

PLAN SYMBOLS

COUNTY LINE...
 TOWNSHIP OR RANGE LINE...
 SECTION LINE...
 QUARTER LINE...
 SIXTEENTH LINE...
 RIGHT OF WAY LINE...
 SLOPE EASEMENT...
 EXISTING RIGHT OF WAY...
 PROPERTY LINE...
 CORPORATE OR CITY LIMITS...
 RETAINING WALL...
 RAILROAD...
 RAILROAD RIGHT OF WAY...
 RIVER OR CREEK...
 DRAINAGE DITCH...
 CULVERT...
 DROP INLET...
 GUARD RAIL...
 BARBED WIRE FENCE...
 WOVEN WIRE FENCE...
 CHAIN LINK FENCE...
 WOOD FENCE...
 STONE WALL OR FENCE...
 HEDGE...

UTILITY SYMBOLS

POWER POLE LINE...
 TELEPHONE OR TELEGRAPH POLE LINE...
 JOINT TELEPHONE & POWER ON POWER POLES...
 ON TELEPHONE POLES...
 ANCHOR...
 STEEL TOWER...
 STREET LIGHT...
 PEDESTAL (Cable Terminal)...
 GAS MAIN...
 WATERMAIN...
 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...

SCALES

PLAN 0 10' 50' 100'

PROFILE HORIZONTAL 0 10' 50' 100'

VERTICAL 0 1' 5' 10'

X-SECTIONS HORIZONTAL 0 1' 5' 10'

VERTICAL 0 2' 10' 20'

INDEX MAP 0 0.5mi 1mi

MINNESOTA DEPARTMENT OF TRANSPORTATION

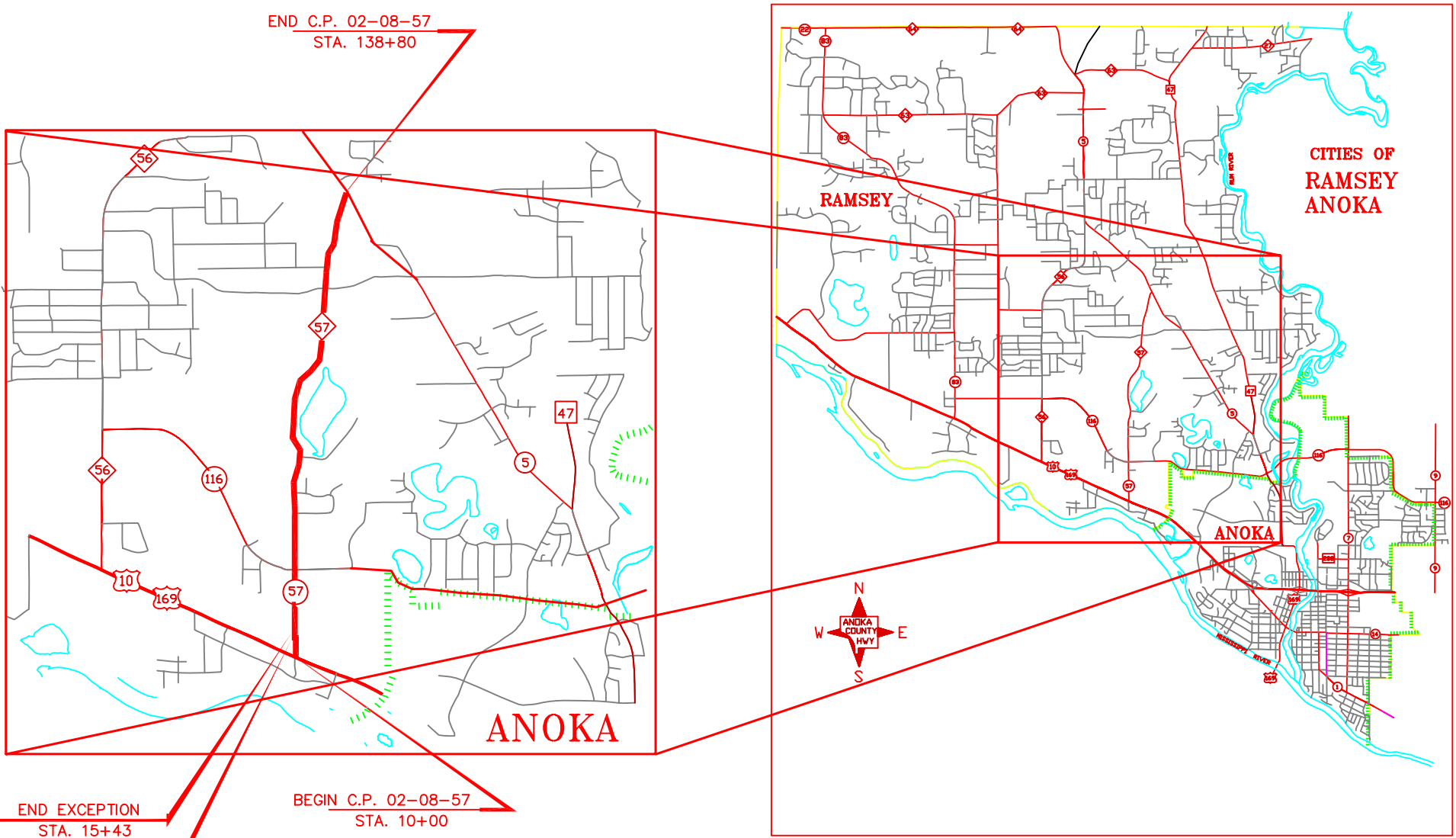
ANOKA COUNTY

CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS RECLAIMING, BITUMINOUS SURFACING

LOCATED ON CR 57 FROM TH 10 TO C.S.A.H. 5 (Geographic Description)

COUNTY PROJECT NO. 02-08-57
CR 57

GROSS LENGTH	12,880	FEET	2.44	MILES
BRIDGES-LENGTH	0.000	FEET	0.000	MILES
EXCEPTIONS-LENGTH	30	FEET	0.005	MILES
NET LENGTH	12,850	FEET	2.44	MILES



MINN. PROJ. NO. _____
 MINN. PROJ. NO. _____

GOVERNING SPECIFICATIONS

THE 2000 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - JANUARY, 2001."

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1	TITLE SHEET
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3 - 4	TYPICAL SECTIONS
5 - 7	TABULATION CHARTS
8	DETAILS
9	EARTHWORK / SUPER CHART
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14 - 18	CROSS-SECTIONS
19 - 24	SIGNING AND STRIPING

THIS PLAN CONTAINS 24 SHEETS

DESIGN DESIGNATION

ESAL ₂₀	1,383,749
R VALUE	50
ADT (2002) =	6438
Proj. ADT (2021) =	10,301
Proj. HCADT (2021) =	608
Soil Factor	NA
<u>10</u> TON DESIGN	

Functional Classification MINOR
 No. of Traffic Lanes 2 No. of Parking Lanes 0
 Design Speed 55 MPH
 Based on Stopping Sight Distance
 Height of eye 3.5' Height of object 0.5'
 Design Speed not achieved at:
 STA. _____ TO STA. _____ MPH
 STA. _____ TO STA. _____ MPH
 STA. _____ TO STA. _____ MPH

Approved _____, 20 _____ ANOKA COUNTY ENGINEER

 Approved _____, 20 _____ CITY OF RAMSEY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: PETER M LEMKE
 SIGNATURE: _____
 DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY BEL DATE 06/27/02
 DESIGN BY MFG DATE 06/27/02
 CHECKED BY PMI DATE 07/03/02



**ANOKA COUNTY
HIGHWAY DEPT.**

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 02-08-57

TITLE SHEET

Sheet 01 of 24 Sheets

NO	DATE	BY	CKD	APPR	REVISION

STATEMENT OF ESTIMATED QUANTITIES

TAB/NOTE NO.	ITEM NUMBER	ITEM	UNIT	TOTAL CONTRACT QUANTITY
	2021.601	RR PROTECTIVE LIABILITY INSURANCE	LUMP SUM	1
	2021.610	RAILROAD PROTECTIVE SERVICES	HOUR	12
Q	2101.502	CLEARING	TREE	6
Q	2101.507	GRUBBING	TREE	15
1	2104.501	REMOVE CM PIPE	LIN FT	36
2, 24	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	138
3	2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	83
2 G	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	172
3 J	2104.513	SAWING CONCRETE, FULL DEPTH	LIN FT	75
4	2104.523	SALVAGE SIGN, TYPE C	EACH	89
25	2104.523	SALVAGE SIGN TYPE SPECIAL	EACH	1
	2105.501	COMMON EXCAVATION (EV) (P)	CU YD	645
26	2105.525	TOPSOIL BORROW (LV)	CU YD	386
	2105.521	SELECT GRANULAR BORROW (LV)	CU YD	1880
6, 7	2105.601	SALVAGE, STOCKPILE & PLACE RECLAIMED BIT. MATERIAL (LV)	CU YD	79
8	2123.503	MOTOR GRADER	HOUR	10
9	2123.509	DOZER	HOUR	10
11	2123.525	8 TON STEEL-WHEELED ROLLER	HOUR	10
13	2130.501	WATER	MGAL	220
14 F, K	2211.501	AGGREGATE BASE CL-5	TON	2516
L	2221.501	AGGREGATE SHOULDERING CLASS 1	TON	890
E	2332.501	MILL BITUMINOUS SURFACE (2")	SQ YD	520
	2331.601	BITUMINOUS PAVEMENT RECLAMATION	SQ YD	64788
A	2350.501	TYPE MV 4 WEARING COURSE MIXTURE (C)	TON	6935
A	2350.502	TYPE MV 3 NON WEARING COURSE MIXTURE (C)	TON	5447
A	2350.502	TYPE LV 3 NON WEARING COURSE MIXTURE (C)	TON	1269
B 27	2350.503	TYPE LV4 WEARING COURSE MIXTURE, 2" THICK	SQ YD	135
16 A, D	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	8257
22 R	2501.511	18" CS PIPE CULVERT	LIN FT	380
22 R	2501.567	18" CS SAFETY APRON & GRATE DESIGN 3128	EACH	4
22	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN H	LIN FT	2.4
22	2506.516	CASTING ASSEMBLY	EACH	1
22	2511.501	RANDOM RIPRAP, CLASS II	CU YD	4
H	2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	83
17 M	2535.501	BITUMINOUS CURB	LIN FT	713
P	2540.602	INSTALL MAILBOX/ SUPPORT	EACH	24
	2563.601	TRAFFIC CONTROL	LS	1
	2563.610	POLICE OFFICER	EACH	8
23	2564.531	F & I SIGN PANEL TYPE C	SQ FT	647
25	2564.537	INSTALL SIGN TYPE SPECIAL	EACH	1
18	2564.602	TEMPORARY RELOCATE SIGN TYPE C	EACH	20
23	2564.603	4" SOLID LINE WHITE - PAINT	LIN FT	26931
23	2564.603	4" SOLID LINE YELLOW - PAINT	LIN FT	2500
23	2564.603	4" DOUBLE SOLID LINE YELLOW - PAINT	LIN FT	19682
23	2564.603	4" BROKEN LINE YELLOW - PAINT	LIN FT	728
23	2564.603	24" SOLID LINE YELLOW - PAINT	LIN FT	260
23	2564.603	24" SOLID LINE WHITE - POLY PREFORM	LIN FT	39
23	2564.604	PAVEMENT MESSAGE WHITE - POLY PREFORM	SQ FT	31
D	2575.501	SEEDING	ACRE	3
D	2575.502	SEED MIXTURE 50B	LB	150
D	2575.502	SEED MIXTURE 130B	LB	300
21 D	2575.505	SODDING, TYPE LAWN	SQ YD	200
D	2575.519	DISK ANCHORING	ACRE	3
19 D	2575.525	EROSION STABILIZATION BLANKET, TYPE 2	SQ YD	833
D	2575.532	COMMERCIAL FERTILIZER ANALYSIS 22-5-10 (SLOW RELEASE)	LB	900
20 C	2580.501	TEMPORARY LANE MARKING	LIN FT	2553

CONSTRUCTION NOTES

1	REMOVE CMP CULVERT AT STATION 66+50 RT
2	INCLUDES ALL BITUMINOUS PAVEMENT REGARDLESS OF DEPTH
3	INCLUDES ALL CONCRETE PAVEMENT REGARDLESS OF DEPTH
4	SALVAGE TO ANOKA COUNTY HIGHWAY DEPARTMENT
5	RELOCATE STREET SIGN AT SUNWOOD, AS DIRECTED BY THE ENGINEER.
6	SALVAGE & STOCKPILE RECLAIMED BITUMINOUS AT GRADE MATCH POINTS, AS DIRECTED BY THE ENGINEER
7	STOCKPILED RECLAIMED BITUMINOUS MATERIAL TO BE REUSED AS AGGREGATE BASE, AS DIRECTED BY THE ENGINEER.
8	TO BE USED TO RESHAPE THE RECLAIMED BITUMINOUS MATERIAL, STA 55+54 TO 72+06, AS DIRECTED BY THE ENGINEER.
9	TO BE USED TO "BENCH" THE INSLOPE (0.0' TO 6.0') AT THE BEGINNING (55+54 TO 58+84) AND END (68+76 TO 72+06) OF THE WIDENING AREA, AS DIRECTED BY THE ENGINEER.
11	TO BE USED TO COMPACT THE "BENCHEC" AREAS, AS DIRECTED BY THE ENGINEER.
13	200 M GALLON FOR DUST CONTROL, 20 M GALLON FOR MOISTENING THE SEED AREAS ALONG THE SHOULDER PRIOR TO APPLYING THE EMULSIFIED ASPHALT.
14	850 TON TO BE USED FOR THE WIDENING AREA, STA 55+54 TO 72+06.
15	TO BE TOPPED WITH 2" TOPSOIL BORROW.
16	INCLUDES 2,056 GALLON ASPHALT EMULSION TO BE APPLIED TO SEED AREAS ALONG THE SHOULDERS. APPLICATION RATE OF 0.18 GALLON PER SQUARE YARD FOR SEED AREAS.
17	PAYMENT FOR PLACING THE BITUMINOUS SHOE-FORMED LIP IN BERM AREAS, AS DIRECTED BY THE ENGINEER.
18	TEMPORARILY RELOCATE SIGNS, TYPE C, IN CONSTRUCTION WIDENING AREAS, AS DIRECTED BY THE ENGINEER.
19	TO BE PLACED AT HIGH EROSION AREAS ALONG THE SHOULDER, AS DIRECTED BY THE ENGINEER.
20	FOR LANE DELINEATION ON ALL BITUMINOUS COURSES.
21	TO BE PLACED AS DIRECTED BY THE ENGINEER.
22	SEE PLAN SHEETS #11 FOR LOCATION
23	SEE PLAN SHEETS #19-24 FOR LOCATIONS
24	FOR 6" BITUMINOUS/AGGREGATE REMOVAL AT SOUTHBOUND RIGHT TURN LANE CONSTRUCTION AT TH 10
25	STREET SIGN AT SUNWOOD AVE. N.W.
26	FOR TOPSOIL SHOULDERING.
27	INCLUDES 33 SQ. YDS. FOR BITUMINOUS FLUME CONSTRUCTION.

