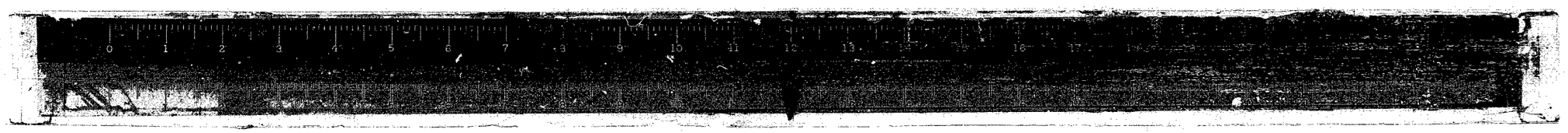
RT. FA 68

SEC. (37, 101) BVB



Stati

Sheet No.	INDEX OF SHEETS
1	Cover Sheet
2 - 3	Typical Sections
4 - 5	Details
6	Summary of Quantities
7 - 11	Quantity Schedule
12 - 16	Plan & Profile - F. A. 24
17 - 18	Plan & Profile - S. R. Sta. 125 + 50
19 - 40	Bridge Plans
41 - 65	Cross Sections - F. A. 24
66 - 67	Cross Sections - S. R. Sta. 125 + 50

STANDARDS

1686-4	Standard Symbols and Abbreviations
1744-4	Right-of-Way Markers
2113-1	Name Plate for Bridges
2117-1	Bituminous Patching Details
2135	Permanent Survey Markers
2228-4	Metal End Section for Pipe Culvert
2237-10	Shoulder Detail *
2249-4	Inlet Box
2258-3	Paved Ditch
2262-3	Precast R.C. Flared End Section
2298-4	Typical Application of Traffic Control Devices
2299-7	Design of Traffic Control Devices
2300-1	Flagman Traffic Control Sign
2301-3	Traffic Control Devices
2302-3	Traffic Control Devices
2303-4	Traffic Control Devices
2305-3	Traffic Control Devices
2307-4	Traffic Control Devices
2322-1	Bituminous Curb and Concrete Inlet For Stabilized Shoulders *

* For Information Only

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

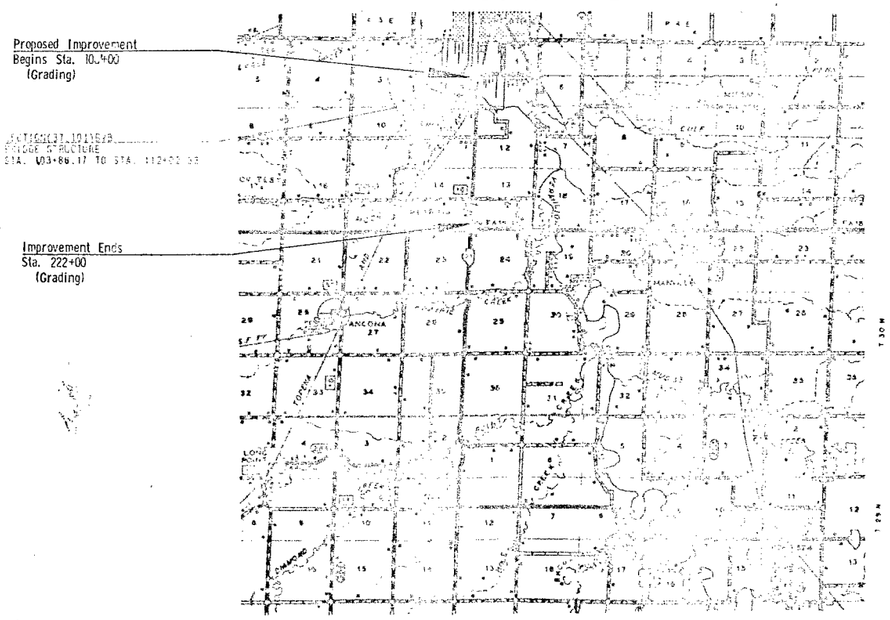
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALE IN FEET

PLAN 0 100 200 PROFILE HOR. 0 100 200
CROSS-SECTIONS HOR. 0 10 20 PROFILE VERT. 0 10 20
CROSS-SECTIONS VERT. 0 5 10

F.A. ROUTE 68
SECTION (37,101)BVB
PROJECT BR-F-F-68(24)
LIVINGSTON COUNTY
C-93-019-78

F. A. Route 68
Formerly F. A. Route 24

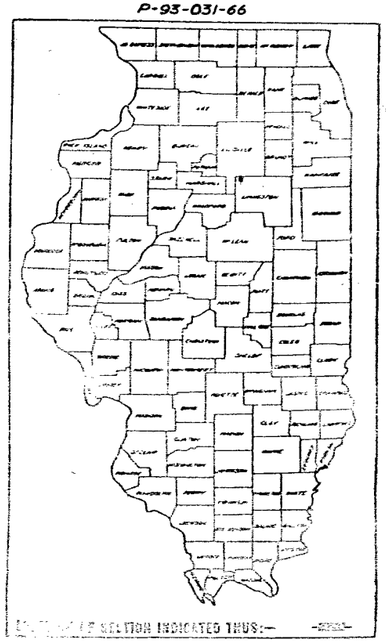


Net Length of Sections (37, 101)R, W & RS (Pregrade) = 11383.8 Ft. = 2.156 Miles
(37, 101) BVB = 816.16 Ft. = 0.155 Miles
Gross Length of Improvement 12200.00 Ft. = 2.311 Miles
Net Length of Improvement 12200.00 Ft. = 2.311 Miles

SCALE IN MILES 0 1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
FA. 68	(37, 101) BVB	LIVINGSTON	67	1
STA.		STATE		
		PROJECT	BR-F-F-68(24)	

P-93-031-66



ENLARGED SECTION INDICATED THUS:—

Design Designation
575(93) Major D. 66(B-15)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED 8/25/78
RECOMMENDED 8/25/78
APPROVED 8/25/78
DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
Jay W. Miller
DIVISION ADMINISTRATOR
11/20/78
DATE

SUBMITTED BY PEORIA AND ASSOCIATES, INC.

Rev. 9-12-78

CONTRACT NO. 82100

LIVINGSTON COUNTY SECTION (37,101)BVB FA ROUTE 24

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FA. 68	137, 101 BVB	LIVINGSTON	67	1
STA.	TO STA.	ILLINOIS	BR-F-F-68(24)	

P-93-031-66

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALE IN FEET

PLAN	0 100 200	PROFILE HOR.	0 100 200
CROSS-SECTIONS HOR.	0 10 20	PROFILE VERT.	0 10 20
CROSS-SECTIONS VERT.	0 5 10		

F.A. ROUTE 68
SECTION (37, 101)BVB
PROJECT BR-F-F-68(24)
LIVINGSTON COUNTY
C-93-019-78

F. A. Route 68
Formerly F. A. Route 24

Sheet No. INDEX OF SHEETS

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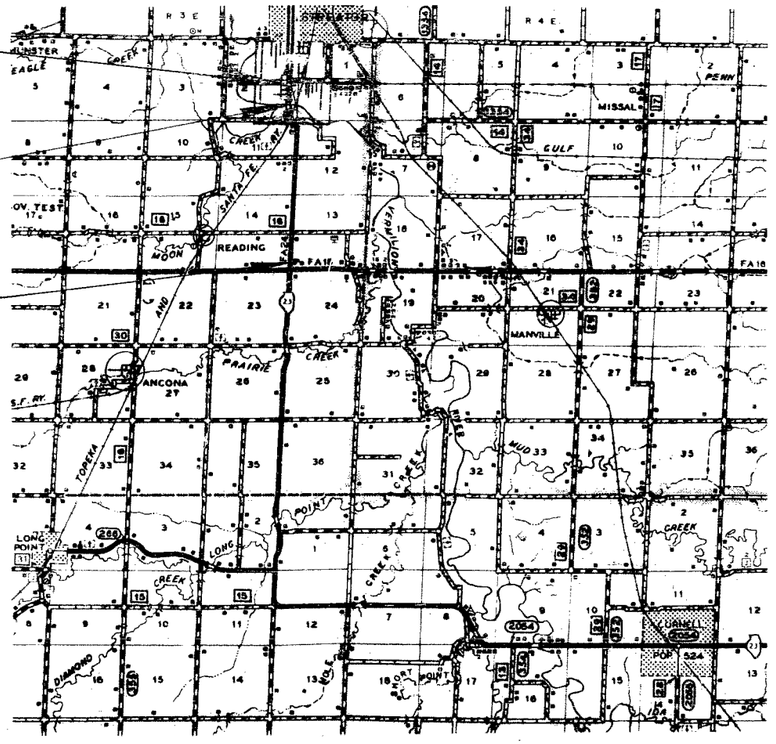
2303-4	Traffic Control Devices
2305-3	Traffic Control Devices
2307-4	Traffic Control Devices
2322-1	Bituminous Curb and Concrete Inlet For Stabilized Shoulders *

* For Information Only

Proposed Improvement
Begins Sta. 100+00
(Grading)

SECTION (37, 101) BVB
BRIDGE STRUCTURE
STA. 103+86.17 TO STA. 112+02.33

Improvement Ends
Sta. 222+00
(Grading)



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Gross Length of Improvement 12200.00 Ft. = 2.311 Miles
Net Length of Improvement 12200.00 Ft. = 2.311 Miles

SCALE IN MILES 0 1 2

LOCATION OF SECTION INDICATED THUS:—

Design Designation:
575(93) Major Q 66(B-15)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 5/19, 78
RECOMMENDED 5/25, 78
PASSED 5/25, 78 Thomas R Bright
APPROVED 5/25, 78
DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

SVERDRUP & PARCEL AND ASSOCIATES, INC.
ENGINEERS — ARCHITECTS
ST. LOUIS, MISSOURI

CONTRACT NO. 33400

LIVINGSTON COUNTY SECTION (37, 101)BVB F.A. ROUTE 24

Rev. 9-12-78

STR

Plan for 12-1-78 Let 11-14-78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALE IN FEET

PLAN 0 100 200 — PROFILE HOR. 0 100 200

CROSS-SECTIONS HOR. 0 10 20 — PROFILE VERT. 0 10 20

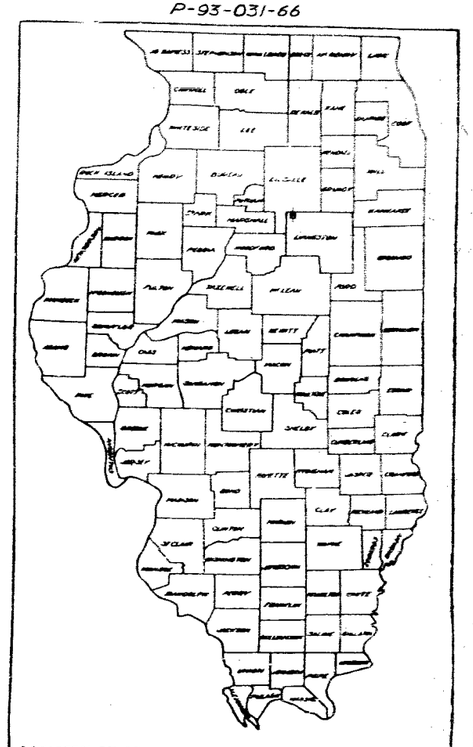
CROSS-SECTIONS VERT. 0 5 10

F.A. ROUTE 68
SECTION (37,101)BVB
PROJECT BR-F-F-68(24)
LIVINGSTON COUNTY
C-93-019-78

F. A. Route 68
Formerly F. A. Route 24

FA. 68 (37, 101) BVB LIVINGSTON 67 1A
BR-F-F-68(24)

P-93-031-66



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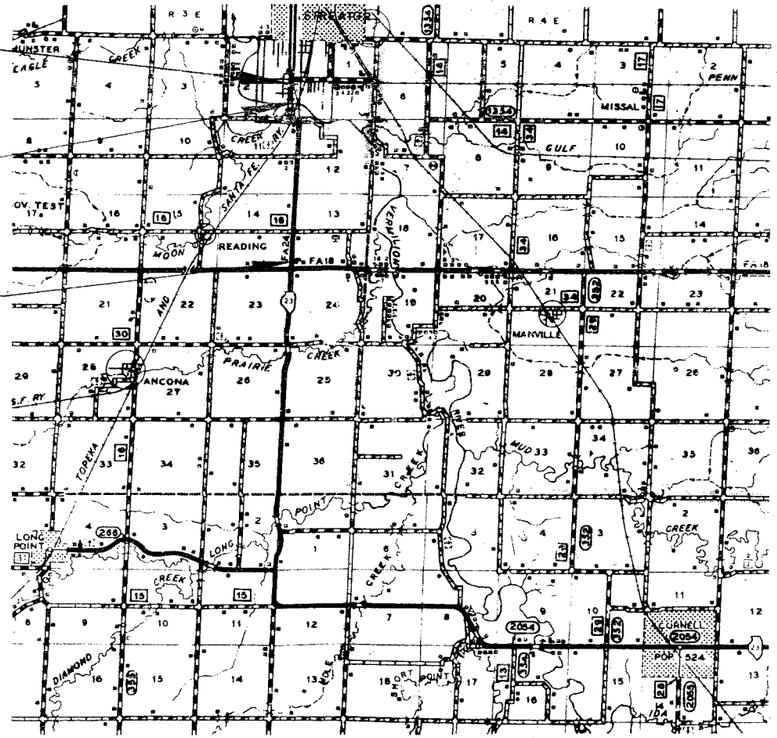
2307-4	Traffic Control Devices
2322-1	Bituminous Curb and Concrete Inlet For Stabilized Shoulders *

* For Information Only

Proposed Improvement
Begins Sta. 102+00
(Grading)

SECTION(37,101)BVB
BRIDGE STRUCTURE
STA. 103+86.17 TO STA. 112+02.33

Improvement Ends
Sta. 222+00
(Grading)



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(37, 101) BVB = 816.16 Ft. = 0.155 Miles
Gross Length of Improvement 12200.00 Ft. = 2.311 Miles
Net Length of Improvement 12200.00 Ft. = 2.311 Miles

SCALE IN MILES 0 1 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 5/17/78 — CHIEF ENGINEER
EXAMINED 5/25/78 — ENGINEER OF PLANS AND CONTRACTS
PASSED 5/25/78 — ENGINEER OF DESIGN
APPROVED 5/25/78 — DIRECTOR OF HIGHWAY

Design Designation:
575(93) Major 0.66(B-15)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR — DATE

SVERDRUP & PARCEL AND ASSOCIATES, INC.
ENGINEERS — ARCHITECTS
ST. LOUIS, MISSOURI

AS REVISED

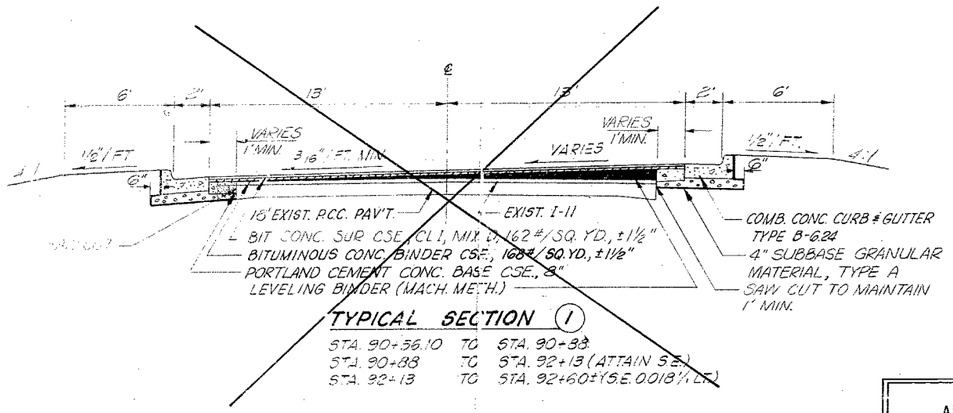
CONTRACT NO. 63401

LIVINGSTON COUNTY SECTION (37, 101)BVB F.A. ROUTE 24 As Revised 1-16-79 L.W

Rev. 9-12-78

STR

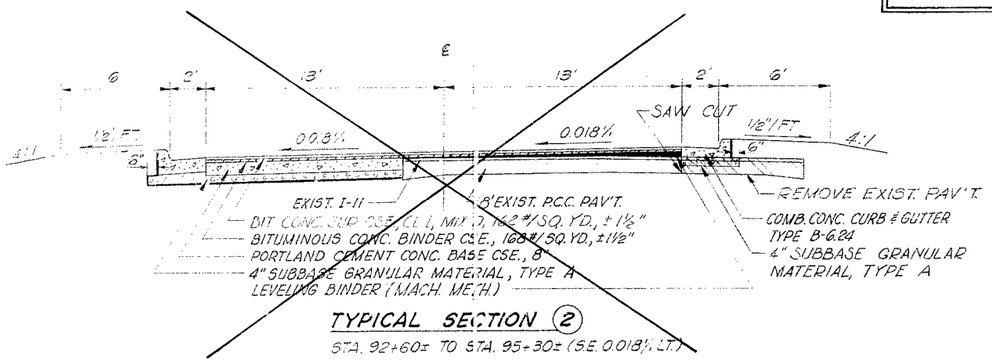
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	(37/01) 8VB	LIVINGSTON	47	2
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION (1)

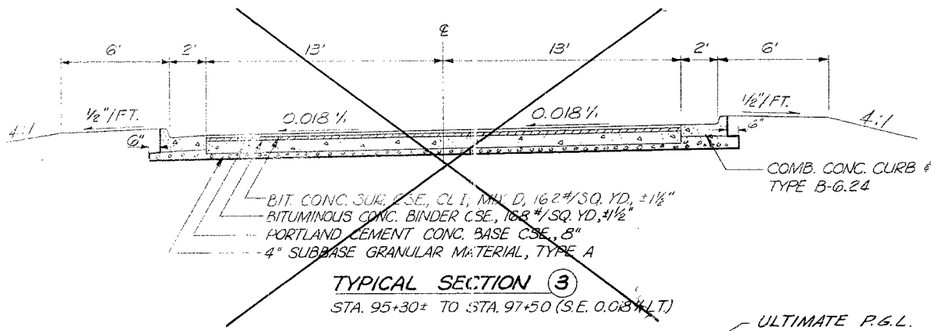
STA. 90+56.10 TO STA. 90+88
STA. 90+88 TO STA. 92+13 (ATTAIN S.E.)
STA. 92+13 TO STA. 92+60± (S.E. 0.018% LT.)

All references to "F. A. Route 24" throughout these Plans shall be construed to mean "F. A. Route 68."



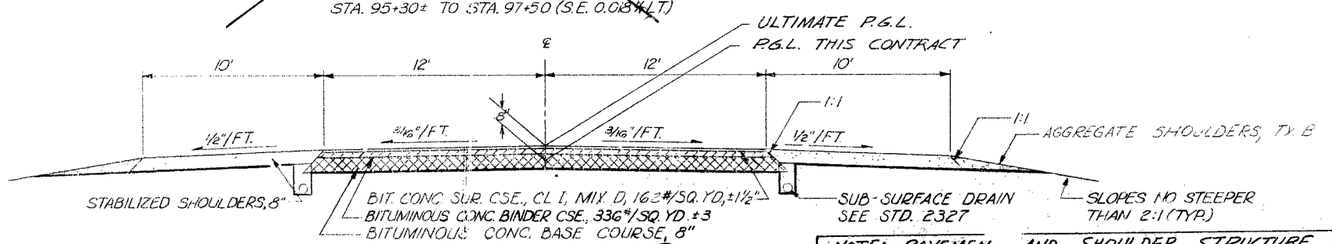
TYPICAL SECTION (2)

STA. 92+60± TO STA. 95+30± (S.E. 0.018% LT.)



TYPICAL SECTION (3)

STA. 95+30± TO STA. 97+50 (S.E. 0.018% LT.)

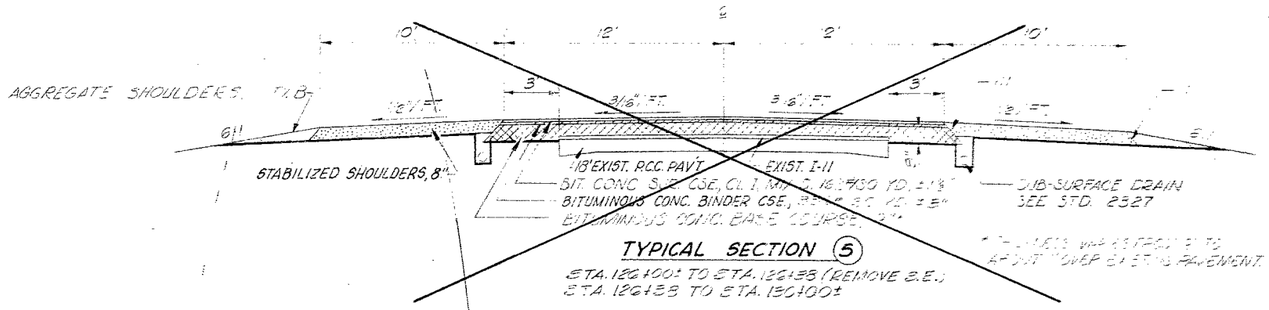


TYPICAL SECTION (4)

STA. 97+50 TO STA. 99+19 (S.E. 0.018% LT.)
STA. 99+19 TO STA. 100+44 (REMOVE S.E.)
STA. 100+44 TO STA. 103+36.16
STA. 112+52.33 TO STA. 115+76

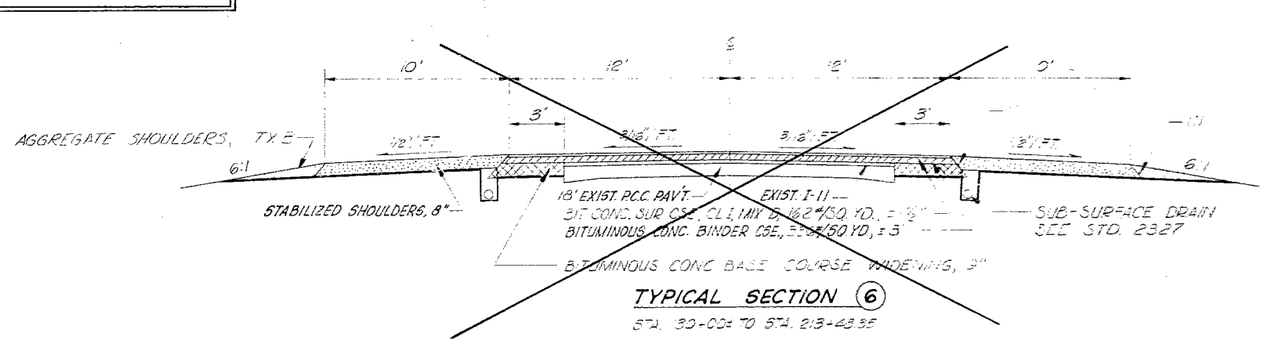
NOTE: PAVEMENT AND SHOULDER STRUCTURE FOR INFORMATION ONLY.

STA. 115+76 TO STA. 117+26 (ATTAIN S.E.)
STA. 117+26 TO STA. 124+88 (S.E. 0.035% RT.)
STA. 124+88 TO STA. 126+00± (REMOVE S.E.)



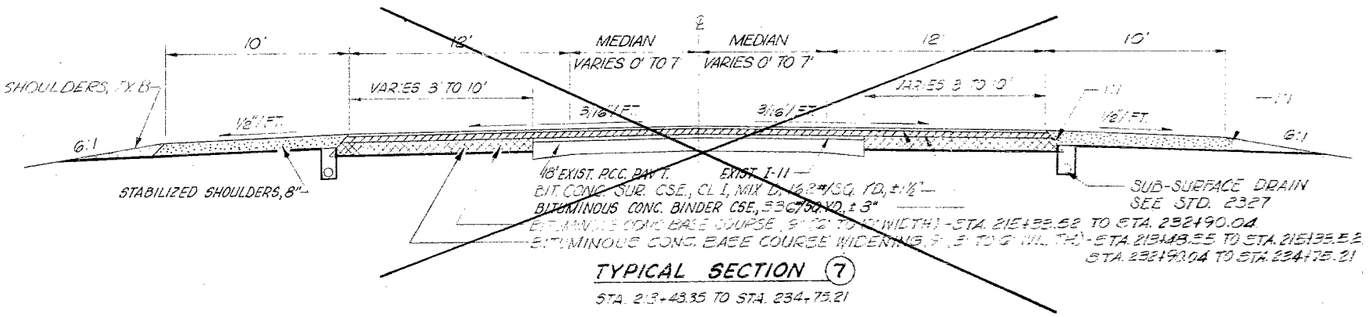
TYPICAL SECTION (5)

STA. 126+00± TO STA. 126+33 (REMOVE S.E.)
STA. 126+33 TO STA. 130+00±



TYPICAL SECTION (6)

STA. 30-00± TO STA. 213+43.35



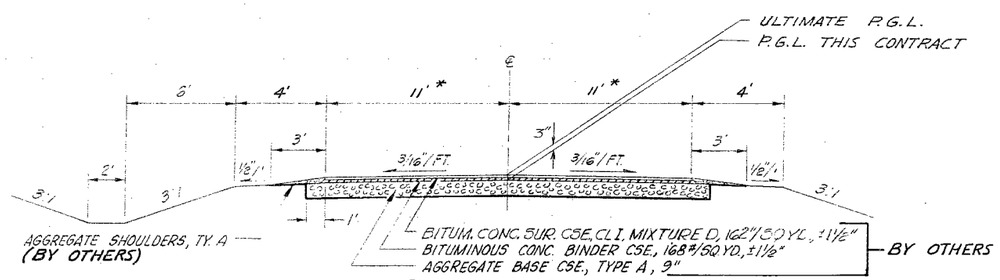
TYPICAL SECTION (7)

STA. 213+43.35 TO STA. 234+73.21

TYPICAL SECTIONS
F.A. ROUTE 24

3291

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	97,101, BVB	LIVINGSTON	67	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION (8) SIDE ROAD RIGHT STA. 125+50 AND DETOUR

STA. 2+57 TO STA. 6+08
STA. 6+08 TO STA. 7+08 (ATTAIN S.E.)
STA. 7+08 TO STA. 8+35 (S.E. 0.020% RT.)
STA. 8+35 TO STA. 9+35 (REMOVE S.E.)
STA. 9+35 TO STA. 9+50
STA. 12+20± TO STA. 14+24 (S.E. 0.040% RT.)
STA. 14+24 TO STA. 15+28 (REMOVE S.E.)
STA. 15+28 TO STA. 16+31 (ATTAIN S.E.)
STA. 16+31 TO STA. 18+68 (S.E. 0.040% LT.)
STA. 18+68 TO STA. 19+68 (REMOVE S.E.)
STA. 19+68 TO STA. 19-90±
DETOUR - STA. 17+44 TO STA. 21+96.14
SIDE ROAD - STA. 6+75 * 10'

NOTE : PAVEMENT AND SHOULDER STRUCTURE FOR INFORMATION ONLY (BY OTHERS).

State of Illinois
Department of Transportation
District Three

Reviewed By: _____
District Engineer of Design

Date: 5-22-72

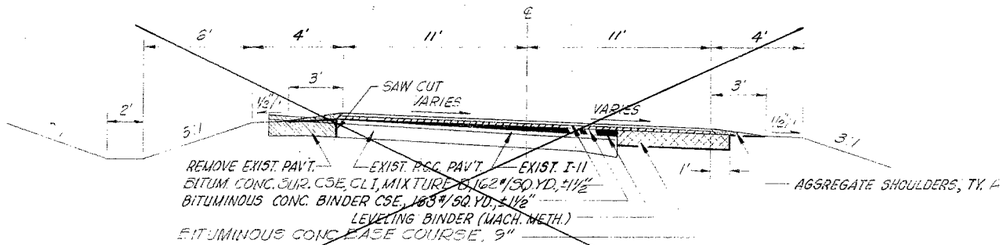
Examined By: _____
District Engineer of Construction

_____
District Engineer of Maintenance

_____
District Engineer of Materials

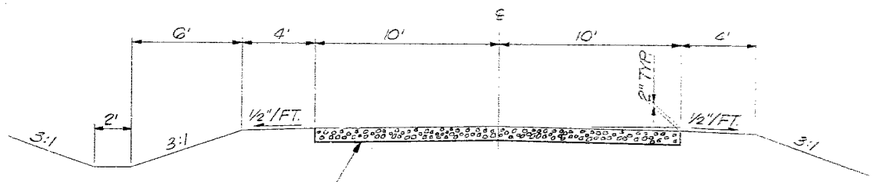
_____
District Engineer of Traffic

_____
District Engineer of Planning



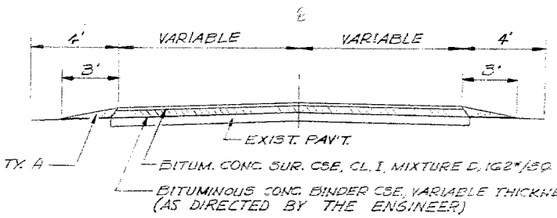
TYPICAL SECTION (9) SIDE ROAD RIGHT STA. 125+50

STA. 10+32 TO STA. 11+32 (ATTAIN S.E.)
STA. 11+32 TO STA. 12+20± (S.E. 0.040% RT.)

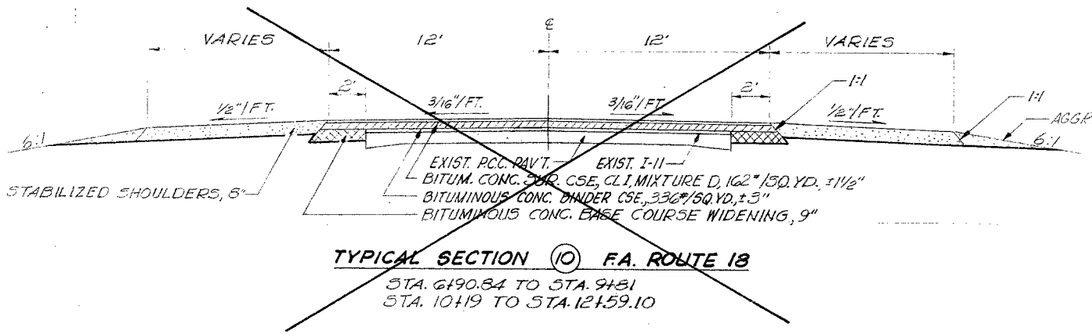


TYPICAL SECTION (12) SIDE ROADS

STA. 144+11.6 LEFT & RIGHT
STA. 197+44.5 LEFT
STA. 197+48.8 RIGHT



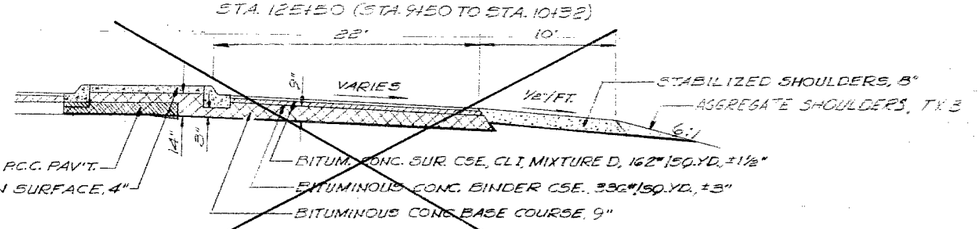
TYPICAL SECTION (13) SIDE ROADS



TYPICAL SECTION (10) F.A. ROUTE 18

STA. 6+90.84 TO STA. 9+81
STA. 10+19 TO STA. 12+59.10

STA. 12E+50 (STA. 9+50 TO STA. 10+32)



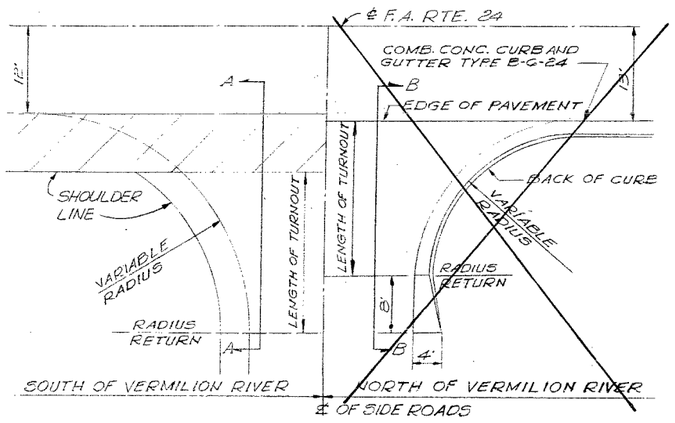
TYPICAL SECTION (14)

TURNING ROADWAYS AT F.A. ROUTE 18

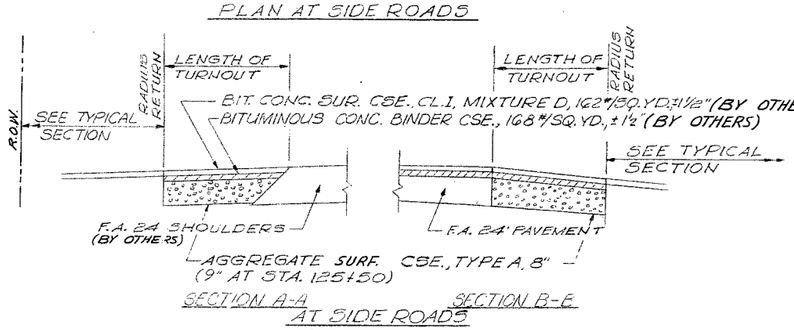
TYPICAL SECTIONS

3291
72C96

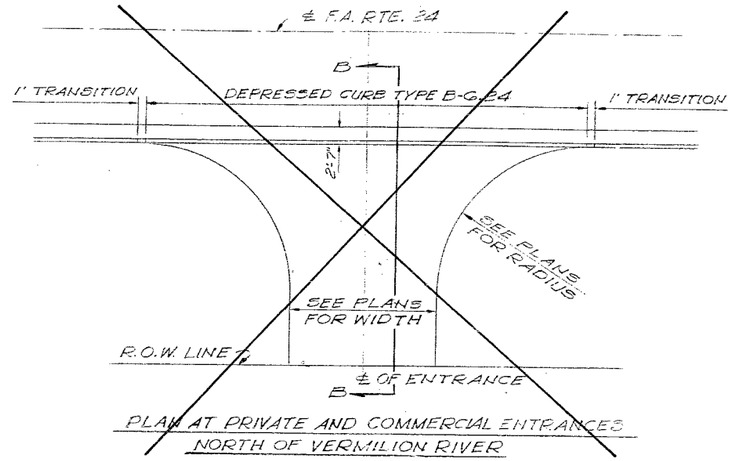
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	(37,100)	LIVINGSTON	67	4
F.A. 24	BYB			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



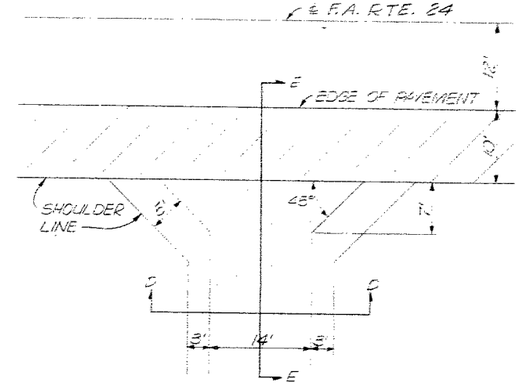
PLAN AT SIDE ROADS



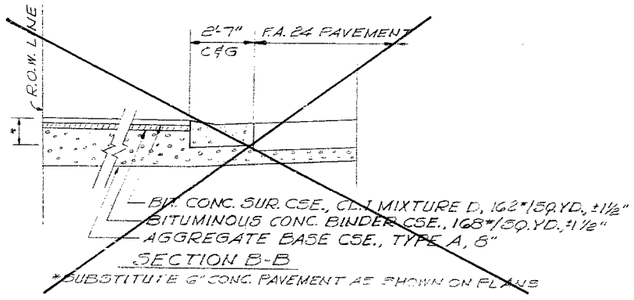
SECTION A-A SECTION B-B
AT SIDE ROADS



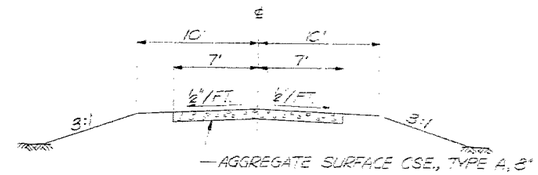
PLAN AT PRIVATE AND COMMERCIAL ENTRANCES
NORTH OF VERMILION RIVER



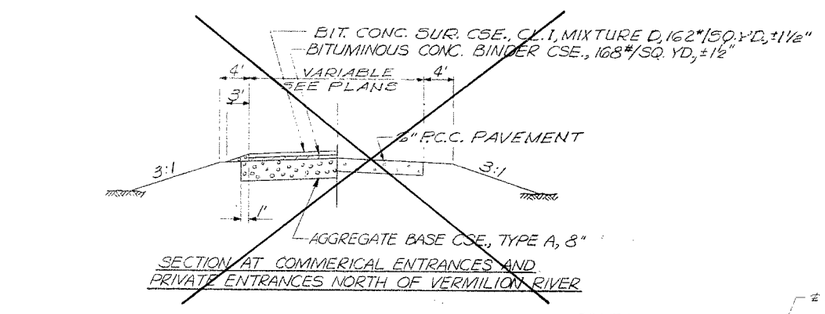
PLAN AT PRIVATE AND FIELD ENTRANCES
SOUTH OF VERMILION RIVER



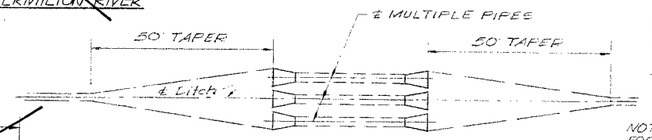
SECTION B-B
*SUBSTITUTE 6" CONC. PAVEMENT AS SHOWN ON PLANS



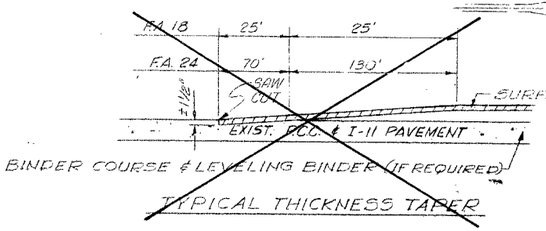
SECTION D-D



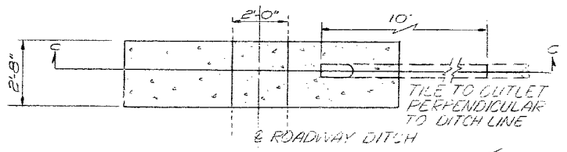
SECTION AT COMMERICAL ENTRANCES AND
PRIVATE ENTRANCES NORTH OF VERMILION RIVER



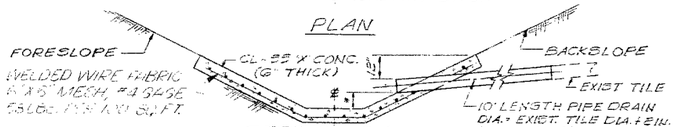
TAPER DITCH FOR MULTIPLE PIPES



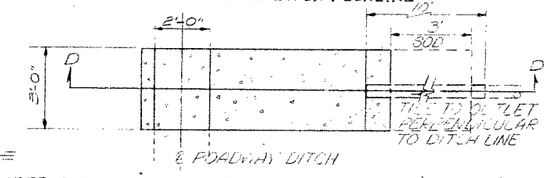
TYPICAL THICKNESS TAPER



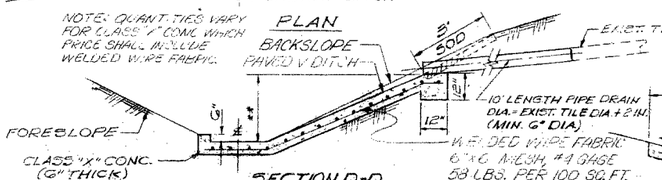
PLAN



SECTION C-C
*TILE FLOWLINE 6" TO 2'-0" ABOVE DITCH FLOWLINE

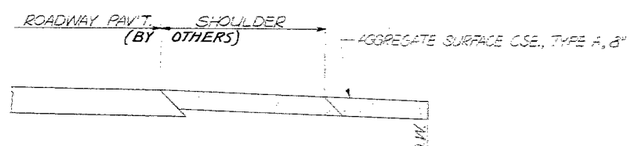


NOTE: QUANT. TIES VARY FOR CLASS "X" CONC. WHICH PRICE SHALL INCLUDE WELDED WIRE FABRIC.



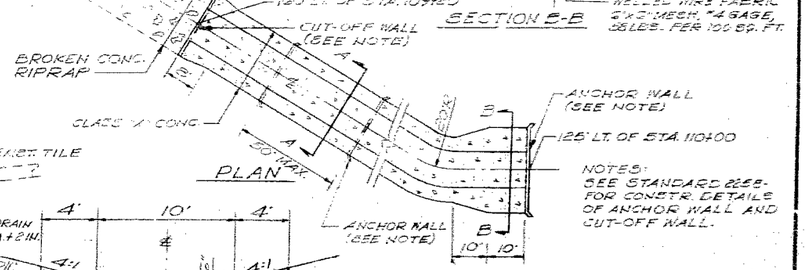
SECTION D-D
**TILE FLOWLINE GREATER THAN 2'-0" ABOVE DITCH FLOWLINE

METHODS FOR OUTLETTING TILE INTO ROADSIDE DITCHES

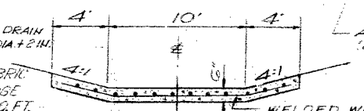


SECTION E-E

SECTION B-B



PLAN

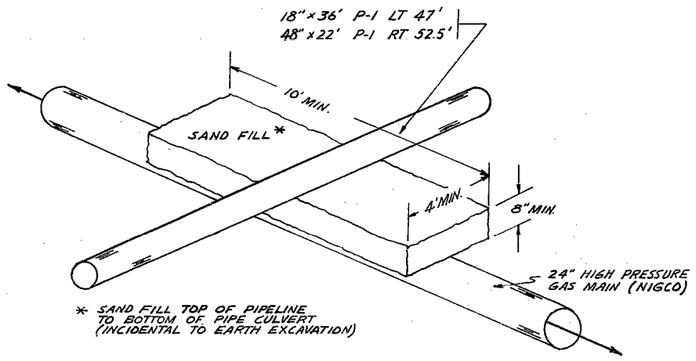


SECTION A-A
WELDED WIRE FABRIC 6"X6" MESH #4 GAGE, 58 LBS. PER 100 SQ.FT.

(SPECIAL) PAVED DITCH (STA. 109+20 TO STA. 110+00)

DETAILS

3291
15C 203



PIPELINE PROTECTION *

STA. 209+58 LT.
STA. 210+00 RT.

* SEE SPECIAL PROVISION

ONLY EARTHWORK SHOWN AS STAGE I ON THE CROSS-SECTIONS IS INCLUDED ON THIS CONTRACT.

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL QUANT.	CONSTRUCTION TYPE CODE 0010-540	X371-531	Y005		BR-F FUND TYPE CODE SBRP	F FUND TYPE CODE F.A.P.
201001	TREE REMOVAL (6 TO 15 INCH DIAMETER)	INCH DIA	207.	207.				207.	
201002	TREE REMOVAL (OVER 15 INCH DIAMETER)	INCH DIA	2,822.	2,822.				1351.	1471.
201005 *	TREE REMOVAL, ACRES	ACRE	12.6	12.6				9.4	3.2
202001 *	EARTH EXCAVATION	CU YD	192,305.	192,305.				192,305.	
204001 *	BORROW EXCAVATION	CU YD	14,050.	14,050.				14,050.	
209002	POROUS GRANULAR EMBANKMENT	CU YD	5,077.	5,077.				5,077.	
210001	TRENCH BACKFILL	CU YD	75	75					75.
211001	POROUS GRANULAR BACKFILL	CU YD	570	570				570	
216001	TOP SOIL EXCAVATION	CU YD	10,630.	10,630.				3,210.	7,420.
216003	TOP SOIL PLACEMENT 4"	SQ YD	95,670.			95,670		28,890.	66,780.
220001 *	EXPLORATION TRENCH 52" DEPTH	LIN FT	1,300.	1,300.				300.	1,000.
402001	AGGREGATE SURFACE COURSE, TYPE A	TON	1,855.	1,855.				1,855.	
501003 *	REMOVAL OF EXISTING STRUCTURES NO. 1 (PIER)	EACH	1.		1.			1.	
502003	COFFERDAM EXCAVATION	CU YD	230.		230.			230.	
502004	ROCK EXCAVATION FOR STRUCTURES	CU YD	7.		7.			7.	
502005	COFFERDAMS	EACH	1.		1.			1.	
504003	CLASS X CONCRETE	CU YD	2,038.1	10.9	2,027.2			2,027.2	10.9
507001	FURNISHING AND ERECTING STRUCTURAL STEEL	LUMP SUM	1.		1.			1.	
507005	STUD SHEAR CONNECTORS	EACH	7,311.		7,311.			7,311.	
508005	ALUMINUM RAILING	LIN FT	1,686.		1,686.			1,686.	
511025 *	PIPE CULVERTS, TYPE 1 15"	LIN FT	22.	22.					22.
511026 *	PIPE CULVERTS, TYPE 1 18"	LIN FT	142.	142.					142.
511028 *	PIPE CULVERTS, TYPE 1 24"	LIN FT	66.	66.					66.
511032 *	PIPE CULVERTS, TYPE 1 48"	LIN FT	124.	124.					124.
511047	PIPE CULVERTS, TYPE 1 RCCP 24"	LIN FT	270.	270.					270.
511051	PIPE CULVERTS, TYPE 1 RCCP 48"	LIN FT	80.	80.					80.
511102	PIPE CULVERTS, TYPE 2 24"	LIN FT	132.	132.					132.
511103	PIPE CULVERTS, TYPE 2 30"	LIN FT	466.	466.					466.
511106	PIPE CULVERTS, TYPE 2 48"	LIN FT	92.	92.					92.
511759	END SECTIONS 12"	EACH	5.	5.				5.	
511760	END SECTIONS 15"	EACH	2.	2.					2.
511761	END SECTIONS 18"	EACH	8.	8.					8.
511763	END SECTIONS 24"	EACH	10.	10.					10.
511765	END SECTIONS 30"	EACH	20.	20.					20.
511769	END SECTIONS 48"	EACH	12.	12.					12.
511780	PRECAST REINFORCED CONC. FLARED END SECTIONS, 24"	EACH	5.	5.					5.
511786	PRECAST REINFORCED CONC. FLARED END SECTIONS, 48"	EACH	2.	2.					2.
512001	REINFORCEMENT BARS	POUND	464,230.		464,230.			464,230.	
514001	NAME PLATES	EACH	1.		1.			1.	

SUMMARY OF QUANTITIES

FA 68 (37,100) BVB LIVINGSTON 67 6

ITEM NO.	ITEM	UNIT	TOTAL QUANT.	CONSTRUCTION TYPE CODE 0010-540	X371-531	Y005	Y080	BR-F FUND TYPE CODE SBRP	F FUND TYPE CODE F.A.P.
601005 *	BROKEN CONCRETE RIPRAP	SQ YD	90.			90.		90.	
603002 *	STORM SEWERS, TYPE 1 6"	LIN FT	130.	130.					130.
603003 *	STORM SEWERS, TYPE 1 8"	LIN FT	300.	300.					300.
603004 *	STORM SEWERS, TYPE 1 10"	LIN FT	70.	70.					70.
607002 *	PIPE DRAINS 6"	LIN FT	80.	80.					80.
607005	PIPE DRAINS 12"	LIN FT	300.	300.				300.	
607077 *	PIPE UNDERDRAINS, 6"	LIN FT	325.	325.				325.	
610002	WATER SERVICE LINE 3/4"	LIN FT	1,330.	1,330.					1,330.
612458	INLET BOX, STANDARD 2249	EACH	1.	1.					1.
616146 *	PAVED DITCH (SPECIAL)	LIN FT	94.			94.		94.	
616166	PAVED DITCH, TYPE B-12	LIN FT	20.			20.			20.
616174	PAVED DITCH, TYPE B-24	LIN FT	10.			10.			10.
618001	SLOPE WALL 4 INCH	SQ YD	664.		664.			664.	
618003	SLOPE WALL 6 INCH	SQ YD	1,251.		1,251.			1,251.	
620019	PAVEMENT REMOVAL AND BITUMINOUS REPLACEMENT, TYPE I, 10 INCH	SQ YD	116.	116.					116.
620020	PAVEMENT REMOVAL AND BITUMINOUS REPLACEMENT, TYPE II, 10 INCH	SQ YD	134.	134.					134.
639001	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	71.	71.				11.	60.
642001	SEEDING, CLASS I	ACRE	35.2			35.2		4.4	30.8
642003	SEEDING, CLASS III	ACRE	3.8			3.8		3.8	
642004	NITROGEN FERTILIZER NUTRIENT	POUND	3,228.			3,228.		658.	2,570.
642005	PHOSPHORUS FERTILIZER NUTRIENT	POUND	6,456.			6,456.		1,316.	5,140.
642006	POTASSIUM FERTILIZER NUTRIENT	POUND	3,228.			3,228.		658.	2,570.
X64308	MULCH METHOD II	TON	82.6			82.6		16.6	66.
643004	EXCELSIOR BLANKET	SQ YD	18,419.			18,419.		18,419.	
643005	EMULSIFIED ASPHALT	GALLON	8,260.			8,260.		1,660.	6,600.
644001 *	SODDING	SQ YD	6,589.			6,589.			6,589.
644002	SUPPLEMENTAL WATERING	UNIT	66.			66.			66.
646004	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	25.		25.			25.	
646006	ENGINEER'S FIELD LABORATORY	CAL MO	25.		25.			25.	
Z10044	BUILDING REMOVAL NO. 1	L SUM	1	1				1	
Z10045	BUILDING REMOVAL NO. 2	L SUM	1	1					1
Z10145 *	CAISSON CONCRETE	CU YD	764.6		764.6			764.6	
Z10232 *	FILLING EXISTING WELLS - DUG	EACH	2.	2.				1.	1.
Z10282	NEOPRENE EXPANSION JOINT 6 1/2"	LIN FT	93.		93.			93.	
Z10301	PERMANENT SURVEY MARKERS, TYPE II	EACH	1.	1.					1.
X04661 *	MINE FILL SAND	TON	300.	300.				300.	
Z10527	TRAINEES	HOUR	2,000				2,000	1,000	1,000

* SEE SPECIAL PROVISIONS or SPECIAL DRAWING

Rev.: 8-31-78, 9-12-78

STR

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 68	97(01) 3R	LIVINGSTON	67	7
STA.	TO STA.			
	ILLINOIS	PROJECT		

SCHEDULE OF EARTHWORK QUANTITIES

Shrinkage Factor = 1.25

BALANCE	ROADWAY	LOCATION	THEORETICAL CUT CU. YD.	THEORETICAL FILL CU. YD.	TOPSOIL REQUIRED IN. CUT CU. YD.	TOPSOIL REQUIRED IN. FILL CU. YD.	TOPSOIL SOURCE IN. CUT CU. YD.	TOPSOIL SOURCE IN. FILL CU. YD.	ADJUSTED CUT CU. YD.	ADJUSTED FILL CU. YD.	BORROW CU. YD.	WASTE CU. YD.	4" TOPSOIL PLACEMENT SQ. YD.	HAUL EARTH EXCAVATION CU. YD.	HAUL TOPSOIL	POROUS GRANULAR EMBANKMENT CU YD
1	ML	100 + 00 TO 102 + 00	3,752.	16,665.	209.	251.	----	----	3,961.	16,414.			4,140.	Place 16,804 From S. R. Rt. 125 + 50	Place 460 Cu. Yd. From 120 + 00 To 150 + 00	
2	ML	102 + 00 TO 105 + 35	13,009.	42,531.	489.	368.	----	----	13,498.	42,163.			7,713.	Place 17,351 From S. R. Rt. 125 + 50 Place 20,016 From 120 + 00 To 150 + 00 Place 1839 From 150 + 00 To 180 + 00	Place 857 Cu. Yd. From 120 + 00 To 150 + 00	
3	ML	109 + 20 TO 115 + 00	8,325.	49,963.	289.	612.	----	----	8,614.	49,351.		2,481.	8,109.	Place 37,987 From 180 + 00 To 210 + 00 Place 17,569 From 150 + 00 To 180 + 00	Place 901 Cu. Yd. From 120 + 00 To 150 + 00	2481
4	ML	115 + 00 TO 120 + 00	8,507.	40,698.	315.	600.	----	----	8,822.	40,098.	14,050.	2,596.	8,235.	Place 8018 From 210 + 00 To 222 + 00 Place 21,829 From 150 + 00 To 180 + 00	Place 915 Cu. Yd. From 120 + 00 To 150 + 00	2596
5	ML	120 + 00 TO 150 + 00	32,646.	7,643.	1,627.	114.	4,874.	- 0 -	29,278.	7,529.			15,669.	Haul 20,016 To 102 + 00 To 105 + 35	Haul 460 Cu. Yd. To 100 + 00 To 102 + 00 Haul 857 Cu. Yd. To 102 + 00 To 105 + 35 Haul 901 Cu. Yd. To 109 + 20 To 115 + 00 Haul 915 Cu. Yd. To 115 + 00 To 120 + 00	
6	ML	150 + 00 TO 180 + 00	44,061.	1,470.	2,115.	- 0 -	3,101.	- 0 -	43,075.	1,470.			19,035.	Haul 1839 To 102 + 00 To 105 + 35 Haul 17,569 To 109 + 20 To 115 + 00 Haul 21,829 To 115 + 00 To 120 + 00	Haul 986 To S. R. Rt. 125 +50	
7	ML	180 + 00 TO 210 + 00	40,055.	1,654.	2,227.	- 0 -	2,227.	- 0 -	40,055.	1,654.			20,043.	Haul 37,987 To 109 + 20 To 115 + 00		
8	ML	210 + 00 TO 222 + 00	8,194.	141.	428.	- 0 -	428.	- 0 -	8,194.	141.			3,852.	Haul 8018 To 115 + 00 To 120 + 00		
9	SIDE ROAD STA. 125 + 50	2 + 57 TO 19 + 00	35,822.	1,894.	986.	- 0 -	----	----	36,808.	1,894.			8,874.	Haul 16,806 To 100 + 00 To 102 + 00 Haul 17,351 To 102 + 00 To 105 + 35	Place 986 Cu. Yd. From 150 + 00 To 180 + 00	
10	SIDE ROAD STA. 224 + 11.9	6 + 90 TO 13 + 09	----	----												
11	DETOUR CONSTRUCTION	17 + 44 TO 21 + 94.14	----	----												
12	DETOUR REMOVAL	17 + 44 TO 21 + 94.14	----	----										OVERHAUL - APPROXIMATELY 6,600,000 CU. YD. - STA.	OVERHAUL - APPROXIMATELY 125,000 CU. YD. - STA.	
TOTALS			194,371.	162,659.	8,685.	1,945.	10,630.		192,305.	160,714.	14,050.	5,077.	95,670.			5077

SCHEDULE OF SIDE ROAD AND ENTRANCE QUANTITIES

STATION	SIDE	TYPE	WIDTH	LENGTH	RADIUS	AGG SURF CRSE TY A TON
127+96	LT	PE	14	123L		874.8
128+20	RT	PE	14	40.		30.8
129+76	RT	PE	14	38.		29.4
144+11.6	LT	SR	20	78.	30.	89.3
144+11.6	RT	SR	20	90.	30.	101.5
145+47	RT	PE	14	43.		33.0
165+74	LT	FE	14	98.		72.3
170+17	RT	PE	14	38.		29.4
170+60	LT	FE	14	98.		72.3
179+44	RT	PE	14	38.		29.4
183+91	LT	FE	14	75.		55.9
188+27	LT	FE	14	70.		52.4
197+44.5	LT	SR	20	90.	30.	101.5
197+48.8	RT	SR	20	90.	30.	101.5
200+74	LT	PE	14	63.		47.4
202+54	LT	FE	14	61.		45.9
203+28	RT	FE	14	63.		47.4
210+00	RT	FE	14	53.		40.3
					TOTAL	1854.5

SCHEDULE OF SEEDING

Station to Station	Seeding Class I Acres *	Seeding Class III Acres **	Nitrogen Fertilizer Pounds 80 lb/AC	Phosphate Fertilizer Pounds 160 lb/AC	Potassium Fertilizer Pounds 80 lb/AC	METHOD II Mulch Tons 2 Tons/AC	Emulsified Asphalt Gallons 100 Gal/Ton Mulch
99+30 to 101+00	0.58		46	92	46	1.2	120
101+00 to 119+00	2.88	3.80	534	1068	534	13.4	1340
119+00 to 120+50	0.98		78	156	78	2.0	200
119+00 to 222+00	27.11		2169	4338	2169	54.2	5420
S. R. @ 125+50	3.65		292	584	292	7.3	730
Sodded Areas			109	218	109		
Totals	3520	3.80	3228.	6456	3228	78.1	7810

* Between Stations 99+30 and 120+50 Seed only areas within the limits of construction or as determined by the Engineer

** Seeding Class III shall be applied to all 2 to 1 slopes

** Station 126+00 and south, existing shoulders are not to be seeded.

SCHEDULE OF EXCELSIOR BLANKET

STATION TO STATION	SIDE	SQ. YD.
101+00 to N. Abut.	LT	2944.
101+00 to N. Abut.	RT	2709.
S. Abut. to 119+00	LT	6592.
S. Abut. to 119+00	RT	6174
	TOTAL	18,419 Sq. Yd.

