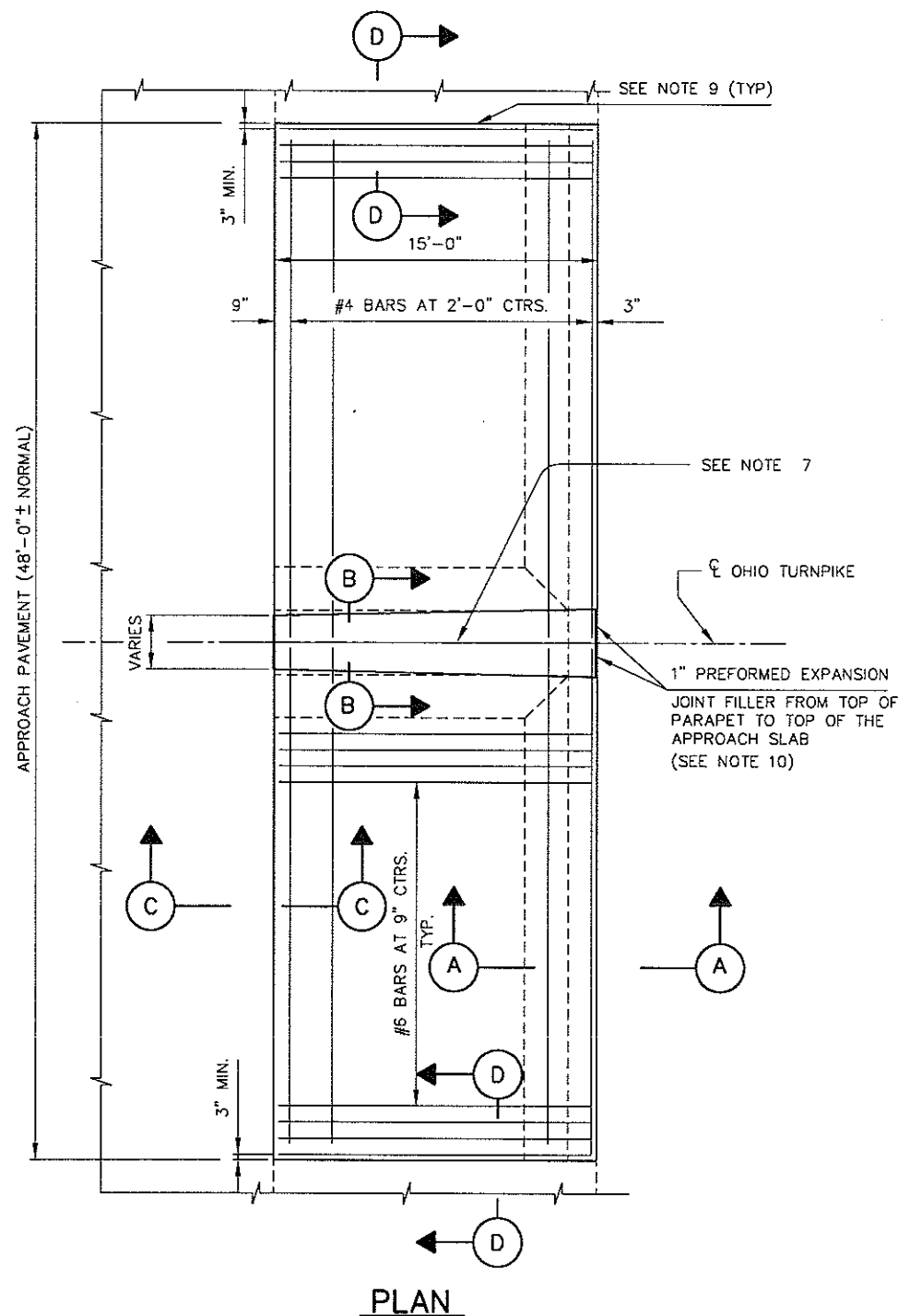


NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
REINFORCEMENT SCHEDULE			
OHIO TURNPIKE MP 126.5			
OVER CHAPPEL CREEK			
DANSARD * GROHNIKE * LONG, LIMITED Consulting Engineers			
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015			
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/96	
DRAWN: BJS	IN CHARGE: RWG	SCALE: NTS	

# NOTES

- THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, ESTIMATED QUANTITY (SQ. YDS), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.
- CONCRETE: CLASS S USING SHRINKAGE COMPENSATING CEMENT. REINFORCING STEEL: ASTM A615, A616 OR A617 - GRADE 60 MIN YIELD STRENGTH 60,000 P.S.I. AND SHALL BE EPOXY COATED.
- LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 511.09.
- CROWN SHALL CONFORM TO THAT OF THE BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH ASPHALT PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED ON THE APPROACH ASPHALT PAVEMENT AT A TRANSITION RATE OF 1 TO 200.
- TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE AS DETAILED ON OTC STANDARD DRAWING AS-2.
- BASE MATERIAL SHALL BE ITEM SP 310-SUBBASE, TYPE I, GRADING A OR ITEM SP 304-AGGREGATE BASE DEPENDING ON MATERIAL SPECIFIED FOR THE MAINLINE PAVEMENT.
- GROOVE AND SEAL WITH 705.04 AS PER ODOT STD. DWG. BP-2.1
- TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.
- THE JOINT BETWEEN THE EXISTING AND THE NEW APPROACH SLABS SHALL BE AS SHOWN IN SECTION 'D-D'.
- 1" PREFORMED EXPANSION JOINT FILLER SHALL BE PER 705.03
- THE TWO 4" DIAMETER PVC CONDUITS WITH MULTI-CELL INNERDUCT SHALL COMPLY WITH SP 625.
- FOR SECTIONS 'A-A', 'B-B', 'C-C' AND 'D-D' ADDITIONAL INFORMATION SEE OTC STANDARD DRAWING AS-2.
- THE FOLLOWING ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM SP 611, CLASS 'S' CONCRETE, APPROACH SLAB, USING SHRINKAGE COMPENSATING CEMENT (T=10"):

- : ALL JOINTS
- : GROOVE AND JOINT SEAL
- : TYPE 'A' WATERPROOFING
- : 1" PREFORMED EXPANSION JOINT FILLER
- : MEDIAN BARRIERS



DESIGNED BY:	CHECKED BY:
DRAWN BY: FFF	DATE:
DATE: 12/27/95	REVISD BY: T.K.L.
CAD FILE NAME: 7026100/AS-1	DATE: 12/20/96

OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE  
APPROACH SLAB

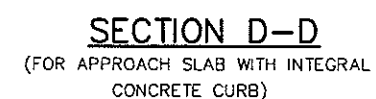
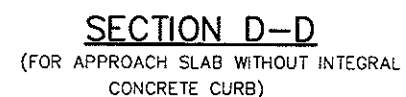
DATE: JANUARY 1, 1997 SCALE: N.T.S.  
O.T.C. STANDARD DRAWING AS-1

SHEET B203 OF B231



A cross-sectional diagram of a pavement structure. From left to right, it shows a hatched area labeled "FLEXIBLE PAVEMENT", a solid black rectangular area labeled "SP 611 APPROACH SLAB", and a hatched area labeled "6\" AGGREGATE BASE MATERIAL". Below the aggregate base material, there is a dimension line indicating a length of "2'". To the right of the SP 611 slab, there is a vertical dimension line indicating a height of "10\"".

