

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PLAN FOR GRADING, STORM SEWER, CONC. CURB & GUTTER,
BASE AND BITUMINOUS SURFACING

County State Aid Highway No. II

Between T.H. 10 And NORTHALE BLVD.

From A PT. 1,825' W AND 90' N. OF S.E. COR. SEC. 24, T31, R24 To A PT. 461.05' N. OF CENTER SECTION 13, T31, R24

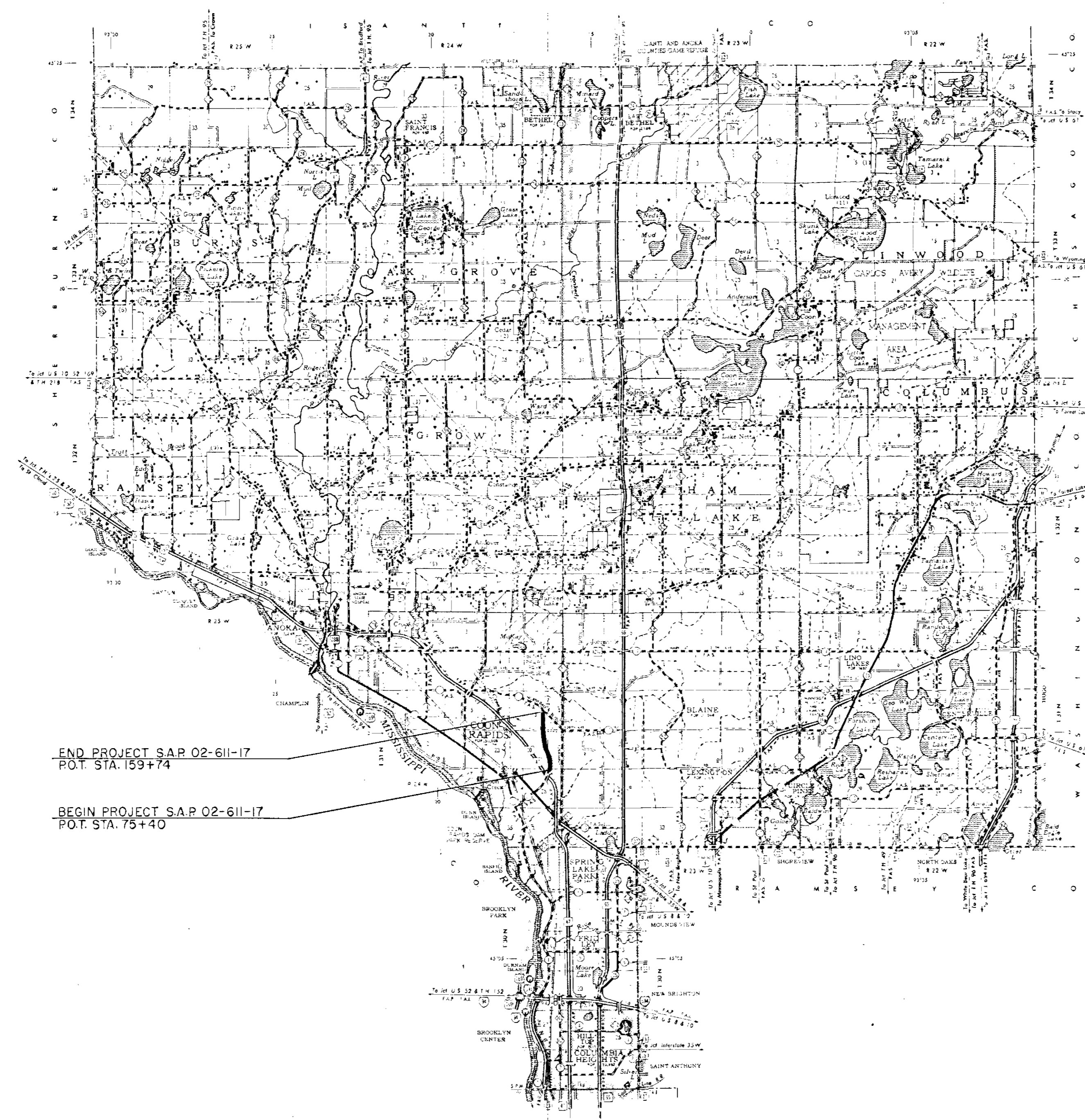
Give appropriate title to Section 5, 7, and 8 of Page

GROSS LENGTH 8434.0 FEET 1.597 MILES
BRIDGES LENGTH 0 FEET 0 MILES
EXCEPTIONS LENGTH 0 FEET 0 MILES
NET LENGTH 8434.0 FEET 1.597 MILES

INDEX OF SHEETS
Sheet No. 1 Title Sheet & Layout Map
No 2-5 Est. Quant. & Typical Sec.
No 6-7 Storm Sewer
No 8-14 Plan & Profile
No 15-37 Cross Sections
No 38-40 Signal Revisions

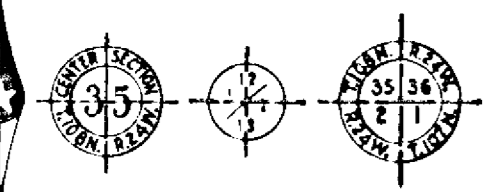
SCALE

INDEX MAP 2 MI.
PLAN & PROFILE VERT. 5'
HORIZ. 50'
CROSS SECTIONS 10'
SIGNAL REVISION 30'



CONVENTIONAL SIGNS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- RIGHT OF WAY LINE
- PRESENT RIGHT OF WAY LINE
- CONTROL OF ACCESS LINE
- PROPERTY LINE (EXCEPT LAND UNDER PLATED PROPERTY)
- CORPORATE OR CITY LIMITS
- TRUNK HIGHWAY CENTER LINE
- RESURFACING ROAD
- RAILROAD
- RAILROAD RIGHT OF WAY LINE
- RIVER OR CREEK
- DRY RUN
- DRAINAGE DITCH
- ELECTRIC POWER LINE
- TELEPHONE OR TELEGRAPH LINE
- JOINT TELEPHONE AND POWER
- CONDUIT
- TELEPHONE CABLE AERIAL
- TELEPHONE CABLE UNDERGROUND
- POWER CABLE UNDERGROUND
- GAS MAIN
- CULVERT
- SHIP PILE
- GUARD RAIL
- BANDED WIRE FENCE
- WOODEN WIRE FENCE
- CHAIN LINK FENCE
- RAILROAD SNOW FENCE
- STONE WALL OR FENCE
- MESSE
- WATER PIPE
- SEWER PIPE
- DRAIN TILE
- SPRING
- MARSH
- TIMBER
- ORCHARD
- BRUSH
- INDUSTRY
- CATCH BASIN
- MANHOLE
- FIRE HYDRANT
- STREET LIGHT
- RAILROAD CROSSING SIGN
- RAILROAD CROSSING BELL
- ELECTRIC WARNING SIGN
- CROSSING GATE
- CATTLE GUARD
- OVERPASS (Highway Over)
- UNDERPASS (Highway Under)
- BRIDGE
- BUILDING (One Story Frame)
- FRAME
- CONCRETE
- STONE
- TILE
- BRICK
- STUCCO
- ROOF PIPE OR RID
- MONUMENT (STONE, CONCRETE OR METAL)
- WOODEN HUB
- GRAVEL PIT
- SAND PIT
- BORROW PIT
- ROCK QUARRY
- MELANDER CORNER



DESIGN DESIGNATION

ADT (CURRENT YEAR) 10,972
ADT (FUTURE YEAR) 17,555
T (HEAVY COMMERCIAL) 600-1100
9 Ton Design Soil Factor A-3, 50%
Design Speed 40 MPH
Design Speed not achieved at:
STA _____ TO STA _____ MPH
STA _____ TO STA _____ MPH

SPECIFICATIONS

THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION," 1983 EDITION AND SUPPLEMENTAL SPECIFICATIONS, DATED JUNE 1, 1984, SHALL GOVERN.

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH, IN THE CONSTRUCTION OF THIS PROJECT.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Paul K. Lund
COUNTY ENGINEER DATE 7-2-84

ANOKA COUNTY REG. NO. 6549

RECOMMENDED FOR APPROVAL *C. E. Luchsel* 7/10/84
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL *D. A. O'Brien* 8-9-84

APPROVED *B. J. ...* 8/7/84
STATE AID ENGINEER

Minn. Proj. No. _____ County Proj. No. _____
State Proj. No. _____ S.A.P. - 02-611-17

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
2021.501	MOBILIZATION	LUMP SUM	1	
2031.501	FIELD OFFICE, TYPE D	EACH	1	
2101.502	CLEARING	TREE	38	
2101.507	GRUBBING	TREE	40	
2104.501	REMOVE PIPE SEWERS	LIN. FT.	330	
2104.501	REMOVE CURB AND GUTTER	LIN. FT.	1325	
2104.503	REMOVE SIDEWALK	SQ. FT.	7575	
2104.505	REMOVE CONCRETE PAVEMENT	SQ. YD.	263	
2104.509	REMOVE MANHOLES AND CATCH BASINS	EACH	8	
2104.521	SALVAGE FENCE	LIN. FT.	7	
0557.603	INSTALL FENCE	LIN. FT.	7	
2104.523	SALVAGE CASTINGS	EACH	14	
2105.501	COMMON EXCAVATION	CU. YD.	19,050	
2105.525	TOPSOIL BORROW (LV)	CU. YD.	1,588	
2130.501	WATER	M-GAL.	300	
2211.503	AGGREGATE BASE PLACED, CLASS 5A	CU. YD.	4,401	
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	754	
2331.510	BINDER COURSE MIXTURE	TON	5,650	
2331.514	BASE COURSE MIXTURE	TON	11,100	
2331.531	TEMPORARY LANE MARKING	RD. STA.	756	
0331.601	2" THICK WEARING COURSE PLACED	SQ. YD.	679	
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	252	
2341.508	WEARING COURSE MIXTURE	TON	4,200	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	7,500	
2503.541	12" RC PIPE SEWER DES. 3006	LIN. FT.	1,154	
2503.541	12" RC PIPE SEWER DES. 3006 CL III	LIN. FT.	56	
2503.541	15" RC PIPE SEWER DES. 3006	LIN. FT.	228	
2503.541	15" RC PIPE SEWER DES. 3006 CL III	LIN. FT.	1,182	
2503.541	18" RC PIPE SEWER DES. 3006	LIN. FT.	451	
2503.541	21" RC PIPE SEWER DES. 3006	LIN. FT.	436	
2503.541	21" RC PIPE SEWER DES. 3006 CL III	LIN. FT.	398	
2503.541	24" RC PIPE SEWER DES. 3006 CL III	LIN. FT.	680	
2506.506	CONSTRUCT MANHOLES DESIGN A OR F	LIN. FT.	59.7	
2506.506	CONSTRUCT MANHOLES DESIGN C OR G	LIN. FT.	31.7	
2506.507	CONSTRUCT CATCH BASINS, DESIGN A OR F	LIN. FT.	25.6	
2506.507	CONSTRUCT CATCH BASINS, DESIGN C OR G	LIN. FT.	149.1	
2506.507	CONSTRUCT CATCH BASINS, DESIGN H	LIN. FT.	34.9	
2506.507	CONSTRUCT CATCH BASINS, DESIGN SPECIAL 1	LIN. FT.	58.4	
2506.511	RECONSTRUCT MANHOLES	LIN. FT.	33.4	
2506.516	CASTING ASSEMBLIES	EACH	84	
2506.522	ADJUST FRAME AND RING CASTINGS	EACH	35	
2521.501	4" CONCRETE WALK	SQ. FT.	14,360	
2521.501	6" CONCRETE WALK	SQ. FT.	445	
2521.501	8" CONCRETE WALK	SQ. FT.	600	
2531.501	CONCRETE CURB AND GUTTER B-618	LIN. FT.	17,191	
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.	701	
2531.507	8" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.	168	
0411.603	STONE RETAINING WALL	SQ. FT.	520	
0504.602	RELOCATE HYDRANT	EACH	8	
0504.602	ADJUST WATER GATE HOUSING	EACH	37	
2545.521	3" RIGID STEEL CONDUIT - SIGNAL	LIN. FT.	340	
2545.553	PULL BOXES - SIGNALS	EACH	4	
2575.505	SODDING	SQ. YD.	14,730	
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 10-10-10	TON	0.8	
0565.511	REVISE FULL - TRAFFIC - ACTUATED TRAFFIC CONTROL SIG. SYSTEM	SIG. SYSTEM	1	
UTILITY SERVICE CONNECTIONS				
1.	4" CONNECTION TO 8" VCP SEWER	EACH	1	
2.	4" PVC (ASTM D-3034 SDR 35) SERVICE PIPE	LIN. FT.	40	
3.	1" WATER SERVICE CONNECTION	EACH	1	
4.	1" COPPER SERVICE PIPE	LIN. FT.	20	

BASIS OF PLANNED QUANTITIES

- 2331 PLANT MIXED BASE COURSE. BITUMINOUS MIXTURE 110 LBS./ S.Y. PER 1" THICKNESS. BITUMINOUS MATERIAL FOR MIXTURE 4.5% BY WT.
- 2331 PLANT MIXED BINDER COURSE. BITUMINOUS MIXTURE 110 LBS./ S.Y. PER 1" THICKNESS. BITUMINOUS MATERIAL FOR MIXTURE 4.5% BY WT.
- 2341 PLANT MIXED WEARING COURSE. BITUMINOUS MIXTURE 110 LBS./ S.Y. PER 1" THICKNESS. BITUMINOUS MATERIAL FOR MIXTURE 6.0% BY WT.
- 2357 BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL. PER S.Y.
- 2575 COMMERCIAL FERTILIZER, ANALYSIS 10-10-10, 500#/ AC. ON ALL SOD AREAS & SEED AREAS.

SPECIAL DETAILS

INPLACE TOPSOIL SHALL BE SALVAGED AND USED TO THE FULLEST EXTENT POSSIBLE PRIOR TO THE USE OF TOPSOIL BORROW ON AREAS DISTURBED BY CONSTRUCTION OPERATIONS. SALVAGE OF INPLACE TOPSOIL FOR USE IN TURF ESTABLISHMENT SHALL BE CONSIDERED TO BE INCIDENTAL TO COMMON EXCAVATION AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.

DISPOSAL OF ANY EXCESS EXCAVATED MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE PROVISIONS OF 2104.

ALL BITUMINOUS PAVEMENT SCHEDULED TO BE REMOVED (APPROX. 46,692 SQ. YDS.) IS INCLUDED IN COMMON EXCAVATION QUANTITIES. DISPOSAL WILL NOT BE ALLOWED WITHIN THE RIGHT OF WAY.

STANDARD PLATES

PLATE NO.	DESCRIPTION
0004 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 I	REINFORCED CONCRETE PIPE
3006 D	GASKET JOINT FOR RC PIPE
3145 C	CONCRETE PIPE TIES
4000 I	MANHOLE OR CATCH BASIN
4002 E	MANHOLE OR CATCH BASIN
4005 K	MANHOLE OR CATCH BASIN
4006 K	MANHOLE OR CATCH BASIN
4010 F	CONCRETE SHORT CONE & ADJUSTING RING
4011 D	PRECAST CONCRETE BASE
4101 C	RING CASTING FOR MANHOLE OR CATCH BASIN
4110 D	COVER CASTING FOR MANHOLE
4126 E	CATCH BASIN FRAME CASTING
4149 C	GRATE CASTING FOR CATCH BASIN
4161 E	CURB BOX CASTING FOR CATCH BASIN
4180 G	MANHOLE OR CATCH BASIN STEP
7035 J	CONCRETE WALK AND CURB RETURNS AT ENTRANCES
7036 C	PEDESTRIAN CURB RAMP
7100 F	CONCRETE CURB AND GUTTERS
7110 E	CURB & GUTTER CONSTRUCTION AT CATCH BASIN
7111 F	INSTALLATION OF CATCH BASIN CASTINGS
8000 H	STANDARD BARRICADES
8003 B	BREAKAWAY SIGN SUPPORT (PLASTIC)
8117 F	PRECAST CONCRETE HANDHOLE (OR PULLBOX)
9322 I	CHAIN LINK FENCE

- (1) COMMON EXCAVATION QUANTITY INCLUDES ALL BITUMINOUS PAVEMENT MATERIAL TO BE REMOVED.
- (2) PROVIDED FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.
- (3) INCLUDES 390 CU. YDS. FOR STREET APPROACHES.
- (4) INCLUDES 550 TON FOR STREET APPROACHES.
- (5) INCLUDES 800 TON FOR STREET APPROACHES.
- (6) PROVIDED FOR DRIVEWAY RESTORATION AND BLVD. PAVING. PAYMENT BY SQ. YD. INCLUDES BITUMINOUS MATERIAL AND 3" CL-5 AGG. BASE.
- (7) INCLUDES 400 TON FOR STREET APPROACHES.
- (8) FOR FUTURE SIGNAL AT T.H. 10 RAMP AND EGRET BLVD.

REMOVE CONCRETE WALK

STATION	LOCATION	SQ. FT.
75+63-75+73	RT.	50
81+20-86+44	RT.	1120
87+54-87+69	RT.	75
88-18-88+28	RT.	50
90-76-90+81	RT.	25
91-35-91+45	RT.	50
94-19-94+24	RT.	25
94-76-94+86	RT.	50
97-33-97+53	RT.	100
97+90-98+05	RT.	75
101+10-101+30	RT.	100
101-79-101+94	RT.	75
104+44-104+49	RT.	25
105+10-105+25	RT.	75
105+67-105+87	RT.	100
105+91-106+11	RT.	100
109+35-109+55	RT.	100
109+90-110+10	RT.	100
113+69-114+14	RT.	225
114-72-114+97	RT.	125
115+66-116+21	RT.	275
118-43-118+63	RT.	100
118-93-122+07	RT.	1570
122-38-122-58	RT.	100
126-81-127+01	RT.	100
127-33-127+53	RT.	100
130-10-130+30	RT.	100
130+63-130+83	RT.	100
133+41-133+61	RT.	100
133+92-134+12	RT.	100
136-70-136+90	RT.	100
137-21-137-41	RT.	100
139+91-140-21	RT.	150
140+52-140+82	RT.	150
140+98-141-24	RT.	430
143+30-143+50	RT.	100
143+62-144+02	RT.	100
147+46-147+66	RT.	100
148+00-148+20	RT.	100
150+90-151-21	RT.	155
151+00	RT. 26+46	100
151+67-151+87	RT.	100
156+54-156+84	RT.	150
158-20-158-50	RT.	450
TOTAL		7575

CLEARING AND GRUBBING

STATION	LOCATION	DESCRIPTION	CLEAR	GRUB	REMARKS
92-06	40' LT	18" OAK	1	1	
93+20	32' LT	18" OAK			SAVE
94+51	34' LT	15" OAK			SAVE
94+74	35' LT	12" PINE			SAVE
94+99	38' LT	18" OAK	1	1	
96+37	41' LT	6" ELM	1	1	
96+43	40' LT	STUMP	1	1	
96+46	34' LT	8" LOCUST	1	1	
96+49	37' LT	6" OAK	1	1	
96+54	39' LT	8" ELM	1	1	
96+66	40' LT	8" LOCUST	1	1	
93+20	32' LT	18" OAK			SAVE
94+02	36' LT	18" OAK	1	1	
94+29	35' LT	12" PINE	1	1	
94+51	34' LT	15" OAK			SAVE
95+29	33' LT	10" PINE	1	1	
95+34	37' LT	STUMP			
95+58	33' LT	10" PINE	1	1	
95+71	33' LT	DBLE. 6" LOCUST	2	1	
95+83	34' LT	15" PINE	1	1	
96+09	40' LT	DBLE 5" OAK	2	1	
96+10	34' LT	12" PINE	1	1	
96+22	40' LT	4" CHERRY	1	1	
96+27	41' LT	STUMP			
96+43	31' LT	6" LOCUST	1	1	
96+46	37' LT	6" OAK	1	1	
96+49	34' LT	8" LOCUST	1	1	
96+58	35' LT	STUMP			
96+66	35' LT	5" LOCUST	1	1	
96+73	36' LT	8" LOCUST	1	1	
96+79	38' LT	10" ELM	1	1	
96+87	37' LT	6" LOCUST	1	1	
99+24	38' LT	10" PINE	1	1	
99+33	39' LT	12" PINE	1	1	
99+44	38' LT	12" PINE	1	1	
99+77	38' LT	14" PINE	1	1	
100+38	36' LT	5" JACK PINE	1	1	
102+70	36' LT	4" OAK			SAVE
98+25	37' LT	BUSH			REMOVE
98+33	45' LT	6" OAK			SAVE
98+42	40' LT	4" OAK	1	1	
98+46	48' LT	10" PINE			SAVE
98+56	41' LT	10" PINE	1	1	
98+69	41' LT	8" OAK	1	1	
98+74	41' LT	6" OAK	1	1	
98+75	46' LT	3" OAK			REMOVE
98+78	41' LT	3" OAK			REMOVE
98+80	45' LT	3" OAK			REMOVE
98+82	40' LT	3" APPLE			REMOVE
98+85	43' LT	6" OAK	1	1	
98+91	43' LT	8" OAK	1	1	
99+00	36' LT	5" LOCUST	1	1	
99+05	34' LT	6" LOCUST	1	1	
TOTALS			38	40	

REMOVE CONC. CURB & GUTTER

STREET	DESCRIPTION	LINEAR FEET	
		SOUTH GUTTER	NORTH GUTTER
101 ST AVE. RT.	REMOVE BULL NOSE, D 412 C & G INP.		5'
T.H.# 10 RAMP LT.	REMOVE BULL NOSE, D 412 C & G INP.		5'
102 RD. LN. LT.	B-618 C&G INP.	11'	20'
103 RD. AVE. RT.	B-618 C&G INP.	14'	10'
104 TH. AVE. RT.	D-418 C&G INP.	14'	24'
104 TH. LN. LT.	D-418 C&G INP.	10'	10'
104 TH. LN. RT.	B-618 C&G INP.	15'	15'
105 TH. AVE. LT.	D-418 C&G INP.	12'	10'
105 TH. AVE. RT.	B-618 C&G INP.	13'	22'
105 TH. LN. LT.	B-618 C&G INP.	27'	28'
105 TH. LN. RT.	B-618 C&G INP.	10'	20'
106 TH. AVE. RT.	B-618 C&G INP.	13'	22'
EGRET BLVD. LT.	B-618 C&G INP.	49'	57'
EGRET BLVD. RT.	B-618 C&G INP.	32'	22'
107 TH. AVE. LT.	D-412 C&G INP.	19'	19'
107 TH. LN. LT.	D-412 C&G INP.	13'	22'
107 TH. LN. RT.	D-418 C&G INP.	26'	26'
108 TH. AVE. RT.	B-618 C&G INP.	11'	21'
108 TH. LN. LT.	B-618 C&G INP.	19'	20'
109 TH. AVE. LT.	B-618 C&G INP.	38'	26'
109 TH. AVE. RT.	B-618 C&G INP.	10'	10'
109 TH. LN. RT.	B-618 C&G INP.	10'	10'
110 TH. AVE. RT.	B-618 C&G INP.	10'	10'
110 TH. AVE. LT.	B-618 C&G INP.	27'	27'
110 TH. LN. RT.	B-618 C&G INP.	11'	11'
111 TH. AVE. LT.	B-618 C&G INP.	23'	23'
111 TH. AVE. RT.	D-418 C&G INP.	10'	10'
111 TH. LN. LT.	D-418 C&G INP.	24'	26'
111 TH. LN. RT.	B-618 C&G INP.	10'	10'
112 TH. LN. LT.	B-618 C&G INP.	24'	23'
112 TH. LN. RT.	D-418 C&G INP.	25'	25'
113 TH. AVE. LT.	B-618 C&G INP.	25'	27'
113 TH. AVE. RT.	B-618 C&G INP.	45'	49'
NORTHALE BLVD. RT.	B-618 C&G INP.	60'	
TOTAL		660'	665'

SIDEWALK CONSTRUCTION (Sq. Ft.)

STATION	LOCATION	REPLMT.		NEW		REPLMT.		NEW	
		4"	4"	6"	6"	8"	8"		
75+50 - 75+73	RT	115							
84+20 - 84+33	RT	65							
84+33 - 84+47	RT			70					
84+47 - 84+77	RT	150							
84+77 - 84+89	RT			60					
84+89 - 86+44	RT	775							
87+54 - 87+71	RT	85							
88+05 - 88+28	RT	115							
88+11 - 97+61	LT		4690		60				
97+95 - 101+55	LT		1800						
90+76 - 90+94	RT	90							
91+27 - 91+45	RT	90							
94+19 - 94+35	RT	80							
94+68 - 94+86	RT	90							
97+33 - 97+55	RT	110							
97+85 - 98+05	RT	100							
101+10 - 101+33	RT	115							
101+76 - 101+94	RT	90							
103+39 - 103+45	RT		30						
103+45 - 103+75	RT							150	
103+75 - 103+79	RT		20						
104+44 - 104+49	RT	25							
104+49 - 104+79	RT							150	
104+79 - 104+86	RT		35						
105+10 - 105+36	RT	100							
105+65 - 105+87	RT	110							
105+90 - 106+11	LT	195							
109+35 - 109+55	RT	100							
109+88 - 110+10	RT	110							
113+69 - 114+19	RT	250							
114+77 - 114+97	RT	100							
115+66 - 115+86	RT	100							
115+86 - 116+01	RT			75					
116+01 - 116+21	RT	100							
118+43 - 118+61	RT	90							
118+95 - 120+12	RT	585							
120+12 - 120+24	RT			60					
120+24 - 122+05	RT	905							
122+40 - 122+58	RT	90							
126+81 - 126+99	RT	90							
127+35 - 127+53	RT	90							
130+10 - 130+28	RT	90							
130+65 - 130+83	RT	90							
133+41 - 133+58	RT	90							
133+94 - 134+12	RT	90							
136+70 - 136+89	RT	95							
137+23 - 137+41	RT	90							
139+91 - 140+19	RT	140							
140+54 - 140+82	RT	140							
140+98 - 141+29	RT	155							
141+29 - 141+53	RT	155		120					
141+53 - 141+84	RT	110							
143+30 - 143+52	RT	105							
143+81 - 144+02	RT	105							
147+46 - 147+67	RT	105							
148+00 - 148+20	RT	100							
150+90 - 151+21	RT	155							150
151+00	RT 26-46	100							
151+67 - 151+87	RT	100							
156+54 - 156+84	RT	150							
156+84 - 157+03	RT		95						
157+03 - 157+33	RT		320						150
157+33 - 157+97	RT								
157+97 - 158+27	RT	140							
158+27 - 158+55	RT	150							
158+60	RT 26-56	150							
TOTAL		7370	6990	385	60				600

ADJUST FRAME & RING CASTING

STATION	LOCATION	TYPE	REMARK
75+90	20' RT	MH	SAN.
78+06	19' RT	MH	SAN.
80+00	20' RT	MH	SAN.
82+03	13' RT	MH	SAN.
84+00	13' RT	MH	SAN.
87+80	17' LT	MH	WATER
87+99	16' RT	MH	SAN.
91+11	1' RT	MH	SAN.
91+49	3' RT	MH	SAN.
101+52	54' RT	MH	SAN.
105+60	20' RT	MH	SAN.
107+73	14' RT	MH	SAN.
109+84	19' RT	MH	SAN.
111+83	16' RT	MH	SAN.
113+96	19' RT	MH	SAN.
122+29	Q	MH	SAN.
123+82	14' LT	MH	WATER
123+93	2' LT	MH	SAN.
127+24	Q	MH	SAN.
130+50	Q	MH	SAN.
133+82	Q	MH	SAN.
135+46	Q	MH	SAN.
137+10	Q	MH	SAN.
140+20	23' RT	MH	STORM
140+33	Q	MH	SAN.
143+68	Q	MH	SAN.
146+69	Q	MH	SAN.
147+80	Q	MH	SAN.
150+24	Q	MH	SAN.
153+52	Q	MH	SAN.
156+24	19' LT	MH	WATER
156+38	19' LT	MH	WATER
156+67	Q	MH	SAN.
156+75	11' LT	MH	WATER

ADJ. WATER GATE HOUSING

STATION	LOCATION
87+86	16' LT
91+03	14' LT
94+58	12' LT
97+62	14' LT
97+95	17' LT
101+40	42' RT
101+52	20' LT
105+38	38' LT
105+58	27' LT
109+63	46' RT
113+70	42' LT
113+90	22' LT
115+54	30' RT
118+48	40' LT
118+95	33' RT
118+95	43' RT
118+73	7' LT
120+38	34' LT
122+12	47' RT
123+77	18' LT
127+07	40' LT
127+07	47' RT
130+40	6' LT
133+67	38' RT
135+30	33' LT
136+94	37' RT
140+24	33' LT
140+24	14' RT
143+50	22' LT
143+50	5' LT
147+69	31' LT
147+69	49' RT
151+28	23' LT
151+30	32' RT
156+99	25' LT
157+03	30' LT
158+69	10' LT