MN DOT STANDARD PLATE NO.	DESCRIPTION
3040 F	CORRUGATED METAL PIPE CULVERT
3128 H	METAL SAFETY APRON & GRATE
3134 C	RIPRAP AT CMP OUTLETS
4006 L	MANHOLE OR CATCH BASIN PRECAST - DESIGN G AND H
4026 A	CONCRETE ENCASED ADJUSTING RINGS
4101 D	RING CASTING FOR MANHOLE OR CATCH BASIN
4140 D	SPECIAL GRATE CASTING FOR CATCH BASIN
8000 I	STANDARD BARRICADE
8117 F	PRECAST CONCRETE HAND HOLE (OR PULLBOX)

TABULATION CHART LIST

CHART	SHEET NO	DESCRIPTION
A	5	BITUMINOUS SUMMARY
B	6	BITUMINOUS DRIVEWAY
C	6	TEMPORARY LANE MARKING
D	6	TURF ESTABLISHMENT
E	6	MILL BITUMINOUS SURFACE (BUTT JOINTS)
F	7	AGGREGATE BASE CLASS 5
G	7	REMOVE CONCRETE PAVEMENT
H	7	6" CONCRETE DRIVEWAY PAVEMENT
J	7	SAWING CONCRETE PAVEMENT
K	7	AGGREGATE BASE CLASS 5 (ENTRANCES)
L	7	AGGREGATE SHOULDER CLASS 1
M	8	BITUMINOUS CURB
N	8	BITUMINOUS FLUME
P	7	INSTALL MAILBOX SUPPORT
Q	7	CLEAR AND GRUB
R	7	PROPOSED CULVERT

BASIS OF ESTIMATED QUANTITIES

SPEC NO.	RATE
2350	TYPE LV3 NONWEAR TYPE MV3 NONWEAR TYPE MV3 WEAR 110 LBS / SQ YD / INCH
2350	TYPE HV 4 WEARING COURSE MIXTURE 110 LBS / SQ YD / INCH
2357	BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL / SQ YD / PER LIFT APPLIED
2575	COMMERCIAL FERTILIZER - ANALYSIS 22-5-10 (SLOW RELEASE) 300 LBS / ACRE FOR SOD AREAS

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 PRINT NAME: PETER M LEMKE
 SIGNATURE: _____
 DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: PML DATE 06/26/02
 DESIGN BY: PML DATE 06/26/02
 CHECKED BY: PML DATE 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 02-08-57

TABULATION CHARTS

Sheet 02 of 24 Sheets

BITUMINOUS SUMMARY							A	A
STATION	TO STATION	LOCATION	REMARKS	TYPE MV 4 WEARING COURSE MIXTURE 2" THICK	TYPE MV 3 NON WEARING COURSE MIXTURE 2" THICK	TYPE LV 3 NON WEARING COURSE MIXTURE 2" THICK	BITUMINOUS MATERIAL FOR TACK COAT (APPLICATION RATE = 0.05 GALLONS PER SQUARE YARD)	BITUMINOUS MATERIAL FOR TACK COAT (APPLICATION RATE = 0.05 GALLONS PER SQUARE YARD)
				TON	TON	TON	GALLON	GALLON
10+00	11+10	SHLD./TURN LN. RT.		15	30		13	13
15+51	37+78	MAINLINE		653	681	708	928	928
15+51	18+93	SHLD./TURN LN. LT.		33			15	15
15+51	19+95	SHLD./TURN LN. RT.	McKINLEY ST.	65	65	65	89	89
18+93	24+58	SHLD./TURN LN. LT.	McKINLEY ST.	83	83	83	113	113
19+95	22+41	SHLD./TURN LN. RT.		24			11	11
22+41	33+41	SHLD./TURN LN. RT.	SUNFISH LK. CT./CSAH 116	161	161	161	220	220
24+58	27+00	SHLD./TURN LN. LT.		24			11	11
27+00	37+78	SHLD./TURN LN. LT.	SUNFISH LK. CT./CSAH 116	158	158	158	216	216
33+41	37+48	SHLD./TURN LN. RT.		40			18	18
37+48	54+28	SHLD./TURN LN. RT.	142nd/143rd/144th	226	226		205	205
37+78	55+54	MAINLINE		521	542		483	483
37+78	63+07	SHLD./TURN LN. LT.		247			112	112
54+28	58+77	SHLD./TURN LN. RT.		44			20	20
55+54	72+06	MAINLINE		665	686		614	614
58+77	64+46	SHLD./TURN LN. RT.	SUNWOOD DR.	84	83		76	76
63+07	68+80	SHLD./TURN LN. LT.	SUNWOOD DR.	84	84		76	76
64+46	100+25	SHLD./TURN LN. RT.		350			159	159
68+80	110+17	SHLD./TURN LN. LT.		405			184	184
72+06	139+08	MAINLINE		1966	2048		1824	1824
100+25	105+65	SHLD./TURN LN. RT.	152nd AVE.	73	73		66	66
105+65	106+98	SHLD./TURN LN. RT.		13			6	6
106+98	112+71	SHLD./TURN LN. RT.	ALPINE DR.	77	77		70	70
110+17	122+43	SHLD./TURN LN. LT.	ALPINE DR./153rd LN.	165	165		150	150
112+71	134+17	SHLD./TURN LN. RT.		210			95	95
122+43	139+08	SHLD./TURN LN. LT.		163			74	74
134+17	138+97	SHLD./TURN LN. RT.	NOWTHEN BLVD.	65	65		59	59
142nd LANE		STREET APPR. RT.		17	11		13	13
143rd LANE		STREET APPR. RT.		17	11		13	13
144th AVE.		STREET APPR. RT.		17	11		13	13
152nd AVE.		STREET APPR. RT.		17	11		13	13
153rd LANE		STREET APPR. LT.		18	12		13	13
ADDR #13745 (N. ENT)		1.5' KICK OUTS RT.	DRIVEWAY	1	1	1	2	2
ADDR #13745 (S. ENT)		1.5' KICK OUTS RT.	DRIVEWAY	1	1	1	2	2
ADDR #14501		1.5' KICK OUTS RT.	DRIVEWAY	1	1		1	1
ADDR #14605		1.5' KICK OUTS RT.	DRIVEWAY	1	1		1	1
ADDR #14851		1.5' KICK OUTS RT.	DRIVEWAY	1	1		1	1
ADDR #14942		1.5' KICK OUTS LT.	DRIVEWAY	1	1		1	1
ADDR #14963		1.5' KICK OUTS RT.	DRIVEWAY	1	1		1	1
ADDR #15308 (N. ENT)		1.5' KICK OUTS LT.	DRIVEWAY	1	1		1	1
ADDR #15315		1.5' KICK OUTS RT.	DRIVEWAY	1	1		1	1
ADDR #15408		1.5' KICK OUTS LT.	DRIVEWAY	1	1		1	1
ADDR #15430		1.5' KICK OUTS LT.	DRIVEWAY	1	1		1	1
ADDR #15558		LT.	DRIVEWAY	1	1		1	1
ALPINE DR.		STREET APPR. LT.		25	16		19	19
ALPINE DR.		STREET APPR. RT.		23	16		18	18
CSAH 116		STREET APPR. LT.		24	16	16	25	25
CSAH 116		STREET APPR. RT.		24	16	16	25	25
McKINLEY ST.		STREET APPR. LT.		24	16	16	25	25
McKINLEY ST.		STREET APPR. RT.		23	16	16	25	25
SUNFISH LAKE CT.		STREET APPR. LT.		22	15	15	23	23
SUNFISH LAKE CT.		STREET APPR. RT.		21	14	14	23	23
SUNWOOD DR.		STREET APPR. LT.	FUTURE STREET	21	14		16	16
SUNWOOD DR.		STREET APPR. RT.		21	14		16	16
TOTALS:				6935	5447	1269	6201	6201

NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

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COUNTY PROJECT NO. 02-08-57

2"THICK LV4WE ENTRANCE CONSTR.			B
LOCATION	OFFSET	REMARKS	TYPE LV 4 WEAR COURSE MIXTURE 2.0" THICK
			SQ YD
11+46	LT.		7.1
14+17	LT.		12.2
111+87	LT.		7
6400 INDUSTRY AVENUE	LT.		3.9
ADDRESS #14059	RT.		4.2
ADDRESS #14150(N)	LT.		3.9
ADDRESS #14150(S)	LT.		4.6
ADDRESS #14280	LT.		3.4
ADDRESS #14310	LT.		3.7
ADDRESS #14351	RT.		3.1
ADDRESS #14730	LT.		4.5
ADDRESS #14920	LT.		3.4
ADDRESS #15001	RT.		3.2
ADDRESS #15308	LT.		3.4
ADDRESS #15324	LT.		3.1
ADDRESS #15345	RT.		2.4
ADDRESS #15360	LT.		3.1
ADDRESS #15403	RT.		2.6
ADDRESS #15429	RT.		3.1
ADDRESS #15450	LT.		3.1
ADDRESS #15500	LT.		2.7
ADDRESS #15558	LT.		3.1
ADDRESS #15620	LT.		3.1
ADDRESS #15650	LT.		3.7
ADDRESS. #14100	LT.		5.1
TOTAL			102

MILL BITUMINOUS SURFACE (BUTT JOINTS)					E
LOCATION	OFFSET	REMARKS	LENGTH	WIDTH	AREA
			FEET	FEET	SQ YD
McKINLEY ST.	LT	STREET APPR.	64.0	4.0	28
SUNFISH LAKE CT.	LT	STREET APPR.	60.0	4.0	27
CSAH 116	LT	STREET APPR.	65.0	4.0	29
SUNWOOD DR.	LT	STREET APPR.	58.0	4.0	26
ALPINE DR.	LT	STREET APPR.	67.0	4.0	30
153rd LANE	LT	STREET APPR.	48.0	4.0	21
McKINLEY ST.	RT	STREET APPR.	64.0	4.0	28
SUNFISH LAKE CT.	RT	STREET APPR.	58.0	4.0	26
CSAH 116	RT	STREET APPR.	65.0	4.0	29
142nd LANE	RT	STREET APPR.	46.0	4.0	20
143rd LANE	RT	STREET APPR.	46.0	4.0	20
144th AVE.	RT	STREET APPR.	46.0	4.0	20
SUNWOOD DR.	RT	STREET APPR.	58.0	4.0	26
152nd AVE.	RT	STREET APPR.	46.0	4.0	20
ALPINE DR.	RT	STREET APPR.	64.0	4.0	28
11+46	LT	BIT. DRIVES	58.0	1.5	10
14+17	LT	BIT. DRIVES	100.0	1.5	17
6400 IND. AVE.	LT	BIT. DRIVES	32.0	1.5	5
ADDR. #14100	LT	BIT. DRIVES	42.0	1.5	7
ADDR. #14150(S)	LT	BIT. DRIVES	38.0	1.5	6
ADDR. #14150(N)	LT	BIT. DRIVES	32.0	1.5	5
ADDR. #14280	LT	BIT. DRIVES	28.0	1.5	5
ADDR. #14310	LT	BIT. DRIVES	30.0	1.5	5
ADDR. #14730	LT	BIT. DRIVES	37.0	1.5	6
ADDR. #14920	LT	BIT. DRIVES	28.0	1.5	5
111+87	LT	BIT. DRIVES	57.0	1.5	10
ADDR. #15308	LT	BIT. DRIVES	28.0	1.5	5
ADDR. #15324	LT	BIT. DRIVES	25.0	1.5	4
ADDR. #15360	LT	BIT. DRIVES	25.0	1.5	4
ADDR. #15450	LT	BIT. DRIVES	25.0	1.5	4
ADDR. #15500	LT	BIT. DRIVES	22.0	1.5	4
ADDR. #15558	LT	BIT. DRIVES	25.0	1.5	4
ADDR. #15620	LT	BIT. DRIVES	25.0	1.5	4
ADDR. #15650	LT	BIT. DRIVES	30.0	1.5	5
ADDR. #14059	RT	BIT. DRIVES	34.0	1.5	6
ADDR. #14351	RT	BIT. DRIVES	25.0	1.5	4
ADDR. #15001	RT	BIT. DRIVES	26.0	1.5	4
ADDR. #15345	RT	BIT. DRIVES	20.0	1.5	3
ADDR. #15403	RT	BIT. DRIVES	21.0	1.5	4
ADDR. #15429	RT	BIT. DRIVES	25.0	1.5	4
TOTAL					520

