

STATEMENT OF ESTIMATED QUANTITIES - PATH				AVERAGE 3 LOWEST BIDDERS	FOREST LAKE		ASCHBACH		H & S ASPHALT		TOTAL ASPHALT		SHAFFER		VALLEY PAVING		PALDA & SONS		BIT. ROADWAYS INC.		DALY & SONS	
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES		UNIT PRICE	AMOUNT	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	L.S.	1		5,500.00	5,500.00	5,500.00	5,500.00	5,500.00	5,500.00	2,850.00	2,850.00	5,000.00	5,000.00	3,800.00	3,800.00	14,000.00	14,000.00	4,000.00	4,000.00	500.00	500.00
2101.502	CLEARING	TREE	16		106.67	1706.72	112.00	1792.00	180.00	2880.00	70.00	1120.00	50.00	800.00	75.00	1200.00	25.00	400.00	75.00	1200.00	100.00	1600.00
2101.507	GRUBBING	TREE	16		76.67	1226.72	60.00	960.00	120.00	1920.00	70.00	1120.00	50.00	800.00	75.00	1200.00	25.00	400.00	75.00	1200.00	100.00	1600.00
2104.509	REMOVE C.B.	EACH	2		95.00	190.00	100.00	200.00	45.00	90.00	140.00	280.00	100.00	200.00	150.00	300.00	90.00	180.00	20.00	400.00	100.00	200.00
2105.501	COMMON EXCAVATION	C.Y.	4666		3.45	16131.00	3.35	15631.10	3.50	16331.50	3.00	13998.00	2.75	12831.50	3.95	18430.70	4.15	19363.90	3.75	17497.50	5.00	23330.00
2105.523	COMMON BORROW (LV)	C.Y.	100		3.15	315.00	3.45	345.00	5.00	500.00	6.00	600.00	4.75	475.00	4.60	460.00	5.00	500.00	6.50	650.00	7.00	700.00
2105.525	TOPSOIL BORROW (LV)	C.Y.	773		5.48	4246.04	7.75	5990.75	5.00	3865.00	6.25	4831.25	6.50	5024.50	7.00	5411.00	5.90	4560.70	7.50	5797.50	7.00	5411.00
2211.501	AGGREGATE BASE, CLASS 6 OR 5 (100% CRUSHED)	TON	2515		5.82	14625.30	4.70	11820.50	6.50	16347.50	7.50	18862.50	6.10	15341.50	7.70	19365.50	7.55	18988.25	8.87	22308.05	7.00	17605.00
0331.603	SAWING BITUMINOUS PAVEMENT SURFACE	L.F.	5920		0.92	5446.40	0.80	4736.00	1.25	7400.00	0.65	3848.00	1.75	10360.00	1.00	5920.00	0.57	3374.40	1.10	6512.00	0.51	3019.20
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	86		191.67	16401.62	190.00	16340.00	190.00	16340.00	200.00	17200.00	205.00	17630.00	195.00	16770.00	190.00	16340.00	198.00	17028.00	190.00	16340.00
2341.508	WEARING COURSE MIXTURE FOR BIKEWAY	TON	565		12.97	7312.35	13.65	7712.25	12.50	7062.50	14.50	8192.50	14.95	8406.75	15.04	8446.75	17.00	9605.00	13.80	7797.00	21.00	11865.00
2341.510	BINDER COURSE MIXTURE FOR BIKEWAY	TON	565		11.83	6680.75	10.25	5771.25	12.50	7062.50	14.50	8192.50	14.95	8406.75	15.24	8610.00	13.00	7345.00	16.78	9480.70	20.00	11300.00
2331.518 M	LEVELING COURSE MIXTURE FOR BIKEWAY	TON	413		11.36	4692.72	9.40	3882.20	12.50	5162.50	14.75	6091.75	15.20	6307.00	14.96	6178.48	12.00	4956.00	16.78	6930.14	18.00	7434.00
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	625		1.07	671.25	1.00	625.00	1.10	687.50	1.25	781.25	1.25	781.25	1.25	781.25	0.60	375.00	1.40	825.00	1.44	900.00
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	2072		0.39	810.72	1.00	2072.00	0.01	20.72	0.80	1657.60	0.85	1761.20	1.30	2693.60	0.40	828.80	1.50	3108.00	1.40	2900.80
2501.515	12" C.S. PIPE APRONS	EACH	3		61.67	185.01	40.00	120.00	75.00	225.00	70.00	210.00	40.00	120.00	45.00	157.50	50.00	150.00	75.00	225.00	44.00	132.00
2501.515	18" R.C. PIPE APRONS	EACH	2		238.33	476.66	230.00	460.00	275.00	550.00	210.00	420.00	75.00	150.00	210.00	420.00	315.00	630.00	300.00	600.00	330.00	660.00
2501.515	24" R.C. PIPE APRONS	EACH	2		286.67	573.34	260.00	520.00	350.00	700.00	250.00	500.00	250.00	500.00	450.00	900.00	325.00	650.00	440.00	880.00	440.00	880.00
2503.511	12" C.S. PIPE SEWER, 16 GAUGE	L.F.	44		15.95	702.20	13.00	572.00	11.85	521.40	23.00	1012.00	20.00	880.00	18.00	792.00	15.00	660.00	28.00	1232.00	14.30	629.20
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	78		22.00	1716.00	19.00	1482.00	24.00	1872.00	25.00	1950.00	24.00	1872.00	22.00	1716.00	35.00	2730.00	22.00	1716.00	22.00	1716.00
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	12		39.00	468.00	25.00	300.00	27.00	324.00	35.00	420.00	27.00	324.00	28.00	336.00	55.00	660.00	27.50	330.00	27.00	324.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN RC-2	EACH	2		606.67	1213.34	670.00	1340.00	700.00	1400.00	450.00	900.00	1000.00	2000.00	950.00	1900.00	625.00	1250.00	1000.00	2000.00	660.00	1320.00
2506.522	ADJUST FRAME AND RING CASTING	EACH	10		73.33	733.30	90.00	900.00	55.00	550.00	75.00	750.00	100.00	1000.00	150.00	1500.00	100.00	1000.00	100.00	1000.00	100.00	1000.00
2535.501	BITUMINOUS CURB	L.F.	65		2.57	167.05	3.00	195.00	1.70	110.50	3.00	195.00	2.75	178.75	2.90	188.50	4.00	260.00	1.85	120.25	3.00	195.00
2575.501	ROADSIDE SEEDING	ACRE	0.3		276.67	83.00	225.00	67.50	202.50	79.50	238.50	102.00	246.00	72.00	350.00	105.00	225.00	67.50	220.00	250.00	75.00	400.00
2575.502	SEEDING MIXTURE 6	POUND	23		4.15	95.45	5.00	115.00	6.00	138.00	1.45	33.25	2.75	63.25	2.00	46.00	5.00	105.00	2.50	56.25	5.00	115.00
2575.505	SODDING	S.Y.	7828		1.10	8610.80	1.05	8219.40	1.25	9785.00	1.00	7828.00	1.15	9002.20	1.15	9002.20	1.05	8375.90	1.15	9002.20	1.70	13307.00
2575.511	MULCH MATERIAL, TYPE 5	TON	0.3		473.33	142.00	520.00	156.00	600.00	180.00	300.00	90.00	380.00	114.00	300.00	90.00	520.00	156.00	572.00	171.00	200.00	
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.34		263.33	89.53	340.00	115.60	400.00	136.00	350.00	119.00	270.00	91.80	350.00	119.00	340.00	115.60	375.00	127.50	400.00	
504.602	ADJUST VALVE BOX	EACH	15		61.67	925.05	80.00	1200.00	55.00	825.00	50.00	750.00	65.00	975.00	90.00	1350.00	95.00	1425.00	90.00	1350.00	50.00	750.00
NOTE: THE CONTRACTOR IS ADVISED THAT HE MAY USE AGGREGATE BASE, CLASS 6 OR, AS AN ALTERNATE, HE MAY USE 100% CRUSHED MATERIAL WHICH MEETS THE REQUIREMENTS OF CLASS 5 IN TABLE 3138-11 OF THE MN/DOT STANDARD SPECIFICATIONS.																						
SUBTOTAL						\$ 100,080.28		\$ 102,318.45		\$ 103,904.51		\$ 106,822.35		\$ 112,619.75		\$ 116,499.23		\$ 119,933.76		\$ 122,298.89		\$ 124,686.60
NON - PARTICIPATING																						
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES																			
OVERLAY CENTER 22"																						
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	50		195.00	9750.00	200.00	10,000.00	190.00	9500.00	200.00	10,000.00	205.00	10,250.00	195.00	9750.00	200.00	10,000.00	198.00	9900.00	190.00	9500.00
2341.508	WEARING COURSE MIXTURE	TON	609		12.95	7857.55	13.60	8382.40	12.50	7612.50	14.50	8830.50	14.95	9104.55	12.20	7429.80	17.00	10353.00	13.81	8410.29	19.00	11571.00
2331.518 M	LEVELING COURSE MIXTURE	TON	232		13.02	3020.64	13.80	3201.60	12.50	2900.00	14.75	3422.00	15.20	3526.40	11.90	2760.80	17.00	3944.00	16.92	3925.44	18.00	4176.00
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	703		1.07	752.21	1.00	703.00	1.10	773.30	1.25	878.75	1.25	878.75	1.50	1054.50	0.60	421.80	1.50	1054.50	1.50	1054.50
SUBTOTAL						\$ 21,246.05		\$ 22,187.00		\$ 20,785.80		\$ 23,131.25		\$ 23,759.70		\$ 20,995.10		\$ 24,718.80		\$ 23,290.23		\$ 26,301.50
GRAND TOTAL						\$ 121,326.33		\$ 124,505.45		\$ 124,690.31		\$ 129,953.60		\$ 136,379.45		\$ 137,494.33		\$ 144,652.56		\$ 145,589.12		\$ 150,988.10

