STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALE IN FEET

PLAN 0 20 40 — PROFILE VERT. 0 5 10

PROFILE HOR. 0 20 40 — CROSS-SECS. HOR. 0 10 20

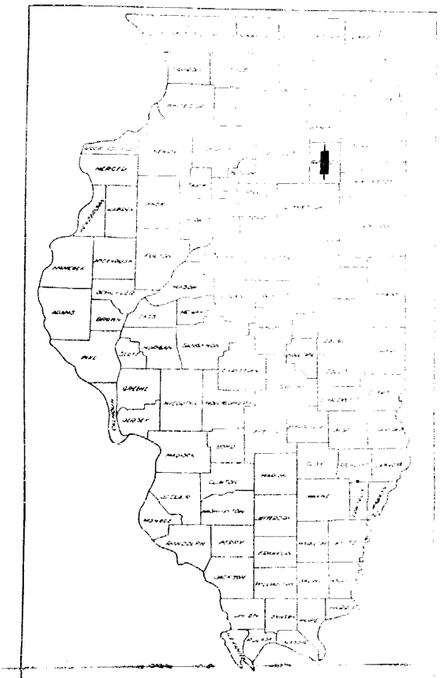
VERT. 0 5 10

F.A. ROUTE 100 (SBI 47)
SECTION 111 (HVB, HB & TS-1)
PROJECT F - FG-100(14)
GRUNDY COUNTY

C-93-056-78

F.A. 100 SBI 47 | 111 (HVB HB) (TS-1) | GRUNDY | 111 | 1 | F FG-100(14)

P-93-022-74



LOCATION OF SECTION INDICATED THUS:—

DESIGN DESIGNATION

2110(94) MAJOR 5.0 (BIT-15)

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2	Typical Sections-S. B. I. Route 47
3	Typical Sections-Armstrong St. & Benton St.
4	Typical Sections-Connector & Buchanan St.
5-7	Summary of Quantities
8-10	Schedule of Quantities
11-13	Storm Sewer Schedule
14	Sanitary Sewer Schedule
15-16	Geometric Details
17-22	Plan and Profile Sheets-S. B. I. Route 47
23	Plan and Profile Sheets-Benton St.
24-25	Plan and Profile Sheets-Armstrong St.
26	Plan and Profile Sheets-Connector
27	Plan and Profile Sheets-Buchanan St.
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58-69	Cross Sections-S. B. I. Route 47
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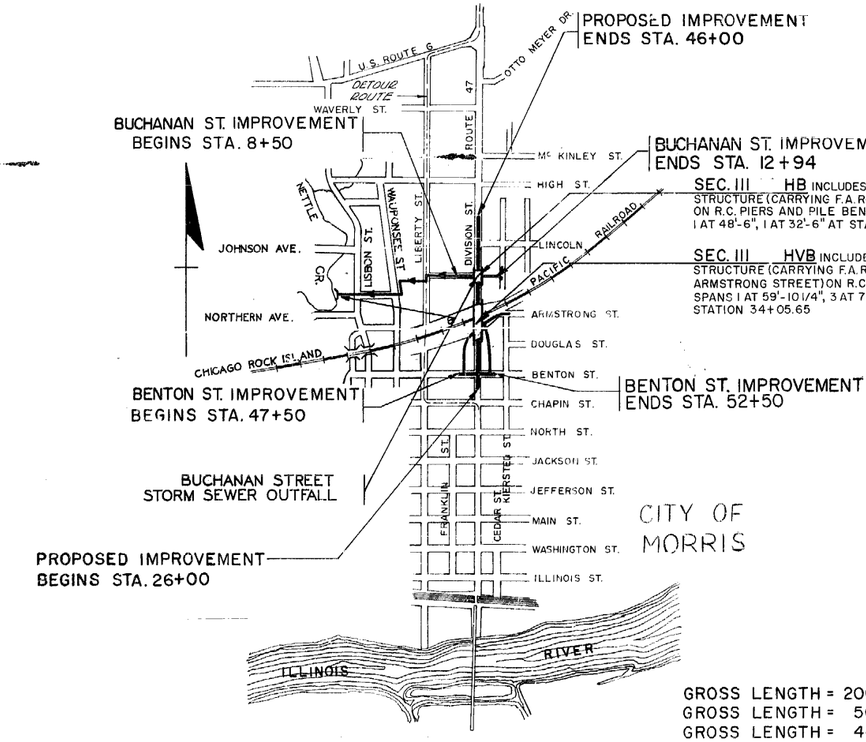
73	Cross Sections-Connector
74	Cross Sections-Buchanan St.
75-98	Structure Plans-Section HVB
99-111	Structure Plans-Section HB
111A & B	Traffic Control and Protection, Standards U-1 & U-2

STANDARDS

STN'D. NO.	DESCRIPTION
2113-1	NAME PLATE
1527-9	MANHOLE, TYPE A
1538-5	CATCH BASIN, TYPE C
1683-4	INLET, TYPE A
1686-4	SYMBOLS AND ABBREVIATIONS
2122-8	CONCRETE MEDIANS
2130-5	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER.
2135	PERMANENT SURVEY MARKERS
2213-4	FRAME AND LID, TYPE 1
2214-4	FRAME AND GRATES, TYPE 3
2217-3	GRATE, TYPE 8
2230-11	STEEL PLATE BEAM GUARDRAIL (SHEETS 1 & 2)
2298-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-7	DESIGN OF TRAFFIC CONTROL DEVICES
2300-1	FLAGMAN TRAFFIC CONTROL SIGN
2354-1	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
2356	SIDEWALK RAMPS FOR THE HANDICAPPED
2360	BRIDGE APPROACH PAVEMENT (50 FT.) (SHEETS 1 & 2)
2362-2	PATCHING DETAILS
2368	DETAILS OF CONCRETE AND MORTAR HANDHOLES
2369	DETAILS OF DOUBLE HANDHOLES AND JUNCTION BOXES
2370	DETAILS OF DETECTOR INSTALLATIONS
2371	DETAILS OF MOUNTING TRAFFIC SIGNALS
2374	DETAILS OF STEEL MAST ARM ASSEMBLY AND POLE
2378	DETAILS OF CONCRETE FOUNDATIONS



GROSS LENGTH = 2000 FEET = 0.3788 MILES ROUTE 47
GROSS LENGTH = 500 FEET = 0.0945 MILES BENTON STREET
GROSS LENGTH = 444 FEET = 0.0841 MILES BUCHANAN STREET

GRAPHIC SCALE 0 800 1600

DEPARTMENT OF TRANSPORTATION

10-23-78

10-23-78

Oct 23 78

DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED

DIVISION ADMINISTRATOR

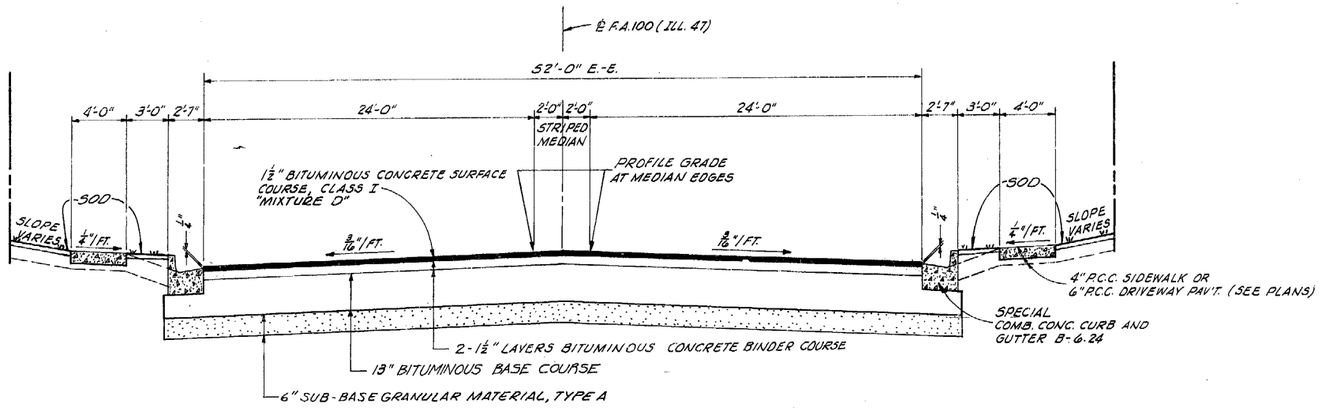
PLANS PREPARED BY

HAZELET & ERDAL
CONSULTING ENGINEERS

CONTRACT NO. 335

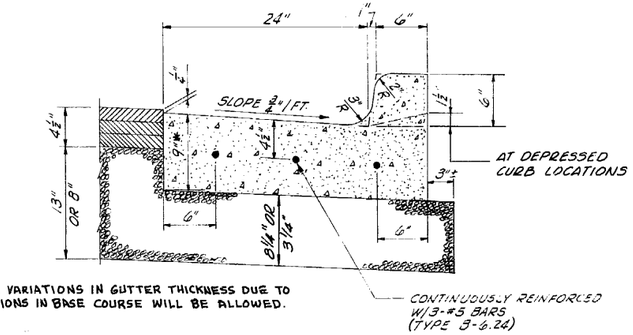
GRUNDY — SECTION 111 (HVB, HB) — F.A. ROUTE 100 ILL. ROUTE 47

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.100 (S.B.I.47)	111(HVB,HB)	GRUNDY	111	2
STA.		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



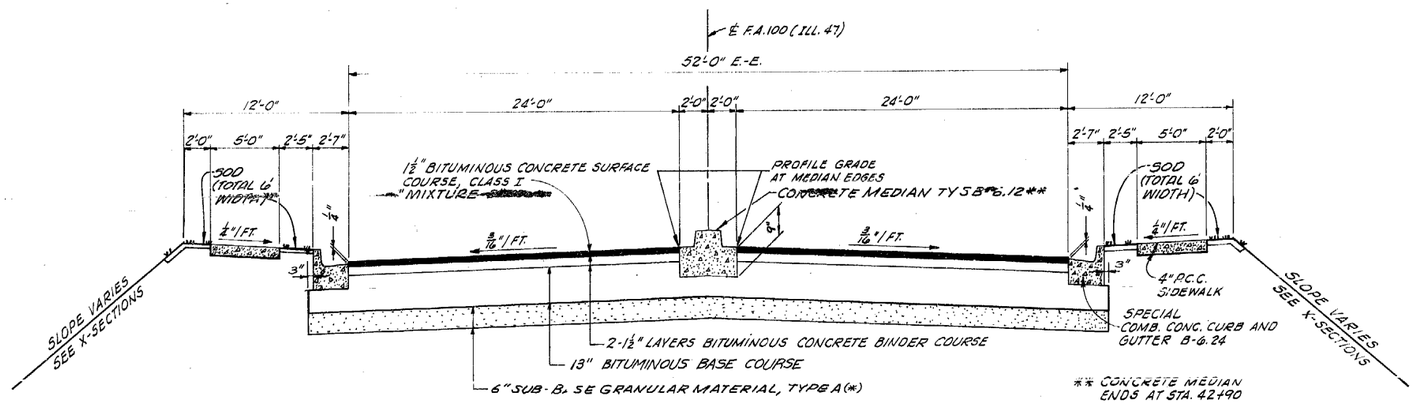
F.A.100 (ILL.47)

STA. 26+00 TO STA. 27+61.25



* NOTE:
MINOR VARIATIONS IN GUTTER THICKNESS DUE TO VARIATIONS IN BASE COURSE WILL BE ALLOWED.

DETAIL - SPECIAL COMB. CONC.
CURB & GUTTER TYPE B6.24 SHOWING REINFORCEMENT



NOTES:

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

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

PROTECTIVE COAT SHALL ALSO BE APPLIED TO ALL GUTTER FLAGS, FACE OF CURB, AND MEDIAN SURFACE.

RATES OF APPLICATION

The following rates of application have been assumed in calculating plan quantities:

Bituminous Materials Prime Coat	0.08 or 0.375 gal. /Sq. Yd.
Bituminous Concrete Binder Course	112 lbs. /Sq. Yd. /Inch
Bituminous Concrete Surface Course	112 lbs. /Sq. Yd. /Inch
Emulsified Asphalt	100 Gal. /Ton of Mulch
Granular Materials	2.05 Tons/Cu. Yd.
Mulch	2 Tons/Acre
Nitrogen Fertilizer Nutrient	80 lbs. /Acre
Phosphorus Fertilizer Nutrient	160 lbs. /Acre
Potassium Fertilizer Nutrient	80 lbs. /Acre
Supplemental Watering	10 Gal. /Sq. Yd. & 1000 Gal. /Unit

Structural Design Traffic: ADT 18,500 P.C. 78%
S.U. 17% M.U. 5%

Class I Road
Minimum Soil Support IBR = 3.0 (Length of Project)
Per Cent of S.D.T. in Design Lane: Up = 32% U_s = 45% Um = 45%
TF = 3.021 Design Thickness Dt = 5.0 Bituminous Base Course Thickness = 13"
Required Surface Thickness: $\frac{5.0 - (0.30 \times 13")}{0.40} = 2.75"$ Minimum Surface = 4.00
Use 4.5"
Surface Course (Mix D) Class I = 1-1/2" Binder Course 2 @ 1-1/2"

F.A.100 (ILL. 47)

(*) STA. 27+61.25 TO STA. 31+20.71
(*) * STA. 31+20.71 TO STA. 31+70.71
* STA. 35+66.03 TO STA. 36+16.03
STA. 36+16.03 TO STA. 37+85.75
* STA. 37+85.75 TO STA. 38+35.75
* STA. 39+56.25 TO STA. 40+06.25
STA. 40+06.25 TO STA. 46+00.00

* INDICATES BRIDGE APPROACH PAVEMENT. FOR PAVEMENT DETAILS, SEE STANDARD DRAWING 2360. USE STANDARD COMB. CONC. CURB AND GUTTER TYPE B6.24 WITH BRIDGE APPROACH PAVEMENT.

NOTE:
TYPICAL SECTIONS NOT TYPICAL FOR STATIONS THROUGH INTERSECTIONS.

State of Illinois
Department of Transportation
District Three

Reviewed By: Ralph A. Chaud
HLP District Engineer of Design

Date: 8-24-78

Examined By: Claude Hurley
District Engineer of Construction

Philip M. Gustin
District Engineer of Maintenance

William N. Frear
District Engineer of Materials

Alvin Johnson
District Engineer of Traffic

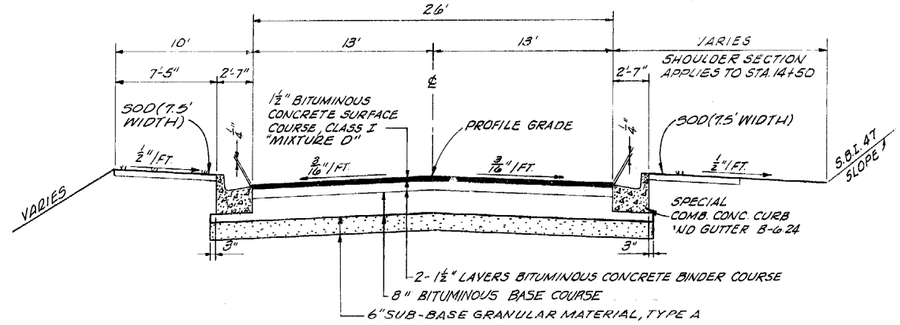
John Piggott
District Engineer of Planning

TYPICAL SECTIONS
DIVISION ST. (ILL. 47)

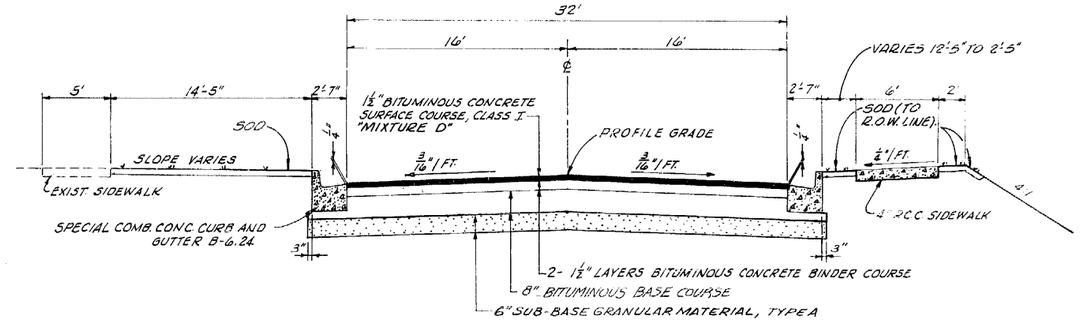
DRAWN BY GNW DATE 10-75
CHECKED BY LSM DATE 8-76

Rev. 1-8-79

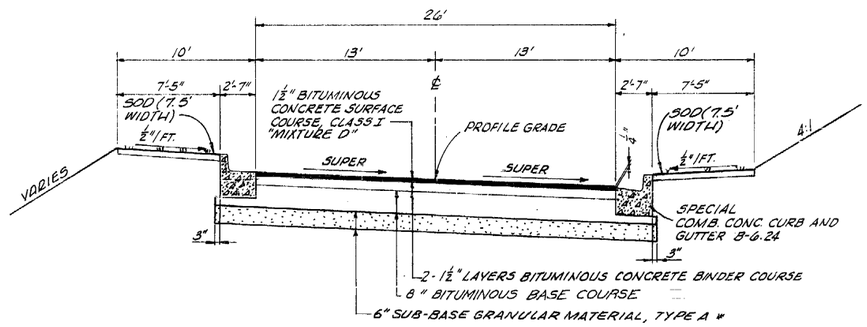
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 120 (S.B. 47)	111 (HVB, HB)	GRUNDY	111	3
STA.		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



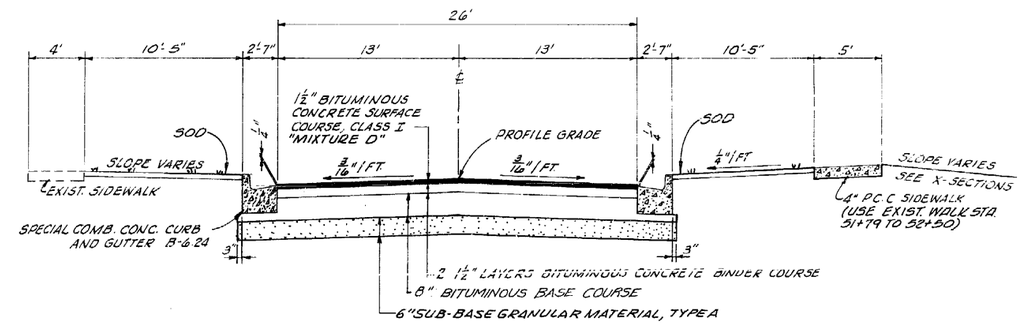
ARMSTRONG STREET
STA. 10+16 TO STA. 12+00



BENTON STREET
STA. 47+50 TO STA. 49+24



ARMSTRONG STREET
STA. 12+00 TO STA. 20+00
* STA. 12+00 TO STA. 17+00



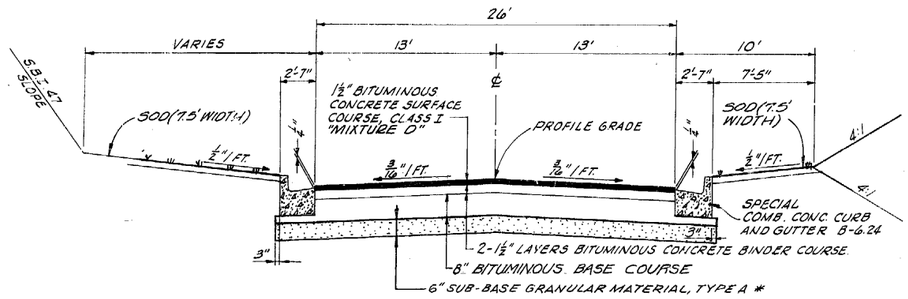
BENTON STREET
STA. 50+75 TO STA. 52+50

DRAWN BY G.W.L. DATE 10-75
CHECKED BY L.S.N. DATE 8-76

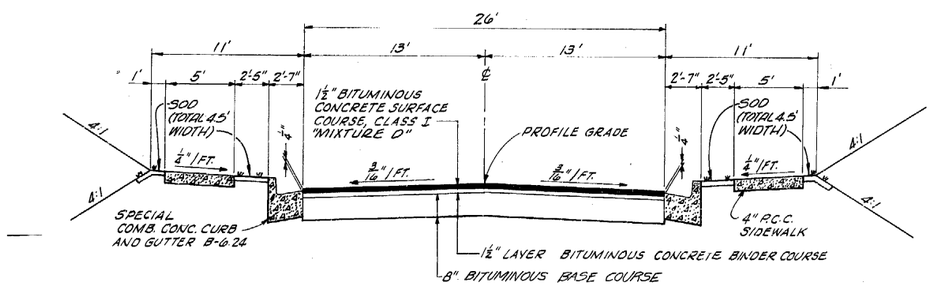
TYPICAL SECTIONS
ARMSTRONG STREET
BENTON STREET

REV. 1-8-77

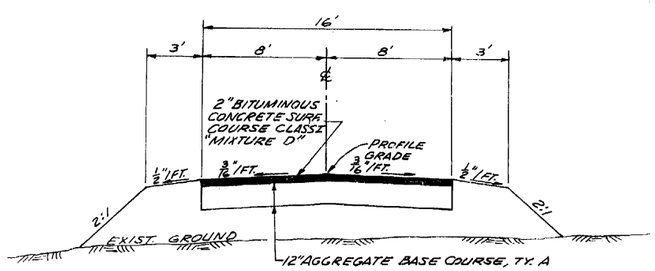
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 102 (SBI 47)	111 (HVB, HB)	GRUNDY	111	4
STA.		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



CONNECTOR
STA. 0+13 TO STA. 5+59
* STA. 0+13 TO STA. 3+00



BUCHANAN STREET
STA. 8+50 TO STA. 12+94



ACCESS DRIVE "A"
LT. STA. 35+05 TO LT. STA. 39+00

DRAWN BY GWH DATE 10-75
CHECKED BY LSN DATE 8-76

TYPICAL SECTIONS

CONNECTOR — BUCHANAN STREET & ACCESS DRIVE "A"

Rev. 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 100 SBI 47	111 (HVB) 111 (TS-1)	CALHOUN	111	5
STA.		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

SUMMARY OF QUANTITIES

CODE NUMBER	ITEMS	UNITS	SEC III HVB Δ		SEC III HB	SEC III CS ROADWAY 26+00 -43+00	SEC III CS ROADWAY 43+00 -46+00	SEC III TS-1	BUCHANAN ST. EAST ROADWAY	BUCHANAN ST. S.S. OUTFALL	WATER MAIN RELOCATION		TOTAL
			CONST. CODE X571		CONST. CODE X271	6203		Y031	6203		Y060		
			F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F	FG	
201001	TREE REMOVAL (6" TO 15" DIAMETER)	IN. DIA.				164	226		13				403
201002	TREE REMOVAL (OVER 15" DIAMETER)	IN. DIA.				675	458		82	48			1263
202001	EARTH EXCAVATION	CU. YD.				1936	4341		1105				7382
204001	BORROW EXCAVATION	CU. YD.				105,327							105,327
205001	SPECIAL EXCAVATION	CU. YD.				7,254	1,211						8,465
210001	TRENCH BACKFILL	CU. YD.				472	222		78	764	32	536	2,104
213001*	SUB-BASE GRANULAR MAT'L., TYPE A	TON				3304	1167						4471
216001	TOPSOIL EXCAVATION	CU. YD.								14			14
⊙ 216003	TOPSOIL PLACEMENT 4"	SQ. YD.				31,740	9039		1283	1260			43,322
301001*	AGGREGATE BASE COURSE, TYPE A	TON				60	104			209			373
X30801*	BITUMINOUS BASE COURSE (3")	SQ. YD.					1136						1136
308005*	BITUMINOUS BASE COURSE (8")	SQ. YD.				1064	7712		1573				10,349
X04748	MOBILIZATION	L. SUM				0.5	0.5						1
308010	BITUMINOUS BASE COURSE (13")	SQ. YD.				5352	1733						7085
402001	AGGREGATE SURFACE COURSE, TYPE A	TON					23			71			94
406001	BITUMINOUS MATERIAL (PRIME COAT)	GAL.				266	105			213			584
406007	BITUMINOUS CONCRETE BINDER COURSE	TON				899	1564		132	36			2631
406013	BITUMINOUS CONCRETE SURFACE COURSE, MIX D, CLASS I	TON	35	156	58	617	806		132	36			1840
620030	PAVEMENT REMOVAL & PCC REPLACEMENT, TYPE III, 9"	SQ. YD.								54			54
408013	PROTECTIVE COAT	SQ. YD.				1371	1390		271				3032
408014	BRIDGE APPROACH PAVEMENT	SQ. YD.				1064							1064
502001	STRUCTURE EXCAVATION	CU. YD.	150	705	200								1055
502004	ROCK EXCAVATION FOR STRUCTURES	CU. YD.	10	20	10	1871 (258**)	44 (6**)			502	48	133	** 2902
503003	PROTECTIVE COAT	SQ. YD.	153	642	264								1109
504003	CLASS X CONCRETE	CU. YD.	297.1	1426.6	555.3					3.1			2282.1
507005	STUD SHEAR CONNECTORS	EACH	1800	7020	2610								11,430
501001	FURNISHING AND ERECTING STRUCTURAL STEEL	L.S.	0.15	0.69	0.16								1
	ALTERNATE "A"												
508006	ALUMINUM RAILING, TYPE L	LIN. FT.	144	689	283								1116
	ALTERNATE "B"												
508007	STEEL RAILING, TYPE M	LIN. FT.	144	689	283								1116
512001	REINFORCEMENT BARS	POUND	54,400	248,630	92,570	58,040				200			453,840
513013	FURNISHING STEEL PILES HP 8x36	LIN. FT.		846	444								1290

Δ Station 32+30 to Station 33+02 (℄ Pier 1 to ℄ Pier 2)

⊙ CONSTRUCTION TYPE CODE: Y005
⊡ CONSTRUCTION TYPE CODE: Y060

* INDICATES ITEMS ~~[illegible]~~ SPECIAL PROVISION AND/OR SPECIAL DRAWING
** 10% (264 TON) ADDITIONAL ADDED FOR POSSIABLE UNKNOWN ROCK

NOTE: NO QUANTITY SCHEDULES INCLUDED FOR BUCHANAN ST. S.S. OUTFALL

SUMMARY OF QUANTITIES

CODE NUMBER	ITEMS	UNITS	SEC III HVB		SEC III HB	SEC III CS ROADWAY 26+00 - 43+00	SEC III CS ROADWAY 43+00 - 46+00	SEC III TS-1	BUCHANAN ST. EAST ROADWAY	BUCHANAN ST. S.S. OUTFALL	WATER MAIN RELOCATION		TOTAL
			CONST. CODE X571		CONST. CODE X271	6203		Y031	6203		Y060		
			F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F	FG	
513027	DRIVING STEEL PILES	LIN. FT.		846	444								1290
513033	TEST PILE STEEL HP 8x36	EACH		2	2								4
514001	NAME PLATES	EACH		1	1								2
603005	STORM SEWERS, TYPE 1 12"	LIN. FT.				393	820		24				1237
603007	STORM SEWERS, TYPE 1 15"	LIN. FT.					67						67
603014	STORM SEWERS, TYPE 1 30"	LIN. FT.					79						79
603016	STORM SEWERS, TYPE 1 36"	LIN. FT.					115						115
603018	STORM SEWERS, TYPE 1 42"	LIN. FT.								442			442
603034	STORM SEWERS, TYPE 2 12"	LIN. FT.				29	258						287
603036	STORM SEWERS, TYPE 2 15"	LIN. FT.				227	138						365
603038	STORM SEWERS, TYPE 2 18"	LIN. FT.				190							190
603041	STORM SEWERS, TYPE 2 24"	LIN. FT.				281							281
603042	STORM SEWERS TYPE 2 27"	LIN. FT.				483							483
603043	STORM SEWERS, TYPE 2 30"	LIN. FT.				85							85
603045	STORM SEWERS, TYPE 2 36"	LIN. FT.					176						176
603047	STORM SEWERS, TYPE 2 42"	LIN. FT.				311			102	1018			1431
603096	STORM SEWERS, TYPE 4 18"	LIN. FT.				185							185
606010	STORM SEWERS, JACKED IN PLACE 27"	LIN. FT.				92							92
607050	PIPE DRAINS, CORRUGATED STEEL OR ALUMINUM ALLOY 12"	LIN. FT.				436							436
⊡ 609062*	ADJUSTING WATER MAIN 4"	LIN. FT.								10			10
⊡ 611003*	ADJUSTING WATER SERVICE LINES	LIN. FT.								170			170
612076	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH				1	3						4
612184	MANHOLES, TYPE A, 4' DIA. TYPE 1 FR., CLOSED LID	EACH				5	2						7
612210	MANHOLES, TYPE A, 5' DIA. TYPE 1 FRAME, OPEN LID	EACH				1							1
612211	MANHOLES, TYPE A, 5' DIA. TYPE 1 FRAME, CLOSED LID	EACH				7				4			11
⊙ 612302*	MANHOLES, SPECIAL, 4' DIA. TYPE 1 FRAME OPEN LID	EACH				1							1
⊙ 612303*	MANHOLES, SPECIAL, 4' DIA. TYPE 1 FRAME CLOSED LID	EACH					1						1
⊙ 612316*	MANHOLES, SPECIAL, 5' DIA. TYPE 1 FRAME, OPEN LID	EACH				1							1
⊙ 612317*	MANHOLES, SPECIAL, 5' DIA. TYPE 1 FRAME CLOSED LID	EACH				2	2						4
612357	INLETS TYPE A, TYPE 3 FRAME & GRATE	EACH				9	12		2				23
⊙ 612284*	MANHOLE 5' x 5' SPECIAL	EACH				1							1

DRAWN BY _____ DATE _____
CHECKED BY _____ DATE _____

REV. [illegible]
REV. 1-8-74

ROUTE		COUNTY	TOTAL SHEETS	SHEET NO.
FA 103 SEC. 27	1 (HVB, HB)	GRUNDY	111	6
FROM STA.		TO STA.		
FED. AID PROJ. REG. 4		ILLINOIS	PROJECT	

SUMMARY OF QUANTITIES

CODE NUMBER	ITEMS	UNITS	SEC III HVB CONST. CODE X571 F FUNDS	SEC III HVB CONST. CODE X571 FG FUNDS	SEC III HB CONST. CODE X271 F FUNDS	SEC III CS ROADWAY 26+00 – 43+00 6203 FG FUNDS	SEC III CS ROADWAY 43+00 – 46+00 6203 F FUNDS	SEC III TS-1 Y031 FG FUNDS	BUCHANAN ST. EAST ROADWAY 6203 F FUNDS	BUCHANAN ST. S.S. OUTFALL 6203 FG FUNDS	WATER MAIN RELOCATION Y060 F	WATER MAIN RELOCATION Y060 FG	TOTAL
612408*	INLETS, TYPE C, TYPE 3 FRAME & GRATE	EACH				9	11						20
612558	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH				1	4						5
612582	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH				5	6						11
615001	FILLING EXISTING MANHOLES	EACH				13	1						14
615003	FILLING EXISTING INLETS	EACH				12	2						14
616006	CONCRETE CURB, TYPE B	LIN. FT.								15			15
616035*	COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.06	LIN. FT.				70	33						103
616050	COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24	LIN. FT.				508	49						557
616054*	COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24 (SPECIAL)	LIN. FT.				1968	4047		813				6828
616086	COMBINATION CONCRETE CURB & GUTTER TYPE M-6.06	LIN. FT.					32						32
616104	COMBINATION CONCRETE CURB & GUTTER TYPE M-6.24	LIN. FT.					41						41
616183	CONCRETE MEDIAN SURFACE, 4 INCH	SQ. FT.				480	349						829
616196	CONCRETE MEDIAN, TYPE S B-6.12	SQ. FT.				3829							3829
617001	PAVEMENT REMOVAL	SQ. YD.				2212	2966		334				5,512
617002	DRIVEWAY PAVEMENT REMOVAL	SQ. YD.					38		120	31			189
617003	CURB REMOVAL	LIN. FT.				355	840			15			1,210
617006	SIDEWALK REMOVAL	SQ. FT.				3146	4101		373	80			7,700
618001	SLOPE WALL, 4 INCH	SQ. YD.		1028	666								1,694
623002	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ. YD.				72	41			33			146
624001	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ. FT.				12199	4478		4380	80			21137
▣ 640001	FIRE HYDRANTS TO BE MOVED	EACH				1	1						2
▣ 640005	FIRE HYDRANTS TO BE REMOVED	EACH				2							2
▣ 641002	DOMESTIC WATER SERVICE BOXES TO BE MOVED	EACH				2	4			1			7
⊙ 642001	SEEDING, CLASS I	ACRE				5.1	1.2		0.2	0.3			6.8
⊙ 642003	SEEDING, CLASS III	ACRE				1.20							1.2
⊙ 642004	NITROGEN FERTILIZER NUTRIENT	POUND				535	150		10	21			716
⊙ 642005	PHOSPHORUS FERTILIZER NUTRIENT	POUND				1070	300		20	42			1432
⊙ 642006	POTASSIUM FERTILIZER NUTRIENT	POUND				535	150		10	21			716
⊙ X64308	MULCH, METHOD 2	TON				10.2	2.3		0.4				12.9
⊙ 643004	EXCELSIOR BLANKET	SQ. YD.				5739							5739

† CONSTRUCTION TYPE CODE : Y002
⊙ CONSTRUCTION TYPE CODE : Y005
▣ CONSTRUCTION TYPE CODE : Y060

SUMMARY OF QUANTITIES

CODE NUMBER	ITEMS	UNITS	SEC III HVB CONST. CODE X571 F FUNDS	SEC III HVB CONST. CODE X571 FG FUNDS	SEC III HB CONST. CODE X271 F FUNDS	SEC III CS ROADWAY 26+00 – 43+00 6203 FG FUNDS	SEC III CS ROADWAY 43+00 – 46+00 6203 F FUNDS	SEC III TS-1 Y031 FG FUNDS	BUCHANAN ST. EAST ROADWAY 6203 F FUNDS	BUCHANAN ST. S.S. OUTFALL 6203 FG FUNDS	WATER MAIN RELOCATION Y060 F	WATER MAIN RELOCATION Y060 FG	TOTAL
⊙ 643005	EMULSIFIED ASPHALT	GAL.				1020	230		40				1290
⊙ 644001	SODDING	SQ. YD.				1321	3317		390				5028
Z10240	FURNISHING AND MAINTAINING AUTOMOTIVE VEHICLES	VEH. MOS.				27							27
⊙ 644002	SUPPLEMENTAL WATERING	UNIT				13	33		4				50
646004	ENGINEER'S FIELD OFFICE, TYPE A	CAL. MO.				27							27
646006	ENGINEER'S FIELD LABORATORY	CAL. MO.				27							27
† T20101	SIGN PANEL - TYPE 1	SQ. FT.				108	27						135
† T30401	TELESCOPING STEEL SIGN SUPPORT	LIN. FT.				64	36						100
† T30601	WOOD SIGN SUPPORT	LIN. FT.				139	32						171
** T40002	SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED	EACH						3					3
T40003	SIGNAL HEAD, 1-FACE 3-SECTION, MAST ARM MOUNTED	EACH						2					2
T40011	SIGNAL HEAD, 2-FACE 3-SECTION, BRACKET MOUNTED	EACH						2					2
T40019	SIGNAL HEAD, 3-FACE 3-SECTION, BRACKET MOUNTED	EACH						1					1
T40202	PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH						4					4
T40204	PEDESTRIAN SIGNAL HEAD, 2 FACE, BRACKET MOUNTED	EACH						2					2
T40301	TRAFFIC SIGNAL BACKPLATE	EACH						12					12
T40605	TRAFFIC SIGNAL POST, 10'	EACH						1					1
T40609	TRAFFIC SIGNAL POST, 14'	EACH						5					5
T40701	PEDESTRIAN PUSH BUTTON POST	EACH						2					2
T40849	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH						1					1
T40854	STEEL MAST ARM ASSEMBLY AND POLE 40 FT.	EACH						1					1
T41125	FULL ACTUATED CONTROLLER, 2 PHASES, VOLUME DENSITY FOR ONE PHASE, DIGITAL TIMING, IN TYPE III CABINET	EACH						1					1
T41603	INDUCTION LOOP DETECTOR AMPLIFIER, DIGITAL DESIGN	EACH						2					2
T41607	INDUCTION LOOP DETECTOR AMPLIFIER WITH CALL DELAY, DIGITAL DESIGN	EACH						4					4
T41801	DETECTOR LOOP	LIN. FT.						590					590
T41901	PEDESTRIAN PUSHBUTTON	EACH						8					8
T42004	GALVANIZED STEEL CONDUIT IN TRENCH 1½"	LIN. FT.						478					478
T42005	GALVANIZED STEEL CONDUIT IN TRENCH 2"	LIN. FT.						227					227
T42007	GALVANIZED STEEL CONDUIT IN TRENCH 3"	LIN. FT.						84					84
T42009	GALVANIZED STEEL CONDUIT IN TRENCH 4"	LIN. FT.						102					102
T42132	ELECTRIC CABLE IN CONDUIT NO. 12 2/C	LIN. FT.						1194					1194
T42133	ELECTRIC CABLE IN CONDUIT NO. 12 3/C	LIN. FT.						386					386
T42134	ELECTRIC CABLE IN CONDUIT NO. 12 5/C	LIN. FT.						685					685
T42135	ELECTRIC CABLE IN CONDUIT NO. 12 7/C	LIN. FT.						383					383
T42136	ELECTRIC CABLE IN CONDUIT NO. 12 9/C	LIN. FT.						300					300
T42184	ELECTRIC CABLE IN CONDUIT NO. 14 2/C SHIELDED	LIN. FT.						1070					1070
T42607*	SERVICE INSTALLATION, SPECIAL	EACH						1					1
T42701	CONCRETE FOUNDATION, TYPE A	LIN. FT.						18					18
T42702	CONCRETE FOUNDATION, TYPE D	LIN. FT.						3.5					3.5
T42704	CONCRETE FOUNDATION, TYPE E, 30 INCH DIA.	LIN. FT.						22					22
T42801	HANDHOLE	EACH						7					7
T42803	DOUBLE HANDHOLE	EACH						1					1
T42901	JUNCTION BOX	EACH						2					2

* INDICATES ITEMS WITH SPECIAL PROVISION AND/OR SPECIAL DRAWING
** SPECIALITY ITEMS

NOTE: NO QUANTITY SCHEDULES INCLUDED FOR BUCHANAN ST. S.S. OUTFALL

DRAWN BY ___ DATE ___
CHECKED BY ___ DATE ___

Rev. 1-8-79
Rev. 3-23-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 SBI 47	111 (HVB, HB)	GRUNDY	111	7
FA	6TS-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT.		

SUMMARY OF QUANTITIES

	CODE NUMBER	ITEMS	UNITS	SEC III HVB		SEC III HB	SEC III CS ROADWAY 26+00 -43+00	SEC III CS ROADWAY 43+00 -46+00	SEC III TS-1	BUCHANAN ST. EAST ROADWAY	BUCHANAN ST. S.S. OUTFALL	WATER MAIN RELOCATION		TOTAL
				CONST. CODE X571		CONST. CODE X271	6203		Y031	6203		Y060		
				F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F	FG	
**	T43001	TRENCH AND BACKFILL	LIN. FT.						891					891
**	T50104	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	LIN. FT.				3316	288						3604
**	T50106	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	LIN. FT.				365	54						419
	Z10044	BUILDING REMOVAL NO. 1	L.S.				1							1
	Z10045	BUILDING REMOVAL NO. 2	L.S.				1							1
	Z10046	BUILDING REMOVAL NO 3	L.S.				1							1
	Z10047	BUILDING REMOVAL NO. 4	L.S.				1							1
	Z10048	BUILDING REMOVAL NO. 5	L.S.				1							1
	Z10049	BUILDING REMOVAL NO. 6	L.S.				1							1
	Z10050	BUILDING REMOVAL NO. 7	L.S.				1							1
	Z10051	BUILDING REMOVAL NO. 8	L.S.				1							1
	Z10052	BUILDING REMOVAL NO. 9	L.S.					1						1
	Z10053	BUILDING REMOVAL NO. 10	L.S.					1						1
	Z10054	BUILDING REMOVAL NO. 11	L.S.					1						1
	Z10055	BUILDING REMOVAL NO. 12	L.S.				1							1
	Z10056	BUILDING REMOVAL NO 13	L.S.					1						1
	Z10057	BUILDING REMOVAL NO. 14	L.S.								1			1
	Z10281	NEOPRENE EXPANSION JOINT (4")	LIN. FT.		150									150

SUMMARY OF QUANTITIES

	CODE NUMBER	ITEMS	UNITS	SEC III HVB		SEC III HB	SEC III CS ROADWAY 26+00 -43+00	SEC III CS ROADWAY 43+00 -46+00	SEC III TS-1	BUCHANAN ST. EAST ROADWAY	BUCHANAN ST. S.S. OUTFALL	WATER MAIN RELOCATION		TOTAL
				CONST. CODE X571		CONST. CODE X271	6203		Y031	6203		Y060		
				F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F	FG	
	Z10300	PERMANENT SURVEY MARKERS, TYPE I	EACH				3							3
	Z10828	PREFORMED JOINT SEALER (2½")	LIN. FT.			138								138
⊡	Z10431	SANITARY SEWER TYPE 3-8"	LIN. FT.				514							514
□	Z10527	TRAINEES	HOUR	1,000	1,000	1,000	1,000							4,000
	Z10530	WATERPROOFING MEMBRANE SYSTEM	SQ. YD.	435	1937	716								3088

WATER MAIN RELOCATION

	CODE NUMBER	ITEMS	UNITS	SEC III HVB		SEC III HB	SEC III CS ROADWAY 26+00 -43+00	SEC III CS ROADWAY 43+00 -46+00	SEC III TS-1	BUCHANAN ST. EAST ROADWAY	BUCHANAN ST. S.S. OUTFALL	WATER MAIN RELOCATION		TOTAL
				CONST. CODE X571		CONST. CODE X271	6203		Y031	6203		Y060		
				F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F FUNDS	FG FUNDS	F	FG	
	X05852	¾" WATER SERVICE TAP	EACH										4	4
	610002	¾" WATER SERVICE LINE	LIN. FT.										74	74
	609029*	4" DUCTILE IRON WATERMAIN	LIN. FT.									47	205	252
	X04177	4" GATE VALVE WITH BOX	EACH									1	3	4
	X04236	4" GATE VALVE IN VAULT	EACH										1	1
	X04237	4" 45° BEND	EACH										3	3
	X04253	4" 90° BEND	EACH									1		1
	X04284	4" CUT-IN SLEEVE	EACH									1	4	5
	609030*	6" DUCTILE IRON WATERMAIN	LIN. FT.										215	215
	X04176	6" GATE VALVE WITH BOX	EACH									1	4	5
	640006	6" FIRE HYDRANT	EACH									1	3	4
	X04304	6" 45° BEND	EACH										2	2
	X04307	6" CUT-IN SLEEVE	EACH										1	1
	609031*	8" DUCTILE IRON WATERMAIN	LIN. FT.									303	1851	2154
	X04175	8" GATE VALVE WITH BOX	EACH									1	4	5
	X04308	8" GATE VALVE IN VAULT	EACH										1	1
	X04326	8" x 4" WYE	EACH										1	1
	X04327	8" x 6" TEE	EACH									1	4	5
	X04332	8" x 4" TEE	EACH									1	3	4
	X04335	8" TEE	EACH										1	1
	X04336	8" 45° BEND	EACH										8	8
	X04395	8" 22½° BEND	EACH									1	3	4
	X04414	8" x 6" REDUCER	EACH										1	1
	X04695	8" PLUG	EACH									1	1	2
	X04448	8" DUCTILE IRON WATERMAIN (JACKED)	LIN. FT.										163	163

⊡ CONSTRUCTION TYPE CODE
□ CONSTRUCTION TYPE CODE: Y080
* SPECIALITY ITEMS
** INDICATES ITEMS WITH SPECIAL PROVISION AND/OR SPECIAL DRAWING

NOTE: NO QUANTITY SCHEDULES INCLUDED FOR BUCHANAN ST. S.S. OUTFALL

DRAWN BY ____ DATE ____
CHECKED BY ____ DATE ____

Rev. 1-8-71

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 193 (381 47)	111 (HVR HB)	GRUNDY	111	8
STA.	4-T-1	TO STA.		
F.H.W.A. REG. 4		ILLI-115	PROJECT.	

