

PLAN SYMBOLS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPERTY LINE
- CORPORATE OR CITY LIMITS
- RAILROAD
- RAILROAD RIGHT-OF-WAY
- RIVER OF CREEK
- CULVERT
- GUARDRAIL
- WOOD FENCE
- BARBED WIRE FENCE
- WOVEN WIRE FENCE
- CHAIN LINK FENCE
- TIMBER WALL
- STONE WALL
- HEDGE
- RAILROAD CROSSING SIGN
- CROSSING GATE
- MEANDER CORNER
- SLOPE EASEMENT (CONST. LIMITS)
- MARSH
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH OR SHRUB
- WOODS
- CATCH BASIN
- BRIDGE
- IRON PIPE OR ROD MONUMENT (STONE, CONCRETE OR METAL)
- WOODEN HUB

UTILITY SYMBOLS

- UTILITY POLE
- GUY OR ANCHOR
- STREET LIGHT
- TELEPHONE PEDESTAL
- GAS MAIN
- WATER MAIN
- TELEPHONE VAULT
- ELECTRIC VAULT
- TELEPHONE CABLE
- ELECTRIC CABLE
- STORM SEWER
- SANITARY SEWER
- SEWER MANHOLE
- GATE VALVE
- CONTROLLER CABINET
- EXISTING HYDRANT
- CABLE TELEVISION-BURIED
- FIBER OPTIC CABLE
- TRAFFIC SIGNAL LINE
- TRAFFIC SIGNAL HAND HOLE

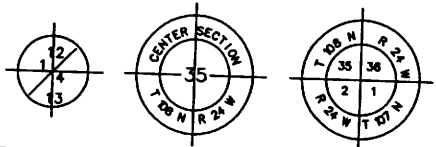
FOR PLANS AND UTILITIES SYMBOLS SEE MN/DOT TECHNICAL MANUAL.

-GOVERNING SPECIFICATIONS-

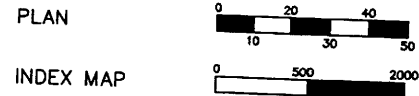
THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, SEE [HTTP://WWW.DOT.STATE.MN.US/TRAFFICENG/](http://www.dot.state.mn.us/trafficeng/)

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.



SCALES IN FEET



GROSS LENGTH	2587.50 FEET	0.490 MILES
BRIDGE LENGTH	----	----
EXCEPTIONS	----	----
NET LENGTH	2587.50 FEET	0.490 MILES



RAMSEY COUNTY
DEPARTMENT OF PUBLIC WORKS

PLAN FOR THE BITUMINOUS MILL & OVERLAY OF
BUFFALO STREET

BETWEEN: TH61 and PORTLAND AVENUE
COUNTY PROJECT P5001

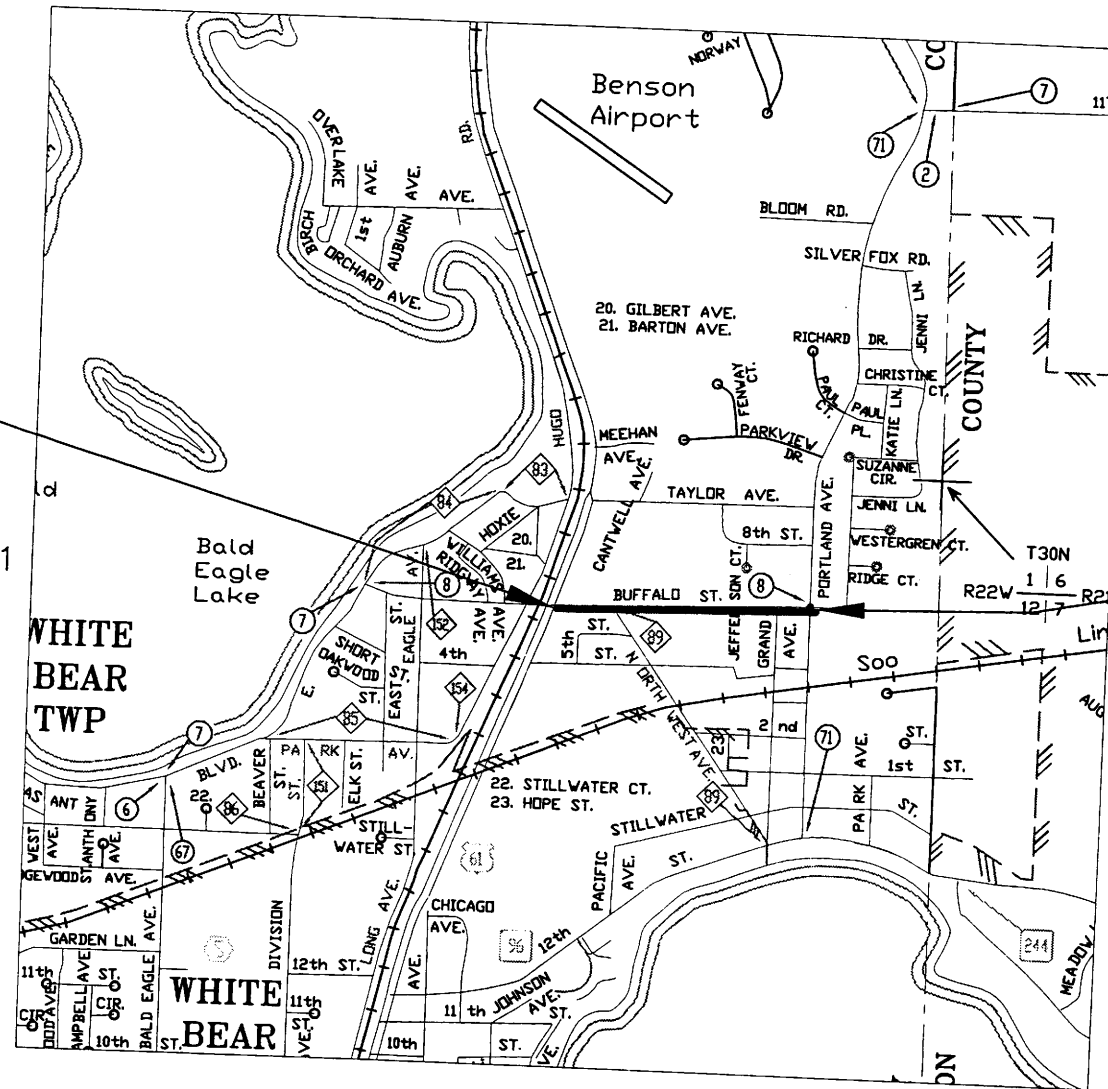
INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4-5	ROADWAY PLAN SHEETS
6-7	STRIPING PLAN

THIS PLAN CONTAINS 7 SHEETS

PROJECT START
BUFFALO STREET
STA. 0+84.80
COUNTY PROJECT P5001

PROJECT END
BUFFALO STREET
STA. 26+72.30
COUNTY PROJECT P5001



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.

JERRY AUGER REG. NO. _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____
RAMSEY COUNTY ENGINEER

APPROVED _____ DATE _____
CITY OF WHITE BEAR LAKE ENGINEER

DRAWN BY MICHAEL DIEGEL DATE 5-28-2013

CHECKED BY _____ DATE _____

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

MINNESOTA DEPARTMENT OF TRANSPORTATION

DISTRICT STATE AID ENGINEER REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY DATE _____

APPROVED _____ DATE _____
APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER

DESIGN DESIGNATION

BUFFALO STREET at TH61 TO PORTLAND AVENUE

PRESENT ADT (2013)	4550
PROJECTED ADT (2033)	5460
FUNCTIONAL CLASS	A MINOR ARTERIAL
TRAFFIC LANES	2
PARKING LANES	0

BASED ON STOPPING DISTANCE
HEIGHT OF EYE: 3.50 FEET
HEIGHT OF OBJECT: 2.00 FEET

Statement of Estimated Quantities

Bituminous Mill and Overlay 2014
County Project P-5001

Item Number	Item	Unit	Quantity BUFFALO ST. P-5001
2021.501	Mobilization	LS	0.2
2104.501	Remove Curb & Gutter	LF	30
2104.511	Saw Concrete Curb & Walk Full Depth	LF	20
2104.513	Saw Bituminous Pavement Full Depth	LF	0
2104.603	Remove & Replace Bit Pavement (Fulldepth)ADA	LF	0
2105.503	Remove Concrete Walk	SF	0
2123.610	Street Sweeper	HOUR	20
2232.501	Mill Bituminous Surface (2")	SY	0
2232.501	Mill Bituminous Surface (4")	SY	0
2331.604	Bituminous Pavement Reclamation	SY	7,629.
2357.502	Bituminous Material for Tack Coat	GAL	381
2360.501	Type SPWEB340B Wearing Course Mixture	TON	0
2360.501	Type SPWEB340C Wearing Course Mixture	TON	1,755
2360.501	Type SPWEB340E Wearing Course Mixture	TON	0
2360.501	Type SPWEB340F Wearing Course Mixture	TON	0
2360.501	Type SPWEB440F Wearing Course Mixture	TON	0
2360.505	Bituminous Mixture for Patching	TON	100
2504.602	Adjust Valve Box	EACH	7
2506.522	Adjust Frame Ring & Casting	EACH	9
2506.602	Construct Survey Control Structure	EACH	0
2521.501	6" Concrete Walk (ADA)	SF	0.00
2531.501	Concrete Curb & Gutter Design B612 (ADA)	LF	30
2531.501	Concrete Curb & Gutter Design B618 (ADA)	LF	0
2531.501	Concrete Curb & Gutter Design D424 (ADA)	LF	0
2531.501	Concrete Curb & Gutter Design B624 (ADA)	LF	0
2531.502	Concrete Curb & Gutter Design Special (ADA)	LF	0
2531.502	Concrete Curb Design V (ADA)	LF	0
2531.618	Truncated Domes	SF	0
2535.501	Bituminous Curb	LF	140
2563.601	Traffic Control	LS	0.2
2563.601	Temporary Pedestrian Access Control	LS	0
2565.602	NMC Loop Detector 6' x 6'	EACH	0.0
2565.602	NMC Loop Detector 6' x 6'	LF	448
2565.602	Pedestrian Indication - Countdown	EACH	0
2565.602	Pedestrian Push Botton Station	EACH	0
2565.602	APS System	EACH	0
2573.530	Storm Drain Inlet Protection	EACH	10
2575.602	Site Restoration (ADA)	EACH	0
2582.501	Pavement Message Lt Arrow - Epoxy	EACH	0
2582.501	Pavement Message Rt Arrow - Epoxy	EACH	1
2582.501	Pavement Message Lt/Thru Arrow - Epoxy	EACH	0
2582.501	Pavement Message (RR Xing) - Epoxy	EACH	1
2582.502	4" Solid Line White - Epoxy	LF	76
2582.502	4" Solid Line Yellow - Epoxy	LF	0
2582.502	4" Dashed Line White - Epoxy	LF	0
2582.502	4" Dashed Line Yellow - Epoxy	LF	0
2582.502	4" Double Line Yellow - Epoxy	LF	2,522
2582.502	12" Solid Line White - Epoxy	LF	0
2582.502	24" Solid Line White - Epoxy	LF	48
2582.618	Crosswalk Marking-Epoxy	SF	255

MN/DOT STANDARD PLATES	
7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
8000I	STANDARD BARRICADES
8112F	PEDESTAL FOUNDATION
8122E	PEDESTAL & PEDESTAL BASE

QUANTITY NOTES	
1.	To be used for restoration of curb removal areas.
2.	Common excavation is measured 3 feet from the back of curb at a depth of 6 inches.
3.	Topsoil is measured 3 feet from back of curb at a depth of 6 inches.
4.	Tack coat is estimated at 0.05 gallons / square yard bituminous / lift
5.	Bituminous is estimated at 115 lbs / square yard / inch of bituminous
6.	Bituminous patching mix is SPWEB340C
7.	Rapid stabilization method 3 is estimated at 6,000 gallons / acre

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\BUFFALO ST. - HWY 61 TO PORTLAND AVE\FINAL PLAN\ESTIMATION & TYP. SECTIONS.DWG January 31, 2014 9:28 AM

NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: _____

REG NO: _____ DATE: _____

BUFFALO STREET
TH61 to PORTLAND AVENUE

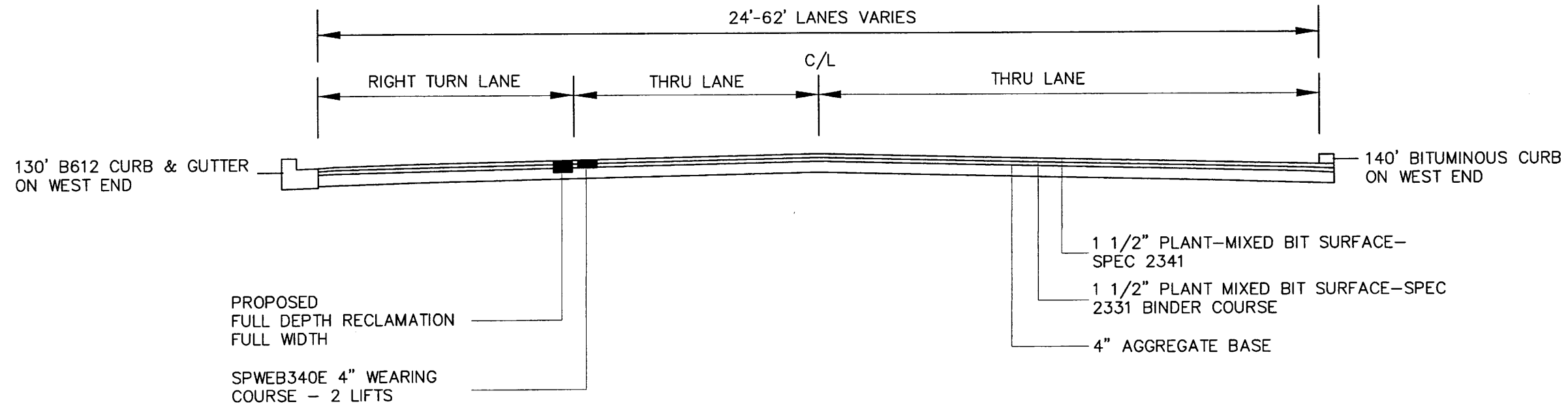
COUNTY PROJ. P-5001



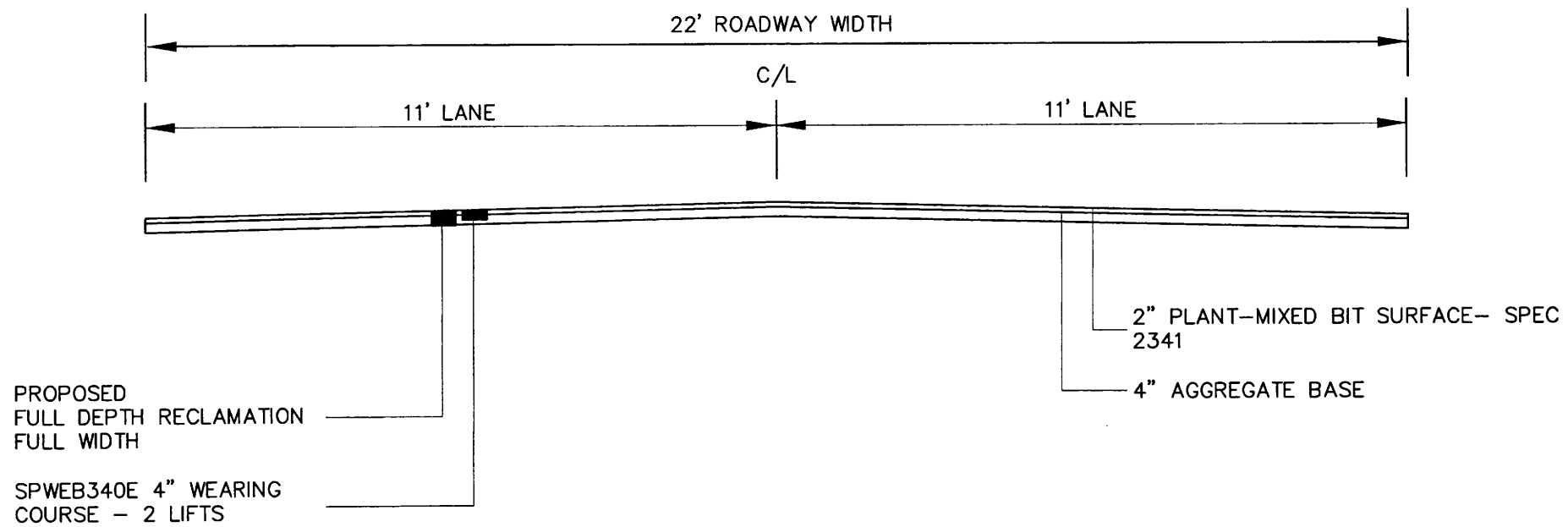
ESTIMATED QUANTITIES
SHEET 2 OF 7 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\BUFFALO ST. - HWY 61 TO PORTLAND AVE\BUFFALO ST. - HWY 61 TO PORTLAND AVE\FINAL PLAN\ESTIMATION & TYP. SECTIONS.DWG January 31, 2014 9:28 AM

TYPICAL SECTION - BUFFALO STREET STA. 00+84 TO STA. 07+00



TYPICAL SECTION - BUFFALO STREET STA. 07+00 TO STA. 26+72



NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: _____

REG NO: _____ DATE: _____

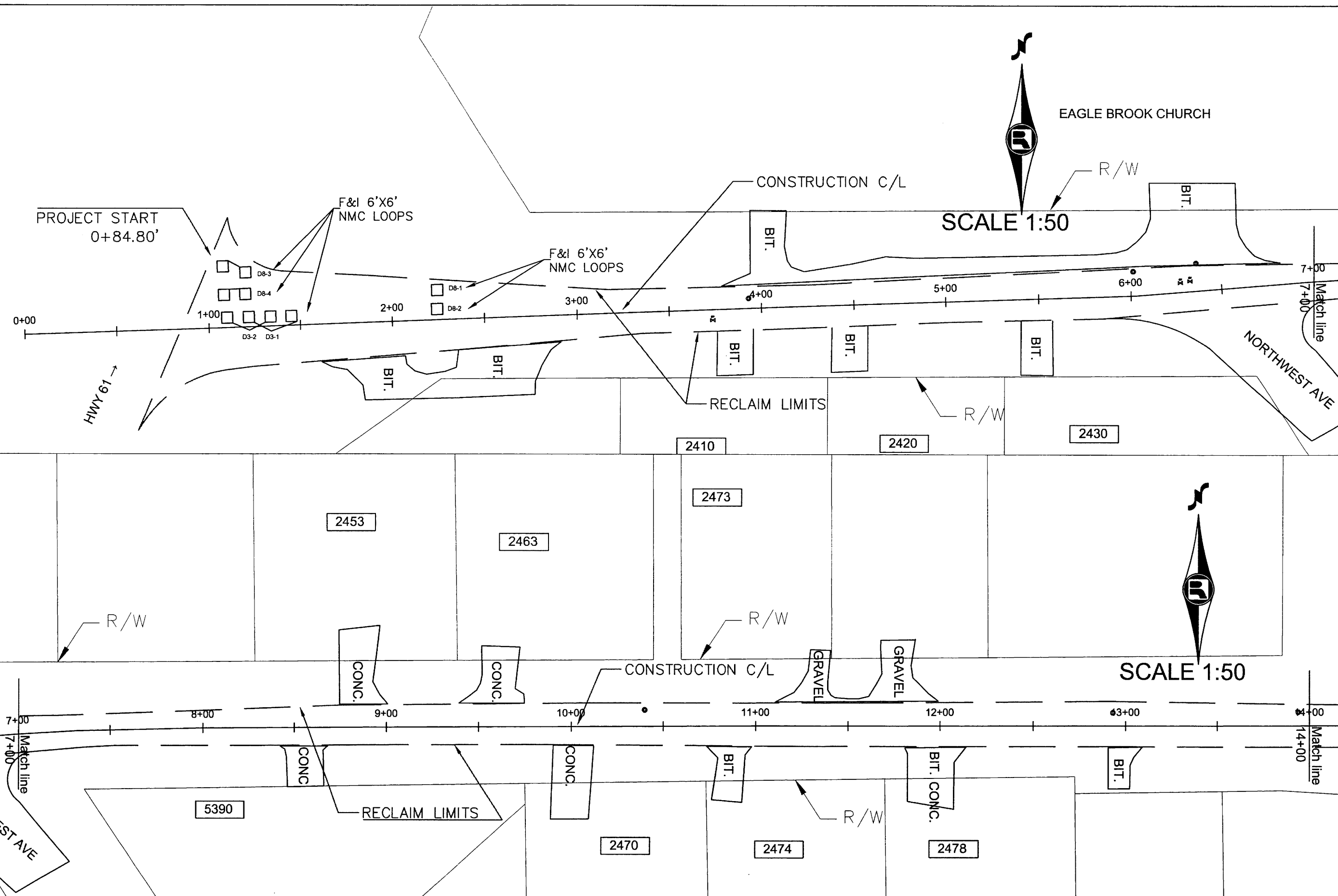
BUFFALO STREET
TH61 to PORTLAND AVENUE

COUNTY PROJ. P5001



TYPICAL SECTION
SHEET 3 OF 7 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\BUFFALO ST. - HWY 61 TO PORTLAND AVE\BUFFALO ST. - HWY 61 TO PORTLAND AVE\FINAL PLAN\14.DWG January 29, 2014 12:16 PM



SCALE 1:50

SCALE 1:50

NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: _____
 REG NO: _____ DATE: _____