TEMPORARY LANE MARKING						C
STATION	STATION	LOCATION	LENGTH	TAPE LENGTH	# PAVING LIFTS	LENGTH x LIFTS
			LIN FT	LIN FT	EACH	LIN FT
9+91	37+78	C/L	2787	223	3	669
37+78	55+54	C/L	1776	142	2	284
55+54	72+06	LSB	1652	132	2	264
55+54	72+06	LNB	1652	132	2	264
72+06	139+08	C/L	6702	536	2	1072
TOTAL						2553

TURF ESTABLISHMENT								D
STATION	STATION	LOCATION	SOD	EROSION BLANKET	SEEDING	SEED	FERT.	MULCH
			SQ.YD.	SQ.YD.	ACRE	POUND	TON	GAL
48+40	48+70	RT		5.5				
49+25	51+25	RT		5.5				
121+15	122+68	LT		5.5				
121+20	121+87	RT		5.5				
122+15	123+65	RT		5.5				
123+00	124+13	LT		5.5				
10+00	138+34	RT & LT	200	800	3.00	450	900	2056
TOTAL			200	833	3	450	900	2056

NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: PML DATE 06/26/02

DESIGN BY: PML DATE 06/26/02

CHECKED BY: PML DATE 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
STATE AID PROJECT NO. _____
COUNTY PROJECT NO. 02-08-57

TABULATION CHARTS

Sheet 06 of 24 Sheets

AGGREGATE BASE CLASS 5								F
STATION	STATION	LOC.	REMARKS	LENGTH	WIDTH	DEPTH	VOLUME	WEIGHT*
				FEET	FEET	FEET	CU YD	TON
15+51	18+93	LT	8' SHOULDER	342.0	10.0	0.333	42.2	76
24+58	27+00	LT	8' SHOULDER	242.0	10.0	0.333	29.8	54
37+78	63+17	LT	8' SHOULDER	2539.0	10.0	0.208	195.6	352
68+80	110+17	LT	8' SHOULDER	4137.0	10.0	0.208	318.7	574
122+43	139+08	LT	8' SHOULDER	1665.0	10.0	0.208	128.3	231
9+69	15+04	RT	8' SHOULDER	535.0	10.0	0.333	66.0	119
19+95	22+41	RT	8' SHOULDER	246.0	10.0	0.333	30.3	55
33+41	37+48	RT	8' SHOULDER	407.0	10.0	0.333	50.2	90
54+28	58+77	RT	8' SHOULDER	449.0	10.0	0.208	34.6	62
64+46	100+25	RT	8' SHOULDER	3579.0	10.0	0.208	275.7	496
105+65	106+98	RT	8' SHOULDER	133.0	10.0	0.208	10.2	18
112+71	134+17	RT	8' SHOULDER	2146.0	10.0	0.208	165.3	298
*BASED ON MNDOT CONVERSION CV -TON OF 1.8							1347.0	2425

AGGREGATE BASE CLASS 5		K
ENTRANCE	LOCATION	WEIGHT
		TON
14+43	RT.	7.0
ADDR. #13745 (N. ENT)	RT.	7.0
ADDR. #13745 (S. ENT)	RT.	7.0
ADDR. #14501	RT.	7.0
ADDR. #14605	RT.	7.0
ADDR. #14851	RT.	7.0
ADDR. #14942	LT.	7.0
ADDR. #14963	RT.	7.0
ADDR. #15308 (N. ENT)	LT.	7.0
ADDR. #15315	RT.	7.0
ADDR. #15408	LT.	7.0
ADDR. #15430	LT.	7.0
ADDR. #15558	LT.	7.0
TOTAL		91.0

INSTALL MAIL BOX SUPPORT		P
ADDRESS	LOCATION	EACH
14059	RT	1
14351	RT	1
14501	RT	1
14605	RT	1
14851	RT	1
14963	RT	1
15001	RT	1
15315	RT	1
15325	RT	1
15403	RT	1
15429	RT	1
14280	LT	1
14300	LT	1
14310	LT	1
14920	LT	1
14942	LT	1
15308	LT	1
15324	LT	1
15360	LT	1
15408	LT	1
15430	LT	1
15450	LT	1
15500	LT	1
15558	LT	1
TOTAL		24

REMOVE CONCRETE DRIVEWAY PAVEMENT					G
STATION	LOC.	LENGTH	WIDTH	AREA	
		FEET	FEET	SQ YD	
ADDRESS #14300	LT	30	10	33.3	
ADDRESS #14131	RT	31	10	34.4	
ADDRESS #15325	RT	14	10	15.6	
TOTAL				83.3	

AGGREGATE SHOULDERING CLASS 1								L	
STATION	STATION	LOC.		LENGTH	DEPTH	CU.YDS./STA.	VOLUME	WEIGHT*	
				STATION	IN	CU YD	CU YD	TON	
1551	1893	LT		3.4	2.0	1.15	3.9	7	
1893	2458	LT	RT. TURN LANE	5.7	6.0	4.63	26.2	47	
2458	2700	LT		2.4	2.0	1.15	2.8	5	
2700	3778	LT	RT. TURN LANE	10.8	6.0	4.63	49.9	90	
3778	6317	LT		25.4	2.0	1.15	29.2	53	
6317	6880	LT	RT. TURN LANE	5.6	4.5	3.11	17.5	32	
6880	11017	LT		41.4	2.0	1.15	47.6	86	
11017	12243	LT	RT. TURN LANE	12.3	4.5	3.11	38.1	69	
12243	13908	LT		16.7	2.0	1.15	19.1	34	
969	1504	RT		5.4	2.0	1.15	6.2	11	
1551	1995	RT	RT. TURN LANE	4.4	6.0	4.63	20.6	37	
1995	2241	RT		2.5	2.0	1.15	2.8	5	
2241	3341	RT	RT. TURN LANE	11.0	6.0	4.63	50.9	92	
3341	3748	RT		4.1	2.0	1.15	4.7	8	
3748	5428	RT	RT. TURN LANE	16.8	4.5	3.11	52.2	94	
5428	5877	RT		4.5	2.0	1.15	5.2	9	
5877	6446	RT	RT. TURN LANE	5.7	4.5	3.11	17.7	32	
6446	10025	RT		35.8	2.0	1.15	41.2	74	
10565	10698	RT		1.3	2.0	1.15	1.5	3	
10698	11271	RT	RT. TURN LANE	5.7	4.5	3.11	17.8	32	
11271	13417	RT		21.5	2.0	1.15	24.7	44	
13417	13897	RT	RT. TURN LANE	4.8	4.5	3.11	14.9	27	
* BASED ON MN/DOT CONVERSION CV -TON OF 1.8)							TOTALS	494.7	890

(1.5' SHLD. 2" DEPTH = 1.15 CU.YDS.(CV)/STATION)
(1.5' SHLD. 6" DEPTH = 4.63 CU.YDS.(CV)/STATION)
(1.5' SHLD. 4.5" DEPTH = 3.11 CU.YDS.(CV)/STATION)

6" CONCRETE DRIVEWAY PAVEMENT					H
STATION	LOC.	LENGTH	WIDTH	AREA	
		FEET	FEET	SQ YD	
ADDRESS #14300	LT	30	10	33.3	
ADDRESS #14131	RT	31	10	34.4	
ADDRESS #15325	RT	14	10	15.6	
TOTAL				83.3	

SAWING CONCRETE PAVEMENT (FULL DEPTH)			J
STATION	LOC.	LENGTH	
		FEET	
ADDRESS #14300	LT	30	
ADDRESS #14131	RT	31	
ADDRESS #15325	RT	14	
TOTAL		75.0	

CLEAR AND GRUB CHART				Q
STATION	LOC		CLEAR	GRUB
5803	34' Rt	6" Stump	0	1
5900	42' Rt	6" Stump	0	1
5912	43' Rt	6" Stump	0	1
5975	40' Rt	6" Stump	0	1
6028	44' Rt	6" Stump	0	1
6030	38' Rt	6" Stump	0	1
6035	39' Rt	6" Stump	0	1
6038	40' Rt	6" Stump	0	1
6044	41' Rt	6" Stump	0	1
6050	41' Rt	6" Stump	0	1
6064	42' Rt	6" Stump	0	1
6065	42' Rt	6" Stump	0	1
6080	41' Rt	12" Stump	0	1
6195	38' Rt	4" Elm	1	1
6645	40' Rt	Quad 5" Elm	5	1
TOTALS:			6	15

PROPOSED CULVERT TABULATION					R
STATION	LOCATION	INPLACE	REMARKS	FEET	APRON
58+00-59+80	32' RT	18" CMP		180	1
59+80-61+30	32'RT-42'RT	18" CMP		150	1
66+44-66+76	44' RT	18" CMP		50	2
TOTALS				380	4

NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: PETER M LEMKE
SIGNATURE: _____
DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: PML DATE 06/26/02
DESIGN BY: PML DATE 06/26/02
CHECKED BY: PML DATE 07/03/02



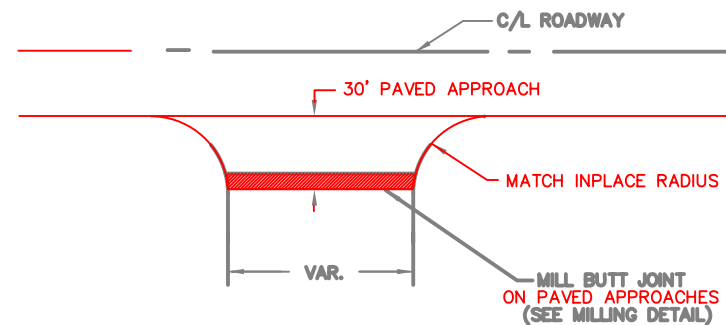
ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
STATE AID PROJECT NO. _____
COUNTY PROJECT NO. 02-08-57

TABULATION CHARTS

Sheet 07 of 24 Sheets

PAVED & UNPAVED STREET APPROACHES

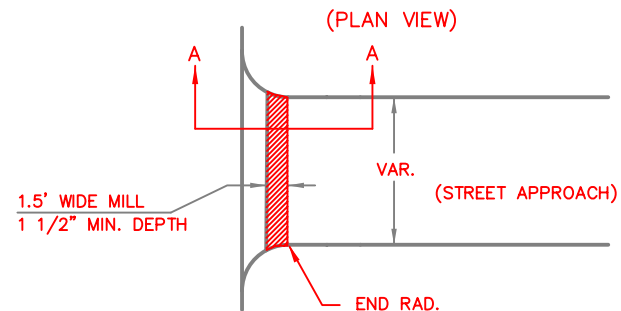


NOTE: PAID FOR AS ITEM NO. 2350.604 (2" THICK BITUMINOUS WEARING COURSE)

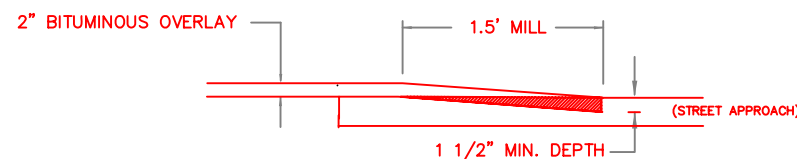
* APPROACHES TO BE PAID BY THE SQ YD

MILLING DETAILS

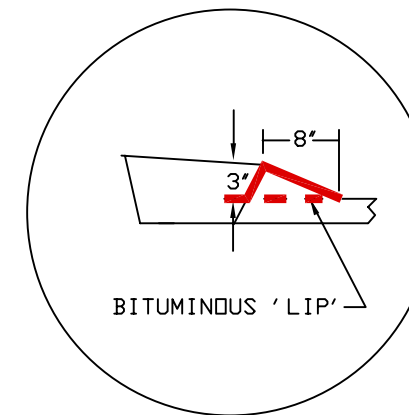
BUTT JOINTS



(SECTION A-A)



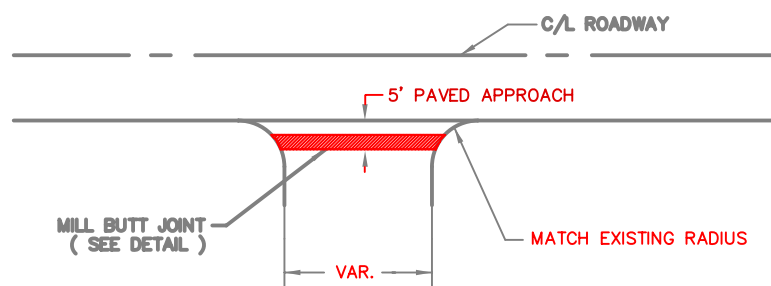
BERM SECTION



- ① EXISTING BITUMINOUS LIP TO BE RECLAIMED WITH SHOULDER
- ② PROPOSED BITUMINOUS LIP TO BE PAID AS BITUMINOUS CURB, ITEM NO. 2535.501

BITUMINOUS CURB			M
STATION	STATION	LOCATION	LENGTH FEET
48+40	48+70	RT	30
49+25	51+25	RT	200
121+15	122+68	LT	153
121+20	121+87	RT	67
122+15	123+65	RT	150
123+00	124+13	LT	113
TOTAL			713

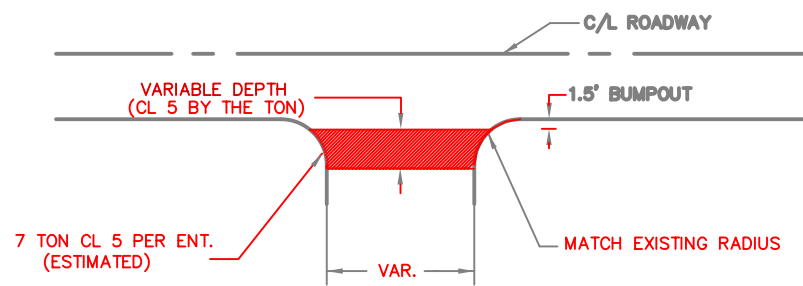
PAVED ENTRANCES



NOTE: PAID FOR AS ITEM NO. 2350.604 (2" THICK BITUMINOUS WEARING COURSE)

- * APPROACHES TO BE PAID BY THE TON IF PAVED AS PART OF MAINLINE PAVING
- * APPROACHES TO BE PAID BY THE SQ YD IF PAVED AS A SEPARATE OPERATION.

