

UNRECORDED
SEP 24 1984

F.H.W.A. REGION	STATE	PROJECT NO.	FUNDS
5	OHIO	BRS-1015 (4)	

124

CLINTON COUNTY
STATE ROUTE 134
CLI. - 134 - 2.25

814 Recd
1-24

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CLI - 134 - 2.25

CLARK TOWNSHIP
CLINTON COUNTY

BRS-1015(4)

1981 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO,
DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND
SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL
SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE
MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING
TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR
THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET
FORTH ON THE PLANS.

CONVENTIONAL SIGNS	
CENTER LINE	---
CORPORATION LINE	---
FENCE LINE	---
GUARD RAIL (EXISTING)	---
GUARD RAIL (PROPOSED)	---
POWER POLES	---
TELEPHONE POLES	---
TREES OR STUMPS (EXISTING)	---
TREES OR STUMPS (TO BE REMOVED)	---
EXISTING R/W LINE	---
PROPOSED R/W LINE	---
PROPERTY LINE	---
EXISTING SANITARY SEWER	---
EXISTING STORM SEWER	---
PROPOSED SANITARY SEWER	---
PROPOSED STORM SEWER	---
GAS LINE (EXISTING)	---
WATER LINE (EXISTING)	---
PROPOSED GAS LINE	---
PROPOSED WATER LINE	---
FIRE HYDRANT (EXISTING)	---
PROPOSED FIRE HYDRANT	---
GAS VALVE (EXISTING)	---
GAS VALVE (PROPOSED)	---
MANHOLE (EXISTING)	---
MANHOLE (PROPOSED)	---
INLET OR CATCH BASIN (EXISTING)	---
INLET OR CATCH BASIN (PROPOSED)	---
WATER VALVE (EXISTING)	---
WATER VALVE (PROPOSED)	---

INDEX TO SHEETS

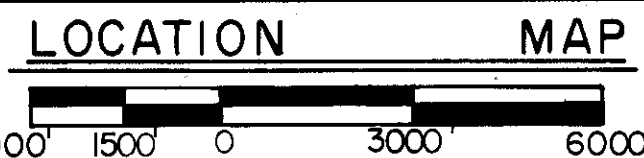
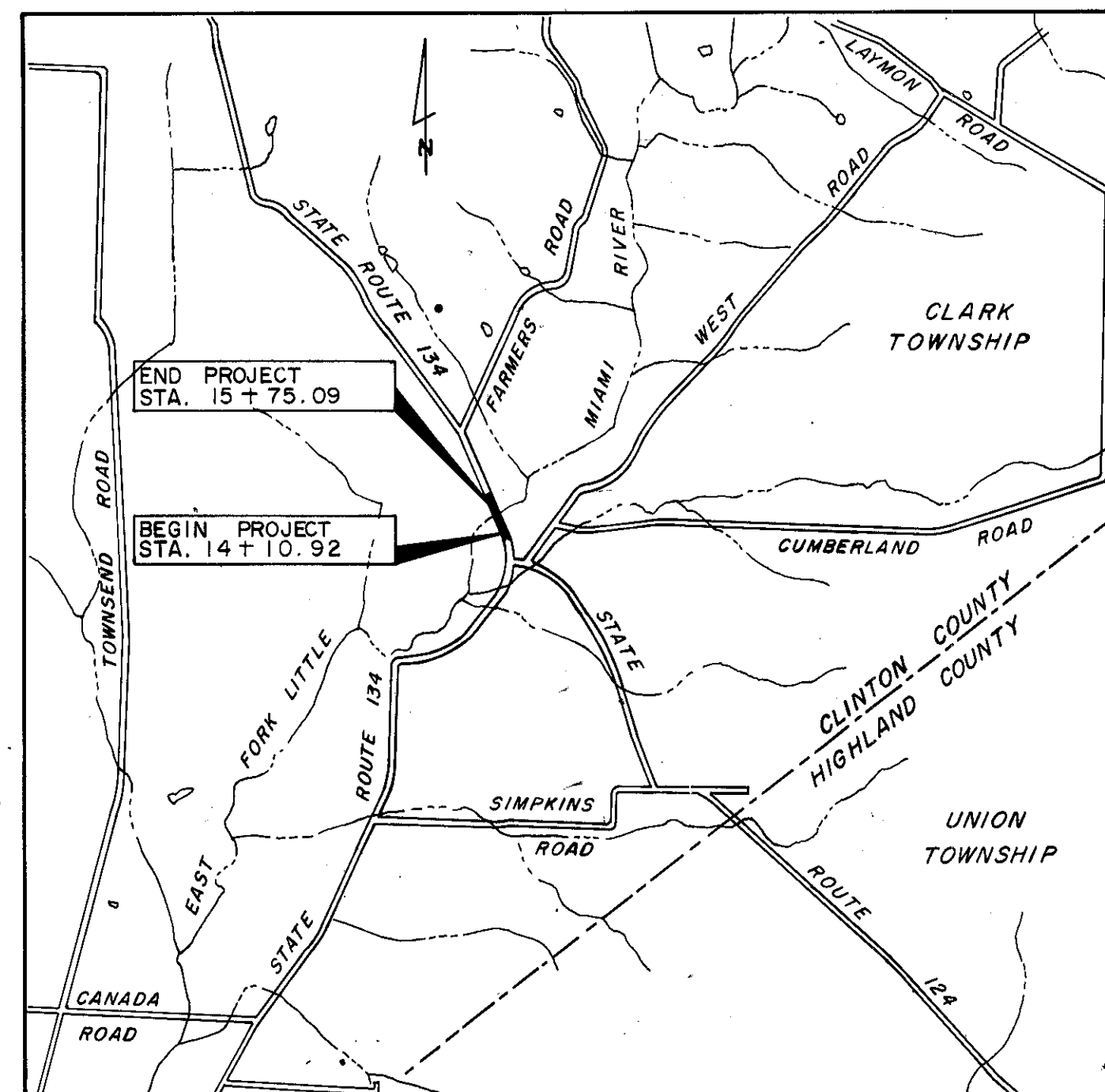
TITLE SHEET	1
TYPICAL SECTIONS	2
GENERAL NOTES	3
QUANTITY CALCULATIONS	4
GENERAL SUMMARY SHEETS	5,6
PLAN AND PROFILE SHEETS	7
CROSS-SECTIONS SHEETS	8-12
TEMPORARY ROAD PLAN	13
TRAFFIC CONTROL PLAN	14-16
STRUC. OVER 20' SPAN	17-22
R/W SUMMARY	23
R/W PLAN & PROPERTY MAP	24

DESIGN DESIGNATION

1978 ADT.	1,300
1998 ADT.	2,080
D.H.V.	208
D.	50
T.	7.7 %
V.	55 M.P.H.

LINE DATA

BEGIN PROJECT	14+10.92
END PROJECT	15+75.09
LENGTH OF PROJECT	164.17' OR 0.031 Miles
STA. 11+90 TO 14+10.92	
STA. 15+75.09 TO 17+92	
LENGTH OF WORK	602.00' OR 0.114 Miles



PLAN

PLAN	---
PROFILE	---
CROSS SECTIONS	---

STANDARD	DRAWINGS
BP-5	7-16-81
GR-1	2-5-82
GR-2B	2-5-82
GR-3	2-5-82
GR-4	2-5-82
MC-11	8-1-78
MC-3	6-1-73
MC-7	10-15-76
MC-10	5-1-76
TC-41.20	3-26-79
TC-42.20	3-26-79
AS-1-81	11-27-81
DBR-2-73	4-20-73
PSBD-1-81	9-18-81

SUPPLEMENTAL	SPECIFICATIONS
1001	1-3-77

PLANS PREPARED AND RECOMMENDED BY:
JOHN DAVID JONES AND ASSOCIATES, INC.
CONSULTING ENGINEERS.....ARCHITECTS.....PLANNERS
2162 FRONT ST. CUYAHOGA FALLS, OHIO

PROJECT:
DATE OF LETTING _____ 19____, CONTRACT No. _____

APPROVED: William W. Brayshaw
DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION
DATE: 10-1-82

APPROVED: Robert B. Pliska
ENGINEER, BUREAU OF BRIDGES AND STRUCTURAL DESIGN
DATE: 12-6-82

APPROVED: Wayne H. Kauble
CHIEF ENGINEER, PLANNING AND DESIGN
DATE: 1-19-83

APPROVED: Warren J. Smith
DIRECTOR, DEPARTMENT OF TRANSPORTATION
DATE: 1-19-83

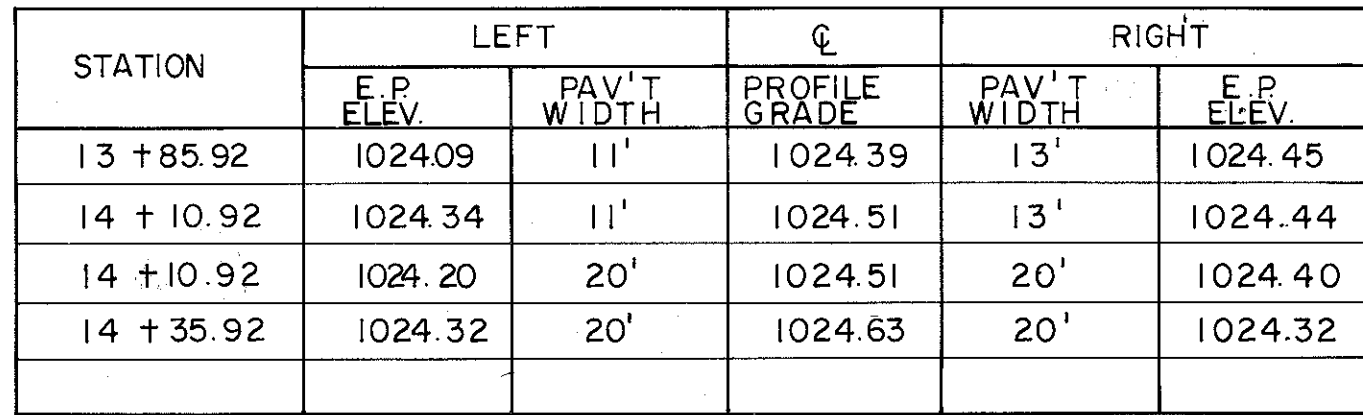
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR

APPROVED:

DIVISION ADMINISTRATOR

DATE

TYPE 404

$$\frac{2}{24}$$


35'-0"

EXIST. R/W

STA. 15+00 TO STA. 17+92
VARIES FROM 0.00' TO 4.26'
VARIES 11.5' TO 15.5'

PROFILE GRADE

C R/W

STA. 15+00 TO STA. 17+92
VARIES FROM 0.00' TO 3.85'
VARIES 10.7' TO 7.5'

35'-0"

EXIST. R/W

EXISTING NORMAL SECTION

STA. 15+55.80 TO STA. 17+92

The diagram illustrates the cross-section of a road, divided into a Normal Section (left) and a Super-elevated Section (right). The road is symmetrical about the centerline (C/Pavement). The layers from top to bottom are: Tack Coat (Item 407), Cover Aggregate (Item 660), 15" Reinforced Concrete Approach Slab (Item 611), 2 1/2" Asphalt Concrete AC-20 (Item 404), and Sub-base Type I (Item 310). The road is flanked by shoulders (4'-0" wide) and guardrails (20'-0" wide). The road width (R/W) is 35'-0". The road is shown with a 2:1 slope and a 12" minimum depth. The road is shown with a 2'-0" rounding (typical) and an 8'-0" rounding (typical). The road is shown with a 2'-0" rounding (typical) and an 8'-0" rounding (typical). The road is shown with a 2'-0" rounding (typical) and an 8'-0" rounding (typical).

Normal Section
STA. 15 +75.09 TO STA. 17+00

Super-elevated Section
STA. 12 +85 TO STA. 14+10.92

Legend:

- ⑧ ITEM 407 TACK COAT
- ⑨ ITEM 660 COVER AGGREGATE - 703.06
- ⑩ ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB
- ⑪ ITEM 404 2 1/2" ASPHALT CONCRETE AC-20
- ⑫ ITEM 310 SUB-BASE TYPE I

LEGEND

(A)	EXISTING ASPHALT PAVEMENT, 5" THK.
(B)	EXISTING BASE MATERIAL, 17" THK.
(1)	ITEM 304 ... 8" AGGREGATE BASE
(2)	ITEM 606 ... GUARDRAIL, TYPE 5
(3)	ITEM 659 ... SEEDING & MULCHING
(4)	ITEM 408 ... BITUMINOUS PRIME COAT @ 0.40 GAL. PER SQ. YD.
(5)	ITEM 409 ... SEAL COAT USING 0.008 CU. YD. OF NO. 8 COVER AGGREGATE PER SQ. YD. & 0.30 GAL. OF BIT. MAT.
(7)	ITEM 404 ... VARIES (1" - 2 1/2") ASPHALT CONCRETE, AC-20
(8)	ITEM 407 ... TACK COAT
(9)	ITEM 407 ... COVER AGGREGATE - 703.06
(10)	ITEM 660 ... SODDING

(11)	ITEM 611	15" REINFORCED CONCRETE APPROACH SLAB
(12)	ITEM 404	2 1/2" ASPHALT CONCRETE AC-20
(13)	ITEM 310	SUB-BASE TYPE I 7"

GENERAL

NOTES

614 - MAINTENANCE OF TRAFFIC

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITH THE LEAST INCONVENIENCE TO, AND MAXIMUM SAFETY OF THE TRAVELING PUBLIC AND THE CONTRACTOR. ANY VARIANCES FROM THESE MAINTENANCE OF TRAFFIC NOTES MUST BE APPROVED IN ADVANCE IN WRITING BY THE ENGINEER. THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", CURRENT EDITION, AND PERTINENT ITEMS OF THE SPECIFICATIONS AND PROPOSAL SHALL APPLY.

THE WORK LIMITS SHOWN ON THE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

TWO WAY TRAFFIC FOR U.S. 134 SHALL BE MAINTAINED AT ALL TIMES EITHER BY USING THE EXISTING STRUCTURE OR THE TEMPORARY RUN-AROUND STRUCTURE. SIGNING FOR THE TEMPORARY RUN-AROUND SHALL BE AS SHOWN IN THE PLANS. ITEM 614 EDGE LINES AND DOUBLE SOLID CENTER LINES SHALL BE INSTALLED ON THE TEMPORARY RUN-AROUND BEFORE IT CAN BE OPENED TO TRAFFIC. ALL EXISTING PAVEMENT MARKINGS THAT WILL CONFLICT WITH TRAFFIC FLOW SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR BY GRINDING, SANDBLASTING, OR OTHER METHODS APPROVED BY THE ENGINEER. PAINTING (BLACK) OVER PAVEMENT MARKINGS IS NOT CONSIDERED TO BE AN ACCEPTABLE REMOVAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF THE TRAFFIC CONTROL DEVICES AT THE COMPLETION OF THE PROJECT. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

ELECTRIC - DAYTON POWER & LIGHT COMPANY
COURTHOUSE PLAZA
DAYTON, OHIO 45401
PHONE: (513) 224-6239

TELEPHONE - GENERAL TELEPHONE COMPANY
241 NELSON ROAD
WILMINGTON, OHIO 45177
PHONE: (614) 353-2125

CLINTON COUNTY ENGINEER
1326 FIFE AVENUE
WILMINGTON, OHIO 45177
PHONE: (513) 382-2078

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP 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.

LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT TO ASSURE THAT THE PLANNED INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS ARE BASED ON FIELD SURVEY AND BORING DATA, BUT THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF SAME.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

REMOVAL OF TREES AND STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING, EXCEPT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED. TEMPORARY SOIL EROSION AND SEDIMENT CONTROL (CONT. *)

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR SOIL EROSION AND SEDIMENT CONTROL MEASURES:

ITEM 659 0.01 TONS COMMERCIAL FERTILIZER
ITEM 659 140 SQ. YD. REPAIR SEEDING AND MULCHING
ITEM 659 0.3 M. GAL. WATER
ITEM 207 25 EA. STRAW OR HAY BALES

MOBILIZATION, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 300 SQ. FT. OF FLOOR SPACE WHICH SHALL BE IN ACCORDANCE WITH 619.01 AND 619.02. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 624, MOBILIZATION, AS PER PLAN.

PROPOSED WORK OF TEMPORARY RUN AROUND

1. ERECT WING BARRICADES AS SHOWN ON STANDARD DRAWING MC-3 NEAR STATIONS 13+00 AND 17+00 OR AS DIRECTED BY THE ENGINEER.
2. BUILD TEMPORARY RUN-AROUND AND TEMPORARY STRUCTURE WITH MINIMUM DISRUPTION OF U.S. 134 TRAFFIC.
3. COMPLETE ALL WORK ON THE TEMPORARY RUN-AROUND AND INSTALL ALL TRAFFIC CONTROL DEVICES.
4. DIVERT U.S. 134 TRAFFIC TO THE TEMPORARY RUN-AROUND.

ITEM 615 - TEMPORARY ROADS AND PAVEMENTS

ON THIS PROJECT THE BITUMINOUS AGGREGATE TEMPORARY PAVEMENT SHALL BE 20 FEET WIDE AND THE ROADWAY WIDTH SHALL BE NOT LESS THAN 26 FEET OUT TO OUT OF SHOULDERS AND 23 FEET FACE TO FACE OF GUARDRAIL. THE ALIGNMENT AND PAVEMENT TYPICAL SECTION SHALL BE AS DETAILED ON THE TEMPORARY ROAD PLAN AND PROFILE SHEET.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED IN CONSTRUCTING THE BITUMINOUS AGGREGATE PAVEMENT:

ITEM 615 TEMPORARY PAVEMENT, AS PER PLAN, SEE TYPICAL SECTION FOR TEMP. PAVT SHT. 13 AND SHT. 4 FOR QUANTITY CALCULATIONS.

ALTHOUGH ESTIMATES FOR TEMPORARY GUARDRAIL AND TEMPORARY EXCAVATION AND EMBANKMENT HAVE BEEN SHOWN ON THE PLAN DETAILS, THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO, AND INCLUDED WITH, PAYMENT FOR ITEM 615 TEMPORARY ROADS.

659 - SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE, IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

659 - WATERING PERMANENT SEEDED AREAS

THE FOLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09.

659 WATER 2.7 MGAL

202 - EXISTING STRUCTURE REMOVED FOR SALVAGE, AS PER PLAN

IN ADDITION TO THE APPLICABLE PROVISIONS OF ITEM 202 - STRUCTURES REMOVED, THE CONTRACTOR SHALL CAREFULLY REMOVE FOR SALVAGE ALL STRUCTURAL STEEL FROM THE EXISTING BRIDGE. ALL SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OHIO DEPARTMENT OF TRANSPORTATION.

THE CONTRACT LUMP SUM PRICE BID SHALL BE FULL COMPENSATION FOR REMOVAL, DISPOSAL AND SALVAGE OF ALL MATERIALS IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015(4)

3
24

	BY	DATE
CALC. BY	RLA	8/82
DRAWN BY	RAD	8/82
CHECKED BY	RJW	8/82

CLINTON COUNTY
CLI-134-0225

LOCATION OF TEMPORARY GUARDRAIL

THE LOCATIONS OF TEMPORARY GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

UTILITIES NOTIFICATION:

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN IN THE PLANS.

THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, AFTER NOTICE IS RECIEVED, STAKE, MARK OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

* REMOVAL OF TREES OR STUMPS (CONTINUED)
THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE TREES AND STUMPS TO BE REMOVED.
SIZE NO. OF TREES NO. OF STUMPS TOTAL
18" 0 0 0
30" 0 0 0
48" 0 0 0
60" 0 0 0
THE ABOVE IS AN APPROXIMATE ESTIMATE AND STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT-OF-WAY AND OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

QUANTITY CALCULATIONS

	BY	DATE	F. H. W. A.	STATE	PROJECT	4
CALC. BY	RLA	8/82	REGION			24
DRAWN BY	RAD	8/82	5	OHIO	BRS-1015(4)	
CHECKED BY	RJW	8/82				

CLINTON COUNTY
CL-134 - 02.25

ITEM 202 - WEARING COURSE REMOVED PER BP-5

13+85.92 TO 13+93.92 (8')(24')1/9	=	21.3 S.Y.
15+92.09 TO 16+00.09 (8')(24')1/9	=	21.3 S.Y.
TOTAL	=	43 S.Y.

ITEM 203 - SUBGRADE COMPACTION

14+10.92 TO 14+35.92(25')(40')1/9	=	111.11 S.Y.
15+50.09 TO 15+75.09(25')(40')1/9	=	111.11 S.Y.
TOTAL	=	222 S.Y.

ITEM 203 EMBANKMENT

(FROM CROSS SECTIONS)	=	938 C.Y.
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ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION

(FROM CROSS SECTIONS)	=	157 C.Y.
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ITEM 304 - AGGREGATE BASE

12+85 TO 14+10.92-4'-L&R(8.0')(125.92')(0.67')1/27	=	25.00 C.Y.
15+75.09 TO 17+00-4'-L&R(8.0')(124.9')(0.67')1/27	=	24.80 C.Y.
ITEM 310 FOR APPROACH SLAB		TOTAL = 50 C.Y.
14+10.92 TO 14+35.92-L&R(16.0')(25.0')(0.58')1/27	=	8.59 C.Y.
15+50.09 TO 15+75.09-L&R(16.0')(25.0')(0.58')1/27	=	8.59 C.Y.
TOTAL	=	18 C.Y.

ITEM 404 ASPHALT CONCRETE, AC-20

13+85.92 TO 14+10.92-(25')(24')(0.125' AVG)1/27	=	2.78 C.Y.
14+10.92 TO 14+35.92-(25')(40')(0.208')1/27	=	7.70 C.Y.
15+50.09 TO 15+75.09-(25')(40')(0.208')1/27	=	7.70 C.Y.
15+75.09 TO 16+00.09-(25')(24')(0.125' AVG)1/27	=	2.78 C.Y.
TOTAL	=	21 C.Y.

