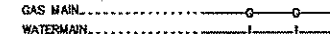
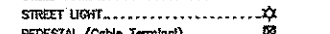
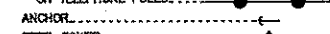
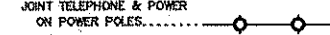
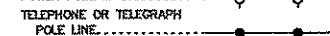
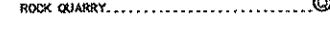
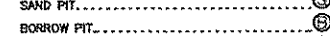
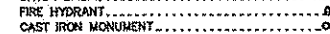
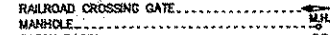
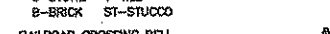
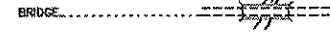
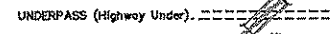
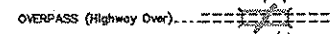
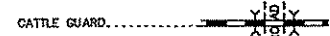
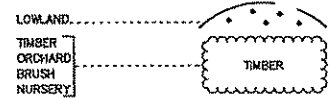


**PLAN SYMBOLS**

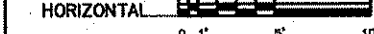
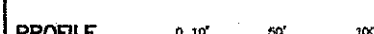
- COUNTY LINE.....
- TOWNSHIP OR RANGE LINE.....
- SECTION LINE.....
- QUARTER LINE.....
- SIXTEENTH LINE.....
- RIGHT OF WAY LINE.....
- SLOPE EASEMENT.....
- EXISTING RIGHT OF WAY.....
- PROPERTY LINE.....
- CORPORATE OR CITY LIMITS.....
- RETAINING WALL.....
- RAILROAD.....
- RAILROAD RIGHT OF WAY.....
- 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.....
- WATER MAIN.....
- 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**



# MINNESOTA DEPARTMENT OF TRANSPORTATION

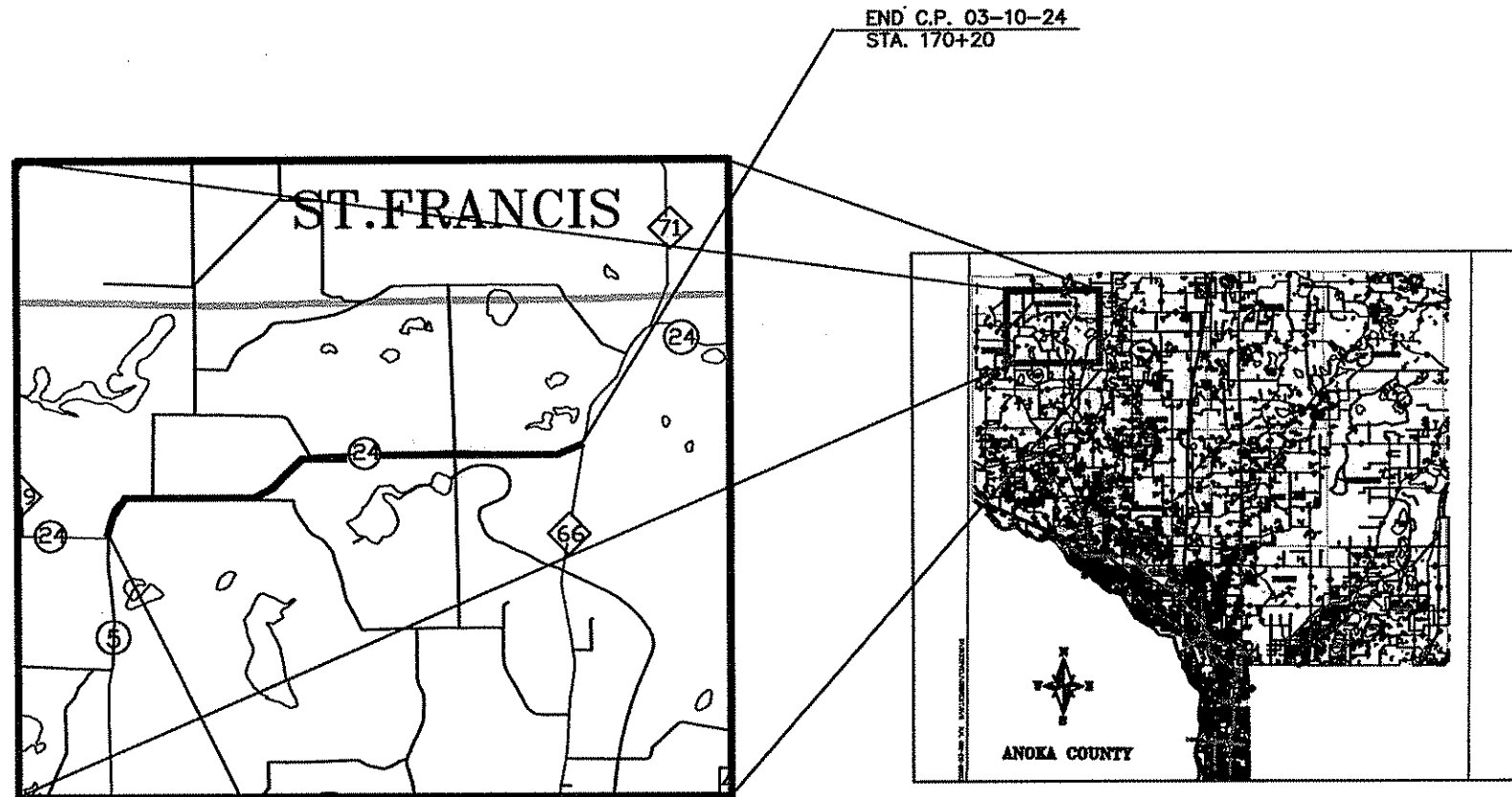
## ANOKA COUNTY

### CONSTRUCTION PLAN FOR BITUMINOUS RECLAMATION, BIT. SURFACING & AGG. SHOULDERING

LOCATED ON C.S.A.H. 24 FROM C.S.A.H 5 TO CR 66

COUNTY PROJECT NO. 03-10-24  
C.S.A.H. 24

GROSS LENGTH	15960.00 FEET	3.022 MILES
BRIDGES-LENGTH	0.00 FEET	0.000 MILES
EXCEPTIONS-LENGTH	0.00 FEET	0.000 MILES
NET LENGTH	15960.00 FEET	3.022 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."

**INDEX**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	TABULATIONS
4-5	TYPICALS
6-7	DETAILS
8	PLAN VIEW
9-14	STRIPING PLAN

THIS PLAN CONTAINS 14 SHEETS

**DESIGN DESIGNATION**

ESAL <sub>20</sub>	270,351
R VALUE	20
ADT (2002) =	1876
Proj. ADT (2022) =	2814
Proj. HCADT (2022) =	166
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 4/29/2003   
 ANOKA COUNTY ENGINEER

NO	DATE	BY	CHK	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: MARK DALY  
 SIGNATURE:   
 DATE: 4/23/2003 LICENSE NO. 21763

DRAWN BY J.F. DATE 4/1/03  
 DESIGN BY G.A. DATE 4/1/03  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-10-24


**TITLE SHEET**

Sheet 1 of 14 Sheets

A. STATEMENT OF ESTIMATED QUANTITIES					
TAB	ITEM NO.	ITEM	NOTE NO.	UNIT	QTY.
	2021.501	MOBILIZATION		LUMP SUM	1.0
K	2104.503	REMOVE CONCRETE DRIVEWAY PAVEMENT	1	SQ YD	27.0
M	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)		LIN FT	24.0
	2123.503	MOTOR GRADER	2	HOUR	30.0
	2123.503	11 CU. YD. SCRAPER, SELF LOADING	3	HOUR	4.0
	2123.521	PNEUMATIC-TIRED ROLLER	2	HOUR	30.0
	2130.501	WATER	4	M-GAL	210.0
P	2211.501	AGGREGATE BASE CLASS-5	5,7	TON	490.0
O	2221.501	AGGREGATE SHOULDERING CLASS-7B	5	TON	1565.0
J	2232.501	MILL BITUMINOUS SURFACE ( 1 1/2" )		SQ YD	94.0
D	2331.604	BITUMINOUS PAVEMENT RECLAMATION		SQ YD	55860.0
E	2350.609	TYPE LV 3 WEARING COURSE MIXTURE	6	TON	4240.0
F	2350.609	TYPE LV 4 WEARING COURSE MIXTURE ST. APPR. & ENT.	6	TON	145.0
G	2350.609	TYPE LV 3 NON- WEARING COURSE MIXTURE	6	TON	5530.0
H	2350.609	TYPE LV 3 NON- WEARING COURSE MIXTURE ST. APPR. & ENT.	6	TON	185.0
I	2357.502	BITUMINOUS MATERIAL FOR TACK COAT		GALLON	2280.0
L	2531.507	6" CONCRETE DRIVEWAY PAVEMENT		SQ YD	27.0
N	2540.602	INSTALL MAILBOX SUPPORT		EACH	38.0
	2563.601	TRAFFIC CONTROL		LUMP SUM	1.0
	2563.604	CONSTRUCTION SIGN SPECIAL ( DIAMOND GRADE )	8	SQ FT	112.0
R	2564.603	4" SOLID LINE WHITE-EPOXY		LIN FT	31639.0
R	2564.603	4" SOLID LINE YELLOW-EPOXY		LIN FT	7719.0
R	2564.603	4" BROKEN LINE YELLOW-EPOXY		LIN FT	2010.0
R	2564.603	4" DOUBLE SOLID LINE YELLOW-EPOXY		LIN FT	5355.0
Q	2580.501	TEMPORARY LANE MARKING		LIN FT	2554.0

C. CONSTRUCTION NOTES	
NOTE NO.	DISCRPTION
1	AS DIRECTED BY THE ENGINEER.
2	FOR FINAL SHAPING AND COMPACTION OF RECLAIMED MATERIAL.
3	FOR RELOCATING RECLAIMED MATERIAL AS DIRECTED BY THE ENGINEER.
4	FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.
5	RECYCLED GLASS WILL NOT BE ALLOWED IN CL-5 & CL-7B.
6	INCLUDES QUANTITY FOR ADDING 1/4" TO THE DESIGN THICKNESS.
7	INCLUDES 200 TON FOR GRADE CORRECTION AS DIRECTED BY THE ENGINEER.
8	2 - 8' X 7' SIGNS, SEE SPECIAL PROVISIONS.