REINFORCING AND DIMENSIONS SYMMETRICAL ABOUT CENTERLINE



A FOR LOCATIONS OF SECTIONS 'A-A', 'B-B', 'C-C', AND 'D-D'  
AND ADDITIONAL NOTES, SEE OTC STANDARD DRAWING AS-1

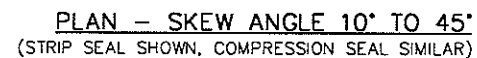
B THE REMOVAL SHALL BE PER 202.05 OF THE ODOT CMS  
BUT THE COST OF THE REMOVAL SHALL BE INCIDENTAL  
TO THE COST OF ITEM SP 611



DESIGNED BY:	CHECKED BY: D.S.B.
DATE:	DATE: 11/01/96
DRAWN BY: A.L.H.	REVISED BY: T.K.I.
DATE: 12/27/95	DATE: 12/20/96
CAD FILE NAME: 7026100/AS-2	

REINFORCED CONCRETE  
APPROACH SLAB  
SECTIONS AND DETAILS

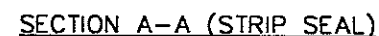
DATE: JANUARY 1, 1997	SCALE: N.T.S.
O.T.C. STANDARD DRAWING AS-1	



NOTE: WHEN SKEW ANGLE IS GREATER THAN 45°, FURNISH JOINT ASSEMBLIES IN TWO SECTIONS AND PROVIDE A FIELD SPLICE AT THE CENTERLINE OF ROADWAY.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING						
	TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2 1/4"	2 1/8"	2"	1 7/8"	1 3/4"	1 5/8"	1 1/2"
4"	2 5/8"	2 1/2"	2 1/2"	2 3/8"	2 1/4"	2 1/8"	2"
5"	2 7/8"	2 3/4"	2 3/4"	2 5/8"	2 5/8"	2 1/2"	2 3/8"

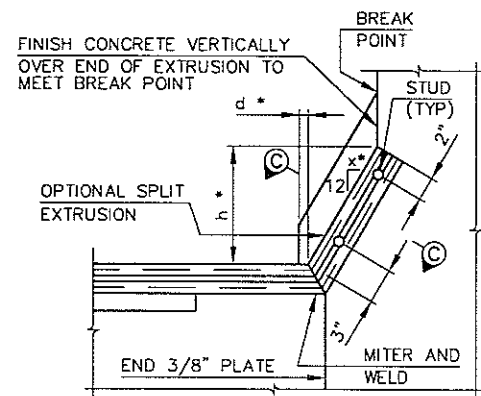


# OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS  
CELLULAR ABUTMENTS

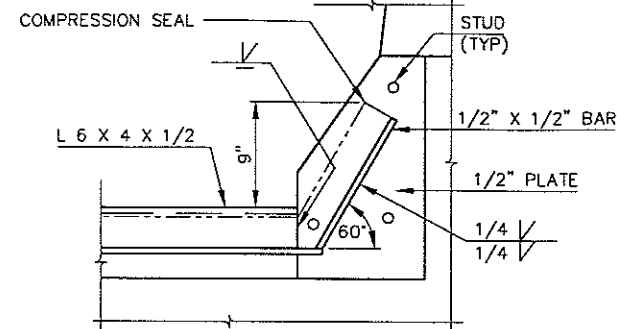
DATE: JANUARY 1, 1997	SCALE: N.T.S.
O.T.C. STANDARD DRAWING DKJ-1	

DESIGNED BY:	CHECKED BY:
DATE:	DATE:
DRAWN BY: KMH	REVISED BY: T.K.I.
DATE: 9/95	DATE: 4/04/96
CAD FILE NAME: 7026100/DKJ-1	

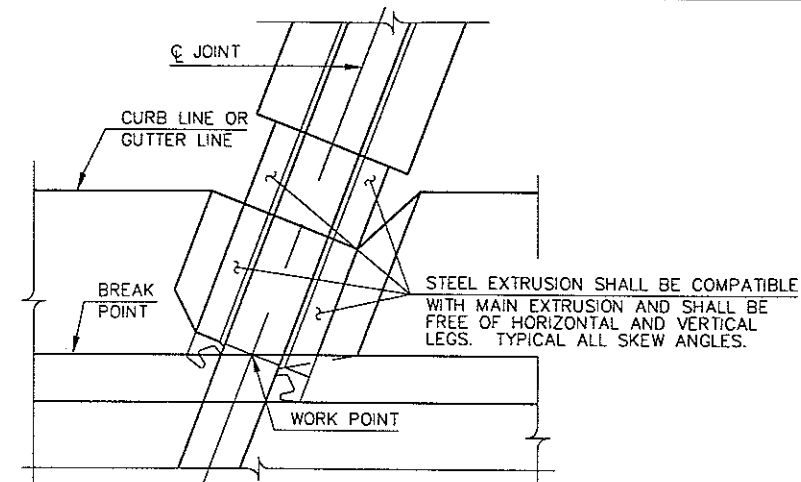


SECTION B-B (STRIP SEAL)

\* SEE TABLE B FOR VALUE



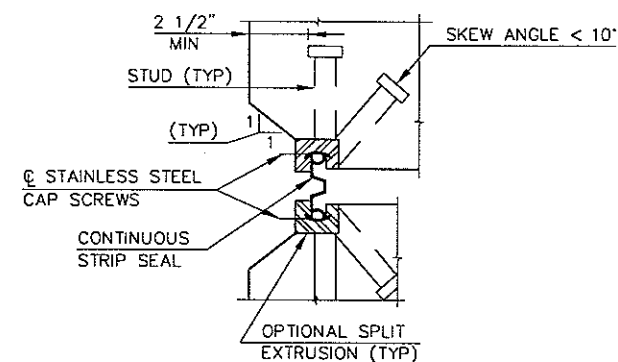
SECTION B-B (COMPRESSION SEAL)