COST BREAKDOWN BASED ON CONTRACTOR'S LOW BID

FUNDING OBLIGATIONS - BIKE PATH

BIKE GRANT FUNDS \$100,080.28 x 75% = \$ 75,060.21

C.S.A.H. FUNDS \$100,080.28 x 25% = 25,020.07

BIKE PATH SUBTOTAL \$100,080.28

NON-PARTICIPATING - CENTER OVERLAY

COUNTY ROAD & BRIDGE FUNDS \$ 21,246.05

BIKE PATH SUBTOTAL \$ 100,080.28

CENTER OVERLAY 21,246.05

GRAND TOTAL \$ 121,326.33

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
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER

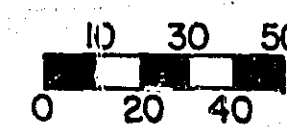
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F FRAME C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT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

UTILITIES SYMBOLS

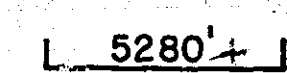
POWER POLE LINE
TELEPHONE OR TELEGRAPH
POLE LINE
JOINT TELEPHONE AND POWER
ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL TELEPHONE CABLE
TERMINAL
GAS MAIN
WATER MAIN

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

PLAN



LAYOUT



GROSS LENGTH 3,800 FEET=.7197 MILES
BRIDGES LENGTH 0 FEET= 0 MILES
EXCEPTIONS-LENGTH 0 FEET= 0 MILES
NET LENGTH 3,800 FEET=.7197 MILES

RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS COUNTY ROAD "E" BIKEWAY

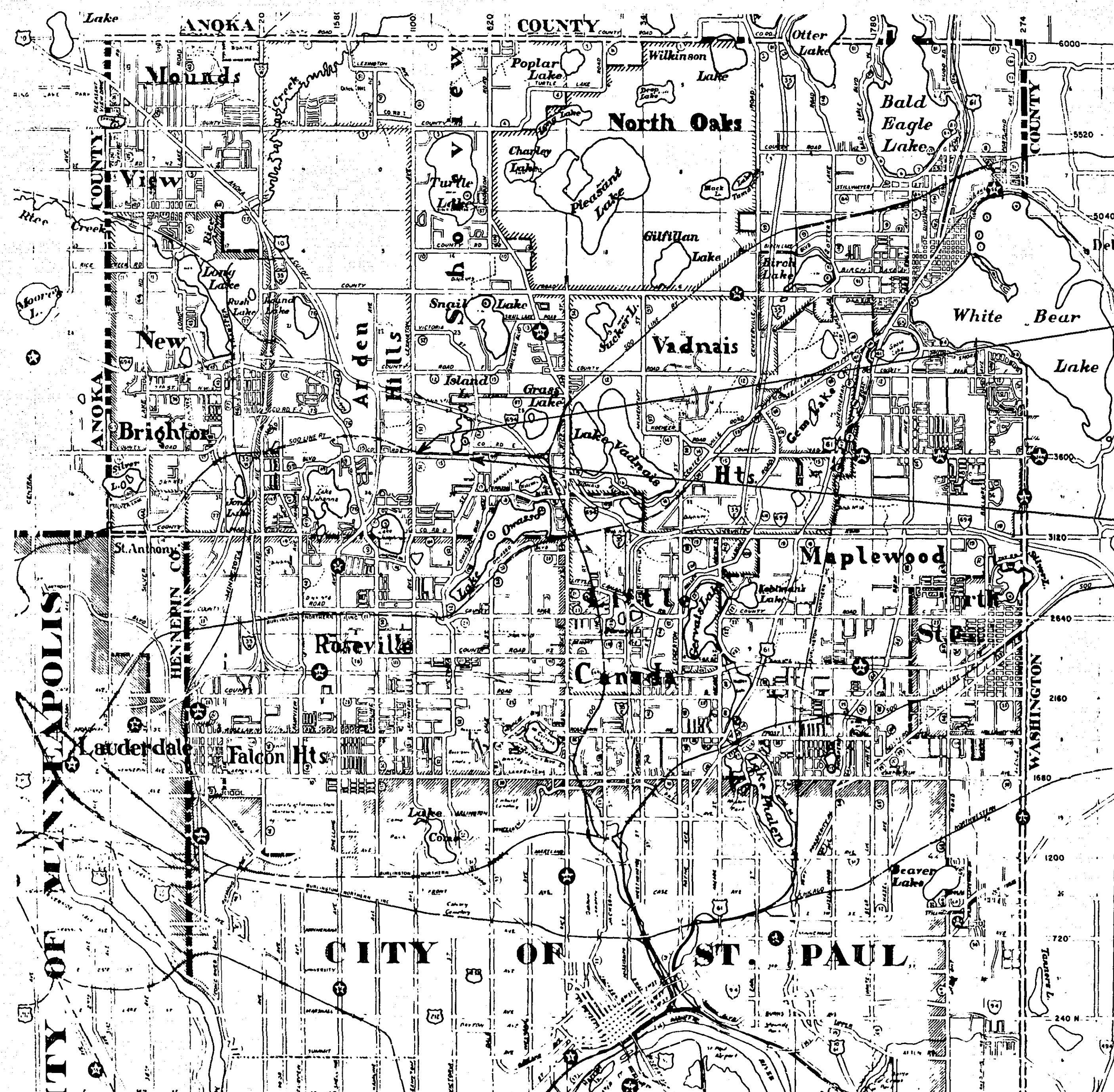
CONSTRUCTION PLAN FOR BITUMINOUS BIKEWAY
BETWEEN LEXINGTON AVENUE AND VICTORIA STREET
S.A.P. NO. 62-615-06

TRAFFIC VOLUME

ADT 1980 5,875
2000 - 12,000

INDEX

1 TITLE SHEET
2 ESTIMATED QUANTITIES & TYPICAL SECTION
3 PLAN SHEET
4-10 CROSS SECTIONS



BEGIN PROJECT
STA. 40+81.80

END PROJECT
STA. 76+56.44

PIT DATA

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

THE 1978 EDITION OF THE MINNESOTA DEPARTMENT
OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR
HIGHWAY CONSTRUCTION" SHALL GOVERN.

