

PLAN SYMBOLS

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

- LOWLAND
- TIMBER
- ORCHARD
- BRUSH
- NURSERY
- CATTLE GUARD
- OVERPASS (Highway Over)
- UNDERPASS (Highway Under)
- BRIDGE
- BUILDING (One Story Frame)
- F-FRAME C-CONCRETE
- S-STONE T-TILE
- B-BRICK ST-STUCCO
- RAILROAD CROSSING BELL
- RAILROAD CROSSING GATE
- MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- CAST IRON MONUMENT
- IRON PIN
- GRAVEL PIT
- SAND PIT
- BORROW PIT
- ROCK QUARRY

UTILITY SYMBOLS

- POWER POLE LINE
- TELEPHONE OR TELEGRAPH POLE LINE
- JOINT TELEPHONE & POWER ON POWER POLES
- ON TELEPHONE POLES
- ANCHOR
- STEEL TOWER
- STREET LIGHT
- PEDESTAL (Cable Terminal)
- GAS MAIN
- WATER MAIN
- TELEPHONE CABLE IN CONDUIT
- ELECTRIC CABLE IN CONDUIT
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- BURIED TELEPHONE CABLE
- BURIED ELECTRIC CABLE
- OVERHEAD UTILITY CABLE
- SEWER (Sanitary or Storm)
- SEWER MANHOLE

SCALES

- PLAN
- PROFILE HORIZONTAL
- VERTICAL
- X-SECTIONS HORIZONTAL
- VERTICAL
- INDEX MAP

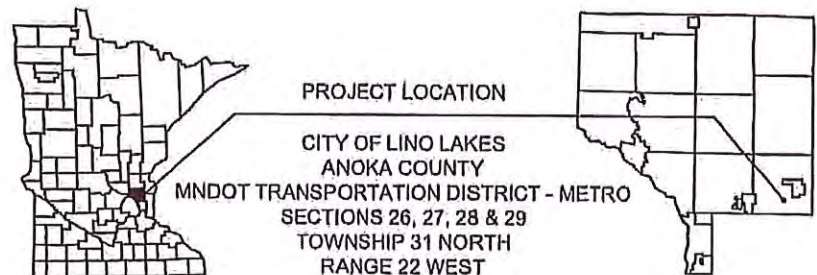
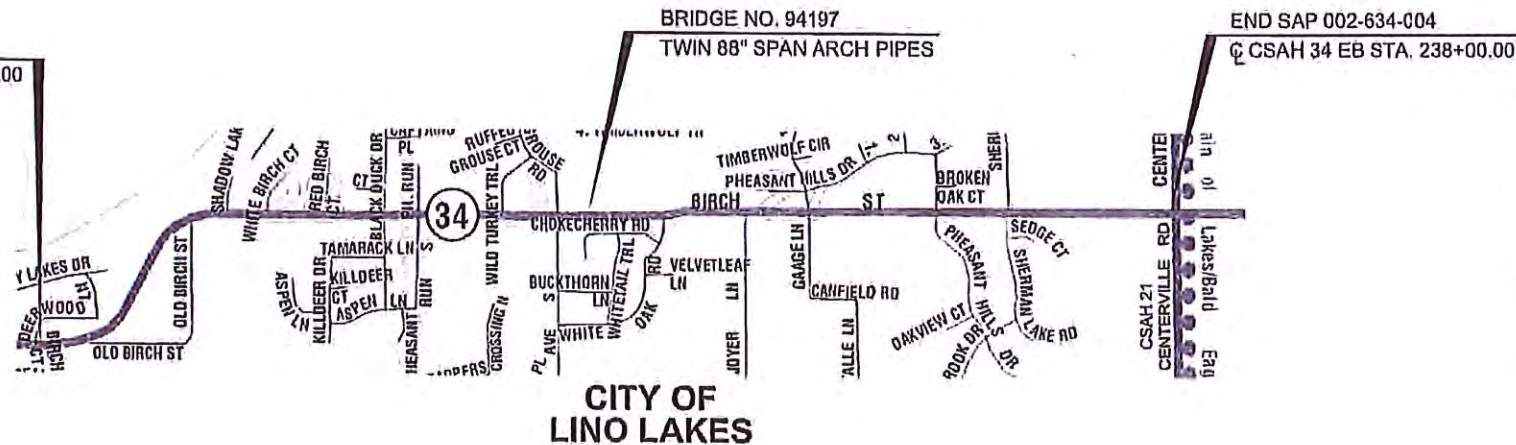
MINNESOTA DEPARTMENT OF TRANSPORTATION ANOKA COUNTY

CONSTRUCTION PLAN FOR RECLAIM AND BITUMINOUS PAVING
LOCATED ON CSAH 34 BETWEEN DEERWOOD LANE AND CENTERVILLE ROAD / CSAH 21

STATE AID PROJ. NO. 002-634-004
CSAH 34

GROSS LENGTH 12,668.00 FEET 2.399 MILES
BRIDGES-LENGTH 50 FEET 0.009 MILES
EXCEPTIONS-LENGTH 0.00 FEET 0.00 MILES
NET LENGTH 12,668.00 FEET 2.399 MILES

BEGIN SAP 002-634-004
@ CSAH 34 EB STA. 111+32.00



GOVERNING SPECIFICATIONS

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

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THIS PLAN CONTAINS 103 SHEETS

APPROVED ANOKA COUNTY ENGINEER 4/22/19 DATE

APPROVED CITY OF LINO LAKES ENGINEER 5/7/19 DATE

FOR DISTRICT STATE AID ENGINEER; REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY 5/8/19 DATE

FOR STATE AID ENGINEER; APPROVED FOR STATE AID FUNDING 5/8/19 DATE

DESIGN DESIGNATION (CSAH 34)

ESAL ₂₀ <u>1,265,838</u>	FUNCTIONAL CLASSIFICATION <u>B - MINOR ARTERIAL</u>
R VALUE <u>15</u>	NO. OF TRAFFIC LANES <u>2</u> NO. OF PARKING LANES <u>0</u>
ADT (2019) <u>10,715</u>	DESIGN SPEED <u>50</u> DESIGN SPEED
PROJ. ADT (2039) <u>10,715</u>	BASED ON STOPPING SIGHT DISTANCE:
PROJ. HCADT (2039) <u>632</u>	HEIGHT OF EYE <u>3.5'</u> HEIGHT OF OBJECT <u>2.0'</u>
SOIL FACTOR <u>A-6</u>	DESIGN SPEED NOT ACHIEVED AT:
<u>10</u> TON DESIGN	STA. <u>NA</u> TO STA. <u>NA</u> MPH <u>NA</u>

NO	DATE	BY	CKD	APPR	REVISION
1	4/16/2019	JCF	NJD		CHANGED ADT DATE FROM 2019 TO 2018

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.

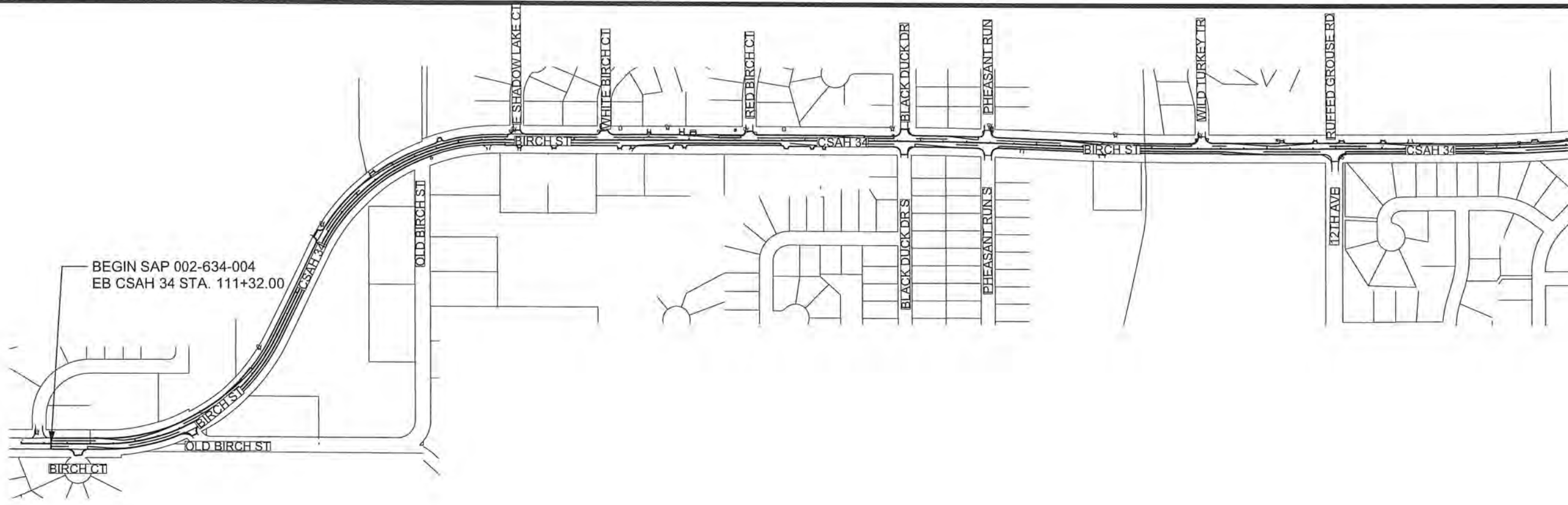
PRINT NAME: NICHOLAS DOBDA
SIGNATURE:
DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY MP DATE 03/26/19
DESIGN BY MP DATE 03/26/19
CHECKED BY JEO DATE 04/05/19

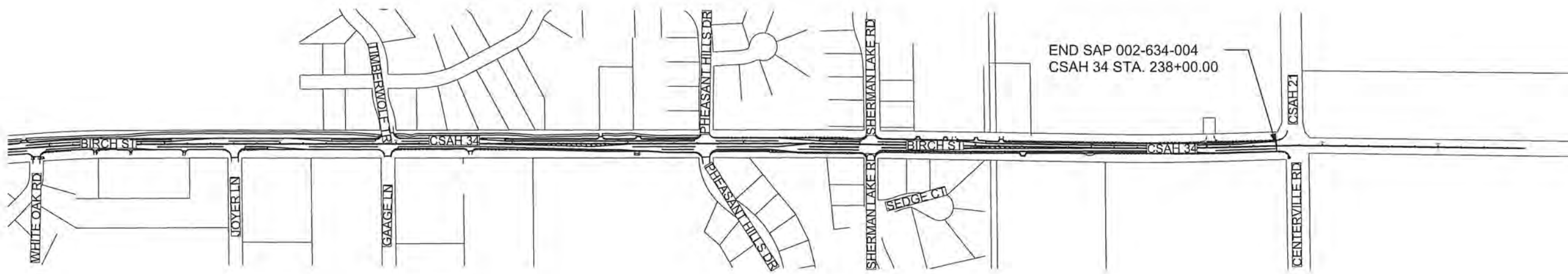
ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

TITLE SHEET
Sheet 1 of 103 Sheets



BEGIN SAP 002-634-004
EB CSAH 34 STA. 111+32.00



END SAP 002-634-004
CSAH 34 STA. 238+00.00




NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_GL1_P1.dgn 04/19/2019 2:51:41 PM

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: NICHOLAS DOBDA
 SIGNATURE: *N. Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19

 ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

GENERAL LAYOUT
 Sheet 2 of 103 Sheets

CSAH 34 STATEMENT OF ESTIMATED QUANTITIES					
TAB	NOTE	ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITIES
					ESTIMATED
		2021.501	MOBILIZATION	LUMP SUM	1
A		2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	46
A	[18]	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	745
A	[22]	2104.503	REMOVE PIPE CULVERTS	LIN FT	192
A		2104.504	REMOVE CONCRETE PAVEMENT	SQ YD	109
A	[18]	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	1050
A	[2]	2105.507	COMMON EXCAVATION	CU YD	2889
	[1]	2123.510	MOTOR GRADER	hour	12
		2130.523	WATER	MGAL	260
B		2211.509	AGGREGATE BASE CLASS 5	TON	508
A	[23]	2215.504	FULL DEPTH RECLAMATION	SQ YD	67088
A	[1]	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	236
B	[4]	2221.509	SHOULDER BASE AGGREGATE CLASS 5	TON	724
A	[5]	2232.504	MILL BITUMINOUS SURFACE (2")	SQ YD	325
C		2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	2875
C	[6]	2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,B) DRWAY / ST APP.	TON	486
C	[7], [19]	2360.509	TYPE SP 12.5 WEARING COURSE MIX (4,C)	TON	14354
D	[21]	2411.502	CONCRETE FLUME	EACH	1
D	[22]	2451.607	PIPE BEDDING MATERIAL	CU YD	258
D	[22]	2501.502	88" SPAN RC PIPE ARCH APRON	EACH	4
D	[22]	2501.503	88" SPAN RC PIPE ARCH CULVERT CLASS IIA	LIN FT	192
A		2504.602	ADJUST GATE VALVE	EACH	6
A	[8]	2506.502	ADJUST FRAME AND RING CASTING	EACH	8
F		2511.507	RANDOM RIPRAP CLASS II	CU YD	62
D	[9]	2521.518	6" CONCRETE WALK	SQ FT	1102
D	[21]	2531.503	CONCRETE CURB & GUTTER DESIGN B424	LIN FT	312
D		2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	63
D	[9]	2531.618	TRUNCATED DOMES	SQ FT	240
E	[10]	2540.602	MAIL BOX SUPPORT	EACH	26
E	[10]	2540.602	RELOCATE MAIL BOX	EACH	2
	[13]	2563.601	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1
H	[13]	2563.601	TRAFFIC CONTROL	LUMP SUM	1
G	[24]	2563.601	DETOUR SIGNING	LUMP SUM	1
H	[11]	2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	20
J	[16] [17]	2564.502	OBJECT MARKER TYPE X4-3	EACH	4
J	[16], [17]	2564.518	SIGN PANELS TYPE C	SQ FT	31.25
F		2573.502	STORM DRAIN INLET PROTECTION	EACH	4
F		2573.502	CULVERT END CONTROLS	EACH	29
F		2573.503	SILT FENCE, TYPE MS	LIN FT	3107
F		2573.507	COMMON TOPSOIL BORROW	CU YD	282
F		2574.508	FERTILIZER TYPE 3	POUND	924
F	[20]	2575.504	EROSION CONTROL BLANKETS CATEGORY 0	SQ YD	394
F		2575.505	SEEDING	ACRE	4.2
F		2575.505	DISK ANCHORING	ACRE	4.2
F		2575.508	SEED MIXTURE 25-131	POUND	917
F		2575.509	MULCH MATERIAL TYPE 1	TON	11
F		2575.523	RAPID STABILIZATION METHOD 3	M GALLON	26
F	[9]	2575.618	SITE RESTORATION	SQ FT	450
	[12]	2581.503	REMOVABLE PREFORM PAVEMENT MARKING TAPE	LIN FT	1013
I	[14]	2582.503	4" SOLID LINE MULTI COMP	LIN FT	32118
I	[14]	2582.503	4" BROKEN LINE MULTI COMP	LIN FT	460
I	[14]	2582.503	8" DOTTED LINE MULTI COMP	LIN FT	186
I	[14]	2582.503	4" DBLE SOLID LINE MULTI COMP	LIN FT	11540
I	[14]	2582.518	PAVT MSSG PREF THERMO	SQ FT	233
I	[14]	2582.518	CROSSWALK PREF THERMO	SQ FT	414
I	[14]	2582.603	PAVEMENT MARKING SPECIAL	LIN FT	299

NOTES	
CULVERT REPLACEMENT AND PROFILE CORRECTION WORK WILL BE DONE UNDER ROAD CLOSURE. ONCE COMPLETED, ROAD SHALL BE OPEN TO TRAFFIC UNDER FLAGGING OPERATIONS FOR REMAINDER OF CONSTRUCTION ACTIVITIES.	
[1]	ITEM USED TO REMOVE EXCESS RECLAIMED MATERIAL IN THE 400' TRANSITION AREA AT BEGINNING AND END OF PROJECT. RECLAIMED MATERIAL TO BE USED ON PROJECT. EXCESS RECLAIMED MATERIAL NOT USED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
[2]	REMOVAL OF BITUMINOUS RECLAIM TO EXPOSE SUBGRADE STA. 177+00 TO STA. 190+00 SUBGRADE TO BE CUT TO NEW PROFILE AND SUPER GRADE. RECLAIM MATERIAL TO BE INSTALLED AND COMPACTED TO NEW GRADE. EXCESS TO BE HAULED OFF SITE.
[3]	CLASS 5 ADDED TO RECLAIMED BITUMINOUS SHOULDER AFTER FIRST LIFT OF PAVING, MATCHING BITUMINOUS.
[4]	1' GRAVEL SHOULDER ALONG FINISHED PAVED SHOULDER AND FOR DRIVEWAYS AS DIRECTED BY ENGINEER.
[5]	2.0" DEEP MILL JOINTS, BEGINNING AND END PROJECT STA. 111+32, STA. 238+00 AND AT CITY STREET INTERSECTIONS. SEE DETAILS.
[6]	CITY STREET APPROACHES AND BITUMINOUS DRIVEWAYS.
[7]	MAINLINE PAVING. 2 - 2" LIFTS OF 12.5 WEAR COURSE.
[8]	EXISTING SANITARY MANHOLE CASTING
[9]	PEDESTRIAN RAMP CONSTRUCTION MUST COMPLY WITH ALL MNDOT ADA STANDARDS. THE CONTRACTOR MAY REMOVE AND REPLACE AN ADDITIONAL 10' OF TRAIL WITH CONCRETE BEYOND THE PLANNED CONSTRUCTION LIMITS IF NECESSARY TO MEET ADA REQUIREMENTS. THIS SHALL BE AT THE DISCRETION OF THE ENGINEER. NOTE: WHERE PEDESTRIAN RAMP MEETS BITUMINOUS RADIUS WITHOUT CONCRETE CURB THE TRUNTADED DOMES SHALL BE SET BACK 1.0' FROM THE EDGE OF BITUMINOUS MAT FOR CONTRAST. SITE RESTORATION REQUIRED FOR ANY DISTURBED AREA ALONG THE PEDESTRIAN RAMP CONSTRUCTION. AREAS OUTSIDE THE PLANNED CONSTRUCTION LIMITS SHALL BE PAID FOR AS ITEM "SITE RESTORATION" ITEM SHALL CONSIST OF TOPSOIL, SEEDING, SEED, MULCH AND FERTILIZER IN THE EROSION CONTROL PLAN COMBINED - AT THE APPLICATION RATES LISTED - PAID AS ONE ITEM, "SITE RESTORATION" - BY THE SQ FT.
[10]	CONTRACTOR RESPONSIBLE TO CONTACT POSTAL AUTHORITY AND HOMEOWNERS PRIOR TO DISTURBING MAILBOXES. CONTRACTOR TO FOLLOW ALL POSTAL AUTHORITY GUIDELINES AS TO THE TEMPORARY PLACEMENT OF MAIL BOXES.
[11]	PORTABLE CHANGEABLE MESSAGE SIGNS ARE BROKEN OUT SEPARATELY FROM TRAFFIC CONTROL LUMP SUM AND PAID FOR BY THE UNIT DAY. TWO MESSAGE BOARDS, ONE ON EACH END OF PROJECT, WILL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION.
[12]	2' YELLOW CENTERLINE SKIPS LENGTH OF PROJECT AND WHITE LANE DESIGNATION SKIPS AT INTERSECTIONS WITH LEFT TURN LANES TO BE APPLIED AS SOON AS POSSIBLE ON EACH NEW LIFT OF PAVEMENT. SKIPS MUST BE INPLACE BEFORE THE CONTRACTOR LEAVES FOR THE DAY. CONTRACTOR SHALL REMOVE SKIPS PRIOR TO FINAL STRIPING ON FINISHED SURFACE.
[13]	ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT REVISION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES." DO NOT PASS, PASS WITH CARE AND NO CENTER STRIPE SIGNS SHALL BE INPLACE WHENEVER PAVEMENT MARKINGS ARE NOT PRESENT.
[14]	FINAL STRIPING AND PAVEMENT MARKINGS SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF WEAR COURSE PAVING.
[15]	TYPE C SIGNS AND POSTS INDICATED ON TRAFFIC PLANS TO BE REMOVED SHALL BECOME THE PROPERTY OF CONTRACTOR.
[16]	SEE PERMANENT SIGNING AND STRIPING PLAN FOR LOCATIONS AND QUANTITIES OF SIGNS TO BE REPLACED.
[17]	INCLUDES SIGN, POSTS AND HARDWARE FOR INSTALLATION.
[18]	BIT DRIVEWAYS, BIT TRAIL AND BEG. - END OF PROJECT. LOCATION OF SAWCUT TO BE LAID OUT BY ENGINEER.
[19]	ALL PAVING SHALL BE PULLED IN THE SAME DIRECTION AS TRAFFIC FOR THAT LANE OF TRAVEL.
[20]	SEE MNDOT STANDARD PLANS 5-297.404 TURF ESTABLISHMENT DETAIL AT CULVERT ENDS.
[21]	NEW CONCRETE CURB. CONSTRUCT CONCRETE FLUME AT OUTFLOW OF NEW CONCRETE CURB, AS DIRECTED BY ENGINEER.
[22]	REMOVE AND REPLACE 2 - 88" SPAN X 54" RISE CONCRETE CULVERTS. STA. 164+61 AND STA. 164+76. PROPOSED CULVERT INVERTS SHALL BE ELEV. 882.60 WITH A 0.0% SLOPE ON BOTH PIPES.
[23]	USE CAUTION DURING RECLAIMING, SEE PLAN LOCATIONS OF INPLACE DRAINTILE BURIED 1.0' BELOW THE EM.
[24]	DETOUR UTILIZED FIRST FOR CULVERT REPLACEMENT. ONCE COMPLETED THEN CLOSER MOVED TO GRADE CORRECTION LOCATION. AS SOON AS CORRECTION AREA IS BROUGHT UP TO PROPOSED GRADE DETOUR IS TO BE REMOVED FOR REMAINDER OF PROJECT.