ITEM 407 TACK COAT

13+85.92 TO 14+10.92(25')(24')(1/9)(0.10 GAL/SY)	=	6.67 GAL.
14+10.92 TO 14+35.92(25')(40')(1/9)(0.10 GAL/SY)	=	11.11 GAL.
15+50.09 TO 15+75.09(25')(40')(1/9)(0.10 GAL/SY)	=	11.11 GAL.
15+75.09 TO 16+00.09(25')(24')(1/9)(0.10 GAL/SY)	=	6.67 GAL.
TOTAL	=	36 GAL.

ITEM 407 - COVER AGGREGATE

13+85.92 TO 14+10.92(25')(24')1/9(7 LB/SY)TN/2000 LB	=	0.23 TN
14+10.92 TO 14+35.92(25')(40')(1/9)(7LB/SY)(TN/2000 LB)	=	0.39 TN
15+50.09 TO 15+75.09(25')(40')(1/9)(7LB/SY)(TN/2000 LB)	=	0.39 TN
15+75.09 TO 15+00.09(25')(24')1/9(7 LB/SY)TN/2000 LB	=	0.23 TN
TOTAL	=	1.24 TN

ITEM 408 - BITUMINOUS PRIME COAT

12+85 TO 14+10.92-4'-L&R(8.0')(125.92')(1/9)(0.40 GAL/SY)	=	44.77 GALS.
15+75.09 TO 17+00-4'-L&R(8.0')(124.91')(1/9)(0.40 GAL/SY)	=	44.41 GALS.
TOTAL	=	89 GALS.

ITEM 409 - SEAL COAT BITUMINOUS MATERIAL

12+85 TO 14+10.92-4'-L&R(8.0')(125.92')(1/9)(0.30 GAL/SY)=	33.58 GALS.
15+75.09 TO 17+00-4'-L&R(8.0')(124.91')(1/9)(0.30 GAL/SY)=	33.31 GALS.
TOTAL	= 67 GALS.

ITEM 409 - SEAL COAT COVER AGGREGATE

12+85 TO 14+10.92-4'-L&R(8.0')(125.92')(1/9)(0.008 CY/SY)=	0.90 C.Y.
15+75.09 TO 17+00-4'-L&R(8.0')(124.91')(1/9)(0.008 CY/SY)=	0.89 C.Y.
TOTAL	= 2 C.Y.

ITEM 611 REINFORCED CONCRETE APPROACH SLAB T=15"

14+10.92 TO 14+35.92(25')(40')1/9	=	111.11 S.Y.
15+50.09 TO 15+75.09(25')(40')1/9	=	111.11 S.Y.
TOTAL	=	222 S.Y.

ITEM 614 - TEMPORARY CENTERLINE, SOLID, DOUBLE CLASS I, TAPE

6+83 TO 11+92	=	509 L.F.
TOTAL	=	509 L.F.

ITEM 614 - TEMPORARY EDGE LINE (WHITE) CLASS I, PAINT

111+83 TO 117+92, RT.	=	609 L.F.
111+83 TO 117+92, LT.	=	609 L.F.
TOTAL	=	1218 L.F. = 23 Mi

ITEM 614 - TEMPORARY CENTERLINE SOLID, DOUBLE, CLASS I, PAINT

111+83 TO 117+92	=	609 L.F.
	=	0.12 Mi

ITEM 614 - TEMPORARY CENTERLINE, BROKEN & SOLID, DOUBLE, CLASS I, TAPE

17+84 TO 22+92	=	508 L.F.
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TOTAL = 1617 L.F. = 0.19 Mi

ITEM 615 - TEMPORARY GUARDRAIL, TYPE 5

RIGHT 113 + 30 TO 16 + 67.5	=	337.5 L.F.
LEFT 111 + 81 TO 118 + 06	=	625 L.F.
TOTAL	=	962.5 L.F.

ITEM 615 - TEMPORARY GUARDRAIL ANCHOR ASSEMBLY TYPE "A"

FROM SHEET 13 OF 30	=	4 EACH
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ITEM 615-TEMPORARY PAVEMENT, AS PER PLAN.

112+00 TO 113+10-(110')(11' AVG) 1/9	=	134.4 S.Y.
113+10 TO 114+42.10-(132.1')(22')1/9	=	322.9 S.Y.
115+55.80 TO 116+96-(140.2')(22')1/9	=	342.7 S.Y.
116+96 TO 117+84.59-(88.59')(11'AVG)1/9	=	108.3 S.Y.
TOTAL	=	908 S.Y.

ITEM 621 - 4" EDGE LINE WHITE POLYESTER, AS PER PLAN

11+90 TO 17+92, RT.	=	602 L.F.
11+90 TO 17+92, LT.	=	602 L.F.
TOTAL	=	1204 L.F.
	=	OR 0.23 MI.

ITEM 621 - 4" CENTERLINE, BROKEN AND SOLID DOUBLE POLYESTER, AS PER PLAN

11+90 TO 17+92	=	602 L.F.
	=	OR 0.11 MI.

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 3 POST

TOTAL	=	14 L.F.
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ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND REERECTION

13+78-22', LT.	=	2 EA.
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ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT

13+78-22', LT.	=	1 EA.
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ITEM 659 SEEDING & MULCHING (FROM CROSS SECTIONS)

TOTAL FROM CROSS SECTIONS	=	1.654 S.Y.
LESS SODDING (FROM SHT. 7)	=	(-)351 S.Y.
TOTAL SEEDING & MULCHING	=	1.303 S.Y.

ITEM 659 - COMMERCIAL FERTILIZER

(1.653.71 S.Y.)(9)(20 LBS/1000 SF)(1 TON/2000 LBS)	=	0.15 TON
TOTAL	=	0.15 TON

ITEM 659 - AGRICULTURAL LIMING

(1.653.71 S.Y.)(9)(100 LBS/1000 SF)(1TON/2000 LBS)	=	0.75 TON
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GENERAL SUMMARY

CALC. BY: RLA 1/82
CHECKED BY: RJW 1/82
DRAWN BY: A.A. 1/82

FHWA REGION	STATE	PROJECT
5	OHIO	BRS -1015 (4)

5
24

CLINTON COUNTY
CLI - 134 - 2.25

ITEM	SHEET NUMBER													COST PARTICIPATION		ITEM	TOTAL	UNIT	DESCRIPTION
														NORMAL					
																			ROADWAY
201																LUMP	201	LUMP	CLEARING AND GRUBBING
202																43	202	43	SQ. YD. WEARING COURSE REMOVED
203																157	203	157	CU. YD. EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION
203																938	203	938	CU. YD. EMBANKMENT
203																222	203	222	SQ. YD. SUBGRADE COMPACTION
606																472	606	471.66	LIN. FT. GUARDRAIL, TYPE 5
606																4	606	4	EACH ANCHOR ASSEMBLY, STANDARD TYPE A
606																4	606	4	EACH BRIDGE TERMINAL ASSEMBLY, STANDARD TYPE B
615																908	615	908	SQ. YD. TEMPORARY PAVEMENT, AS PER PLAN
615																LUMP	615	LUMP	TEMPORARY ROADS
																			EROSION CONTROL
207																25	207	25	EACH STRAW OR HAY BALES
207																			
601																9	601	9	CU. YD. ROCK CHANNEL PROTECTION, TYPE D W/ BEDDING
660																35	660	35	SQ. YD. REINFORCED SODDING, STANDARD
659																1303	659	1303	SQ. YD. SEEDING AND MULCHING
659																140	659	140	SQ. YD. REPAIR SEEDING AND MULCHING
659																0.16	659	0.16	TON COMMERCIAL FERTILIZER
659																3	659	3	M. GAL. WATER
659																0.75	659	0.75	TON AGRICULTURAL LIMING
660																316	660	316	SQ. YD. SODDING
																			PAVEMENT
304																50	304	50	CU. YD. AGGREGATE BASE
404																21	404	21	CU. YD. ASPHALT CONCRETE, AC-20
310																18	310	18	CU. YD. SUB-BASE TYPE I
407																36	407	36	GAL. TACK COAT
407																1	407	1	TON COVER AGGREGATE
408																89	408	89	GAL. BITUMINOUS PRIME COAT
409																67	409	67	GAL. SEAL COAT BITUMINOUS MATERIAL
409																2	409	2	CU. YD. SEAL COAT COVER AGGREGATE, NO. 8
611																222	611	222	SQ. YD. REINFORCED CONCRETE APPROACH SLAB (T=15")

GENERAL SUMMARY

CALC. BY : RLA 1/82
CHECKED BY : RJW 1/82
DRAWN BY : A.A. 1/82

FHWA REGION	STATE	PROJECT	
5	OHIO	BRS-1015(4)	

CLINTON COUNTY
CLI. - 134 - 2.25

[illegible]

SEP 24 1984

CURVE DATA EXIST. C.S.R. 134
 P.I. STA. 8+62.68 Lc = 768.54
 $\Delta = 61^{\circ} 06' 45''$ Xc = 249.57
 Dc = 6° 00' Yc = 10.90'
 Rc = 954.93' Ec = 157.16'
 Ls = 250.00' Os = 7° 30'
 Ts = 690.30'

BEGIN PROJECT
 STA. 14 + 10.92
 BRS - 1015 (4)

ROCK CHANNEL PROTECTION
 TYPE D W/BEDDING (10'x4'x12")

BEGIN APPROACH SLAB
 STA. 15 + 50.09

END PROJECT
 STA. 15 + 75.09
 BRS - 1015 (4)

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO	BRS-1015 (4)	7 24

CLINTON COUNTY
 CLI. - 134 - 2.25

NOTE:
 ADJUSTMENTS MAY BE MADE
 BY THE ENGINEER IN PLACEMENT
 OF REINFORCED SODDING.

EXISTING STRUCTURE

STRUCTURE FILE No. 1402882
 STRUCTURE TYPE: TIMBER WITH STEEL STRINGERS

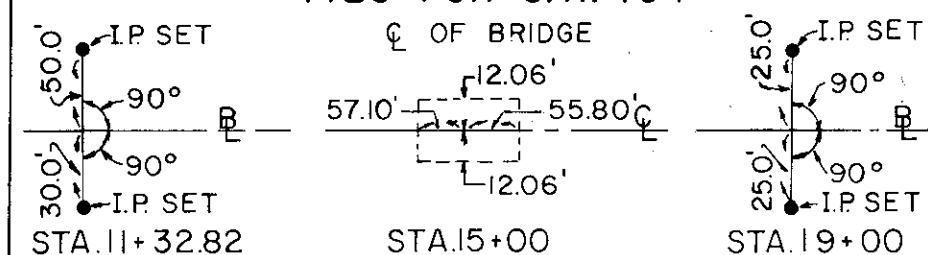
SPANS: 3 @ 37'-6"
 ROADWAY: 24'-0"
 LOAD CAPACITY: POSTING 10% REDUCTION
 ALIGNMENT: NO SKEW
 CONDITION: POOR
 BUILT: 1931

PROPOSED STRUCTURE

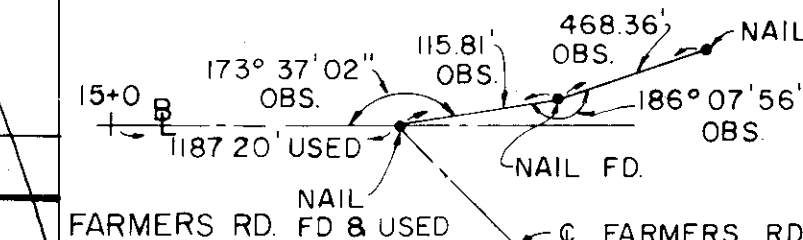
TYPE: 3 SPAN PRESTRESSED CONCRETE BOX BEAM
 WITH CAPPED PILE ABUTMENTS
 SPANS: 37'-1" 37'-1" 37'-1" c/c BRG'S.
 37'-8" 37'-8" 37'-8" c/c SUBTR.
 ROADWAY: 40' F/F GUARD RAILS
 LOADING: HS 20-44 AND THE ALTERNATE
 MILITARY LOADING.
 SKEW: NONE
 WEARING SURFACE: 2 1/2" ASPHALT CONCRETE.
 APPROACH SLABS: AS-1-81 (25' LONG)
 ALIGNMENT: TANGENT

	BY	DATE
DESIGNED	R.W.	11/81
DRAWN	A.A.	11/81
CHECKED	R.L.A.	11/81

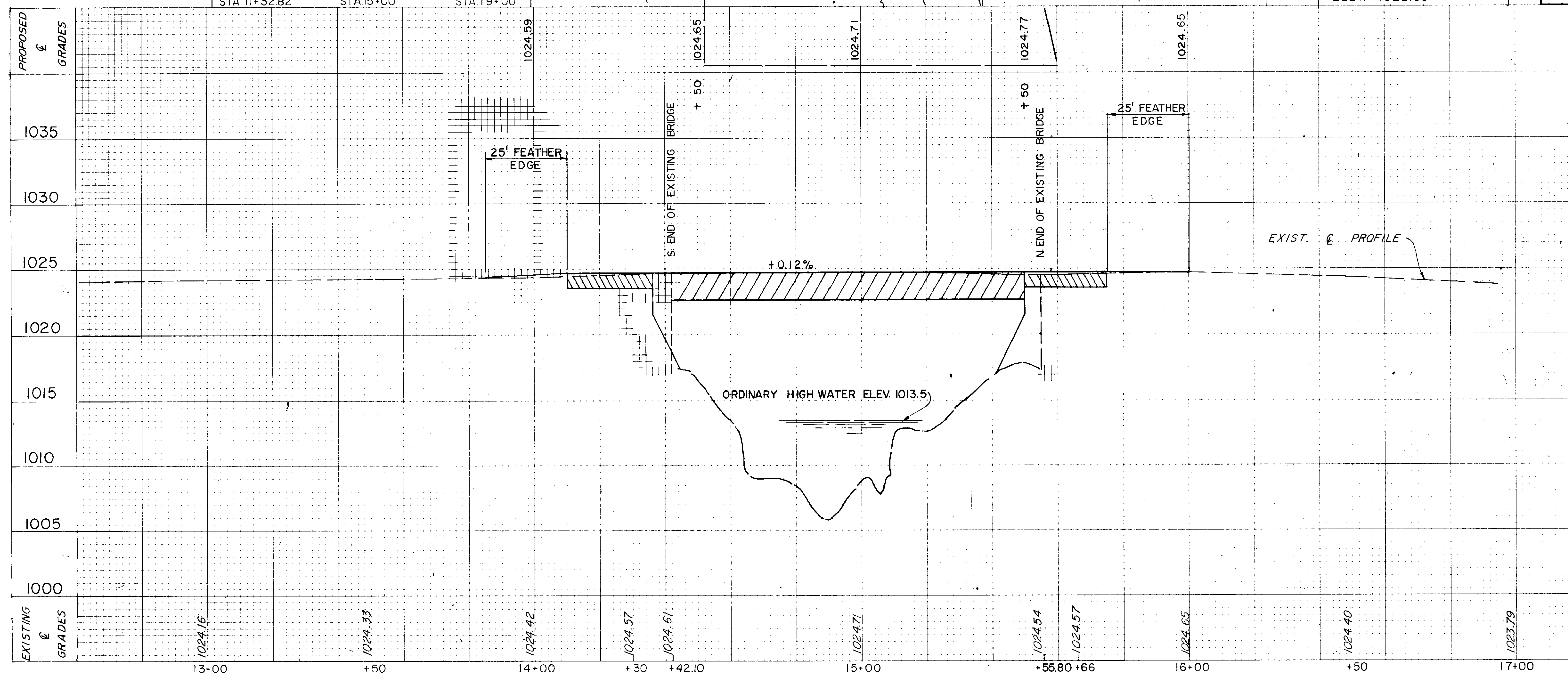
TIES FOR S.R. 134



TIES FOR S.R. 134



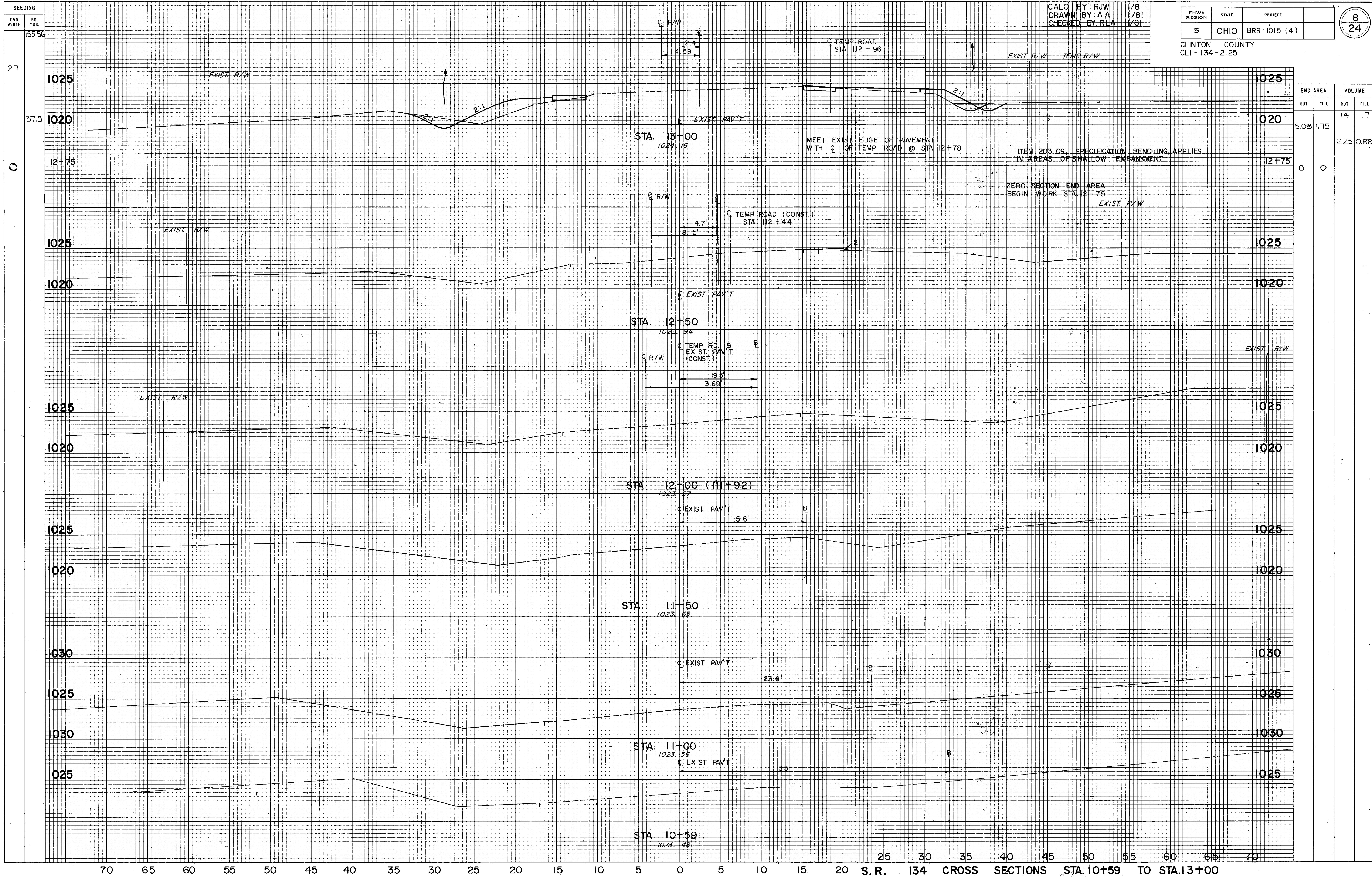
BM #2
 TOP OF I.P. USED FOR
 TIE AT STA. 11+32.82 -
 50' W OF R
 ELEV. 1022.95



QUANTITIES

REF. No.	STATION	SIDE	601 ROCK CHANNEL PROT. TYPE D W/ BEDDING	606 BRIDGE TERMINAL ASSEMBLY TYPE B	606 GUARDRAIL TYPE 5	606 GUARDRAIL ANCHOR ASSEMBLY TYPE "A"	660 REINFORCED SODDING	660 SODDING
	FROM	TO	CU. YD.	EACH	LIN. FT.	EACH	SQ. YD.	SQ. YD.
S-1	12+85	14+55	RT.					76
S-2	12+85	14+60	LT.					78
S-3	15+28	17+10	RT.					81
S-4	15+28	17+10	LT.					81
G-1	13+00	14+36	RT.		110.92			
G-2	15+50	17+00	RT.		124.91			
G-3	13+00	14+36	LT.		110.92			
G-4	15+50	17+00	LT.		124.91			
CP-1	14+55	14+65	LT.	2.2				
CP-2	14+60	14+70	RT.	2.2				
CP-3	15+18	15+28	LT.	2.2				
CP-4	15+18	15+28	RT.	2.2				
R-1	14+30	14+34	RT.					8
R-2	14+30	14+34	LT.					7
R-3	15+52	15+56	RT.					10
R-4	15+52	15+56	LT.					10
TOTALS				9	4	471.66	4	35
								316

14	.7
2.25	0.88



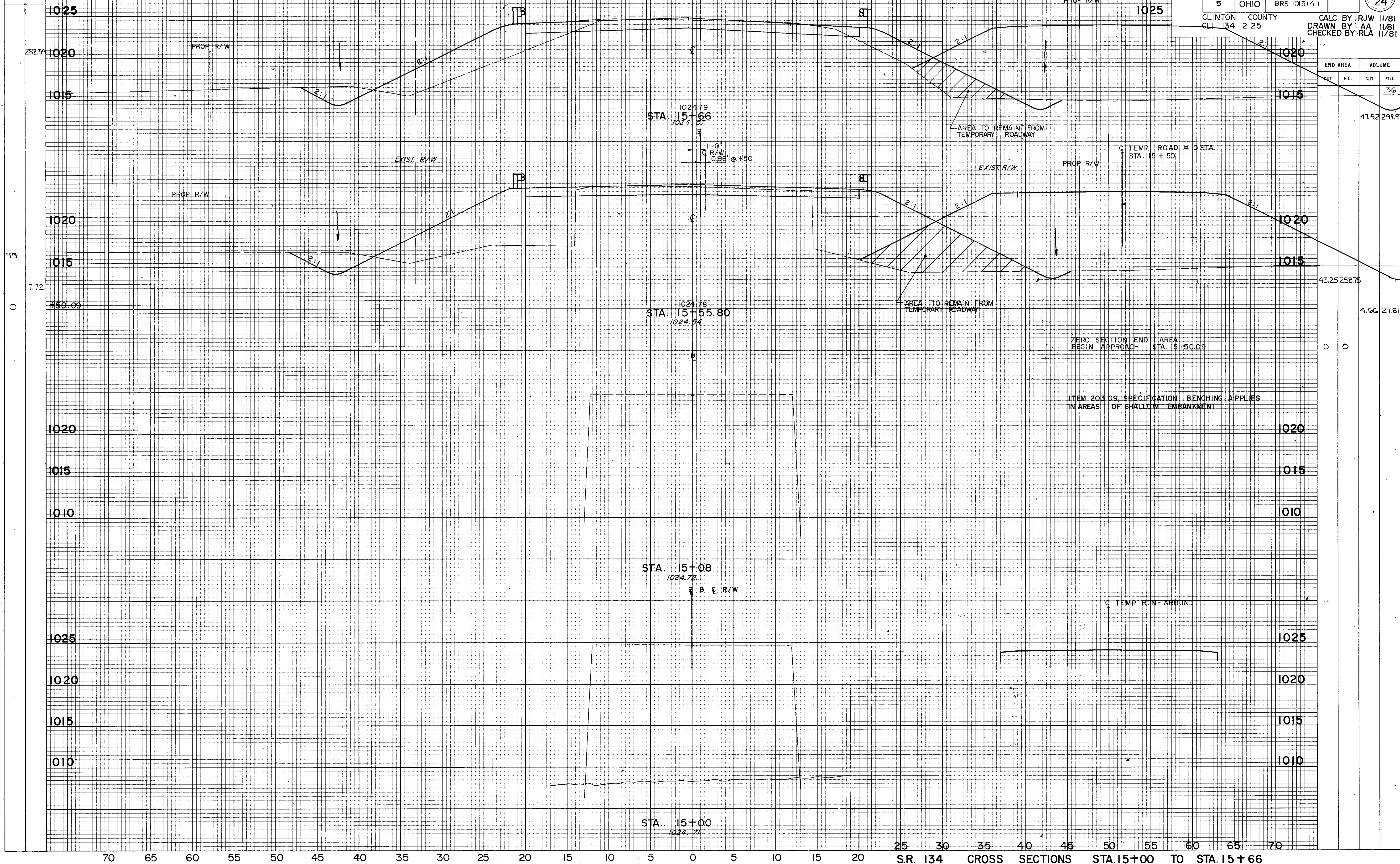
SEEDING
END
WIDTH
SO.
YDS.