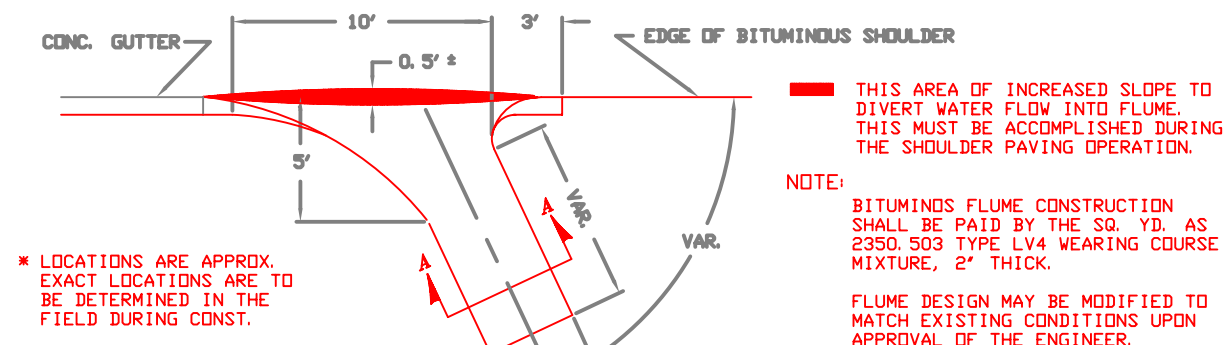
FIELD AND UNPAVED ENTRANCES



NOTE: PAID FOR AS ITEM NO. 2211.501 (AGGREGATE BASE CL 5 (TON))

(NOT TO SCALE)

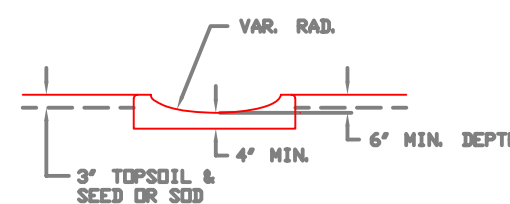
TYPICAL BITUMINOUS FLUME



* LOCATIONS ARE APPROX. EXACT LOCATIONS ARE TO BE DETERMINED IN THE FIELD DURING CONST.

NOTE: BITUMINOUS FLUME CONSTRUCTION SHALL BE PAID BY THE SQ. YD. AS 2350.503 TYPE LV4 WEARING COURSE MIXTURE, 2" THICK. FLUME DESIGN MAY BE MODIFIED TO MATCH EXISTING CONDITIONS UPON APPROVAL OF THE ENGINEER.

(SECTION A-A)



BITUMINOUS FLUME		N
STATION	LOCATION	AREA SQ YD
48+40	LT	5.5
49+25	LT	5.5
121+15	RT	5.5
121+20	RT	5.5
122+15	RT	5.5
124+13	LT	5.5
TOTAL		33

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: PETER M LEMKE
 SIGNATURE: _____
 DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: BFL DATE: 06/26/02
 DESIGN BY: MFG DATE: 06/26/02
 CHECKED BY: PML DATE: 07/03/02



**ANOKA COUNTY
 HIGHWAY DEPT.**

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 02-01-00
 COUNTY SUB-PROJECT NO. 02-08-57

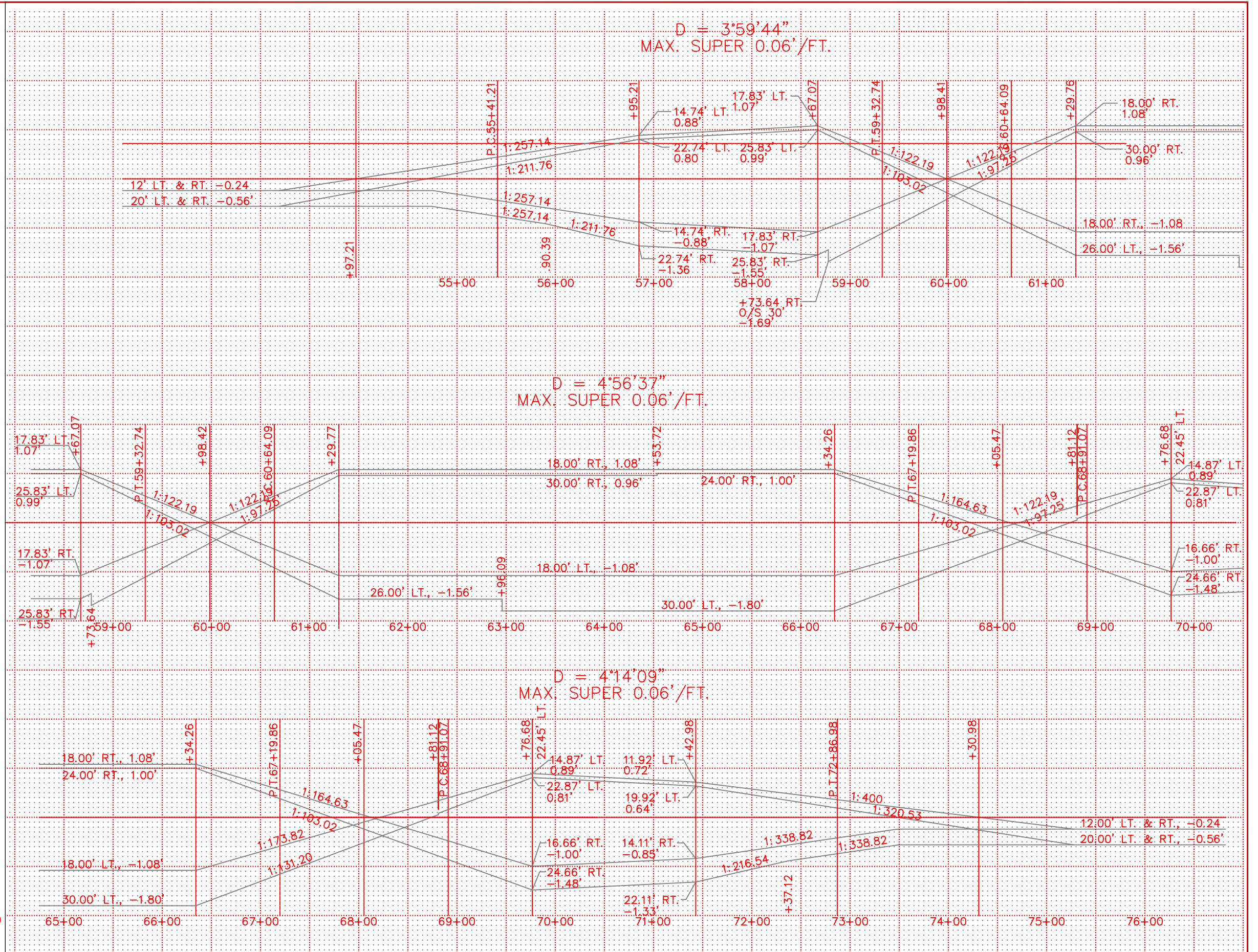
TYPICAL SECTIONS

Sheet 08 of 24 Sheets

STATION	DISTANCE	REG.		BALANCE TOTALS	
		CUT	FILL	CU.YD.	CU.YD.
57+75.00	25.00	0	0	68	6
58+00.00	25.00	5	13	73	20
58+25.00	25.00	6	17	80	37
58+50.00	25.00	7	21	86	56
58+75.00	25.00	7	21	93	78
59+00.00	6.24	8	26	95	84
59+06.24	18.76	8	26	101	103
59+25.00	7.74	8	29	104	112
59+32.74	17.26	8	30	109	131
59+50.00	25.00	8	31	117	155
59+75.00	25.00	8	21	124	166
60+00.00	23.92	7	2	135	167
60+23.92	1.08	17	0	136	167
60+25.00	25.00	23	0	150	175
60+50.00	14.09	8	19	154	192
60+64.09	7.17	9	23	157	200
60+71.26	3.74	9	44	158	207
60+75.00	25.00	9	44	166	248
61+00.00	25.00	10	48	175	290
61+25.00	50.00	9	44	192	369
61+50.00	25.00	9	42	200	409
61+75.00	25.00	9	44	209	451
62+00.00	25.00	10	46	220	497
62+25.00	25.00	12	52	232	543
62+50.00	25.00	13	48	243	591
62+75.00	25.00	13	54	255	645
63+00.00	14.94	13	63	263	675
63+14.94	10.06	18	46	271	690
63+25.00	25.00	25	34	290	715
63+40.66	9.34	41	17	299	718
63+50.00	25.00	15	19	303	725
63+75.00	10.95	14	3	308	727
63+85.95	3.12	13	4	310	727
63+89.07	10.93	12	5	315	731
64+00.00	11.87	16	14	324	745
64+11.87	13.13	25	49	335	780
64+25.00	8.66	20	96	341	805
64+33.66	14.22	28	79	351	842
64+47.88	2.12	15	60	342	810
64+50.00	25.00	14	61	354	859
64+75.00	25.00	12	46	373	906
65+00.00	25.00	29	55	392	957
65+25.00	25.00	13	55	405	1008
65+50.00	25.00	14	55	420	1060
65+75.00	25.00	18	56	436	1111
66+00.00	25.00	16	55	449	1159
66+25.00	25.00	13	49	461	1186
66+50.00	16.76	13	9	468	1192
66+66.76	8.24	8	9	471	1199
66+75.00	25.00	12	39	482	1238
67+00.00	19.86	12	45	491	1273
67+19.86	5.14	12	49	493	1280
67+25.00	6.26	14	33	496	1288
67+31.26	18.74	14	35	506	1312
67+50.00	25.00	14	35	518	1347
67+75.00	25.00	13	40	530	1384
68+00.00	25.00	13	40	541	1422
68+25.00	25.00	12	42	553	1462
68+50.00	25.00	13	45	564	1503
68+75.00	10.85	13	43	569	1520
68+85.85	5.22	13	41	572	1527
68+91.07	8.93	13	40	576	1539
69+00.00	25.00	13	37	584	1560
69+25.00	1.77	13	35	585	1562
69+26.77	23.23	13	35	596	1590
69+50.00	25.00	14	31	609	1616
69+75.00	25.00	16	26	624	1638
70+00.00	25.00	16	21	638	1657
70+25.00	25.00	15	19	645	1665
70+50.00	0	0	0	645	1665
TOTALS =				645	1665

EARTHWORK NOTES

COMMON EXCAVATION - 645 C.Y. (E.V.) X 0.80% = 516 C.Y. C.V.
 SALVAGE TOPSOIL = 506 C.Y.(C.V.) - 297 C.Y.(C.V.) REQ'D.=
 108 C.Y.(C.V.) SALVAGE T.S. AVAILABLE AS COMMON EXC.
 1665 C.Y. EMB. (C.V.) - 219 C.Y.(C.V.) COM. EXC. = 1446 C.Y.(C.V.)
 1446 C.Y.(C.V.) X 1.30% = 1880 C.Y. (L.V.) GRANULAR BORROW



NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: PETER M LEMKE
 SIGNATURE: _____
 DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: BFL DATE 06/27/02
 DESIGN BY: MFG DATE 06/27/02
 CHECKED BY: PML DATE 07/03/02

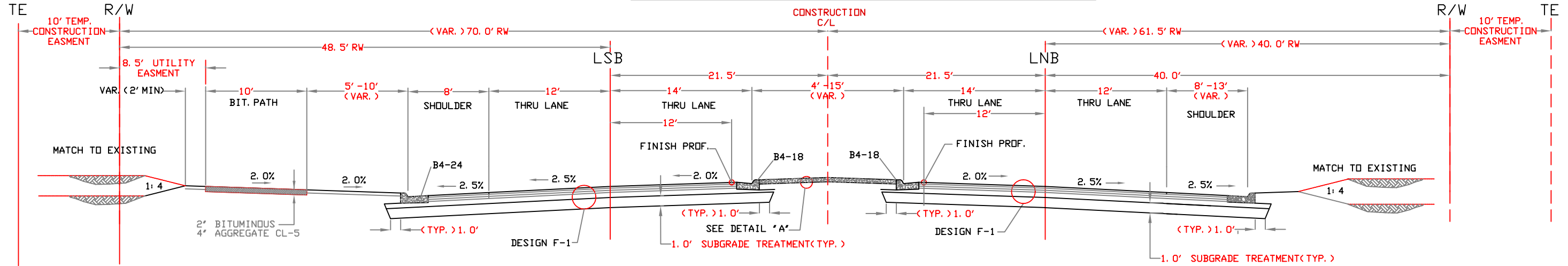


ANOKA COUNTY
HIGHWAY DEPT.