CURBS & GUTTERS & MEDIANS & ISLANDS

LOCATION	SIDE	SPECIAL COMBINATION CONC. CURB & GUTTER TYPE B-6.24 LIN. FT.	COMBINATION CONC. CURB & GUTTER TYPE B-6.06 LIN. FT.	COMBINATION CONC. CURB & GUTTER TYPE M-6.24 LIN. FT.	COMBINATION CONC. CURB & GUTTER TYPE M-6.06 LIN. FT.	CONCRETE MEDIAN (SOLID) TYPE B-6.12 SQ. FT.	CONCRETE MEDIAN SURFACE 4 INCHES SQ. FT.	PROTECTIVE COAT SQ. YDS.	COMBINATION CONC. CURB & GUTTER TYPE B-6.24 LIN. FT.
DIVISION ST. RT. 47									
STA. 26+00 TO BENTON ST.	LEFT	174						58	
STA. 26+00 TO BENTON ST.	RIGHT	177						59	
BENTON ST. TO STA. 30+00	LEFT	225						75	
BENTON ST. TO STA. 30+00	RIGHT	225						75	
AT BENTON ST. (LT.)	ISLAND		35				240	24	54
STA. 30+00 TO 31+12.5	LEFT	113						38	
STA. 30+00 TO 31+27.5	RIGHT	128						43	
STA. 28+19.00 TO BRIDGE	MEDIAN					1407		196	
STA. 31+12.5 TO BRIDGE	LEFT							14	43
STA. 31+27.5 TO BRIDGE	RIGHT							19	57
BRIDGE TO STA. 36+14	LEFT							17	52
BRIDGE TO STA. 36+20	RIGHT							16	48
BRIDGE TO BRIDGE	MEDIAN					1079		150	
STA. 36+14 TO 37+86	LEFT	172						57	
STA. 36+20 TO 37+86	RIGHT	166						55	
STA. 37+85 TO BRIDGE	LEFT							17	50
STA. 37+85 TO BRIDGE	RIGHT							17	50
BRIDGE TO STA. 40+06	LEFT							17	50
BRIDGE TO STA. 40+06	RIGHT							17	50
BRIDGE TO STA. 42+92	MEDIAN					1343		187	
STA. 40+06 TO 46+00.00	LEFT	594						198	
STA. 40+06 TO 46+00.00	RIGHT	594						198	
BENTON STREET									
STA. 47+50 TO DIVISION ST.	LEFT	110						37	
STA. 47+50 TO DIVISION ST.	RIGHT	174						58	
DIVISION ST. TO STA. 52+50	LEFT	113						38	
DIVISION ST. TO STA. 52+50	RIGHT	175						58	
AT DIVISION ST. (LT.)	ISLAND		35				240	24	54
ARMSTRONG STREET									
BENTON ST. TO STA. 20+00	LEFT	946						315	
BENTON ST. TO STA. 20+00	RIGHT	779						260	
CONNECTOR									
BENTON ST. TO ARMSTRONG ST.	LEFT	561						187	
BENTON ST. TO ARMSTRONG ST.	RIGHT	589						196	
AT BENTON ST. (LT.)	ISLAND		33				224	22	49
AT ARMSTRONG ST. (RT.)	ISLAND			41	32		125	19	
BUCHANAN STREET									
STA. 9+00 TO KIERSTED ST.	LEFT	398						133	
STA. 9+00 TO KIERSTED ST.	RIGHT	415						138	
TOTALS		6828	103	41	32	3829	829	3032	357

P.C.C. SIDEWALK 4 INCH

LOCATION	SIDE	SQ. FT.
DIVISION ST. RT. 47		
STA. 26+00 TO BENTON ST.	LEFT	868
STA. 26+00 TO BENTON ST.	RIGHT	668
BENTON ST. TO STA. 30+00	LEFT	1383
BENTON ST. TO STA. 30+00	RIGHT	1460
STA. 30+00 TO 36+00 (EXCL. BRIDGE)	LEFT	960
STA. 30+00 TO 36+00 (EXCL. BRIDGE)	RIGHT	1070
STA. 36+00 TO 42+00 (EXCL. BRIDGE)	LEFT	2395
STA. 36+00 TO 42+00 (EXCL. BRIDGE)	RIGHT	2395
STA. 42+00 TO 46+00	LEFT	1633
STA. 42+00 TO 46+00	RIGHT	2000
BENTON STREET		
STA. 47+50 TO 52+50	LEFT	244
STA. 47+50 TO 52+50	RIGHT	1449
ARMSTRONG STREET		
KIERSTED ST. AT ARMSTRONG ST.	RIGHT	152
BUCHANAN STREET		
STA. 9+00 TO KIERSTED ST.	LEFT	2365
STA. 9+00 TO KIERSTED ST.	RIGHT	2015
TOTAL		21,057

SUMMARY OF EARTHWORK

LOCATION	EARTH EXCAVATION CU. YDS.	FILL CU. YDS.	BORROW EXCAVATION CU. YDS.	EXCESS CU. YDS.
DIVISION STREET RT. 47				
STA. 26+00 TO 32+19±	635	27378		
STA. 35+13± TO 38+75±	58	44789		
STA. 39+25± TO 43+00		18294		
STA. 43+00 TO 46+00	148	3125		
BENTON STREET				
STA. 47+50 TO 52+50	85	685		
ARMSTRONG STREET				
STA. 10+50 TO 20+00	1745	588		1010
CONNECTOR				
STA. 0+50 TO 5+00	1657	9		1646
BUCHANAN STREET				
STA. 8+50 TO 12+92	941	36		896
SUB-TOTAL	5269	94,924		3552
ADJUSTMENT FOR EXCAVATION FOR TOPSOIL	+2113	-1915		
SUB-TOTAL	7382	93,009	108,879 -3552	
TOTALS	7382	93,009	105,327	0

NOTES:
ASSUMED SHRINKAGE FACTOR IS 1.25

THE EARTH SHOWN AS EXCESS SHALL BE UTILIZED IN THE FILL, THEREBY REDUCING THE BORROW.

SCHEDULE OF BUILDING REMOVAL

BUILDING NO.	STATION ±	SIDE	QUANTITY (LUMP SUM)	
DIVISION ST. RT. 47				
	~~36+40~~	~~95' RT.~~	~~1~~	REMOVED BY OTHERS
1	38+25	85' LT.	1	
2	38+40	125' LT.	1	
	~~40+05~~	~~110' LT.~~	~~1~~	REMOVED BY OTHERS
3	40+65	60' RT.	1	
4	40+45	130' RT.	1	
5	41+15	65' RT.	1	
6	41+00	115' RT.	1	
7	41+60	60' RT.	1	
8	41+70	120' RT.	1	
9	42+60	70' LT.	1	
11	39+61	150' RT.	1	
	~~41+91~~	~~65' LT.~~	~~1~~	REMOVED BY OTHERS
12	42+70	140' LT.	1	
13	43+91	65' LT.	1	
ARMSTRONG ST.				
10	17+65	45' RT.	1	

SCHEDULE OF WATERMAIN ADJUSTMENTS

WATER MANHOLES AND BUFFALO BOXES

LOCATION	WATER MANHOLES: RECONSTRUCT EXISTING EACH	WATER MANHOLES: FILL EXISTING EACH	DOMESTIC BUFFALO BOXES TO BE MOVED EACH
DIVISION ST. RT. 47			
27+22 RT.	1		
27+99 RT.	1		
38+60 RT.		1	
38+65 RT.		1	
39+08 LT.		1	
43+15 RT.		1	
50+36 RT. BENTON ST.	1		
(@ VARIOUS LOCATIONS)			6
TOTALS	3	4	6

FIRE HYDRANTS

EXISTING STATION	EXISTING SIDE	EXISTING OFFSET	MOVE TO STATION	SIDE	OFFSET	REMOVE
DIVISION ST.						
28+00±	RT.	25'±	26+90	RT.	30'	
32+25±	RT.	24'±				1
35+60±	RT.	23'±				1
43+03±	RT.	21'±	43+00	RT.	30'	
TOTALS			2(EACH)			2(EACH)

PERMANENT SURVEY MARKERS

STATION	DESCRIPTION	QUANTITY (EACH)
27+61.25	@ BENTON ST.	1
36+00.00	P.O.T.	1
42+00.00	P.O.T.	1
	TOTAL	3

DRAWN BY L.W. DATE 4-77
CHECKED BY L.S.M. DATE 5-77

SCHEDULE OF QUANTITIES

Rev 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (SB. 47)	111 (HVB, HB)	GRUNDY	111	9
STA.	L.T.S.-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

ENTRANCES & ALLEYS

℄ STATION	SIDE	ANGLE TO ℄	TYPE	LENGTH BACK OF CURB TO END OF ENTR. ALONG ENTR. ℄ (FEET)	WIDTH EDGE OF PAV'T. TO EDGE OF PAV'T. (FEET)	TURN OFF TO EDGE OF ALLEY OR ENTR. (FEET)	P.C.C. DRIVEWAY PAVEMENT 6" (SQ.YDS.)	BIT. CONC. SURF. CSE. CLASS I 1½" (TON)	BIT. CONC. BINDER COURSE 1½" (TON)	AGGREGATE BASE CSE. TYPE A 6", 8", & 12" (TON)	AGGREGATE SURF. CSE. TYPE A 6" (TON)	BITUMINOUS MATERIALS PRIME COAT (GAL)	BITUMINOUS BASE COURSE 8" (SQ. YDS.)
DIVISION ST. RT. 47													
43+40	LT.	90°	C.E.	101.5	30	2@20'R	41.2	26.6	26.6				317
44+10	LT.	90°	R.E.	51.5	12	2@45°	10.5	4.9	4.9	20.3		26	
44+85	LT.	90°	R.E.	26.5	12	2@45°	10.5				8.8		
45+11	LT.	90°	R.E.	22.5	11	2@45°	9.7				6.4		
BENTON ST.													
51+74	RT.	90°	ALLEY	15.5	10	2@ 45°	18.2						
51+89	LT.	90°	R.E.	30	14	2@ 45°	22.6				8.0		
ARMSTRONG ST.													
11+81	LT.	90°	ALLEY	9	12	2@ 45°		1.1	1.1	6.0		6	
14+00	LT.	90°	ALLEY	41	20	2@ 45°		7.7	7.7	42.4		41	
17+38	LT.	90°	ALLEY	13	14	2@ 45°		1.8	1.8	9.8		10	
CONNECTOR													
1+17	RT.	90°	R.E.	14.5	14	2@ 45°		2.0	2.0	8.1		11	
2+15	RT.	90°	R.E.	14.5	14	2@ 45°		2.0	2.0	8.1		11	
ACCESS DRIVE "A"													
35+05 - 38+85	LT.	90°	DRIVE	380.0	16	2@15'R		80.0		54.0		266	
						TOTALS	112.7	126.1	46.1	163.7*	23.2	371	317

* 10% HAS BEEN ADDED TO TOTAL FOR MAINTENANCE.

BITUMINOUS, AGGREGATE & CONCRETE QUANTITIES

LOCATION	BITUMINOUS BASE COURSE (SQ.YDS.) 13"	*8¼"	8"	*3¼"	BIT. CONC. BINDER CSE. (TONS)	BIT. CONC. SURF. CSE. CLASS I (TONS)	BRIDGE APPR. PAV'T. 9" (SQ.YDS.)	REINFORCEMENT BARS (LB.)	SUB-BASE GRANULAR MATERIAL TYPE A (TONS)
DIVISION ST. RT. 47									
STA. 26+00 TO 46+00	7085	1253			1190	595			3304
STA. 31+21± TO 31+71±						22	266	14780	
STA. 35+66± TO 36+16±						22	266	14500	
STA. 37+86± TO 38+36±						22	266	14380	
STA. 39+57± TO 40+07±						22	266	14380	
BENTON ST.									
STA. 47+50 TO 52+50			1989	199	334	167			
ARMSTRONG ST.									
STA. 10+16 TO 20+00			3138	543	544	272			830
CONNECTOR									
STA. 0+16 TO 5+60±			2079	394	349	175			336
BUCHANAN ST.									
STA. 8+00 TO 12+95±			1373		132	132			
	7085	1253	8779	1136	2549	1429	1064	58040	4471

* TO BE PAID FOR AS BITUMINOUS BASE COURSE 8" AND BITUMINOUS BASE COURSE 3"

TREE REMOVAL

STATION	SIDE	DISTANCE FROM ℄ FEET	6" TO 15" DIA.	OVER 15" DIA.	STATION	SIDE	DISTANCE FROM ℄ FEET	6" TO 15" DIA.	OVER 15" DIA.	STATION	SIDE	DISTANCE FROM ℄ FEET	6" TO 15" DIA.	OVER 15" DIA.
DIVISION ST. RT. 47					29+74	RT.	125		18	37+87	RT.	97		41
26+02	LT.	37		19	30+09	LT.	34		30	38+13	RT.	37		37
26+05	RT.	25		23	30+34	LT.	34		33	38+27	RT.	37		24
26+25	RT.	25		22	30+34	RT.	52	10		38+96	RT.	37		23
26+35	LT.	21		35	30+36	RT.	115	12		39+12	RT.	37		22
26+51	RT.	25		32	30+58	RT.	130		17	39+21	RT.	74		16
26+57	LT.	23		25	30+64	RT.	83		16	39+29	RT.	204	13	
27+12	RT.	25	15		30+96	RT.	90	12		39+77	RT.	284		21
27+37	RT.	92	11		30+99	RT.	120	8		40+07	RT.	100	8	
27+37	RT.	111	12		31+00	LT.	120	6		40+21	RT.	21	15	
27+37	RT.	153		26	31+05	LT.	136		18	40+34	RT.	97	15	
27+85	RT.	131		28	31+05	LT.	155		18	40+85	RT.	89	8	
27+86	LT.	181		23	31+13	RT.	111	6		41+05	RT.	41	13	
27+90	LT.	94		21	31+16	LT.	20	10		41+22	LT.	82		35
27+90	LT.	141		33	31+54	RT.	142	11		41+86	RT.	33	15	
27+95	RT.	56		33	31+54	RT.	152	7		41+86	RT.	61		31
28+01	LT.	59		38	31+77	LT.	86	9		43+54	LT.	36		37
28+05	RT.	43		29	31+87	LT.	87	12		43+81	RT.	39		36
28+14	RT.	41		33	31+92	RT.	153	15		43+81	LT.	40	8	
28+43	LT.	84		17	31+97	LT.	111	6		43+95	LT.	40	8	
28+70	LT.	160	7		31+97	LT.	122	10		44+14	RT.	39	9	
28+86	LT.	71		17	32+01	LT.	107	7		44+63	RT.	35		22
28+86	LT.	107		33	35+07	LT.	118	11		44+94	RT.	22	13	
28+99	RT.	130		31	35+10	LT.	109		21	45+19	RT.	22	12	
29+17	RT.	45	8		35+40	LT.	37		30	45+23	LT.	22	12	
29+24	RT.	42	10		35+76	LT.	33	12		45+85	RT.	22		19
29+24	RT.	117		40	35+83	LT.	33		18					
29+29	LT.	105		22	36+08	LT.	85	7						
29+50	LT.	142	13		36+16	RT.	143		30					
29+55	LT.	50	7		36+66	LT.	21		22					
												TOTALS	403"	1215"

SCHEDULE OF REMOVAL

LOCATION	PAVEMENT SQ.YD.	SIDEWALK SQ.FT.	DRIVEWAY SQ.YD.	CURB LIN.FT.	LOCATION	PAVEMENT SQ.YD.	SIDEWALK SQ.FT.	DRIVEWAY SQ.YD.	CURB LIN.FT.
DIVISION ST. RT.47					ARMSTRONG ST.				
STA. 26+00 TO 27+40	486			280	STA. 15+85 TO 20+00	1473			
STA. 26+00 TO 27+40 RT.		771			STA. 12+00 RT. & 12+60 RT.		180		
STA. 26+00 TO 27+40 LT.		894			AT CORNER OF KIERSTED ST.		76		
STA. 31+95 TO 35+15 LT.		1200							
STA. 32+10 TO 35+20	967				CONNECTOR				
STA. 38+70 TO 39+30	200			75	STA. 1+21 LT. & 1+75 LT.		178		
STA. 38+70 TO 39+30 LT.		131			STA. 2+26 LT. & 3+20 LT.		75		
STA. 38+70 TO 39+30 RT.		150							
STA. 44+70 TO 46+00	433			260	RAILROAD ST.				
STA. 44+70 TO 46+00 LT.		587			EAST R.O.W. TO DIVISION ST.	372			
STA. 44+70 TO 46+00 RT.		737							
					LINCOLN ST.				
BENTON ST.					EAST R.O.W. TO TOE OF SLOPE	187			
STA. 47+50 TO 48+90	560			280					
STA. 47+97 TO 49+20 LT.		707			BUC[illegible]				
STA. 48+00 TO 49+20 RT.		792			STA. 8+50 [illegible] 9+83	334			
STA. 51+00 TO 52+50	500			300	STA. 9+05 TO 9+70 LT.		325		
STA. 51+00 TO 52+00 LT.		434			[illegible] 80 RT. AT KIERSTED		48		
STA. 51+10 TO 51+69 RT.		295			STA. 9+10 LT.			120	
STA. 48+25 LT.			17						
STA. 51+80 LT.			21						
STA. 52+15 RT.		40							
					TOTALS	5512	7620	158	1195

DRAWN BY L.W. DATE 4-77
CHECKED BY L.S.M. DATE 5-77

SCHEDULE OF QUANTITIES

Rev. 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.00 (SBI 47)	111 (HVB, HB)	GRUNDY	111	10
STA. 4+75.1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

SEEDING QUANTITIES

STATION	SIDE	AREA SQ.YDS.	SEEDING CLASS I ACRES	SEEDING CLASS III ACRES	TOPSOIL (4")	PLACEMENT SQ. YDS.	FERTILIZER NUTRIENTS NITROGEN 80#/ACRE LBS.	PHOSPHORUS 160#/ACRE LBS.	POTASSIUM 80#/ACRE LBS.	MULCH 2 T./ACRE TON	EMULSIFIED ASPHALT GAL. ①	EXCELSIOR BLANKET SQ. YDS.
DIVISION ST. RT. 47												
26+79 TO 27+30	RT.	728	0.15			728	12.0	24.0	12.0	0.30	30	
28+12 TO 28+50	LT.	270	0.06			270	4.8	9.6	4.8	0.12	12	
28+10 TO 28+50	RT.	227	0.05			227	4.0	8.0	4.0	0.10	10	
28+50 TO 30+50	LT.	2311	0.48			2311	38.4	76.8	38.4	0.96	96	
28+50 TO 31+00	RT.	2417	0.50			2417	40.0	80.0	40.0	1.00	100	
31+00 TO (CONE@ABUT.)	RT.	1283		0.27		1307	21.6	43.2	21.6			1283
30+50 TO (CONE@ABUT.)	LT.	1413		0.29		1404	23.2	46.4	23.2			1413
(CONE@ABUT.) TO 35+84	RT.	922		0.19		920	15.2	30.4	15.2			922
(CONE@ABUT.) TO 35+70	LT.	1000		0.21		1016	16.8	33.6	16.8			1000
35+70 TO 36+25	LT.	3655	0.76			3655	60.8	121.6	60.8	1.52	152	
35+84 TO 37+00	RT.	1740	0.36			1740	28.8	57.6	28.8	0.72	72	
37+00 TO 37+87	RT.	1759	0.36			1759	28.8	57.6	28.8	0.72	72	
37+87 TO 38+25	RT.	688	0.14			688	11.2	22.4	11.2	0.28	28	
38+25 TO BUCHANAN ST.	LT.	382	0.08			382	6.4	12.8	6.4	0.16	16	
38+25 TO BUCHANAN ST.	RT.	646	0.13			646	10.4	20.8	10.4	0.26	26	
38+35 TO (CONE@ABUT.)	RT.	324		0.07		339	5.6	11.2	5.6			324
38+35 TO (CONE@ABUT.)	LT.	331		0.07		339	5.6	11.2	5.6			331
39+57 TO (CONE@ABUT.)	RT.	229		0.05		242	4.0	8.0	4.0			229
39+57 TO (CONE@ABUT.)	LT.	237		0.05		242	4.0	8.0	4.0			237
BUCHANAN ST. TO 39+67	LT.	144	0.03			144	2.4	4.8	2.4	0.06	6	
BUCHANAN ST. TO 39+67	RT.	280	0.06			280	4.8	9.6	4.8	0.12	12	
39+67 TO 40+54	LT.	648	0.13			648	10.4	20.8	10.4	0.26	26	
40+54 TO 41+75	LT.	2030	0.42			2030	33.6	67.2	33.6	0.84	84	
41+75 TO 42+43	LT.	982	0.20			982	16.0	32.0	16.0	0.40	40	
42+43 TO 43+10	LT.	1094	0.23			1094	18.4	36.8	18.4	0.46	46	
43+10 TO 43+77	LT.	391	0.08			391	6.4	12.8	6.4	0.16	16	
43+77 TO 46+00	LT.	370	0.08			370	6.4	12.8	6.4	0.16	16	
39+67 TO 46+00	RT.	7315	1.51			7315	120.8	241.6	120.8	3.02	302	
TOTAL DIVISION ST.			5.81	1.20		28077	560.8	1121.6	560.8	11.62	1162	5739
ARMSTRONG ST.												
10+38 TO 12+50	LT.	178	0.04			178	3.2	6.4	3.2	0.08	8	
12+50 TO 14+00	LT.	334	0.07			334	5.6	11.2	5.6	0.14	14	
14+00 TO 15+40	LT.	154	0.03			154	2.4	4.8	2.4	0.06	6	
16+25 TO 20+00	LT.	433	0.09			433	7.2	14.4	7.2	0.18	18	
17+38 TO 19+25	RT.	307	0.06			307	4.8	9.6	4.8	0.12	12	
TOTAL ARMSTRONG ST.			0.29			1409	23.2	46.4	23.2	0.58	58	
CONNECTOR												
0+30 TO 2+15	RT.	108	0.02			108	1.6	3.2	1.6	0.04	4	
2+15 TO ARMSTRONG ST.	RT.	738	0.15			738	12.0	24.0	12.0	0.30	30	
TOTAL CONNECTOR			0.17			846	13.6	27.2	13.6	0.34	34	
BUCHANAN ST.												
11+36 TO KIERSTED ST.	LT.	789	0.16			789	12.8	25.6	12.8	0.32	32	
11+88 TO KIERSTED ST.	RT.	104	0.02			104	1.6	3.2	1.6	0.04	4	
TOTAL BUCHANAN ST.			0.18			893	14.4	28.8	14.4	0.36	36	
TOTALS			6.45	1.20		37034	612.0	1224.0	612.0	12.90	1290	5739

① 100 GAL. PER TON OF MULCH

SODDING QUANTITIES

STATION	SIDE	SODDING SQ.YD.	SUPPLEMENTAL WATERING .010 UNITS PER SQ.YD.	FERTILIZER NUTRIENTS NITROGEN 80#/ACRE LBS.	PHOSPHORUS 160#/ACRE LBS.	POTASSIUM 80#/ACRE LBS.	TOPSOIL PLACEMENT 4" SQ.YDS.
DIVISION ST. RT. 47							
26+00 TO 26+95	LT.	78		1.29	2.58	1.29	78
26+00 TO 27+00	RT.	82		1.36	2.71	1.36	82
28+16 TO 30+00	LT.	127		2.10	4.20	2.10	127
28+13 TO 30+00	RT.	128		2.12	4.23	2.12	128
30+00 TO 31+35	LT.	90		1.49	2.98	1.49	90
30+00 TO 31+70	RT.	113		1.87	3.74	1.87	113
35+75 TO 38+20	LT.	163		2.69	5.39	2.69	163
35+88 TO 38+20	RT.	155		2.56	5.12	2.56	155
39+70 TO 46+00	LT.	365		6.03	12.07	6.03	365
39+70 TO 46+00	RT.	420		6.94	13.88	6.94	420
TOTAL DIVISION ST.		1721	17.21	28.45	56.90	28.45	1721
BENTON ST.							
47+50 TO 48+20	LT.	117		1.93	3.87	1.93	117
47+50 TO 49+25	RT.	292		4.83	9.65	4.83	292
S.W. COR. BENT. & DIV.		77		1.27	2.55	1.27	77
S.E. COR. BENT. & DIV.		50		0.83	1.65	0.83	50
50+75 TO ALLEY	RT.	108		1.79	3.57	1.79	108
ALLEY TO 52+50	RT.	79		1.31	2.61	1.31	79
51+95 TO 52+50	LT.	64		1.06	2.12	1.06	64
TOTAL BENTON ST.		787	7.87	13.02	26.02	13.02	787
BUCHANAN ST.							
9+00 TO 12+60	LT.	149		2.46	4.93	2.46	149
9+00 TO 12+60	RT.	146		2.41	4.83	2.41	146
N.W. COR. KIERS. & BUCH.		50		0.83	1.65	0.83	50
S.W. COR. KIERS. & BUCH.		45		0.74	1.49	0.74	45
TOTAL BUCHANAN ST.		390	3.90	6.44	12.90	6.44	390
ARMSTRONG ST.							
10+38 TO 15+40	LT.	392		6.48	12.96	6.48	392
10+50 TO 15+05	RT.	379		6.26	12.53	6.26	379
16+25 TO 20+00	LT.	312		5.16	10.31	5.16	312
17+38 TO 20+00	RT.	183		3.02	6.05	3.02	183
TOTAL ARMSTRONG ST.		1266	12.66	20.92	41.85	20.92	1266
CONNECTOR							
0+30 TO ARM. ST.	RT.	439		7.26	14.51	7.26	439
0+32 TO ARM. ST.	LT.	425		7.02	14.05	7.02	425
TOTAL CONNECTOR		864	8.64	14.28	28.56	14.28	864
TOTALS		5028	50.28	83.11	166.23	83.11	5028

NOTES:
SOD QUANTITIES ARE INCLUDED ON THE SHOULDERS THROUGHOUT THE IMPROVEMENT TO THE LIMITS SHOWN ON THE TYPICAL SECTIONS. ALL REMAINING EARTH AREAS WITHIN THE RIGHT OF WAY LIMITS SHALL BE SEEDED. FERTILIZER NUTRIENTS SHALL BE APPLIED TO BOTH THE SODDED AND SEEDED AREAS. MULCH AND EMULSIFIED ASPHALT SHALL NOT BE APPLIED TO EXCELSIOR BLANKET OR SODDED AREAS. CLASS III SEEDING SHALL BE USED ON SLOPES STEEPER THAN 3 TO 1 THAT ARE NOT TO BE SODDED.

SCHEDULE OF QUANTITIES

DRAWN BY L.W. DATE 4-77
CHECKED BY L.S.M. DATE 5-77

Rev. 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A. 103 (SB 1,57)	111 (HVB, HB)	GRUNDY	111	11
STA. 43+3.1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

STORM SEWER SCHEDULE

STATION NUMBER	TYPE	STANDARD & DESIGN NO.	STORM SEWERS TYPE 1 12"	15"	30"	36"	TYPE 2 12"	15"	18"	24"	27"	30"	36"	42"	TYPE 4 18"	PIPE DRAIN 12"	JACKED 27"	INLETS TYPE A 3F&G	TYPE C 3F&G	FILL EXISTING	CATCH BASIN TYPE C 8G	MANHOLES A-4'ϕ 1-C	A-5'ϕ 1-C	A-5'ϕ 1-P	4'ϕ SPEC. 1-C	4'ϕ SPEC. 1-P	5'ϕ SPEC. 1-C	5'ϕ SPEC. 1-P	RECONSTR. EXISTING	FILL EXISTING	ADJUST EXISTING	TRENCH BACKFILL CU. YDS.
DIVISION ST. - RT. 47																																
26+26 LT.	INLET	1683 & 2214																1														
26+26 LT. TO 26+34 LT.	12"x 5'	SST-1	5'																													
26+34 LT.	INLET	2214 & SP. DWG.																	1													0.8
26+26 RT.	INLET	1683 & 2214																1														
26+26 RT. TO 26+34 RT.	12"x 5'	SST-1	5'																													
26+34 RT.	INLET	2214 & SP. DWG.																	1													0.8
26+34 LT. TO 26+34 RT.	12"x 52'	SST-1	52'																													
26+34 RT. TO 26+65 RT.	12"x 29'	SST-2					29'																									11.0
26+65 (33' RT.)	M.H.	1527 & 2213																				1										11.8
26+65 RT. TO 28+07 RT.	15"x 143'	SST-2						143'																								
27+35± LT.	INLET																			1												41.6
27+39± RT.	INLET																			1												
27+44± LT.	M.H.																													1		
27+46± RT.	M.H.																													1		
27+76 RT.	M.H.																													1		
27+80 LT.	M.H.																													1		
27+83 RT.	INLET																			1												
27+86 LT.	INLET																			1												
28+07 (70' RT)	M.H.	1527 & 2213																				1										
28+19 RT.	M.H.																													1		
28+07 RT. TO 28+90 RT.	15"x 84'	SST-2						84'																								3.7
28+90 LT.	INLET	1638 & 2214																1														
28+90 LT. TO 28+90 RT.	12"x 53'	SST-1	53'																													10.8
28+90 RT.	INLET	2214 & SP. DWG.																	1													
28+90 RT.	12"x 71'	SPEC. DWG.														71'																
28+90 (100' RT.)	M.H.	1527 & 2213																				1										
28+90 RT. TO 29+50 RT.	18"x 56'	SST-2							56'																							
29+50 (89' LT.)	M.H.	1527 & 2213																								1						
29+50 LT. TO 29+50 RT.	18"x 185'	SST-4													185'																	73.3
29+50 (100' RT.)	M.H.	1527 & 2213																					1									
29+50 RT. TO 31+30 RT.	24"x 176'	SST-2								176'																						
31+30 LT.	INLET	1538 & 2214																1														
31+30 LT. TO 31+30 RT.	12"x 53'	SST-1	53'																													10.8
31+30 RT.	INLET	2214 & SP. DWG.																	1													
31+30 RT.	12"x 76'	SPEC. DWG.														76'																
31+30 (100' RT.)	M.H.	1527 & 2213																					1									
31+30 RT. TO 32+35 RT.	24"x 105'	SST-2								105'																						67.1
32+35 (72' RT.)	M.H.	1527 & 2213																					1									
30+47 RT.	M.H.																													1		
31+94 RT.	M.H.																													1		
32+44 LT.	INLET																			1												
32+46 RT.	INLET																			1												
32+47 RT.	INLET																			1												
32+50 RT.	M.H.																													1		
32+55 RT.	M.H.																													1		
32+35 RT. TO 33+62 RT.	27"x 121'	SST-2									121'																					85.1
33+62 (80' RT.)	M.H.	1527 & 2213																						1								
33+62 RT. TO 34+22 RT.	27"x 38'	SST-2									38'						20'															15.3
34+22 (95' RT.)	M.H.	1527 & 2213																					1									
34+22 RT. TO 34+75 RT.	27"x 52'	JACKED S.S.															52'															
34+75 (73' RT.)	M.H.	1527 & 2213																					1									
34+75 RT. TO 36+00 RT.	27"x 109'	SST-2									109'						20'															17.4
36+00 LT.	INLET	1683 & 2214																1														
36+00 LT. TO 36+00 RT.	12"x 53'	SST-1	53'																													10.8
36+00 RT.	INLET	2214 & SP. DWG.																	1		0											
36+00 RT.	12"x 93'	SPEC. DWG.														93'																
36+00 (120' RT.)	M.H.	1527 & 2213																					1									
36+00 RT. TO 38+20 RT.	27"x 215'	SST-2									215'																					
38+10 LT.	INLET	1683 & 2214																1														
38+10 LT. TO 38+20 LT.	12"x 7'	SST-1	7'																													1.0
38+20 LT.	INLET	2214 & SP. DWG.																	1													
TOTALS THIS SHEET			228	0	0	0	29	227	56	281	483	0	0	0	185	240	92	6	6	7	0	3	6	1	0	1	0	0	0	9	0	361.5

DRAWN BY L.W. DATE 4-77
CHECKED BY L.S.W. DATE 4-77

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 1024 (SBI 47)	111 (HVB, HB)	GRUNDY	111	12
STA. 43+-1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

STORM SEWER SCHEDULE

STATION NUMBER	TYPE	STANDARD & DESIGN NO.	STORM SEWERS TYPE 1 12"	15"	30"	36"	TYPE 2 12"	15"	18"	24"	27"	30"	36"	42"	TYPE 4 18"	PIPE DRAIN 12"	JACKED 27"	INLETS TYPE A BF&G	TYPE C BF&G	FILL EXISTING	CATCH BASIN TYPE C BG	MANHOLES A-4'ϕ 1-C	A-5'ϕ 1-C	A-5'ϕ 1-P	4'ϕ SPEC. 1-C	4'ϕ SPEC. 1-P	5'ϕ SPEC. 1-C	5'ϕ SPEC 1-P	RECONSTR. EXISTING	FILL EXISTING	ADJUST EXISTING	TRENCH BACKFILL CU. YDS.
DIVISION ST. ~ RT. 47																																
38+20 LT. TO 38+20 RT.	12"x52'	SST-1	52'																													10.5
38+10 RT.	INLET	1683 & 2214																1														
38+10 RT. TO 38+20 RT.	12"x7'	SST-1	7'																													1.0
38+20 RT.	INLET	2214 & SP. DWG.																	1													
38+20 RT.	12"x88'	SPEC. DWG.														88'																
38+20 (115' RT.)	M.H.	1527 & 2213																										1				
38+74 LT.	INLET																			1												
38+77 RT.	INLET																			1												
38+78 LT.	M.H.																													1		
39+21 LT.	M.H.																														1	
39+24 LT.	INLET																			1												
38+20 RT. TO 10+80 (BUCHANAN ST.)	30"x85'	SST-2										85'																				14.3
10+80 (1' LT. BUCHANAN ST.)	M.H.	SP. DWG.																									1(1)					
10+80 (BUCHANAN ST.) TO 39+75 RT.	42"x70'	SST-2												70'																		14.8
39+75 LT.	INLET	1683 & 2214																1														
39+75 LT. TO 39+75 RT.	12"x53'	SST-1	53'																													10.8
39+75 RT.	INLET	2214 & SP. DWG.																	1													
39+75 RT.	12"x68'	SPEC. DWG.														68'																
39+75 (95' RT.)	M.H.	1527 & 2213																					1									
39+75 RT. TO 42+20 RT.	42"x241'	SST-2												241'																		
42+20 LT.	INLET	1683 & 2214																1														
42+20 LT. TO 42+20 RT.	12"x53'	SST-1	53'																													10.8
42+20 RT.	INLET	2214 & SP. DWG.																	1													
42+20 RT.	12"x40'	SPEC. DWG.														40'																
42+20 (70' RT.)	M.H.	2213 & SP. DWG.																									1					
42+47 RT.	INLET																			1												
42+47 LT.	M.H.																												1			
42+50 LT.	INLET																			1												
43+95 RT.	INLET																			1												
43+96 LT.	INLET																			1												
43+98 LT.	M.H.																												1			
42+20 RT. TO 44+00 RT.	36"x176'	SST-2											176'																			
44+00 LT.	INLET	1683 & 2214																1														
44+00 LT. TO 44+00 RT.	12"x53'	SST-1	53'																													10.8
44+00 RT.	INLET	2214 & SP. DWG.																	1													
44+00 RT.	12"x30'	SST-1	30'																													3.7
44+00 (60' RT.)	M.H.	2213 & SP. DWG.																									1					
44+00 RT.	12"x40'	SST-2					40'																									
44+00 (103' RT.)	C. BASIN	1538 & 2217																			1											
44+00 RT. TO 45+20 RT.	36"x115'	SST-1				115'																										
45+20 LT.	INLET	1683 & 2214																1														
45+20 LT. TO 45+20 RT.	12"x53'	SST-1	53'																													10.8
45+20 RT.	INLET	2214 & SP. DWG.																	1													
45+20 RT.	12"x20'	SST-1	20'																													3.7
45+20 (30' RT.)	M.H.	2213 & SP. DWG.																									1					
45+20 RT. TO 46+00 RT.	30"x79'	SST-1		79'																												7.0
BENTON STREET																																
48+10 LT.	M.H.																														1	
48+44 RT.	INLET	1683 & 2214																1														
48+44 RT. TO 48+50 RT.	12"x18'	SST-1	18'																													3.1
48+44 RT. TO 28+09 RT. (DIV.)	12"x85'	SST-1	85'																													20.1
48+50 (36' RT.)	C. BASIN	1538 & 2217																			1											
50+80 LT.	INLET	1683 & 2214																1														
50+80 LT. TO 28+07 RT. (DIV.)	12"x12'	SST-1	12'																													3.4
51+71 LT.	M.H.																														1	
52+30 RT.	INLET	1683 & 2214																1														
52+30 RT. TO 52+41 RT.	12"x8'	SST-1	8'																													1.6
TOTALS THIS SHEET			444'	0	79'	115'		40'	0	0		0	0	85'	176'	311'	0	196'	0		8	5	7	2	0	1	0	0	0	4(2)	1	2	1	3	128.4

(1) MANHOLE 5'x5' SPECIAL
(2) MANHOLE 5'x5' SPECIAL INCLUDED IN TOTAL.

CHECKED BY: LSM DATE: 5-77

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A. 106 (SBI 27)	111 (HVB, HB)	GRUNDY	111	13
STA.		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

STORM SEWER SCHEDULE

STATION NUMBER	TYPE	STANDARD & DESIGN NO.	STORM SEWERS: TYPE 1 12"	TYPE 1 15"	TYPE 1 30"	TYPE 1 36"	TYPE 2 12"	TYPE 2 15"	TYPE 2 18"	TYPE 2 24"	TYPE 2 27"	TYPE 2 30"	TYPE 2 36"	TYPE 2 42"	TYPE 4 18"	PIPE DRAIN 12"	JACKED 27"	INLETS: TYPE A 3F&G	TYPE C 3F&G	FILL EXISTING	CATCH BASIN TYPE C 8G	MANHOLES: A-4'ϕ 1-C	A-5'ϕ 1-C	A-5'ϕ 1-P	4'ϕ SPEC. 1-C	4'ϕ SPEC. 1-P	5'ϕ SPEC. 1-C	5'ϕ SPEC. 1-P	RECONSTR. EXISTING	FILL EXISTING	ADJUST EXISTING	TRENCH BACKFILL CU. YDS.
BENTON STREET																																
52+41 RT.	INLET	2214 & SP. DWG.																	1													
52+41 RT. TO 52+41 LT.	12"x26'	SST-1	26'																													
52+41 LT.	INLET	2214 & SP. DWG.																	1													5.6
52+10 LT. TO 52+41 LT.	12"x29'	SST-2					29'																									
52+10 (25' LT.)	M.H.	1527 & 2213																				1										10.5
52+10 LT. TO 28+07 RT. (DIV.)	15"x138'	SST-2						138'																								
																																67.0
ARMSTRONG ST.																																
10+55 (41' RT.)	INLET	1683 & 2214																1														
10+55 RT. TO 28+09 LT. (DIV.)	12"x11'	SST-1	11'																													
28+09 (98' LT. DIVISION)	M.H.	1527 & 2213																				1										3.3
28+09 LT. (DIV.) TO 29+50 LT. (DIV.)	12"x138'	SST-2					138'																									
12+00 LT.	INLET	2214 & SP. DWG.																	1													
12+00 LT. TO 11+96 RT.	12"x26'	SST-1	26'																													
11+96 RT.	INLET	2214 & SP. DWG.																	1													4.2
11+96 RT. TO 29+50 LT. (DIV.)	12"x45'	SST-1	45'																													
29+50 LT. (DIV.) TO 30+20 LT. (DIV.)	15"x67'	SST-1		67'																												
30+20 (100' LT. DIVISION)	M.H.	2213 & SP. DWG.																														
12+00 LT. TO 12+25 LT.	12"x23'	SST-1	23'																						1							
12+25 LT.	INLET	1683 & 2214																1														5.0
12+67 RT.	INLET	1683 & 2214																1														
12+67 RT. TO 30+20 LT. (DIV.)	12"x34'	SST-1	34'																													
14+00 RT. TO 30+20 LT. (DIV.)	12"x125'	SST-1	125'																													
13+75 (32' LT.)	C. BASIN	1538 & 2217																			1											
13+75 LT. TO 14+00 RT.	12"x50'	SST-1	50'																													
14+00 RT.	INLET	2214 & SP. DWG.																	1													7.8
17+50 (17' RT.)	INLET	1683 & 2214																1														
16+82 LT. TO 17+50 RT.	12"x81'	SST-1	81'																													
																																33.1
CONNECTOR																																
1+30 RT.	INLET	1683 & 2214																1														
1+30 RT. TO 1+30 LT.	12"x26'	SST-1	26'																													
1+30 LT.	INLET	2214 & SP. DWG.																	1													5.5
1+30 LT. TO 28+90 RT. (DIV.)	12"x30'	SST-2					30'																									
2+04 RT.	INLET	1683 & 2214																1														
2+04 RT. TO 2+04 LT.	12"x26'	SST-1	26'																													
2+04 LT.	INLET	2214 & SP. DWG.																	1													5.5
2+04 LT. TO 29+50 RT. (DIV.)	12"x33'	SST-1	33'																													
4+70 RT.	INLET	1683 & 2214																1														
4+70 RT. TO 4+80 RT.	12"x8'	SST-1	8'																													
4+80 RT.	INLET	2214 & SP. DWG.																														1.6
4+80 RT. TO 4+80 LT.	12"x27'	SST-1	27'																1													
4+80 LT.	INLET	2214 & SP. DWG.																														6.2
4+80 LT. TO 32+35 RT. (DIV.)	12"x21'	SST-2					21'												1													
BUCHANAN STREET																																
10+73 LT.	INLET	1683 & 2214																														
10+73 LT. TO 10+80 LT.	12"x11'	SST-1	11'															1														
10+73 RT.	INLET	1683 & 2214																														2.2
10+73 RT. TO 10+80 LT.	12"x13'	SST-1	13'															1														
10+80 LT. TO 9+75.5 LT.	42"x102'	SST-2												102'																		2.6
																																73.6
ACCESS DRIVE "A"																																
38+00 RT. TO 39+00 RT.									134'																							
38+00 (14' RT.)	C.B.	1538-5 & 2217-3																			1											48.0
TOTALS THIS SHEET			565'	67'	0	0	218'	138'	134'	0	0	0	0	102'	0	0	0	9	9	0	2	2	0	0	1	0	0	0	0	0	0	281.7
GRAND TOTALS			1237'	67'	79'	115'	287'	365'	190'	281'	483'	85'	176'	413'	185'	436'	92'	23	20	14	4	5	7	1	1	1	4(2)	1	2	10	3	771.6

(2) MANHOLE 5'x5' SPECIAL INCLUDED IN TOTAL.

NOTE: BUCHANAN STREET STORM SEWER OUTFALL QUANTITIES ARE NOT INCLUDED IN THIS STORM SEWER SCHEDULE.

