

DESIGN DESIGNATION

CURRENT A.D.T. (1972) 19,800
DESIGN YEAR A.D.T. (1990) 37,610
D.H.V. 3,385
D (DIRECTIONAL DISTRIBUTION) 40%-60%
T (PERCENT B+C TRUCKS) 30%
V (DESIGN SPEED) 70 MPH

MICROFILMED
OCT 13 1982

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
RIC-30-3.74 RIC-CH.135
VILLAGE OF ONTARIO
SPRINGFIELD TWP.
CITY OF MANSFIELD RICHLAND COUNTY

NOTE: Project designation RIC-30-3.74 appearing throughout this plan shall be considered to read RIC-30-3.74.

Table with columns: FHWA REGION, STATE, PROJECT, SHEET NO., TOTAL SHEETS. Values: 5, OHIO, RIC-30-3.74, 1, 618.

RIC-30-3.74
RIC-CH.135

RF-U-600 (19)
M-2N00 (1) & ISSUE NO.1

LIMITED ACCESS

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

1975 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.

THE RIGHT OF WAY FOR THIS IMPROVEMENT WILL BE PROVIDED FOR BY THE STATE OF OHIO.

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 AND ESTIMATES.

APPROVED: H.H. Reader
DATE: 3-3-75 DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

APPROVED: Robert B. ...
DATE: 4-9-76 ENGINEER, BUREAU OF BRIDGES

APPROVED: E.J. Schaefer
DATE: 4-8-76 ENGINEER, BUREAU OF ROADWAY DESIGN

APPROVED:
DATE: ASSISTANT DEPUTY DIRECTOR OF HIGHWAY DESIGN.

APPROVED: New Billingsley
DATE: 7/12/76 ASSISTANT DEPUTY DIRECTOR FOR REAL ESTATE

APPROVED: Howard E. ...
DATE: 4-12-76 ASSIST. DEP. DIRECTOR FOR PROGRAM DEVELOPMENT

APPROVED: R.E. Ballin
DATE: 4-12-76 CHIEF ENGINEER, DESIGN

APPROVED:
DATE: CHIEF ENGINEER, CONSTRUCTION

APPROVED: David L. ...
DATE: 4-12-76 ASSIST. DIRECTOR, DEPARTMENT OF TRANSPORTATION

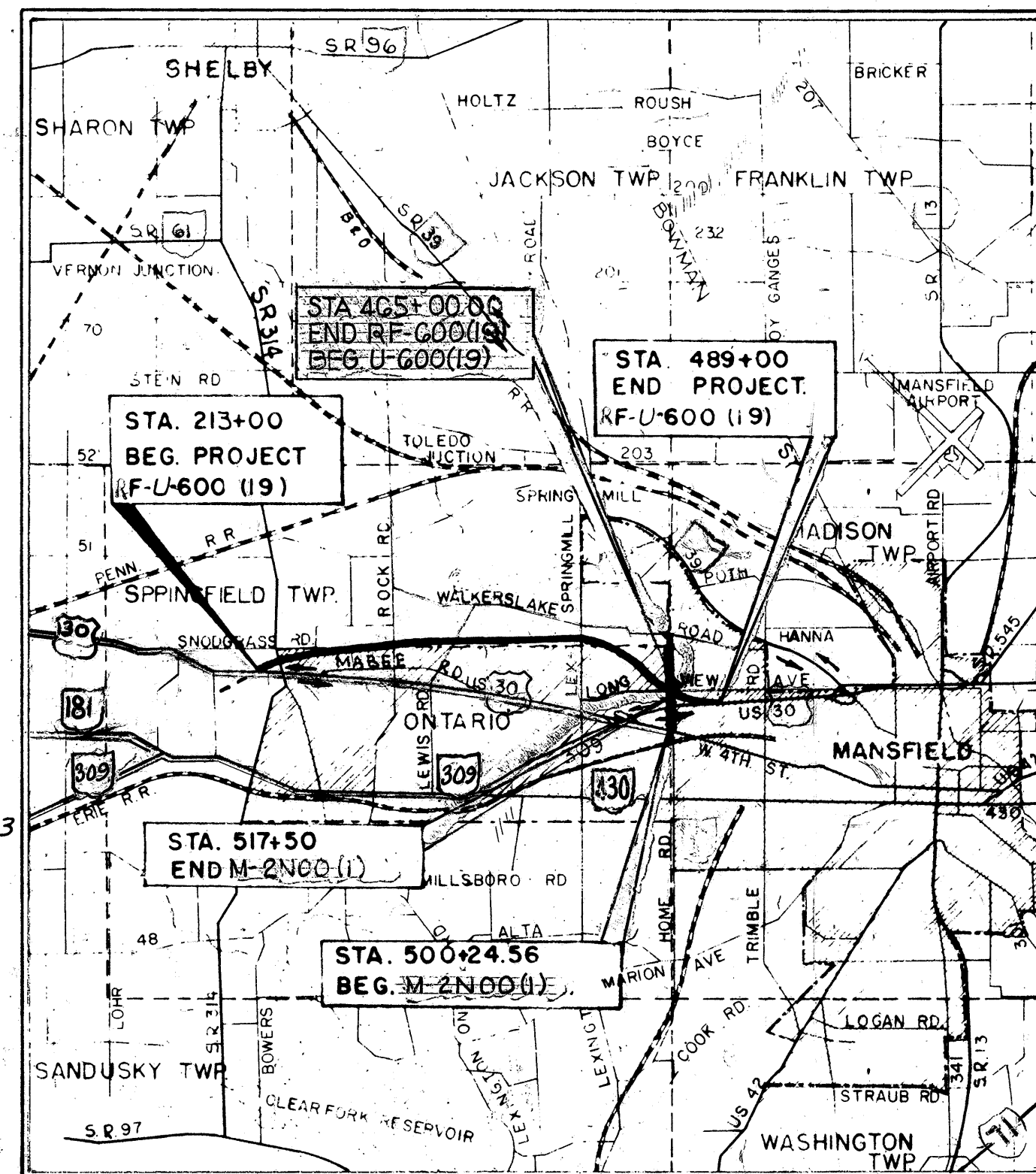
APPROVED: Richard D. Jackson
DATE: 4-12-76 DIRECTOR, DEPARTMENT OF TRANSPORTATION

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
FENCE LINE (EXISTING) (PROPOSED)
CENTER LINE
TREES STUMPS & (TO BE REMOVED)
UTILITY POLES: TELEPHONE POWER LIGHT

INDEX OF SHEETS

Table listing sheet titles and numbers: TITLE SHEET, SCHEMATIC PLAN, GENERAL NOTES, CALCULATIONS, STRUCTURE TABLE 20' SPAN & UNDER, etc.



LOCATION MAP

SCALE OF MILES

PORTION TO BE IMPROVED
STATE HIGHWAY
OTHER STREETS
DETOUR (SR 314)

SCALES

PLAN 1" = 50'
PROFILE - HORIZONTAL 1" = 50'
PROFILE - VERTICAL 1" = 5'
CROSS SECTIONS 1" = 10'
RIGHT OF WAY 1" = 50'
OTHERS AS SHOWN

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

Table listing supplemental prints: BP-1, BP-2, BP-3, BP-4, BP-5, BP-6, BP-7, CB-2A&B, CB-3, CB-3A, CB-4, CB-5, CB-6, etc.

SUPPLEMENTAL SPECIFICATION

Table listing supplemental specifications: 808, 839, 814, 844, 856, 941, 948, 5625, 5713, 1001, etc.

LINE DATA table with columns: PROJECT, WORK, BEGIN, END, GROSS, STATION EQUATION, NET LENGTH, etc.

PREPARED AND RECOMMENDED BY
PARRETT & MC CARTNEY
CONSULTING ENGINEERS

PROJECT RIC-30-3.74 RIC-CH.135

DATE OF LETTING 19 CONTRACT NO.

MANSFIELD OHIO

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
DIVISION ADMINISTRATOR DATE

Rev. 5-76

MICROFILMED
OCT 13 1982

FED. RD. DIVISION	STATE	PROJECT

28
618

RIC-30-392
RIC-CH-135

BEGIN WORK STA. 0+12

STANDER ACCESS DR

WALKER LAKE RD.

SECTION 12
SECTION 13

CURVE DATA
PI. STA. 416+11.25
 $\Delta = 53^{\circ}11'48''$ RT.
D = 1'28"
T = 1956.10'
E = 462.37'
R = 3906.53'
L = 3627.045'
PC. STA. 396+55.15
PT. STA. 432+82.20

STA. 436+12.46 BACK =
STA. 434+97.89 AHEAD

STANDARD U-TURN
STA. 450+50

SINCLAIR PIPE LINE CO.
'G' LINE

SECTION 13
SECTION 14

STA. 527+75 HOME RD. =
STA. 0+00 RELOC.
LONGVIEW AVE. (E)
 $545^{\circ}07'29''$ E

END WORK STA. 6+00
RELOC. C.H. 142
 $N 88^{\circ}30'31''$ E

STA. 464+36.00 US 30 =
STA. 522+49.25 C.H. 135

BRIDGE NO.
RIC-30-0880

END WORK STA. 14+87.73
RELOC. C.H. 142

STA. 518+50 HOME RD. =
STA. 15+00 RELOC.
LONGVIEW AVE. (W)

BEGIN WORK STA. 4+50
RELOC. C.H. 142
 $S 29^{\circ}37'11''$ E

PROJECT NO. R-1400 (19)
STA. 517+50
END PROJECT STA. 517+50
M-2100 (1)

VILLAGE OF ONTARIO
CITY OF MANSFIELD
CORP LINE

END RELOC. SECTION
STA. 465+00
BEGIN U-TURN SECTION
STA. 465+00

473+52.93 BEGIN
MEDIAN TRANSITION

BRIDGE NO.
RIC-30-0894

DIRECTIONAL ROADWAY
(Prop. W.B. & R. 309)

484+25.92 END
MEDIAN TRANSITION

PROJECT NO. R-1400 (19)
STA. 517+50
END PROJECT STA. 517+50
M-2100 (1)

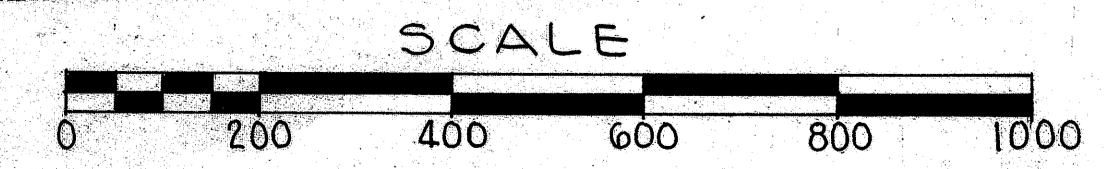
BRIDGE NO.
RIC-30-0877 (Exist.)
RIC-309-0872 (Prop.)