B. BASIS OF ESTIMATED QUANTITIES	
SPEC NO.	RATE
2350	LV 3 WEARING COURSE MIXTURE, ( LVWE35030C ) LV 3 NON WEARING COURSE MIXTURE, (LVNW35030C ) LV 4 WEARING COURSE MIXTURE, STREET APPR.& ENT. ( LVWE35030C ) LV 3 NON WEARING COURSE MIXTURE, STREET APPR.& ENT. ( LVNW35030C ) 110 LBS / SQ YD / INCH
2357	BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL SQ / YD / PER LIFT APPLIED

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: <u>MARK DALY</u> SIGNATURE: <u>[Signature]</u> DATE: <u>4/23/2003</u> LICENSE NO. <u>21763</u>					DRAWN BY: <u>J.F.</u> DATE: <u>4/1/03</u> DESIGN BY: <u>G.A.</u> DATE: <u>4/1/03</u> CHECKED BY: _____ DATE: _____	 <b>ANOKA COUNTY</b> <b>HIGHWAY DEPT.</b>	STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ STATE AID PROJECT NO. _____ COUNTY PROJECT NO. <u>03-10-24</u>	<b>STATEMENT OF ESTIMATED QUANTITIES</b> Sheet <u>2</u> of <u>14</u> Sheets	
NO	DATE	BY	CKD	APPR	REVISION				

D. RECLAIM BITUMINOUS SURFACING				
MAINLINE STA.	STA.	L'	W'	SQ. YDS.
1060	17020	15960	31.5	55860.0
TOTAL SQ YDS.				55860.0

E. TYPE LV3 WEARING CORSE MAIN LINE 1.75" (110LBS/IN/SY)				
MAINLINE STA.	STA.	L'	W'	SQ. YDS.
1060 C/L	17020	15960.0	24.0	42560.0
1060 LT.	1522	462.0	12.0	616.0
1060 RT.	1256	196.0	12.0	261.3
1256 RT.	1522	266.0	8.0	236.4
1.5' KICK OUTS AGG. DR. LOC				
HSE. # 21860	LT.	38	1.5	6.3
HSE. # 7840	RT.	39	1.5	6.5
HSE. # 7726	RT.	58	1.5	9.7
HSE. # 7633	LT.	66	1.5	11.0
HSE. # 7540	RT.	40	1.5	6.7
HSE. # 7540	RT.	45	1.5	7.5
HSE. # 7555	LT.	36	1.5	6.0
HSE. # 7447	LT.	38	1.5	6.3
HSE. # 7417	LT.	47	1.5	7.8
HSE. # 7343	LT.	35	1.5	5.8
HSE. # 7323	LT.	33	1.5	5.5
HSE. # 7293	LT.	35	1.5	5.8
HSE. # 7166	LT.	30	1.5	5.0
HSE. # 7005	LT.	40	1.5	6.7
HSE. # 6807	LT.	50	1.5	8.3
HSE. # 6747	LT.	40	1.5	6.7
HSE. # 6560	RT.	51	1.5	8.5
HSE. # 6437	LT.	50	1.5	8.3
HSE. # 6437	LT.	57	1.5	9.5
HSE. # 6427	LT.	36	1.5	6.0
HSE. # 6380	RT.	43	1.5	7.2
HSE. # 6275	LT.	34	1.5	5.7
HSE. # 6225	LT.	52	1.5	8.7
HSE. # 6213	LT.	41	1.5	6.8
HSE. # 6151	LT.	44	1.5	7.3
HSE. # 6101	LT.	48	1.5	8.0
HSE. # 6038	RT.	46	1.5	7.7
HSE. # 6063	LT.	48	1.5	8.0
HSE. # 6010	RT.	40	1.5	6.7
HSE. # 5833	LT.	36	1.5	6.0
HSE. # 5970	RT.	33	1.5	5.5
1.5' KICK OUTS FIELD ENT.				
20 @ AVG. W. 36"	LT./RT.	720	1.5	120.0
SQ. YDS.				44015.3
TONS				4236.0

F. TYPE LV4 WEARING COURSE ENT./ST. APPR. 1.75" (110LBS/IN/SY)				
ADDR./STA.	LOC	L'	W'	SQ. YDS.
GARNETT ST.	LT.	53	30	176.7
C.R. 66	RT.	56	30	186.7
ST. APPR. (AGG)				
ZEOLITE ST.	LT.	60	30	200.0
PINNAKER RD.	RT.	54	30	180.0
HILLSIDE TRAIL	LT.	44	30	146.7
XEON ST.	LT.	58	30	193.3
XEON ST.	RT.	56	30	186.7
BITUMINOUS ENT.				
HSE. # 7735	LT.	16	10	17.8
HSE. # 7675	LT.	18	10	20.0
HSE. # 7410	RT.	24	10	26.7
HSE. # 7010	RT.	27	10	30.0
HSE. # 6935	LT.	32	10	35.6
HSE. # 6820	RT.	20	10	22.2
HSE. # 6701	LT.	67	10	74.4
SQ. YDS.				1496.7
TONS				144.0

G. TYPE LV3 NON WEARING CORSE MAIN LINE 2.25" (110LBS/IN/SY)				
MAINLINE STA.	STA.	L'	W'	SQ. YDS.
1060 C/L	17020	15960.0	25.0	44333.3
1.5' KICK OUTS AGG. DR. LOC				
HSE. # 21860	LT.	38	1.5	6.3
HSE. # 7840	RT.	39	1.5	6.5
HSE. # 7726	RT.	58	1.5	9.7
HSE. # 7633	LT.	66	1.5	11.0
HSE. # 7540	RT.	40	1.5	6.7
HSE. # 7540	RT.	45	1.5	7.5
HSE. # 7555	LT.	36	1.5	6.0
HSE. # 7447	LT.	38	1.5	6.3
HSE. # 7417	LT.	47	1.5	7.8
HSE. # 7343	LT.	35	1.5	5.8
HSE. # 7323	LT.	33	1.5	5.5
HSE. # 7293	LT.	35	1.5	5.8
HSE. # 7166	LT.	30	1.5	5.0
HSE. # 7005	LT.	40	1.5	6.7
HSE. # 6807	LT.	50	1.5	8.3
HSE. # 6747	LT.	40	1.5	6.7
HSE. # 6560	RT.	51	1.5	8.5
HSE. # 6437	LT.	50	1.5	8.3
HSE. # 6437	LT.	57	1.5	9.5
HSE. # 6427	LT.	36	1.5	6.0
HSE. # 6380	RT.	43	1.5	7.2
HSE. # 6275	LT.	34	1.5	5.7
HSE. # 6225	LT.	52	1.5	8.7
HSE. # 6213	LT.	41	1.5	6.8
HSE. # 6151	LT.	44	1.5	7.3
HSE. # 6101	LT.	48	1.5	8.0
HSE. # 6038	RT.	46	1.5	7.7
HSE. # 6063	LT.	48	1.5	8.0
HSE. # 6010	RT.	40	1.5	6.7
HSE. # 5833	LT.	36	1.5	6.0
HSE. # 5970	RT.	33	1.5	5.5
1.5' KICK OUTS FIELD ENT.				
20 @ AVG. W. 36"	LT./RT.	720	1.5	120.0
SQ. YDS.				44674.8
TONS				5529.0

H. TYPE LV3 NON WEARING COURSE ENT./ST. APPR. 2.25" (110LBS/IN/SY)				
ADDR./STA.	LOC	L'	W'	SQ. YDS.
GARNETT ST.	LT.	53	30	176.7
C.R. 66	RT.	56	30	186.7
ST. APPR. (AGG)				
ZEOLITE ST.	LT.	60	30	200.0
PINNAKER RD.	RT.	54	30	180.0
HILLSIDE TRAIL	LT.	44	30	146.7
XEON ST.	LT.	58	30	193.3
XEON ST.	RT.	56	30	186.7
BITUMINOUS ENT.				
HSE. # 7735	LT.	16	10	17.8
HSE. # 7675	LT.	18	10	20.0
HSE. # 7410	RT.	24	10	26.7
HSE. # 7010	RT.	27	10	30.0
HSE. # 6935	LT.	32	10	35.6
HSE. # 6820	RT.	20	10	22.2
HSE. # 6701	LT.	67	10	74.4
SQ. YDS.				1496.7
TONS				185.0

I. BITUMINOUS MATERIAL FOR TACK 0.05 GAL/SQ YD			
	SQ YDS	GAL / SQ YD	GALLONS
MV3 WEAR MAIN LINE	44015.0	0.05	2200.8
MV3 WEAR ST. APPR.	1497.0	0.05	74.9
GALLONS			2275.6

J. MILL BITUMINOUS SURFACE ( BUTT JOINTS )				
STA./ADDR.	LOC	LENGTH	WIDTH	SQ. YDS.
10+60	LT.	12	4.0	5.3
10+60	RT.	12	4.0	5.3
STREET APPR.				
GARNETT ST.	LT.	53	4.0	23.6
C.R. 66	RT.	56	4.0	24.9
BIT. DRIVES				
HSE. # 7735	LT.	16	1.5	2.7
HSE. # 7675	LT.	18	1.5	3.0
HSE. # 7410	RT.	24	1.5	4.0
HSE. # 7010	RT.	27	1.5	4.5
HSE. # 6935	LT.	32	1.5	5.3
HSE. # 6820	RT.	20	1.5	3.3
HSE. # 6701	LT.	67	1.5	11.2
SQ. YDS.				93.1

