

STATE OF ILLINOIS

DEPARTMENT OF PUBLIC WORKS AND BUILDINGS

DIVISION OF HIGHWAYS

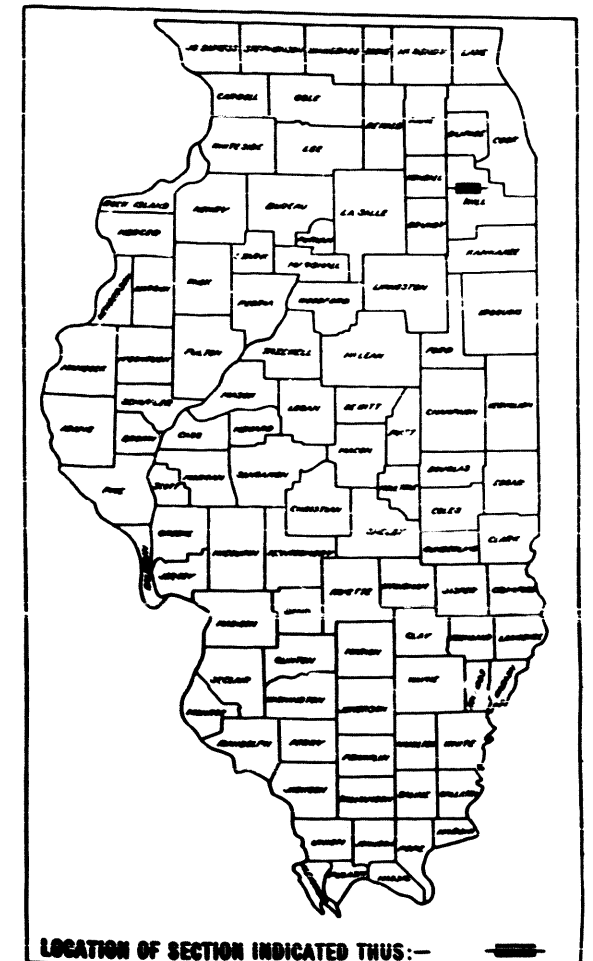
PLANS FOR PROPOSED

FEDERAL AID INTERSTATE HIGHWAY

SCALES { PLAN 1 INCH = 50 FT.
PROFILE HOR. 1 INCH = 50 FT.
PROFILE VERT. 1 INCH = 5 FT.
CROSS-SECTIONS 1 INCH = 10 FT.

FAI. ROUTE 80 SECTION 99-4VB
PROJECT I- IG -80-4(35)134
WILL COUNTY

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
5A-80	99-4VB	WILL	34	7
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT	235	60-405134



LOCATION OF SECTION INDICATED THUS:—

PLANS AND STRUCTURES EXAMINED OCT 26 61

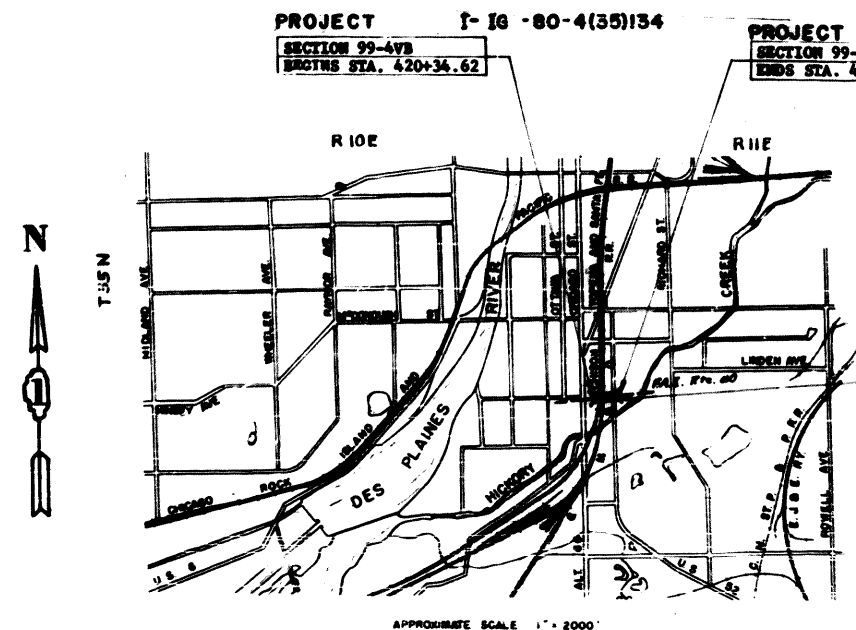
W.E. Bauman
CHIEF ENGINEER

Revised Sheet 6/11/64
MAY 6-2-64

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS	
SUBMITTED	July 31, 1961
EXAMINED	April 27, 1964
PASSED	April 27, 1964
APPROVED	April 27, 1964
REVISIONS	April 27, 1964

99-4VB

- 1 TITLE SHEET
- 2 TYPICAL SECTION
- 3 SUMMARY OF QUANTITIES SECTION 99-4VB
- 34 TOTAL SUMMARY OF QUANTITIES FOR SECTION 99-4VB & 99-4B-1
- 4 SCHEDULES OF QUANTITIES
- 5-8 PLANS AND PROFILES
- 9-11 EXISTING TOPOGRAPHY AND REMOVAL QUANTITIES
- 12-14 EXISTING UTILITIES
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- 35 STANDARDS 1686-E AND 2153-4
- 36 STANDARDS 1971-3, 2113 AND 2114
- 37 STANDARDS 1517 AND 1683-1
- 38 STANDARD 2051



APPROXIMATE SCALE 1" = 2000'

PROJECT I- IG -80-4(35)134
SECTION 99-4VB includes:
TWIN 7-SPAN STEEL WP BRIDGE
SPANS 34'-6", 96'-0", 53'-1", 52'-7 7/8",
67'-7", 80'-6", 67'-0" AT STATION 424+01.36
AND THE CONSTRUCTION OF THE APPROACH BERM

SET 2 of 2 SETS

PROJECT LENGTH 480.24 Ft. = 0.091 Miles

PLANS PREPARED AND RECOMMENDED BY
BLAUVELT ENGINEERING COMPANY
CONSULTING ENGINEERS
CRYSTAL LAKE, ILL. - NEW YORK, N.Y. - WOODBURY, N.J.

DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED	
DIVISION ENGINEER	DATE

[illegible]

GENERAL NOTES

WHENEVER CONCRETE MASONRY WALLS ARE ENCOUNTERED, THEY SHALL BE REMOVED TO AN ELEVATION 12 INCHES BELOW THE ESTABLISHED GRADE OR SUBGRADE AS SHOWN ON THE PLANS. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

EXISTING OPEN WELL WALLS SHALL BE REMOVED TO A POINT ONE FOOT BELOW THE EXISTING GROUND SURFACE AND THE WELL FILLED WITH FREE FLOWING SAND. WELL CASINGS SHALL BE CUT OFF AT COMPARABLE POINTS AND CAPPED. COST OF SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.

UNDERGROUND GASOLINE TANKS OR SEPTIC TANKS WITHIN THE LIMITS OF THE RIGHT OF WAY WHICH HAVE NOT BEEN REMOVED AND WILL NOT INTERFERE WITH CONSTRUCTION SHALL BE FILLED WITH A FREE-FLOWING SAND AT THE DIRECTION OF THE ENGINEER. COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THIS CONTRACT.

PLAN QUANTITIES FOR TREE REMOVAL HAVE BEEN BASED ON REMOVAL OF ALL TREES WITHIN THE RIGHT OF WAY. THIS QUANTITY MAY BE REDUCED DURING CONSTRUCTION AT THE DIRECTION OF THE ENGINEER BY DELETING FROM THE TREE REMOVAL SCHEDULE SUCH TREES AS DO NOT INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE CONTRACTOR SHALL CO-OPERATE WITH VILLAGE OR CITY IN ANY UNDERGROUND CONSTRUCTION WHICH THE VILLAGE OR CITY MAY WISH TO PLACE BEFORE THE PROJECT IS COMPLETED.

THE CONTRACTOR, AT HIS EXPENSE, WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE ALL ROAD SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:

1. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
2. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND VISIBLE TO TRAFFIC ON THE HIGHWAY. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND NEAT APPEARING FOR THE DURATION OF THE TEMPORARY SETTING.
3. ALL SIGNS SHALL BE RE-ERECTED IN THEIR PERMANENT LOCATIONS SO THAT THERE IS A HORIZONTAL CLEARANCE OF 12 FEET FROM THE PAVEMENT EDGE TO THE SIGN, OR AS DESIGNATED BY THE ENGINEER, AS THE ROADWAY IS COMPLETED.
4. AT SOME TEMPORARY AND PERMANENT SIGN LOCATIONS, IT WILL BE NECESSARY TO USE LONGER POSTS TO MAINTAIN PROPER SIGN ELEVATIONS, IN WHICH CASE THEY WILL BE FURNISHED BY THE STATE IN EXCHANGE FOR THE EXISTING POSTS.
5. ALL UNUSED POSTS ARE TO BE STORED WITHIN THE STATES RIGHTS OF WAY FOR PICKUP BY THE DIVISION OF HIGHWAYS. A CHARGE OF \$3.00 PER POST WILL BE MADE AGAINST THE CONTRACTOR FOR ALL POSTS NOT ACCOUNTED FOR.

THE COST OF REMOVAL OF EXISTING CONCRETE HEADWALLS, PIPE OR OTHER OBSTRUCTIONS WHICH INTERFERE WITH THE PROPOSED ROADWAY CONSTRUCTION AND WHICH ARE NOT TO BE REMOVED AS A SEPARATE PAY ITEM WILL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT.

THE COST OF REMOVING EXISTING DRAINAGE STRUCTURES, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

ADDED EXPENSE WILL BE INVOLVED IN CONNECTING EXISTING DRAINAGE, STORM SEWER OR PIPE CULVERTS TO PROPOSED STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE STRUCTURE INVOLVED.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE DEPARTMENT AND THE INDICATED ADJUSTMENTS OR RECONSTRUCTION ARE CONSIDERED TO BE REASONABLY ACCURATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, AS DETAILED IN SECTION 74 OF THE STANDARD SPECIFICATIONS TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE DEPARTMENT, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 7.19 AND 7.21 OF THE STANDARD SPECIFICATIONS.

ALL ELEVATIONS SHOWN REFER TO THE U.S.G.S. DATUM AT MEAN SEA LEVEL.

RIGHT OF WAY MAPS ARE AVAILABLE AT THE DISTRICT OFFICE OF THE DIVISION OF HIGHWAYS IN ELGIN.

FOR GENERAL NOTES PERTAINING TO STRUCTURE SEE SHEET 14.

ABANDONED WELLS SHALL BE FILLED AND SEALED IN ACCORDANCE WITH LOCAL HEALTH REGULATIONS

Wherever in these plans reference is made to the "Standard Specifications", it is understood to include the "Supplemental Specifications" effective July 2, 1964.

One (1) sign conforming to Standard 253-4 shall be erected at locations as shown on sheet 14.

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

ROUTE NO.	EST.	COUNTY	TOTAL SHEETS	SHEET NO.
99-448	WILL		38	3
FED. ROAD DIST. NO. 1				

SUMMARY OF QUANTITIES

SECTION 99-448 only

QUANTITY	UNIT	ITEM	CODE	QUANTITY	UNIT	ITEM	CODE
1,231	IN.DIA.	TREE REMOVAL (6 TO 15 INCH DIAMETER)	010001	3,103	LIN.FT.	FURNISHING STEEL PILES 10BP42	060026
972	IN.DIA.	TREE REMOVAL (OVER 15 INCH DIAMETER)	010002	2	EACH	TEST PILE STEEL 12BP53	060023
197,448	CU.YD.	BORROW EXCAVATION	013001	2	EACH	TEST PILE STEEL 10BP42	060035
8	CU.YD.	TRENCH BACKFILL	020001	6,824	LIN.FT.	DRIVING STEEL PILES	060037
783	CU.YD.	CLASS A EXCAVATION FOR STRUCTURES	050001				
5,565	SQ.YD.	PROTECTIVE COAT	052021				
2,439.9	CU.YD.	CLASS X CONCRETE	052003	2	EACH	NAME PLATES	061001
6.1	CU.YD.	CLASS X CONCRETE HEADWALLS	052016	26	LIN.FT.	STORM SEWERS, TYPE 1 15"	066004
1,422.828	POINT	FURNISHING AND ERECTING STRUCTURAL STEEL	054001	1	EACH	INLETS, TYPE A, TYPE 10 FRAME	075105
276	LIN.FT.	PIPE CULVERTS TYPE 6A 36"	058640	400	SQ.FT.	SIDEWALK REMOVAL	082006
478,750				7,968	SQ.YD.	SLOPE WALL 4 INCH	083002
478,075	POUND	REINFORCEMENT BARS	059001	400	SQ.FT.	PORTLAND CEMENT CONCRETE SIDEWALK, 4 INCH	089002
800	LIN.FT.	FURNISHING CREOSOTED PILES 20.1 TO 38 FEET	060005	1	EACH	FIRE HYDRANTS TO BE MOVED	107001
800	LIN.FT.	DRIVING TIMBER PILES	060008	1,913	LIN.FT.	ALUMINUM HANDRAIL	200004
3,721	LIN.FT.	FURNISHING STEEL PILES 12BP53	060024		L. SUM	RAILROAD PROTECTIVE SERVICE	201065
				1	EACH	CONSTRUCTION IDENTIFICATION SIGN	201320

NOTE: See Sheet N-3A for the total Summary of Quantities for Section 99-448 & 99-449-1

Revised quant. from 478,075 to 478,750 (includes 675) not changed with revisions 8-6-64 9-17-64 LDW

Deleted alternate for pipe culvert. Revised quantities from 468,075 to 478,075. 10-1-64

Quant. change 8/1/61 - 10/1/64 "Rebuilding Removal - N.M.D."

COMBINED SUMMARY OF QUANTITIES FOR SECTION 99-4VB & 99-4B-1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
99-4VB	99-4B-1	WILL	38	34

Code No.	Item	UNIT	TOTAL QUANTITY	PROJ. I - 99-4VB/34	PROJ. I - 99-4B-1
				I	I
010001	TREE REMOVAL (6 TO 15 INCH DIAMETER)	IN DIA	1995	764	1231
010002	TREE REMOVAL (OVER 15 INCH DIAMETER)	IN DIA	1510	538	972
013001	BORROW EXCAVATION	CU YD	338,520	141,072	197,448
020001	TRENCH BACKFILL	CU YD	8	-	8
050001	CLASS A EXCAVATION FOR STRUCTURES	CU YD	438	155	522
050002	CLASS B EXCAVATION FOR STRUCTURES	CU YD	20	20	-
050003	BACK EXCAVATION FOR STRUCTURES	CU YD	260	260	-
052003	CLASS X CONCRETE	CU YD	4020.1	1580.2	1330.5
052016	CLASS X CONCRETE HEADWALLS	CU YD	6.1	-	6.1
052021	PROTECTIVE COAT	SQ YD	8853	3,288	8173
054001	FURNISHING & ERECTING STRUCTURAL STEEL	LBS	2,409,280	1,174,460	81,012
058840	PIPE CULVERTS TYPE 6A 36"	LIN. FT	276	-	276
059001	REINFORCEMENT BARS	LBS	741,800	263,950	209,481
060005	FURNISHING CREOSOTED PILES 201 TO 38 FEET	LIN. FT	1025	1,015	800
060008	DRIVING TIMBER PILES	LIN. FT	1025	1,015	800
060024	FURNISHING STEEL PILES 12BP53	LIN. FT	3781	-	1484
060026	FURNISHING STEEL PILES 10BP42	LIN. FT	5690	2,587	1537
060033	TEST PILE STEEL 12BP53	EACH	2	-	1
060035	TEST PILE STEEL 10BP42	EACH	4	2	1
060037	DRIVING STEEL PILES	LIN. FT	9411	2,587	3021
061001	NAME PLATES	EACH	4	2	1
066004	STORM SEWERS, TYPE 1, 15"	LIN. FT	26	-	26
075105	INLETS, TYPE A, TYPE 10 FRAME	EACH	1	-	1

Code No.	Item	UNIT	TOTAL QUANTITY	PROJ. I - 99-4VB/34	PROJ. I - 99-4B-1
				I	I
082006	SIDEWALK REMOVAL	SQ. FT	400	-	400
083002	SLOPE WALL, 4 INCH	SQ. YD	2322	-	1394
083003	SLOPE WALL, 6 INCH	SQ. YD	3529	3529	928
089002	PORTLAND CEMENT CONCRETE SIDEWALK, 4 INCH	SQ. FT	400	-	400
107001	FIRE HYDRANTS TO BE MOVED	EACH	1	-	1
107002	FIRE HYDRANTS TO BE REMOVED	EACH	1	1	-
200004	ALUMINUM HANDRAIL	LIN. FT	2965	1052	1090
201065	RAILROAD PROTECTIVE SERVICES	L. SUM	1	-	-
201023	Bridge seat sealant	L. SUM	1	1	-
201320	CONSTRUCTION IDENTIFICATION SIGN	EACH	1	-	1

Revised Quantities (SEE 99-4VB) UNDER 200,806 TO 209,481 (includes 2400 not changed with revisions 8-6-64)
 changed total w/ from 739,125 to 741,800 9-17-64 L.D.W.

Revised Quantities
 HUL 5-15-64

Quantities - Deleted item "Removal of Existing Removal" - 8/15/64
 split quantities for urban & rural, 4-10-64 Remove Urban & Rural Split 4-18-64

SUMMARY OF QUANTITIES

TREE REMOVAL

ROADWAY	LOCATION	SIDE	DISTANCE	6"-15"	OVER 15"
FAI-80	417+54	LT	30'	10"	
FAI-80	417+56	LT	37'	12"	
FAI-80	418+10	LT	40'	6"	
FAI-80	418+21	LT	88'	10"	
FAI-80	418+37	LT	77'		28"
FAI-80	418+44	RT	20'	10"	
FAI-80	418+52	RT	54'	8"	
FAI-80	418+66	LT	64'	14"	
FAI-80	418+86	RT	32'	12"	
FAI-80	419+03	LT	28'		34"
FAI-80	419+20	RT	4'	12"	
FAI-80	419+24	RT	65'	12"	
FAI-80	419+34	RT	79'	10"	
FAI-80	419+42	LT	73'	6"	
FAI-80	419+43	LT	116'	6"	
FAI-80	419+45	LT	85'	6"	
FAI-80	419+53	LT	106'	8"	
FAI-80	419+62	LT	68'	6"	
FAI-80	419+64	LT	83'	6"	
FAI-80	419+64	LT	1'	10"	
FAI-80	419+67	LT	103'	8"	
FAI-80	419+67	RT	20'	10"	
FAI-80	419+67	RT	70'	8"	
FAI-80	419+84	LT	28'	8"	
FAI-80	419+97	RT	53'		26"
FAI-80	420+06	LT	67'	8"	
FAI-80	420+08	LT	100'	8"	
FAI-80	420+10	LT	26'	12"	
FAI-80	420+36	RT	46'	12"	
FAI-80	420+38	RT	26'	14"	
FAI-80	420+49	RT	2'	10"	
FAI-80	420+65	LT	57'		30"
FAI-80	420+72	LT	119'	14"	
FAI-80	422+19	RT	53'	16"	
FAI-80	422+52	RT	9'		16"
FAI-80	422+71	RT	10'		22"
FAI-80	422+71	LT	96'	10"	
FAI-80	422+72	LT	103'		20"
FAI-80	422+78	LT	111'	12"	
FAI-80	422+96	LT	108'		16"
FAI-80	422+97	RT	15'		22"
FAI-80	422+99	RT	84'		26"
Sub. Total				304"	240"

TREE REMOVAL

ROADWAY	LOCATION	SIDE	DISTANCE	6"-15"	OVER 15"
FAI-80	423+13	LT	107'	14"	
FAI-80	423+39	RT	18'		24"
FAI-80	423+39	RT	94'	13"	
FAI-80	423+48	RT	20'		16"
FAI-80	423+52	RT	95'	10"	
FAI-80	423+57	RT	20'	6"	
FAI-80	423+60	RT	31'		26"
FAI-80	423+79	RT	8'		16"
FAI-80	423+79	LT	77'		18"
FAI-80	423+79	LT	84'		18"
FAI-80	423+81	LT	7'	14"	
FAI-80	424+14	RT	62'	14"	
FAI-80	424+17	RT	155'	6"	
FAI-80	424+18	RT	42'	6"	
FAI-80	424+20	RT	27'		20"
FAI-80	424+28	RT	120'	6"	
FAI-80	424+30	RT	80'		20"
FAI-80	424+30	RT	59'		20"
FAI-80	424+36	LT	67'		22"
FAI-80	424+36	RT	45'	14"	
FAI-80	424+51	RT	173'		26"
FAI-80	424+51	RT	31'		20"
FAI-80	424+51	LT	82'	8"	
FAI-80	424+53	LT	94'		16"
FAI-80	424+56	LT	117'	8"	
FAI-80	424+58	LT	126'	14"	
FAI-80	424+66	LT	38'	6"	
FAI-80	424+69	LT	130'	14"	
FAI-80	424+77	RT	178'	12"	
FAI-80	425+00	RT	177'	8"	
FAI-80	425+03	RT	76'	12"	
FAI-80	425+08	RT	84'	10"	
FAI-80	425+09	RT	77'	12"	
FAI-80	425+13	RT	40'	10"	
FAI-80	425+22	LT	84'		18"
FAI-80	425+25	RT	98'	12"	
FAI-80	425+26	LT	81'	8"	
FAI-80	425+39	LT	128'	12"	
FAI-80	425+43	RT	100'	12"	
Sub. Total				387"	380"

TREE REMOVAL

ROADWAY	LOCATION	SIDE	DISTANCE	6"-15"	OVER 15"
FAI-80	425+45	LT	15'		34"
FAI-80	425+48	LT	103'		32"
FAI-80	425+61	LT	60'	10"	
FAI-80	425+63	LT	55'	10"	
FAI-80	425+66	LT	167'		18"
FAI-80	425+68	LT	59'	10"	
FAI-80	425+68	LT	132'		30"
FAI-80	425+81	LT	97'	12"	
FAI-80	425+93	LT	5'		16"
FAI-80	425+93	RT	160'		22"
FAI-80	425+96	RT	86'	12"	
FAI-80	426+00	LT	124'	12"	
FAI-80	426+02	LT	58'	12"	
FAI-80	426+02	LT	65'	10"	
FAI-80	426+02	LT	85'	12"	
FAI-80	426+15	LT	33'	10"	
FAI-80	426+15	RT	8'	14"	
FAI-80	426+34	LT	83'	12"	
FAI-80	426+35	RT	118'	12"	
FAI-80	426+37	RT	10'	10"	
FAI-80	426+38	LT	2'	12"	
FAI-80	426+39	RT	99'	14"	
FAI-80	426+43	RT	78'	10"	
FAI-80	426+50	LT	87'	12"	
FAI-80	426+51	LT	120'		22"
FAI-80	426+55	RT	14'	10"	
FAI-80	426+60	LT	56'	6"	
FAI-80	426+60	LT	72'	12"	
FAI-80	426+60	LT	100'	10"	
FAI-80	426+65	RT	16'	10"	
FAI-80	426+66	LT	60'	12"	
FAI-80	426+71	RT	143'	8"	
FAI-80	426+71	LT	82'	12"	
FAI-80	426+72	LT	69'	12"	
FAI-80	426+74	LT	95'	6"	
FAI-80	426+78	RT	17'	6"	
FAI-80	426+84	LT	145'		26"
FAI-80	426+85	RT	3'	12"	
FAI-80	426+89	LT	90'	12"	
FAI-80	426+89	RT	106'	12"	
FAI-80	426+90	RT	19'	8"	
FAI-80	426+91	RT	147'	10"	
Sub. Total				348"	280"

TREE REMOVAL

ROADWAY	LOCATION	SIDE	DISTANCE	6"-15"	OVER 15"
FAI-80	426+93	LT	144'	8"	
FAI-80	426+93	RT	131'	10"	
FAI-80	426+98	LT	141'	8"	
FAI-80	427+00	RT	98'	10"	
FAI-80	427+01	LT	126'	6"	
FAI-80	427+02	RT	88'	12"	
FAI-80	427+04	LT	141'	8"	
FAI-80	427+08	LT	125'	6"	
FAI-80	427+12	LT	141'	8"	
FAI-80	427+14	LT	3'		36"
FAI-80	427+17	LT	20'		22"
FAI-80	427+17	LT	33'	14"	
FAI-80	427+27	LT	5'		32"
FAI-80	427+28	RT	139'	6"	
FAI-80	427+31	RT	156'		20"
FAI-80	427+40	RT	142'		28"
FAI-80	427+43	RT	119'	10"	
FAI-80	427+51	RT	78'		18"
FAI-80	427+54	RT	19'		16"
FAI-80	427+60	LT	128'	8"	
FAI-80	427+60	RT	5'		18"
FAI-80	427+62	LT	4'		22"
FAI-80	427+70	LT	77'	6"	
FAI-80	427+73	LT	48'	12"	
FAI-80	427+73	RT	21'	10"	
FAI-80	427+86	LT	114'	12"	
FAI-80	427+87	RT	20'	10"	
FAI-80	427+93	LT	45'	6"	
FAI-80	427+93	LT	125'	14"	
FAI-80	427+96	RT	5'	8"	
FAI-80	427+96	RT	11'	8"	
FAI-80	427+97	LT	50'	6"	
FAI-80	428+02	RT	24'	12"	
FAI-80	428+02	LT	17'	8"	
FAI-80	428+02	LT	108'	12"	
FAI-80	428+02	LT	116'	10"	
FAI-80	428+04	LT	30'	14"	
FAI-80	428+11	LT	97'	10"	
FAI-80	428+14	LT	36'	12"	
Sub. Total				298"	212"

BUILDING REMOVAL BY SECTION (99-4) DM

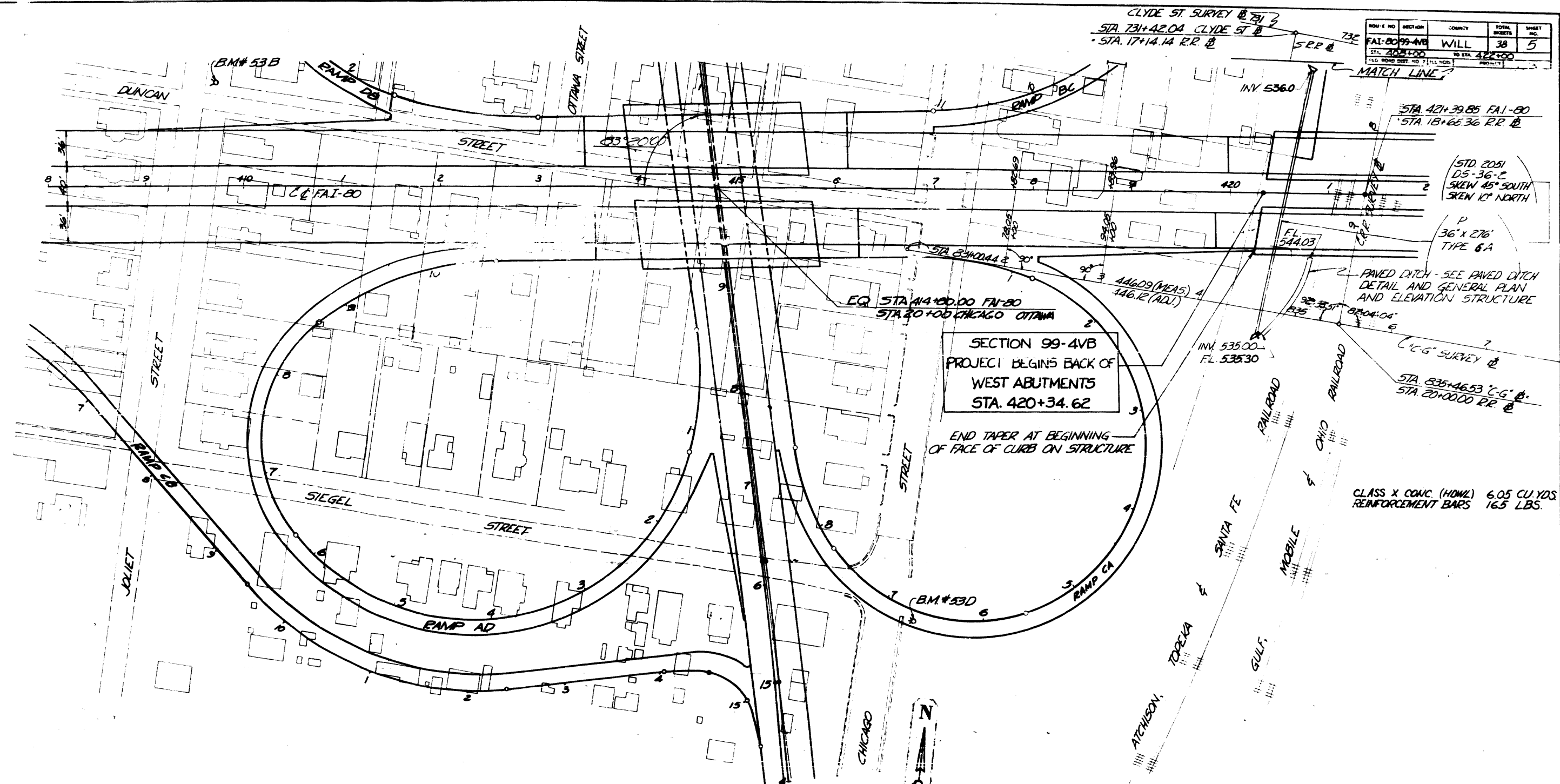
ROADWAY	STATION	SIDE	DISTANCE	HOUSE NO.	REMARKS
CLYDE ST.		SOUTH		8	1-1/2F-B
CLYDE ST.		SOUTH		10	2-F-B
CLYDE ST.		SOUTH		12	1-F-B
CHICAGO ST.		EAST		604	2-F-B
CHICAGO ST.		EAST		606	2-F-B
FAI-80	418+00	LT	10'		1-BR-GAS STA.
FAI-80	418+28	CL	0'		REST.-HD
FAI-80	418+60	CL	0'		1-F-CABIN
FAI-80	418+96	LT	11'		1-F-CABIN
FAI-80	419+12	RT	32'		1-F-CABIN
FAI-80	419+43	CL	0'		1-F-CABIN
FAI-80	419+43	LT	28'		1-C-HX-B
FAI-80	419+59	RT	40'		1-F-CABIN
CARDNER ST.		WEST		615	2-F-B
CARDNER ST.		WEST		617	2-F-B
CARDNER ST.		WEST		619	1-1/2F-B
CARDNER ST.		WEST		621	1-1/2F-B
CARDNER ST.		EAST		608	1-F-B
CARDNER ST.		EAST		610	2-F-B
CARDNER ST.		EAST		612	2-F-B
CARDNER ST.		EAST		618	1-F-B
CARDNER ST.		EAST		620	1-F-B
CARDNER ST.		EAST		622	1-F-B
FERDINAND ST.		SOUTH		108	1-F
FERDINAND ST.		SOUTH		109	
FERDINAND ST.		SOUTH		110	1-F-B
FERDINAND ST.		NORTH		111	1-1/2F-B
FERDINAND ST.		SOUTH		112	1-F-B
FERDINAND ST.		NORTH		113	1-1/2F-B
FERDINAND ST.		SOUTH		114	1-F-B
FERDINAND ST.		NORTH		115	1-F-B

TOTAL TO BE REMOVED - 31 (BY OTHERS).