INDEX OF TABULATION CHARTS		
TAB.	DESCRIPTION	SHEET NO.
A	REMOVALS	5
B	AGGREGATE	8
C	BITUMINOUS	10
D	CONCRETE	11
E	MAILBOXES	11
F	TURF ESTABLISHMENT & EROSION CONTROL / SOILS NOTES	12
G	DETOUR	22
H	TRAFFIC CONTROL / STAGING	60
I	PERMANENT MARKINGS	61
J	SIGNING QUANTITIES	67

THE FOLLOWING STANDARD PLATES APPROVED BY THE DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

STANDARD PLATES	
PLATE NO.	DESCRIPTION
3110G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3014J	REINFORCED CONCRETE PIPE ARCH
3133D	RIPRAP AT RCP OUTLETS
4108F	ADJUSTING RINGS FOR CATCH BASINS & MANHOLES
8000J	CHANNELIZERS
8150C	INSTALLATION OF CULVERT MARKERS
9350A	MAILBOX SUPPORT (SWING AWAY)

BASIS OF QUANTITIES		
SPEC NO	DESCRIPTION	RATE
2123.510	MOTOR GRADER	hour
2211.509	AGGREGATE BASE CLASS 5 (CV)	1.8 TONS / CU YD
2221.507	SHOULDERING BASE AGGREGATE CLASS 5 (LV)	1.4 TONS / CU YD
2357.506	BITUMINOUS MATERIAL FOR TACK COAT	0.05 GAL X SQ YD X LIFT
2360.501	TYPE SP9.5 WEARING COURSE MIXTURE	115 LBS X SQ YD X IN / 2000 = TONS
2360.501	TYPE SP12.5 NON-WEARING COURSE MIXTURE	115 LBS X SQ YD X IN / 2000 = TONS
2575.508	SEED MIXTURE 25-131	220 LBS / ACRE
2574.508	FERTILIZER TYPE 3 (22-5-10)	200 LBS / ACRE
2581.503	REMOVABLE PREFORMED MARKING TAPE	2' AT 50' INTERVALS PER LIFT

NO	DATE	BY	CKD	APPR	REVISION
1	4/16/2019	JCF	NJD		REMOVED CUTTER NUMBERS
2	4/19/2019	JCF	NJD		ADDED "EXCESS TO BE HAULED OFF SITE" TO NOTE 2
3	5/14/2019	DFP	NJD		ADDED STANDARD PLATE 3133D

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: NICHOLAS DOBBA
 SIGNATURE: *[Signature]*
 DATE: 5/14/2019 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

STATEMENT OF EST. QUANTITIES,
BASIS OF QUANTITIES, CONST. NOTES,
STANDARD PLATES, INDEX OF TABS

Sheet 3 of 103 Sheets

REMOVALS, SAWING, MILLING, RECLAIM AND ADJUST

LOCATION	LT / RT	STATION TO STATION	REMOVE		SAWING		MILLING	RECLAIM		ADJUST		NOTES		
			CONCRETE PAVEMENT	BITUMINOUS PAVEMENT	PIPE CULVERTS	CONCRETE PAVEMENT	BITUMINOUS PAVEMENT	JOINTS 2"	BITUMINOUS PAVEMENT	HAUL BIT RECLAIM (LV)	COMMON EXCAVATION		FRAME AND RING CASTING	GATE VALVE AND BOX
			SQ YD	SQ YD	LIN FT	LIN FT	LIN FT	SQ YD	SQ YD	CU YD	CU YD		EACH	EACH
MAINLINE	LT/RT	111+38				48	21						[1]	
MAINLINE	LT/RT	111+38 - 115+38							118				[11]	
MAINLINE	LT/RT	111+38 - 238+00						67088					[2]	
BIRCH CT	RT	112+32 - 112+64					14						[4]	
SAN MH	RT	112+49									1		[3]	
OLD BIRCH	RT	117+35 - 117+60					12						[4]	
? MH	LT	118+18									1		[3]	
#865	LT	127+46 - 127+81		107		35							[5]	
SAN MH	LT	127+74									1		[3]	
#895	LT	130+97 - 131+18		29		21							[5]	
#915	LT	134+11 - 134+31		30		40							[5]	
#920	LT	136+18 - 136+34		32									[5]	
E SHADOW LK	LT	137+25		8		8							[6]	
E SHADOW LK	LT	137+36 - 137+66					15						[4]	
E SHADOW LK	LT	137+70		7		8							[6]	
GV	LT	137+40										1	[8]	
#948	RT	137+57 - 137+70		21		13							[5]	
#952	RT	139+05 - 139+23		29		18							[5]	
WHITE BIRCH CT	LT	141+10		9		8							[6]	
WHITE BIRCH CT	LT	141+16 - 141+46					14						[4]	
WHITE BIRCH CT	LT	141+50		9		8							[6]	
GV	LT	141+22										1	[8]	
GV	LT	141+23										1	[8]	
SAN MH	LT	141+31									1		[3]	
#972 W	RT	141+90 - 142+05		25		15							[5]	
#972 E	RT	142+43 - 142+59		26		16							[5]	
#979	LT	143+18 - 143+32		17		14							[5]	
? MH		143+24									1		[3]	
#984 W	RT	144+15 - 144+29		22		14							[5]	
#985	LT	144+59 - 144+78		29		19							[5]	
#984 E	RT	144+73 - 144+86		21		13							[5]	
#991	LT	145+06 - 145+30	33			24							[10]	
RED BIRCH CT	LT	147+30		10		8							[6]	
RED BIRCH CT	LT	147+45 - 147+75					15						[4]	
RED BIRCH CT	LT	147+80		9		8							[6]	
GV	LT	147+46										1	[8]	
#1026 W	RT	149+13 - 149+38		27		25							[5]	
#1026 E	RT	150+27 - 150+38		19		11							[5]	
#1034	RT	150+79 - 150+89		19		10							[5]	
BLACK DUCK DR S	RT	154+15 - 154+45					14						[4]	
BLACK DUCK DR	LT	154+10		9		8							[6]	
BLACK DUCK DR	LT	154+15 - 154+45					14						[4]	
BLACK DUCK DR	LT	154+50	6	4		8							[6]	
PHEASANT RUN	LT	157+70	6	3		8							[6]	
PHEASANT RUN	LT	157+73 - 158+03					14						[4]	
PHEASANT RUN	LT	158+05	6	3		8							[6]	
PHEASANT RUN S	RT	157+78 - 158+08					13						[4]	
SAN MH	LT	157+90									1		[3]	
#1180	RT	162+70 - 163+01		36		31							[5]	
TRAIL, CULVERT REP.	LT	164+32.81 - 165+04.80		69		16							[7]	
CULVERT REP.	ML	164+61 - 164+76			192								[9]	
WILD TURKEY TR	LT	167+00	6										[6]	

NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\19-01-00CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_TAB.dgn					
04/19/2019 1:33:06 PM					

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: NICHOLAS DOBDA

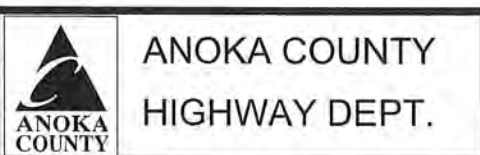
SIGNATURE: *[Signature]*

DATE: 4/23/19 LICENSE NO. 49045

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004

REMOVALS, SAWING, MILLING, RECLAIM AND ADJUST

LOCATION	LT / RT	STATION TO STATION	REMOVE		SAWING		MILLING	RECLAIM		ADJUST		NOTES		
			CONCRETE PAVEMENT	BITUMINOUS PAVEMENT	PIPE CULVERTS	CONCRETE PAVEMENT	BITUMINOUS PAVEMENT	JOINTS 2"	BITUMINOUS PAVEMENT	HAUL BIT RECLAIM (LV)	COMMON EXCAVATION		FRAME AND RING CASTING	GATE VALVE AND BOX
			SQ YD	SQ YD	LIN FT	LIN FT	LIN FT	SQ YD	SQ YD	CU YD	CU YD		EACH	EACH
WILD TURKEY TR	LT	167+03 - 167+33					14					[4]		
WILD TURKEY TR	LT	167+40	6									[6]		
SAN MH	LT	167+20										[3]		
#1199 W	LT	170+56 - 170+74		20			18				1	[5]		
#1199 E	LT	172+04 - 172+18		23			14					[5]		
12TH AVE	RT	172+81 - 173+13						15				[4]		
#1221 W	LT	173+15 - 173+35		28			20					[5]		
#1221 E	LT	174+96 - 175+14		36			18					[5]		
PROFILE ADJUSTMENT	ML	177+00 - 190+00								2889		[12]		
#1271	LT	181+55 - 181+79		34			24					[5]		
#1281	LT	183+78 - 184+00		32			22					[5]		
WHITE OAK RD	RT	184+25 - 184+55						15				[4]		
GV	RT	184+29										[8]		
SAN MH	RT	184+39									1	[3]		
#1300	RT	186+91 - 187+04		5			13					[5]		
#1310	RT	188+49 - 188+58		5			9					[5]		
#1310	RT	190+83 - 190+96		28			13					[5]		
JOYER LN	RT	192+90 - 193+20						13				[4]		
TIMBERWOLF TR	LT	199+35	7									[6]		
TIMBERWOLF TR	LT	199+40 - 199+85						22				[4]		
TIMBERWOLF TR	LT	199+95	7									[6]		
GAAGE LN	RT	199+50 - 199+79						13				[4]		
#1430	RT	203+10 - 203+33		28			23					[5]		
#1481	LT	208+76 - 208+92		34								[5]		
#1490	RT	210+27 - 210+49	24			22						[10]		
#1485	LT	210+38 - 210+54		20			16					[5]		
PHEASANT HILLS DR	LT	213+05	8									[6]		
PHEASANT HILLS DR	LT	213+19 - 213+49						14				[4]		
PHEASANT HILLS DR	RT	213+23 - 213+53						18				[4]		
GV	RT	213+34									1	[8]		
SHERMAN LAKE RD	LT	220+34 - 220+64						14				[4]		
SHERMAN LAKE RD	RT	220+35 - 220+65						21				[4]		
#1585	LT	222+45 - 222+58		25			13					[5]		
#1585	LT	223+66 - 223+79		22			13					[5]		
#1599	LT	224+98 - 225+09		19			11					[5]		
#1613	LT	226+02 - 226+17		18			15					[5]		
#1612	RT	226+96 - 227+13		44			17					[5]		
MAINLINE	LT/RT	234+00 - 238+00								118		[11]		
MAINLINE	LT/RT	238+00										[1]		
PROJECT TOTAL			109	1050	192	46	745	325	67088	236	2889	8	6	

REMOVAL NOTES:

- [1] BEGIN / END PROJECT SAWCUT FULL DEPTH & 4' WIDE MILL JOINT.
- [2] FULL DEPTH RECLAIM, FROM BEGINNING OF PROJECT TO END OF PROJECT.
- [3] INCLUDES REMOVAL OF CASTINGS AND RINGS FOR RECLAIMING, ADJUST AND RING CASTING TO NEW BITUMINOUS SURFACE.
- [4] 4' WIDE MILL JOINT ON CITY STREETS, AS DIRECTED BY ENGINEER.
- [5] SAWCUT LOCATION DETERMINED BY ENGINEER. REMOVE BITUMINOUS AND ADD GRAVEL PRIOR TO PAVING DRIVEWAY, AS DIRECTED BY ENGINEER.
- [6] REMOVE AND REPLACE PEDESTRIAN RAMP WITH ADA COMPLIANT CONCRETE RAMP AND TRUNCATED DOMES, AS DIRECTED BY ENGINEER.
- [7] REMOVE AND REPLACE EXISTING BITUMINOUS TRAIL FOR CULVERT REPLACEMENT, AS DIRECTED BY ENGINEER.
- [8] ADJUST TO NEW BITUMINOUS SURFACE.
- [9] REPLACEMENT OF (2) 88" SPAN X 54" RISE ARCH CULVERTS. CULVERT REPLACEMENT SHALL BE DONE UNDER DETOUR. REPLACEMENT SHALL BE PRIOR TO ROAD RECLAMATION.
- [10] SAWCUT LOCATION DETERMINED BY ENGINEER. REMOVE CONCRETE AND ADD GRAVEL TO RAISE GRADE PRIOR TO PLACING NEW CONCRETE DRIVEWAY, AS DIRECTED BY ENGINEER.
- [11] REMOVAL OF EXCESS BITUMINOUS RECLAIMED MATERIAL AT THE BEGINNING AND END OF PROJECT TO MEET EXISTING BITUMINOUS SURFACE.
- [12] REMOVAL OF BITUMINOUS RECLAIM TO EXPOSE SUBGRADE. SUBGRADE TO BE CUT TO NEW PROFILE AND SUPER GRADE. RECLAIM MATERIAL TO BE RE-INSTALLED AND COMPACTED TO NEW GRADE. QUANTITY CONSISTS OF 1918 CU YD'S RECLAIM REMOVAL, 971 CU YD'S SUBGRADE REMOVAL AND 1548 CU YD'S RECLAIM REPLACEMENT.

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\0000000000_TAB.dgn 04/19/2019 1:50:52 PM

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: NICHOLAS DOBDA

SIGNATURE:

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

TABULATIONS

AGGREGATE SUMMARY											B
ADDRESS / LOCATION	DESCRIPTION	LT / RT ALI 34	STA.	TO	STA.	SQ FT	DEPTH	CU FT	BASE CLASS 5	SHLDR BASE CLASS 5	NOTES
									TON	TON	
	GRVL SHLDR	RT	111+38	-	112+32	114	0.33	38		3	[1]
	GRVL SHLDR	LT	111+38	-	127+31	1577	0.33	520		35	[1]
	GRVL SHLDR	RT	112+64	-	117+35	509	0.33	168		11	[1]
	GRVL SHLDR	RT	117+60	-	135+95	1571	0.33	518		35	[1]
	PAVED SHLDR	RT	117+88	-	137+01	19040	0.08	1523	102		[2]
	PAVED SHLDR	LT	121+15	-	127+31	6133	0.08	491	33		[2]
#865	PAVED DRVWY	LT	127+31	-	128+00	863	0.33	285		19	[3]
	GRVL SHLDR	LT	128+00	-	130+91	300	0.33	99		7	[1]
#895	PAVED DRVWY	LT	130+96	-	131+28	336	0.33	111		7	[3]
	GRVL SHLDR	LT	131+28	-	133+99	282	0.33	93		6	[1]
	PAVED SHLDR	LT	132+00	-	137+11	5198	0.08	416	28		[2]
#915	PAVED DRVWY	LT	133+99	-	134+41	405	0.33	134		9	[3]
	GRVL SHLDR	LT	134+41	-	137+36	309	0.33	102		7	[1]
#920	GRVL DRVWY	RT	135+95	-	136+45		0.33			7	[4]
	GRVL SHLDR	RT	136+45	-	137+42	101	0.33	33		2	[1]
#948	PAVED DRVWY	RT	137+42	-	137+84	246	0.33	81		5	[3]
	GRVL SHLDR	LT	137+67	-	141+15	362	0.33	119		8	[1]
	GRVL SHLDR	RT	137+84	-	138+95	111	0.33	37		2	[1]
#952	PAVED DRVWY	RT	138+95	-	139+34	266	0.33	88		6	[3]
	GRVL SHLDR	RT	139+34	-	141+80	247	0.33	82		5	[1]
	GRVL SHLDR	LT	141+48	-	143+13	362	0.33	119		8	[1]
#972 W	PAVED DRVWY	RT	141+80	-	142+16	228	0.33	75		5	[3]
	GRVL SHLDR	RT	142+16	-	142+42	26	0.33	9		1	[1]
#972 E	PAVED DRVWY	RT	142+42	-	142+76	227	0.33	75		5	[3]
	GRVL SHLDR	RT	142+76	-	144+05	129	0.33	43		3	[1]
#979	PAVED DRVWY	LT	143+13	-	143+37	158	0.33	52		3	[3]
	GRVL SHLDR	LT	143+37	-	144+53	116	0.33	38		3	[1]
#984 W	PAVED DRVWY	RT	144+05	-	144+39	232	0.33	77		5	[3]
	PAVED SHLDR	RT	144+39	-	148+97	3660	0.08	293	20		[2]
	GRVL SHLDR	RT	144+39	-	144+63	24	0.33	8		1	[1]
#985	PAVED DRVWY	LT	144+53	-	144+83	264	0.33	87		6	[3]
#984 E	PAVED DRVWY	RT	144+63	-	144+97	211	0.33	70		5	[3]
	GRVL SHLDR	LT	144+83	-	145+05	22	0.33	7			[1]
	GRVL SHLDR	RT	144+97	-	148+97	399	0.33	132		9	[1]
#991	CONC DRVWY	LT	145+05	-	145+31	301	0.33	99		7	[3]
	GRVL SHLDR	LT	145+31	-	147+44	239	0.33	79		5	[1]
	PAVED SHLDR	LT	146+27	-	147+24	772	0.08	62	4		[2]
	GRVL SHLDR	LT	147+76	-	154+14	672	0.33	222		15	[1]
#1026 W	PAVED DRVWY	RT	148+97	-	149+37	259	0.33	85		6	[3]
	GRVL SHLDR	RT	149+37	-	150+17	80	0.33	26		2	[1]
#1026 E	PAVED DRVWY	RT	150+17	-	150+48	176	0.33	58		4	[3]
	GRVL SHLDR	RT	150+48	-	150+73	26	0.33	9		1	[1]
#1034	PAVED DRVWY	RT	150+73	-	150+94	143	0.33	47		3	[3]
	GRVL SHLDR	RT	150+94	-	154+15	341	0.33	113		8	[1]

1	4/19/2019	JCF	NJD	CHANGED AGG ON PAVED SHLDR TO 1.0"
NO	DATE	BY	CHKD	APPR
				REVISION
NAME: P:\19-01-00\CSAH_34 (CSAH49-CSAH21)\Plan\0000000000_TAB.dgn 04/19/2019 1:33:11 PM				

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO: 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/09/19



ANOKA COUNTY
 HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

TABULATIONS
 Sheet 6 of 103 Sheets

AGGREGATE SUMMARY											B
ADDRESS / LOCATION	DESCRIPTION	LT / RT ALI 34	STA.	TO	STA.	SQ FT	DEPTH	CU FT	BASE CLASS 5	SHLDR BASE CLASS 5	NOTES
									TON	TON	
	PAVED SHLDR	LT	152+56	-	153+85	1028	0.08	82	5		[2]
	GRVL SHLDR	RT	154+45	-	157+78	367	0.33	121		8	[1]
	GRVL SHLDR	LT	154+46	-	157+72	342	0.33	113		8	[1]
	GRVL SHLDR	LT	158+04	-	167+03	942	0.33	311		21	[1]
	GRVL SHLDR	RT	158+08	-	162+49	462	0.33	152		10	[1]
	PAVED SHLDR	RT	158+38	-	168+04	7728	0.08	618	41		[2]
#1180	PAVED DRVWY	RT	162+49	-	163+19	502	0.33	166		11	[3]
	PAVED SHLDR	LT	162+83	-	166+73	3119	0.08	250	17		[2]
CULVERT REP.	TRAIL	LT	164+33	-	165+05	720				16	[5]
	GRVL SHLDR	LT	167+33	-	170+51	332	0.33	110		7	[1]
#1199 W	PAVED DRVWY	LT	170+51	-	170+84	243	0.33	80		5	[3]
	GRVL SHLDR	LT	170+84	-	171+92	108	0.33	36		2	[1]
#1199 E	PAVED DRVWY	LT	171+92	-	172+27	223	0.33	74		5	[3]
	GRVL SHLDR	LT	172+27	-	173+05	78	0.33	26		2	[1]
#1221 W	PAVED DRVWY	LT	173+05	-	173+45	283	0.33	93		6	[3]
	GRVL SHLDR	RT	173+12	-	184+22	1153	0.33	380		25	[1]
	PAVED SHLDR	RT	173+42	-	179+46	4830	0.08	386	26		[2]
	GRVL SHLDR	LT	173+45	-	174+87	142	0.33	47		3	[1]
#1221 E	PAVED DRVWY	LT	174+87	-	175+24	244	0.33	81		5	[3]
	GRVL SHLDR	LT	175+24	-	179+36	427	0.33	141		9	[1]
	PAVED SHLDR	LT	176+64	-	179+36	2173	0.08	174	12		[2]
#1271	PAVED DRVWY	LT	181+45	-	181+90	334	0.33	110		7	[3]
#1281	PAVED DRVWY	LT	183+64	-	184+19	376	0.33	124		8	[3]
	GRVL SHLDR	LT	184+31	-	199+33	1554	0.33	513		34	[1]
	GRVL SHLDR	RT	184+56	-	186+81	232	0.33	77		5	[1]
	PAVED SHLDR	RT	184+84	-	187+89	2435	0.08	195	13		[2]
#1300	PAVED DRVWY	RT	186+81	-	187+15	210	0.33	69		5	[3]
	GRVL SHLDR	RT	187+15	-	188+39	140	0.33	46		3	[1]
#1310 W	PAVED DRVWY	RT	188+39	-	188+63	137	0.33	45		3	[3]
	GRVL SHLDR	RT	188+63	-	190+68	205	0.33	68		5	[1]
	PAVED SHLDR	LT	188+63	-	190+29	1328	0.08	106	7		[2]
#1310 E	PAVED DRVWY	RT	190+68	-	191+10	250	0.33	83		6	[3]
	GRVL SHLDR	RT	191+10	-	192+90	199	0.33	66		4	[1]
	GRVL SHLDR	RT	193+20	-	199+50	685	0.33	226		15	[1]
	PAVED SHLDR	RT	193+49	-	194+46	771	0.08	62	4		[2]
	PAVED SHLDR	LT	197+24	-	199+10	1493	0.08	119	8		[2]
	GRVL SHLDR	RT	199+79	-	202+89	329	0.33	109		7	[1]
	GRVL SHLDR	LT	199+96	-	208+61	884	0.33	292		19	[1]
	PAVED SHLDR	RT	200+09	-	208+36	6615	0.08	529	35		[2]
#1430	PAVED DRVWY	RT	202+89	-	203+53	405	0.33	134		9	[3]
	PAVED SHLDR	LT	204+69	-	212+89	6560	0.08	525	35		[2]
#1481	PAVED DRVWY	LT	208+61	-	209+06	282	0.33	93		6	[3]
	GRVL SHLDR	LT	209+06	-	210+23	117	0.33	39		3	[1]
#1490	CONC DRVWY	RT	210+22	-	210+54	215	0.33	71		5	[3]
#1485	PAVED DRVWY	LT	210+23	-	210+65	270	0.33	89		6	[3]

1	4/19/2019	JCF	NJD	CHANGED AGG ON PAVED SHLDR TO 1.0"
NO	DATE	BY	CKD	APPR
				REVISION
NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\000000000_TAB.dgn				04/19/2019 1:33:14 PM

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49045

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

AGGREGATE SUMMARY										B	
ADDRESS / LOCATION	DESCRIPTION	LT / RT ALI 34	STA.	TO	STA.	SQ FT	DEPTH	CU FT	BASE CLASS 5	SHLDR BASE CLASS 5	NOTES
									TON	TON	
	GRVL SHLDR	LT	210+65	-	213+08	244	0.33	81		5	[1]
	GRVL SHLDR	RT	211+48	-	213+21	182	0.33	60		4	[1]
	GRVL SHLDR	LT	213+50	-	220+34	738	0.33	244		16	[1]
	GRVL SHLDR	RT	213+53	-	220+33	715	0.33	236		16	[1]
	PAVED SHLDR	RT	213+83	-	216+13	1844	0.08	148	10		[2]
	PAVED SHLDR	LT	218+30	-	220+04	1397	0.08	112	7		[2]
	GRVL SHLDR	LT	220+64	-	222+35	193	0.33	64		4	[1]
	GRVL SHLDR	RT	220+65	-	226+85	631	0.33	208		14	[1]
	PAVED SHLDR	RT	220+95	-	233+57	10099	0.08	808	54		[2]
#1585 W	PAVED DRVWY	LT	222+35	-	222+69	222	0.33	73		5	[3]
	GRVL SHLDR	LT	222+69	-	223+60	91	0.33	30		2	[1]
#1585 E	PAVED DRVWY	LT	223+60	-	223+86	207	0.33	68		5	[3]
	GRVL SHLDR	LT	223+86	-	223+99	13	0.33	4			[1]
#1599 W	GRVL DRVWY	LT	223+99	-	224+35		0.33			7	[4]
	GRVL SHLDR	LT	224+35	-	225+19	55	0.33	18		1	[1]
#1599 E	PAVED DRVWY	LT	224+87	-	225+19	203	0.33	67		4	[3]
	GRVL SHLDR	LT	225+19	-	225+92	89	0.33	29		2	[1]
	PAVED SHLDR	LT	225+45	-	236+42	8769	0.08	702	47		[2]
#1613 W	PAVED DRVWY	LT	225+92	-	226+27	234	0.33	77		5	[3]
	GRVL SHLDR	LT	226+27	-	234+82	854	0.33	282		19	[1]
#1612 W	PAVED DRVWY	RT	226+85	-	227+24	270	0.33	89		6	[3]
	GRVL SHLDR	RT	227+24	-	238+00	1102	0.33	364		24	[1]
#1649	GRVL DRVWY	LT	234+82	-	235+49		0.33			7	[4]
	GRVL SHLDR	LT	235+49	-	238+00	255	0.33	84		6	[1]
PROJECT TOTAL									508	724	


AGGREGATE NOTES:
SEE CONCRETE TAB FOR PIPE BEDDING FOR CULVERT REPLACEMENT.
SHLDR BASE CLASS 5 INCLUDES GRAVEL BASE FOR DRIVEWAYS.