K. REMOVE CONCRETE DRIVEWAY PAVEMENT				
	LOC	L'	W'	SQ. YDS.
HSE. # 7555	LT.	24	10	26.7
SQ. YDS.				26.7

L. 6" CONCRETE DRIVEWAY PAVEMENT				
	LOC	L'	W'	SQ. YDS.
HSE. # 7555	LT.	24	10	26.7
SQ. YDS.				26.7

M. SAWING CONCRETE PAVEMENT FULL DEPTH			
	LOC	L'	LIN. FT.
HSE. # 7555	LT.	24	24.0
LIN. FT.			24.0

N. MAIL BOX SUPPORTS			
1)	HSE. # 21860	20)	HSE. # 6935
2)	HSE. # 7840	21)	HSE. # 6820
3)	HSE. # 7726	22)	HSE. # 6807
4)	HSE. # 7735	23)	HSE. # 6747
5)	HSE. # 7675	24)	HSE. # 6701
6)	HSE. # 7633	25)	HSE. # 6560
7)	HSE. # 7555	26)	HSE. # 6437
8)	HSE. # 7540	27)	HSE. # 6427
9)	HSE. # 7533	28)	HSE. # 6380
10)	HSE. # 7447	29)	HSE. # 6275
11)	HSE. # 7417	30)	HSE. # 6225
12)	HSE. # 7410	31)	HSE. # 6213
13)	HSE. # 7343	32)	HSE. # 6151
14)	HSE. # 7323	33)	HSE. # 6101
15)	HSE. # 7293	34)	HSE. # 6038
16)	HSE. # 7166	35)	HSE. # 6063
17)	HSE. # 7005	36)	HSE. # 6010
18)	HSE. # 7001	37)	HSE. # 5833
19)	HSE. # 7010	38)	HSE. # 5970

O. AGGR. SHLD CL-7B/C 2.0' SHLD. 3.5" DEPTH = CU.YDS.(CV)/STATION						
STA.	STA.	LOC.	L-IN STA.	DEPTH	CU. YDS./STA.	CU. YDS. (CV)
1060	1522	LT.	4.6	1.5	0.58	2.7
1060	1522	RT.	4.6	1.5	0.58	2.7
1522	17020	LT.	155.0	3.5	2.78	430.8
1522	17020	RT.	155.0	3.5	2.78	430.8
CU. YDS. (CV) =						867.0
TONS =						1560.7

P. AGGREGATE BASE CLASS 5			
ST. APPR.	ADDR.	LOC.	TON
	ZEOLITE ST.	LT.	7
	PINNAKER RD.	RT.	7
	HILLSIDE TRAIL	LT.	7
	XEON ST.	LT.	7
	XEON ST.	RT.	7
AGG. DR.			
	HSE. # 21860	LT.	5
	HSE. # 7840	RT.	6
	HSE. # 7726	RT.	5
	HSE. # 7633	LT.	5
	HSE. # 7540	RT.	5
	HSE. # 7540	RT.	5
	HSE. # 7555	LT.	5
	HSE. # 7447	LT.	5
	HSE. # 7417	LT.	5
	HSE. # 7343	LT.	5
	HSE. # 7323	LT.	5
	HSE. # 7293	LT.	5
	HSE. # 7166	LT.	5
	HSE. # 7005	LT.	5
	HSE. # 6807	LT.	5
	HSE. # 6747	LT.	5
	HSE. # 6560	RT.	5
	HSE. # 6437	LT.	5
	HSE. # 6437	LT.	5
	HSE. # 6427	LT.	5
	HSE. # 6380	RT.	5
	HSE. # 6275	LT.	5
	HSE. # 6225	LT.	5
	HSE. # 6213	LT.	5
	HSE. # 6151	LT.	5
	HSE. # 6101	LT.	5
	HSE. # 6038	RT.	5
	HSE. # 6063	LT.	5
	HSE. # 6010	RT.	5
	HSE. # 5833	LT.	5
	HSE. # 5970	RT.	5
FIELD ENT.			
	(20 @ 5 TON EACH)	LT./RT.	100
TONS =			290.0

Q. TEMPORARY LANE MARKING 4' SKIPS AT 50' INTERVALS						
STA.	STA.	LOC.	LENGTH	TAPE LENGTH	LIFTS	LIN. FT.
1060	17020	C/L	15960	1277.0	2	2554.0
LIN. FT. =						2554.0

R. PERMANENT STRIPING	
DISCRPTION	LIN. FT.
4" SOLID LINE WHITE-EPOXY	31639
4" SOLID LINE YELLOW-EPOXY	7719
4" BROKEN LINE YELLOW-EPOXY	2010
4" DOUBLE SOLID LINE YELLOW-EPOXY	5355

NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\LIB\DWG\template\Plan-Tab Sheet.dwg 03/25/2003 07:43:37 AM CST

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

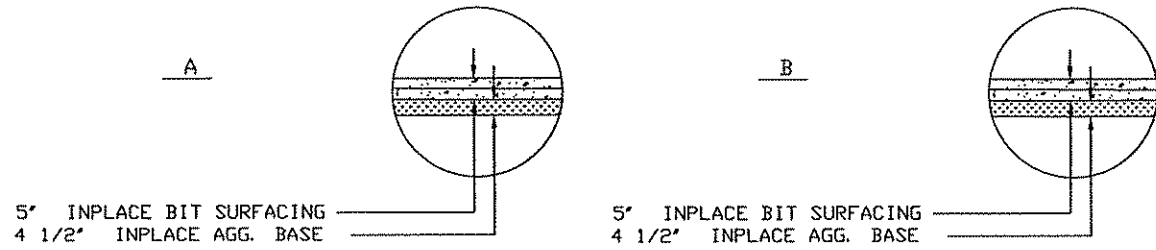
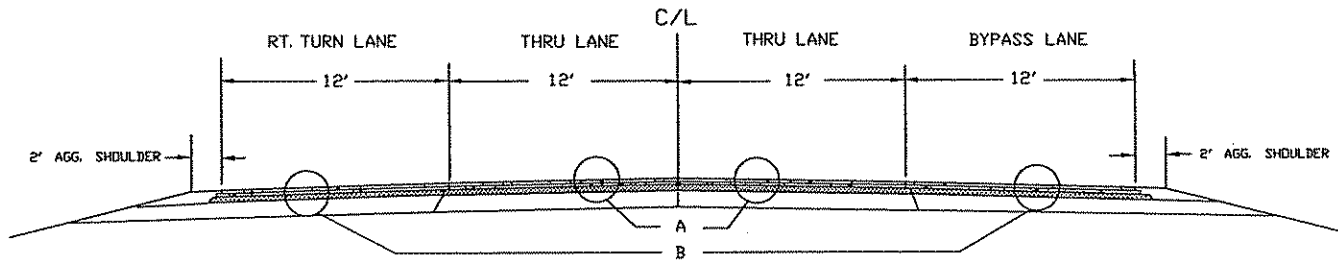
PRINT NAME: MARK DALY  
 SIGNATURE: *Mark Daly*  
 DATE: 4/23/2003 LICENSE NO. 21763

DRAWN BY: J.F. DATE 4/1/03  
 DESIGN BY: G.A. DATE 4/1/03  
 CHECKED BY: DATE



ANOKA COUNTY  
HIGHWAY DEPT.

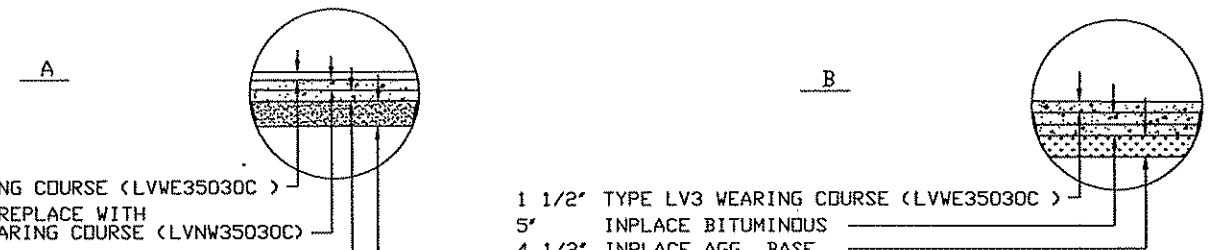
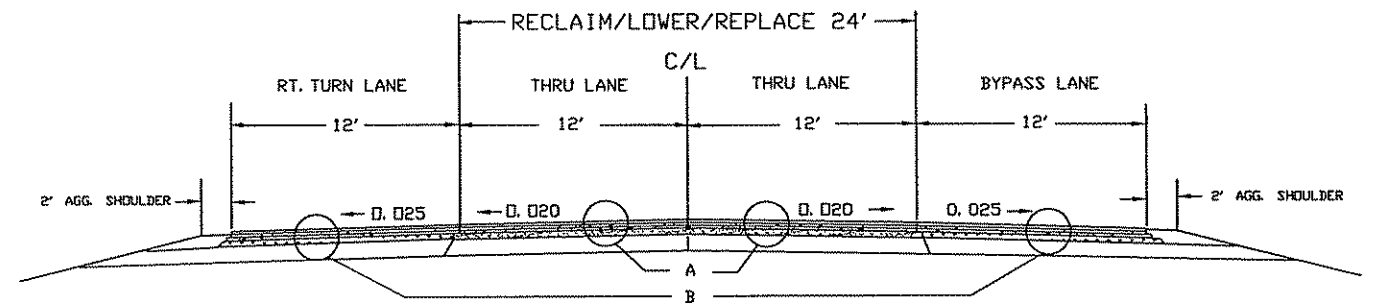
EXISTING ROADWAY  
STA. 10+60 - 12+56