SCHEDULE OF MULCH FOR EROSION CONTROL PROTECTION *

Location	Area (AC)	Mulch 2 Ton/AC	Emulsified Asphalt 100 Gal/Ton
Mi.	1.50	3.0	300
SR RT 125+50	0.75	1.5	150
Total	2.25AC	4.5 Ton	450 Gallons

* As Directed by the Engineer

SCHEDULE OF DUG WELLS TO BE FILLED

STATION	REPORTED DEPTH	WELL TO BE FILLED
63' RT STA 117+45.5	14'	1
35' RT STA 170+72	15'	1
	TOTAL	2

STR

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBR-FA 24	BVB	LIVINGSTON	67	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF TREE REMOVAL. INCHES

STATION	SIDE	DISTANCE	6" TO 15" DIA.	OVER 15" DIA.
97+50	℄			39
97+69	RT	14		19
98+04	RT	24		15
98+45	RT	48	10	
98+59	RT	42	10	
98+71	RT	51	10	
98+71	LT	13		16
98+78	LT	68	13	
98+91	RT	44		19
98+95	LT	57		33
98+96	RT	26		25
99+12	LT	57	8	
99+15	LT	59		25
99+96	RT	4	9	
99+99	LT	4	8	
100+00	LT	11	13	
*100+01	RT	67		19
*100+25	LT	92		38
*100+29	RT	72		16
*100+32	RT	89		30
*100+53	RT	85		20
*112+55	LT	128		18
*112+81	LT	10		24
*113+00	LT	117		33
*113+20	LT	120		23
*113+30	LT	50		28
*113+30	RT	12		19
*113+40	LT	95		20
*113+50	LT	9		26
*113+60	LT	70		16
*113+63	RT	40		39
*113+65	RT	44		24
*113+65	LT	13		16
*113+71	RT	45		25
*113+80	℄			16
*113+80	LT	90		20
*113+84	LT	107		24
*113+85	RT	4		39
*113+87	RT	59		19
*113+95	RT	38		30
*113+97	LT	80		38
*114+06	RT	69		26
*114+08	LT	115		16
*114+08	LT	140		31
*114+09	RT	62		33
*114+11	LT	95		18
*114+20	RT	93		51
*114+31	LT	95		16
*114+41	LT	142		31
*114+44	LT	120		26
*114+49	LT	105		16
*114+66	LT	130		25
*114+80	RT	30		25
*114+95	LT	95		20
*115+07	LT	116		28
*115+19	LT	52		38
*115+26	LT	128		40
*115+35	LT	22		33
*115+50	LT	82		25
*115+74	LT	30		31
*117+20	RT	55		15
*117+70	RT	13		45
*118+45	RT	55		26
*118+50	LT	45		30
*118+80	RT	8		38
*119+30	RT	150		33
*119+35	RT	185		15
120+70	RT	45	10	26
120+72	RT	7	6	
120+92	LT	52	8	
120+97	LT	53	8	
121+04	LT	47	6	
121+06	LT	51	9	
121+07	LT	5		28
121+42	LT	42	9	
121+50	LT	45	10	
121+52	RT	7		46
121+70	RT	30		38
122+20	RT	25		30
126+17	RT	36		40
128+53	RT	44		19
130+01	RT	34		36
131+07	RT	47	6	
145+23	RT	49		31
168+61	RT	30	14	
168+99	RT	41		28
169+29	RT	32		
169+37	RT	55	8	

* SBRP

SCHEDULE OF TREE REMOVAL. INCHES (CONT.)

STATION	SIDE	DISTANCE	6" TO 15" DIA.	OVER 15" DIA.
169+64	RT	33		28
169+98	RT	32		30
170+32	RT	31		30
170+79	RT	32		28
178+78	RT	35		51
179+16	RT	36		16
180+16	RT	26		48
180+57	RT	28		55
200+07	LT	71		39
200+15	LT	35	13	
200+34	LT	72		25
208+07	LT	23		18
209+72	LT	29		20
SIDE ROAD : 125+50				
12+55	LT	65		18
14+55	LT	115	9	
14+75	LT	100		24
14+83	RT	48		25
14+88	LT	130	10	
15+06	RT	17		21
15+18	LT	145		15
15+20	℄			50
15+40	LT	110		45
16+00	LT	145		43
16+00	RT	55		24
16+20	RT	45		19
16+45	LT	173		26
16+65	LT	137		40
17+00	LT	60		36
17+25	LT	75		45
17+70	LT	80		30
17+71	LT	40		38
18+95	LT	85		26
19+00	RT	35		43
TOTALS		207		2622

SCHEDULE OF TREE REMOVAL. ACRES

STATION TO STATION ROUTE F.A. 24		ACRES
* 100+65	106+05	6.49 (1.59 DENSE)
* 107+10	109+00	.51 (.23 DENSE)
* 109+20	111+30	1.23 (.49 DENSE)
* 119+40	120+55	1.16 (.24 DENSE)
SIDE RD. 125+50		
2+50	8+90	3.24 (1.16 DENSE)
TOTAL		12.63 (3.71 DENSE)

* SBRP

SCHEDULE OF EXISTING STRUCTURES TO BE ADJUSTED OR FILLED

STATION	SIDE	CATCH BASIN TO BE ADJUSTED WITH TYPE 1 FRAME, OPEN LID	CATCH BASIN FILLED	WELL FILLED
90+75	LT	1		
90+76	RT		1	
117+45.5	RT			1
170+72	RT			1
12+66 (RTE. 17)	RT			1
224+85	RT			1
TOTALS		1	1	4

SCHEDULE OF RIGHT-OF-WAY MARKERS

STATION	SIDE	DISTANCE	EACH
ROUTE F.A. 24			
93+98.73	LT	40'	1
95+70	LT	52.80'	1
97+58.01	LT	55'	1
97+76.42	LT	115.18'	1
98+71.54	LT	92.71'	1
*100+26.08	LT	110'	1
*101+75.48	LT	437.89'	1
*105+29.55	RT	236.84	1
*107+09.42	RT	60'	1
*107+87.18	LT	225'	1
*108+00	LT	300'	1
*108+46.38	RT	60'	1
*110+00	LT	180'	1
*112+82.36	RT	120'	1
*115+00	LT	140'	1
*120+00	LT	110'	1
121+06.81	LT	110'	1
125+37.64	LT	110'	1
126+60	RT	60'	1
132+00	LT	110'	1
137+00	LT	100'	1
142+50	RT	60'	1
143+86.49	LT	100'	1
143+88.64	RT	112'	1
144+31.43	LT	100'	1
144+45.34	RT	112'	1
145+30	RT	65'	1
158+00	LT	100'	1
163+00	RT	85'	1
166+00	LT	120'	1
166+00	RT	60'	1
181+00	RT	60'	1
183+00	RT	90'	1
190+00	LT	90'	1
196+20	LT	90'	1
196+40	RT	90'	1
197+17.99	LT	112'	1
197+25.90	RT	112'	1
197+70.46	LT	112'	1
197+78.34	RT	112'	1
198+60	LT	85'	1
198+70	RT	85'	1
202+00	LT	85'	1
203+00	RT	85'	1
207+00	LT	70'	1
208+00	RT	75'	1
222+80	LT	70'	1
222+80	RT	75'	1
225+50	LT & RT	85'	2
SIDE ROAD 125+50			
2+40	RT	18.88' 135°	2
6+74.53	RT	80'	1
8+83.08	RT	80'	1
10+90.52	RT	80'	1
10+98.97	RT	80'	1
12+78.28	RT	80'	1
14+57.56	RT	80'	1
17+00	RT	80'	1
F.A. 18 224+11.90			
13+10	LT	40' & 60'	2
12+70	RT	40' & 60'	2
11+40	LT & RT	60'	2
8+60	LT & RT	60'	2
7+00	LT & RT	50'	2
6+00	LT & RT	40'	2
		TOTAL	71

* SBRP

REMOVAL OF EXISTING STRUCTURES

STRUCTURE	STATION	SIDE	DESCRIPTION
1	105+	RT	BRIDGE
2	150+50	LT	BRIDGE PIER

SCHEDULE OF BUILDING REMOVALS

BUILDING	STATION	SIDE	DESCRIPTION
1	85+06	LT	1 STORY MASONRY SERVICE STATION
2	96+70	RT	1 STORY FRAME HOUSE
3	99+70	LT	1 1/2 STORY FRAME GARAGE
4	100+35	LT	FRAME SHED
5	101+85	RT	1 STORY FRAME GARAGE
6	131+75	RT	1 1/2 STORY FRAME HOUSE
7	136+40	RT	1 STORY FRAME HOUSE
8	137+90	RT	2 STORY FRAME HOUSE
9	144+75	RT	1 STORY FRAME HOUSE
10	186+44	LT	STEEL GRAIN BIN
2	202+86	LT	2 STORY FRAME BARN
12	222+15	LT	1 STORY FRAME GARAGE AND SHED
13	228+15	LT	1 STORY FRAME SERVICE STATION
14	229+28	RT	METAL GRAIN STAND

SCHEDULE OF STRUCTURE DISPOSITION

STATION	SIDE	DESCRIPTION	EACH	LUMP SUM
95+50	LT	FILL UNDERGROUND FUEL TANK	1	
95+50	LT	FILL UNDERGROUND FUEL TANK	1	
95+50	LT	FILL UNDERGROUND FUEL TANK	1	
98+85	LT	FILL UNDERGROUND FUEL TANK	1	
97+35	RT	REMOVE 75 FOOT TOWER & BASE		1
			4	1

SCHEDULE OF SEEDING

STATION TO STATION		SEEDING CLASS I ACRES *	SEEDING CLASS III ACRES **	NITROGEN FERTILIZER POUNDS 80 Lb./Ac.	PHOSPH. FERTILIZER POUNDS 160 Lb./Ac.	POTASSIUM FERTILIZER POUNDS 80 Lb./Ac.	MULCH TONS 2 Ton/Ac.	EMULSIFIED ASPHALT GALLONS 100 Gal/Ton Mulch
97+50	101+00	1.2		96	192	96	2.4	240
101+00	119+00	3.1	3.2	504	1,008	504	12.6	1,260
119+00	234+75	30.9		2472	4,944	2472	61.8	6180
S.R. @ 125+50		4.0		320	640	320	8.0	800
F.A. 18		1.2		96	192	96	2.4	240
TOTALS		40.4	3.2	3488	6976	3488	87.2	8,720

* BETWEEN STATIONS 97+50 AND 126+60 SEED ONLY AREAS WITHIN THE LIMITS OF CONSTRUCTION OR AS DETERMINED BY THE ENGINEER.

** SEEDING CLASS III SHALL BE APPLIED TO ALL 2 TO 1 SLOPES.

3291
7705

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	(27-W) BVB	LIVINGSTON	67	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF CURB AND GUTTER

STATION	TO STATION	SIDE	TYPE B6.24 LIN. FT.	TYPE M6.06 LIN. FT.
90+55	93+60	LT	309	
90+56	93+60	RT	310	
93+60	97+58	LT	404	
93+60	97+58	RT	417	
223+85±		RT		49
223+85±		LT		48
224+40±		RT		49
224+40±		LT		48
		TOTALS	1,440	194

SCHEDULE OF WATER SERVICE LINE, 3/4"

STATION	TO STATION	SIDE	LIN. FT.	REMARKS
116+90	128+10	LT	1,160	
128+05		LT & RT	170	WITHIN R.O.W.
		TOTAL	1,330	

SCHEDULE OF PAVEMENT MARKING TAPE

STATION	TO STATION	ROADWAY	LIN. FT.
90+56	95+30	F.A. 24	19
126+00	234+75.21	F.A. 24	870
2+50	4+00	S.R. ℄ 125+50	6
8+50	12+00	S.R. ℄ 125+50	14
6+00	13+09.01	RTE. 17	56
		TOTAL	965

SCHEDULE OF PERMANENT SURVEY MARKERS, TYPE I

STATION	LOCATION	DESCRIPTION	EACH
91+71.77	℄	P.C.	1
99+61.08	℄	P.T.	1
116+75.97	℄	P.C.	1
125+37.64	℄	P.T.	1
144+08.24	0.36' LT	¼ SEC. COR.	1
170+75.94	0.67' RT	SEC. COR.	1
197+42.03	1.46' RT	¼ SEC. COR.	1
224+08.18	3.05' RT	SEC. COR.	1
		TOTAL	8

SCHEDULE OF SODDING

STATION	TO STATION	SIDE	DESCRIPTION	SQ. YDS.	SUPPLEMENTAL WATERING
~~90+56~~	~~FRANKLIN ST~~	~~RT~~	~~URBAN~~	~~201~~	
~~91+00~~	~~FRANKLIN ST~~	~~LT~~	~~URBAN~~	~~286~~	
~~FRANKLIN ST~~	~~97+62~~	~~RT~~	~~URBAN~~	~~1,048~~	
~~FRANKLIN ST~~	~~97+50~~	~~LT~~	~~URBAN~~	~~1,219~~	
119+80	122+05	LT	10' DITCH, 1.5' DEPTH	505	
136+00	138+00	LT	2' DITCH 2' DEPTH	498	
131+00	183+00	RT	2' DITCH, 2' DEPTH	498	
3+50	7+00 SR @ 125+50	RT	2' DITCH, 1' DEPTH	324	
~~96 END SECTIONS~~				~~[illegible]~~	
~~1 INLET BOX~~				~~6~~	
~~34 UNDERDRAIN OUTLETS~~		~~LT&RT~~		~~102~~	
128+30	131+35	RT	LAWN	744	
144+30	146+15	RT	LAWN	608	
168+15	170+85	RT	LAWN	654	
177+65	181+10	RT	LAWN	846	
198+25	202+70	LT	LAWN	1,912	
			TOTAL	6589	65.9

SCHEDULE OF YELLOW THERMOPLASTIC PAVEMENT MARKING

STATION	TO STATION	4" LIN. FT.	12" LIN. FT.
213+48.35	223+48.35	4,000	
224+75.21	234+75.21	4,000	
213+48.35	220+48.35		304
227+75.21	234+75.21		304
	TOTALS	8,000	608

SCHEDULE OF PORTLAND CEMENT CONCRETE BASE COURSE (14") ; APPROACH SLABS

STATION	TO STATION	SQ. YDS.
103+36.70	103+86.70	133.0
112+01.93	112+51.93	133.0
	TOTAL	266.0

SCHEDULE OF PAVEMENT REMOVAL

STATION	TO STATION	ROADWAY	SQ. YDS.
92+60	97+00± RT	F.A. 24	590
6+75 LT	9+50	S.R. ℄ 125+50	1,000
11+17	126+00 F.A. 24	S.R. ℄ 125+50	1,783
		TOTAL	3,373

SCHEDULE OF STEEL PLATE BEAM GUARD RAIL AND TERMINAL SECTION

STATION	TO STATION	SIDE	GUARD RAIL LIN. FT.	TERMINAL SECTION EACH
100+05	103+60	LT	350	1
100+14	103+64	RT	325	1
112+17	119+92	LT	750	1
112+17	121+42	RT	900	1
		TOTALS	2,325	4

SCHEDULE OF PAVED DITCH

STATION	TO STATION	SIDE	SPECIAL LIN. FT.	B-12 LIN. FT.	B-24 LIN. FT.
109+20	110+00	LT	94		
136+05	136+15	RT		10	
137+95	138+05	LT			10
138+15	138+25	RT		10	
		TOTALS	94	20	10

SCHEDULE OF TRENCH BACKFILL

STATION	CU. YDS.
~~102+00 105+25~~	~~570.0~~
128+05	4.7
133+00	14.9
144+11.6 LT	7.8
144+11.6 RT	5.8
175+99.5	5.6
183+00	8.2
197+44.5 LT	12.8
197+48.8 RT	14.8
~~9+00 RTE. 17~~	~~13.6~~
TOTAL	74.6

SCHEDULE OF POROUS GRANULAR BACKFILL

± Station	Cu. Yds.
102+00 ~ 105+25	570*
Total	570

* SBRP

SCHEDULE OF PAVEMENT REMOVAL AND REPLACEMENT 10"

STATION	TYPE I SQ. YD. LT.	TYPE I SQ. YD. RT.	TYPE II SQ. YD. LT.	TYPE II SQ. YD. RT.	~~TYPE III SQ. YD. LT.~~	~~TYPE III SQ. YD. RT.~~
128+05	3	3				
133+00			10	10		
175+99.5	5	5				
183+00			7	7		
CONTINGENCY	100		100		~~18.4~~	~~18.4~~
TOTAL	116		134		~~36.8~~	

SCHEDULE OF EXPLORATION TRENCH

STATION	LIN. FT.	REMARKS
102+50	300 *	200' LT TO 100' RT
ESTIMATE FOR UNKNOWN LOCATIONS	1,000	
TOTAL	1,300	

* SBRP

SCHEDULE OF DELINEATORS

STATION TO STATION	EACH
97+00 - 99+00 RT & LT (150' SPACING)	4
100+50 - 116+50 RT & LT (200' SPACING)	18
118+00 - 125+50 RT & LT (150' SPACING)	[illegible]
127+50 - 233+50 RT & LT (200' SPACING)	[illegible]
TOTAL	[illegible]

SCHEDULE OF P.C.C. SIDEWALK

STATION	TO STATION	SIDE	SQ. FT.
93+35±	93+42±	RT	28
93+72±	93+80±	RT	32
		TOTAL	60

SCHEDULE OF PROTECTIVE COAT

SURFACE	SQ. YDS.
P.C.C. DRIVEWAY	97.3
SIDEWALK	10.2
CURB & GUTTER B6.24	480.0
CURB & GUTTER M6.06	28.7
CONC. MEDIAN SURFACE	44.2
TOTAL	660.4

SCHEDULE OF CONCRETE MEDIAN SURFACE, 4"

STATION	SIDE	SQ. FT.
223+85±	RT	100
223+85±	LT	99
224+40±	RT	99
224+40±	LT	100
	TOTAL	398

SCHEDULE OF BROKEN CONCRETE RIPRAP

STATION	SIDE	SQ. YDS.
109+20±	LT	90

SCHEDULE OF STORM SEWERS, TYPE I

LOCATION	LIN. FT. 6"	LIN. FT. 8"	LIN. FT. 10"	REMARKS
TO BE CONSTRUCTED AT LOCATIONS DETERMINED BY ENGINEER BY USE OF EXPLORATION TRENCH	130	130	70	ESTIMATED
STA. 128+05		170		
TOTAL	130	300	70	

SCHEDULE OF PERMANENT SURVEY MARKERS, TYPE II

STATION	LOCATION	DESCRIPTION	EACH
117+65.37	107.33' LT.	SEC. COR.	1
		TOTAL	1

3291
7768

F.A. 24 (37,101) BVB | LIVINGSTON | 67 | 70

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

BRIDGE, CULVERT AND STORM SEWER SCHEDULE

DIST.
F.A. ROUTE 68
SECTION (37,101) BVB
LIVINGSTON COUNTY
SHEET 1 OF 2

STATION NO.	TYPE	STANDARD AND DESIGN NUMBER		CLASS X CONCRETE CU.YDS	REINFORCEMENT BARS LBS.	PIPE CULVERTS TYPE 1 15"	18"	24"	48"	TYPE 2 24"	30"	48"	S.S. Type 1 8"	RCCP TYPE 1 24"	48"	END SECTIONS 15"	18"	24"	30"	48"	RCCP END SECTIONS 12"	24"	48"	INLET A-3	INLET BOX 2249
~~95+52 LT~~	~~A-3~~	~~1583~~																							
~~96+24 LT~~		~~2262~~																							
~~97+25 RT~~	~~18"x56' P-1~~	~~2228~~																							
~~103+36.70~~																									
~~103+86.70~~	~~APPROACH SLAB~~	~~2360~~			~~7,300~~																				
103+86.70	BRIDGE STRUCTURE			2,027.2	464,230																				
112+01.83 –																									
~~112+51.83~~	~~APPROACH SLAB~~	~~2360~~			~~7,100~~																				
119+80 LT	30"x34' P-2	2228									34								2						
124+65 LT	3-30"x46' P-2	2228									138								6						
128+05	8"x 170' P-1 RCCP	2262											170												
127+96 LT	3-30"x56' P-2	2226									168								6						
129+78 RT	15"x22' P-1	2228				22										2									
133+00	2-24"x96' P-1 RCCP	2262												192							4				
135+65 LT	3-30"x42' P-2	2228									126								6						
144+11.6 LT	48"x38' P-1	2228							38											2					
144+11.6 RT	24"x40' P-1	2228						40										2							
145+47 RT	24"x26' P-1	2228						26										2							
165+74 LT	48"x50' P-2	2228										50								2					
170+60 LT	48"x42' P-2	2228										42								2					
175+99.5	24"x78' P-1 RCCP	2262	& 2249											78							1			1	
183+00	48"x80' P-1 RCCP	2262													80							2			
183+91 LT	24"x44' P-2	2228								44								2							
188+27 LT	24"x40' P-2	2228								40								2							
197+44.5 LT	24"x48' P-2	2228								48								2							
197+48.8 RT	48"x40' P-1	2228							40											2					
200+74 LT	18"x36' P-1	2228					36										2								
202+52 LT	18"x36' P-1	2228					36										2								
203+28 RT	48"x24' P-1	2228							24											2					
210+00 RT	48"x22' P-1	2228							22											2					
209+58 LT	18"x36' P-1	2228					36										2								
S.R. @ 224+11.9																									
~~5+00~~	~~3-24"x80' P-1 RCCP~~	~~2262~~																							
S.R. @ 125+50																									
S 75 LT	18"x34' P-1	2228					34										2								
~~19+00 RT~~	~~15"x24' P-1~~	~~2228~~																							
TOTALS				2027.2	464,230	22	142	66	124		132	466	92	170	270	80	2	8	10	20	12		5	2	1

MADE BY: RMJ DATE: 5-14-75
CHECKED BY RMR DATE: 5-19-75

E.A. 24(37.10) LIVINGSTON 67 11
BVB

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

BRIDGE, CULVERT AND STORM SEWER SCHEDULE

PROJECT
F.A. ROUTE 68
SEC. (37.10) BVB
LIVINGSTON COUNTY
SHEET 2 OF 2

STATION NO.	TYPE	STANDARD AND DESIGN NUMBER	CLASS X CONCRETE CU. YDS	REINFORCEMENT BARS LBS.	PIPE UNDERDRAINS 4"	PIPE UNDERDRAINS 6"	PIPE DRAINS 4"	PIPE DRAINS 6"	PIPE DRAIN HOWLS	PIPE DRAINS 12"	OUTLET ELEVATION OF PIPE UNDERDRAIN	STORM SEWER SS-2 12"	END SECTIONS 12"
~~95+52~~ –													
96+24 LT	SS-2												
97+70													
103+90 LT	CONT. UNDERDRAIN				620								
97+70													
103+80 RT	CONT. UNDERDRAIN				610								
~~97+76 RT & LT~~	~~OUTLET~~	~~2327 & 2362~~					~~30~~		~~2~~				
102+00 –	CONT. UNDERDRAIN												
105+25	IN EXISTING DRAW	SPECIAL PROVISION				325							
~~108+50 RT & LT~~	~~OUTLET~~	~~2327 & 2362~~					~~36~~		~~2~~				
112+04 –													
120+00 RT & LT	CONT. UNDERDRAIN				1592								
116+00 RT & LT	OUTLET	2327 & 2362					34		2				
120+00													
150+00 RT & LT	CONT. UNDERDRAIN				6000								
121+00 RT & LT	OUTLET	2327 & 2362					28		2				
126+00 RT & LT	OUTLET	2327 & 2362					36		2		609.29		
138+00 RT & LT	OUTLET	2327 & 2362					29		2		609.84		
142+00 RT & LT	OUTLET	2327 & 2362					29		2		610.63		
147+00 RT & LT	OUTLET	2327 & 2362					29		2		612.33		
150+00 –													
180+00 RT & LT	CONT. UNDERDRAIN				6000								
156+00 RT & LT	OUTLET	2327 & 2362					35		2		612.87		
161+00 RT & LT	OUTLET	2327 & 2362					29		2		614.55		
171+00 RT & LT	OUTLET	2327 & 2362					29		2		615.57		
180+00 –													
210+00 RT & LT	CONT. UNDERDRAIN				6000								
193+00 RT & LT	OUTLET	2327 & 2362					36		2		614.27		
203+00 RT & LT	OUTLET	2327 & 2362					36		2		614.27		
210+00 –													
234+75 RT & LT	CONT. UNDERDRAIN				4950								
212+00 RT & LT	OUTLET	2327 & 2362					39		2		614.01		
220+00 RT & LT	OUTLET	2327 & 2362					40		2		613.47		
227+00 RT & LT	OUTLET	2327 & 2362					38		2		613.60		
234+75 RT & LT	OUTLET	2327 & 2362					36		2		613.82		
FIELD TILE OUTLET													
105+25 RT			.25										
225± – 235± RT & LT	8± OUTLETS		10.68					80					
100+50 RT	SLOPE DRAIN	2228 & 2322								54		1	
115+50 LT	SLOPE DRAIN	2228 & 2322								82		1	
118+25 RT	SLOPE DRAIN	2228 & 2322								48		1	
119+95 LT	SLOPE DRAIN	2228 & 2322								68		1	
119+95 RT	SLOPE DRAIN	2228 & 2322								48		1	
TOTALS			10.93		~~25772~~	325	~~568~~	80	~~34~~	300		5	

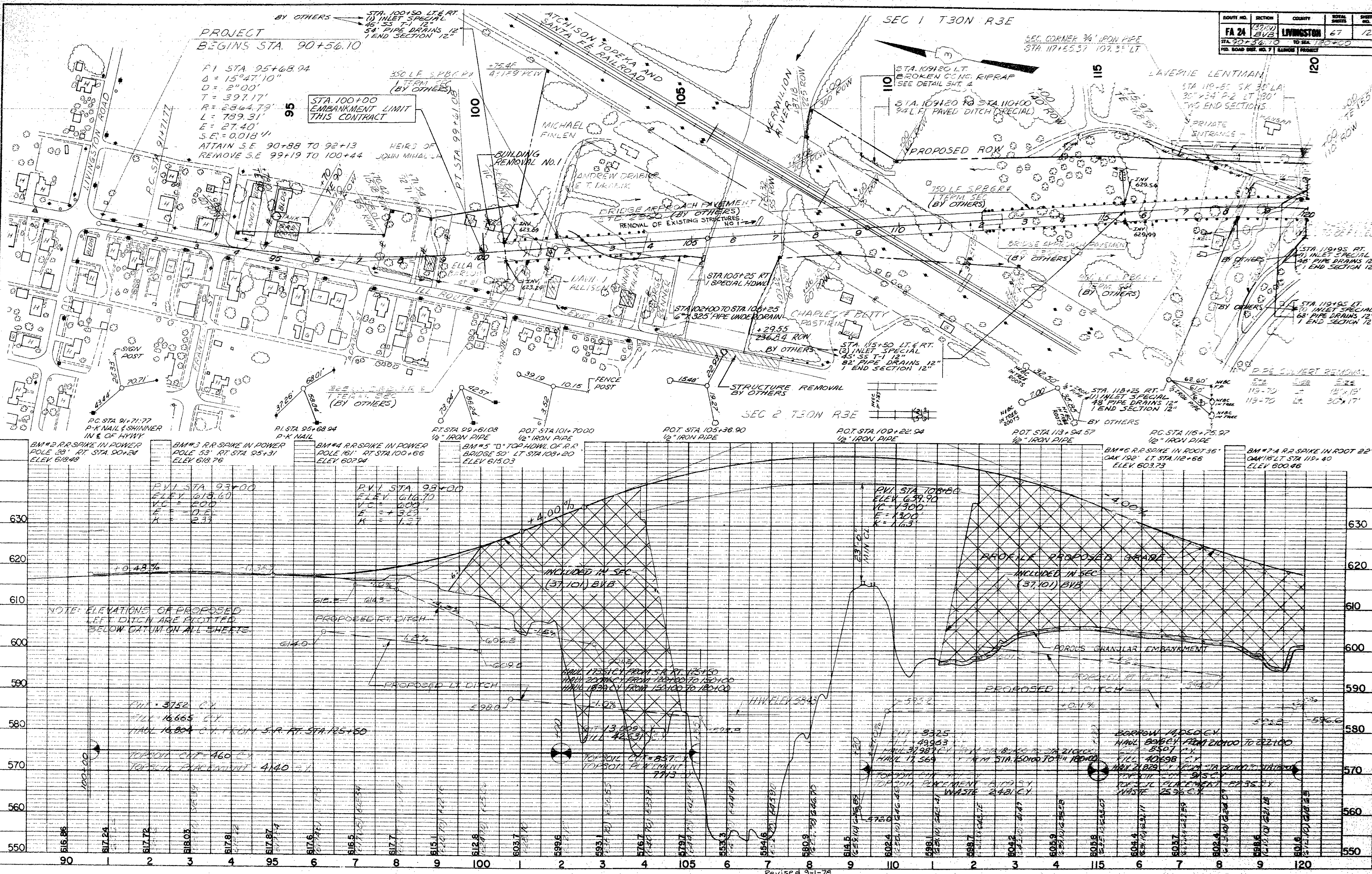
MADE BY RWJ DATE 11-16-76
CHECKED BY BJP DATE 12-8-76
REV. DLC 3-9-78

NOTES: ~~X~~ TYPE 45° OUTLETS ARE TO BE INSTALLED WHEN THE PROFILE GRADE IS GREATER THAN 2.5%.

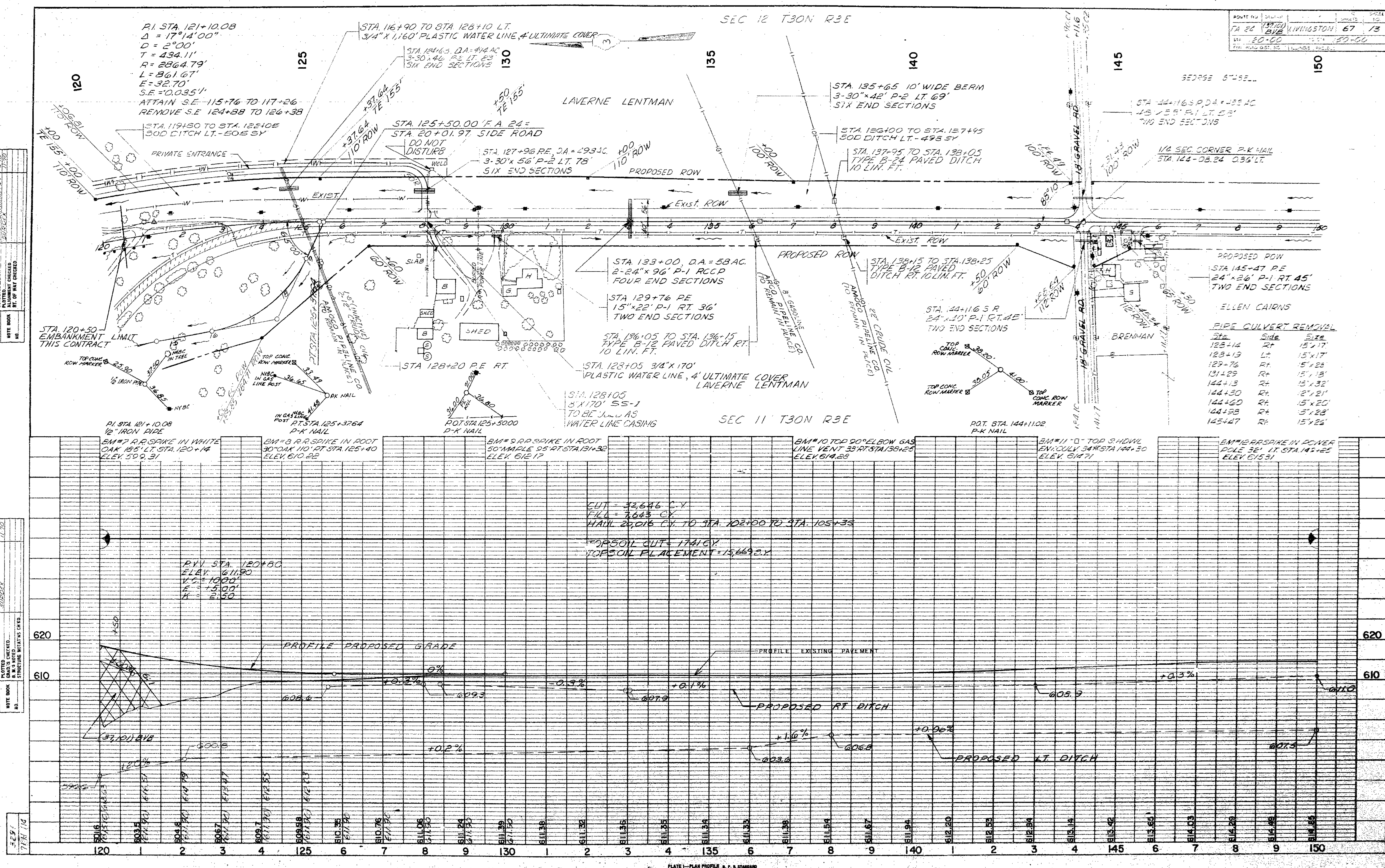
PIPE UNDERDRAIN OUTLETS TO BE PLACED AT THE DEPTH SHOWN ON STANDARD DRAWING NO. 2327 UNLESS OTHERWISE NOTED.

MINIMUM GRADE FOR PIPE UNDERDRAINS SHALL BE 0.1%.

3291
1767



ROUTE NO. FA 24
SECTION (37)(14) BVB
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 12
STA. 90+56.10 TO STA. 120+00
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
SEC 1 T30N R3E
SEC 2 T30N R3E
PROJECT BEGINS STA. 90+56.10
BY OTHERS
STA. 100+50 LT. & RT. (1) INLET SPECIAL 45' SS T-1 12" 54' PIPE DRAINS 12" 1 END SECTION 12"
P.I. STA. 95+68.94
Δ = 15°47'10"
D = 2°00'
T = 397.17'
R = 2864.79'
L = 789.31'
E = 27.40'
S.E. = 0.018'/'
ATTAIN S.E. 90+88 TO 92+13
REMOVE S.E. 99+19 TO 100+44
STA. 100+00 EMBANKMENT LIMIT THIS CONTRACT
BUILDING REMOVAL NO. 1
ATCHISON TOPEKA AND SANTA FE RAILROAD
VERMILION RIVER
BRIDGE APPROACH PAVEMENT (BY OTHERS)
REMOVAL OF EXISTING STRUCTURES NO. 1
ILL ROUTE 23
MICHAEL FINLEN
HEIRS OF JOHN MIHALICH
ANDREW DRABIK
ELLA C.
CHARLES & BETTY PASTIRIK
LAVERNE LENTMAN
SEC. CORNER 3/4" IRON PIPE STA. 117+65.37 107.3' LT.
STA. 109+20 LT. BROKEN CONC. RIPRAP SEE DETAIL SHT. 4
STA. 109+20 TO STA. 110+00 94 L.F. PAVED DITCH (SPECIAL)
PROPOSED ROW
PRIVATE ENTRANCE
STA. 105+25 RT. 1 SPECIAL HDWL
STA. 102+00 TO STA. 105+25 6" x 325' PIPE UNDERDRAIN
STA. 115+50 LT. & RT. (2) INLET SPECIAL 45' SS T-1 12" 82' PIPE DRAINS 12" 1 END SECTION 12"
STA. 118+25 RT. (1) INLET SPECIAL 48' PIPE DRAINS 12" 1 END SECTION 12"
STA. 119+95 RT. (1) INLET SPECIAL 48' PIPE DRAINS 12" 1 END SECTION 12"
STA. 119+95 LT. (1) INLET SPECIAL 68' PIPE DRAINS 12" 1 END SECTION 12"
STRUCTURE REMOVAL BY OTHERS
SIGN POST
FENCE POST
P.C. STA. 91+71.77 P-K NAIL & SHINNER IN ℄ OF HYWY
P.I. STA. 95+68.94 P-K NAIL
P.T. STA. 99+61.08 1/2" IRON PIPE
P.O.T. STA. 101+70.00 1/2" IRON PIPE
P.O.T. STA. 105+36.90 1/2" IRON PIPE
P.O.T. STA. 109+22.94 1/2" IRON PIPE
P.O.T. STA. 113+94.57 1/2" IRON PIPE
P.C. STA. 116+75.97 1/2" IRON PIPE
BM #2 R.R. SPIKE IN POWER POLE 28' RT. STA. 90+24 ELEV. 618.48
BM #3 R.R. SPIKE IN POWER POLE 53' RT. STA. 95+31 ELEV. 618.76
BM #4 R.R. SPIKE IN POWER POLE 161' RT. STA. 100+66 ELEV. 607.94
BM #5 "D" TOP HDWL. OF R.R. BRIDGE 50' LT. STA. 108+20 ELEV. 615.03
BM #6 R.R. SPIKE IN ROOT 35" OAK 192' LT. STA. 112+66 ELEV. 603.73
BM #7-A R.R. SPIKE IN ROOT 22" OAK 118' LT. STA. 119+40 ELEV. 600.46
P.V.I. STA. 93+00 ELEV. 618.60 V.C. = 200'
P.V.I. STA. 98+00 ELEV. 616.70 V.C. = 600'
P.V.I. STA. 108+80 ELEV. 639.90 V.C. = 1300'
+0.48%
+4.00%
-4.00%
INCLUDED IN SEC. (37.101) BVB
PROFILE PROPOSED GRADE
NOTE: ELEVATIONS OF PROPOSED LEFT DITCH ARE PLOTTED BELOW DATUM ON ALL SHEETS
PROPOSED RT. DITCH
PROPOSED LT. DITCH
POROUS GRANULAR EMBANKMENT
H.W. ELEV. 584
CUT = 3752 C.Y.
FILL = 16,665 C.Y.
HAUL 16,804 C.Y. FROM S.R. RT. STA. 125+50
TOPSOIL CUT = 460 C.Y.
TOPSOIL PLACEMENT = 4140 S.Y.
BORROW 14050 C.Y.
WASTE 2481 C.Y.
WASTE 2596 C.Y.
630
620
610
600
590
580
570
560
550
90 1 2 3 4 95 6 7 8 9 100 1 2 3 4 105 6 7 8 9 110 1 2 3 4 115 6 7 8 9 120
Revised 9-1-78
PLATE I—PLAN PROFILE B. P. R. STANDARD
THE FREDERICK POST CO., CHICAGO
PLAN
PROFILE


SEC 12 T30N R3E
SEC 11 T30N R3E
FA 24 (37/101) BVB LIVINGSTON 67 13
P.I. STA. 121+10.08
Δ = 17°14'00"
D = 2°00'
T = 434.11'
R = 2864.79'
L = 861.67'
E = 32.70'
S.E. = 0.035'/'
ATTAIN S.E. 115+76 TO 117+26
REMOVE S.E 124+88 TO 126+38
STA. 116+90 TO STA. 128+10 LT.
3/4" X 1,160' PLASTIC WATER LINE, 4' ULTIMATE COVER
STA. 119+80 TO STA. 122+05
SOD DITCH LT. - 505 SY
PRIVATE ENTRANCE
STA. 125+50.00 F.A. 24 =
STA. 20+01.97 SIDE ROAD
DO NOT DISTURB
STA. 127+96 P.E. D.A. = 4.93 AC.
3-30"x 56' P-2 LT. 78'
SIX END SECTIONS
LAVERNE LENTMAN
PROPOSED ROW
EXIST. ROW
STA. 135+65 10' WIDE BERM
3-30"x42' P-2 LT. 69'
SIX END SECTIONS
STA. 136+00 TO STA. 137+95
SOD DITCH LT. - 495 SY
STA. 137+95 TO STA. 138+05
TYPE B-24 PAVED DITCH
10 LIN. FT.
18' GRAVEL RD.
1/4 SEC. CORNER P-K NAIL
STA. 144-08.24 0.36' LT.
STA. 133+00, D.A. = 58 AC.
2-24"x 96' P-1 RCCP
FOUR END SECTIONS
STA 129+76 P.E
15"x22' P-1 RT. 36'
TWO END SECTIONS
STA. 136+05 TO STA. 136+15
TYPE B-12 PAVED DITCH RT.
10 LIN. FT.
STA. 138+15 TO STA. 138+25
TYPE B-12 PAVED DITCH RT. 10 LIN. FT.
STA 128+20 P.E RT.
STA. 128+05 3/4"X 170'
PLASTIC WATER LINE, 4' ULTIMATE COVER
LAVERNE LENTMAN
STA. 128+05
5"X170' SS-1
WATER LINE CASING
STA. 120+50
EMBANKMENT LIMIT
THIS CONTRACT
STA. 145+47 P.E
24"x26' P-1 RT. 45'
TWO END SECTIONS
PROPOSED ROW
ELLEN CAIRNS
BRENNAN
PIPE CULVERT REMOVAL
Sta. Side Size
128+14 Rt. 15"x17'
128+19 Lt. 15"x17'
129+76 Rt. 15"x23'
131+29 Rt. 15"x18'
144+13 Rt. 15"x32'
144+30 Rt. 12"x21'
144+60 Rt. 15"x20'
144+98 Rt. 15"x23'
145+47 Rt. 15"x26'
P.I. STA. 121+10.08
1/2" IRON PIPE
P.T. STA. 125+37.64
P-K NAIL
P.O.T. STA. 125+50.00
P-K NAIL
P.O.T. STA. 144+11.02
P-K NAIL
BM#7 R.R. SPIKE IN WHITE OAK 185' LT. STA. 120+14 ELEV. 599.31
BM#8 R.R. SPIKE IN ROOT 30" OAK 110' RT. STA. 125+40 ELEV. 610.22
BM#9 R.R. SPIKE IN ROOT 50" MAPLE 95' RT. STA. 131+32 ELEV. 618.17
BM#10 TOP 90° ELBOW GAS LINE VENT 33' RT. STA. 138+25 ELEV. 614.28
BM#12 R.R. SPIKE IN POWER POLE 32' LT. STA. 147+25 ELEV. 615.31
CUT = 32,646 C.Y.
FILL = 7,643 C.Y.
HAUL 20,016 C.Y. TO STA. 102+00 TO STA. 105+35
TOPSOIL CUT = 1741 C.Y.
TOPSOIL PLACEMENT = 15,669 C.Y.
P.V.I. STA. 120+80
ELEV. 611.90
V.C. = 1000'
E = +5.00'
K = 2.50
PROFILE PROPOSED GRADE
PROFILE EXISTING PAVEMENT
PROPOSED RT. DITCH
PROPOSED LT. DITCH
(37/101) BVB
620
610
120 1 2 3 4 125 6 7 8 9 130 1 2 3 4 135 6 7 8 9 140 1 2 3 4 145 6 7 8 9 150
PLATE 1—PLAN PROFILE
THE FREDERICK POST CO., CHICAGO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 24	(37-1-1) B-1-2	LIVINGSTON	67	14
STA. 150+00		TO STA. 180+00		
FED. ROAD DIST. NO. 7	ILLINOIS	FAP 24		

SEC. 12 T30N R3E

SEC. 13 T30N R3E

150 155 160 165 170 175 180

GEORGE STASELL

HELEN CAIRNS

STA. 165+74 F.E., D.A.=427 AC.
48"×50' P-2 LT. 78'
TWO END SECTIONS

STA. 170+60 F.E., D.A.=426 AC.
48"×42' P-2 LT. 73'
TWO END SECTIONS

STA. 175+99.5
24"×78' P-1 RCCP
ONE END SECTION
ONE INLET BOX
SEC. CORNER P-K NAIL
STA. 170+75.94 0.07' RT.

STA 175+99.5 LT 29'
C.B. TO BE REMOVED

STA. 175+99.5
EXISTING 8'×8' CONCRETE CULVERT TO BE REMOVED

+75.94

-00 60' ROW

+00 60' ROW

PROPOSED ROW

EXIST. ROW

REMOVE CONCRETE SLAB (INCIDENTAL TO EARTH EXCAVATION)

DANIEL & HELEN DOCHERTY

FLAG POLE

PROPOSED ROW

STA. 170+72 RT 35' WELL TO BE FILLED

8" TILE TO BE REMOVED

STA. 170+17 P.E. RT

STA. 179+44 P.E. RT

SHED

SHED

PIPE CULVERT REMOVAL

Sta.	Side	Size
165+72	LT	5'×17'
170+10	RT	5'×22'
170+70	LT	5'×16'
175+99.5	LT	8'×34'

FE

"X" CUT IN CENTER HDWL.

35.15 22.25

PK NAIL

TOP CONC. ROW MARKER

PK NAIL 33.42

33.81 38.28

HUB & TACK IN TREE

TOP CONC. ROW MARKER

P.O.T. STA. 165+72.44
P-K NAIL

P.O.T. STA. 170+75.94
P-K NAIL

ELLEN CAIRNS

ELLEN CAIRNS

SEC. 11 T30N R3E

SEC. 14 T30N R3E

BM#13 R.R. SPIKE IN POWER POLE 32' LT. STA. 155+50
ELEV. 615.26

BM#14 R.R. SPIKE IN POWER POLE 32' LT. STA. 163+00
ELEV. 617.48

BM#15 R.R. SPIKE IN ROOT 14" MAPLE 75' RT. STA. 171+00
ELEV. 618.01

BM#16 R.R. SPIKE IN ROOT 30" ELM 80' RT. STA. 175+50
ELEV. 617.04

CUT = 44061 C.Y.
FILL = 1470 C.Y.
HAUL 1839 C.Y. TO STA. 102+00 TO STA. 105+35
HAUL 17569 C.Y. TO STA. 109+20 TO STA. 115+00
HAUL 21829 C.Y. TO STA. 115+00 TO STA. 120+00
TOPSOIL CUT =2715 C.Y.
TOPSOIL PLACEMENT = 1903.5 C.Y.

PROFILE EXISTING PAVEMENT

PROPOSED RT. DITCH

PROPOSED LT. DITCH

+0.1% +0.3% -0.7% -0.2% +0.3% -0.3%

+0.06%

611.0 611.8 607.5 615.4 614.2 613.4 614.4 614.2 609.3

620 610

150	1	2	3	4	155	6	7	8	9	160	1	2	3	4	165	6	7	8	9	170	1	2	3	4	175	6	7	8	9	180
614.65	614.83	614.97	614.93	614.94	615.01	615.03	615.04	615.04	615.35	615.75	616.25	616.86	617.38	617.65	617.84	617.89	617.72	617.65	617.55	617.43	617.27	617.17	617.07	617.02	617.00	616.95	616.71	616.71	616.67	616.62

PLATE I—PLAN PROFILE S. P. R. STANDARD
THE FREDERICK POST CO., CHICAGO

STR.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 24	(130)(D) BVB	LIVINGSTON	67	15
STA. 150+00		TO STA. 210+00		
FED. ROAD DIST. NO. 2	ILLINOIS	PROJECT		

PLAN		BY	DATE
NOTE BOOK	SURVEYED	PHOTOGRAMMETRY	2-70
NO.	PLOTTED	SURDEX	11-70
	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

PROFILE		BY	DATE
NOTE BOOK	SURVEYED	SURDEX	9-70
NO.	PLOTTED	SURDEX	11-70
	GRADES CHECKED		
	B. M.'S NOTED		
	STRUCTURE NOTAT'NS CH'KD.		

PIPE CULVERT REMOVAL

Sta.	Side	Size
183+91	Lt	15"x18'
188+27	Lt	15"x18'
200+74	Lt	15"x20'
202+52	Lt	15"x18'
203+28	Rt	15"x17'

CUT = 40055 C.Y.
FILL = 1654 C.Y.

HAUL 37,987 C.Y. TO STA. 109+20 TO STA 105+00

TOPSOIL CUT = 8227 C.Y.
TOPSOIL PLACEMENT = 20043 C.Y.

3291
7H 116

PLATE 1—PLAN PROFILE B. P. R. STANDARD
THE FREDERICK POST CO., CHICAGO

STR.

ROUTE NO.		COUNTY	SHEETS
FA 24 (SBI 2)	LIVINGSTON	67	16
	BLR		
210+00	239+75		

SEC 13 T30N R3E

SEC 24 T30N R3E

MERLE MORTLAND

MERLE MORTLAND

LEO'D HUTTON

PROPOSED ROW

EXIST. ROW

PROPOSED ROW

EXIST. ROW

PROJECT ENDS STA. 237+75.21

STA. 221-11.90 FA 24 = STA. 0-00 FA. B (ILL. 20-E 7)

STA 210+00 P.E., D.A.=.373AC. 48"×22" P-1 RT. 52.5' TWO END SECTIONS

GRADING SECTION ENDS STATION 222+00

SEC. CORNER P-K NAIL STA. 224+08.18 3.05' RT.

STA. 224+75.2 TO STA. 236+75.2 TRANS. TO 24' PAVEMENT TAPERED SEE DETAIL SHT NO. 4

STA.	RT. EP	LT. EP
210-76	22'	5'-1.9"
222+34	-0-	12'-1.52"
222+91	12'	5'-1.30"

HIGH PRESSURE GAS LINE TO REMAIN IN PLACE

MAIN

N'BC

N'BC IN CHURCH SIGN POST

PK NAIL

P.O.T. STA. 210+76.26 P-K NAIL

CUT IN CENTERLINE

NOAH W DEFENBAUGH AND ALBERT DEFENBAUGH

HEIRS OF ANNA F DEFENBAUGH AND CHARLES P DEFENBAUGH

SEC 14 T30N R3E

SEC 23 T30N R3E

TOP CONC. ROW MARKER

N'BC

TOP CONC. ROW MARKER

P.O.T. STA. 237+22.14 P-K NAIL

BM# 22 "D" TOP S. HDWL ENT. CULV 21' RT. STA. 210+75 ELEV. 616.38

BM# 23 RR SPIKE IN POWER POLE 30' LT. STA 216+75 ELEV. 615.95

BM# 25 "D" ON TOP N.W. END CONC. GAS PUMP ISLAND 69' LT. STA 223+16 ELEV. 616.90

BM# 26 RR SPIKE IN POWER POLE 32' RT. STA. 227+00 ELEV. 616.69

BM# 27 RR SPIKE IN POWER POLE 30' RT. STA 232+00 ELEV. 616.45

BM# 28 RR SPIKE IN POWER POLE 100' LT. STA 237+15 ELEV. 612.58

CUT = 8194 C.Y.
FILL = 141 C.Y.
HAUL 8018 TO STA. 145+00 & STA. 120+00
TOPSOIL CUT =428 C.Y.
TO SOIL PLACEMENT = 3852 C.Y.