DRAWN BY I.W. DATE 4-77
CHECKED BY L.S.M. DATE 5-77

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.100 (SBI 47)	111 (HVB, HB)	GRUNDY	111	14
STA.	13+1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

SANITARY SEWER SCHEDULE

STATION NUMBER	TYPE	STANDARD & DESIGN NO.	SANITARY SEWER TYPE 3 8"			MANHOLES A-4'ϕ I-C	ADJUST EXISTING	RECONSTR. EXISTING		
DIVISION ST. RT. 47										
27+83 RT.	M.H.							1		
37+68 (14.5' RT.)	M.H.	1527 & 2213				1				
37+68 RT. TO 40+50 RT.	8" x 278'	T-3	278'							
40+50 (14.5 RT.)	M.H.	1527 & 2213				1				
40+50 RT. TO 42+90 RT.	8" x 236'	T-3	236'							
40+90 RT.	M.H.	1527 & 2213				1				
42+88 RT.	M.H.							1		
43+67 LT.	M.H.							1		
43+68 RT.	M.H.							1		
43+91 LT.	M.H.							1		
44+70 LT.	M.H.							1		
44+95 LT.	M.H.						1			
44+96 LT.	M.H.						1			
TOTALS			514'			3	2	6		

ROCK EXCAVATION SCHEDULE
FOR WATER MAIN

STA. TO STA.		SEC. 111 (HVB, HB & TS-1) F FUNDS	FG FUNDS	SEC. (111 SC-R)-1 & TS-2 FOR INFORMATION ONLY
13+60	18+00			63.06
18+00	24+00			120.97
28+00	30+00		7.84	
31+00	32+20		3.17	
35+40	46+00	48.00	121.60	
46+00	48+50			57.33
48+00	54+50			124.98
54+50	55+70			24.30
MISC. STREET CROSSING				74.00
TOTALS		48.00	132.61	464.64

TRAFFIC SIGN SCHEDULE

Side	Station	Sign Standard	Description	Panel Area Sq. Ft. Type 1 ≤9	Type 2 >9	Wood or Telescoping Metal Posts Type	Feet	Offset for ℄
LT	26±25	W6-6-3636	Two way traffic	9.00		W	16	35
RT	45±75	W6-6-3636	Two way traffic	9.00		W	16	35
LT	27±10	W4-2R-3636	Width transition	9.00		W	16	35
RT	44±90	W4-2R-3636	Width transition	9.00		W	16	35
LT	29±50	W4-3R-3636	Right lane ends	9.00		W	16	35
RT	42±50	W4-3R-3636	Right lane ends	9.00		W	16	35
LT	52±00 (Benton Street)	R1-1-3636	Stop sign	9.00		W	15	20
RT	48±00 (Benton Street)	R1-1-3636	Stop sign	9.00		W	15	20
LT	10±40 (Armstrong Street)	R1-1-3636	Stop sign	9.00		W	15	20
LT	0±20 (Connector)	R1-1-3636	Stop sign	9.00		W	15	20
RT	5±65 (Connector)	R1-1-3636	Stop sign	9.00		W	15	25
RT	26+60	R1-1L-3636	No left turn	9.00		M	14	35
LT	28±60	R1-1L-3636	No left turn	9.00		M	14	35
LT	26+00	Type 3	Object marker	3.00		M	12	20
		Type 3	Object marker	3.00		M	12	20
		Type 3	Object marker	3.00		M	12	20
RT	46+00	Type 3	Object marker	3.00		M	12	20
		Type 3	Object marker	3.00		M	12	20
		Type 3	Object marker	3.00		M	12	20
						W	171	
		Totals		135.00		M	100	

ROCK EXCAVATION SCHEDULE
FOR STORM SEWERS

Station to Station	Cu. Yds. F. Funds	G. Funds
28+07 RT to 28+90 RT		18.5
28+90 LT to 29+50 RT		19.9
29+50 LT to 29+50 RT		124.2
29+50 RT to 31+30 RT		156.4
31+30 RT to 32+35 RT		93.3
32+35 RT to 33+62 RT		86.5
33+62 RT to 34+22 RT		40.5
34+22 RT to 34+75 RT		41.3
34+75 RT to 36+00 RT		137.3
36+00 RT to 38+20 RT		181.1
38+20 RT to 10+80 (Buchanan Street)		53.3
44+00 RT to 45+20 RT	22.0	
45+20 RT to 46+00 RT	21.4	
10+80 (Buchanan Street) to 39+75 RT		52.2
39+75 RT to 42+20 RT		189.9
28+09 LT to 29+50 LT		43.4
10+80 LT to 9+75.5 LT (Buchanan Street)		48.2
Total	43.4	1185.6
Buchanan Street		100.4

FOR SANITARY SEWERS

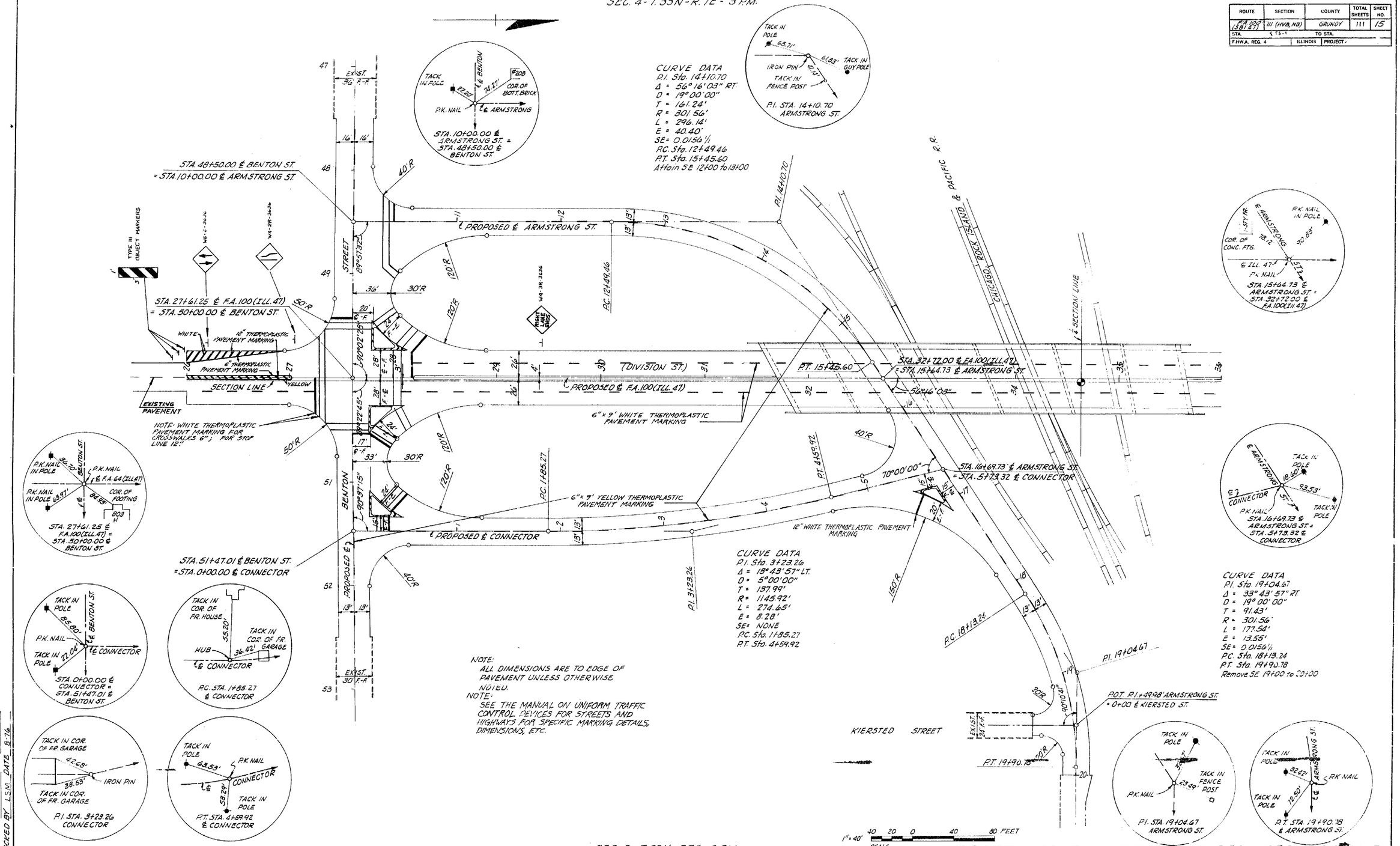
37+68 RT to 40+50 RT	370.1
40+50 RT to 42+90 RT	314.7
Total	684.8

DRAWN BY L.W. DATE 4-71
CHECKED BY L.S.M. DATE 5-71

Rev. 1-8-71

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI 67)	III (HVB, M3)	GRUNDY	111	15
STA.	4-T5-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT /		

SEC. 4 - T. 33N - R. 7E - 3 P.M.



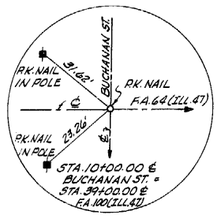
SEC. 3 - T. 33N - R. 7E - 3 P.M.

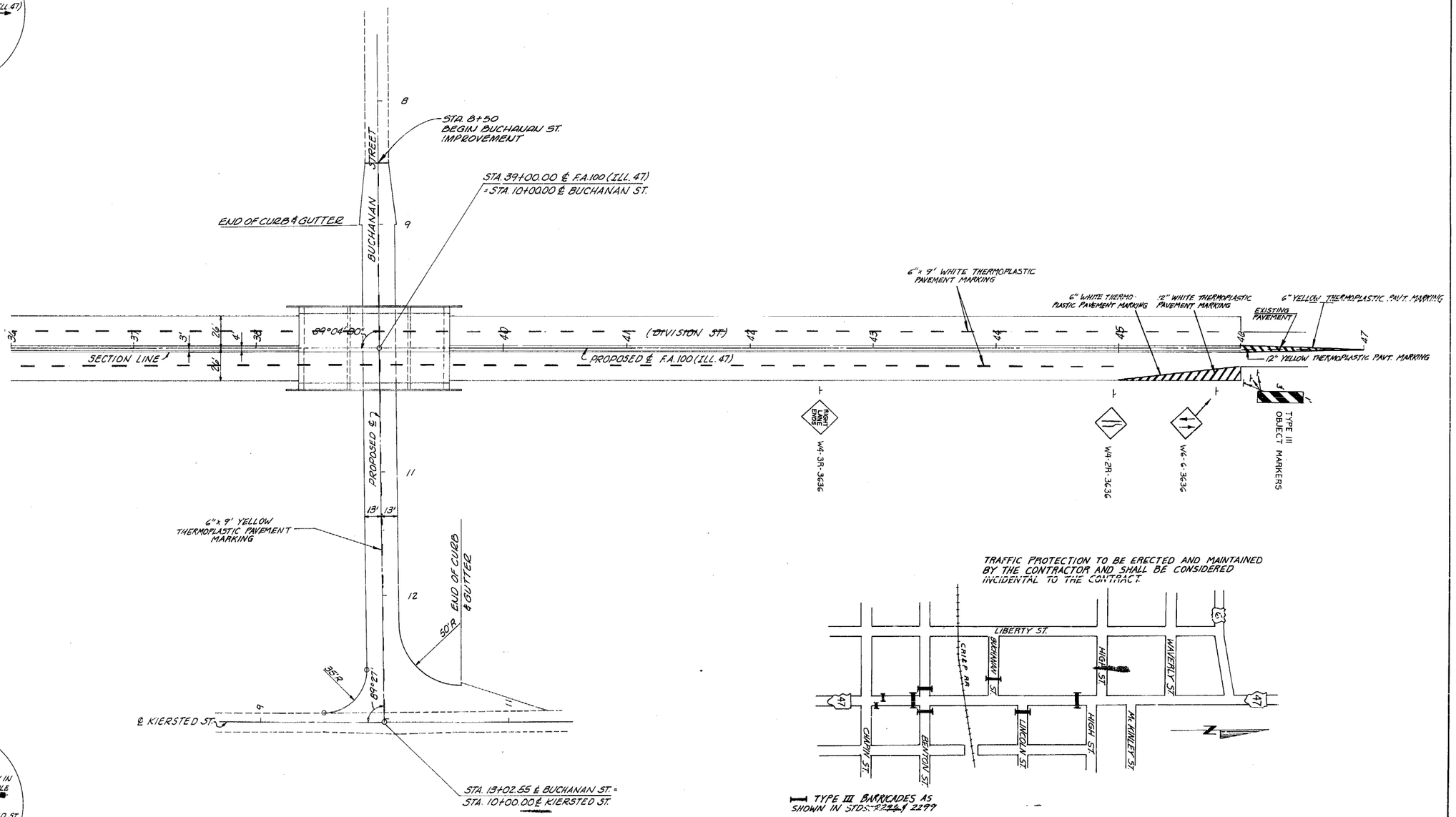
TRAFFIC CONTROL DETAILS & GEOMETRIC DETAILS

DRAWN BY GWK DATE 9-75
CHECKED BY L.S.M. DATE 8-76

SEC. 4 - T. 33N - R. 7E - 3 P.M.

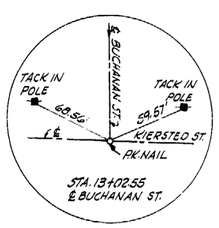
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI. 47)	III (NVB, HB)	GRUNDY	111	16
STA. ℄ T1-1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		





TRAFFIC PROTECTION TO BE ERECTED AND MAINTAINED BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

TYPE III BARRICADES AS SHOWN IN STDS. ~~2236~~ & 2299



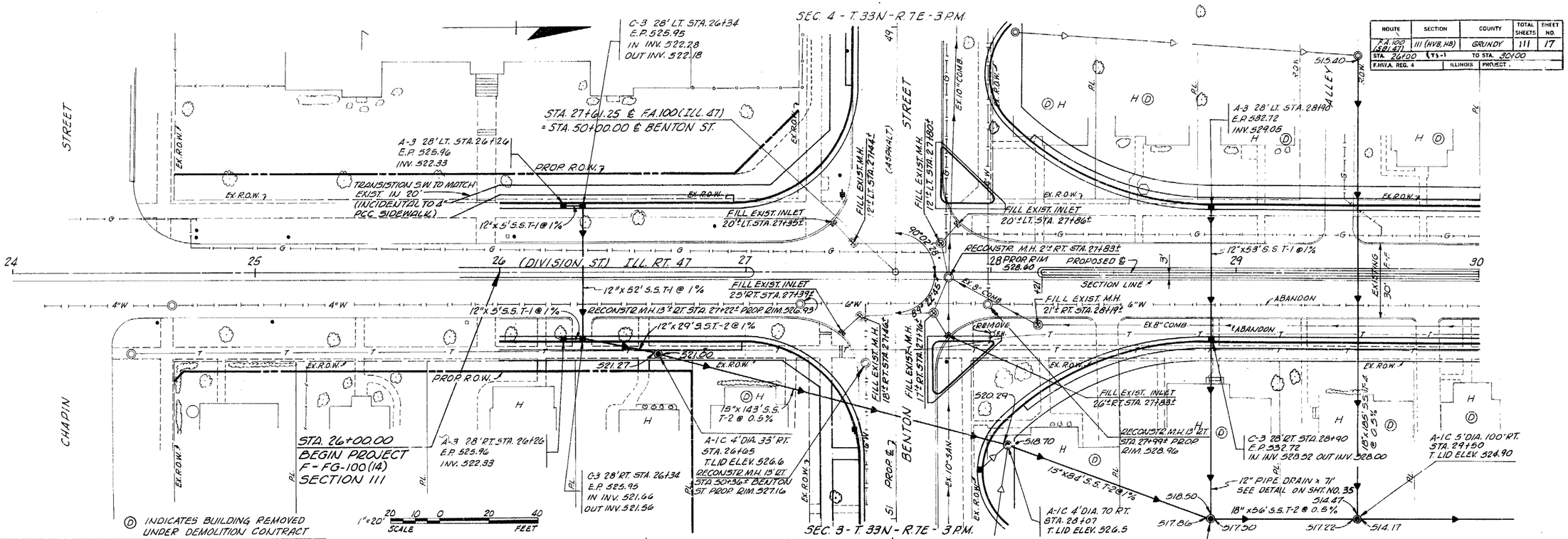
1" = 40' SCALE — 40 20 0 40 80 FEET

SEC 3 - T 33N - R. 7E - 3 P.M.

TRAFFIC CONTROL DETAILS & GEOMETRIC DETAILS

DRAWN BY S.W.H. DATE 9-75
CHECKED BY E.S.M. DATE 8-76

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI. 47)	III (HVB, HB)	GRUNDY	111	17
STA. 26+00	(T5-1	TO STA. 30+00		
F.H.W.A. REG. 4	ILLINOIS	PROJECT .		



Ⓓ INDICATES BUILDING REMOVED UNDER DEMOLITION CONTRACT

1" = 20' SCALE 20 10 0 20 40 FEET

B.M. No. 3 - CHISELED "D" ON N.E. END OF CONC. WALK AT S.W. CORNER OF KIERSTED & BENTON ST., ON WALK ENDING AT KIERSTED. ELEV. 524.23

NOTE: THE EMBANKMENT AREAS BETWEEN STA. 28+00 AND STA. 46+00 SHALL BE RECOMPACTED AS SPECIFIED IN THE SPECIAL PROVISIONS AND TO THE WIDTHS SHOWN ON THE CROSS SECTIONS.

GENERAL NOTES

HERE SECTION OR SUB-SECTION MONUMENTS ARE NCOUNTERED, THE ENGINEER SHALL BE NOTIFIED EFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR HALL PROTECT AND CAREFULLY PRESERVE ALL MONU-MENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS ITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. HE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING N AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION R SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATION.

THE CONTRACTORS RESPONSIBILITY FOR UTILITIES WILL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR COOPERATION WITH UTILITIES LOCATED IN THE SPECIAL PROVISIONS FOR THIS CONTRACT.

EXISTING COMBINATION SEWERS ARE TO REMAIN IN PLACE TO FUNCTION AS SANITARY SEWERS.

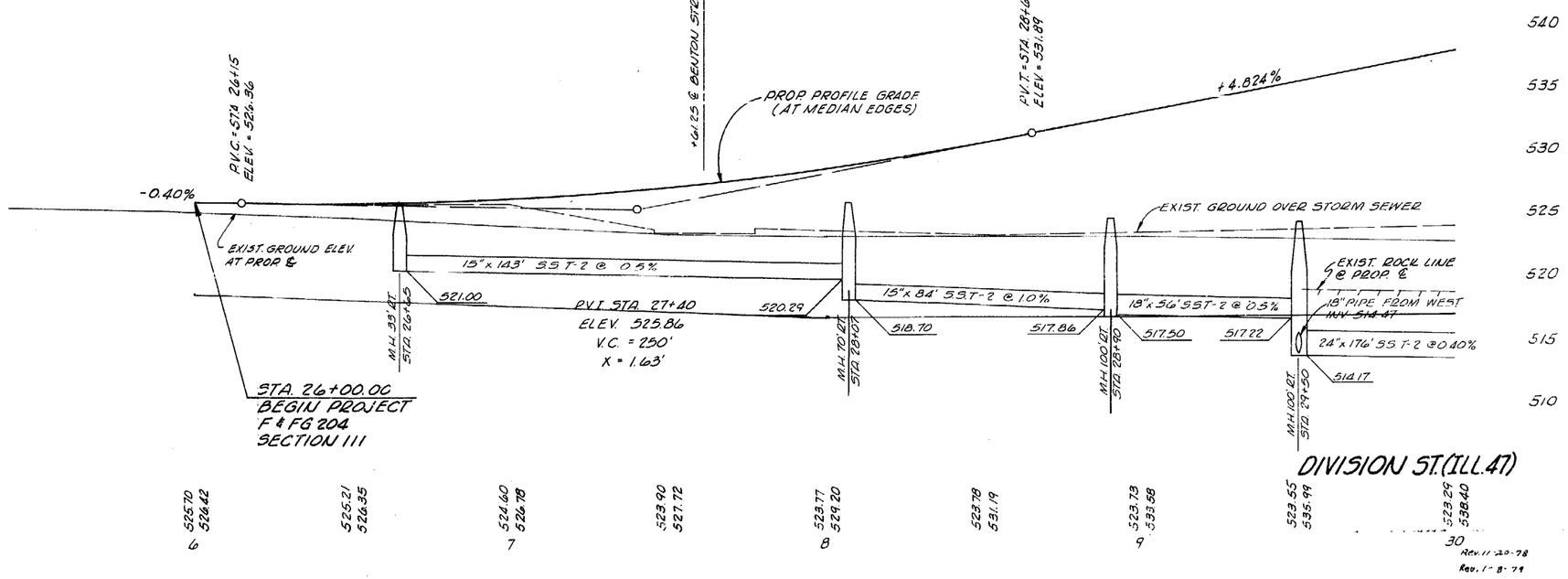
NY REFERENCE TO A STANDARD IN THESE PLANS HALL BE INTERPRETED TO MEAN THE EDITION AS NDICATED BY THE SUB-NUMBER LISTED IN THE NDEX OF SHEETS OR THE COPY OF THE STANDARD NCLUDED IN THESE PLANS.

LUG OR REMOVE ALL EXISTING PIPES AS CONSTR-CTION OPERATIONS REQUIRE. PLUGGING PIPES SHALL E AT THE APPROVAL OF THE ENGINEER. THIS WORK HALL BE CONSIDERED INCIDENTAL TO EARTH EX-AVATION.

EFORE ORDERING PIPE CULVERTS, STORM SEWERS, ND SANITARY SEWERS THE CONTRACTOR SHALL ONSULT THE ENGINEER FOR EXACT LENGTHS.

NY ADDITIONAL EXPENSE WHICH WILL BE INVOLVED N CONNECTING EXISTING DRAIN TILE, STORM SEWER, ND SANITARY SEWER TO PROPOSED STRUCTURES HALL BE CONSIDERED INCIDENTAL TO THE COST OF HE STRUCTURE INVOLVED.

NLET OFFSETS ARE TO FACE OF CURB OR EDGE OF EDIAN.



Rev. 11-20-78
Rev. 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 S.B. 47	111 (HVB, HB)	GRUNDY	111	18
STA. 30+00 ℄ T5-1		TO STA. 36+00		
F.H.W.A. REG. 4		ILLINOIS	PROJECT.	

SEC. 4 - T33N - R7E - 3 P.M.

1" = 20' SCALE — 20 10 0 20 40 FEET

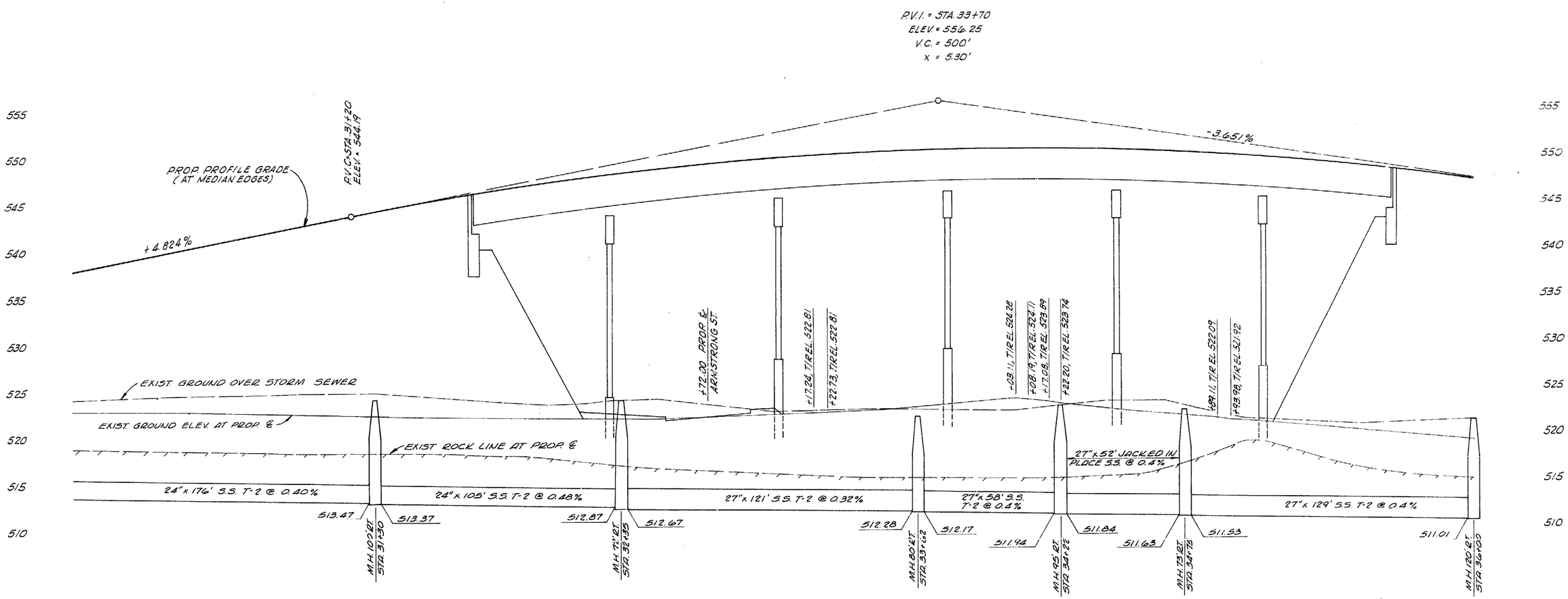
EX. R.O.W.
SITE GRADE AREA FROM TOE OF SLOPE TO EXIST. R.O.W.
ALLEY
EX. & PROP. R.O.W.
P.C. 112+49.46
PROP. & ARMSTRONG ST.
(GRAVEL)
A-3 28' LT. STA. 31+30
E.P. 544.29
INV. 540.62
SIDEWALK TAPER 10' (TYPICAL)
EX. R.O.W.
PT. 151+45.60
PERM. EASEMENT LINE
STA. 32+12.00 ℄ F.A. 100 (ILL. 47)
= STA. 151+64.73 ℄ ARMSTRONG ST.
BILLBOARD
R.O.W.
℄ SECTION LINE
PROP. R.O.W.
ACCESS DRIVE "A" 35+05
ACCESS DRIVE "A"
16'
10R
36
132'
5"12" x 53' S.S. S T-1 @ 1%
(DIVISION ST.) ILL. RT. 47
FILL EXIST. INLET 14' LT. STA. 32+44±
PROPOSED ℄
SECTION LINE
FILL EXIST. M.H. 22' RT. STA. 30+47±
EX. STANDING F-F
+27.5' BEGIN APPR. SLAB
(ASPHALT)
FILL EXIST. M.H. 21' RT. STA. 31+44±
FILL EXIST. INLET 16' RT. STA. 32+46±
-56"16.03"
FILL EXIST. M.H. 21' RT. STA. 32+55±
ABANDON
EX. 8" COMB.
REMOVE F.H.
EX. R.O.W.
APPR. SLAB QUANTITIES FOR 2-24' ROADWAYS
BRIDGE APPR. PVMT. 266 S.Y.
BIT. CONC. SURFACE CLASS I 22 TONS
PVMT. REINF. 14,780 LBS.
A-1C 5' DIA. 100' RT. STA. 31+30 T. LID ELEV. 524.4
C-3 29' RT. STA. 31+30
E.P. 544.29
IN INV. 540.09
OUT INV. 540.00
12" PIPE DRAIN x 76' FOR DETAILS SEE SHT. NO.
FILL EXIST. INLET 29' RT. STA. 32+47±
FILL EXIST. M.H. 41' RT. STA. 32+50±
A-1C 5' DIA. 72' RT. STA. 32+35 T. LID ELEV. 524.3
512.87
512.67
RESTAURANT
27" x 121' S.S. T-2 @ 0.32%
70°00'00"
24" x 105' S.S. T-2 @ 0.48%
518.50
24" x 176' S.S. T-2 @ 0.10%
513.47
513.37
PROP. ℄ CONNECTOR
PT. 4+59.92
STA. 161+69.73 ℄ ARMSTRONG ST.
= STA. 5+73.32 ℄ CONNECTOR
TO BE MOVED BY OWNER
SITE GRADE AREA FROM TOE OF SLOPE TO EXIST. R.O.W.
EX. & PROP. R.O.W.
ALLEY
EX. R.O.W.
S. SPUR
S. MAIN
N. MAIN
N. SPUR
A-1 OPEN 5' DIA. 80' RT. STA. 33+42 T. LID ELEV. 522.40
512.28
512.17
27" x 20' JACKED IN PLACE S.S. @ 0.4%
27" x 38' S.S. T-2 @ 0.40%
511.94
511.84
A-1C 5' DIA. 95' RT. STA. 34+22 T. LID ELEV. 523.5
A-1C 5' DIA. 73' RT. STA. 34+75 T. LID ELEV. 523.0
511.63
511.53
27" x 52' JACKED IN PLACE S.S. @ 0.4%
27" x 20' JACKED IN PLACE S.S. @ 0.4%
RAILROAD ST. (ASPHALT)
27" x 109' S.S. T-2 @ 0.4%
511.01
20' MIN. CLL.
ARMSTRONG ST. (ASPHALT)
PERM. EASEMENT LINE
SEC. 3 - T. 33 N. - R. 7 E. - 3 P.M.
DIVISION ST. (ILL. 47)

DRAWN BY SWH DATE 11-75
CHECKED BY LSM DATE 8-76

Rev. 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 100 S.B.I. 37	111 (HV8, HB)	GRUNDY	111	19
STA. 30+00 ℄ T3-1		TO STA. 36+00		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

GEOM. 11-25
L.S.M. 8-76

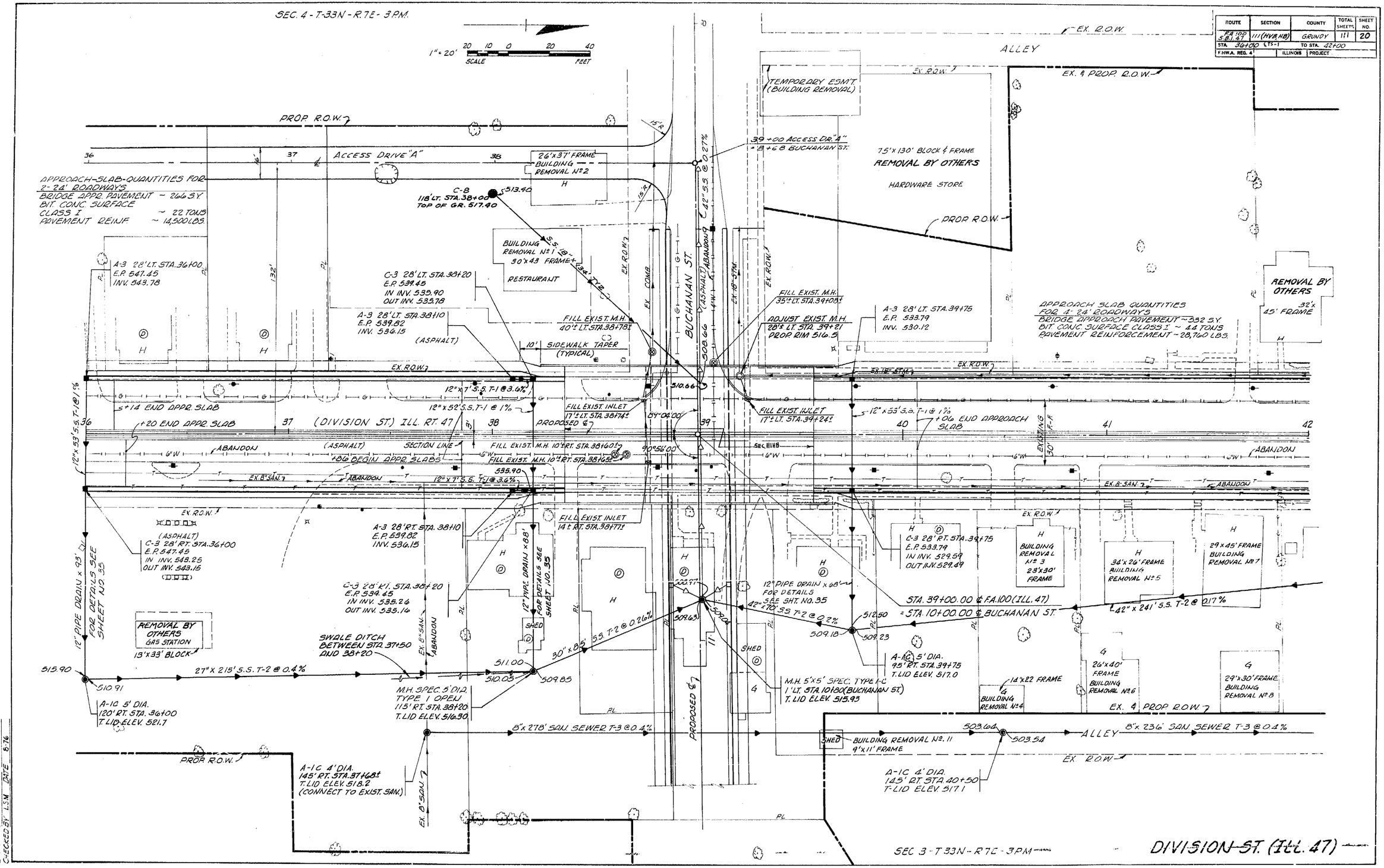


DIVISION ST. (ILL. 47)

523.29 538.40 | 523.19 540.81 | 522.68 543.23 | 522.61 545.56 | 522.44 547.51 | 522.34 549.03 | 522.66 550.13 | 523.13 550.80 | 524.32 551.05 | 522.86 550.88 | 521.80 550.28 | 520.73 549.26 | 519.63 547.82

30 1 2 3 4 35 6

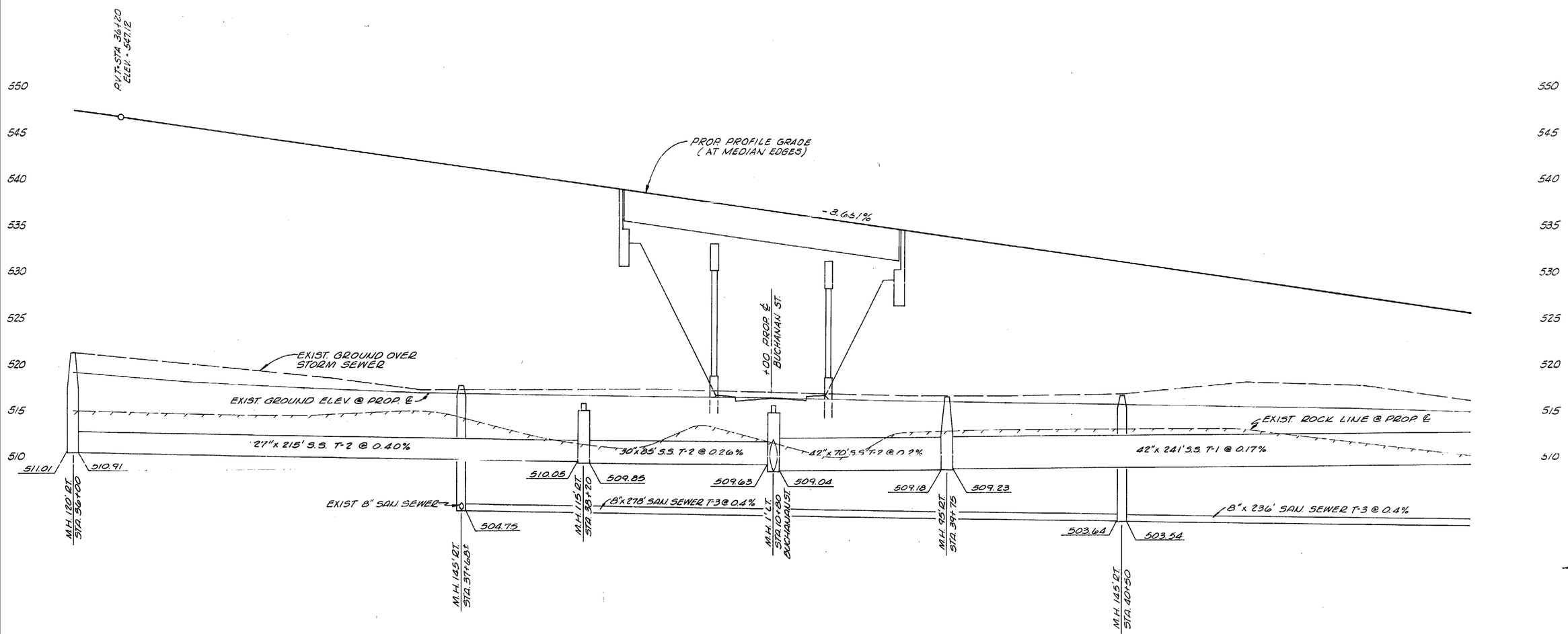
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 S.B. 47	111 (HVB & HB)	GRUNDY	111	20
STA. 36+00 ℄ T5-1		TO STA. 42+00		
F.H.W.A. REG. 4		ILLINOIS	PROJECT	



DRAWN BY GWH DATE 7-75
CHECKED BY LSM DATE 8-76

Rev. 1-8-79

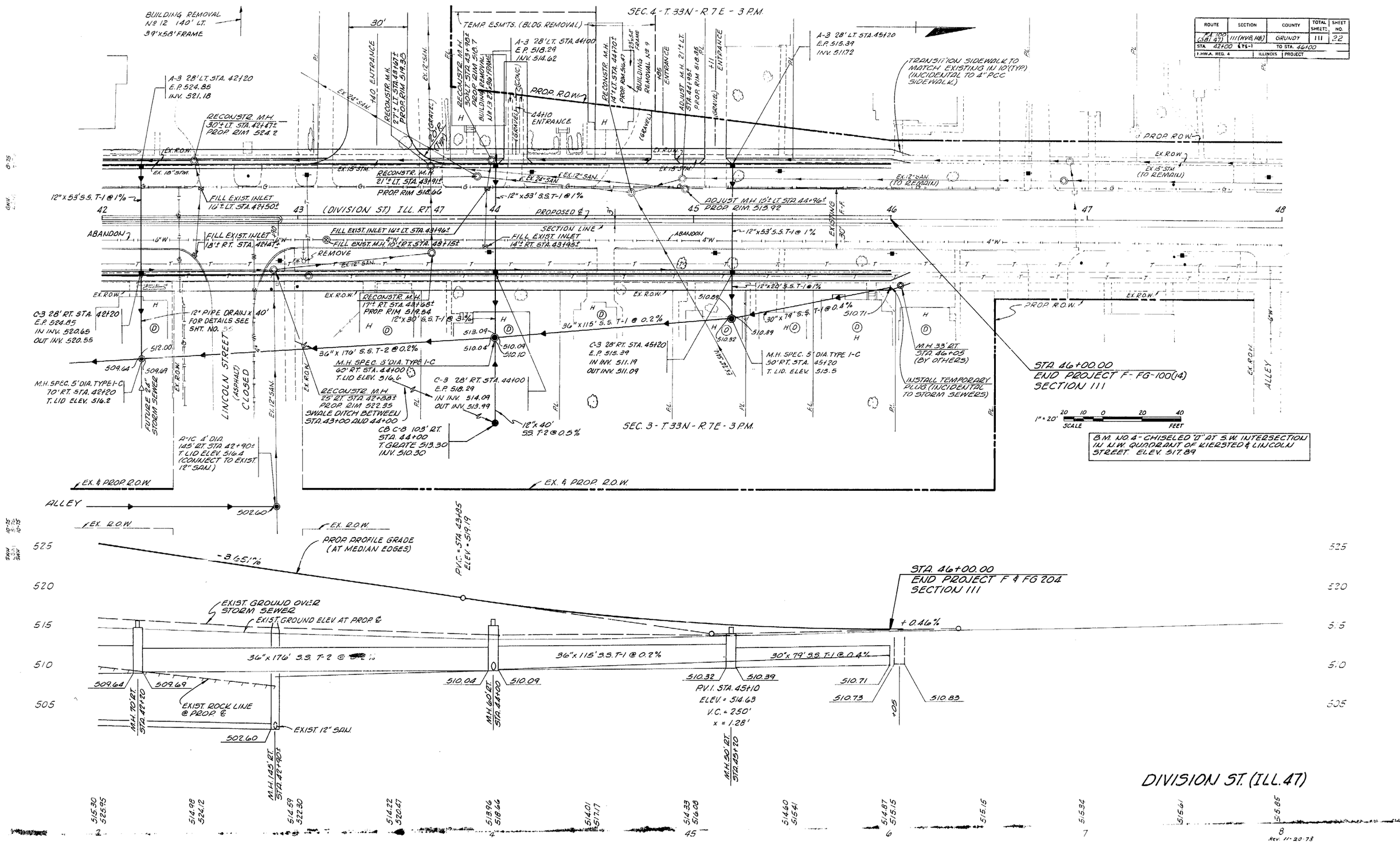
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 1100 S.B. 47	111 (HVB, HB)	GRUNDY	111	21
STA. 36+00 ℄ T3-1		TO STA. 42+00		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



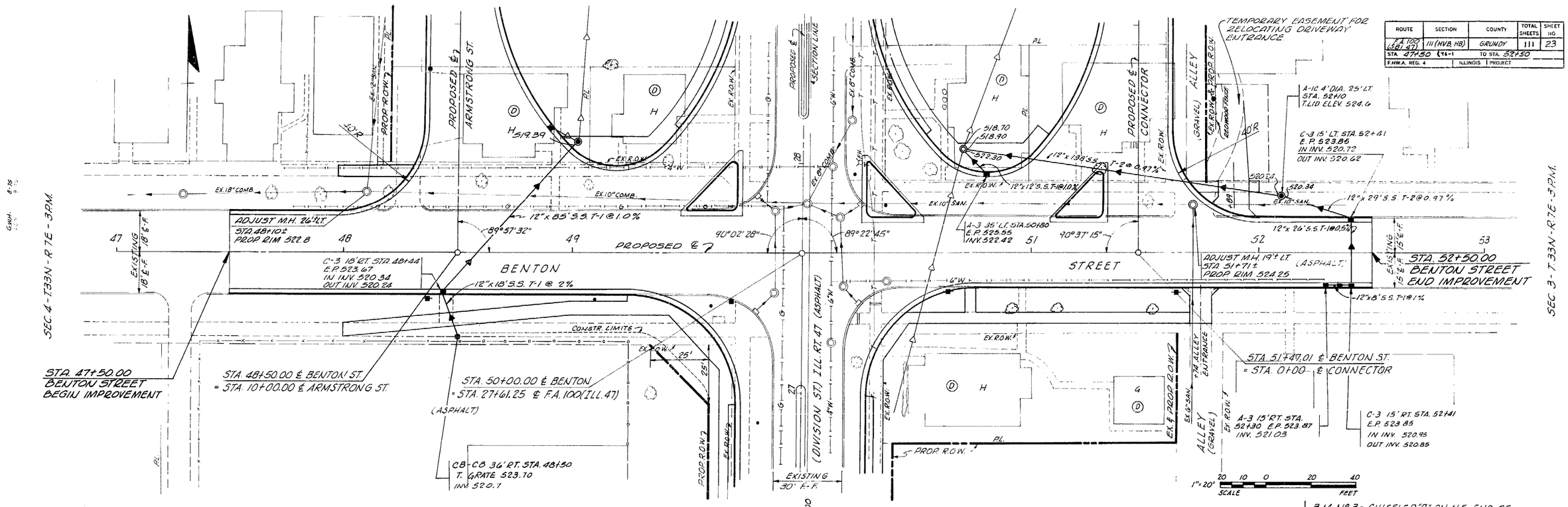
DIVISION ST. (ILL. 47)

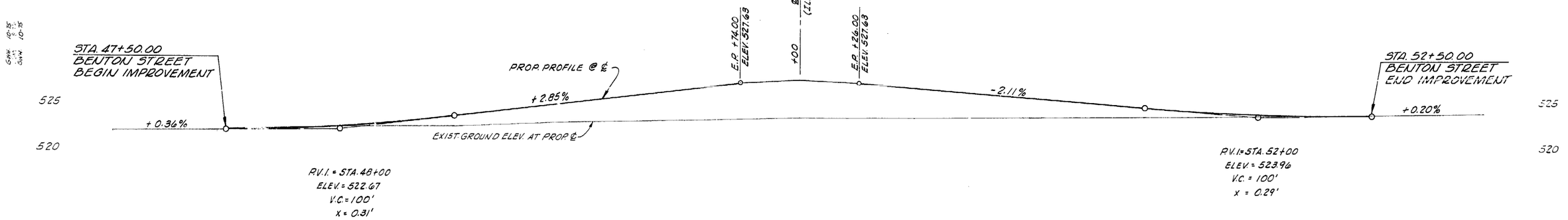
519.43 547.82	518.52 546.03	517.90 544.20	517.49 542.38	517.24 540.55	517.02 538.73	516.81 536.90	516.58 535.08	516.33 533.25	516.10 531.42	515.93 529.60	515.65 527.77	515.30 525.95
6		7				9		10		1		2

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI 47)	111 (HVB, HB)	GRUNDY	111	22
STA. 42+00 & F5-1		TO STA. 46+00		
F.H.W.A. REG. 4		ILLINOIS	PROJECT	



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI. 47)	III (HVB, HB)	GRUNDY	111	23
STA. 47+50 (T6-1		TO STA. 52+50		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		





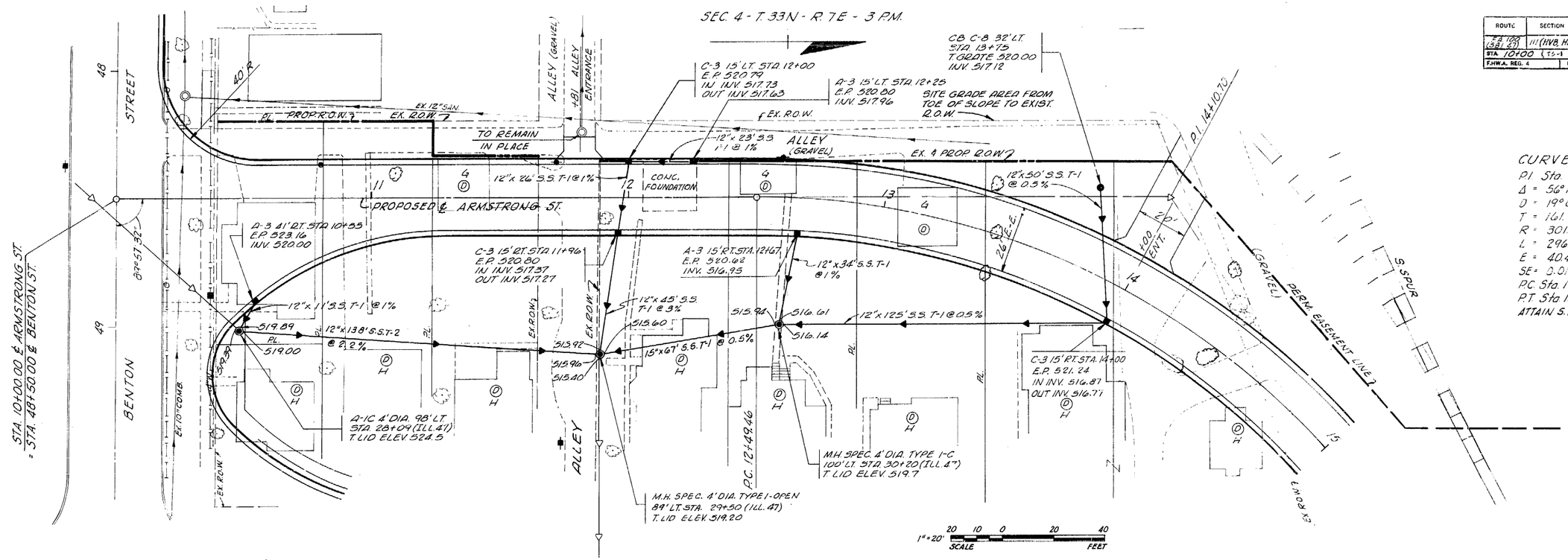
EARTHWORK QUANTITIES
STA. 47+50 - 52+50

EARTH EXCAVATION - 151 CU. YDS.
FILL - 614 CU. YDS.