RECONSTRUCT MANHOLES

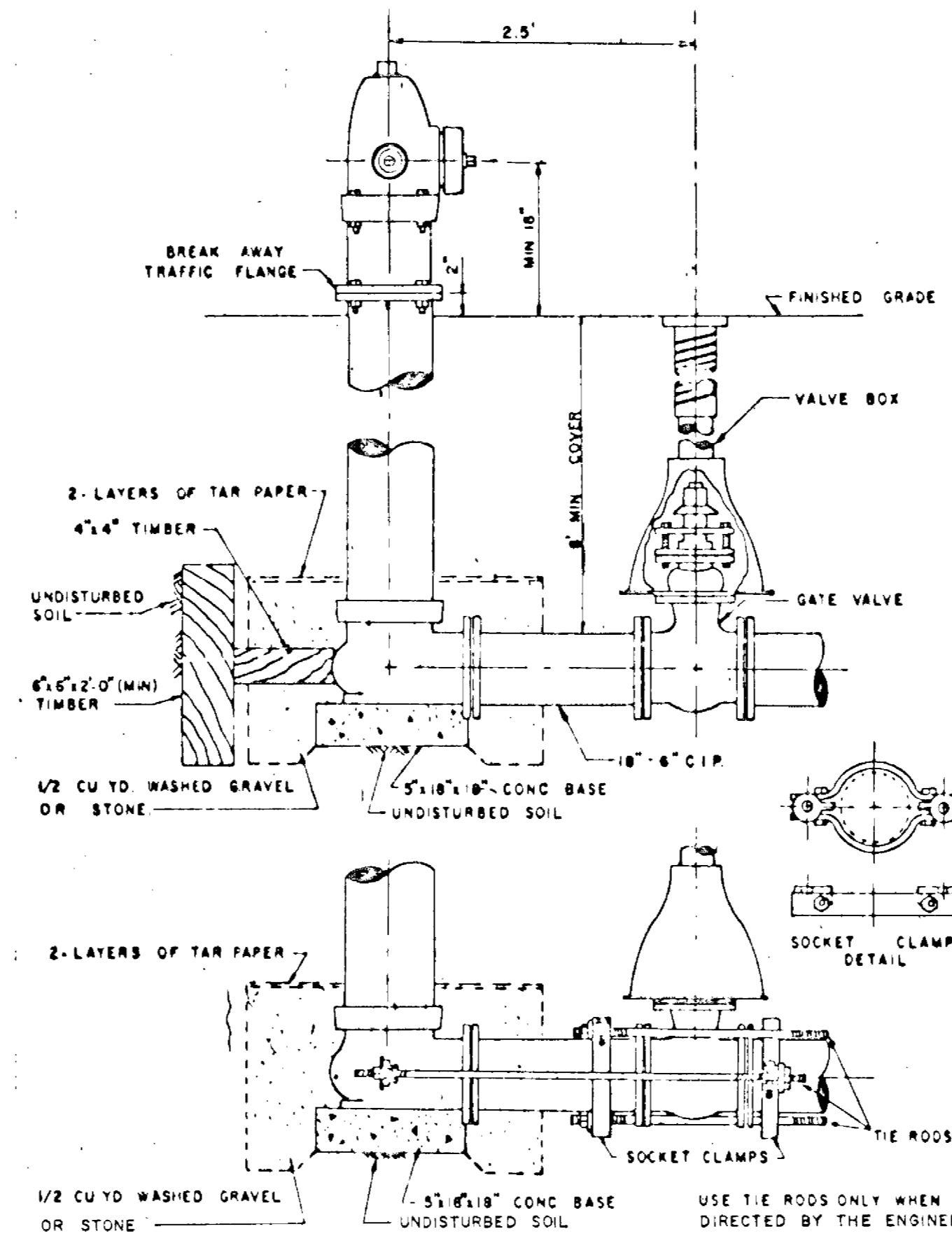
STATION	LOCATION	LIN. FT.	REMARKS
134+09	21' RT	3.6	STORM SEWER
136+76	21' RT	6.2	STORM SEWER
137+36	21' RT	6.1	STORM SEWER
142+36	22' RT	3.4	STORM SEWER
156+24	19' LT	8.0	WATER MAIN
156+36	19' LT	6.1	WATER MAIN

TOTAL 33.4

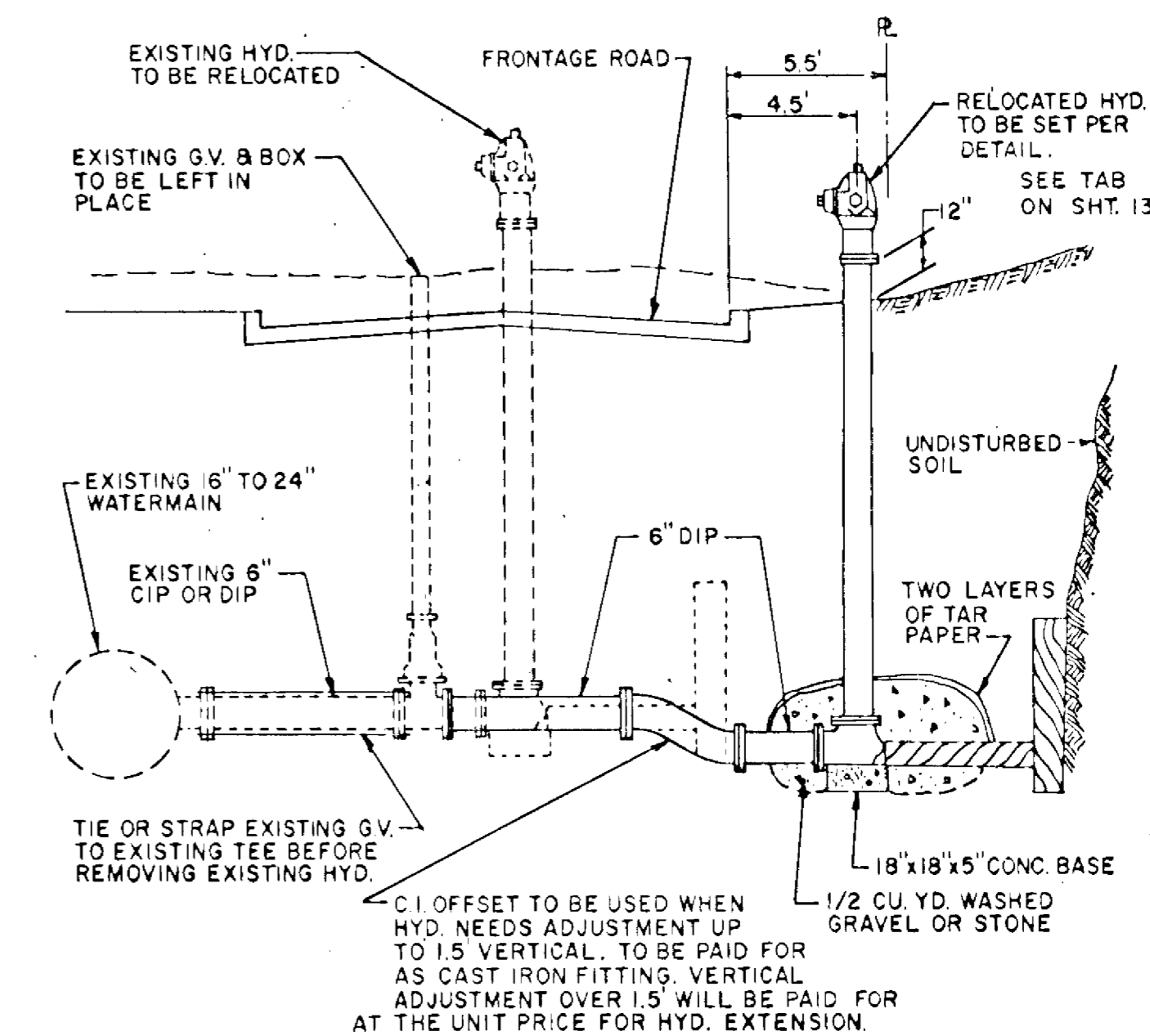
HYDRANT RELOCATION

EXISTING LOCATION		PROPOSED LOCATION	
1. 81+71	24' RT	81+71	30' RT
2. 87+69	45' RT	87+66	45' RT
3. 118+56	33' RT	118+53	33' RT
4. 123+66	36' LT	123+62	40' LT
5. 126+96	34' LT	126+92	34' LT
6. 135+19	35' LT	135+14	35' LT
7. 143+39	34' LT	143+36	34' LT
8. 147+58	34' LT	147+55	34' LT

NOTE: ALL HYDRANT LEADS, TIE BARS, BRACING AND OTHER EQUIPMENT, WORK AND MATERIALS REQUIRED TO COMPLETE THE JOB AS SPECIFIED SHALL BE CONSIDERED AS INCIDENTAL TO RELOCATING HYDRANTS.



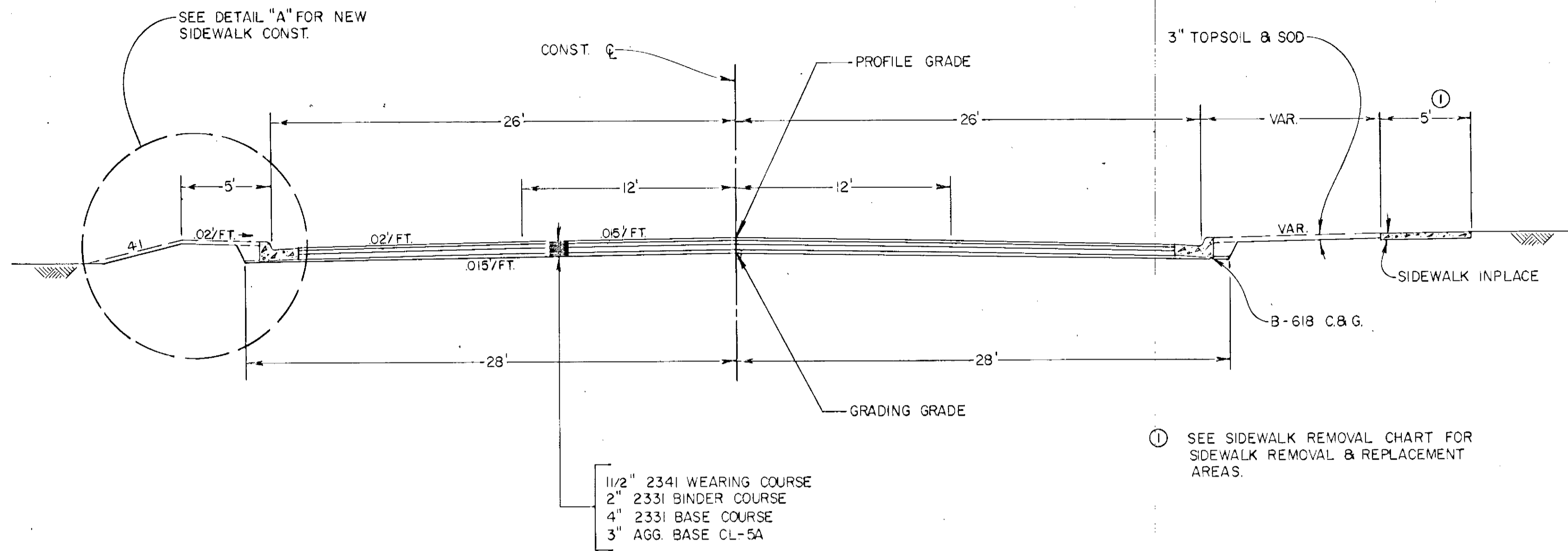
TYPICAL HYDRANT SETTING DETAIL



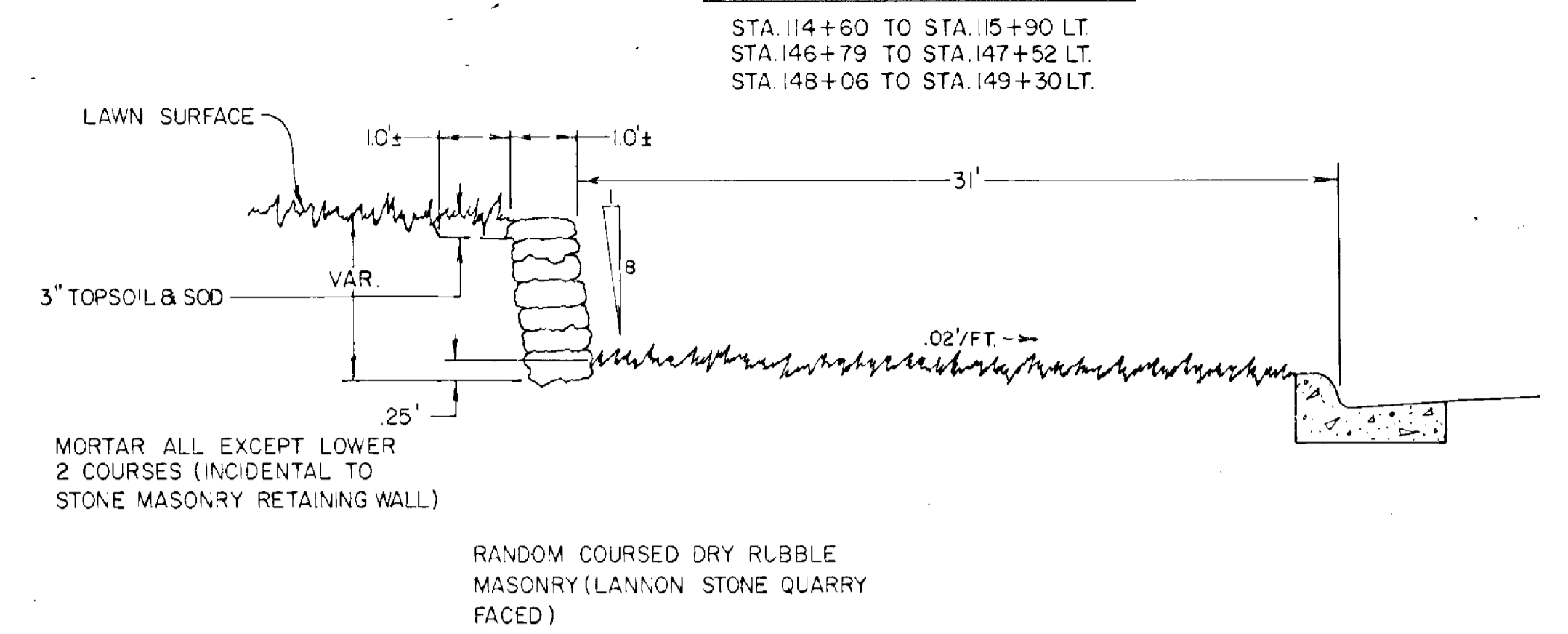
NOTE: HYDRANT RELOCATION SHALL INCLUDE ALL TOOLS, MATERIALS AND LABOR TO SECURE THE EXISTING GATE VALVE TO THE EXISTING TEE, REMOVE AND RELOCATE THE EXISTING HYDRANT WITHOUT SHUTTING DOWN THE EXISTING WATERMAIN.

HYDRANT RELOCATION DETAIL

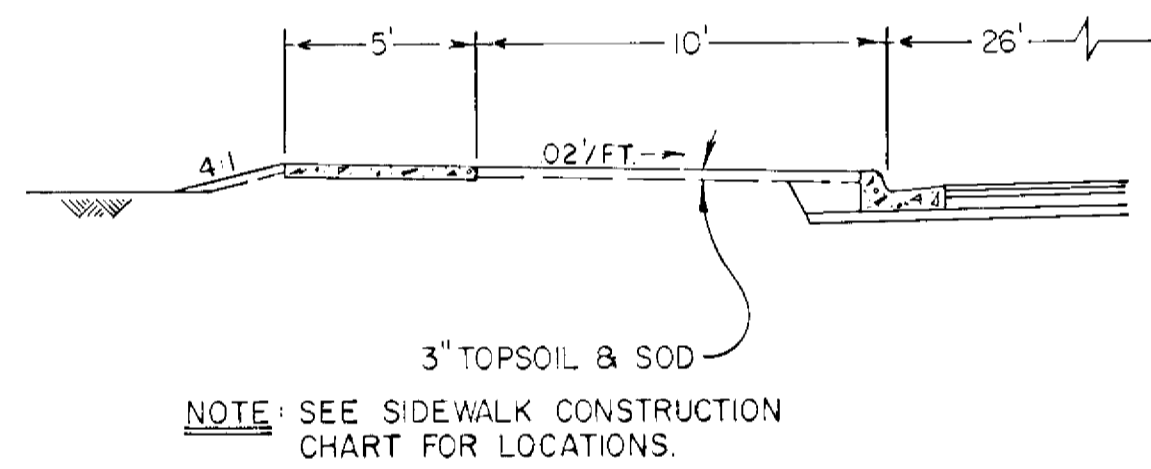
GRADING, BASE & BITUMINOUS SECTION



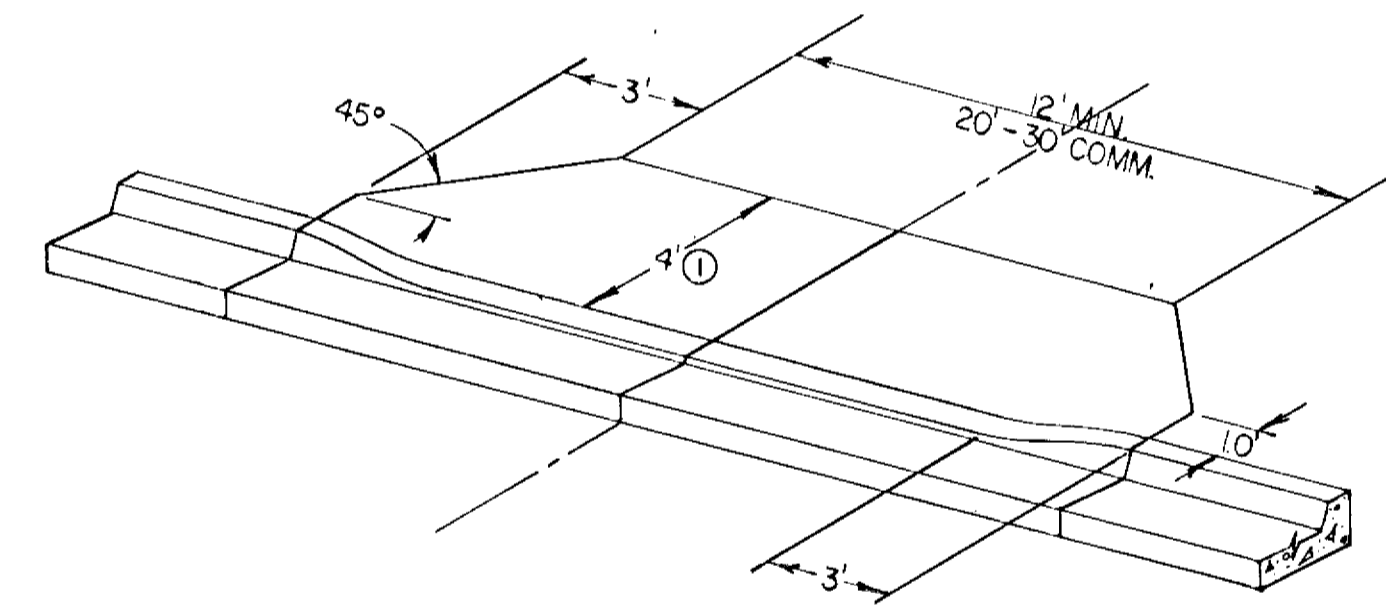
RETAINING WALL DETAIL



DETAIL "A"

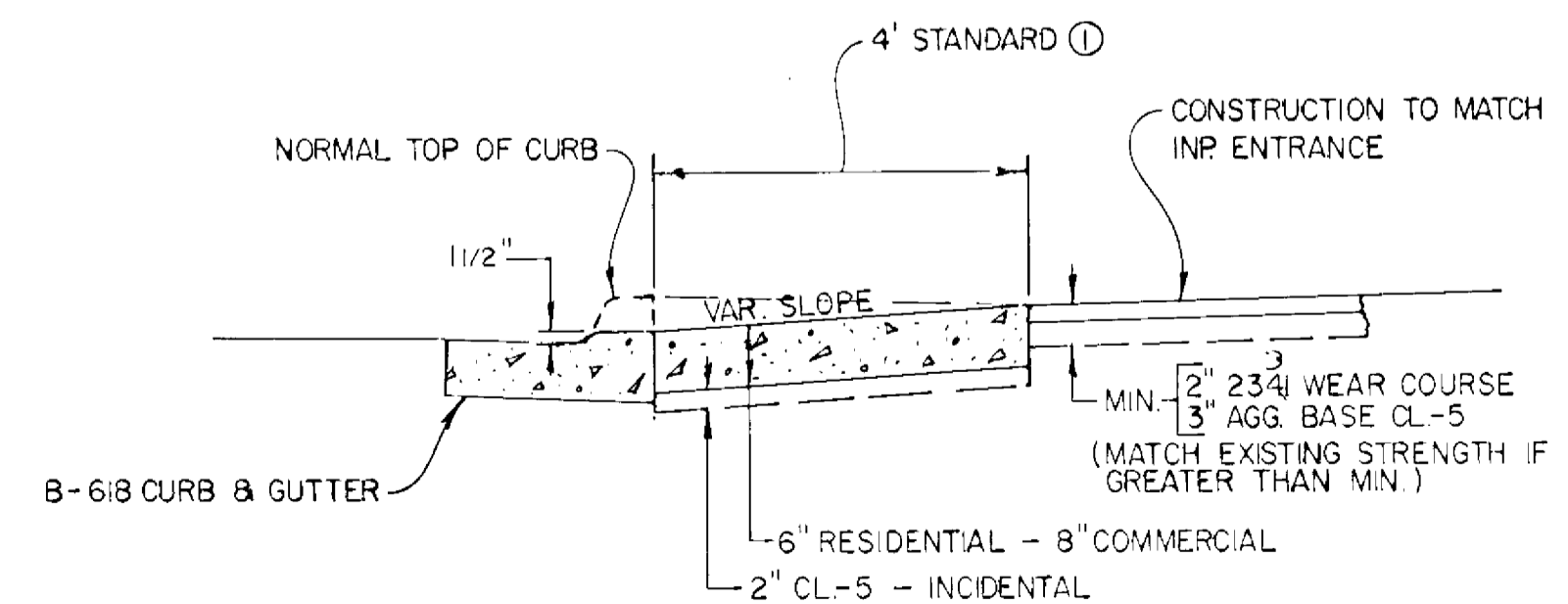
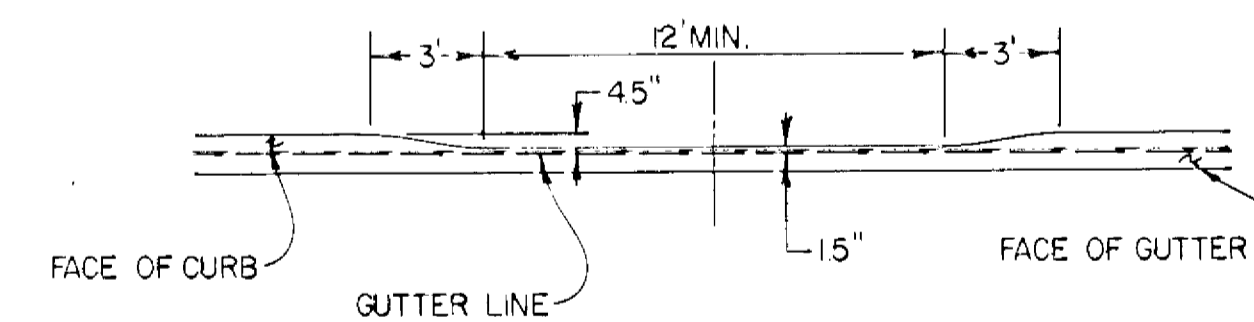
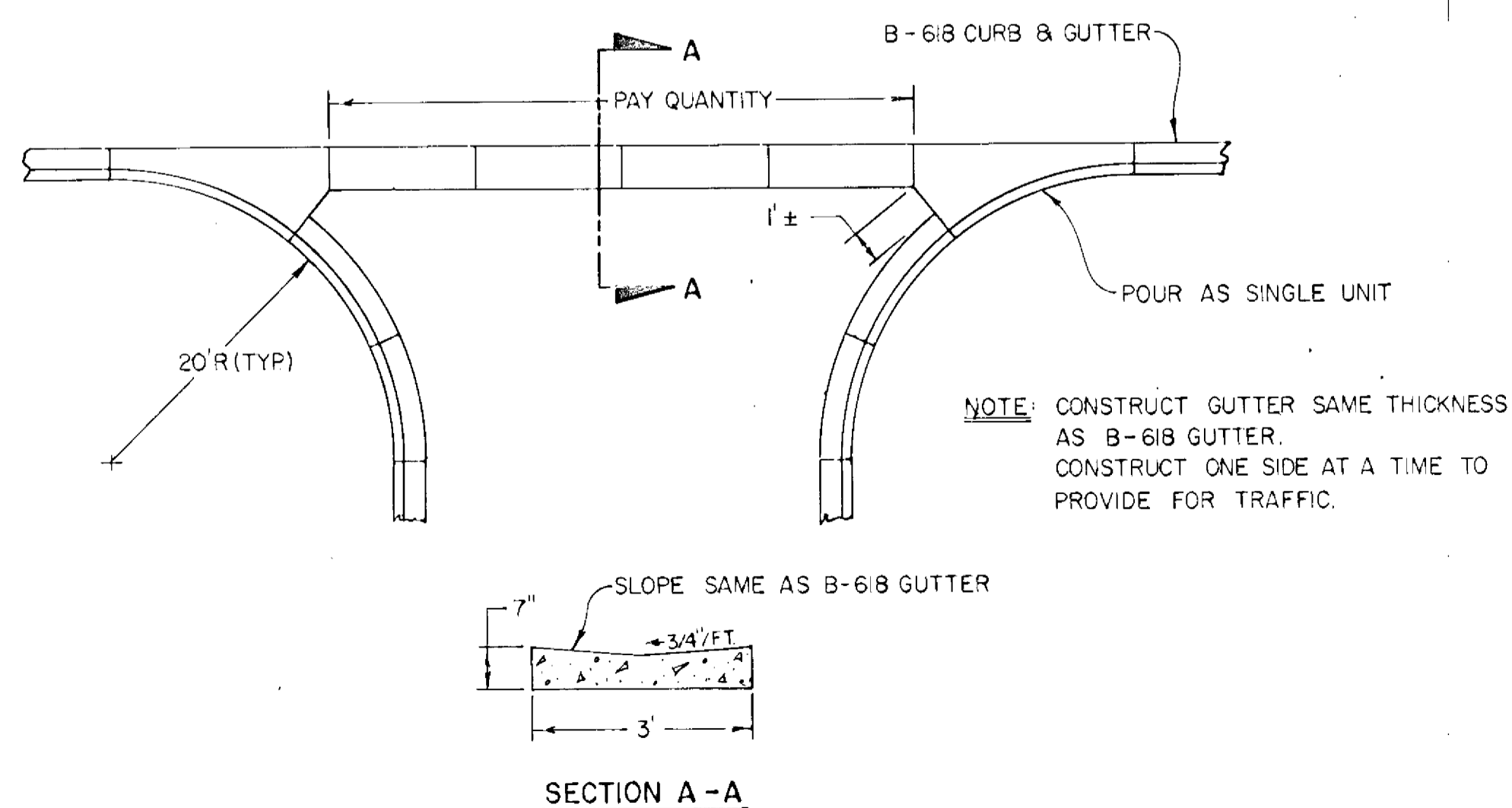


CONCRETE APRON DETAIL



CROSS GUTTER DETAIL

LOCATION
STA. 147+82 LT. & RT.



① IN SIDEWALK AREAS EXTEND CONC. APRON TO MATCH SIDEWALK.