PROFILE EXISTING PAVEMENT

+0.06% PROPOSED RT. DITCH

+0.06% PROPOSED LT. DITCH

+0.1% PROPOSED RT. DITCH

-0.06% PROPOSED LT. DITCH

-0.5%

611.3 612.5 612.1 613.3 612.9 612.9 612.3

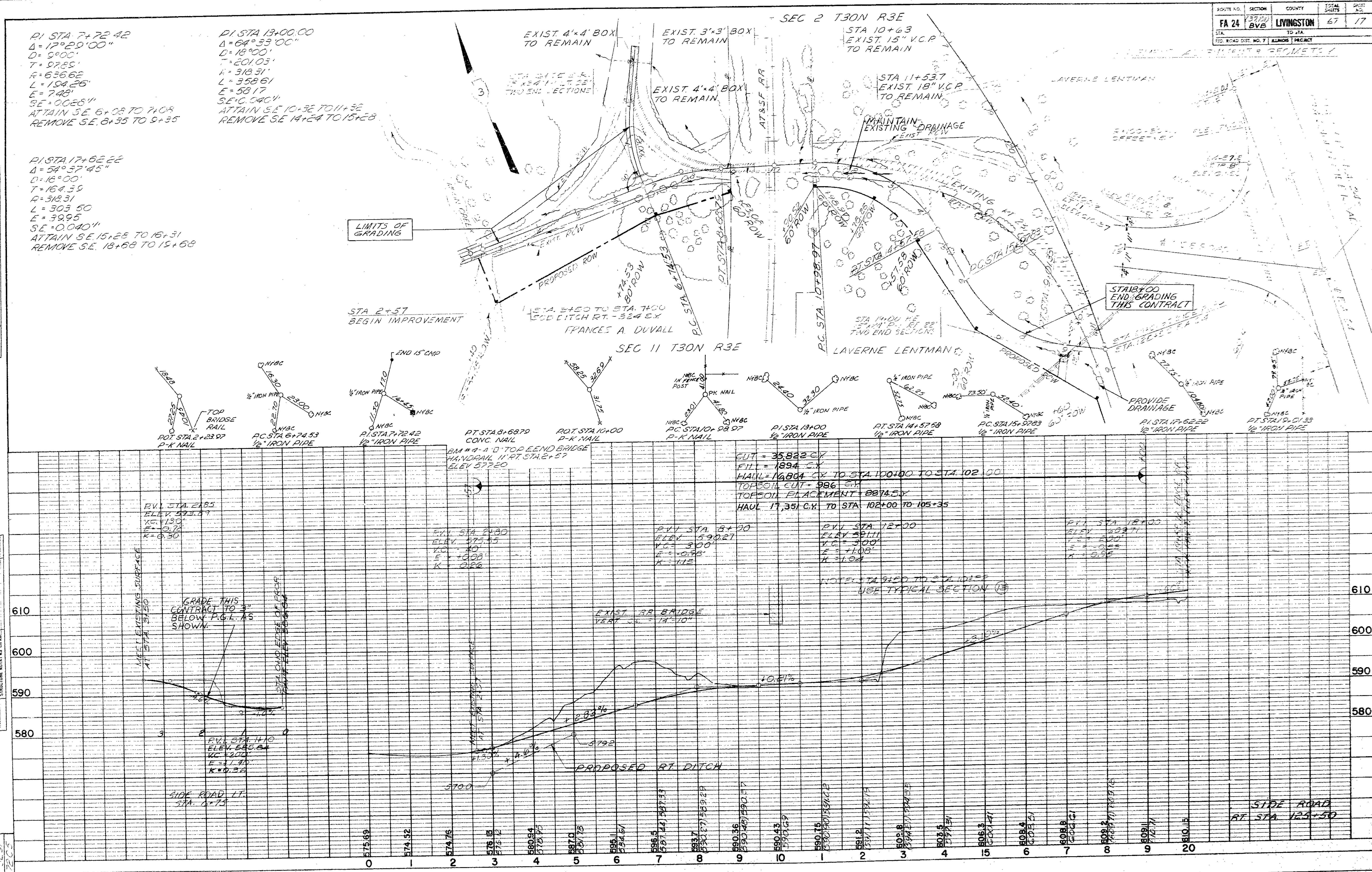
616.51 616.50 616.48 616.44 616.41 616.31 616.19 616.05 615.99 615.98 615.96 615.97 615.98 615.98 615.93 615.91 615.98 615.97 615.96 615.96 615.99 616.00 615.99 616.00 615.97 615.94 615.94 615.86 615.95 615.84 615.95

620 610

210 1 2 3 4 215 6 7 8 9 220 1 2 3 4 225 6 7 8 9 230 1 2 3 4 235 6 7 8 9 240

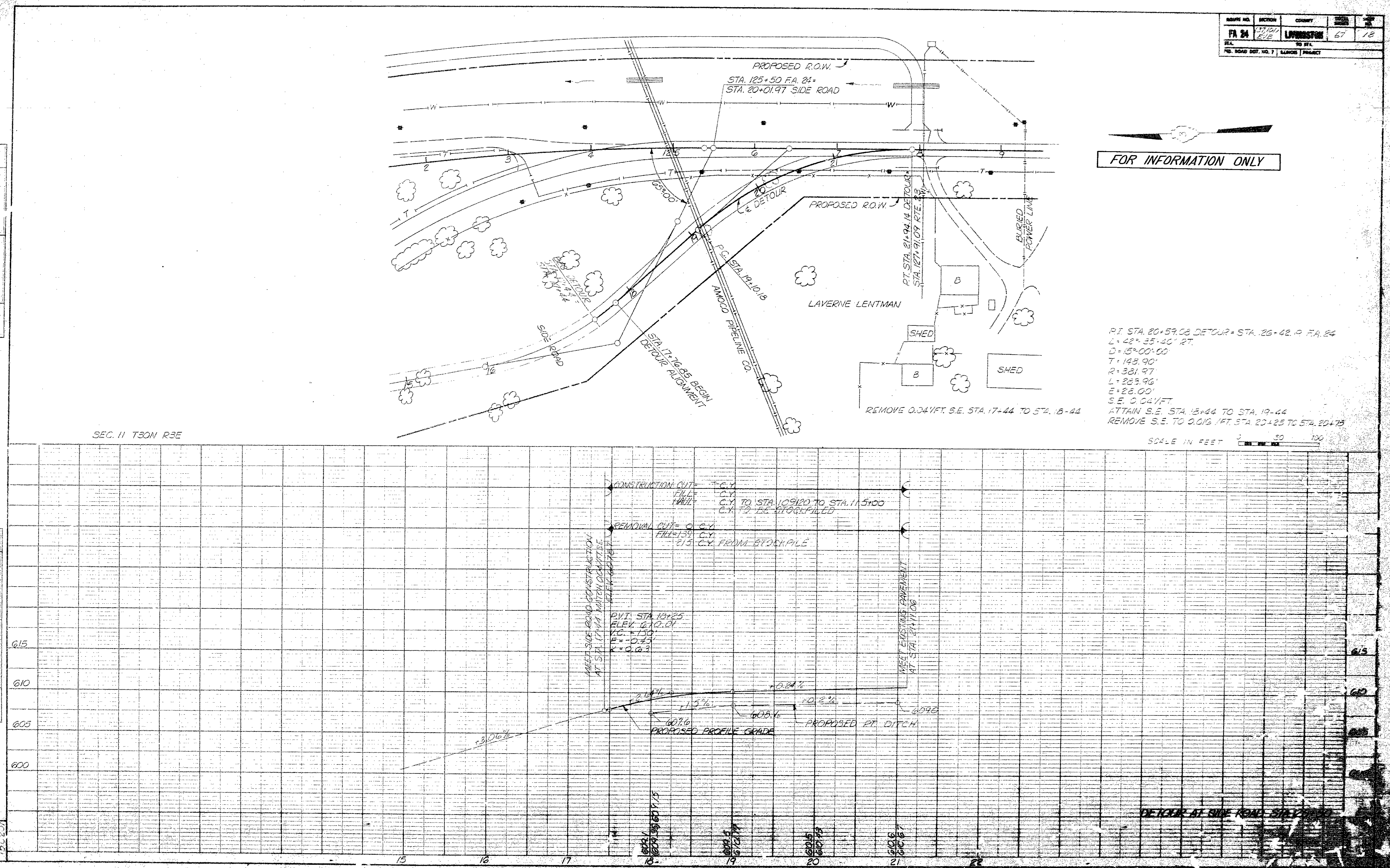
PLATE I—PLAN PROFILE U. P. R. STANDARD
THE FREDERICK POST CO., CHICAGO

STR.



FA 24
LIVINGSTON
67
17
P.I. STA. 7+72.42
Δ=17°29'00"
D=9°00'
T=97.85'
R=636.62
L=194.26'
E=7.48'
SE=0.068'/'
ATTAIN S.E. 6+08 TO 7+08
REMOVE S.E. 8+35 TO 9+35
P.I. STA. 13+00.00
Δ=64°33'00"
D=18°00'
T=201.03'
R=318.31'
L=358.61'
E=58.17
S.E.=0.040'/'
ATTAIN S.E. 10+36 TO 11+36
REMOVE S.E. 14+24 TO 15+28
P.I. STA. 17+62.22
Δ=54°37'45"
D=18°00'
T=164.39
R=318.31
L=303.50
E=39.95
SE=0.040'/'
ATTAIN S.E. 15+25 TO 16+31
REMOVE S.E. 18+68 TO 19+68
SEC 2 T30N R3E
EXIST. 4'×4' BOX TO REMAIN
EXIST. 3'×3' BOX TO REMAIN
STA 10+63 EXIST. 15" V.C.P. TO REMAIN
EXIST. 4'×4' BOX TO REMAIN
STA 11+53.7 EXIST. 18" V.C.P. TO REMAIN
MAINTAIN EXISTING DRAINAGE
LAVERNE LENTMAN
LIMITS OF GRADING
PROPOSED ROW
EXIST. ROW
P.C. STA. 6+74.53
P.T. STA. 8+68.79
P.C. STA. 10+98.97
P.T. STA. 14+57.58
P.C. STA. 15+97.83
STA 2+57 BEGIN IMPROVEMENT
STA. 3+50 TO STA. 7+00 DITCH RT. - 324 C.Y.
FRANCES A. DUVALL
SEC 11 T30N R3E
STA 18+00 END GRADING THIS CONTRACT
PROVIDE DRAINAGE
P.O.T. STA. 2+23.97 P-K NAIL
P.C. STA. 6+74.53 1/2" IRON PIPE
P.I. STA. 7+72.42 1/2" IRON PIPE
P.T. STA. 8+68.79 CONC. NAIL
P.O.T. STA. 10+00 P-K NAIL
P.C. STA. 10+98.97 P-K NAIL
P.I. STA. 13+00 1/2" IRON PIPE
P.T. STA. 14+57.58 1/2" IRON PIPE
P.C. STA. 15+97.83 1/2" IRON PIPE
P.I. STA. 17+62.22 1/2" IRON PIPE
P.T. STA. 19+01.33 1/2" IRON PIPE
BM #4 - A "D" TOP E END BRIDGE HANDRAIL 11' RT. STA. 2+57 ELEV. 577.20
CUT = 35,822 C.Y.
FILL = 1894 C.Y.
HAUL = 16,804 C.Y. TO STA. 100+00 TO STA. 102+00
TOPSOIL CUT - 986 C.Y.
TOPSOIL PLACEMENT - 8874 S.Y.
HAUL 17,351 C.Y. TO STA. 102+00 TO 105+35
P.V.I. STA. 2+85
P.V.I. STA. 8+00 ELEV. 590.27 V.C. = 300' K = 1.12
P.V.I. STA. 12+00 V.C. = 300' E = +1.08' K = 1.04
P.V.I. STA. 18+00 V.C. = 200'
NOTE: STA. 9+50 TO STA. 10+50 USE TYPICAL SECTION
GRADE THIS CONTRACT TO 3" BELOW P.G.L. AS SHOWN.
MEET EXISTING SURFACE AT STA. 3+50
EXIST. RR BRIDGE
+2.83%
+0.51%
PROPOSED RT. DITCH
SIDE ROAD LT. STA. 6+75
SIDE ROAD RT. STA. 125+50
610
600
590
580
0
1
2
3
4
5
6
7
8
9
10
1
2
3
4
15
6
7
8
9
20
PLAN
PROFILE
PLATE 1—PLAN PROFILE B. P. R. STANDARD
THE FREDERICK POST CO., CHICAGO

STR.



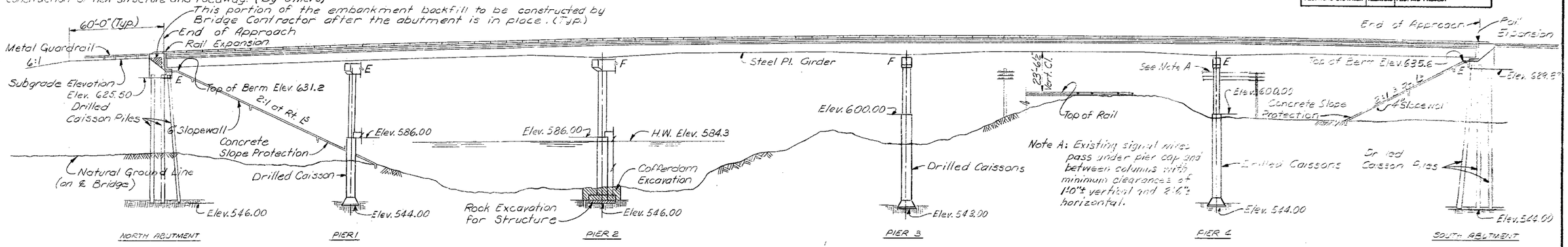
FA 24
LIVINGSTON
67
12
FOR INFORMATION ONLY
PROPOSED R.O.W.
STA. 125+50 F.A. 24=
STA. 20+01.97 SIDE ROAD
℄ DETOUR
P.C. STA. 19+10.18
P.T. STA. 21+94.14 DETOUR
STA. 127+91.09 RTE. 33
BURIED POWER LINE
AMOCO PIPELINE CO.
LAVERNE LENTMAN
SHED
SIDE ROAD
STA. 17+76.85 BEGIN DETOUR ALIGNMENT
P.I. STA. 20+59.08 DETOUR = STA. 126+42.9 F.A. 24
Δ = 42° 35' 40" RT.
D = 15°00'00"
T = 148.90'
R = 381.97'
L = 283.96'
E = 28.00'
S.E. 0.04'/FT.
ATTAIN S.E. STA. 18+44 TO STA. 19+44
REMOVE S.E. TO 0.016'/FT. STA. 20+25 TO STA. 20+75
REMOVE 0.04'/FT. S.E. STA. 17+44 TO STA. 18+44
SCALE IN FEET 0 50 100
SEC. 11 T30N R3E
CONSTRUCTION CUT = C.Y.
FILL = C.Y.
HAUL = C.Y. TO STA. 109+20 TO STA. 115+00
C.Y. TO BE STOCKPILED
REMOVAL CUT = 0 C.Y.
FILL = 139 C.Y.
215 C.Y. FROM STOCKPILE
MEET SIDE ROAD CONSTRUCTION AT STA. 17+44 MATCH QUANTITIES
MEET EXISTING PAVEMENT AT STA. 21+71.06
P.V.I. STA. 18+25
ELEV. 610.01
V.C. = 150'
E = -0.43'
K = 0.63
+3.06%
+1.5%
+0.84%
+0.2%
607.6
608.6
609.8
PROPOSED PROFILE GRADE
PROPOSED RT. DITCH
615
610
605
600
15
16
17
18
19
20
21
22
DETOUR AT SIDE ROAD STA. 20+00
PLATE 1 - PLAN - PROFILE

B.M.: "5"a" Top Headwall of R.R. Bridge 50' Lt. Sta. 108+20 Elev. 615.03.
Existing Structure: SA Bte. 16A, Sec. Q15D built in 1924. Reinf. Concrete Deck Girders and closed Abutments. Bridge to be removed after construction of new structure and roadway. (By Others)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
22 SHEETS

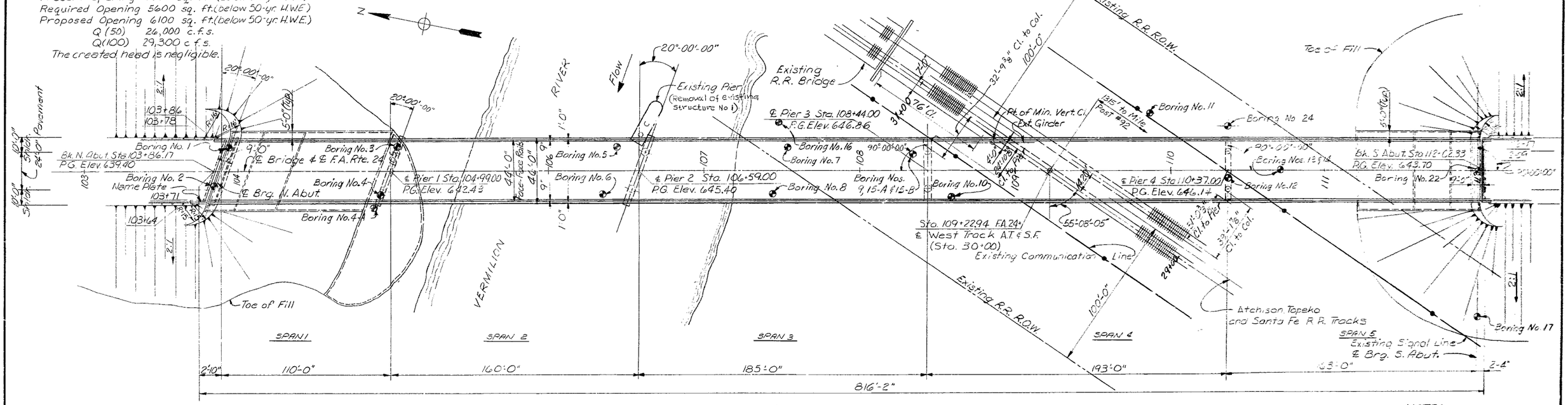


Note A: Existing signal wires pass under pier cap and between columns with minimum clearances of 1'-0" vertical and 2'-6" horizontal.

ELEVATION

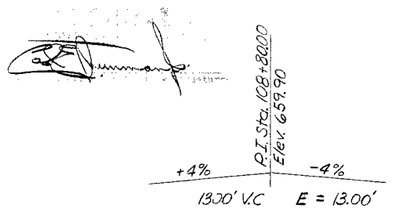
WATERWAY INFORMATION

Drainage Area 1080 sq. mi.
Present Opening 4970 sq. ft. (below 50-yr. H.W.E.)
Required Opening 5600 sq. ft. (below 50-yr. H.W.E.)
Proposed Opening 6100 sq. ft. (below 50-yr. H.W.E.)
Q (50) 26,000 c.f.s.
Q (100) 29,300 c.f.s.
The created head is negligible.

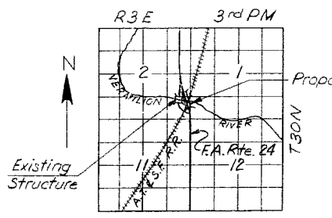


LIST OF DRAWINGS

PLAN



PROFILE GRADE
(F.A. Rte. 24)



LOCATION SKETCH

STATION 106+39
BUILT 197 BY
STATE OF ILLINOIS
F.A. RT. 24 SEC. (37,101) BVB
F.A. PROJ. BR-F-F-68(24)
LOADING HS20

NAME PLATE
(See Std. 2113)

NOTES

For Boring Data, see Special Provisions
Abutment berms shall be sloped ½" per foot to drain.
For details and sections thru slope walls, see Sheet 2.
For General Notes and Estimated Quantities, see Sheet 2.

GENERAL PLAN AND ELEVATION
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	C. Wieczorek, S. Franklin
CHECKED	G. Routa
DRAWN	D. Ammons
CHECKED	G. Dee

3291
755299

Note: Do not scale this drawing. Follow dimensions.

Revised 9-1-78

Rev. 9-12-78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37.101 BVB	LIVINGSTON	67	20.
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2
22 SHEETS

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:

State of Illinois Standard Specifications for Road and Bridge Construction (1973 Edition) and Special Provisions.

DESIGN SPECIFICATIONS:

Division I of the AASHTO "Standard Specifications for Highway Bridges" (1973 Edition) including all Interim Specifications.

DESIGN LOADING:

Live Load - HS20-44
Dead Load - Weight of structure includes reinforced concrete at 150 lbs. per cu. ft.; 18 lbs. per sq. ft. for Class I Surface Course and provisions for a future wearing surface of 25 lbs. per sq. ft. of roadway.

DESIGN UNIT STRESSES:

Concrete in Flexure:
fc = 1,200 psi (Deck Slab)
fc = 1,400 psi (Curbs, Parapets) Substructure f'c = 3500 psi.
Reinforcing Steel: (ASTM 615)
Grade 40 fs = 20,000 psi. tension, fy = 40,000 psi.
Grade 60 fs = 24,000 psi. tension, fy = 60,000 psi.
Structural Steel;
Structural Carbon Steel (M183)
fs = 20,000 psi.

CONCRETE:

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.

REINFORCEMENT:

All reinforcement shall conform to A.S.T.M. A615, Grade 40 except as otherwise noted for Pier 4 and spirals.

PAINTING:

The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.

PROTECTIVE COAT:

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

STRUCTURAL STEEL:

Fasteners shall be high strength bolts. Bolts 7/8" ϕ, open holes 15/16" ϕ, unless otherwise noted.

Anchor bolts shall be set before bolting cross frames over supports.

Field welding of construction accessories will not be permitted to the bottom flange of 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.

The main load carrying member components subject to the supplemental requirements for notch toughness are the flanges as designated in the elevation view along with the webs and all splice plates of the steel girders.

EMBANKMENTS AND SLOPE WALLS:

The embankment configurations shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.

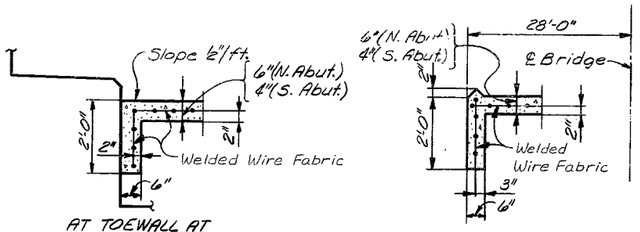
CAISSON CONCRETE:

For construction requirements and payment for Caisson Concrete see Special Provisions; f'c = 3500 psi.

TOTAL BILL OF MATERIAL

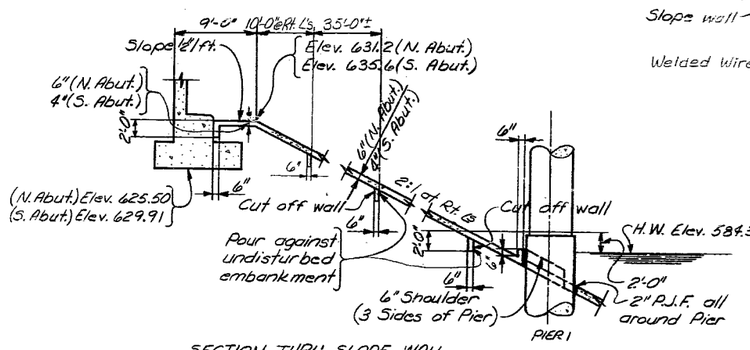
Item	Unit	Super.	Sub.	Total
Cofferdam Excavation	Cu. Yd.	——	230.0	230.0
Caisson Concrete	Cu. Yd.	——	764.6	764.6
Class X Concrete	Cu. Yd.	1116.2	911.0	2027.2
Reinforcement Bars	Lbs.	304,610	159,620	464,230
*Structural Steel	Lump Sum	1	——	1
Stud Shear Connectors	Each	7,311	——	7,311
Aluminum Railings	Lin. Ft.	1,686	——	1,686
Slope Wall 6 Inch	Sq. Yd.	——	1251	1251
Slope Wall 4 Inch	Sq. Yd.	——	664	664
Name Plates	Each	1	——	1
Neoprene Expansion Joint (6 1/2")	Lin. Ft.	93	——	93
Removal Of Existing Structures (Pier)	Each			1
Rock Excavation For Structure	Cu. Yd.	——	7.0	7.0
Cofferdams	Each	——	1	1

*Calculated plan wt. of structural steel = 1,727,125 Lb.



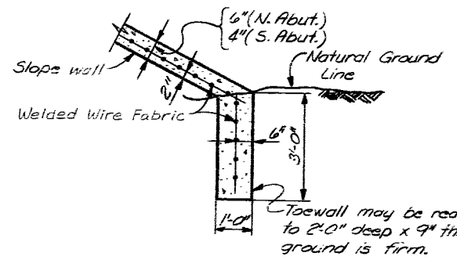
AT TOEWALL AT ABUTMENT CAP

SECTION THRU EDGE WALL



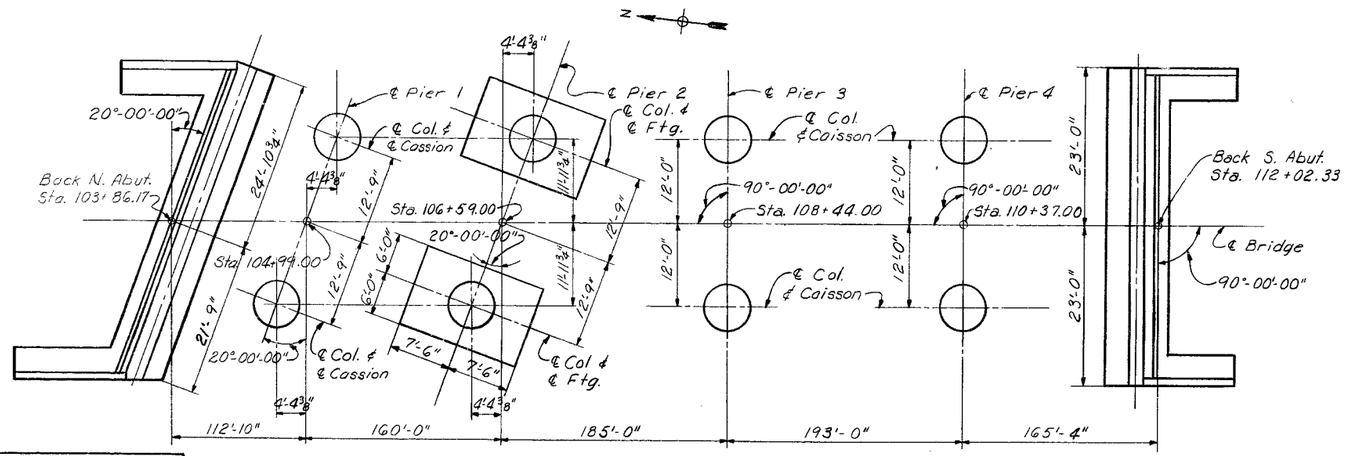
SECTION THRU SLOPE WALL NORTH ABUTMENT

Note: Section at South Abut. similar except cut off wall at High Water and joint around pier not required.
Wire Fabric not shown to be 6"×6" Mesh, No. 4 Wires, Wt. 58#/100□'.

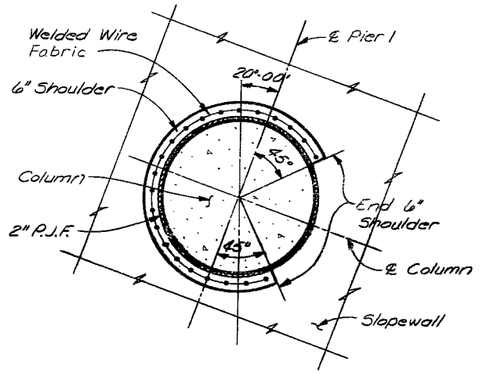


TOEWALL AT GROUND LINE

BILL OF MATERIAL		
Slope Wall (6 inch)	Sq. Yd.	1251
Slope Wall (4 inch)	Sq. Yd.	664

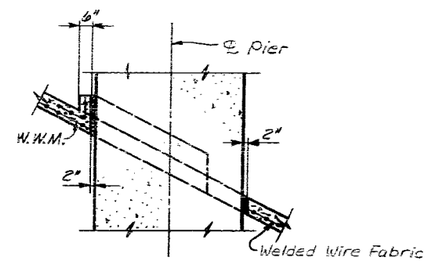


FOOTING LAYOUT



PLAN

SLOPE WALL AT PIER 1 COLUMNS



SECTION

GENERAL NOTES, ESTIMATED QUANTITIES & FOOTING LAYOUT
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37101) BVB
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	——
CHECKED	——
DRAWN	D. Richardson
CHECKED	G. Dee

3291
7552 96

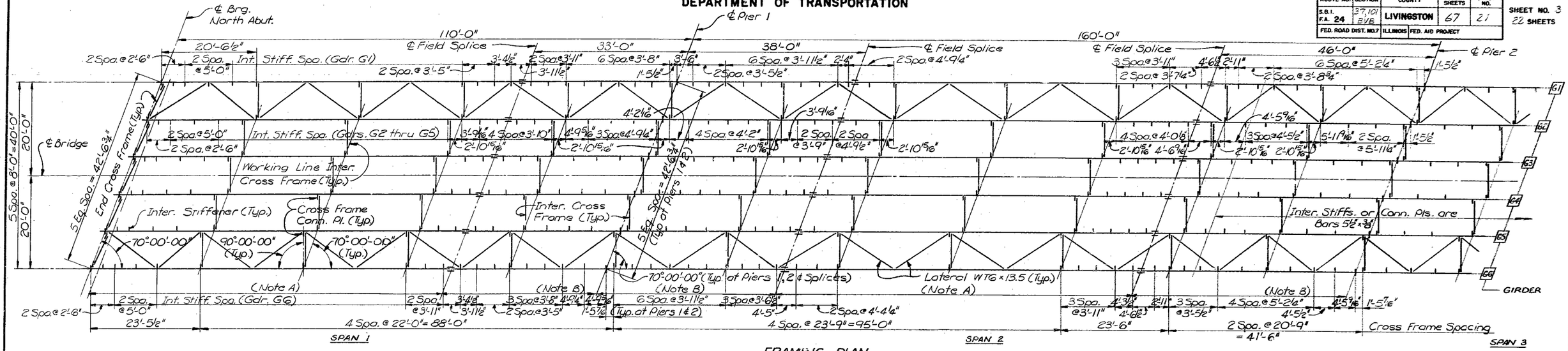
Note: Do not scale this drawing. Follow dimensions.

Rev. 9-12-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

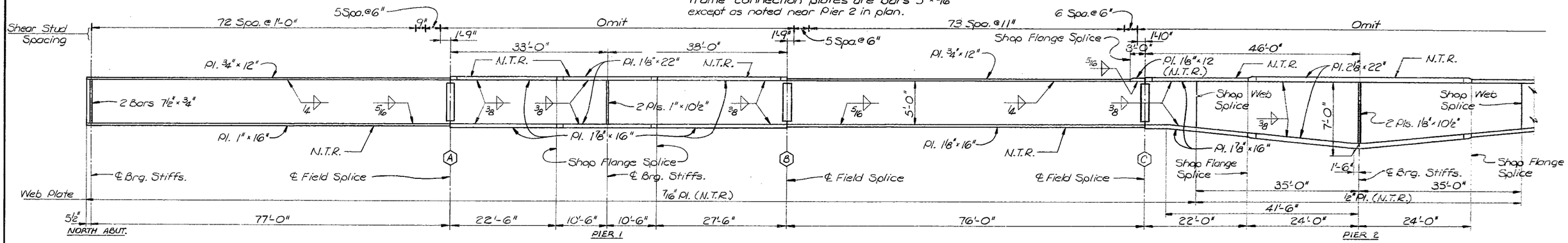
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3
22 SHEETS



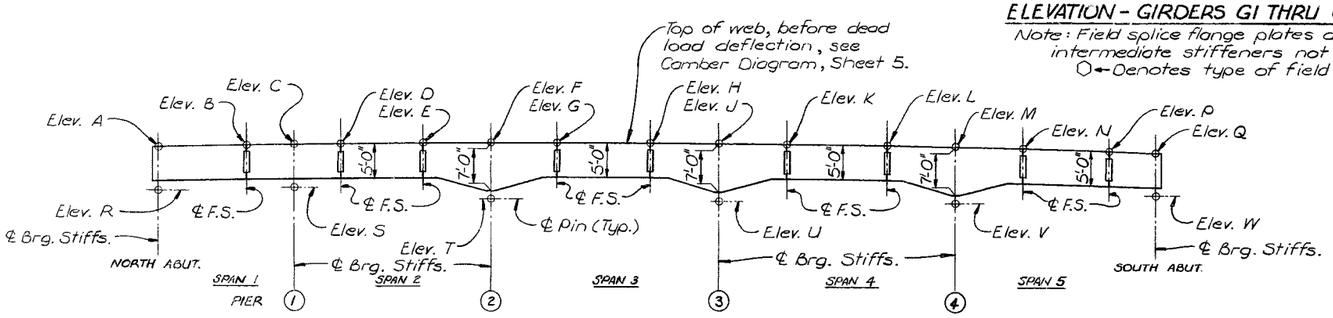
FRAMING PLAN

Note: Intermediate stiffeners and cross frame connection plates are Bars 5" × 5/16" except as noted near Pier 2 in plan.



ELEVATION - GIRDERS G1 THRU G6

Note: Field splice flange plates and intermediate stiffeners not shown.
○← Denotes type of field splice.



GIRDER LAYOUT

Note: All splices and bearing stiffeners shall be vertical.
F.S. indicates Field Splice.

GIRDER ELEVATIONS																℄ PIN ELEVATIONS					
Girder	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G	Elev. H	Elev. J	Elev. K	Elev. L	Elev. M	Elev. N	Elev. P	Elev. Q	Elev. R	Elev. S	Elev. T	Elev. U	Elev. V	Elev. W
G1	638.450	640.487	641.255	642.140	643.494	644.130	644.766	645.424	645.506	645.588	645.200	644.780	644.377	643.248	642.457	632.867	635.432	636.286	637.672	636.947	636.790
G2	638.530	640.580	641.355	642.246	643.614	644.258	644.902	645.591	645.673	645.755	645.367	644.946	644.544	643.414	642.624	632.947	635.532	636.414	637.839	637.113	636.957
G3	638.568	640.632	641.412	642.310	643.688	644.344	645.000	645.717	645.798	645.879	645.492	645.071	644.669	643.539	642.749	632.984	635.589	636.500	637.964	637.238	637.082
G4	638.480	640.557	641.344	642.249	643.637	644.304	644.971	645.718	645.798	645.878	645.492	645.071	644.669	643.539	642.749	632.896	635.521	636.461	637.964	637.238	637.082
G5	638.266	640.358	641.150	642.062	643.461	644.139	644.818	645.596	645.673	645.749	645.367	644.946	644.544	643.414	642.624	632.683	635.327	636.295	637.839	637.113	636.957
G6	638.010	640.116	640.914	641.833	643.245	643.932	644.619	645.429	645.506	645.583	645.200	644.780	644.377	643.248	642.457	632.427	635.091	636.088	636.672	636.947	636.790

Note A: Intermediate stiffeners or cross frame connection plates used as intermediate stiffeners shall be welded to top flange of girders.
Note B: Intermediate stiffeners or cross frame connection plates used as intermediate stiffeners shall be welded to bottom flange of girders.
Note: Welding for cross frame connection plates shall be same as intermediate stiffeners shown on plans.

NOTES

Longitudinal dimensions are measured horizontally along the center line of girders.
For Girder Details, see Sheet 6.
"N.T.R." indicates plates subject to the Supplemental Requirements for Notch Toughness.
For Structural Steel Notes, see Sheet 6.

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	G. Dee
CHECKED	R. Butterfield

3291
75S223

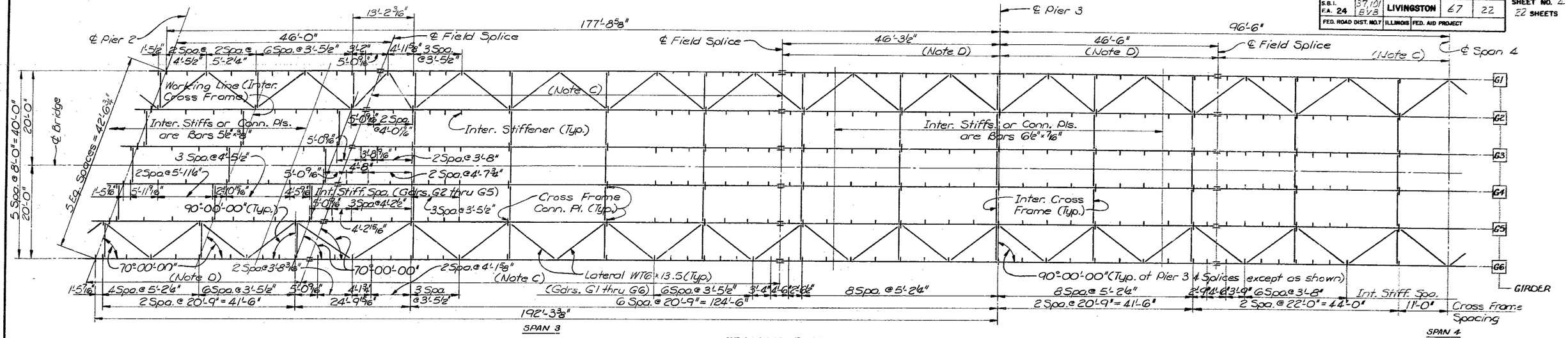
STRUCTURAL STEEL
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

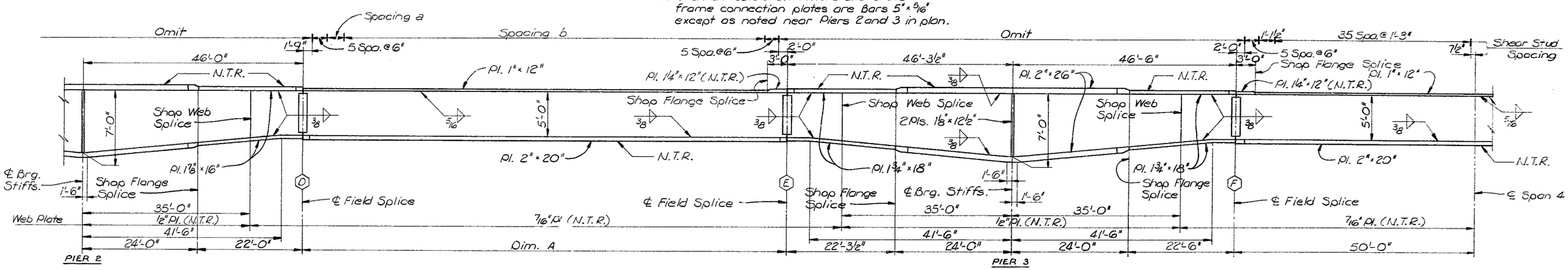
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	22
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 4
22 SHEETS



FRAMING PLAN

Note: Intermediate stiffeners and cross frame connection plates are Bars 5"×5/16" except as noted near Piers 2 and 3 in plan.



ELEVATION - GIRDERS G1 THRU G6

Note: Field splice flange plates and intermediate stiffeners not shown.
⬡ ← Denotes type of field splice.

Girder	Dimension A	Spacing a	Spacing b
G1	85'-5⅛"	11/8"	72 Spa. @ 1'-0 5/8"
G2	88'-4 1/16"	10 1/16"	72 Spa. @ 1'-1/16"
G3	91'-3"	9"	72 Spa. @ 1'-1 5/8"
G4	94'-2"	8"	72 Spa. @ 1'-2 1/8"
G5	97'-0 15/16"	6 15/16"	72 Spa. @ 1'-2 5/8"
G6	99'-11⅞"	2 Spa. @ 7 7/16"	72 Spa. @ 1'-3"

Note C: Intermediate stiffeners or cross frame connection plates used as intermediate stiffeners shall be welded to top flange of girders.

Note D: Intermediate stiffeners or cross frame connection plates used as intermediate stiffeners shall be welded to bottom flange of girders.

Note: Welding for cross frame connection plates shall be same as intermediate stiffeners shown on plans.

NOTES

Longitudinal dimensions are measured horizontally along the center line of girders.
For Girder Details, see Sheet 6.
"N.T.R." indicates plates subject to the Supplemental Requirements for Notch Toughness.
For Structural Steel Notes, see Sheet 6.

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	G. Dee
CHECKED	R. Butterfield

3291
75S222

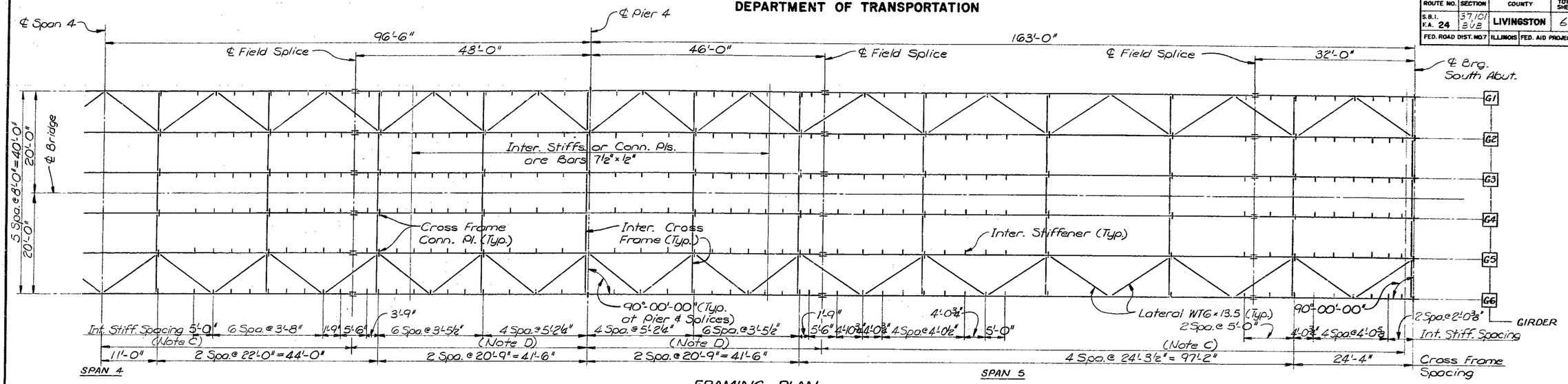
Note: Do not scale this drawing. Follow dimensions.

STRUCTURAL STEEL
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT 24 SEC. (37101) BVB
LIVINGSTON COUNTY
STATION 106+39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

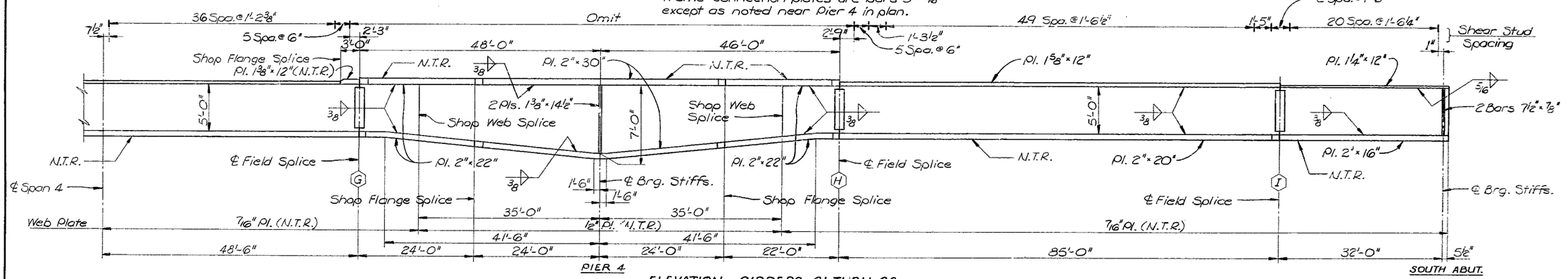
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37,101 BVB	LIVINGSTON	67	23
F.A. 24				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5
22 SHEETS



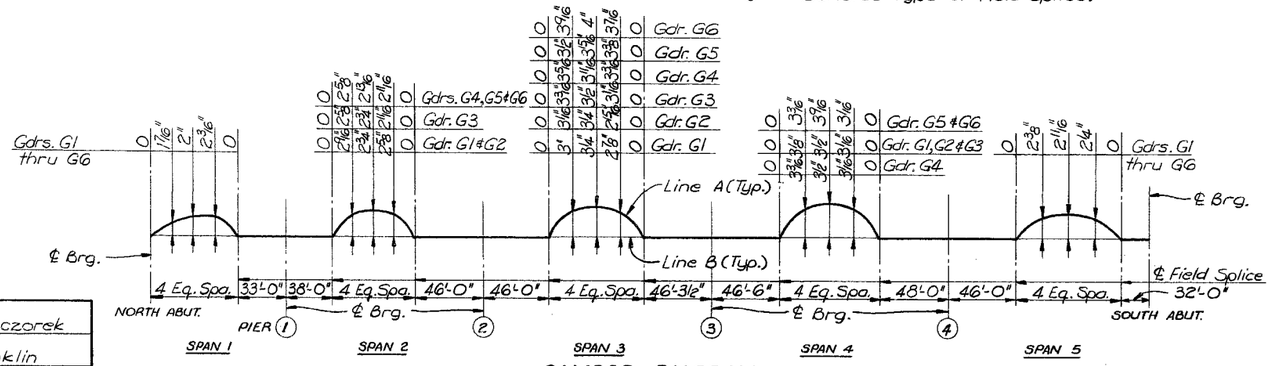
FRAMING PLAN

Note: Intermediate stiffeners and cross frame connection plates are Bars 5" x 5/16" except as noted near Pier 4 in plan.



ELEVATION - GIRDERS G1 THRU G6

Note: Field splice flange plates and intermediate stiffeners not shown.
⬡ ← Denotes type of field splice.



CAMBER DIAGRAM

Note: Line A indicates top of web plate before dead load deflection occurs. Line B is a straight line between ℄ brg. stiffener and splice or ℄ between splices at top of web plate.

Note C: Intermediate stiffeners or cross frame connection plates used as intermediate stiffeners shall be welded to top flange of girders.

Note D: Intermediate stiffeners or cross frame connection plates used as intermediate stiffeners shall be welded to bottom flange of girders.

Note: Welding for cross frame connection plates shall be same as intermediate stiffeners shown on plans.

NOTES

Longitudinal dimensions are measured horizontally along the center line of girders.
For Girder Details, see Sheet 6.
"N.T.R." indicates plates subject to the Supplemental Requirements for Notch Toughness.
For Structural Steel Notes, see Sheet 6.

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	G. Dee
CHECKED	R. Butterfield

3291
755224

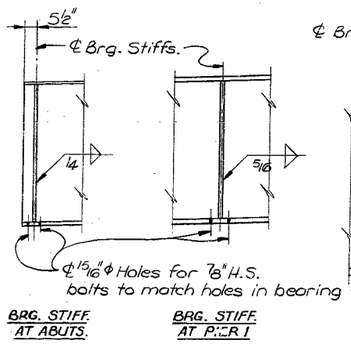
STRUCTURAL STEEL
F.A. ROUTE 24 (I.L. 23) OVER
VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37101) BVB
LIVINGSTON COUNTY
STATION 106+39

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

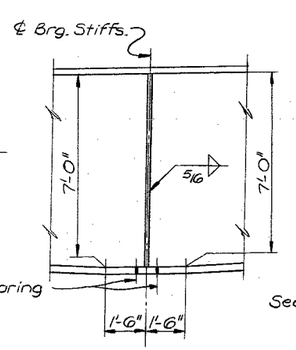
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	24
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 6
22 SHEETS



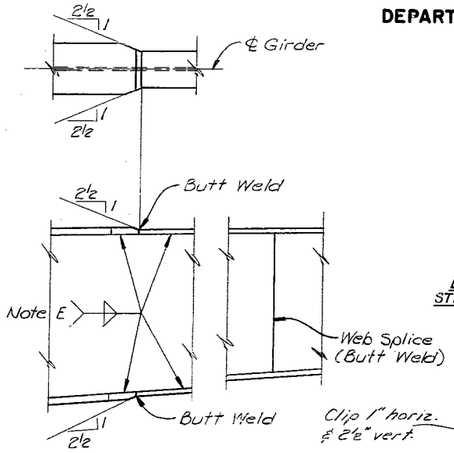
BRG. STIFF. AT ABUTS.

BRG. STIFF. AT PIER 1

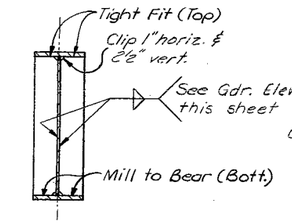


BRG. STIFF. AT PIERS 2, 3 & 4

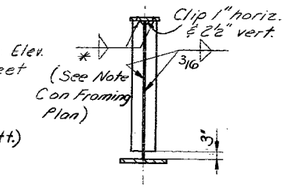
Note E: Size of fillet weld,
3/4" flange plate use 1/4" weld
flange plates over 3/4" to 1 1/2" use 5/16" weld
flange plates over 1 1/2" to 2 1/8" use 3/8" weld



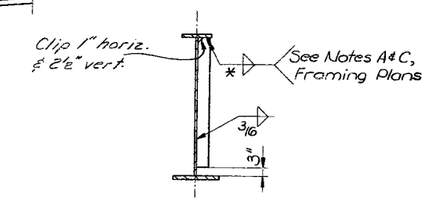
SHOP SPLICES



BEARING STIFFENERS



NEAR MID-SPAN



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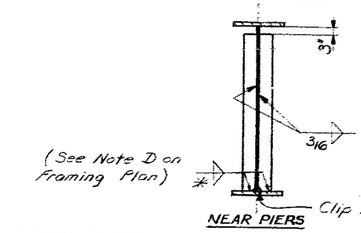
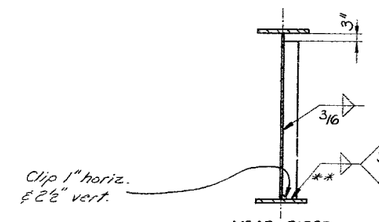
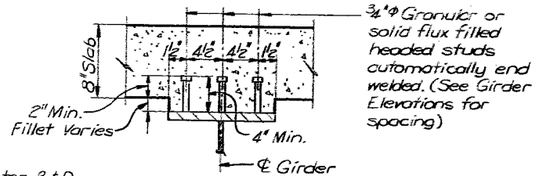


NEAR PIERS
Clip 1" horiz. & 2 1/2" vert.

CROSS FRAME CONNECTION PLATES



NEAR PIERS

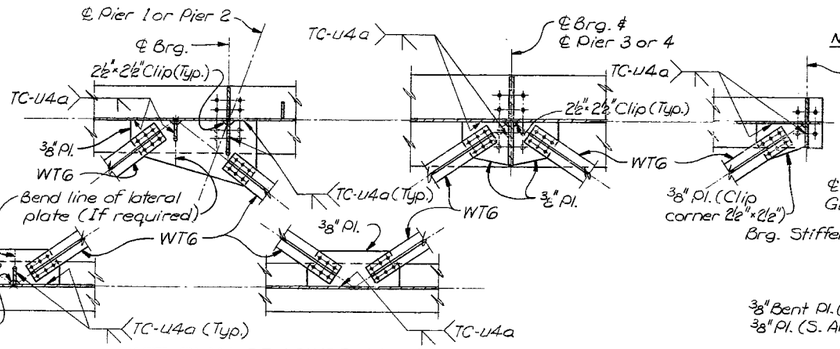


SHEAR STUDS
(7401 - Required)

** 5/16" for 5/16" Stiffeners
3/8" for 3/8" & 7/16" Stiffeners

GIRDER ELEVATIONS

Note: For flange to web welds, see Girder Elevations.

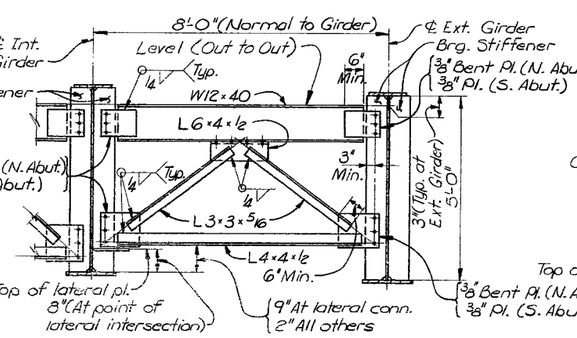


PART PLAN OF LOWER LATERAL BRACING

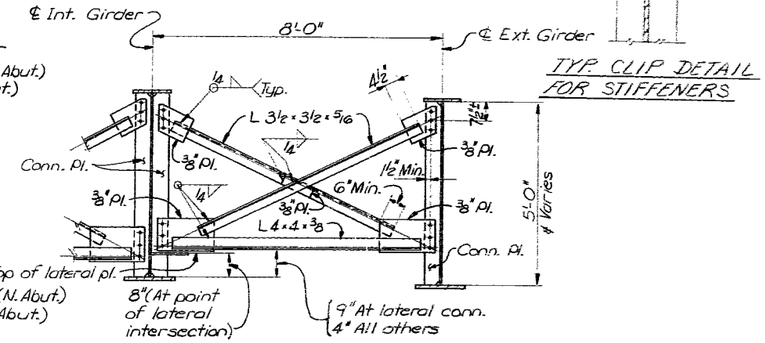
Note: Intermediate and end cross frames not shown.
Cope 3/8" lateral plates where necessary to fit around stiffeners.

CROSS FRAME CONNECTION PLATES OR INTERMEDIATE STIFFENERS

* Fillet weld size same as shown in Note E.

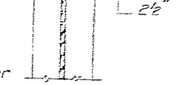


END CROSS FRAME



INTERMEDIATE CROSS FRAME

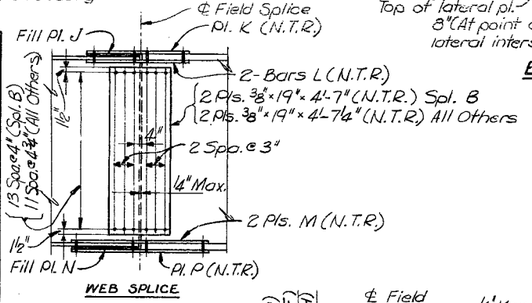
Note: Intermediate cross frame connection to bearing stiffeners similar.



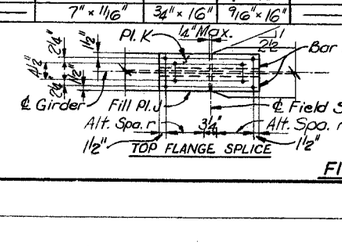
TYP. CLIP DETAIL FOR STIFFENERS

FIELD SPLICES

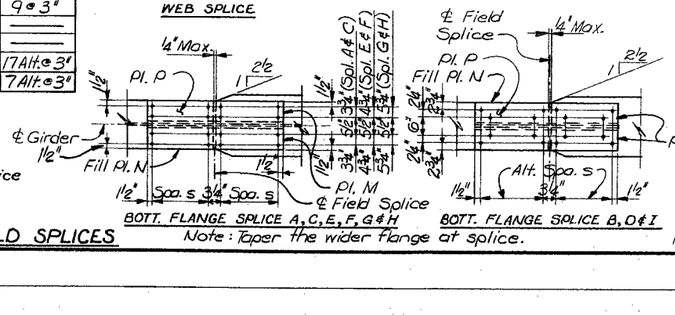
SPLICE	TABLE OF VARIABLES							
	PL. J	PL. K	BAR L	PL. M	PL. N	PL. P	SPA. r	SPA. s
A (Top Flg.)	1 1/16" x 12"	1/2" x 12"	5 1/4" x 3/8"				5@3"	
A (Bott. Flg.)				7" x 5/8"	7/8" x 16"	1 2/16" x 16"		3@3"
B (Top Flg.)	1 1/8" x 12"	7/16" x 12"	5 1/4" x 3/8"				4@3"	
C (Bott. Flg.)				7" x 1 1/16"	3/4" x 16"	9/16" x 16"		4@3"
C (Top Flg.)	3/4" x 12"	5/8" x 12"	5 1/4" x 1/2"				5@3"	
D (Top Flg.)	7/8" x 12"	1/2" x 12"	5 1/4" x 5/8"				5@3"	
D (Bott. Flg.)				7" x 1 1/8"	1 6/16" x 16"	1 5/16" x 16"		13 Alt. @ 3"
E & F (Top Flg.)	1/2" x 12"	5/8" x 12"	5 1/4" x 5/8"				6@3"	
E & F (Bott. Flg.)				8" x 1"	1/4" x 18"	7/8" x 18"		7@3"
G (Top Flg.)	5/8" x 12"	3/4" x 12"	5 1/4" x 5/8"				7@3"	
G & H (Bott. Flg.)				1 1/8" x 9"		1 5/16" x 20"		9@3"
H (Top Flg.)	3/8" x 12"	7/8" x 12"	5 1/4" x 7/8"				9@3"	
I (Top Flg.)	3/8" x 12"	3/4" x 12"	5 1/4" x 3/4"				8@3"	
I (Bott. Flg.)				7" x 1 1/4"		1" x 16"		17 Alt. @ 3"
B (Bott. Flg.)				7" x 1 1/16"	3/4" x 16"	9/16" x 16"		7 Alt. @ 3"



WEB SPLICE



TOP FLANGE SPLICE



BOTT. FLANGE SPLICE A, C, E, F, G & H

Note: Taper the wider flange at splice.

BOTT. FLANGE SPLICE B, D & I

FIELD SPLICES

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	G. Dee
CHECKED	R. Butterfield

3291
735230

STRUCTURAL STEEL NOTES

GENERAL NOTES: See Sheet 2.
CAMBER: All girders to be cambered as shown on Sheet 5.
MATERIALS: All structural carbon steel shall conform to A.A.S.H.T.O. M183.
FIELD CONNECTIONS: All field splices and connections to be bolted with 7/8" High Strength bolts conforming to A.A.S.H.T.O. M164.
Holes shall be 1 1/16" ϕ in all lower lateral connection plates and gusset plates of cross frames for 7/8" ϕ High Strength Bolts. Hardened washers shall be required over holes in laterals and gusset plates.
All other holes shall be 15/16" ϕ.
DETAILS: All longitudinal and transverse dimensions are measured horizontally at a normal temperature of 50° F.

NOTES

For Bearing Details, see Sheet 7.
For exact location of stiffeners, see Framing Plans.

