CLEVELAND Ave. FROM I 35 W to Co. RD. "D" 62-646-04

BID TABULATIONS TAKEN NOV 9th 1977

ITEM NO.	ITEM	UNIT	PARTICIPATING	NON-PARTICIPATING	AVERAGE 3 LOW BIDDERS	ALEXANDER UNIT PRICE	ALEXANDER AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1			21900 00	21,900 00														
2101.502	CLEARING	TREE	77			60 00	4,620 00														
2101.507	GRUBBING	TREE	89			33 00	2,937 00														
2104.501	REMOVE FENCE	LIN. FT.	20			1 58	31 60														
2104.501	REMOVE SEWER PIPE (S.C.)	LIN. FT.	740			3 00	2,220 00														
2104.501	REMOVE SEWER PIPE (R.C.P.)	LIN. FT.	1225			3 25	3,981 25														
2104.505	REMOVE CONCRETE PAVEMENT	SQ. YD.	165			6 00	990 00														
2104.523	SALVAGE HYDRANT	EACH	6			110 00	660 00														
2104.521	SALVAGE FENCE	LIN. FT.	920			2 05	1,886 00														
2105.501	COMMON EXCAVATION	CU. YD.	21,902			3 50	76,657 00														
2105.505	MUCK EXCAVATION	CU. YD.	6276			3 00	18,828 00														
2105.525	TOPSOIL BORROW (L.V.)	CU. YD.	2,197			6 05	13,291 85														
2130.501	WATER	M(GAL.)	200			7 00	1,400 00														
2211.501	CLASS 5, AGGREGATE BASE	TON	9,692	1,055*		3 40	36,539 80														
2105.523	COMMON BORROW (L.V.)	CU. YD.	18,653			2 50	46,632 50														
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	196	15 *		79 00	16,669 00														
2331.514	BITUMINOUS BASE COURSE	TON	4,351	332 *		6 95	32,546 85														
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	145	10 *																	
2341.508	BITUMINOUS WEARING COURSE	TON	0	166 *		32 00	5,312 00														
2341.510	BITUMINOUS BINDER COURSE	TON	2,902			7 25	21,039 50														
2357.502	BITUMINOUS TACK COAT	GALLON	2,640			55	1,452 00														
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	7,914			50	3,957 00														
2361.504	BITUMINOUS MATERIAL FOR PAVEMENT	TON	159			79 00	12,561 00														
2361.508	BITUMINOUS WEARING COURSE	TON	1,590			14 96	23,786 40														
2501.515	12" R.C. APRON	EACH	1			260 00	260 00														
2501.515	15" R.C. APRON	EACH	3			280 00	840 00														
2501.515	18" R.C. APRON	EACH	2			310 00	620 00														
2501.515	42" R.C. APRON	EACH	1			690 00	690 00														
2503.511	12" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	115			12 75	1466 25														
2503.511	15" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	1369			13 90	19,029 10														
2503.511	18" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1401			16 60	23,256 60														
2503.511	21" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1055			19 80	20,889 00														
2503.511	36" R.C.P. PIPE SEWER, CLASS II	LIN. FT.	1976			32 35	63,908 30														
2503.511	42" R.C.P. PIPE SEWER, CLASS II	LIN. FT.	345			43 00	14,835 00														
2506.508	CONSTRUCT M.H. DESIGN A OR F	EACH	20			715 00	14,300 00														
2506.509	CONSTRUCT C.B. (L.P.)	EACH	23			825 00	18,975 00														
2506.511	RECONSTRUCT M.H.	LIN. FT.	40.7			110 00	4,477 00														
2506.522	ADJUST FRAME AND RING CASTING	EACH	25			90 00	2,250 00														
2506.521	INSTALL CASTING	EACH	13			75 00	975 00														
2503.511	12" C.S.P. PIPE SEWER	LIN. FT.		68 *		12 00	816 00														
2531.501	CONCRETE CURB AND GUTTER, DESIGN B624	LIN. FT.	10,235			4 70	48,104 50														
2521.507	8" CONCRETE DRIVEWAY PVMT.	SQ. YD.	25			20 00	500 00														
2535.5[illegible]	BITUMINOUS CURB	LIN. FT.	175			3 00	525 00														
2571.541	TRANSPLANT TREES, 4" MAPLE	TREE	3			85 00	255 00														
2575.505	SODDING	SQ. YD.	26,370			89	23,469 30														
2575.531	FERTILIZER 12-12-12	TON	1.35			262 50	354 38														
2575.501	SEEDING (MIXTURE 6)	ACRE	2.13			265 50	564 38														
2575.511	MULCH MATERIAL, TYPE 1	TON	4.30			118 50	509 55														
	8"x12" WET TAP WITH 8" GATE VALVE	EACH		3		1,225 00	3,675 00														
	8" D.I.P. WATERMAIN	LIN. FT.		174		22 00	3,828 00														
911.620	WIER STRUCTURE	LUMP SUM	1			10,800 00	10,800 00														
505.666	INSTALL HYDRANT	EACH	6			450 00	2,700 00														
557.604	INSTALL FENCE	LIN. FT.	920			2 80	2,576 00														
504.679	ADJUST VALVE BOX	EACH	8																		
504.677	ADJUST WATER SERVICE	EACH	13			140 00	1,820 00														
504.677	ADJUST WATERMAIN	EACH	3			1975 00	5,925 00														
504.673	ADJUST SAN. SEWER SERVICE	EACH	7			190 00	1,330 00														
	4" C.I.S.P. SAN. SEWER SERVICE	LIN. FT.		10		12 00	120 00														
	1" CURB STOP AND BOX	EACH		1		60 00	60 00														
	1" CORPORATION COCK	EACH		1		30 00	30 00														
	1" COPPER SERVICE PIPE	LIN. FT.		66		9 00	594 00														
545.602	RELOCATE LIGHT STANDARD	EACH	1			825 00	825 00														
2451.509	AGGREGATE PEDDING, CLASS A	CU. YD.	250			11 00	2,750 00														
2511.501	RANDOM RIPRAP, CLASS A	CU. YD.	21.3			25 00	532 50														
2511.504	FILTER BLANKET, TYPE 1	CU. YD.	10.9			20 00	218 00														
2521.501	4" CONC. SIDEWALK	SQ. FT.	1900			1 45	2,755 00														
2531.501	CONCRETE CURB AND GUTTER, DESIGN P612	LIN. FT.	380			600	2,280 00														
							667,351.61														

* COUNTY ROAD C-2 QUANTITIES

26-116

CLEVELAND Ave. FROM I 35 W to Co. RD. "D" 62-646-04

BID TABULATIONS TAKEN NOV 9th 1977

ITEM NO	ITEM	UNIT	PARTICIPATING	NON-PARTICIPATING	AVERAGE 3 LOW BIDDERS	C.S. McCROSSAN UNIT PRICE	C.S. McCROSSAN AMOUNT	C.W. HOULE UNIT PRICE	C.W. HOULE AMOUNT	SHAFER UNIT PRICE	SHAFER AMOUNT	ORFEI & Sons UNIT PRICE	ORFEI & Sons AMOUNT	HARDRIVES UNIT PRICE	HARDRIVES AMOUNT	ARCON UNIT PRICE	ARCON AMOUNT	ASCHBACH UNIT PRICE	ASCHBACH AMOUNT	PROGRESSIVE UNIT PRICE	PROGRESSIVE AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1		11,666.67	12,000.00	12,000.00	8,000.00	8,000.00	15,000.00	15,000.00	15,000.00	15,000.00	20,000.00	20,000.00	32,000.00	32,000.00	13,500.00	13,500.00	41,000.00	41,000.00
2101.502	CLEARING	TREE	77		55.00	60.00	4,620.00	30.00	2,310.00	75.00	5,775.00	57.75	4,446.75	54.00	4,158.00	85.00	6,545.00	37.50	2,887.50	55.00	4,235.00
2101.507	GRUBBING	TREE	89		38.33	35.00	3,115.00	30.00	2,670.00	50.00	4,450.00	31.50	2,803.50	38.50	3,426.50	85.00	7,565.00	23.00	2,047.00	30.00	2,670.00
2104.501	REMOVE FENCE	LIN. FT.	20		1.60	1.65	33.00	1.65	33.00	1.50	30.00	1.58	31.60	1.40	28.00	1.50	30.00	1.75	35.00	3.00	60.00
2104.501	REMOVE SEWER PIPE (S.C.)	LIN. FT.	740		4.33	5.00	3,700.00	5.00	3,700.00	3.00	2,220.00	3.42	2,530.80	3.30	2,442.00	3.00	2,220.00	2.50	1,850.00	6.00	4,440.00
2104.501	REMOVE SEWER PIPE (R.C.P.)	LIN. FT.	1225		4.67	5.00	6,125.00	5.00	6,125.00	4.00	4,900.00	3.57	4,373.25	3.58	4,385.50	5.00	6,125.00	4.50	5,512.50	7.00	8,575.00
2104.505	REMOVE CONCRETE PAVEMENT	SQ. YD.	165		4.33	5.00	825.00	5.00	825.00	3.00	495.00	1.61	265.65	5.50	907.50	1.30	214.50	4.75	783.75	5.50	907.50
2104.523	SALVAGE HYDRANT	EACH	6		300.00	400.00	2,400.00	200.00	1,200.00	300.00	1,800.00	210.35	1,262.10	121.00	726.00	100.00	600.00	115.00	690.00	400.00	2,400.00
2104.521	SALVAGE FENCE	LIN. FT.	920		2.08	2.15	1,978.00	2.15	1,978.00	1.55	1,794.00	2.05	1,886.00	1.87	1,720.40	1.95	1,794.00	2.25	2,070.00	1.00	920.00
2105.501	COMMON EXCAVATION	CU. YD.	21,902		1.48	1.20	26,282.40	1.50	32,853.00	1.75	38,328.50	1.16	25,410.32	1.21	26,501.42	1.15	25,187.30	2.92	63,953.84	3.60	78,847.20
2105.505	MUCK EXCAVATION	CU. YD.	6276		2.13	2.65	16,631.40	2.00	12,552.00	1.75	10,983.00	.89	5,585.64	.94	5,899.44	.90	5,648.40	2.95	18,514.20	1.90	11,924.40
2105.525	TOPSOIL BORROW (L.V.)	CU. YD.	2,197		3.63	6.30	13,841.10	4.50	9,886.50	.10	219.70	5.51	12,105.47	4.95	10,875.15	4.50	9,886.50	5.25	11,534.25	5.75	12,632.75
2130.501	WATER	M(GAL.)	200		10.00	15.00	3,000.00	8.00	1,600.00	7.00	1,400.00	13.14	2,628.00	6.00	1,200.00	7.00	1,400.00	11.50	2,300.00	15.00	3,000.00
2211.501	CLASS 5, AGGREGATE BASE	TON	9,692	1,055*	4.02	3.80	40,838.60	4.90	52,160.30	3.35	36,002.45	3.52	37,827.44	3.54	38,044.38	3.45	37,077.15	3.50	37,614.50	6.25	35,557.50
2105.523	COMMON BORROW (L.V.)	CU. YD.	18,653		1.48	1.20	22,383.60	1.50	27,979.50	1.75	32,642.75	1.84	34,321.52	1.76	32,829.28	1.80	33,575.40	2.10	39,171.30	1.95	36,373.35
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	196	15 *	76.57	77.00	16,247.00	78.22	16,501.42	74.50	15,719.50	78.23	16,501.53	84.00	17,724.00	76.73	16,190.03	78.00	16,458.00	74.50	15,719.50
2331.514	BITUMINOUS BASE COURSE	TON	4,351	332 *	7.33	7.75	34,293.25	7.29	34,139.07	6.95	32,546.85	7.30	34,185.90	7.22	33,811.26	7.75	33,483.45	7.35	34,420.05	6.95	32,546.85
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	145	10 *	76.57	77.00	11,165.00	78.22	12,124.10	74.50	11,547.50	78.23	12,125.65	84.00	13,020.00	76.73	11,893.15	78.00	12,090.00	74.50	11,547.50
2341.508	BITUMINOUS WEARING COURSE	TON	0	166 *	23.50	50.00	8,300.00	10.50	1,743.00	10.00	1,660.00	10.50	1,743.00	7.22	1,198.52	10.30	1,709.80	8.60	1,427.60	10.00	1,660.00
2341.510	BITUMINOUS BINDER COURSE	TON	2,902		7.86	7.50	21,765.00	8.24	23,912.48	7.85	22,780.70	8.24	23,912.48	7.22	20,952.44	8.08	23,448.16	7.60	22,055.20	7.85	22,780.70
2357.502	BITUMINOUS TACK COAT	GALLON	2,640		.62	.75	1,980.00	.56	1,478.40	.55	1,452.00	.58	1,531.20	.60	1,584.00	.60	1,584.00	.55	1,452.00	0.55	1,452.00
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	7,914		.27	.10	791.40	.20	1,582.80	.50	3,957.00	.21	1,661.94	.01	79.14	.25	1,978.50	.52	4,115.28	0.20	1,582.80
2361.504	ASPHALT CEMENT	TON	159		76.57	77.00	12,243.00	78.22	12,434.98	74.50	11,845.50	78.23	12,438.57	50.00	7,950.00	76.73	12,200.07	78.00	12,402.00	74.50	11,845.50
2361.508	BITUMINOUS WEARING COURSE	TON	1,590		13.51	14.00	22,260.00	13.59	21,608.10	12.95	20,590.50	13.60	21,624.00	18.21	28,953.90	13.33	21,194.70	12.90	20,511.00	12.95	20,590.50
2501.515	12" R.C. APRON	EACH	1		316.67	300.00	300.00	320.00	320.00	330.00	330.00	240.66	240.66	286.00	286.00	275.00	275.00	280.00	280.00	315.00	315.00
2501.515	15" R.C. APRON	EACH	3		360.00	350.00	1,050.00	350.00	1,050.00	380.00	1,140.00	270.68	812.04	308.00	924.00	330.00	990.00	315.00	945.00	360.00	1,080.00
2501.515	18" R.C. APRON	EACH	2		405.00	400.00	800.00	415.00	830.00	400.00	800.00	286.90	573.80	341.00	682.00	340.00	680.00	345.00	690.00	400.00	800.00
2501.515	42" R.C. APRON	EACH	1		833.33	725.00	725.00	840.00	840.00	950.00	950.00	661.83	661.83	760.00	760.00	780.00	780.00	820.00	820.00	800.00	800.00
2503.511	12" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	115		13.87	11.00	1,265.00	13.60	1,564.00	17.00	1,955.00	19.04	2,189.60	14.05	1,615.75	18.30	2,104.50	13.50	1,552.50	12.25	1,408.75
2503.511	15" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	1369		16.00	13.00	17,797.00	16.00	21,904.00	19.00	26,011.00	20.55	28,132.95	15.30	20,945.70	22.90	31,350.10	15.55	21,287.95	14.00	19,166.00
2503.511	18" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1401		18.20	15.00	21,015.00	18.60	26,058.60	21.00	29,421.00	22.51	31,536.51	18.26	25,582.26	21.90	30,681.90	18.25	25,568.25	20.50	28,720.50
2503.511	21" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1055		19.33	17.00	17,935.00	19.00	20,045.00	22.00	23,210.00	23.87	25,182.85	21.78	22,977.90	22.50	23,737.50	20.50	21,627.50	22.10	23,315.50
2503.511	36" R.C.P. PIPE SEWER, CLASS II	LIN. FT.	1976		30.80	29.00	57,362.00	29.40	58,153.20	34.00	67,252.00	35.25	69,726.00	35.59	70,339.70	35.20	69,595.20	35.55	70,317.90	31.00	61,318.00
2503.511	42" R.C.P. PIPE SEWER, CLASS II	LIN. FT.	345		39.00	38.00	13,110.00	37.00	12,765.00	42.00	14,490.00	44.56	15,373.20	47.30	16,318.50	56.70	19,561.50	50.50	17,422.50	47.50	16,387.50
2506.508	CONSTRUCT M.H. DESIGN A OR F	EACH	20		720.00	700.00	14,000.00	560.00	11,200.00	900.00	18,000.00	650.60	13,012.00	787.00	15,740.00	600.00	12,000.00	765.00	15,300.00	710.00	14,200.00
2506.509	CONSTRUCT C.B. (L.P.)	EACH	23		766.67	700.00	16,100.00	800.00	18,400.00	800.00	18,400.00	579.73	13,333.79	908.00	20,884.00	950.00	21,850.00	760.00	17,480.00	1200.00	27,600.00
2506.511	RECONSTRUCT M.H.	LIN. FT.	40.7		91.67	100.00	4,070.00	80.00	3,256.00	95.00	3,866.50	58.47	2,379.73	121.00	4,924.70	110.00	4,477.00	70.00	2,849.00	125.00	5,087.50
2506.522	ADJUST FRAME AND RING CASTING	EACH	25		90.00	100.00	2,500.00	75.00	1,875.00	95.00	2,375.00	80.20	2,005.00	78.00	1,950.00	80.00	2,000.00	90.00	2,250.00	105.00	2,625.00
2506.521	INSTALL CASTING	EACH	13		126.67	100.00	1,300.00	185.00	2,405.00	95.00	1,235.00	21.03	273.39	60.00	780.00	80.00	1,040.00	132.50	1,722.50	75.00	975.00
2503.511	12" C.S.P. PIPE SEWER	LIN. FT.	*	68 *	14.00	13.00	884.00	17.00	1,156.00	12.00	816.00	19.76	1,343.68	13.20	897.60	13.20	897.60	15.25	1,037.00	12.25	833.00
2531.501	CONCRETE CURB AND GUTTER, DESIGN B624	LIN. FT.	10,235		4.30	4.65	47,592.75	4.34	44,419.90	3.90	39,916.50	4.10	41,963.50	4.35	44,522.25	3.95	40,428.25	4.56	46,671.60	4.50	49,128.00
2531.507	8" CONCRETE DRIVEWAY PVMT.	SQ. YD.	25		18.48	17.60	440.00	17.85	446.25	20.00	500.00	21.00	525.00	16.15	403.75	14.68	367.00	23.50	587.50	18.00	450.00
2535.501	BITUMINOUS CURB	LIN. FT.	175		1.68	2.50	437.50	1.31	229.25	1.25	218.75	1.31	229.25	3.00	525.00	1.25	218.75	1.40	245.00	1.25	218.75
2571.541	TRANSPLANT TREES, 4" MAPLE	TREE	3		94.17	82.50	247.50	100.00	300.00	100.00	300.00	78.75	236.25	55.00	165.00	120.00	360.00	87.75	263.25	75.00	225.00
2575.505	SODDING	SQ. YD	26,370		.97	0.94	24,787.80	1.13	29,798.10	.85	22,414.50	1.02	26,897.40	.97	25,578.90	.83	23,205.60	.92	24,260.40	.85	22,414.50
2575.531	FERTILIZER 12-12-12	TON	1.35		275.00	275.00	371.25	300.00	405.00	250.00	337.50	210.00	283.50	330.00	445.50	300.00	405.00	164.00	221.40	250.00	337.50
2575.501	HYDRAULIC SEEDING (MIXTURE 6)	ACRE	2.15		258.33	275.00	591.25	250.00	537.50	250.00	537.50	236.25	507.94	275.00	591.25	250.00	537.50	146.00	313.90	250.00	537.50
2575.511	MULCH MATERIAL TYPE 1	TON	4.30		120.67	127.00	546.10	120.00	516.00	115.00	494.50	157.50	677.25	132.00	567.60	120.00	516.00	146.00	627.80	115.00	494.50
	8"x12" WET TAP WITH 8" GATE VALVE	EACH		3	1,333.33	1,600.00	4,800.00	1,400.00	4,200.00	1,000.00	3,000.00	1,750.99	5,252.97	1,350.00	4,050.00	1,350.00	4,050.00	1,170.00	3,510.00	1,925.00	5,775.00
	8" D.I.P. WATERMAIN	LIN. FT.		174	17.67	14.00	2,436.00	14.00	2,436.00	25.00	4,350.00	25.13	4,372.62	24.20	4,210.80	36.00	6,264.00	13.10	2,279.40	17.20	2,992.80
411.620	WIER STRUCTURE	LUMP SUM	1		8,666.67	9,000.00	9,000.00	7,000.00	7,000.00	10,000.00	10,000.00	11,186.70	11,186.70	12,000.00	12,000.00	7,045.00	7,045.00	12,089.00	12,089.00	6,000.00	6,000.00
505.666	INSTALL HYDRANT	EACH	6		391.67	400.00	2,400.00	400.00	2,400.00	375.00	2,250.00	337.37	2,024.22	500.00	3,000.00	150.00	900.00	351.00	2,106.00	600.00	3,600.00
557.604	INSTALL FENCE	LIN. FT.	920		2.85	2.90	2,668.00	3.00	2,760.00	2.65	2,438.00	2.78	2,557.60	3.30	3,036.00	2.65	2,438.00	3.10	2,852.00	5.10	4,692.00
504.679	ADJUST VALVE BOX	EACH	8		68.33	65.00	520.00	65.00	520.00	75.00	600.00	50.47	403.76	60.00	480.00	60.00	480.00	52.00	416.00	65.00	520.00
504.677	ADJUST WATER SERVICE	EACH	13		101.67	125.00	1,625.00	130.00	1,690.00	50.00	650.00	22.127	287.651	154.00	2,002.00	300.00	3,900.00	176.00	2,288.00	490.00	6,370.00
504.677	ADJUST WATERMAIN	EACH	3		1,271.67	850.00	2,550.00	1,465.00	4,395.00	1,500.00	4,500.00	1,825.60	5,476.80	2,200.00	6,600.00	1,500.00	4,500.00	644.00	1,932.00	2,050.00	6,150.00
504.673	ADJUST SAN. SEWER SERVICE	EACH	7		100.00	100.00	700.00	150.00	1,050.00	50.00	350.00	431.62	3,021.34	210.00	1,470.00	350.00	2,450.00	176.00	1,232.00	900.00	6,300.00
	4" C.I.S.P. SAN. SEWER SERVICE	LIN. FT.		10	16.00	14.00	140.00	14.00	140.00	20.00	200.00	15.05	150.50	13.20	132.00	15.00	150.00	9.40	94.00	19.00	190.00
	1" CURB STOP AND BOX	EACH		1	80.00	45.00	45.00	70.00	70.00	125.00	125.00	14.37	14.37	66.00	66.00	50.00	50.00	53.00	53.00	60.00	60.00
	1" CORPORATION COCK	EACH*		1	40.67	25.00	25.00	40.00	40.00	75.00	75.00	15.60	15.60	35.00	35.00	20.00	20.00	18.00	18.00	20.00	20.00
	1" COPPER SERVICE PIPE	LIN. FT.		66	8.67	10.00	660.00	6.00	396.00	10.00	660.00	13.65	900.90	10.00	660.00	12.00	792.00	7.00	462.00	7.50	495.00
545.602	RELOCATE LIGHT STANDARD	EACH	1		616.67	400.00	400.00	700.00	700.00	750.00	750.00	2,625.00	2,625.00	1,100.00	1,100.00	1,200.00	1,200.00	878.00	878.00	300.00	300.00
2451.509	AGGREGATE BEDDING, L.V.	CU. YD.	250		10.33	10.00	2,500.00	14.00	3,500.00	7.00	1,750.00	14.50	3,625.00	12.10	3,025.00	9.00	2,250.00	3.75	937.50	10.00	2,500.00
2511.501	RANDOM RIPRAP, CLASS A	CU. YD.	21.3		38.33	40.00	852.00	30.00	639.00	45.00	958.50	15.98	340.37	27.50	585.75	30.00	639.00	37.00	788.10	65.00	1,384.50
2511.504	FILTER BLANKET, TYPE I	CU. YD.	10.9		13.32	10.00	109.00	10.00	109.00	20.00	218.00	15.98	174.18	22.00	239.80	20.00	218.00	23.00	250.70	35.00	381.50
2521.501	4" CONC. SIDEWALK	SQ. FT	1900		1.25	1.25	2,375.00	1.26	2,394.00	1.25	2,375.00	1.31	2,489.00	1.33	2,527.00	1.21	2,299.00	1.45	2,755.00	1.30	2,470.00
2531.501	CONCRETE CURB AND GUTTER, DESIGN B612	LIN. FT.	380		4.94	4.90	1,862.00	6.03	2,291.40	3.90	1,482.00	4.10	1,558.00	4.91	1,865.80	4.46	1,694.80	4.55	1,729.00	5.00	1,900.00
	TOTAL						570,481.90		585,105.85		589,842.20		603,369.77		603,966.66		622,978.71		638,405.62		693,694.35