DESIGN SQUAD _____ DATE _____
DRAWN BY _____ DATE _____
CHECKED BY _____ DATE _____

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.
DATE 2-27-81 REG. NO. 13501 ENGR. Larry K. Feldman
7-21-81

RECOMMENDED FOR APPROVAL PK TRAFFIC ENGR. DATE 7/22/81
RECOMMENDED FOR APPROVAL JDL ENV ENGR. DATE 7-21-81
RECOMMENDED FOR APPROVAL MDK MAINT ENGR. DATE 7-21-81
RECOMMENDED FOR APPROVAL DRU CONST ENGR. DATE 7-21-81
RECOMMENDED FOR APPROVAL LKE DESIGN ENGR. DATE 7-21-81
RECOMMENDED FOR APPROVAL RSW R.S.W. ENGR. DATE 7-23-81
APPROVED W. J. J. COORDINATING ENGR. DATE 7-23-81

RECOMMENDED FOR APPROVAL K. J. J. COUNTY ENGINEER DATE 7-21-81
APPROVED Robert J. Bath CHAIRMAN OF THE RAMSEY COUNTY BOARD DATE 9/28/81
APPROVED Richard L. Wedell MAYOR VILLAGE OF SHOREVIEW DATE 5-7-81
APPROVED J. T. J. CITY MANAGER, VILLAGE OF SHOREVIEW DATE 5-7-81
MINNESOTA DEPARTMENT OF TRANSPORTATION
RECOMMENDED FOR APPROVAL Dilbert O. O. DATE 8-7-81
RECOMMENDED FOR APPROVAL J. J. J. DISTRICT STATE AID ENGINEER DATE 7/29/81
DATE 8/7/81

PLAN REVISIONS		
DATE	SHEET NO.	BY
4-27-81	Increased width to 20' R.S.W.	R.S.W.
7-21-81	1-section Estimate R.S.W.	R.S.W.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: R.S.W.
DATE: 3/8/83

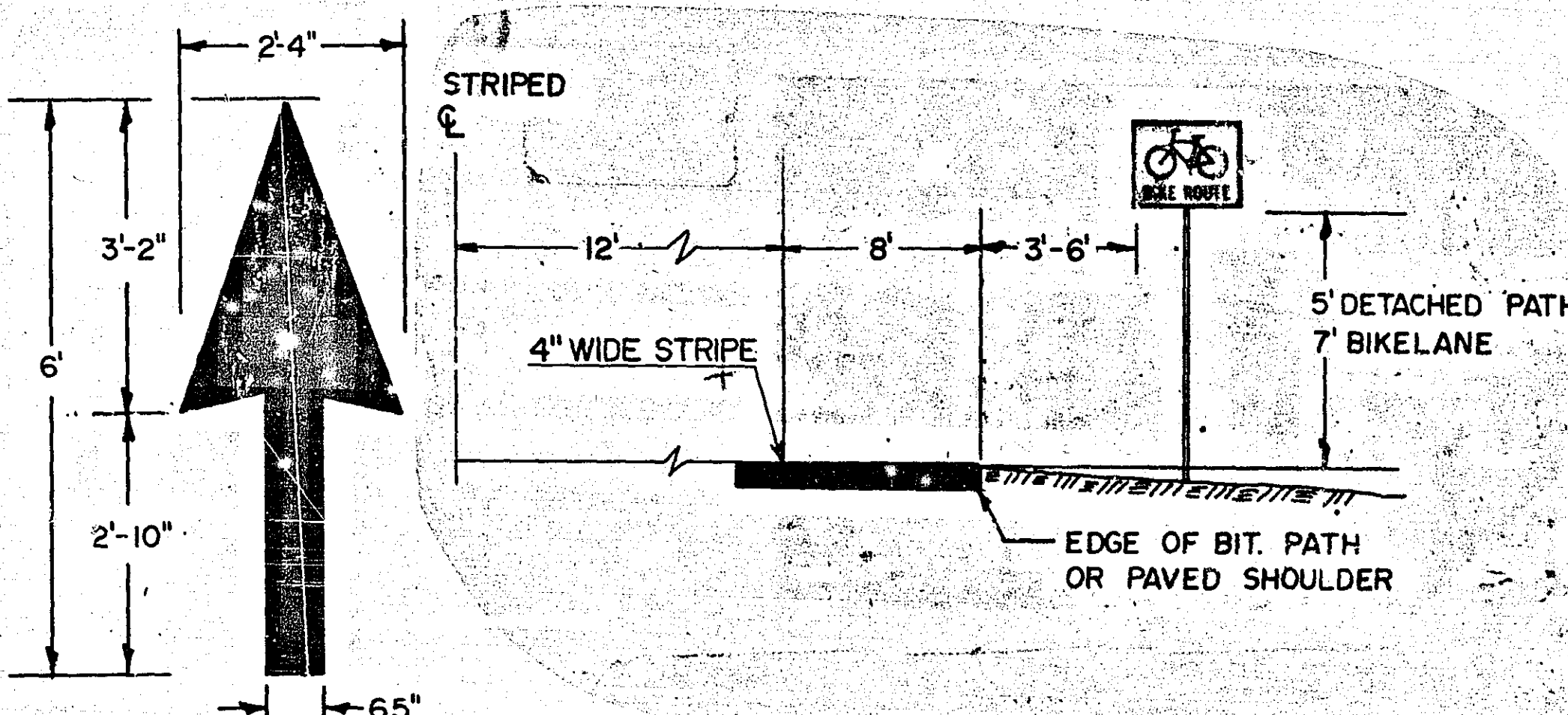
STATEMENT OF ESTIMATED QUANTITIES - PATH

ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	FINAL Quantity		QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2021.501	MOBILIZATION	L.S.	1	5,500.00	1.00	5,500.00														
2101.502	CLEARING	TREE	16	70.00	8.00	560.00														
2101.507	GRUBBING	TREE	16	40.00	6.00	240.00														
2104.509	REMOVE C.B.	EACH	2	100.00	2.00	200.00														
2105.501	COMMON EXCAVATION	C.Y.	4666	3.50	4666.00	16331.00														
2105.523	COMMON BORROW (LV)	C.Y.	100	1.00	0.00	0.00														
2105.525	TOPSOIL BORROW (LV)	C.Y.	773	3.70	1078.00	3988.60														
2211.501	AGGREGATE BASE, CLASS 6 OR 5 (100% CRUSHED)	TON	2515	6.25	2242.00	14,012.50														
0331.603	SAWING BITUMINOUS PAVEMENT SURFACE	L.F.	5920	.70	596.00	4,102.00														
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	86	125.00	84.1	16,399.50														
2341.508	WEARING COURSE MIXTURE FOR BIKEWAY	TON	565	12.75	406.00	7,726.50														
2341.510	BINDER COURSE MIXTURE FOR BIKEWAY	TON	565	12.75	564.00	7,191.00														
2331.518 M	LEVELING COURSE MIXTURE FOR BIKEWAY	TON	413	12.17	591.00	7,192.47	*SEE	CHANGE ORDER #1												
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	623	1.10	562.00	552.20														
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	2072	.01	0.00	0.00														
2501.515	12" C.S. PIPE APRONS	EACH	3	40.00	3.00	120.00														
2501.515	18" R.C. PIPE APRONS	EACH	2	230.00	4.00	920.00	** SEE	CHANGE ORDER #2												
2501.515	24" R.C. PIPE APRONS	EACH	2	240.00	0.00	0.00	** SEE	CHANGE ORDER #2												
2503.511	12" C.S. PIPE SEWER, 16 GAUGE	L.F.	44	13.00	44.00	572.00														
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	78	23.00	123.00	2829.00	** SEE	CHANGE ORDER #2												
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	12	65.00	0.00	0.00	** SEE	CHANGE ORDER #2												
2506.509	CONSTRUCT CATCH BASINS, DESIGN RC-2	EACH	2	670.00	2.00	1340.00														
2506.522	ADJUST FRAME AND RING CASTING	EACH	10	90.00	3.00	270.00														
2535.501	BITUMINOUS CURB	L.F.	65	3.00	67.00	201.00														
2575.501	ROADSIDE SEEDING	ACRE	0.3	225.00	.3	67.50														
2575.502	SEEDING MIXTURE 6	POUND	23	5.00	23.00	115.00														
2575.505	SODDING	S.Y.	7828	1.65	8445.00	8867.25														
2575.511	MULCH MATERIAL, TYPE 5	TON	0.3	520.00	.3	156.00														
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.34	340.00	0.34	115.60														
504.602	ADJUST VALVE BOX	EACH	15	80.00	3.00	240.00														
SubTotal						\$99,809.12														