5" INPLACE BIT SURFACING  
4 1/2" INPLACE AGG. BASE

5" INPLACE BIT SURFACING  
4 1/2" INPLACE AGG. BASE

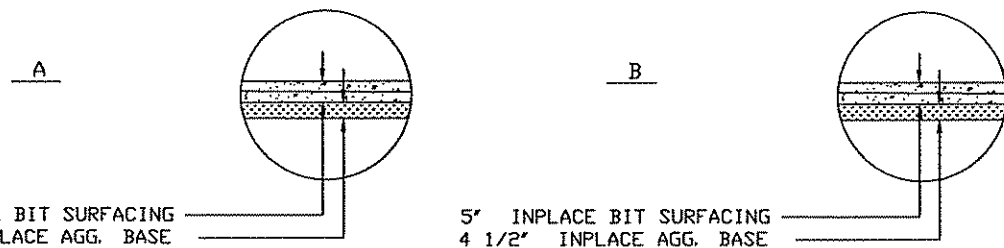
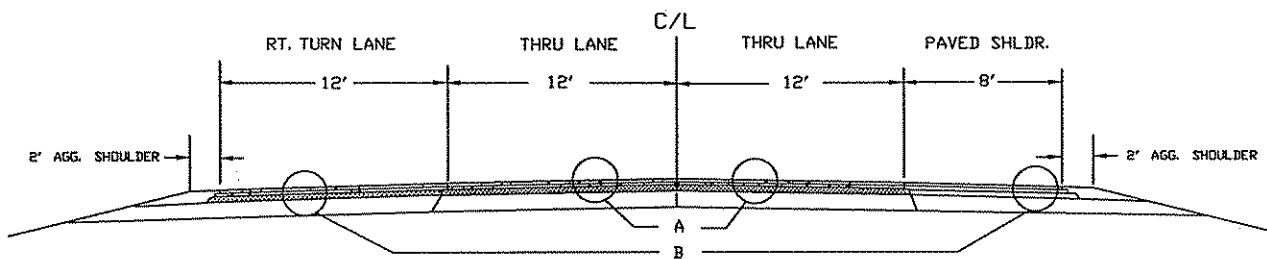
PROPOSED CONSTRUCTION  
STA. 10+60 - 12+56



1 1/2" TYPE LV3 WEARING COURSE (LVWE35030C )  
2" RECLAIM/LOWER/REPLACE WITH  
TYPE LV3 NONWEARING COURSE (LVNW35030C)  
3" RECLAIMED INPLACE BITUMINOUS  
4 1/2" RECLAIMED INPLACE CL-5

1 1/2" TYPE LV3 WEARING COURSE (LVWE35030C )  
5" INPLACE BITUMINOUS  
4 1/2" INPLACE AGG. BASE

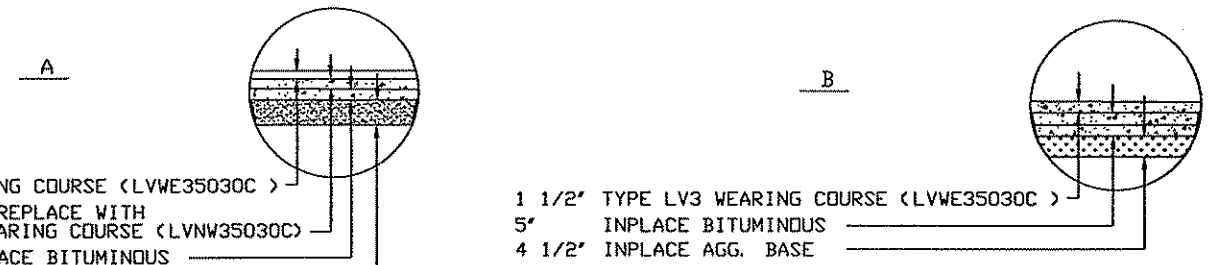
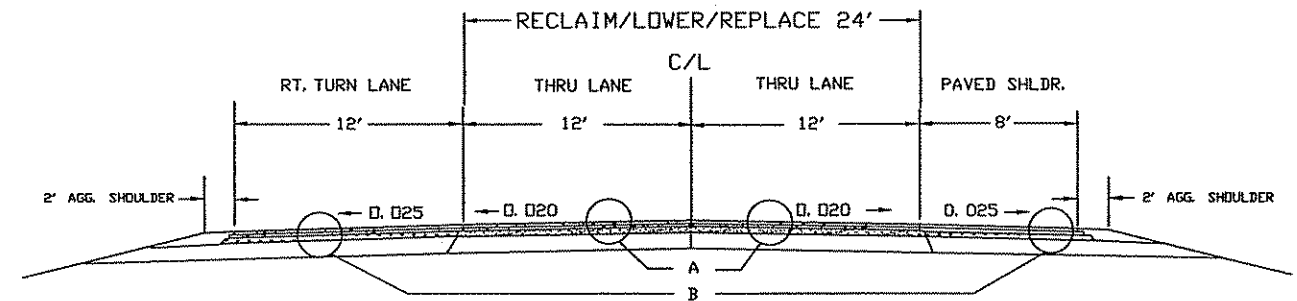
EXISTING ROADWAY  
STA. 12+56 - 15+22



5" INPLACE BIT SURFACING  
4 1/2" INPLACE AGG. BASE

5" INPLACE BIT SURFACING  
4 1/2" INPLACE AGG. BASE

PROPOSED CONSTRUCTION  
STA. 12+56 - 15+22



1 1/2" TYPE LV3 WEARING COURSE (LVWE35030C )  
2" RECLAIM/LOWER/REPLACE WITH  
TYPE LV3 NONWEARING COURSE (LVNW35030C)  
3" RECLAIMED INPLACE BITUMINOUS  
4 1/2" RECLAIMED INPLACE CL-5

1 1/2" TYPE LV3 WEARING COURSE (LVWE35030C )  
5" INPLACE BITUMINOUS  
4 1/2" INPLACE AGG. BASE

NO	DATE	BY	CHKD	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: MARK DALY  
SIGNATURE: *Mark Daly*  
DATE: 4/23/2003 LICENSE NO. 21783

DRAWN BY: J.E. DATE: 4/1/03  
DESIGN BY: S.A. DATE: 4/1/03  
CHECKED BY: DATE:



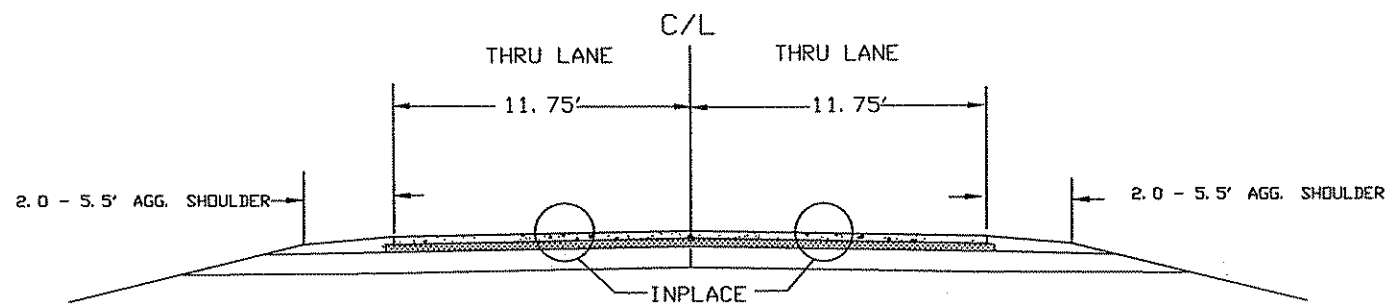
ANOKA COUNTY  
HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
STATE AID PROJECT NO. \_\_\_\_\_  
STATE AID PROJECT NO. \_\_\_\_\_  
COUNTY PROJECT NO. 03-10-24

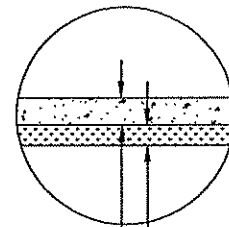
TYPICAL SECTION

Sheet 4 of 14 Sheets

EXISTING ROADWAY  
STA. 15+22 - 170+20

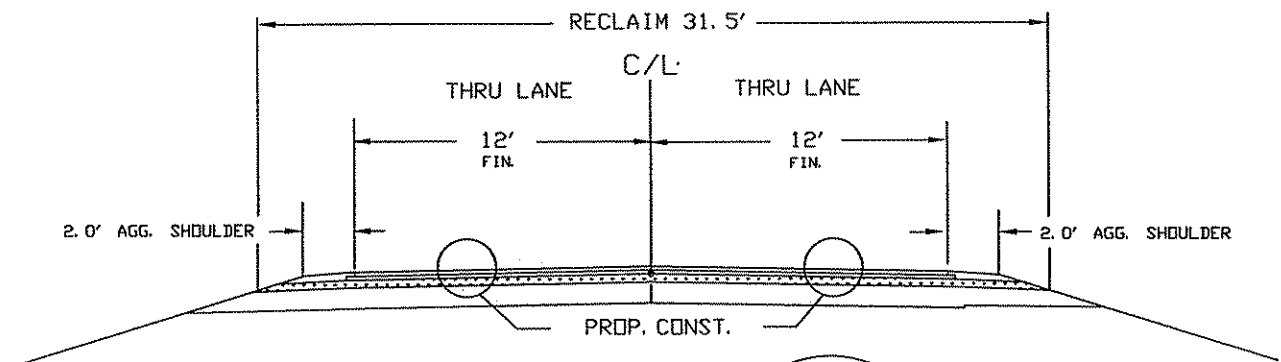


INPLACE

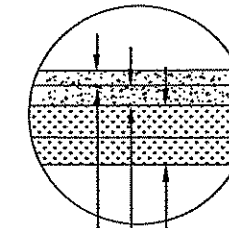


- 5' INPLACE BIT SURFACING
- 4' INPLACE AGG. BASE

PROPOSED CONSTRUCTION  
STA. 15+22 - 170+20



PROP. CONST.



