

BID TABULATIONS TAKEN NOV. 20, 1974

STATEMENT OF ESTIMATED QUANTITIES					AVERAGE	C.W. HOULE INC.	ALEXANDER CONST	HARDRIVES INC.	C.S. McCROSS INC.	BURY & CARLSON	SHAFFER CONTR.	PROGRESSIVE CONTR. INC.	MARVIN REHBEIN		
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	ENGINEERS ESTIMATE	LOW BIDDER	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	15,000.00	13,133.33	19,000.00	19,000.00	10,400.00	10,400.00	10,000.00	10,000.00	5,000.00	5,000.00	11,000.00	11,000.00
2104.501	REMOVE INTEGRANT CURB	L.F.	150	0.75	2.43	1.30	195.00	1.50	225.00	6.00	900.00	2.00	300.00	2.10	315.00
2104.501	REMOVE FENCE, 3' WOOD	L.F.	70	0.95	1.50	1.50	105.00	1.00	70.00	2.00	140.00	1.00	70.00	1.25	87.50
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	50	0.95	1.93	1.30	65.00	1.50	75.00	3.00	150.00	1.50	75.00	2.10	105.00
2104.501	REMOVE SEWER PIPE	L.F.	1,001	4.00	3.83	5.50	5,505.50	3.00	3,003.00	3.00	3,003.00	3.00	3,003.00	2.45	2,452.45
2104.505	REMOVE CONCRETE PAVEMENT (R.C.)	S.Y.	9564	1.40	1.71	1.95	18,649.80	1.20	11,476.80	1.97	18,841.08	1.40	13,389.60	1.32	12,624.48
2104.509	REMOVE CATCH BASINS	EA.	7	62.00	70.00	60.00	420.00	75.00	525.00	75.00	525.00	200.00	1,400.00	42.00	294.00
2104.509	REMOVE MANHOLES	EA.	2	62.00	96.67	90.00	180.00	100.00	200.00	100.00	200.00	250.00	500.00	75.00	1,500.00
2104.521	SALVAGE FENCE	L.F.	308	1.25	1.32	1.30	400.40	1.25	385.00	1.40	431.20	1.40	431.20	1.35	415.80
2104.521	SALVAGE GUARD RAIL	L.F.	250	1.45	1.84	1.80	450.00	1.75	437.50	1.96	490.00	1.90	475.00	1.90	475.00
2105.501	COMMON EXCAVATION	C.Y.	33,847	1.10	1.08	.90	30,462.30	1.25	42,308.75	1.10	37,231.70	1.10	37,231.70	1.37	46,370.39
2130.501	WATER	(M) GAL.	100	6.35	6.50	7.00	700.00	6.50	650.00	6.00	600.00	7.00	700.00	9.00	900.00
2211.501	AGGREGATE BASE, CLASS 6	TON	8,952	3.80	2.94	2.95	26,408.40	3.10	27,751.20	2.76	24,707.52	3.25	29,094.00	3.20	28,646.40
2211.501	AGGREGATE BASE, CLASS 4	TON	16,357	3.40	2.67	2.75	44,981.75	2.70	44,163.90	2.56	41,873.92	3.00	49,071.00	2.40	39,256.80
2301.503	CONCRETE PAVEMENT IRR. WIDTH	S.Y.	284	8.00	8.65	8.00	2,272.00	9.00	2,556.00	8.96	2,544.64	6.00	1,704.00	8.25	2,343.00
2301.511	STRUCTURAL CONCRETE	C.Y.	63	26.00	29.79	28.00	1,764.00	30.00	1,890.00	31.36	1,975.68	25.00	1,575.00	28.75	1,811.25
2301.529	REINFORCEMENT BARS	POUND	75	0.45	0.88	.80	60.00	1.00	75.00	0.84	63.00	.40	30.00	.77	57.75
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	448	93.50	89.33	90.00	40,320.00	88.00	39,424.00	90.00	40,320.00	90.00	40,320.00	86.50	38,152.00
2341.508	WEARING COURSE MIXTURE	TON	2,742	1.15	6.59	7.65	20,976.30	6.45	17,685.90	5.68	15,574.56	7.40	20,290.80	8.20	22,454.40
2341.510	BINDER COURSE MIXTURE	TON	5,061	1.15	6.51	7.35	37,198.35	6.15	31,125.15	6.03	30,517.83	7.05	35,680.05	7.95	40,234.95
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	1,141	0.55	0.55	.50	570.50	.55	627.55	0.60	684.60	.75	855.75	.48	547.68
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	7,477	0.45	0.38	.25	1,869.25	.45	3,364.65	0.45	3,364.65	.70	5,233.70	.44	3,289.88
2501.511	18" C.S. PIPE CULVERT, 16 GAUGE	L.F.	24	13.00	12.15	14.00	336.00	12.45	298.80	10.00	240.00	12.00	288.00	11.60	278.40
2503.511	15" R.C. PIPE SEWER, CLASS IV	L.F.	1321	10.60	11.63	11.50	15,191.50	10.40	13,738.40	13.00	17,173.00	10.00	13,210.00	10.45	13,804.45
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	225	10.80	12.58	12.00	2,700.00	13.75	3,093.75	12.00	2,700.00	11.00	2,475.00	10.95	2,463.75
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	724	14.00	15.42	14.50	10,498.00	16.75	12,127.00	15.00	10,860.00	14.00	10,136.00	13.90	10,063.60
2503.511	27" R.C. PIPE SEWER, CLASS II	L.F.	479	16.10	17.67	16.50	7,903.50	19.50	9,340.50	17.00	8,133.00	16.00	7,440.00	15.60	7,464.00
2503.511	30" R.C. PIPE SEWER, CLASS II	L.F.	428	17.10	18.02	17.30	7,404.40	18.75	8,025.00	18.00	7,704.00	20.00	8,560.00	19.45	8,324.60
2506.508	CONSTRUCT MANHOLES, DESIGN A OR F	EA.	13	500.00	650.00	570.00	7,410.00	750.00	9,750.00	630.00	8,190.00	750.00	9,750.00	650.00	8,450.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.2	EA.	21	450.00	508.60	410.00	8,610.00	570.00	11,970.00	546.00	11,466.00	650.00	13,650.00	510.00	10,710.00
2506.522	ADJUST FRAME & RING CASTING	EA.	2	65.00	76.67	60.00	120.00	70.00	140.00	100.00	200.00	100.00	200.00	85.00	170.00
2521.501	4" CONCRETE WALK	S.F.	2,703	0.85	1.12	1.00	2,703.00	1.25	3,378.75	1.12	3,027.36	1.00	2,703.00	1.05	2,838.15
2531.501	CONCRETE CURB & GUTTER, DESIGN B618	L.F.	6,361	2.75	3.37	3.25	20,673.25	3.00	19,083.00	3.86	24,553.46	3.75	23,853.75	3.55	22,581.55
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	S.Y.	40	12.00	14.25	14.50	580.00	12.00	480.00	16.24	649.60	15.00	600.00	14.95	598.00
2535.501	BITUMINOUS CURB	L.F.	1,241	1.50	1.38	1.25	1,551.25	1.40	1,737.40	1.50	1,861.50	1.50	1,861.50	1.00	1,241.00
2557.501	WIRE FENCE, DESIGN 60G-9322	L.F.	20	500.00	11.96	11.50	230.00	11.50	230.00	12.88	257.60	12.50	250.00	12.50	250.00
2571.541	TRANSPLANT TREES (3"-5" PINE'S)	TREE	6	75.00	92.67	65.00	390.00	45.00	270.00	168.00	1,008.00	110.00	660.00	70.00	420.00
2575.501	ROADSIDE SEEDING	ACRE	05	100.00	441.00	100.00	500.00	1,000.00	500.00	168.00	84.00	165.00	60.00	30.00	150.00
2575.502	SEED, MIXTURE 6	POUND	38	1.25	1.60	1.40	53.20	2.00	76.00	1.40	53.20	1.35	51.30	1.20	47.50
2575.505	SODDING	S.Y.	5,327	0.10	0.80	.85	4,527.95	.65	3,462.55	0.90	4,794.30	.85	4,527.95	.70	3,728.90
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	05	200.00	224.66	200.00	1,000.00	250.00	1,250.00	2.24	112.00	220.00	110.00	270.00	300.00
2575.551	TOPSOIL BORROW	C.Y.	609	3.25	4.26	4.00	2,436.00	3.75	2,283.75	5.04	3,069.36	4.95	3,014.55	3.90	2,375.70
504.679	ADJUST VAIVE BOX	BOX	10	32.00	50.00	50.00	500.00	50.00	500.00	50.00	500.00	60.00	600.00	45.00	450.00
554.601	INSTALL GUARD RAIL	L.F.	125	3.00	4.16	4.00	500.00	4.00	500.00	4.48	560.00	4.40	550.00	4.25	531.25
557.604	INSTALL CHAIN LINK FENCE	L.F.	308	2.50	3.05	3.00	924.00	2.90	893.20	3.25	1,001.00	3.20	985.60	3.10	954.80

\$355,082.65

347,945.60	340,422.50	342,345.76	352,213.15	352,571.48	369,028.04	388,453.03	390,787.18
73,131.00	82,465.00	85,182.00	82,606.00	88,315.75	78,701.50	72,603.50	88,190.00
421,076.60	422,887.50	427,527.76	434,819.15	440,887.23	447,729.54	461,056.53	478,977.18

WATERMAIN (NON-PARTICIPATING)

ITEM NO.		UNIT	ESTIMATED QUANTITIES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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PLANS SYMBOLS

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 Line Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER

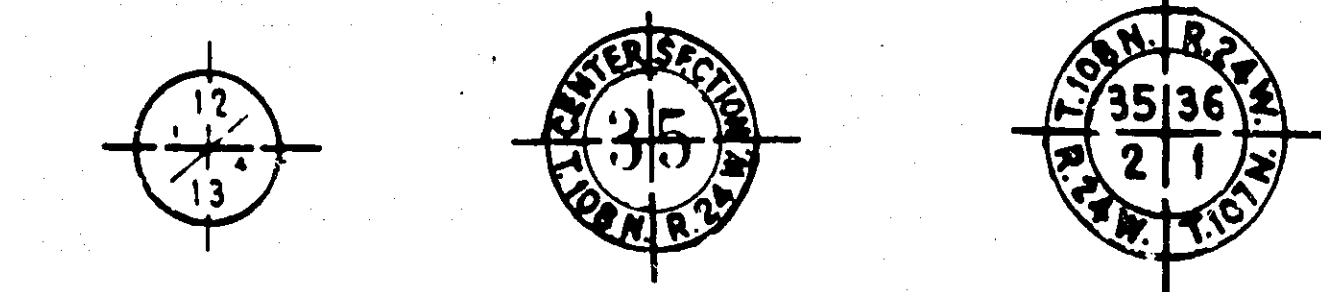
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
P-FRAME C-CONCRETE
S-STONE T-TILE
B-BRICK ST-STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY

GROSS LENGTH 3,030 FEET = 0.5739 MILES
BRIDGES-LENGTH FEET = MILES
EXCEPTIONS-LENGTH FEET = MILES
NET LENGTH 3030 FEET = 0.5739 MILES
SCALES PLAN, 1 INCH=30 FEET
PROFILE, HORIZ. 1 INCH=30 FEET VERT. 1 INCH=5 FEET
CROSS-SECTIONS, 1 INCH= 5 FEET
LAYOUT, 0.75 INCH=5280 FEET