* COUNTY ROAD C-2 QUANTITIES

26-116

CLEVELAND Ave. FROM I 35 W to Co. RD. "D" 62-6446-04

BID TABULATIONS TAKEN NOV 9th 1977

STATEMENT OF ESTIMATED QUANTITIES					AVERAGE	C.S. McCROSSAN		C.W. HOULE		SHAFER		ORFEI & Sons		HARDRIVES		ARCON		ASCHBACH		PROGRESSIVE	
ITEM NO.	ITEM	UNIT	PARTICIPATING	NON-PARTICIPATING	3 LOW BIDDERS	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1		11,666.67	12,000.00	12,000.00	8,000.00	8,000.00	15,000.00	15,000.00	15,000.00	15,000.00	20,000.00	20,000.00	32,000.00	32,000.00	13,500.00	13,500.00	41,000.00	41,000.00
2101.502	CLEARING	TREE	77		55.00	60.00	4,620.00	30.00	2,310.00	75.00	5,775.00	57.75	4,446.75	54.00	4,158.00	85.00	6,545.00	37.50	2,887.50	55.00	4,235.00
2101.507	GRUBBING	TREE	89		38.33	35.00	3,115.00	30.00	2,670.00	50.00	4,450.00	31.50	2,803.50	38.50	3,426.50	85.00	7,565.00	23.00	2,047.00	30.00	2,670.00
2104.501	REMOVE FENCE	LIN. FT.	20		1.60	1.65	33.00	1.65	33.00	1.50	30.00	1.58	31.60	1.40	28.00	1.50	30.00	1.75	35.00	3.00	60.00
2104.501	REMOVE SEWER PIPE (SC.)	LIN.FT.	740		4.33	5.00	3,700.00	5.00	3,700.00	3.00	2,220.00	3.42	2,530.80	3.30	2,442.00	3.00	2,220.00	2.50	1,850.00	6.00	4,440.00
2104.501	REMOVE SEWER PIPE (R.C.P.)	LIN.FT.	1225		4.67	5.00	6,125.00	5.00	6,125.00	4.00	4,900.00	3.57	4,373.25	3.58	4,385.50	5.00	6,125.00	4.50	5,512.50	7.00	8,575.00
2104.505	REMOVE CONCRETE PAVEMENT	SQ. YD.	165		4.33	5.00	825.00	5.00	825.00	3.00	495.00	1.61	265.65	5.50	907.50	1.30	214.50	4.75	783.75	5.50	907.50
2104.523	SALVAGE HYDRANT	EACH	6		300.00	400.00	2,400.00	200.00	1,200.00	300.00	1,800.00	210.35	1,262.10	121.00	726.00	100.00	600.00	115.00	690.00	400.00	2,400.00
2104.521	SALVAGE FENCE	LIN. FT.	920		2.08	2.15	1,978.00	2.15	1,978.00	1.95	1,794.00	2.05	1,886.00	1.87	1,720.40	1.95	1,794.00	2.25	2,070.00	1.00	920.00
2105.501	COMMON EXCAVATION	CU. YD.	21,902	-	1.48	1.20	26,282.40	1.50	32,853.00	1.75	38,328.50	1.16	25,406.32	1.21	26,501.42	1.15	25,187.30	2.92	63,953.84	3.60	78,847.20
2105.505	MUCK EXCAVATION	CU. YD.	6276		2.13	2.65	16,631.40	2.00	12,552.00	1.75	10,983.00	.89	5,585.64	.94	5,899.44	.90	5,648.40	2.95	18,514.20	1.90	11,924.40
2105.525	TOPSOIL BORROW (L.V.)	CU. YD.	2,197		3.63	6.30	13,841.10	4.50	9,886.50	.10	219.70	5.51	12,105.47	4.95	10,875.15	4.50	9,886.50	5.25	11,534.25	5.75	12,632.75
2130.501	WATER	M(GAL.)	200	-	10.00	15.00	3,000.00	8.00	1,600.00	7.00	1,400.00	13.14	2,628.00	6.00	1,200.00	7.00	1,400.00	11.50	2,300.00	15.00	3,000.00
2211.501	CLASS 5, AGGREGATE BASE	TON	9,692	1,055*	4.02	3.80	40,838.60	4.90	52,660.30	3.35	36,602.45	3.52	37,829.44	3.54	38,044.38	3.45	37,077.15	3.50	37,614.50	6.25	35,537.50
2105.523	COMMON BORROW (L.V.)	CU. YD.	18,653		1.48	1.20	22,383.60	1.50	27,979.50	1.75	32,642.75	1.84	34,321.52	1.76	32,829.28	1.80	33,575.40	2.10	39,171.30	1.95	36,373.35
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	196	15 *	76.57	77.00	16,247.00	78.22	16,507.42	74.50	15,719.50	78.23	16,506.53	84.00	17,724.00	76.73	16,190.03	78.00	16,458.00	74.50	15,719.50
2331.514	BITUMINOUS BASE COURSE	TON	4,351	332 *	7.33	7.75	36,293.25	7.79	34,139.07	6.95	32,546.85	7.30	34,185.90	7.22	33,811.26	7.75	33,483.45	7.35	34,420.05	6.95	32,546.85
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	145	10 *	76.57	77.00	11,935.00	78.22	12,124.10	74.50	11,547.50	78.23	12,125.65	84.00	13,020.00	76.73	11,893.15	78.00	12,090.00	74.50	11,547.50
2341.508	BITUMINOUS WEARING COURSE	TON	0	166 *	23.50	50.00	8,300.00	10.50	1,743.00	10.00	1,660.00	10.50	1,743.00	7.22	1,198.52	10.30	1,709.80	8.60	1,427.60	10.00	1,660.00
2341.510	BITUMINOUS BINDER COURSE	TON	2,902		7.86	7.50	21,765.00	8.24	23,912.48	7.85	22,780.70	8.24	23,912.48	7.22	20,952.44	8.08	23,448.16	7.60	22,055.20	7.85	22,780.70
2357.502	BITUMINOUS TACK COAT	GALLON	2,640		.62	.75	1,980.00	.56	1,478.40	.55	1,452.00	.58	1,531.20	.60	1,584.00	.60	1,584.00	.55	1,452.00	.55	1,452.00
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	7,914		.27	.10	791.40	.20	1,582.80	.50	3,957.00	.21	1,661.94	.01	79.14	.25	1,978.50	.52	4,115.28	.20	1,582.80
2361.504	ASPHALT CEMENT	TON	159		76.57	77.00	12,243.00	78.22	12,433.98	74.50	11,845.50	78.23	12,438.57	50.00	7,950.00	76.73	12,200.07	78.00	12,402.00	74.50	11,845.50
2361.508	BITUMINOUS WEARING COURSE	TON	1,590		13.51	14.00	22,260.00	13.59	21,608.10	12.95	20,590.50	13.60	21,624.00	18.21	28,953.90	13.33	21,194.70	12.90	20,511.00	12.95	20,590.50
2501.515	12" R.C. APRON	EACH	1		316.67	300.00	300.00	320.00	320.00	330.00	330.00	240.06	240.06	286.00	286.00	275.00	275.00	280.00	280.00	315.00	315.00
2501.515	15" R.C. APRON	EACH	3		360.00	350.00	1,050.00	350.00	1,050.00	380.00	1,140.00	270.68	812.04	308.00	924.00	330.00	990.00	315.00	945.00	360.00	1,080.00
2501.515	18" R.C. APRON	EACH	2		405.00	400.00	800.00	415.00	830.00	400.00	800.00	286.90	573.80	341.00	682.00	340.00	680.00	345.00	690.00	400.00	800.00
2501.515	42" R.C. APRON	EACH	1		838.33	725.00	725.00	840.00	840.00	950.00	950.00	661.83	661.83	760.00	760.00	780.00	780.00	820.00	820.00	800.00	800.00
2503.511	12" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	115		13.87	11.00	1,265.00	13.60	1,564.00	17.00	1,955.00	19.04	2,189.60	14.65	1,685.75	18.30	2,104.50	13.50	1,552.50	12.25	1,408.75
2503.511	15" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	1369		16.00	13.00	17,797.00	16.00	21,904.00	19.00	26,011.00	20.55	28,132.95	15.30	20,945.70	22.90	31,350.10	15.55	21,287.95	14.00	19,166.00
2503.511	18" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1401		18.20	15.00	21,015.00	18.60	26,058.60	21.00	29,421.00	22.51	31,536.51	18.26	25,582.26	21.90	30,681.90	18.25	25,568.25	20.50	28,720.50
2503.511	21" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1055		19.33	17.00	17,935.00	19.00	20,045.00	22.00	23,210.00	23.87	25,182.85	21.78	22,977.90	22.50	23,737.50	20.50	21,627.50	22.10	23,315.50
2503.511	36" R.C.P. PIPE SEWER, CLASS II	LIN.FT.	1976		30.80	29.00	57,362.00	29.40	58,153.20	34.00	67,252.00	35.25	69,726.00	35.59	70,337.02	35.20	69,635.20	35.55	70,317.90	31.00	61,318.00
2503.511	42" R.C.P. PIPE SEWER, CLASS II	LIN.FT.	345		39.00	38.00	13,110.00	37.00	12,765.00	42.00	14,490.00	44.56	15,373.20	47.30	16,318.50	56.70	19,561.50	50.50	17,422.50	47.50	16,387.50
2506.508	CONSTRUCT M.H. DESIGN A OR F	EACH	20		720.00	700.00	14,000.00	560.00	11,200.00	900.00	18,000.00	650.80	13,016.00	787.00	15,740.00	600.00	12,000.00	765.00	15,300.00	710.00	14,200.00
2506.509	CONSTRUCT C.B. (L.P.)	EACH	23		766.67	700.00	16,100.00	800.00	18,400.00	800.00	18,400.00	579.73	13,333.79	908.00	20,884.00	950.00	21,850.00	760.00	17,480.00	1,200.00	27,600.00
2506.511	RECONSTRUCT M.H.	LIN. FT.	40.7		91.67	100.00	4,070.00	80.00	3,256.00	95.00	3,866.50	58.47	2,379.73	121.00	4,924.70	110.00	4,477.00	70.00	2,849.00	125.00	5,087.50
2506.522	ADJUST FRAME AND RING CASTING	EACH	25		90.00	100.00	2,500.00	75.00	1,875.00	95.00	2,375.00	80.20	2,005.00	78.00	1,950.00	80.00	2,000.00	90.00	2,250.00	105.00	2,625.00
2506.521	INSTALL CASTING	EACH	13		126.67	100.00	1,300.00	185.00	2,405.00	95.00	1,235.00	21.03	273.39	60.00	780.00	80.00	1,040.00	132.50	1,722.50	75.00	975.00
2503.511	12" C.S.P. PIPE SEWER	LIN. FT.	*	68 *	14.00	13.00	884.00	17.00	1,156.00	12.00	816.00	19.76	1,343.68	13.20	897.60	13.20	897.60	15.25	1,037.00	12.25	833.00
2531.501	CONCRETE CURB AND GUTTER, DESIGN B624	LIN. FT.	10,235		4.30	4.65	47,592.75	4.34	44,419.90	3.90	39,916.50	4.10	41,963.50	4.35	44,522.25	3.95	40,428.25	4.56	46,671.60	4.50	49,128.00
2531.507	8" CONCRETE DRIVEWAY PVMT.	SQ. YD.	25		18.48	17.60	440.00	17.85	446.25	20.00	500.00	21.00	525.00	16.15	403.75	14.68	367.00	23.50	587.50	18.00	450.00
2535.501	BITUMINOUS CURB	LIN. FT.	175		1.69	2.50	437.50	1.31	229.25	1.25	218.75	1.31	229.25	3.00	525.00	1.25	218.75	1.40	245.00	1.25	218.75
2571.541	TRANSPLANT TREES, 4" MAPLE	TREE	3		94.17	82.50	247.50	100.00	300.00	100.00	300.00	78.75	236.25	55.00	165.00	120.00	360.00	87.75	263.25	75.00	225.00
2575.505	SODDING	SQ. YD	26,370		.97	.094	24,787.80	1.13	29,798.10	.85	22,414.50	1.02	26,897.40	.97	25,578.90	.88	23,205.60	.92	24,260.40	.85	22,414.50
2575.531	FERTILIZER 12-12-12	TON	1.35		275.00	275.00	371.25	300.00	405.00	250.00	337.50	210.00	283.50	330.00	445.50	300.00	405.00	164.00	221.40	250.00	337.50
2575.501	POLYDIDE SEEDING (MIXTURE 6)	ACRE	2.15		258.33	275.00	591.25	250.00	537.50	250.00	537.50	236.25	507.94	275.00	591.25	250.00	537.50	146.00	313.90	250.00	537.50
2575.511	MULCH MATERIAL TYPE 1	TON	4.30		120.67	127.00	546.10	120.00	516.00	115.00	494.50	157.50	677.25	132.00	567.60	120.00	516.00	146.00	627.80	115.00	494.50
	8"x12" WET TAP WITH 8" GATE VALVE	EACH		3	1,333.33	1,600.00	4,800.00	1,400.00	4,200.00	1,000.00	3,000.00	1,750.99	5,252.97	1,350.00	4,050.00	1,350.00	4,050.00	1,170.00	3,510.00	1,925.00	5,775.00
	8" D.I.P. WATERMAIN	LIN. FT.		174	17.67	14.00	2,436.00	14.00	2,436.00	25.00	4,350.00	25.13	4,372.62	24.20	4,210.80	36.00	6,264.00	13.10	2,279.40	17.20	2,992.80
411.620	WIER STRUCTURE	LUMP SUM	1		8,666.67	9,000.00	9,000.00	7,000.00	7,000.00	10,000.00	10,000.00	11,186.70	11,186.70	12,000.00	12,000.00	7,045.00	7,045.00	12,089.00	12,089.00	6,000.00	6,000.00
505.666	INSTALL HYDRANT	EACH	6		391.67	400.00	2,400.00	400.00	2,400.00	375.00	2,250.00	337.37	2,024.22	500.00	3,000.00	150.00	900.00	351.00	2,106.00	600.00	3,600.00
557.604	INSTALL FENCE	LIN. FT.	920		2.85	2.90	2,668.00	3.00	2,760.00	2.65	2,438.00	2.78	2,557.60	3.30	3,036.00	2.65	2,438.00	3.10	2,852.00	5.00	4,600.00
504.679	ADJUST VALVE BOX	EACH	8		68.33	65.00	520.00	65.00	520.00	75.00	600.00	50.47	403.76	60.00	480.00	60.00	480.00	52.00	416.00	65.00	520.00
504.677	ADJUST WATER SERVICE	EACH	13		101.67	125.00	1,625.00	130.00	1,690.00	50.00	650.00	221.27	287.65	154.00	2,002.00	300.00	3,900.00	176.00	2,288.00	490.00	6,370.00
504.677	ADJUST WATERMAIN	EACH	3		1,271.67	850.00	2,550.00	1,465.00	4,395.00	1,500.00	4,500.00	1,825.60	5,476.80	2,200.00	6,600.00	1,500.00	4,500.00	644.00	1,932.00	2,050.00	6,150.00
504.673	ADJUST SAN. SEWER SERVICE	EACH	7		100.00	100.00	700.00	150.00	1,050.00	50.00	350.00	431.62	3,021.34	210.00	1,470.00	350.00	2,450.00	176.00	1,232.00	900.00	6,300.00
	4" C.I.S.P. SAN. SEWER SERVICE	LIN.FT.		10	16.00	14.00	140.00	14.00	140.00	20.00	200.00	15.05	150.50	13.20	132.00	15.00	150.00	9.40	94.00	19.00	190.00
	1" CURB STOP AND BOX	EACH		1	80.00	45.00	45.00	70.00	70.00	125.00	125.00	14.37	14.37	66.00	66.00	50.00	50.00	53.00	53.00	60.00	60.00
	1" CORPORATION COCK	EACH		1	44.67	25.00	25.00	40.00	40.00	75.00	75.00	15.60	15.60	35.00	35.00	20.00	20.00	18.00	18.00	20.00	20.00
	1" COPPER SERVICE PIPE	LIN. FT.		66	8.67	10.00	660.00	6.00	396.00	10.00	660.00	13.65	900.90	10.00	660.00	12.00	792.00	7.00	462.00	7.50	495.00
545.602	RELOCATE LIGHT STANDARD	EACH	1		611.67	400.00	400.00	700.00	700.00	750.00	750.00	2,625.00	2,625.00	1,100.00	1,100.00	1,200.00	1,200.00	878.00	878.00	300.00	300.00
2451.509	AGGREGATE BEDDING, L.V.	CU.YD.	250		10.33	10.00	2,500.00	14.00	3,500.00	7.00	1,750.00	14.50	3,625.00	12.10	3,025.00	9.00	2,250.00	3.75	937.50	10.00	2,500.00
2511.501	RANDOM RIPRAP, CLASS A	CU.YD.	21.3		38.33	40.00	852.00	30.00	639.00	45.00	958.50	15.98	340.37	27.50	585.75	30.00	639.00	37.00	788.10	65.00	1,384.50
2511.504	FILTER BLANKET, TYPE I	CU.YD.	10.9		13.33	10.00	109.00	10.00	109.00	20.00	218.00	15.98	174.18	22.00	239.80	20.00	218.00	23.00	250.70	35.00	381.50
2521.501	4" CONC. SIDEWALK	SQ. FT.	1900		1.25	1.25	2,375.00	1.26	2,394.00	1.25	2,375.00	1.31	2,489.00	1.33	2,527.00	1.21	2,299.00	1.45	2,755.00	1.30	2,470.00
2531.501	CONCRETE CURB AND GUTTER, DESIGN B612	LIN. FT.	380		4.94	4.90	1,862.00	6.03	2,291.40	3.90	1,482.00	4.10	1,558.00	4.91	1,865.80	4.46	1,694.80	4.55	1,729.00	5.00	1,900.00
	TOTAL						570,481.90		585,105.85		589,842.20		603,309.77		603,966.66		622,978.71		638,405.62		693,694.35

* COUNTY ROAD C-2 QUANTITIES

26-116

REVISED	DATE		
Add Detail	10-11-79	DESIGNED BY	
		DRAWN BY	
		CHECKED BY	

REMOVE AND RELOCATE FENCE

[illegible] REMOVED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL [illegible] LOCATION. SATISFACTORY ARRANGEMENTS SHALL BE MADE FOR TEMPORARY RELOCATION.

REMOVE BIT. RAILWAYS [illegible] TO CONSTRUCT CURB & GUTTER

REPLACE BIT. TO CONSTRUCT CURB & GUTTER

INSTALL FENCE

CONSTRUCT INSPECTION TEES

All American Transporting Inc.

C.B.21 C.B.25 C.B.27 C.B.20 C.B.24 C.B.26

124 125 126 127 128 129 130 131 132

59 59

900.62 901.87 901.84

910 905 900

EXISTING GRADE

900.68 900.93 901.54 INV. 901.31

-0.5% 0.5%

INSPECTION TEES

CONSTRUCTION NOTES

CONSTRUCT UNDERGROUND DRAINS AT LOCATIONS SHOWN ABOVE

INSPECTION TEES : SPECIFICATION REFERENCE 2502, STANDARD PLATE 3143E

CONSTRUCT DRAINS INTO CB'S 24 & 25 FOR ACCESS PURPOSES; PLUG ACCESSES WITH REMOVABLE WATERTIGHT PLUGS AS DIRECTED BY THE ENGINEER.

(2502) SUBSURFACE DRAIN

Subsurface drain construction shall be performed in accordance with the provisions of Mn/DOT 2502 except as modified below:

The exact location and actual quantity of 6" Perforated Pipe drain will be determined by the Engineer at the time of the construction operation within the subgrade correction area.

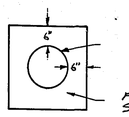
Measurement and payment will be made only for the actual quantities of 6" Perforated Pipe drain required and no compensation other than the Contract bid price will be made therefore.

In lieu of the 6 inch perforated and non-perforated PVC pipe drain provided on the plans, the Contractor may elect to use equivalent pipe conforming to one of the following specifications, with no adjustment in any Contract bid price:

(A) Thermoplastic Pipe (PVC) - M.H.D. 3245
(B) Acrylonitrile - Butadiene - Styrene (ABS) - ASTM D-2751
(C) Heavy Duty Corrugated Polyethylene (PE) - AASHTO - M252 - 75 1*

*Polyethylene pipe may be used outside of the shoulder P.I. only.

SUBSURFACE DRAIN DETAIL



Drains shall be (ABS), (PVC), or (PE) The perforated pipe shall be imbedded in a minimum of 6 inches of filter aggregate Spec. 3149

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 ... Reg No. ...

7 REVISED

8-03-79
CLEVELAND AVENUE UNDERGROUND DRAIN PLAN
S.A.P. 62-646-04

LXF

SHEET 8 REV.

26-116

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 Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK (NAME)
DRY RUN
DRAINAGE DITCH (SIZE)
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE (C-L)
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 (TIMBER)
CATCH BASIN C.B.
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame) 15'
F-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

UTILITIES SYMBOLS

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

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

GROSS LENGTH	FEET = 4995.00 MILES	0.946
BRIDGES - LENGTH	FEET = 0 MILES	0
EXCEPTIONS - LENGTH	FEET = 0 MILES	0
NET LENGTH	FEET = 4995.00 MILES	0.946

PLAN, 0 10 20 30 40 50
PROFILE, HORZ., 0 20 40 10 30 50
PROFILE, VERT., 0 5 10
CROSS SECTIONS, 0 5 10
LAYOUT, 5,280'

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY

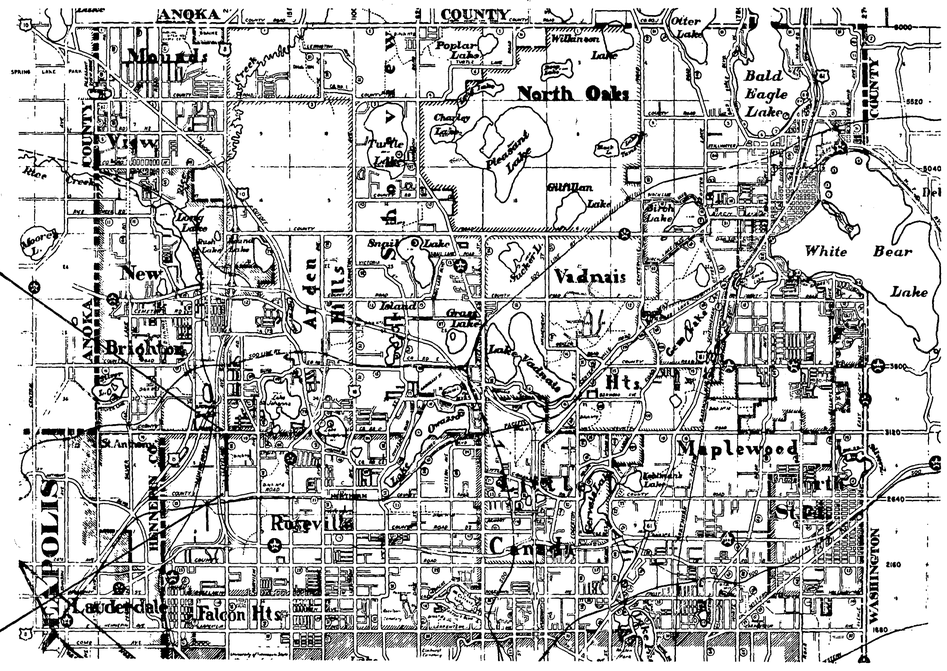
CLEVELAND AVENUE

S.A.P. 62-646-04

CONSTRUCTION PLAN FOR: GRADING, BITUMINOUS SURFACING, AND STORM SEWER.
BETWEEN: I 35W AND COUNTY RD. "D"

FROM: A POINT 533.95 FEET NORTH OF THE SOUTHEAST CORNER OF SECTION 5, T. 30N., R. 23 W..

TO: A POINT 14.93 FEET SOUTH OF THE NORTHEAST CORNER OF SECTION 5, T. 30N., R. 23W..



END PROJECT
STA. 160+45.00

BEGIN PROJECT
STA. 110+50.00

NOTE SECTION NUMBERS READ FROM THE SOUTH

PIT DATA

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

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

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET AND LAYOUT MAP
2	ESTIMATED QUANTITIES
3	TYPICAL SECTION
4-5	DRAINAGE CHART
6-14	PLAN PROFILE
15-36	CROSS SECTIONS

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION "DATED" JANUARY 1, 1972 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS "DATED APRIL 1, 1976 SHALL GOVERN.

DESIGN DESIGNATION

S.A.P. NO. 62-646-04

ADT (CURRENT YEAR) 1975	= 4350	35W TO CO. RD. C-2
ADT (FUTURE YEAR) 1995	= 10500	
ADT (CURRENT YEAR) 1975	= 2850	CO. RD. C-2 TO CO. RD. D
ADT. (FUTURE YEAR) 1995	= 9000	
Σ, N18 20 YEAR	= 1,615,350	35W TO CO. RD. C-2
Σ, N18 20 YEAR	= 1,218,488	CO. RD. C-2 TO CO. RD. D
DESIGN LOAD	= 9 TON	
STABILOMETER "R" VALUE	= 66*	
DESIGN SPEED	= 50 MPH	

*"R" VALUE 40 BETWEEN STA. 144+00 TO 150+00

RECOMMENDED FOR APPROVAL _____ DATE 10/24/77
ENVIRONMENTAL ENGINEER
RECOMMENDED FOR APPROVAL MDK DATE 10/24/77
MAINTENANCE ENGINEER
RECOMMENDED FOR APPROVAL J.A.G. DATE 10-24-77
CONSTRUCTION ENGINEER
RECOMMENDED FOR APPROVAL _____ DATE _____
R.O.W. SURVEYOR
RECOMMENDED FOR APPROVAL RJK DATE 10-24-77
TRAFFIC ENGINEER
RECOMMENDED FOR APPROVAL LKF DATE 10-24-77
DESIGN ENGINEER
RECOMMENDED FOR APPROVAL _____ DATE 10-25-77
CO-ORDINATING ENGINEER

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.

Charles V. Hoskell REG. NO. 10675 DATE 3-29-77

RECOMMENDED FOR APPROVAL _____ DATE 8-18-77
COUNTY ENGINEER
APPROVED _____ DATE August 22, 1977
MAYOR, CITY OF ROSEVILLE
APPROVED _____ DATE _____
CHAIRMAN OF THE RAMSEY COUNTY BOARD
APPROVED _____ DATE _____

MINNESOTA DEPARTMENT OF TRANSPORTATION

RECOMMENDED FOR APPROVAL _____ DATE 3-6-77
DISTRICT STATE AID ENGINEER
RECOMMENDED FOR APPROVAL _____ DATE 8-19-77
APPROVAL _____ DATE 9/6/77
STATE AID ENGINEER

26-116

STATEMENT OF ESTIMATED QUANITITIES

ITEM NO.	ITEM	UNIT	PARTICIPATING	NON-PARTICIPATING
2021.501	MOBILIZATION	LUMP SUM	1	
2101.502	CLEARING	TREE	77	
2101.507	GRUBBING	TREE	89	
2104.501	REMOVE FENCE	LIN. FT.	20	
2104.501	REMOVE SEWER PIPE (S.C.)	LIN.FT.	740	
2104.501	REMOVE SEWER PIPE (R.C.P.)	LIN.FT.	1225	
2104.505	REMOVE CONCRETE PAVEMENT	SQ.YD.	165	
2104.523	SALVAGE HYDRANT	EACH	6	
2104.521	SALVAGE FENCE	LIN. FT.	920	
2105.501	COMMON EXCAVATION	CU. YD.	21,902	
2105.505	MUCK EXCAVATION	CU.YD.	6276	
2105.525	TOPSOIL BORROW (L.V.)	CU.YD.	2,197	
2130.501	WATER	M(GAL.)	200	
2211.501	CLASS 5, AGGREGATE BASE	TON	9,692	1,055 *
2105.523	COMMON BORROW (L.V.)	CU. YD.	18,653	
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	196	15 *
2331.514	BITUMINOUS BASE COURSE	TON	4,351	332 *
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	145	10 *
2341.508	BITUMINOUS WEARING COURSE	TON	0	166 *
2341.510	BITUMINOUS BINDER COURSE	TON	2,902	
2357.502	BITUMINOUS TACK COAT	GALLON	2,640	
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	7,914	
2361.504	ASPHALT CEMENT	TON	159	
2361.508	BITUMINOUS WEARING COURSE	TON	1,590	
2501.515	12" R.C. APRON	EACH	1	
2501.515	15" R.C. APRON	EACH	3	
2501.515	18" R.C. APRON	EACH	2	
2501.515	42" R.C. APRON	EACH	1	
2503.511	12" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	115	
2503.511	15" R.C.P. PIPE SEWER, CLASS IV	LIN. FT.	1369	
2503.511	18" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1401	
2503.511	21" R.C.P. PIPE SEWER, CLASS III	LIN. FT.	1055	
2503.511	36" R.C.P. PIPE SEWER, CLASS II	LIN.FT.	1978	
2503.511	42" R.C.P. PIPE SEWER, CLASS II	LIN.FT.	345	
2506.508	CONSTRUCT M.H. DESIGN A OR F	EACH	20	
2506.509	CONSTRUCT C.B. (L.P.)	EACH	23	
2506.511	RECONSTRUCT M.H.	LIN. FT.	40.7	
2506.522	ADJUST FRAME AND RING CASTING	EACH	25	
2506.521	INSTALL CASTING	EACH	13	
2503.511	12" C.S.P. PIPE SEWER	LIN FT.		68 *
2531.501	CONCRETE CURB AND GUTTER, DESIGN B624	LIN. FT.	10,235	
2531.507	8" CONCRETE DRIVEWAY PVMT.	SQ.YD.	25	
2535.501	BITUMINOUS CURB	LIN. FT.	175	
2571.541	TRANSPLANT TREES, 4" MAPLE	TREE	3	
2575.505	SODDING	SQ.YD	26,370	
2575.531	FERTILIZER 12-12-12	TON	1.35	
2575.501	ROADSIDE SEEDING (MIXTURE 6)	ACRE	2.15	
2575.511	MULCH MATERIAL TYPE 1	TON	4.30	
	8"x 12" WET TAP WITH 8" GATE VALVE	EACH		3
	8" D.I.P. WATERMAIN	LIN. FT.		174
411.620	WIER STRUCTURE	LUMP SUM	1	
505.666	INSTALL HYDRANT	EACH	6	
557.604	INSTALL FENCE	LIN. FT.	920	
504.679	ADJUST VALVE BOX	EACH	8	
504.677	ADJUST WATER SERVICE	EACH	13	
504.677	ADJUST WATERMAIN	EACH	3	
504.673	ADJUST SAN. SEWER SERVICE	EACH	7	
	4" C.I.S.P. SAN. SEWER SERVICE	LIN. FT.		10
	1" CURB STOP AND BOX	EACH		1
	1" CORPORATION COCK	EACH		1
	1" COPPER SERVICE PIPE	LIN. FT.		66
545.602	RELOCATE LIGHT STANDARD	EACH	1	
2451.509	AGGREGATE BEDDING, L.V.	CU.YD.	250	
2511.501	RANDOM RIPRAP, CLASS A	CU.YD.	21.3	
2511.504	FILTER BLANKET, TYPE I	CU.YD.	10.9	
2521.501	4" CONC. SIDEWALK	SQ. FT.	1900	
2531.501	CONCRETE CURB AND GUTTER, DESIGN B612	LIN. FT.	380	

* COUNTY ROAD C-2 QUANTITIES

CLEAR, GRUB AND TRANSPLANT

STATION	LOCATION	DESCRIPTION	CLEAR	GRUB	TRANSPLANT	TRANSPLANT TO
112+76	42' LT.	4" ELM	1	1		
112+85	37' LT.	5" ELM	1	1		
112+99	37' LT.	3-4" ELM	3	3		
113+07	39' LT.	TWIN 8" ELM	1	1		
113+23	38' LT.	4" ELM	1	1		
113+35	39' LT.	6" ELM	1	1		
113+36	39' LT.	8" ELM	1	1		
115+29	39' LT.	2-4" WILLOW	2	2		
115+31	34' LT.	4-7" WILLOW	4	4		
115+45	40' LT.	2-4" WILLOW	2	2		
119+05	50' LT.	13" ELM	1	1		
119+07	44' LT.	7" ELM	1	1		
119+09	37' LT.	7" ELM	1	1		
119+10	44' LT.	7" ELM	1	1		
119+13	43' LT.	8" ELM	1	1		
119+17	44' LT.	6" ELM	1	1		
119+18	46' LT.	TWIN 7" ELM	1	1		
119+42	40' LT.	11" ELM	1	1		
134+59	38' RT.	4" ELM	1	1		
134+61	32' RT.	6" ELM	1	1		
136+12	35' RT.	TWIN ELM	1	1		
140+05	34' LT.	14" ELM	1	1		
140+15	36' LT.	15" ELM	1	1		
140+90	33' LT.	10" ELM	1	1		
142+03	34' RT.	LILAC	X	X		
142+51	34' RT.	LILAC	X	X		
143+78	42' RT.	2" MAPLE			1	50' RT.
143+86	36' RT.	3-1" ELM	X	X		
144+18	40' RT.	BUSH	X	X		
144+27	43' RT.	3-5" ELM	3	3		
144+71	42' RT.	TWIN 15" ELM	1	1		
144+71	46' RT.	4" ELM	1	1		
145+49	30' RT.	STUMP	0	1		
145+83	42' RT.	12" ELM	1	1		
146+17	42' RT.	15" ELM	1	1		
146+23	37' LT.	STUMP	0	1		
146+33	42' RT.	22" ELM	1	1		
146+45	42' LT.	STUMP	0	1		
146+48	38' RT.	4" EVERGREEN			1	50' RT.
146+68	40' LT.	STUMP	0	1		
146+94	40' LT.	STUMP	0	1		
146+98	36' LT.	STUMP	0	1		
146+99	39' LT.	STUMP	0	1		
147+00	39' LT.	STUMP	0	2		
147+19	40' LT.	STUMP	0	1		
147+34	37' LT.	STUMP	0	2		
148+11	45' LT.	TWIN 2" ELM	X	X		
148+29	46' LT.	12" COTTONWOOD	1	1		
148+97	31' LT.	14" COTTONWOOD	1	1		
149+07	37' LT.	19" COTTONWOOD	1	1		
149+78	30' LT.	TWIN 8" ELM	1	1		
149+85	33' LT.	TWIN POPLAR	X	X		
149+87	36' LT.	4-4" POPLAR	4	4		
150+82	35' LT.	22" COTTONWOOD	1	1		
150+95	38' LT.	TWIN COTTONWOOD	X	X		
150+98	34' LT.	TWIN COTTONWOOD	X	X		
150+99	36' LT.	6" COTTONWOOD	1	1		
151+00	35' LT.	7" COTTONWOOD	1	1		
153+13	38' LT.	3-8" ELM	3	3		
153+38	34' LT.	8" POPLAR	1	1		
153+40	32' LT.	10" POPLAR	1	1		
153+82	43' RT.	4" MAPLE			1	50' RT.
154+30	35' RT.	15" MAPLE	1	1		
154+36	39' LT.	8" POPLAR	1	1		
155+18	32' RT.	LILAC	X	X		
155+87	55' LT.	DEAD TREE	X	X		
155+94	35' LT.	24" ELM	1	1		
156+10	31' RT.	BUSH	X	X		
156+45	25' RT.	15" ELM	1	1		
156+76	29' LT.	10" EVERGREEN	1	1		
156+78	35' LT.	BUSH	X	X		
156+78	39' RT.	24" BOX ELDER	1	1		
157+25	36' RT.	15" ELM	1	1		
157+52	32' LT.	24" ELM	1	1		
157+56	35' RT.	22" ELM	1	1		
157+62	29' RT.	BUSH	X	X		
157+88	35' RT.	20" ELM	1	1		
157+92	29' RT.	BUSH	X	X		
158+03	29' RT.	BUSH	X	X		
158+14	29' RT.	BUSH	X	X		
158+15	24' LT.	24" BOX ELDER	1	1		
158+18	29' RT.	BUSH	X	X		
158+19	35' RT.	20" ELM	1	1		
			X	X		
LST2 1+50	3' LT.	14" COTTONWOOD	1	1		
LST2 1+58	10' LT.	TWIN 16" COTTONWOOD	1	1		
LST2 1+85	6' LT.	8" COTTONWOOD	1	1		
LST2 1+87	6' LT.	18" COTTONWOOD	1	1		
LST2 2+01	1' RT.	10" COTTONWOOD	1	1		
LST2 2+02	0	BUSH	X	X		
LST2 2+05	3' LT.	5" COTTONWOOD	1	1		
LST2 2+09	4' LT.	15" COTTONWOOD	1	1		
LST2 2+14	10' LT.	15" COTTONWOOD	1	1		
LST2 2+83	5' LT.	20" ELM	1	1		
LST2 3+18	7' LT.	12" ELM	1	1		
LST2 6+60	22' LT.	2" ELM	X	X		

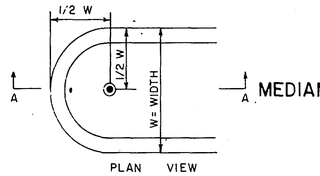
X- FOR INFORMATION ONLY, NOT A PAY ITEM

STANDARD DETAIL PLATES

3000 G	REINFORCED CONCRETE PIPE
3100 F	REINFORCED CONCRETE APRON
3145 A	CONCRETE PIPE JOINT TIES
3006 B	GASKET JOINT FOR R.C. PIPE
4021 C	PRECAST CURB OPENING CATCH BASIN
4000 G	MAN HOLE OR CATCH BASIN
4005 J	MAN HOLE OR CATCH BASIN
4010 E	CONCRETE SHORT CONE AND ADJUSTING RING
4011 C	PRECAST CONCRETE BASE
4101 B	RING CASTING
4108 D	MAN HOLE ADJUSTING RING
4110 D	COVER CASTING
4181 A	ALUMINUM MAN HOLE STEPS
7100 D	CONCRETE CURB AND GUTTER
8000 F	STANDARD BARRICADES
0002 A	SPECIFICATION REFERENCE TO STANDARD PLATES
9102 C	SODDING AT PIPE CULVERT ENDS
3133 A	RIPRAP AT RCP OUTLET
4129 B	CATCH BASIN FRAME CASTING
4151 B	GRATE CASTING FOR CATCH BASIN
4160 C	CURB BOX CASTING FOR CATCH BASIN
7065 C	BITUMINOUS CURB

HYDRANT CHART

REMOVE		INSTALL	
STATION	LOCATION	STATION	LOCATION
131+89	28' RT.	131+89	40' RT.
135+89	28' RT.	135+89	40' RT.
139+67	26' RT.	139+67	50' RT.
143+80	29' RT.	143+80	40' RT.
148+09	28' RT.	148+09	40' RT.
152+03	28' RT.	152+03	40' RT.



PLACEMENT OF MEDIAN HOLES

NOTES:

1.) PAYMENT FOR SLEEVE TO BE INCIDENTAL AND INCLUDED IN ITEM NO. 2531.503 CONCRETE MEDIAN.

2.) WHERE CONCRETE MEDIAN IS PLACED ON EXISTING CONCRETE PAVEMENT, THE EXISTING PAVEMENT SHALL BE BROKEN OUT TO ACCOMMODATE SLEEVE, PAYMENT SHALL BE INCIDENTAL TO ITEM NO. 2531.503

3.) • DENOTES PLACEMENT OF MEDIAN HOLES ON CONSTRUCTION PLAN.

4.) HOLES SHALL BE FILLED WITH SILICA SAND.

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.

Charles V. Hovekell

Date 3-29-77 Reg. No. 10695

REVISED 11/1/77 11/3/77

S.A.P. 62-646-04

Sheet 2 of 36 Sheets

26-116

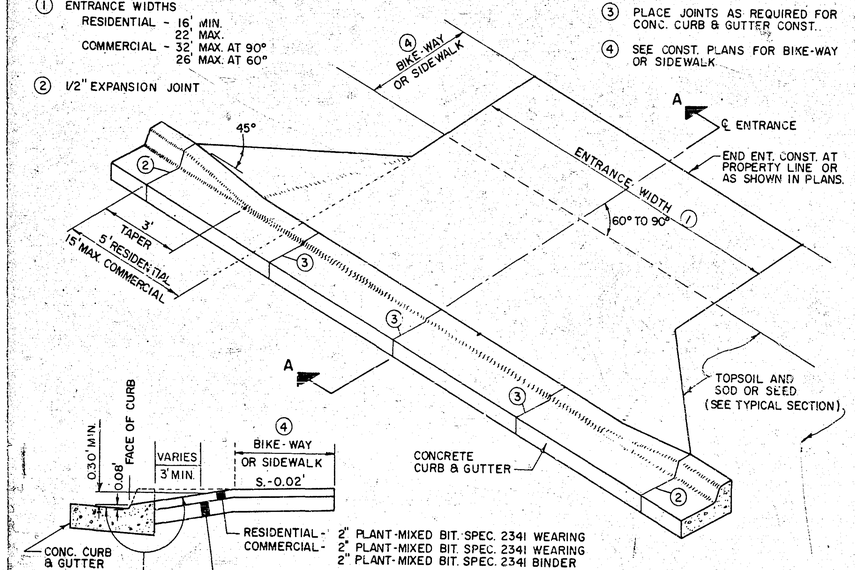
BITUMINOUS ENTRANCE DETAIL

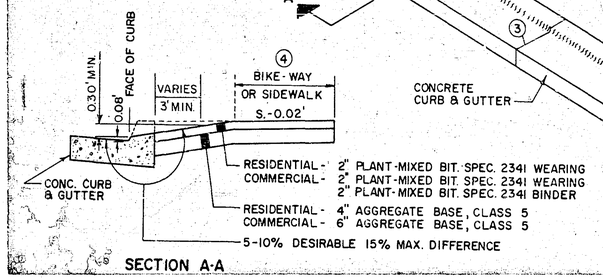
① ENTRANCE WIDTHS
RESIDENTIAL - 16' MIN. 22' MAX.
COMMERCIAL - 32' MAX. AT 90° 26' MAX. AT 60°

② 1/2" EXPANSION JOINT

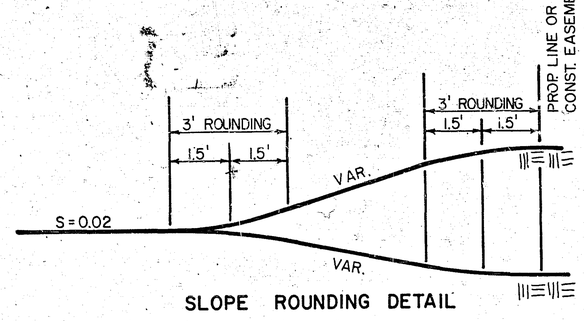
③ PLACE JOINTS AS REQUIRED FOR CONC. CURB & GUTTER CONST.