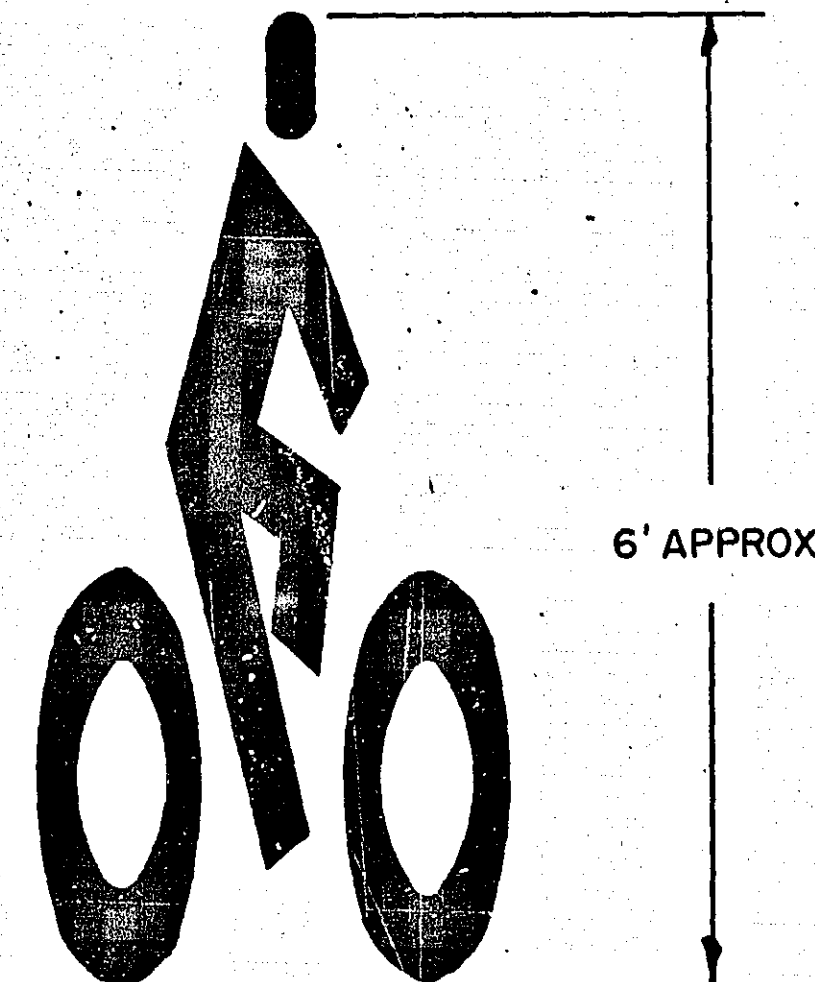
NON - PARTICIPATING

ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES																	
	OVERLAY CENTER 22' ±																			
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	50	195.00	54.33	10,594.35														
2341.508	WEARING COURSE MIXTURE	TON	609	12.75	409.00	7,764.75														
2331.518 M	LEVELING COURSE MIXTURE	TON	232	12.75	496.00	6,247.50	* SEE	CHANGE ORDER #1												
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	703	1.10	530.00	583.00														
SubTotal						\$25,189.60														
Grand Total						\$124,998.72														
COST BREAK DOWN BASED ON FINAL QUANTITIES																				
Funding Obligations - RISE GRANT Funds										*25,189.12 x	75% =	\$14,856.09								
C.S.A.H. Funds										*25,189.12 x	25% =	\$6,322.28								
												\$99,809.12								
Ramsey County Road & Bridge Fund												25,189.60								
												\$124,998.72								

STATEMENT OF ESTIMATED QUANTITIES - PATH				
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	FINAL ESTIMATED QUANTITIES
2021.501	MOBILIZATION	L.S.	1	
2101.502	CLEARING	TREE	16	
2101.507	GRUBBING	TREE	16	
2104.509	REMOVE C.B.	EACH	2	
2105.501	COMMON EXCAVATION	C.Y.	4666	
2105.523	COMMON BORROW (LV)	C.Y.	100	
2105.525	TOPSOIL BORROW (LV)	C.Y.	773	
2211.501	AGGREGATE BASE, CLASS 6 OR 5 (100% CRUSHED)	TON	2515	
0331.603	SAWING BITUMINOUS PAVEMENT SURFACE	L.F.	5920	
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	86	
2341.508	WEARING COURSE MIXTURE FOR BIKEWAY	TON	565	
2341.510	BINDER COURSE MIXTURE FOR BIKEWAY	TON	565	
2331.518 M	LEVELING COURSE MIXTURE FOR BIKEWAY	TON	413	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	625	
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	2072	
2501.515	12" C.S. PIPE APRONS	EACH	3	
2501.515	18" R.C. PIPE APRONS	EACH	2	
2501.515	24" R.C. PIPE APRONS	EACH	2	
2503.511	12" C.S. PIPE SEWER, 16 GAUGE	L.F.	44	
2503.511	18" R.C. PIPE SEWER, CLASS II	L.F.	78	
2503.511	24" R.C. PIPE SEWER, CLASS II	L.F.	12	
2506.509	CONSTRUCT CATCH BASINS, DESIGN RC-2	EACH	2	
2506.522	ADJUST FRAME AND RING CASTING	EACH	10	
2535.501	BITUMINOUS CURB	L.F.	65	
2575.501	ROADSIDE SEEDING	ACRE	0.3	
2575.502	SEEDING MIXTURE 6	POUND	23	
2575.505	SODDING	S.Y.	7828	
2575.511	MULCH MATERIAL, TYPE 5	TON	0.3	
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.34	
504.602	ADJUST VALVE BOX	EACH	15	
NOTE: THE CONTRACTOR IS ADVISED THAT HE MAY USE AGGREGATE BASE, CLASS 6 OR, AS AN ALTERNATE, HE MAY USE 100% CRUSHED MATERIAL WHICH MEETS THE REQUIREMENTS OF CLASS 5 IN TABLE 3138-1 OF THE MN./D.O.T. STANDARD SPECIFICATIONS.				



