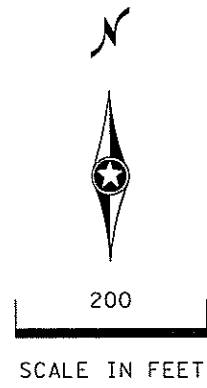
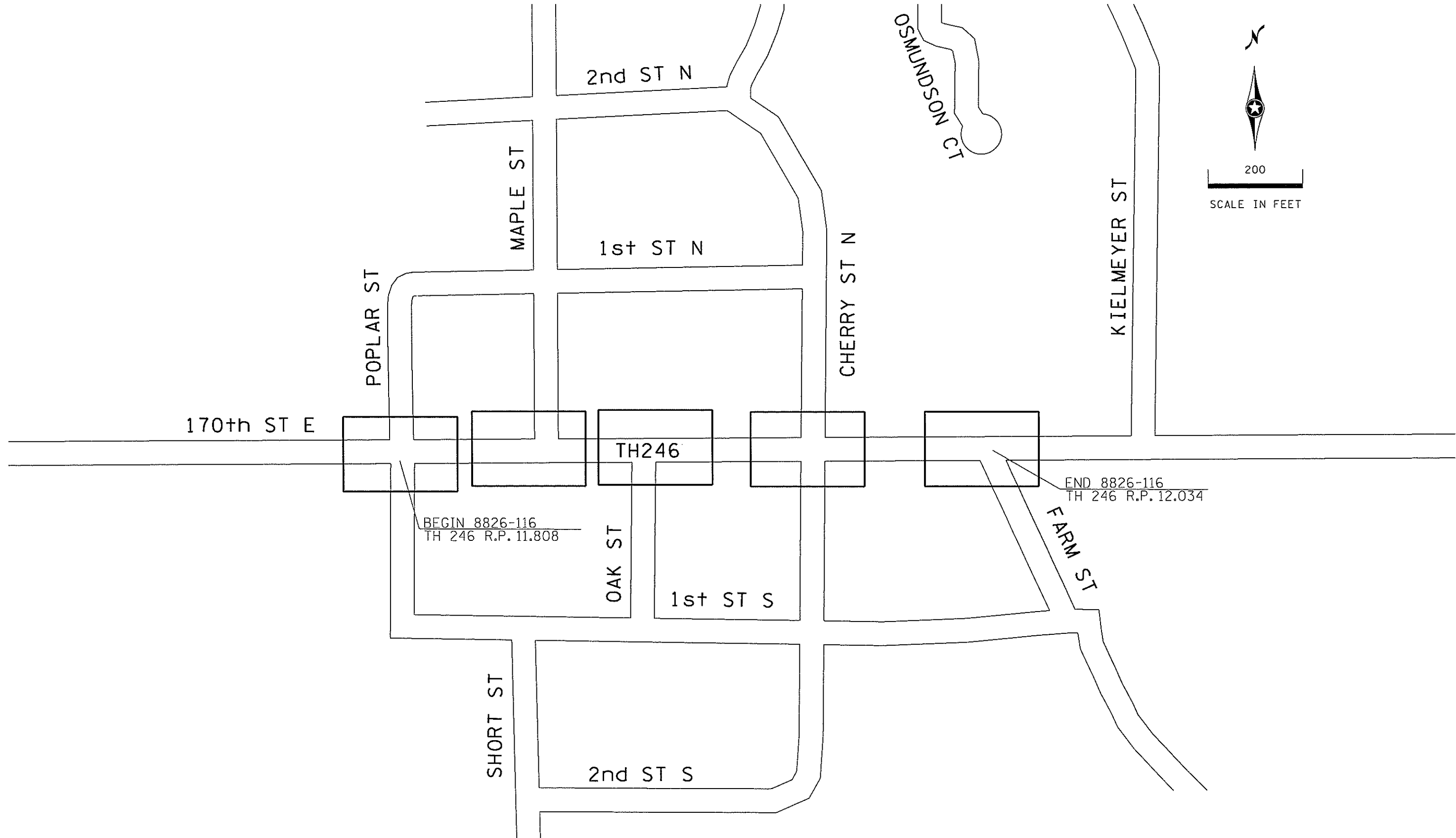


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DISTRICT #: METRO
IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
PATH & FILENAME: P:\2011\08.000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CDB826116_g1B01.dgn



NERSTRAND

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
 engineering

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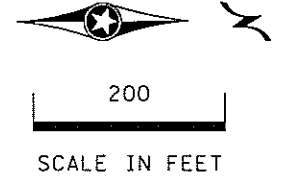
GENERAL LAYOUT

STATE PROJ. NO. 8826-116

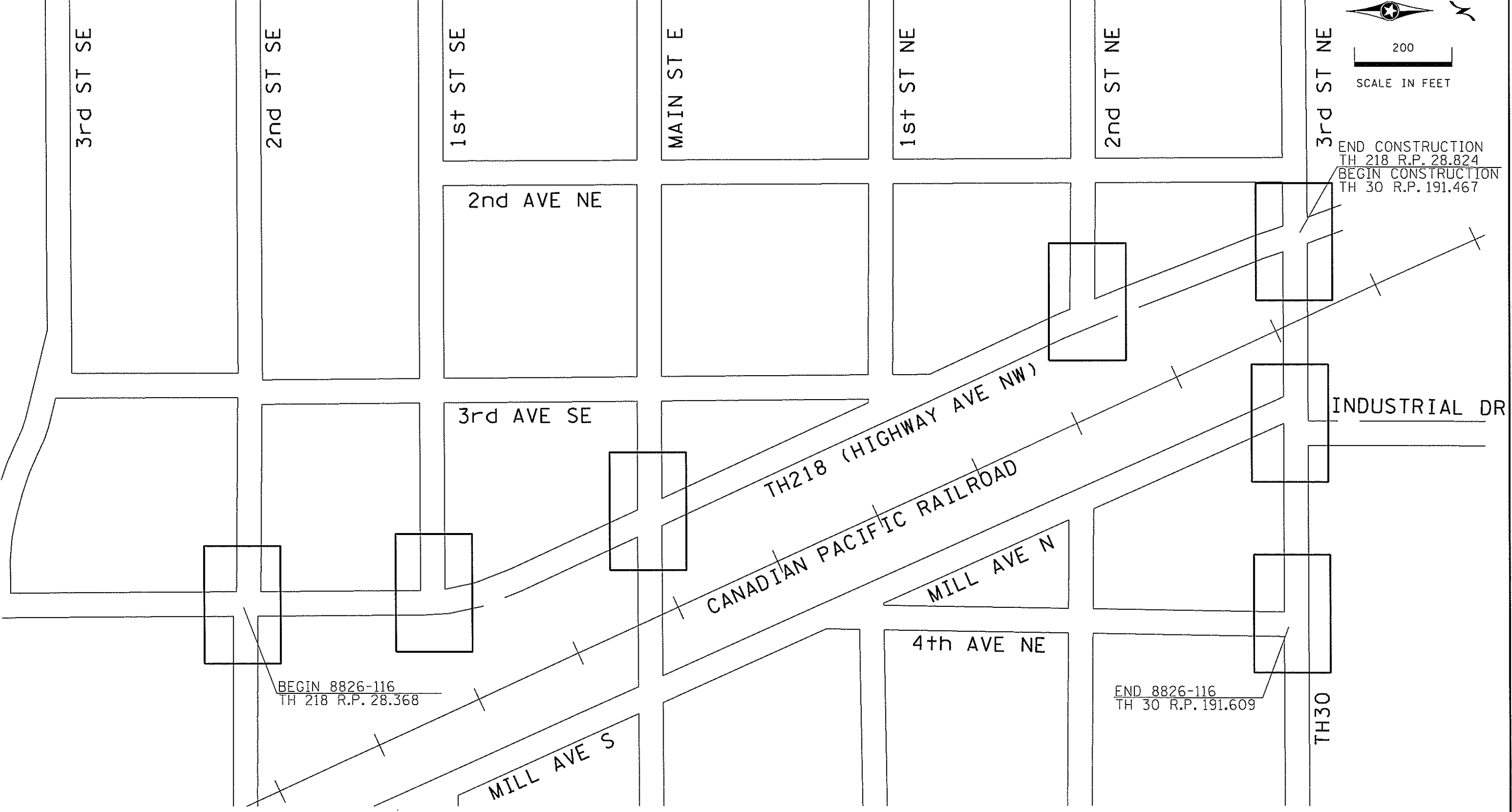
SHEET NO. 2 OF 53 SHEETS

PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
IPLLOT NAME: \$\$\$IPLLOT\$NAME\$\$\$
PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_gICD.dgn



END CONSTRUCTION
TH 218 R.P. 28.824
BEGIN CONSTRUCTION
TH 30 R.P. 191.467



BEGIN 8826-116
TH 218 R.P. 28.368

END 8826-116
TH 30 R.P. 191.609

BLOOMING PRAIRIE

GENERAL LAYOUT

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CL I

Designed By: ABW

Checked By: ELA

Approved By: ABW



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STATE PROJ. NO. 8826-116

SHEET NO. 3 OF 53 SHEETS

PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
I/PLOT NAME: \$\$\$I/PLOT \$NAME\$\$\$
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ELLENDALE

GENERAL LAYOUT

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE #: 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW



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STATE PROJ. NO. 8826-116

SHEET NO. 4 OF 53 SHEETS

DISTRICT #: METRO
 I/PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116.tbl.dgn
 PLOTTED/REVISED: 4/30/2012

STATEMENT OF ESTIMATED QUANTITIES

NOTES	TABULATION	SHEET NUMBER	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
			2011.601	CONSTRUCTION SURVEYING	LUMP SUM	1
			2021.501	MOBILIZATION	LUMP SUM	1
			2051.501	MAINT & RESTORATION OF HAUL ROADS	LUMP SUM	1
	A	7-8	2102.501	PAVEMENT MARKING REMOVAL-PERMANENT	SQ FT	682
	A	7-8	2104.501	REMOVE CURB	LIN FT	202
	A	7-8	2104.501	REMOVE CURB AND GUTTER	LIN FT	776
	A	7-8	2104.503	REMOVE CONCRETE WALK	SQ FT	6606
(7)	A	7-8	2104.503	REMOVE CONCRETE PAVEMENT	SQ FT	226
(1)	A	7-8	2104.503	REMOVE BITUMINOUS PAVEMENT	SQ FT	722
	A	7-8	2104.509	REMOVE CASTING	EACH	3
	A	7-8	2104.509	REMOVE CURB BOX	EACH	4
	A	7-8	2104.523	SALVAGE CASTING	EACH	2
(1) (2)	A	7-8	2104.603	REMOVE AND REPLACE BITUMINOUS PAVEMENT	LIN FT	17
(2) (4)	B	9-10	2231.604	BITUMINOUS PATCH SPECIAL	SQ YD	61
	A	7-8	2232.501	MILL BITUMINOUS SURFACE (2.0")	SQ YD	21
(2)	A	7-8	2232.603	MILL AND PATCH BITUMINOUS PAVEMENT	LIN FT	780
(7)	B	9-10	2301.501	CONCRETE PAVEMENT	SQ YD	26
	B	9-10	2504.602	ADJUST VALVE BOX	EACH	1
(3)	B	9-10	2506.516	CASTING ASSEMBLY	EACH	3
	B	9-10	2506.521	INSTALL CASTING	EACH	2
	B	9-10	2506.522	ADJUST FRAME & RING CASTING	EACH	5
	B	9-10	2521.618	CONCRETE WALK	SQ FT	6787
(8)	B	9-10	2531.502	CONCRETE CURB DESIGN B4	LIN FT	16
(8)	B	9-10	2531.502	CONCRETE CURB DESIGN B6	LIN FT	192
	B	9-10	2531.603	CONCRETE CURB & GUTTER	LIN FT	778
	B	9-10	2531.603	CONCRETE CURB DESIGN V	LIN FT	109
	B	9-10	2531.618	TRUNCATED DOMES	SQ FT	786
			2563.601	TRAFFIC CONTROL	LUMP SUM	1
	A	7-8	2573.530	STORM DRAIN INLET PROTECTION	EACH	26
(6)			2575.555	TURF ESTABLISHMENT	LUMP SUM	1
(5)	B	9-10	2582.503	CROSSWALK MARKING-EPOXY	SQ FT	396

NOTES:

- (1) AVERAGE DEPTH IS 8 INCHES.
- (2) BITUMINOUS CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF MN/DOT 2360, TYPE SP 12.5 WEARING COURSE (SPWEB340B).
- (3) REPLACE EXISTING GRATE CASTING WITH ADA COMPLIANT GRATE CASTING. OPENINGS SHALL NOT PERMIT PASSAGE OF A SPHERE MORE THAN 0.5" IN DIAMETER. ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.
- (4) BITUMINOUS PATCH DEPTH SHALL BE 2".
- (5) TO BE USED FOR RETAINING ZEBRA STRIPING IN AREAS OF BITUMINOUS PATCHING.
- (6) PERMANENT TURF ESTABLISHMENT SHALL BE COMPLETED USING SOD TYPE SALT RESISTANT. 4" MINIMUM TOP SOIL SHALL BE PLACED AT ALL AREAS REQUIRING TURF ESTABLISHMENT. TURF ESTABLISHMENTS SHALL BE PROVIDED AT ALL AREAS DISTURBED AS A RESULT OF CONSTRUCTION.
- (7) AVERAGE DEPTH OF REINFORCED CONCRETE PAVEMENT IS 8". SUBGRADE PREP AND CLASS V BASE ARE INCIDENTAL.
- (8) CLASS V BASE AND SUBGRADE PREP ARE INCIDENTAL.

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088
 DATE: 03/15/12 SIGNATURE: *[Signature]*
 DESIGN SQUAD RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
 engineering
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STATEMENT OF ESTIMATED QUANTITIES

SOILS AND CONSTRUCTION NOTES AND GUIDELINES

- NEW CONCRETE WALK SHALL BE CONSTRUCTED WITH 6" OF CONCRETE WALK AND 3" MINIMUM OF CLASS 5 AGGREGATE BASE.
- SAWING FOR REMOVAL OF CURB, CURB AND GUTTER, CONCRETE WALK, CONCRETE PAVEMENT, AND BITUMINOUS PAVEMENT SHALL BE CONSIDERED INCIDENTAL.
- PROVIDE BITUMINOUS TACK COAT (MN/DOT SPECIFICATION 2357) FOR ALL BITUMINOUS PATCHING MIXTURES. THE TACK COAT SHALL BE CONSIDERED INCIDENTAL.
- BITUMINOUS PATCHING MIXTURE SHALL BE PLACED AND COMPACTED IN 3" MAXIMUM AND 1.5" MINIMUM LIFTS.
- ALL STAKING COORDINATES SHOWN ON THE PLAN ARE RICE & STEELE COUNTY COORDINATES.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (FIELD MANUAL - TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, DATED FEBRUARY 2011). SEE CHAPTER 6D - "PEDESTRIAN AND WORKER SAFETY" OF THE MMUTCD AND THE SPECIAL PROVISIONS, (1404) MAINTENANCE OF TRAFFIC CONTROL (2563) TRAFFIC CONTROL.
- MAINTAIN A MINIMUM 4' WIDE PEDESTRIAN ACCESS ROUTE OBSTRUCTION TO OBSTRUCTION AND/OR OBSTRUCTION TO EDGE OF WALK.

PERMANENT PAVEMENT MARKING NOTES

GENERAL:

- THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. THE CONTRACTOR WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.
- EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS.
- A TOLERANCE OF 1/4 INCH UNDER OR 1/4 INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS MAY VARY UP TO ONE-HALF FOOT FROM THE SPECIFIED LENGTHS PROVIDED THE OVER AND UNDER VARIATIONS ARE REASONABLY COMPENSATORY. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 1 INCH. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.

EPOXY:

- THE ROAD SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE ENGINEER JUST PRIOR TO APPLICATION. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. NEW PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE TREATMENTS AND/OR LAITANCE. ON LOW SPEED (SPEED LIMIT 35 OR LESS) URBAN PORTLAND CEMENT CONCRETE ROADWAYS, SANDBLAST CLEANING SHALL BE USED FOR ALL EPOXY PAVEMENT MARKINGS.
- THE EPOXY MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE EPOXY RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.
- FOR 15 MIL APPLICATIONS, GLASS BEADS SHALL BE APPLIED AT A RATE OF AT LEAST 25 LB/GAL. THE "NO-TRACKING" CONDITION SHALL BE DETERMINED ON AN APPLICATION OF SPECIFIED THICKNESS TO THE PAVEMENT AND COVERED WITH GLASS BEADS AT THE RATE OF AT LEAST 25 LB/GAL.
- OPERATIONS SHALL BE CONDUCTED ONLY WHEN THE ROAD PAVEMENT SURFACE TEMPERATURES ARE 50 DEGREES °F OR GREATER.
- PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT	
STANDARD PLATES	
PLATE NO.	DESCRIPTION
4010H	CONCRETE SHORT CONE & ADJUSTING RING (SECTIONAL CONCRETE)
4026A	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4132F	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE)
4154B	CATCH BASIN GRATE CASTING
7020K	CONCRETE CURB (DESIGN B, DESIGN V, DESIGN S, DESIGN DR AND DESIGN BR) (2 SHEETS)
7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100H	CONCRETE CURB AND GUTTER (DESIGN B AND DESIGN V)
7111J	INSTALLATION OF CATCH BASIN CASTINGS (CONCRETE CURB AND GUTTER)
8000I	STANDARD BARRICADES

UTILITIES NOTES

THE FOLLOWING UTILITIES HAVE FACILITIES WITHIN THE PROJECT LIMITS, NO UTILITIES WILL BE AFFECTED BY THIS PROJECT.

UTILITIES:

NERSTRAND:

CITY OF NERSTRAND
QWEST CORP.
XCEL ENERGY

BLOOMING PRAIRIE:

BLOOMING PRAIRIE UTILITIES
MEDIACOM
FRONTIER COMMUNICATIONS OF MINNESOTA, INC.
JAGUAR COMMUNICATIONS
MINNESOTA ENERGY RESOURCES CORP.
QWEST CORP.
STEELE COUNTY

ELLENDALE:

CITY OF ELLENDALE
INTERSTATE POWER & LIGHT CO.
FRONTIER COMMUNICATIONS OF MINNESOTA, INC.
HICKORY TECH
PAETEC BUSINESS SERVICES
MINNESOTA ENERGY RESOURCES CORP.
MIDCONTINENT COMMUNICATIONS
QWEST COMMUNICATIONS CORP.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-20, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

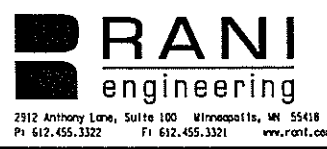
PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
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PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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 PRINT NAME: ANDREW WELLS LICENSE # 49088
 DATE: 03/15/12 SIGNATURE: *AW*
 DESIGN SQUAD RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW



STANDARD PLATES, SOIL AND CONSTRUCTION NOTES, AND UTILITY NOTES

PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116.tbl03.dgn

MISCELLANEOUS SALVAGE AND REMOVALS															A
LOCATION	QUADRANT	PAVEMENT MARKING REMOVAL	REMOVE CURB	REMOVE CURB AND GUTTER	REMOVE CONCRETE WALK	REMOVE CONCRETE PAVEMENT	REMOVE BITUMINOUS PAVEMENT	REMOVE AND REPLACE BITUMINOUS PAVEMENT	REMOVE CASTING	REMOVE CURB BOX	SALVAGE CASTING	MILL BITUMINOUS SURFACE (2.0")	MILL AND PATCH BITUMINOUS PAVEMENT	STORM DRAIN INLET PROTECTION	NOTES
		SO FT	LIN FT	LIN FT	SO FT	SO FT	SO FT	LIN FT	EACH	EACH	EACH	SO YD	LIN FT	EACH	
TH 246 - NERSTRAND															
TH 246 & POPLAR ST	NE				49										
TH 246 & POPLAR ST	SE				56										
TH 246 & MAPLE ST	NW				42										
TH 246 & MAPLE ST	NE				44										
TH 246 & OAK ST	N	108			123										
TH 246 & OAK ST	SW				38									1	
TH 246 & OAK ST	SE			20	130								25		
TH 246 & CHERRY ST	NW				75							12		1	
TH 246 & CHERRY ST	NE		16		76							9			
TH 246 & CHERRY ST	SW		20		142				1				32	1	
TH 246 & CHERRY ST	SE			23	166		39						37	1	
TH 246 & FARM ST	SW			24	133								36	1	
SUBTOTALS:		108	36	67	1074		39		1			21	130	5	
TH 30 - ELLENDALE															
TH 30 & 5TH ST N	NW			13	85								16		
TH 30 & 5TH ST N	NE			16	30				1	1			19	1	
TH 30 & 5TH ST N	SW			15	62								17	1	
TH 30 & 5TH ST N	SE			14	47								16	1	
TH 30 & 4TH ST N	NW			27	169								32		
TH 30 & 4TH ST N	NE			12	86								14		
TH 30 & 4TH ST N	SW			24	160								28		
TH 30 & 4TH ST N	SE			12	59								14		
TH 30 & 3RD ST N	NW			35	244								43		
TH 30 & 3RD ST N	NE			34	220								42		
TH 30 & 3RD ST N	SW			32	229								63		
TH 30 & 3RD ST N	SE			36	300								45		
TH 30 & 2ND ST N	NW			35	228								43		
TH 30 & 2ND ST N	NE			38	254								47		
TH 30 & 2ND ST N	SW			36	232								43		
TH 30 & 2ND ST N	SE			37	234								43		
TH 30 & 1ST ST N	W	286													REM. CROSSWALK AND "SCHOOL XING"
TH 30 & RR XING	SW						177							1	
TH 30 & COMMERCIAL ST	SE			11	157								13	2	
TH 30 & SCHOOL ST	SW			14	147			17	1	1				1	
SUBTOTALS:		286		441	2943		177	17	2	2			538	7	

PLAN REVISIONS		
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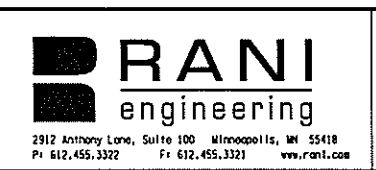
DESIGN SQUAD: RANI ENGINEERING

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TABULATIONS

PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
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MISCELLANEOUS SALVAGE AND REMOVALS															A
LOCATION TH 30 - BLOOMING PRAIRIE	QUADRANT	PAVEMENT MARKING REMOVAL	REMOVE CURB	REMOVE CURB AND GUTTER	REMOVE CONCRETE WALK	REMOVE CONCRETE PAVEMENT	REMOVE BITUMINOUS PAVEMENT	REMOVE AND REPLACE BITUMINOUS PAVEMENT	REMOVE CASTING	REMOVE CURB BOX	SALVAGE CASTING	MILL BITUMINOUS SURFACE (2.0")	MILL AND PATCH BITUMINOUS PAVEMENT	STORM DRAIN INLET PROTECTION	NOTES
		SO FT	LIN FT	LIN FT	SO FT	SO FT	SO FT	LIN FT	EACH	EACH	EACH	SO YD	LIN FT	EACH	
TH 30 & TH 218	NW	144		33	130										
TH 30 & TH 218	NE			21	113										
TH 30 & TH 218	SW		29	11	218	216									
TH 30 & TH 218	SE		14		123										
TH 30 & MILL AVE N	SW			13	89								15	1	
TH 30 & MILL AVE N	SE			10	76								12	1	
TH 30 & INDUSTRIAL DR	NW			10	74		42								
TH 30 & INDUSTRIAL DR	NE			10	86		38								
TH 30 & 4TH AVE NE	SW			12	80								14		
TH 30 & 4TH AVE NE	SE			11	95								13		
TH 218 & 2ND ST NE	NW			11	89									1	
TH 218 & 2ND ST NE	SW			29			187							2	
TH 218 & MAIN ST	NW		18	25	327	10				2	2		28	2	
TH 218 & MAIN ST	NE			10	95									1	
TH 218 & MAIN ST	SW		11	21	349								21	1	
TH 218 & 1ST ST SE	NW		7	28	239								9	1	
TH 218 & 1ST ST SE	SW			6	194									1	
TH 218 & 2ND ST SE	NW	144	19	7	105									1	
TH 218 & 2ND ST SE	NE		18											1	
TH 218 & 2ND ST SE	SW		28				239								
TH 218 & 2ND ST SE	SE		22		107									1	
SUBTOTAL:		288	166	268	2589	226	506			2	2		112	14	
PROJECT TOTAL:		682	202	776	6606	226	722	17	3	4	2	21	780	26	

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

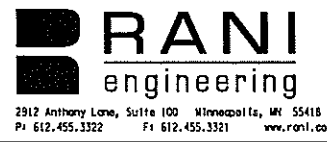
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TABULATIONS

MISCELLANEOUS CONSTRUCTION

B


LOCATION	QUADRANT	BITUMINOUS PATCH SPECIAL	CONCRETE PAVEMENT	ADJUST VALVE BOX	CASTING ASSEMBLY	INSTALL CASTING	ADJUST FRAME & RING CASTING	CONCRETE WALK	CONCRETE CURB DESIGN B4	CONCRETE CURB DESIGN B6	CONCRETE CURB & GUTTER	CONCRETE CURB DESIGN V	TRUNCATED DOMES	CROSSWALK MARKING-EPOXY	NOTES
		SO YD	SO YD	EACH	EACH	EACH	EACH	SO FT	LIN FT	LIN FT	LIN FT	LIN FT	SO FT	SO FT	
TH 246 - NERSTRAND															
TH 246 & POPLAR ST	NE							94					9		
TH 246 & POPLAR ST	SE							58					10		
TH 246 & MAPLE ST	NW							42					9		
TH 246 & MAPLE ST	NE							44					9		
TH 246 & OAK ST	N							170					10	108	
TH 246 & OAK ST	SW							58					8		
TH 246 & OAK ST	SE							165			20		28		
TH 246 & CHERRY ST	NW	12					1	75					10		
TH 246 & CHERRY ST	NE	9						76	16				14		
TH 246 & CHERRY ST	SW				1			144		26			17		
TH 246 & CHERRY ST	SE						1	187			23	15	19		
TH 246 & FARM ST	SW						1	128			24	10	10		
SUBTOTALS:		21			1		3	1241	16	26	67	25	153	108	
TH 30 - ELLENDALE															
TH 30 & 5TH ST N	NW							65			13		6		
TH 30 & 5TH ST N	NE				1			27			16		4		
TH 30 & 5TH ST N	SW							40			15		8		
TH 30 & 5TH ST N	SE							34			14		6		
TH 30 & 4TH ST N	NW							174			27		14		
TH 30 & 4TH ST N	NE							77			12		9		
TH 30 & 4TH ST N	SW							170			24		17		
TH 30 & 4TH ST N	SE							47			12		9		
TH 30 & 3RD ST N	NW							244			35	20	27		
TH 30 & 3RD ST N	NE							219			34	10	34		
TH 30 & 3RD ST N	SW							229			32		38		
TH 30 & 3RD ST N	SE							301			36		30		
TH 30 & 2ND ST N	NW							228			35	20	27		
TH 30 & 2ND ST N	NE			1				254			38		30		
TH 30 & 2ND ST N	SW							232			36		28		
TH 30 & 2ND ST N	SE							260			37	18	31		
TH 30 & 1ST ST N	SE														
TH 30 & RR XING	SW							164					10		
TH 30 & COMMERCIAL ST	SE							138			11		10		
TH 30 & SCHOOL ST	SW				1			143			14		10		
SUBTOTALS:				1	2			3046			441	68	348		

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116.tbl05.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088
 DATE: 03/15/12 SIGNATURE: *AW*
 DESIGN SQUAD RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW



2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 Ph 612.455.3322 Fx 612.455.3321 www.rani.com

TABULATIONS

MISCELLANEOUS CONSTRUCTION

B


LOCATION	QUADRANT	BITUMINOUS PATCH SPECIAL	CONCRETE PAVEMENT	ADJUST VALVE BOX	CASTING ASSEMBLY	INSTALL CASTING	ADJUST FRAME & RING CASTING	CONCRETE WALK	CONCRETE CURB DESIGN B4	CONCRETE CURB DESIGN B6	CONCRETE CURB & GUTTER	CONCRETE CURB DESIGN V	TRUNCATED DOMES	CROSSWALK MARKING-EPOXY	NOTES
		SQ YD	SQ YD	EACH	EACH	EACH	EACH	SQ FT	LIN FT	LIN FT	LIN FT	LIN FT	SO FT	SO FT	
TH 30 - BLOOMING PRAIRIE															
TH 30 & TH 218	NW							140			33		20	144	
TH 30 & TH 218	NE							68			21		6		
TH 30 & TH 218	SW		24					221		29	11		20		
TH 30 & TH 218	SE							69		14			6		
TH 30 & MILL AVE N	SW							61			13		5		
TH 30 & MILL AVE N	SE							53			10		7		
TH 30 & INDUSTRIAL DR	NW	5						67			10		6		
TH 30 & INDUSTRIAL DR	NE	4						71			10		6		
TH 30 & 4TH AVE NE	SW							53			12		6		
TH 30 & 4TH AVE NE	SE							81			11		10		
TH 218 & 2ND ST NE	NW							89			11		10		
TH 218 & 2ND ST NE	SW	15						55			29		29		
TH 218 & MAIN ST	NW		2			2		327		18	25		27		
TH 218 & MAIN ST	NE							90			10		10		
TH 218 & MAIN ST	SW						1	259		11	21	16	8		
TH 218 & 1ST ST SE	NW						1	239		7	28		10		
TH 218 & 1ST ST SE	SW							191			8		8		
TH 218 & 2ND ST SE	NW							114		19	7		16	144	
TH 218 & 2ND ST SE	NE							32		18			15		
TH 218 & 2ND ST SE	SW	16						98		28			32		
TH 218 & 2ND ST SE	SE							122		22			28		
SUBTOTALS:		40	26			2	2	2500		166	270	16	285	288	
PROJECT TOTAL:		61	26	1	3	2	5	6787	16	192	778	109	786	396	

DISTRICT #: METRO
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 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BF, Narstrand\CD8826116.tb06.dgn
 PLOTTED/REVISED: 4/27/2012

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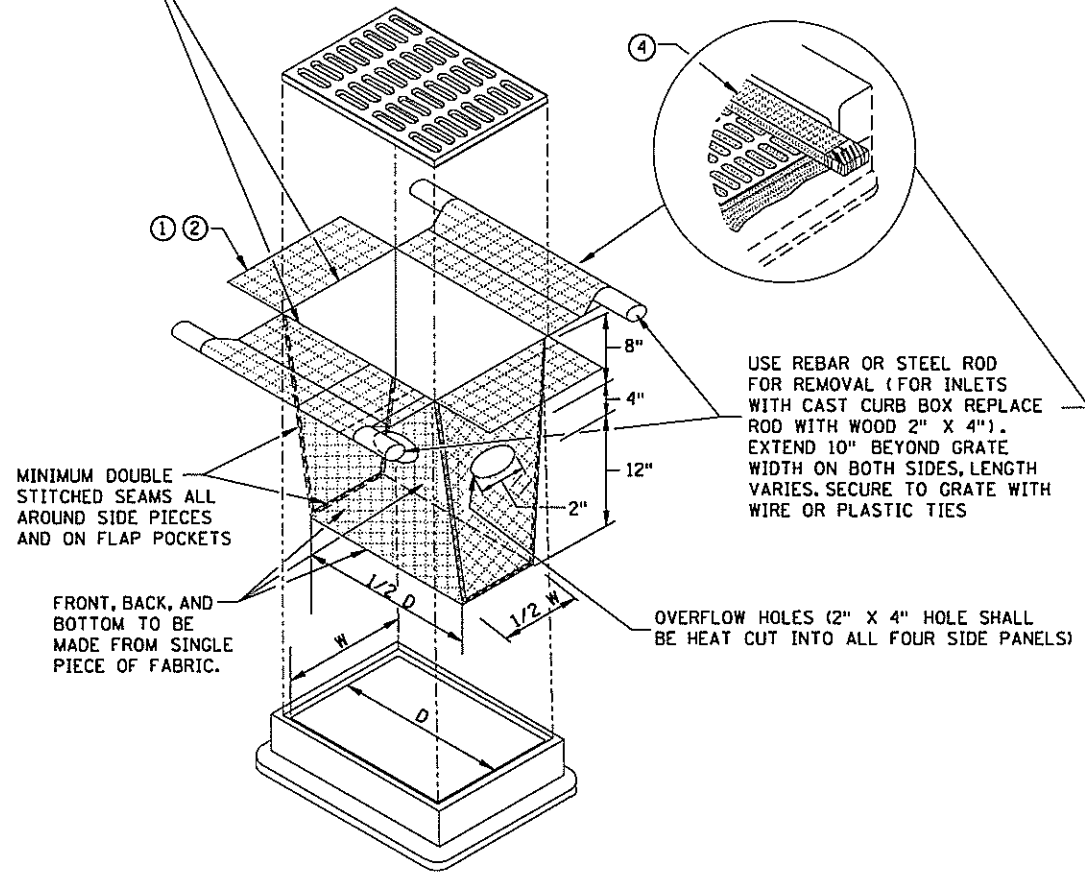
TABULATIONS

PLOTTED/REVISED:
4/27/2012

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USER NAME: \$\$\$@USER\$NAME\$\$\$
PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Reference\Standard Plans\405-4_spr.dgn

FILE NAME:
@FILENAME@

INLET SPECIFICATIONS AS PER THE PLAN
DIMENSION LENGTH AND WIDTH TO MATCH
FLAP POCKET



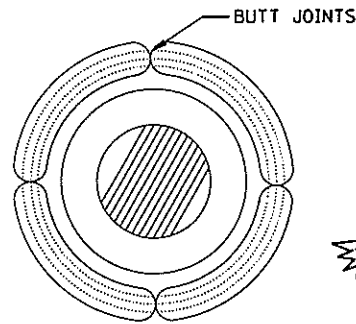
FILTER BAG INSERT ③

(CAN BE INSTALLED IN ANY INLET TYPE
WITH OR WITHOUT A CURB BOX)

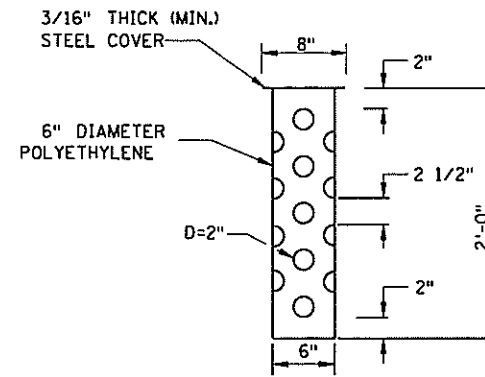
USE REBAR OR STEEL ROD
FOR REMOVAL (FOR INLETS
WITH CAST CURB BOX REPLACE
ROD WITH WOOD 2" X 4").
EXTEND 10" BEYOND GRATE
WIDTH ON BOTH SIDES, LENGTH
VARIES. SECURE TO GRATE WITH
WIRE OR PLASTIC TIES

OVERFLOW HOLES (2" X 4" HOLE SHALL
BE HEAT CUT INTO ALL FOUR SIDE PANELS)

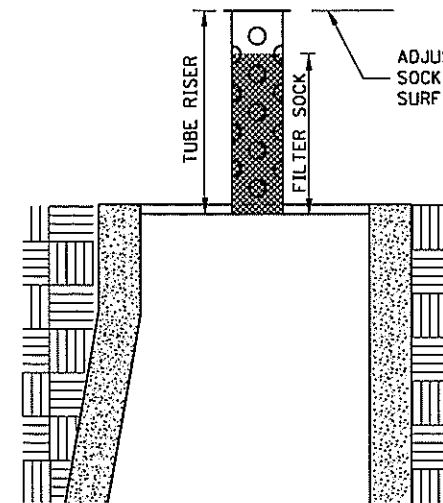
ENDS SECURELY CLOSED TO
PREVENT LOSS OF OPEN GRADED
AGGREGATE FILL. SECURED WITH
50 PSI. ZIP TIE.