FHWA REGION	STATE	PROJECT
5	OHIO	BRS-1015(4)

CLINTON COUNTY
CLI-134-2.25

CALC. BY: RJW 11/81
DRAWN BY: AA 11/81
CHECKED BY: RLA 11/81

10
24



END AREA		VOLUME	
CUT	FILL	CUT	FILL
			.36

47.52 299.93

43.25 258.75

4.66 27.81

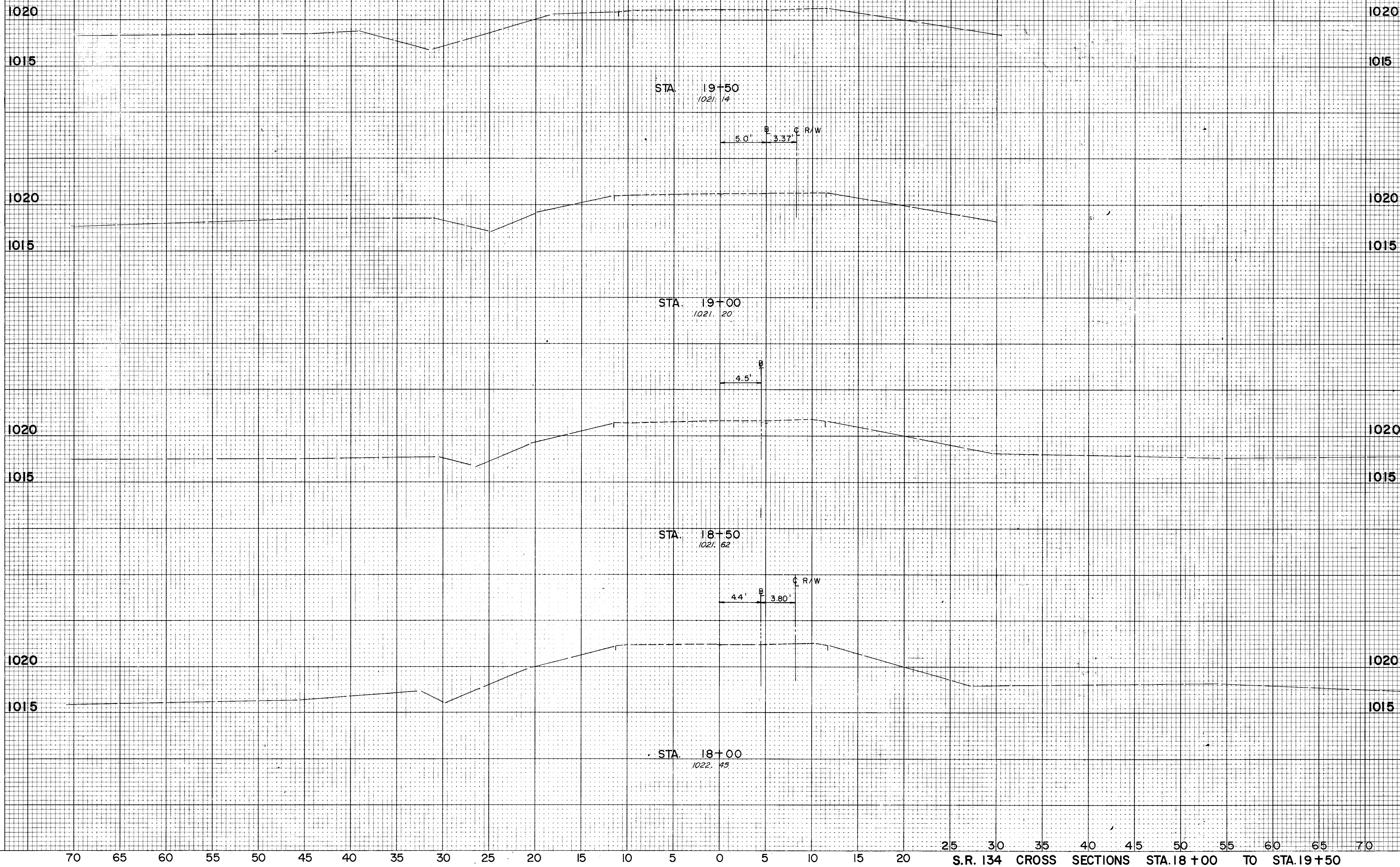
SEEDING
END
WIDTH
SQ.
YDS.

CALC BY: RJW 11/81
DRAWN BY: AA 11/81
CHECKED BY: RLA 11/81

FHWA REGION	STATE	PROJECT	
5	OHIO	BRS-1015 (4)	
CLINTON COUNTY			
CLI-134-2.25			

12
24

END AREA		VOLUME	
CUT	FILL	CUT	FILL

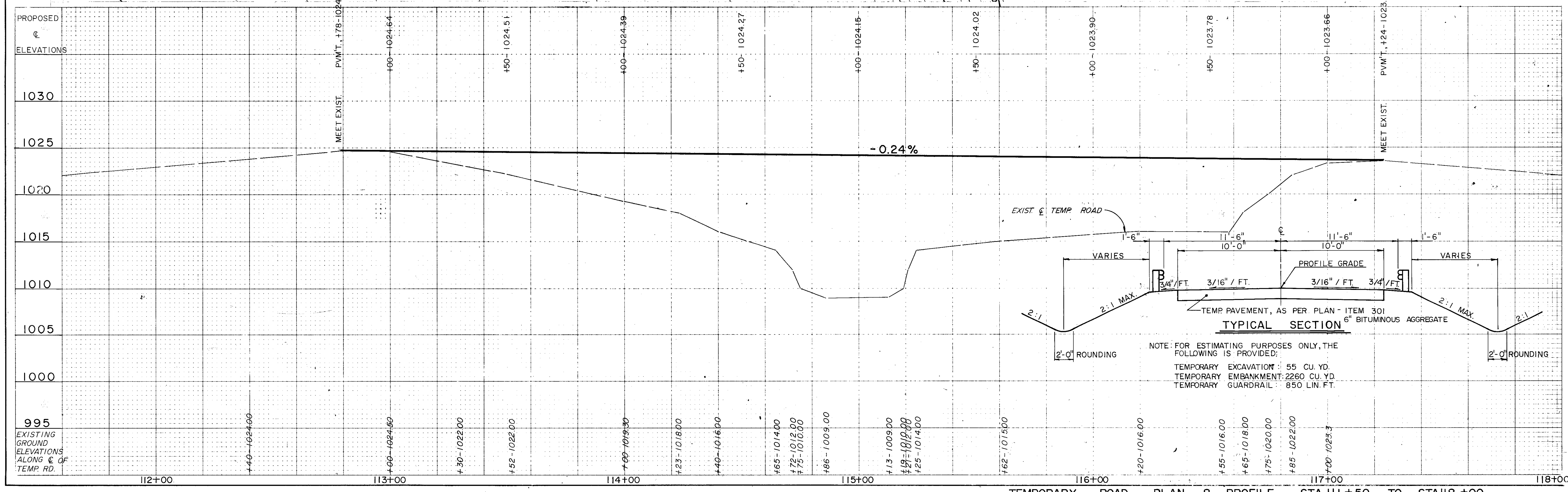
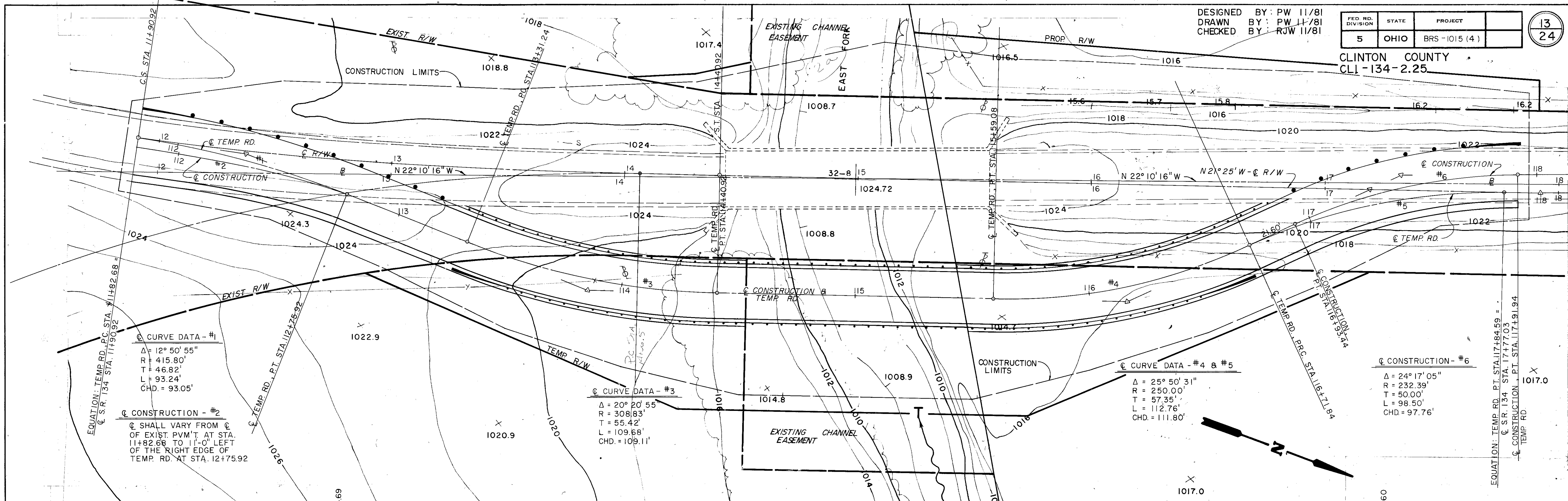


DESIGNED BY: PW 11/81
DRAWN BY: PW 11/81
CHECKED BY: RJW 11/81

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	BRS -1015 (4)

13
24

CLINTON COUNTY
CL-134-2.25



TRAFFIC

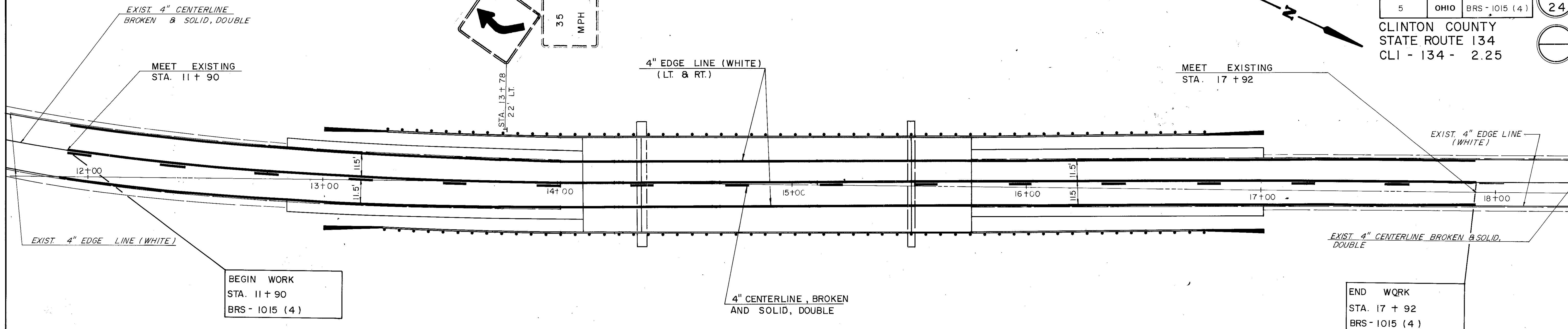
CONTROL

DESIGNED BY: PW 11/81
DRAWN BY: PW 11/81
CHECKED BY: RJW 11/81

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS - 1015 (4)

14
24

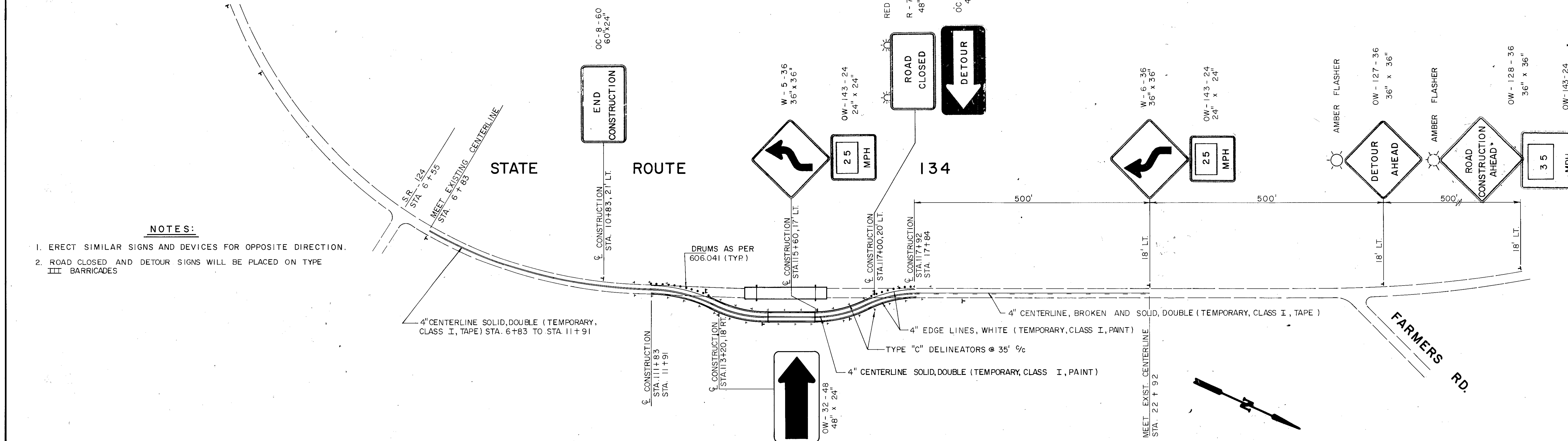
CLINTON COUNTY
STATE ROUTE 134
CLI - 134 - 2.25



TEMPORARY

TRAFFIC

CONTROL



NOTES:

1. ERECT SIMILAR SIGNS AND DEVICES FOR OPPOSITE DIRECTION.
2. ROAD CLOSED AND DETOUR SIGNS WILL BE PLACED ON TYPE III BARRICADES

TRAFFIC CONTROL

TEMPORARY PAVEMENT MARKINGS
NOTE B

FHWA	STATE	PROJECT	
5	OHIO	BR3-1015(4)	

15
24

CL1-134-02.25

GENERAL

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND WHEN NECESSARY, REMOVE TEMPORARY RETROREFLECTIVE PAVEMENT MARKINGS ON EXISTING, RECONSTRUCTED, RESURFACED OR TEMPORARY ROADS WITHIN THE WORK LIMITS, IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE MARKINGS SHALL BE MAINTAINED IN GOOD CONDITION DURING THE REQUIRED SERVICE PERIOD TO PROVIDE DAY AND NIGHT VISIBILITY. THE MARKINGS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER TO MAINTAIN REQUIRED VISIBILITY AND/OR REFLECTIVITY AT NO ADDITIONAL COST TO THE STATE.

MATERIALS

UNLESS OTHERWISE INDICATED ON THE PLANS, TEMPORARY PAVEMENT MARKINGS MAY BE OF PAINT, PAVEMENT MARKING TAPE OR REMOVABLE PAVEMENT MARKING TAPE (TYPE R TAPE).

A. PAINT

PAINT SHALL COMPLY WITH 708.14 AND SHALL BE APPLIED IN ACCORDANCE WITH 621 EXCEPT AS MODIFIED HEREIN.

B. PAVEMENT MARKING TAPE

FLEXIBLE RETROREFLECTIVE PREFORMED PRESSURE SENSITIVE TAPE SHALL HAVE STRAIGHT EDGES AND BE FREE OF CRACKS. THE TAPE SHALL CONSIST OF PIGMENT AND FILLERS WITH SUFFICIENT BINDER AND PLASTICIZER TO RETAIN GLASS BEADS HAVING A REFRACTIVE INDEX MEETING THE MINIMUM REFLECTIVE INTENSITY STANDARD STATED IN THE MANUFACTURERS INFORMATION. THE TAPE SHALL BE FLEXOLITE "WET REFLECTIVE", 3M "SCOTCHLANE", OR AN APPROVED EQUAL.

THE GLASS BEADS SHALL BE DISTRIBUTED UNIFORMLY THROUGHOUT THE TAPE WITH SUFFICIENT SURFACE BEADS TO PROVIDE OPTIMUM REFLECTORIZATION AT ALL TIMES.

PAVEMENT MARKING TAPE SHALL COMPLY WITH THE COLOR REQUIREMENTS OF 708.14.

THE TAPE SHALL HAVE A PRECOATED ADHESIVE LAYER FOR PAVEMENT APPLICATION WITHOUT THE USE OF HEAT, SOLVENTS OR ADDITIONAL ADHESIVES. THE ADHESIVE SHALL BE SUFFICIENT TO RETAIN COMPLETE MARKINGS ON THE PAVEMENT SURFACE THROUGHOUT THE USEFUL LIFE OF THE MARKINGS.

IN ADDITION TO THE FOREGOING, ALL TEMPERATURE APPLICATION REQUIREMENTS AND OTHER APPLICABLE MANUFACTURERS MATERIAL AND APPLICATION INSTRUCTIONS SHALL BE FOLLOWED.

WHEN APPROVED BY THE ENGINEER THE CONTRACTOR MAY USE REMOVABLE PAVEMENT MARKING TAPE (TYPE R TAPE), IN LIEU OF THAT DESCRIBED ABOVE, TO FACILITATE REMOVAL OF MARKINGS.

C. REMOVABLE PAVEMENT MARKING TAPE (TYPE R TAPE)

THE MARKING MATERIAL SHALL BE A MIXTURE OF POLYMERIC MATERIALS, PIGMENTS, REINFORCING MEDIUM TO FACILITATE REMOVAL, GLASS BEADS THROUGHOUT THE PIGMENTED PORTION, AND A RETROREFLECTIVE LAYER OF GLASS BEADS BONDED TO THE TOP SURFACE.

THE TAPE SHALL BE PRECOATED WITH A PRESSURE SENSITIVE ADHESIVE CAPABLE OF TEMPORARILY BONDING TO ASPHALT CONCRETE OR PORTLAND CEMENT CONCRETE PAVEMENT AT AN AMBIENT TEMPERATURE OF NOT LESS THAN 50° F AND RISING, AT A PAVEMENT TEMPERATURE OF NOT LESS THAN 50° F NOR MORE THAN 150° F, WITHOUT THE USE OF HEAT, SOLVENTS, AND ADDITIONAL ADHESIVES OR ACTIVATORS.

MATERIALS SHALL CONFORM TO THE COLOR REQUIREMENTS OF 708.14.

THE TAPE SHALL BE REMOVABLE FROM ASPHALT AND PORTLAND CEMENT CONCRETE INTACT OR IN LARGE PIECES AT TEMPERATURES ABOVE 40° F WITHOUT USE OF HEAT, SOLVENTS, GRINDING, OR SANDBLASTING. REMOVAL SHALL NOT RESULT IN DAMAGE TO OR OBJECTIONABLE STAINING OF THE PAVEMENT.

GLASS BEADS SHALL BE PROVIDED IN A PROPER SIZE, QUANTITY AND DISTRIBUTION TO ASSURE OPTIMUM RETROREFLECTIVITY AS THE FILM WEARS. THE FOLLOWING INITIAL AVERAGE REFLECTANCE VALUES AT 86.0 ENTRANCE ANGLE AS MEASURED IN ACCORDANCE WITH THE TESTING PROCEDURES OF FEDERAL TEST METHOD 370 SHALL BE CERTIFIED:

	WHITE		YELLOW	
OBSERVATION ANGLE	0.2	0.5	0.2	0.5
SPECIFIC LUMINANCE	1770	1270	1310	810
(MCD/FT ²)/FC				

THE TAPE SHALL BE 3-M COMPANY'S "STAMARK, DETOUR GRADE (SERIES 57L0, 57L1, 6270, 62L1)" OR AN APPROVED EQUAL.