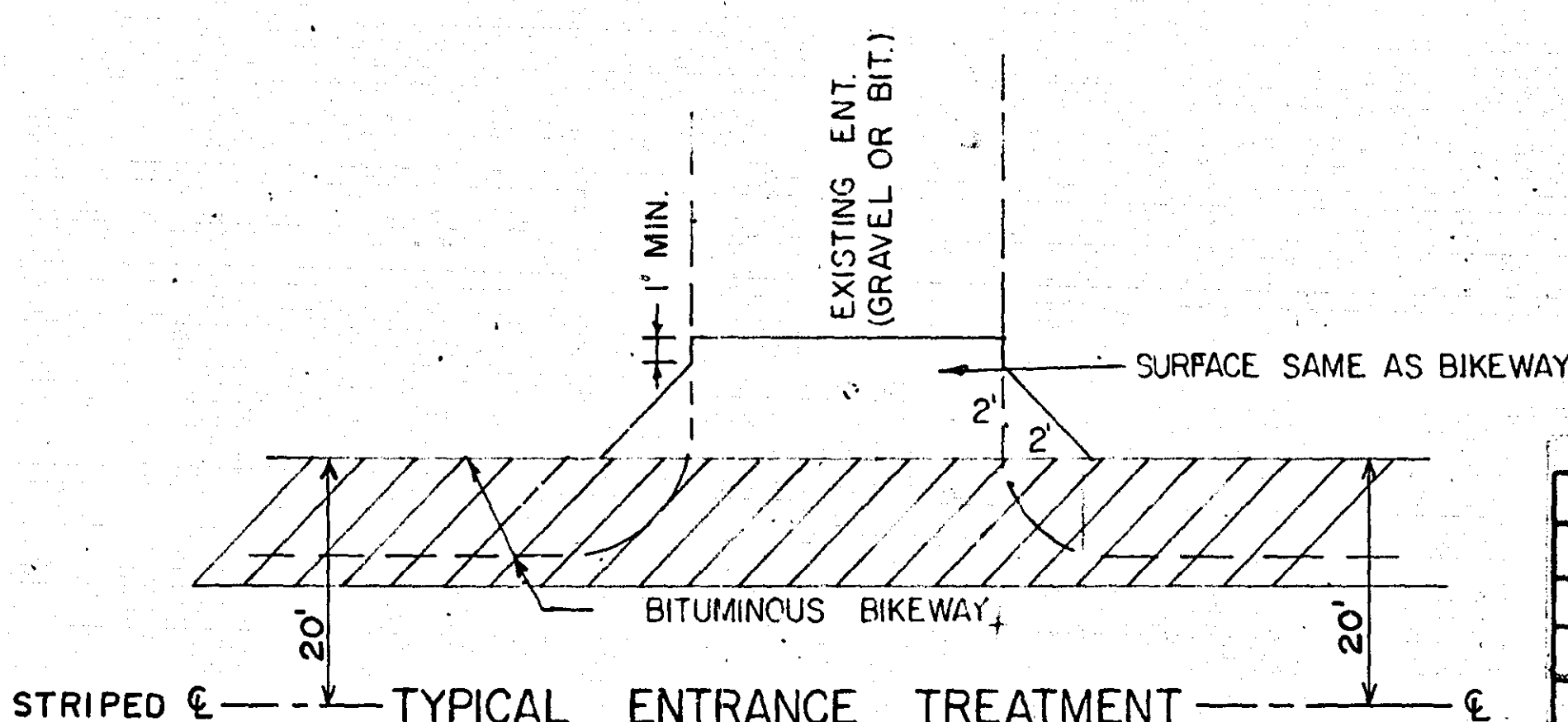
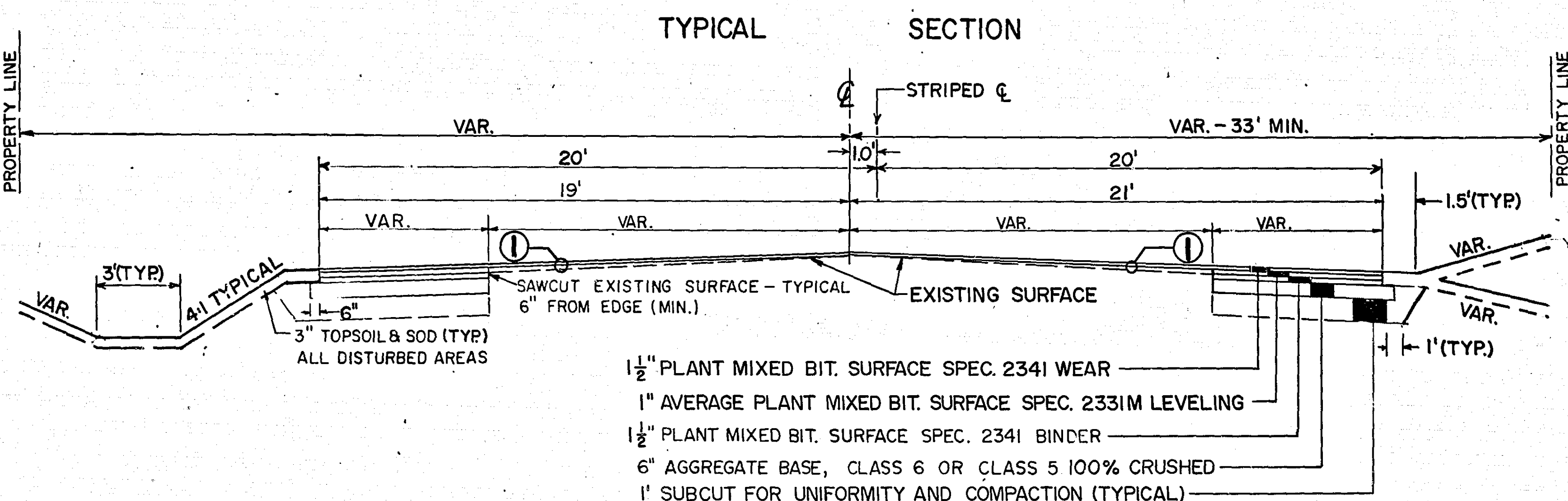
TYPICAL SIGN & PAVEMENT MESSAGE PLACEMENT



- (A) LOCATIONS WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
- (B) FOR BID PURPOSES ONLY IN CASE UNSUITABLE MATERIAL ENCOUNTERED ON PROJECT.
- (C) BITUMINOUS MATERIAL SHALL BE PAID FOR UNDER 2341.504 "BITUMINOUS MATERIAL FOR MIXTURE."
- SIGNING AND PAINTING TO BE DONE BY OTHERS

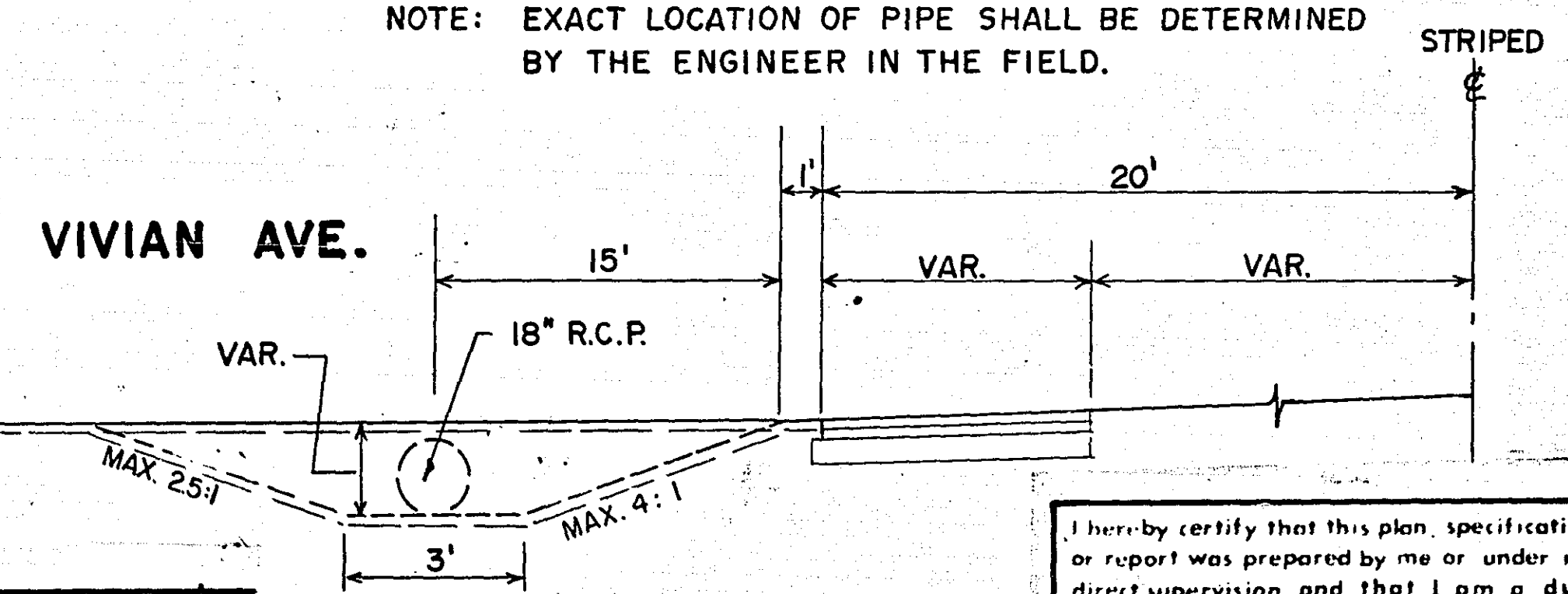
STANDARD DETAIL PLATES	
0003 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 H	REINFORCED CONCRETE PIPE
3100 F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3006 C	GASKET JOINT FOR R.C. PIPE
4000 H	MANHOLE OR CATCH BASIN
4129 C	CATCH BASIN FRAME CASTING
4151 B	GRATE CASTING FOR CATCH BASIN
4160 C	CURB BOX CASTING FOR CATCH BASIN
7065 C	BITUMINOUS CURB
8000 H	STANDARD BARRICADES
9102 C	SODDING AT PIPE CULVERT ENDS
3040 F	CORRUGATED METAL PIPE CULVERT
3123 H	METAL APRON FOR C.M. PIPE
4010 E	CONC. SHORT CONE & ADJUSTING RING

NON - PARTICIPATING				
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	
	OVERLAY CENTER 22' ±			
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	50	
2341.508	WEARING COURSE MIXTURE	TON	609	
2331.518 M	LEVELING COURSE MIXTURE	TON	232	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	703	