NOTE: ALSO SEE STD. PLATE NO. 7035 J

DRIVEWAY CONSTRUCTION

1 OF 2

STATION	ADDRESS	REMARKS	REMOVE		CONCRETE DRIVEWAY PAVEMENT						BIT PAVEMENT		
			CONCRETE		APRON SQ YDS			DRIVEWAY SQ YDS			DRIVEWAY SQ YDS		
			SY.	SY (1)	WIDTH	6"	8"	WIDTH	REPLMT	NEW	WIDTH	REPLMT	NEW
76+30 RT	#10111	PAVE TO SIDEWALK			4'	8'					14'		13'
77+25 RT	#10121	PAVE TO SIDEWALK			12'	7'					12'	3	11'
77+44 LT	#10120	REMOVE BIT. & PAVE TO 33'		12	12'	7'					12'		7'
77+84 LT	#10130	REMOVE BIT. & PAVE TO 33'			12'	7'					12'		7'
78+55 RT	#10131	REMOVE BIT. & PAVE TO SIDEWALK		25	14'	8'					14'	11	
78+68 LT	#10130	REMOVE BIT. & PAVE TO 33'		20	14'	8'					14'	4	
79+52 RT	#10141	PAVE TO SIDEWALK			12'	7'					12'		8
79+60 LT	#10140	PAVE TO SIDEWALK			12'	7'					12'		
80+59 RT	#10151	REMOVE BIT. & PAVE TO SIDEWALK		25	14'	8'					14'	11	
80+69 LT	#10150	REMOVE BIT. & PAVE TO 33'		15	12'	7'					12'	3	
80+95 LT	#10200	REMOVE BIT. & PAVE TO 33'		17	14'	8'					14'	4	
81+01 RT	#10201	REMOVE BIT. & PAVE TO SIDEWALK		30	18'	10'					18'	12	
81+57 RT	#10201	REMOVE BIT. & PAVE TO SIDEWALK		20	12'	7'					12'	8	
81+86 RT	#10207	REMOVE BIT. & PAVE TO SIDEWALK		19	12'	7'					12'	7	
82+69 LT	#10210	REMOVE BIT. & PAVE TO SIDEWALK			12'	7'					12'		
82+78 RT	#10209	REMOVE BIT. TO SIDEWALK		12	12'	7'					12'		
83+68 LT	#10220	REMOVE BIT. & CONC.&REPLACE	8		12'	7'							
84+40 RT	#10221	REMOVE BIT. & CONC.&REPLACE CONC. OUT TO 40'		14	14'	8'	14'	8					
84+80 LT	#10230	REMOVE BIT. & PAVE TO 40'			12'	7'					12'	7	
84+83 RT	#10241	REMOVE BIT. & PAVE TO 40'		19	12'	7'					12'	7	
85+64 LT	#10240	REMOVE CONCRETE TO WALK	20		12'	7'							
86+33 RT	#10251	REMOVE BIT.		20	20'	11'							
86+70 RT	#10261	REMOVE BIT.			18'	10'							
90+88 LT		PAVE TO SIDEWALK			14'	8'					12'		3
95+81 RT	#10401	PAVE TO SIDEWALK			12'	7'					14'		4
96+22 RT		PAVE TO SIDEWALK			14'	8'					14'		
103+60 RT	#10533	REMOVE BIT. & PAVE TO 47'		53	30'	15'					30'	37	
103+65 LT		PAVE TO 33'		19	12'	7'					12'	3	
104+64 RT	#10533	REMOVE BIT. & PAVE TO 49'		58	30'	15'	15'				30'	61	
111+45 RT		REMOVE BIT. & PAVE TO SIDEWALK		19	12'	7'					12'	6	
111+53 LT	#10608	REMOVE BIT. & PAVE TO SIDEWALK		45	24'	12'					24'	26	
111+84 RT		REMOVE BIT. & PAVE TO SIDEWALK		19	12'	7'					12'	6	
115+93 RT		REMOVE BIT. & PAVE TO SIDEWALK		23	15'	8'					12'	9	
116+56 LT	#10714	PAVE TO SIDEWALK			12'	7'					12'		7
116+65 RT	#10715	PAVE TO SIDEWALK			12'	7'					12'		
117+30 RT		REMOVE BIT. & PAVE TO SIDEWALK		16	12'	7'					12'	7	
117+54 LT	#10740	REMOVE BIT. & PAVE TO SIDEWALK			18'	10'					12'		
119+85 LT	#10744	PAVE TO SIDEWALK			12'	7'					12'		7
120+18 RT	#10743	PAVE TO SIDEWALK			12'	7'					12'		
120+56 LT		NO ENTRANCE REQUIRED											
121+08 LT		REMOVE BIT. & PAVE TO 46'		31	12'	7'					12'	20	
122+47 LT		REMOVE BIT. & PAVE TO 44'		28	12'	7'					12'	17	
122+83 LT		REMOVE BIT. & PAVE TO 44'			12'	7'					12'		
123+36 RT	#10807	REMOVE BIT. & PAVE TO SIDEWALK		19	12'	7'					12'	7	
123+72 RT	#10821	REMOVE BIT. & PAVE TO SIDEWALK		22	14'	8'					14'	8	
124+97 LT		REMOVE CONC. & REPLACE CONC. TO 36'	20		14'	8'	14'	8					

DRIVEWAY CONSTRUCTION

2 OF 2

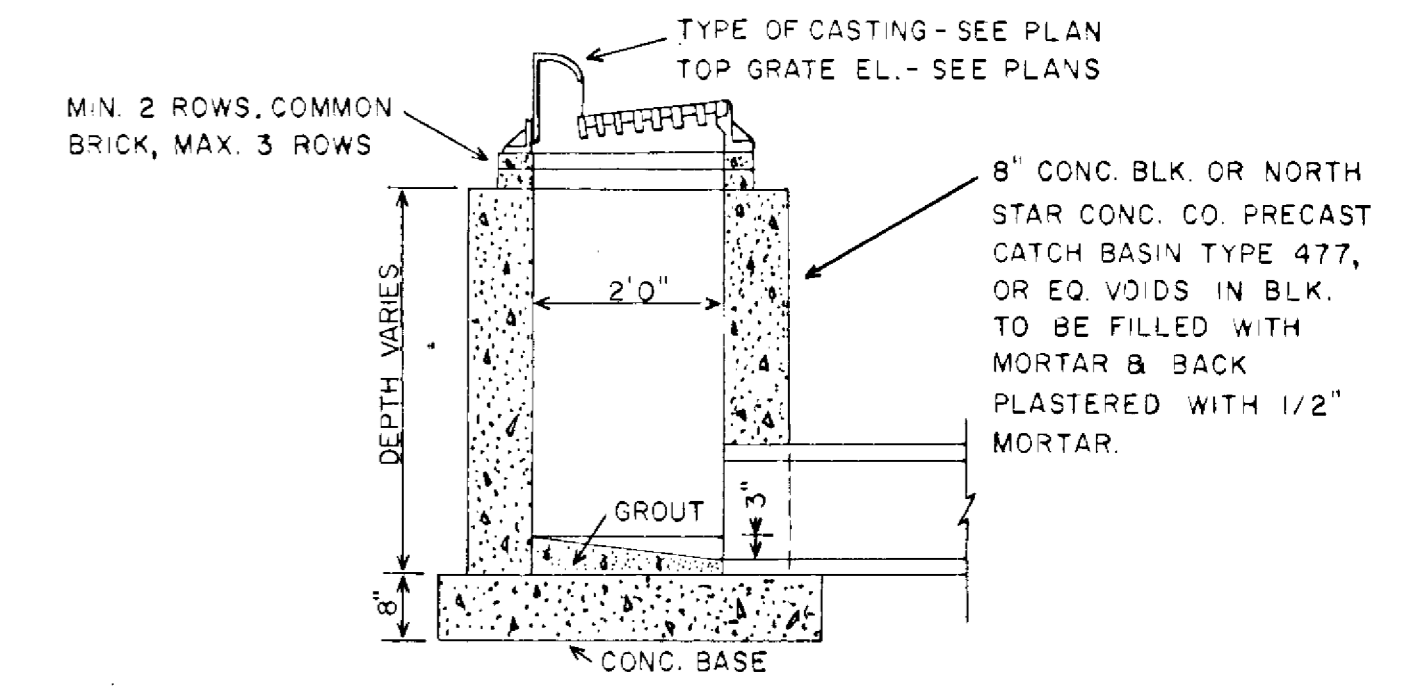
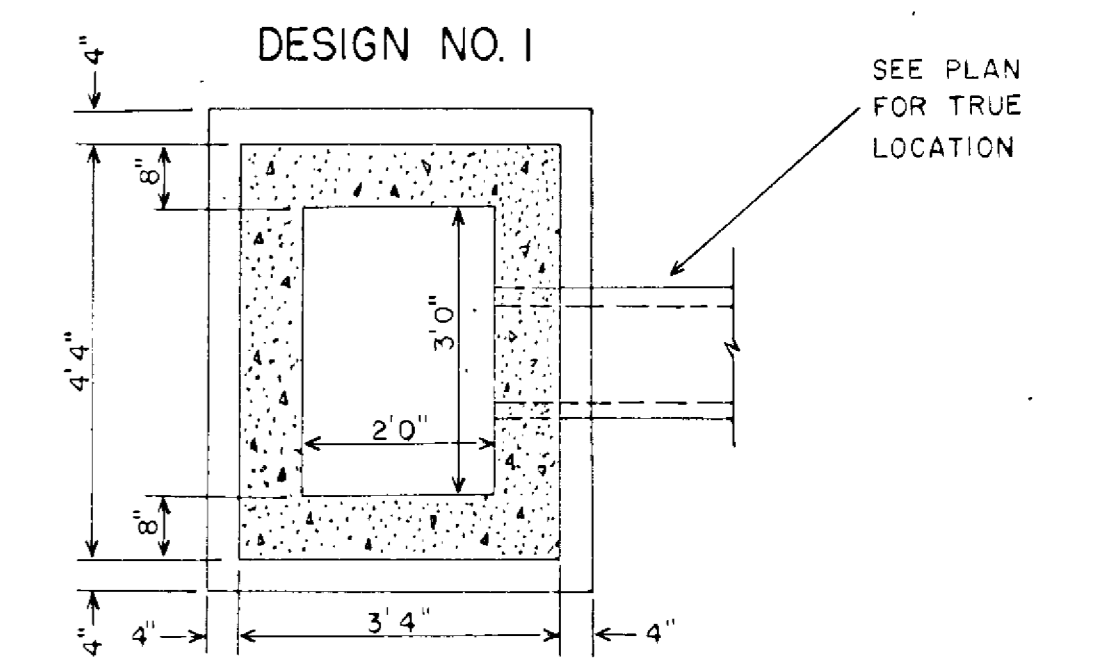
STATION	ADDRESS	REMARKS	REMOVE		CONCRETE DRIVEWAY PAVEMENT						BIT PAVEMENT		
			CONCRETE		APRON SQ YDS			DRIVEWAY SQ YDS			DRIVEWAY SQ YDS		
			SY.	SY (1)	WIDTH	6"	8"	WIDTH	REPLMT	NEW	WIDTH	REPLMT	NEW
125+19 RT	#10831	REMOVE BIT. & PAVE TO SIDEWALK		25	16'	9'					16'	9	
126+07 RT	#10861	REMOVE BIT. & PAVE TO SIDEWALK		11	12'	7'					12'	7	
128+36 RT	#10901	REMOVE BIT. & PAVE TO SIDEWALK		17	12'	7'					12'	7	
128+48 LT	#10900	REMOVE BIT. & PAVE TO 33'		20	16'	9'					16'	4	
128+97 LT		REMOVE BIT. & PAVE TO 33'			12'	7'					12'		
129+63 LT		REMOVE BIT. & PAVE TO 33'		18	16'	9'					16'	4	
129+80 RT	#10931	REMOVE BIT. & PAVE TO SIDEWALK		25	16'	9'					16'	9	
130+47 LT		REMOVE CONC. & REPLACE CONC. TO 45'	32		12'	7'	12'	19'					
131+04 LT		REMOVE BIT. & PAVE TO 35'		62	30'	15'					30'	14	
131+51 RT	#10937	REMOVE BIT. & PAVE TO SIDEWALK		16	12'	7'					12'	7	
131+82 RT		REMOVE CONC. & REPLACE CONC. TO SIDEWALK	31		20'	11'	20'	12'					
132+44 RT	#10961	REMOVE CONC. & REPLACE CONC. TO SIDEWALK	22		14'	8'	14'	8					
133+43 LT		REMOVE BIT. & PAVE TO 33'		20	14'	8'					16'	4	
134+07 LT	#10960	REMOVE BIT. & PAVE TO 33'		16	16'	9'					12'	7	
134+89 RT	#11001	REMOVE BIT. & PAVE TO SIDEWALK			12'	7'					12'		
135+74 RT	#11021	REMOVE CONC. & REPLACE TO SIDEWALK	30		18'	10'	18'	11'					
136+58 LT		REMOVE BIT. & PAVE TO 40'		28	14'	8'					14'	15	
137+30 LT	#11032	REMOVE BIT. & PAVE TO 40'		25	14'	8'					14'	9	
138+19 RT	#11041	REMOVE BIT. & PAVE TO SIDEWALK			16'	9'					16'		
138+56 LT	#11040	REMOVE CONC. & REPLACE CONC. TO 33'	12		12'	7'	12'	3					
139+12 LT	#11052	REMOVE BIT. & PAVE TO 33'		44	30'	15'					30'	8	
139+35 RT	#11051	REMOVE BIT. & PAVE TO SIDEWALK		37	24'	12'					24'	14	
141+41 RT	#11061	REMOVE BIT. & PAVE TO 50'		59	24'	12'					24'	38	
141+41 LT	#11100	REMOVE BIT. & PAVE TO 45'		37	14'	8'					14'	8	
142+15 LT		REMOVE BIT. & PAVE TO 45'			12'	7'					12'		
142+94 RT	#11103	REMOVE CONC. & REPLACE CONC. TO SIDEWALK	16		12'	7'	12'	7					
144+80 RT	#11121	REMOVE BIT. & PAVE TO SIDEWALK		28	18'	10'					18'	11	
144+82 LT		REMOVE BIT. & PAVE TO SIDEWALK		22	30'	15'	15'				30'	18	
145+33 LT		REMOVE BIT. & PAVE TO 36'			12'	7'					12'		
146+66 LT		REMOVE BIT. & PAVE TO 40'		40	20'	11'					20'	21	
149+16 RT		PAVE TO SIDEWALK			12'	7'					12'		7
149+44 LT		REMOVE BIT. & PAVE TO 33'		26	18'	10'					18'	5	
150+40 LT		REMOVE BIT. & PAVE TO 33'			14'	8'					14'		
152+45 LT		REMOVE BIT. & PAVE TO 33'		15	30'	15'					30'	8	
152+86 RT		REMOVE BIT. & PAVE TO SIDEWALK		35	24'	12'	12'				24'	14	
153+75 LT		REMOVE BIT. & PAVE TO SIDEWALK			18'	10'					18'		
154+22 RT	#11247	REMOVE BIT. & PAVE TO SIDEWALK		38	26'	13'					26'	15	
154+87 RT	#11247	REMOVE BIT. & PAVE TO SIDEWALK		35	22'	12'					22'	12	
156+12 RT		REMOVE BIT. & PAVE TO SIDEWALK		53	30'	15'					30'	18	
157+01 LT		REMOVE BIT. & PAVE TO 33'		33	25'	13'					25'	6	
157+18 RT		REMOVE CONC. APRON & BIT. & PAVE TO 35'	36		7	30'	15'				30'	14	
157+90 LT		REMOVE BIT. & PAVE TO 33'		33	25'	13'					25'	6	
158+12 RT		REMOVE CONC. APRON & BIT., PAVE TO 35'	36		7	30'	15'				30'	14	
TOTALS			263	1457	625	68	76	0			619	69	

(1) FOR INFORMATION ONLY ALL BITUMINOUS REMOVALS ARE INCLUDED WITH COMMON EXCAVATION FOR PAYMENT.

NOTE: PAVE ALL DRIVEWAYS TO PROPERTY LINE OR SIDEWALK, AND MATCH EXISTING DRIVEWAY.

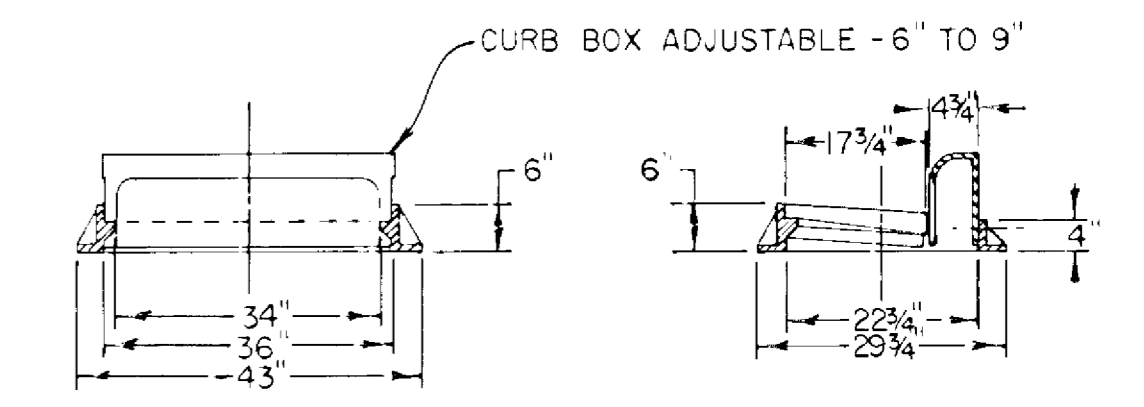
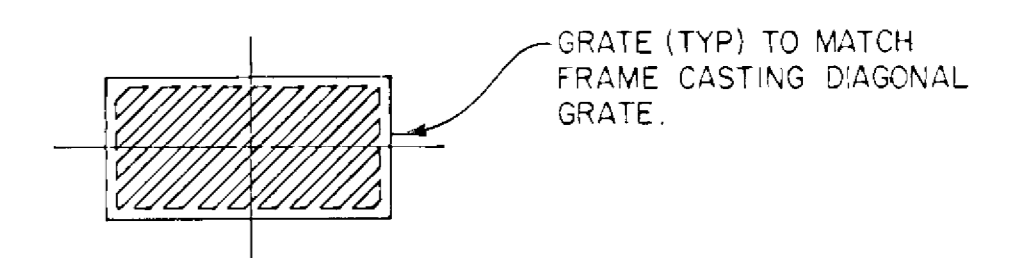
STORM SEWER

NO.	STA.	LOC.	REMARKS	TYPE	DESIGN	LIN. FT.	REMOVE SEWER PIPE	TOP	OUTLET	DRAINS TO	F&I CASTING ASSEMBLY	FURNISH & INSTALL									
												RCP SEWER PIPE									
												12" CL II	12" CL III	15" CL II	15" CL III	18" CL II	18" CL III	21" CL II	21" CL III	24" CL II	24" CL III
1	85+42	25.7' LT		CB	SPECIAL 1	4.3		898.04	894.00	CB 2	C	8'									
2	85+50	25.7' LT		CB	SPECIAL 1	4.5		898.00	893.72	CB 3	C			51'							
3	85+50	24.9' RT		CB	COR G	4.7		898.01	893.21	CB 4	B					196'					
4	87+46	24.9' RT		CB	A OR F	6.0		898.20	892.03	MH 5	B					68'					
5	88+14	24.9' RT		MH	A OR F	6.5		898.06	891.62	CB 10	A					252'					
6	87+77	53' RT		CB	COR G	4.7		898.26	893.40	CB 7	B	30'									
7	88+05	53' RT		CB	COR G	5.2		898.24	892.85	MH 5	B			28'							
8	90+54	23' RT	REMOVE CB STRUCT. & SEAL RCP SEWER OPENING	CB INPL.						CB 2											
9	90+54	23' LT	REMOVE CB STRUCT. & SEAL RCP SEWER OPENING	CB INPL.			18" X 105' CMP			DITCH											
10	90+66	24.9' RT		CB	A OR F	7.0		897.08	889.86	MH 13	B					63'					
11	91+05	24.9' LT		CB	COR G	5.3		896.94	891.50	CB 12	B	8'									
12	91+13	24.9' LT	TIE LAST 3 RCP SECTIONS AT OUTLET	CB	A OR F	6.8		896.93	890.00	DITCH	B			58'							
13	91+29	20.8' RT	SALVAGE CB CASTING F & I MH CASTING	MH				897.15	885.47	DITCH	A										
14	91+49	18.0' RT		MH	A OR F	10.8		897.36	886.62	MH 13	A								20'		
15	91+57	24.9' RT		CB	COR G	5.1		897.21	891.90	MH 14	B	11'									
16	94+89	18.0' RT		MH	A OR F	11.7		899.89	888.32	MH 14	A								340'		
17	94+99	24.9' RT		CB	COR G	5.2		899.68	894.30	MH 16	B			12'							
18	94+95	24.9' LT		CB	COR G	5.2		899.67	894.30	MH 16	B			44'							
19	97+62	53.0' RT		CB	COR G	4.7		901.15	896.28	CB 20	B	28'									
20	97+91	50.0' RT		CB	COR G	5.2		901.12	895.75	MH 21	B			37'							
21	98+09	18.0' RT		MH	A OR F	11.0		900.85	889.92	MH 16	A								320'		
22	98+17	24.9' RT		CB	COR G	4.8		900.63	895.61	MH 21	B	11'									
23	101+08	24.9' RT		CB	COR G	5.2		899.87	894.50	MH 24	B	12'									
24	101+17	18.0' RT		MH	A OR F	7.8		900.03	892.36	MH 21	A								308'		
24A	102+28	32.0' RT	SALVAGE CASTING, REMOVE CB STRUCTURE				18" X 64' CMP														
25	101+34	53.0' RT		CB	COR G	5.1		899.61	894.38	MH 24	B			38'							
26	101+64	50.0' RT		CB	COR G	4.6		899.66	894.93	CB 25	B	30'									
27	103+25	25.7' LT		CB	SPECIAL 1	3.9		897.80	894.16	CB 28	C	51'									
28	103+25	25.7' RT		CB	SPECIAL 1	4.4		897.80	893.69	MH 21	C					208'					
29	105+29	24.9' RT		MH	COR G	5.2		899.49	894.42	CB 28	A			204'							
30	105+29	53' RT		CB	COR G	4.6		899.52	894.72	MH 29	B			30'							
31	105+60	53' RT		CB	COR G	4.2		899.67	895.27	CB 30	B	30'									
32	105+95	24.9' RT		CB	COR G	4.6		899.58	894.83	MH 29	B	66'									
33	106+25	24.9' LT		CB	H	3.4		898.74	895.12	CB 32	B	58'									
34	113+82	24.9' RT		CB	COR G	4.4		904.73	900.15	CB 36	B	125'									
35	114+77	24.9' LT		CB	COR G	3.8		904.05	900.11	CB 36	B	59'									
36	115+07	24.9' RT		CB	COR G	4.8		904.23	899.27	MH 37	B			68'							
37	115+75	21.7' RT	SALVAGE CASTING, F & I MH CASTING	MH	INPLACE			904.80	889.53	36" RCP INPL	A										
38	118+40	24.9' RT		CB	A OR F	5.8		905.31	899.29	MH 37	B					265'					
39	119+70	25.7' RT		CB	SPECIAL 1	5.1		904.83	900.01	CB 38	C			130'							
40	119+70	25.7' LT		CB	SPECIAL 1	4.3		904.83	900.76	CB 39	C	50'									
41	126+77	24.9' RT		CB	COR G	3.9		901.10	897.07	MH 43	B	11'									
42	126+77	24.9' LT		CB	H	3.5		901.10	897.41	MH 43	B	44'									
43	126+85	18.0' RT		MH	COR G	4.6		901.24	896.77	MH 47	A			84'							
44	127+03	50.0' RT		CB	H	3.6		901.04	897.31	CB 45	B	28'									
45	127+31	50.0' RT		CB	COR G	4.0		901.01	896.83	CB 46	B			40'							
46	127+63	24.9' RT		CB	COR G	3.9		900.56	896.51	MH 47	B			9'							



SPECIAL CATCH BASIN DETAIL
SCALE: 1/2" = 1'0"

NOTE: TO BE USED WITH CB DESIGN SPECIAL 1



CB CASTING DETAIL - TYPE B

CASTING ASSEMBLIES			
ASSEMBLY	ITEM	CASTING NO.	QUANTITY
A	FRAME COVER	700-7 712	23
B	FRAME GRATE CURB BOX	801 810 821 B	45
C	FRAME GRATE CURB BOX	SEE CAST. DETAIL	15
D	FRAME GRATE	700-7 721	1

STORM SEWER

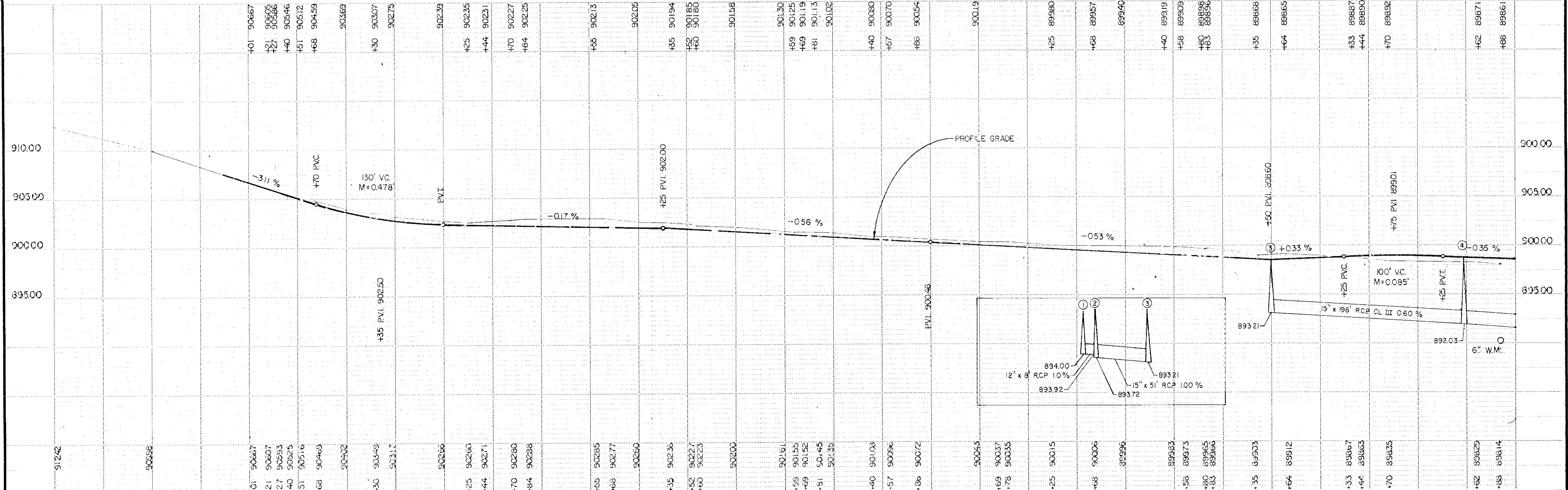
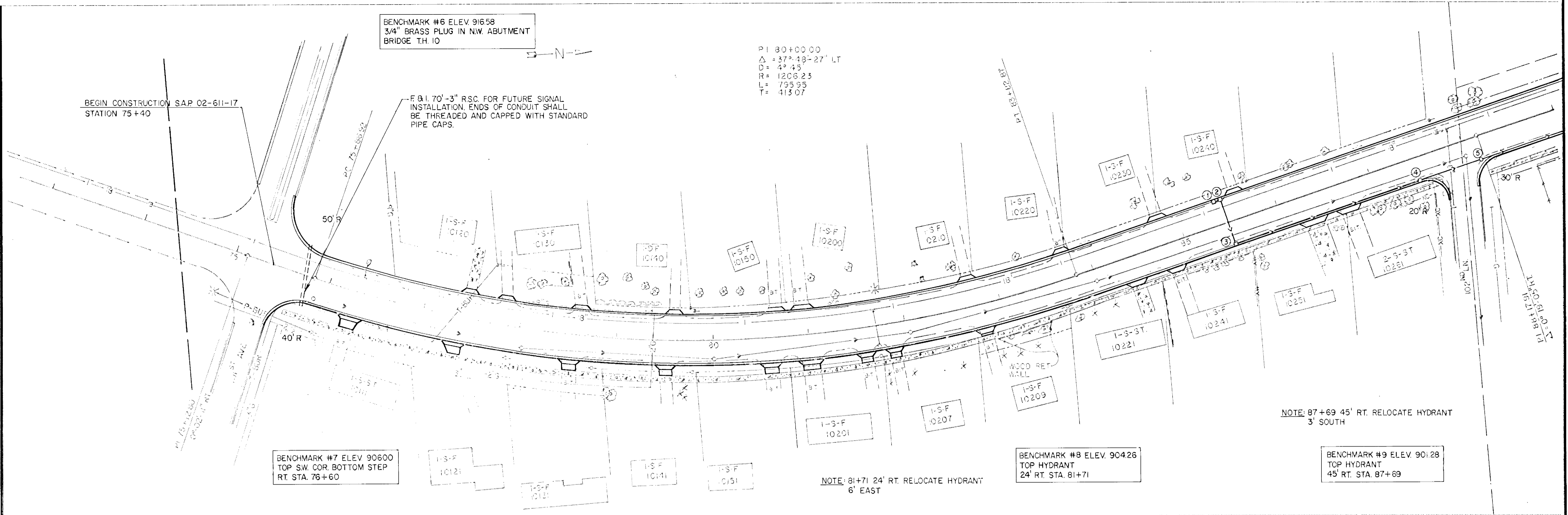
NO.	STA.	LOC.	REMARKS	TYPE	DESIGN	LIN. FT.	REMOVE SEWER PIPE	TOP	OUTLET	DRAINS TO	F&I CASTING ASSEMBLY	FURNISH & INSTALL									
												RCP SEWER PIPE									
												12"CL II	12"CL III	15"CL II	15"CL III	18"CL II	21"CL II	21"CL III	24"CL III		
47	127+69	18.0' RT		MH	C OR G	4.7		900.81	896.22	MH 49	A										
48	127+63	24.9' LT		CB	H	3.5		900.56	896.86	MH 47	B	44'						244'			
49	130+13	18.0' RT		MH	A OR F	5.8		900.70	895.00	MH 53	A							60'			
50	130+07	24.9' RT		CB	C OR G	4.7		900.47	895.59	MH 49	B	9'									
51	130+33	50.0' RT		CB	C OR G	4.4		900.29	895.70	CB 52	B	26'									
52	130+61	50.0' RT		CB	C OR G	4.8		900.24	895.22	MH 53	B			34'							
53	130+73	18.0' RT		MH	A OR F	6.1		900.52	894.55	MH 55	A									268'	
54	130+74	24.9' LT		CB	C OR G	4.6		900.28	895.48	MH 53	B	43'									
55	133+41	18.0' RT		MH	C OR G	4.4		897.36	893.05	MH 60	A									68'	
56	133+35	24.9' RT		CB	H	3.3		897.17	893.74	MH 55	B	9'									
57	133+48	21.1' RT	SALVAGE CASTING, REMOVE CB STRUCTURE	CB			15" X 61' RCP	897.19	893.25	MH 60											
58	133+62	50.0' RT		CB	H	3.4		897.13	893.57	CB 59	B	28'									
59	133+90	50.0' RT		CB	H	3.7		897.07	893.19	MH 60	B			38'							
60	134+09	20.7' RT	SALVAGE CB CASTING, RECONSTRUCT MH, & F&I MH CASTING	MH	RECONST.	3.6		896.83	892.67	MH 61	A										
61	134+32	20.7' RT	CONSTRUCT MH ON EXISTING 21" RCP SEWER	MH	C OR G	4.4		896.81	892.50	MH 64	A										
62	134+26	25.7' RT		CB	SPECIAL 1	3.8		896.58	893.08	MH 61	C	8'									
63	134+26	25.7' LT		CB	SPECIAL 1	3.5		896.58	893.38	MH 61	C	47'									
64	135+55	20.6' RT	SALVAGE CB CASTING, F & I MH CASTING	MH	INPLACE			897.27	890.63	MH 66	A										
65	135+26	33' LT	SALVAGE CB CASTING, REMOVE CB STRUCT. & SEAL PIPE OPEN.	CB						MH 66											
66	135+54	33.2' LT	SALVAGE CB CASTING, F & I MH CASTING	MH				896.82	890.53	INPL. 36"	A										
67	135+80	24.9' LT		CB	C OR G	4.6		897.18	892.37	MH 66	B	27'									
68	136+76	20.9' RT	SALVAGE CB CASTING, RECONST. MH STRUCT. & F&I MH CAST.	MH	RECONST.	6.2		897.74	890.96	MH 64	A										
69	136+91	50.0' RT		CB	C OR G	5.3		898.05	892.55	MH 68	B			35'							
70	137+19	50.0' RT		CB	C OR G	4.8		898.02	893.08	CB 69	B	28'									
71	137+36	20.9' RT	SALVAGE CB CASTING, RECONST. MH STRUCT. & F&I MH CAST.	MH	RECONST.	6.1		898.05	891.38	MH 68	A										
72	140+19	21' RT	ADJUST CASTING	MH				897.04	891.65	MH 71	A										
73	139+94	24.9' LT		CB	C OR G	3.9		897.15	893.07	MH 74	B	25'									
74	140+19	25.0' LT		MH	C OR G	4.4		896.96	892.62	MH 72	A			46'							
75	140+20	50.0' LT		CB	C OR G	4.1		897.06	892.75	MH 74	B			25'							
76	140+48	50.0' LT		CB	H	3.7		897.09	893.17	CB 75	B	28'									
77	142+29	25.7' RT		CB	SPECIAL 1	3.3		895.54	892.48	MH 78	C	8'									
78	142+36	22' RT	SALVAGE CB CASTING, RECONST. MH STRUCT. & F&I MH CAST.	MH	RECONST.	3.4		895.74	891.85	MH 72	A										
79	142+36	22' LT	SALVAGE CB CASTING, REMOVE CB STRUCTURE	CB			18" X 44' RCP	895.54	892.54	MH 78											
80	142+29	25.7' LT		CB	SPECIAL 1	3.0		895.54	892.78	MH 78	C	48'									
81	143+36	18.0' RT		MH	C OR G	4.0		896.30	892.35	MH 78	A								100'		
82	143+50	50.0' RT		CB	H	3.6		896.60	892.81	MH 81	B			35'							
83	143+78	50.0' RT		CB	H	3.2		896.61	893.22	CB 82	B	28'									
84	144+04	25.7' RT		CB	SPECIAL 1	4.1		896.73	892.93	MH 81	C			68'							
85	144+04	25.7' LT		CB	SPECIAL 1	3.6		896.73	893.34	CB 84	C	51'									
86	158+34	25.7' RT		CB	SPECIAL 1	4.2		900.96	897.03	CB 87	C	27'									
87	158+60	32' RT	SALVAGE CB CASTING, REMOVE CB STRUCTURE	CB	C OR G	4.7		901.10	896.51	MH 91	D									52'	
88	159+08	25.7' LT	SALVAGE CB CASTING, REMOVE CB STRUCTURE	CB	SPECIAL 1	3.9	15" X 56' RCP	900.56	896.89	CB 87	C									75'	
89	159+34	36' LT	MH INPLACE					901.00	898.20	CB INPLACE											
90	159+43	33' LT	LOCATE CB IN 75' RADIOUS	CB	SPECIAL 1	2.5		900.50	898.28	MH 89	C	8'									
91	158+95	68' RT	TO BE CONSTRUCTED WITH CITY PROJECT	MH					895.75												
TOTALS												1154	56	928	1182	431	436	308	680		