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER CERTIFICATION THAT THE MATERIAL SUPPLIED MEETS THE PROPERTIES SPECIFIED HEREIN.

LAYOUT

THE TEMPORARY MARKINGS SHALL BE ACCURATELY LAID OUT IN CONFORMANCE WITH 621.051 AND SHALL BE LOCATED IN A TRUE LINE ON THE CENTER LINE, LANE LINE, EDGE LINE, OR CHANNELIZING LINE WHERE PERMANENT MARKINGS WOULD LIE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PLACEMENT

TEMPORARY MARKINGS SHALL BE PLACED IN ACCORDANCE WITH LAYOUTS ON SHEETS AND THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

TEMPORARY MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. WHEN TEMPORARY MARKINGS ARE NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH 621.134 AND NECESSARY PAVEMENT MARKINGS INSTALLED BEFORE THE FLOW OF TRAFFIC IS CHANGED TO THE NEXT PHASE OR RETURNED TO ITS NORMAL CHANNEL.

WHERE PERMANENT PAVEMENT MARKINGS ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL FURNISH AND PLACE THE PERMANENT MARKINGS WITHIN 30 CALENDAR DAYS FOLLOWING COMPLETION OF ALL SURFACE COURSES IN A SINGLE ROADWAY OR PRIOR TO THE END OF THE CONSTRUCTION SEASON, WHICHEVER COMES FIRST. PERMANENT MARKINGS SHALL NOT BE PLACED OVER ANY TAPE MARKINGS.

A. CLASS I MARKINGS

CLASS I MARKINGS SHALL BE AS DEFINED IN 621, EXCEPT AS FOLLOWS:

- 1) LANE LINES SHALL BE 4-INCHES IN WIDTH.
- 2) TRANSVERSE LINES SHALL BE 8-INCHES IN WIDTH.
- 3) STOP LINES SHALL BE 12-INCHES IN WIDTH.
- 4) CROSS WALK LINES SHALL BE 8-INCHES IN WIDTH.

GORE MARKINGS SHALL CONSIST OF TWO CHANNELIZING LINES PLACED AT THE THEORETICAL OR TEMPORARY GORE OF RAMPS AND DIVERGING OR CONVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR SOLID 4-INCH LINES, 24 GALLONS PER MILE FOR SOLID 6-INCH LINES, 48 GALLONS PER MILE FOR SOLID 12-INCH LINES, AND 4 GALLONS PER MILE FOR 4-INCH DASHED LINES.

B. CLASS II MARKINGS

CENTER LINES SHALL CONSIST OF SINGLE, YELLOW 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

LANE LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

CHANNELIZING LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 20-FOOT INTERVALS.

GORE MARKINGS SHALL BE TWO CONTINUOUS, WHITE 50-FOOT BY 4-INCH LINES PLACED AT THE THEORETICAL GORE OF AN EXIT RAMP OR DIVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR GORE MARKINGS, 0.8 GALLONS PER MILE FOR CHANNELIZING LINE, AND 0.4 GALLONS PER MILE FOR LANE LINE AND CENTER LINE.

CONFLICTING MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY MARKINGS, REMOVE ALL EXISTING CONFLICTING MARKINGS VISIBLE TO THE TRAVELING PUBLIC DURING DAYLIGHT OR NIGHTTIME HOURS IN ACCORDANCE WITH 621.134. THE COST FOR REMOVAL OF CONFLICTING MARKINGS SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS.

METHOD OF MEASUREMENT

TEMPORARY PAVEMENT MARKINGS WILL BE MEASURED COMPLETE IN PLACE, BY CLASS AND MATERIAL, IN THE UNITS DESIGNATED. DASHED LINE QUANTITIES WILL BE THE LENGTH OF THE COMPLETED STRIPE, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED, IN ACCORDANCE WITH 621.15.

TEMPORARY PAVEMENT MARKINGS WILL INCLUDE THE LAYOUT, APPLICATION AND REMOVAL OF THE MARKINGS, WHEN REQUIRED.

BASIS OF PAYMENT

PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL

COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND NECESSARY REMOVAL OF THE MARKINGS.

ITEM	UNIT	DESCRIPTION
614	MILES	TEMPORARY LANE LINES, CLASS _____, (PAINT, TAPE OR TYPE R TAPE)
614	MILES	TEMPORARY CENTER LINES, CLASS <u>I</u> , (PAINT, TAPE OR TYPE R TAPE)
614	MILES/LIN. FT.	TEMPORARY CHANNELIZING LINES, CLASS _____, (PAINT, TAPE OR TYPE R TAPE)
614	MILES	TEMPORARY EDGE LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)
614	LIN. FT.	TEMPORARY GORE MARKING, CLASS II, (PAINT, TAPE OR TYPE R TAPE)
614	LIN. FT.	TEMPORARY STOP LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)
614	LIN. FT.	TEMPORARY CROSSWALK LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)
614	EACH	TEMPORARY LANE ARROWS, CLASS I, (PAINT, TAPE OR TYPE R TAPE)
614	EACH	TEMPORARY WORD "ONLY" ON PAVEMENT, 72-INCH, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY TRANSVERSE LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)

621 PAVEMENT MARKING, POLYESTER, AS PER PLAN

POLYESTER PAVEMENT MARKINGS SHALL CONFORM TO 621 EXCEPT AS FOLLOWS:

ALL REFERENCES TO PAINT SHALL BE CONSIDERED TO READ POLYESTER MATERIAL.

ITEM 621.02 MATERIALS IS HEREBY DELETED-EXCEPT FOR GLASS BEAD REQUIREMENTS. IN ADDITION, PAVEMENT MARKING MATERIAL SHALL BE RETROREFLECTORIZED POLYESTER COMPOUND AS MANUFACTURED BY THE GLIDDEN-DURKEE CO., MOBIL CHEMICAL CO., DESANTIS COATING, INC., OR APPROVED EQUAL.

ITEM 621.05 APPLICATION IS HEREBY MODIFIED AS FOLLOWS:

PARAGRAPH 1 THE FIFTH SENTENCE IS DELETED AND THE FOLLOWING SUBSTITUTED:

*

PAVEMENT MARKINGS SHALL BE APPLIED ONLY WHEN THE SURFACE IS CLEAN AND DRY AND WHEN THE AIR TEMPERATURE IS ABOVE 50 F.

PARAGRAPH 4 IS HEREBY DELETED.

THE APPLICATION RATE TABLE IS HEREBY DELETED AND THE FOLLOWING SUBSTITUTED:

THE MATERIAL SHALL BE APPLIED AT THE RATE OF 16 GALLONS PER MILE FOR A SOLID LINE OF 4 INCHES IN WIDTH TO PROVIDE A UNIFORM WET FILM THICKNESS OF 15 MILS. APPLICATION RATES FOR DASHED OR DOTTED LINES AND FOR LINES WIDER THAN 4 INCHES SHALL BE PROPORTIONAL TO THE SOLID LINE RATES.

PARAGRAPH 5 IS HEREBY MODIFIED AS FOLLOWS:

GLASS BEADS SHALL BE APPLIED TO THE WET POLYESTER SO THAT THE BEADS ARE EMBEDDED AND RETAINED IN THE POLYESTER AND UNIFORMLY COVER THE POLYESTER SURFACE. THE RATE OF APPLICATION SHALL BE 15 POUNDS OF GLASS BEADS PER GALLON OF POLYESTER MATERIAL APPLIED.

PARAGRAPH 6 IS HEREBY DELETED AND THE FOLLOWING SUBSTITUTED:

THE MARKING MATERIAL SHALL DRY TO A "NO-TRACKING" CONDITION IN NOT MORE THAN FORTY-FIVE (45) MINUTES.

ITEM 621.051 LAYOUT AND PREMARKING IS MODIFIED BY THE FOLLOWING ADDITIONAL REQUIREMENTS.

(A) THE GAPS NOT MARKED AS A RESULT OF TEMPLATE USE SHALL BE FILLED WITH MARKING MATERIAL AFTER TEMPLATE REMOVAL.

(B) "T" MARKING OF CENTERLINE NO PASSING ZONES SHALL BE CONSIDERED INCIDENTAL TO APPLYING THE LINE.

ITEM 621.08 CENTER LINES IS MODIFIED BY THE FOLLOWING ADDITIONAL REQUIREMENTS: CENTER LINE MARKING SHALL ALSO INCLUDE TWO-WAY LEFT-TURN STRIPING AND THE OUTLINE OF YELLOW MARKED ISLANDS.

ITEM 621.12, 621.131 AND 621.132 RATES OF APPLICATION ARE HEREBY MODIFIED AS FOLLOWS:

POLYESTER MATERIAL SHALL BE APPLIED AT A RATE OF 1 GALLON PER 100 SQUARE FEET OF MARKING SURFACE.

ITEM 621.14 DEDUCTION FOR DEFICIENCY SHALL BE MODIFIED BY THE FOLLOWING ADDITIONAL REQUIREMENTS:

THE QUANTITY OF POLYESTER MARKING MATERIAL OR GLASS BEADS APPLIED PER UNIT OF MEASUREMENT WILL BE COMPUTED BY THE ENGINEER AT THE END OF EACH DAY'S WORK.

A DAY'S APPLIED QUANTITY OF LESS THAN 5 GALLONS OF MARKING MATERIAL MAY BE INCLUDED IN THE NEXT DAY'S APPLIED MARKINGS FOR THE PURPOSE OF COMPUTING MARKING MATERIAL AND BEAD APPLICATION RATES.

THE CONTRACTOR SHALL PROVIDE A CALIBRATED MEASURING DEVICE TO MEASURE THE POLYESTER RESIN IN THE TANKS.

THE QUANTITY OF POLYESTER MARKING MATERIAL USED SHALL BE DETERMINED BY MEASURING THE POLYESTER RESIN IN THE TANKS BEFORE AND AFTER MARKING MATERIAL IS APPLIED. THE CONTRACTOR SHALL PERMIT THE ENGINEER TO TAKE MEASUREMENTS WHENEVER REQUESTED. THE MARKING MATERIAL APPLICATION RATE SHALL BE DETERMINED BY DIVIDING THE TOTAL GALLONS USED BY THE APPROPRIATE MARKING UNIT OF MEASURE. ANY DETERMINATION OF PAY DEDUCTION RESULTING FROM SHORTAGES IN MARKING MATERIALS SHALL BE BASED ON THE MEASUREMENTS OBTAINED BY THIS METHOD. THE AMOUNT OF GLASS BEADS APPLIED SHALL BE ASCERTAINED BY THE ENGINEER BY OBSERVATION AND FROM INFORMATION SUPPLIED BY THE CONTRACTOR AS TO QUANTITY USED.

ITEM 621.16 BASIS OF PAYMENT SHALL BE MODIFIED BY ADDING THE WORDS "POLYESTER, AS PER PLAN" TO EACH ITEM DESCRIPTION.

EQUIPMENT

THE CONTRACTOR'S STRIPER SHALL BE EQUIPPED WITH AN ODOMETER GRADUATED TO 1/100 OF A MILE. THE ENGINEER SHALL DETERMINE THE DEGREE OF ACCURACY OF THE CONTRACTOR'S ODOMETER AND ESTABLISH AN ADJUSTMENT FACTOR AS MAY BE REQUIRED TO ACCURATELY DETERMINE THE PAY ITEM QUANTITIES. THE ENGINEER SHALL PERIODICALLY CHECK THE ODOMETER OPERATION TO ASSURE MAINTENANCE OF ACCURATE MEASUREMENTS.

FAILURE OF THE ODOMETER TO FUNCTION PROPERLY SHALL BE CAUSE TO STOP THE WORK UNTIL THE ODOMETER IS MADE TO FUNCTION PROPERLY. IF MEASUREMENT OF THE WORK HAS TO BE PERFORMED BY THE DEPARTMENT, THE COST OF THE DEPARTMENT LABOR AND EQUIPMENT PLUS 10 PERCENT SHALL BE DEDUCTED FROM PAYMENT DUE THE CONTRACTOR FOR THE WORK.

THE PAVEMENT MARKING EQUIPMENT SHALL BE EQUIPPED WITH A PRESSURE REGULATED AIR JET WHICH SHALL REMOVE ALL DEBRIS FROM THE PAVEMENT IN ADVANCE OF THE APPLICATOR GUN. THE AIR JET SHALL OPERATE WHEN MARKING MATERIAL IS BEING APPLIED AND SHALL BE SYNCHRONIZED WITH MARKING MATERIAL APPLICATION OR REMAIN "ON" AT ALL TIMES.

THE CONTRACTOR SHALL USE AN ACCURATE DASHING MECHANISM, CAPABLE OF BEING EASILY ADJUSTED, TO RETRACE EXISTING LANE OR CENTERLINE MARKINGS AS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

PROVISIONS FOR THE DESCRIBED SPECIAL EQUIPMENT BY THE CONTRACTOR SHALL BE INCIDENTAL TO THE APPLICATION.

* POLYESTER PAVEMENT MARKINGS SHALL NOT BE APPLIED TO NEW ASPHALT CONCRETE SURFACES UNTIL AT LEAST 14 CALENDAR DAYS HAVE ELAPSED.

FHWA	STATE	PROJECT	
5	OHIO	BRS-1015 (4)	

16
24

CLINTON COUNTY
CLI-134-02.25

621 PAVEMENT MARKING, POLYESTER, AS PER PLAN

POLYESTER PAVEMENT MARKINGS SHALL CONFORM TO 621 EXCEPT AS FOLLOWS:

ALL REFERENCES TO PAINT SHALL BE CONSIDERED TO READ POLYESTER MATERIAL.

ITEM 621.02 MATERIALS IS HEREBY DELETED-EXCEPT FOR GLASS BEAD REQUIREMENTS. IN ADDITION, PAVEMENT MARKING MATERIAL SHALL BE RETROREFLECTORIZED POLYESTER COMPOUND AS MANUFACTURED BY THE GLIDDEN-DURKEE CO., MOBIL CHEMICAL CO., DESANTIS COATING, INC., OR APPROVED EQUAL.

ITEM 621.05 APPLICATION IS HEREBY MODIFIED AS FOLLOWS:

PARAGRAPH 1 THE FIFTH SENTENCE IS DELETED AND THE FOLLOWING SUBSTITUTED:

*

PAVEMENT MARKINGS SHALL BE APPLIED ONLY WHEN THE SURFACE IS CLEAN AND DRY AND WHEN THE AIR TEMPERATURE IS ABOVE 50 F.

PARAGRAPH 4 IS HEREBY DELETED.

THE APPLICATION RATE TABLE IS HEREBY DELETED AND THE FOLLOWING SUBSTITUTED:

THE MATERIAL SHALL BE APPLIED AT THE RATE OF 16 GALLONS PER MILE FOR A SOLID LINE OF 4 INCHES IN WIDTH TO PROVIDE A UNIFORM WET FILM THICKNESS OF 15 MILS. APPLICATION RATES FOR DASHED OR DOTTED LINES AND FOR LINES WIDER THAN 4 INCHES SHALL BE PROPORTIONAL TO THE SOLID LINE RATES.

PARAGRAPH 5 IS HEREBY MODIFIED AS FOLLOWS:

GLASS BEADS SHALL BE APPLIED TO THE WET POLYESTER SO THAT THE BEADS ARE EMBEDDED AND RETAINED IN THE POLYESTER AND UNIFORMLY COVER THE POLYESTER SURFACE. THE RATE OF APPLICATION SHALL BE 15 POUNDS OF GLASS BEADS PER GALLON OF POLYESTER MATERIAL APPLIED.

PARAGRAPH 6 IS HEREBY DELETED AND THE FOLLOWING SUBSTITUTED:

THE MARKING MATERIAL SHALL DRY TO A "NO-TRACKING" CONDITION IN NOT MORE THAN FORTY-FIVE (45) MINUTES.

ITEM 621.051 LAYOUT AND PREMARKING IS MODIFIED BY THE FOLLOWING ADDITIONAL REQUIREMENTS.

- (A) THE GAPS NOT MARKED AS A RESULT OF TEMPLATE USE SHALL BE FILLED WITH MARKING MATERIAL AFTER TEMPLATE REMOVAL.
- (B) "T" MARKING OF CENTERLINE NO PASSING ZONES SHALL BE CONSIDERED INCIDENTAL TO APPLYING THE LINE.

ITEM 621.08 CENTER LINES IS MODIFIED BY THE FOLLOWING ADDITIONAL REQUIREMENTS: CENTER LINE MARKING SHALL ALSO INCLUDE TWO-WAY LEFT-TURN STRIPING AND THE OUTLINE OF YELLOW MARKED ISLANDS.

ITEM 621.12, 621.131 AND 621.132 RATES OF APPLICATION ARE HEREBY MODIFIED AS FOLLOWS:

POLYESTER MATERIAL SHALL BE APPLIED AT A RATE OF 1 GALLON PER 100 SQUARE FEET OF MARKING SURFACE.

ITEM 621.14 DEDUCTION FOR DEFICIENCY SHALL BE MODIFIED BY THE FOLLOWING ADDITIONAL REQUIREMENTS:

THE QUANTITY OF POLYESTER MARKING MATERIAL OR GLASS BEADS APPLIED PER UNIT OF MEASUREMENT WILL BE COMPUTED BY THE ENGINEER AT THE END OF EACH DAY'S WORK.

A DAY'S APPLIED QUANTITY OF LESS THAN 5 GALLONS OF MARKING MATERIAL MAY BE INCLUDED IN THE NEXT DAY'S APPLIED MARKINGS FOR THE PURPOSE OF COMPUTING MARKING MATERIAL AND BEAD APPLICATION RATES.

THE CONTRACTOR SHALL PROVIDE A CALIBRATED MEASURING DEVICE TO MEASURE THE POLYESTER RESIN IN THE TANKS.

THE QUANTITY OF POLYESTER MARKING MATERIAL USED SHALL BE DETERMINED BY MEASURING THE POLYESTER RESIN IN THE TANKS BEFORE AND AFTER MARKING MATERIAL IS APPLIED. THE CONTRACTOR SHALL PERMIT THE ENGINEER TO TAKE MEASUREMENTS WHENEVER REQUESTED. THE MARKING MATERIAL APPLICATION RATE SHALL BE DETERMINED BY DIVIDING THE TOTAL GALLONS USED BY THE APPROPRIATE MARKING UNIT OF MEASURE. ANY DETERMINATION OF PAY DEDUCTION RESULTING FROM SHORTAGES IN MARKING MATERIALS SHALL BE BASED ON THE MEASUREMENTS OBTAINED BY THIS METHOD. THE AMOUNT OF GLASS BEADS APPLIED SHALL BE ASCERTAINED BY THE ENGINEER BY OBSERVATION AND FROM INFORMATION SUPPLIED BY THE CONTRACTOR AS TO QUANTITY USED.

ITEM 621.16 BASIS OF PAYMENT SHALL BE MODIFIED BY ADDING THE WORDS "POLYESTER, AS PER PLAN" TO EACH ITEM DESCRIPTION.

EQUIPMENT

THE CONTRACTOR'S STRIPER SHALL BE EQUIPPED WITH AN ODOMETER GRADUATED TO 1/100 OF A MILE. THE ENGINEER SHALL DETERMINE THE DEGREE OF ACCURACY OF THE CONTRACTOR'S ODOMETER AND ESTABLISH AN ADJUSTMENT FACTOR AS MAY BE REQUIRED TO ACCURATELY DETERMINE THE PAY ITEM QUANTITIES. THE ENGINEER SHALL PERIODICALLY CHECK THE ODOMETER OPERATION TO ASSURE MAINTENANCE OF ACCURATE MEASUREMENTS.

FAILURE OF THE ODOMETER TO FUNCTION PROPERLY SHALL BE CAUSE TO STOP THE WORK UNTIL THE ODOMETER IS MADE TO FUNCTION PROPERLY. IF MEASUREMENT OF THE WORK HAS TO BE PERFORMED BY THE DEPARTMENT, THE COST OF THE DEPARTMENT LABOR AND EQUIPMENT PLUS 10 PERCENT SHALL BE DEDUCTED FROM PAYMENT DUE THE CONTRACTOR FOR THE WORK.

THE PAVEMENT MARKING EQUIPMENT SHALL BE EQUIPPED WITH A PRESSURE REGULATED AIR JET WHICH SHALL REMOVE ALL DEBRIS FROM THE PAVEMENT IN ADVANCE OF THE APPLICATOR GUN. THE AIR JET SHALL OPERATE WHEN MARKING MATERIAL IS BEING APPLIED AND SHALL BE SYNCHRONIZED WITH MARKING MATERIAL APPLICATION OR REMAIN "ON" AT ALL TIMES.

THE CONTRACTOR SHALL USE AN ACCURATE DASHING MECHANISM, CAPABLE OF BEING EASILY ADJUSTED, TO RETRACE EXISTING LANE OR CENTERLINE MARKINGS AS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

PROVISIONS FOR THE DESCRIBED SPECIAL EQUIPMENT BY THE CONTRACTOR SHALL BE INCIDENTAL TO THE APPLICATION.

* POLYESTER PAVEMENT MARKINGS SHALL NOT BE APPLIED TO NEW ASPHALT CONCRETE SURFACES UNTIL AT LEAST 14 CALENDAR DAYS HAVE ELAPSED.