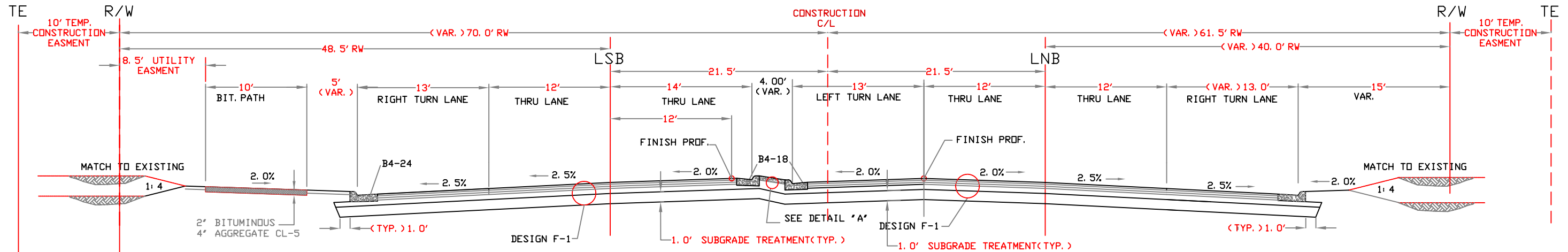
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 02-08-57

EARTHWORK
(SUNWOOD)
& SUPERELEVATION
 Sheet 9 of 24 Sheets

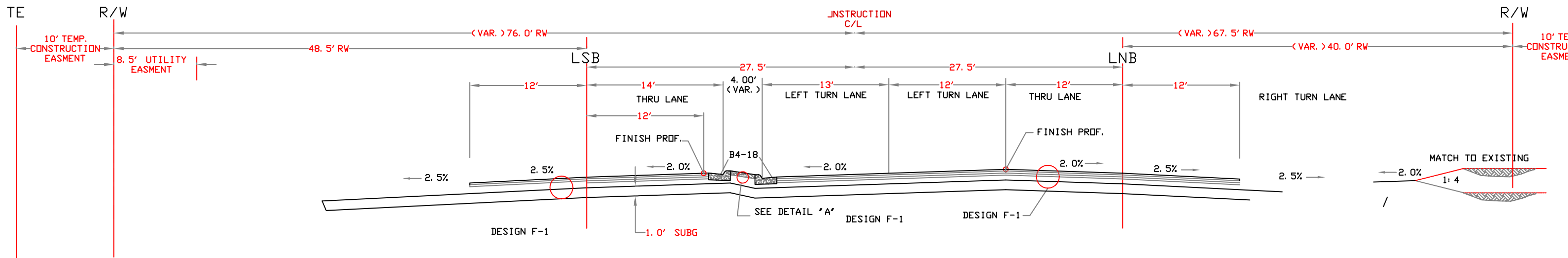
RADISSON ROAD (CSAH 52) TYPICAL SECTION
 BUNKER LAKE BLVD. (CSAH 116) TYPICAL SECTION



RADISSON ROAD (CSAH 52) TYPICAL SECTION
 BUNKER LAKE BLVD. (CSAH 116) TYPICAL SECTION
 TYPICAL LEFT AND RIGHT TURN LANES



RADISSON ROAD (CSAH 52) TYPICAL SECTION



NO	DATE	BY	CKD	APPR	REVISION

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PRINT NAME: _____
 SIGNATURE: _____
 DATE: _____ LICENSE NO. _____

DRAWN BY: _____ MN DATE: 05/12/06
 DESIGN BY: _____ MN DATE: 05/12/06
 CHECKED BY: _____ LAR DATE: 00/00/00



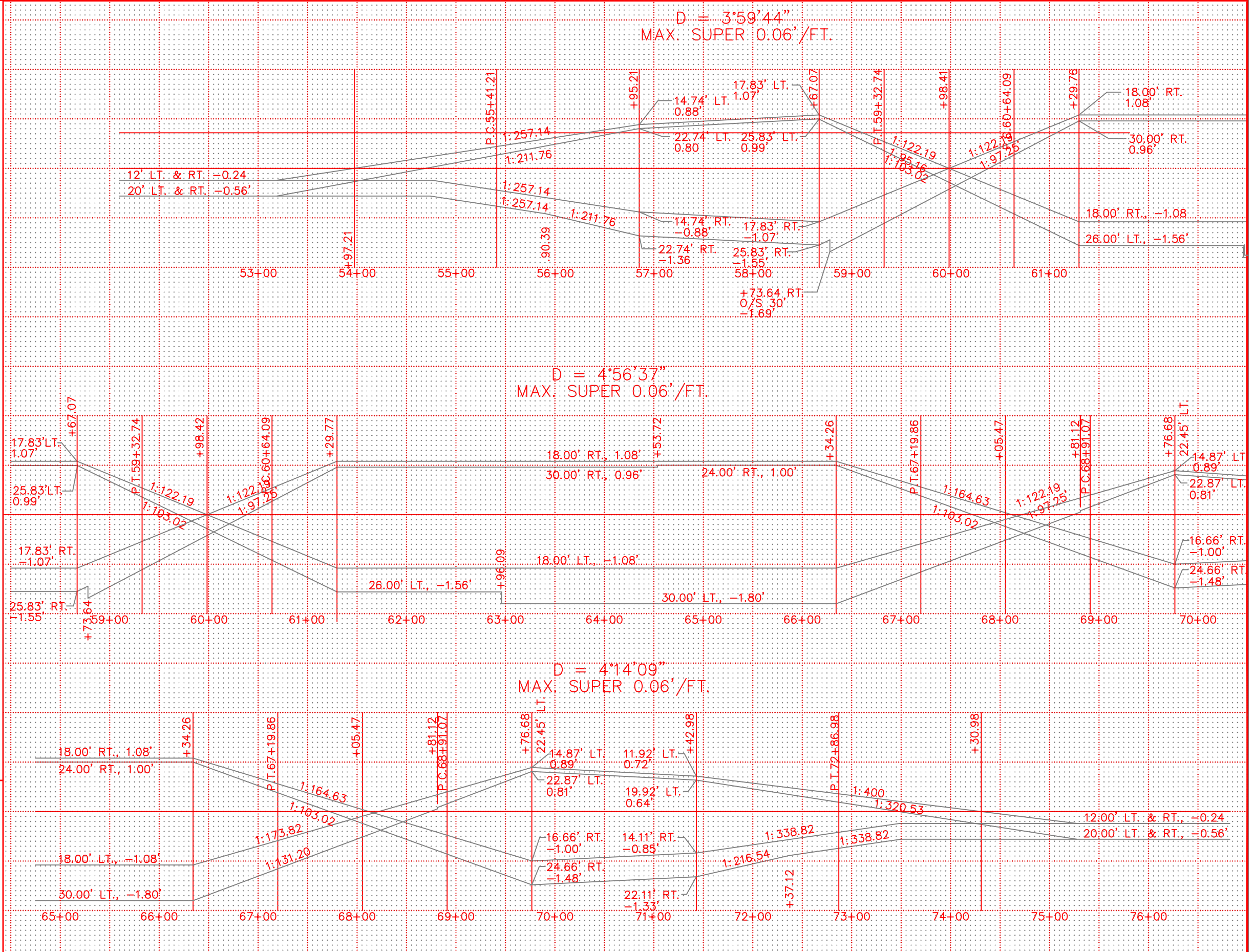
ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. 02-652-05
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. _____

TYPICAL SECTION
 Sheet 13 of 14 Sheets

EARTHWORK

STATION	DISTANCE	REG. CUT	REG. FILL	BALANCE TOTALS CU.YD.	CU.YD.
57+75.00	25.00	0	0	68	6
58+00.00	25.00	5	13	73	20
58+25.00	25.00	6	17	80	37
58+50.00	25.00	7	21	86	56
58+75.00	25.00	7	21	93	78
59+00.00	6.24	8	26	95	84
59+06.24	18.76	8	26	101	103
59+25.00	7.74	8	29	104	112
59+32.74	17.26	8	30	109	131
59+50.00	25.00	8	31	117	155
59+75.00	25.00	8	21	124	166
60+00.00	23.92	7	2	135	167
60+23.92	1.08	17	0	136	167
60+25.00	25.00	23	0	150	175
60+50.00	14.09	8	19	154	192
60+64.09	7.17	9	23	157	200
60+71.26	3.74	9	44	158	207
60+75.00	25.00	9	44	166	248
61+00.00	25.00	10	48	175	290
61+25.00	50.00	9	44	182	389
61+50.00	25.00	9	44	200	409
61+75.00	25.00	9	44	209	451
62+00.00	25.00	10	46	232	497
62+25.00	25.00	12	52	232	543
62+50.00	25.00	13	48	243	591
62+75.00	25.00	13	54	255	645
63+00.00	14.94	13	63	263	675
63+14.94	10.06	18	46	271	690
63+25.00	25.00	25	34	290	715
63+40.66	9.34	41	17	299	718
63+50.00	25.00	15	19	303	725
63+75.00	10.95	14	3	308	727
63+85.95	3.12	13	4	310	727
63+89.07	10.93	12	5	315	731
64+00.00	11.87	16	14	324	745
64+11.87	13.13	25	49	335	780
64+25.00	8.66	20	96	341	805
64+33.66	14.22	28	79	351	842
64+47.88	2.12	15	60	342	810
64+50.00	25.00	14	61	354	859
64+75.00	25.00	12	46	373	906
65+00.00	25.00	29	55	392	957
65+25.00	25.00	13	55	405	1008
65+50.00	25.00	14	55	420	1060
65+75.00	25.00	18	56	436	1111
66+00.00	25.00	16	55	449	1159
66+25.00	25.00	13	49	461	1185
66+50.00	16.76	13	9	468	1192
66+66.76	8.24	8	9	471	1199
66+75.00	25.00	12	39	482	1238
67+00.00	19.86	12	45	491	1273
67+19.86	5.14	12	49	493	1280
67+25.00	6.26	14	33	496	1288
67+31.26	18.74	14	35	506	1312
67+50.00	25.00	14	35	518	1347
67+75.00	25.00	13	40	530	1384
68+00.00	25.00	13	40	541	1422
68+25.00	25.00	12	42	553	1462
68+50.00	25.00	12	39	482	1238
67+00.00	19.86	12	45	491	1273
67+19.86	5.14	12	49	493	1280
67+25.00	6.26	14	33	496	1288
67+31.26	18.74	14	35	506	1312
67+50.00	25.00	14	35	518	1347
67+75.00	25.00	13	40	530	1384
68+00.00	25.00	13	40	541	1422
68+25.00	25.00	12	42	553	1462
68+50.00	25.00	13	45	564	1503
68+75.00	10.85	13	43	569	1520
68+85.85	5.22	13	41	572	1527
68+91.07	8.93	13	40	576	1539
69+00.00	25.00	13	37	584	1560
69+25.00	1.77	13	35	585	1562
69+26.77	23.23	13	35	596	1590
69+50.00	25.00	14	31	609	1616
69+75.00	25.00	16	26	624	1638
70+00.00	25.00	16	21	638	1657
70+25.00	25.00	15	19	645	1665
70+50.00	0	0	0	645	1665
TOTALS =				645	1665



EARTHWORK NOTES

COMMON EXCAVATION - 645 C.Y.(E.V.) @ 0.80% = 516 C.Y.(C.V.),
 SALV. T.S. AVAIL. = 506 C.Y.(E.V.) X 0.80% = 405 C.Y.(C.V.), AVAIL.
 COMMON EXC. - 516 C.Y.(C.V.) - 297 C.Y.(C.V.) TOPSOIL REQ'D. =
 219 C.Y.(C.V.) AVAIL. COMMON EXCAVATION.

REG. EMB. = 1665 C.Y.(C.V.) - 219 C.Y.(C.V.) COMMON EXC. =
 1446 C.Y.(C.V.) X 130% = 1880 C.Y.(L.V.) SELECT GRAN. BORROW

① QUANTITY INCLUDES SALVAGE TOPSOIL

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: _____
 SIGNATURE: _____
 DATE: _____ LICENSE NO. _____