BENCHMARK #6 ELEV. 91658
3/4" BRASS PLUG IN N.W. ABUTMENT
BRIDGE T.H. 10

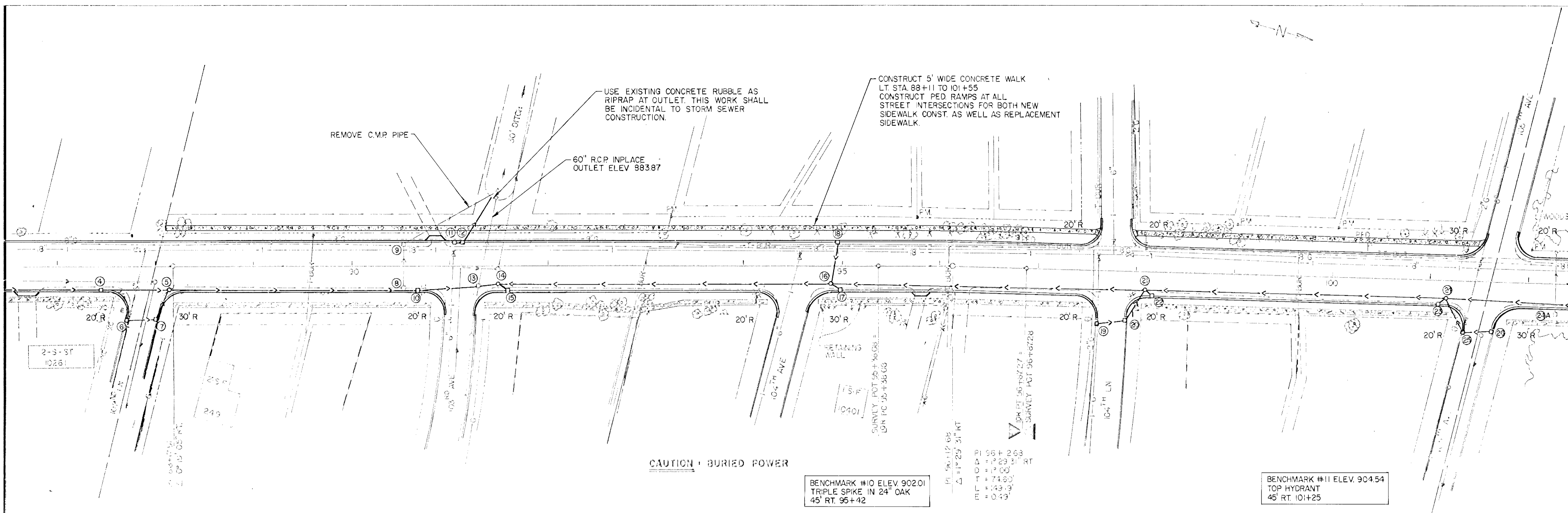
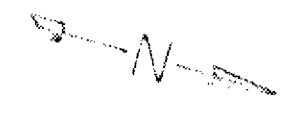
P1 80+00.00
Δ = 37° 49' 27" LT
D = 4° 45'
R = 1206.23
L = 795.95
T = 413.07

BEGIN CONSTRUCTION SAP 02-611-17
STATION 75+40

F & I 70'-3" RSC FOR FUTURE SIGNAL
INSTALLATION. ENDS OF CONDUIT SHALL
BE THREADED AND CAPPED WITH STANDARD
PIPE CAPS.



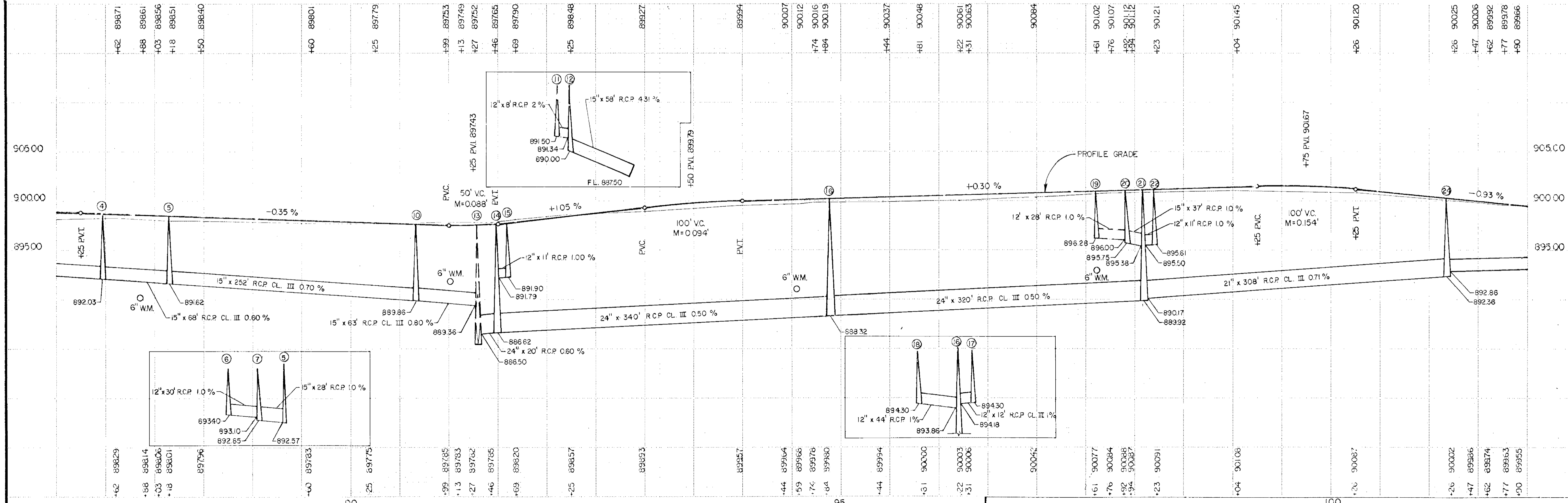
TELETYPE POST - SINGLE PLAN - PROFILE - 10/24



CAUTION - BURIED POWER

BENCHMARK #10 ELEV. 902.01
TRIPLE SPIKE IN 24" OAK
45' RT. 95+42

BENCHMARK #11 ELEV. 904.54
TOP HYDRANT
45' RT. 101+25



ELECTRIC POST - SINGLE PLAN - PROFILE - N.W.M.

CAUTION: BURIED POWER

BENCHMARK #13 ELEV. 903.56
R.R. SPIKE IN 18" OAK
50' LT. 108+76

BENCHMARK #14 ELEV. 909.16
TOP HYD. 50' LT. 113+73

CAUTION: BURIED POWER

P1 105+75.95
L=13'-25'-14"
E=6'-00"
R=954.35'
L=240.34'
T=120.81'

P1 105+75.95
L=13'-25'-14"
E=6'-00"
R=954.35'
L=240.34'
T=120.81'

F&I 4-HAND HOLES AND 270'-3" R.S.C. FOR
FUTURE SIGNAL INSTALLATION. ENDS OF CONDUIT
SHALL BE THREADED AND CAPPED WITH STANDARD
PIPE CAPS.

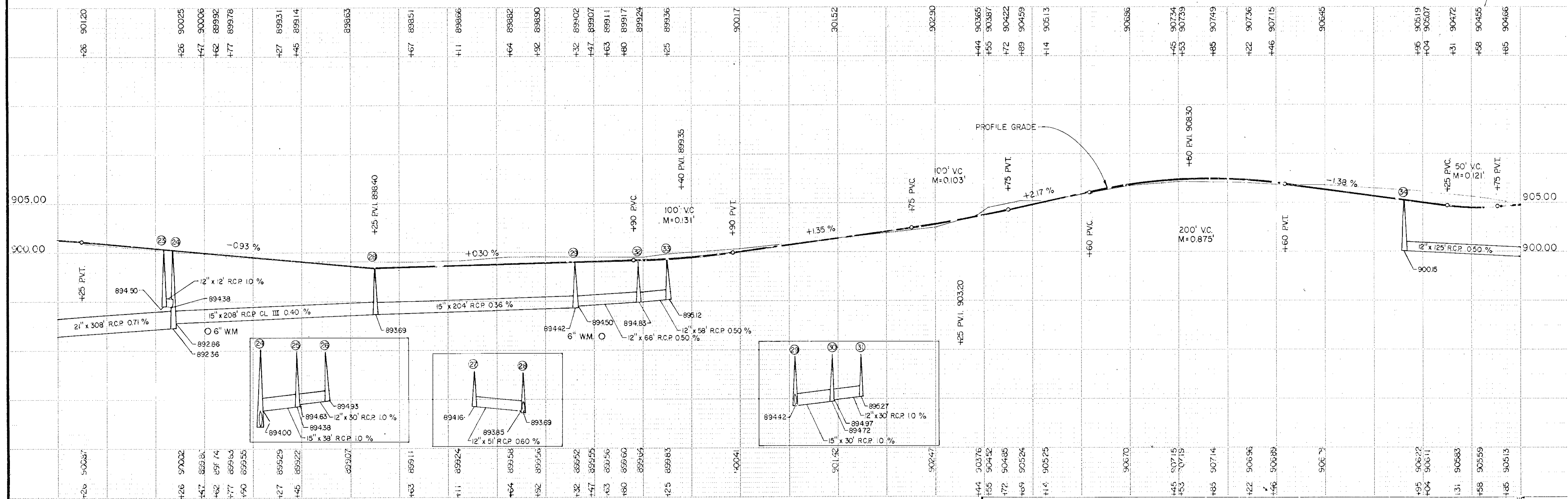
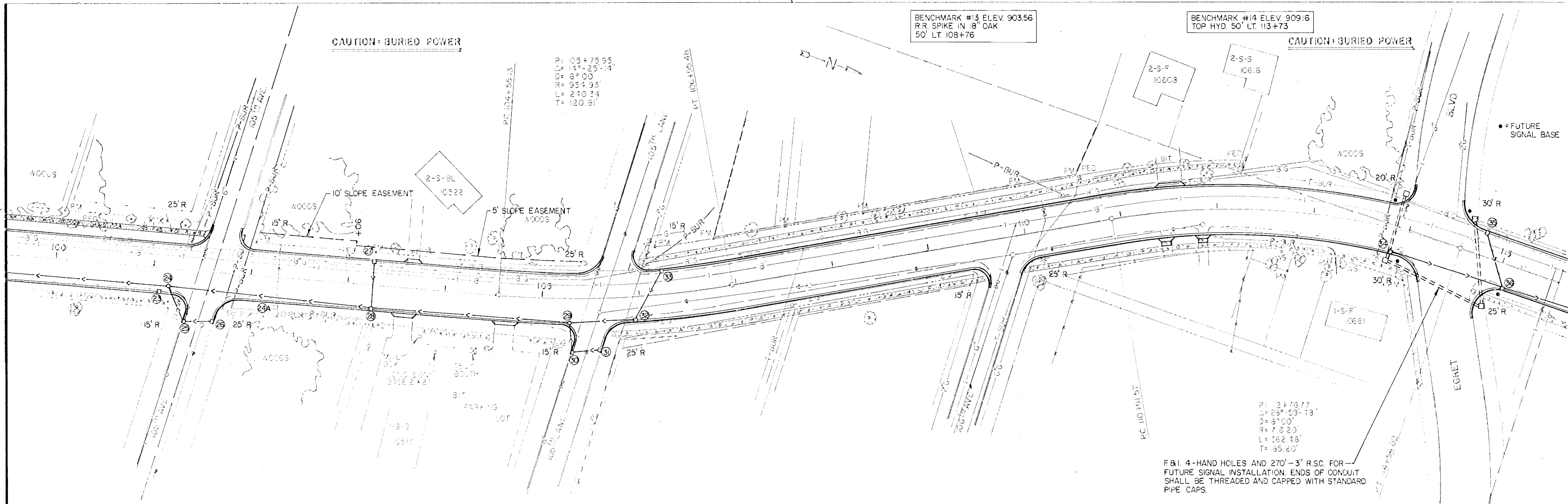


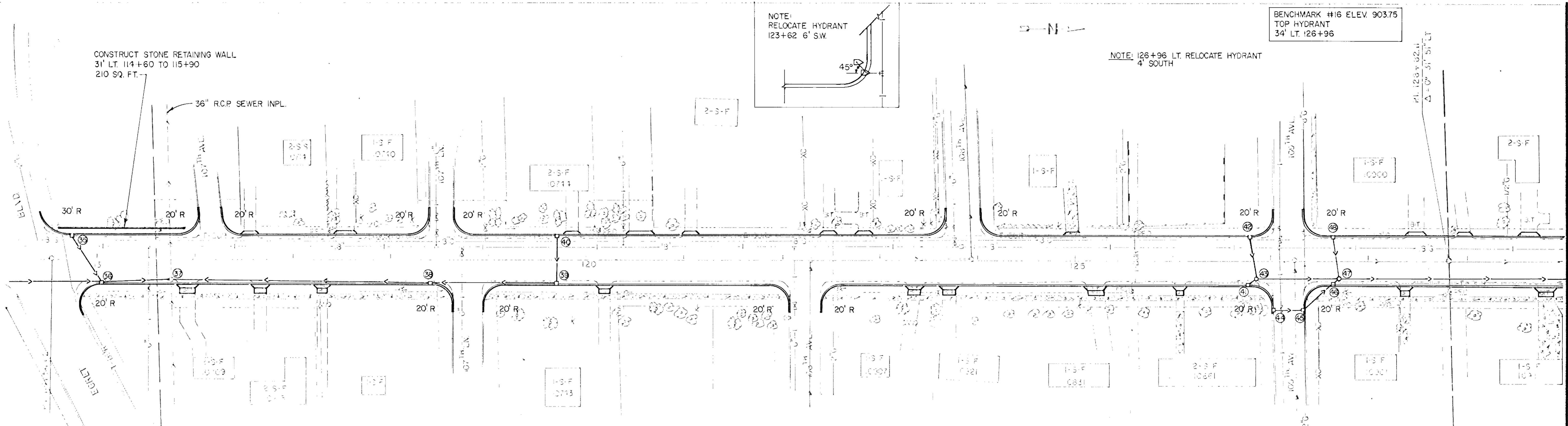
ILLUSTRATION - SINGLE PLAN - PROFILE - 10/24

NOTE: RELOCATE HYDRANT 123+62.6' S.W.

BENCHMARK #16 ELEV. 903.75
TOP HYDRANT
34' LT. 126+96

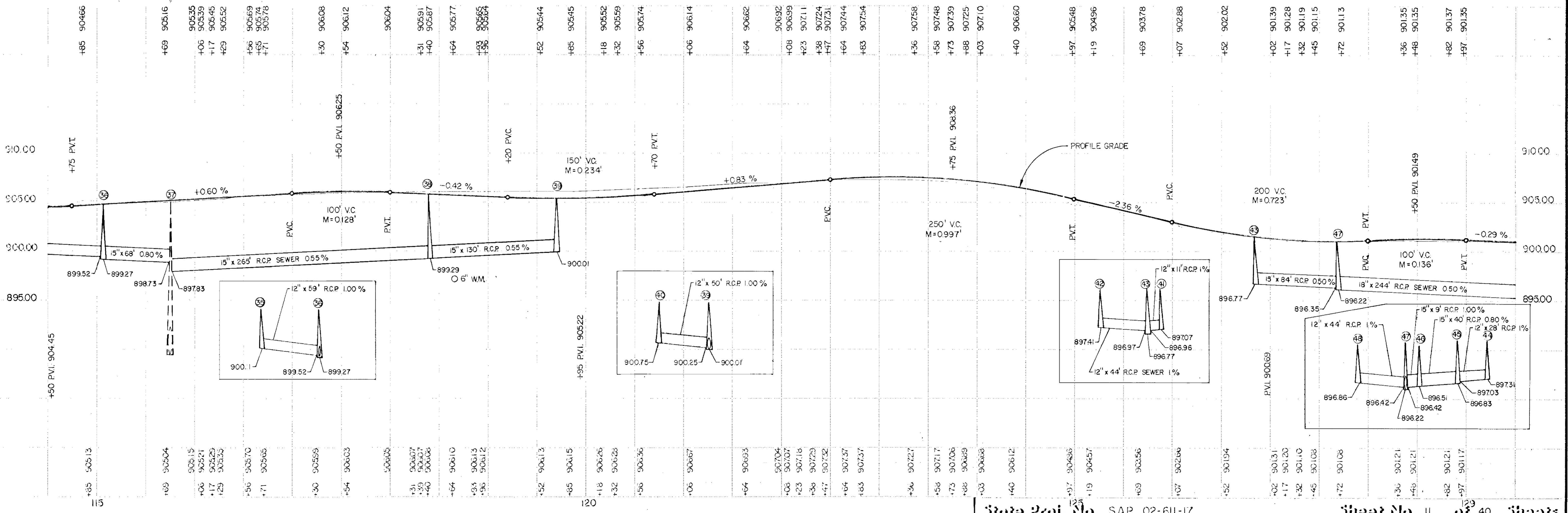
NOTE: 126+96 LT. RELOCATE HYDRANT
4' SOUTH

CONSTRUCT STONE RETAINING WALL
31' LT. 114+60 TO 115+90
210 SQ. FT.



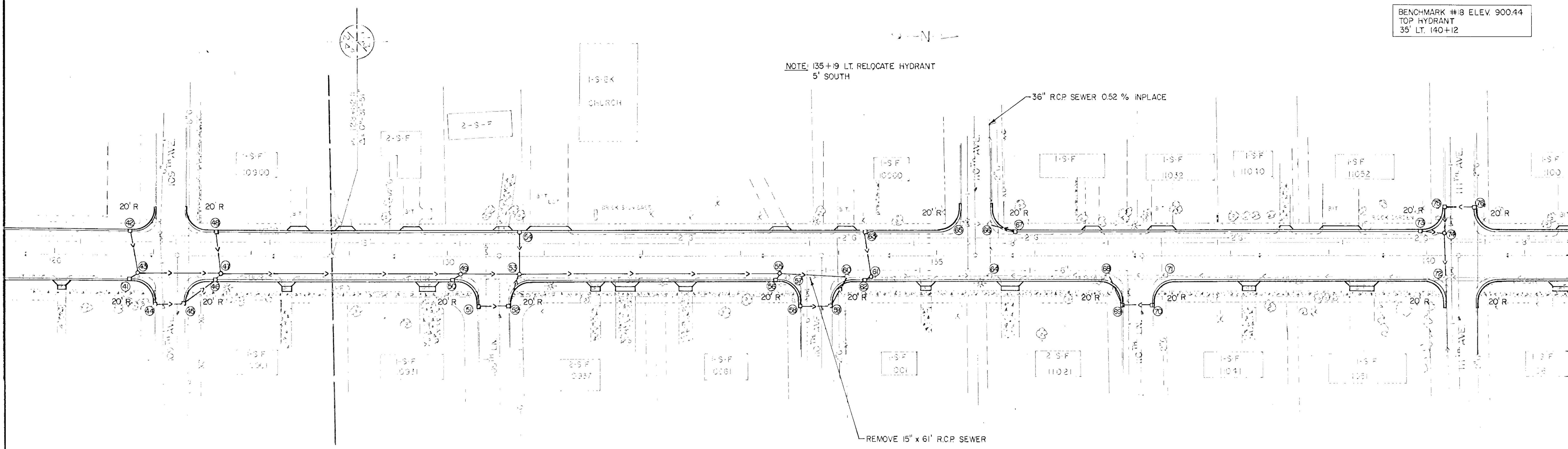
NOTE: 118+56 RT. RELOCATE HYDRANT
3' SOUTH

BENCHMARK #15 ELEV. 910.25
TOP HYDRANT
58' RT. 122+04

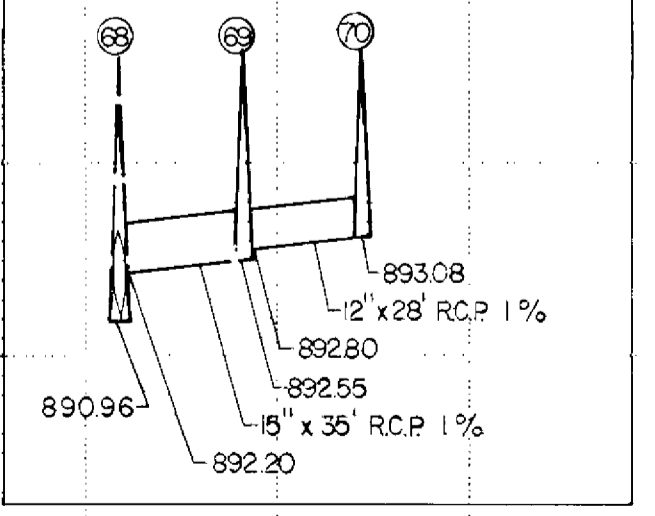
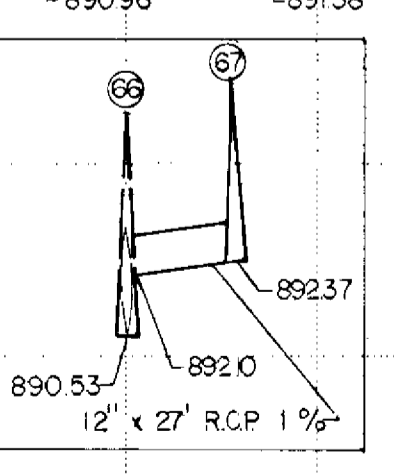
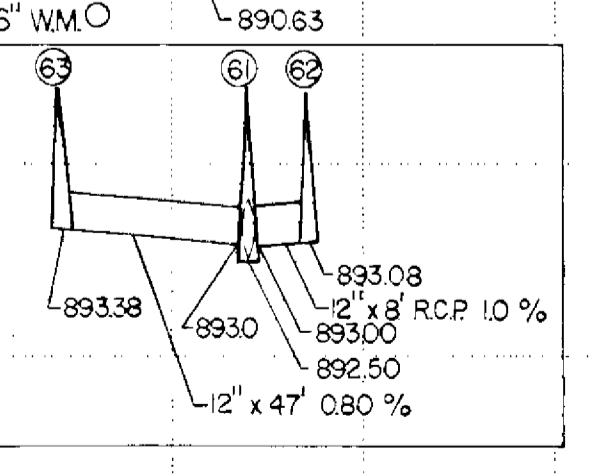
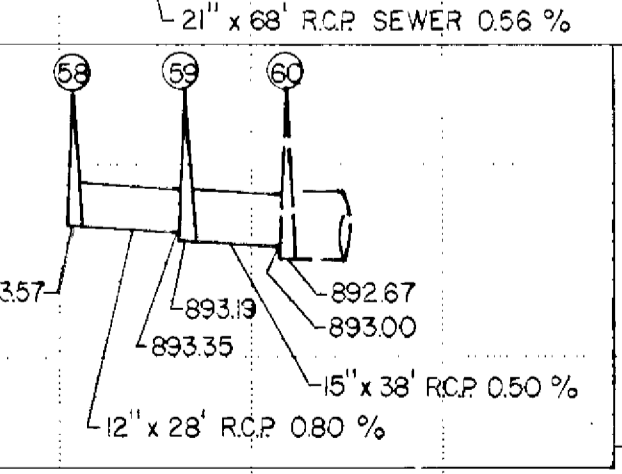
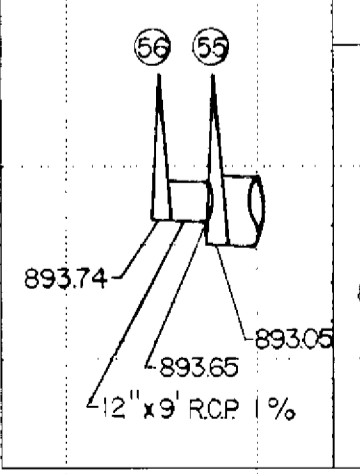
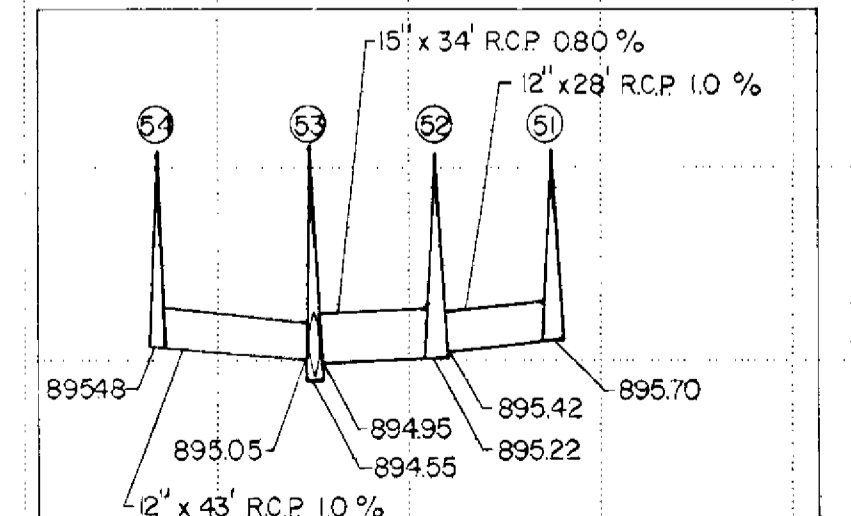
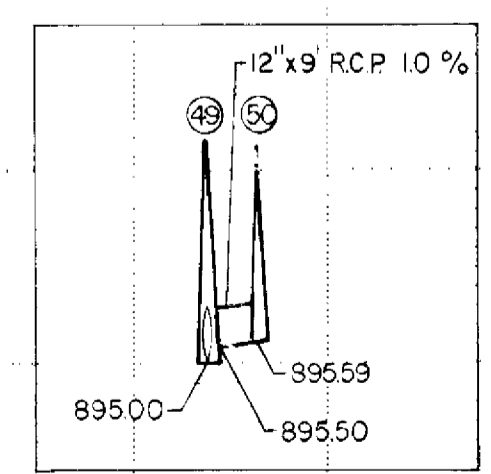
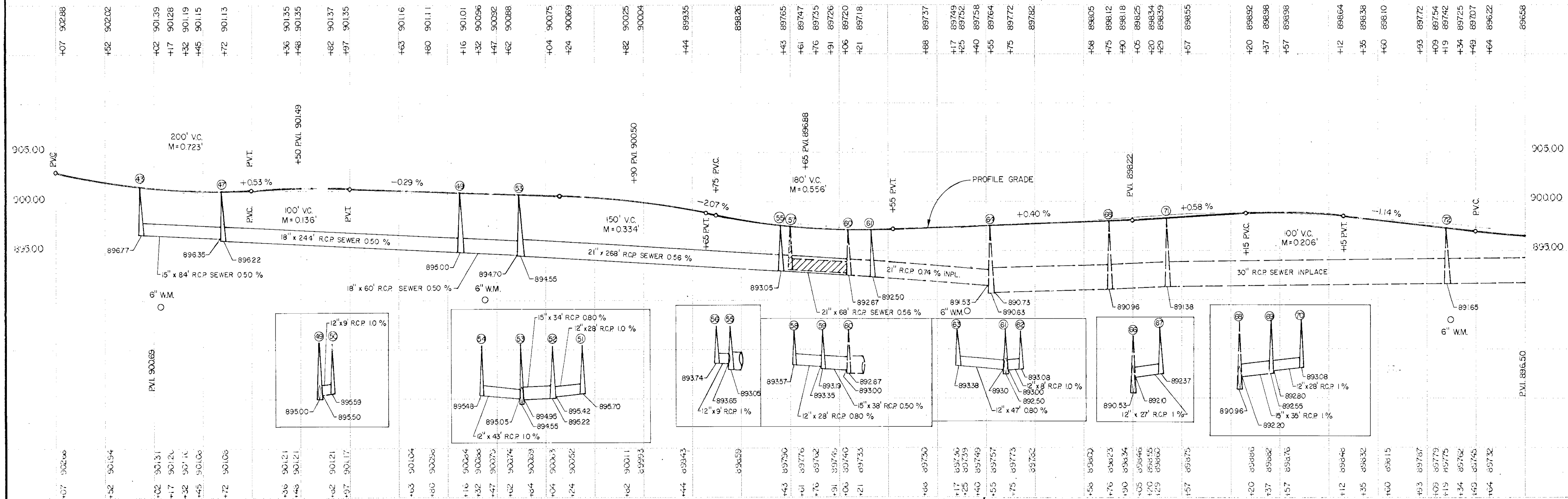