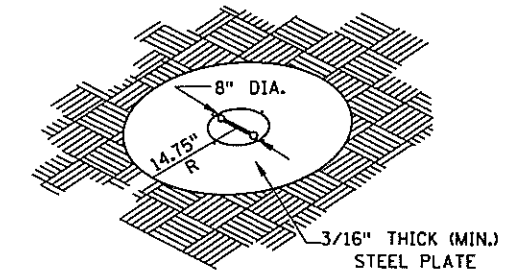
ROCK LOG/COMPOST LOG



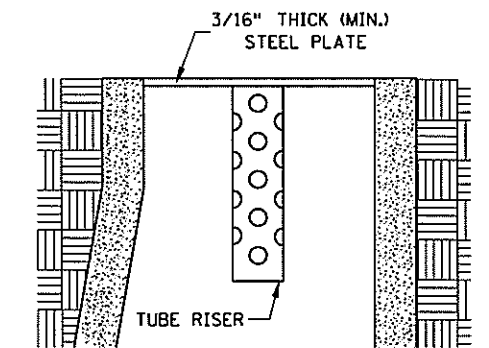
TUBE RISER



**SECTION
(UP POSITION)**

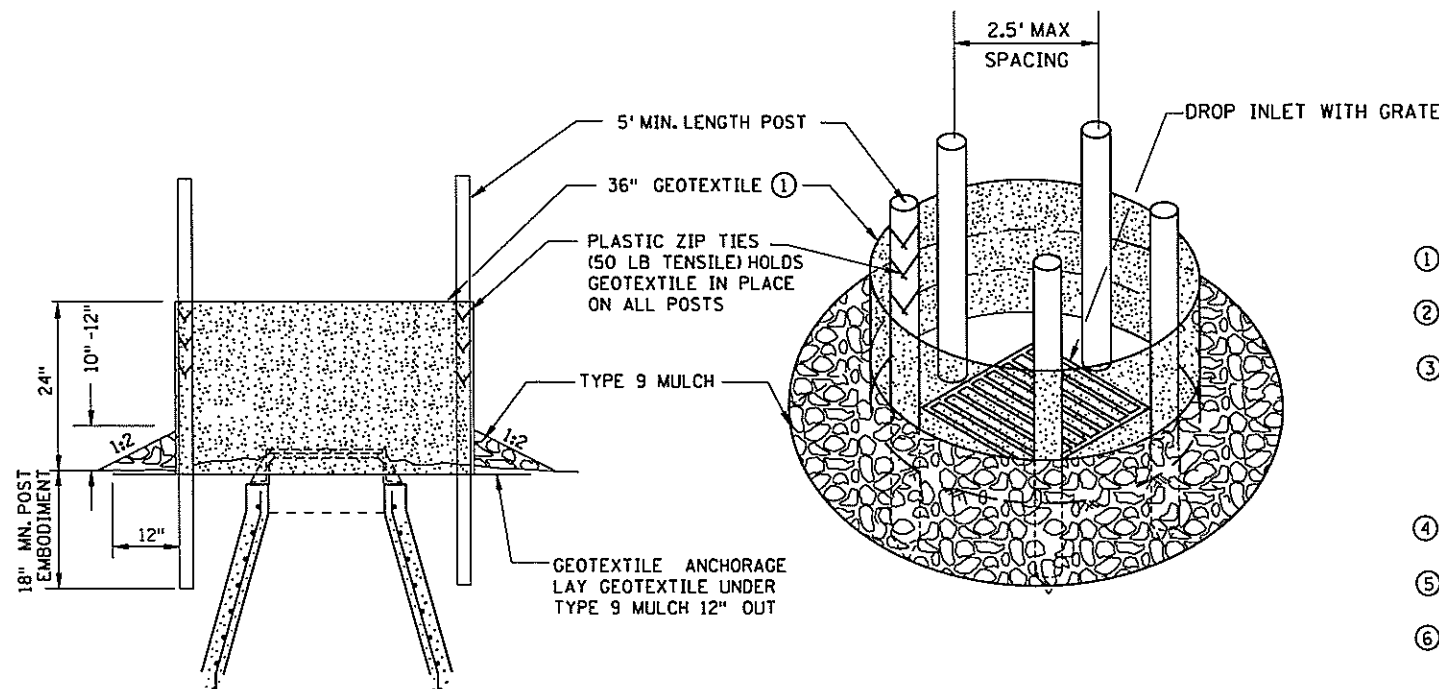


PERSPECTIVE VIEW



**SECTION
(DOWN POSITION)**

POP-UP HEAD



SILT FENCE RING AND ROCK FILTER BERM

USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 OR LESS

NOTES:

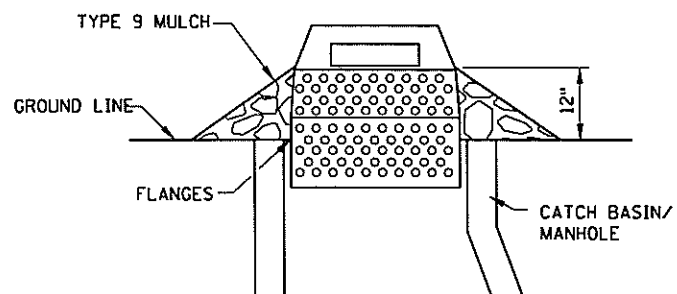
SEE SPECS. 2573, 3137, 3886 & 3891.

MANUFACTURED ALTERNATIVES LISTED ON Mn/DOT'S APPROVED PRODUCTS LIST
MAY BE SUBSTITUTED.

- ① ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.
- ② FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ③ INSTALLATION NOTES:
DO NOT INSTALL FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3 INCHES BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCH SIDE CLEARANCE.
- ④ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.
- ⑤ SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.
- ⑥ GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

NOTE:

THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.



SEDIMENT CONTROL INLET HAT

SAP 246-010-003

STANDARD SHEET NO.
297.405 (4 OF 4)

STANDARD APPROVED:
MARCH 29, 2012

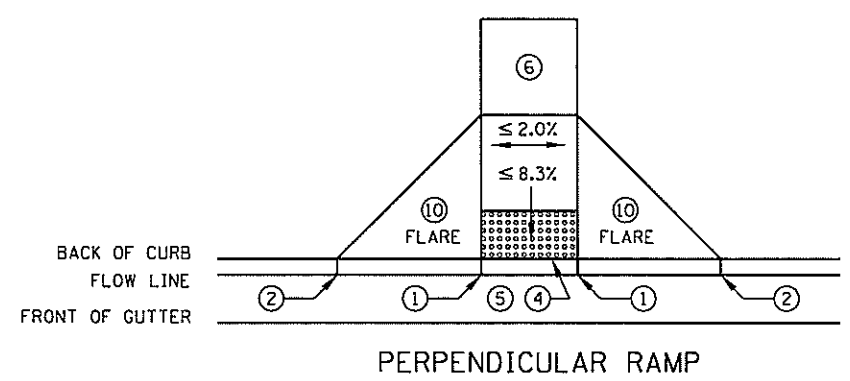
TITLE:

**TEMPORARY SEDIMENT CONTROL
STORM DRAIN INLET PROTECTION**

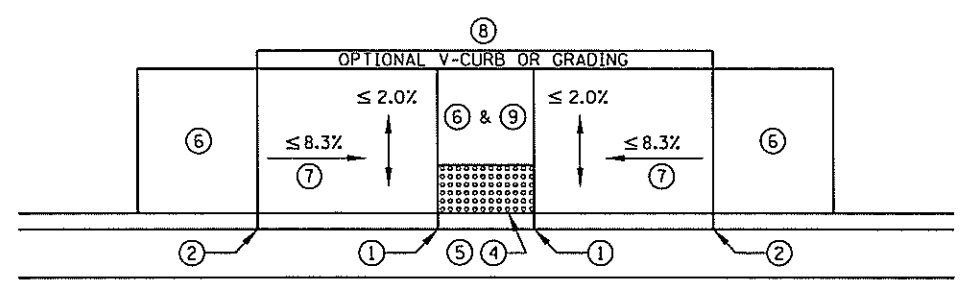
STATE PROJ. NO. 8826-116

SHEET NO.11 OF 53 SHEETS

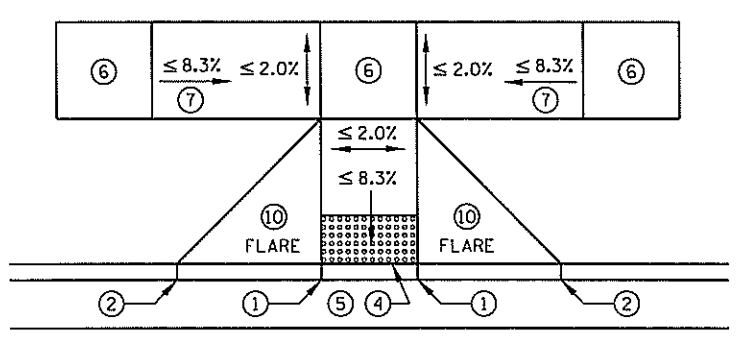
PLOTTED/REVISED: 4/27/2012



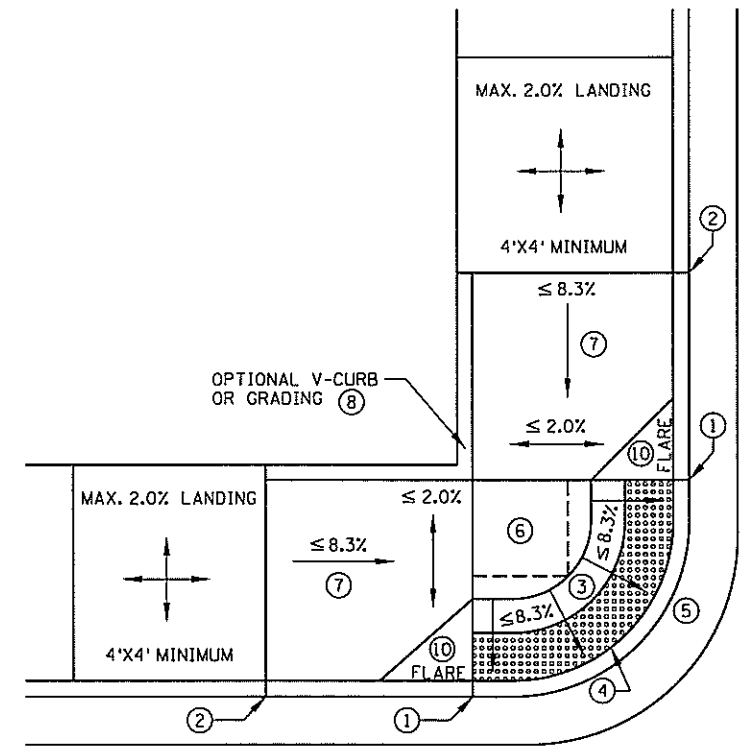
PERPENDICULAR RAMP



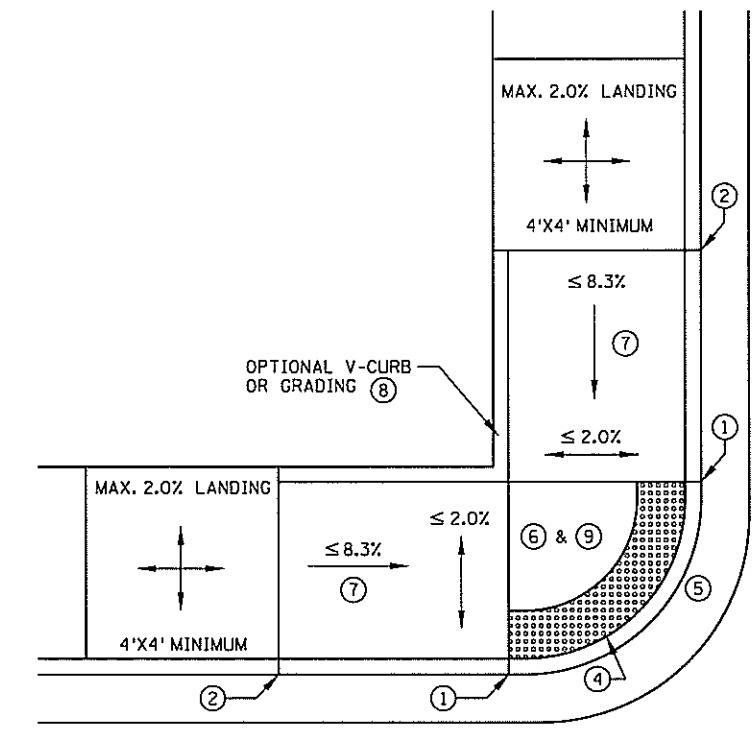
PARALLEL RAMP



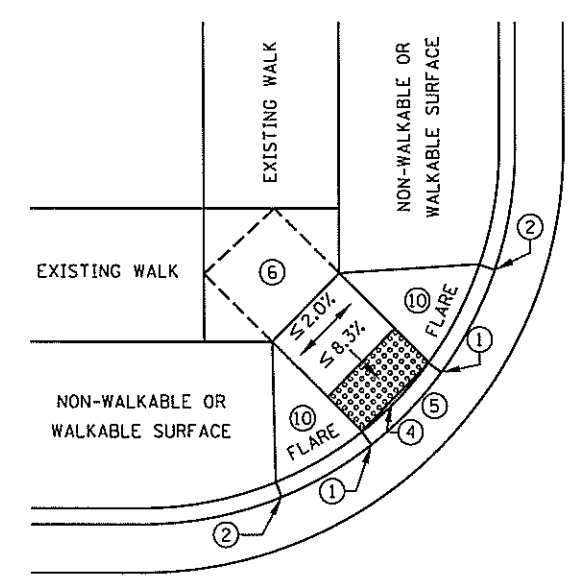
TIERED PERPENDICULAR RAMP



FAN RAMP



DEPRESSED CORNER RAMP



DIAGONAL RAMP

(DIAGONAL RAMPS SHOULD ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN CONSIDERED AND DEEMED IMPRACTICAL)

NOTES:

- SEE STANDARD PLATE 7038, SPECIAL PROVISIONS AND SHEET 4 OF 5 FOR DETAILS ON DETECTABLE WARNING.
- LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE CHANGES DIRECTION, AND AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5%.
- INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE.
- SECONDARY CURB RAMP LANDINGS ARE REQUIRED EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS 5% OR GREATER.
- CONTRACTION JOINTS SHALL BE CONSTRUCTED AT ALL GRADE BREAKS.
- TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.
- USE 6" CONCRETE WALK UP TO EXISTING SIDEWALK GRADES FOR ALL RAMP AND LANDING AREAS.
- CONTRACTOR SHALL EMPLOY APPROPRIATE METHODS FOR INTERMEDIATE GRADE CONTROL TO ENSURE ALL GRADE BREAKS ARE CONSTRUCTED PROPERLY.
- 1 0" CURB HEIGHT.
- 2 FULL CURB HEIGHT.
- 3 LESS THAN 5% PREFERRED. 5-8.3% SHOULD ONLY BE USED AFTER ALL OTHER SLOPES HAVE BEEN CONSIDERED AND DEEMED IMPRACTICAL.
- 4 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS.
- 5 SEE PEDESTRIAN ACCESS ROUTE CURB AND GUTTER DETAIL FOR INFORMATION ON CONSTRUCTING CURB AND GUTTER AT CURB OPENINGS. SEE SHEET NO. 3.
- 6 4' BY 4' MIN. LANDING WITH MAX. 2% SLOPE IN ALL DIRECTIONS.
- 7 IF RUNNING SLOPE IS LESS THAN 5.0% NO LANDING IS REQUIRED.
- 8 V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN ROW ALLOWS.
- 9 DETECTABLE WARNINGS MAY BE PART OF 4' X 4' LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
- 10 SEE SHEET 4 OF 5, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.

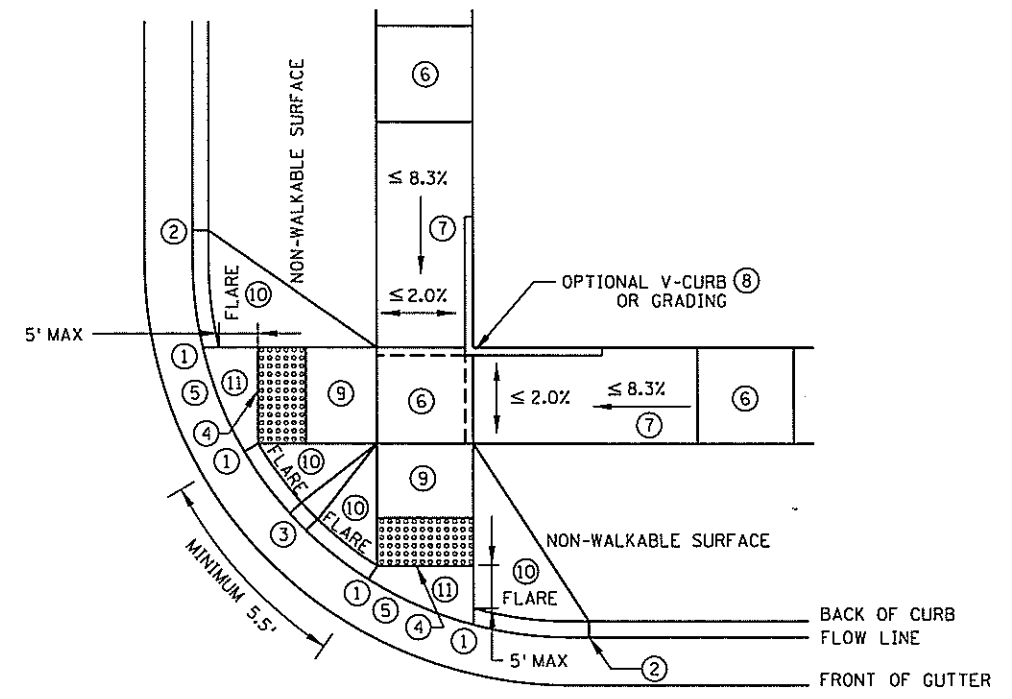
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PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
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CERTIFIED BY Bob Bell LIC. NO. 49088
LICENSED PROFESSIONAL ENGINEER

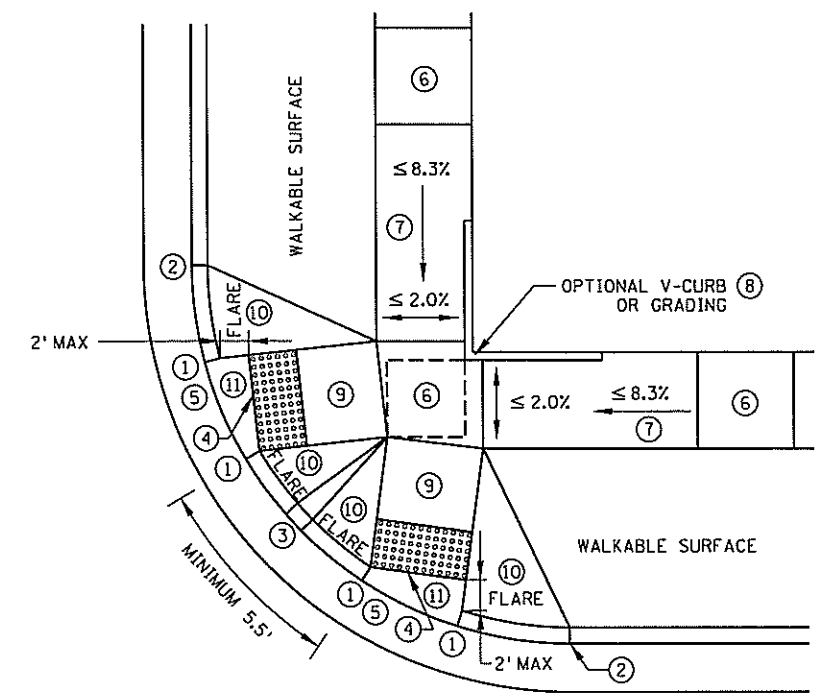
STATE PROJ. NO. 8826-116

CURB RAMP CONCEPTS

PLOTTED/REVISED: 4/27/2012

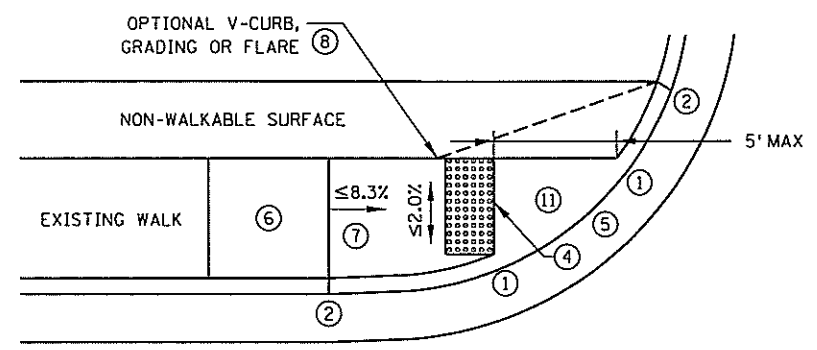


(ADJACENT TO NON-WALKABLE SURFACE)



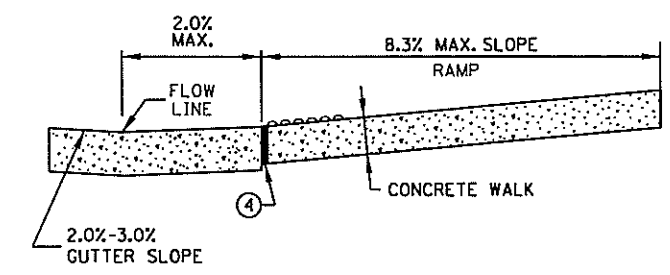
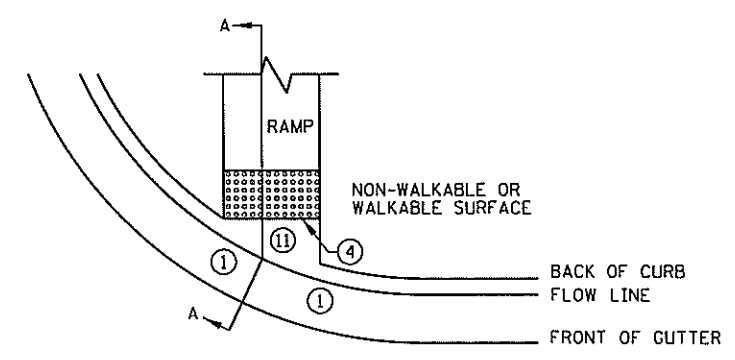
(ADJACENT TO WALKABLE SURFACE)

COMBINED DIRECTIONAL RAMPS



IF NON-WALKABLE BLVD. IS LESS THAN 4' CONSTRUCT CONCRETE WALK ADJACENT TO CURB TO TOP OF TRANSITION.

ONE WAY DIRECTIONAL RAMPS



DIRECTIONAL CURB
(SHALL BE USED FOR ALL DIRECTIONAL RAMPS)

NOTES:

- SEE STANDARD PLATE 7038, SPECIAL PROVISIONS AND SHEET 4 OF 5 FOR DETAILS ON DETECTABLE WARNING.
- LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE CHANGES DIRECTION, AND AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5%.
- INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE.
- SECONDARY CURB RAMP LANDINGS ARE REQUIRED EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS 5% OR GREATER.
- CONTRACTION JOINTS SHALL BE CONSTRUCTED AT ALL GRADE BREAKS.
- TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.
- USE 6" CONCRETE WALK UP TO EXISTING SIDEWALK GRADES FOR ALL RAMP AND LANDING AREAS.
- CONTRACTOR SHALL EMPLOY APPROPRIATE METHODS FOR INTERMEDIATE GRADE CONTROL TO ENSURE ALL GRADE BREAKS ARE CONSTRUCTED PROPERLY.
- ① 0" CURB HEIGHT.
- ② FULL CURB HEIGHT.
- ③ 3" MINIMUM CURB HEIGHT.
- ④ 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS.
- ⑤ SEE PEDESTRIAN ACCESS ROUTE CURB AND GUTTER DETAIL FOR INFORMATION ON CONSTRUCTING CURB AND GUTTER AT CURB OPENINGS. SEE SHEET NO. 3.
- ⑥ 4' BY 4' MIN. LANDING WITH MAX. 2% SLOPE IN ALL DIRECTIONS.
- ⑦ IF RAMP SLOPE IS LESS THAN 5% NO LANDING IS REQUIRED.
- ⑧ V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN ROW ALLOWS.
- ⑨ RUNNING SLOPE LESS THAN OR EQUAL TO 8.3% & CROSS SLOPE LESS THAN OR EQUAL TO 2%.
- ⑩ SEE SHEET 4 OF 5, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.
- ⑪ MAX. 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER (SEE DIRECTIONAL CURB DETAIL ON THIS SHEET).