[1] 4" SHOULDERING BASE CLASS 5 ADDED TO 1' GRAVEL SHOULDER FOLLOWING WEAR COURSE.
[2] 1.0" CLASS 5 BASE TO BE ADDED / COMPACTED TO THE PAVED SHOULDER AREA, TO ALLOW FOR 1 - 3.0" PAVED SHOULDER LIFT TO MATCH MAINLINE FINAL WEAR.
[3] BASE CLASS-5 TO BE ADDED TO BITUMINOUS AND CONCRETE DRIVEWAY REMOVAL AREA AS DIRECTED BY ENGINEER PRIOR TO PAVING.
[4] BASE CLASS-5 TO BE ADDED TO GRAVEL DRIVEWAYS FOLLOWING SHOULDER PAVING. ESTIMATED QTY. OF 7 TONS PER DRIVEWAY, 10' FROM BIT. BUMPOUT.
[5] CLASS 5 FOR BITUMINOUS TRAIL OVER CULVERT REPLACEMENT, AS DIRECTED BY ENGINEER. NOTE FOUND ON SHEET 7.

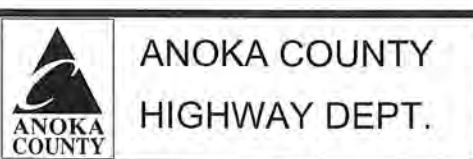
NO	DATE	BY	CKD	APPR	REVISION
1	4/16/2019	JCF	NJD		ADDED LOCATION TO NOTE 5
2	4/19/2019	JCF	NJD		CHANGED AGG ON PAVED SHLDR TO 1.0"

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_TAB.dgn 04/19/2019 1:33:16 PM

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: NICHOLAS DOBDA
SIGNATURE: 
DATE: 4/22/19 LICENSE NO. 49045

DRAWN BY: MP DATE: 03/28/19
DESIGN BY: MP DATE: 03/28/19
CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004

BITUMINOUS SUMMARY										C		
DESCRIPTION	STA	TO	STA	LOC	PROPOSED BIT THICKNESS	AREA		BITUMINOUS			NOTES	
								SP 12.5 WEAR (4,C)	SP 9.5 WEAR (3,B)	BIT TACK COAT		
								TON	TON	GAL		
					INCHES	SQ FT	SQ YDS					
THROUGH LANES	111+32	-	238+00	CL	4	304032	33781		7770		1689	[1]
RTL	111+32	-	114+95	LT	4	4356	484		111		24	[2]
RTL	111+32	-	117+88	RT	4	7872	875		201		44	[2]
BIRCH CT. APP.	112+03	-	112+89	RT	2	1127	125			14	6	[3]
BYPASS	114+95	-	121+15	LT	4	7440	827		190		41	[2]
10' SHLDR	117+88	-	137+01	RT	3	19130	2126		367			[4]
OLD BIRCH APP. (W)	117+06	-	117+88	RT	2	1185	132			15	7	[3]
10' SHLDR	121+15	-	127+31	LT	3	6160	684		118			[3]
#865	127+31	-	128+00	LT	2	863	96			11		[5]
RTL	127+31	-	132+00	LT	4	5628	625		144		31	[2]
#895	130+91	-	131+28	LT	2	336	37			4		[5]
10' SHLDR	132+00	-	137+11	LT	3	5110	568		98			[4]
BYPASS	137+01	-	144+39	RT	4	8856	984		226		49	[2]
E SHADOW LK CT APP.	137+11	-	137+91	LT	2	809	90			10	4	[3]
RTL	137+11	-	146+27	LT	4	10992	1221		281		61	[2]
#915	133+99	-	134+41	LT	2	405	45			5		[5]
#948	137+42	-	137+84	RT	2	246	27			3		[5]
#952	138+95	-	139+34	RT	2	266	30			3		[5]
WHITE BIRCH CT APP.	140+95	-	141+72	LT	2	769	85			10	4	[3]
#972 W	141+80	-	142+16	RT	2	228	25			3		[5]
#972 E	142+42	-	142+76	RT	2	227	25			3		[5]
#979	143+13	-	143+37	RT	2	158	18			2		[5]
#984 W	144+05	-	144+39	RT	2	232	26			3		[5]
8' SHLDR	144+39	-	148+97	RT	3	3664	407		70			[4]
#985	144+53	-	144+83	LT	2	264	29			3		[5]
#984 E	144+63	-	144+97	RT	2	211	23			3		[5]
8' SHLDR	146+27	-	147+24	LT	3	776	86		15			[4]
RED BIRCH CT APP.	147+24	-	147+96	LT	2	748	83			10	4	[3]
RTL	147+24	-	152+56	LT	4	6384	709		163		35	[2]
#1026 W	148+97	-	149+37	RT	2	259	29			3		[5]
RTL	148+97	-	158+38	RT	4	11292	1255		289		63	[2]
#1026 E	150+17	-	150+48	RT	2	176	20			2		[5]
#1034	150+73	-	150+94	RT	2	143	16			2		[5]
8' SHLDR	152+56	-	153+85	LT	3	1032	115		20			[4]
BLACK DUCK DR APP.	153+85	-	154+75	LT	2	1302	145			17	7	[3]
BLACK DUCK DR S APP.	153+85	-	154+75	RT	2	1382	154			18	8	[3]
RTL	153+85	-	162+83	LT	4	10776	1197		275		60	[2]
PHEASANT RUN S APP.	157+48	-	158+38	RT	2	1335	148			17	7	[3]
PHEASANT RUN APP.	157+49	-	158+28	LT	2	1181	131			15	7	[3]
8' SHLDR	158+38	-	168+04	RT	3	7728	859		148			[4]
#1180	162+49	-	163+19	RT	2	502	56			6		[5]
8' SHLDR	162+83	-	166+73	LT	3	3120	347		60			[4]
BIT TRAIL, CULVERT REP.	164+33	-	165+05	LT	2	615	68			8		[6]
WILD TURKEY TR APP.	166+73	-	167+63	LT	2	1302	145			17	7	[3]
RTL	166+73	-	170+44	LT	4	4452	495		114		25	[2]
RTL	168+03	-	173+42	RT	4	6468	719		165		36	[2]
BYPASS	170+44	-	176+64	LT	4	7440	827		190		41	[2]
#1199 W	170+51	-	170+84	LT	2	243	27			3		[5]
#1199 E	171+92	-	172+27	LT	2	223	25			3		[5]
12TH AVE APP.	172+54	-	173+42	RT	2	1298	144			17	7	[2]
#1221 W	173+05	-	173+45	LT	2	283	31			4		[5]
8' SHLDR	173+42	-	179+46	RT	3	4832	537		93			[4]
#1221 E	174+87	-	175+24	LT	2	244	27			3		[5]
8' SHLDR	176+64	-	179+36	LT	3	2176	242		42			[4]
BYPASS	179+36	-	188+63	LT	4	11124	1236		284		62	[2]
RTL	179+46	-	184+84	RT	4	6456	717		165		36	[2]

1	4/19/2019	JCF	NJD	INCREASED BIT SHOULDER DEPTH TO 3.0' PER H.G.
NO	DATE	BY	CKD	APPR
REVISION				
NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\00000000_TAB.dgn 04/19/2019 1:33:18 PM				

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO: 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19

ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

BITUMINOUS SUMMARY										C	
DESCRIPTION	STA	TO	STA	LOC	PROPOSED BIT THICKNESS	AREA		BITUMINOUS			NOTES
						SQ FT	SQ YDS	SP 12.5 WEAR (4,C)	SP 9.5 WEAR (3,B)	BIT TACK COAT	
								INCHES	TON	TON	
#1271	181+45	-	181+90	LT	2	334	37		4		[5]
#1281	183+64	-	184+19	LT	2	376	42		5		[5]
WHITE OAK RD APP.	183+99	-	184+84	RT	2	820	91		10	5	[3]
8' SHLDR	184+84	-	187+89	RT	3	2440	271	47			[4]
#1300	186+81	-	187+15	RT	2	210	23		3		[5]
RTL	187+89	-	193+49	RT	4	6720	747	172		37	[2]
#1310 W	188+39	-	188+63	RT	2	137	15		2		[5]
8' SHLDR	188+63	-	190+29	LT	3	1328	148	25			[4]
BYPASS	190+29	-	197+24	LT	4	8340	927	213		46	[2]
#1310 E	190+68	-	191+10	RT	2	250	28		3		[5]
JOYER LN APP.	192+55	-	193+49	RT	2	1548	172		20	9	[3]
8' SHLDR	193+49	-	194+46	RT	3	776	86	15			[4]
RTL	194+46	-	200+09	RT	4	6756	751	173		38	[2]
8' SHLDR	197+24	-	199+10	LT	3	1488	165	29			[4]
TIMBERWOLF TR APP.	199+10	-	200+19	LT	2	1717	191		22	10	[3]
RTL	199+10	-	204+69	LT	4	6708	745	171		37	[2]
GAAGE LN APP.	199+20	-	200+09	RT	2	1270	141		16	7	[3]
8' SHLDR	200+09	-	208+36	RT	3	6616	735	127			[4]
#1430	202+89	-	203+53	RT	2	405	45		5		[5]
PAINTED MEDIAN	203+67	-	208+38	LT	2	2824	314		36	16	[2]
8' SHLDR	204+69	-	212+89	LT	3	6560	729	126			[4]
RTL	208+36	-	213+83	RT	4	6564	729	168		36	[2]
LTL	208+38	-	216+53	RT	4	10595	1177	271		59	[2]
#1481	208+61	-	209+06	LT	2	282	31		4		[5]
#1485	210+23	-	210+65	LT	2	270	30		3		[5]
PHEASANT HILLS DR APP. (N)	212+89	-	213+80	LT	2	1201	133		15	7	[3]
RTL	212+89	-	218+30	LT	4	1202	134	1			[2]
PHEASANT HILLS DR APP. (S)	212+93	-	213+83	RT	2	1214	135		16	7	[3]
8' SHLDR	213+83	-	216+13	RT	3	1840	204	35			[4]
RTL	216+13	-	220+95	RT	4	5784	643	148		32	[2]
LTL	216+53	-	225+95	RT	4	12246	1361	313		68	[2]
8' SHLDR	218+30	-	220+04	LT	3	1392	155	27			[4]
SHERMAN LAKE RD (N)	220+04	-	220+94	LT	2	1524	169		19	8	[3]
RTL	220+04	-	225+45	LT	4	6492	721	166		36	[2]
SHERMAN LAKE RD (S)	220+05	-	220+95	RT	2	1227	136		16	7	[3]
8' SHLDR	220+95	-	233+57	RT	3	10096	1122	194			[4]
#1585 W	222+35	-	222+69	LT	2	222	25		3		[5]
#1585 E	223+60	-	223+86	LT	2	207	23		3		[5]
#1599 E	224+87	-	225+19	LT	2	203	23		3		[5]
8' SHLDR	225+45	-	236+42	LT	3	8776	975	168			[4]
#1613 W	225+92	-	226+27	LT	2	234	26		3		[5]
PAINTED MEDIAN	225+95	-	231+44	LT	2	2685	298		34	15	[2]
#1612 W	226+85	-	227+24	RT	2	270	30		3		[5]
RTL	233+57	-	238+00	RT	4	5316	591	136		30	[2]
8' SHLDR	236+42	-	238+00	LT	3	1579	175	30			[4]
PROJECT TOTAL								14354	486	2875	

BITUMINOUS SUMMARY NOTES:

[1] MAIN LINE PAVING, 25' BASE COURSE WIDTH, 24' WEAR COURSE WIDTH. 2 - 2" LIFTS 12.5 WEAR MIX (FIRST LIFT AREA CALCULATED USING 25.0' WIDTH X 12668' LIN FT)

[2] 12.0' RIGHT TURN LANE / LEFT TURN LANE / BYPASS LANE, 12.0' BASE COURSE, 12.0' WEAR COURSE. 2 - 2" LIFTS 12.5 WEAR MIX

[3] OVERLAY EXISTING STREET APPROACH

[4] PAVED SHOULDER, 1 - 3.0" LIFT 12.5 WEAR MIX

[5] 2" BITUMINOUS DRIVEWAY, SAWCUT REMOVE EXISTING BITUMINOUS, ADD CLASS 5 AND PAVE AS DIRECTED BY ENGINEER.

[6] 2" BITUMINOUS TRAIL, CULVERT REPLACEMENT. ADD CLASS 5 AND PAVE AS DIRECTED BY ENGINEER. NOTE FOUND ON SHEET 9.

1	4/16/2019	JCF	NJD	ADDED LOCATION TO NOTE 6
1	4/19/2019	JCF	NJD	INCREASED BIT SHOULDER DEPTH TO 3.0" PER H.G.
NO	DATE	BY	CKD	APPR
REVISION				
NAME: P:\19-01-00\CSAH_34_CSAH19-CSAH21\Plan\00000000_TAB.dgn				

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: NICHOLAS DOBDA

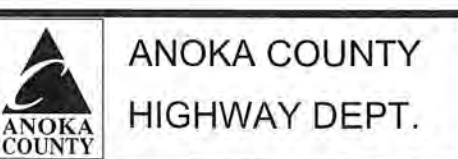
SIGNATURE: *Nicholas Dobda*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

CONCRETE SUMMARY

D

LOCATION	STA. TO STA.	OFFSET LT / RT ALI 34	88" SPAN RC PIPE-ARCH CULVERT CLASS IIA	88" SPAN RC PIPE-ARCH APRON	PIPE BEDDING MATERIAL CLASS "B"	6" CONCRETE DRIVEWAY PAVEMENT	6" CONCRETE WALK	CONCRETE CURB & GUTTER DESIGN B-424	TRUNCATED DOMES	CONCRETE FLUME	NOTES
			LIN FT	EACH	CU YD	SQ YD	SQ FT	LIN FT	SQ FT	EACH	
E SHADOW LK	137+25	LT					71		16		[1]
E SHADOW LK	137+70	LT					67		16		[1]
WHITE BIRCH CT	141+10	LT					82		16		[1]
WHITE BIRCH CT	141+50	LT					78		16		[1]
#991 BIRCH ST	145+05 - 145+31	LT				37					[2]
RED BIRCH CT	147+30	LT					88		16		[1]
RED BIRCH CT	147+80	LT					78		16		[1]
BLACK DUCK DR	154+10	LT					80		16		[1]
BLACK DUCK DR	154+50	LT					90		16		[1]
PHEASANT RUN	157+70	LT					81		16		[1]
PHEASANT RUN	158+05	LT					81		16		[1]
CULVERT REPLACEMENT	164+32	ML	96	2	129						[4]
CULVERT REPLACEMENT	165+04	ML	96	2	129						[4]
WILD TURKEY TR	167+00	LT					54		16		[1]
WILD TURKEY TR	167+40	LT					54		16		[1]
TIMBERWOLF TR	199+35	LT					63		16		[1]
TIMBERWOLF TR	199+95	LT					63		16		[1]
NEW CURB LINE	208+36 - 211+48	RT						312			[3]
#1490 BIRCH ST	210+20 - 210+53	RT				26					[2]
END OF CURB	211+48	RT								1	[3]
PHEASANT HILLS DR	213+05	LT					72		16		[1]
TOTAL			192	4	258	63	1102	312	240	1	

NOTES:

- [1] CONSTRUCT ADA COMPLIANT PEDESTRIAN RAMP MEETING ALL ADA WIDTHS AND SLOPE REQUIREMENTS INCLUDING TRUNCATED DOMES.
- [2] CONCRETE DRIVEWAY CONSTRUCT WITH APRON FLARES AS DIRECTED BY ENGINEER.
- [3] NEW CURB LINE INSTALLED PRIOR TO PAVING, EB STA 208+36 - 211+48 SOUTH SIDE OF ROAD. EAST END OF CURB TO HAVE CONCRETE FLUME TO DITCH, AS DIRECTED BY ENGINEER.
- [4] QTY (2) 88" SPAN X 54" RISE ARCH CULVERT REPLACEMENTS. 96' END OF APRON TO END OF APRON. REPLACE IN-KIND WITH 96' END OF APRON TO END OF APRON ARCH PIPE AND APRONS - TOTAL LENGTH OF NEW INSTALLATION 96' INCLUDING APRONS. CLASS "B" PIPE BEDDING REQUIRED. DETOUR TO BE UTILIZED FOR REPLACEMENT. PIPES SHALL BE REPLACED PRIOR TO THE PROJECT'S RECLAMATION OF ROAD SURFACE.

NW END OF APRON	X = 546942.8776	Y = 140382.1024	INV 882.50	SLOPE 0.001%
NE END OF APRON	X = 546955.5247	Y = 140382.1024	INV 882.50	SLOPE 0.001%
SW END OF APRON	X = 546942.3421	Y = 140286.1024	INV 882.60	SLOPE 0.001%
SE END OF APRON	X = 546954.9911	Y = 140286.1024	INV 882.60	SLOPE 0.001%

MAIL BOXES

E

ADDRESS	STATION	BOX LOCATED LT / RT	RELOCATE MAIL BOX	INSTALL MAIL BOX SUPPORT	NOTES	ADDRESS	STATION	BOX LOCATED LT / RT	RELOCATE MAIL BOX	INSTALL MAIL BOX SUPPORT	NOTES
#895	130+85	LT		1	[1]	#1310	190+73	RT		1	[1]
#915	134+04	LT		1	[1]	#1430	202+94	RT		1	[1]
#920	136+49	RT		1	[1]	#1481	209+12	LT		1	[1]
#948	137+89	RT		1	[1]	#1485	210+69	LT		1	[1]
#952	138+88	RT		1	[1]	#1490	210+85	RT	1	1	[1], [2]
#972	142+25	RT		1	[1]	#1585	223+92	LT		1	[1]
#979	143+10	LT		1	[1]	#1599	223+95	LT		1	[1]
#984	144+46	RT		1	[1]	#1613	225+98	LT		1	[1]
#985	144+52	LT		1	[1]	#1612	226+79	RT	1	1	[1], [2]
#991	145+38	LT		1	[1]	SUB TOTAL "B"			2	9	
#1026	150+56	RT		1	[1]	SUB TOTAL "A"			0	17	
#1034	151+04	RT		1	[1]	PROJECT TOTAL			2	26	
#1141	153+24	LT		1	NO HOUSE	MAILBOX NOTES:					
#1180		RT			NO MAILBOX	[1] ITEM "INSTALL MAIL BOX SUPPORT" INCLUDES ALL HARDWARE, TIME AND MATERIALS TO COMPLETE INSTALLATION OF FINISHED MAILBOX					
#1199	171+83	LT		1	[1]	[2] MAILBOXES TO BE RELOCATED OUTSIDE OF CLOSED AREA FOR MAIL SERVICE. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POSTAL SERVICE FOR APPROVED LOCATION AND NOTIFYING HOME OWNERS PRIOR TO RELOCATING.					
#1271	181+34	LT		1	[1]						
#1281	184+12	LT		1	[1]						
#1300	186+75	RT		1	[1]						
SUB TOTAL "A"			0	17							

NO	DATE	BY	CKD	APPR	REVISION
1	4/19/2019	JCF	NJD		INCREASED CONC. DRIVEWAY TO 6.0"
2	5/14/2019	OFF	NJD		NW & NE CULVERT ELEVATION CHANGED TO 882.5

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\000000000_TAB.dgn 05/14/2019 7:41:22 AM

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 5/14/2019 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

TABULATIONS

CONCRETE SUMMARY

LOCATION	STA. TO STA.	OFFSET LT / RT ALI 34	88" SPAN RC PIPE-ARCH CULVERT CLASS IIA	88" SPAN RC PIPE-ARCH APRON	PIPE BEDDING MATERIAL CLASS "B"	6" CONCRETE DRIVEWAY PAVEMENT	6" CONCRETE WALK	CONCRETE CURB & GUTTER DESIGN B-424	TRUNCATED DOMES	CONCRETE FLUME	NOTES
			LIN FT	EACH	CU YD	SQ YD	SQ FT	LIN FT	SQ FT	EACH	
E SHADOW LK	137+25	LT					71		16		[1]
E SHADOW LK	137+70	LT					67		16		[1]
WHITE BIRCH CT	141+10	LT					82		16		[1]
WHITE BIRCH CT	141+50	LT					78		16		[1]
#991 BIRCH ST	145+05 - 145+31	LT				37					[2]
RED BIRCH CT	147+30	LT					88		16		[1]
RED BIRCH CT	147+80	LT					78		16		[1]
BLACK DUCK DR	154+10	LT					80		16		[1]
BLACK DUCK DR	154+50	LT					90		16		[1]
PHEASANT RUN	157+70	LT					81		16		[1]
PHEASANT RUN	158+05	LT					81		16		[1]
CULVERT REPLACEMENT	164+32	ML	96	2	129						[4]
CULVERT REPLACEMENT	165+04	ML	96	2	129						[4]
WILD TURKEY TR	167+00	LT					54		16		[1]
WILD TURKEY TR	167+40	LT					54		16		[1]
TIMBERWOLF TR	199+35	LT					63		16		[1]
TIMBERWOLF TR	199+95	LT					63		16		[1]
NEW CURB LINE	208+36 - 211+48	RT						312			[3]
#1490 BIRCH ST	210+20 - 210+53	RT				26					[2]
END OF CURB	211+48	RT								1	[3]
PHEASANT HILLS DR	213+05	LT					72		16		[1]
TOTAL			192	4	258	63	1102	312	240	1	

NOTES:

- [1] CONSTRUCT ADA COMPLIANT PEDESTRIAN RAMP MEETING ALL ADA WIDTHS AND SLOPE REQUIREMENTS INCLUDING TRUNCATED DOMES.
- [2] CONCRETE DRIVEWAY CONSTRUCT WITH APRON FLARES AS DIRECTED BY ENGINEER.
- [3] NEW CURB LINE INSTALLED PRIOR TO PAVING, EB STA 208+36 - 211+48 SOUTH SIDE OF ROAD. EAST END OF CURB TO HAVE CONCRETE FLUME TO DITCH, AS DIRECTED BY ENGINEER.
- [4] QTY (2) 88" SPAN X 54" RISE ARCH CULVERT REPLACEMENTS. 96' END OF APRON TO END OF APRON. REPLACE IN-KIND WITH 96' END OF APRON TO END OF APRON ARCH PIPE AND APRONS - TOTAL LENGTH OF NEW INSTALLATION 96' INCLUDING APRONS. CLASS "B" PIPE BEDDING REQUIRED. DETOUR TO BE UTILIZED FOR REPLACEMENT. PIPES SHALL BE REPLACED PRIOR TO THE PROJECT'S RECLAMATION OF ROAD SURFACE.