LEGEND

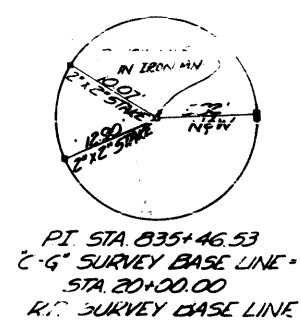
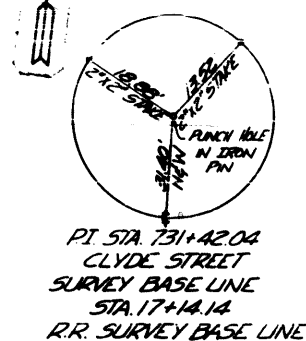
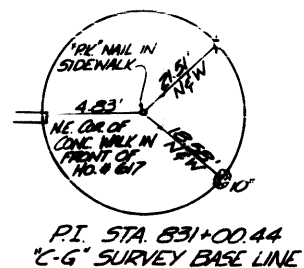
- COMBINATION TELEPHONE AND POWER POLE
- TEMPORARY BARRICADE
- PERMANENT BARRICADE
- SANITARY SEWER
- MANHOLE
- GAS LINE
- WATER LINE
- WATER LINE SERVICE BOX OR METER VAULT
- STORM SEWER

DATE	NO.	BY	CHECKED	DATE	NO.	BY	CHECKED
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1
1/12/22	1	JL	1/12/22	1	JL	1/12/22	1



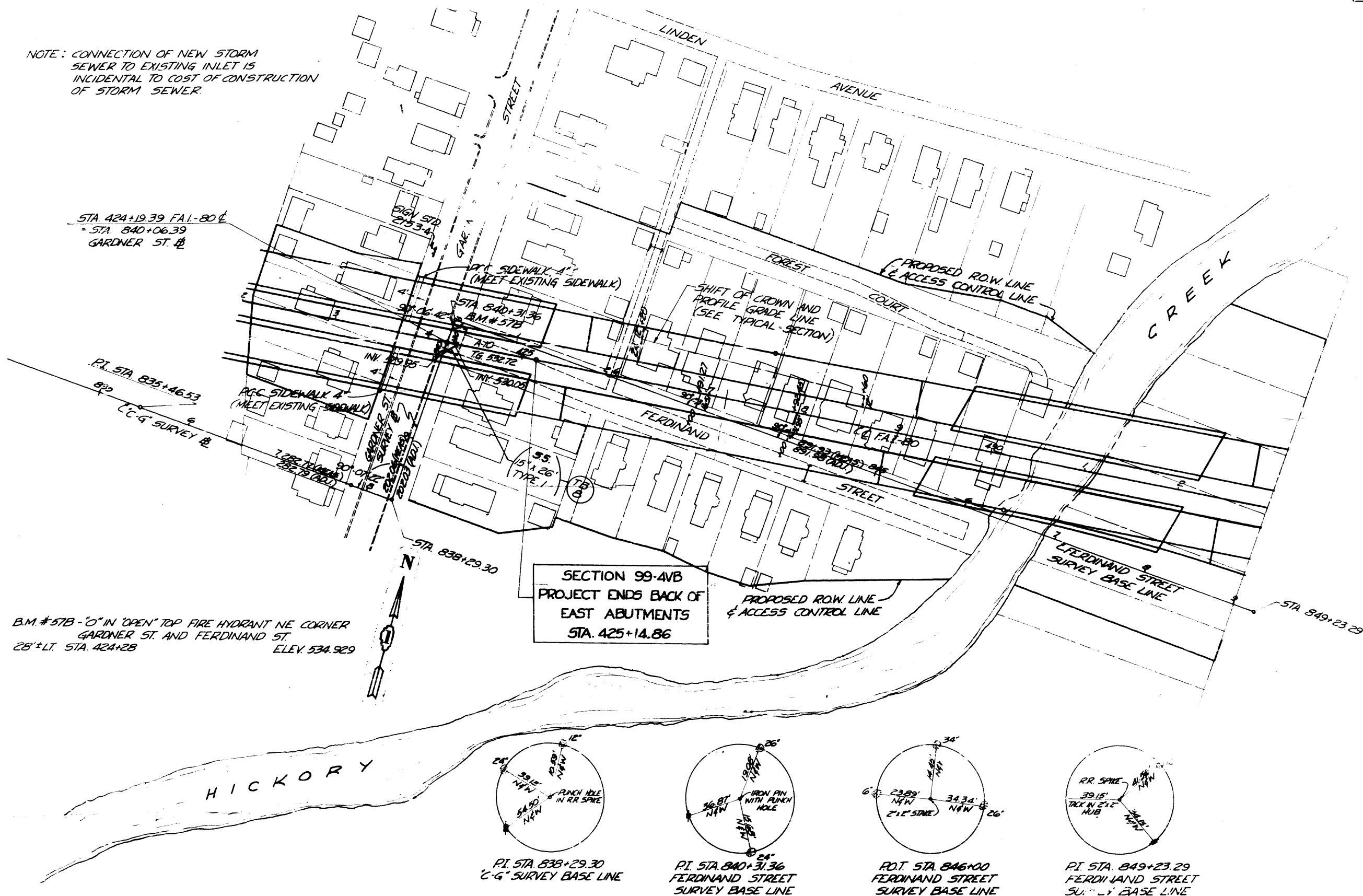
BM#53B - EYEBOLT ON SOUTH SIDE FIRE HYDRANT NE. CORNER JOLIET ST. & DUNCAN ST.
 102'± LT. STA. 409+73 ELEV. 526.084

BM#53D - "O" IN "OPEN" TOP FIRE HYDRANT EAST SIDE CHICAGO AV. AT END SIEGEL ST.
 434'± RT. STA. 416+73 ELEV. 531.801



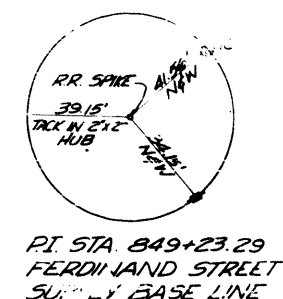
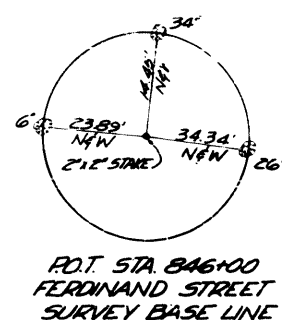
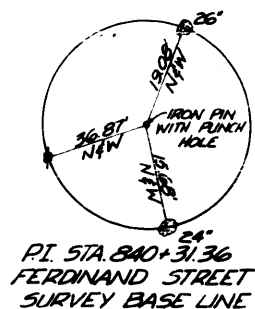
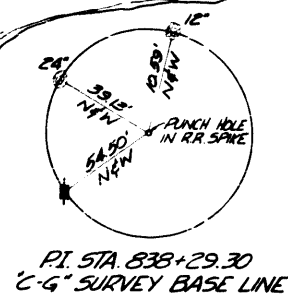
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-80-99-4VB		WILL	38	6
STA. 422+00				TO STA. 433+00
FILE ROAD DIST. NO. 1				PROJECT

NOTE: CONNECTION OF NEW STORM SEWER TO EXISTING INLET IS INCIDENTAL TO COST OF CONSTRUCTION OF STORM SEWER.

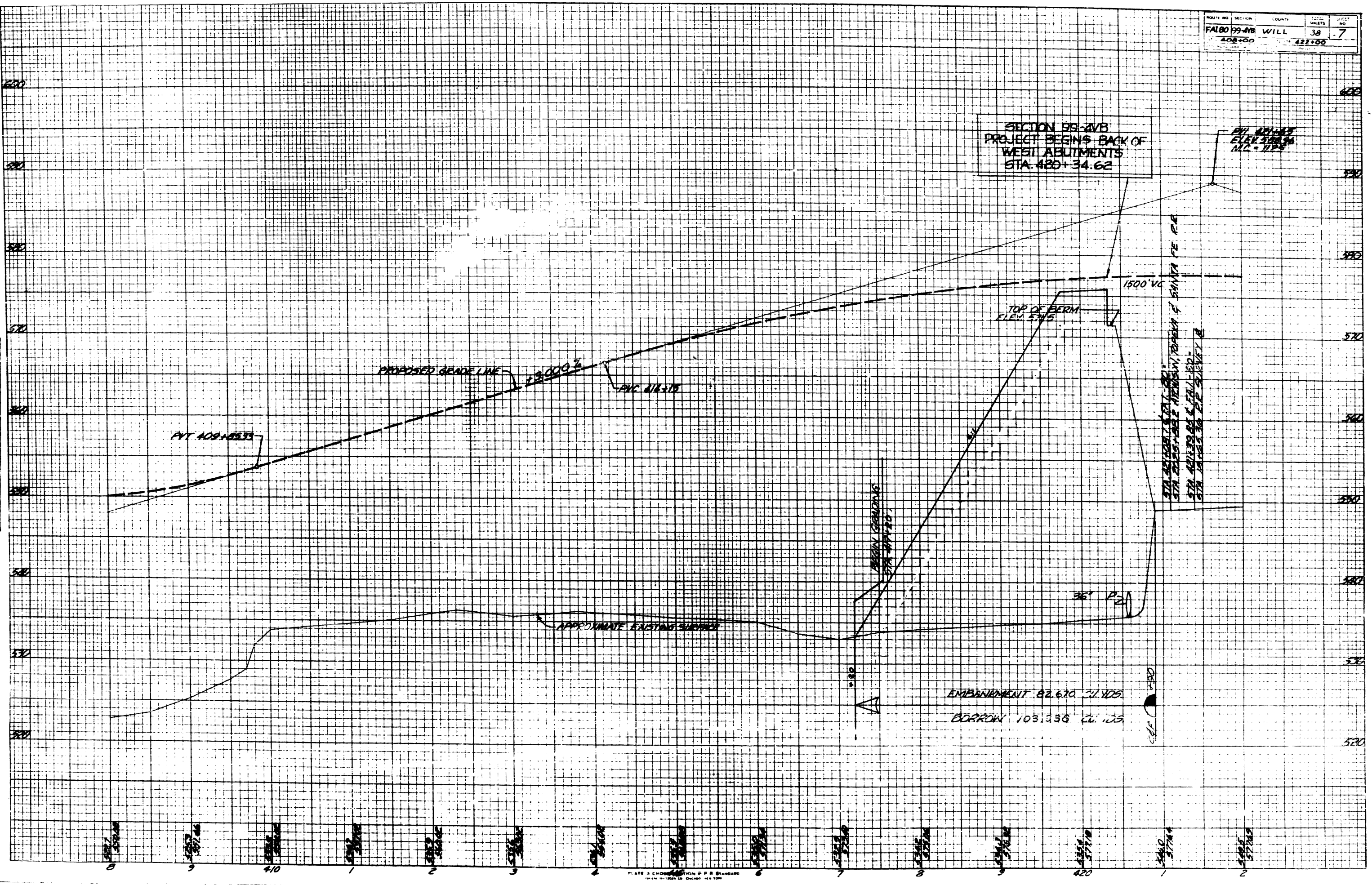


B.M. #57B - "O" IN "OPEN" TOP FIRE HYDRANT NE CORNER GARDNER ST. AND FERDINAND ST. 28'± LT. STA. 424+28 ELEV. 534.929

SECTION 99-4VB
PROJECT ENDS BACK OF
EAST ABUTMENTS
STA. 425+14.86



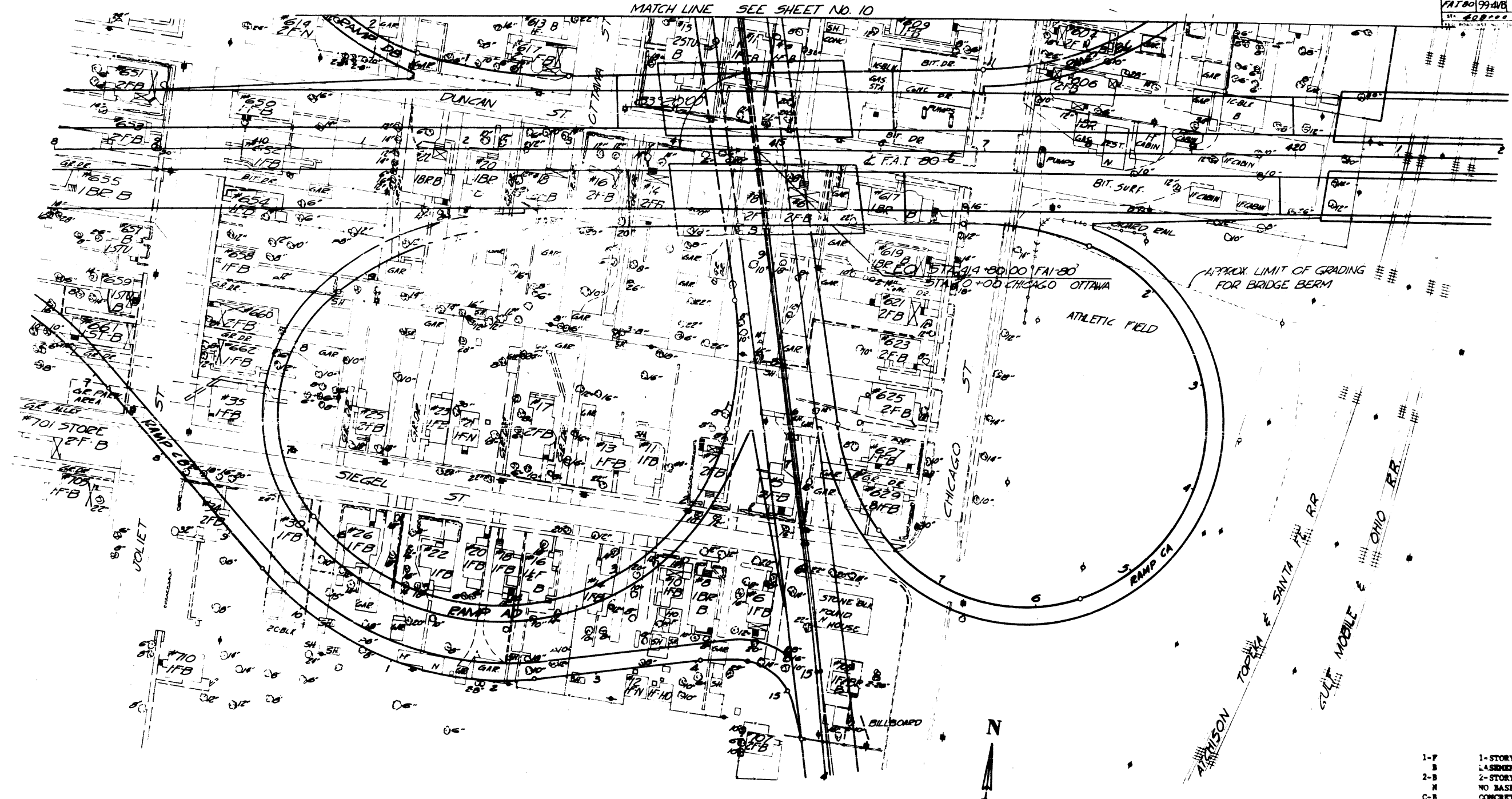
PROJECT NO. 99-4VB
 DATE 12/20/00
 BY J. J. QUINN
 CHECKED BY J. J. QUINN
 SCALE 1" = 40' HORIZ.
 1" = 10' VERT.



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 80	99-4VB	WILL	98	9
STA. 422+00			TO STA. 422+00	

MATCH LINE SEE SHEET NO. 10

PLAN	SECTION	DATE	BY	CHKD.
27	27	11/11/50	W. J. H. H.	W. J. H. H.
28	28	11/11/50	W. J. H. H.	W. J. H. H.
29	29	11/11/50	W. J. H. H.	W. J. H. H.
30	30	11/11/50	W. J. H. H.	W. J. H. H.
31	31	11/11/50	W. J. H. H.	W. J. H. H.
32	32	11/11/50	W. J. H. H.	W. J. H. H.
33	33	11/11/50	W. J. H. H.	W. J. H. H.
34	34	11/11/50	W. J. H. H.	W. J. H. H.
35	35	11/11/50	W. J. H. H.	W. J. H. H.
36	36	11/11/50	W. J. H. H.	W. J. H. H.
37	37	11/11/50	W. J. H. H.	W. J. H. H.
38	38	11/11/50	W. J. H. H.	W. J. H. H.
39	39	11/11/50	W. J. H. H.	W. J. H. H.
40	40	11/11/50	W. J. H. H.	W. J. H. H.
41	41	11/11/50	W. J. H. H.	W. J. H. H.
42	42	11/11/50	W. J. H. H.	W. J. H. H.
43	43	11/11/50	W. J. H. H.	W. J. H. H.
44	44	11/11/50	W. J. H. H.	W. J. H. H.
45	45	11/11/50	W. J. H. H.	W. J. H. H.
46	46	11/11/50	W. J. H. H.	W. J. H. H.
47	47	11/11/50	W. J. H. H.	W. J. H. H.
48	48	11/11/50	W. J. H. H.	W. J. H. H.
49	49	11/11/50	W. J. H. H.	W. J. H. H.
50	50	11/11/50	W. J. H. H.	W. J. H. H.
51	51	11/11/50	W. J. H. H.	W. J. H. H.
52	52	11/11/50	W. J. H. H.	W. J. H. H.
53	53	11/11/50	W. J. H. H.	W. J. H. H.
54	54	11/11/50	W. J. H. H.	W. J. H. H.
55	55	11/11/50	W. J. H. H.	W. J. H. H.
56	56	11/11/50	W. J. H. H.	W. J. H. H.
57	57	11/11/50	W. J. H. H.	W. J. H. H.
58	58	11/11/50	W. J. H. H.	W. J. H. H.
59	59	11/11/50	W. J. H. H.	W. J. H. H.
60	60	11/11/50	W. J. H. H.	W. J. H. H.
61	61	11/11/50	W. J. H. H.	W. J. H. H.
62	62	11/11/50	W. J. H. H.	W. J. H. H.
63	63	11/11/50	W. J. H. H.	W. J. H. H.
64	64	11/11/50	W. J. H. H.	W. J. H. H.
65	65	11/11/50	W. J. H. H.	W. J. H. H.
66	66	11/11/50	W. J. H. H.	W. J. H. H.
67	67	11/11/50	W. J. H. H.	W. J. H. H.
68	68	11/11/50	W. J. H. H.	W. J. H. H.
69	69	11/11/50	W. J. H. H.	W. J. H. H.
70	70	11/11/50	W. J. H. H.	W. J. H. H.
71	71	11/11/50	W. J. H. H.	W. J. H. H.
72	72	11/11/50	W. J. H. H.	W. J. H. H.
73	73	11/11/50	W. J. H. H.	W. J. H. H.
74	74	11/11/50	W. J. H. H.	W. J. H. H.
75	75	11/11/50	W. J. H. H.	W. J. H. H.
76	76	11/11/50	W. J. H. H.	W. J. H. H.
77	77	11/11/50	W. J. H. H.	W. J. H. H.
78	78	11/11/50	W. J. H. H.	W. J. H. H.
79	79	11/11/50	W. J. H. H.	W. J. H. H.
80	80	11/11/50	W. J. H. H.	W. J. H. H.
81	81	11/11/50	W. J. H. H.	W. J. H. H.
82	82	11/11/50	W. J. H. H.	W. J. H. H.
83	83	11/11/50	W. J. H. H.	W. J. H. H.
84	84	11/11/50	W. J. H. H.	W. J. H. H.
85	85	11/11/50	W. J. H. H.	W. J. H. H.
86	86	11/11/50	W. J. H. H.	W. J. H. H.
87	87	11/11/50	W. J. H. H.	W. J. H. H.
88	88	11/11/50	W. J. H. H.	W. J. H. H.
89	89	11/11/50	W. J. H. H.	W. J. H. H.
90	90	11/11/50	W. J. H. H.	W. J. H. H.
91	91	11/11/50	W. J. H. H.	W. J. H. H.
92	92	11/11/50	W. J. H. H.	W. J. H. H.
93	93	11/11/50	W. J. H. H.	W. J. H. H.
94	94	11/11/50	W. J. H. H.	W. J. H. H.
95	95	11/11/50	W. J. H. H.	W. J. H. H.
96	96	11/11/50	W. J. H. H.	W. J. H. H.
97	97	11/11/50	W. J. H. H.	W. J. H. H.
98	98	11/11/50	W. J. H. H.	W. J. H. H.
99	99	11/11/50	W. J. H. H.	W. J. H. H.
100	100	11/11/50	W. J. H. H.	W. J. H. H.



LEGEND

1-F	1-STORY FRAME HOUSE
B	BASEMENT
2-B	2-STORY BRICK HOUSE
N	NO BASEMENT
C-B	CONCRETE BLOCK HOUSE
SH	SHED
GAR	GARAGE
BR	BRICK
BLK	BLOCK
REST	RESTAURANT

NOTE:
FOR SCHEDULES OF TREE
REMOVAL SEE SHEET 4
BUILDING REMOVAL
BY OTHERS

EXISTING TOPOGRAPHY
&
REMOVAL QUANTITIES
F.A.I. ROUTE 80
SECTION 99-4VB
WILL COUNTY
SCALE 1"=50'
BLAUVELT ENGINEERING CO.

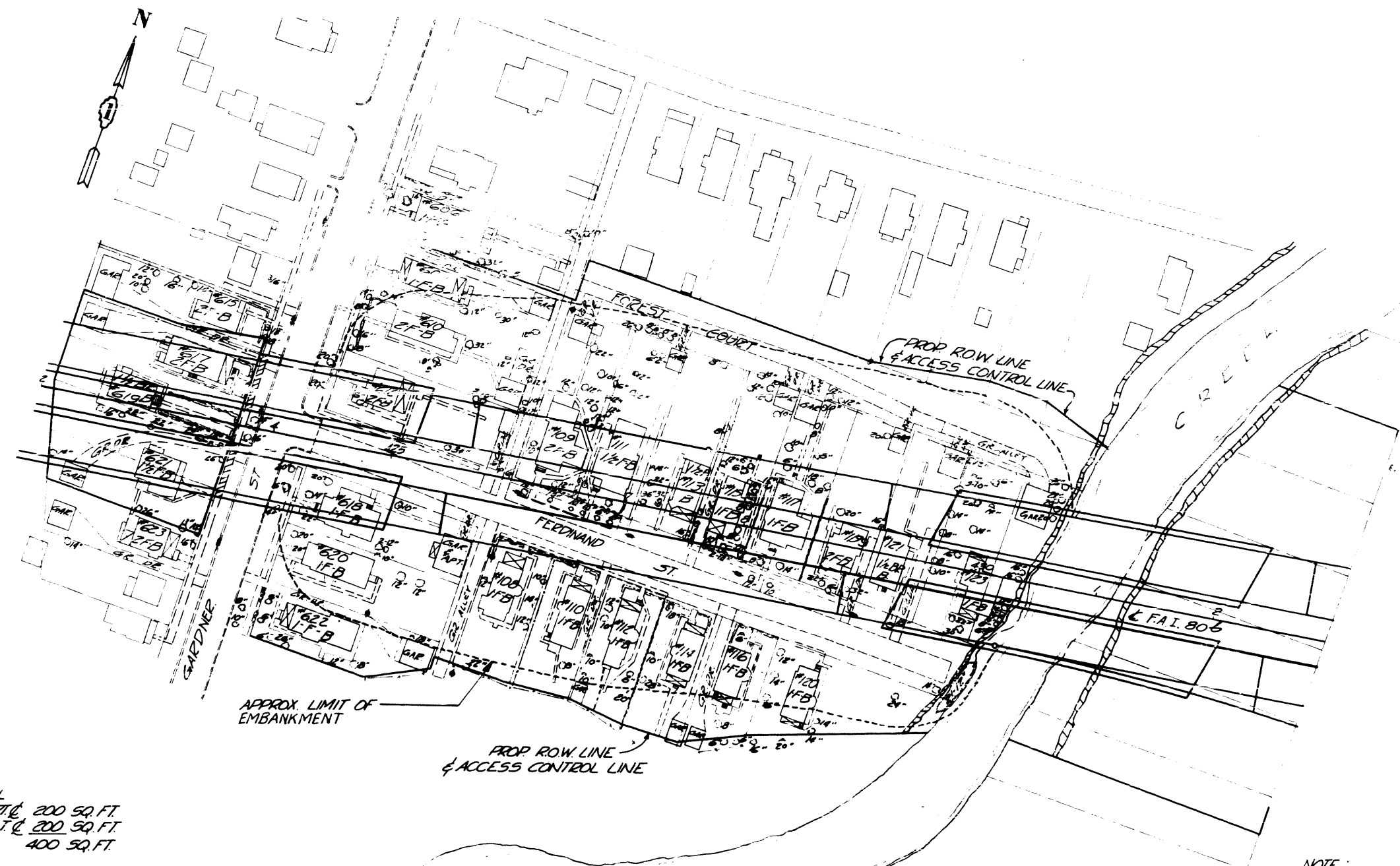
PLAN
 SHEET NO. 10
 DATE 5/24/61
 BY J. H. HARRIS
 CHECKED BY J. H. HARRIS
 SCALE 1"=50'



NOTE:
 FOR SCHEDULES OF TREE
 REMOVAL SEE SHEET #
 BUILDING REMOVAL
 BY OTHERS

EXISTING TOPOGRAPHY
 REMOVAL QUANTITIES
 F.A.I. ROUTE 80
 SECTION 99-4VB
 WILL COUNTY
 SCALE 1"=50'
 BLAUVELT ENGINEERING CO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEET NO.	SHEET NO.
FAI 80-4VB	WILL		11	11
423+00			4327.95	



SIDEWALK REMOVAL
 STA 423+65 TO STA 423+72 RT. 200 SQ. FT.
 STA 423+72 TO STA 423+85 LT. 200 SQ. FT.
 TOTAL 400 SQ. FT.