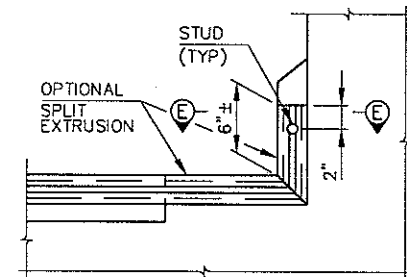
DETAIL A

NOTE: FOR JOINT DETAILS IN SIDEWALK SEE OTC STANDARD DRAWING DKJ-3

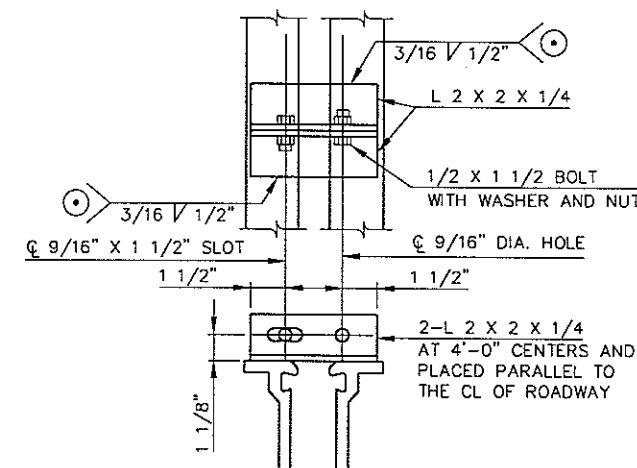
- NOTES**
1. THE SPLIT EXTRUSION SHOWN IS A NORMAL EXTRUSION WHICH HAS BEEN MODIFIED. AT JOINT UPTURNS, ESPECIALLY ON SKEWED BRIDGE DECKS, THE USE OF SPLIT EXTRUSIONS MAY BE NECESSARY TO ENSURE GOOD SEAL INSTALLATION. ON SHOP DRAWINGS, WHERE THE SPLIT EXTRUSION IS NOT USED, THE SEAL MANUFACTURER OR HIS AGENT WARRANTS TO THE CHIEF ENGINEER THAT THE FURNISHED CONFIGURATION WILL PROVIDE FOR READY INSTALLATION AND REPLACEMENT OF THE SEAL.
  2. SECTION F-F & G-G - THE BENT STEEL PLATES SHALL BE A-36 STEEL, GALVANIZED IN ACCORDANCE WITH ITEM 711.02. SHOP DRAWINGS SHALL BE SUBMITTED PER CMS 501.05. BASIS OF PAYMENT: THE UNIT PRICE SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS TO FURNISH AND INSTALL THE BENT PLATES. PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER POUND FOR ITEM 513, PARAPET PLATES, AS PER PLAN.
  3. FOR GENERAL NOTES, SEE OTC STANDARD DRAWING DKJ-1.



SECTION C-C

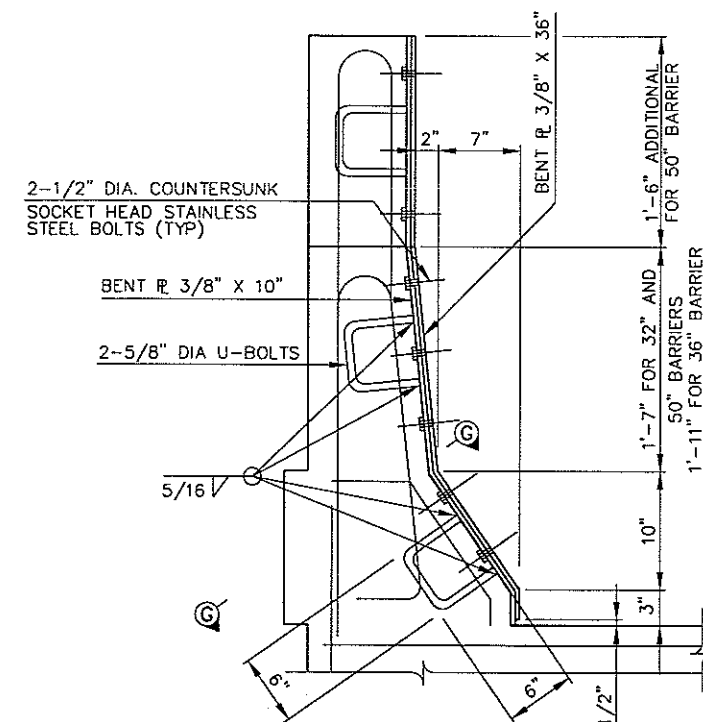


SECTION D-D

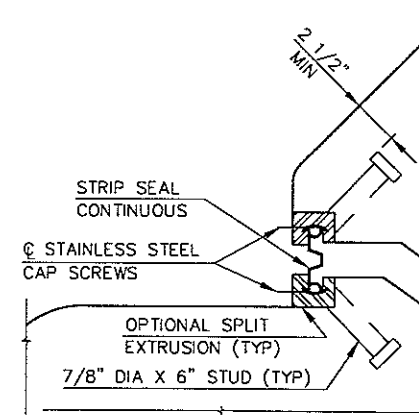


DETAIL - ALIGNMENT BRACKET

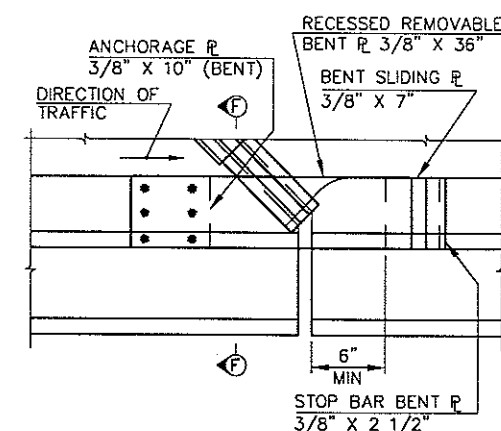
- TEMPORARY WELD TO BE REMOVED AND GROUND SMOOTH IN FIELD. LOOSEN TEMPORARY JOINT ARMOR AFTER INITIAL SET OF CONCRETE, PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF CONCRETE PLACEMENT.



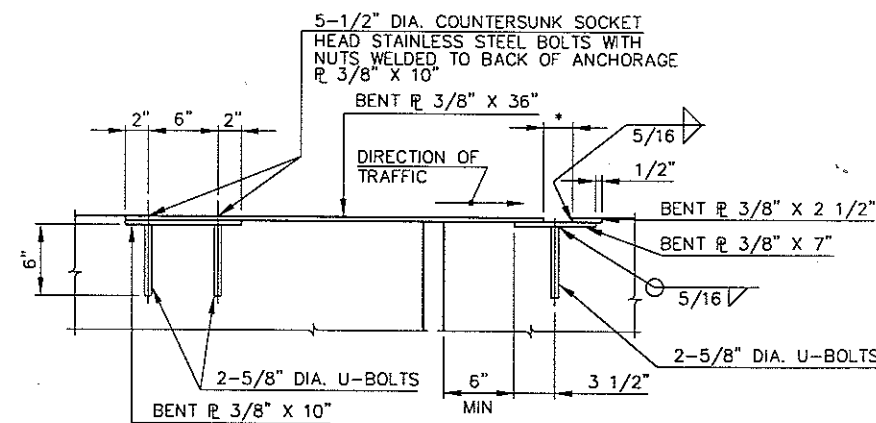
SECTION F-F



SECTION E-E



PLAN - SKEWS > 45°



SECTION G-G

\* DIMENSION SET EQUAL TO STRIP SEAL JOINT OPENING AT TIME OF INSTALLATION

STRIP SEAL SELECTION TABLE		
SEAL MOVEMENT RATING (SIZE)	MANUFACTURER & DESIGNATION *	
	THE D.S. BROWN COMPANY	WATSON-BOWMAN & ACME CORP.
3"	300L	SE-300
4"	400L	SE-400
5"	500L	SE-500

