

STATEMENT OF ESTIMATED QUANTITIES				STORM SEWER		WATERMAIN		WATER MAIN		ALDRICH ARENA SIDEWALK		CHAIN LINK FENCE	
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	ESTIMATED UNIT PRICE	AMOUNT	FINAL	AMOUNT	ESTIMATED	FINAL	ESTIMATED	FINAL	ESTIMATED	FINAL
2021.501	MOBILIZATION	LUMP SUM	1	17,000.00	17,000.00								
2104.501	REMOVE CONCRETE CURB & GUTTER (SEE C.O. #114)	L.F.	23	7.00	161.00	53	371.00		62	434.00			
2104.503	REMOVE WALK	S.F.	400	0.51	204.00	305	155.55						
2104.521	SALVAGE 48" R.C. PIPE SEWER	L.F.	178	6.50	1,157.00	178	1,157.00						
2104.501	REMOVE FENCE-CHAIN LINK (SEE S.A. #2)	L.F.	680	1.20	816.00								
2105.523	COMMON BORROW	CY.	1216	2.00	2,432.00	747.0	1,494.00						
2105.525	TOPSOIL BORROW (L.V.) (SEE C.O. #3)	CY.	70	10.00	700.00	64	640.00						
2331.504	BITUMINOUS MATERIAL FOR MIXTURE (SEE C.O. #46)	TON	5.4	160.00	864.00	18.2	2,912.00		67	107.20		33	330.00
2331.514	BASE COURSE MIXTURE (PARKING LOT RESURFACING)	TON	87	30.00	2,610.00	330.9	9,927.00		12.1	363.00			
2451.507	GRANULAR BEDDING (SEE C.O. #5)	CY.	20	15.00	300.00	49.3	739.50			10	150.00		
2501.515	18" R.C. PIPE APRONS	EA.	2	227.00	454.00	2	454.00						
2501.515	24" R.C. PIPE APRONS	EA.	2	260.00	520.00	2	520.00						
2104.501	REMOVE C.M.P.	L.F.	172	1.00	172.00	142	142.00						
2503.511	6" E.S.V.C. PIPE SEWER	L.F.	90	6.50	585.00	72.0	468.00						
2503.511	8" E.S.V.C. PIPE SEWER	L.F.	130	11.80	1,534.00	96	1,132.80						
2503.511	12" E.S.V.C. PIPE SEWER	L.F.	100	20.80	2,080.00	132	2,745.60						
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	224	19.50	4,368.00	213	4,153.50						
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	763	18.70	14,268.10	772	14,567.30						
2503.511	24" R.C. PIPE SEWER, CL. II	L.F.	48	24.30	1,166.40	45	1,093.50						
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.	146	24.10	3,510.60	146	3,518.60						
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	860	26.20	22,532.00	882	23,284.40						
2503.511	36" R.C. PIPE SEWER, CL. II	L.F.	105	34.30	3,601.50	107	3,670.10						
2503.511	42" R.C. PIPE SEWER, CL. II	L.F.	231	47.50	10,972.50	230	10,925.00						
2503.511	48" R.C. PIPE SEWER, CL. II	L.F.	90	57.10	5,139.00	171	9,861.75						
2503.571	INSTALL 48" R.C. PIPE SEWER	L.F.	178	9.25	1,646.50	9	7,200.00						
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EA.	9	800.00	7,200.00	5	3,125.00						
2506.509	CONSTRUCT CATCH BASINS, DESIGN A OR F	EA.	5	625.00	3,125.00	5	3,125.00						
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C. 2	EA.	5	630.00	3,150.00	1	230.00						
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P. 4	EA.	1	930.00	930.00	16	672.00						
2511.503	GROUTED RIPRAP, CLASS A	CY.	16	42.00	672.00								
2521.501	6" CONCRETE WALK	S.F.	400	1.84	736.00	300	552.00						
2531.501	CONCRETE CURB & GUTTER, DESIGN B624 (SEE C.O. #4)	L.F.	28	10.00	280.00	53	530.00		62	620.00			
2557.501	WIRE FENCE DESIGN 9322H (SEE S.A. #2)	L.F.	680										
2575.505	SODDING (SEE C.O. #3)	S.Y.	2061	1.30	2,679.30	2,910.4	5,335.20			581	755.30		
2597.516	PEDESTRIAN GATE	EA.	1	160.00									160.00
412.601	TRAPEZOIDAL CONCRETE DITCH	LUMP SUM	1	3,500.00	3,500.00	1	3,500.00						
503.602	F.B.I. TRASH GUARD FOR 24" R.C.P.	EA.	2	275.00	550.00	2	550.00						
	8" DUCTILE IRON PIPE C-15-76	L.F.	460	11.50									
	DUCTILE IRON FITTINGS (SEE C.O. #9)	POUND	320	1.20				250	(C.O. #9) 250.00	460	5,290.00	454	5,221.00
	8" GATE VALVE	EACH	2	370.00				2		320	320.00	685	685.00
	FIRE HYDRANT (SEE C.O. #3)	EACH	1	800.00				1		2	740.00	1	370.00
	6" DUCTILE IRON PIPE HYDRANT LEADS (SEE C.O. #3)	L.F.	10	20.50				10		1	800.00	1	800.00
	CONNECT TO EXISTING WATERMAIN (SEE C.O. #3)	EACH	1	150.00				1		8	205.00	8	164.00
2402.583	ORNAMENTAL METAL RAILING	L.F.	80	25.00	2,000.00	122.5 *	3,062.50			1	150.00	1	150.00
2411.507	CONCRETE STEPS	EACH	2	980.00	1,960.00	2	1,960.00						
	CONSTRUCT SEWER CLEANOUT	EACH	2	80.00	160.00	1	80.00						
	6"X8"X8" E.S. VCP TEE SECTION	EACH	1	30.00	30.00	2	60.00						
	6"X8"X12" E.S. VCP TEE SECTION	EACH	1	50.00	50.00	0	0.00						
	6"X12"X12" E.S. VCP TEE SECTION	EACH	2	45.00	90.00	3	135.00						

ALDRICH ARENA SIDEWALKS & DRIVEWAYS

ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	SUB TOTAL	*137,933.30	*1,774.20	*8,295.30	*330.00
2104.503	REMOVE CONCRETE SIDEWALK	S.F.	7,500	0.51				7,500
2104.505	REMOVE CONCRETE DRIVEWAY P.V.M.T. (REINFORCED)	S.Y.	1,639	3.26				1,639
2105.501	COMMON EXCAVATION (SEE C.O. #7)	CY.	435	2.20				435
2211.501	AGGREGATE BASE CLASS 5 (SEE C.O. #10)	TON	827	5.15	744.3	3833.14		827
2472.511	STEEL FABRIC (SEE C.O. #8)	POUND	6,195	0.30		24.3	125.14	6,195
2521.501	4" CONCRETE SIDEWALK	S.F.	8,050	1.50				8,050
2531.507	6" CONCRETE DRIVEWAY PAVEMENT (REINFORCED)	S.Y.	1,639	17.85				1,639
2575.505	SODDING	S.Y.	324	1.30				324
411.602	GUARD POST FOUNDATION	EACH	4	60.00				4
	S.A. # 2 VEHICULAR GATES	L.S.						
	S.A. # 2 FENCE	L.S.						
	S.A. # 3 6" GATE VALVES	EA.		380.95				
	C.O. # 2 A LOCATING DRYWELL ADDITIONAL	L.S.			1	380.95		
	C.O. # 1 CONNECTION TO DRYWELL	L.S.				468.75		
	C.O. # 2 6" MANHOLES	L.S.			1	1,890.00		
	C.O. # 3 HYDRANT SERVICE							
	FURNISH AND INSTALL FREE HYDRANT	EACH		800.00				
	CONNECTION TO EXISTING WATER MAIN	EACH		150.00				
	6" D.I.P. WATER MAIN	L.F.		12.00		205	1,600.00	
	Sodding	S.Y.		1.30		1	150.00	
	Top Soil BORROW (L.V.)	CY.		10.00		205	2,460.00	
	Removal & Replacement of 6" B.V. Surfaces	SEE Individual Pay Items				20	325.00	
	C.B. #7 DRAINAGE CORRECTION	L.S.					200.00	
	Repair 3" Irrigation Line	L.S.						
	Delay Williams Bros Pipeline	L.S.						
	C.O. # 5 GRANULAR Bedding							
	C.O. # 6 Bituminous Mat'l & Base Course Mixture							
	C.O. # 7 COMMON BORROW							
	C.O. # 8 STEEL FABRIC							
	C.O. # 9 Ductile IRON Fittings							
	C.O. # 10 Aggregate Base CLASS 5							
	C.O. # 11 REMOVE CONCRETE CURB & Gutter							
	DRAINAGE CORRECTION N.W. COR. ARENA	L.S.						
	SUB TOTAL				*8,511.17	*7,359.84	*380.95	*55,803.53
	TOTAL				*146,444.47	*9,134.04	*8,676.25	*56,633.53

* Total could BE Negotiated \$3,800.00

* 147,244.47

* 147,244.47

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TOTAL Cost \$231,463.49

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NURSING HOME STORM SEWER PARTICIPATION

STORM SEWER TOTAL AMOUNT \$ 125,913.90
 RAMSEY COUNTY PARKS DEPT. (80.5%) 101,360.69
 RAMSEY COUNTY NURSING HOME (19.5%) 24,553.21
 \$ 125,913.90

ANTICIPATED FUNDING

NURSING HOME PORTION

STORM SEWER \$ 24,553.21
 CHAIN LINK FENCE 3,730.00
 SUBTOTAL \$ 28,283.21
 +5% FOR ENGINEERING 1,414.16
 TOTAL \$ 29,697.37
 INCREASE- CHANGE ORDER #1 \$ 1,890.00
 REVISED TOTAL \$ 31,587.37

PARKS DEPT. PORTION

STORM SEWER \$ 101,360.69
 WATERMAIN 7,505.00
 ALDRICH ARENA SIDEWALK 59,459.24
 SUBTOTAL \$ 168,324.93
 +5% FOR ENGINEERING \$ 8,416.25
 TOTAL \$ 176,741.18

Estimated FINAL NURSING HOME STORM SEWER PARTICIPATION

STORM SEWER TOTAL AMOUNT \$ 147,244.47
 RAMSEY COUNTY PARKS DEPT. (80.5%) \$ 118,531.80
 RAMSEY COUNTY NURSING HOME (19.5%) \$ 28,712.67

Estimated FINAL FUNDING

Acc'T # 56710-040400

NURSING HOME PORTION

STORM SEWER \$ 28,712.67
 CHAIN LINK FENCE 9,775.20
 WATERMAIN 9,134.04
 SUBTOTAL \$ 47,621.91
 5% FOR ENGINEERING 2,381.10
 TOTAL \$ 50,003.01

Acc'T # 56516-040400

PARKS DEPT. PORTION

STORM SEWER \$ 118,531.80
 WATERMAIN 8,676.25
 ALDRICH ARENA SIDEWALK 56,633.53
 SUBTOTAL \$ 183,841.58
 5% FOR ENGINEERING 9,192.08
 TOTAL ESTIMATED \$ 193,033.66

Total Cost Including ENGINEERING \$ 243,036.67

25-124

COST PARTICIPATION BASED ON CONTRACTOR'S LOW BID

RECEIVED: 12 NOV. 80

STATEMENT OF ESTIMATED QUANTITIES				STORM SEWER		CHAIN LINK FENCE		WATERMAIN		ALDRICH ARENA SIDEWALK	
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	17,000.00	17,000.00						
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	23	7.00	161.00						
2104.503	REMOVE WALK	S.F.	400	0.51	204.00						
2104.521	SALVAGE 48" R.C. PIPE SEWER	L.F.	178	6.50	1,157.00						
2104.501	REMOVE FENCE-CHAIN LINK	L.F.	680	1.20	816.00						
2105.523	COMMON BORROW	CY.	1216	2.00	2,432.00						
2105.525	TOPSOIL BORROW (L.V.)	CY.	70	10.00	700.00						
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	54	160.00	8,640.00						
2331.514	BASE COURSE MIXTURE (PARKING LOT RESURFACING)	TON	87	30.00	2,610.00						
2451.507	GRANULAR BEDDING	CY.	20	15.00	300.00						
2501.515	18" R.C. PIPE APRONS	EA.	2	227.00	454.00						
2501.515	24" R.C. PIPE APRONS	EA.	2	260.00	520.00						
2104.501	REMOVE C.M.P.	L.F.	172	1.00	172.00						
2503.511	6" E.S.V.C. PIPE SEWER	L.F.	90	6.50	585.00						
2503.511	8" E.S.V.C. PIPE SEWER	L.F.	130	11.80	1,534.00						
2503.511	12" E.S.V.C. PIPE SEWER	L.F.	100	20.80	2,080.00						
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	224	19.50	4,368.00						
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	763	18.70	14,268.10						
2503.511	24" R.C. PIPE SEWER, CL. II	L.F.	48	24.30	1,166.40						
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.	146	24.10	3,510.60						
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	860	26.20	22,532.00						
2503.511	36" R.C. PIPE SEWER, CL. II	L.F.	105	34.30	3,601.50						
2503.511	42" R.C. PIPE SEWER, CL. II	L.F.	231	47.50	10,972.50						
2503.511	48" R.C. PIPE SEWER, CL. II	L.F.	90	57.10	5,139.00						
2503.571	INSTALL 48" R.C. PIPE SEWER	L.F.	178	9.25	1,646.50						
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EA.	9	800.00	7,200.00						
2506.509	CONSTRUCT CATCH BASINS, DESIGN A OR F	EA.	5	625.00	3,125.00						
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C. 2	EA.	5	630.00	3,150.00						
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P. 4	EA.	1	930.00	930.00						
2511.503	GROUTED RIPRAP, CLASS A	CY.	16	42.00	672.00						
2521.501	6" CONCRETE WALK	S.F.	400	1.84	736.00						
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	28	10.00	280.00						
2557.501	WIRE FENCE DESIGN 9322H	L.F.	680			5.25	3,570.00				
2575.505	SODDING	S.Y.	2061	1.30	2,679.30						
2557.516	PEDESTRIAN GATE	EA.	1			160.00	160.00				
412.601	TRAPEZOIDAL CONCRETE DITCH	LUMP SUM	1	3,500.00	3,500.00						
503.602	F & I. TRASH GUARD FOR 24" R.C.P.	EA.	2	275.00	550.00						
	8" DUCTILE IRON PIPE C-151-76	L.F.	460					11.50	5,290.00		
	DUCTILE IRON FITTINGS	POUND	320					1.00	320.00		
	8" GATE VALVE	EACH	2					370.00	740.00		
	FIRE HYDRANT	EACH	1					800.00	800.00		
	6" DUCTILE IRON PIPE HYDRANT LEADS	L.F.	10					20.50	205.00		
	CONNECT TO EXISTING WATERMAIN	EACH	1					150.00	150.00		
2402.583	ORNAMENTAL METAL RAILING	L.F.	80	25.00	2,000.00						
2411.507	CONCRETE STEPS	EACH	2	980.00	1,960.00						
	CONSTRUCT SEWER CLEANOUT	EACH	2	80.00	160.00						
	6"X8"X8" E.S. V.C.P. TEE SECTION	EACH	1	30.00	30.00						
	6"X8"X12" E.S. V.C.P. TEE SECTION	EACH	1	50.00	50.00						
	6"X12"X12" E.S. V.C.P. TEE SECTION	EACH	2	45.00	90.00						
ALDRICH ARENA SIDEWALKS & DRIVEWAYS											
2104.503	REMOVE CONCRETE SIDEWALK	S.F.	7,500							0.51	3,825.00
2104.505	REMOVE CONCRETE DRIVEWAY P.V.M.T. (REINFORCED)	S.Y.	1,639							3.96	6,490.44
2105.501	COMMON EXCAVATION	CY.	435							2.00	870.00
2211.501	AGGREGATE BASE CLASS 5	TON	827							5.15	4,259.05
2472.511	STEEL FABRIC	POUND	6,195							0.30	1,858.50
2521.501	4" CONCRETE SIDEWALK	S.F.	8,050							1.50	12,075.00
2531.507	6" CONCRETE DRIVEWAY PAVEMENT (REINFORCED)	S.Y.	1,639							17.05	27,920.05
2575.505	SODDING	S.Y.	324							1.30	421.20
411.602	GUARD POST FOUNDATION	EACH	4							60.00	240.00

CONTRACTOR'S BID

SUBTOTALS
TOTAL

\$ 125,913.90

\$ 3,730.00

\$ 7,505.00

\$ 59,459.24

\$ 196,608.14

NURSING HOME
STORM SEWER PARTICIPATION

STORM SEWER TOTAL AMOUNT \$ 125,913.90
 RAMSEY COUNTY PARKS DEPT. (80.5%) 101,360.69
 RAMSEY COUNTY NURSING HOME (19.5%) 24,553.21
 \$ 125,913.90

ANTICIPATED FUNDING

NURSING HOME PORTION

STORM SEWER \$ 24,553.21
 CHAIN LINK FENCE 3,730.00
 SUBTOTAL \$ 28,283.21
 +5% FOR ENGINEERING 1,414.16
 TOTAL \$ 29,697.37
 INCREASE- CHANGE ORDER #1 \$ 1,890.00
 REVISED TOTAL \$ 31,587.37

PARKS DEPT. PORTION

STORM SEWER \$ 101,360.69
 WATERMAIN 7,505.00
 ALDRICH ARENA SIDEWALK 59,459.24
 SUBTOTAL \$ 168,324.93
 +5% FOR ENGINEERING \$ 8,416.25
 TOTAL \$ 176,741.18

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NURSING HOME STORM SEWER / ALDRICH ARENA SIDEWALKS - PROJ. 80-1

BID TABULATIONS

BIDS RECEIVED: 12 NOV. 80

SHEET 1 of 2 SHEETS

STATEMENT OF ESTIMATED QUANTITIES				AVERAGE	ACG MECHANICAL INC.		AUSTIN P. KELLER CONST. CO.		R. W. MOORE CO.		PALDA & SONS INC.		ORFEI & SONS INC.		RICHARD KNUTSON		BARBAROSSA & SONS INC.		O & P CONTRACTING		SHAFFER CONTR. CO. INC.	
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	3 LOWEST 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	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	8,166.67	17,000.00	17,000.00	5,000.00	5,000.00	2,500.00	2,500.00	11,200.00	11,200.00	3,000.00	3,000.00	10,000.00	10,000.00	7,500.00	7,500.00	1,000.00	1,000.00	10,000.00	10,000.00
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	23	4.00	7.00	161.00	2.00	46.00	3.00	69.00	3.00	69.00	5.25	120.75	2.50	57.50	5.00	115.00	3.00	69.00	0.75	17.25
2104.503	REMOVE WALK	S.F.	400	0.67	0.51	204.00	1.00	400.00	0.50	200.00	0.60	240.00	1.05	420.00	2.00	800.00	0.55	220.00	1.54	616.00	0.50	200.00
2104.521	SALVAGE 48" R.C. PIPE SEWER	L.F.	178	7.83	6.50	1,157.00	5.00	890.00	12.00	2,136.00	9.00	1,602.00	9.35	1,664.30	12.35	2,198.30	16.00	2,848.00	8.42	1,498.76	10.00	1,780.00
2104.501	REMOVE FENCE-CHAIN LINK	L.F.	680	1.73	1.20	816.00	2.00	1,360.00	2.00	1,360.00	0.80	544.00	1.21	822.80	1.00	680.00	1.25	850.00	1.00	680.00	1.50	1,020.00
2105.523	COMMON BORROW	CY	1216	3.33	2.00	2,432.00	5.00	6,080.00	3.00	3,648.00	3.00	3,648.00	5.72	6,955.52	6.00	7,296.00	5.45	6,627.20	6.71	8,159.36	3.50	4,256.00
2105.525	TOPSOIL BORROW (LV)	CY	70	9.67	10.00	700.00	9.00	630.00	10.00	700.00	10.00	700.00	7.88	551.60	9.00	630.00	7.50	525.00	7.00	490.00	7.00	490.00
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	54	160.00	160.00	864.00	160.00	864.00	160.00	864.00	150.00	810.00	168.00	907.20	165.00	891.00	150.00	810.00	165.00	891.00	160.00	864.00
2331.514	BASE COURSE MIXTURE (PARKING LOT RESURFACING)	TON	87	27.33	30.00	2,610.00	30.00	2,610.00	22.00	1,914.00	39.00	3,393.00	25.86	2,249.82	38.75	3,371.25	28.50	2,479.50	55.00	4,785.00	30.00	2,610.00
2451.507	GRANULAR BEDDING	CY	20	12.33	15.00	300.00	10.00	200.00	12.00	240.00	8.00	160.00	9.35	187.00	9.00	180.00	10.00	200.00	6.00	120.00	10.00	200.00
2501.515	18" R.C. PIPE APRONS	EA.	2	225.67	227.00	454.00	260.00	520.00	190.00	380.00	232.00	464.00	186.81	373.62	400.00	800.00	300.00	600.00	155.20	310.40	250.00	500.00
2501.515	24" R.C. PIPE APRONS	EA.	2	266.67	260.00	520.00	300.00	600.00	240.00	480.00	260.00	520.00	224.91	449.82	425.00	850.00	350.00	700.00	187.00	374.00	375.00	750.00
2104.501	REMOVE C.M.P.	L.F.	172	2.67	1.00	172.00	5.00	860.00	2.00	344.00	1.00	172.00	4.89	841.08	7.30	1,255.60	13.00	2,236.00	3.00	516.00	4.50	774.00
2503.511	6" E.S.V.C. PIPE SEWER	L.F.	90	10.50	6.50	585.00	10.00	900.00	15.00	1,350.00	14.50	1,305.00	13.74	1,236.60	13.25	1,192.50	15.00	1,350.00	12.87	1,158.30	15.00	1,350.00
2503.511	8" E.S.V.C. PIPE SEWER	L.F.	130	11.27	11.80	1,534.00	11.00	1,430.00	11.00	1,430.00	12.70	1,612.00	14.84	1,929.20	13.75	1,787.50	17.00	2,210.00	14.12	1,835.60	16.00	2,080.00
2503.511	12" E.S.V.C. PIPE SEWER	L.F.	100	15.93	20.80	2,080.00	12.00	1,200.00	15.00	1,500.00	16.25	1,625.00	18.33	1,833.00	17.25	1,725.00	22.00	2,200.00	17.75	1,775.00	19.00	1,900.00
2503.511	15" R.C. PIPE SEWER, CL IV	L.F.	224	16.50	19.50	4,368.00	14.00	3,136.00	16.00	3,584.00	21.60	4,838.40	21.96	4,919.04	20.00	4,400.00	23.00	5,152.00	21.56	4,629.44	20.00	4,480.00
2503.511	18" R.C. PIPE SEWER, CL II	L.F.	763	17.67	18.70	14,266.10	15.00	11,445.00	17.50	13,352.50	23.35	17,816.05	22.09	16,854.67	20.90	15,946.70	25.00	19,075.00	23.50	17,930.50	21.00	16,023.00
2503.511	24" R.C. PIPE SEWER, CL II	L.F.	48	21.43	24.30	1,166.40	18.00	864.00	22.00	1,056.00	26.15	1,255.20	26.58	1,275.84	24.00	1,152.00	27.00	1,296.00	26.59	1,276.32	23.00	1,104.00
2503.511	27" R.C. PIPE SEWER, CL II	L.F.	146	23.63	24.10	3,518.60	21.00	3,066.00	24.00	3,504.00	28.90	4,219.40	27.69	4,042.74	31.30	4,569.80	31.00	4,526.00	29.74	4,342.04	26.80	3,796.00
2503.511	30" R.C. PIPE SEWER, CL II	L.F.	860	26.07	26.20	22,532.00	24.00	20,640.00	28.00	24,080.00	31.50	27,090.00	30.51	26,066.60	29.15	25,069.00	33.00	28,380.00	32.44	27,941.40	31.00	26,660.00
2503.511	36" R.C. PIPE SEWER, CL II	L.F.	105	34.10	34.30	3,601.50	32.00	3,360.00	36.00	3,780.00	39.20	4,116.00	38.81	4,075.05	37.60	3,948.00	41.00	4,305.00	40.95	4,299.75	40.00	4,200.00
2503.511	42" R.C. PIPE SEWER, CL II	L.F.	231	46.83	47.50	10,972.50	44.00	10,164.00	49.00	11,319.00	51.50	11,896.50	52.15	12,046.65	47.95	11,076.45	53.00	12,243.00	54.51	12,591.81	52.00	12,012.00
2503.511	48" R.C. PIPE SEWER, CL II	L.F.	90	57.03	57.10	5,139.00	54.00	4,860.00	60.00	5,400.00	66.65	5,998.50	61.37	5,523.30	57.20	5,148.00	63.00	5,670.00	64.58	5,812.20	61.00	5,490.00
2503.571	INSTALL 48" R.C. PIPE SEWER	L.F.	178	9.75	9.25	1,646.50	7.00	1,246.00	13.00	2,314.00	12.00	2,136.00	12.11	2,155.58	12.35	2,198.30	18.00	3,204.00	11.84	2,107.52	25.00	4,450.00
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EA.	9	883.33	800.00	7,200.00	900.00	8,100.00	950.00	8,550.00	778.00	7,002.00	738.55	6,646.95	825.00	7,425.00	860.00	7,740.00	11.08	99.72	1,300.00	11,700.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN A OR F	EA.	5	875.00	625.00	3,125.00	1,000.00	5,000.00	1,000.00	5,000.00	520.00	2,600.00	793.15	3,965.75	850.00	4,250.00	650.00	3,250.00	700.00	3,500.00	950.00	4,750.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C. 2	EA.	5	676.67	630.00	3,150.00	800.00	4,000.00	600.00	3,000.00	775.00	3,875.00	756.89	3,783.45	635.00	3,175.00	790.00	3,950.00	600.00	3,000.00	1,000.00	5,000.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P. 4	EA.	1	943.33	930.00	930.00	800.00	800.00	1,100.00	1,100.00	1,060.00	1,060.00	1,100.70	995.00	995.00	1,300.00	1,300.00	700.00	700.00	1,500.00	1,500.00	
2511.503	GROUTED RIPRAP, CLASS A	CY	16	65.67	42.00	672.00	80.00	1,280.00	75.00	1,200.00	72.00	1,152.00	25.57	409.12	50.00	800.00	50.00	800.00	60.00	960.00	60.00	960.00
2521.501	6" CONCRETE WALK	S.F.	400	2.35	1.84	736.00	2.60	1,040.00	2.60	1,040.00	1.50	600.00	2.63	1,052.00	2.30	880.00	1.50	600.00	2.64	1,056.00	1.90	760.00
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	28	8.97	10.00	280.00	8.50	238.00	8.40	235.20	10.00	280.00	8.40	235.20	11.00	308.00	10.00	280.00	16.50	462.00	10.00	280.00
2557.501	WIRE FENCE DESIGN 9322H	L.F.	680	5.68	5.25	3,570.00	6.30	4,284.00	5.50	3,740.00	5.00	3,400.00	5.25	3,570.00	5.50	3,740.00	5.00	3,400.00	6.45			