NW END OF APRON	X = 546942.8776	Y = 140382.1024	INV 882.60	SLOPE 0.0%
NE END OF APRON	X = 546955.5247	Y = 140382.1024	INV 882.60	SLOPE 0.0%
SW END OF APRON	X = 546942.3421	Y = 140286.1024	INV 882.60	SLOPE 0.0%
SE END OF APRON	X = 546954.9911	Y = 140286.1024	INV 882.60	SLOPE 0.0%

MAIL BOXES

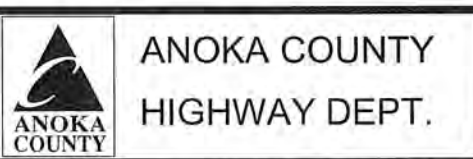
ADDRESS	STATION	BOX LOCATED LT / RT	RELOCATE MAIL BOX	INSTALL MAIL BOX SUPPORT	NOTES	ADDRESS	STATION	BOX LOCATED LT / RT	RELOCATE MAIL BOX	INSTALL MAIL BOX SUPPORT	NOTES
#895	130+85	LT		1	[1]	#1310	190+73	RT		1	[1]
#915	134+04	LT		1	[1]	#1430	202+94	RT		1	[1]
#920	136+49	RT		1	[1]	#1481	209+12	LT		1	[1]
#948	137+89	RT		1	[1]	#1485	210+69	LT		1	[1]
#952	138+88	RT		1	[1]	#1490	210+85	RT	1	1	[1], [2]
#972	142+25	RT		1	[1]	#1585	223+92	LT		1	[1]
#979	143+10	LT		1	[1]	#1599	223+95	LT		1	[1]
#984	144+46	RT		1	[1]	#1613	225+98	LT		1	[1]
#985	144+52	LT		1	[1]	#1612	226+79	RT	1	1	[1], [2]
#991	145+38	LT		1	[1]	SUB TOTAL "B"			2	9	
#1026	150+56	RT		1	[1]	SUB TOTAL "A"			0	17	
#1034	151+04	RT		1	[1]	PROJECT TOTAL			2	26	
#1141	153+24	LT		1	NO HOUSE	MAILBOX NOTES:					
#1180		RT			NO MAILBOX	[1] ITEM "INSTALL MAIL BOX SUPPORT" INCLUDES ALL HARDWARE, TIME AND MATERIALS TO COMPLETE INSTALLATION OF FINISHED MAILBOX.					
#1199	171+83	LT		1	[1]	[2] MAILBOXES TO BE RELOCATED OUTSIDE OF CLOSED AREA FOR MAIL SERVICE. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POSTAL SERVICE FOR APPROVED LOCATION AND NOTIFYING HOME OWNERS PRIOR TO RELOCATING.					
#1271	181+34	LT		1	[1]						
#1281	184+12	LT		1	[1]						
#1300	186+75	RT		1	[1]						
SUB TOTAL "A"			0	17							

1	4/19/2019	JCF	NJD		INCREASED CONC. DRIVEWAY TO 6.0"
NO	DATE	BY	CKD	APPR	REVISION
					NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_TAB.dgn
					04/19/2019 1:33:23 PM

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49046

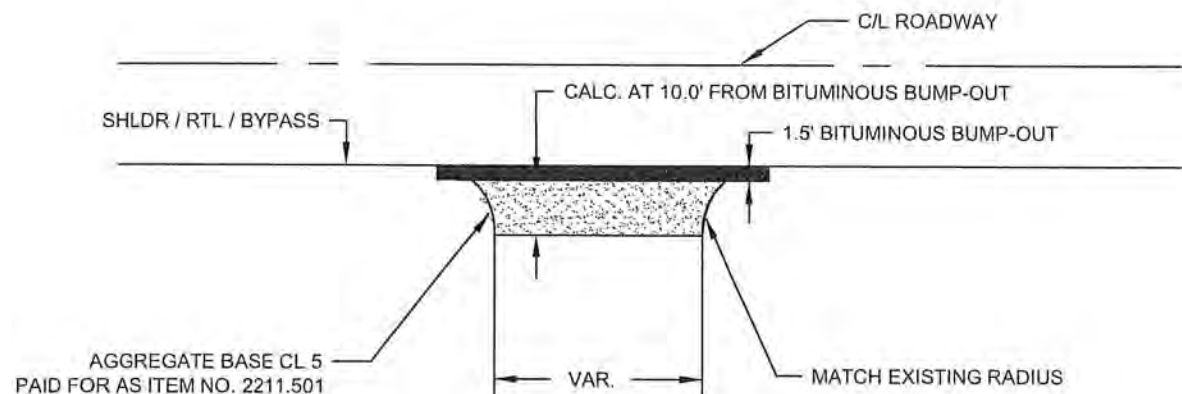
DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



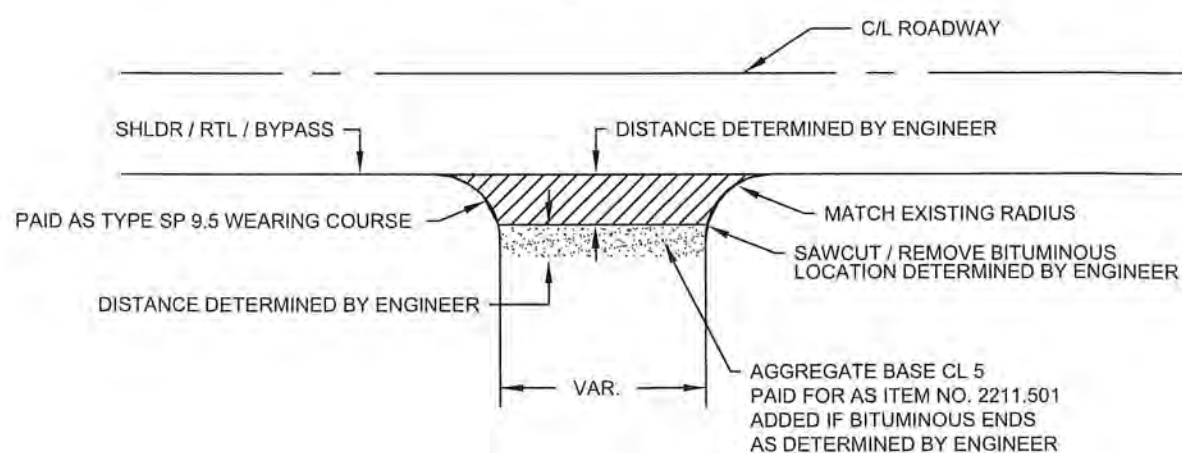
ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

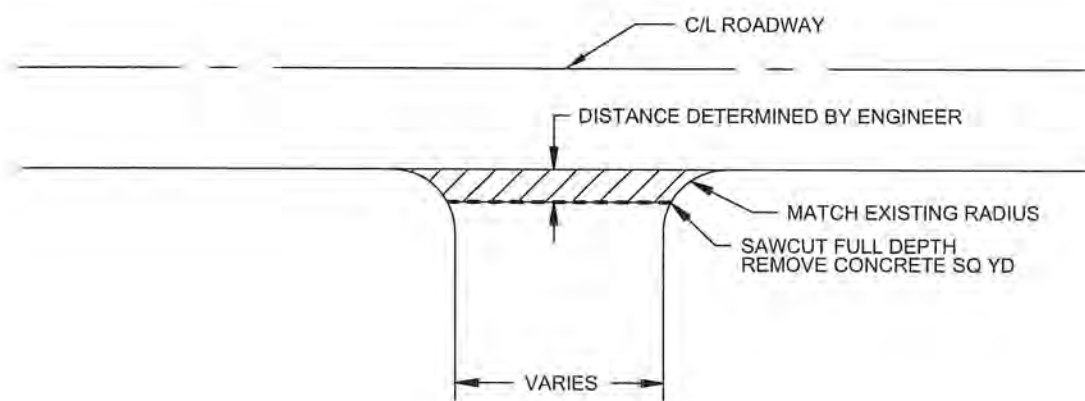
GRAVEL DRIVEWAYS AND FIELD ENT.



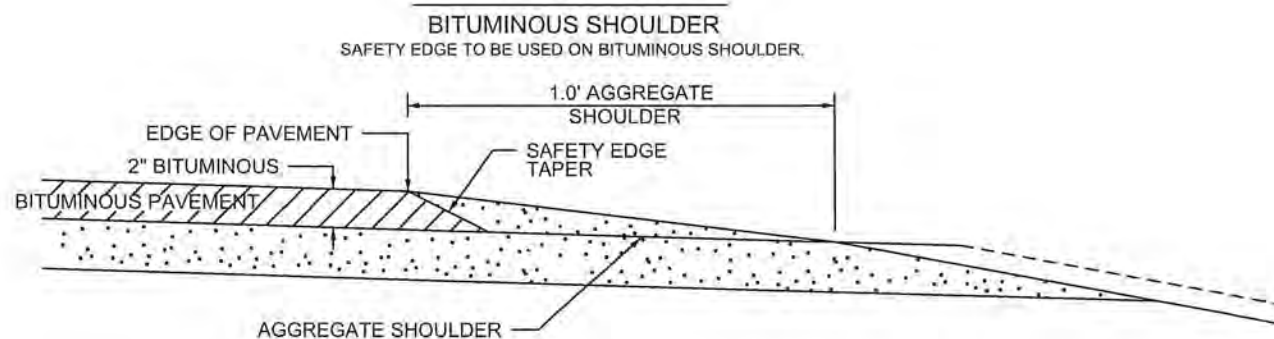
PAVED DRIVEWAYS



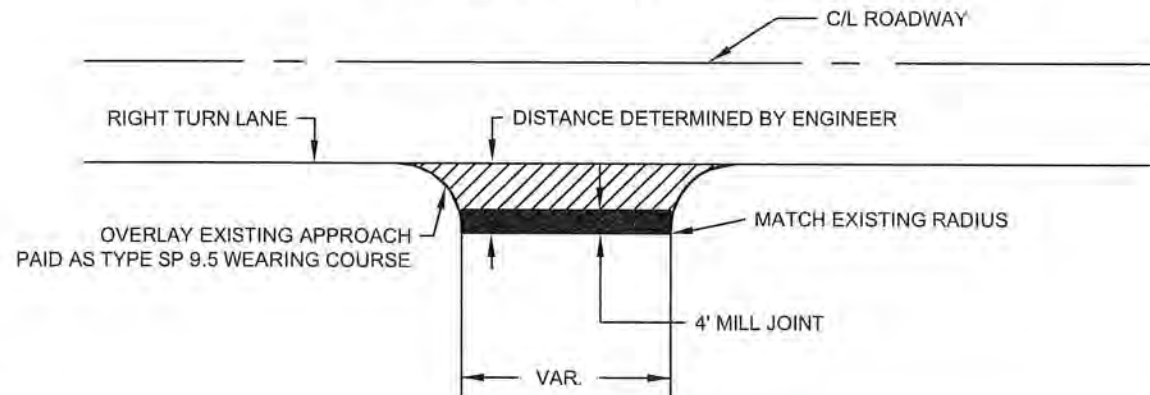
**DRIVEWAY DETAIL
CONCRETE DRIVEWAY**



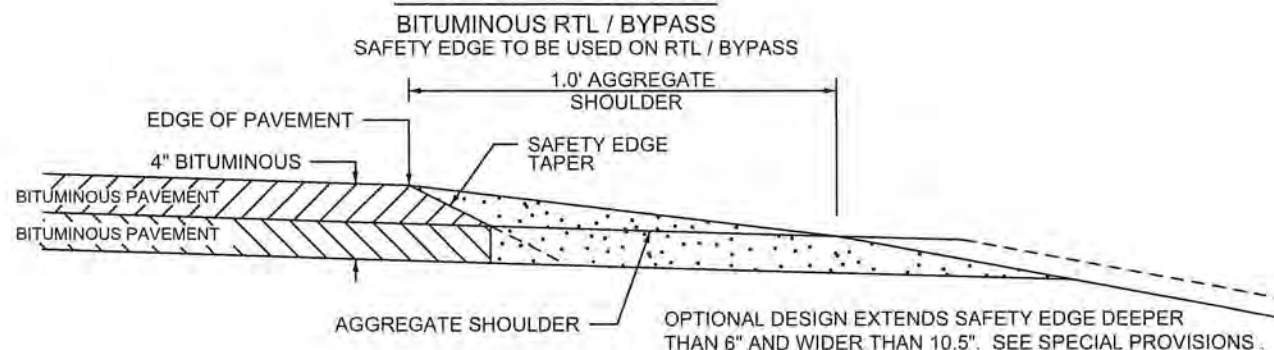
SAFETY EDGE



PAVED STREET APPROACH



SAFETY EDGE

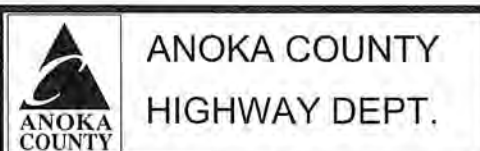


NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\0000000000_MD1.dgn 04/19/2019 1:31:36 PM

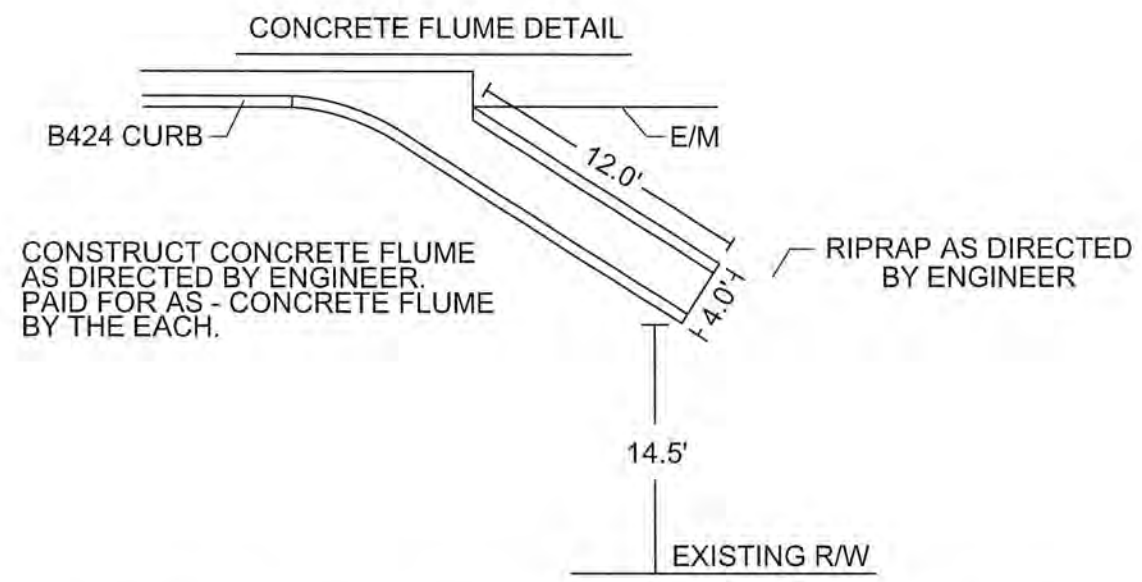
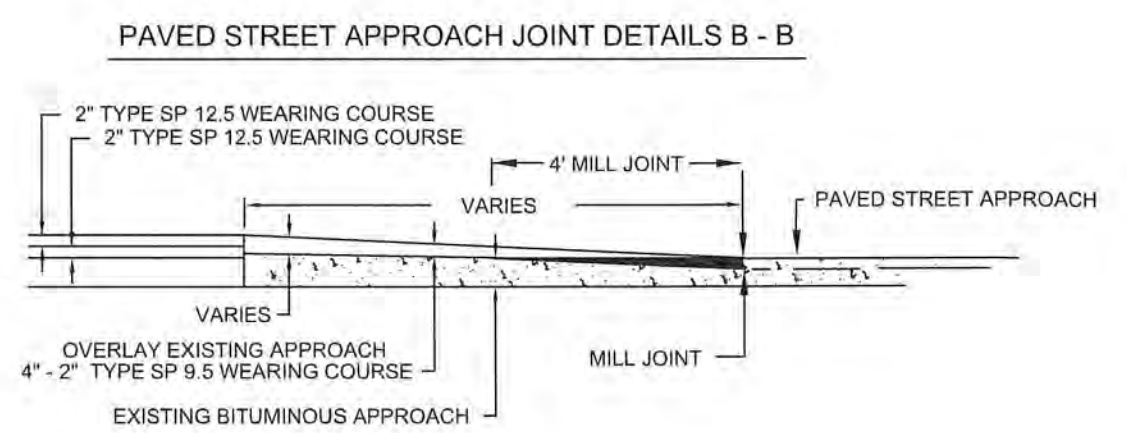
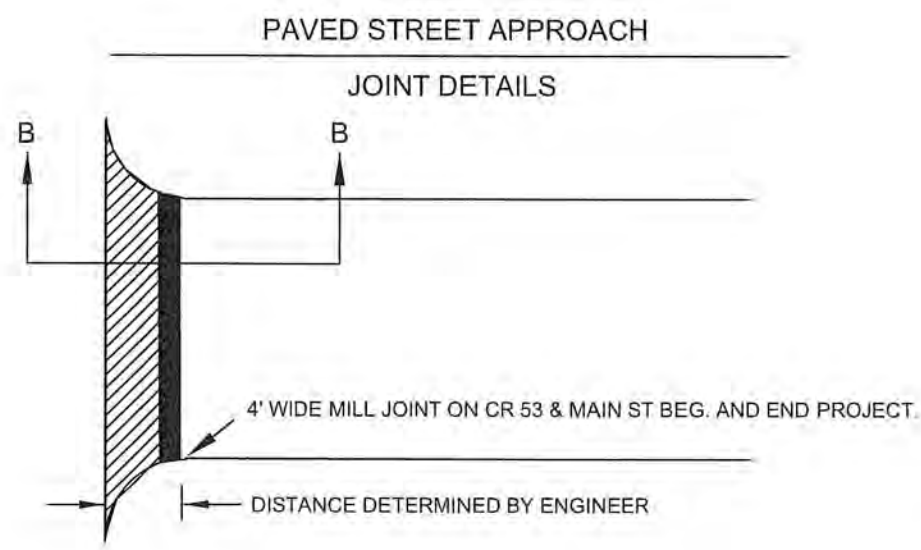
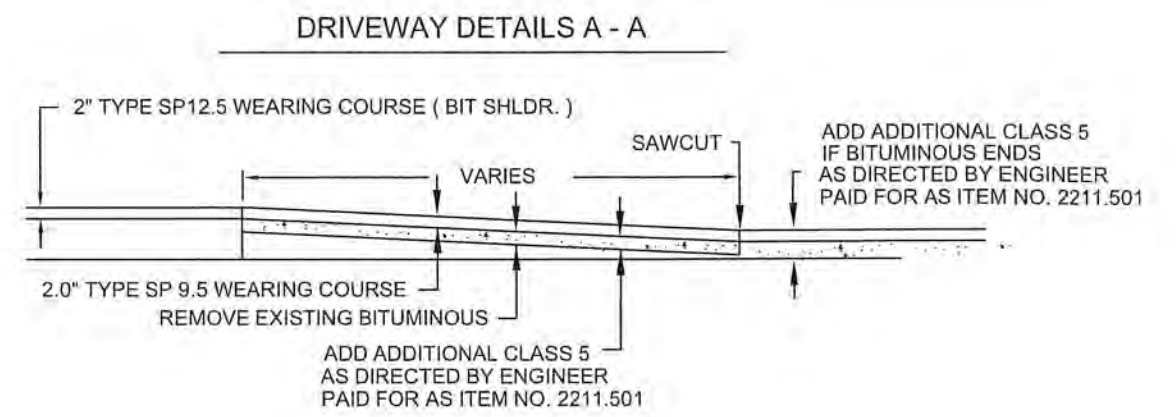
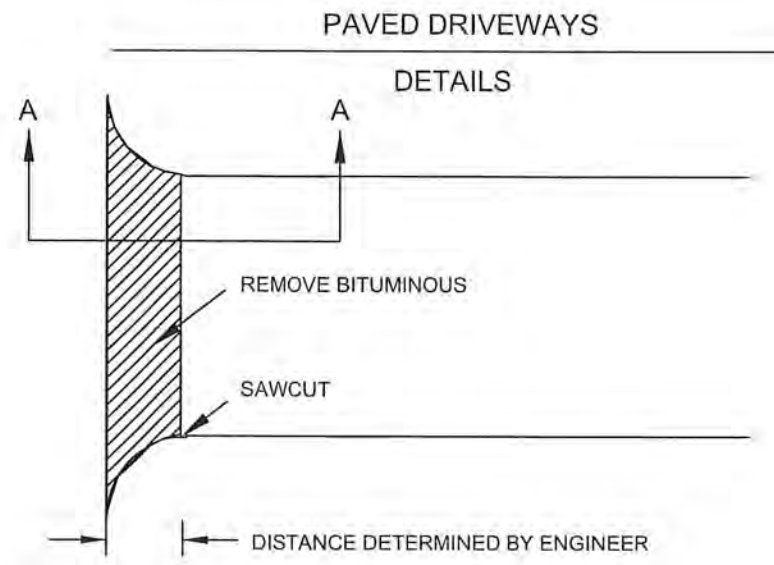
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO: 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

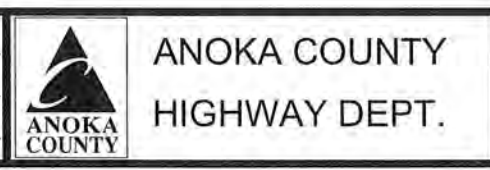
MISC. DETAILS
 Sheet 13 of 103 Sheets



1	04/19/2019	JCF	HG	JEO	ADDED CONCRETE FLUME DETAIL
NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_MD1.dgn 04/19/2019 1:31:38 PM					

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 PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO: 49046

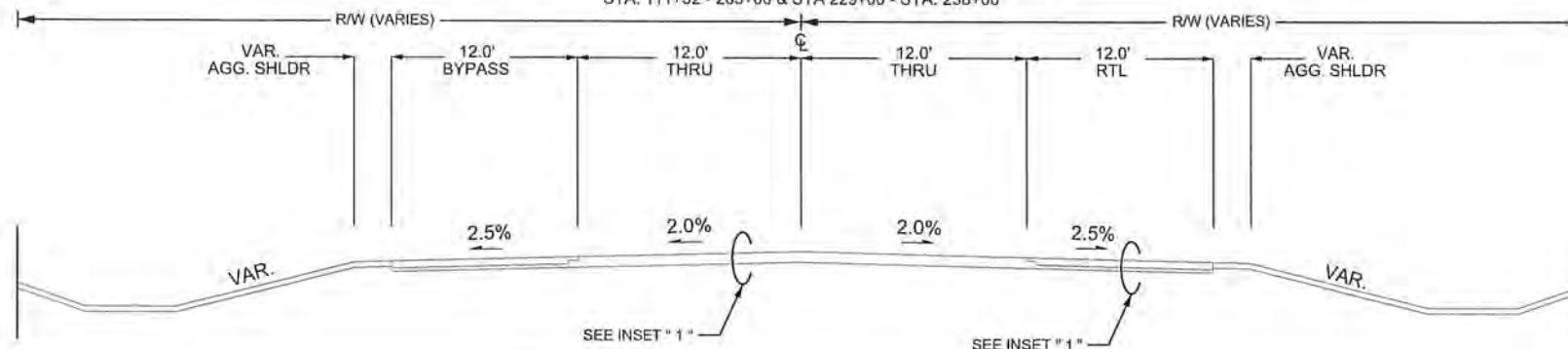
DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004

