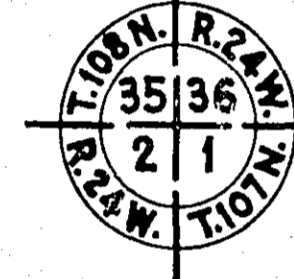
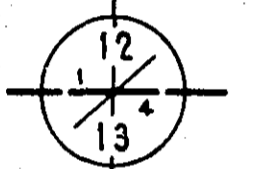


CONVENTIONAL SIGNS

STATE LINE	-----	TIMBER	.....
COUNTY LINE	-----	BRUSH	.....
TOWNSHIP OR RANGE LINE	-----	ORCHARD	.....
SECTION LINE	-----	ROCK LEDGE	.....
QUARTER LINE	-----	SAND	.....
SIXTEENTH LINE	-----	EDGE OF CUT	.....
RIGHT-OF-WAY LINE	-----	TOE OF EMBANKMENT	.....
PRESENT ROAD 7/8 LINE	-----	CATCH BASIN	.....
LIMITED ACCESS	-----	MANHOLE	.....
PROPERTY LINE (Except Land Lines)	-----	DROP INLET	.....
VACATED PLATTED PROPERTY	-----	FIRE HYDRANT	.....
CORPORATE OR CITY LIMITS	-----	ARC LAMP	.....
TRUNK HIGHWAY CENTER LINE	-----	OTHER LAMPS (Table Kind)	.....
RETAINING WALL	-----	RAILROAD CROSSING SIGN	.....
STEAM RAILROAD	-----	RAILROAD CROSSING BELL	.....
ELECTRIC RAILROAD	-----	ELECTRIC WARNING SIGN	.....
RAILROAD RIGHT-OF-WAY LINE	-----	CROSSING GATE	.....
CREEK	-----	CATTLE GUARD	.....
RAPIDS OR WATERFALL	-----	OVERHEAD (Highway Over)	.....
DRY RUN	-----	UNDERPASS (Highway Under)	.....
DRAINAGE DITCH	-----	ABUTMENT, WALL & PIER	.....
HIGH TENSION LINE	-----	BRIDGE	.....
POWER POLE LINE	-----	CULVERT	.....
TELEPHONE OR TELEGRAPH LINE	-----	BUILDING (One Story Frame)	.....
TELEPHONE CONDUIT	-----	C-CONCRETE S-STONE T-TILE B-BRICK ST-STUCCO	.....
GUARD RAIL	-----	HEDGE	.....
WIRE FENCE	-----	IRON PIPE	.....
RAILROAD SNOW FENCE	-----	STONE MONUMENT	.....
BOARD OR HIGHWAY SNOW FENCE	-----	WOOD STAKE OR HUB	.....
STONE WALL OR FENCE	-----	MEANDER CORNER	.....
GAS MAIN	-----		
WATER PIPE	-----		
SEWER PIPE	-----		
DRAIN TILE	-----		
GRAVEL PIT	-----		
SAND PIT	-----		
CLAY PIT	-----		
ROCK QUARRY	-----		
SPRINGS	-----		
MARSH	-----		



NOTE: SECTION NUMBERS READ FROM THE SOUTH

PIT DATA

COUNTY	PIT NO.	Located in
		Dead Haul
-----	PIT NO.	Located in
-----		Dead Haul
-----	PIT NO.	Located in
-----		Dead Haul
-----	PIT NO.	Located in
-----		Dead Haul

SPECIFICATIONS

THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JAN. 1, 1964 SHALL GOVERN.

NOTE: THESE PLANS WERE PREPARED BY REVISING PLANS SUBMITTED TO THIS OFFICE BY THE NEW BRIGHTON VILLAGE ENGINEER. NO ORIGINAL SURVEY WAS MADE BY THIS OFFICE.

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY

CONSTRUCTION PLAN FOR GRADING AND SURFACING

FIFTH ST. N.W. S.A.P. 62-673-02 C.S.A.H. 73

BETWEEN: FIFTH AVE. N.W.

AND: SECOND AVE. N.W.

FROM: 1300 FT. EAST OF CENTER OF SEC. 29, T30N., R23W.

TO: 2300 FT. EAST OF CENTER OF SEC. 29, T30N., R23W.

GROSS LENGTH	1010.0 FEET	0.1913 MILES
BRIDGES-LENGTH	0 FEET	0 MILES
EXCEPTIONS-LENGTH	0 FEET	0 MILES
NET LENGTH	1010.0 FEET	0.1913 MILES

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS, & ESTIMATED QUANTITIES
3	PLAN & PROFILE, DRAINAGE STRUCTURES & DETAIL PLATES
4-5	CROSS SECTION SHEETS