BENTON STREET

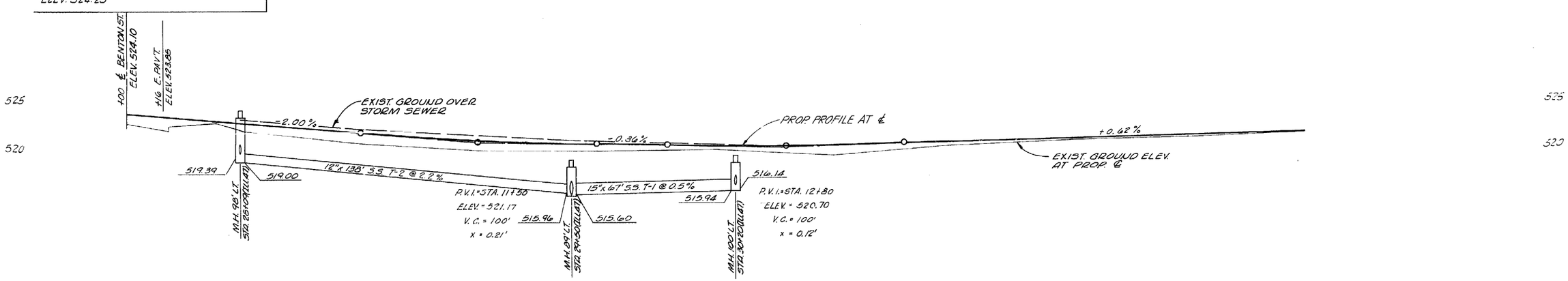
7	8	9	60	1	2	3
522.31	522.49 / 522.49	522.77 / 522.98	523.02 / 524.10	523.28 / 525.52	523.53 / 526.95	523.87
523.67 / 527.13	523.78 / 526.07	523.83 / 525.02	523.97 / 524.25	524.06 / 524.06	524.16	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 103 (SBI. 47)	111 (HVB, HB)	GRUNDY	111	24
STA. 10+00	(TS-1)	TO STA. 15+00		
F.H.W.A. REG. 4	ILLINOIS	PROJEC.		



CURVE DATA
P.I. Sta. 14+10.70
Δ = 56°16'03"
D = 19°00'00"
T = 161.24'
R = 301.56'
L = 296.14'
E = 40.40'
SE = 0.0156'
P.C. Sta. 12+49.46
P.T. Sta. 15+45.60
ATTAIN S.E. 12+00 TO 13+00

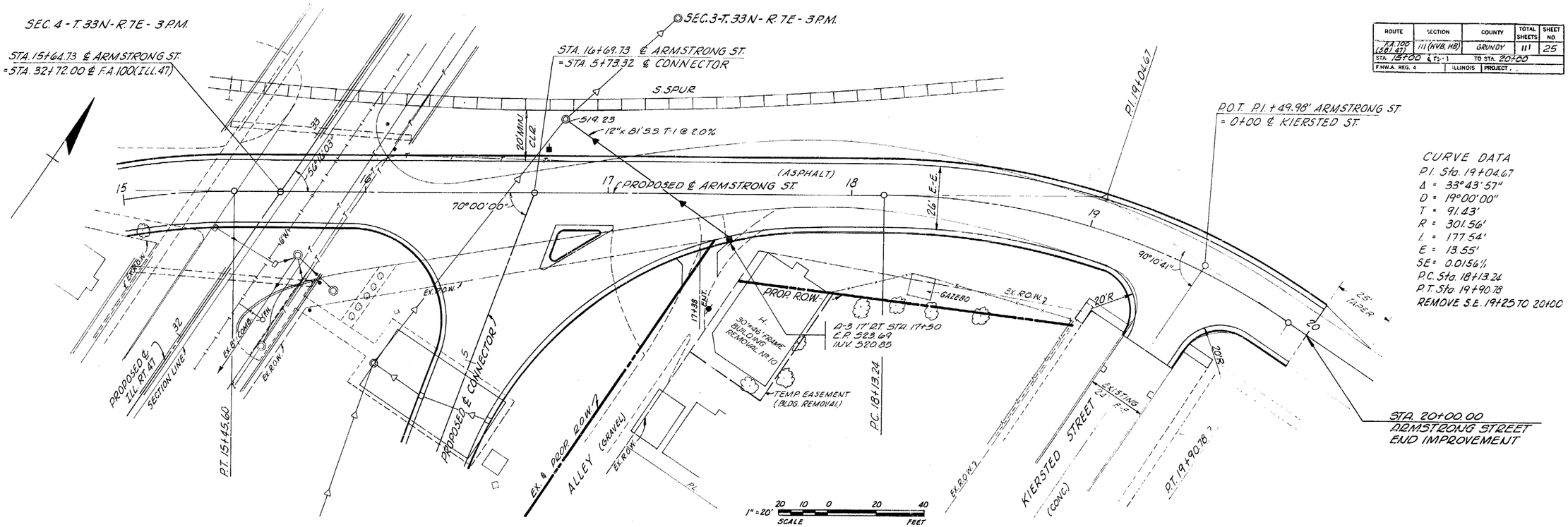
B.M. No. 3 - CHISELED "□" ON N.E. END OF CONC. WALK AT S.W. CORNER OF KIERSTED & BENTON ST., ON WALK ENDING AT KIERSTED. ELEV. 524.23



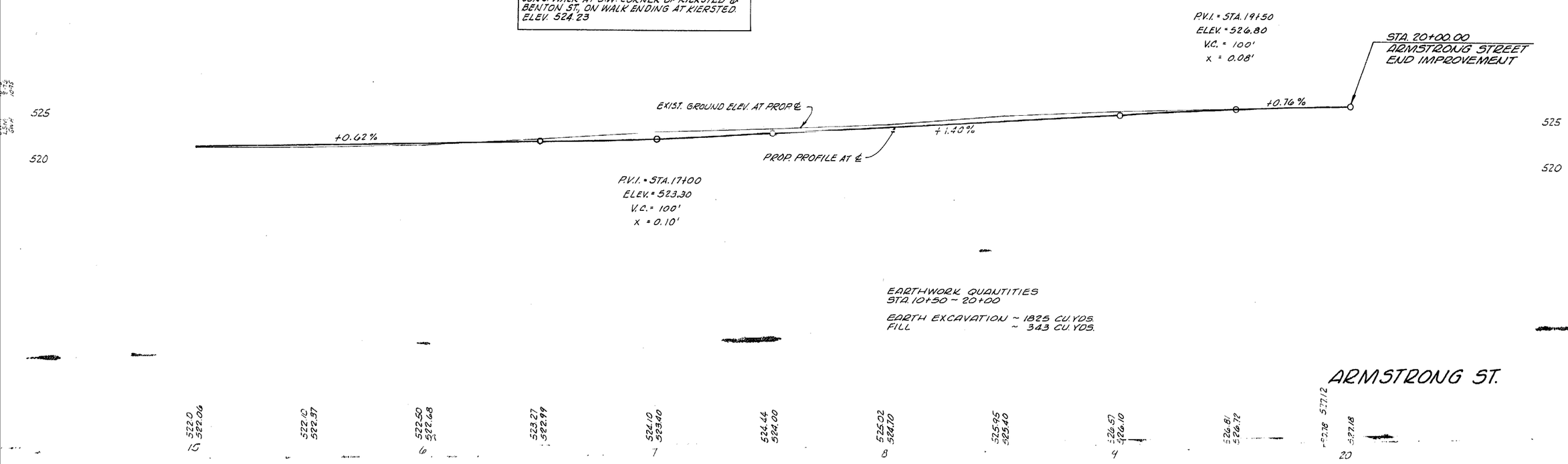
ARMSTRONG ST.

522.95 524.10	522.5 523.11	521.0 522.17	520.3 521.38	520.2 520.99	520.3 520.83	519.7 520.86	520.7 521.3	521.2 521.44	521.6 521.75	522.0 522.06
10	1			2		3		4		5

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (S.B. 47)	111 (RVB, HB)	GRUNDY	111	25
STA. 15+00		TO STA. 20+00		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



CURVE DATA
P.I. Sta. 19+04.67
Δ = 33°43'57"
D = 19°00'00"
T = 91.43'
R = 301.56'
L = 177.54'
E = 13.55'
SE = 0.0156 1/2
P.C. Sta. 18+13.24
P.T. Sta. 19+90.78
REMOVE S.E. 19+25 TO 20+00

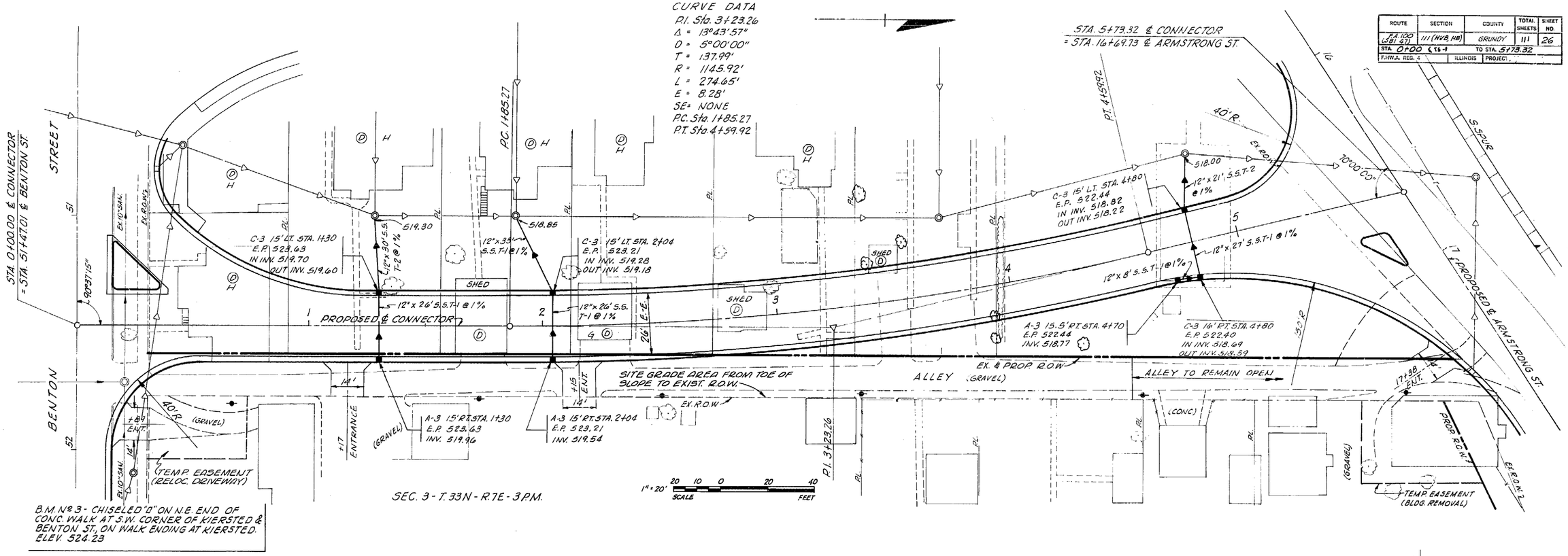


EARTHWORK QUANTITIES
STA. 10+50 ~ 20+00

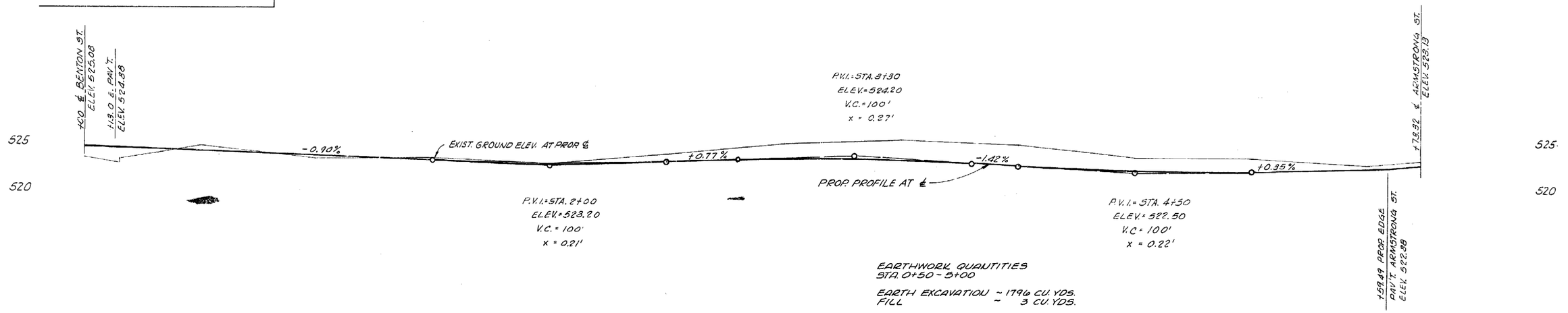
EARTH EXCAVATION ~ 1825 CU. YDS.
FILL ~ 343 CU. YDS.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (SBI 67)	111 (NVB, HB)	GRUNDY	111	26
STA. 0+00 (℄ 15-1)		TO STA. 5+73.32		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

CURVE DATA
P.I. Sta. 3+23.26
Δ = 13°43'57"
D = 5°00'00"
T = 137.99'
R = 1145.92'
L = 274.65'
E = 8.28'
SE = NONE
P.C. Sta. 1+85.27
P.T. Sta. 4+59.92



B.M. No. 3 - CHISELED "D" ON N.E. END OF CONC. WALK AT S.W. CORNER OF KIERSTED & BENTON ST., ON WALK ENDING AT KIERSTED. ELEV. 524.23



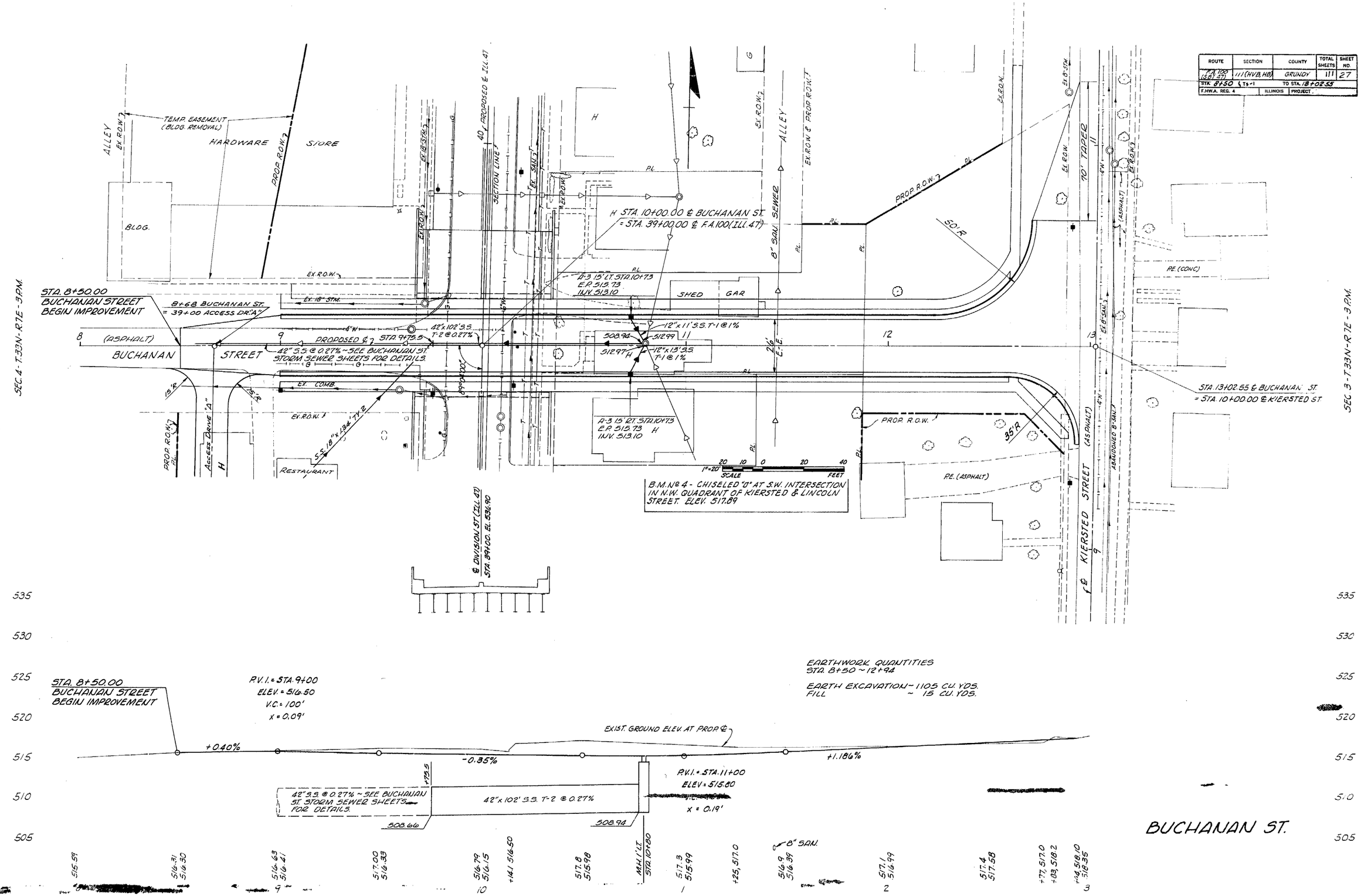
EARTHWORK QUANTITIES
STA. 0+50 - 5+00

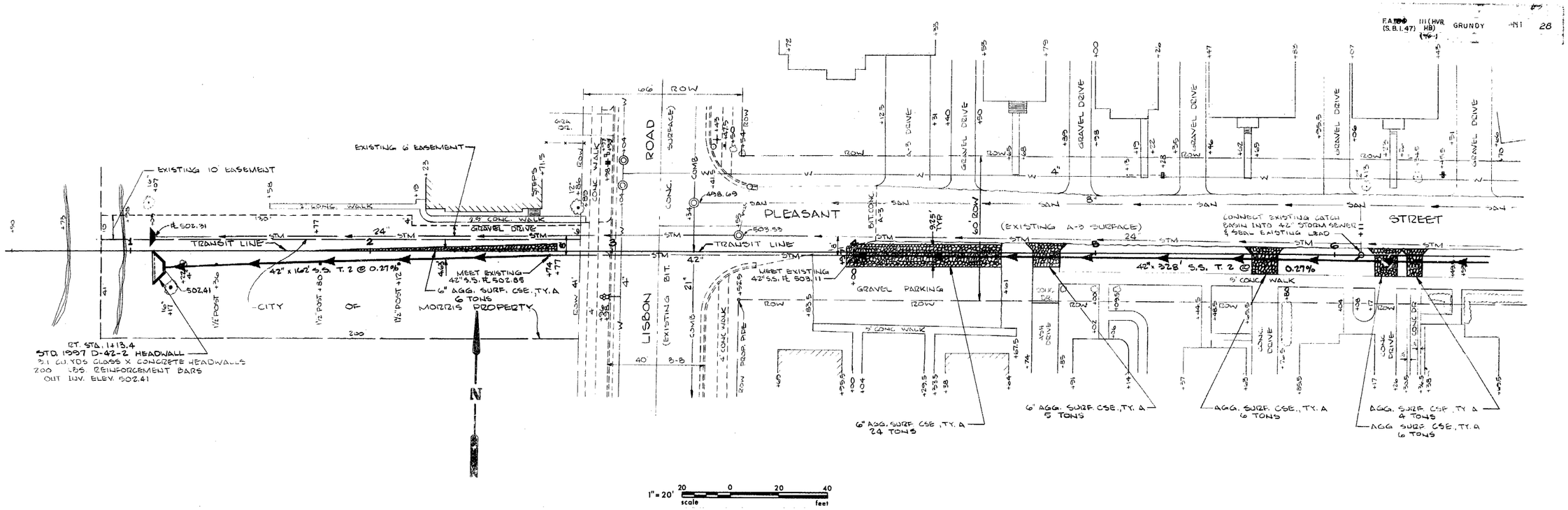
EARTH EXCAVATION ~ 1796 CU. YDS.
FILL ~ 3 CU. YDS.

CONNECTOR

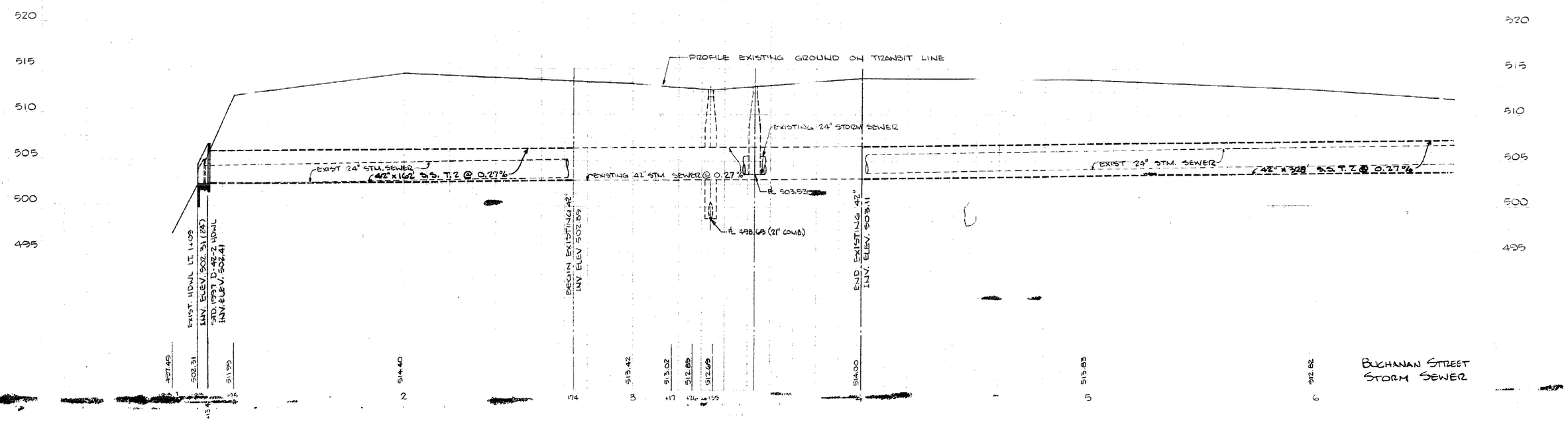
0	1	2	3	4	5	
523.81 / 525.08	525.2 / 524.35	523.8 / 524.10	523.9 / 523.65	523.4 / 523.41	524.4 / 523.59	525.6 / 523.93
526.0 / 523.82	525.4 / 523.21	524.1 / 522.72	524.05 / 522.68	523.2 / 522.85	+73.32, 523.65	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (S.B.I. 47)	111 (HVB, HB)	GRUNDY	111	27
STA. 8+50 ℄ Ts-1		TO STA. 18+02.55		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		





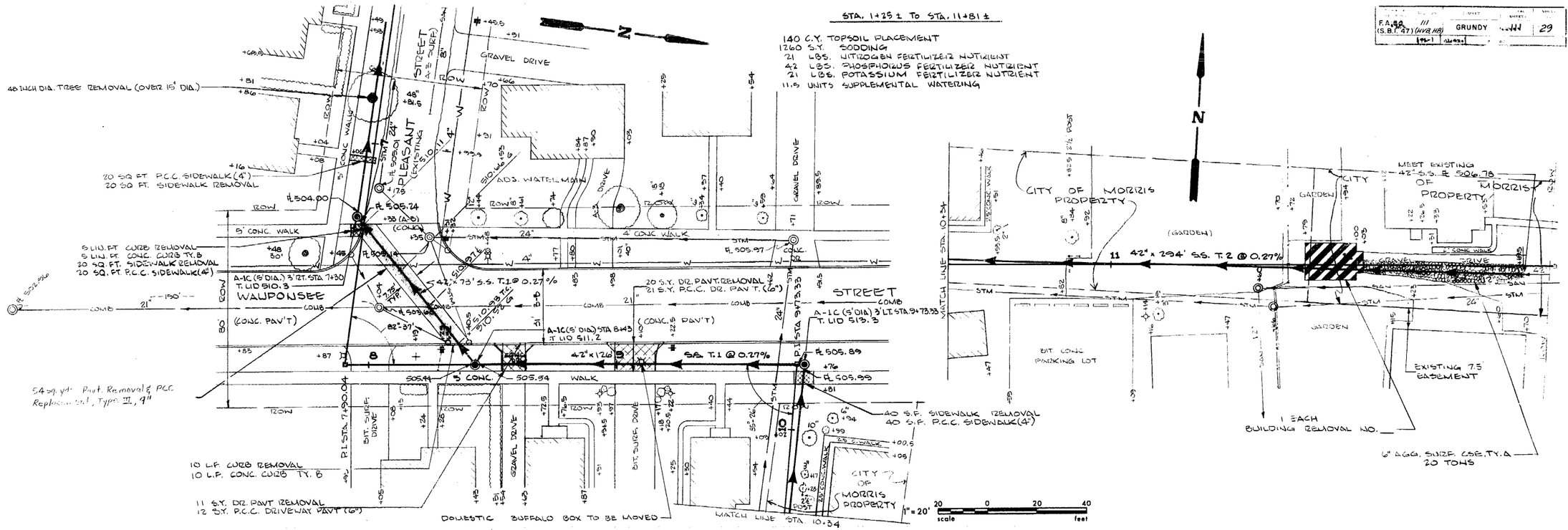
B.M. N.E. CORNER TOP OF FIRE HYDRANT
WEST SIDE LISBON RT. STA. 2+96
ELEVATION 514.83

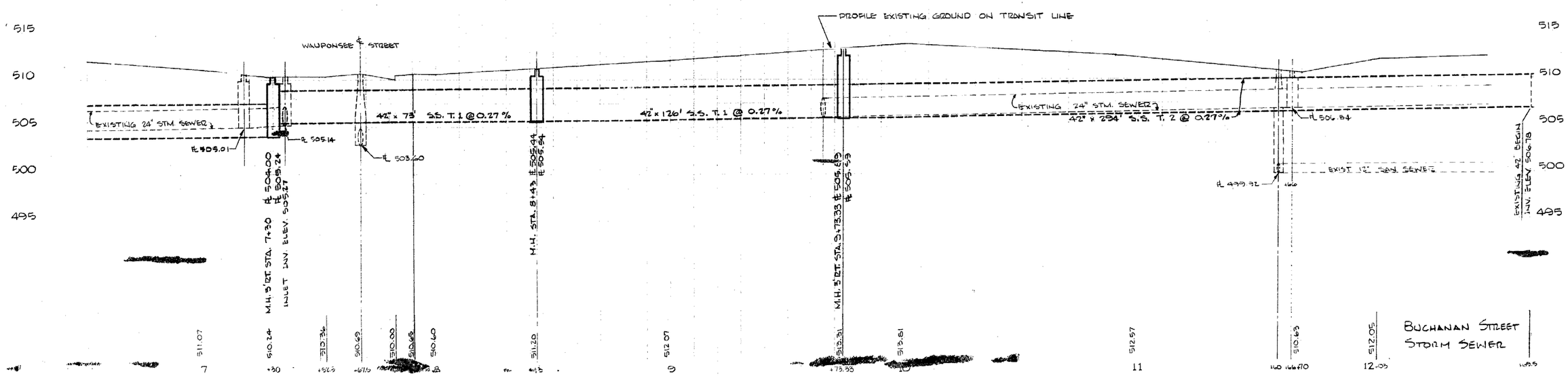


F.A.P. 88 (S.B.F. 47)	111 (HVH HB)	GRUNDY		SHEET 29

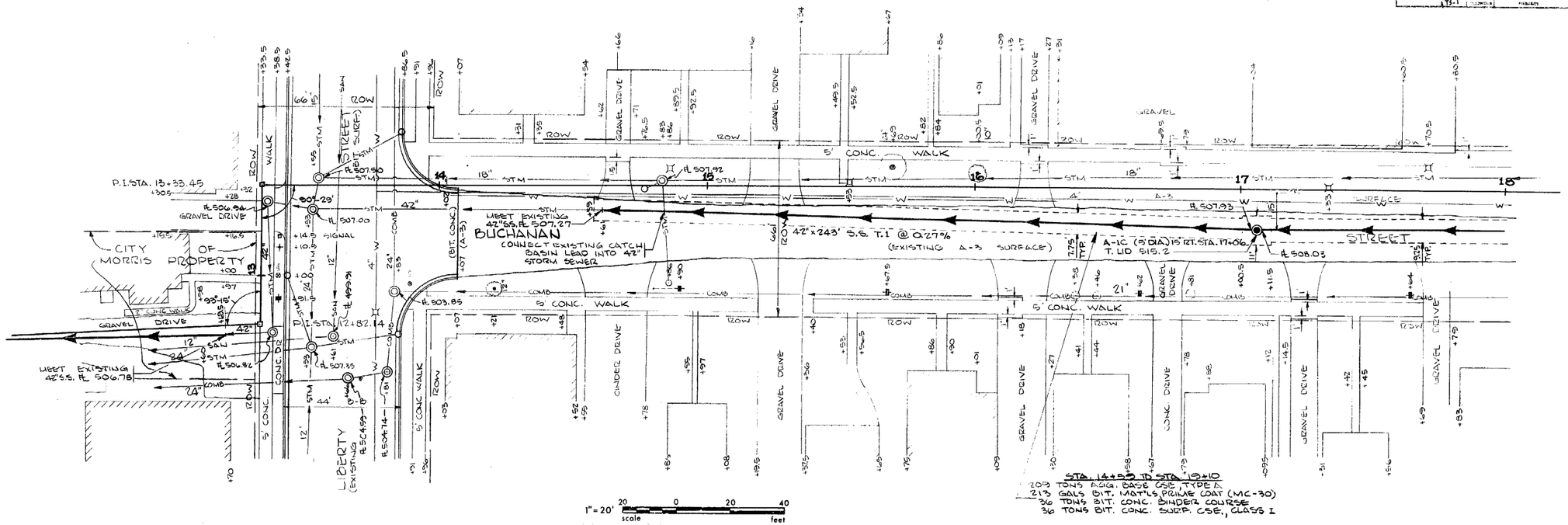
STA. 1+25 ± TO STA. 11+81 ±

140 C.Y. TOPSOIL PLACEMENT
1760 S.Y. SODDING
21 LBS. NITROGEN FERTILIZER NUTRIENT
42 LBS. PHOSPHORUS FERTILIZER NUTRIENT
21 LBS. POTASSIUM FERTILIZER NUTRIENT
11.5 UNITS SUPPLEMENTAL WATERING

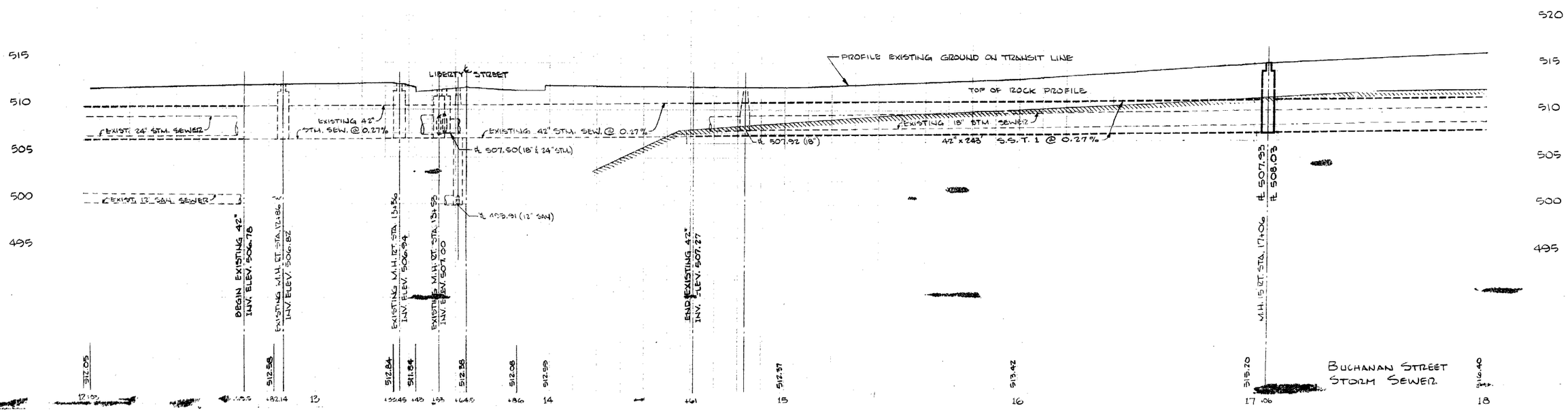




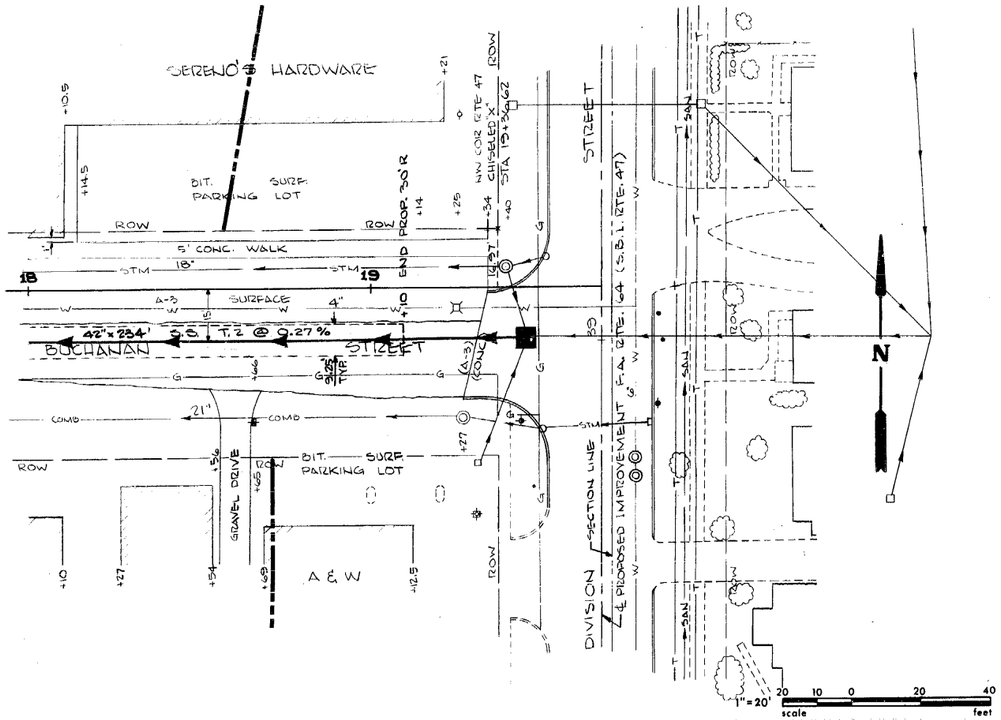
FEDERAL AID PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. [redacted] (S.B.I.47)	(IVB, IVB)	GRUNDY	44	30

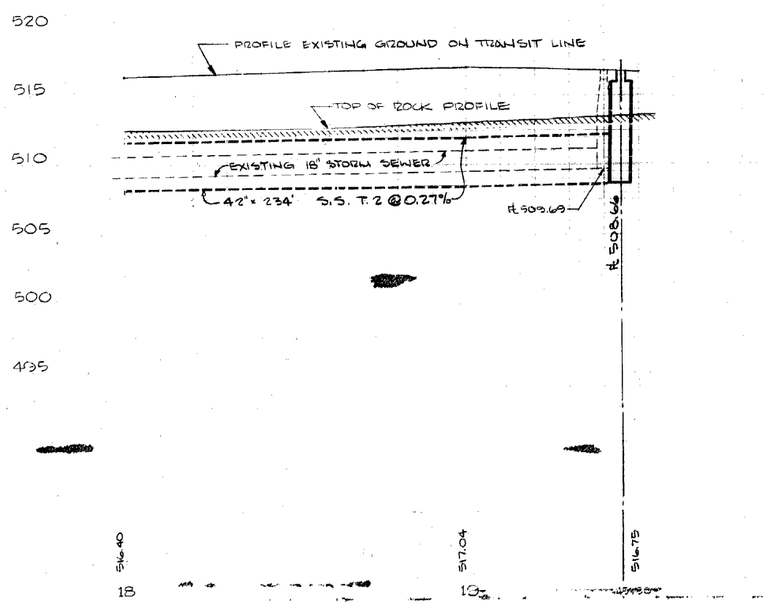


STA. 14+50 TO STA. 19+10
209 TONS AGG. BASE CSE. TYPE A
213 GALS BIT. MAT'LS PRIME COAT (MC-30)
36 TONS BIT. CONC. BINDER COURSE
36 TONS BIT. CONC. SURF. CSE., CLASS I



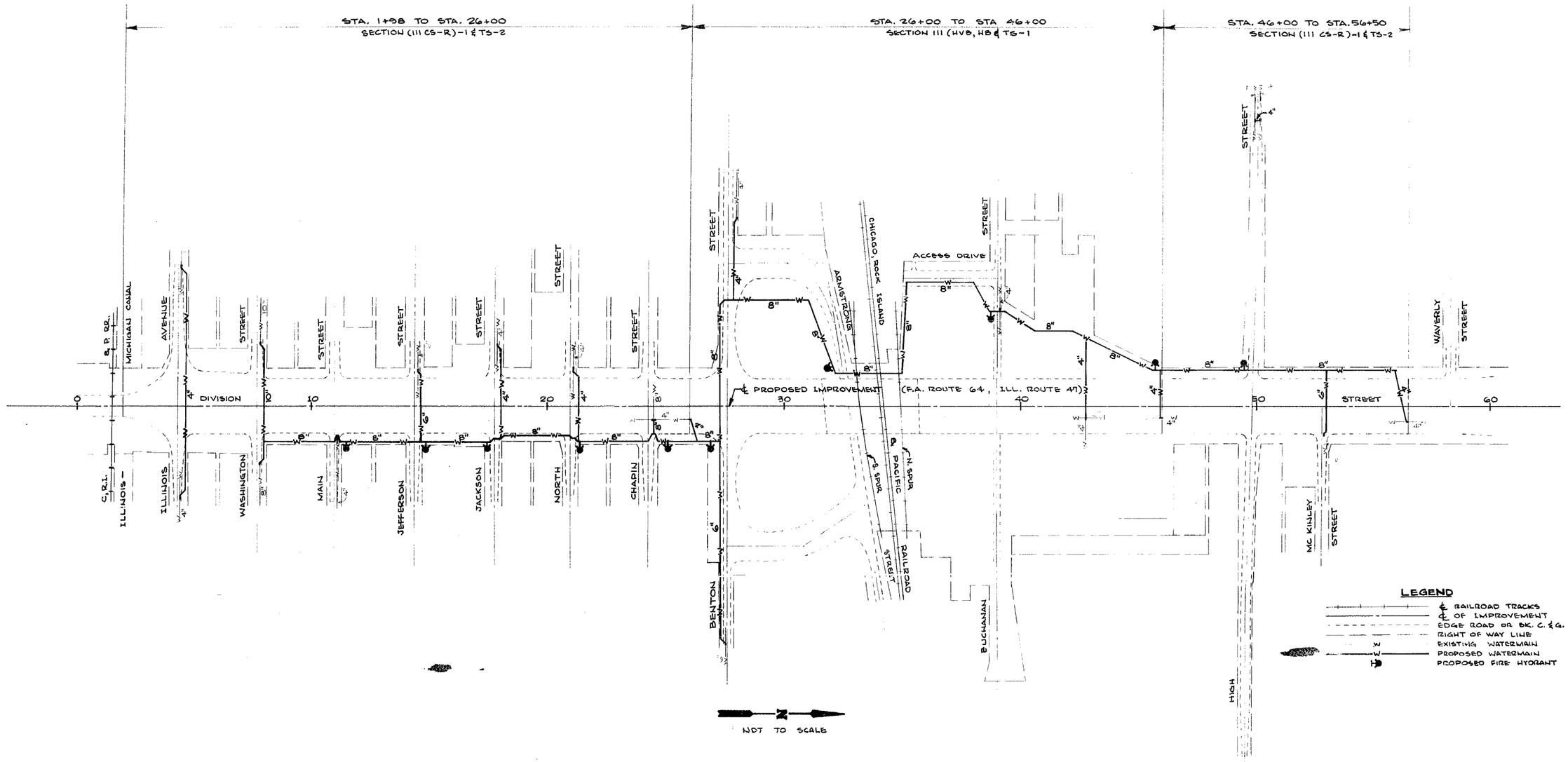
FEDERAL AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 180 (S.B.I. 47)	111 (HVB, HB)	GRUNDY	111	31
(TS-1)	ILLINOIS	PROJECT		



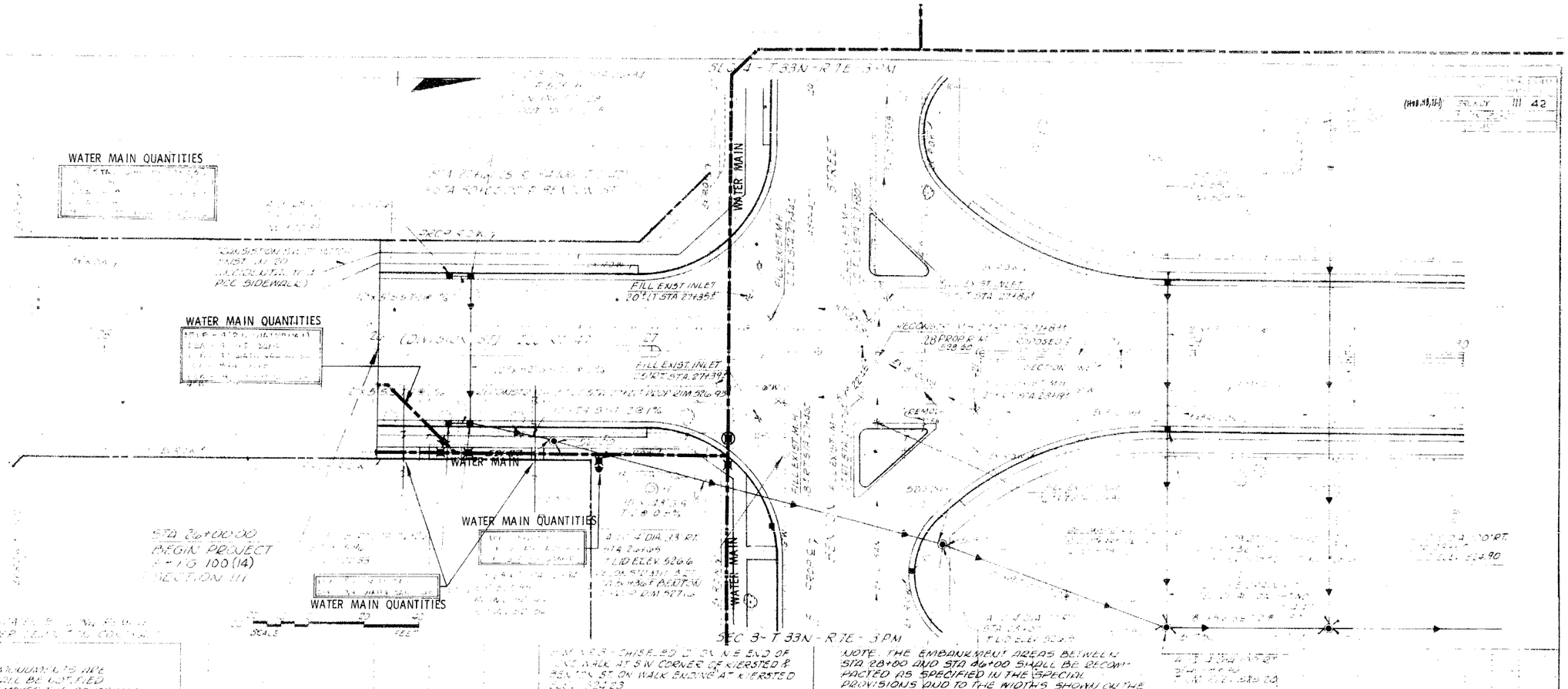


BUCHANAN STREET
STORM SEWER

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
106	111 (HVB, HB, TS-1)	Grundy	111	32
F.A.P. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



LOCATION MAP
PROPOSED WATERMAIN CONSTRUCTION
SECTION 111 (HVB, HB & TS-1
SECTION (111 CS-R)-1 & TS-2



GENERAL NOTES

WHERE SECTION & SUB-SECTION BOUNDARIES ARE DISCOVERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR SHALL HAVE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION & SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

THE CONTRACTOR'S RESPONSIBILITY FOR UTILITIES WILL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR COOPERATION WITH UTILITIES LOCATED IN THE SPECIAL PROVISIONS OF THIS CONTRACT.

EXISTING COMBINATION SEWERS ARE TO REMAIN IN PLACE TO FUNCTION AS SANITARY SEWERS.