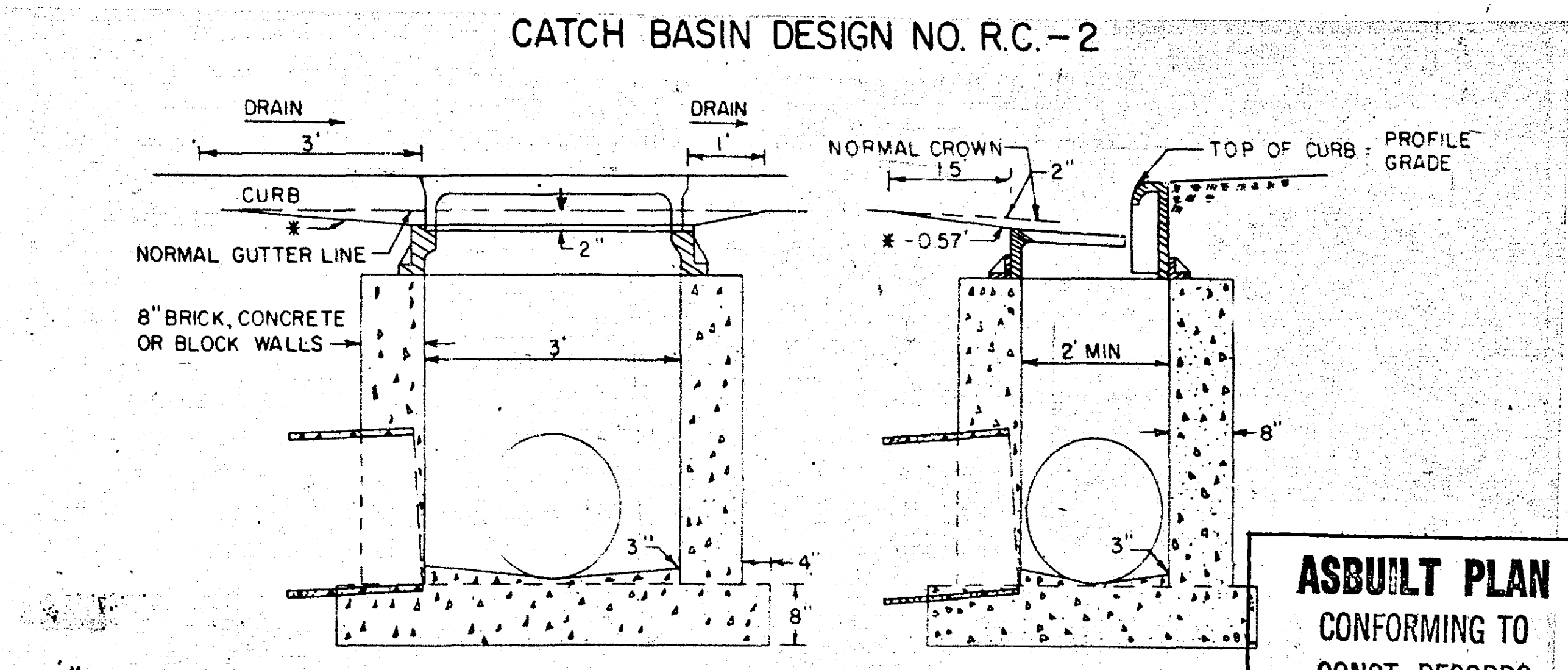


ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: G.P.B.
DATE: 3/8/83

REVISED	DATE	DESIGNED BY
SHB	4-27-81	
R.O.	4-27-81	
R.S.	5-21-81	
M.R.G.	6-25-81	
M.R.G.	20 JUL 81	
		DRAWN BY
		CHECKED BY



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: 3-18-81 Reg. No. 13501



REVISED	DATE		
4-27-81	MA	DESIGNED BY	
2 July 81	RJD	DRAWN BY	
JULY 20, 1981	R.J.J.	CHECKED BY	

Sheet No. 3 of 10 Sheets

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

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.

Larry Fildner

Date 3-18-81 Reg. No. 13501

Fed. Proj. No.

EXC

EMB

113

80

119

93

106

126

98

100

67

41

14

8

51+00 45.9

50+00 44.2

49+00 42.6

48+00 43.0

47+00 45.0

46+00 46.6

45+00 948.1

ENTRANCE

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: SFC

DATE: 3/8/83

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.
Harry K. Feldman
Date 7-24-81 Reg. No. 13501

S.A.P. No. 62-615-06

Sheet No. 4 of 10 Sheets

EXC

EMB

26

15

87

44

25

18

68

53

120

89

106

91

55+00 50.6

54+75 50.3

54+00 49.4

53+75 48.9

53+00 48.2

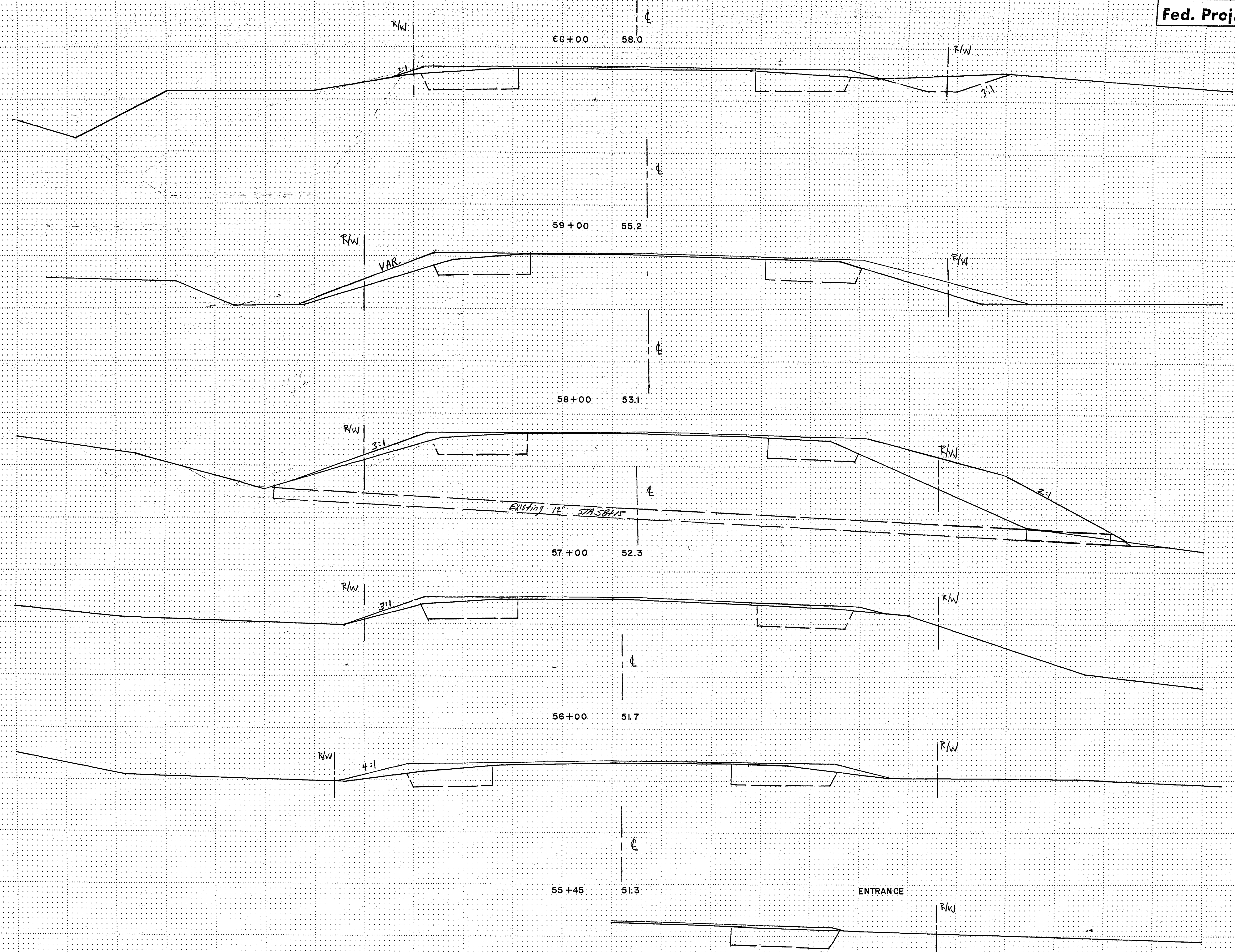
52+00 947.0

ENTRANCE

ENTRANCE

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.
Randy K. Fildner
 Date 7-24-81 Reg. No. 13501