CURVE DATA
PI. STA. 474+33.66 = 161+81.90 Exist. 30
 $\Delta = 48^{\circ}55'10''$ LT.
D = 2'
L = 300'
T = 2864.789'
E = 1453.709'
R = 283.885'
L = 2145.97'
PC = 1.30'
X = 149.99'
Y = 299.92'
Z = 5.24'
PH = 5'
LT = 200.03'
ST = 100.03'
PT = 42^{\circ}55'10''
TS. STA. 459+79.95
SC. STA. 462+79.95
CS. STA. 484+25.92

END PROJECT
STA. 489+00
S.L.M = 9.17

RF-U-600 (19)

END WORK STA. 526+40.31 RIC-30-392 =
STA. 215+50 EXIST. 30.



QUANTITY	INIT.	DATE
CALCULATED	AW	8/70
CHECKED	AW	10/70
REVISED		

BEG. PROJECT
STA. 500+24.56
M-2100 (1)

STA. 505+51.12 HOME RD.
0+00 RHODES ACCESS RD.

STA 500+00 W FOURTH ST

END WORK STA. 7+00

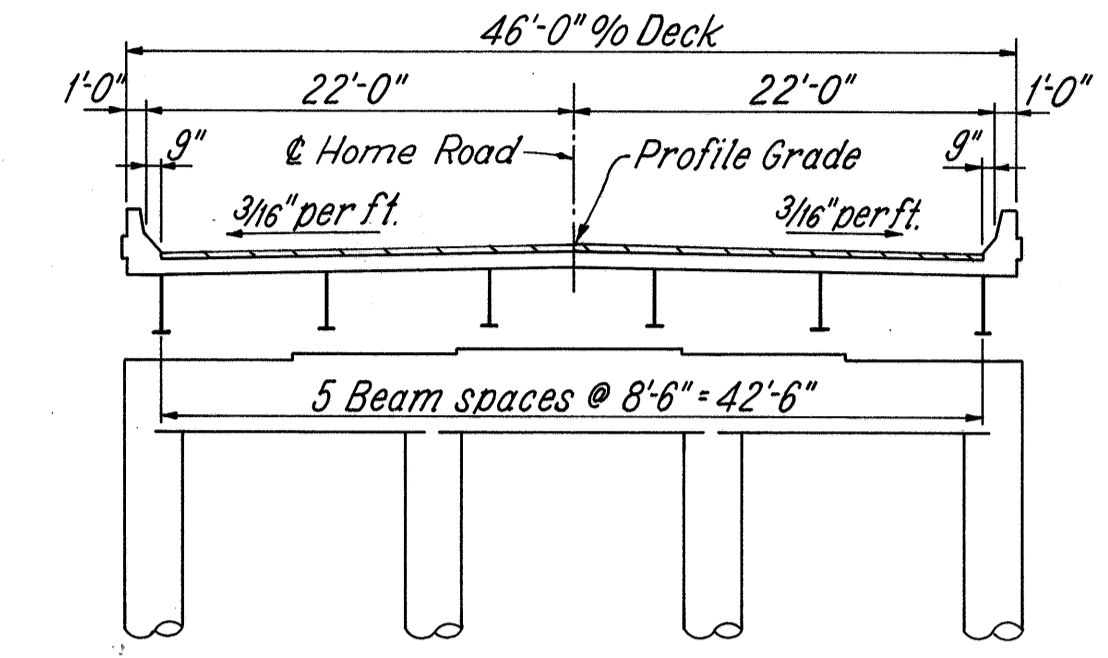
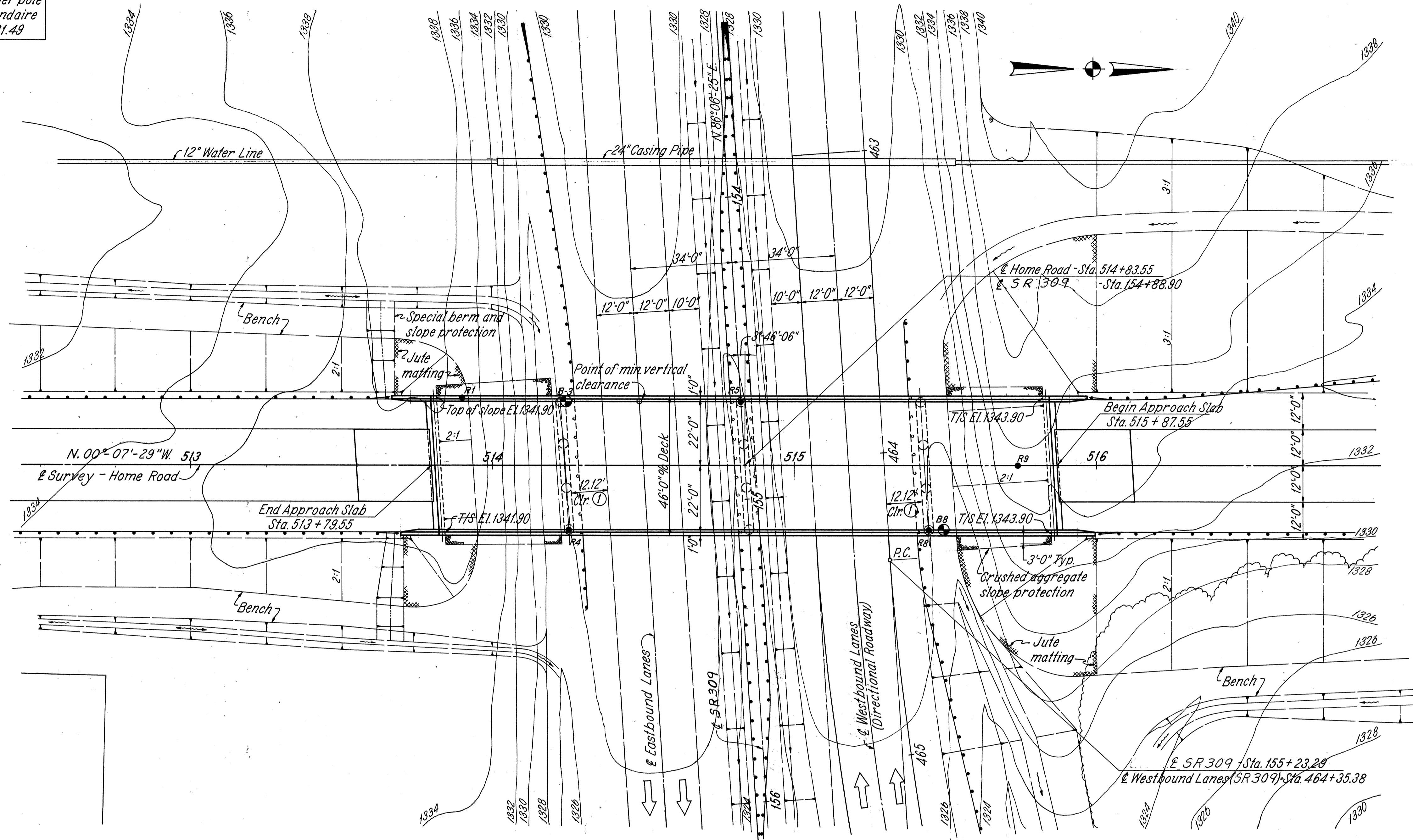
ST. STA. 487+25.92

B.M. - R.R. Spike in Power pole
N.E. Corner Home & Lindaire
El. 1331.49

MICROFILMED
OCT 13 1982

FED. RD. DIVISION	STATE	PROJECT	481 C18
2	OHIO		

RIC-30-3.92
RIC. C.H. 135



TRANSVERSE SECTION

EARTHWORK limits shown are schematic. Actual slopes shall conform to plan cross-sections.

CURVE DATA
Westbound Lanes (SR 309)
P.I. Sta. 466+86.79
 $\Delta = 29^\circ 30'$
Dc = 6'-00'
R = 954.93'
T = 251.41'
L = 491.67'
E = 32.54'

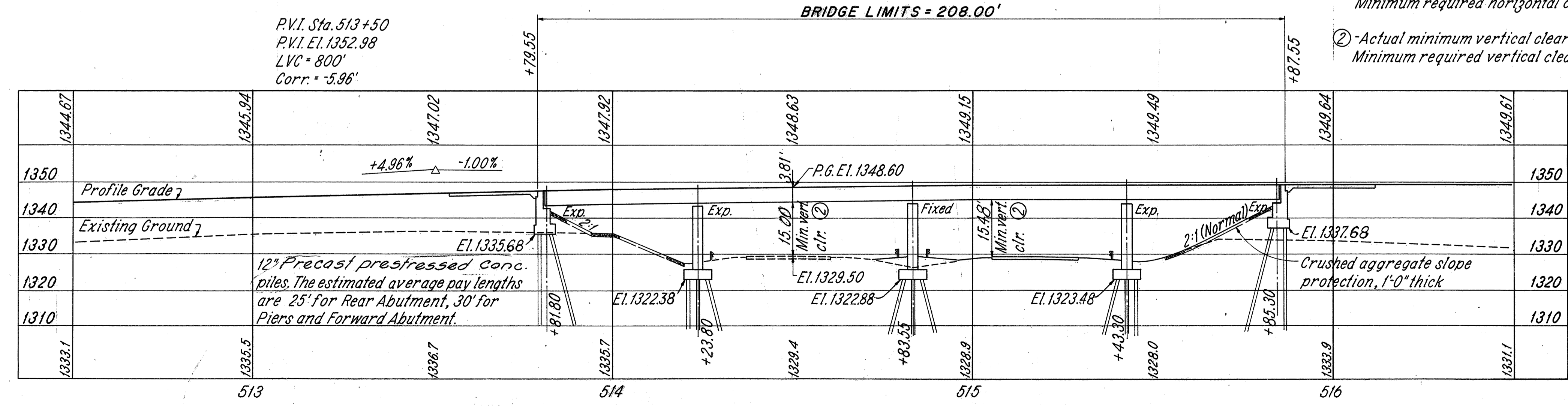
PROPOSED STRUCTURE
TYPE: Continuous steel beam bridge with reinforced concrete deck and substructure.
SPANS: 42'-0", 59'-9", 59'-9", 42'-0" % Bearings
ROADWAY: 44'-0" f/f Parapets
LOADING: HS 20-44
SKEW: 3°-46'-06" R.F.
SURFACE COURSE: 1/2" Asphalt Concrete
APPROACH SLABS: AS-1-72 (25'-0" long) Modified
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC: 3294 (1990)

FOUNDATION INVESTIGATION LEGEND
⊕ - Indicates core boring location
● - Indicates rod sounding location