NOTE:
 FOR SCHEDULES OF TREE REMOVAL SEE
 SHEET 4; BUILDING REMOVAL BY OTHERS

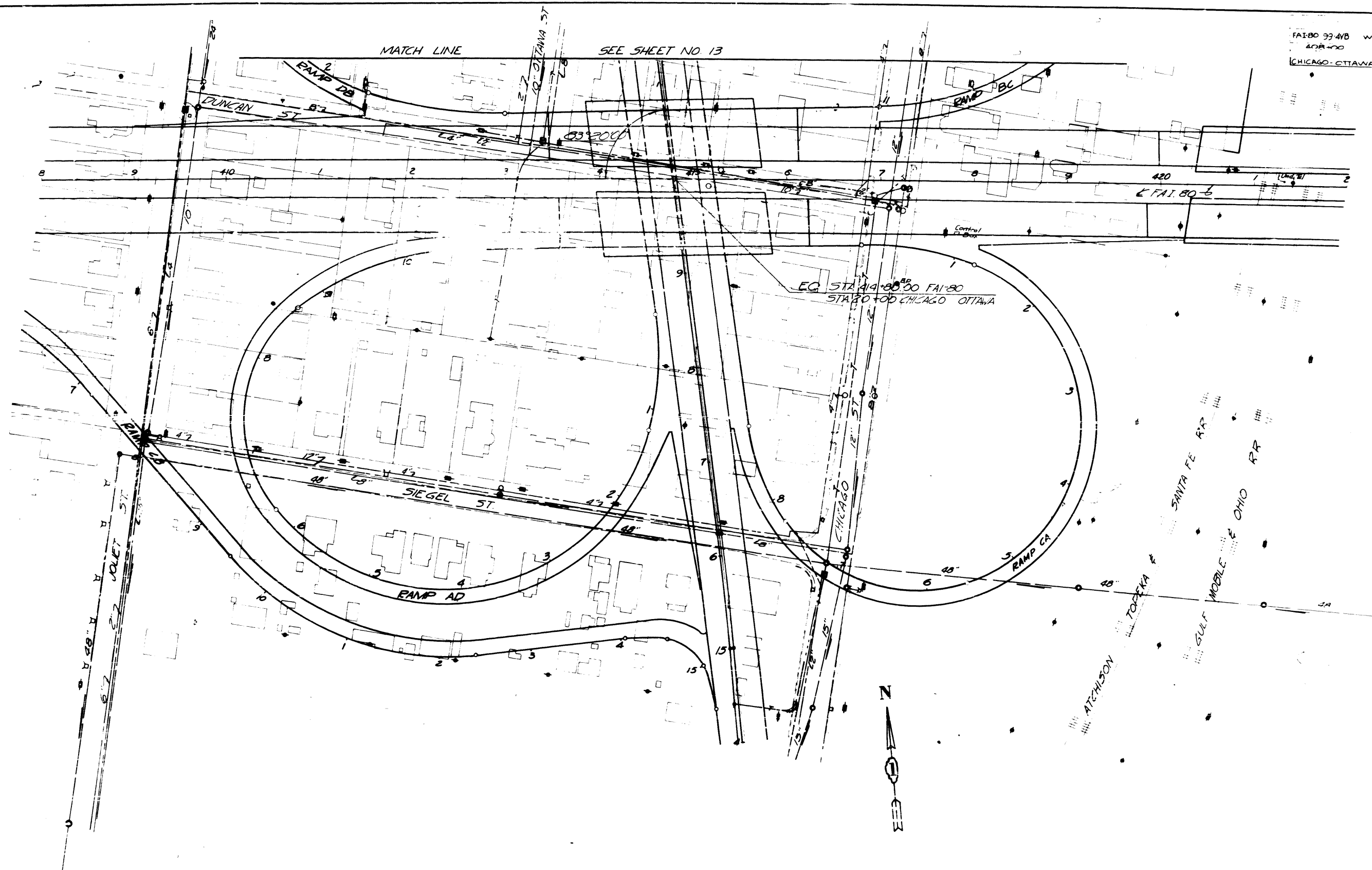
EXISTING TOPOGRAPHY
 REMOVAL QUANTITIES
 F.A.I. ROUTE 80
 SECTION 99-4VB
 WILL COUNTY
 SCALE 1"=50'
 BLAUVELT ENGINEERING CO.

PLAN	NO. 1212
DESIGNED	BY J. H. B.
PLOTTED	BY J. H. B.
CHECKED	BY J. H. B.
APPROVED	BY J. H. B.
DATE	6-2-44

APR. ROW
 KHN 6-2-44

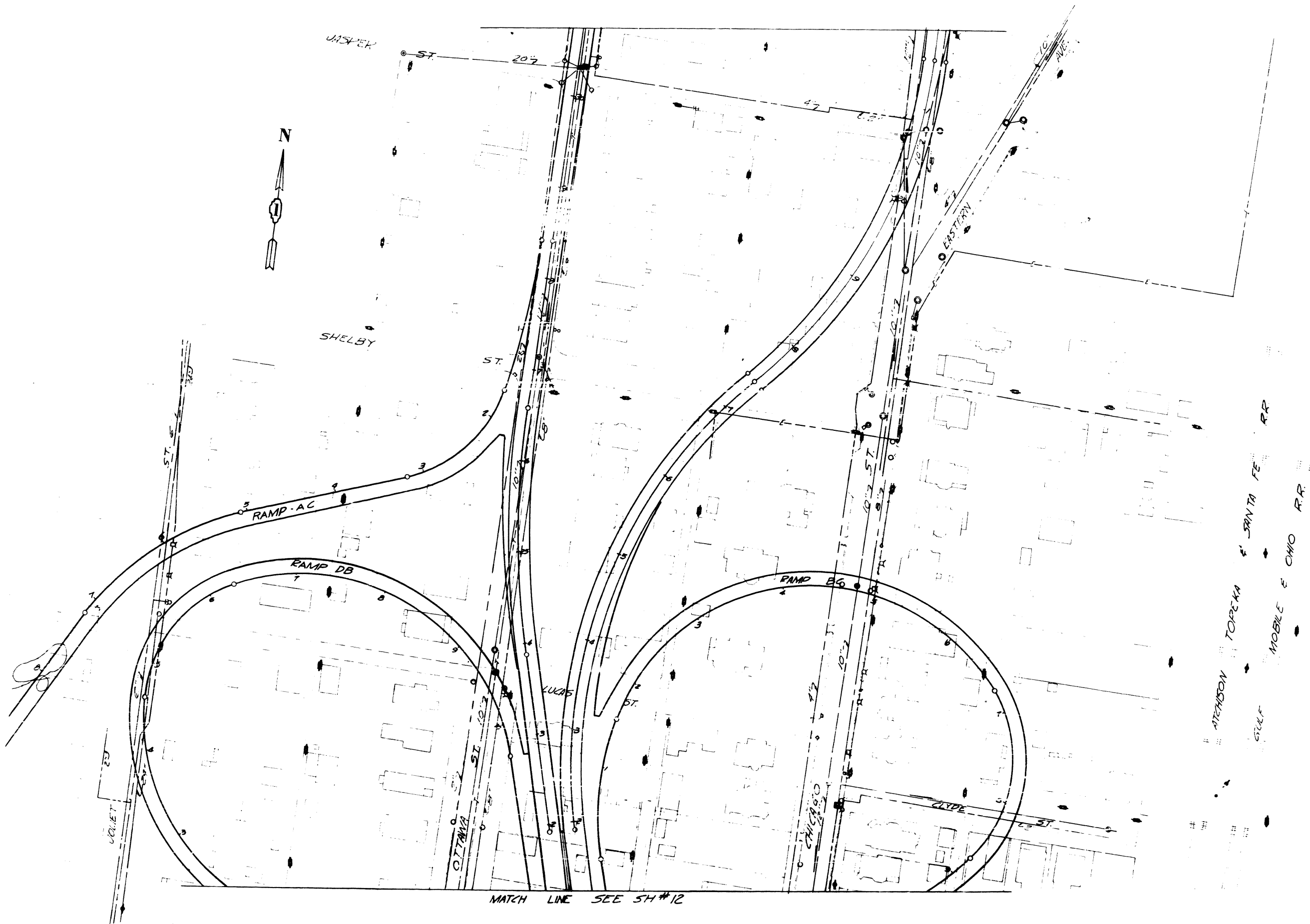
NEW EMBANKMENT
 KHN 6-2-44

FAI-80 99-4VB WILL 38 12
 402+00 422+00
 CHICAGO-OTTAWA INTERCHANGE 30/2



EXISTING UTILITIES
 FAI-ROUTE 80
 SECTION 99-4VB
 WILL COUNTY
 SCALE 1"= 50'
 BLAUVELT ENGINEERING CO.

PLAN	DATE	BY	CHECKED	DATE
NOTES	DATE	BY	CHECKED	DATE
NO. 122	DATE	BY	CHECKED	DATE



EXISTING UTILITIES
FAL ROUTE 80
SECTION 99-4VB
WILL COUNTY
SCALE 1" = 50'
BLAUVELT ENGINEERING CO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-80-99-4VB	WILL	38	14	
422-00		433-00		

NOTE: EXISTING VALVE AND VALVE VAULT IN 6" WATER LINE TO BE REMOVED. THE WATER LINE SHALL BE STERILIZED AND CAPPED WITH CAST IRON PLUG PRIOR TO PLACEMENT OF BACKFILL. THE EXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH THE SPECIFICATIONS FOR TRENCH BACKFILL. THE VALVE, VALVE VAULT FRAME AND COVER SHALL BE SALVAGED AND STORED WHERE DIRECTED BY THE ENGINEER. THE ABOVE CONSTRUCTION IS INCIDENTAL TO COST OF CONSTRUCTION OF EMBANKMENT.

THE 10" SANITARY SEWER RUNNING EAST FROM MANHOLE ON GARDNER ST. SHALL BE SEALED OFF TO THE SATISFACTION OF THE ENGINEER. COST SHALL BE INCIDENTAL TO THE CONSTRUCTION OF EMBANKMENT.

EACH FIRE HYDRANT TO BE INSTALLED 28' FROM STA. 424+30

EXISTING UTILITIES
FAI ROUTE 80
SECTION 99-4VB
WILL COUNTY
SCALE 1"=50'
BLAUVELT ENGINEERING CO.

REV ROW
KHN 6-3-51

REV ENCROACHMENT
KHN 6-3-51

Bench Mark No. 57B: "O" in open top fire Hydrant NE. Corner Gardner and Ferdinand Streets. Elev. 534.93
No Existing Structure.

PVI Sta. 421+65.00
EI. 588.96
VC: 1500'
MO: 1125'

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL.	38	73
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	I-16-80-4(35)/134	

GENERAL NOTES

Class X Concrete shall be used throughout. Coarse aggregate used in parapets and end posts must be free of chert, flint, limonite, lignite and soft sand stone. The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications. Rivets shall be $\frac{3}{4}\phi$ with $\frac{1}{2}\phi$ open holes unless noted.

All Rockers, Bolsters, Bearing Plates, Lead Plates, Pintles and Anchor Bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of Structural Steel. Anchor bolts shall be set before connecting diaphragms over support. Space reinforcing to miss Anchor Bolts.

Expansion guards and plates shall be fabricated and erected in accordance with Article 51.13(d) of the Standard Specifications and are in quantity of Structural Steel.

Except as otherwise provided all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.

All surfaces of Expansion Guards inaccessible after erection shall be given two shop coats of red lead paint. The $\frac{3}{4}\phi$ welded studs shall not be painted.

Floor drains shall not be paid for separately but are to be included in price bid for Class X Concrete.

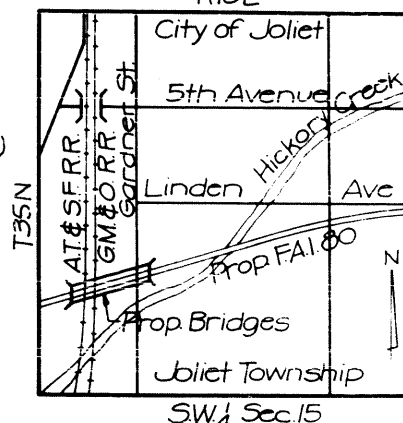
The Contractor shall drive four (4) test piles in permanent locations before ordering remainder of piles. For locations see Pier sheets.

No rock larger than 3" shall be placed in fills in the area where piles are to be driven.

All Steel Bearing Piles are to be driven to refusal. Permanent forms will not be permitted in forming the concrete floor.

DESIGN STRESSES

Reinforced Concrete:
f_c: 3500 p.s.i.
f_s: 20,000 p.s.i.
n: 10
f_c: 1400 p.s.i. (except ftgs)
f_c: 1000 p.s.i. (footings)
f_s: 90 p.s.i. (except ftgs)
f_s: 75 p.s.i. (footings)
Structural Steel:
f_y: 20,000 p.s.i. (A-36)
Loading:
H20-S16 & Alternate.



LOCATION PLAN

CURVE DATA

AT & SF R.R. (Chord Def)
PC Sta. 424+01.36
D: 2° 00' 00"
Δ: 9° 00' 00"
R: 2864.93'
T: 225.47'
PT Sta. 2028+20.2
G.M. & O. R.R. (Chord Def)
PC Sta. 1999+43.4
D: 1° 12' 00"
Δ: 8° 28' 30"
R: 14.74'
T: 353.78'
PT Sta. 2006+49.4

GENERAL PLAN & ELEVATION
FAI. 80 OVER

AT & S.F. AND G.M. & O. R.R. AND GARDNER ST.

FAI. 80 STA. ON GARDNER ST. 424+01.36

F.A.I. ROUTE 80 PROJECT I-16-80-4(35)/134

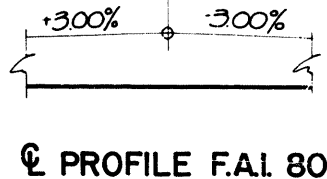
SECTION 99-4VB WILL COUNTY

Scale: NO SCALE Date Jan. 19, 1961

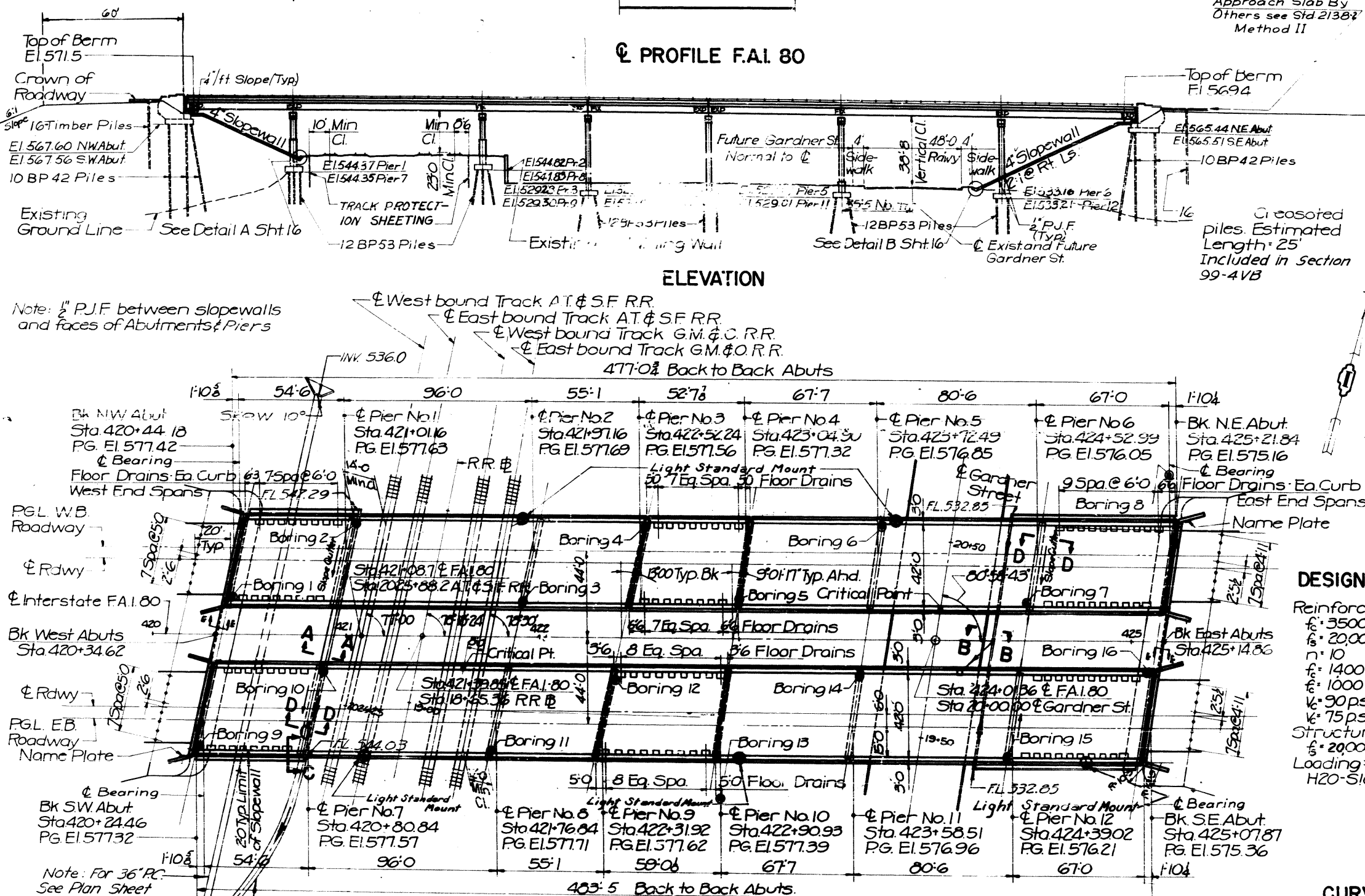
BLAUVELT ENGINEERING CO.

CONSULTING ENGINEERS

WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.



ELEVATION



PLAN

Note: See Plan Sheet for Inlet and storm sewer

STATION 424+01.36
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. 99-4VB
F.A. PROJ. I-16-80-4(35)
LOADING H20-S16 & ALT.

See Standard 2113-1

LETTERING FOR NAME PLATE

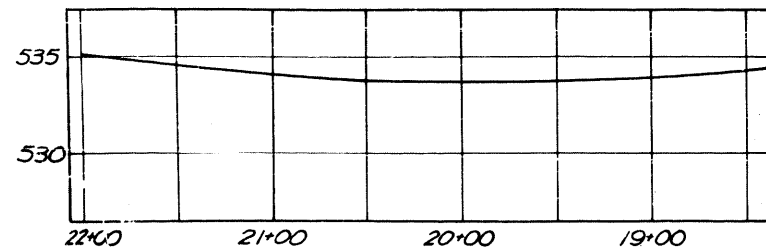
Prepared and recommended by
Blauvelt Engineering Co.

Structural Engineer
81-2251

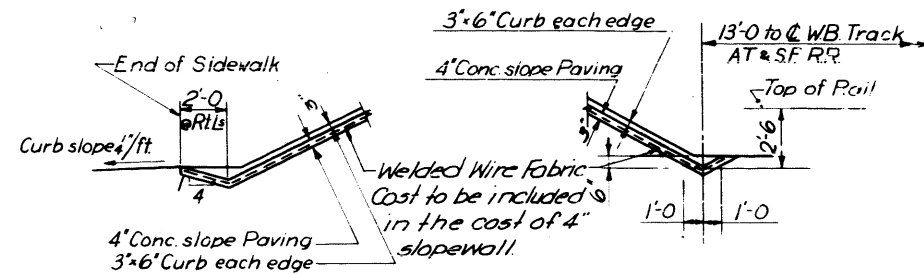
DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	S.E.F.
CHECKED	L.A.N.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-80	99-4VB	WILL	38	16
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



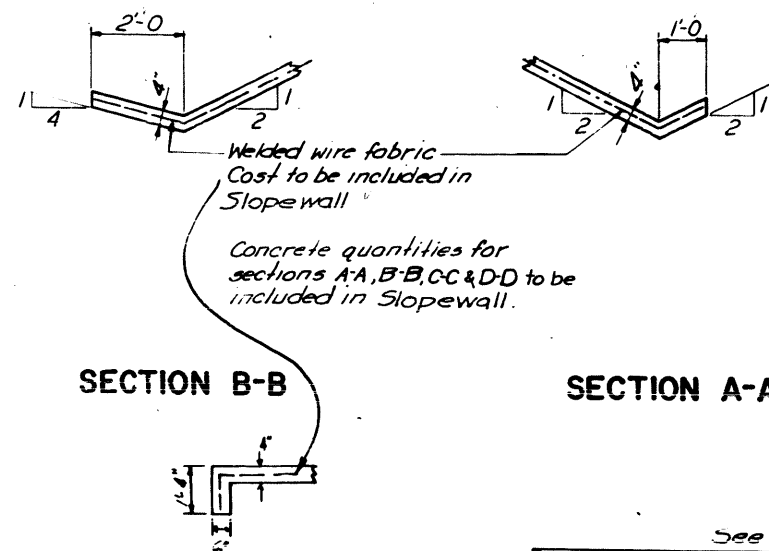
EXISTING PROFILE-GARDNER STREET



DETAIL "B"

DETAIL "A"

Note: Welded wire fabric shall be 6x6 mesh, #4 wires, weight 58#/100 sq.



SECTION B-B

SECTION A-A

SECTION E-E

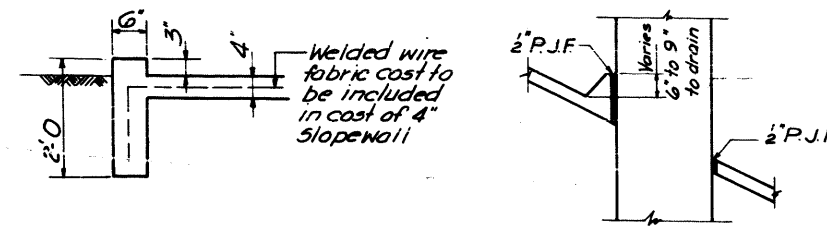
DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	E.R.
CHECKED	L.A.N.

TOTAL BILL OF MATERIAL

Section 99-4VB

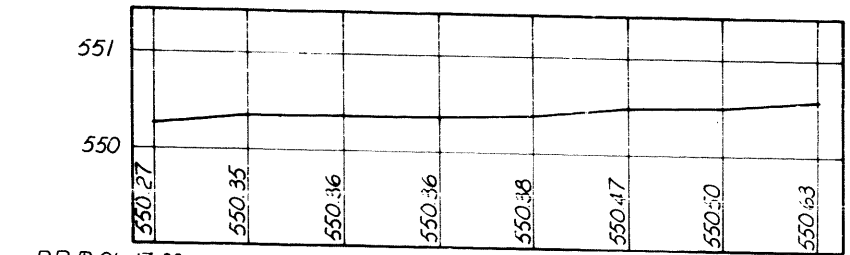
Item	Unit	Super	Sub	Total
Class A Excavation for Structures	Cu. Yd.		783	783
Class A Concrete	Cu. Yd.	1284.0	1155.9	2439.9
Furnishing & Erecting Structural Steel	Pound	1,422,828		1,422,828
Protective Coat	Sq. Yd.	5565		5565
Reinforcement Bars	Pound	332,764	143,140	475,904
Furnishing Creosoted Piles 20.1 to 38 feet	Lin. Ft.		800	800
Driving Timber Piles	Lin. Ft.		800	800
Furnishing Steel Piles 12BP53	Lin. Ft.		3721	3721
Furnishing Steel Piles 10BP42	Lin. Ft.		3103	3103
Test Pile Steel 12BP53	Each		2	2
Test Pile Steel 10BP42	Each		2	2
Driving Steel Piles	Lin. Ft.		6824	6824
Name Plates	Each		2	2
Slopewall, 4"	Sq. Yd.			2322
Aluminum Handrail	Lin. Ft.	1913		1913

*Includes Excavation For Slopewall

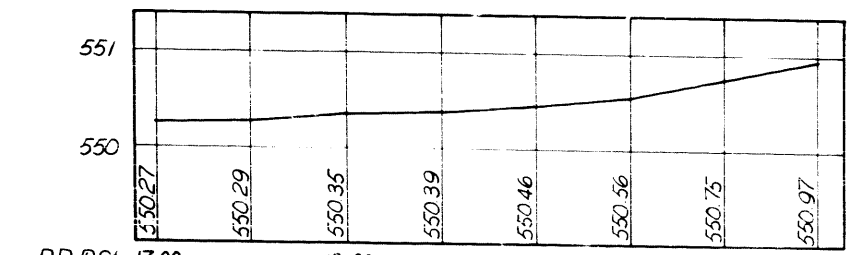


SECTION C-C

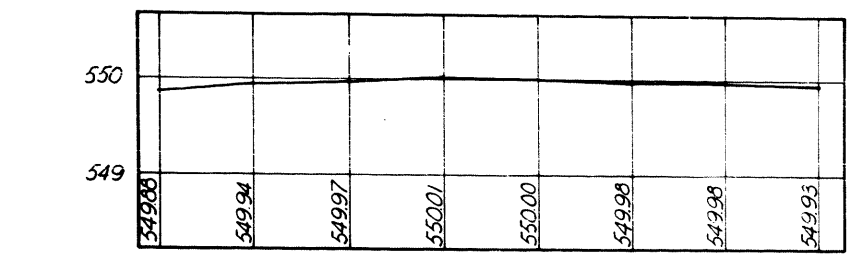
SECTION D-D



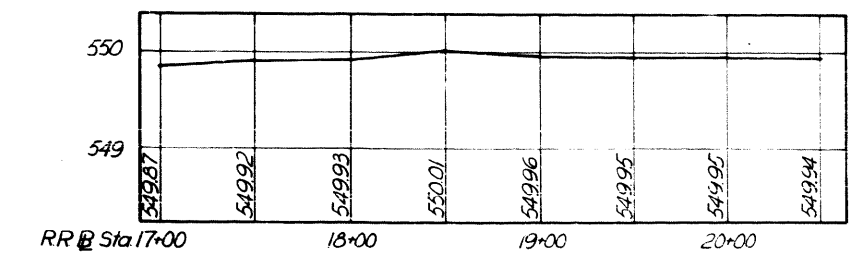
EAST RAIL-EASTBOUND TRACK C.M.&O.R.R.



EAST RAIL-WESTBOUND TRACK G.M.&O.R.R.



EAST RAIL-EASTBOUND TRACK A.T.&S.F. R.R.



EAST RAIL-WESTBOUND TRACK A.T.&S.F. R.R.