STATEMENT OF ESTIMATED QUANTITIES				AVERAGE	RD-50 CONTR. INC.															
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	LOWEST 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		10,000.00	10,000.00														
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	23		3.00	69.00														
2104.503	REMOVE WALK	S.F.	400		0.50	200.00														
2104.521	SALVAGE 48" R.C. PIPE SEWER	L.F.	178		10.85	1,942.30														
2104.501	REMOVE FENCE-CHAIN LINK	L.F.	680		0.50	340.00														
2105.523	COMMON BORROW	CY	1216		4.00	4,864.00														
2105.525	TOPSOIL BORROW (L.V.)	CY	70		8.00	560.00														
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	5.4		175.00	945.00														
2331.514	BASE COURSE MIXTURE (PARKING LOT RESURFACING)	TON	87		60.00	5,220.00														
2451.507	GRANULAR BEDDING	CY	20		12.00	240.00														
2501.515	18" R.C. PIPE APRONS	EA.	2		195.00	390.00														
2501.515	24" R.C. PIPE APRONS	EA.	2		250.00	500.00														
2104.501	REMOVE C.M.P.	L.F.	172		1.50	258.00														
2503.511	6" E.S.V.C. PIPE SEWER	L.F.	90		11.25	1,012.50														
2503.511	8" E.S.V.C. PIPE SEWER	L.F.	130		10.25	1,332.50														
2503.511	12" E.S.V.C. PIPE SEWER	L.F.	100		16.00	1,600.00														
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	224		17.25	3,864.00														
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	763		20.00	15,260.00														
2503.511	24" R.C. PIPE SEWER, CL. II	L.F.	48		32.00	1,536.00														
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.	146		27.00	3,942.00														
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	860		30.00	25,800.00														
2503.511	36" R.C. PIPE SEWER, CL. II	L.F.	105		40.00	4,200.00														
2503.511	42" R.C. PIPE SEWER, CL. II	L.F.	231		55.00	12,705.00														
2503.511	48" R.C. PIPE SEWER, CL. II	L.F.	90		69.50	6,255.00														
2503.571	INSTALL 48" R.C. PIPE SEWER	L.F.	178		12.00	2,136.00														
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EA.	9		870.00	7,830.00														
2506.509	CONSTRUCT CATCH BASINS, DESIGN A OR F	EA.	5		660.00	3,300.00														
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C. 2	EA.	5		840.00	4,200.00														
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P.-4	EA.	1		1,100.00	1,100.00														
2511.503	GROUTED RIPRAP, CLASS A	CY	16		26.00	416.00														
2521.501	6" CONCRETE WALK	S.F.	400		2.70	1,080.00														
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	28		9.00	252.00														
2557.501	WIRE FENCE DESIGN 9322H	L.F.	680		6.25	4,250.00														
2575.505	SODDING	S.Y.	2061		2.50	5,152.50														
2557.516	PEDESTRIAN GATE	EA.	1		150.00	150.00														
412.601	TRAPEZOIDAL CONCRETE DITCH	LUMP SUM	1		12,460.00	12,460.00														
503.602	FBI TRASH GUARD FOR 24" R.C.P.	EA.	2		300.00	600.00														
	8" DUCTILE IRON PIPE C-151-76	L.F.	460		15.00	6,900.00														
	DUCTILE IRON FITTINGS	POUND	320		2.00	640.00														
	8" GATE VALVE	EACH	2		425.00	850.00														
	FIRE HYDRANT	EACH	1		800.00	800.00														
	6" DUCTILE IRON PIPE HYDRANT LEADS	L.F.	10		13.30	133.00														
	CONNECT TO EXISTING WATERMAIN	EACH	1		150.00	150.00														
2402.583	ORNAMENTAL METAL RAILING	L.F.	80		0.01	0.80														
2411.507	CONCRETE STEPS	EACH	2		1,875.00	3,750.00														
	CONSTRUCT SEWER CLEANOUT	EACH	2		500.00	1,000.00														
	6"X8"X8" E.S. VCP TEE SECTION	EACH	1		40.00	40.00														
	6"X8"X12" E.S. VCP TEE SECTION	EACH	1		60.00	60.00														
	6"X12"X12" E.S. VCP TEE SECTION	EACH	2		80.00	160.00														
ALDRICH ARENA SIDEWALKS & DRIVEWAYS						\$ 160,803.40														
2104.503	REMOVE CONCRETE SIDEWALK	S.F.	7,500		0.95	7,125.00														
2104.505	REMOVE CONCRETE DRIVEWAY PVMNT. (REINFORCED)	S.Y.	1,639		6.45	10,571.55														
2105.501	COMMON EXCAVATION	C.Y.	435		4.00	1,740.00														
2211.501	AGGREGATE BASE CLASS 5	TON	827		8.60	7,112.20														
2472.511	STEEL FABRIC	POUND	6,195		0.45	2,787.75														
2521.501	4" CONCRETE SIDEWALK	S.F.	8,050		1.50	12,075.00														
2531.507	6" CONCRETE DRIVEWAY PAVEMENT (REINFORCED)	S.Y.	1,639		22.50	36,877.50														
2575.505	SODDING	S.Y.	324		6.00	1,944.00														
411.602	GUARD POST FOUNDATION	EACH	4		130.00	520.00														

\$ 80,753.00

\$ 241,556.40

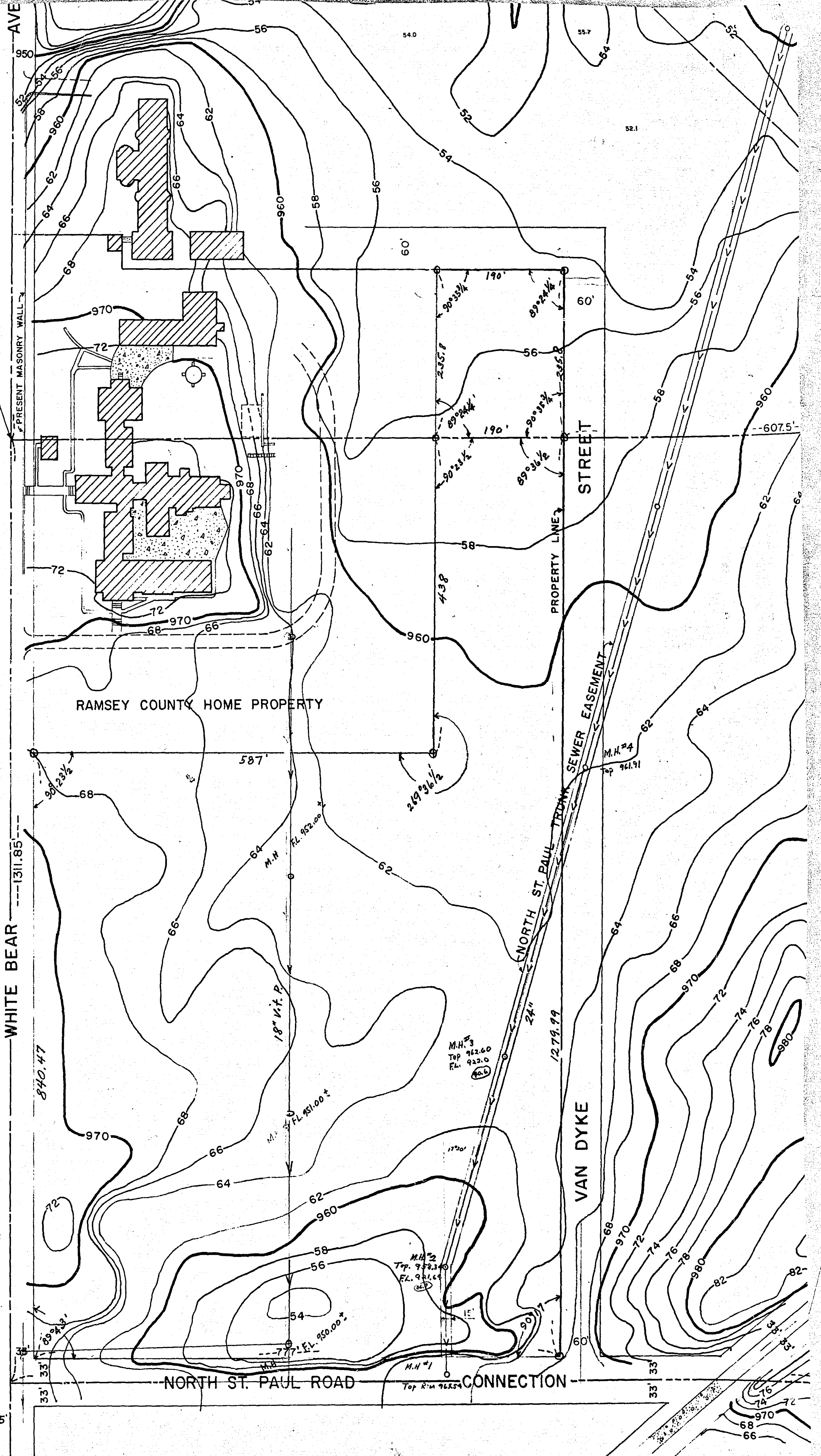
SUBTOTAL
(NURSING HOME)

SUBTOTAL
(ALDRICH ARENA)
TOTAL

25-124

WEST 1/4 CORNER
SECTION 14, T.29N., R.22W.

FROST AVE. 86'



ENGINEER'S ESTIMATE NURSING HOME STORM SEWER

5 SEPT. 80

STATEMENT OF ESTIMATED QUANTITIES					
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	4,500.00	4,500.00
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	23	3.70	85.10
2104.503	REMOVE WALK	S.F.	400	1.05	420.00
2104.521	SALVAGE 48" R.C. PIPE SEWER	L.F.	178	10.00	1,780.00
2104.501	REMOVE FENCE-CHAIN LINK	L.F.	680	2.50	1,700.00
2105.523	COMMON BORROW	CY.	1216	3.00	3,648.00
2105.525	TOPSOIL BORROW (L.V.)	CY.	70	4.70	329.00
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	5.4	148.00	799.20
2331.514	BASE COURSE MIXTURE (PARKING LOT RESURFACING)	TON	87	20.00	1,740.00
2451.507	GRANULAR BEDDING	CY.	20	8.00	160.00
2501.515	18" R.C. PIPE APRONS	EA.	2	275.00	550.00
2501.515	24" R.C. PIPE APRONS	EA.	2	325.00	650.00
2104.501	REMOVE C.M.P.	L.F.	172	5.00	860.00
2503.511	6" E.S.V.C. PIPE SEWER	L.F.	90	12.00	1,080.00
2503.511	8" E.S.V.C. PIPE SEWER	L.F.	130	16.00	2,080.00
2503.511	12" E.S.V.C. PIPE SEWER	L.F.	100	20.00	2,000.00
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	224	23.00	5,152.00
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	763	25.00	19,075.00
2503.511	24" R.C. PIPE SEWER, CL. II	L.F.	48	30.00	1,440.00
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.	146	35.00	5,110.00
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	860	40.00	34,400.00
2503.511	36" R.C. PIPE SEWER, CL. II	L.F.	105	45.00	4,725.00
2503.511	42" R.C. PIPE SEWER, CL. II	L.F.	231	60.00	13,860.00
2503.511	48" R.C. PIPE SEWER, CL. II	L.F.	90	75.00	6,750.00
2503.571	INSTALL 48" R.C. PIPE SEWER	L.F.	178	25.00	4,450.00
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EA.	9	1,100.00	9,900.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN A OR F	EA.	5	1,000.00	5,000.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C. 2	EA.	5	1,150.00	5,750.00
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P-4	EA.	1	1,100.00	1,100.00
2511.503	GROUTED RIPRAP, CLASS A	CY.	16	80.00	1,280.00
2521.501	6" CONCRETE WALK	S.F.	400	3.50	1,400.00
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	28	6.50	182.00
2557.501	WIRE FENCE DESIGN 9322H	L.F.	680	4.35	2,958.00
2575.505	SODDING	S.Y.	2061	1.00	2,061.00
2557.516	PEDESTRIAN GATE	EA.	1	250.00	250.00
412.601	TRAPEZOIDAL CONCRETE DITCH	LUMP SUM	1	5,000.00	5,000.00
503.602	F & I TRASH GUARD FOR 24" R.C.P.	EA.	2	475.00	950.00
	8" DUCTILE IRON PIPE C-151-76	L.F.	460	16.00	7,360.00
	DUCTILE IRON FITTINGS	POUND	320	1.15	368.00
	8" GATE VALVE	EACH	2	475.00	950.00
	FIRE HYDRANT	EACH	1	1,000.00	1,000.00
	6" DUCTILE IRON PIPE HYDRANT LEADS	L.F.	10	16.00	160.00
	CONNECT TO EXISTING WATERMAIN	EACH	1	200.00	200.00
2402.583	ORNAMENTAL METAL RAILING	L.F.	80	50.00	4,000.00
2411.507	CONCRETE STEPS	EACH	2	1,270.00	2,540.00
	CONSTRUCT SEWER CLEANOUT	EACH	2	500.00	1,000.00
	6"x8"x8" E.S. V.C.P. TEE SECTION	EACH	1	75.00	75.00
	6"x8"x12" E.S. V.C.P. TEE SECTION	EACH	1	75.00	75.00
	6"x12"x12" E.S. V.C.P. TEE SECTION	EACH	2	75.00	150.00

SUBTOTAL \$171,052.30

ALDRICH ARENA SIDEWALKS & DRIVEWAYS					
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL AMOUNT
2104.503	REMOVE CONCRETE SIDEWALK	S.F.	7,500	.50	3,750.00
2104.505	REMOVE CONCRETE DRIVEWAY P.V.M.T. (REINFORCED)	S.Y.	1,639	2.50	4,097.50
2105.501	COMMON EXCAVATION	CY.	435	5.00	2,175.00
2211.501	AGGREGATE BASE CLASS 5	TON	827	5.75	4,755.25
2472.511	STEEL FABRIC	POUND	6,195	.26	1,610.70
2521.501	4" CONCRETE SIDEWALK	S.F.	8,050	1.25	10,062.50
2531.507	6" CONCRETE DRIVEWAY PAVEMENT (REINFORCED)	S.Y.	1,639	20.00	32,780.00
2575.505	SODDING	S.Y.	324	1.50	486.00
411.602	GUARD POST FOUNDATION	EACH	4	50.00	200.00

SUBTOTAL \$ 59,916.95

TOTAL \$ 230,969.25

RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS

RAMSEY COUNTY NURSING HOME STORM SEWER ALDRICH ARENA SIDEWALKS & DRIVEWAYS LOCATION: STARTING WEST OF ALDRICH ARENA, AND ENDING ON THE EAST END OF THE RAMSEY CO. RACETRACK.

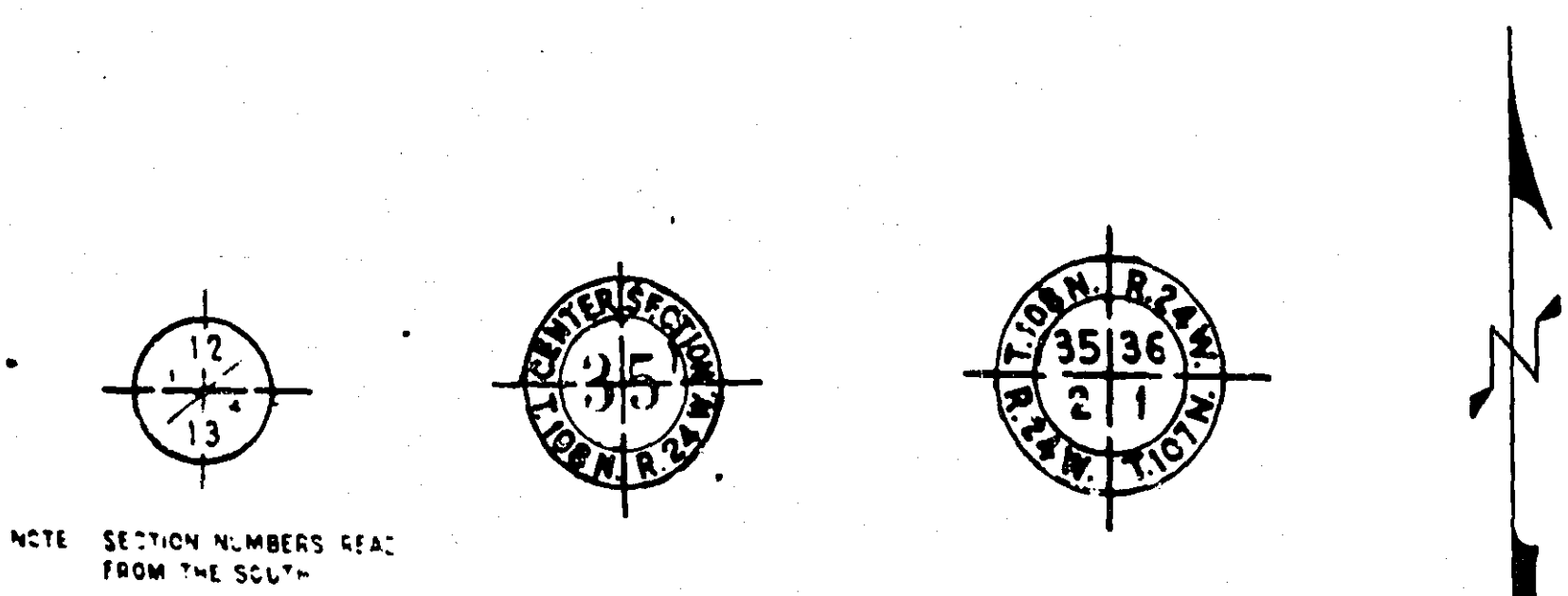
COUNTY PROJECT 80-1

PLANS SYMBOLS

STATE LINE	SPRINGS
COUNTY LINE	MARSH
TOWNSHIP OR RANGE LINE	TIMBER
SECTION LINE	ORCHARD
QUARTER LINE	BRUSH
SIXTEENTH LINE	NURSERY
RIGHT-OF-WAY LINE	CATCH BASIN
PRESENT RIGHT-OF-WAY LINE	FIRE HYDRANT
CONTROL OF ACCESS LINE	CATTLE GUARD
PROPERTY LINE (Except Land Lines)	OVERPASS (Highway Over)
VACATED PLATTED PROPERTY	UNDERPASS (Highway Under)
CORPORATE OR CITY LIMITS	BRIDGE
TRUNK HIGHWAY CENTER LINE	BUILDING (One Story Frame)
RETAINING WALL	F-FRAME C-CONCRETE
RAILROAD	S-STONE T-TILE
RAILROAD RIGHT-OF-WAY LINE	B-BRICK ST-STUCCO
RIVER OR CREEK	IRON PIPE OR ROD
DRY RUN	MONUMENT (STONE, CONCRETE, OR METAL)
DRAINAGE DITCH	WOODEN HUB
DRAIN TILE	GRAVEL PIT
CULVERT	SAND PIT
DROP INLET	BORROW PIT
GUARD RAIL	ROCK QUARRY
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	

UTILITIES SYMBOLS

POWER POLE LINE	CONDUIT
TELEPHONE OR TELEGRAPH POLE LINE	TELEPHONE CABLE IN CONDUIT
JOINT TELEPHONE AND POWER ON POWER POLES	ELECTRIC CABLE IN CONDUIT
ON TELEPHONE POLES	TELEPHONE MAINHOLE
ANCHOR	ELECTRIC MAINHOLE
STEEL TOWER	BURIED TELEPHONE CABLE
STREET LIGHT	BURIED ELECTRIC CABLE
PEDISTAL (TELEPHONE CABLE TERMINAL)	AERIAL TELEPHONE CABLE
GAS MAIN	SEWER (SANITARY OR STORM)
WATER MAIN	SEWER MAINHOLE