\* OR APPROVED EQUAL

TABLE B

	SKEW ANGLE	
	<10°	10° - 45°
d	3/4" MIN	3/4"
x	6 15/16"	7 1/2"
h	10"	10"

DESIGNED BY:	CHECKED BY:
DATE:	DATE:
DRAWN BY: KMH	REVISED BY: T.K.L.
DATE: 9/95	DATE: 4/04/96
CAD FILE NAME: 7028100/DKJ-2	

OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

DATE: JANUARY 1, 1997 SCALE: N.T.S.  
O.T.C. STANDARD DRAWING DKJ-2

SHEET B210 OF B231

CONTRACT NO. C-28  
COUNTY - ERIE  
DATE: MARCH 14, 1953



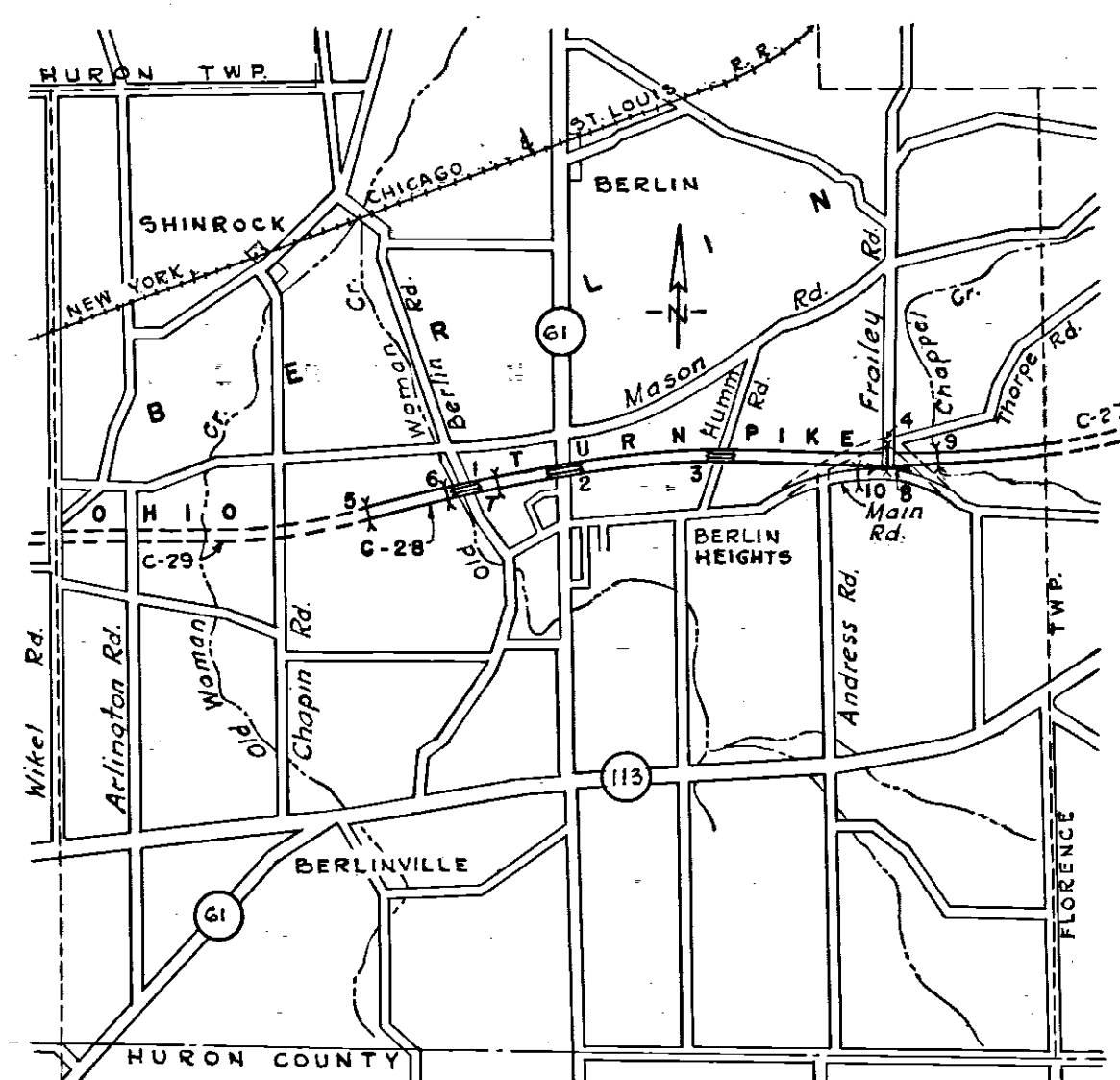
# OHIO TURNPIKE COMMISSION

## OHIO TURNPIKE PROJECT NO. 1

DESIGN SECTION D-9

## CONTRACT NO. C-28

TURNPIKE CONSTRUCTION CONTRACT  
STATION 919+40.93 TO STATION 1121+50



LOCATION PLAN  
(FROM ERIE COUNTY MAP)

SCALE IN MILES

APPROVAL RECOMMENDED  
HARDESTY & HANOVER - ANDREWS, CLARK & BUCKLEY  
CONTRACTING ENGINEER

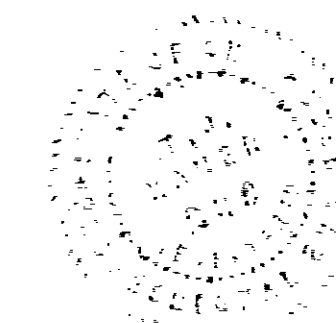
*Shadrigh Hardesty* March 14, 1953.  
*Ernest J. Clark* March 14, 1953.