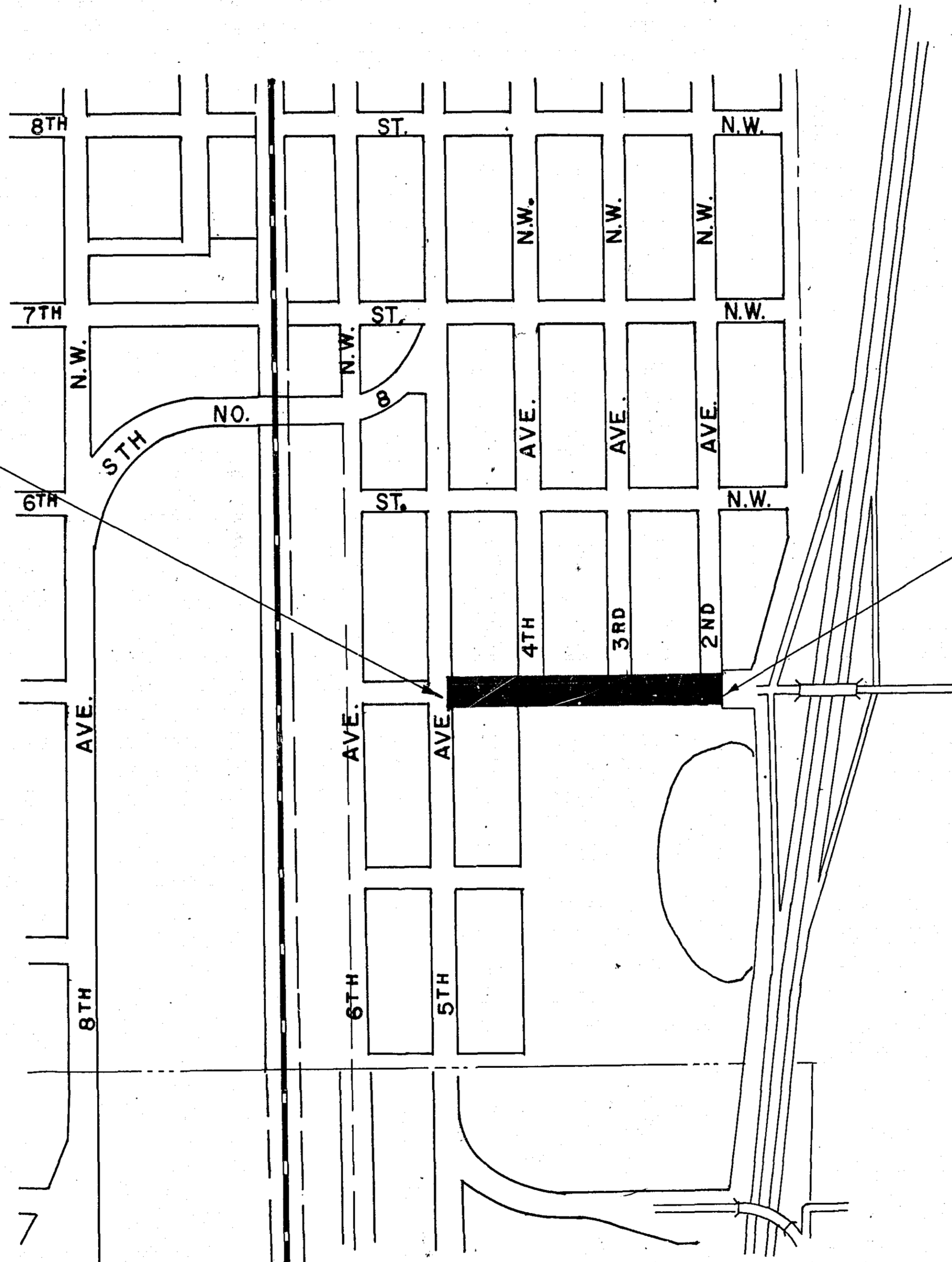
SCALES

PLAN, 1 inch = 100 Feet
PROFILE, Horiz. 1 inch = 100 Feet. Vert. 1 inch = 10 Feet.
WORKING PLANS { Horiz. 1 inch = 100 Feet
{ Vert. 1 inch = 10 Feet
{ Cross-Sections 1 inch = 10 Feet
LAYOUT, 1 inch = Feet

DESIGN SPEED: 35 M.P.H.
DESIGN LOAD: 9 TON ULTIMATE
TRAFFIC COUNT-NONE AVAILABLE

BEGIN PROJECT
STA. 0+00

END PROJECT
STA. 10+10



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.
Walter A. Baker REG. NO. 2042 DATE 6-11-64
DESIGN ENGINEER

RECOMMENDED FOR APPROVAL *Dean R. ...* DATE 6-22-64
COUNTY ENGINEER

APPROVED *H. F. Goodrich* DATE
CHAIRMAN OF RAMSEY COUNTY BOARD

MINNESOTA STATE HIGHWAY DEPARTMENT

RECOMMENDED FOR APPROVAL *J. D. ...* DATE 7-10-64

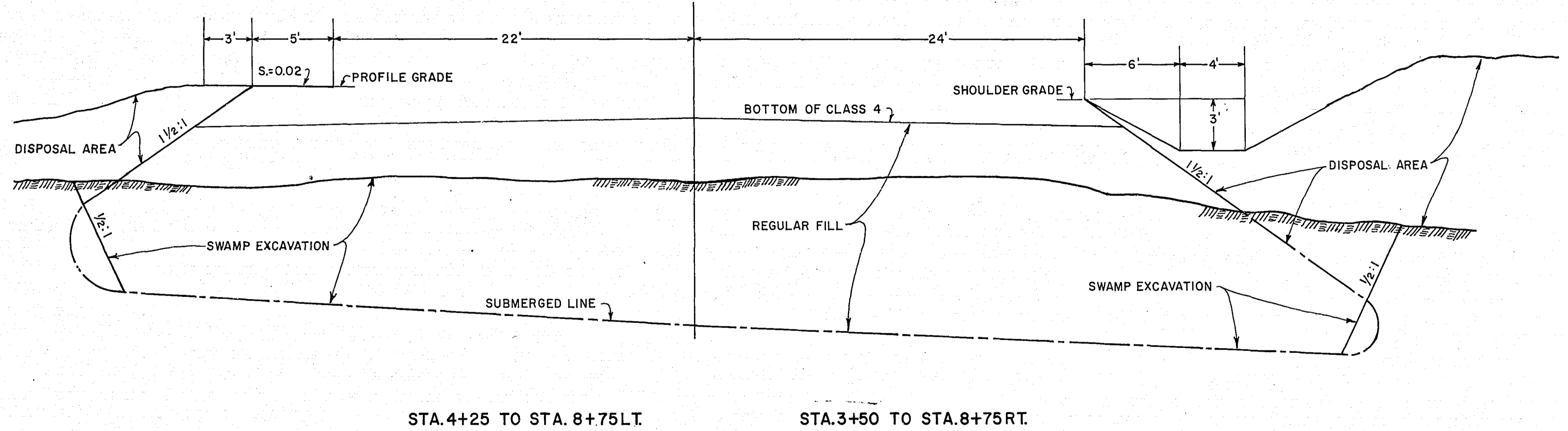
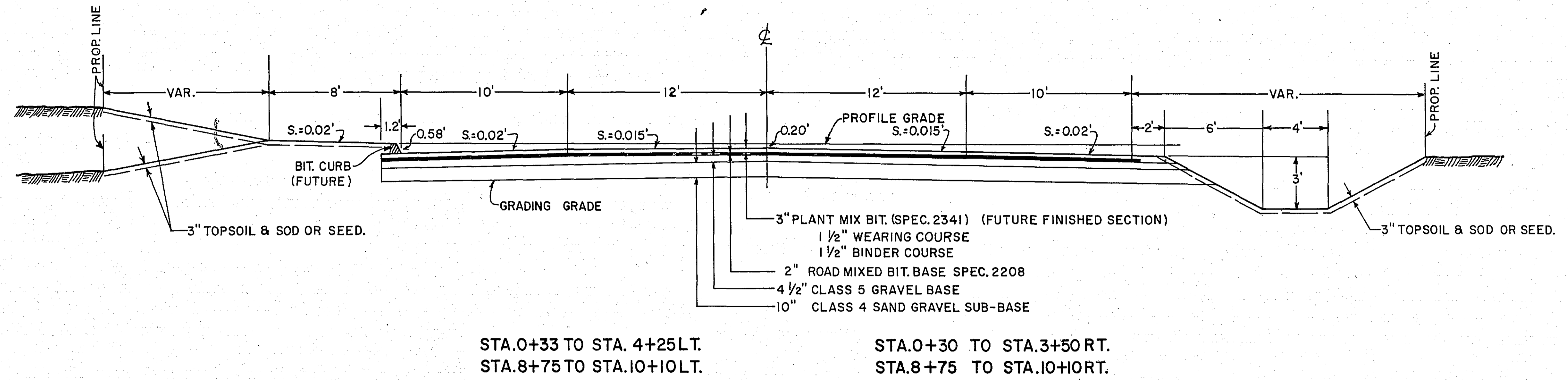
RECOMMENDED FOR APPROVAL *R. T. ...* DATE 6-23-64
DISTRICT ENGINEER