BENCHMARK #18 ELEV. 900.44
TOP HYDRANT
35' LT. 140+12

NOTE: 135+19 LT. RELOCATE HYDRANT
5' SOUTH



BENCHMARK #17 ELEV. 900.47
TOP HYDRANT
43' RT. 133+55



DESIGNED BY: [unreadable] DRAWN BY: [unreadable] CHECKED BY: [unreadable]

BENCHMARK #19 ELEV 907.11
TOP HYDRANT
34' LT. 147+58

NOTE: 143+39 34' LT. RELOCATE HYD. 3' SOUTH

NOTE: 147+58 34' LT. RELOCATE HYD. 3' SOUTH

CONSTRUCT STONE RETAINING WALL
31' LT. 146+52 TO 147+52
127 SQ. FT.

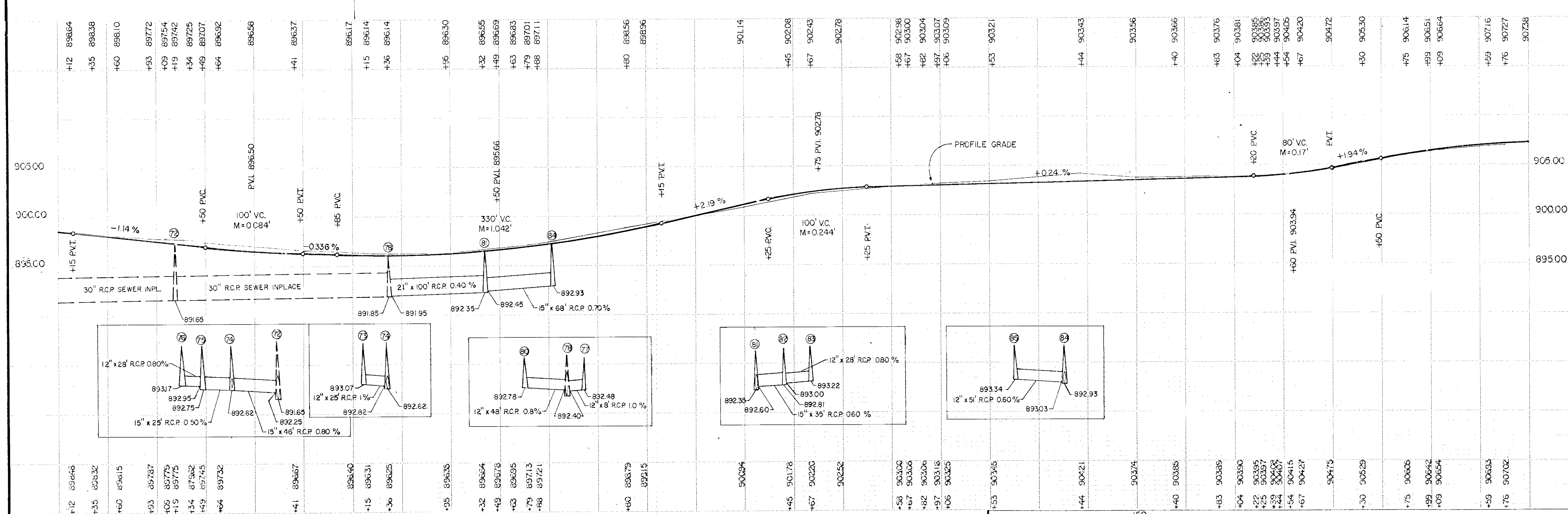
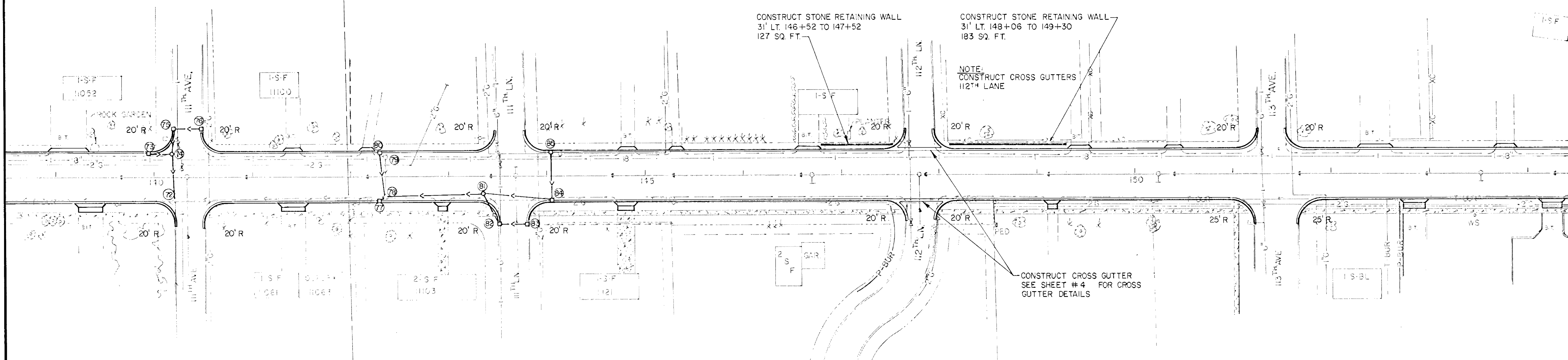
CONSTRUCT STONE RETAINING WALL
31' LT. 148+06 TO 149+30
183 SQ. FT.

NOTE:
CONSTRUCT CROSS GUTTERS
112TH LANE

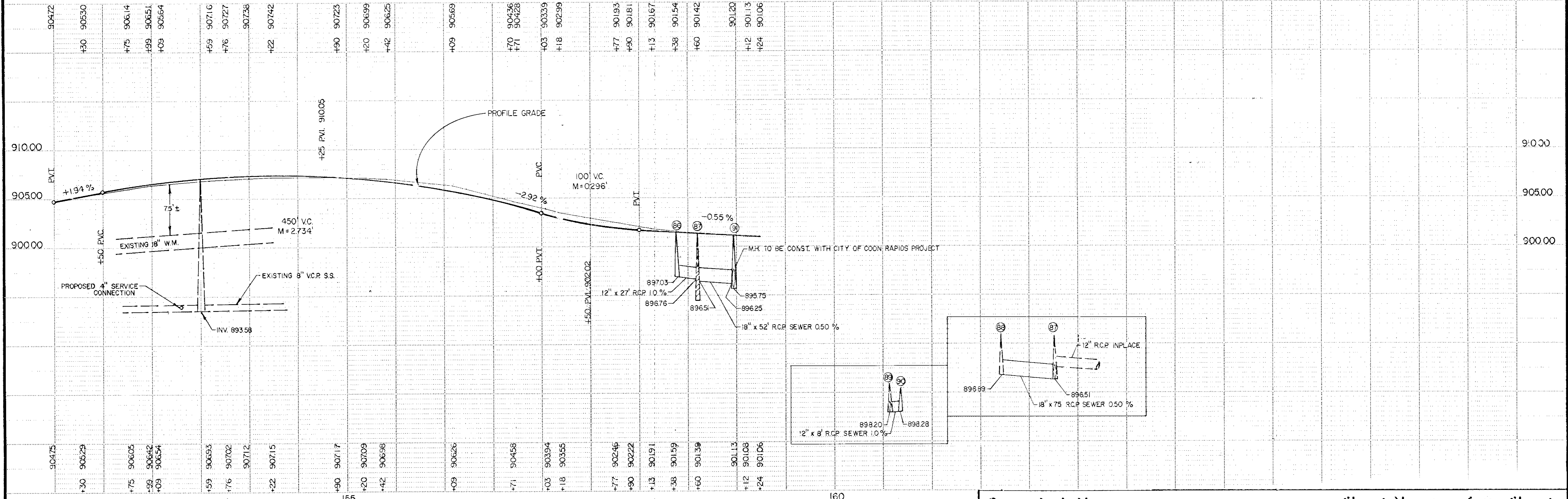
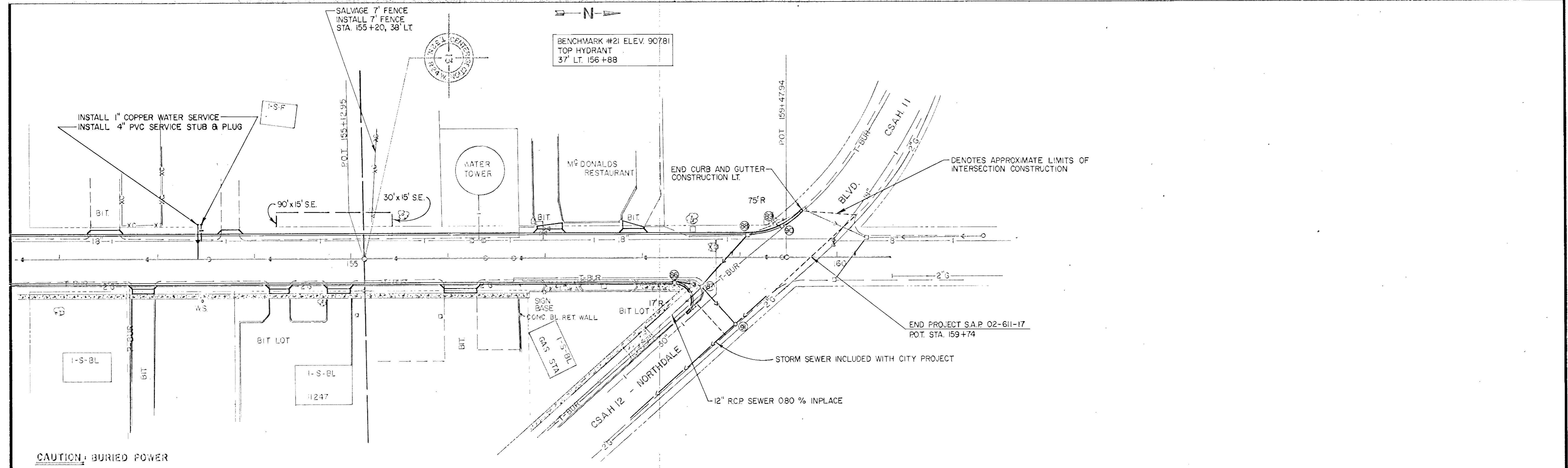
CONSTRUCT CROSS GUTTER
SEE SHEET # 4 FOR CROSS
GUTTER DETAILS

CAUTION: BURIED POWER

BENCHMARK #20 ELEV 907.11
TOP HYDRANT
50' RT. 151+18



ILLUSTR. POST - SINGLE PLAN - PROFILE - 1/2" = 10'



ELEVATION POST - SINGLE PLAN - PROFILE - 1/2" = 1'

REV. 8-21-84 JKW

EXCAVATION EMBANKMENT

DATE: 10/15/17
BY: [Signature]
SCALE: 1"=10'

Fed. Proj. No.

EXCAVATION EMBANKMENT

DATE: 10/15/17
BY: [Signature]
SCALE: 1"=10'

75+51 90516

NO GUTTER ICIST AVE. (ON-RANGE)

77+25 90260

10' BIT ENT RT (ON-RANGE)

NO GUTTER ON RAMP TH IO

75+40 90325

77+00 90268

SO GUTTER ON RAMP TH IO

75+27 90393

76+50 90317

126 1
7 F.S.

NO GUTTER OFF RAMP TH IO

75+21 90307

76+30 90349

14' BIT ENT

140 1
7 F.S.

SO GUTTER OFF RAMP TH IO

75+01 90367

76+00 90402

HYD. Δ +31

74+00 90393

75+68 90469

79 0
5 F.S.

31 0
2 F.S.

Station 178+00 to Sta 184+00

STA 74+00 TO STA 77+25

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

Excavation Elevation Embankment Elevation

Excavation Elevation Embankment Elevation

15 0
3 T.S.

123 0
4 T.S.

209 0
8 T.S.

222 0
11 T.S.

80+59 90153

80+50 90161

80+00 90200

79+60 90223

79+52 90227

79+35 90236

129 0
6 T.S.

183 0
8 T.S.

+77

+50 END
RELOC

+13 RES
PINE HEDG

± 14' BIT ENT (ON RANGE)

± 14' SAND ENT

± 10' BIT & CONC ENT

Exc. APPROX ELEV. 701.76

← Camp Site

GAS VALVE
X +24

79+00 90260

78+68 90277

78+53 90285

77+84 90288

77+70 90290

77+44 90271

Full Section

0+17

± 14' BIT ENT RT. (ON RANGE)

Full Super RT & LT

± 10' SAND ENT

± 14' BIT ENT

± 12' SAND ENT

CAUTION - GAS CROSSING

G-2'

G-2'

STA. 77+47 TO STA. 80+59

ILLUSTRATION POST & CO. ST. LOUIS, MO. MADE IN U.S.A.

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

81+88 90072 @ 12' BIT ENT.

84+00 89936

81+37 90038 @ 12' BIT ENT.

83+88 90008 @ 10' SAND ENT. (ON RANGE)

81+40 90103

83+25 90015

12' ELM. @ 132

95 0
4 T.S.

@ 14' BIT ENT.

81+00 90135

@ 18' BIT ENT.

82+78 90035 @ 12' BIT ENT.

43 0
3 T.S.

80+81 90145

82+69 90037 @ 10' SAND ENT.

+71 @ -0+ +71

68 1
3 T.S.

@ 12' BIT ENT.

80+69 90182

82+50 90043

240 0
4 T.S.

STA. 80+69 TO STA. 84+00

EXCAVATION EMBANKMENT
EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT
EXCAVATION EMBANKMENT

+15 0-
E 10' SAND ENT.

83+64 83312

③ +08 2' MARK

③ +26 DEL 3' ELEM
③ +09 3' ELEM

83+03 83306

E 102 ND LN. (ON RANGE)

83+35 83334

+05 END FENCE
③ +15 6' ASH

87+88 83314

SO. GUTTER 102ND LN. (ON RANGE)

+20 2' ASH
+20 2' ASH
③ +10 8' FENCE
+94 WIRE FENCE

237 0
7 F.S.

+176

87+62 83329

84+33 83366

E 12' BIT ENT

105 2
11 F.S.

E 12' SAND ENT.

84+80 83365

③ +63 4' FCP

86+70 83351

E 20' BIT ENT

86+44 83363

③ +22 DEL 6' MARK

84+58 83375

+0+62
X-X-X-X-X-X +62 LINE FENCE

234 0
10 F.S.

163 0
4 F.S.

86+33 83367

E 20' CONC. ENT.

③ +23 4' FCP
③ +23 4' FCP

84+40 83383

E 14' CONC. ENT.

STA 84+40 TO STA 88+05

ILLINOIS ROAD & HIGHWAY DIST. 1987

EXCAVATION EMBANKMENT
342 0
21 T.S.

EXCAVATION EMBANKMENT
183 26
20 T.S.

91+15 897.35 E 103 RD AVE (ON RANGE)

94100 89857

+15 X

90+99 897.85 SO. GUTTER 103 RD AVE (ON RANGE)

93+00 89893

+2
+60 (6) 10" OAK

-71 X

Woods

+75 (6) 8" OAK
+68 (6) 6" OAK
+46 (6) 6" OAK

161 17
15 T.S.

90+25 897.15

92+25 89857

-0 +83

159 0
10 T.S.

162 0
17 T.S.

91+69 89820

-0 +61

89+60 897.35

73 0
4 T.S.

177 18
24 T.S.

91+46 897.85

E 30' DITCH (ON RANGE)

892 WOODS

72 0
4 T.S.

88+50 897.35

FL. OUTLET 60" RCP APRON
883.87

91+27 897.82

NO GUTTER 103 RD AVE (ON RANGE)

3' DIA (6) +26

+27

64 2
15 T.S.

88+18 898.01 NO GUTTER 102 RD LN (ON RANGE)

(3) +3 3" ELM

(8) +60 6" OAK

STA 88+18 TO STA. 94+00

Vertical Curve
1.1' Curve
1.1' Curve

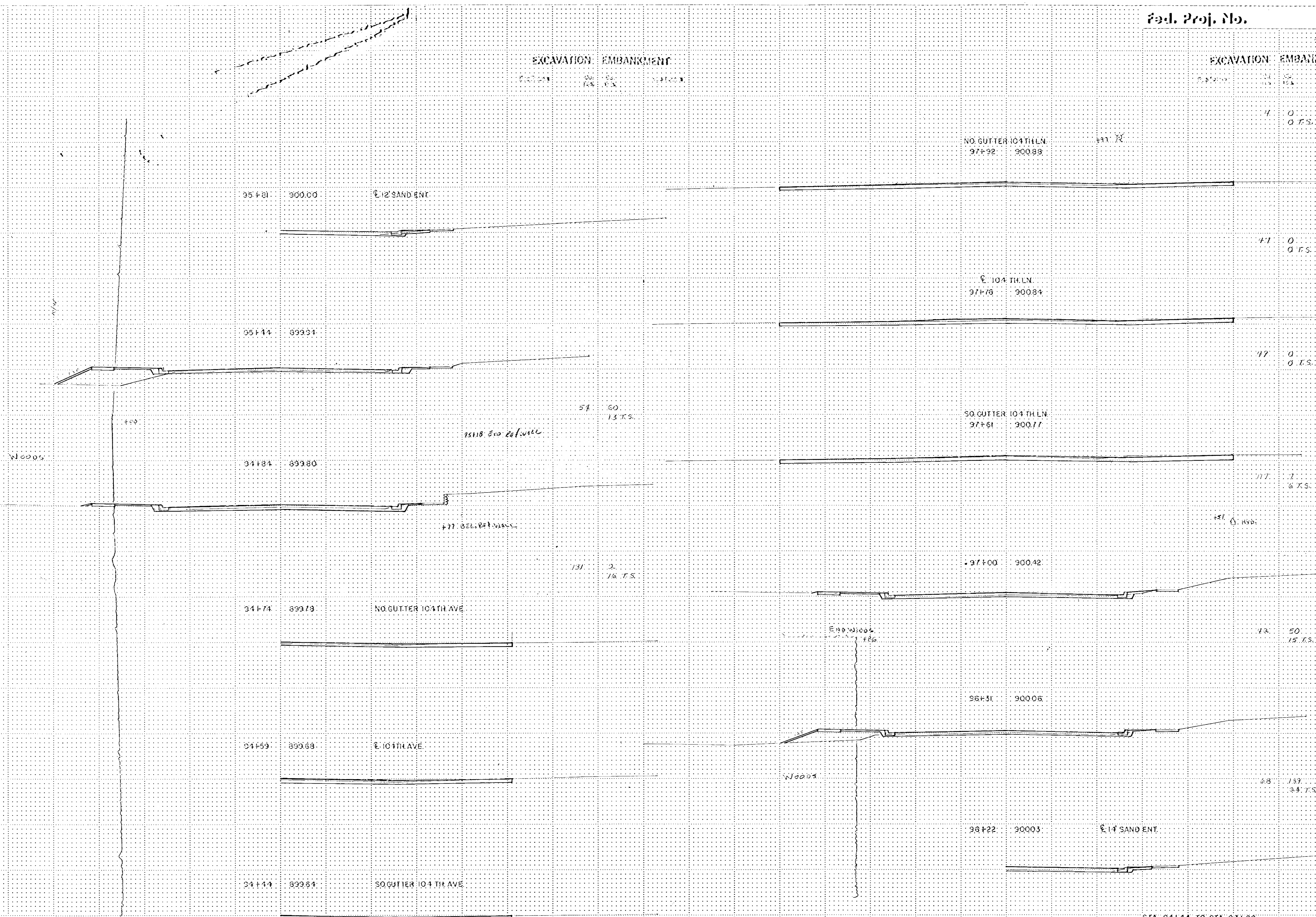
REVISIONS
DATE
BY

Profile 11-25-13

Fed. Proj. No.

EXCAVATION		EMBANKMENT	
Station	Depth	Station	Height
95+81	300.00		
95+74	899.34		
94+84	899.80		
94+74	899.73		
94+59	899.68		
94+44	899.64		

EXCAVATION		EMBANKMENT	
Station	Depth	Station	Height
97+92	900.88		
97+76	900.84		
97+61	900.77		
97+00	900.42		
96+31	900.06		
96+22	900.03		

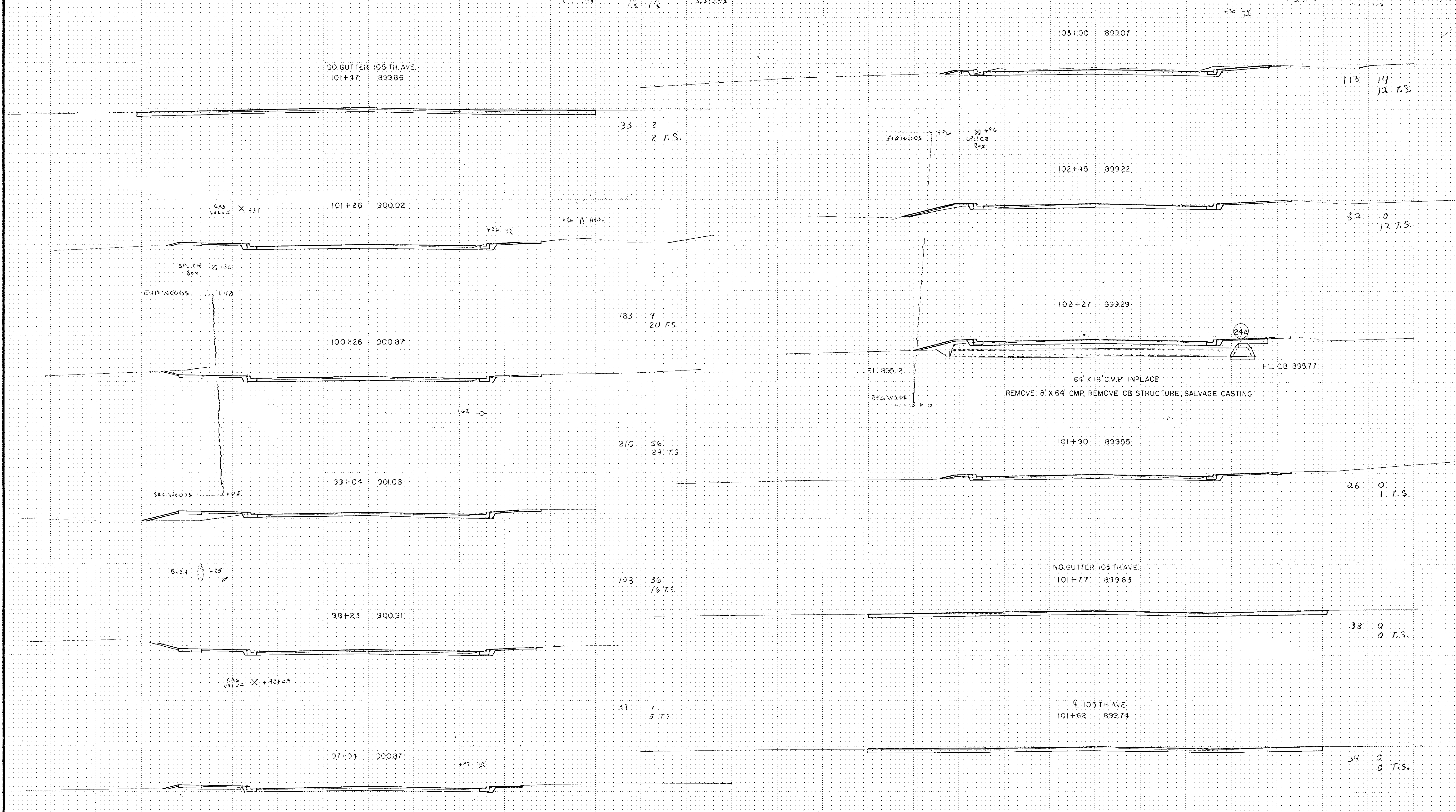


STA. 94+44 TO STA. 97+92

REPRODUCE THIS SHEET FROM THE ORIGINAL DRAWING

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT



33
2
2 T.S.

113
14
12 T.S.

183
9
20 T.S.

82
10
12 T.S.

210
56
29 T.S.

26
0
1 T.S.

108
36
16 T.S.

38
0
0 T.S.

57
1
5 T.S.