**EXISTING
C.S.A.H. 34 (BIRCH STREET) TYPICAL RTL/BYPASS SECTION**

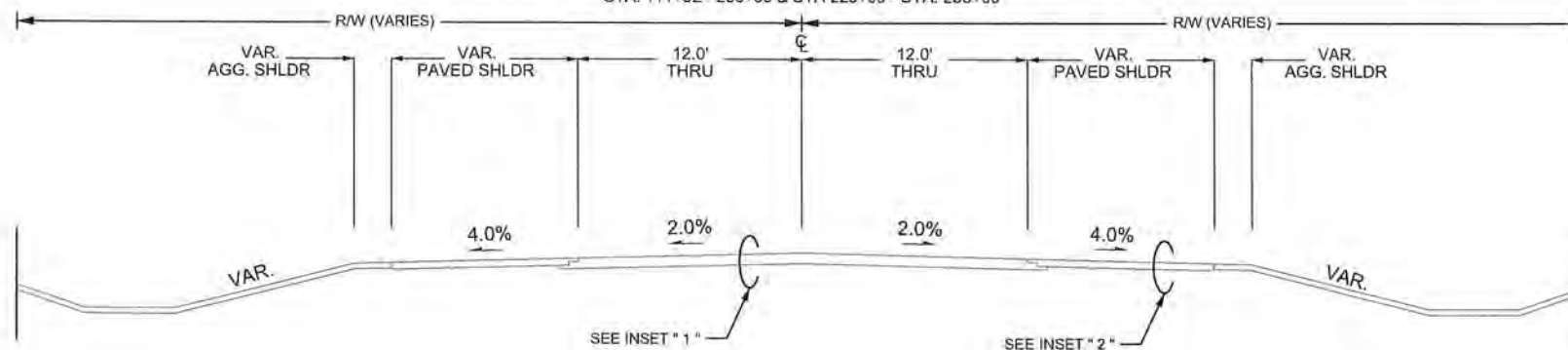
STA. 111+32 - 205+00 & STA 229+00 - STA. 238+00



NOTE
POSSIBLE PERF. PIPE 1.0' BELOW E/M
APPROX. STA. 111+32 TO 137+00
BOTH SIDES OF ROAD
USE CAUTION DURING RECLAIM

**EXISTING
C.S.A.H. 34 (BIRCH STREET) TYPICAL SECTION**

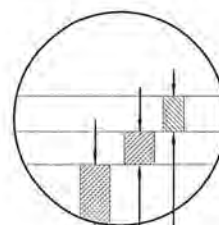
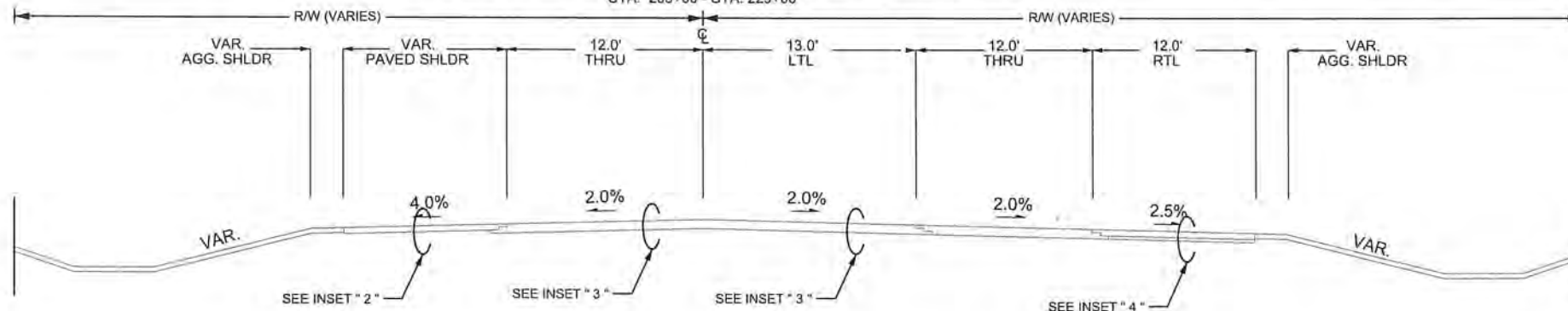
STA. 111+32 - 205+00 & STA 229+00 - STA. 238+00



NOTE
POSSIBLE PERF. PIPE 1.0' BELOW E/M
APPROX. STA. 111+32 TO 137+00
BOTH SIDES OF ROAD
USE CAUTION DURING RECLAIM

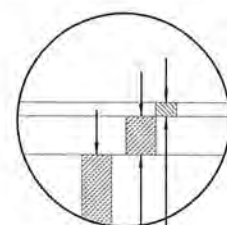
**EXISTING
C.S.A.H. 34 (BIRCH STREET) TYPICAL LTL SECTION**

STA. 205+00 - STA. 229+00



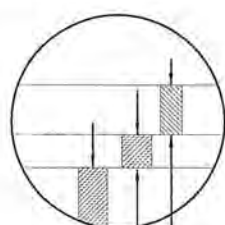
INSET " 1 "

4.0" EXISTING BITUMINOUS
6.0" EXISTING AGGREGATE BASE
EXISTING SUBGRADE



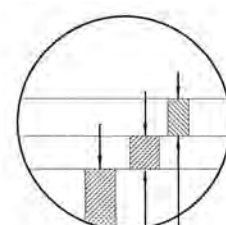
INSET " 2 "

2.0" - 4.0" EXISTING BITUMINOUS
6.0" - 8.0" EXISTING AGGREGATE BASE
EXISTING SUBGRADE



INSET " 3 "

8.0" EXISTING BITUMINOUS
6.0" EXISTING AGGREGATE BASE
EXISTING SUBGRADE



INSET " 4 "

4.0" - 6.0" EXISTING BITUMINOUS
6.0" EXISTING AGGREGATE BASE
EXISTING SUBGRADE

EXISTING ROAD CORES

BITUMINOUS AND AGGREGATE BASE DEPTHS ARE APPROXIMATE
CONTRACTOR TO FIELD VERIFY

NUMBER	STA.	LOC	DESCRIPTION	BITUMINOUS	GRAVEL
CORE #1	114+10	18' RT	RTL	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO THE DEPTHS
OF THE ROAD CORES. THEY ARE INCLUDED FOR INFO ONLY.
IT IS THE RESPONSIBILITY OF THE CONTRACTOR
TO VERIFY PAVEMENT AND AGGREGATE DEPTHS.

1 OF 4

NO	DATE	BY	CHKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34 (CSAH49-CSAH21)\Plan\000000000_TYP.dgn 04/19/2019 1:33:33 PM

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: NICHOLAS DOBDA
SIGNATURE: *N. Dobda*
DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
DESIGN BY: MP DATE: 03/28/19
CHECKED BY: JEO DATE: 04/05/19



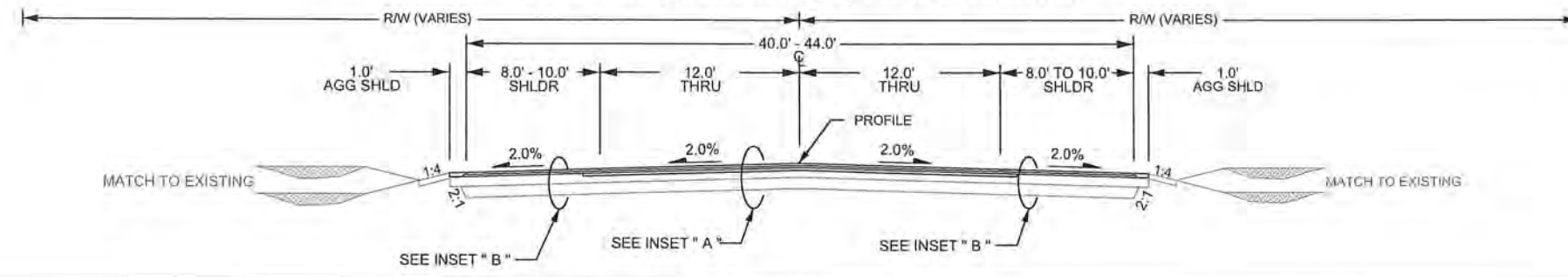
**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

EXISTING
TYPICAL SECTIONS

Sheet 15 of 103 Sheets

**PROPOSED
C.S.A.H. 34 (BIRCH STREET) TYPICAL SECTION**



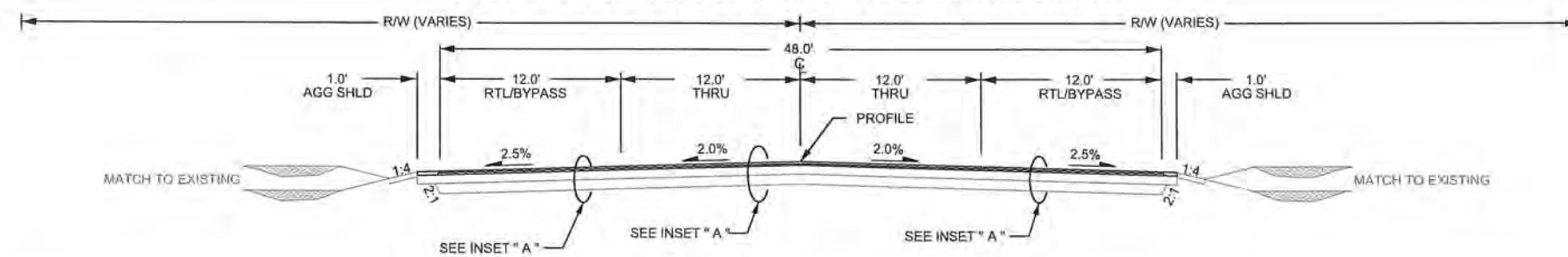
10' PAVED SHOULDER

STA. 121+15 TO STA. 127+31
STA. 132+00 TO STA. 137+01

8' PAVED SHOULDER

STA. 146+27 TO STA. 147+24
STA. 162+83 TO STA. 166+73
STA. 176+64 TO STA. 179+36
STA. 231+44 TO STA. 233+57

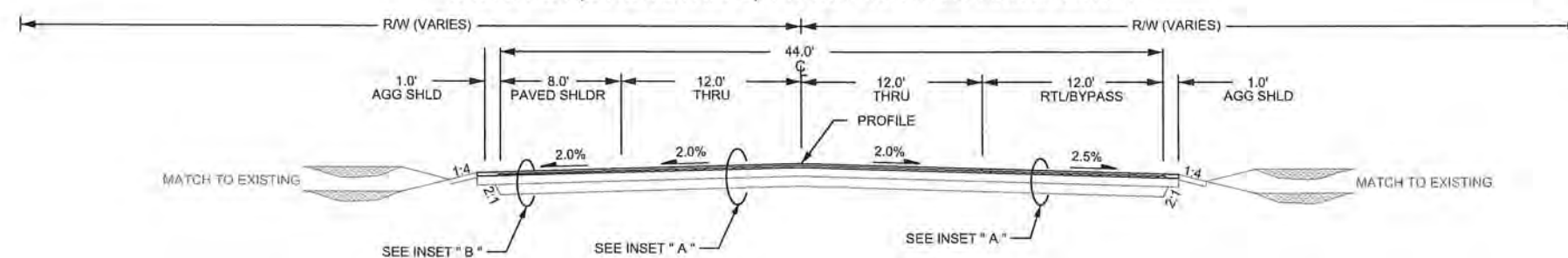
**PROPOSED
C.S.A.H. 34 (BIRCH STREET) TYPICAL RTL / BYPASS SECTION**



DUAL RTL / BYPASS

STA. 111+32 TO STA. 117+88
STA. 137+11 TO STA. 144+39
STA. 148+97 TO STA. 152+56
STA. 153+85 TO STA. 158+387
STA. 168+04 TO STA. 173+42
STA. 184+31 TO STA. 184+84
STA. 187+89 TO STA. 188+63
STA. 190+29 TO STA. 193+49
STA. 194+46 TO STA. 197+24
STA. 199+10 TO STA. 200+09
STA. 216+13 TO STA. 218+30

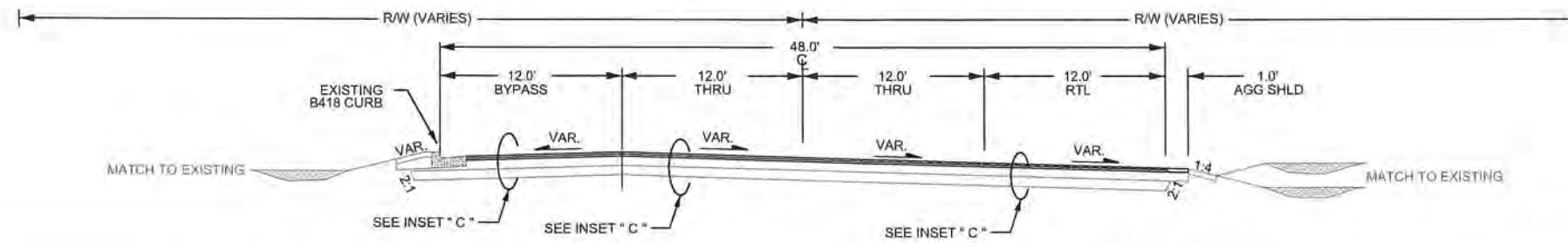
**PROPOSED
C.S.A.H. 34 (BIRCH STREET) TYPICAL RTL / BYPASS SECTION**



SINGLE RTL / BYPASS

BYPASS WB STA. 117+88 TO STA. 121+15
RTL EB STA. 127+31 TO STA. 132+00
RTL EB STA. 137+01 TO STA. 137+11
RTL WB STA. 144+39 TO STA. 146+27
RTL WB STA. 147+24 TO STA. 148+97
RTL EB STA. 152+56 TO STA. 153+85
RTL WB STA. 158+38 TO STA. 162+83
RTL WB STA. 166+73 TO STA. 168+04
BYPASS WB STA. 173+42 TO STA. 176+64
RTL EB STA. 179+36 TO STA. 179+46
BYPASS WB STA. 184+84 TO STA. 187+89
RTL EB STA. 188+63 TO STA. 190+29
BYPASS WB STA. 193+49 TO STA. 194+46
RTL EB STA. 197+24 TO STA. 199+10
RTL WB STA. 200+09 TO STA. 203+67
RTL EB STA. 218+30 TO STA. 220+04
RTL EB STA. 233+57 TO STA. 236+42

**PROPOSED
C.S.A.H. 34 (BIRCH STREET) TYPICAL RTL / BYPASS SECTION
GRADE / SUPERELEVATION CORRECTION AREA STA. 177+00 TO STA. 190+00
SLOPES VARY WITH SUPER. SEE SUPER PLAN, "HIGH POINT VARIES"
SHORT SEGMENTS OF PAVED SHOULDERS IN CORRECTION AREA SHALL BE INSET " D "**



EXISTING CURB

WB STA. 179+36 TO STA. 184+31

1	4/16/2019	JCF	NJD	REMOVED VAR. WIDTH SHLDR, ADDED 8.0' TO 10.0' TO SHLDR.
NO	DATE	BY	CKD	APPR
NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_TYP.dgn 04/19/2019 2:33:54 PM				

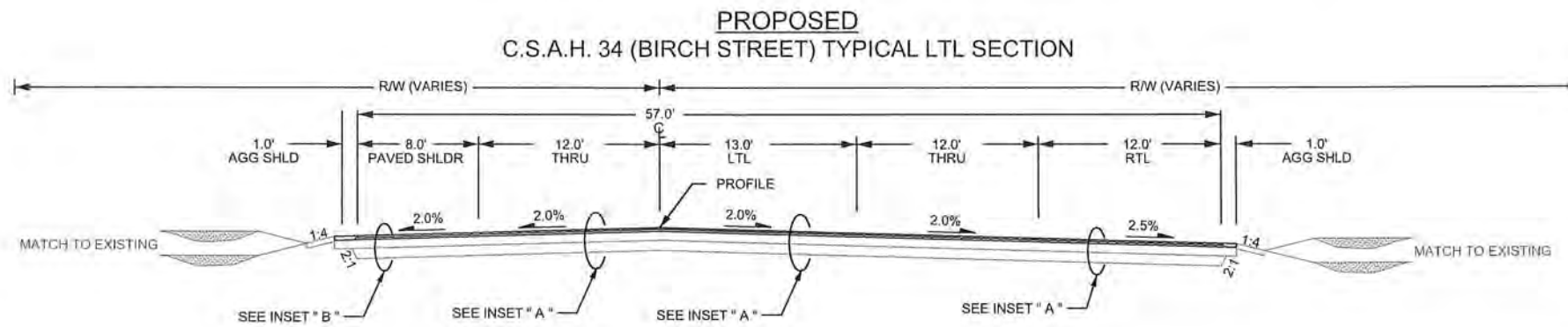
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: NICHOLAS DOBDA
SIGNATURE: *Nicholas Dobda*
DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
DESIGN BY: MP DATE: 03/26/19
CHECKED BY: JEO DATE: 04/05/19

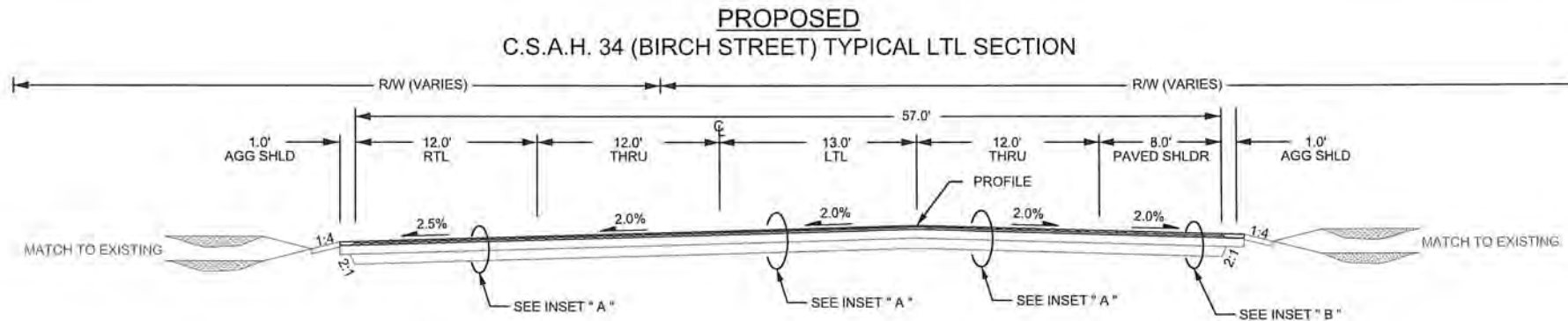


**ANOKA COUNTY
HIGHWAY DEPT.**

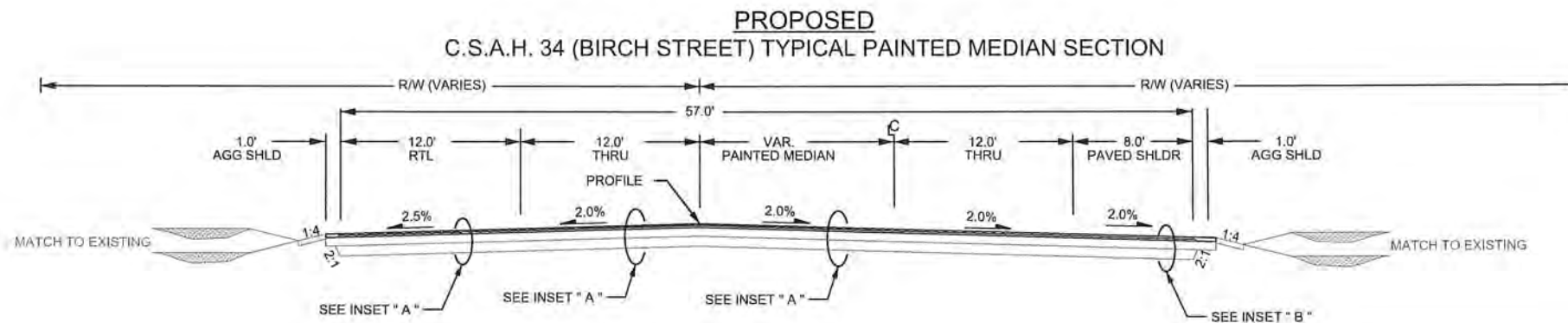
ANOKA COUNTY SAP 002-634-004



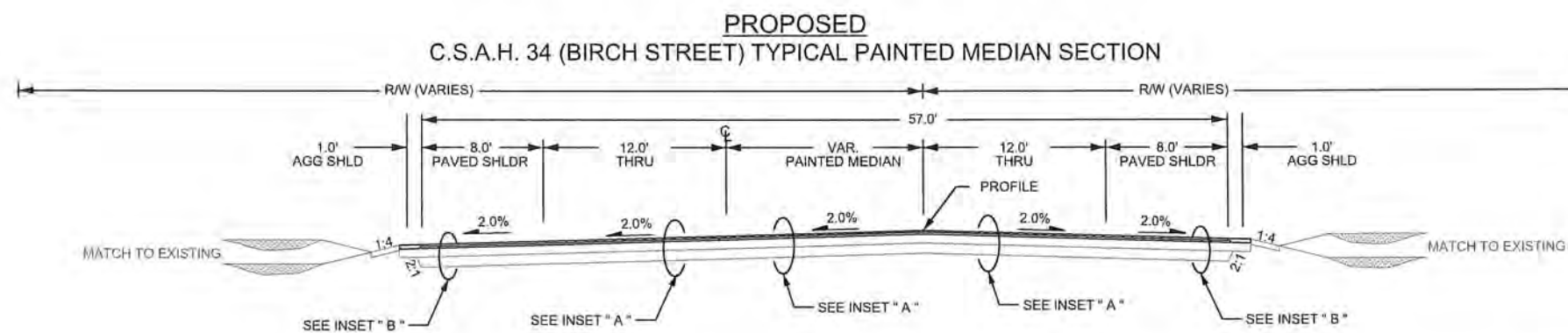
EB LEFT TURN LANES
 LTL EB STA. 211+48 TO STA. 212+89
 LTL EB STA. 216+13 TO STA. 220+04



WB LEFT TURN LANES
 STA. 213+83 TO STA. 216+13
 STA. 220+95 TO STA. 225+45



PAINTED MEDIAN
 STA. 203+67 TO STA. 204+69
 STA. 224+25 TO STA. 225+45



PAINTED MEDIAN
 STA. 204+69 TO STA. 208+36
 STA. 225+45 TO STA. 231+44

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\00000000_TYP.dgn 04/19/2019 1:33:38 PM

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 PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *N. Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
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**ANOKA COUNTY
HIGHWAY DEPT.**