APPROVED *W. E. ...* DATE 7-13-64

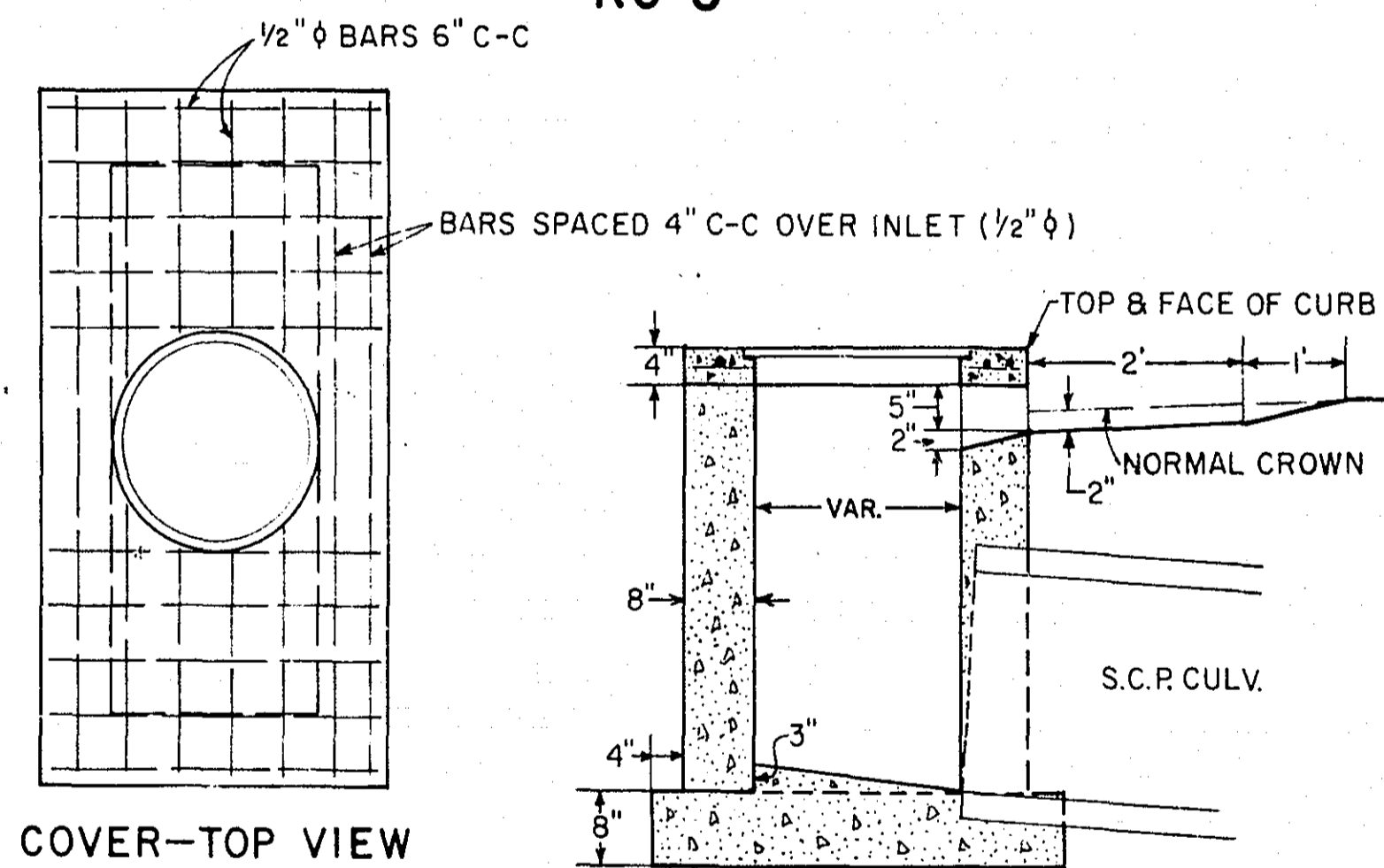
MICRO-FILMED

ESTIMATED QUANTITIES			
SPEC. NO.	DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITIES
2101.502	CLEARING	TREE	15
2101.507	GRUBBING	TREE	13
2104.511	REMOVE CATCH BASIN	STRUCTURE	3
2104.515	REMOVE PIPE SEWER	LINEAR FOOT	185
2105.501	CLASS A EXCAVATION	CUBIC YARD	3,500
2105.506	BORROW EXCAVATION (CLASS A)	CUBIC YARD	27,000
2105.510	TOPSOIL COVERING	CUBIC YARD	720
2123.506	3/4 YARD DRAGLINE	HOURS	495
2201.526	GRAVEL SUB-BASE IN PLACE (CLASS 4)	TON	2,700
2202.526	GRAVEL BASE IN PLACE (CLASS 5)	TON	2,000
2208.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	1,850
2208.503	BITUMINOUS MATERIAL FOR MIXTURE	GALLON	5,800
2209.506	AGGREGATE	TON	680
2356.505	BITUMINOUS MATERIAL FOR SEAL COAT	GALLON	722
356.611	SEAL COAT AGGREGATE	TON	45
2501.522	F. & I. 22" SPAN R.C.P. - A, CLASS II	LINEAR FOOT	70
2503.512	F. & I. 15" R.C.P. SEWER, CLASS II	LINEAR FOOT	176
2503.514	F. & I. 24" C.M.P. SEWER	LINEAR FOOT	120
2503.514	F. & I. 18" C.M.P. SEWER, 14 GAUGE	LINEAR FOOT	60
2506.507	CONSTRUCT CATCH BASINS, DESIGN C	LINEAR FOOT	15.0
2506.507	CONSTRUCT CATCH BASINS, DESIGN R.C.3	LINEAR FOOT	8.4
2506.516	F. & I. CASTING ASSEMBLIES	ASSEMBLY	6
2506.522	ADJUST FRAME & RING CASTING	ASSEMBLY	2
2574.501	ROADSIDE SEEDING	ACRE	1
2576.501	SODDING	SQUARE YARD	1,400