④ SEE CONST. PLANS FOR BIKE-WAY OR SIDEWALK



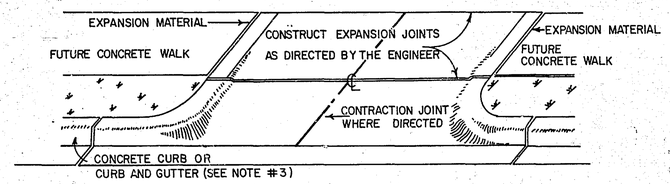


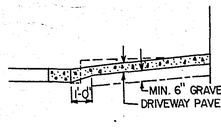
SECTION A-A



SLOPE ROUNDING DETAIL

CONCRETE DRIVEWAY

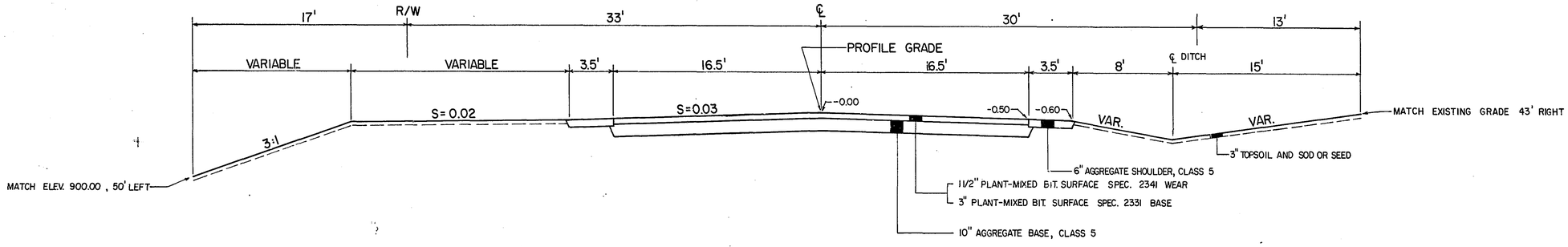




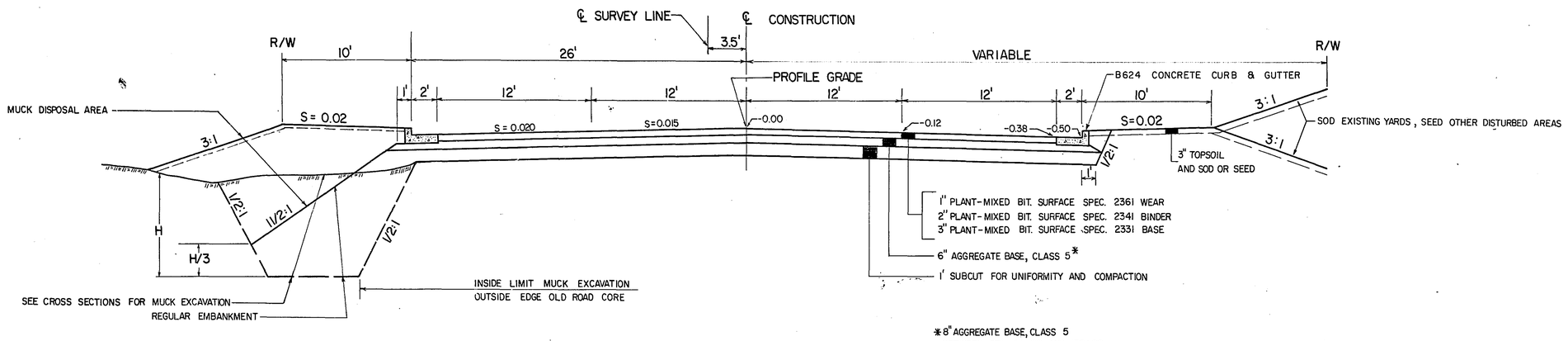
SECTION ON ℄ DRIVEWAY

NOTE: 1. CONTRACTION JOINT REQUIRED IF WIDTH EXCEEDS 16'.
2. THE EXACT LOCATION AND WIDTH OF ENTRANCES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. GUTTER TO BE PAVED INTEGRAL WITH DRIVEWAY PAVEMENT WHERE CURB AND GUTTER IS USED.
4. DRIVEWAY WIDTH, RESIDENTIAL MIN. 12', MAX. 22', COMMERCIAL 90°= 32', 60°= 26'
5. RADIUS, RESIDENTIAL IS 5', COMMERCIAL IS MIN. 5', MAX. 15' ALL TO BE VARIFIED BY THE ENGINEER.

TYPICAL SECTION COUNTY ROAD C-2



TYPICAL SECTION CLEVELAND AVE.



*8" AGGREGATE BASE, CLASS 5 BETWEEN STA. 144+00 AND 150+00

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.
Charles V. Hoverstad
Date 3-29-77 Reg. No. 10695

S.A.P. NO. 62-646-04 Sheet No. 3 of 36 Sheets

26-116

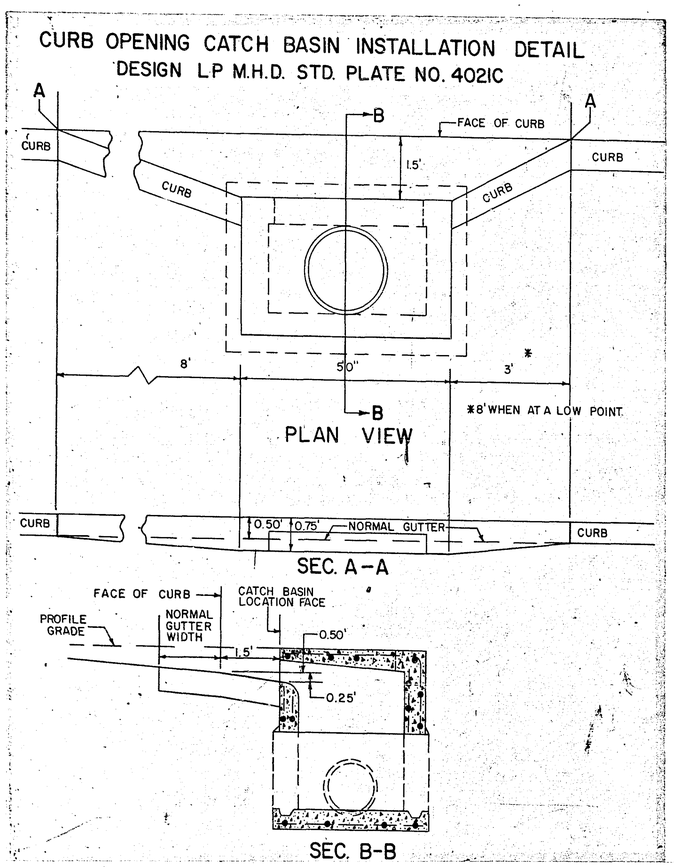
DRAINAGE CHART

STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION PROFILE	ELEVATION ORIGNAL GRATE OR RING	ELEVATION NEW GRATE OR RING	ELEVATION CB. or M.H. INVERT	ADJUST CASTING ASSEMBLY	RECONSTRUCT CATCH BASIN OR MAN HOLE LIN. FT.	INSTALL CASTING ASSEMBLY	FURNISH AND INSTALL PIPE SEWER REINFORCED CONCRETE PIPE 12"	15"	18"	21"	24"	30"	42"	CORRUGATED STEEL PIPE 12"	15"	18"			APRON	CLASS	DRAINS TO STRUCTURE NO.	DRAINS TO INVERT EL.	REMARKS
110+32	58' RT	1	MH	TELE			909.66	912.00	912.00																					
110+57	30' RT	2	MH	SAN. SEW.			909.43	909.41	909.06		-0.35																			REMOVE 2 RINGS
110+93	63' LT	3	C.B.	ST. SEW.			909.10	907.85	907.85																					
110+95	96' LT	4	C.B.	ST. SEW.			909.08	908.07	908.07																					
111+52	100' LT	5	C.B.	ST. SEW.			908.64	907.22	907.22																					
111+74	42' RT	6	C.B.	A OR F			908.55	908.28	908.05	902.72		5.56	C							225						II	12	902.05	REMOVE 185 L.F. 24" R.C.P.
111+81	48' RT	7	MH	TELE.			908.51	908.90	908.90																					
112+29.58	21.5' LT	9	C.B.	A OR F	5.55	B	908.42		907.92	905.38					30											15"	IV	POND	905.08	
112+40	14' LT	10	MH	TELE			908.43	907.83	908.15		-0.23																			REMOVE 1 ROW BRICK
112+65	22' RT	11	MH	SAN. SEW.			908.49	907.38	908.21		+0.84																			ADD 5 CONC. RINGS
114+00	42' RT	12	MH	A OR F	6.65	A	909.10		908.70	902.05										90						42"	II	POND	901.78	
116+67	22' RT	13	MH	SAN. SEW.			910.09	906.55	909.74			+3.19																		BUILD WITH BLOCK
117+00	28 LT.	14	MH	TELE			910.04	906.51	910.14			+3.63																		
		15	MH	SAN. SEW																										
118+68	14' LT	16	MH	TELE			909.26	906.68	908.96			+2.28																		
120+75	33.5 RT	17	C.B.	L.P.	7.34	C	908.22		908.22	900.88					60												IV	18	900.58	
120+75	26.5 LT	18	C.B.	L.P.	8.14	C	908.22		908.22	900.08						25										18"	III	POND	900.00	
121+82	80' RT	19	MH	SAN. SEW.			907.69	910.50	910.50																					
123+65	33.5 RT	20	C.B.	L.P.	5.29	C	906.77		906.77	901.48					60												IV	21	901.18	
123+65	26.5 LT	21	C.B.	L.P.	6.09	C	906.77		906.77	900.68						290											III	18	900.08	
124+69	12' LT	22	MH	TELE			906.25	905.00	905.97			+0.97																		
		23	MH	SAN. SEW.																										
126+60	33.5 RT	24	C.B.	L.P.	3.32	C	905.30		905.30	901.85					60												IV	25	901.55	
126+60	26.5 LT	25	C.B.	L.P.	3.75	C	905.30		905.30	901.55					295												IV	21	900.93	
~~128+94.65~~							~~904.23~~		~~904.23~~	~~901.64~~																			~~901.46~~	
~~128+89.29~~	33.5 RT	26	C.B.	L.P.	3.11	C	~~904.37~~		~~904.37~~	~~901.76~~					60												IV	27	~~901.37~~	
~~128+94.65~~							~~904.23~~		~~904.23~~	~~901.21~~																				
~~128+89.29~~	26.5 LT	27	C.B.	L.P	3.25	C	~~904.37~~		~~904.37~~	~~901.12~~						295											III	28	900.33	
131+82	35' LT	28	C.B.	L. P.	5.37	C	905.70		905.70	900.33						80											III	33	900.09	
131+07	18' LT	29	MH	TELE			905.39	903.62	905.00		+1.38																			
131+19	14' LT	30	MH	TELE			905.47	903.87	905.17		+1.30																			
131+22	22' RT	31	MH	WATER			905.49	903.35	905.11		+1.81																			
131+83	23' RT	32	MH	WATER			905.86	903.63	905.46			+2.4																		REMOVE RINGS ADD 2' SECTION
131+80	45' RT	33	CB	L.P	5.61	C	905.70		905.70	900.09						30										18"	III	POND	900.00	
136+50	33.5 RT	37	C.B.	L.P.	4.98	C	905.10		905.10	900.12					25											15"	IV	POND	900.00	
136+50	26.5 LT	38	C.B.	L.P.	4.68	C	905.10		905.10	900.42					60												IV	37	900.12	
137+69	22' LT	39	MH	SAN. SEW.			905.45	905.29	904.97			+5.0																		REMOVE 1' SECTION REPLACE CONE
138+58	33.5 RT	40	CB	L.P.	4.61	C	905.88		905.88	901.27					23												IV	41	901.04	
138+80	56' RT	41	MH	A OR F	5.67	A	906.00		905.50	899.83								325									II	47	899.02	
138+58	26.5 LT	42	CB	L.P.	4.01	C	905.88		905.88	901.87					60												IV	40	901.27	
138+50	58' LT	41 A	WIER							899.90								20									II	41	899.83	
138+67	15' LT	43	MH	TELE			905.94	905.80	905.61		-0.19																			
141+29	22' LT	44	MH	SAN. SEW.			907.25	907.46	906.77			+4.0																		REMOVE CONE, FRI 2' CONE & MEX. HAT
142+00	230' RT.	45	FES				907.65			900.00					196											15"	IV	46	899.14	
142+00	33.5 RT.	46	C.B.		8.51	C	907.65		907.65	899.14					17												IV	47	899.02	
142+00	16.5' RT.	47	MH		8.43	A	907.65		907.45	899.02								300									II	50	~~898.51~~ ~~898.27~~	
142+10	26.5 LT	48	C.B.	L.P.	4.00	C	907.65		907.65	903.65					45												IV	47	900.70	
144+90	22' LT	49	MH	SAN. SEW.			908.84	908.40	908.36		-0.04																			
145+00	17' RT	50	MH	A OR F	10.36	A	908.85		908.62	~~898.51~~ ~~898.27~~								275									II	54	898.04	
146+35	16' LT	51	MH	TELE			908.42	908.85	908.07		-0.78																			
146+46	17' LT	52	MH	TELE			908.38	908.85	908.03		-0.82																			
147+75	33.5 RT	53	C.B.	L.P.	4.72	C	907.72		907.72	903.00					17												IV	54	902.91	
147+75	17' RT	54	MH	A OR F	9.46	A	907.72		907.50	898.04								193									II	60	897.81	
147+75	26.5 LT	55	C.B.	L.P.	4.72	C	907.72		907.72	903.00					43												IV	54	902.79	
148+21	24' LT	56	MH	SAN. SEW.			907.50	906.05	907.50			+5.50																		REMOVE CONE, ADD 2' SECTION, REPLACE CONE
148+21	48' LT	57	MH	SAN. SEW.			907.50	903.44	903.44																					
148+15	48 LT	57A	LIFT STA.	SAN. SEW.			907.52																							

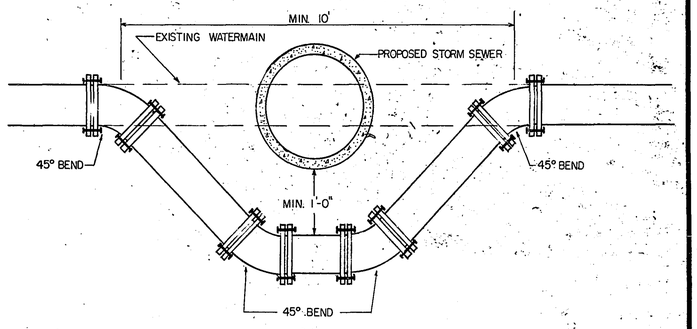
CASTINGS — A = RING CASTING M.H.D. NO. 700-7, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
B = M.H.D. CASTING NO. 802-A, GRATE NO. 811, CURB BOX NO. 823 A (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
C = RING CASTING M.H.D. NO. 790-2, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
D = RING CASTING M.H.D. NO. 700-7, COVER CASTING NO. 730-6 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).

MANHOLES & CATCH BASINS — A OR F, M.H.D. STD. PLATE NO. 4000G OR 4005I; L.P., DETAIL ON SHEET NO. 4

CURB OPENING CATCH BASIN INSTALLATION DETAIL



LOWER WATERMAIN DETAIL 1" = 2'-0"



1. ALL PIPE TO BE DUCTILE IRON
2. ALL FITTINGS TO BE CAST IRON MECHANICAL JOINT

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.
Charles V. Hanchett
Date 3-29-77 Reg. No. 10695

S.A.P. NO. 62-646-04

Sheet No. 4 of 36 Sheets

26-116

DRAINAGE CHART

STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION PROFILE	ELEVATION ORIGNAL GRATE OR RING	ELEVATION NEW GRATE OR RING	ELEVATION C.B. or M.H. INVERT	ADJUST CASTING ASSEMBLY	RECONSTRUCT CATCH BASIN OR MAN HOLE L.IN. FT.	INSTALL CASTING ASSEMBLY	FURNISH AND INSTALL PIPE SEWER REINFORCED CONCRETE PIPE 12"	15"	18"	21"	24"	36"	42"	FURNISH AND INSTALL PIPE SEWER CORRUGATED STEEL PIPE 12"	15"	18"			APRON	CLASS	DRAINS TO STRUCTURE NO.	DRAINS TO INVERT EL.	REMARKS
149+35	33.5 RT	58	C.B.	L.P	4.90	C	906.90		906.90	902.00					38												IV	60	901.81	
149+35	26.5 LT	59	C.B.	L.P.	4.90	C	906.90		906.90	902.00.					55												IV	60	901.72	
149+68	17' RT	60	MH	A OR F	9.09	A	907.12		906.90	897.81									280								II	60-A	897.47	
2+80	LST 1	60A	MH	A OR F	6.53	A	904.00		904.00	897.47									295								II	60-B	897.12	
5+75	LST 1	60B	MH	A OR F	7.88	A	905.00		905.00	897.12									63								II	60-C	897.04	
6+28	LST 1	60C	MH	A OR F	7.21.	A	904.25		904.25	897.04									227								II	60-D	896.77	
149+75	17' RT	61	MH				907.13	907.22	906.91	896.90		-4.0																61-A	897.38	REMOVE CONE, F&I 2' SEC. & MEX. HAT
2+79	LST 2	61A	MH				904.00	904.05		897.38																		61-B	897.10	
5+73	LST 2	61B	MH				904.88	904.90		897.10																		61-C	896.80	
8+15	LST 2	61C	MH				904.30	904.30		896.80																		STATE OF MINN		
149+90	24' LT	62	MH	SAN. SEW.			907.14	906.74	907.15		+0.39																			
149+90	47' RT	63	MH	SAN. SEW.			907.14	907.56	907.56																					
152+02	24' LT	64	MH	SAN. SEW.			908.11	907.10	908.10		+1.00																			BUILD WITH RINGS
153+00	33.5 RT	65	C.B.	L.P.	5.60	C	908.60		908.60	903.00					17												IV	66	902.91	
153+00	17' RT	66	MH	A OR F	7.20	A	908.60		908.38	901.18							325										III	61	899.55	
153+00	26.5' LT	67	C.B.	L.P.	5.60	C	908.60		908.60	903.00					43												IV	66	902.79	
153+40	47 RT	68	MH	SAN. SEW.			908.80	912.00	912.00																					
153+92	13' LT	69	MH	TELE			909.06	910.04	908.78			-1.26																		
154+06	31' LT	70	MH	TELE			909.15	909.48	909.50																					
155+89	21' LT	71	MH	SAN. SEW.			910.75	912.39	910.39			-4.50																		REMOVE CONE, F&I 1' SEC & MEX HAT
156+75	33.5 RT	72	C.B.	L.P.	4.29	C	911.79		911.79	907.50					17												IV	73	907.28	
156+75	17' RT	73	MH	A OR F	8.52	A	911.79		911.57	903.05							375										III	66	901.18	
156+75	26.5 LT	74	C.B.	L.P.	4.29	C	911.79		911.79	907.50					43												IV	73	907.42	
160+13	24' LT	75	MH	SAN. SEW.			915.77	916.18	915.75			-4.0																		REMOVE CONE, F&I 2' SEC & MEX. HAT
160+20	22' RT	76	MH.	WATER			915.81	916.23	915.43		-0.80																			REMOVE RINGS, F&I 6" CASTING
160+30	17' RT	77	MH	A OR F	10.81	A	915.85		915.63	904.83							355										III	73	903.05	
8+55	L^{STI}	60D	MH	A OR F			904.25		904.25																					D.O.T.

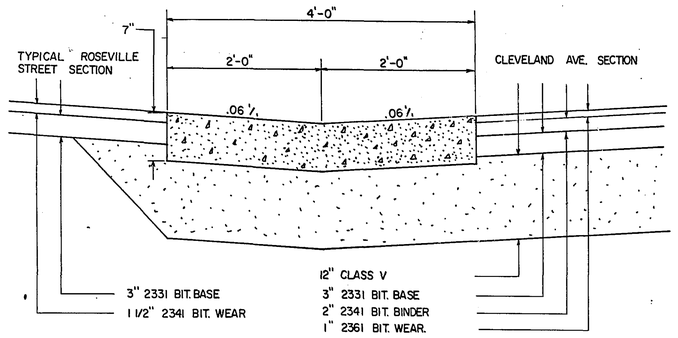
COUNTY ROAD D

81+15	30 RT	78	C.B.	A OR F	9.74	D	916.00		916.00	906.26								181.								III	77	905.12	
83+35	30 RT	79	MH	A OR F	10.05	D	916.70		917.70	907.65								220								III	78	906.26	
86+15	30 RT	80	MH	A OR F	8.59	D	918.00		918.00	909.41								280								III	79	907.65	
86+55	66' RT	81	FES				917.80			909.80				55							12"					IV	80	909.41	
81+92	28' LT	82	CB	A OR F	5.00	D			915.00	910.00					95											IV	78	909.05	
83+13	50' RT.	83	C.B.	A OR F	5.00	B	916.30		916.20	911.20				30												IV	79	910.90	
82+83	50' RT	84	C.B.	A OR F	4.10	B	915.70		915.60	911.50				30												IV	83	911.20	

CASTINGS
- A = RING CASTING M.H.D. NO. 700-7, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
- B = MHD GRATE NO. 802-A, GRATE NO. 811, CURB BOX NO. 823A (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
- C = RING CASTING MHD NO. 790-2, COVER CASTING NO. 712 (INCLUDE WITH STRUCTURE, NOT SEPARATE PAY ITEM).
- D = RING CASTING MHD NO. 700-7, COVER CASTING NO. 730-6 (INCLUDE WITH STRUCTRE, NOT SEPERATE PAY ITEM.)

MANHOLES & CATCH BASINS
- 4
- A. OR F, M.H.D. STD. PLATE NO. 4000G OR 4005I
- L.P., DETAIL ON SHEET NO. 4

CONCRETE GUTTER THRU INTERSECTIONS 1" = 1'-0"



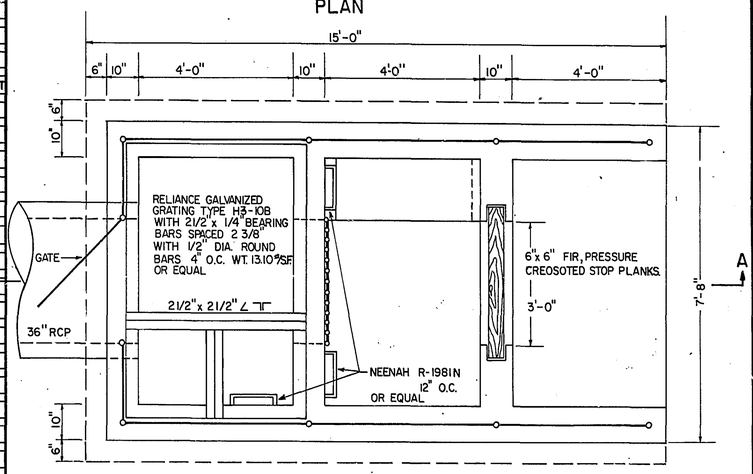
PAID FOR AS B624 CONCRETE CURB AND GUTTER

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 _____ Reg. No. _____

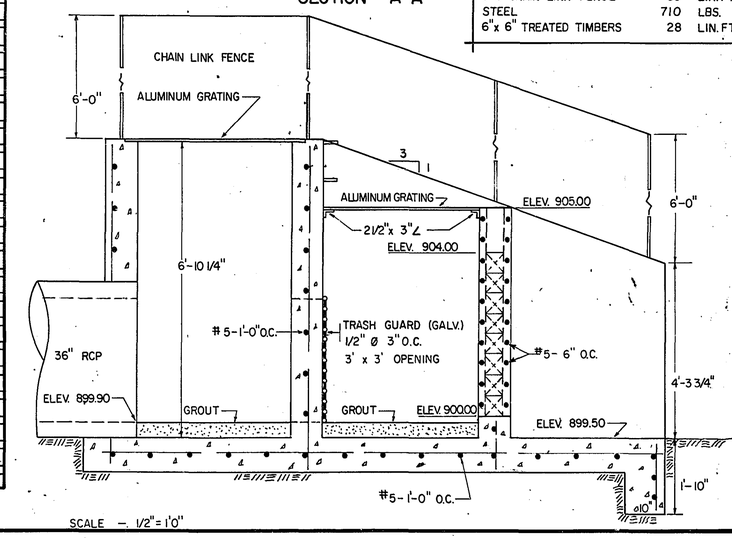
WIER STRUCTURE

PLAN



CONCRETE, DESIGN 3443	14.5	CU.YD.
6'-0" CHAIN LINK FENCE	35	LIN.FT.
STEEL	710	LBS.
6"x 6" TREATED TIMBERS	28	LIN.FT.

SECTION A-A



SCALE - 1/2" = 1'0"

S.A.P. NO. 62-646-04

Sheet No. 5 of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

NOTE- FOR MORE INFORMATION CONCERNING MHD'S ELECTRICAL SYSTEM AT STA. 112+00 SEE PAGES 36A & 36B.

SCALE 1" = 30'

12" CMP CB 4
CB 5 15" CMP
42" RCP
12" CMP CB 3
TAPER TO MATCH EXISTING CURB
REMOVE GUARD POSTS (INCIDENTAL)
50' R
RELOCATE & RECONNECT EXIST. LIGHT STANDARD 5' BEHIND CURB (PROP. MN/DOT, PAY ITEM)
INSTALL UNDERGROUND CABLE
RELOCATE & RECONNECT EXIST. POWER POLE 5' BEHIND CURB (BY OTHERS)
UG ELEC.
CB 9
MH 10
CONSTRUCTION LIMITS
BEGIN TAPER 114+50.00
50:1 TAPER
END TAPER 116+50.00
B624 CONCRETE CURB & GUTTER
MH 14
MH 16
UGTC
27'
26.5'
22.5'
40'
110 111 112 113 114 115 116 117 118 119
WARP CROWN TO DRAIN TO C.B. 6
+63 .3'R 65'R B612 CURB AND GUTTER 3'R +50
DOHRN TRUCKING NO. ENT.
MH 11
MH 13
MH 2
43'
30:1 TAPER
24" CMP
MH 12
MH 15
36" RCP
CB 6
MH
REMOVE
PUDDLE
EXISTING CMP ENT. CULVERT
RAISE HYDRANT AS REQUIRED BY CITY OF ROSEVILLE FORCES
MH 1
GRADE TO DRAIN
CONSTRUCTION LIMITS
BEGIN CONST. 110+50.00
BEGIN TAPER 111+75.00
BLDG.
END TAPER 115+95.00
PUDDLE GRADE TO ELIMINATE PUDDLE
50'±
17'
32'
IONA LANE
33'
PLACE WEARING COURSE MIXTURE, SPEC 2341 WEAR IN ENTRANCE TO ELIMINATE PONDING.

CONSTRUCTION NOTES:
CONSTRUCT 12-15 L.F. 12" CMP + APRON WITH SURFACE DRAIN LOCATED ON SOUTH RADIUS IONA LANE.

GRADE AREAS INDICATED ABOVE TO DRAIN AND PLACE TOPSOIL AND SOD. WORK MAY REQUIRE PLACING FILL.

PVI 9906.10 PVI 9906.10 PVI 9906.10 PVI 9906.10 PVI 9906.10 PVI 9906.10

910 905 900

-0.92%
CB 6
2.0'
VC=200'
M=0.36
903.23
902.73
10" SUBCUT FOR UNIFORMITY AND COMPACTION
225' 42" RCP at 0.30%
902.05
MH 12
+0.50%
PROFILE GRADE
VC=100'
M=0.125
-0.50%
EXISTING ℄ GRADE

CB 9
15" RC APRON WITH TRASH GUARD AND RIPRAP
30:15"
SQF of 100%
905.38
WATER LEVEL APRIL 1976
902.70
42" R.C. APRON WITH TRASH GUARD AND RIPRAP
901.78
90' 42" RCP at 0.30%
902.05
MH 12
10-15" RCP PLUS APRON WITH TRASH GUARD AND SOD

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 3-14-77 Reg. No. 13,615

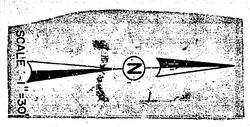
SUPPLEMENTAL AGREEMENT

S.A.P. 62-646-04 8-01-79 DOHRN TRUCKING DRAINAGE IMPROVEMENT WORK LKE Sheet No. 6 REVISED of 36 Sheets

76-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

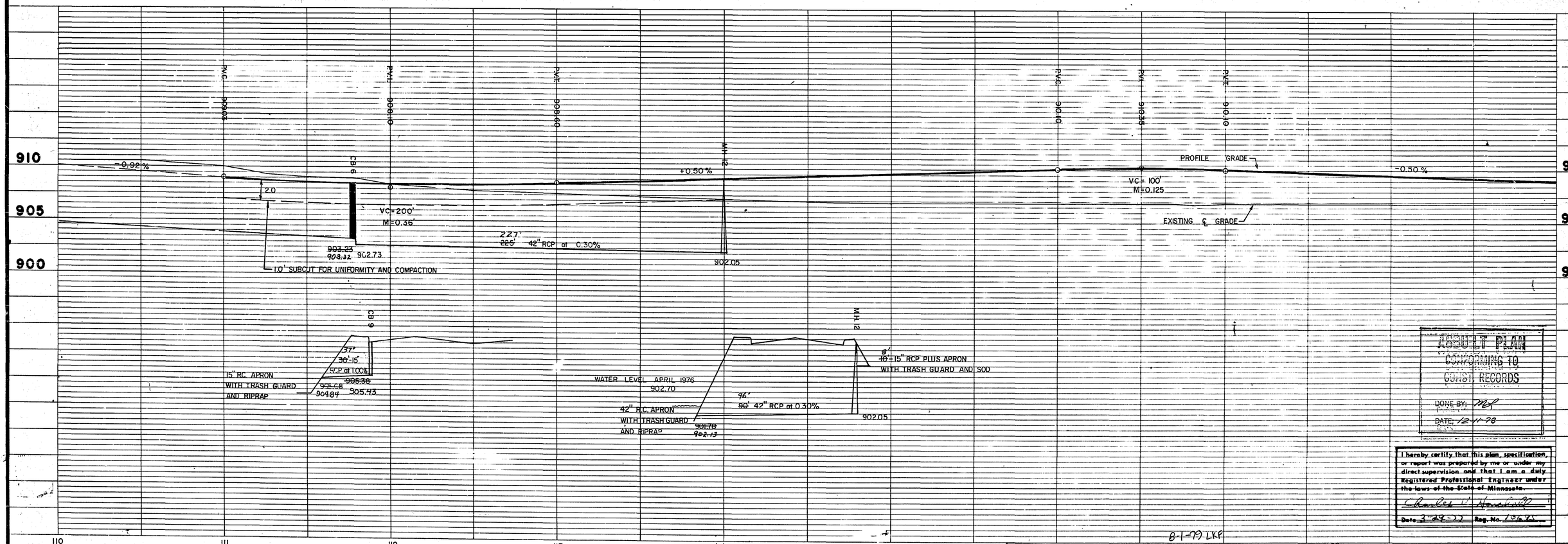
NOTE- FOR MORE INFORMATION CONCERNING MHD'S ELECTRICAL SYSTEM AT STA. 112+00 SEE PAGES 36A & 36B.



NOTE:

CLEVELAND AVENUE RECEIVED 1" OF 2361 BIT. OVERLAY BETWEEN COUNTY ROAD C & I 35W RAMP ROADS UNDER S.A.# 5 OF S.A.P. 62-646-04.