PARRETT & McCARTNEY
CONSULTING ENGINEERS
MANSFIELD OHIO

SITE PLAN
BRIDGE NO. RIC-309-0872
UNDER HOME ROAD
RICHLAND COUNTY U.S.R. 30
STA. 154 + 88.90

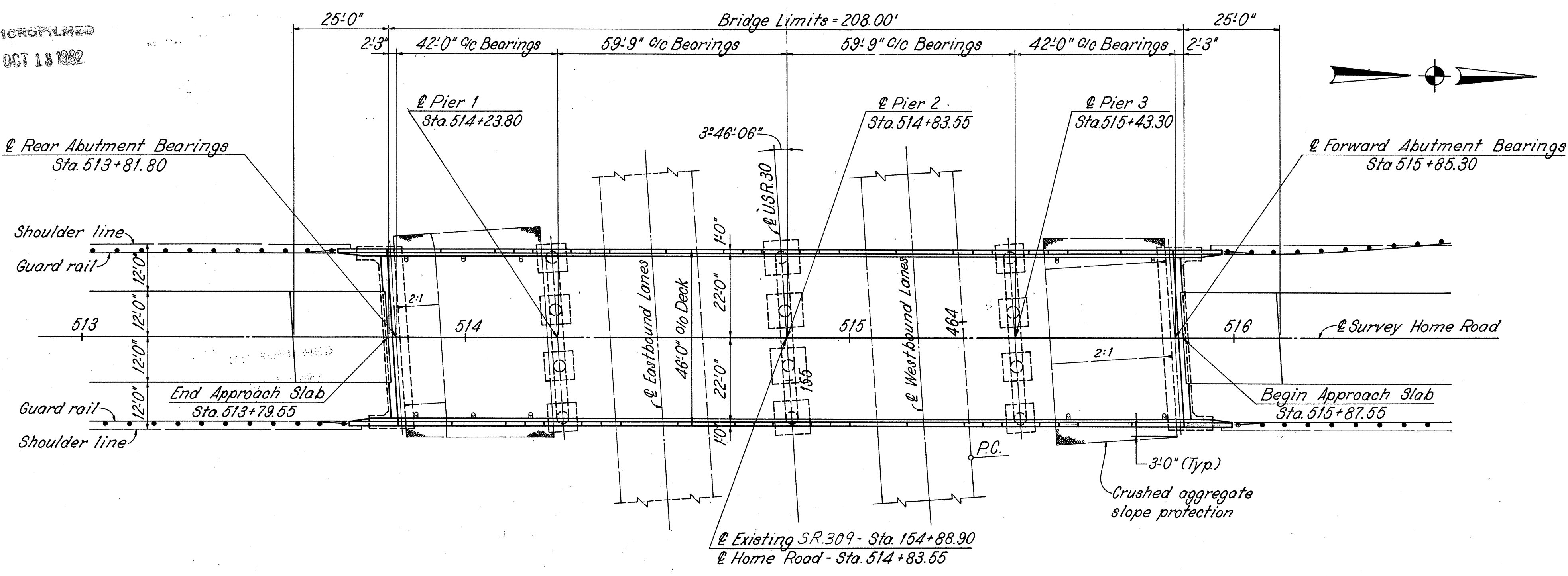
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.H.T.	D.H.T.	UJL	L.C.T.	DHT	4/14/71	



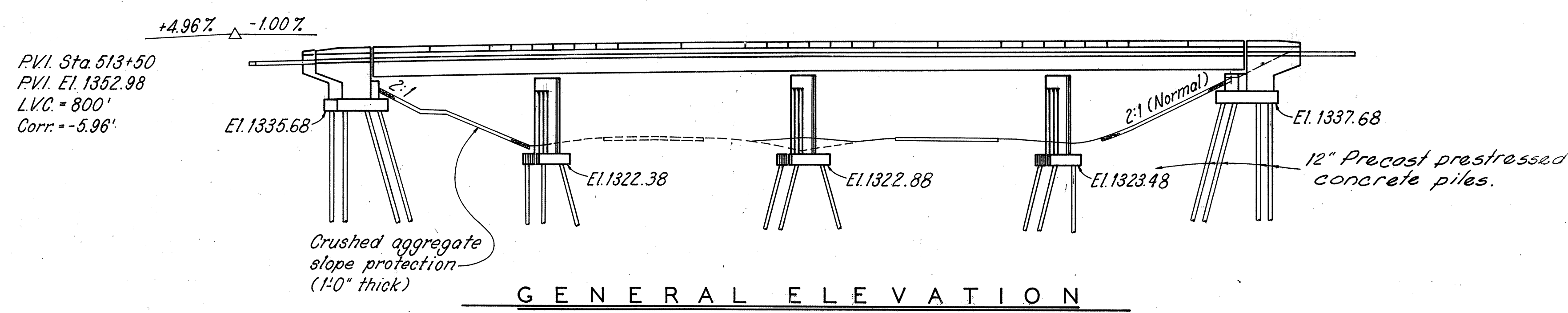
- ① - Actual minimum horizontal clearance shown. Minimum required horizontal clearance 12'-0".
- ② - Actual minimum vertical clearance shown. Minimum required vertical clearance 15'-0".

MICROFILMED
OCT 13 1982

RIC-30-3.92
RIC. C.H. 135



GENERAL PLAN



GENERAL ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings AS-1-72 (dated 6-30-72); SD-1-69, sheets 1 thru 4 (dated 6-12-69); BR-1-67, sheet 1 of 3 (revised 10-15-71); RB-1-55 (revised 2-2-59); and to Supplemental Specifications 808 (revised 1-1-71) and 836 (revised 3-12-75), 838 (3-18-70).

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1969, including the Ohio "Supplement" to these specifications.

DESIGN DATA:
 Design Loading - HS20-44
 Concrete Class C - unit stress 1200 p.s.i. for superstructure
 unit stress 1333 p.s.i. for substructure
 Structural Steel - ASTM A36 - unit stress 20,000 p.s.i.
 Reinforcing Steel - ASTM A615, A616 or A617 - unit stress 20,000 p.s.i.
 Spiral reinforcement may be plain bars ASTM A82 or A615.

EMBANKMENT CONSTRUCTION: The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutments and piles driven.

UTILITY LINES: All expense involved in relocating the affected utility lines shall be borne by the Owners. The Contractor and Owners are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

PILES shall be driven to a minimum bearing capacity of 36 tons per pile for the abutments and 39 tons per pile for the piers.

ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN'L
503	477	Cu. yds.	Unclassified excavation		261	216	
503	Lump	Sum	Cofferdams, Cribs, and Sheeting				Lump
404	27	Cu. yds.	Asphalt Concrete, AC-20	27			
505	Lump	Sum	Test pile				Lump
507	2280	Lin. Ft.	12" Precast prestressed conc. piling furnished as per plan		660	1620	
509	128,810	Lbs.	Reinforcing steel	82,205	13,773	30,832	
507	2280	Lin. Ft.	12" Precast prestressed conc. piling in place as per plan		660	1620	
511	302	Cu. yds.	Class "C" concrete, superstructure (see prop. note)	302			
511	97	Cu. yds.	Class "C" concrete, pier caps and columns			97	
511	101	Cu. yds.	Class "C" concrete, abutments above footings		101		
511	170	Cu. yds.	Class "C" concrete, footings		78	92	
513	200,924	Lbs.	Structural steel	200,924			
514	200,924	Lbs.	Field painting of structural steel	200,924			
838	3	Hours	Special pile tests.				3
518	10	Each	Scuppers, including supports	10			
518	55	Cu. yds.	Porous backfill		55		
518	76	Lin. Ft.	6" Perforated helical CMP, 707.01		76		
518	72	Lin. Ft.	6" Non-perforated helical CMP, including specials, 707.01		72		
518	34	Each	Subdrainage for Wearing Course, as per plan.	34			
801	436	Sq. yds.	Crushed aggregate slope protection		436		
Special	14	Cu. Yds.	Asphaltic Protective Course (See Proposal Note)	14			
808	302	Units	Chemical admixture for concrete, Type A, B or D	302			
Special	967	Sq. Yds.	Membrane Waterproofing (cold applied liquid) (See Proposal Note)	967			

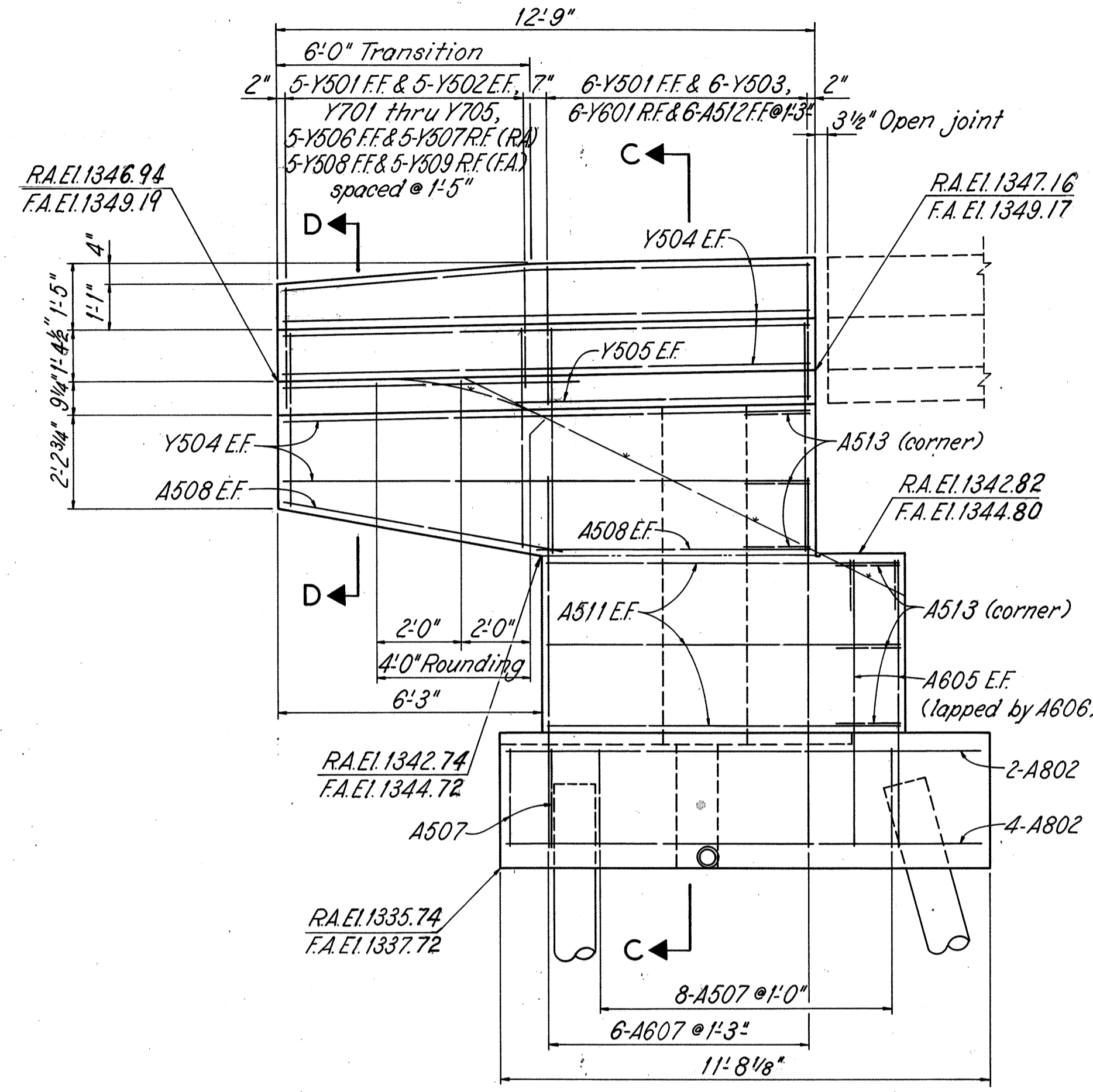
QUANTITIES	INIT.	DATE
CALCULATED	RAR	7-8-70
CHECKED	GAB	7-10-70
REVISED	WTF	1-2-75