TYPICAL SECTIONS



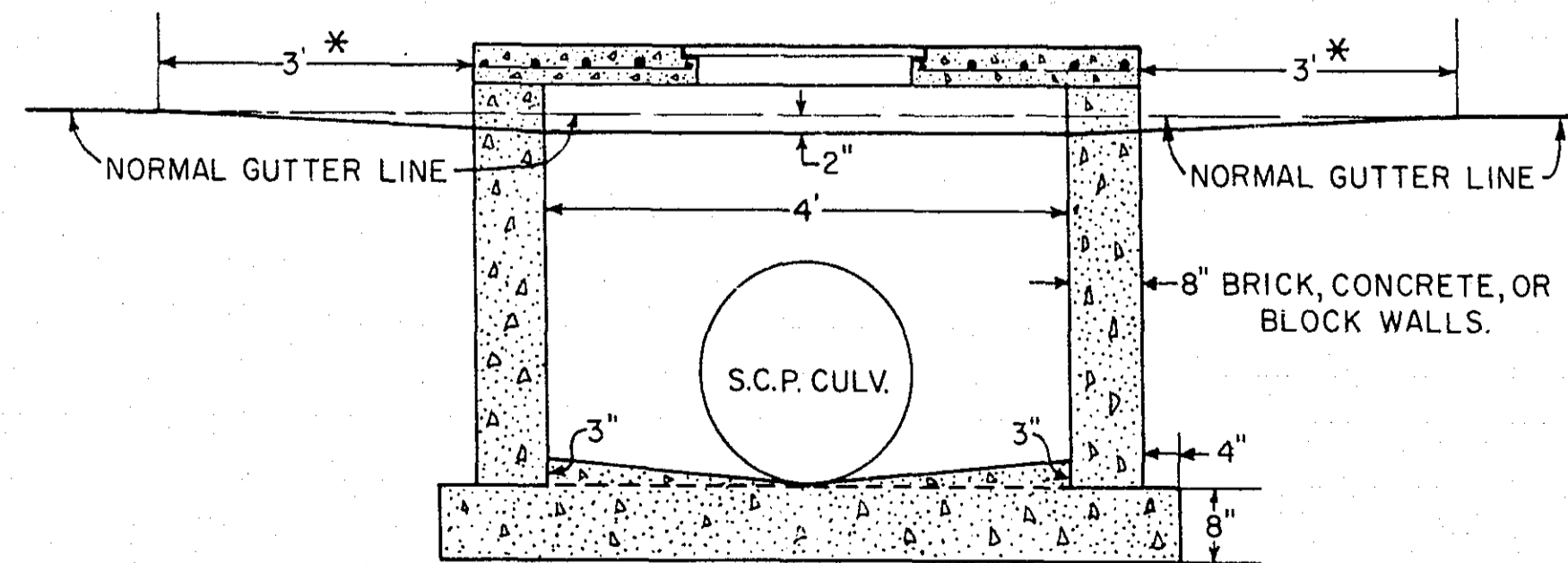
SPECIAL CATCH BASIN RC-3



COVER-TOP VIEW

RING B COVER ASSEMBLY
M.H.D. ST. PLATE 4109B - CASTING NO. 790-2
M.H.D. ST. PLATE 4111C - CASTING NO. 712

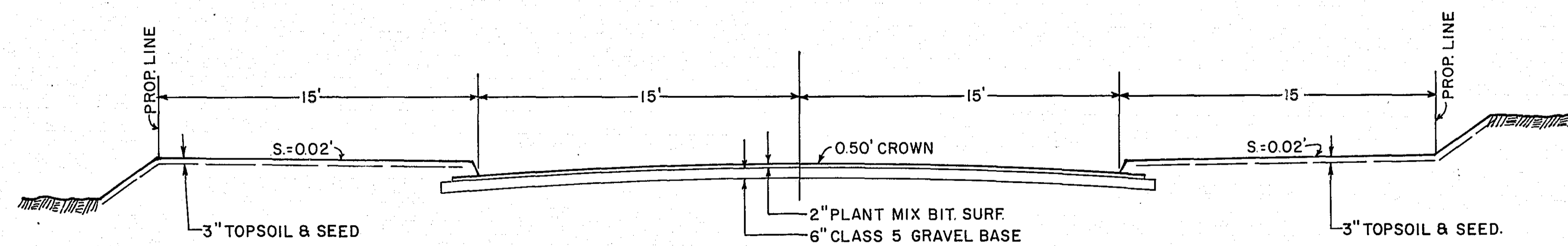
SIDE VIEW



FRONT VIEW

* CONSTRUCT 3 LIN. FT. CONCRETE CURB ON EACH SIDE OF CATCH BASINS.
CHANGE 3\"/>

SIDE STREETS



STA. 0+64 F&I 70L.F. R.C.P-A CULV. CLASS II
 S=22 R=13
 INV. LT.=898.3 = 40'
 INV. RT.=897.9 = 30'

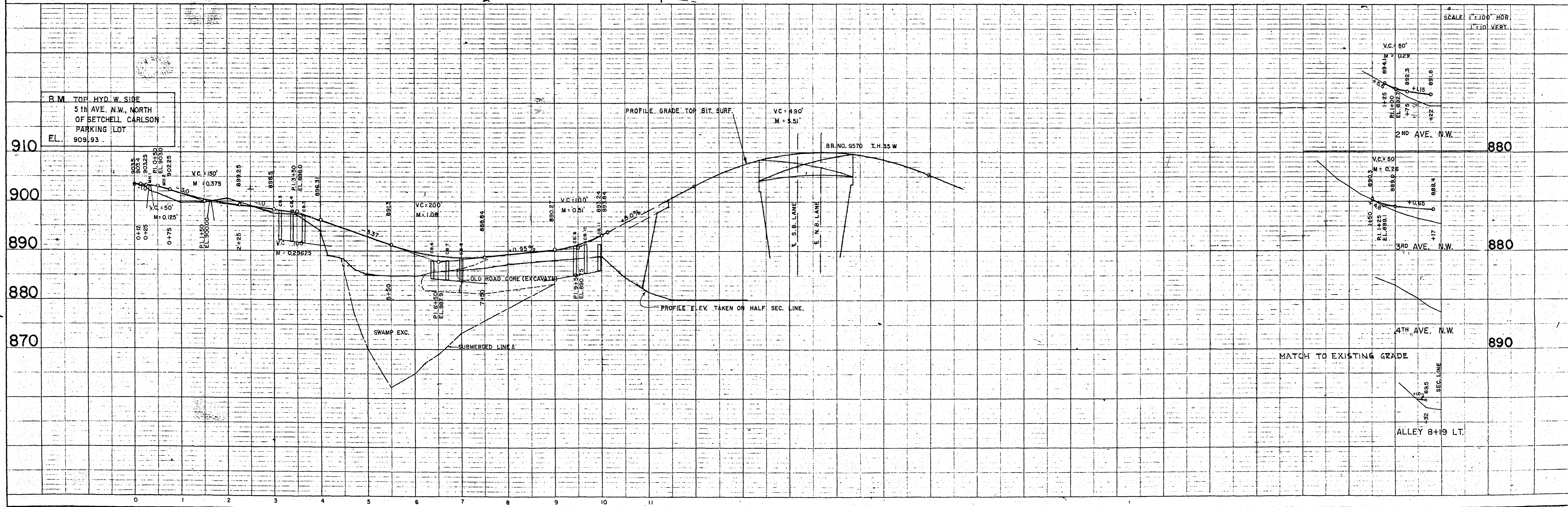
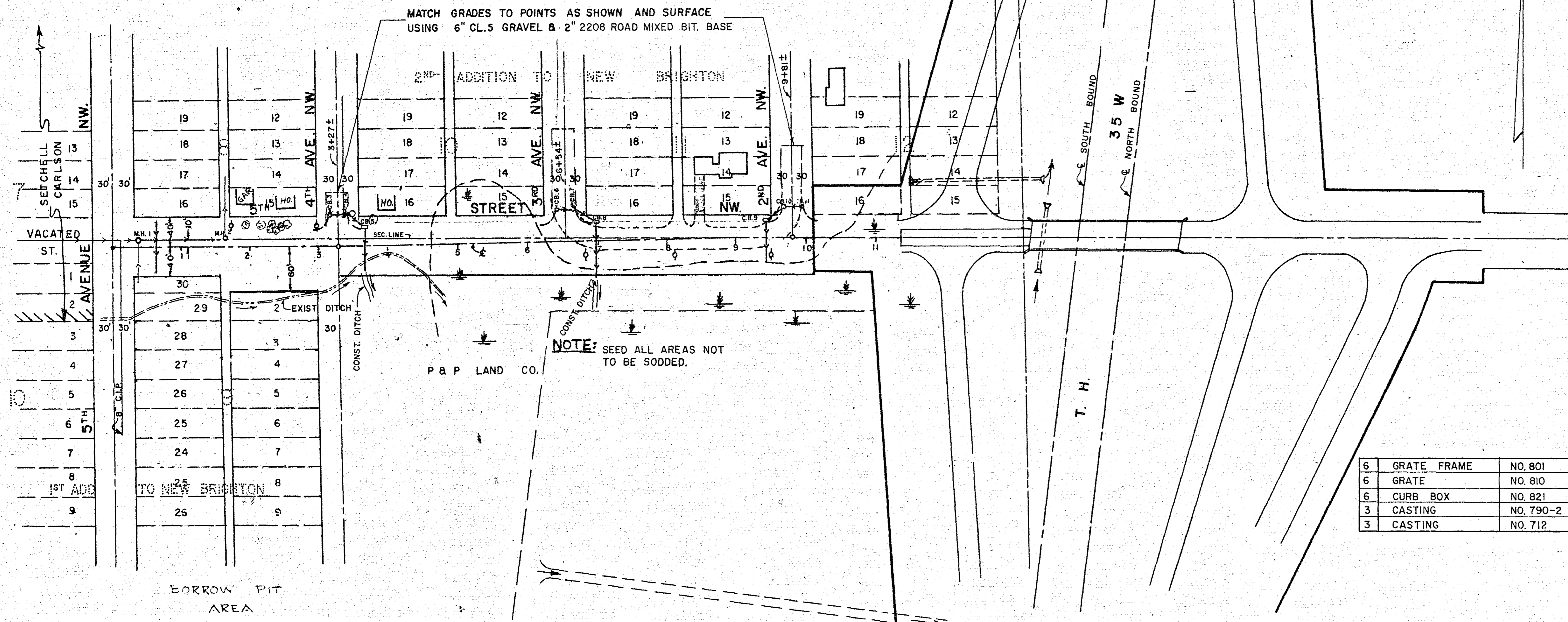
DRAINAGE STRUCTURES