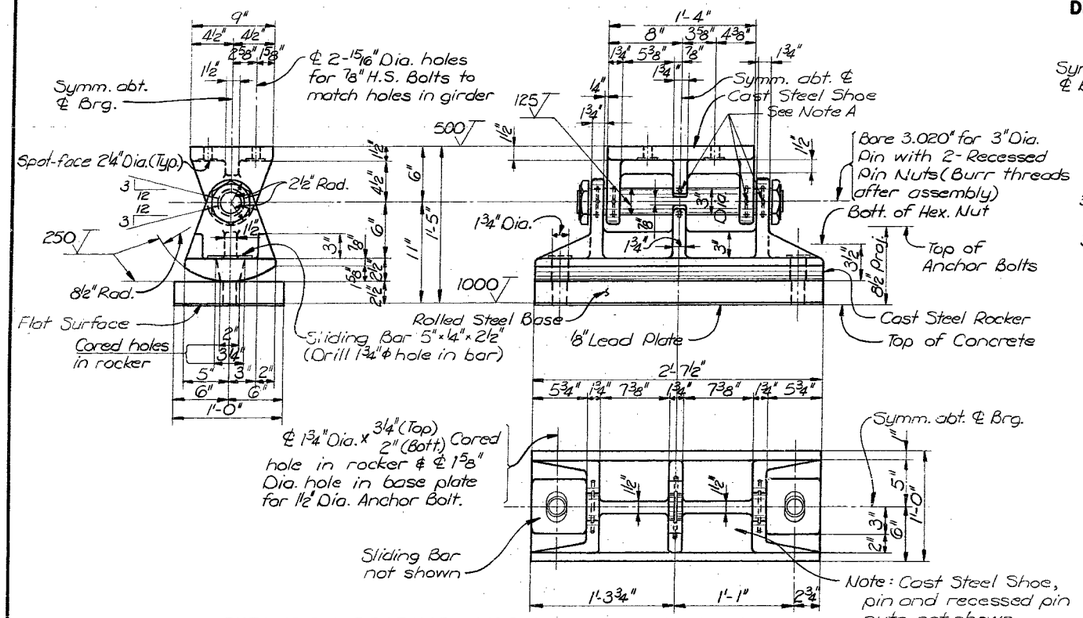
STRUCTURAL STEEL
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37101) BVB
LIVINGSTON COUNTY
STATION 106+39

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

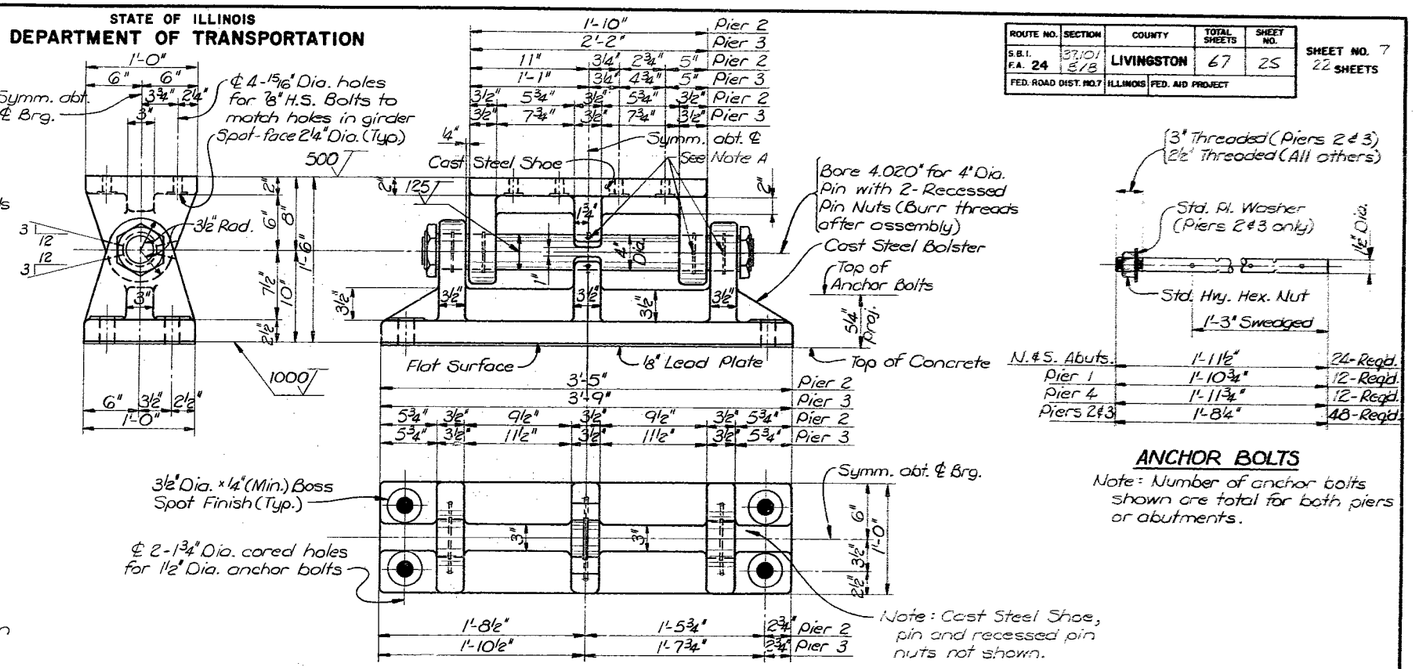
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 & 7,8	LIVINGSTON	67	25
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7
22 SHEETS



EXPANSION BEARING - NORTH AND SOUTH ABUTMENT

(6 - Required at each abutment)



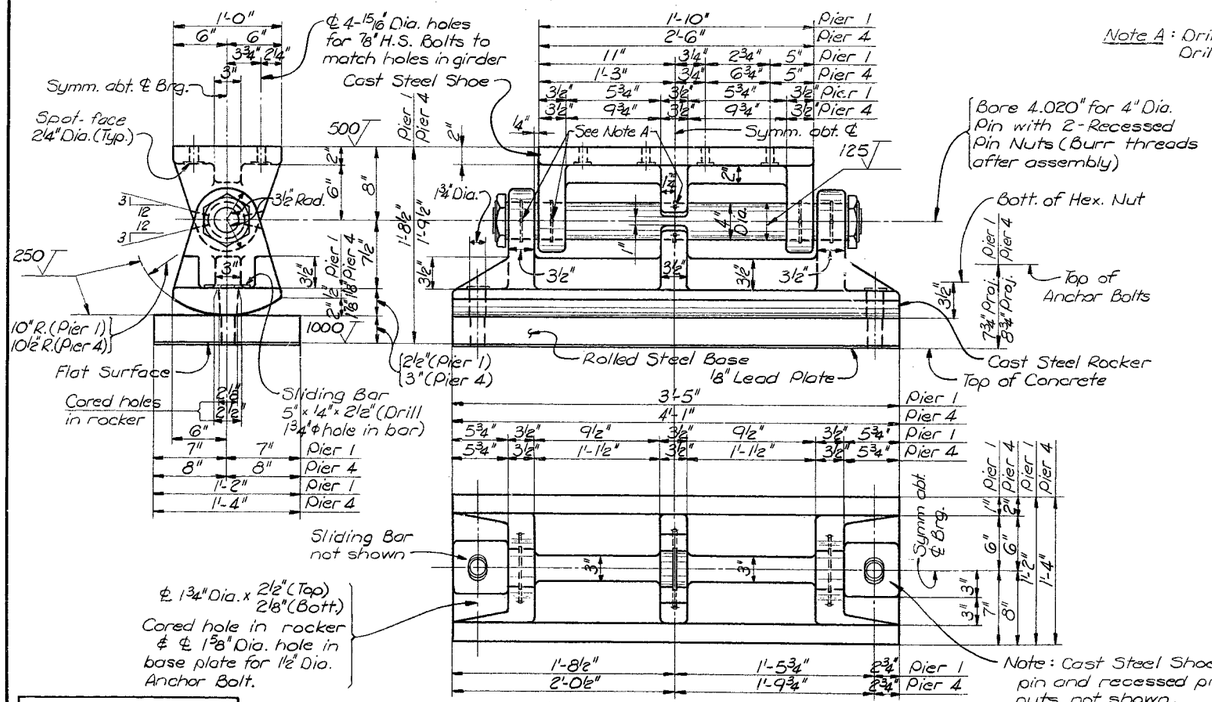
FIXED BEARING - PIERS 2 AND 3

(6 - Required at each pier)

N. & S. Abuts.	1'-11½"	24-Reqd.
Pier 1	1'-10¾"	12-Reqd.
Pier 4	1'-11¾"	12-Reqd.
Piers 2 & 3	1'-8¼"	48-Reqd.

ANCHOR BOLTS

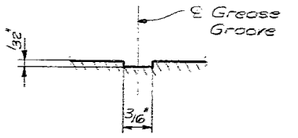
Note: Number of anchor bolts shown are total for both piers or abutments.



EXPANSION BEARING - PIERS 1 AND 4

(6 - Required at each pier)

Note A: Drill ¼" ϕ Hole to grease groove. Drill and tap for grease fitting (Typ.)



GREASE GROOVE ON SADDLE

Note: Grease bearing assembly with molybdenum grease before installation.

BEARING NOTES

For Structural Steel Notes, see Sheet 6.

All fillets to be ¾" radius unless otherwise shown.

Structural steel weldments of equal sections and strength may be substituted for the castings.

Lead plates shall conform to A.A.S.H.T.O. M112. Weight of lead plates shall be included in weight of Structural Steel.

All material shall conform A.A.S.H.T.O M183 except as otherwise noted.

Castings shall conform to A.A.S.H.T.O M 192, Class 70.

Anchor bolts shall conform to A.S.T.M. A307.

Weight of castings shall be computed on the basis of the minimum thickness of material shown. Drafts supplied at the convenience of the fabricater shall not be included in payment.

Where finished surfaces are indicated on the drawings, the surface finishes shall conform to the American National Standard's Institute surface roughness requirements in A.N.S.I. B46.1.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

Pins shall conform to S.A.E. 8620 material and shall be heat treated and case hardened to a depth of 0.12" to 0.15" to a hardness of 58 H.R.C. Pins shall be polished to a smooth finish after case hardening.

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	G. Dee
CHECKED	R. Butterfield

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BEARINGS
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	26
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 8
22 SHEETS

MOMENT TABLE - *Unsymmetrical Composite 5 Spans*
(Composite in Positive Moment Areas Only)

	INTERIOR GIRDER MOMENT TABLE																		
	SPAN 1	PIER 1	SPAN 2	PIER 2				SPAN 3 - 0.5 PT.				PIER 3				SPAN 4	PIER 4	SPAN 5
	0.4 PT.		0.5 PT.	G1 & G2	G3	G4	G5 & G6	G1 & G2	G3	G4	G5 & G6	G1 & G2	G3	G4	G5 & G6	0.5 PT.		0.6 PT.
I_S (IN^4)	30161	86862	31550	198071	198071	198071	198071	47713	47713	47713	47713	216982	216982	216982	216982	47713	246566	60061
I_C (IN^4)	81457	—	86634	—	—	—	—	136197	136197	136197	136197	—	—	—	—	136197	—	138741
S_S (IN^3)	1125	2725	1217	4489	4489	4489	4489	2291	2291	2291	2291	4931	4931	4931	4931	2291	5604	2447
S_C (IN^3)	1590	—	1714	—	—	—	—	3065	3065	3065	3065	—	—	—	—	3065	—	3062
DL (K/')	1.048	1.185	1.053	1.152	1.152	1.152	1.152	1.133	1.133	1.133	1.133	1.284	1.284	1.284	1.284	1.132	1.355	1.125
MDL ('K)	699	2156	644	3510	3570	3631	3692	1108	1144	1180	1217	3961	4023	4086	4148	986	4918	1717
f_{SDL} (KSI)	7.5	9.5	6.4	9.4	9.5	9.7	9.9	5.8	6.0	6.2	6.4	9.6	9.8	9.9	10.1	5.2	10.5	8.4
SDL (K/')	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485	0.485
MSDL ('K)	389	787	477	1328	1351	1374	1397	616	636	656	677	1461	1484	1507	1530	636	1798	847
MLL ('K)	1031	1306	1241	2059	2095	2130	2166	1565	1615	1667	1720	2306	2342	2378	2415	1645	2449	1683
MIMP ('K)	220	251	217	349	353	357	361	256	262	268	273	370	374	378	382	258	404	293
TOTAL ('K)	1640	2344	1935	3736	3799	3861	3924	2437	2513	2591	2670	4137	4200	4263	4327	2539	4601	2823
f_{SLL} (KSI)	12.4	10.3	13.6	10.0	10.2	10.3	10.5	9.5	9.8	10.1	10.5	10.1	10.2	10.4	10.5	9.9	9.9	11.1
f_{STOTAL} (KSI)	19.9	19.8	20.0	19.4	19.7	20.0	20.4	15.3	15.8	16.3	16.9	19.7	20.0	20.3	20.6	15.1	20.4	19.5
VR (K)	56.1	—	57.6	—	—	—	—	63.6	63.6	63.6	63.6	—	—	—	—	62.7	—	59.2

I_S and S_S are the moment of inertia and section modulus of the steel section.
I_C and S_C are the moment of inertia and section modulus of the composite section used in computing f_S.
V_R is the maximum LL + Impact shear range for positive moment areas used to determine shear connector spacing.

REACTION TABLE

	INTERIOR GIRDER REACTION TABLE					
	ABUT. 1	PIER 1	PIER 2	PIER 3	PIER 4	ABUT. 2
RDL (K)	58.3	231.2	295.9	316.9	352.7	91.7
RLL (K)	51.2	98.8	118.5	125.1	125.8	57.5
RIMP (K)	10.9	19.0	19.9	19.9	20.8	10.0
RTOTAL (K)	120.4	349.0	434.3	461.9	499.3	159.2

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	R. Rois
CHECKED	E. Petzold

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MOMENTS AND REACTIONS
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

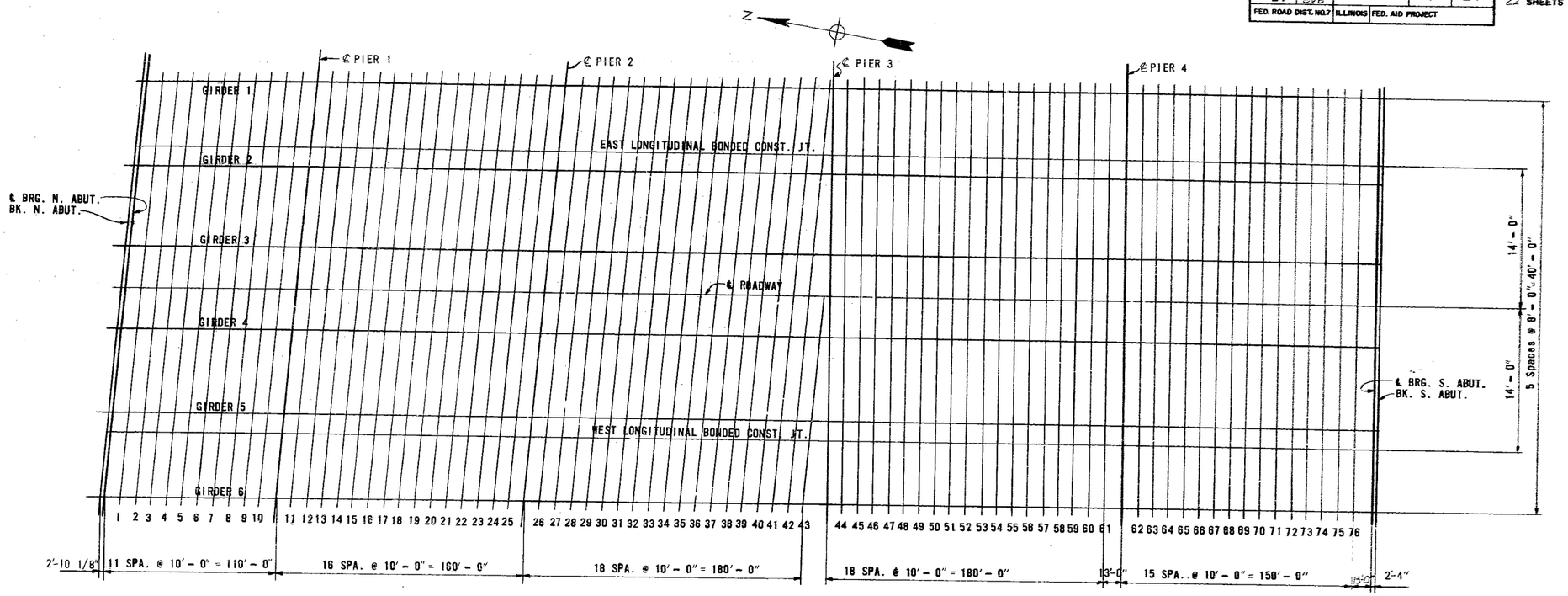
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	27
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9
22 SHEETS

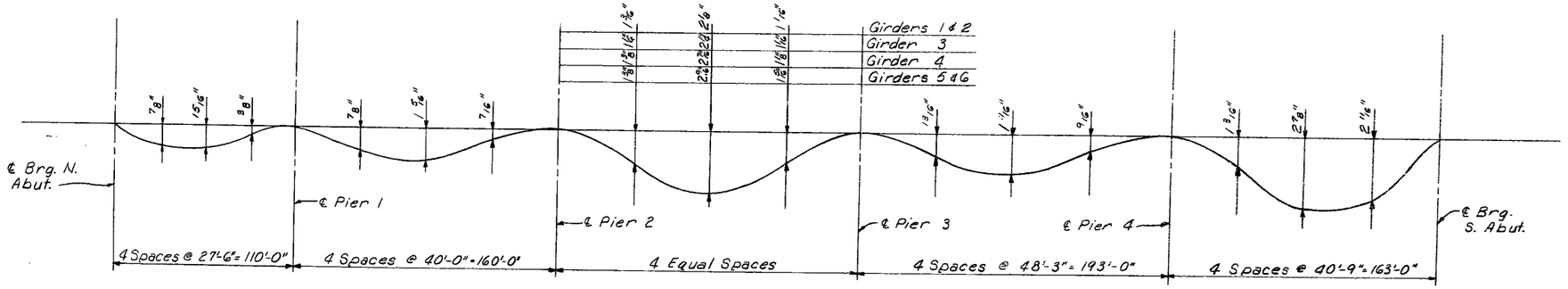
CENTERLINE OF ROADWAY

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10386.162	639.271	639.271
℄ Brg. N. Abut.	10389.000	639.357	639.357
1	10399.000	639.656	639.688
2	10409.000	639.949	640.007
3	10419.000	640.236	640.314
4	10429.000	640.517	640.605
5	10439.000	640.791	640.877
6	10449.000	641.059	641.153
7	10459.000	641.321	641.376
8	10469.000	641.577	641.613
9	10479.000	641.827	641.843
10	10489.000	642.071	642.074
℄ Brg. Pier 1	10499.000	642.309	642.309
11	10509.000	642.540	642.548
12	10519.000	642.765	642.788
13	10529.000	642.984	643.030
14	10539.000	643.197	643.269
15	10549.000	643.404	643.495
16	10559.000	643.605	643.712
17	10569.000	643.799	643.914
18	10579.000	643.987	644.099
19	10589.000	644.169	644.268
20	10599.000	644.345	644.427
21	10609.000	644.515	644.574
22	10619.000	644.679	644.715
23	10629.000	644.837	644.853
24	10639.000	644.988	644.993
25	10649.000	645.133	645.134
℄ Brg. Pier 2	10659.000	645.272	645.272
26	10669.000	645.405	645.418
27	10679.000	645.532	645.564
28	10689.000	645.653	645.710
29	10699.000	645.767	645.855
30	10709.000	645.875	645.995
31	10719.000	645.977	646.028
32	10729.000	646.073	646.248
33	10739.000	646.163	646.353
34	10749.000	646.247	646.444
35	10759.000	646.325	646.518
36	10769.000	646.396	646.573
37	10779.000	646.461	646.616
38	10789.000	646.520	646.646
39	10799.000	646.573	646.665
40	10809.000	646.620	646.682
41	10819.000	646.661	646.698
42	10829.000	646.695	646.712
43	10839.000	646.723	646.727
℄ Brg. Pier 3	10844.000	646.735	646.735
44	10854.000	646.754	646.757
45	10864.000	646.770	646.779
46	10874.000	646.774	646.801
47	10884.000	646.773	646.823
48	10894.000	646.769	646.842
49	10904.000	646.757	646.855
50	10914.000	646.739	646.857
51	10924.000	646.715	646.847
52	10934.000	646.685	646.824
53	10944.000	646.649	646.787
54	10954.000	646.607	646.734
55	10964.000	646.558	646.665
56	10974.000	646.503	646.586
57	10984.000	646.442	646.500
58	10994.000	646.375	646.410
59	11004.000	646.302	646.320
60	11014.000	646.223	646.229
61	11024.000	646.137	646.138
℄ Brg. Pier 4	11037.000	646.017	646.017
62	11047.000	645.917	645.993
63	11057.000	645.811	645.848
64	11067.000	645.699	645.762
65	11077.000	645.581	645.678
66	11087.000	645.457	645.596
67	11097.000	645.326	645.525
68	11107.000	645.189	645.401
69	11117.000	645.047	645.285
70	11127.000	644.898	645.154
71	11137.000	644.743	645.003
72	11147.000	644.581	644.833
73	11157.000	644.414	644.645
74	11167.000	644.241	644.438
75	11177.000	644.061	644.211
76	11187.000	643.875	643.968
℄ Brg. S. Abut.	11200.000	643.624	643.624
Back S. Abut.	11202.333	643.578	643.578

Note: Elevations are at top of concrete slab.

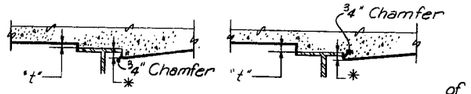


PLAN



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets 9 & 10.



*Variable (¼" minimum)

FILLET HEIGHTS

To determine "t": After all steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown in the Plan. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 10 & 11, minus 8" slab thickness, equals the fillet heights "t" above top flanges of girders.

Note: Do not scale this drawing. Follow dimensions.

DECK ELEVATIONS
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106 + 39

DRAWN D. RICHARDSON
CHECKED W.O. Walden
DESIGNED
CHECKED
3291
75235

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	28
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10 OF 22 SHEETS

GIRDER 1 — EAST LONGITUDINAL BONDED CONSTRUCTION JOINT — GIRDER 2 — GIRDER 3

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10393.442	639.137	639.137
℄ Brg. N. Abut.	10396.279	639.221	639.221
1	10406.279	639.516	639.548
2	10416.279	639.804	639.862
3	10426.279	640.087	640.165
4	10436.279	640.363	640.451
5	10446.279	640.633	640.719
6	10456.279	640.897	640.971
7	10466.279	641.154	641.209
8	10476.279	641.406	641.442
9	10486.279	641.651	641.667
10	10496.279	641.890	641.893
℄ Brg. Pier 1	10506.279	642.123	642.123
11	10516.279	642.350	642.358
12	10526.279	642.571	642.594
13	10536.279	642.786	642.832
14	10546.279	642.994	643.066
15	10556.279	643.196	643.287
16	10566.279	643.393	643.500
17	10576.279	643.582	643.697
18	10586.279	643.766	643.878
19	10596.279	643.944	644.043
20	10606.279	644.116	644.198
21	10616.279	644.281	644.340
22	10626.279	644.440	644.476
23	10636.279	644.593	644.609
24	10646.279	644.740	644.745
25	10656.279	644.881	644.882
℄ Brg. Pier 2	10666.279	645.015	645.015
26	10676.279	645.144	645.157
27	10686.279	645.266	645.296
28	10696.279	645.382	645.435
29	10706.279	645.492	645.576
30	10716.279	645.596	645.710
31	10726.279	645.694	645.835
32	10736.279	645.785	645.947
33	10746.279	645.871	646.045
34	10756.279	645.950	646.129
35	10766.279	646.023	646.196
36	10776.279	646.090	646.246
37	10786.279	646.151	646.284
38	10796.179	646.205	646.311
39	10806.279	646.254	646.328
40	10816.279	646.296	646.344
41	10826.279	646.332	646.358
42	10836.279	646.362	646.371
43	——	——	——
℄ Brg. Pier 3	10844.000	646.381	646.381
44	10854.000	646.400	646.403
45	10864.000	646.413	646.425
46	10874.000	646.420	646.447
47	10884.000	646.420	646.468
48	10894.000	646.415	646.488
49	10904.000	646.403	646.501
50	10914.000	646.385	646.503
51	10924.000	646.361	646.493
52	10934.000	646.331	646.470
53	10944.000	646.295	646.433
54	10954.000	646.252	646.379
55	10964.000	646.204	646.311
56	10974.000	646.149	646.232
57	10984.000	646.088	646.146
58	10994.000	646.021	646.056
59	11004.000	645.948	645.966
60	11014.000	645.868	645.874
61	11024.000	645.783	645.784
℄ Brg. Pier 4	11037.000	645.662	645.662
62	11047.000	645.563	645.579
63	11057.000	645.457	645.494
64	11067.000	645.345	645.408
65	11077.000	645.227	645.324
66	11087.000	645.102	645.241
67	11097.000	644.972	645.151
68	11107.000	644.835	645.047
69	11117.000	644.693	644.931
70	11127.000	644.544	644.800
71	11137.000	644.389	644.649
72	11147.000	644.227	644.479
73	11157.000	644.060	644.291
74	11167.000	643.886	644.083
75	11177.000	643.707	643.857
76	11187.000	643.521	643.614
℄ Brg. S. Abut.	11200.000	643.270	643.270
Back S. Abut.	11202.333	643.224	643.224

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10397.258	639.196	639.196
℄ Brg. N. Abut.	10399.096	639.281	639.281
1	10409.096	639.577	639.609
2	10419.096	639.867	639.925
3	10429.096	640.150	640.228
4	10439.096	640.428	640.516
5	10449.096	640.699	640.785
6	10459.096	640.964	641.038
7	10469.096	641.223	641.278
8	10479.096	641.476	641.512
9	10489.096	641.723	641.739
10	10499.096	641.964	641.967
℄ Brg. Pier 1	10509.096	642.198	642.198
11	10519.096	642.426	642.434
12	10529.096	642.648	642.671
13	10539.096	642.864	642.910
14	10549.096	643.074	643.146
15	10559.096	643.278	643.369
16	10569.096	643.475	643.582
17	10579.096	643.667	643.782
18	10589.096	643.852	643.964
19	10599.096	644.031	644.130
20	10609.096	644.204	644.286
21	10619.096	644.370	644.429
22	10629.096	644.531	644.567
23	10639.096	644.685	644.701
24	10649.096	644.833	644.838
25	10659.096	644.976	644.977
℄ Brg. Pier 2	10669.096	645.112	645.112
26	10679.096	645.241	645.254
27	10689.096	645.365	645.395
28	10699.096	645.482	645.535
29	10709.096	645.594	645.678
30	10719.096	645.699	645.813
31	10729.096	645.798	645.939
32	10739.096	645.891	646.053
33	10749.096	645.983	646.152
34	10759.096	646.058	646.237
35	10769.096	646.132	646.305
36	10779.096	646.201	646.357
37	10789.096	646.263	646.396
38	10799.096	646.319	646.425
39	10809.096	646.369	646.443
40	10819.096	646.412	646.460
41	10829.096	646.450	646.476
42	10839.096	646.481	646.490
43	——	——	——
℄ Brg. Pier 3	10849.000	646.506	646.506
44	10859.000	646.525	646.528
45	10869.000	646.538	646.550
46	10879.000	646.545	646.572
47	10889.000	646.545	646.593
48	10899.000	646.540	646.613
49	10909.000	646.528	646.626
50	10919.000	646.510	646.628
51	10929.000	646.486	646.618
52	10939.000	646.456	646.595
53	10949.000	646.420	646.558
54	10959.000	646.377	646.504
55	10969.000	646.329	646.436
56	10979.000	646.274	646.357
57	10989.000	646.213	646.271
58	10999.000	646.146	646.181
59	11009.000	646.073	646.091
60	11019.000	645.993	645.999
61	11029.000	645.908	645.909
℄ Brg. Pier 4	11037.000	645.787	645.787
62	11047.000	645.688	645.704
63	11057.000	645.582	645.619
64	11067.000	645.470	645.533
65	11077.000	645.352	645.450
66	11087.000	645.227	645.366
67	11097.000	645.097	645.276
68	11107.000	644.960	645.172
69	11117.000	644.818	645.056
70	11127.000	644.669	644.925
71	11137.000	644.514	644.774
72	11147.000	644.352	644.604
73	11157.000	644.185	644.416
74	11167.000	644.011	644.208
75	11177.000	643.832	643.982
76	11187.000	643.646	643.739
℄ Brg. S. Abut.	11200.000	643.395	643.395
Back S. Abut.	11202.333	643.349	643.349

LOCATIONS	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10390.530	639.216	639.216
℄ Brg. N. Abut.	10393.368	639.301	639.301
1	10403.368	639.597	639.629
2	10413.368	639.888	639.946
3	10423.368	640.172	640.250
4	10433.368	640.450	640.538
5	10443.368	640.739	640.807
6	10453.368	640.987	641.061
7	10463.368	641.246	641.301
8	10473.368	641.500	641.536
9	10483.368	641.747	641.763
10	10493.368	641.985	641.991
℄ Brg. Pier 1	10503.368	642.223	642.223
11	10513.368	642.452	642.460
12	10523.368	642.674	642.697
13	10533.368	642.890	642.936
14	10543.368	643.101	643.173
15	10553.368	643.305	643.396
16	10563.368	643.503	643.610
17	10573.368	643.694	643.809
18	10583.368	643.880	643.992
19	10593.368	644.060	644.159
20	10603.368	644.233	644.315
21	10613.368	644.400	644.459
22	10623.368	644.561	644.597
23	10633.368	644.716	644.732
24	10643.368	644.865	644.870
25	10653.368	645.007	645.008
℄ Brg. Pier 2	10663.368	645.144	645.144
26	10673.368	645.274	645.287
27	10683.368	645.398	645.428
28	10693.368	645.516	645.569
29	10703.368	645.628	645.712
30	10713.368	645.733	645.847
31	10723.368	645.833	645.974
32	10733.368	645.926	646.088
33	10743.368	646.013	646.187
34	10753.368	646.094	646.273
35	10763.368	646.169	646.342
36	10773.368	646.238	646.394
37	10783.368	646.300	646.433
38	10793.368	646.357	646.463
39	10803.368	646.407	646.481
40	10813.368	646.451	646.499
41	10823.368	646.489	646.515
42	10833.368	646.521	646.530
43	——	——	——
℄ Brg. Pier 3	10844.000	646.548	646.548
44	10854.000	646.567	646.570
45	10864.000	646.580	646.592
46	10874.000	646.586	646.613
47	10884.000	646.587	646.635
48	10894.000	646.581	646.654
49	10904.000	646.570	646.668
50	10914.000	646.552	646.670
51	10924.000	646.528	646.660
52	10934.000	646.498	646.637
53	10944.000	646.461	646.599
54	10954.000	646.419	646.546
55	10964.000	646.370	646.477
56	10974.000	646.316	646.399
57	10984.000	646.255	646.313
58	10994.000	646.188	646.223
59	11004.000	646.114	646.132
60	11014.000	646.035	646.036
61	11024.000	645.949	645.949
℄ Brg. Pier 4	11037.000	645.829	645.829
62	11047.000	645.729	645.745
63	11057.000	645.624	645.661
64	11067.000	645.512	645.575
65	11077.000	645.393	645.491
66	11087.000	645.269	645.408
67	11097.000	645.139	645.318
68	11107.000	645.002	645.214
69	11117.000	644.859	645.097
70	11127.000	644.710	644.966
71	11137.000	644.555	644.815
72	11147.000	644.394	644.646
73	11157.000	644.227	644.458
74	11167.000	644.053	644.250
75	11177.000	643.873	644.023
76	11187.000	643.688	643.781
℄ Brg. S. Abut.	11200.000	643.437	643.437
Back S. Abut.	11202.333	643.391	643.391

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10387.618	639.255	639.255
℄ Brg. N. Abut.	10390.456	639.339	639.339
1	10400.456	639.637	639.669
2	10410.456	639.929	639.987
3	10420.456	640.215	640.293
4	10430.456	640.494	640.582
5	10440.456	640.768	640.854
6	10450.456	641.035	641.109
7	10460.456	641.297	641.353
8	10470.456	641.552	641.588
9	10480.456	641.801	641.817
10	10490.456	642.043	642.046
℄ Brg. Pier 1	10500.456	642.280	642.280
11	10510.456	642.511	642.519
12	10520.456	642.735	642.758
13	10530.456	642.953	642.999
14	10540.456	643.165	643.237
15	10550.456	643.371	643.468
16	10560.456	643.571	643.678
17	10570.456	643.764	643.879
18	10580.456	643.952	644.064
19	10590.456	644.133	644.232
20	10600.456	644.308	644.390
21	10610.456	644.477	644.536
22	10620.456	644.640	644.676
23	10630.456	644.796	644.812
24	10640.456	644.947	644.952
25	10650.456	645.091	645.092
℄ Brg. Pier 2	10660.456	645.229	645.229
26	10670.456	645.361	645.375
27	10680.456	645.487	645.518
28	10690.456	645.607	645.661
29	10700.456	645.721	645.807
30	10710.456	645.828	645.946
31	10720.456	645.929	646.076
32	10730.456	646.024	646.194
33	10740.456	646.113	646.299
34	10750.456	646.196	646.387
35	10760.456	646.273	646.459
36	10770.456	646.343	646.513
37	10780.456	646.408	646.554
38	10790.456	646.466	646.585
39	10800.456	646.518	646.601
40	10810.456	646.564	646.618
41	10820.456	646.603	646.634
42	10830.456	646.637	646.650
43	——	——	——
℄ Brg. Pier 3	10844.000	646.675	646.675
44	10854.000	646.692	646.695
45	10864.000	646.703	646.717
46	10874.000	646.711	646.738
47	10884.000	646.712	646.760
48	10894.000	646.708	646.779
49	10904.000	646.695	646.793
50	10914.000	646.677	646.795
51	10924.000	646.653	646.785
52	10934.000	646.623	646.762
53	10944.000	646.586	646.724
54	10954.000	646.544	646.671
55	10964.000	646.495	646.602
56	10974.000	646.441	646.524
57	10984.000	646.380	646.435
58	10994.000	646.313	646.338
59	11004.000	646.239	646.237
60	11014.000	646.160	646.166
61	11024.000	646.074	646.075
℄ Brg. Pier 4	11037.000	645.954	645.954
62	11047.000	645.854	645.870
63	11057.000	645.749	645.786
64	11067.000	645.637	645.700
65	11077.000	645.518	645.615
66	11087.000	645.394	645.533
67	11097.000	645.264	645.443
68	11107.000	645.127	645.339
69	11117.000	644.984	645.222
70	11127.000	644.835	645.091
71	11137.000	644.680	644.940
72	11147.000	644.519	644.771
73	11157.000	644.352	644.583
74	11167.000	644.178	644.375
75	11177.000	643.998	644.148
76	11187.000	643.813	643.906
℄ Brg. S. Abut.	11200.000	643.562	643.562
Back S. Abut.	11202.333	643.516	643.516

NOTES

For Plan of grid layout see Sheet 8.
Elevations are at top of concrete slab.

DECK ELEVATIONS
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101)BVB
LIVINGSTON COUNTY
STATION 106 + 39

DESIGNED	
CHECKED	
DRAWN	D. RICHARDSON
CHECKED	W.O. Walden

3291
75S237

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37,101 BVB	LIVINGSTON	67	29
F.A. 24				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 11
22 SHEETS

GIRDER 4

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10384.706	639.164	639.164
℄ Brg. N. Abut.	10387.544	639.251	639.251
1	10397.544	639.551	639.583
2	10407.544	639.844	639.902
3	10417.544	640.132	640.210
4	10427.544	640.414	640.502
5	10437.544	640.689	640.775
6	10447.544	640.958	641.032
7	10457.544	641.221	641.276
8	10467.544	641.478	641.514
9	10477.544	641.729	641.745
10	10487.544	641.973	641.976
℄ Brg. Pier 1	10497.544	642.212	642.212
11	10507.544	642.444	642.452
12	10517.544	642.670	642.693
13	10527.544	642.890	642.936
14	10537.544	643.104	643.176
15	10547.544	643.312	643.403
16	10557.544	643.513	643.620
17	10567.544	643.709	643.824
18	10577.544	643.898	644.010
19	10587.544	644.081	644.180
20	10597.544	644.258	644.340
21	10607.544	644.428	644.487
22	10617.544	644.593	644.629
23	10627.544	644.751	644.857
24	10637.544	644.904	644.909
25	10647.	645.050	645.051
℄ Brg. Pier 2	10657.544	645.190	645.190
26	10667.544	645.324	645.337
27	10677.544	645.451	645.484
28	10687.544	645.573	645.632
29	10697.544	645.688	645.178
30	10707.544	645.797	645.920
31	10717.544	645.900	646.054
32	10727.544	645.997	646.176
33	10737.544	646.088	646.283
34	10747.544	646.173	646.374
35	10757.544	646.251	646.448
36	10767.544	646.323	646.506
37	10777.544	646.390	646.550
38	10787.544	646.449	646.581
39	10797.544	646.503	646.596
40	10807.544	646.551	646.619
41	10817.544	646.592	646.631
42	10827.544	646.628	646.646
43	10837.544	646.657	646.663
℄ Brg. Pier 3	10844.000	646.673	646.673
44	10854.000	646.692	646.695
45	10864.000	646.705	646.717
46	10874.000	646.711	646.738
47	10884.000	646.712	646.760
48	10894.000	646.706	646.779
49	10904.000	646.695	646.793
50	10914.000	646.677	646.795
51	10924.000	646.653	646.785
52	10934.000	646.623	646.762
53	10944.000	646.586	646.724
54	10954.000	646.544	646.671
55	10964.000	646.495	646.602
56	10974.000	646.441	646.524
57	10984.000	646.380	646.438
58	10994.000	646.313	646.348
59	11004.000	646.239	646.257
60	11014.000	646.160	646.166
61	11024.000	646.074	646.075
℄ Brg. Pier 4	11037.000	645.954	645.954
62	11047.000	645.854	645.870
63	11057.000	645.749	645.786
64	11067.000	645.637	645.700
65	11077.000	645.518	645.615
66	11087.000	645.394	645.533
67	11097.000	645.264	645.443
68	11107.000	645.127	645.339
69	11117.000	644.984	645.222
70	11127.000	644.833	645.091
71	11137.000	644.680	644.940
72	11147.000	644.519	644.771
73	11157.000	644.352	644.583
74	11167.000	644.178	644.375
75.	11177.000	643.998	644.148
76	11187.000	643.813	643.906
℄ Brg. S. Abut.	11200.000	643.562	643.562
Back S. Abut.	11202.333	643.516	643.516

GIRDER 5

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10381.795	638.950	638.950
℄ Brg. N. Abut.	10384.632	639.037	639.037
1	10394.632	639.359	639.371
2	10404.632	639.634	639.692
3	10414.632	639.924	640.002
4	10424.632	640.207	640.295
5	10434.632	640.484	640.570
6	10444.632	640.755	640.829
7	10454.632	641.020	641.075
8	10464.632	641.279	641.315
9	10474.632	641.531	641.547
10	10484.632	641.778	641.781
℄ Brg. Pier 1	10494.632	642.018	642.018
11	10504.632	642.252	642.260
12	10514.632	642.480	642.503
13	10524.632	642.702	642.748
14	10534.632	642.917	642.989
15	10544.632	643.127	643.218
16	10554.632	643.330	643.437
17	10564.632	643.527	643.642
18	10574.632	643.718	643.830
19	10584.632	643.903	644.002
20	10594.632	644.082	644.164
21	10604.632	644.254	644.313
22	10614.632	644.421	644.457
23	10624.632	644.581	644.597
24	10634.632	644.735	644.740
25	10644.632	644.883	644.884
℄ Brg. Pier 2	10654.632	645.025	645.025
26	10664.632	645.160	645.175
27	10674.632	645.290	645.325
28	10684.632	645.413	645.477
29	10694.632	645.530	645.623
30	10704.632	645.641	645.767
31	10714.632	645.746	645.908
32	10724.632	645.845	646.034
33	10734.632	645.937	646.144
34	10744.632	646.024	646.239
35	10754.632	646.104	646.316
36	10764.632	646.178	646.377
37	10774.632	646.246	646.424
38	10784.632	646.308	646.456
39	10794.632	646.363	646.476
40	10804.632	646.413	646.491
41	10814.632	646.456	646.506
42	10824.632	646.493	646.520
43	10834.632	646.524	646.534
℄ Brg. Pier 3	10844.000	646.548	646.548
44	10854.000	646.567	646.570
45	10864.000	646.580	646.592
46	10874.000	646.586	646.613
47	10884.000	646.587	646.635
48	10894.000	646.581	646.654
49	10904.000	646.570	646.668
50	10914.000	646.552	646.670
51	10924.000	646.528	646.660
52	10934.000	646.498	646.637
53	10944.000	646.461	646.599
54	10954.000	646.419	646.546
55	10964.000	646.370	646.477
56	10974.000	646.316	646.399
57	10984.000	646.255	646.313
58	10994.000	646.188	646.223
59	11004.000	646.114	646.132
60	11014.000	646.035	646.041
61	11024.000	645.949	645.950
℄ Brg. Pier 4	11037.000	645.829	645.829
62	11047.000	645.729	645.745
63	11057.000	645.624	645.661
64	11067.000	645.512	645.575
65	11077.000	645.393	645.490
66	11087.000	645.269	645.408
67	11097.000	645.139	645.318
68	11107.000	645.002	645.214
69	11117.000	644.859	645.097
70	11127.000	644.710	644.966
71	11137.000	644.555	644.815
72	11147.000	644.394	644.646
73	11157.000	644.227	644.458
74	11167.000	644.053	644.250
75	11177.000	643.873	644.023
76	11187.000	643.688	643.781
℄ Brg. S. Abut.	11200.000	643.437	643.437
Back S. Abut.	11202.333	643.391	643.391

WEST LONGITUDINAL BONDED CONSTRUCTION JOINT

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10381.067	638.886	638.886
℄ Brg. N. Abut.	10383.904	638.973	638.973
1	10393.904	639.275	639.307
2	10403.904	639.571	639.629
3	10413.904	639.861	639.939
4	10423.904	640.145	640.233
5	10433.904	640.423	640.509
6	10443.904	640.694	640.748
7	10453.904	640.959	641.014
8	10463.904	641.219	641.255
9	10473.904	641.472	641.488
10	10483.904	641.718	641.721
℄ Brg. Pier 1	10493.904	641.959	641.959
11	10503.904	642.194	642.202
12	10513.904	642.422	642.445
13	10523.904	642.644	642.690
14	10533.904	642.860	642.932
15	10543.904	643.070	643.161
16	10553.904	643.274	643.381
17	10563.904	643.471	643.586
18	10573.904	643.663	643.775
19	10583.904	643.848	643.947
20	10593.904	644.027	644.109
21	10603.904	644.200	644.259
22	10613.904	644.367	644.403
23	10623.904	644.528	644.544
24	10633.904	644.682	644.687
25	10643.904	644.831	644.832
℄ Brg. Pier 2	10653.904	644.973	644.973
26	10663.904	645.109	645.124
27	10673.904	645.239	645.274
28	10683.904	645.363	645.427
29	10693.904	645.480	645.573
30	10703.904	645.592	645.718
31	10713.904	645.697	645.859
32	10723.904	645.796	645.985
33	10733.904	645.889	646.096
34	10743.904	645.976	646.191
35	10753.904	646.057	646.269
36	10763.904	646.131	646.330
37	10773.904	646.199	646.377
38	10783.904	646.262	646.410
39	10793.904	646.318	646.431
40	10803.904	646.368	646 446
41	10813.904	646.411	646 461
42	10823.904	646.449	646.476
43	10833.904	646.480	646.490
℄ Brg. Pier 3	10844.000	646.506	646.506
44	10854.000	646.525	646.528
45	10864.000	646.538	646.550
46	10874.000	646.545	646.572
47	10884.000	646.545	646.593
48	10894.000	646.540	646.613
49	10904.000	646.528	646.626
50	10914.000	646.510	646.628
51	10924.000	646.486	646.618
52	10934.000	646.456	646.595
53	10944.000	646.420	646.558
54	10954.000	646.377	646.504
55	10964.000	646.329	646.436
56	10974.000	646.274	646.357
57	10984.000	646.213	646.271
58	10994.000	646.146	646.181
59	11004.000	646.073	646.091
60	11014.000	645.993	645.999
61	11024.000	645.908	645.909
℄ Brg. Pier 4	11037.000	645.787	645.787
62	11047.000	645.688	645.704
63	11057.000	645.582	645.619
64	11067.000	645.470	645.533
65	11077.000	645.352	645.449
66	11087.000	645.227	645.366
67	11097.000	645.097	645.276
68	11107.000	644.960	645.172
69	11117.000	644.818	645.056
70	11127.000	644.669	644.925
71	11137.000	644.514	644.774
72	11147.000	644.352	644.604
73	11157.000	644.185	644.416
74.	11167.000	644.011	644.208
75	11177.000	643.832	643.982
76	11187.000	643.646	643.739
℄ Brg. S. Abut.	11200.000	643.395	643.395
Back S. Abut.	11202.333	643.349	643.349

GIRDER 6

LOCATION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
Back N. Abut.	10378.883	638.694	638.694
℄ BRG. N. Abut.	10381.721	638.781	638.781
1	10391.721	639.085	639.117
2	10401.721	639.382	639.440
3	10411.721	639.674	639.752
4	10421.721	639.959	640.047
5	10431.721	640.238	640.324
6	10441.721	640.510	640.584
7	10451.721	640.777	640.832
8	10461.721	641.038	641.074
9	10471.721	641.292	641.308
10	10481.721	641.540	641.543
℄ Brg. Pier 1	10491.721	641.782	641.782
11	10501.721	642.018	642.024
12	10511.721	642.248	642.271
13	10521.721	642.471	642.517
14	10531.721	642.689	642.761
15	10541.721	642.900	642.991
16	10551.721	643.105	643.212
17	10561.721	643.304	643.419
18	10571.721	643.497	643.609
19	10581.721	643.683	643.782
20	10591.721	643.864	643.946
21	10601.721	644.038	644.097
22	10611.721	644.206	644.242
23	10621.721	644.368	644.384
24	10631.721	644.524	644.529
25	10631.721	644.674	644.675
℄ Brg. Pier 2	10651.721	644.817	644.817
26	10661.721	644.955	644.970
27	10671.721	645.086	645.121
28	10681.721	645.211	645.273
29	10691.721	645.330	645.423
30	10701.721	645.443	645.569
31	10711.721	645.550	645.712
32	10721.721	645.650	645.849
33	10731.721	645.744	645.951
34	10741.721	645.832	646.047
35	10751.721	645.915	646.127
36	10761.721	645.990	646.189
37	10771.721	646.060	646.238
38	10781.721	646.124	646.272
39	10791.721	646.181	646.294
40	10801.721	646.232	646.310
41	10811.721	646.277	646.327
42	10821.721	646.316	646.348
43	10831.721	646.349	646.359
℄ Brg. Pier 3	10844.000	646.381	646.381
44	10854.000	646.400	646.408
45	10864.000	646.4[illegible]	646.428
46	10874.000	646.420	646.447
47	10884.000	646.420	646.465
48	10894.000	646.415	646.483
49	10904.000	646.403	646.501
50	10914.000	646.385	646.503
51	10924.000	646.361	646.493
52	10934.000	646.331	646.472
53	10944.000	646.295	646.433
54	10954.000	646.252	646.379
55	10964.000	646.204	646.311
56	10974.000	646.149	646.232
57	10984.000	646.088	646.146
58	10994.000	646.021	646.054
59	11004.000	645.948	645.956
60	11014.000	645.868	645.854
61	11024.000	645.783	645.764
℄ Brg. Pier 4	11037.000	645.662	645.662
62	11047.000	645.543	645.559
63	11057.000	645.457	645. 494
64	11067.000	645.345	645. 408
65	11077.000	645.227	645. 324
66	11087.000	645.102	645.241
67	11097.000	644.972	645.151
68	11107.000	644.835	645.047
69	11117.000	644.693	644.921
70	11127.000	644.544	644.800
71	11137.000	644.389	644.649
72	11147.000	644.227	644.479
73	11157.000	644.060	644.291
74	11167.000	643.886	644.088
75	11177.000	643.707	643.857
76	11186.000	643.521	643.614
℄ Brg. S. Abut.	11200.000	643.270	643.270
Back S. Abut.	11202.333	643.224	643.224

NOTES

For Plan of grid layout see Sheet 8.
Elevations are at top of concrete slab.

DECK ELEVATIONS
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101)BVB
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	
CHECKED	
DRAWN	O. RICHARDSON
CHECKED	W. O. Walden

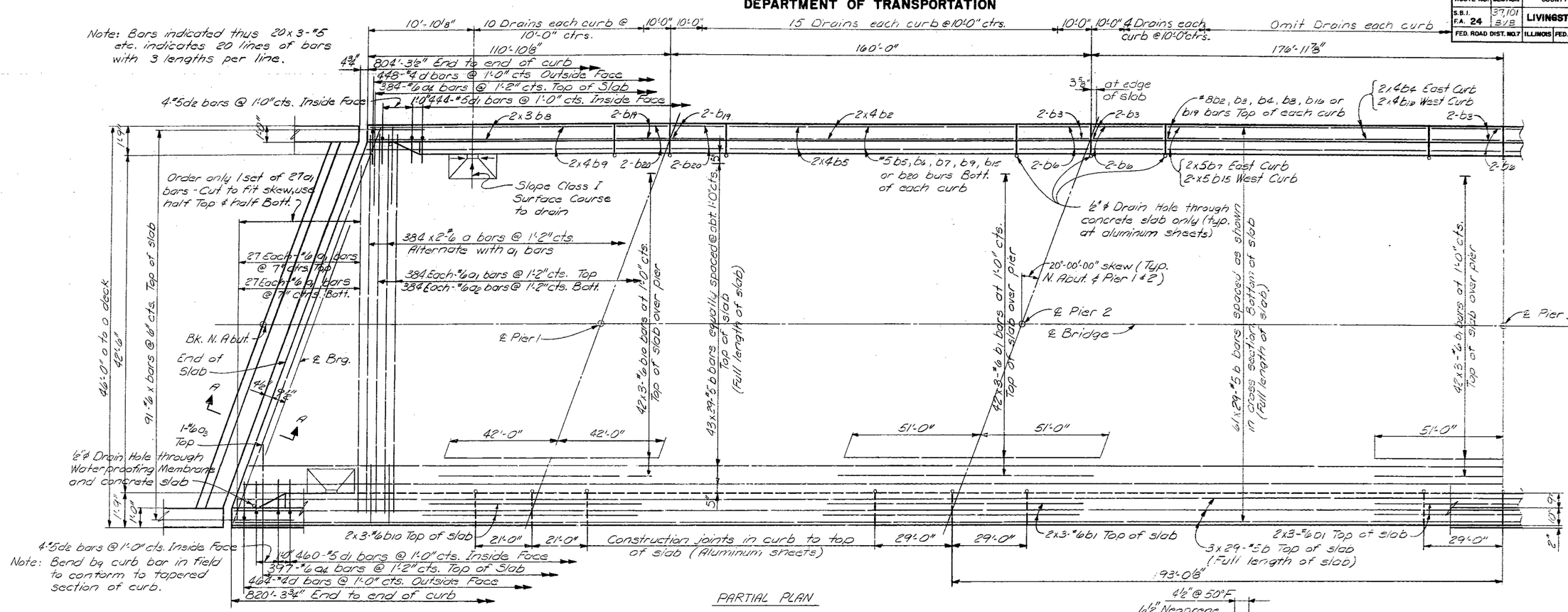
3291
753236

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

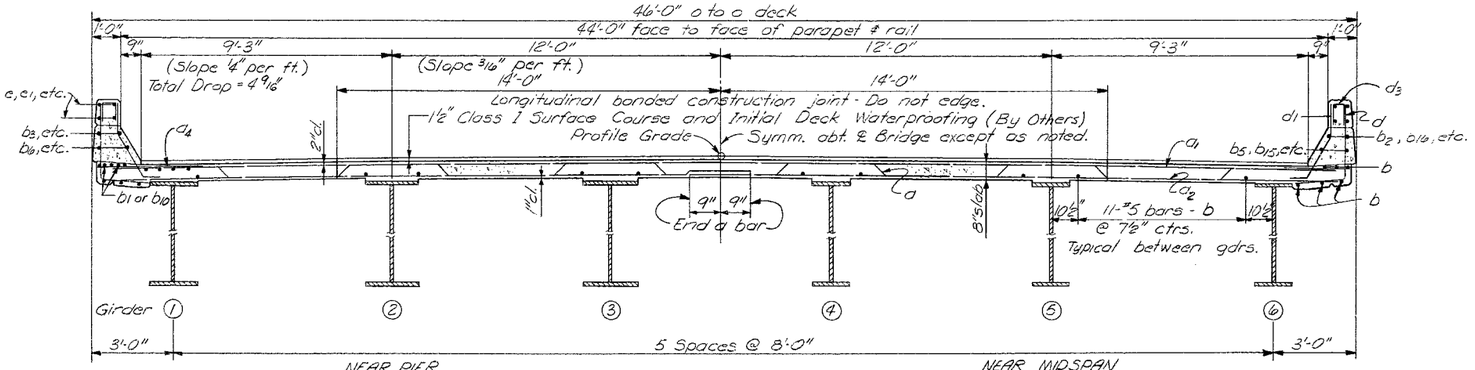
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37,101	LIVINGSTON	67	30
F.A. 24	B,VB			
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 12
22 SHEETS

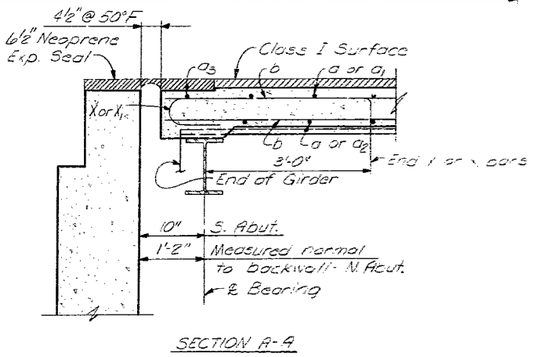
Note: Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



PARTIAL PLAN



CROSS SECTION
Looking Up Station



SECTION A-A

NOTES
Work this sheet with Sheet 13.

DESIGNED	C. Wieczorek
CHECKED	S.R. Franklin
DRAWN	J.O. Smith Jr.
CHECKED	R.V. Butterfield

3291
755297

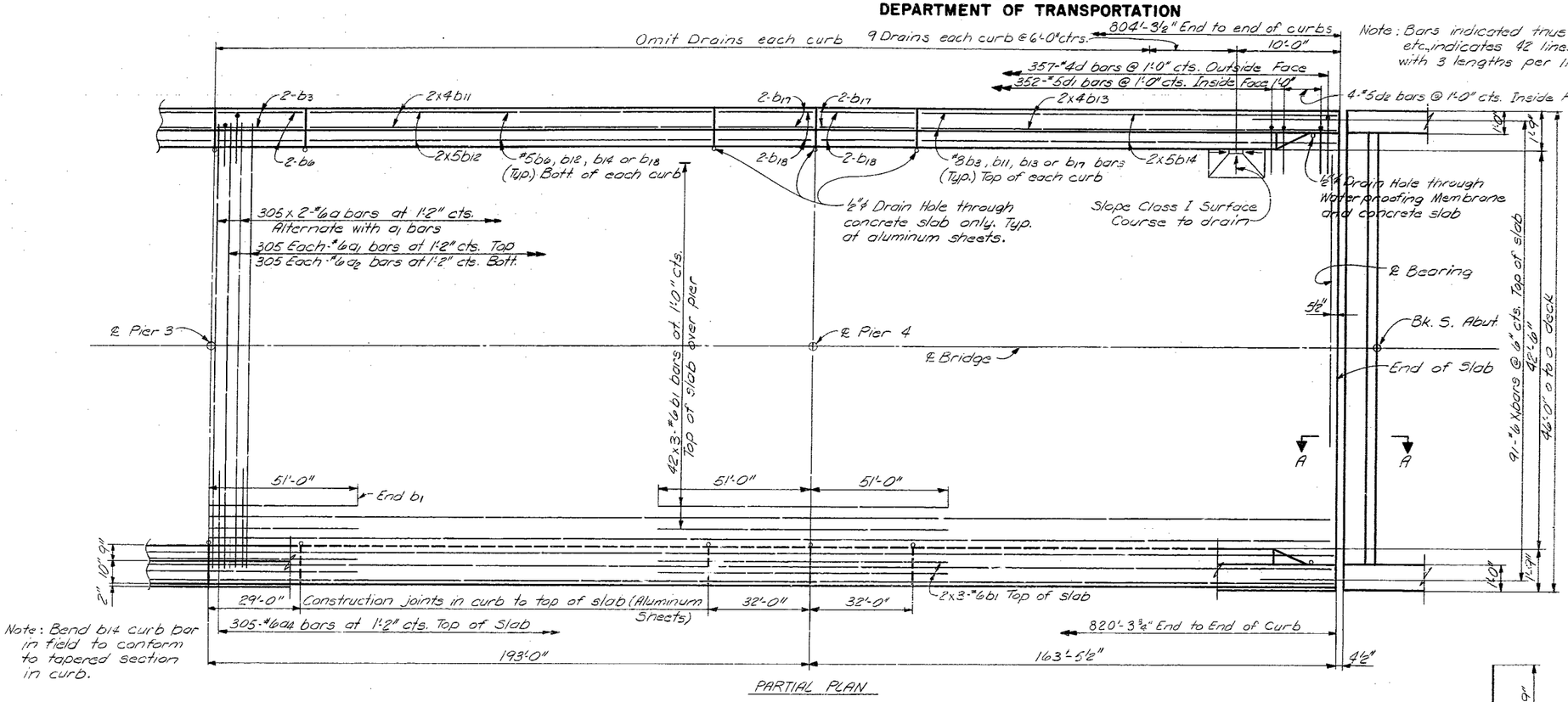
SLAB
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37,101	LIVINGSTON	67	31
F.A. 24	3VB			
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 13
22 SHEETS



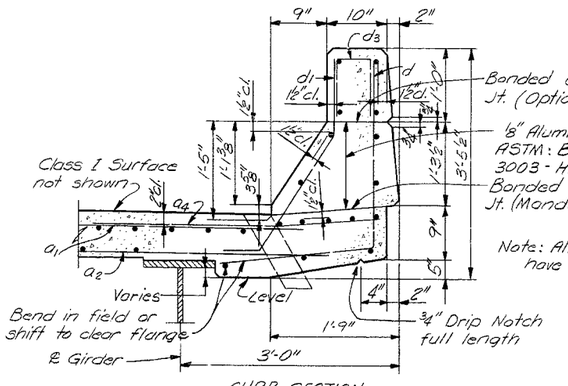
PARTIAL PLAN

Note: Bars indicated thus 42 x 3-#6 etc., indicates 42 lines of bars with 3 lengths per line.