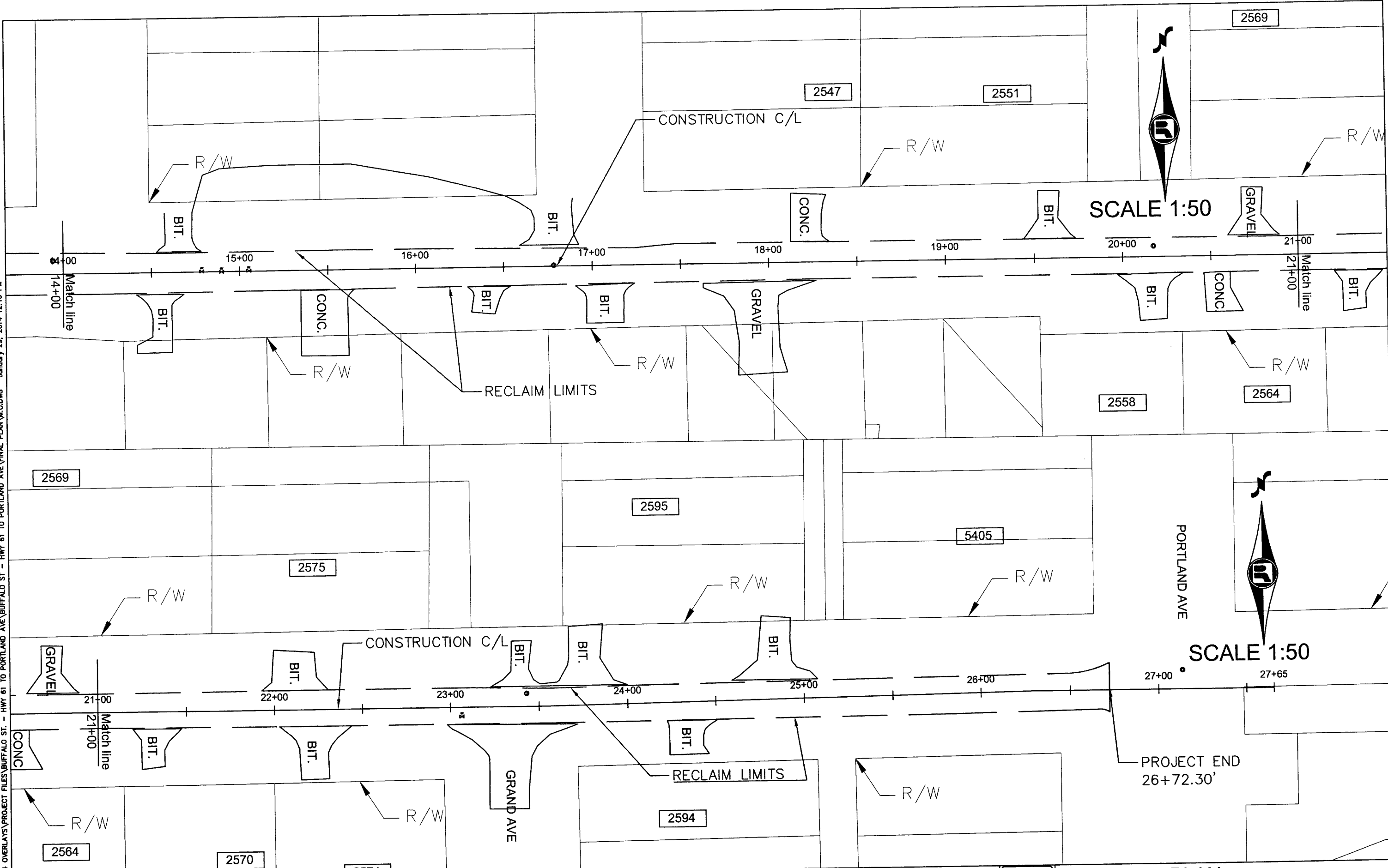
BUFFALO STREET
 TH61 to PORTLAND AVENUE

COUNTY PROJ. P5001



ROADWAY PLAN
SHEET 4 OF 7 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\BUFFALO ST. - HWY 61 TO PORTLAND AVE\FINAL PLAN\M.O.DWG January 29, 2014 12:16 PM



NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: _____
 REG NO: _____ DATE: _____

BUFFALO STREET
 TH61 to PORTLAND AVENUE

COUNTY PROJ. P-5001

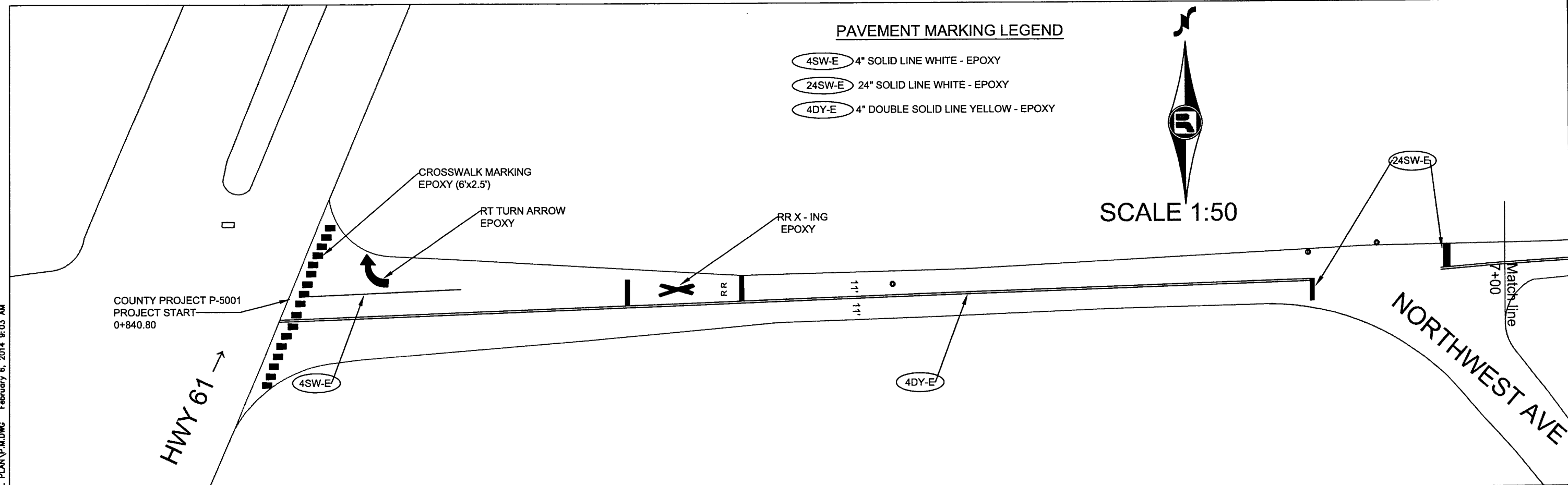


PAVEMENT MARKING LEGEND

- 4SW-E 4" SOLID LINE WHITE - EPOXY
- 24SW-E 24" SOLID LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY



SCALE 1:50



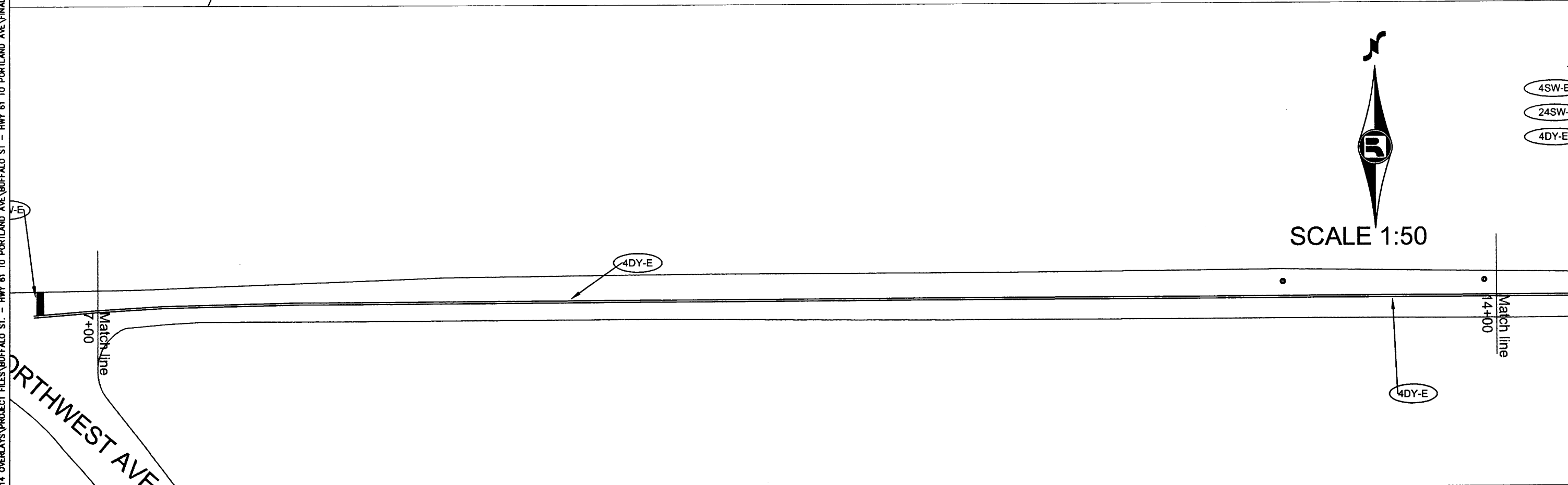
COUNTY PROJECT P-5001
PROJECT START
0+840.80

HWY 61 →

NORTHWEST AVE



SCALE 1:50



- 4SW-E
- 24SW-E
- 4DY-E

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\BUFFALO ST. - HWY 61 TO PORTLAND AVE\FINAL PLAN\PLAN.MDWG February 6, 2014 9:03 AM

NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: _____

REG NO: _____ DATE: _____

BUFFALO STREET
TH61 to PORTLAND AVENUE

COUNTY PROJ. P-5001



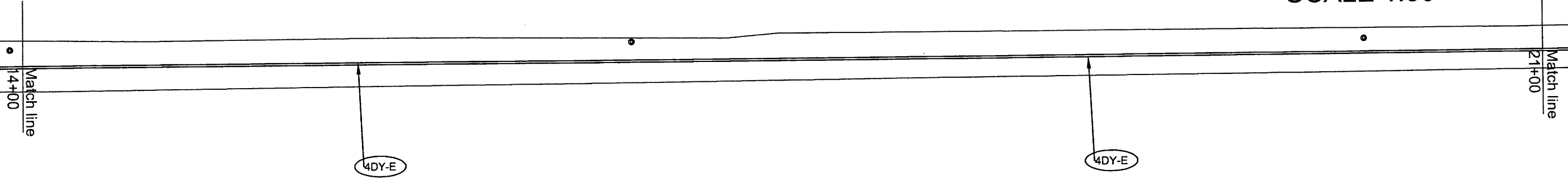
PAVEMENT MARKING PLAN
SHEET 6 OF 7 SHEETS

PAVEMENT MARKING LEGEND

- 4SW-E 4" SOLID LINE WHITE - EPOXY
- 24SW-E 24" SOLID LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY



SCALE 1:50



SCALE 1:50

PORTLAND AVE

COUNTY PROJECT P-5001
PROJECT END
26+72.3

Match line
21+00

GRAND AVE

4DY-E

4DY-E

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\BUFFALO ST. - HWY 61 TO PORTLAND AVE\FINAL PLAN\M.DWG February 6, 2014 9:03 AM

NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: _____

REG NO: _____ DATE: _____

BUFFALO STREET
TH61 to PORTLAND AVENUE

COUNTY PROJ. P-5001



PAVEMENT MARKING PLAN
SHEET 7 OF 7 SHEETS

PLAN SYMBOLS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPERTY LINE
- CORPORATE OR CITY LIMITS
- RAILROAD
- RAILROAD RIGHT-OF-WAY
- RIVER OF CREEK
- CULVERT
- GUARDRAIL
- WOOD FENCE
- BARBED WIRE FENCE
- WOVEN WIRE FENCE
- CHAIN LINK FENCE
- TIMBER WALL
- STONE WALL
- HEDGE
- RAILROAD CROSSING SIGN
- CROSSING GATE
- MEANDER CORNER
- SLOPE EASEMENT (CONST. LIMITS)

- MARSH
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH OR SHRUB
- WOODS
- CATCH BASIN
- BRIDGE
- IRON PIPE OR ROD
- MONUMENT (STONE, CONCRETE OR METAL)
- WOODEN HUB

UTILITY SYMBOLS

- UTILITY POLE
- GUY OR ANCHOR
- STREET LIGHT
- TELEPHONE PEDESTAL
- GAS MAIN
- WATER MAIN
- TELEPHONE VAULT
- ELECTRIC VAULT
- TELEPHONE CABLE
- ELECTRIC CABLE
- STORM SEWER
- SANITARY SEWER
- SEWER MANHOLE
- GATE VALVE
- CONTROLLER CABINET
- EXISTING HYDRANT
- CABLE TELEVISION-BURIED
- FIBER OPTIC CABLE
- TRAFFIC SIGNAL LINE
- TRAFFIC SIGNAL HAND HOLE

FOR PLANS AND UTILITIES SYMBOLS SEE MN/DOT TECHNICAL MANUAL.

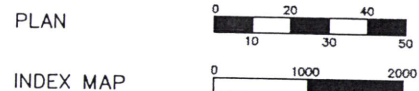
-GOVERNING SPECIFICATIONS-

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, SEE HTTP://WWW.DOT.STATE.MN.US/TRAFFICENG/

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

SCALES IN FEET



GROSS LENGTH 7073.00 FEET 1.34 MILES
 BRIDGE LENGTH -----
 EXCEPTIONS -----
 NET LENGTH 7073.00 FEET 1.34 MILES



RAMSEY COUNTY
 DEPARTMENT OF PUBLIC WORKS

PLAN FOR THE FULL DEPTH RECLAMATION OF

CENTERVILLE ROAD
 S.A.P. No. 062-659-016

BETWEEN: COUNTY ROAD H2 & COUNTY ROAD J
 COUNTY PROJECT P5002

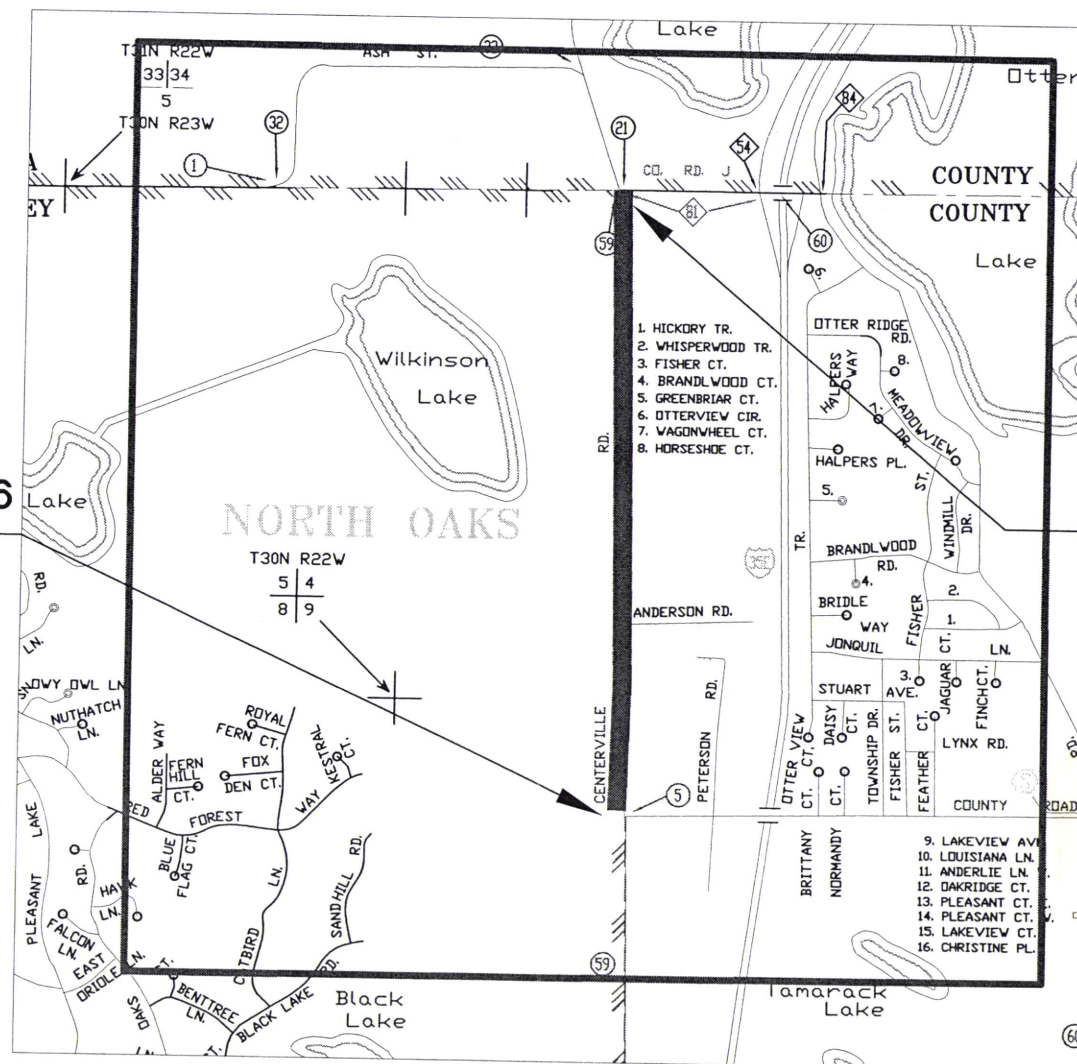
INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4	DETAILS
5-10	PLAN SHEETS
11-16	STRIPING PLAN

THIS PLAN CONTAINS 16 SHEETS

BEGIN S.A.P. 062-659-016
 CENTERVILLE ROAD
 STA. 9+38.00

END S.A.P. 062-659-016
 CENTERVILLE ROAD
 STA. 81+11.00



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.

Nicklaus Fischer
 NICKLAUS FISCHER REG. NO. 50791 DATE 4/30/2014

RECOMMENDED FOR APPROVAL *[Signature]* DATE 5/19/14
 RAMSEY COUNTY ENGINEER

APPROVED *[Signature]* DATE 5/2/2014
 WHITE BEAR TWP.

APPROVED *[Signature]* DATE 4/30/2014
 CITY OF NORTH OAKS

DRAWN BY R. BUSSIERE DATE 4-22-14
 CHECKED BY _____ DATE _____

DESIGN DESIGNATION

COUNTY ROAD H2 TO COUNTY RD J

PRESENT ADT (2014)	5450
PROJECTED ADT (2034)	6540
FUNCTIONAL CLASS	A MINOR EXPANDER
TRAFFIC LANES	2
PARKING LANES	0
SOILS R-VALUE	50

BASED ON STOPPING DISTANCE
 HEIGHT OF EYE: 3.50 FEET
 HEIGHT OF OBJECT: 2.00 FEET

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

MINNESOTA DEPARTMENT OF TRANSPORTATION

Jane Drael
 DISTRICT STATE AID ENGINEER
 REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY
 APPROVED *Jane Drael* DATE 5/19/14
 APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER



STATEMENT OF ESTIMATED QUANTITIES

**FULL DEPTH RECLAMATION
S.A.P. 062-659-016**

Item Number	Item	Notes	Unit	Estimated Quantity 100% S.A.P. 062-659-017
2021.501	MOBILIZATION		L.S.	1
2104.501	REMOVE CURB & GUTTER		L.F.	100
2104.511	SAWCUT CONCRETE - FULL DEPTH		L.F.	100
2105.501	COMMON EXCAVATION (EV)	1	C.Y.	15
2123.610	STREET SWEEPER (WITH PICKUP BROOM)		Hour	20
2331.604	BITUMINOUS PAVEMENT RECLAMATION		S.Y.	31,134
2357.502	BITUMINOUS MATERIAL FOR TACK	3	GAL.	3,114
2360.501	TYPE SPWEB340C WEARING COURSE	4	TON	7,161
2360.505	BITUMINOUS MIXTURE FOR PATCHING	5	TON	100
2506.522	ADJUST FRAME RING & CASTING		EACH	22
2506.602	CONSTRUCT SURVEY CONTROL STRUCTURE		EACH	2
2531.501	CONCRETE CURB & GUTTER DESIGN D424		L.F.	100
2563.601	TRAFFIC CONTROL		L.S.	1
2573.530	STORM DRAIN INLET PROTECTION		EACH	20
2574.525	TOPSOIL BORROW (LV)	2	C.Y.	22
2575.571	RAPID STABILIZATION METHOD 3	6,7	M.GAL.	10
2582.501	PAVEMENT MESSAGE RT. ARROW - EPOXY		EACH	4
2582.502	4" SOLID LINE WHITE - EPOXY		L.F.	13,778
2582.502	12" SOLID LINE WHITE - EPOXY		L.F.	40
2582.502	4" SOLID LINE YELLOW - EPOXY		L.F.	1,775
2582.502	4" BROKEN LINE YELLOW - EPOXY		L.F.	1,262
2582.502	4" DOUBLE LINE YELLOW - EPOXY		L.F.	1,704

1. Common Excavation is measured 3 feet from the back of curb at a depth of 6 inches.
2. Topsoil is measured 3 feet from back of curb at a depth of 4 inches.
3. Tack coat is estimated at 0.05 gallons / square yard bituminous / lift
4. Bituminous is estimated at 115 lbs / square yard / inch of bituminous
5. Bituminous patching mix is SPWEB340C
6. Rapid stabilization method 3 is estimated at 6,000 gallons / acre
7. Only to be used on curb removal areas.

MNDOT STANDARD PLATES	
8000 I	STANDARD BARRICADES

NO.	REV-DATE	BY:	DESCRIPTION
1	xx-xx-xx	xx	

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.
 SIGNED: *William F. ...*
 REG NO: 50791 DATE: 4-30-2014

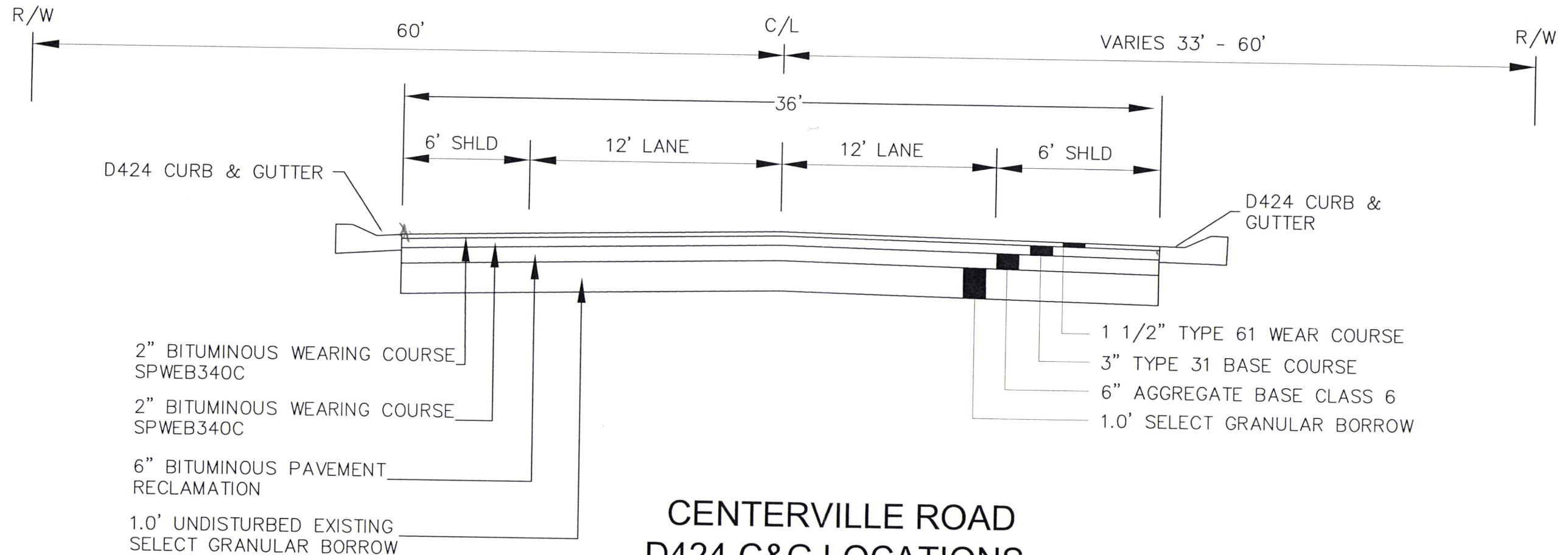
CENTERVILLE ROAD
 COUNTY ROAD H2 to COUNTY ROAD J

