

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

FOR INDEX
SEE SHEET NO. 4

PLAN 1 INCH = 100 FT.
PROFILE, HOR. 1 INCH = 100 FT.
PROFILE, VERT. 1 INCH = 10 FT.
CROSS-SECTIONS AS SHOWN

F.A.I. ROUTE 474
SECTION 72-3HB-3
PROJECT I-474-7(47)91
PEORIA COUNTY

R.T.E. C-94-004-71

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-3	PEORIA	33	1
FED. ROAD DIV NO. 7	ILLINOIS	PROJECT I-474-7(47)		

P-94-017-00



LOCATION OF SECTION INDICATED THUS:

HIGHWAY CLASSIFICATION

CLOSEN ROAD
145-T-30 (1992)
MAXIMUM GRADE 1.00%

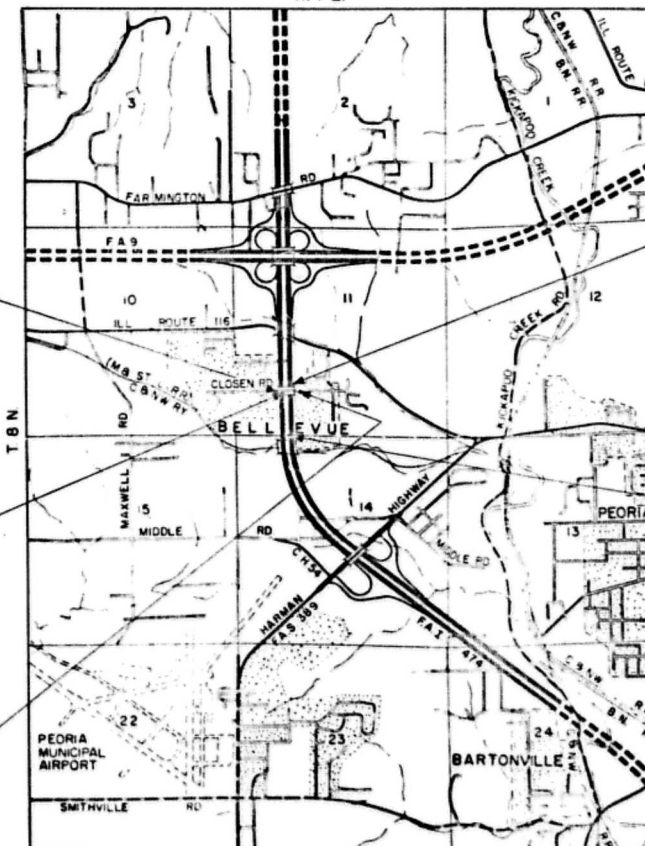
BEGIN IMPROVEMENT
STA. 18 + 24.00

F.A.I. ROUTE 474
SEC. 72-3HB-3
STA. 237 + 76.77 ± F.A.I. 474
• STA. 20+00.00 ± CLOSEN ROAD

DESIGN DESIGNATION

F.A.I. 474 3290(92) • TRUNK • 12.92 (PCC-20)
CLOSEN ROAD 1450(92) • CITY STREET • 0.09 (B-20)

END IMPROVEMENT
STA. 21 + 61.00



4 PM.
LAYOUT

SCALE = 1" = 2000'

PROPOSED IMPROVEMENT

INCLUDES A TWO SPAN CONTINUOUS WELDED PLATE GIRDER GRADE SEPARATION STRUCTURE (CARRYING CLOSEN ROAD OVER F.A.I. 474) ON AN R.C. PIER AND P.C.C. VAULTED ABUTMENTS. THE SPANS ARE 89'-0" AND 87'-0" AT STA. 237 + 76.77 ± F.A.I. 474. ALSO INCLUDED IS THE RECONSTRUCTION OF 0.015 MILES OF APPROACH ROADWAY OF CLOSEN ROAD ADJACENT TO THE PROPOSED STRUCTURE.

THIS SECTION ALSO INCLUDES THE CONSTRUCTION OF ALL APPURTENANT WORK AS SHOWN ON THE PLANS.

STATION EQUATION

STA. 248 + 99.73 (BK) • STA. 248 + 98.96 (AH)

APPROVED

FOR STRUCTURAL ADEQUACY ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

DESIGNED BY: *5-29-94*

CHECKED BY: *6-8-94*

APPROVED BY: *6-8-94*

DATE: *6-8-94*

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED BY: *C. S. Monnier*

DIVISION ENGINEER

DATE: *8/4/94*

PROJECT LENGTH = 0.000 FT (0.000 MILES)
NET LENGTH OF PROPOSED IMPROVEMENT
= 337.0 FEET = 0.064 MILES

CHRISTIAN-ROGE AND ASSOC., INC.

CONTRACT NO. 28634

JOB NUMBER

PEORIA COUNTY SECTION 72-3HB-3 F. A. ROUTE 474

STATE

STATE OF ILLINOIS

DEPARTMENT OF PUBLIC WORKS AND BUILDINGS

DIVISION OF HIGHWAYS

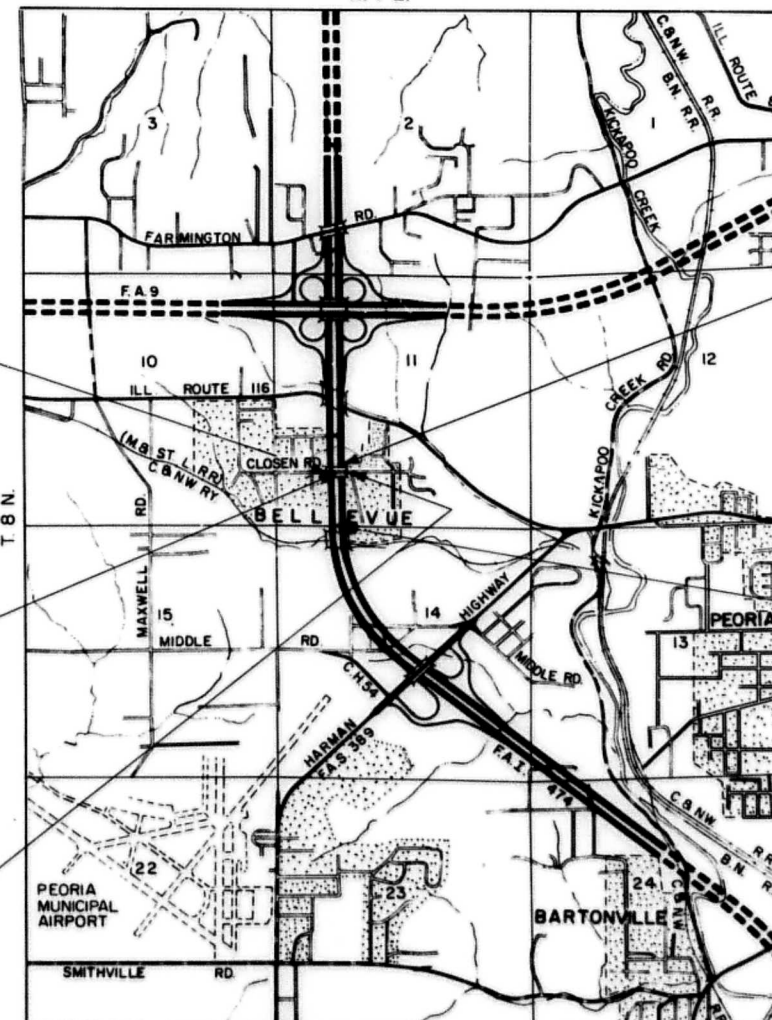
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FOR INDEX
SEE SHEET NO. 4

SCALES
PLAN 1 INCH = 100 FT.
PROFILE, HOR. 1 INCH = 100 FT.
PROFILE, VERT. 1 INCH = 10 FT.
CROSS-SECTIONS AS SHOWN

F.A.I. ROUTE 474
SECTION 72-3HB-3
PROJECT I-474-7(47)91
PEORIA COUNTY

R.7.E. C-94-004-71



4 P.M.
LAYOUT

SCALE = 1" = 2000'

HIGHWAY CLASSIFICATION

CLOSEN ROAD
145-T-30 (1992)
MAXIMUM GRADE 1.00%

BEGIN IMPROVEMENT
STA. 18 + 24.00

F.A.I. ROUTE 474
SEC. 72-3HB-3
STA. 237 + 76.77 & F.A.I. 474
= STA. 20+00.00 @ CLOSEN ROAD

DESIGN DESIGNATION

F.A.I. 474 3290 (92) • TRUNK • I2.92 (PCC-20)
CLOSEN ROAD 1450 (92) • CITY STREET • 0.09 (B-20)

END IMPROVEMENT
STA. 21 + 61.00

PROPOSED IMPROVEMENT

INCLUDES A TWO SPAN CONTINUOUS WELDED PLATE GIRDER GRADE SEPARATION STRUCTURE (CARRYING CLOSEN ROAD OVER F.A.I. 474) ON AN R.C. PIER AND P.C.C. VAULTED ABUTMENTS. THE SPANS ARE 89'-0" AND 87'-0" AT STA. 237 + 76.77 & F.A.I. 474. ALSO INCLUDED IS THE RECONSTRUCTION OF 0.015 MILES OF APPROACH ROADWAY OF CLOSEN ROAD ADJACENT TO THE PROPOSED STRUCTURE.

THIS SECTION ALSO INCLUDES THE CONSTRUCTION OF ALL APPURTENANT WORK AS SHOWN ON THE PLANS.

STATION EQUATION

STA. 248 + 99.73 (BK) = STA. 248 + 98.96 (AH)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-3	PEORIA	33	1
FED. ROAD DIV NO. 7	ILLINOIS	PROJECT I-474-7(47)		

P-94-017-00



LOCATION OF SECTION INDICATED THUS: [shaded area]

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Carl E. Thuman
Engineer of Bridge & Traffic Structures

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED 5-29-91
EXAMINED 6-8-91
PASSED 6-8-91
APPROVED 6-8-91
APPROVED 6-8-91

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED []
DIVISION ENGINEER [] DATE []

PROJECT LENGTH = 000 FT. (0.000 MILES)
NET LENGTH OF PROPOSED IMPROVEMENT
= 337.0 FEET = 0.064 MILES

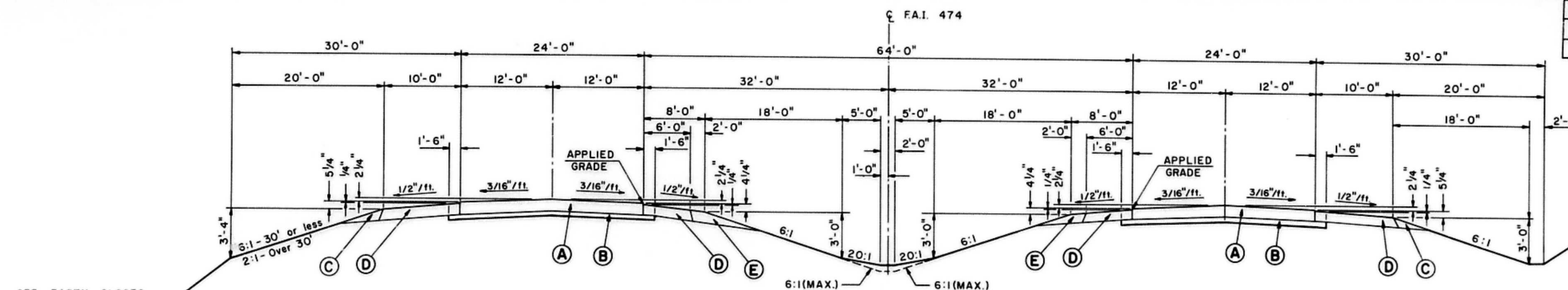
CHRISTIAN-ROGE AND ASSOC., INC.

CONTRACT NO. 28634

JOB NUMBER

PEORIA COUNTY SECTION 72-3HB-3 F. A. ROUTE 474

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-3	PEORIA	33	2
FED ROAD DIV. NO. 7		ILLINOIS	PROJECT	

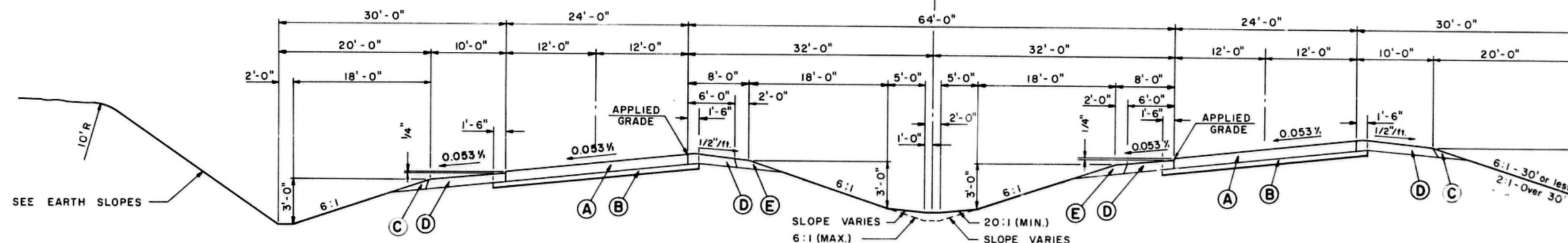


F.A.I. ROUTE 474 TANGENT SECTION - 64' MEDIAN

STA. 173 + 00 TO STA. 248 + 99.73
STA. 282 + 85.94 TO STA. 348 + 55.79 W.B.
STA. 350 + 43.13 E.B.

F.A.I. ROUTE 9 TANGENT SECTION - 64' MEDIAN

STA. 112 + 73.76 TO STA. 160 + 90.18
F.A.I. 474



F.A.I. ROUTE 474 SUPERELEVATED SECTION - 64' MEDIAN

ROTATED AROUND MEDIAN EDGE OF PAVEMENT

STA. 248 + 98.96 TO STA. 282 + 85.94

SUBMITTED May 21, 1971
EXAMINED May 20, 1971
EXAMINED May 21, 1971
EXAMINED 5/19/71
Entire section inspected and approved as to policy.
DATE 5-24-71

PAVEMENT DESIGN
F.A.I. RTE. 474 SECTION 72-3
STA. 173 + 00 TO STA. 223 + 71.15
Class I
Design Year 1982
P.C. = 16,226 U_p = 32%
S.U. = 2,562 U_s = 45%
M.U. = 2,562 U_m = 45%
C.B.R. = 3.0
T.F. = 10.77

STA. 223 + 71.15 TO STA. 348 + 55.79 W.B.
350 + 43.13 E.B.
Class I
Design Year 1982
P.C. = 19,456 U_p = 32%
S.U. = 3,072 U_s = 45%
M.U. = 3,072 U_m = 45%
C.B.R. = 3.0
T.F. = 12.92

PAVEMENT DESIGN
F.A.I. RTE. 9 SECTION 12K
Class I
Design Year 1982
P.C. = 11,832 U_p = 32%
S.U. = 1,360 U_s = 45%
M.U. = 408 U_m = 45%
C.B.R. = 3.0
T.F. = 2.10

- * 8" CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT - STA. 173 + 00 TO STA. 223 + 71.15 F.A.I. 474
- * 9" CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT - STA. 112 + 73.76 TO STA. 160 + 90.18 F.A.I. 9
- * 223 + 71.15 TO STA. 348 + 55.79 W.B. F.A.I. 474
- * 350 + 43.13 E.B.
- (B) 4" STABILIZED SUB-BASE (BAM)
- (C) EARTH
- (D) 8" STABILIZED SHOULDERS (BAM)
- (E) AGGREGATE SHOULDER TYPE A

SEE STANDARD 2237
FOR SHOULDER DETAILS.

EARTH SLOPES

CUT	FILL
10' OR LESS - 4:1	10' OR LESS - 6:1
10' TO 20' - 3:1	10' TO 30' - 4:1
OVER 20' - 2:1	OVER 30' - 2:1

* SEE STANDARDS 2224 & 2225
FOR CONSTRUCTION DETAILS.

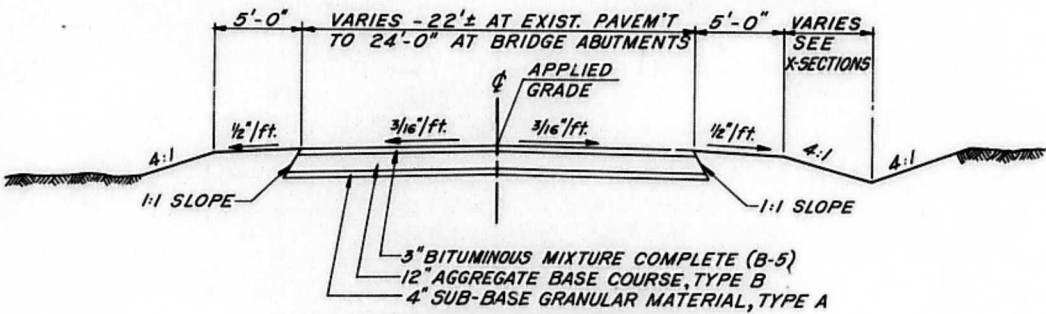
THE NOMINAL THICKNESS FOR SUB-BASE GRANULAR MATERIAL, BASE AND SURFACE COURSES ARE SHOWN ON THE TYPICAL SECTIONS, STANDARDS, SCHEDULES OR SPECIAL DETAILS. THE CONSTRUCTED THICKNESS OF THE ABOVE ITEMS SHALL NOT BE LESS THAN 90 PER CENT OF THE NOMINAL THICKNESS AT ANY LOCATION.

THE THICKNESS OF BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

FOR INFORMATION ONLY

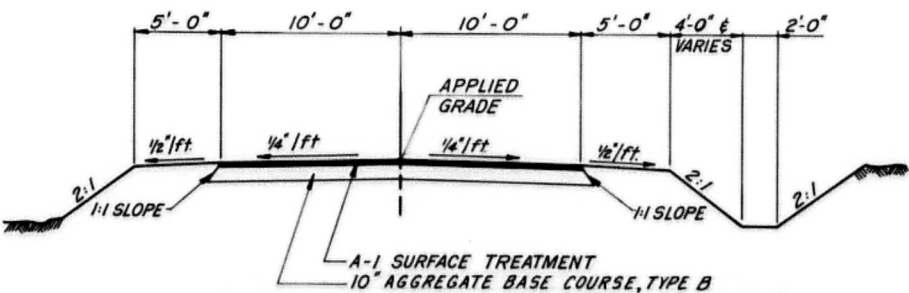
F.A.I. ROUTE 474
SECTION 72 - 3
TYPICAL CROSS SECTIONS
NOT TO SCALE

FEDERAL-AID ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
F.A.I. 474	72-3HB-3	PEORIA	33	3
FED. ROAD DIV. No. 4 ILLINOIS PROJECT				



CLOSED ROAD - TYPICAL SECTION

STA. 18+24.00 TO STA. 18+68.71
STA. 21+27.54 TO STA. 21+61.00



DETOUR ROAD - TYPICAL SECTION

STA. 0+09.00 TO STA. 5+49.21

THE NOMINAL THICKNESS FOR SUB-BASE GRANULAR MATERIAL, BASE AND SURFACE COURSES ARE SHOWN ON THE TYPICAL SECTIONS, STANDARDS, SCHEDULES OR SPECIAL DETAILS. THE CONSTRUCTED THICKNESS OF THE ABOVE ITEMS SHALL NOT BE LESS THAN 90 PER CENT OF THE NOMINAL THICKNESS AT ANY LOCATION.

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F.A.I. ROUTE 474
SECTION 72-3HB-3

TYPICAL CROSS SECTIONS

NOT TO SCALE

SUMMARY OF QUANTITIES

SECTION		72-3HB-3	
		BRIDGE	ROAD
LOCATION STATION		STA.20+00	STA.18+24 TO STA.21+61
CONSTRUCTION TYPE CODE		X 7 7 1	4 2 5 1
CODE NO.	ITEM	UNIT	TOTAL QUANTITY
201001	TREE REMOVAL (6 TO 15 INCH DIAMETER)	IN DIA	315
201002	TREE REMOVAL (OVER 15 INCH DIAMETER)	IN DIA	474
202001	EARTH EXCAVATION	CU YD	53,796
210001	TRENCH BACKFILL	CU YD	58
213003	SUB-BASE---GRANULAR MATERIAL, TYPE A	SG YD	224
X21602	TOP SOIL PLACEMENT	SG YD	1314
301004	AGGREGATE BASE COURSE, TYPE B	TON	856
403003	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	300
403006	SEAL COAT AGGREGATE	TON	12
405003	BITUMINOUS MIXTURE COMPLETE	TON	34
502001	CLASS A EXCAVATION FOR STRUCTURES	CU YD	426
503004	PROTECTIVE COAT	SG YD	1,349
504003	CLASS X CONCRETE	CU YD	835.9
505008	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 36 IN.	LIN FT	320
507030	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
507025	STUD SHEAR CONNECTORS	EACH	1,800
511A01	PIPE CULVERTS, TYPE 1, 12" (TEMPORARY)	LIN FT	36
511D02	PIPE CULVERTS, TYPE 1 CSCP 18"	LIN FT	78
512001	REINFORCEMENT BARS	POUND	128,730
513013	FURNISHING STEEL PILES 10BP42	LIN FT	773
513026	DRIVING STEEL PILES	LIN FT	773
513033	TEST PILE STEEL 10BP42	EACH	2
514001	NAME PLATES	EACH	1
609004*	WATER MAIN 8"	LIN FT	440
609028*	WATER VALVES 8"	EACH	2
612150	INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID	EACH	1
612186	VALVE VAULTS, TYPE A, 4' DIAMETER TYPE 1 FRAME, CLOSED LID	EACH	2
628001	STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	LIN FT	50
X62801	TERMINAL SECTION, SINGLE RAIL	EACH	4
629003	CHAIN LINK FENCE, 6'	LIN FT	1,056
630029	BARBED WIRE FENCE, TWO STRAND	LIN FT	228
635007	STOCK-PILING SALVAGE AGGREGATE	CU YD	296
639001	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	7
642001	SEEDING, CLASS I	ACRE	1.5
642003	SEEDING, CLASS III	ACRE	0.3
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1
210037	BUILDING REMOVAL NO. 1	L SUM	1
210038	BUILDING REMOVAL NO. 2	L SUM	1
210039	BUILDING REMOVAL NO. 3	L SUM	1
210040	BUILDING REMOVAL NO. 4	L SUM	1
210041	BUILDING REMOVAL NO. 5	L SUM	1
210042	BUILDING REMOVAL NO. 6	L SUM	1
210043	BUILDING REMOVAL NO. 7	L SUM	1
210044	BUILDING REMOVAL NO. 8	L SUM	1
XZ1100	TRAINEES	HOUR	2,000 **
210294	PREFORMED JOINT SEALER	LIN FT	88
210435*	STEEL CASINGS 16"	LIN FT	160
XZ1016	TRAFFIC CONTROL AND PROTECTION, STD 2310	EACH	1
508006	ALTERNATE A ALUMINUM RAILING, TYPE L	LIN FT	510
508007	ALTERNATE B STEEL RAILING, TYPE M	LIN FT	510
*	SPECIALTY ITEMS		
**	CONSTRUCTION TYPE CODE YEAR		

SEEDING CLASS I AND CLASS III

NITROGEN FERTILIZER NUTRIENT	120#/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	72#/ACRE
POTASSIUM FERTILIZER NUTRIENT	48#/ACRE
AGRICULTURE GROUND LIMESTONE	2 TON/ACRE
ASPHALT COATED MULCH	2 TON/ACRE
EMULSIFIED ASPHALT	100 GAL./TON MULCH

SALVAGE AGGREGATE FROM DETOUR ROAD

STATION 0+09 TO STATION 5+49.21
711.0 X 50% + 1.2 Cu.Yd. = 296.2 Cu.Yd.

STOCKPILING SALVAGE AGGREGATE AT STATION 236+01.77 - F.A.I. 474 - 296.2 Cu.Yd.