DISTRICT #: METRO
PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
PATH & FILENAME: P:\2011\08.000_District 6 Ped Ramps\Reference\Standard Plans\5B_Curb Ramp Concepts.dgn

CERTIFIED BY Bob Bell
LICENSED PROFESSIONAL ENGINEER

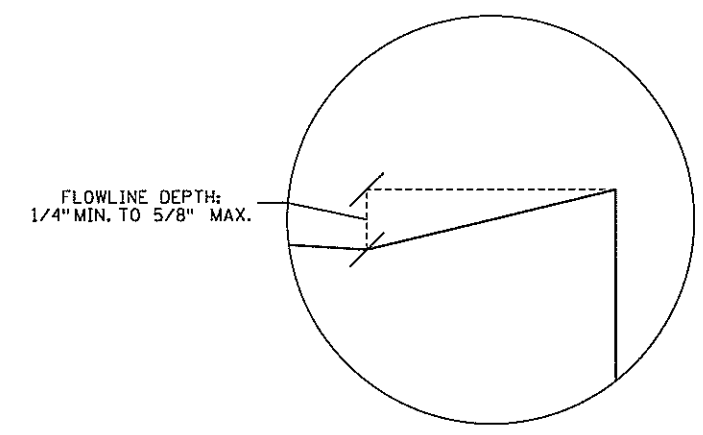
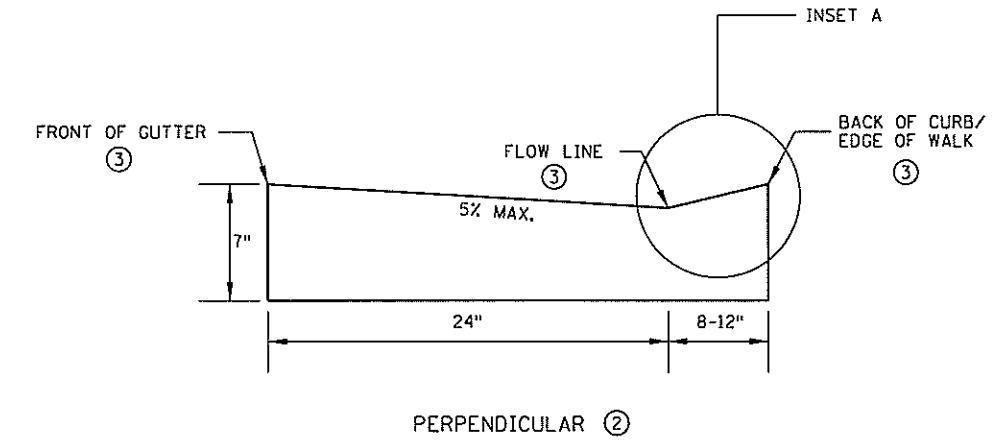
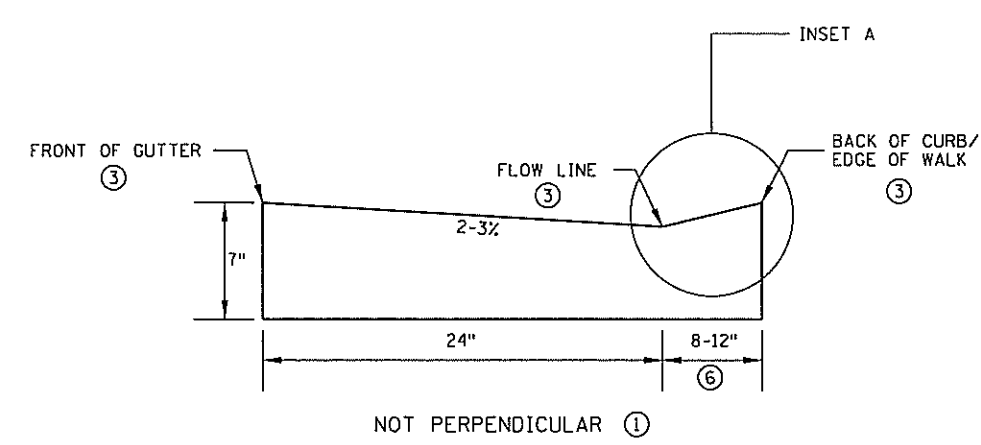
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STATE PROJ. NO. 8826-116

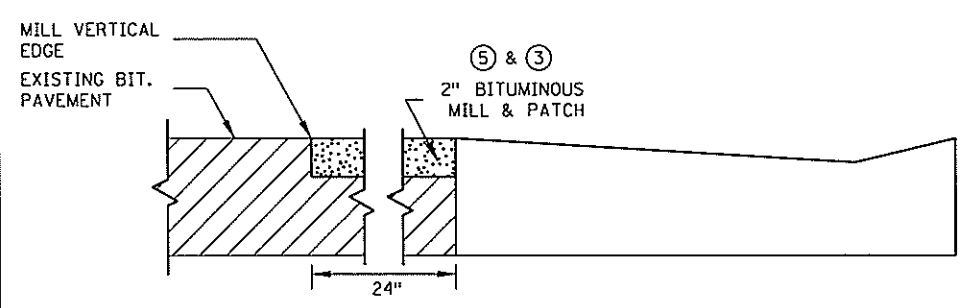
CURB RAMP CONCEPTS

SHEET NO. 13 OF 53 SHEETS

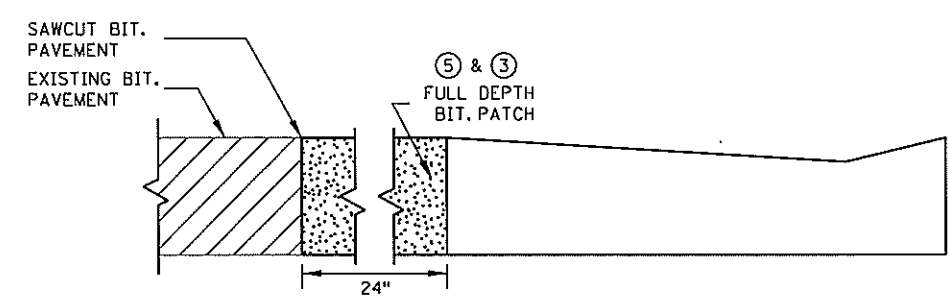
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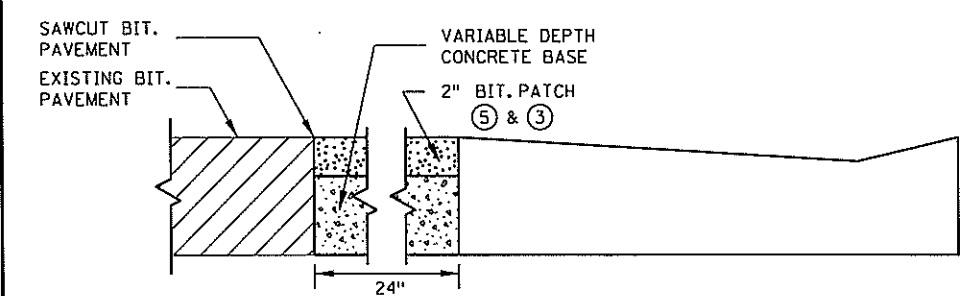
PEDESTRIAN ACCESS ROUTE
CURB & GUTTER DETAIL



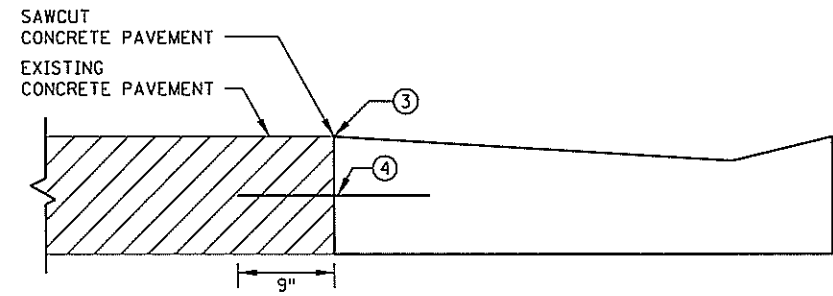
(EXISTING BIT. PAVEMENT IN GOOD CONDITION)



(EXISTING BIT. PAVEMENT IN POOR CONDITION)



(EXISTING BIT. PAVEMENT IN POOR CONDITION)



(EXISTING CONCRETE PAVEMENT)

PAVEMENT TREATMENT OPTIONS
IN FRONT OF CURB & GUTTER

(USE ON STAND ALONE CURB RAMP RETROFITS)

- NOTES:
- ADEQUATE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM.
 - NO PONDING SHALL BE PRESENT IN THE PAR.
 - ① FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS NOT PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS, DEPRESSED CORNERS, & ONE WAY AND COMBINED DIRECTIONALS.
 - ② FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, PARALLEL AND DIAGONAL RAMPS.
 - ③ THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".
 - ④ DRILL AND GROUT NO. 13 EPOXY COATED 18" LONG BARS AT 2' CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT.
 - ⑤ ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.
 - ⑥ VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS.

DISTRICT #: METRO
I PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
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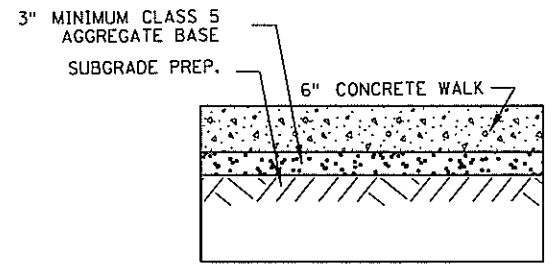
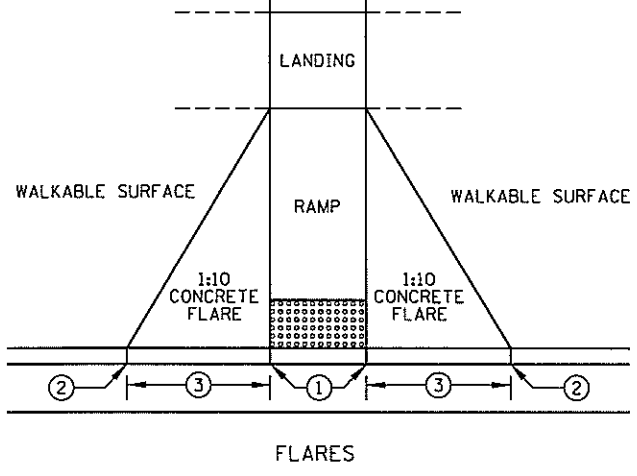
CERTIFIED BY *Bob Bell* LIC. NO. 49088
LICENSED PROFESSIONAL ENGINEER

STATE PROJ. NO. 8826-116

CURB RAMP CONCEPTS

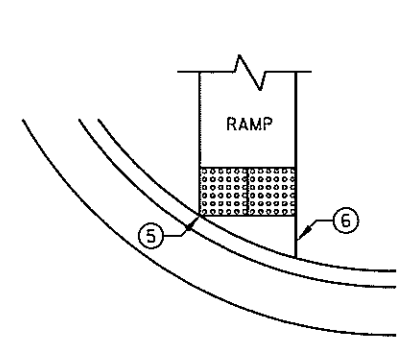
SHEET NO. 14 OF 53 SHEETS

PLOTTED/REVISED: 4/27/2012

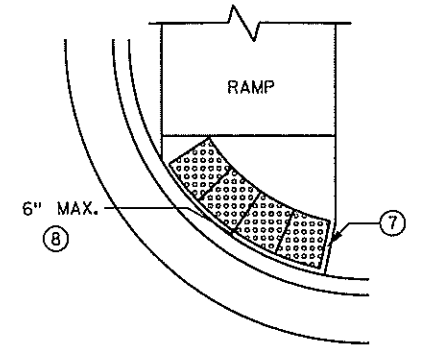


CONSTRUCT PER SPEC. 2521.3

TYPICAL SIDEWALK SECTION AT QUADRANT



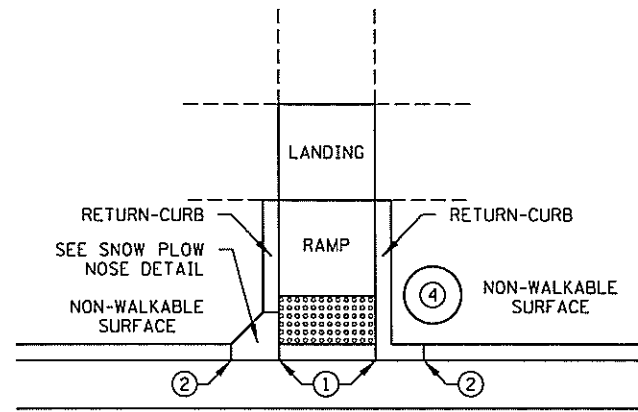
DETECTABLE WARNING SETBACK CRITERIA



RADIAL DETECTABLE WARNING AT RADIUS

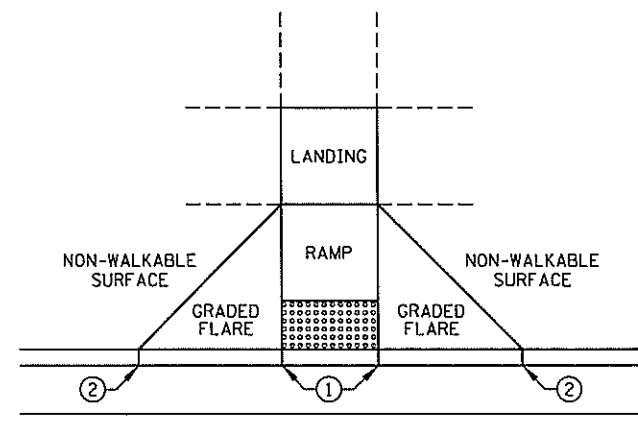
DETECTABLE WARNING SHOULD BE PLACED AT AN UNIFORM OFFSET DISTANCE FROM 3" TO 6" FROM THE BACK OF CURB.

DETECTABLE WARNING PLACEMENT



V-CURB RETURNED CURB

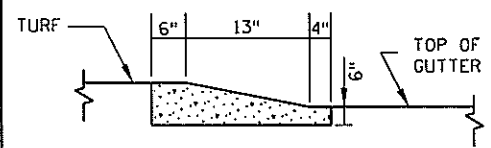
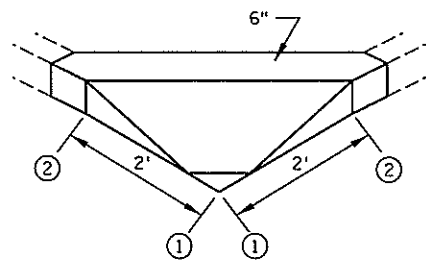
← DIRECTION OF TRAFFIC



GRADING

TYPICAL SIDE TREATMENT OPTIONS

SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED ON ALL RAMPS AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.

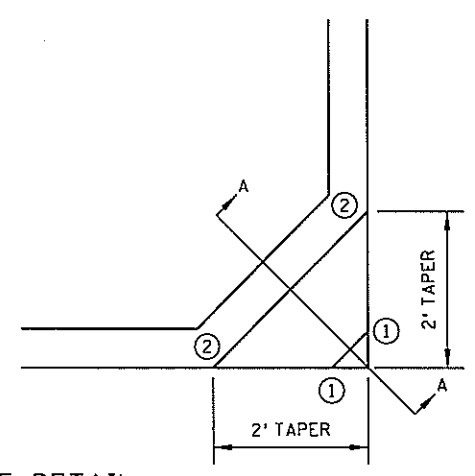


SECTION A-A NOT TO SCALE

SNOW PLOW NOSE DETAIL

(SHALL BE USED ON DOWNSTREAM SIDE OF TRAFFIC)

SNOW PLOW NOSE SHALL BE PAID FOR AS 2'-V-CURB AND 2' CURB AND GUTTER.



- NOTES:
SEE STANDARD PLATE 7038, SPECIAL PROVISIONS AND THIS SHEET FOR DETAILS ON DETECTABLE WARNING.
USE 6" CONCRETE WALK UP TO EXISTING SIDEWALK GRADES FOR ALL RAMP AND LANDING AREAS.
WHETHER A SURFACE IS WALKABLE OR NOT SHALL BE DETERMINED BY THE ENGINEER.
- ① 0" CURB HEIGHT.
 - ② FULL CURB HEIGHT.
 - ③ SHALL BE 1:10 WHEN ADJACENT TO WALKABLE SURFACES & SHOULD BE 2' WHEN ADJACENT TO NON-WALKABLE SURFACES.
 - ④ IMMOVABLE OBJECT OR OBSTRUCTION.
 - ⑤ DETECTABLE WARNING SHALL HAVE ONE CORNER 3" FROM THE BACK OF CURB.
 - ⑥ SHALL BE 2' MAXIMUM OFFSET WHEN ADJACENT TO WALKABLE SURFACE AND 5' MAXIMUM OFFSET WHEN ADJACENT TO NON-WALKABLE SURFACE.
 - ⑦ CONCRETE EDGE SHALL BE CONSTRUCTED 3" PARALLEL TO THE DETECTABLE WARNING EDGE WHEN PLACED IN A RADIAL FASHION, WITHOUT FLARES.
 - ⑧ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS DETECTABLE WARNING SHOULD BE PLACED 1' FROM THE EDGE OF ROADWAY TO PROVIDE CONCRETE BORDER.

DISTRICT #: METRO
PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
PATH & FILENAME: F:\2011\JOB\000_District 6 Ped Ramps\Reference\Standard Plans\SD Curb Ramp Concepts.dgn

CERTIFIED BY *Bob Bell*
LICENSED PROFESSIONAL ENGINEER

LIC. NO. 49088

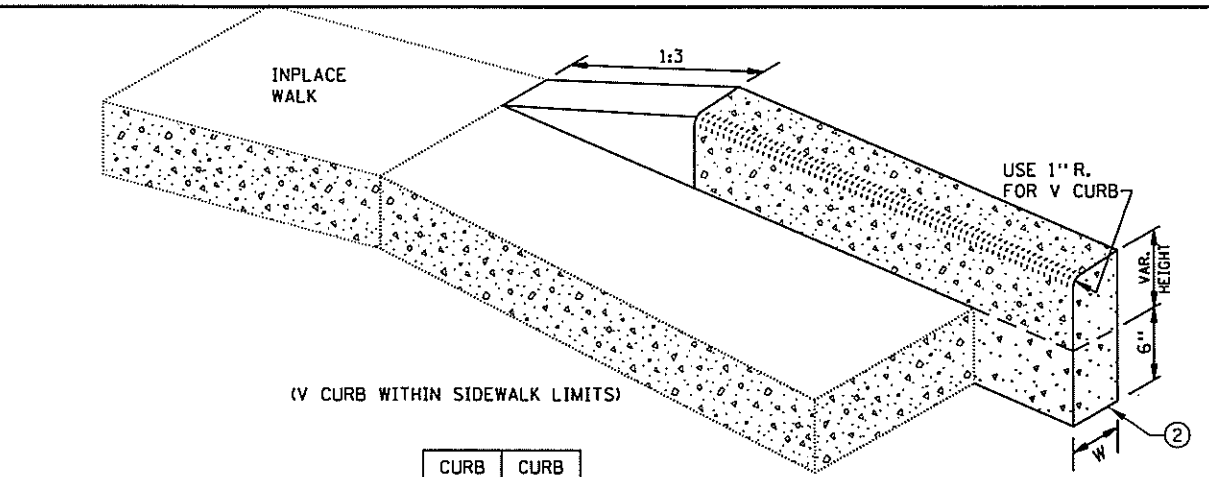
STATE PROJ. NO. 8826-116

CURB RAMP CONCEPTS

SHEET NO. 15 OF 53 SHEETS

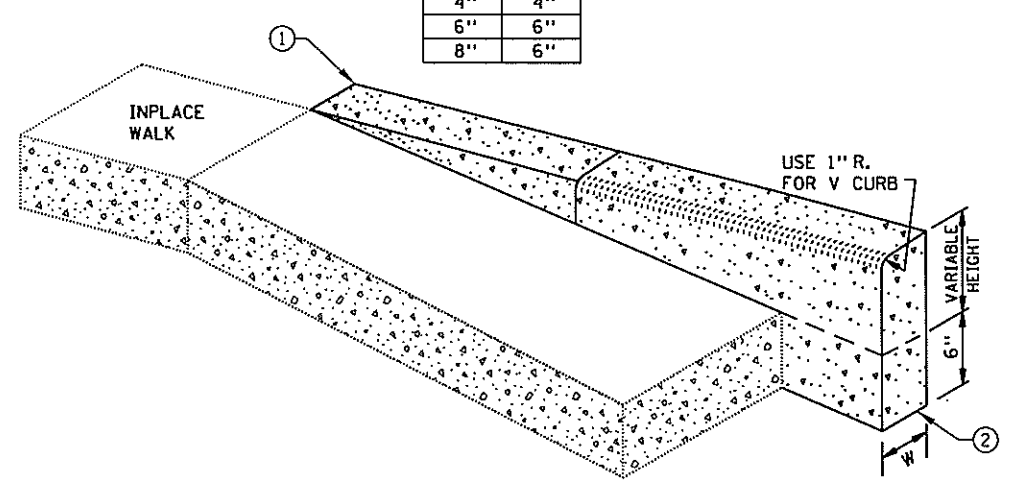
PLOTTED/REVISED: 4/27/2012

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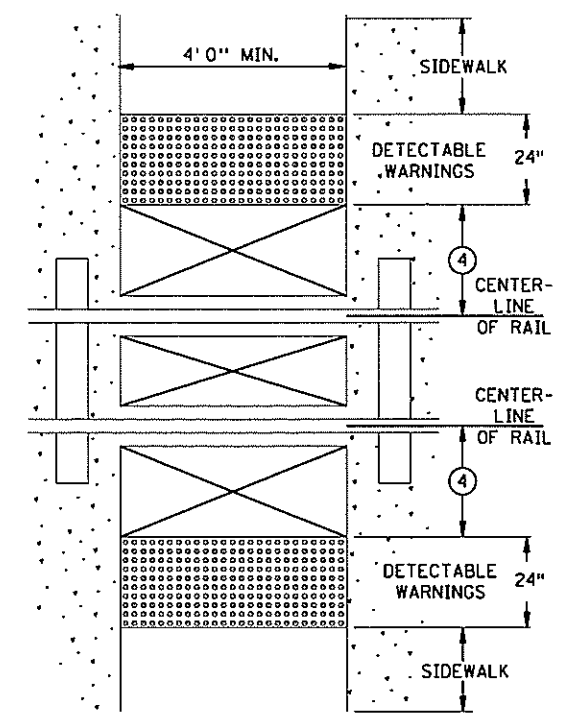
(V CURB WITHIN SIDEWALK LIMITS)

CURB HEIGHT H	CURB WIDTH W
<4"	4"
4"	4"
6"	6"
8"	6"

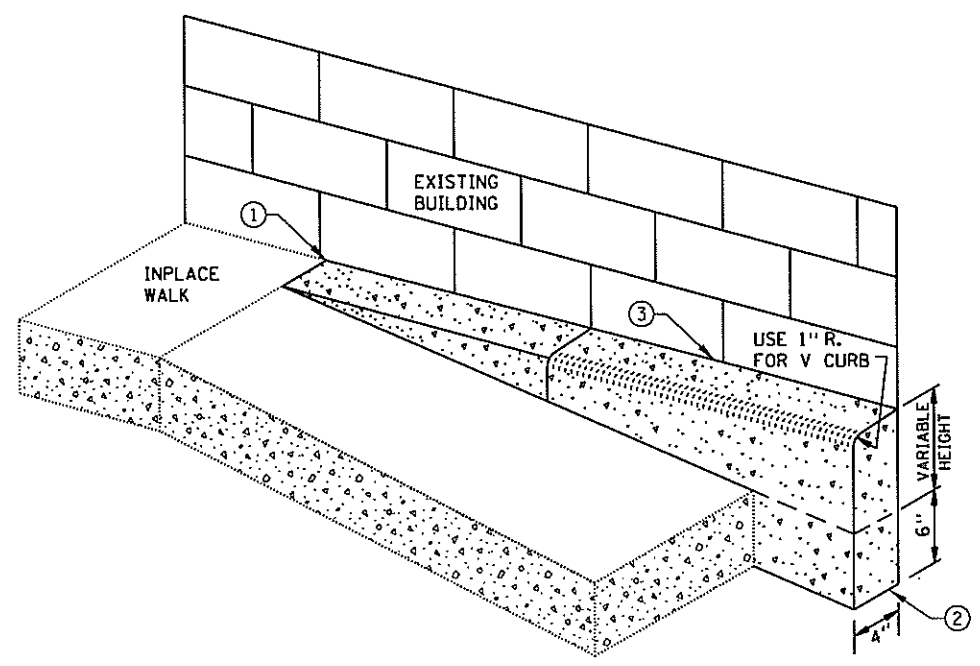


(V CURB OUTSIDE SIDEWALK LIMITS)

V CURB ADJACENT TO LANDSCAPE



RAILROAD CROSSING
PLAN VIEW



V CURB ADJACENT TO BUILDING

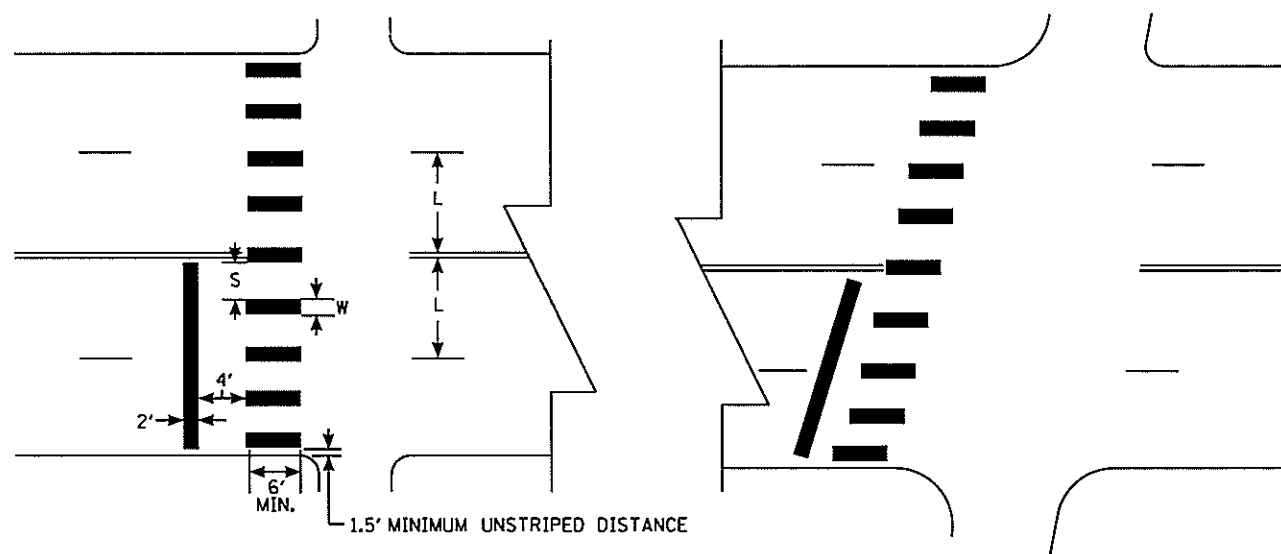
- NOTES:
- ALL V-CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.
 - V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN ROW ALLOWS.
 - V-CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.
 - ① END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
 - ② ALL V-CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
 - ③ EDGE BETWEEN NEW V-CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.
 - ④ EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 6' MINIMUM TO 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL.

CERTIFIED BY *Bob Bluffs*
 LICENSED PROFESSIONAL ENGINEER LIC. NO. 49088

CURB RAMP CONCEPTS

**PEDESTRIAN CROSSWALK MARKINGS
CONTINENTAL BLOCK DESIGN**

(L) WIDTH OF INSIDE LANE	(W) WIDTH OF PAINTED AREA	(S) WIDTH OF SPACE
9'	2.0'	2.5'
10'	2.5'	2.5'
11'	2.5'	3.0'
12'	3.0'	3.0'
13'	3.0'	3.5'



NOTES:

PAINTED AREAS TO BE CENTERED ON CENTERLINE AND LANE LINES.

A MINIMUM OF 1.5' CLEAR DISTANCE SHALL BE LEFT ADJACENT TO THE CURB. IF LAST PAINTED AREA FALLS INTO THIS DISTANCE IT MUST BE OMITTED.



ON TWO LANE TWO WAY STREETS, USE SPACING SHOWN FOR AN 11 FT. INSIDE LANE.

FOR DIVIDED ROADWAYS, ADJUSTMENTS IN SPACING OF THE BLOCKS SHOULD BE MADE IN THE MEDIAN SO THAT THE BLOCKS ARE MAINTAINED IN THEIR PROPER LOCATION ACROSS THE TRAVELED PORTION OF THE ROADWAY.


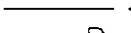
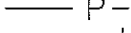
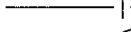
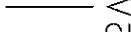
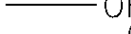

AT SKEWED CROSSWALKS, THE BLOCKS ARE TO REMAIN PARALLEL TO THE LANE LINES AS SHOWN.

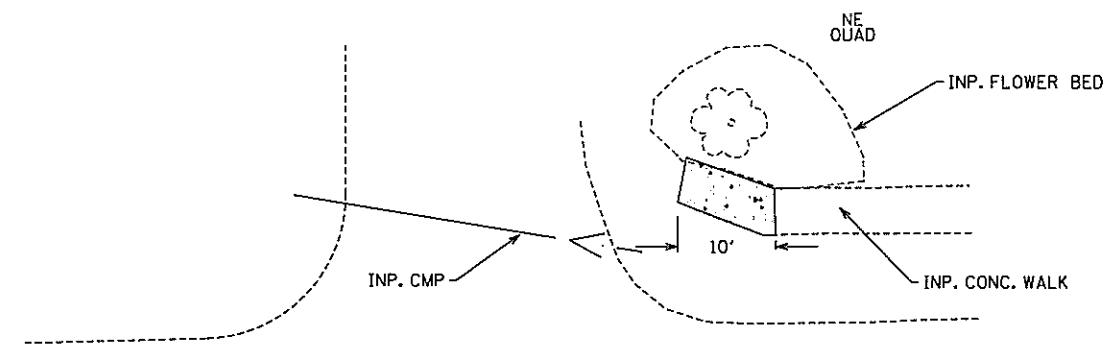
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 PLOTTED/REVISED: 4/27/2012

LEGEND

-  REMOVE CONCRETE WALK
-  TEMPORARY WIDTH ORDER (T.W.O.)
(100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND

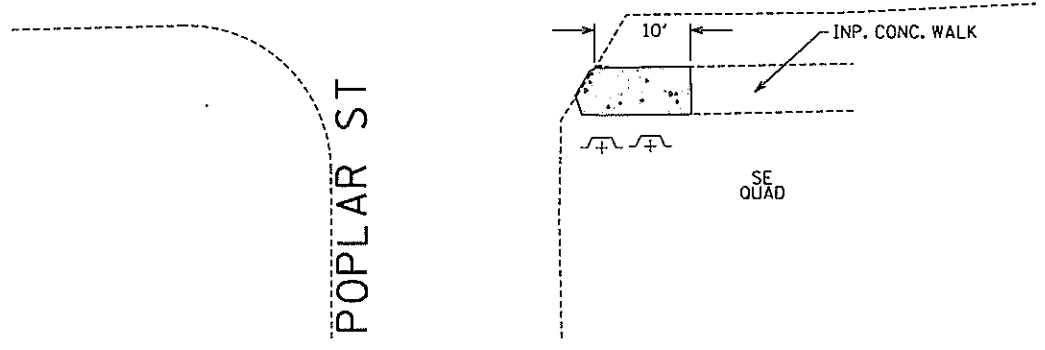
-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE



TH 246/MAIN ST

OM

INPLACE BITUMINOUS



POPLAR ST

INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
CURB RAMP PLANS - NERSTRAND

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

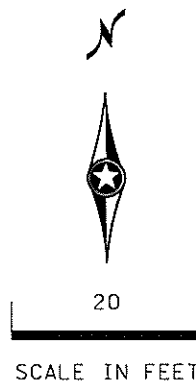
DESIGN SQUAD RANI ENGINEERING

Drawn By: CLI
Designed By: ABW
Checked By: ELA
Approved By: ABW



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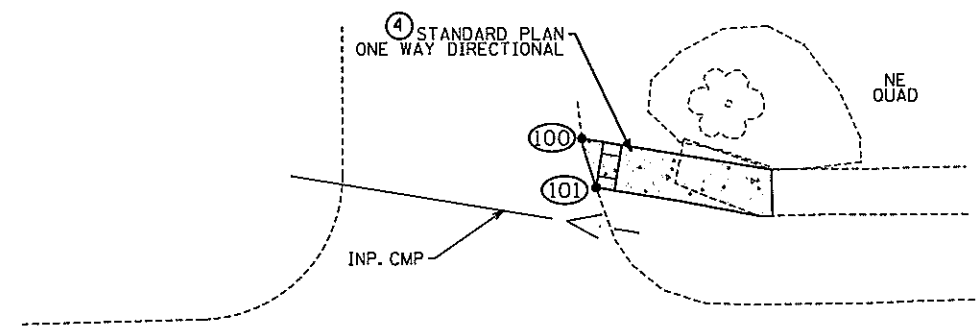
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 PLOTTED/REVISED: 4/27/2012



LEGEND	
	CONCRETE WALK
	TRUNCATED DOMES (SEE STD. PLATE 7038)
	INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT EDGE OF PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

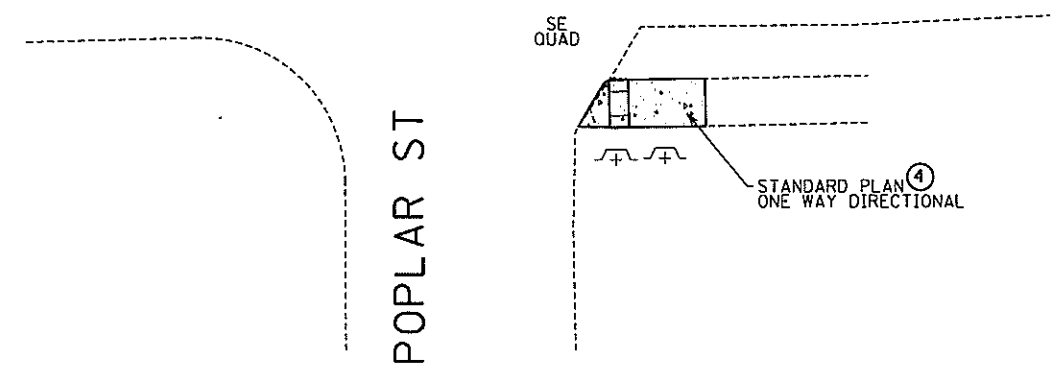
UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

- NOTES:
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12-16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