STATION	LOCATION	STRUCTURE						F&I PIPE				
		NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	F&I CASTING ASSEMBLY	ELEVATION GRATE OR RING	OUTLET	ADJUST. CASTING ASSEMBLY	18" C.M.R.	15" R.C.P.	24" CMP
0+39 ±	LT. 10'	1	M.H.									
1+66 ±	LT. 12'	2	M.H.									
3+12 ±	LT. 42'	3	C.B.	C	5.4		898.3	892.1				28'
3+42 ±	LT. 42'	4	C.B.	C	5.7		898.3	891.8				28'
3+65 ±	LT. 23'	5	C.B.	R.C.-3	5.5		897.0	891.5		60"	EL. 891.0	
6+38 ±	LT. 42'	6	C.B.	C	3.9		888.0	884.4				28'
6+68 ±	LT. 42'	7	C.B.	C	4.2		888.0	884.1				36'
7+00 ±	LT. 23'	8	C.B.	R.C.-3	4.8		888.6	883.8			58"	EL. 883.5
9+42 ±	LT. 23'	9	C.B.	R.C.-3	6.0		891.0	885.0			62"	EL. 884.0
9+66 ±	LT. 42'	10	C.B.	C	4.9		891.3	885.5				28'
9+96 ±	LT. 42'	11	C.B.	C	4.4		891.3	886.0				28'

STANDARD DETAIL PLATES

4002 C	MANHOLE OR CATCH BASIN
4126 C	CATCH BASIN FRAME CASTING
4149 B	GRATE CASTING FOR CATCH BASIN
4161 C	CURB BOX CASTING FOR CATCH BASIN
4108 B	AUXILIARY CASTING FOR MANHOLE RING EXTENSION
4111 C	COVER CASTING FOR MANHOLE
3000B	REINFORCED CONCRETE PIPE
3014 A	REINFORCED CONCRETE PIPE-ARCH

6	GRATE FRAME	NO. 801
6	GRATE	NO. 810
6	CURB BOX	NO. 821
3	CASTING	NO. 790-2
3	CASTING	NO. 712

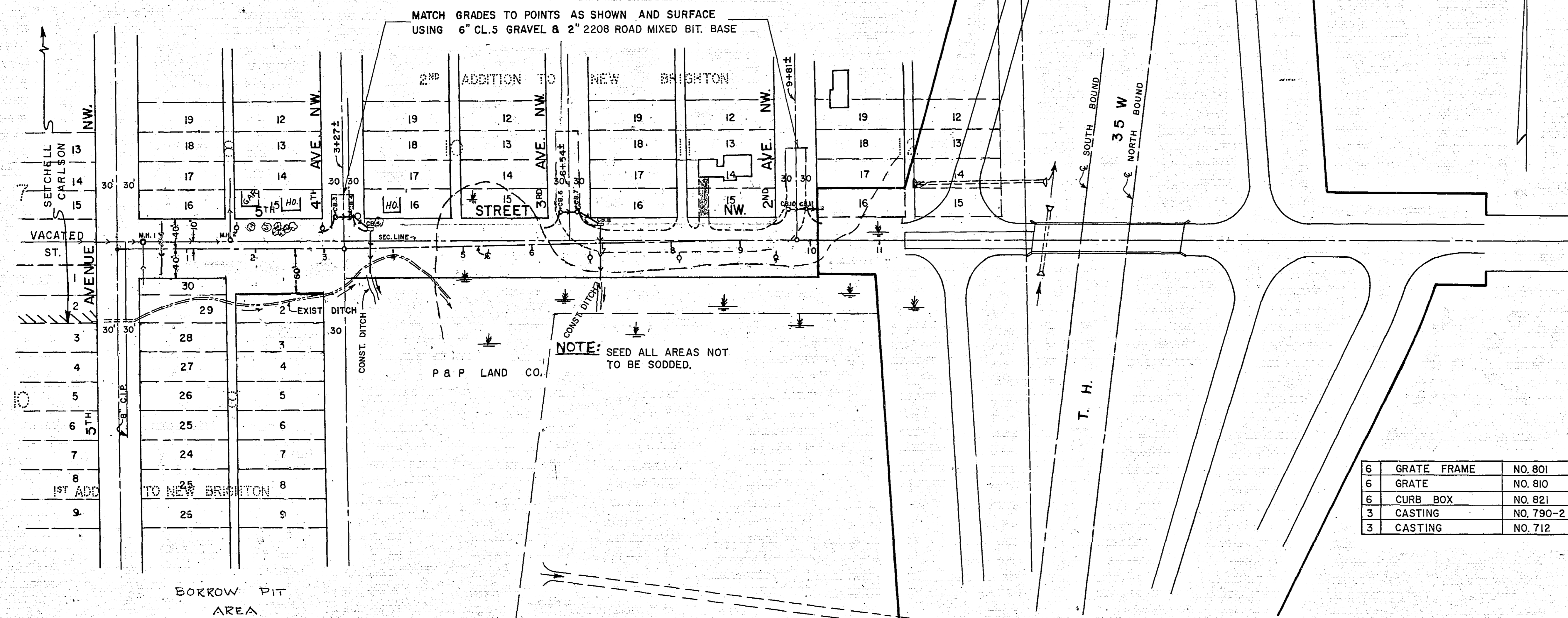


STA. 0+64 F.B.I. 70.L.F. R.C.P.-A CULV. CLASS II
 S=22 & R=13
 INV. LT.=898.3 = 40'
 INV. RT.=897.9 = 30'