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	TYPICAL CROSS SECTIONS - F.A.I. 474 SECTION 72-3
3	TYPICAL CROSS SECTIONS - F.A.I. 474 SECTION 72-3HB-3
4	INDEX OF SHEETS, SUMMARY OF QUANTITIES GENERAL NOTES
5	PLAN AND PROFILE CLOSED ROAD, CONCRETE BLOCK DETAIL STATION 15+00 TO STATION 25+00
6	PLAN AND PROFILE F.A.I. 474 STATION 220+00 TO STATION 250+00
7-24	BRIDGE PLANS
24A	TOPSOIL PLACEMENT DETAIL
25	CROSS SECTIONS, DETOUR - CLOSED ROAD
26-28	CROSS SECTIONS, CLOSED ROAD
29-33	CROSS SECTIONS, F.A.I. 474 STANDARD 1683-2, 2213-2, 1526-4 STANDARD 1686-3, 1744-2 STANDARD 2113-1, 2153-8 STANDARD 2168-5 STANDARD 2230-7 STANDARD 2231-3 STANDARD 2298-2, 2299-1 STANDARD 2300, 2310-1

GENERAL NOTES

ALL ELEVATIONS REFER TO U.S.C. & G.S. MEAN SEA LEVEL DATUM.

THE PROFILE GRADE LINE REFERS TO THE GRADE ELEVATION AT THE POINT SHOWN ON THE TYPICAL SECTION AND PLANS.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE STANDARDS WITH THE REVISION NUMBERS LISTED IN THE INDEX OF SHEETS, SHALL APPLY TO THIS SECTION.

TWO SIGNS CONFORMING TO STANDARD 2153 SHALL BE ERECTED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITHIN THE LIMITS OF CONSTRUCTION:

CENTRAL ILLINOIS LIGHT COMPANY
300 LIBERTY
PEORIA, ILLINOIS (Electric, Gas)

ILLINOIS BELL TELEPHONE COMPANY
411 HAMILTON BOULEVARD
PEORIA, ILLINOIS

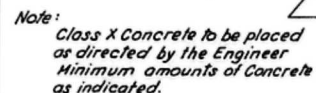
VILLAGE OF BELLEVUE WATER WORKS
211 EAST CLOVEN ROAD
BELLEVUE, ILLINOIS

GREATER PEORIA SANITARY DISTRICT
2322 SOUTH DARST STREET
PEORIA, ILLINOIS

QUANTITIES NOT OTHERWISE SHOWN

LOCATION	LENGTH (FT.)	WIDTH (FT.)	AREA (SQ.YD.)	BIT. MTL'S. COVER & SEAL COAT (GALLON) 0.25 GAL./SQ.YD.	SEAL COAT AGGREGATE (TONS) 0.01 TON/SQ.YD.	BIT. MIXTURE COMPLETE (TONS) 112# IN./SQ.YD.	AGG.BASE CSE. TYPE B (12") (TONS) 2.05 TONS/CU.YD.	AGG.BASE CSE. TYPE B (10") (TONS) 2.05 TONS/CU.YD.	SUB.BASE GRAN. MTL'S TYPE A (4") SQ.YD.
CLOSEN ROAD Sta.18+24 to Sta.18+68.71	44.71	24' & Var.	114			20.0	83.0		128.3
BRIDGE OMISSION Sta.18+68.71 to Sta.21+27.54	258.83								
Sta.21+27.54 to Sta.31+61.0	33.46	24' & Var.	86			14.5	62.3		96.0
DETOUR ROAD Sta. 0+09 to Sta. 5+49.21	540.21	20'	1200	300	12		711.0		
TOTALS				300	12	34.5	145.3	711.0	224.3

F.A.I. ROUTE 474
CLOSEN ROAD
SECTION 72-3HB-3
INDEX OF SHEETS
SUMMARY OF QUANTITIES
GENERAL NOTES

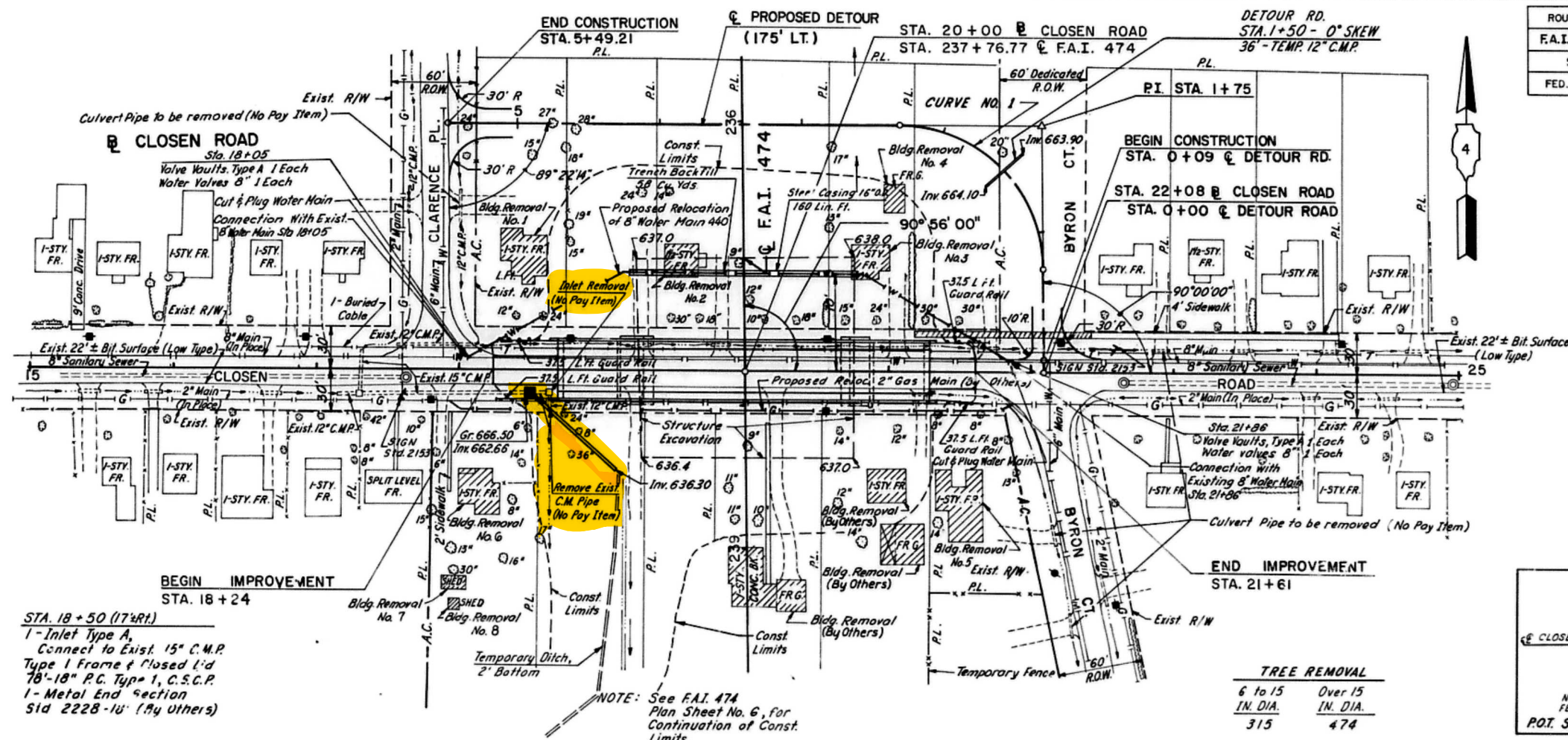


STEEL PLATE BEAM GUARD RAIL, S.R.

<u>Sta. 18+50.93</u>	to	<u>Sta. 18+63.43</u>	<u>12.5 Lin. Ft.-Lt.</u>
<u>Sta. 18+51.52</u>	to	<u>Sta. 18+64.02</u>	<u>12.5 Lin. Ft. - Rt.</u>
<u>Sta. 21+32.23</u>	to	<u>Sta. 21+44.73</u>	<u>12.5 Lin. Ft.-Lt.</u>
<u>Sta. 21+32.85</u>	to	<u>Sta. 21+45.35</u>	<u>12.5 Lin. Ft. - Rt.</u>
TOTAL -			50 Lin. Ft.

TERMINAL SECTION, S. R.

Sta. 18 + 25.93	to	Sta. 18 + 50.93	1 Each - Lt.
Sta. 18 + 26.52	to	Sta. 18 + 51.52	1 Each - Rt.
Sta. 21 + 44.73	to	Sta. 21 + 69.73	1 Each - Lt.
Sta. 21 + 45.35	to	Sta. 21 + 70.35	1 Each - Rt.
TOTAL -			4 Each

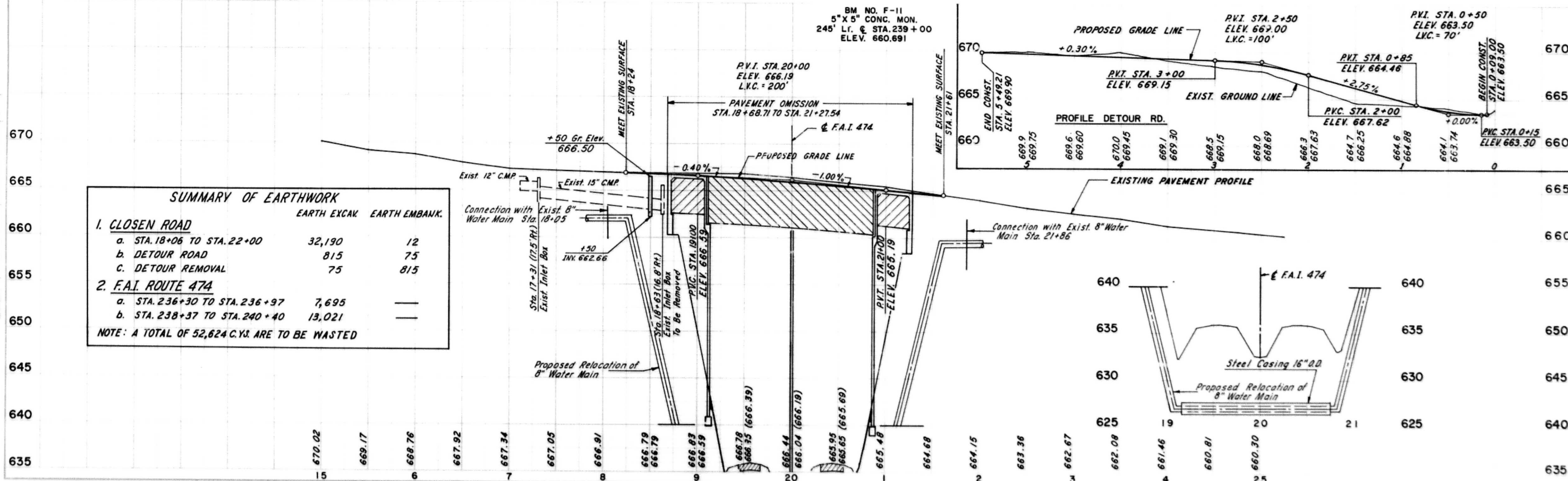
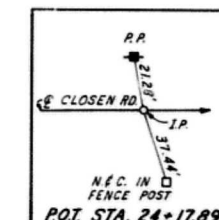


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-3	PEORIA	33	5
STA. 15 + 00		TO STA. 25 + 00		
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	

DETOUR RD.
CURVE NO. 1

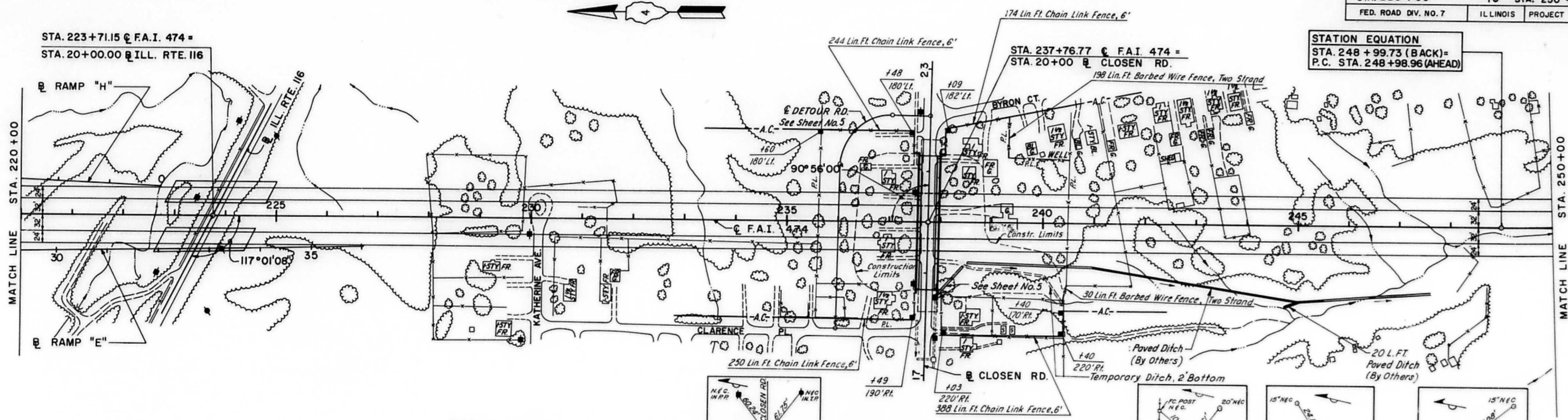
$PI. = STA. 1+75.00$
 $\Delta = 90^{\circ}00'00''$
 $D = 57^{\circ}17'45''$
 $R = 100.00'$
 $T = 100.00'$
 $L = 157.08'$
 $E = 41.42'$
 $PC. = STA. 0+75.00$
 $PT. = STA. 2+32.08$

TREE REMOVAL	
6 to 15 IN. D.I.A.	Over 15 IN. D.I.A.
315	474



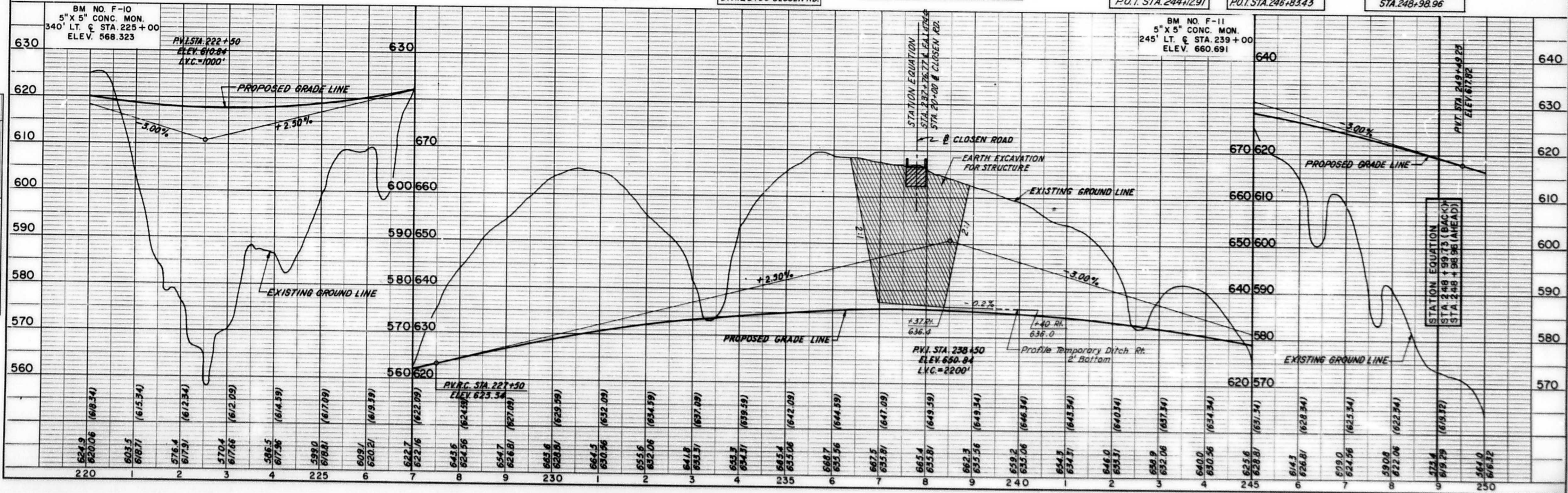
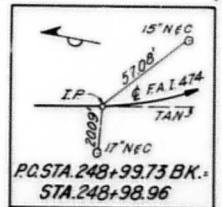
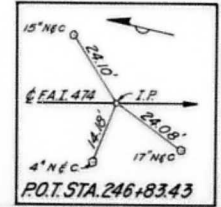
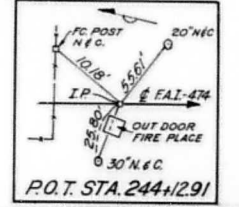
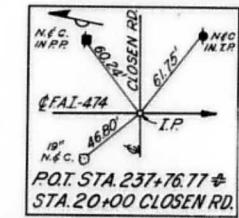
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-3	PEORIA	33	6
STA. 220 + 00		TO STA. 250 + 00		
FED. ROAD DIV. NO. 7		ILLINOIS PROJECT		

STATION EQUATION
 STA. 248 + 99.73 (BACK) =
 P.C. STA. 248 + 98.96 (AHEAD)



SEEDING CLASS I
 Sta. 236+35 to Sta. 240+40 1.5 Ac.
 SEEDING CLASS III
 Sta. 238+00 to Sta. 240+40 (RT) 0.3 Ac.

NOTE: PAVING OF F.A.I. 474 BY OTHERS
 RIGHT OF WAY MARKERS - 7 EACH

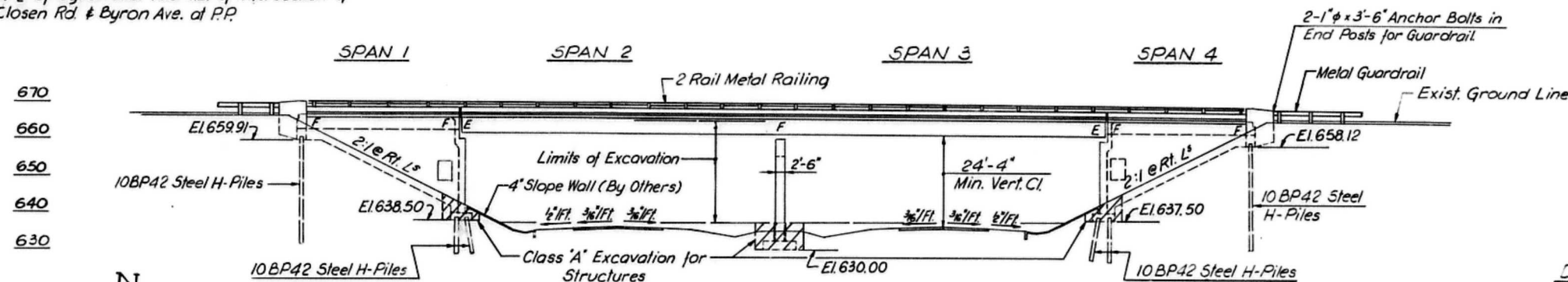


PLAN
 SURVEYED
 PLOTTED
 CHECKED
 BY
 DATE

PROFILE
 SURVEYED
 PLOTTED
 CHECKED
 BY
 DATE

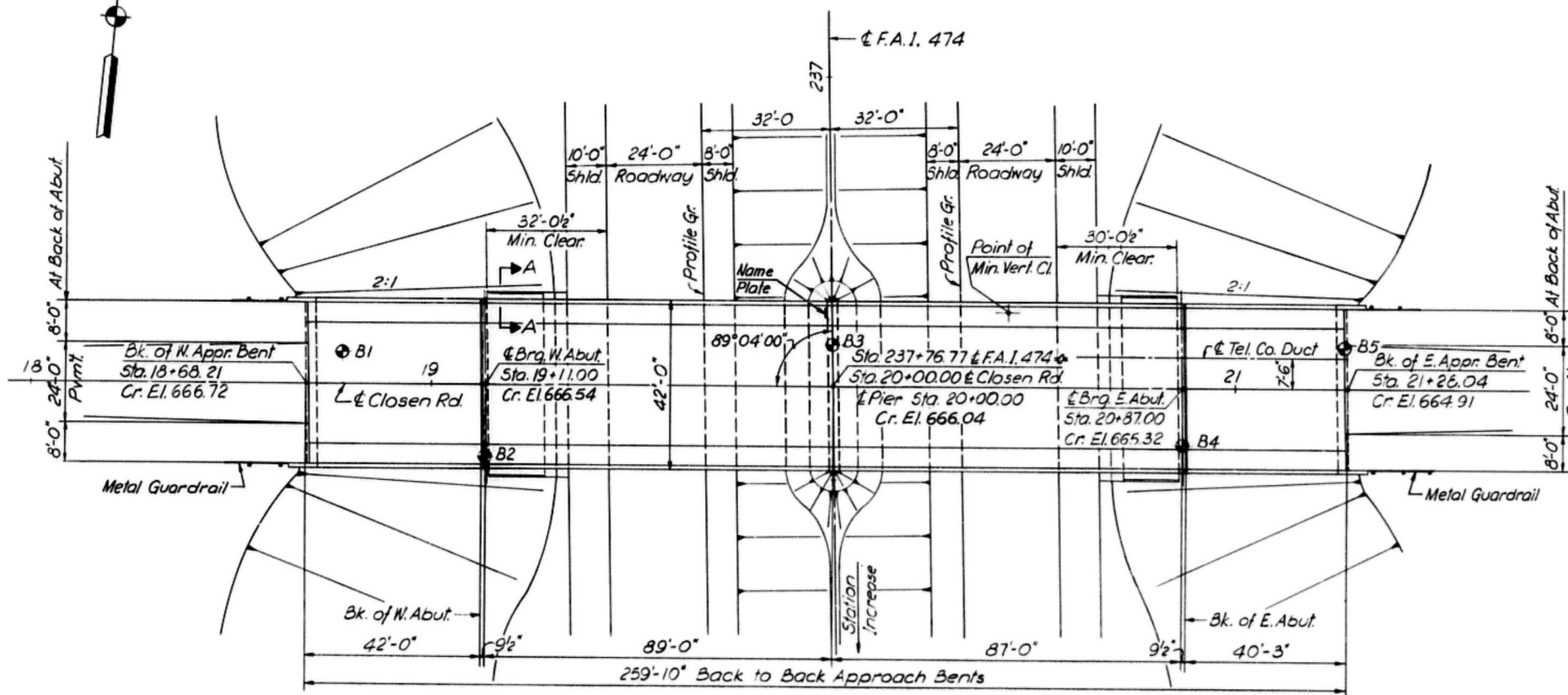
B.M. F-11; El. 666.691 - 5'x5' Concrete Monument with copperweld disc stamped "F-11" located 245' left of Sta. 239+00, 20' W. of E. of Byron Ave. 160' SE. of intersection of Cloven Rd. & Byron Ave. at P.P.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-474	72-3HB-3	PEORIA	33	7
FED ROAD DIV NO 7		ILLINOIS	PROJECT	



ELEVATION

PLAN
Scale: 1"=20'



DESIGN STRESSES
 $f_c = 4,200$ psi Deck Slab
 $f_c = 1,400$ psi Substructure, Curb & Parapet
 $n = 10$
 $f_s = 20,000$ psi Structural Steel
 $f_s = 20,000$ psi Reinforcement
 $v = 75$ psi Footings
 L.L. Deflection: $\frac{L}{1,440}$

Precast Prestressed Concrete Beams
 $f_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 248,000$ psi (Strands)
 $f_{si} = 173,600$ psi (Strands)

LOADING
 HS 20-44
 25'1d Future Wearing Surface
SPECIFICATIONS
 1969 A.A.S.H.O. as applicable.