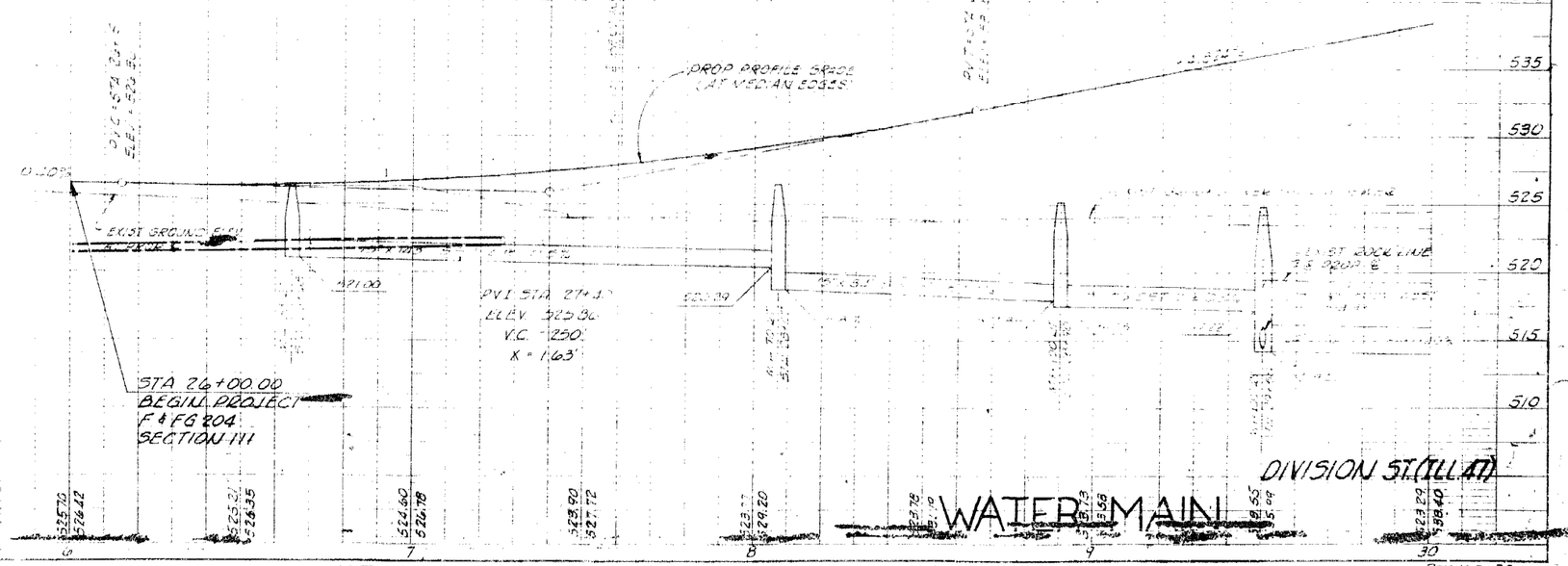
ANY REFERENCE TO A STANDARD PLAN OR PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE CURRENT STANDARD INCLUDED IN THESE PLANS.

PLUG OR REMOVE ALL EXISTING PIPES. CONSTRUCTION OPERATIONS REQUIRE PLUGGING PIPES SHALL BE AT THE APPROVAL OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO EARTHWORK EXCAVATION.

BEFORE ORDERING PIPE CULVERTS, STORM SEWERS, AND SANITARY SEWERS THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

ANY ADDITIONAL EXPENSE WHICH WILL BE INVOLVED IN CONNECTING EXISTING DRAIN TILE, STORM SEWER, AND SANITARY SEWER TO PROPOSED STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE STRUCTURE INVOLVED.

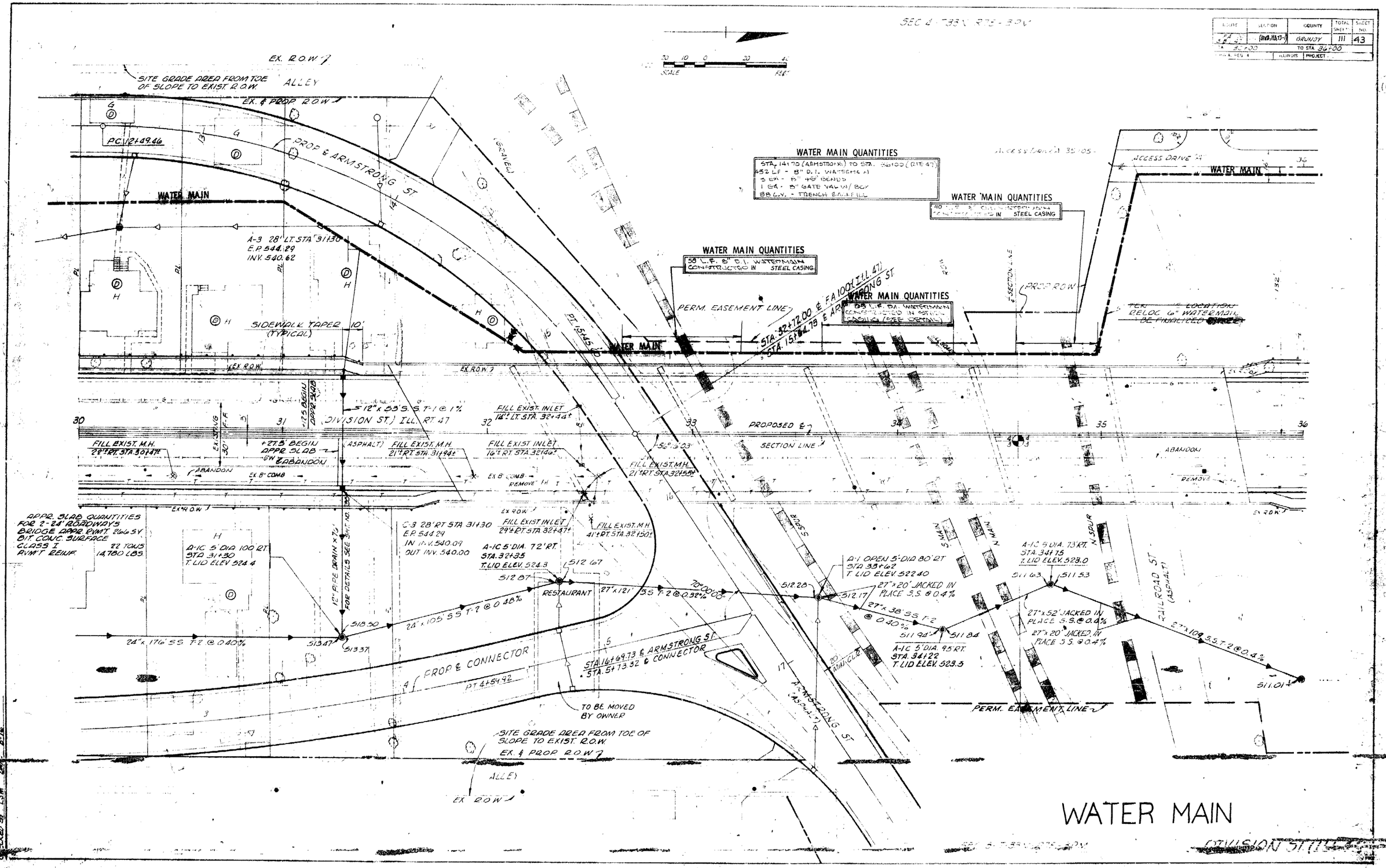
ALL OFFSETS ARE TO FACE OF CURB OR EDGE OF PAVEMENT.



K+E PLATE 1, PLAN-PROFILE

Rev. 11-20-78

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(BVB, HA, 13-1)	GRUNDY	111	43
STA. 32+00		TO STA. 36+00		
FED. RD. DIST. NO. 4	ILLINOIS	PROJECT		



DRAWN BY GWH DATE 11-75
CHECKED BY LSM DATE 8-76

525
520
515
EXIST. GROUND PROFILE
ALONG PROPOSED WATERMAIN
26
27
28
29
30
31
32
525
520
515
32
33
34
35
36
37
38
520
515
510
EXIST. ROCK PROFILE (ASSUMED)
PROPOSED WATERMAIN
38
39
40
41
42
43
44
520
515
44
45
46

SEC 4 - T33N - R7E - 3PM

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 SBI 47	(B38,B5,B-1)	GRUNDY	111	45
STA. 36+00		TO STA. 42+00		
F.A.W.A. REG. 4	ILLINOIS	PROJECT		

1" = 20' SCALE — 20 10 0 20 40 FEET

WATER MAIN QUANTITIES
1 EA - 8" x 6" TEE
1 EA - 6" GATE VAL W/ BOX
1 EA - 6" FIRE HYDRANT

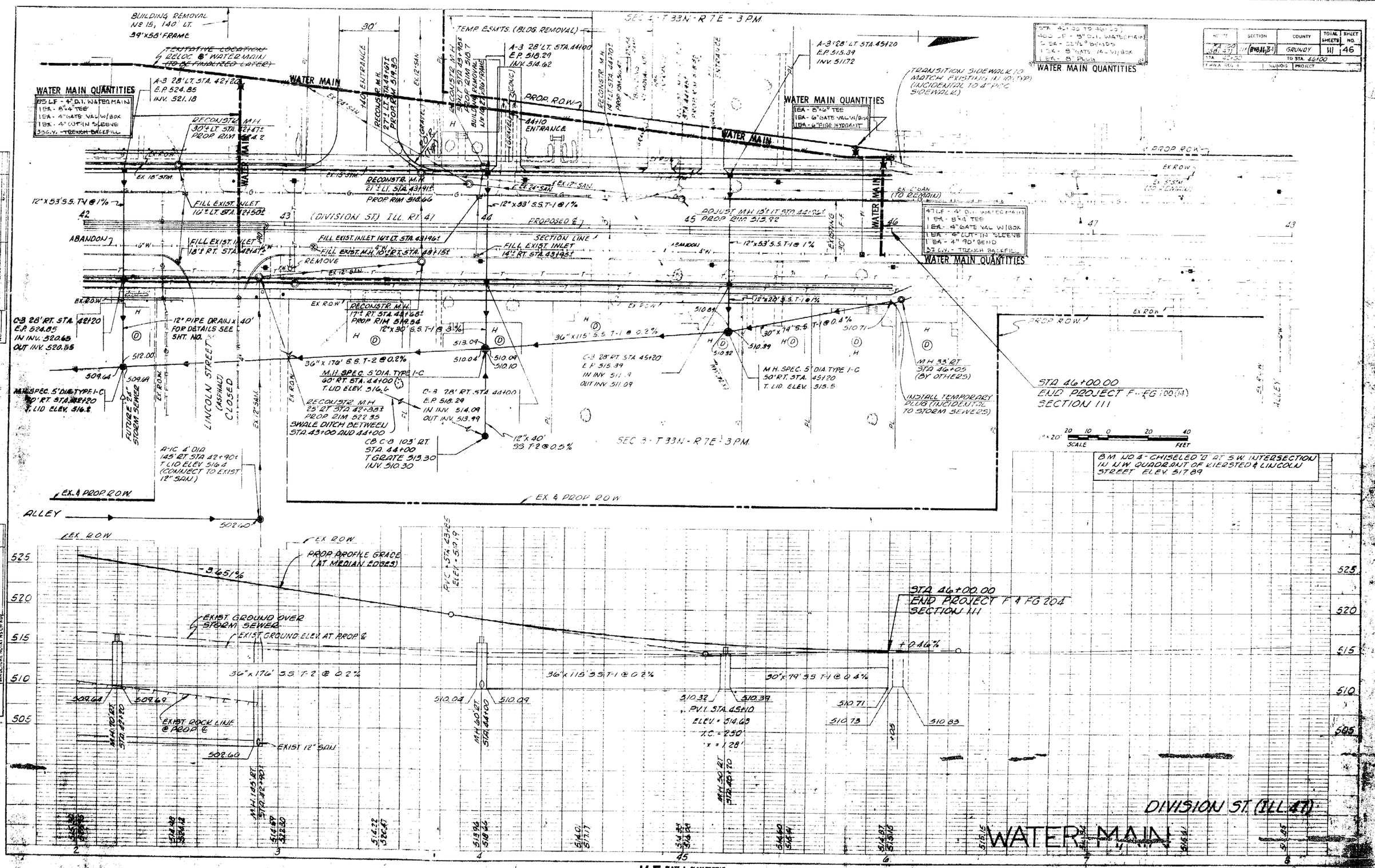
PROP R.O.W.
ACCESS DRIVE "A"
WATER MAIN
APPROACH-SLAB-QUANTITIES FOR 2-24' ROADWAYS
BRIDGE APPR PAVEMENT ~ 266 SY
BIT. CONC. SURFACE CLASS I ~ 22 TONS
PAVEMENT REINF ~ 14,500 LBS
26'x37' FRAME BUILDING — REMOVAL Nº 3
C-B 1'⁺ LT. STA. 38+00 TOP OF GR. 517.40 (ACCESS DR. "A")
BUILDING REMOVAL Nº 2 30'x43' FRAME
RESTAURANT
A-3 28' LT. STA. 36+00 E.P. 547.45 INV. 543.78
C-3 28' LT. STA. 38+20 E.P. 539.45 IN INV. 535.90 OUT INV. 533.78
A-3 28' LT. STA. 38+10 E.P. 539.82 INV. 536.15
(ASPHALT)
FILL EXIST. M.H. 40'± LT. STA. 38+78±
10' SIDEWALK TAPER (TYPICAL)
EX. R.O.W.
12" x 7' S.S. T-1 @ 3.6%
12" x 52' S.S. T-1 @ 1%
+14 END APPR SLAB
+20 END APPR SLAB
(DIVISION ST) ILL RT 47
SECTION LINE
FILL EXIST. M.H. 10' RT. STA. 38+60±
FILL EXIST. M.H. 10' RT. STA. 38+65±
12" x 7' S.S. T-1 @ 3.6%
FILL EXIST. INLET 17'± LT. STA. 38+74±
FILL EXIST. INLET 14'± LT. STA. 38+77±
PROPOSED ℄
ABANDON
EX. 8" SAN
12" x 53' S.S. T-1 @ 1%
12" PIPE DRAIN x 93'
12" PIPE DRAIN x 88'
FOR DETAILS SEE SHEET NO. 35
REMOVAL BY OTHERS
BUILDING REMOVAL Nº 1 ~~GAS STATION~~
13'x33' BLOCK
SWALE DITCH BETWEEN STA. 37+50 AND 38+20
27" x 215' S.S. T-2 @ 0.4%
A-1C 5' DIA. 120' RT. STA. 36+00 T. LID ELEV. 521.7
M.H. SPEC. 5' DIA. TYPE 1 OPEN 115' RT. STA. 38+20 T. LID ELEV. 516.30
8" x 278' SAN SEWER T-3 @ 0.4%
PROP R.O.W.
A-1C 4' DIA. 145' RT. STA. 37+68± T. LID ELEV. 518.2 (CONNECT TO EXIST. SAN.)
EX. 8" SAN
BUCHANAN ST.
EX. CONC.
EX. 18" STM.
42" x 55' @ 0.27%
39+00 ACCESS DR. "A" & B BUCHANAN ST.
1 EA - 8" x 4" TEE
1 EA - 4" GATE VAL IN VAULT
1 EA - 4" CUT-IN SLEEVE
WATER MAIN QUANTITIES
TEMPORARY ESM'T (BUILDING REMOVAL)
REMOVAL BY OTHERS
~~75'x130' BLOCK & FRAME~~ BUILDING REMOVAL Nº 4
~~HARDWARE STORE~~
FILL EXIST. M.H. 35'± LT. STA. 39+08±
ADJUST EXIST. M.H. 28'± LT. STA. 39+21 PROP RIM 516.5
A-3 28' LT. STA. 39+76 E.P. 533.79 INV. 530.12
12" PIPE DRAIN x 68' FOR DETAILS SEE SHT. NO. 35
42" x 70' S.S. T-2 @ 0.2%
C-3 28' RT. STA. 39+75 E.P. 533.79 IN INV. 529.59 OUT INV. 529.49
A-1C 5' DIA. 95' RT. STA. 39+75 T. LID ELEV. 517.0
M.H. SPEC. 5' DIA. TYPE 1-C 1' LT. STA. 40+50 (BUCHANAN ST) T. LID ELEV. 515.95
PROPOSED ℄
STA. 39+00.00 ℄ F.A. 100 (ILL. 47) = STA 10+00.00 ℄ BUCHANAN ST.
42" x 241' S.S. T-2 @ 0.17%
BUILDING REMOVAL Nº 5 23'x30' FRAME
BUILDING REMOVAL Nº 6
BUILDING REMOVAL Nº 7 34'x26' FRAME
BUILDING REMOVAL Nº 8 26'x40' FRAME
BUILDING REMOVAL Nº 9 29'x45' FRAME
BUILDING REMOVAL Nº 10 29'x30' FRAME
BUILDING REMOVAL Nº 13 4'x11' FRAME
A-1C 4' DIA. 145' RT. STA. 40+50 T. LID ELEV. 517.1
8" x 236' SAN SEWER T-3 @ 0.4%
ALLEY
EX. & PROP R.O.W.
WATER MAIN QUANTITIES
(STA 36+00 TO 42+00)
603 LF - 8" D.I. WATERMAIN
2 EA - 8" 45° BENDS
1 EA - 8" 22½° BENDS
172 C.Y. - TRENCH BACKFILL
~~TENTATIVE LOCATION~~ RELOC. 8" WATERMAIN ~~TO BE FINALIZED LATER~~
REMOVAL BY OTHERS
~~BUILDING REMOVAL Nº 12 32'x42' FRAME~~
APPROACH SLAB QUANTITIES FOR 1-24' ROADWAYS
BRIDGE APPROACH PAVEMENT ~ 332 SY
BIT CONC SURFACE CLASS I ~ 44 TONS
PAVEMENT REINFORCEMENT ~ 28,760 LBS
+06 END APPROACH SLAB

WATER MAIN

SEC. 3 - T33N - R7E - 3PM

DIVISION ST. (ILL. 47)

DRAWN BY SMM DATE
CHECKED BY LSM DATE 8-76



NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
38, 37	(FAU 1, 2-1)	GRUNDY	111	46
STA. 42+00		TO STA. 46+00		
F.H.W.A. REG. 4		ILLINOIS	PROJECT	

PLAN	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
BRIDGE STRUCTURE		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		
NOTE BOOK		
NO.		

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
BRIDGE STRUCTURE		
NOTE BOOK		
NO.		

SEC 4 - T-33N - R.7E - 3PM.

1" = 20' SCALE — 20 10 0 20 40 FEET

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 109 SBI 29	(138.1B-1)	GRUNDY	111	45
STA. 36+00		TO STA. 42+00		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

WATER MAIN QUANTITIES
1 EA - 8" x 6" TEE
1 EA - 6" GATE VAL. W/ BOX
1 EA - 6" FIRE HYDRANT

PROP. R.O.W.

WATER MAIN

ACCESS DRIVE "A"

APPROACH-SLAB-QUANTITIES FOR 2-24' ROADWAYS
BRIDGE APPR. PAVEMENT - 266 S.Y.
BIT. CONC. SURFACE CLASS I - 22 TONS
PAVEMENT REINF. - 14,500 LBS.

26'x37' FRAME BUILDING REMOVAL No. 3

C-B 1'LT. STA. 38+00 TOP OF GR. 517.40 (ACCESS DR. "A")

A-3 28' LT. STA. 36+00 E.P. 547.45 INV. 543.78

C-3 28' LT. STA. 38+20 E.P. 539.48 IN INV. 535.90 OUT INV. 535.78

A-3 28' LT. STA. 38+10 E.P. 539.82 INV. 536.15

BUILDING REMOVAL No. 2 30'x43' FRAME

RESTAURANT

FILL EXIST. M.H. 40' LT. STA. 38+78±

10' SIDEWALK TAPER (TYPICAL)

EX. R.O.W.

12" x 7' S.S. T-1 @ 3.6%

12" x 52' S.S. T-1 @ 1%

+14 END APPR. SLAB

+20 END APPR. SLAB

(DIVISION ST.) ILL. RT. 47

SECTION LINE

+86 BEGIN APPR. SLAB

ABANDON

FILL EXIST. M.H. 10' RT. STA. 38+65±

12" x 7' S.S. T-1 @ 3.6%

FILL EXIST. INLET 17' LT. STA. 38+77±

PROPOSED ℄

BUCHANAN ST. (ASPHALT) ABANDON

EX. CONC.

EX. R.O.W.

39+00 ACCESS DR. "A" = B+6.8 BUCHANAN ST.

1 EA - 8" x 4" TEE
1 EA - 4" GATE VAL. IN VAULT
1 EA - 4" CUT-IN SLEEVE

WATER MAIN QUANTITIES

TEMPORARY ESM'T (BUILDING REMOVAL)

REMOVAL BY OTHERS
45'x130' BLOCK & FRAME
BUILDING REMOVAL No. 4
HARDWARE STORE

EX. & PROP. R.O.W.

ALLEY

WATER MAIN QUANTITIES
(STA. 36+00 TO 42+00)
605 LF - 8" D.I. WATERMAIN
2 EA - 8" 45° BENDS
2 EA - 8" 22½° BENDS
172 C.Y. - TRENCH BACKFILL

PROP. R.O.W.

~~TENTATIVE LOCATION~~ RELOC. 8" WATERMAIN ~~TO BE FINALIZED LATER~~

WATER MAIN

REMOVAL BY OTHERS
BUILDING REMOVAL No. 14 32'x43' FRAME

APPROACH-SLAB QUANTITIES FOR 2-24' ROADWAYS
BRIDGE APPROACH PAVEMENT - 332 S.Y.
BIT. CONC. SURFACE CLASS I - 22 TONS
PAVEMENT REINFORCEMENT - 28,760 LBS.

FILL EXIST. M.H. 35' LT. STA. 39+08±

ADJUST EXIST. M.H. 28' LT. STA. 39+21 PROP. RIM 516.5

A-3 28' LT. STA. 39+78 E.P. 533.79 INV. 530.12

FILL EXIST. INLET 17' LT. STA. 39+24±

+06 END APPROACH SLAB

EX. 12" STM.

EX. 8" SAN.

ABANDON

FILL EXIST. INLET 14' RT. STA. 38+77±

12" PIPE DRAIN x 88 FOR DETAILS SEE SHEET NO. 35

C-3 28' RT. STA. 36+00 E.P. 547.45 IN INV. 543.28 OUT INV. 543.16

C-3 28' RT. STA. 38+20 E.P. 539.45 IN INV. 535.26 OUT INV. 535.16

REMOVAL BY OTHERS
~~BUILDING REMOVAL No. 1~~
~~GAS STATION~~
18'x33' BLOCK

12" PIPE DRAIN x 93 FOR DETAILS SEE SHEET NO. 35

SWALE DITCH BETWEEN STA. 37+50 AND 38+20

30" x 86' S.S. T-2 @ 0.26%

27" x 215' S.S. T-2 @ 0.4%

A-1C 5' DIA. 120' RT. STA. 36+00 T. LID ELEV. 521.7

MH SPEC. 5' DIA. TYPE 1 OPEN 115' RT. STA. 38+20 T. LID ELEV. 516.30

8" x 278' SAN. SEWER T-3 @ 0.4%

SHED

PROPOSED ℄

12" PIPE DRAIN x 68 FOR DETAILS SEE SHT. NO. 35

42" x 70' S.S. T-2 @ 0.2%

STA. 39+00.00 ℄ F.A. 100 (ILL. 47) = STA. 10+00.00 ℄ BUCHANAN ST.

42" x 241' S.S. T-2 @ 0.17%

C-3 28' RT. STA. 39+75 E.P. 533.79 IN INV. 529.59 OUT INV. 529.49

BUILDING REMOVAL No. 5 28'x30' FRAME

34'x26' FRAME BUILDING REMOVAL No. 7

29'x45' FRAME BUILDING REMOVAL No. 9

A-1C 5' DIA. 95' RT. STA. 39+75 T. LID ELEV. 517.0

M.H. SPEC. 5' DIA. TYPE 1-C 1' LT. STA. 40+00 (BUCHANAN ST.) T. LID ELEV. 515.45

14'x22' FRAME BUILDING REMOVAL No. 6

24'x40' FRAME BUILDING REMOVAL No. 8

29'x30' FRAME BUILDING REMOVAL No. 10

EX. & PROP. R.O.W.

BUILDING REMOVAL No. 13 9'x11' FRAME

8" x 236' SAN. SEWER T-3 @ 0.4%

ALLEY

EX. R.O.W.

A-1C 4' DIA. 145' RT. STA. 40+50 T. LID ELEV. 517.1

A-1C 4' DIA. 145' RT. STA. 37+68± T. LID ELEV. 518.2 (CONNECT TO EXIST. SAN.)

EX. 8" SAN.

SEC. 3 - T 33N - R 7E - 3PM

WATER MAIN

DIVISION ST. (ILL. 47)

DRAWN BY: JSM DATE
CHECKED BY: LSM DATE 8-76

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
(FAU 8113-1)	GRUNDY	III	46

TO STA 45+30

WATER MAIN QUANTITIES

WATER MAIN QUANTITIES
95 LF - 4" D.I. WATER MAIN
1 EA - 6"x4" TEE
1 EA - 4" GATE VAL. W/ BOX
1 EA - 4" CUT-IN SLEEVE
3 C.Y. ~~TRENCH BACKFILL~~

WATER MAIN QUANTITIES
1 EA - 6"x6" TEE
1 EA - 6" GATE VAL. W/ BOX
1 EA - 6" FIRE HYDRANT

WATER MAIN QUANTITIES
1 EA - 4" GATE VAL. W/ BOX
1 EA - 4" CUT-IN SLEEVE
1 EA - 4" 90° BEND
3 C.Y. TRENCH BACKFILL

BUILDING REMOVAL
N 3 B, 14' x 34'
34'x58' FRAME

~~TENTATIVE LOCATION~~
RELOC. 8" WATER MAIN
~~(TO BE FINALIZED LATER)~~

TEMP EASMTS (BLDG REMOVAL)

SEC 3 - T33N - R7E - 3 PM

A-3 28' LT. STA. 42+20
E.P. 524.85
INV. 521.18

A-3 28' LT. STA. 44+00
E.P. 518.29
INV. 514.62

A-3 28' LT. STA. 45+20
E.P. 515.39
INV. 511.72

WATER MAIN

PROP. ROW

44+10 ENTRANCE

RECONSTR. M.H. 30' ± LT. STA. 42+47 ± PROP. RIM 524.2

RECONSTR. M.H. 27' ± LT. STA. 43+97 ± PROP. RIM 519.30

RECONSTR. M.H. 21' ± LT. STA. 43+91 ± PROP. RIM 518.66

RECONSTR. M.H. 14' ± LT. STA. 44+70 ± PROP. RIM 516.47

ADJUST M.H. 15' ± LT. STA. 44+95 ± PROP. RIM 515.92

ADJUST M.H. 15' LT. STA. 44+96 ± PROP. RIM 515.92

TRANSITION SIDEWALK
MATCH EXISTING
(INCIDENTAL TO STORM SEWER)

EX. ROW

EX. 18" STM

EX. 15" STM

EX. 24" STM

EX. 12" SAN

12" x 53' S.S. T-1 @ 1%

FILL EXIST. INLET 10' ± LT. STA. 42+50 ±

(DIVISION ST) ILL. RT. 47

PROPOSED ℄

SECTION LINE

ABANDON

FILL EXIST. INLET 16' ± LT. STA. 43+96 ±

FILL EXIST. M.H. 10' ± RT. STA. 43+15 ±

FILL EXIST. INLET 18' ± RT. STA. 42+42 ±

FILL EXIST. INLET 14' ± RT. STA. 43+95 ±

REMOVE

EX. 12" SAN.

42 43 44 45 46 47

12" x 53' S.S. T-1 @ 1%

12" x 20' S.S. T-1 @ 1%

EX. ROW

RECONSTR. M.H. 17' ± RT. STA. 44+66 ± PROP. RIM 519.54

12" x 30' S.S. T-1 @ 3%

12" PIPE DRAIN x 40' FOR DETAILS SEE SHT. NO.

C-3 28' RT. STA. 42+20
E.P. 524.85
IN INV. 520.65
OUT INV. 520.55

512.00

504.64 509.69

M.H. SPEC. 5' DIA. TYPE I-C
40' RT. STA. 42+20
T. LID ELEV. 516.2

FUTURE 24" STORM SEWER

LINCOLN STREET (ASPHALT) CLOSED

EX. 12" SAN

36" x 176' S.S. T-2 @ 0.2%

M.H. SPEC. 5' DIA. TYPE I-C
40' RT. STA. 44+00
T. LID ELEV. 516.6

RECONSTR. M.H.
25' RT. STA. 42+88 ±
PROP. RIM 522.35

SWALE DITCH BETWEEN STA. 43+00 AND 44+00

C-3 28' RT. STA. 44+00
E.P. 518.29
IN INV. 514.09
OUT INV. 513.99

CB C-8 103' RT. STA. 44+00
T. GRATE 513.30
INV. 510.30

12" x 40' S.S. T-2 @ 0.5%

513.09 510.04 510.09 510.10

36" x 115' S.S. T-1 @ 0.2%

C-3 28' RT. STA. 45+20
E.P. 515.39
IN INV. 511.19
OUT INV. 511.09

30" x 74' S.S. T-1 @ 0.4%

510.84 510.32 510.39

M.H. SPEC. 5' DIA. TYPE I-C
50' RT. STA. 45+20
T. LID ELEV. 515.5

M.H. 33' RT. STA. 46+05 (BY OTHERS)

INSTALL TEMPORARY PLUG (INCIDENTAL) TO STORM SEWER(S)

STA. 46+00.00
END PROJECT F.A. FG 100 (1)
SECTION III

SCALE 20 10 0 20 40 FEET

BM NO 4 - CHISELED "O" ON SW INTERSECTION IN NW QUADRANT OF KIERSTED & LINCOLN STREET ELEV. 517.89

A IC 4' DIA.
45' RT. STA. 42+96 ±
T. LID ELEV. 516.4
(CONNECT TO EXIST. 12" SAN)

EX. & PROP. ROW

ALLEY

502.20

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'N CH'KD.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'N CH'KD.
BY
DATE

525 520 515 510 505

EX. ROW

PROP. PROFILE GRADE (AT MEDIAN EDGES)

-3.65%

EXIST. GROUND OVER STORM SEWER

EXIST. GROUND ELEV. AT PROP'E

STA. 46+00.00
END PROJECT F.A. FG 100 (1)
SECTION III

+0.46%

36" x 176' S.S. T-2 @ 0.2%

36" x 115' S.S. T-1 @ 0.2%

30" x 79' S.S. T-1 @ 0.4%

509.64 509.69

EXIST. ROCK LINE @ PROP'E

502.60

EXIST. 12" SAN

M.H. 70' RT. STA. 42+20

M.H. 60' RT. STA. 44+00

M.H. 50' RT. STA. 45+20

M.H. 125' RT. STA. 42+40

510.04 510.09

510.32 510.39

P.V.I. STA. 45+10
ELEV. = 514.68
V.C. = 250'
x = 1.28'

510.71 510.73 510.83

+.05

DIVISION ST. (ILL. 47)

WATER MAIN

2 3 45 6 7 8

K+E PLATE 1. PLAN-PROFILE
KEUFFEL & ESSER CO.
46 7020 PHOENIX TRACING CLOTH

Rev. 11-20-73

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 7170 (SBI 4)	(PTB 118-13-1)	GRUNDY	111	47
STA 47+50		TO STA 52+50		
F.H.W.A. REG. 5	ILLINOIS	IN-DOT		

WATER MAIN QUANTITIES

- 8" x 4" DI WATER MAIN
- 1 EA - 4" GATE VALVE IN VALVE VAULT
- 2 EA - 4" x 15" BENDS
- 1 EA - 8" x 4" IN SLEEVE
- 1 EA - 8" x 4" TEE

WATER MAIN QUANTITIES

- 12" x 24" S.S. PIPE

WATER MAIN QUANTITIES

- 1 EA - 8" x 8" BEND
- 1 EA - 8" x 8" TEE
- 3 EA - 8" x 8" SLEEVES

WATER MAIN QUANTITIES

- 1 EA - 8" x 8" REDUCER

WATER MAIN QUANTITIES

- 1 EA - 6" GATE VALVE W/ BOX

WATER MAIN QUANTITIES

- 215 LF - 8" D.I. WATER MAIN

WATER MAIN QUANTITIES

- 1 EA - 8" x 8" TEE
- 1 EA - 8" x 8" VALVE SEC. [illegible]

WATER MAIN QUANTITIES

- STA. 48+00 TO 53+50 (BENTON ST.)
- STA. 10+00 TO 11+50 (ARMSTRONG ST.)
- 275 LF - 8" D.I. WATER MAIN
- 1 EA - 8" GATE VALVE IN VAULT
- 1 EA - 8" x 8" TEE
- 2 EA - 8" x 45° BENDS
- 200 C.Y. - TOPSOIL REPLACEMENT

WATER MAIN QUANTITIES

- 1 EA - 8" x 8" TEE
- 1 EA - 8" x 8" VALVE SEC. [illegible]

TEMPORARY EASEMENT FOR RELOCATING DRIVEWAY ENTRANCE

ADJUST MH 26" LT STA 48+10 PROP RIM 522.8

STA 47+50.00 BENTON STREET BEGIN IMPROVEMENT

STA 48+50.00 ℄ BENTON ST. = STA 10+00.00 ℄ ARMSTRONG ST.

STA 50+00.00 ℄ BENTON ST. = STA 27+61.25 ℄ ARMSTRONG ST.

CB-CB 36 RT STA 48+50 T. GRATE 523.70 INV 520.7

STA 52+50.00 BENTON STREET END IMPROVEMENT

℄ BENTON STREET

℄ ALLEY ENTRANCE

℄ DRIVEWAY CONNECTOR

PROPOSED ℄ ARMSTRONG ST.

PROPOSED ℄ CONNECTOR

PROPOSED ℄

EXISTING ℄

EXISTING ROW

PROP ROW

SEC 4-T33N-R7E-3PM

SEC 3-T33N-R7E-3PM

1" = 20' SCALE 20 10 0 20 40 FEET

B.M. NO. 3 - CHISELED "X" ON N.E. END OF CONC. WALK AT S.W. CORNER OF KIERSTED & BENTON ST. ON A-2 x ENDING AT KIERSTED ELEV. 524.23

STA 47+50.00 BENTON STREET BEGIN IMPROVEMENT

PROP PROFILE @ ℄

+0.36%

+2.85%

-2.11%

+0.20%

E.P. +14.00 ELEV. 527.63

℄ DIVISION ST. (STA. 47) ELEV. 528.00

E.P. +26.00 ELEV. 527.63

EXIST. GROUND ELEV. AT PROFILE

P.V.I. = STA 48+00 ELEV. = 522.67 VC = 100' X = 0.31'

P.V.I. = STA 52+00 ELEV. = 528.92 VC = 100' X = 0.29'

STA 52+50.00 BENTON STREET END IMPROVEMENT

EAR - HWORK QUANTITIES STA. 47+50 - 52+50

EAR H EXCAVATION - 151 CU YDS

FILL - 614 CU YDS

BENTON STREET

WATER MAIN

K+E PLATE 1/2" PLAN-PROFILE KEUFFEL & ESSER CO.

46 7020 PHOENIX

SEC. 4 - T. 33N - R. 7E - 3 PM

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		GRUNDY	III	48
STA. 10+00		TO STA. 15+00		
F.H.W.A. REG.		FUNDINGS	PROJEC	

STA. 11+00 TO 14+70 (ARMSTRONG ST.)
354 LF - 8" D.I. WATER MAIN
1 EA - 8"x6" TEE
1 EA - 6" GATE VALVE W/BOX

WATER MAIN QUANTITIES

CURVE DATA
[illegible]
[illegible] 03"
[illegible] 00.00
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] 49.26
[illegible] 45.60
[illegible] 12+00 TO 13+00

STA. 10+00.00 ℄ ARMSTRONG ST.
STA. [illegible] ℄ BENTON ST.

BENTON STREET

ALLEY (GRAVEL)

ALLEY ENTRANCE

PL. PROP. R.O.W.

EX. R.O.W.

EX. 12" SAN.

TO REMAIN IN PLACE

40' R

48

49

11

12

13

14

4

D

PROPOSED ℄ ARMSTRONG ST.

CONC. FOUNDATION

C-3 15' LT STA 12+00
E.P. 520.79
IN INV 517.73
OUT INV 517.63

A-3 15' LT STA 12+25
E.P. 520.00
INV 517.96

CB C-8 32' LT
STA 13+75
T GRATE 520.00
INV 517.12

SITE GRADE AREA FROM TOE OF SLOPE TO EXIST R.O.W.

12"x 28.5' S.S. T-1 @ 1%

12"x 26' S.S. T-1 @ 1%

12"x 60' S.S. T-1 @ 0.5%

D-3 41' RT STA 10+55
E.P. 523.16
INV 520.00

C-3 15' RT STA 11+96
E.P. 520.80
IN INV 517.37
OUT INV 517.27

A-3 15' RT STA 12+67
E.P. 520.62
INV. 516.95

12"x 34' S.S. T-1 @ 1%

WATER MAIN

12"x 11' S.S. T-1 @ 1%

12"x 138' S.S. T-2 @ 2.2%

519.89

PL 519.00

519.97

515.92

515.96

515.40

12"x 45' S.S. T-1 @ 0.5%

515.60

15"x 67' S.S. T-1 @ 0.5%

515.94

516.61

516.14

12"x 125' S.S. T-1 @ 0.5%

C-3 15' RT STA 14+00
E.P. 521.24
IN INV. 516.87
OUT INV. 516.77

EX. ROW

EX. 10" CONC.

2-IC 4' DIA. 98' LT
STA 28+09 (ILL 47)
T LID ELEV 524.5

M.H. SPEC. 4' DIA TYPE 1-C
100' LT STA 30+20 (ILL 47)
T LID ELEV 519.7

M.H. SPEC. 4' DIA TYPE 1-OPEN
89' LT. STA. 29+50 (ILL 47)
T LID ELEV 519.20

ALLEY

OPEN EASEMENT

WATER MAIN

WATER MAIN QUANTITIES
1 EA - 8"x6" TEE
1 EA - 6" GATE VALVE W/BOX
1 EA - 6" FIRE HYDRANT
1 EA - 8" GATE VALVE W/BOX

~~HEAVY VE LOCATION~~
2 ELLS 8" WATERMAIN
~~TO BE INSTALLED LATER~~

1" = 20' SCALE 20 10 0 20 40 FEET

B.M. No 3 - CHISELED "D" ON N.E. END OF CONC. WALK AT S.W. CORNER OF KIERSTED & BENTON ST., ON WALK ENDING AT KIERSTED
ELEV 524.23

PROFILE

BENTON ST.
ELEV. 524.10

HYD. E. FAY T
ELEV. 523.86

525

520

EXIST. GROUND O'ER STORM SEWER

-2.00%

-0.36%

PROP. PROFILE AT ℄

+0.42%

EXIST. GROUND ELEV AT PROP. ℄

12"x 138' S.S. T-2 @ 2.2%

519.89

519.00

M.H. 98' LT
STA 28+09 (ILL 47)

15"x 67' S.S. T-1 @ 0.5%

515.96

515.40

M.H. 89' LT
STA 29+50 (ILL 47)

516.14

516.61

P.V.I. STA. 11+80
ELEV. = 521.11
V.C. = 100'
X = 0.21'

P.V.I. STA. 12+80
ELEV. = 520.70
V.C. = 100'
X = 0.12'

M.H. 100' LT
STA 30+20 (ILL 47)

ARMSTRONG ST.

WATER MAIN

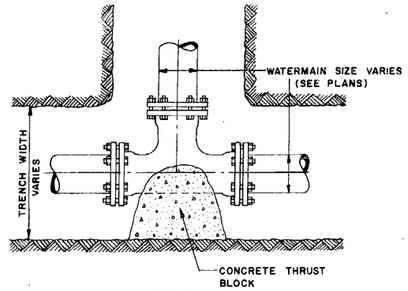
10 1 2 3 4 15

K+E PLATE 1 | PLAN-PROFILE
KEUFFEL & ESSER CO.
46 7080 PHOENIX® TRACING CLOTH
MADE IN U.S.A.

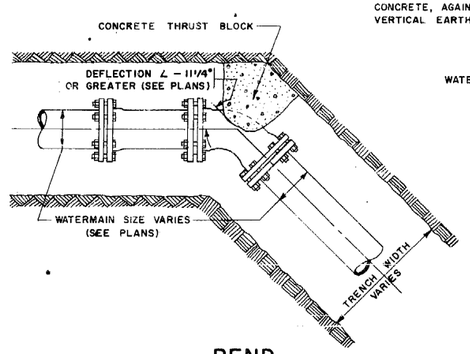
PLAN	BY	DATE
SURVEYED		
PLOTTED	GRW	6-75
ALIGNMENT CHECKED	GRW	6-75
RT. OF WAY CHECKED		
NOTE BOOK		
NO.		

PROFILE	BY	DATE
SURVEYED		
PLOTTED	GRW	6-75
GRADES CHECKED	GRW	6-75
B.M. NO. NOTED		
S.R. NOTED & NOTES CHECKED		
NOTE BOOK		
NO.		

WATERMAIN CONSTRUCTION STANDARDS

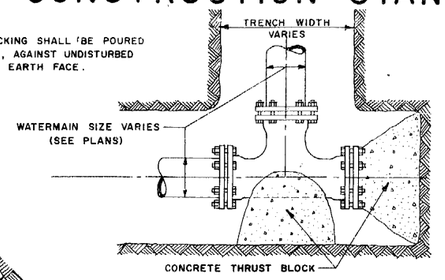


TEE

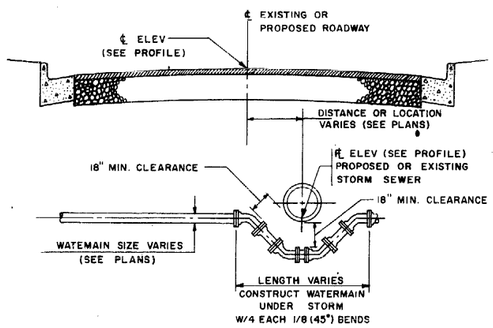


NOTE: ALL BLOCKING SHALL BE POURED CONCRETE, AGAINST UNDISTURBED VERTICAL EARTH FACE.