BILL OF MATERIAL

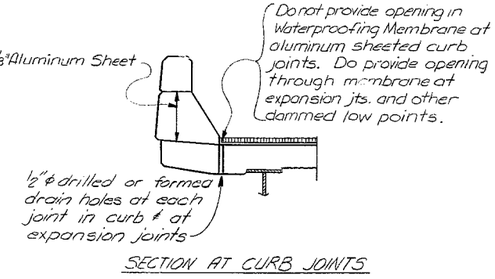
Bar	No.	Size	Length	Shape	Bar Lap
a	1378	#6	22'-2"		
a1	716	#6	43'-6"		
a2	689	#6	44'-0"		
a3	1	#6	47'-6"		
a4	1391	#6	4'-0"		
b	3190	#5	29'-6"		1'-3"
b1	412	#6	35'-0"		1'-6"
b2	16	#8	29'-8"		3'-0"
b3	16	#8	28'-8"		
b4	8	#8	31'-11"		3'-0"
b5	16	#5	28'-5"		1'-3"
b6	16	#5	28'-8"		
b7	10	#5	24'-9"		1'-3"
b8	12	#8	31'-10"		3'-0"
b9	16	#5	23'-4"		1'-3"
b10	138	#6	29'-0"		1'-6"
b11	16	#8	35'-2"		3'-0"
b12	20	#5	27'-4"		1'-3"
b13	16	#8	35'-1"		3'-0"
b14	20	#5	27'-8"		1'-3"
b15	10	#5	23'-0"		1'-3"
b16	8	#8	35'-11"		3'-0"
b17	8	#8	31'-8"		
b18	8	#5	31'-8"		
b19	8	#8	20'-8"		
b20	8	#5	20'-8"		
d	1626	#4	4'-9"		
d1	1608	#5	3'-7"		
d2	16	#5	3'-4"		
X	91	#6	4'-2"		
X1	91	#6	4'-5"		
Reinforcement Bars			Lbs.	299,880	
Structural Steel			Lbs.	1,127,125	
Class X Concrete (Slab and Curb)			Cu. Yds.	1058.7	

Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel. Estimated Weight = 45,655 lbs.

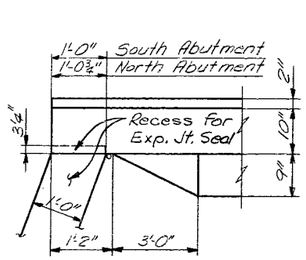


CURB SECTION

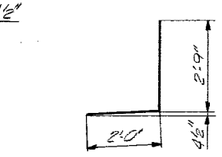
Cost of Aluminum Drains and Sheets shall be incidental to Class X Concrete.



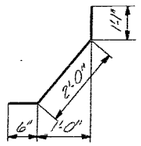
SECTION AT CURB JOINTS



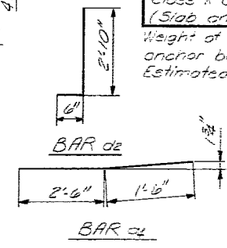
PLAN
(North Abutment shown South Abutment similar)



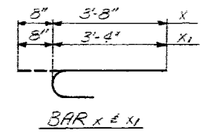
BAR d



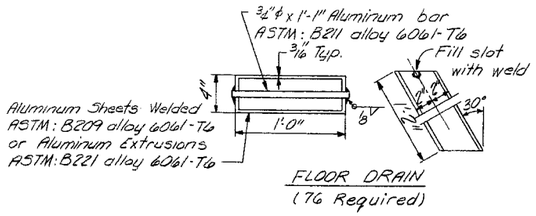
BAR d1



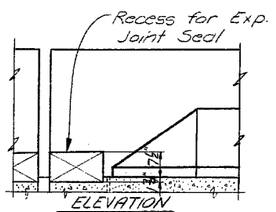
BAR d2



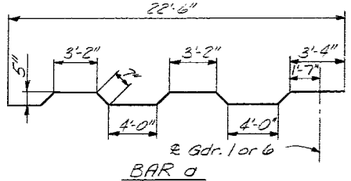
BAR x & x1



FLOOR DRAIN
(76 Required)



END CURB DETAIL



BAR a

NOTES

Work this sheet with Sheet 12.

SLAB
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) 8VB
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	C. Wieczorek
CHECKED	S.R. Franklin
DRAWN	J.O. Smith Jr.
CHECKED	R.V. Butterfield

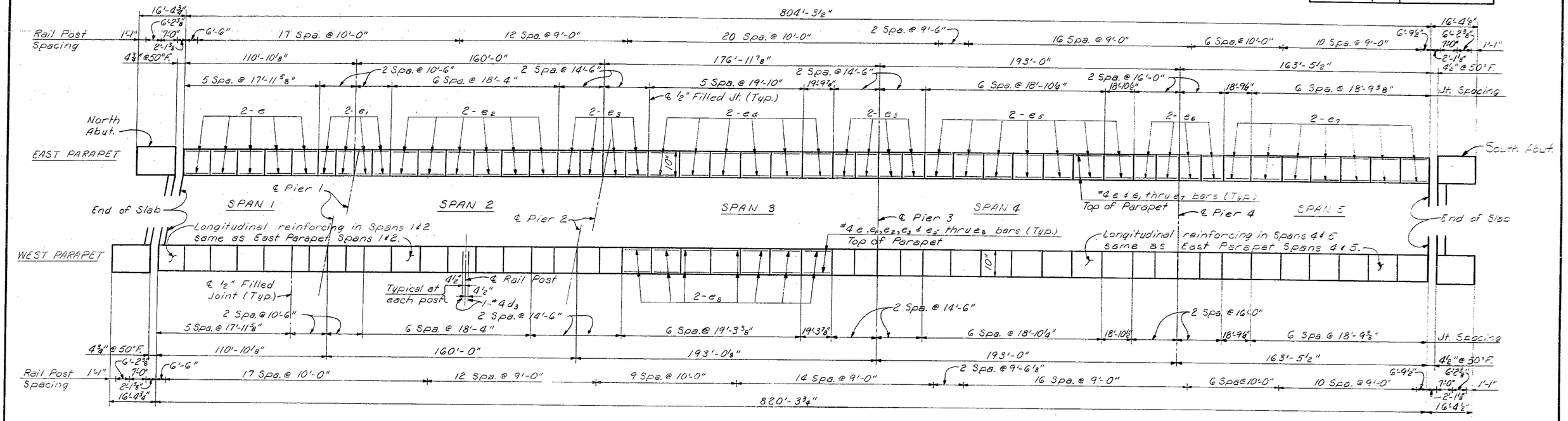
3291
755298

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

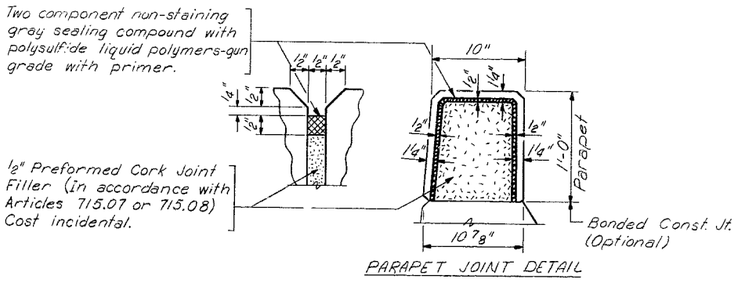
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	32
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 14
22 SHEETS

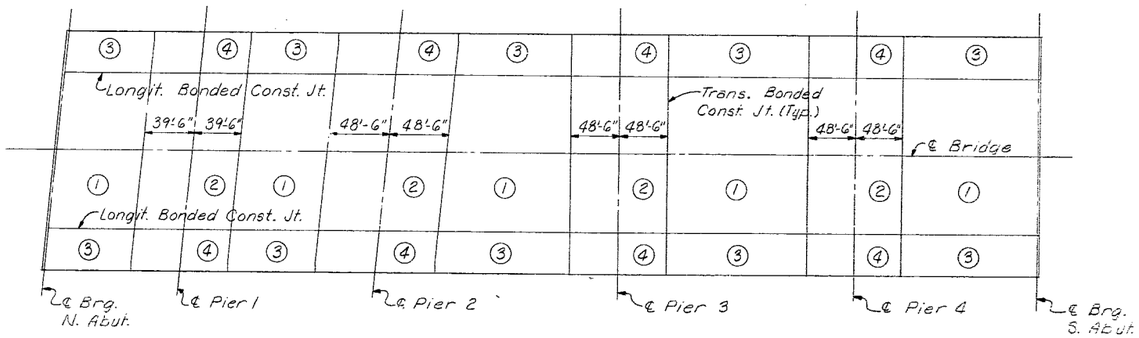


PLAN OF PARAPET

Note : All joints in parapet shall be vertical. All longitudinal dimensions are measured along inside face of parapet.

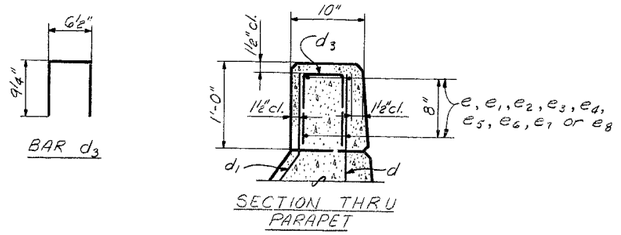


PARAPET JOINT DETAIL



SLAB POURING SEQUENCE

Note : Pouring shall begin preferably at either or both abutments and proceed successively toward the other end. Pours shall be made in order indicated by numbers in circles. If longitudinal joint is omitted, follow pouring sequence for center section of slab.



SECTION THRU PARAPET

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d3	342	#4	2'-1"	⌐¬
e	45	#4	17'-7"	—
e1	32	#4	15'-2"	—
e2	48	#4	18'-0"	—
e3	64	#4	14'-2"	—
e4	24	#4	19'-6"	—
e5	56	#4	18'-6"	—
e6	32	#4	15'-8"	—
e7	56	#4	18'-5"	—
e8	28	#4	18'-11"	—
Aluminum Railing			Lin. Ft.	1,686
Class X Concrete			Cu. Yds.	52.2
Reinforcement Bars			Lbs.	4,750

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	D. Richardson
CHECKED	G. Dee

3291
755238

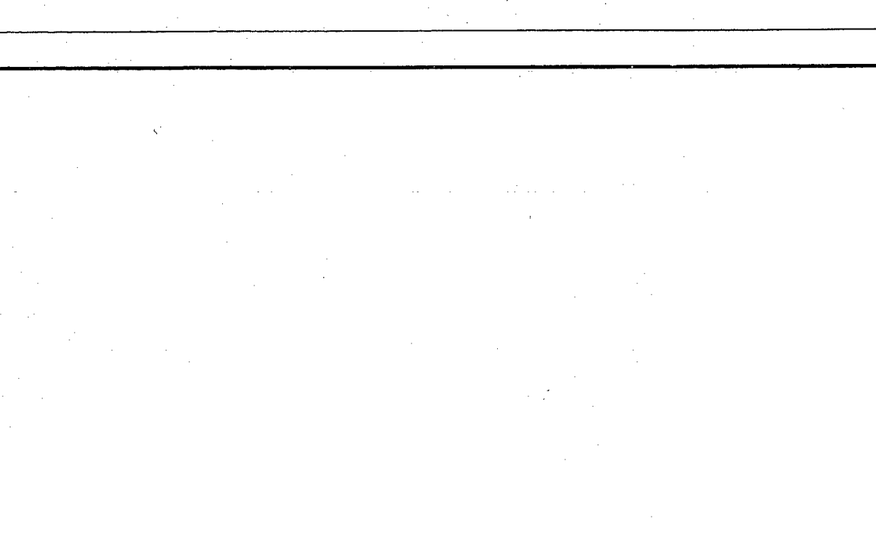
Note : Do not scale this drawing. Follow dimensions.

PARAPET AND SLAB POURING SEQUENCE
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

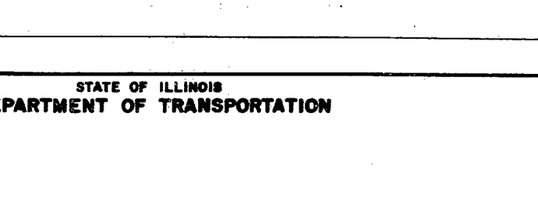
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 B,V,B	LIVINGSTON	67	33
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 15
22 SHEETS



RAIL POST DETAILS

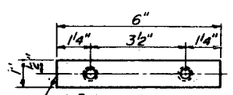


RAIL SPLICE

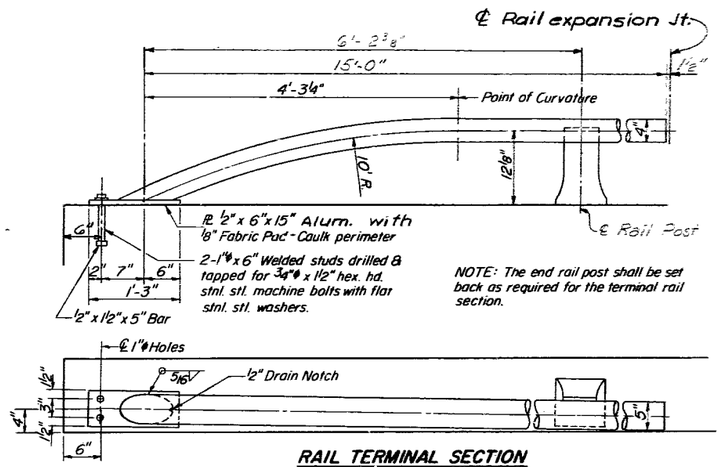
SEC. THRU ELLIPTICAL RAIL SECTION

Splice must be a sliding fit in Rail Section

SEC. THRU SPLICE



CLAMP BAR



RAIL TERMINAL SECTION

Stainless steel machine bolts or cap screws shall be in accordance with Article 710.37(a) of the Std. Spec's. except Grade B8 or B8M may be furnished.

Quantity :
Neoprene Expansion Jt. (6/2) = 93 L.F.

NOTES

For Rail Post Spacing and Estimated Quantity of Rail, see Sheet 14.
For Neoprene Expansion Joint, see Sheet 22.

NOTES:

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 - 1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

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

ALUMINUM RAILING
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) B,V,B
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	C. Wieczorek
CHECKED	S. Franklin
DRAWN	D. Richardson
CHECKED	G. Dee

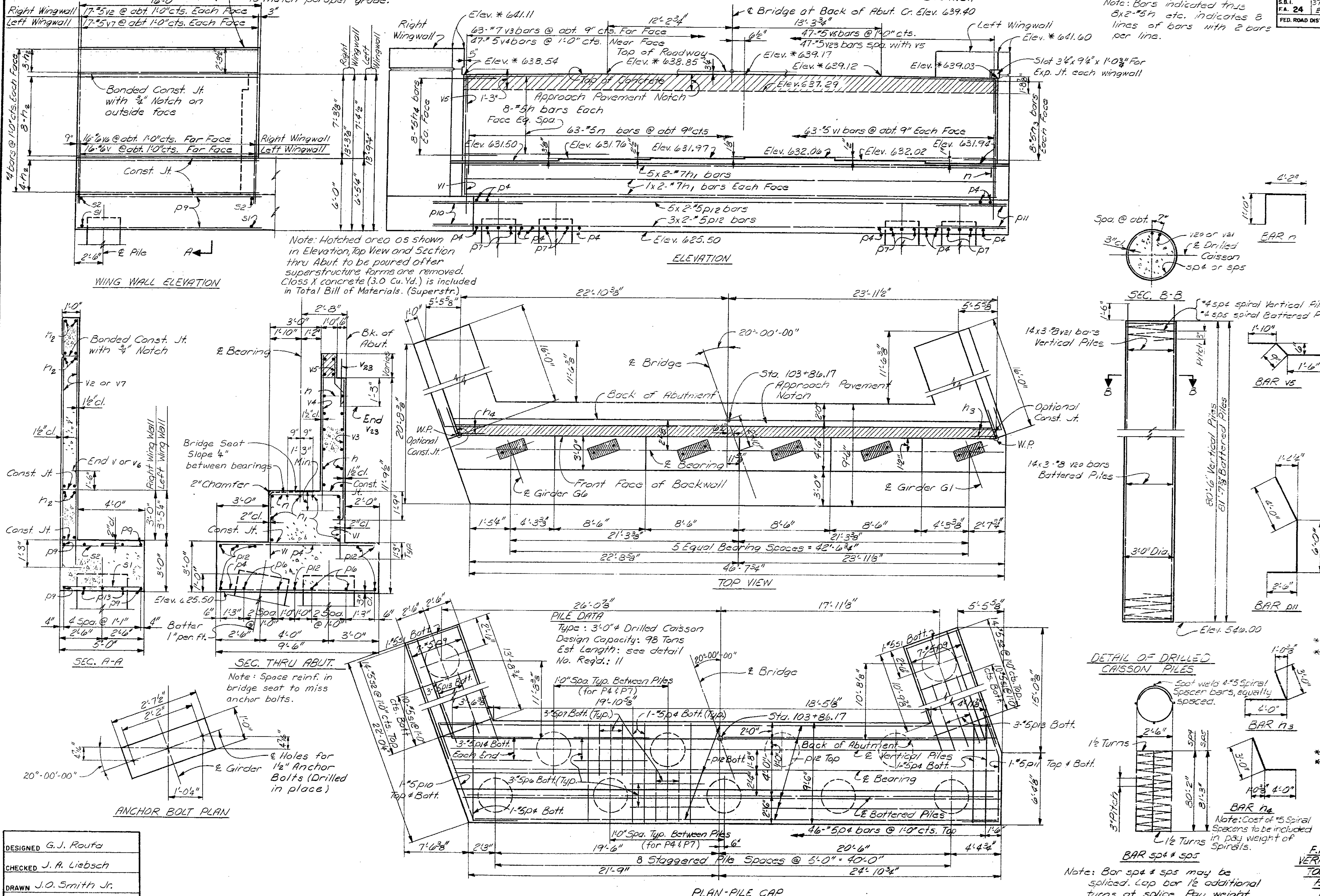
3291
155239

Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37, 101 BVB	LIVINGSTON	67	34
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 16
22 SHEETS



* Elevation at Front Face of Backwall

Note: Bars indicated thus 6x2-#5n etc. indicates 6 lines of bars with 2 bars per line.

Note: Hatched area as shown in Elevation, Top View and Section thru Abut. to be poured after superstructure forms are removed. Class X concrete (3.0 Cu. Yd.) is included in Total Bill of Materials. (Superstr.)

Note: Space reinf. in bridge seat to miss anchor bolts.

NORTH ABUT.
BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar Lap
n	16	#5	46'-6"	—	
n1	18	#7	25'-3"	—	1'-9"
n2	60	#4	15'-8"	—	
n3	16	#5	7'-0"	⌐	
n4	16	#5	7'-0"	⌐	
n	63	#5	7'-10"	⊓	
p4	65	#5	9'-2"	—	
p6	21	#5	6'-10"	—	
p7	27	#5	4'-2"	—	
p9	14	#5	14'-9"	—	
p10	2	#5	14'-3"	⊏	
p11	2	#5	12'-6"	⌐	
p12	16	#5	24'-11"	—	1'-3"
p13	6	#5	10'-9"	—	
p14	6	#5	7'-6"	—	
s1	22	#5	4'-8"	—	
s2	28	#5	5'-6"	⌐	
** sp4	6	#4	2503'-7"	spiral	
** sp5	5	#4	2534'-6"	spiral	
v	16	#6	6'-5"	—	
v1	126	#5	4'-6"	—	
v2	34	#5	14'-0"	⌐	
v3	63	#7	8'-6"	⌐	
v4	47	#5	8'-9"	—	
v5	47	#5	4'-1"	⌐	
v6	16	#6	6'-0"	—	
v7	34	#5	14'-6"	—	
** v20	210	#8	29'-11"	—	
** v21	252	#8	29'-7"	—	
v23	47	#5	2'-4	—	
Class X Concrete			Cu. Yds.	118.6	
Reinforcement Bars			Lbs.	8790	
Caisson Concrete			Cu. Yds.	233.3	

** Bars included in cost of Caisson Concrete.

NORTH ABUTMENT
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37, 101) BVB
LIVINGSTON COUNTY
STATION 106+39

Note: Bar sp4 & sp5 may be spliced. Lap bar 1½ additional turns at splice. Pay weight to be based on length shown on plans.

Note: Do not scale this drawing. Follow dimensions.

DESIGNED	G. J. Roufa
CHECKED	J. A. Liebsch
DRAWN	J. O. Smith Jr.
CHECKED	R. V. Butterfield

3291
755295

Rev. 9-12-78

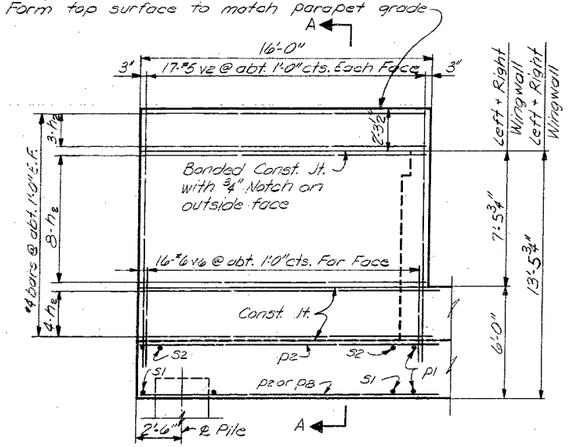
End post shall be poured after bridge parapet is in place. Form top surface to match parapet grade

Note: Bars indicated thus 8x2-#5h5 etc. indicates 8 lines of bars with 2 bars per line.

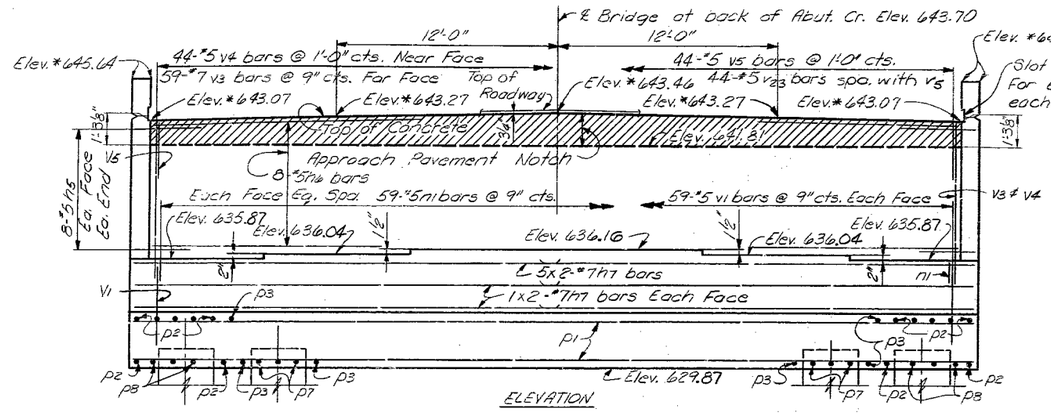
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION * Elevation at Front Face of Backwall

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	35
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

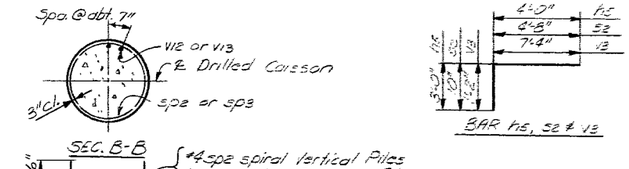
SHEET NO. 17
22 SHEETS



WING WALL ELEVATION

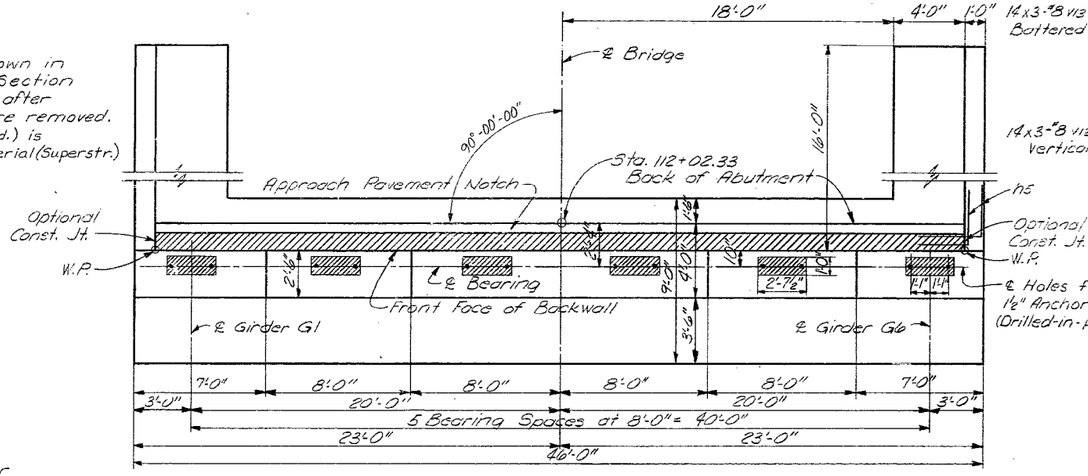


ELEVATION

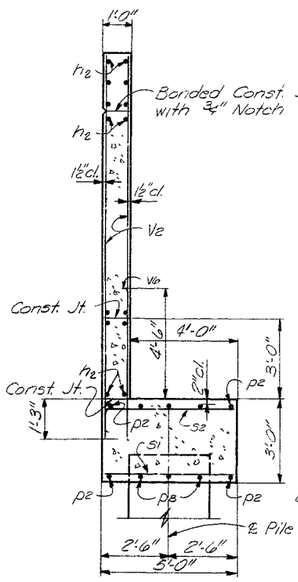


BAR h5, s2 & v13

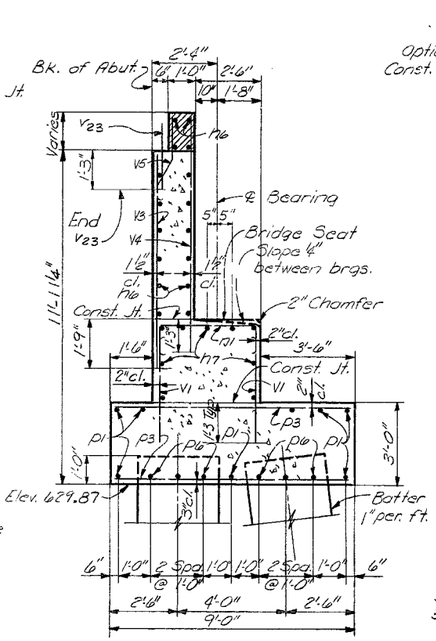
Note: Hatched area as shown in Elevation, Top View and Section thru Abut. to be poured after superstructure forms are removed. Class X Concrete (2.3 Cu. Yd.) is included in Total Bill of Material (Superstr.)



TOP VIEW



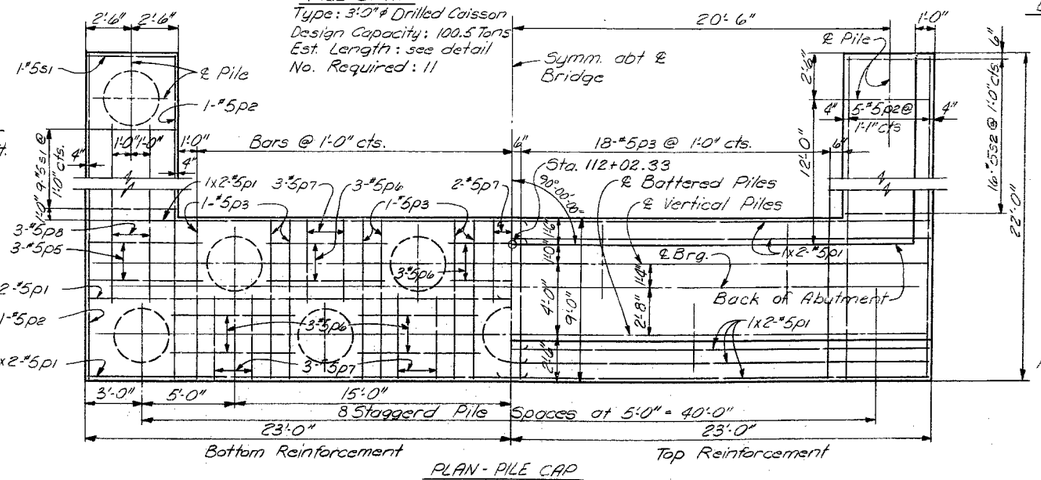
SEC. A-A



SEC. THRU ABUT.

Note: Space reinf. in bridge seat to miss anchor bolts.

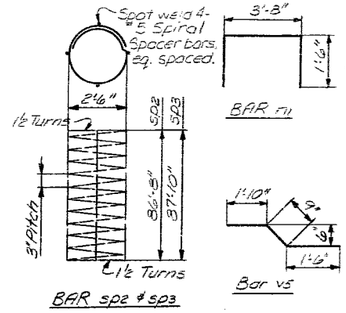
PILE DATA
Type: 3'-0"ø Drilled Caisson
Design Capacity: 100.5 Tons
Est. Length: see detail
No. Required: 11



Bottom Reinforcement — Top Reinforcement

PLAN - PILE CAP

DETAIL OF DRILLED CAISSON PILES



BAR sp2 & sp3

Note: Bar sp2 and sp3 may be spliced. Lap bar 1½ additional turns at splice. Pay weight to be based on length shown on plans.
Cost of #5 Spiral Spacers to be included in pay weight of spirals.

SOUTH ABUT.
BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar Lap
h2	60	#4	15'-8"		
h5	32	#5	7'-0"		
h6	16	#5	43'-8"		
h7	18	#7	23'-9"		1'-9"
m1	59	#5	6'-8"		
p1	16	#5	23'-7"		1'-3"
p2	14	#5	21'-8"		
p3	50	#5	8'-8"		
p5	6	#5	6'-2"		
p6	21	#5	6'-10"		
p7	21	#5	4'-8"		
p8	6	#5	13'-10"		
s1	20	#5	4'-8"		
s2	32	#5	5'-6"		
** sp2	6	#4	2704-6"		
** sp3	5	#4	2743-1"		
v1	118	#5	4'-6"		
v2	68	#5	14'-0"		
v3	59	#7	8'-6"		
v4	44	#5	8'-9"		
v5	44	#5	4'-1"		
v6	32	#6	6'-0"		
** v12	252	#8	31'-6"		
** v13	210	#8	32'-3"		
v23	44	#5	2'-4"		
Class X Concrete			Cu. Yds.	1025	
Reinforcement Bars			Lbs.	82350	
Caisson Concrete			Cu. Yds.	252.1	

** Bars included in cost of Caisson Concrete.

DESIGNED	G. J. Routa
CHECKED	J. A. Liebsch
DRAWN	J. O. Smith Jr.
CHECKED	R. V. Butterfield

3291
755283

Note: Do not scale this drawing. Follow dimensions.

SOUTH ABUTMENT
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

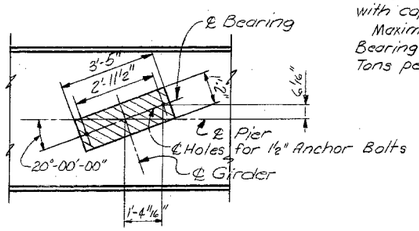
Rev. 9-12-78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

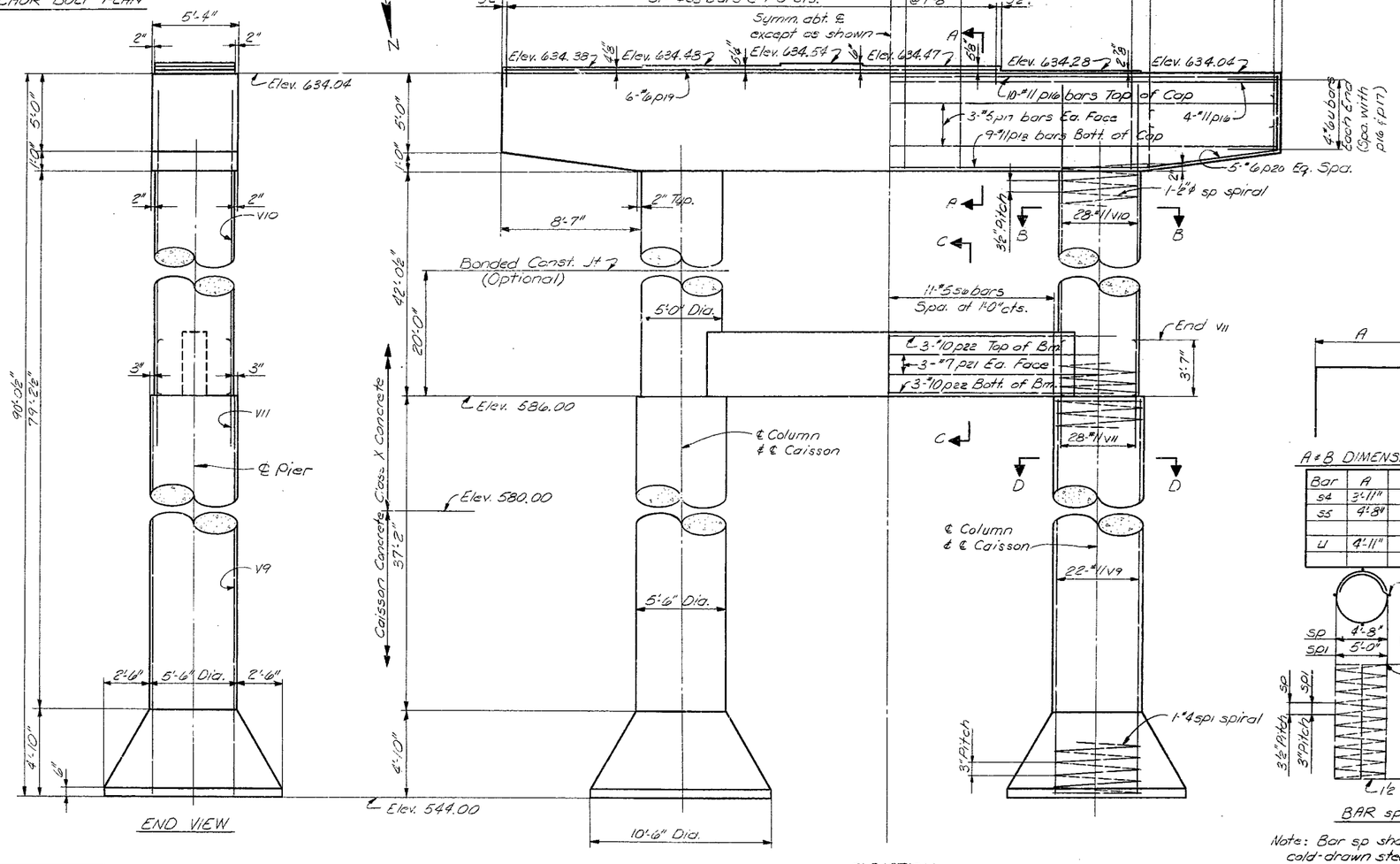
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37,101	LIVINGSTON	67	36
F.A. 24	BVB			
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

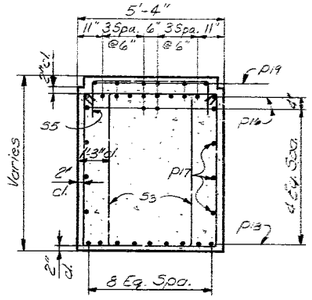
SHEET NO. 13
22 SHEETS

Note: Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Pour steps monolithically with cap.
Maximum Design Bearing Pressure = 9.4 Tons per sq. ft.

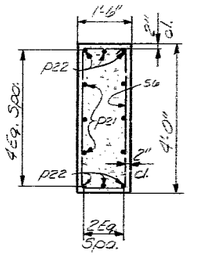


ANCHOR BOLT PLAN

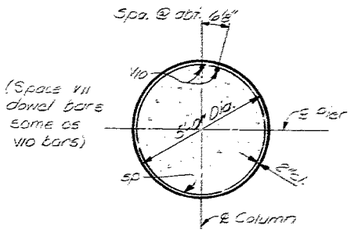




SECTION A-A

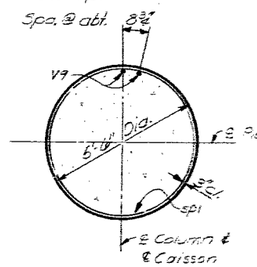


SECTION C-C



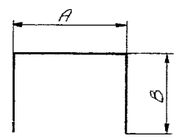
SECTION B-B

Note: Spacing of V10 bars is measured along inside face of bar sp.



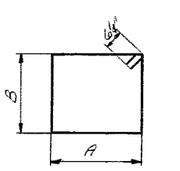
SECTION D-D

Note: Spacing of V9 bars is measured along inside face of bar sp1.



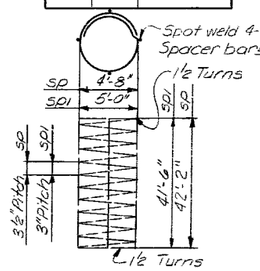
A & B DIMENSIONS

Bar	A	B
s4	3'-11"	3'-6"
s5	4'-8¾"	1'-6"
U	4'-11"	1'-6"



A & B DIMENSIONS

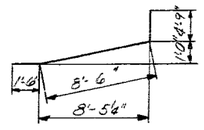
Bar	A	B
s2	3'-11"	5'-8"
s6	1'-2"	3'-8"



BAR sp & sp1

Note: Cost of Spiral Spacers to be included in pay weight of spirals.

Note: Bar sp shall be cold-drawn steel wire A.A.S.H.T.O. M32.
Bar sp & sp1 may be spliced. Lap bar 1½ additional turns at splice. Pay weight to be based on length shown on plans.



BAR p20

PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p16	14	#11	47'-4"	—
p17	6	#5	47'-4"	—
p18	9	#11	30'-10"	—
p19	6	#6	30'-0"	—
p20	10	#6	14'-9"	∠
p21	6	#7	25'-6"	—
p22	6	#10	27'-0"	—
s2	56	#5	20'-4"	□
s4	56	#5	10'-11"	⌊
s5	31	#4	7'-8"	⌊
s6	21	#5	10'-10"	□
sp	2	½" ϕ	2144'-4"	∿∿∿
* sp1	2	#4	2632'-10"	∿∿∿
u	8	#6	7'-11"	⌊
* V9	44	#11	41'-6"	—
V10	56	#11	47'-0"	—
V11	56	#11	7'-4"	—
Class X Concrete			Cu. Yds.	133.8
Caisson Concrete			Cu. Yds.	14.7
Reinforcement Bars			Lbs.	28,140

* Bar included in cost of Caisson Concrete.

PIER 1
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	S.W. Yordy
CHECKED	G.J. Routa.
DRAWN	J.O. Smith Jr.
CHECKED	R.V. Butterfield

3291
7-65-42

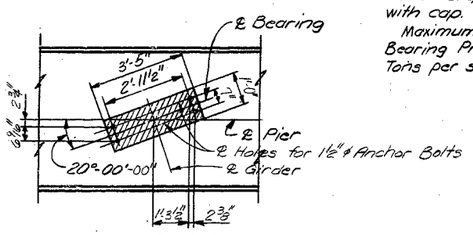
Note: Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

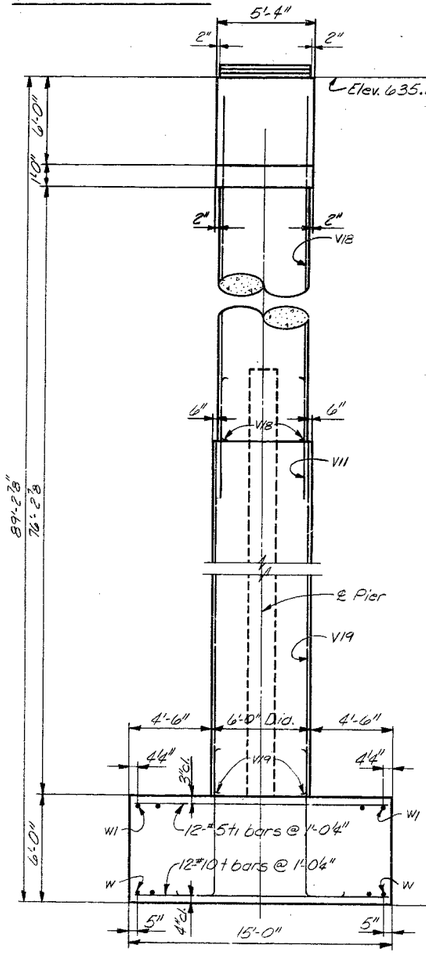
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37101	LIVINGSTON	67	37
F.A. 24	B,VE			
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 19
22 SHEETS

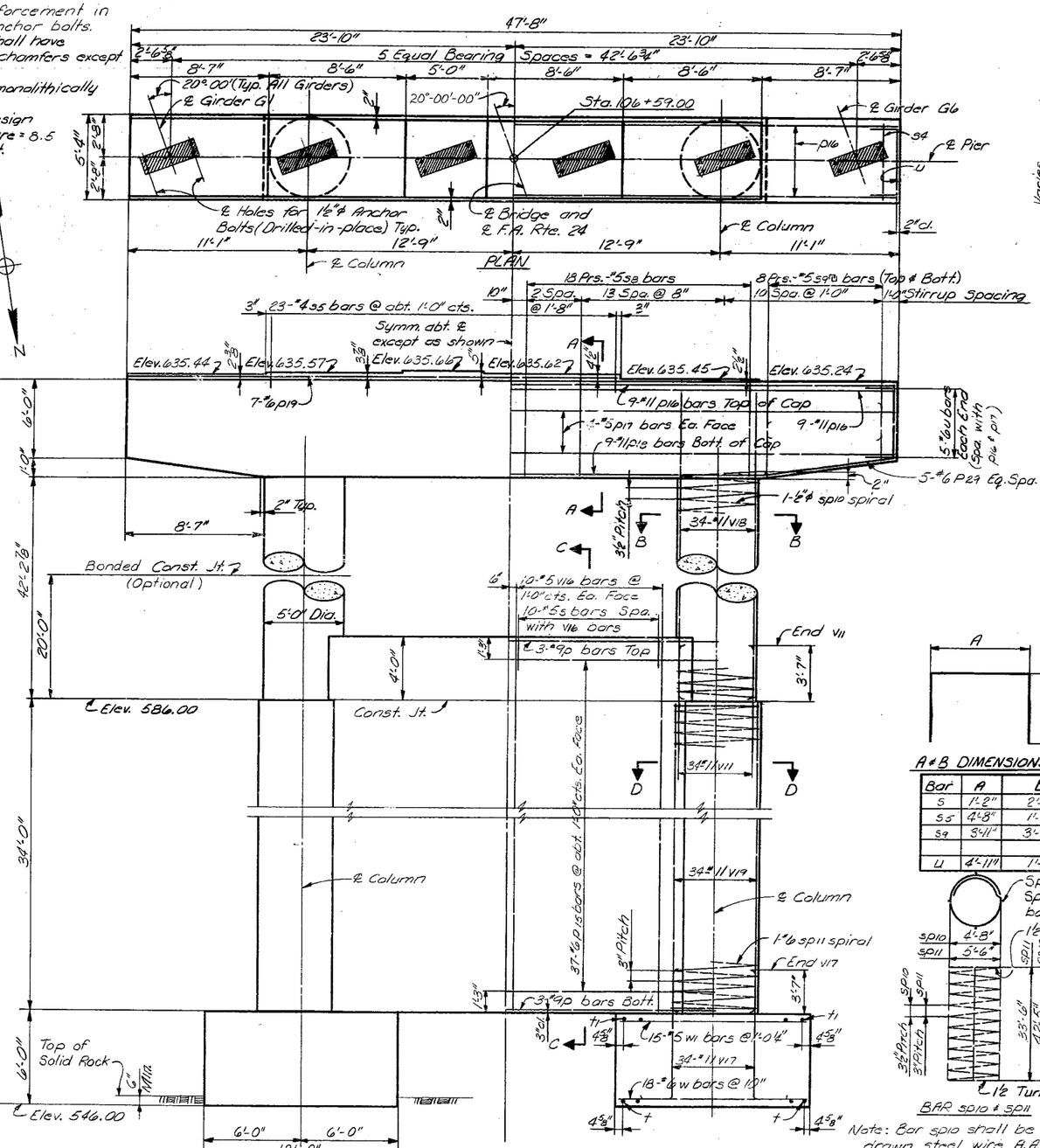
Note: Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Pour steps monolithically with cap.
Maximum Design Bearing Pressure = 8.5 Tons per sq. ft.



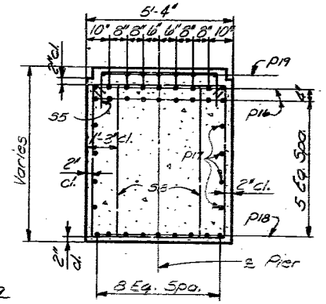
ANCHOR BOLT PLAN



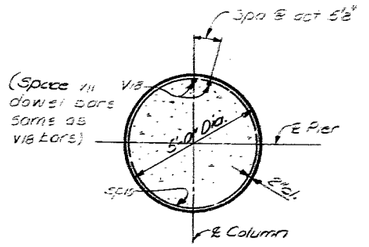
END VIEW



ELEVATION

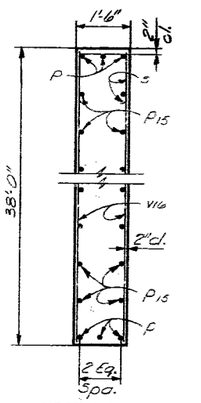


SECTION A-A

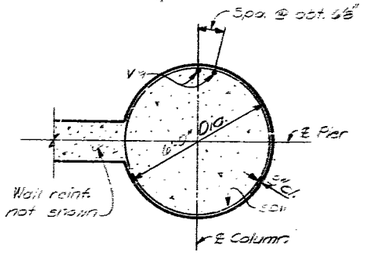


SECTION B-B

Note: Spacing of V18 bars is measured along inside face of bar spl0.

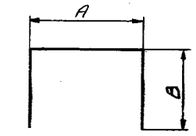


SECTION C-C



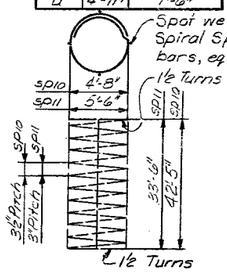
SECTION D-D

Note: Spacing of V17 bars is measured along inside face of bar spl1.



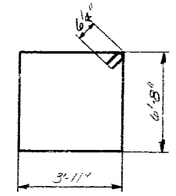
A & B DIMENSIONS

Bar	A	B
S	1'-2"	2'-0"
S5	4'-8"	1'-6"
S9	3'-11"	3'-11"
U	4'-11"	1'-6"

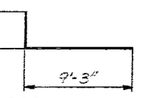


BAR spl0 & spl1

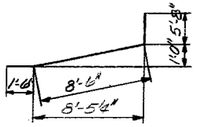
Note: Bar spl0 shall be cold drawn steel wire A.A.S.H.T.O. M32.
Bar spl0 and spl1 may be spliced. Lap bar 1½ additional turns at splice. Pay weight to be based on length shown on plans.
Cost of spiral spaces to be included in pay weight of spirals.



BAR S2



BAR V17



BAR P29

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
P	6	#9	25'-6"	
P15	74	#6	25'-6"	
P16	18	#11	47'-4"	
P17	8	#5	47'-4"	
P18	9	#11	30'-0"	
P19	7	#6	30'-0"	
P29	10	#6	15'-8"	
S	20	#5	5'-0"	
S5	23	#4	7'-8"	
S9	72	#5	22'-4"	
S9	64	#5	11'-9"	
SP10	2	½"ø	3156'-0"	
SP11	2	#6	2360'-6"	
T	24	#10	14'-4"	
T1	24	#5	14'-4"	
W	36	#6	11'-6"	
W1	30	#5	11'-6"	
U	10	#6	7'-11"	
V11	68	#11	74'-4"	
V16	40	#5	37'-8"	
V17	68	#11	11'-3"	
V18	68	#11	98'-3"	
V19	68	#11	33'-8"	
Class X Concrete			Cu. Yds.	320.6
Reinforcement Bars			Lbs.	43,740
Cofferdams			Each	1
Rock Excavation for Structure			Cu. Yd.	7.0

PIER 2
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) B,VE
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	S. Yordy
CHECKED	G. Roufa,
DRAWN	J.O. Smith Jr.
CHECKED	G. J. Dee

3291
755300

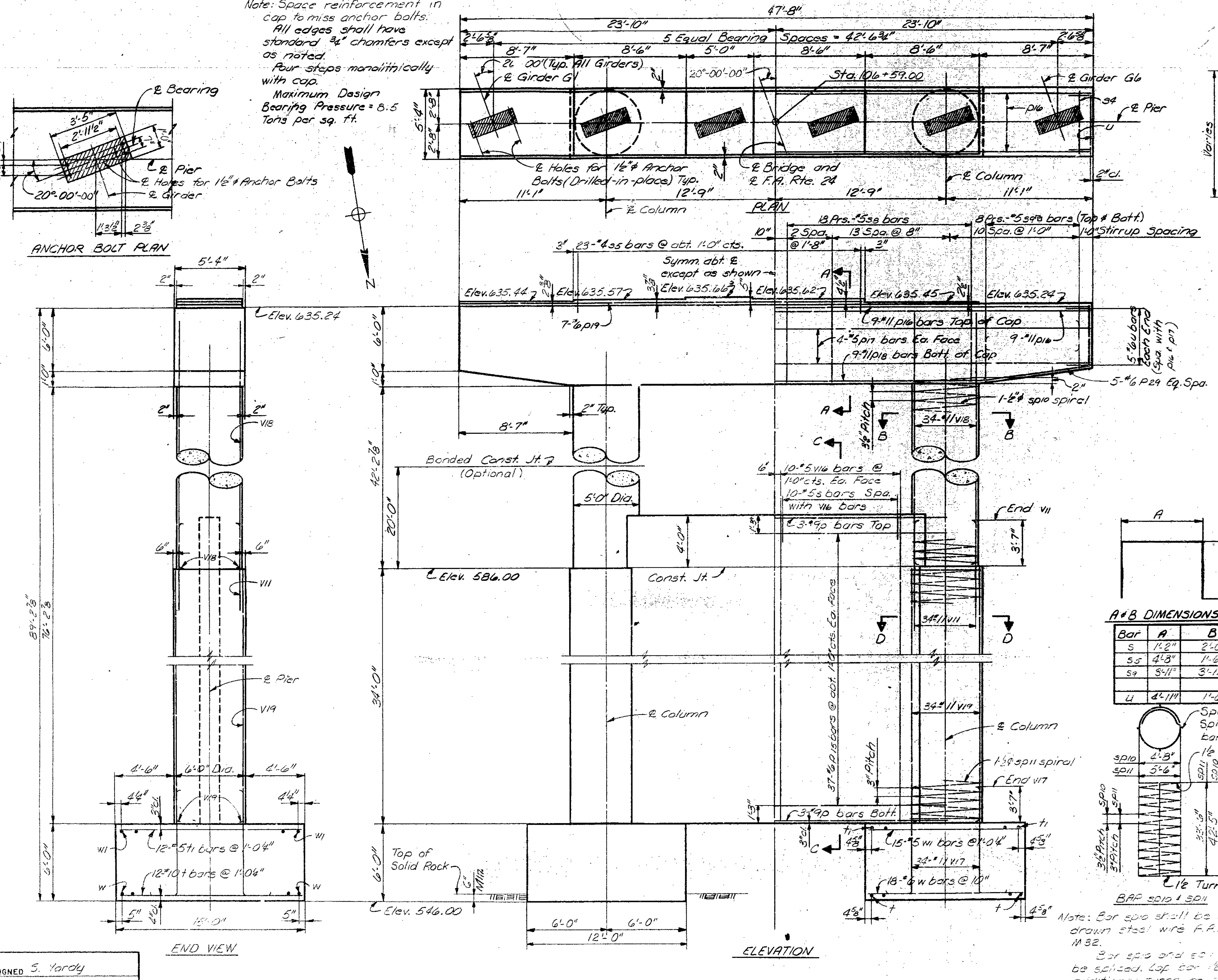
Note: Do not scale this drawing. Follow dimensions.