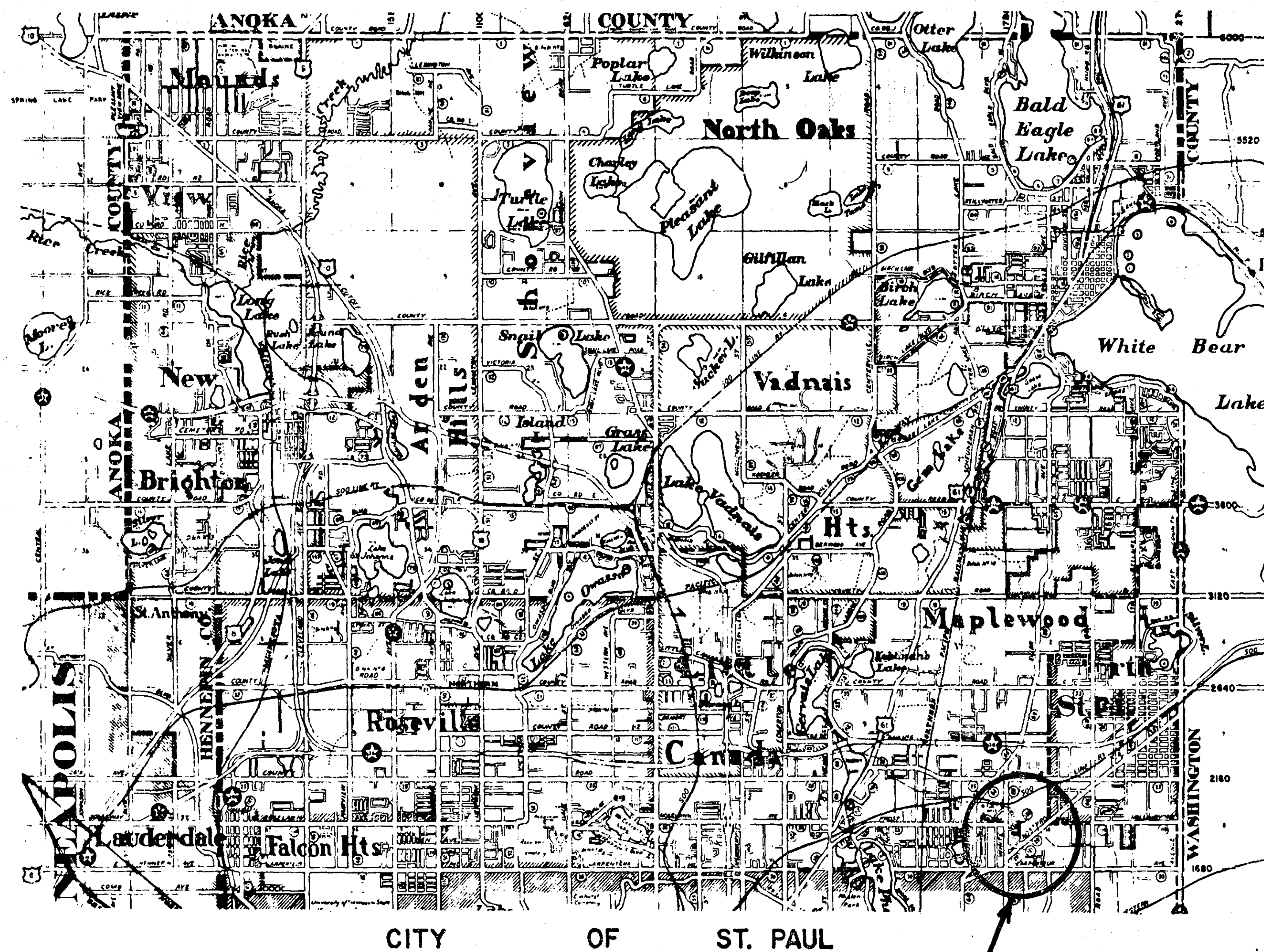


PIT DATA

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

SCALE DESIGNATION +

PLAN =	0' 10' 20' 30' 40' 50' 100'
PROFILE HORIZ. =	0' 10' 20' 30' 40' 50'
PROFILE VERT. =	0' 5' 10'
CROSS SECTIONS =	0' 5' 10'



CO. PROJ. 80-1

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN SHEET 8 ESTIMATED QUANTITIES
3	PROFILE SHEET
4-4A	DETAIL SHEETS
5-8	X-SECTIONS

SCALE

PLAN:	1" = 50'
PROFILE HORIZ.	1" = 30'
PROFILE VERT.	1" = 5'
CROSS SECTIONS:	1" = 5'

RECOMMENDED FOR APPROVAL	<i>Emil B. Soberg</i>	DATE	10-24-80
	NURSING HOME ADMINISTRATOR		
RECOMMENDED FOR APPROVAL	<i>Anthony J. Edwards</i>	DATE	10-24-80
	DIRECTOR OF PARKS & RECREATION		
RECOMMENDED FOR APPROVAL	<i>Kenneth B. Smith</i>	DATE	10-6-80
	COUNTY ENGINEER		
APPROVED	<i>Robert J. Oath</i>	DATE	10-6-80
	CHAIRMAN OF THE RAMSEY COUNTY BOARD		
APPROVED	<i>William R. Roth</i>	DATE	10-24-80
	CITY OF MAPLEWOOD		
APPROVED		DATE	

RECOMMENDED FOR APPROVAL	<i>P.K.</i>	DATE	4-22-80
	TRAFFIC ENGR		
RECOMMENDED FOR APPROVAL	<i>DRD</i>	DATE	5-06-80
	ENV. ENGR		
RECOMMENDED FOR APPROVAL	<i>MCK</i>	DATE	5-6-80
	MAYOR		
RECOMMENDED FOR APPROVAL	<i>WMA</i>	DATE	5-6-80
	CONST. ENGR		
RECOMMENDED FOR APPROVAL	<i>LKF</i>	DATE	5-06-80
	DESIGN ENGR		
RECOMMENDED FOR APPROVAL	<i>JAP</i>	DATE	5-6-80
	PLW. ENGR		
APPROVED	<i>William W. Leonard</i>	DATE	5-7-80
	COORDINATING ENGR.		

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *CPB*
DATE: 4/13/82

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.
Frederick W. W. Leonard
Date 5/11/80 Reg. No. 9345

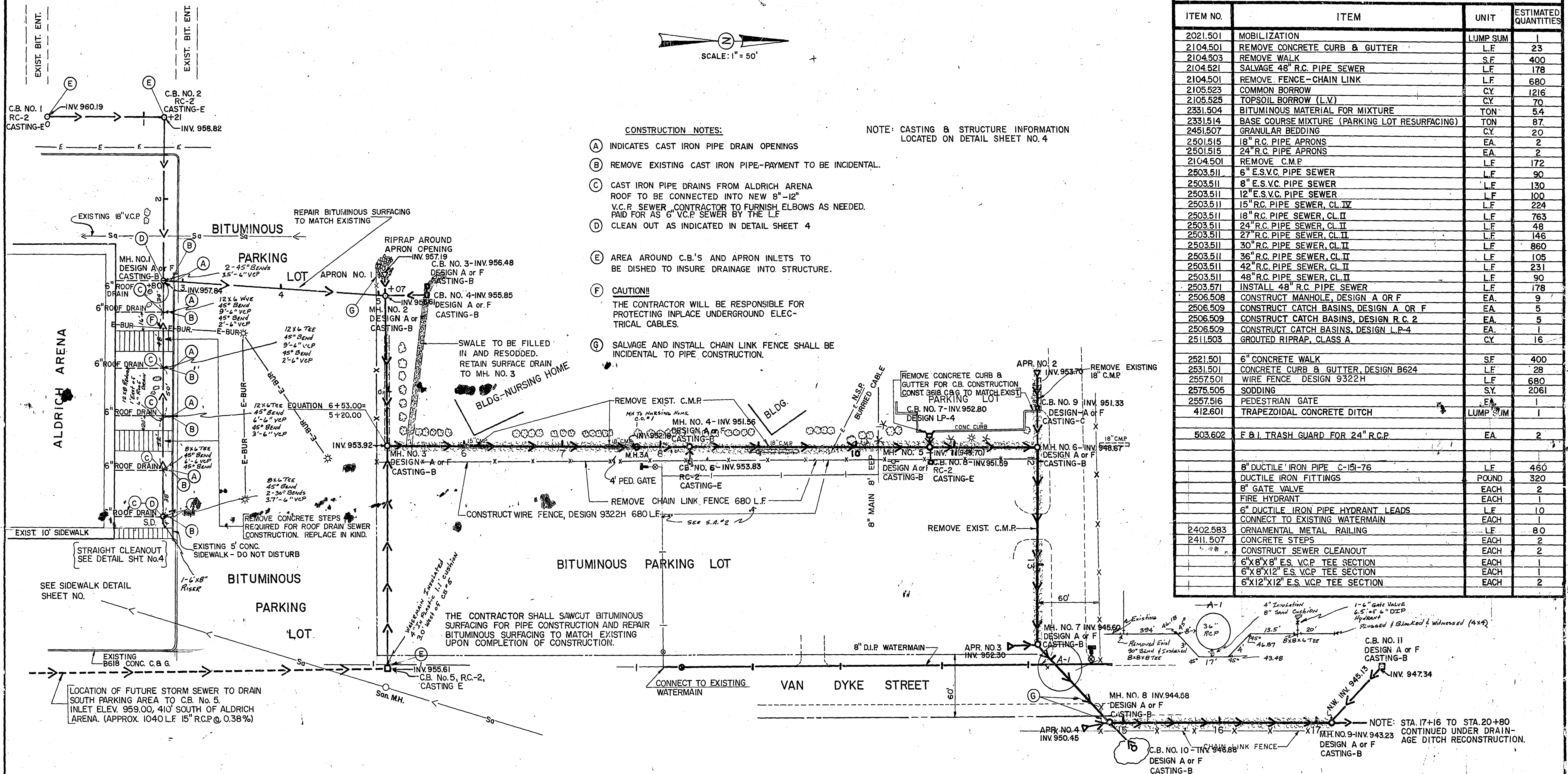
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RSO	8-22-80	RWL	CPB	
RSO	9-4-80			
SHB	10-23-80			

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

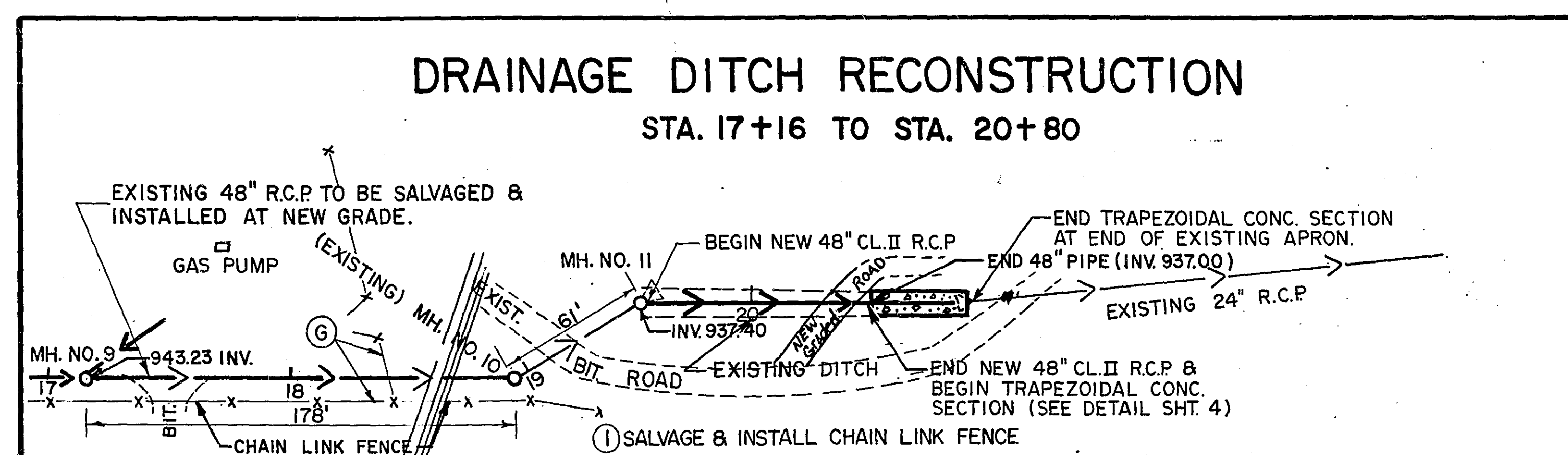
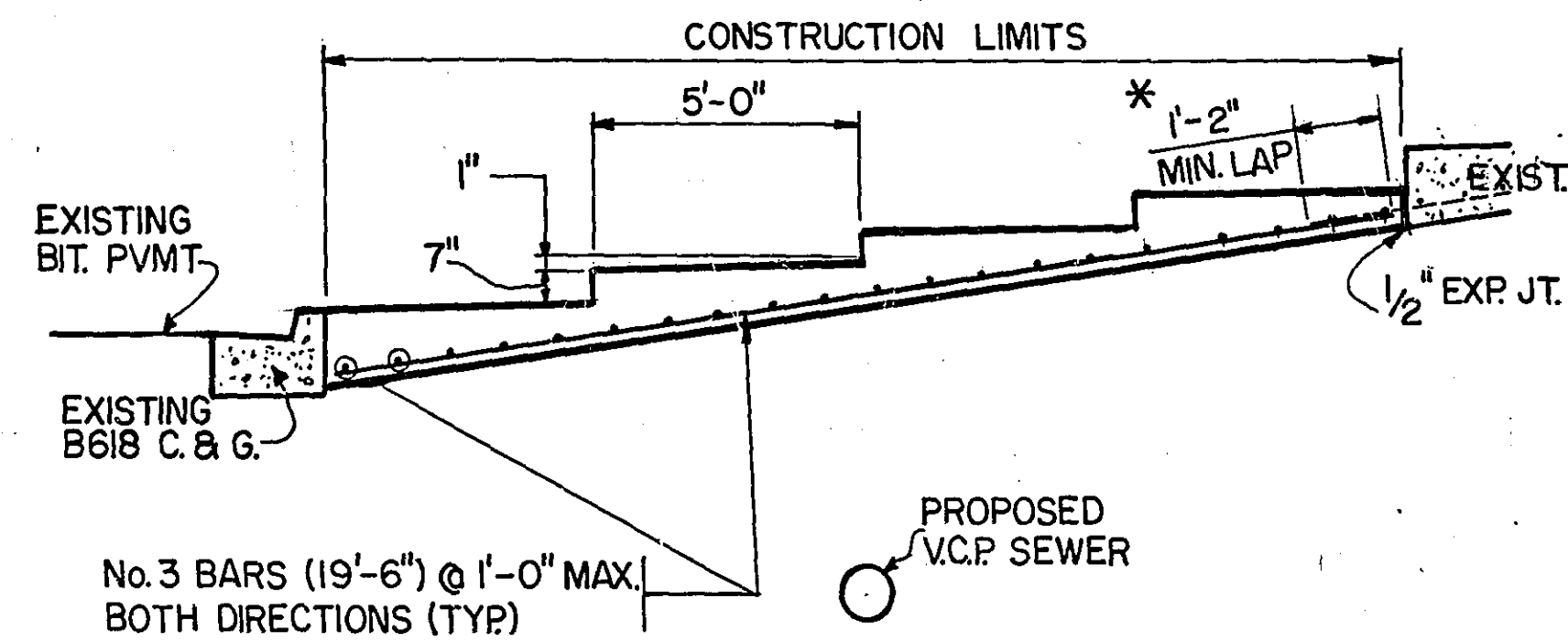
CO. PROJ. 80-1

Sheet No. 1 of 8 Sheets

25-124



ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LUMP SUM	1
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	23
2104.503	REMOVE WALK	S.F.	400
2104.521	SALVAGE 48" R.C. PIPE SEWER	L.F.	178
2104.501	REMOVE FENCE-CHAIN LINK	L.F.	680
2105.523	COMMON BORROW	CY	1216
2105.525	TOPSOIL BORROW (L.V.)	CY	70
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	5.4
2331.514	BASE COURSE MIXTURE (PARKING LOT RESURFACING)	TON	87
2451.507	GRANULAR BEDDING	CY	20
2501.515	18" R.C. PIPE APRONS	EA.	2
2501.515	24" R.C. PIPE APRONS	EA.	2
2104.501	REMOVE C.M.P.	L.F.	172
2503.511	6" E.S.V.C. PIPE SEWER	L.F.	90
2503.511	8" E.S.V.C. PIPE SEWER	L.F.	130
2503.511	12" E.S.V.C. PIPE SEWER	L.F.	100
2503.511	15" R.C. PIPE SEWER, CL. IV	L.F.	224
2503.511	18" R.C. PIPE SEWER, CL. II	L.F.	763
2503.511	24" R.C. PIPE SEWER, CL. II	L.F.	48
2503.511	27" R.C. PIPE SEWER, CL. II	L.F.	146
2503.511	30" R.C. PIPE SEWER, CL. II	L.F.	860
2503.511	36" R.C. PIPE SEWER, CL. II	L.F.	105
2503.511	42" R.C. PIPE SEWER, CL. II	L.F.	231
2503.511	48" R.C. PIPE SEWER, CL. II	L.F.	90
2503.571	INSTALL 48" R.C. PIPE SEWER	L.F.	178
2506.508	CONSTRUCT MANHOLE, DESIGN A OR F	EA.	9
2506.509	CONSTRUCT CATCH BASINS, DESIGN A OR F	EA.	5
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C. 2	EA.	5
2506.509	CONSTRUCT CATCH BASINS, DESIGN L.P. 4	EA.	1
2511.503	GROUTED RIPRAP, CLASS A	CY	16
2521.501	6" CONCRETE WALK	S.F.	400
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	28
2557.501	WIRE FENCE DESIGN 9322H	L.F.	680
2575.505	SODDING	S.Y.	2061
2557.516	PEDESTRIAN GATE	EA.	1
412.601	TRAPEZOIDAL CONCRETE DITCH	LUMP SUM	1
503.602	F & I TRASH GUARD FOR 24" R.C.P.	EA.	2
8" DUCTILE IRON PIPE C-151-76		L.F.	460
DUCTILE IRON FITTINGS		POUND	320
8" GATE VALVE		EACH	2
FIRE HYDRANT		EACH	1
6" DUCTILE IRON PIPE HYDRANT LEADS		L.F.	10
CONNECT TO EXISTING WATERMAIN		EACH	1
2402.583	ORNAMENTAL METAL RAILING	L.F.	80
2411.507	CONCRETE STEPS	EACH	2
	CONSTRUCT SEWER CLEANOUT	EACH	2
	6"x8"x8" E.S. V.C.P. TEE SECTION	EACH	1
	6"x8"x12" E.S. V.C.P. TEE SECTION	EACH	1
	6"x12"x12" E.S. V.C.P. TEE SECTION	EACH	2



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *J. A. R.R.*
DATE: 2-3-82
4-13-82

ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES
2104.503	REMOVE CONCRETE SIDEWALK	S.F.	7,500
2104.505	REMOVE CONCRETE DRIVEWAY PVMNT. (REINFORCED)	S.Y.	1,639
2105.501	COMMON EXCAVATION	CY	435
2211.501	AGGREGATE BASE CLASS 5	TON	827
2472.511	STEEL FABRIC	POUND	6,195
2521.501	4" CONCRETE SIDEWALK	S.F.	8,050
2531.507	6" CONCRETE DRIVEWAY PAVEMENT (REINFORCED)	S.Y.	1,639
2575.505	SODDING	S.Y.	324
411.602	GUARD POST FOUNDATION	EACH	4

STRUCTURAL CONCRETE (3A32) 18 CY.
REINFORCEMENT BARS 587 POUNDS

CONCRETE STEP RECONSTRUCTION DETAIL
SCALE: 1" = 4'-0"

STORM SEWER PLAN

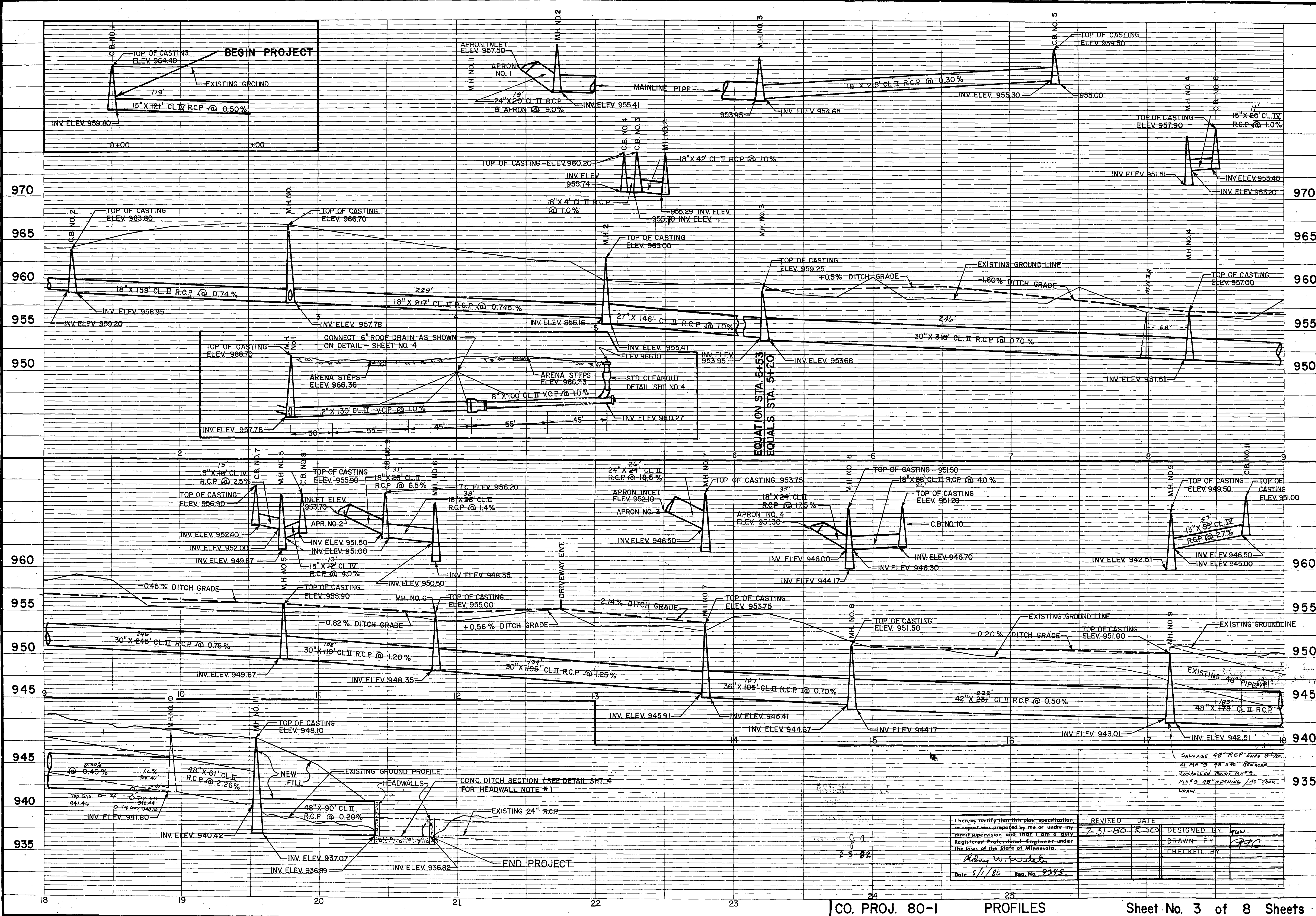
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
John A. R.R.
Date: 5/11/82 Reg. No. 9345

REVISED DATE
R30 7-30-82 DESIGNED BY *R.R.*
R30 8-20-82 DRAWN BY *R.R.*
R30 9-4-82 CHECKED BY *R.R.*
OLSEN 9-15-82
SHB 10-23-82