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN

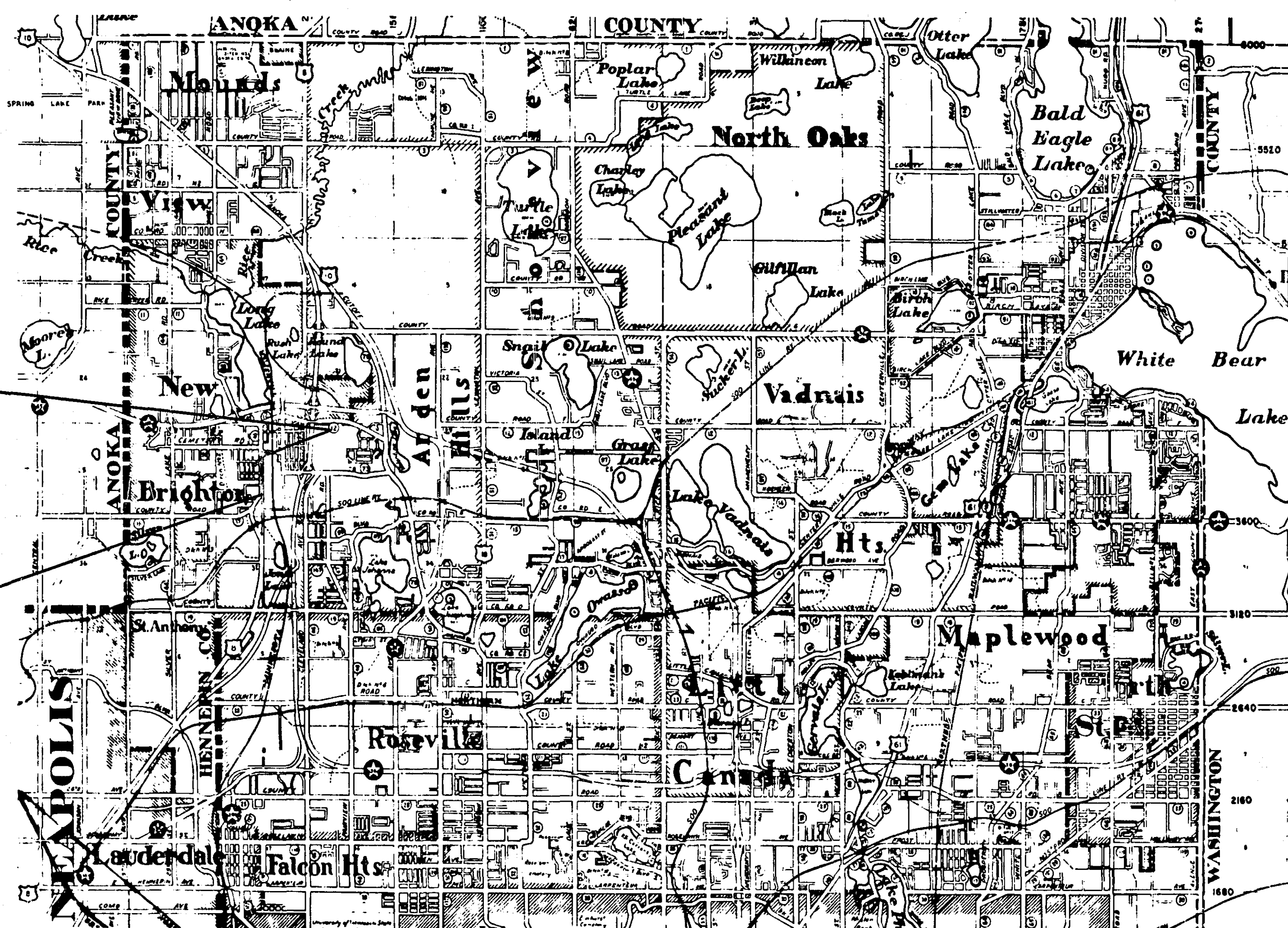
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE-MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE



PIT DATA

PIT NO. Located in Dead Haul
PIT NO. Located in Dead Haul

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1972 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED JANUARY 1, 1974 SHALL GOVERN.



CITY OF ST. PAUL

OFFICE OF COUNTY ENGINEER RAMSEY COUNTY

CONSTRUCTION PLAN FOR GRADING, BITUMINOUS SURFACING AND WATERMAIN COUNTY STATE AID HIGHWAY NO. 77

BEGINNING: AT A POINT 1024.51 FEET NORTH AND 24.21 FEET WEST OF THE SOUTH 1/4 CORNER OF SECTION 29, TOWNSHIP 30, RANGE 23.

TO: A POINT 969.34 FEET NORTH AND 560.98 FEET EAST OF THE CENTER OF SECTION 25, TOWNSHIP 30, RANGE 23.

BETWEEN: 2ND AVE. NW. AND: MINNESOTA TRANSFER RAILROAD BRIDGE

DESIGN DESIGNATION

ADT 1974 = 6,100
ADT 1990 = 15,000
D (DIRECTIONAL DISTRIBUTION) = 50-50
T (HEAVY COMMERCIAL) 1990 = 950
DESIGN LOAD = 9TON
SOIL FACTOR = 100%
DESIGN SPEED
STA. 105+62 TO 123+68 = 40 M.P.H.
STA. 123+68 TO 133+00 = 35 M.P.H.

INDEX

SHEET NO. DESCRIPTION
1 TITLE SHEET
2 ESTIMATED QUANTITIES & MISC. DETAILS
3 TYPICAL SECTION & MISC. DETAILS
4 DRAINAGE CHART & MISC. DETAILS
5-8 PLAN & PROFILES SURVEYED MAY, 1974
9-27 CROSS-SECTIONS
28-30 WATERMAIN PLANS

I hereby certify that this plan, specification, or report 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.

Wayne J. Brown
Date 10-2-74 Reg. No. 5782

RECOMMENDED FOR APPROVAL *PLK* DATE 10-2-74 TRAFFIC ENGINEER
RECOMMENDED FOR APPROVAL *Dean R. Ambler* DATE 10-9-74 COUNTY ENGINEER
RECOMMENDED FOR APPROVAL *M.D.H.* DATE 10-1-74 MAINTENANCE ENGINEER
RECOMMENDED FOR APPROVAL *RED* DATE 10-2-74 CONSTRUCTION ENGINEER
RECOMMENDED FOR APPROVAL *LLP* DATE 10-3-74 R.O.W. ENGINEER
RECOMMENDED FOR APPROVAL *J.P.A.* DATE 10-4-74
APPROVED _____ DATE _____ COUNTY ENGINEER
APPROVED _____ DATE _____ MAYOR CITY OF NEW BRIGHTON
APPROVED _____ DATE 10-21-74 CHAIRMAN OF THE RAMSEY COUNTY BOARD
MINNESOTA STATE HIGHWAY DEPARTMENT
RECOMMENDED FOR APPROVAL *Ing. J. Solon* DATE 10-25-74
RECOMMENDED FOR APPROVAL *DRM* DATE 10-24-74 DISTRICT STATE AID ENGINEER
APPROVAL *William M. Hall* DATE 10-28-74 STATE AID ENGINEER

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *JEERY AUG*
DATE: 1-6-76

SET NO.

MICROFILMED
RAMSEY CO. ENGR.

STATEMENT OF ESTIMATED QUANTITIES				
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	FINAL ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LUMP SUM	1	1
2104.501	REMOVE INTEGRANT CURB	L.F.	150	940
2104.501	REMOVE FENCE, 3' WOOD	L.F.	70	—
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	50	161
2104.501	REMOVE SEWER PIPE	L.F.	1,001	1202
2104.505	REMOVE CONCRETE PAVEMENT (R.C.)	S.Y.	9564	9,989
2104.509	REMOVE CATCH BASINS	EA.	7	5
2104.509	REMOVE MANHOLES	EA.	2	2
2104.521	SALVAGE FENCE	L.F.	308	361
2104.521	SALVAGE GUARD RAIL	L.F.	250	254
2105.501	COMMON EXCAVATION	C.Y.	33,847	33,847
2130.501	WATER	(M) GAL.	100	1,338
2211.501	AGGREGATE BASE, CLASS 6	TON	8,952	9,570
2211.501	AGGREGATE BASE, CLASS 4	TON	16,357	15,466
2301.503	CONCRETE PAVEMENT IRR. WIDTH	S.Y.	284	291.2
2301.511	STRUCTURAL CONCRETE	C.Y.	63	64.5
2301.529	REINFORCEMENT BARS	POUND	75	84
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	448	398.3
2341.508	WEARING COURSE MIXTURE	TON	2,742	3,223
2341.510	BINDER COURSE MIXTURE	TON	5,061	5,270
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	1,141	1,718.3
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	7,477	—
2501.511	18" C.S. PIPE CULVERT, 16 GUAGE	L.F.	24	—
2503.511	15" R.C. PIPE SEWER, CLASS IV	L.F.	1321	1,345
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	225	286
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	724	723
2503.511	27" R.C. PIPE SEWER, CLASS II	L.F.	479	484
2503.511	30" R.C. PIPE SEWER, CLASS II	L.F.	428	429
2506.508	CONSTRUCT MANHOLES, DESIGN A OR F	EA.	13	13
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.2	EA.	21	20
2506.522	ADJUST FRAME & RING CASTING	EA.	2	3
2521.501	4" CONCRETE WALK	S.F.	2,703	2,434
2531.501	CONCRETE CURB & GUTTER, DESIGN B618	L.F.	6,361	6,650
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	S.Y.	40	93.6
2535.501	BITUMINOUS CURB	L.F.	1,241	1,313
2557.501	WIRE FENCE, DESIGN 606-9322	L.F.	20	21
2571.541	TRANSPLANT TREES (3"-5" PINES)	TREE	6	5
2575.501	ROADSIDE SEEDING	ACRE	05	—
2575.502	SEED, MIXTURE 6	POUND	38	30.8
2575.505	SODDING	S.Y.	5327	3,035
2575.531	COMMERCIAL FERTILIZIER, ANALYSIS 12-12-12	TON	05	—
2575.551	TOPSOIL BORROW	C.Y.	609	1,414
504.679	ADJUST VALVE BOX	BOX	10	19
554.601	INSTALL GUARD RAIL	L.F.	125	125
557.604	INSTALL CHAIN LINK FENCE	L.F.	308	363