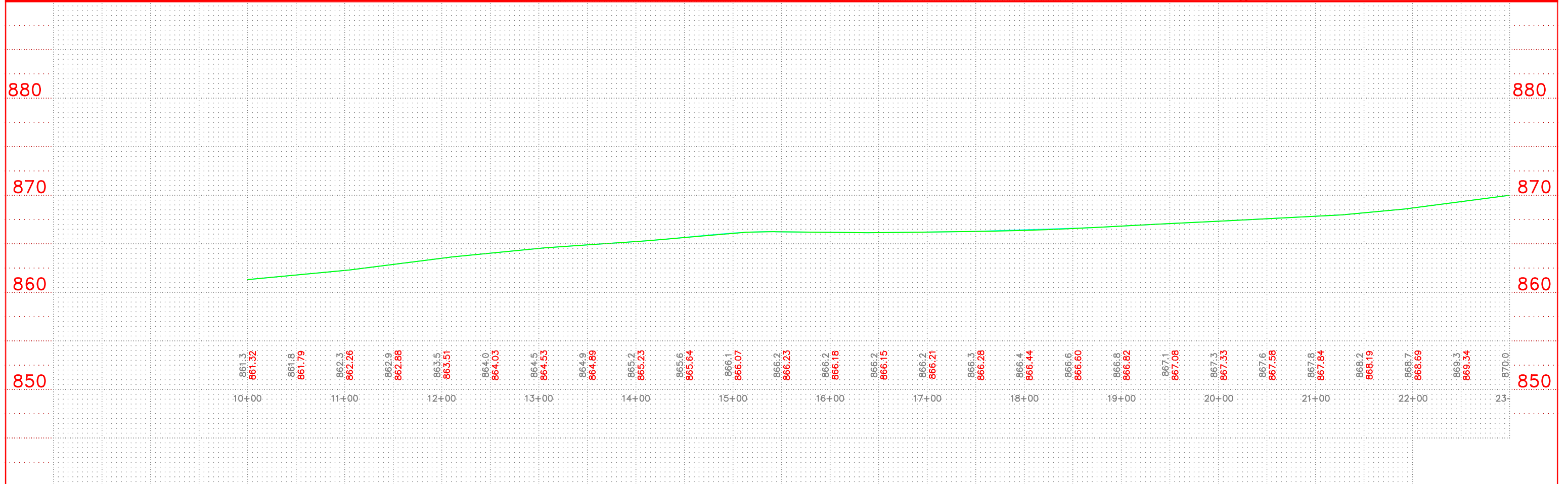
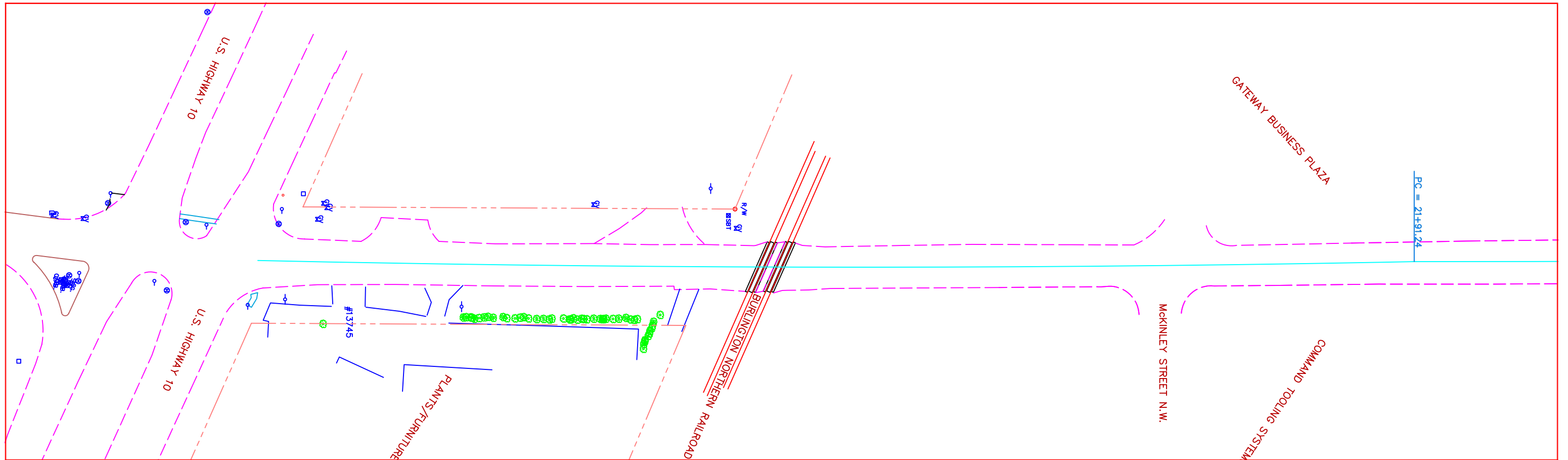
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 DESIGN BY: KGL DATE 07/08/02
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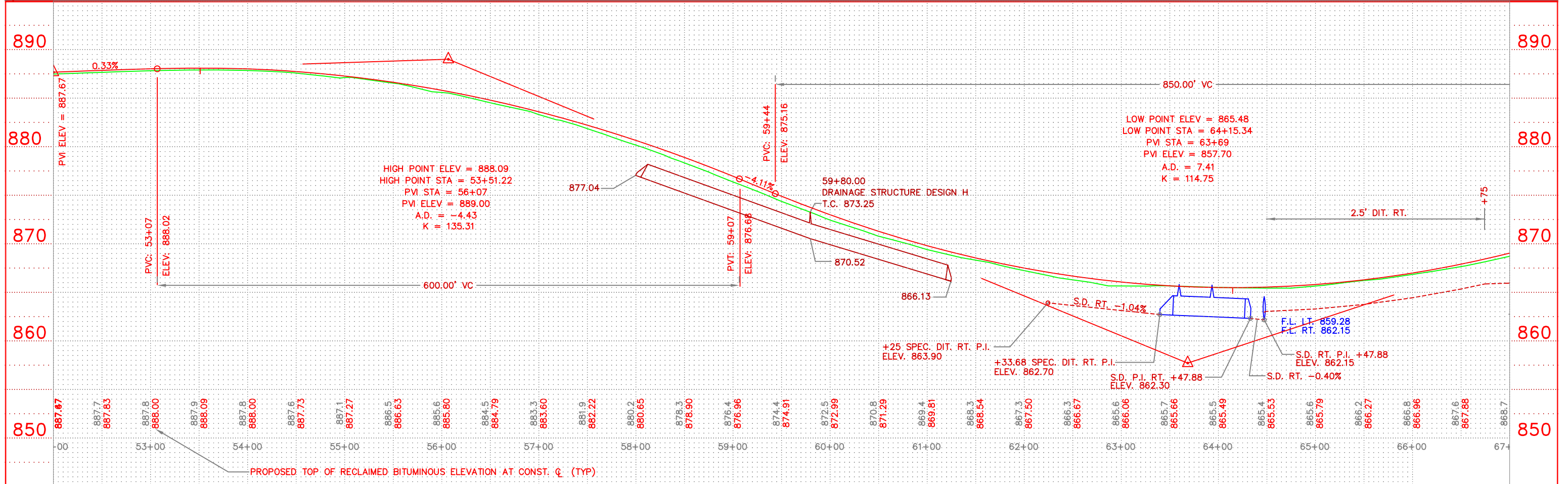
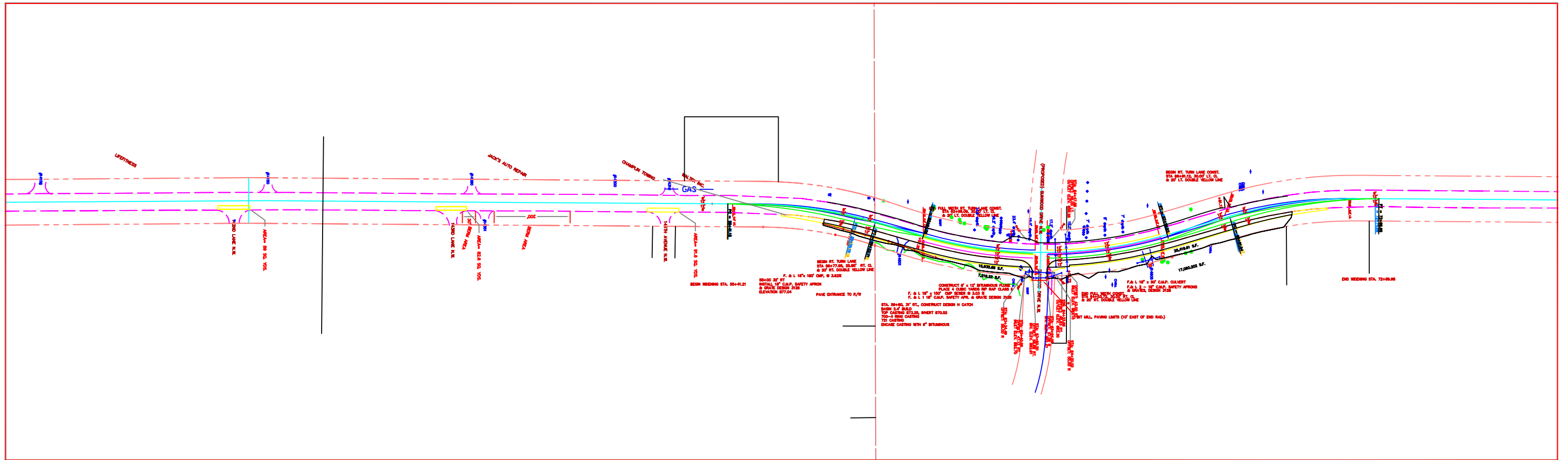
ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 02-08-57

SUPERELEVATION
 Sheet 9 of 24 Sheets



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. PRINT NAME: <u>PETER M LEMKE</u> SIGNATURE: _____ DATE: <u>07/03/02</u> REG. NO. <u>40118</u>					DRAWN BY <u>KGJ</u> DATE <u>06/27/02</u> DESIGN BY <u>KGJ</u> DATE <u>06/27/02</u> CHECKED BY <u>PML</u> DATE <u>07/03/02</u>		 ANOKA COUNTY HIGHWAY DEPT.		STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ STATE AID PROJECT NO. _____ COUNTY PROJECT NO. <u>02-08-57</u>		PLAN AND PROFILE STA10+00 TO 23+00 Sheet <u>10</u> of <u>24</u> Sheets	
NO	DATE	BY	CKD	APPR	REVISION							
NAME: P:\02-01-00\02-08-57\base\020857.dwg						04/01/03 11:16:49 AM CST						



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-01-00\02-08-57\base\020857.dwg 04/01/03 11:16:49 AM CST

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.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 REG. NO. 40118

DRAWN BY: KGI DATE 06/27/02

DESIGN BY: KGI DATE 06/27/02

CHECKED BY: PML DATE 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

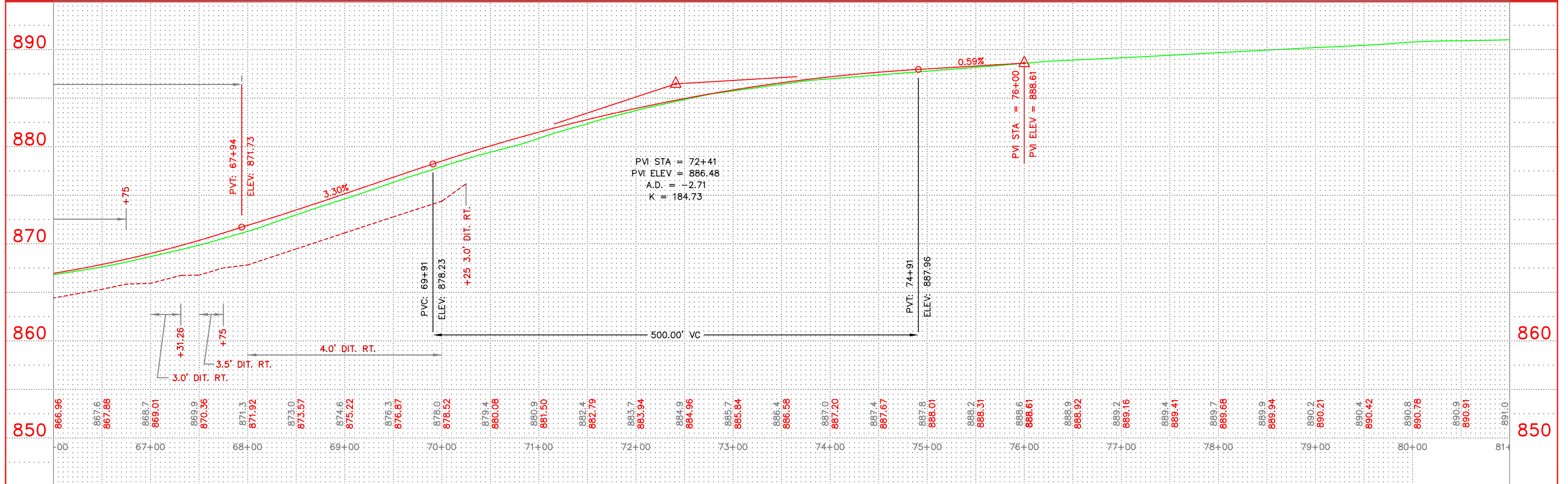
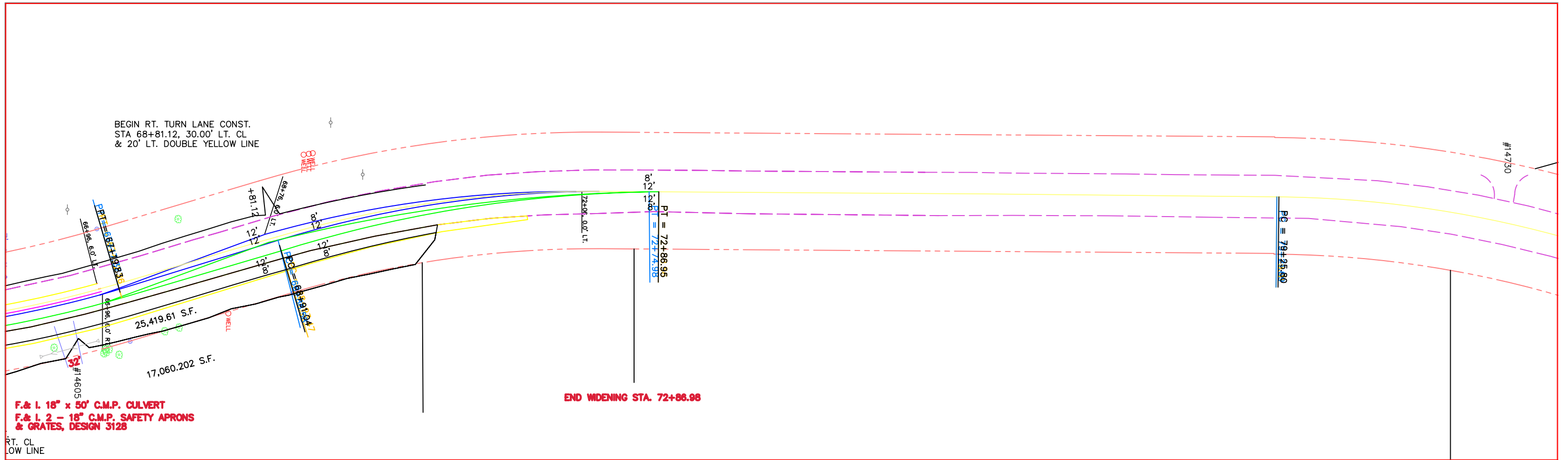
STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 02-08-57