CO. PROJ. 80-1

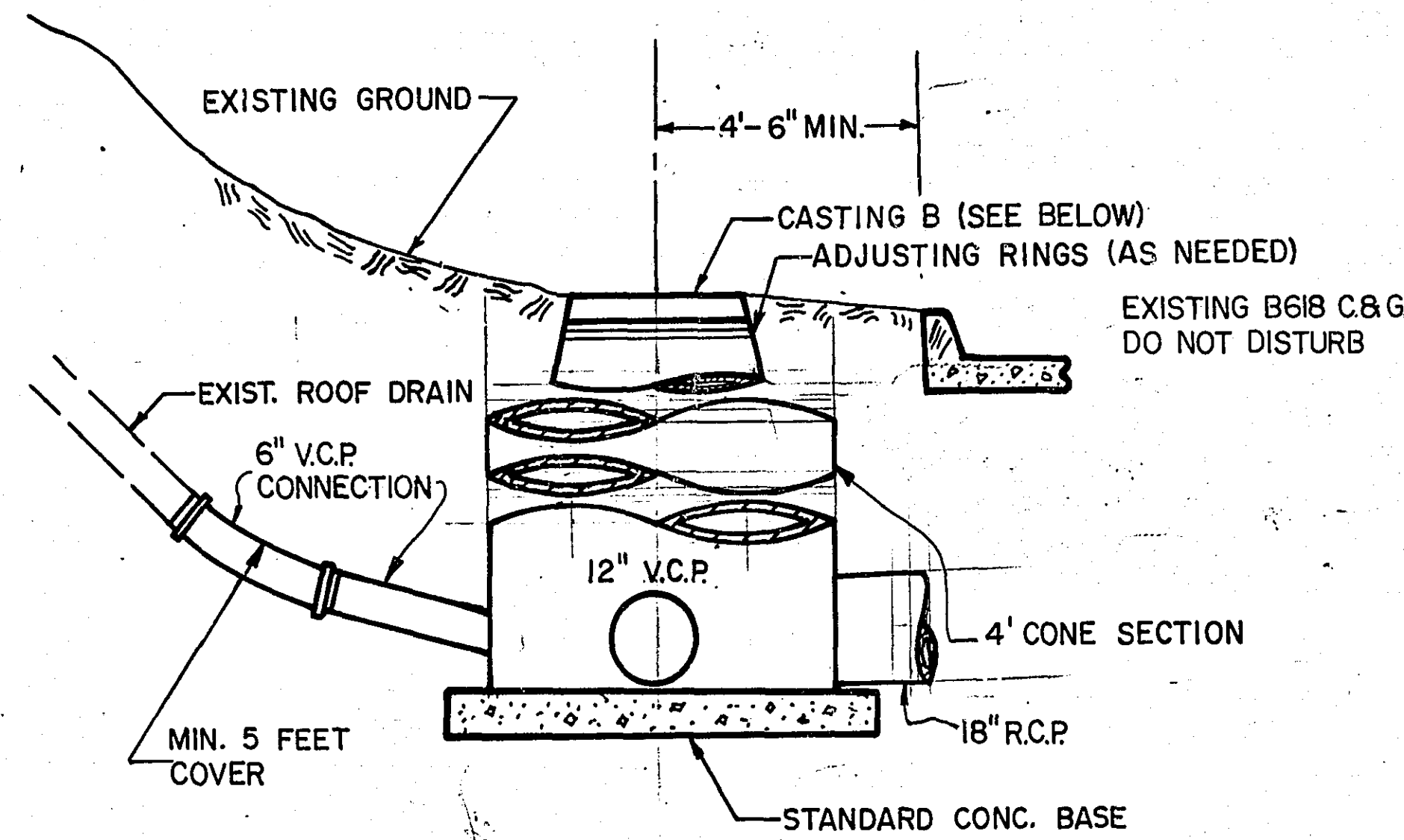
Sheet No. 2 of 8 Sheets

25-124



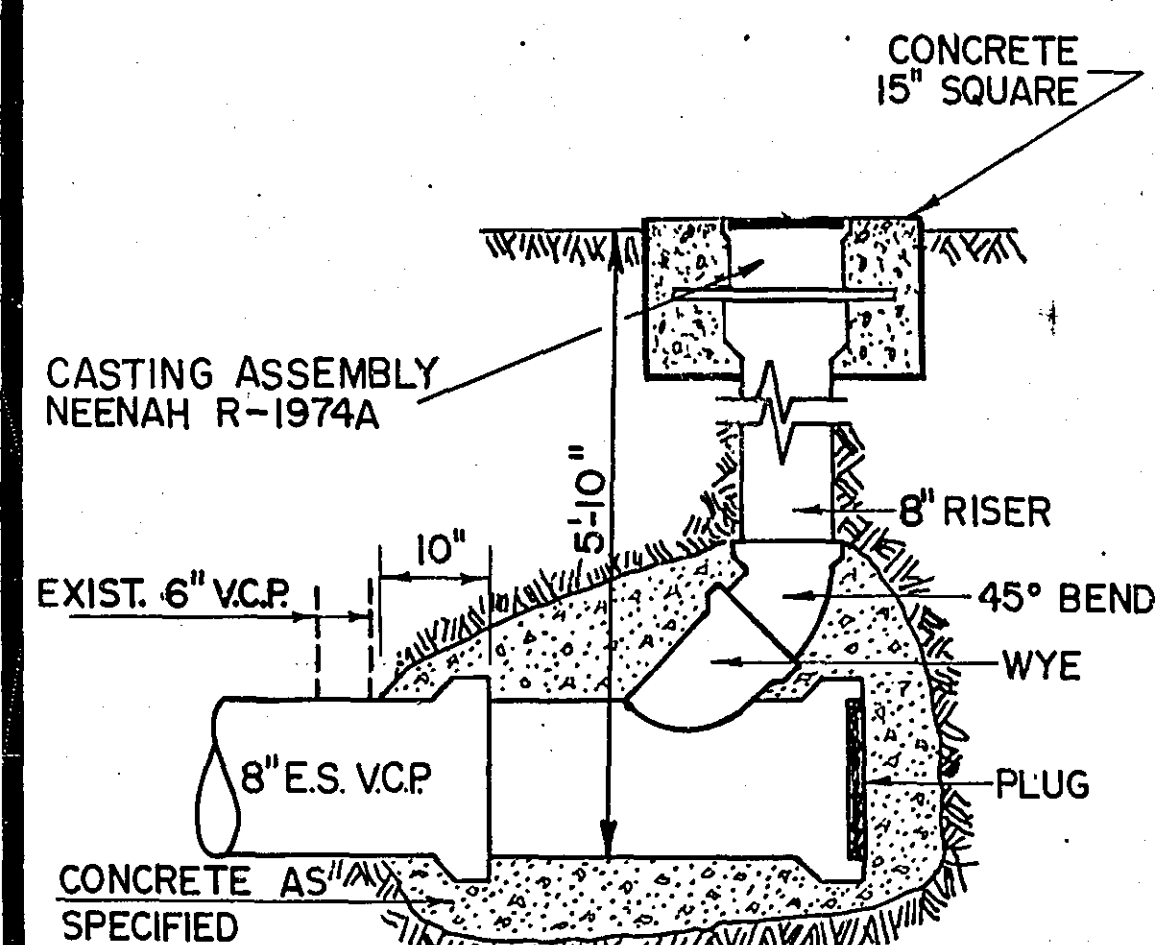
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.		REVISED	DATE	DESIGNED BY
Riding W. W. W. W.		7-31-80	RSC	gaw
Date 8/1/80 Reg. No. 9345.				DRAWN BY
				732
				CHECKED BY

MANHOLE NUMBER 1



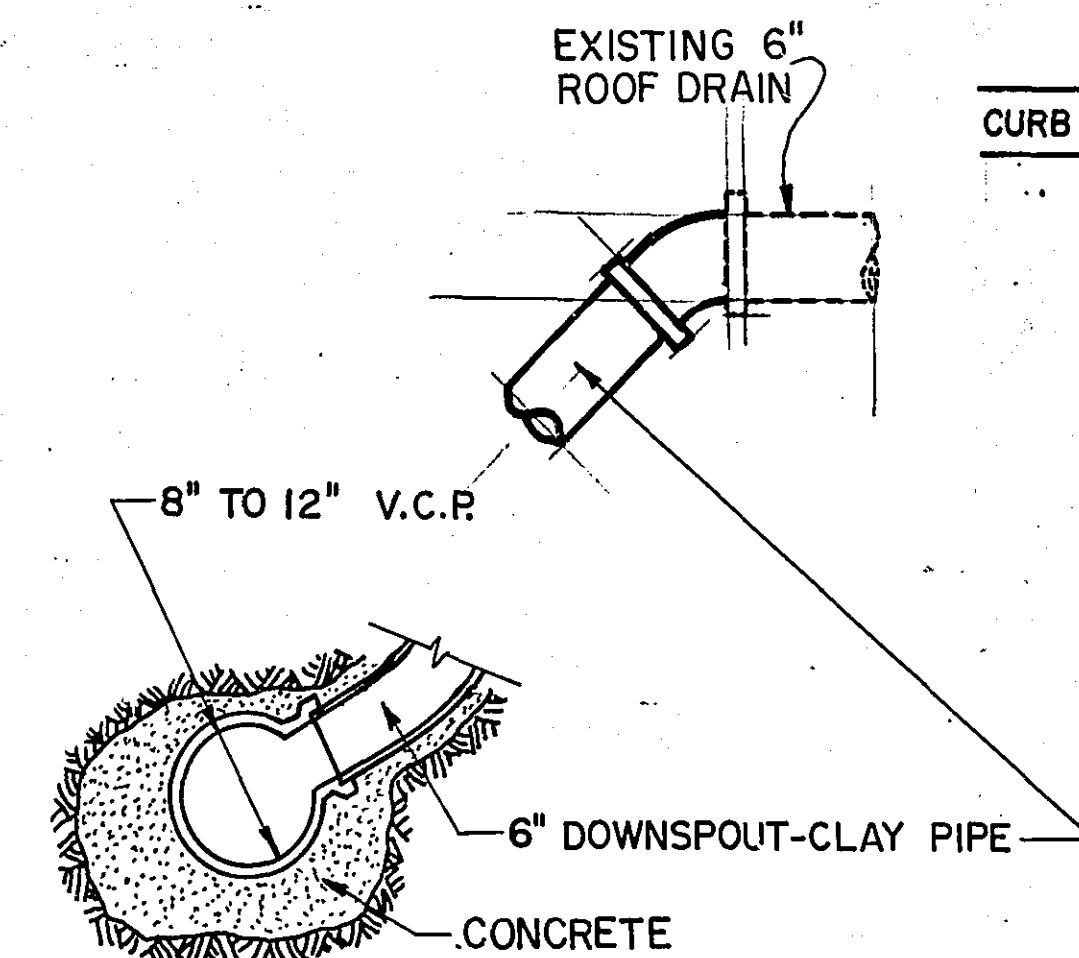
CAST IRON ATTACHMENT DRAIN PIPE MANHOLE DETAIL

STRAIGHT CLEANOUT

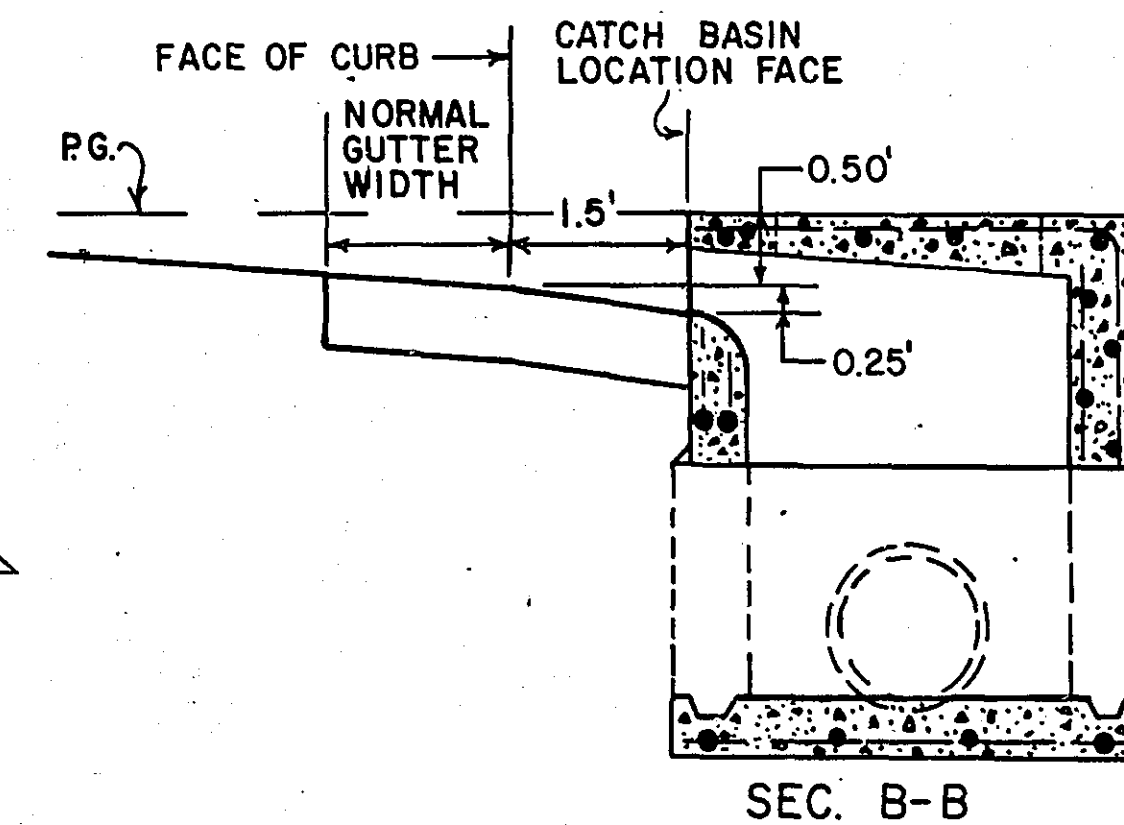
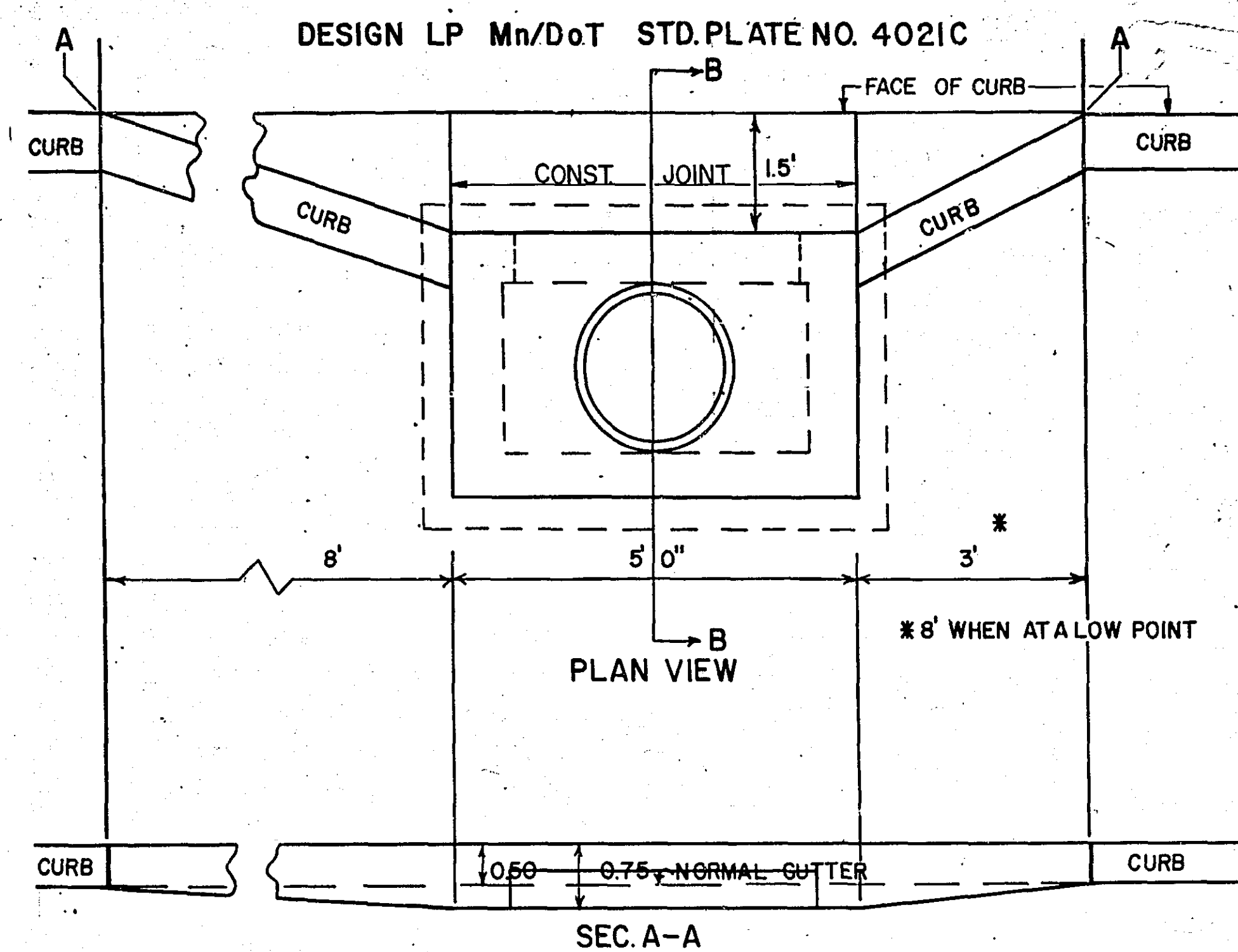


CONSTRUCT STRAIGHT CLEANOUT TO INCLUDE CASTING ASSEMBLY, 8" RISER, 45° ELBOW SECTION, PLUG, TEE & WYE SECTIONS, COMPLETE & INPLACE.

ROOF DRAIN CONNECTION-TYPICAL



CURB OPENING CATCH BASIN INSTALLATION DETAIL



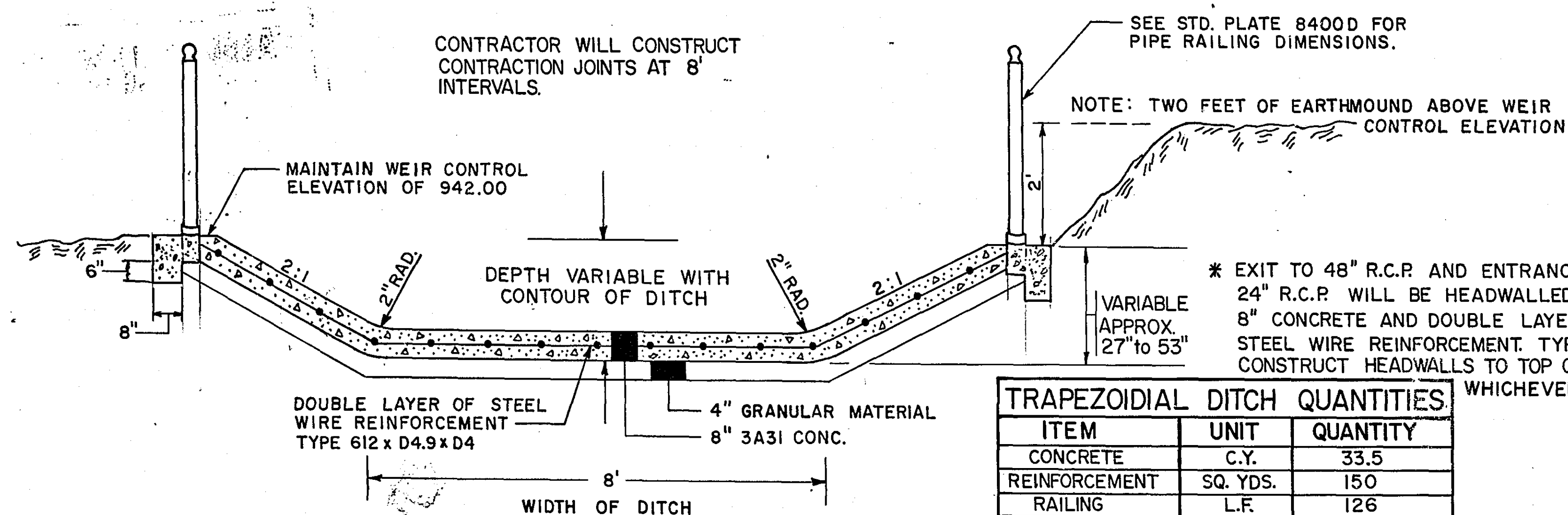
MANHOLES & CATCH BASINS RC-2, DETAIL ON THIS SHEET
A or F, Mn/DOT STD. PLATES NO. 4000H OR 4005K, DETAIL ON THIS SHEET
LP-4, Mn/DOT STD. PLATE NO. 4021C, DETAIL ON THIS SHEET

** CASTINGS
A = Mn/DOT NO. 700-7 COVER CASTING NO. 712.
B = Mn/DOT NO. 700-7 GRATE CASTING NO. 720.
C = Mn/DOT NO. 801 FRAME CASTING; NO. 810 GRATE; NO. 821B CURB BOX.
D = NEENAH INLET FRAME GRATE AND CURB BOX NO. R-3067 OR EQUAL.
E = NEENAH INLET FRAME AND GRATE R-3403-F.

** INCLUDED WITH STRUCTURE, NOT SEPARATE PAY ITEM.

SECTION A-A

TRAPEZOIDAL DITCH DETAIL LENGTH APPROX. 40'



TRAPEZOIDAL DITCH QUANTITIES		
ITEM	UNIT	QUANTITY
CONCRETE	C.Y.	33.5
REINFORCEMENT	SQ. YDS.	150
RAILING	L.F.	126
GRAN. MAT'L.	C.Y.	14.2

THE ABOVE QUANTITIES ARE FOR CONTRACTOR'S INFORMATION ONLY.

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.