- 1 1/2" TYPE LV3 WEARING COURSE (LVWE35030C)
- 2" TYPE LV 3 NON WEARING COURSE (LVNW35030C)
- 9" RECLAIMED BITUMINOUS / CL-5

NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: *[Signature]*  
 DATE: 4/23/2002 LICENSE NO. 21783

DRAWN BY: J.F. DATE: 4/1/03  
 DESIGN BY: S.A. DATE: 4/1/03  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

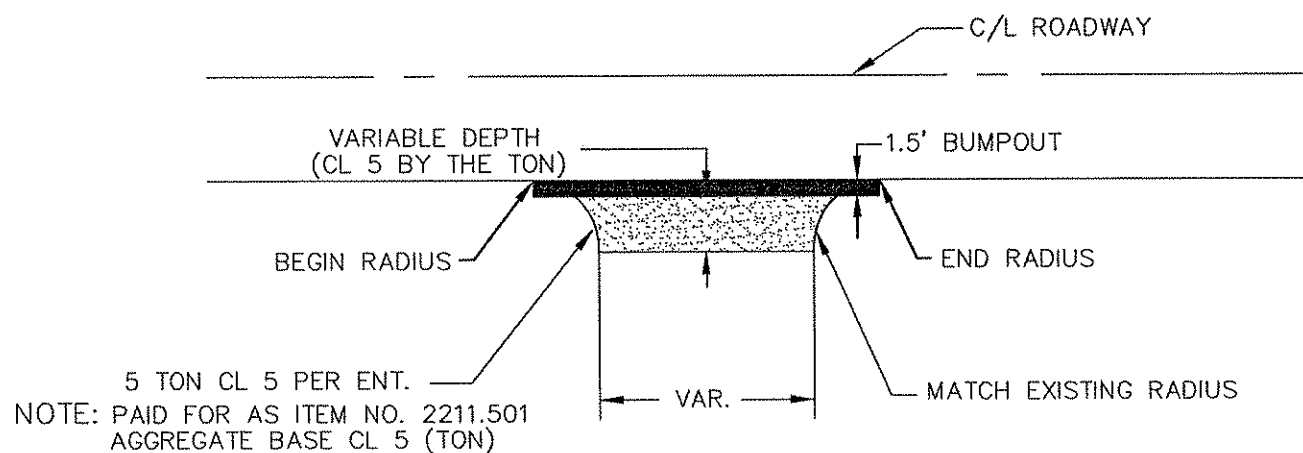


ANOKA COUNTY  
HIGHWAY DEPT.

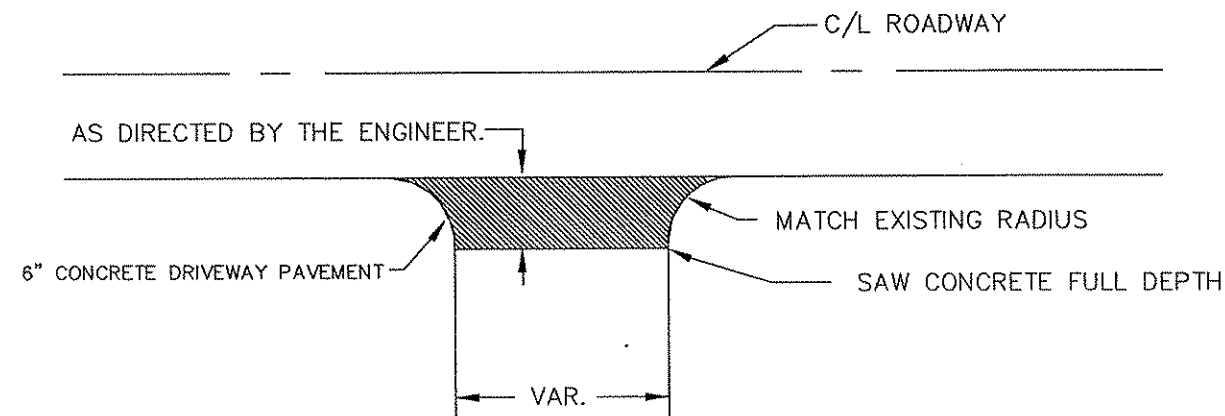
STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-10-24

TYPICAL SECTION  
 Sheet 5 of 14 Sheets

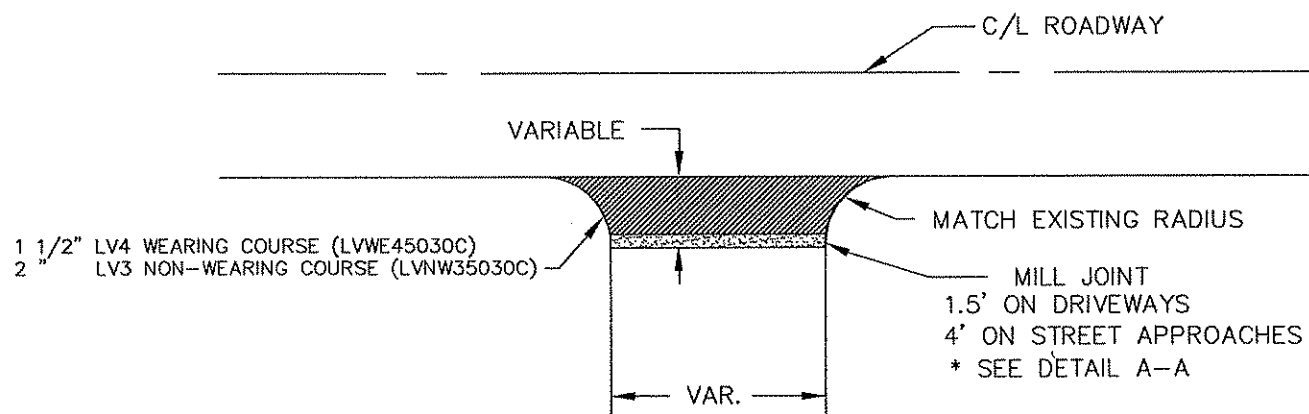
FIELD AND UNPAVED ENTRANCES



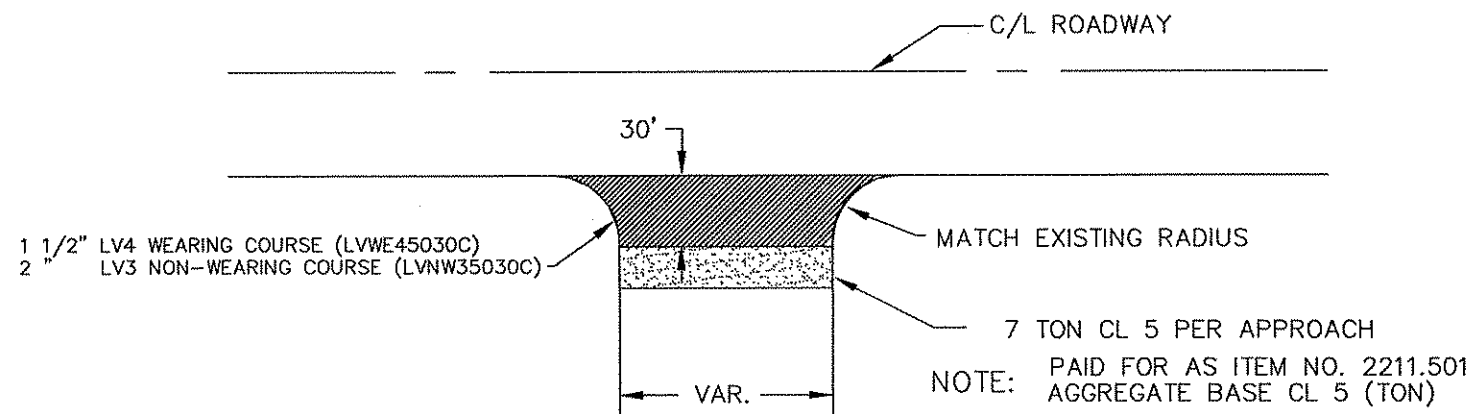
CONCRETE DRIVEWAYS



PAVED DRIVEWAYS/PAVED STREET APPROACHES



UNPAVED STREET APPROACHES



NO	DATE	BY	CHKD	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: MARK DALY

SIGNATURE: *Mark Daly*

DATE: 4/23/2003 LICENSE NO. 21763

DRAWN BY: J.F. DATE: 4/1/03

DESIGN BY: G.A. DATE: 4/1/03

CHECKED BY: DATE:



ANOKA COUNTY  
HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_

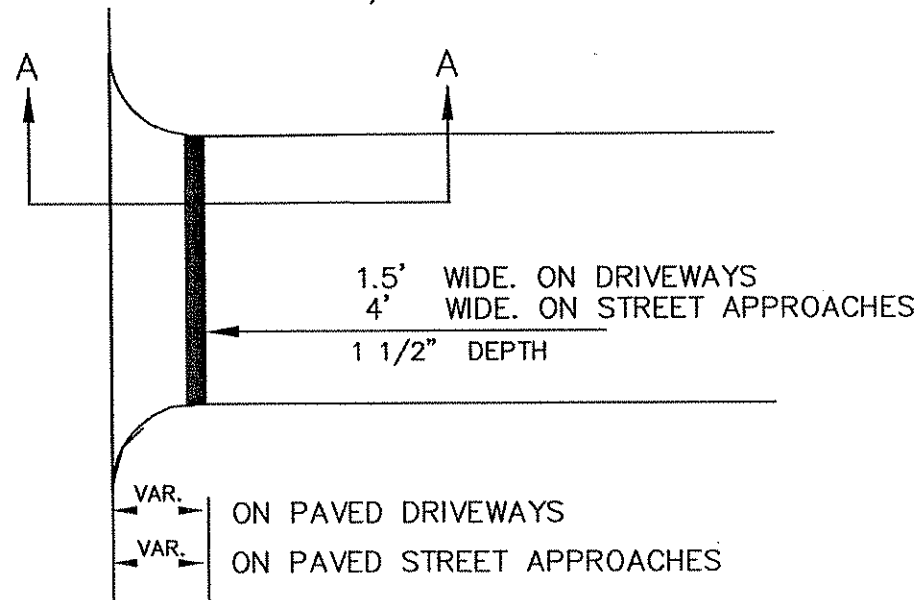
STATE AID PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