APPROVED  
J. E. GREINER CO.  
CONSULTING ENGINEER

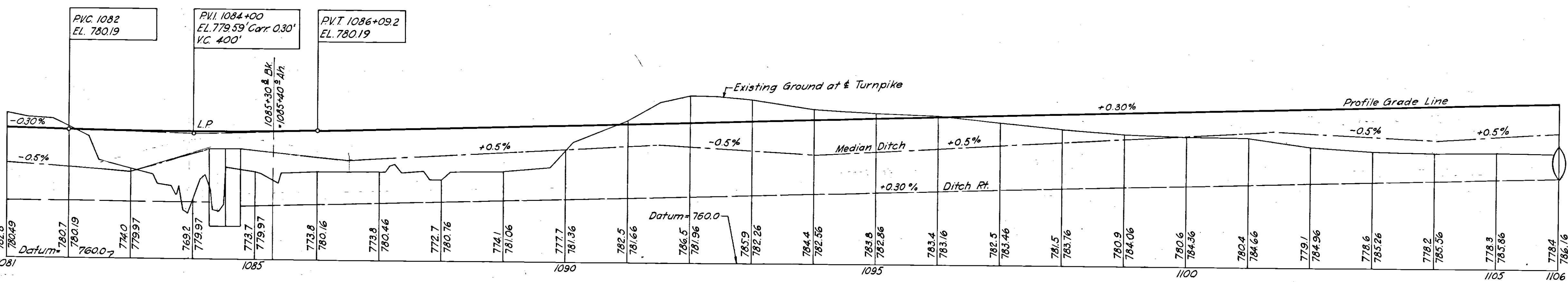
*J. E. Greiner*  
6-8-53

APPROVED  