PLAN AND PROFILE
STA 52+00.00 TO 66+00.00

Sheet 11 of 24 Sheets



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-01-00\02-08-57\base\020857.dwg 04/01/03 11:16:49 AM CST

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.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 REG. NO. 40118

DRAWN BY: KGJ DATE 06/27/02

DESIGN BY: KGJ DATE 06/27/02

CHECKED BY: PML DATE 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

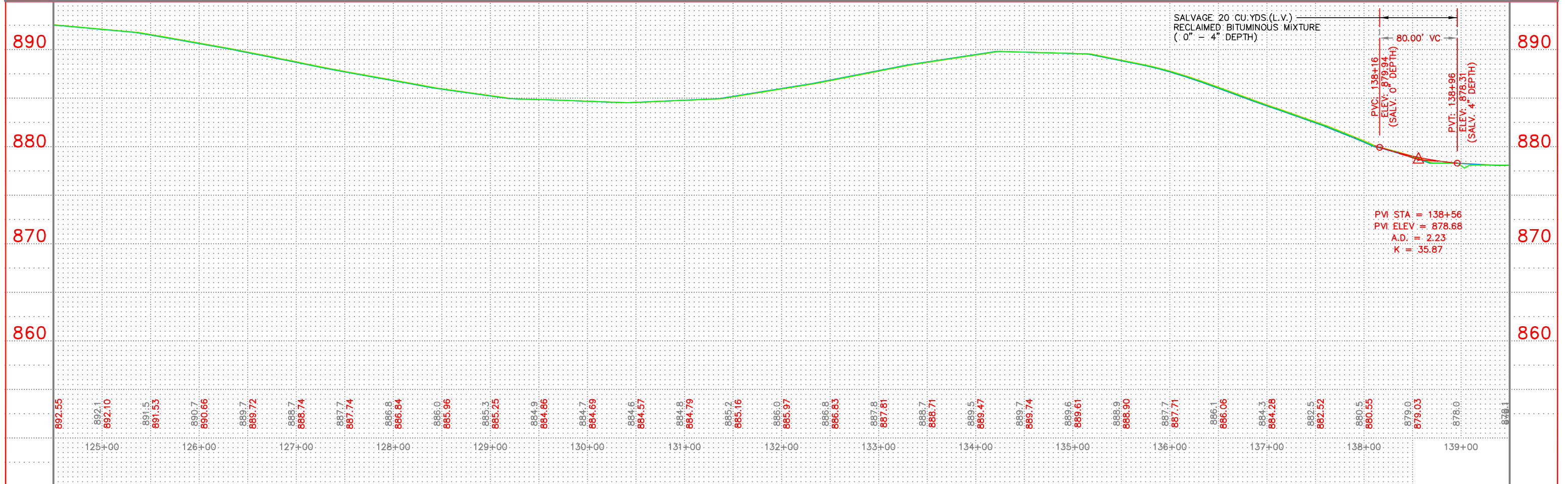
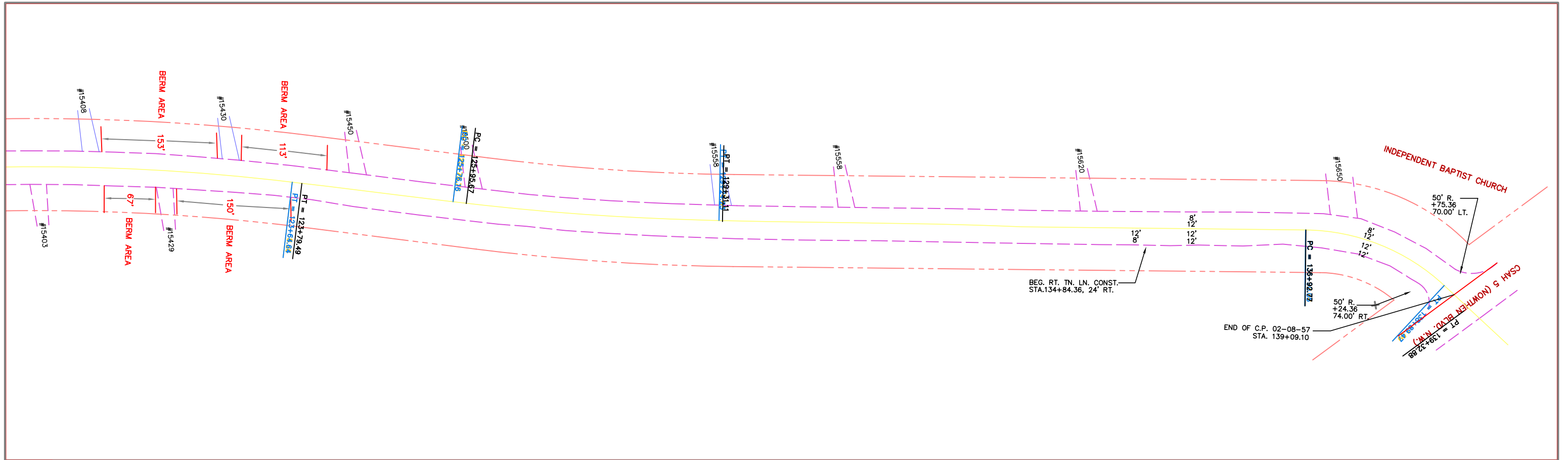
STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 02-08-57

PLAN AND PROFILE
STA 66+00 TO 81+00

Sheet 12 of 24 Sheets



NO	DATE	BY	CKD	APPR	REVISION

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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.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 REG. NO. 40118

DRAWN BY: KGJ DATE 06/27/02

DESIGN BY: KGJ DATE 06/27/02

CHECKED BY: PML DATE 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

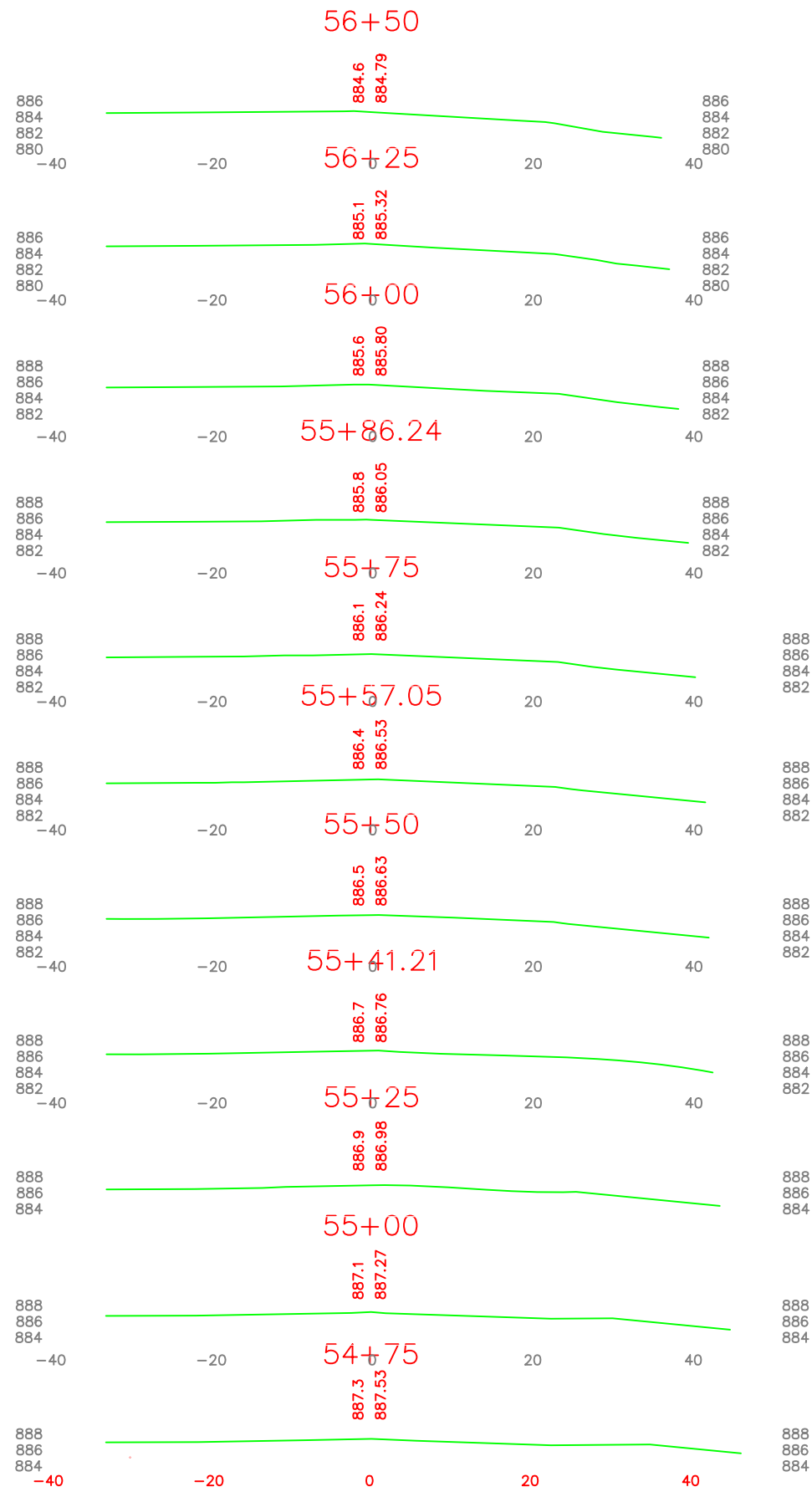
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STATE AID PROJECT NO. _____

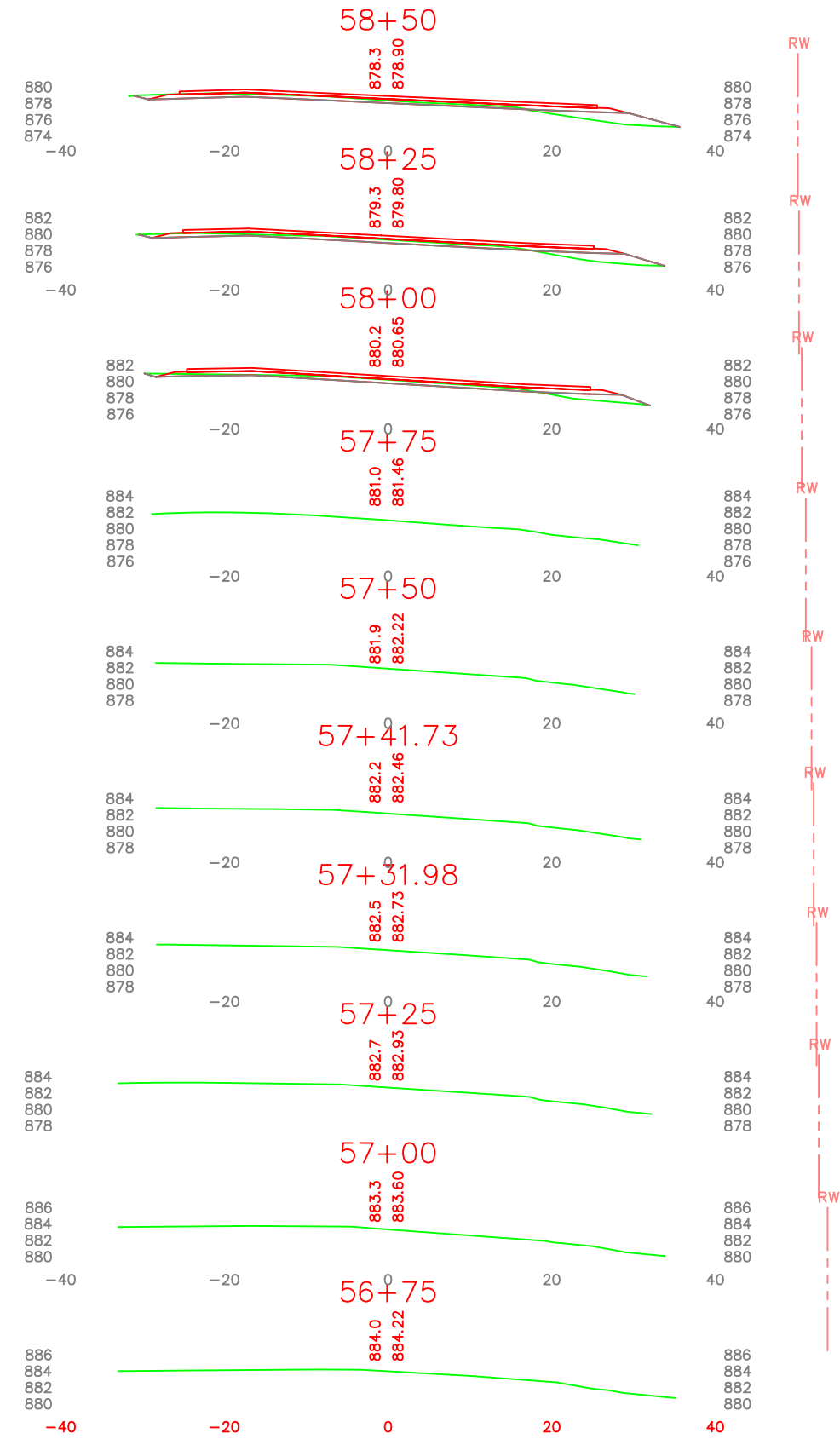
COUNTY PROJECT NO. 02-08-57

PLAN AND PROFILE
STA 120+00 TO 139+00

Sheet 13 of 24 Sheets



DIT. ELEV. REPRESENT FINISHED GRADE



1	7/23/02	KGJ	MAD	MAD	ADJUSTED X-SECTIONS TO MATCH GRID
NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\02-01-00\02-08-57\Plan\X-Section.dwg 07/25/2002 12:37:52 PM CDT					