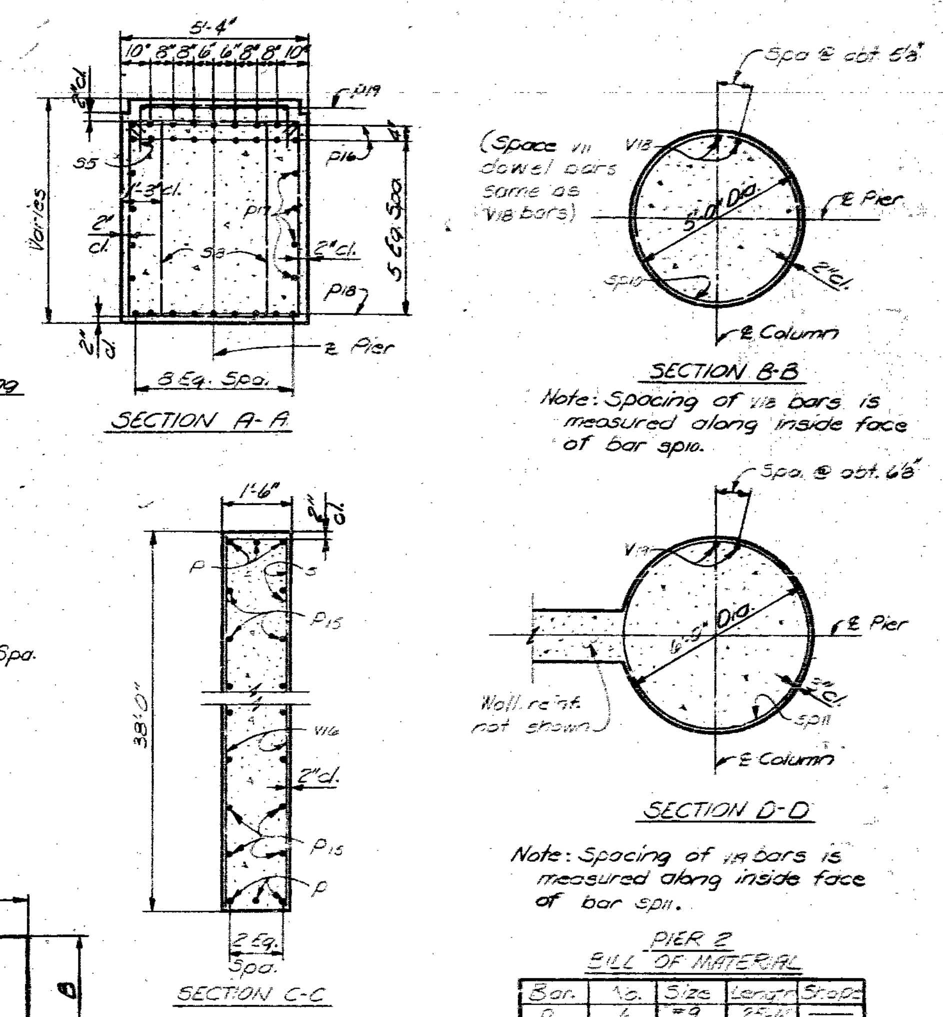
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVE	LIVINGSTON	67	37A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 19
22 SHEETS

Note: Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Four steps monolithically with cap.
Maximum Design Bearing Pressure = 8.5 Tons per sq. ft.

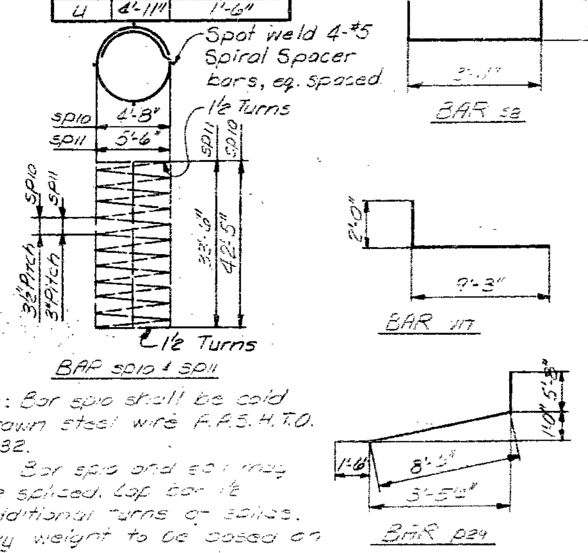




Note: Spacing of v19 bars is measured along inside face of bar sp11.

A & B DIMENSIONS

Bar	A	B
s	1'-2"	2'-0"
s5	4'-8"	1'-6"
s9	5'-11"	3'-11"
u	4'-11"	1'-6"



Note: Bar sp10 shall be cold drawn steel wire A.A.S.H.T.O. M32.
Bar sp10 and sp11 may be spliced. Lap bar 1½ additional turns or splice.
Pay weight to be based on length shown on plans.
Cost of spiral spaces to be included in pay weight of spirals.

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p	6	#9	25'-6"	——
p15	74	#6	25'-6"	——
p16	18	#11	47'-4"	——
p17	8	#5	47'-4"	——
p18	9	#11	30'-0"	——
p19	7	#6	30'-0"	——
p29	10	#6	15'-5"	[illegible]
s	20	#5	5'-2"	[illegible]
s5	23	#4	7'-8"	[illegible]
s8	72	#5	22'-4"	[illegible]
s9	64	#5	11'-9"	[illegible]
sp10	2	¼"⌀	2156'-0"	[illegible]
sp11	2	[illegible]	2340'-6"	[illegible]
t	24	#10	14'-6"	——
t1	24	#5	14'-6"	——
w	36	#6	11'-6"	——
w1	30	#5	11'-6"	——
u	10	#6	7'-11"	[illegible]
v11	68	#11	7'-4"	——
v16	40	#5	37'-5"	——
v17	68	#11	11'-3"	[illegible]
v18	68	#11	48'-3"	——
v19	68	#11	33'-8"	——
Class X Concrete			Cu. Yds.	320.6
Reinforcement Bars			Lbs.	53,740
Cofferdams			Each	1
Rock Excavation for Structure			Cu. Yd.	7.0

PIER 2
F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVE
LIVINGSTON COUNTY
STATION 106+39

DESIGNED	S. Yordy
CHECKED	G. Roufa
DRAWN	J.O. Smith Jr.
CHECKED	G. J. Doe

AS REVISED

Note: Do not scale this drawing. Follow dimensions.

3291 / 75300

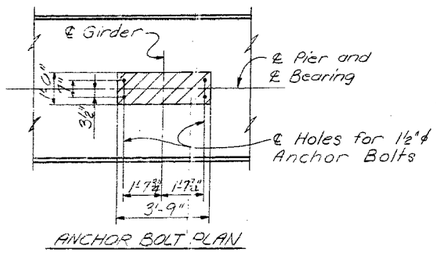
As Revised 1-16-74 L.W.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

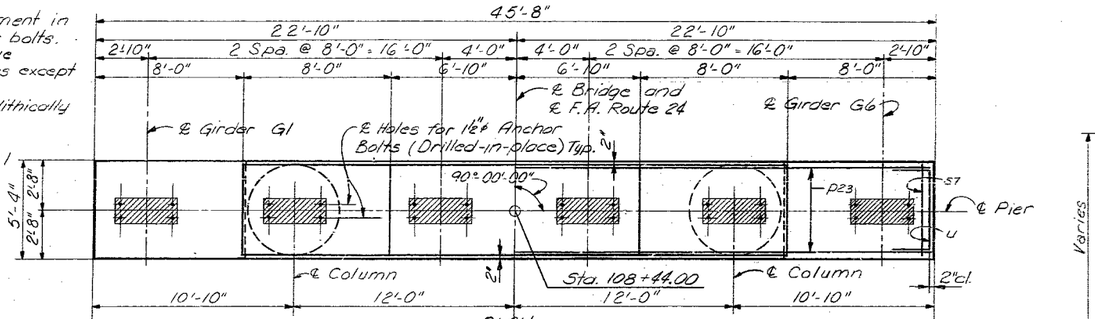
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 24	37,101 BVB	LIVINGSTON	67	38
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 20
22 SHEETS

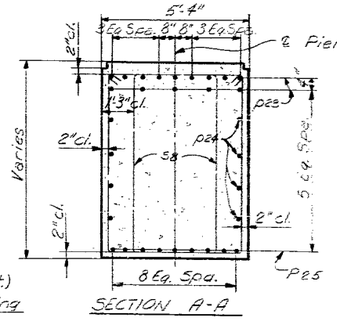
Note: Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Pour steps monolithically with cap.
Maximum Design Bearing Pressure = 9.1 Tons per sq. ft.



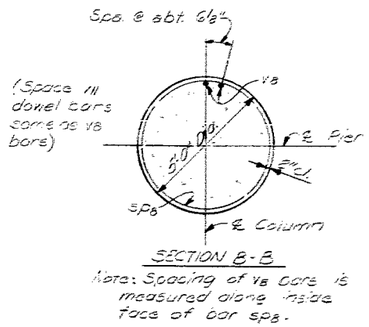
ANCHOR BOLT PLAN



PLAN

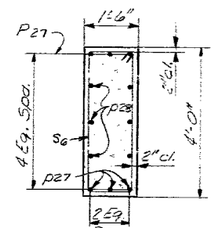


SECTION A-A

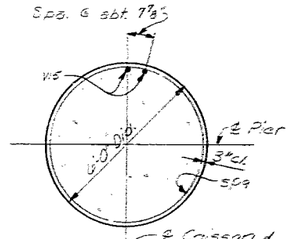


SECTION B-B

Note: Spacing of V8 bars is measured along inside face of bar sp8.

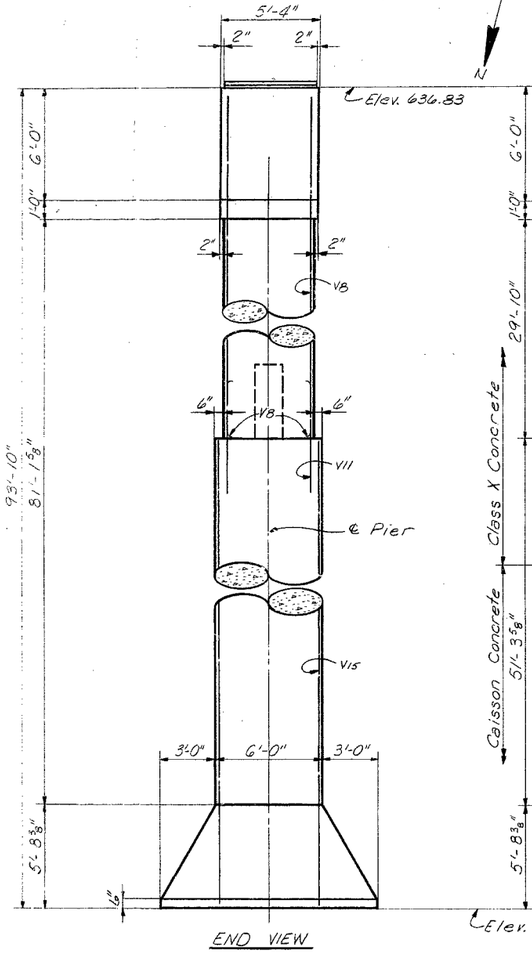


SECTION C-C

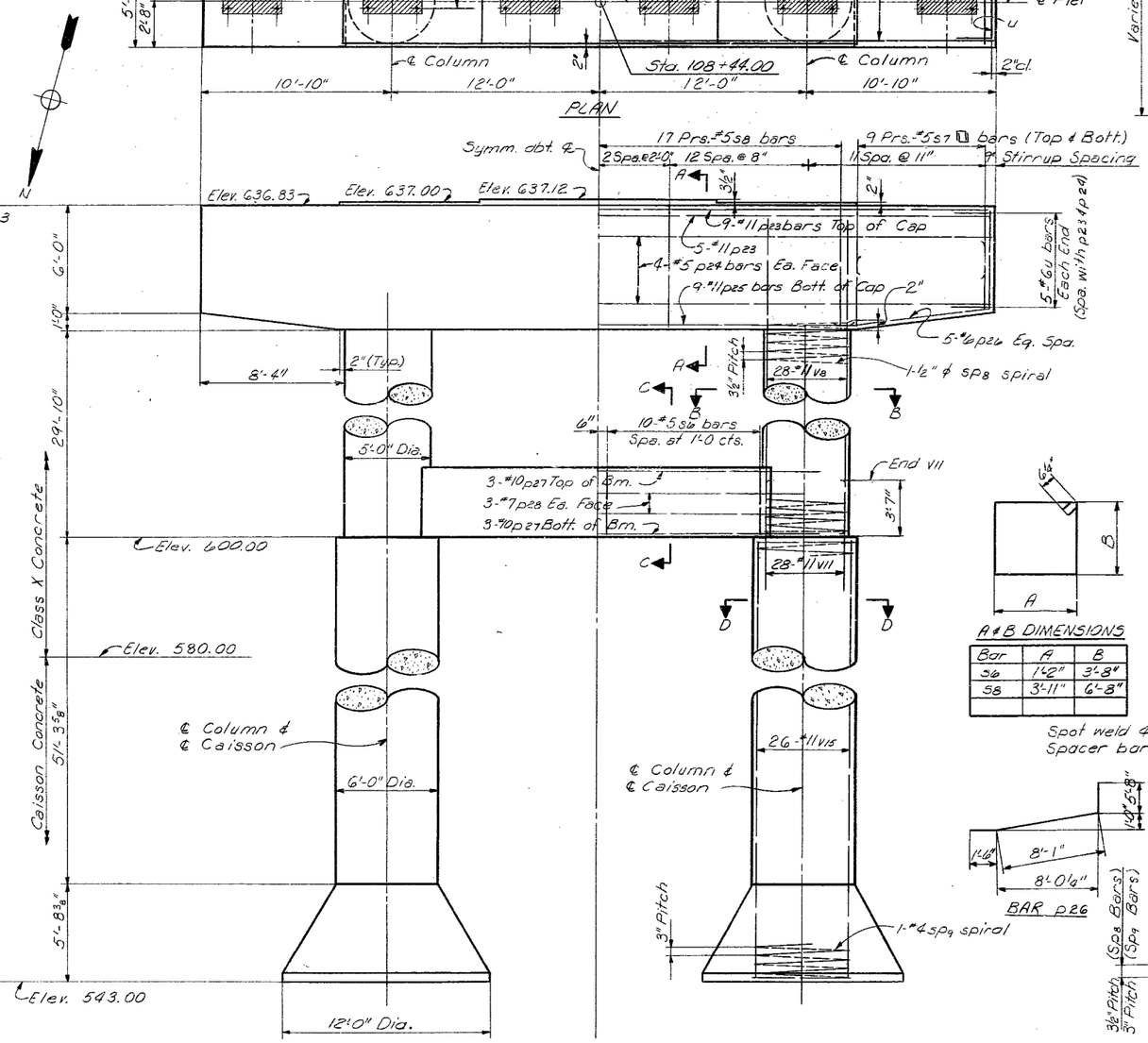


SECTION D-D

Note: Spacing of V15 bars is measured along inside face of bar sp9.



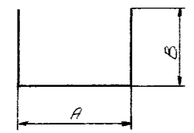
END VIEW



ELEVATION

A & B DIMENSIONS

Bar	A	B
s6	1'-2"	3'-8"
s8	3'-11"	6'-8"



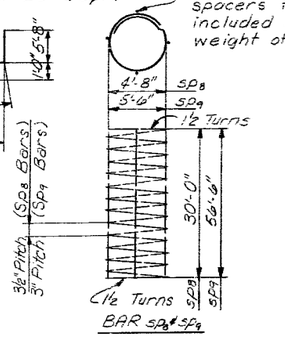
A & B DIMENSIONS

Bar	A	B
s7	3'-11"	4'-0"
u	4'-11"	1'-6"

Spot weld 4-#5 Spiral Spacer bars, eq. spaced

Note: Cost of spiral spacers to be included in pay weight of spirals.

BAR p26



BAR sp8 & sp9

Note: Bar sp8 shall be cold drawn steel wire A.A.S.H.T.O. M32.
Bar sp8 and sp9 may be spliced. Lap bar 1½ additional turns at splice. Pay weight to be based on length shown on plans.

PIER 3
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	p23	19	#11	45'-4"	—
	p24	8	#5	45'-4"	—
	p25	9	#11	29'-4"	—
	p26	10	#6	15'-3"	⌋
	p27	6	#10	25'-6"	—
	p28	6	#7	25'-6"	—
	s6	20	#5	10'-10"	⊓
	s7	72	#5	11'-11"	⌊⌋
	s8	66	#5	22'-4"	⊓
	sp8	2	½"ϕ	1538'-3"	∿∿∿
*	sp9	2	#4	3927'-3"	∿∿∿
	u	10	#6	7'-11"	⌊⌋
	V8	56	#11	36'-0"	—
	V11	56	#11	7'-4"	—
*	V15	52	#11	56'-6"	—
	Class X Concrete		Cu. Yds.	152.3	
	Caisson Concrete		Cu. Yds.	95.1	
	Reinforcement Bars		Lbs.	24,060	

* Bar included in cost of Caisson Concrete.

PIER 3
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 108+39

DESIGNED	S. Yordy
CHECKED	G. Roufa
DRAWN	D. Richardson
CHECKED	G. Dee

3291
(5-59)

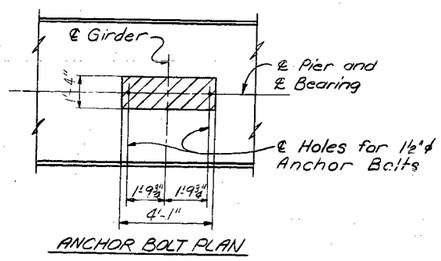
Note : Do not scale this drawing. Follow dimensions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

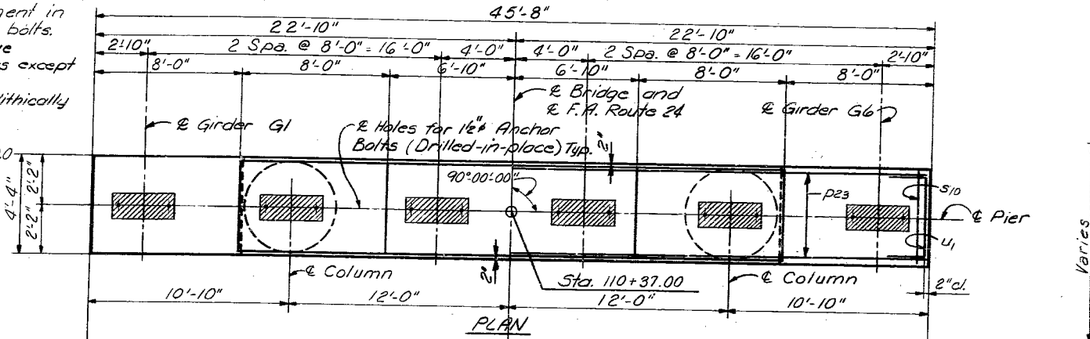
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	37,101 BVB	LIVINGSTON	67	39
F.A. 24				
FED. ROAD DIST. NO.7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 21
22 SHEETS

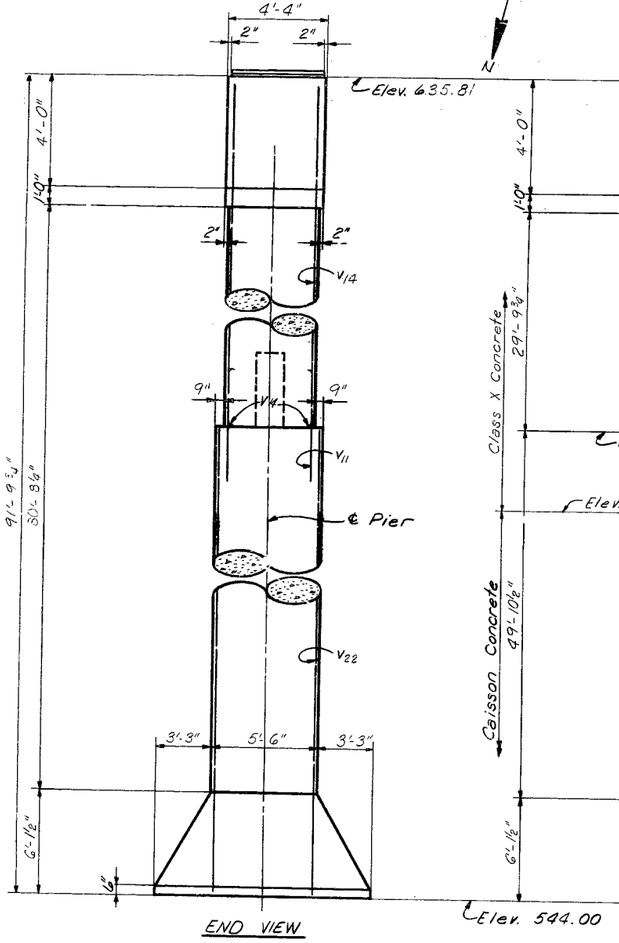
Note: Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Pour steps monolithically with cap.
Maximum Design Bearing Pressure = 10.0 Tons per sq. ft.



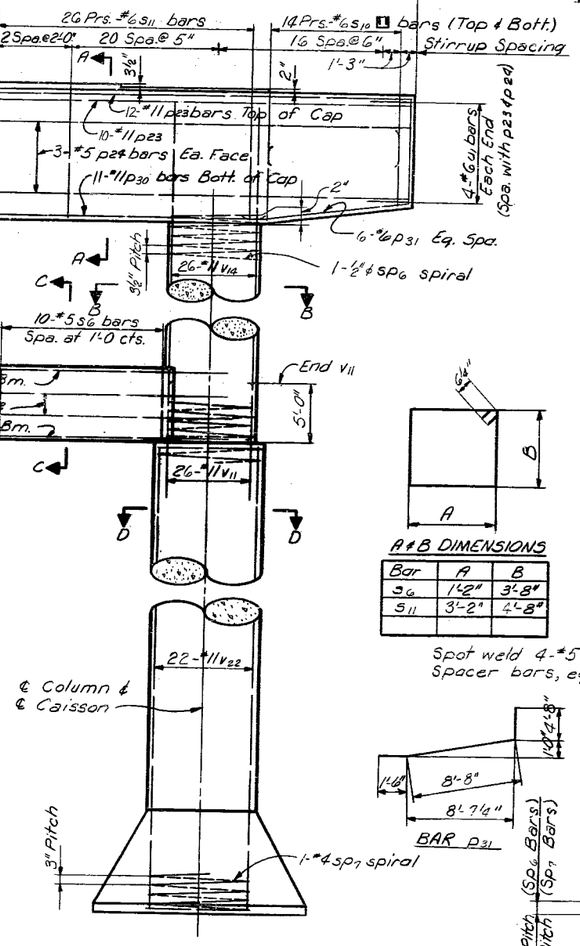
ANCHOR BOLT PLAN



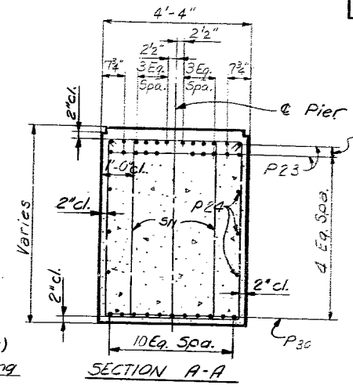
PLAN



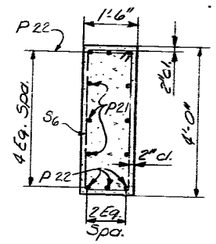
END VIEW



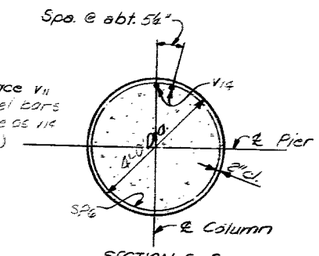
ELEVATION



SECTION A-A

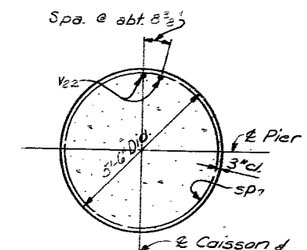


SECTION C-C



SECTION B-B

Note: Spacing of V_{14} bars is measured along inside face of bar SP_6.

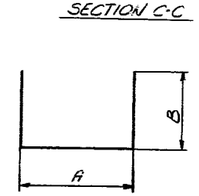


SECTION D-D

Note: Spacing of V_{22} bars is measured along inside face of bar SP_7.

A & B DIMENSIONS

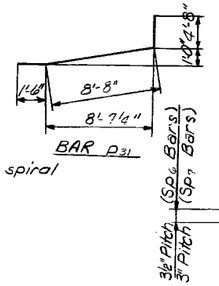
Bar	A	B
S6	1'-2"	3'-8"
S11	3'-2"	4'-8"



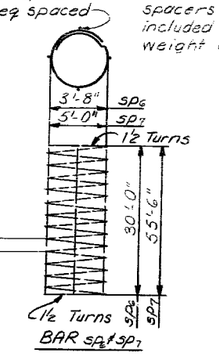
A & B DIMENSIONS

Bar	A	B
S10	3'-2"	3'-0"
U1	3'-11"	1'-6"

Spot weld 4-#5 Spiral Spacer bars, eq spaced



Note: Cost of spiral spacers to be included in pay weight of spirals.



BAR SP6 & SP7

PIER 4
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	P21	6	#7	25'-6"	—
	P22	6	#10	27'-0"	—
	P23	22	#11	45'-4"	—
	P24	6	#5	45'-4"	—
	P30	11	#11	28'-4"	—
	P31	12	#6	14'-10"	⌐
	S6	20	#5	10'-10"	⌐
	S10	112	#6	9'-2"	⌐
	S11	102	#6	16'-10"	⌐
	SP6	2	½"ϕ	1,205 Lb	WWW
*	SP7	2	#4	3,505 Lb	WWW
	U1	8	#6	6'-11"	⌐
	V11	52	#11	7'-4"	—
*	V14	52	#11	33'-0"	—
*	V22	44	#11	53'-6"	—
	Class X Concrete		Cu. Yds.	77.2	
	Caisson Concrete		Cu. Yds.	109.4	
	Reinforcement Bars		Lbs.	26,640	

* Bar included in cost of Caisson Concrete.

PIER 4
F.A. ROUTE 24 (ILL. 23) OVER VERMILION RIVER AND THE ATCHISON TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

NOTES

All reinforcing steel shall conform to A.S.T.M. A615 Grade 40, except column bars V_{11} & V_{14} shall conform to A.S.T.M. A615, Grade 60.

Note: Bar SP_6 shall be cold drawn steel wire A.A.S.H.T.O. M32.
Bar SP_6 and SP_7 may be spliced. Lap bar 1'2 additional turns at splice. Pay weight to be based on length shown on plans.

DESIGNED	S. Yordy
CHECKED	G. Roufa
DRAWN	D. Richardson
CHECKED	G. Dee

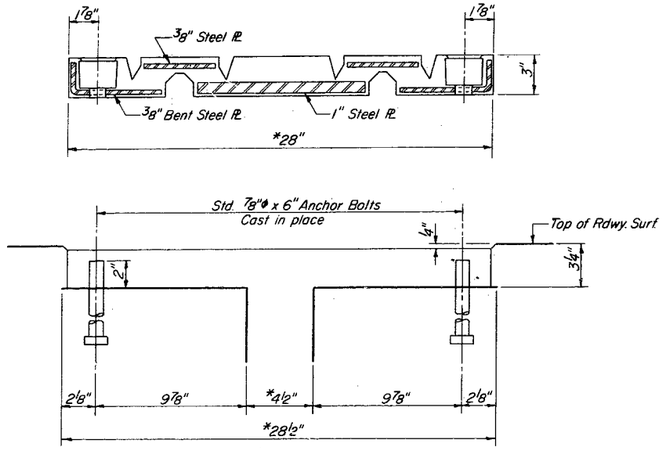
3291
75S294

Note: Do not scale this drawing. Follow dimensions.

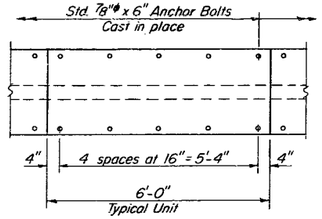
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.R.T. 24	37,101 B,V,B	LIVINGSTON	67	40
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 22
22 SHEETS



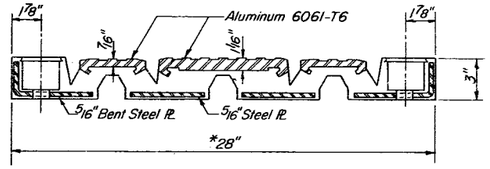
CROSS SECTION
*At 50° F.
Dimensions are at right angles.

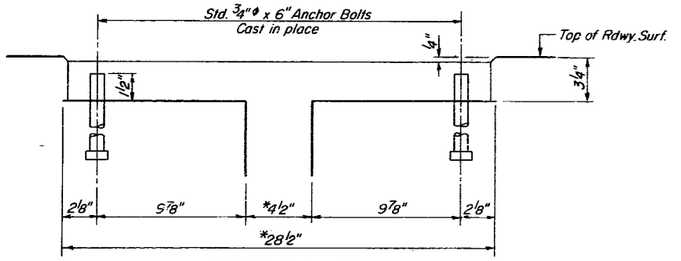


PLAN

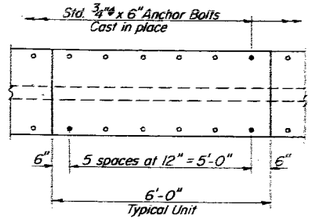
Note: Anchor bolts require a clipped washer, lockwasher and hex nut.

TRANSFLEX MODEL 650
(Structural Rubber Products Co.)





CROSS SECTION
*At 50° F.
Dimensions are at right angles



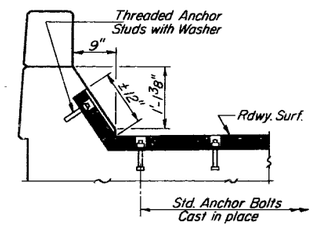
PLAN

Note: Anchor bolts require a clipped washer, lockwasher and hex nut.

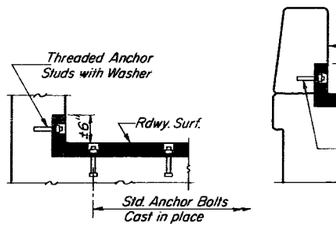
WABOFLEX MODEL SR 6.5
(Watson-Bowman Associates Inc.)

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

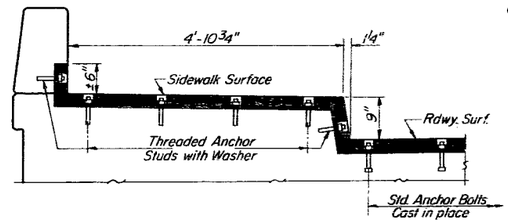
EJ-4 4-15-75



AT CURB



AT ABUTMENT



AT SIDEWALK

TYPICAL END TREATMENTS

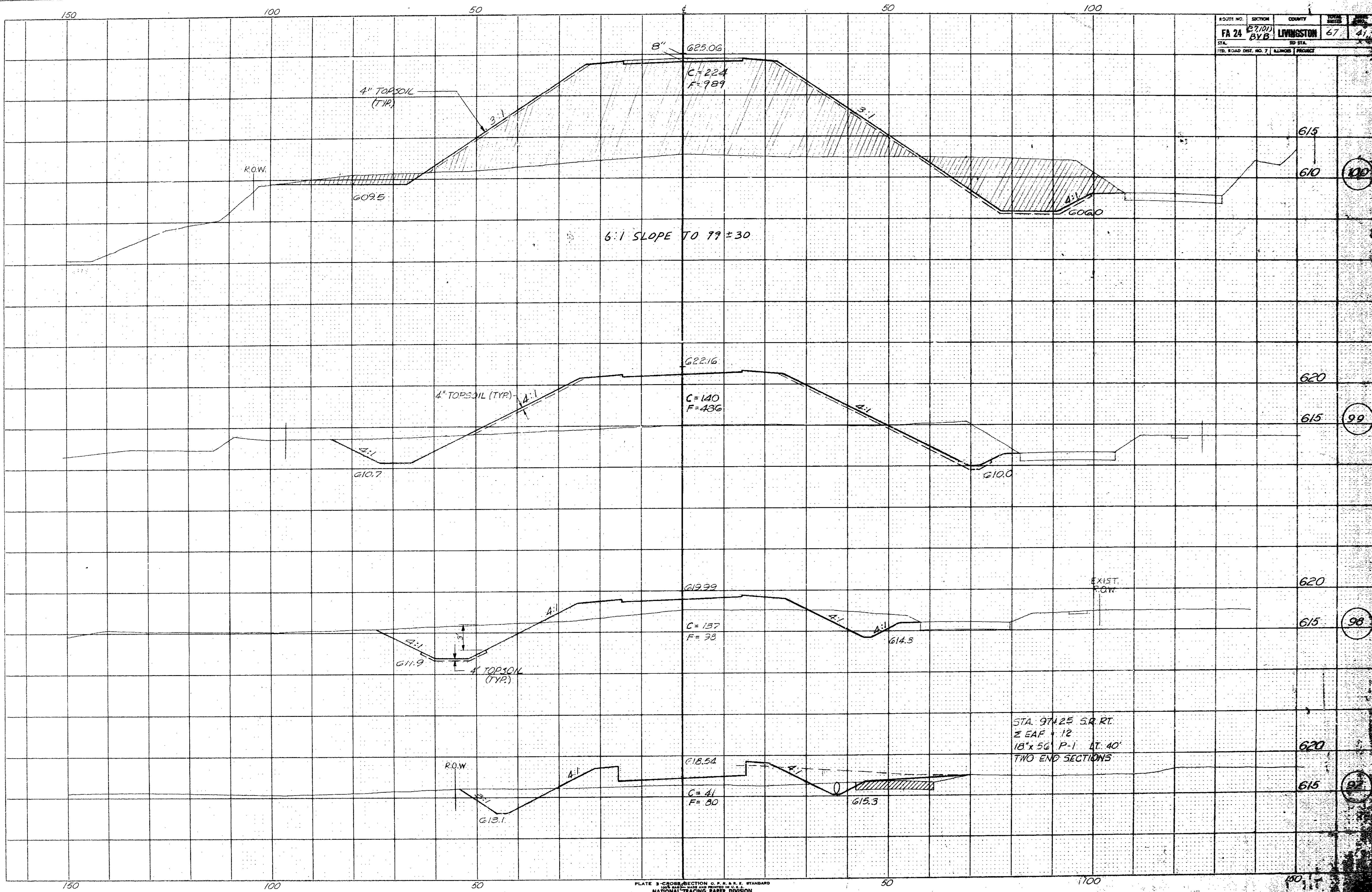
NOTE:
Joint openings shall be adjusted in accordance with Article 503.07 (c) of the Std. Spec's. when the deck is poured at an ambient temperature other than 50° F.

NEOPRENE EXPANSION JOINTS (6 1/2")
FOR EXPANSION LENGTH OF DECK = 320 ft. to 520 ft.

F.A. ROUTE 24 (ILL. 23) OVER
VERMILION RIVER AND THE ATCHISON
TOPEKA & SANTA FE RAILROAD
F.A. RT. 24 SEC. (37,101) BVB
LIVINGSTON COUNTY
STATION 106+39

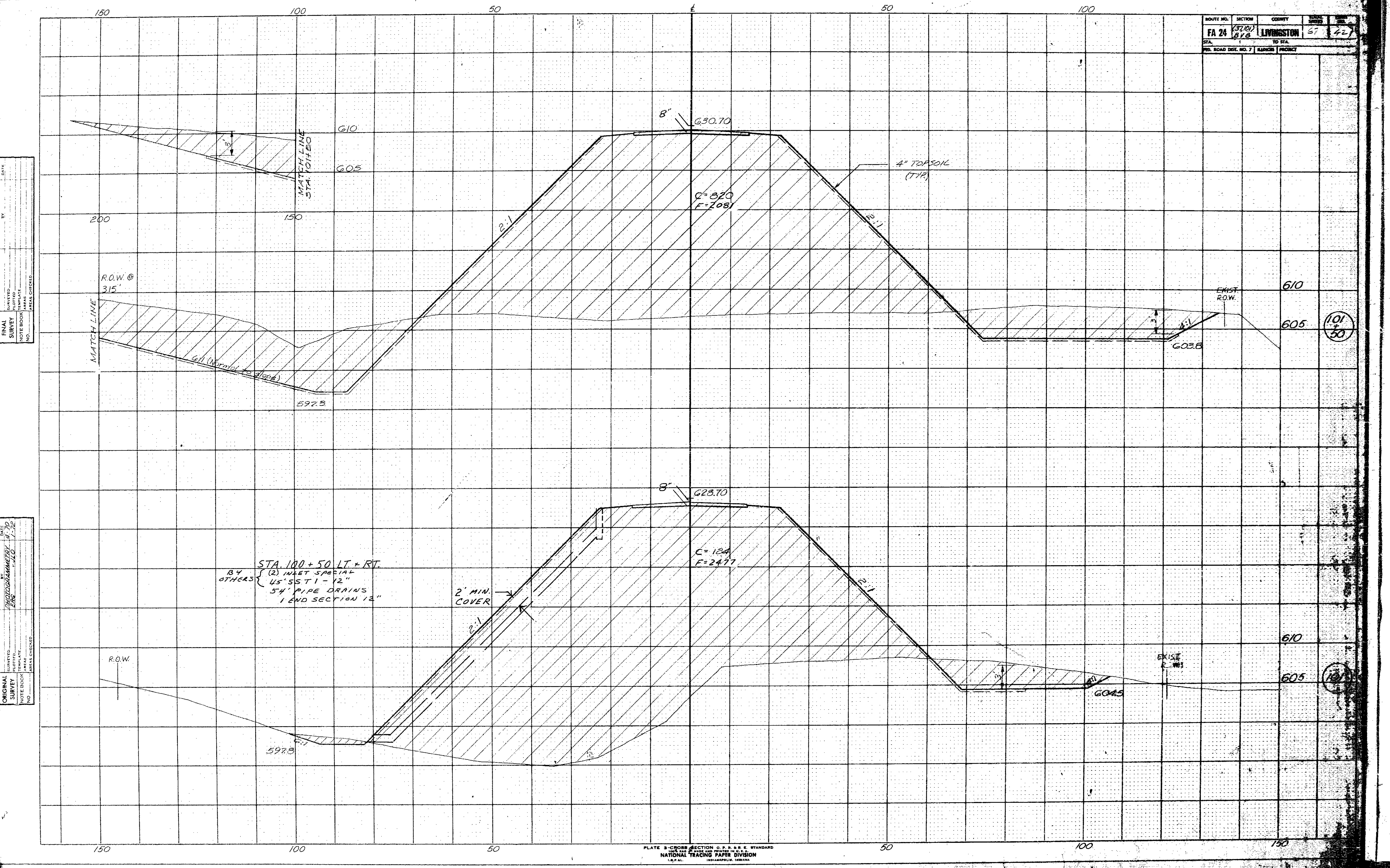
FINAL SURVEY
NOTE BOOK
NO.

ORIGINAL SURVEY
NOTE BOOK
NO.
PHOTOGRAMMETRY 7-70
ERG. JJLO 1-72

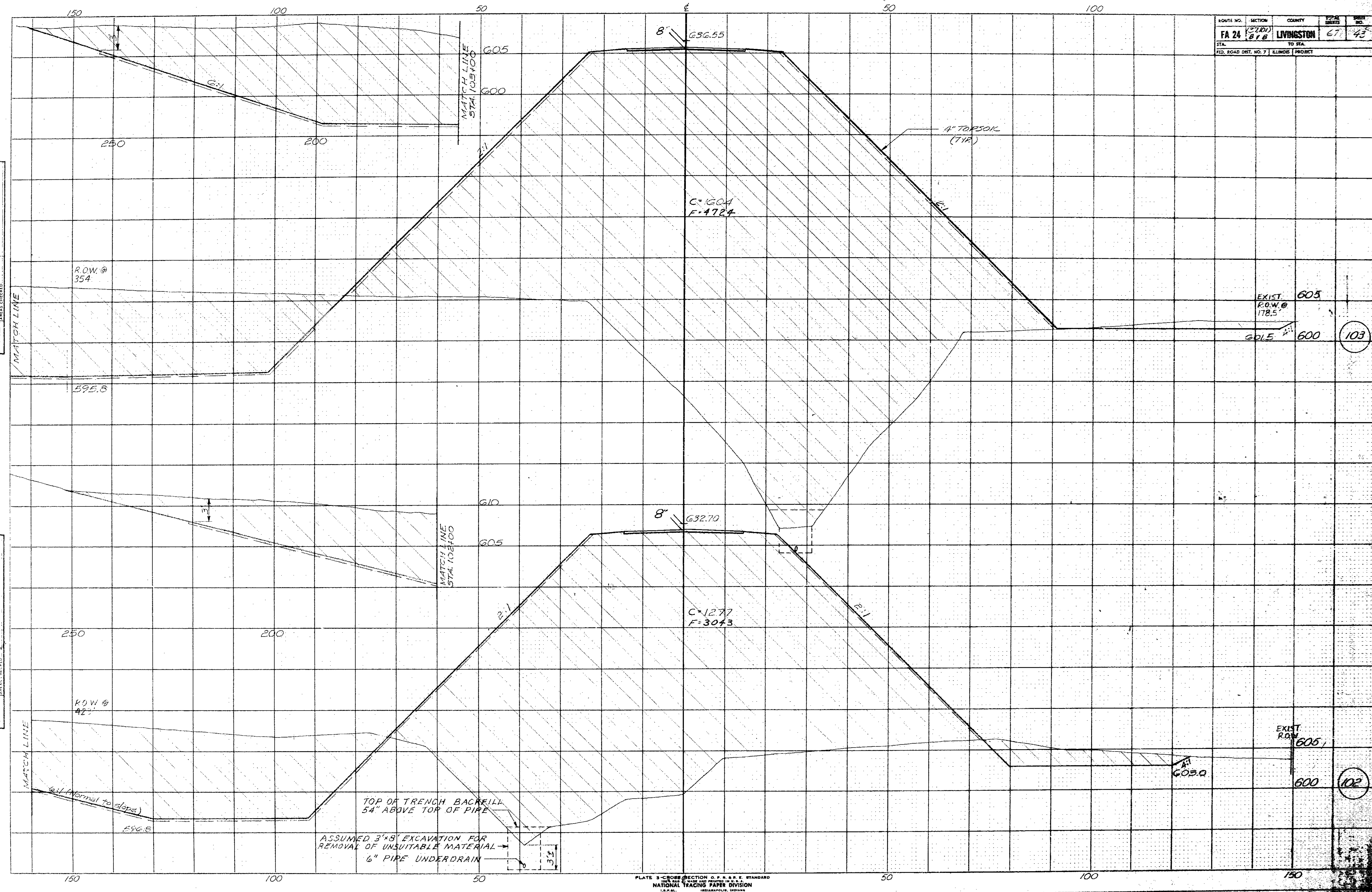


ROUTE NO. FA 24
SECTION (37,101) BYB
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 41
STA. TO STA.
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
150
100
50
℄
50
100
8"
685.06
C=224
F=989
4" TOPSOIL (TYP.)
3:1
3:1
R.O.W.
609.5
4:1
606.0
615
610
100
6:1 SLOPE TO 99±30
622.16
C=140
F=486
4" TOPSOIL (TYP.)
4:1
4:1
4:1
610.7
610.0
620
615
99
619.99
C=137
F=38
4:1
4:1
4:1
4:1
611.9
614.3
4" TOPSOIL (TYP.)
EXIST. R.O.W.
620
615
98
STA. 97+25 S.R. RT.
Σ EAF = 12
18"x 56' P-1 LT. 40'
TWO END SECTIONS
618.54
C=41
F=80
R.O.W.
3:1
4:1
4:1
613.1
615.3
620
615
97
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

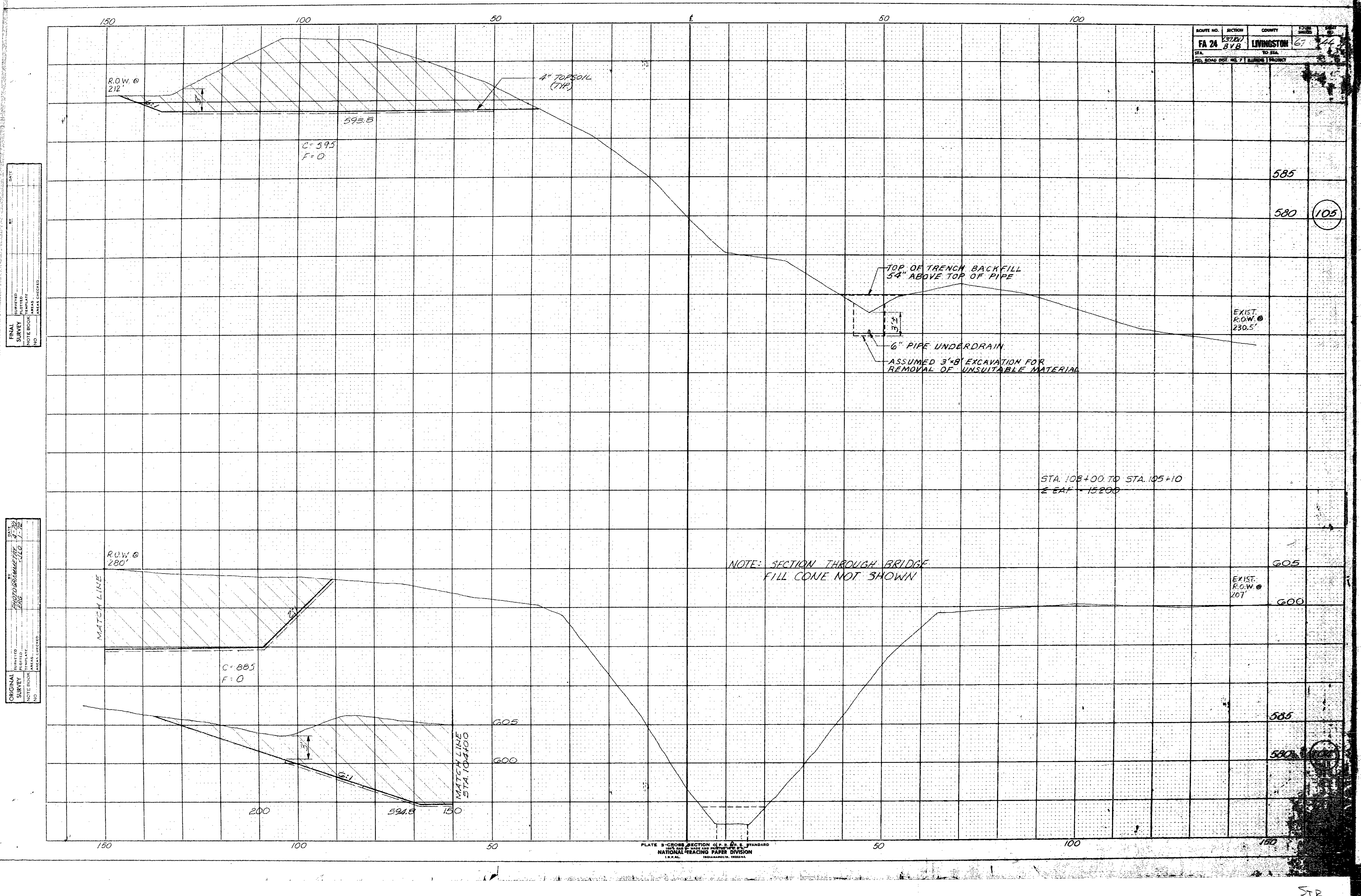
(37,101)BYB Livingston STR

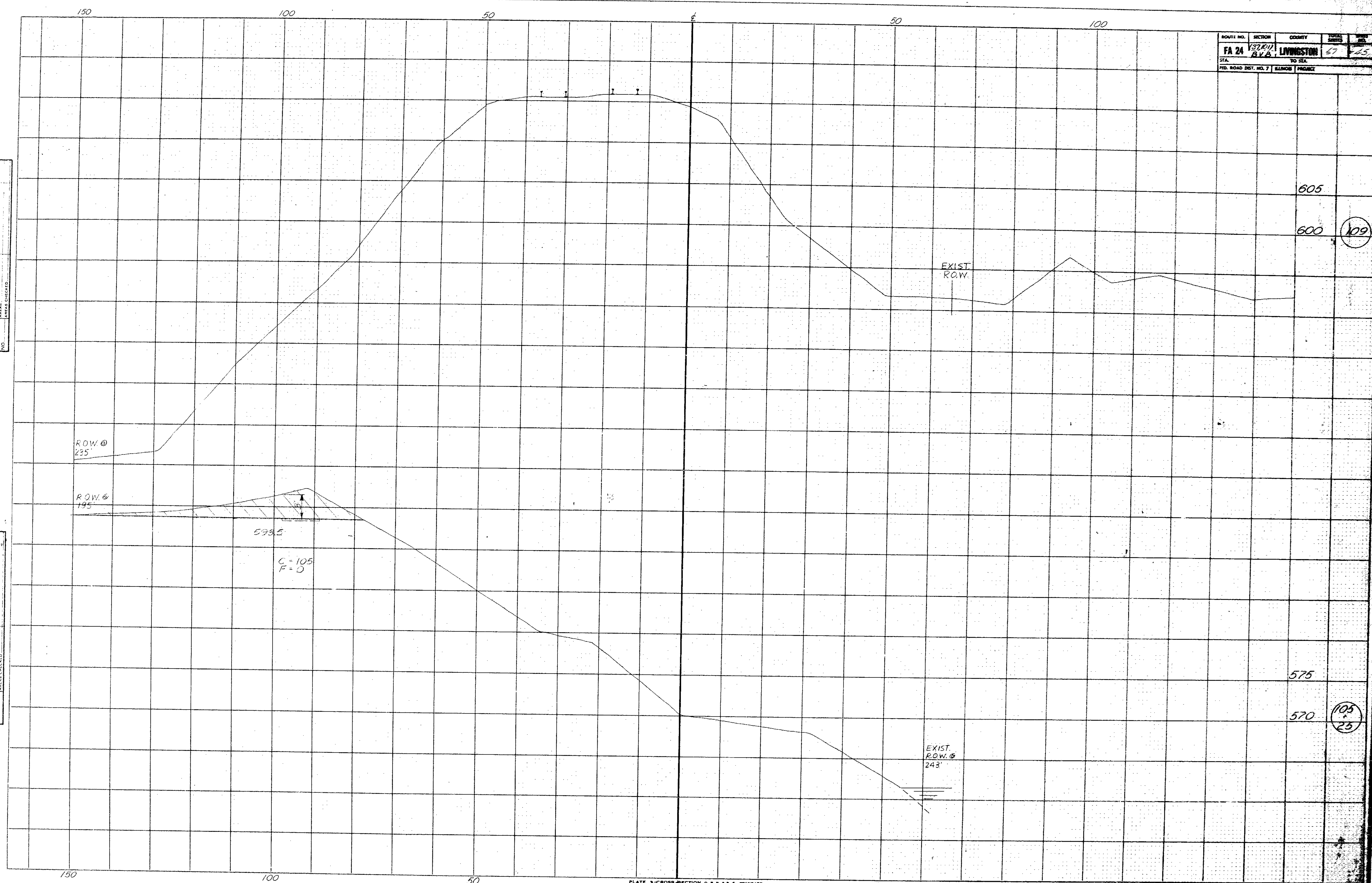


ROUTE NO. FA 24
SECTION (37,101) BYB
COUNTY LIVINGSTON
67
42
STA. TO STA.
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
150 100 50 ℄ 50 100
8"
630.70
610
605
MATCH LINE STA. 101+50
4" TOPSOIL (TYP.)
C=820
F=2081
2:1
200 150
R.O.W. @ 315'
MATCH LINE
6:1 (Normal to slope)
597.5
EXIST. R.O.W.
4:1
603.8
610
605
101+50
8"
628.70
C=124
F=2477
STA. 100+50 LT + RT.
BY OTHERS (2) INLET SPECIAL
45' SST 1 - 12"
54' PIPE DRAINS
1 END SECTION 12"
2' MIN. COVER
R.O.W.
597.8
EXIST. R.O.W.
604.5
610
605
101
150 100 50 50 100 150
FINAL SURVEY
NOTE BOOK
ORIGINAL SURVEY
PHOTOGRAMMETRY
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION



ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
FA 24 | (37101) B & B | LIVINGSTON | 67 | 43
FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT
8" 636.55
605
600
MATCH LINE STA. 103+00
4" TOPSOIL (TYP.)
2:1
C=1604
F=4724
R.O.W. @ 354
MATCH LINE
595.8
EXIST. R.O.W. @ 178.5'
605
600
601.5
(103)
8" 632.70
610
605
MATCH LINE STA. 102+00
C=1277
F=3043
R.O.W. @ 425'
EXIST. R.O.W.
605
600
603.0
(102)
4:1
6:1 (Normal to slope)
596.8
TOP OF TRENCH BACKFILL 54" ABOVE TOP OF PIPE
ASSUMED 3'x8' EXCAVATION FOR REMOVAL OF UNSUITABLE MATERIAL
6" PIPE UNDERDRAIN
FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY
150
100
50
50
100
150
250
200
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION

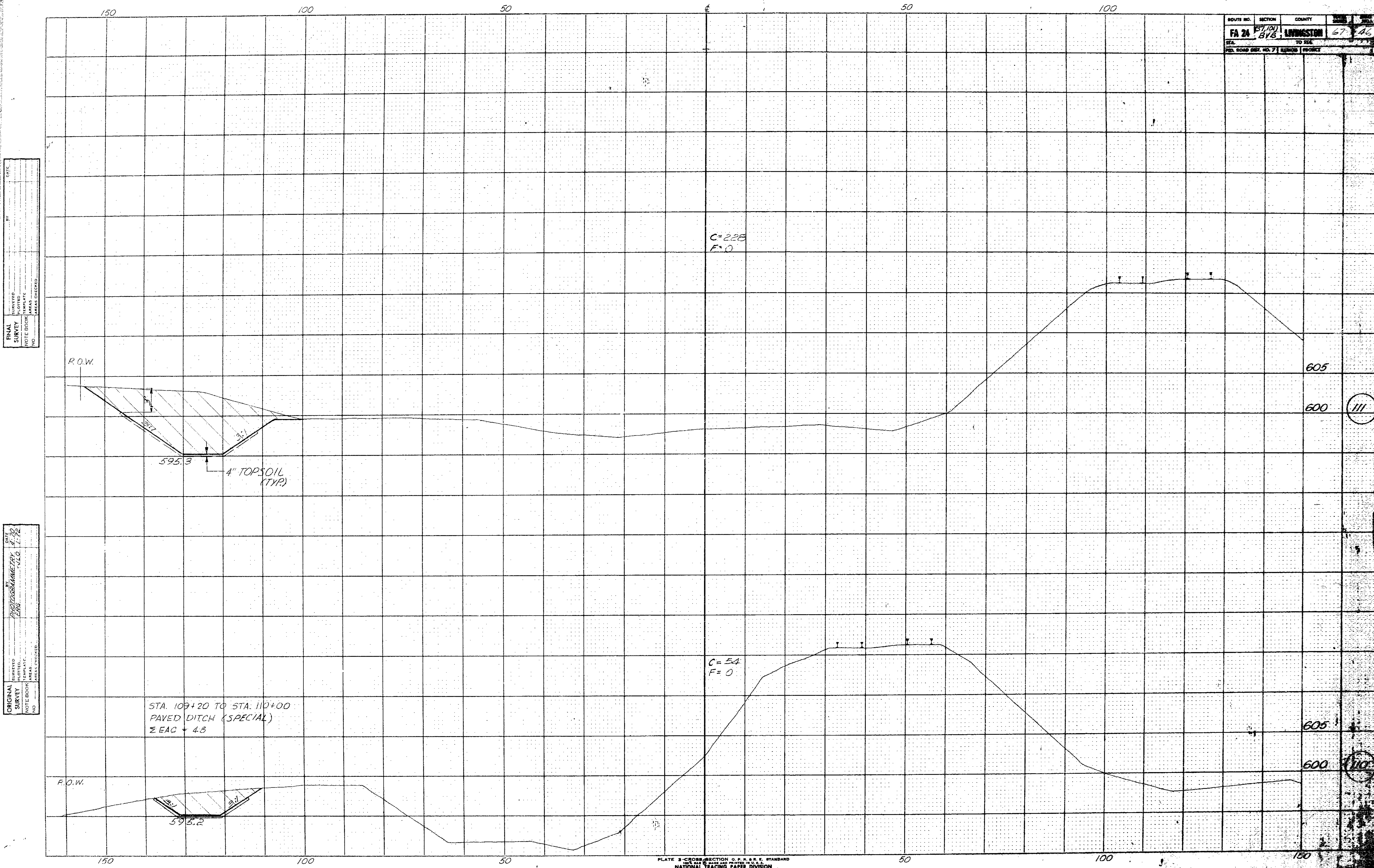

ROUTE NO. FA 24
SECTION (37.1(2)) BVB
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 44
STA. TO STA.
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK NO.
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
ORIGINAL SURVEY
SURVEYED PHOTOGRAMMETRY 4-70
PLOTTED ERG / JLO 1-72
150
100
50
℄
50
100
R.O.W. @ 212'
4" TOPSOIL (TYP.)
3'
6:1
593.8
C=595
F=0
585
580
105
TOP OF TRENCH BACKFILL 54" ABOVE TOP OF PIPE
3'±
6" PIPE UNDERDRAIN
ASSUMED 3'×8' EXCAVATION FOR REMOVAL OF UNSUITABLE MATERIAL
EXIST. R.O.W. @ 230.5'
STA. 103+00 TO STA. 105+10
℄ EAF = 15200
R.O.W. @ 280'
MATCH LINE
3'
C=885
F=0
NOTE: SECTION THROUGH BRIDGE FILL CONE NOT SHOWN
605
EXIST. R.O.W. @ 207'
600
585
580
605
600
3'
6:1
MATCH LINE STA. 104+00
200
594.8
150
PLATE 3-CROSS SECTION OF P. R. ... STANDARD
NATIONAL TRACING PAPER DIVISION
STR