OHIO TURNPIKE COMMISSION

*W. E. Miller*  
CHIEF ENGINEER 6-9-53

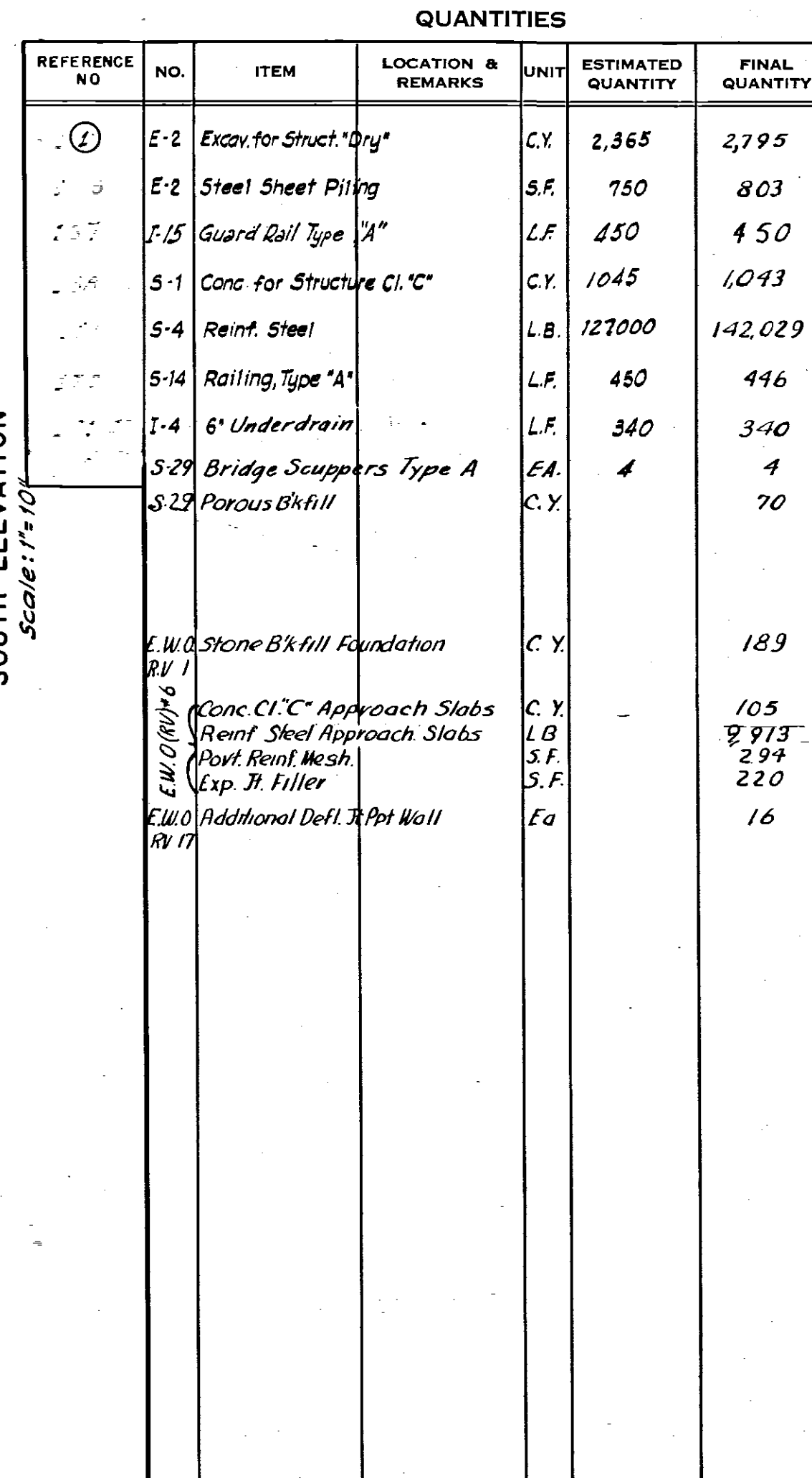
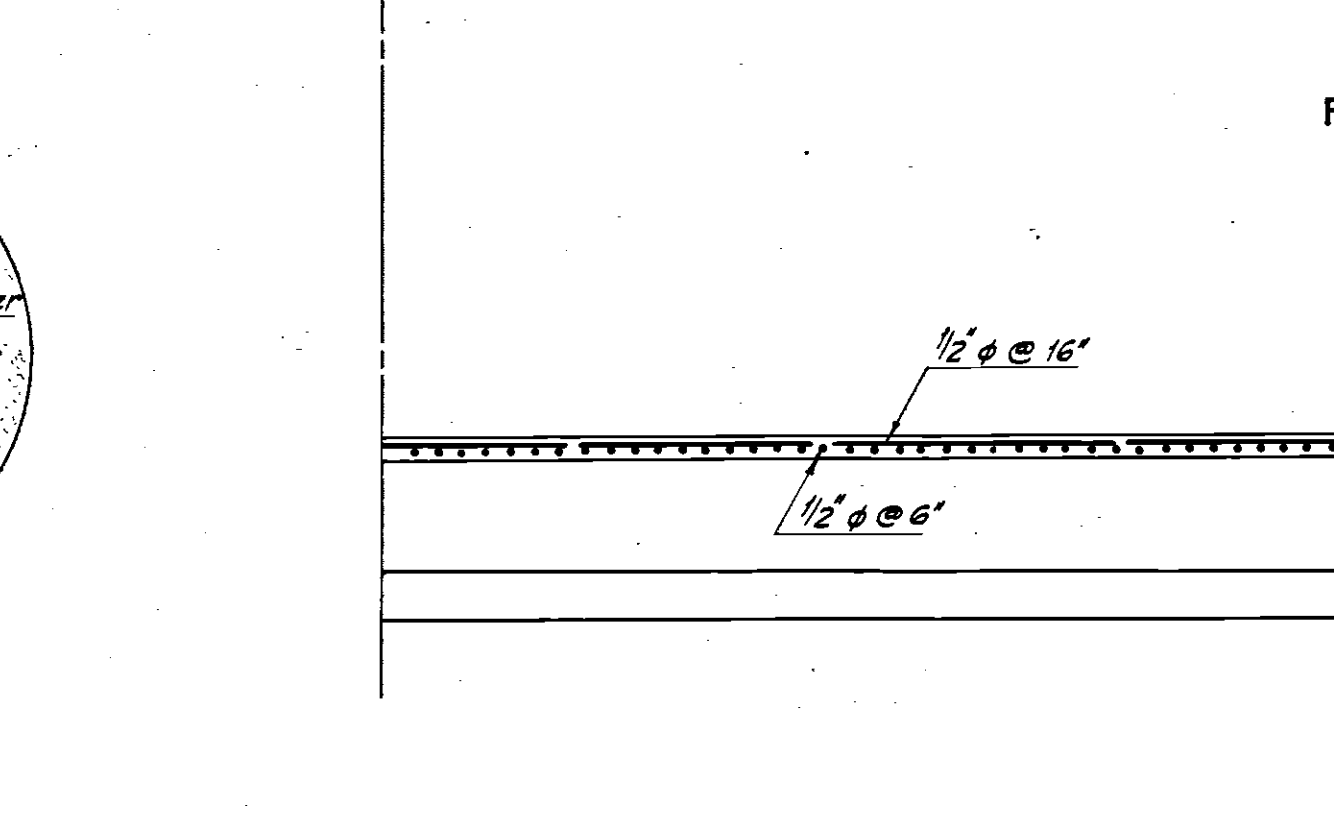