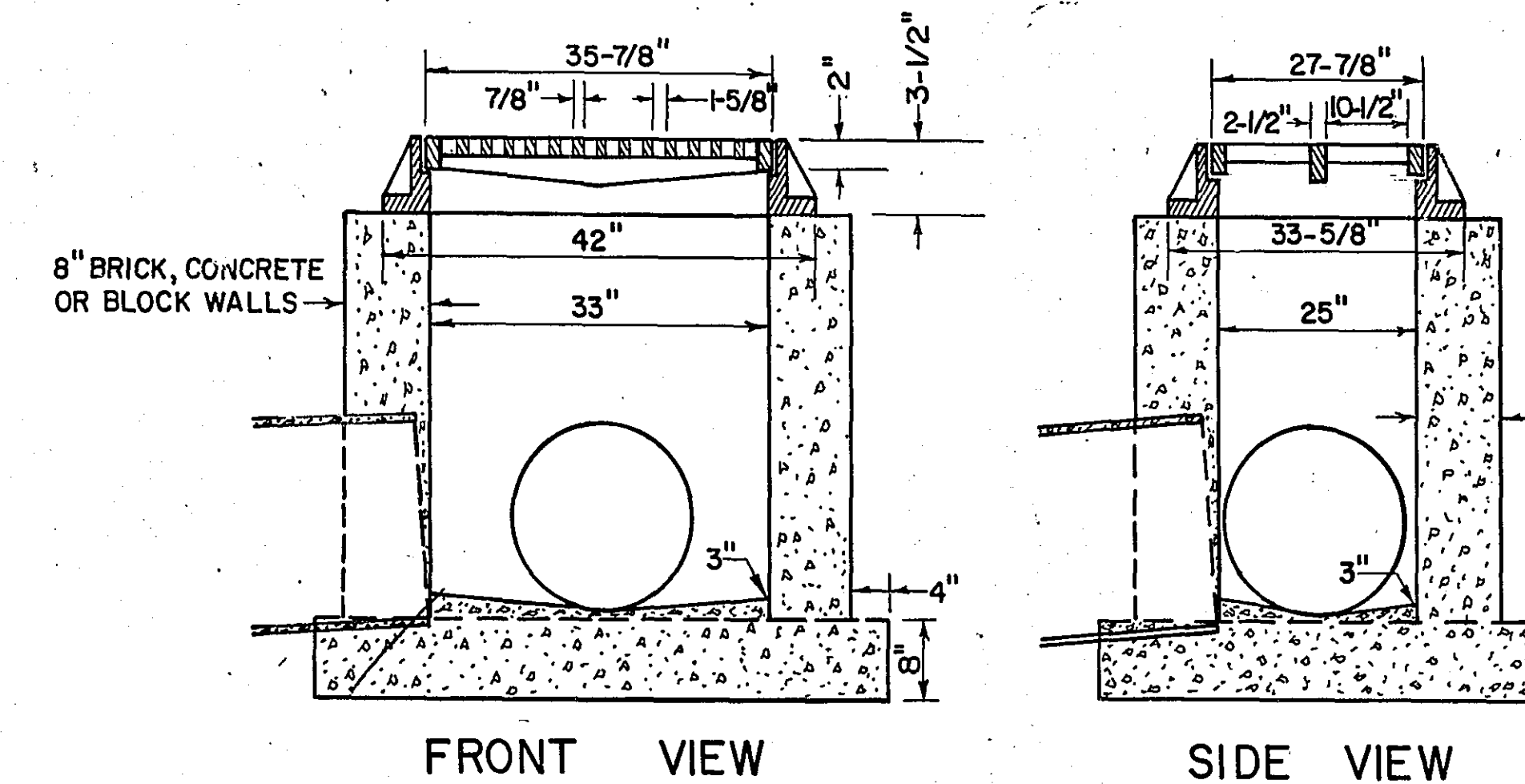
Robert W. W. W.
Date: 5/1/80 Reg. No. 9345

REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
R50	7-31-80			
R50	8-22-80			
S.H.B.	10-23-80			

STANDARD DETAIL PLATES

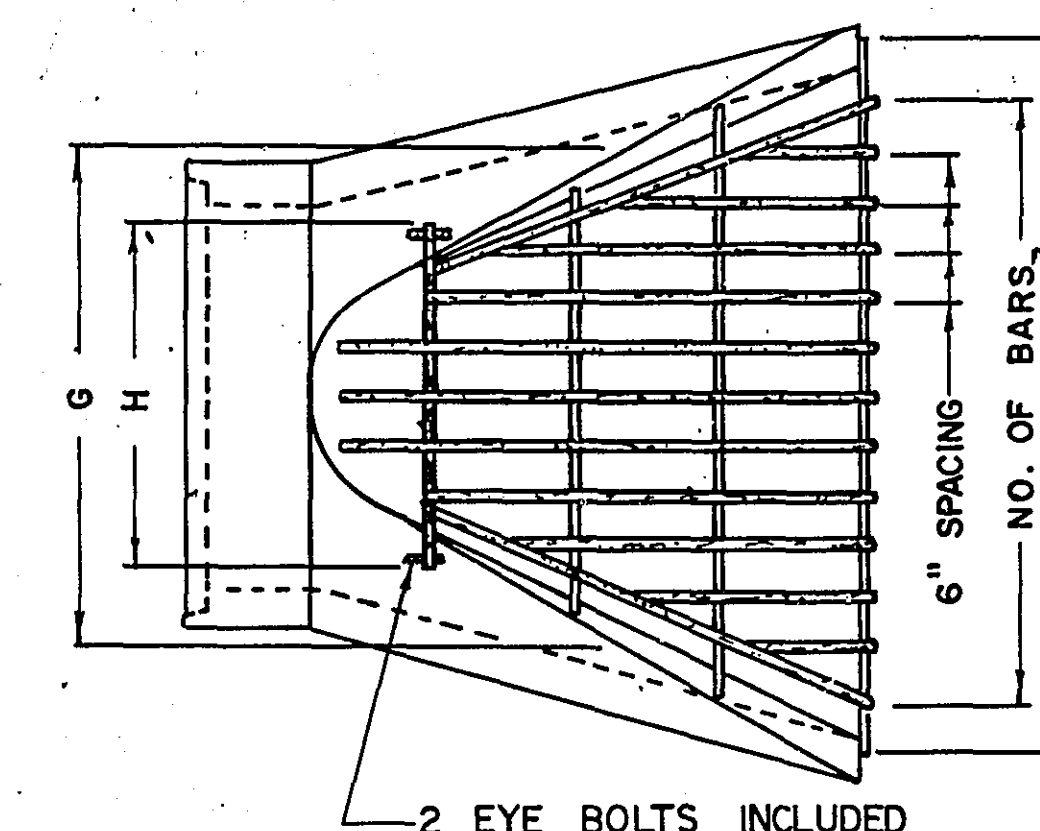
PLATE NO.	DESCRIPTION	PLATE NO.	DESCRIPTION
0003 A	SPECIFICATION REFERENCE TO STANDARD DETAIL PLATES	4101 B	RING CASTING FOR MANHOLE OR CATCH BASIN
3000 H	REINFORCED CONCRETE PIPE	4110 D	COVER CASTING FOR MANHOLE
3006 C	GASKET JOINT FOR R.C. PIPE	4126 E	CATCH BASIN FRAME CASTING
3100 F	CONCRETE APRON FOR R.C. PIPE	4149 C	GRATE CASTING FOR CATCH BASIN
3145 A	CONCRETE PIPE JOINT TIES	4161 E	CURB BOX CASTING FOR CATCH BASIN
4000 H	MANHOLE OR CATCH BASIN	4180 G	MANHOLE OR CATCH BASIN STEP
4005 K	MANHOLE OR CATCH BASIN	7100 E	CONCRETE CURB & GUTTER
4010 E	CONCRETE SHORT CONE & ADJUSTING RING	7111 E	INSTALLATION OF CATCH BASIN CASTINGS
4011 D	PRECAST CONCRETE BASE	9102 C	SODDING AT PIPE CULVERT ENDS
4021 C	PRECAST CURB OPENING CATCH BASIN	9322 H	CHAIN LINK FENCE
8400 D	PIPE RAILING	7035 J	CONCRETE WALK & CURB RETURN AT ENTRANCES

CATCH BASIN DESIGN NO. R.C.-2

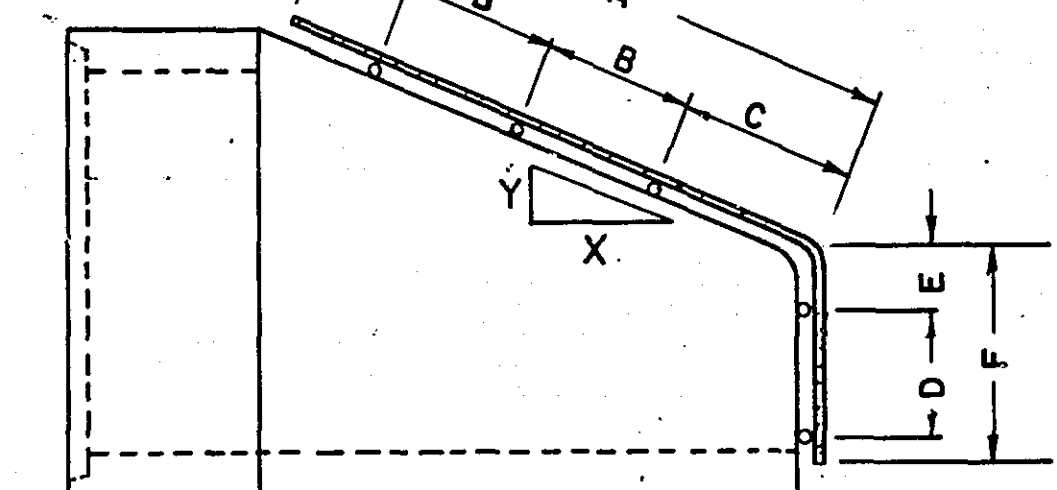


TOP VIEW - CASTING E

3/4" BARS FOR TRANSVERSE AND EDGE REINFORCEMENT



NOTE: TRASH GUARD DETAIL APPLIES ONLY TO 21" APRON AND LARGER.



1/2" BARS FOR LONGITUDINAL INTERIOR BARS, WELD EACH INTERSECTION.

CONTRACTOR SHALL FURNISH SUITABLE LOCKING DEVICE APPROVED BY ENGINEER.

SIZE	NO. OF BARS	SLOPE	A	B	C	D	E	F	G	H	K
24"	9	3 to 1	44	20	20	10	4	16	36		52

TRASH GUARD (GALVANIZED) (FOR CONCRETE APRON)

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

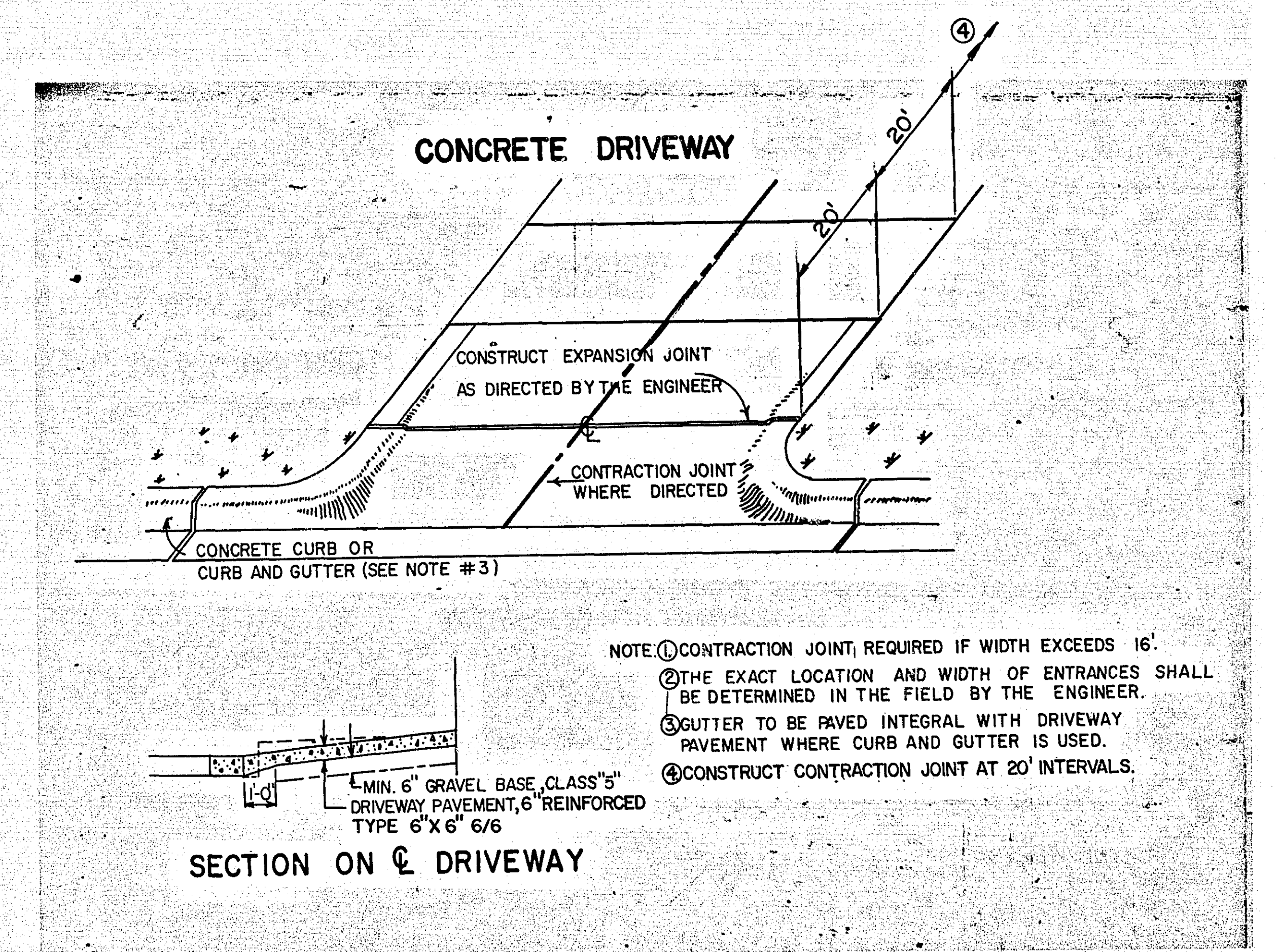
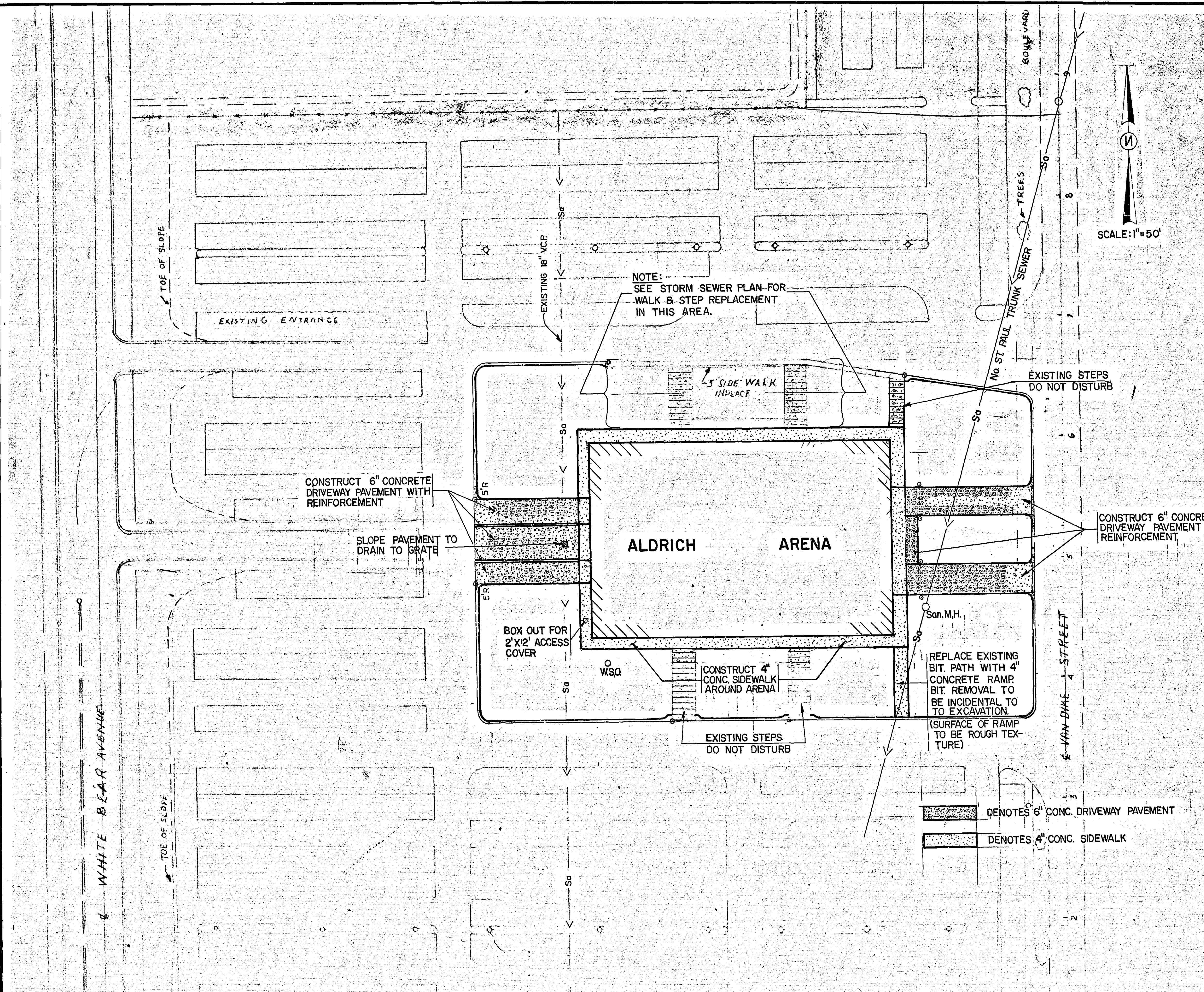
DONE BY: *CRB*
DATE: 4/12/82

CO. PROJ. NO. 80-1

DETAILS

Sheet No. 4 of 8 Sheets

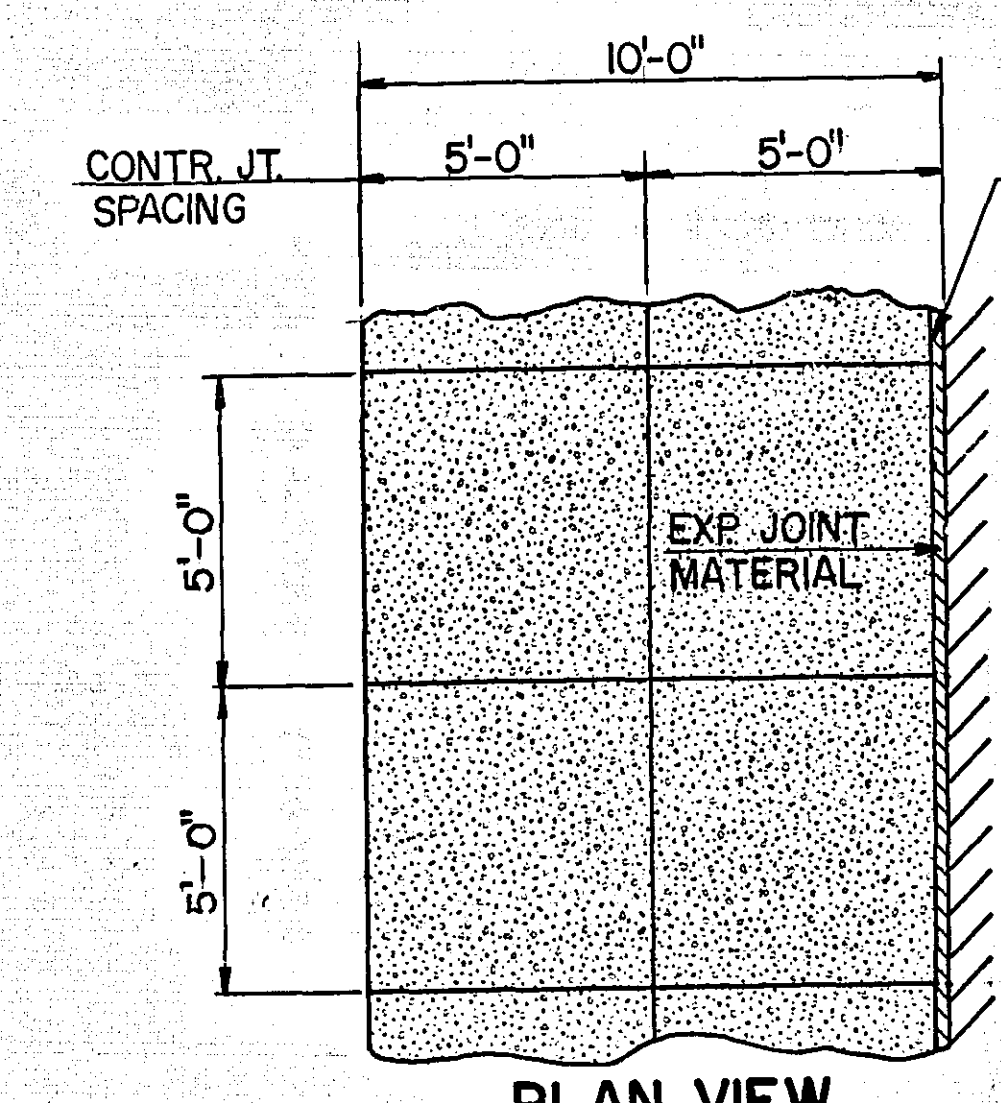
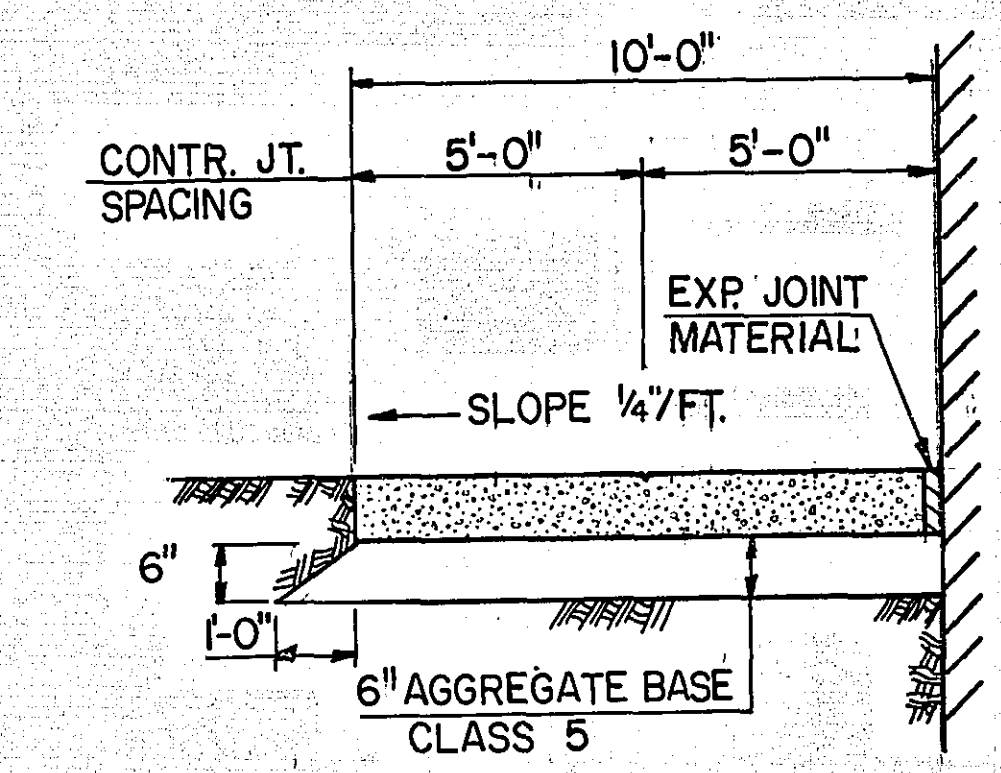
25-124



REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
			OLSEN	

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. _____



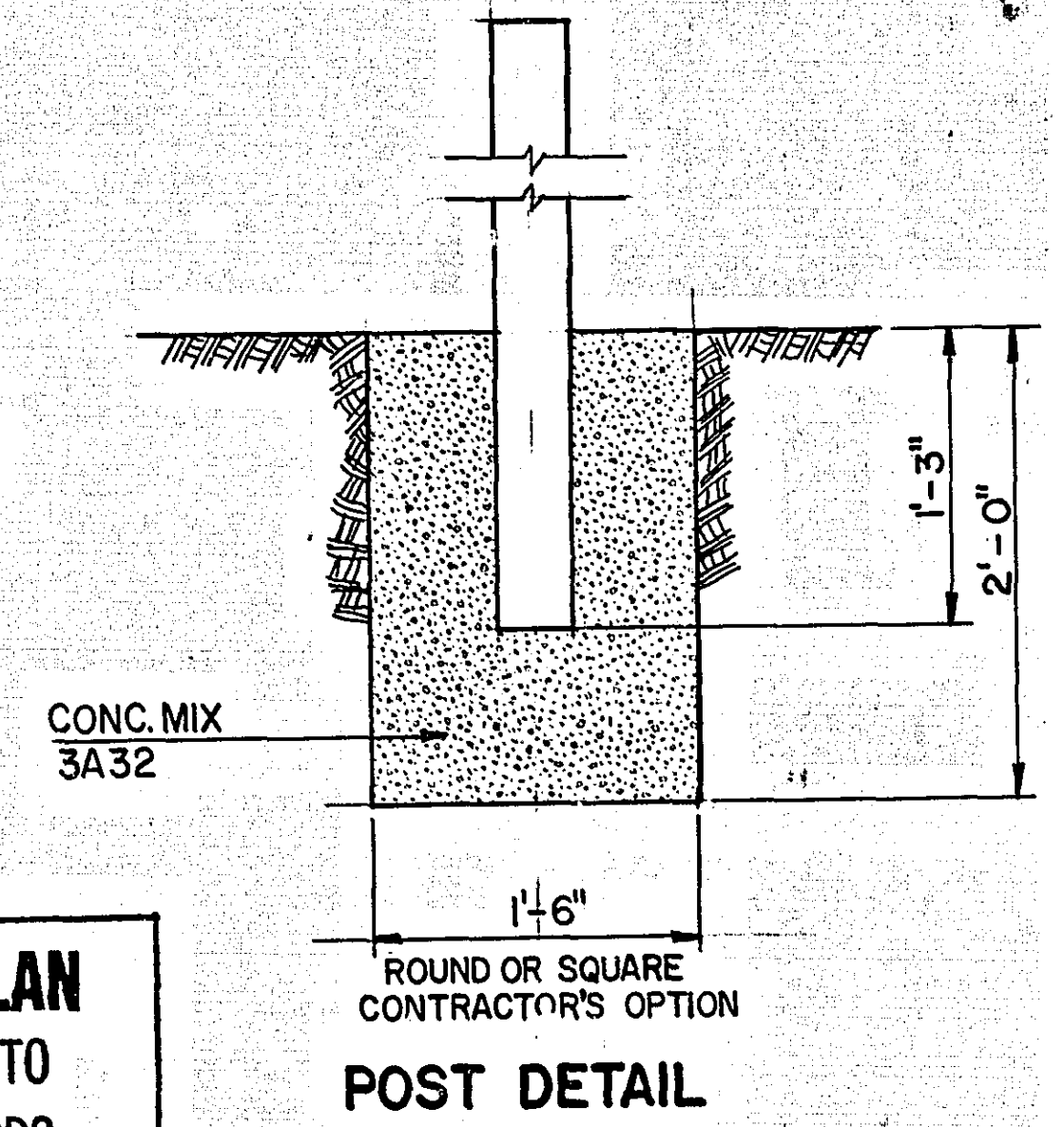
BLDG.