PARRETT & McCARTNEY		2 / 8	
CONSULTING ENGINEERS		OHIO	
GENERAL PLAN, GENERAL NOTES AND ESTIMATED QUANTITIES			
BRIDGE NO. RIC-309-0872			
UNDER HOME ROAD			
RICHLAND COUNTY		U.S.R. 30	
STA. 154 + 88.90			
DESIGNED	DRAWN	TRACED	CHECKED
GSB	RAR	RAR	LGT
DATE	REVIEWED	DATE	REVIEWED
	DHT	4/14/71	1-14-72

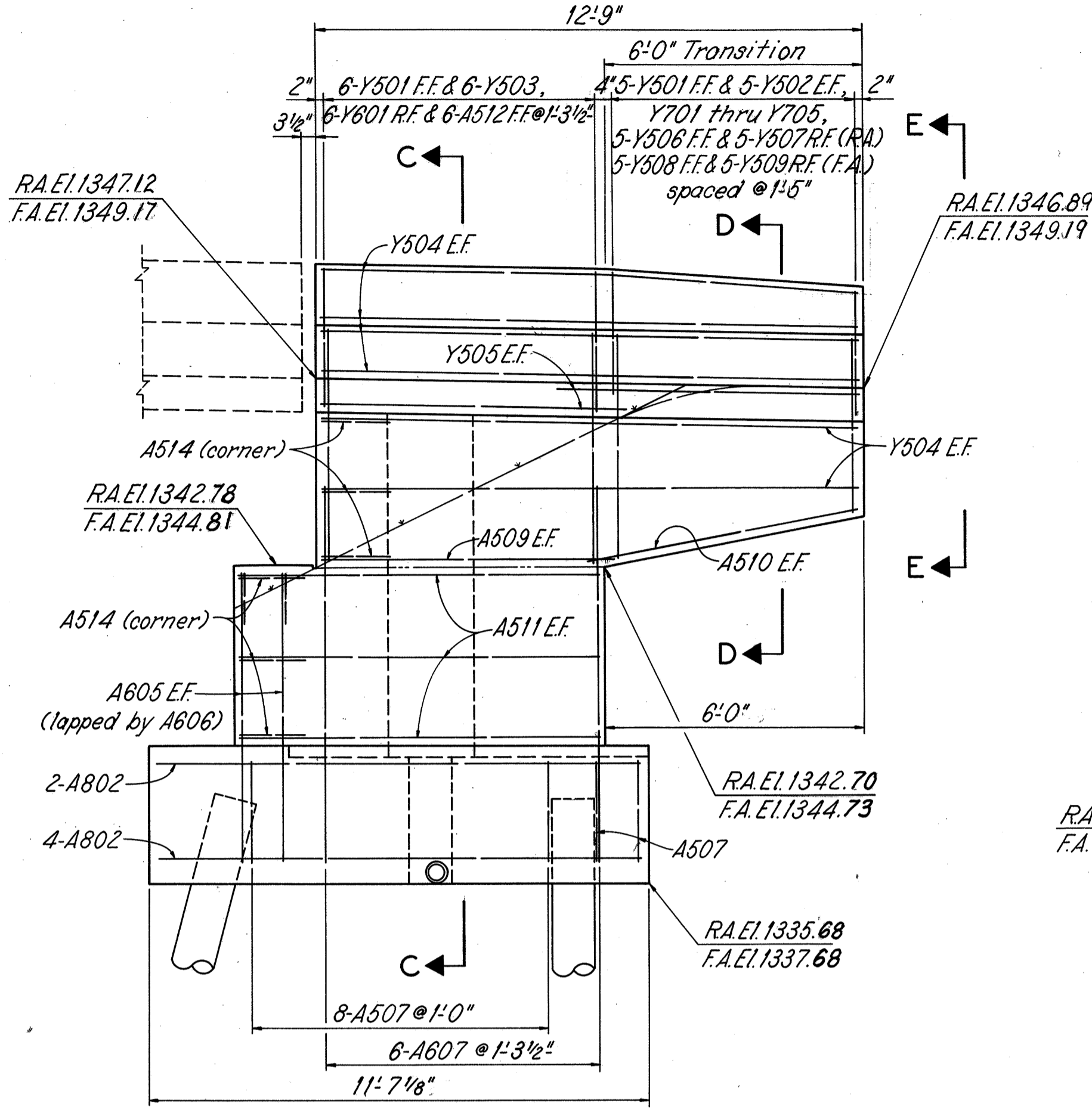
MICROFILMED
OCT 13 1982

FED. RD. DIVISION	STATE	PROJECT	484 C18
2	OHIO		

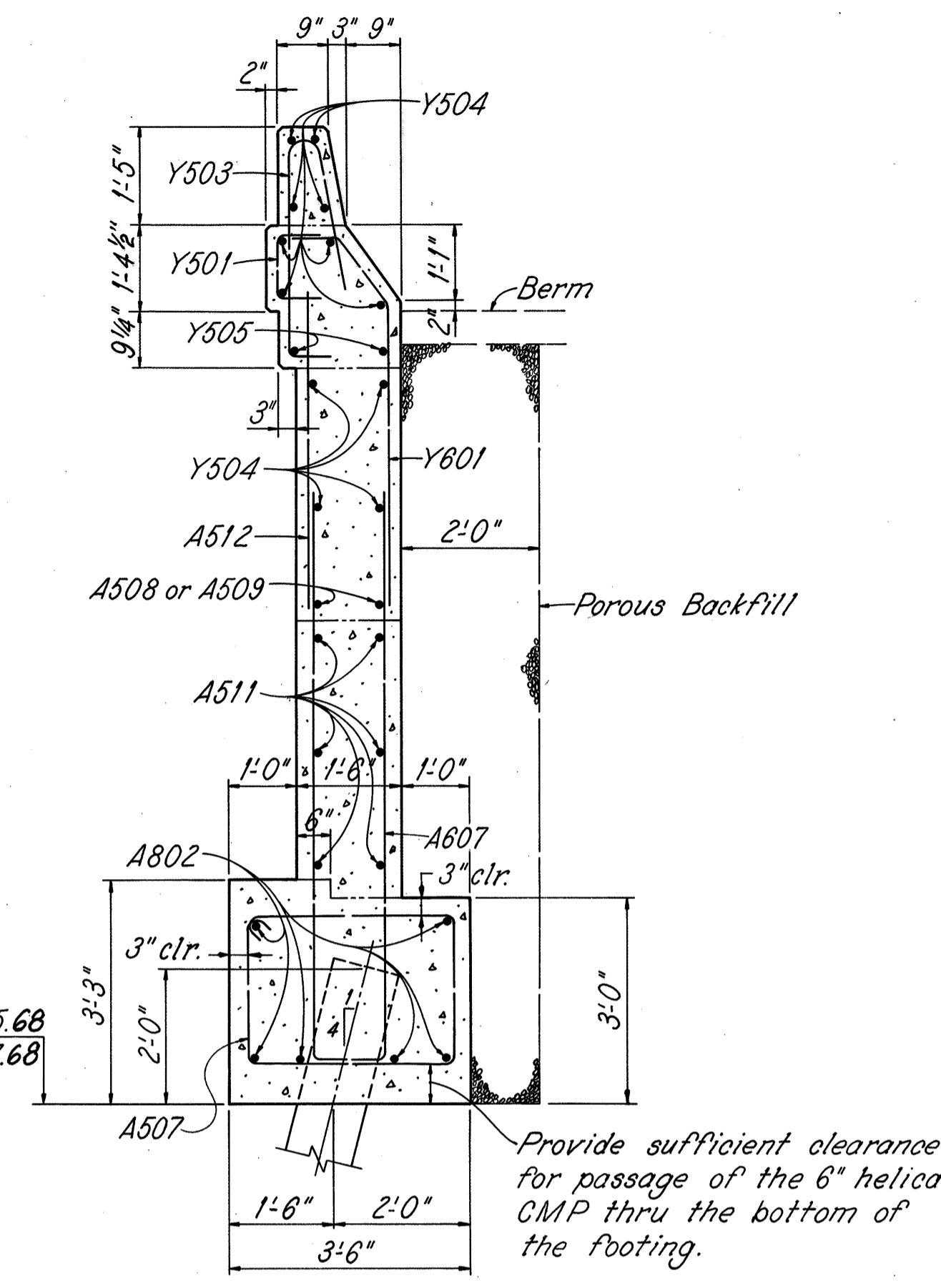
RIC-30-3.92
RIC. C.H. 135



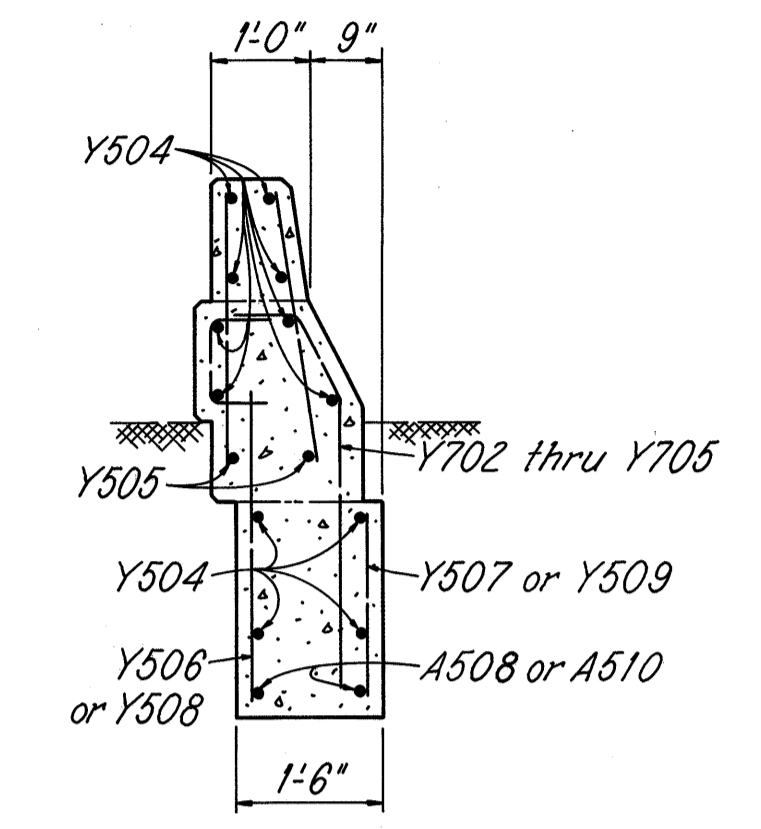
VIEW R-R



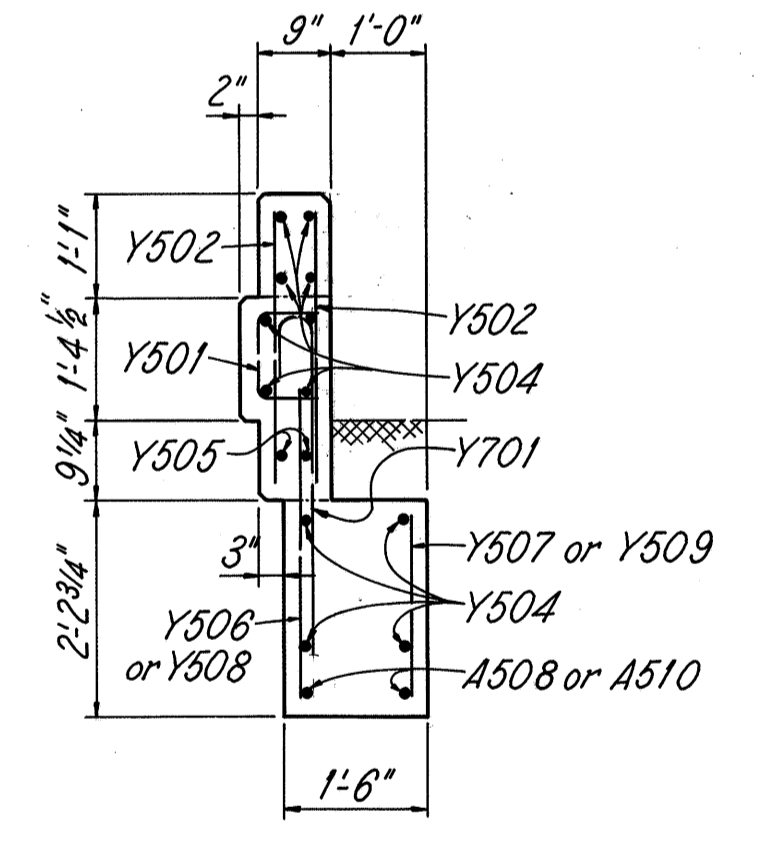