TH 246/MAIN ST

OM
INPLACE BITUMINOUS



POPLAR ST

DETAIL POINTS		
PT. NO.	X	Y
100	2,867,776.71	818,657.15
101	2,867,778.20	818,652.05

CONSTRUCTION PLAN

CURB RAMP PLANS - NERSTRAND

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$\$
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PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

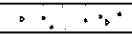
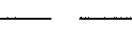


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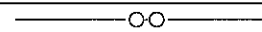
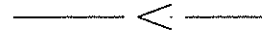
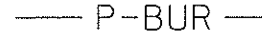
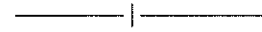



STATE PROJ. NO. 8826-116

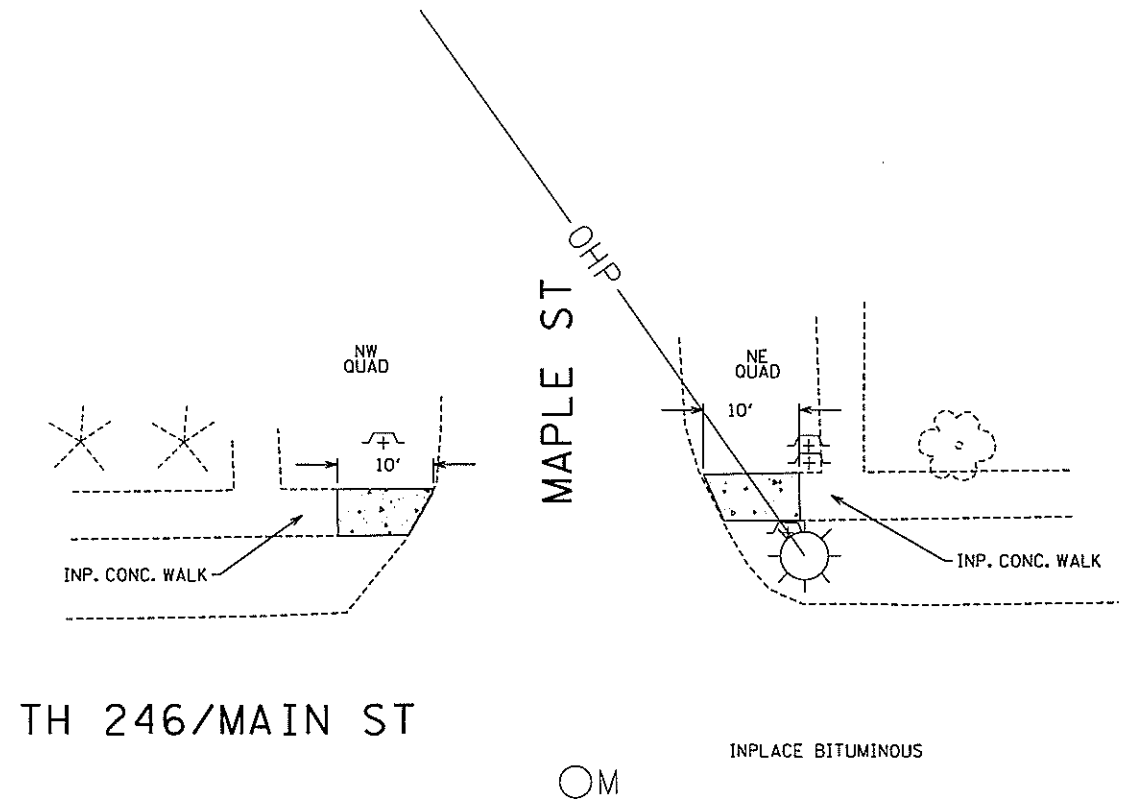
SHEET NO. 19 OF 53 SHEETS

LEGEND

-  REMOVE CONCRETE WALK
-  TEMPORARY WIDTH ORDER (T.W.O.)
(100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE



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DISTRICT #: METRO
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INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - NERSTRAND

PLAN REVISIONS		
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PRINT NAME: ANDREW WELLS LICENSE # 49088

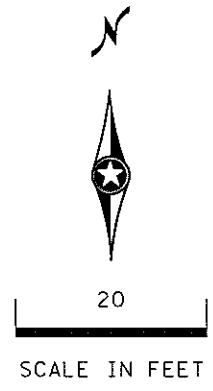
DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

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 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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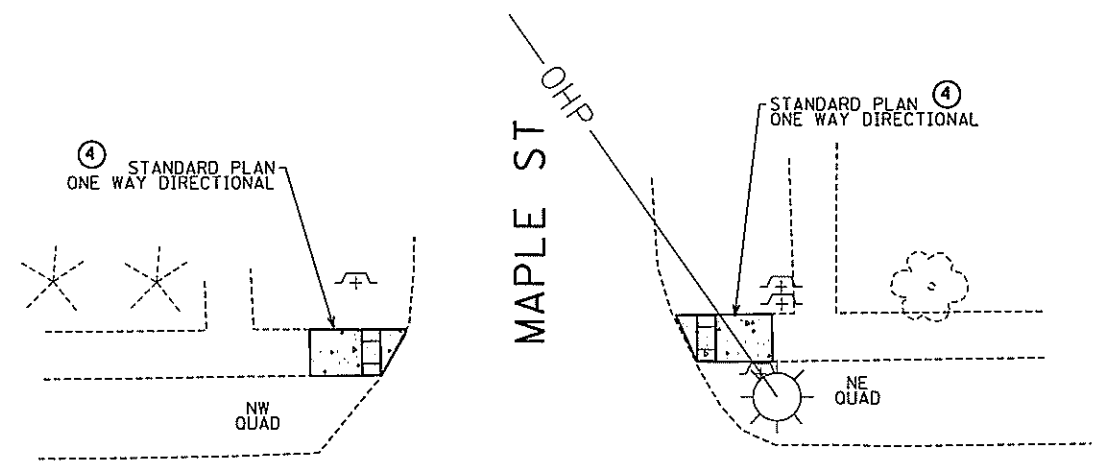
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LEGEND	
	CONCRETE WALK
	TRUNCATED DOMES (SEE STD. PLATE 7038)
	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

- NOTES:
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12-16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



INPLACE BITUMINOUS

OM

TH 246/MAIN ST

CONSTRUCTION PLAN

CURB RAMP PLANS - NERSTRAND

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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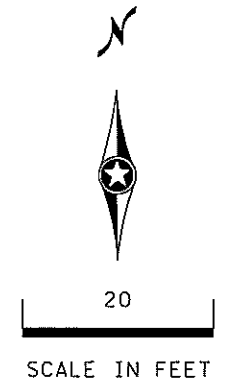
DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

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 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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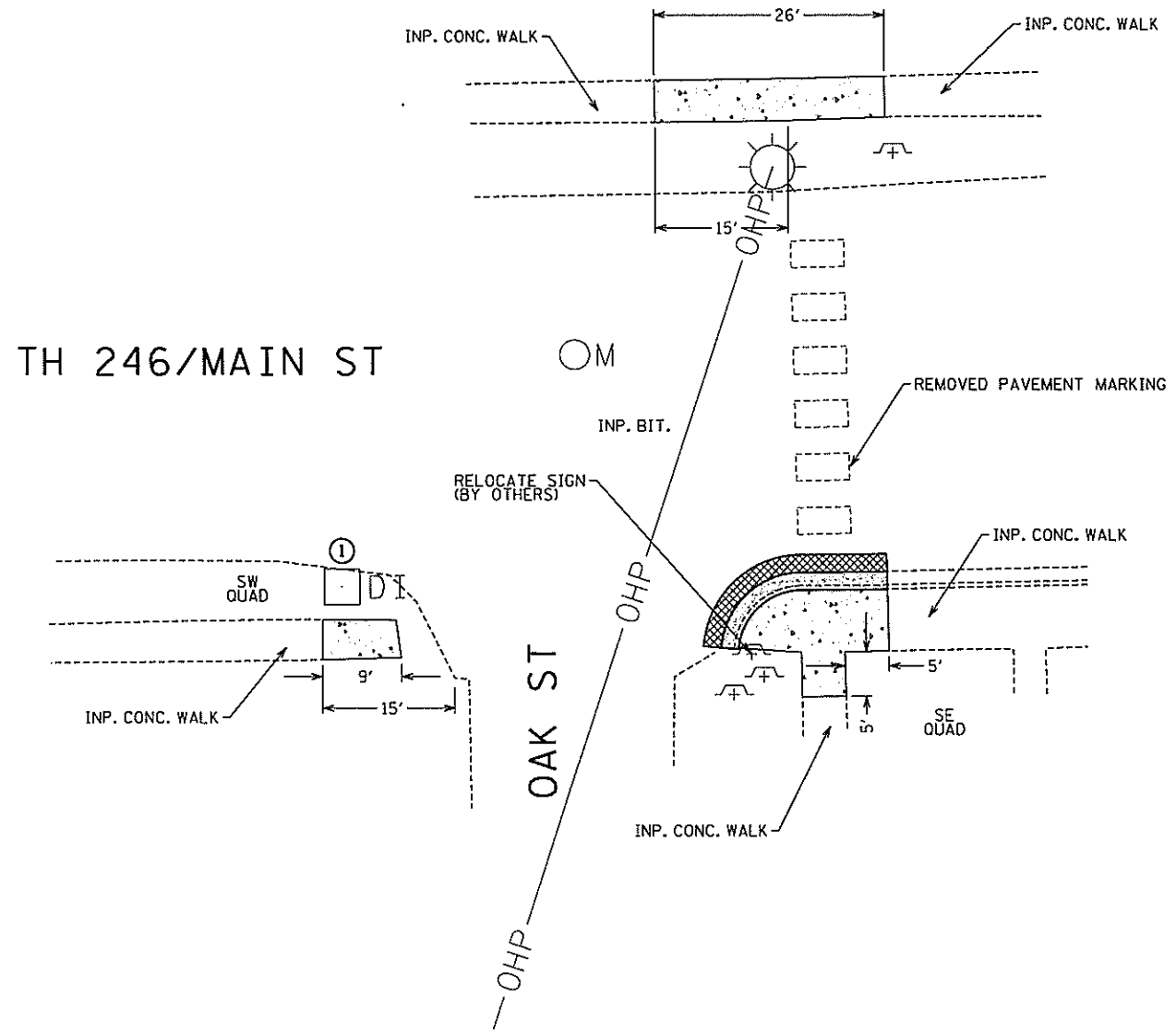
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 PLOTTED/REVISED: 4/27/2012



LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - NERSTRAND

DISTRICT #: METRO
 I/PLOT NAME: \$\$\$I/PLOT\$NAME\$\$\$
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DATE	SHEET NO.	APPROVED BY

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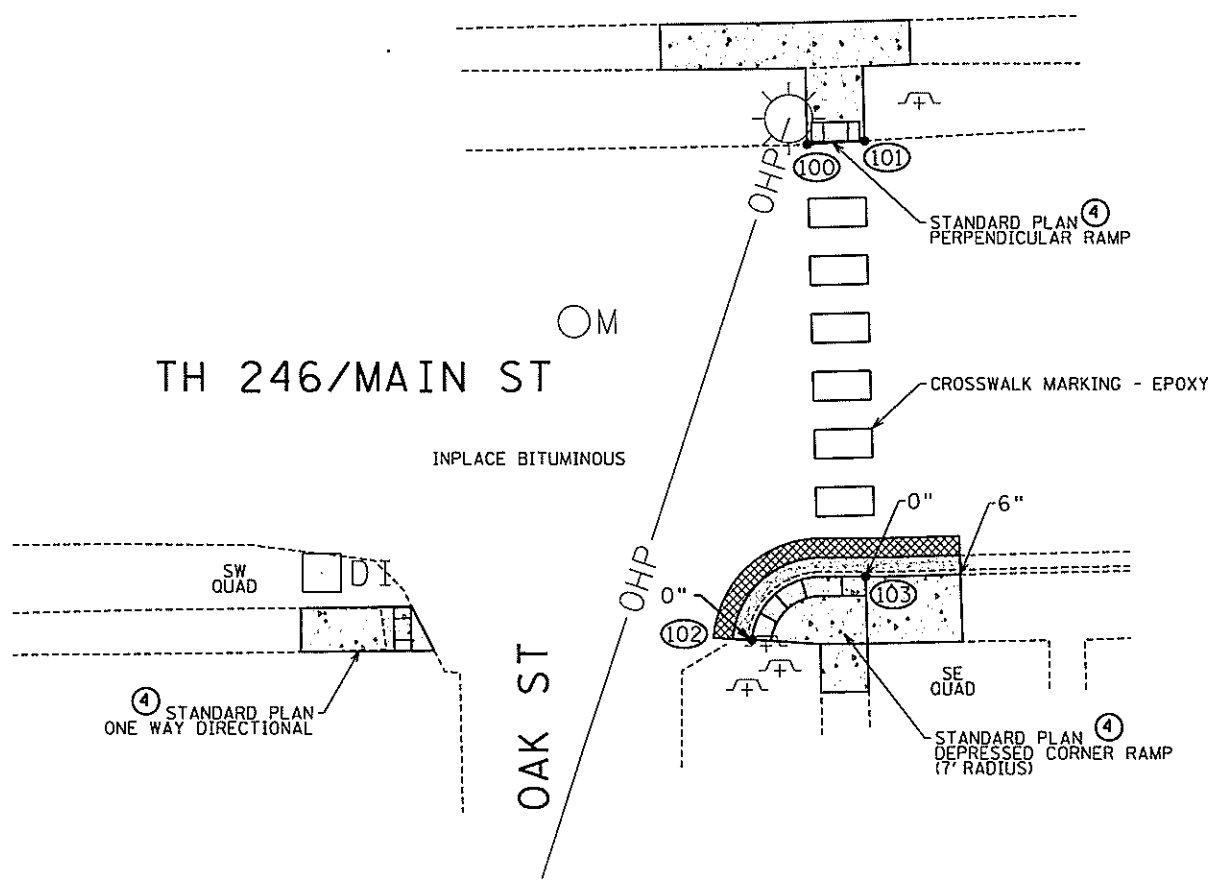
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LEGEND	
	CONCRETE WALK
	CONSTRUCT CONCRETE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TRUNCATED DOMES (SEE STD. PLATE 7038)
X"	CURB HEIGHT AT INDICATED LOCATION
	INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB OR EDGE OF PAVEMENT
---	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

- NOTES:
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12 -16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
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101	2,868,307.23	818,649.15
102	2,868,295.34	818,597.33
103	2,868,307.21	818,603.88

CONSTRUCTION PLAN

CURB RAMP PLANS - NERSTRAND

DISTRICT #: METRO
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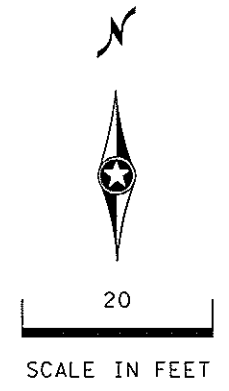
PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
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 Approved By: ABW

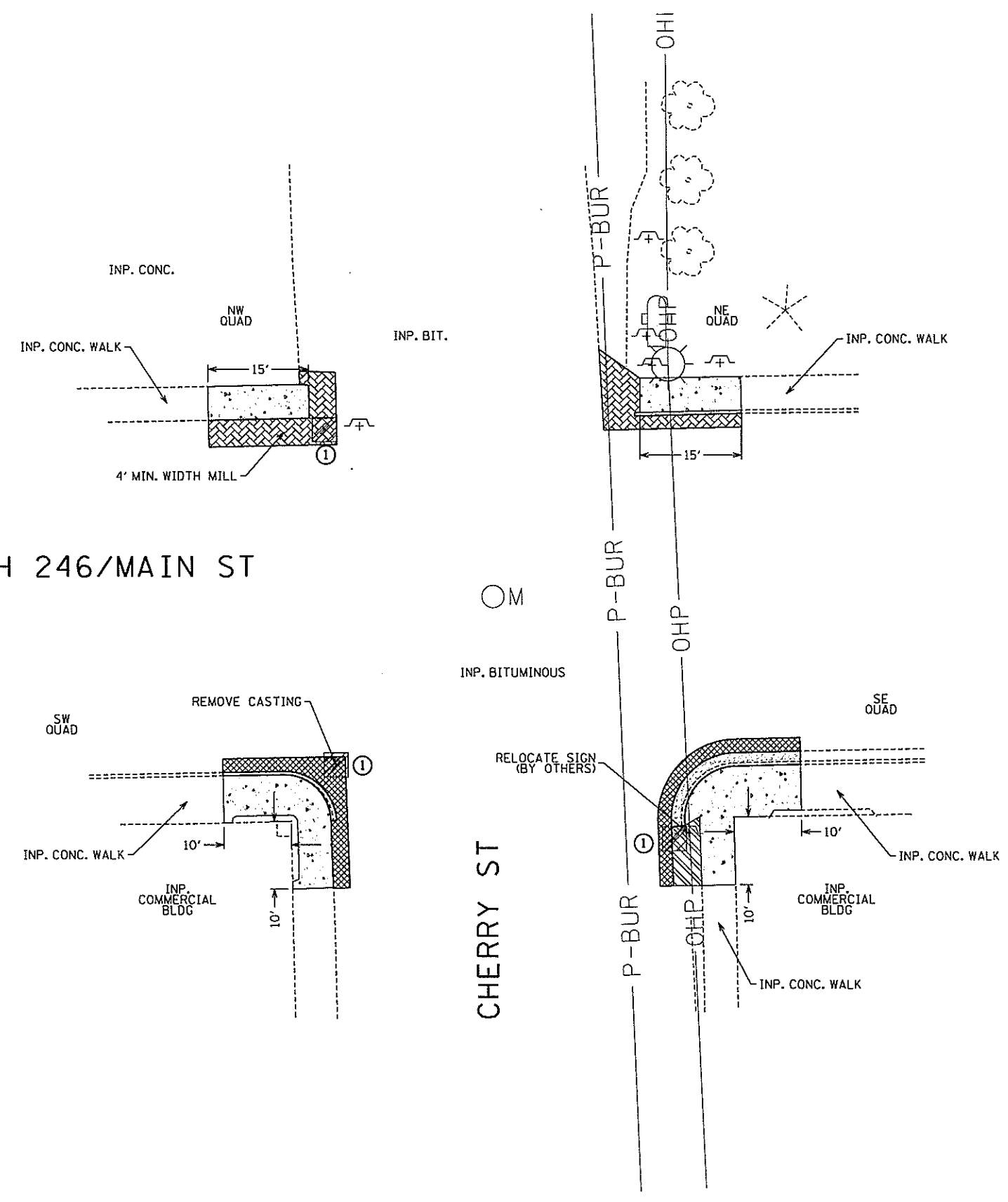
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LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	MILL BITUMINOUS SURFACE (2.0")
	REMOVE BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN

CURB RAMP PLANS - NERSTRAND

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DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

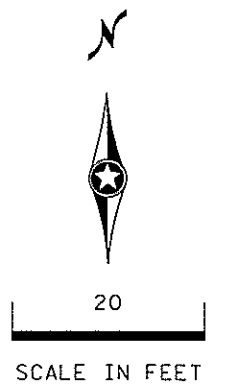
DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW



2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 P: 612.455.3322 F: 612.455.3321 www.rani.com



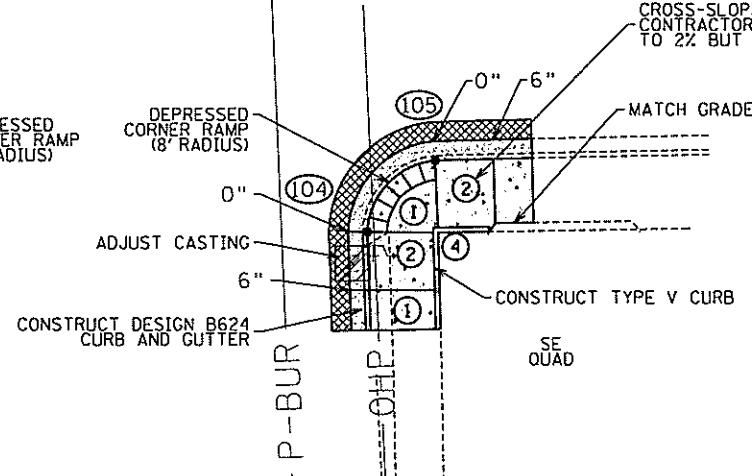
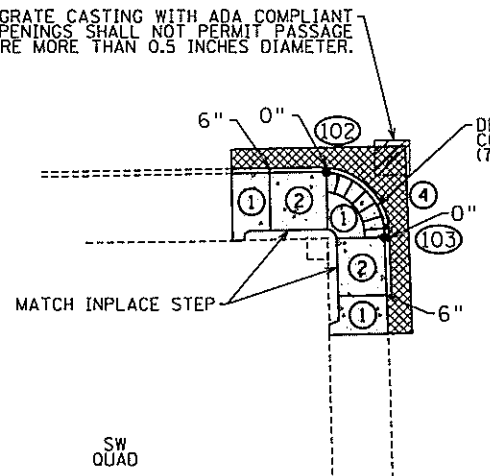
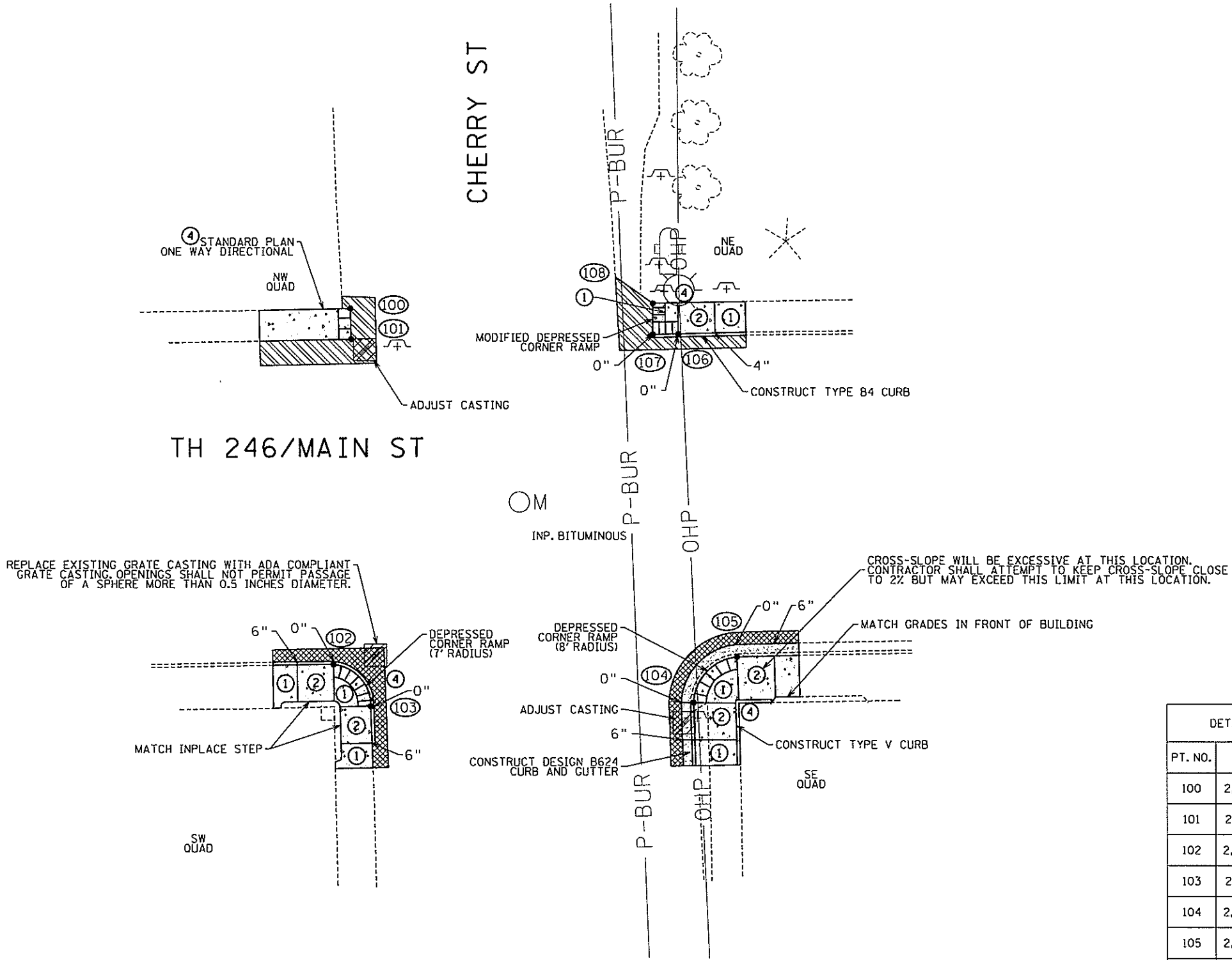
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- BITUMINOUS PATCH SPECIAL
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- X" CURB HEIGHT AT INDICATED LOCATION
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE ≤8.3% CROSS SLOPE SHALL BE ≤2.0%
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,868,610.94	818,667.35
101	2,868,611.05	818,662.35
102	2,868,608.03	818,609.49
103	2,868,614.01	818,602.73
104	2,868,666.62	818,603.31
105	2,868,673.70	818,610.74
106	2,868,664.25	818,663.23
107	2,868,660.14	818,663.14
108	2,868,660.16	818,668.19

CONSTRUCTION PLAN

CURB RAMP PLANS - NERSTRAND

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_cpB04.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

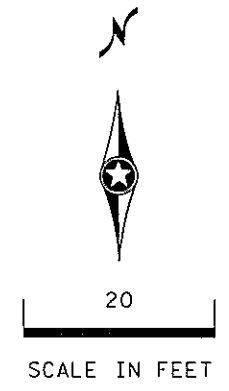
DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
 engineering

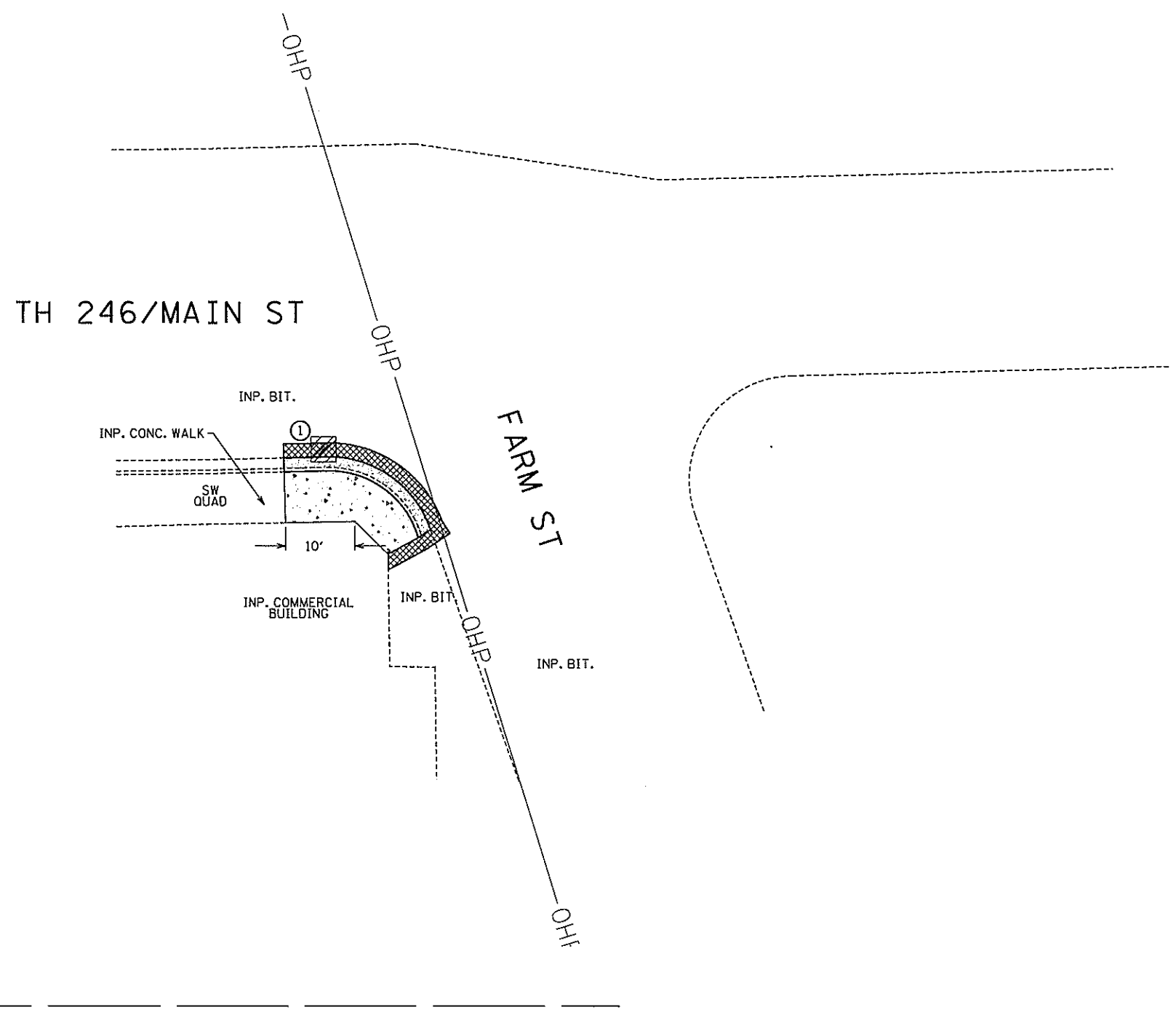
2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 Ph: 612.455.3322 Fx: 612.455.3321 www.rani.com



LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:
 ① INLET PROTECTION



PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
 I-FILE NAME: \$\$\$I-FILE NAME\$\$\$
 PATH & FILE NAME: P:\2011\08.000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_remB05.dgn

INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - NERSTRAND

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088
 DATE: 03/15/12 SIGNATURE: *Andrew Wells*
 DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
 engineering
 2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 P: 612.455.3322 F: 612.455.3321 www.rani.com