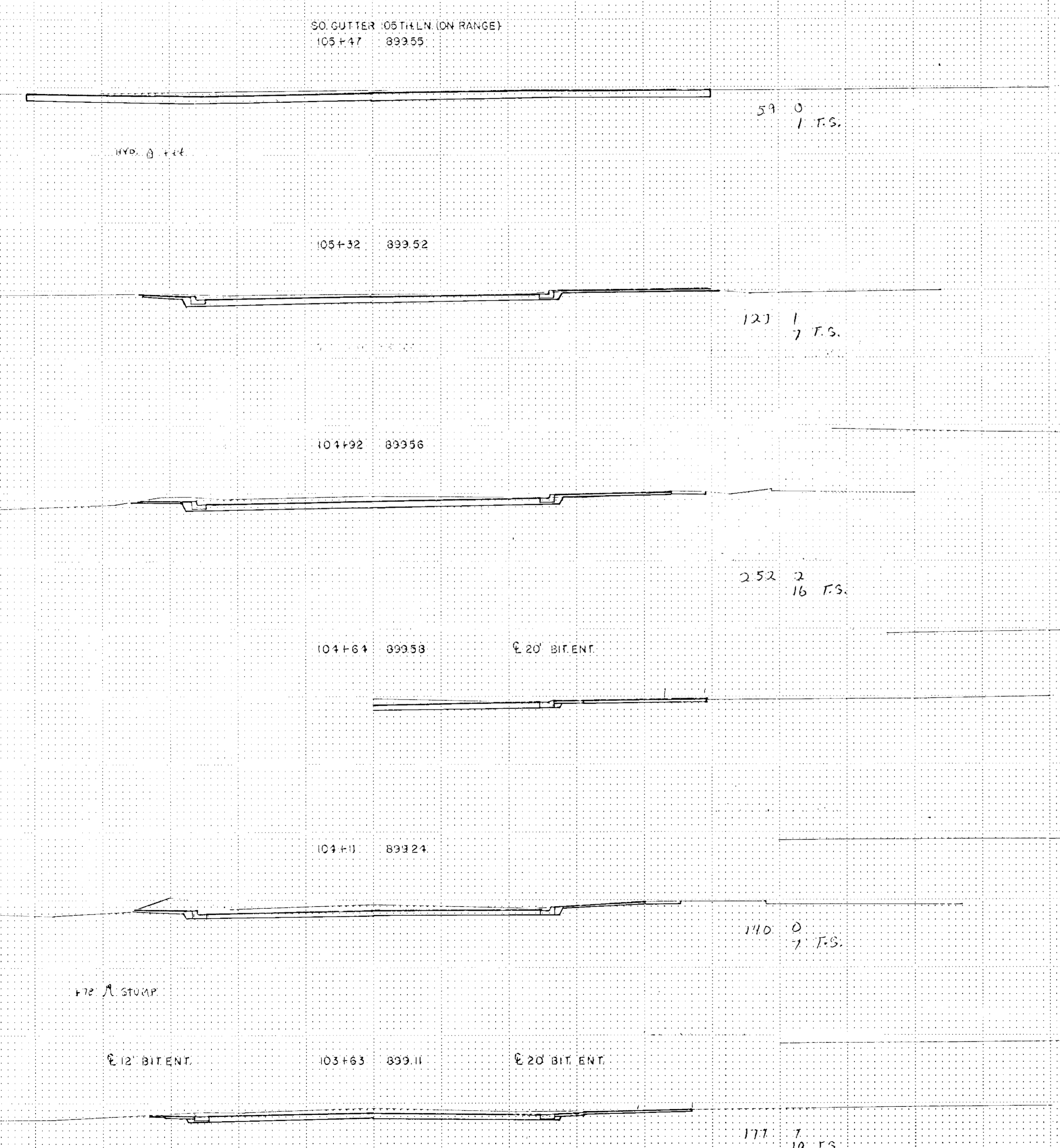
34
0
0 T.S.

STA. 97+94 TO STA. 103+00

DRAWING PUBLISHED SECTION 1011 11/19/97

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT



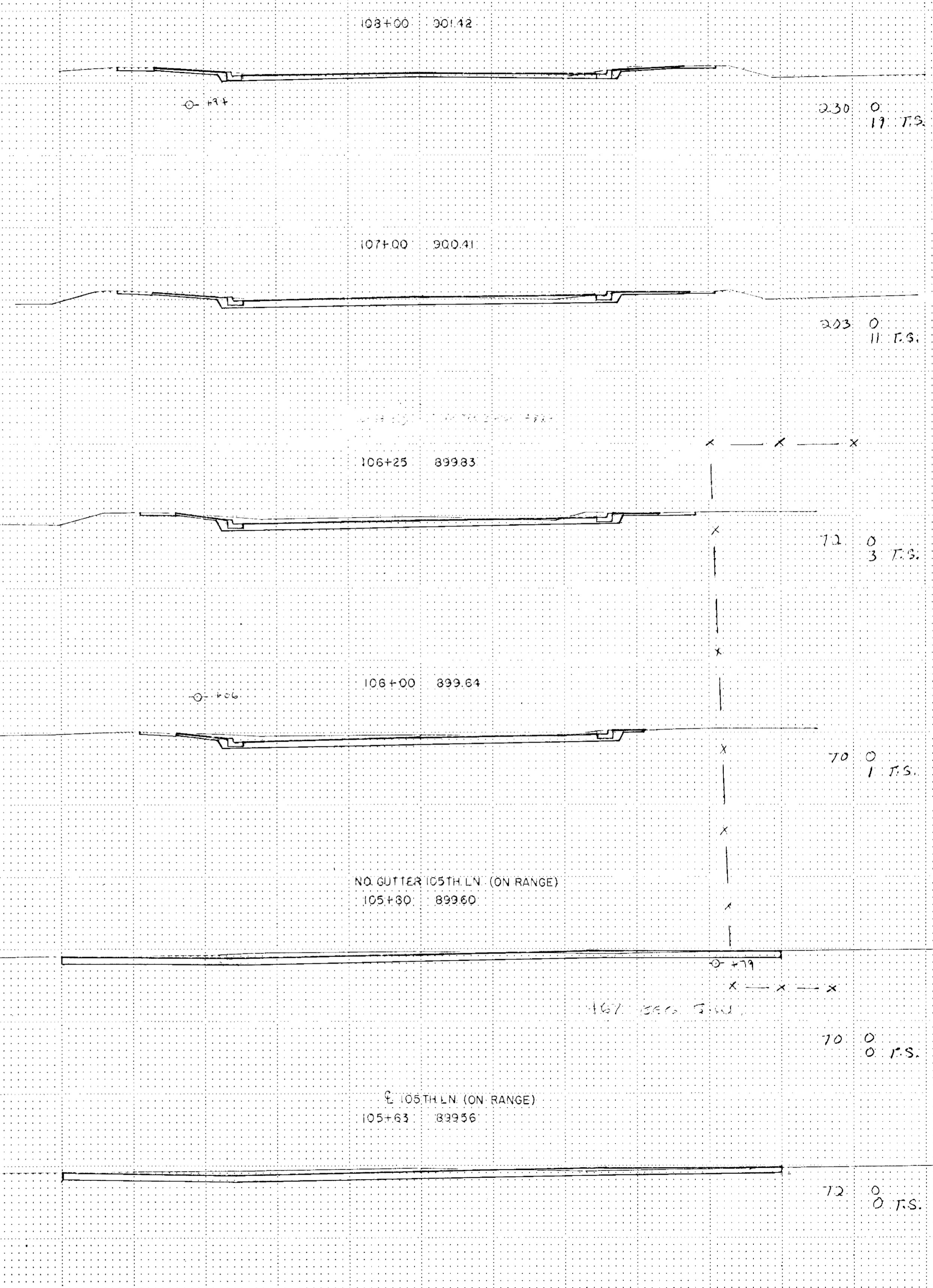
59 0
1 F.S.

127 1
7 F.S.

252 2
16 F.S.

110 0
7 F.S.

177 7
10 F.S.



230 0
17 F.S.

203 0
11 F.S.

71 0
3 F.S.

70 0
1 F.S.

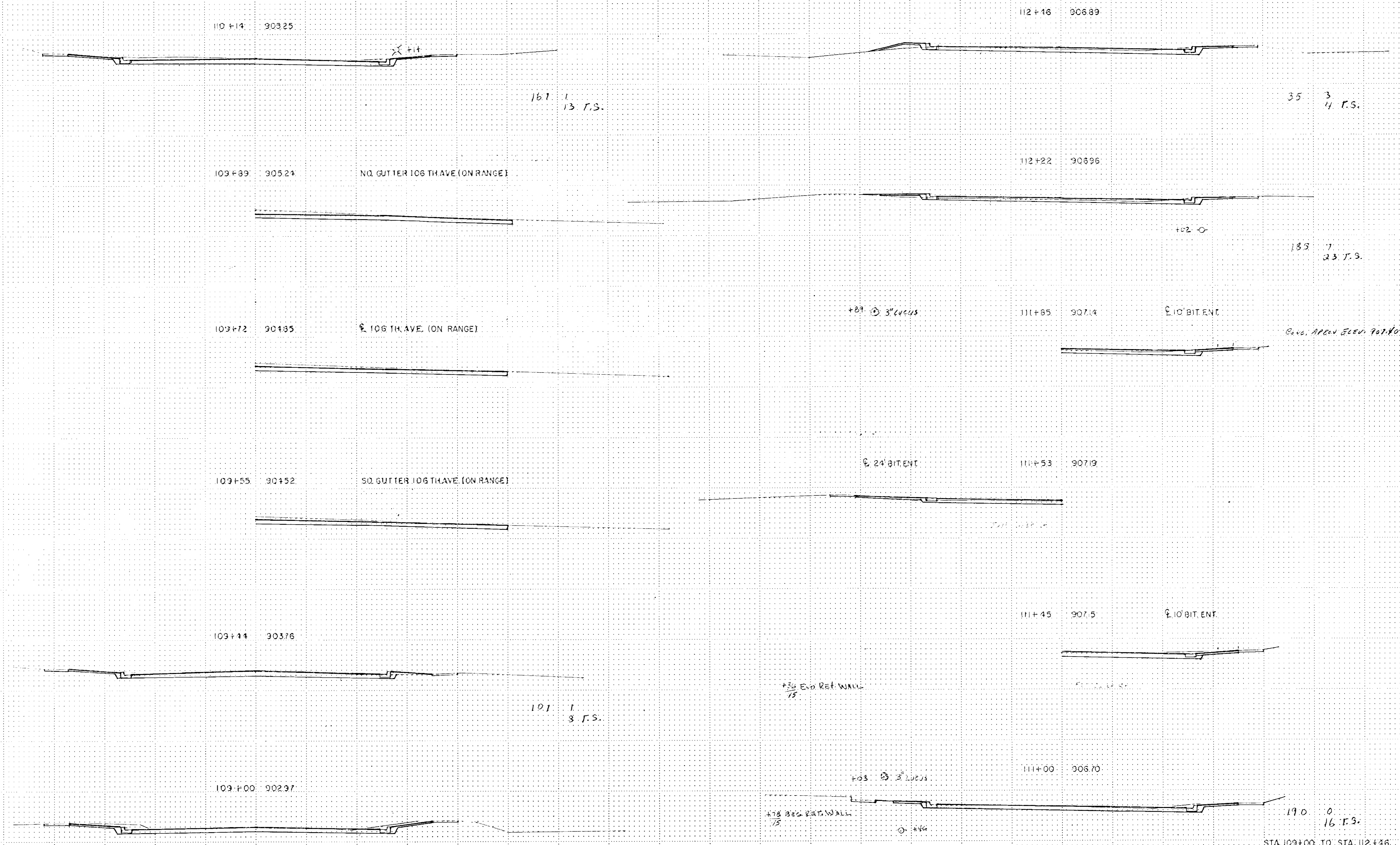
70 0
0 F.S.

72 0
0 F.S.

STA. 103+63 TO STA. 108+00

EXCAVATION		EMBANKMENT	
Station	Elev.	Station	Elev.

EXCAVATION		EMBANKMENT	
Station	Elev.	Station	Elev.



167 1 13 F.S.

35 3 4 F.S.

183 7 23 F.S.

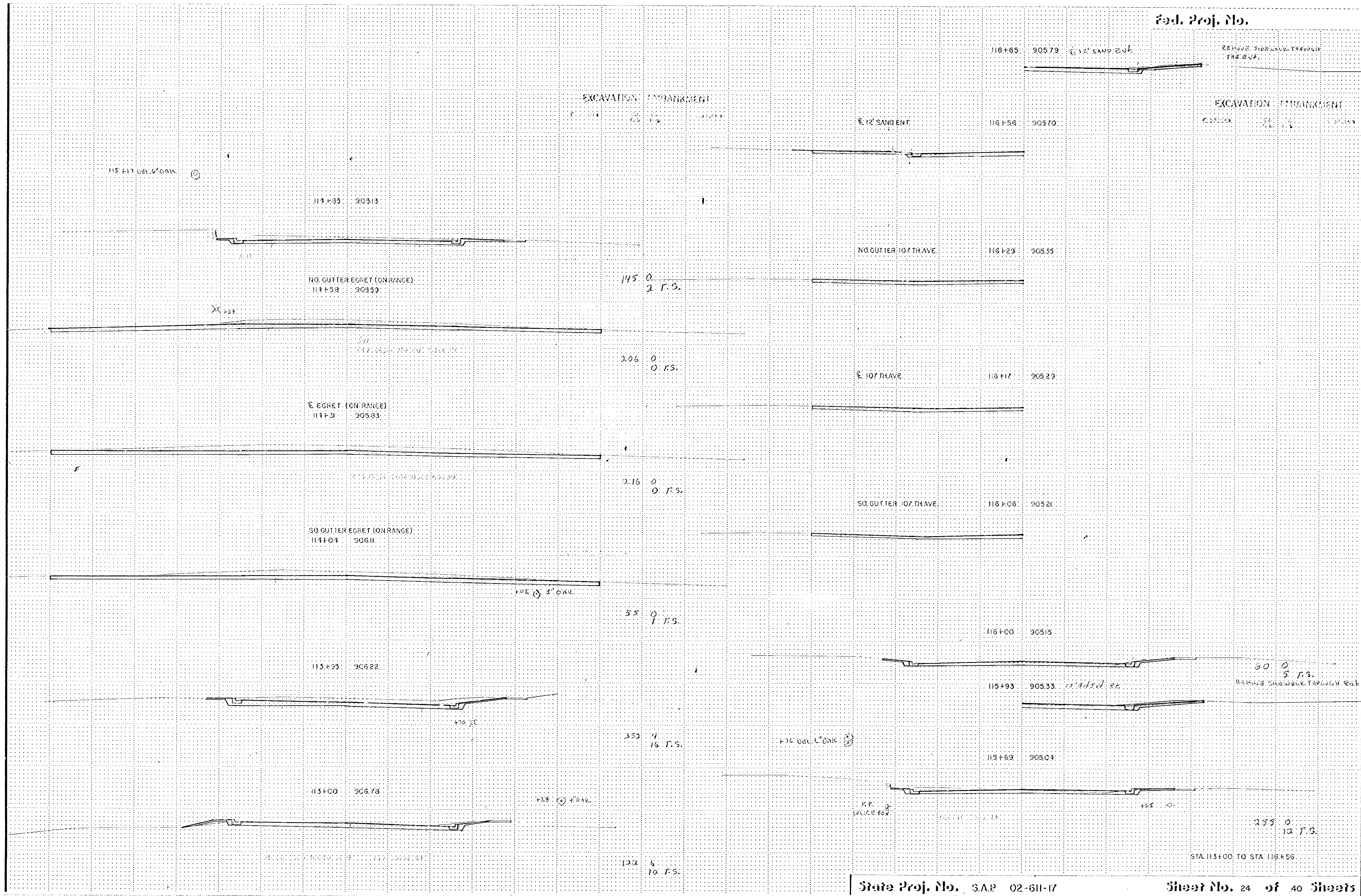
Circ. AREA Elev. 907.40

101 1 8 F.S.

190 0 16 F.S.

STA. 109+00 TO STA. 112+16

REVISIONS MUST BE MADE IN THIS MANNER



EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

115 FT DBL. OAK

114+58 903.13

NO. GUTTER EGRET (ON RANGE)
114+58 903.39

145 0
2 F.S.

12' SAND ENT.

116+58 903.70

EXCAVATION

EMBANKMENT

NO. GUTTER 10' THAVE

116+23 905.55

10' THAVE

118+17 905.29

EGRET (ON RANGE)
114+31 905.83

206 0
0 F.S.

SO. GUTTER 10' THAVE

116+06 905.21

SO. GUTTER EGRET (ON RANGE)
114+04 906.11

216 0
0 F.S.

102 @ 5' OAK

55 0
1 F.S.

116+00 905.15

113+55 906.22

60 0
5 F.S.

115+93 905.33

REMOVE SIDEWALK THROUGH ENT.

350 4
16 F.S.

174 DBL. OAK

115+83 908.04

113+00 906.78

+2E @ 4' OAK

S.P. SPLICE BOX

355 0
12 F.S.

120 4
10 F.S.

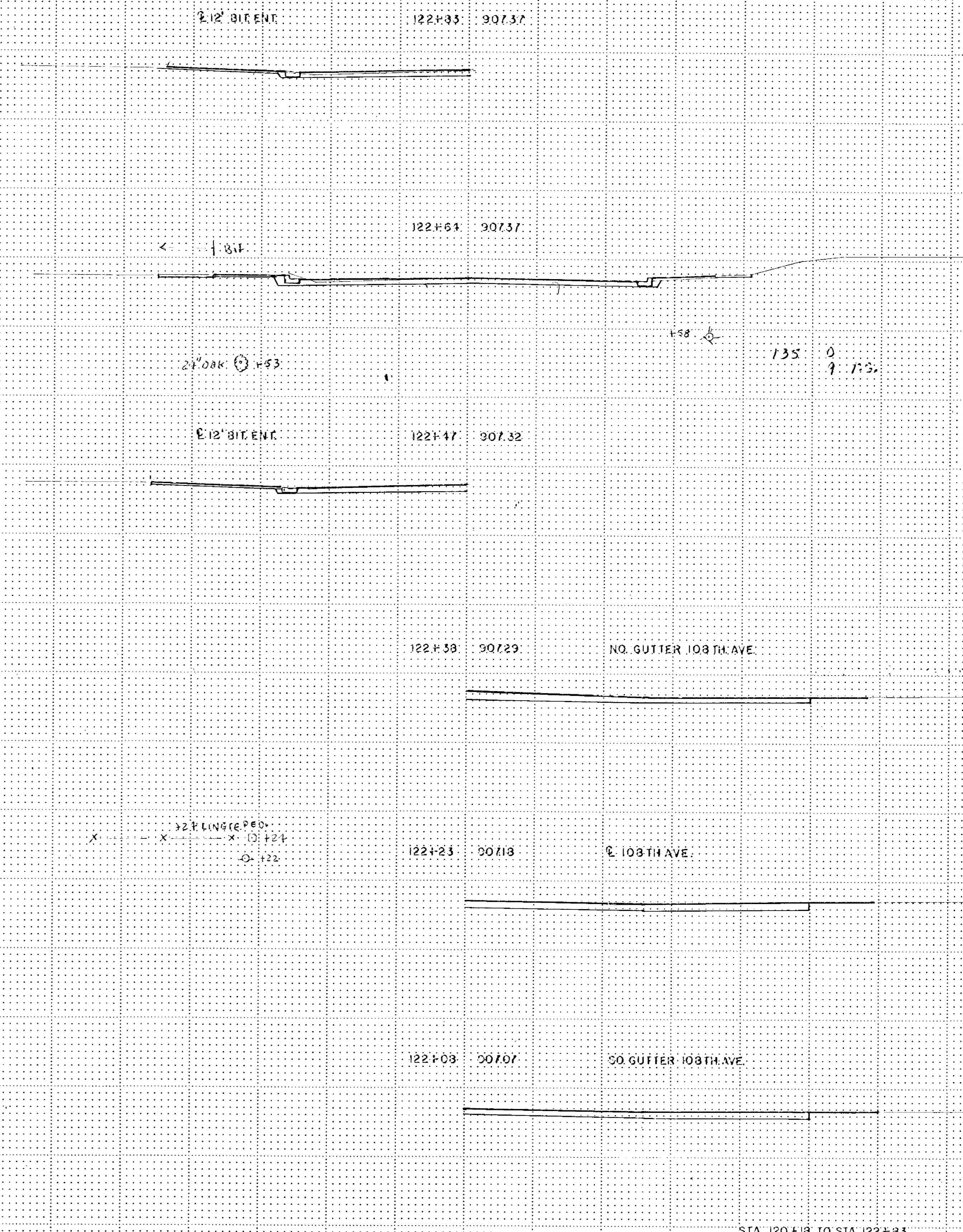
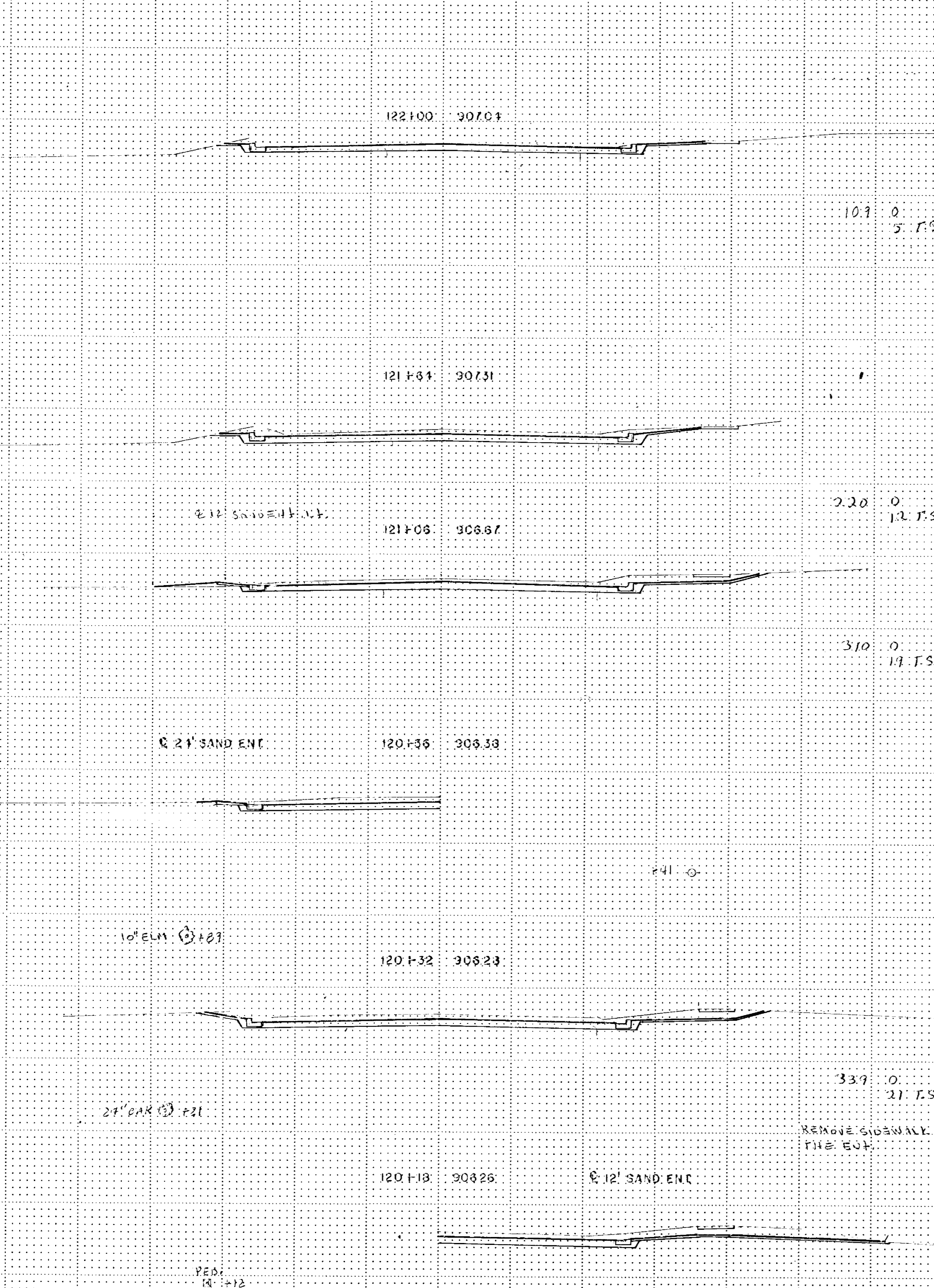
STA 113+00 TO STA 116+56

Plotted E. Huber
Checked by S. ...

Fed. Proj. No.

EXCAVATION
EMBANKMENT

EXCAVATION
EMBANKMENT



STA. 120+18 TO STA. 122+85

EXCAVATION EMBANKMENT
20024 28 24 24024

EXCAVATION EMBANKMENT
20024 28 24 24024

Exc. Hedge } +18
1360' Hedge } +25
2' Concrete } +19

SO. CUTTER 109TH AVE
127+02 901.31

124+10 90812

110 0
3 T.S.

58 4
1 T.S.

HYD. 0+26

NO. GUTTER 108TH LN.

124+03 90858

610 Fe. x +53

126+92 901.34

103 0
12 T.S.

8' 108TH LN.

123+88 908.89

126+07 90266

8' BIT-CONC. ENT.

SO. CUTTER 108TH LN.

123+73 90706

8' 14' BIT ENT.

125+69 90356

4" MARL. 0+23
PEB. 0+16
0+14
0+14

81 7
22 T.S.

HYD. 0+26

15 0
2 T.S.

123+38 90717

157 GL

125+19 90457

8' BIT ENT.

158 510 Fe.

1560 Fe. x +10

4" PIPE 152'

113 0
14 T.S.

123+36 90727

8' 12' BIT-SAND ENT.

124+97 90486

8' 14' CONC. ENT.

4" PIPE 115'

12" OAK 10+31

12" MAPLE 0+10

3" CEDAR 0+83

STA 123+36 TO STA 127+02

11-11-53 12-15-53 12-16-53
checked by [unclear] 12-28-53

10-11-53 10-15-53 10-16-53

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

128+13 90121 2' BIT-ENT.

130+32 90088 50' GUTTER 109 TH LN.

128+36 90121 2' 10" BIT-CONC. ENT.

130+16 90081

127+72 90103 475' 2'

129+80 90098 2' 16" BIT-CONC. ENT.

77 0 3 F.S.

127+45 90108 2' 5" BIT-CONC. S.V.

129+83 90104 2' 6" BIT-ENT.

127+32 90110 NO. GUTTER 109 TH AVE.

128+97 90117 2' 12" SAND ENT.

144 0 0 F.S.

127+17 90120 2' 109 TH AVE.

128+82 90121 4" SAND 481

113 0 0 F.S.

231 0 20 F.S.

STA. 127+17 TO STA. 130+32

Plan 12-15-50

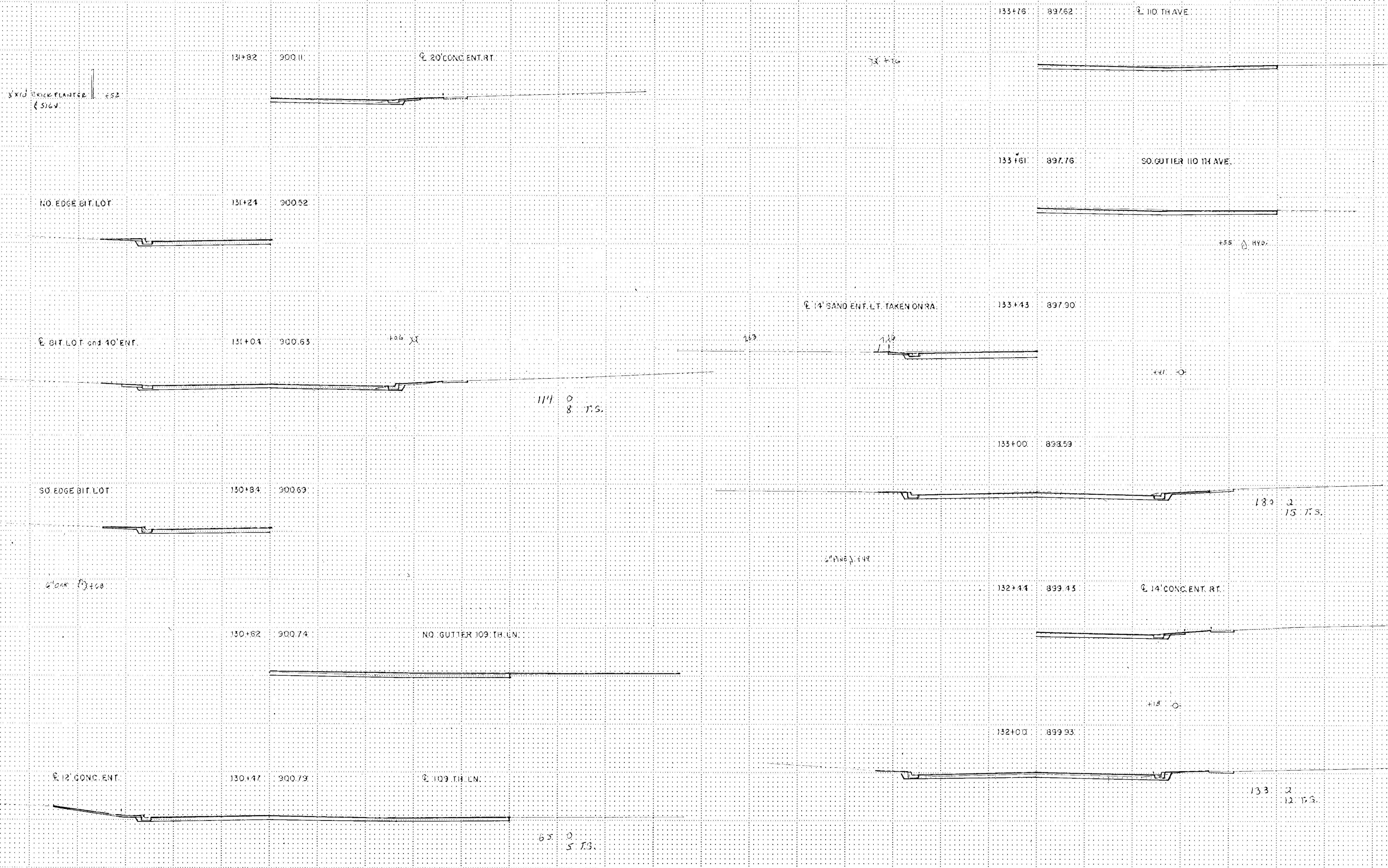
TELLEPS, EAST CROSS SECTION, UNIT 12-15-50

Added notes from
sheet 29 of 40 dated 12-30-13

Fed. Proj. No.