TAPER TO MATCH EXISTING CURB
REMOVE GUARD POSTS (INCIDENTAL)
RELOCATE & RECONNECT EXIST. LIGHT STANDARD 5' BEHIND CURB (PROP. MN/DOT, PAY ITEM)
INSTALL UNDERGROUND CABLE
RELOCATE & RECONNECT EXIST. POWER POLE 5' BEHIND CURB (BY OTHERS)
CONSTRUCTION LIMITS
BEGIN TAPER 114+50.00
50:1 TAPER
END TAPER 116+50.00
B624 CONCRETE CURB & GUTTER
B612 CURB AND GUTTER
WARP CROWN TO DRAIN TO C.B. 6
30:1 TAPER
REMOVE
RAISE HYDRANT AS REQUIRED BY CITY OF ROSEVILLE FORCES
EXISTING ENT. CMP CULVERT
GRADED TO DRAIN
GRADE TO DRAIN
BALES OF HAY
LOW AREA
BLDG.
BEGIN CONST. 110+50.00
BEGIN TAPER 111+75.00
END TAPER 115+95.00
SKIN PATCH ENT. WITH 2341 WEAR TO ELIMINATE PONDING IN ENTRANCE
IONA LANE
ENT.
CB1 CB2 CB3 CB5 CB6 CB9
MH 1 MH 2 MH 10 MH 11 MH 12 MH 13 MH 14 MH 15 MH 16
12" CMP 15" CMP 42" RCP 36" RCP 24" RCP 24" CMP 18" CMP 12" CMP 30"x15" RCP 98"x15" RCP 17"x13" CMP
110 111 112 113 114 115 116 117 118 119



AS BUILT PLAN CONFORMING TO CONST. RECORDS
DONE BY: MLP
DATE: 12-11-78

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.
Charles L. Hansell
Date 3-29-77 Reg. No. 13675

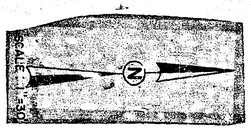
8-1-79 LKP
5-5-81 DOHRN TRUCKING DRAINAGE IMPROVEMENT WORK

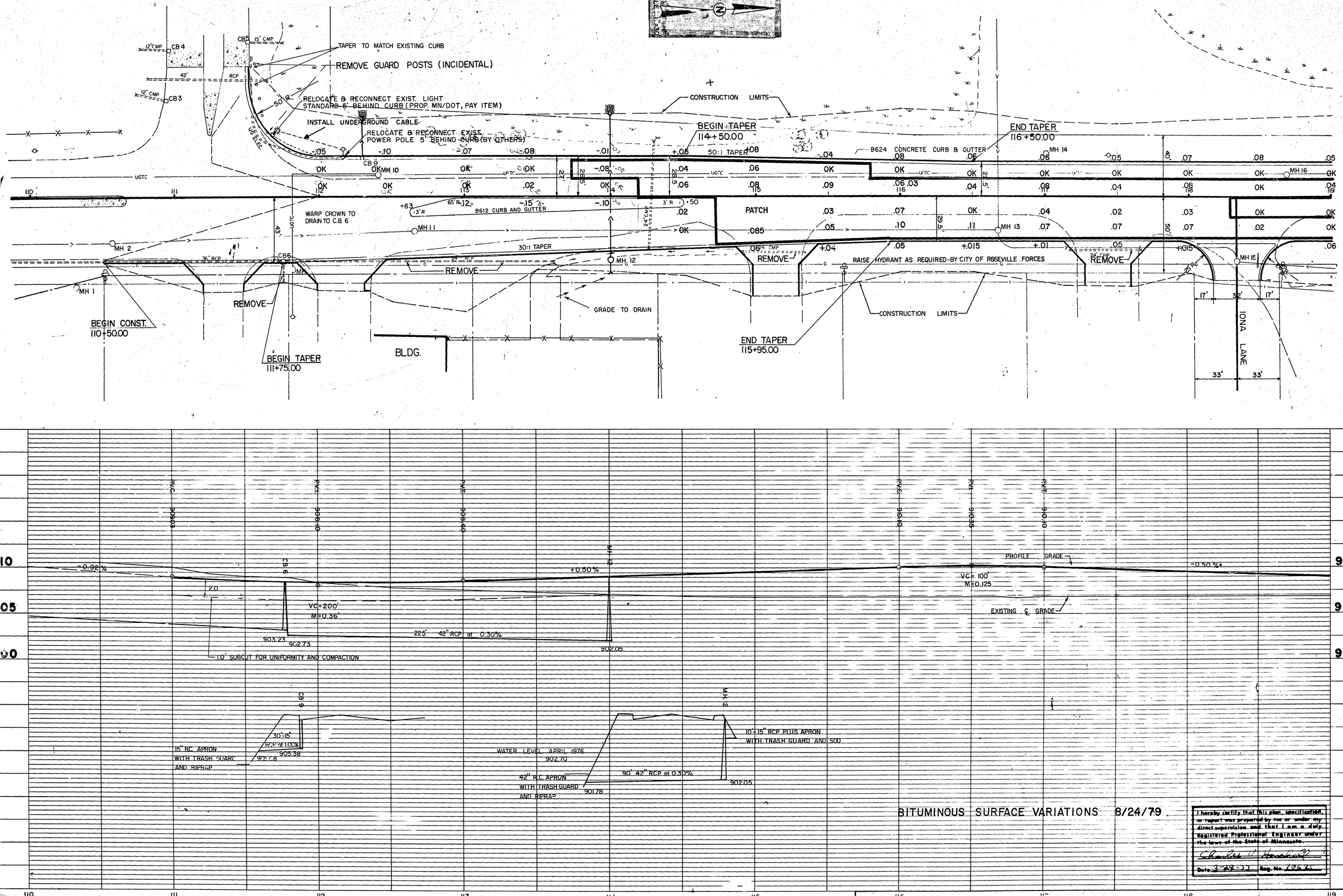
S.A.P. 62-646-04 Sheet No. 6 REVISED of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

NOTE- FOR MORE INFORMATION CONCERNING MHD'S ELECTRICAL SYSTEM AT STA. 112+00 SEE PAGES 36A & 36B.





BITUMINOUS SURFACE VARIATIONS 8/24/79

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 3-29-79 Reg. No. 10671

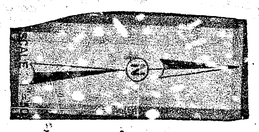
S.A.P. 62-646-04

Sheet No. 6 of 36+ Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

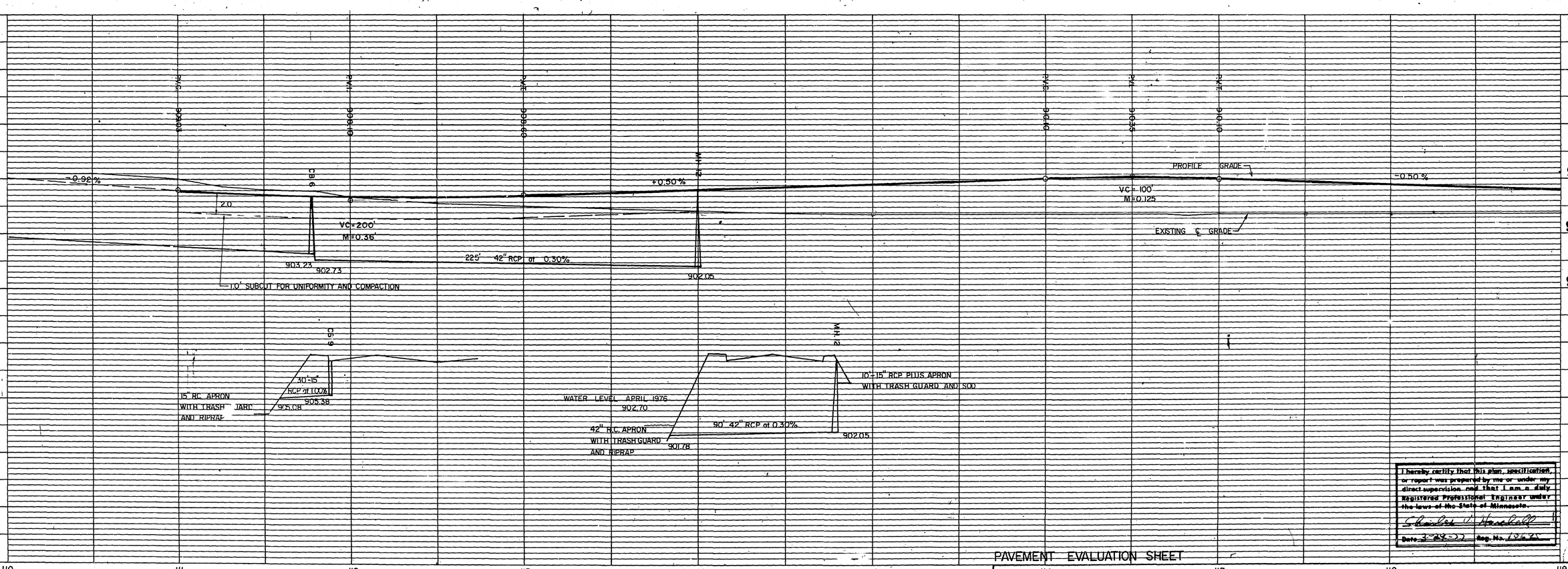
NOTE- FOR MORE INFORMATION CONCERNING MHD'S ELECTRICAL SYSTEM AT STA. 112+00 SEE PAGES 36A & 36B.



VISUAL INSPECTION
CRACKS
SEPERATIONS

BENKELMAN BEAM TEST
(DEFLECTIONS GREATER THAN 0.032")

CB4 12" CMP
CB5 15" CMP
CB3 12" CMP
42" RCP
TAPER TO MATCH EXISTING CURB.
REMOVE GUARD POSTS (INCIDENTAL)
50' R
RELOCATE & RECONNECT EXIST. LIGHT STANDARD & BEHIND CURB (PROP. MN/DOT, PAY ITEM)
INSTALL UNDERGROUND CABLE
RELOCATE & RECONNECT EXIST. POWER POLE 5' BEHIND CURB (BY OTHERS)
16" ELEC.
CONSTRUCTION LIMITS
BEGIN TAPER 114+50.00
50:1 TAPER
END TAPER 116+50.00
B624 CONCRETE CURB & GUTTER
MH 14
MH 10
BASE COURSE
UGTC
MH 16
110 111 112 113 114 115 116 117 118 119
63' 65' R 3' R -3' R
B612 CURB AND GUTTER
WARP CROWN TO DRAIN TO C.B. 6
MH 11
MH 13
MH 2
30:1 TAPER
24" CMP
36" RCP
CB6
MH 12
REMOVE
RAISE HYDRANT AS REQUIRED BY CITY OF ROSEVILLE FORCES
MH 15
MH 1
GRADE TO DRAIN
BEGIN CONST. 110+50.00
BEGIN TAPER 111+75.00
BLDG.
END TAPER 115+95.00
17' 32' 17'
IONA LANE
33' 33'



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.

Charles V. Hanchett

Date 3-24-77 Reg. No. 13671

PAVEMENT EVALUATION SHEET

S.A.P. 62-646-04

Sheet No. 6A of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE: 1"=30'

SWAMP

CUT DITCH TO POND AS DIRECTED BY ENGINEER

CLOSE

REMOVE AND RELOCATE FENCE

FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

BIT. SPILL

REMOVE 24" CMP

CB 18 | CB21 | CB 25

MH22

119 120 121 122 123 124 125 126 127 128

40' | 22.5 | 33' | 40' | 40' | 22.5

50' | 29.5 | 50' | 29.5

.024 .026 .026 .026 .032 .034 .036 .038 .032
.023 .026 .028 .036 .037 .036 .035 .048 .057
.017 .018 .020 .022 .023 .028 .030 .032 .029 .044 .041 .055 .057
.026 .027 .027 .029 .035 .038 .040 .032 .030 .054 .059 .055 .041

CB17 | CB20 | CB24

B624 CONCRETE CURB & GUTTER

EXIST. BIT.

MH 19 | MH 23

REPLACE BIT. TO CONST. LIMITS

SALVAGE AND REINSTALL FENCE

GRADE TO DRAIN

EXIST. BIT. | EXIST. BIT. | EXIST. BIT.

CB 18 | CB 17 | CB 21 | CB 20 | CB 25 | CB 24

25'-18"RCP PLUS APRON WITH TRASH GUARD AND RIPRAP

59' 60'-15" RCP at 0.50%

900.00 | 900.08 | 900.58 | ~~900.88~~ 900.52

59' 60'-15" RCP at 0.50%

~~900.68~~ 900.62 | 901.18 | ~~901.48~~ 901.87

59' 60'-15" RCP at 0.50%

901.55 | ~~901.85~~ 901.84

910 | 905 | 900

PROFILE GRADE

EXISTING ℄ GRADE

-0.50%

2.0

290'-18" RCP at ~~0.30%~~

295'-15" RCP at 0.30%

~~900.08~~ 900.00 | ~~900.68~~ 900.93 | ~~901.55~~ 901.54

10' SUBCUT FOR UNIFORMITY AND COMPACTION

Bonded Concrete Barrier Curb & Gutter Design 25, T Beam Jan. 1979 Revised

7 of 36 sheets

MK 12-11-78

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.

Charles V. Hauckoll

Date 3-27-79 Reg. No. 10695

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE 1"=30'

SWAMP

CUT DITCH TO POND AS DIRECTED BY ENGINEER

CLOSE

REMOVE AND RELOCATE FENCE

FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

REMOVE 24" CMP

CB 18 CB 17 CB 21 CB 20 MH 22 CB 25 CB 24

B624 CONCRETE CURB & GUTTER

EXIST. BIT.

MH 19 MH 23

REPLACE BIT. TO CONST. LIMITS

GRADE TO DRAIN

SALVAGE AND REINSTALL FENCE

25'-18" RCP PLUS APRON WITH TRASH GUARD AND RIPRAP

60'-15" RCP at 0.50%

290'-18" RCP at 0.30%

295'-15" RCP at 0.30%

PROFILE GRADE

EXISTING ℄ GRADE

-0.50%

2.0'

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

BITUMINOUS SURFACE VARIATIONS 8/24/79

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.

Charles V. Hinchoff

Date 3-29-77 Reg. No. 10695

S.A.P. 62-646-04

Sheet No. 7 of 36 Sheets 26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

SCALE: 1"=30'

REMOVE AND RELOCATE FENCE
FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

SWAMP

CUT DITCH TO POND AS DIRECTED BY ENGINEER

CLOSE 290'X 18" R.C.P.

REMOVE 24" CMP

295'X 15" R.C.P

BIT. SPILL.

BIT. SPILL.

BIT. SPILL.

CB 18 CB 21 MH 22 CB 25 FRENCH DRAIN PIPE

CB 17 CB 20 CB 24 FRENCH DRAIN PIPE

40' 22.5' UGTC 33' 40' 40' 22.5'

50' 29.5' 46' 50' 29.5'

55'X 15" R.C.P. 55'X 15" R.C.P. 59'X 15" R.C.P.

119 120 121 122 123 124 125 126 127 128

B624 CONCRETE CURB & GUTTER

EXIST. BIT. MH 19 MH 23 EXIST. BIT. EXIST. BIT. EXIST. BIT.

REPLACE BIT. TO CONST. LIMITS

SALVAGE AND REINSTALL FENCE

GRADE TO DRAIN

CB 18 CB 17 CB 21 CB 20 CB 25 CB 24

25'-18"RCP PLUS APRON WITH TRASH GUARD AND RIPRAP

59' 60'-15" RCP at 0.50%

900.00 ~~900.00~~ 900.00 900.58 ~~900.00~~ 900.52

59' 60'-15" RCP at 0.50%

901.18 ~~900.68~~ 900.62 ~~901.48~~ 901.87

59' 60'-15" RCP at 0.50%

901.55 ~~901.85~~ 901.84

910 905 900

REVISED PROFILE GRADE

PROFILE GRADE

-0.50%

2.0

EXISTING ℄ GRADE

0.21%

290'-18" RCP at ~~0.30%~~

295'-15" RCP at ~~0.30%~~

~~900.00~~ 900.00 900.68 900.93 901.55

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: MK
DATE: 12-11-78

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.
Charles V. Stuckall
Date 3-24-77 Reg. No. 10695

S.A.P. 62-646-04

Sheet No. 7 of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

⚠ STATE CORE TEST
STA. 119+35 LT. 10'
ID.NO. 78450 2331 BASE : OIL 4.2%
78451 2341 BINDER: OIL 4.2%

SWAMP

CUT DITCH TO POND AS DIRECTED BY ENGINEER

CLOSE

REMOVE 24" CMP

REMOVE AND RELOCATE FENCE
FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

BIT. SPILL.

BASE MAT

BASE COURSE

CB 18 CB 21 CB 25 MH 22 CB 17 CB 20 CB 24 MH 19 MH 23

B624 CONCRETE CURB & GUTTER

EXIST. BIT.

REPLACE BIT. TO CONST. LIMITS

SALVAGE AND REINSTALL FENCE

GRADE TO DRAIN

25'-18"RCP PLUS APRON WITH TRASH GUARD AND RIPRAP 900.00

60'-15" RCP at 0.50% 900.58 900.08 900.88

60'-15" RCP at 0.50% 901.18 900.68 901.48

60'-15" RCP at 0.50% 901.55 901.85

290'-18" RCP at ~~0.30%~~ 0.21% 900.08

295'-15" RCP at ~~0.30%~~ 0.21% 900.68 900.93 901.55

-0.50%

2.0'

10' SUBCUT FOR UNIFORMITY AND COMPACTION

PROFILE GRADE

EXISTING ℄ GRADE

910 905 900

119 120 121 122 123 124 125 126 127 128

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.
Charles V. Marshall
Date 3-29-77 Reg. No. 10695

PAVEMENT EVALUATION SHEET
S.A.P. 62-646-04
Sheet No. 7A of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

REMOVE AND RELOCATE FENCE
FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

STA. 131+53.40 P.O.T. = 10+00.00 CO.RD.C-2

EXISTING C.I. MONUMENT

12"x 8" WET TAP WITH 8" GATE VALVE 72'-8" D.I.P. WITH PLUG

CONSTRUCTION LIMITS

BIT. SPILL

CB 27 CB 28 CB 38 CB 26 CB 33 CB 37

MH 29 MH 30 MH 31 MH 32

REMOVE CLOSE

B624 CONCRETE CURB & GUTTER

GRADE TO DRAIN LOW AREAS

12"x 8" WET TAP WITH 8" GATE VALVE 28'-8" D.I.P. WITH PLUG

GRADE TO DRAIN

COUNTY ROAD C-2

CO. RD. C-2 SEE SHEET 14

VC = 100'
M = 0.14

VC = 100'
M = 0.125

PROFILE GRADE

EXISTING ℄ GRADE

+0.62%

= 0.50%

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

59' 60"-15" RCP at 0.30%

18" RCP at 0.30%

83' 82"-18" RCP at 0.30%

31' 30"-18" RCP at 0.30%

18" R.C. APRON WITH TRASH GUARD AND RIPRAP

59' 60"-15" RCP at 0.50%

24"-15" RCP at 0.50%

12" RC. APRON WITH TRASH GUARD AND RIPRAP

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.

Charles V. Hovdsell

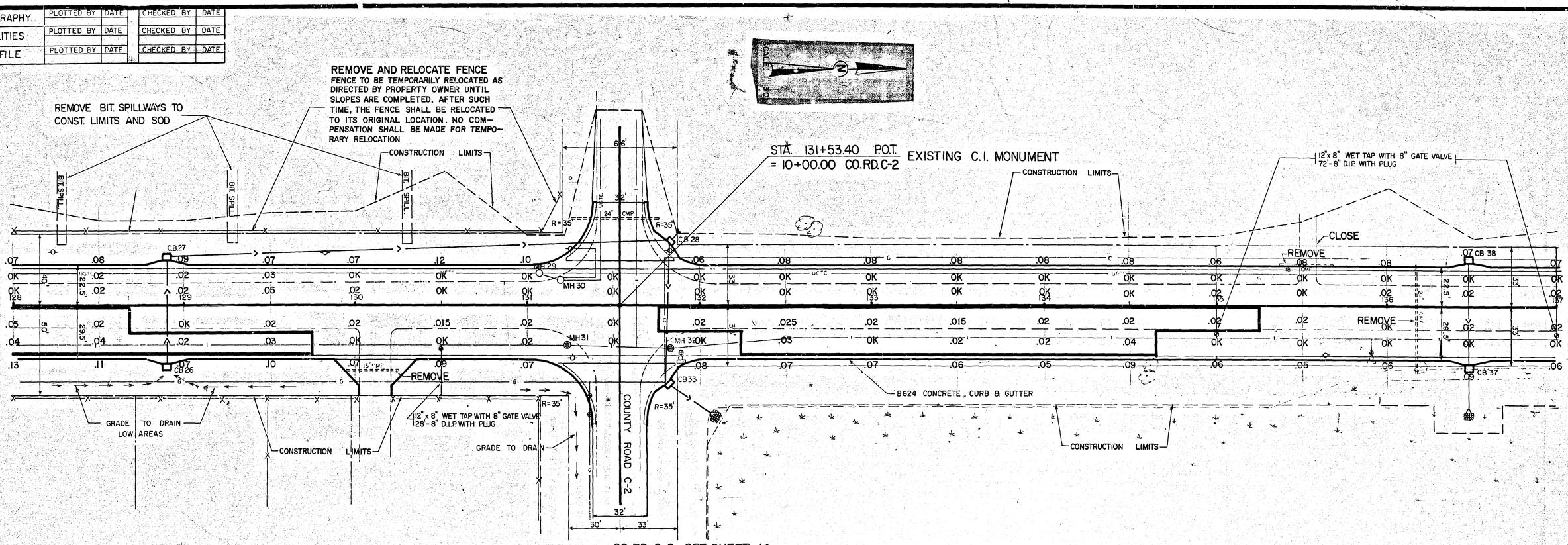
Date 3-27-72 Reg. No. 10655

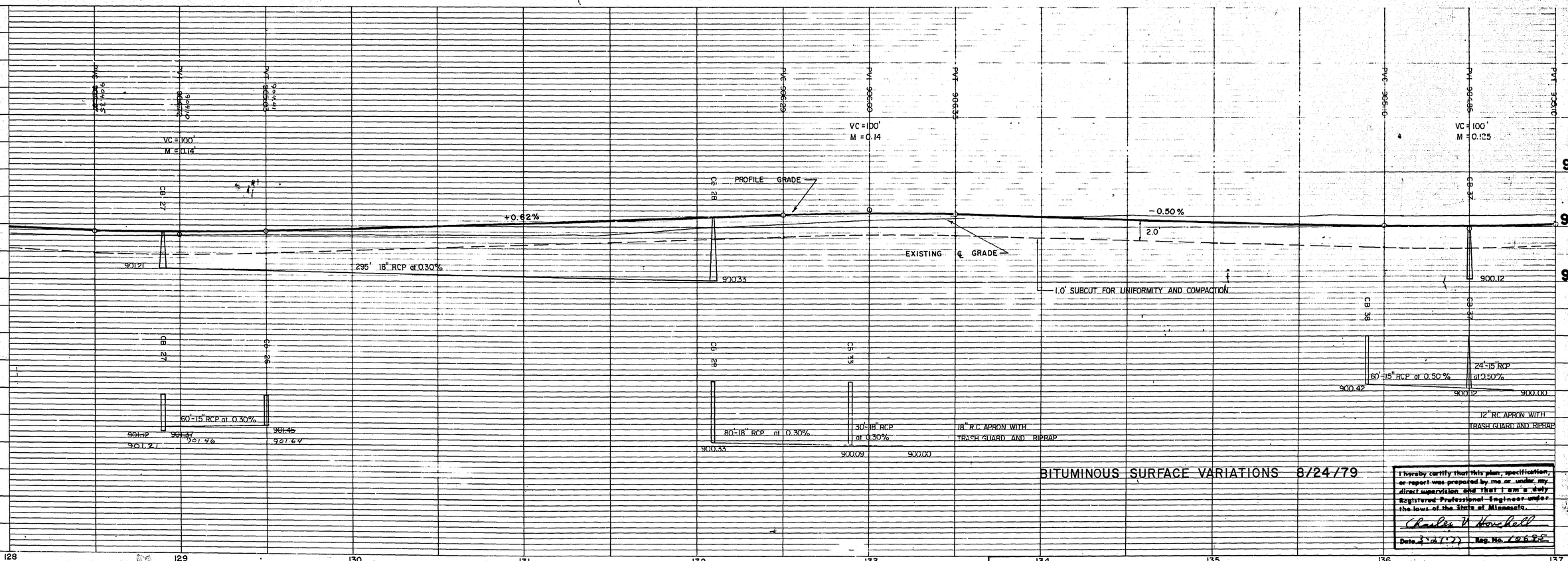
12-11-78

S.A.P. 62-646-04 Sheet No. 8 of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE





BITUMINOUS SURFACE VARIATIONS 8/24/79

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.

Charles V. Bouchall

Date 3-21-79 Reg. No. 20655

S.A.P. 62-646-04 Sheet No. 8 of 36 Sheets

24-416

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

REMOVE AND RELOCATE FENCE
FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

SCALE 1" = 30'

STA. 131+53.40 P.O.T. = 10+00.00 CO.RD.C-2

EXISTING C.I. MONUMENT

12"x 8" WET TAP WITH 8" GATE VALVE 72'-8" D.I.P. WITH PLUG

CONSTRUCTION LIMITS

BIT. SPILL

FRENCH DRAIN PIPE

290'x 18" R.C.P.

CB 27

CB 28

CLEANOUT INSP. TEE

MH 29

MH 30

MH 31

MH 32

CB 33

CB 26

CB 37

CB 38

CLOSE

REMOVE

B624 CONCRETE CURB & GUTTER

GRADE TO DRAIN LOW AREAS

12"x 8" WET TAP WITH 8" GATE VALVE 28'-8" D.I.P. WITH PLUG

GRADE TO DRAIN

COUNTY ROAD C-2

CO. RD. C-2 SEE SHEET 14

66'

32'

24" CMP

R=35'

30'

33'

128 129 130 131 132 133 134 135 136 137

910 905 900

VC = 100' M = 0.14

VC = 100' M = 0.14

VC = 100' M = 0.125

PROFILE GRADE

+0.62%

-0.50%

2.0'

EXISTING ℄ GRADE

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

290' 295' 18" RCP at 0.30%

59' 60'-15" RCP at 0.30%

83' 88'-18" RCP at 0.30%

31' 30'-18" RCP at 0.30%

59' 60'-15" RCP at 0.50%

24'-15" RCP at 0.50%

APR. INLET 900.65

18" R.C. APRON WITH TRASH GUARD AND RIPRAP

12" RC. APRON WITH TRASH GUARD AND RIPRAP

900.33 900.54 900.49 900.12 900.00

901.31 901.82 901.46 901.45 901.37 901.31 901.84 902.48

AS-BUILT PLAN CONFORMING TO CONST. RECORDS

DONE BY: DMH

DATE: 12-11-78

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.

Charles V. Hoeschen

Date 3-27-79 Reg. No. 18695

S.A.P. 62-646-04 Sheet No. 8 of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE: 1"=30'

REMOVE AND RELOCATE FENCE
FENCE TO BE TEMPORARILY RELOCATED AS DIRECTED BY PROPERTY OWNER UNTIL SLOPES ARE COMPLETED. AFTER SUCH TIME, THE FENCE SHALL BE RELOCATED TO ITS ORIGINAL LOCATION. NO COMPENSATION SHALL BE MADE FOR TEMPORARY RELOCATION

REMOVE BIT. SPILLWAYS TO CONST. LIMITS AND SOD

BIT SPILL

CONSTRUCTION LIMITS

STA. 131+53.40 P.O.T. = 10+00.00 CO.RD.C-2 EXISTING C.I. MONUMENT

66'

32'

24" CMP

R=35'

CB 27

CB 28

MH 29

MH 30

MH 31

MH 32

CB 33

CB 26

40'

50'

22.5'

28.5'

33'

REMOVE

12"x 8" WET TAP WITH 8" GATE VALVE 28'-8" D.I.P. WITH PLUG

GRADE TO DRAIN LOW AREAS

CONSTRUCTION LIMITS

STATE CORE TEST
STA. 129+47 RT. 10'
ID.NO. 78448 2331 BASE: OIL 4.3%
78449 2341 BINDER: OIL 3.6%

COUNTY ROAD C-2

30'

33'

B624 CONCRETE CURB & GUTTER

12"x 8" WET TAP WITH 8" GATE VALVE 72'-8" D.I.P. WITH PLUG

CLOSE

CB 38

CB 37

CO.RD. C-2 SEE SHEET 14

128 129 130 131 132 133 134 135 136 137

VC = 100'
M. = 0.14

VC = 100'
M. = 0.14

VC = 100'
M. = 0.125

PVT 90521

PVT 90513

PVT 90509

PVT 90500

PVT 90495

PVT 90486

PVT 90480

910

905

900

CB 27

CB 26

CB 28

CB 33

CB 36

CB 37

PROFILE GRADE

+0.62%

-0.50%

2.0'

EXISTING ℄ GRADE

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

295' 18" RCP at 0.30%

90(2)

900.33

900.12

60'-15" RCP at 0.30%

901.12
901.27
901.37
901.46
901.45
901.64

80'-18" RCP at 0.30%

900.33

30'-18" RCP at 0.30%

900.09

900.00

18" R.C. APRON WITH TRASH GUARD AND RIPRAP

60'-15" RCP at 0.50%

900.42

24'-15" RCP at 0.50%

900.12

900.00

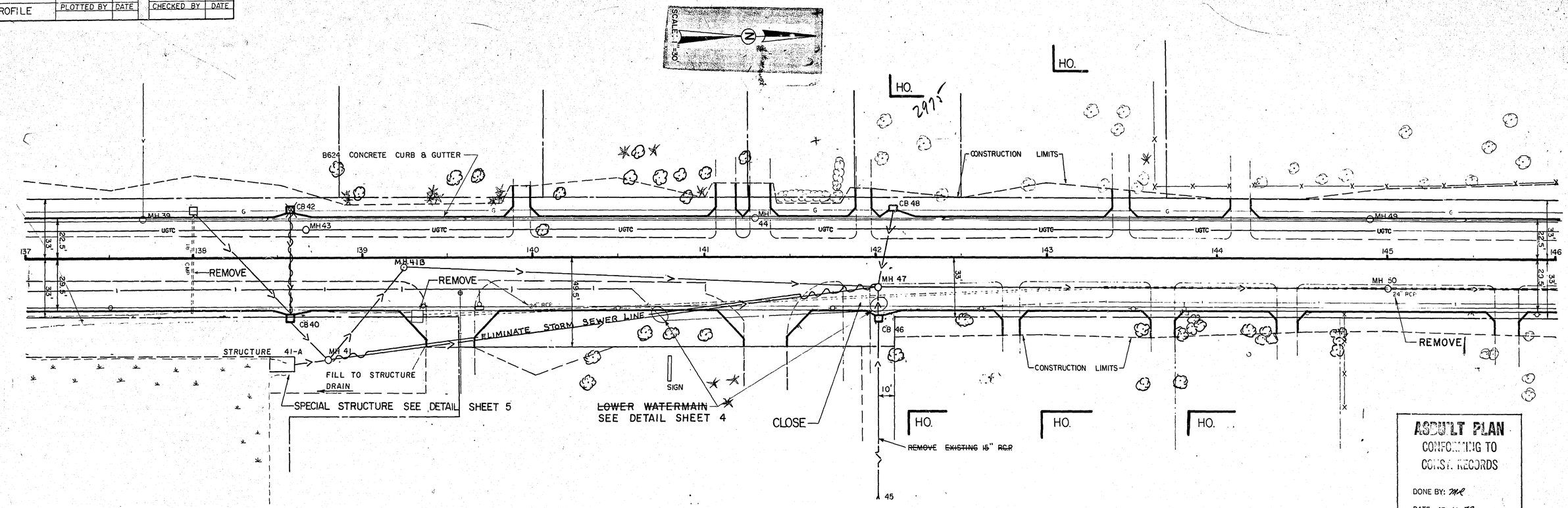
12" RC APRON WITH TRASH GUARD AND RIPRAP

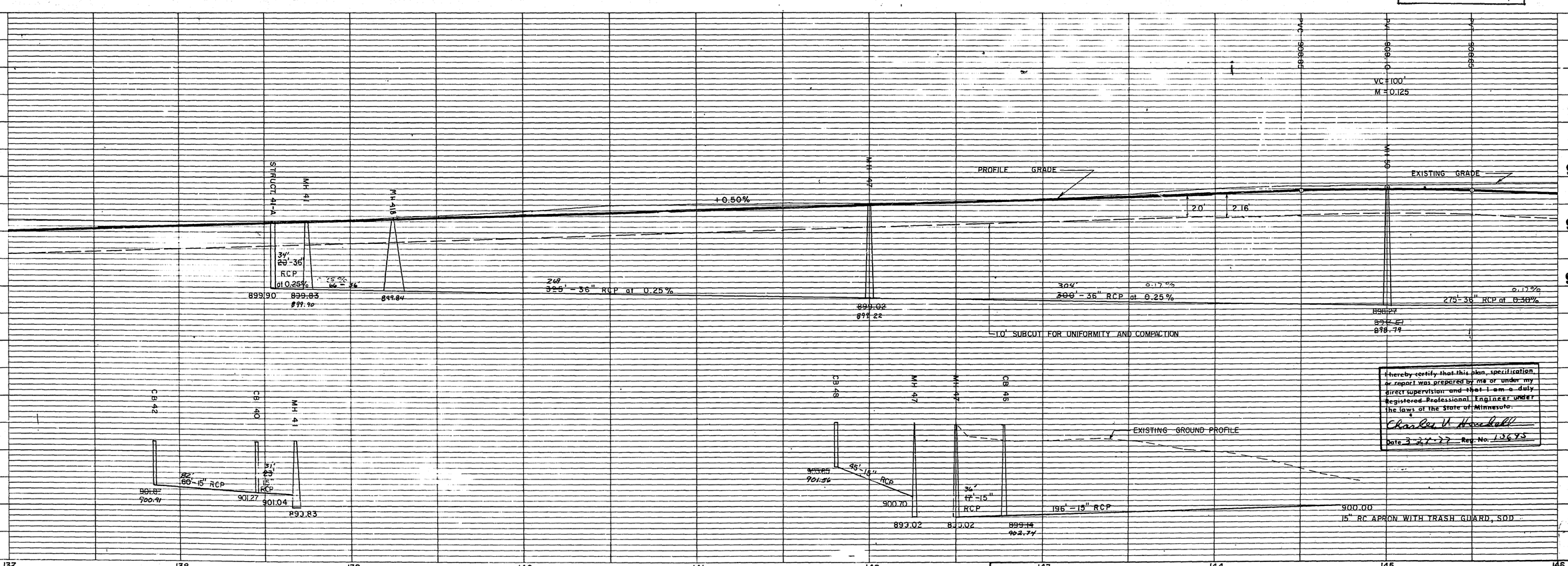
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Charles V. Hanchett
Date 3-21-72 Reg. No. 10635

PAVEMENT EVALUATION SHEET

S.A.P. 62-646-04 Sheet No. 8A of 36 Sheets 26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				





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.