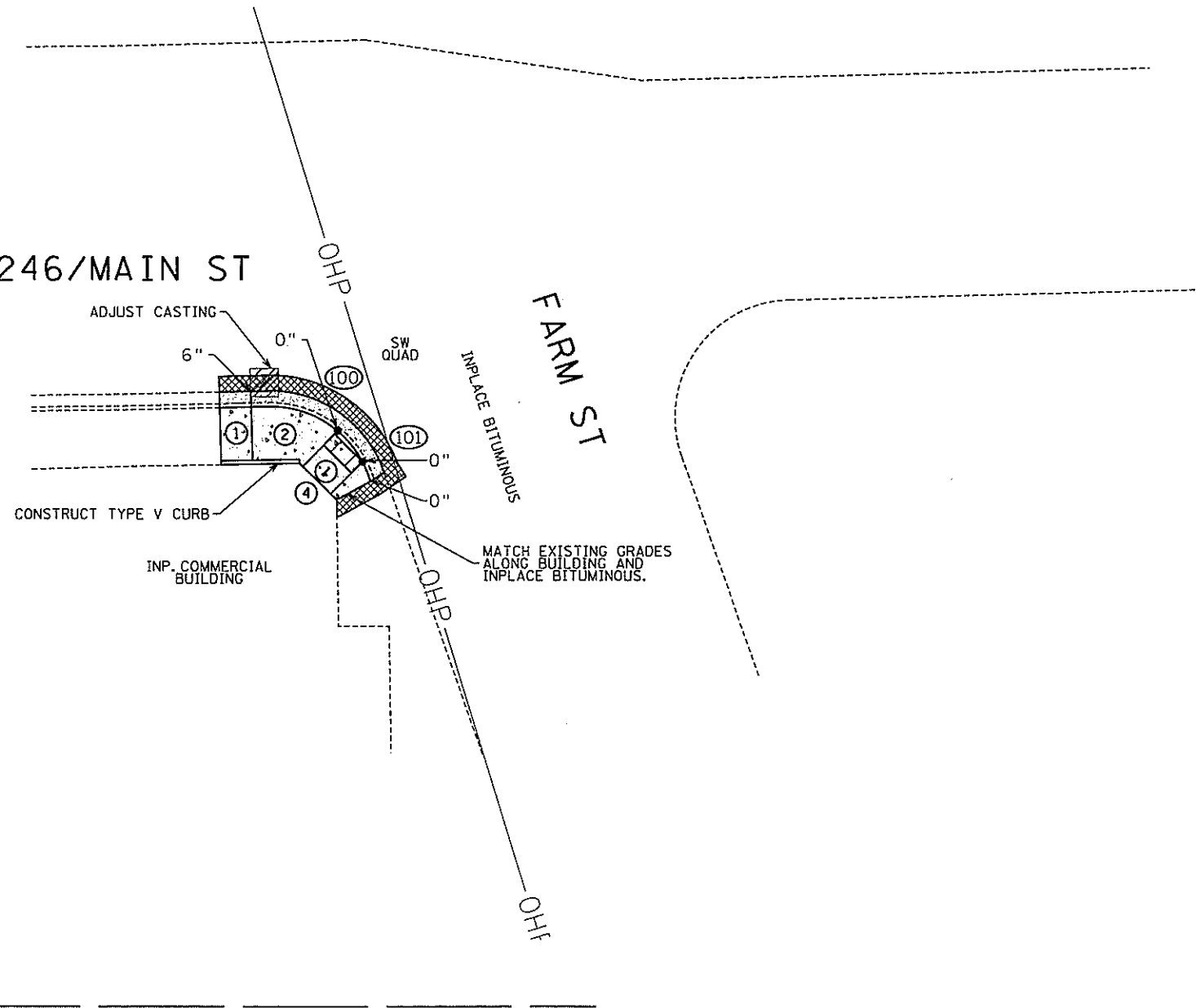
LEGEND	
	CONCRETE WALK
	CONSTRUCT CONCRETE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TRUNCATED DOMES (SEE STD. PLATE 7038)
X"	CURB HEIGHT AT INDICATED LOCATION
	INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
---	TEMPORARY WIDTH ORDER (T.W.O.) (100' EITHER SIDE OF CENTERLINE TH 246 - NERSTRAND)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:

- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
- ② RUNNING SLOPE SHALL BE ≤8.3% CROSS SLOPE SHALL BE ≤2.0%
- ③ NOT ON THIS SHEET
- ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS

TH 246/MAIN ST



DETAIL POINTS		
PT. NO.	X	Y
100	2,868,983.39	818,613.04
101	2,868,986.54	818,609.13

CONSTRUCTION PLAN

CURB RAMP PLANS - NERSTRAND

PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\JOB\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_cp805.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 45088

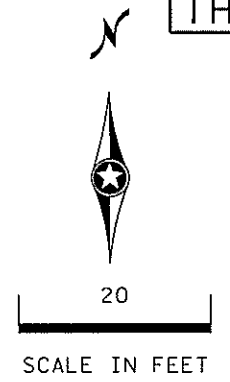
DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

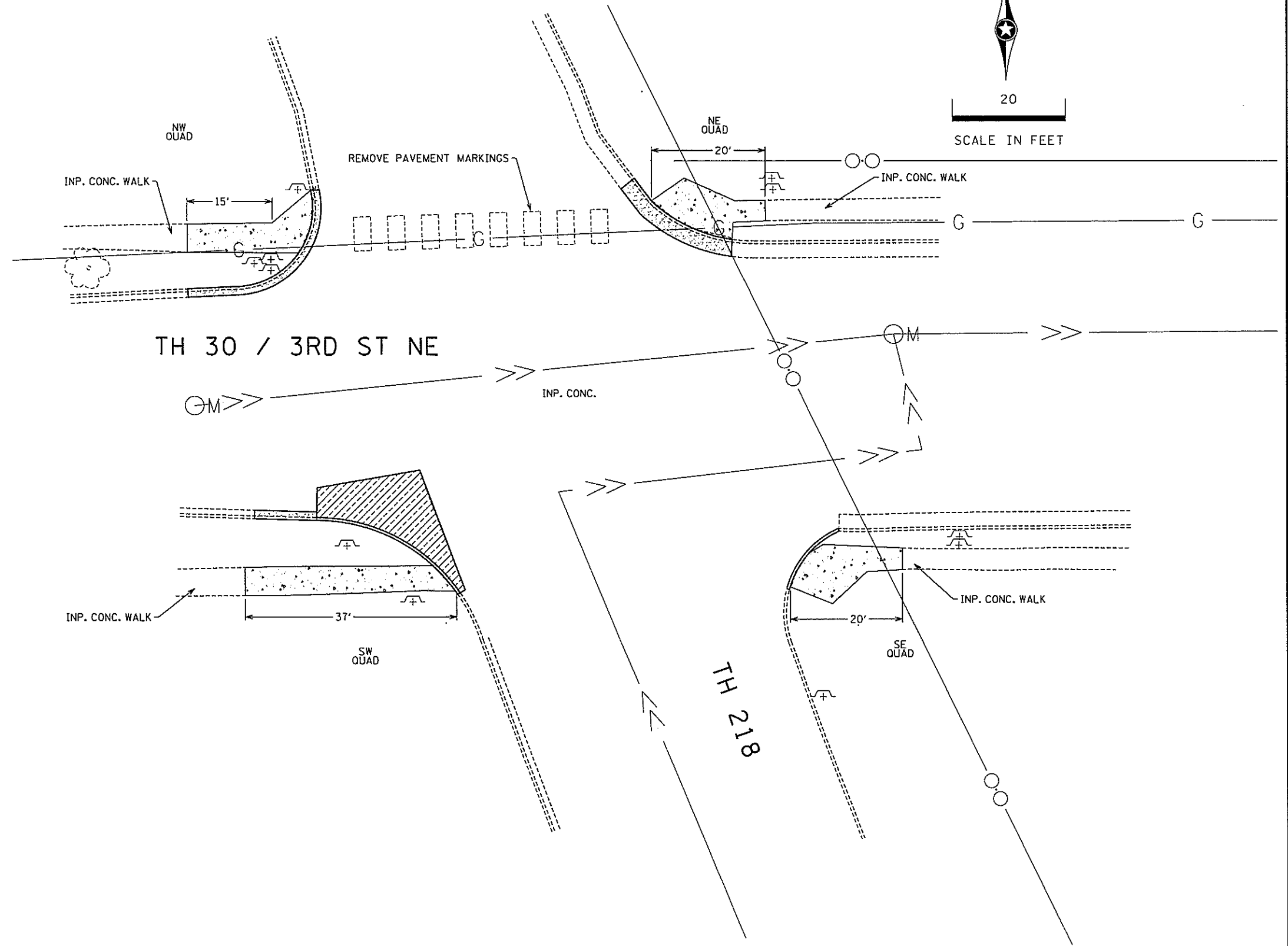
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LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	REMOVE CONCRETE PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - BLOOMING PRAIRIE) (75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$IPLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Merstrand\CDB826116_rencol.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088
 DATE: 03/15/12 SIGNATURE: *Andrew Wells*
 DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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 Ph 612.455.3322 Fx 612.455.3321 www.rani.com

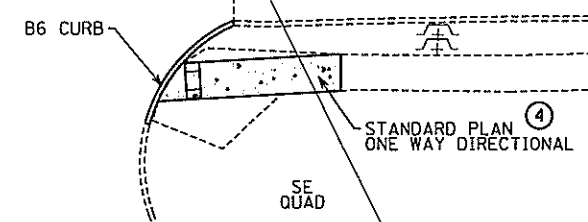
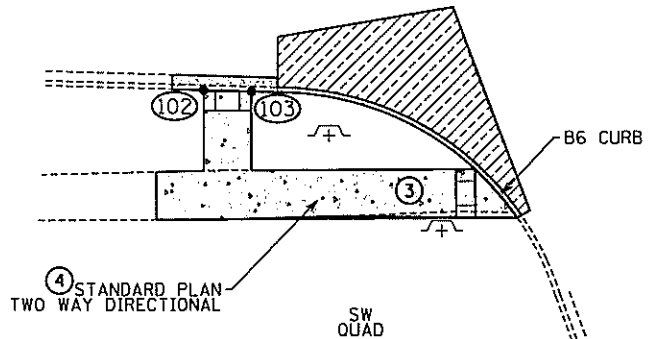
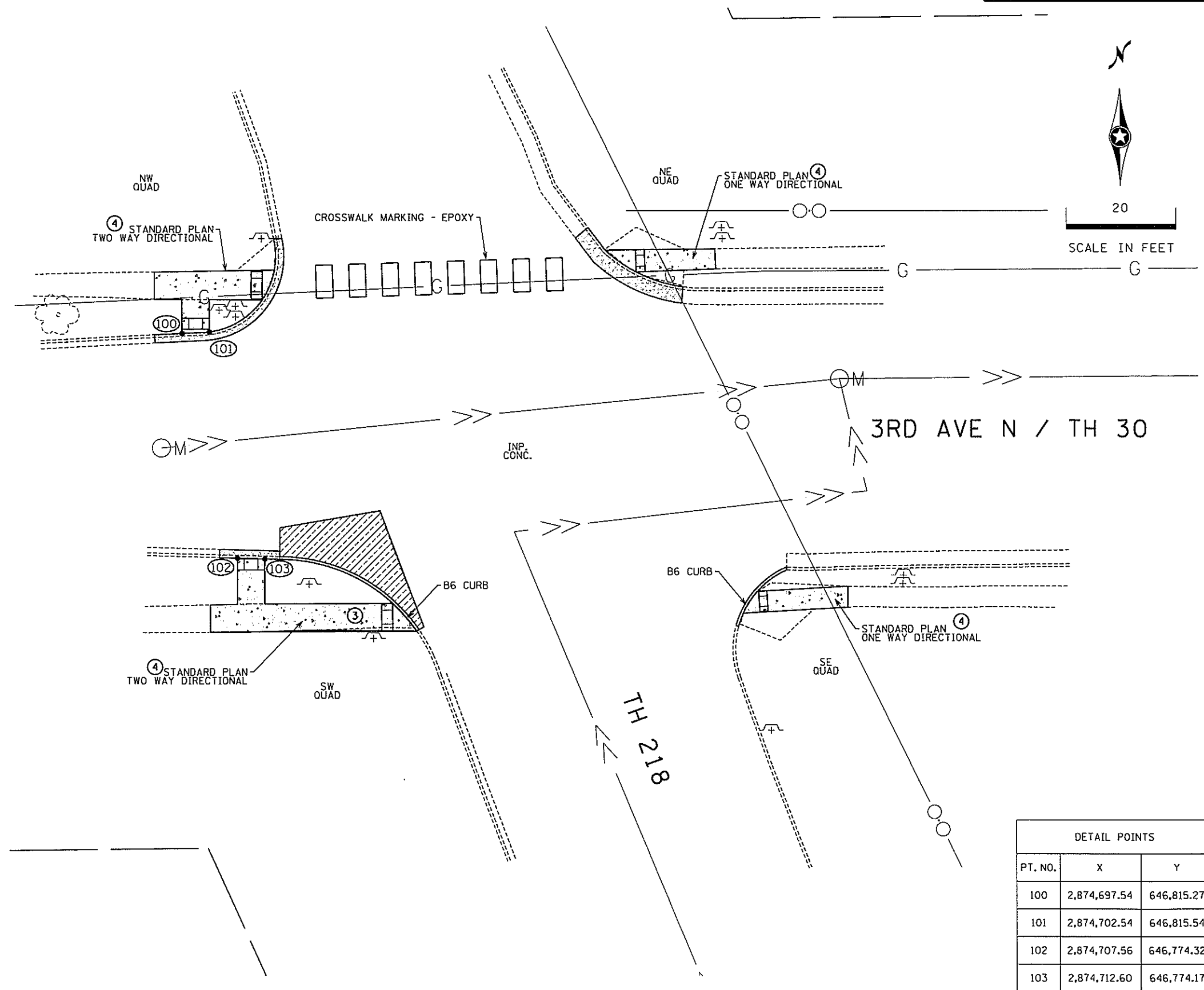
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- CONCRETE PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 30 - BLOOMING PRAIRIE)
(75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ RUNNING SLOPE SHALL BE =5.0%
CROSS SLOPE SHALL BE =2.0%
 - ④ SEE SHEETS 12 -16 FOR
CONSTRUCTION DETAIL OF CURB
RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,874,697.54	646,815.27
101	2,874,702.54	646,815.54
102	2,874,707.56	646,774.32
103	2,874,712.60	646,774.17

CONSTRUCTION PLAN

CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\JOB\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nersfrand\CD8826116_cp001.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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 P: 612.455.3322 F: 612.455.3321 www.rani.com

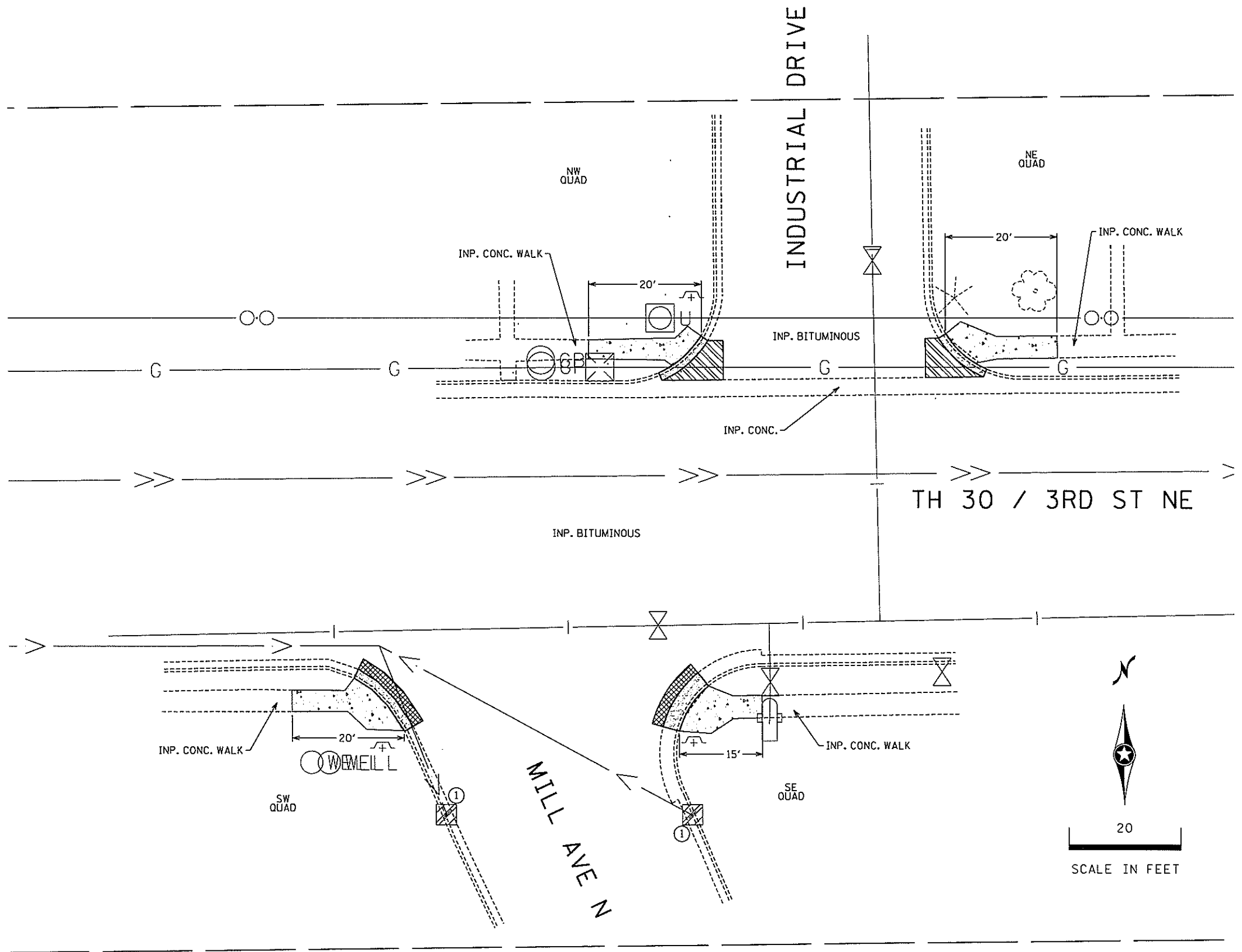
LEGEND

- REMOVE CONCRETE WALK
- REMOVE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS PAVEMENT
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - BLOOMING PRAIRIE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_remC02.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

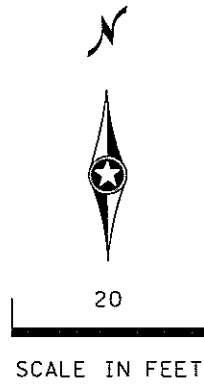
Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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 Ph 612.455.3322 Fx 612.455.3321 www.rani.com

LEGEND

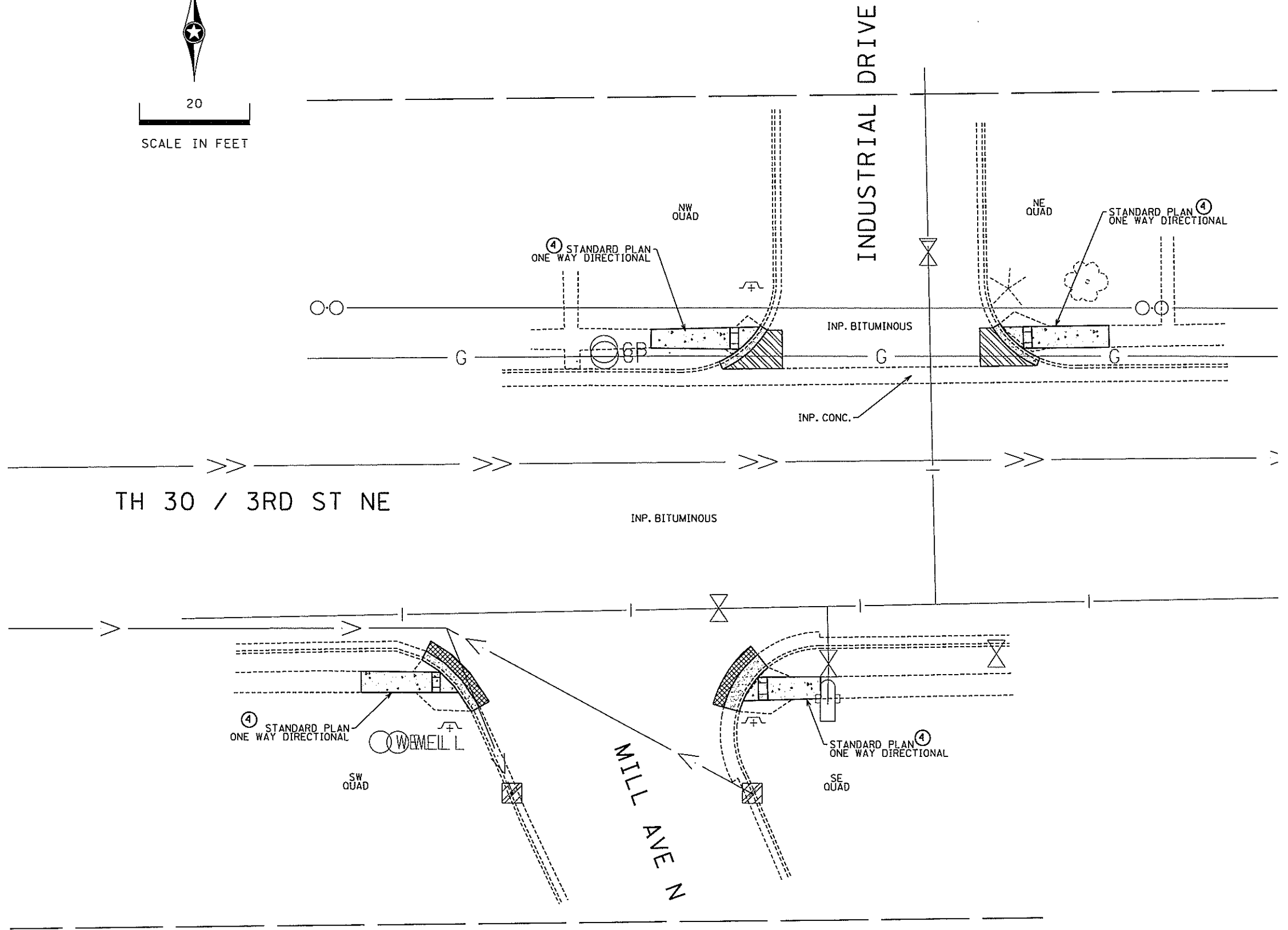
- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- BITUMINOUS PATCH SPECIAL
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - BLOOMING PRAIRIE)



UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Merstrand\CD8826116_cp02.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE #: 49088

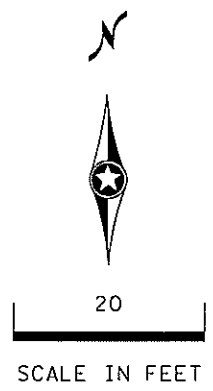
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Drawn By: CL I
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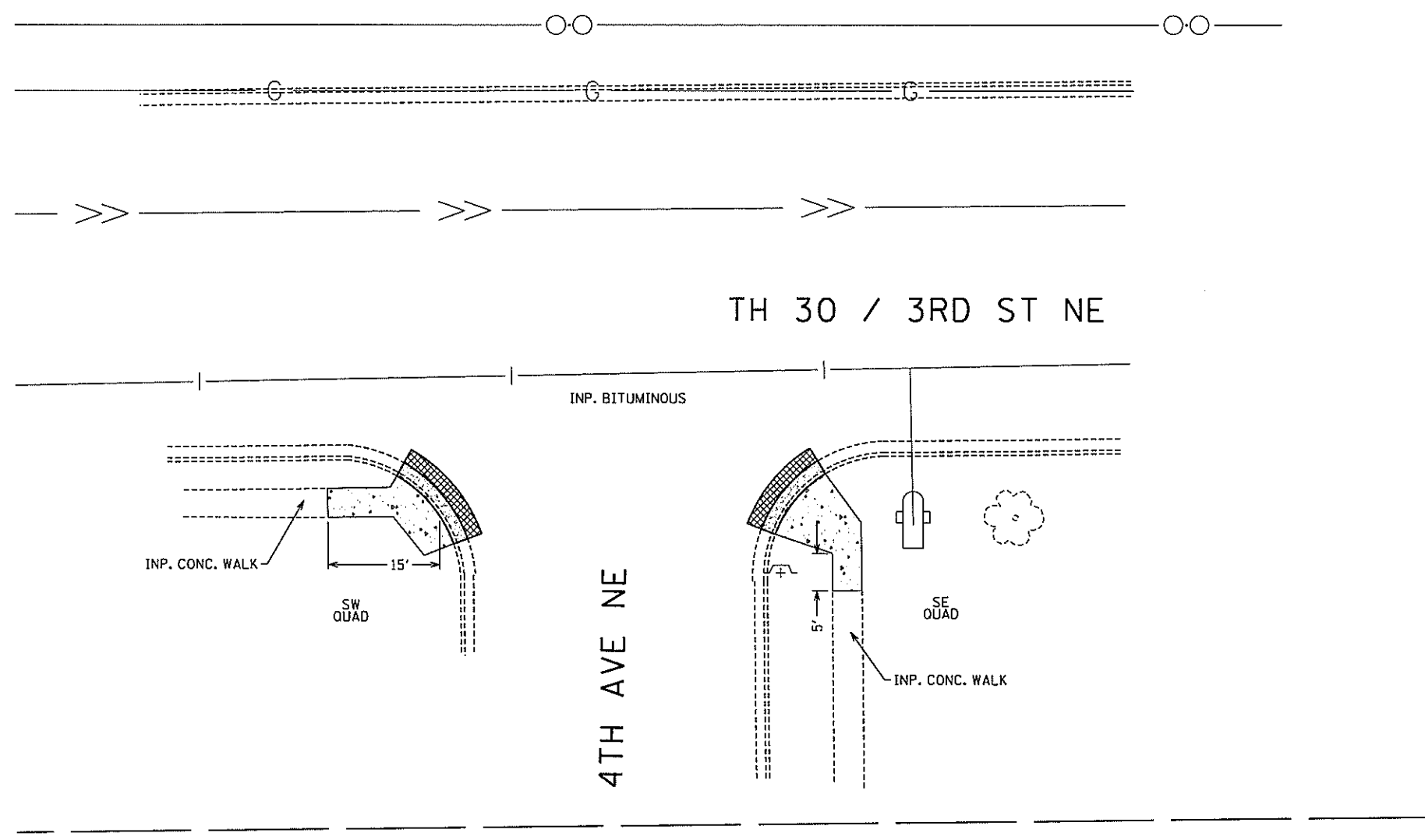
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LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - BLOOMING PRAIRIE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE



PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_remCO3.dgn

INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - BLOOMING PRAIRIE

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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 PRINT NAME: ANDREW WELLS LICENSE # 49088
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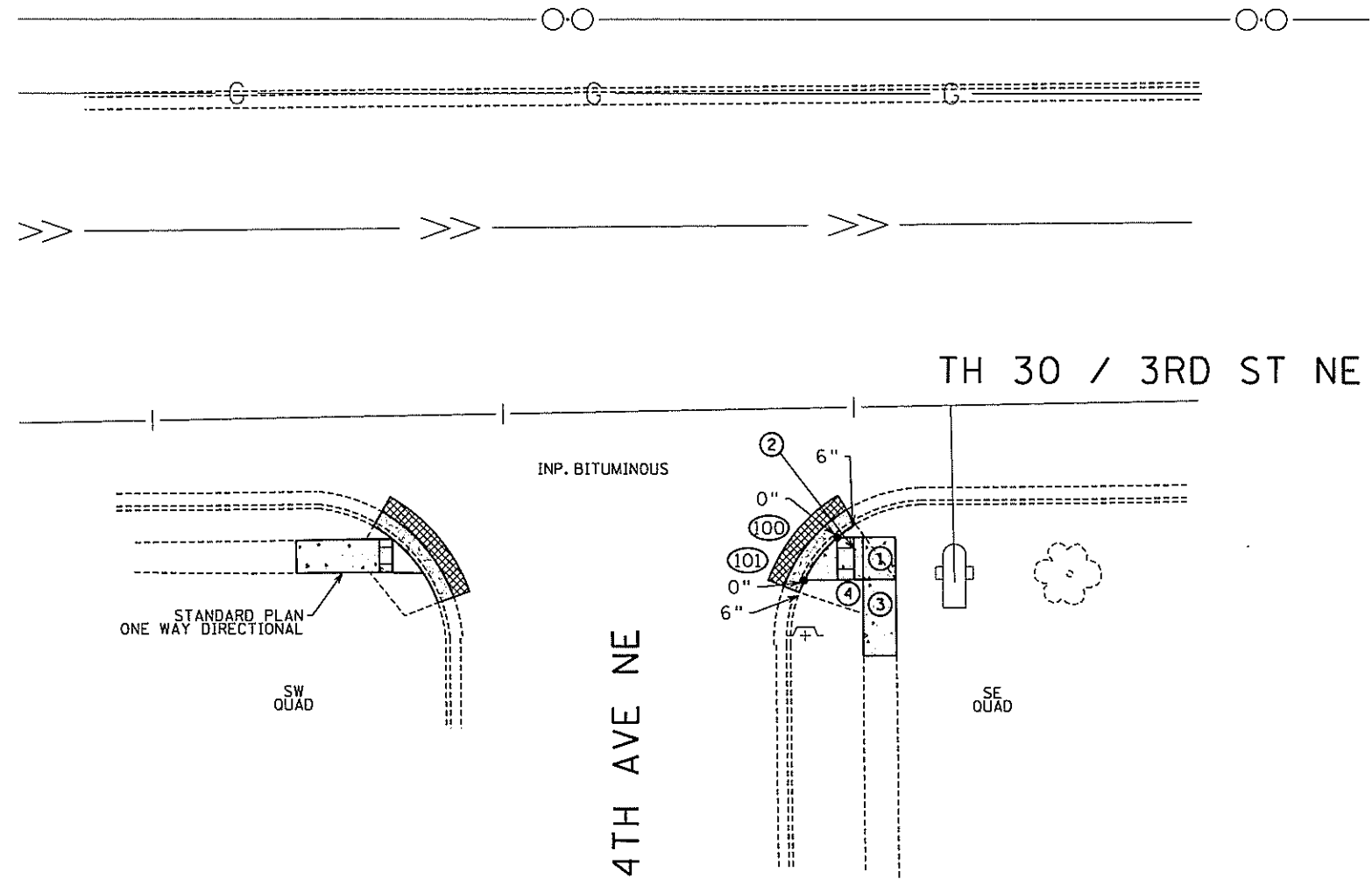
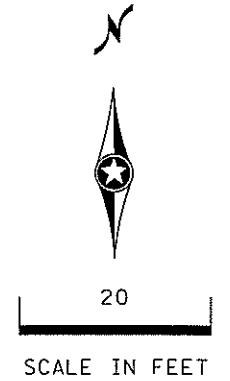
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- X" CURB HEIGHT AT INDICATED LOCATION
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - BLOOMING PRAIRIE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE ≤8.3% CROSS SLOPE SHALL BE ≤2.0%
 - ③ RUNNING SLOPE SHALL BE ≤5.0% CROSS SLOPE SHALL BE ≤2.0%
 - ④ SEE SHEETS 12-16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,875,572.06	646,776.16
101	2,875,568.08	646,771.11

CONSTRUCTION PLAN

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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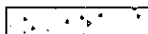
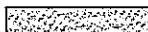


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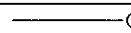
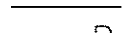


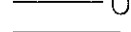
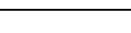

CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08.000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116...cp03.dgn
 PLOTTED/REVISED: 4/27/2012

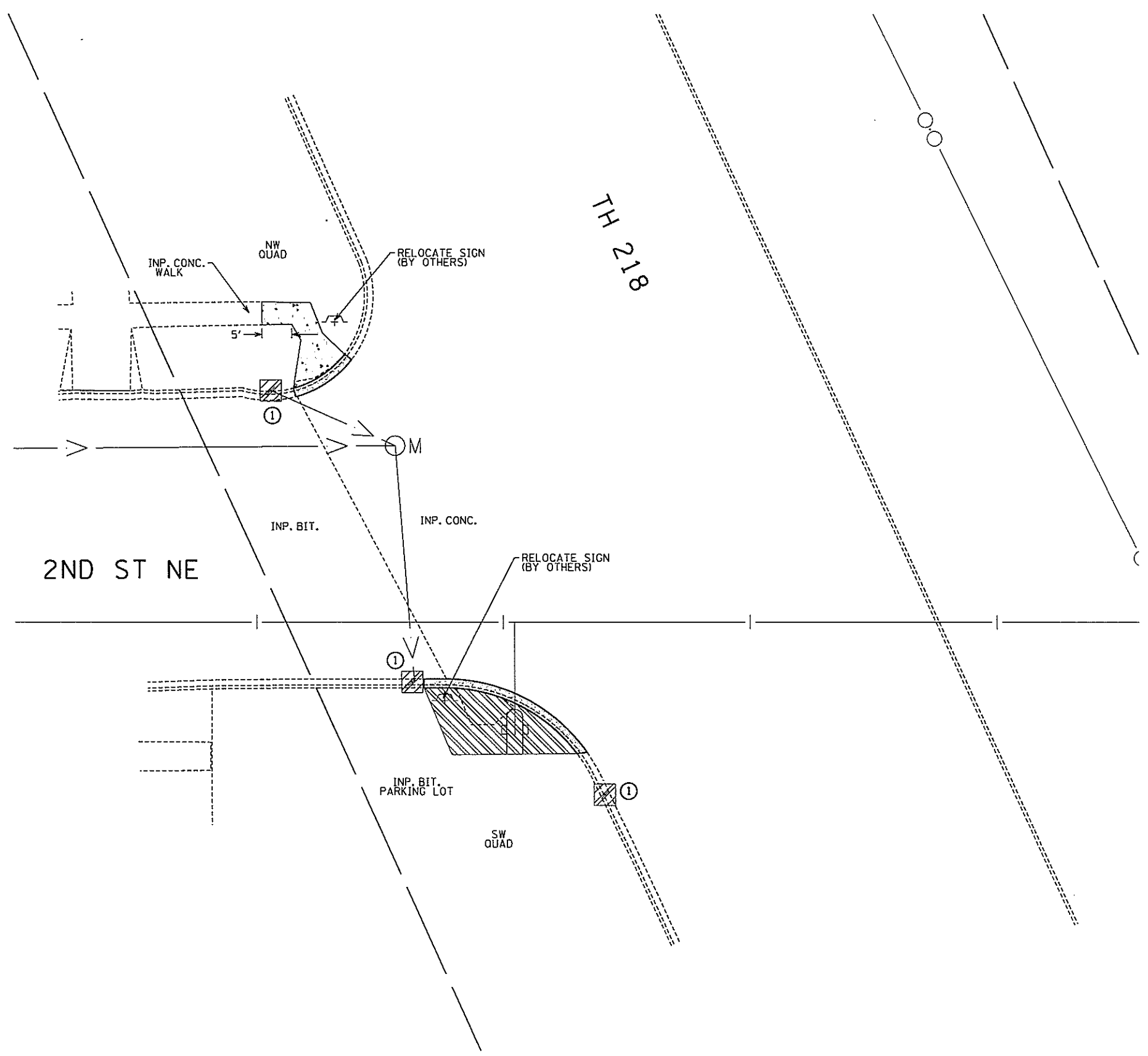
LEGEND

-  REMOVE CONCRETE WALK
-  REMOVE CURB / CURB & GUTTER
-  REMOVE BITUMINOUS PAVEMENT
-  TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE

NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_remCO4.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

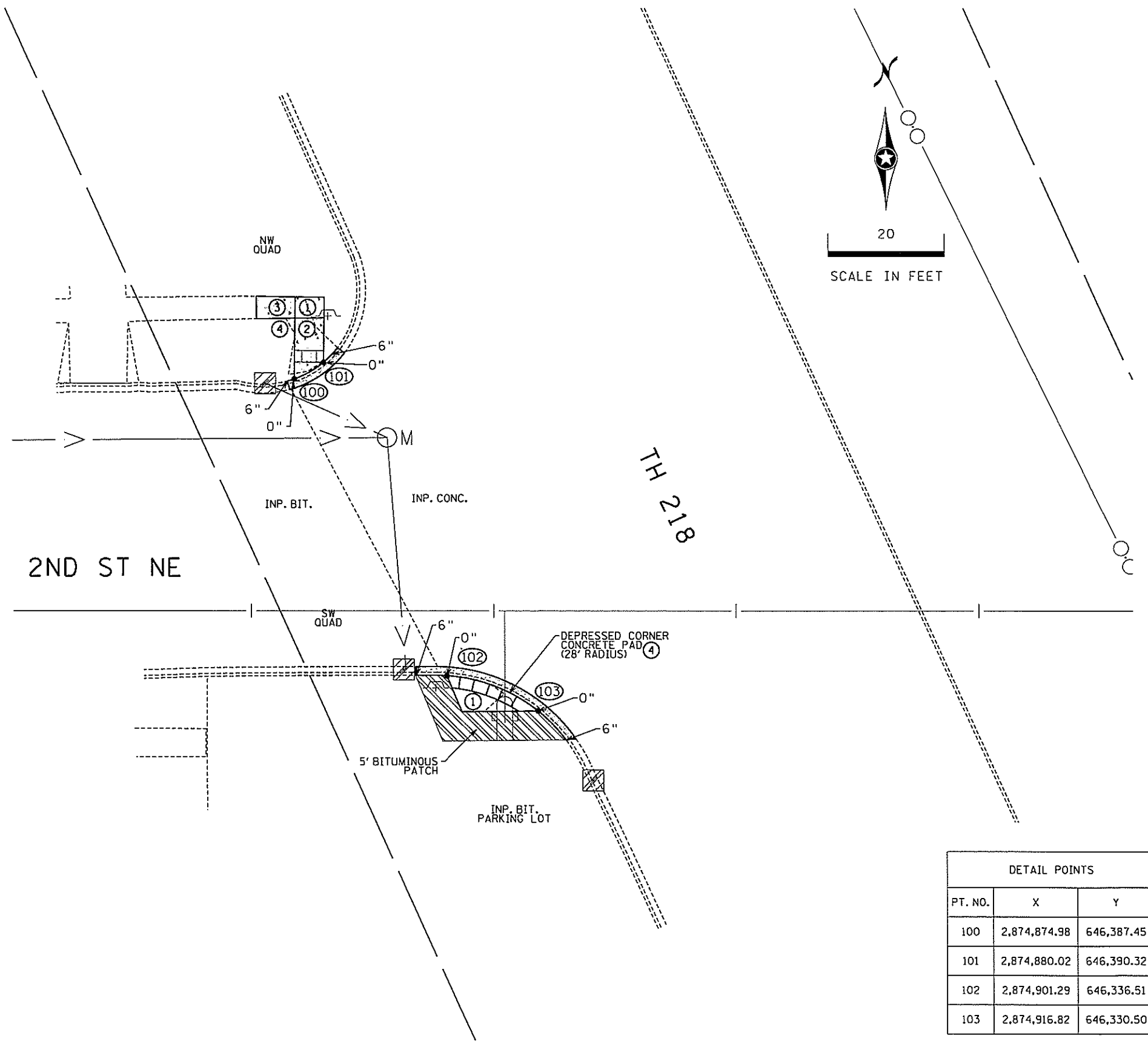
RANI
 engineering

2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 P: 612.455.3322 F: 612.455.3321 www.rani.com

LEGEND	
	CONCRETE WALK
	CONSTRUCT CONCRETE CURB / CURB & GUTTER
	BITUMINOUS PATCH SPECIAL
	TRUNCATED DOMES (SEE STD. PLATE 7038)
X"	CURB HEIGHT AT INDICATED LOCATION
	INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
---	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

- NOTES:
- CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - RUNNING SLOPE SHALL BE ≤ 8.3%
CROSS SLOPE SHALL BE ≤ 2.0%
 - RUNNING SLOPE SHALL BE ≤ 5.0%
CROSS SLOPE SHALL BE ≤ 2.0%
 - SEE SHEETS 12-16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,874,874.98	646,387.45
101	2,874,880.02	646,390.32
102	2,874,901.29	646,336.51
103	2,874,916.82	646,330.50

CONSTRUCTION PLAN

CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
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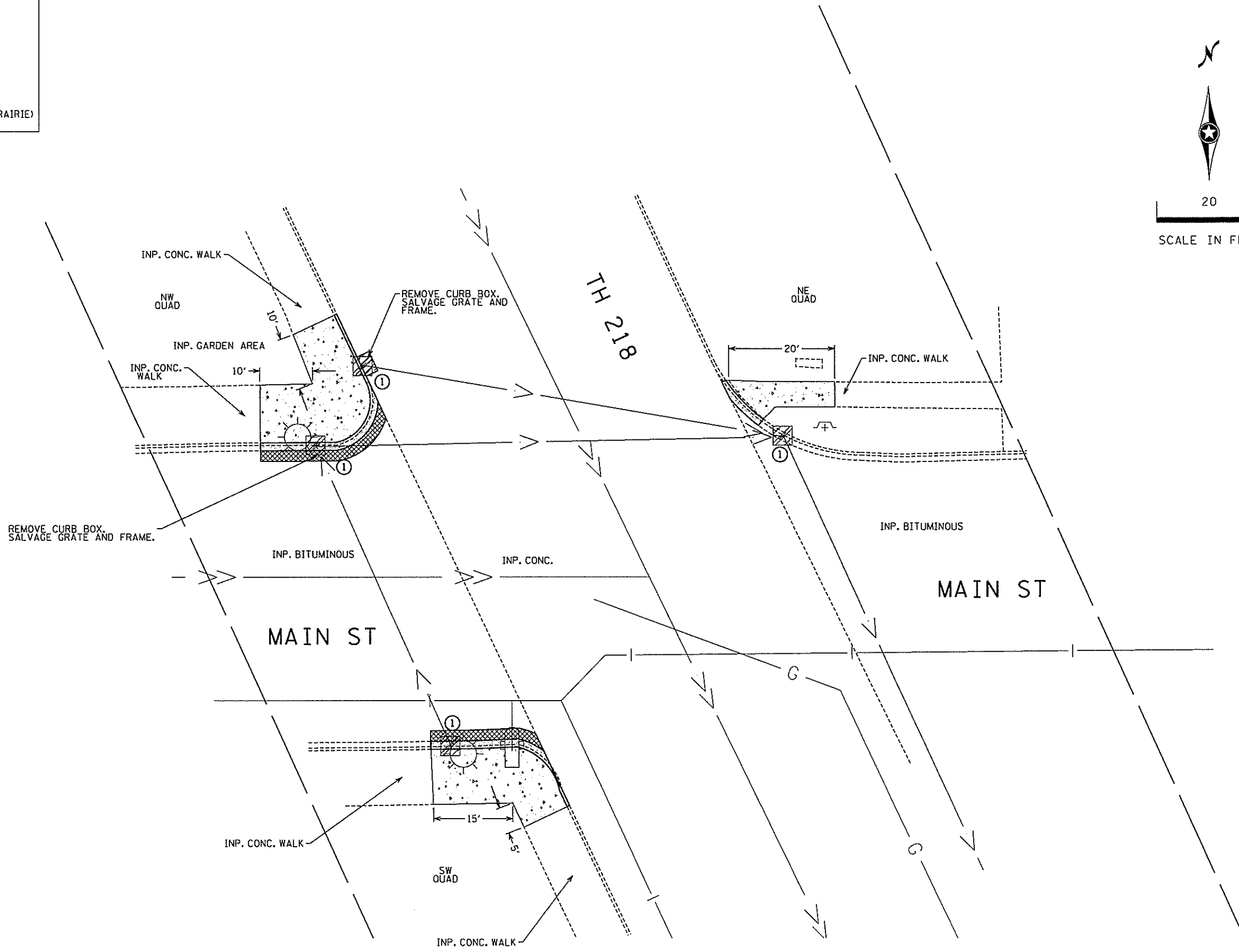
2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 Ph: 612.455.3322 Fx: 612.455.3321 www.rani.com



LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\JOB\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_renc05.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

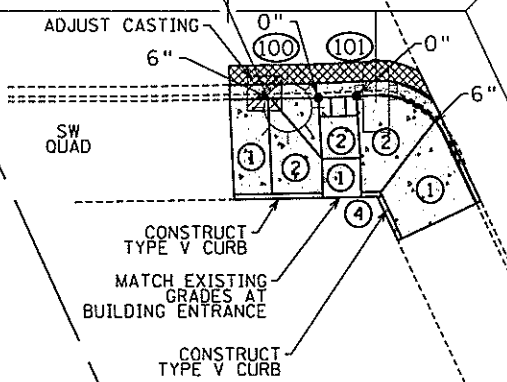
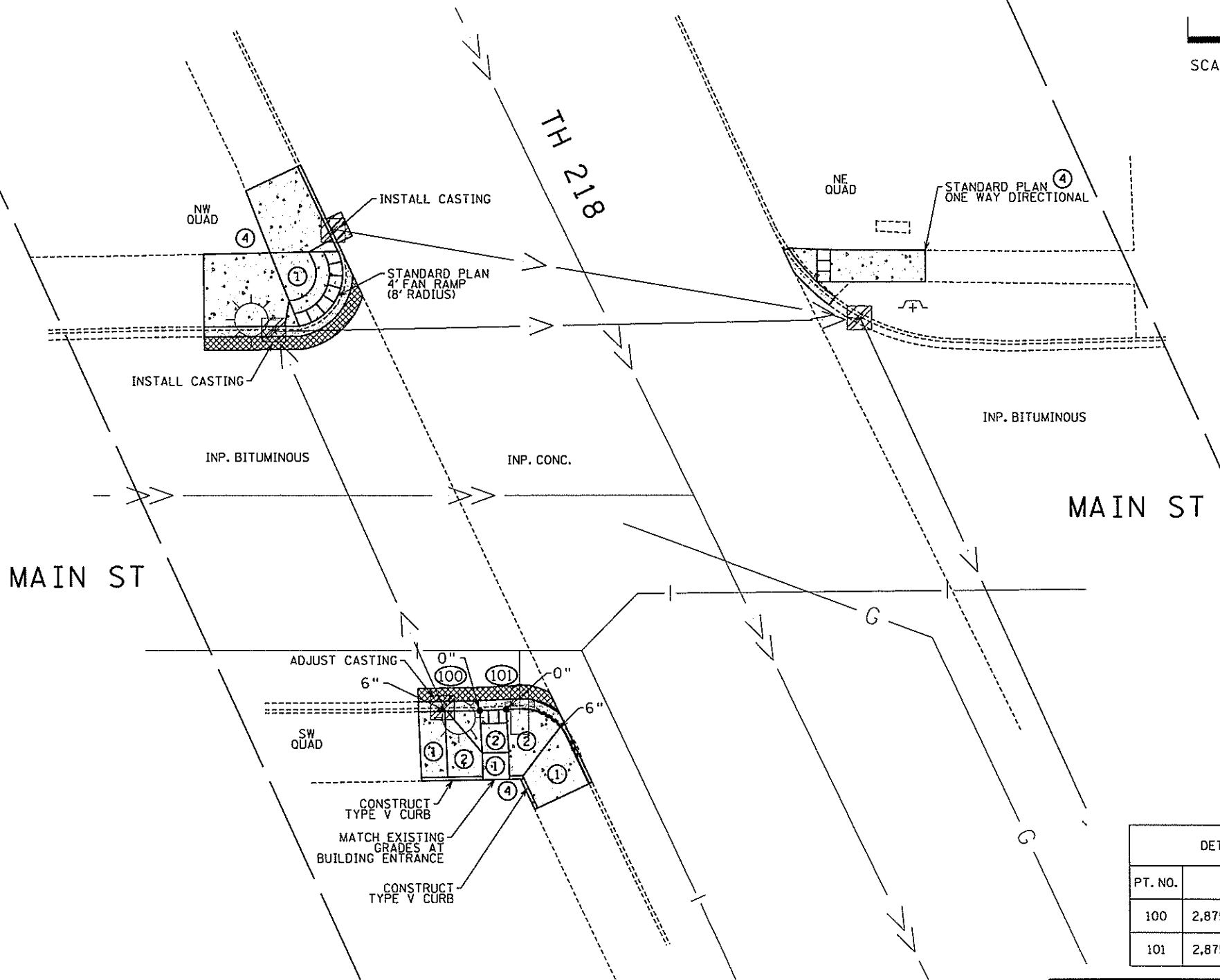
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LEGEND	
	CONCRETE WALK
	CONSTRUCT CONCRETE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	CONCRETE PAVEMENT
	TRUNCATED DOMES (SEE STD. PLATE 7038)
X"	CURB HEIGHT AT INDICATED LOCATION
	INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

- NOTES:
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE ≤8.3% CROSS SLOPE SHALL BE ≤2.0%
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,875,313.76	645,459.80
101	2,875,317.73	645,459.96

CONSTRUCTION PLAN

CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$IPLLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\JOB\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Merstrand\CDB826116_cpc05.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

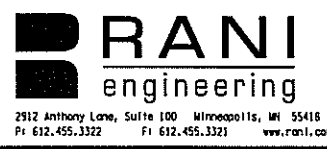
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: ANDREW WELLS LICENSE # 49088

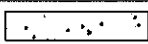


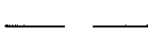
DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING








Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW



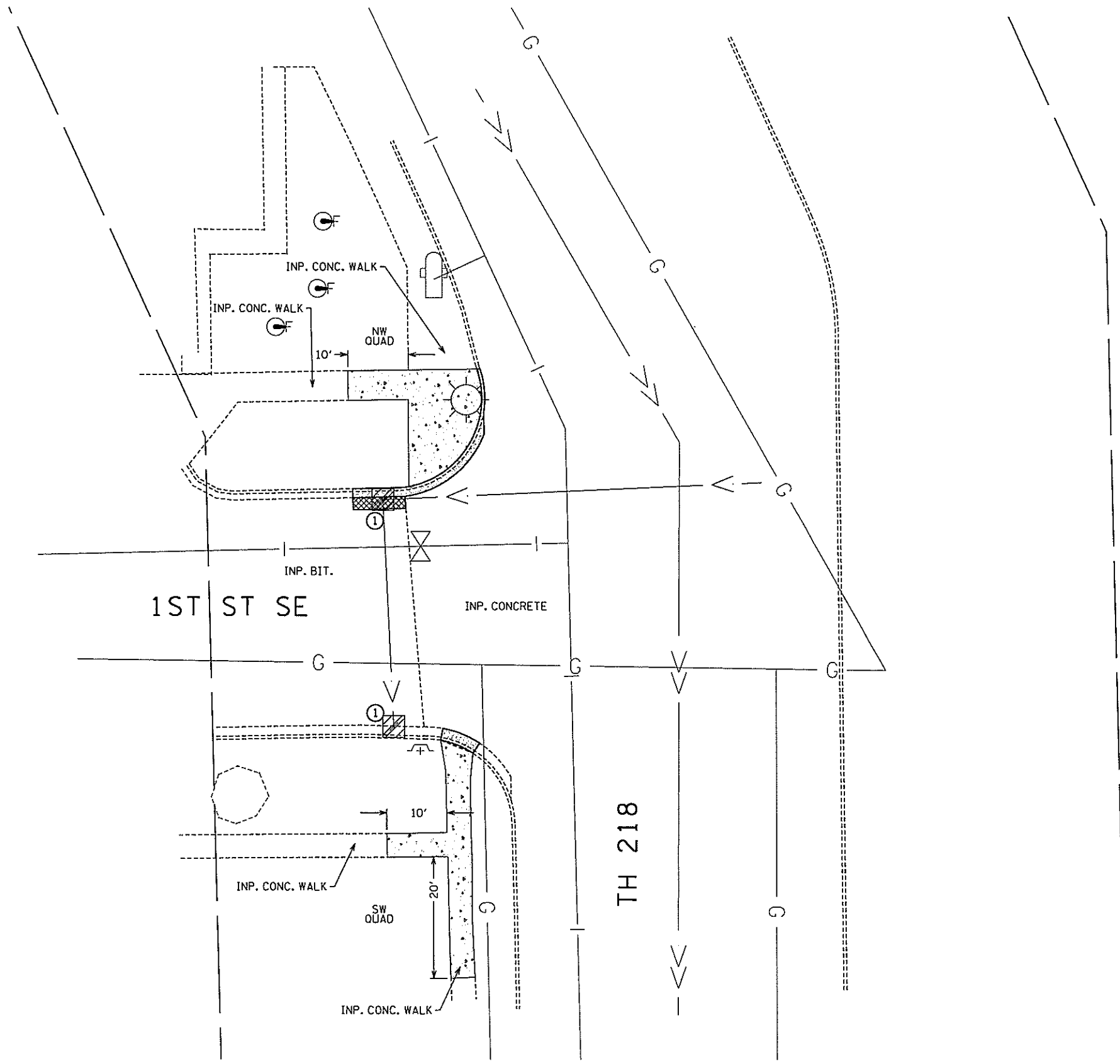
LEGEND

-  REMOVE CONCRETE WALK
-  REMOVE CURB / CURB & GUTTER
-  MILL AND PATCH BITUMINOUS PAVEMENT
-  TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE

NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BF, Nersirand\CD8826116_remC06.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
 engineering

2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 P: 612.455.3322 F: 612.455.3321 www.rani.com



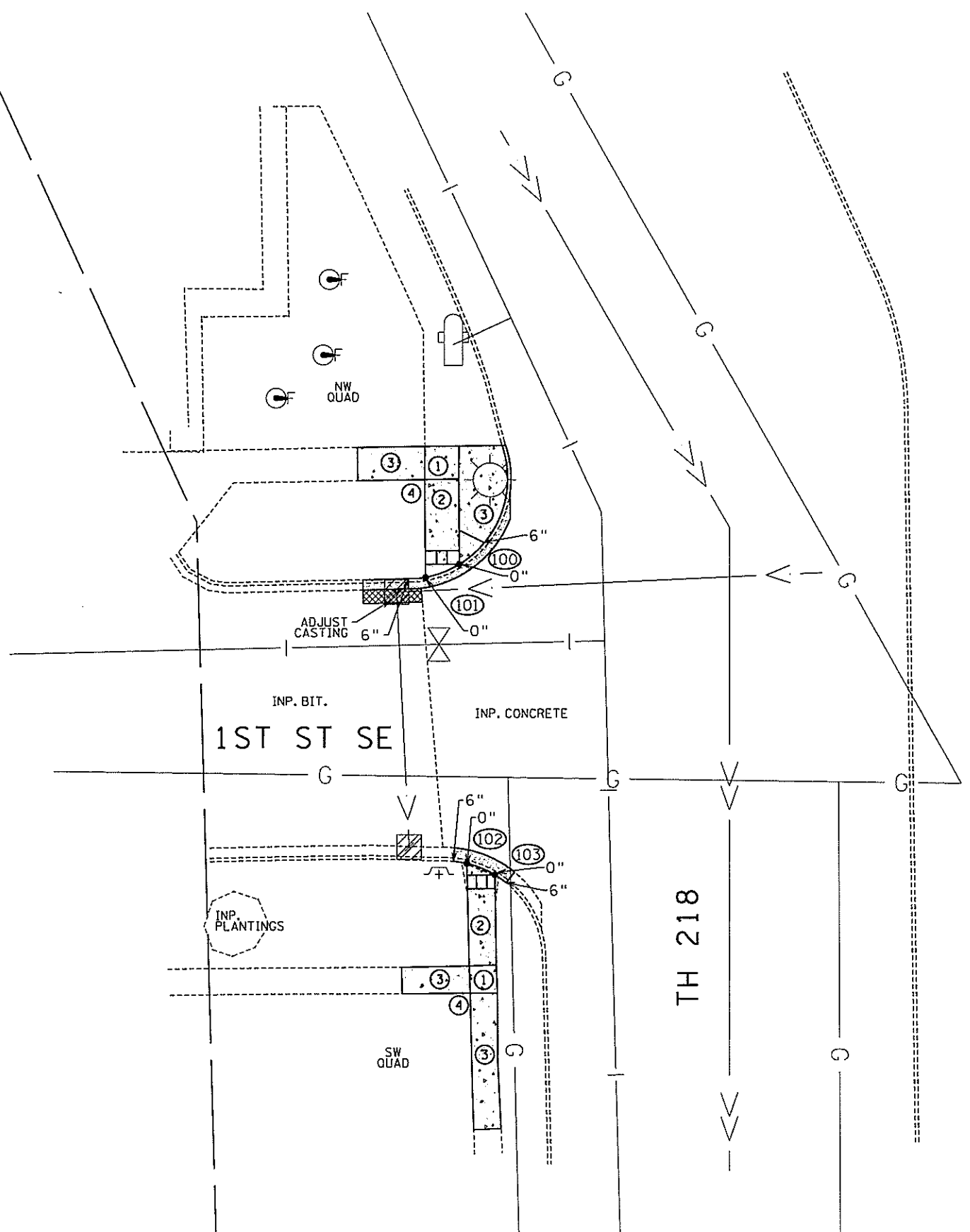
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- X" CURB HEIGHT AT INDICATED LOCATION
- XXX INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE ≤8.3%
CROSS SLOPE SHALL BE ≤2.0%
 - ③ RUNNING SLOPE SHALL BE ≤5.0%
CROSS SLOPE SHALL BE ≤2.0%
 - ④ SEE SHEETS 12 -16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS

PT. NO.	X	Y
100	2,875,489.03	645,073.66
101	2,875,484.04	645,071.72
102	2,875,489.97	645,029.70
103	2,875,494.08	645,028.03

CONSTRUCTION PLAN

CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_Dis\1st\1st 6 Ped Ramps\Drawings\8826-116 - Elendale, BP, Nerstrand\CDB826116_cpc06.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS

DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

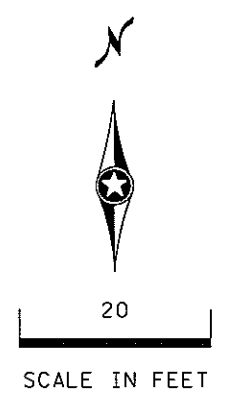
DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
 engineering

2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 Ph 612.455.3322 Fx 612.455.3321 www.rani.com



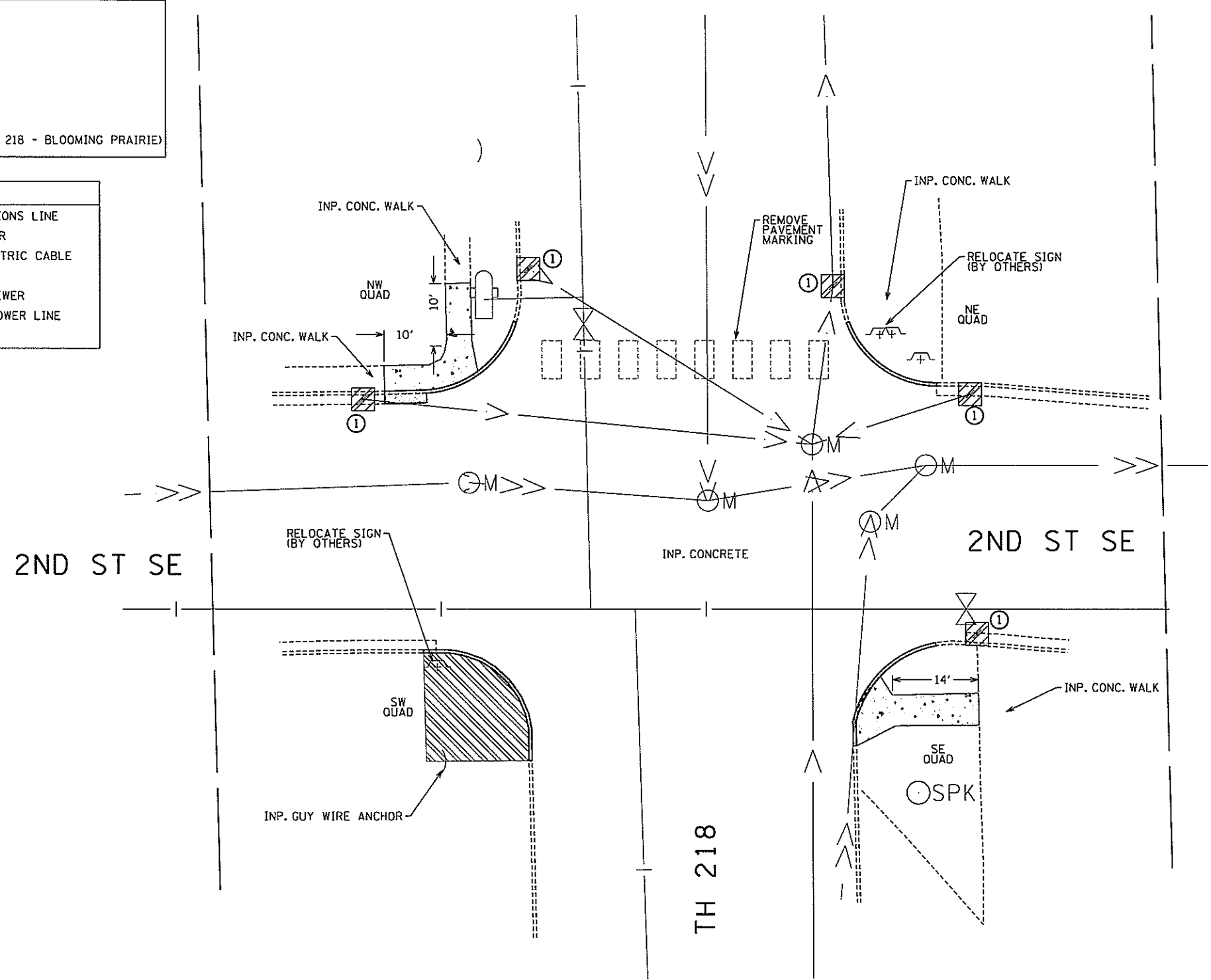
LEGEND

	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	REMOVE BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND

	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:
 ① INLET PROTECTION



PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000\District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_rampC07.dgn

PLAN REVISIONS

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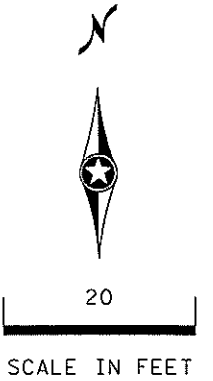
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INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - BLOOMING PRAIRIE



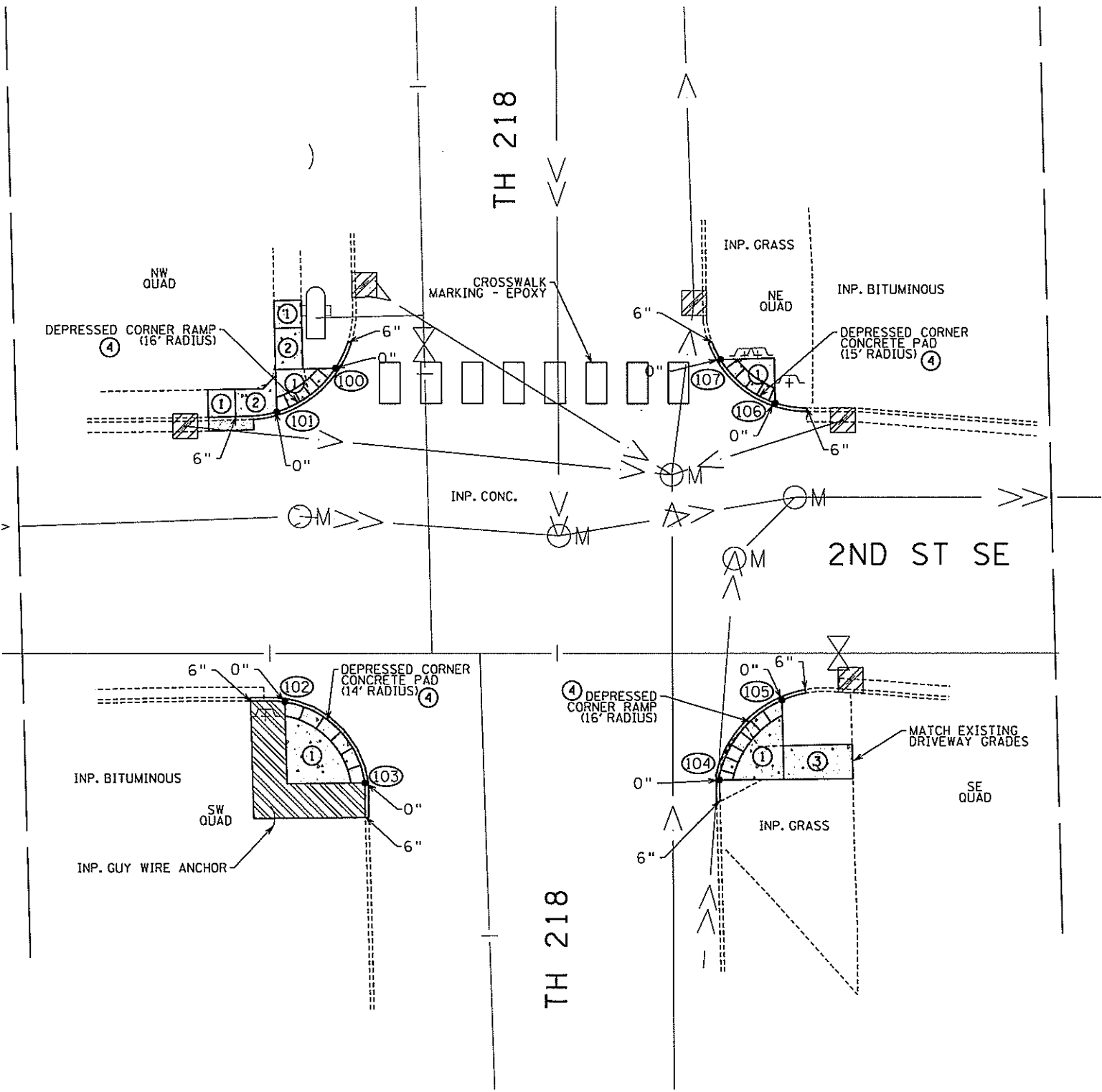
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- BITUMINOUS PATCH SPECIAL
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- X" CURB HEIGHT AT INDICATED LOCATION
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 218 - BLOOMING PRAIRIE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE ≤ 8.3% CROSS SLOPE SHALL BE ≤ 2.0%
 - ③ RUNNING SLOPE SHALL BE ≤ 5.0% CROSS SLOPE SHALL BE ≤ 2.0%
 - ④ SEE SHEETS 12-16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,875,506.38	644,665.63
101	2,875,497.85	644,659.30
102	2,875,498.87	644,617.2169
103	2,875,510.47	644,605.48
104	2,875,562.01	644,605.90
105	2,875,571.11	644,617.44
106	2,875,570.24	644,660.56
107	2,875,562.34	644,666.87