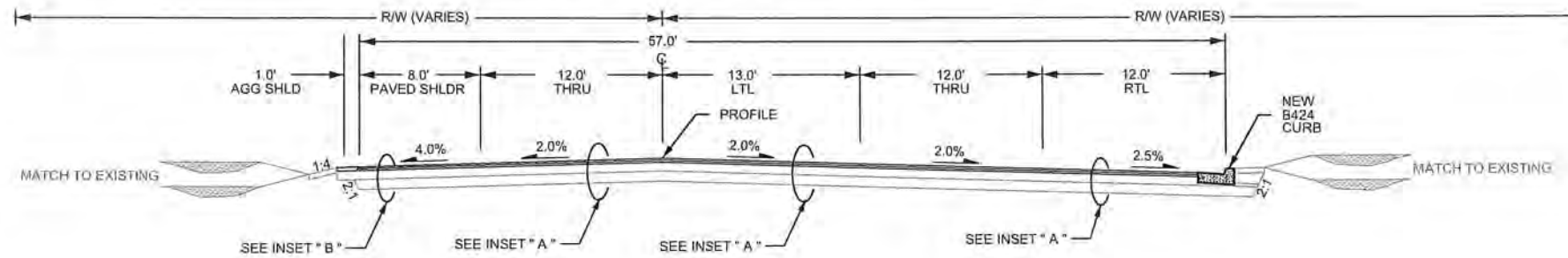
ANOKA COUNTY SAP 002-634-004

**PROPOSED
TYPICAL SECTIONS**

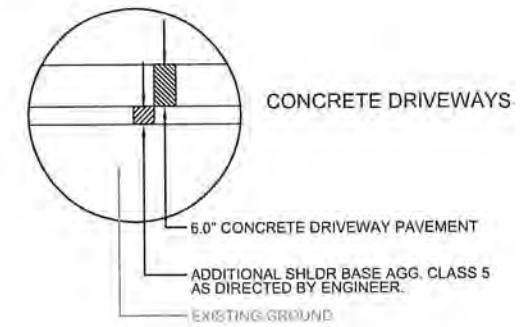
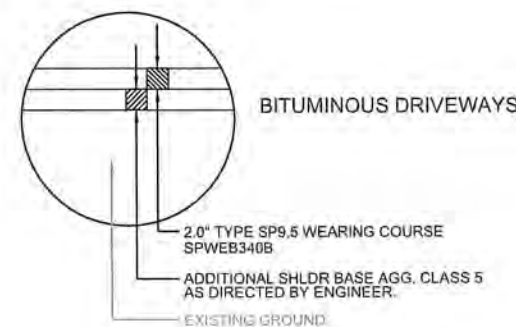
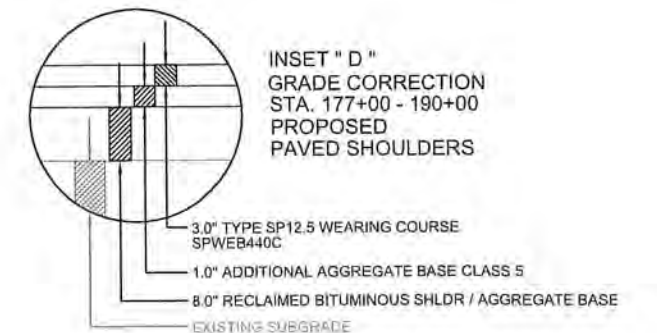
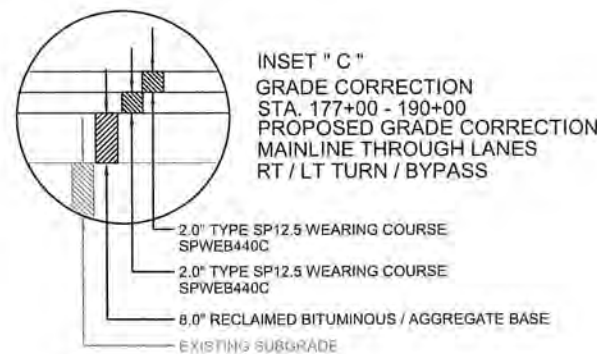
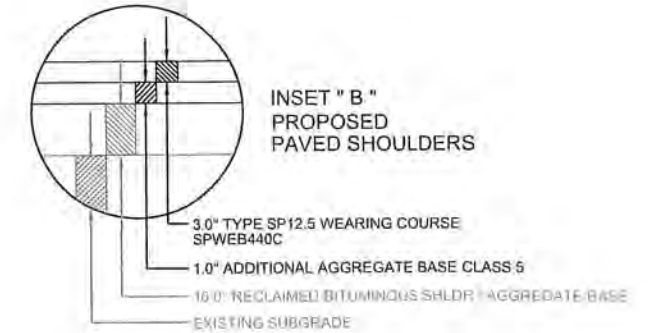
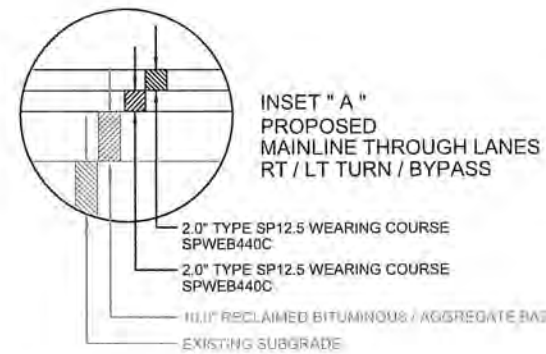
Sheet 17 of 103 Sheets

PROPOSED
C.S.A.H. 34 (BIRCH STREET) TYPICAL NEW CURB SECTION

NEW CURB
EB STA. 208+36 TO STA. 211+48



STREET APPROACH RAD. POINTS. // RAD. MEASURED TO E/M				
STREET	QUAD	RAD	STA. ALI 34 EB	OFFSET
BIRCH CT	SW	30	112+02.56	54.00
BIRCH CT	SE	25	112+88.74	49.00
OLD BIRCH	SW	30	117+06.10	54.00
OLD BIRCH	SE	30	117+87.92	52.00
E SHADOW LK CT	NW	25	137+11.34	-47.00
E SHADOW LK CT	NE	25	137+91.07	-49.00
WHITE BIRCH CT	NW	20	140+95.34	-44.00
WHITE BIRCH CT	NE	25	141+72.30	-49.00
RED BIRCH CT	NW	20	147+23.63	-40.00
RED BIRCH CT	NE	20	147+96.06	-44.00
BLACK DUCK DR N.	NW	30	153+84.80	-50.00
BLACK DUCK DR N.	NE	30	154+74.62	-54.00
BLACK DUCK DR S.	SW	30	153+85.20	54.00
BLACK DUCK DR S.	SE	30	154+75.28	54.00
PHEASANT RUN N.	NW	25	157+48.50	-49.00
PHEASANT RUN N.	NE	25	158+28.06	-49.00
PHEASANT RUN S.	SW	30	157+47.67	54.00
PHEASANT RUN S.	SE	30	158+37.92	50.00
WILD TURKEY TR	NW	30	166+73.36	-50.00
WILD TURKEY TR	NE	30	167+63.34	-54.00
12TH AVE	SW	30	172+53.79	54.00
12TH AVE	SE	30	173+42.13	50.00
WHITE OAK RD	SW	25	183+99.27	49.00
WHITE OAK RD	SE	30	184+84.13	50.00
JOYER LN	SW	35	192+54.68	59.00
JOYER LN	SE	30	193+49.48	50.00
TIMBERWOLF TR	NW	30	199+10.44	-50.00
TIMBERWOLF TR	NE	30	200+18.94	-54.00
GAAGE LN	SW	30	199+19.85	54.00
GAAGE LN	SE	30	200+09.20	50.00
PHEASANT HILLS DR N.	NW	30	212+88.87	-50.00
PHEASANT HILLS DR N.	NE	30	213+79.82	-54.00
PHEASANT HILLS DR S.	SW	30	212+92.65	67.00
PHEASANT HILLS DR S.	SE	30	213+82.81	63.00
SHERMAN LAKE RD N.	NW	30	220+04.19	-50.00
SHERMAN LAKE RD N.	NE	30	220+93.95	-54.00
SHERMAN LAKE RD S.	SW	30	220+04.75	67.00
SHERMAN LAKE RD S.	SE	30	220+94.61	63.00



1	4/19/2019	JCF	NJD	CHANGED DRIVEWAY CONCRETE TO 6.0"
2	4/19/2019	JCF	NJD	CHANGED TYP B & D TO 3.0" BIT AND 1.0 ADD AGG. ON SHOULDERS
NO	DATE	BY	CKD	APPR
REVISION				
NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_TYP.dgn 04/19/2019 1:33:41 PM				

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DRAWN BY: MP DATE: 03/26/19
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ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

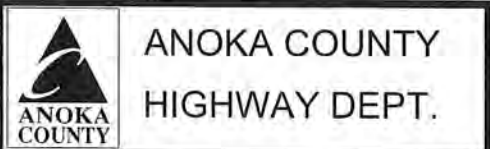
TYPICAL SECTIONS
INSETS

ALIGNMENT TABULATION

POINT NUMBER	POINT	STATION	CIRCULAR CURVE DATA					COORDINATES		AZIMUTH
			DELTA	DEGREE	RADIUS	TANGENT	LENGTH	E	N	
☉ C.S.A.H. 34 EASTBOUND <34P_1>										
1000	POT	110+00.000						542,085.8407	139,036.9660	
	PC	113+68.881						542,454.7217	139,036.8887	S 89° 59' 16.78" E
34P_11	PI	118+84.331	64° 22' 11.30" LT	6° 59' 44.96"	819.000'	515.450'	920.118'	542,970.1722	139,036.7808	PI
	CC							542,454.8933	139,855.8887	
	PT	122+88.999						543,193.2333	139,501.4666	N 25° 38' 31.92" E
	PC	127+05.751						543,373.5828	139,877.1747	N 25° 38' 31.92" E
34P_12	PI	132+39.400	64° 18' 13.47" RT	6° 44' 55.03"	849.000'	533.648'	952.843'	543,604.5190	140,358.2662	PI
	CC							544,138.9682	139,509.7701	
	PT	136+58.594						544,138.1672	140,358.7697	N 89° 56' 45.38" E
1001	POT	139+32.237						544,411.8095	140,359.0279	
1002	POT	145+44.471						545,024.0410	140,360.7720	
	PC	154+02.930						545,882.5003	140,361.8242	N 89° 55' 47.18" E
34P_13	PI	156+19.320	2° 09' 49.20" RT	0° 30' 00.02"	11,459.000'	216.389'	432.727'	546,098.8896	140,362.0894	PI
	CC							545,896.5454	128,902.8328	
	PT	158+35.658						546,315.1346	140,354.1849	S 87° 54' 23.62" E
	PC	162+10.720						546,689.9465	140,340.4841	S 87° 54' 23.62" E
34P_14	PI	164+25.492	2° 08' 51.00" LT	0° 30' 00.02"	11,459.000'	214.772'	429.494'	546,904.5754	140,332.6386	PI
	CC							547,108.5357	151,791.8362	
	PT	166+40.214						547,119.3476	140,332.8413	N 89° 56' 45.38" E
	PC	178+29.832						548,308.9643	140,333.9637	N 89° 56' 45.38" E
34P_15	PI	181+13.459	4° 15' 09.70" LT	0° 45' 00.15"	7,639.000'	283.627'	566.993'	548,592.5911	140,334.2313	PI
	CC							548,301.7567	147,972.9603	
	PT	183+96.825						548,875.4172	140,355.5307	N 85° 41' 35.68" E
	PC	184+82.132						548,960.4836	140,361.9369	N 85° 41' 35.68" E
34P_16	PI	186+11.467	3° 52' 41.81" RT	1° 29' 59.60"	3,820.000'	129.335'	258.571'	549,089.4533	140,371.6495	PI
	CC							549,247.3514	136,552.7235	
	PT	187+40.703						549,218.7847	140,372.6167	N 89° 34' 17.49" E
1003	POT	189+54.299						549,432.3740	140,374.2140	
1004	POT	203+67.300						550,845.3490	140,382.8890	
	PC	217+40.220						552,218.2433	140,391.2310	N 89° 39' 06.70" E
34P_17	PI	218+42.122	1° 01' 08.42" RT	0° 30' 00.02"	11,459.000'	101.902'	203.798'	552,320.1432	140,391.8502	PI
	CC							552,287.8697	128,932.4426	
	PT	219+44.018						552,422.0380	140,390.6571	S 89° 19' 44.88" E
1005	POT	225+87.657						553,065.6330	140,383.1210	
	PC	231+20.046						553,597.9920	140,377.5003	S 89° 23' 42.33" E
34P_18	PI	233+63.088	2° 25' 48.31" LT	0° 30' 00.02"	11,459.000'	243.042'	486.011'	553,841.0203	140,374.9344	PI
	CC							553,718.9696	151,835.8617	
	PT	236+06.057						554,083.9388	140,382.6753	N 88° 10' 29.35" E
	PC	237+38.881						554,216.6960	140,386.9058	N 88° 10' 29.35" E
34P_19	PI	238+70.274	2° 37' 37.93" RT	0° 59' 59.73"	5,730.000'	131.393'	262.740'	554,348.0222	140,391.0907	PI
	CC							554,399.1965	134,659.8129	
	PT	240+01.621						554,479.4023	140,389.2515	S 89° 11' 52.71" E
1006	POT	248+75.736						555,353.4315	140,377.0161	

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49946

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/09/19



ANOKA COUNTY SAP 002-634-004

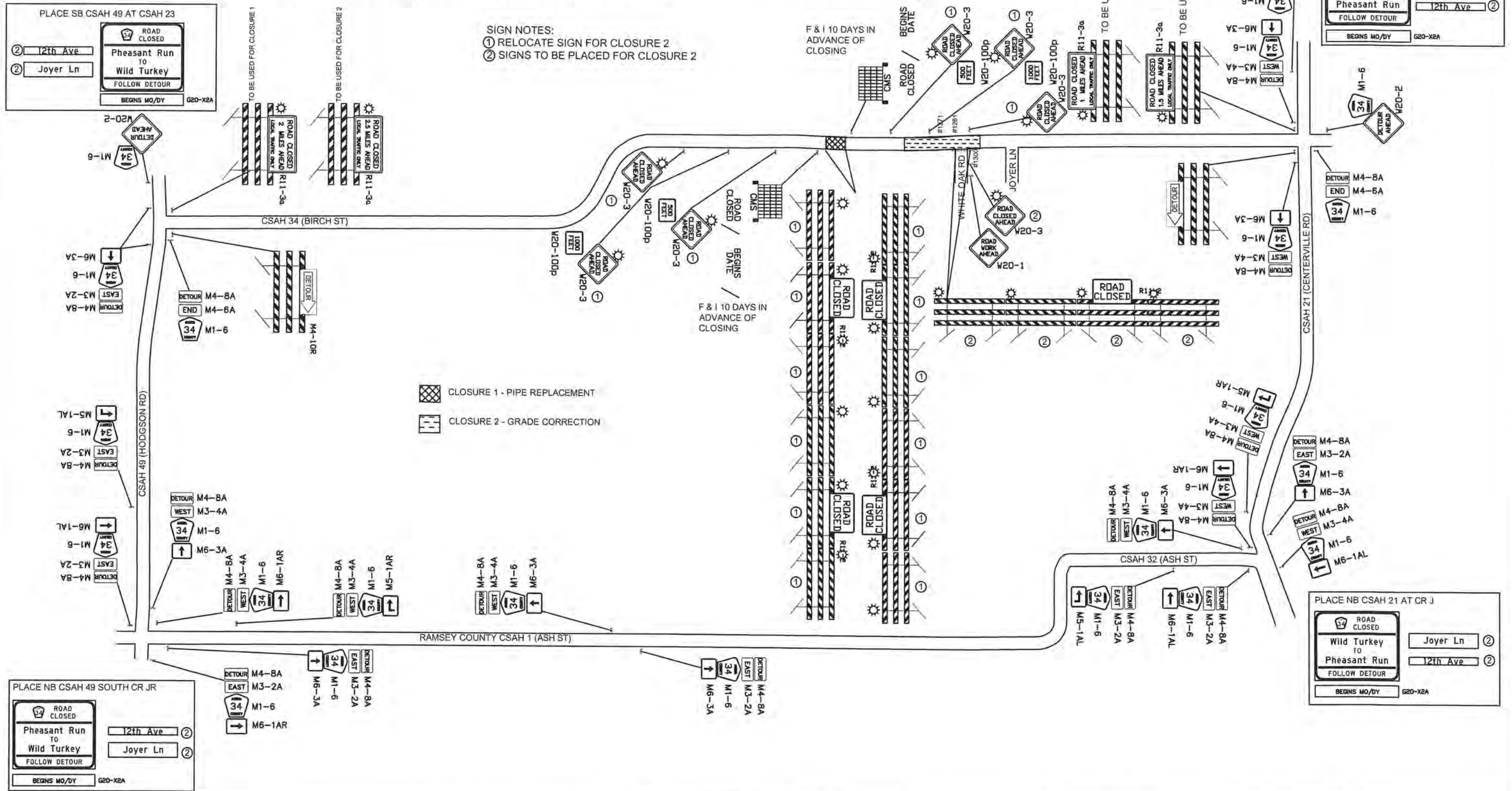
NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\00000000_AL1.dgn 04/09/2019 10:03:36 AM

TRAFFIC CONTROL NOTES:

- THE CONTRACTOR SHALL SUPPLY AND INSTALL THE PORTABLE CHANGEABLE MESSAGE SIGNS (CMS) A MINIMUM OF TEN DAYS PRIOR TO ACTUAL COMMENCEMENT OF ROAD CLOSURE, TO A LOCATION AS SPECIFIED BY THE ENGINEER. SIGNS TO BE REMOVED WHEN ROAD CLOSURE BEGINS. PAYMENT SHALL BE MADE AS PER ITEM 2563.613 PORTABLE CHANGEABLE MESSAGE SIGN BY THE UNIT/DAY.
- ADVANCE WARNING SIGNS SHALL BE SPACED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - FIELD MANUAL OF THE SAME MANUAL FOR EACH CLOSURE.
- CONSTRUCTION ACTIVITIES FOR CLOSURE 1 SHALL BE COMPLETE, BARRICADES REMOVED AND ROADWAY OPEN TO TRAFFIC PRIOR TO THE COMMENCEMENT OF CLOSURE 2.
- ACCESS SHALL BE MAINTAINED TO RESIDENTS AT #1271, #1281 AND #1300 AT ALL TIMES DURING CLOSURE 2.
- FOR THE RELOCATION OF ADVANCE WARNING SIGNS FOR CLOSURE 2, RELOCATION INCIDENTAL TO TRAFFIC CONTROL.

- SIGN NOTES:**
- ① RELOCATE SIGN FOR CLOSURE 2
 - ② SIGNS TO BE PLACED FOR CLOSURE 2



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH 34\Detour.dwg

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: DOUGLAS W. FISCHER

SIGNATURE: *[Signature]*

DATE: 4/21/19 LICENSE NO. 20235

DRAWN BY: TMV DATE: 03/28/19

DESIGN BY: _____ DATE: _____

CHECKED BY: _____ DATE: _____

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. **002-634-004**

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. _____

DETOUR

Sheet 20 of 103 Sheets

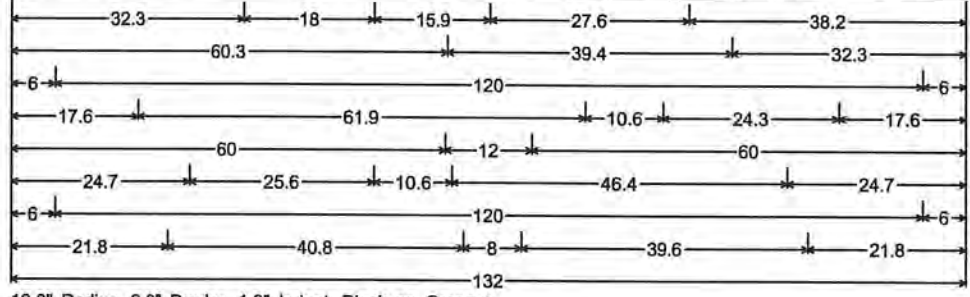
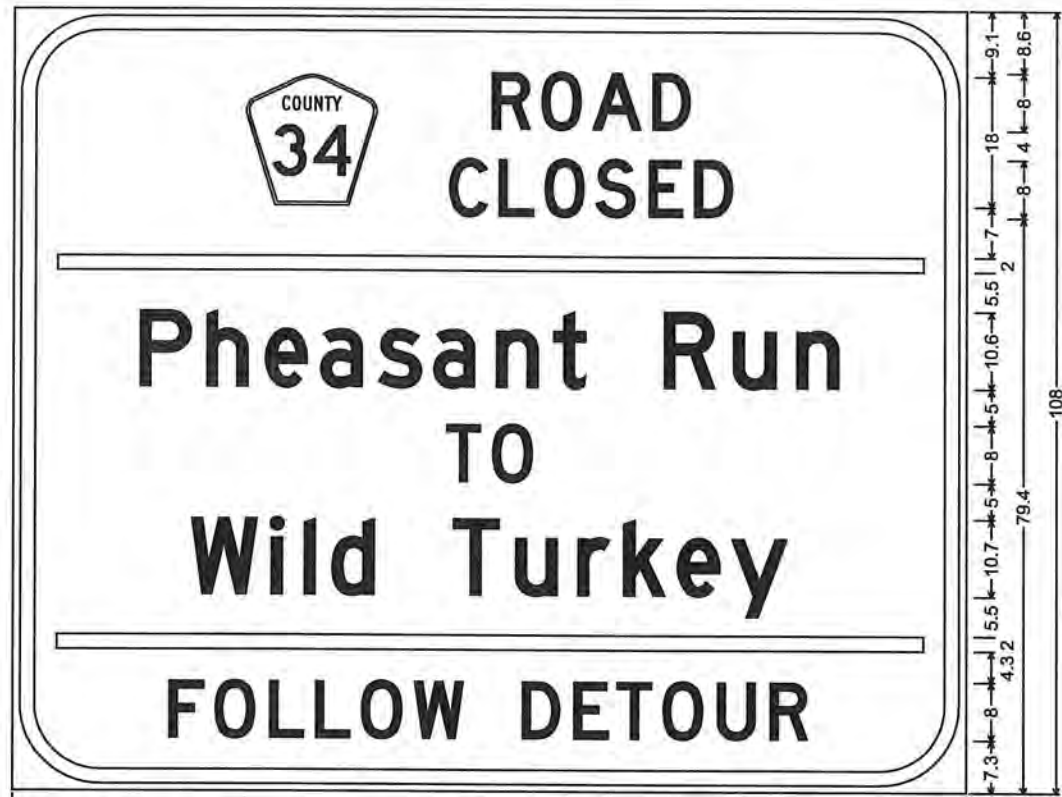
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M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY	M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY	M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY	M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY
W20-1	36" x 36"		1	R11-3a	60" x 30"		1	M4-8A	24" x 12"		10	G20-X2	132" x 108"		2
M1-6A	24" x 24"		3	TYPE III	8 FOOT			M3-4A	24" x 12"		10				2
W20-2	36" x 36"		3	FLASHER				M1-6A	24" x 24"		10				2
W20-3	36" x 36"		7	R11-3a	60" x 30"		1		21" X 15"		0				2
W20-100p	30" x 24"		2	TYPE III	8 FOOT						1	G20-X2A	114" x 20"		* 2
W20-100p	30" x 24"		2	FLASHER							2				2
M4-10R	48" x 18"			R11-3a	60" x 30"		3				2				2
TYPE III	8 FOOT		1	TYPE III	8 FOOT						5				
M4-10L	48" x 18"			R11-3a	60" x 30"		2	M4-8A	24" x 12"		9				
TYPE III	8 FOOT		1	TYPE III	8 FOOT			M3-4A	24" x 12"		9				
R11-3a	60" x 30"		1	FLASHER				M1-6A	24" x 24"		9				
TYPE III	8 FOOT			TYPE III	8 FOOT		5		21" X 15"		2				
FLASHER				FLASHER							2				
R11-3a	60" x 30"		1	TYPE III	8 FOOT						0				
TYPE III	8 FOOT			TYPE III	8 FOOT		6				1				
FLASHER				FLASHER							4				
								M4-6A	24" x 12"		2				
								M4-8A	24" x 12"		2				
								M1-6A	24" x 24"		2				
											2				
											(2 @ 10 = 20 UDAY)				

* SIGNS TO BE INSTALLED A MINIMUM OF TEN DAYS PRIOR TO ACTUAL CLOSING DATE OF ROAD CLOSURE AND IMPLEMENTATION OF DETOUR SIGNING. SIGNS TO BE REMOVED AT TIME OF DETOUR INSTALLATION. THESE SIGNS ARE INCIDENTAL TO DETOUR PAY ITEM.