Charles H. Handell

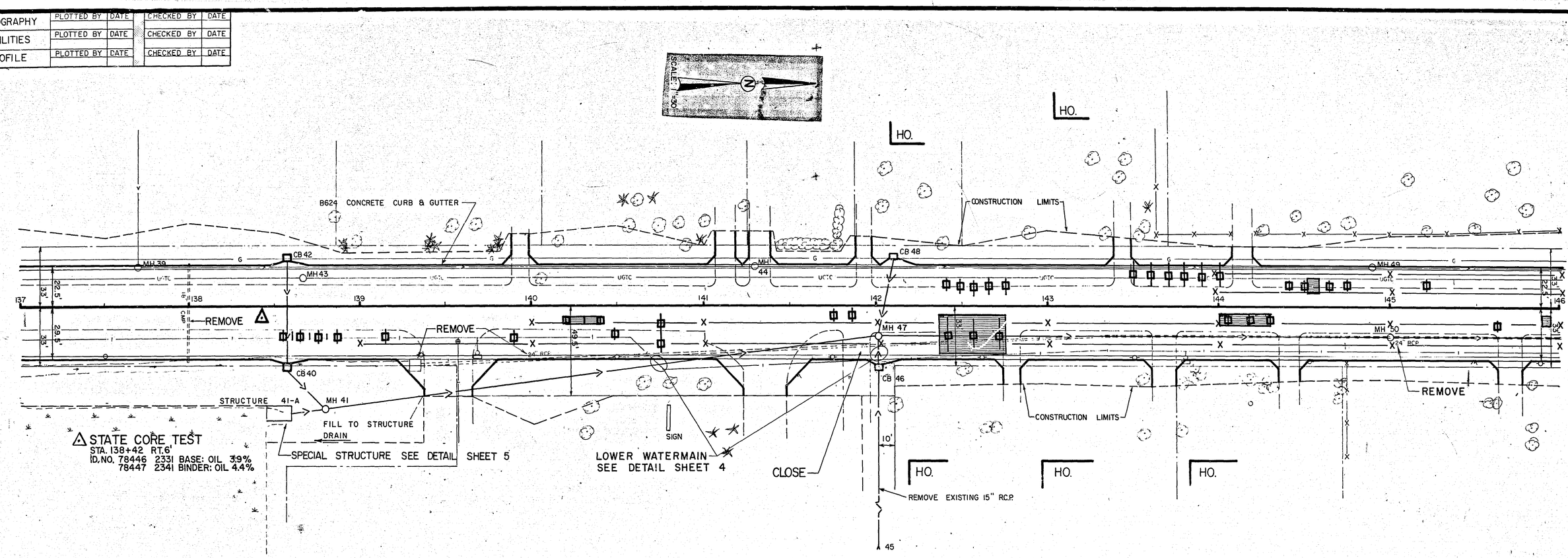
Date 3-27-77 Reg. No. 13695

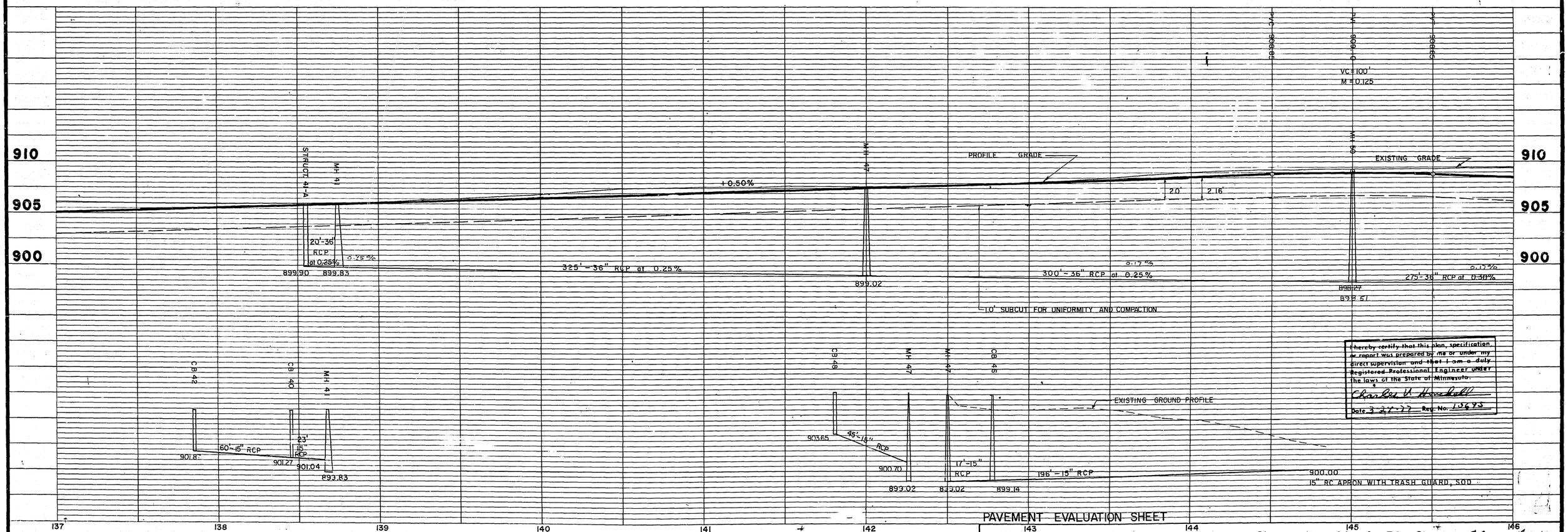
S.A.P. 62-646-04

Sheet No. 9 of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				





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.

Charles V. Hoeksema

Date 3-27-77 Reg. No. 13693

PAVEMENT EVALUATION SHEET

S.A.P. 62-646-04

Sheet No. 9A of 36 Sheets 26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE 1" = 30'

SEE SHEET 13 FOR ALIGNMENT

DO NOT DISTURB EXIST. STORM SEWER

10'-4" C.I.S.P STA. 152+50 INV. EL. 897.55
56'-1" COPPER STA. 152+52
1" CURB STOP AND BOX
1" CORPORATION COCK

15'-12" CMP WITH APRONS

CONSTRUCTION LIMITS

REMOVE

MH 57 · MH 56 · MH 51 · MH 52 · MH 54 · MH 60 · MH 61 · MH 63 · MH 64 · MH 66 · MH 68 · MH 69 · MH 70

CB 55 · CB 59 · CB 53 · CB 58 · CB 67 · CB 65

24" RCP · 15" SCP · 15" CMP

R=20' · R=20'

B624 CONCRETE CURB & GUTTER

R/W TO BE AQUIRED

CONSTRUCTION LIMITS

MATCH EXISTING CURB

BRENNER AVE.

60'

HO. · HO. · HO.

915
910
905

PVC 907.04 · PVI 906.77 · PVT 907.02 · PVC 902.35 · PVI = 895.80

VC = 100'
M = 0.13'

VC = 100'
M = 0.10

+85.00 · +35.00 · +85.00

-0.54% · +0.50%

EXISTING ℄ GRADE

PROFILE GRADE

2.16' · 2.0'

7'-18" R.C.P. EQUIL. INV. EL. 902.00

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

0.12%

275' 36" RCP at 0.12%

193' 36" RCP at 0.12%

325' 21" RCP at 0.50%

375' 21" RCP at 0.50%

898.04 · 897.81 · 896.90 · 899.55 · 901.18

CB 55 · MH 54 · CB 53 · CB 59 · MH 60 · MH 61 · CB 58 · CB 67 · MH 66 · CB 65

43'-15" RCP · 17'-15" RCP · 55'-15" RCP · 38'-15" RCP · 43'-15" R.C.P. · 17'-15" R.C.P.

903.00 · 902.79 · 902.91 · 903.00 · 902.00 · 901.72 · 901.81 · 902.00 · 903.00 · 902.79 · 902.91 · 903.00 · 901.18 · 897.81 · 898.04

146 · 147 · 148 · 149 · 150 · 151 · 152 · 153 · 154 · 155

BITUMINOUS SURFACE VARIATIONS 8/24/79

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.

Charles V. Hanchett

Date 3-19-22 Reg. No. 19695

S.A.P. 62-646-04

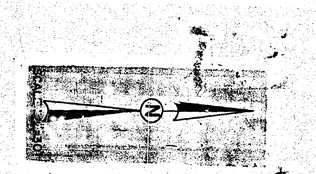
Sheet No. 10 of 36 Sheets

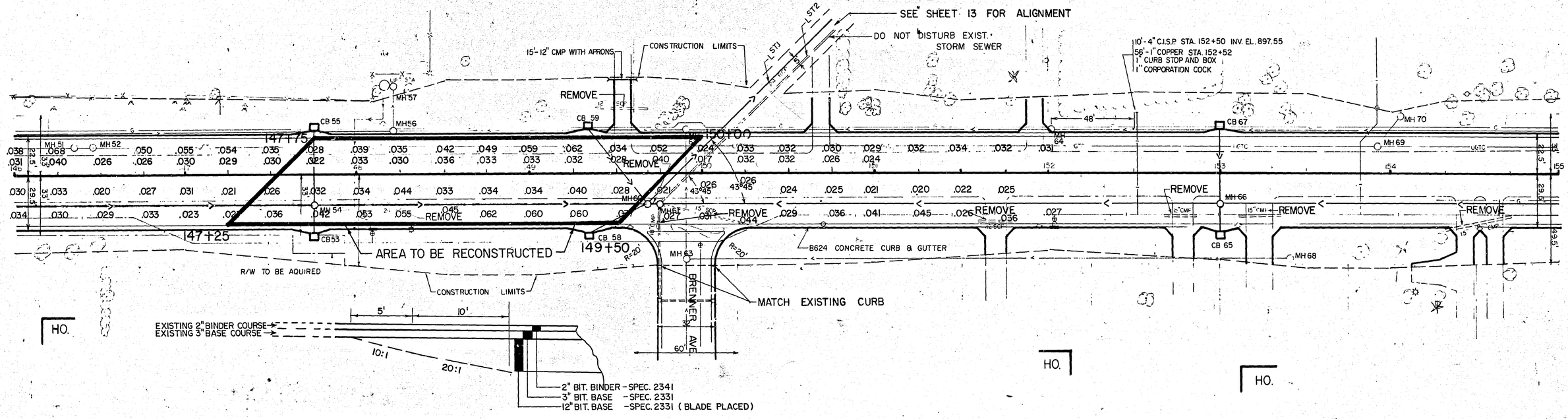
36-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

REVISED	DATE
ADDED 2" BINDER	10-15-79

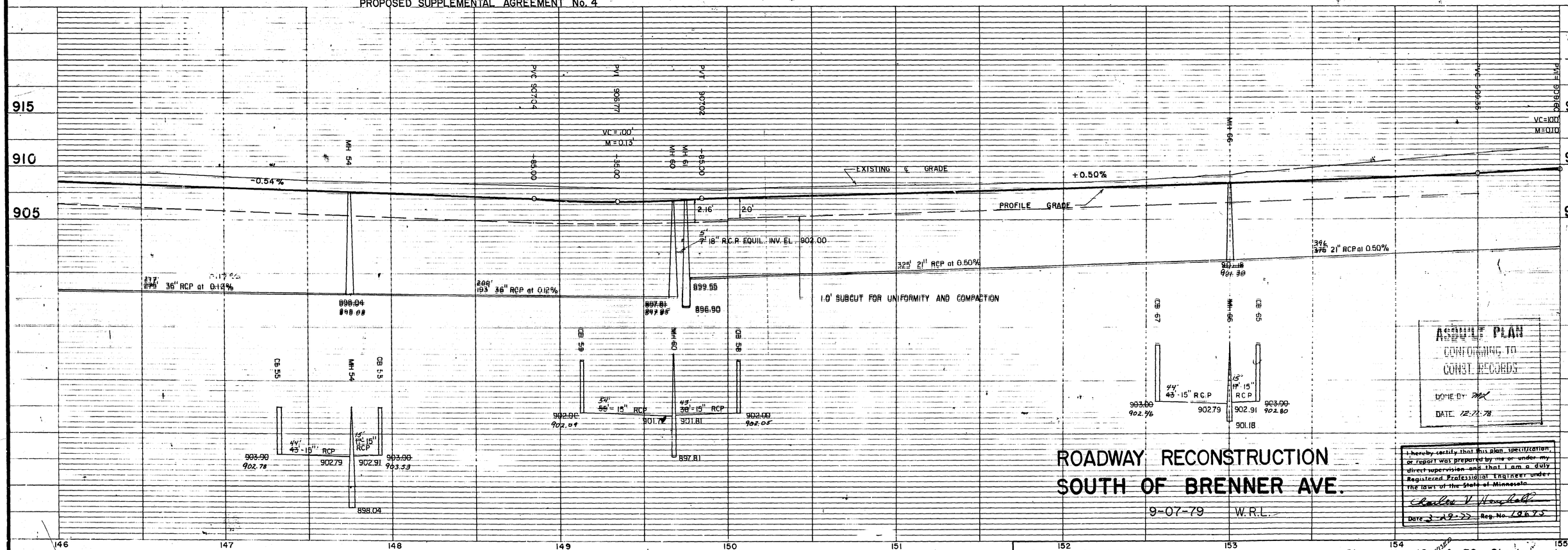
DESIGNED BY	
DRAWN BY	
CHECKED BY	





TYPICAL SECTION (AT BOTH ENDS)

PROPOSED SUPPLEMENTAL AGREEMENT No. 4



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: MK
DATE: 12-12-79

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.
Reuben V. Houghton
Date 3-29-79 Reg. No. 18673

ROADWAY RECONSTRUCTION
SOUTH OF BRENNER AVE.
9-07-79 W.R.L.

S.A.P. 62-646-04

Sheet No. 10 REVISED of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE 1"=30'

SEE SHEET 13 FOR ALIGNMENT

DO NOT DISTURB EXIST. STORM SEWER

10'-4" C.I.S.P. STA. 152+50 INV. EL. 897.55
56'-1" COPPER STA. 152+52
1" CURB STOP AND BOX
1" CORPORATION COCK

15'-12" CMP WITH APRONS

CONSTRUCTION LIMITS

MH 160E

LST2

LST1

165'x36" RCP

5'x4'x5' RCP

43'x15" RCP

REMOVE

MH 57 · MH 56 · MH 51 · MH 52 · CB 55 · CB 59 · MH 62 · MH 64 · CB 67 · MH 70 · MH 69 · MH 54 · CB 53 · MH 60 · MH 61 · CB 58 · MH 63 · MH 66 · CB 65 · MH 68

24" RCP

15" SCP

15" CMP

B624 CONCRETE CURB & GUTTER

MATCH EXISTING CURB

R/W TO BE AQUIRED

CONSTRUCTION LIMITS

BREMNER AVE.

60'

HO.

HO.

HO.

146 147 148 149 150 151 152 153 154 155

915 910 905

PVC 907.04 · PVI 906.77 · PVT 907.02 · PVC 899.60 · PVI 899.60 · PVT 899.60

VC=100'
M=0.13'

VC=100'
M=0.10

-0.54%

+0.50%

EXISTING ℄ GRADE

PROFILE GRADE

-185.00 · -135.00

2.16' · 2.0'

7'-18" R.C.P. EQUIL. INV. EL. 902.00

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

277' / ~~275'~~ 36" RCP at 0.17% / ~~0.12%~~

898.04
898.09

205'
193' 36" RCP at 0.12%

~~897.81~~ / ~~897.85~~
896.90
896.96

899.55

325' 21" RCP at 0.50%

391' / ~~375'~~ 21" RCP at 0.50%

~~901.18~~ / ~~901.30~~

CB 55 · MH 54 · CB 53 · CB 59 · MH 60 · CB 58 · CB 67 · MH 66 · CB 65

44' 43'-15" RCP
~~903.00~~ / ~~902.78~~
902.79
902.91 / ~~903.00~~ / ~~903.33~~

32' 15" RCP

898.04

54' 55'-15" RCP
~~902.01~~ / 902.09
901.72

43' 38'-15" RCP
901.81
897.81

~~902.00~~ / ~~902.05~~

15' 17'-15" R.C.P

44' 43'-15" R.C.P
~~903.00~~ / ~~902.96~~
902.79

902.91
901.18

~~903.00~~ / ~~902.80~~

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: ~~MK~~
DATE: ~~12-11-78~~

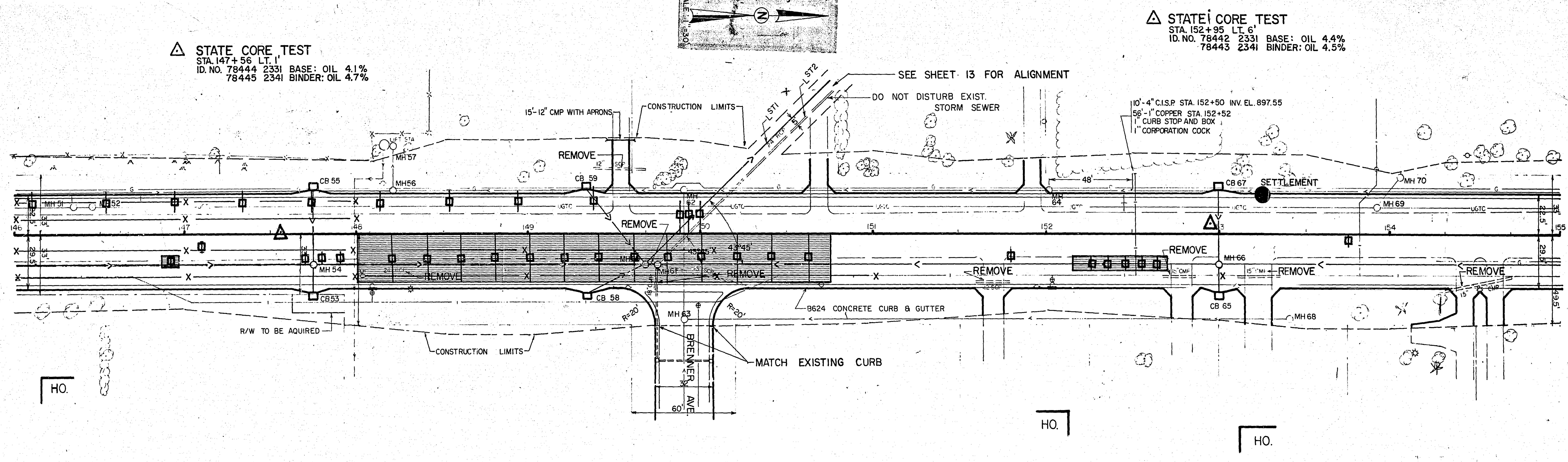
I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Charles V Hoschek
Date 3-29-22 Reg. No. 18675

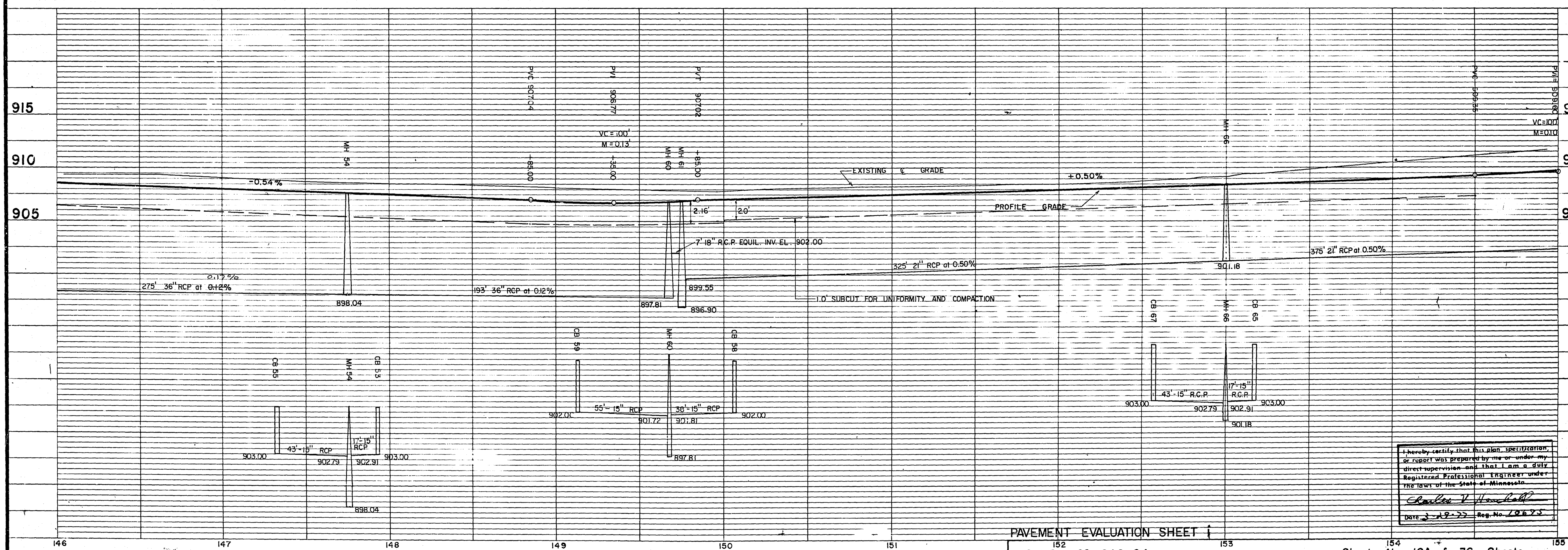
S.A.P. 62-646-04

Sheet No. 10 of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE





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.

Charles V. Hanchett

Date 3-29-77 Reg. No. 10675

PAVEMENT EVALUATION SHEET

S.A.P. 62-646-04

Sheet No. 10A of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE: 1" = 30'

ROSEVILLE

NEW BRIGHTON

ROSEVILLE

ARDEN HILLS

CONSTRUCTION LIMITS

CONCRETE DRIVEWAY

CB 74

CB 72

MH 73

MH 71

MH 75

MH 76

MH 77

M.H.

GAS METER

CLASS V

BIT.

CONCRETE DRIVEWAY

CLOSE AND REMOVE CONCRETE AND REPLACE WITH SOD.

END B624 C&G
STA. 160+00

END CONSTRUCTION
STA. 160+45.00

COUNTY RD. D

REMOVE

15" CMP

B624 CONCRETE CURB & GUTTER

HO.

CONCRETE DRIVEWAYS

CONSTRUCTION LIMITS

CLEVELAND AVE.
STA. 160+59.93 P.O.T. =
STA. 79+16.70 P.O.T.
COUNTY ROAD "D"

EXISTING C.I. MONUMENT

COUNTY RD. D
SEE SHEET 12

PVI 909.60
PVT 908.39
VC = 100'
M = 0.10'
PVI 915.90
PVT 916.39
VC = 200'
M = 0.60'
EXISTING ℄ GRADE
+1.40%
2.0'
PROFILE GRADE
END SUBCUT +45 ON RT.
END SUBCUT +00 ON LT.
375'-21" RCP at 0.50%
355'-21" RCP at 0.50%
903.05
904.83
1.0' SUBCUT FOR UNIFORMITY AND COMPACTION
43'-15" RCP
17'-15" RCP
907.50
907.28
907.42
907.50
903.05

BITUMINOUS SURFACE VARIATIONS 8/24/79

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.

Charles V. Touchett

Date 3-29-79 Reg. No. 10685

S.A.P. 62-646-04

Sheet No. 11 of 36 Sheets 26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	CATE	CHECKED BY	DATE

SCALE: 1" = 30'

ROSEVILLE

NEW BRIGHTON

ROSEVILLE

ARDEN HILLS

CONSTRUCTION LIMITS

CONCRETE DRIVEWAY

CB 74

MH 71

UGTC

CLASS V

BIT.

CONCRETE DRIVEWAY

GAS METER

CONCRETE DRIVEWAY

CLOSE AND REMOVE CONCRETE AND REPLACE WITH SOD.

REMOVE

REMOVE

16.45

MH 75

END B624 C&G
STA. 160+00

COUNTY RD. D

END CONSTRUCTION
STA. 160+45.00

MH

MH

MH

MH

155 156 157 158 159 160 161

33'

22.5'

49.5'

39.5'

REMOVE

MH 66A

15" CMP

15" CMP

REMOVE

MH 73

CB 72

15" CMP

REMOVE

15" CMP

REMOVE

16.45

MH 76

MH 77

CONCRETE DRIVEWAYS

16.84

16.80

R=35'

B624 CONCRETE CURB & GUTTER

HO.

CONCRETE DRIVEWAY

CONSTRUCTION LIMITS

CLEVELAND AVE.
STA. 160+59.93 P.O.T. =
STA. 79+16.70 P.O.T.
COUNTY ROAD "D"

EXISTING C.I. MONUMENT

COUNTY RD. D

SEE SHEET 12

920

915

910

905

VC= 100'
M = 0.10'

MH 66A

MH 73

EXISTING ℄ GRADE

+1.40%

2.0'

PROFILE GRADE

VC= 200'
M = 0.60'

MH 77

END SUBCUT ±45 ON RT.

END SUBCUT ±00 ON LT.

402.34

904.74

904.83

TO SUBCUT FOR UNIFORMITY AND COMPACTION

44'
43-15" RCP
907.70
907.28

15'
17-15" RCP
907.42
907.36

903.05

155 156 157 158 159 160 161

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.

Charles V. Hochbell

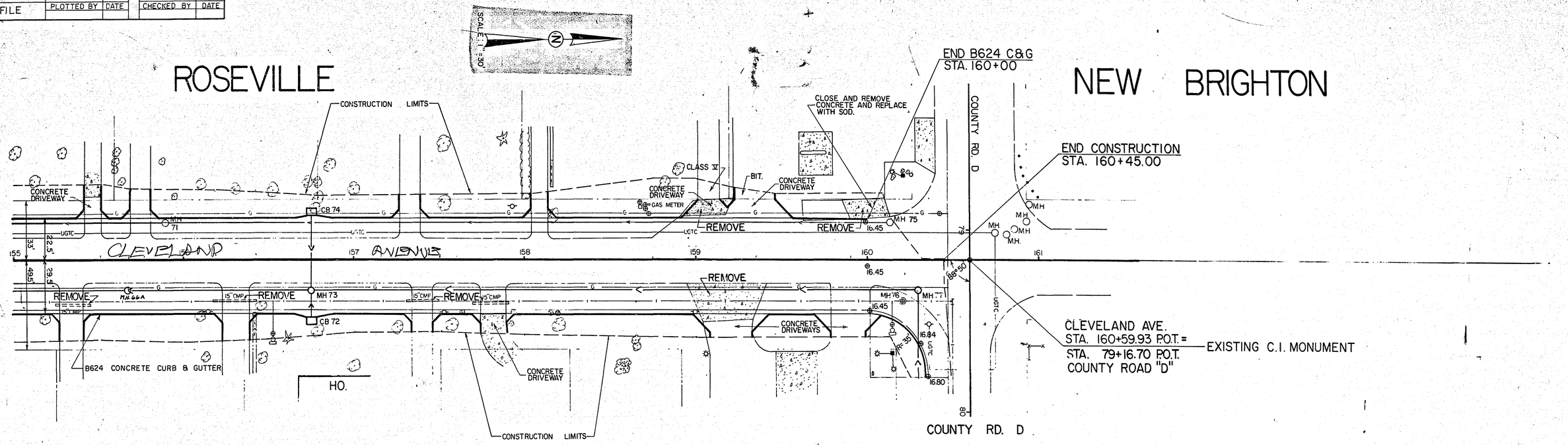
Date 3-29-79 Reg. No. 10695

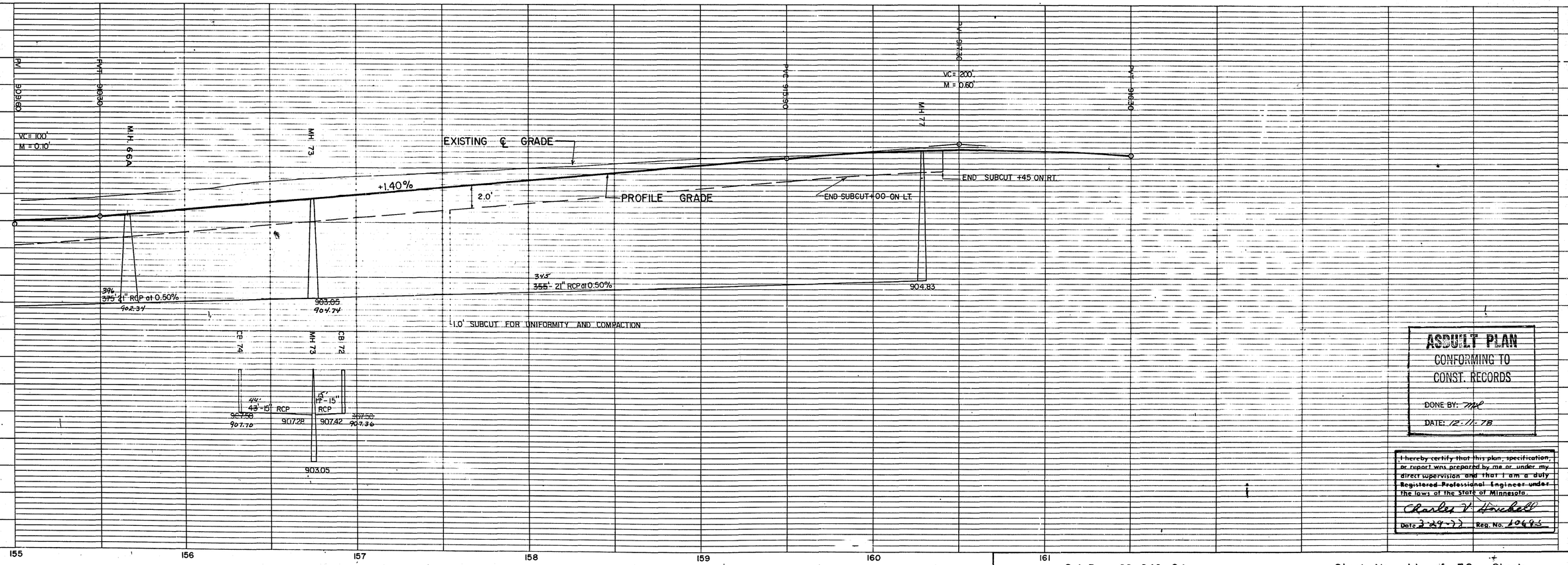
12-11-78

S.A.P. 62-646-04

Sheet No. 11 of 36 Sheets 26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE





ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: MLP
DATE: 12-11-78

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.
Charles V. Hovbell
Date 3-29-77 Reg. No. 10695

S.A.P. 62-646-04

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

SCALE 1" = 50'

△ STATE CORE TEST
STA. 158+87 LT. 22'
ID. NO. 78440 2331 BASE: OIL 4.3%
78441 2341 BINDER: OIL 4.8%

ROSEVILLE

NEW BRIGHTON

CONSTRUCTION LIMITS

CONCRETE DRIVEWAY

CB 74

MH 71

UGTC

CLASS V

BIT.