AUGUST 13, 1979
NOVEMBER 18, 1980
JANUARY 8, 1982

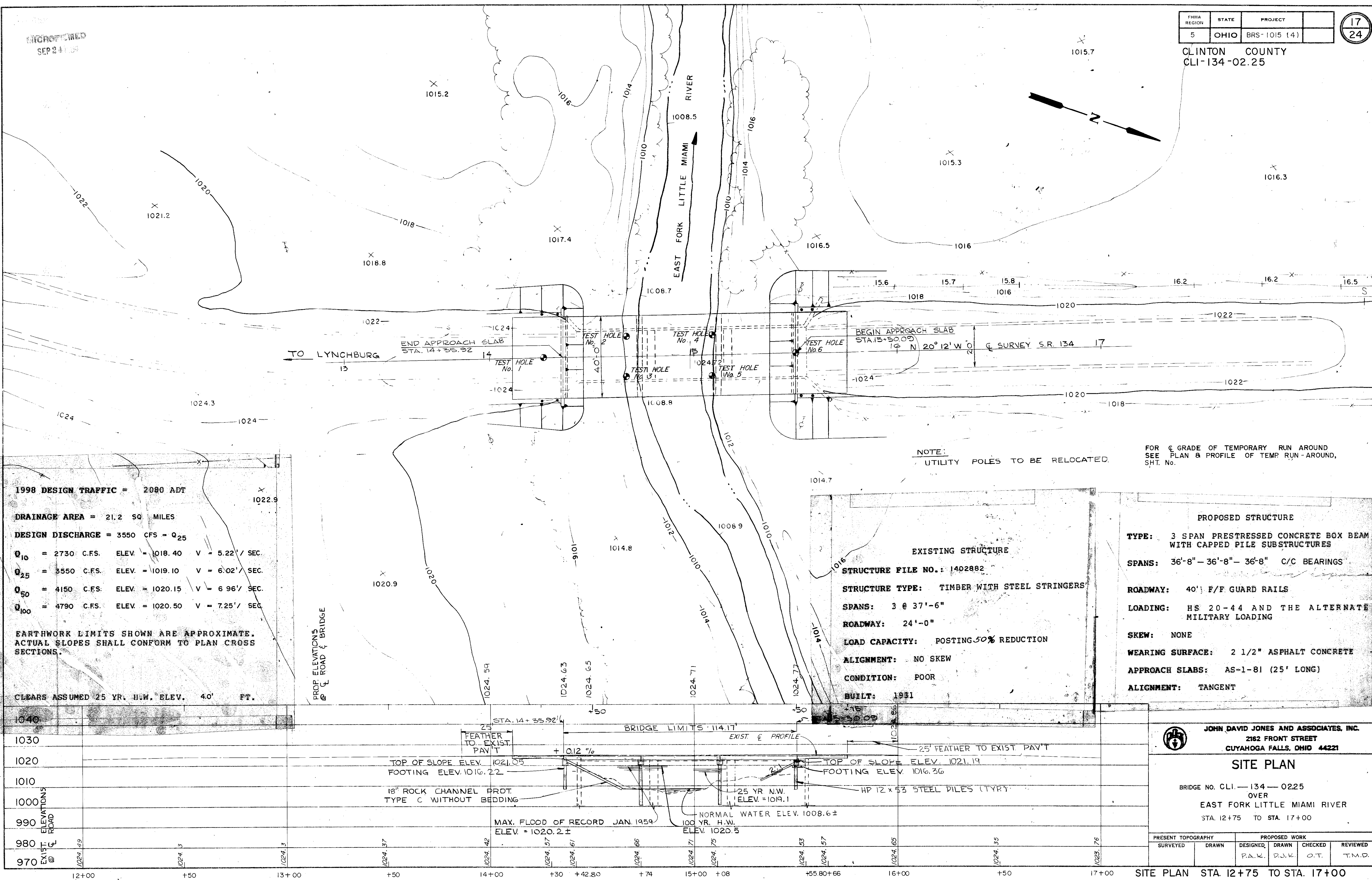
GENERAL NOTES

UNRECORDED
SEP 24 1959

FHWA REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4)

17
24

CLINTON COUNTY
CLI-134-02.25



NOTE:
UTILITY POLES TO BE RELOCATED.

FOR & GRADE OF TEMPORARY RUN AROUND
SEE PLAN & PROFILE OF TEMP. RUN-AROUND,
SHT. No.

1998 DESIGN TRAFFIC = 2080 ADT

DRAINAGE AREA = 21.2 SQ. MILES

DESIGN DISCHARGE = 3550 CFS = Q₂₅

Q₁₀ = 2730 C.F.S. ELEV. = 1018.40 V = 5.22' / SEC.

Q₂₅ = 3550 C.F.S. ELEV. = 1019.10 V = 6.02' / SEC.

Q₅₀ = 4150 C.F.S. ELEV. = 1020.15 V = 6.96' / SEC.

Q₁₀₀ = 4790 C.F.S. ELEV. = 1020.50 V = 7.25' / SEC.

EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS
SECTIONS.

CLEAR ASSUMED 25 YR. H.W. ELEV. 4.0' FT.

EXISTING STRUCTURE

STRUCTURE FILE NO.: 1402882

STRUCTURE TYPE: TIMBER WITH STEEL STRINGERS

SPANS: 3 @ 37'-6"

ROADWAY: 24'-0"

LOAD CAPACITY: POSTING 50% REDUCTION

ALIGNMENT: NO SKEW

CONDITION: POOR

BUILT: 1931

PROPOSED STRUCTURE

TYPE: 3 SPAN PRESTRESSED CONCRETE BOX BEAM
WITH CAPPED PILE SUBSTRUCTURES

SPANS: 36'-8" - 36'-8" - 36'-8" C/C BEARINGS

ROADWAY: 40' F/F GUARD RAILS

LOADING: HS 20-44 AND THE ALTERNATE
MILITARY LOADING

SKEW: NONE

WEARING SURFACE: 2 1/2" ASPHALT CONCRETE

APPROACH SLABS: AS-1-81 (25' LONG)

ALIGNMENT: TANGENT



JOHN DAVID JONES AND ASSOCIATES, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221

SITE PLAN

BRIDGE NO. CLI-134-02.25
OVER
EAST FORK LITTLE MIAMI RIVER
STA. 12+75 TO STA. 17+00

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

SITE PLAN STA. 12+75 TO STA. 17+00

REINFORCING	STEEL	LIST
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GENERAL NOTES:

2. DESIGN DATA:
- DESIGN LOADING - HS20-44 AND THE ALTERNATE MILITARY LOADING
- CONCRETE - MIN. COMPRESSIVE STRENGTH - FOR PRECAST BEAMS
OF 5500 PSI AT 28 DAYS
- CLASS S, HIGH EARLY STRENGTH - FOR SUPERSTRUCTURE
WITH A MIN. COMPRESSIVE CAST IN PLACE
STRENGTH OF 4500 PSI CONCRETE
- CLASS C, WITH A MIN. - FOR ABUTMENTS, PIERS
COMPRESSIVE STRENGTH AND APPROACH SLABS
OF 4000 PSI AT 28 DAYS



REINFORCEMENT STEEL NOTES:

1. BAR DIMENSIONS SHOWN OUT TO OUT AT Ø OF A BAR
2. LAP SPLICES FOR BARS IN TENSION TO BE CLASS "C"
LAP SPLICES AND SHALL BE FOR:
- | | |
|------------|---------|
| P90I, P90Z | - 7'-6" |
| T80I, T80Z | - 4'-8" |
| T50I, P50I | - 1'-8" |
| A60I | - 2'-0" |
| A40Z | - 1'-4" |
3. ST - INDICATES STRAIGHT BAR
- STD - INDICATES STANDARD END HOOK

REINFORCING STEEL SAMPLES

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

ESTIMATED QUANTITIES

3. REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:
AS-1-81 DATED 11-27-81
DBR-2-73 DATED 4-20-73
PSBD-1-81 DATED 9-18-81
4. BEFORE CONSTRUCTING NEW BRIDGE, THE EXISTING STRUCTURE SHALL BE REMOVED.
5. MINIMUM PILE BEARING CAPACITY - 50 TONS PER PILE. ESTIMATED AVERAGE PAY LENGTHS CAN BE 30 FEET FOR ABUTMENTS AND 35 FEET FOR PIERS.
6. PILES SHALL BE DRIVEN TO ULTIMATE CAPACITY OF 100 TONS.
7. RAILING SHALL BE DEEP BEAM RAIL WITH TUBULAR BACK-UP, TYPE 2 POSTS AND TYPE B & C ANCHORS INSERTED INTO CONCRETE BEAMS.

8. DECK PROTECTIVE METHOD - MEMBRANE WATERPROOFING AND ASPHALT CONCRETE WEARING SURFACE.

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

GENERAL NOTES, ESTIMATED QUANTITIES

REINFORCING STEEL LIST
BRIDGE CLI-134-02.25
OVER
EAST FORK LITTLE MIAMI RIVER

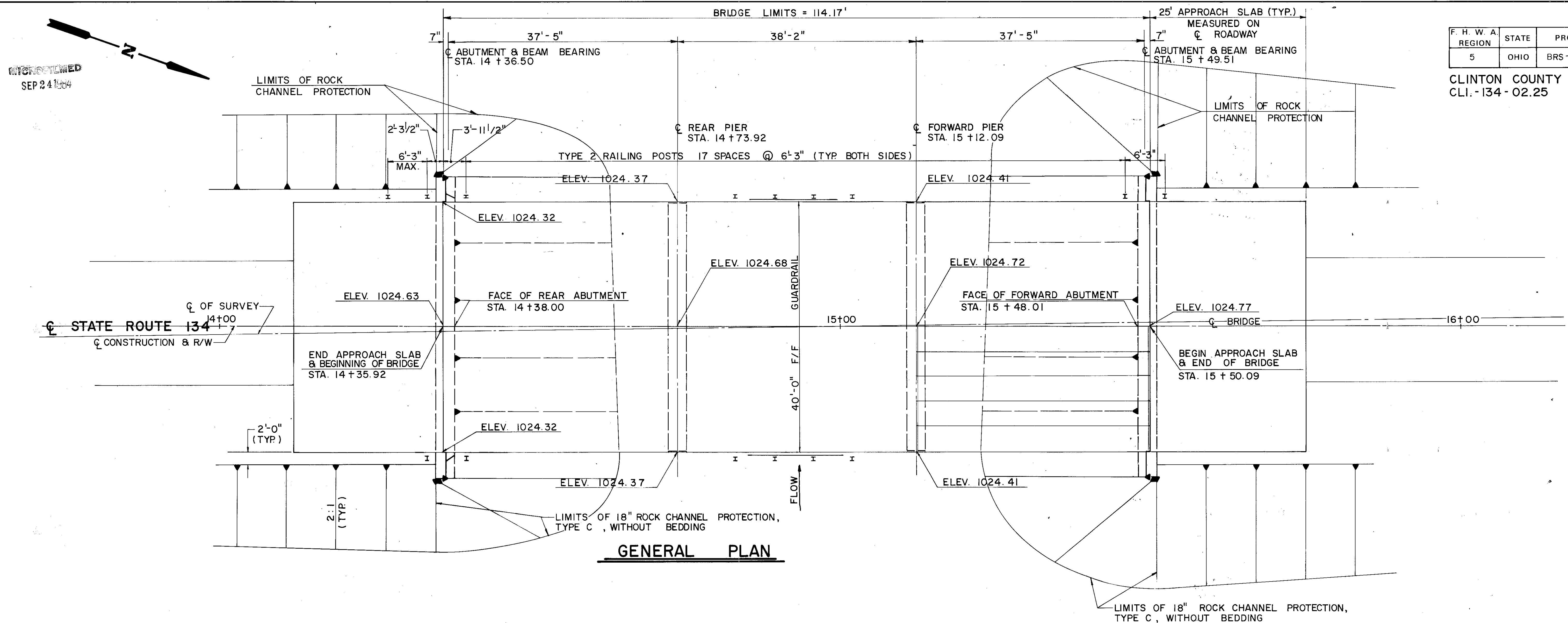
SEC SCALE		EAST FORK LITTLE MIAMI RIVER			
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED O.T.	DRAWN A.A.	CHECKED P.A.K.	REVIEWED T.M.D.

MICROFILMED
SEP 24 1984

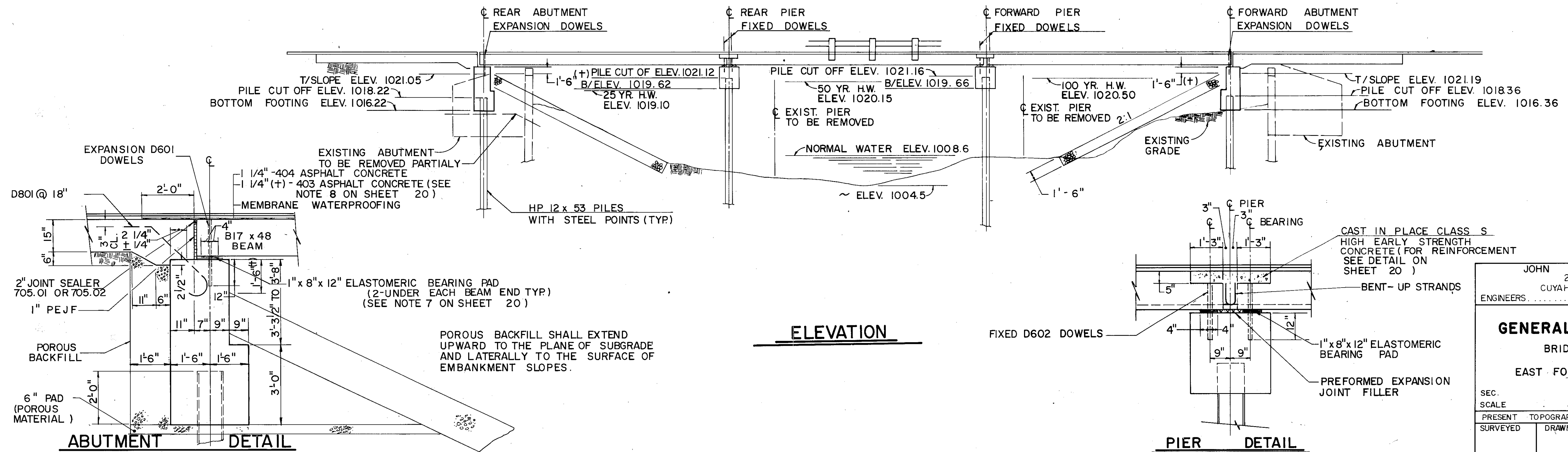
F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4)

CLINTON COUNTY
CLI: - 134 - 02.25

19
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GENERAL PLAN



ELEVATION

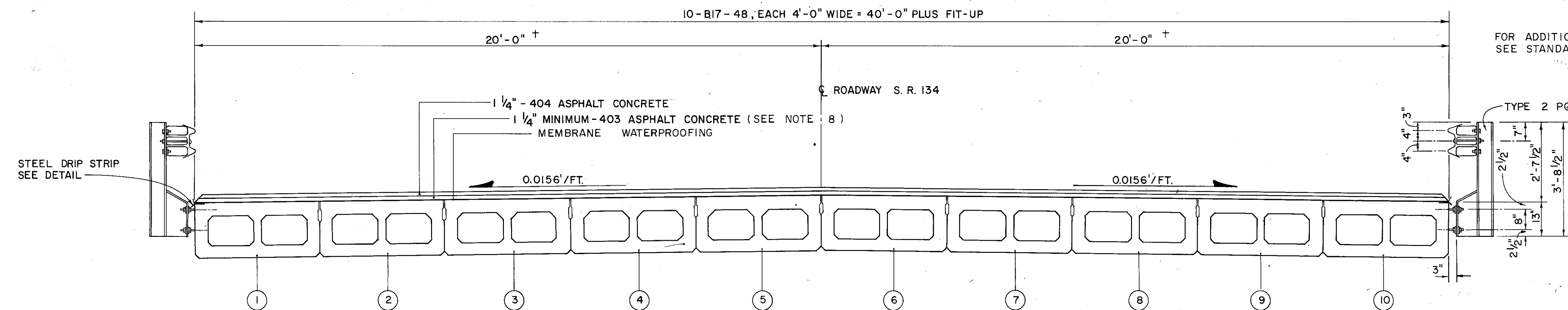
PIER	DETAIL
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JOHN DAVID JONES & ASSOC., INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS.....ARCHITECTS.....PLANNERS

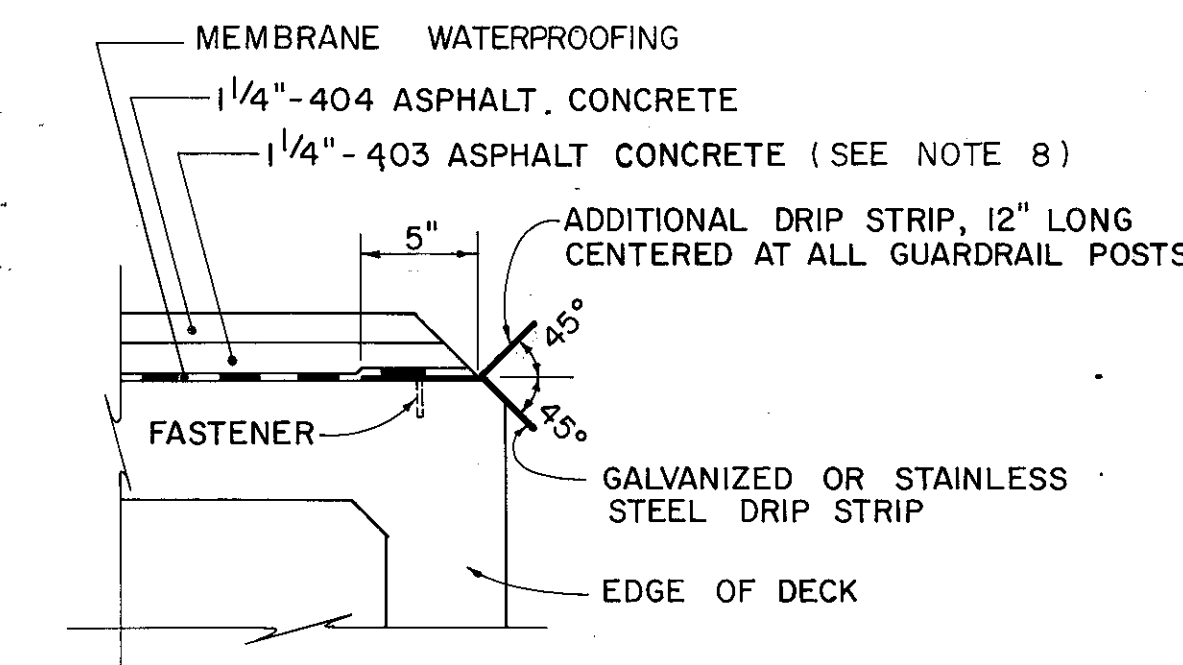
GENERAL PLAN & ELEVATION

BRIDGE CL. - 134 - 02.25
OVER
EAST FORK LITTLE MIAMI RIVER

SEC.					
SCALE					
PRESENT	TOPOGRAPHY	PROPOSED		WORK	
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		P.A.K.	A.J.A.	O.T.	T.M.D.



FOR ADDITIONAL RAILING DETAILS
SEE STANDARD DRAWING No. DBR-2-73



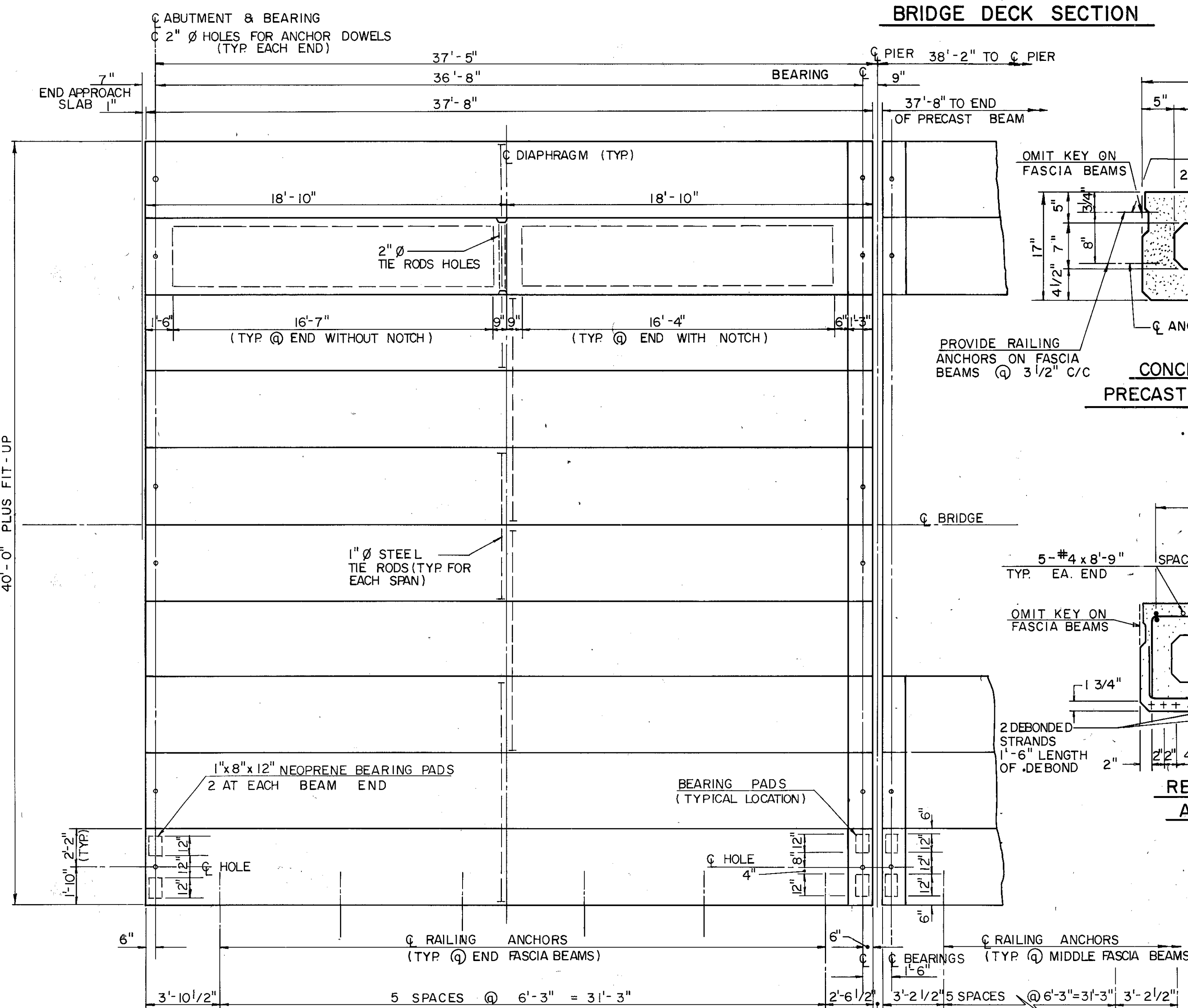
DRIP STRIP DETAIL

NOTES:

1. CONCRETE FOR PRECAST BEAMS SHALL HAVE MIN. COMPRESSIVE STRENGTH OF 5500 PSI AT 28 DAYS. MIN. COMPRESSIVE STRENGTH AT TIME OF INITIAL PRESTRESS SHALL BE 4000 PSI.
2. REINFORCING STEEL FOR PRECAST BEAMS - ASTM A615, A616, A617 GRADE 60
3. 1" ϕ TIE ROD STEEL - ASTM A36
4. PRESTRESSING STEEL - ASTM A416 GRADE 270, (f_s = 270,000 PSI) 1/2" DIAMETER, SEVEN WIRE, UNCOATED, STRESS-RELIEVED STRAND WITH A_s = 0.153 SQ. IN. FOR ONE STRAND. INITIAL STRESS $0.7f_s$ = 189,000 PSI. STRESS AT RELEASE $0.63f_s$ = 170,000 PSI.
5. ESTIMATED INITIAL CAMBER 0.44 IN. GIVEN AT TIME OF TRANSFER OF STRESS AND INCLUDES DEFLECTION DUE TO WEIGHT OF BEAM
6. REFERENCE SHALL BE MADE TO STANDARD DRAWINGS PSBD-1-81 AND DBR-2-73 FOR DETAILS NOT SHOWN ON THIS DRAWING.
7. 1/8" THICK PREFORMED BEARING PAD SHIMS, PLAN AREA 8" X 12", SHALL BE PLACED ON TOP OF BEARING PADS WHERE REQUIRED FOR PROPER BEARING. THE NUMBER SUPPLIED SHALL BE 2 SHIMS PER BEAM. SHIMS NOT USED SHALL BECOME THE PROPERTY OF THE STATE.