S.A.P. 062-659-016
 County Proj. P-5002



Estimated Quantities
 Sheet No. 2 of 16 Sheets

TYPICAL SECTION - CENTERVILLE RD. STA. 9+38.00 TO STA. 81+11.00

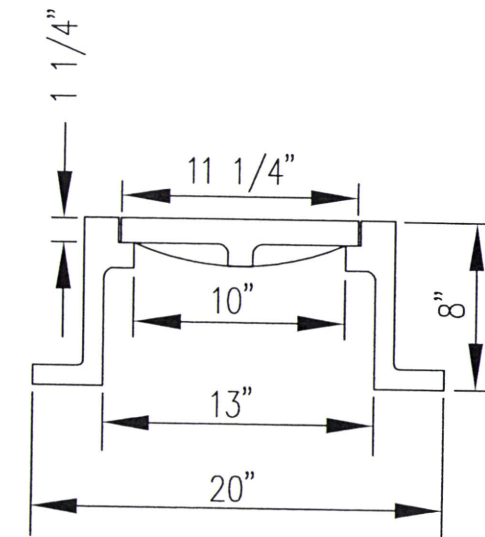
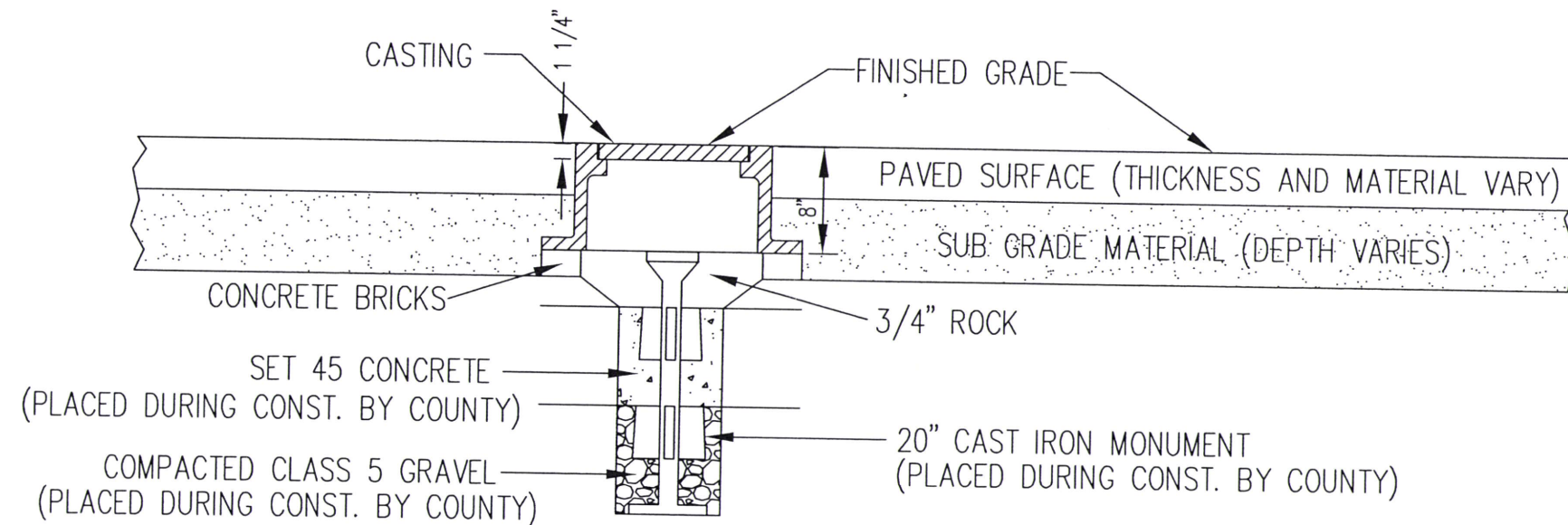


CENTERVILLE ROAD D424 C&G LOCATIONS

- STA. 10+35 TO STA. 22+89 C&G ON LT
- STA. 10+85 TO STA. 17+85 C&G ON RT
- STA. 35+20 TO STA. 39+40 C&G ON RT
- STA. 50+25 TO STA. 54+50 C&G ON RT
- STA. 61+05 TO STA. 77+05 C&G ON RT

NO.	REV-DATE	BY:	DESCRIPTION	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.	S.A.P. 062-659-016		Typical Section
				SIGNED: <i>[Signature]</i> REG NO: 50791 DATE: 4-30-2014	County Proj. P-5002		Sheet No. 3 of 16 Sheets
				CENTERVILLE ROAD CO RD H2 TO COUNTY RD J			

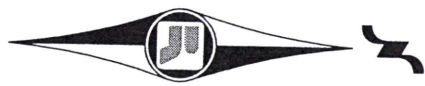
CONTROL STRUCTURE SURVEY MONUMENT MANHOLE



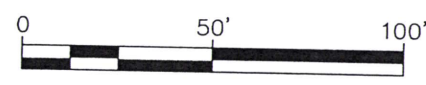
CAST IRON CASTING

WEIGHT = 95 lbs

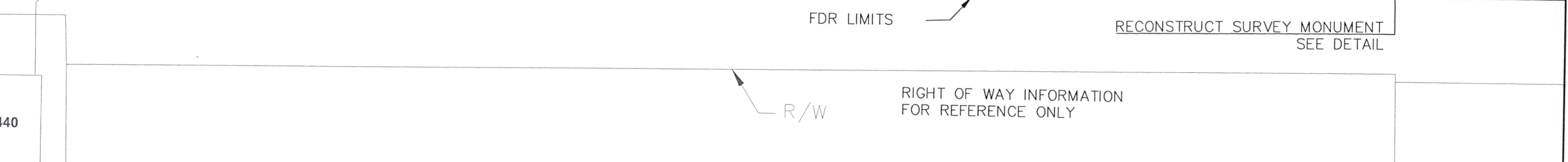
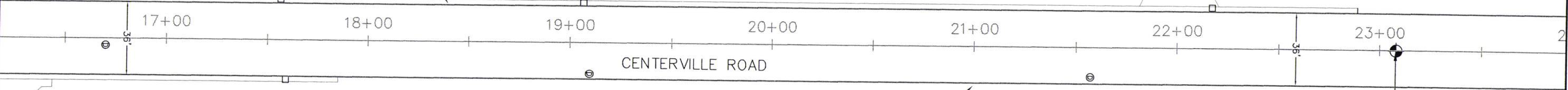
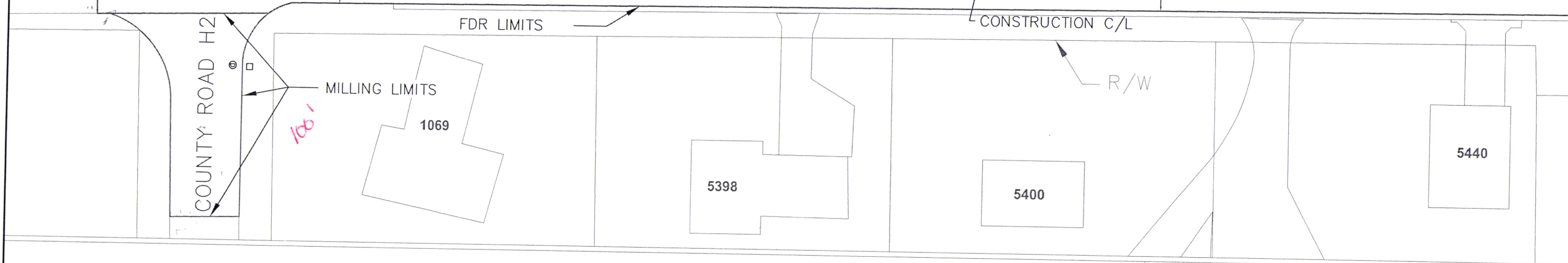
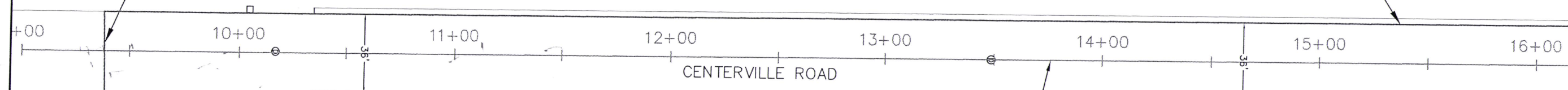
NO. REV-DATE	BY:	DESCRIPTION	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	S.A.P. 062-659-016		Detail
			SIGNED: <i>Mark Fusler</i>	County Proj. P-5002		Sheet No. 4 of 16 Sheets
			REG NO: <u>50791</u> DATE: <u>4-30-2014</u>			
CENTERVILLE ROAD CO RD H2 TO COUNTY RD J						



BEGIN PROJECT
 STA 9+38.00
 S.A.P. 062-659-016
 CENTERVILLE RD.



RIGHT OF WAY INFORMATION
 FOR REFERENCE ONLY

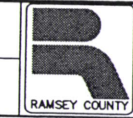


NO.	REV-DATE	BY:	DESCRIPTION

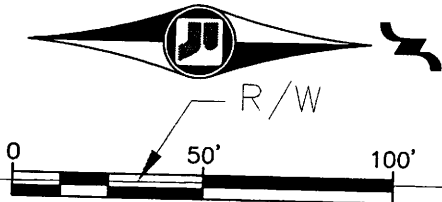
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNED: *Melissa Siskin*
 REG NO: 50791 DATE: 5-16-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
 County Proj. P-5002



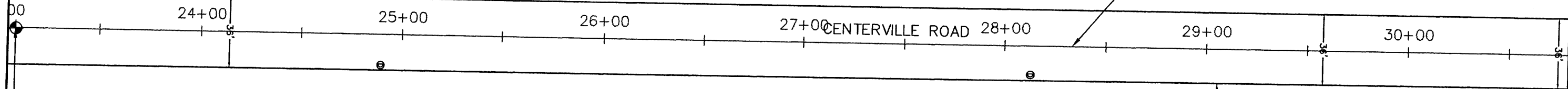
Roadway Plan
 Sheet No. 5 of 16 Sheets



FDR LIMITS

RIGHT OF WAY INFORMATION
FOR REFERENCE ONLY

CONSTRUCTION C/L



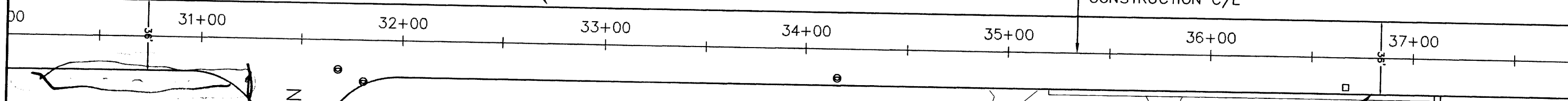
FDR LIMITS

R/W

FDR LIMITS

RIGHT OF WAY INFORMATION
FOR REFERENCE ONLY

CONSTRUCTION C/L



FDR LIMITS

R/W

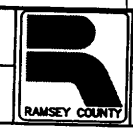
ANDERSON LN

NO.	REV-DATE	BY:	DESCRIPTION
1	XX-XX-XX	XX	

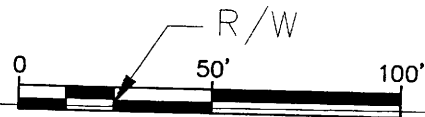
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
SIGNED: *William J. Jahn*
REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
CO RD H2 TO COUNTY RD J

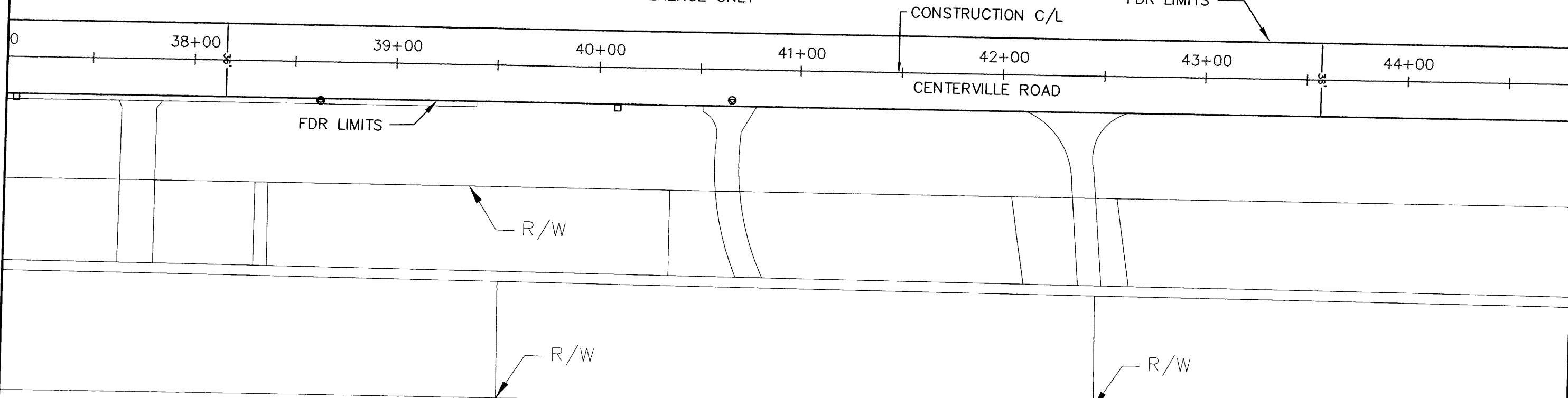
S.A.P. 062-659-016
County Proj. P-5002



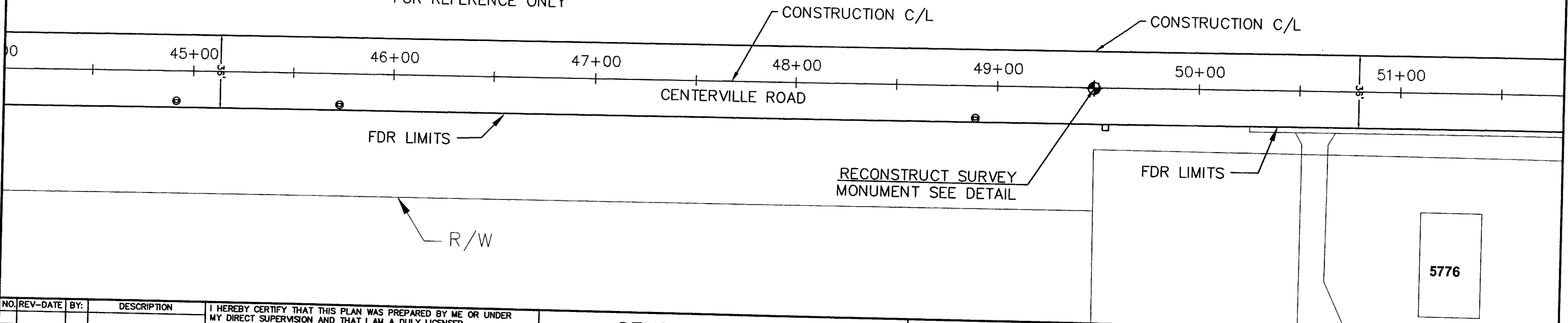
Roadway Plan
Sheet No. 6 of 16 Sheets



RIGHT OF WAY INFORMATION
FOR REFERENCE ONLY



RIGHT OF WAY INFORMATION
FOR REFERENCE ONLY



NO.	REV.	DATE	BY:	DESCRIPTION

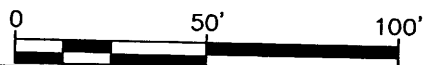
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNED: *Pauline J. Leelan*
 REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
 County Proj. P-5002



Roadway Plan
 Sheet No. 7 of 16 Sheets



RIGHT OF WAY INFORMATION
FOR REFERENCE ONLY

R/W

FDR LIMITS

CONSTRUCTION C/L

0 52+00 53+00 54+00 55+00 56+00 57+00 58+00

CENTERVILLE ROAD

FDR LIMITS

5776

R/W

KINSON LAKE BLVD

RIGHT OF WAY INFORMATION
FOR REFERENCE ONLY

R/W

CONSTRUCTION C/L

FDR LIMITS

59+00 60+00 61+00 62+00 63+00 64+00 65+00

CENTERVILLE ROAD

FDR LIMITS

R/W

NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Michael J. Fisher*
 REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

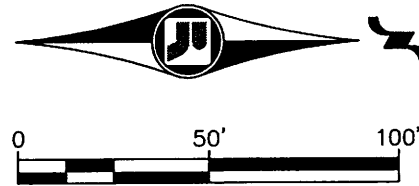
S.A.P. 062-659-016
 County Proj. P-5002



Roadway Plan

Sheet No. 8 of 16

Sheets



R/W
 RIGHT OF WAY INFORMATION
 FOR REFERENCE ONLY

CONSTRUCTION C/L

FDR LIMITS

66+00 67+00 68+00 69+00 70+00 71+00 72+00

CENTERVILLE ROAD

FDR LIMITS

5900

R/W

RIGHT OF WAY INFORMATION
 FOR REFERENCE ONLY

R/W

FDR LIMITS

CONSTRUCTION C/L

79+00

78+00

BEGIN TAPER
 78+35

1:5

77+00

76+00

75+00

74+00

73+00

72+00

CENTERVILLE ROAD

FDR LIMITS

R/W

R/W
 EXISTING BITUMINOUS EDGE

NO.	REV-DATE	BY:	DESCRIPTION

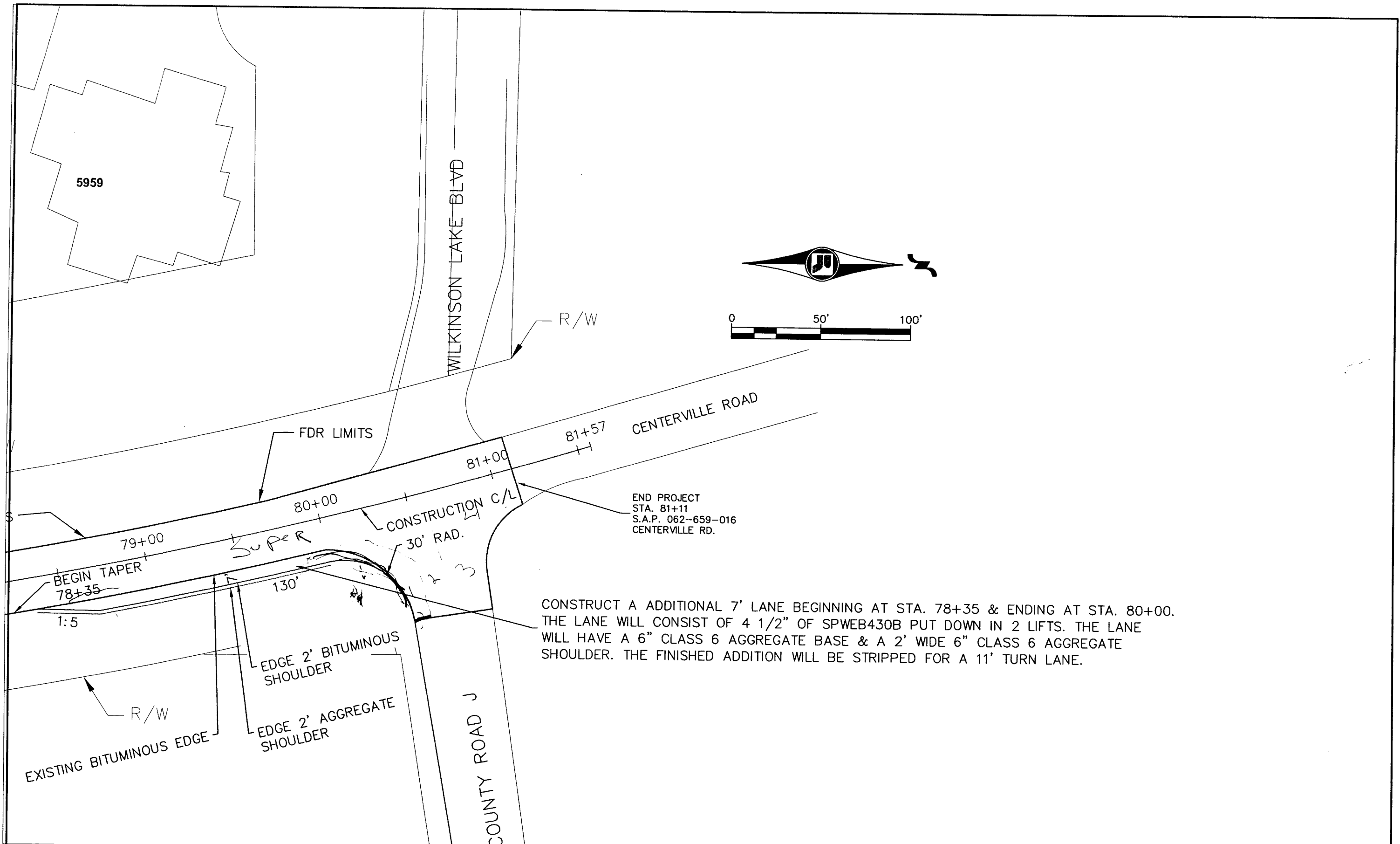
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNED: *Matthew J. ...*
 REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
 County Proj. P-5002



Roadway Plan
 Sheet No. 9 of 16 Sheets



END PROJECT
 STA. 81+11
 S.A.P. 062-659-016
 CENTERVILLE RD.

CONSTRUCT A ADDITIONAL 7' LANE BEGINNING AT STA. 78+35 & ENDING AT STA. 80+00. THE LANE WILL CONSIST OF 4 1/2" OF SPWEB430B PUT DOWN IN 2 LIFTS. THE LANE WILL HAVE A 6" CLASS 6 AGGREGATE BASE & A 2' WIDE 6" CLASS 6 AGGREGATE SHOULDER. THE FINISHED ADDITION WILL BE STRIPPED FOR A 11' TURN LANE.

NO.	REV-DATE	BY:	DESCRIPTION

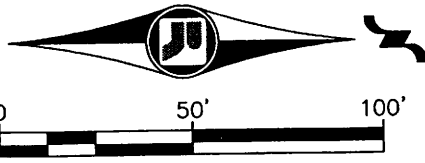
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNED: *[Signature]*
 REG NO: 50791 DATE: 5-16-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

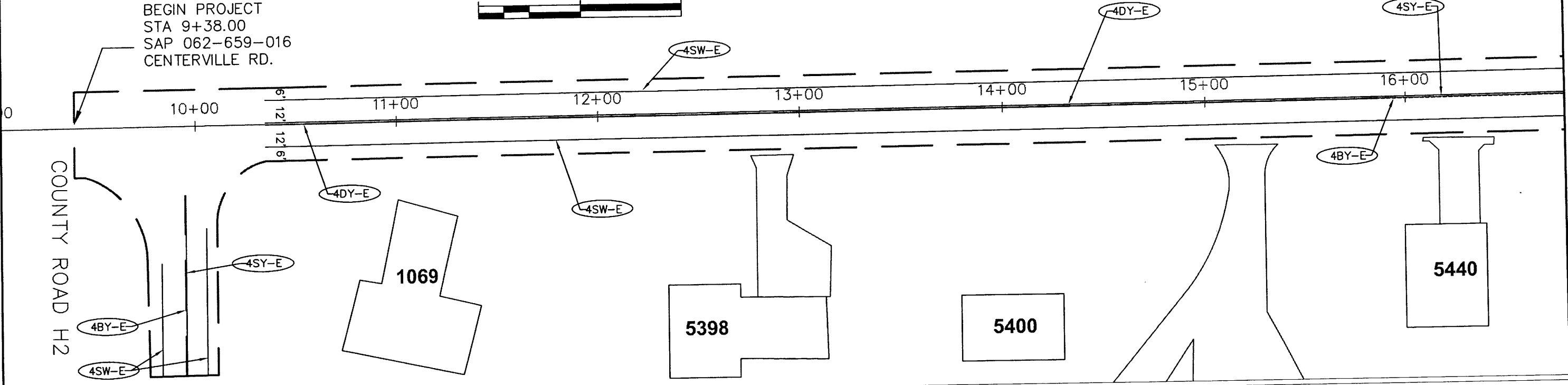
S.A.P. 062-659-016
 County Proj. P-5002



Roadway Plan
 Sheet No. 10 of 16 Sheets

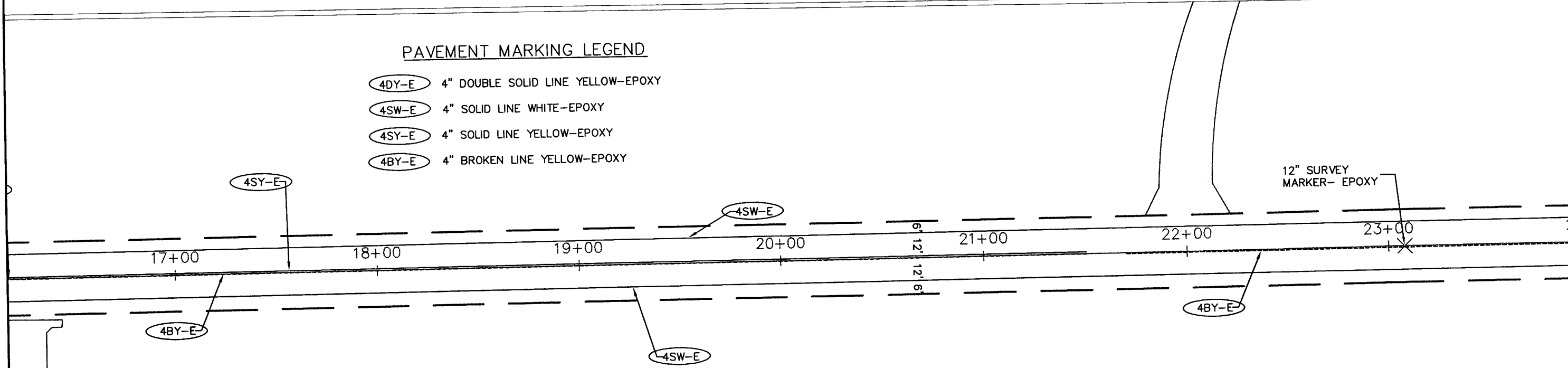


BEGIN PROJECT
 STA 9+38.00
 SAP 062-659-016
 CENTERVILLE RD.