STATEMENT OF ESTIMATED QUANTITIES				
CITY OF NEW BRIGHTON				
WATERMAIN (NON-PARTICIPATING)				
ITEM NO.		UNIT	ESTIMATED QUANTITIES	
1	12" D.I.P. WATERMAIN	L.F.	2985	
2	6" D.I.P. WATERMAIN	L.F.	36	
3	12" X 12" X 12" D.I.P. TEE & SLEEVE	EA.	1	
4	12" GATE VALVE BOX & SLEEVE	EA.	2	
5	12" X 12" X 6" X 6" D.I.P. CROSS & SLEEVE	EA.	3	
6	DISCONNECT OLD 6" WATERMAIN, & F&I. 6" D.I.P. PLUGS	EA.	11	
7	DISCONNECT HYDRANT LEG FROM OLD 6" MAIN, & RECONNECT TO NEW 12" MAIN	EA.	5	
8	MOVE HYDRANTS	EA.	4	
9	12" X 12" X 12" D.I.P. TEE	EA.	2	
10	12" X 6" D.I.P. REDUCERS	EA.	1	
11	6" GATE VALVES AND VALVE BOXES	EA.	5	
12	12" X 12" X 6" D.I.P. TEES	EA.	3	
13	12" GATE VALVES & VALVE BOXES	EA.	10	
14	57' LONG 1" COPPER HOUSE SERVICE, CORPORATION STOP & CURB STOP & BOX	EA.	6	
15	77' LONG 1" COPPER HOUSE SERVICE, CORPORATION STOP & CURB STOP & BOX	EA.	2	
16	43' LONG 1" COPPER HOUSE SERVICE, CORPORATION STOP & CURB STOP & BOX	EA.	3	
17	23' LONG 1" COPPER HOUSE SERVICE, CORPORATION STOP & CURB STOP & BOX	EA.	9	
18	18' LONG 1" COPPER HOUSE SERVICE, CORPORATION STOP & CURB STOP & BOX	EA.	2	
19	1" COPPER TUBING	L.F.	100	
20	DISCONNECT EXISTING SERVICE FROM OLD 6" MAIN AND RECONNECT TO NEW 12" MAIN	EA.	13	
21	PIPE BEDDING	TON	100	

STANDARD DETAIL PLATES	
0002A	SPECIFICATION REFERENCE TO STANDARD PLATES
1120 N	CONTRACTION JOINTS
1140 N	LONGITUDINAL JOINTS
1141 B	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
3000 F	REINFORCED CONCRETE PIPE
3006 A	GASKET JOINT FOR R.C. PIPE
3040 D	CORRUGATED METAL PIPE
4000 G	MANHOLE OR CATCH BASIN
4005 I	MANHOLE OR CATCH BASIN
4010 D	CONC. SHORT CONE & ADJUSTING RING
4011 C	PRECAST CONCRETE BASE
4101 B	RING CASTING FOR MANHOLE OR CATCH BASIN
4110 D	COVER CASTING FOR MANHOLE
4180 F	MANHOLE STEP CASTING
4181 A	ALUMINUM MANHOLE STEP
7035 H	CONCRETE WALK & CURB RETURN AT ENTRANCES
7065 C	BITUMINOUS CURB
7100 D	CONCRETE CURB & GUTTERS
8000 F	STANDARD BARRICADES
7036 A	PEDESTRIAN CURB RAMP
8307 K	STRUCTURAL PLATE BEAM GUARDRAIL
8319 C	TWISTED END TREATMENT
9322 E	CHAIN LINK FENCE
CITY OF NEW BRIGHTON	
NB-1	TYPICAL GATE VALVE & BOX INSTALLATION
NB-2	BACKING DETAIL-TEMPORARY DEAD-END
NB-3	TYPICAL FIRE HYDRANT INSTALLATION
NB-4	BLOCKING AT TEES AND BENDS
NB-5	DUCTILE IRON PIPE-SLIP TYPE JOINTS

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

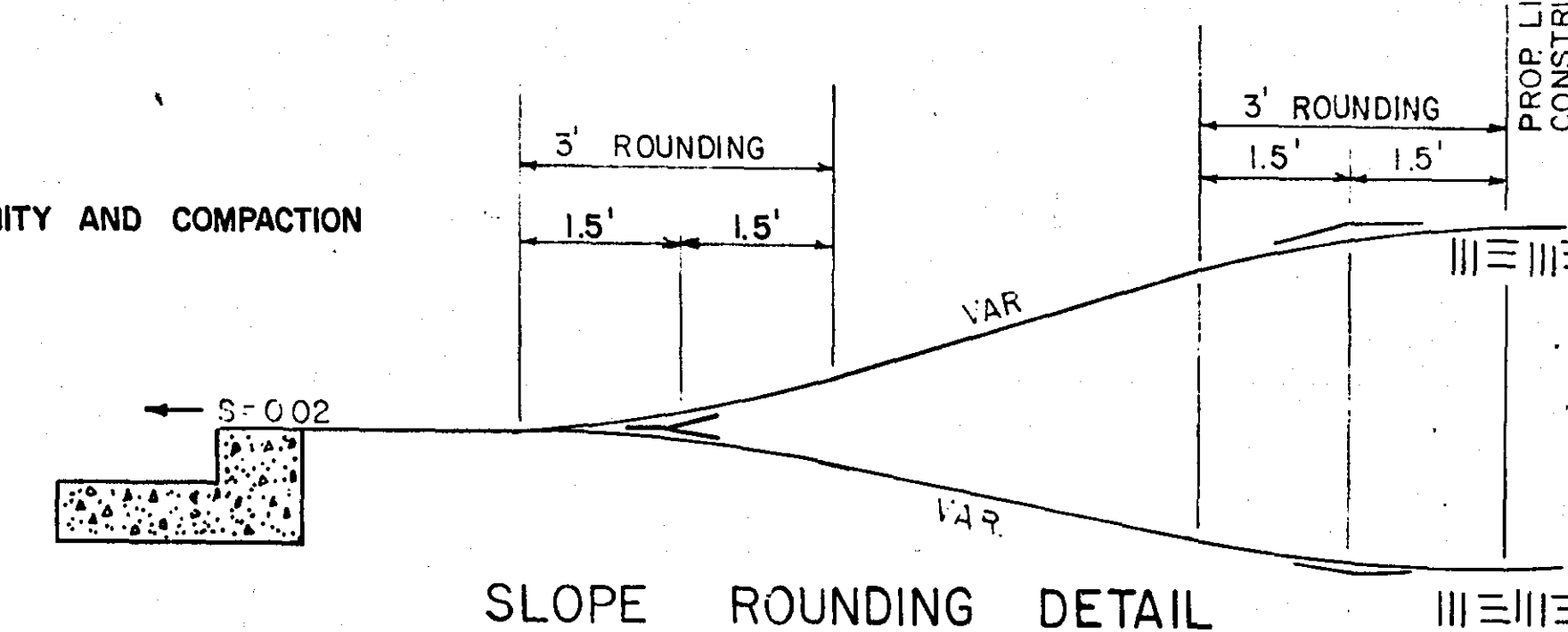
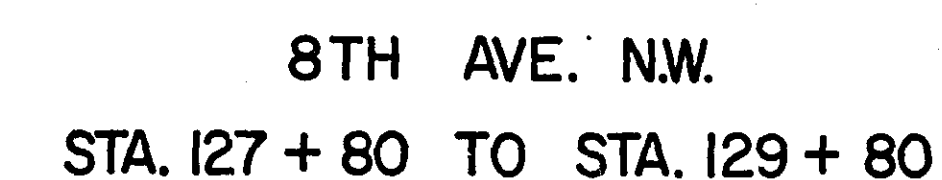
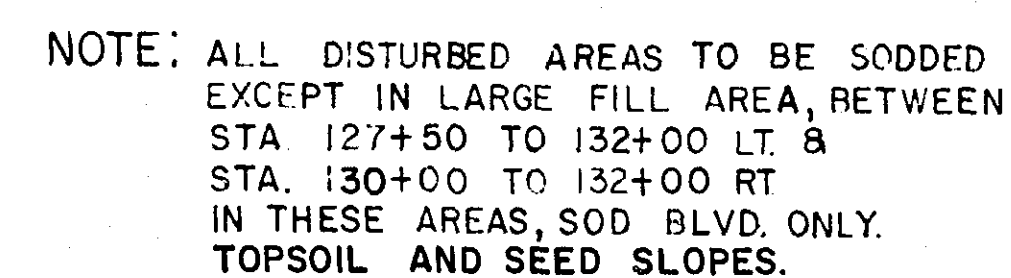
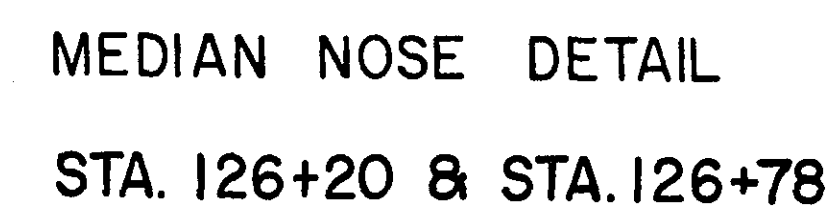
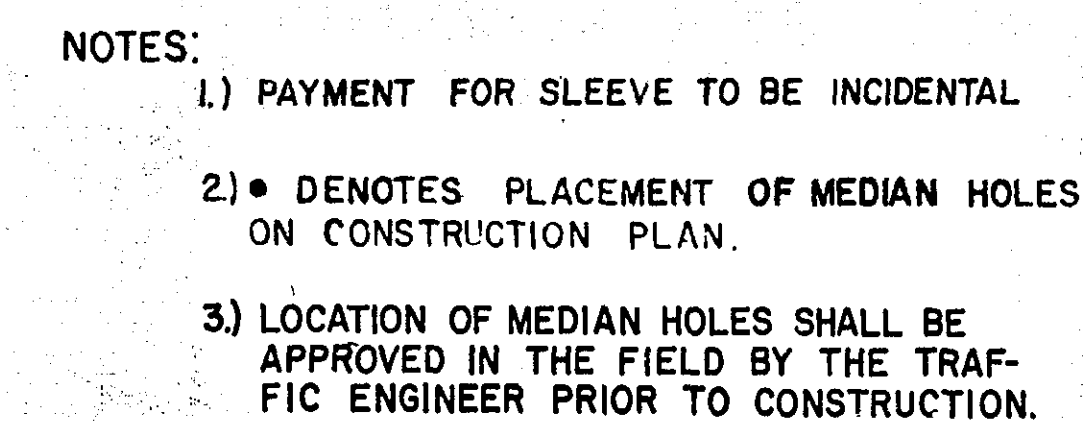
DONE BY: JERRY Auer

DATE: 1-6-76

I hereby certify that this plan, specification, or report 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.

William J. Leonard
Date 10-10-74 Reg. No. 5792

1



I hereby certify that this plan, specification, or report 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.