LONGITUDINAL BARS SHALL EXTEND TO END OF BEAM. HOOKS SHALL BE PROVIDED ONLY FOR BEAMS OVER PIERS.

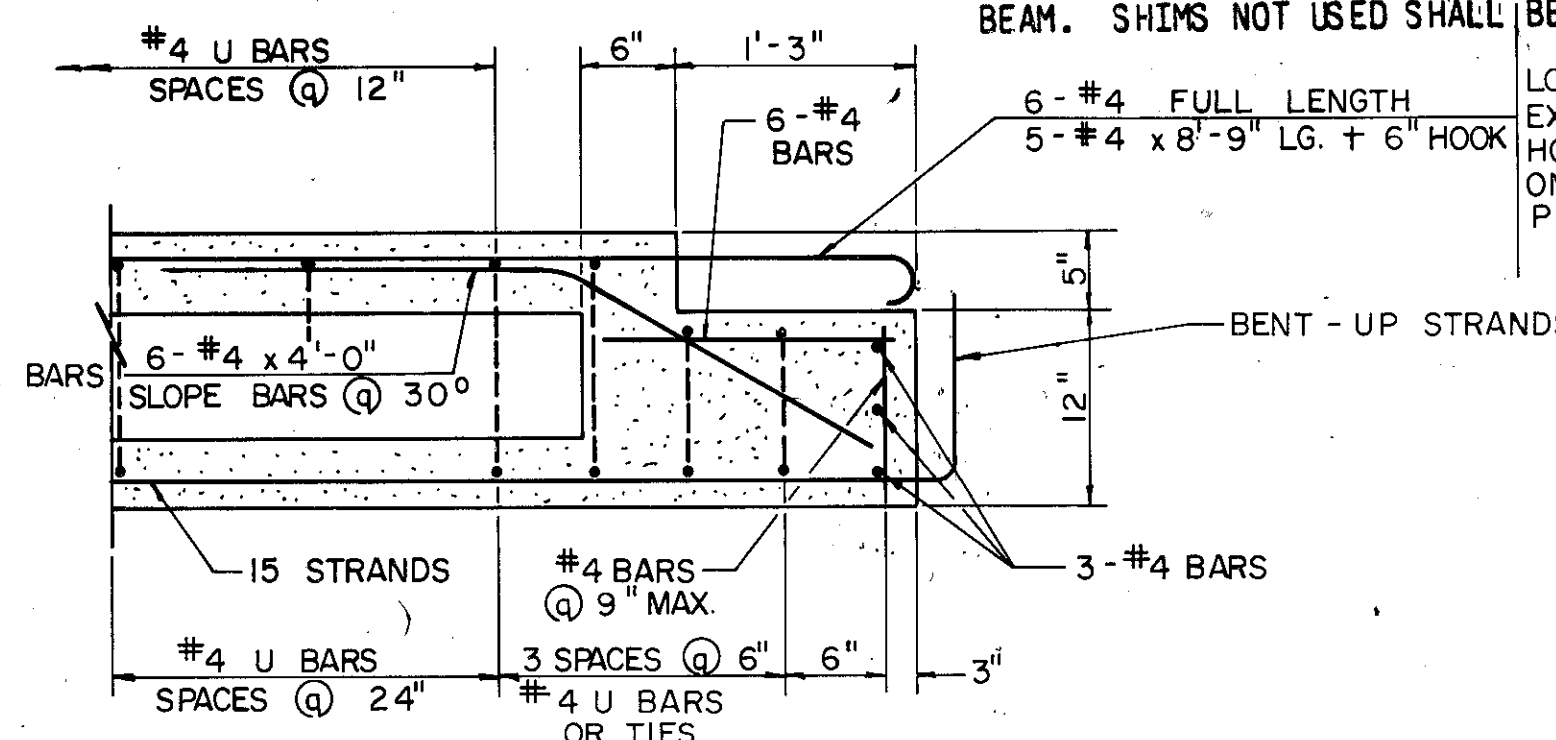
BRIDGE DECK SECTION



CONCRETE SECTION
PRECAST BEAM B17-48

REINFORCEMENT SECTION
AT END OF BEAM

MONOLITHIC DETAIL OVER PIERS
(REFERENCE STD. DRAWING PSBD-1-81 SHEET 4)



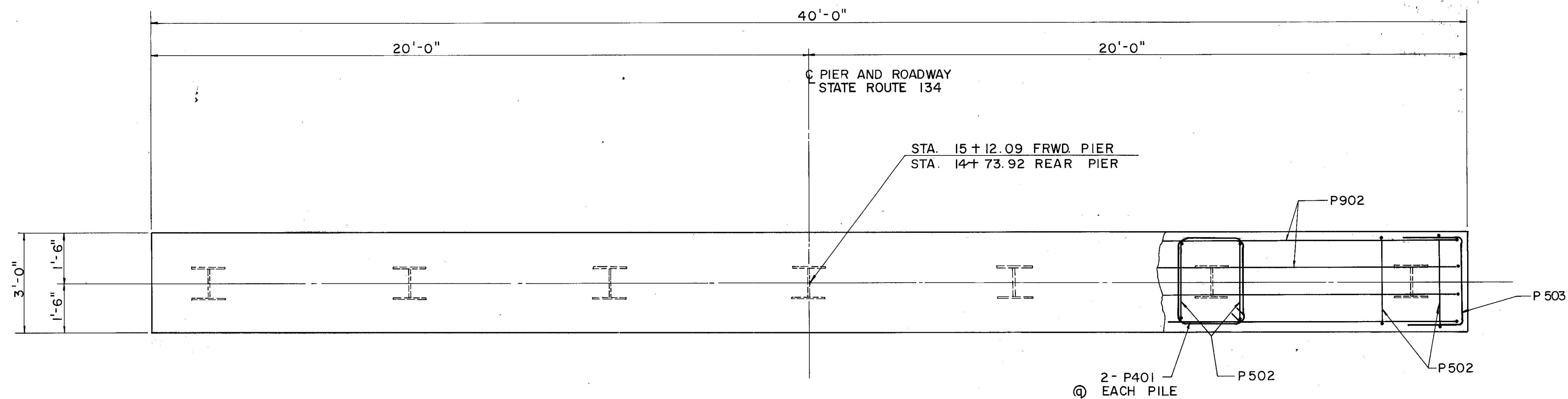
REINFORCEMENT DETAIL AT BEAM END
WITH NOTCH

8. CALCULATED CAMBER AT TIME OF PAVING, INCLUDING ALLOWANCE FOR CAMBER GROWTH DUE TO CREEP IS - 0.34 IN.
CALCULATED DEFLECTION DUE TO WEIGHT OF SURFACE COURSE AND RAILING IS + 0.07 IN.
NET FINAL CAMBER OF BEAMS IS - 0.27 IN.
THIS EXCESS AMOUNT SHALL BE COMPENSATED FOR BY THICKENING THE 403 LEVELING COURSE FROM 1/4" TO 1/2" AT BEAM ENDS.

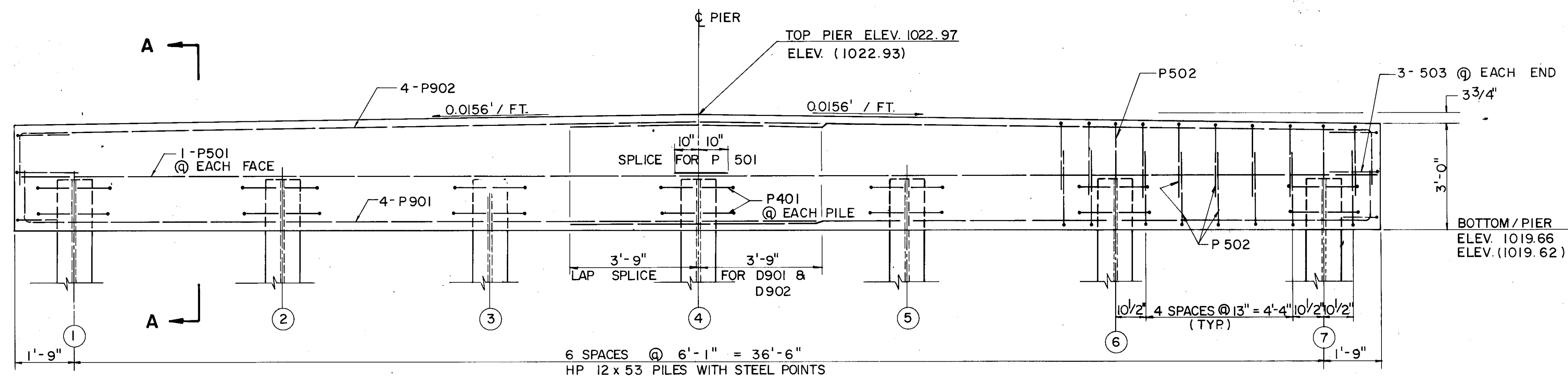
DECK PLAN

JOHN DAVID JONES & ASSOC., INC.				
2162 FRONT STREET, CUYAHOGA FALLS, OHIO 44221				
ENGINEERS ARCHITECTS PLANNERS				
BRIDGE SUPERSTRUCTURE				
BRIDGE No. CLI-134-02.25				
OVER EAST FORK LITTLE MIAMI RIVER				
SEC. SCALE				
PRESENT TOPOGRAPHY	DESIGNED PAK.	PROPOSED PLW.	WORK CHECKED O.T.	REVIEWED T.M.D.
SURVEYED	DRAWN	DRAWN	CHECKED	REVIEWED

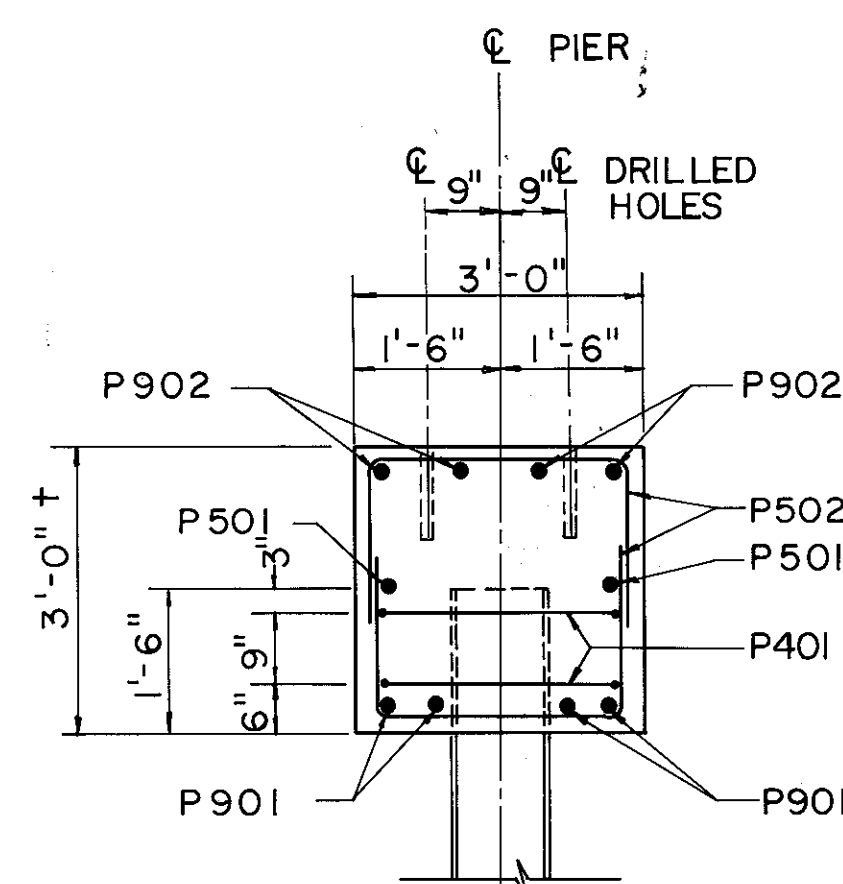
REVISED
SEP 24/84



PIER PLAN



PIER ELEVATION



SECTION A-A

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015(4)

CLINTON COUNTY
CLI.-134 - 02.25

21
24

NOTES:

1. () - INDICATES REAR PIER VERTICAL ELEVATION.
2. FOR REINFORCING STEEL BENDING DIAGRAM, SEE "GENERAL NOTES AND ESTIMATED QUANTITIES ... SHEET."
3. CONCRETE COVER FOR REINFORCING STEEL SHALL BE 2" MIN.
4. PROVIDE 3/4" CHAMFER AT ALL CORNERS.
5. LAP SPLICES SHALL BE 7'-6" FOR P901 & P902, 1'-8" FOR P501.
6. SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING HOLES FOR ANCHOR BARS.

JOHN DAVID JONES & ASSOC., INC. 2162 FRONT STREET CUYAHOGA FALLS, OHIO 44221 ENGINEERS ARCHITECTS PLANNERS					
BRIDGE PIERS BRIDGE CLI.-134 - 02.25 OVER EAST FORK LITTLE MIAMI RIVER					
SEC. SCALE					
PRESENT SURVEYED	TOPOGRAPHY DRAWN	DESIGNED P.A.K.	PROPOSED DRAWN A.J.A.	WORK CHECKED O.T.	REVIEWED T.M.D.

NOTED
SEP 24 1964

ABUTMENT & STATE ROUTE 134

F. H. W. A REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4)

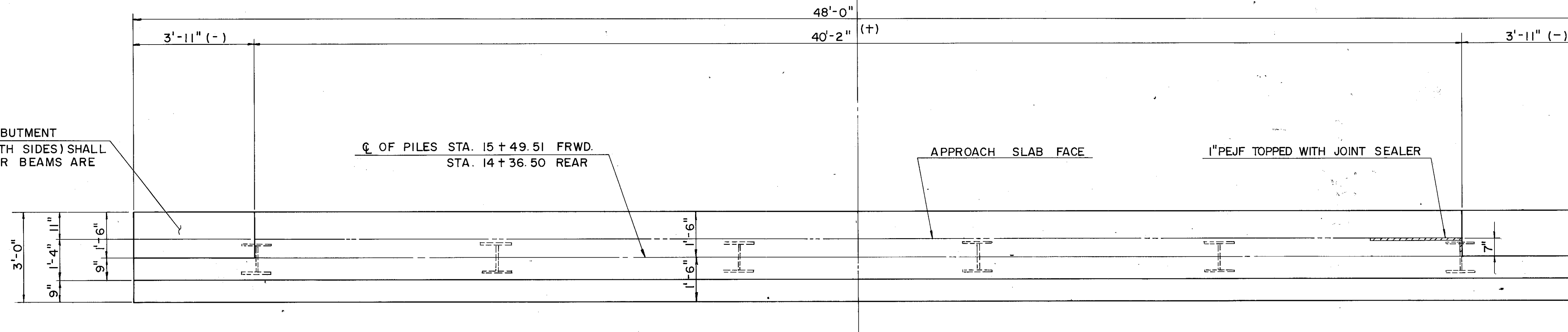
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CLINTON COUNTY
CL. - 134 - 02.25

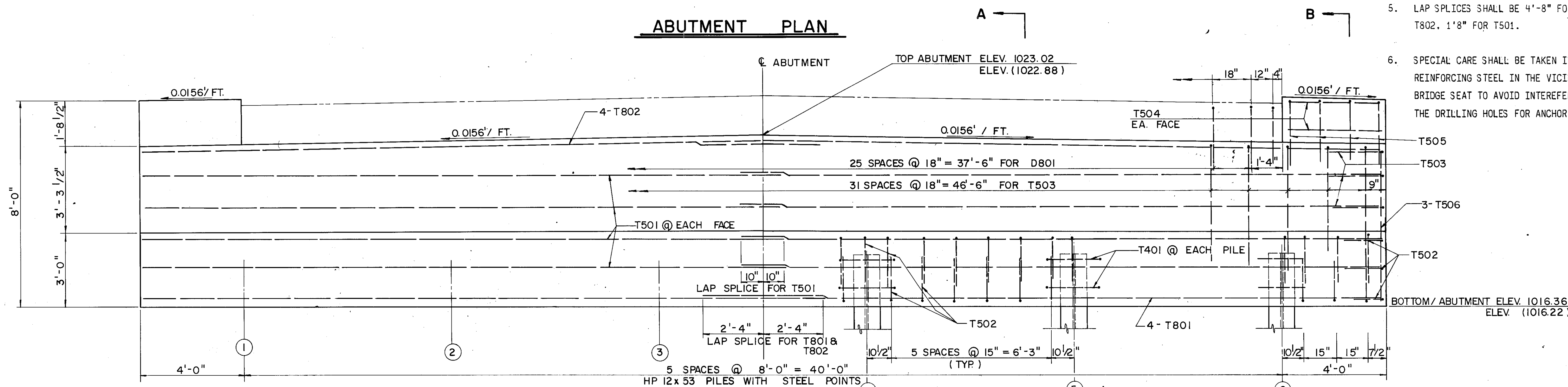
NOTES:

1. () - INDICATES REAR ABUTMENT VERTICAL ELEVATION.
2. FOR REINFORCING STEEL BENDING DIAGRAM, SEE "GENERAL NOTES AND ESTIMATED QUANTITIES . . . " SHEET.
3. CONCRETE COVER FOR REINFORCING STEEL SHALL BE 2" MIN. UNLESS OTHERWISE NOTED.
4. PROVIDE 3/4" CHAMFER AT ALL CORNERS
5. LAP SPLICES SHALL BE 4'-8" FOR T801 & T802, 1'8" FOR T501.
6. SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING HOLES FOR ANCHOR BARS.