PAVEMENT MARKING LEGEND

- 4DY-E 4" DOUBLE SOLID LINE YELLOW-EPOXY
- 4SW-E 4" SOLID LINE WHITE-EPOXY
- 4SY-E 4" SOLID LINE YELLOW-EPOXY
- 4BY-E 4" BROKEN LINE YELLOW-EPOXY

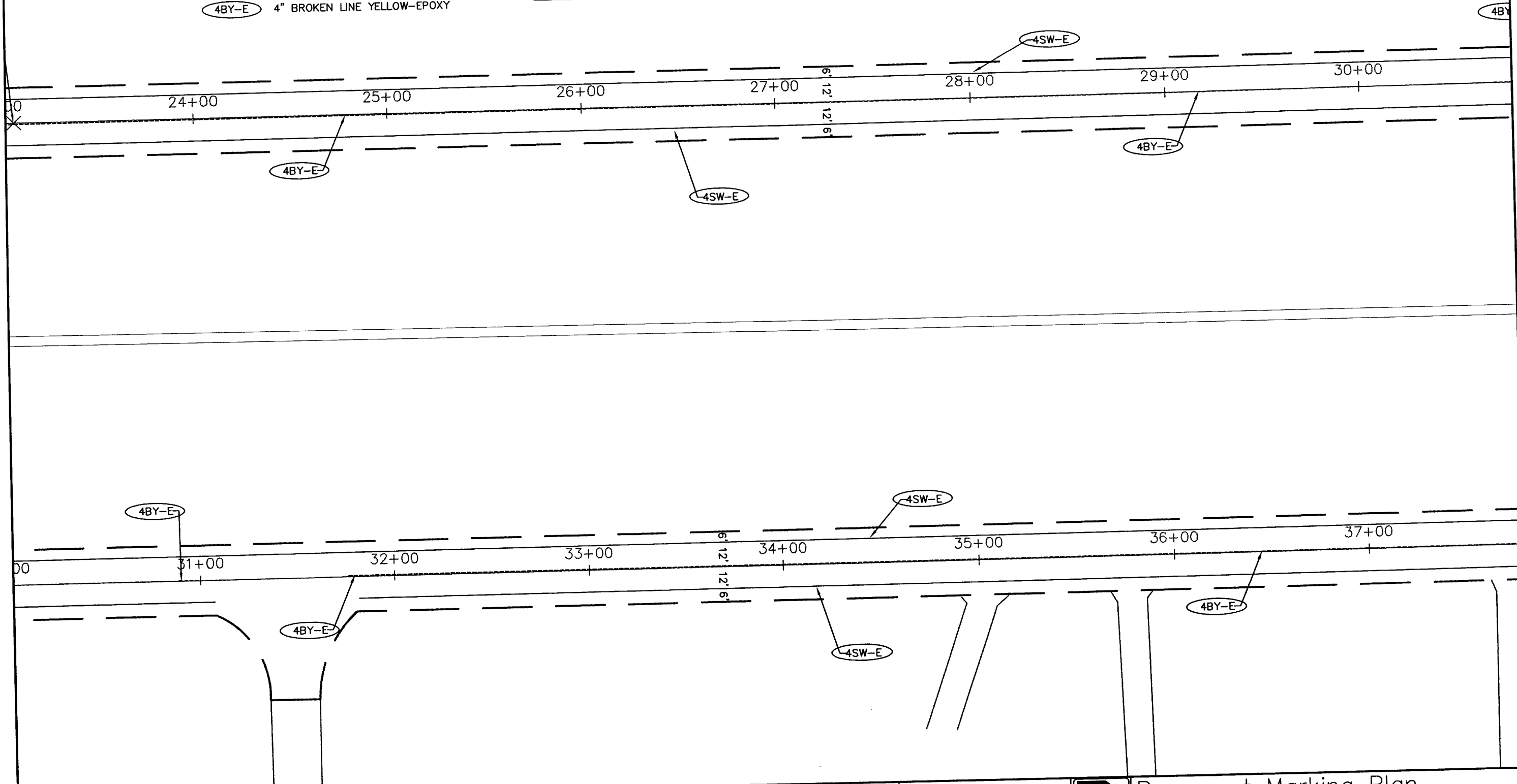
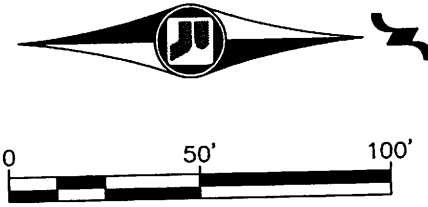


440

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: 8px;">NO.</th> <th style="font-size: 8px;">REV-DATE</th> <th style="font-size: 8px;">BY:</th> <th style="font-size: 8px;">DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	REV-DATE	BY:	DESCRIPTION													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. SIGNED: <i>[Signature]</i> REG NO: 50791 DATE: 5-16-2014	CENTERVILLE ROAD CO RD H2 TO COUNTY RD J	S.A.P. 062-659-016 County Proj. P-5002	 RAMSEY COUNTY	Pavement Marking Plan Sheet No. 11 of 16 Sheets
NO.	REV-DATE	BY:	DESCRIPTION																		

PAVEMENT MARKING LEGEND

- 4DY-E 4" DOUBLE SOLID LINE YELLOW-EPOXY
- 4SW-E 4" SOLID LINE WHITE-EPOXY
- 4SY-E 4" SOLID LINE YELLOW-EPOXY
- 4BY-E 4" BROKEN LINE YELLOW-EPOXY



NO.	REV-DATE	BY:	DESCRIPTION
1	XX-XX-XX	XX	

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.

SIGNED: *[Signature]*

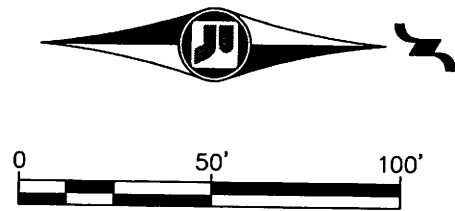
REG NO: 20991 DATE: _____

CENTERVILLE ROAD
CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
* County Proj. P-5002

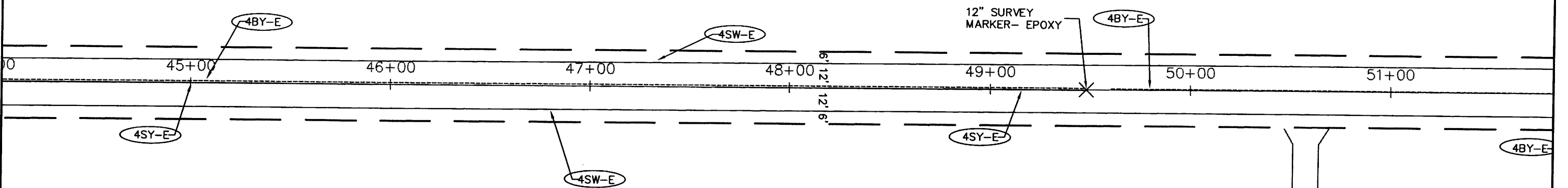
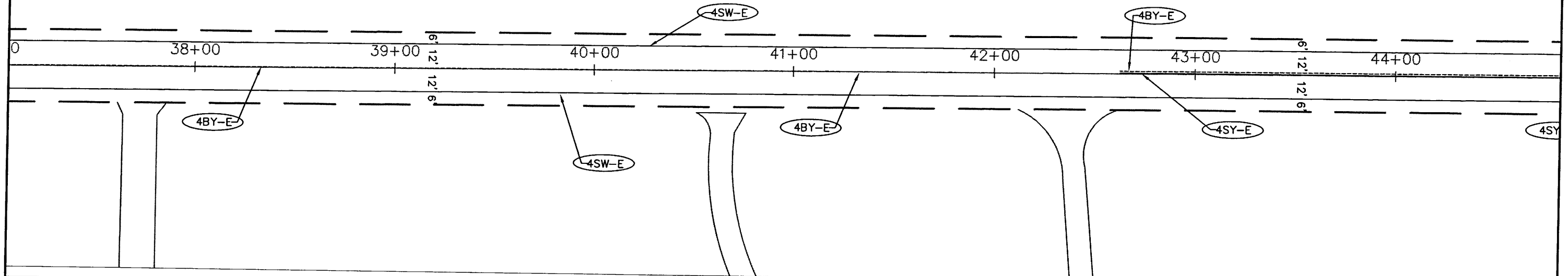


Pavement Marking Plan
Sheet No. 12 of 16 Sheets



PAVEMENT MARKING LEGEND

- 4DY-E 4" DOUBLE SOLID LINE YELLOW-EPOXY
- 4SW-E 4" SOLID LINE WHITE-EPOXY
- 4SY-E 4" SOLID LINE YELLOW-EPOXY
- 4BY-E 4" BROKEN LINE YELLOW-EPOXY



5776

NO.	REV-DATE	BY:	DESCRIPTION

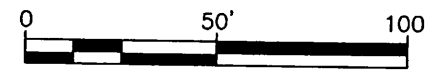
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNED: *[Signature]*
 REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
 County Proj. P-5002

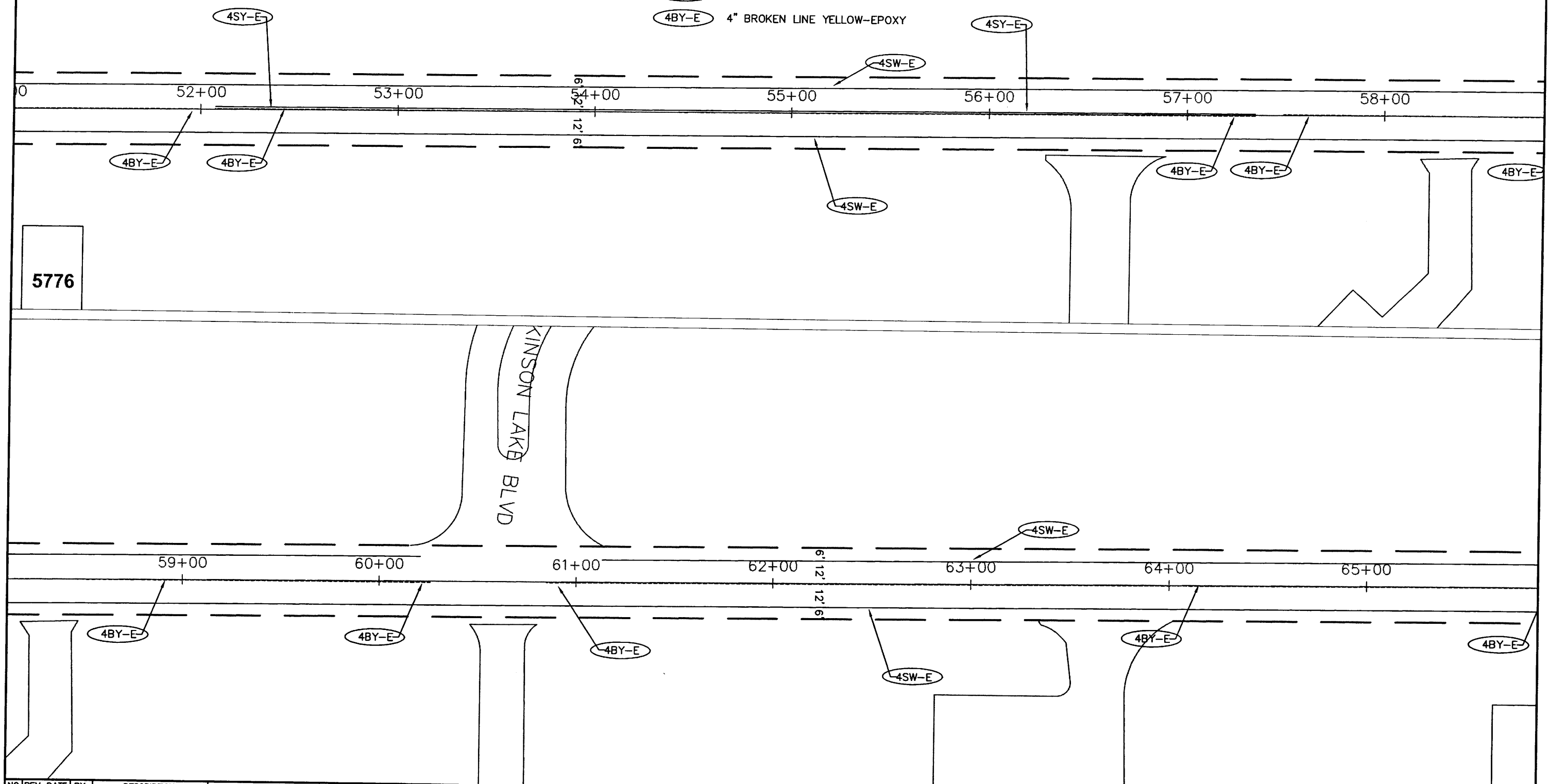


Pavement Marking Plan
 Sheet No. 13 of 16 Sheets



PAVEMENT MARKING LEGEND

- (4DY-E) 4" DOUBLE SOLID LINE YELLOW-EPOXY
- (4SW-E) 4" SOLID LINE WHITE-EPOXY
- (4SY-E) 4" SOLID LINE YELLOW-EPOXY
- (4BY-E) 4" BROKEN LINE YELLOW-EPOXY



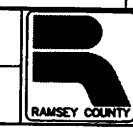
5776

NO.	REV-DATE	BY:	DESCRIPTION

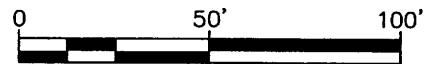
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNED: *Nicholas J. ...*
 REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
 County Proj. P-5002

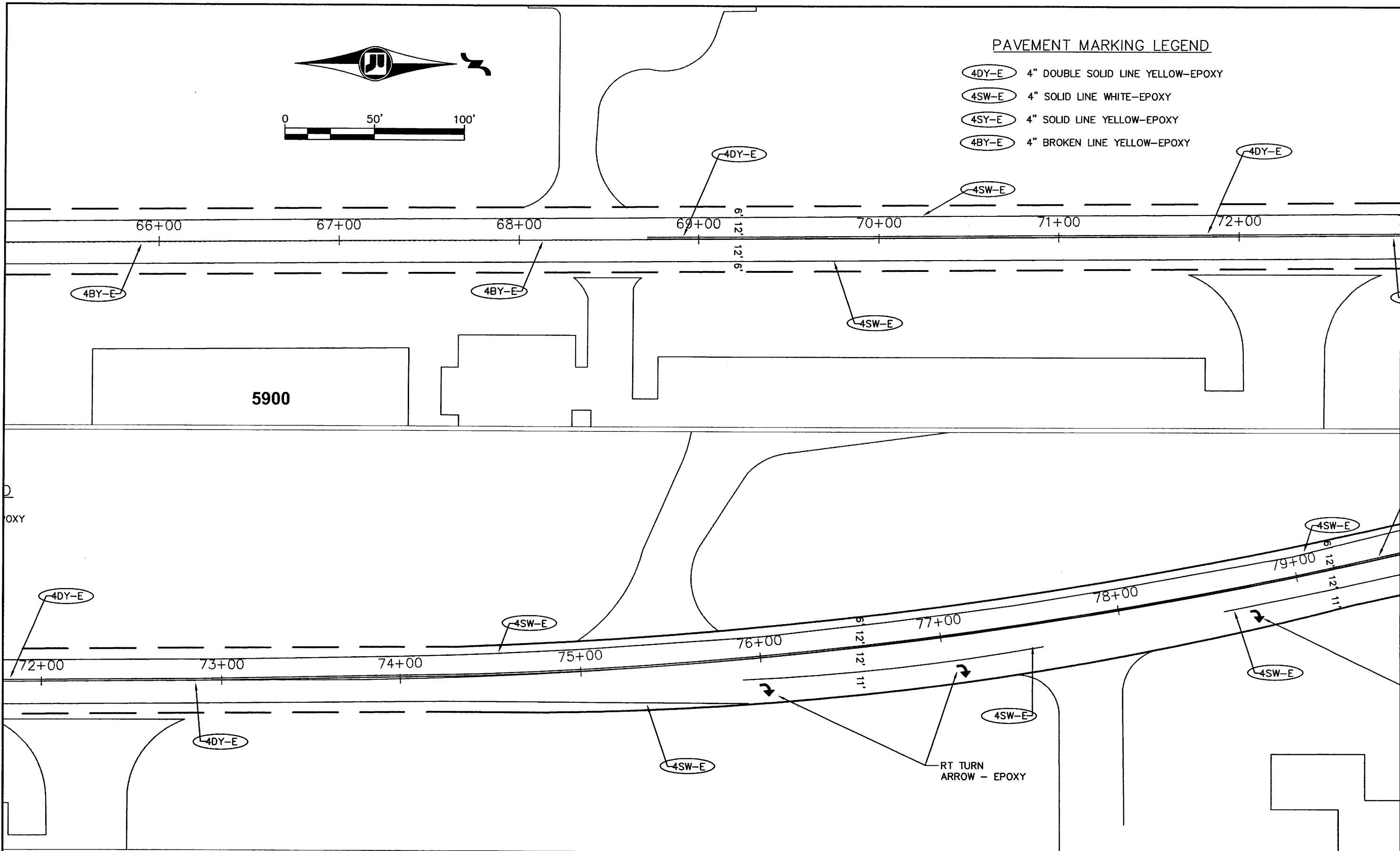


Pavement Marking Plan
 Sheet No. 14 of 16 Sheets



PAVEMENT MARKING LEGEND

- 4" DOUBLE SOLID LINE YELLOW-EPOXY
- 4" SOLID LINE WHITE-EPOXY
- 4" SOLID LINE YELLOW-EPOXY
- 4" BROKEN LINE YELLOW-EPOXY



NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *William Fisher*
 REG NO: 50791 DATE: 4-30-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

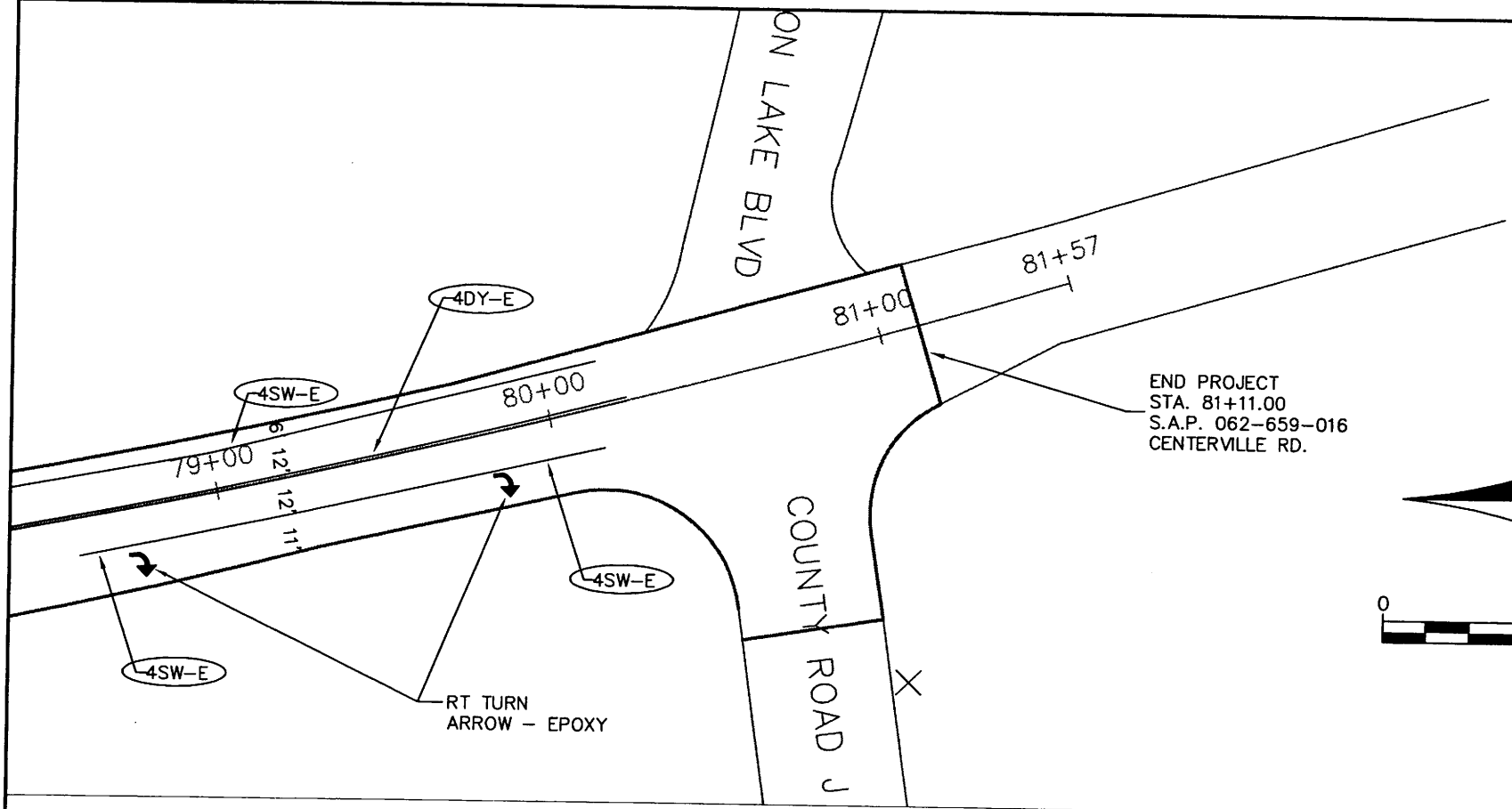
S.A.P. 062-659-016
 County Proj. P-5002



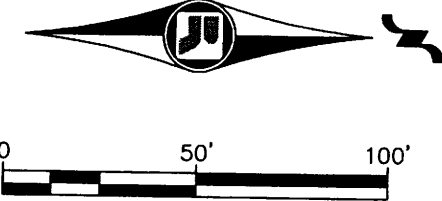
Pavement Marking Plan
 Sheet No. 15 of 16 Sheets

PAVEMENT MARKING LEGEND

- 4DY-E 4" DOUBLE SOLID LINE YELLOW-EPOXY
- 4SW-E 4" SOLID LINE WHITE-EPOXY
- 4SY-E 4" SOLID LINE YELLOW-EPOXY
- 4BY-E 4" BROKEN LINE YELLOW-EPOXY



END PROJECT
 STA. 81+11.00
 S.A.P. 062-659-016
 CENTERVILLE RD.



NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Michelle Finkbeiner*
 REG NO: 50791 DATE: 5-16-2014

CENTERVILLE ROAD
 CO RD H2 TO COUNTY RD J

S.A.P. 062-659-016
 County Proj. P-5002



Pavement Marking Plan
 Sheet No. 16 of 16 Sheets

PLAN SYMBOLS	
STATE LINE	---
COUNTY LINE	---
TOWNSHIP OR RANGE LINE	---
SECTION LINE	---
QUARTER LINE	---
SIXTEENTH LINE	---
EXISTING RIGHT OF WAY LINE	---
PROPOSED RIGHT OF WAY LINE	---
PROPERTY LINE	---
CORPORATE OR CITY LIMITS	---
RAILROAD	---
RAILROAD RIGHT-OF-WAY	---
RIVER OF CREEK	---
CULVERT	---
GUARDRAIL	---
WOOD FENCE	---
BARBED WIRE FENCE	---
WOVEN WIRE FENCE	---
CHAIN LINK FENCE	---
TIMBER WALL	---
STONE WALL	---
HEDGE	---
RAILROAD CROSSING SIGN	---
CROSSING GATE	---
MEANDER CORNER	---
SLOPE EASEMENT (CONST. LIMITS)	---
MARSH	---
DECIDUOUS TREE	---
CONIFEROUS TREE	---
BUSH OR SHRUB	---
WOODS	---
CATCH BASIN	---
BRIDGE	---
IRON PIPE OR ROD MONUMENT (STONE, CONCRETE OR METAL)	---
WOODEN HUB	---

UTILITY SYMBOLS	
UTILITY POLE	---
CUY OR ANCHOR	---
STREET LIGHT	---
TELEPHONE PEDESTAL	---
GAS MAIN	---
WATER MAIN	---
TELEPHONE VAULT	---
ELECTRIC VAULT	---
TELEPHONE CABLE	---
ELECTRIC CABLE	---
STORM SEWER	---
SANITARY SEWER	---
SEWER MANHOLE	---
GATE VALVE	---
CONTROLLER CABINET	---
EXISTING HYDRANT	---
CABLE TELEVISION-BURIED	---
FIBER OPTIC CABLE	---
TRAFFIC SIGNAL LINE	---
TRAFFIC SIGNAL HAND HOLE	---

FOR PLANS AND UTILITIES SYMBOLS SEE MN/DOT TECHNICAL MANUAL.

-GOVERNING SPECIFICATIONS-

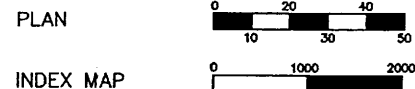
THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, SEE [HTTP://WWW.DOT.STATE.MN.US/TRAFFICENG/](http://www.dot.state.mn.us/trafficeng/)

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.



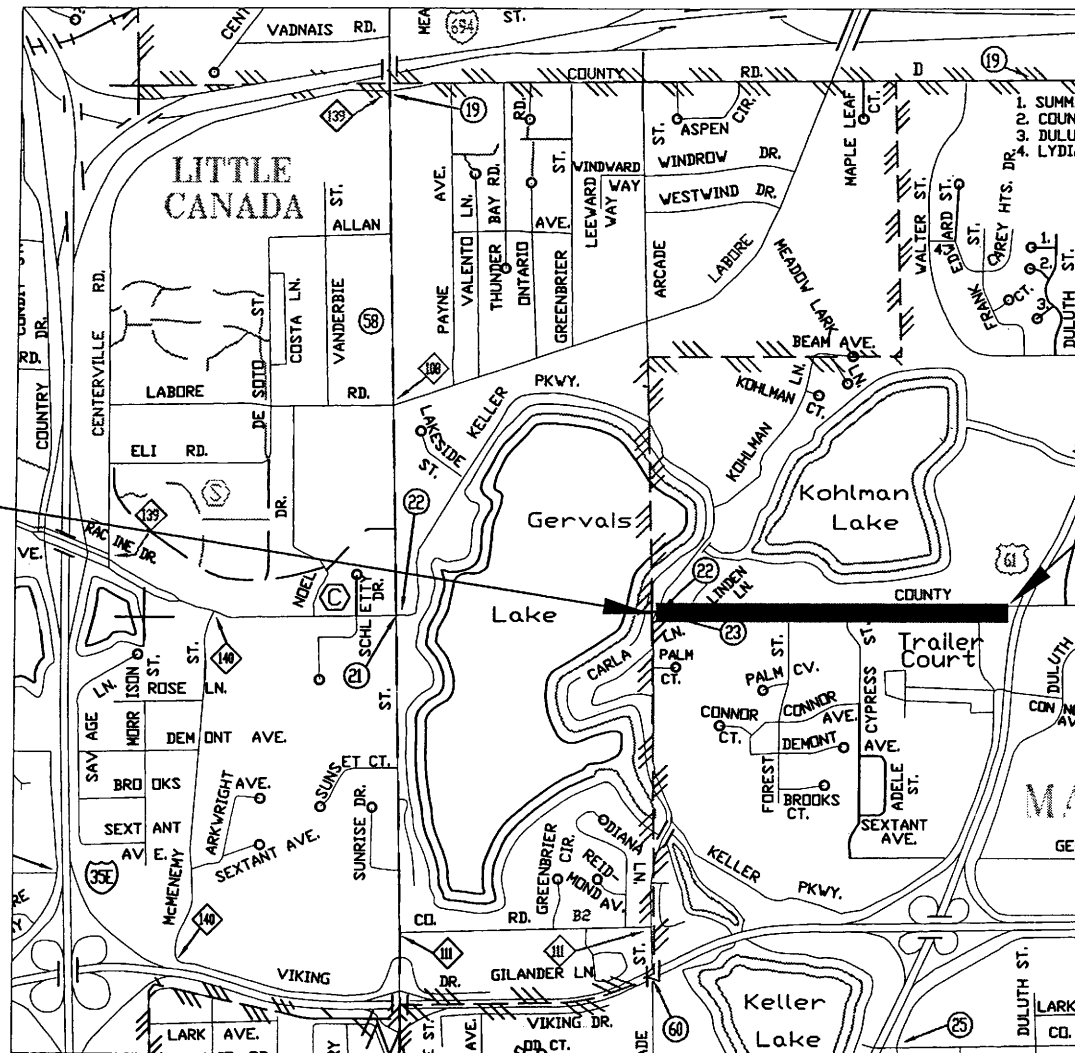
SCALES IN FEET



GROSS LENGTH	3640.00 FEET	0.689 MILES
BRIDGE LENGTH	---	---
EXCEPTIONS	---	---
NET LENGTH	3640.00 FEET	0.689 MILES

PROJECT START
STA. 10+50.00
S.A.P. 062-623-053

PROJECT END
STA. 46+90.00
S.A.P. 062-623-053



DESIGN DESIGNATION

COUNTY ROAD C FROM KELLER PARKWAY TO 80' WEST OF US HIGHWAY 61

PRESENT ADT (2014)	2950
PROJECTED ADT (2034)	3540
FUNCTIONAL CLASS	B MINOR
TRAFFIC LANES	2
PARKING LANES	0

BASED ON STOPPING DISTANCE
HEIGHT OF EYE: 3.50 FEET
HEIGHT OF OBJECT: 2.00 FEET

DRAWN BY D. BODELSON DATE 4-22-14
CHECKED BY _____ DATE _____

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY



RAMSEY COUNTY
DEPARTMENT OF PUBLIC WORKS

PLAN FOR THE FULL DEPTH RECLAMATION & BITUMINOUS MILL AND OVERLAY OF

COUNTY ROAD C

S.A.P. 062-623-053

BETWEEN: KELLER PARKWAY AND US HIGHWAY 61

COUNTY PROJECT P5004

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4-6	PLAN SHEETS
7-9	STRIPING PLAN

THIS PLAN CONTAINS 9 SHEETS

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.

Nicklaus Fischer REG. NO. 50791 DATE 4/30/2014
NICKLAUS FISCHER

RECOMMENDED FOR APPROVAL [Signature] DATE 5/14/14
RAMSEY COUNTY ENGINEER

APPROVED [Signature] DATE 5/11/2014
CITY OF MAPLEWOOD

MINNESOTA DEPARTMENT OF TRANSPORTATION

Jane Dressel DATE 5/15/14
DISTRICT STATE AID ENGINEER
FOR REVIEW FOR COMPLIANCE WITH STATE-AID RULES/POLICY
Jane Dressel DATE 5/15/14
APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\SEC.& TYP SECTIONS.DWG April 23, 2014 2:56 PM

ESTIMATED QUANTITIES				
Item Number	Item	Notes	Unit	Estimated Quantity 100% S.A.P. 62-623-053
2021.501	MOBILIZATION		LS	1
2104.513	SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)		LF	130
2105.501	COMMON EXCAVATION (EV)	1,2	CY	140
2123.610	STREET SWEEPER W / PICKUP BROOM		HOUR	20
2232.501	MILL BITUMINOUS SURFACE (2")		S.Y.	1,801
2331.604	BITUMINOUS PAVEMENT RECLAMATION		S.Y.	13,250
2357.502	BITUMINOUS MATERIAL FOR TACK	4	GAL.	753
2360.501	TYPE SPWEB340C WEARING COURSE	5	TON	3,256
2360.505	BITUMINOUS MIXTURE FOR PATCHING	6	TON	100
2504.602	ADJUST VALVE BOX		EACH	1
2506.522	ADJUST FRAME RING & CASTING		EACH	20
2506.602	CONSTRUCT SURVEY CONTROL STRUCTURE		EACH	1
2535.501	BITUMINOUS CURB		LF	2325
2563.601	TRAFFIC CONTROL		LS	1
2565.602	NMC LOOP DETECTOR (6' X6')		LF	39
2573.530	STORM DRAIN INLET PROTECTION		EACH	10
2574.525	TOPSOIL BORROW (LV)	1,3	CY	210
2575.571	RAPID STABILIZATION METHOD 3	7	M Gal	10
2582.502	4" BROKEN LINE WHITE - EPOXY		LF	1,393
2582.502	4" DOUBLE LINE YELLOW - EPOXY		LF	2,628
2582.503	CROSSWALK MARKING - EPOXY		SF	150

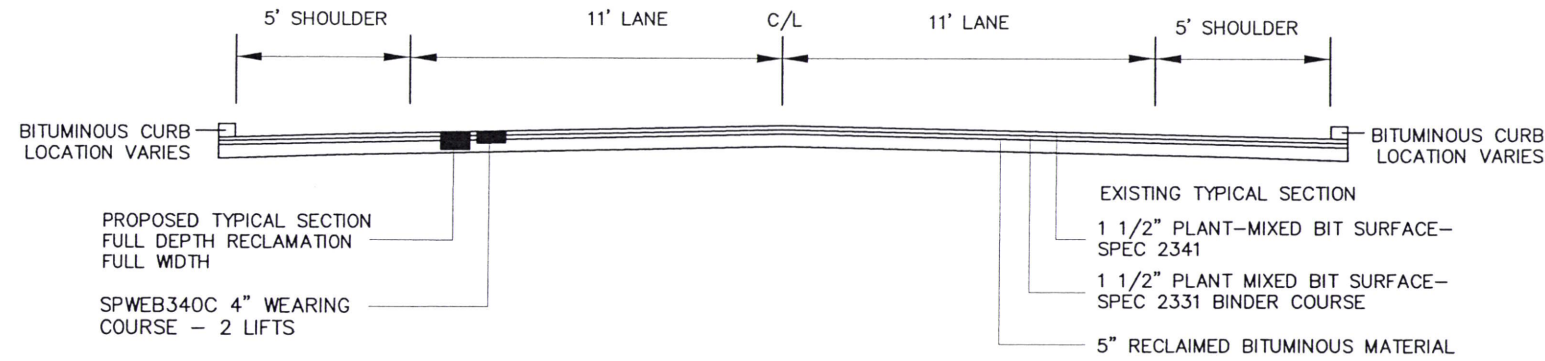
MN/DOT STANDARD PLATES	
8000I	STANDARD BARRICADES

QUANTITY NOTES
1. To be used for restoration of curb removal areas.
2. Common excavation is measured 3 feet from the back of curb at a depth of 6 inches.
3. Topsoil is measured 3 feet from back of curb at a depth of 6 inches.
4. Tack coat is estimated at 0.05 gallons / square yard bituminous / lift
5. Bituminous is estimated at 115-lbs / square yard / inch of bituminous
6. Bituminous patching mix is SPWEB340C
7. Rapid stabilization method 3 is estimated at 6,000 gallons / acre

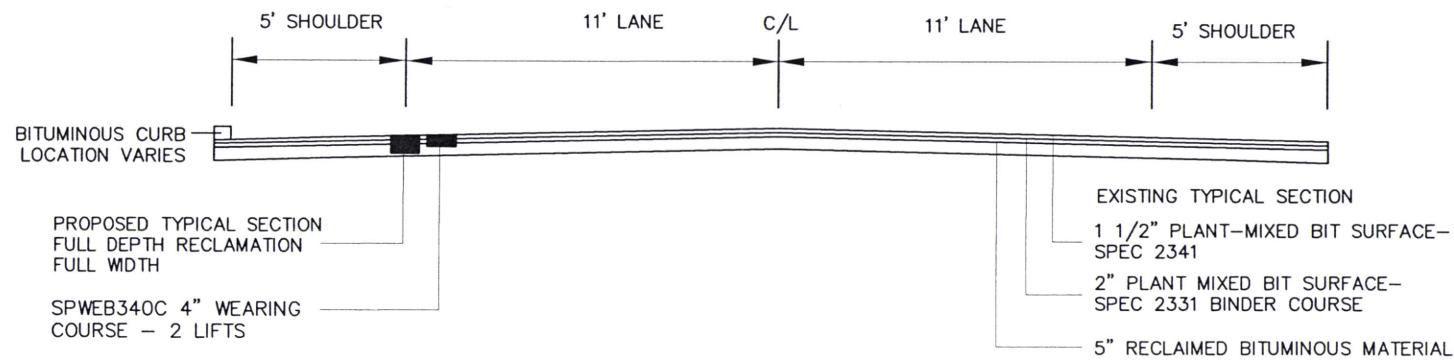
NO.	REV-DATE	BY:	DESCRIPTION	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. SIGNED: <i>[Signature]</i> REG NO: <u>50791</u> DATE: <u>4-30-2014</u>	COUNTY ROAD C KELLER PARKWAY TO US HIGHWAY 61	062-623-053 COUNTY PROJ.P-5004		ESTIMATED QUANTITIES
								SHEET 2 OF 9 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\SE&E& TYP SECTIONS.DWG April 18, 2014 9:40 AM

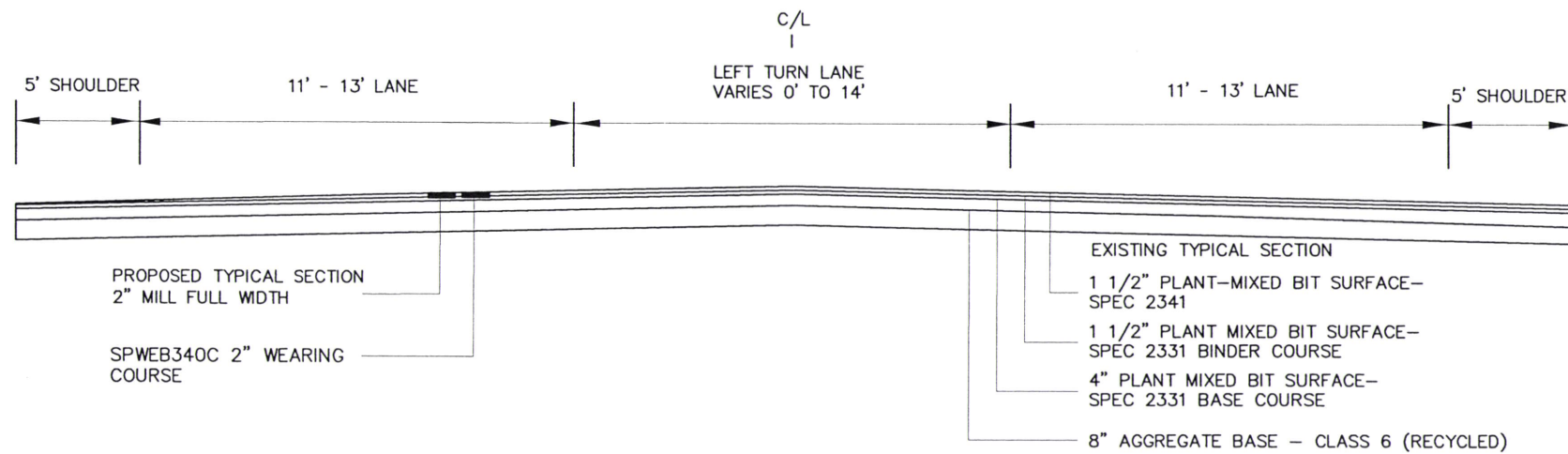
TYPICAL SECTION - COUNTY ROAD C
STA. 10+50 TO STA. 29+80



TYPICAL SECTION - COUNTY ROAD C
STA. 29+80 TO STA. 43+35



TYPICAL SECTION - COUNTY ROAD C
STA. 43+35 TO 46+90



NO.	REV-DATE	BY:	DESCRIPTION

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.
SIGNED: *Richard J. Jahn*
REG NO: 50791 DATE: 4-30-2014

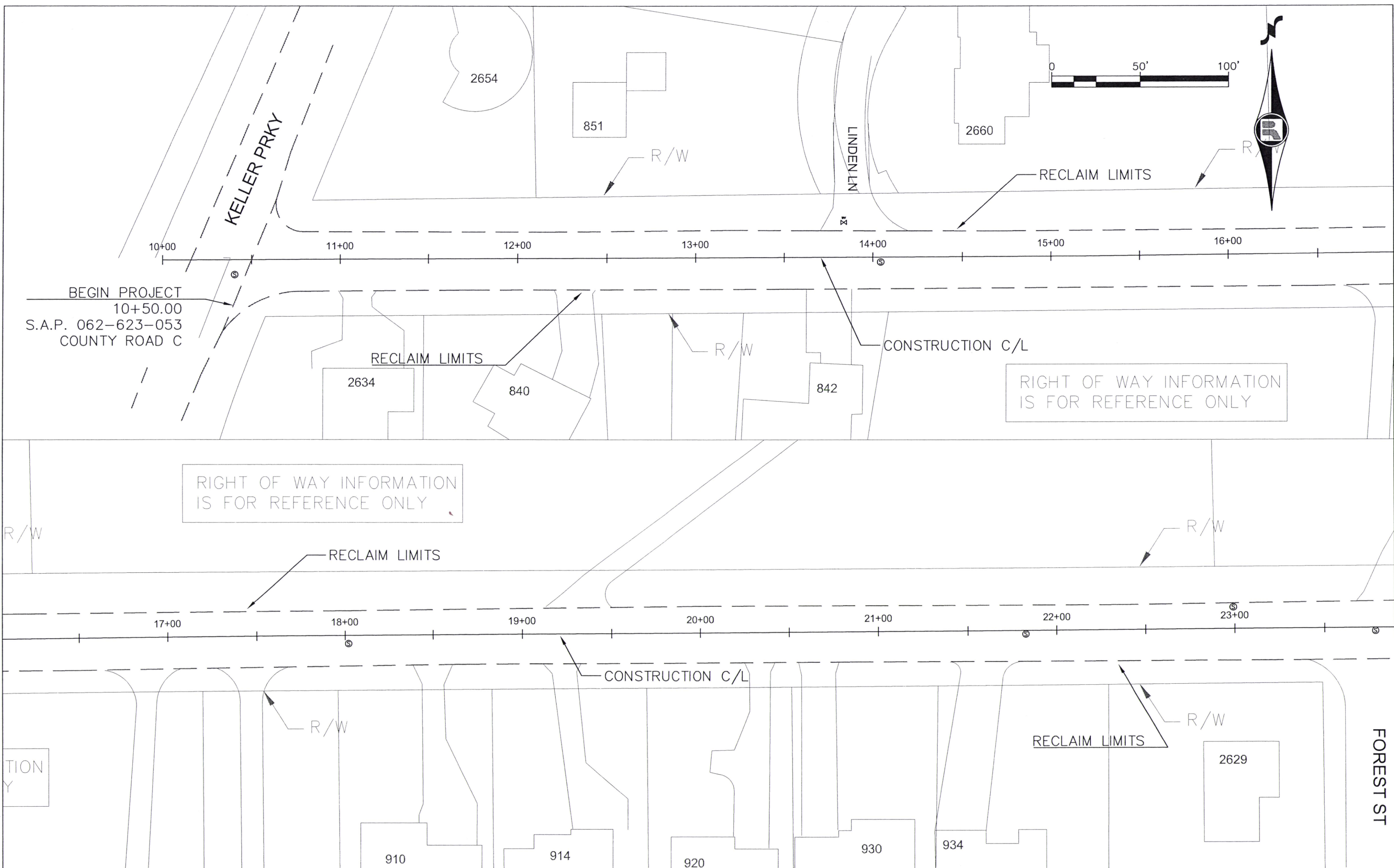
COUNTY ROAD C
KELLER PARKWAY TO US HIGHWAY 61

062-623-053
COUNTY PROJ. P5004



TYPICAL SECTION
SHEET 3 OF 9 SHEETS

P:\PROJECTS\2014_OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\M_O & PEDS.DWG April 17, 2014 8:16 AM



NO.	REV-DATE	BY:	DESCRIPTION

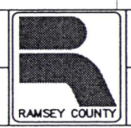
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNED: *R. J. ...*

REG NO: 50791 DATE: 4-30-2014

COUNTY ROAD C
 KELLER PARKWAY to US HIGHWAY 61

S.A.P. 62-623-053
 COUNTY PROJ. P-5004



ROADWAY PLAN
SHEET 4 OF 9 SHEETS



RIGHT OF WAY INFORMATION IS FOR REFERENCE ONLY



RECLAIM LIMITS

975

985

999

1003

1005

R/W

24+00

25+00

26+00

27+00

28+00

29+00

30+00

CONSTRUCTION C/L

R/W

R/W

RECLAIM LIMITS

CYPRESS ST

988

1000

2630

FORESTS

1005

1011

1023

R/W

RECONSTRUCT SURVEY MONUMENT SEE DETAIL

R/W

31+00

32+00

33+00

34+00

35+00

36+00

37+00

R/W

R/W

CONSTRUCTION C/L

RECLAIM LIMITS

R/W

RIGHT OF WAY INFORMATION IS FOR REFERENCE ONLY

RIGHT OF WAY IS FOR REFERENCE ONLY

P:\PROJECTS\2014_OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\M, O & PEDS.DWG April 17, 2014 8:16 AM

NO.	REV-DATE	BY:	DESCRIPTION

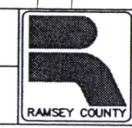
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNED: *[Signature]*