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY KGJ DATE 06/27/02

DESIGN BY KGJ DATE 06/27/02

CHECKED BY PML DATE 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

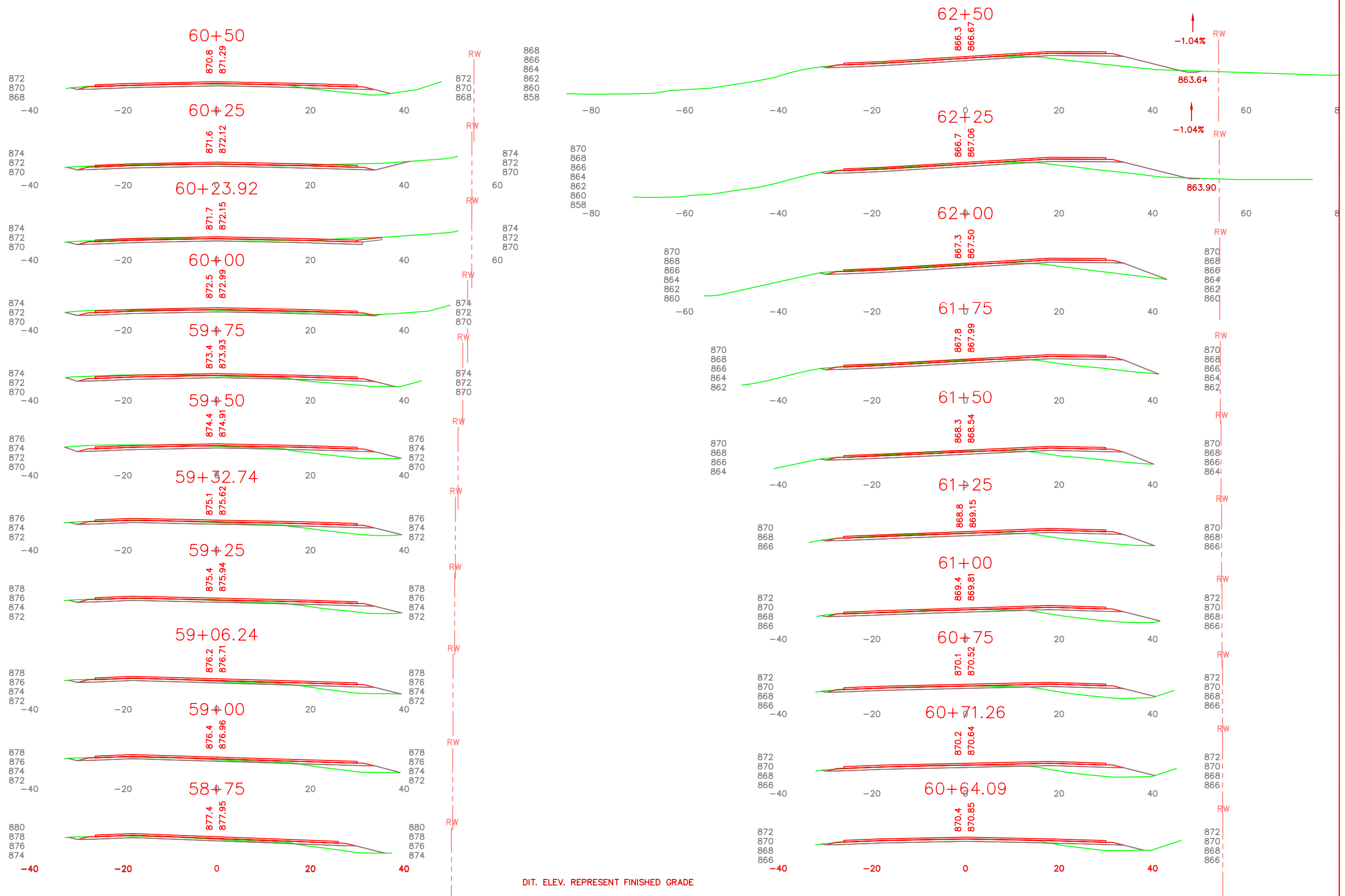
STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 02-08-57

CROSS SECTIONS
STA 54+75 TO 58+50

Sheet 14 of 24 Sheets



DIT. ELEV. REPRESENT FINISHED GRADE

1	7/23/02	KGJ	MAD	MAD	ADJUSTED X-SECTIONS TO MATCH GRID
NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\02-01-00\02-08-57\Plan\X-Section.dwg 07/25/2002 12:37:52 PM CDT					

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: KGJ DATE: 06/27/02

DESIGN BY: KGJ DATE: 06/27/02

CHECKED BY: PML DATE: 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

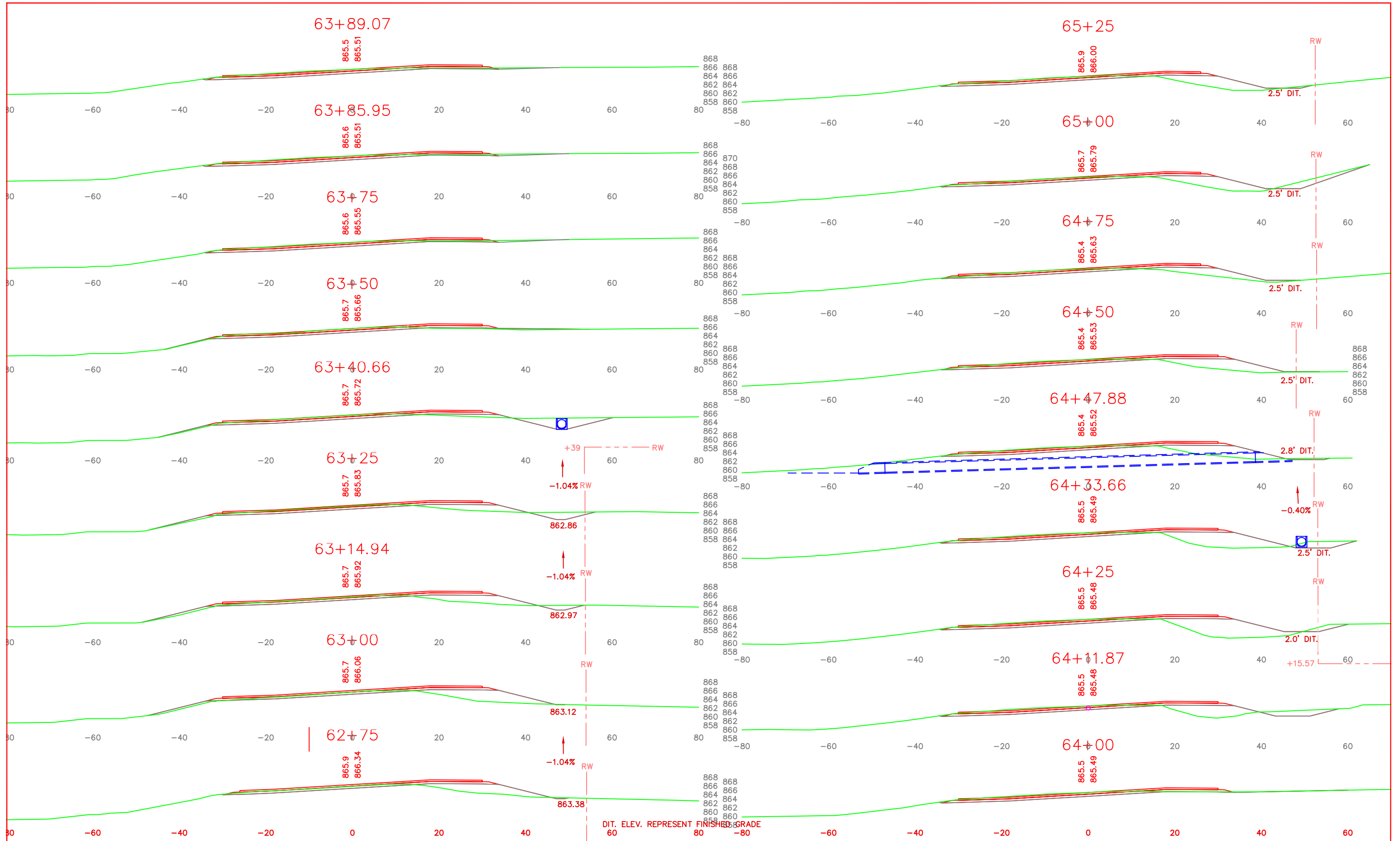
STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 02-08-57

CROSS SECTIONS
STA 58+75 TO 62+50
Sheet 15 of 24 Sheets



DIT. ELEV. REPRESENT FINISHED GRADE

1	7/27/02	KGJ	MAD	MAD	ADJUSTED X-SECTIONS TO MATCH GRID
NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\02-01-00\02-08-57\Plan\X-Section.dwg 07/25/2002 12:37:52 PM CDT					

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: PETER M LEMKE

SIGNATURE: _____

DATE: 07/03/02 LICENSE NO. 40118

DRAWN BY: KGJ DATE: 06/27/02

DESIGN BY: KGJ DATE: 06/27/02

CHECKED BY: PML DATE: 07/03/02



ANOKA COUNTY
HIGHWAY DEPT.

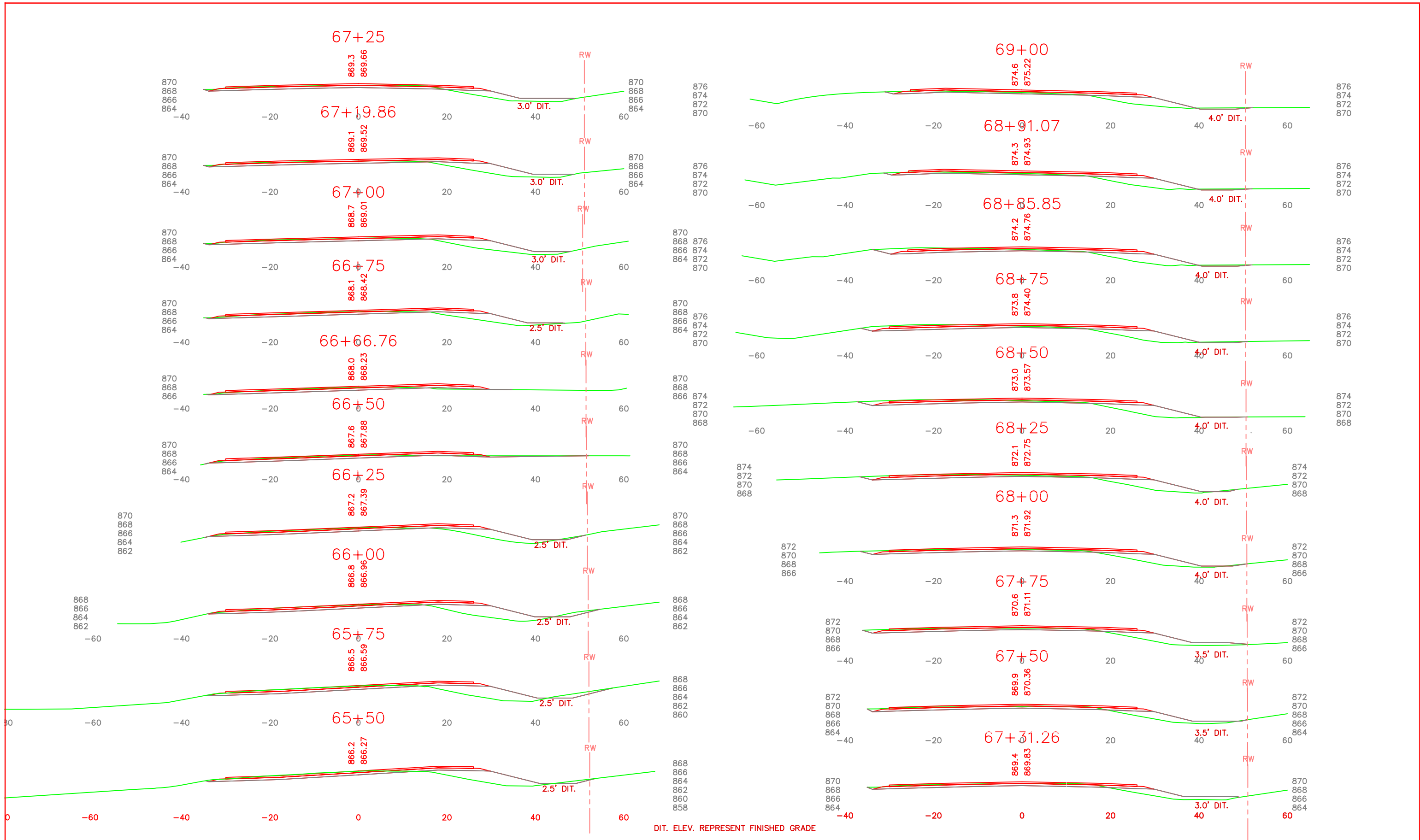
STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 02-08-57

CROSS SECTIONS
STA 62+75 TO 65+25
Sheet 16 of 24 Sheets



DIT. ELEV. REPRESENT FINISHED GRADE

1	7/23/02	KGJ	MAD	MAD	ADJUSTED X-SECTIONS TO MATCH GRID
NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\02-01-00\02-08-57\Plan\X-Section.dwg 07/25/2002 12:37:52 PM CDT					

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ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 02-08-57

CROSS SECTIONS
STA 65+50 TO 69+00
Sheet 17 of 24 Sheets