Wayne K. Leonard

Date 10-2-74 Reg. No. 5742

CHART

[illegible]

AS OF MAY 25, 1974

- ① LAWRENCE E. RICE
 - ② VIOLET L. CHRISTIANSON
VIOLET L. KARNES
 - ③ KENT A. CHRISTIANSON
 - ④ CARL FORTHMILLER
 - ⑤ CARL FORTHMILLER
 - ⑥ SVEA JANSSEN
 - ⑦ DONNELLY ELECTRIC INC.
 - ⑧ BELL LUMBER CO.
 - ⑨ RIEGER TRANSPORT INC
SUN OIL COMPANY
 - ⑩ FREDERICK J. & STELLA B.
WICKERS
MINNIE A. LEE
 - ⑪ SVEA A. JANSSEN
 - ⑫ HERMAN BEHRENS
 - ⑬ FRANK H. & EILEEN WALERIUS
 - ⑭ MIDWEST OVERLAY & WELDING
CO.
 - ⑮ H.R. BERNHAGEN
 - ⑯ HENRY A. MURLOWSKI
 - ⑰ ROBERT ARKO
 - ⑱ A.P.I. INC.
 - ⑲ PETER APLIKOWSKI
 - ⑳ RAYMOND N. BEIM
 - ㉑ RAYMOND N. BEIM
SUN OIL COMPANY
 - ㉒ GEORGE J. GAME
DALE D. CROSS
 - ㉓ JACK W. CANFIELD
 - ㉔ JACK W. & CHRISTINE L.
CANFIELD
 - ㉕ JACK E. CANFIELD
CARL C. JACOBSEN
 - ㉖ JACK W. JR. & CHRISTINE L.
CANFIELD
 - ㉗ GRIFFIS INC.
 - ㉘ GERALD G. JOHNSON
 - ㉙ ERNEST L. HAGLUND
 - ㉚ GRIFFIS INC.,
WILLIAM FOUSSARD
 - ㉛ ROBERT J. CALDWELL
 - ㉜ INDEPENDENT SCHOOL DIST. 38
 - ㉝ ROBINS DAVIS LYONS
VILLAGE OF NEW BRIGHTON
 - ㉞ WILLIAM J. STEWART
 - ㉟ JACK E. CANFIELD
CARL C. JACOBSEN
 - ㊱ VIRGIL E. RAYMOND
 - ㊲ ANTON INVESTMENT INC.
 - ㊳ KEER-McGEE CORP.-P. MORGAN
 - ㊴ GREATER METROPOLITAN
ENTERPRISES INC.
 - ㊵ JAMES BROCK

NOTE: ALL CASTINGS THAT ARE TO BE REMOVED SHALL BE SALVAGED AND BECOME THE PROPERTY OF RAMSEY COUNTY. NO DIRECT COMPENSATION SHALL BE MADE THEREFOR.

ASSAULT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: JERRY AUGE

DATE: 1-6-76

① Revised Elev. 12-30-74

I hereby certify that this plan, specification, or report 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.

Date 10-2-77 Reg. No. 5782

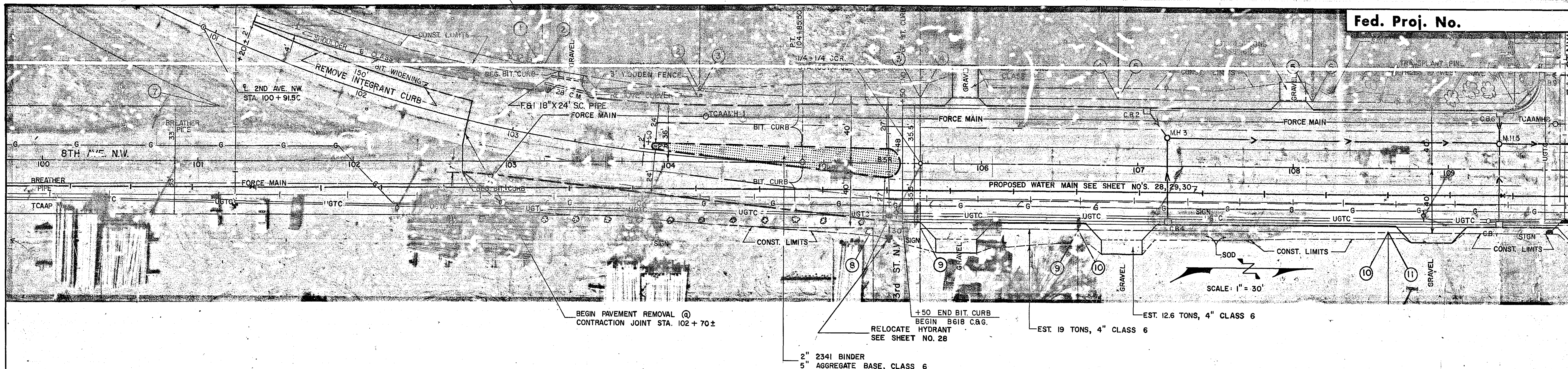
CASTINGS- [A= RING CASTING M.H.D. NO. 700-7, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
B= NEENAH INLET FRAME, GRATE, & CURB BOX NO. R-3067 OR EQUAL (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).

MANHOLES & CATCH BASINS [R.C-2, DETAIL ON SHEET NO.2
A.O.R.E, M.H.D. STD. PLATE NO.4000G OR 4005I

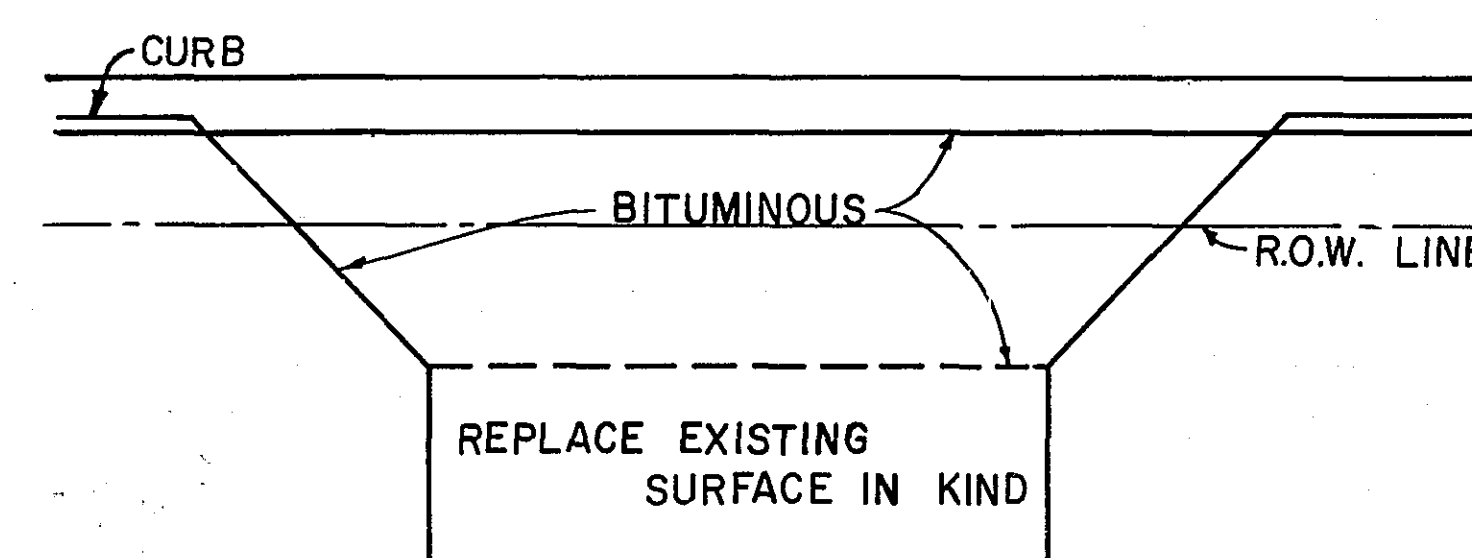
S.A.P. NO. 62-677-06 C.T.B.

MICROFILMED
RAMSEY CO. ENGR.

Sheet No. 4 of 30 Sheets



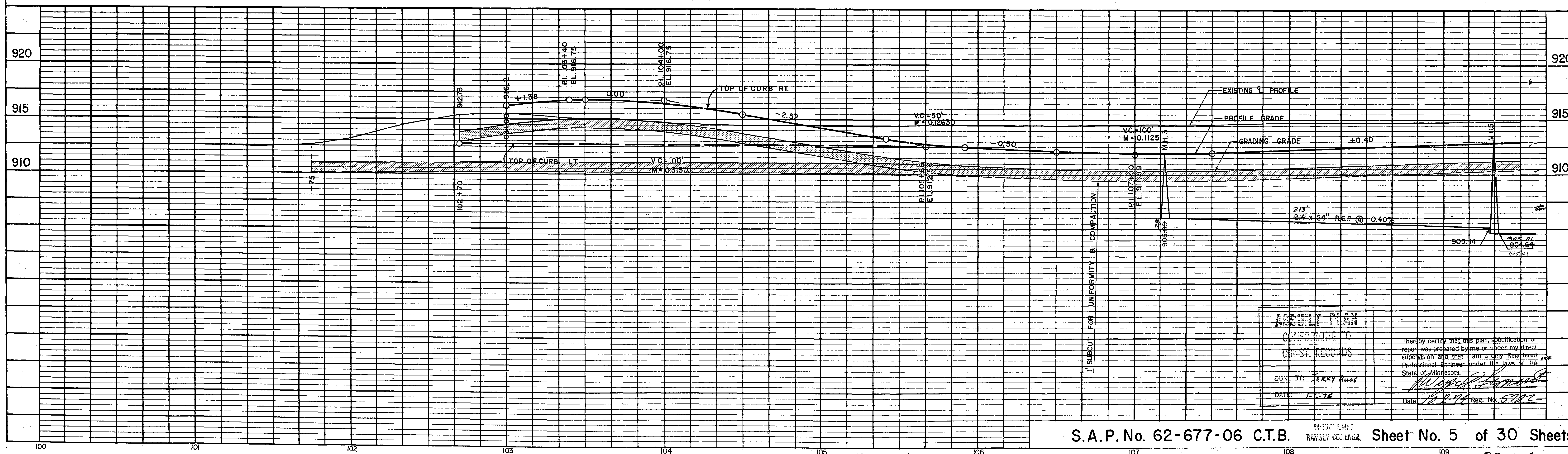
NOTE: OUTSIDE R/W LIMITS REPLACE EXISTING SURFACING AS SHOWN.



B.M. EL. 914.71
TOP OF HYD.
N.E. COR. 2ND ST. N.W.

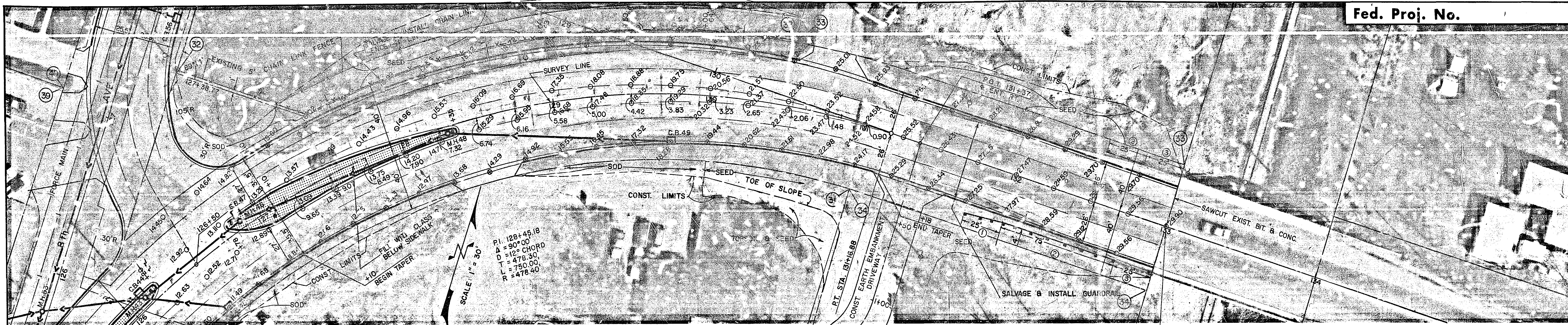
AERIAL PHOTO TAKEN:
4-26-74

B.M. EL. 916.68
TOP OF HYD.
S.E. COR. 3A ST. N.W.