EXCAVATION		EMBANKMENT	
Excavation	Emb.	Excavation	Emb.

EXCAVATION		EMBANKMENT	
Excavation	Emb.	Excavation	Emb.



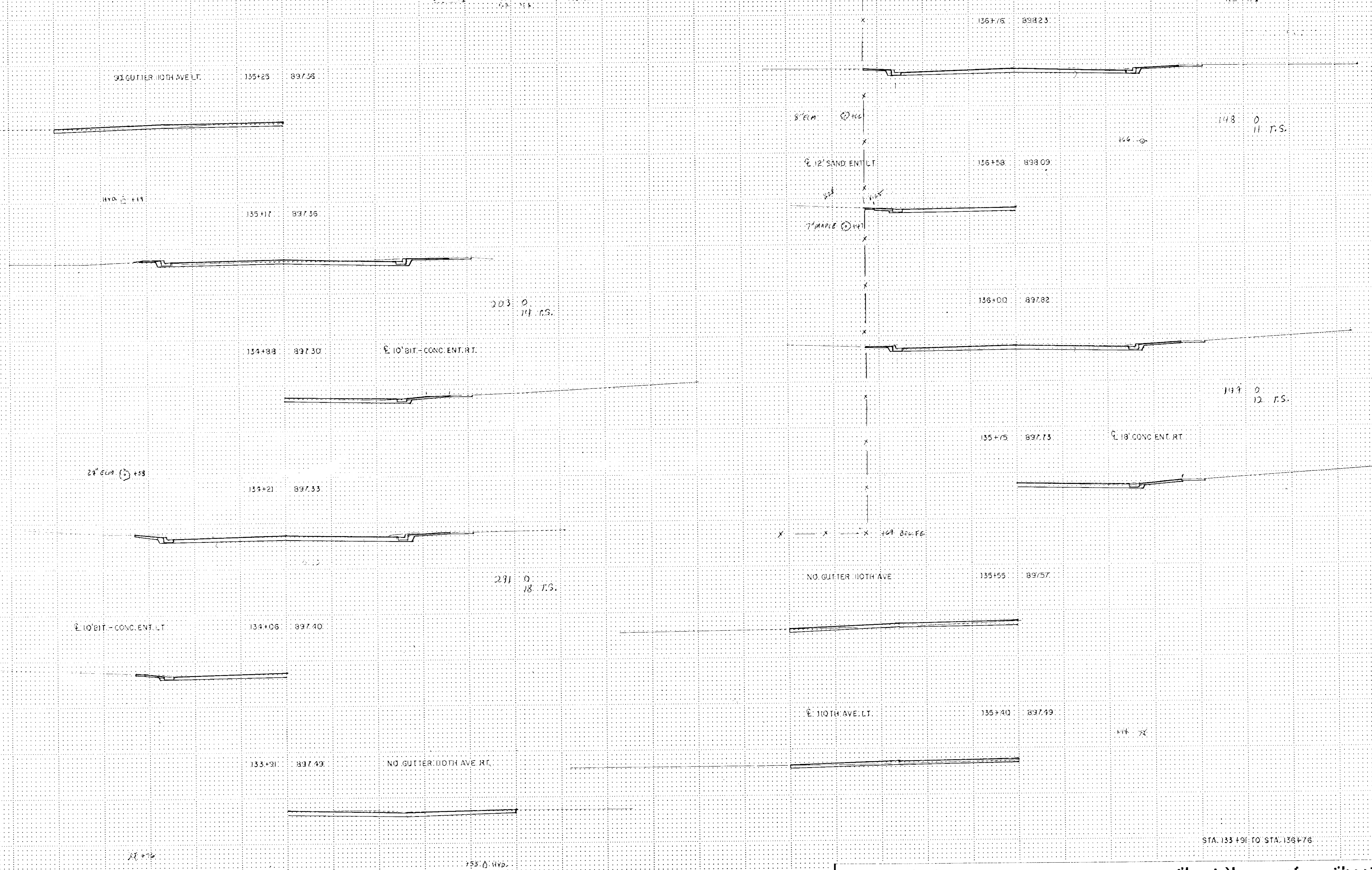
STA. 130+47 TO STA. 133+76

PLANNING POSITION SECTION, 1011, 11/10/13

Revised 11/12/12
12/1/12

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT



STA. 133+91 TO STA. 136+76

ILLINOIS STATE BOARD OF SURVEYORS

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

SO GUTTER WITH LN.
143+49 896.78

Exc. Above Elev. 896.58
E 12 BIT ENT.

141+41 896.67

E 24 BIT ENT. REMOVE SUBWAY THROUGH THE DWY.

8" PIPE @ 141+26
10" MANHOLE @ 141+22

194 0
11 F.S.

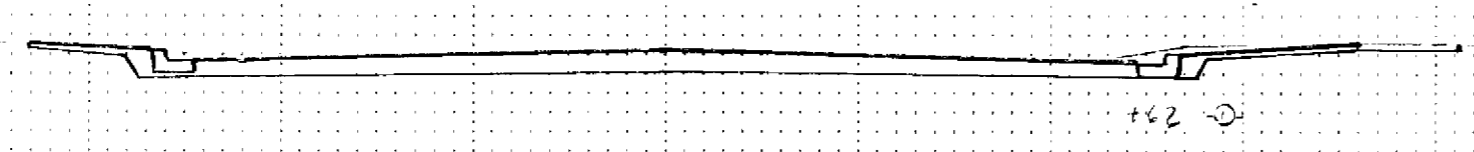
H.V. @ +24
O- 132

143+32 896.64

+38 -0-

46 0
1 F.S.

140+64 897.32



47 0
1 F.S.

142+95 896.35

E 10' CONC. ENT.

197 0
14 F.S.

2" PIPE @ 140+51

NO GUTTER WITH AVE.
140+49 897.45

63 0
0 F.S.

142+36 896.25

E WITH AVE.
140+34 897.62

32 0
6 F.S.

SO GUTTER WITH AVE.
140+19 897.75

62 0
0 F.S.

E 10' SAND ENT.

142+15 896.31

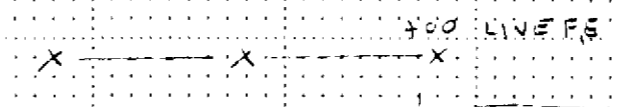
H.V. @ +3.

140+03 897.79

31 0
1 F.S.

142+00 896.40

+04 -0-



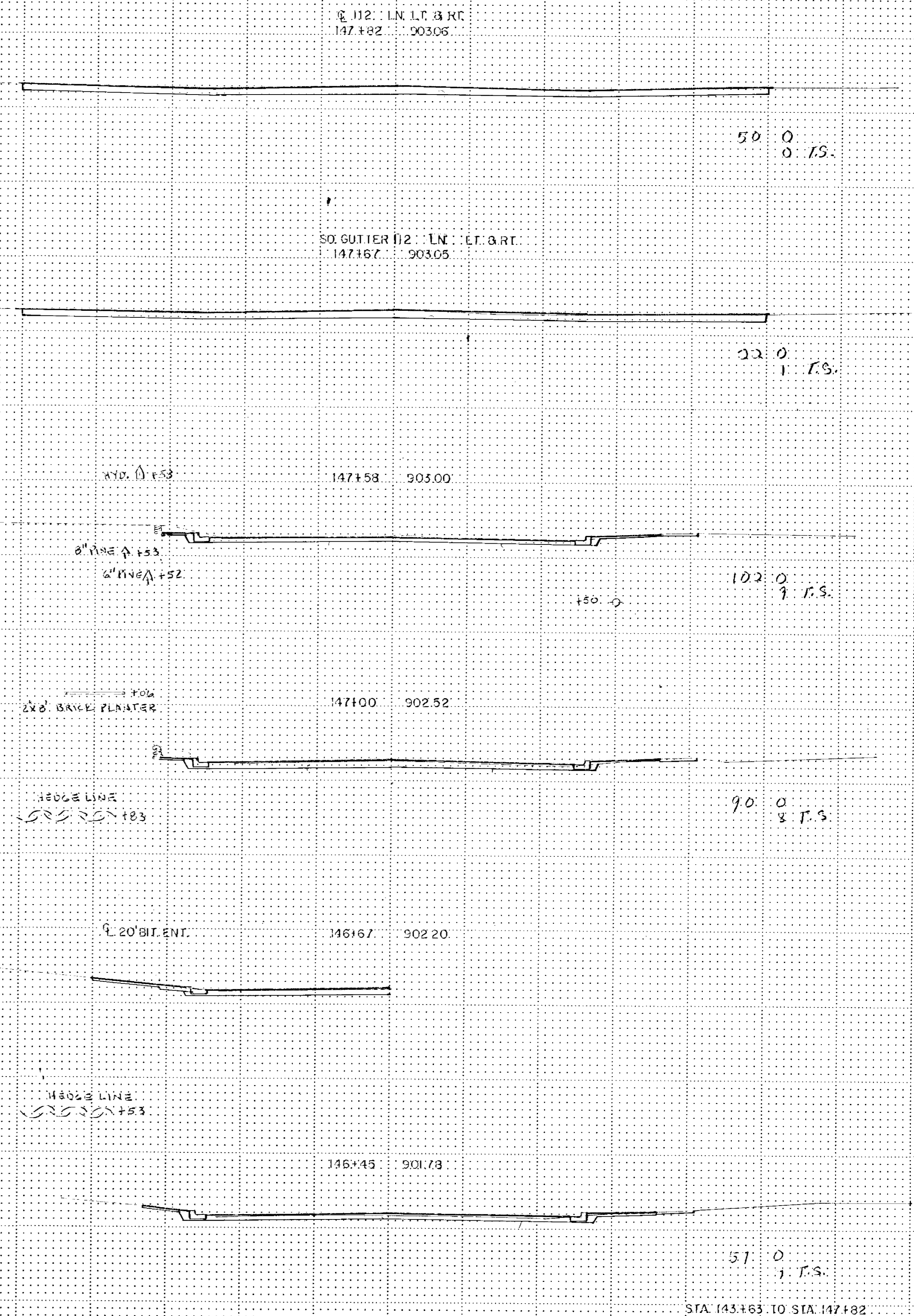
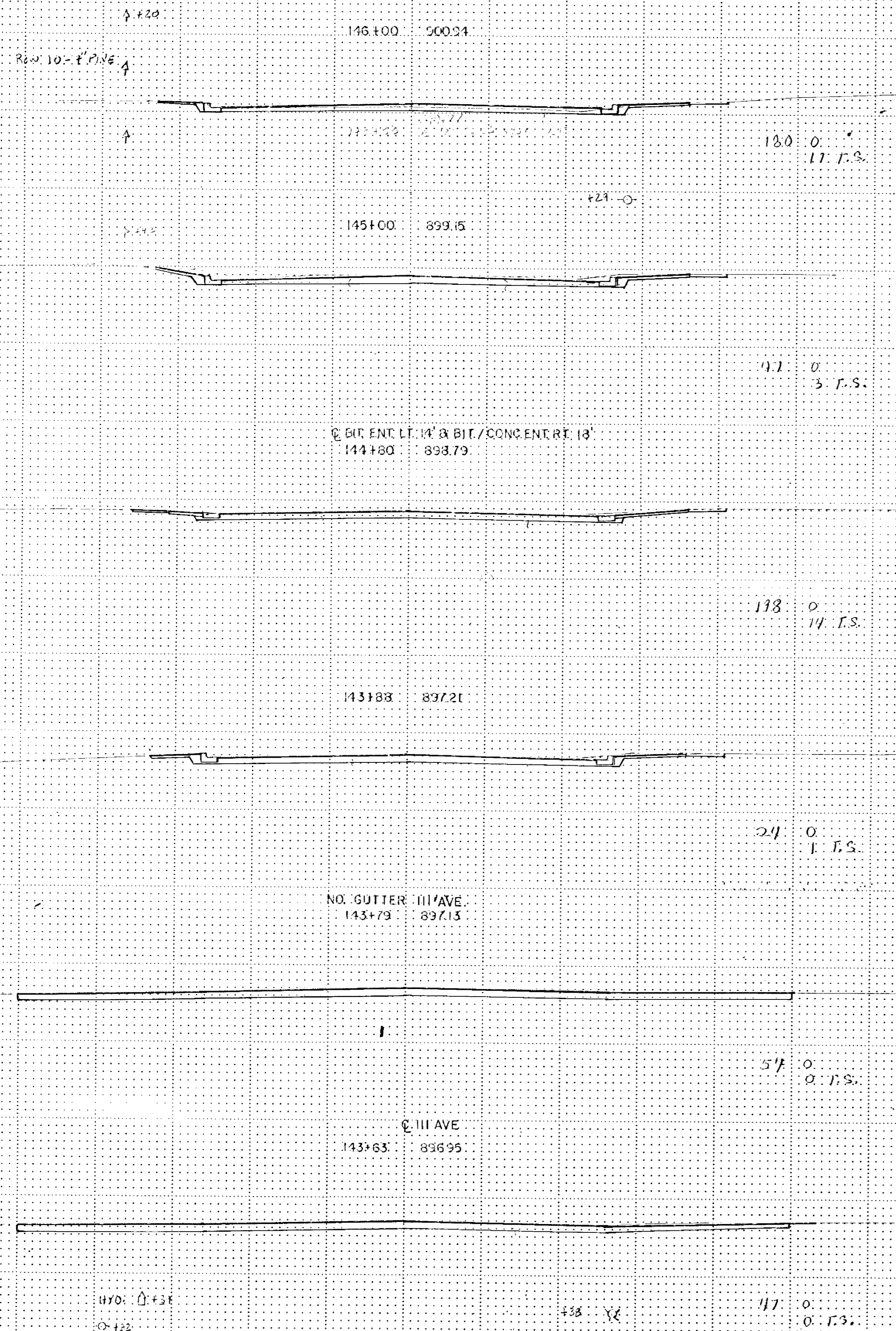
31 0
2 F.S.

164 0
10 F.S.

STA. 140+03 TO STA. 143+49

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT



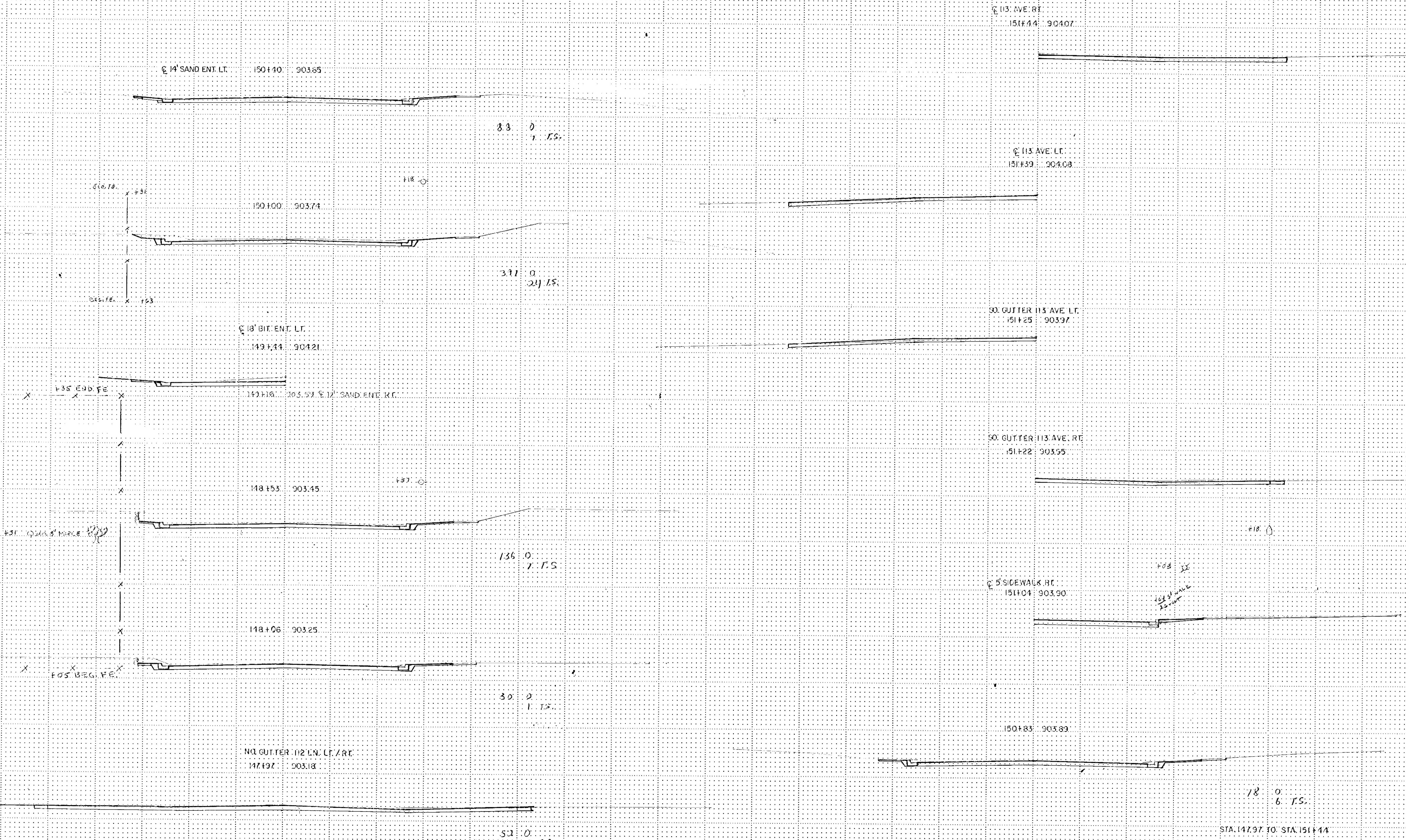
STA. 143+63 TO STA. 147+82

From H. T. ...
 ...
 ...

ILLUSTRATION BOARD NO. 1011

EXCAVATION EMBANKMENT
150+00 150+100 150+200

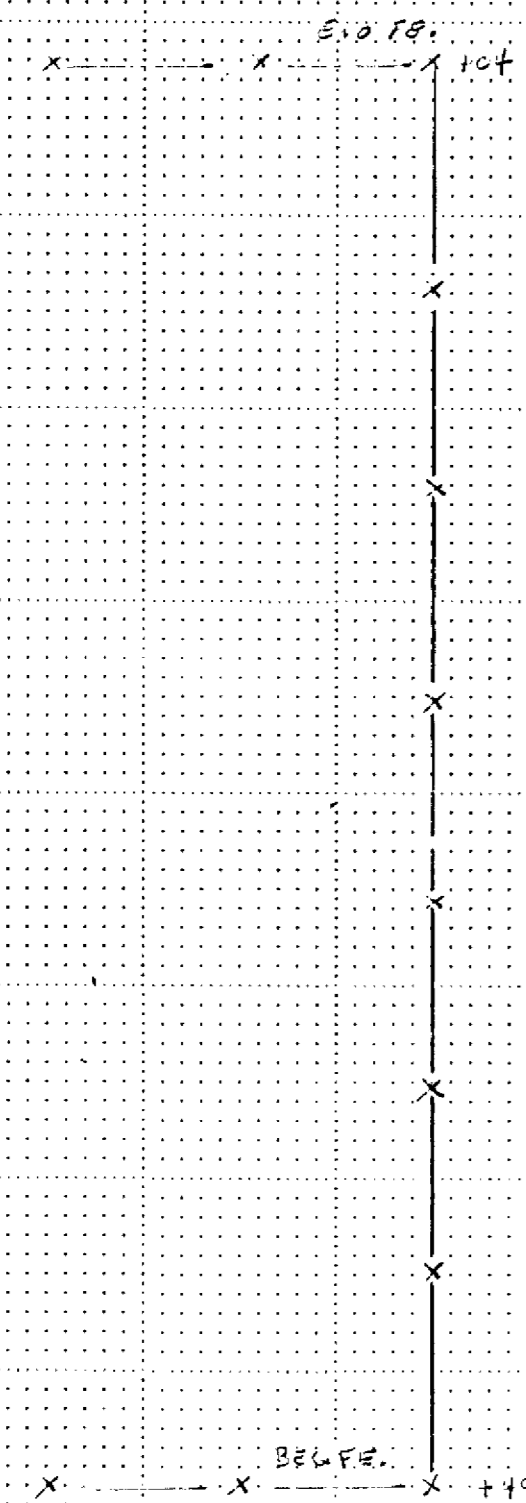
EXCAVATION EMBANKMENT
150+00 150+100 150+200



Handwritten notes on the left margin: '10' 0.6% T.S.' and '10' 0.6% T.S.'

EXCAVATION EMBANKMENT

EXCAVATION	EMBANKMENT
154+00	154+00



152+39 NO. GUTTER ENT. RT. BIT. 906.42

152+75 SO. GUTTER ENT. RT. BIT. 906.05

152+15 30' BIT ENT. 905.29

152+00 904.75

151+67 NO. GUTTER 115 AVE. 904.27

151+54 NO. GUTTER 115 AVE. 904.15

154+30 24' BIT ENT. 907.17

154+22 22' BIT ENT. RT. 907.15

154+00 907.12

153+76 16' SAND ENT. 907.02

153+59 906.93

153+09 906.54

72 1 9 FS

BIT. LOT.

245 0 17 FS

63 2 1 FS

208 0 16 FS

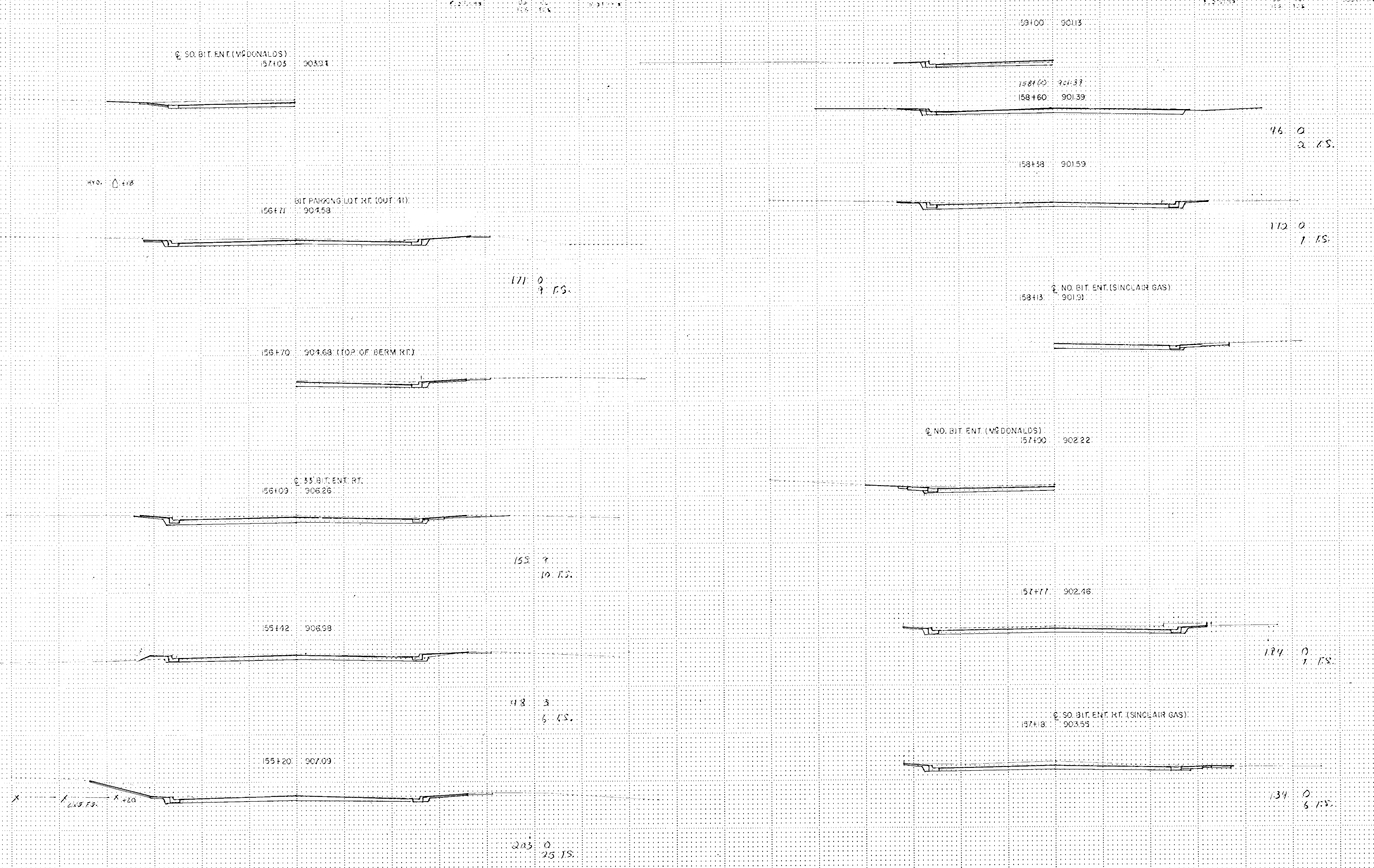
STA. 151+54 TO STA. 154+30

115 110

Handwritten notes on the left margin.

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT



412 - 0

STA. 153+20 TO STA. 159+00

ILLUSTRATION POST OFFICE DIVISION

EXCAVATION	EMBANKMENT
CU. YDS.	CU. YDS.

NO. GUTTER NORTHDAL BLVD.
159+74

247
0
a r s.

SO. GUTTER NORTHDAL BLVD. ON RA.
159+24 1001.06

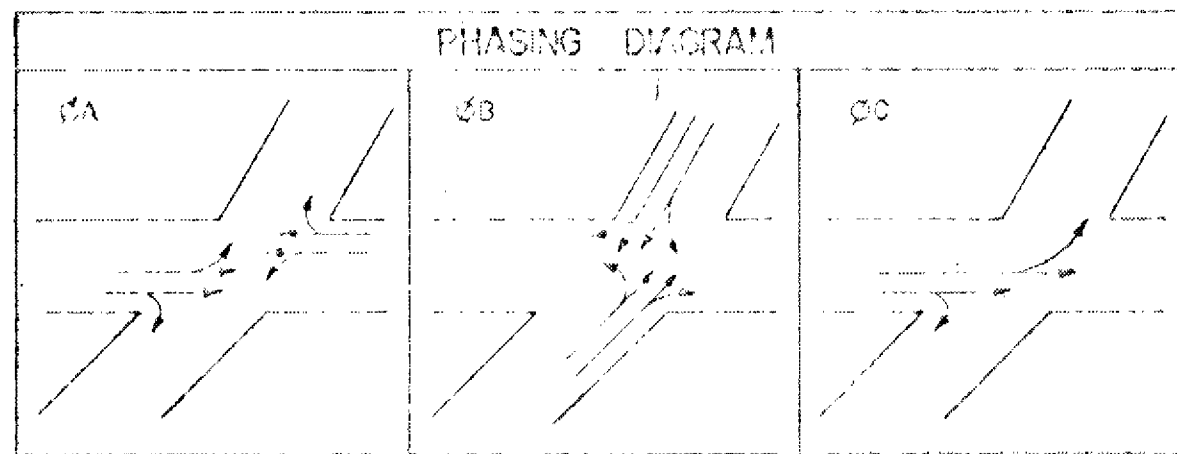
PROJECT SUMMARY

COMMON EXCAVATION	19,050 CU. YDS. (INCLUDES ALL BIT PAVEMENT INPLACE)
REGULAR EMBANKMENT	537 CU. YDS. x 150 % SHRINKAGE FACTOR = 806 CU. YDS.
EXCESS MATERIAL	18,244 CU. YDS. TO BE DISPOSED OF BY THE CONTRACTOR
TOPSOIL FILL	1,270 CU. YDS. x 1.25 % SHRINKAGE FACTOR = 1,588 CU. YDS. TOPSOIL BORROW

SO. GUTTER NORTHDAL BLVD. ON RA.
159+12 1001.08

151
0
a r s.