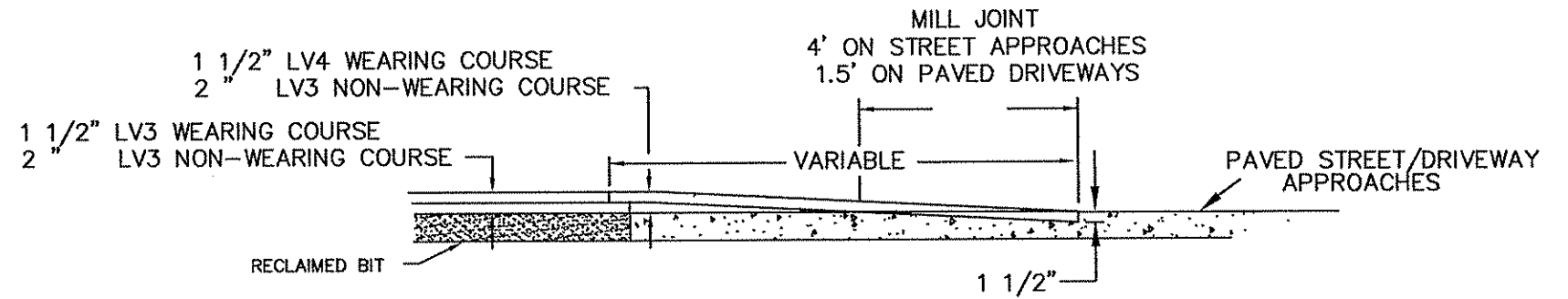
COUNTY PROJECT NO. 03-10-24

DETAILS

JOINT DETAILS  
DRIVEWAYS/STREET APPROACHES

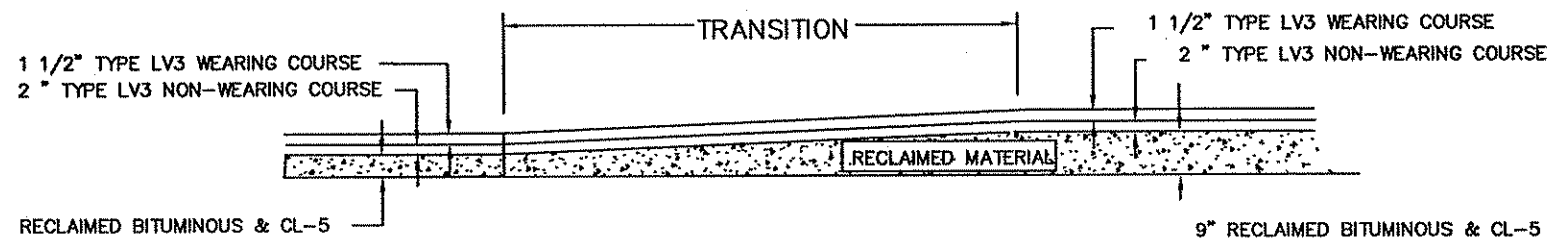


JOINT DETAILS  
DRIVEWAYS/STREET APPROACHES



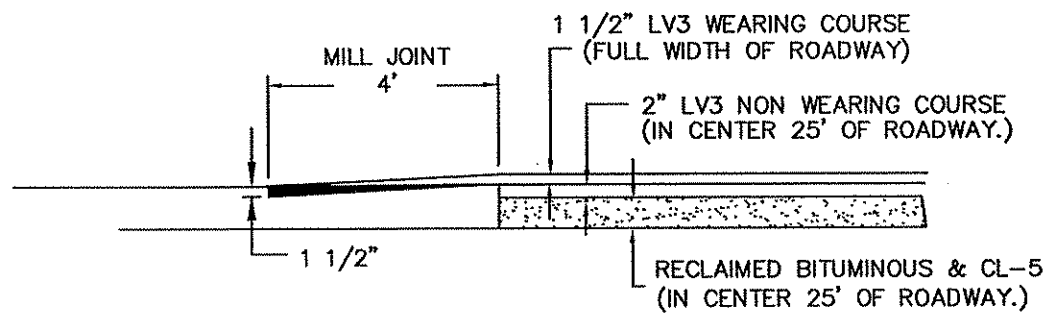
TRANSITION DETAIL  
STA. 15+22

TRANSITION LENGTH TO BE DETERMIND BY ENGINEER.



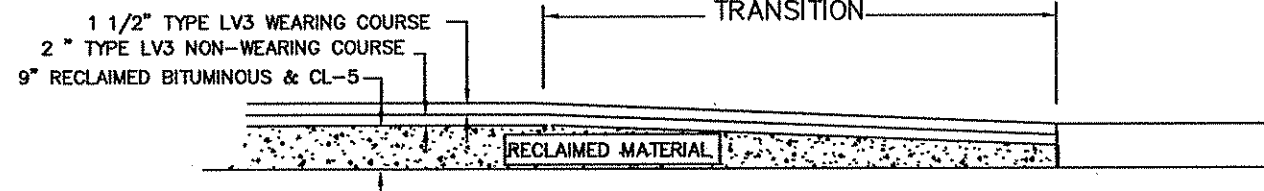
\* NOTE- TRANSITION TO BE PAID AS EQUIP. HRS FOR MOTOR GRADER & ROLLER TO MOVE AND COMPACT RECLAIMED MATERIAL FOR JOINT.

TRANSITION DETAIL  
STA. 10+60



TRANSITION DETAIL  
STA. 170+20

TRANSITION LENGTH TO BE DETERMIND BY ENGINEER.



\* NOTE- TRANSITION TO BE PAID AS EQUIP. HRS FOR MOTOR GRADER & ROLLER TO MOVE AND COMPACT RECLAIMED MATERIAL FOR JOINT.

NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/23/03 LICENSE NO. 21763

DRAWN BY: J.F. DATE: 4/1/03  
 DESIGN BY: G.A. DATE: 4/1/03  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

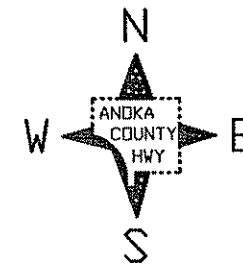
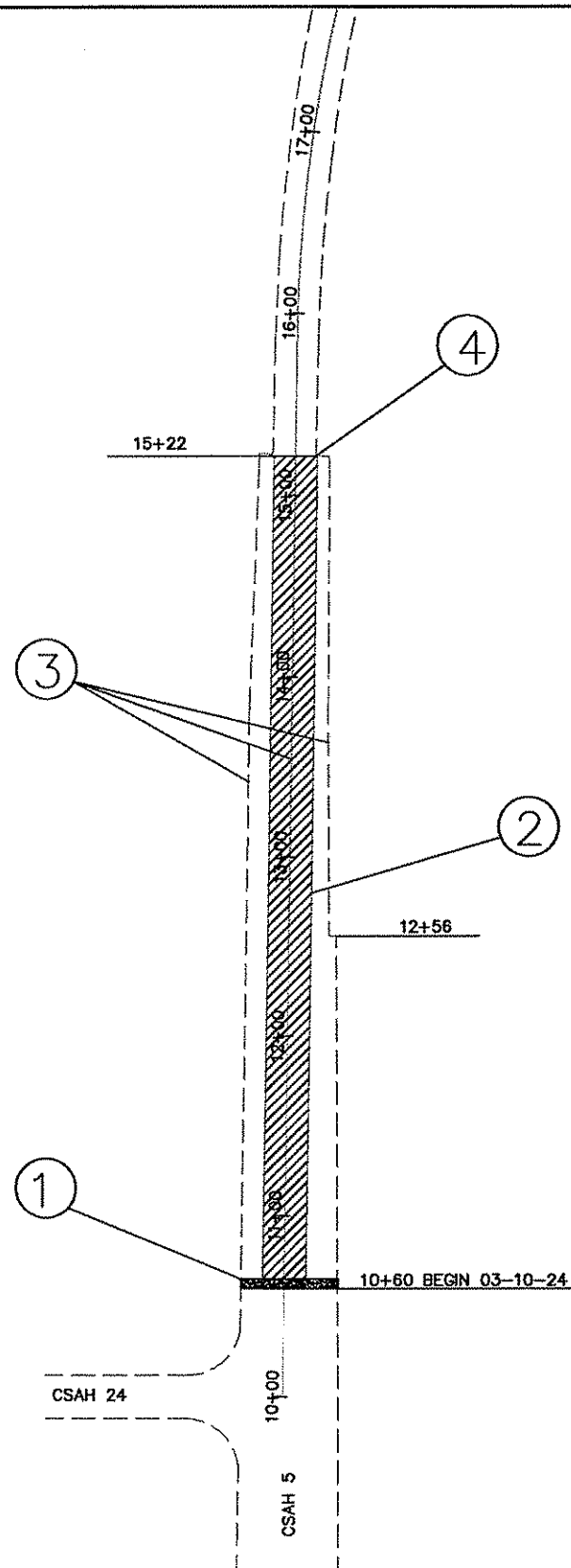


ANOKA COUNTY  
HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-10-24

DETAILS  
 Sheet 7 of 14 Sheets





1)	BEGIN PROJECT C.P. 03-10-24 STA. 10+60 , MILL JOINT SEE DETAILS.
2)	HATCHED AREA FROM STA. 10+60 - 15+22 TO BE RECLAIMED FULL DEPTH 9" , LOWERED TO 2" BELOW EXISTING TURN / BYPASS LANE PAVEMENT AND REPAVED LV 3 NON-WEARING COURSE (LVNW35030C) 462' X 24' X 2"
	11 CU YD SCRAPER / MOTOR GRADER / PNEUMATIC-TIRED ROLLER PAID FOR BY THE HOUR FOR LOWERING / COMPACTING RECLAIMED MATERIAL.
3)	STA. 10+60 - 15+22 TO BE OVERLAYED 1 1/2" LV 3 WEARING COURSE TO EXISTING PAVEMENT WIDTHS ONCE CENTER HAS BEEN RECLAIMED, LOWERED, & REPAVED.
4)	STA. 15+22 , RECLAIMED MATERIAL TO BE LOWERED AND TRANSITIONED TO THE NORTH, ALLOWING THE 3 1/2" OVERLAY- OVER RECLAIMED MATERIAL NORTH OF STA. 15+22 TO MATCH LOWER OVERLAYED BIT SOUTH OF STA 15+22. (DISTANCE OF TRANSITION TO BE DETERMEND IN THE FIELD BY ENGINEER)
	11 CU YD SCRAPER / MOTOR GRADER / PNEUMATIC-TIRED ROLLER PAID FOR BY THE HOUR FOR LOWERING / COMPACTING RECLAIMED MATERIAL.