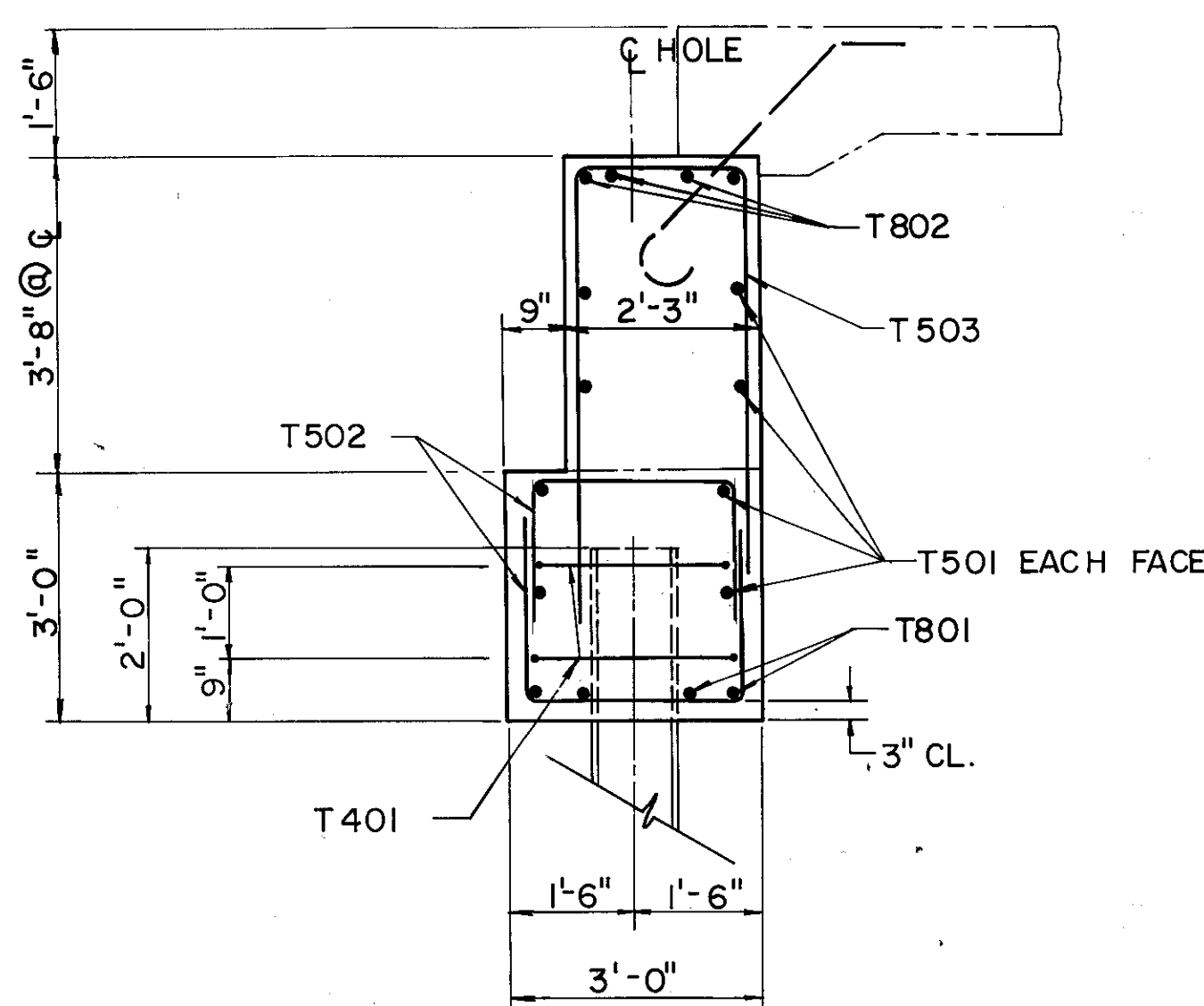
THIS PORTION OF ABUTMENT
(WINGWALLS AT BOTH SIDES) SHALL
BE PLACED AFTER BEAMS ARE
IN PLACE



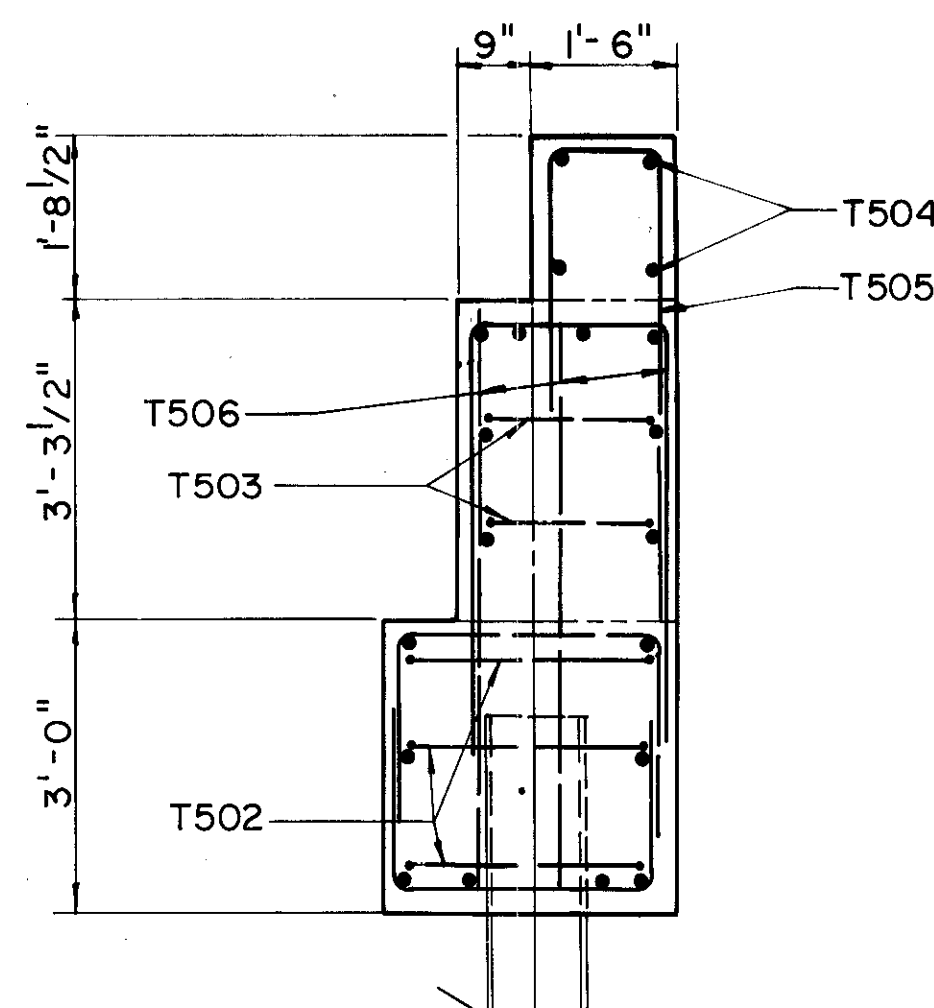
ABUTMENT PLAN



ABUTMENT ELEVATION



SECTION A-A



SECTION B-B

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

BRIDGE ABUTMENTS

BRIDGE CL. - 134 - 02.2

OVER

EAST FORK LITTLE MIAMI RIVER

SEC.
SCALE

PRESENT SURVEYED	TOPOGRAPHY DRAWN	DESIGNED P.A.K.	PROPOSED DRAWN A.J.A.	WORK CHECKED O.T.	REVIEWED T.M.D.
---------------------	---------------------	--------------------	-----------------------------	-------------------------	--------------------

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

$$\frac{23}{24}$$
[illegible]

RIGHT - OF - WAY PLAN

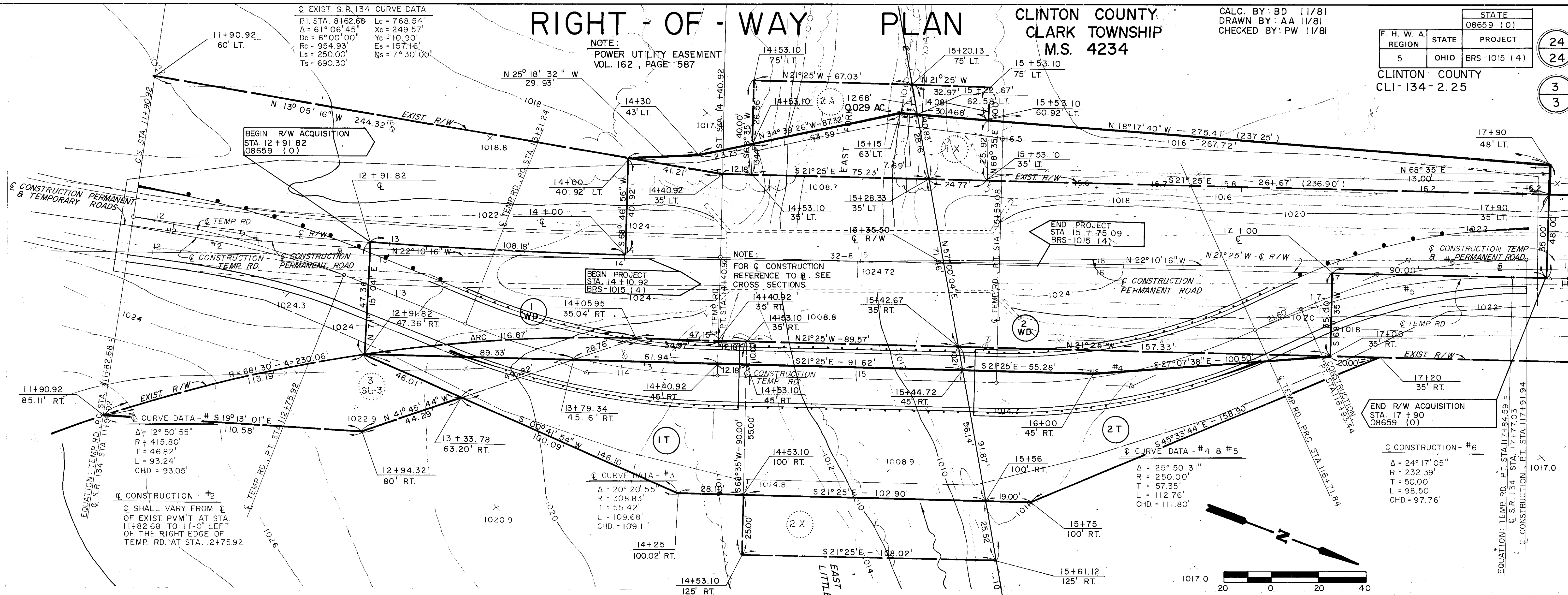
CLINTON COUNTY
CLARK TOWNSHIP
M.S. 4234

CALC. BY: BD 11/81
DRAWN BY: AA 11/81
CHECKED BY: PW 11/81

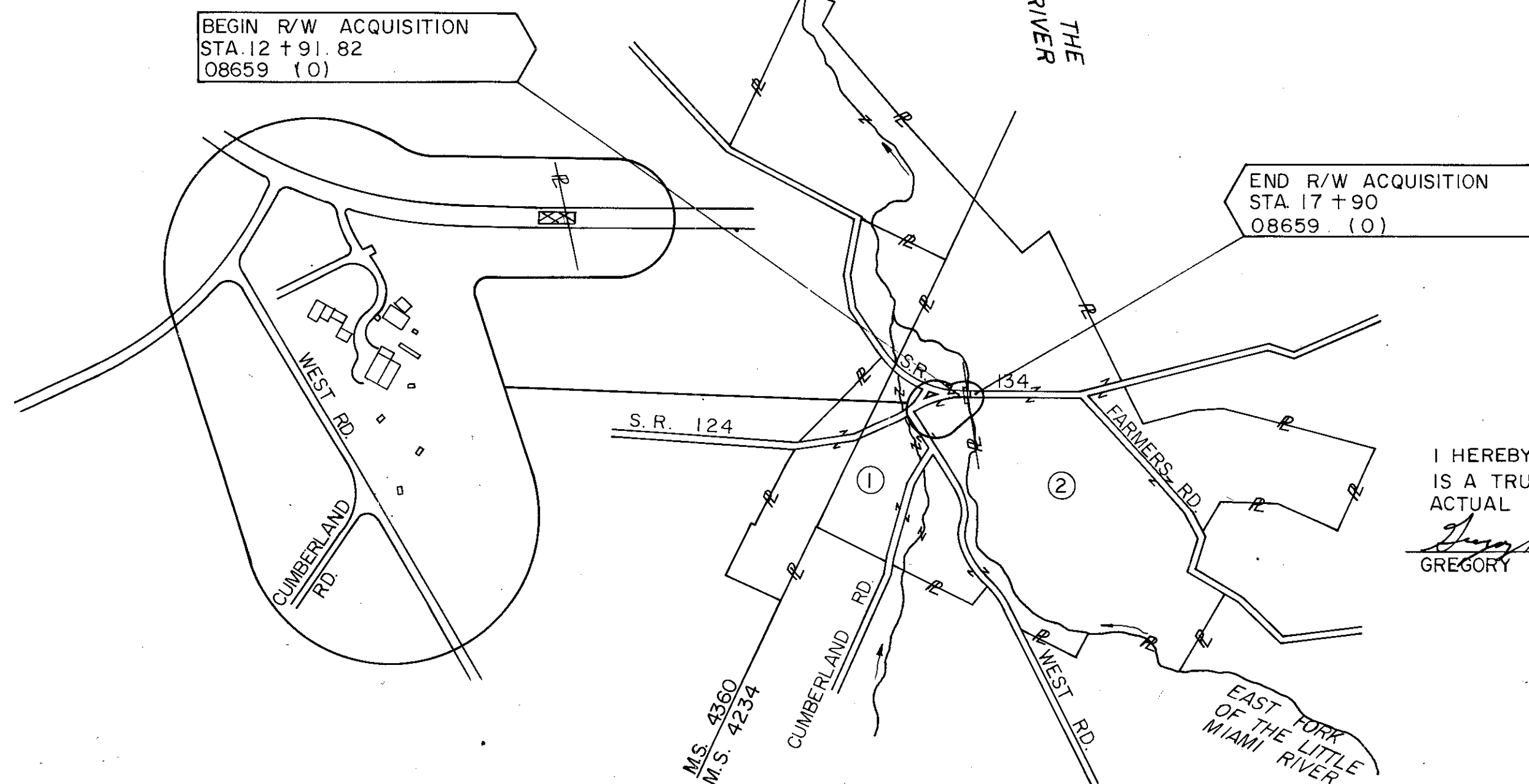
STATE	08659 (0)
F. H. W. A. REGION	5
STATE	OHIO
PROJECT	BRS-1015 (4)

CLINTON COUNTY
CLI-134-2.25

24
24
3
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PROPERTY MAP



ORRIS E. & ELSIE M. FIELDS

1 WD	T.B.A.	0.093	ACRES
	P.R.O.	0.320	ACRES
	TOTAL	0.413	ACRES
2 A	ACQUIRED UNDER S.H. 451 - SEC. "G" BRIDGE		
2 X			
3	ACQUIRED UNDER CLI-134-1.92 CLI-124-0.80		
3 L-3			
1-T	T.B.A.	0.244	ACRES

UTILITY OWNERS

ELECTRIC: DAYTON POWER AND LIGHT COMPANY
COURTHOUSE PLAZA
DAYTON, OHIO 45401
PHONE: (513) 224-6239

TELEPHONE: GENERAL TELEPHONE COMPANY
241 NELSON ROAD
WILMINGTON, OHIO 45177
PHONE: (614) 353-2125

ROGER L. & JANET ACHOR

2 WD	T.B.A.	0.147	ACRES
	P.R.O.	0.337	ACRES
	TOTAL	0.484	ACRES

1 X ACQUIRED UNDER S.H. 451 -
SEC. "G" BRIDGE

2-T T.B.A. 0.122 ACRES

REVISIONS	DATE	BY

RIGHT OF WAY PLAN

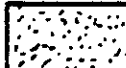
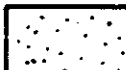
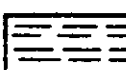
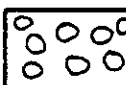
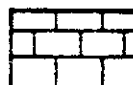
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CHECKED BY: RJW
11/81

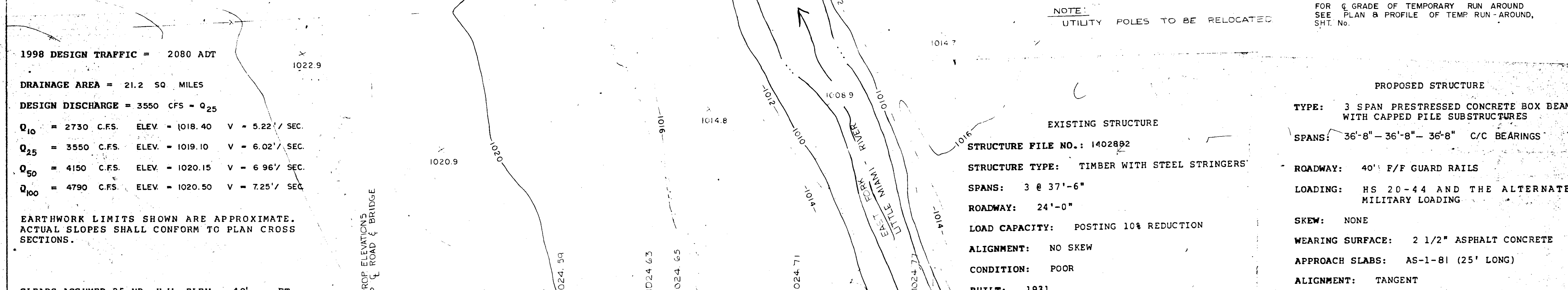
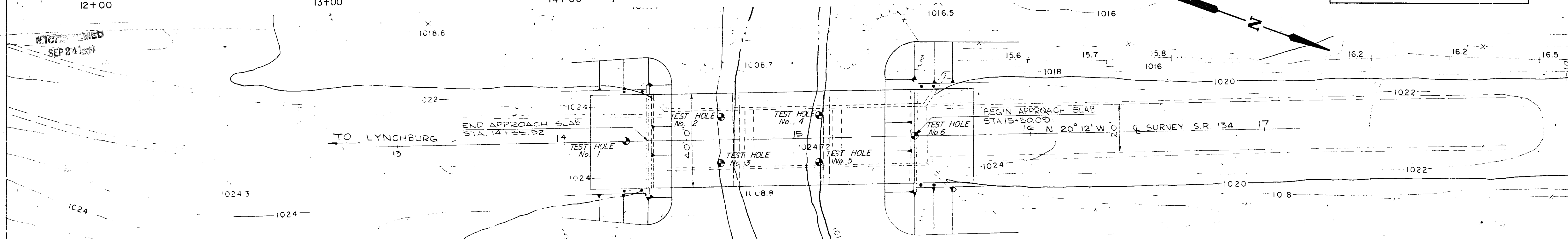
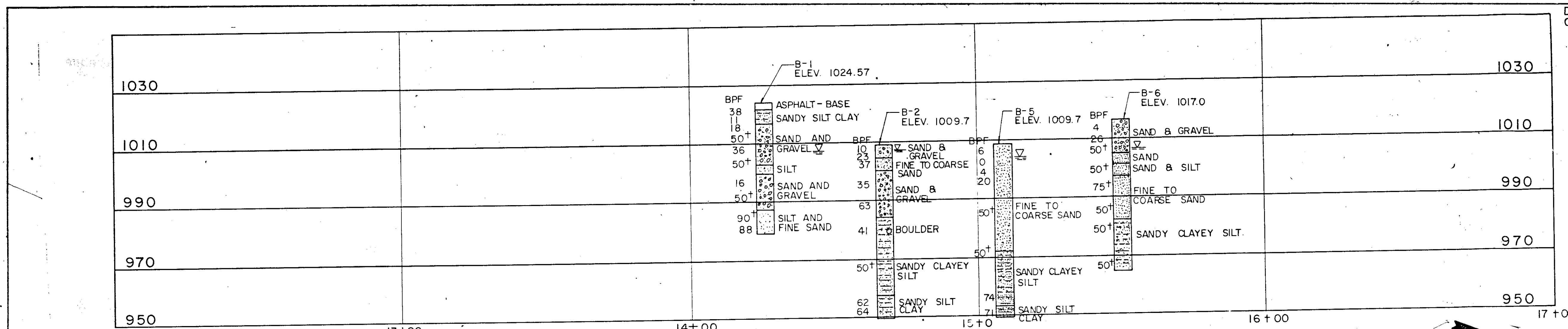
FHWA REGION	STATE	PROJECT
5	OHIO	BRS-1015(4)



CLINTON COUNTY
CLI-134-02.25

KEY

B.P.F.	BLOWS PER FOOT		WATER TAB
	GRAVEL		
	SAND		TEST HOLE
	SILT		SOD AND TOPSOIL
	CLAY		ASPHALT / BASE
			SHALE
	BOULDERS		LIMESTONE



1998 DESIGN TRAFFIC = 2080 ADT

DRAINAGE AREA = 21.2 SQ. MILES

DESIGN DISCHARGE = 3550 CFS - Q₂₅

Q₁₀ = 2730 C.F.S. ELEV. = 1018.40 V = 5.22' / SEC.

Q₂₅ = 3550 C.F.S. ELEV. = 1019.10 V = 6.02' / SEC.

Q₅₀ = 4150 C.F.S. ELEV. = 1020.15 V = 6.96' / SEC.

Q₁₀₀ = 4790 C.F.S. ELEV. = 1020.50 V = 7.25' / SEC.

EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS
SECTIONS.

CLEAR ASSUMED 25 YR. H.W. ELEV. 4.0' FT.

PROP. ELEVATIONS
@ C/L ROAD & BRIDGE

NOTE:
UTILITY POLES TO BE RELOCATED

FOR C/GRADE OF TEMPORARY RUN AROUND
SEE PLAN & PROFILE OF TEMP. RUN-AROUND,
SHT. No.

PROPOSED STRUCTURE

TYPE: 3 SPAN PRESTRESSED CONCRETE BOX BEAM
WITH CAPPED PILE SUBSTRUCTURES

SPANS: 36'-8" - 36'-8" - 36'-8" C/C BEARINGS

ROADWAY: 40' F/F GUARD RAILS

LOADING: HS 20-44 AND THE ALTERNATE
MILITARY LOADING

SKREW: NONE

WEARING SURFACE: 2 1/2" ASPHALT CONCRETE

APPROACH SLABS: AS-1-81 (25' LONG)

ALIGNMENT: TANGENT

EXISTING STRUCTURE

STRUCTURE FILE NO.: 1402892

STRUCTURE TYPE: TIMBER WITH STEEL STRINGERS

SPANS: 3 @ 37'-6"

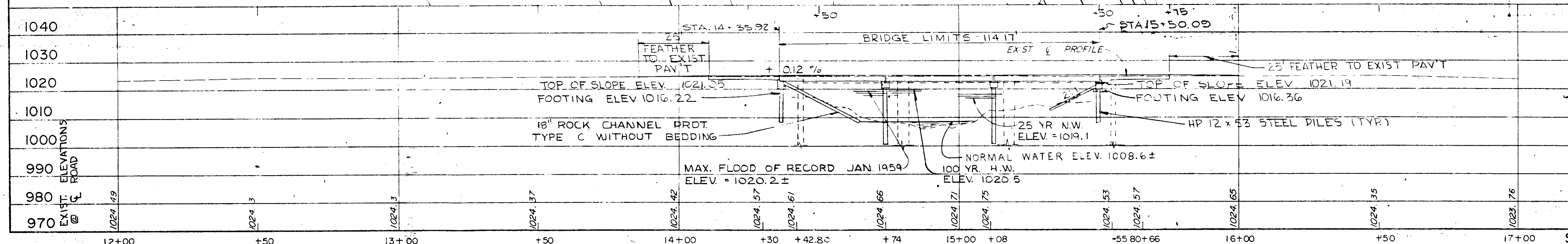
ROADWAY: 24'-0"

LOAD CAPACITY: POSTING 10% REDUCTION

ALIGNMENT: NO SKEW

CONDITION: POOR

BUILT: 1931



JOHN DAVID JONES AND ASSOCIATES, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221

SITE PLAN

BRIDGE NO. CLI-134-02.25
OVER
EAST FORK LITTLE MIAMI RIVER
STA. 12+75 TO STA. 17+00

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		PAK.	A.A.	R.J.W.	T.M.D.

SITE PLAN STA. 12+75 TO STA. 17+00

RECEIVED
SEP 24 1964

REPORT
OF
FOUNDATION INVESTIGATION
PROPOSED BRIDGE REPLACEMENT
CLI - 134 - 02.25
SR 134 over EAST FORK LITTLE MIAMI RIVER
CLINTON COUNTY, OHIO

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4)

2
6

CLINTON COUNTY
STATE ROUTE 134
CLI-134-02.25

INTRODUCTION

The site is located approximately 3 miles north of Lynchburg, Ohio, on State Route 134 over the East Fork of the Little Miami River.

The purpose of this investigation was to determine subsurface soil, rock and groundwater conditions which will be significantly affected by the foundation of the proposed bridge and related structures, and to evaluate the physical properties of the materials which will influence the foundation design and construction.