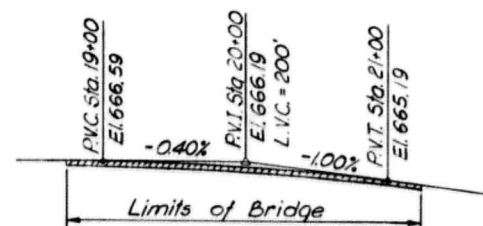
NAME PLATE
 See Std. 2113-1
 For location see Sh. 16

GENERAL NOTES
 All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
 Fasteners shall be high strength bolts. Bolts 3/4"; open holes 13/16", unless otherwise noted.
 Calculated weight of Structural Steel = 214,770 Lbs.
 Diaphragm connections may be adapted to shop welding subject to approval by the Engineer.
 The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.
 Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
 Anchor bolts shall be set before riveting diaphragms over supports.
 Slope wall shall be reinforced with welded wire fabric 6" X 6" mesh, weighing 58# per 100 sq.ft.
 The Contractor shall drive one (1) steel test pile in a permanent location at the west and east abutments as directed by the Engineer before ordering the remainder of piles.
 Class A Excavation for structures includes excavation for slope wall.
 An alternate strand pattern using Extra High Strength Prestressing strand (270 K.S.I.) is permitted.
 The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

TOTAL BILL OF MATERIAL

Item	Unit	Superstr.	Substr.	Total
Class 'A' Excavation for Structures	Cu.Yd.	—	426	426
Protective Coat	Sq.Yd.	1,333	16	1,349
Class 'X' Concrete	Cu.Yd.	484.0	351.9	835.9
F & E. PP Concrete I-Beams (36")	Lin.Ft.	320	—	320
F & E. Structural Steel	Lump.Sum	1	—	1
Stud Shear Connectors	Each	1,800	—	1,800
Aluminum Railing, Type L	Lin.Ft.	510	—	510
Steel Railing, Type M	Lin.Ft.	510	—	510
Reinforcement Bars	Lb.	85,380	43,350	128,730
Furnishing Steel Piles 10BP42	Lin.Ft.	—	773	773
Driving Steel Piles	Lin.Ft.	—	773	773
Test Pile Steel 10BP42	Each	—	2	2
Name Plate	Each	—	1	1
Preformed Joint Sealer (2 1/2")	Lin.Ft.	88	—	88

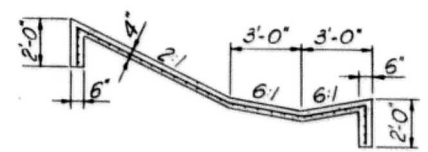
* Alternate to Aluminum



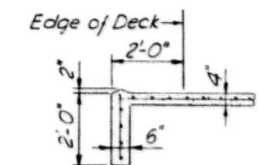
PROFILE ALONG CLOVEN RD.



PROFILE ALONG F.A.I. 474
(At Median Edge)



SECTION THRU SLOPEWALL

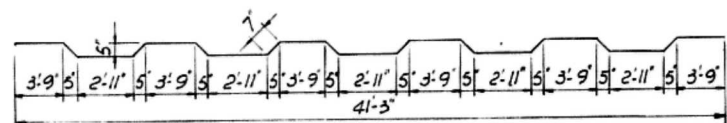
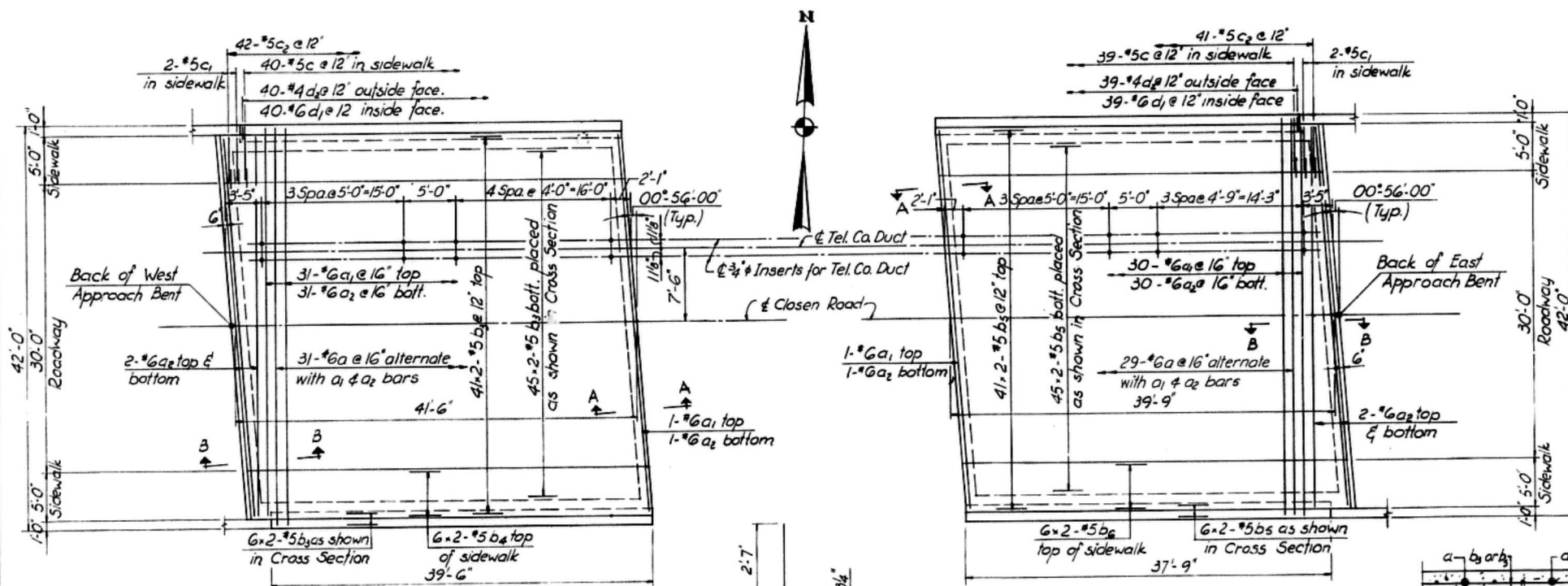


SECTION A-A

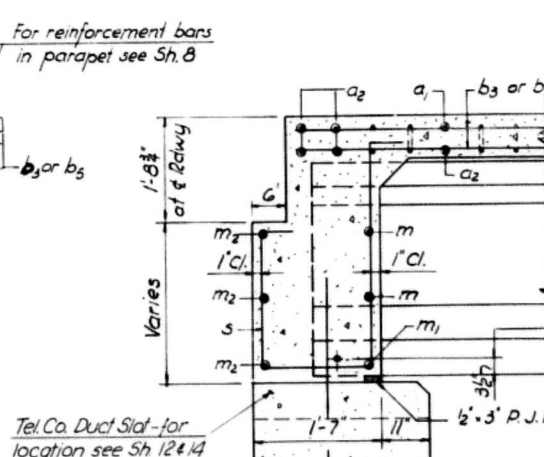
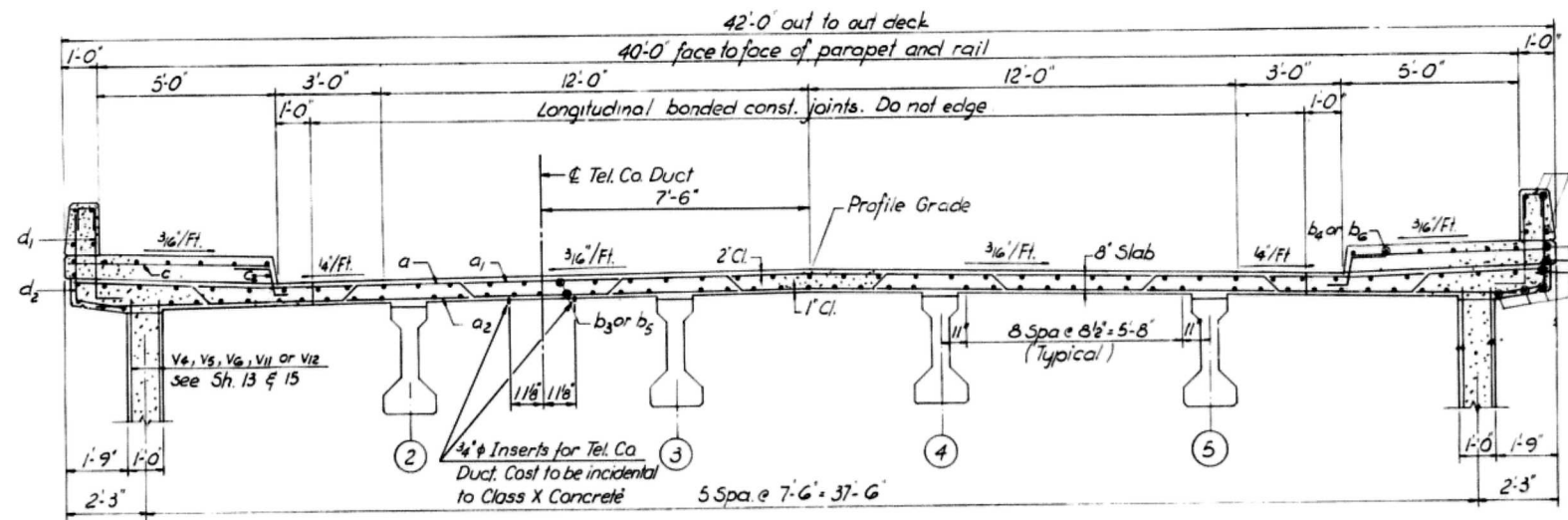
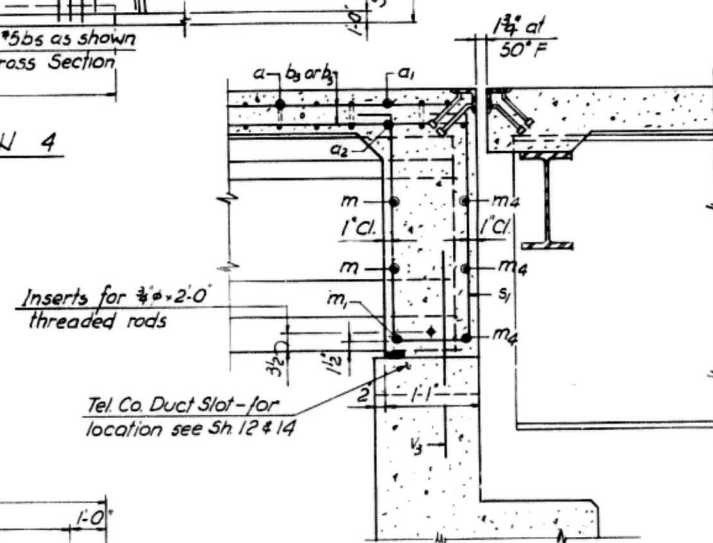
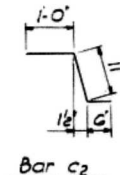
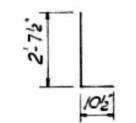
DESIGNED BY AT
 DRAWN BY EF
 CHECKED BY TT

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
GENERAL PLAN
 CLOVEN ROAD
 OVER
 F.A.I. ROUTE 474
 STA. 237+76.77
 FAI RT 474 PEORIA COUNTY SECTION 72-3HB-3
 CHRISTIAN-ROGE AND ASSOC
 ENGINEERS
 CHICAGO, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-3	PEORIA	33	8
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	



BAR d2



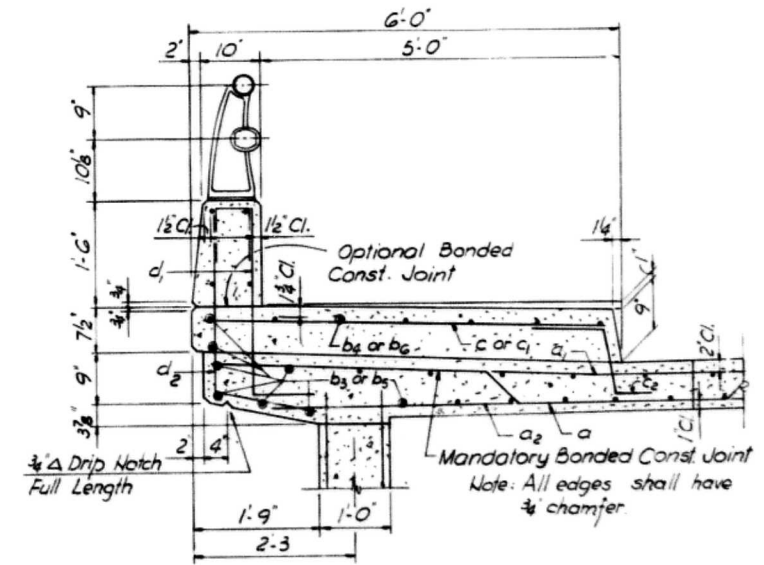
BILL OF MATERIAL, SPAN 1

Bar	Number	Size	Length	Shape
a	31	#6	42'-11"	U
a1	32	#6	41'-3"	U
a2	36	#6	39'-5"	U
b3	196	#5	21'-3"	U
b4	24	#5	21'-5"	U
c	80	#5	5'-8"	U
c1	4	#5	4'-8"	U
c2	84	#5	2'-5"	L
d1	80	#6	3'-6"	L
d2	80	#4	4'-0"	L
m	30	#4	6'-7"	U
m1	10	#5	5'-9"	U
m2	6	#5	20'-6"	U
m3	10	#4	5'-10"	U
m4	6	#5	18'-9"	U
s	25	#4	7'-6"	U
s1	25	#4	8'-3"	U
s2	25	#4	6'-10"	U
Reinforcement bars				Lbs 13,190
Class X Concrete				Cu. Yds 72.1
Protective Coat				Sq. Yds 213

BILL OF MATERIAL, SPAN 4

Bar	Number	Size	Length	Shape
a	29	#6	42'-11"	U
a1	31	#6	41'-3"	U
a2	35	#6	39'-5"	U
b3	196	#5	20'-4"	U
b4	24	#5	20'-6"	U
c	78	#5	5'-8"	U
c1	4	#5	4'-8"	U
c2	82	#5	2'-5"	L
d1	78	#6	3'-6"	L
d2	78	#4	4'-0"	L
m	30	#4	6'-7"	U
m1	10	#5	5'-9"	U
m2	6	#5	20'-6"	U
m3	10	#4	5'-10"	U
m4	6	#5	18'-9"	U
s	25	#4	7'-6"	U
s1	25	#4	8'-3"	U
s2	25	#4	6'-10"	U
Reinforcement bars				Lbs 12,690
Class X Concrete				Cu. Yds 69.6
Protective Coat				Sq. Yds 205

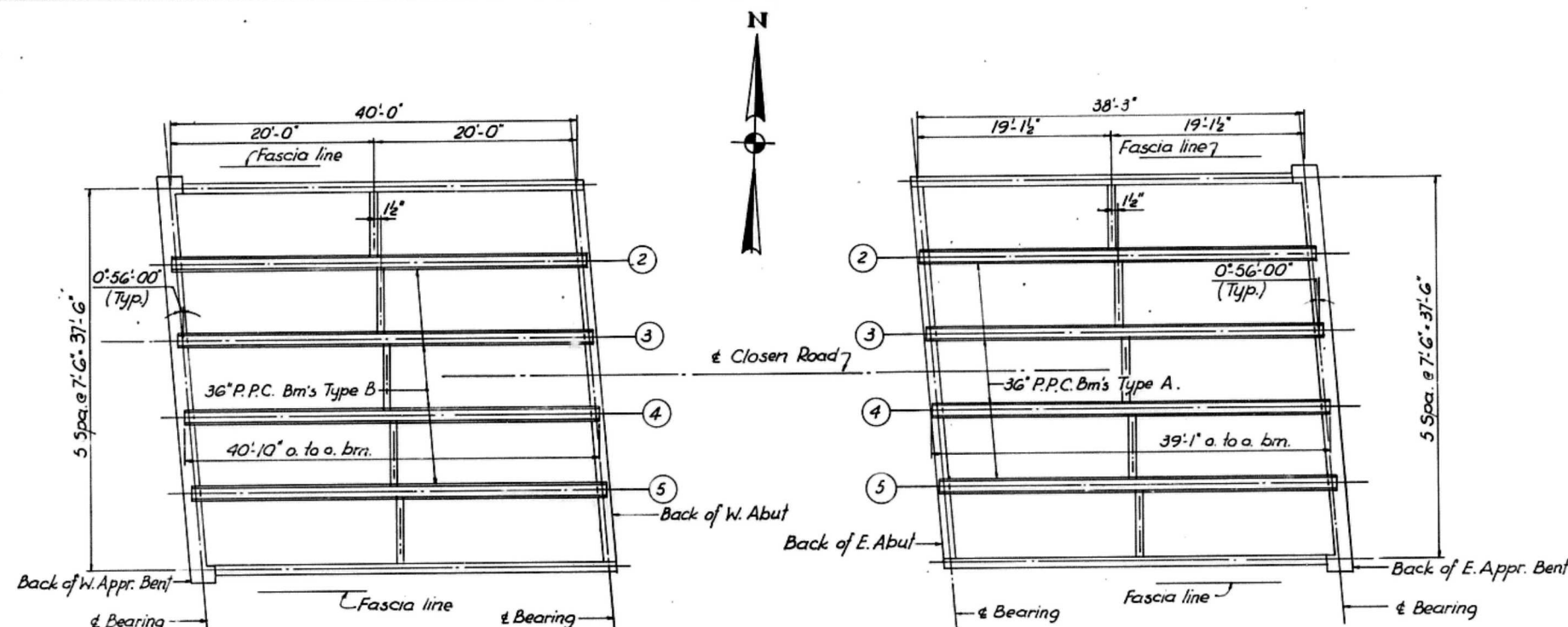
For placement and details of bars m thru m4 and s thru s2 see Sh. 4



Notes:
For details of expansion guards see Section C-C Sh. 3.
"v" bars are billed on abutment drawings.
For details of "s" bars see Sh. 4.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
SUPERSTRUCTURE SPANS 1 & 4
CLOSED ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROBE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

DESIGNED BY A.T.
DRAWN BY E.C.
CHECKED BY A.T.



SPAN 1

SPAN 4

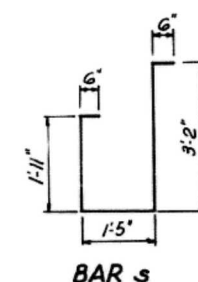
FRAMING PLAN

TOP OF BEAM ELEVATIONS

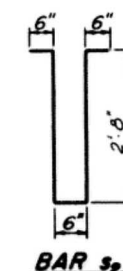
Beam	Brig. W. App. Bent	Brig. W. Abutment	Brig. E. Abutment	Brig. E. App. Bent
2	665.78	665.62	664.38	664.00
3	665.90	665.74	664.49	664.11
4	665.90	665.74	664.49	664.11
5	665.78	665.62	664.37	663.99

TABLE OF MOMENTS & SHEARS

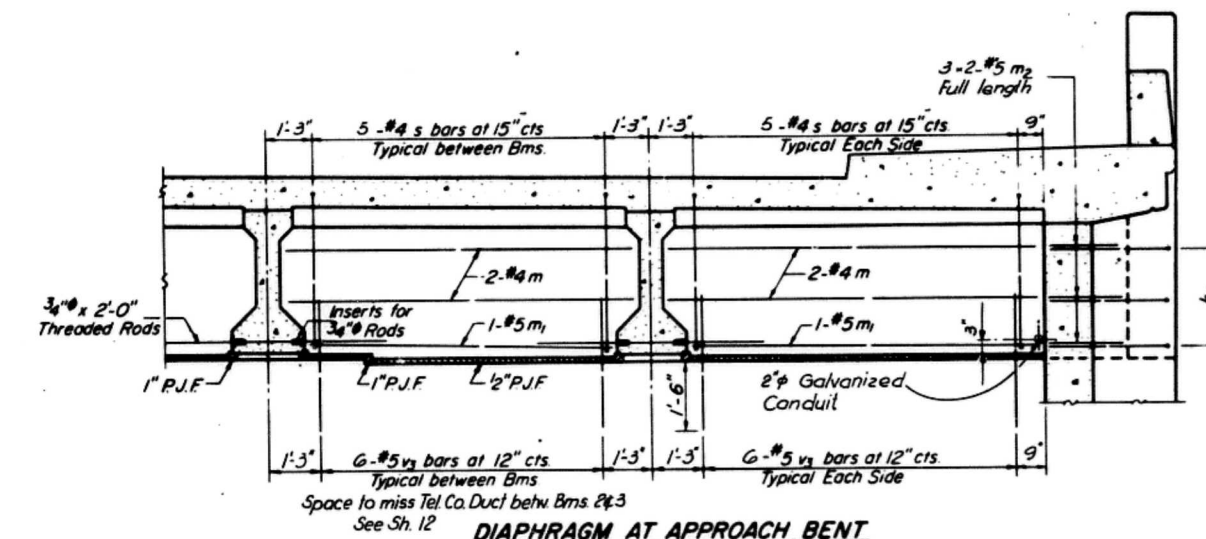
	Unit	Span 1	Span 4
D.L.	k/1	1.135	1.135
Diaph.	k	1.81	1.81
M.D.L.	1k	245.1	225.3
S.D.L.	k/1	.396	.396
M.S.D.L.	1k	79.0	72.5
M.L.L.	1k	305	288
M Imp.	1k	92	86.5
R.D.L.	k	23.6	22.7
R.S.D.L.	k	7.9	7.6
R.L.L.	k	37.6	37.0
R Imp.	k	11.3	11.1