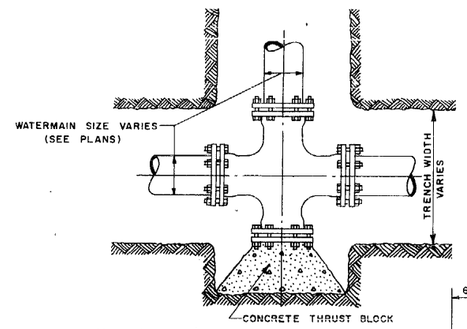
BEND



TEE & PLUG

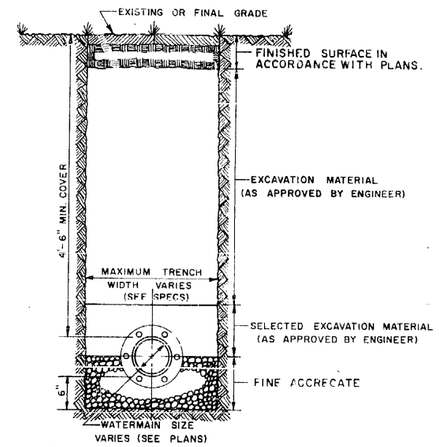


SPECIAL WATERMAIN CONSTRUCTION UNDER STORM SEWER

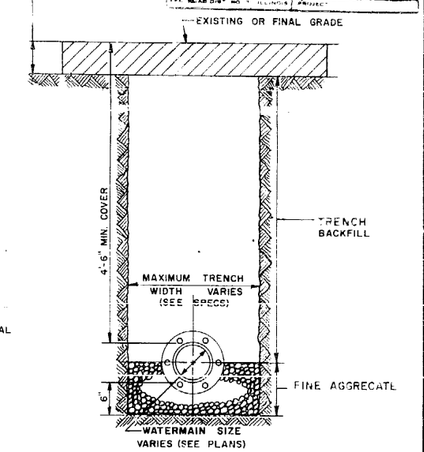


CROSS & PLUG

PROPOSED PAVEMENT - SEE TYPICAL ROADWAY SECTIONS

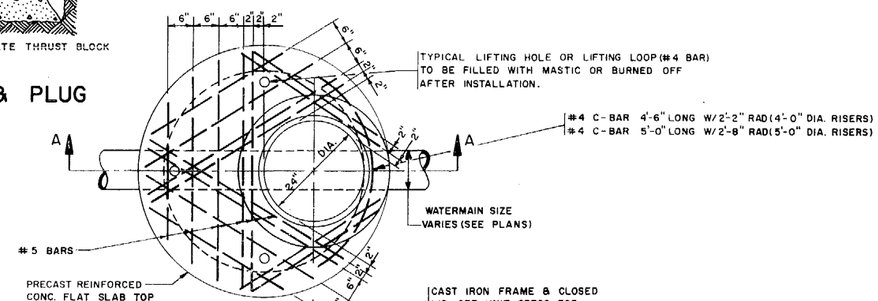


CASE I - UNDER NON-PAVED AREAS

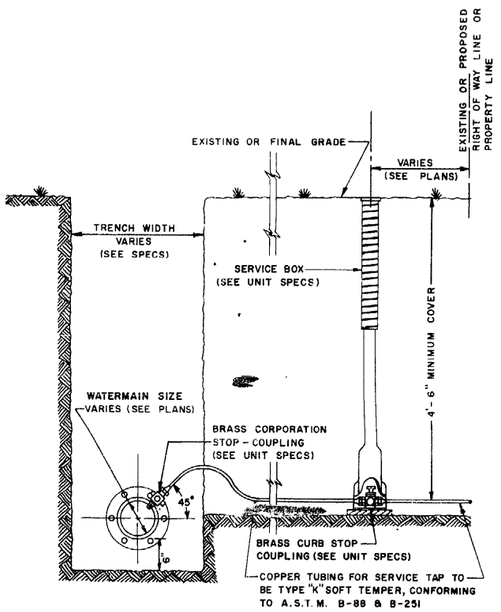


CASE II - UNDER PROPOSED PAVEMENT & SWK

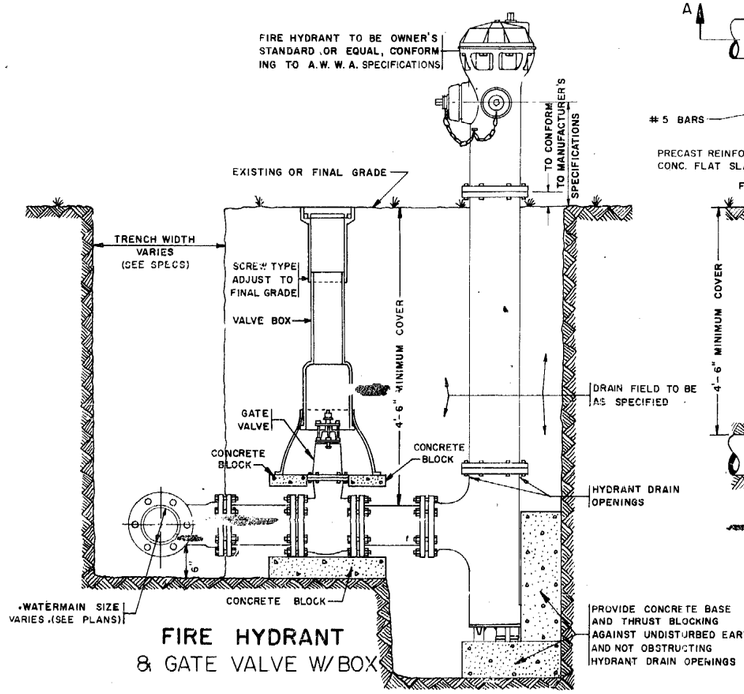
TYPICAL WATERMAIN TRENCHES



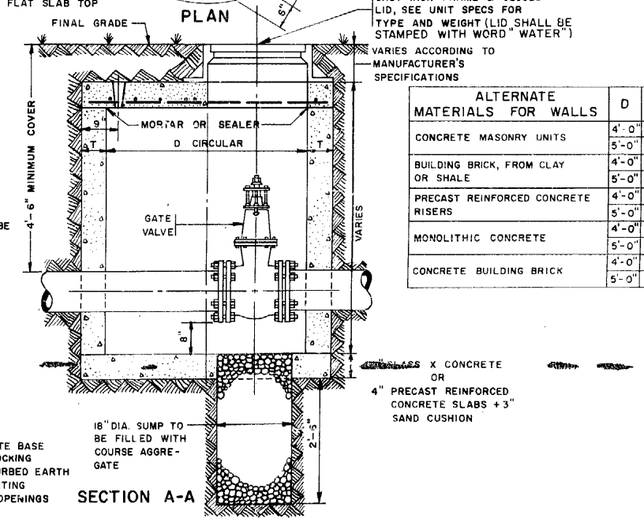
PLAN



WATER SERVICE TAP



FIRE HYDRANT & GATE VALVE W/ BOX



SECTION A-A

GATE VALVE IN VAULT

ALTERNATE MATERIALS FOR WALLS	D	T
CONCRETE MASONRY UNITS	4'-0"	5"
	5'-0"	5"
BUILDING BRICK, FROM CLAY OR SHALE	4'-0"	8"
	5'-0"	8"
PRECAST REINFORCED CONCRETE RISERS	4'-0"	4"
	5'-0"	5"
MONOLITHIC CONCRETE	4'-0"	6"
	5'-0"	6"
CONCRETE BUILDING BRICK	4'-0"	8"
	5'-0"	8"

DIAMETER OF WATERMAIN	D
8 INCHES AND UNDER	4'-0"
10 INCHES AND OVER	5'-0"

NOTES:

VALVE VAULTS SHALL BE CONSTRUCTED ONLY WHEN WATERMAIN VALVE FALL IN PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.

BRICK, CONC. MASONRY UNITS, AND PRECAST REINFORCED CONCRETE RISERS SHALL BE LAID IN FULL MORTAR BEDS WITH FLUSH JOINTS.

SUMP FOR VALVE VAULT SHALL BE CONSTRUCTED ONLY WHEN NOTED IN UNIT SPECS OR WHEN SHOWN ON PLANS.

CONTRACT UNIT PRICE FOR VALVE VAULT, SHALL INCLUDE THE COST OF:

FURNISHING AND PLACING THE SAND CUSHION, WHEN USED;

FURNISHING AND PLACING THE FRAME AND CLOSED LID SPECIFIED IN THE UNIT SPECS OR ON THE PLANS;

FURNISHING AND PLACING THE SUMP WHEN SPECIFIED ON THE PLANS OR IN THE UNIT SPECS;

FURNISHING AND PLACING THE PRECAST REINFORCED CONCRETE FLAT SLAB TOP.

CAST IRON OR GALVANIZED IRON STEPS WILL NOT BE REQUIRED UNLESS SPECIFIED IN UNIT SPECS.

BAD COPY

WATER MAIN RELOCATION

FEDERAL AID PROJECT NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
100	111 (HUB) 8002-1	Grundy	111	50

SCHEDULE OF QUANTITIES

CODE NO.	ITEM	UNIT	*	FG	F	*
				4		
				4		
				33	33	247
				7	7	
				6	7	
				34	7	
				1851	103	4979
				6	7	
				3	7	25
				7	1	
	8" D.I. WATER MAIN, JACKED	L.F.		133	48	
				163		163

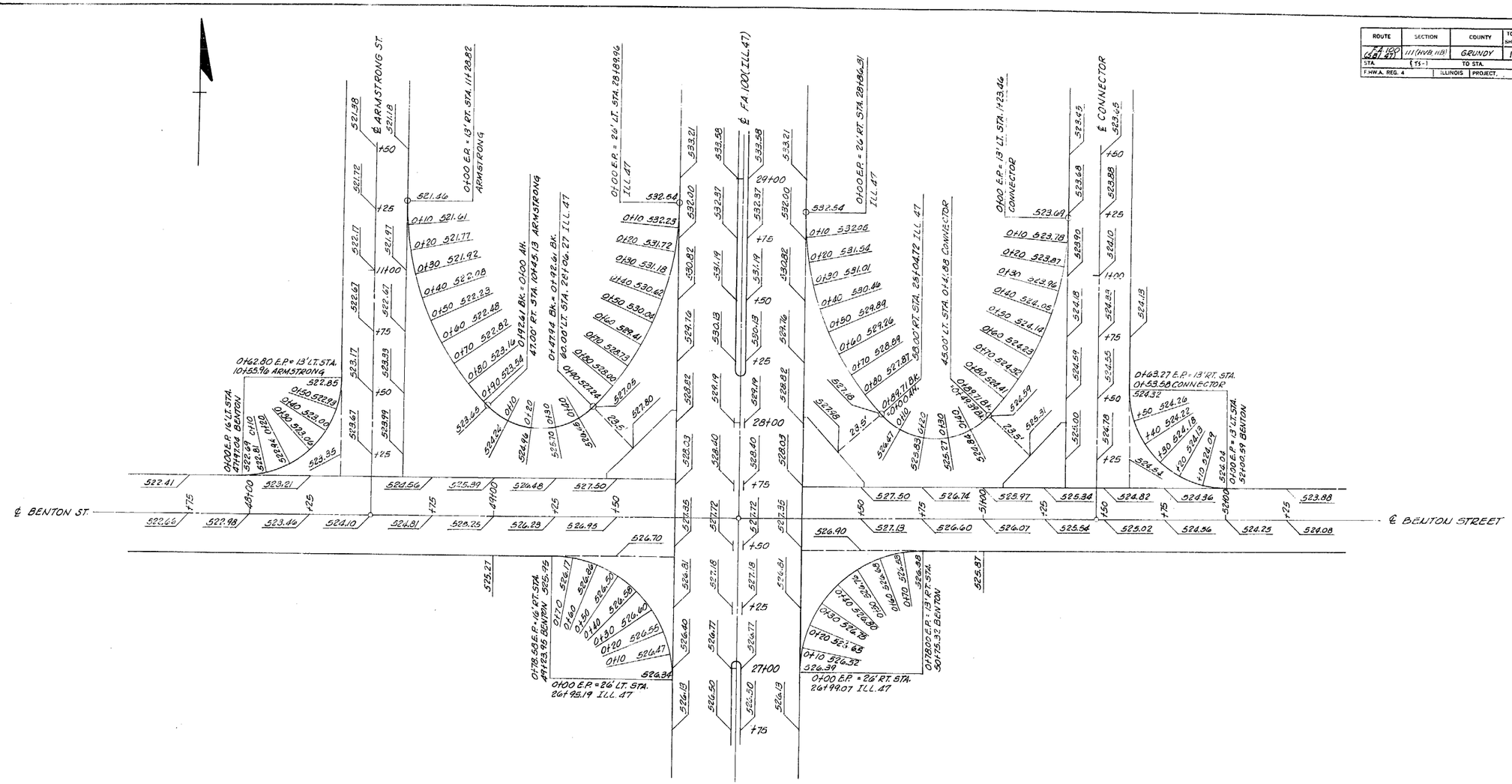
* ALTERNATE DETAILS FOR OPEN CUT

WATER MAIN

Rev. 1-8-79

BAD COPY

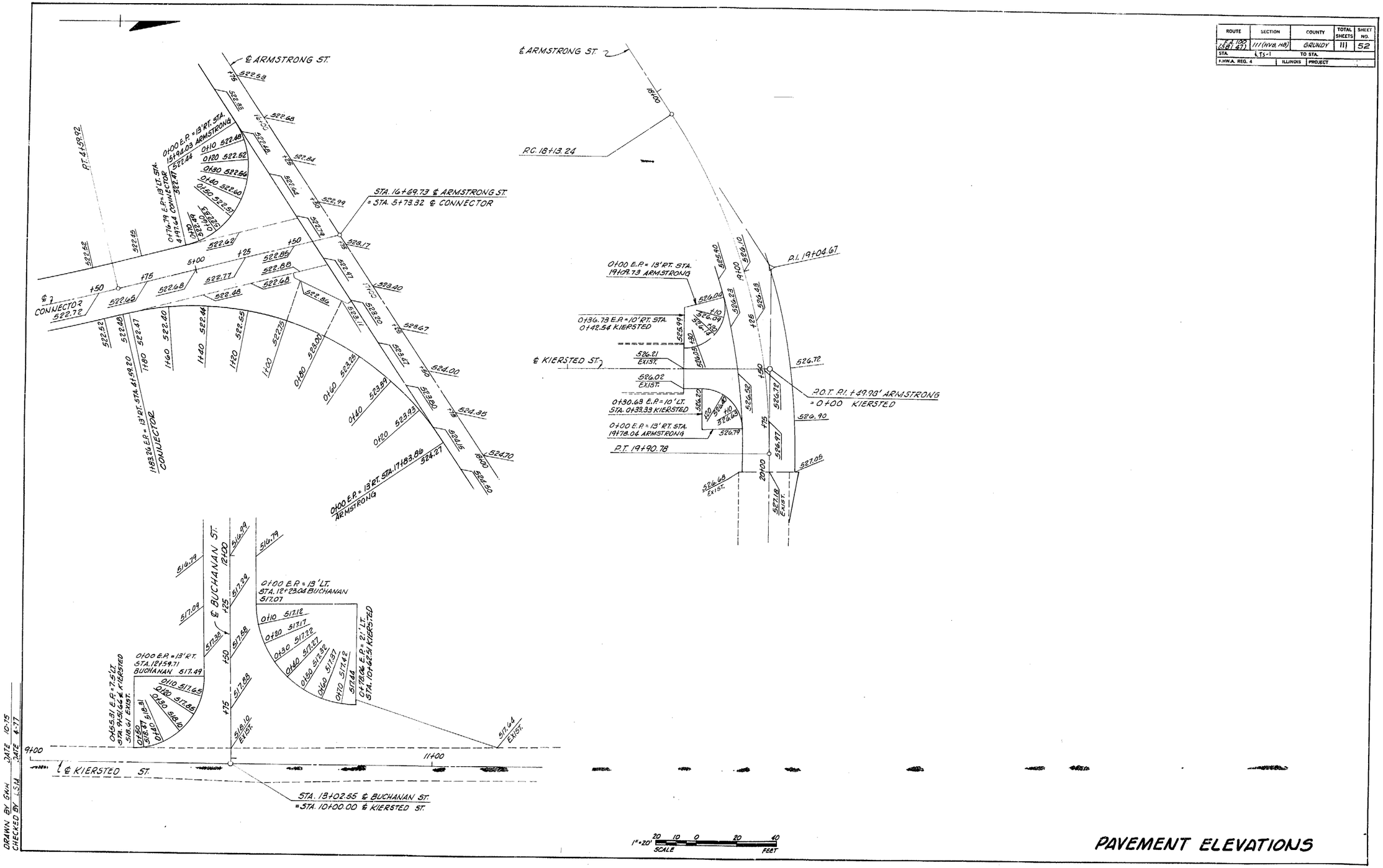
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA 100 (ILL 47)	111 (HVB, HB)	GRUNDY	111	51
STA. (T5-1)		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



PAVEMENT ELEVATIONS

DRAWN BY GHW DATE 10-75
CHECKED BY LSN DATE 4-77

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 100 (SBI 47)	111 (HVB, HB)	GRUNDY	111	52
STA. 4+75-1		TO STA.		
F.HW.A. REG. 4	ILLINOIS	PROJECT		



DRAWN BY GKH DATE 10-75
CHECKED BY L.S.H. DATE 4-77

PAVEMENT ELEVATIONS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 00 (38) 47)	111 (IVR. HB)	GRUNDY	111	53
STA.	(T.)	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

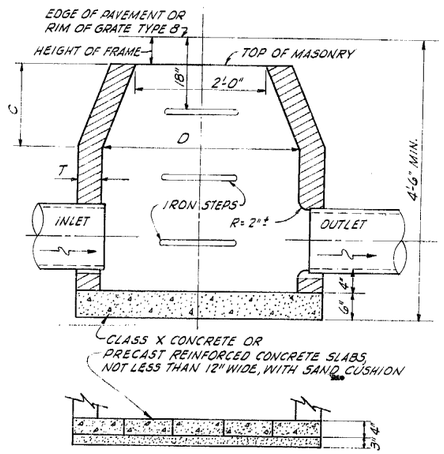
CONSTRUCTION DRAWING
INLET TYPE "C"

ALL INLETS TYPE "C" SHALL BE 3'-0" IN DIAMETER UNLESS OTHERWISE NOTED ON THE PLANS.

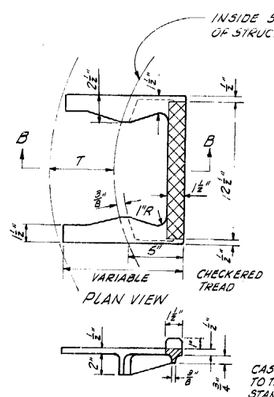
ALTERNATE MATERIALS FOR WALLS	D	C	T (MIN.)
CONCRETE MASONRY UNITS	3'-0" 4'-0"	1'-3" 2'-6"	5" 5"
BUILDING BRICK, GRADE SW. FROM CLAY OR SHALE	3'-0" 4'-0"	1'-3" 2'-6"	8" 8"
PRECAST REINFORCED CONCRETE RISERS	3'-0" 4'-0"	1'-3" 2'-6"	3" 4"
MONOLITHIC CONCRETE	3'-0" 4'-0"	1'-3" 2'-6"	6" 6"
CONCRETE BUILDING BRICK GRADE A	3'-0" 4'-0"	1'-3" 2'-6"	8" 8"

INLET TYPE "C" TO BE PROVIDED WITH:

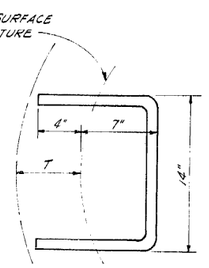
TYPE 1 FRAME OPEN LID
OR TYPE 3 FRAME
OR TYPE 5 FRAME OPEN LID
OR TYPE 6 FRAME
OR TYPE 8 GRATE
OR TYPE 9 GRATE
OR TYPE 10 FRAME
OR TYPE 11 FRAME
OR TYPE 12 FRAME
OR TYPE 15 FRAME



SECTION A-A



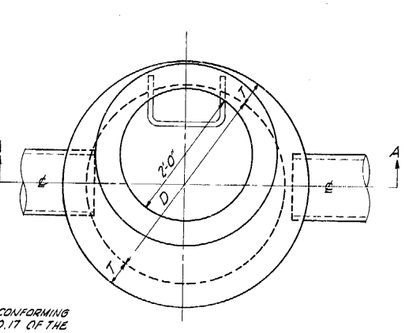
PLAN VIEW



1" ROUND GALVANIZED IRON STEPS

CAST IRON STEPS

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 710.17 OF THE STANDARD SPECIFICATIONS.



PLAN VIEW

NOTES:

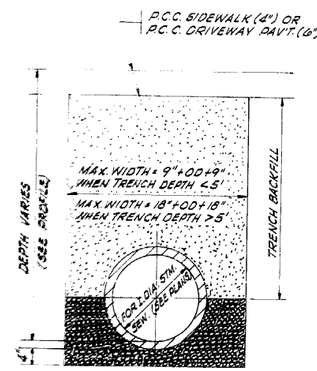
1.) THE INLET INVERT SHALL BE ±1" OR MORE ABOVE OUTLET INVERT.

2.) THE METAL STEPS SHALL BE EITHER 1" GALVANIZED IRON BARS OR CAST IRON AS SHOWN IN THE DETAILS. THE STEPS SHALL BE SPACED 12" TO 16" C TO C.

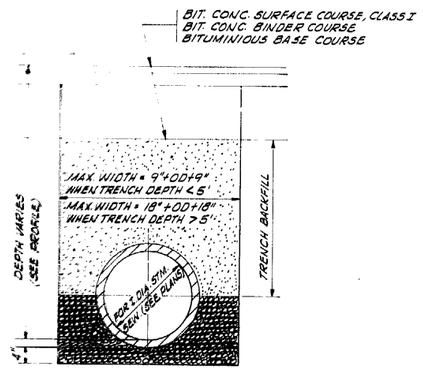
3.) THE CONTRACT UNIT PRICE FOR INLETS TYPE "C" INCLUDE THE COST OF FURNISHING AND PLACING THE FRAME AND LID OR GRATE, THE METAL STEPS, AND, WHEN REQUIRED, THE SAND CUSHION.

4.) STEPS SHALL BE EMBEDDED INTO WALL A MINIMUM OF 4" EXCEPT FOR THE 9" WALL. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

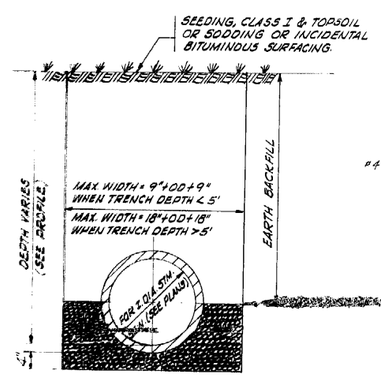
5.) FOR LOCATIONS - SEE PLANS



UNDER DRIVES & WALKS

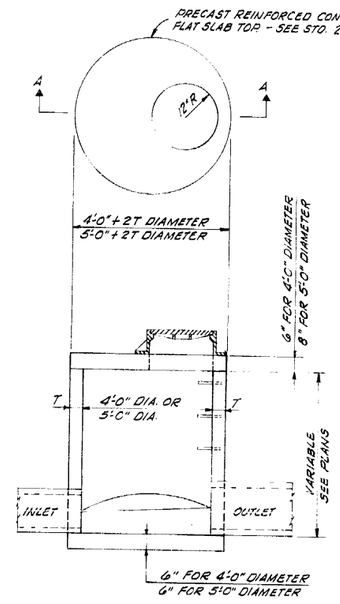


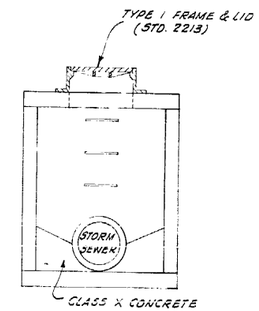
UNDER ROADWAY



THROUGH SHOULDER

TYPICAL TRENCH DETAILS
STORM SEWER CONSTRUCTION

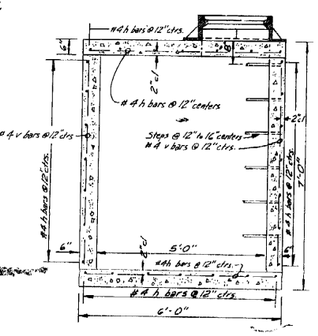


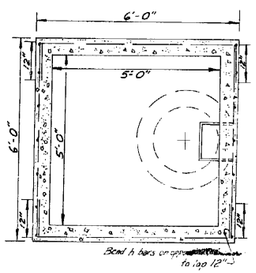


MANHOLE SPECIAL - 4 FT. OR 5 FT. DIAMETER

NOTES:

1. MANHOLE TO BE 48" OR 60" DIAMETER R.C.C.P. TYPE I.
2. STEPS, MANHOLE BOTTOM SLAB, AND OTHER MANHOLE DETAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 1527.
3. THE PRECAST REINFORCED CONCRETE FLAT SLAB TOP SHALL BE OF CLASS X CONCRETE AND CONSTRUCTED IN ACCORDANCE WITH STD. 2354.
4. SEE PLANS FOR EXACT LOCATIONS.
5. THE CONTRACT UNIT PRICE FOR MANHOLE SPECIAL 4' OR 5' DIAMETER SHALL INCLUDE TYPE I FRAME AND LID AND SHALL INCLUDE PRECAST REINFORCED CONCRETE FLAT SLAB TOP.





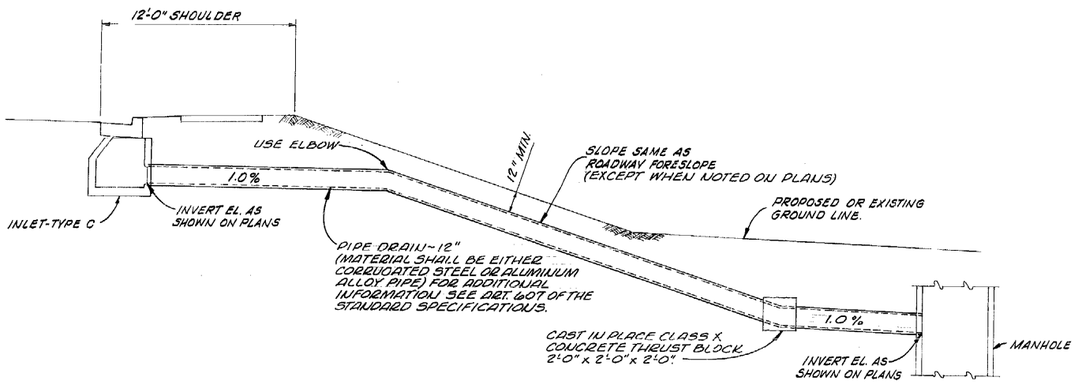
MANHOLE 5 FT. X 5 FT. - SPECIAL
STA. 10+80 (BUCHANAN STREET)

DRAWN BY G.W.J. DATE 7-76
CHECKED BY L.S.M. DATE 4-77

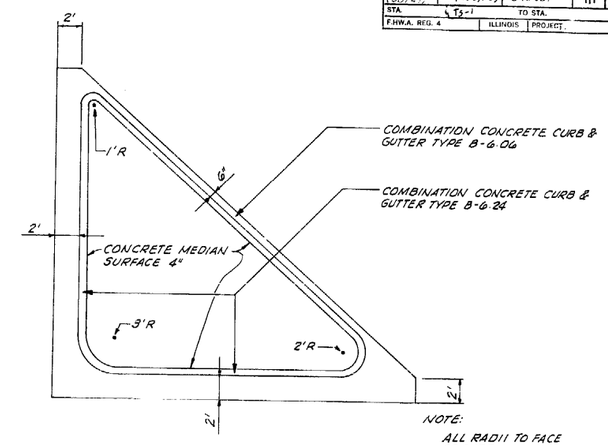
SPECIAL DETAILS

Rev. 1-8-79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 S.B. 117	111 (HVB, HB)	GRUNDY	111	54
STA.	13-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

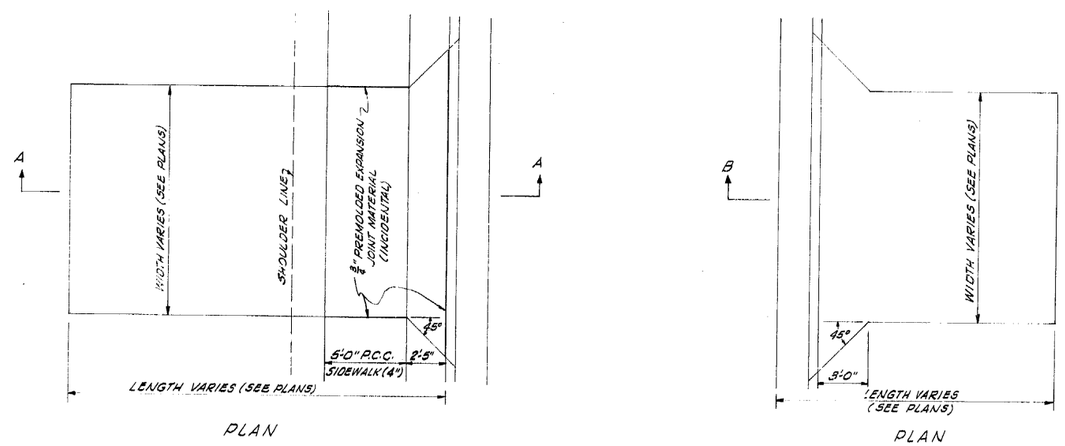


DETAIL- 12" PIPE DRAIN

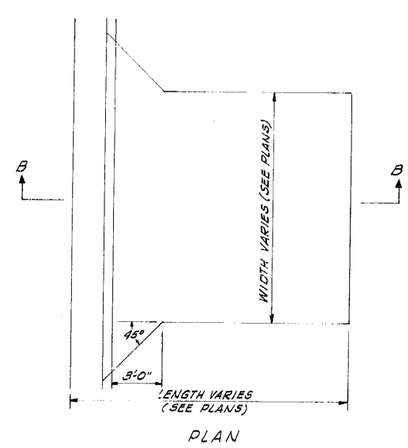


NOTE:
ALL RADII TO FACE OF CURB.

ISLAND DETAIL



PLAN



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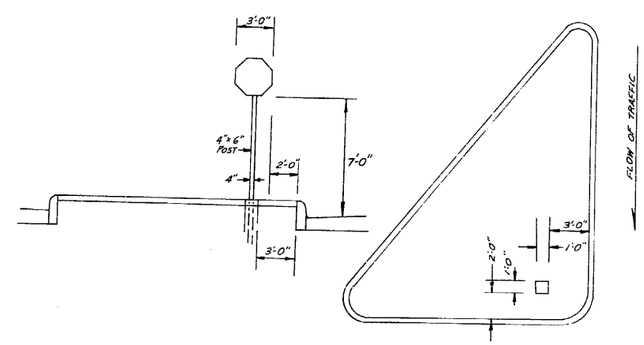
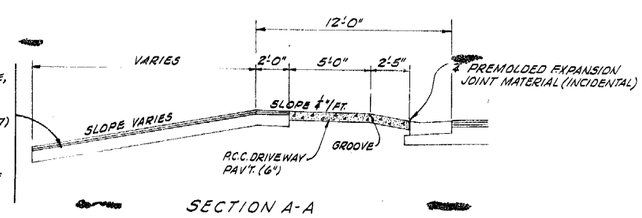
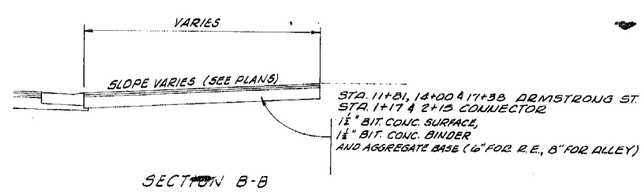


ISLAND OMISSIONS
DETAIL FOR STOP SIGNS



SECTION A-A

DETAIL - DRIVEWAY ENTRANCE



SECTION B-B

DETAIL - DRIVEWAY & ALLEY ENTRANCE

DRAWN BY S.W.H. DATE 7-76
CHECKED BY J.S.M. DATE 4-77

SPECIAL DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SH 47)	111 (VPB-B 25-1)	GRUNDY	111	55
STA.	TO STA.			
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

SCHEDULE OF QUANTITIES

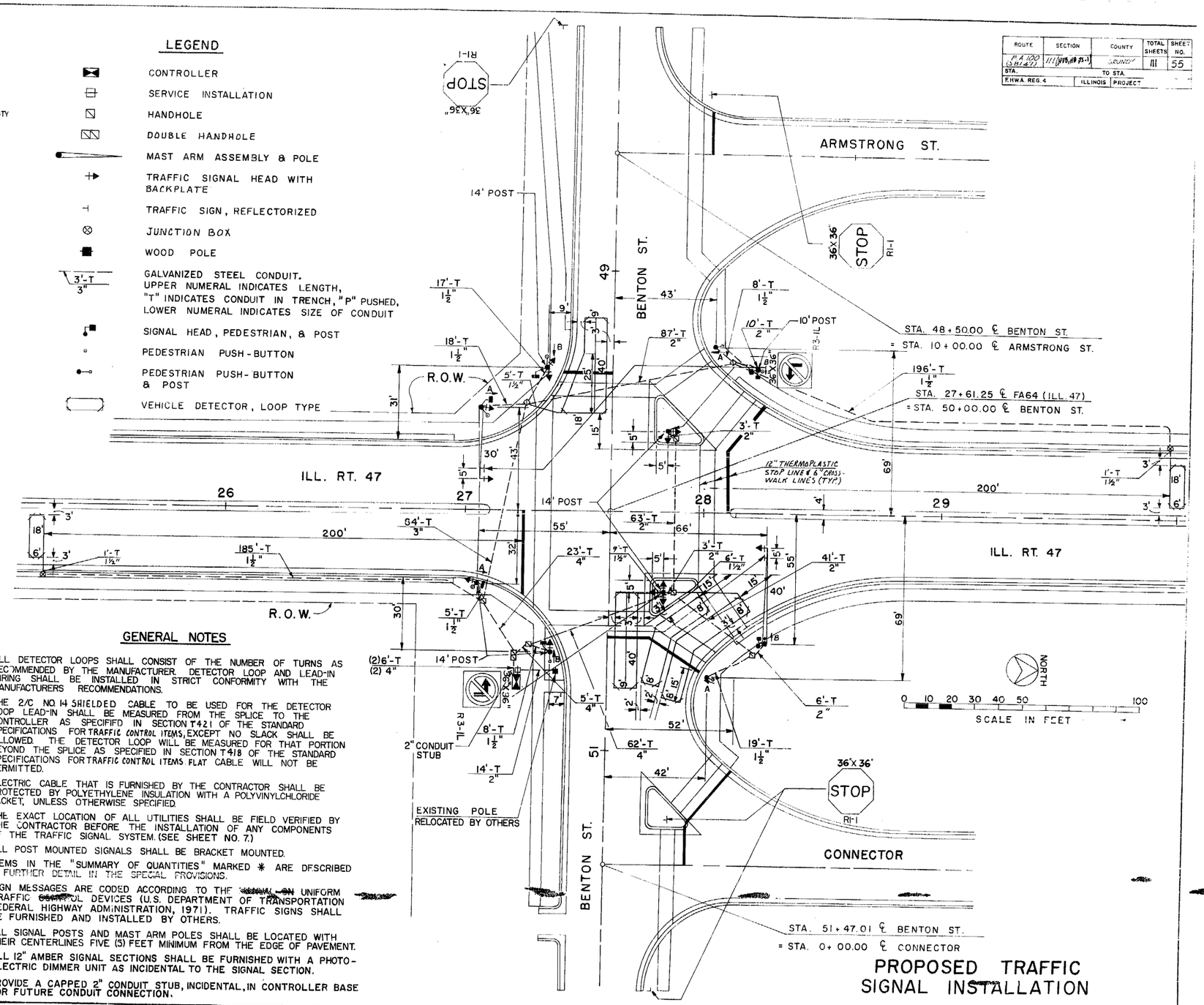
CODE NO.	ITEM	UNIT	QUANTITY
T40002	SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
T40003	SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
T40011	SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
T40019	SIGNAL HEAD, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
T40202	PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	4
T40204	PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	2
T40301	TRAFFIC SIGNAL BACKPLATE	EACH	12
T40605	TRAFFIC SIGNAL POST, 10 FT.	EACH	1
T40609	TRAFFIC SIGNAL POST, 14 FT.	EACH	5
T40701	PEDESTRIAN PUSH-BUTTON POST	EACH	2
T40849	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
T40854	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
T41125	FULL-ACTUATED CONTROLLER, 2 PHASES, VOLUME DENSITY FOR ONE PHASE, DIGITAL TIMING, IN TYPE III CABINET	EACH	1
T41603	INDUCTION LOOP DETECTOR AMPLIFIER, DIGITAL DESIGN	EACH	2
T41607	INDUCTION LOOP DETECTOR AMPLIFIER WITH CALL DELAY, DIGITAL DESIGN	EACH	4
T41801	DETECTOR LOOP	LIN FT	590
T41901	PEDESTRIAN PUSHBUTTON	EACH	8
T42004	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/2"	LIN FT	478
T42005	GALVANIZED STEEL CONDUIT IN TRENCH 2"	LIN FT	227
T42007	GALVANIZED STEEL CONDUIT IN TRENCH 3"	LIN FT	84
T42009	GALVANIZED STEEL CONDUIT IN TRENCH 4"	LIN FT	102
T42132	ELECTRIC CABLE IN CONDUIT NO. 12 2/c	LIN FT	1194
T42133	ELECTRIC CABLE IN CONDUIT NO. 12 3/c	LIN FT	386
T42134	ELECTRIC CABLE IN CONDUIT NO. 12 5/c	LIN FT	685
T42135	ELECTRIC CABLE IN CONDUIT NO. 12 7/c	LIN FT	383
T42136	ELECTRIC CABLE IN CONDUIT NO. 12 9/c	LIN FT	300
T42184	ELECTRIC CABLE IN CONDUIT NO. 14 2/c, SHIELDED	LIN FT	1070
* T42607	SERVICE INSTALLATION, SPECIAL	EACH	1
T42701	CONCRETE FOUNDATION, TYPE A	LIN FT	18
T42702	CONCRETE FOUNDATION, TYPE D	LIN FT	3.5
T42704	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	LIN FT	22.0
T42801	HANDHOLE	EACH	7
T42803	DOUBLE HANDHOLE	EACH	1
T42901	JUNCTION BOX	EACH	2
T43001	TRENCH AND BACKFILL	LIN FT	891
T50104	THERMOPLASTIC PAVEMENT MARKING 6"	LIN FT	3604
T50106	THERMOPLASTIC PAVEMENT MARKING 12"	LIN FT	419

LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- HANDHOLE
- DOUBLE HANDHOLE
- MAST ARM ASSEMBLY & POLE
- TRAFFIC SIGNAL HEAD WITH BACKPLATE
- TRAFFIC SIGN, REFLECTORIZED
- JUNCTION BOX
- WOOD POLE
- 3'-T / 3" — GALVANIZED STEEL CONDUIT. UPPER NUMERAL INDICATES LENGTH, "T" INDICATES CONDUIT IN TRENCH, "P" PUSHED, LOWER NUMERAL INDICATES SIZE OF CONDUIT
- SIGNAL HEAD, PEDESTRIAN, & POST
- PEDESTRIAN PUSH-BUTTON
- PEDESTRIAN PUSH-BUTTON & POST
- VEHICLE DETECTOR, LOOP TYPE

GENERAL NOTES

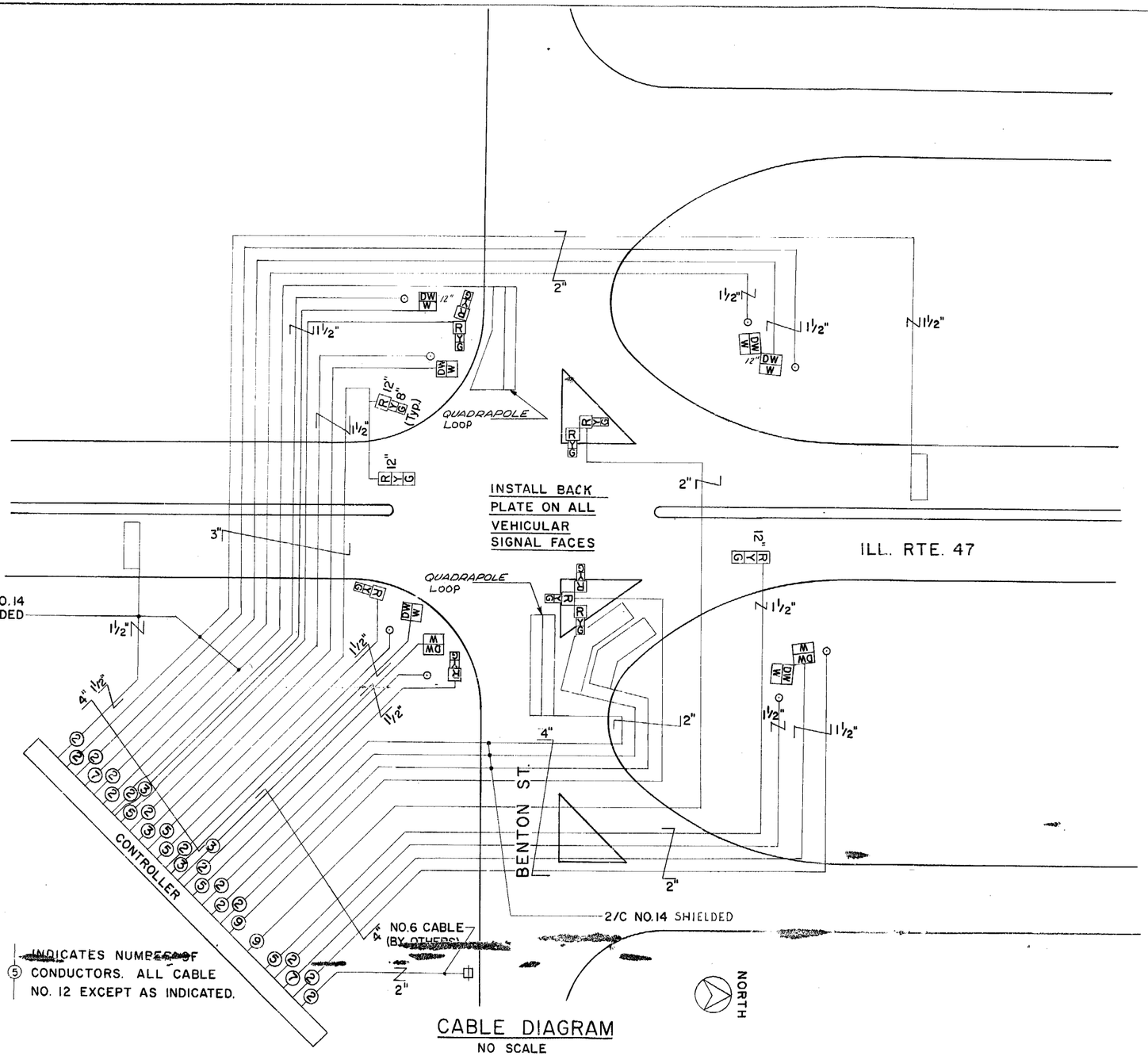
1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS AS RECOMMENDED BY THE MANUFACTURER. DETECTOR LOOP AND LEAD-IN WIRING SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURERS RECOMMENDATIONS.
2. THE 2/C NO 14 SHIELDED CABLE TO BE USED FOR THE DETECTOR LOOP LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER AS SPECIFIED IN SECTION T421 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS, EXCEPT NO SLACK SHALL BE ALLOWED. THE DETECTOR LOOP WILL BE MEASURED FOR THAT PORTION BEYOND THE SPLICE AS SPECIFIED IN SECTION T418 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. FLAT CABLE WILL NOT BE PERMITTED.
3. ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET, UNLESS OTHERWISE SPECIFIED.
4. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. (SEE SHEET NO. 7.)
5. ALL POST MOUNTED SIGNALS SHALL BE BRACKET MOUNTED.
6. ITEMS IN THE "SUMMARY OF QUANTITIES" MARKED * ARE DESCRIBED IN FURTHER DETAIL IN THE SPECIAL PROVISIONS.
7. SIGN MESSAGES ARE CODED ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION, 1971). TRAFFIC SIGNS SHALL BE FURNISHED AND INSTALLED BY OTHERS.
8. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINES FIVE (5) FEET MINIMUM FROM THE EDGE OF PAVEMENT.
9. ALL 12" AMBER SIGNAL SECTIONS SHALL BE FURNISHED WITH A PHOTO-ELECTRIC DIMMER UNIT AS INCIDENTAL TO THE SIGNAL SECTION.
10. PROVIDE A CAPPED 2" CONDUIT STUB, INCIDENTAL, IN CONTROLLER BASE FOR FUTURE CONDUIT CONNECTION.



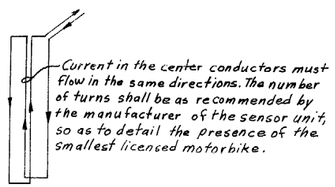
PROPOSED TRAFFIC SIGNAL INSTALLATION

TRAFFIC SIGNALS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (SBI 47)	111 (INV B, 118 B, 17-1)	GRUNDY	111	56
STA.		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



CABLE DIAGRAM
NO SCALE



QUADRUPOLE DETECTOR LOOP

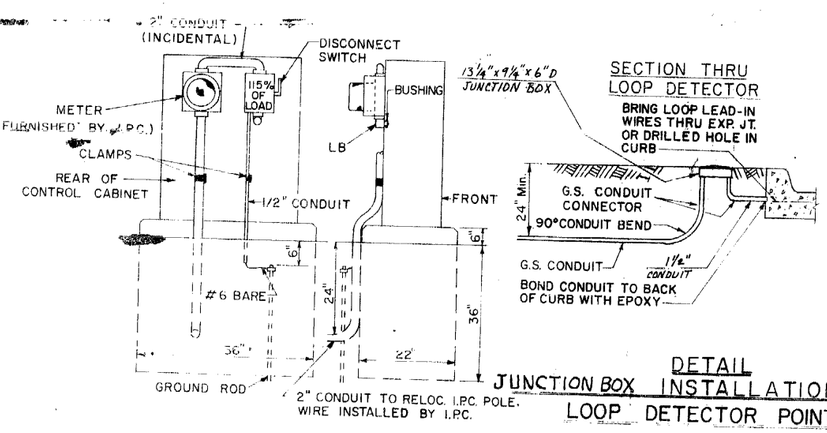
PROPOSED SEQUENCE OF OPERATION

PHASE	A			B			FLASH OPER.
MOVEMENT							
INTERVAL	1	2	3	4	5	6	
STREET \ CHANGE TO			B			A	
ILL. RTE. 47 NORTHBOUND, NEAR RIGHT, INTERMEDIATE RIGHT, & FAR RIGHT	G	G	Y	R	R	R	Y
ILL. RTE. 47 SOUTHBOUND, NEAR RIGHT, FAR RIGHT, & FAR LEFT	G	G	Y	R	R	R	Y
BENTON ST. WESTBOUND, NEAR RIGHT, FAR RIGHT, & FAR LEFT	R	R	R	G	G	Y	R
BENTON ST. EASTBOUND, NEAR RIGHT, FAR RIGHT, & FAR LEFT	R	R	R	G	G	Y	R
PEDESTRIAN ACROSS ILL. RTE. 47	DW	DW	DW	W*	Fla.* DW	DW	DARK
PEDESTRIAN ACROSS BENTON ST.	W*	Fla.* DW	DW	DW	DW	DW	DARK

* PEDESTRIAN SIGNALS DISPLAY "WALK" AND FLASHING "DONT WALK" ONLY WHEN PEDESTRIAN DETECTOR IS ENERGIZED. AT OTHER TIMES PEDESTRIAN SIGNALS SHALL DISPLAY "DONT WALK".