ASBUILT PLAN
 CONFORMING TO
 CONST. RECORDS
 DONE BY: *GRS*
 DATE: 3/8/83



154

133

124

270

120

224

119

94

51

39

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

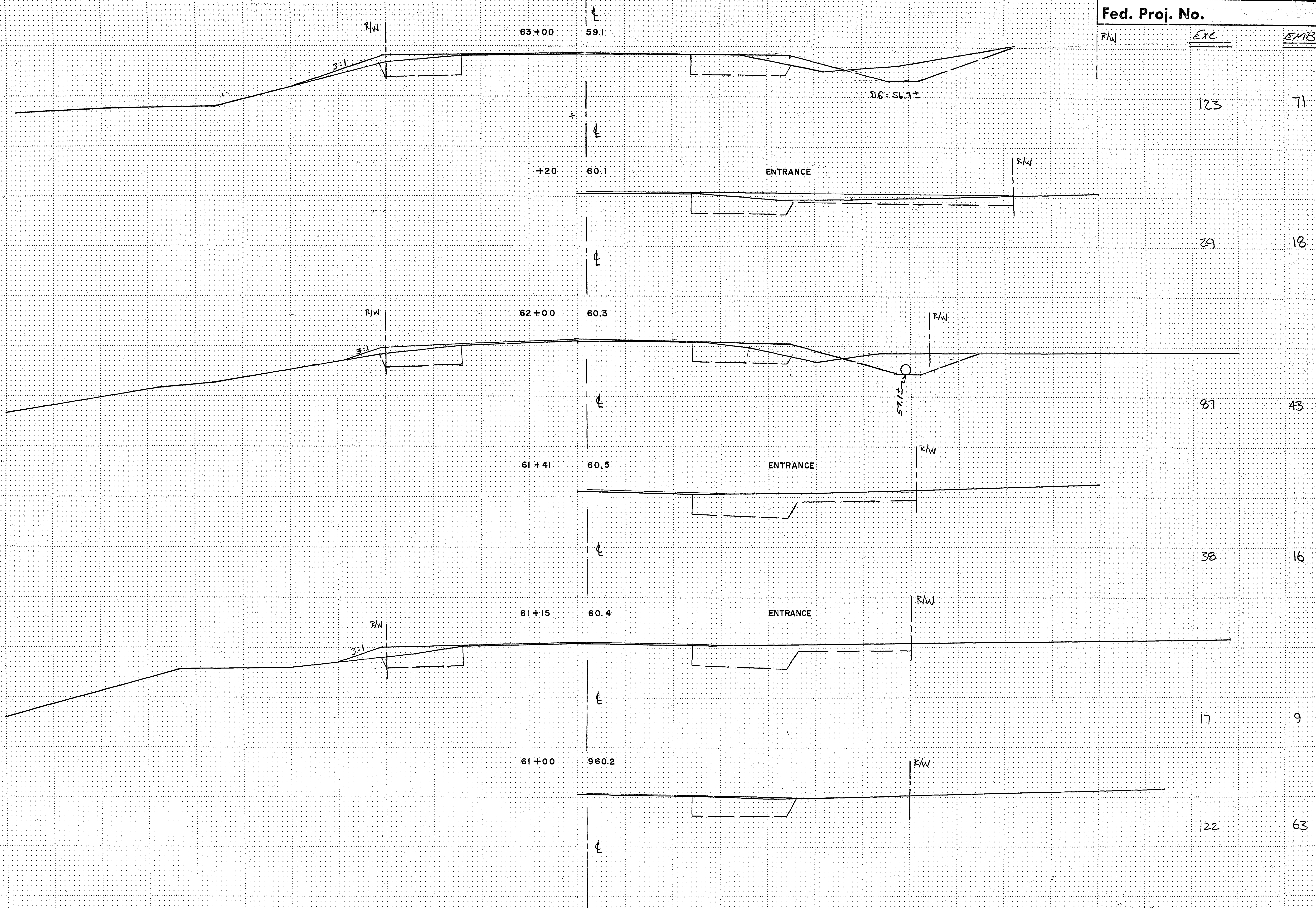
DONE BY: CRP
DATE: 3/8/83

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.

Harry K. Feldman
Date 7-10-81 Reg. No. 13501

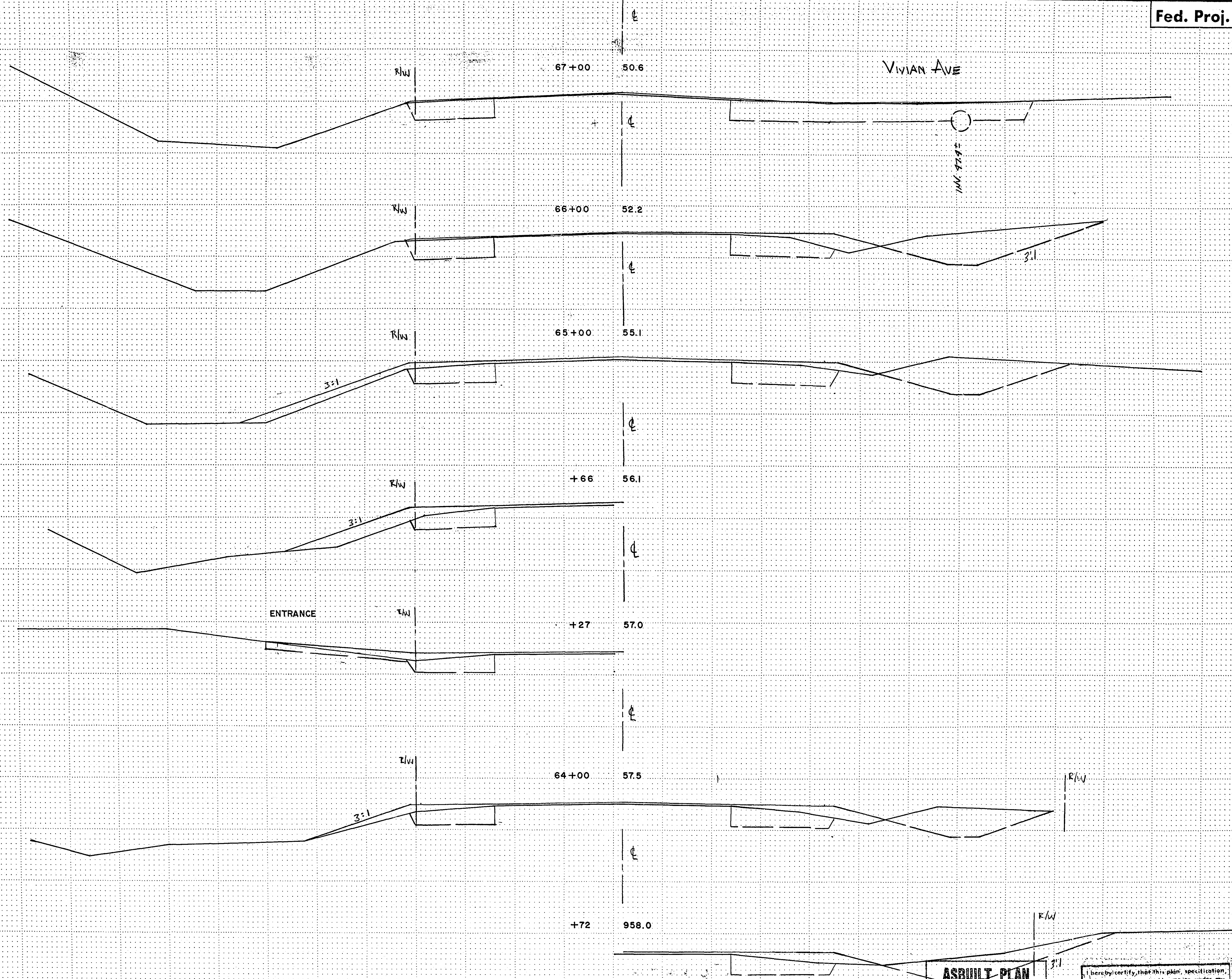
Fed. Proj. No.