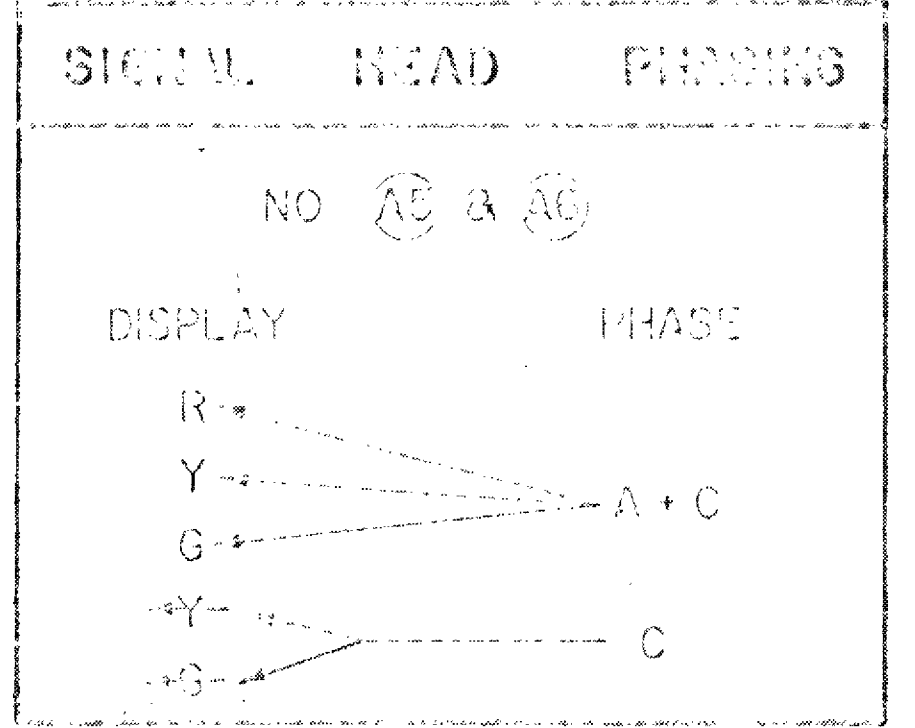
STA. 159+12 TO STA. 159+24



FACE	PHASE	SIGNAL CLEARANCE CHART																							
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12		
A		
B		
C		

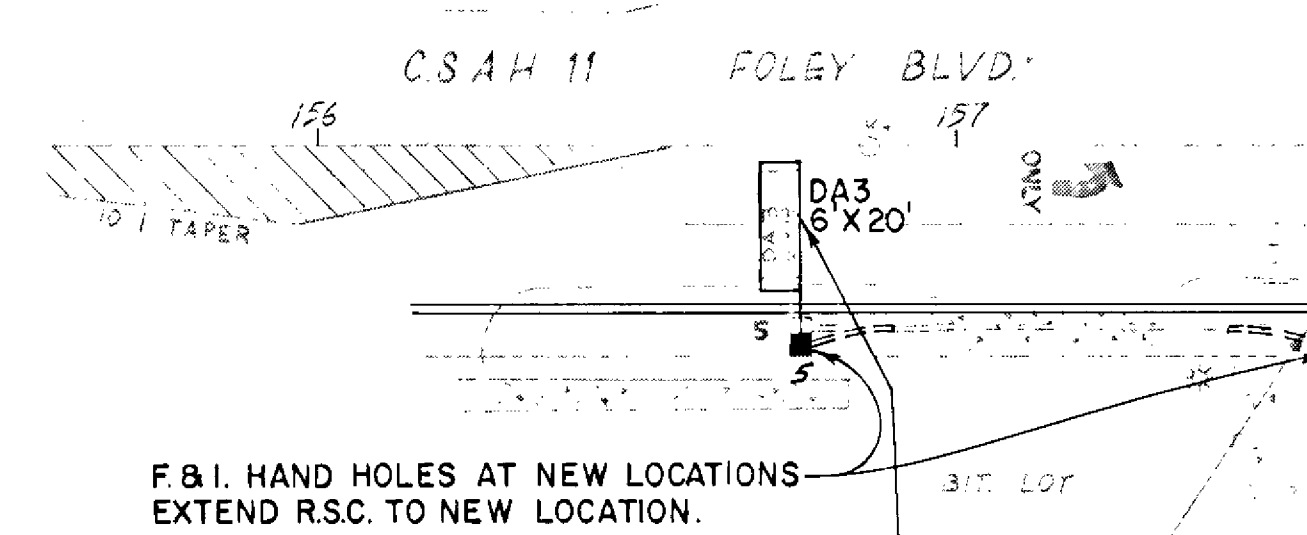
LEGEND	
[Symbol]	CONTROLLER
[Symbol]	PEDESTAL INPLACE
[Symbol]	PEDESTAL
[Symbol]	HANDHOLE (PULLBOX)
[Symbol]	HANDHOLE (PULLBOX) INPLACE
[Symbol]	6"x6" LOOP DETECTOR (RSC) INPLACE
[Symbol]	RIGID STEEL CONDUIT (RSC) INPLACE
[Symbol]	6"x6" LOOP DETECTOR INPLACE
[Symbol]	6"x6" LOOP DETECTOR
[Symbol]	6"x6" LOOP DETECTOR (CALLING)
[Symbol]	SIGNAL FACE
[Symbol]	PEDESTRIAN FACE
[Symbol]	6"x6" LOOP DETECTOR INPLACE
[Symbol]	6"x6" LOOP DETECTOR
[Symbol]	6"x6" LOOP DETECTOR

FACE	PHASE	FLASK	SIGNAL INDICATION CHART			
			1	2	3	4
A1	A	R	2	2	2	2
A2	A	R	2	2	2	2
A3	A	R	2	2	2	2
A4	A+C	R	2	2	2	2
A5	A+C	R	2	2	2	2
A6	A+C	R	2	2	2	2
A7	A	R	2	2	2	2
A8	A	R	2	2	2	2
A9	A	R	2	2	2	2
A10	A	R	2	2	2	2
B1	B	R	2	2	2	2
B2	B	R	2	2	2	2
B3	B	R	2	2	2	2
B4	B	R	2	2	2	2
B5	B	R	2	2	2	2
B6	B	R	2	2	2	2
B7	B	R	2	2	2	2
B8	B	R	2	2	2	2
B9	B	R	2	2	2	2
B10	B	R	2	2	2	2
B11	B	R	2	2	2	2



ONE WAY SIGNAL (TYPE 1A)
 4 STEEL GUARD POSTS
 EXTEND 1" RSC
 1-12/C #2 INTO HH1
 CONTROLLER & CABINET
 EXTEND 5" RSC 9-12/C #2
 5-3/C #2 9-2/C #4 2-1/C #6 INTO HH1
 1" RSC 2-1/C #10
 1" RSC 2-1/C #6
 SOURCE OF POWER
 SERVICE EQUIPMENT
 3 1/2" RSC
 3-12/C #2
 3-3/C #2
 4-1/C #10
 3-2/C #14

F&I. NEW HAND HOLE
 SALVAGE & INSTALL EXISTING LD COVER
 EXTEND 2 1/2" RSC TO NEW H.H. LOCATION



F&I. HAND HOLES AT NEW LOCATIONS
 EXTEND RSC TO NEW LOCATION.

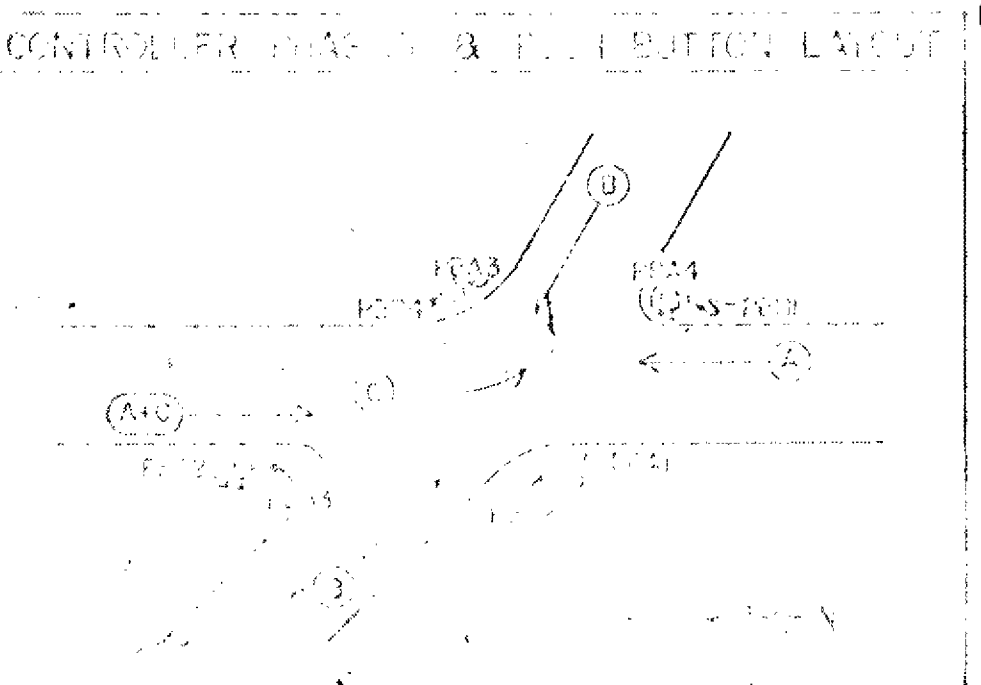
F&I. 6'x20' LOOP DETECTOR
 REMOVE - 6'x18' LOOP DETECTOR

F&I. 2-6'x20' LOOP DETECTORS
 REMOVE - 6'x50' LOOP DETECTOR
 F&I. 6'x6' LOOP DETECTOR (CALLING)
 REMOVE - 6'x6' LOOP DETECTOR (CALLING)

SALVAGE & INSTALL ON NEW PED. FOUND
 TWO WAY SIGNAL (TYPE 2C)
 TWO WAY PEDESTRIAN INDICATIONS
 2 PEDESTRIAN PUSH BUTTONS
 4 STEEL GUARD POSTS
 EXTEND 2" RSC 1-12/C #2 AND
 2-3/C #2 INTO HH 3

F&I. NEW PEDESTAL FOUNDATION
 F&I. 2- GUARD POST ASSY'S.
 F&I. 2 1/2" RSC TO NEW PED. LOC.

FOLEY BLVD	
14+12	RT 28
14+14	RT 28
14+16	RT 28
14+18	RT 28
14+20	RT 28
14+22	RT 28
14+24	RT 28
14+26	RT 28
14+28	RT 28
14+30	RT 28
14+32	RT 28
14+34	RT 28
14+36	RT 28
14+38	RT 28
14+40	RT 28
14+42	RT 28
14+44	RT 28
14+46	RT 28
14+48	RT 28
14+50	RT 28
14+52	RT 28
14+54	RT 28
14+56	RT 28
14+58	RT 28
14+60	RT 28



6'x16' LOOP DETECTOR
 1" RSC
 1-2/C #14
 2 1/2" 2-1/2" RSC
 2-12/C #2
 1-3/C #2
 2-2/C #14

6'x16' LOOP DETECTOR (CALLING)
 F&I. 6'x20' LOOP DETECTOR

TYPE B-25-T30-10(140)
 TWO WAY SIGNALS (OVERHEAD)
 TWO WAY SIGNAL (TYPE 20D POLE MOUNTED O)
 TWO WAY PEDESTRIAN INDICATIONS
 2 PEDESTRIAN PUSH BUTTONS
 3 STEEL GUARD POSTS
 EXTEND 2-1/2" RSC 2-12/C #2
 1-3/C #2 AND 2-1/C #10 INTO HH2

DB5 EXT DELAY 6'x20'

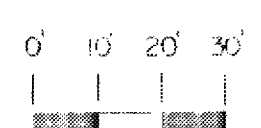
TYPE B-25-T30-10(30)
 2 ONE WAY SIGNALS (OVERHEAD)
 TWO WAY SIGNAL (TYPE 20D POLE MOUNTED O)
 TWO WAY PEDESTRIAN INDICATIONS
 2 PEDESTRIAN PUSH BUTTONS
 EXTEND 3" RSC 3-12/C #2 1-3/C #2 AND 2-1/C #10 INTO HH9
 3 STEEL GUARD POSTS
 1-1/2" RSC
 2-2/C #14

EXISTING DRIVEWAY TO BE REMOVED
 6'x16' LOOP DETECTOR (CALLING)
 1" RSC
 1-2/C #14
 6'x10' LOOP DETECTOR

TWO WAY SIGNAL (TYPE 2C)
 TWO WAY PEDESTRIAN INDICATIONS
 2 PEDESTRIAN PUSH BUTTONS
 3 STEEL GUARD POSTS
 EXTEND 2" RSC 2-12/C #2 AND 1-3/C #2 INTO HH12
 6'x6' LOOP DETECTOR (CALLING)
 1" RSC
 1-2/C #14
 6'x6' LOOP DETECTOR

NOTES

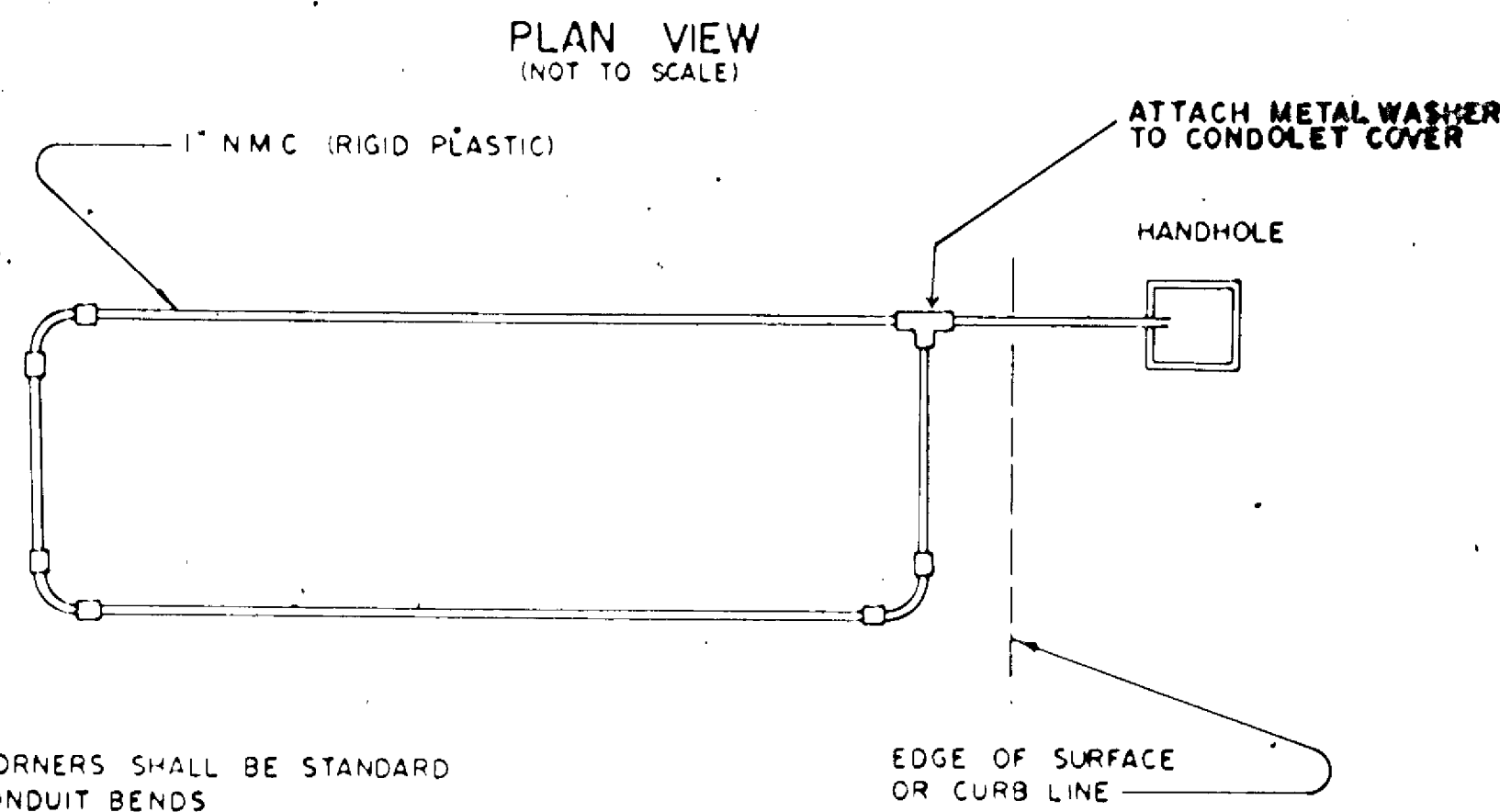
- 1) ALL LOOP DETECTORS SHALL BE INSTALLED IN P.V.C. CONDUIT IN ACCORDANCE WITH DETAILS ON SHEET NO. 40.
- 2) ALL STREET UTILITY AND SIGNAL SYSTEM STRUCTURES REMOVED AND NOT REUSED, SHALL BE SALVAGED AND DELIVERED TO THE COUNTY AT THE CONSTRUCTION SITE.
- 3) SEE SHEET NO. 39 FOR WIRING DETAILS.



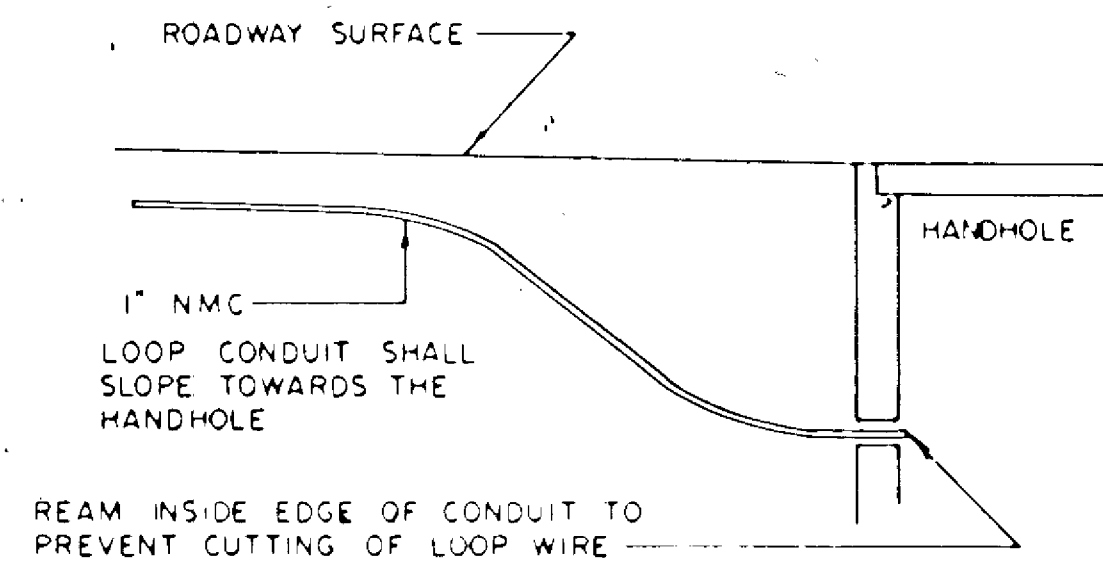
SIGNAL PLAN LAYOUT

ANCKA COUNTY

LOOP DETECTOR DETAIL "A"

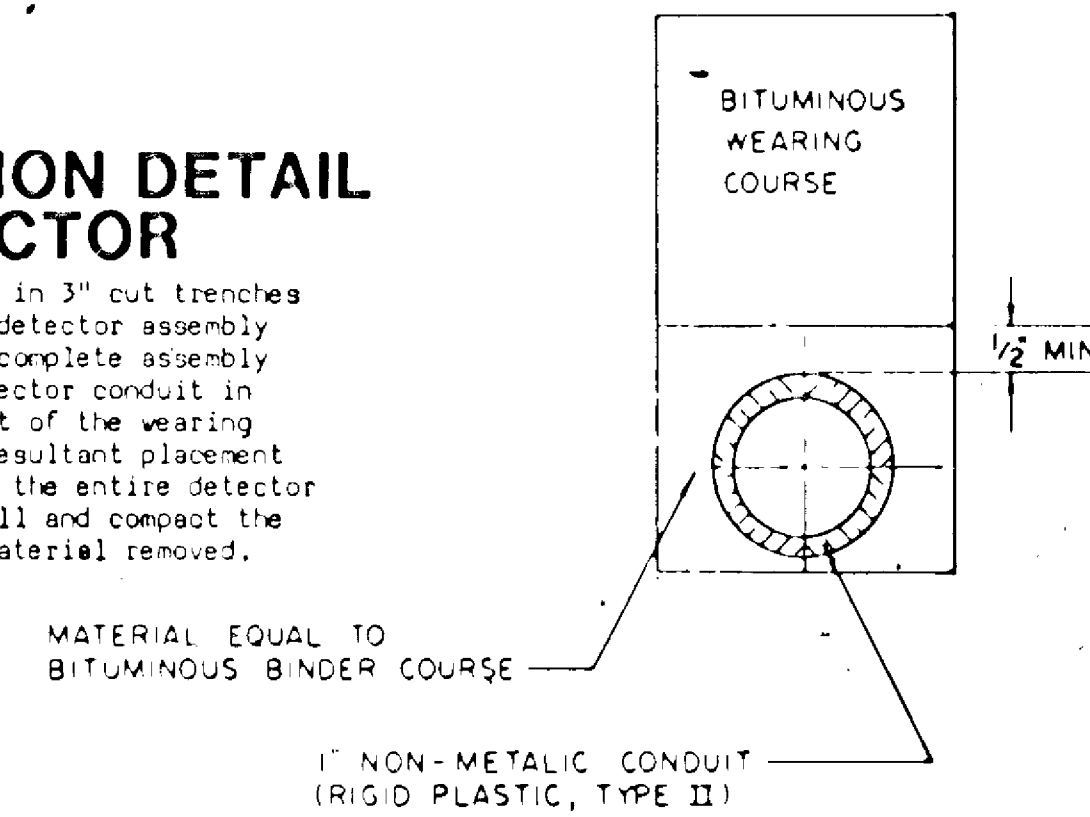


DRAINAGE DETAILS



CONDUIT INSTALLATION DETAIL FOR LOOP DETECTOR

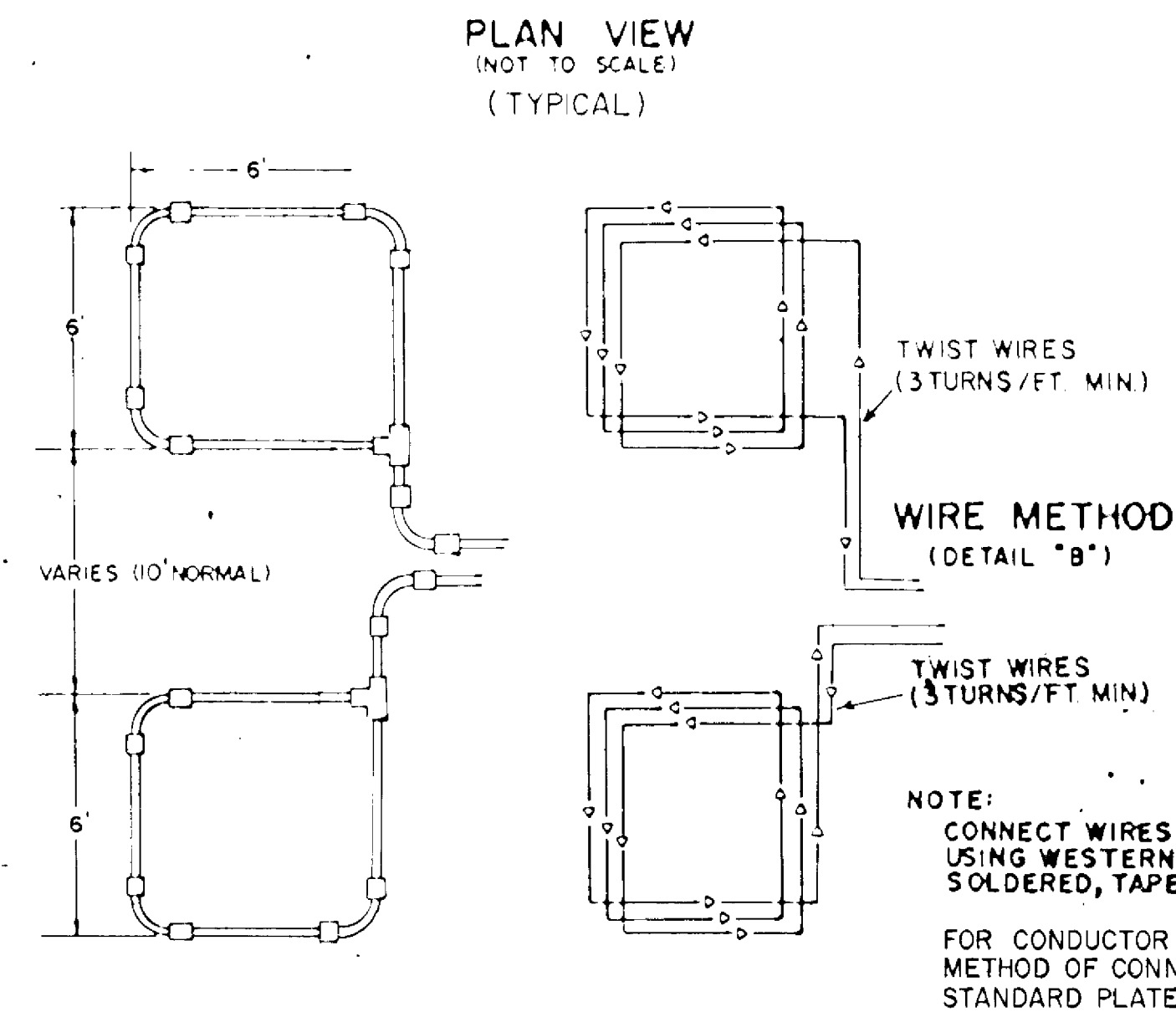
Loop detector conduits are to be installed in 3" cut trenches as shown on plans. Install each complete detector assembly with the detector wire pulled through the complete assembly to handhole. Where appropriate, place detector conduit in bituminous binder course prior to placement of the wearing course. The depth of the trench and the resultant placement of the detector conduit shall be such that the entire detector assembly drains into the handhole. Backfill and compact the trenches with material equivalent to the material removed.



ABBREVIATIONS

- EQUIPMENT AND INDICATIONS
- RED - RED
 - YEL - YELLOW
 - GRN - GREEN
 - WLK - WALK
 - NEU - NEUTRAL
 - DWK - DON'T WALK
 - LUM - LUMINAIRE
 - DNL - DOWNLIGHT
 - H.H. - HANDHOLE
 - EGG - EQUIPMENT GROUND
 - R'SC - RIGID STEEL CONDUIT
 - GLTA - GREEN LEFT TURN ARROW
 - YRTA - YELLOW RIGHT TURN ARROW
 - D2-1(eg) - DETECTOR - PHASE "2"
 - GR - GROUND ROD
 - SER - SERVICE
 - PAI - PEDESTRAIN INDICATIONS
 - 2-1(eg) - SIGNAL HEADS - PHASE "2"
 - SPR - SPARE CONDUCTORS
 - N.M.C. - NON METALLIC CONDUIT
 - E.V.P. - EMERGENCY VEHICLE PRE-EMPTION
 - J.B. - JUNCTION BOX
 - WP - WOOD POLE
 - PEC - PHOTOELECTRIC CELL
 - BR GRD - BARE GROUND

LOOP DETECTOR DETAIL "B"



CONDUITS MAY BE PLACED IN A COMMON TRENCH.

CONDUCTOR COLOR CODING

R	.BLK	
O	WH	2-1/C#6
BL		2-1/C#10
WH	R	
R/BLK	W	3/C#12
O/BLK	BLK	
BL/BLK	BLK	2/C#14
WH/BLK	CLEAR	
BLK	R OR O	
BLK/WH	WH OR YEL	3/C#20
G/BLK	BLK OR BL	
G		

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE

CONDUCTOR COLOR CODE

- R - RED
- O - ORANGE
- BL - BLUE
- WH - WHITE
- R/BLK - RED WITH BLACK TRACER
- O/BLK - ORANGE WITH BLACK TRACER
- BL/BLK - BLUE WITH BLACK TRACER
- WH/BLK - WHITE WITH BLACK TRACER
- BLK - BLACK
- BLK/WH - BLACK WITH WHITE TRACER
- G - GREEN

STANDARD PLATES

PLATE NO.	DESCRIPTION
8110 C	TRAFFIC SIGNAL BRACKETING - POLE MOUNTED
8111 B	TRAFFIC SIGNAL BRACKETING - PEDESTAL MOUNTED
* 8112 C	PEDESTAL FOUNDATION
8113 C	MAGNETIC VEHICLE DETECTOR INSTALLATION
8115 C	PEDESTRIAN PUSH BUTTON INSTALLATION
* 8116 C	STEEL GUARD POST
* 8117 F	PRECAST CONCRETE HANDHOLE
8118 C	SERVICE EQUIPMENT AND POLE
8119 C	GROUND MOUNTED CABINET FOUNDATION
8120 H	POLE FOUNDATION
* 8122 C	PEDESTAL AND PEDESTAL BASE
8123 B	POLE AND MAST ARM
8124 C	SIGNAL HEAD MOUNTS
8125 A	SWING AWAY HINGE
8130 G	SAW CUT LOOP DETECTORS
* 8121 B	TRANSFORMER BASE
* 8126 C	P 100 POLE FOUNDATION

* THESE STANDARD PLATES APPLY TO THIS PLAN