CONSTRUCTION PLAN

CURB RAMP PLANS - BLOOMING PRAIRIE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
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PLAN REVISIONS

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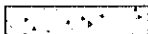


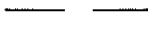
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






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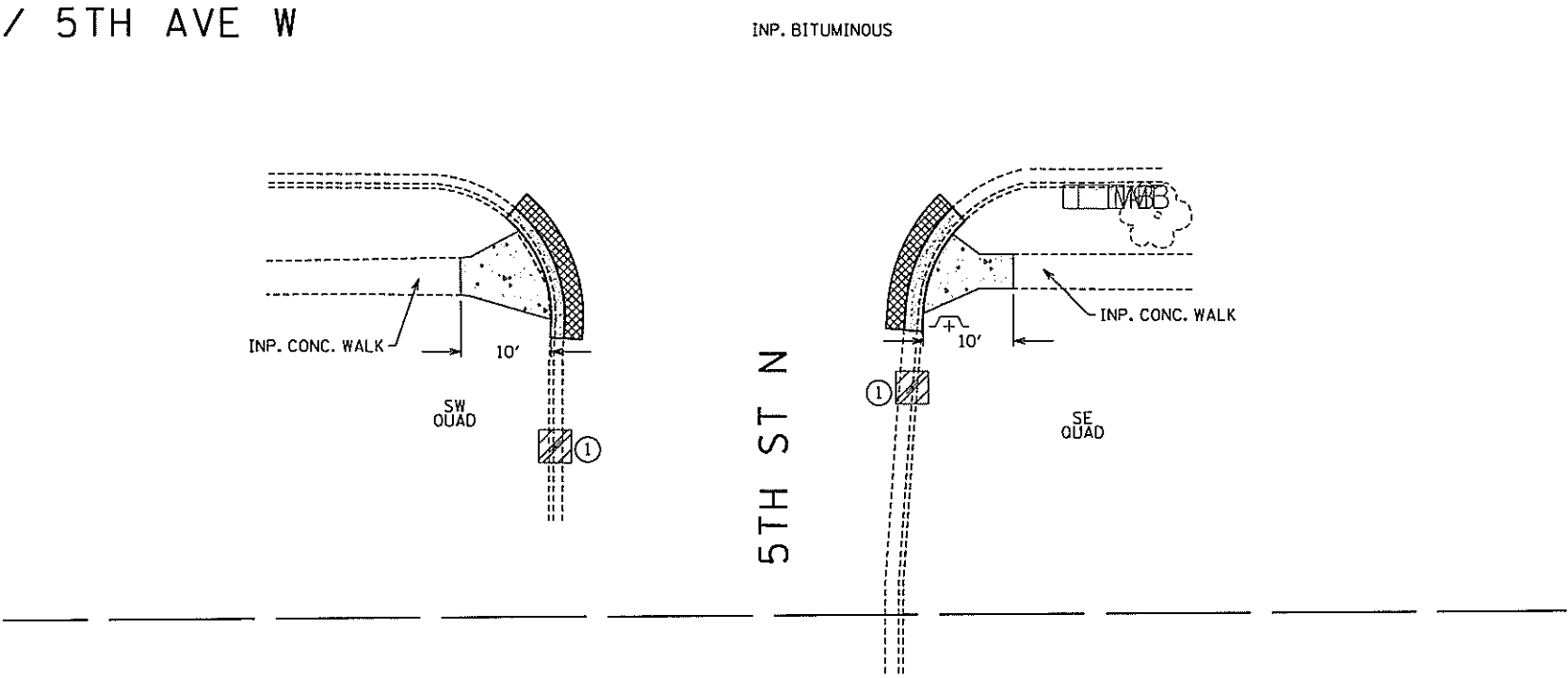
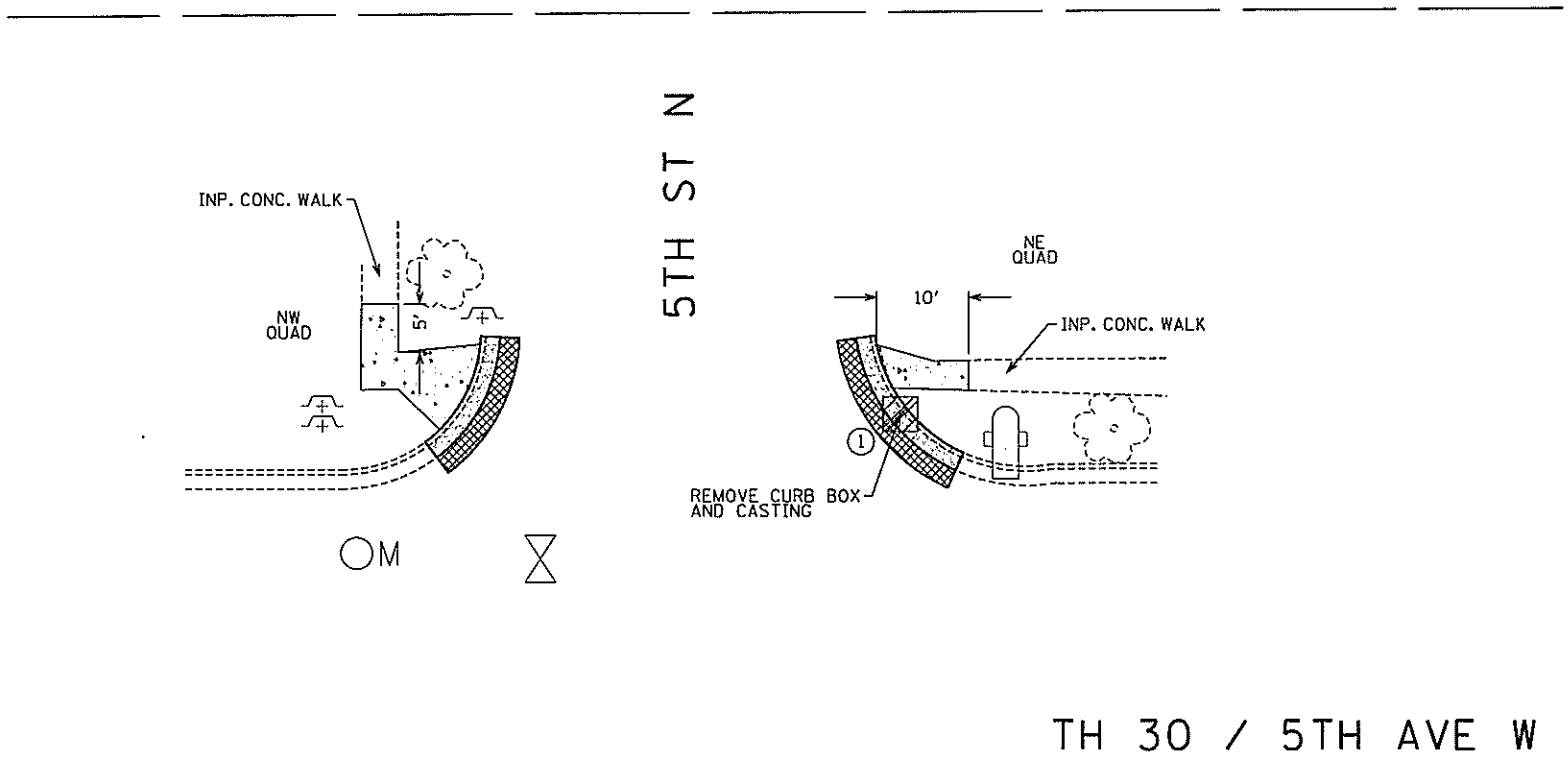
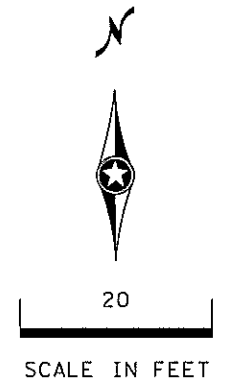
LEGEND

-  REMOVE CONCRETE WALK
-  REMOVE CURB / CURB & GUTTER
-  MILL AND PATCH BITUMINOUS PAVEMENT
-  TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE

NOTES:
 ① INLET PROTECTION



PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
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INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN

CURB RAMP PLANS - ELLENDALE

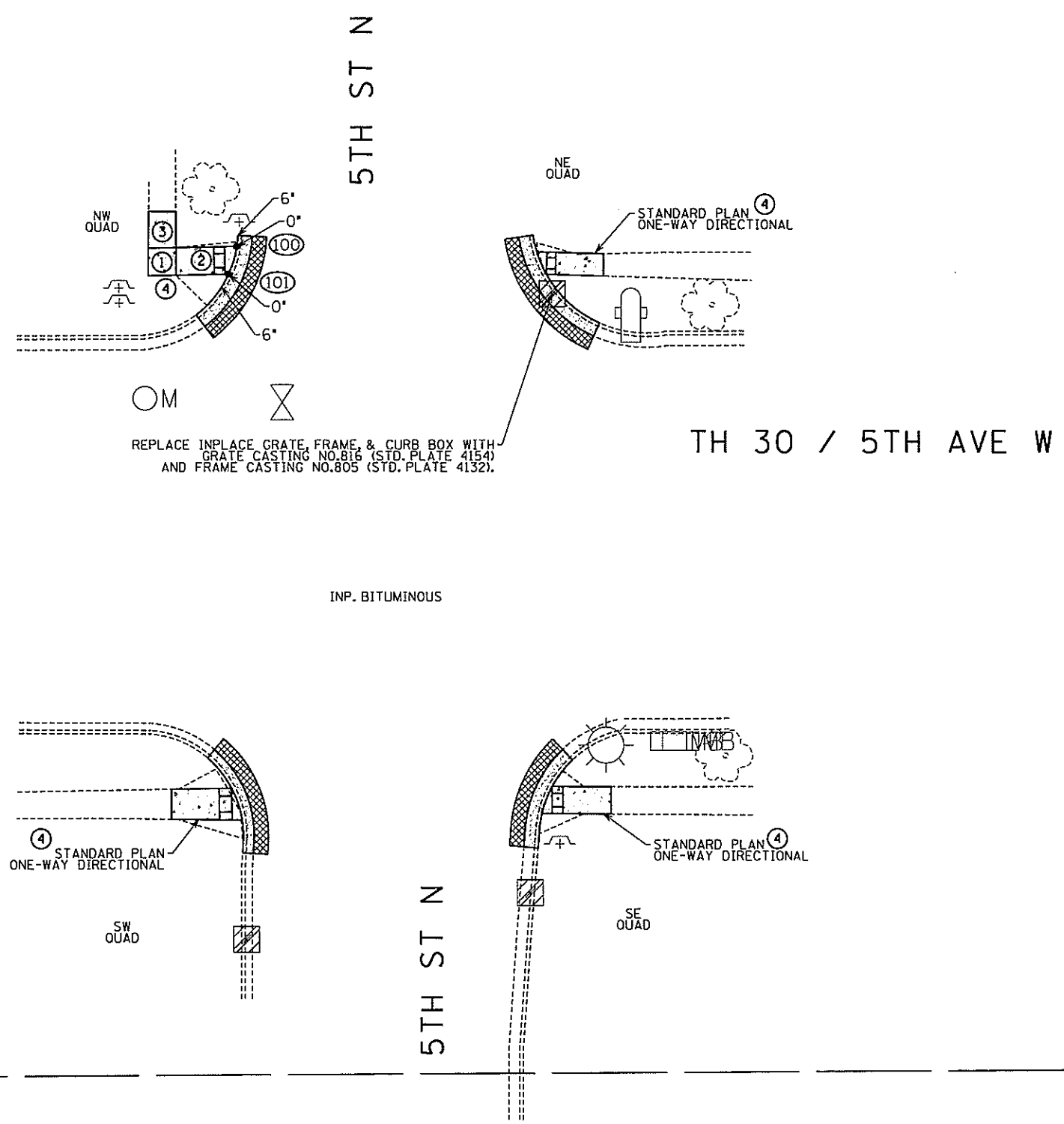
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- X" CURB HEIGHT AT INDICATED LOCATION
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE $\leq 8.3\%$ CROSS SLOPE SHALL BE $\leq 2.0\%$
 - ③ RUNNING SLOPE SHALL BE $\leq 5.0\%$ CROSS SLOPE SHALL BE $\leq 2.0\%$
 - ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,808,044.29	647,150.44
101	2,808,043.20	647,146.59

CONSTRUCTION PLAN

CURB RAMP PLANS - ELLENDALE

PLAN REVISIONS

DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

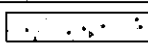


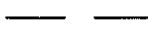
Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI engineering








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 Ph 612.455.3322 Fx 612.455.3321 www.rani.com

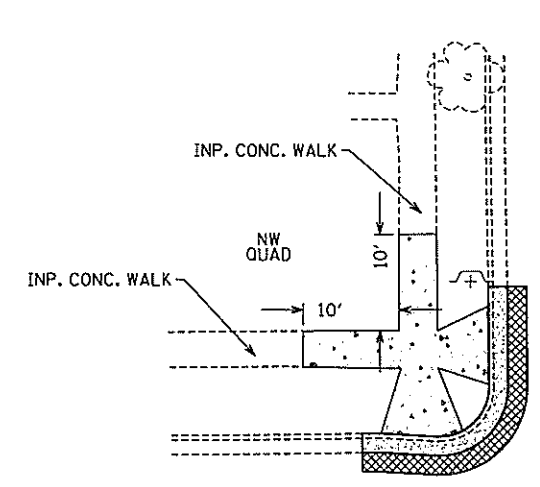
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 PLOTTED/REVISED: 4/27/2012

LEGEND

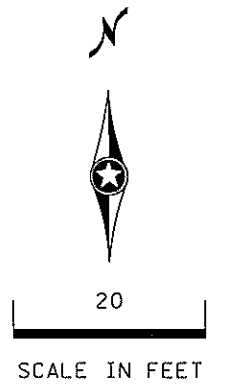
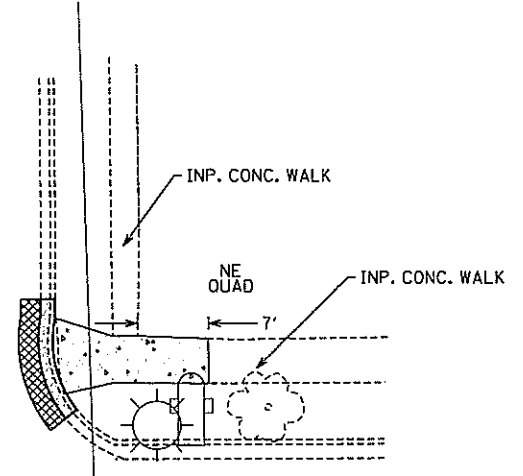
-  REMOVE CONCRETE WALK
-  REMOVE CURB / CURB & GUTTER
-  MILL AND PATCH BITUMINOUS PAVEMENT
-  TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE



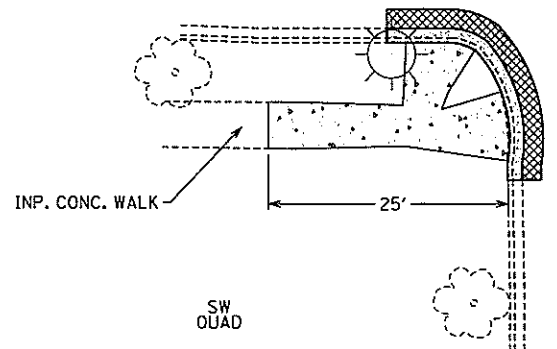
4TH ST N



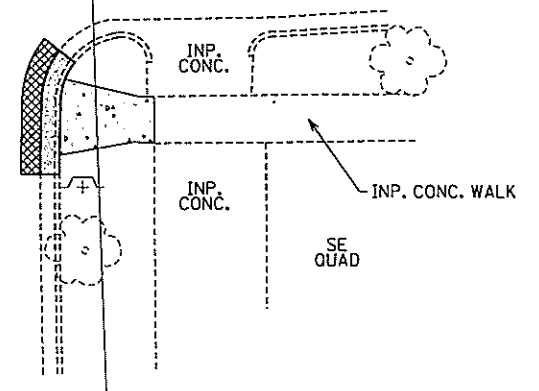
TH 30 / 5TH AVE W

INP. BITUMINOUS

TH 30 / 5TH AVE W



4TH ST N



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN

CURB RAMP PLANS - ELLENDALE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale.BP_Nerf and CD8826116_rem002.dgn
 PLOTTED/REVISED: 4/27/2012

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

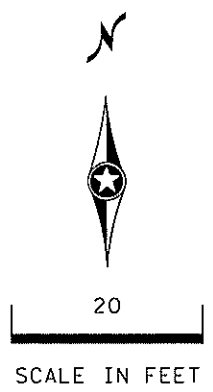
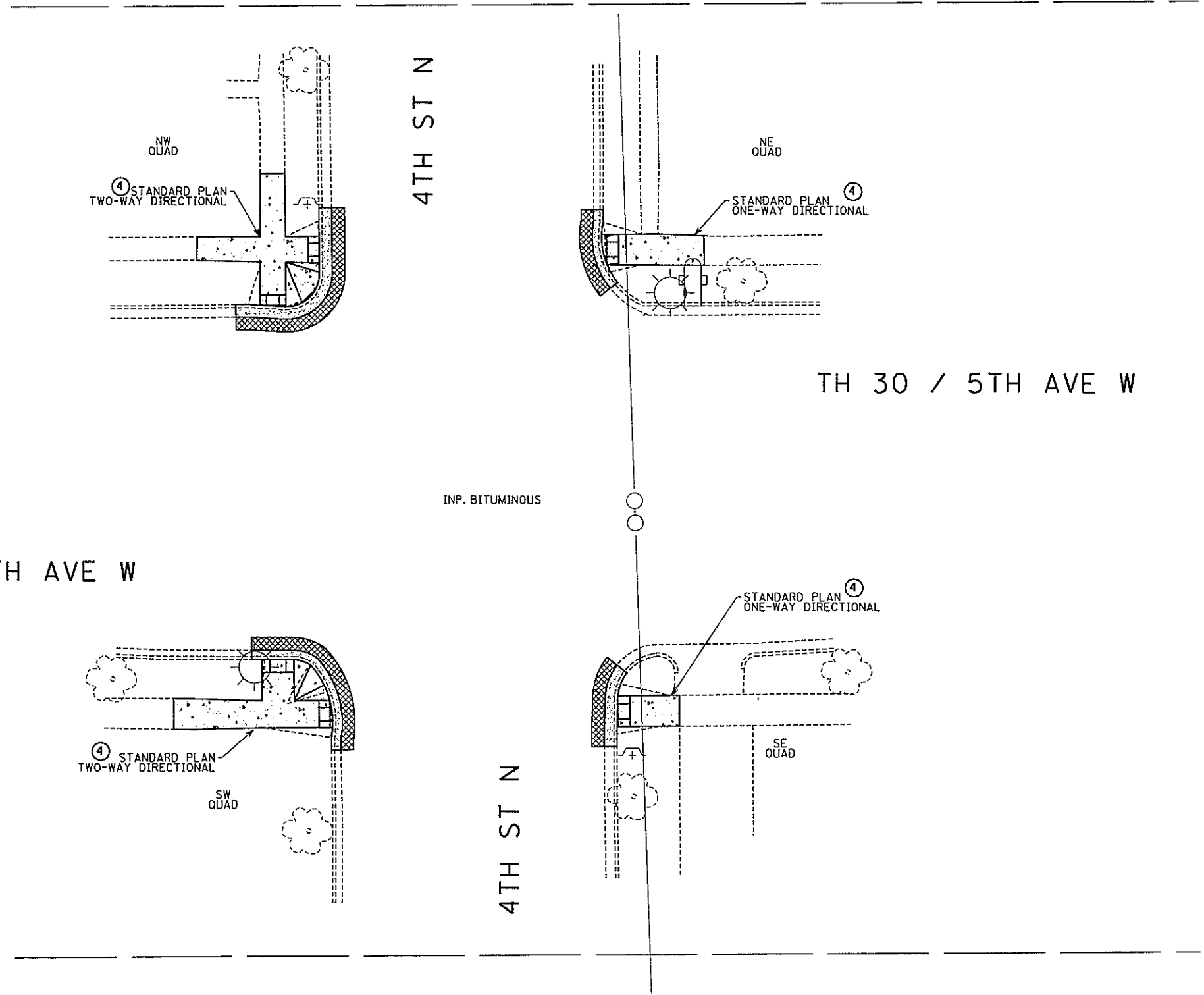
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 engineering

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LEGEND	
	CONCRETE WALK
	CONSTRUCT CONCRETE CURB / CURB & GUTTER
	MILL AND PATCH BITUMINOUS PAVEMENT
	TRUNCATED DOMES (SEE STD. PLATE 7038)
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

- NOTES:
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12 -16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



TH 30 / 5TH AVE W

TH 30 / 5TH AVE W

4TH ST N

4TH ST N

INP. BITUMINOUS

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$
 PATH & FILENAME: F:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826116_opD02.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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 engineering

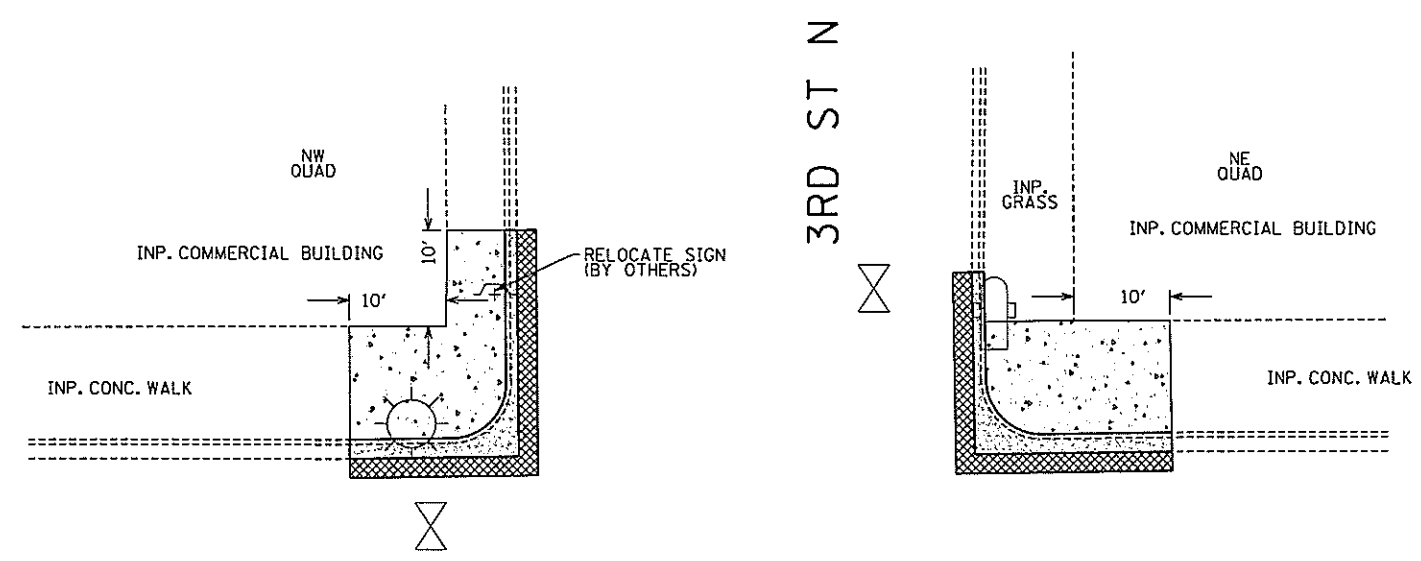
2912 Anthony Lane, Suite 100 Minneapolis, MN 55418
 Ph 612.455.3322 Fx 612.455.3321 www.rani.com

LEGEND

- REMOVE CONCRETE WALK
- REMOVE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

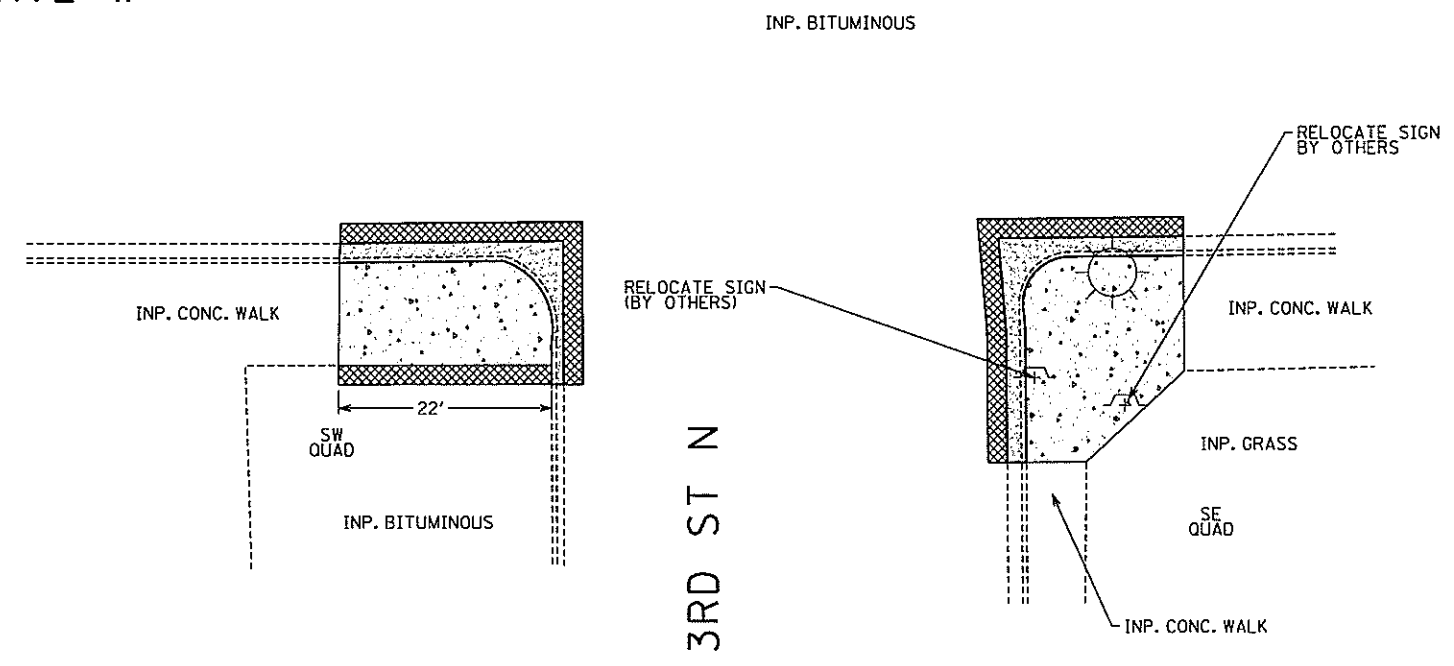
UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE



TH 30 / 5TH AVE W

TH 30 / 5TH AVE W



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
CURB RAMP PLANS - ELLENDALE

DISTRICT #: METRO
 PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08.000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Nerstrand\CD8826\16_Rem003.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

RANI
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2312 Anthony Lane, Suite 100 Minneapolis, MN 55418
 P: 612.455.3322 F: 612.455.3321 www.rani.com

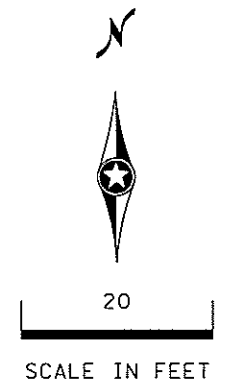
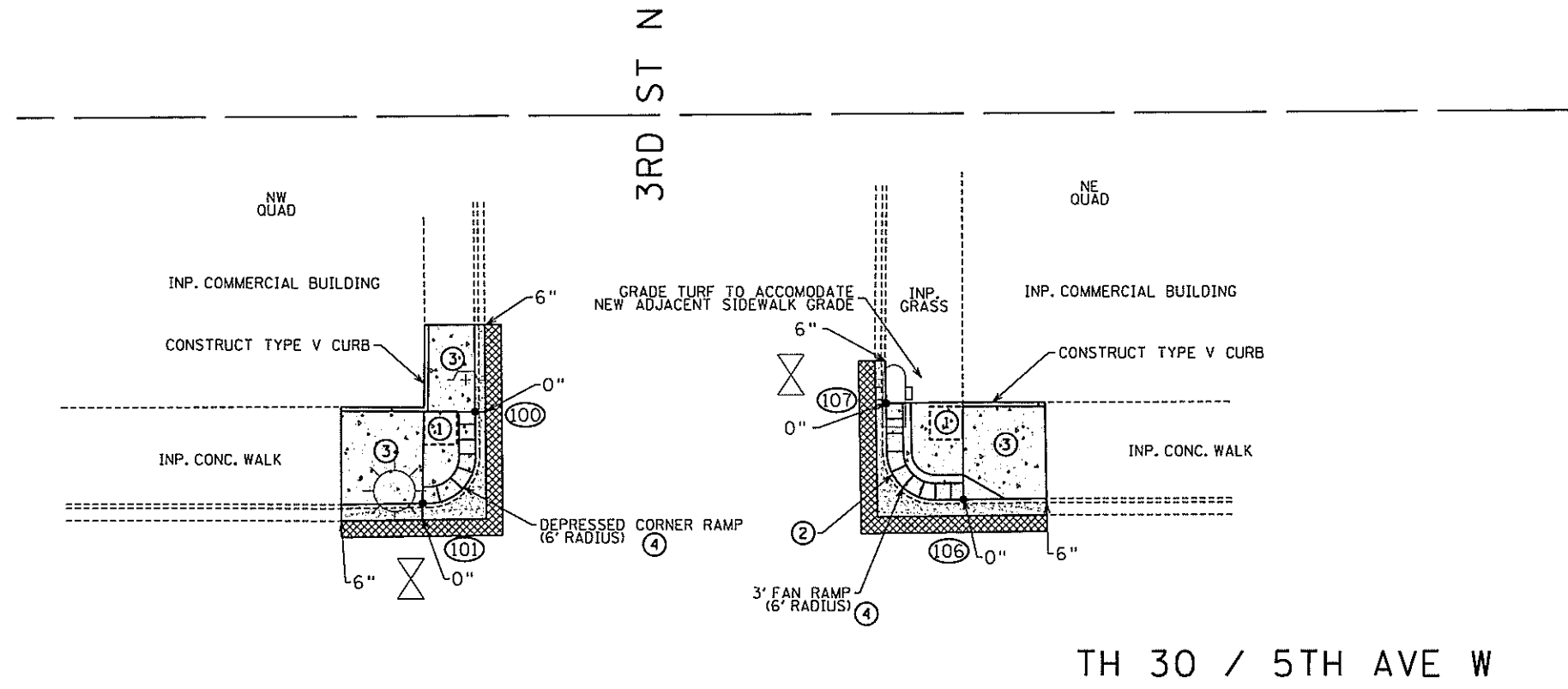
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- X" CURB HEIGHT AT INDICATED LOCATION
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