REG NO: 50791 DATE: 4-30-2014

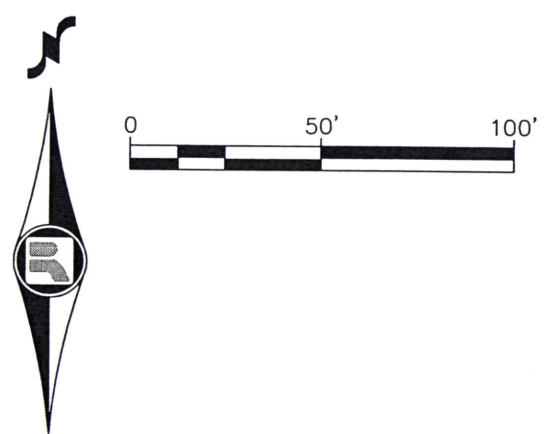
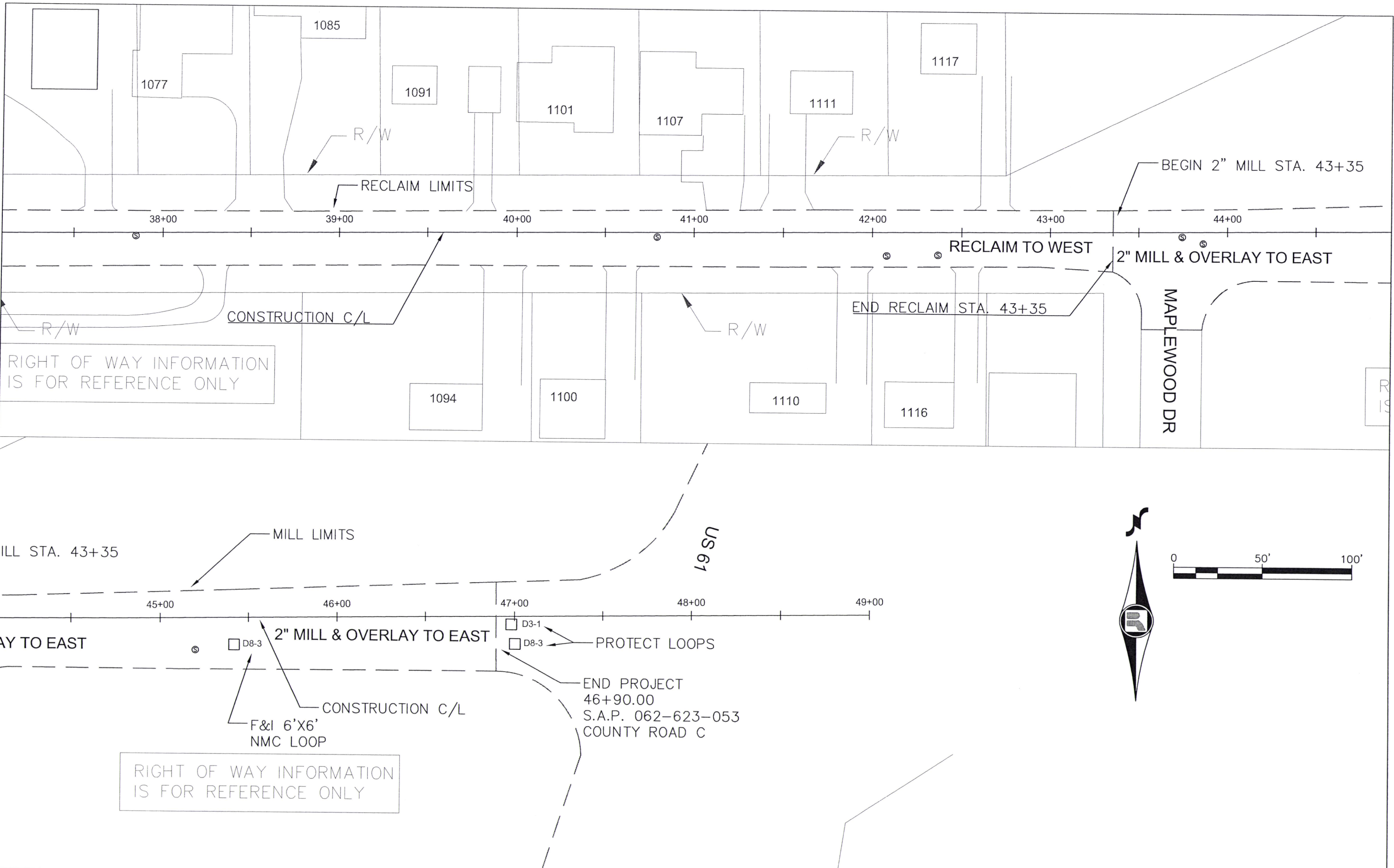
COUNTY ROAD C
KELLER PARKWAY to US HIGHWAY 61

S.A.P. 62-623-053
COUNTY PROJ. P-5004



ROADWAY PLAN
SHEET 5 OF 9 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\W, O & PEDS.DWG April 17, 2014 8:16 AM



RIGHT OF WAY INFORMATION IS FOR REFERENCE ONLY

NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Richard J. Early*
 REG NO: 50791 DATE: 4-30-2014

COUNTY ROAD C
 KELLER PARKWAY to US HIGHWAY 61

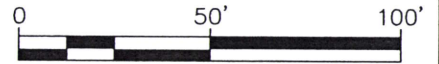
S.A.P. 62-623-053
 COUNTY PROJ. P-5004



ROADWAY PLAN
 SHEET 6 OF 9 SHEETS

PAVEMENT MARKING LEGEND

- 4SW-E 4" SOLID LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY
- 12SW-E 12" SOLID LINE WHITE - EPOXY
- 24SY-E 24" SOLID LINE YELLOW - EPOXY
- 24SW-E 24" SOLID LINE WHITE - EPOXY



BEGIN PROJECT
STA. 10+50
S.A.P. 062-623-053
COUNTY ROAD C

KELLER PRKY

LINDEN LN

FOREST ST

24SW-E

4SW-E

4SW-E

4DY-E

4DY-E

4SW-E

4SW-E

4DY-E

4SW-E


P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\STRIPPING.DWG April 17, 2014 8:20 AM

NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Kevin F. Fisher*
 REG NO: 50791 DATE: 4-30-2014

COUNTY ROAD C
 KELLER PARKWAY to US HIGHWAY 61

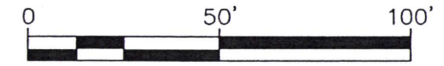
S.A.P. 062-623-053
 COUNTY PROJ. P-5004



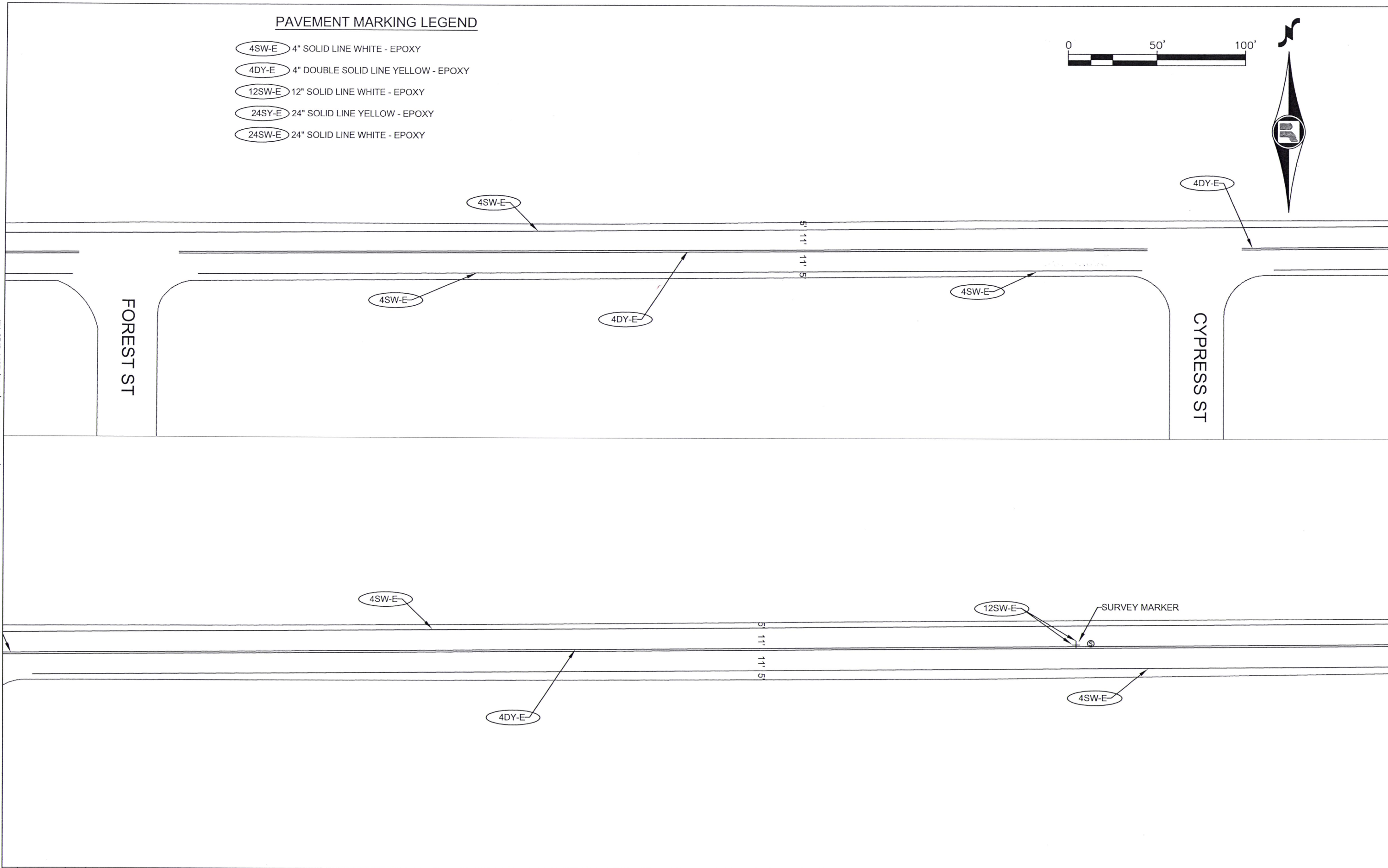
STRIPING PLAN
 SHEET 7 OF 9 SHEETS

PAVEMENT MARKING LEGEND

- 4SW-E 4" SOLID LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY
- 12SW-E 12" SOLID LINE WHITE - EPOXY
- 24SY-E 24" SOLID LINE YELLOW - EPOXY
- 24SW-E 24" SOLID LINE WHITE - EPOXY



P:\PROJECTS\2014_OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\STRIPPING.DWG April 17, 2014 8:20 AM



NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Richard J. Fisher*
 REG NO: 50791 DATE: 4-30-2014

COUNTY ROAD C
 KELLER PARKWAY to US HIGHWAY 61

S.A.P. 062-623-053
 COUNTY PROJ. P-5004

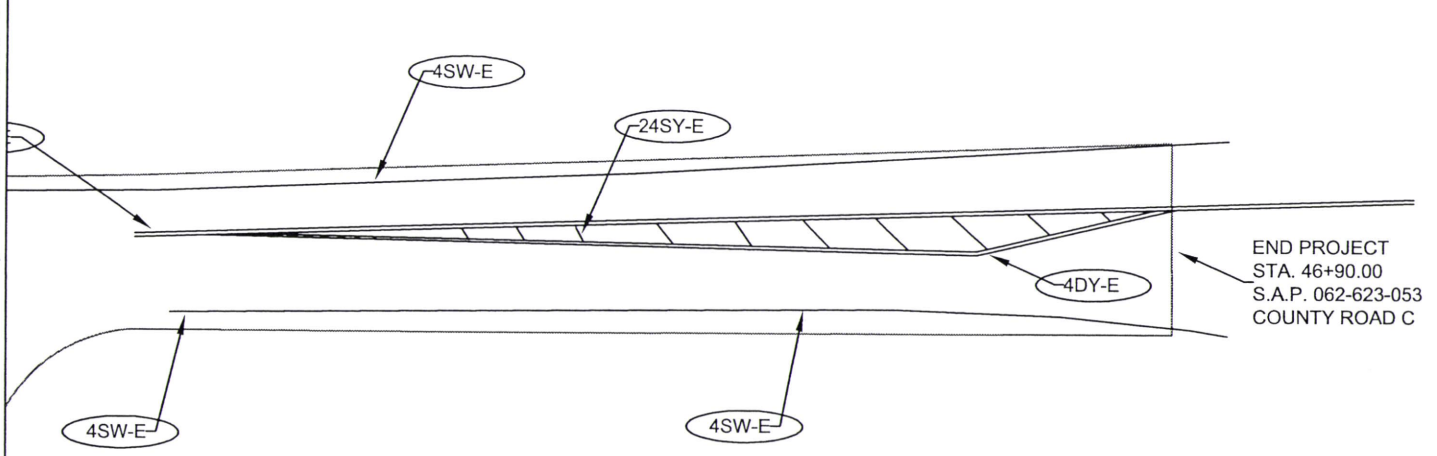
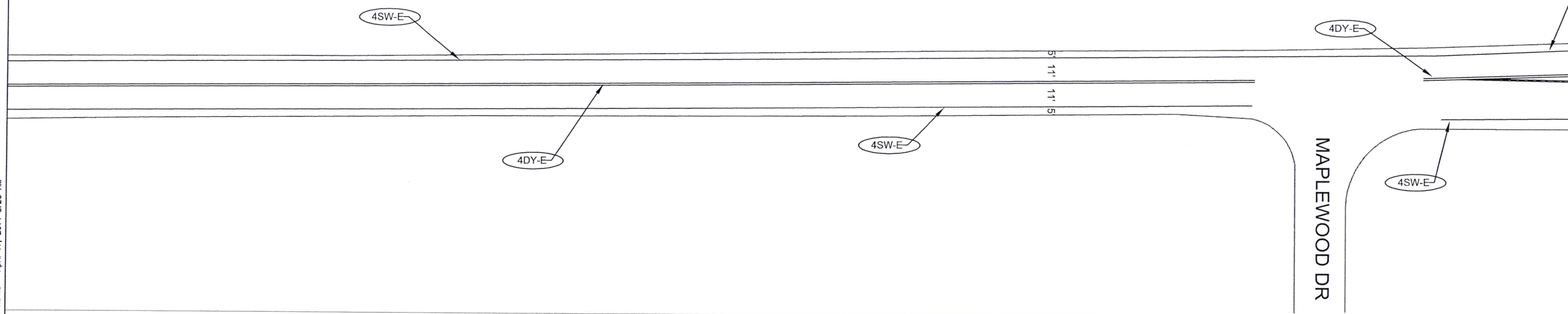


STRIPING PLAN
 SHEET 8 OF 9 SHEETS

PAVEMENT MARKING LEGEND

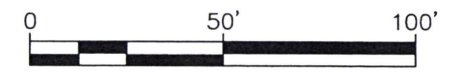
- 4SW-E 4" SOLID LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY
- 12SW-E 12" SOLID LINE WHITE - EPOXY
- 24SY-E 24" SOLID LINE YELLOW - EPOXY
- 24SW-E 24" SOLID LINE WHITE - EPOXY

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\CR C - KELLER PRKY TO HWY 61\CR C - KELLER PRKY TO HWY 61\FINAL PLAN\STRIPPING.DWG April 17, 2014 8:20 AM



END PROJECT
STA. 46+90.00
S.A.P. 062-623-053
COUNTY ROAD C

US 61

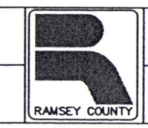


NO.	REV-DATE	BY:	DESCRIPTION

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.
SIGNED: *[Signature]*
REG NO: 50797 DATE: 4-30-2014

COUNTY ROAD C
KELLER PARKWAY to US HIGHWAY 61

S.A.P. 062-623-053
COUNTY PROJ. P-5004



STRIPING PLAN
SHEET 9 OF 9 SHEETS

P:\PROJECTS\2014_OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\FINAL PLAN\TITLE.DWG

PLAN SYMBOLS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPERTY LINE
- CORPORATE OR CITY LIMITS
- RAILROAD
- RAILROAD RIGHT-OF-WAY
- RIVER OF CREEK
- CULVERT
- GUARDRAIL
- WOOD FENCE
- BARBED WIRE FENCE
- WOVEN WIRE FENCE
- CHAIN LINK FENCE
- TIMBER WALL
- STONE WALL
- HEDGE
- RAILROAD CROSSING SIGN
- CROSSING GATE
- MEANDER CORNER
- SLOPE EASEMENT (CONST. LIMITS)
- MARSH
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH OR SHRUB
- WOODS
- CATCH BASIN
- BRIDGE
- IRON PIPE OR ROD
- MONUMENT (STONE, CONCRETE OR METAL)
- WOODEN HUB

UTILITY SYMBOLS

- UTILITY POLE
- GUY OR ANCHOR
- STREET LIGHT
- TELEPHONE PEDESTAL
- GAS MAIN
- WATER MAIN
- TELEPHONE VAULT
- ELECTRIC VAULT
- TELEPHONE CABLE
- ELECTRIC CABLE
- STORM SEWER
- SANITARY SEWER
- SEWER MANHOLE
- GATE VALVE
- CONTROLLER CABINET
- EXISTING HYDRANT
- CABLE TELEVISION-BURIED
- FIBER OPTIC CABLE
- TRAFFIC SIGNAL LINE
- TRAFFIC SIGNAL HAND HOLE

FOR PLANS AND UTILITIES SYMBOLS SEE MN/DOT TECHNICAL MANUAL.

-GOVERNING SPECIFICATIONS-

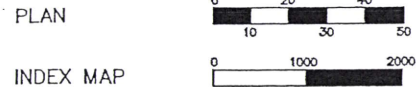
THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, SEE [HTTP://WWW.DOT.STATE.MN.US/TRAFFICENG/](http://www.dot.state.mn.us/trafficing/)

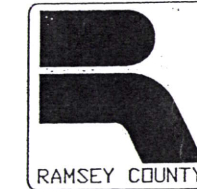
ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.



SCALES IN FEET



GROSS LENGTH 4606 FEET 0.87 MILES
 BRIDGE LENGTH -----
 EXCEPTIONS -----
 NET LENGTH 4606 FEET 0.87 MILES



RAMSEY COUNTY
 DEPARTMENT OF PUBLIC WORKS

PLAN FOR THE BITUMINOUS MILL & OVERLAY OF

HAMLIN AVE.
 S.A.P. No. 062-650-012

BETWEEN: FLORAL DRIVE W. AND COUNTY HIGHWAY CSAH 96

COUNTY PROJECT P5010

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4	DETAILS
5-8	PLAN SHEETS
9-12	STRIPING PLAN

THIS PLAN CONTAINS 12 SHEETS

END S.A.P. 062-650-012
 HAMLIN AVE.
 STA. 46+05.85



BEGIN S.A.P. 062-650-012
 HAMLIN AVE.
 STA. 0+00.00

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.

Nicklaus Fischer
 NICKLAUS FISCHER REG. NO. 50791 DATE 4/30/2014

RECOMMENDED FOR APPROVAL *[Signature]* DATE 5/14/14
 RAMSEY COUNTY ENGINEER

APPROVED *[Signature]* DATE 5/14/14
 CITY OF ARDEN HILLS

DESIGN DESIGNATION

HAMLIN AVENUE BETWEEN FLORAL DRIVE W. TO COUNTY HIGHWAY 96

PRESENT ADT (2014)	10325
PROJECTED ADT (2034)	12390
FUNCTIONAL CLASS	B MINOR ARTERIAL
TRAFFIC LANES	2
PARKING LANES	0
SOILS R-VALUE	50

BASED ON STOPPING DISTANCE
 HEIGHT OF EYE: 3.50 FEET
 HEIGHT OF OBJECT: 2.00 FEET

DRAWN BY D. BODELSON DATE 2-13-2013
 CHECKED BY L. LORTIE DATE 4-29-2013

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

MINNESOTA DEPARTMENT OF TRANSPORTATION

[Signature] DATE 5/19/14
 DISTRICT STATE AID ENGINEER
 REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY
[Signature] DATE 5/19/14
 APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\TOP SECTIONS.DWG May 19, 2014 7:30 AM

ESTIMATED QUANTITIES

Item Number	Item	Unit	Estimated Quantity 100% S.A.P. 062-650-012
2021.501	Mobilization	LS	1
2104.501	Remove Curb & Gutter	LF	192
2104.503	Saw Concrete Curb & Walk Full Depth	LF	170
2104.511	Saw Bituminous Pavement Full Depth	LF	100
2104.513	Remove & Replace Bit Pavement (Fulldepth) ADA	LF	192
2104.603	Remove Concrete Walk	SF	1,476
2123.610	Street Sweeper	Hour	20
2232.501	Mill Bituminous Surface (2")	SY	26,585
2357.502	Bituminous Material for Tack Coat	Gal.	1,329
2360.501	Type SPWEB340F Wearing Course Mixture	Ton	3,057
2360.505	Bituminous Mixture for Patching	Ton	100
2506.522	Adjust Valve Box	Each	20
2521.501	Adjust Frame Ring & Casting	Each	26
2521.501	Construct Survey Control Structure	Each	1
2531.501	6" Concrete Walk (ADA)	SF	1,524
2531.501	Concrete Curb & Gutter Design B618 (ADA)	LF	216
2531.502	Concrete Curb Design V (ADA)	LF	48
2531.618	Truncated Domes	SF	144
2563.601	Traffic Control	LS	1
2563.601	Storm Drain Inlet Protection	Each	25
2573.530	Site Restoration (ADA)	Each	12
2575.602	Pavement Message LT Arrow - Epoxy	Each	42
2582.501	Pavement Message LT/Thru Arrow - Epoxy	Each	2
2582.501	4" Solid Line White - Epoxy	LF	7,888
2582.502	4" Dashed Line White - Epoxy	LF	50
2582.502	12" Solid Line White - Epoxy	LF	20
2582.502	4" Solid Line Yellow - Epoxy	LF	6,616
2583.502	4" Dashed Line Yellow - Epoxy	LF	1,654
2582.502	4" Double Line Yellow - Epoxy	LF	360
2582.502	Crosswalk Marking-Epoxy	SF	505

SIGNAL REVISION NOTES

APS SYSTEM- Complete with 8 Buttons and Signs. Remove and salvage old buttons and signs. Plug old holes. Includes 2/c#14 cable as needed. See plan. Must be listed on Mn/DOT approved/qualified products list web site for signals. <http://www.dot.state.mn.us/products/index.html>

PEDESTRIAN- push button station-see detail
Furnish & Install pedestal pole and base. Install pedestal base includes remount the ped head on the **TOP** of the new pedestal pole

MN/DOT STANDARD PLATES

7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
8000I	STANDARD BARRICADES
8112F	PEDESTAL FOUNDATION
8122E	PEDESTAL & PEDESTAL BASE

QUANTITY NOTES

- To be used for restoration of curb removal areas.
- Common excavation is measured 3 feet from the back of curb at a depth of 6 inches.
- Topsoil is measured 3 feet from back of curb at a depth of 6 inches.
- Tack coat is estimated at 0.05 gallons / square yard bituminous / lift
- Bituminous is estimated at 115 lbs / square yard / inch of bituminous
- Bituminous patching mix is SPWEB340F
- Rapid stabilization method 3 is estimated at 6,000 gallons / acre

NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Ruben S. ...*
 REG NO: 50791 DATE: 5-19-2014