BLDG.

ASBUILT PLAN
 CONFORMING TO
 CONST. RECORDS

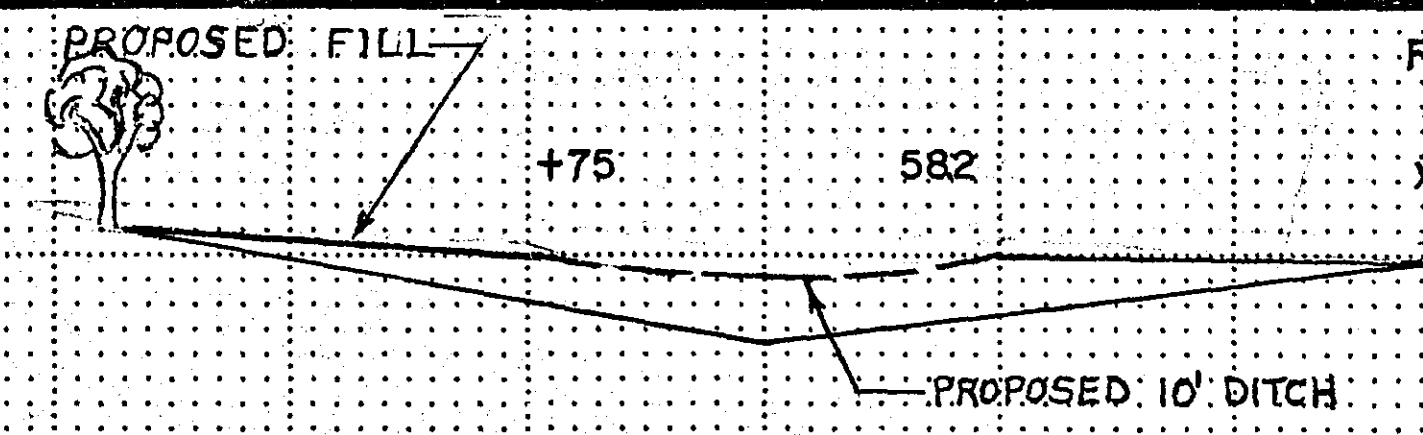
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DATE: 4/13/82

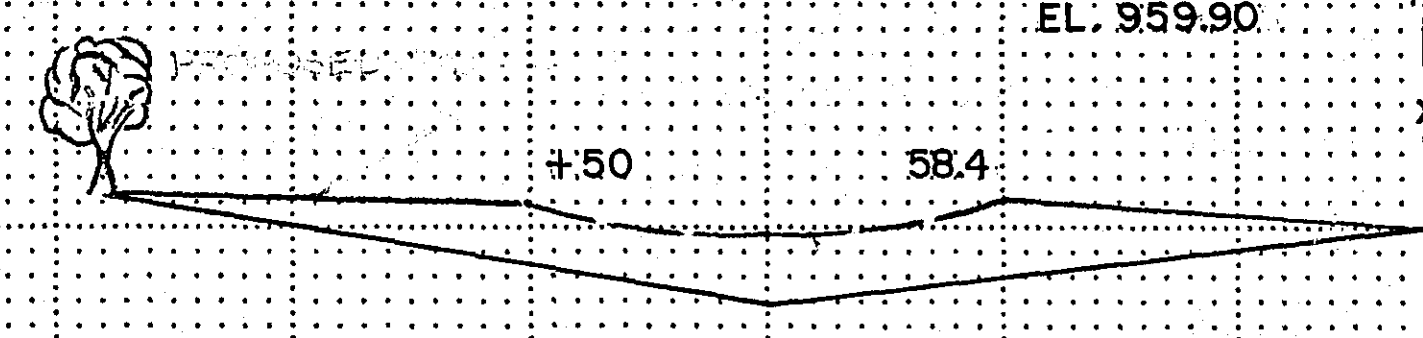


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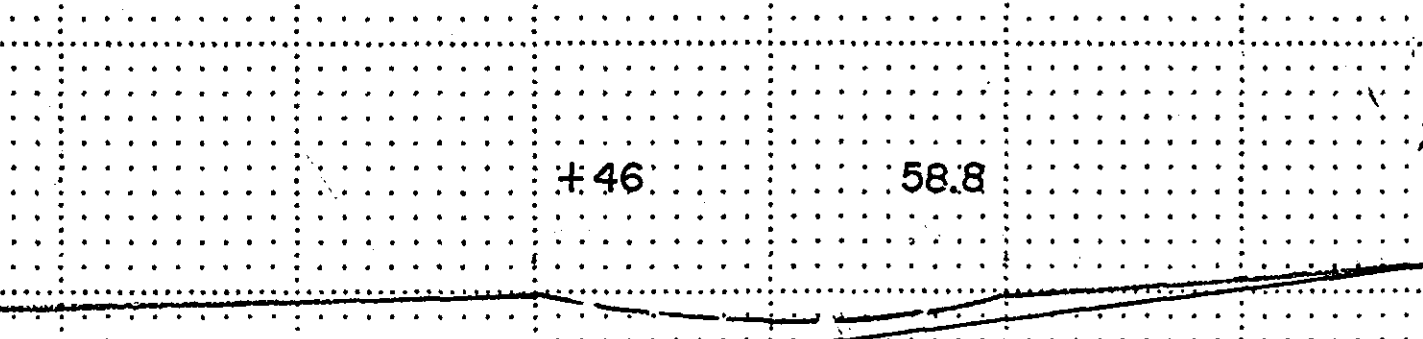
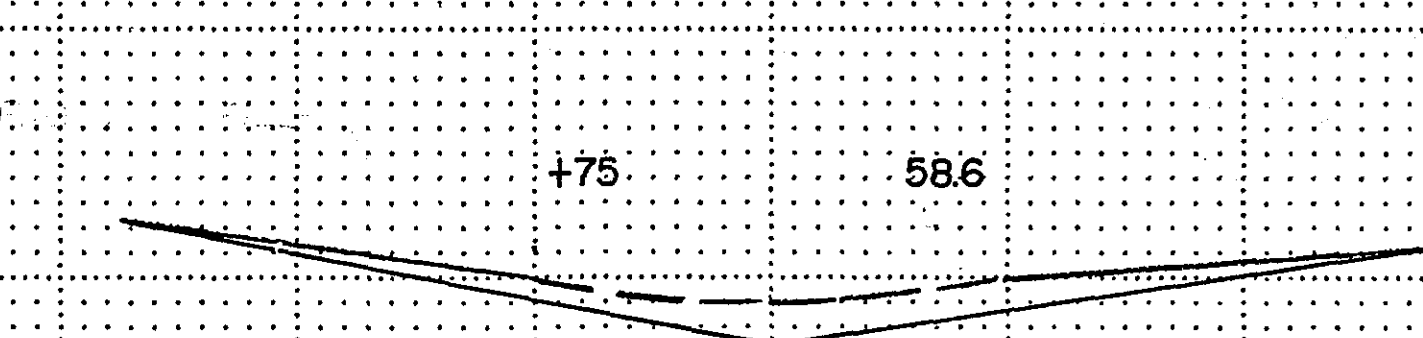
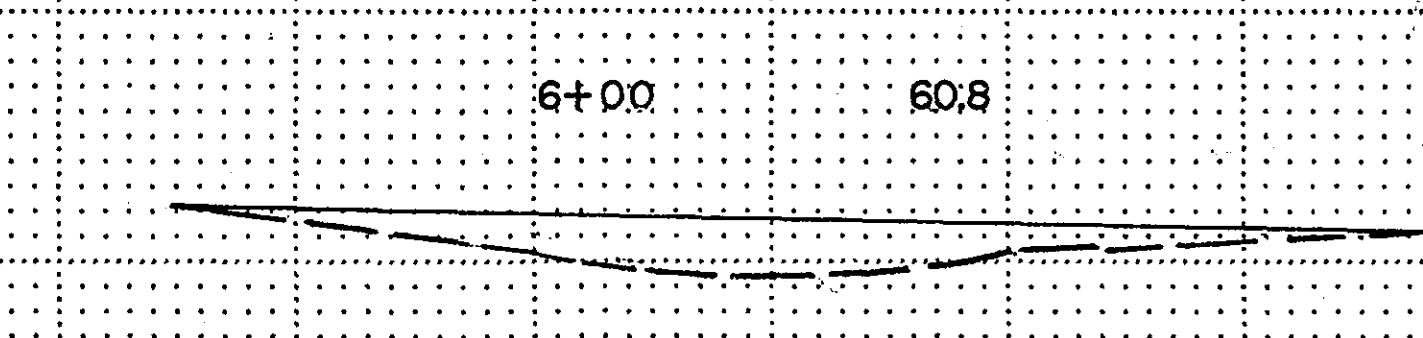
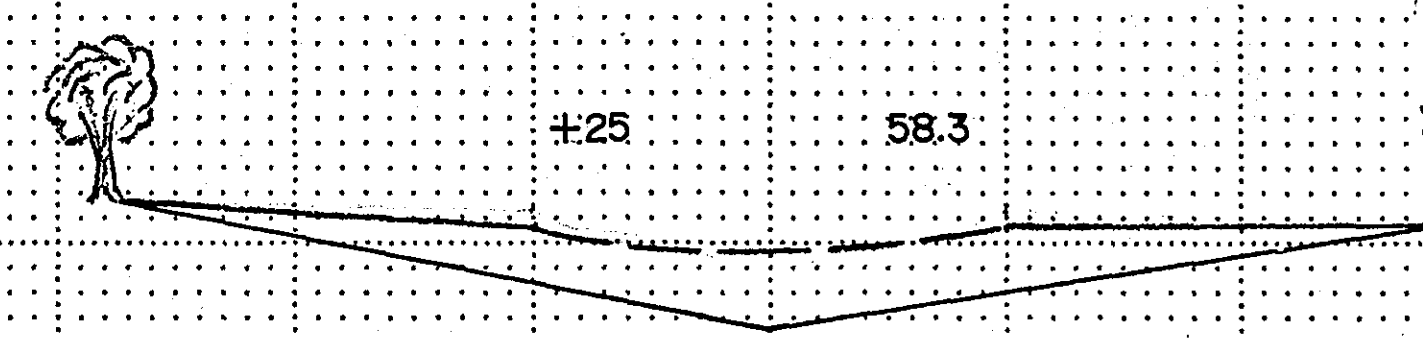
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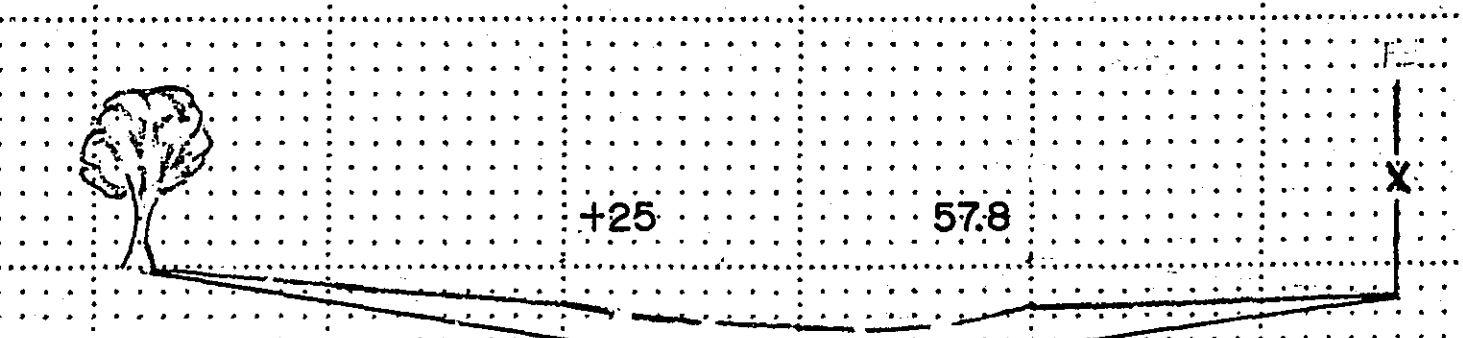
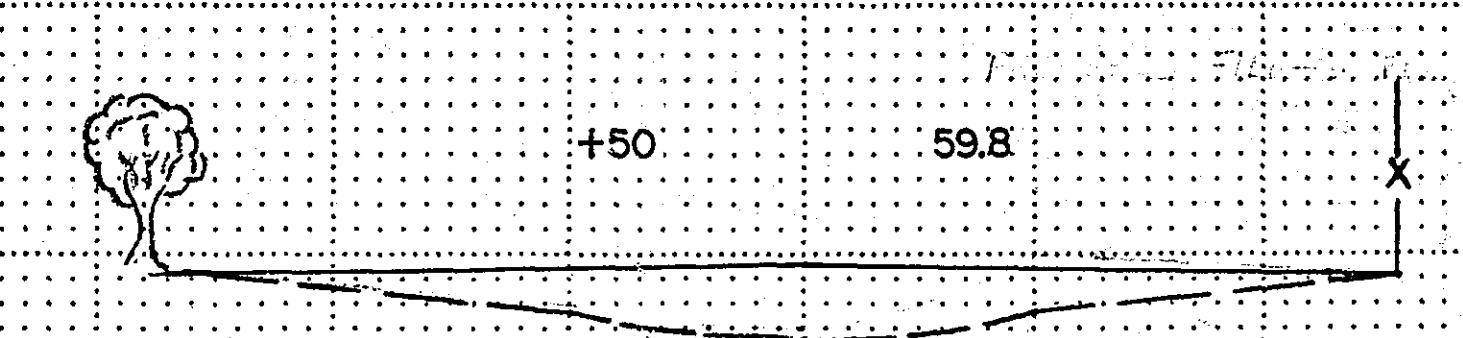
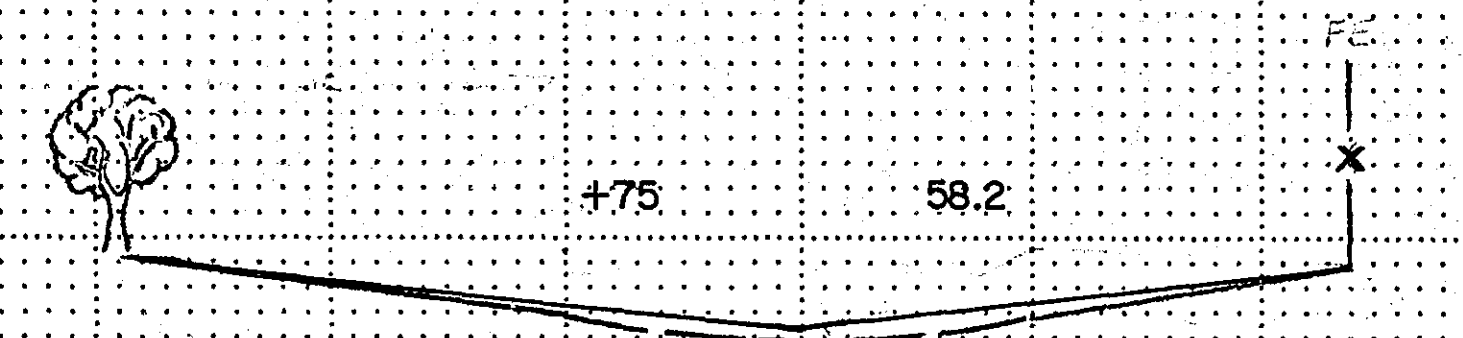
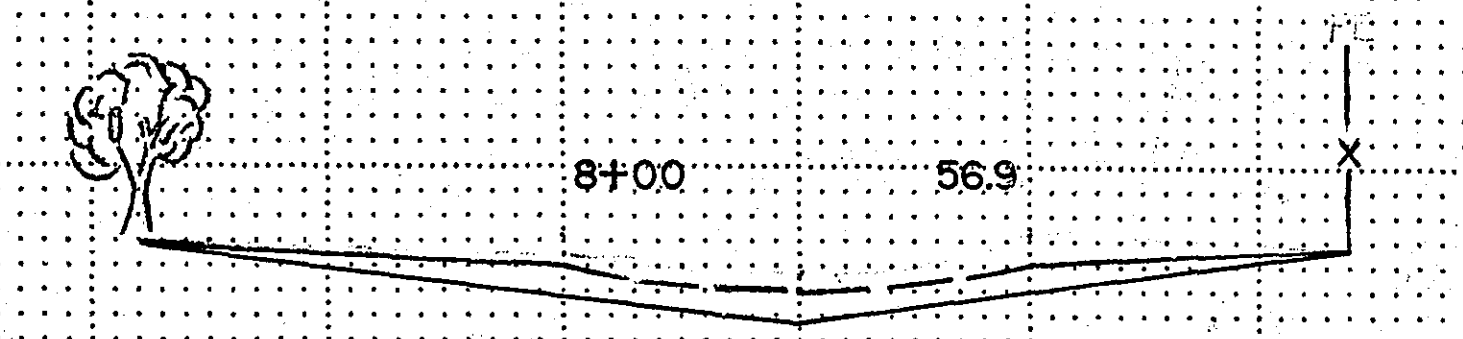
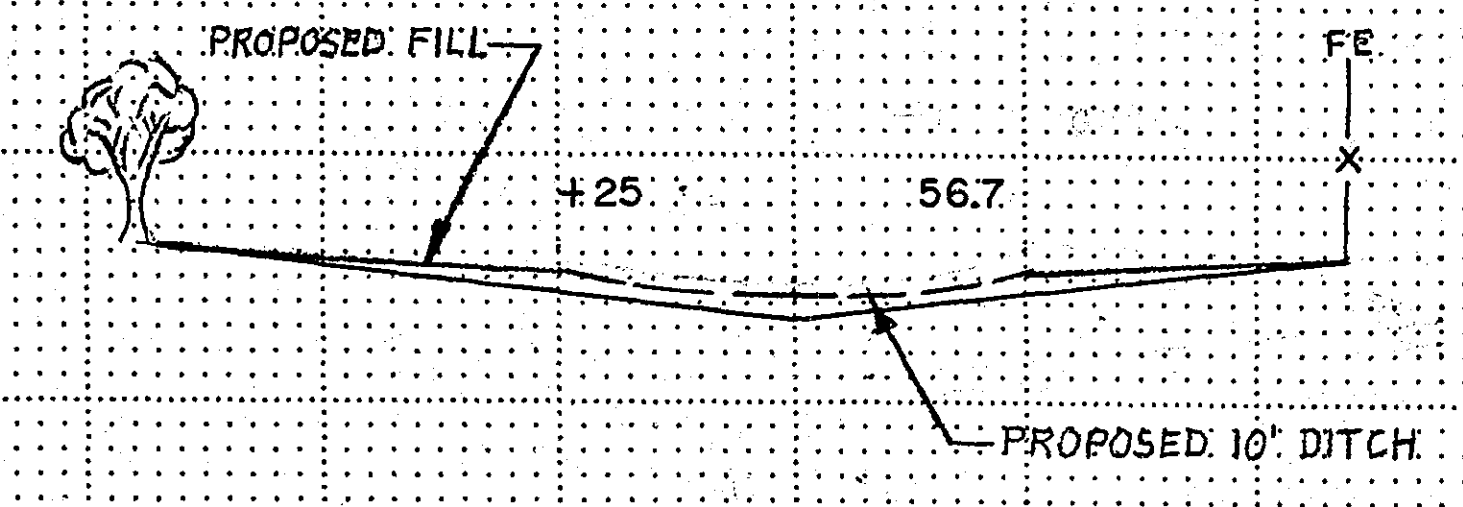
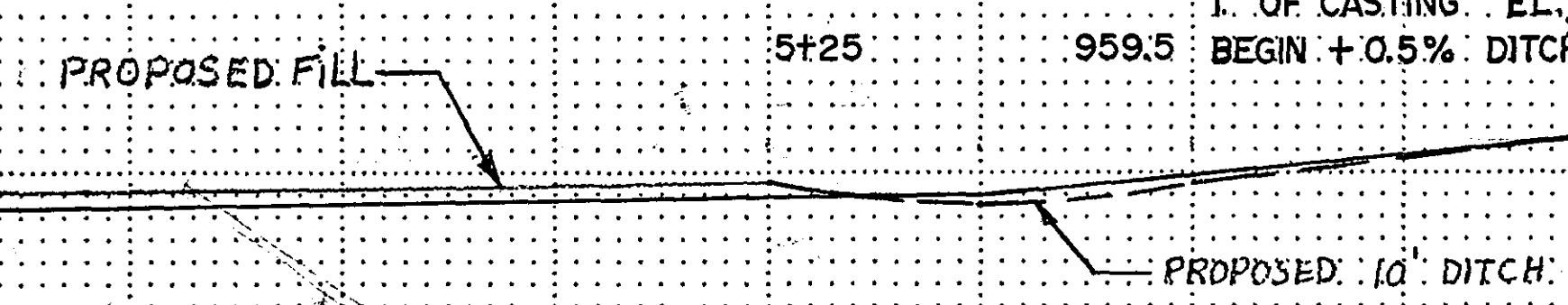
STA. 6+50
BEGIN -1.60%
EL. 959.90