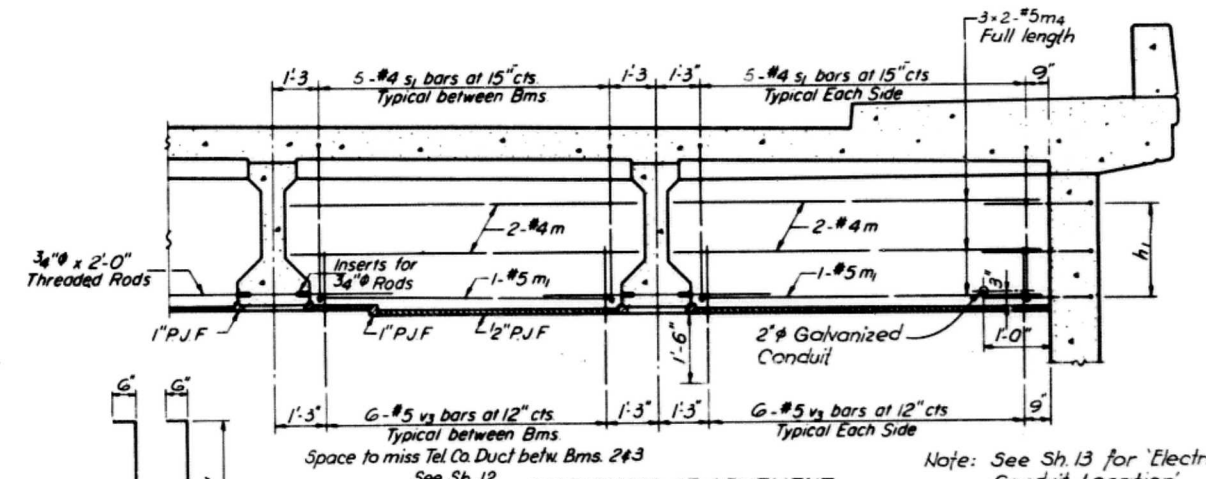
BAR S



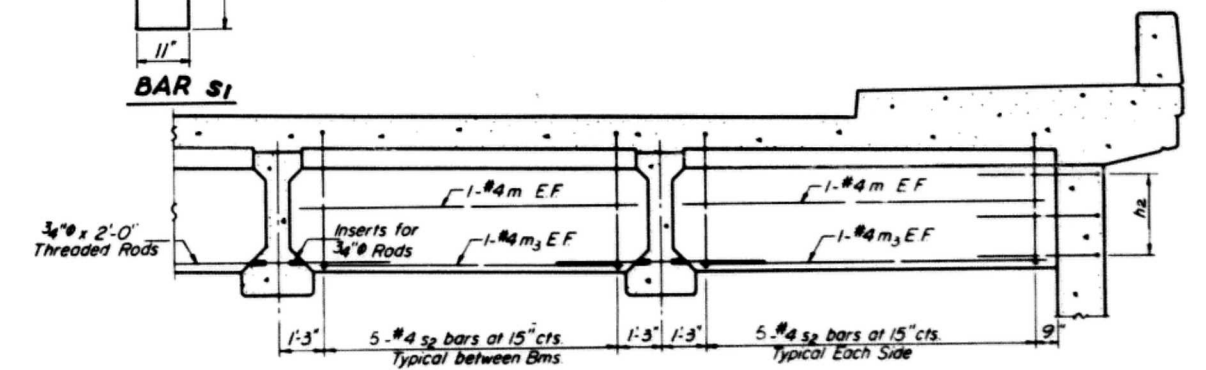
BAR S1



DIAPHRAGM AT APPROACH BENT

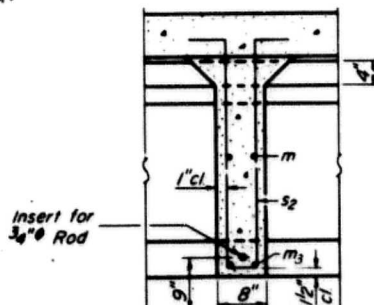


DIAPHRAGM AT ABUTMENT

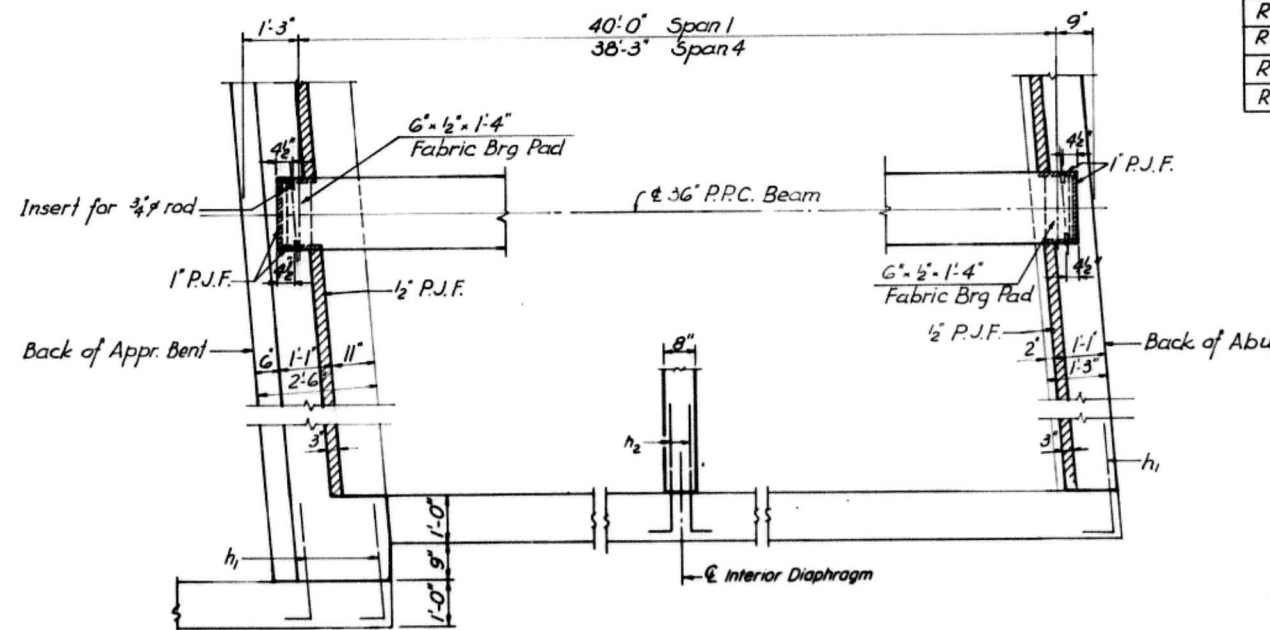


INTERIOR DIAPHRAGM

NOTES:
 Bars s thru s₂ and m thru m₄ are billed with Approach Slab Bill of Material on sheet #2.
 Bars h₁, h₂, & v₃ are billed with Abutment Bill of Material on sheet #12 and sheet #14.
 See sheet #2 for sections thru abutment and approach bent diaphragms.



SECTION THRU INTERIOR DIAPHRAGM



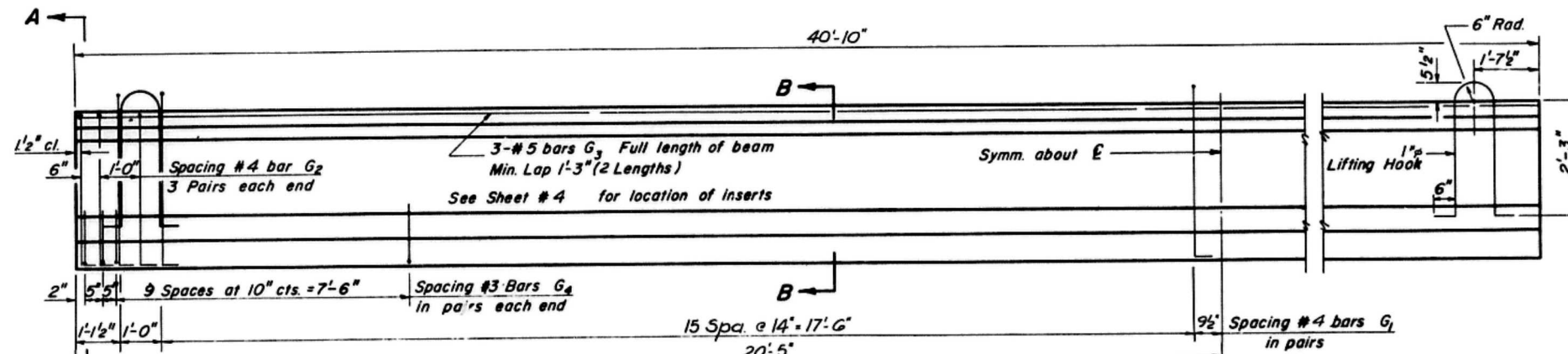
PARTIAL PLAN

DESIGNED BY: A.T.
 DRAWN BY: E.C.
 CHECKED BY: A.T.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 APPROACH SPANS DETAILS
 CLOSEN ROAD
 OVER
 F.A.I. ROUTE 474
 STA. 237+76.77
 F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-3
 CHRISTIAN-ROGE AND ASSOC.
 ENGINEERS
 CHICAGO, ILLINOIS

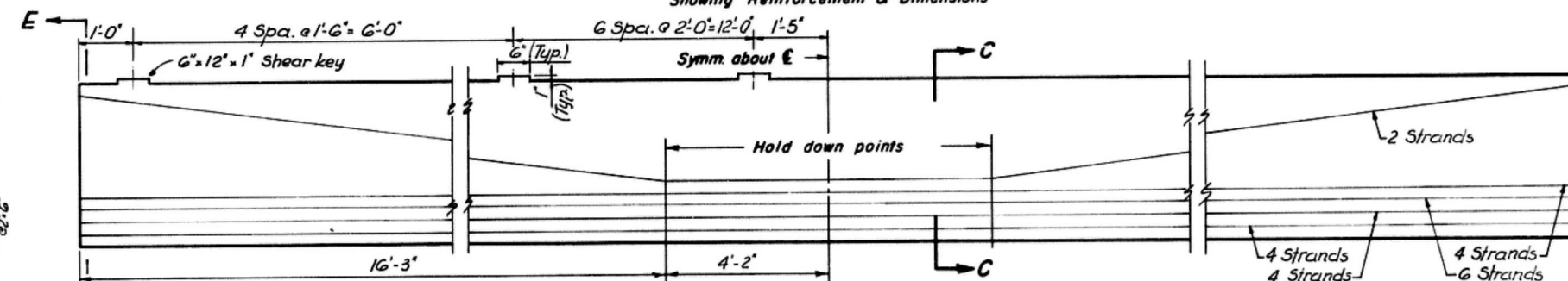
SHEET
 4 of 18

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F A I - 474	72-3HB-3	PEORIA	33	11
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT		



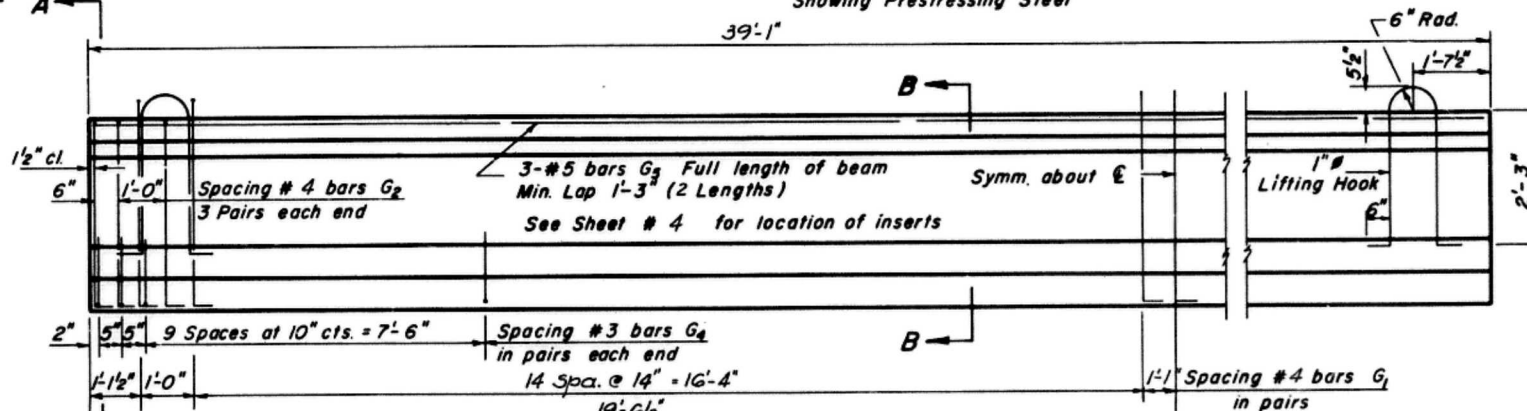
ELEVATION OF BEAMS TYPE B

Showing Reinforcement & Dimensions



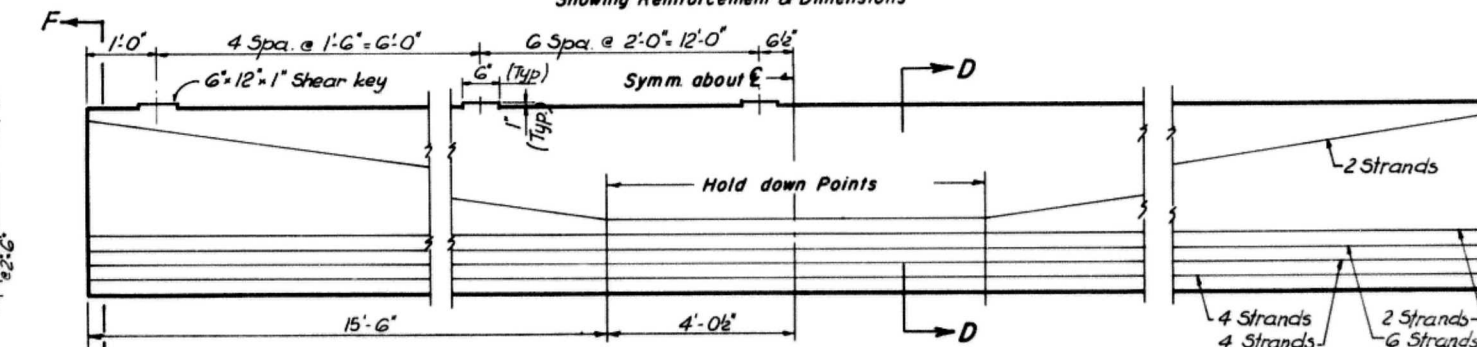
ELEVATION OF BEAMS TYPE B

Showing Prestressing Steel



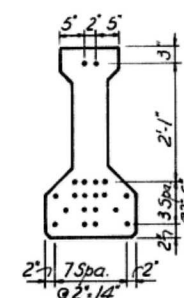
ELEVATION OF BEAMS TYPE A

Showing Reinforcement & Dimensions

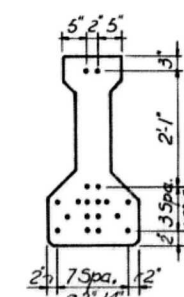


ELEVATION OF BEAMS TYPE A

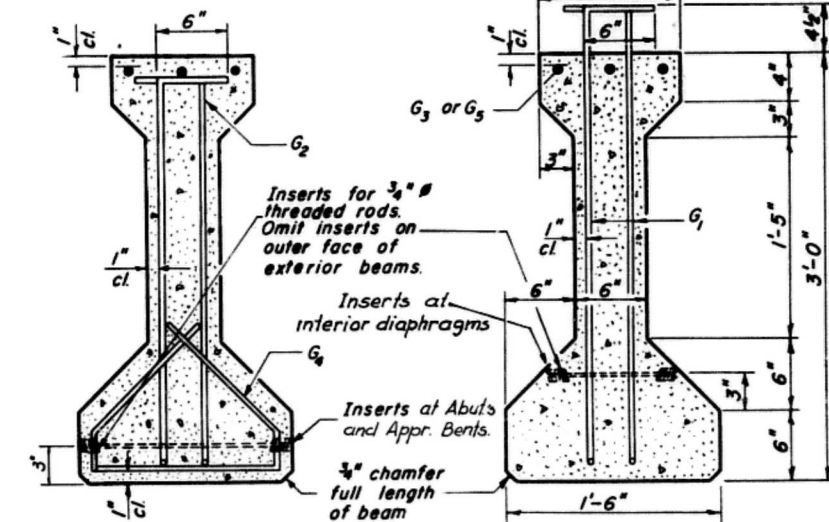
Showing Prestressing Steel



SECTION E-E

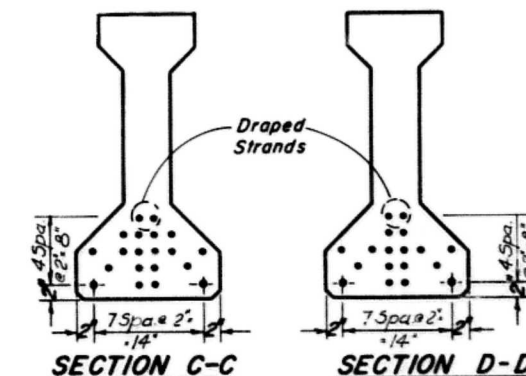


SECTION F-F



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

***BAR LIST**

Bar	No.	Size	Length	Shape
G1	66	#4	4'-2 1/2"	7L
G2	12	#4	3'-9"	7L
G3	-	#5	21'-0"	-
G4	48	#3	2'-7"	L
G5	6	#5	20'-1"	-

* For one beam only.

BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 36"	Lin. Ft.	320

NOTES

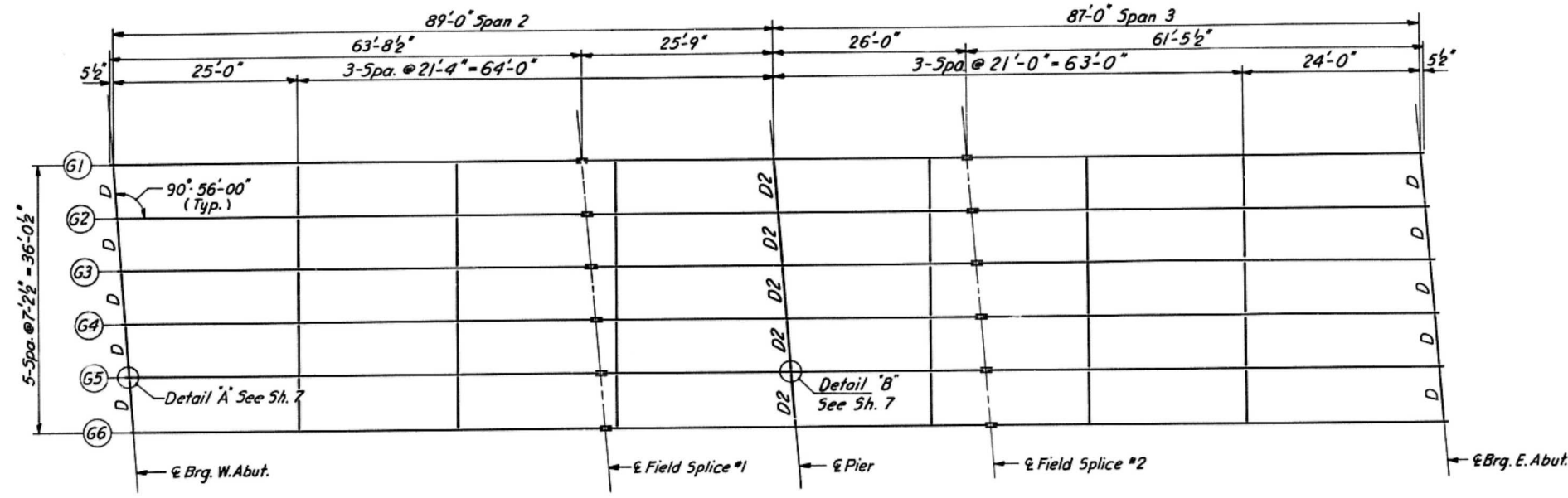
All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 36 in." Prestressing Steel shall have a nominal diameter of 1/8". Inserts for 3/4" threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams. Steel for lifting hooks shall be ASTM A-306, Grade 70-80. Ends of beams to be encased with cast in place concrete shall not be coated with asphalt paint.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
PRESTRESSED BEAM DETAILS
CLOSED ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
F A I RT 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
5 of 18

DESIGNED BY: A.T.
DRAWN BY: E.C.
CHECKED BY: A.T.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. - 474	72-3HB-3	PEORIA	33	12
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT		



FRAMING PLAN

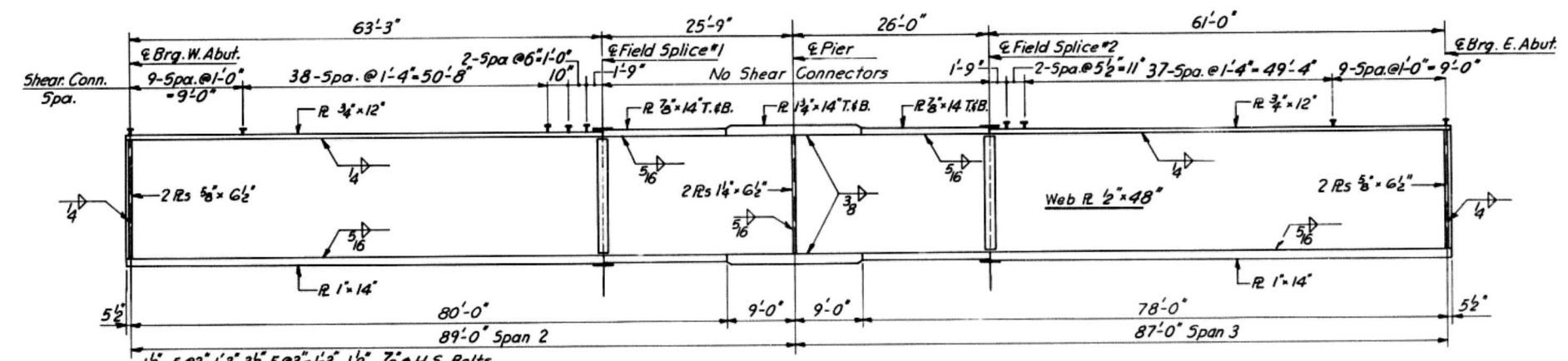
Note: All Diaphragms DI unless otherwise noted.

INTERIOR GIRDER MOMENT TABLE

	4 Spa. 2	Pier	6 Spa. 3
I_s (in ⁴)	17831	34624	17831
I_c (in ⁴)	45668	—	45668
S_s (in ³)	785	1332	785
S_c (in ³)	1100	—	1100
Q (K/I)	1.003	1.003	1.003
M_D (IK)	497.4	1139.8	455.1
$f_s D$ (KSI)	7.6	10.2	7.0
S_D (K/I)	396	396	396
$M_s D$ (IK)	239.1	343.0	222.4
M_u (IK)	717.0	535.0	700.0
M_{imp} (IK)	169.8	132.0	167.5
Total (IK)	1125.9	1010.0	1089.9
$f_s L$ (KSI)	12.3	9.1	11.9
f_s Total (KSI)	19.9	19.3	18.9
VR (K)	54.2	—	54.1

INTERIOR GIRDER REACTION TABLE

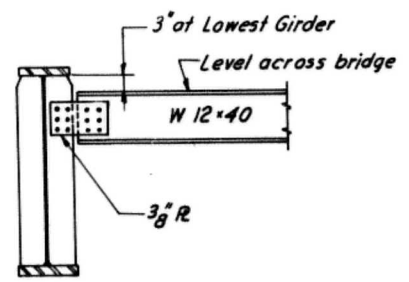
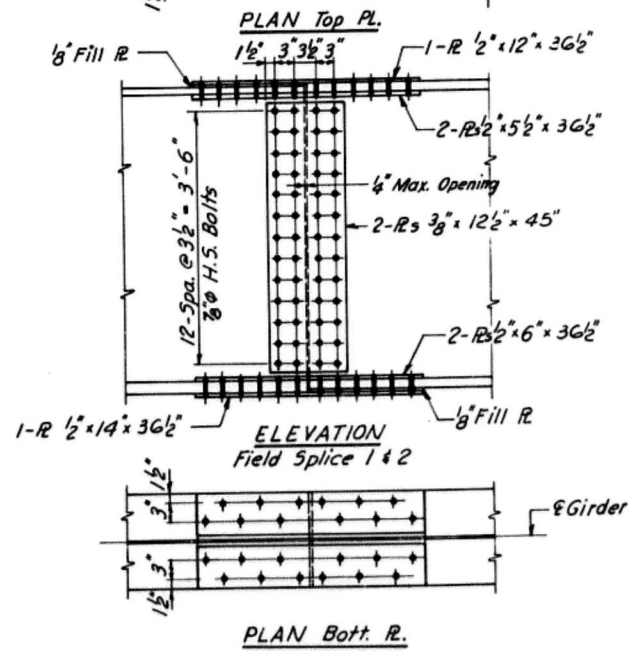
	W. Abut.	Pier	E. Abut.
R_e (K)	45.5	156.6	43.7
R_u (K)	43.0	63.8	43.0
Imp. (K)	10.4	15.0	10.3
R_{Total} (K)	98.9	235.4	97.0



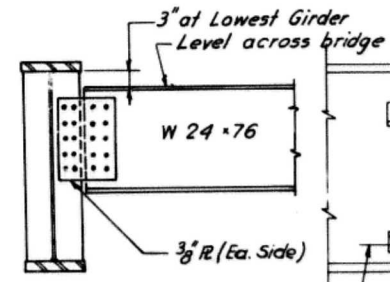
GIRDER ELEVATION

TOP OF WEB ELEVATIONS FOR FABRICATION

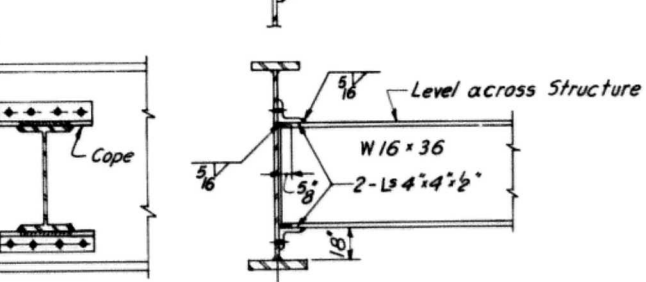
	G1	G2	G3	G4	G5	G6
E Bearing W. Abutment	665.49	665.64	665.75	665.75	665.63	665.49
E Field Splice 1	665.12	665.26	665.37	665.37	665.26	665.11
E Bearing Pier	664.91	665.05	665.16	665.16	665.05	664.91
E Field Splice 2	664.69	664.84	664.95	664.95	664.83	664.69
E Bearing E. Abutment	664.27	664.41	664.52	664.52	664.41	664.26



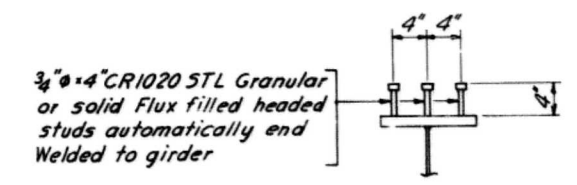
DIAPHRAGM D
10 Required



DIAPHRAGM D2
5 Required



DIAPHRAGM D1
30 Required

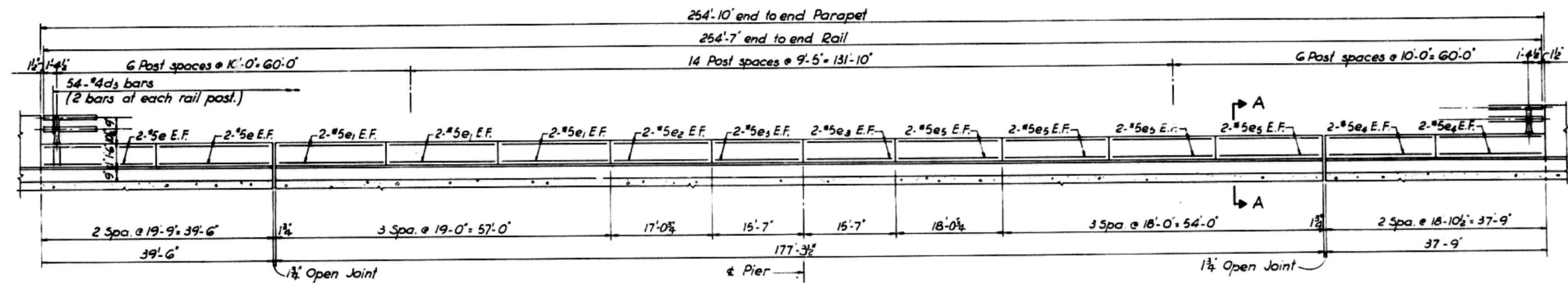


SHEAR CONNECTOR DETAIL
No Req'd = 1800

DESIGNED BY J.J.
DRAWN BY J.J.
CHECKED BY A.T.