VIEW S-S



SECTION C-C



SECTION D-D



VIEW E-E

ABUTMENT NOTES: See Sheet 3 / 8

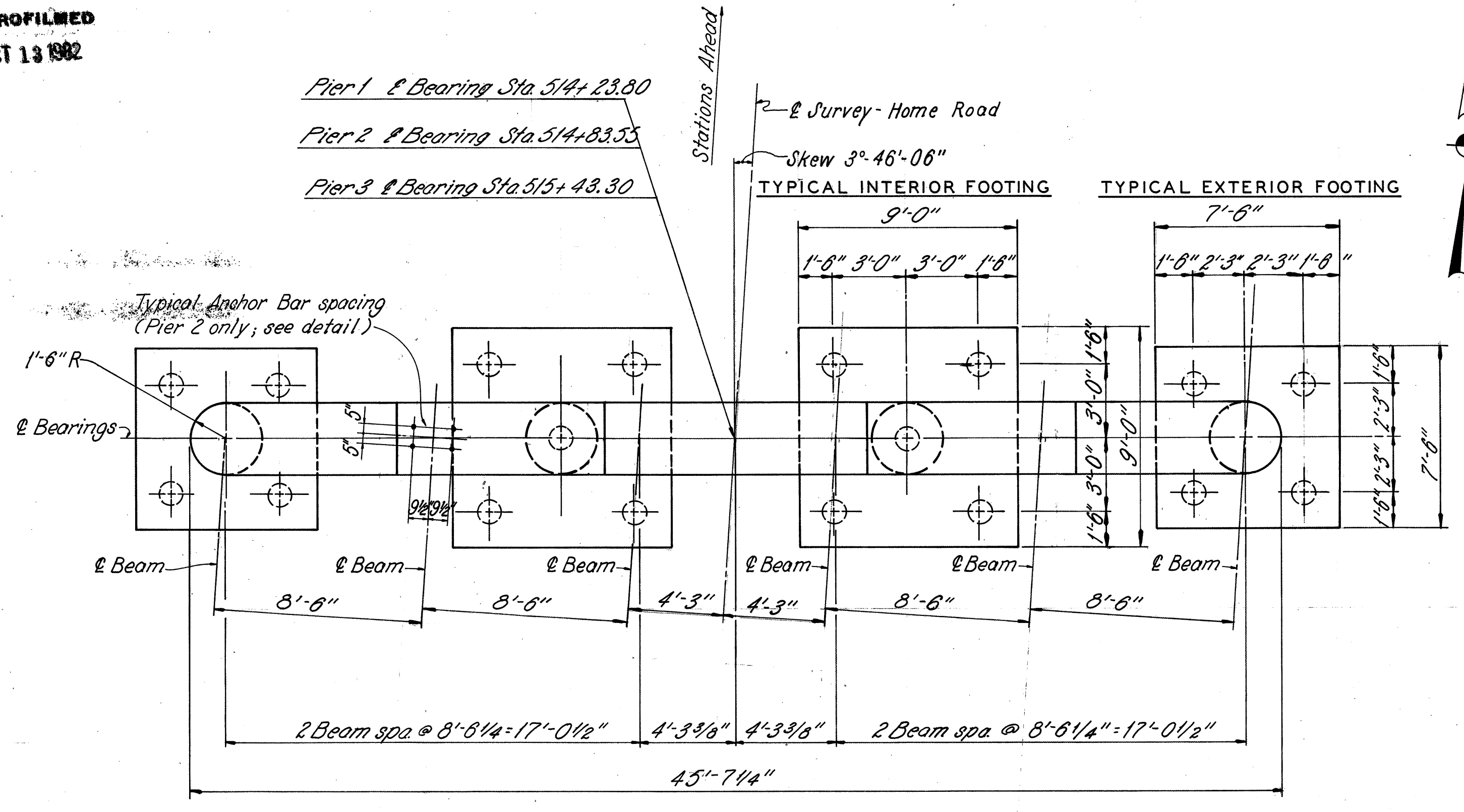
PARRETT & McCARTNEY CONSULTING ENGINEERS		4 / 8
MANSFIELD		OHIO
ABUTMENT DETAILS		
BRIDGE NO. RIC-309-0872		
UNDER HOME ROAD		
RICHLAND COUNTY		U.S.R. 30
STA. 154 + 88.90		
DESIGNED	DRAWN	TRACED
G.S.B.	R.A.R.	R.A.R.
CHECKED	REVIEWED	DATE
L.C.T.	D.H.T.	4/14/71

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OCT 13 1982

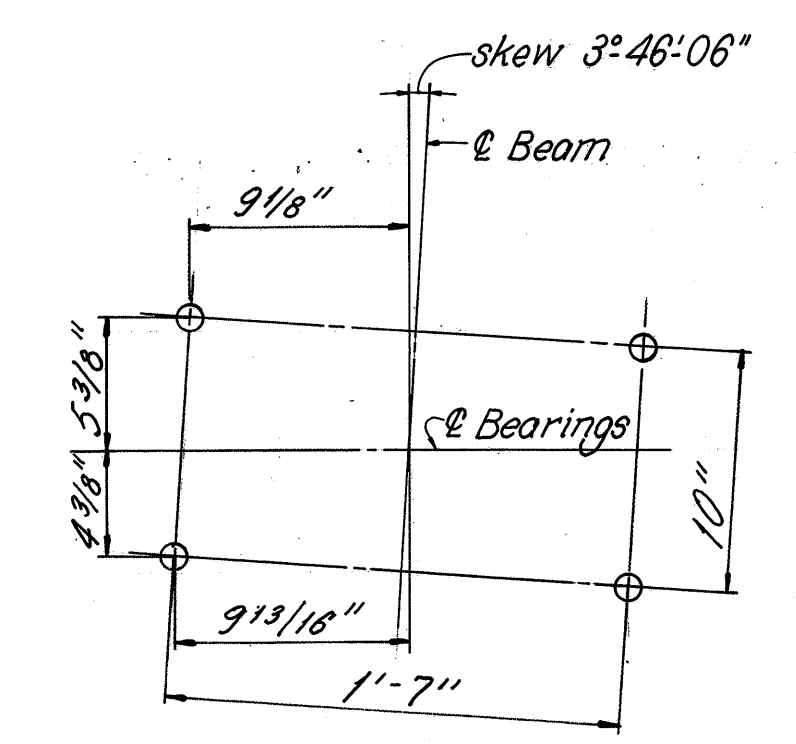
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