TRAFFIC SIGNALS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI 47)	111 (WB, NB) B-1	GRUNDY	111	57
STA.		TO STA.		
F.H.W.A. REG. 4		ILLINOIS	PROJECT	



JUNCTION BOX DETAIL

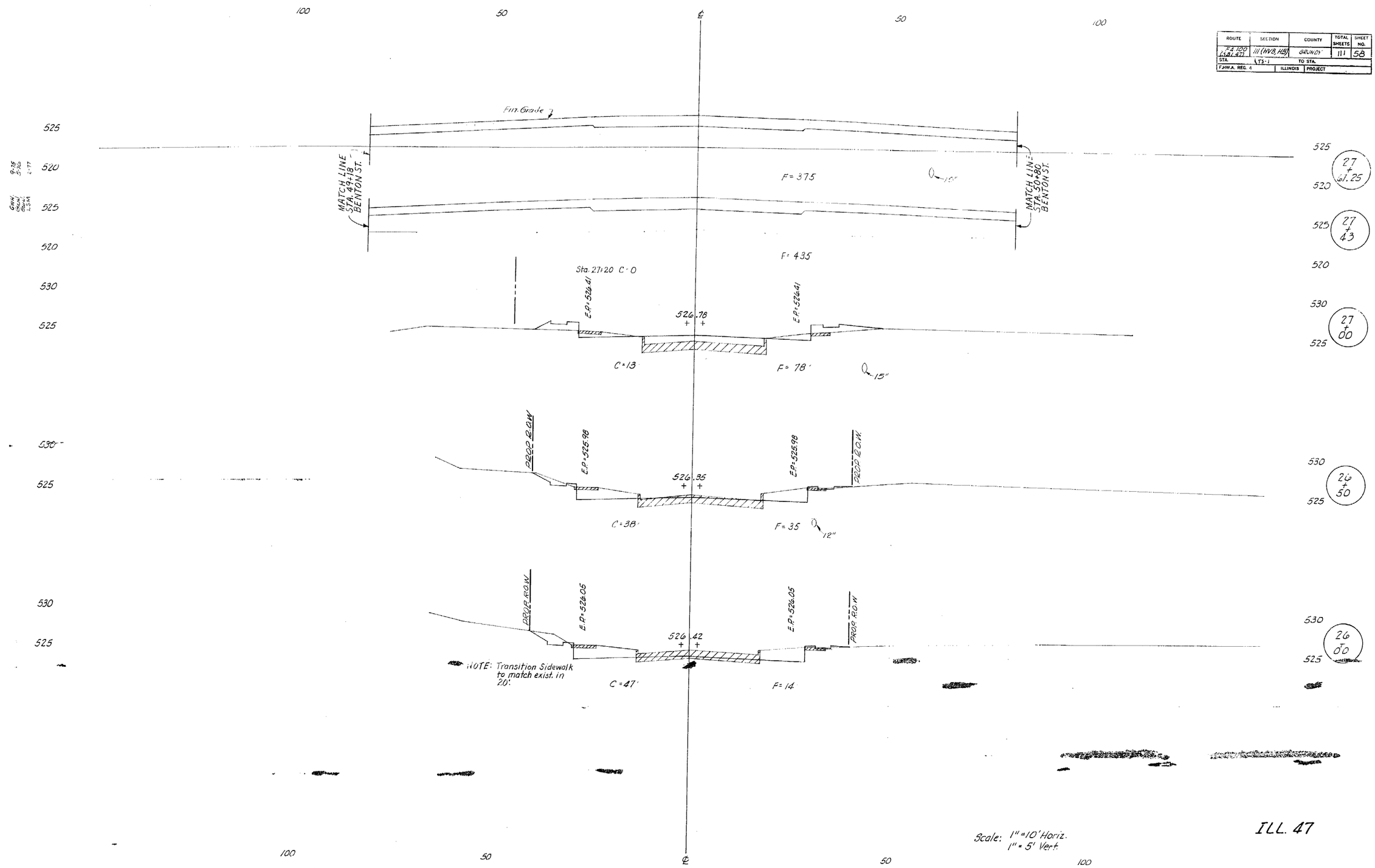
INSTALLATION FOR LOOP DETECTOR POINT

SERVICE INSTALLATION, SPECIAL

TRAFFIC SIGNALS

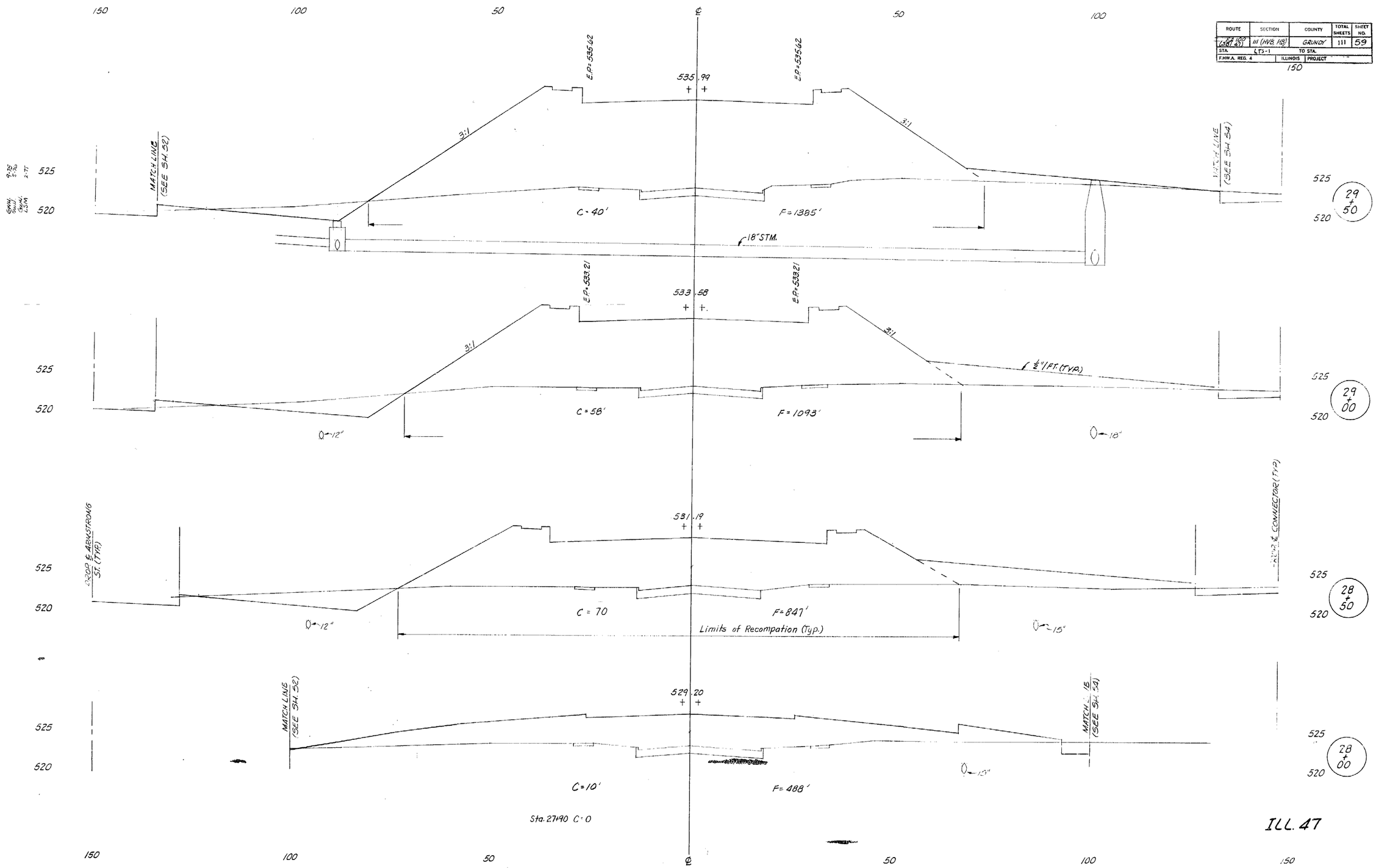
BAD COPY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (U.S. 47)	III (HVB, HB)	GRUNDY	111	58
STA.	LT5-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



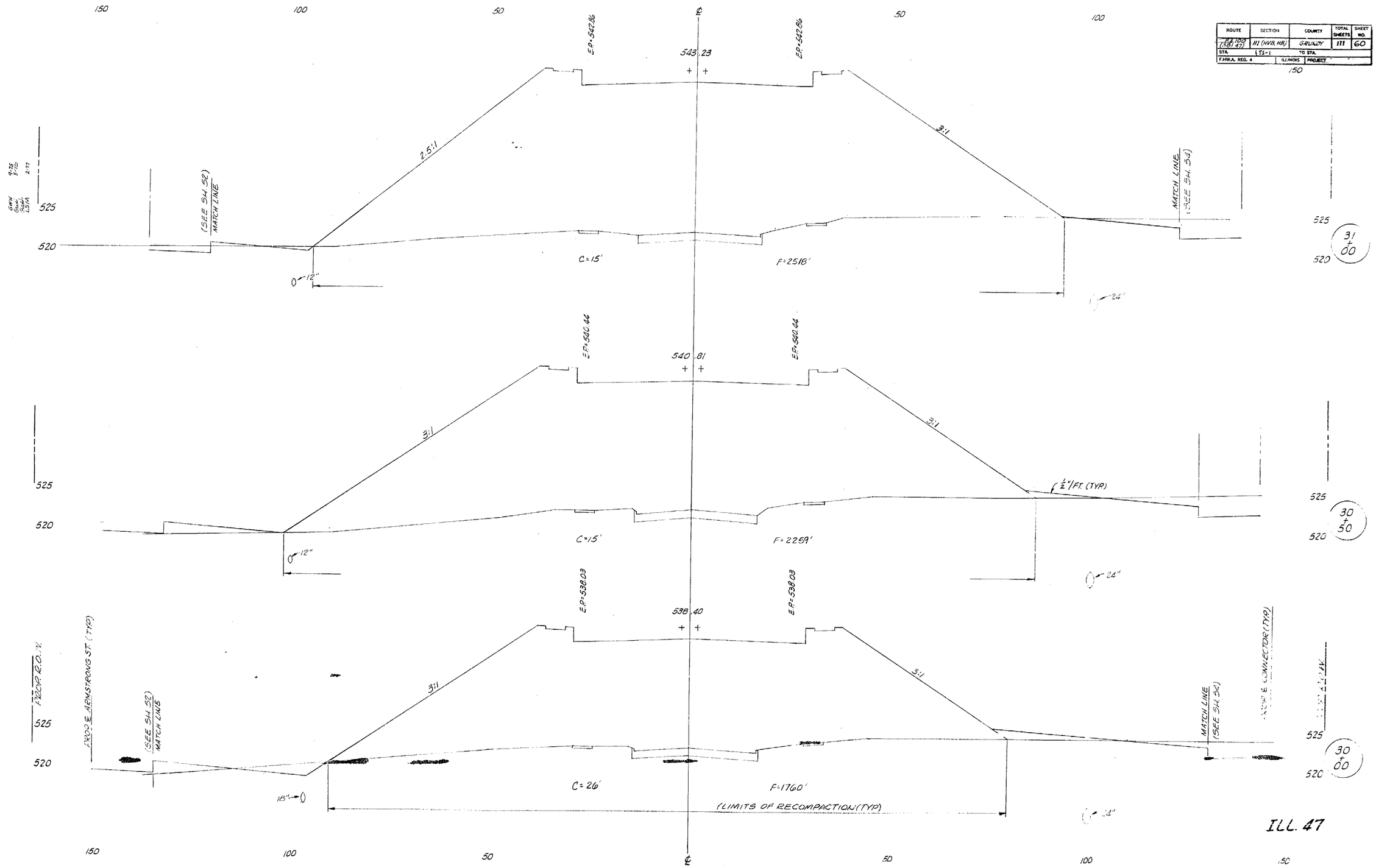
ILL. 47

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (SBI 47)	III (HVB, HB)	GRUNDY	111	59
STA. LT3-1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



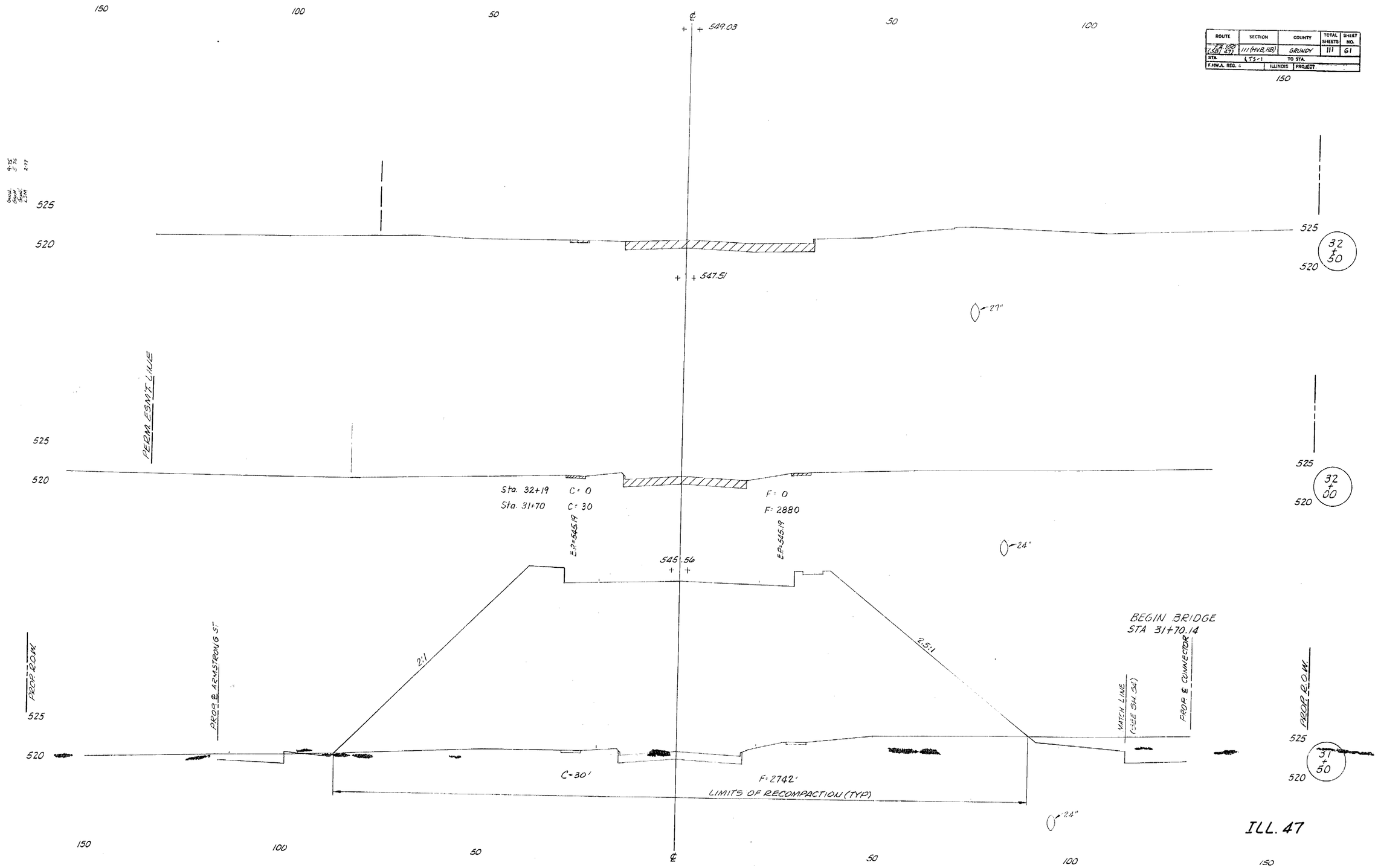
ILL. 47

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 1012 (SBI 47)	III (HVR, HR)	GRUNDY	111	60
STA.	LTS-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

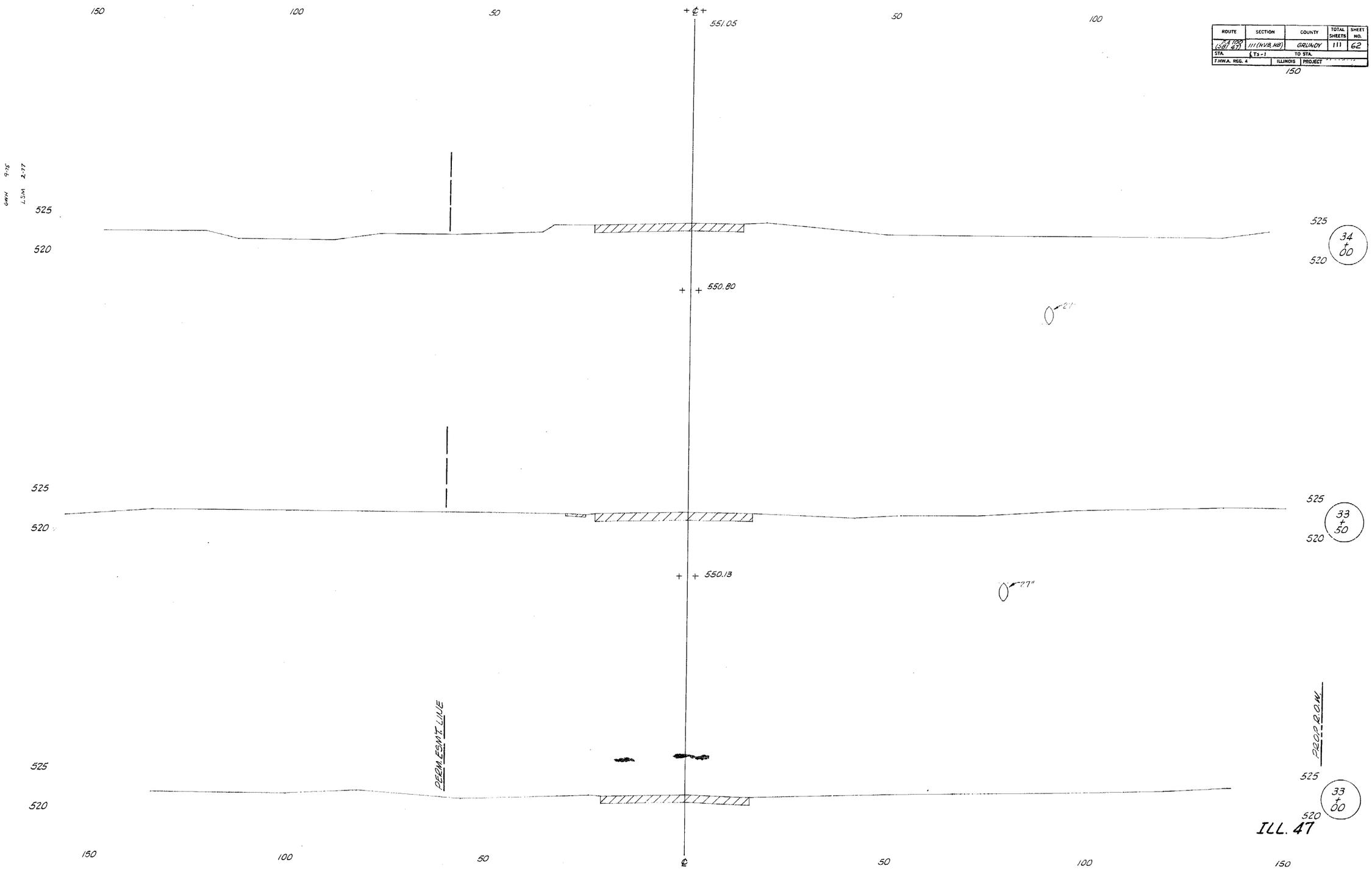


ILL. 47

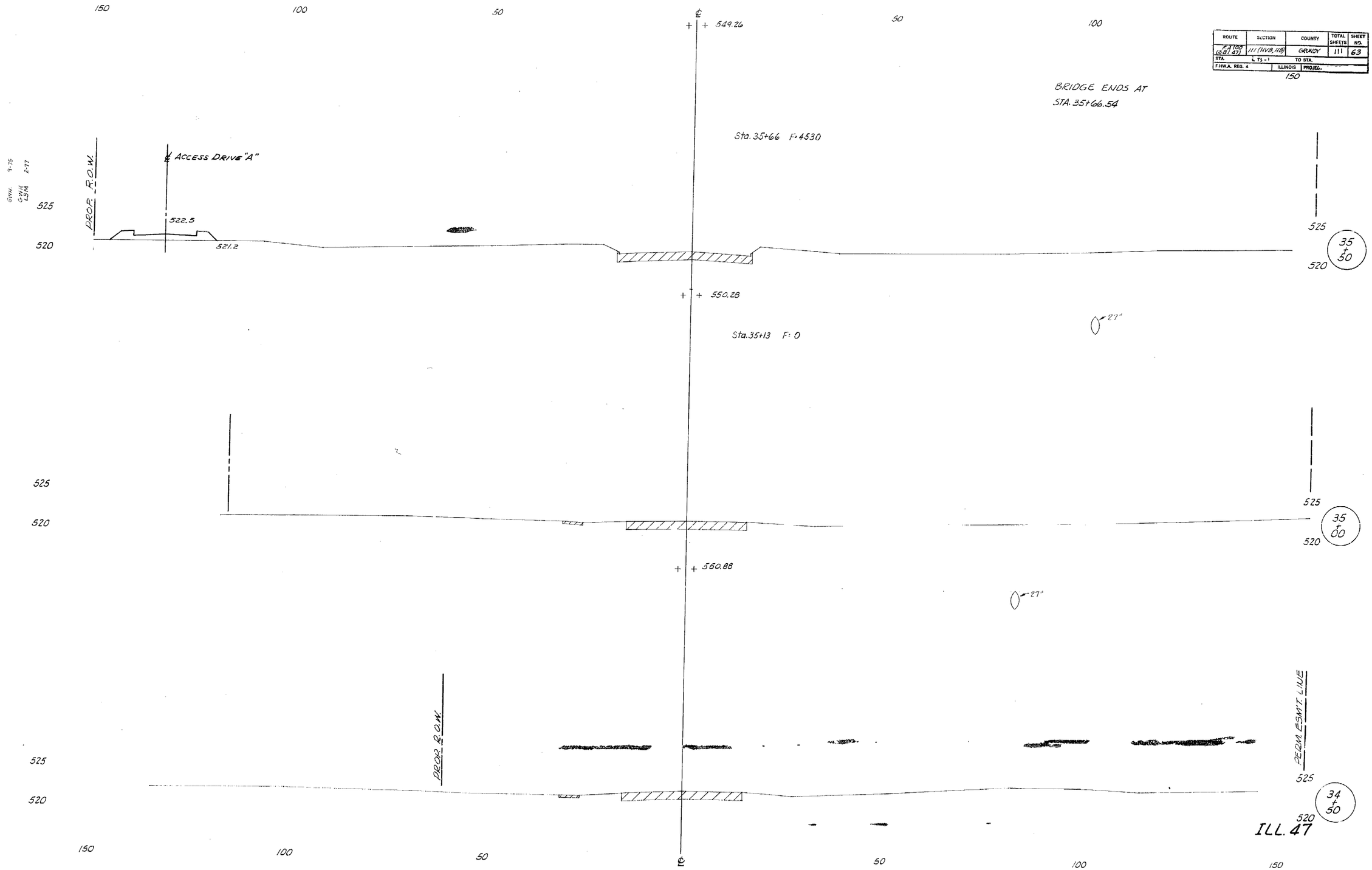
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI 47)	111 (HVB, HB)	GRUNDY	111	61
STA. ℄ T5-1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



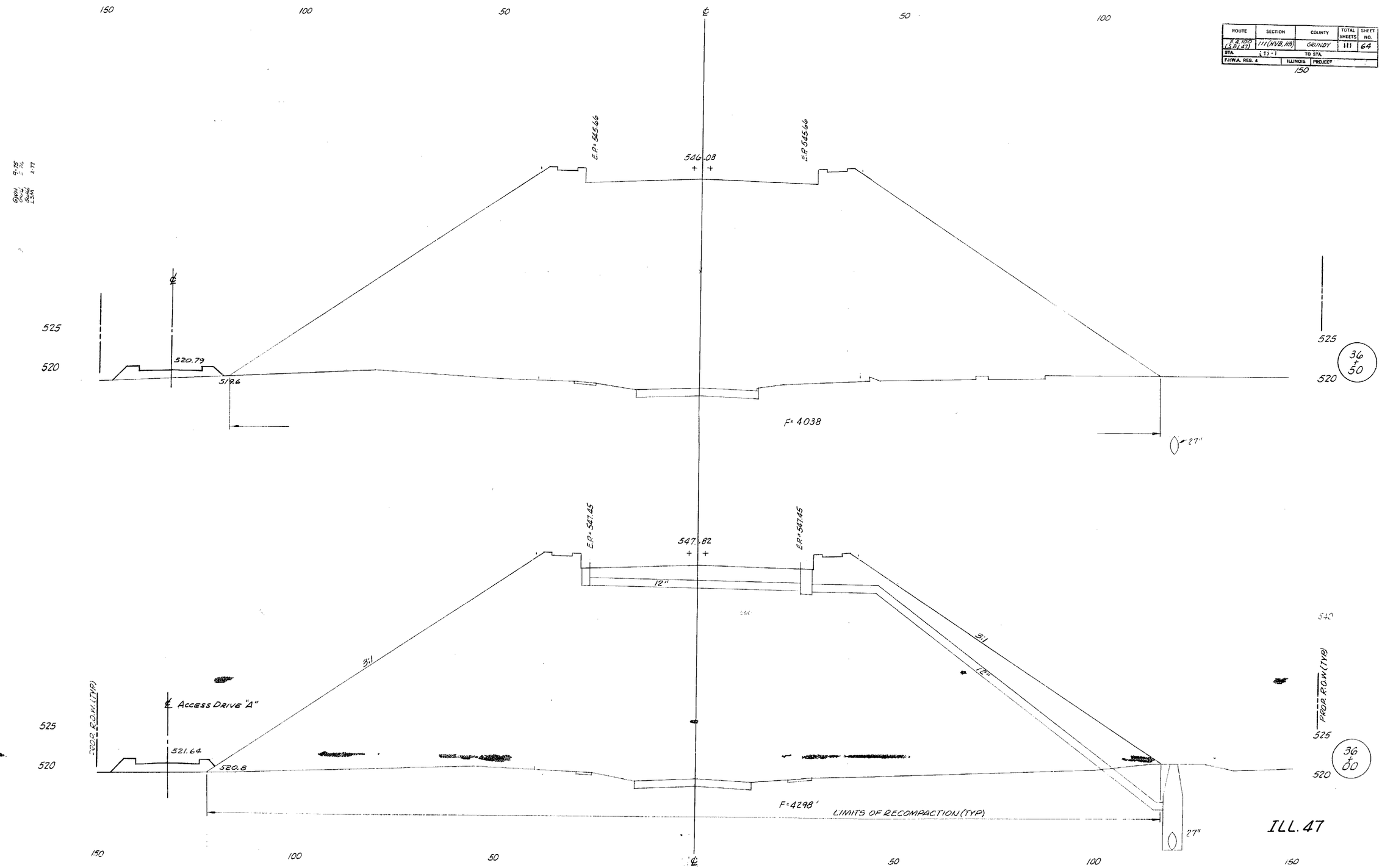
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (SB 47)	111 (HVB, HB)	GRUNDY	111	62
STA.	℄ TS-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (US 67)	111 (HV28, 118)	GRUNDY	111	63
STA.	L T5 - 1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT.		

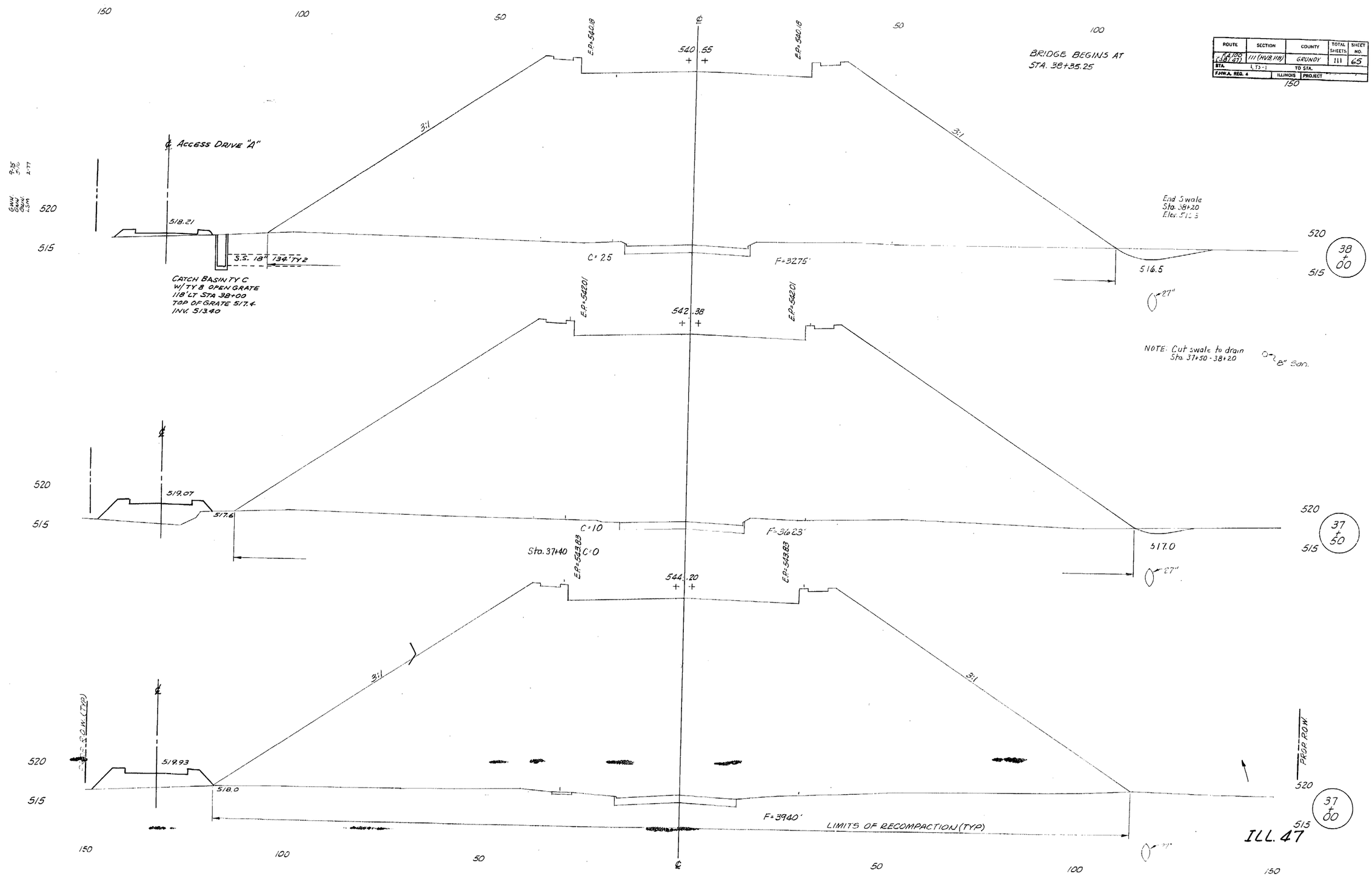


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (I.B.I.47)	111(HVB,HB)	GRUNDY	111	64
STA. ↓ T5-1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

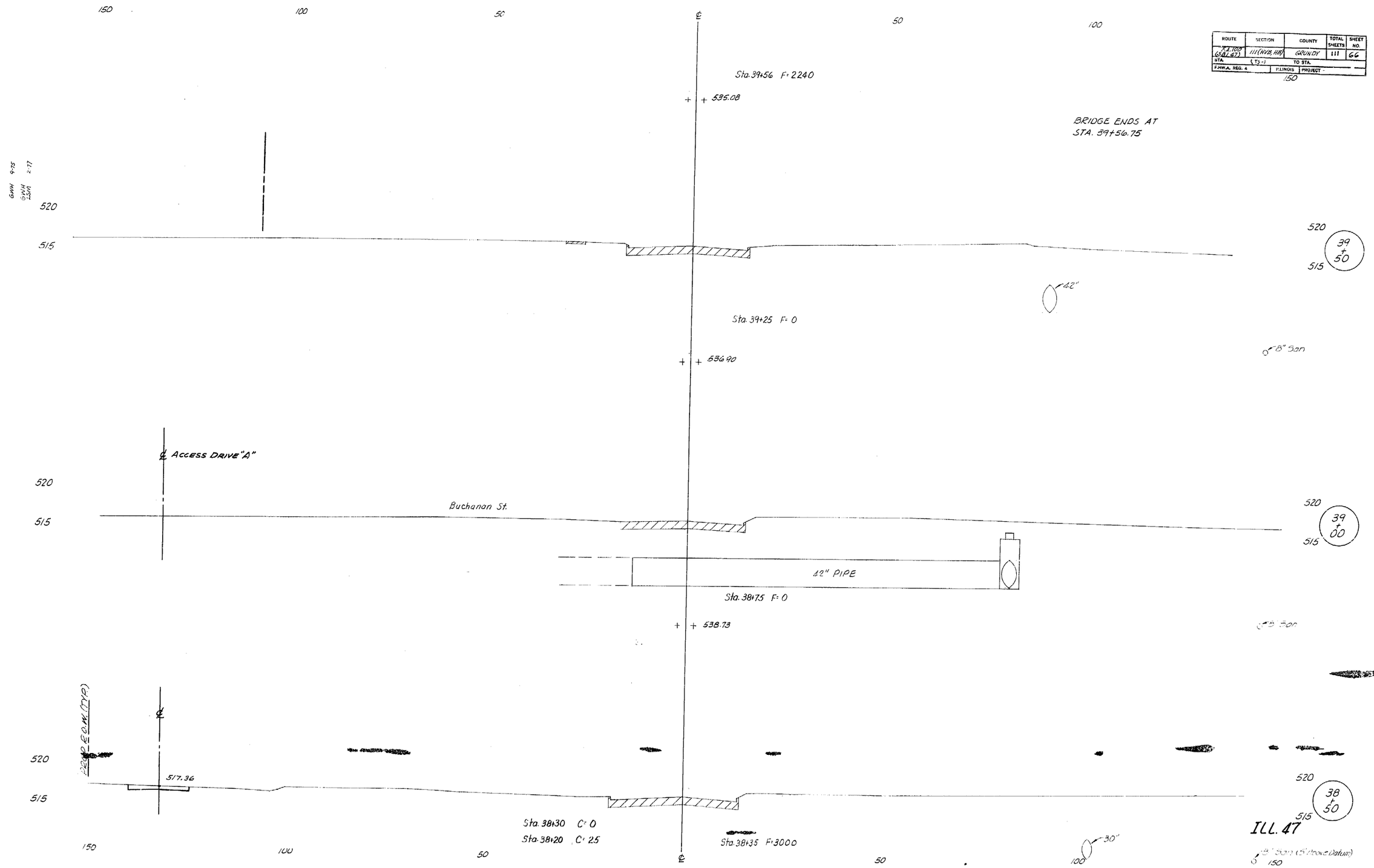


ILL. 47

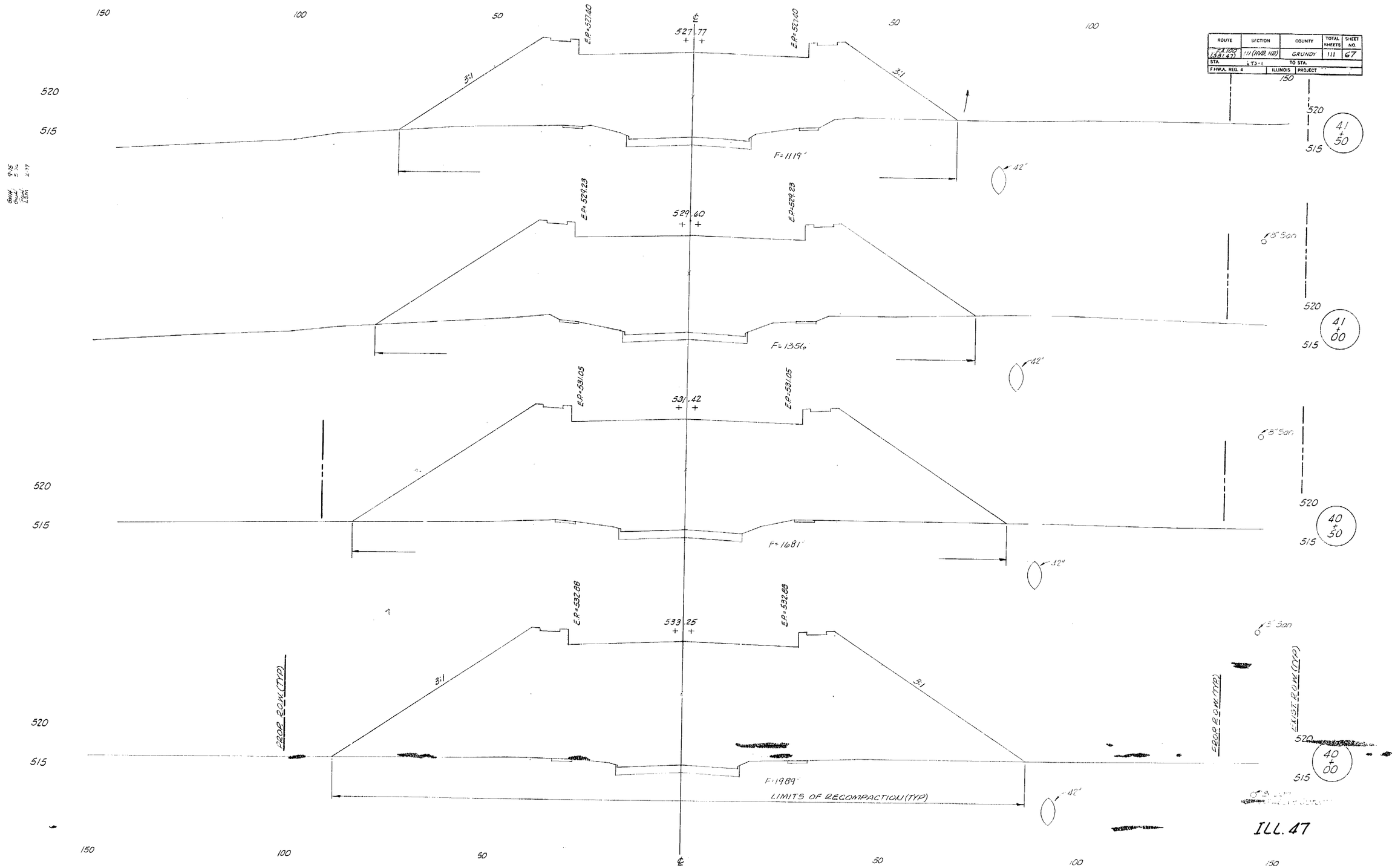
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.100 (38,47)	III (HVB.118)	GRUNDY	111	65
STA.	I, T3-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



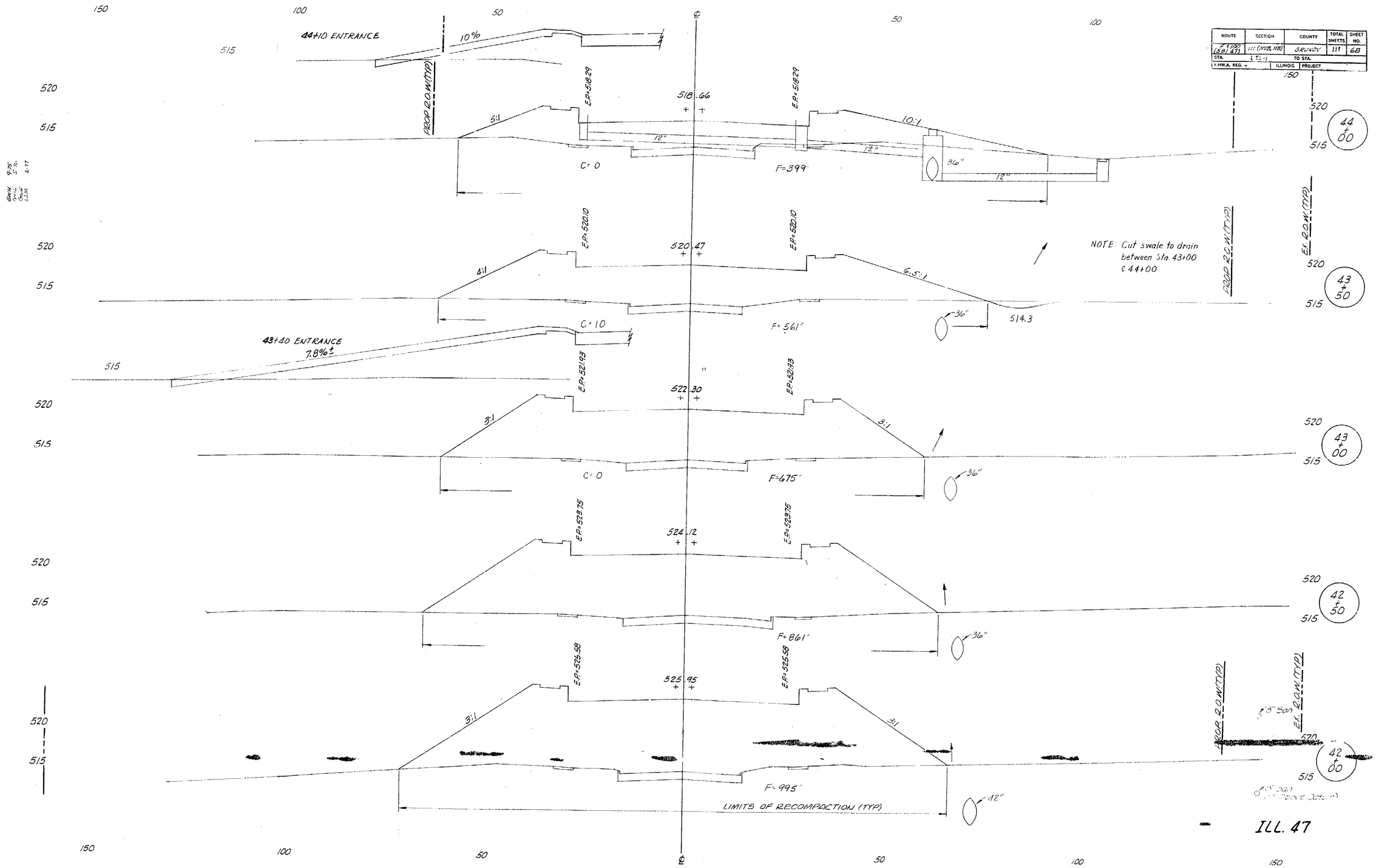
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (SBI 47)	111 (WB, HB)	GRUNDY	111	66
STA. (T3-)		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 100 (SBI 47)	111 (WB, HB)	GRUNDY	111	67
STA.	& T3-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



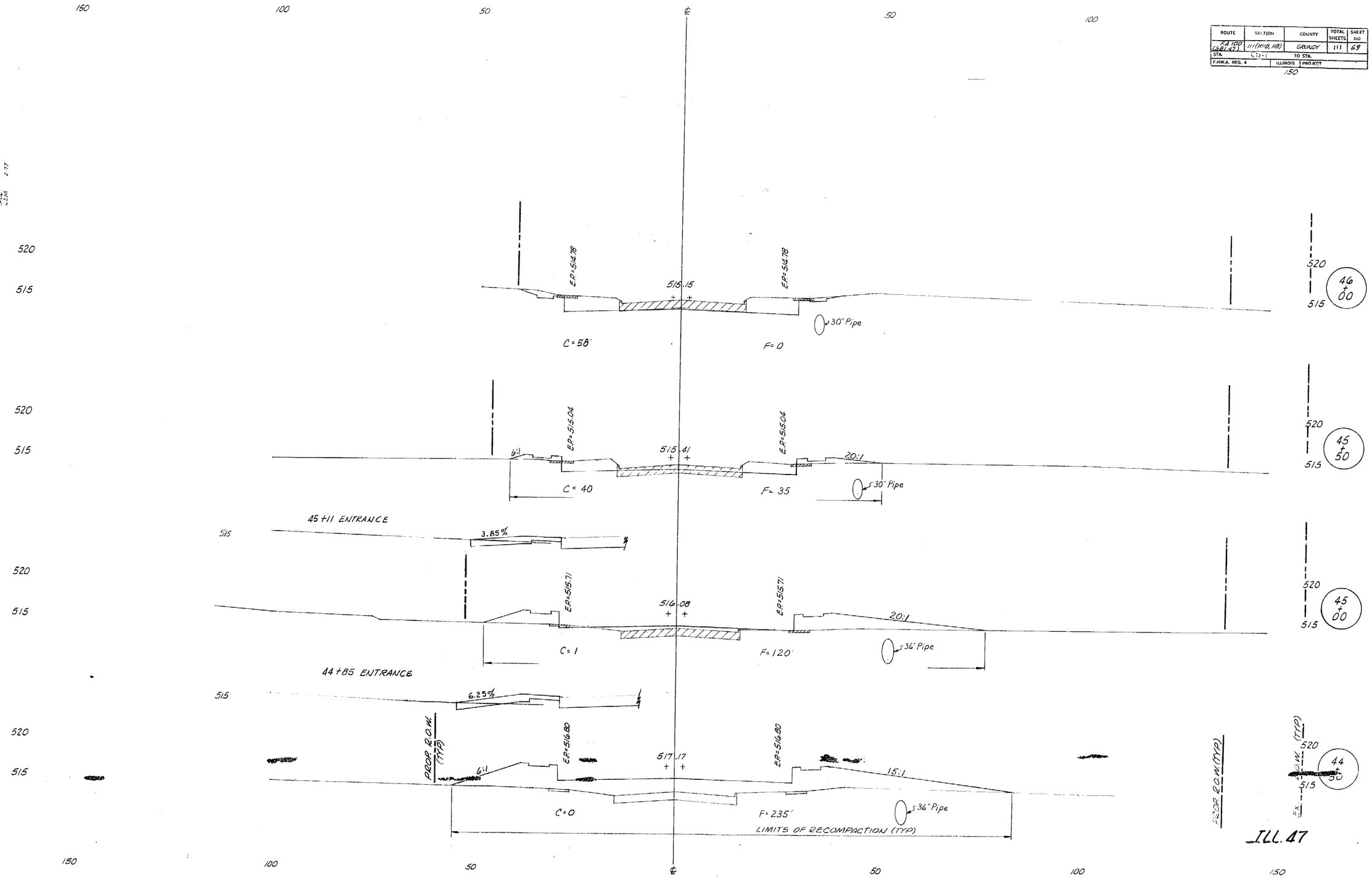
ILL. 47



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 120 (SBI 47)	111 (HW2, HB)	GRUNDY	111	68
STA.	L.T.S.-1	TO STA.		
F.H.W.A. REG. -	ILLINOIS	PROJECT		