STA. 6+50
END -1.60% DITCH GRADE
EL. 959.90



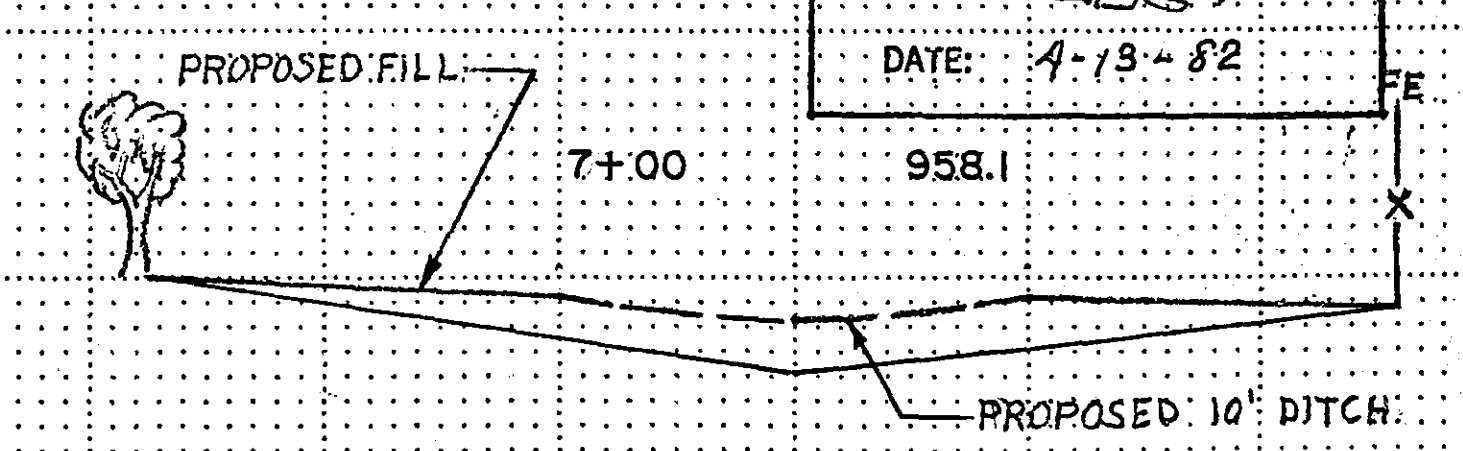
STA. 5+20
T. OF CASTING EL. 959.25
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**ASBUILT PLAN
CONFORMING TO
CONST. RECORDS**

DONE BY: *CRK*
DATE: 4-19-82

958.1



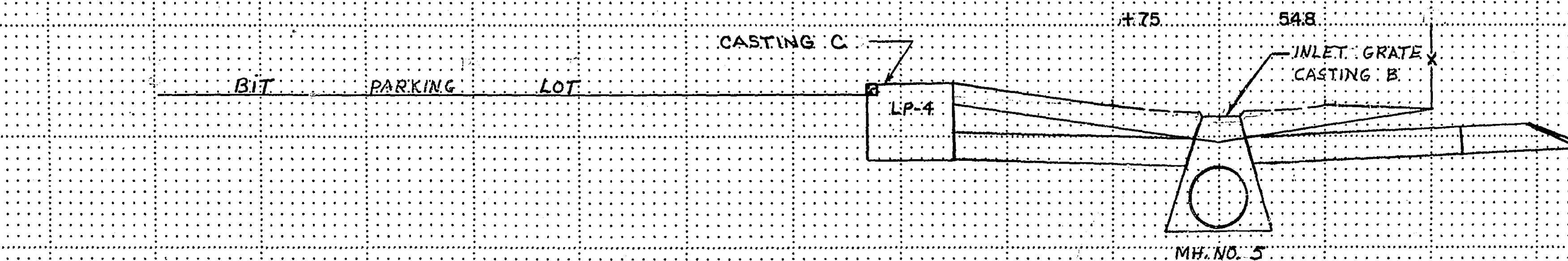
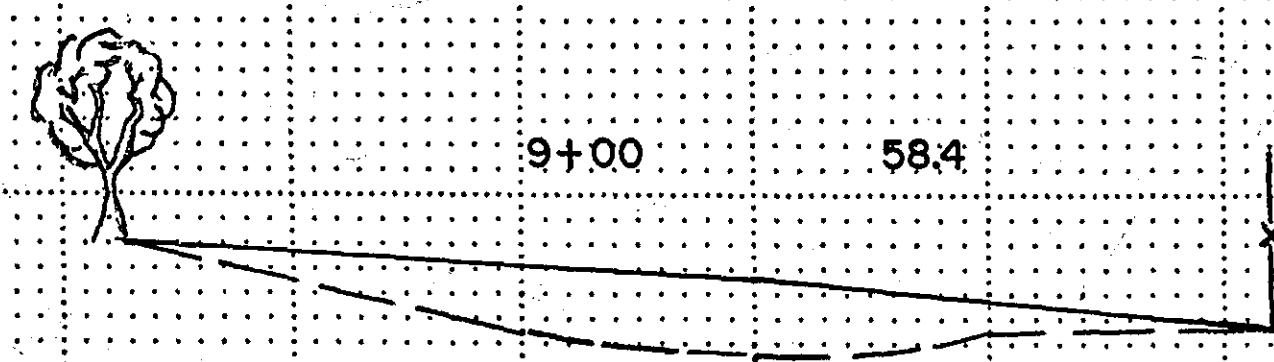
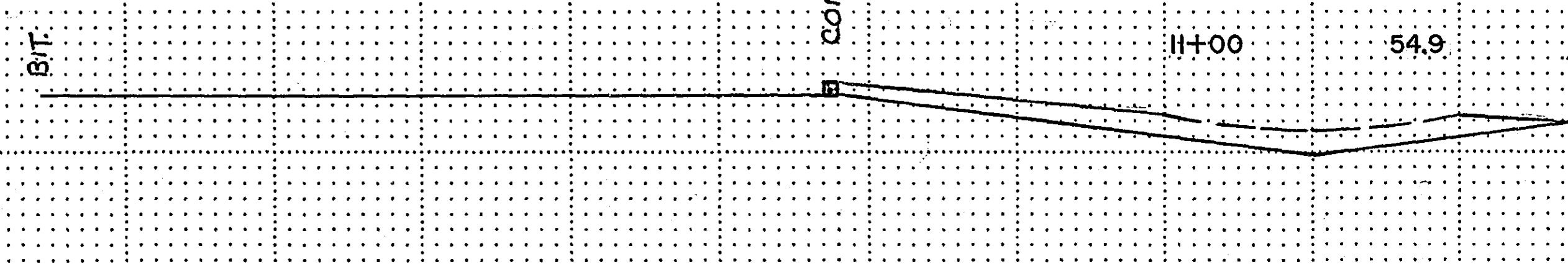
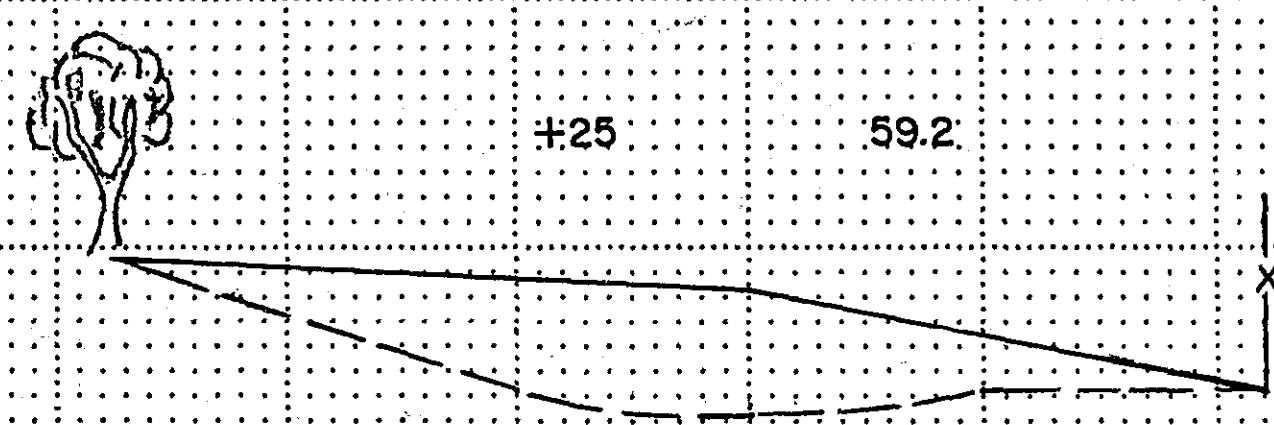
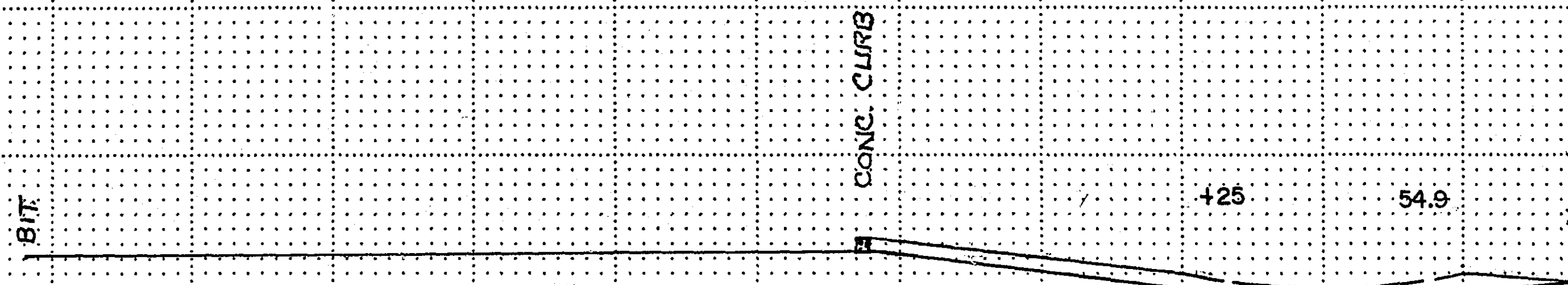
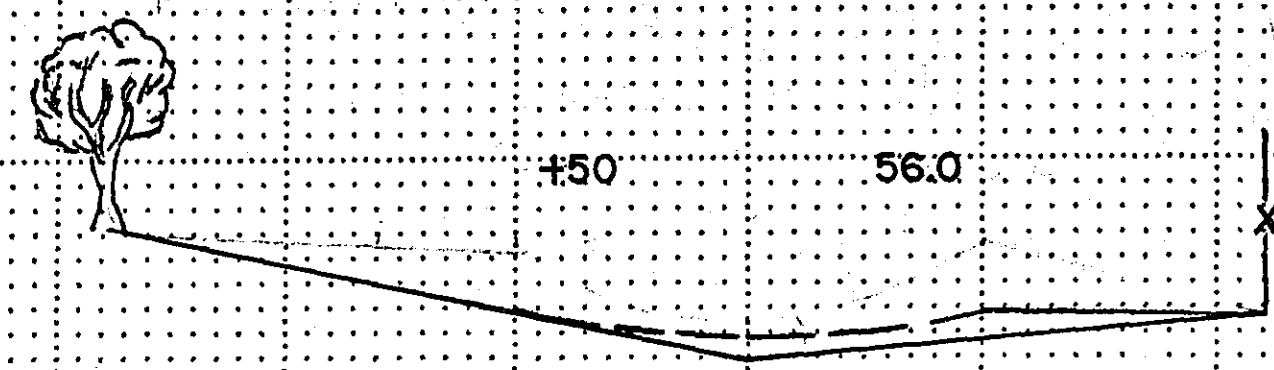
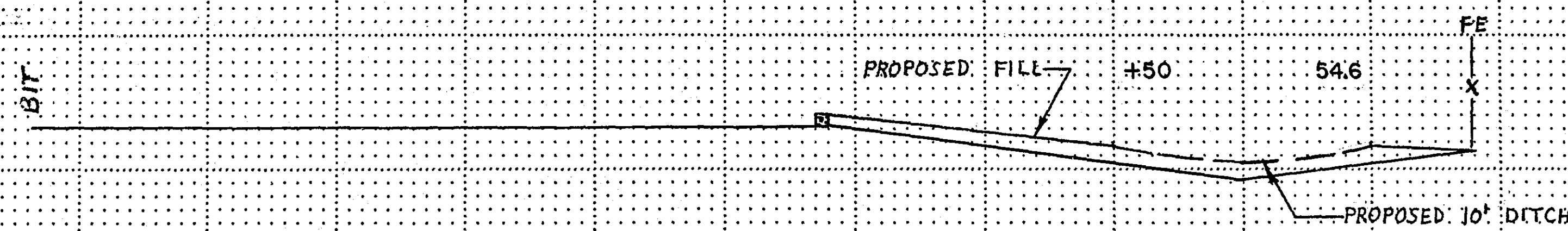
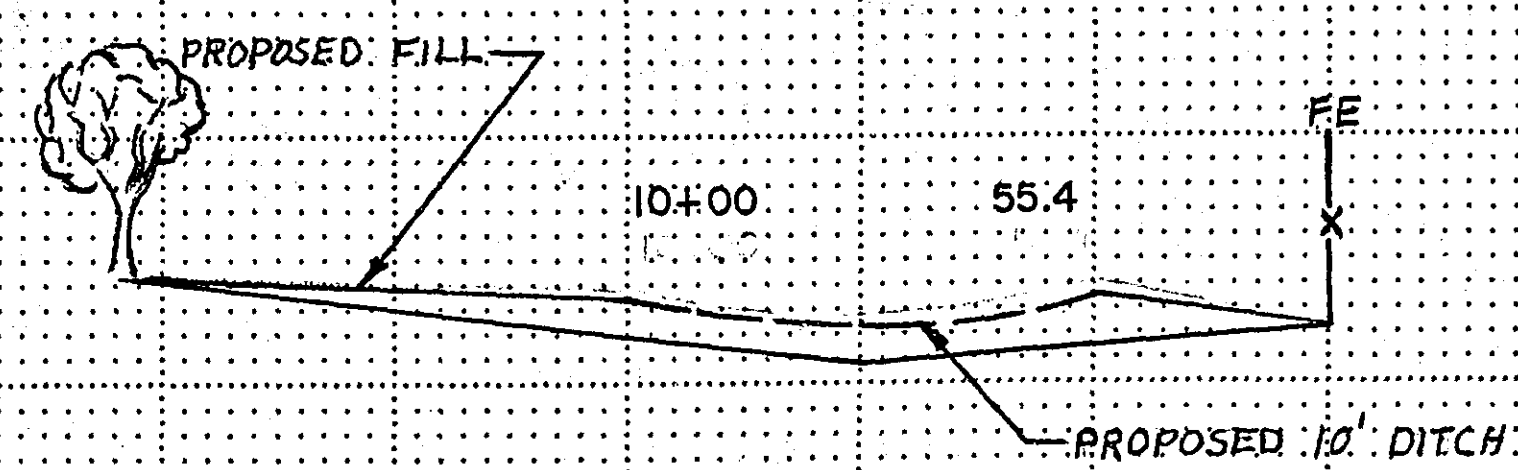
REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		<i>CRK</i>	<i>CRK</i>	

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
William J. Kuebler
Date: 5/1/82 Reg. No. 9345

CO. PROJ. NO. 80-1

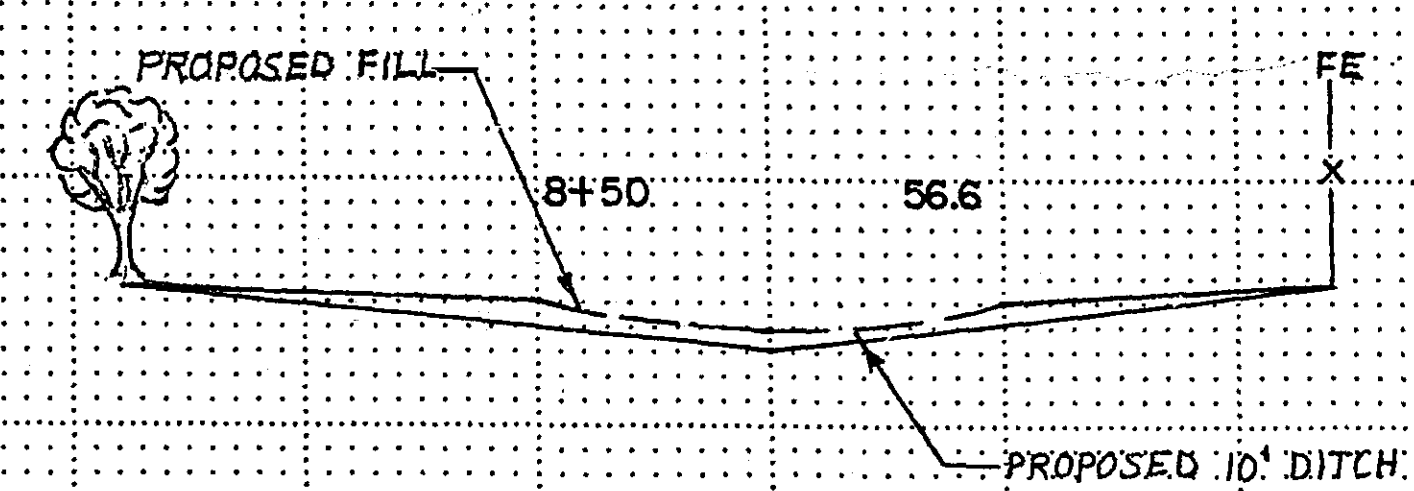
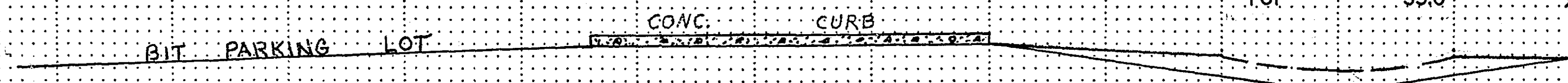
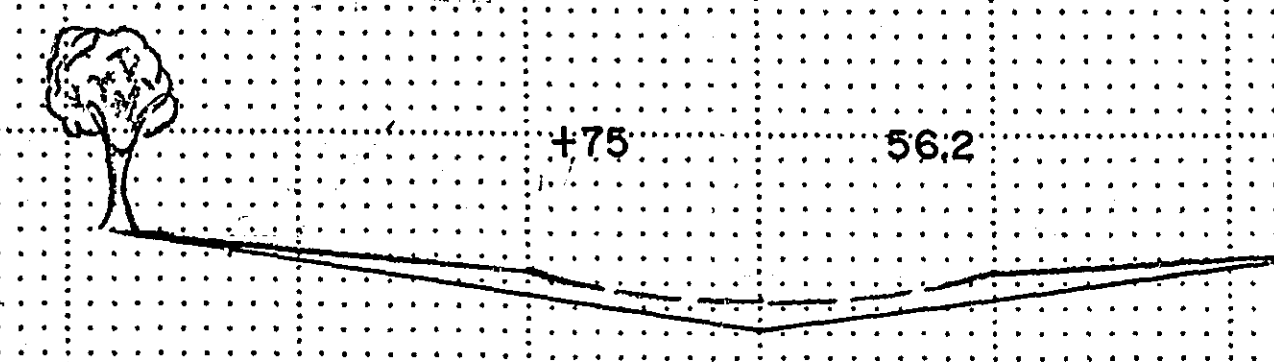
Sheet No. 5 of 8 Sheets

25-124

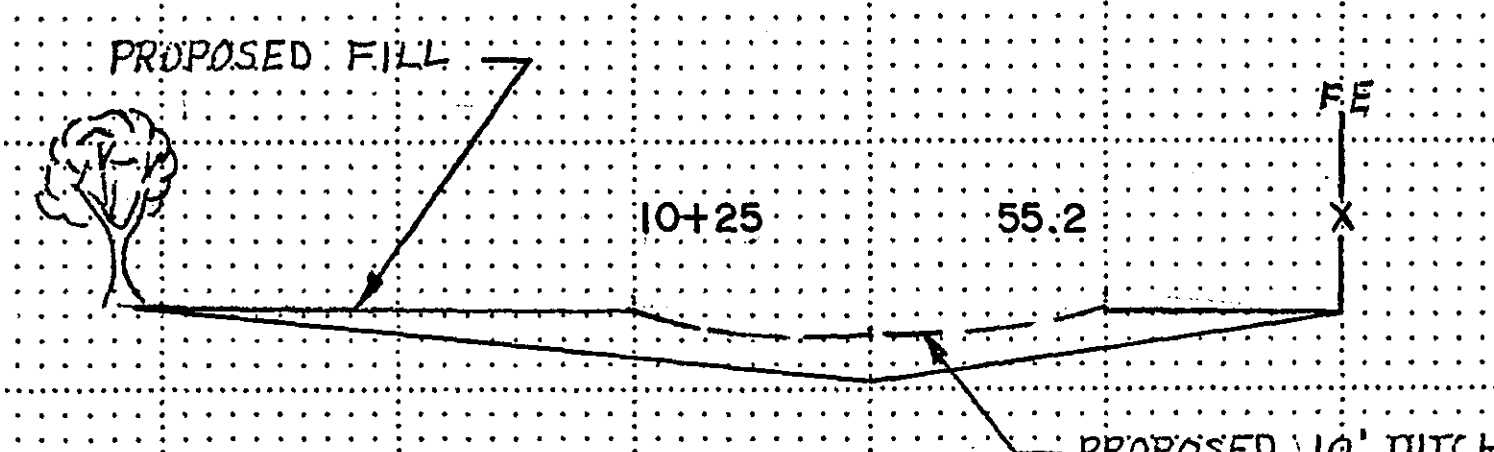


STA. 10+75
T. OF CASTING EL. 955.90
BEGIN -0.82% DITCH GRADE

STA. 10+75
T. OF CASTING EL. 955.90
END -0.45% DITCH GRADE



STA. 8+30
T. OF CASTING EL. 957.00
BEGIN -0.45% DITCH GRADE



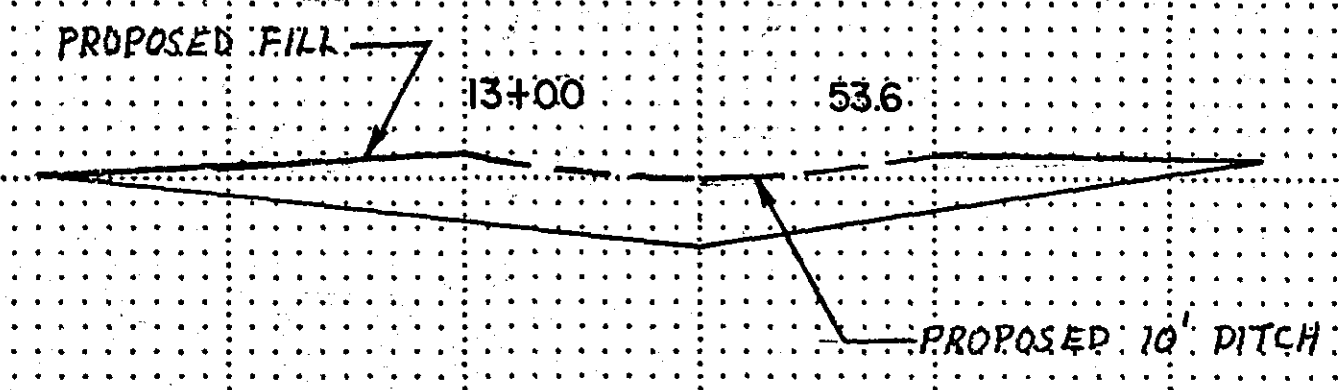
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *CRB*
DATE: 4-13-82