ELEVATIONS-TOP OF BEAMS

See Dead Load Deflection Diagram & Framing Plan for location of points

Pl. Str.	A	B	C	D	E	F	G	H	J	K	L	M	N	O
1	576.52	576.60	576.72	576.68	576.55	576.39	576.22	576.18	576.33	576.48	576.39	576.61	576.54	576.38
7	576.71	576.86	576.91	576.88	576.76	576.60	576.43	576.41	576.56	576.72	576.85	576.85	576.78	576.63
Splice #1	576.75	576.89	576.95	576.92	576.80	576.64	576.48	576.46	576.61	576.76	576.88	576.90	576.84	576.68
Splice #2	576.78	576.93	576.99	576.96	576.84	576.69	576.53	576.53	576.68	576.83	576.91	576.99	576.93	576.78
17	576.76	576.91	576.97	576.95	576.83	576.68	576.52	576.53	576.68	576.84	576.96	576.99	576.93	576.78
23	576.62	576.78	576.84	576.82	576.71	576.56	576.40	576.43	576.59	576.75	576.88	576.91	576.85	576.70
24	576.71	576.85	576.92	576.90	576.78	576.63	576.49	576.51	576.67	576.83	576.95	576.98	576.93	576.79
30	576.47	576.62	576.69	576.66	576.55	576.40	576.26	576.29	576.44	576.60	576.73	576.76	576.71	576.57
31	576.41	576.57	576.64	576.62	576.50	576.35	576.20	576.23	576.39	576.56	576.68	576.72	576.66	576.51
38	575.94	576.10	576.17	576.15	576.04	575.90	575.75	575.79	575.96	576.12	576.25	576.28	576.23	576.09
Splice #3	575.78	575.94	576.01	576.00	575.89	575.74	575.59	575.64	575.81	575.97	576.10	576.14	576.09	575.95
Splice #4	575.34	575.50	575.58	575.56	575.45	575.31	575.16	575.22	575.39	575.56	575.68	575.73	575.68	575.54
46	575.13	575.30	575.37	575.36	575.25	575.11	574.96	575.02	575.19	575.36	575.49	575.54	575.49	575.35
53	574.27	574.43	574.51	574.50	574.40	574.26	574.11	574.19	574.36	574.53	574.67	574.71	574.67	574.53

Note: Elevations are to top of WF Section. Add cover plate thickness to get top of structural steel. These elevations have not been adjusted for deflections.

MISCELLANEOUS DETAILS

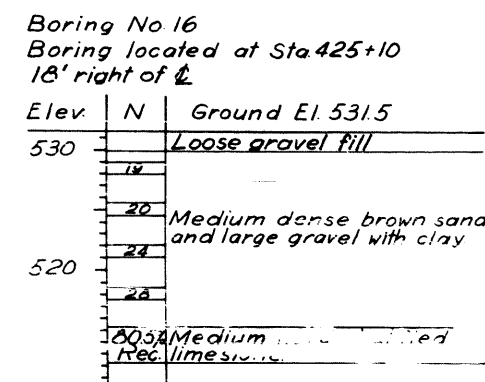
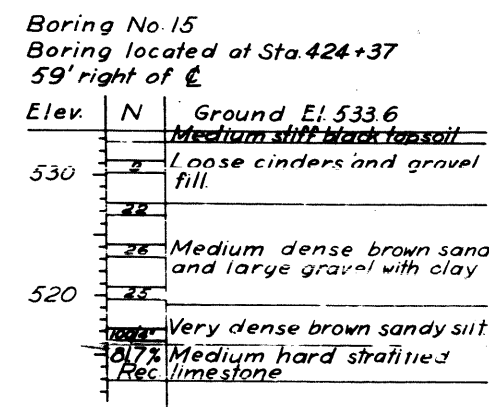
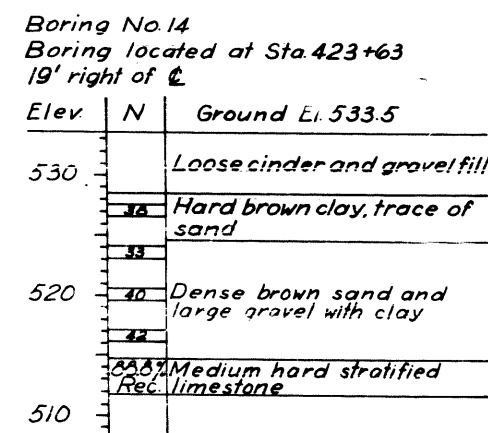
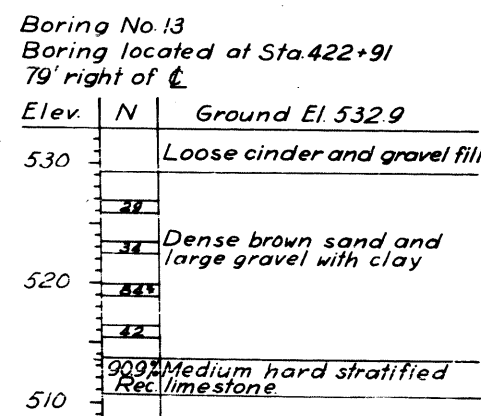
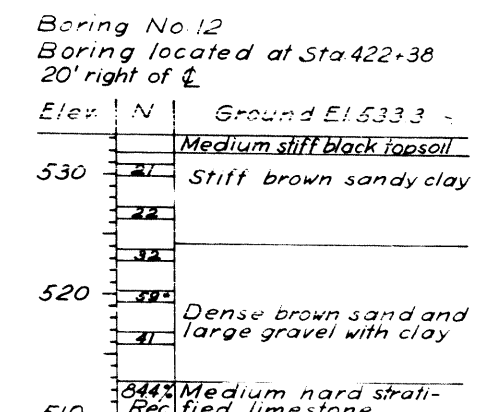
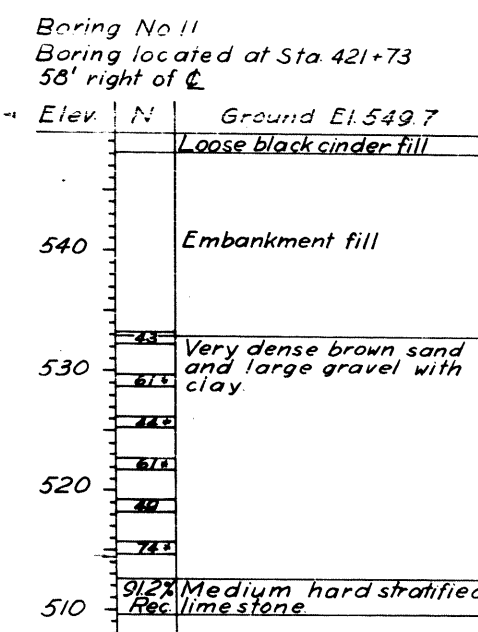
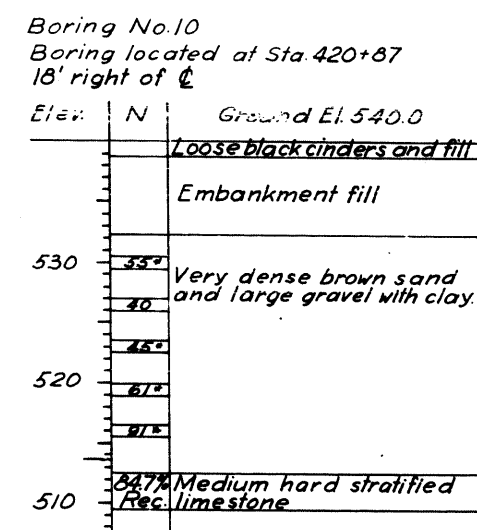
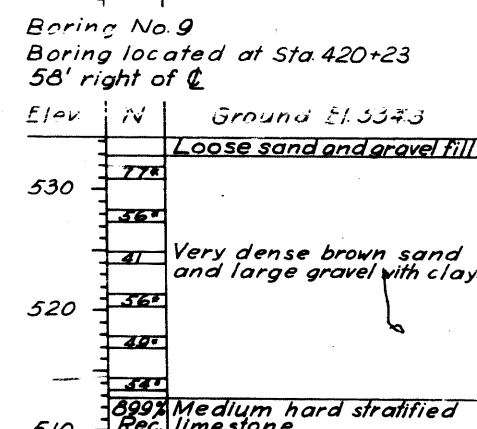
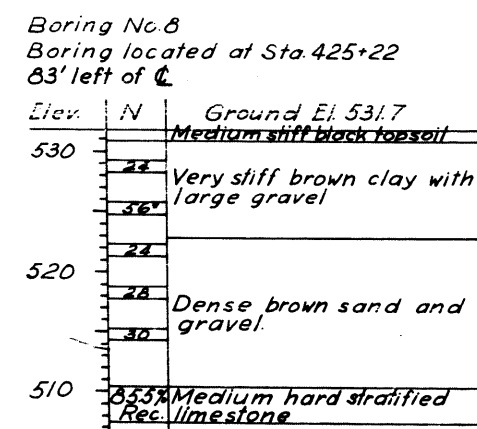
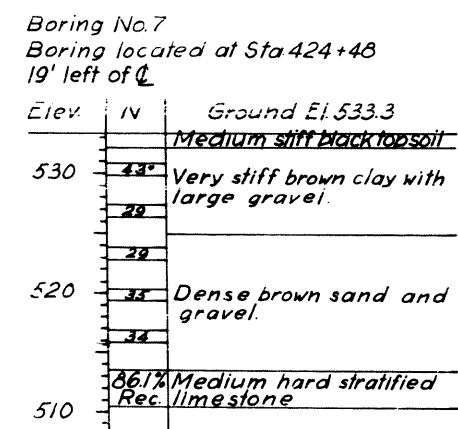
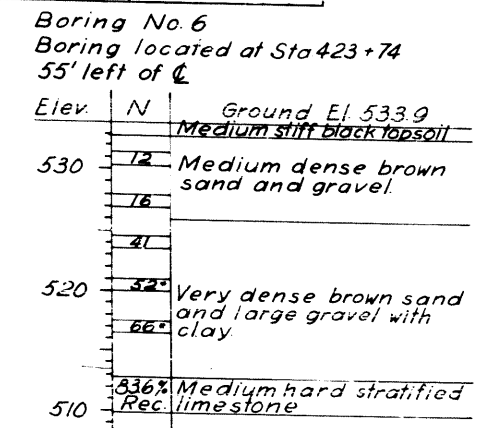
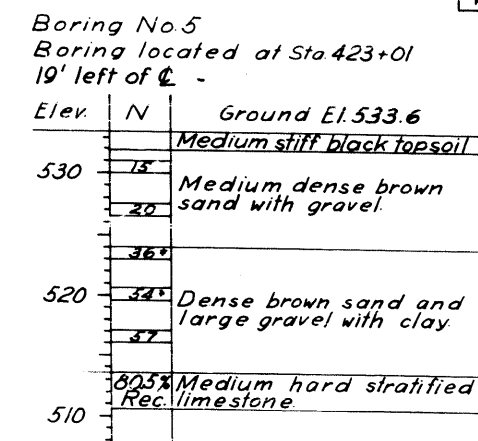
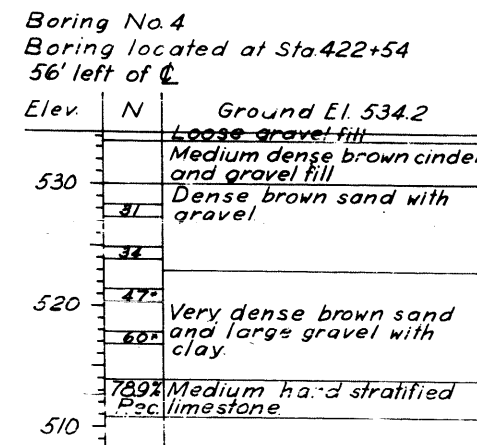
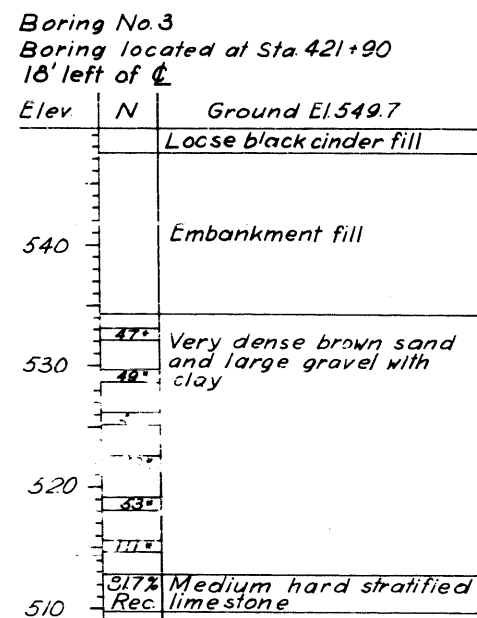
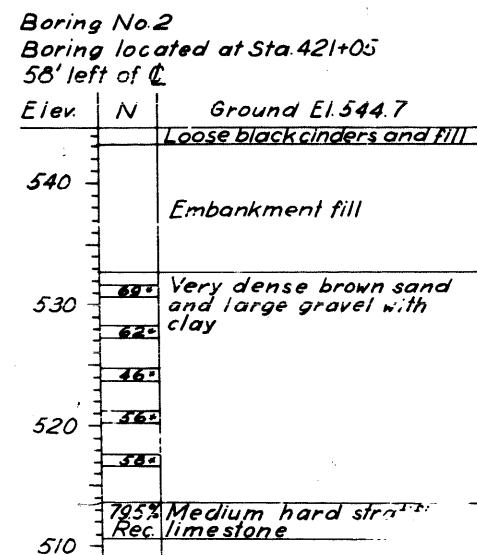
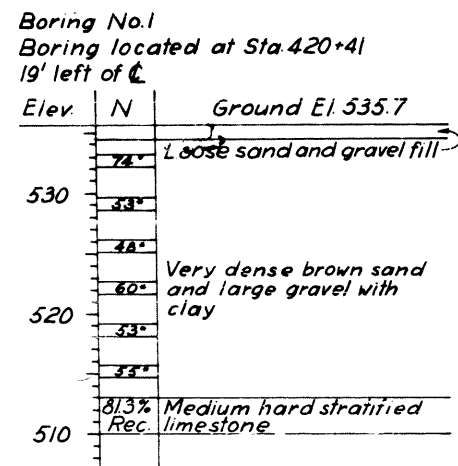
F.A.I. 80 OVER
A.T. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST 424+01.36

F.A.I. ROUTE 80 PROJECT
SECTION 99-4VB WILL COUNTY
Scale: NO SCALE Date: Jan. 19, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	38	17
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



Note: N - Blows per foot of penetration of sampling spoon. Hammer Wt = 140 lbs. Drop = 30 in.

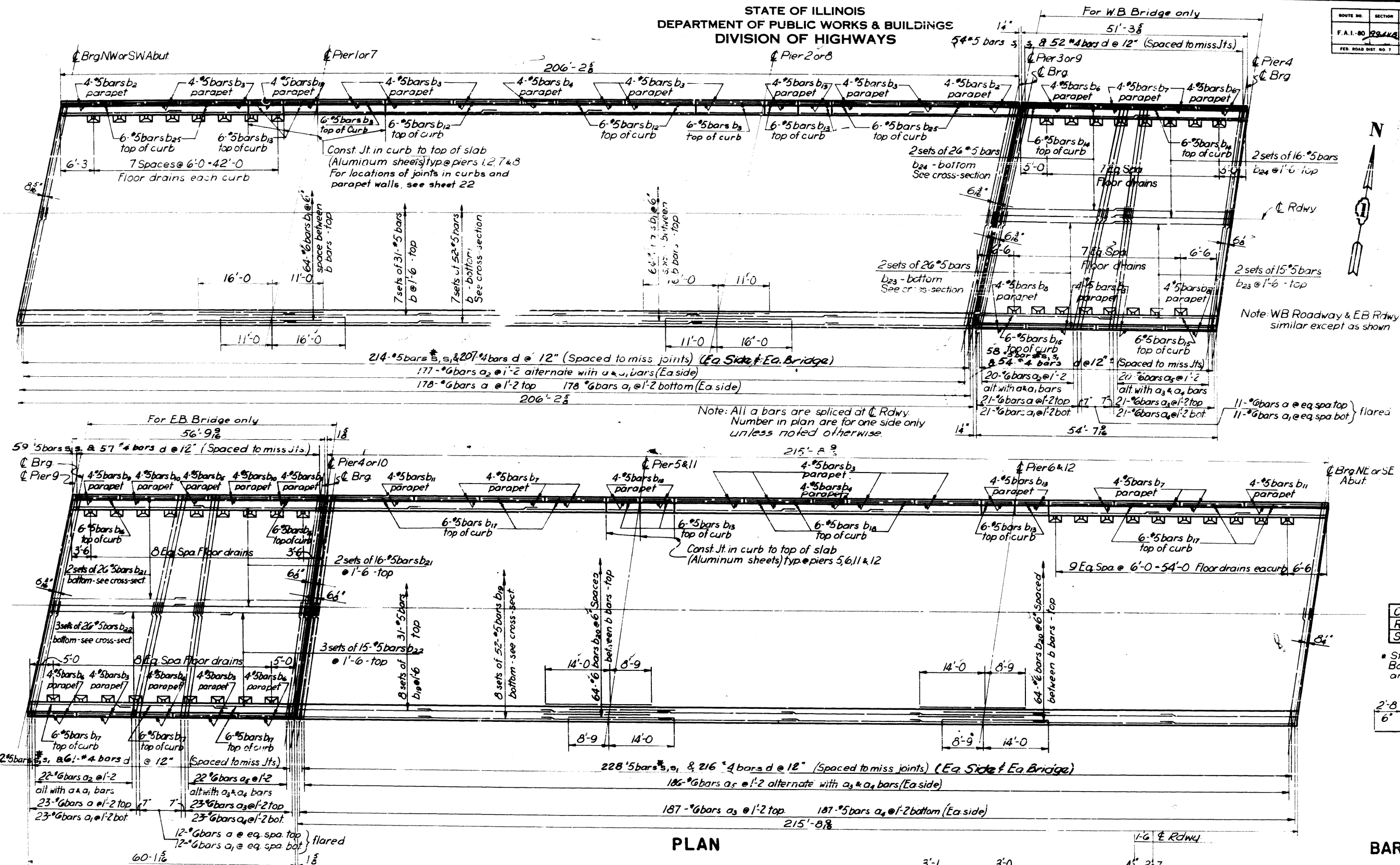
DESIGNED	E.R.
CHECKED	J.M.C.
DRAWN	E.R.
CHECKED	L.A.N.

BORING DATA

BORING DATA
F.A.I. 80 OVER
AT. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON C GARDNER ST. 424+0136
F.A.I. ROUTE 80
SECTION 99-4VB
Scale: NO SCALE
PROJECT
WILL COUNTY
Date: Jan. 19, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. Y. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	38	19
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



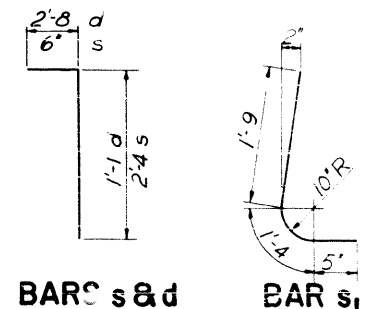
BILL OF REINFORCEMENT

Bar	No.	Size	Lgth	Shape
a	846	#6	25'3"	
a ₁	846	#6	24'9"	
a ₂	792	#6	26'2"	
a ₃	836	#6	25'0"	
a ₄	836	#6	24'3"	
a ₅	825	#6	25'11"	
b	1162	#5	30'3"	
b ₁	256	#6	27'0"	
b ₂	32	#5	11'4"	
b ₃	288	#5	14'3"	
b ₄	36	#5	7'0"	
b ₅	4	#5	6'6"	
b ₆	16	#5	11'3"	
b ₇	104	#5	13'9"	
b ₈	8	#5	12'0"	
b ₉	8	#5	10'9"	
b ₁₀	8	#5	13'3"	
b ₁₁	32	#5	18'0"	
b ₁₂	72	#5	23'1"	
b ₁₃	320	#5	6'9"	
b ₁₄	12	#5	26'0"	
b ₁₅	12	#5	27'9"	
b ₁₆	12	#5	28'9"	
b ₁₇	162	#5	20'9"	
b ₁₈	72	#5	22'6"	
b ₁₉	1328	#5	28'0"	
b ₂₀	256	#6	22'9"	
b ₂₁	84	#5	29'9"	
b ₂₂	123	#5	20'6"	
b ₂₃	82	#5	27'6"	
b ₂₄	84	#5	27'0"	
b ₂₅	96	#5	21'0"	
s	2557	#5	2'10"	
s ₁	2001	#5	3'6"	
d	1916	#4	3'9"	

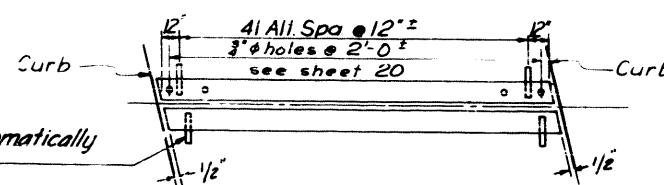
BILL OF MATERIALS

Class X Concrete	Cu Yd	1284
Reinforcement Bars	Lbs	332,764
Structural Steel *	Lbs	142,828

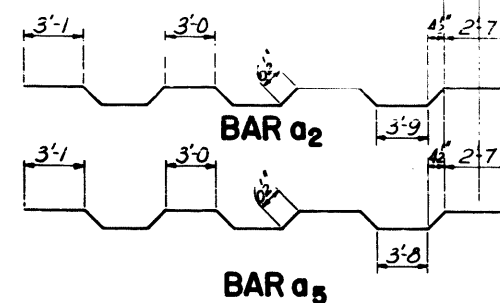
* Structural Steel includes weight of rockers, Bolsters, Bearing Plates, Lead Plates, Pintles and Anchor Bolts. Est. Weight - 4,300 lbs.



PLAN



EXPANSION GUARD DETAIL



BAR a5

SLAB PLAN

F.A.I. 80 OVER
AT & SE AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST. 424+01.36

F.A.I. ROUTE 80 PROJECT
SECTION 99-4VB WILL COUNTY
Scale: NO SCALE Date: Jan. 19, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	SEF
CHECKED	L.A.N.

* In addition to the s bars shown;
2 additional #5 bars shall be placed
at each rail post.
138 - #5 s bars N. rail E.B. 140 - #5 s bars N. rail M.B.
136 - #5 s bars S. rail E.B. 136 - #5 s bars S. rail M.B.

ELEVATIONS - TO TOP SLAB**

See Dead Load Deflections Diagram for location of Pts.

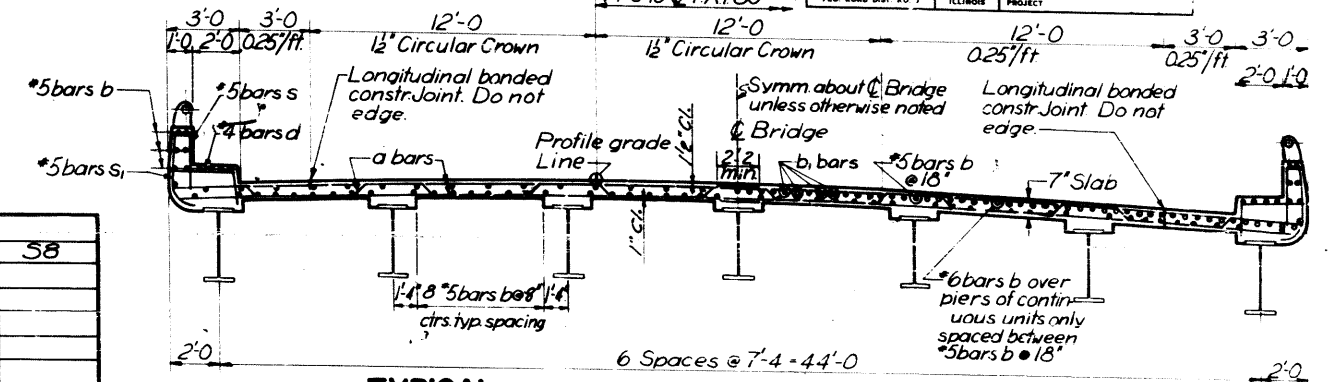
STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	38	19
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

A*	B	C	D	E	F	G*	H*	J	K	L	M	N	O*
1	577.24	577.37	577.43	577.39	577.26	577.10	576.94	576.90	577.04	577.19	577.30	577.32	577.25
2	577.28	577.41	577.47	577.43	577.30	577.14	576.98	576.95	577.09	577.24	577.35	577.37	577.30
3	577.32	577.45	577.51	577.47	577.34	577.18	577.02	576.99	577.13	577.28	577.39	577.41	577.34
4	577.35	577.48	577.54	577.51	577.38	577.22	577.06	577.03	577.17	577.32	577.43	577.46	577.39
5	577.38	577.51	577.57	577.54	577.41	577.25	577.09	577.07	577.21	577.36	577.47	577.49	577.42
6	577.41	577.54	577.60	577.57	577.44	577.28	577.13	577.10	577.24	577.39	577.51	577.53	577.46
7	577.43	577.57	577.62	577.59	577.47	577.31	577.15	577.13	577.27	577.43	577.54	577.56	577.49
8	577.45	577.59	577.65	577.62	577.49	577.33	577.18	577.16	577.30	577.46	577.57	577.59	577.53
9	577.47	577.61	577.67	577.63	577.51	577.35	577.20	577.18	577.33	577.48	577.60	577.62	577.55
10	577.48	577.62	577.68	577.65	577.53	577.37	577.22	577.20	577.35	577.50	577.62	577.64	577.58
11	577.49	577.63	577.69	577.66	577.54	577.38	577.23	577.22	577.37	577.52	577.64	577.66	577.60
12	577.50	577.64	577.70	577.67	577.55	577.39	577.24	577.23	577.38	577.54	577.65	577.68	577.61
13	577.50	577.64	577.70	577.67	577.55	577.40	577.25	577.24	577.39	577.55	577.66	577.69	577.63
14	577.50	577.64	577.71	577.68	577.56	577.40	577.25	577.25	577.40	577.55	577.67	577.70	577.64
15	577.50	577.64	577.70	577.67	577.55	577.40	577.25	577.25	577.40	577.56	577.67	577.70	577.64
16	577.49	577.63	577.70	577.67	577.55	577.39	577.25	577.25	577.40	577.56	577.67	577.70	577.64
17	577.48	577.62	577.68	577.66	577.54	577.39	577.24	577.25	577.39	577.55	577.66	577.69	577.63
18	577.46	577.61	577.67	577.64	577.53	577.37	577.23	577.24	577.39	577.55	577.67	577.70	577.63
19	577.44	577.59	577.65	577.63	577.51	577.36	577.21	577.23	577.38	577.53	577.65	577.68	577.61
20	577.42	577.57	577.63	577.61	577.49	577.34	577.20	577.21	577.36	577.52	577.64	577.67	577.61
21	577.40	577.54	577.61	577.59	577.47	577.32	577.18	577.19	577.34	577.50	577.62	577.65	577.60
22	577.37	577.52	577.58	577.56	577.44	577.29	577.15	577.17	577.32	577.48	577.61	577.64	577.58
23	577.34	577.49	577.55	577.53	577.42	577.27	577.13	577.15	577.30	577.46	577.59	577.62	577.56
24	577.34	577.48	577.55	577.53	577.41	577.26	577.12	577.14	577.30	577.46	577.59	577.62	577.56
25	577.30	577.45	577.52	577.50	577.38	577.23	577.09	577.11	577.27	577.43	577.55	577.59	577.53
26	577.27	577.41	577.48	577.46	577.35	577.20	577.06	577.08	577.23	577.40	577.52	577.56	577.50
27	577.23	577.38	577.45	577.42	577.31	577.16	577.02	577.05	577.20	577.36	577.49	577.52	577.46
28	577.19	577.34	577.41	577.38	577.27	577.12	576.98	577.01	577.16	577.32	577.45	577.48	577.42
29	577.15	577.29	577.36	577.34	577.23	577.08	576.94	576.96	577.12	577.28	577.40	577.44	577.38
30	577.10	577.25	577.32	577.29	577.18	577.03	576.89	576.91	577.07	577.23	577.36	577.39	577.33
31	577.09	577.24	577.31	577.29	577.17	577.02	576.88	576.91	577.06	577.23	577.35	577.39	577.33
32	577.04	577.18	577.25	577.23	577.12	576.97	576.83	576.86	577.01	577.17	577.30	577.34	577.28
33	576.98	577.12	577.19	577.17	577.06	576.91	576.77	576.80	576.96	577.12	577.25	577.28	577.22
34	576.91	577.06	577.13	577.11	577.00	576.85	576.71	576.74	576.90	577.06	577.19	577.22	577.16
35	576.84	576.99	577.06	577.04	576.93	576.78	576.64	576.68	576.83	577.00	577.13	577.16	577.10
36	576.77	576.92	576.99	576.97	576.86	576.72	576.58	576.61	576.77	576.93	577.06	577.10	577.04
37	576.70	576.85	576.92	576.90	576.79	576.64	576.50	576.54	576.70	576.86	576.99	577.03	576.98
38	576.62	576.77	576.84	576.82	576.71	576.57	576.43	576.47	576.63	576.79	576.92	576.96	576.90
39	576.53	576.68	576.76	576.74	576.63	576.48	576.34	576.39	576.54	576.71	576.84	576.88	576.82
40	576.44	576.59	576.67	576.65	576.54	576.39	576.26	576.30	576.46	576.63	576.76	576.79	576.74
41	576.35	576.50	576.57	576.55	576.45	576.30	576.16	576.21	576.37	576.54	576.67	576.71	576.65
42	576.25	576.40	576.48	576.46	576.35	576.21	576.07	576.12	576.28	576.44	576.57	576.61	576.56
43	576.15	576.30	576.37	576.36	576.25	576.10	575.97	576.02	576.18	576.35	576.48	576.52	576.47
44	576.04	576.19	576.27	576.25	576.14	576.00	575.86	575.92	576.08	576.25	576.38	576.42	576.37
45	575.93	576.08	576.16	576.14	576.04	575.89	575.76	575.81	575.97	576.14	576.27	576.31	576.26
46	575.81	575.97	576.04	576.03	575.92	575.78	575.64	575.70	575.86	576.03	576.16	576.21	576.16
47	575.70	575.85	575.93	575.92	575.81	575.67	575.53	575.59	575.75	575.92	576.06	576.10	576.05
48	575.58	575.74	575.82	575.80	575.70	575.55	575.42	575.48	575.64	575.81	575.95	576.00	575.95
49	575.46	575.62	575.70	575.68	575.58	575.43	575.30	575.36	575.53	575.70	575.83	575.87	575.83
50	575.34	575.49	575.57	575.56	575.45	575.31	575.18	575.24	575.41	575.58	575.71	575.76	575.71
51	575.21	575.37	575.45	575.43	575.33	575.19	575.06	575.12	575.29	575.46	575.59	575.64	575.59
52	575.08	575.24	575.32	575.30	575.20	575.06	574.93	575.00	575.16	575.33	575.47	575.51	575.46
53	574.95	575.10	575.18	575.17	575.07	574.93	574.79	574.87	575.03	575.20	575.34	575.38	575.34

* Where Curb is over stringer add depth of curb to elevation to get top of concrete elevation over $\frac{1}{2}$ of stringer.
** These elevations are theoretical grade and have not been adjusted for D.L. deflections.