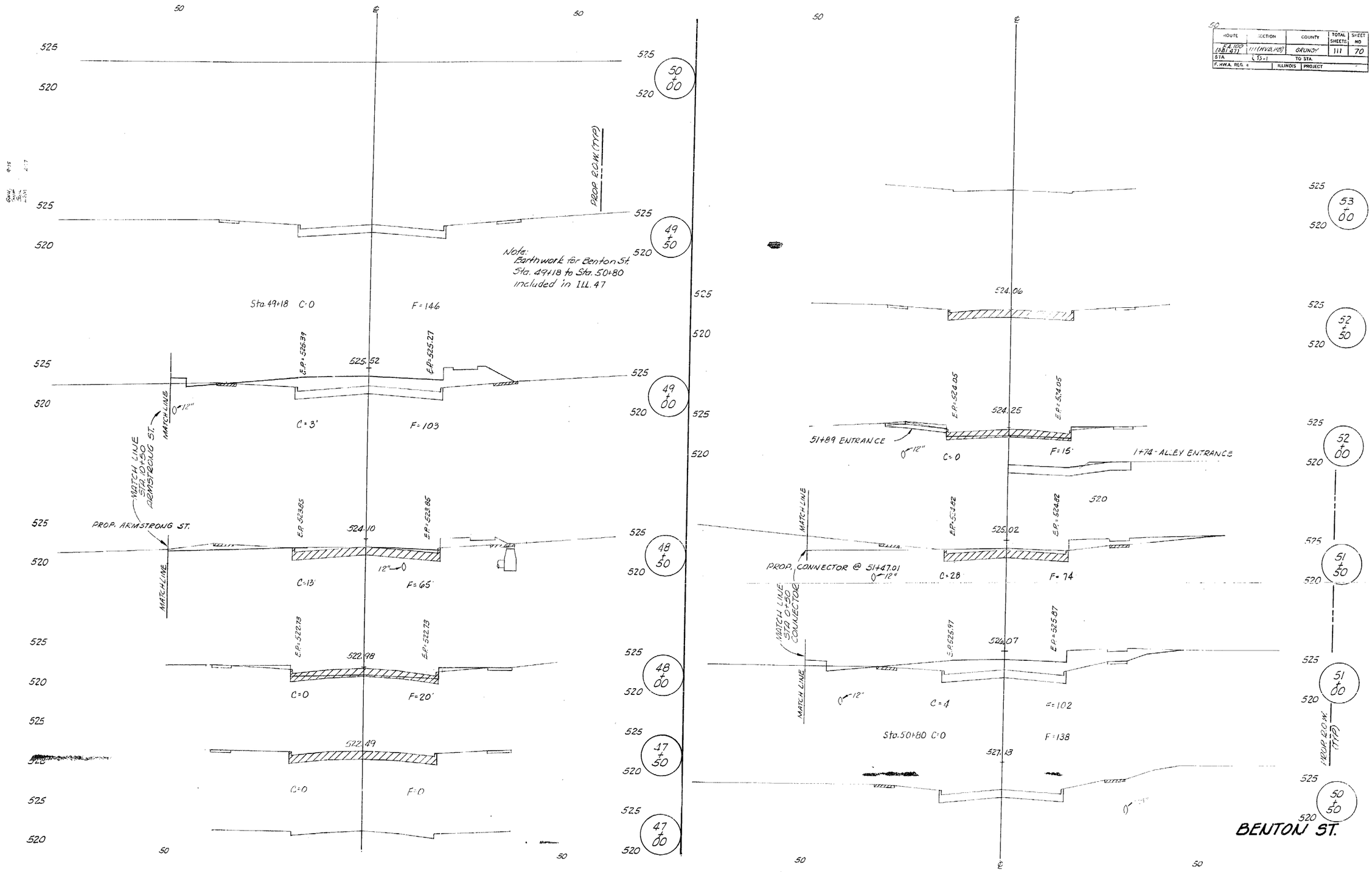
ILL. 47

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA 100 (SBI 47)	111(HHB, HB)	GRUNDY	111	69
STA. 45+11		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

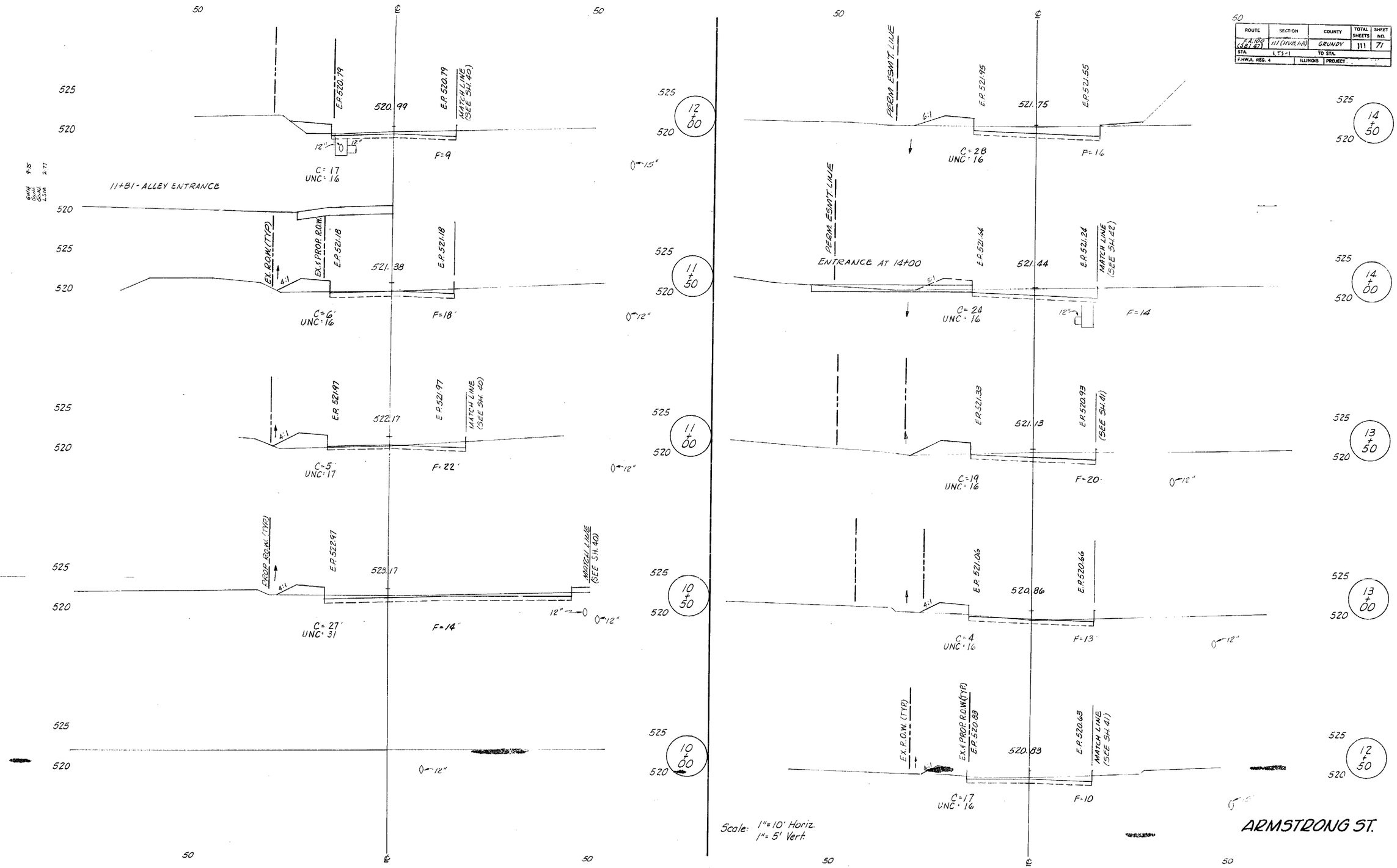


ILL. 47

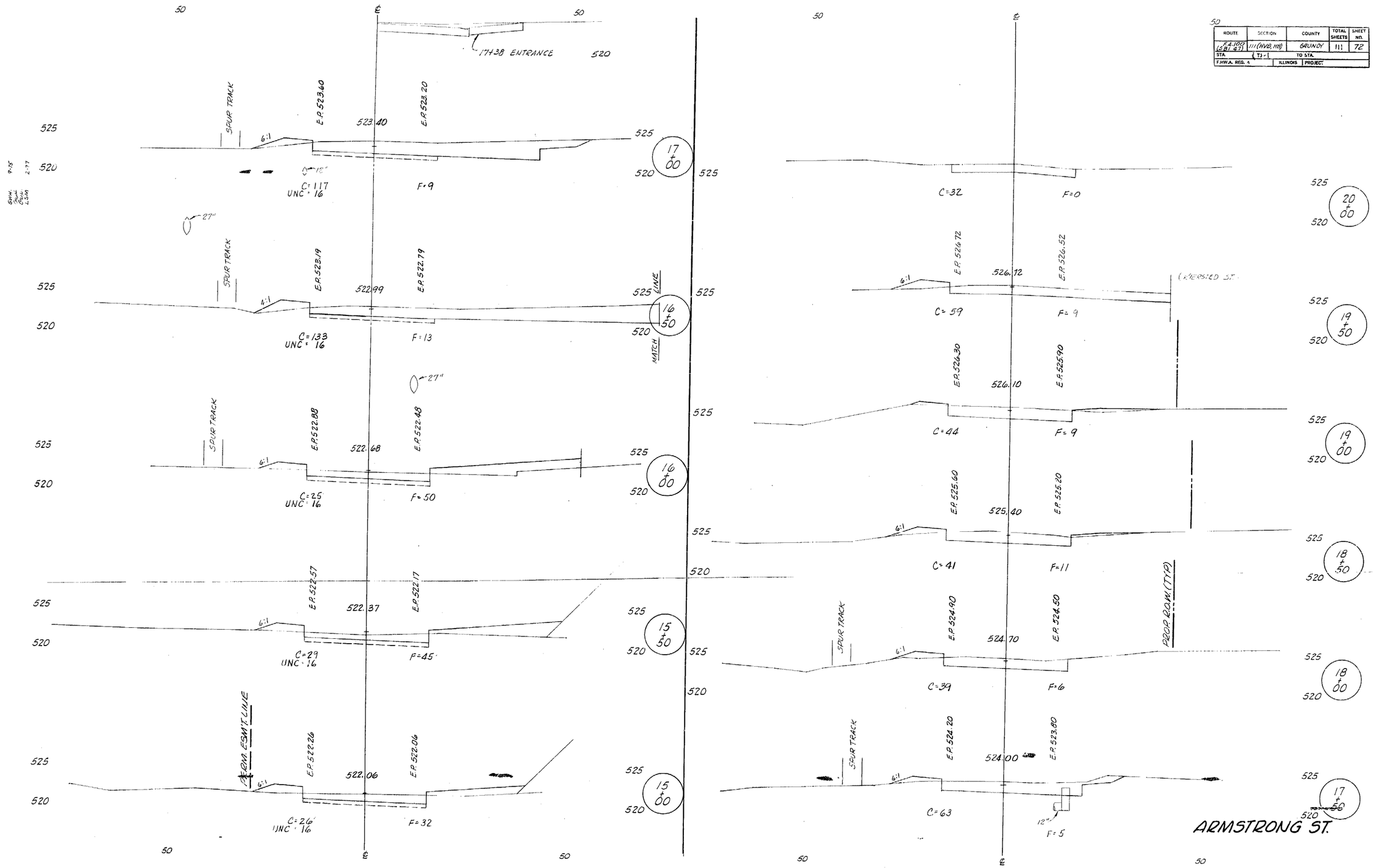
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A. 100 (38 & 47)	111 (HVB, HB)	GRUNDY	111	70
STA.	(T3-1) TO STA.			
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



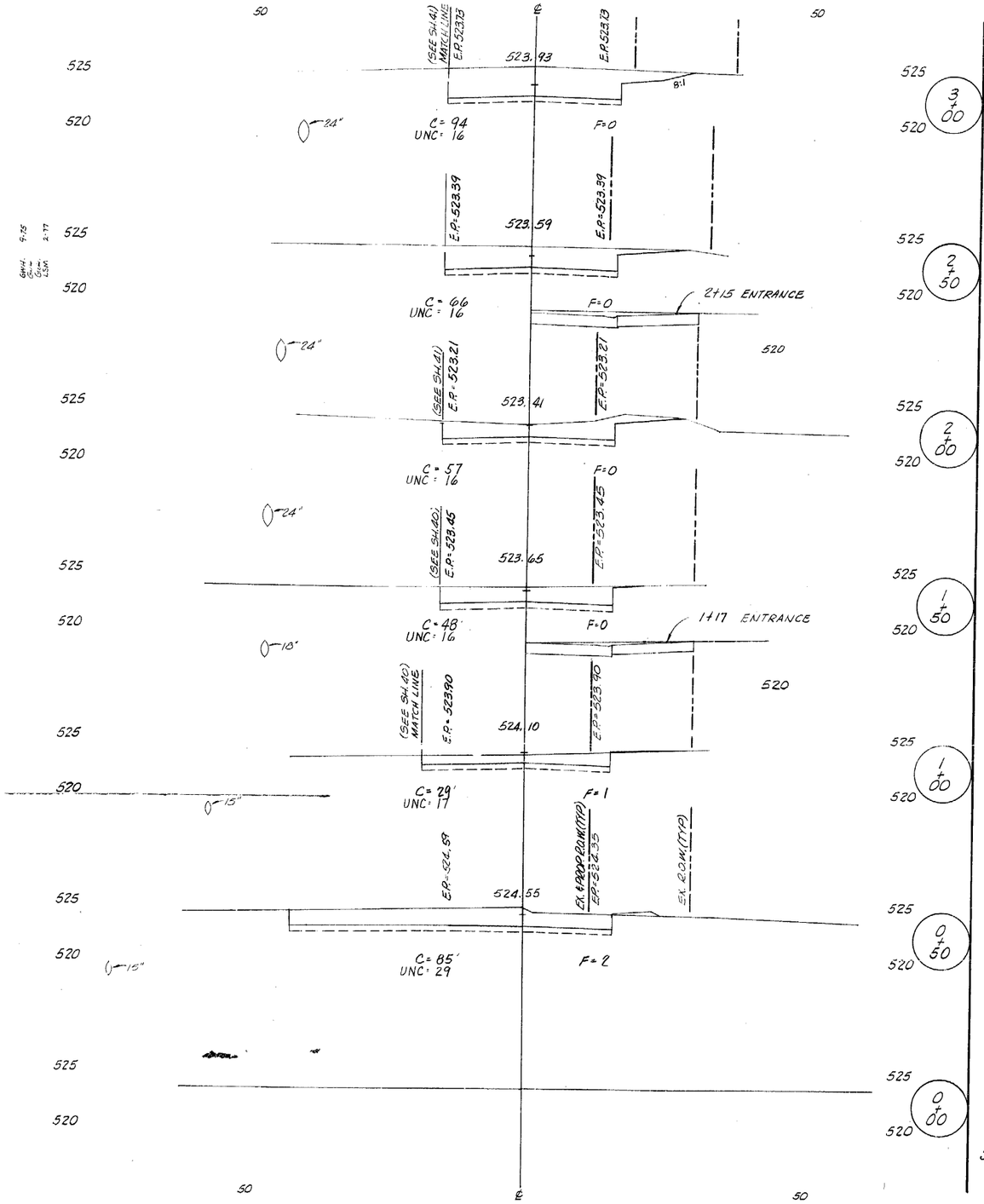
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 108 (S.B.I. 47)	111 (HVE, HB)	GRUNDY	111	71
STA. 6.75-1		TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		

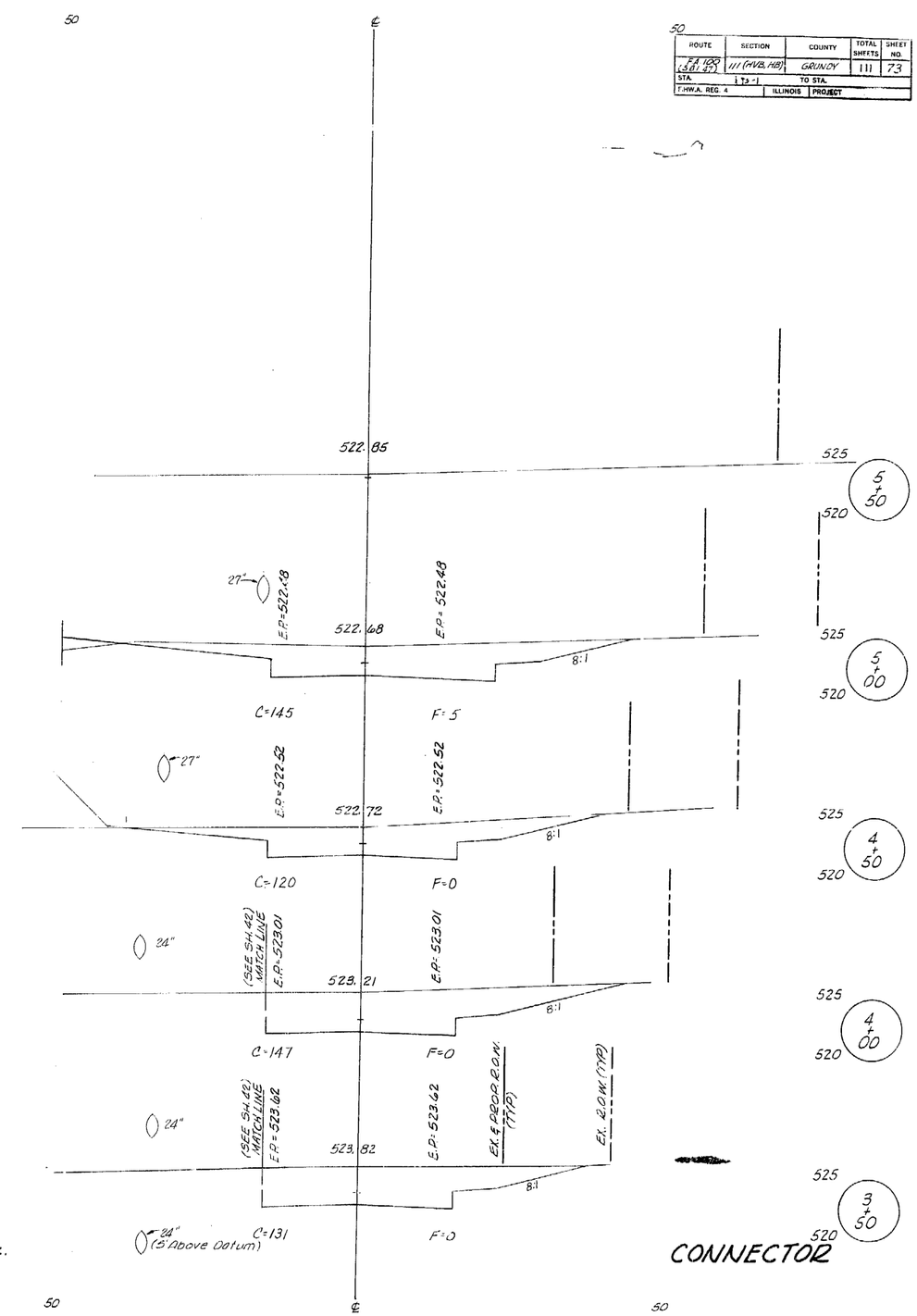


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-100 (SBI 47)	111 (NVB, HB)	GRUNDY	111	72
STA.	TJ-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



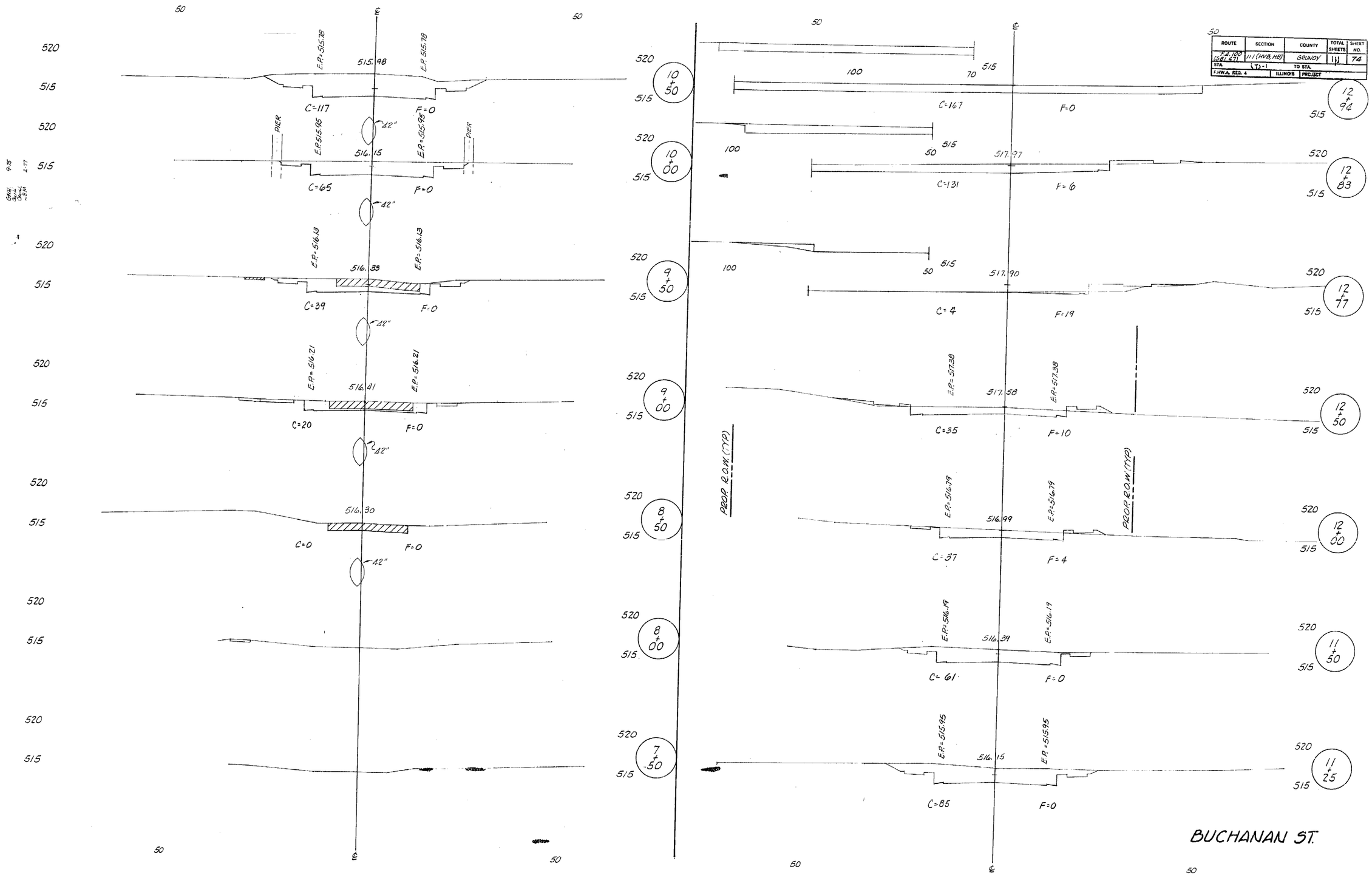
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (S.B.I. 47)	111 (HVB, HB)	GRUNDY	111	73
STA.	73-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		





Scale: 1"=10' Horiz.
1"=5' Vert.

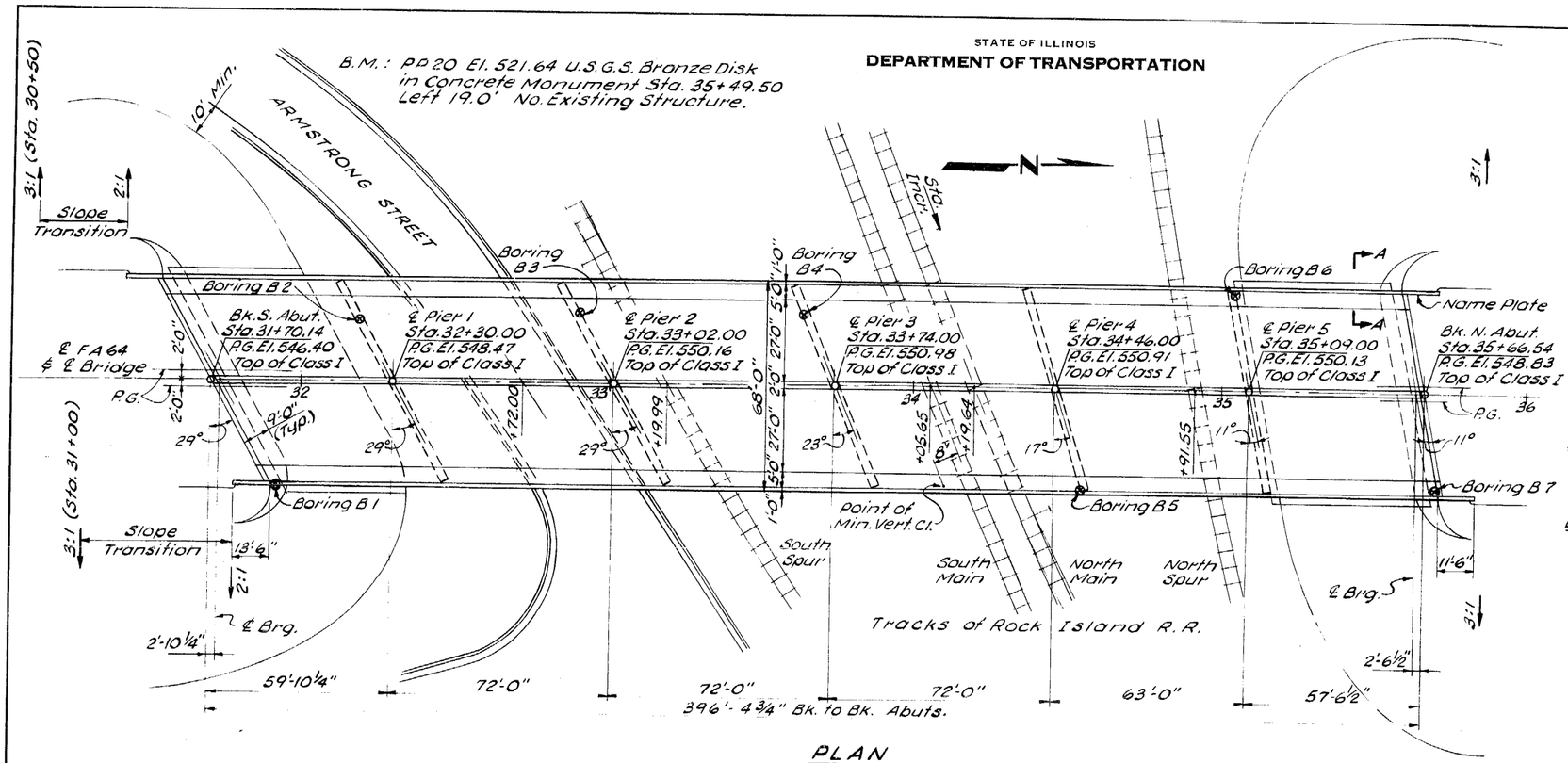
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100 (GBI 47)	111 (HVB, HB)	GRUNDY	111	74
STA.	72-1	TO STA.		
F.H.W.A. REG. 4	ILLINOIS	PROJECT		



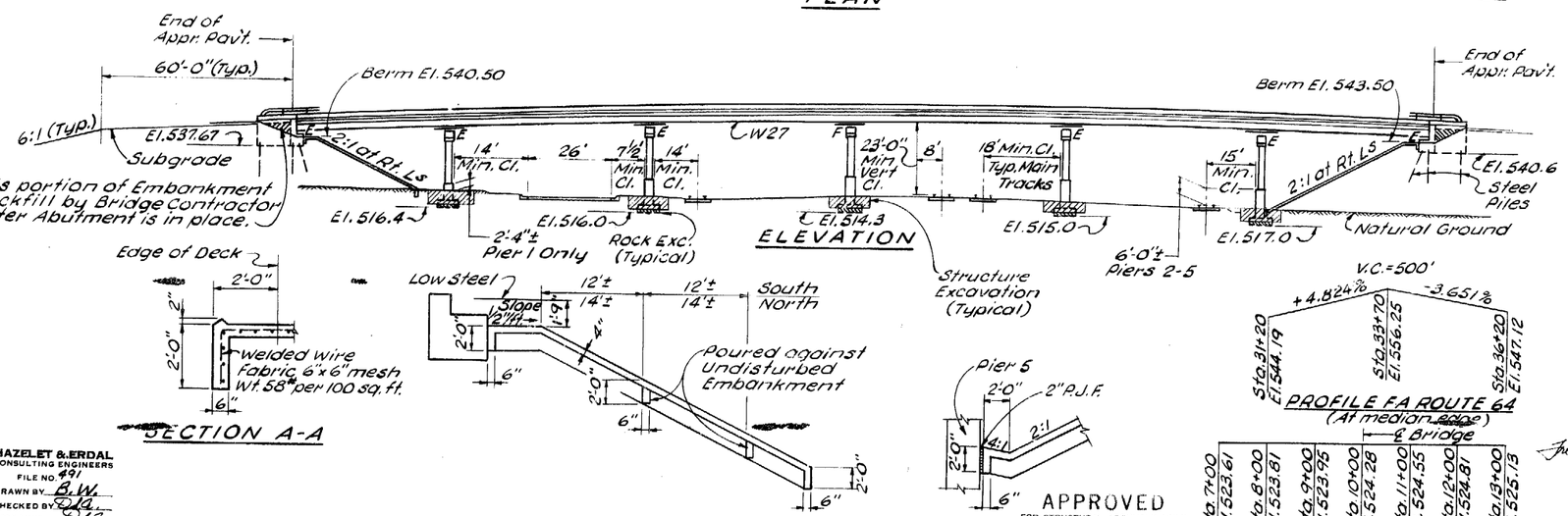
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 100	111 (HVB) (B.R.75-1)	Grundy	111	75
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
24 SHEETS



PLAN



ELEVATION

SECTION A-A

SLOPEWALL DETAILS

Notes:

Design Loading:
HS 20-44 and Allowance for 25 Lbs/Sq. Ft. for Future Wearing Surface.

Design Stresses:

f'_c = 3500 psi Parapet & Substructures

f'_c = 3500 psi For Deck Slab
f_y = 60,000 psi Deck Slab Reinforcement
f_y = 40000 psi For Reinforcement Steel (Except)

f_s = 20000 psi For M183 Structural Steel

v = 118 psi Allowable Shear in Substructures

n = 10

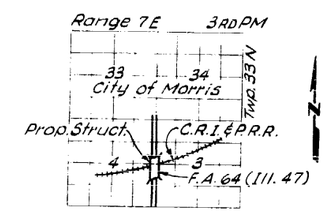
Allowable Live Load Deflection = L/1200 (Composite)

Design Specifications:

Current AASHTO 1973 & Interims 1974 & 1975 (As applicable)

Boring Data:

See Special Provisions for Boring Data.



HAZELET & ERDAL
CONSULTING ENGINEERS
FILE NO. 491
DRAWN BY B.W.
CHECKED BY D.A.
APPROVED BY D.A.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridge & Traffic Structures

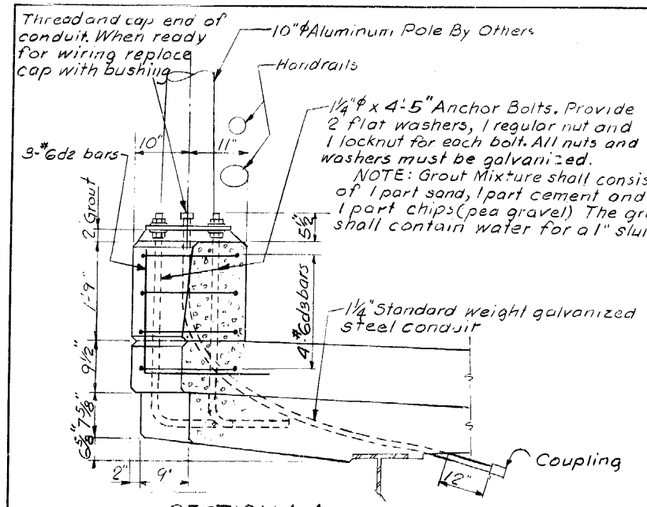
Frederick A. Parker

GENERAL PLAN AND ELEVATION
F.A. ROUTE 64 SEC. 111CS HVB
GRUNDY COUNTY
STA. 34 + 05.65

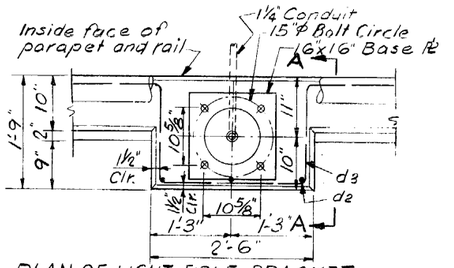
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.	111 (BRD)			
F.A. 16B	111 (75-1)	Grundy	111	83
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

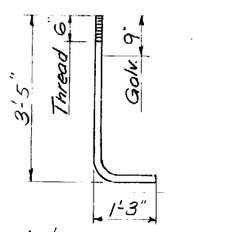
SHEET NO. 9
24 SHEETS



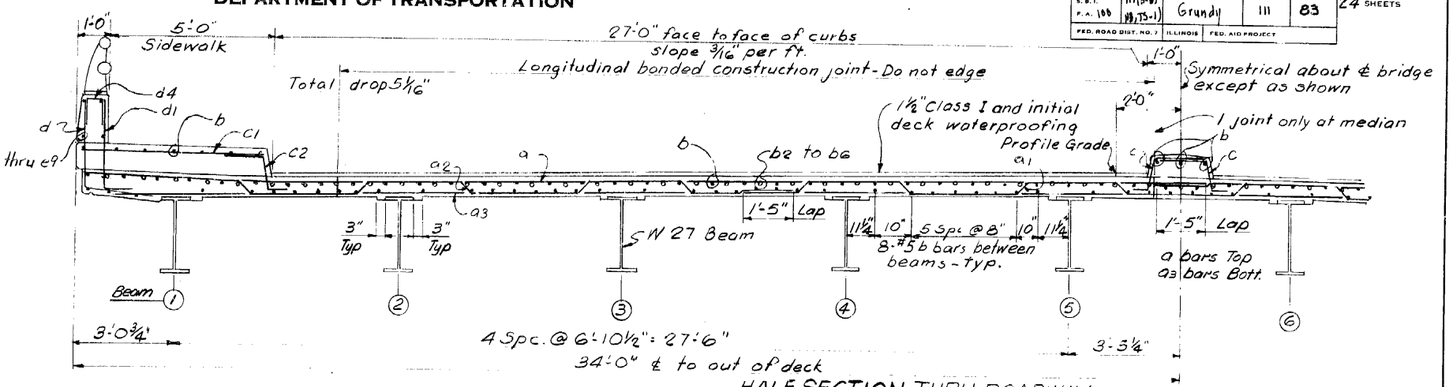
SECTION A-A



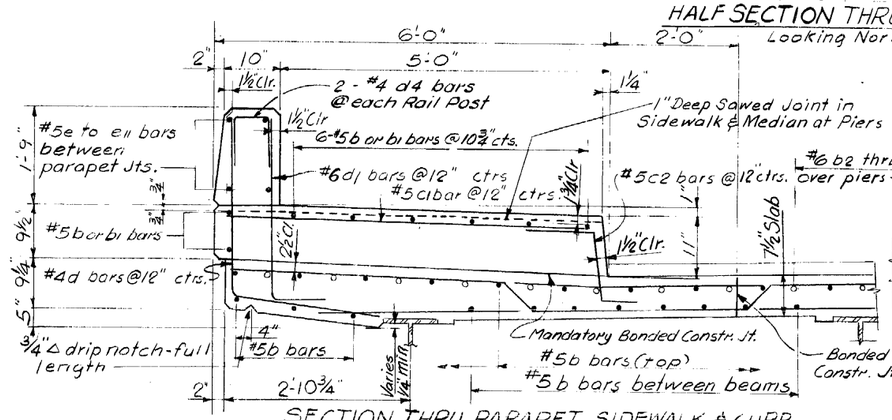
PLAN OF LIGHT POLE BRACKET
3 brackets req'd.-see deck plans for location



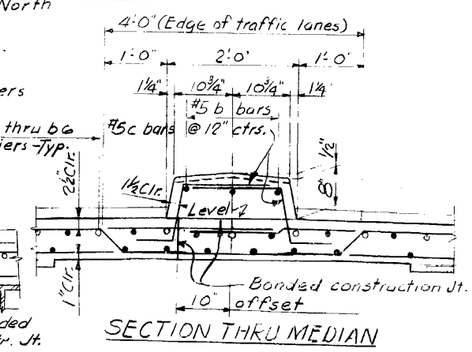
1¼" ϕ ANCHOR BOLT



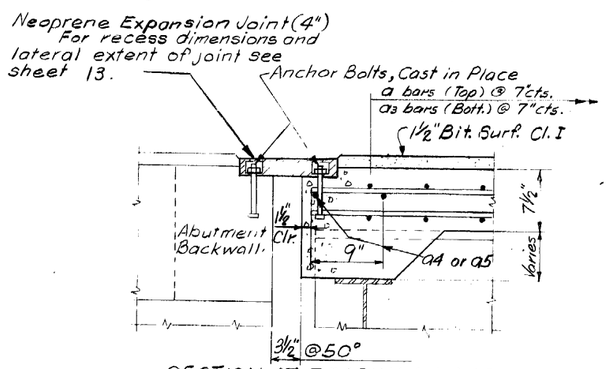
HALF SECTION THRU ROADWAY
Looking North



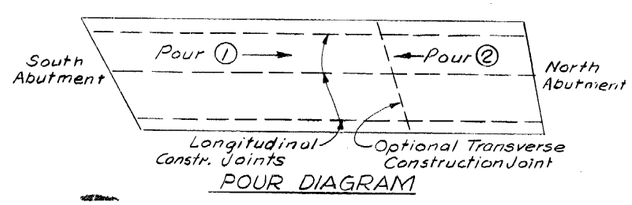
SECTION THRU PARAPET, SIDEWALK & CURB



SECTION THRU MEDIAN



SECTION AT ROADWAY JOINT
Taken at right angle to joint



POUR DIAGRAM

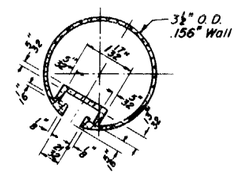
HAZELET & ERDAL
CONSULTING ENGINEERS
FILE NO.
DRAWN BY LED
CHECKED BY
APPROVED BY

DECK DETAILS
F.A. ROUTE 64 SEC. 111CS HVB
GRUNDY COUNTY
STA. 34 + 05.65

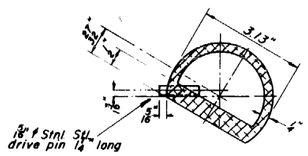
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 100	III (CS) BR,75-4	Grundy	111	85
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

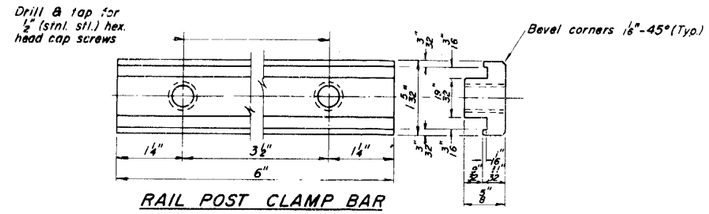
SHEET NO. 11
24 SHEETS



SECTION THRU TOP RAIL



SECTION THRU SPLICE
TOP RAIL



RAIL POST CLAMP BAR
For Top Rail

NOTES:

All Posts shall be normal to parapet

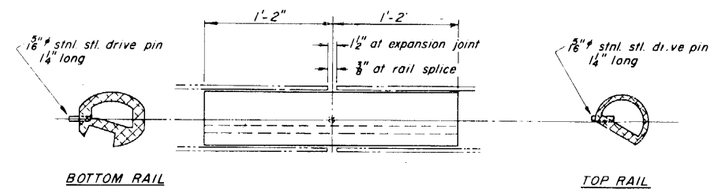
All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced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

All joints in rail shall be spliced per detail

Provide 1-⅛" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for ALUMINUM RAILING, TYPE L.

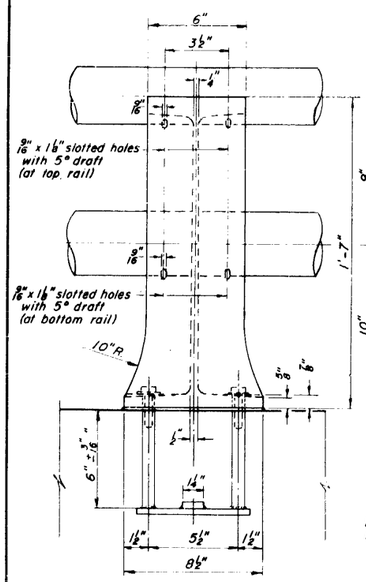
Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.



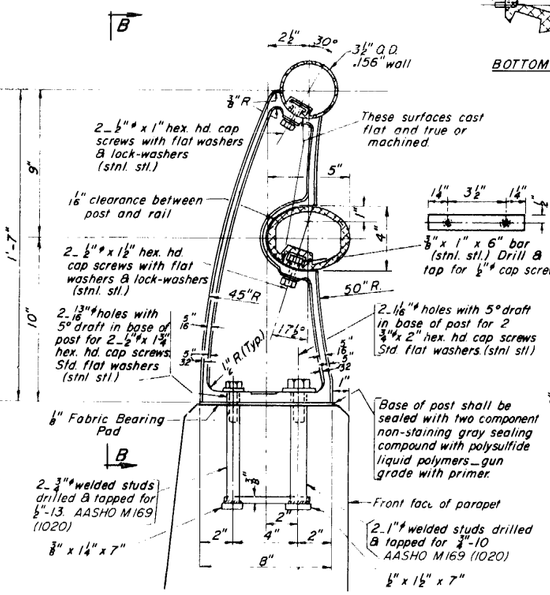
BOTTOM RAIL

RAIL SPLICE

TOP RAIL

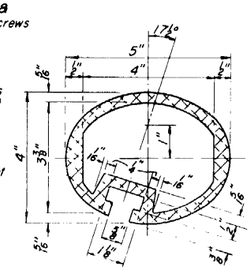


VIEW B-B

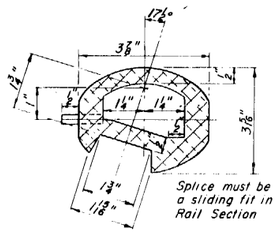


SECTION A-A

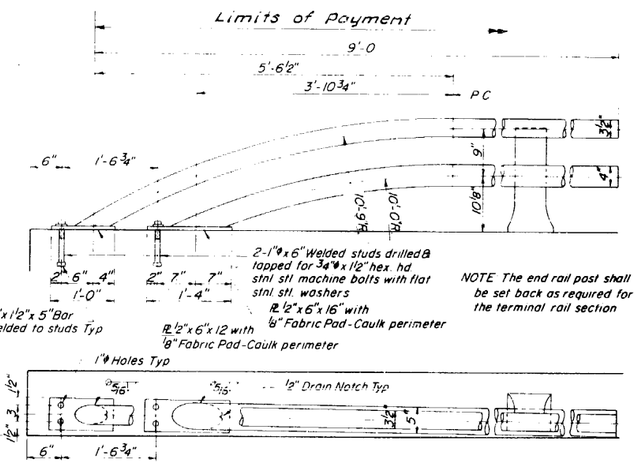
RAIL POST DETAILS



SEC. THRU ELLIPTICAL RAIL SECTION

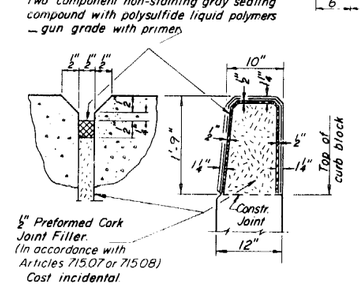


SEC. THRU SPLICE



NOTE The end rail post shall be set back as required for the terminal rail section

RAIL TERMINAL SECTION



PARAPET JOINT DETAIL

BILL of MATERIALS

Item	Unit	Quantity
ALUMINUM RAILING, TYPE L	Lin. Ft.	833
CLASS X CONCRETE	Cu. Yds.	40.0
REINFORCEMENT BARS	Lbs.	3440

TYPE L
ALUMINUM RAILING

F.A. ROUTE 64 SEC. 111CS HVB
GRUNDY COUNTY
STA. 34 + 05.65

HAZELET & ERDAL
CONSULTING ENGINEERS
DRAWN S.W.
CHECKED J.W. APPR'D. E.L.E.

R-20 4-15-73