REVISED	DATE	DESIGNED BY	CHECKED BY
		<i>CRB</i>	<i>CRB</i>

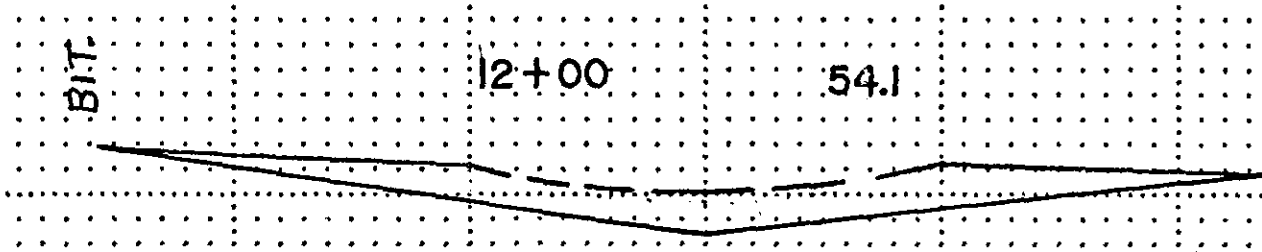
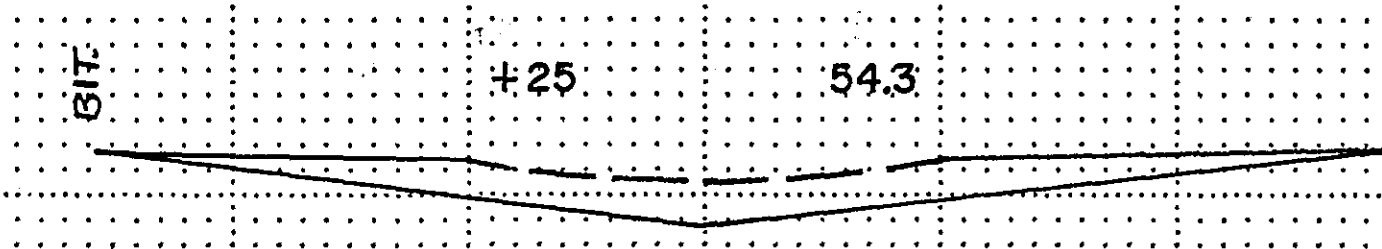
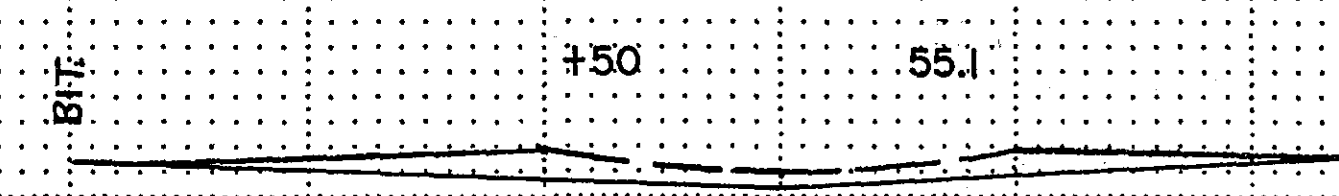
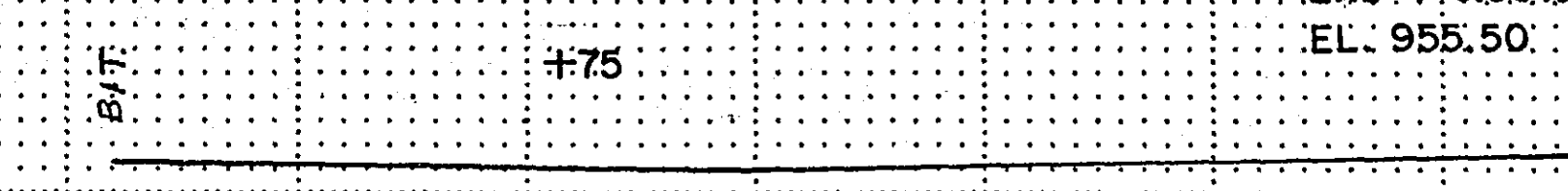
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Richard W. Wulfsberg
Date: 4/13/82 Reg. No. 9885

Fed. Proj. No.



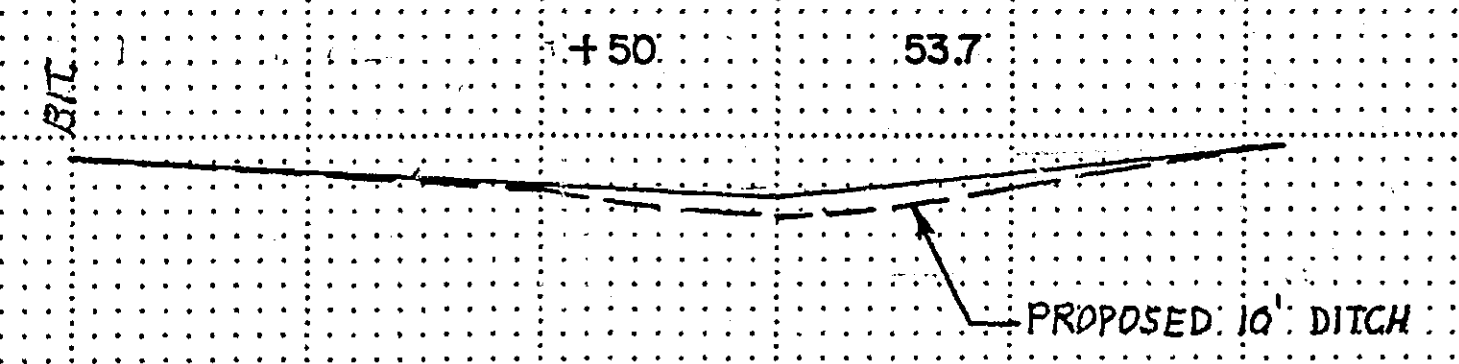
STA. 12+75 DRIVEWAY ENTRANCE
BEGIN -2.14% DITCH GRADE
EL. 955.50

STA. 12+75 DRIVEWAY ENTRANCE
END +0.56% DITCH GRADE
EL. 955.50

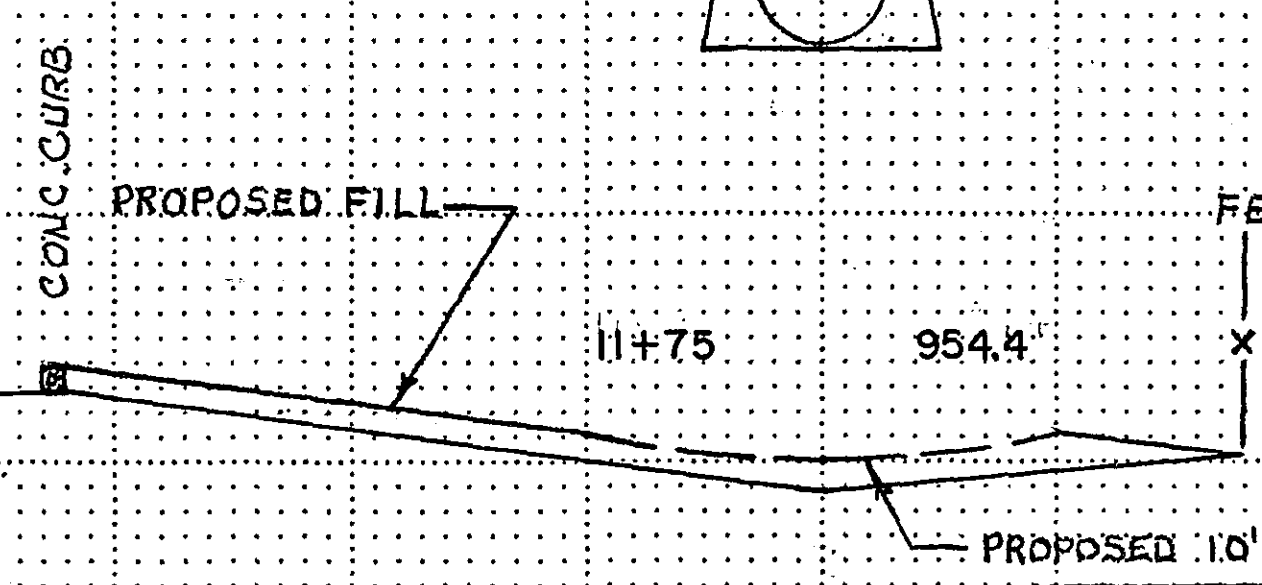
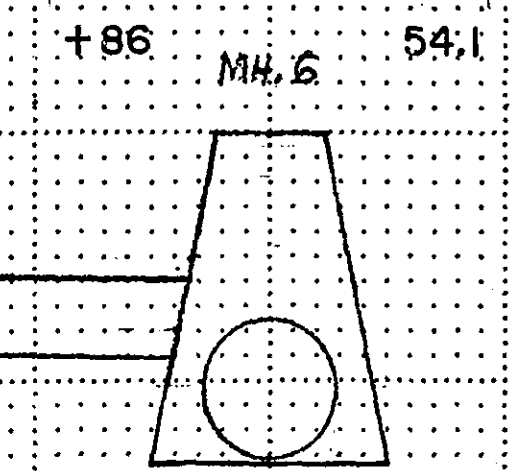


STA. 11+85
T. OF CASTING EL. 955.00
BEGIN +0.56%

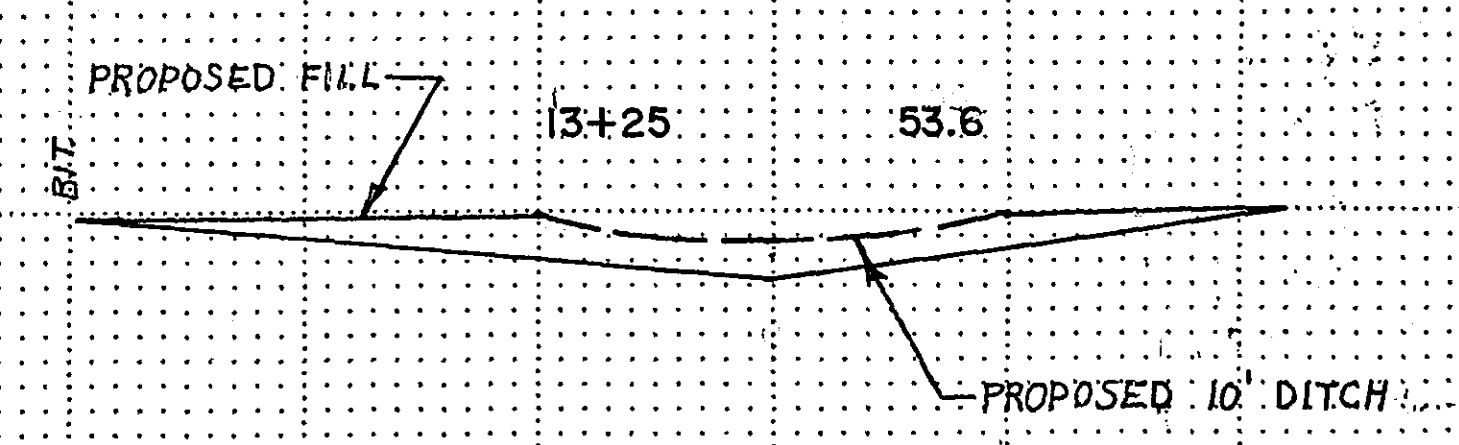
STA. 11+85
T. OF CASTING EL. 955.00
END -0.82% DITCH GRADE



C.B.9 1/2 DITCH SQ. SIDE OF ROAD



BIT PARKING LOT



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

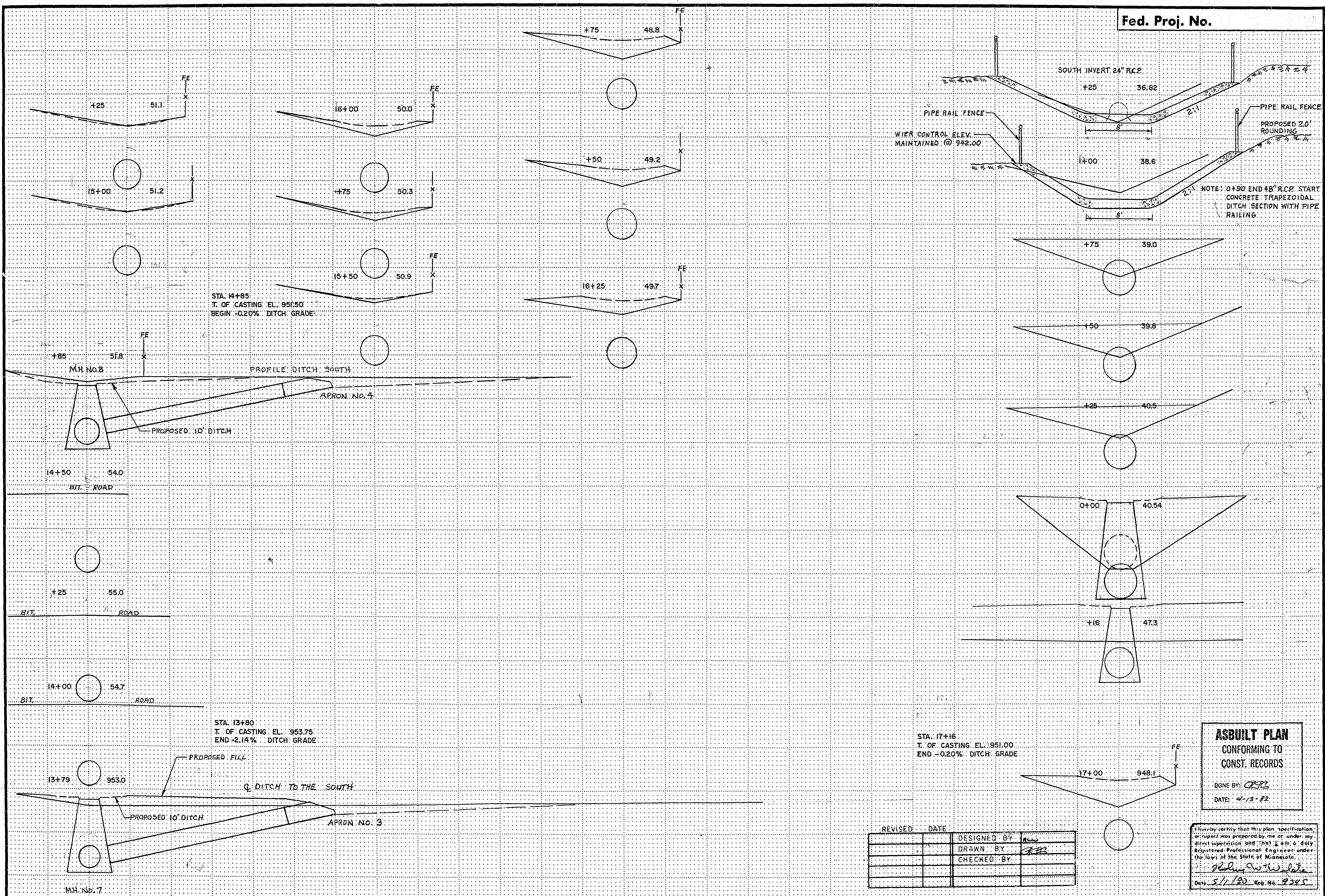
DONE BY: *SPR*
DATE: 4-13-82

REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
			<i>SPR</i>	

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.
Edmund W. Witalis
Date 5/1/82 Reg. No. 2385

CO. PROJ. NO. 80-1

Sheet No. 7 of 8 Sheets

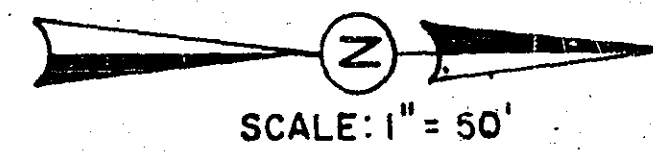


STA. 17+16
T.O. OF CASTING EL. 951.00
END -0.20% DITCH GRADE

REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY

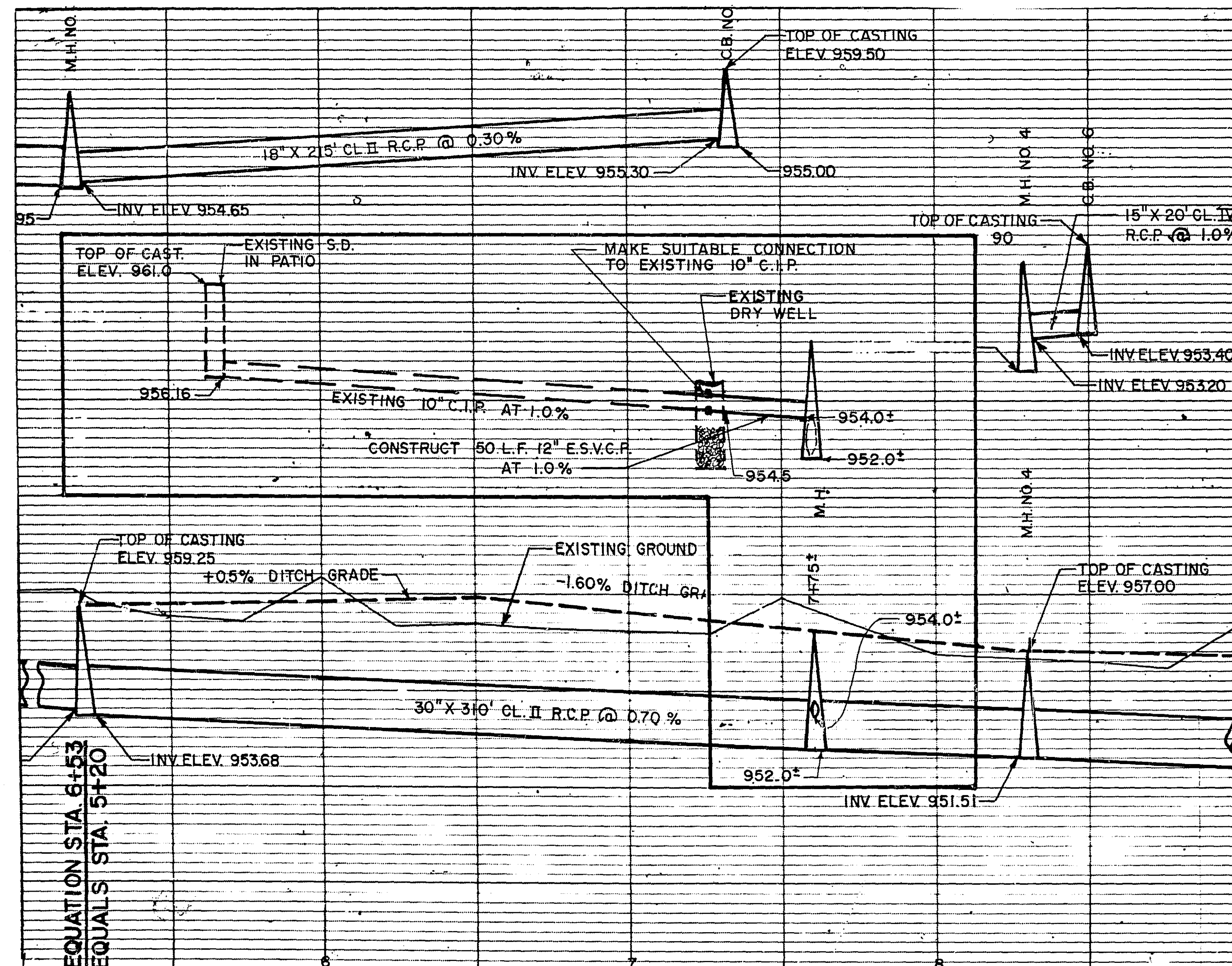
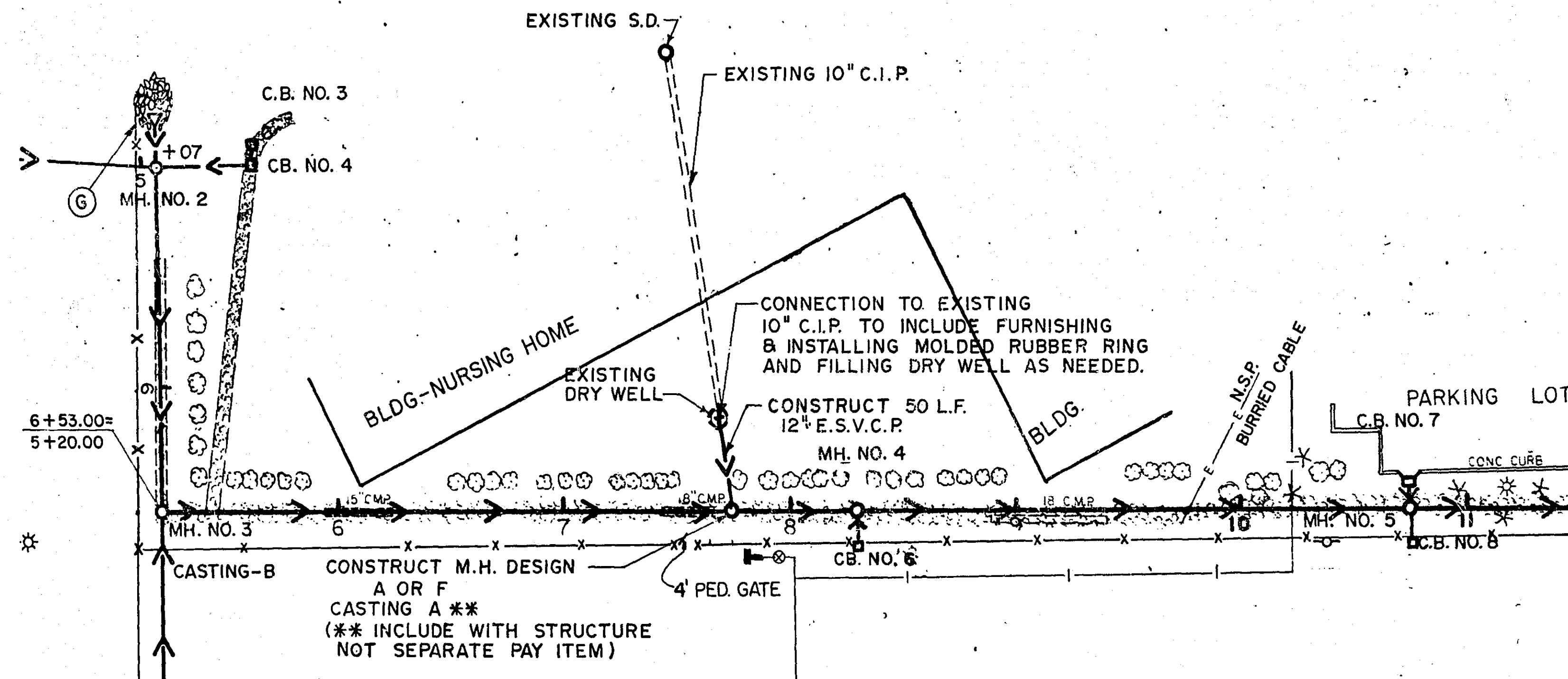
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *CRP*
DATE: 4-13-82

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.
Richard W. White
Date: 5/1/80 Reg. No. 9245



SCALE: 1" = 50'

NOTE: ADDITIONAL SURFACE RESTORATION
TO BE PAID FOR UNDER THE APPROPRIATE
CONTRACT PAY ITEMS.



COUNTY PROJECT 80-1 NURSING HOME STORM SEWER PATIO DRAIN CONNECTION

ITEM	UNIT	ESTIMATED QUANTITIES
12" E.S.V.C.P.	L.F.	50
M.H. DESIGN A OR F	EA.	1
CONN. TO EXISTING 10" C.I.P.	L.S.	1

REVISED	DATE	DESIGNED BY	11-17-80
		DRAWN BY	R.E.L.
		CHECKED BY	

CO. PROJ. 80-1

PATIO DRAIN CONNECTION

(8A of 8)

25-124