INVESTIGATION PROCEDURES

Borings were made at four (4) locations, one at each structure.
Borings 3 and 4 were eliminated because of close proximity to Borings 2 and 5.

Locations of the borings are indicated on the Boring Logs.

Ground surface elevations at boring locations were estimated from the provided plans.

Depths of borings were planned to be sufficient for evaluation of pile foundations.

Drilling and sampling were conducted in accordance with procedures generally recognized and accepted as standardized methods of investigation of subsurface conditions as related to earthwork and foundation engineering considerations. Borings were drilled with a truck-mounted drill rig.

Drive sampling was performed in increments of depth of 1.5 feet to a depth of 15.0 feet, intermittent 1.5 foot increments below 15.0 feet to 30.0 feet and 1.5 foot increments for each 5.0 feet below 30.0 feet. Standard penetration data was developed and one or more representative samples were preserved from each sampling increment.

In the laboratory all samples were examined and visually classified by a soils engineer. Moisture contents of all fine-grained soil samples were determined. A limited number of samples, considered representative of foundation materials present, were selected for performance of general engineering performance index tests (grain-size analysis and plasticity characteristics).

Logs of the borings, presented in the plans have been prepared on the basis of the drillers' field record of drilling and sampling, and the soils engineer's examination and visual classification of the samples. Laboratory test results are also shown on the logs.

GEOLOGICAL INFORMATION

The natural soil deposits in the general vicinity of the site are indicated in generalized geologic references as being either glacial end moraine deposited by the Wisconsin glacier or glacial ground moraine deposited by the previous Illinoian glacier. Recent stream alluvium frequently overlies general deposits in the channels of present-day streams. Glacial end moraine is generally composed of an unsorted, unstratified mixture of clay, silt, sand and coarser fragments, and may contain lenses or masses of stratified sand and gravel. Boulders are common. Glacial ground moraine is generally composed of an unsorted, unstratified mixture of clay, silt, sand and coarser fragments. Recent alluvium generally comprises poorly sorted, poorly bedded silt and sand, and may contain buried vegetation.

Bedrock is indicated in generalized geologic references as being shale and limestone, located at an elevation of approximately 1000± feet. The site appears to be located over a relatively small buried valley, which has been filled by the glacier. The borings did not encounter bedrock within the interval penetrated to elevation 950 feet.

Boring No. 1 was drilled back of the existing rear abutment, through the pavement. Asphalt concrete was encountered overlying base material, in turn overlying fill to a depth of approximately 3 to 5 feet. A silt clay soil was encountered below the fill to a depth of approximately 7.5 feet or elevation 1017.1 feet.

Boring No. 5 encountered loose/soft organic sands and silts to a depth of approximately 9.5 feet or elevation 1000.2 feet.

Boring No. 6 encountered loose/soft sand and clayey silt, considered to possibly be fill, to a depth of approximately 4.5 feet. This material was underlain by a fine sandy silt to an approximate depth of 5.8 feet or elevation 1011.2 feet.

Generally two (2) zones of subsoils were encountered below the near surface materials described above for Boring Nos. 1, 5 and 6; and immediately below the ground surface in Boring No. 2.

The upper zone was found to predominantly comprise sands and sand and gravel (A-1-a to A-3a), with occasional layers of predominantly silt (A-4b). The density generally varied from dense to very dense, with Boring No. 2 being the least dense and Boring No. 5 being the most dense. The material was generally saturated below approximate elevation 1009 feet, which corresponds to the water level in the river at the time of drilling. This sand and sand and gravel zone extended to the bottom of Boring No. 1, at elevation 979.6 feet, and to approximate elevations 979.6, 972.7 and 977.5 feet, in Boring Nos. 2, 5 and 6, respectively.

The lower zone was found to be glacial till, comprising generally a sandy clayey silt to sandy silt clay (A-4a to A-6a). Boring No. 5 encountered a layer of silt (A-4b) within the glacial till mass. The consistency of the glacial till was found to be predominantly hard and the moisture condition generally damp. This zone extended to the bottom of Boring Nos. 2, 5 and 6.

Water seepage was encountered in all of the borings below approximate elevation 1009 feet, and the water level at completion of drilling generally raised to this level, which corresponded to the water level in the river.

ADDITIONAL SOIL INFORMATION- All available soil and bedrock information which can be conveniently shown on the soil profile and/or structure foundation investigation sheets has been so reported. Additional subsurface investigations may have been made to study some special aspect of the project. Copies of this data, if any, may be inspected in the District Deputy Director's Office, the Bureau of Test at 1600 West Broad Street, the Pavement and Soils Section of the Bureau of Location and Design or in the Bridge Bureau at 25 South Front Street.

REVISED
SEP 24 1981

SOIL INVESTIGATION

LEGEND - BORING LOG TERMINOLOGY

Explanation of each column, progressing from left to right.

- Depth (in feet) - Is distance below the ground surface.
- Elevation (in feet) - is referenced to mean sea level, unless otherwise noted.
- Penetration, Blows per 6"- the number of blows required to drive a 2-inch O.D., 1-3/8 inch I.D., split-spoon sampler, using a 140 pound hammer with a 30-inch free fall, recorded for 6-inch drive increments. Standard penetration resistance is based on total number of blows required for one-foot of penetration.
- Length of sampler drive is indicated graphically by horizontal lines across the "Standard Penetration" and "Recovery" columns.
- Recovery from each drive is indicated numerically, in the column headed "Recovery".
- Drive sample location is designated by the heavy vertical bar in the "Sample No., Drive" column.
- Length of hydraulically pressing "Undisturbed" sample is indicated graphically by horizontal lines across the "Press" column.
- Sample numbers are designated consecutively, increasing with depth.
- Description

- a. Moisture content is expressed relative to plastic properties:

Term	Relative Moisture or Appearance
Dry	Powdery
Damp	Moisture content slightly below plastic limit
Moist	Moisture content above plastic limit, but below liquid limit
Wet	Moisture content above liquid limit

- b. Texture is based on the Ohio Department of Transportation Classification System. Soil particle size definitions are as follows:

Description	Size	Description	Size
Boulders	Larger than 12"		
Cobbles	12" to 3"	Sand - Coarse	2.00 mm. to 0.42 mm.
Gravel - Coarse	3" to 3/4"	- Fine	0.42 mm. to 0.074 mm.
- Fine	3/4" to 2.00 mm.	Silt	0.074 mm. to 0.005 mm.
		Clay	Smaller than 0.005 mm.

- c. Color - If a soil is uniform color throughout, the term is single, modified by such adjectives as light and dark. If the predominant color is shaded by a secondary color, the secondary color precedes the primary color separated by a hyphen. If two major and distinct colors are swirled throughout the soil, the colors are modified by the term "mottled".

- Gradation - when tests are performed, the percentage of each particle size is listed in the indicated column (defined in Item 9b.).
- Moisture content is indicated graphically when test is performed for natural moisture content, liquid limit moisture content or plastic limit moisture content.

CLINTON COUNTY
STATE ROUTE 134
CLI-134-02.25

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4)

3
6

BORING LOG		Boring No. 1	Location: Sta. 14+26, 6' Rt.	Date Drilled: 7-6-81	STANDARD PENETRATION (N) Blows per foot									
DEPTH in feet	ELEVATION in feet	PENETRATION Blows per 6" in inches	RECOVERY in inches	SAMPLE NO. DRIVE	WATER OBSERVATIONS:	GRADATION	MOISTURE CONTENT - %							
							PL	Natural	LL					
0	1024.6													
0.4	1024.2					ASPHALT CONCRETE								
1.8	1022.8	21		1		FILL BASE MATERIAL								
2.3	1022.5	19	12			Sandy SILT CLAY								
3.0	1021.6				Damp	SILT, SAND & GRAVEL (Base Material)								
					POSSIBLE FILL	SAND (Driller's notes)								
5.0	1019.6	10	18	2		Sandy SILT CLAY,								
		7	15	3	Moist	Very Sandy SILT CLAY,								
7.5	1017.1	6	12	4		SAND &								
		15	18	5*	Damp	GRAVEL								
10		50	6*	6*		little Silt & Clay								
		14	18	7*	Damp	SAND &								
		20	18	8	Moist	GRAVEL								
15		27	16	9	Saturated	SAND & GRAVEL, trace - little Silt & Clay								
20		26	18	10	Saturated	Like Sample No. 9								
21.4	1003.2	50	6	11	Saturated	SILT, trace fine sand, trace Clay								
24.5	1000.1	46	12	12	Saturated	SAND & GRAVEL trace Silt & Clay								
28.0	996.6	14	16	13	Saturated	Silty FINE SAND SAND & GRAVEL, trace Silt & Clay								
29.0	995.6	33	16											
30														
		21	10	14	Saturated	Like Sample No. 13								
35		50												
37.0	987.6													
		22	10	15	Saturated	Laminated SILT & FINE SAND, little Clay								
40		40												
		25	15	16	Saturated	SAND & GRAVEL, trace Silt & Clay, Sandy Clayey SILT seam 43.7' to 44.1'								
45.0	979.6	50				Bottom of Boring - 45.0'								
NOTE: 50 50 blows for 0.4' penetration. * Gravel broken in driving. ** Drilling water at completion in hollow stem augers - 19.1' after augers removed 15.4'														

SOIL INVESTIGATION

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4

CLINTON COUNTY
STATE ROUTE 134
CLI-134-02.25

BORING LOG			Boring No.	Location	Sta. 14+67, 6' Lt.	Date Drilled: 7-8/9-81	STANDARD PENETRATION (M)											
DEPTH in feet	ELEVATION in feet	PENETRA- TION Blows/ft	RECOVERY in inches	SAMPLE NO.	WATER OBSERVATIONS:	DESCRIPTION	Soil Classification	GRADATION					MOISTURE CONTENT - %					
								% Agg.	% C.S.	% M.S.	% Silt	% Clay	PL	NEUTRAL	LL			
0	1024.7					GROUND SURFACE												
150	1009.7	24 6	4			SAND & GRAVEL, little silt & clay, trace vegetation fibers	Yellow Brown											
		70 12	2			SAND & GRAVEL, trace - little silt & clay	Gray - Brown	A-4	41	31	-	9	7	3				
145	1005.2	30 13	6			Fine - coarse sand, trace silt & clay												
140		60 18	18			SAND, trace silt & clay, trace gravel	Gray	A-3	10	25	-	68	6	1				Non-Plastic
135		60 19				Fine - coarse sand, trace gravel, trace silt & clay												
130		12 18	10			Coarse gravel												
125		10 20	2															
120		80 25	8			SAND & GRAVEL, trace silt & clay	Gray	A-4	34	43	-	20	2	1				Non-Plastic
115		80 17	10															
110		80 14	10															
105		10 21	16															
100		50 19	0															
95		70 20	3															
90		33 30	4															
85		10 25	18															
80		10 50	6															
75		10 50	10															
70		21 50	9															
65		38 35	18															
60		19 25	18															
55		19 37																
50		21 26	15															
45		21 26	15															
40		21 26	15															
35		21 26	15															
30		21 26	15															
25		21 26	15															
20		21 26	15															
15		21 26	15															
10		21 26	15															
5		21 26	15															
0		21 26	15															

NOTE: BOTTOM OF BORING - 75.0'

50# 50 blows for 0.3' penetration.

50# 50 blows for 0.4'.

* Gravel broken in driving.

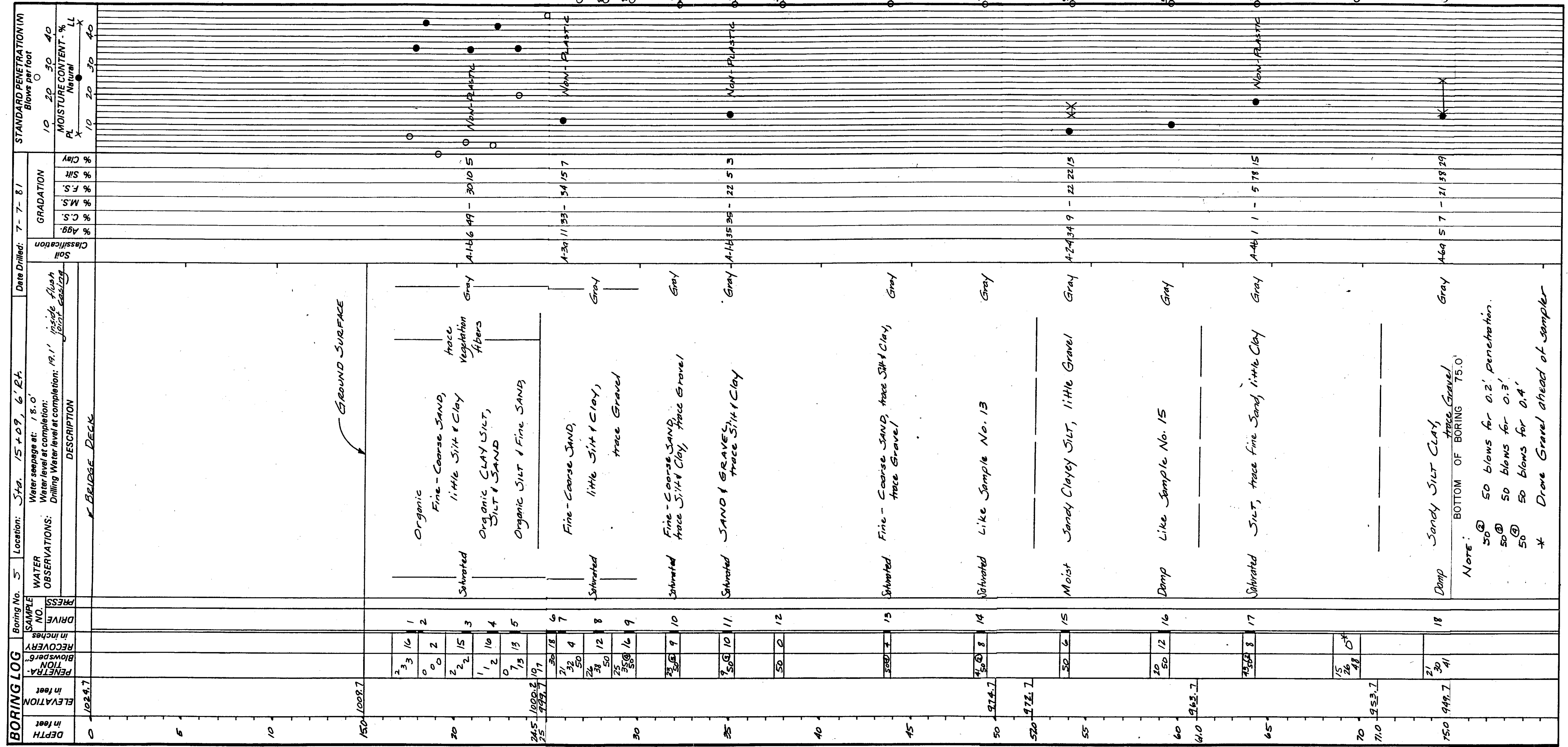
Drove on coarse gravel.

SEP 24 1964

SOIL INVESTIGATION

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS - 1015 (4)

CLINTON COUNTY
STATE ROUTE 134
CLI-134-02.25



NOT RECORDED
SEP 24 1960

SOIL INVESTIGATION

F. H. W. A. REGION	STATE	PROJECT
5	OHIO	BRS-1015 (4)

CLINTON COUNTY
STATE ROUTE 134
CLI-134-02.25

6

6

BORING LOG		Boring No. 6	Location: Sta. 15+50, 6' L.H.	Date Drilled: 7-8-61	STANDARD PENETRATION (N) Blows per foot	
DEPTH in feet	ELEVATION in feet	PENETRATION Blows per foot	RECOVERY in inches	SAMPLE NO.	WATER OBSERVATIONS:	7-8-61
					Water seepage at: 16.1'	
					Water level at completion:	% Clay
					Drilling Water level at completion: **	% Silt
					DESCRIPTION	% F.S.
						% M.S.
						% C.S.
						% Agg.
					Soil Classification	
0	1024.5				BRIDGE DECK	
7.5	1017.0	1 22	6	1	Moist	
10		2 22	16	2	Moist - POSSIBLE FILL: Clayey Sand streaks	
12.0	1012.5	3 35	8	3	Moist	
13.3	1011.2	4 24	16	4	Moist	
15		5 19	18	5	SAND & GRAVEL, trace Silt & Clay	
17.5		6 18	12	6	Saturated	
19.9	1004.6	7 24	18	7	Saturated	
20		8 14	18	8	Saturated	
22.5		9 28	12	9	Saturated	
25		10 50	6	10	Saturated	
27.5		11 22	10	11	Saturated	
30		12 10	18	12	Saturated	
32.5		13 25	16	13	Saturated	
35		14 18	17	14	Saturated	
37.5		15 30	12	15	Saturated	
40		16 30	3	16	Saturated	
42.5		17 20	2	17	Saturated	
45		18 30	7	18	Damp	
47.5		19 41	5	19	Damp	
50		20 25		20	Damp	
52.5		21 25		21	Damp	
55		22 25		22	Damp	
57.5		23 25		23	Damp	
60		24 25		24	Damp	
62.5		25 25		25	Damp	
65		26 25		26	Damp	
67.5		27 25		27	Damp	
70		28 25		28	Damp	
72.5		29 25		29	Damp	
75		30 25		30	Damp	
77.5		31 25		31	Damp	
80		32 25		32	Damp	
82.5		33 25		33	Damp	
85		34 25		34	Damp	
87.5		35 25		35	Damp	
90		36 25		36	Damp	
92.5		37 25		37	Damp	
95		38 25		38	Damp	
97.5		39 25		39	Damp	
100		40 25		40	Damp	
102.5		41 25		41	Damp	
105		42 25		42	Damp	
107.5		43 25		43	Damp	
110		44 25		44	Damp	
112.5		45 25		45	Damp	
115		46 25		46	Damp	
117.5		47 25		47	Damp	
120		48 25		48	Damp	
122.5		49 25		49	Damp	
125		50 25		50	Damp	
127.5		51 25		51	Damp	
130		52 25		52	Damp	
132.5		53 25		53	Damp	
135		54 25		54	Damp	
137.5		55 25		55	Damp	
140		56 25		56	Damp	
142.5		57 25		57	Damp	
145		58 25		58	Damp	
147.5		59 25		59	Damp	
150		60 25		60	Damp	
152.5		61 25		61	Damp	
155		62 25		62	Damp	
157.5		63 25		63	Damp	
160		64 25		64	Damp	
162.5		65 25		65	Damp	
165		66 25		66	Damp	
167.5		67 25		67	Damp	
170		68 25		68	Damp	
172.5		69 25		69	Damp	
175		70 25		70	Damp	
177.5		71 25		71	Damp	
180		72 25		72	Damp	
182.5		73 25		73	Damp	
185		74 25		74	Damp	
187.5		75 25		75	Damp	
190		76 25		76	Damp	
192.5		77 25		77	Damp	
195		78 25		78	Damp	
197.5		79 25		79	Damp	
200		80 25		80	Damp	
202.5		81 25		81	Damp	
205		82 25		82	Damp	
207.5		83 25		83	Damp	
210		84 25		84	Damp	
212.5		85 25		85	Damp	
215		86 25		86	Damp	
217.5		87 25		87	Damp	
220		88 25		88	Damp	
222.5		89 25		89	Damp	
225		90 25		90	Damp	
227.5		91 25		91	Damp	
230		92 25		92	Damp	
232.5		93 25		93	Damp	
235		94 25		94	Damp	
237.5		95 25		95	Damp	
240		96 25		96	Damp	
242.5		97 25		97	Damp	
245		98 25		98	Damp	
247.5		99 25		99	Damp	
250		100 25		100	Damp	
252.5		101 25		101	Damp	
255		102 25		102	Damp	
257.5		103 25		103	Damp	
260		104 25		104	Damp	
262.5		105 25		105	Damp	
265		106 25		106	Damp	
267.5		107 25		107	Damp	
270		108 25		108	Damp	
272.5		109 25		109	Damp	
275		110 25		110	Damp	
277.5		111 25		111	Damp	
280		112 25		112	Damp	
282.5		113 25		113	Damp	
285		114 25		114	Damp	
287.5		115 25		115	Damp	
290		116 25		116	Damp	
292.5		117 25		117	Damp	
295		118 25		118	Damp	
297.5		119 25		119	Damp	
300		120 25		120	Damp	
302.5		121 25		121	Damp	
305		122 25		122	Damp	
307.5		123 25		123	Damp	
310		124 25		124	Damp	
312.5		125 25		125	Damp	
315		126 25		126	Damp	
317.5		127 25		127	Damp	
320		128 25		128	Damp	
322.5		129 25		129	Damp	
325		130 25		130	Damp	
327.5		131 25		131	Damp	
330		132 25		132	Damp	
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335		134 25		134	Damp	
337.5		135 25		135	Damp	
340		136 25		136	Damp	
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357.5		143 25		143	Damp	
360		144 25		144	Damp	
362.5		145 25		145	Damp	
365		146 25		146	Damp	
367.5		147 25		147	Damp	
370		148 25		148	Damp	
372.5		149 25		149	Damp	
375		150 25		150	Damp	
377.5		151 25		151	Damp	
380		152 25		152	Damp	
382.5		153 25		153	Damp	
385		154 25		154	Damp	
387.5		155 25		155	Damp	
390		156 25		156	Damp	
392.5		157 25		157	Damp	
395		158 25		158	Damp	
397.5		159 25		159	Damp	
400		160 25		160	Damp	
402.5		161 25		161	Damp	
405		162 25		162	Damp	
407.5		163 25		163	Damp	
410		164 25		164	Damp	
412.5		165 25		165	Damp	
415		166 25		166	Damp	
417.5		167 25		167	Damp	
420		168 25		168	Damp	
422.5		169 25		169	Damp	
425		170 25		170	Damp	
427.5		171 25		171	Damp	
430		172 25		172	Damp	
432.5		173 25		173	Damp	
435		174 25		174	Damp	
437.5		175 25		175	Damp	
440		176 25		176	Damp	
442.5		177 25		177	Damp	
445		178 25		178	Damp	
447.5		179 25		179	Damp	
450		180 25		180	Damp	
452.5		181 25		181	Damp	
455		182 25		182	Damp	
457.5		183 25		183	Damp	