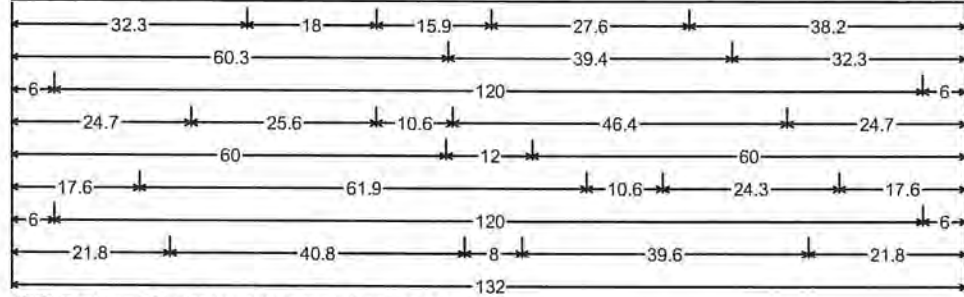
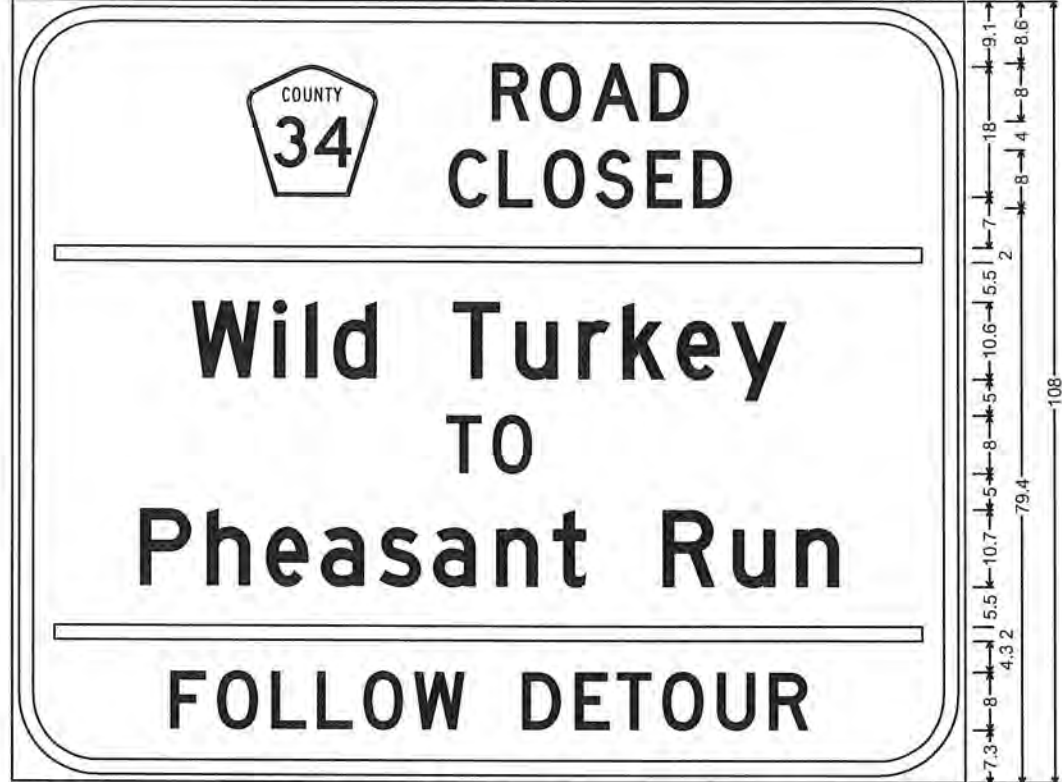
NOTES:

- 1) ALL BARRICADES SHALL BE PROPERLY WEIGHTED WITH SANDBAGS.
- 2) ALL BARRICADES SHALL HAVE REFLECTIVE MATERIAL ON BOTH SIDES.
- 3) ALL BARRICADE MARKINGS SHALL BE SLANTED IN ACCORDANCE WITH THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES INCLUDING THE FIELD MANUAL DATED JANUARY, 1998
- 4) ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL DATED JANUARY, 1998
- 5) ADDITIONS OR CHANGES TO THIS PLAN MAY BE MADE AS DETERMINED BY THE ENGINEER.

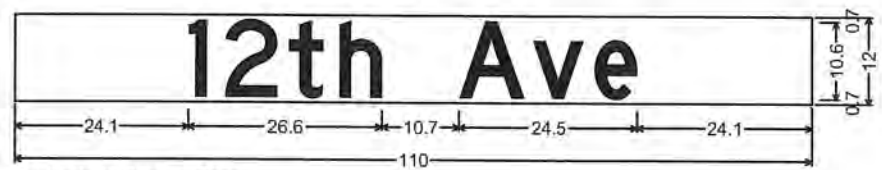
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: DOUGLAS W. FISCHER SIGNATURE: DATE: 4/22/19 LICENSE NO. 20235					DRAWN BY: TMY DATE: 03/28/19 DESIGN BY: DATE: _____ CHECKED BY: DATE: _____		 ANOKA COUNTY HIGHWAY DEPT.		STATE PROJECT NO. _____ STATE AID PROJECT NO. 002-634-004 STATE AID PROJECT NO. _____ COUNTY PROJECT NO. _____		DETOUR Sheet <u>21</u> of <u>103</u> Sheets	
NO	DATE	BY	CKD	APPR	REVISION							
NAME: P:\19-01-00\CSAH 34\Detour.dwg												



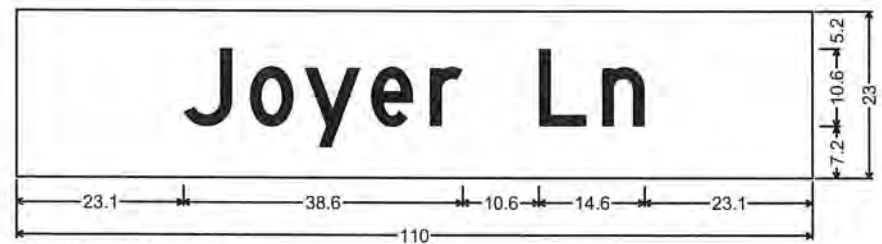
12.0" Radius, 2.0" Border, 1.0" Indent, Black on Orange;
 Pentagonal County 34 M1-6a; [ROAD] D; [CLOSED] D; [Pheasant Run] D; [TO] D; [Wild Turkey] D;
 [FOLLOW] D; [DETOUR] D;



12.0" Radius, 2.0" Border, 1.0" Indent, Black on Orange;
 Pentagonal County 34 M1-6a; [ROAD] D; [CLOSED] D; [Wild Turkey] D; [TO] D; [Pheasant Run] D;
 [FOLLOW] D; [DETOUR] D;




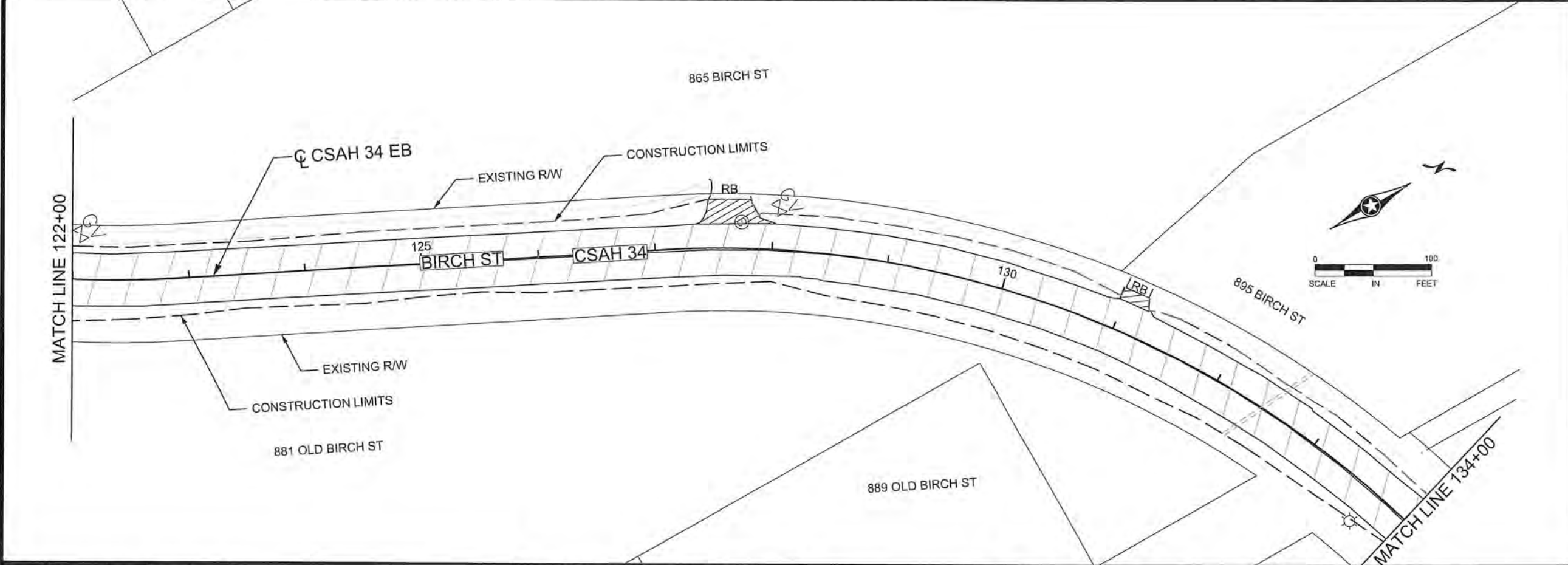
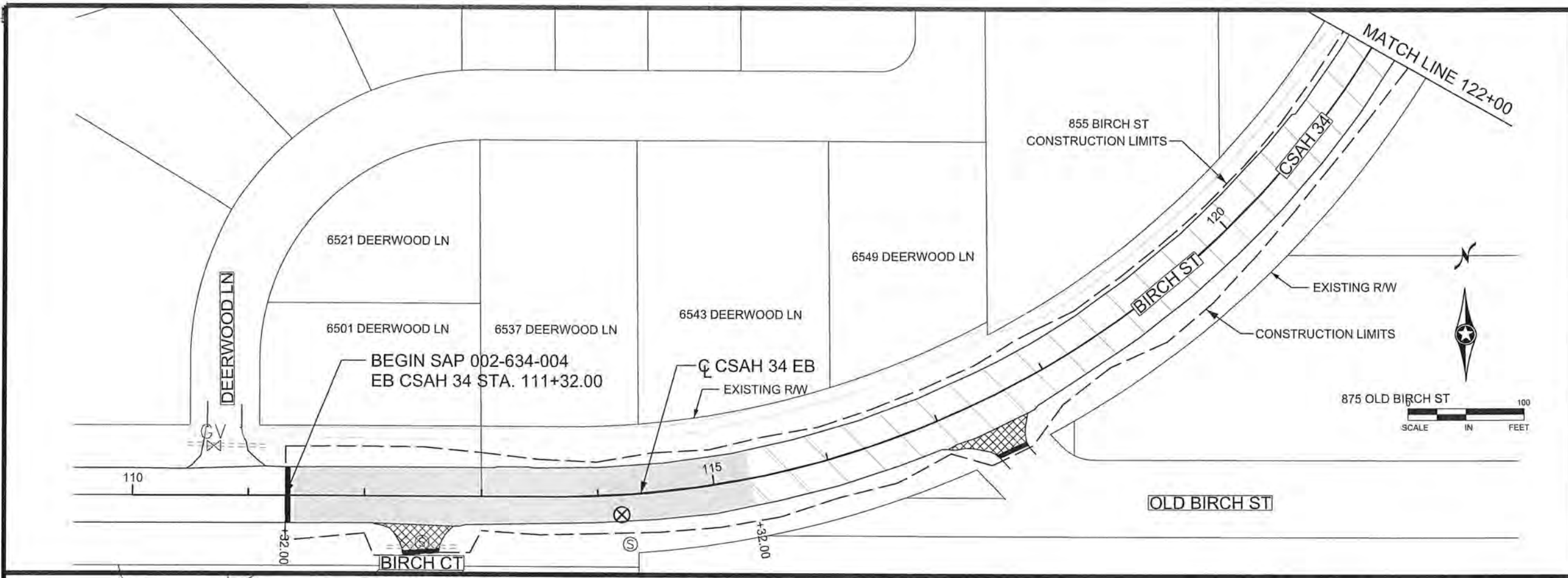
No border, White on Orange;
 [12th Ave] Black D;



No border, White on Orange;
 [Joyer Ln] Black D;

ALL SIGN DIMENSIONS
 ARE IN INCHES

					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.		DRAWN BY <u>TMV</u> DATE <u>03/28/15</u>		 ANOKA COUNTY HIGHWAY DEPT.	STATE PROJECT NO. _____		DETOUR
					PRINT NAME: <u>DOUGLAS W. FISCHER</u>		DESIGN BY _____ DATE _____			STATE AID PROJECT NO. <u>002-634-004</u>		
					SIGNATURE: <u>[Signature]</u>		CHECKED BY _____ DATE _____		STATE AID PROJECT NO. _____			
					DATE: <u>4/22/15</u> LICENSE NO. <u>20235</u>				COUNTY PROJECT NO. _____			
NO	DATE	BY	CKD	APPR	REVISION							
NAME: P:\19-01-00\CSAH 34\Detour.dwg												



LEGEND

- FULL DEPTH RECLAIM
- REMOVE RECLAIM MATERIAL 400' TRANSITION TO MATCH EXISTING BITUMINOUS - SEE PLAN & PROFILE
- EXISTING STREET APPROACH REMAINS INPLACE AND IS OVERLAYED
- RB REMOVE BITUMINOUS DRIVEWAY / BIT TRAIL
- RC REMOVE CONCRETE DRIVEWAY
- REMOVE / REPLACE PEDESTRIAN RAMP
- MILL JOINT
- EXISTING CULVERT REMAINS IN PLACE
- CULVERT REPLACEMENT (QTY 2) STA. 164+75

NOTE: POSSIBLE PERF. PIPE BELOW E/M APPROX. STA. 111+32 TO 137+00 BOTH SIDES OF ROAD USE CAUTION DURING RECLAIM

SYMBOLS:

- ROAD CORE
- CATCH BASIN
- MANHOLE
- GATE VALVE
- HYDRANT
- POWER POLE
- LIGHT POLE
- UTILITY BOX

EXISTING ROAD CORES
BIT. AND AGG. BASE DEPTHS ARE APPROXIMATE CONTRACTOR TO FIELD VERIFY

NUM.	STA.	LOC.	DES.	BIT.	GR.
CORE #1	114+10	18' RT	RTL	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO THE DEPTHS OF THE ROAD CORES. CORES ARE INCLUDED FOR INFO ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY PAVEMENT AND AGGREGATE DEPTHS.

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_RM1_P1.dgn 04/19/2019 1:32:26 PM

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49046

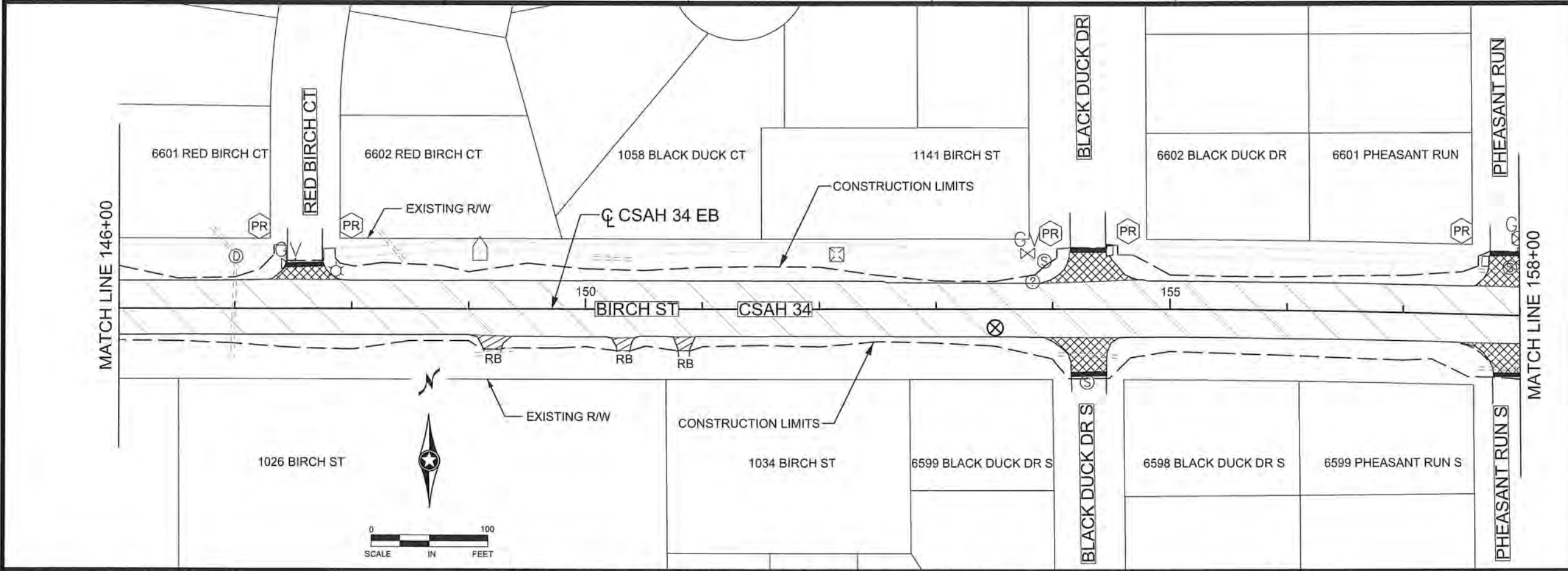
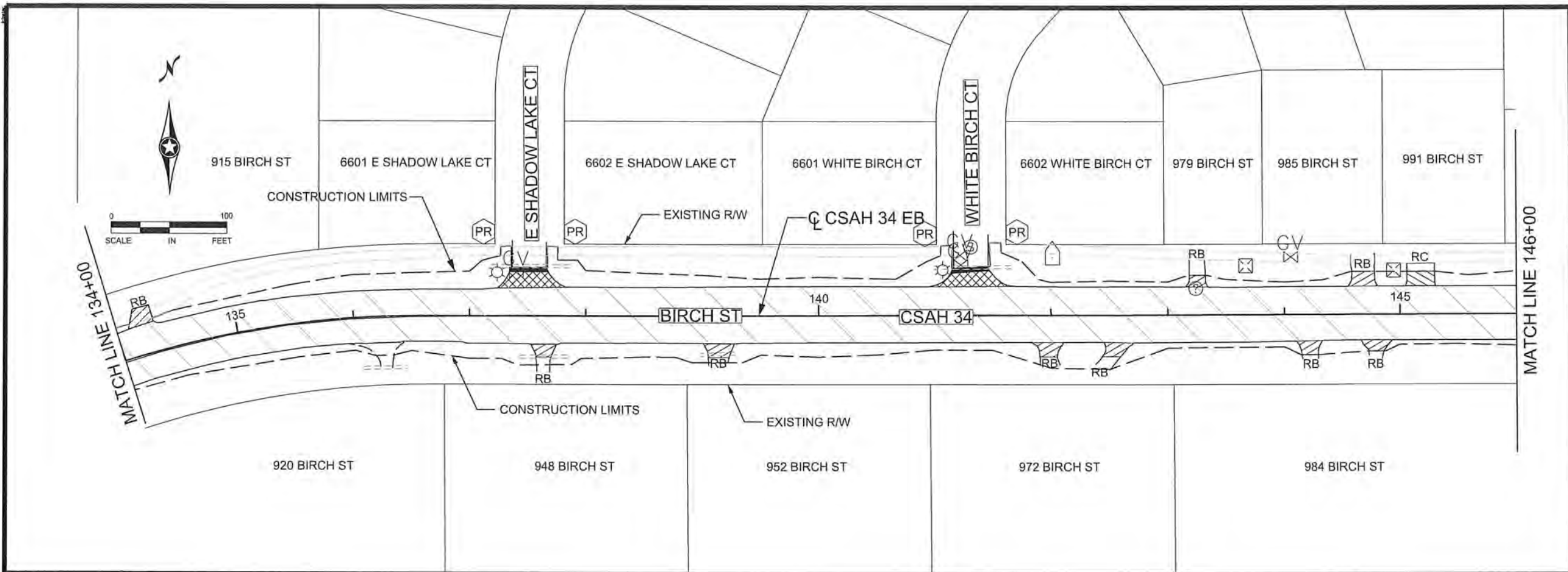
DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

REMOVAL PLAN
 STA 111+32.00 TO 134+00.00
 Sheet 23 of 103 Sheets



LEGEND

- FULL DEPTH RECLAIM
- REMOVE RECLAIM MATERIAL 400' TRANSITION TO MATCH EXISTING BITUMINOUS - SEE PLAN & PROFILE
- EXISTING STREET APPROACH REMAINS INPLACE AND IS OVERLAYED
- REMOVE BITUMINOUS DRIVEWAY / BIT TRAIL
- REMOVE CONCRETE DRIVEWAY
- REMOVE / REPLACE PEDESTRIAN RAMP
- MILL JOINT
- EXISTING CULVERT REMAINS IN PLACE
- CULVERT REPLACEMENT (QTY 2) STA. 164+75

NOTE: POSSIBLE PERF. PIPE BELOW E/M APPROX. STA. 111+32 TO 137+00 BOTH SIDES OF ROAD USE CAUTION DURING RECLAIM

SYMBOLS:

- ROAD CORE
- CATCH BASIN
- MANHOLE
- GATE VALVE
- HYDRANT
- POWER POLE
- LIGHT POLE
- UTILITY BOX

EXISTING ROAD CORES
BIT. AND AGG. BASE DEPTHS ARE APPROXIMATE CONTRACTOR TO FIELD VERIFY

NUM.	STA.	LOC.	DES.	BIT.	GR.
CORE #1	114+10	18' RT	RTL	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO THE DEPTHS OF THE ROAD CORES. CORES ARE INCLUDED FOR INFO ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY PAVEMENT AND AGGREGATE DEPTHS.