NO	DATE	BY	CHKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 PRINT NAME: **MARK DALY**  
 SIGNATURE: *[Signature]*  
 DATE: **7/23/2003** LICENSE NO. **21763**

DRAWN BY: **J.F.** DATE: **4/1/03**  
 DESIGN BY: **G.A.** DATE: **4/1/03**  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

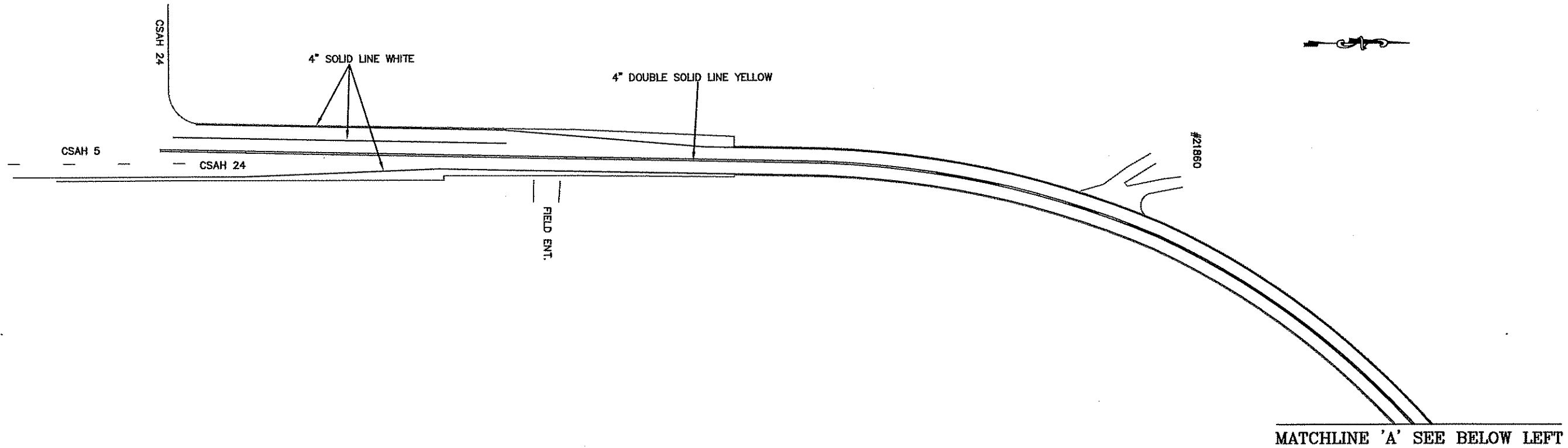


**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. **03-10-24**

**PLAN VIEW**  
 Sheet **8** of **14** Sheets





MATCHLINE 'A' SEE ABOVE RIGHT

MATCHLINE 'B' SEE SHEET 10 of 14

5355' 4" DOUBLE SOLID LINE YELLOW - EPOXY  
 7719' 4" SOLID LINE YELLOW - EPOXY  
 31639' 4" SOLID LINE WHITE - EPOXY  
 2010 ~~10020~~ 4" BROKEN LINE YELLOW - EPOXY

C.S.A.H. 24 NORRIS LAKE ROAD  
 FROM C.S.A.H. 5 TO C.R. 66

NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: *MR DALY*  
 DATE: 4/23/03 LICENSE NO. 21763

DRAWN BY: ST DATE 04/22/03  
 DESIGN BY: DATE  
 CHECKED BY: DATE



ANOKA COUNTY  
 HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-10-24

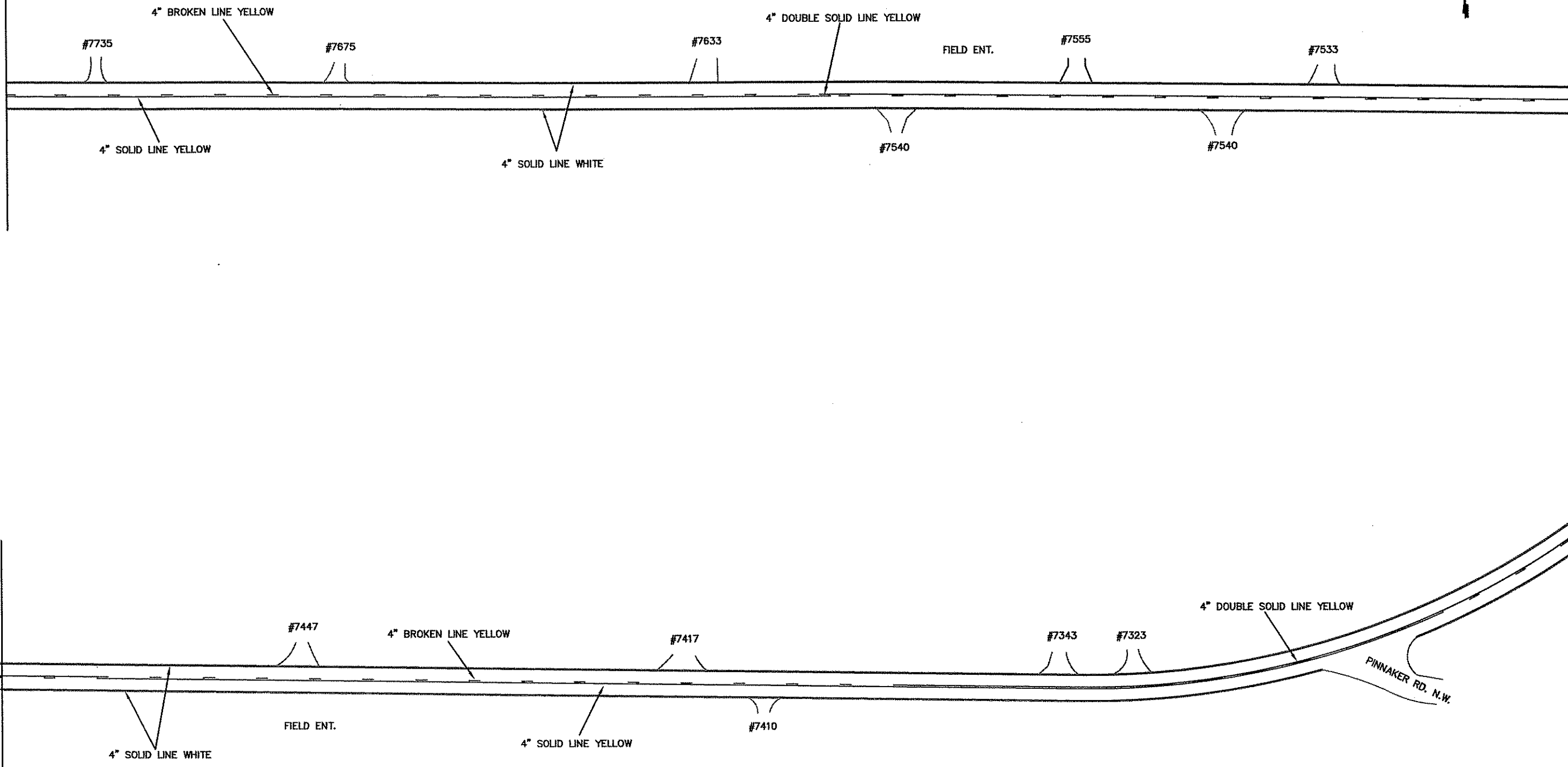
PERMANENT STRIPING  
 Sheet 9 of 14 Sheets

MATCHLINE 'B' SEE SHEET 9 of 14

MATCHLINE 'C' SEE ABOVE RIGHT

MATCHLINE 'C' SEE BELOW LEFT

MATCHLINE 'D' SEE SHEET 11 of 14



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: MARY DICK

SIGNATURE: [Signature]

DATE: 4/23/03 LICENSE NO. 21763

DRAWN BY: ST DATE: 04/22/03

DESIGN BY: \_\_\_\_\_ DATE: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

COUNTY PROJECT NO. 03-10-24

**PERMANENT STRIPING**

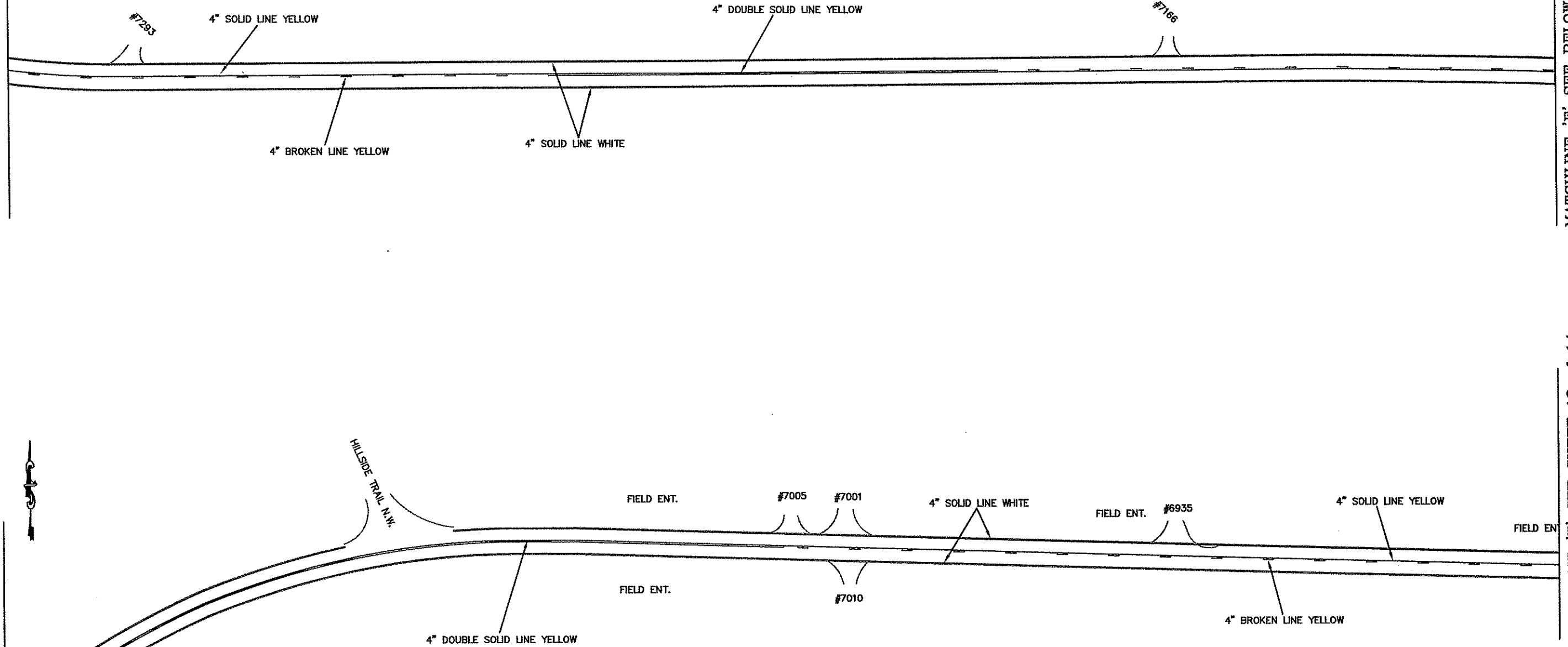
Sheet 10 of 14 Sheets

MATCHLINE 'D' SEE SHEET 10 of 14

MATCHLINE 'E' SEE ABOVE RIGHT

MATCHLINE 'E' SEE BELOW LEFT

MATCHLINE 'F' SEE SHEET 12 of 14



NO	DATE	BY	CHKD	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: MARK DANN

SIGNATURE: *Mark Dann*

DATE: 4/23/03 LICENSE NO. 21763

DRAWN BY: ST DATE 04/22/03

DESIGN BY: \_\_\_\_\_ DATE \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ DATE \_\_\_\_\_