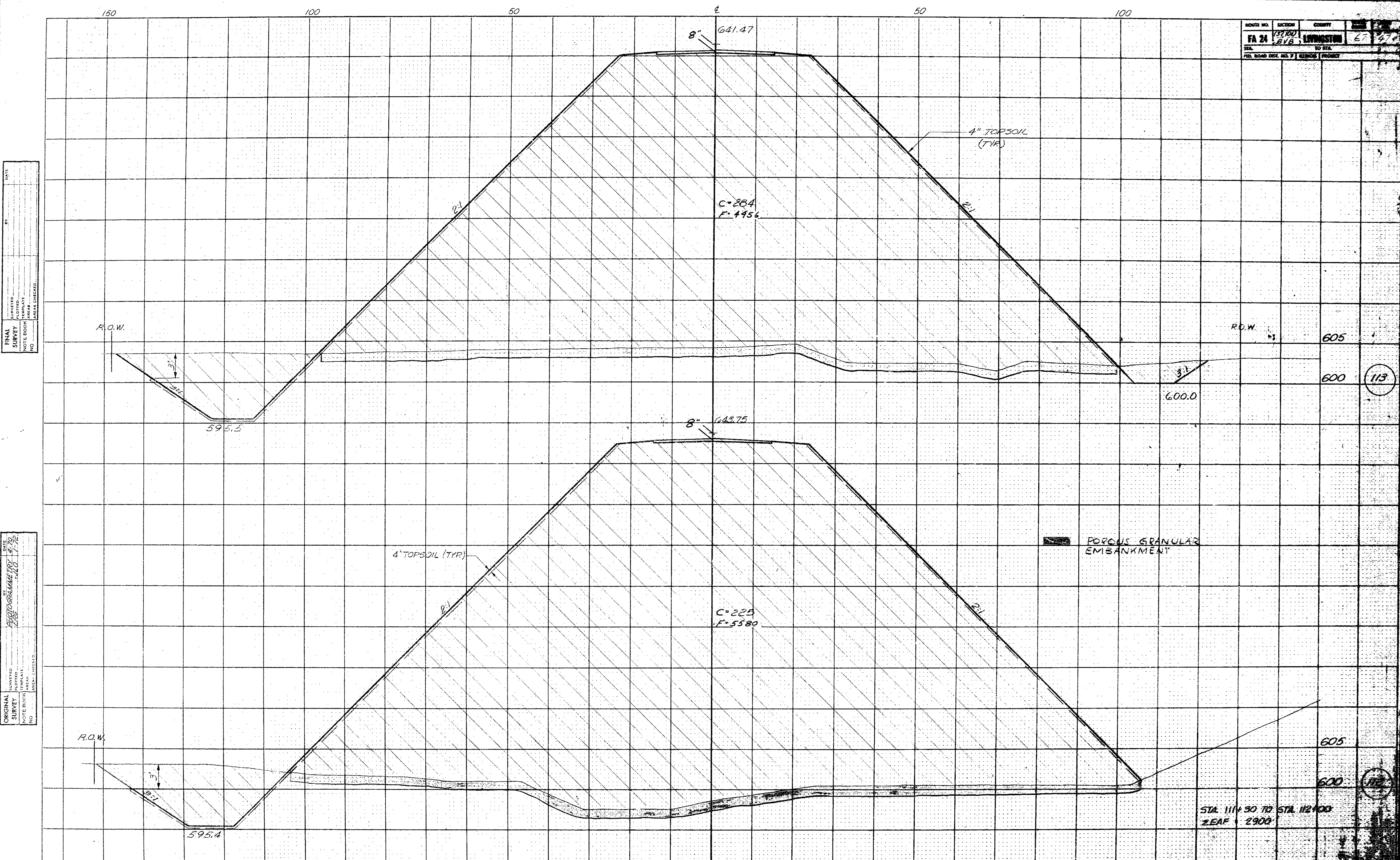
FINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, NO., AREAS, AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, NO., AREAS, AREAS CHECKED — BY: PHOTOGRAMMETRY, ERG, JLO — DATE: 4-70, 1-72

PLATE 3 - CROSS SECTION C. P. R. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

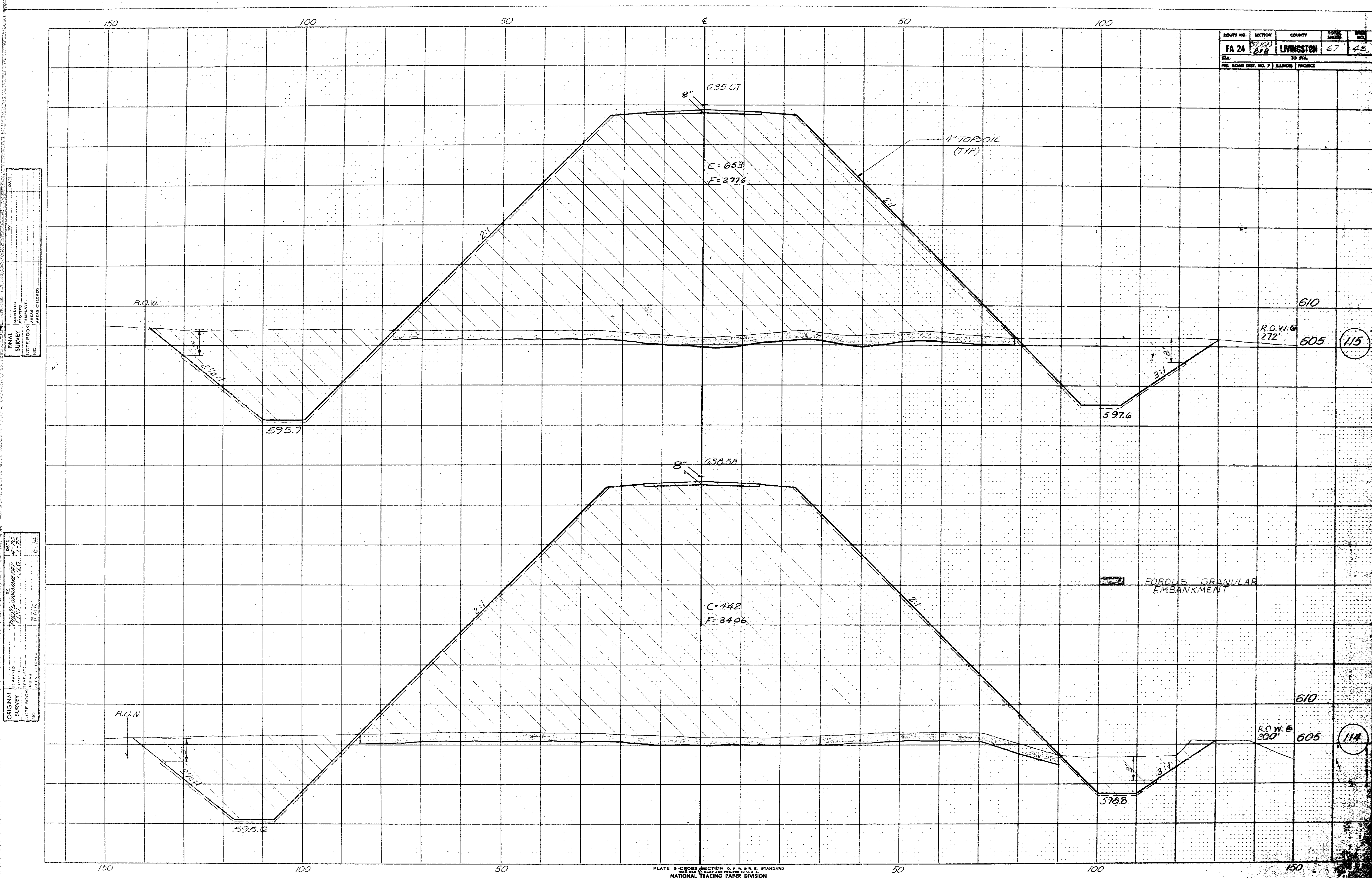


ROUTE NO. | SECTION | COUNTY
FA 24 | (57,101) BVB | LIVINGSTON | 67 | 46
FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT
150
100
50
℄
50
100
C=228
F=0
R.O.W.
3:1
595.3
4" TOPSOIL (TYP.)
605
600
111
C=54
F=0
STA. 109+20 TO STA. 110+00
PAVED DITCH (SPECIAL)
Σ EAC = 4.8
R.O.W.
595.2
605
600
110
FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
ORIGINAL SURVEY
PHOTOGRAMMETRY
ERG
VLO
4-70
1-72
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION



ROUTE NO. | SECTION | COUNTY
FA 24 | (37,100) BVB | LIVINGSTON | 67 | 47
STA. TO STA.
FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT
150
100
50
℄
50
100
8"
641.47
4" TOPSOIL (TYP.)
2:1
2:1
C=284
F=4956
R.O.W.
R.O.W.
3'
3:1
3:1
605
600
113
600.0
595.5
8"
643.75
PORGUS GRANULAR EMBANKMENT
4" TOPSOIL (TYP.)
2:1
2:1
C=225
F=5580
R.O.W.
3'
3:1
605
600
112
595.4
STA. 111+30 TO STA. 112+00
ZEAF = 2900
150
100
50
50
100
100
FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
NO
AREAS CHECKED
BY
DATE
ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
NO
AREAS CHECKED
PHOTOGRAMMETRY

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG MADE AND PRINTED IN U. S. A.
NATIONAL TRACING PAPER DIVISION
I.B.P.SL. INDIANAPOLIS, INDIANA



ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
FA 24 | 87(101) BR8 | LIVINGSTON | 67 | 48
STA. TO STA.
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
150
100
50
℄
50
100
150
635.07
8"
4" TOPSOIL (TYP.)
C = 653
F = 2776
2:1
2:1
R.O.W.
2½:1
3'
595.7
610
605
R.O.W. @ 272'
115
3'
3:1
597.6
638.58
8"
POROUS GRANULAR EMBANKMENT
C = 442
F = 3406
2:1
2:1
R.O.W.
2½:1
595.6
610
605
R.O.W. @ 200'
114
3'
3:1
598.8
FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE
ORIGINAL SURVEY
PHOTOGRAMMETRY
RMK
PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

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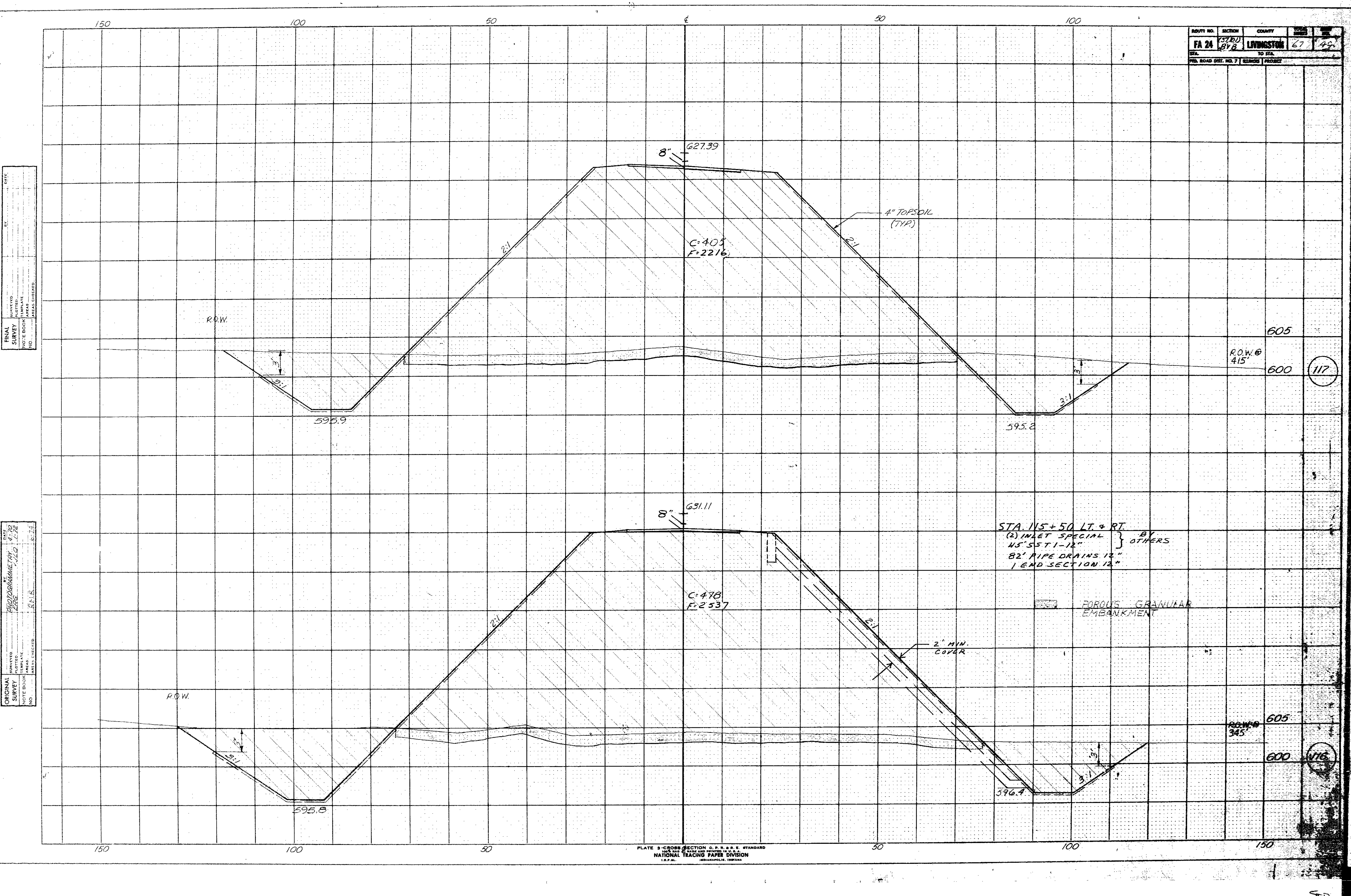
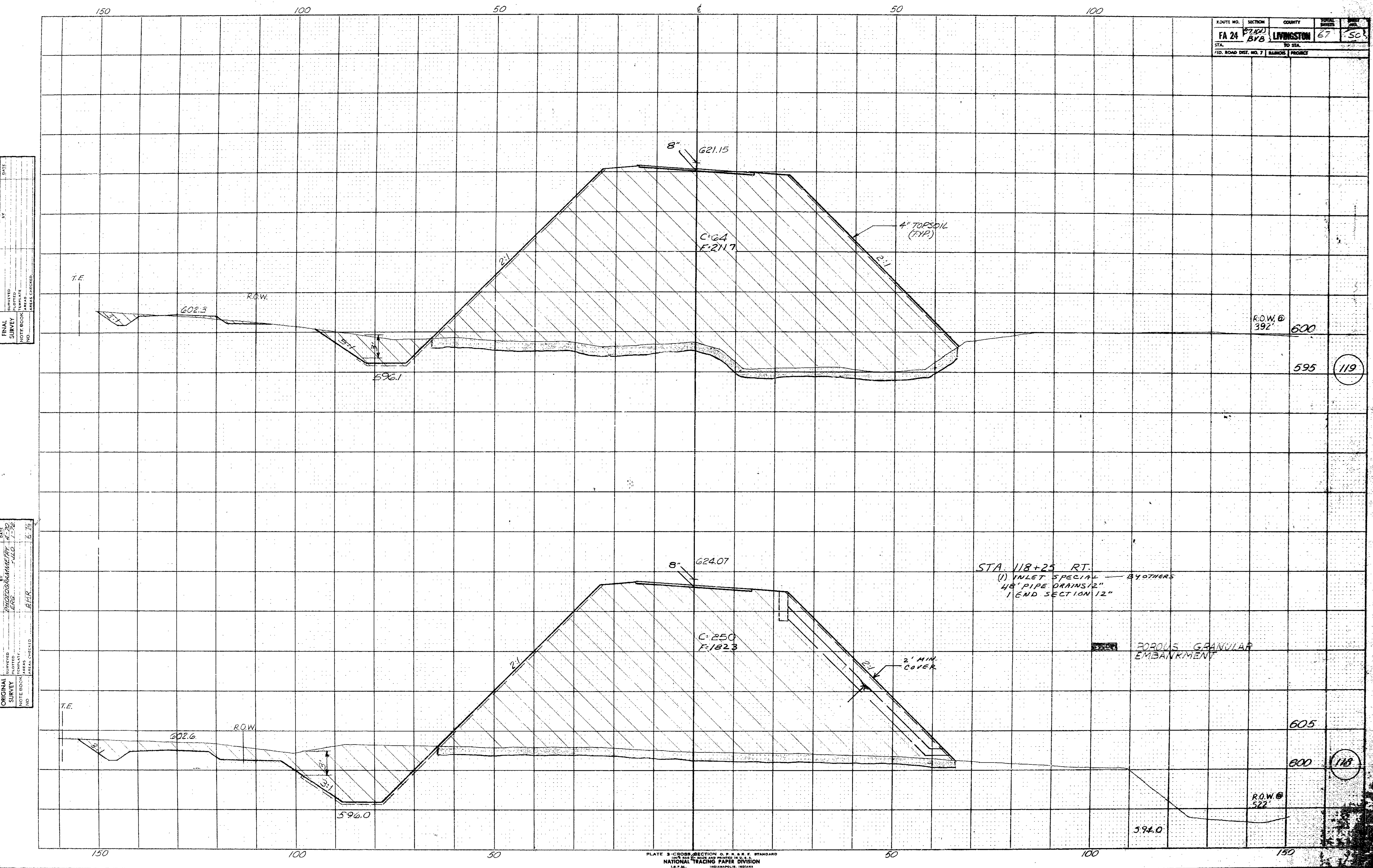
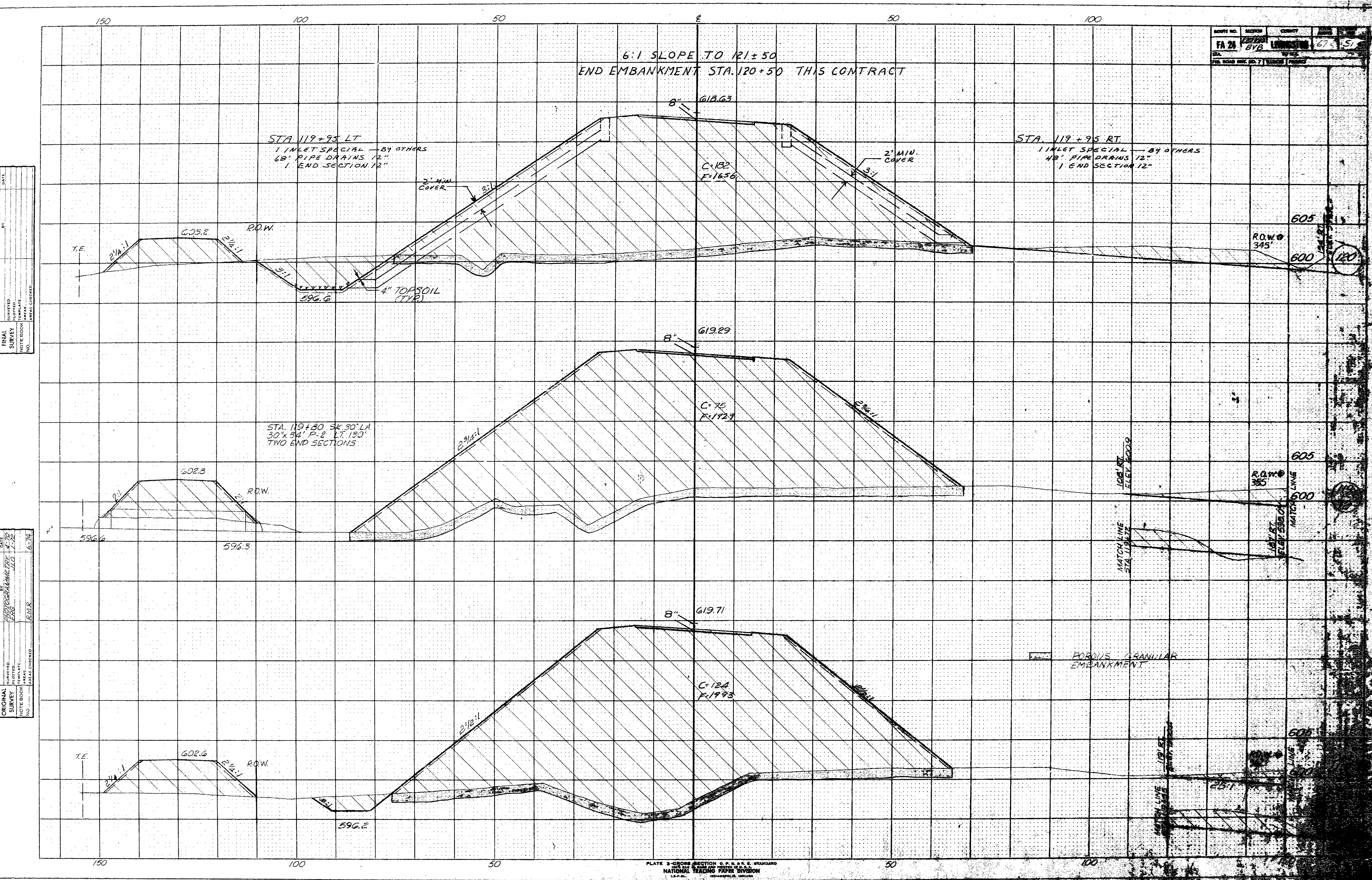
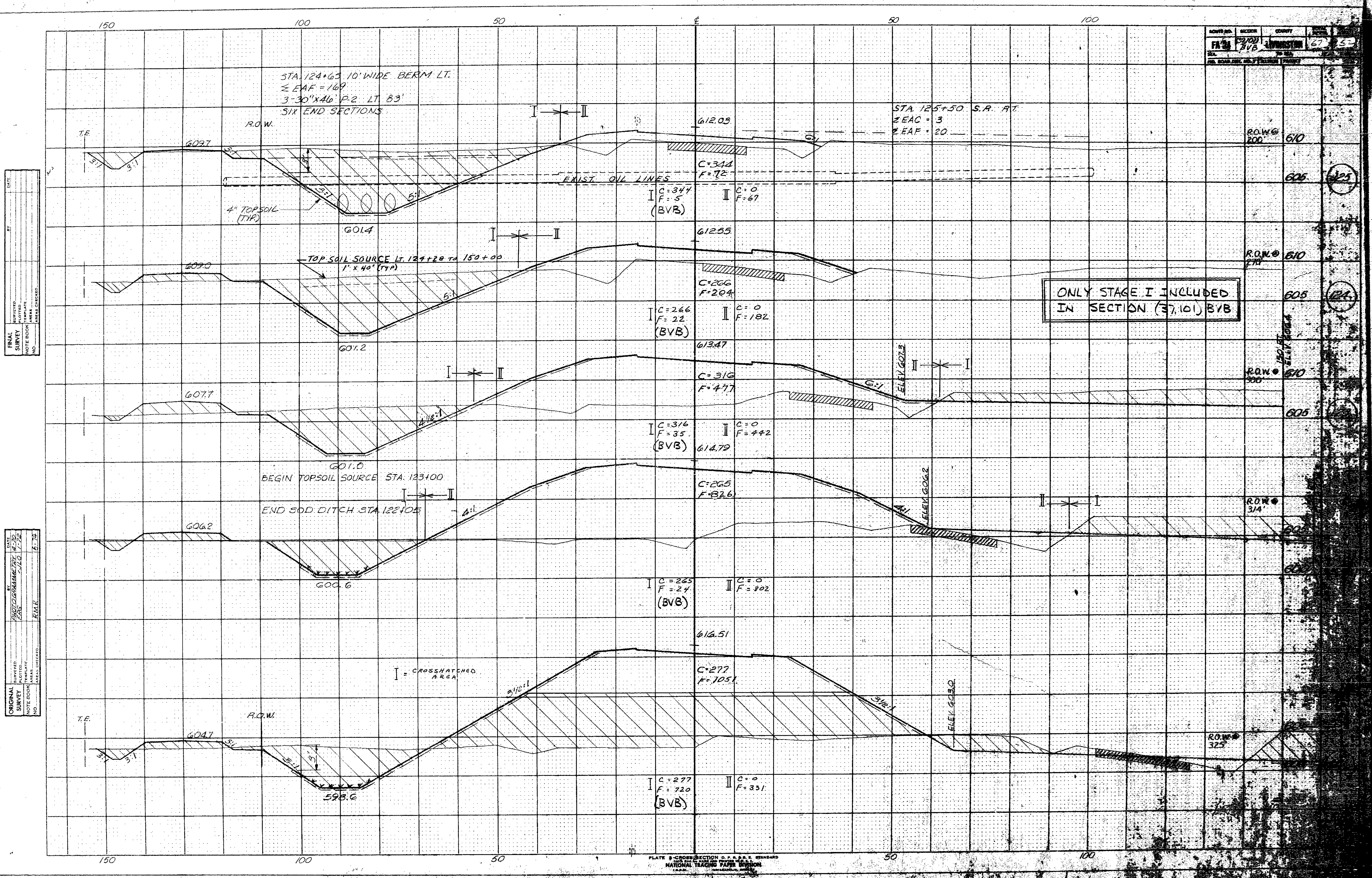

ROUTE NO. SECTION COUNTY
FA 24 (37,101) BYB LIVINGSTON 67
STA. TO STA.
ILLINOIS PROJECT
150 100 50 ℄ 50 100
8"
627.39
4" TOPSOIL (TYP.)
2:1
C: 405
F: 2216
R.O.W.
3'
3:1
595.9
605
R.O.W. @ 415'
600
117
595.2
8"
631.11
STA. 115+50 LT. & RT.
(2) INLET SPECIAL
45' SST 1-12"
BY OTHERS
82' PIPE DRAINS 12"
1 END SECTION 12"
C: 478
F: 2537
POROUS GRANULAR EMBANKMENT
2" MIN. COVER
R.O.W.
R.O.W. @ 345'
595.8
596.4
116
150 100 50 50 100 150
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA
FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY



ROUTE NO. SECTION COUNTY TOTAL SHEETS SHEET NO.
FA 24 BYB LIVINGSTON 67 50
STA. TO STA.
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
150 100 50 ℄ 50 100
8"
621.15
C: 64
F: 2117
4" TOPSOIL (TYP.)
2:1
2:1
T.E.
R.O.W.
602.3
596.1
R.O.W. @ 392'
600
595
119
8"
624.07
C: 250
F: 1823
2' MIN. COVER
2:1
2:1
3:1
T.E.
R.O.W.
602.6
596.0
594.0
R.O.W. @ 522'
605
600
118
STA. 118+25 RT.
(1) INLET SPECIAL — BY OTHERS
48' PIPE DRAINS 12"
1 END SECTION 12"
POROUS GRANULAR EMBANKMENT
FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA
ST2



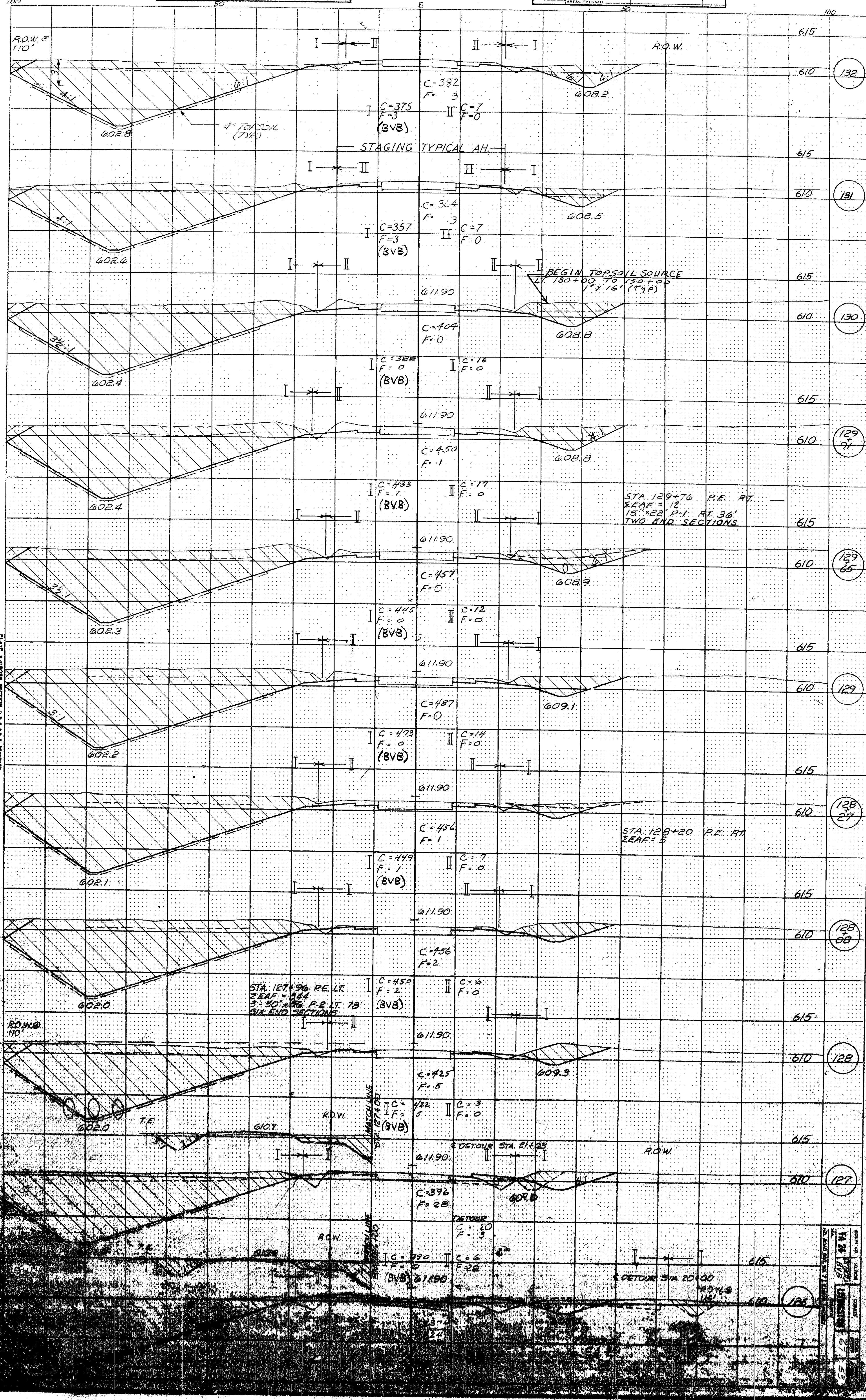
6:1 SLOPE TO 121± 50
END EMBANKMENT STA. 120+50 THIS CONTRACT
STA. 119+95 LT
1 INLET SPECIAL — BY OTHERS
68' PIPE DRAINS 12"
1 END SECTION 12"
STA. 119+95 RT.
1 INLET SPECIAL — BY OTHERS
48' PIPE DRAINS 12"
1 END SECTION 12"
2' MIN. COVER
4" TOPSOIL (TYP.)
618.63
C=132
F=1656
605.2
596.6
R.O.W.
T.E.
R.O.W. 345'
605
600
120
STA. 119+80 SK. 30° LA
30"x34" P. 2 LT. 130'
TWO END SECTIONS
619.29
C=75
F=1929
602.8
596.6
596.3
R.O.W. 355'
108' RT. ELEV. 600.9
MATCH LINE STA. 119+72
MATCH LINE
619.71
C=124
F=1993
602.6
596.2
POROUS GRANULAR EMBANKMENT
150
100
50
FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY
RMR
PLATE 3 CROSS SECTION
NATIONAL TRACING PAPER DIVISION
FA 24



150
100
50
℄
50
100
FA 24
(37,101) BVB
LIVINGSTON
67
52
STA. 124+65 10' WIDE BERM LT.
Σ EAF = 169
3-30"x46" P-2 LT. 83'
SIX END SECTIONS
R.O.W.
T.E.
609.7
612.03
STA. 125+50 S.R. RT.
Σ EAC = 3
Σ EAF = 20
R.O.W.@ 200'
610
C=344
F=72
EXIST. OIL LINES
605
125
C=344
F=5
(BVB)
C=0
F=67
4" TOPSOIL (TYP.)
601.4
612.55
TOP SOIL SOURCE LT. 124+28 TO 150+00
1' x 40' (TYP)
609.0
R.O.W.@ 279'
610
ONLY STAGE I INCLUDED
IN SECTION (37,101) BVB
C=266
F=204
605
124
C=266
F=22
(BVB)
C=0
F=182
601.2
613.47
ELEV. 607.3
R.O.W.@ 300'
610
607.7
C=316
F=477
6:1
605
C=316
F=35
(BVB)
C=0
F=442
601.0
614.79
BEGIN TOPSOIL SOURCE STA. 123+00
C=265
F=82.6
ELEV. 606.2
END SOD DITCH STA. 122+05
4:1
R.O.W.@ 314'
606.2
600.6
C=265
F=24
(BVB)
C=0
F=802
616.51
I = CROSSHATCHED AREA
C=277
F=1051
3½:1
ELEV. 603.0
R.O.W.
T.E.
604.7
R.O.W.@ 325'
598.6
C=277
F=720
(BVB)
C=0
F=331
FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY 4-72
EAG
RWR
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION

ORIGINAL SURVEY		BY	DATE
	SURVEYED	PHOTOGRAMMETRY	4-70
	PLOTTED	MVR	11-71
NOTE BOOK	TEMPLATE	PAG	
	AREAS		
NO.	AREAS CHECKED	BMR	6-74

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

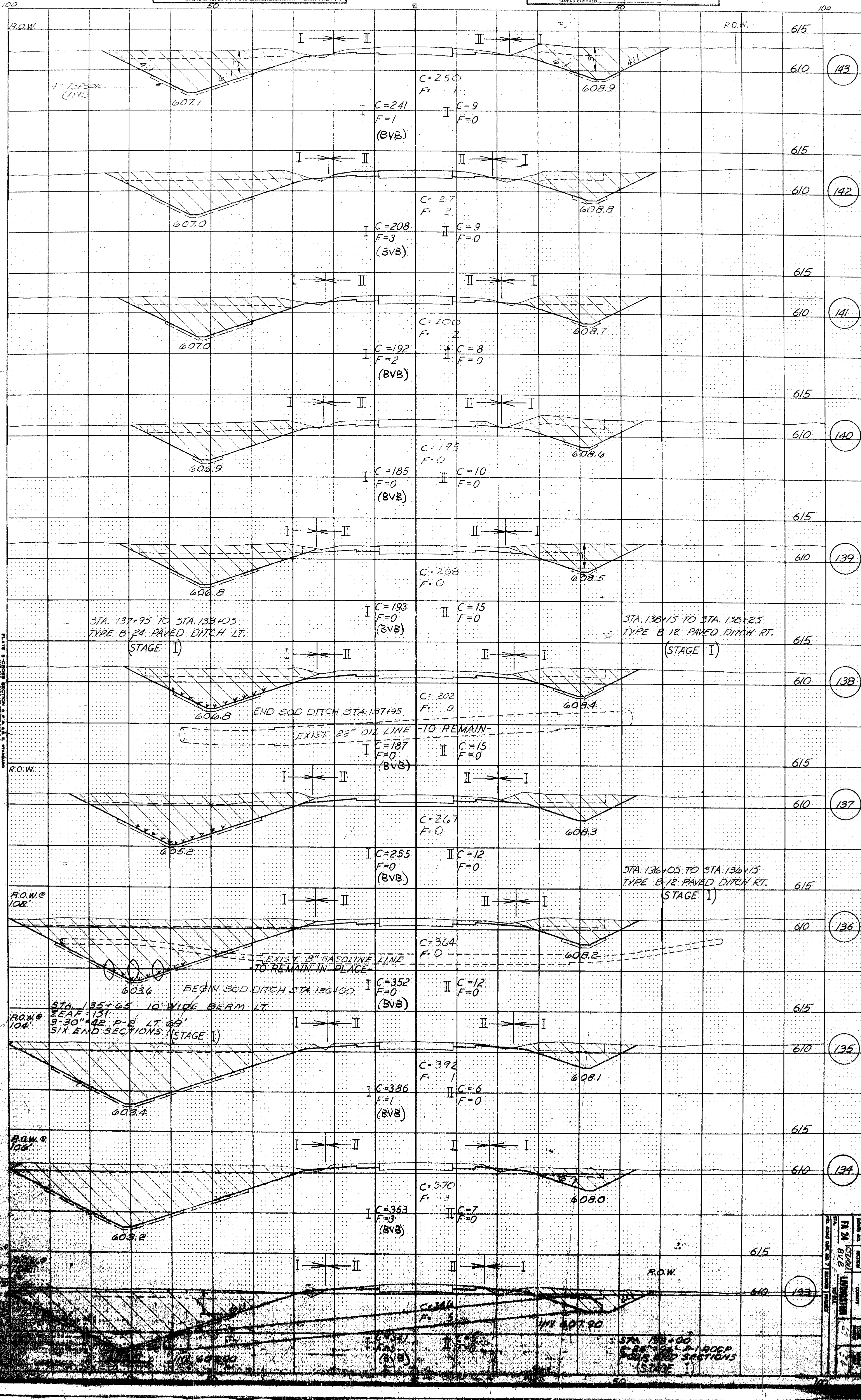


ROUTE NO.	SECTION	COUNTY		
FA 26	BVB	LIVINGSTON	67	53

5T2

ORIGINAL SURVEY — SURVEYED / PLOTTED: PHOTOGRAMMETRY MVR — DATE 4-70; TEMPLATE: PAG — 11-71; AREAS: R.M.R. — 6-73; NOTE BOOK NO.; AREAS CHECKED

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

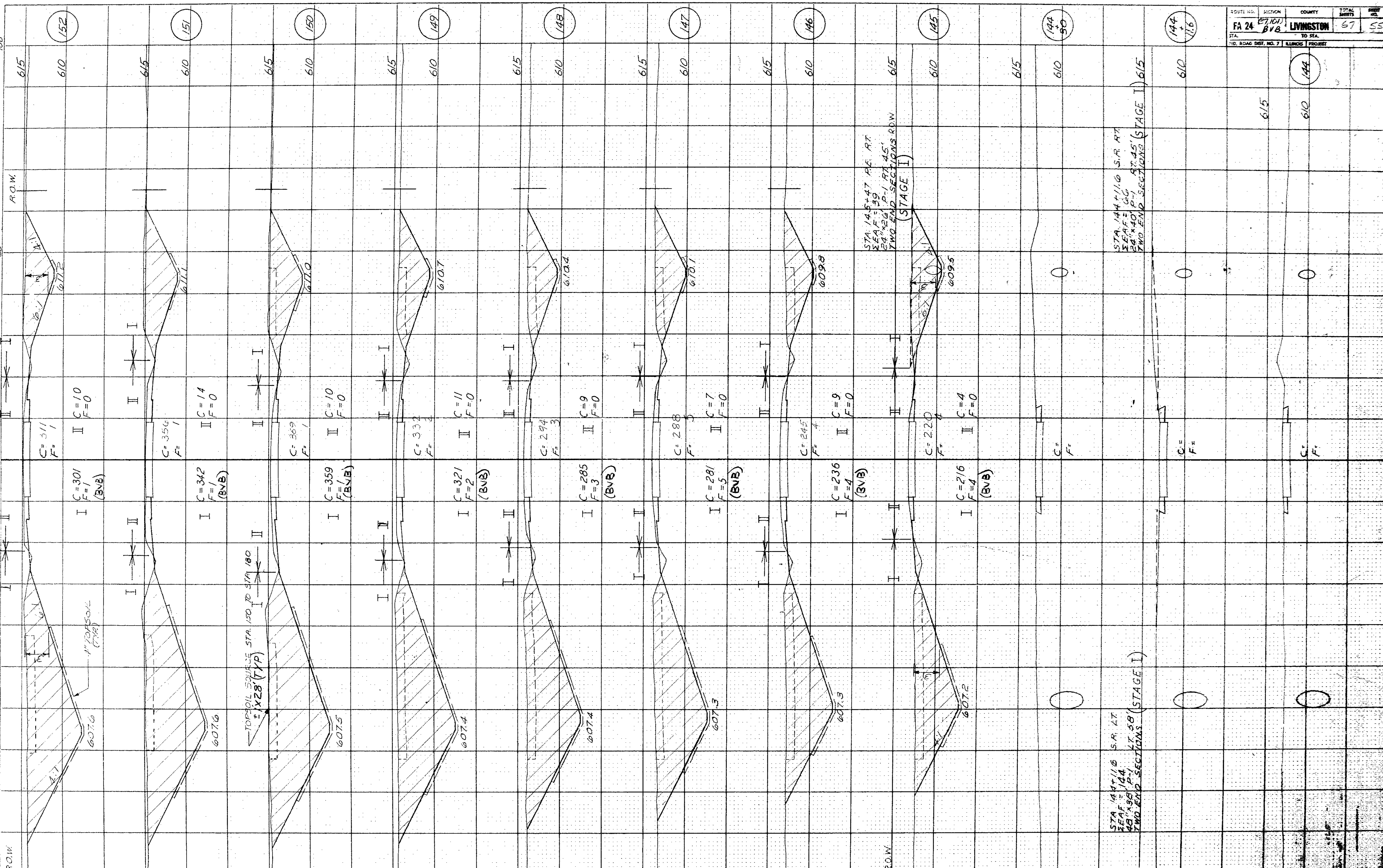


R.O.W.
615
610
143
607.1
608.9
1" TOPSOIL (TYP.)
C=250 F=1
C=241 F=1 (BVB)
C=9 F=0
142
607.0
608.8
C=217 F=3
C=208 F=3 (BVB)
C=9 F=0
141
607.0
608.7
C=200 F=2
C=192 F=2 (BVB)
C=8 F=0
140
606.9
608.6
C=195 F=0
C=185 F=0 (BVB)
C=10 F=0
139
606.8
608.5
C=208 F=0
C=193 F=0 (BVB)
C=15 F=0
STA. 137+95 TO STA. 138+05
TYPE B 24 PAVED DITCH LT.
(STAGE I)
STA. 138+15 TO STA. 138+25
TYPE B 12 PAVED DITCH RT.
(STAGE I)
138
606.8
608.4
END SOD DITCH STA. 137+95
EXIST. 22" OIL LINE - TO REMAIN-
C=202 F=0
C=187 F=0 (BVB)
C=15 F=0
137
605.2
608.3
C=267 F=0
C=255 F=0 (BVB)
C=12 F=0
STA. 136+05 TO STA. 136+15
TYPE B 12 PAVED DITCH RT.
(STAGE I)
R.O.W.@ 102'
136
603.6
608.2
EXIST. 8" GASOLINE LINE
TO REMAIN IN PLACE
C=364 F=0
BEGIN SOD DITCH STA. 136+00
C=352 F=0 (BVB)
C=12 F=0
STA. 135+65 10' WIDE BERM LT.
STA. 135+65
EAF=131
3-30"x42" P-E LT. 69'
SIX END SECTIONS (STAGE I)
R.O.W.@ 104'
135
603.4
608.1
C=392 F=1
C=386 F=1 (BVB)
C=6 F=0
R.O.W.@ 106'
134
603.2
608.0
C=370 F=3
C=363 F=3 (BVB)
C=7 F=0
R.O.W.
133
C=346 F=5
(BVB)
STA. 133+00
SIX END SECTIONS
(STAGE I)
FA 24
BVB
LIVINGSTON
67

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 24	(57,101) BVB	LIVINGSTON	67	55

STA. TO STA.

FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT



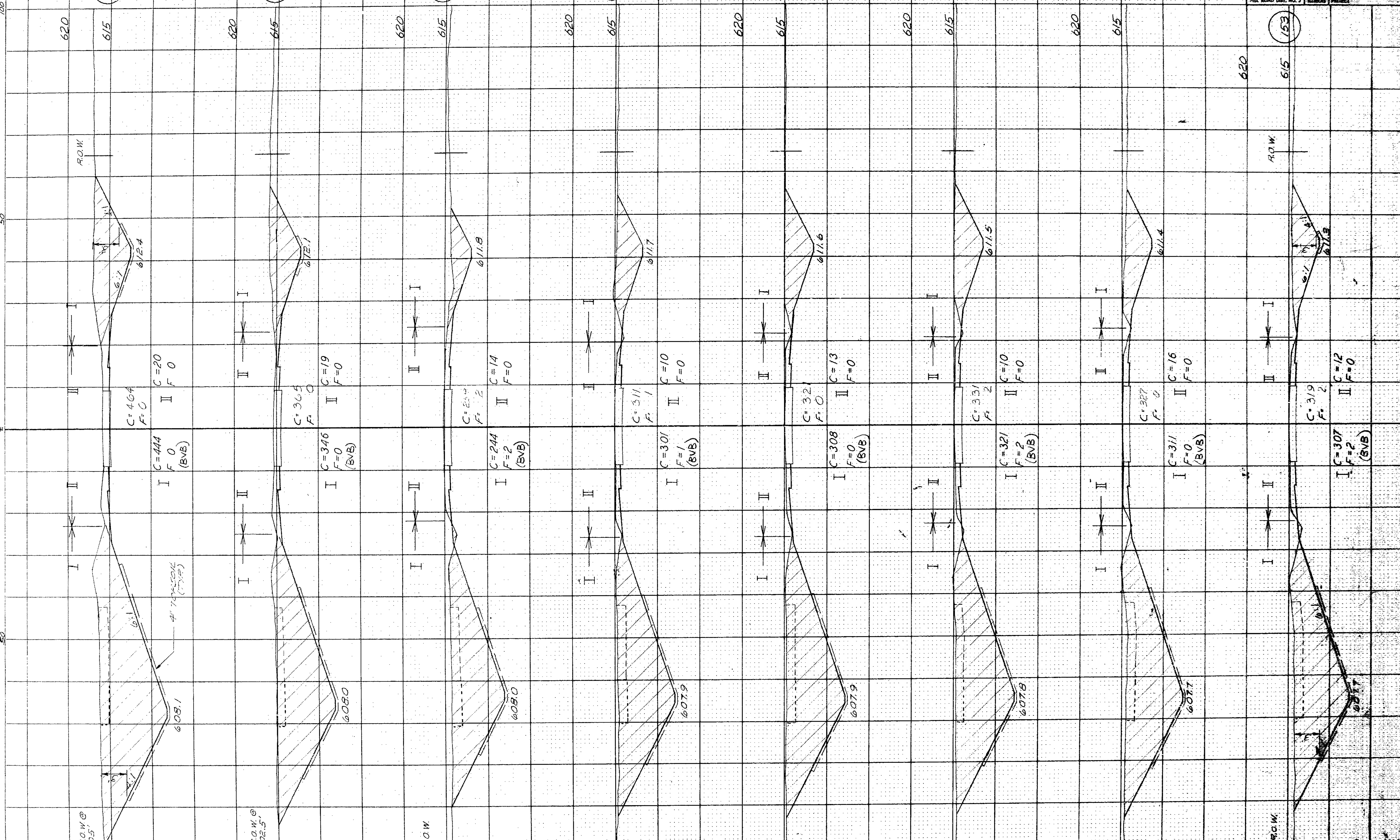
152
151
150
149
148
147
146
145
144+50
144+11.6
144
615
610
R.O.W.
C=311 F=1
C=301 F=1 (BVB)
C=10 F=0
C=356 F=1
C=342 F=1 (BVB)
C=14 F=0
C=369 F=1
C=359 F=1 (BVB)
C=10 F=0
C=332 F=2
C=321 F=2 (BVB)
C=11 F=0
C=294 F=3
C=285 F=3 (BVB)
C=9 F=0
C=288 F=5
C=281 F=5 (BVB)
C=7 F=0
C=245 F=4
C=236 F=4 (BVB)
C=9 F=0
C=220 F=4
C=216 F=4 (BVB)
C=4 F=0
611.2
611.1
611.0
610.7
610.4
610.1
609.8
609.5
607.6
607.6
607.5
607.4
607.4
607.3
607.3
607.2
4:1
6:1
4" TOPSOIL (TYP)
TOPSOIL SOURCE STA. 150 TO STA. 180
1'X28' (TYP)
STA. 145+47 P.E. RT.
ΣEAF=39
24"x24' P-1 RT. 45'
TWO END SECTIONS ROW
(STAGE I)
STA. 144+11.6 S.R. RT.
ΣEAF=66
24"x40' P-1 RT. 45'
TWO END SECTIONS (STAGE I)
STA. 144+11.6 S.R. LT.
ΣEAF=144
48"x38' P-1 LT. 58'
TWO END SECTIONS (STAGE I)
ORIGINAL SURVEY
PHOTOGRAMMETRY 4-70
R.M.R.
6-74
FINAL SURVEY

ST 2

ROUTE NO.	SECTION	COUNTY		
FA 24	(37,101) BVB	LIVINGSTON	67	56

STA. TO STA.

FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT



FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY
MVR

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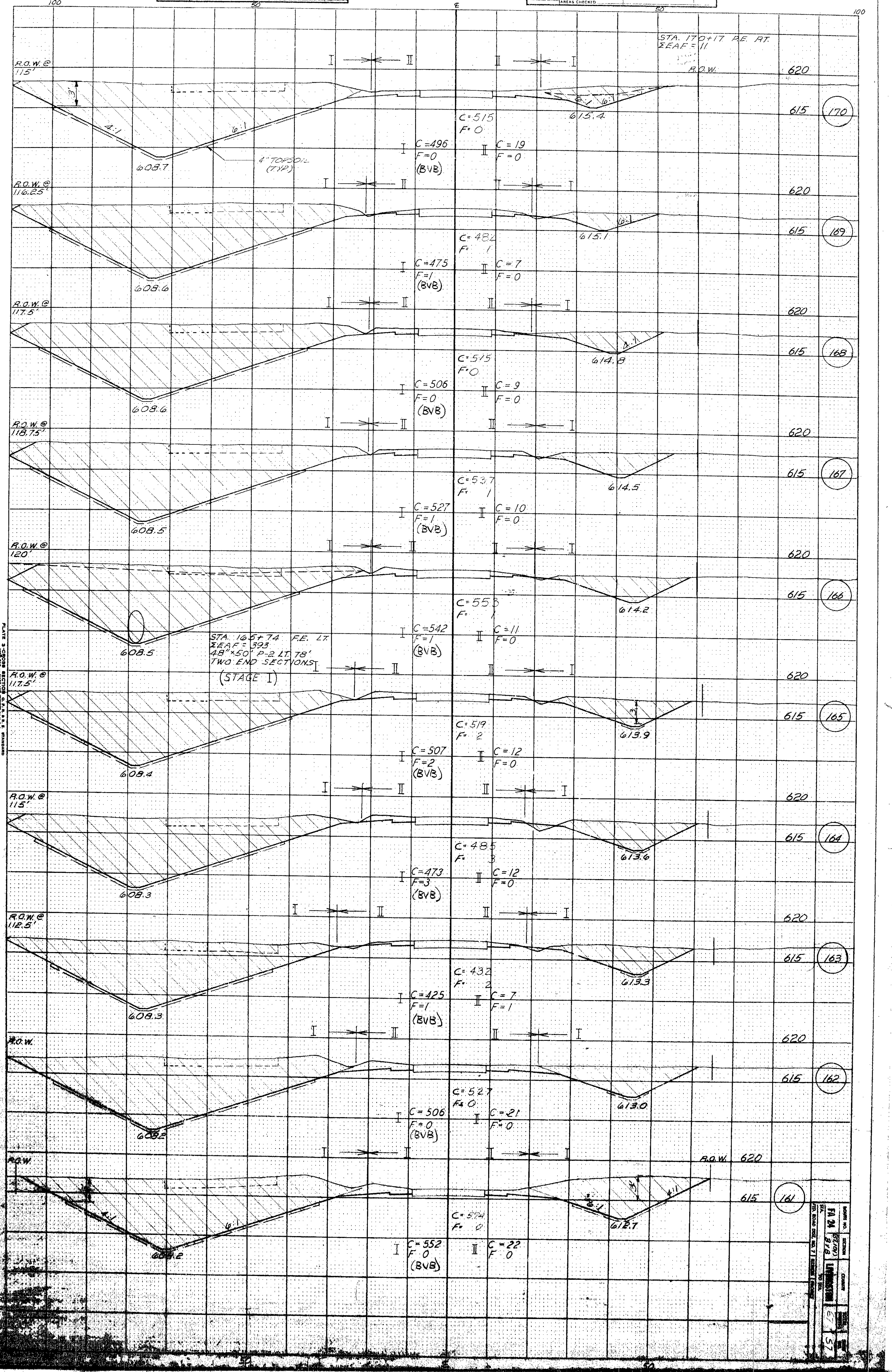
STL

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED	PHOTOGRAMMETRY	4-70
NO.	PLOTTED	MVR ✓PAG	11-71
	TEMPLATE		
	AREAS		
	AREAS CHECKED	R.M.R.	6-74

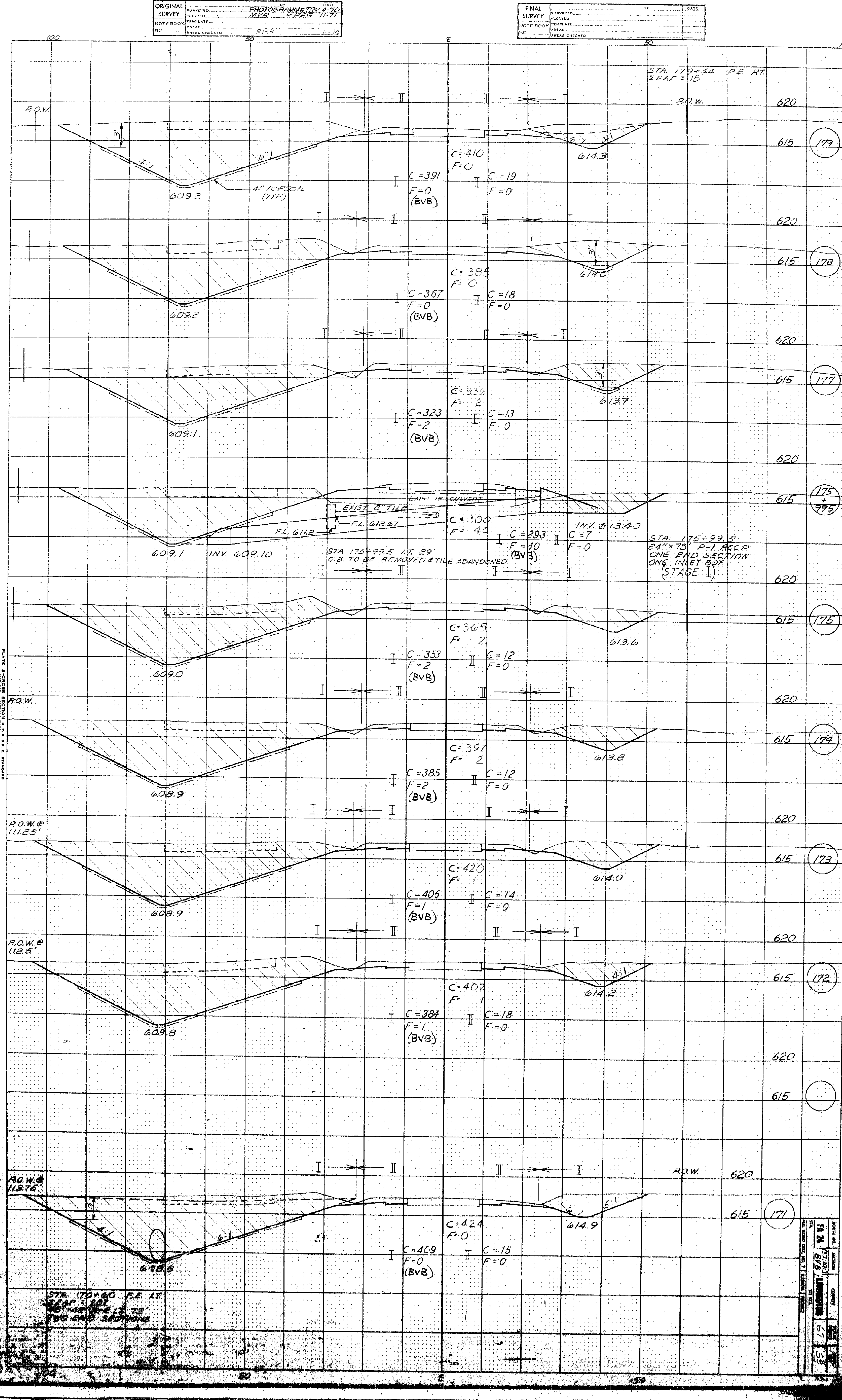
FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STA. 170+17 P.E. RT.
ΣEAF = 11
R.O.W.
R.O.W. @ 115'
4" TOPSOIL (TYP)
608.7
615.4
C=515 F=0
C=496 F=0 (BVB)
C=19 F=0
170
R.O.W. @ 116.25'
608.6
615.1
C=482 F=1
C=475 F=1 (BVB)
C=7 F=0
169
R.O.W. @ 117.5'
608.6
614.8
C=515 F=0
C=506 F=0 (BVB)
C=9 F=0
168
R.O.W. @ 118.75'
608.5
614.5
C=537 F=1
C=527 F=1 (BVB)
C=10 F=0
167
R.O.W. @ 120'
608.5
614.2
C=553 F=1
C=542 F=1 (BVB)
C=11 F=0
STA. 165+74 F.E. LT.
ΣEAF = 393
48"×50" P-2 LT. 78'
TWO END SECTIONS
(STAGE I)
166
R.O.W. @ 117.5'
608.4
613.9
C=519 F=2
C=507 F=2 (BVB)
C=12 F=0
165
R.O.W. @ 115'
608.3
613.6
C=485 F=3
C=473 F=3 (BVB)
C=12 F=0
164
R.O.W. @ 112.5'
608.3
613.3
C=432 F=2
C=425 F=1 (BVB)
C=7 F=1
163
R.O.W.
608.2
613.0
C=527 F=0
C=506 F=0 (BVB)
C=21 F=0
162
R.O.W.
R.O.W. 620
608.2
612.7
C=574 F=0
C=552 F=0 (BVB)
C=22 F=0
161
620
615
4:1
6:1
100
50
℄
ROUTE NO. FA 24
SECTION (BL101) BVB
COUNTY LIVINGSTON
67
57
FED. ROAD DIST. NO. 7

PLATE 3-CROSS SECTION O.P.R. & R.E. STANDARD
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

572


ORIGINAL SURVEY
SURVEYED PHOTOGRAMMETRY 4-70
PLOTTED MYR PAG 11-71
NOTE BOOK NO.
TEMPLATE
AREAS
AREAS CHECKED RMB 6-79
FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK NO.
TEMPLATE
AREAS
AREAS CHECKED
BY DATE
STA. 179+44 P.E. RT.
ΣEAF = 15
R.O.W.
620
615
179
614.3
609.2
4" TOPSOIL (TYP.)
6:1
4:1
C = 410
F = 0
C = 391
F = 0
(BVB)
C = 19
F = 0
178
614.0
C = 385
F = 0
C = 367
F = 0
(BVB)
C = 18
F = 0
177
613.7
609.1
C = 336
F = 2
C = 323
F = 2
(BVB)
C = 13
F = 0
175 + 99.5
EXIST. 18" CULVERT
EXIST. 8" TILE
F.L. 612.67
F.L. 611.2
INV. 609.10
INV. 613.40
C = 300
F = 40
C = 293
F = 40
(BVB)
C = 7
F = 0
STA. 175+99.5 LT. 29'
C.B. TO BE REMOVED & TILE ABANDONED
STA. 175+99.5
24"x78' P-1 RCCP
ONE END SECTION
ONE INLET BOX
(STAGE I)
175
613.6
609.0
C = 365
F = 2
C = 353
F = 2
(BVB)
C = 12
F = 0
174
613.8
608.9
C = 397
F = 2
C = 385
F = 2
(BVB)
C = 12
F = 0
R.O.W. @ 111.25'
173
614.0
C = 420
F = 1
C = 406
F = 1
(BVB)
C = 14
F = 0
R.O.W. @ 112.5'
172
614.2
608.8
C = 402
F = 1
C = 384
F = 1
(BVB)
C = 18
F = 0
R.O.W. @ 113.75'
171
614.9
5:1
C = 424
F = 0
C = 409
F = 0
(BVB)
C = 15
F = 0
STA. 170+60 P.E. LT.
ΣEAF = 287
TWO END SECTIONS
100
50
℄
PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
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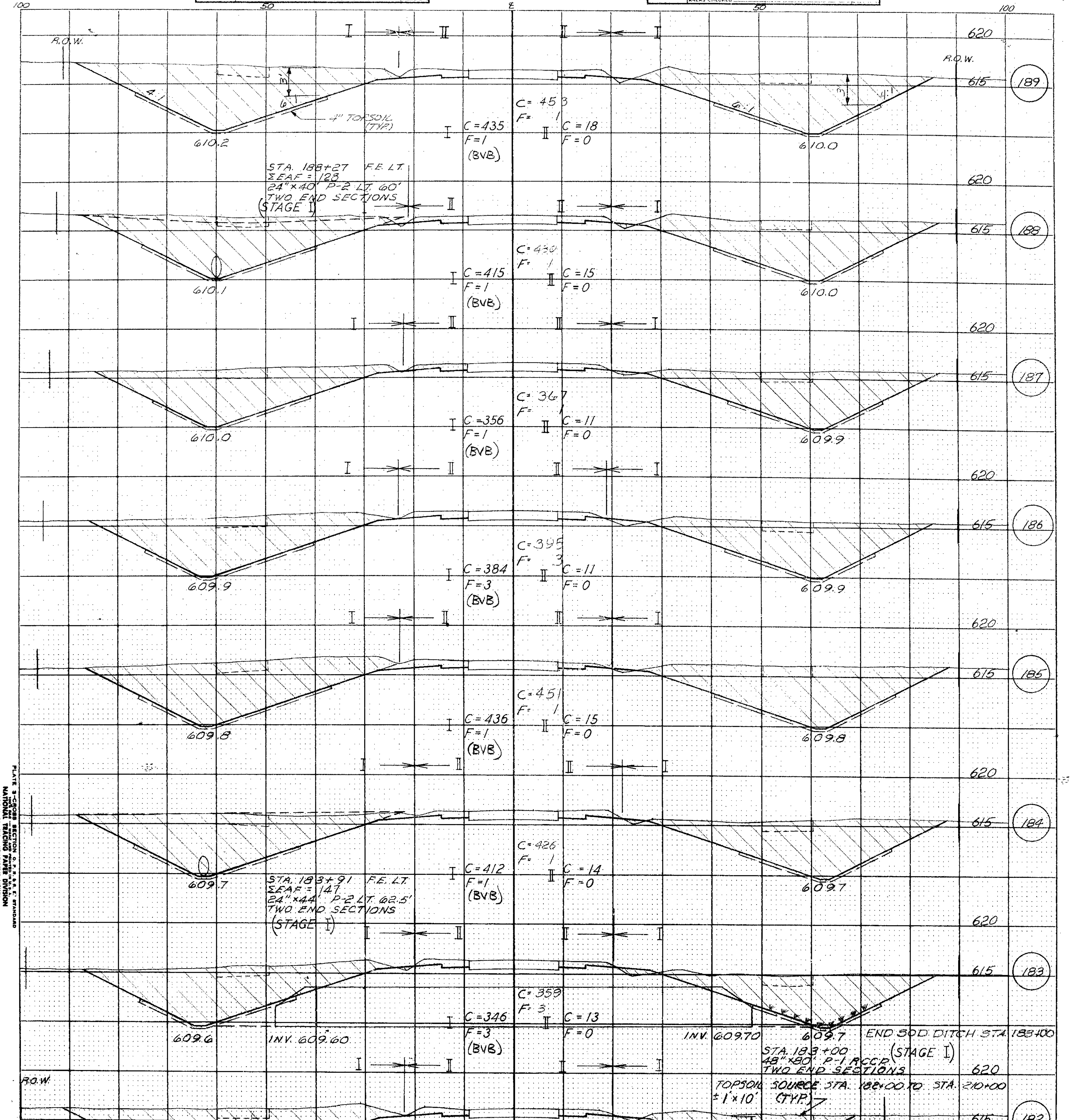
INDIANAPOLIS, INDIANA
ROUTE NO. FA 24
SECTION 57.101 BVB
COUNTY LIVINGSTON
67
58
FED. ROAD DIST. NO. 7 ILLINOIS
TO STA.
STA.
PROJECT

ORIGINAL SURVEY		BY	DATE
	SURVEYED	PHOTOGRAMMETRY	A-70
	PLOTTED	M.V.R.	11-71
NOTE BOOK	TEMPLATE	PAG	
NO.	AREAS		
	AREAS CHECKED	RMR	6-74

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



189
C = 435 F = 1 (BVB)
C = 453 F = 1
C = 18 F = 0
610.2
610.0
4" TOPSOIL (TYP.)
STA. 188+27 F.E. LT.
ΣEAF = 128
24"×40' P-2 LT. 60'
TWO END SECTIONS
(STAGE I)
188
C = 415 F = 1 (BVB)
C = 430 F = 1
C = 15 F = 0
610.1
610.0
187
C = 356 F = 1 (BVB)
C = 367 F = 1
C = 11 F = 0
610.0
609.9
186
C = 384 F = 3 (BVB)
C = 395 F = 3
C = 11 F = 0
609.9
609.9
185
C = 436 F = 1 (BVB)
C = 451 F = 1
C = 15 F = 0
609.8
609.8
184
C = 412 F = 1 (BVB)
C = 426 F = 1
C = 14 F = 0
609.7
609.7
STA. 183+91 F.E. LT.
ΣEAF = 147
24"×44' P-2 LT. 62.5'
TWO END SECTIONS
(STAGE I)
183
C = 346 F = 3 (BVB)
C = 359 F = 3
C = 13 F = 0
609.6
INV. 609.60
INV. 609.70
609.7
END SOD DITCH STA. 183+00
STA. 183+00
48"×80' P-1 RCCP
TWO END SECTIONS
(STAGE I)
TOPSOIL SOURCE STA. 182+00 TO STA. 210+00
±1'×10' (TYP.)
182
C = 348 F = 1 (BVB)
C = 361 F = 1
C = 13 F = 0
609.5
611.6
BEGIN TOPSOIL SOURCE STA. 182+00
181
R.O.W. @ 101.25'
C = 322 F = 0 (BVB)
C = 334 F = 0
C = 12 F = 0
609.4
613.6
BEGIN SOD DITCH STA. 181+00
TOPSOIL SOURCE STA. 180+00 TO STA. 210+00
1'×10.6
180
R.O.W. @ 102.5'
C = 334 F = 0 (BVB)
C = 349 F = 0
C = 15 F = 0
614.2
R.O.W.
620
615
100
50
℄
ROUTE NO. FA 24
SECTION (37,101) BY B
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 59
STA. TO STA.
ILL. ROAD DIST. NO. 7 ILLINOIS PROJECT

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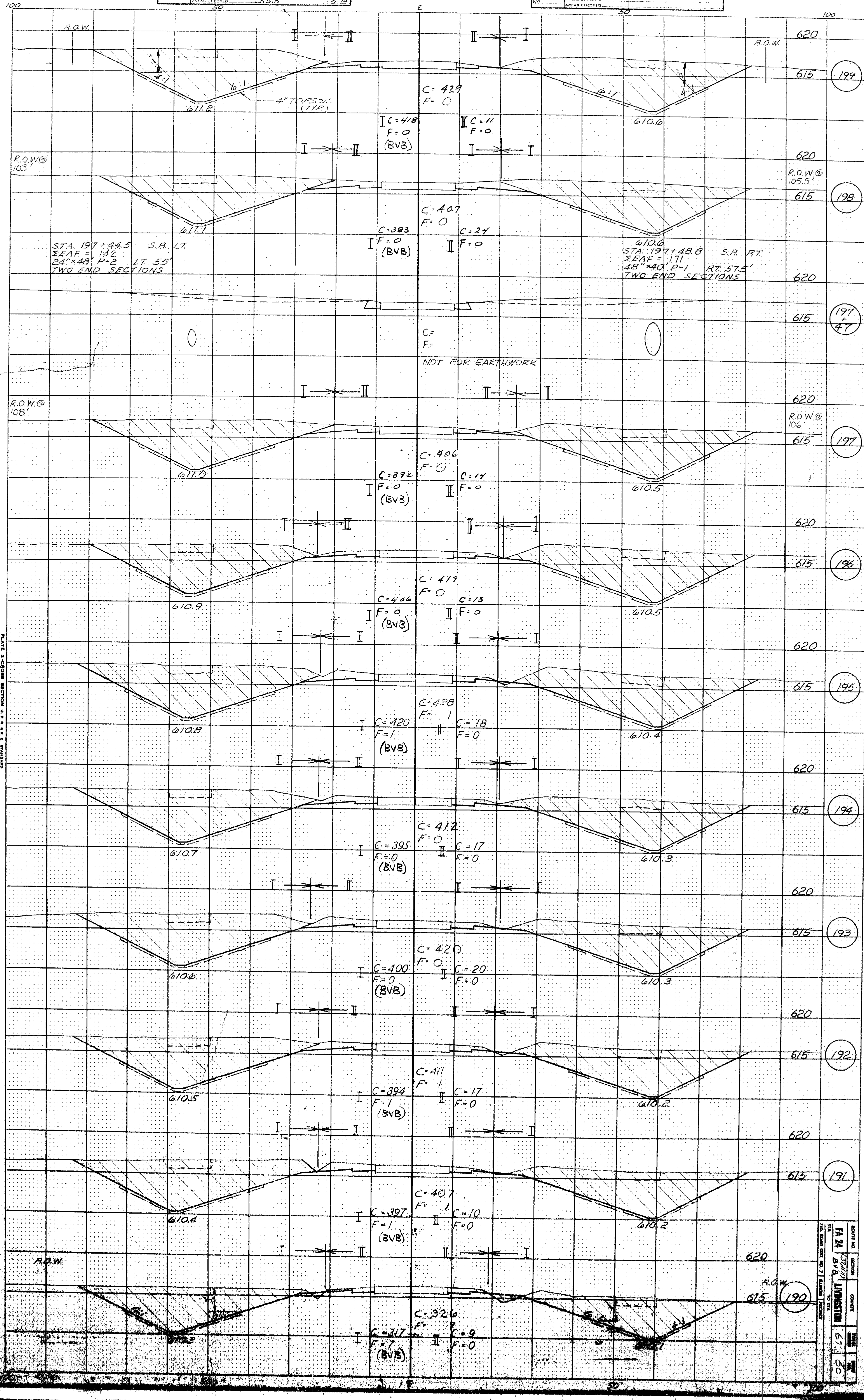
I.B.P. CO., INC. INDIANAPOLIS, INDIANA

ORIGINAL SURVEY		BY	DATE
	SURVEYED	PHOTOGRAMMETRY	4-79
	PLOTTED	MVR "PAG"	11-79
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED	RMR	6-74

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


100
50
℄
50
100
R.O.W.
620
615
199
4:1
6:1
611.2
610.6
4" TOPSOIL (TYP.)
C = 429 F = 0
C = 418 F = 0 (BVB)
C = 11 F = 0
R.O.W.@ 103'
R.O.W.@ 105.5'
198
611.1
610.6
C = 407 F = 0
C = 383 F = 0 (BVB)
C = 24 F = 0
STA. 197+44.5 S.R. LT.
ΣAF = 142
24"x48" P-2 LT. 55'
TWO END SECTIONS
STA. 197+48.8 S.R. RT.
ΣAF = 171
48"x40" P-1 RT. 57.5'
TWO END SECTIONS
197 + 47
C=
F=
NOT FOR EARTHWORK
R.O.W.@ 108'
R.O.W.@ 106'
197
611.0
610.5
C = 406 F = 0
C = 392 F = 0 (BVB)
C = 14 F = 0
196
610.9
610.5
C = 419 F = 0
C = 406 F = 0 (BVB)
C = 13 F = 0
195
610.8
610.4
C = 438 F = 1
C = 420 F = 1 (BVB)
C = 18 F = 0
194
610.7
610.3
C = 412 F = 0
C = 395 F = 0 (BVB)
C = 17 F = 0
193
610.6
610.3
C = 420 F = 0
C = 400 F = 0 (BVB)
C = 20 F = 0
192
610.5
610.2
C = 411 F = 1
C = 394 F = 1 (BVB)
C = 17 F = 0
191
610.4
610.2
C = 407 F = 1
C = 397 F = 1 (BVB)
C = 10 F = 0
190
C = 326 F = 7
C = 317 F = 7 (BVB)
C = 9 F = 0
ROUTE NO. FA 24
SECTION (37,101) BVB
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 5C
STA. TO STA.
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT

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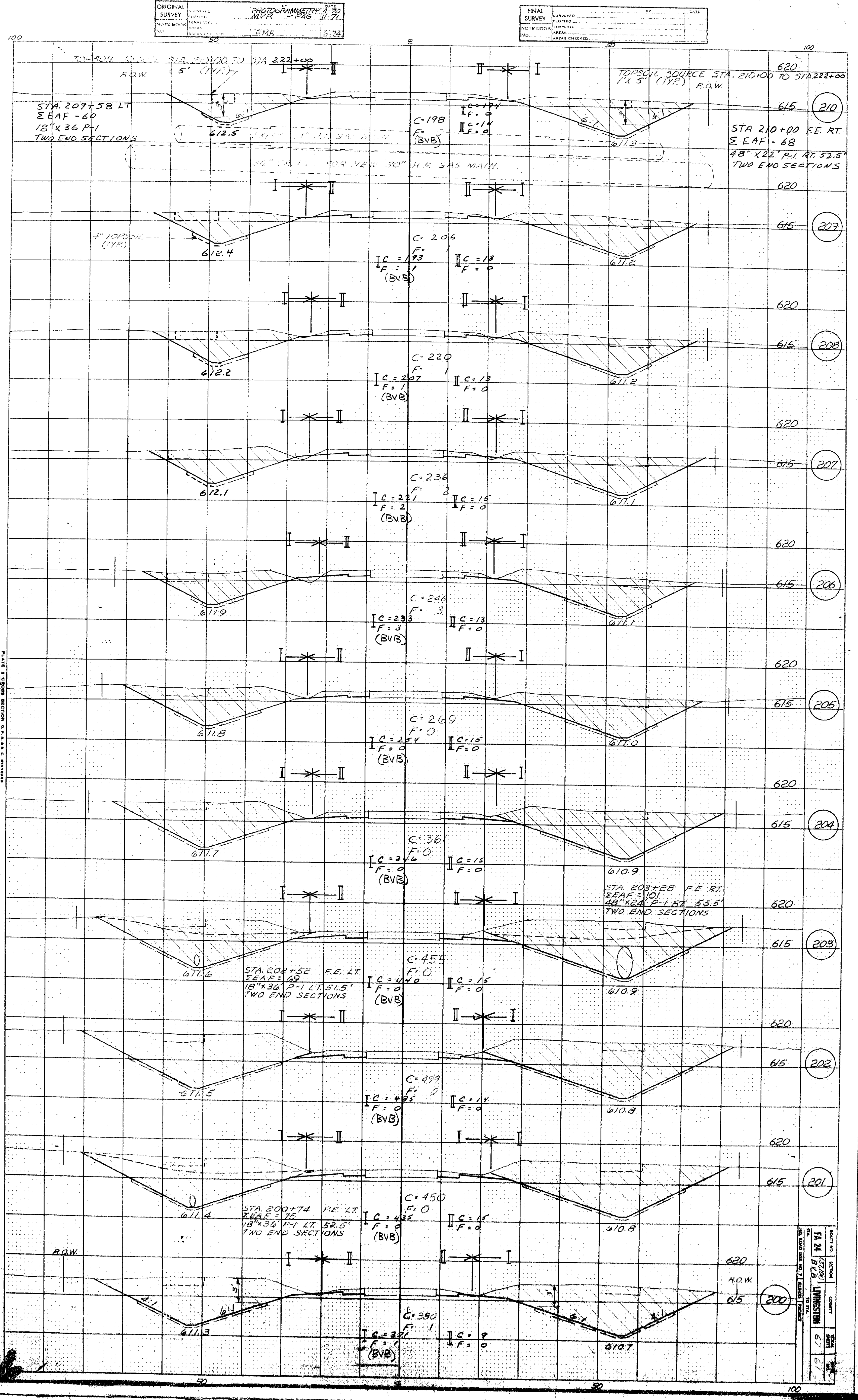
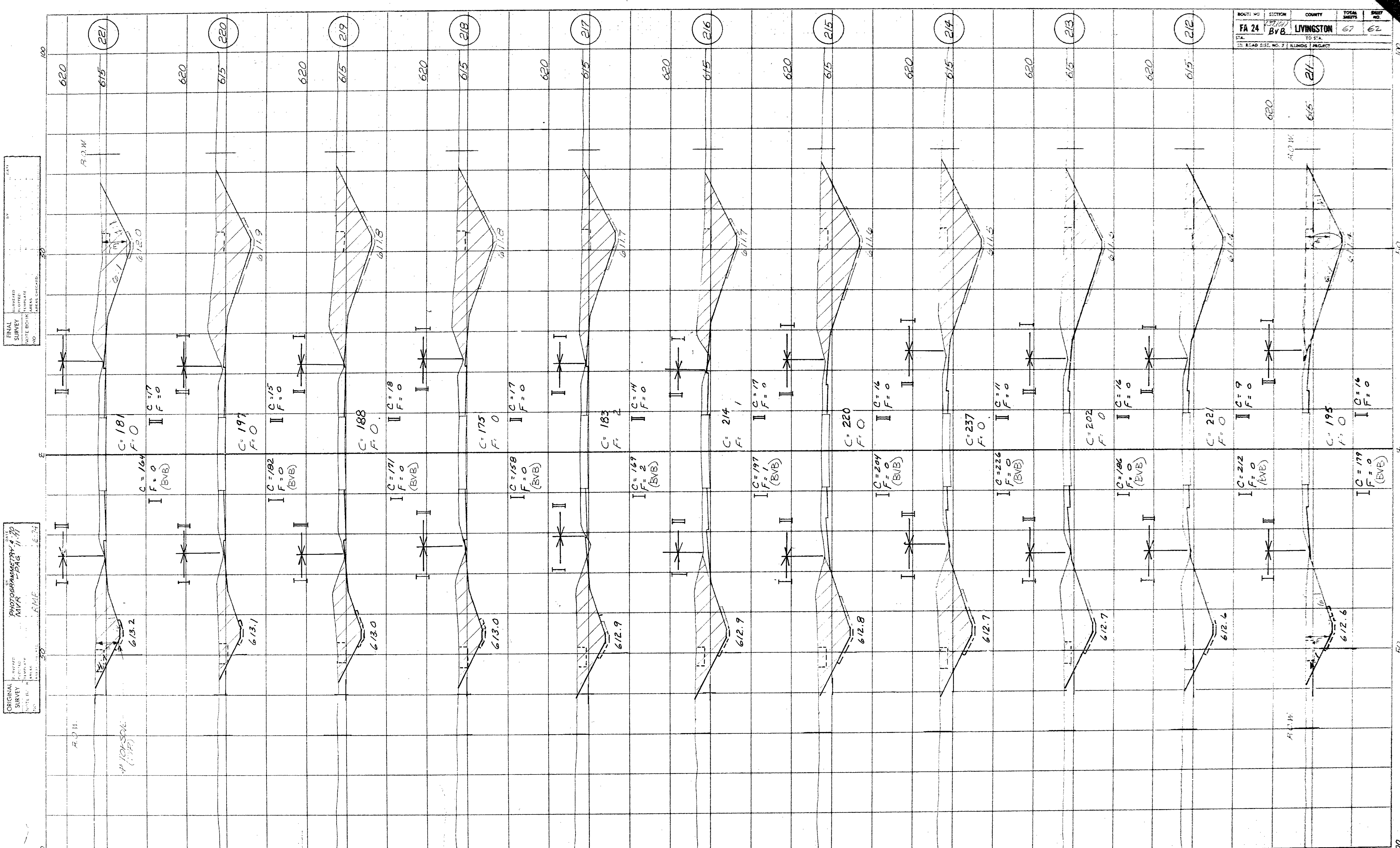

ORIGINAL SURVEY
PHOTOGRAMMETRY 4-70
MVR PAG 11-71
RMR 6-74
FINAL SURVEY
TOPSOIL SOURCE STA. 210+00 TO STA. 222+00
1'x 5' (TYP.)
R.O.W.
STA. 209+58 LT.
Σ EAF = 60
18" x 36 P-1
TWO END SECTIONS
STA 210+00 F.E. RT.
Σ EAF = 68
48" X 22" P-1 RT. 52.5'
TWO END SECTIONS
4" TOPSOIL (TYP.)
STA. 203+28 F.E. RT.
ΣEAF = 101
48" x 24" P-1 RT. 55.5'
TWO END SECTIONS
STA. 202+52 F.E. LT.
ΣEAF = 69
18" x 36 P-1 LT. 51.5'
TWO END SECTIONS
STA. 200+74 P.E. LT.
ΣEAF = 75
18" x 36 P-1 LT. 52.5'
TWO END SECTIONS
210
209
208
207
206
205
204
203
202
201
200
FA 24
(37,101) BVB
LIVINGSTON
67
61
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION



FA 24
BVB
LIVINGSTON
67
62
I.D. ROAD DIST. NO. 3
ILLINOIS
FINAL SURVEY
ORIGINAL SURVEY
PHOTOGRAMMETRY 4-70
MVR
221
220
219
218
217
216
215
214
213
212
211
620
615
R.O.W.
C 181 F 0
C 197 F 0
C 188 F 0
C 175 F 0
C 183 F 2
C 214 F 1
C 220 F 0
C 237 F 0
C 202 F 0
C 221 F 0
C 195 F 0
C = 164 F = 0 (BVB)
C = 182 F = 0 (BVB)
C = 171 F = 0 (BVB)
C = 158 F = 0 (BVB)
C = 169 F = 2 (BVB)
C = 197 F = 1 (BVB)
C = 204 F = 0 (BVB)
C = 226 F = 0 (BVB)
C = 186 F = 0 (BVB)
C = 212 F = 0 (BVB)
C = 179 F = 0 (BVB)
612.0
611.9
611.8
611.7
611.6
611.5
611.4
613.2
613.1
613.0
612.9
612.8
612.7
612.6

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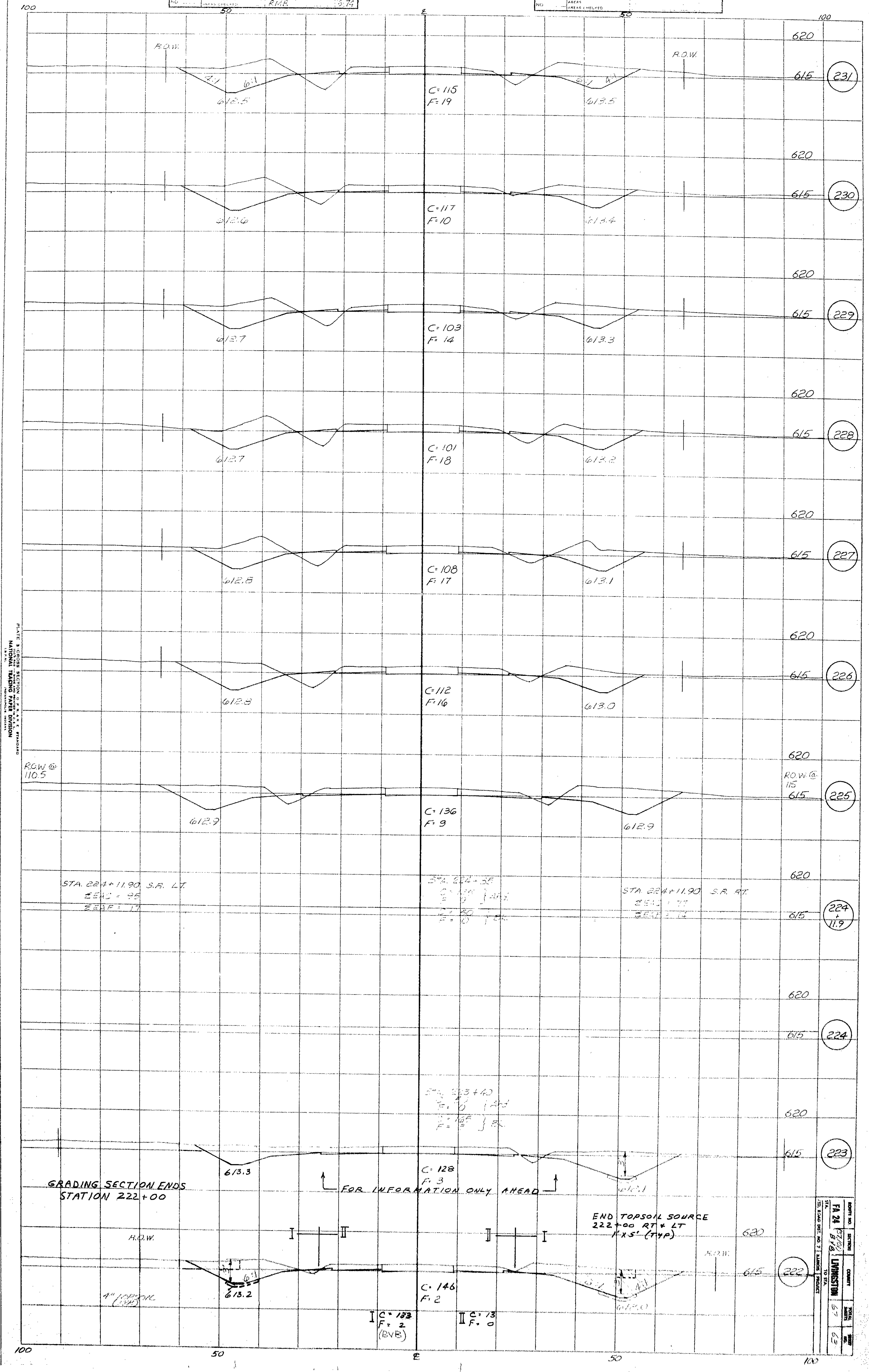
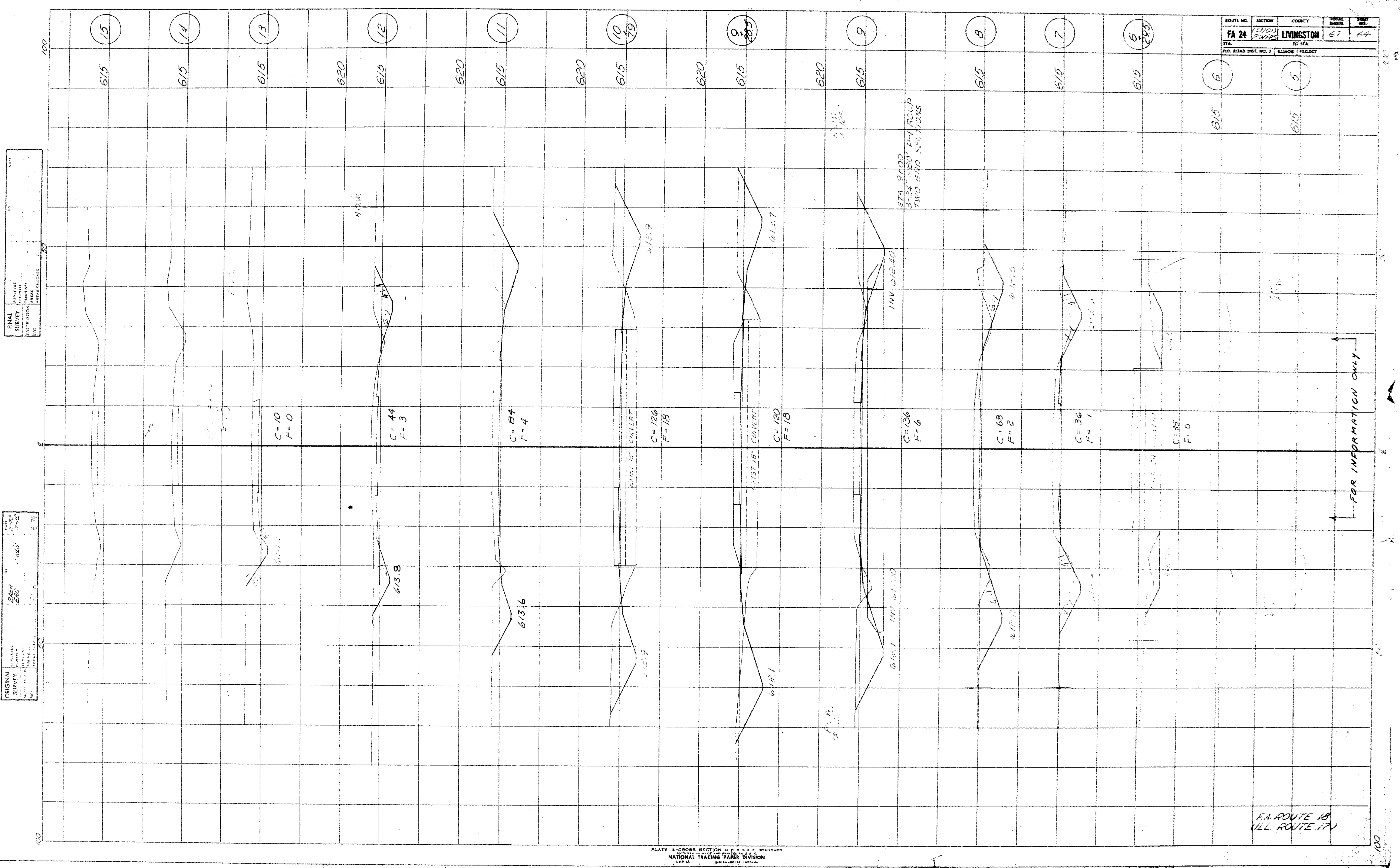

ORIGINAL SURVEY
PHOTOGRAMMETRY 4-70
MVR — PAG 11-71
RMB 3-74
FINAL SURVEY
R.O.W.
231
C=115
F=19
612.5
613.5
230
C=117
F=10
612.6
613.4
229
C=103
F=14
612.7
613.3
228
C=101
F=18
612.7
613.2
227
C=108
F=17
612.8
613.1
226
C=112
F=16
612.8
613.0
225
R.O.W. @ 110.5
R.O.W. @ 115
C=136
F=9
612.9
612.9
224+11.9
STA. 224+11.90 S.R. LT.
STA. 224+11.90 S.R. RT.
224
223
C=128
F=3
613.3
FOR INFORMATION ONLY AHEAD
GRADING SECTION ENDS
STATION 222+00
END TOPSOIL SOURCE
222+00 RT & LT
1'x5' (TYP)
222
C=146
F=2
613.2
4" TOPSOIL (TYP)
I C=133 F=2 (BVB)
II C=13 F=0
620
615
100
50
℄
PLATE 3 CROSS SECTION
NATIONAL TRACING PAPER DIVISION
ROUTE NO. FA 24
SECTION (37,10) B&B
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 63
ILLINOIS PROJECT


ROUTE NO. FA 24
SECTION
COUNTY LIVINGSTON
TOTAL SHEETS 67
SHEET NO. 64
STA. TO STA.
FED. ROAD DIST. NO. 3 ILLINOIS PROJECT
FINAL SURVEY
ORIGINAL SURVEY
15 14 13 12 11 10+79 9+205 9 8 7 6+595 6 5
615 620
C = 10 F = 0
C = 44 F = 3
C = 84 F = 4
C = 126 F = 18
C = 120 F = 18
C = 136 F = 6
C = 68 F = 2
C = 36 F = 1
C = 35 F = 0
EXIST 15" CULVERT
EXIST 18" CULVERT
STA. 9+00
TWO END SECTIONS
INV. 618.40
INV. 617.10
R.O.W.
613.8
613.6
FOR INFORMATION ONLY
F.A. ROUTE 18
(ILL. ROUTE 17)
PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 24	[illegible]	LIVINGSTON	67	65

STA. TO STA.

FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT

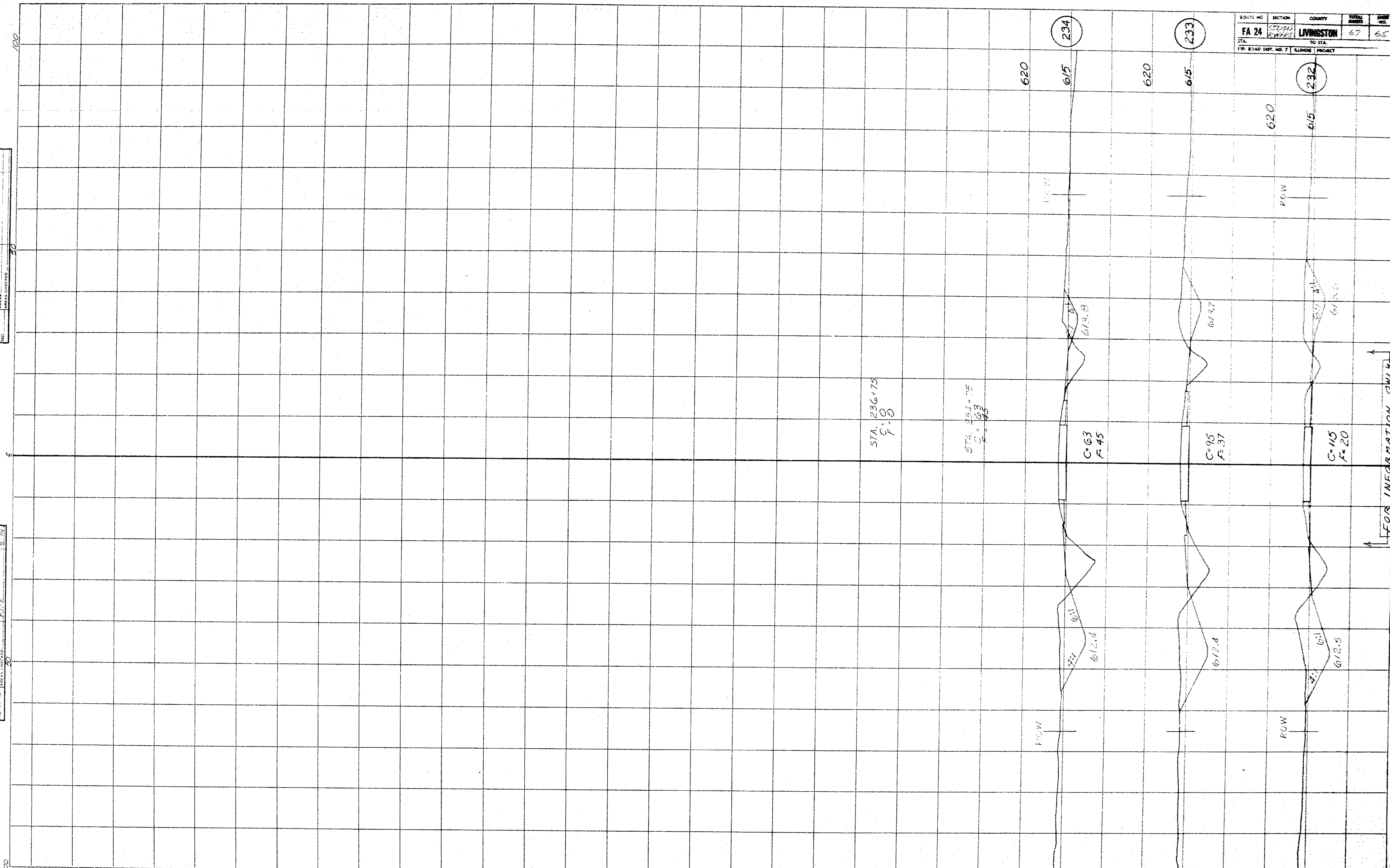
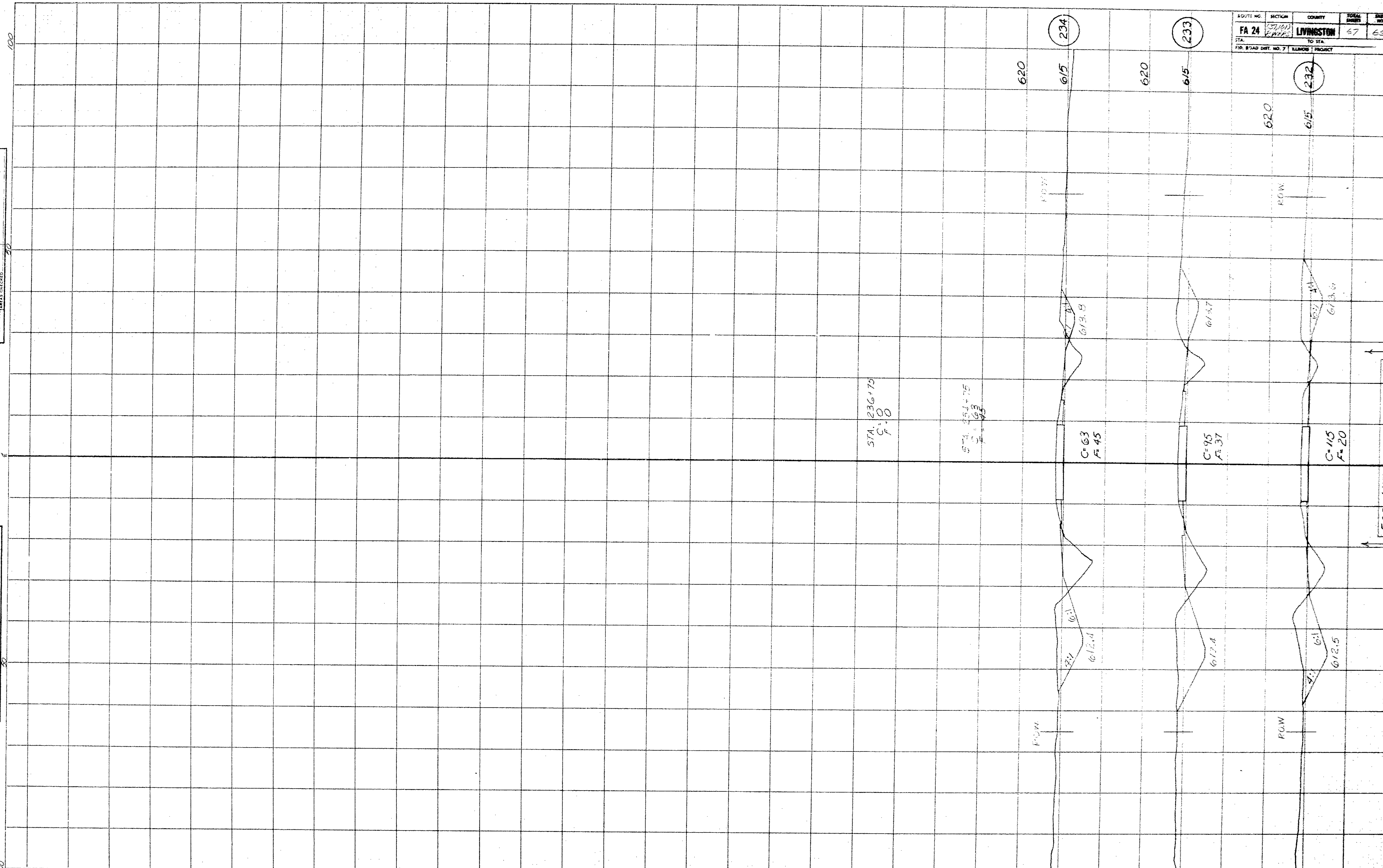


PLATE 3-CROSS SECTION
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 24	(STURN) EWERS	LIVINGSTON	67	65

STA. TO STA.

FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT



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

ORIGINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / TEMPLATE / NO. / AREAS / AREAS CHECKED — BY: PHOTOGRAMMETRY, MVR, JPAG — DATE: 6-70, 11-71

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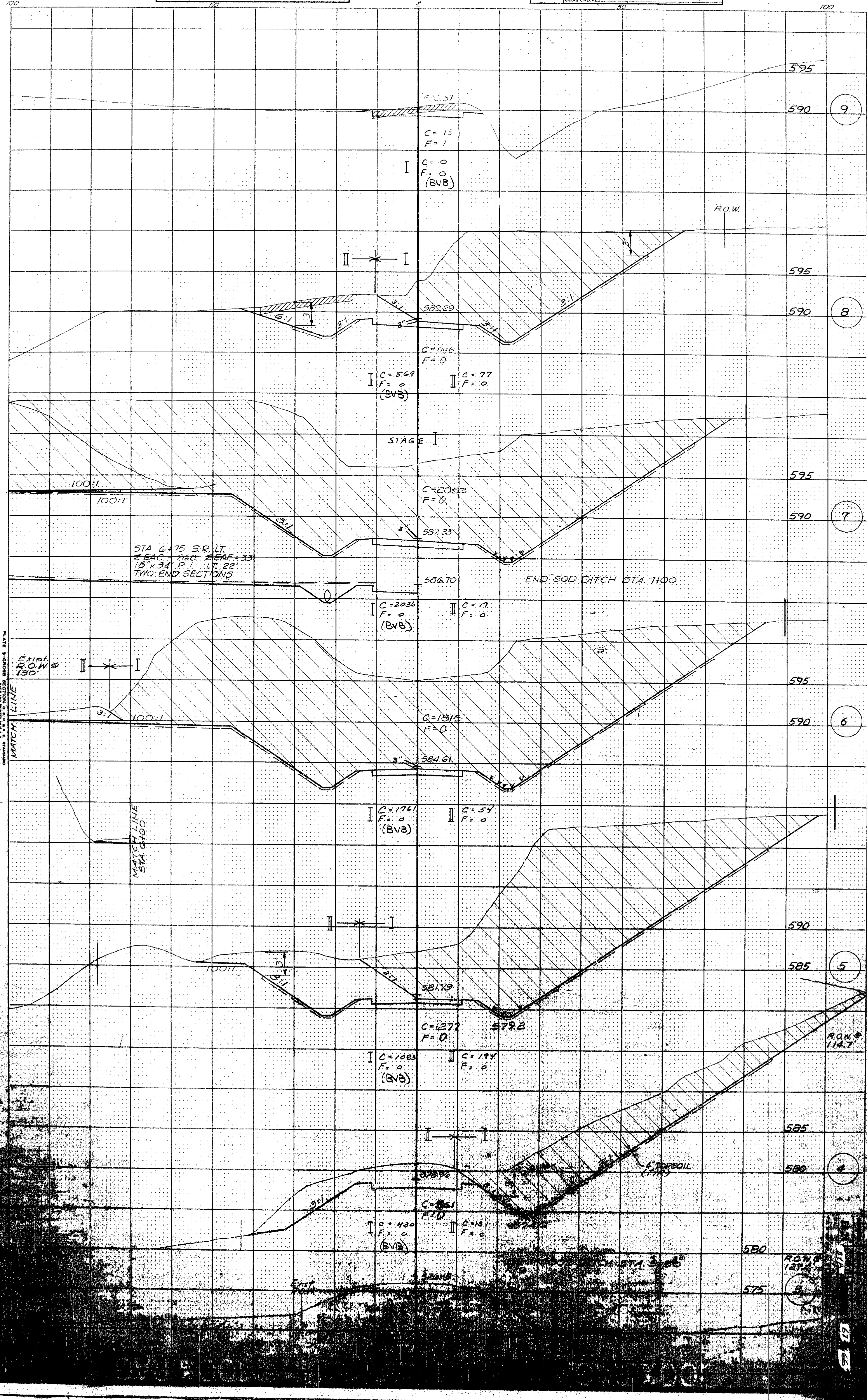
INDIANAPOLIS, INDIANA

ORIGINAL SURVEY		BY	DATE
	SURVEYED	PHOTOGRAMMETRY	4-70
NOTE BOOK	PLOTTED	MVB / ROW	4-72
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED	RMP	6-74

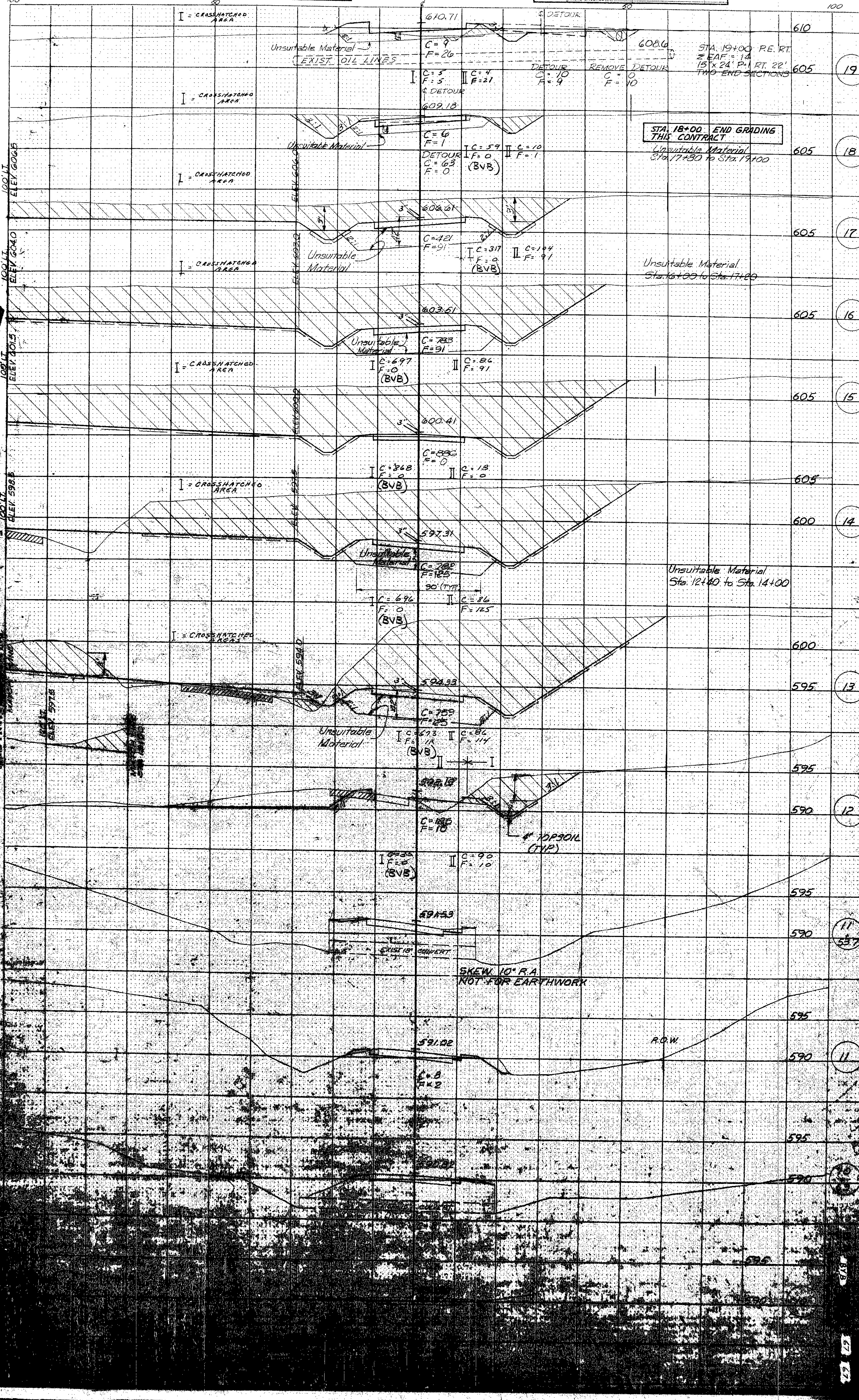
FINAL SURVEY		BY	DATE
	SURVEYED		
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		



100
50
50
100
595
590
9
590.37
C= 13
F= 1
C= 0
F= 0
(BVB)
R.O.W.
595
590
8
6:1
3:1
3:1
3:1
3:1
589.29
3"
C= 646
F= 0
C= 569
F= 0
(BVB)
C= 77
F= 0
STAGE I
100:1
100:1
595
590
7
C=2063
F=0
3:1
3"
587.83
STA. 6+75 S.R. LT.
Z EAC - 260 Z EAF - 33
18"x34" P.I. LT. 22'
TWO END SECTIONS
586.70
END SOD DITCH STA. 7+00
C= 2036
F= 0
(BVB)
C= 17
F= 0
Exist. R.O.W. @ 130'
MATCH LINE
3:1
100:1
595
590
6
C=1815
F=0
3"
584.61
C= 1761
F= 0
(BVB)
C= 54
F= 0
MATCH LINE STA. 6+00
590
585
5
100:1
3:1
3:1
581.19
579.8
C=1277
F=0
R.O.W. @ 114.7'
C= 1083
F= 0
(BVB)
C= 194
F= 0
585
580
4
4" TOPSOIL (P.T.)
578.96
3:1
C= 561
F= 0
C= 430
F= 0
(BVB)
C= 131
F= 0
580
575
R.O.W. @ 127.4'
PLATE 3-CROSS SECTION O.P.R.&R.E. STANDARD
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

ORIGINAL SURVEY		BY	DATE
	SURVEYED	PHOTOGRAMMETRY	4-70
	PLOTTED	MVR	9-72
NOTE BOOK	TEMPLATE	CROW	
	AREAS		
NO.	AREAS CHECKED	EMR	6-74

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



I = CROSSHATCHED AREA
610.71
¢ DETOUR
Unsuitable Material
EXIST. OIL LINES
C = 9
F = 26
608.6
STA. 19+00 P.E. RT.
Z EAF = 14
15" x 24' P. RT. 22'
TWO END SECTIONS
C = 5
F = 5
C = 4
F = 21
DETOUR
C = 10
F = 9
REMOVE DETOUR
C = 0
F = 10
¢ DETOUR
609.18
C = 6
F = 1
STA. 18+00 END GRADING
THIS CONTRACT
Unsuitable Material
Sta. 17+80 to Sta. 19+00
DETOUR
C = 63
F = 0
C = 59
F = 0
(BVB)
C = 10
F = 1
100' LT. ELEV. 606.5
606.61
C = 421
F = 91
C = 317
F = 0
(BVB)
C = 104
F = 91
Unsuitable Material
Unsuitable Material
Sta. 16+00 to Sta. 17+80
100' LT. ELEV. 604.0
603.61
C = 783
F = 91
C = 697
F = 0
(BVB)
C = 86
F = 91
100' LT. ELEV. 601.5
600.41
C = 886
F = 0
C = 868
F = 0
(BVB)
C = 18
F = 0
100' LT. ELEV. 598.5
597.31
C = 780
F = 125
30' (TYP.)
Unsuitable Material
Sta. 12+80 to Sta. 14+00
C = 696
F = 0
(BVB)
C = 86
F = 125
I = CROSSHATCHED AREAS
ELEV. 594.0
594.33
C = 759
F = 125
Unsuitable Material
C = 673
F = 11
(BVB)
C = 86
F = 114
4" TOPSOIL (TYP.)
C = 90
F = 10
EXIST. 18" CULVERT
SKEW 10° R.A.
NOT FOR EARTHWORK
591.02
R.O.W.
C = 8
F = 2
610
605
600
595
590
19
18
17
16
15
14
13
12
11
537
11