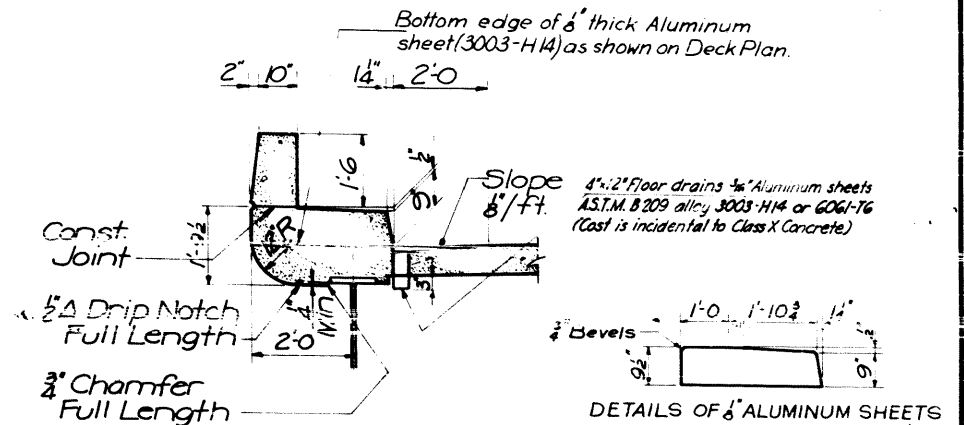
Δ Dead Load Deflection in feet due to weight of slab.



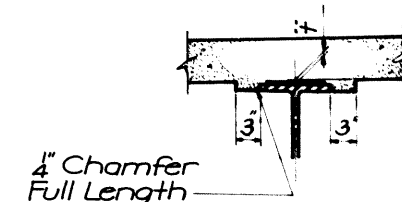
TYPICAL

CROSS SECTION

OVER PIERS

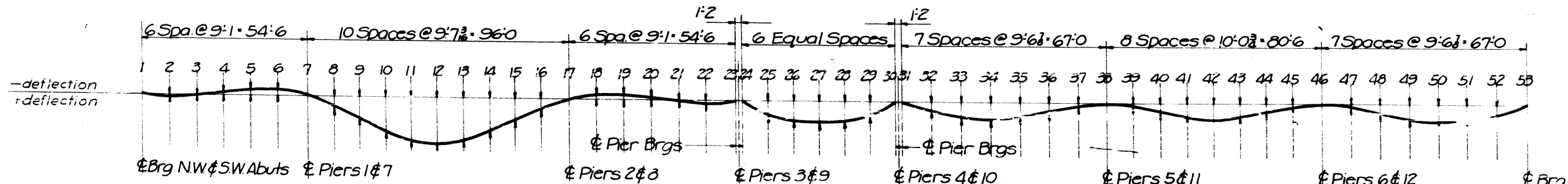


CURB DETAILS



After all structural steel has been erected elevations of the top flanges of the beams shall be taken at intervals shown on D.L. Deflection Diagram. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above tops of beams.

METHOD OF DETERMINING FILLET HEIGHT "f"



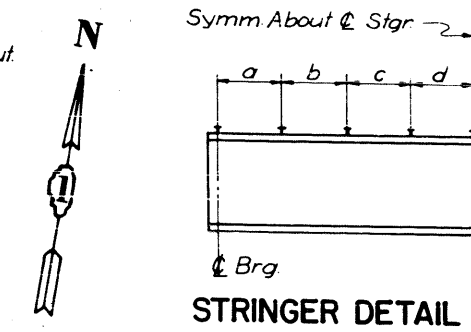
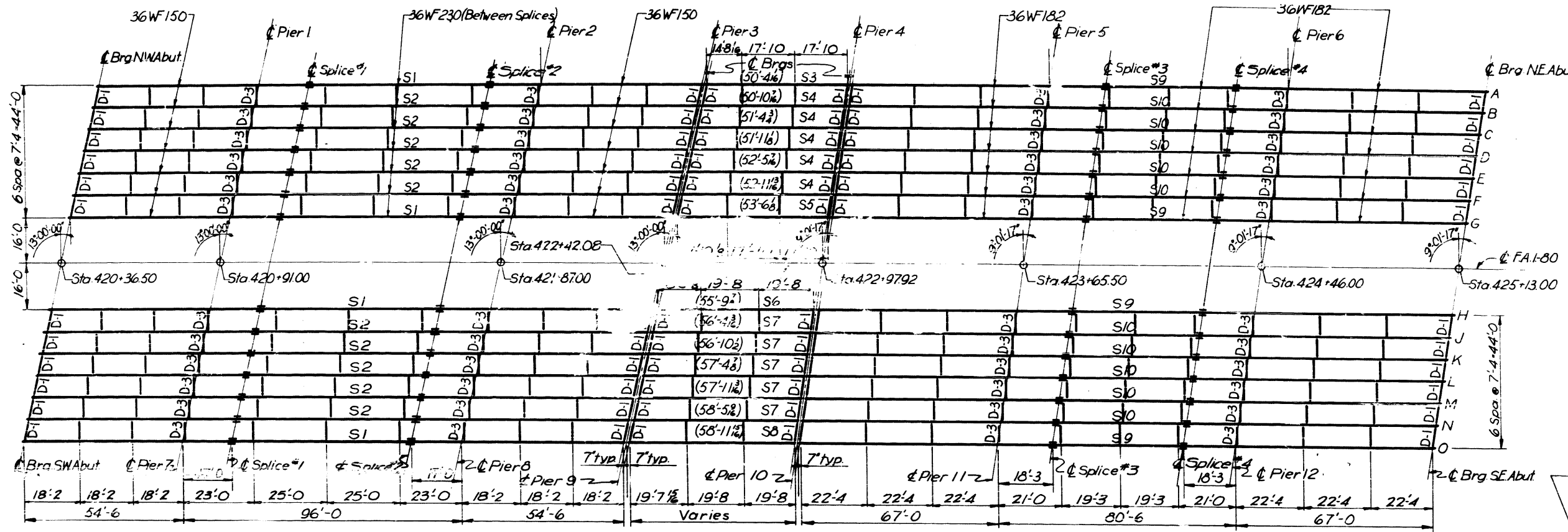
DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	SEF
CHECKED	L.A.N.

DEAD LOAD DEFLECTIONS

DECK DETAILS
F.A.I. 80 OVER
A.T. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON $\frac{1}{2}$ GARDNER ST. 424+01.36
F.A.I. ROUTE 80
SECTION 99-4VB
Scale: NO SCALE
PROJECT
WILL COUNTY
Date: Jan. 19, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

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

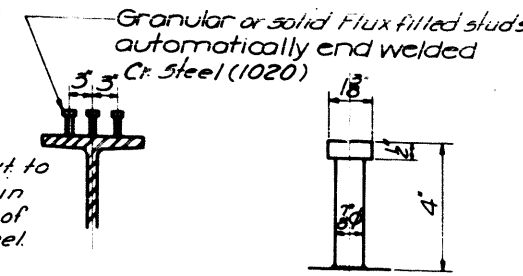
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	36	20
FOR ROAD DIST. NO. 1	ILLINOIS	PROJECT		



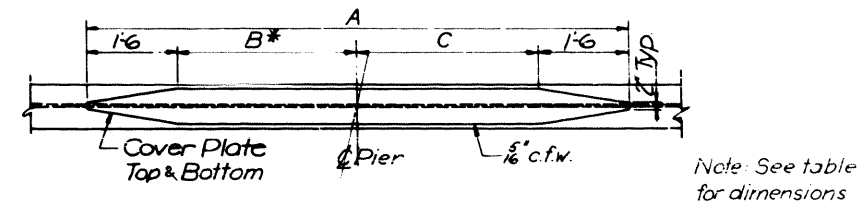
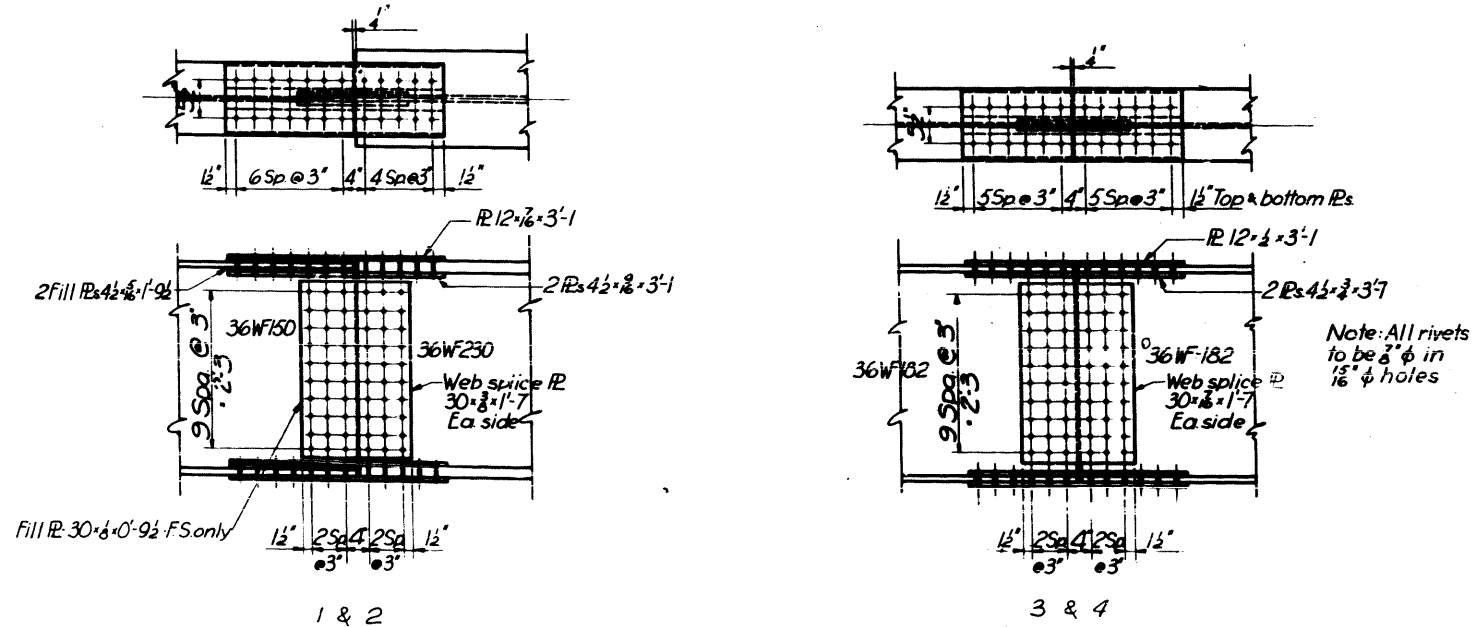
SHEAR CONNECTOR SPA&THEO.CAMBER

Str Mk	Size	Shear Connector Spacing							
		a	b	c	d	e	f	g	h
S3	36WF150	8'-4"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	22'-0"
S4	36WF150	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	21'-0"
S5	36WF150	8'-4"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	22'-0"
S6	36WF160	8'-4"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	22'-0"
S7	36WF170	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	21'-0"
S8	36WF182	8'-4"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	22'-0"

* Includes camber for vertical curve



Note: All dimensions are in a horizontal plane. Dimensions in parenthesis () are stringer length center to center of bearings. Bridges are symmetrical about F.A.I. 80 except as noted. All diaphragms are Mark D-2 unless noted otherwise.



Note: For Top of Slab Elevations & Dead Load Deflections see sheet #19. For Top of Beam Elevations see sheet #16.

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	S.E.F.
CHECKED	L.A.N.

Cover Size	Piers 1, 2, 7 & 8	Piers 5, 6, 11 & 12	Piers 3 & 4	Piers 9 & 10	Piers 11 & 12	Piers 13 & 14
	A	B	C	A	B	C
S-1	11'-1"	22'-9"	11'-9"	8'-0"	-	-
S-2	11'-1"	22'-9"	11'-9"	8'-0"	-	-
S-9	8'-4"	-	-	-	12'-0"	4'-6"
S-10	8'-4"	-	-	-	12'-0"	4'-6"

TABLE OF COVER PLATE DIMENSIONS

* The B dimension for S1 and S-2 of 11'-9" is for the 54'-6" spans

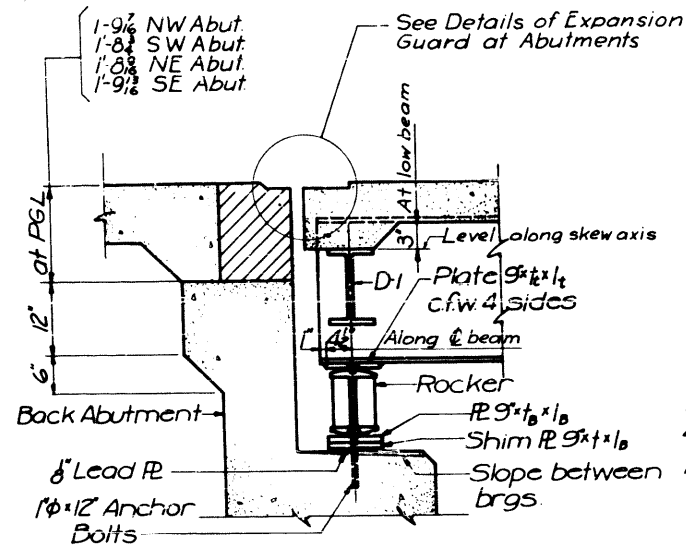
FRAMING PLAN AND STEEL DETAILS
F.A.I. 80 OVER
AT. & SE. AND GM. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST. 424+01.36

F.A.I. ROUTE 80
SECTION 99-4VB
WILL COUNTY
Scale: NO SCALE
Date Jan. 19, 1961

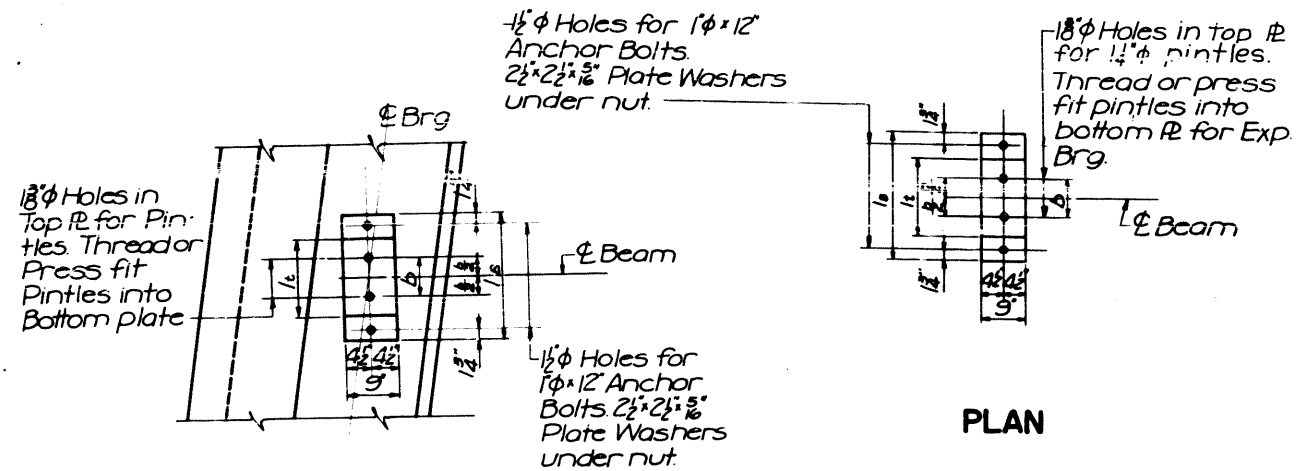
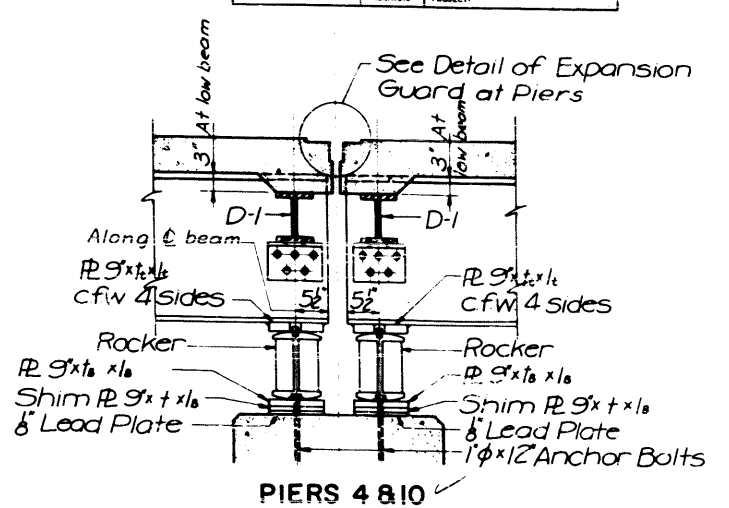
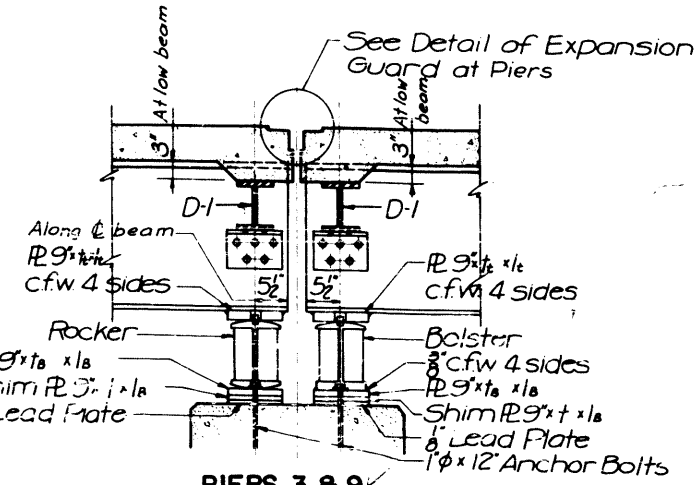
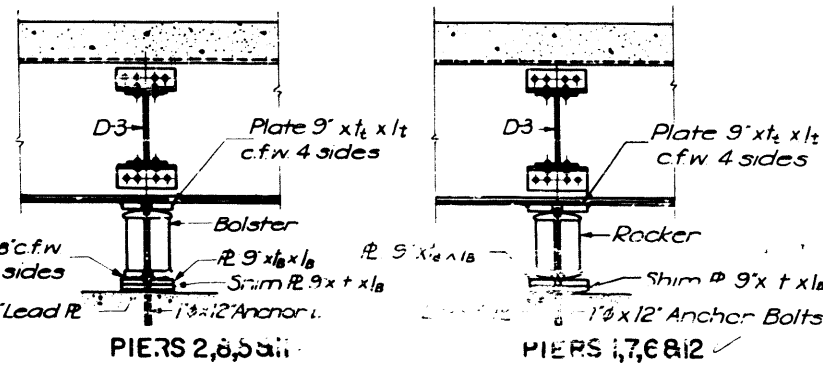
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

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

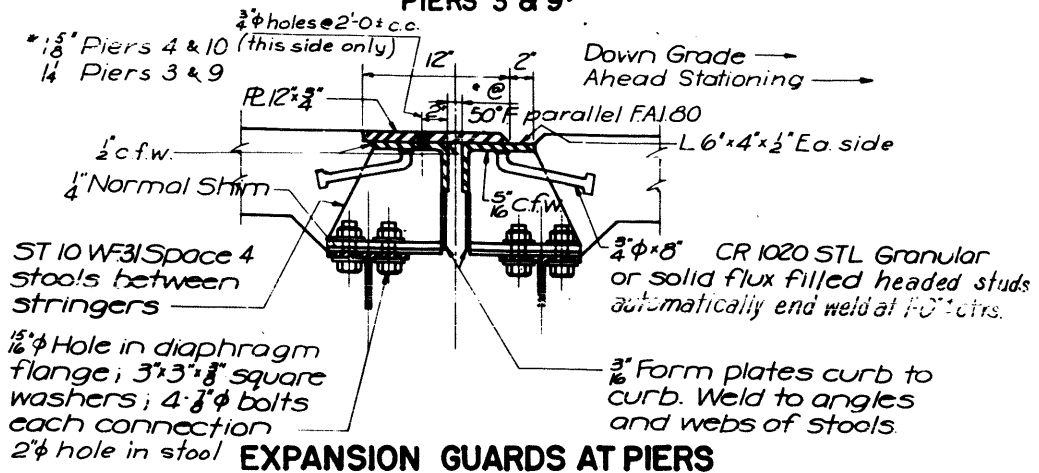
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	38	27
PER ROAD DIST. NO. 7		ILLINOIS	PROJECT	



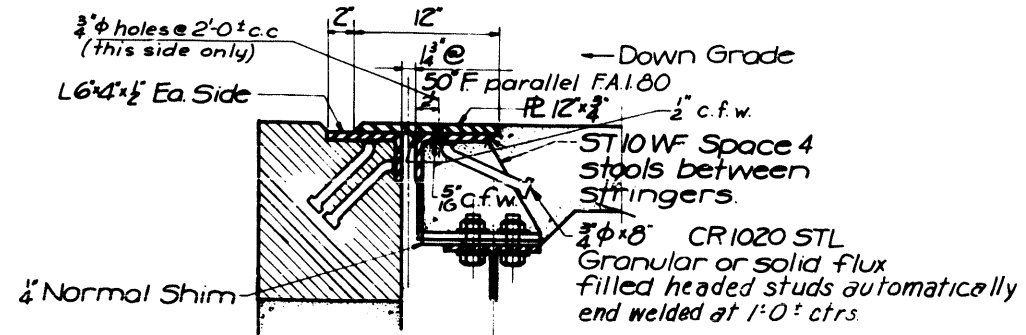
SECTION AT ABUTMENTS



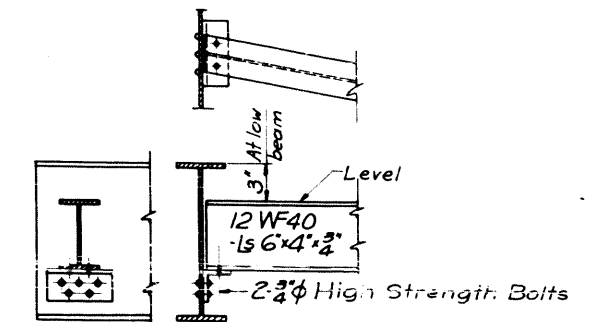
PLAN



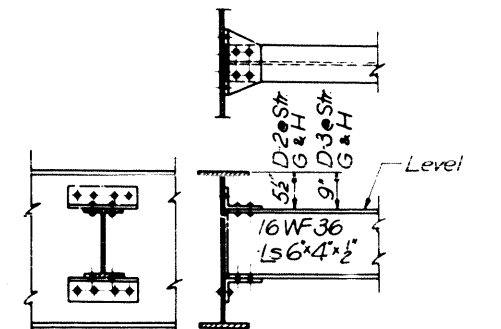
EXPANSION GUARDS AT PIERS



EXPANSION GUARDS AT ABUTMENTS



DIAPHRAGMS D-1



DIAPHRAGMS D-2 & D-3

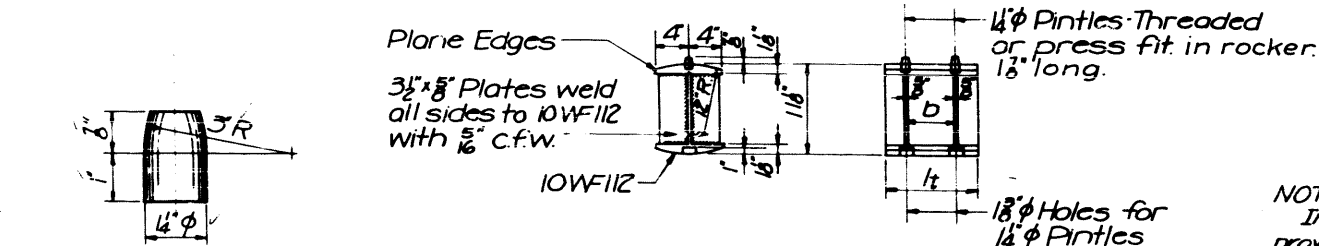
NOTE:
In addition to the 1/4" Normal Shims provide 2-1/4" and 1-1/8" shim for 50% of the stool connections.

TABLE OF "I" DIMENSIONS

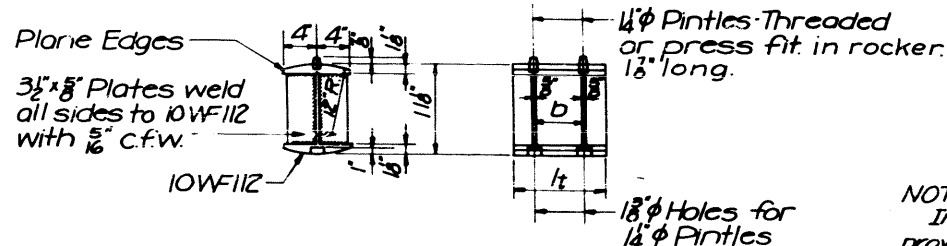
STR.	NW Abut	Pier #1	Pier #2	Pier #3	Pier #4	Pier #5	Pier #6	NE Abut
C	11'	11'	11'	11'	11'	11'	11'	11'
D	11'	11'	11'	11'	11'	11'	11'	11'
STR	SW Abut	Pier #7	Pier #8	Pier #9	Pier #10	Pier #11	Pier #12	SE Abut
L	11'	11'	11'	11'	11'	11'	11'	11'
M	11'	11'	11'	11'	11'	11'	11'	11'

DIMENSIONS FOR BEARINGS

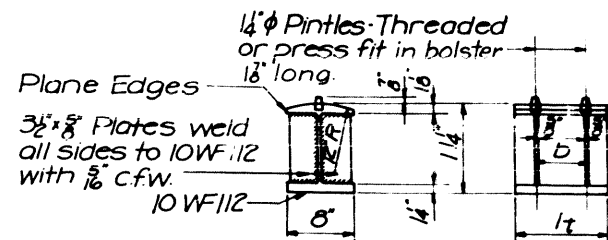
STR.	LOCATION	TYPE	1c	1s	c.f.w.	1a	1b	1c
S-1	NW & SW Abut	EXP	13'	20 1/2"	1"	1 1/2"	1"	6 1/2"
S-2	Piers 1 & 7	EXP	12'	19 1/2"	1"	1 1/2"	1"	6"
S-3	Piers 2 & 8	FIX	12'	19 1/2"	1"	1 1/2"	1"	6"
S-4	Piers 3 & 9	FIX	13'	20 1/2"	1"	1 1/2"	1"	6 1/2"
S-5	Piers 4 & 10	EXP	13'	20 1/2"	1"	1 1/2"	1"	6 1/2"
S-6	NE & SE Abut	EXP	13'	20 1/2"	1"	1 1/2"	1"	6 1/2"
S-7	Piers 5 & 11	EXP	12'	19 1/2"	1"	1 1/2"	1"	6"
S-8	Piers 6 & 12	EXP	12'	19 1/2"	1"	1 1/2"	1"	6"



DETAIL OF PINTLE



DETAIL OF EXPANSION BEARING



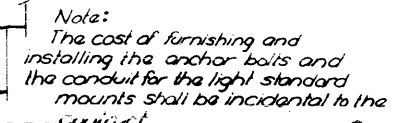
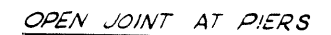
DETAIL OF FIXED BEARING

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	S.E.F.
CHECKED	L.A.N.