RECEIVED PLAN
CONFORMING TO
CONST. RECORDS
DATE: 12-78
BY: JERRY RUGG

Thereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of this State of Minnesota.
Date: 12-78 Reg. No. 5782

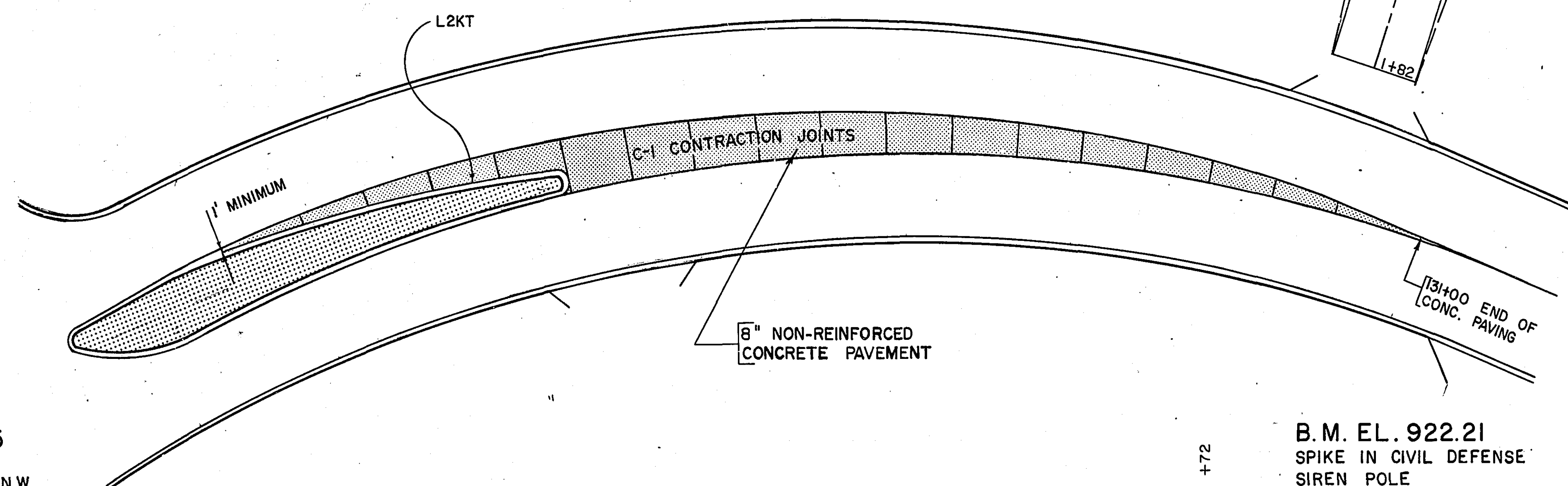


- TOP OF CURB ELEV.
- PAVEMENT ELEV.
- 4" CONCRETE SIDEWALK

- ① TWISTED END TREATMENT
- ② INSTALL GUARDRAIL
- ③ O.K. LEAVE

NOTE: TRANSITION B618 CURB & GUTTER TO VIO24 IN 20', TO BE PAID FOR AS B618

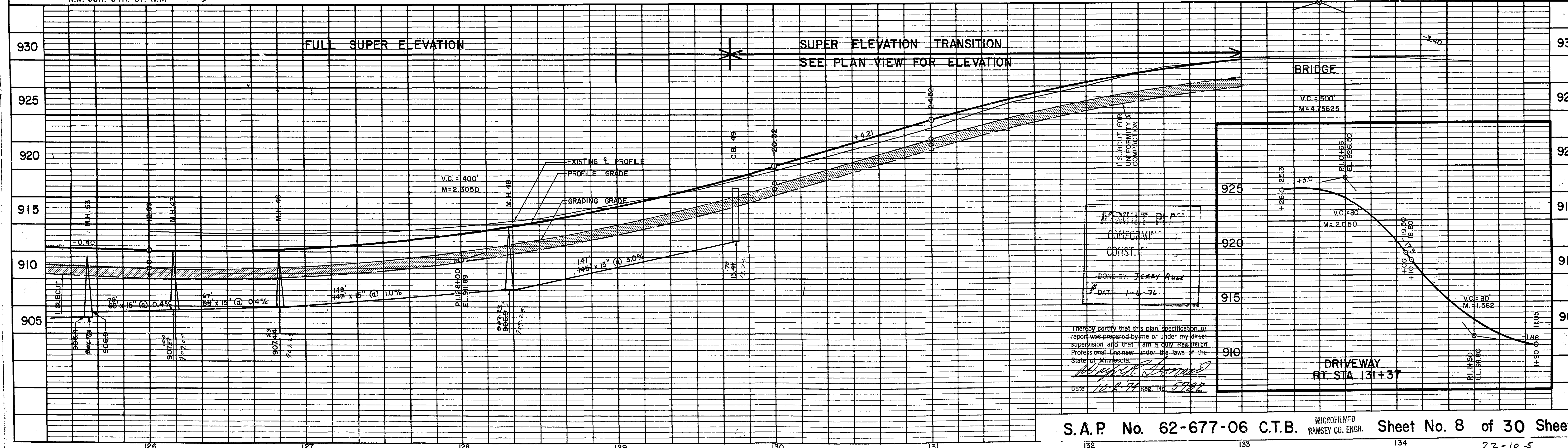
END PROJECT
STA. 133+00



B.M. EL. 918.05
TOP OF HYD
N.W. COR. 6TH. ST. N.W.

B.M. EL. 922.21
SPIKE IN CIVIL DEFENSE
SIREN POLE

P.I. 133+50
EL. = 935.05



STATION ELEVATION

EXCAVATION EMBANKMENT
SUB TOTALS CU. YDS. SUB TOTALS

208 92

117 47

31 17

21 7

8 2

+70 15.40

+35 14.50

102+00 13.20

+75 12.60

+43 12.40

101+00 912.50

R/W

2:1

2:1

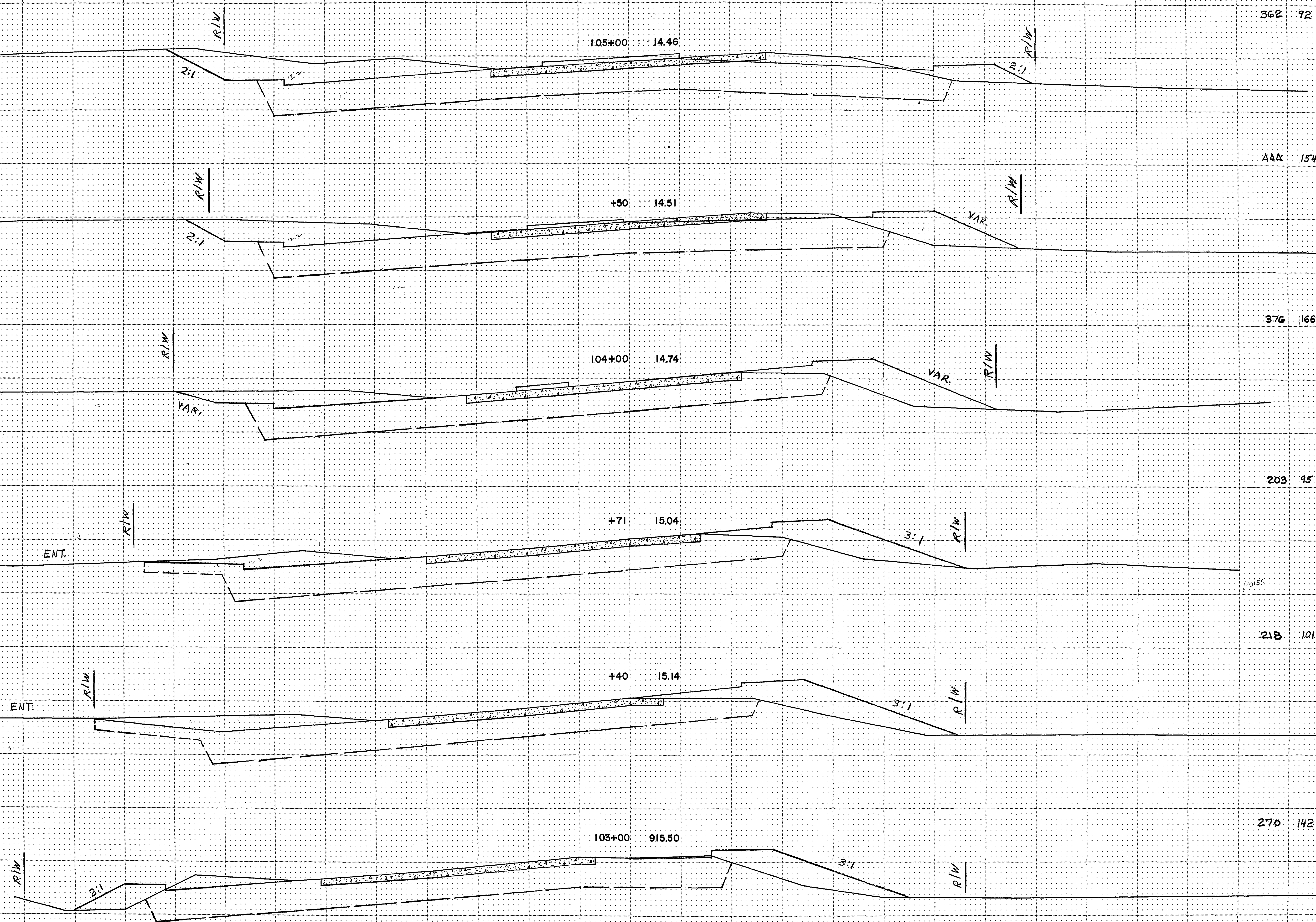
2:1

MICROFILMED
RAYSEY CO. ENGR.

I hereby certify that this plan, specification, or report 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.
W. A. Ramsey
Date 12-7-77 Reg. No. 57802

STATION-ELEVATION

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



362	92
444	154
376	166
283	95
218	101
276	142

I hereby certify that this plan, specification, or report 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.

Michael J. [Signature]

Date 10-2-74 Reg. No. 5792

MICROFILMED
KIMSEY CO. ENGINEERS

STATION-ELEVATION

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

+50 14.67

762 137

107+00 1467

778 137

+50 1452

788 137

106+00 14.51

1060 137

+66 14.48

901 93

105+33 91443

631 90

VAR TRANS

I hereby certify that this plan, specification, or report 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 J. Howard
Date 10-2-77 Reg. No. 5782

MINNESOTA
RAMSEY CO. ENGR.

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 11 of 30 Sheets

STATION-ELEVATION

±

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

195 41

3A ST. N.W.

+70 14.86

159 34

3A ST. N.W.

+61 14.88

170 36

+50 14.86

634 139

109+00 14.84

ENT

676 134

+50 14.77

742 137

108+00 914.75

thereby certify that this plan, specification, or report 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.
[Signature]
Date 10-2-74 Reg. No. 5882

MICROFILMED
BY CO. ENGR.

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 12 of 30 Sheets

22-105

FUNCTIONAL CROSS SECTION - DPE; DOTTED
M. A. ROGERS CO. - MINNEAPOLIS, ST. PAUL

STATION - ELEVATION

EXCAVATION
SUB TOTALS CU. YDS. CU. YDS. SHD. TOTALS

306 85

+22 15.07

3:1 R/W

1:1 P/W

253 66

III+00 15.05

ENT.

564 150

+50 15.00

267 69

+27 14.96

R/W

338 77

III+00 14.97

ENT.

280 60

3A ST. N.W.