HAMLIN AVE.
 FLORAL DR. TO COUNTY HWY. # 96

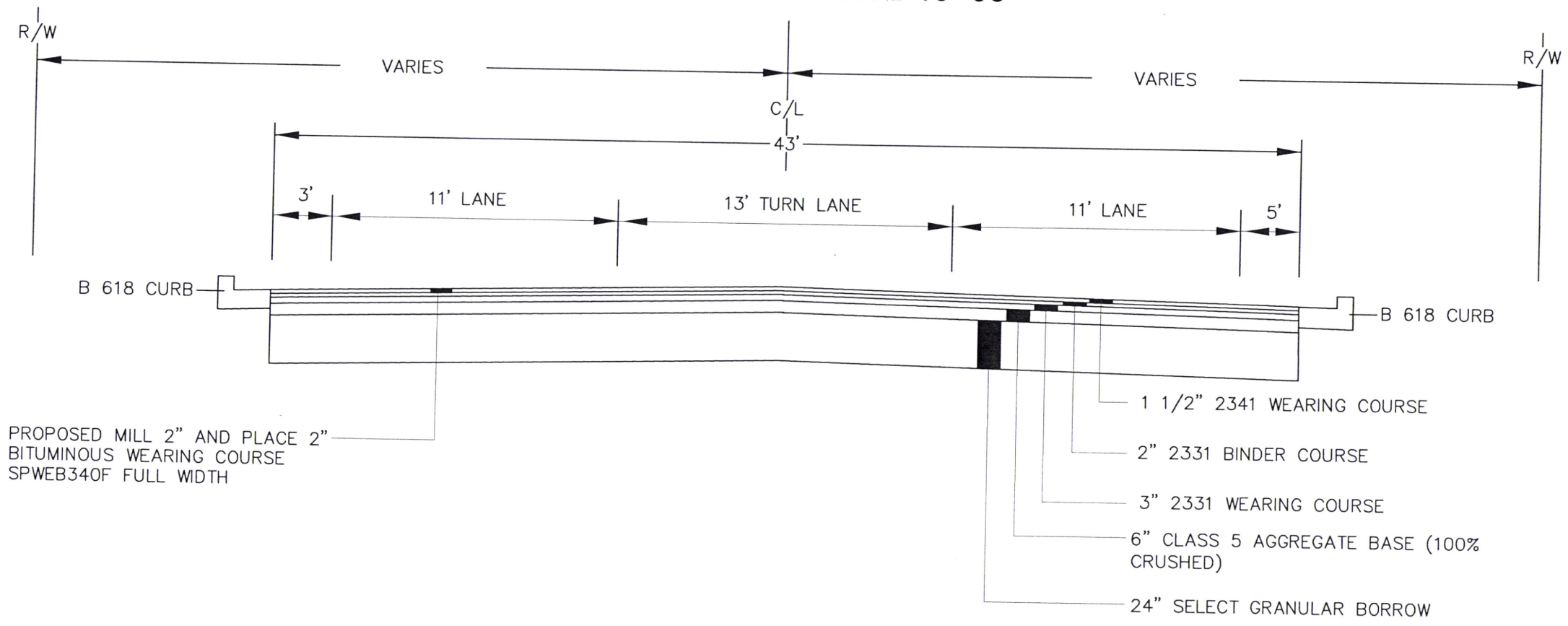
062-650-012

COUNTY PROJ.P-5010



ESTIMATED QUANTITIES
SHEET 2 OF 12 SHEETS

TYPICAL SECTION - HAMLINE AVENUE STA. 0+00 TO STA. 46+06



P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\TYP SECTIONS.DWG May 6, 2014 9:32 AM

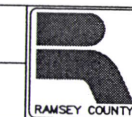
NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: *Michael J. [Signature]*
 REG NO: 50791 DATE: 5-6-2014

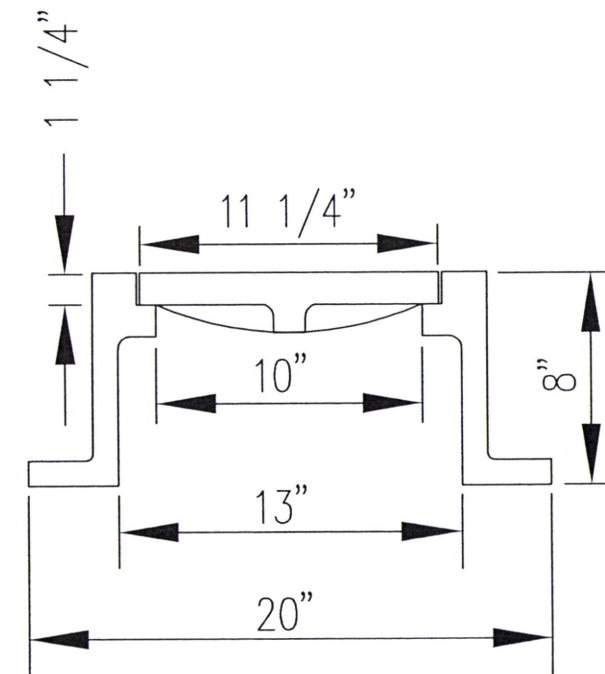
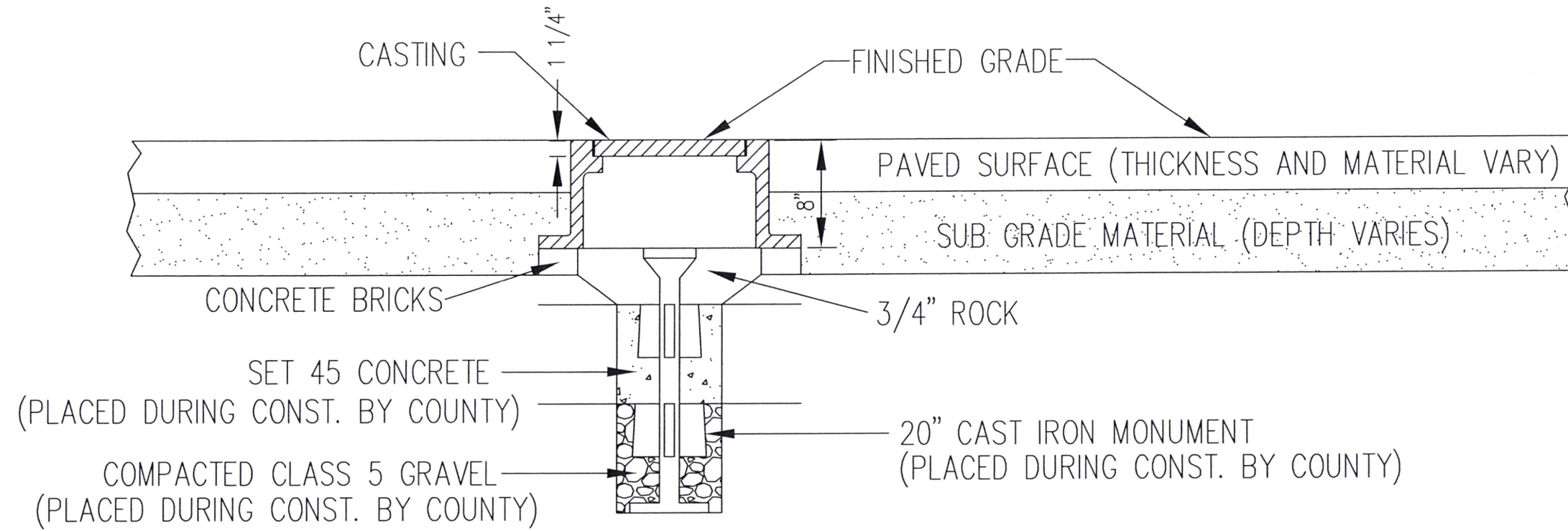
HAMLINE AVENUE
FLORAL DR. W TO CSAH 96

062-650-012
COUNTY PROJ. P5010



TYPICAL SECTION
SHEET 3 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR. TO HWY 96\HAMLINE AVE - FLORAL DR. TO HWY 96\FINAL PLAN\M & O, PEDS.DWG April 17, 2014 8:50 AM



CAST IRON CASTING

WEIGHT = 95 lbs

NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: *Nehemiah F. Fisher*

REG NO: 50791 DATE: 4-30-2014

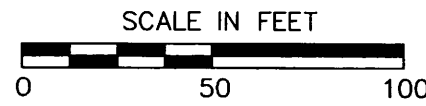
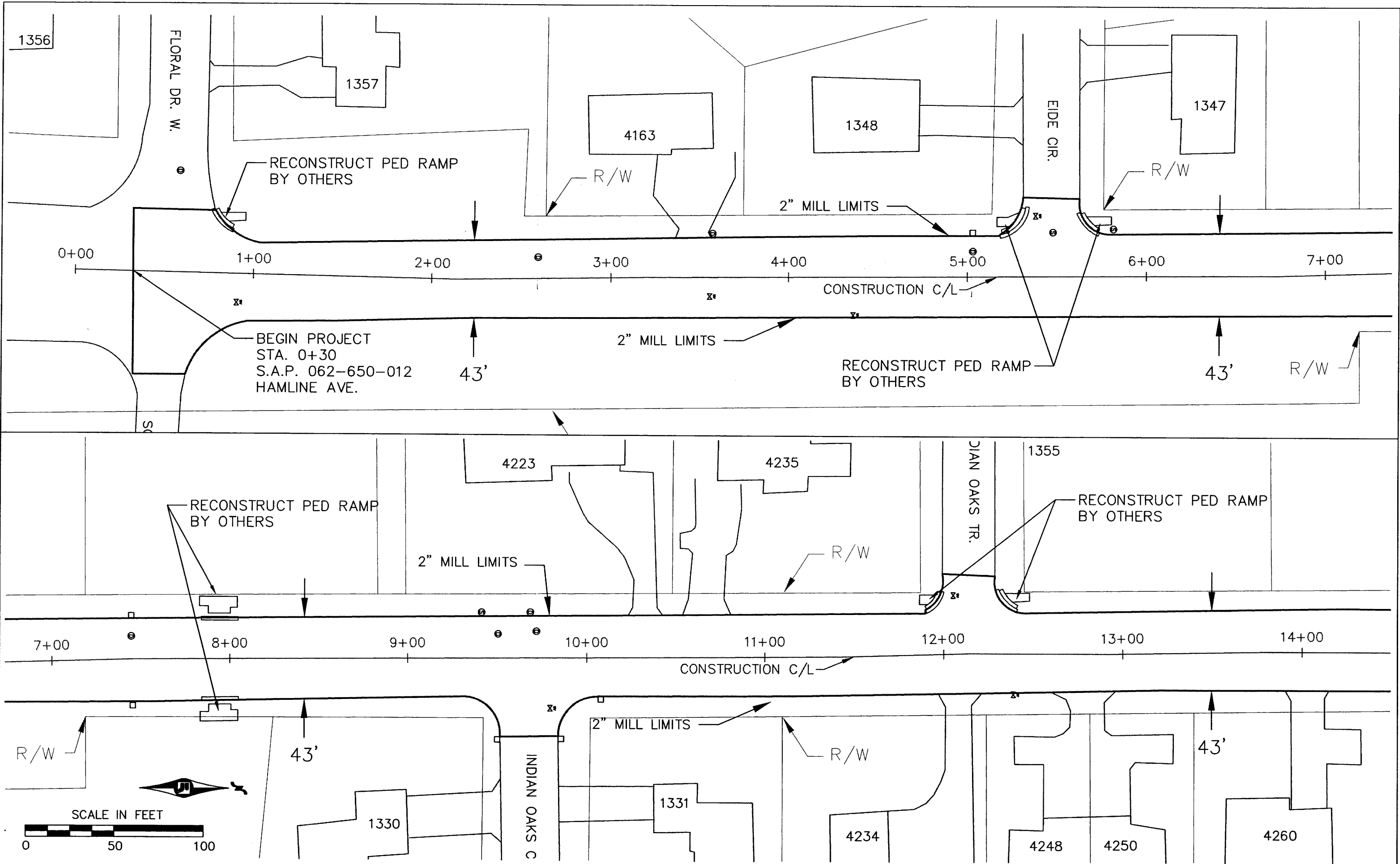
HAMLIN AVENUE
FLORAL DR. W. TO CSAH 96

S.A.P. 062-650-012
COUNTY PROJ. P-5010



DETAIL
SHEET 4 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\M & O, PEDS.DWG April 17, 2014 8:50 AM



NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *[Signature]*
 REG NO: 50791 DATE: 4-30-2014

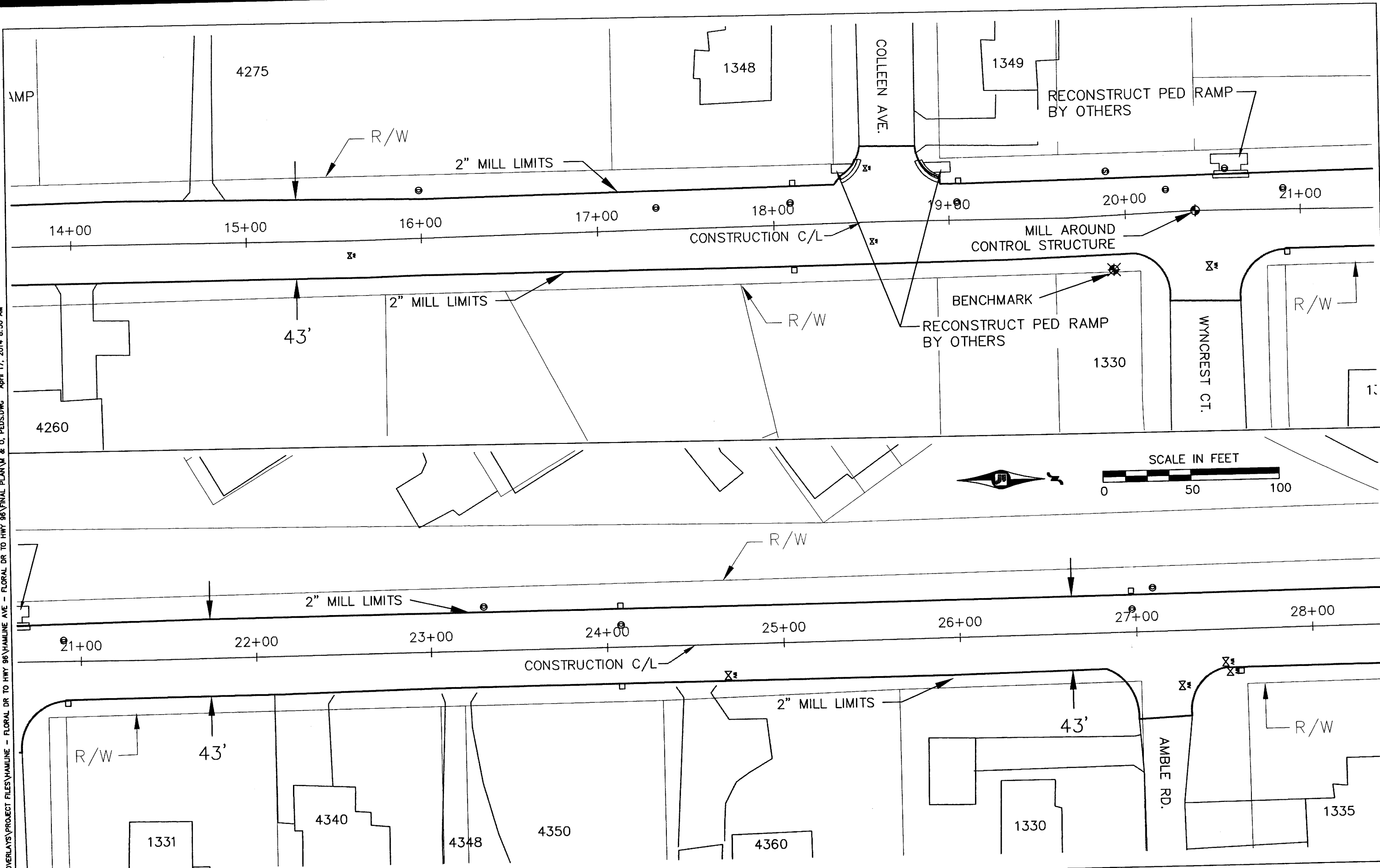
HAMLIN AVENUE
 FLORAL DR. W. TO CSAH 96

S.A.P. 062-650-012
 COUNTY PROJ. P-5010



ROADWAY PLAN
 SHEET 5 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE - FLORAL DR TO HWY 96\FINAL PLAN\M & C, PEDS.DWG April 17, 2014 8:50 AM



NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Niklaus J. [Signature]*
 REG NO: 50791 DATE: 4-30-2014

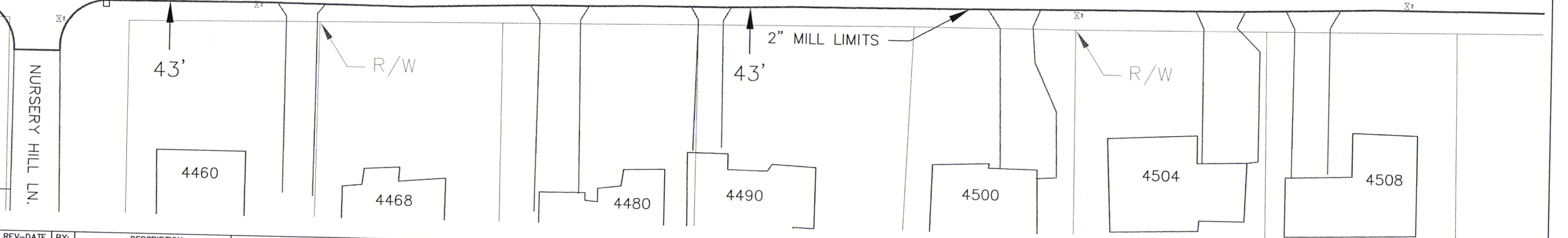
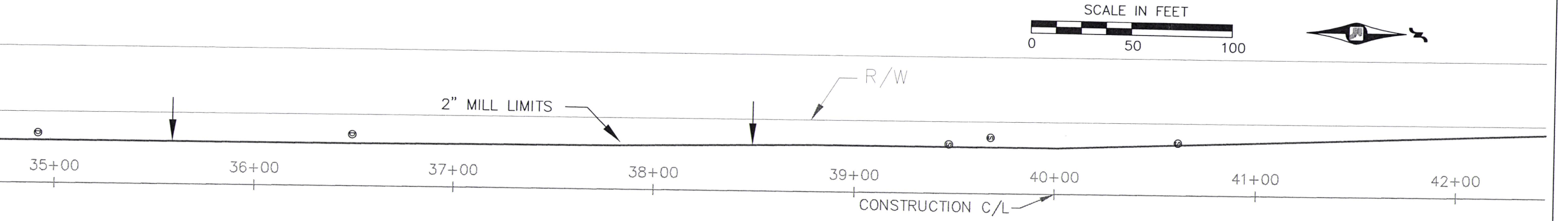
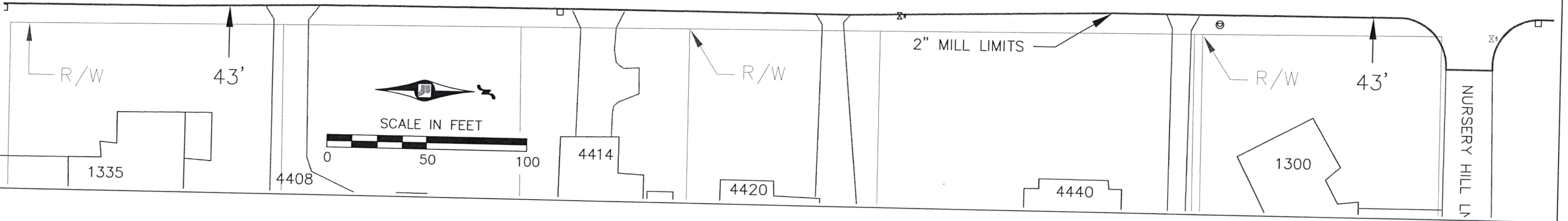
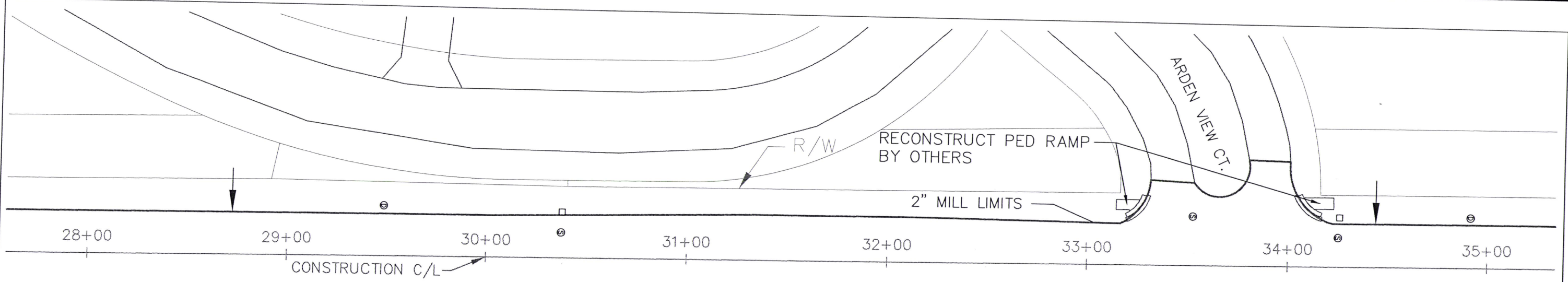
HAMLIN AVENUE
 FLORAL DR. W. TO CSAH 96

S.A.P. 062-650-012
 COUNTY PROJ. P-5010



ROADWAY PLAN
 SHEET 6 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\M & O, PEDS.DWG April 17, 2014 8:50 AM

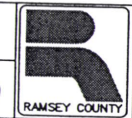


NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *[Signature]*
 REG NO: 50791 DATE: 4-30-2014

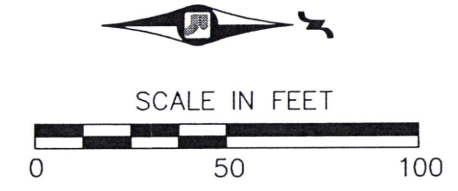
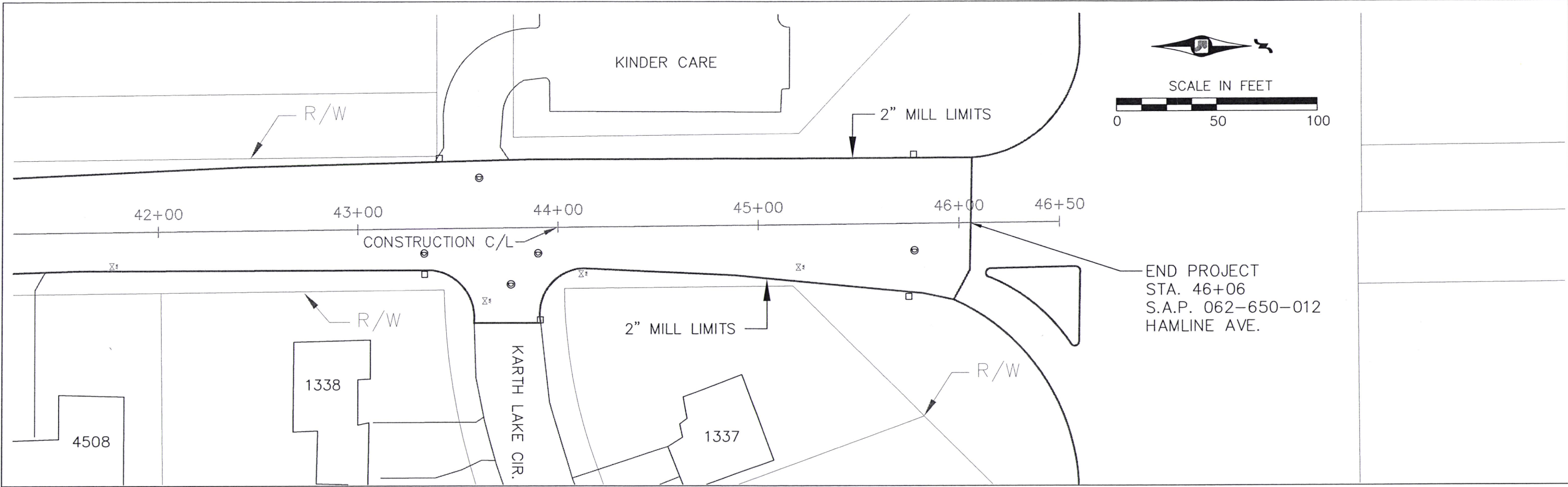
HAMLIN AVENUE
 FLORAL DR. W. TO CSAH 96

S.A.P. 062-650-012
 COUNTY PROJ. P-5010



ROADWAY PLAN
 SHEET 7 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\M & O, PEDES.DWG April 17, 2014 8:50 AM



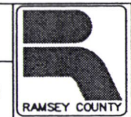
END PROJECT
 STA. 46+06
 S.A.P. 062-650-012
 HAMLINE AVE.

NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Michael J. Iselin*
 REG NO: 50791 DATE: 4-30-2014

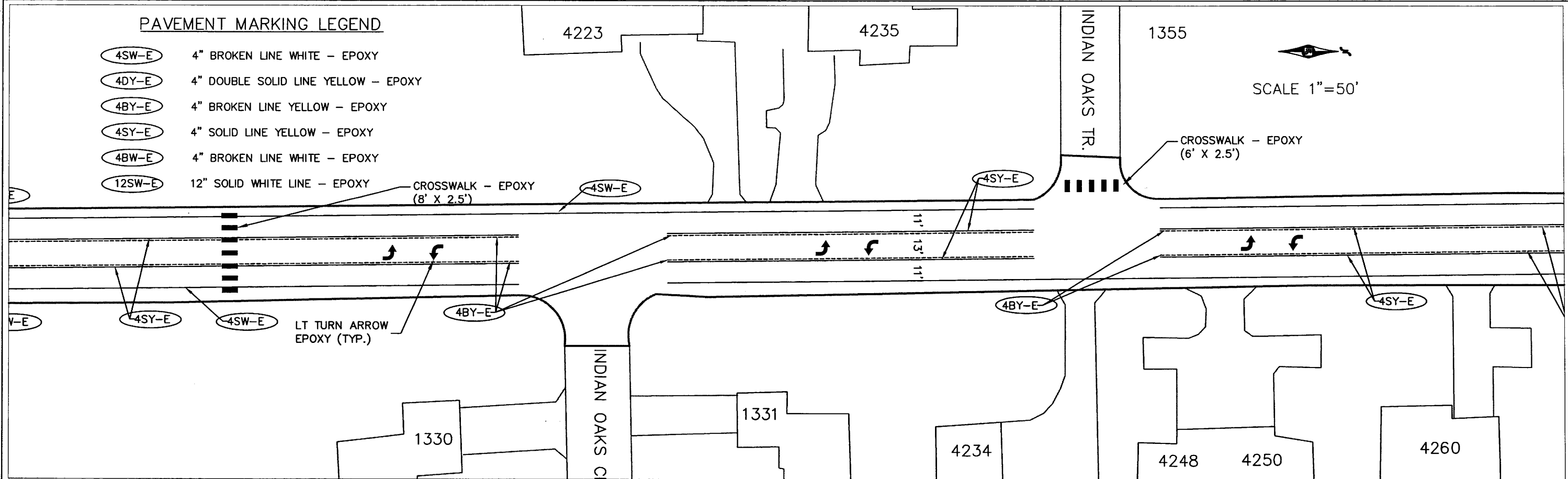
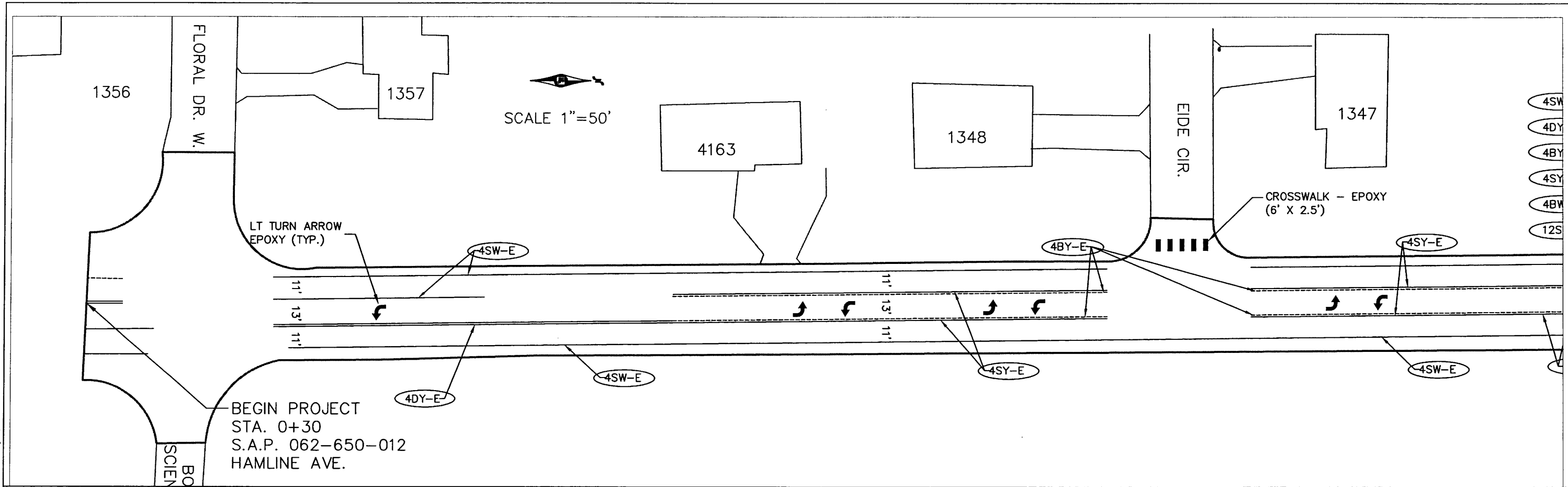
HAMLIN AVENUE
 FLORAL DR. W. TO CSAH 96

S.A.P. 062-650-012
 COUNTY PROJ. P-5010



ROADWAY PLAN
 SHEET 8 OF 12 SHEETS

P:\PROJECTS\2014_OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\PM.DWG May 6, 2014 8:27 AM



PAVEMENT MARKING LEGEND

- 4SW-E 4" BROKEN LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY
- 4BY-E 4" BROKEN LINE YELLOW - EPOXY
- 4SY-E 4" SOLID LINE YELLOW - EPOXY
- 4BW-E 4" BROKEN LINE WHITE - EPOXY
- 12SW-E 12" SOLID WHITE LINE - EPOXY
- CROSSWALK - EPOXY (8' X 2.5')

NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: *Richard Fisher*

REG NO: 50791 DATE: 5-6-2014

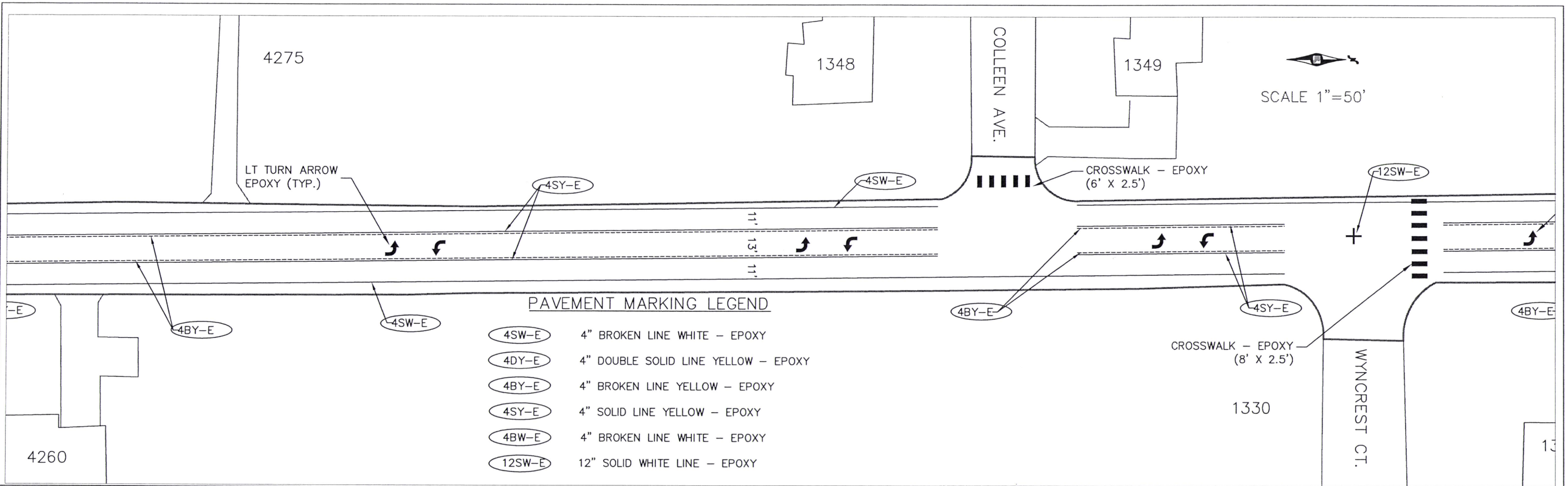
HAMLINE AVENUE
FLORAL DR. W. TO COUNTY ROAD 96

S.A.P. 062-650-012
COUNTY PROJ. P-5010



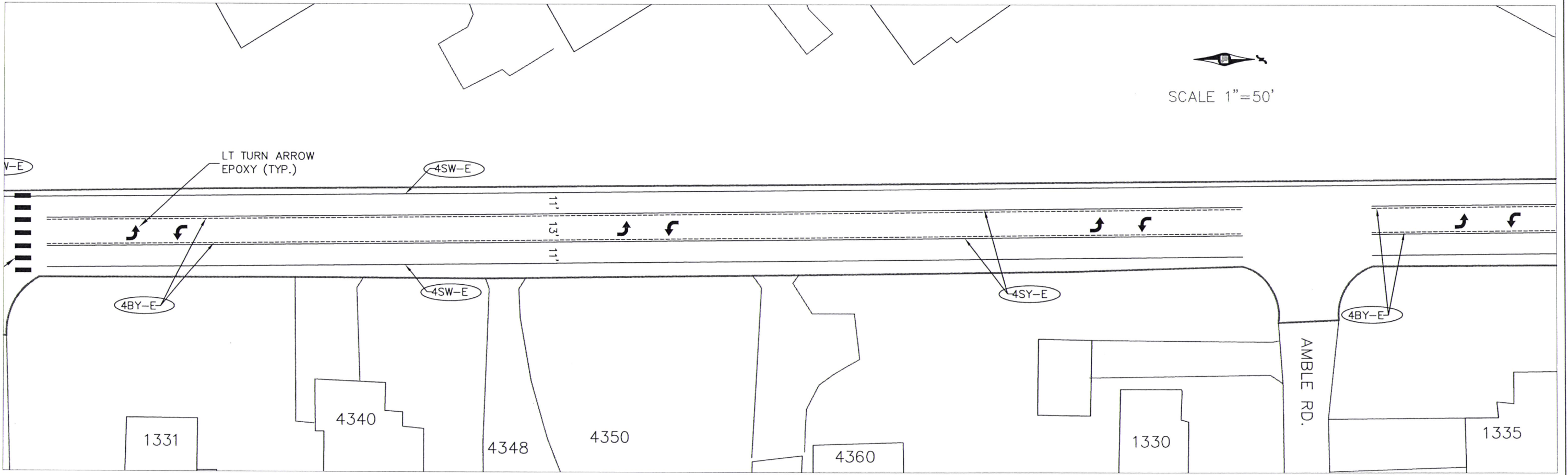
PAVEMENT MARKING PLAN
SHEET 9 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\PM.DWG May 6, 2014 8:27 AM



PAVEMENT MARKING LEGEND

- (4SW-E) 4" BROKEN LINE WHITE - EPOXY
- (4DY-E) 4" DOUBLE SOLID LINE YELLOW - EPOXY
- (4BY-E) 4" BROKEN LINE YELLOW - EPOXY
- (4SY-E) 4" SOLID LINE YELLOW - EPOXY
- (4BW-E) 4" BROKEN LINE WHITE - EPOXY
- (12SW-E) 12" SOLID WHITE LINE - EPOXY



NO.	REV-DATE	BY:	DESCRIPTION

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.
 SIGNED: *Andrew J. ...*
 REG NO: 50791 DATE: 5-6-2014

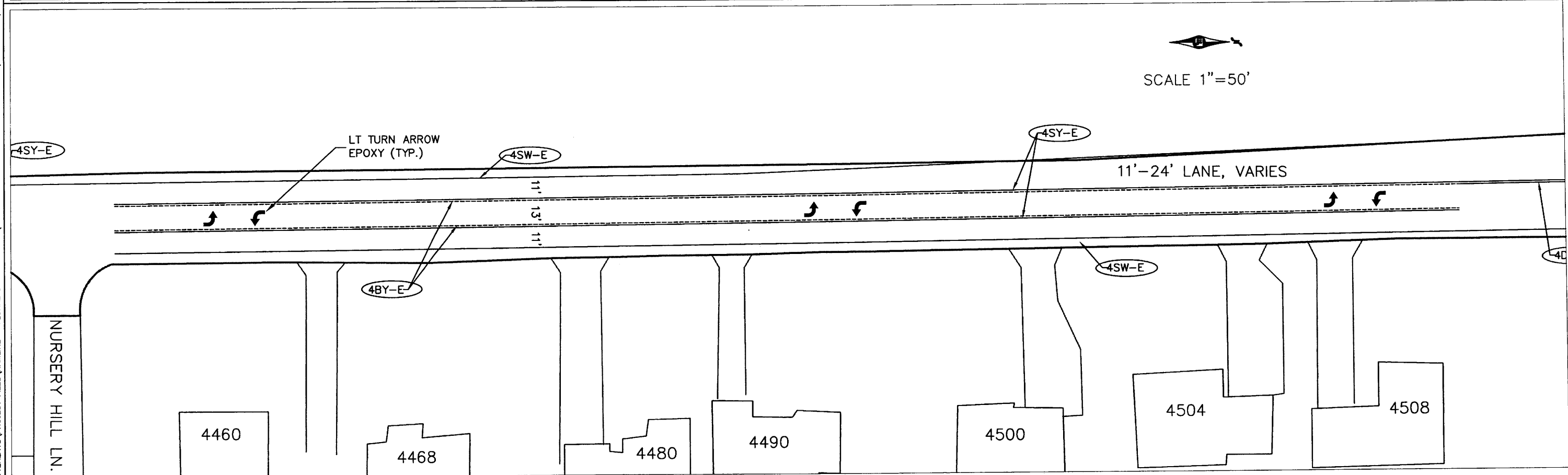
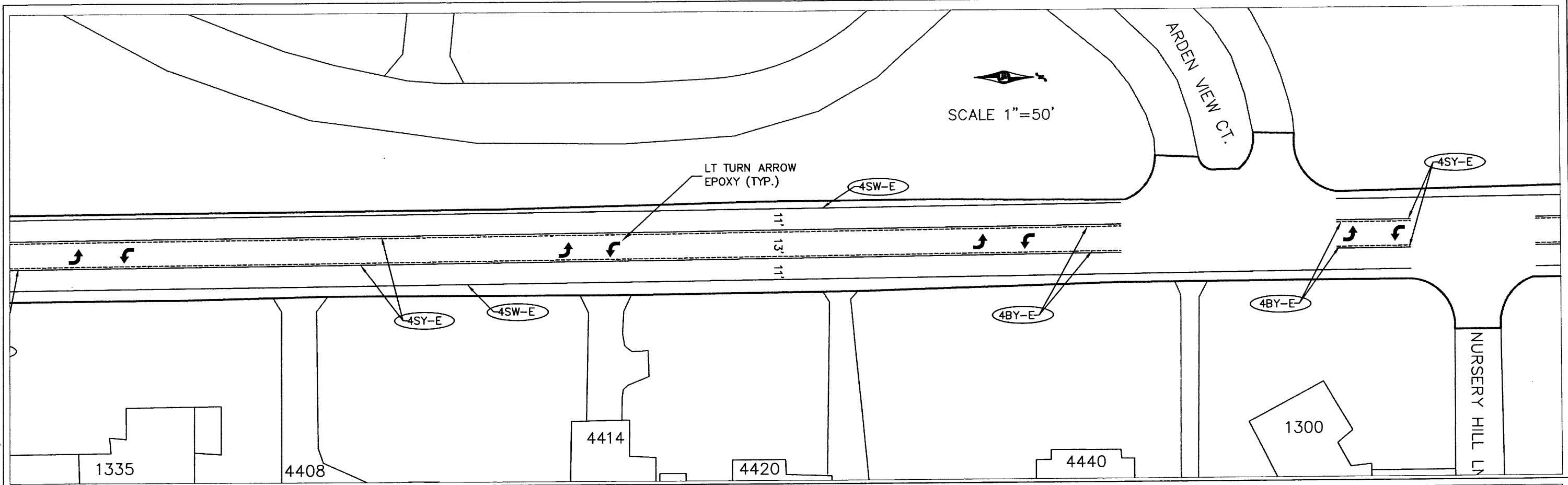
HAMLINE AVENUE
 FLORAL DR. W. TO COUNTY ROAD 96

S.A.P. 062-650-012
 COUNTY PROJ. P-5010



PAVEMENT MARKING PLAN
 SHEET 10 OF 12 SHEETS

P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE - FLORAL DR TO HWY 96\FINAL PLAN\PM.DWG May 6, 2014 8:27 AM



NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: *William Fisher*


REG NO: 50791 DATE: 5-6-2014

HAMLIN AVENUE

FLORAL DR. W. TO COUNTY ROAD 96

S.A.P. 062-650-012

COUNTY PROJ. P-5010



RAMSEY COUNTY

PAVEMENT MARKING PLAN

SHEET 11 OF 12 SHEETS

KINDER CARE



SCALE 1"=50'

END PROJECT
STA. 46+06
S.A.P. 062-650-012
HAMLINE AVE.

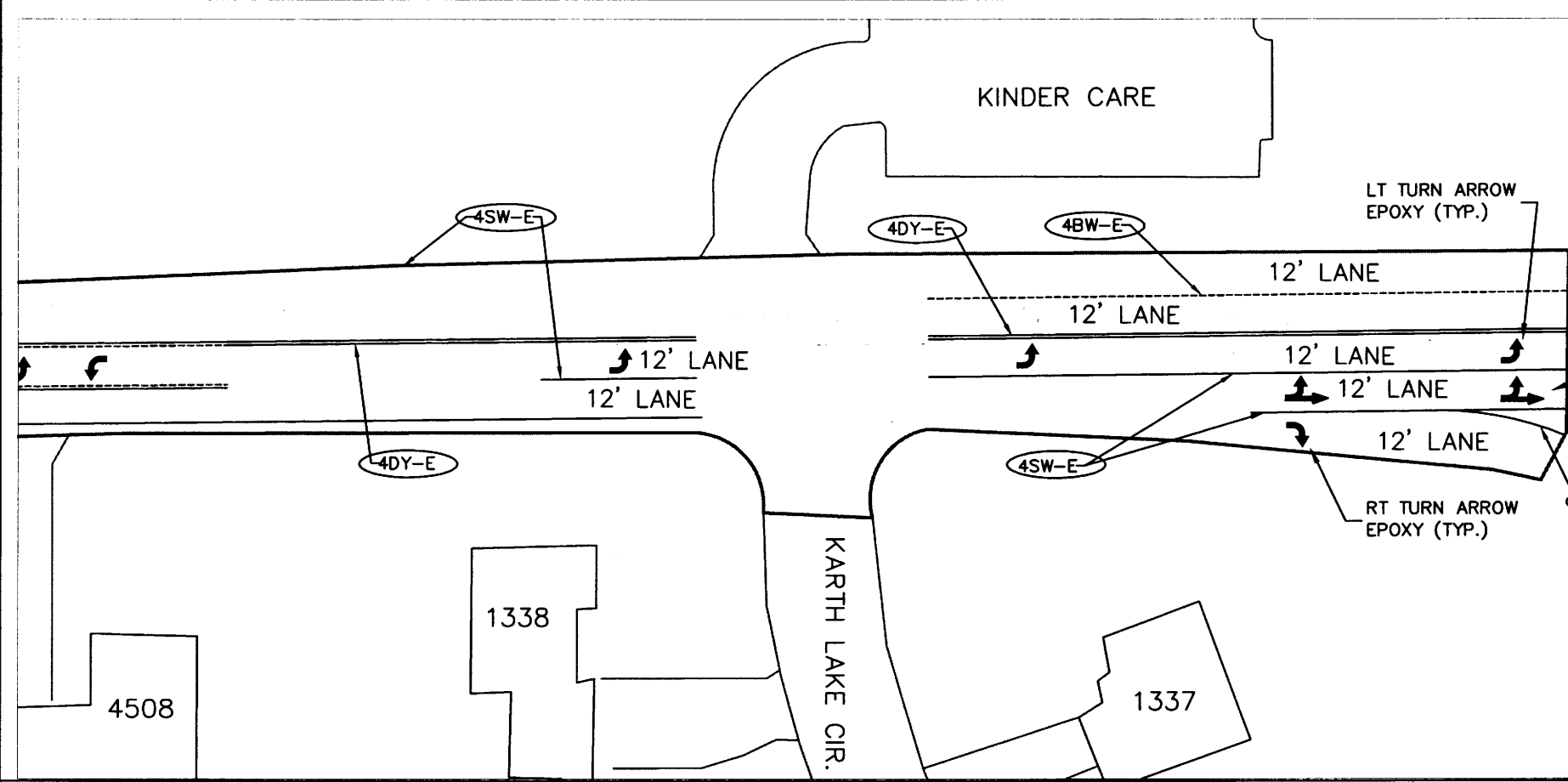
PAVEMENT MARKING LEGEND

- 4SW-E 4" BROKEN LINE WHITE - EPOXY
- 4DY-E 4" DOUBLE SOLID LINE YELLOW - EPOXY
- 4BY-E 4" BROKEN LINE YELLOW - EPOXY
- 4SY-E 4" SOLID LINE YELLOW - EPOXY
- 4BW-E 4" BROKEN LINE WHITE - EPOXY
- 12SW-E 12" SOLID WHITE LINE - EPOXY

LT TURN ARROW
EPOXY (TYP.)

LT/THRU TURN
ARROW-EPOXY (TYP.)

RT TURN ARROW
EPOXY (TYP.)



P:\PROJECTS\2014 OVERLAYS\PROJECT FILES\HAMLINE - FLORAL DR TO HWY 96\HAMLINE AVE - FLORAL DR TO HWY 96\FINAL PLAN\PM.DWG May 6, 2014 7:29 AM

NO.	REV-DATE	BY:	DESCRIPTION

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.

SIGNED: _____

REG NO: _____ DATE: _____

HAMLINE AVENUE
FLORAL DR. W. TO COUNTY ROAD 96

S.A.P. 062-650-012
COUNTY PROJ. P-5010



PAVEMENT MARKING PLAN
SHEET 12 OF 12 SHEETS