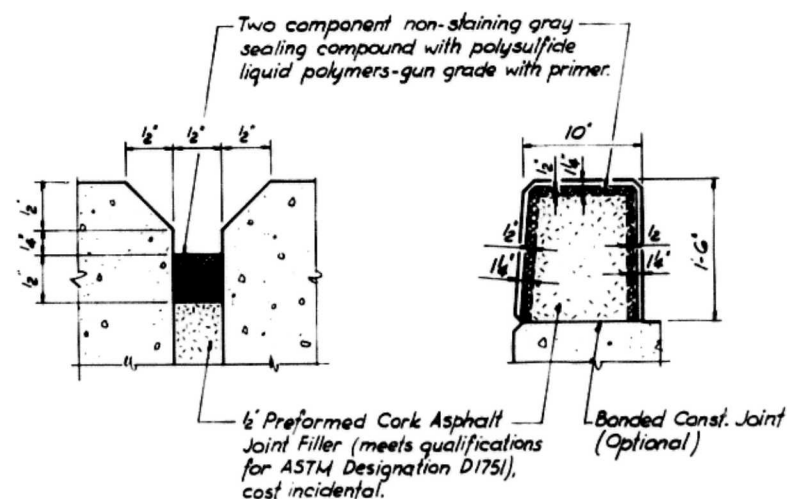
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
STRUCTURAL STEEL
CLOSED ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 6 OF 18

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-3	PEORIA	33	14
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	

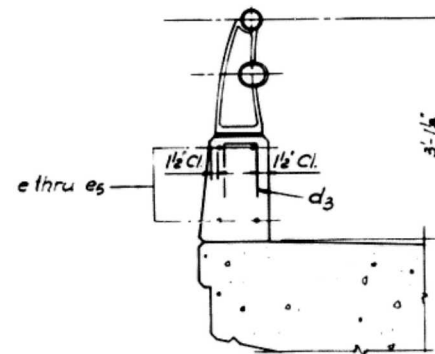


ELEVATION

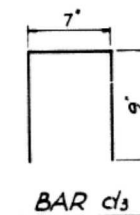
(North parapet, inside face. South parapet similar)



PARAPET JOINT DETAIL



SECTION A-A



BILL OF MATERIAL *

Bar	No.	Size	Length	Shape
e	16	#5	19'-6"	—
e1	24	#5	18'-9"	—
e2	8	#5	16'-10"	—
e3	16	#5	15'-4"	—
e4	16	#5	18'-7"	—
e5	32	#5	17'-9"	—
d3	108	#4	2'-1"	□
Reinforcement Bars			Lbs	2240
Class 'X' Concrete			Cu. Yds	26.0

* Both parapets

DESIGNED BY F.C.
 DRAWN BY A.T.
 CHECKED BY A.T.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 PARAPET & RAILING LAYOUT
 CLOSED ROAD
 OVER
 F.A.I. ROUTE 474
 STA. 237+78.77
 F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-3
 CHRISTIAN-ROSE AND ASSOC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 8 of 18

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F A 1 - 474	72-3HB-3	PEORIA	33	15
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	

NOTES:

All Posts shall be normal to parapet

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

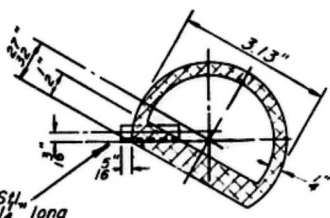
Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts.

Rail elements shall be parallel to grade - high spots shall be ground and low spots shimmed.

Railing shall be in accordance with Section 50B of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for ALUMINUM RAILING, TYPE L.

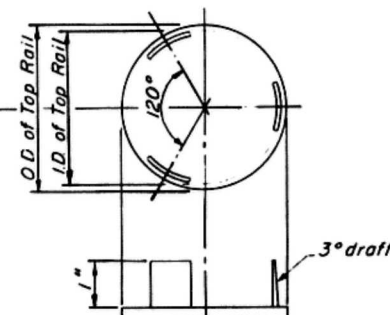
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38ksi, and elongation of 10% in 2 inches.

SECTION THRU TOP RAIL

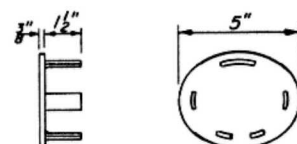


SECTION THRU SPLICE TOP RAIL

1/8" # Stnl. SH.
drive pin 1/4" long

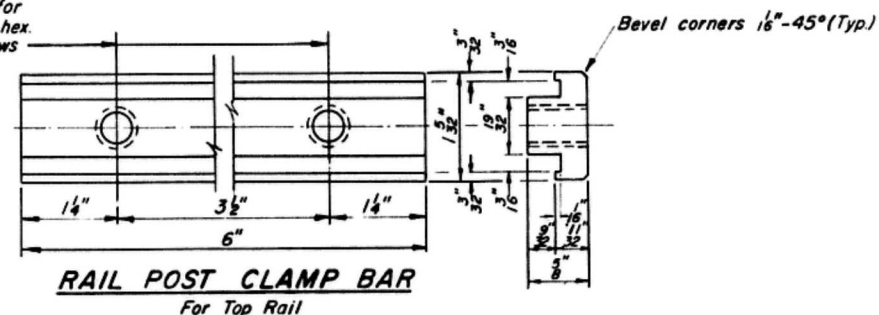


CAST END CAP For Top Rail 4 Required



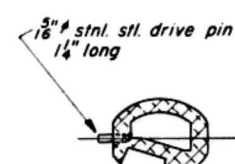
CAST END CAP For Bottom Rail DRIVE FIT TYPE 4 Required

Drill & tap for
1/2" (stnl. stl.) hex.
head cap screws

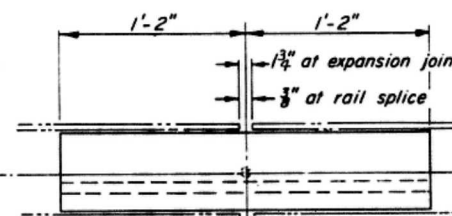


RAIL POST CLAMP BAR For Top Rail

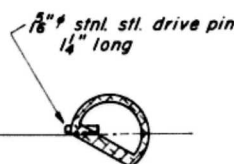
Bevel corners 1/8"-45°(Typ.)



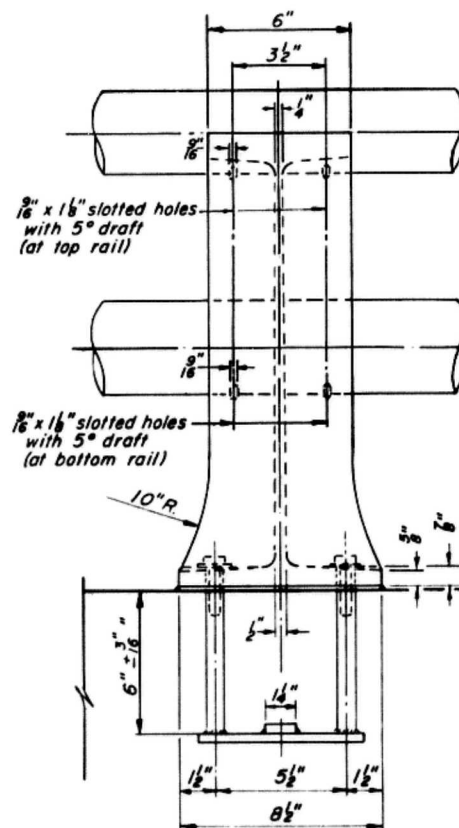
BOTTOM RAIL



RAIL SPLICE

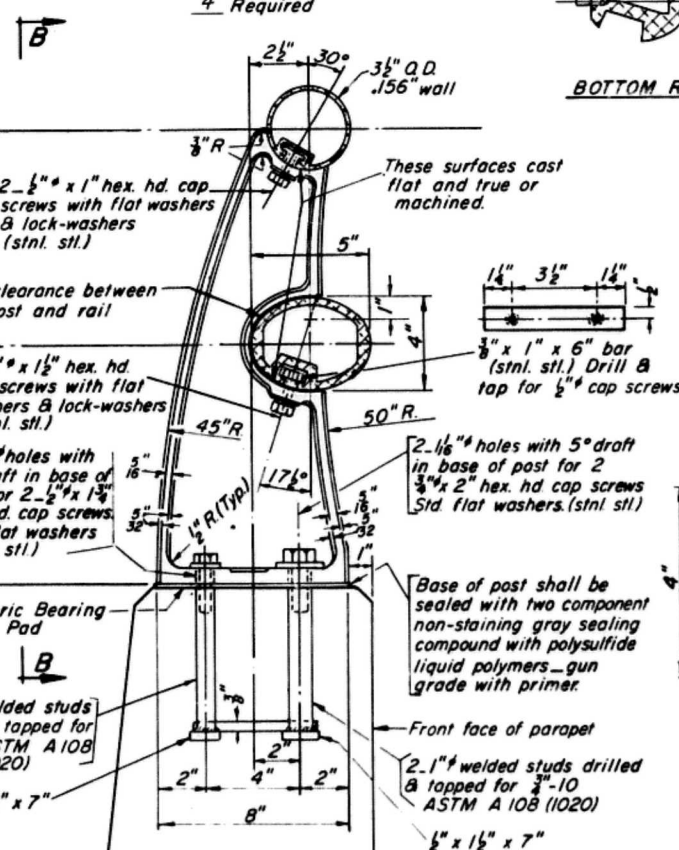


TOP RAIL

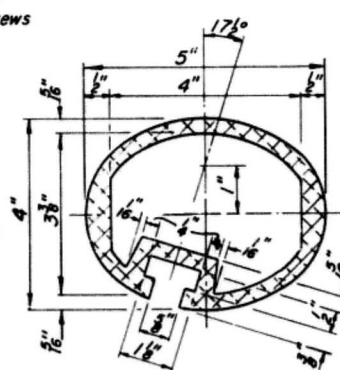


VIEW B-B

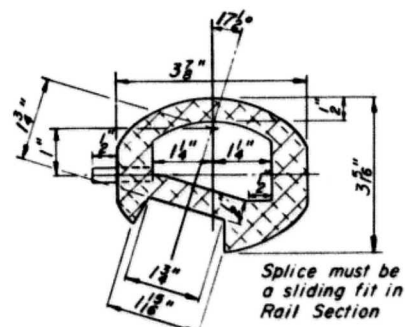
RAIL POST DETAILS



SECTION A-A

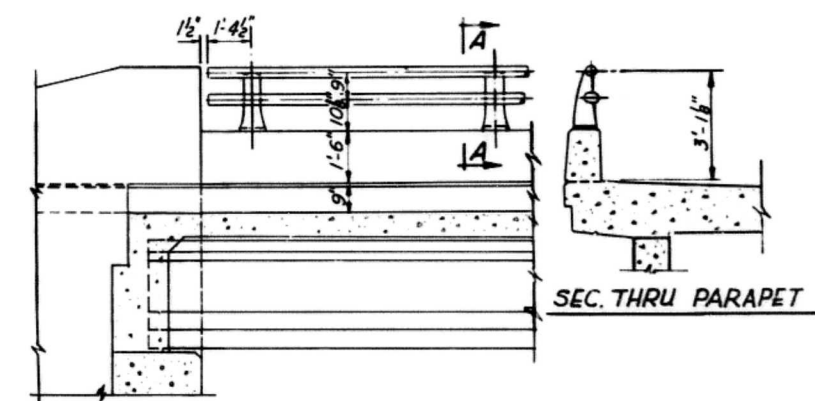


SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____



SEC. THRU PARAPET

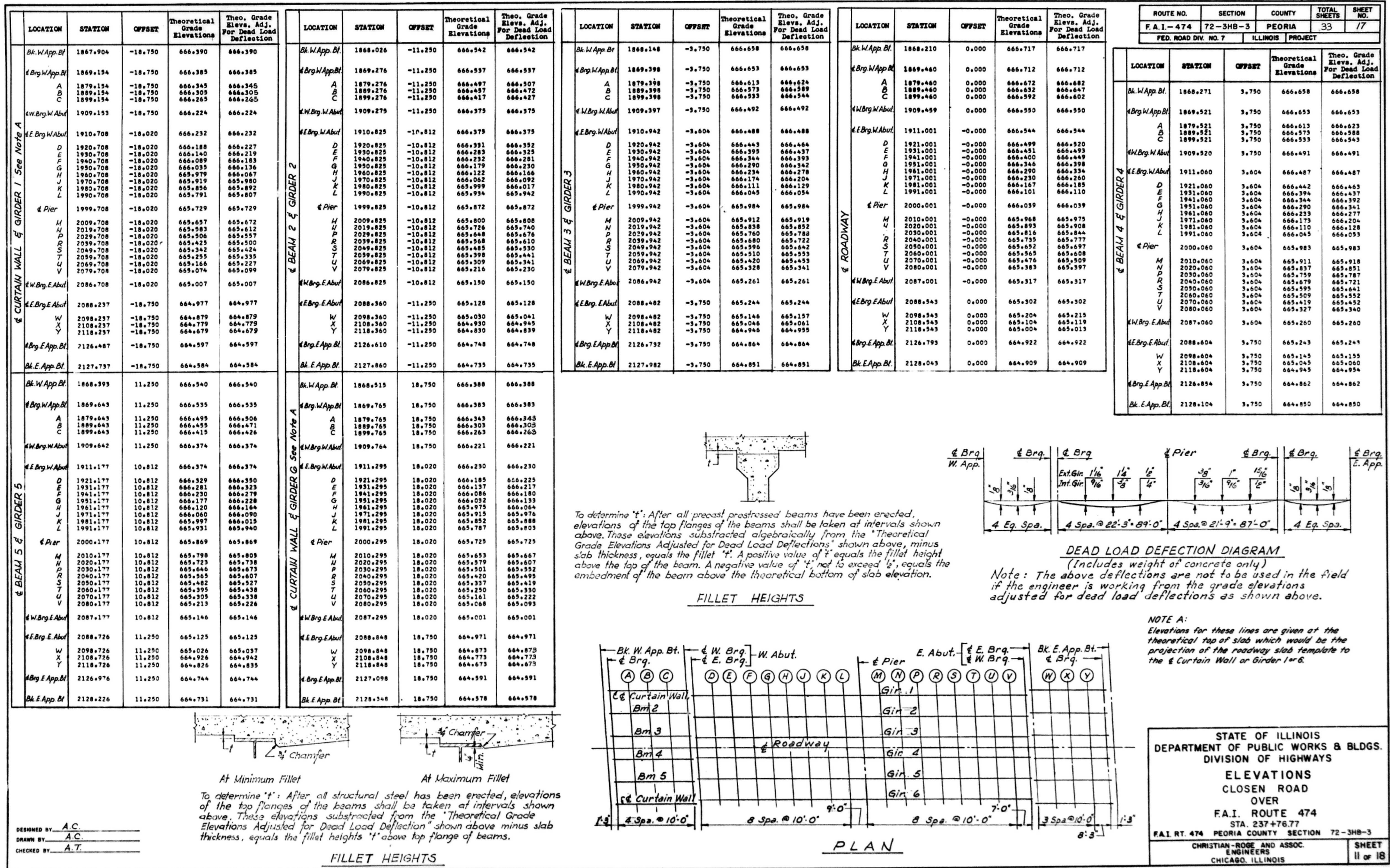
INSIDE VIEW AT ABUTMENT

BILL of MATERIALS

Item	Unit	Quantity
ALUMINUM RAILING, TYPE L	Lin. Ft.	510

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
ALUMINUM RAILING TYPE L
CLOSED ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
F A I RT 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