GAS METER

REMOVE

CLOSE AND REMOVE CONCRETE AND REPLACE WITH SOD.

CONCRETE DRIVEWAY

MH 75

END B624 C&G
STA. 160+00

COUNTY RD. D

END CONSTRUCTION
STA. 160+45.00

MH

M.H.

33'

22.5'

49.5'

39.5'

155 156 157 158 159 160 161

REMOVE

15" CMP

MH 73

CB 72

MH 76

MH 77

16.45

16.84

16.80

CONCRETE DRIVEWAYS

R=35'

88°50'

B624 CONCRETE CURB & GUTTER

HO.

CONCRETE DRIVEWAY

CONSTRUCTION LIMITS

CLEVELAND AVE.
STA. 160+59.93 P.O.T. =
STA. 79+16.70 P.O.T.
COUNTY ROAD "D"

EXISTING C.I. MONUMENT

COUNTY RD. D
SEE SHEET 12

ROSEVILLE

ARDEN HILLS

920

915

910

905

VC= 100'
M = 0.10'

+1.40%

EXISTING ℄ GRADE

PROFILE GRADE

2.0'

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

END SUBCUT +45 ON RT.

END SUBCUT +00 ON LT.

VC= 200'
M.= 0.60'

903.05

904.83

375'-21" RCP at 0.50%

355'-21" RCP at 0.50%

CB 74

MH 73

CB 72

43'-15" RCP

17'-15" RCP

907.50

907.28

907.42

907.50

903.05

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.

Charles V. Hinchell

Date 3-29-72 Reg. No. 10645

PAVEMENT EVALUATION SHEET

S.A.P. 62-646-04

Sheet No. 11A of 36 Sheets

26-116

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

ARDEN HILLS

CO. RD. "D"
P.O.T. = 79+16.70
P.O.T.=160+59.93
CLEVELAND AVE.

EXISTING C.I. MONUMENT

SAW CUT EXISTING SURFACE

H.O.

C.B. 82

UGTC

COUNTY ROAD D

CLEVELAND AVE.

MH77

20:1 TAPER

R=35'

ENT. LOCATED AT STA. 79+83 28' WIDE Drive

B624 CONCRETE CURB & GUTTER

BITUMINOUS CURB

C.B. 78

SAVE

18" CMP

CONSTRUCTION LIMITS

NOTE: STA. 81+75 TO STA. 86+75 ALL AREAS DISTURBED BY STORM SEWER CONSTRUCTION SHALL BE REPLACED IN KIND, PAYMENT SHALL BE INCIDENTAL TO THE CONTRACT

WILDER ST

C.B. 84

C.B. 83

MH79

MH80

12" R.C.APRON 81
STA. 86+55 66'RT.

ROSEVILLE

SCALE: 1" = 30'

M.H.78A

M.H. 78

122' x 15" R.C.P.

INV. 909.47

INV. 909.73

920
915
910
905

MH77

MH 78

MH 79

MH 80

176'-24"
181'-18" RCP at 0.63%

220'-18" RCP at 0.63%

285'
280' 18" RCP at 0.63%

52'
55' 12" RCP at 0.63%

12" RCP PLUS APRON WITH TRASH GUARD

904.83
905.12
906.26
909.47
907.65
909.41
909.78
909.90
908.90

C.B. 82

C.B. 84

C.B. 83

MH 79

M.H.78A

95'
95' 15" RCP

122' - 15" RCP

30'-12" RCP at 1.00%

31'
30'-12" RCP at 1.00%

910.00
910.11
909.05
906.26
909.47
908.13
911.50
911.83
911.28
911.02
910.90
907.65
907.64

79 80 81 82 83 84 85 86 87

ROBERT BIAN
CONFORMING TO CONST. RECORDS
DONE BY:
DATE:

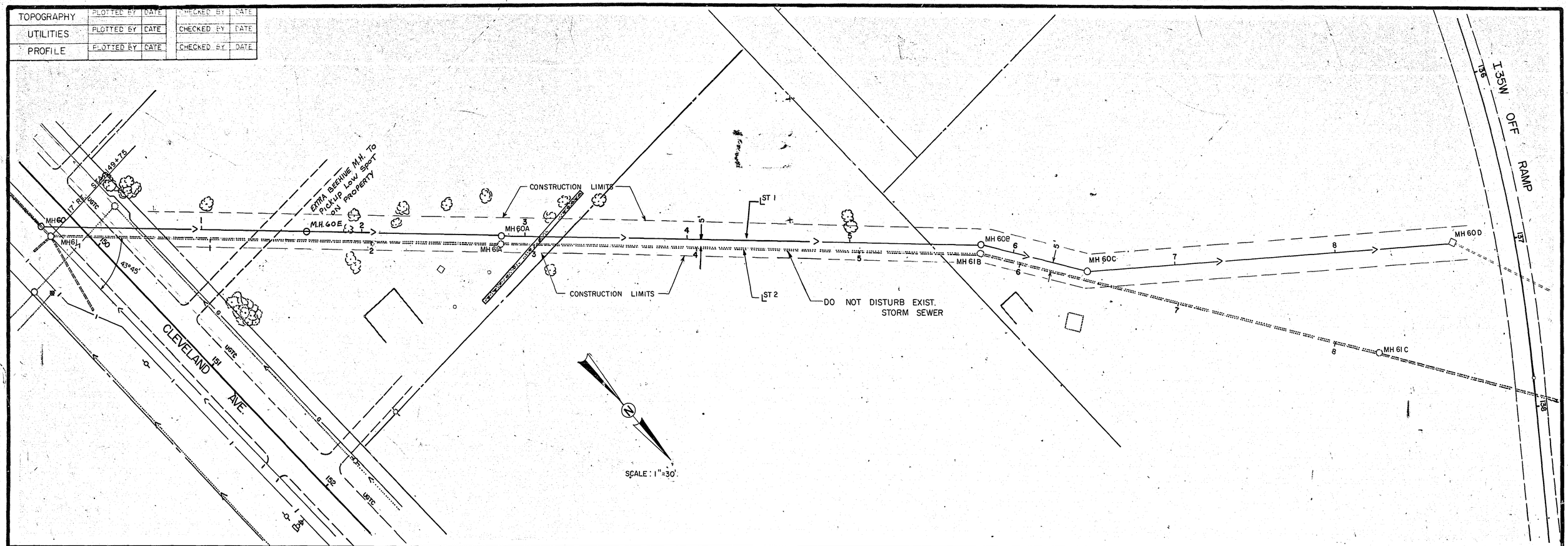
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of MINNESOTA.
Charles V. Hourdos
Date 3-29-72 Reg. No. 12695

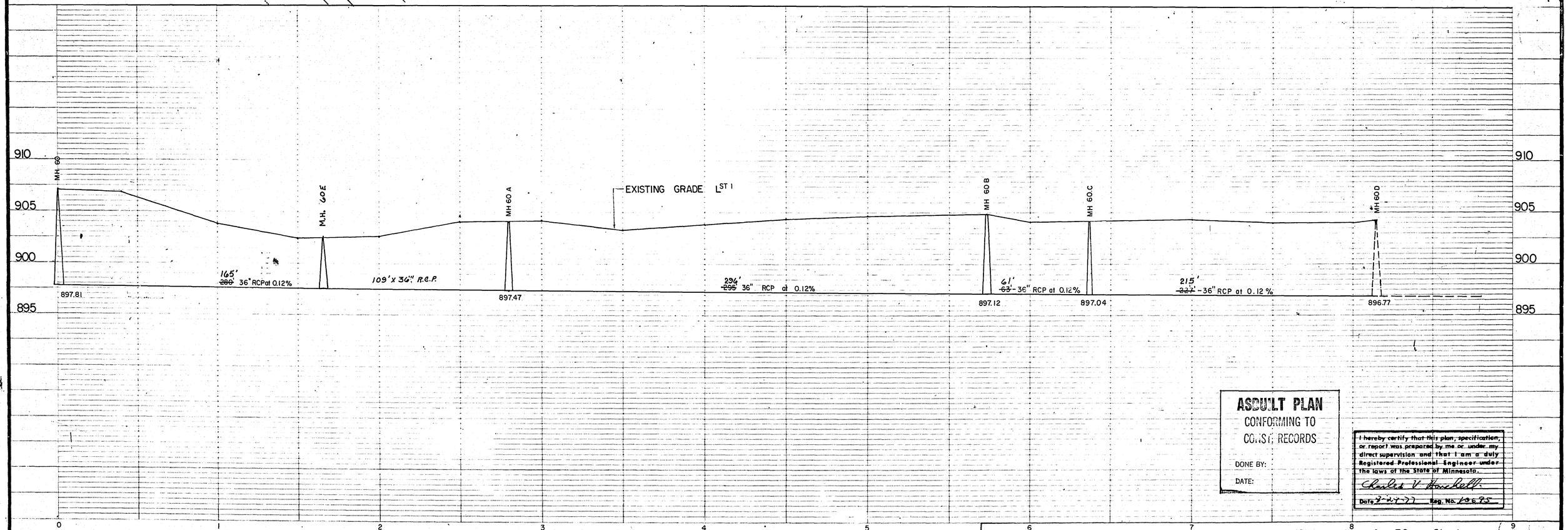
S.A.P. 62-646-04

Sheet 12 of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE





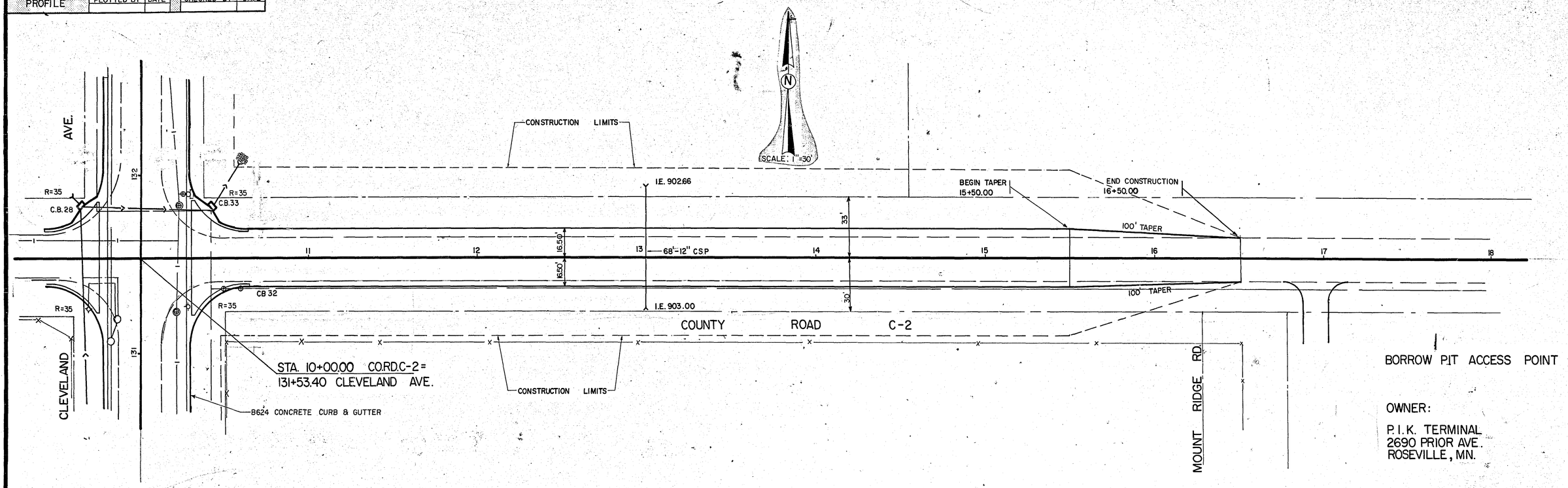
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY:
DATE:

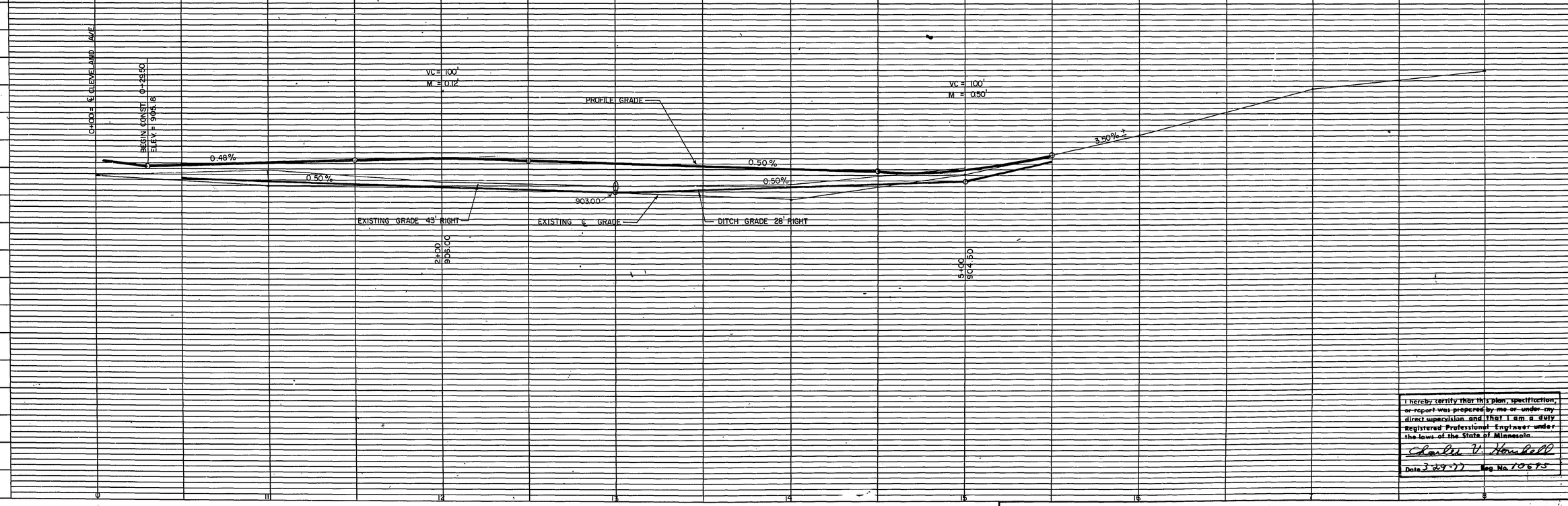
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Charles V Howdell
Date 2-24-77 Reg. No. 19695

S.A.P. 62-646-04 Sheet 13 of 36 Sheets

26-116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE





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.

Charles V. Hornfeldt

Date 3-29-77 Reg. No. 10695

S.A.P. 62-646-04

Sheet 14 of 36 Sheets

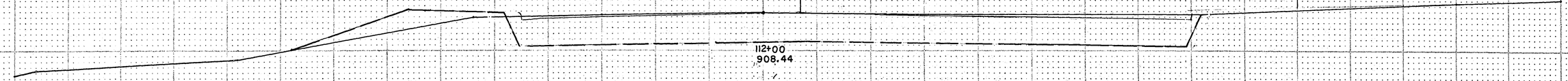
26-116

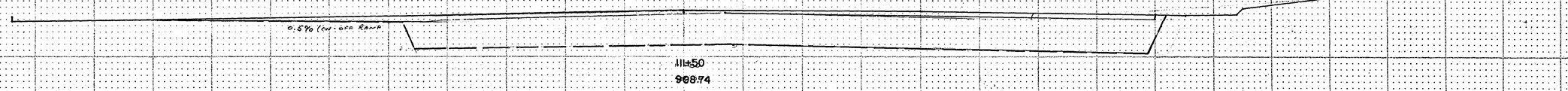
Fed. Proj. No.

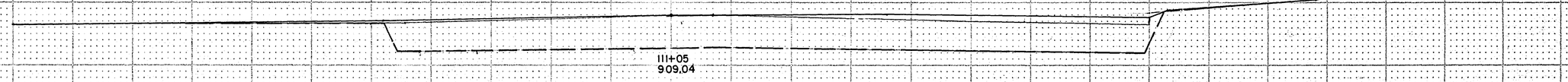
℄ SURVEY LINE

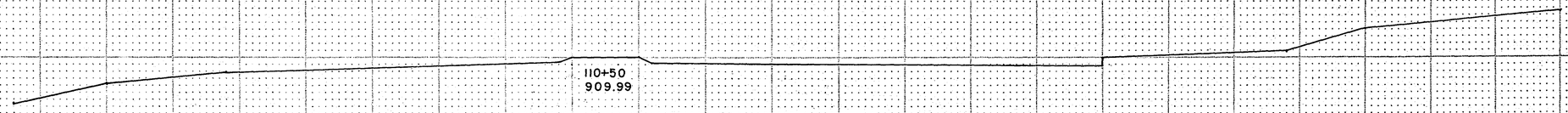
R/W VARIES

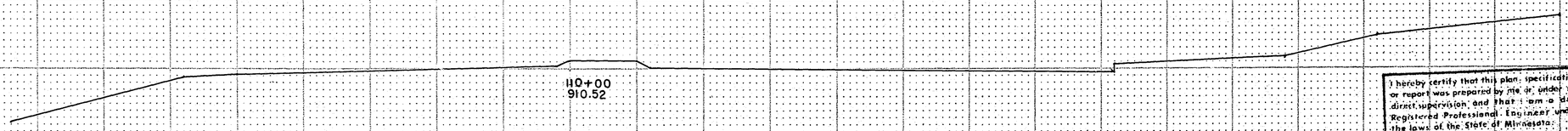
PROFILE GRADE











	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
R/W	330	134	0
R/W	302	104	0

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.

Charles V. Hoekstra

Date 3-29-77 Reg. No. 10695

State Proj. No. 62-646-04

Sheet No. 15 of 36 Sheets

26-116

FUNCTIONAL CROSS SECTION - OPEN DOTTED

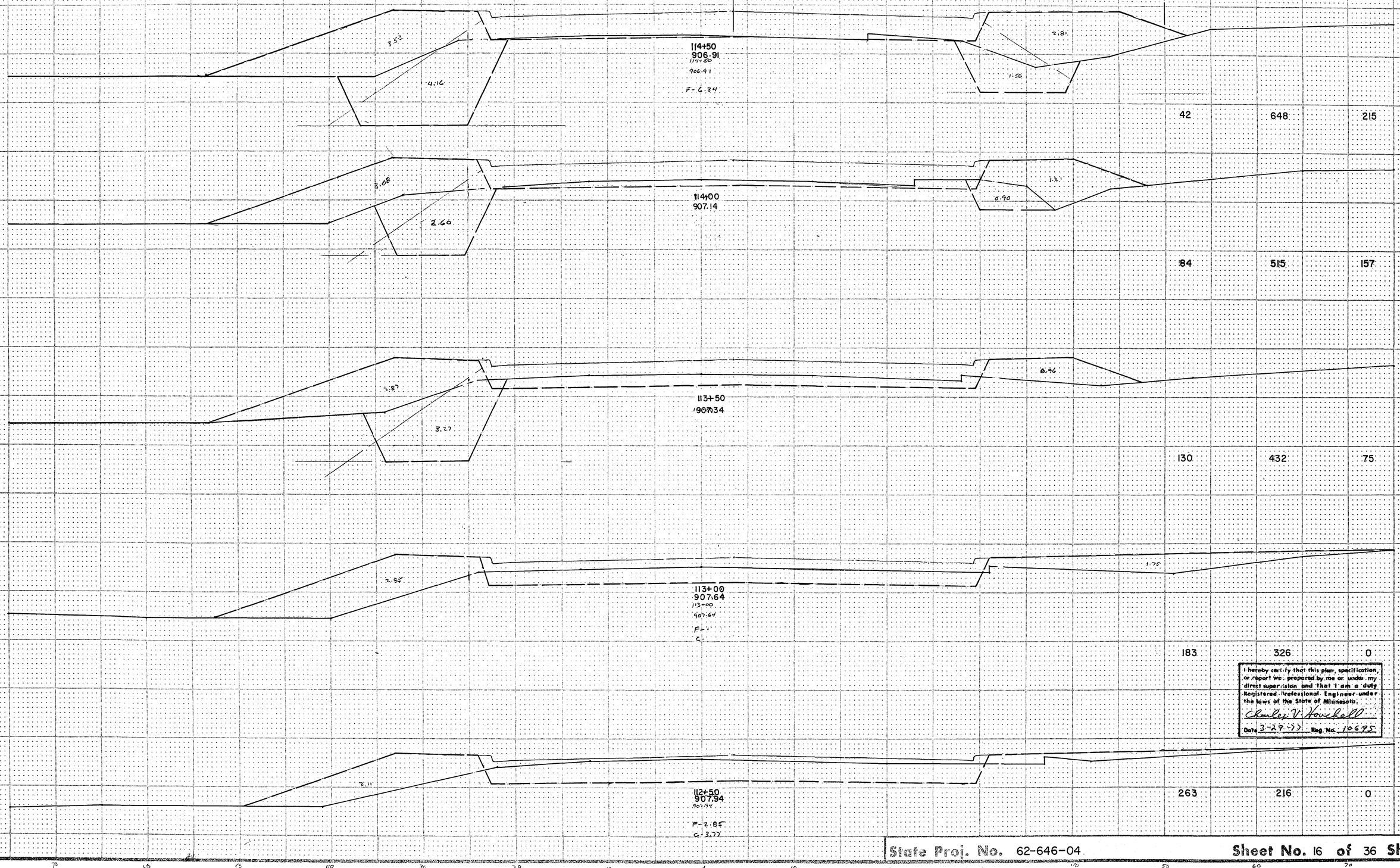
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

Fed. Proj. No.

℄ SURVEY LINE

PROFILE GRADE

R/W VARIES



R/W	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
	42	648	215
	84	515	157
	130	432	75
	183	326	0
	263	216	0

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.

Charles V. Hovebell

Date 3-29-77 Reg. No. 10695

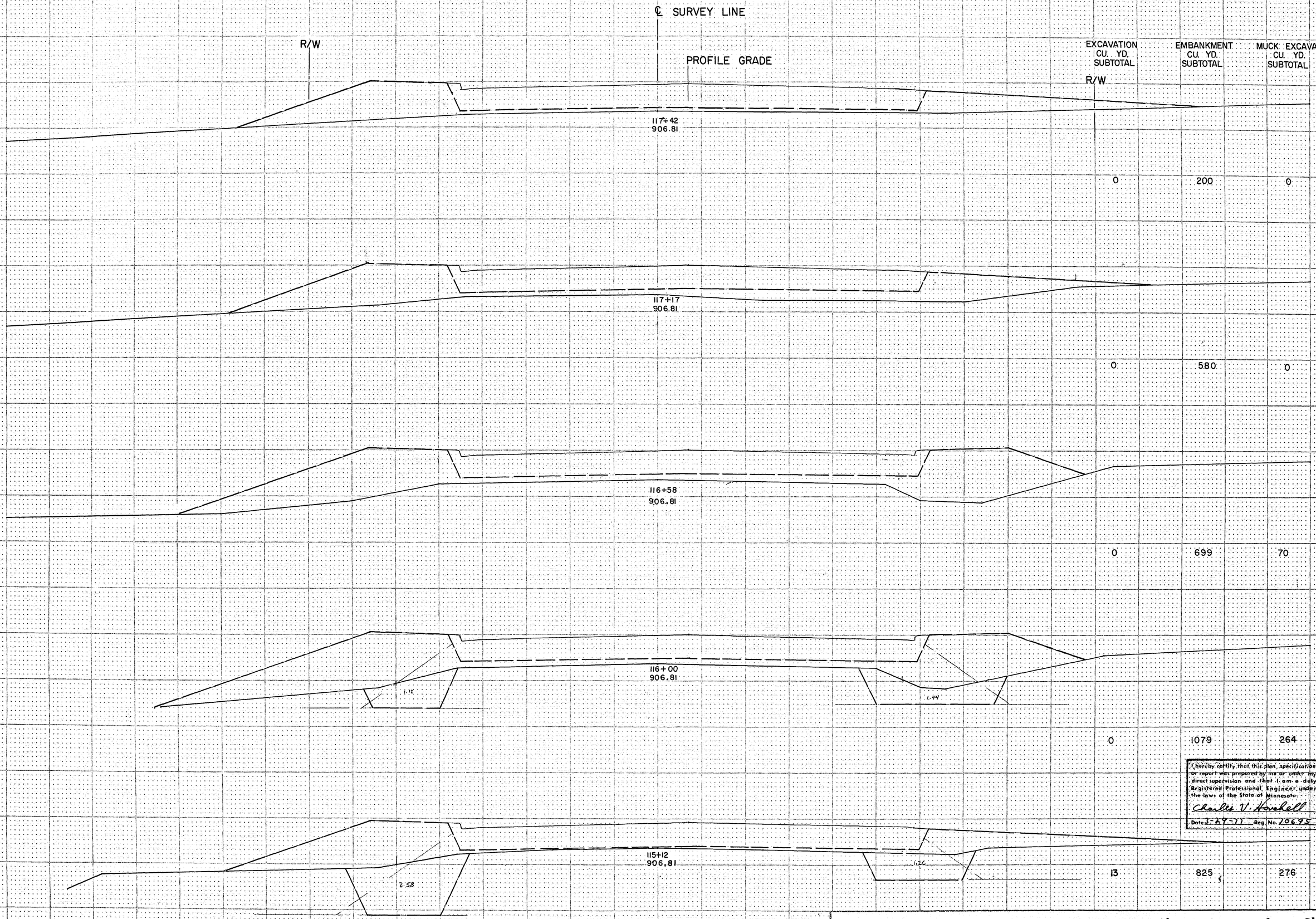
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 16 of 36 Sheets

26+116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
	0	200	0
	0	580	0
	0	699	70
	0	1079	264
	13	825	276

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.

Charles V. Hovbell

Date 3-29-71 Reg. No. 10695

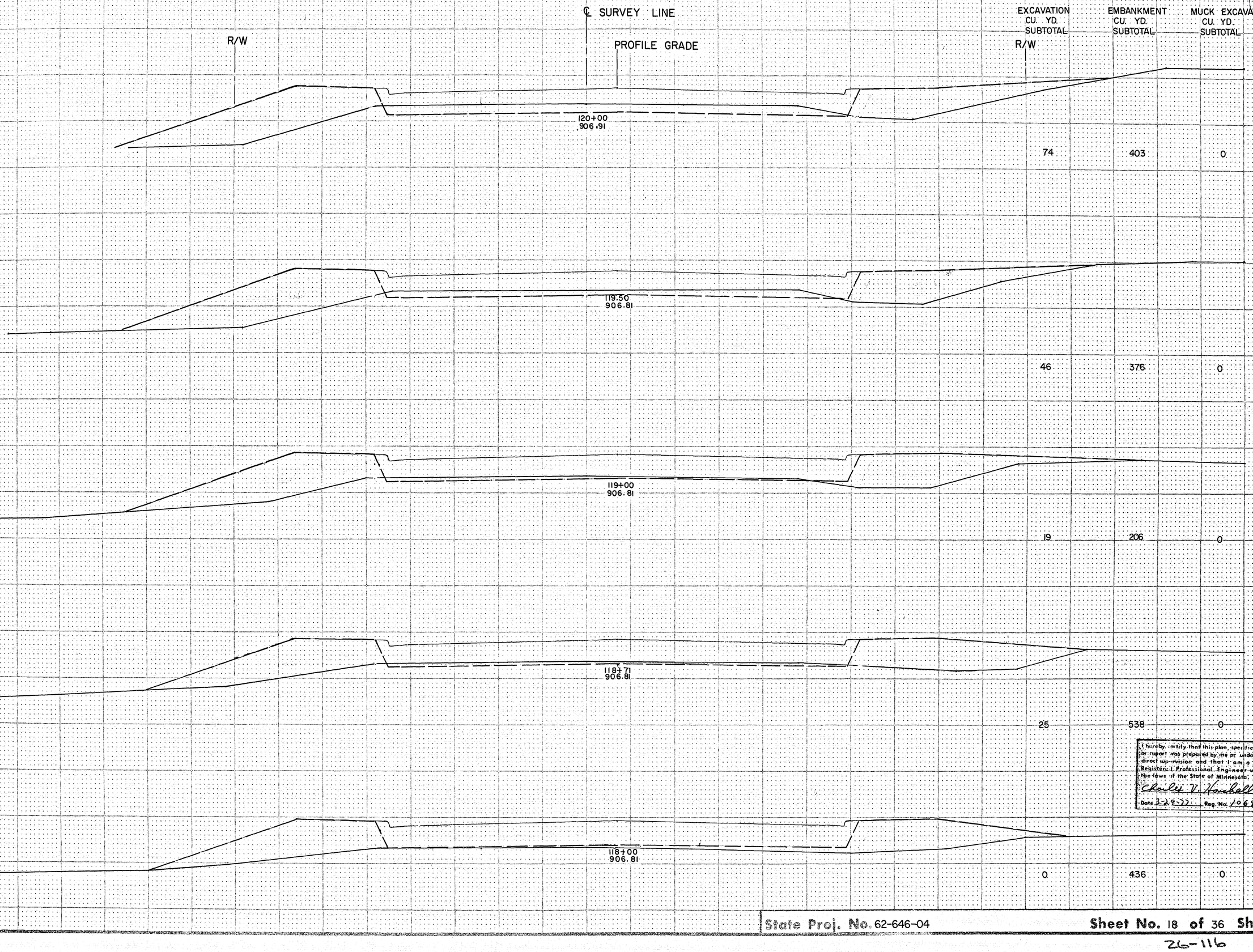
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 17 of 36 Sheets

26-116

Fed. Proj. No.



EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
74	403	0
46	376	0
19	206	0
25	538	0
0	436	0

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.

Charles V. Haverkamp

Date 3-28-77 Reg. No. 10695

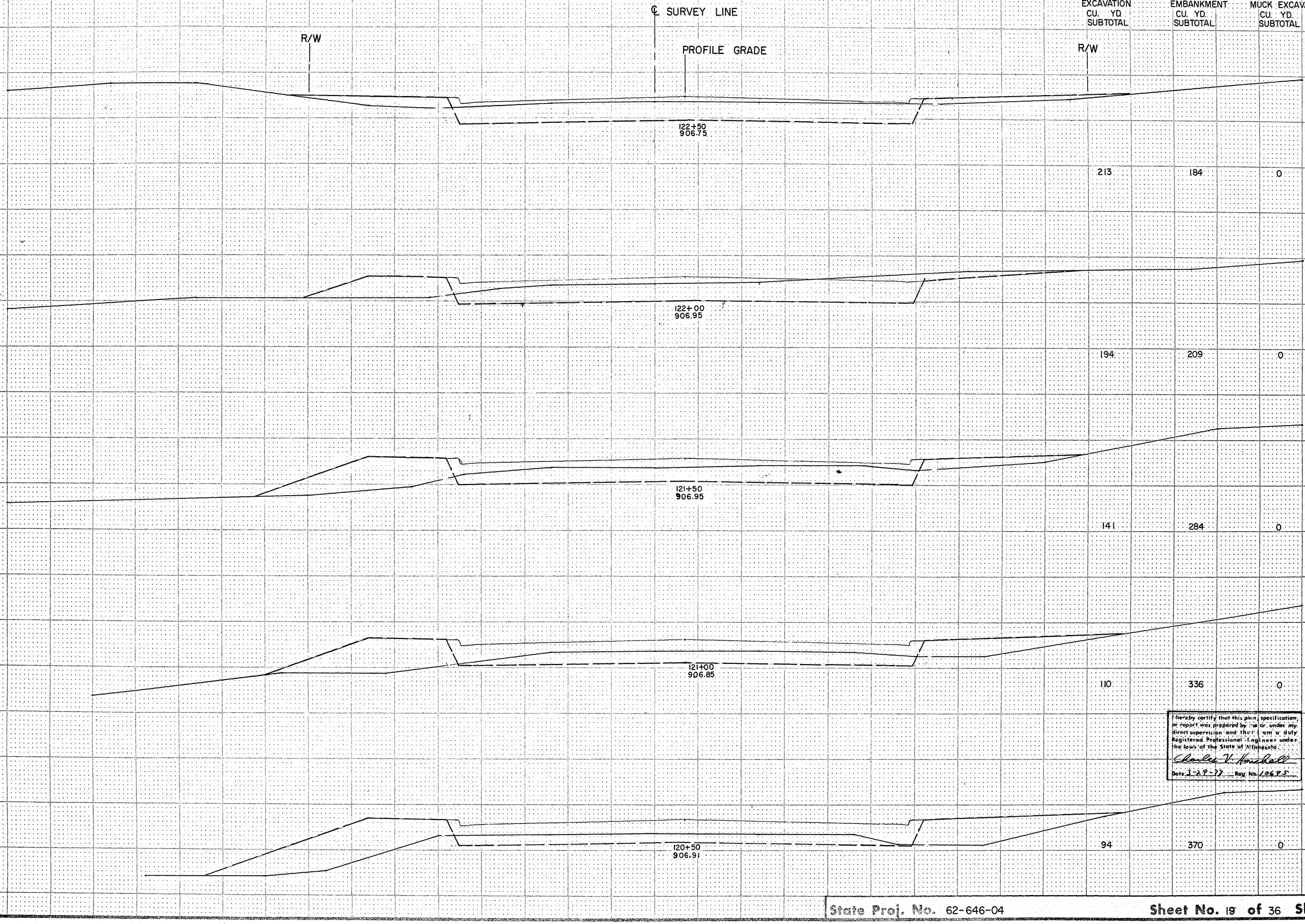
State Proj. No. 62-646-04

Sheet No. 18 of 36 Sheets

26-116

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

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
122+50	213	184	0
122+00	194	209	0
121+50	141	284	0
121+00	110	336	0
120+50	94	370	0

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.