485
C18

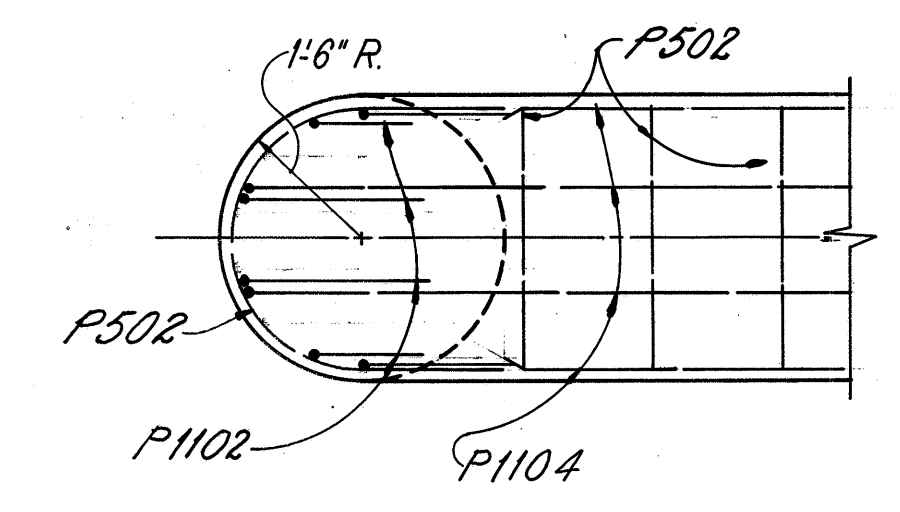
RIC-30-3.92
RIC. C.H. 135



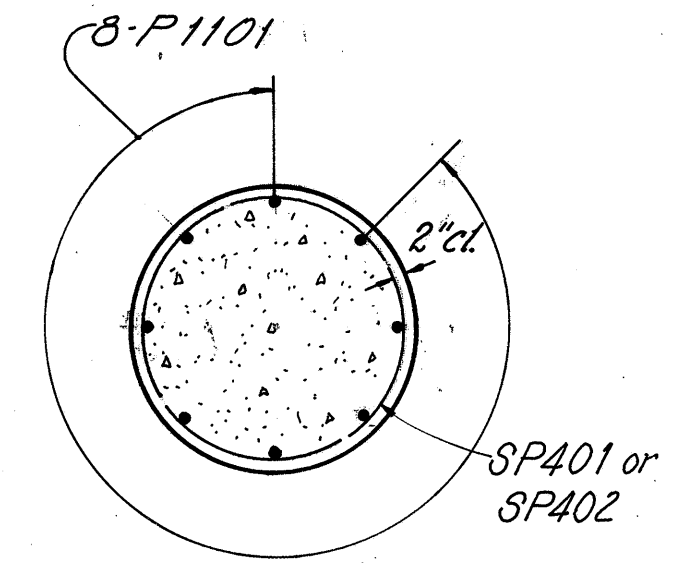
PLAN



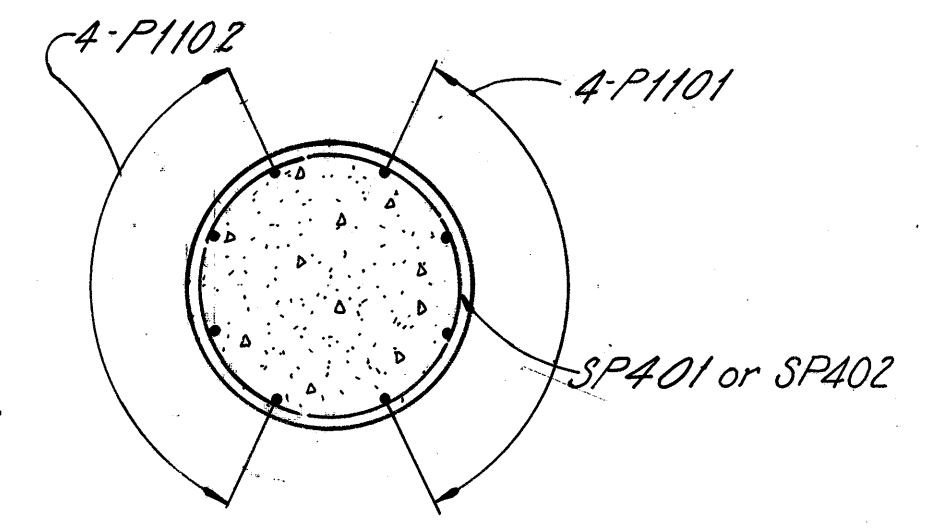
ANCHOR BOLT LAYOUT
SHOE B-175 PIER 2 ONLY



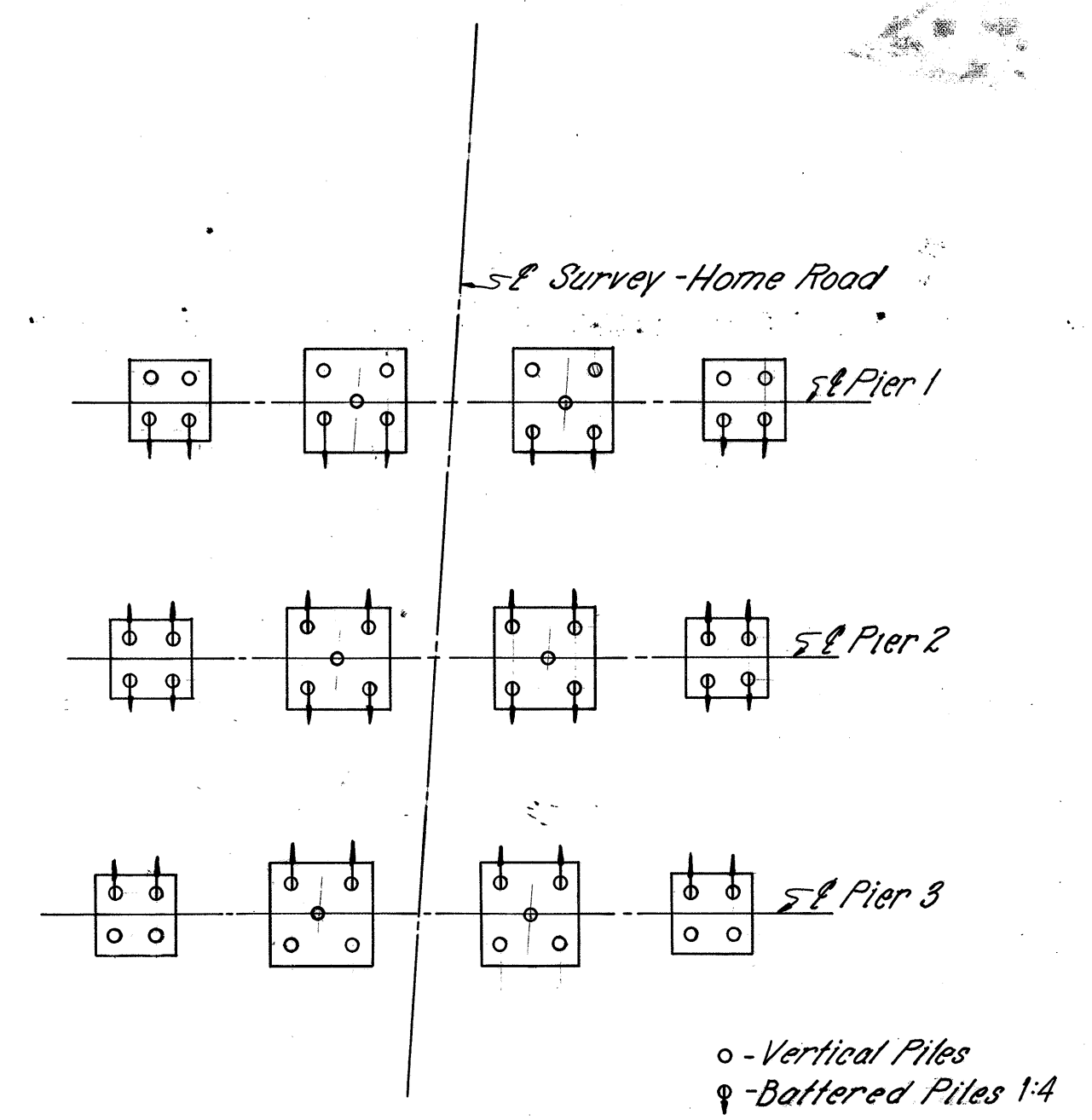
VIEW A-A



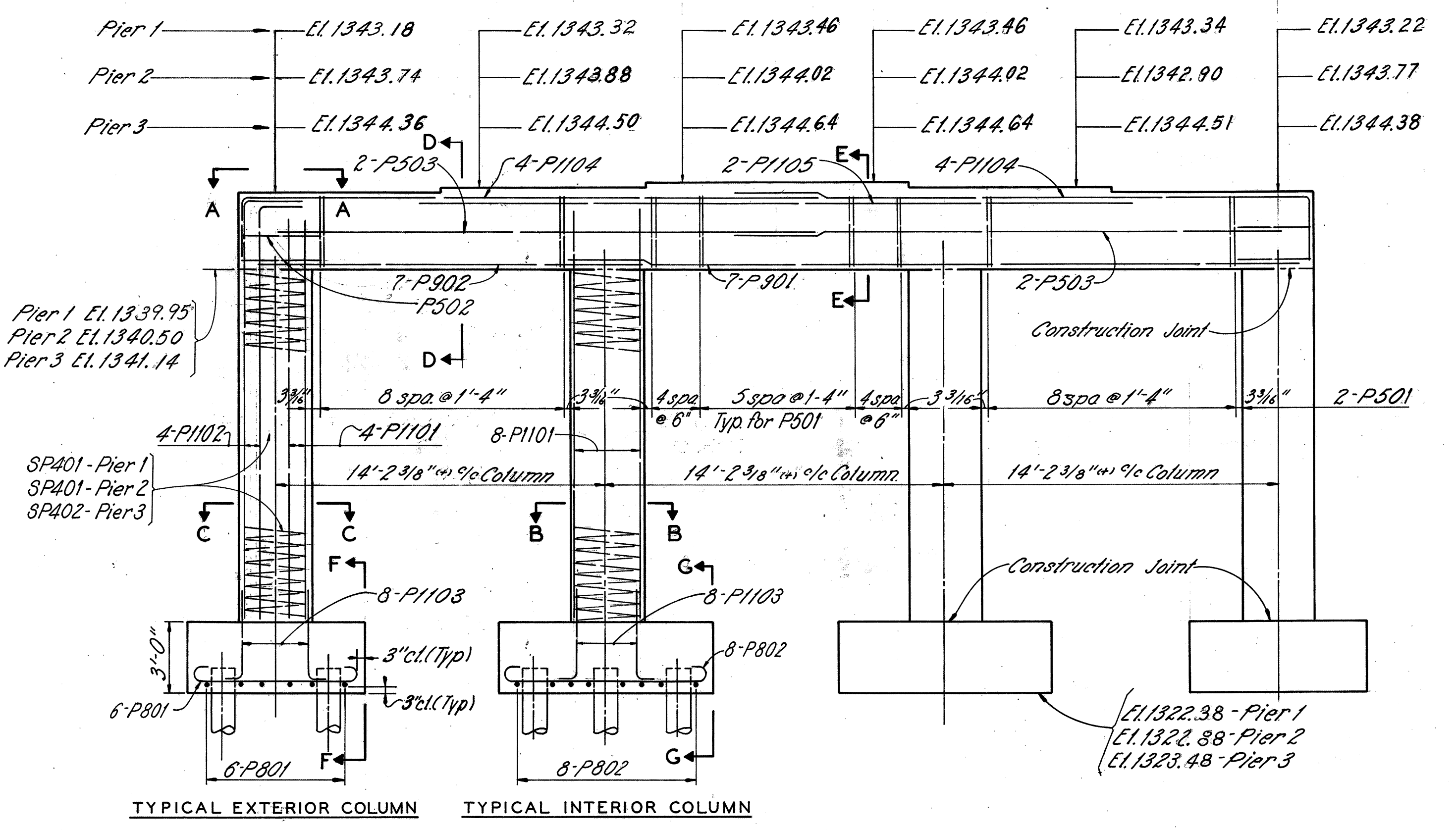
SECTION B-B



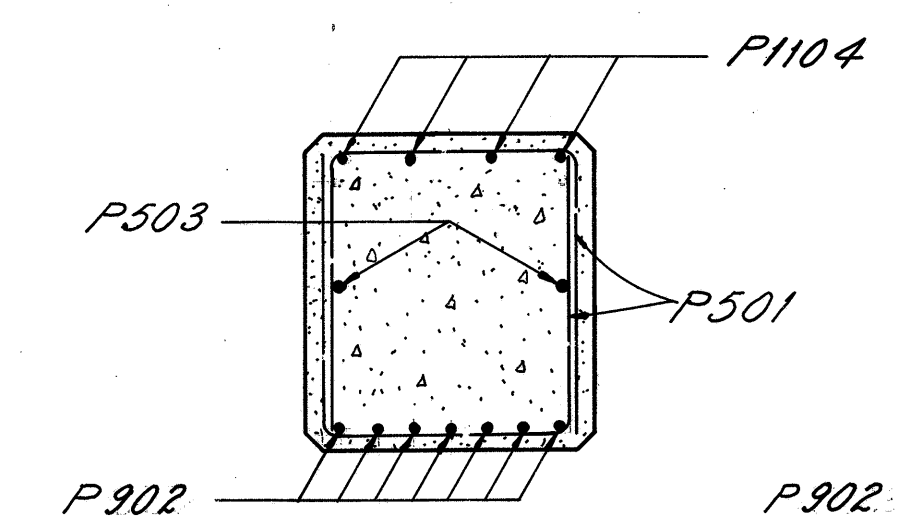
SECTION C-C



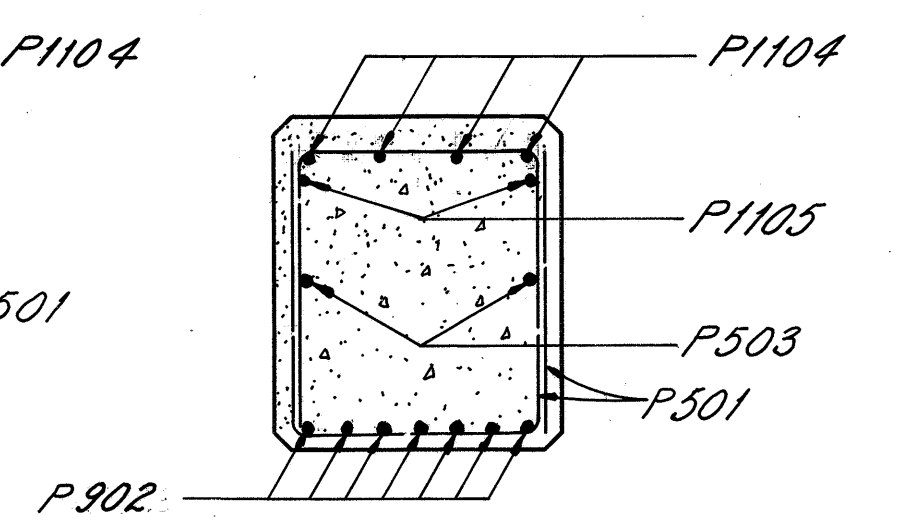
PILE PATTERN LAYOUT