STATION		LOCATION		STRUCTURE										
NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	F. B. I. CASTING ASSEMBLY	ELEVATION		ADJUST. CASTING ASSEMBLY	F.B.I. PIPE CONC. C.M.						
					GRATE OR RING	OUTLET		18" C.M.P.	15" R.C.P.	24" C.M.P.				
0+39 ±	LT. 10'	1	M.H.											
1+66 ±	LT. 12'	2	M.H.											
3+12 ±	LT. 42'	3	C.B.	C	5.4	898.3	892.1							
3+42 ±	LT. 42'	4	C.B.	C	5.7	898.3	891.8						28'	
3+65 ±	LT. 23'	5	C.B.	RC-3	5.5	897.0	891.5					60' = EL. 891.0		
6+38 ±	LT. 42'	6	C.B.	C	3.9	889.0	884.9						28'	
6+68 ±	LT. 42'	7	C.B.	C	4.2	889.0	884.6						28'	
7+00 ±	LT. 23'	8	C.B.	RC-3	4.8	889.6	884.3						36'	56' = EL. 884.0
9+66 ±	LT. 42'	10	C.B.	C	4.9	892.3	886.5						28'	
9+96 ±	LT. 42'	11	C.B.	C	4.4	892.3	886.0						28'	

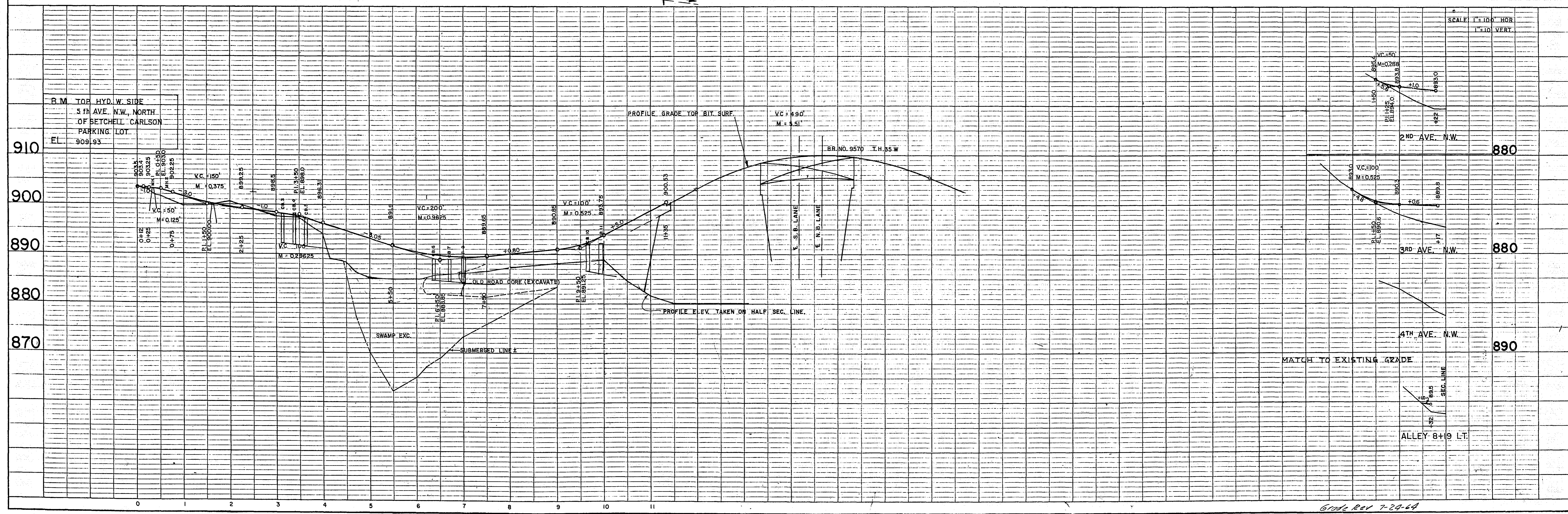
STANDARD DETAIL PLATES	
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6	GRATE FRAME	NO. 801
6	GRATE	NO. 810
6	CURB BOX	NO. 821
3	CASTING	NO. 790-2
3	CASTING	NO. 712



PLAN
 DRAWN BY: []
 CHECKED BY: []
 DATE: []