109+81 914.92

R/W

ENT.

I hereby certify that this plan, specification, or report 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.

MICROFILMED
RAMSEY, ON 1/2/82

Date 11-2-76 Reg. No. 5702

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 13 of 30 Sheets

22-105

STATION-ELEVATION

±

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

214 46

4th ST. NW

+66 15.76

R/W

ENT.

481 114

+26 15.63

ENT.

291 79

113+00 15.55

538 158

+50 15.38

534 155

112+00 15.25

ENT.

529 150

111+50 915.11

R/W

MICROFILMED
RAMSEY CO. ENGR.

I hereby certify that this plan, specification, or
report 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.
Wesley Leonard
Date 10-2-78 Reg. No. 5702

STATION-ELEVATION

C

EXCAVATION
SUB TOTALS CU. YDS. CU. YDS. SUB-TOTALS

532 137

115+00 16.21

490 123

+55 16.13

218 52

+36 16.05

343 77

114+08 15.95

215 46

+93 15.87

ENT.

184 41

113+81 915.85

ENT.

MICROFILMED
RAMSEY CO. ENGR.I hereby certify that this plan, specification, or
report was prepared by me or under my direct
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Professional Engineer under the laws of the
State of Minnesota.
Date 10-2-74 Reg. No. 5782

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 15 of 30 Sheets

22-105

STATION-ELEVATION

EXCAVATION EMBANKMENT
SUB-TOTALS CU. YDS. CU. YDS. SUB-TOTALS

376 104

BLDG.

+21 1645

215 58

117+00 16.36

397 112

+59 16.37

278 71

+33 16.41

357 90

116+00 16.35

511 137

115+50 916.29

I hereby certify that this plan, specification, or
report 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.MICROFILMED
RAMSEY CO. ENGR.

Date 10.2.74 Reg. No. 57182

STATION-ELEVATION

EXCAVATION EMBANKMENT
SUR TOTALS - CU. YDS. CU. YDS. - SUB TOTALS

265

86

5TH ST. N.W.

+76

16.17

5TH ST. N.W.

280

86

+54

16.18

422

120

+17

16.26

203

47

118+00

16.31

BLDG.

263

61

+78

16.32

198

52

117+59

916.34

BLDG.

MICROFILMED
RAMSEY CO. ENGR.I hereby certify that this plan, specification, or
report 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 J. Howard
Date 10-2-74 Reg. No. 5782

S.A.P. No. 62-677-02 C.T.B.

Sheet No. 17 of 30 Sheets

22-105

STATION-ELEVATION

±

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

582 137

121+00 15.60

560 137

+50 15.80

560 137

120+00 15.89

142 33

+88 15.89

503 126

119+42 16.04

506 143

118+98 916.12

5TH ST. N.W.

5TH ST. N.W.

I hereby certify that this plan, specification, or report 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.

W. A. Rogers
Date 10-2-74 Reg. No. 5792

MICROFILMED
RAMSEY CO. ENGR.

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 18 of 30 Sheets

22-105

FUNCTIONAL CROSS SECTION - OPEN DOTTED
W. A. ROGERS CO., MINNEAPOLIS, ST. PAUL

STATION-ELEVATION

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

+18 15.14

537 126

123+00 15.19

242 49

+84 15.21

216 44

+50 15.28

402 93

122+00 15.45

599 137

121+50 91.52

622 137

I hereby certify that this plan, specification, or report 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.
Date 10-2-74 Reg. No. 5792

MICROFILM
RAMSEY CO. ENGINEERS

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 19 of 30 Sheets

22-105

FUNCTIONAL CROSS SECTION- OPEN DOTTED
M. A. ROSSER CO. - MINNEAPOLIS, ST. PAUL

STATION-ELEVATION

EXCAVATION EMBANKMENT
SUR. TOTALS CU. YDS. CU. YDS. SUR. TOTALS

+19 15.80

R/W

390 86

12%

285 55

125+00 15.90

3:1

672 140

+52 15.53

VAR.

5:1

259 55

+32 15.33

VAR.

ENT.

393 88

ENT.

124+00 15.10

3:1

419 99

123+64 915.05

R/W

R/W

3:1

3:1

MICROFILMED
JANUARY 1974

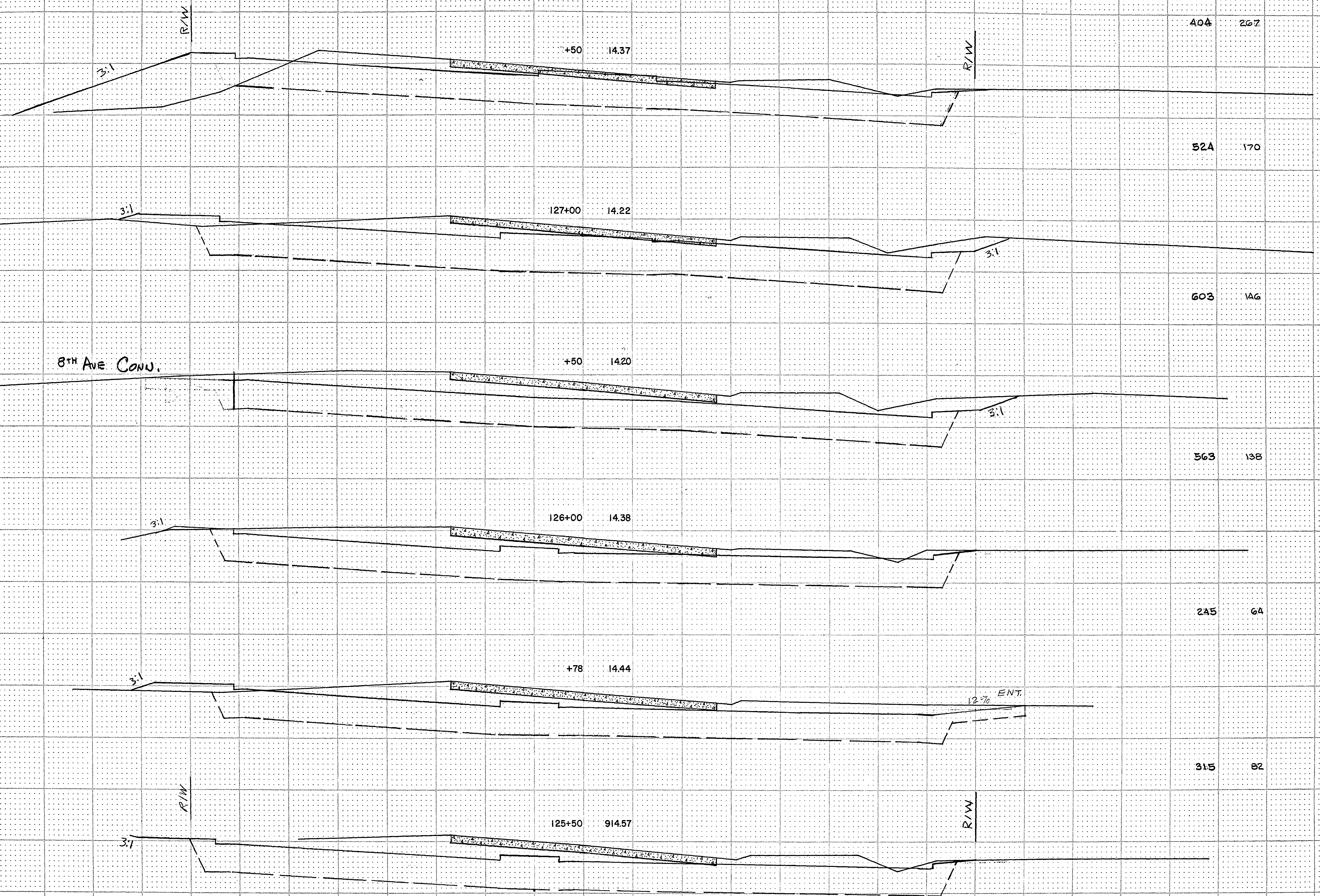
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
W. J. [Signature]
Date 10-2-74 Reg. No. 5702

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 20 of 30 Sheets

STATION--ELEVATION

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



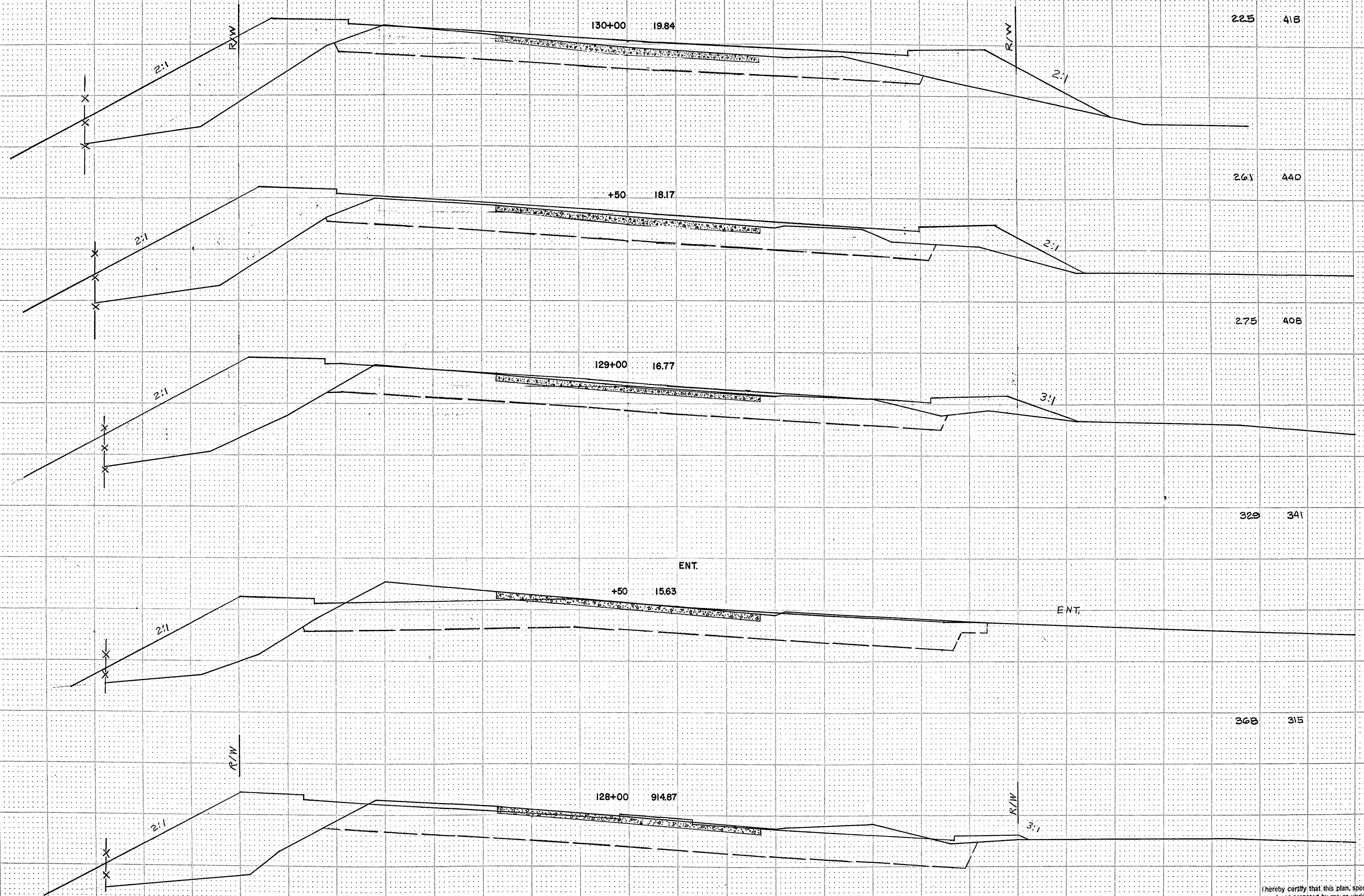
AMCROFILMED
RAMSEY CO.