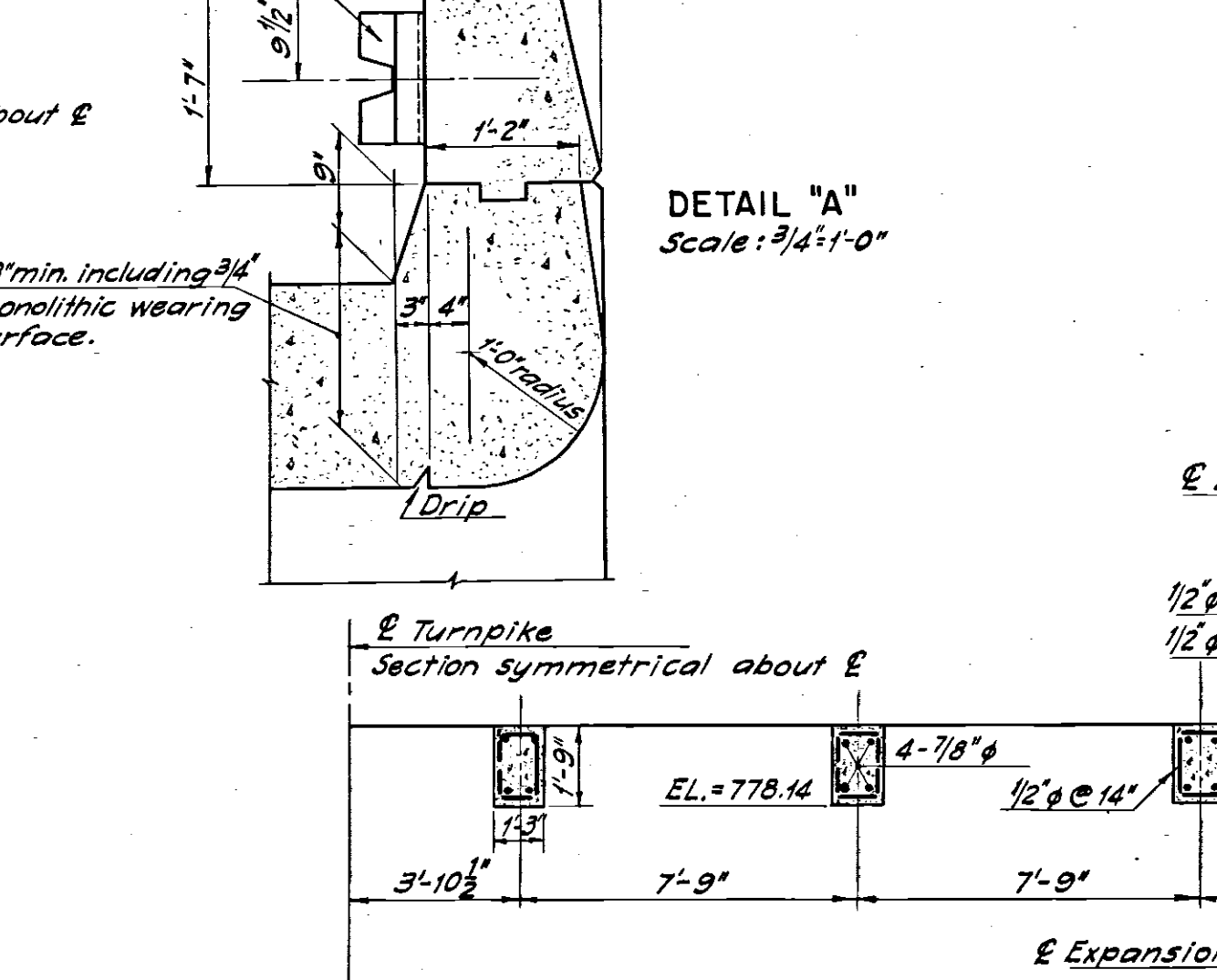
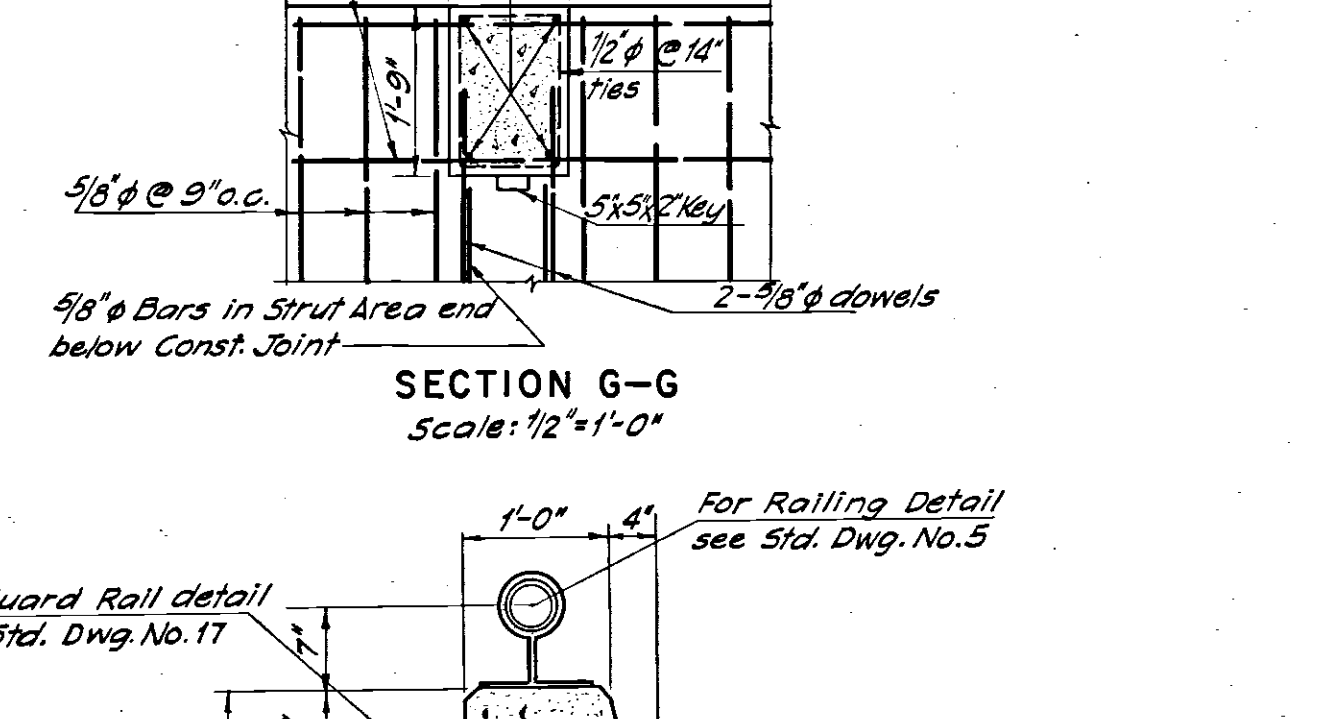
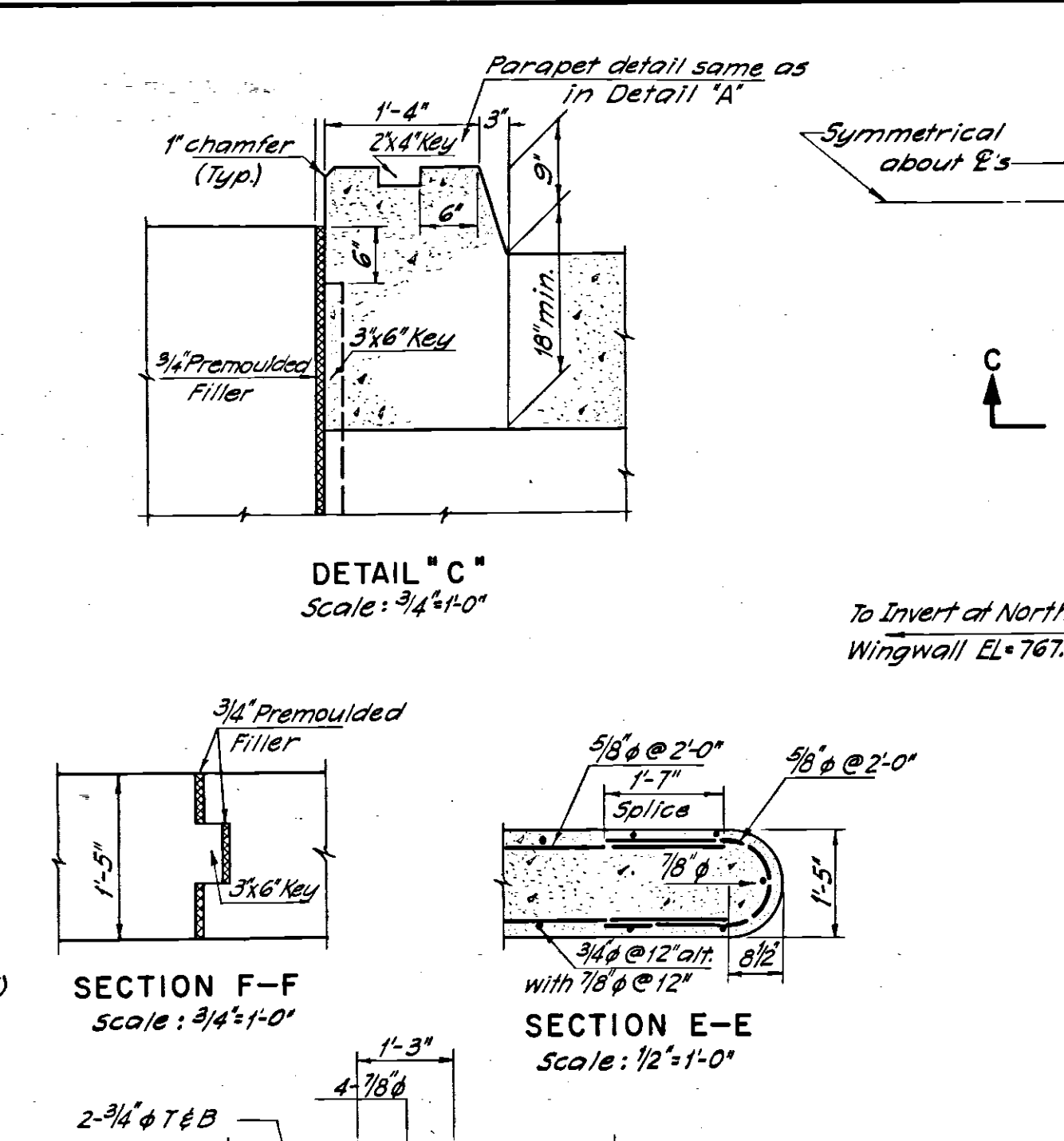