**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

COUNTY PROJECT NO. 03-10-24

**PERMANENT STRIPING**

Sheet 11 of 14 Sheets

MATCHLINE 'F' SEE SHEET 11 of 14

MATCHLINE 'G' SEE BELOW LEFT

GARNETT ST. N.W.

#6807

#6747

#6701

4" SOLID LINE WHITE

#6820

FIELD ENT.

4" BROKEN LINE YELLOW

MATCHLINE 'G' SEE ABOVE RIGHT

MATCHLINE 'H' SEE SHEET 13 of 14

4" SOLID LINE WHITE

#6437

4" BROKEN LINE YELLOW

#6437

#6427

FIELD ENT.

4" BROKEN LINE YELLOW

#6560

4" SOLID LINE YELLOW

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: MARY DMO

SIGNATURE: [Signature]

DATE: 4/23/2003 LICENSE NO. 21763

DRAWN BY: ST DATE 04/22/03

DESIGN BY: \_\_\_\_\_ DATE \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ DATE \_\_\_\_\_



ANOKA COUNTY  
HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

COUNTY PROJECT NO. 03-10-24

PERMANENT STRIPING

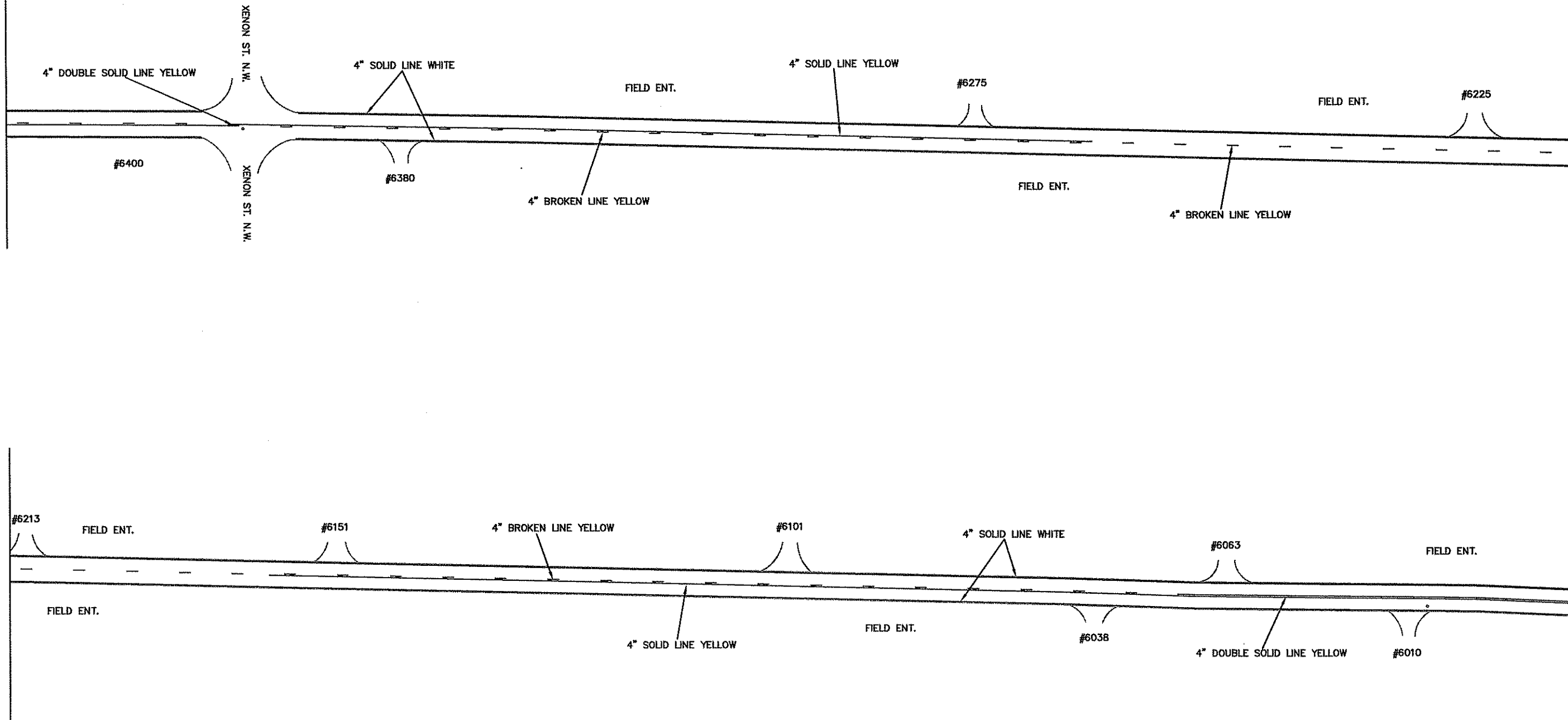
Sheet 12 of 14 Sheets

MATCHLINE 'H' SEE SHEET 12 of 14

MATCHLINE 'J' SEE BELOW LEFT

MATCHLINE 'J' SEE ABOVE RIGHT

MATCHLINE 'K' SEE SHEET 14 of 14



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: MARY DAD

SIGNATURE: *MAD*

DATE: 1/23/2003 LICENSE NO. 21763

DRAWN BY: ST DATE 04/22/03

DESIGN BY: \_\_\_\_\_ DATE \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ DATE \_\_\_\_\_



**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

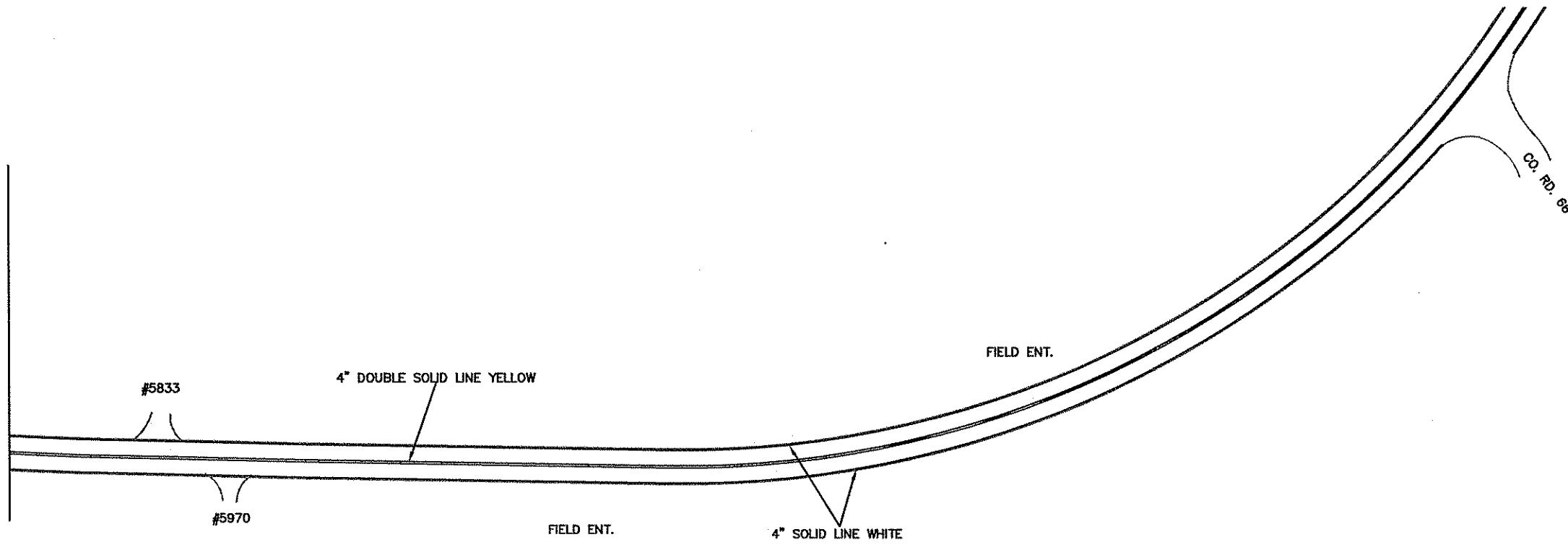
STATE AID PROJECT NO. \_\_\_\_\_

COUNTY PROJECT NO. 03-10-24

**PERMANENT STRIPING**

Sheet 13 of 14 Sheets

MATCHLINE 'K' SEE SHEET 13 of 14



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: MARK DALY  
 SIGNATURE: *[Signature]*  
 DATE: 4/23/2003 LICENSE NO. 21763

DRAWN BY: ST DATE: 04/22/03  
 DESIGN BY: DATE: \_\_\_\_\_  
 CHECKED BY: DATE: \_\_\_\_\_



ANOKA COUNTY  
 HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-10-24

PERMANENT STRIPING  
 Sheet 14 of 14 Sheets