I hereby certify that this plan, specification, or report 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.
Wm. J. Donald
Date 10-2-77 Reg. No. 5793

STATION-ELEVATION

±

EXCAVATION EMBANKMENT
SUB-TOTALS CU. YDS. CU. YDS. SUB-TOTALS



MICROFILMED
RAMSEY CO. ENGR.

I hereby certify that this plan, specification, or report 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 J. Howard
Date 10-2-77 Reg. No. 5782

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 22 of 30 Sheets

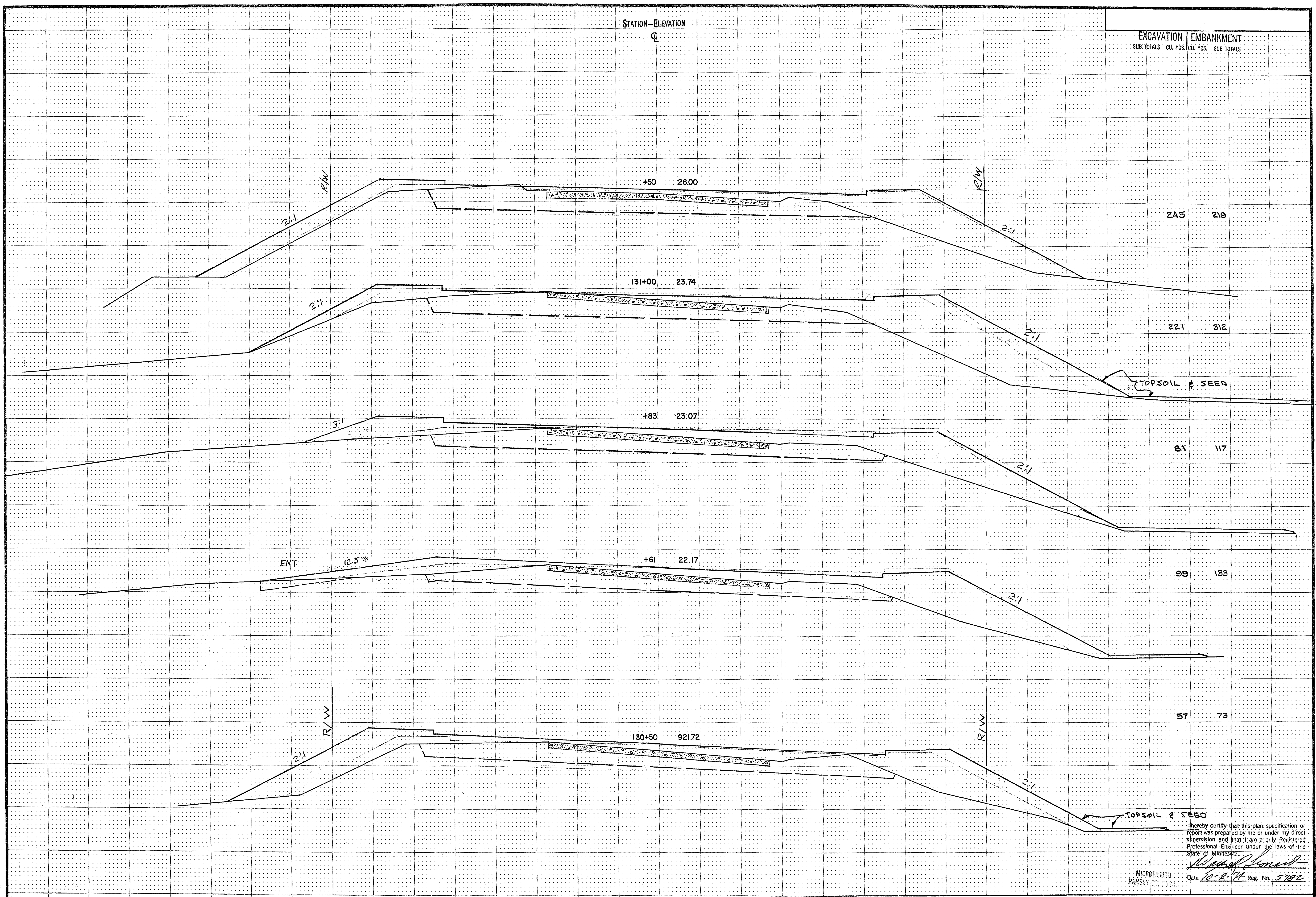
22-105

STATION-ELEVATION

±

EXCAVATION EMBANKMENT

SUB-TOTALS CU. YDS. CU. YDS. SUB-TOTALS



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Walter J. Leonard
Date 10-2-74 Reg. No. 5782

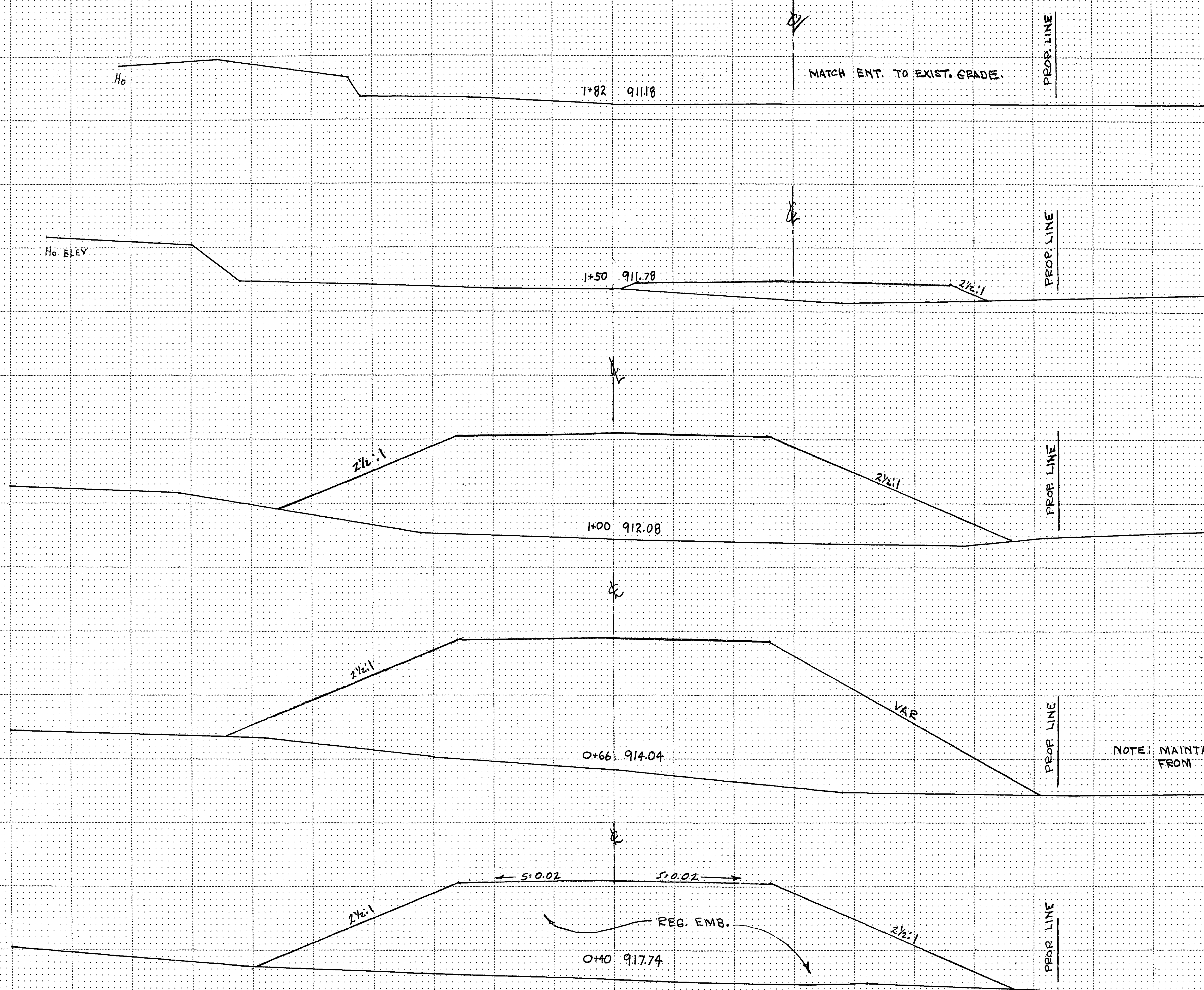
MICROFILMED
RAMSEY CO. 1981

S.A.P. No. 62-677-06 C.T.B.

Sheet No. 23 of 30 Sheets

22-103

EXCAVATION EMBANKMENT
SUB TOTALS - CU. YDS. CU. YDS. SUB TOTALS



0 22

0 367

0 535

0 401

NOTE: MAINTAIN 1.5' MIN. DISTANCE FROM PROP. LINE.

ENT. RT. STA. 131+37

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RAMSEY CO. E1304

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Date 10-2-72 Reg. No. 5702

S.A.P. NO. 62-677-06 C.T.B.

Sheet No. 25 of 30 Sheets

22-103

STATION-ELEVATION

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

ENT.

+17 11.00

39 48

R/W

128+00 11.20

21 24

+50 12.10

21 32

+27 12.60

127+00 13.10

126+82 913.40

I hereby certify that this plan, specification, or report 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.
[Signature]
Date 10-2-74 Reg. No. 5782

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RANNEY CO. (ENR)

STATION-ELEVATION

130+00 08.60

EXCAVATION EMBANKMENT
SUB TOTALS CU. YDS. SUB TOTALS

PLAN TOTAL

ENT. RT. STA. 134+37
BTH. 127+80 TO 129+80
BTH. IN RADIUS CURVE

33,193	10,503
0	1,325
144	200
766	255
34,103	12,283 x 130% = 15,968
-15,968	
18,135	EXCESS

+67 09.00

VAR

R/W

ENT.

+37 09.30

VAR

129+00 09.80

VAR

ENT.