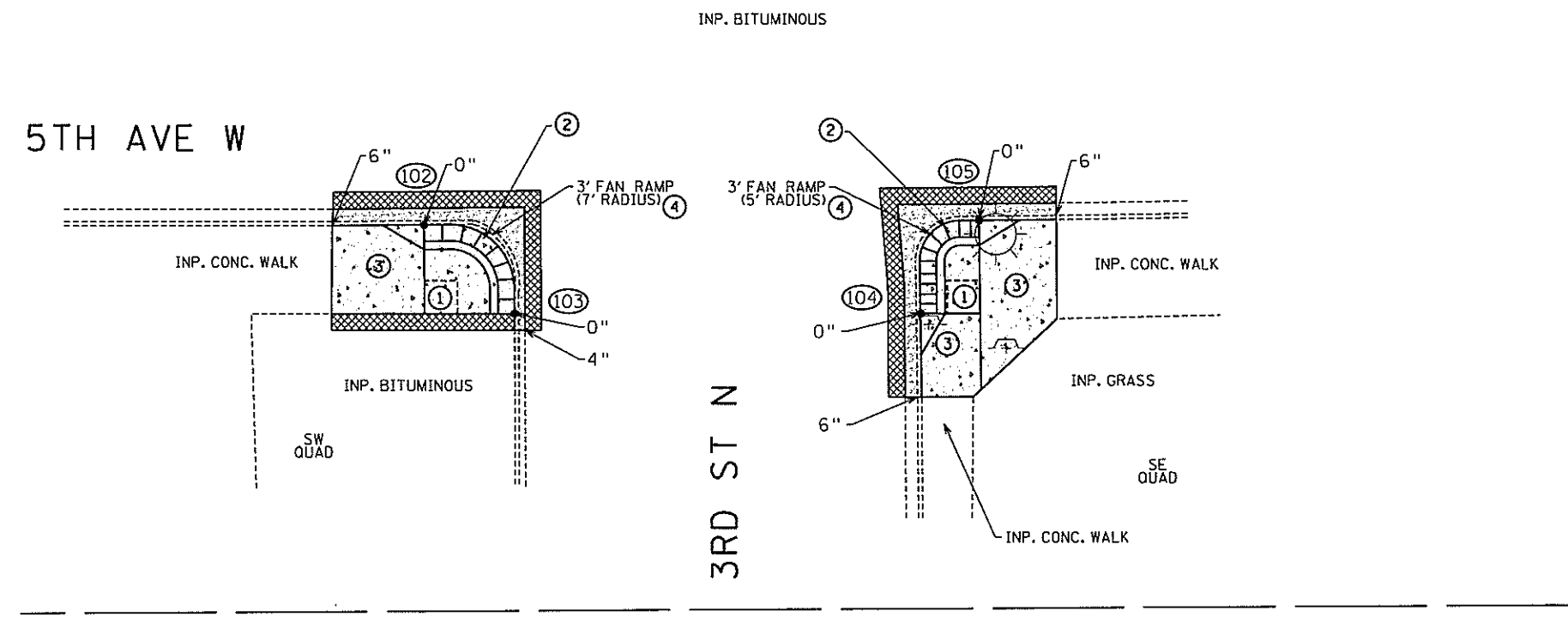
UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② RUNNING SLOPE SHALL BE ≤8.3% CROSS SLOPE SHALL BE ≤2.0%
 - ③ RUNNING SLOPE SHALL BE ≤5.0% CROSS SLOPE SHALL BE ≤2.0%
 - ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



TH 30 / 5TH AVE W



DETAIL POINTS		
PT. NO.	X	Y
100	2,808,669.25	647,153.19
101	2,808,662.88	647,142.07
102	2,808,662.88	647,085.75
103	2,808,673.84	647,075.01
104	2,808,723.27	647,075.06
105	2,808,730.30	647,086.32
106	2,808,728.51	647,142.56
107	2,808,719.18	647,154.21

CONSTRUCTION PLAN

CURB RAMP PLANS - ELLENDALE

PLAN REVISIONS

DATE	SHEET NO.	APPROVED BY

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

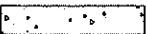
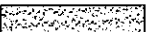

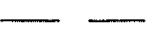
Drawn By: CLI
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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




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 Ph: 612.455.3322 Fax: 612.455.3321 www.rani.com

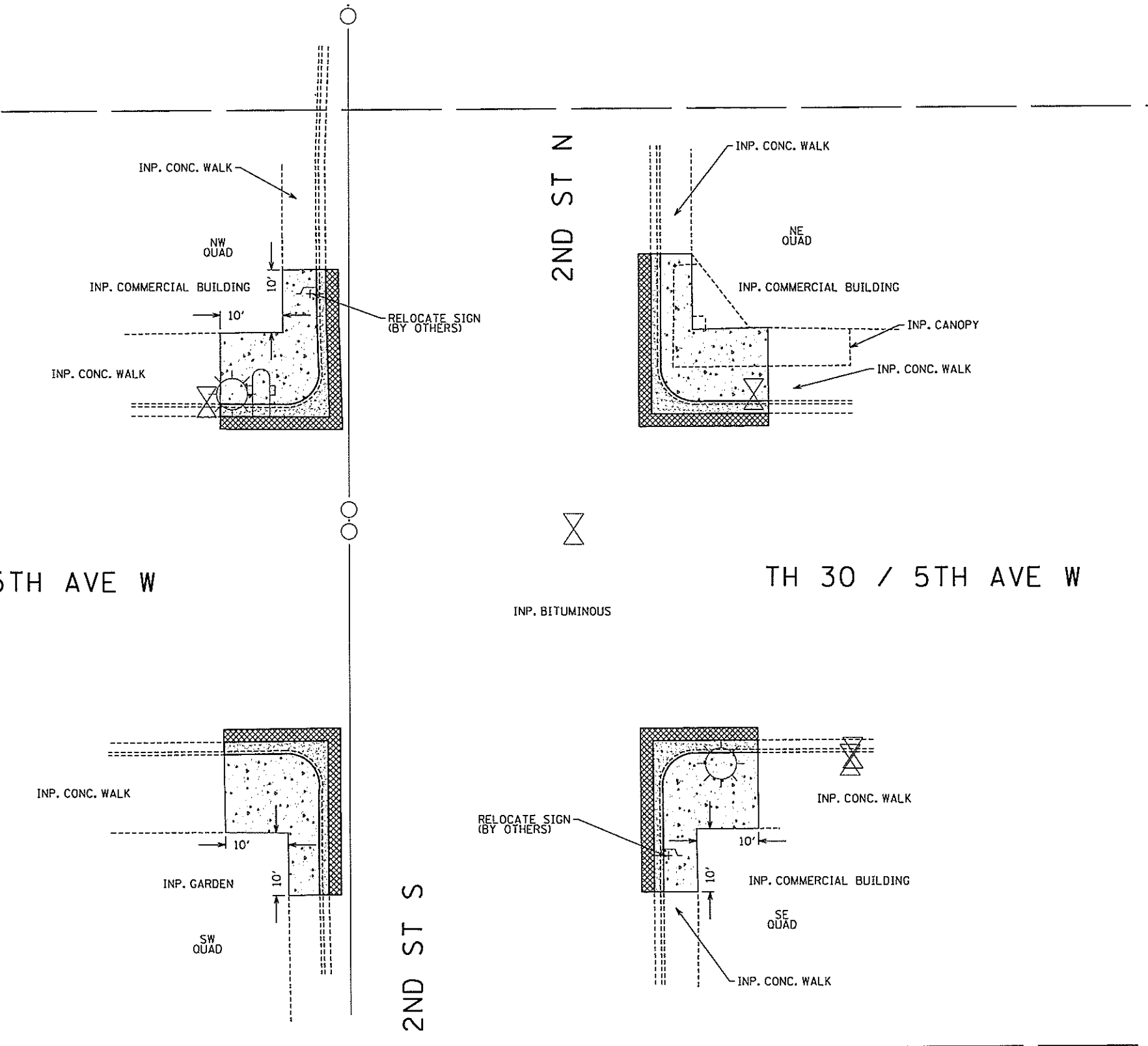
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 PLOTTED/REVISED: 4/27/2012

LEGEND

-  REMOVE CONCRETE WALK
-  REMOVE CURB / CURB & GUTTER
-  MILL AND PATCH BITUMINOUS PAVEMENT
-  TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE



PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
 I/PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08.000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale, BP, Merstrand\CD8826116_rem004.dgn

INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - ELLENDALE

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

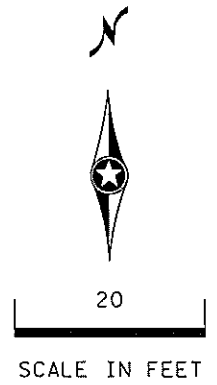
DATE: 03/15/12 SIGNATURE: *Andrew Wells*

DESIGN SQUAD: RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW

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 P: 612.455.3322 F: 612.455.3321 www.rani.com



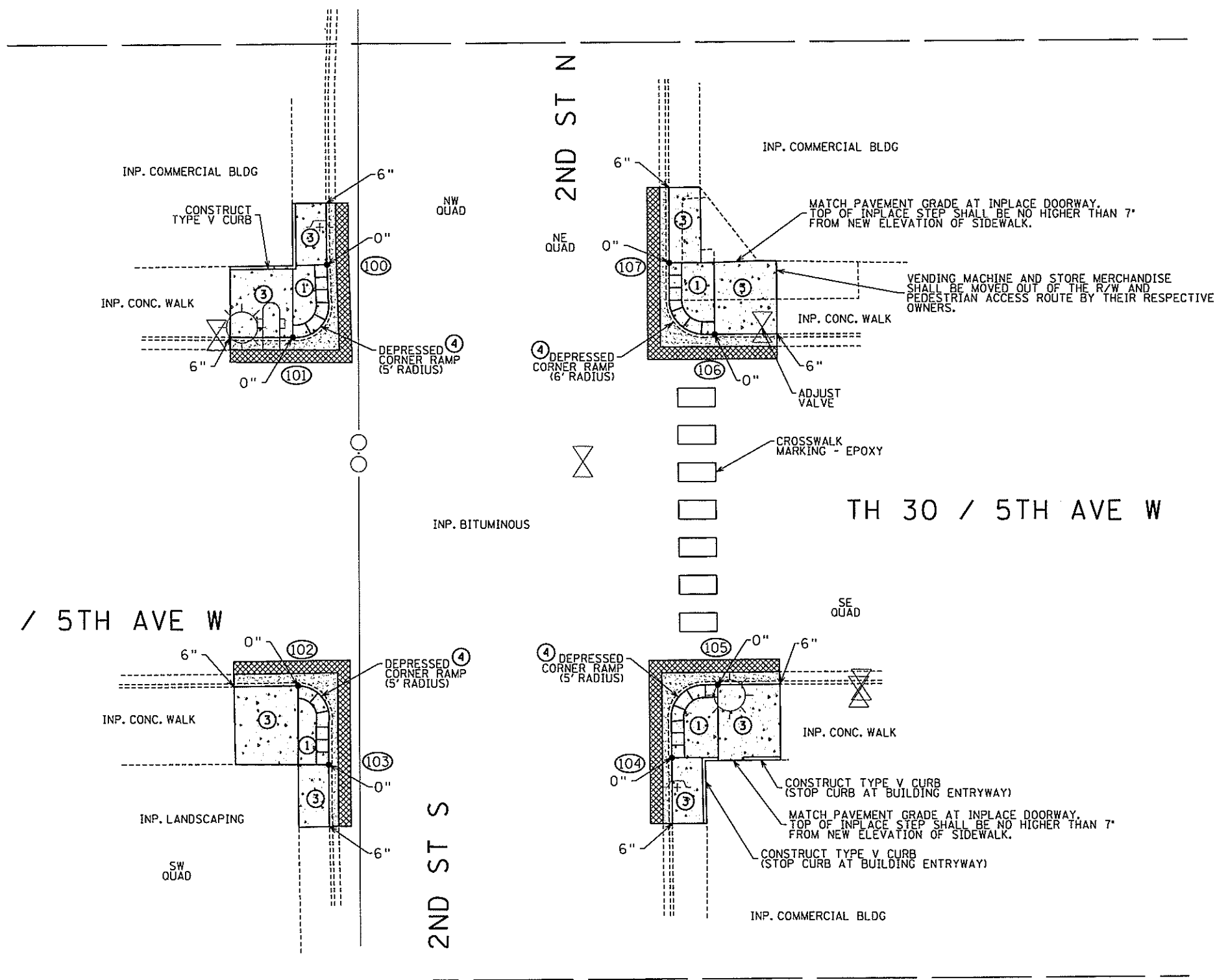
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- CURB HEIGHT AT INDICATED LOCATION
- INTERSECTION POINT OF CROSSWALK EDGE AND PEDESTRIAN RAMP AT FACE OF CURB
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE

- NOTES:**
- ① CONSTRUCT 4' X 4' MINIMUM PEDESTRIAN LANDING AREAS AT A MAXIMUM SLOPE OF 0.02 FT./FT. FOR DRAINAGE.
 - ② NOT ON THIS SHEET
 - ③ RUNNING SLOPE SHALL BE ≤5.0% CROSS SLOPE SHALL BE ≤2.0%
 - ④ SEE SHEETS 12 -16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS



DETAIL POINTS		
PT. NO.	X	Y
100	2,808,984.63	647,155.52
101	2,808,979.15	647,143.83
102	2,808,979.80	647,088.02
103	2,808,984.68	647,075.43
104	2,809,039.83	647,076.52
105	2,809,047.21	647,088.20
106	2,809,046.86	647,144.36
107	2,809,039.58	647,155.83

CONSTRUCTION PLAN

CURB RAMP PLANS - ELLENDALE

PLAN REVISIONS

DATE	SHEET NO.	APPROVED BY

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Drawn By: CL I
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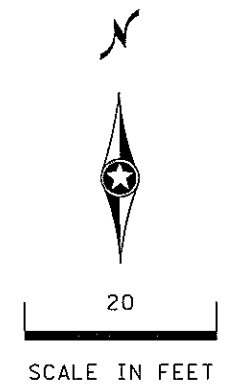
DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale.BP_Nerstrand\CDB826116_cp004.dgn
 PLOTTED/REVISED: 4/27/2012

LEGEND

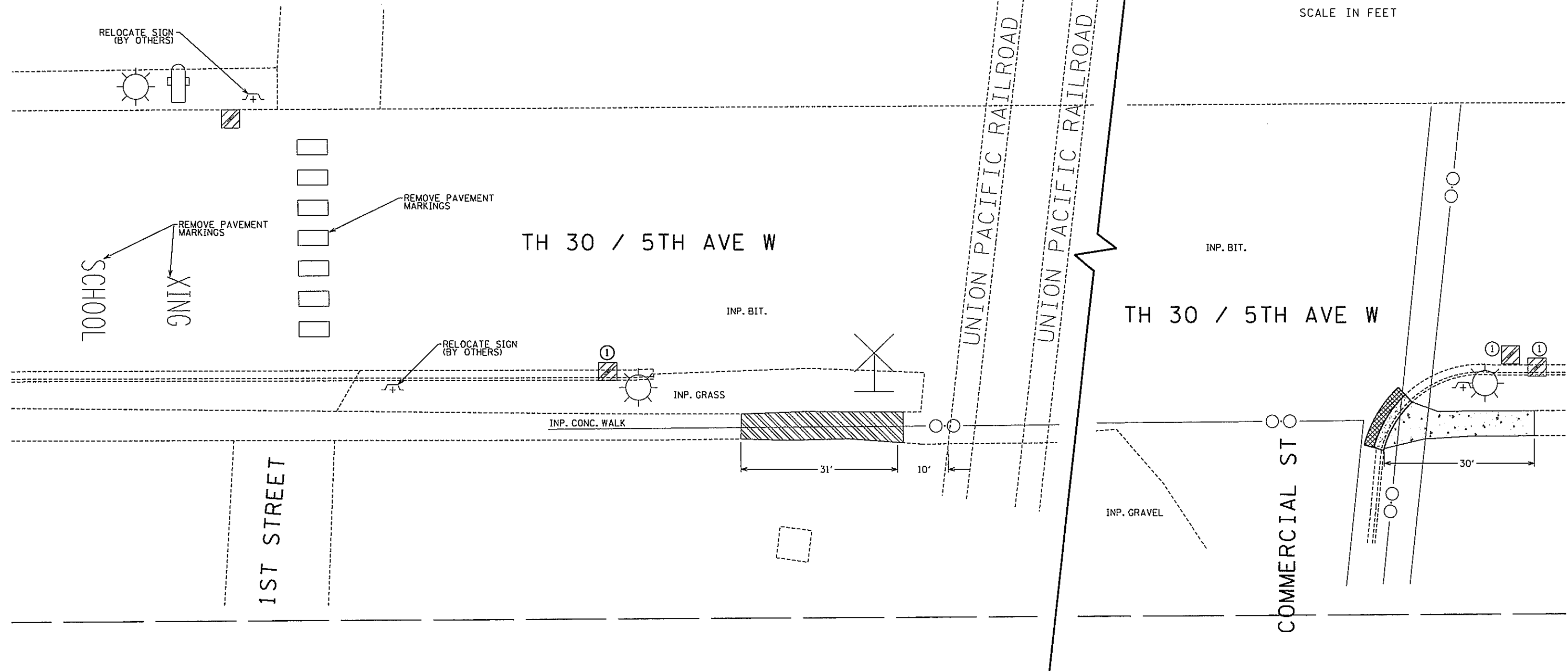
- REMOVE CONCRETE WALK
- REMOVE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS PAVEMENT
- TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE



NOTES:
 ① INLET PROTECTION



INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - ELLENDALE

DISTRICT #: METRO
 IPLOT NAME: \$\$\$PLOT\$NAME\$\$
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 PLOTTED/REVISED: 4/27/2012

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PRINT NAME: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *AW*

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Drawn By: CLI
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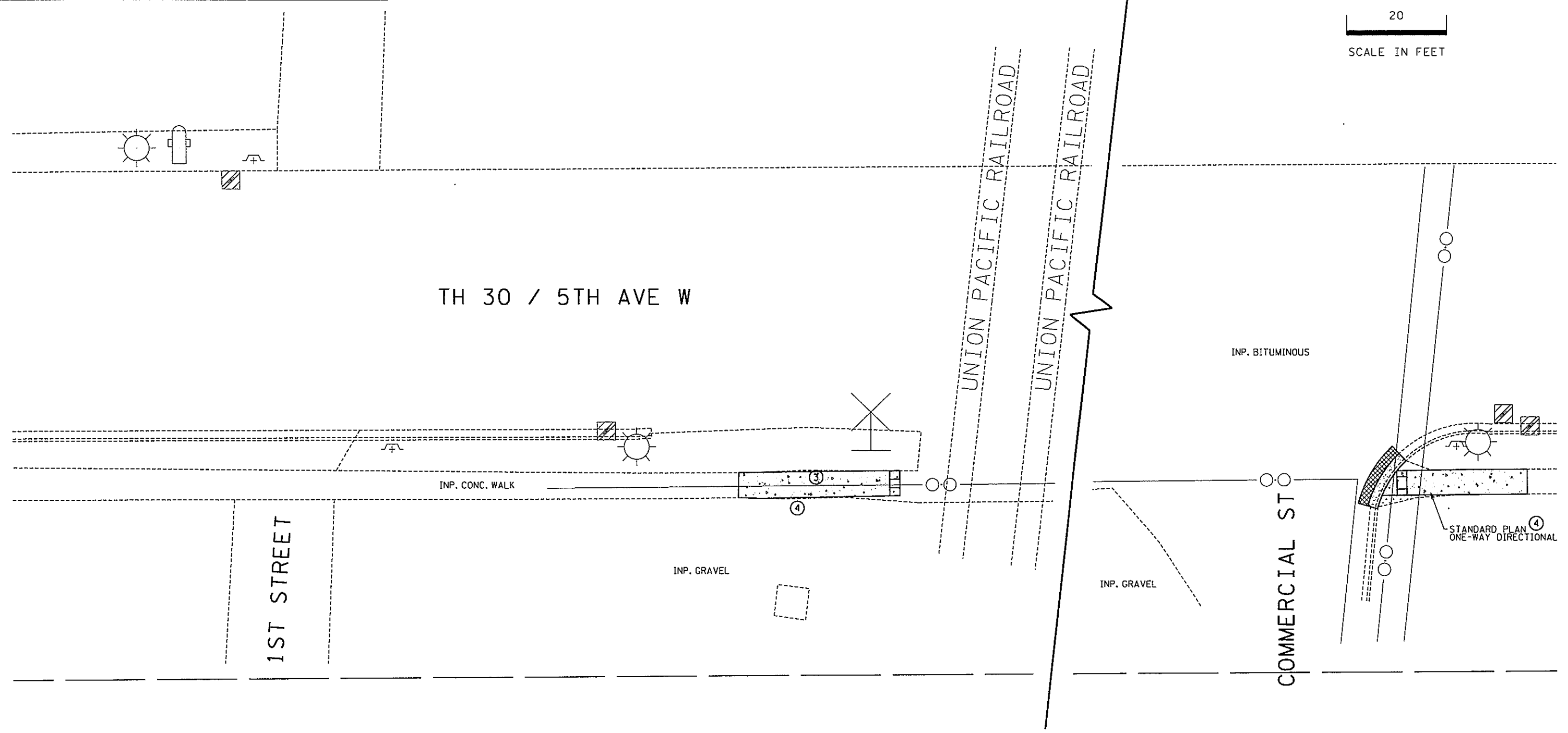
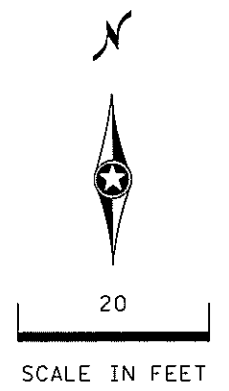
LEGEND

- CONCRETE WALK
- CONSTRUCT CONCRETE CURB / CURB & GUTTER
- MILL AND PATCH BITUMINOUS PAVEMENT
- TRUNCATED DOMES (SEE STD. PLATE 7038)
- TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

- NOTES:**
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ RUNNING SLOPE SHALL BE $\leq 5.0\%$
CROSS SLOPE SHALL BE $\leq 2.0\%$
 - ④ SEE SHEETS 12 -16 FOR
CONSTRUCTION DETAIL OF CURB
RAMP CONCEPTS

UTILITY LEGEND

- COMMUNICATIONS LINE
- STORM SEWER
- BURIED ELECTRIC CABLE
- WATER MAIN
- SANITARY SEWER
- OVERHEAD POWER LINE
- GAS LINE



CONSTRUCTION PLAN

CURB RAMP PLANS - ELLENDALE

PLOTTED/REVISED: 4/27/2012

DISTRICT #: METRO
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PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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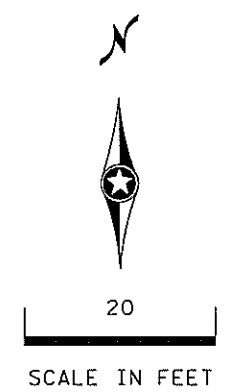
Designed By: ABW

Checked By: ELA

Approved By: ABW

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engineering

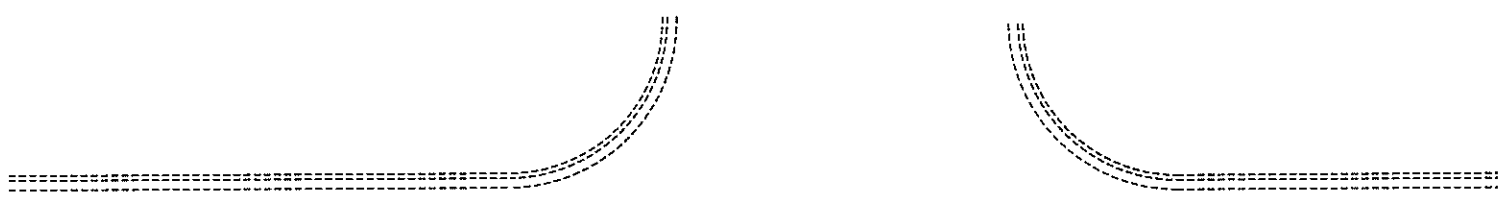
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 Ph 612.455.3322 Fr 612.455.3321 www.rani.com



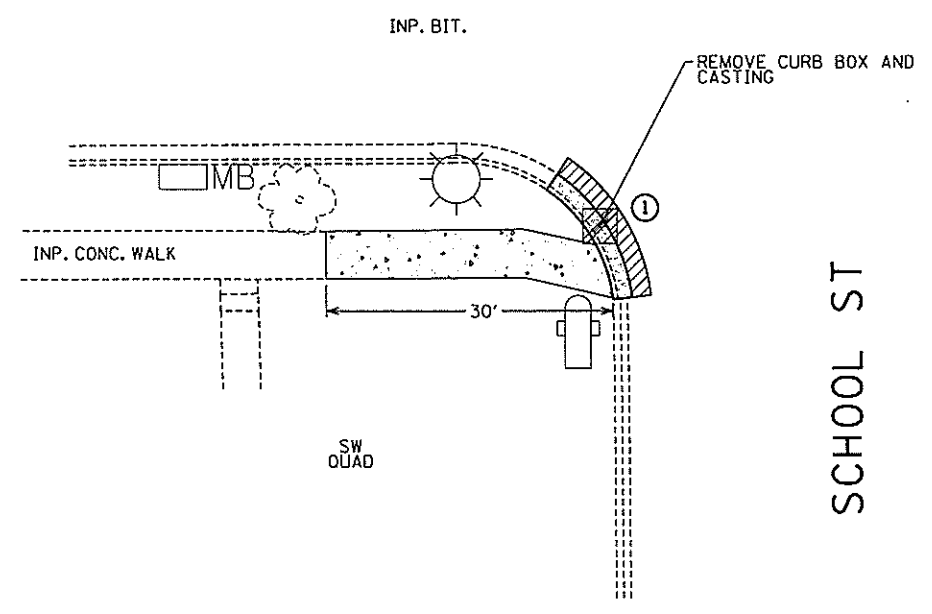
LEGEND	
	REMOVE CONCRETE WALK
	REMOVE CURB / CURB & GUTTER
	REMOVE AND REPLACE BITUMINOUS PAVEMENT
	TEMPORARY WIDTH ORDER (T.W.O.) (75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

UTILITY LEGEND	
	COMMUNICATIONS LINE
	STORM SEWER
	BURIED ELECTRIC CABLE
	WATER MAIN
	SANITARY SEWER
	OVERHEAD POWER LINE
	GAS LINE

NOTES:
 ① INLET PROTECTION



TH 30 / 5TH AVE W



SCHOOL ST

INPLACE UTILITIES, TOPOGRAPHY, & REMOVAL PLAN
 CURB RAMP PLANS - ELLENDALE

DISTRICT #: METRO
 PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: F:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale.BP_Netstrand\CDB26116_renD06.dgn

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

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: ANDREW WELLS LICENSE # 49088

DATE: 03/15/12 SIGNATURE: *Andrew Wells*


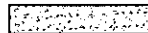


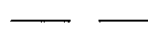
DESIGN SQUAD: RANI ENGINEERING

Drawn By: CL I
 Designed By: ABW
 Checked By: ELA
 Approved By: ABW








RANI
 engineering

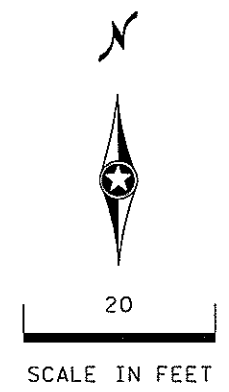
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LEGEND

-  CONCRETE WALK
-  CONSTRUCT CONCRETE CURB / CURB & CUTTER
-  REMOVE AND REPLACE BITUMINOUS PAVEMENT
-  TRUNCATED DOMES (SEE STD. PLATE 7038)
-  TEMPORARY WIDTH ORDER (T.W.O.)
(75' EITHER SIDE OF CENTERLINE TH 30 - ELLENDALE)

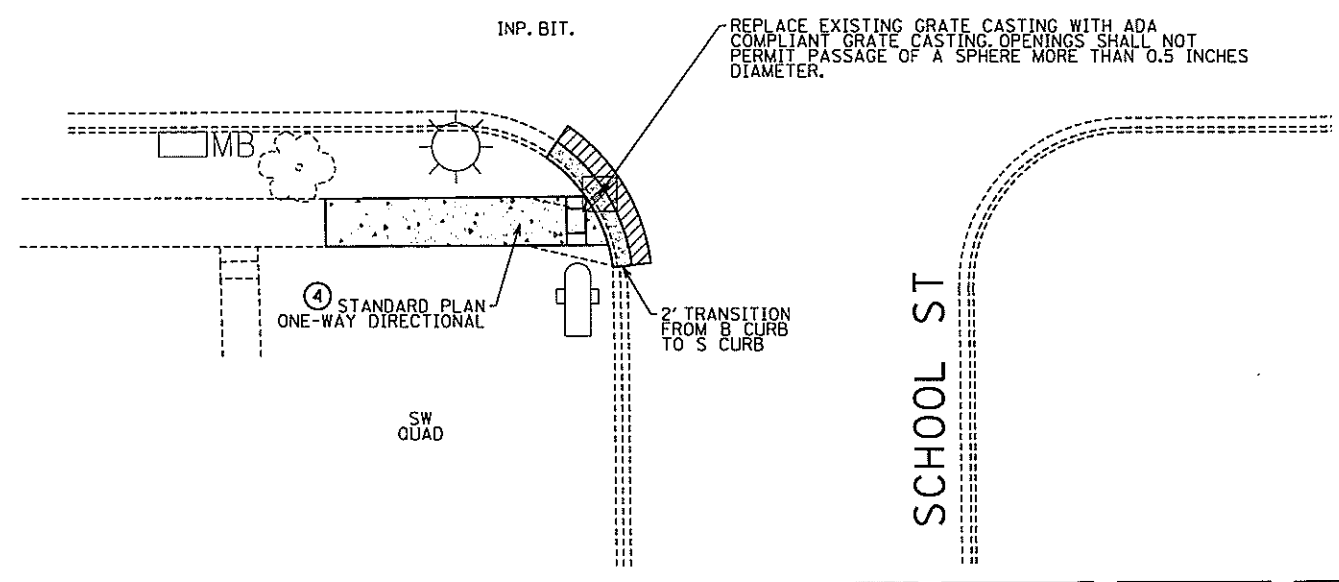
UTILITY LEGEND

-  COMMUNICATIONS LINE
-  STORM SEWER
-  BURIED ELECTRIC CABLE
-  WATER MAIN
-  SANITARY SEWER
-  OVERHEAD POWER LINE
-  GAS LINE



- NOTES:**
- ① NOT ON THIS SHEET
 - ② NOT ON THIS SHEET
 - ③ NOT ON THIS SHEET
 - ④ SEE SHEETS 12 - 16 FOR CONSTRUCTION DETAIL OF CURB RAMP CONCEPTS

TH 30 / 5TH AVE W



CONSTRUCTION PLAN

CURB RAMP PLANS - ELLENDALE

DISTRICT #: METRO
 PLOT NAME: \$\$\$PLOT\$NAME\$\$\$
 PATH & FILENAME: P:\2011\08\000_District 6 Ped Ramps\Drawings\8826-116 - Ellendale_BP_Nerstrand\CD8826116_cpD06.dgn

PLAN REVISIONS		
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