Charles V. Marshall

Date 3-29-77 Reg. No. 10695

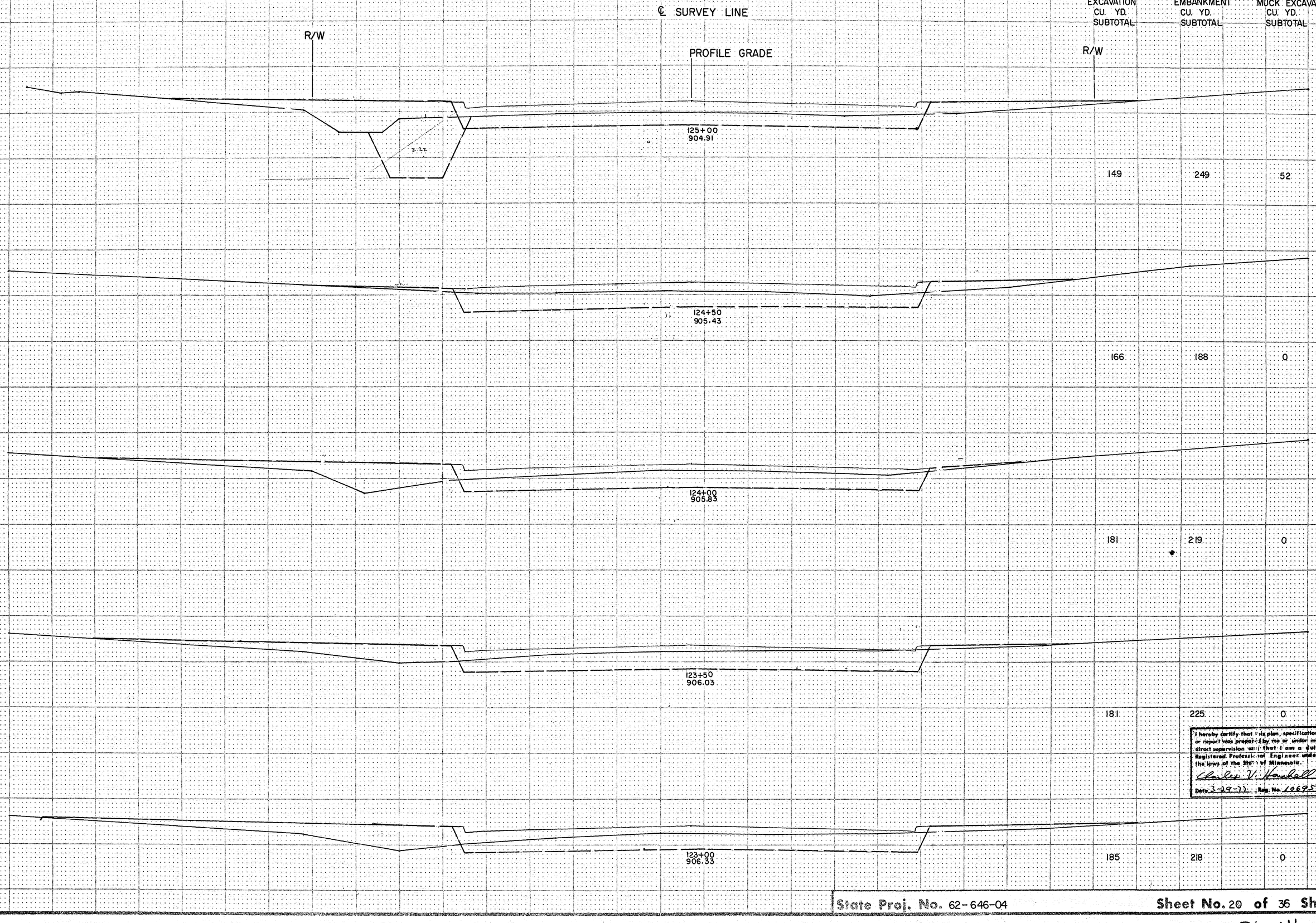
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 19 of 36 Sheets

26-116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
125+00	149	249	52
124+50	166	188	0
124+00	181	219	0
123+50	181	225	0
123+00	185	218	0

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.

Charles V. Hoverstad

Date 3-29-72 Reg. No. 10695

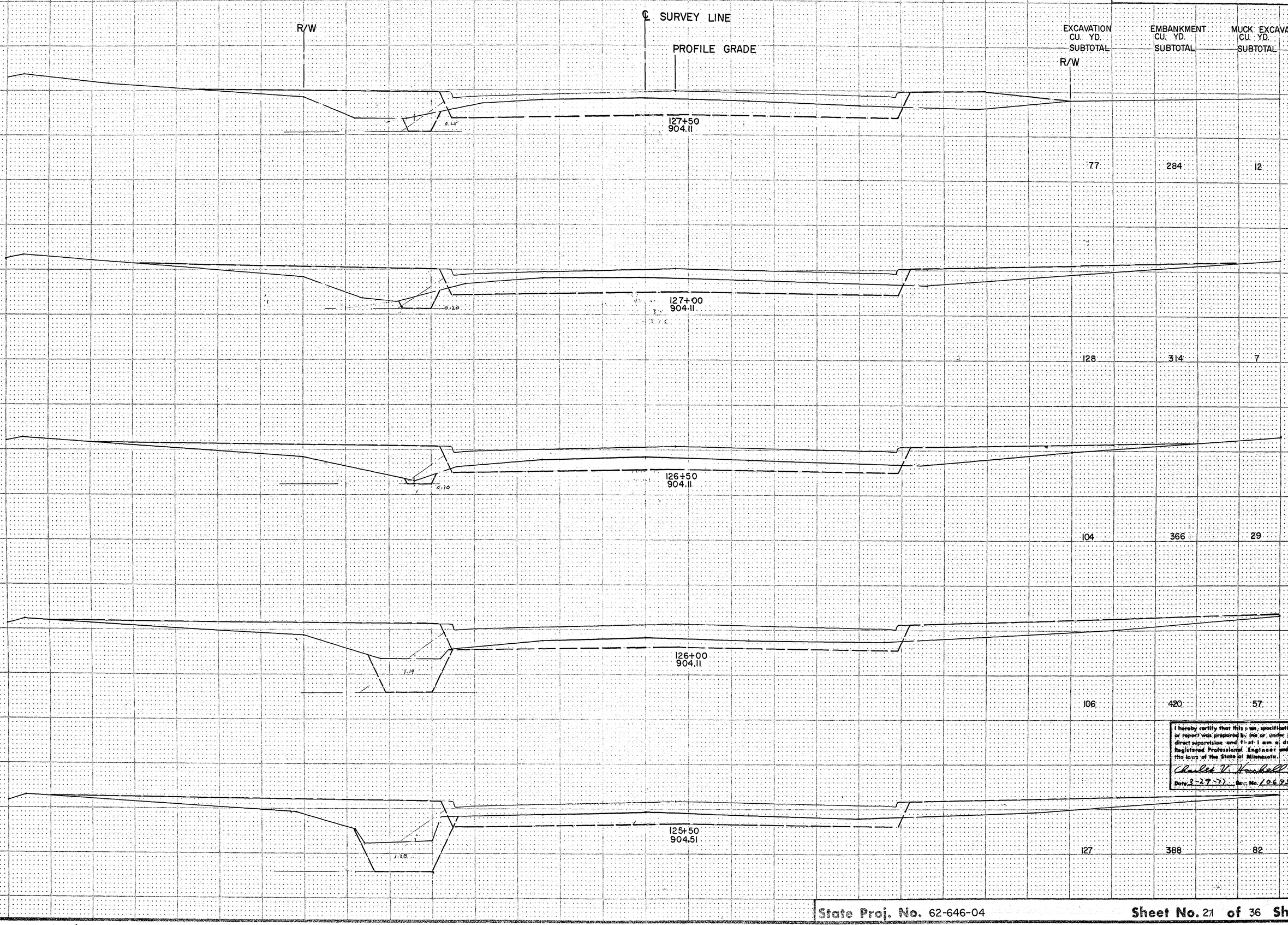
State Proj. No. 62-646-04

Sheet No. 20 of 36 Sheets

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

26-116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
	77	284	12
	128	314	7
	104	366	29
	106	420	57
	127	388	82

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.

Charles V. Hookell

Date 3-29-71 Reg. No. 10695

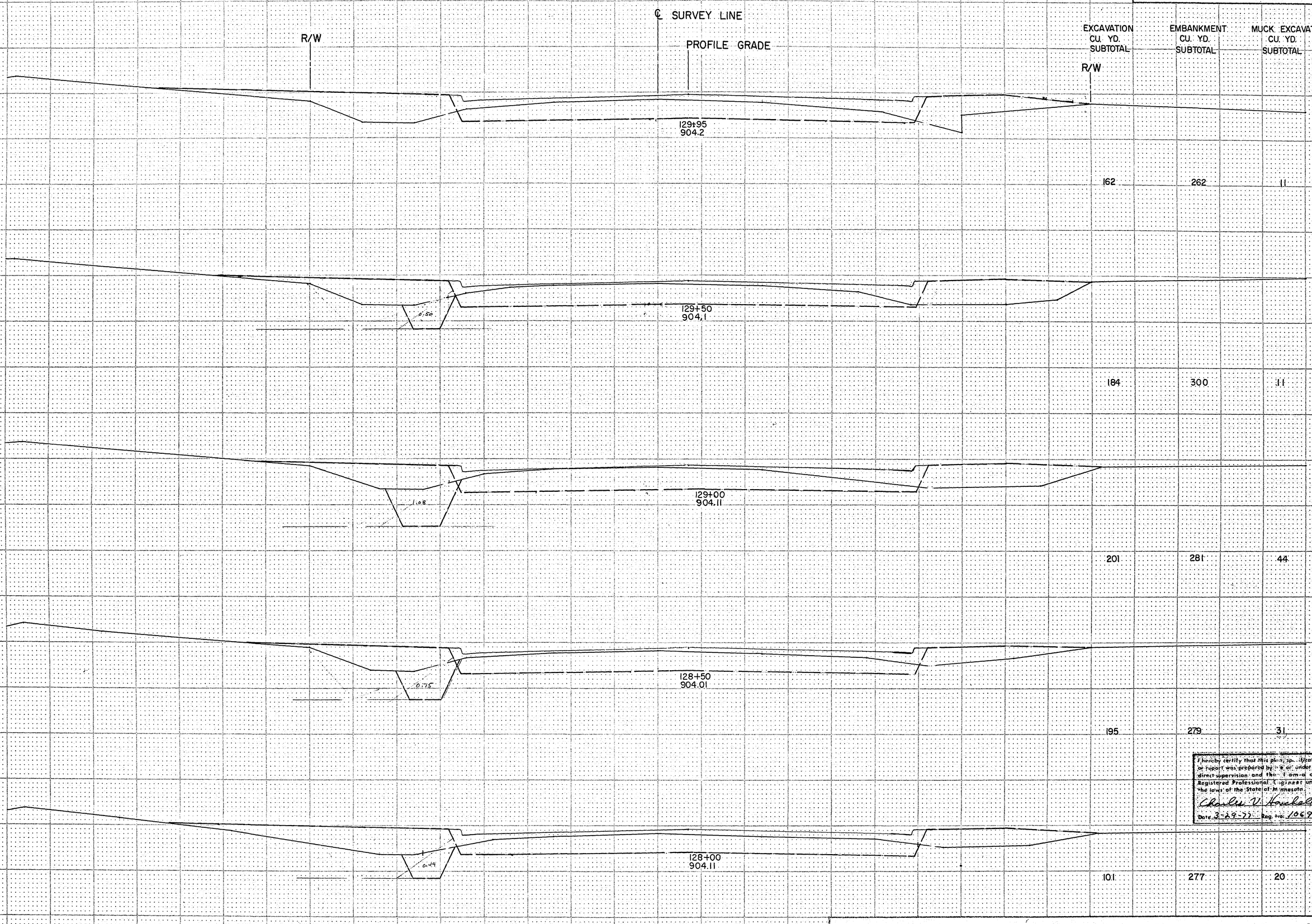
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 21 of 36 Sheets

26-116

Fed. Proj. No.



EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
162	262	11
184	300	11
201	281	44
195	279	31
101	277	20

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.

Charles V. Hackbell

Date 3-29-77 Reg. No. 10695

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

State Proj. No. 62-646-04

Sheet No. 22 of 36 Sheets

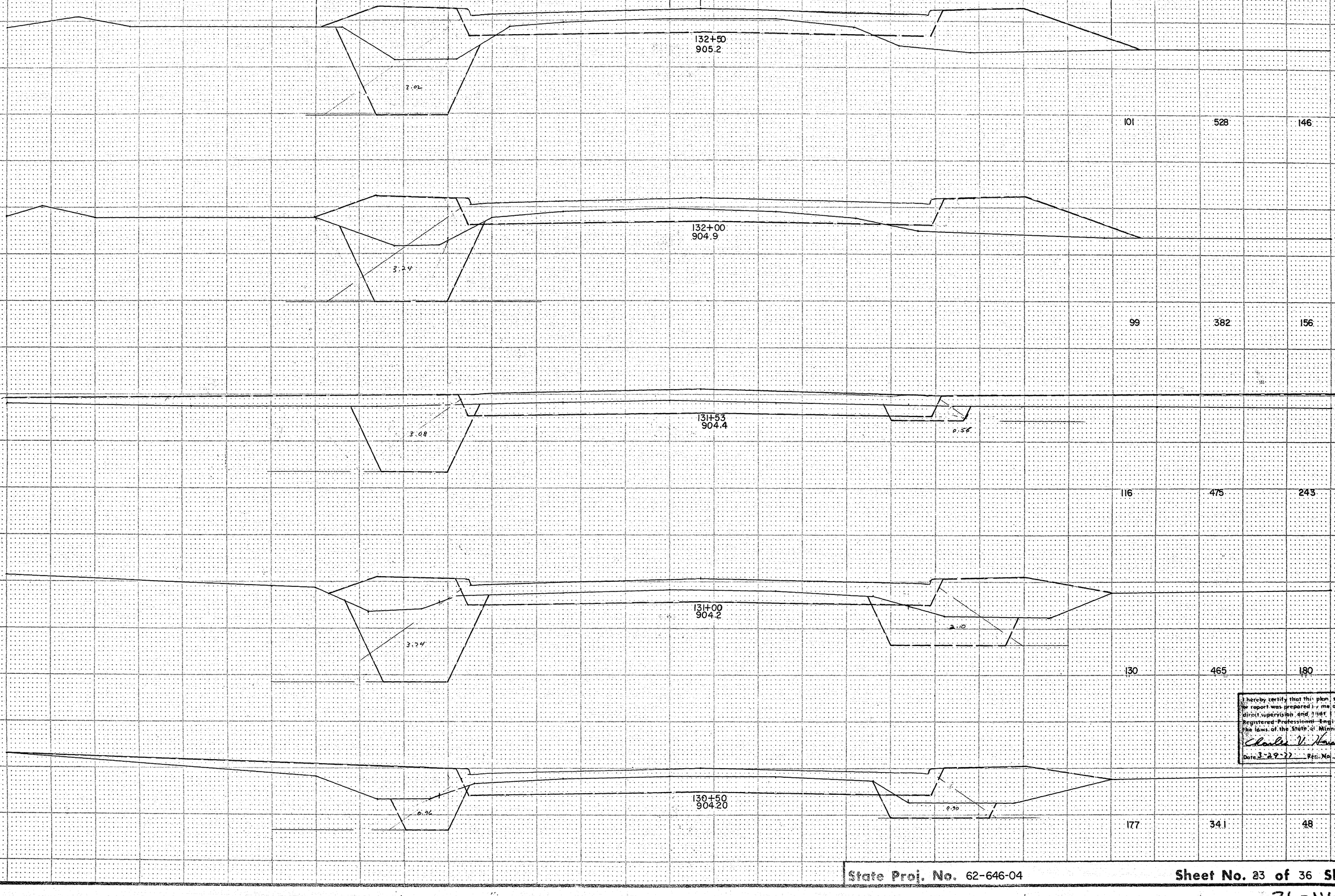
26-116

Fed. Proj. No.

℄ SURVEY LINE

PROFILE GRADE

R/W



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
R/W			
	101	528	146
	99	382	156
	116	475	243
	130	465	180
	177	341	48

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.

Charles V. Haukell

Date 3-29-77 Reg. No. 10695

State Proj. No. 62-646-04

Sheet No. 23 of 36 Sheets

26-116

FUNCTIONAL CROSS SECTION - OPEN DOTTED

H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

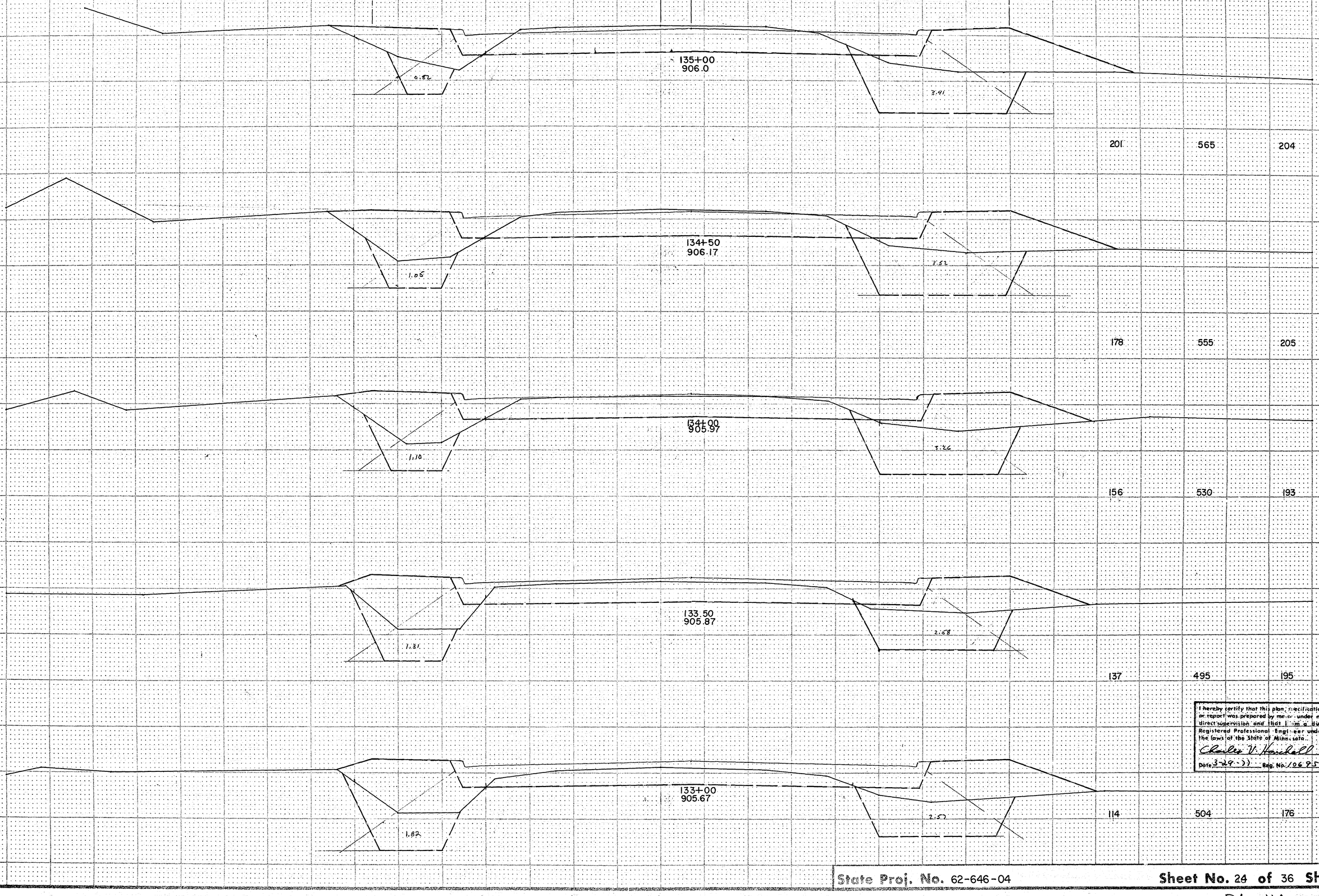
Fed. Proj. No.

℄ SURVEY LINE

PROFILE GRADE

R/W

R/W



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU YD SUBTOTAL
	201	565	204
	178	555	205
	156	530	193
	137	495	195
	114	504	176

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.

Charles V. Hochhalter

Date 3-29-93 Reg. No. 10695

State Proj. No. 62-646-04

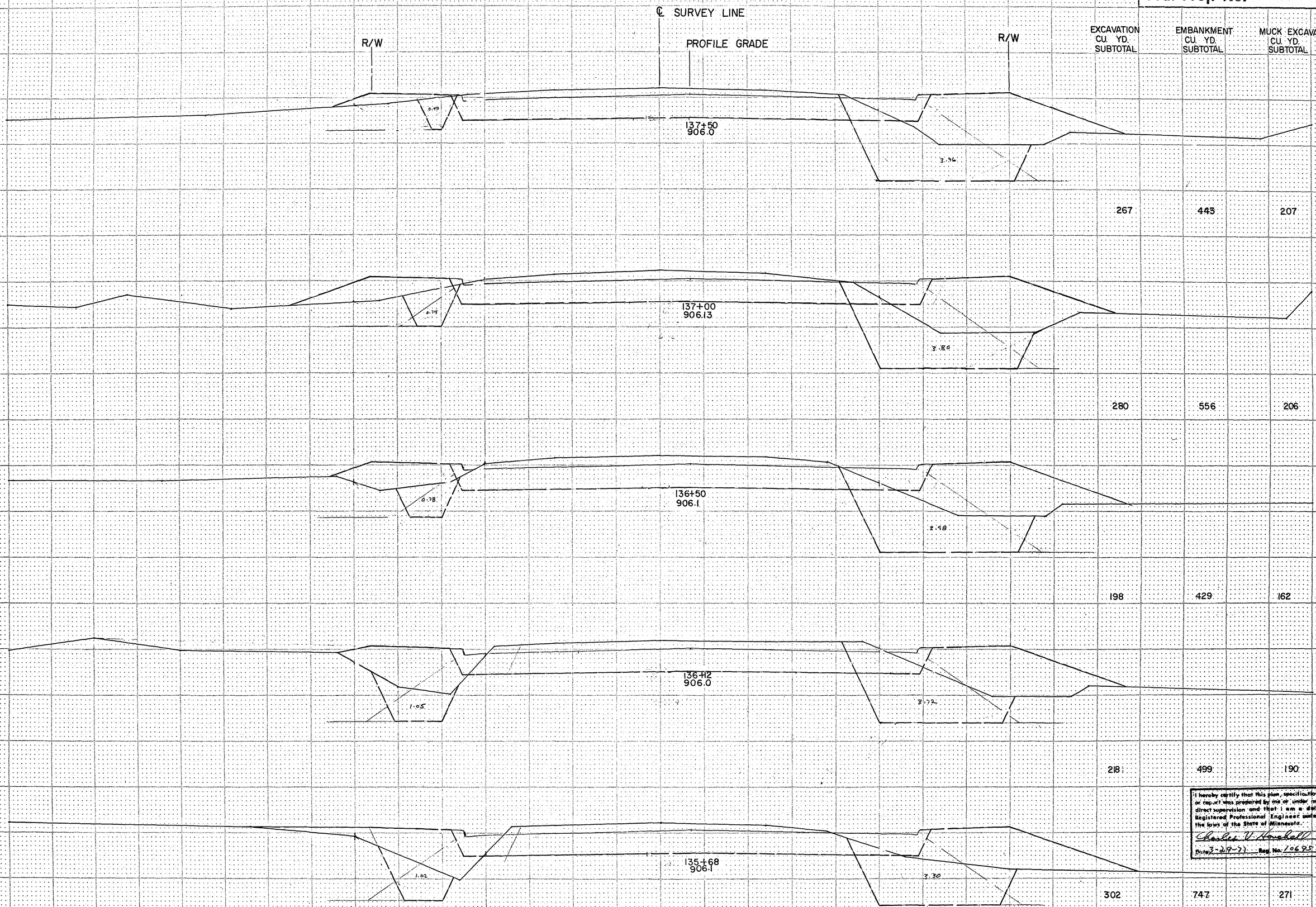
Sheet No. 24 of 36 Sheets

26-116

FUNCTIONAL CROSS SECTION - OPEN DOTTED

M. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

Fed. Proj. No.



EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
267	443	207
280	556	206
198	429	162
218	499	190
302	747	271

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.

Charles V. Kendall

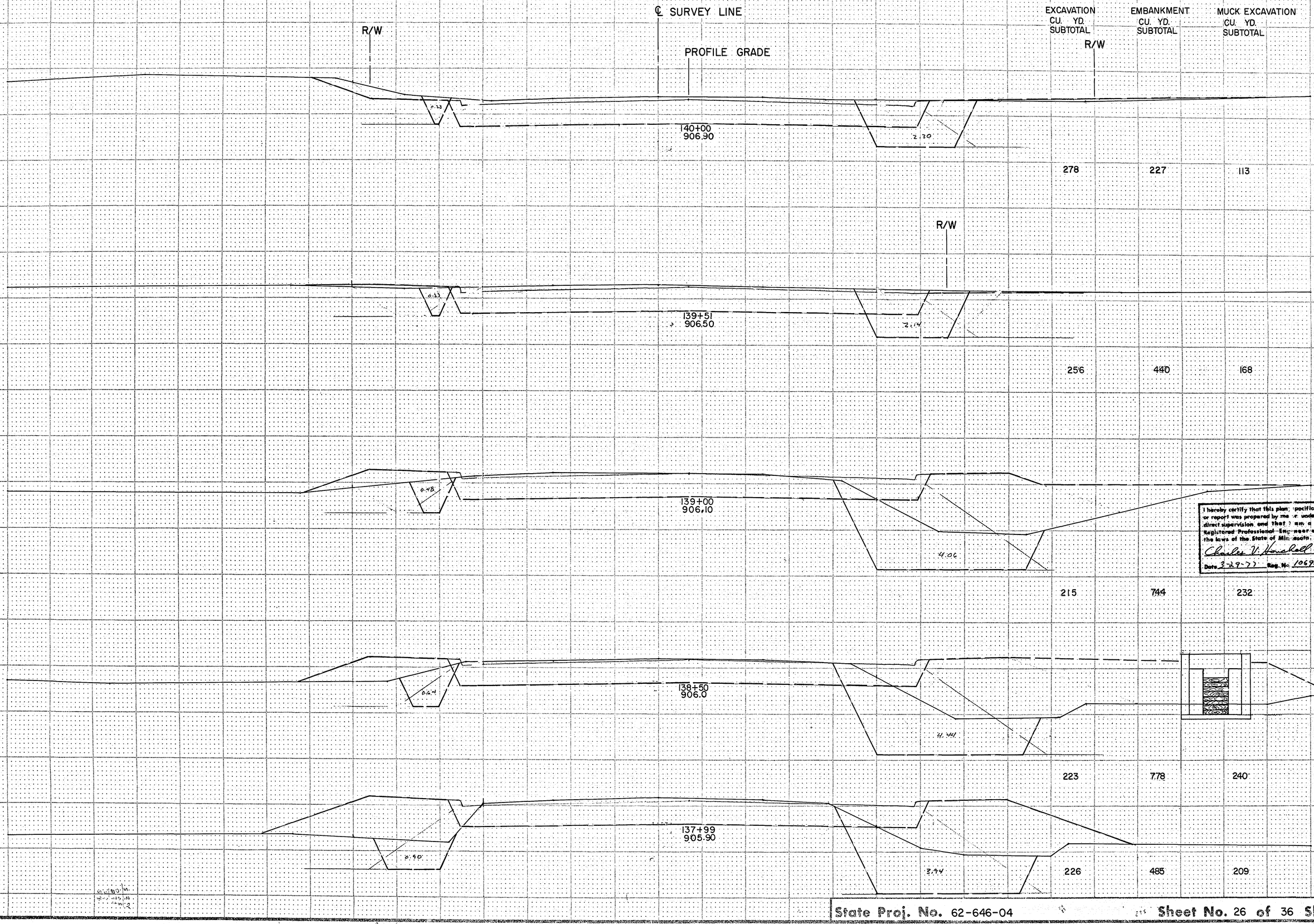
Date 3-29-71 Reg. No. 10695

FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS 15, PAUL

State Proj. No. 62-646-04

Sheet No. 25 of 36 Sheets

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
	278	227	113
	256	440	168
	215	744	232
	223	778	240
	226	485	209

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.

Charles V. Hovehell

Date 3-29-72 Reg. No. 10695

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

State Proj. No. 62-646-04 Sheet No. 26 of 36 Sheets

26-116

Fed. Proj. No.

℄ SURVEY LINE

PROFILE GRADE

R/W

R/W

142+50
907.8

142+00
907.70

141+53
907.70

141+00
907.6

140+50
907.4

	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
142+50	256	147	0
142+00	286	126	0
141+53	403	122	0
141+00	419	115	0
140+50	347	175	59

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.

Charles V. Forshell

Date 3-29-77 Reg. No. 10695

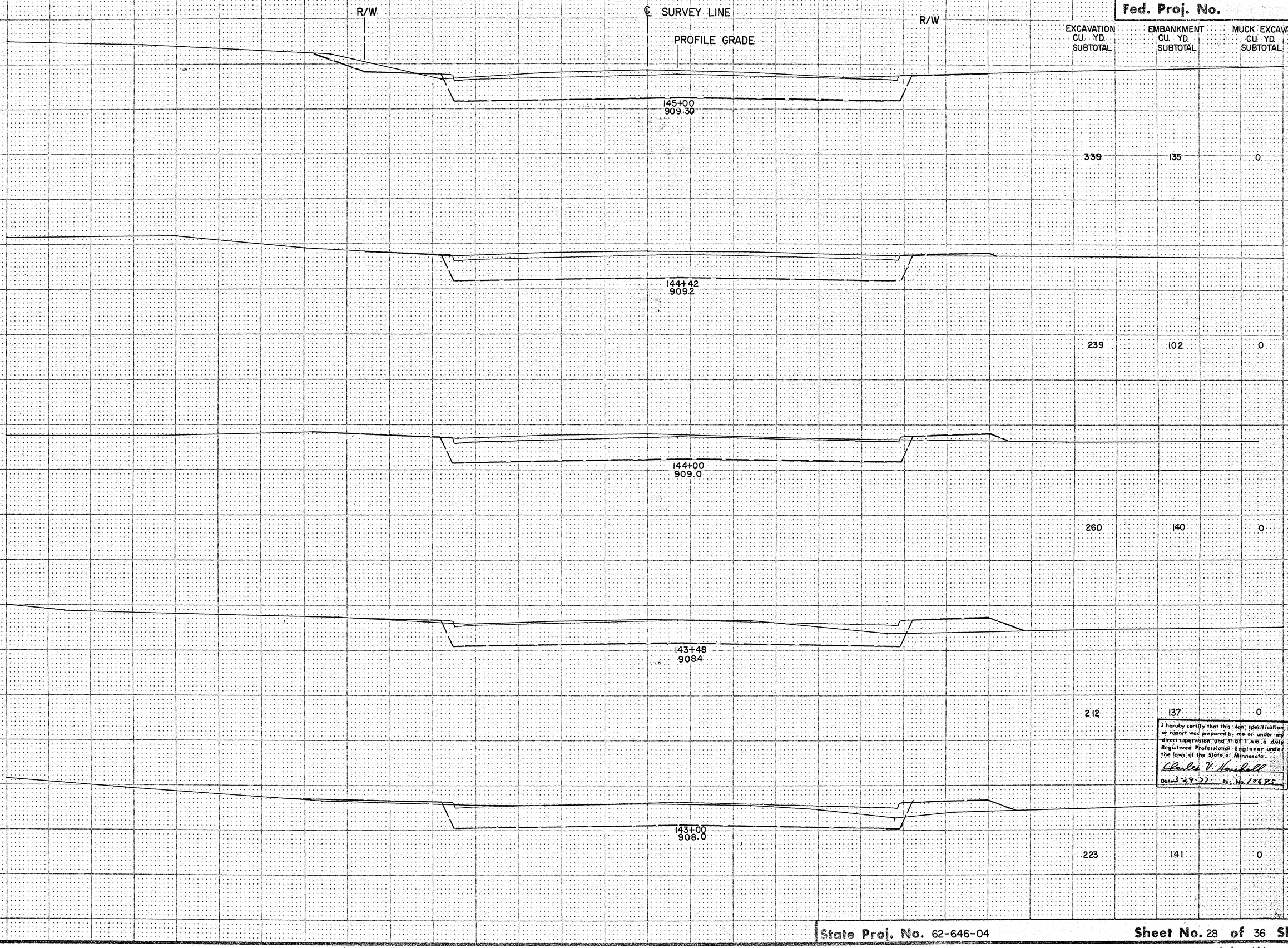
State Proj. No. 62-646-04

Sheet No. 27 of 36 Sheets

26-116

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

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
145+00			
144+42	339	135	0
144+00	239	102	0
143+48	260	140	0
143+00	212	137	0
	223	141	0

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.