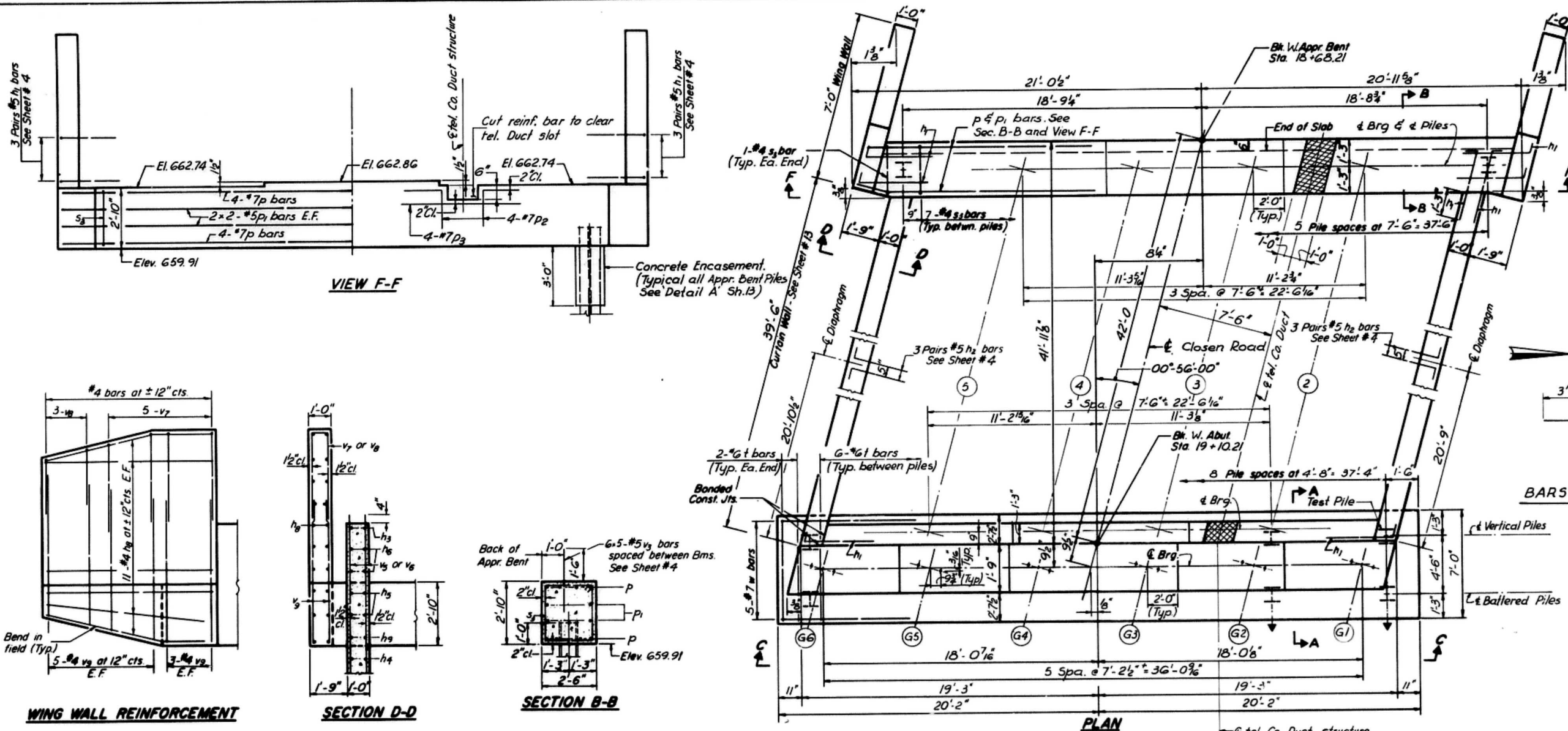
SHEET
9 of 18



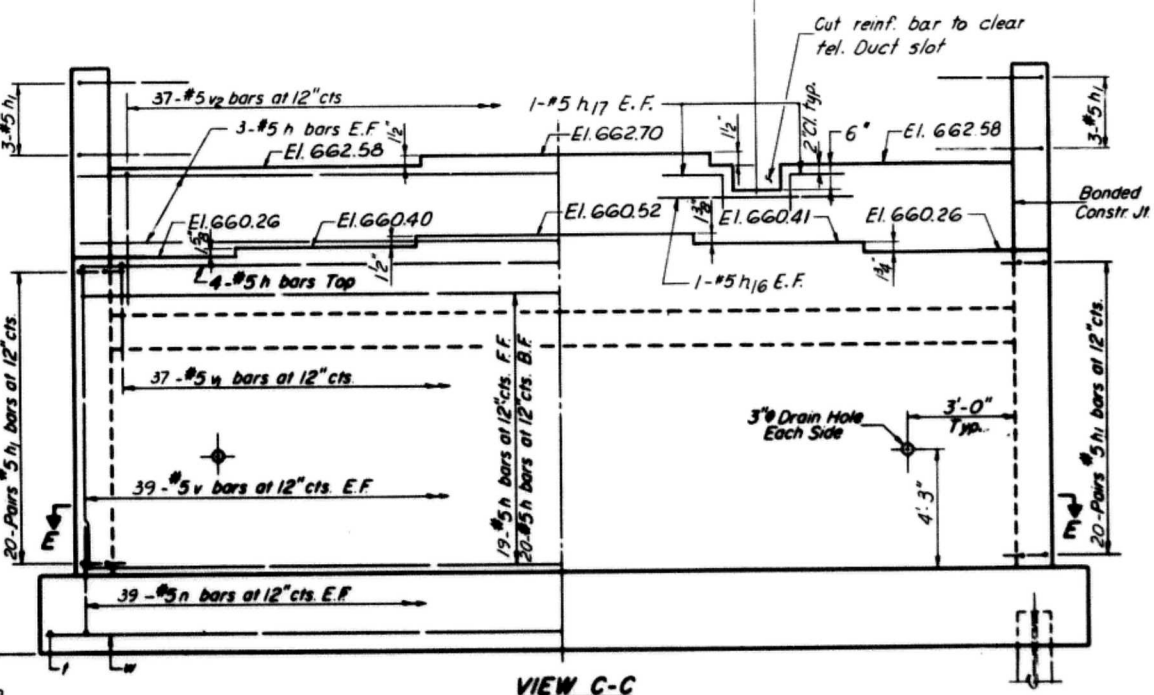
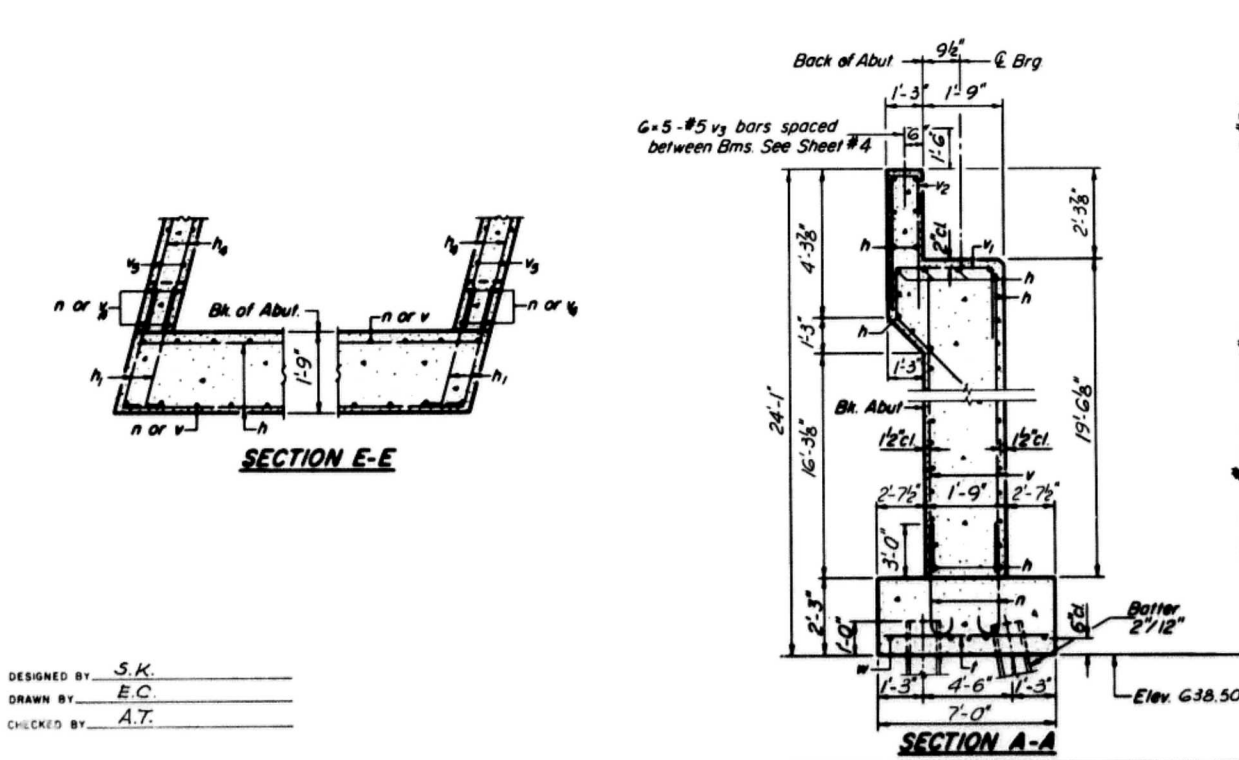
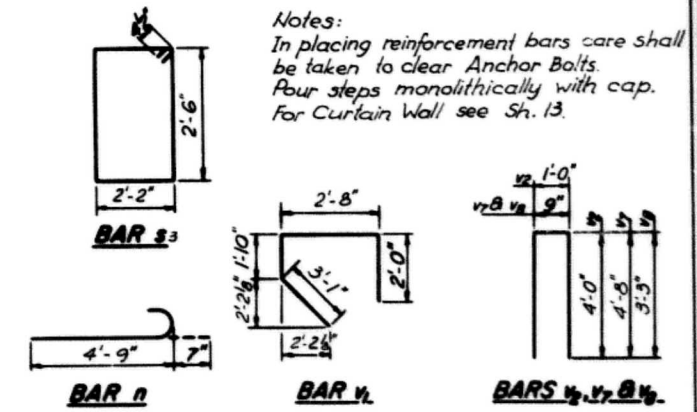
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	49	#5	38'-2"	
h	110	#5	3'-7"	
h	12	#5	3'-0"	
h	4	#5	4'-2"	
h	34	#5	37'-8"	
h	16	#5	20'-3"	
h	16	#5	21'-3"	
h	8	#10	40'-3"	
h	44	#4	6'-8"	
h	4	#5	33'-9"	
h	8	#10	7'-0"	
h	2	#5	10'-6"	
h	4	#5	6'-0"	
n	90	#5	5'-4"	
p	8	#7	41'-8"	
p	8	#5	21'-6"	
p	8	#7	6'-0"	
p	4	#7	10'-6"	
v	78	#5	19'-3"	
v	37	#5	9'-7"	
v	37	#5	9'-0"	
v	68	#5	3'-0"	
v	12	#5	25'-1"	
v	66	#5	28'-8"	
v	28	#5	5'-11"	
v	10	#4	10'-1"	
v	6	#4	7'-3"	
v	32	#4	6'-9"	
v	37	#4	10'-1"	
w	5	#7	40'-0"	
t	52	#8	6'-8"	
Reinforcement Bars				Lbs. 14,720
Class X Concrete				Cu Yds. 1327
10BP42 Steel H Piles				Lin. Ft. 378*
Test Pile				Ea. 1
Protective Coat				Sq. Yds. 8

* Test Pile not included



Notes:
In placing reinforcement bars care shall be taken to clear Anchor Bolts. Pour steps monolithically with cap. For Curtain Wall see Sh. 13.

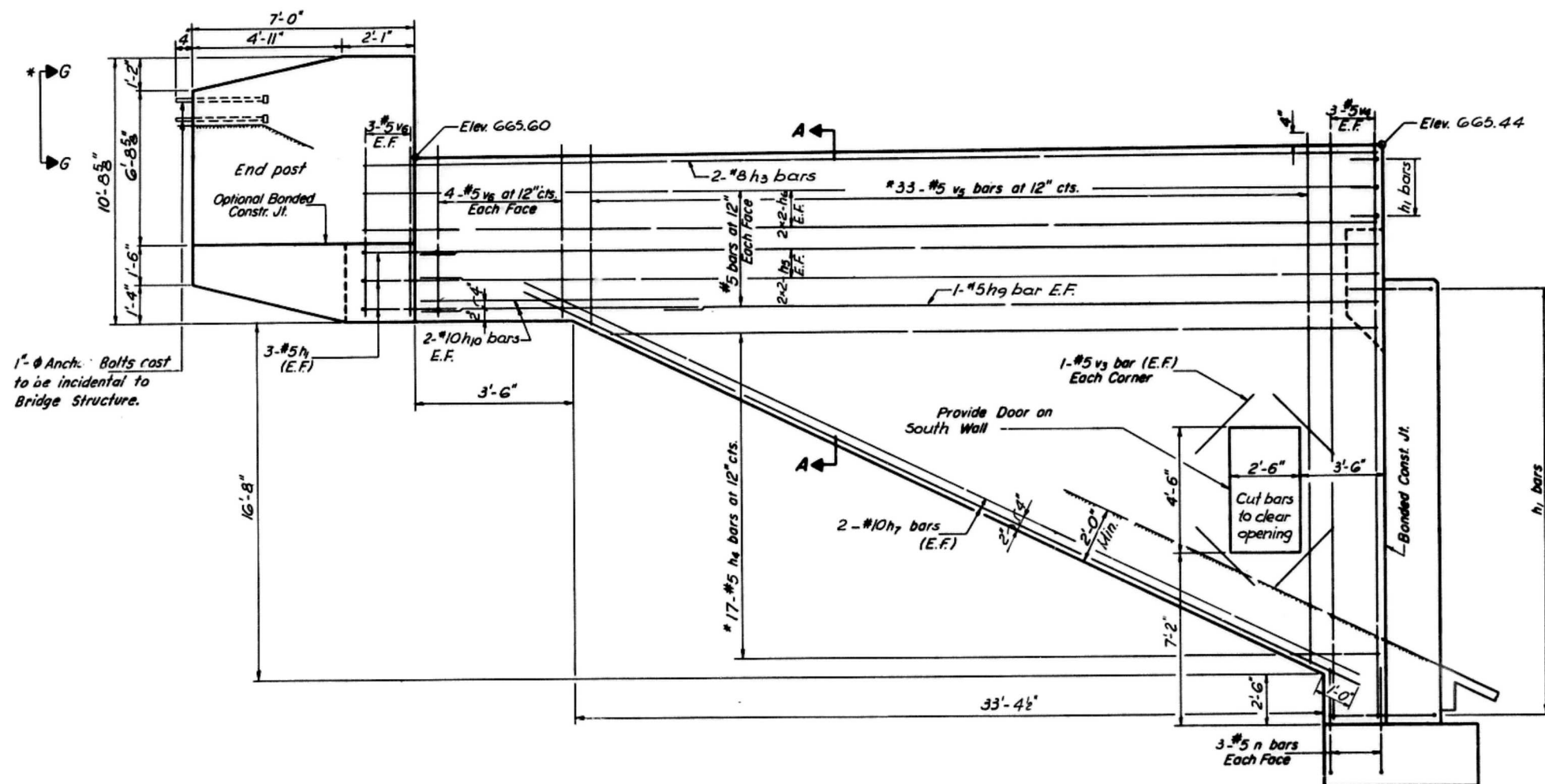


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
WEST ABUTMENT & APPROACH BENT
CLOSED ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
FAI RT 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

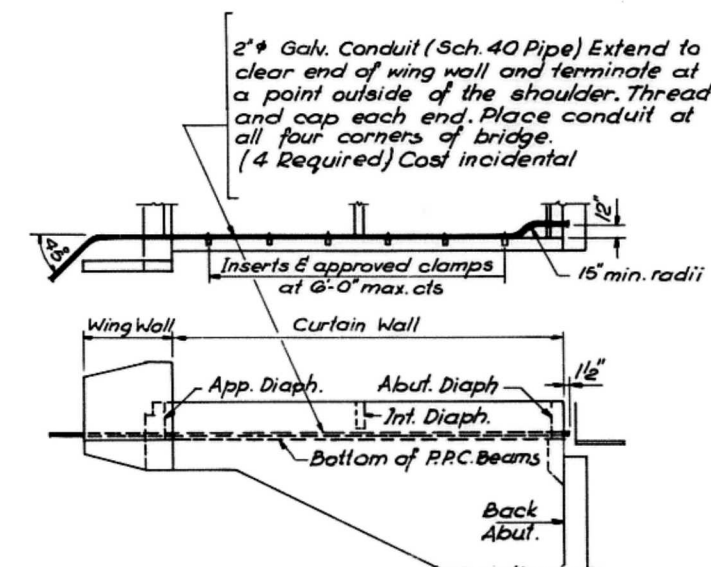
DESIGNED BY S.K.
DRAWN BY E.C.
CHECKED BY A.T.

*For View G-G and Anchor Bolt, See Sheet 15.

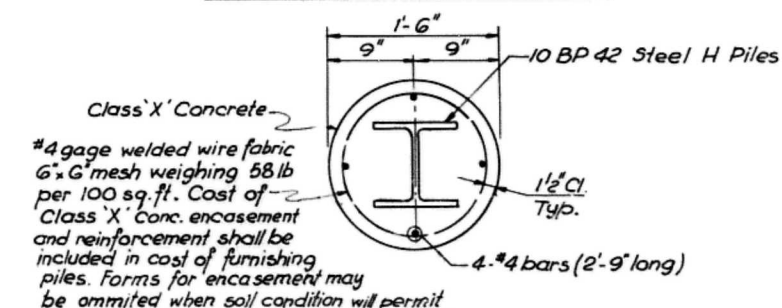
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. - 474	72-3HB-3	PEORIA	33	19
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT		



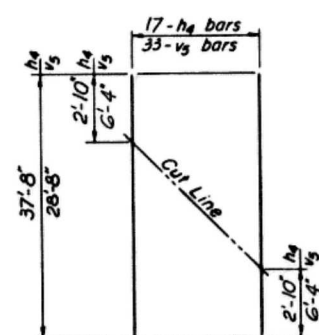
SIDE ELEVATION



ELECTRICAL CONDUIT LOCATION

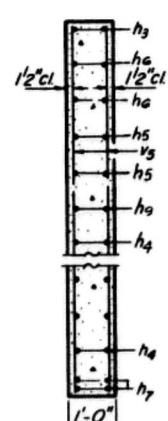


DETAIL 'A'

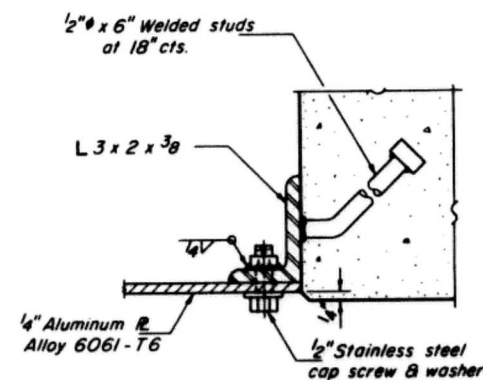


FIELD CUTTING DIAGRAM

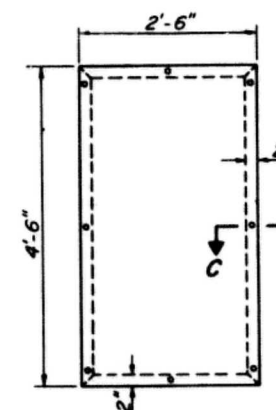
* Order h_4 & v_3 bars full length.
Cut to fit as shown and use
remainder of bars in other face.



SECTION A-A



SECTION C-C



DOOR ELEVATION
(Cost of door and frame are incidental)

APPR. BENT - PILE DATA

Type : 10BP42 Steel H Piles
Capacity : Drive to refusal
Est. Length : 29'
No. Req'd : 6

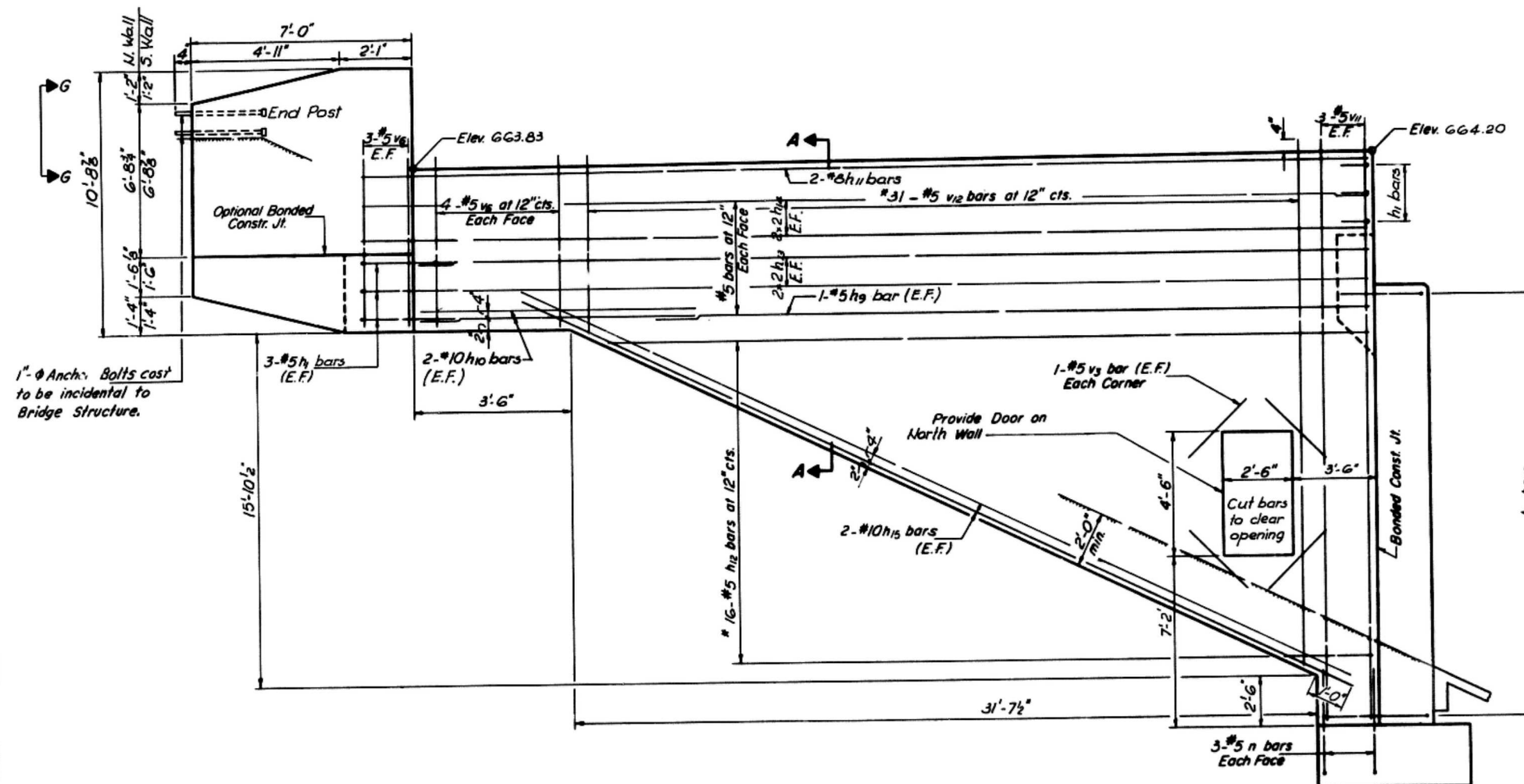
ABUT - PILE DATA

Type : 10BP42 Steel H Piles
Capacity : Drive to refusal
Est. Length : 12'
No. Req'd : 17 plus 1 test pile

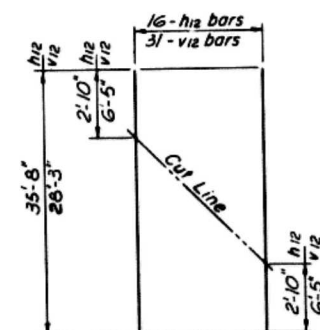
STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BLDGS. DIVISION OF HIGHWAYS WEST END CURTAIN WALLS & WING WALLS CLOSEN ROAD OVER F.A.I. ROUTE 474 STA. 237+76.77 F.A.I. RT 474 PEORIA COUNTY SECTION 72-3HB-3 CHRISTIAN-ROGE AND ASSOC. ENGINEERS CHICAGO, ILLINOIS	SHEET 13 OF 18
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DESIGNED BY: S.K.
DRAWN BY: E.C.
CHECKED BY: A.T.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F A I - 474	72-3HB-3	PEORIA	33	21
FED ROAD DIV. NO. 7		ILLINOIS	PROJECT	

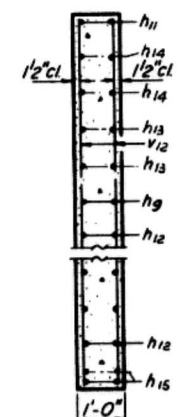


SIDE ELEVATION

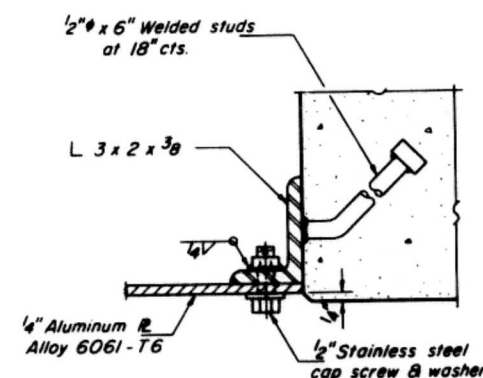


FIELD CUTTING DIAGRAM

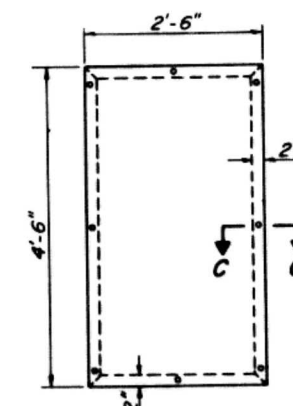
* Order h₈ & v₃ bars full length.
Cut to fit as shown and use
remainder of bars in other face



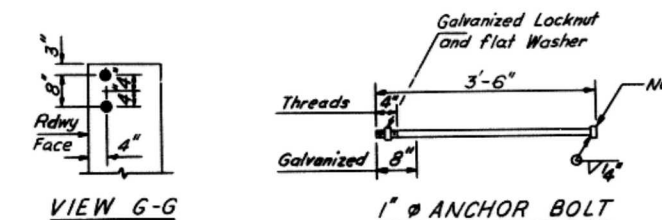
SECTION A-A



SECTION C-C



DOOR ELEVATION
(Cost of door and frame are incidental)



APPR. BENT - PILE DATA

Type : 10 BP42 Steel H Piles
Capacity : Drive to refusal
Est. Length : 29'
No. Req'd. : 6

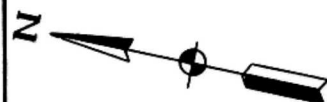
ABUT - PILE DATA

Type : 10 BP42 Steel H Piles
Capacity : Drive to refusal
Est. Length : 13'
No. Req'd. : 17 plus 1 test pile

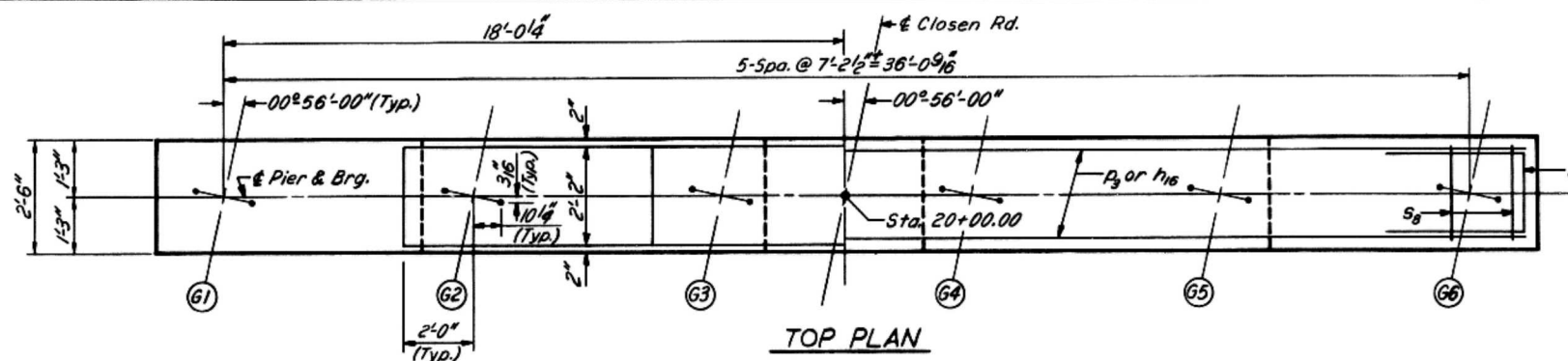
DESIGNED BY: S.K.
DRAWN BY: E.C.
CHECKED BY: A.T.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
EAST END CURTAIN WALLS & WING WALLS
CLOSED ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
F A I RT 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

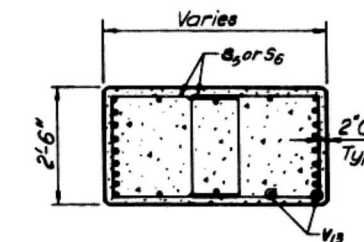
SHEET
15 OF 18



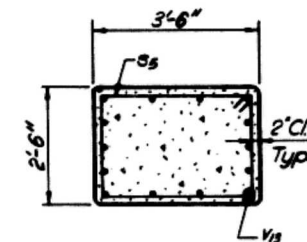
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-3	PEORIA	33	22
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	