BEARING & DIAPHRAGM DETAILS
F.A.I. 80 OVER
AT & S.E. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST. 424+01.36
F.A.I. ROUTE 80 PROJECT
SECTION 99-4VB WILL COUNTY
Scale: NO SCALE Date Jan. 19, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

DATE	SECTION	SUBJECT	TOTAL SHEETS	SHEET NO
1-180	99416	Will		22
FED. ROAD DIST. NO.		ILLINOIS	FED. NO. PROJECT	

SHEET NO
SHEETS



DETAILS OF LIGHT STANDARD MOUNT

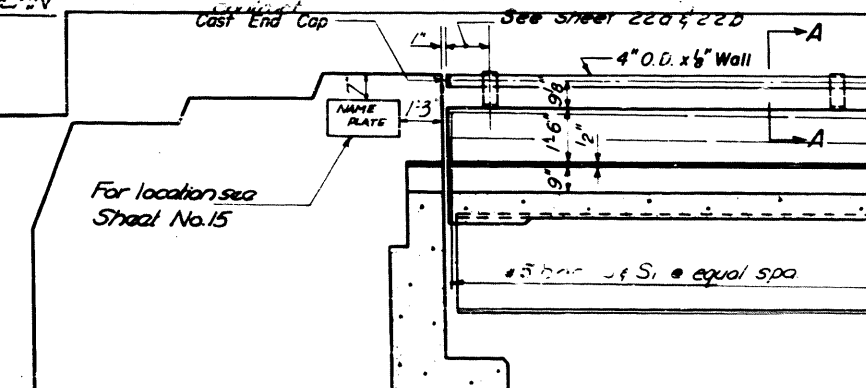


SECTION A-A

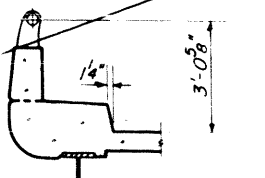


CAST END CAP

DRIVE FIT TYPE
34 - Required
Incidental to item "Aluminum
Handrail"



ELEVATION - END POST

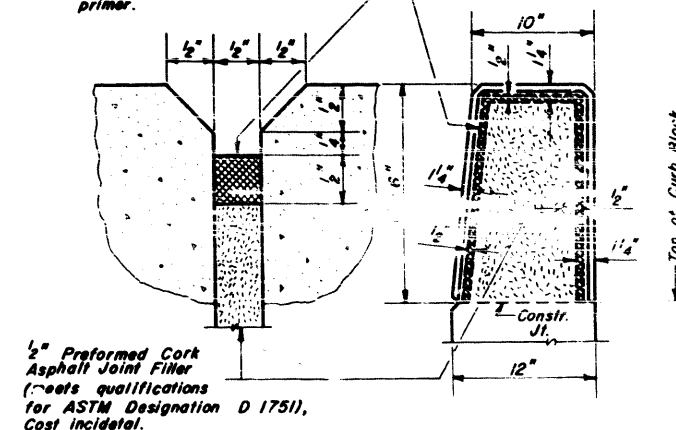


SEC. THRU CURB

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	913

**Two component non-staining gray
sealing compound with polysulfide
liquid polymers - gun grade with
primer.**



PARAPET JOINT DETAIL

ALUMINUM HANDRAIL

Project
FA! 80
Section 99.4VB
Hill County
Station 424+0/36

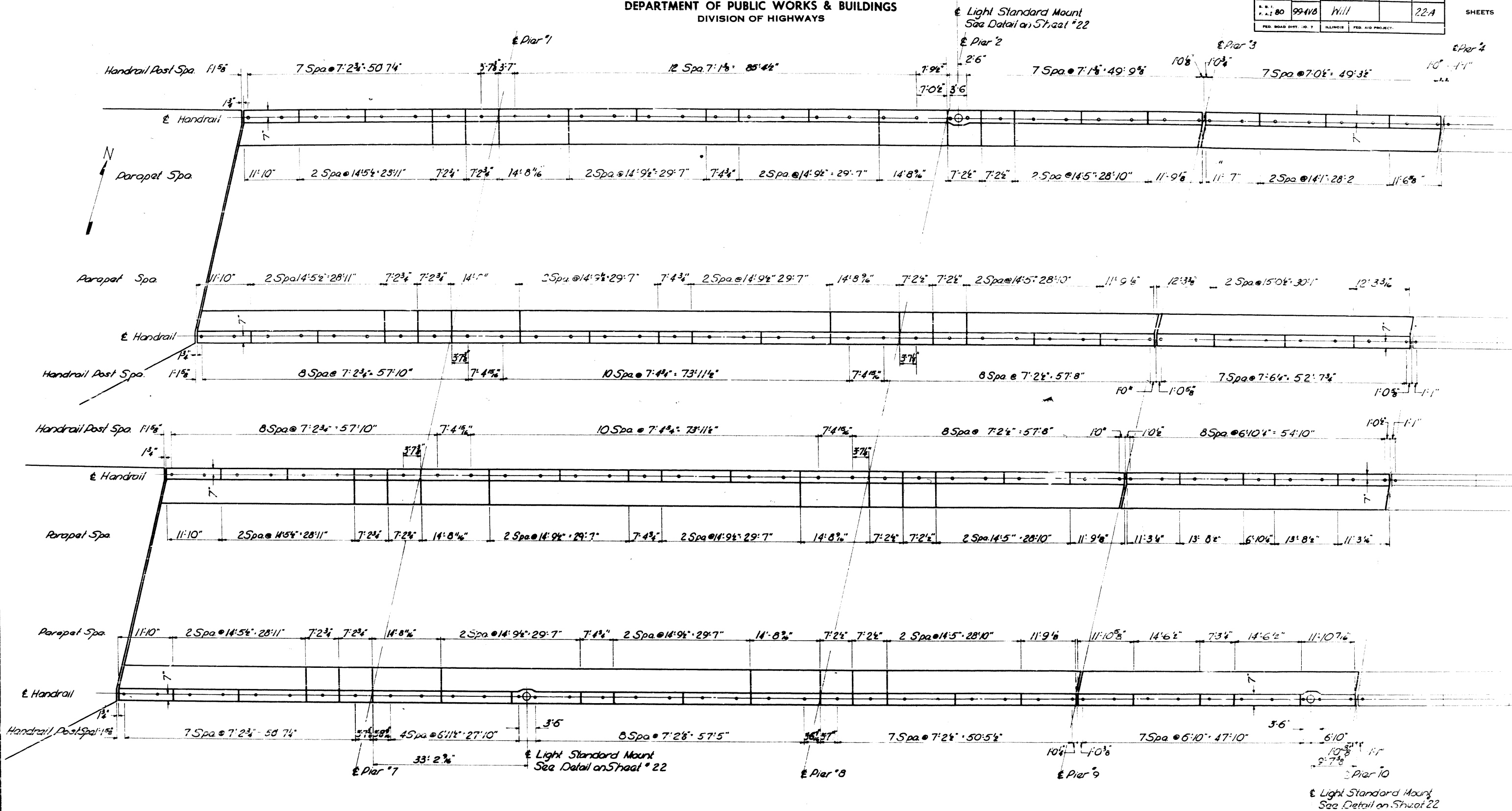
All Posts shall be placed normal to parapet
All Posts shall be of Aluminum conforming to ASIM
Specification B-106 alloy 5052-T6.
All Rail Tubing shall be of Aluminum conforming to ASTM
Specification B-235 alloy 6061-T6, or 6062-T6
Aluminum handrail shall be measured in lineal feet. The
length paid for shall be the overall length along the top
longitudinal railing member through all post and gaps.
Rail Tubing may extend a maximum of 3 panel lengths
For material composition of Prefabricated Pad, See Art.
54.9 (f), (Bearings and Anchorage), of the Std. Specs.
Set Screws shall be of Aluminum conforming to ASTM
Specification B-211 alloy 2024-T4.

Aluminum handrail will be paid for at the contract unit price per lined foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation and erection.

DESIGNED	EXAMINED
CHECKED	EMPLOYEE NAME: [REDACTED] ADDRESS: [REDACTED] DATE OF BIRTH: [REDACTED]
P.G.B. DRAWN	PASSED
W. A. Sausaman	APPROVED
CHECKED	

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
80	99-4VB	Will		22A	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

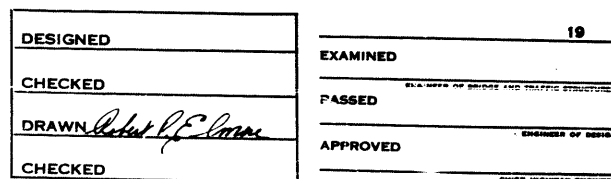


DESIGNED	
CHECKED	
DRAWN	Robert P. Elmer
CHECKED	

EXAMINED	19
PASSED	ENGINEER OF BRIDGE - NO TRAFFIC STRUCTURES
APPROVED	ENGINEER OF DESIGN
	CHIEF HIGHWAY ENGINEER

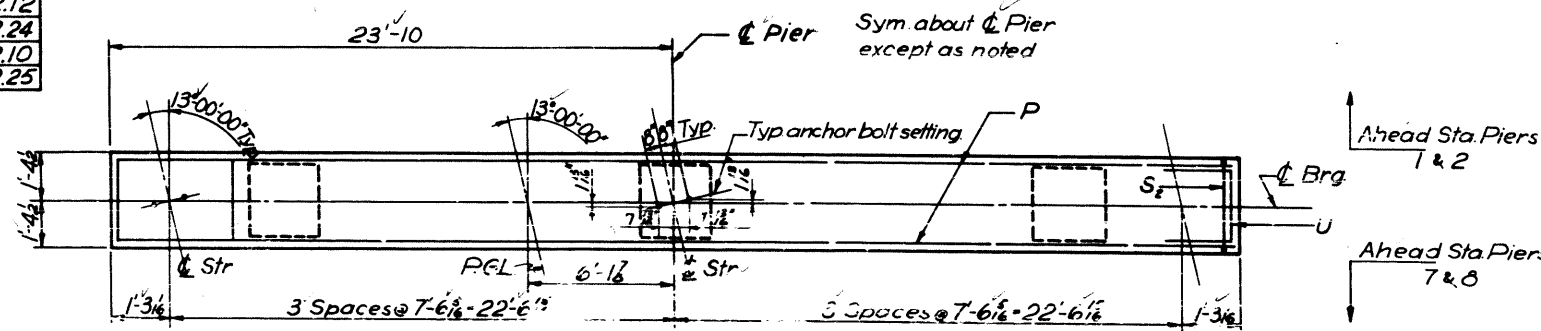
HANDRAIL
Project
FAT Route 80
Section 99-4VB
Will County
Station 424+01.35

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. E. 1. P. A.	99118	Will		220
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.	



HANDRAIL
Project
F.A.T. Route 80
Section 99-4VB
Will County
Station 124+01.36

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-80	99.475	WILL	38	23
PER. ROAD DIST. NO. 7		ALLIANCE	PROJECT	

[illegible]

SECTION A-A

The drawing consists of two main parts: **ELEVATION** and **REINFORCEMENT**.

ELEVATION: Shows the profile of the pier with various levels and dimensions. Key dimensions include:

- Overall height: 27'-5" (Piers 2 & 8), 27'-9" (Piers 1 & 7), 12'-0" (Piers 1 & 7), 12'-6" (Piers 2 & 8), 10'-2'-3"
- Width: 5'-0", 7'-4", 16'-6", 18'-6", 13'-4" (bars S₄ @ 12")
- Levels: Elev. A, Elev. B, Elev. C, Elev. D, Elev. E, Elev. 572.12 Pier 1, 572.24 Pier 2, 572.10 Pier 7, 572.25 Pier 8, Elev. 556.04 Pier 1, 556.49 Pier 2, 556.02 Pier 7, 556.50 Pier 8, Elev. 544.37 Pier 1, 544.62 Pier 2, 544.35 Pier 7, 544.63 Pier 8
- Reinforcement: 3*5 bars S₁ over Col., 6*5 bars S, 7*14*5 bars S, 3*5 bars S over Col., 9 Ea. Spa, 5 prs*5 bars S₁ as shown, 5 prs*5 bars S₂ as shown, 4*10 bars P₂, 1*4 bar P Each Side, 15*10 bars P₂, 3*9 bars P₂, 4*9 bars P₂ Bot. of Cap, 5*1 Stop P₂ bars Ea. Side, 4*10 bars P₂, 5*10 bars P₂, 4*4 bars P₂, 12*8 bars V Each Column See Section C-C, 5*5 bars h top and bottom, 2*6 bar h₁ Ea. Face, 12*8 bars h₁ Ea. Column, 26*5 bars S₄ @ 1'-6" ctrs.

REINFORCEMENT: Shows the cross-section of the pier with reinforcement details. Key details include:

- Reinforcement symmetrical about C-C Pier
- 12*8 bars V Each Column See Section C-C
- 5*5 bars h top and bottom
- 2*6 bar h₁ Ea. Face
- 12*8 bars h₁ Ea. Column
- 26*5 bars S₄ @ 1'-6" ctrs.

Technical drawing of a rectangular plate. The drawing shows a top view and a side view. The top view is a rectangle with a width of 2'-5 5/8" and a height of 2'-2 5/8". A dimension line indicates a width of 2'-5 5/8" and another dimension line indicates a height of 2'-2 5/8". A label "S 8 S4 BARS" is written below the top view. The side view is a rectangle with a height of 8" and a width of 2'-5 5/8". A dimension line indicates a height of 8" and another dimension line indicates a width of 2'-5 5/8". A label "S 8 S4 BARS" is written below the side view.

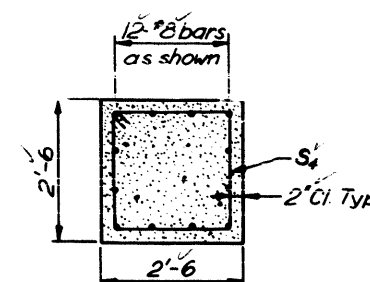
A & B DIMENSIONS

Bar	A	B
S_1	1'-7"	1'-11"
S_2	1'-7"	1'-8"
S_3	2'-5"	7'-11"

Type: 12 BP 53 ✓
Cap: Refusal
Est length: 31' ✓
No. Required: 59-4 Piers ✓
One test pile @ Pier 8 ✓

U BARS

n BARS



SECTION C-C

Bar	No	Size	Lgth	Shape
h	80	#5	19'-0"	—
h ₁	32	#6	19'-3"	—
ri	141	#6	14'-6"	—
p	16	#4	24'-3"	—
p ₁	40	#10	13'-6"	—
p ₂	32	#10	25'-0"	—
p ₃	40	#10	13'-6"	—
p ₄	24	#9	10'-6"	—
p ₅	16	#9	36'-0"	—
p ₆	32	#4	6'-0"	—
s	196	#5	11'-8"	☒
s ₁	160	#5	5'-5"	☐
s ₂	160	#5	4'-11"	☐
s ₃	104	#5	18'-3"	☐
s ₄	156	#4	9'-8"	☒
t	108	#7	8'-6"	—
u	24	#6	8'-6"	☐
v	144	#8	15'-0"	—
w	108	#5	5'-6"	—
Class X Concrete			Cu Yd.	308.4
Reinf. bars			Lbs.	34,858
Steel piles (2BP53)			Lin. Ft.	1829
Test pile (2BP53)			Each	1

F A I ROUTE 80
SECTION 99-4VB
Scale: **NO SCALE**

PROJECT
WILL COUNTY
Date: *Jan. 19, 1961*

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	E.R.
CHECKED	L.A.N.

indicates pile
batter 2:12 ✓

Piles: 4x8
each footing ✓

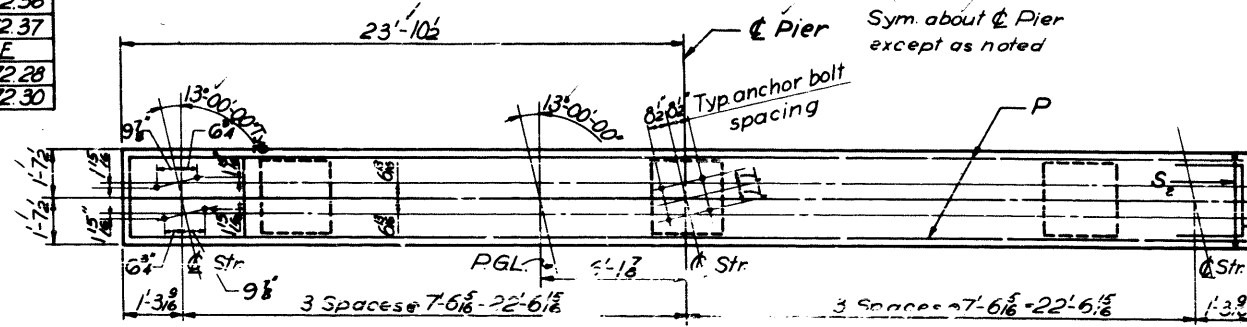
FOOTING PLAN

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	38	24
FWS. 8822 4001, 88. 7 ILLINOIS PROJECT				

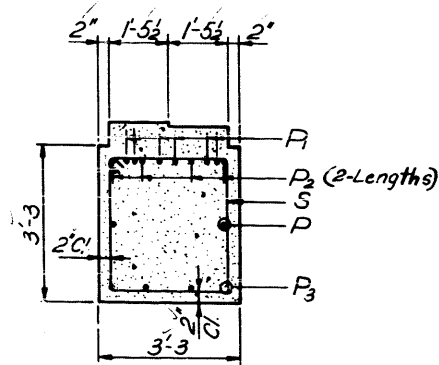
TABLE OF PAD ELEVATION					
AHD.	A	B	C	D	E
Pier 3	572.58	572.72	572.65	572.50	572.36
Pier 9	572.62	572.77	572.67	572.51	572.37
BK.	A	B	C	D	E
Pier 3	572.50	572.66	572.59	572.44	572.28
Pier 9	572.53	572.73	572.63	572.47	572.30

PGL Pier 3
Sta 422+52.24
P.G. Elev. 577.56
PGL Pier 9
Sta 422+31.92
P.G. Elev. 577.62

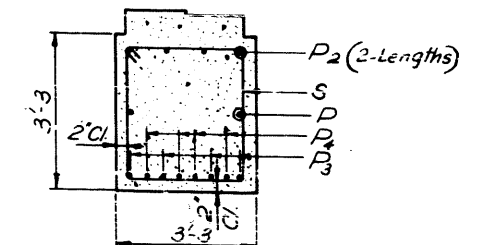


Ahead Sta Pier 3

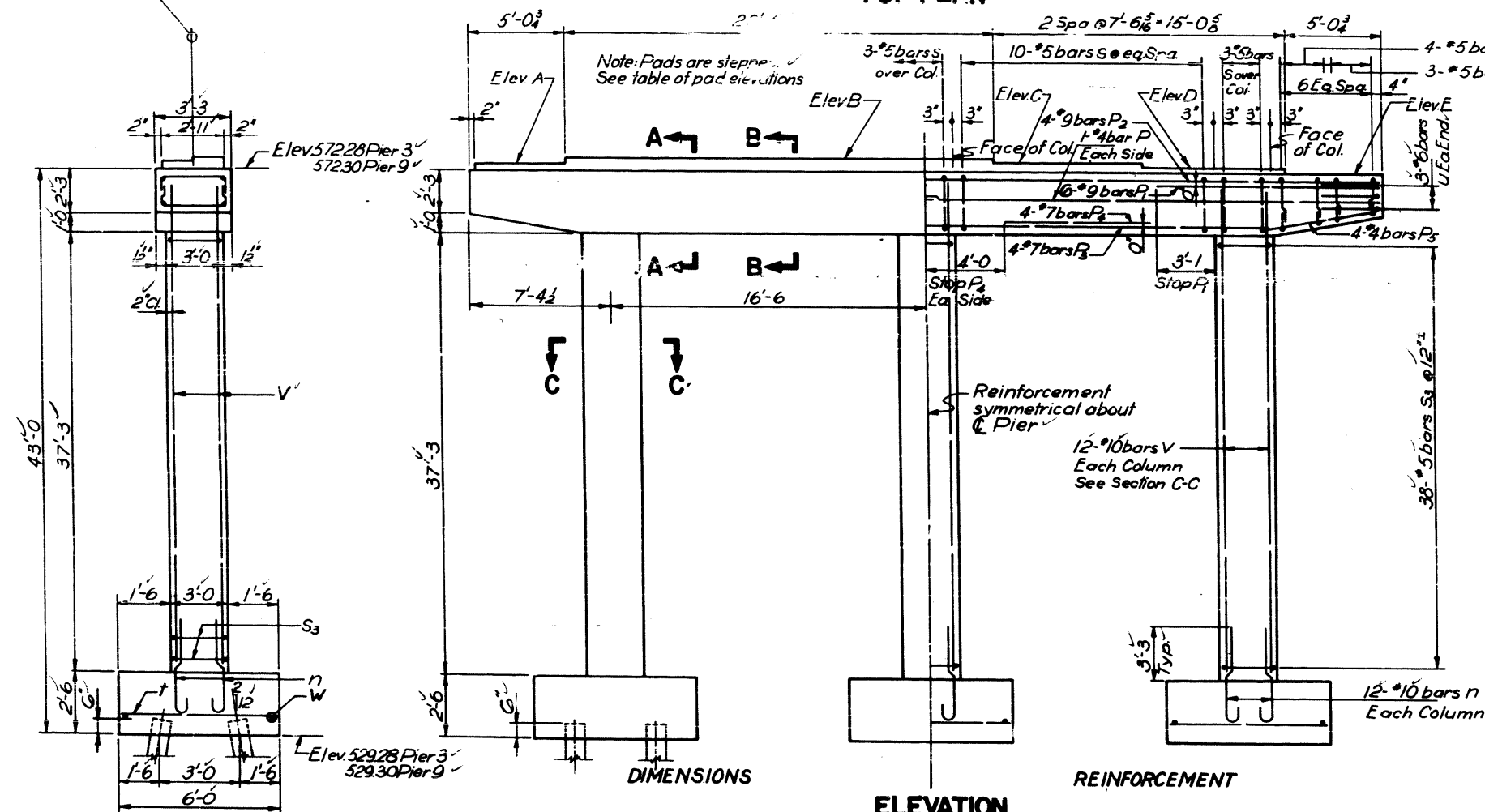
Ahead Sta Pier 9



SECTION A-A



SECTION B-B



Note: All edges shall have standard chamfer except footing

s & s₃ BARS

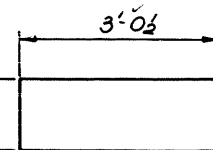
s BARS

A & B DIMENSIONS

Bar	A	B
S ₁	2'-11"	1'-11"
S ₂	2'-11"	1'-8"

PILE DATA

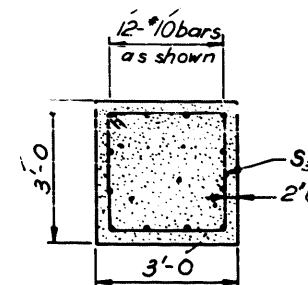
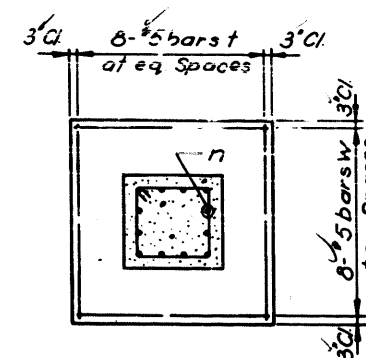
Type: 12 BP 53
Cap: Refusa
Est length: 17'
No Required: 24-2 Piers



u BARS

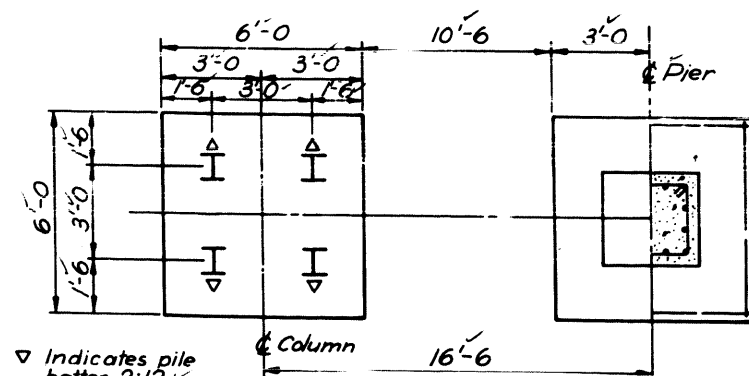
n BARS

REINFORCEMENT



SECTION C-C

END VIEW



FOOTING PLAN

PIERS 3 & 9
BILL OF MATERIAL

Bar	No	Size	Length	Shape
n	72	#10	6'-8"	C
s	58	#5	12'-8"	C
s ₁	32	#5	6'-9"	C
s ₂	24	#5	6'-3"	C
s ₃	228	#5	11'-8"	C
t	48	#5	5'-6"	C
u	12	#6	9'-0"	C
v	72	#10	40'-0"	C
w	48	#5	5'-6"	C
Class X Concrete Cu Yd 1334				
Reinf bars Lbs 22405				
Steel Piles (12BP53) Lin. Ft. 408				

PIERS 3 & 9
F.A.I. 80 OVER

A.T. & S.F. AND G.M. & O.R.R. AND GARDNER ST.

F.A.I. 80 STA. ON E GARDNER ST. 424+01.36

SECTION 99-4VB

Scale: NO SCALE

PROJECT
WILL COUNTY

Date: Jan. 19, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	E.R.
CHECKED	L.A.N.

Indicates pile batter 2:12

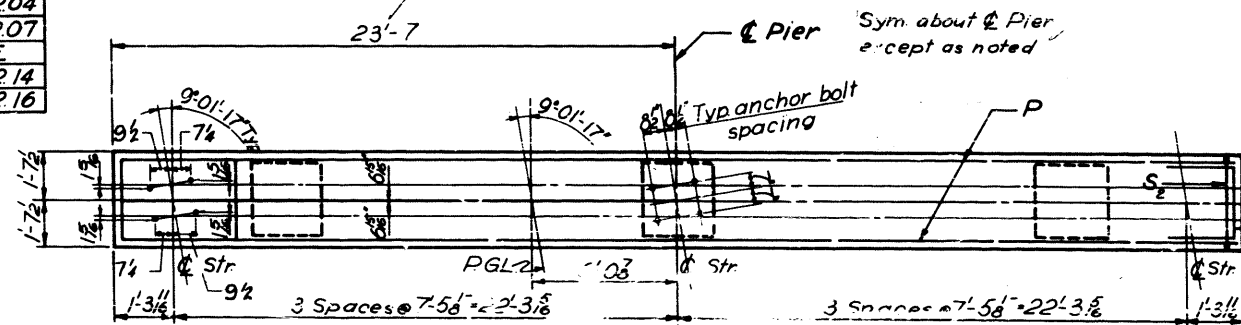
Piles: Typ each footing.