+76 10.10

VAR

128+50 910.50

VAR

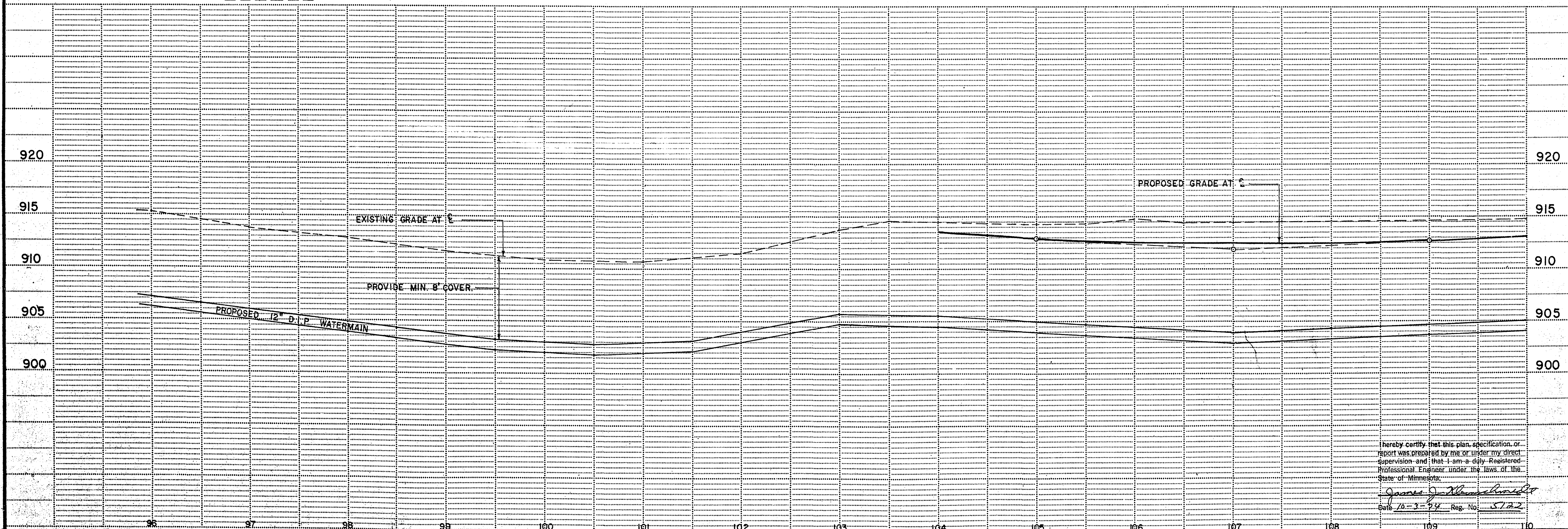
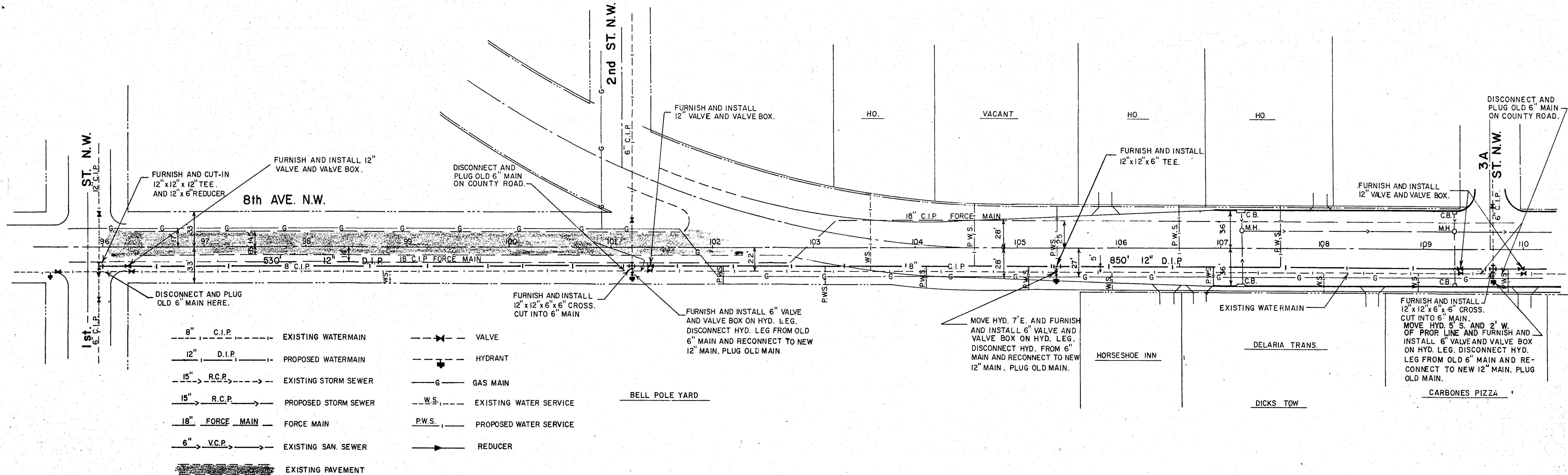
R/W

3:1

R/W

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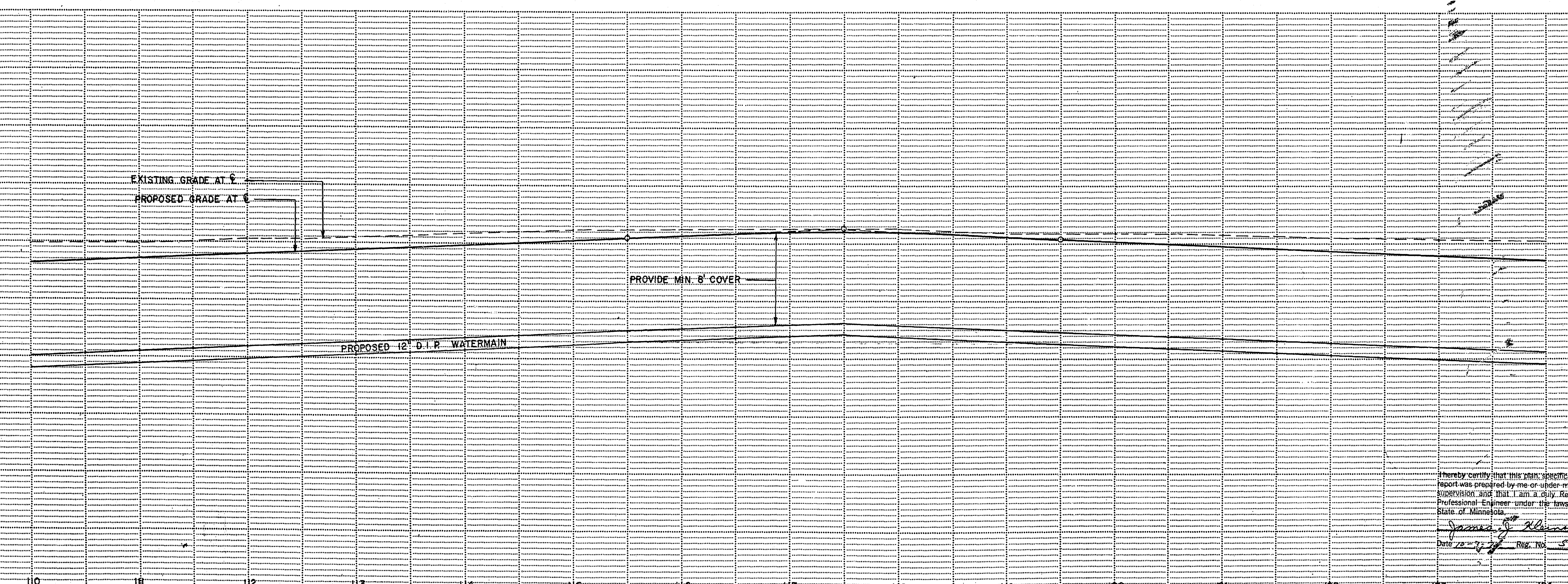
Walter Howard
Date 10-2-74 Reg. No. 5782



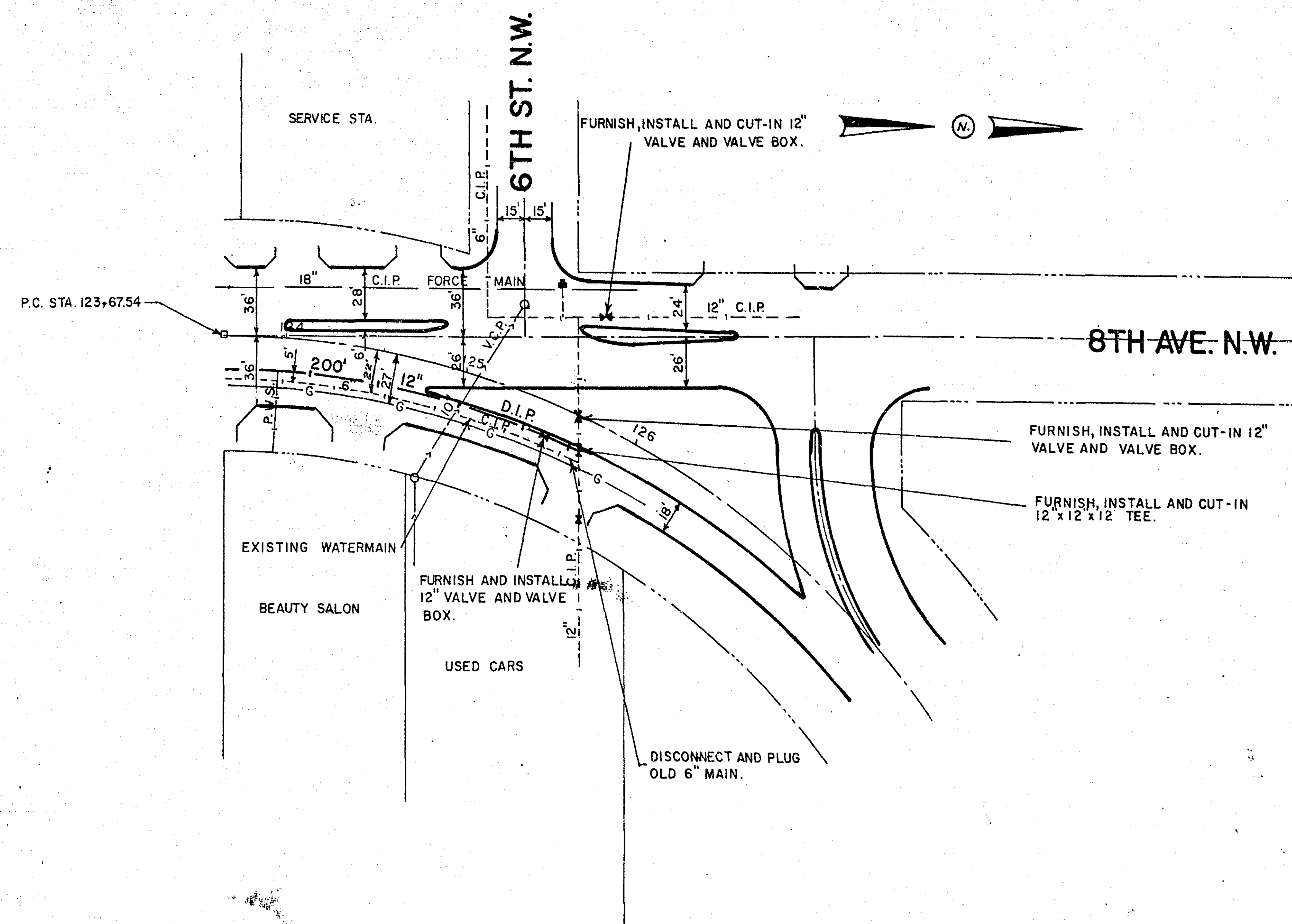
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

James J. Munch

Date 10-3-94 Reg. No. 5722



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EXISTING GRADE AT C
PROPOSED GRADE AT C

PROVIDE MIN. 8' COVER

PROPOSED 12\"/>

I hereby certify that this plan, specification, or report 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.

James J. [Signature]
Date 10-3-74 Reg. No. 5722