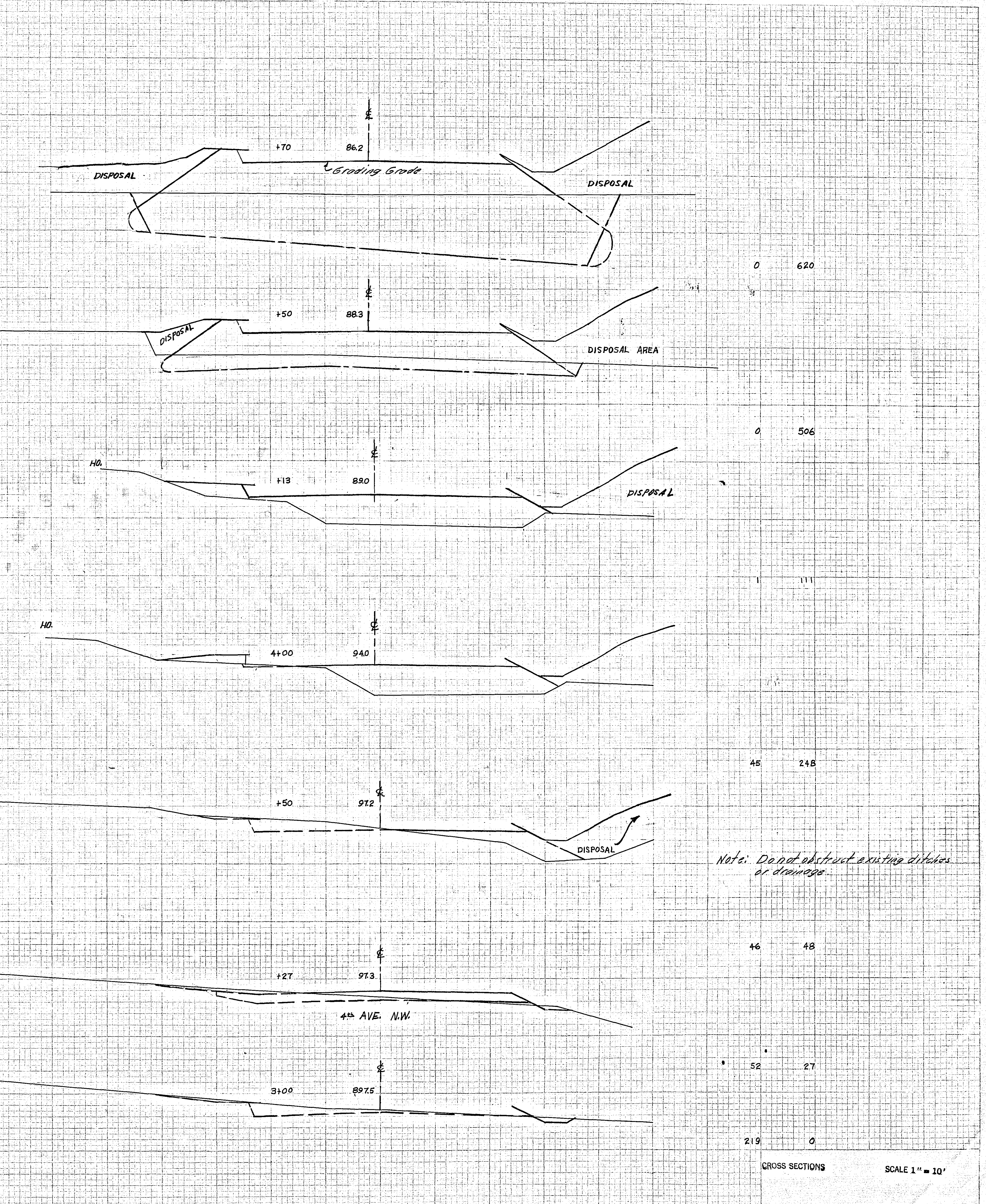
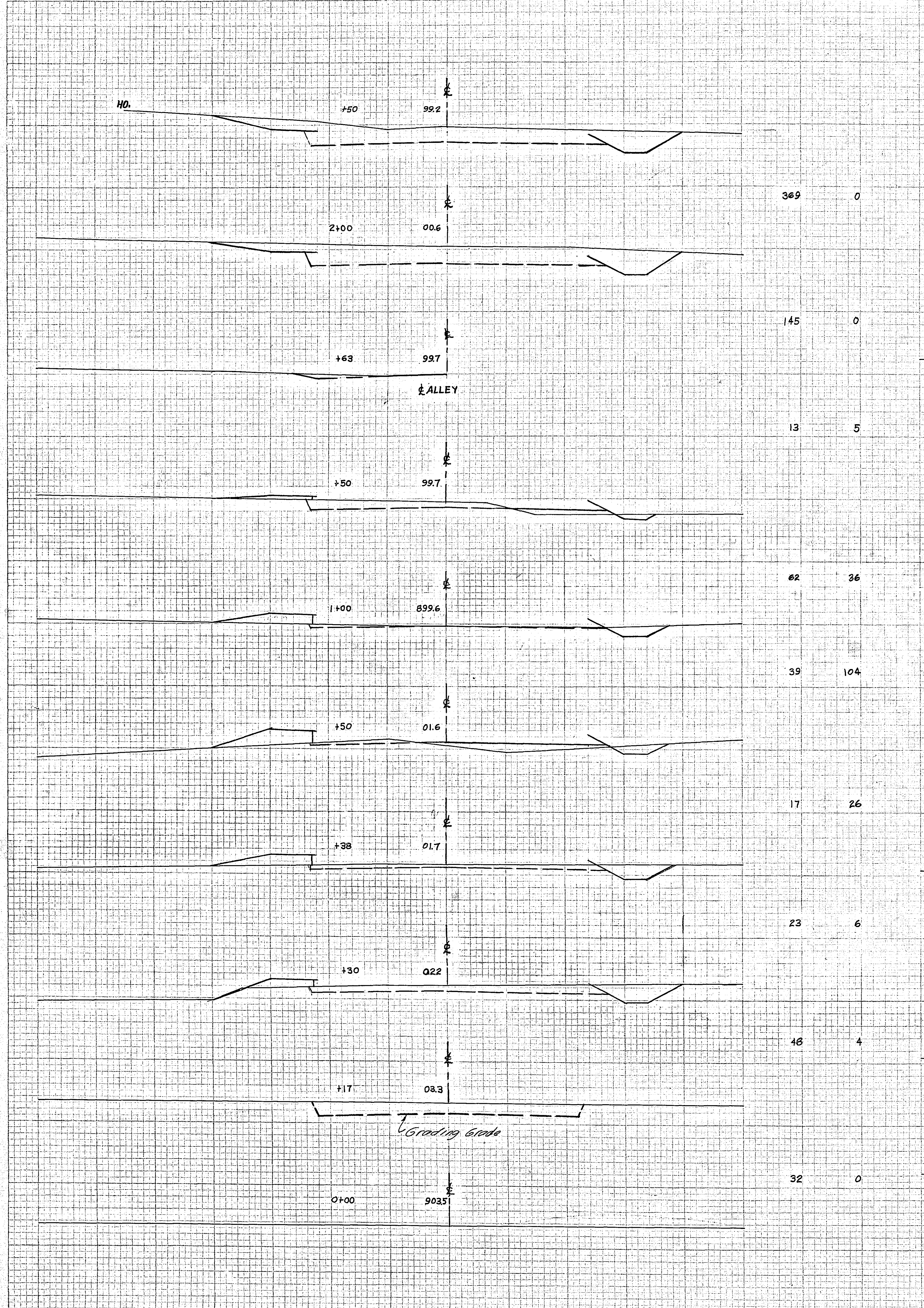
PROFILE
 DRAWN BY: []
 CHECKED BY: []
 DATE: []



6873

NO. 10
ROUTE BOOK
SURVEY
ORIGINAL

NO. 10
ROUTE BOOK
SURVEY
FILM



Note: Do not abstract existing ditches or drainage.

CROSS SECTIONS SCALE 1" = 10'