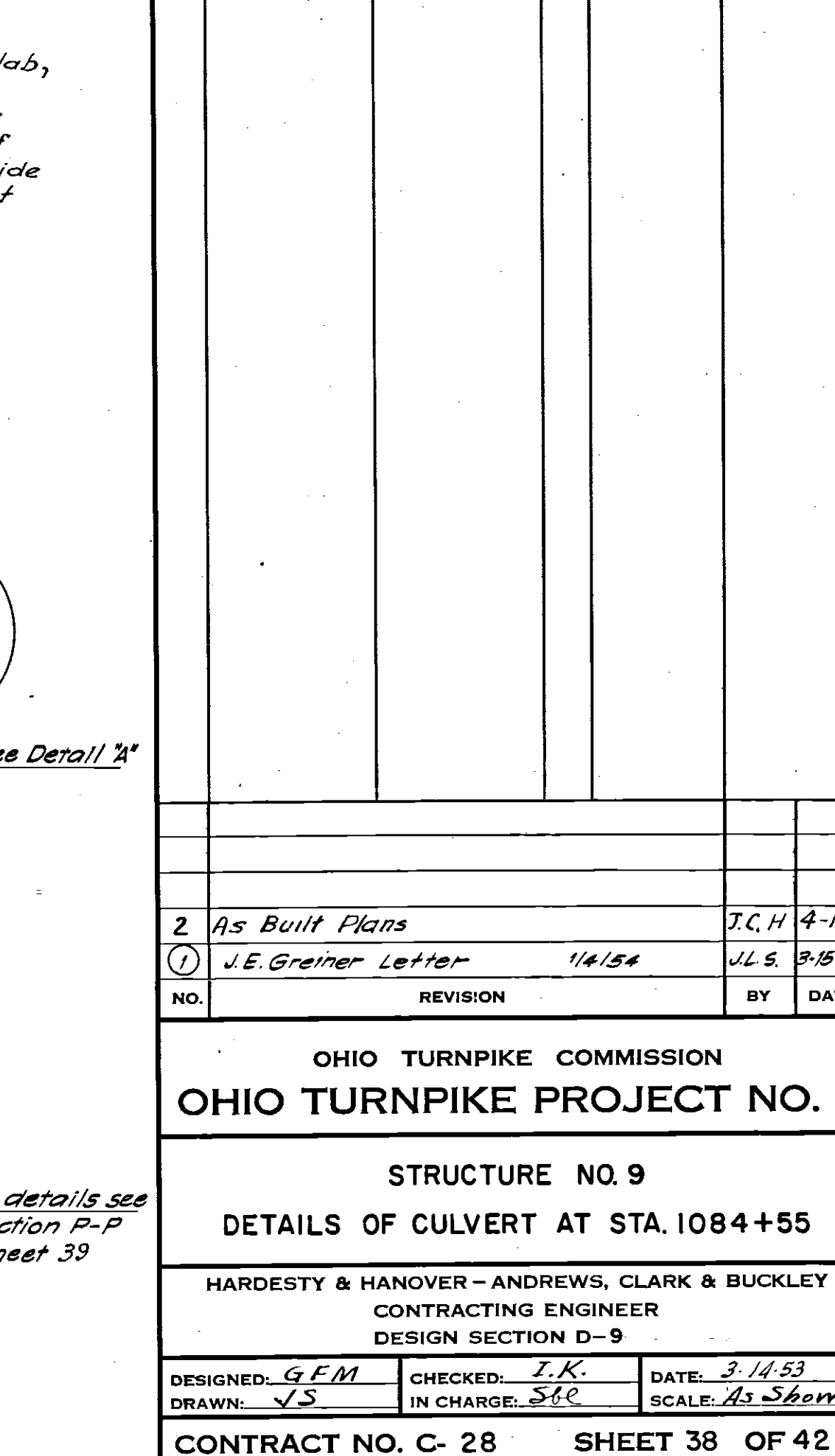


QUANTITIES					
NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
E-1	Roadway Excav.		C.Y.	41,241	46,351
E-3	Channel Excav.		C.Y.	1500	1,255
E-4	Borrow		C.Y.	11,752	5,052
E-11	Water		M.Ga.	404	105
I-15	Guard Rail, Type A		L.F.	1350	1,346
I-23	Farm Field Fence		L.F.	5250	5005
L-3	Place 5 1/2" Road Soil	Type A	S.Y.	14,143	14,370
L-9	Seed, f/Protect		S.Y.	14,143	None
L-9	Comm'l Fertilizer	10-6-4	Ton.	2	None
L-19	Special Seeding		S.Y.	12,801	None
E-2	Exc. For Struct. Dug		C.Y.	368	504
S-1	Conc. for Struct. Dug		C.Y.	30	26
S-4	Reinf. Steel		Lb.	1808	4628
I-2	15" R.C.C.P. (b)		L.F.	304	486
I-4	6" Port. C.M.P. Gali.		L.F.	232	224
S-27	54" R.C.C.P. (D)		L.F.	148	167
I-8	Inlet, Type A		Ea.	1	None
I-8	Inlet, Type A1		Ea.	3	4
I-30	6" E.R.D.T.		L.F.	2865	3412
I-26	Perm. Man. & Sta.	10851+99.55	Ea.	None	1
I-30	6" Pipe Outlet		L.F.	40	40
I-30	8" Pipe Outlet		L.F.	None	20
F-33	Bit Mac Surf. Crse		S.Y.	9784	9784
T-71	Reinf. Conc. Pylt	10"	S.Y.	13,046	13,150
I-22	Select Sub-base		C.Y.	7275	7275
E.W.R. #11	Sandstone Blk #11		C.Y.	None	8,000
E.W.R. #12	Agricultural Lime	L-9	Ton.	None	6
E.W.R. #13	Seed & Protect	L-9 Type A	S.Y.	None	14,370
	Comm'l Fert	L-9, 10-20-10	Ton.	None	2
	Spec. Seeding	L-19	S.Y.	None	33,000
2	As Built Plans			J.C.H.	4-1-56
1	J.E. Greiner Letter	1/2/54		J.L.S.	3-15-56
NO.	REVISION		BY	DATE	
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE PROJECT NO. 1					
TURNPIKE					
PLAN AND PROFILE					
STA. 1081+00-1106+00					
HARDESTY & HANOVER - ANDREWS, CLARK & BUCKLEY					
CONTRACTING ENGINEER					
DESIGN SECTION D-9					
DESIGNED: EB	CHECKED: J.L.S.	DATE: 3-14-53			
DRAWN: EB	IN CHARGE: JBL	SCALE: Hor. 1"=100' Vert. 1"=10'			
CONTRACT NO. C-28			SHEET 10 OF 42		





**NOTE:**  
All construction joints in the deck slab, both longitudinal and transverse, shall be sealed with a joint sealer in accordance with Item T-77-31 of the General Specifications. A  $\frac{3}{8}$ " wide groove  $\frac{3}{4}$ " deep shall be formed at each joint with the edges of the groove beveled to a  $\frac{1}{4}$ " radius.



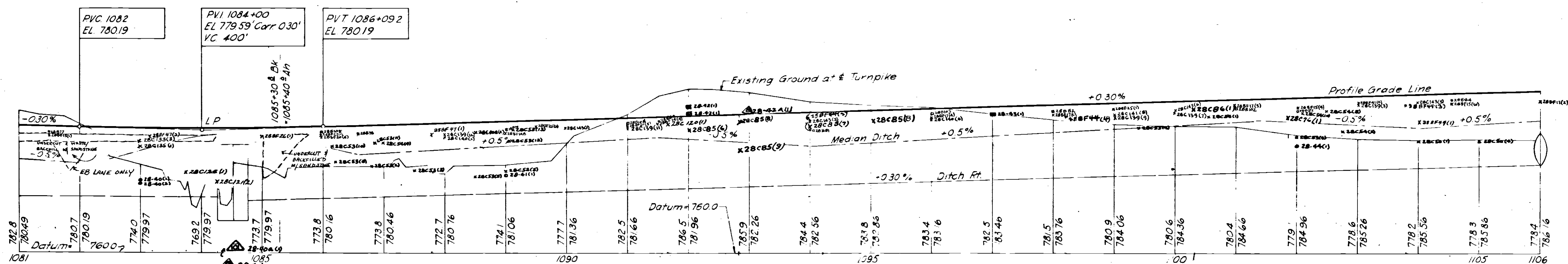

NO.	REVISION		
OHIO TURNPIKE COMMISSION			

STRUCTURE NO.9  
DETAILS OF CULVERT AT STA. 1084+55

DESIGNED: <i>GFM</i>	CHECKED: <i>L.K.</i>	DATE: <i>3-14-53</i>
DRAWN: <i>JS</i>	IN CHARGE: <i>Sbl</i>	SCALE: <i>As Shown</i>

CONTRACT NO. C- 28      SHEET 39   OF 42





OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
TURNPIKE			
SPECIAL PLAN AND PROFILE, SOILS STA. 1081+00-1106+00			
HARDESTY & HANOVER - ANDREWS, CLARK & BUCKLEY CONTRACTING ENGINEER DESIGN SECTION D-9			
DESIGNED <i>EB</i>	CHECKED <i>J.L.S.</i>	DATE <i>3-14-53</i>	
DRAWN: <i>EB</i>	IN CHARGE <i>SBL</i>	BY: <i>HO-1116-1012</i>	
CONTRACT NO. C-28		SHEET <i>7</i> OF <i>11</i>	