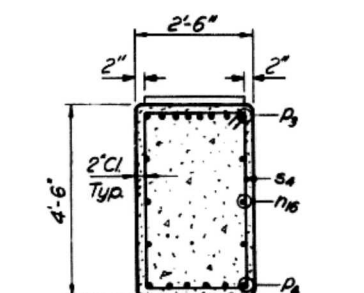
TOP PLAN



SECTION B-B



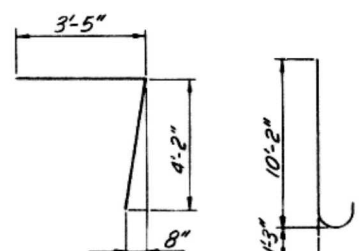
SECTION C-C



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p1	6	#5	32'-4"	
p2	7	#9	25'-0"	
p3	10	#5	25'-0"	
h1	48	#9	11'-5"	
h2	26	#6	10'-6"	
h3	14	#9	7'-10"	
s1	16	#9	7'-7"	7
s2	8	#9	39'-0"	
s3	6	#8	32'-4"	
s4	22	#5	13'-5"	
s5	55	#5	11'-5"	
s6	36	#5	12'-11"	
s7	20	#5	11'-2"	
s8	16	#5	6'-2"	
s9	26	#6	10'-6"	
t1	43	#8	8'-2"	
v1	62	#9	22'-5"	
w1	9	#8	31'-8"	
Class X Concrete		Cu. Yds.	79.5	
Reinforcement Bars		Lbs.	14,320	
Name Plate		Ea.	1	



BAR p1

BAR p2

BAR p3

BAR h1

BAR h2

BAR h3

BAR s1

BAR s2

BAR s3

BAR s4

BAR s5

BAR s6

BAR s7

BAR s8

BAR s9

BAR s10

BAR s11

BAR s12

BAR s13

BAR s14

BAR s15

BAR s16

BAR s17

BAR s18

BAR s19

BAR s20

BAR s21

BAR s22

BAR s23

BAR s24

BAR s25

BAR s26

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BAR s79

BAR s80

BAR s81

BAR s82

BAR s83

BAR s84

BAR s85

BAR s86

BAR s87

BAR s88

BAR s89

BAR s90

BAR s91

BAR s92

BAR s93

BAR s94

BAR s95

BAR s96

BAR s97

BAR s98

BAR s99

BAR s100

A&B DIMENSIONS

Bar	A	B
p1	2'-6"	4'-0"
p2	2'-2"	4'-6"
p3	2'-2"	2'-0"
h1	2'-6"	4'-0"
h2	2'-6"	4'-0"
h3	2'-6"	4'-0"
s1	2'-6"	4'-0"
s2	2'-6"	4'-0"
s3	2'-6"	4'-0"
s4	2'-6"	4'-0"
s5	2'-6"	4'-0"
s6	2'-6"	4'-0"
s7	2'-6"	4'-0"
s8	2'-6"	4'-0"
s9	2'-6"	4'-0"
s10	2'-6"	4'-0"
s11	2'-6"	4'-0"
s12	2'-6"	4'-0"
s13	2'-6"	4'-0"
s14	2'-6"	4'-0"
s15	2'-6"	4'-0"
s16	2'-6"	4'-0"
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s82	2'-6"	4'-0"
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s92	2'-6"	4'-0"
s93	2'-6"	4'-0"
s94	2'-6"	4'-0"
s95	2'-6"	4'-0"
s96	2'-6"	4'-0"
s97	2'-6"	4'-0"
s98	2'-6"	4'-0"
s99	2'-6"	4'-0"
s100	2'-6"	4'-0"

Max. Soil Pressure 2.85 T/ft'

BAR p1

BAR p2

BAR p3

BAR h1

BAR h2

BAR h3

BAR s1

BAR s2

BAR s3

BAR s4

BAR s5

BAR s6

BAR s7

BAR s8

BAR s9

BAR s10

BAR s11

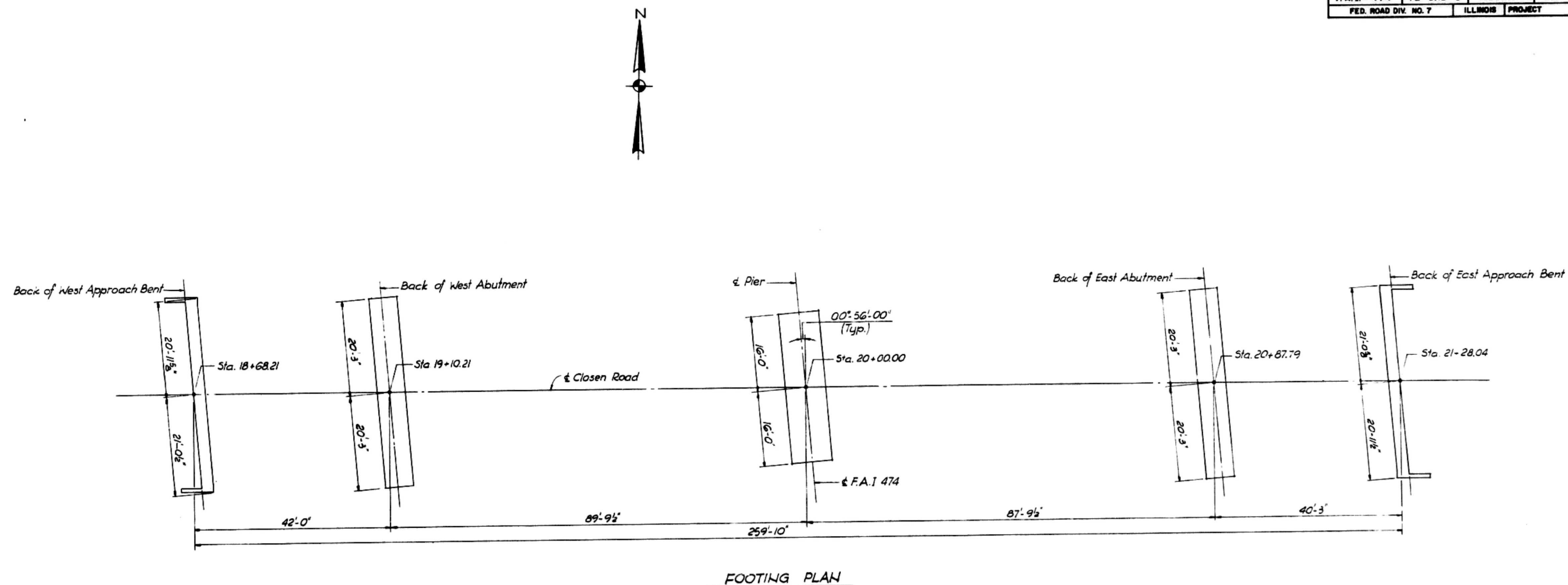
BAR s12

BAR s13

BAR s14

BAR s15

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 474	72-3HB-3	PEORIA	33	23
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	



DESIGNED BY _____
 DRAWN BY E.C.
 CHECKED BY A.T.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 FOOTING LAYOUT
 CLOSEN ROAD
 OVER
 F.A.I. ROUTE 474
 STA. 237+76.77
 F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-3
 CHRISTIAN-ROGE AND ASSOC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
17 OF 18

Boring No. 1	Station 18+77	Offset 8' 1/2" Q	Ground Surface 666.7	0			
BROWN, MOIST CLAY							
	663.7	11	1.8	S	-		
BROWN, MOIST SILTY CLAY							
	661.2	6	1.0	S	-		
LIGHT BROWN, MOIST SILTY CLAY LOAM							
Bl. W. App. Bent Flg							
	658.7	7	0.6	S	-		
LIGHT BROWN TO BROWN, MOIST SILTY LOAM (DIFFICULT TO POOR SAMPLE RECOVERY)							
	-10	7	0.6	S	-		
		11	0.9	S	-		
	-15	6	0.7	S	-		
		7	0.6	S	-		
	-20	11	0.7	S	-		
	644.7						
		9	0.8	S	-		
	642.2						
	-25	15	2.0	S	-		
BROWN, MOIST CLAY (TRACE OF SAND AND GRAVEL)							
		17	1.2	S	-		
	-30	24	3.1	S	-		
BROWN AND GRAY, DAMP CLAY LOAM							
	633.7	100	10+	S	-		
BROWN AND GRAY, DAMP SHALEY CLAY LOAM							
	631.2	50	3"		-		
GRAY, DRY SANDSTONE							
	628.7	50	1"		-		
END OF BORING							
	-45						

Boring No. 2	Station 19+11	Offset 18' RT Q	Ground Surface 666.4	0			
BROWN, MOIST SILTY CLAY LOAM							
		7	1.7	S	26		
	660.9	5	1.3	S	27		
LIGHT BROWN AND GRAY, WET SILTY CLAY LOAM							
	658.4	3	0.3	S	29		
LIGHT BROWN AND GRAY, WET TO DAMP SILTY LOAM							
	-10	5	0.2	S	27		
		15	0.7	S	20		
	-15	11	0.6	S	-		
		13	0.6	S	26		
BROWN, MOIST SILTY CLAY LOAM							
	648.4						
	-20	13	0.9	S	25		
	644.4						
	-25	12	1.0	S	25		
	640.9	6	0.8	S	24		
BROWN, MOIST CLAY (TRACE OF SAND AND GRAVEL)							
Bl. W. Abut. Flg							
	638.4	23	3.1	S	21		
BROWN, DAMP SILTY CLAY							
	-30	27	3.3	S	22		
	633.4	13	3.0	S	15		
BROWN, DAMP CLAY LOAM							
	630.9	25	-	-	12		
GRAY SHALEY CLAY							
	-50	50	2.8	S	13		
	-60	50	6"		-		
	623.4	50	5"		9		
END OF BORING							
	-45						

Boring No. 3	Station 20+00	Offset 10' RT Q	Ground Surface 666.3	0			
BROWN, MOIST CLAY							
	661.8	14	1.9	S	-		
LIGHT BROWN AND GRAY SILTY CLAY							
	-5	8	1.1	S	-		
	656.8	11	1.2	S	-		
LIGHT BROWN AND GRAY WET TO DAMP SILTY LOAM							
	-10	6	0.2	S	-		
		17	0.9	S	-		
	-15	10	1.0	S	-		
		9	0.7	S	-		
	-20	6	0.6	S	-		
	642.8						
	641.8	10	0.9	S	-		
BROWN, WET SILTY CLAY LOAM							
	639.3	6	1.1	S	-		
LIGHT BROWN AND GRAY, MOIST CLAY (TRACE OF SAND)							
Bl. E. Abut. Flg							
		19	3.5	S	-		
	-30	15	2.5	S	-		
	634.3						
LIGHT BROWN AND GRAY, WET CLAY LOAM (TRACE OF SAND)							
	631.8	1	0.2	S	-		
LIGHT GRAY, DAMP CLAY LOAM							
	629.3	64	7.0	S	-		
LIGHT GRAY, DAMP SHALEY CLAY LOAM							
	-50	50	7.7	S	-		
	-60	100	7.0	S	-		
	624.3						
	-45	50	5"		-		
	616.8	50	5"		-		
END OF BORING							
	-45						

Boring No. 4	Station 20+87	Offset 1 1/2' RT Q	Ground Surface 661.8	0			
BROWN, MOIST CLAY							
	661.8	14	1.9	S	-		
LIGHT BROWN AND GRAY SILTY CLAY							
	-5	8	1.1	S	-		
	656.8	11	1.2	S	-		
LIGHT BROWN AND GRAY WET TO DAMP SILTY LOAM							
	-10	6	0.2	S	-		
		17	0.9	S	-		
	-15	10	1.0	S	-		
		9	0.7	S	-		
	-20	6	0.6	S	-		
	642.8						
	641.8	10	0.9	S	-		
BROWN, WET SILTY CLAY LOAM							
	639.3	6	1.1	S	-		
LIGHT BROWN AND GRAY, MOIST CLAY (TRACE OF SAND)							
Bl. E. Abut. Flg							
		19	3.5	S	-		
	-30	15	2.5	S	-		
	634.3						
LIGHT BROWN AND GRAY, WET CLAY LOAM (TRACE OF SAND)							
	631.8	1	0.2	S	-		
LIGHT GRAY, DAMP CLAY LOAM							
	629.3	64	7.0	S	-		
LIGHT GRAY, DAMP SHALEY CLAY LOAM							
	-50	50	7.7	S	-		
	-60	100	7.0	S	-		
	624.3						
	-45	50	5"		-		
	616.8	50	5"		-		
END OF BORING							
	-45						

Boring No. 5	Station 21+27	Offset 10' RT Q	Ground Surface 661.8	0			
BROWN, MOIST CLAY							
	661.8	19	2.1	S	25		
BROWN, MOIST SILTY CLAY							
	659.3	12	1.1	S	25		
LIGHT BROWN, WET SILTY CLAY LOAM							
Bl. E. App. Bent Flg							
	656.8	6	0.3	S	29		
LIGHT BROWN AND GRAY, WET TO DAMP SILTY LOAM							
	-10	5	0.2	S	29		
		19	0.7	S	20		
	-15	9	0.7	S	22		
		14	0.6	S	-		
	-20	8	0.7	S	27		
	642.8						
	639.3	8	1.0	S	24		
BROWN, MOIST CLAY (TRACE OF SAND)							
		21	3.3	S	23		
	-30	22	2.7	S	22		
	631.8	100	2.1	S	-		
SANDSTONE LAST 2"							
LIGHT BROWN SANDSTONE							
	629.3	50	0.6"		-		
MILKY LIMESTONE							
	626.8	50	1"		-		
END OF BORING							
	-45						

N - Standard Penetration Test - Blows per foot to drive 3" O.D. Split Spore Sampler 12" with 140# hammer falling 30".

Qu - Unconfined Compressive Strength - t/d
w - Water Content - percentage of oven dry weight - %

Type Failure
S - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

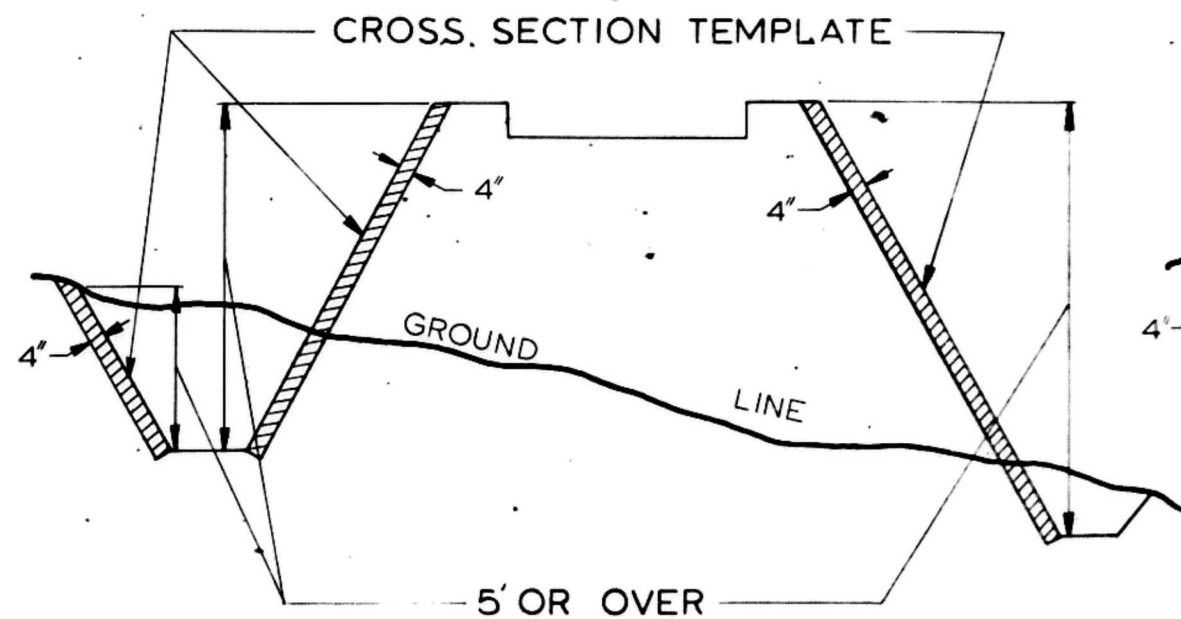
DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
BORING LOGS
CLOSEN ROAD
OVER
F.A.I. ROUTE 474
STA. 237+76.77
F.A.I. RT 474 PEORIA COUNTY SECTION 72-3HB-3
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET
18 OF 18

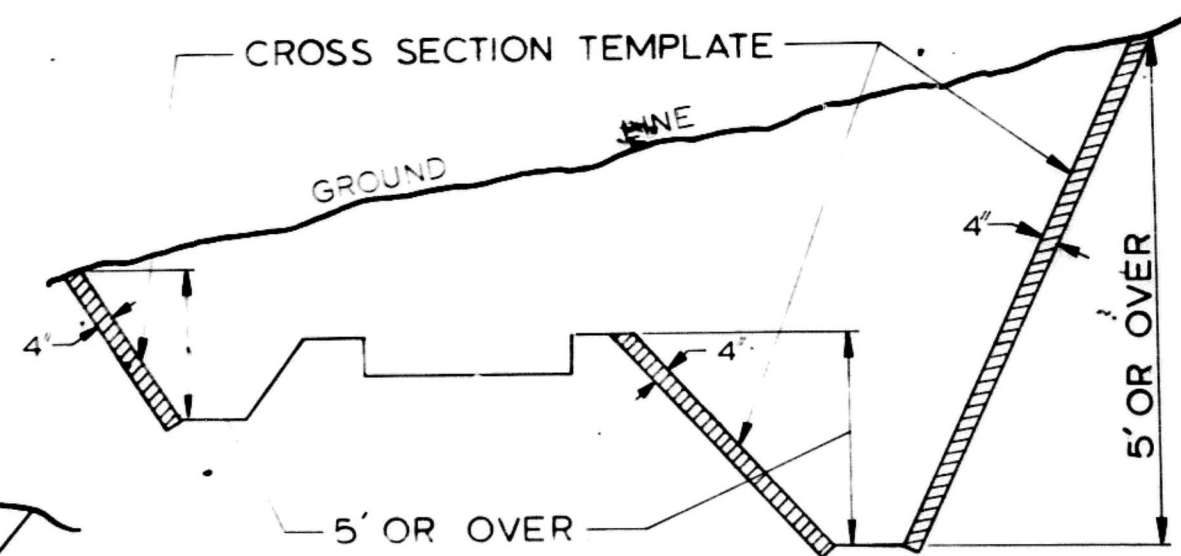
TOPSOIL PLACEMENT DETAIL

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.I. 474	72-3HB-3	PEORIA	33	24A
ILLINOIS PROJECT				

FILL



CUT



NOT TO SCALE

NOTE: TOPSOIL QUANTITIES IN EACH EARTH BALANCE
ARE SHOWN ON PLAN SHEETS
NOTE: SEE "X" SECTIONS FOR 4" TOPSOIL LOCATIONS

END CONSTRUCTION
STA. 5+49.21

670
5 + 49.21

C=73
F=0

670
5 + 00

C=65
F=0

670
4 + 50

C=49
F=0

670
4 + 00

C=78
F=0

670
3 + 50

C=40
F=0

670
3 + 00

C=20
F=5

670
2 + 50

C=45
F=2

670
2 + 00

C=10
F=19

665
1 + 50

C=10
F=15

665
1 + 00

C=31
F=0

665
0 + 50

C=42
F=0

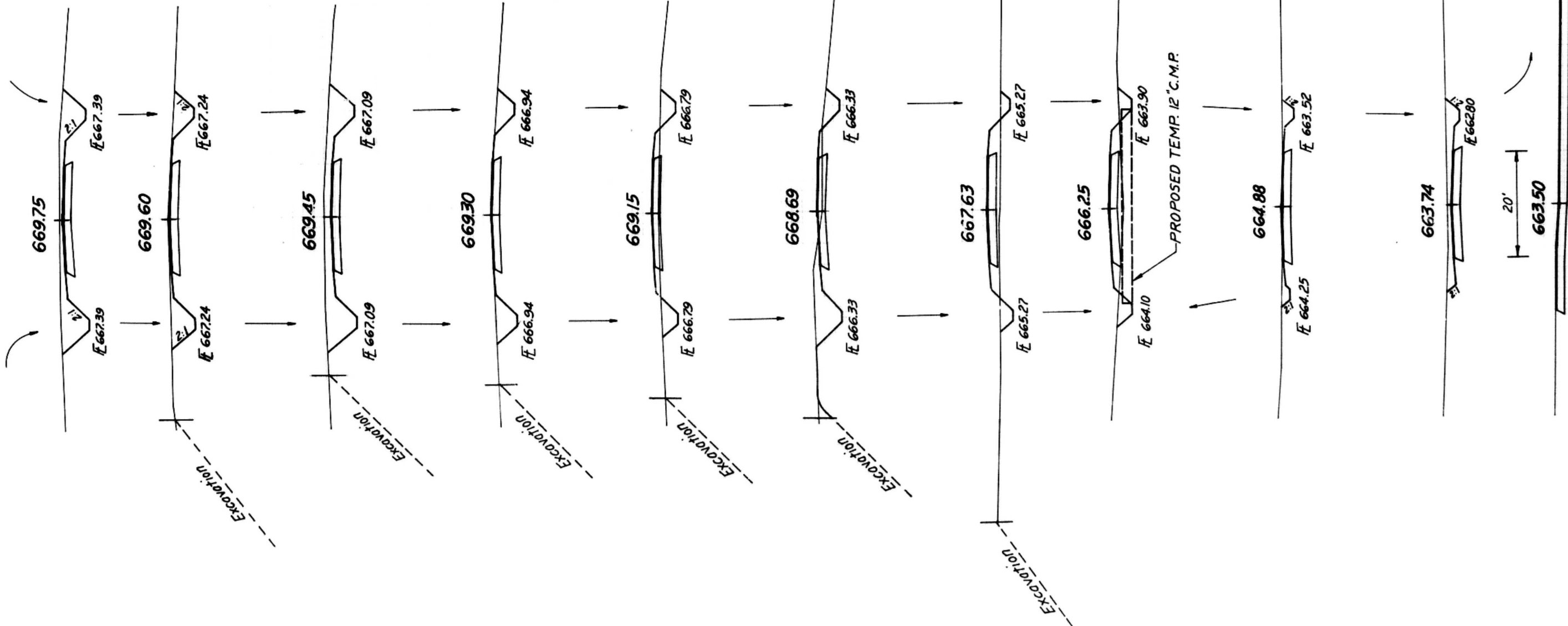
665
0 + 09

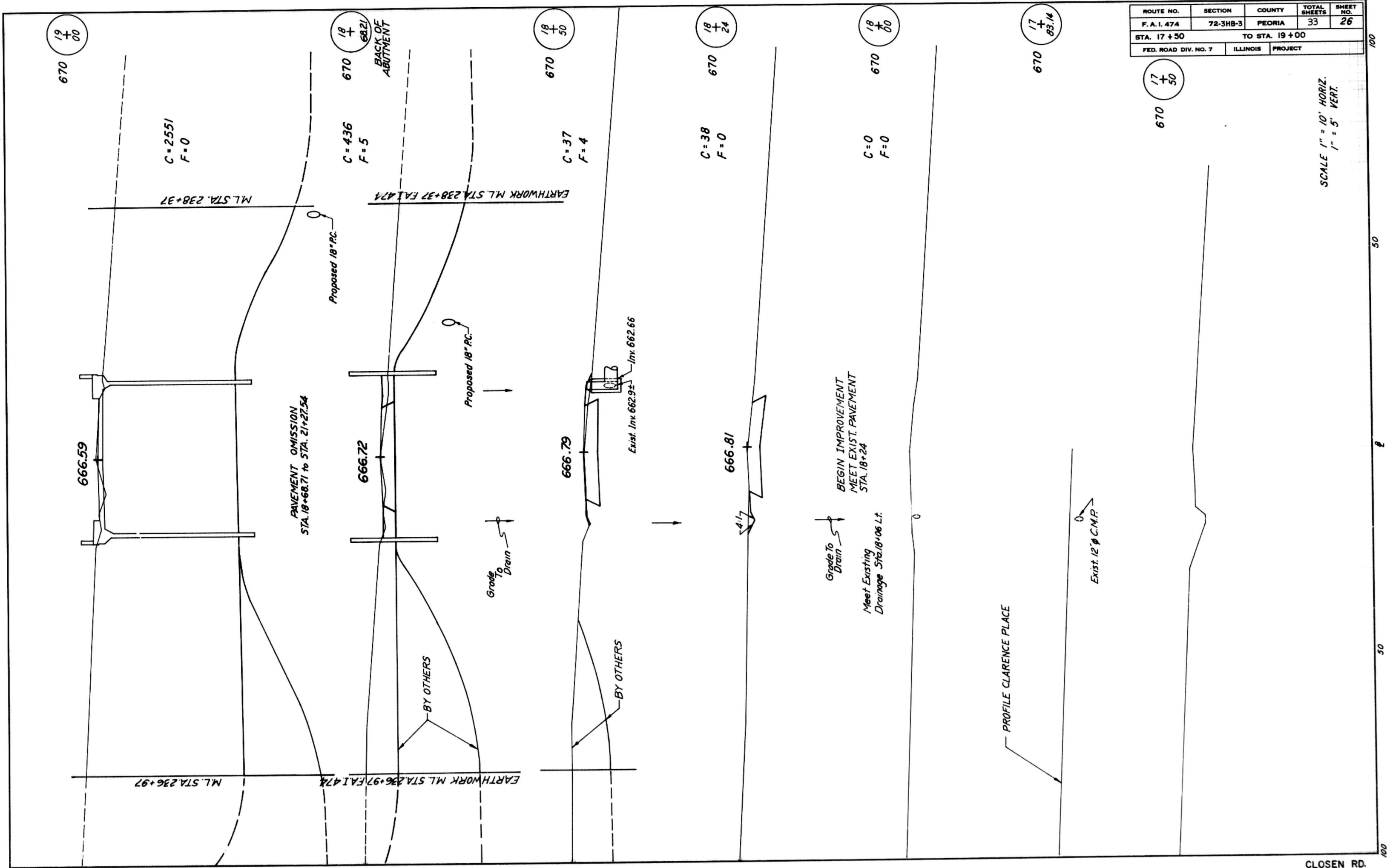
C=51
F=0

BEGIN CONSTRUCTION
STA. 0+09

SCALE: 1"=10' HORIZ.
1/4"=5' VERT.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 474	72-3HB-3	PEORIA	33	25
STA. 0+09.00		TO STA. 5+49.21		
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	





ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 474	72-3HB-3	PEORIA	33	26
STA. 17+50 TO STA. 19+00				
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT		

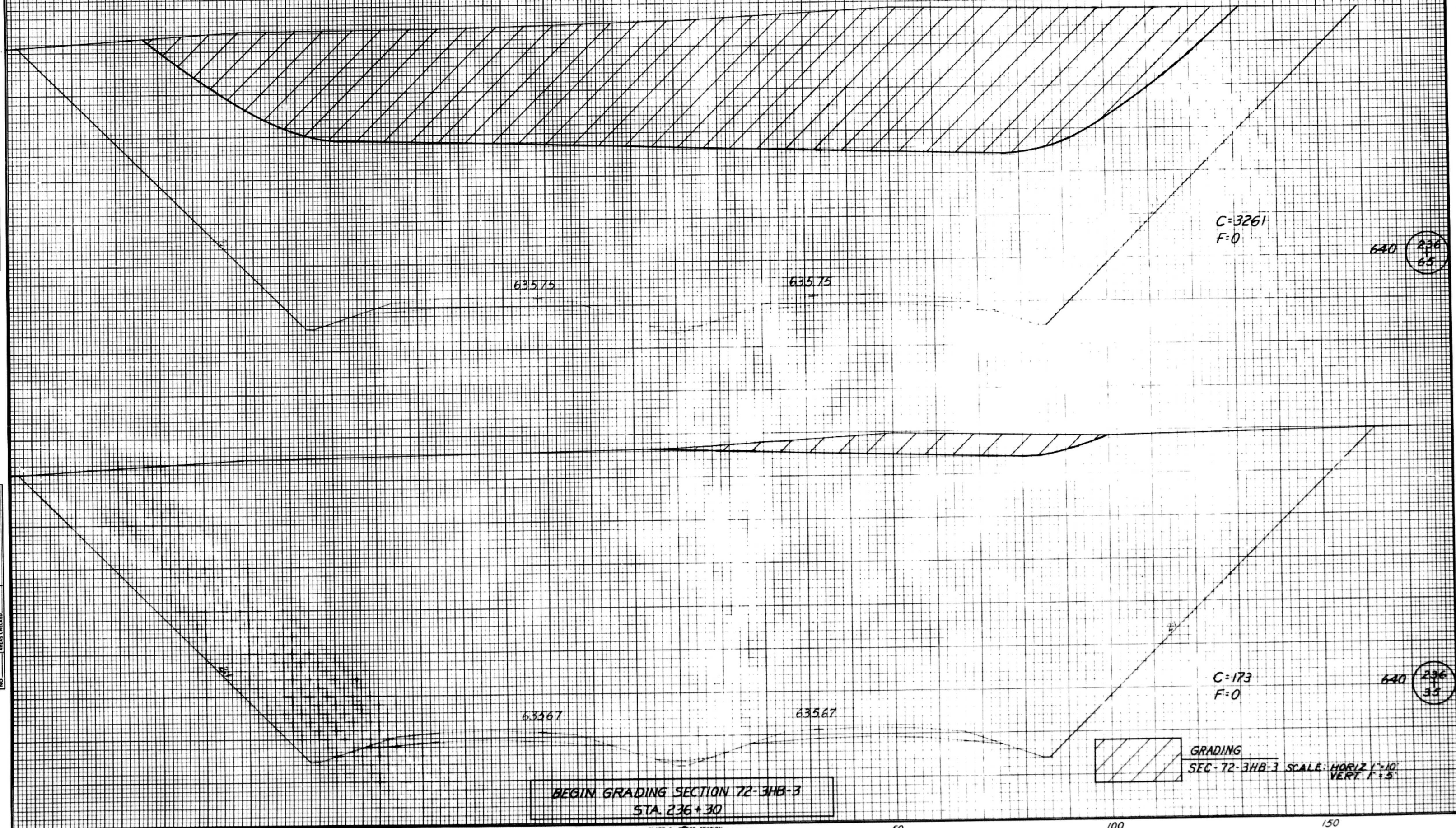
SCALE 1" = 10' HORIZ.
1" = 5' VERT.

CLOSED RD.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 1.474	72-3HB-3	PEORIA	33	29
STA. 236+35			TO STA. 236+65	
FED. ROAD DIV. NO. 1			ILLINOIS PROJECT	

DATE	
BY	
NO.	
FINAL SURVEY	
CURVED	
NOTE BOOK	
AREAS CHECKED	

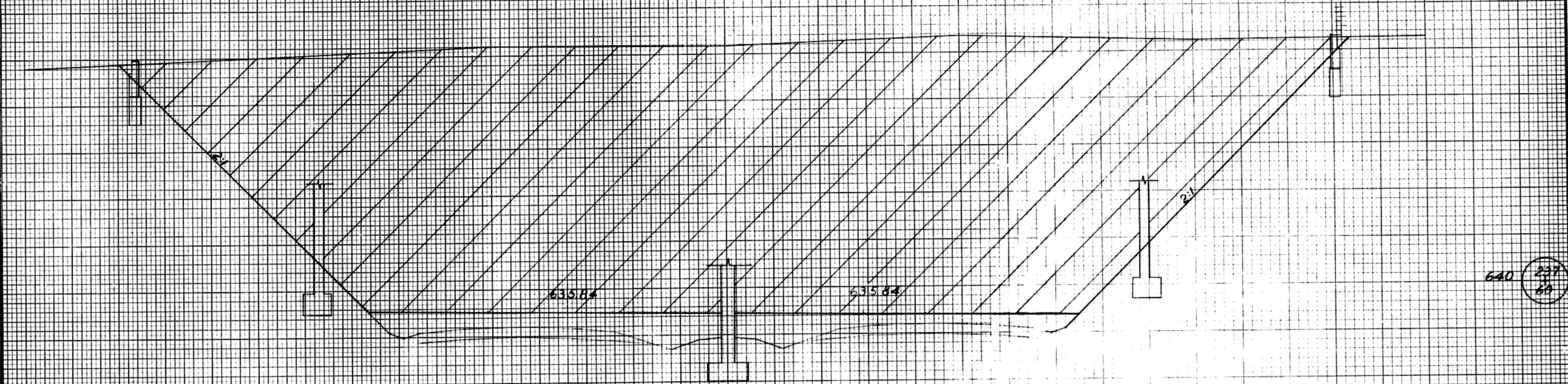
DATE	
BY	
NO.	
ORIGINAL SURVEY	
CURVED	
NOTE BOOK	
AREAS CHECKED	



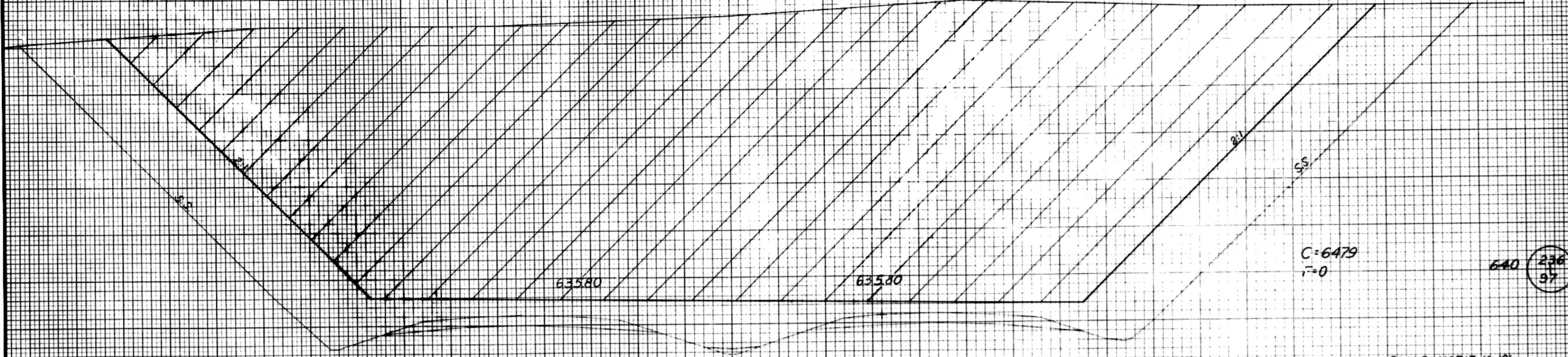
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 1474	72-3HB-3	PEORIA	33	30
STA. 236+97			TO STA. 237+60	
FED. ROAD DIV. NO. 2			PROJECT	

DATE	
BY	
NO.	
FINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
NO.	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



GRADING OMISSION SECTION 72-3HB-3
 STA. 236+97 to STA. 237+37
 SEE CLOSED RD. CROSS SECTIONS FOR EARTHWORK
 INCLUSIVE CROSS SECTIONS FOR INFORMATION ONLY



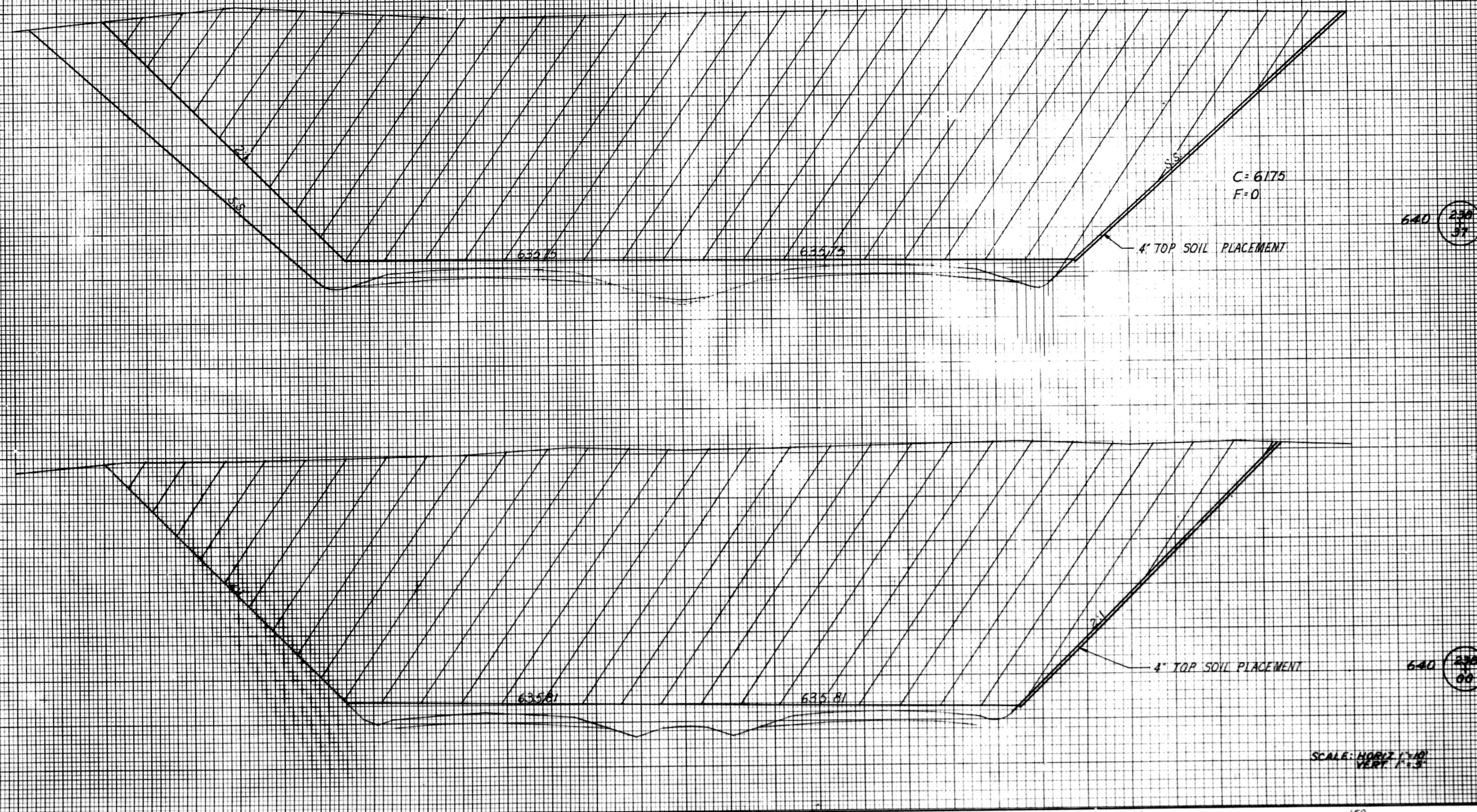
C=6479
 I=0

SCALE: HORIZ. 1"=10'
 VERT. 1"=5'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 1.474	72-3HB-3	PEORIA	33	31
STA. 238+00			TO STA. 238+37	
FED. ROAD DIV. NO. 7			ILLINOIS PROJECT	

DATE	BY
FINAL SURVEY	
NOTE BOOK	
NO	
AREAS CHECKED	

DATE	BY
ORIGINAL SURVEY	
NOTE BOOK	
NO	
AREAS CHECKED	



C = 6175
F = 0

640 238 37

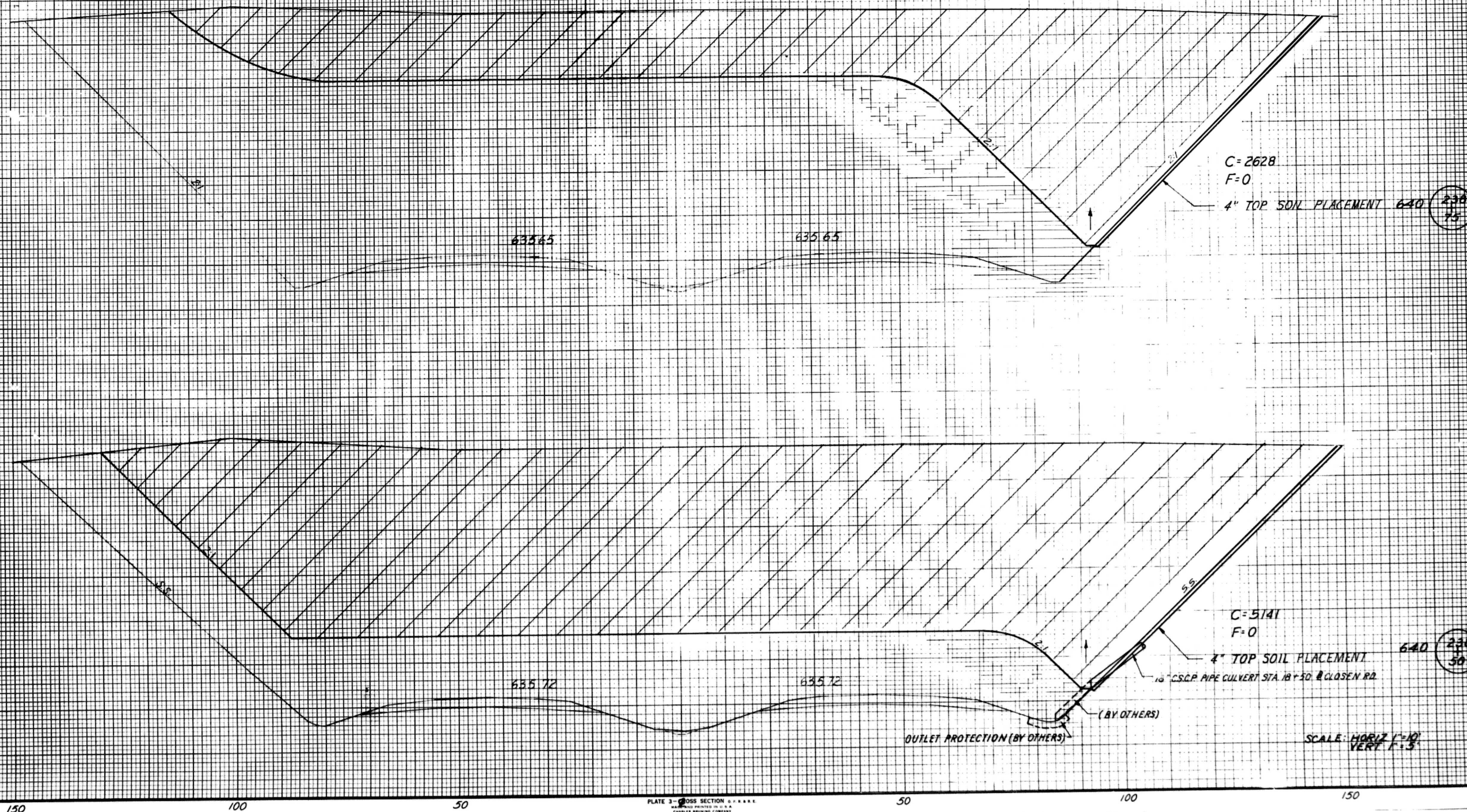
640 238 00

SCALE: HORIZ 1"=10'
VERT 1"=5'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 1.474	72-3HB-3	PEORIA	33	32
STA. 238+50		TO STA. 238+75		
FED. ROAD DIV. NO. 7		ILLINOIS PROJECT		

DATE	
BY	
SURVEYED	
NOTED	
PLOTTED	
TEMPERATURE	
WIND	
MOON	
NO.	

DATE	
BY	
SURVEYED	
NOTED	
PLOTTED	
TEMPERATURE	
WIND	
MOON	
NO.	

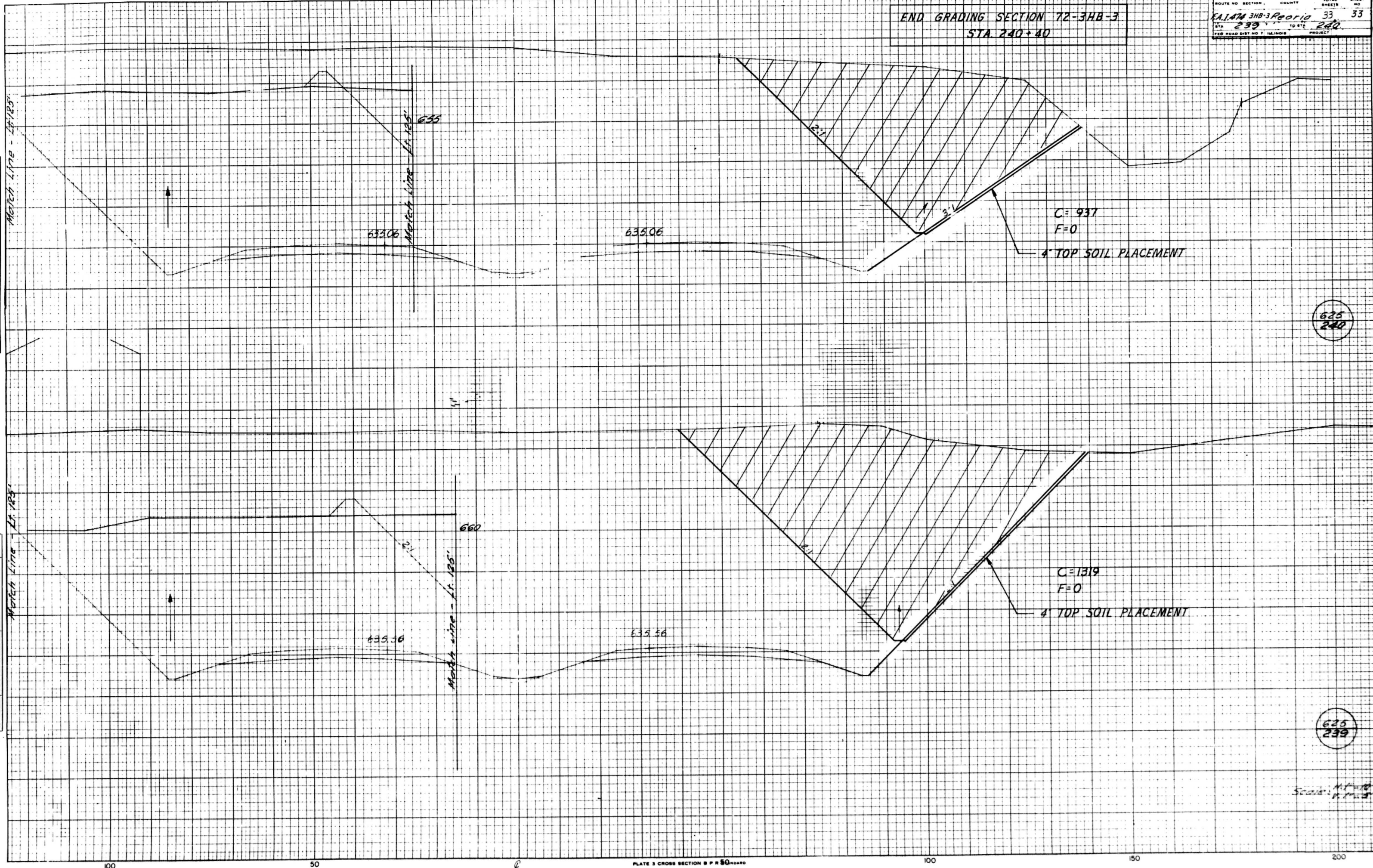


END GRADING SECTION 12-3HB-3
STA. 240+40

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA. 1.474	3HB-3	Peoria	33	33
STA. 233	TO STA. 240			
FED. ROAD DIST. NO. 7	ILLINOIS			

FINAL SURVEY	DATE
BY	
APPROVED	
NOTED	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
BY	
APPROVED	
NOTED	
AREAS CHECKED	



Scale: 1" = 10'