STATION-ELEVATION

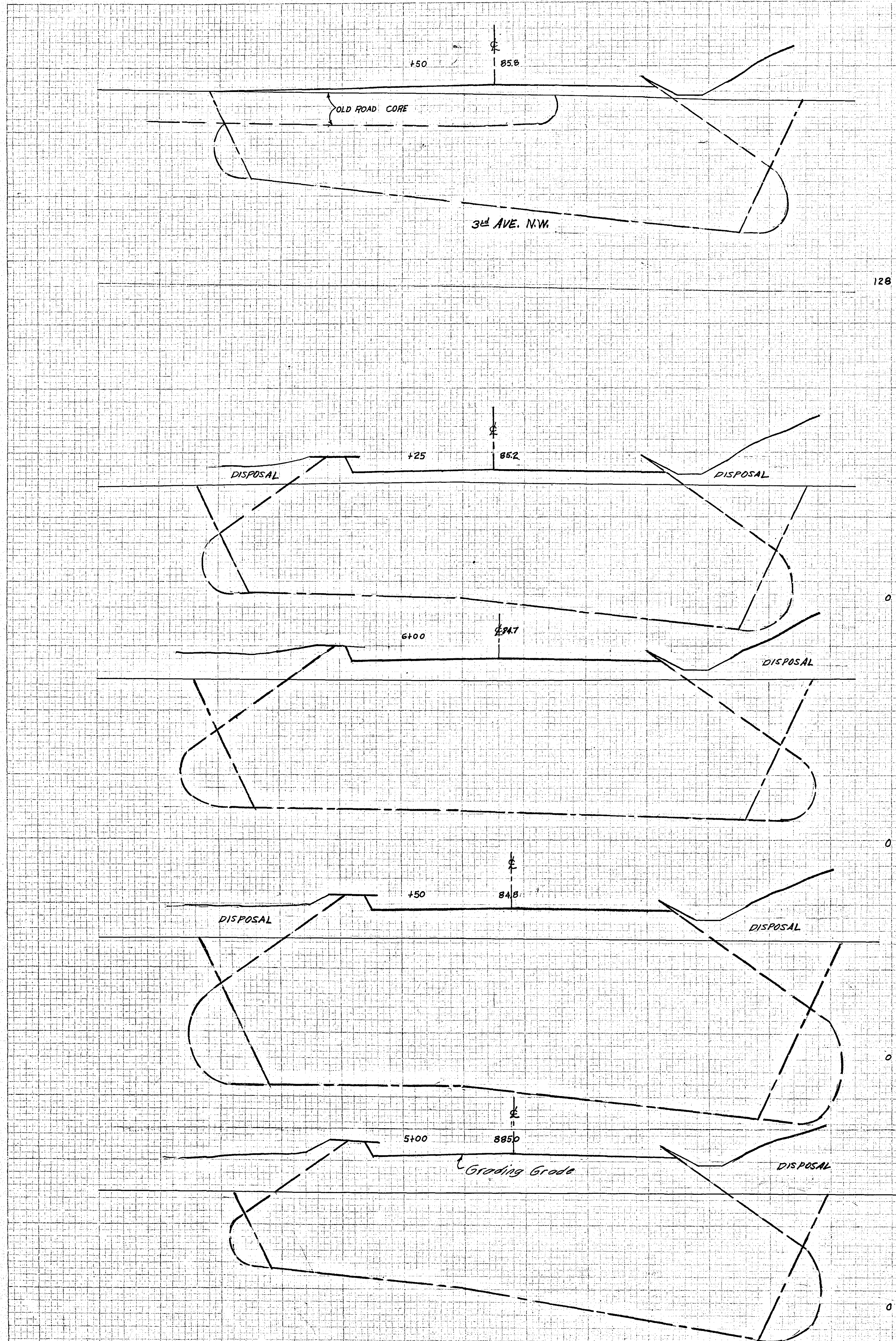
EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

STATION-ELEVATION

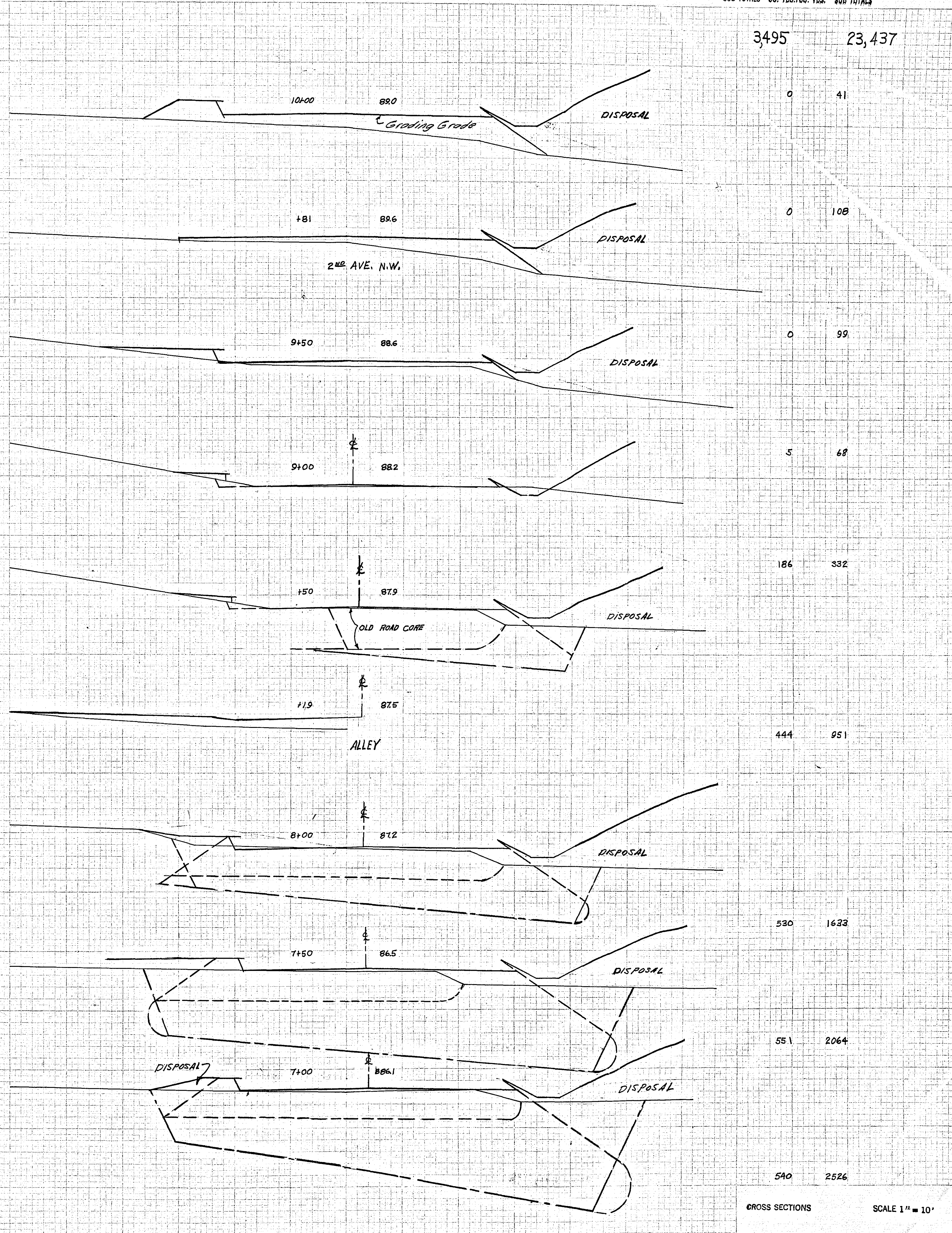
EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

NO. 1
DATE
BY
CHECKED
APPROVED
PROJECT NO.
SHEET NO.

JAMIE
TIVUS
ACORN
PROJECT NO.
SHEET NO.



128 1568
0 1790
0 4440
0 4330
0 1746



3495 23,437
0 41
0 108
0 99
5 68
186 332
444 951
530 1633
551 2064
540 2526

GROSS SECTIONS SCALE 1" = 10'