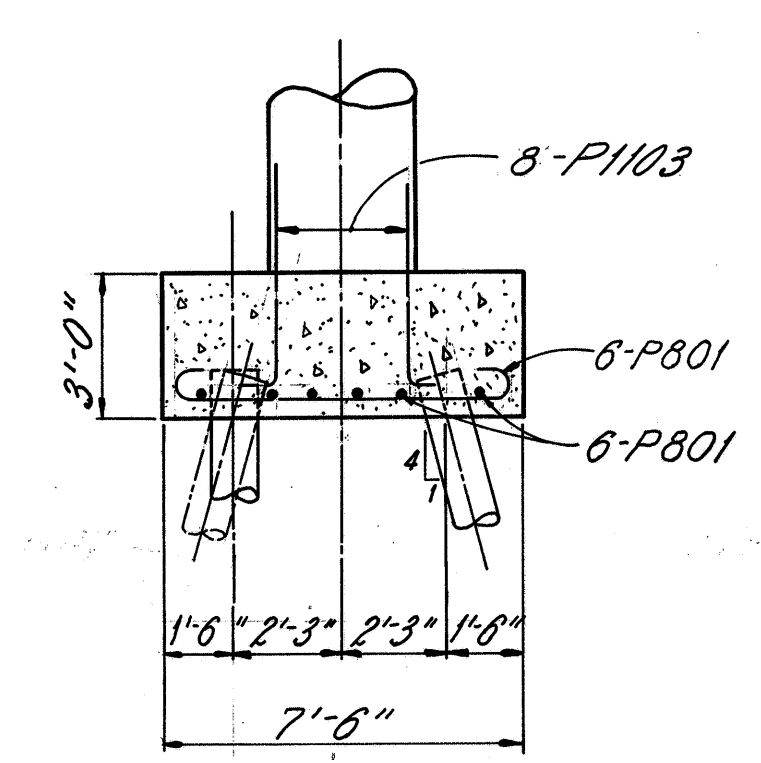
ELEVATION



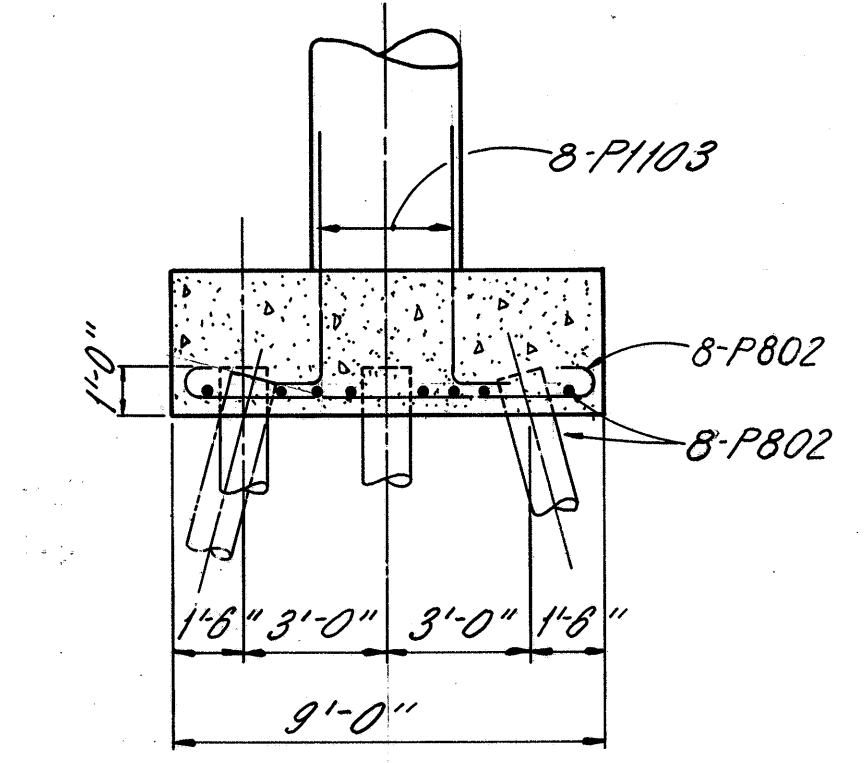
SECTION D-D



SECTION E-E



SECTION F-F



SECTION G-G

NOTES:
BRIDGE SEAT REINFORCING:
Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.

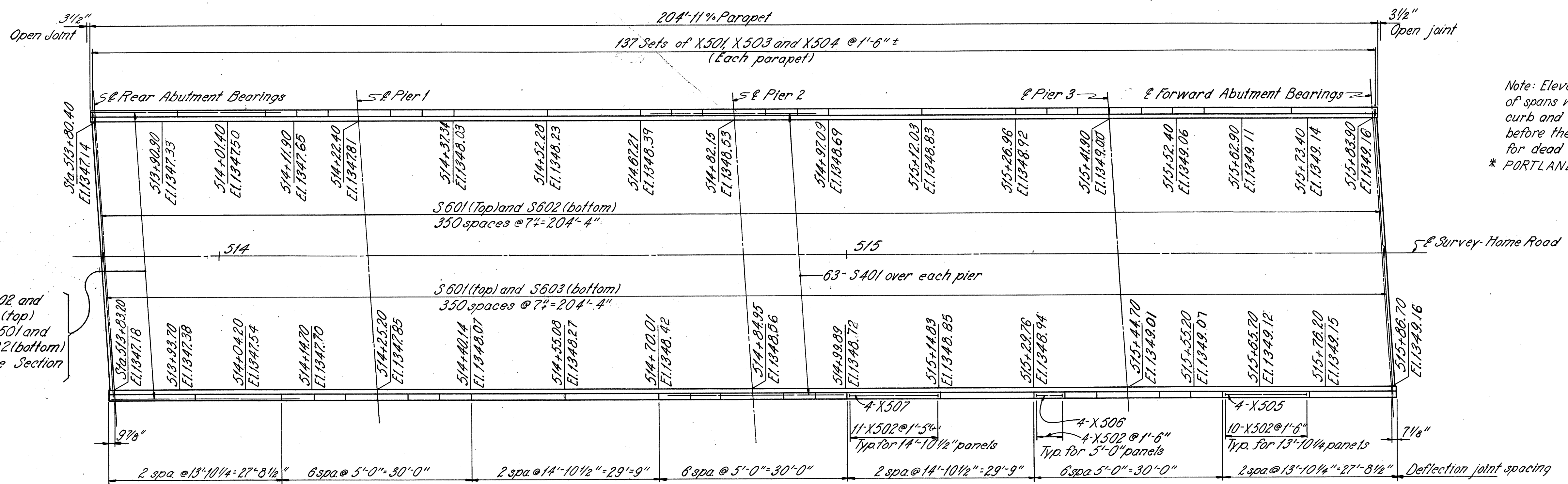
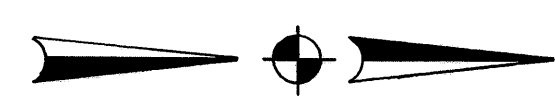
GENERAL NOTES: See sheet
2/8

BEARING ANCHORS: At the option of the Contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.