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

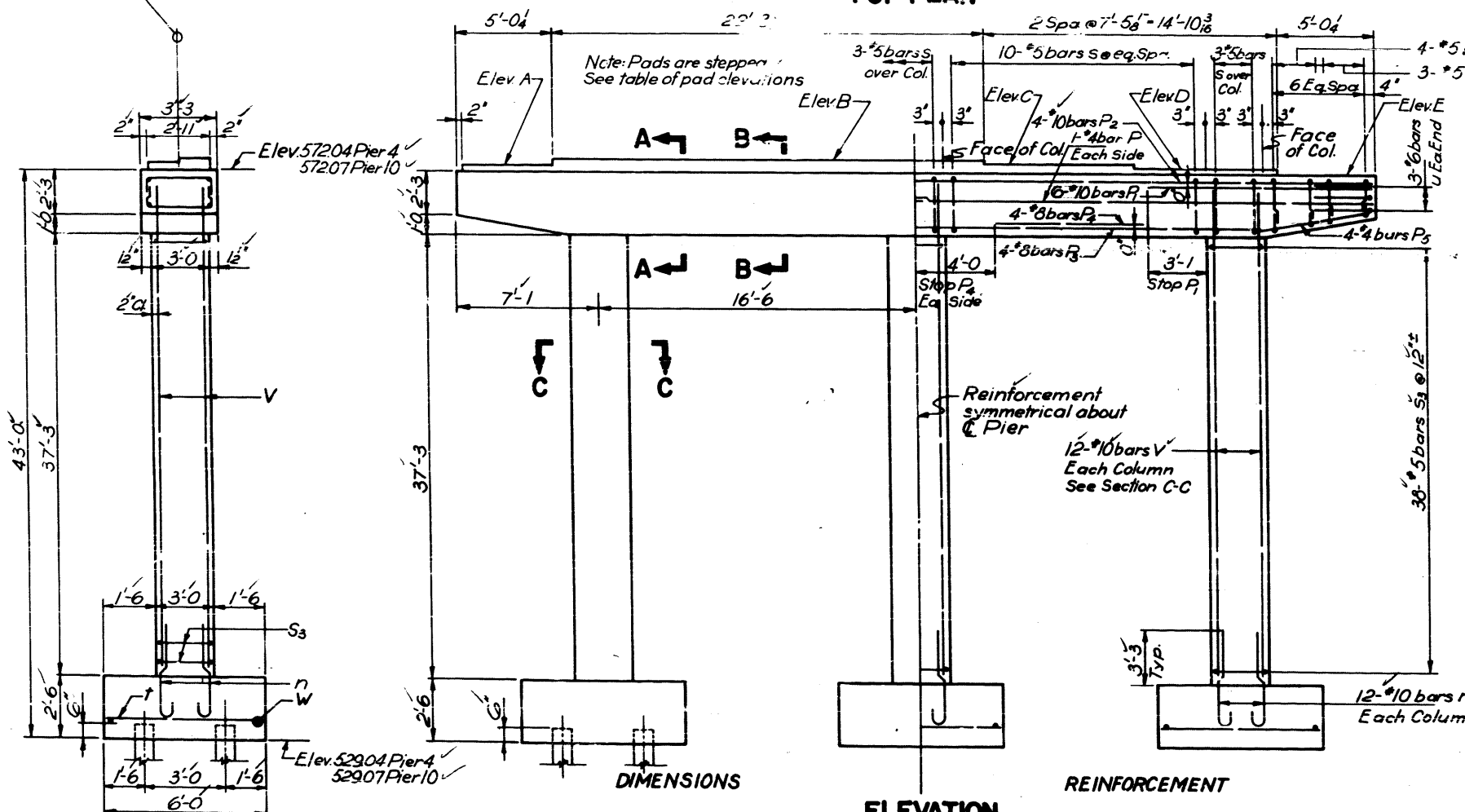
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL.	38	23
F.A.I. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

TABLE OF PAD ELEVATION					
AHD	A	B	C	D	E
Pier 4	572.25	572.41	572.34	572.20	572.04
Pier 10	572.35	572.50	572.40	572.23	572.07
BK.	A	B	C	D	E
Pier 4	572.35	572.50	572.43	572.28	572.14
Pier 10	572.41	572.56	572.46	572.30	572.16

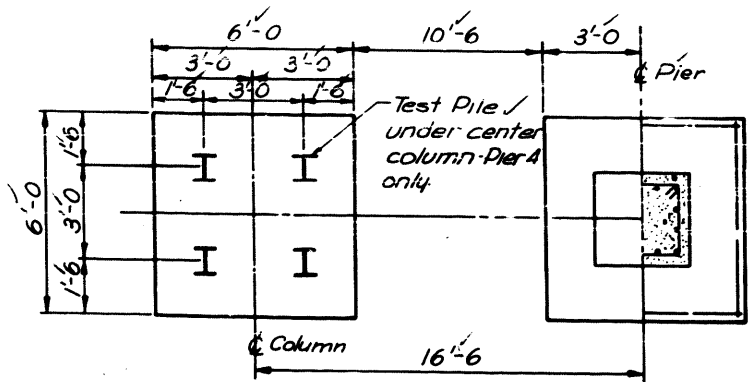
PGL Pier 4
Sta 423+04.90
PG Elev 577.32
PGL Pier 10
Sta 422+90.93
PG Elev 577.39



TOP PLAN

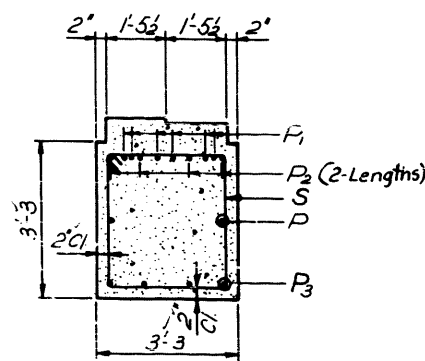


ELEVATION

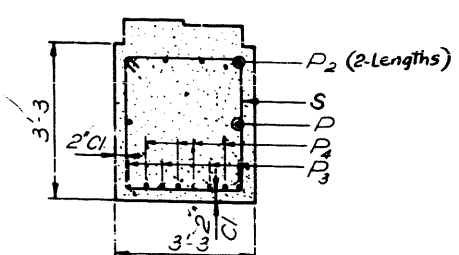


FOOTING PLAN

Piles: Typ. each footing



SECTION A-A



SECTION B-B

Note: All edges shall have standard chamfer except footing

PILE DATA
Type: 12 BP 53
Cap: Refusal
Est length: 16'
No. Required: 23-2 Piers
One test pile at Pier 4

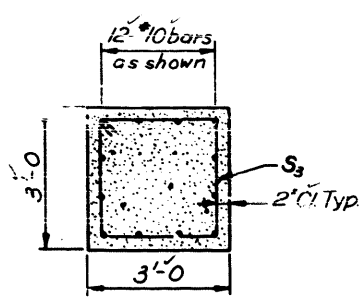
A & B DIMENSIONS

Bar	A	B
S ₁	2'-11"	1'-11"
S ₂	2'-11"	1'-8"

S BARS

U BARS

N BARS



SECTION C-C

PIERS 4 & 10
BILL OF MATERIAL

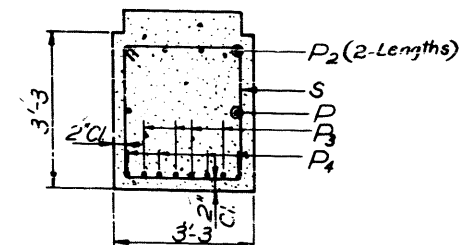
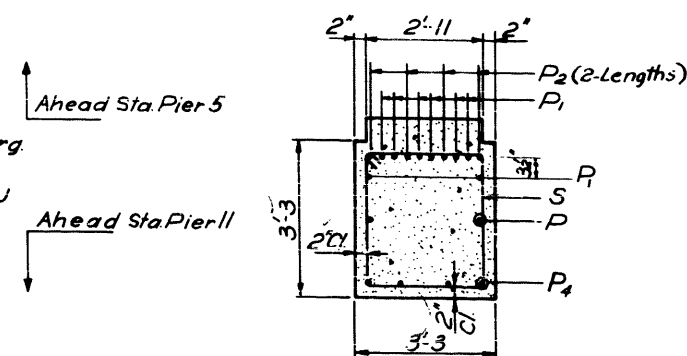
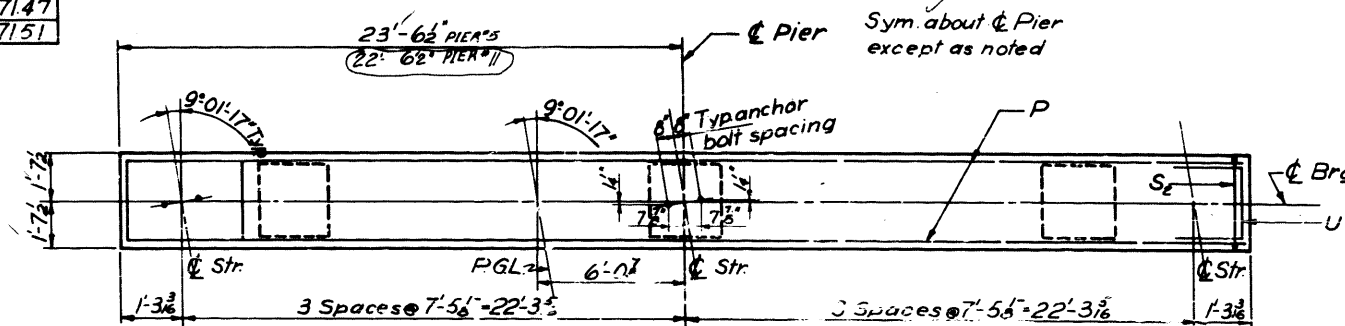
Bar	No.	Size	Length	Shape
n	72	#10	6'-8"	C
P	8	#4	24'-0"	
P ₁	24	#10	11'-6"	
P ₂	16	#10	24'-6"	
P ₃	8	#8	36'-0"	
P ₄	16	#8	8'-6"	
P ₅	16	#4	5'-9"	
S ₁	58	#5	12'-8"	□
S ₂	32	#5	6'-9"	□
S ₃	24	#5	6'-3"	□
S ₄	228	#5	11'-8"	□
t	48	#5	5'-6"	
u	12	#6	9'-0"	
v	72	#10	40'-0"	
w	48	#5	5'-6"	
Class X Concrete				Cu Yd 133.0
Reinf bars				Lbs 23,211
Steel Piles (2BP 53)				Lin. Ft. 368
Test Pile (2BP 53)				Each 1

PIERS 4 & 10
F.A.I. 80 OVER
AT & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON GARDNER ST. 424+01.36
F.A.I. ROUTE 80
SECTION 99-4VB
Scale: NO SCALE
PROJECT
WILL COUNTY
Date: Jan. 19, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

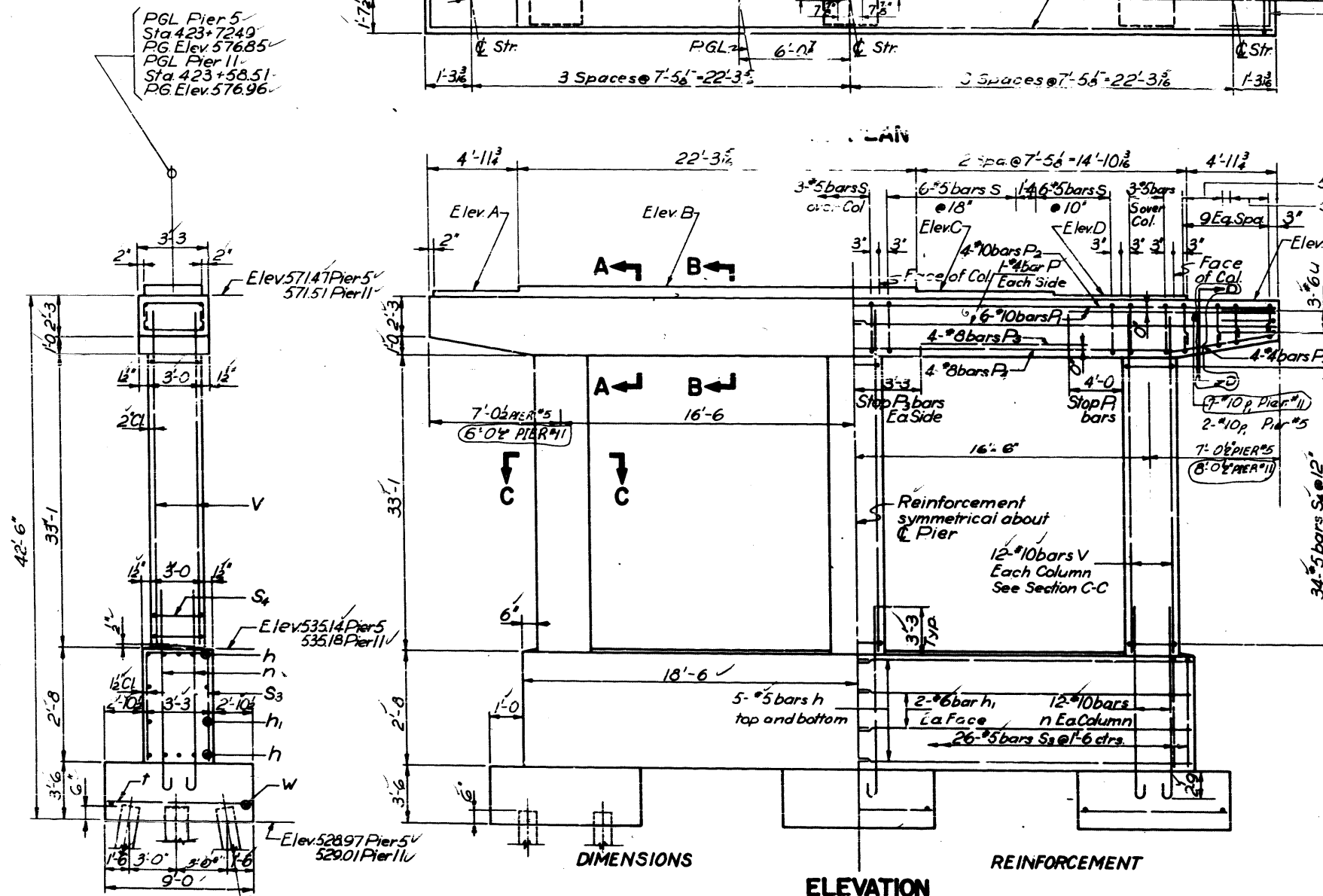
DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	E.R.
CHECKED	L.A.N.

ROUTE NO.	SECTION	COUNTY	TOTAL ASSETS	SHEET NO.
F.A.I.-80	99-415	WILL	38	26
PED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

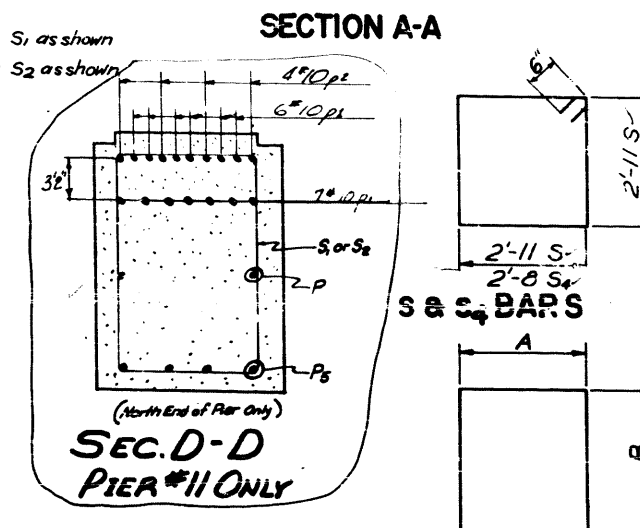
TABLE OF PAD ELEVATION					
	A	B	C	D	E
Pier 5	571.66	571.83	571.77	571.62	571.47
Pier 11	571.82	571.96	571.85	571.68	571.51



SECTION B-B



END VIEW



§ BARS

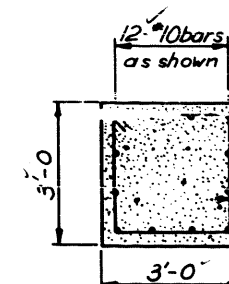
A & B DIMENSIONS

Bar	A	B
S ₁	2'-11	1'-11
S ₂	2'-11	1'-8
S ₃	2'-11	2'-4

4 BARS

n BARS

SECTION C-C



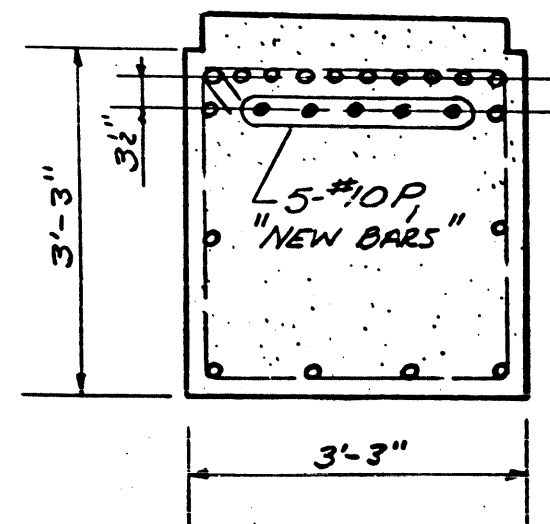
FOOTING PLAN

PIERS 5 & 11
BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
h	40	#5	19'-0"	—
h ₁	16	#6	19'-0"	—
n	72	#10	10'-1"	U
P	8	#4	24'-0"	—
P ₁	(32)	#10	12'-3"	—
P ₂	16	#10	24'-6"	—
P ₃	16	#8	10'-0"	—
P ₄	8	#8	36'-0"	—
P ₅	16	#4	5'-9"	—
S	66	#5	12'-8"	☒
S ₁	40	#5	6'-9"	☐
S ₂	40	#5	6'-3"	☐
S ₃	52	#5	7'-7"	☐
S ₄	204	#5	11'-8"	☒
t	54	#7	8'-6"	—
u	12	#6	9'-0"	—
v	72	#10	35'-9"	—
w	54	#5	5'-6"	—
Class X Concrete			Cur. Yd.	170
Reinf. bars			Lbs.	2557
Steel piles (2BP33)			Lin. Ft.	576

25812

PIERS 5&11
F.A.I. 80 OVER
A.T. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST. 424+01.36
F A I ROUTE 80 PROJECT
SECTION 99-4VP WILL COUNTY
Scale: NO SCALE Date: Jan. 19, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.



ADDITIONAL REINFORCEMENT

REVISED PIER N° 11 (CAP ONLY)

Project I-IG-80-4(35)134
FAI Route 80
Section 99-4VB
Will County
Station 424+01.56

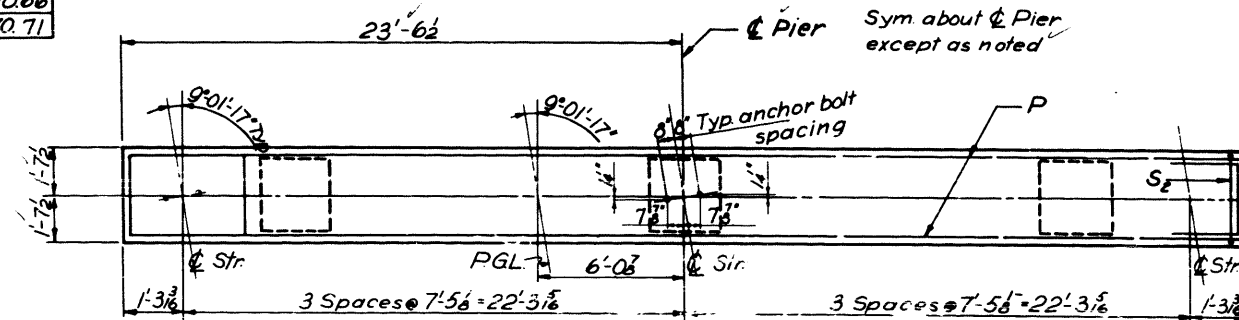
REVISED PAGE #11
Sheet 26 of 30 sheets
(Contract Plans)

9-16-64
L. D. Wilson

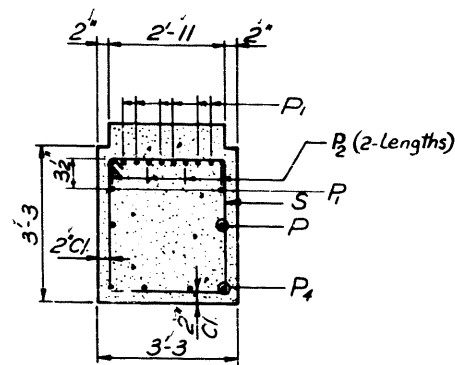
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VR	WILL	38	27
F.A.I. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

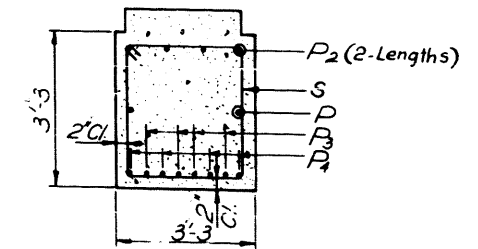
TABLE OF PIER ELEVATION					
	A	B	C	D	E
Pier 6	570.82	570.99	570.95	570.80	570.66
Pier 12	571.04	571.18	571.06	570.89	570.71



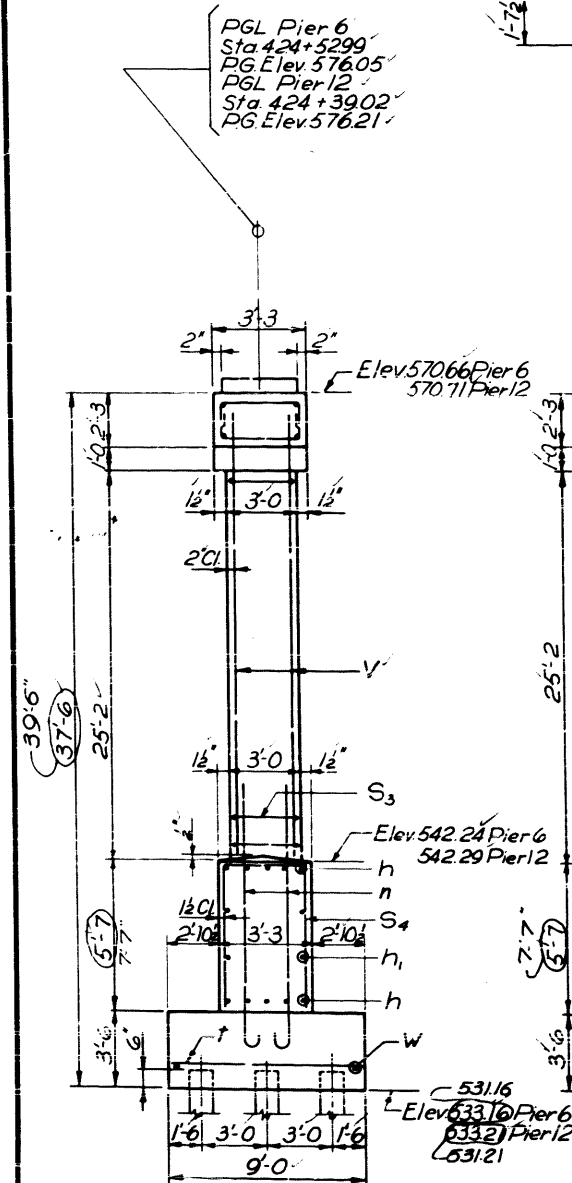
Ahead Sta. Pier 6
U Ahead Sta. Pier 12



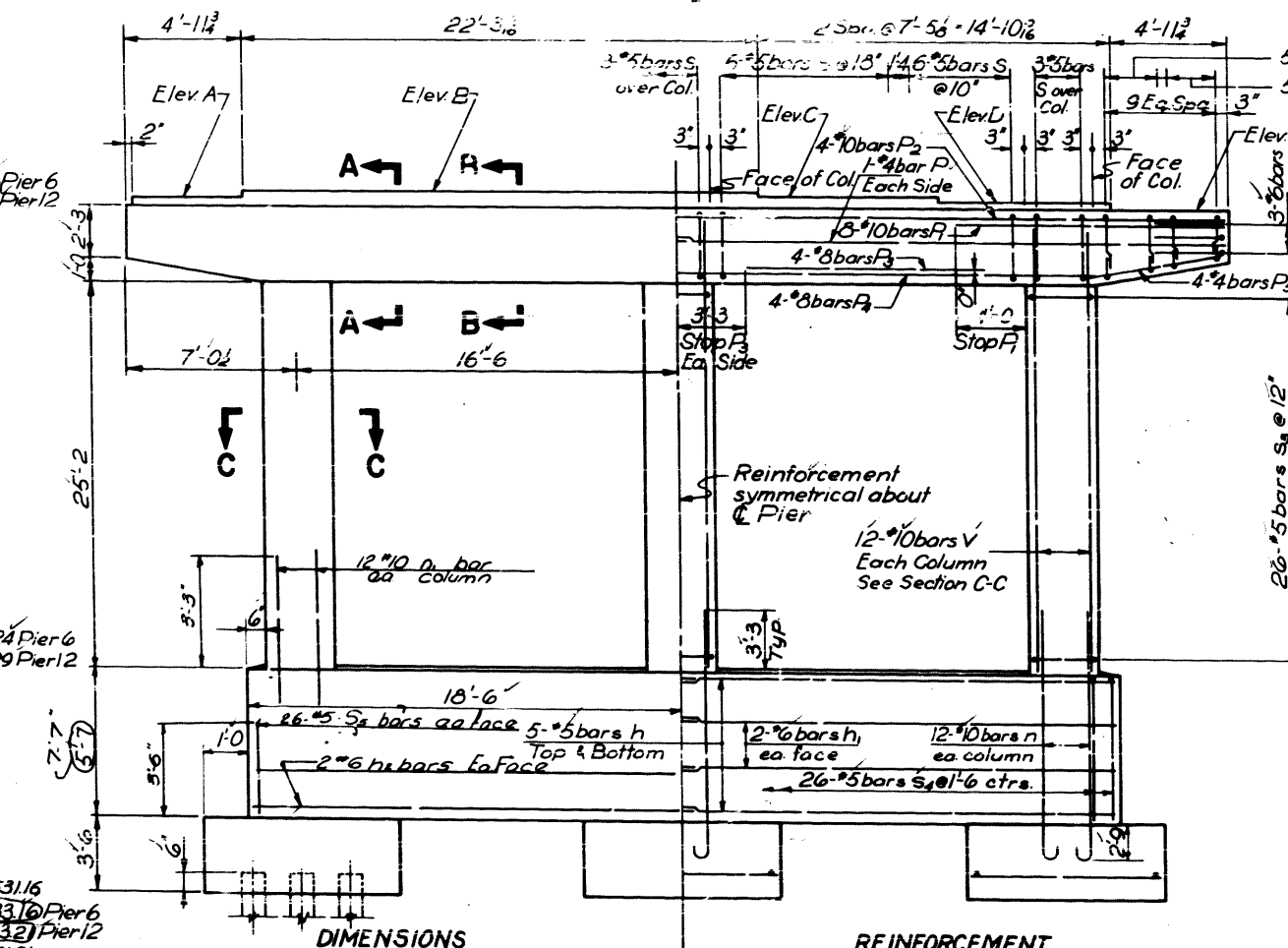
SECTION A-A



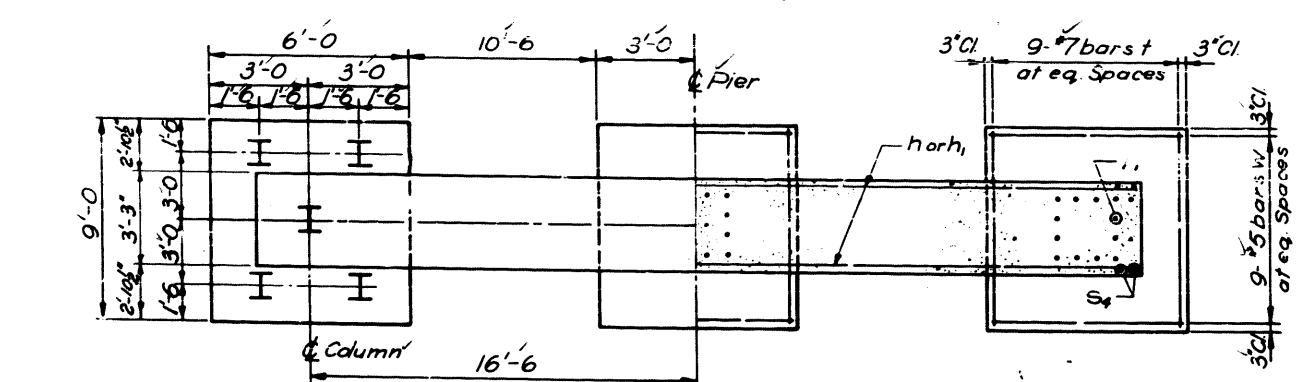
SECTION B-B



END VIEW



ELEVATION



FOOTING PLAN

Note: All edges shall have standard chamfer except footing

PILE DATA
Type: 12 BP 53
Cap: Rebar
Est length: 18'
No Required: 30-2 Piers

A & B DIMENSIONS

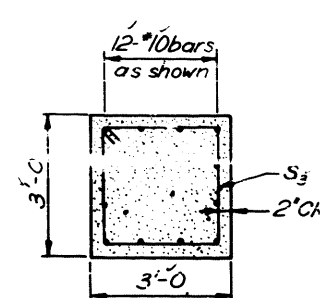
Bar	A	B
S ₁	2'-11	1'-11
S ₂	2'-11	1'-8
S ₃	2'-11	5'-3