Charles V. Hovekell

Date 3-29-77 Reg. No. 10655

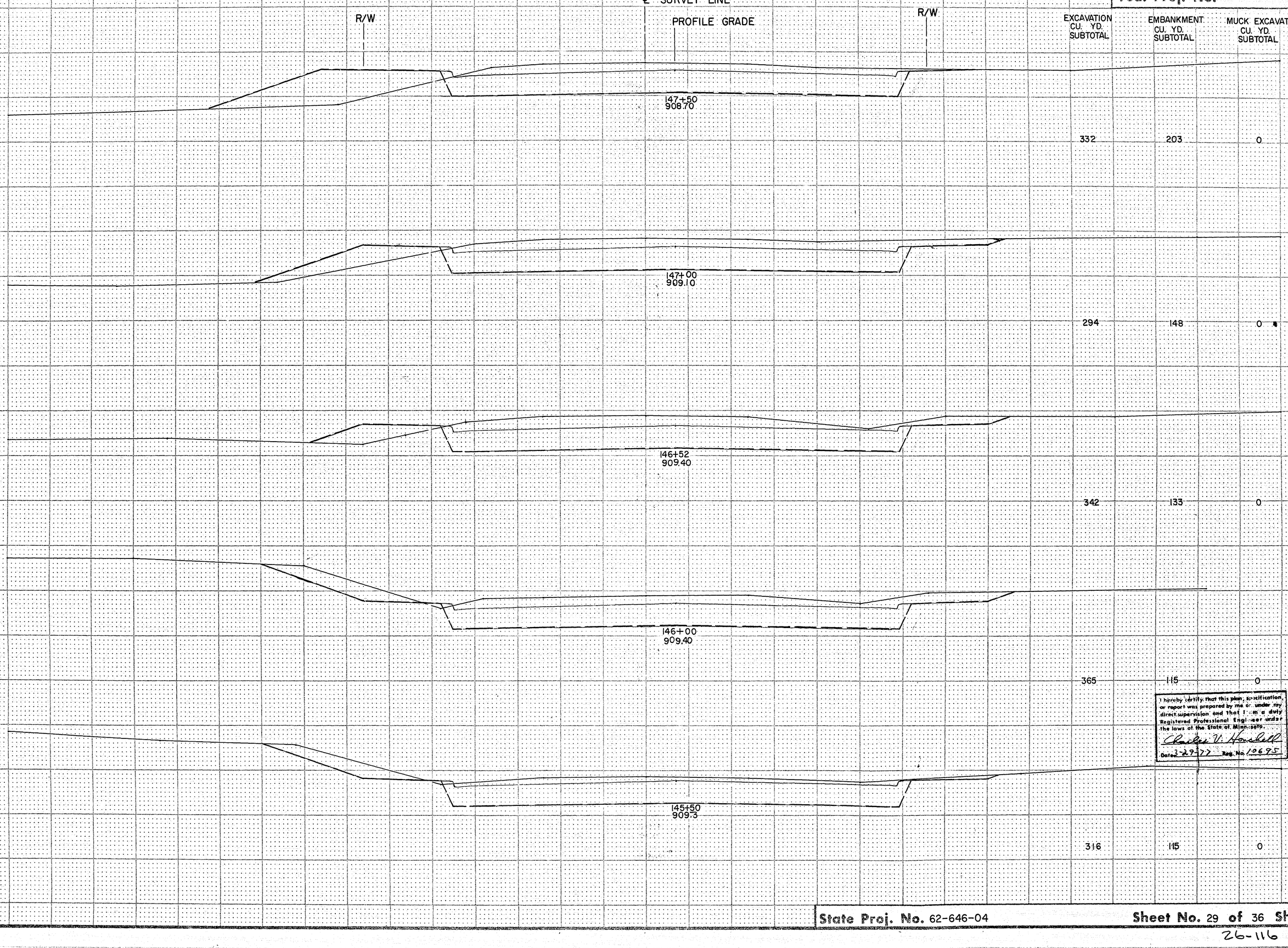
State Proj. No. 62-646-04

Sheet No. 28 of 36 Sheets

26-116

FUNCTIONAL CROSS SECTION - OPEN BOTTED
H. A. RICARD CO. - MINNEAPOLIS - ST. PAUL

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
147+50 908.70	332	203	0
147+00 909.10	294	148	0
146+52 909.40	342	133	0
146+00 909.40	365	115	0
145+50 909.3	316	115	0

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.

Charles V. Hoshall

Date 3-29-77 Reg. No. 10695

State Proj. No. 62-646-04

Sheet No. 29 of 36 Sheets

26-116

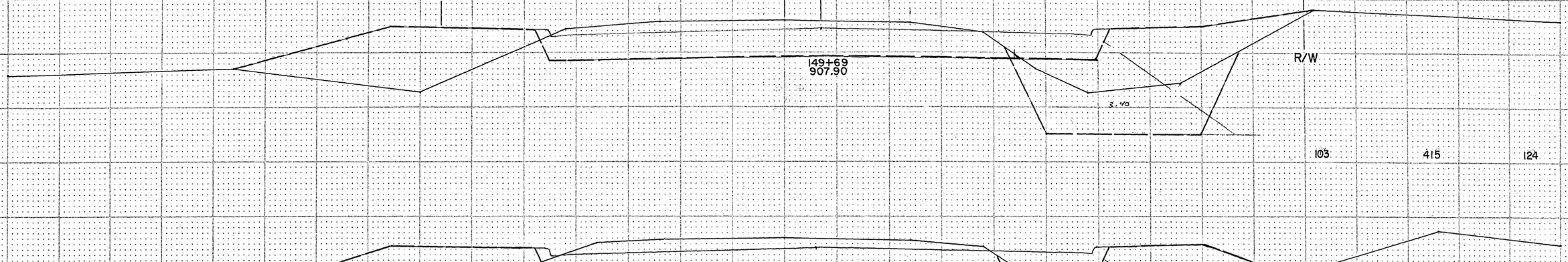
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

Fed. Proj. No.

℄ SURVEY LINE

PROFILE GRADE

R/W



EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
103	415	124
189	473	190
253	669	292
272	515	173
301	278	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.

Charles V. Rockell

Date 3-29-77 Reg. No. 10695

State Proj. No. 62-646-04

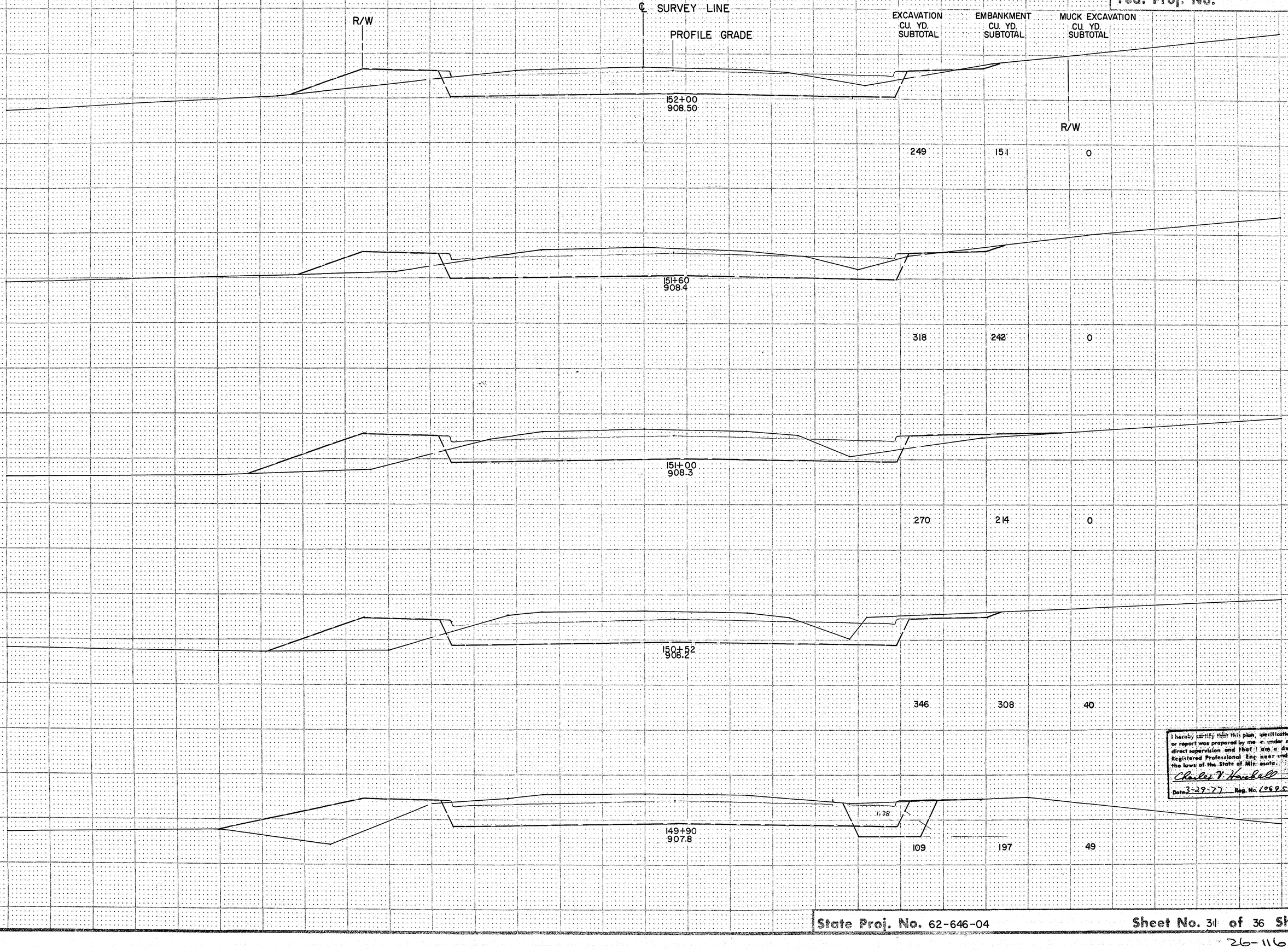
Sheet No. 30 of 36 Sheets

FUNCTIONAL CROSS SECTION - OPEN DOTTED

M. L. ROGERS CO., MINNEAPOLIS - ST. PAUL

26-116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
	249	151	0
	318	242	0
	270	214	0
	346	308	40
	109	197	49

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.

Charles T. Haverhall

Date 3-29-77 Reg. No. 10695

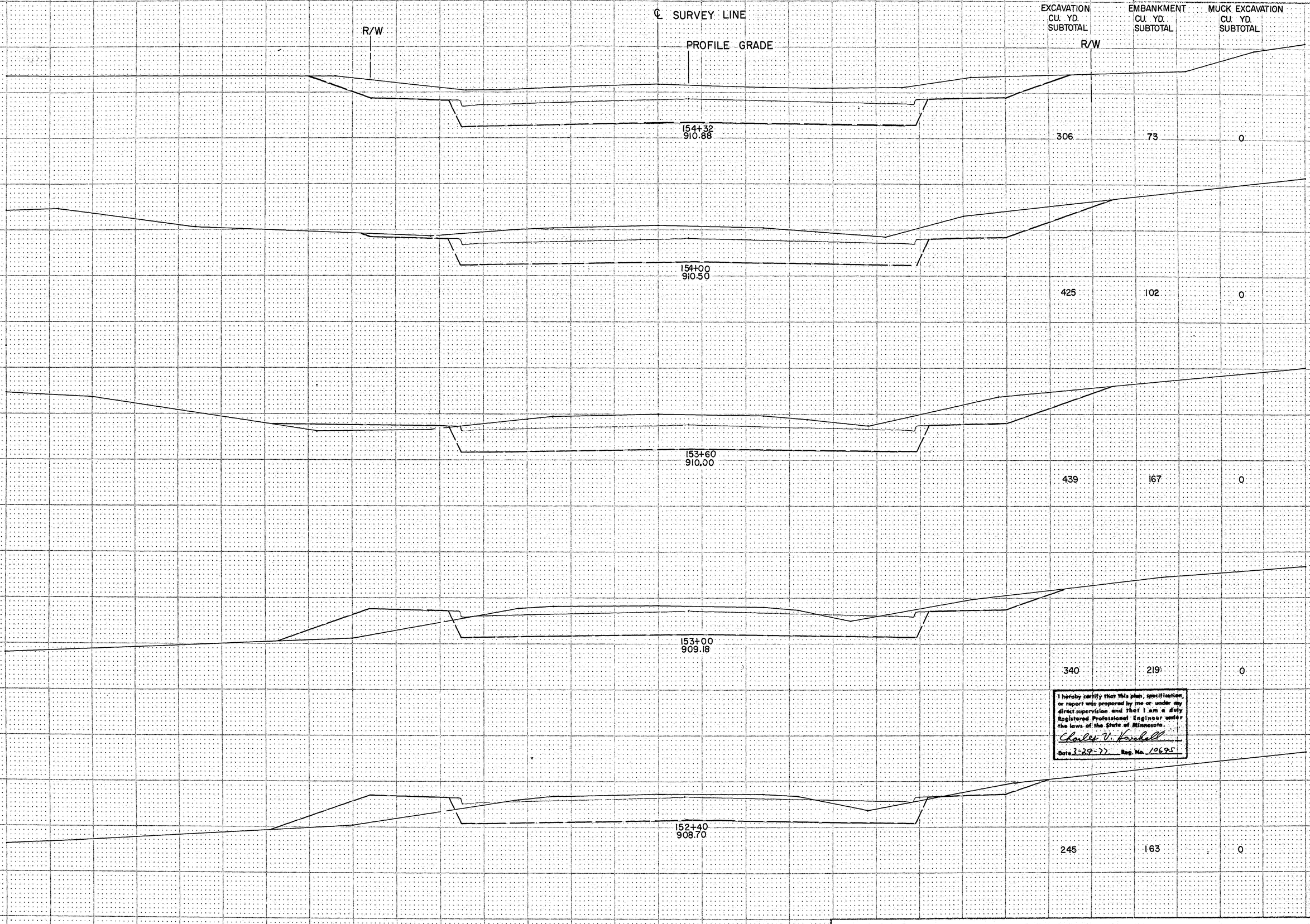
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO., MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 31 of 36 Sheets

26-116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
154+32 910.88	306	73	0
154+00 910.50	425	102	0
153+60 910.00	439	167	0
153+00 909.18	340	219	0
152+40 908.70	245	163	0

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.

Charles V. Voxhall

Date 3-29-77 Reg. No. 10695

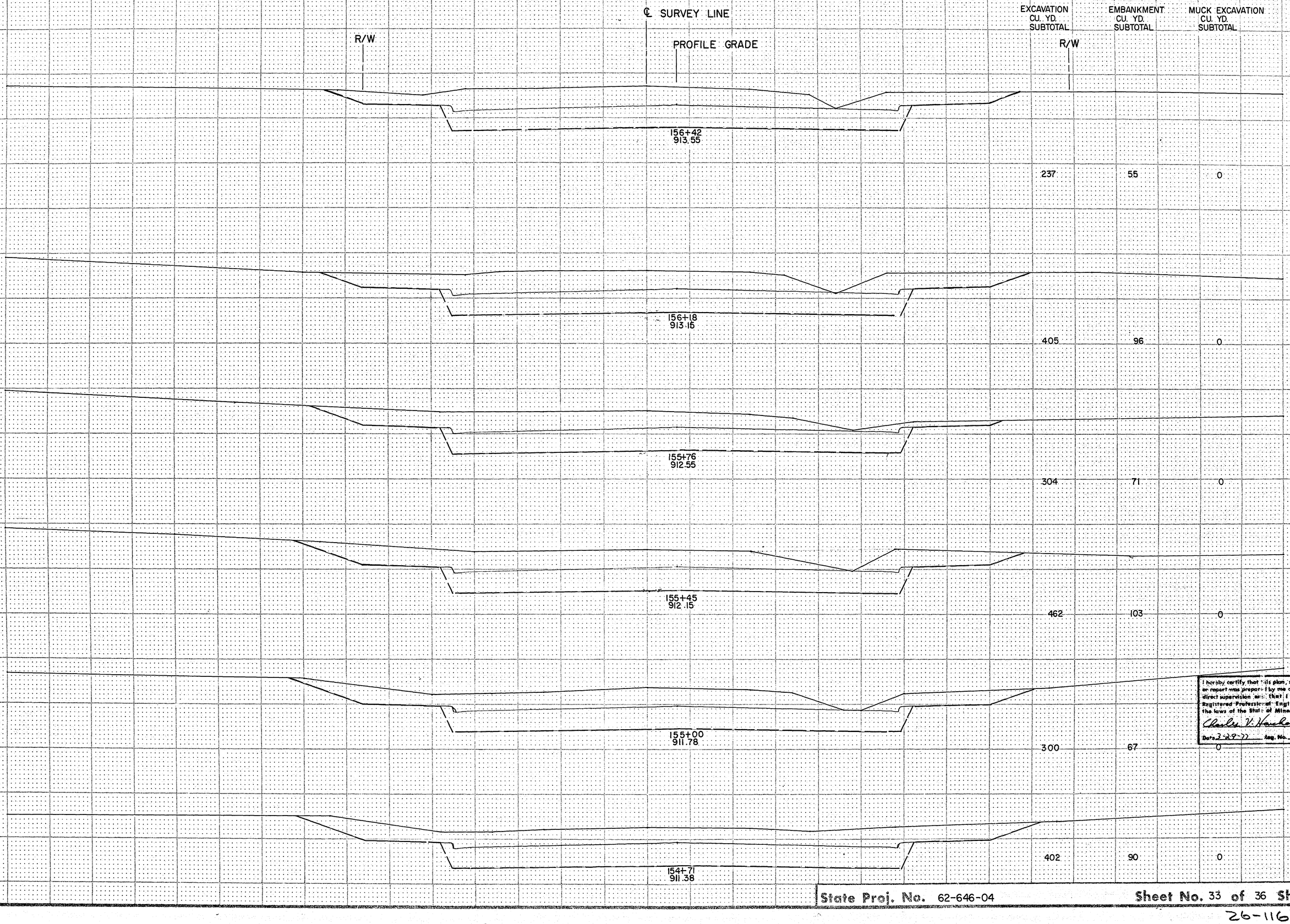
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 32 of 36 Sheets

26-116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
R/W			
	237	55	0
	405	96	0
	304	71	0
	462	103	0
	300	67	0
	402	90	0

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Charles V. Hanchett

Date 3-29-77 Reg. No. 10695

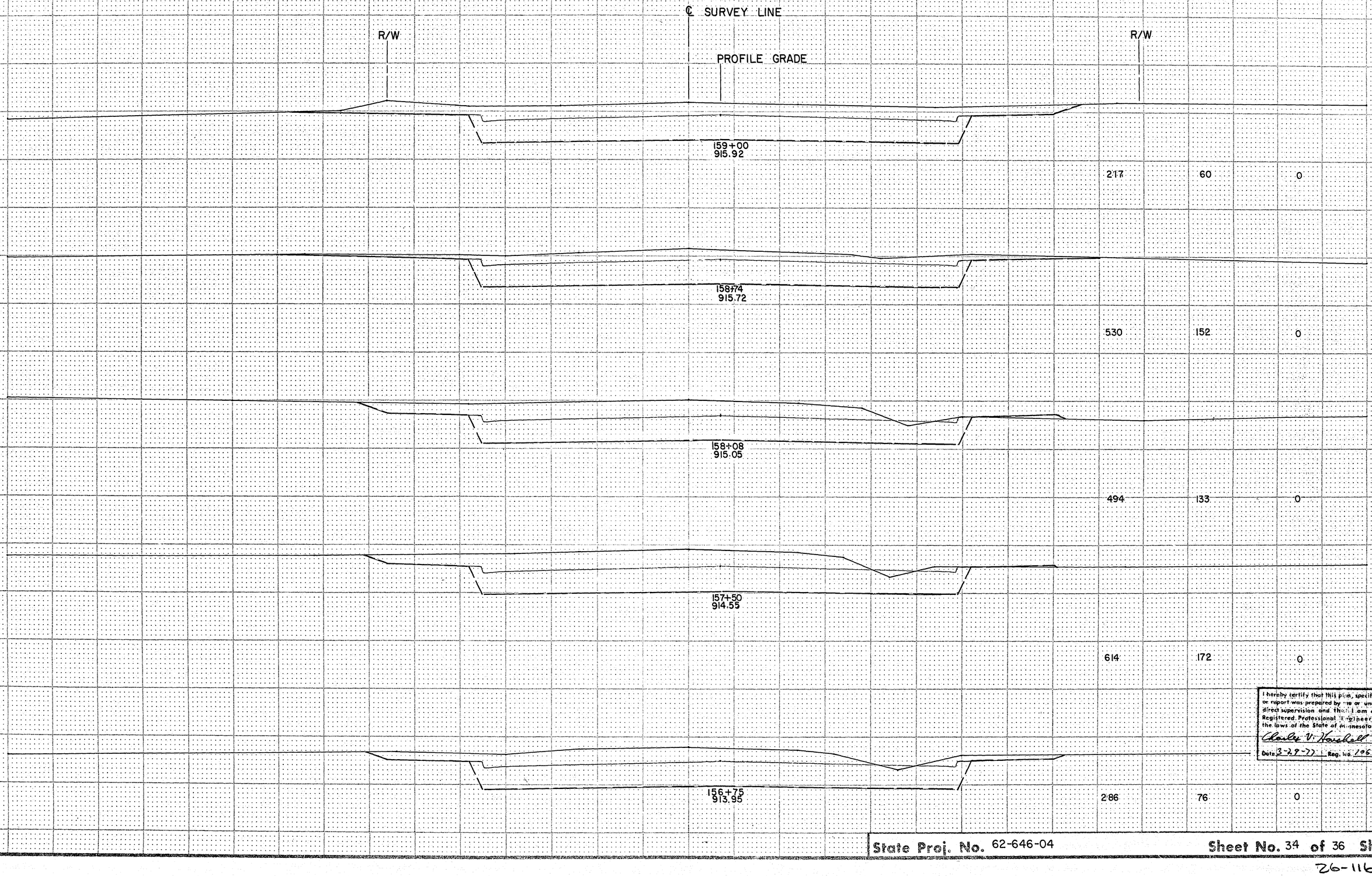
FUNCTIONAL CROSS SECTION - OPEN DOTTED
H. A. ROGERS CO. - MINNEAPOLIS - ST. PAUL

State Proj. No. 62-646-04

Sheet No. 33 of 36 Sheets

26-116

Fed. Proj. No.



	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
159+00 915.92	217	60	0
158+74 915.72	530	152	0
158+08 915.05	494	133	0
157+50 914.55	614	172	0
156+75 913.95	286	76	0

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Charles V. Marshall

Date 3-29-77 Reg. No. 19695

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

State Proj. No. 62-646-04 Sheet No. 34 of 36 Sheets

26-116

Fed. Proj. No.

	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
160+61 917.02			
160+41 917.02	419	117	0
159+90 916,52	450	126	0
159+35 916.12	318	80	0

TOTAL EARTHWORK QUANTITIES

	EXCAVATION	EMBANKMENT
EXCAVATION	21,902	
EMBANKMENT		31,196 x 1.30 = 40,555
MUCK EXCAVATION	6,276 x 1.30 = 8,158	
TOTAL	[illegible]	[illegible]

℄ SURVEY LINE

R/W

PROFILE GRADE

R/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.

Charles V. Kendall

Date 3-29-77 Reg. No. 10695

State Proj. No. 62-646-04

Sheet No. 35 of 36 Sheets

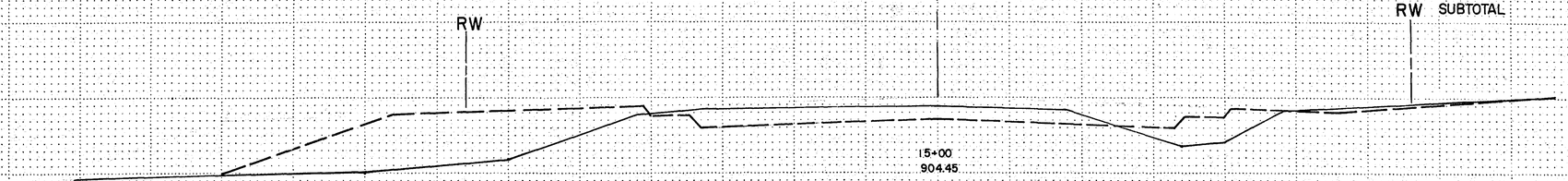
26-116

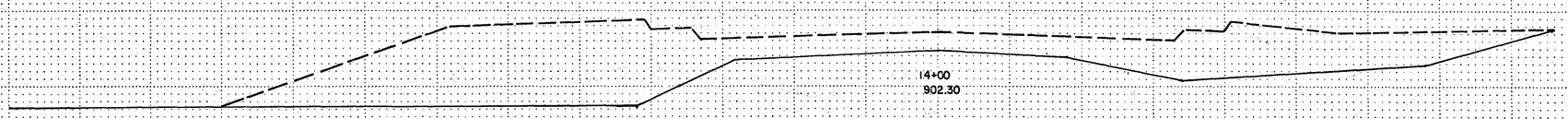
FUNCTIONAL CROSS SECTION - OPEN DOTTED

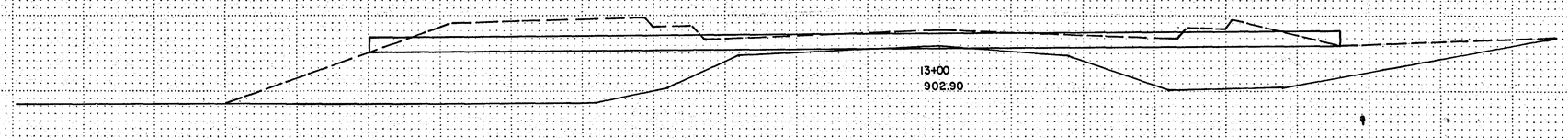
H. A. ROBERTS CO. - MINNEAPOLIS - ST. PAUL

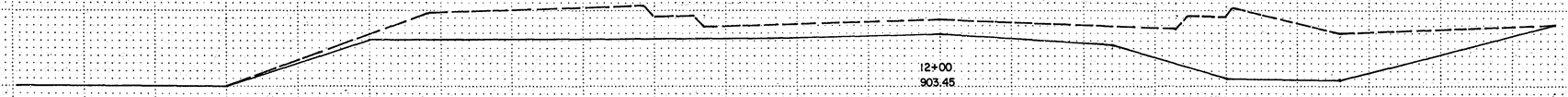
Fed. Proj. No.

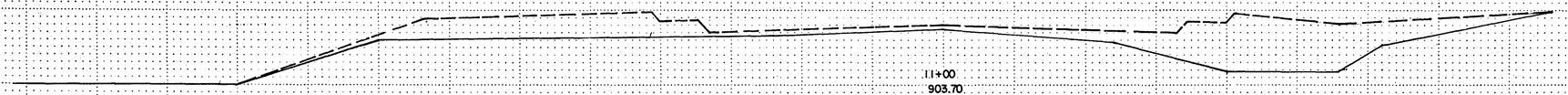
℄ SURVEY LINE & PROFILE

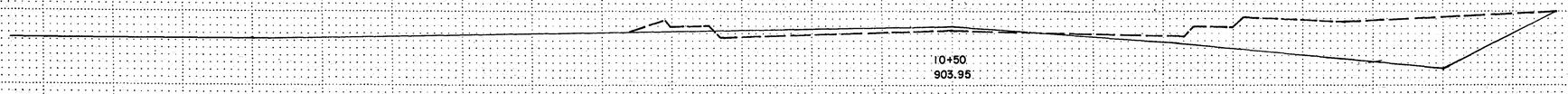












	EXCAVATION CU. YD. SUBTOTAL	EMBANKMENT CU. YD. SUBTOTAL	MUCK EXCAVATION CU. YD. SUBTOTAL
	52	602	0
	0	902	0
	0	719	0
	0	467	0
	6	177	0

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.

Charles V. Hackell

Date 3-28-77 Reg. No. 10695

EARTHWORK QUANTITIES- CO. RD. C-2

ECAVATION	58 CU. YD.	
EMBANKMENT	2867 CU. YD. X 1.30 =	3727
EXCESS FROM CLEVELAND AVE.		5348
TOTAL NEEDED		3669
TOTAL EXCESS		1679

State Proj. No. 62-646-04

Sheet No. 36 of 36 Sheets

26-116

NORSTAR © No. 101 ST. PAUL - MINNEAPOLIS, MINNESOTA ©

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

SCALE: 1"=50'

B624 CONCRETE CURB & GUTTER

CONSTRUCTION LIMITS

MH 39 CB 42 MH 44 CB 48 MH 39

REMOVE REMOVE MH 47 MH 50 24" RCP REMOVE

CB 40 CB 46

STRUCTURE 41-A MH 41

FILL TO STRUCTURE DRAIN

SPECIAL STRUCTURE SEE DETAIL SHEET 5

SIGN

LOWER WATERMAIN SEE DETAIL SHEET 4

CLOSE

CONSTRUCTION LIMITS

REMOVE EXISTING 15" R.C.P.

HO.

10'

45

PVC 908.85 PVI 909.10 PVT 909.35

VC = 100'
M = 0.125

PROFILE GRADE EXISTING GRADE

+0.50%

20' 2.16'

STRUCT. 41-A MH 41 MH 47 MH 50

20'-36" RCP at 0.25%

899.90 899.83

325'-36" RCP at 0.25%

899.02

0.17%

300'-36" RCP at 0.25%

0.17%

275'-36" RCP at 0.30%

898.27 898.61

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

CB 42 CB 40 MH 41

60'-15" RCP

23'-15" RCP

901.87 901.27 901.04 893.83

CB 48 MH 47 MH 42 CB 46

EXISTING GROUND PROFILE

903.65 95'-15" RCP 900.70

17'-15" RCP

196'-15" RCP

893.02 893.02 899.14

900.00

15" RC APRON WITH TRASH GUARD, SOD

910 905 900

137 138 139 140 141 142 143 144 145 146

BITUMINOUS SURFACE VARIATIONS 8/24/79

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.

Charles H. Hovebell

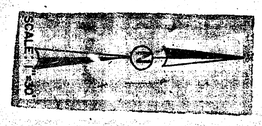
Date 3-27-79 Reg. No. 13692

S.A.P. 62-646-04

Sheet No. 9 of 36 Sheets

26116

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE



HO.

HO.

B624 CONCRETE CURB & GUTTER

CONSTRUCTION LIMITS

CB 42

MH 39

MH 43

MH 44

CB 48

MH 49

MH 47

MH 50

CB 40

CB 46

MH 41

STRUCTURE 41-A

REMOVE

REMOVE

REMOVE

FILL TO STRUCTURE DRAIN

SPECIAL STRUCTURE SEE DETAIL SHEET 5

SIGN

~~LOWER WATERMAIN~~
SEE DETAIL SHEET 4

CLOSE

CONSTRUCTION LIMITS

10'

HO.

HO.

HO.

~~REMOVE EXISTING 15" RCP~~

45

AS-BUILT PLAN
CHANGES PER TO
CONST. RECORDS

DONE BY: MR
DATE: 12-11-78

910
905
900

STRUCT. 41-A
MH 41
MH 418
MH 47
MH 50
CB 42
CB 40
CB 46
CB 48

PROFILE GRADE
EXISTING GRADE
+0.50%
2.0'
2.16'

34" 29'-36" RCP at 0.26%
899.90
~~899.83~~
899.90
899.84

268' ~~325'~~ - 36" RCP at 0.25%
~~898.02~~
898.22

1.0' SUBCUT FOR UNIFORMITY AND COMPACTION

304' ~~300'~~ - 36" RCP at 0.25%

275' 36" RCP at 0.30%
898.27
~~898.78~~
898.79

VC = 100'
M = 0.125

PVC 900.85
PVC 900.85
PVC 909.10

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duty Registered Professional Engineer under the laws of the State of Minnesota.
Date 3-27-77 Reg. No. 13675
Charles V. Hackett

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

EXISTING GROUND PROFILE

~~82'~~ 60'-15" RCP
~~90.87~~
900.91

~~31'~~ 29'-15" RCP
901.27
901.04
893.83

~~45'-15"~~ RCP
~~901.56~~
900.70
893.02

36' 17'-15" RCP
~~893.02~~
~~899.14~~
902.74

196'-15" RCP
900.00
15" RC APRON WITH TRASH GUARD, SOD

26-116