PARRETT & McCARTNEY		5/8	
CONSULTING ENGINEERS		OHIO	
PIERS			
BRIDGE NO. RIC-309-0872			
UNDER HOME ROAD			
RICHLAND COUNTY		U.S.R. 30	
STA. 154 + 88.90			
DESIGNED	DRAWN	TRACED	CHECKED
G.S.B.	M.A.Y.	M.A.Y.	LCT
REVIEWED	DATE	REVISED	
DHT	4/14/11		

MICROFILMED
OCT 14 1982

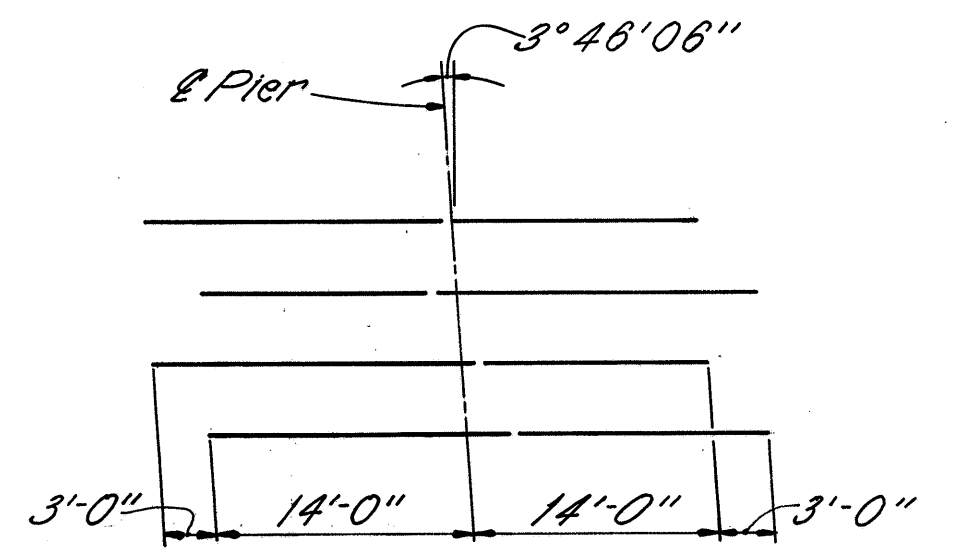
RIC-30-3.92
RIC. C.H. 135



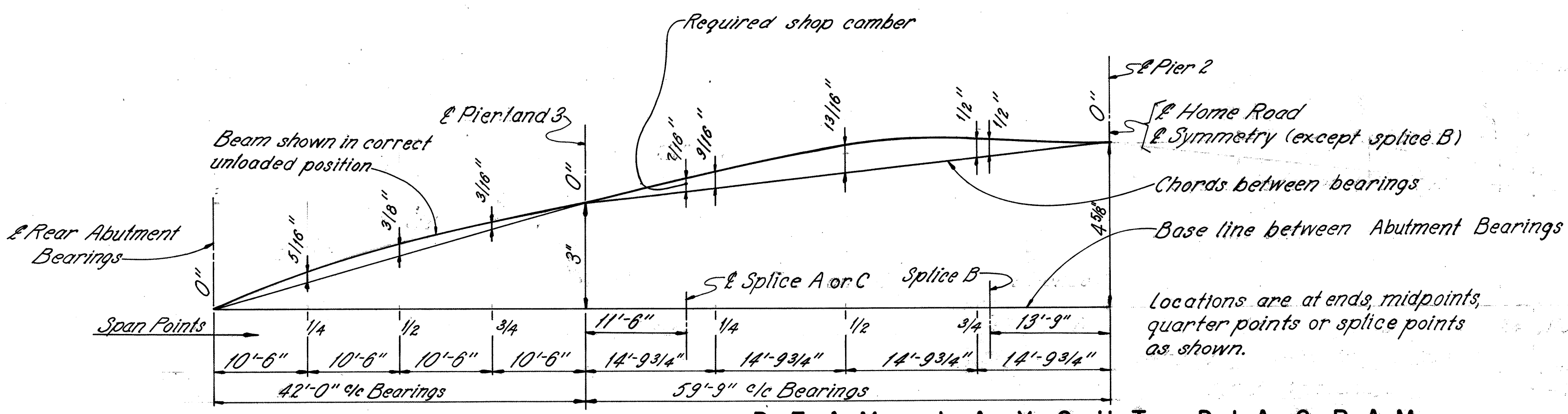
Note: Elevations shown are at quarter points of spans where top of deck meets face of curb and are those which are required before the deck concrete is placed to allow for dead load deflection.
* PORTLAND CEMENT CONCRETE

6 Sets of 58-S402 and 1 Set of 58-S403 (top)
6 Sets of 64-S501 and 1 Set of 64-S502 (bottom)
See Transverse Section for spacing.

SLAB PLAN



STAGGER OF S401 BARS OVER PIERS



BEAM LAYOUT DIAGRAM

Cambering of beams is required in accordance with the following table:

	SPAN 1 & 4			SPAN 2 & 3					
	SPAN POINTS	1/4	1/2	3/4	SPL A OR C	1/4	1/2	3/4	SPL B
Deflection due to weight of steel	0	0	0	0	0	1/16"	0	0	
Deflection due to remaining dead load	1/8"	3/16"	1/16"	3/16"	1/4"	3/8"	3/16"	3/16"	
Adjustment required for vertical curve	3/16"	3/16"	1/8"	1/4"	5/16"	3/8"	5/16"	5/16"	
Required shop camber	5/16"	3/8"	3/16"	7/16"	3/16"	13/16"	1/2"	1/2"	

Note: Deflection and Camber symmetrical about Pier 2 except bolted field splice "B"

SUPERSTRUCTURE NOTES: see sheet 6/8

PARRETT & McCARTNEY 7/8
CONSULTING ENGINEERS OHIO

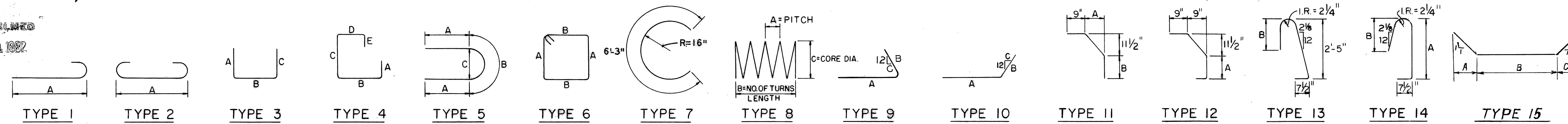
SUPERSTRUCTURE-2
BRIDGE NO. RIC-309-0872
UNDER HOME ROAD

RICHLAND COUNTY U.S.R. 30
STA. 154 + 88.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.S.B.	R.N.U.	P.L.O.Y.	L.C.T.	D.H.T.	4/14/71	

MICROFILMED
OCT 14 1982

RIC-30-3.92
RIC. C.H. 135



ABUTMENTS									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
Y501	44	2'-0"	3	7 1/2"	1'-0"	7 1/2"			92
Y502	40	2'-9"	Str.						115
Y503	24	6'-0"	14	3'-0"	2'-5"				150
Y504	48	12'-5"	Str.						622
Y505	16	7'-0"	Str.						117
Y506	10	Varies	Str.	3'-2" to 4'-3"				2 sets of 5 bars	39
Y507	10	Varies	Str.	1'-11" to 3'-0"				vary each by 3/4"	26
Y508	10	Varies	Str.	3'-2" to 4'-6"				2 sets of 5 bars	40
Y509	10	Varies	Str.	1'-10" to 3'-2"				vary each by 4"	26
Y601	24	6'-2"	11	9"	4'-4"				222
Y701	4	4'-4"	1	3'-6"					35
Y702	4	4'-9"	11	2 1/2"	3'-2"				39
Y703	4	4'-10"	11	4"	3'-2"				40
Y704	4	4'-11"	11	6"	3'-2"				40
Y705	4	5'-0"	11	9"	3'-2"				41
A501	60	8'-5"	3	1'-8"	5'-4"	1'-8"			527
A502	60	7'-5"	3	6'-8"	10"	0			464
A503	60	7'-0"	3	1'-11"	3'-5"	1'-11"			438
A504	60	23'-5"	Str.						1465
A505	4	28'-0"	Str.						117
A506	4	10'-3"	Str.						43
A507	40	10'-11"	6	2'-2"	3'-0"				455
A508	8	6'-4"	Str.						53
A509	4	6'-6"	Str.						27
A510	4	6'-0"	Str.						25
A511	24	8'-3"	Str.						207
A512	24	4'-4"	Str.						108
A513	12	3'-11"	9	2'-0"	2'-0"	3/4"			49
A514	12	3'-11"	10	2'-0"	2'-0"	3/4"			49
A601	60	14'-3"	3	6'-8"	5'-4"	2'-7"			1284
A602	128	9'-1"	3	4'-0"	1'-5"	4'-0"			1746
A603	48	6'-3"	3	2'-7"	1'-5"	2'-7"			451
A604	48	6'-11"	3	3'-2"	11"	3'-2"			499
A605	16	6'-4"	Str.						152
A606	8	4'-10"	3	2'-0"	1'-2"	2'-0"			58
A607	24	17'-10"	3	8'-6"	1'-2"	8'-6"			643
A608	24	6'-3"	Str.						225
A801	28	24'-10"	Str.						1857
A802	24	11'-1"	Str.						710
D801	32	5'-7"	15	1'-1"	3'-6"	6"			477
Total Weight									13,773

PIERS									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
SP401	8	14'-7"	8	4 1/2"	42	2'-8"			2221
SP402	4	14'-8"	8	4 1/2"	42	2'-8"			1116
P501	192	8'-3"	3	2'-11"	2'-8"	2'-11"			1652
P502	12	7'-6"	5	1'-8"	4'-2"	2'-8"			94
P503	12	22'-2"	Str.						277
P801	72	9'-2"	2	7'-0"					1762
P802	96	10'-8"	2	8'-6"					2734
P901	21	30'-0"	Str.						2142
P902	21	18'-1"	Str.						1291
P1101	72	17'-6"	Str.						6694
P1102	24	19'-2"	3	17'-6"	2'-0"	0			2444
P1103	96	7'-11"	3	6'-3"	2'-0"	0			4038
P1104	24	26'-9"	3	24'-4"	2'-9"	0			3411
P1105	6	30'-0"	Str.						956
Total Weight									30,832

SUPERSTRUCTURE									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
X501	274	2'-0"	3	7 1/2"	1'-0"	7 1/2"			572
X502	312	5'-4"	13	2'-5"	2'-2"	7 1/2"			1735
X503	274	2'-1"	3	1'-7"	7 1/2"	0			595
X504	274	3'-1"	12	9"					881
X505	32	13'-6"	Str.						451
X506	144	4'-8"	Str.						701
X507	32	14'-6"	Str.						484
S401	189	31'-0"	Str.						3914
S402	348	30'-0"	Str.						6974
S403	58	31'-10"	Str.						1233
S501	384	30'-0"	Str.						12015
S502	64	33'-10"	Str.						2258
S601	702	23'-11"	Str.						25218
S602	351	19'-9"	Str.						10412
S603	351	28'-0"	Str.						14762
Total Weight									82,205

NOTES:

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by the pitch, plus three turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformation but shall in other respects conform to Item 509. 1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channels, tee or angle spacers, weighing approximately 0.80 lbs. per lin. ft. of spacers, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lbs. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08

PARRETT & McCARTNEY		8 / 8	
CONSULTING ENGINEERS		OHIO	
REINFORCING STEEL			
BRIDGE NO. RIC-309-0872			
UNDER HOME ROAD			
RICHLAND COUNTY		U.S.R. 30	
STA. 154 + 88.90			
DESIGNED	DRAWN	TRACED	CHECKED
GSB	GRB	GRB	LCT
REVIEWED	DATE	REVISED	
DHT	4/14/71		