S BARS

S & S₃ BARS

U BARS

N BARS



SECTION C-C

PIERS 6 & 12
BILL OF MATERIAL

Bar	No	Size	Length	Shape
n	72	#10	13'-0	C
h	40	#5	19'-0	C
h ₁	16	#6	19'-0	C
p	8	#4	24'-0	C
P ₁	32	#10	12'-3	C
P ₂	16	#10	24'-6	C
P ₃	16	#8	10'-0	C
P ₄	8	#8	36'-0	C
P ₅	16	#4	5'-9	C
n	72	#10	5'-0	C
n	16	#6	20'-0	C
S	66	#5	12'-8	C
S ₁	40	#5	6'-9	C
S ₂	40	#5	6'-3	C
S ₃	156	#5	11'-8	C
S ₄	52	#5	13'-5	C
S ₅	104	#5	5'-6	C
t	54	#7	8'-6	C
U	12	#6	9'-0	C
V	72	#10	28'-0	C
W	54	#5	5'-6	C
Class X Concrete Cu Yds 1805				
Reinf bars Lbs 23995				
Steel Piles (12BP53) Lin Ft 540				

* Additional reinf and class X conc added in lowering fig 20 (2410' reinf) (178 cu yds conc)

PIERS 6 & 12
F.A.I. 80 OVER

A.T. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST. 424+01.36

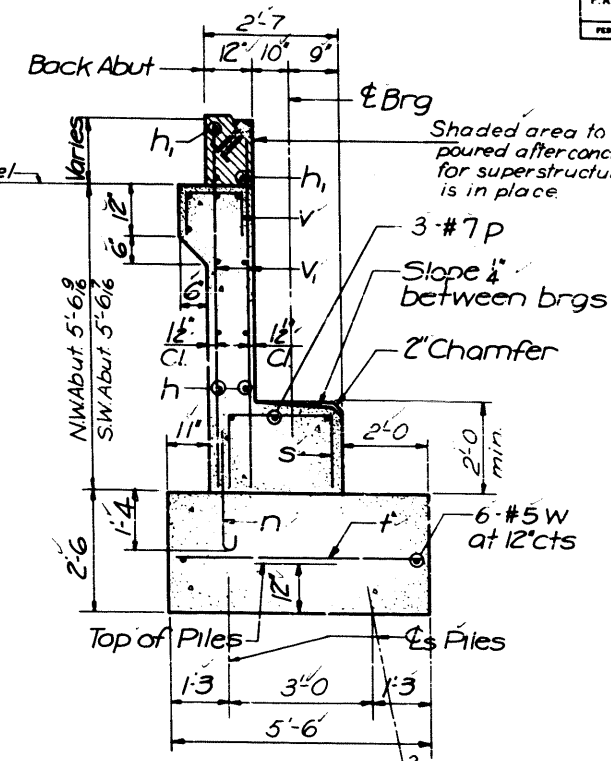
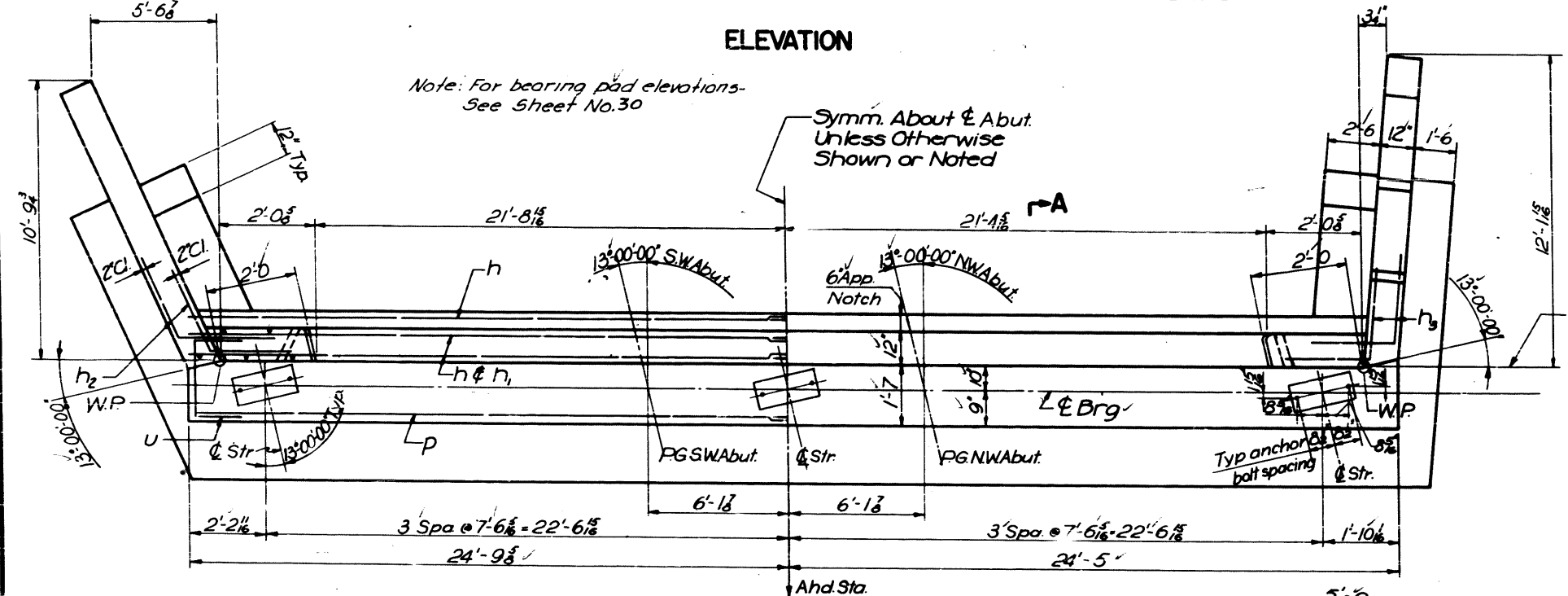
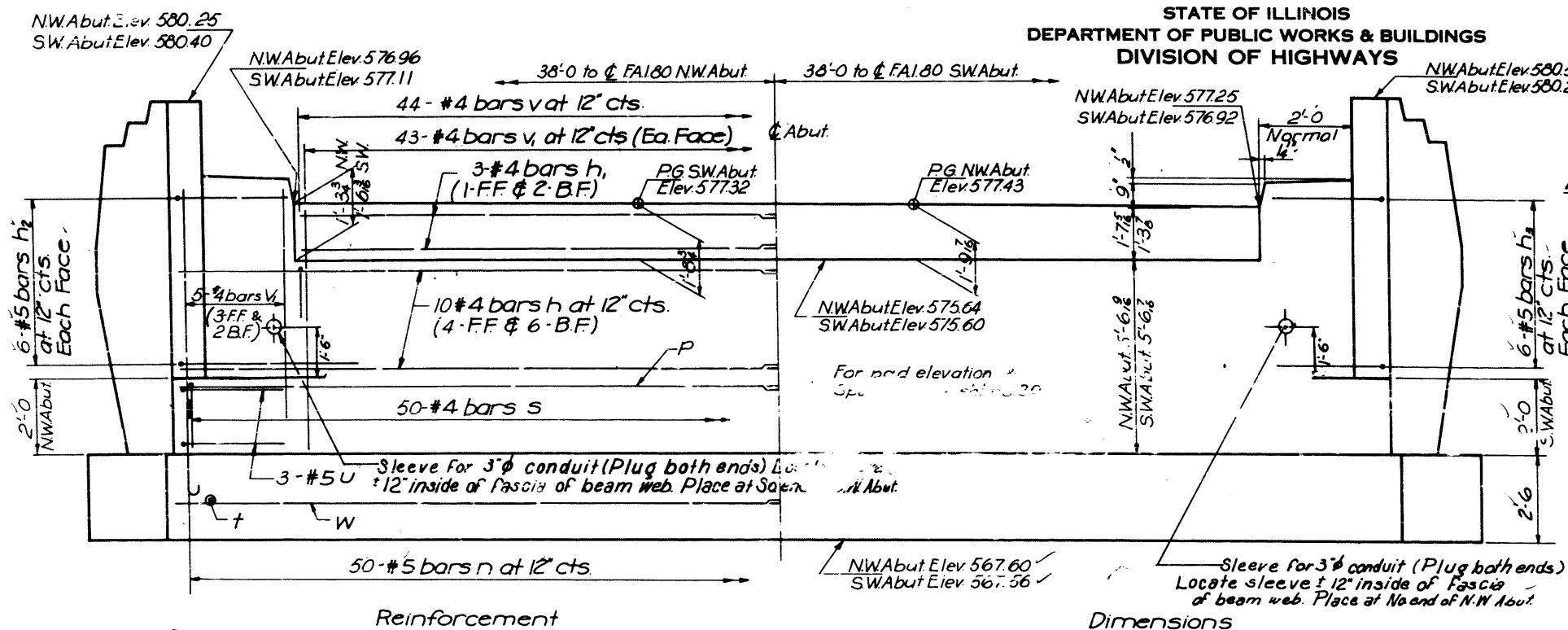
F.A.I. ROUTE 80
SECTION 99-4VR
WILL COUNTY
Date: Jan. 19, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOCGBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

AS BUILT

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4V	WILL	38	28
PER. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



NW & SW ABUTMENTS
BILL OF REINFORCEMENT

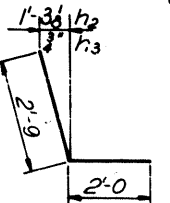
Bar	No.	Size	Lgth	Shape
h	40	#4	25'-0"	—
h ₁	12	#4	22'-0"	—
h ₂	24	#5	4'-9"	—
h ₃	24	#5	4'-9"	—
n	100	#5	3'-3"	C
n ₁	56	#5	4'-0"	C
p	12	#7	25'-3"	—
s	100	#4	5'-11"	□
t	94	#5	5'-0"	—
t ₁	46	#5	4'-6"	—
u	12	#5	5'-2"	—
v	88	#4	2'-9"	□
v ₁	212	#4	6'-9"	—
w	24	#5	23'-9"	—
w ₁	10	#5	10'-6"	—
w ₂	10	#5	11'-3"	—

NW & SW ABUTMENTS
BILL OF MATERIAL

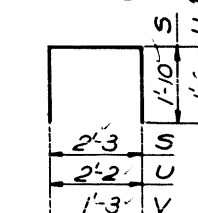
Item	Unit	Quan.
Class X Concrete	Cu Yds	115.5
Reinforcement Bars	lbs	6460
Steel Piles (10BP42)	Lin. Ft	1566
Test Pile (10BP42)	Each	1

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

BAR n & n₁



BAR h₂ & h₃



BAR s



PILE DATA

Type: 10BP42
Capacity: Refusal
Est. Length: 54 Feet
No. Req'd: 29 - Two Abutments
One test pile at NW Abut.

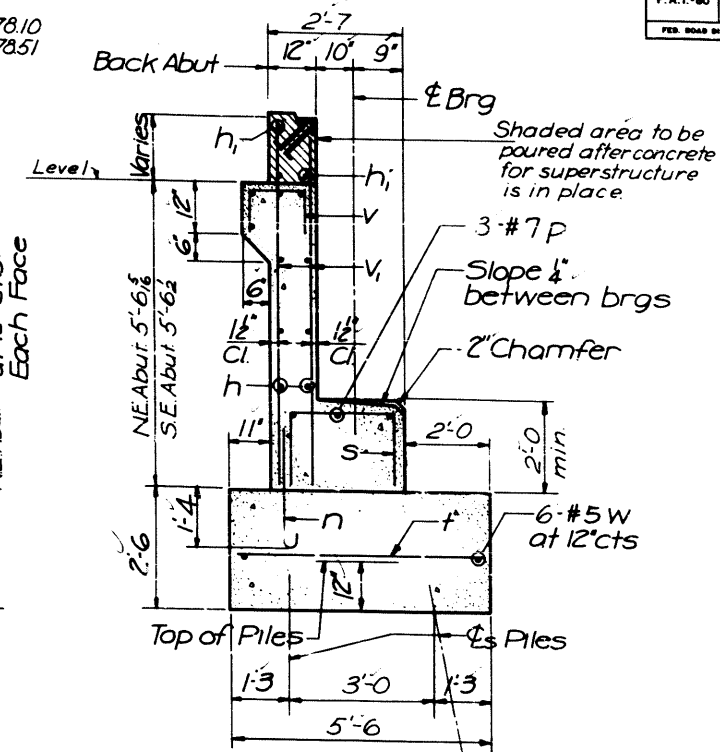
NW & SW ABUTMENTS
F.A.I. 80 OVER
AT. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON C GARDNER ST. 424+01.36

F.A.I. ROUTE 80
SECTION 99-4V
Scale: NO SCALE

PROJECT
WILL COUNTY
Date: Jan. 19, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

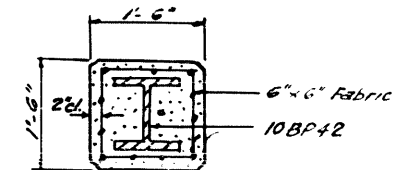
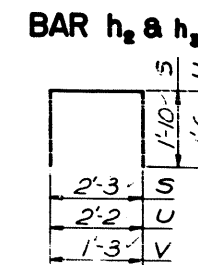
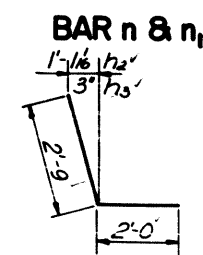
DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	S.E.F.
CHECKED	L.A.N.



Bar	No.	Size	Lgth	Shape
h	40	*4	24'-9"	—
h_1	12	*4	21'-9"	—
h_2	24	*5	4'-9"	✓
h_3	24	*5	4'-9"	┘
n	98	*5	3'-3"	┘
n_1	56	*5	4'-0"	┘
p	12	*7	25'-3"	—
s	98	*4	5'-11"	┘
t	92	*5	5'-0"	—
t_1	46	*5	4'-6"	—
u	12	*5	5'-2"	┘
v	86	*4	2'-9"	┘
v_1	212	*4	6'-6"	—
w	24	*5	23'-3"	—
w_1	10	*5	10'-6"	—
w_2	10	*5	11'-0"	—

Item	Unit	Quan.
Class X Concrete	Cu.Yds	114.4
Reinforcement Bars	lbs	6640
Steel piles (10BP42)	Lin Ft.	1537
Test pile (10BP42)	Each	1

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.



*4 gage welded wire fabric 6"x6" mesh wt. 587100
sq. ft. Cost incidental to steel piles.
Class X Concrete Encasement incidental to
steel piles.

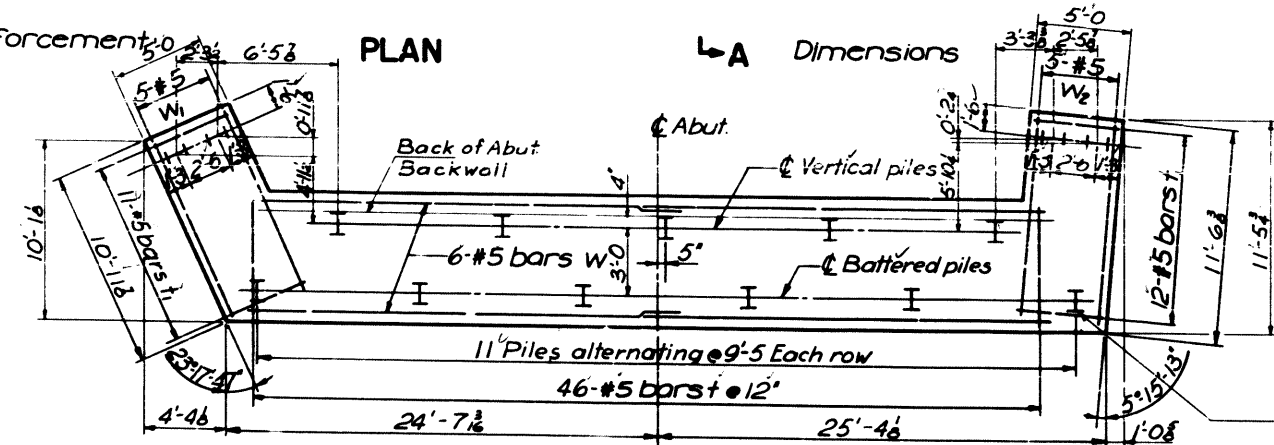
Typical for all Abutment piles.

F A I ROUTE 80
SECTION 99-4VB
Scale: **NO SCALE**

PROJECT
WILL COUNTY
Date: *Jan. 19, 1961*

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

↳ A Dimensions



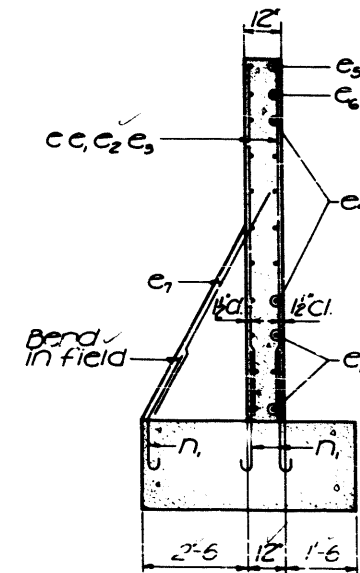
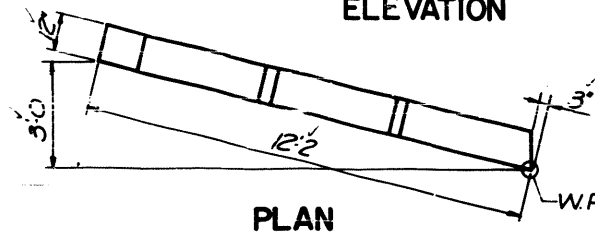
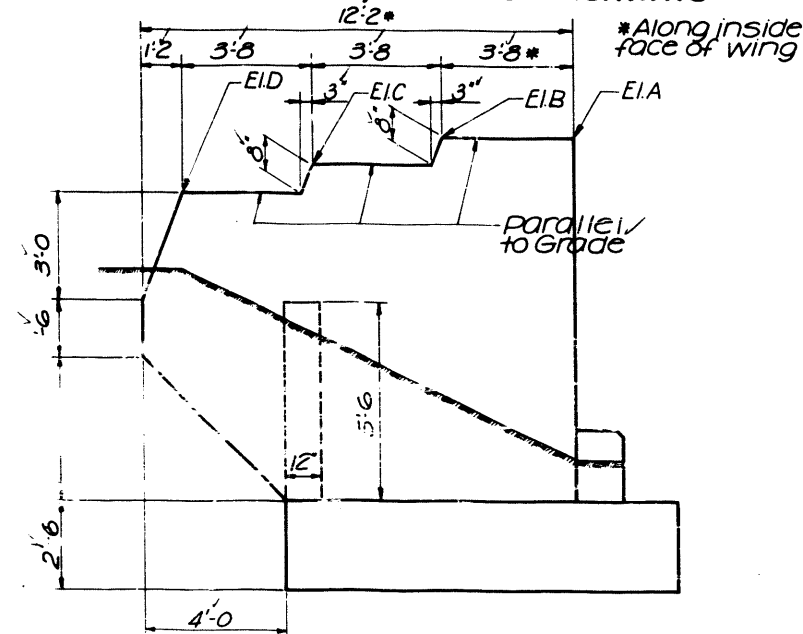
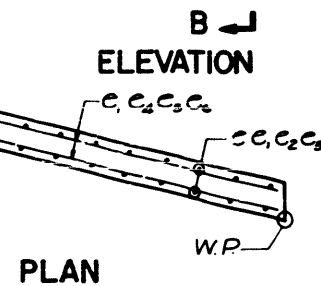
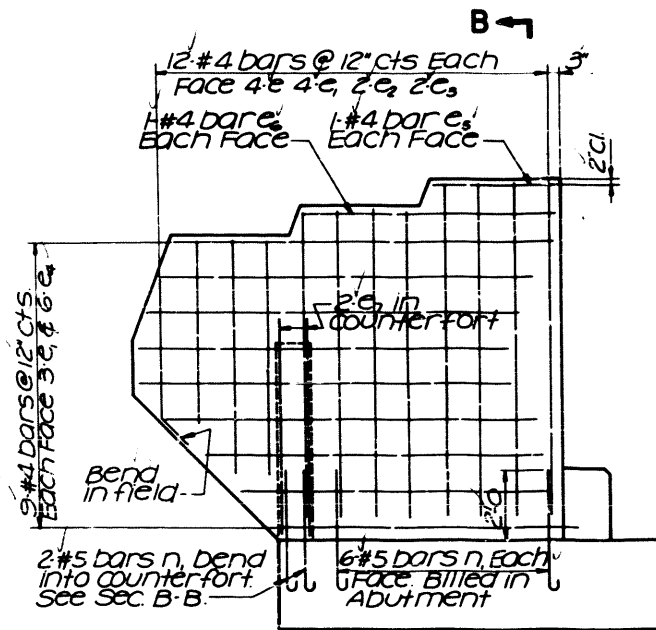
FOOTING PLAN

Type - 10 BP 42
Capacity - Refusal
Est. Length - 53 Feet
No. Req'd - 29 Two Abuts.
One test pile at SE Abut.

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	S.E.F.
CHECKED	L.A.N.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-4VB	WILL	38	30
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



SECTION B-B

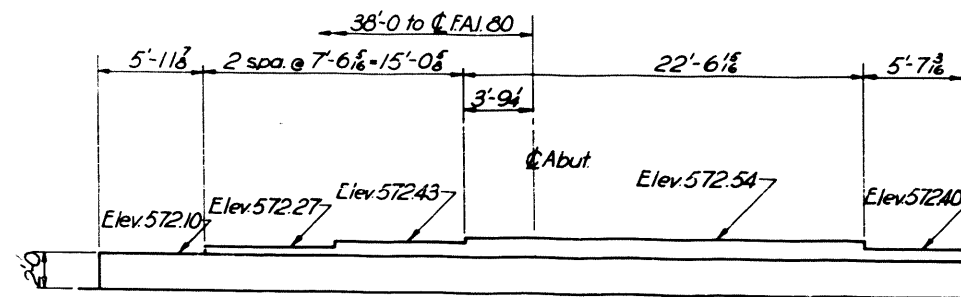
ONE END POST
BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
e	8	#4	9-3	—
e	14	#4	8-6	—
e	4	#4	6-6	—
e	4	#4	5-0	—
e	12	#4	10-6	—
e	2	#4	3-6	—
e	2	#4	7-0	—
e	2	#5	7-0	—
Reinforcement bars lbs				270

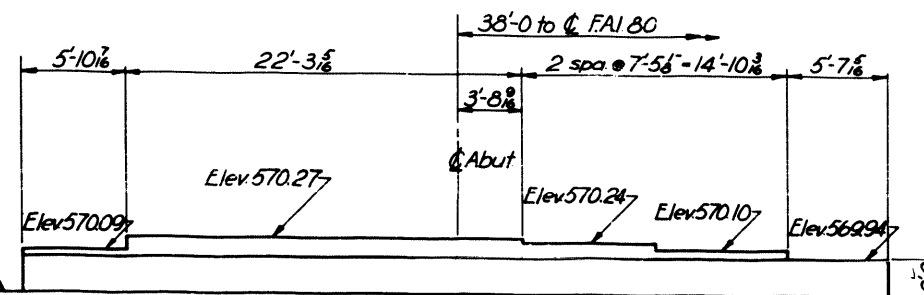
Included in Quantity on sheets 28&29

TABLE OF WINGWALL ELEVATION
AND DIMENSIONS

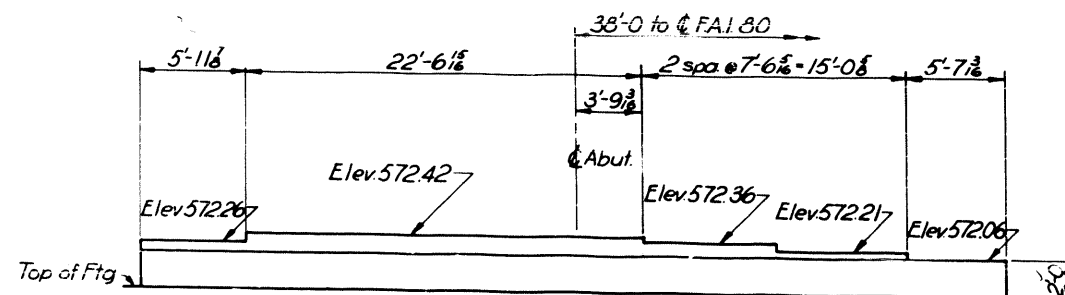
POINT	NW ABUT		SW ABUT		NE ABUT		SE ABUT	
	NWW	SWW	NWW	SWW	NWW	SWW	NWW	SWW
A	580.55	580.25	580.21	580.40	578.24	578.10	578.16	578.51
B	580.53	580.23	580.19	580.38	578.19	578.05	578.11	578.46
C	579.84	579.55	579.50	579.69	577.47	577.33	577.39	577.74
D	579.16	578.87	578.82	579.01	577.76	576.61	576.68	577.03
E	4'-6 1/2	4'-3 1/2	4'-3 1/2	4'-5 1/2	5'-3 1/2	4'-2	4'-2	4'-6 1/2



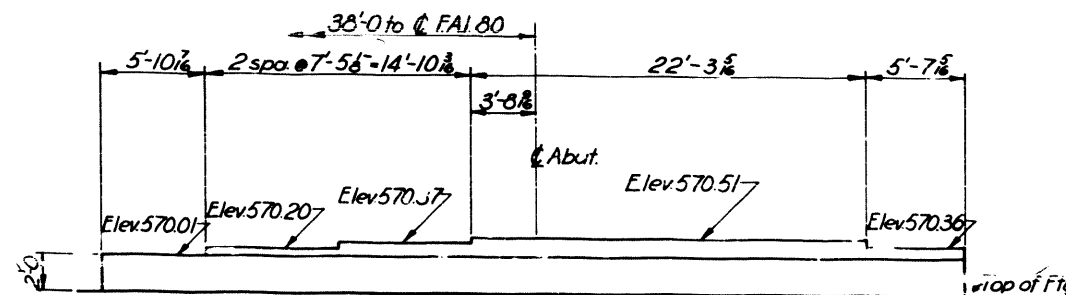
NW ABUTMENT



NE ABUTMENT



SW ABUTMENT



SE ABUTMENT

ABUTMENT PAD ELEVATIONS

DESIGNED	J.M.C.
CHECKED	C.S.
DRAWN	SEF
CHECKED	L.A.N.

ABUTMENT DETAILS

F.A.I. 80 OVER
A.T. & S.F. AND G.M. & O.R.R. AND GARDNER ST.
F.A.I. 80 STA. ON E GARDNER ST. 424+01.36

F.A.I. ROUTE 80
SECTION 99-4VB
PROJECT
WILL COUNTY
Scale: NO SCALE
Date: Jan. 19, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.