R/W EXC EMB



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *[Signature]*
DATE: 3/8/83

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
[Signature]
Date: 7/24/81 Reg. No. 13501



204

83

269

85' R/W

109

52

36

22

24

36

20

73

31

133

57

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

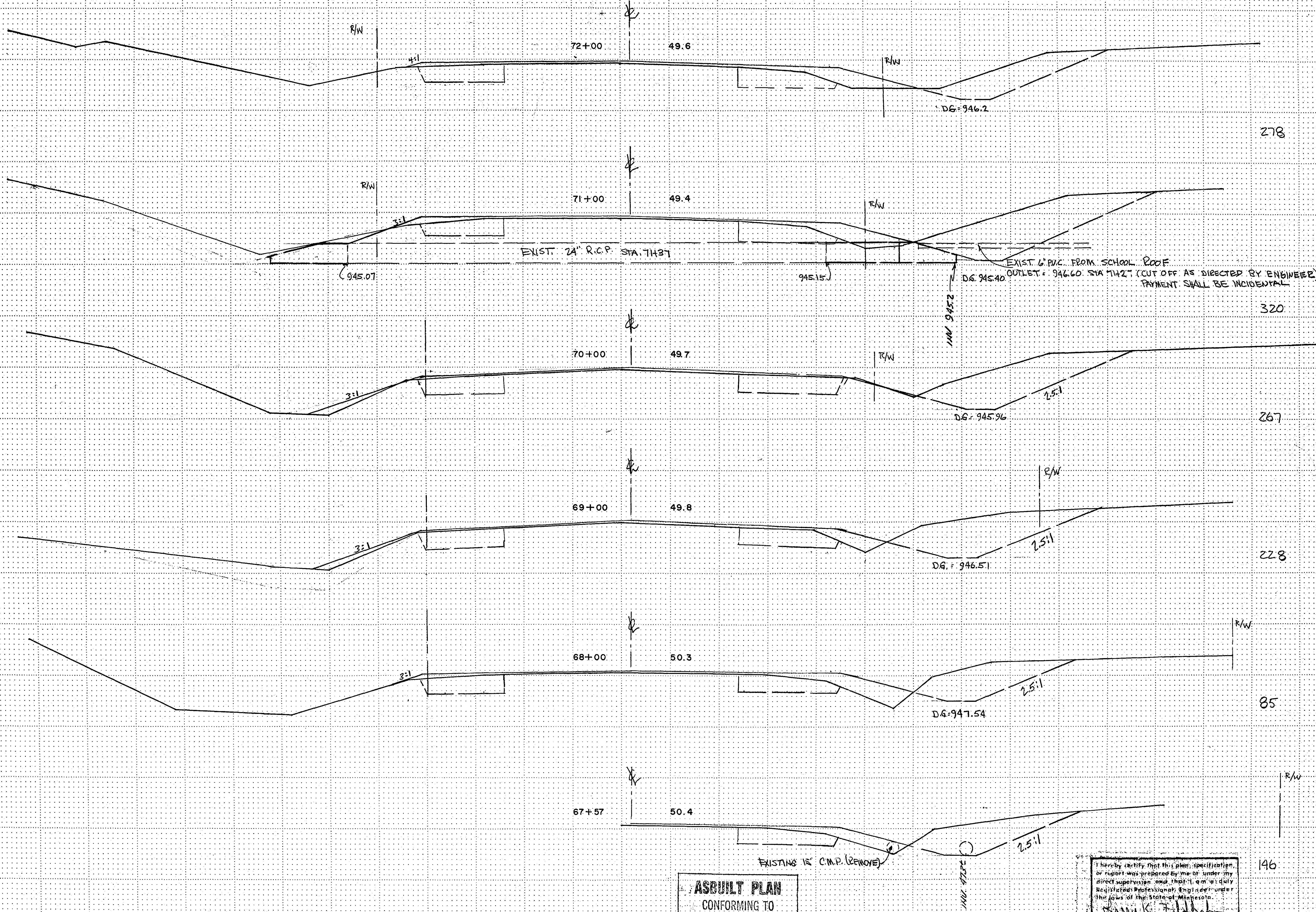
DONE BY: *RPB*
DATE: 3/3/83

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.
Raymond K. Fildner
Date: 7-24-83 Reg. No. 13501

Fed. Proj. No.

EXC 4666 yds.³ EMB 2940 yds.³

TOTAL



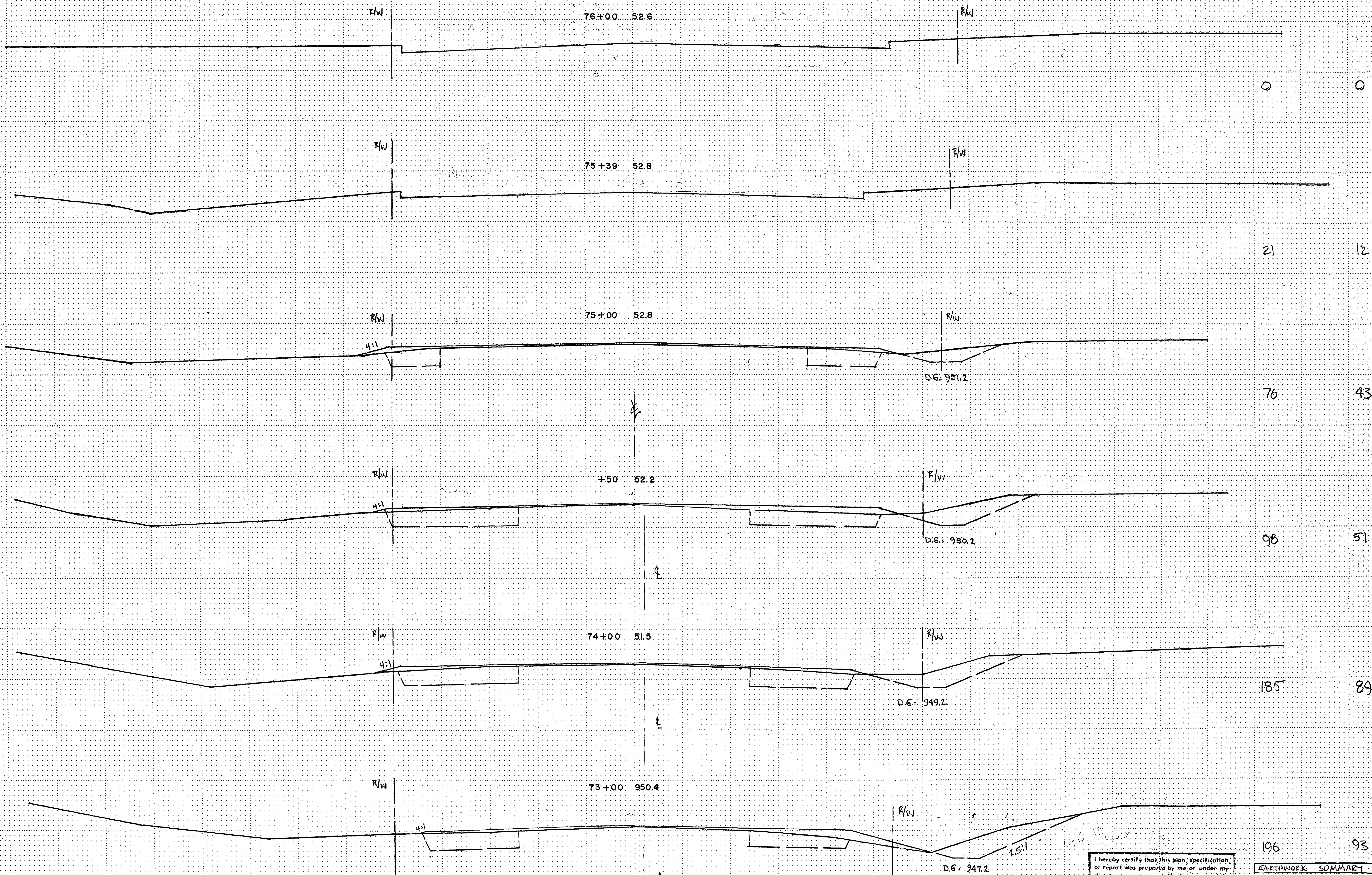
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: GCB
DATE: 3/8/83

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: 7/24/81 Reg. No. 13501

S.A.P No. 62-615-06

Sheet No. 9 of 10 Sheets

NORESTAR © No. 101 ST. PAUL, MINNEAPOLIS, MINNESOTA ©



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *[Signature]*
DATE: 3/8/83

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
[Signature]
Date: *[Date]* Reg. No. 13501

EARTHWORK SUMMARY	
TOTAL FILL X 1.3 =	3822
TOTAL CUT =	4666
	8484 yds ³
	EXCESS