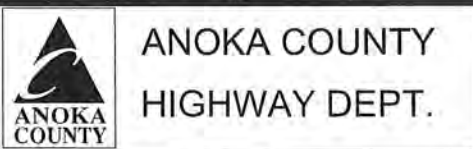
NO	DATE	BY	CKD	APPR	REVISION

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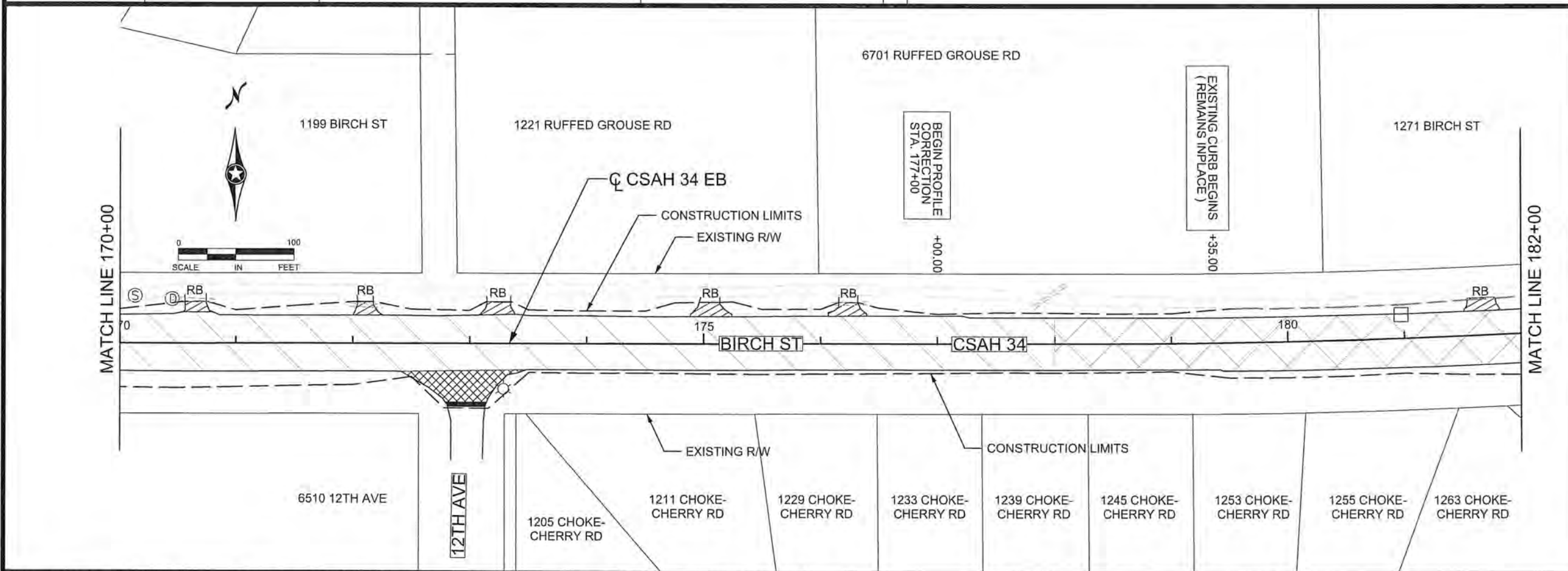
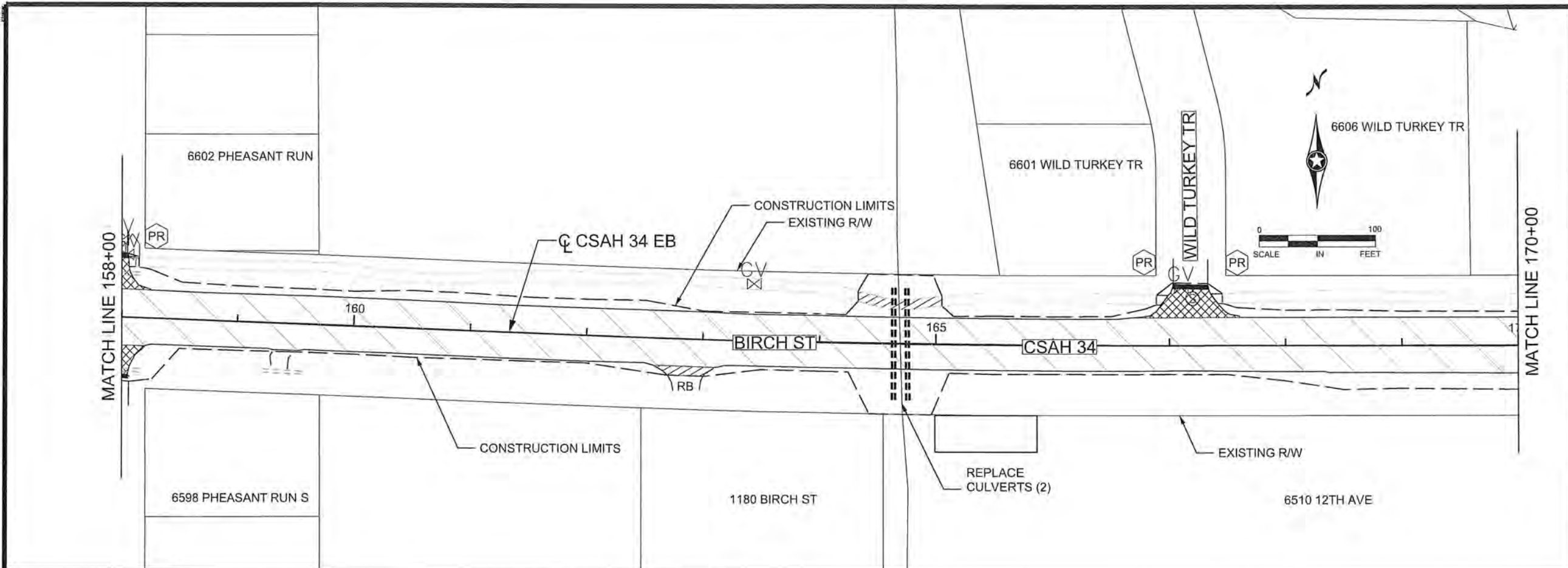
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: NICHOLAS DOBDA
SIGNATURE: *N. Dobda*
DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
DESIGN BY: MP DATE: 03/26/19
CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004



LEGEND

- FULL DEPTH RECLAIM
- REMOVE RECLAIM MATERIAL 400' TRANSITION TO MATCH EXISTING BITUMINOUS - SEE PLAN & PROFILE
- EXISTING STREET APPROACH REMAINS INPLACE AND IS OVERLAYED
- REMOVE BITUMINOUS DRIVEWAY / BIT TRAIL
- REMOVE CONCRETE DRIVEWAY
- REMOVE / REPLACE PEDESTRIAN RAMP
- MILL JOINT
- EXISTING CULVERT REMAINS IN PLACE
- CULVERT REPLACEMENT (QTY 2) STA. 164+75

NOTE: POSSIBLE PERF. PIPE BELOW E/M APPROX. STA. 111+32 TO 137+00 BOTH SIDES OF ROAD USE CAUTION DURING RECLAIM

SYMBOLS:

- ROAD CORE
- CATCH BASIN
- MANHOLE
- GATE VALVE
- HYDRANT
- POWER POLE
- LIGHT POLE
- UTILITY BOX

NOTE: SUBGRADE PROFILE CORRECTION STA. 177+00 - STA 190+00 SEE "PLAN AND PROFILE". RECLAIMED MATERIAL AND EXISTING CL-5 TO BE PICKED UP SO AS TO EXPOSE SUBGRADE. SUBGRADE TO BE BLUETOPPED, CUT TO GRADE AND COMPACTED. CL-5 ADDED AND COMPACTED TO MEET PROPOSED BITUMINOUS PROFILE.

EXISTING ROAD CORES
BIT. AND AGG. BASE DEPTHS ARE APPROXIMATE CONTRACTOR TO FIELD VERIFY

NUM.	STA.	LOC.	DES.	BIT.	GR.
CORE #1	114+10	16' RT	RTL	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO THE DEPTHS OF THE ROAD CORES. CORES ARE INCLUDED FOR INFO ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY PAVEMENT AND AGGREGATE DEPTHS.

1	4/19/2019	JCF	NJD	ADDED HATCH TO GRADE CORRECTION AREA
NO	DATE	BY	CKD	APPR
NAME: P:119-01-00/CSAH_34_(CSAH49-CSAH21)Plan/0000000000_RM1_P3.dgn	04/19/2019			1:32:32 PM

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: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49046

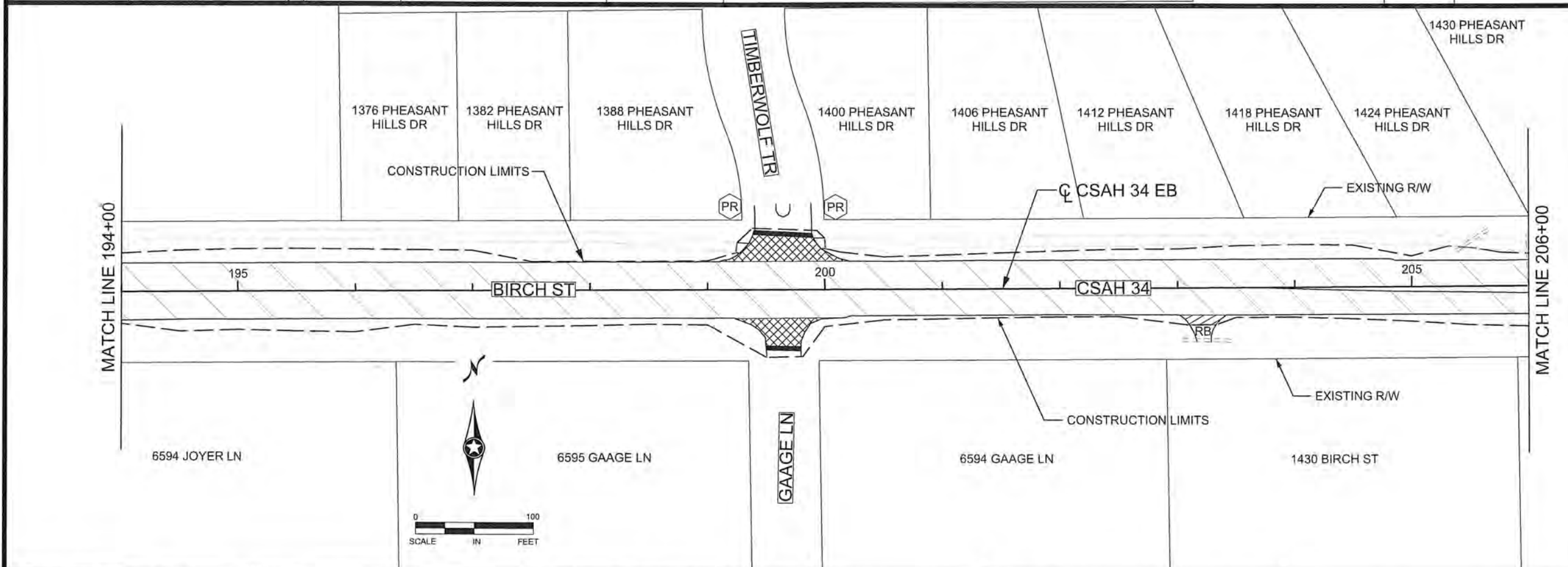
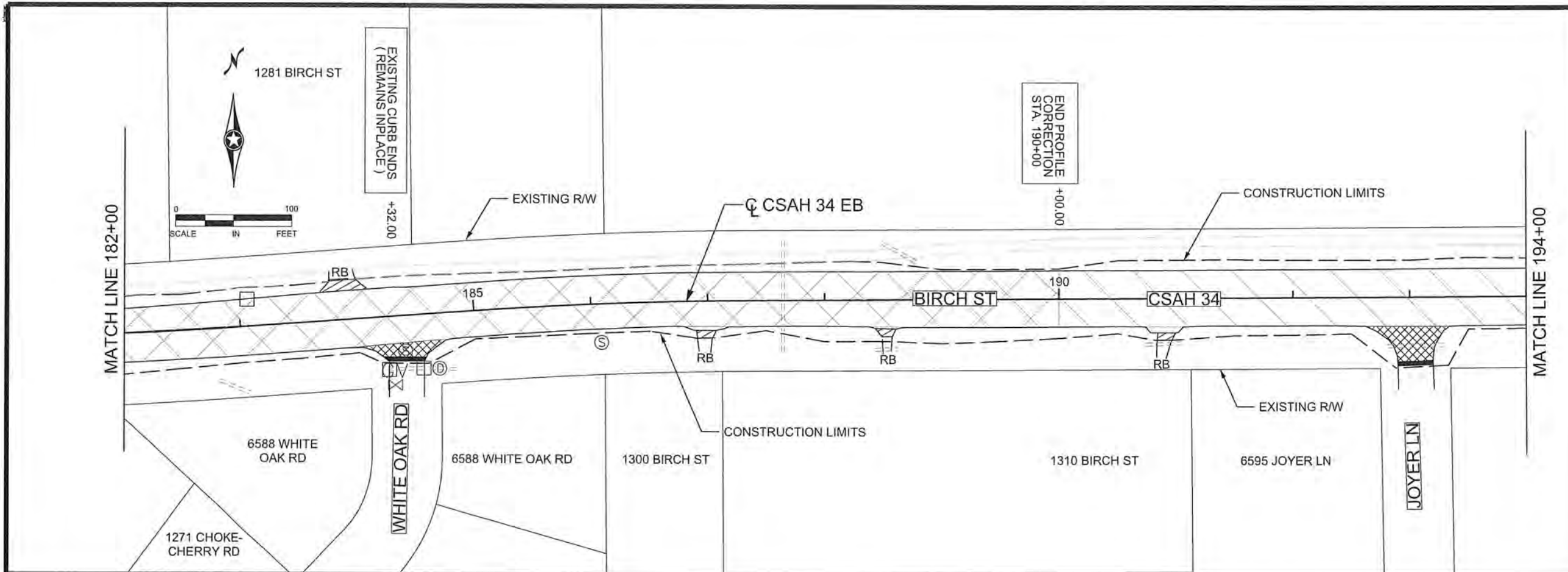
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 CHECKED BY: JEO DATE: 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

REMOVAL PLAN
 STA 158+00 TO 182+00
 Sheet 25 of 103 Sheets



LEGEND

- FULL DEPTH RECLAIM
- REMOVE RECLAIM MATERIAL 400' TRANSITION TO MATCH EXISTING BITUMINOUS - SEE PLAN & PROFILE
- EXISTING STREET APPROACH REMAINS INPLACE AND IS OVERLAYED
- REMOVE BITUMINOUS DRIVEWAY / BIT TRAIL
- REMOVE CONCRETE DRIVEWAY
- REMOVE / REPLACE PEDESTRIAN RAMP
- MILL JOINT
- EXISTING CULVERT REMAINS IN PLACE
- CULVERT REPLACEMENT (QTY 2) STA. 164+75

NOTE: POSSIBLE PERF. PIPE BELOW E/M APPROX. STA. 111+32 TO 137+00 BOTH SIDES OF ROAD USE CAUTION DURING RECLAIM

SYMBOLS:

- ROAD CORE
- CATCH BASIN
- MANHOLE
- GATE VALVE
- HYDRANT
- POWER POLE
- LIGHT POLE
- UTILITY BOX

NOTE: SUBGRADE PROFILE CORRECTION STA. 177+00 - STA 190+00 SEE "PLAN AND PROFILE".
 RECLAIMED MATERIAL AND EXISTING CL-5 TO BE PICKED UP SO AS TO EXPOSE SUBGRADE. SUBGRADE TO BE BLUETOPPED, CUT TO GRADE AND COMPACTED. CL-5 ADDED AND COMPACTED TO MEET PROPOSED BITUMINOUS PROFILE.

EXISTING ROAD CORES
 BIT. AND AGG. BASE DEPTHS ARE APPROXIMATE
 CONTRACTOR TO FIELD VERIFY

NUM.	STA.	LOC.	DES.	BIT.	GR.
CORE #1	114+10	18' RT	RTL.	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO THE DEPTHS OF THE ROAD CORES. CORES ARE INCLUDED FOR INFO ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY PAVEMENT AND AGGREGATE DEPTHS.

1	4/19/2019	JCF	NJD	ADDED HATCH TO GRADE CORRECTION AREA
NO	DATE	BY	CKD	APPR
				REVISION
NAME: P:\19-01-00\CSAH_34 (CSAH49-CSAH21)\Plan\0000000000_RM1_P4.dgn				DATE: 04/19/2019 1:32:35 PM

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: NICHOLAS DOBDA
 SIGNATURE: *Nicholas Dobda*
 DATE: 4/22/19 LICENSE NO. 49045

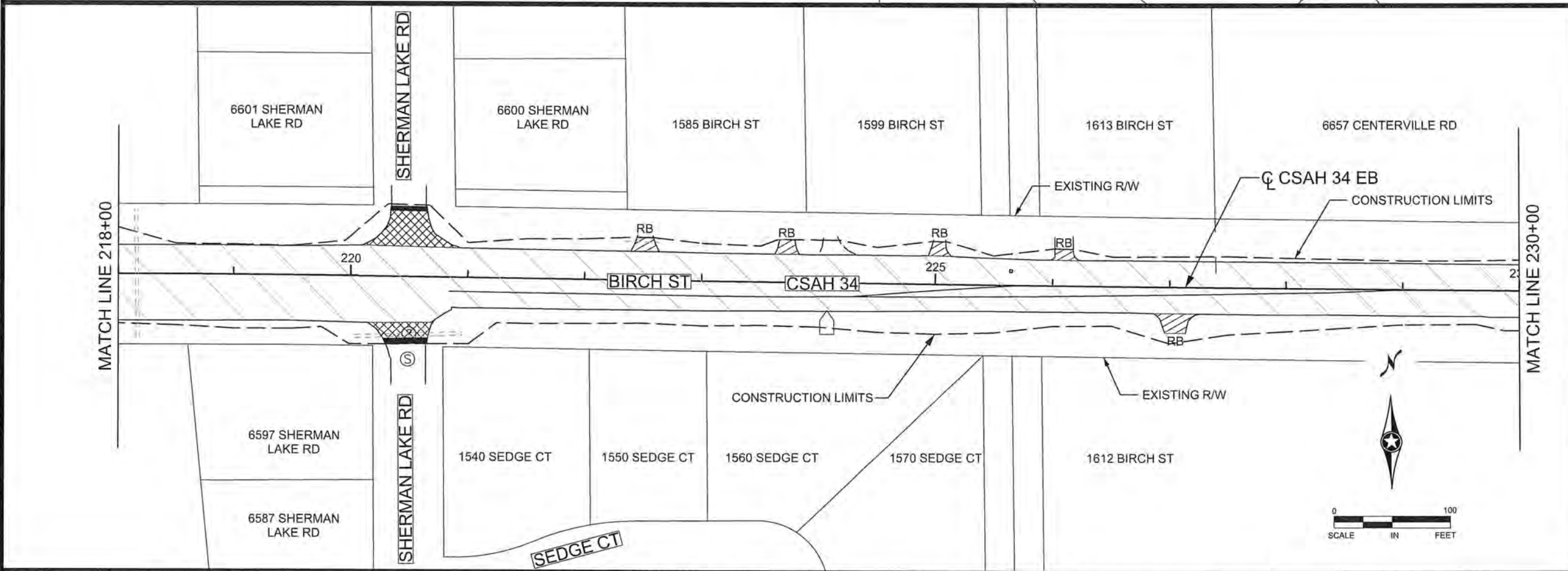
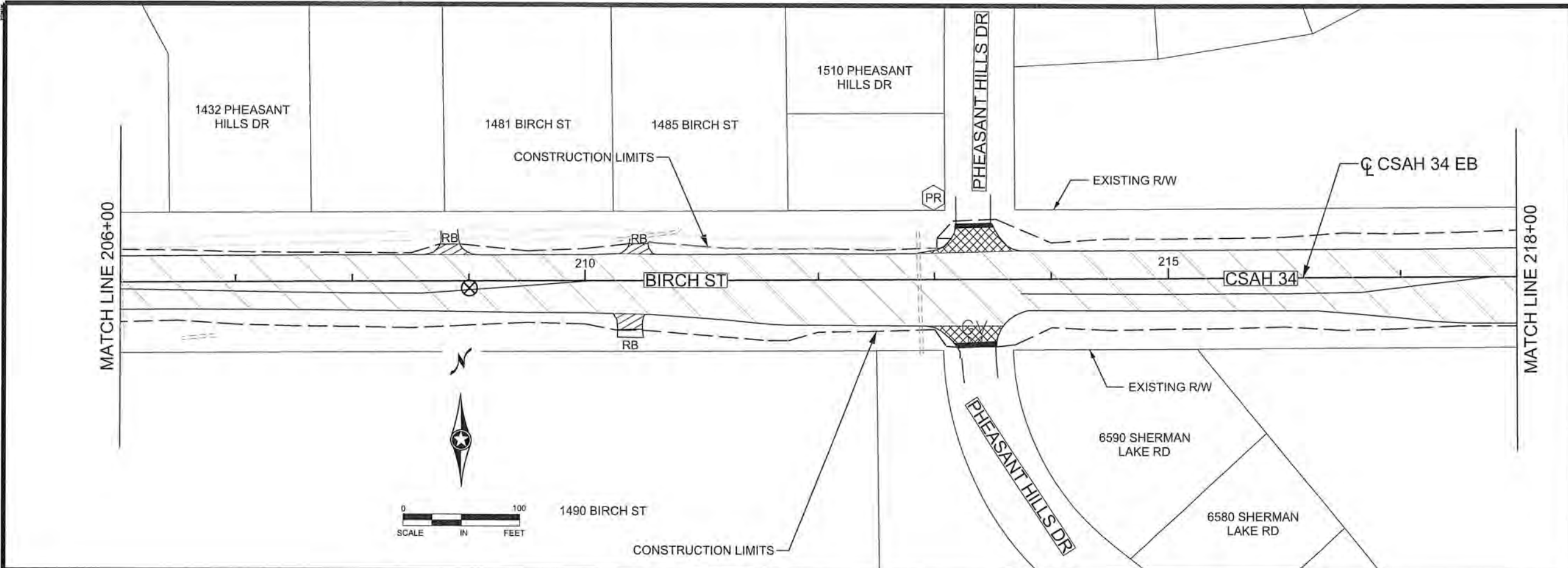
DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



**ANOKA COUNTY
 HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

REMOVAL PLAN
 STA 182+00 TO 206+00
 Sheet 26 of 103 Sheets



LEGEND

- FULL DEPTH RECLAIM
- REMOVE RECLAIM MATERIAL 400' TRANSITION TO MATCH EXISTING BITUMINOUS - SEE PLAN & PROFILE
- EXISTING STREET APPROACH REMAINS INPLACE AND IS OVERLAYED
- REMOVE BITUMINOUS DRIVEWAY / BIT TRAIL
- REMOVE CONCRETE DRIVEWAY
- REMOVE / REPLACE PEDESTRIAN RAMP
- MILL JOINT
- EXISTING CULVERT REMAINS IN PLACE
- CULVERT REPLACEMENT (QTY 2) STA. 164+75

NOTE: POSSIBLE PERF. PIPE BELOW E/M APPROX. STA. 111+32 TO 137+00 BOTH SIDES OF ROAD USE CAUTION DURING RECLAIM

SYMBOLS:

- ROAD CORE
- CATCH BASIN
- MANHOLE
- GATE VALVE
- HYDRANT
- POWER POLE
- LIGHT POLE
- UTILITY BOX

EXISTING ROAD CORES
BIT. AND AGG. BASE DEPTHS ARE APPROXIMATE CONTRACTOR TO FIELD VERIFY

NUM.	STA.	LOC.	DES.	BIT.	GR.
CORE #1	114+10	18' RT	RTL	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO THE DEPTHS OF THE ROAD CORES. CORES ARE INCLUDED FOR INFO ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY PAVEMENT AND AGGREGATE DEPTHS.

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_RM1_P5.dgn 04/19/2019 1:32:39 PM

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: NICHOLAS DOBDA
SIGNATURE: *[Signature]*
DATE: 4/22/19 LICENSE NO. 49046

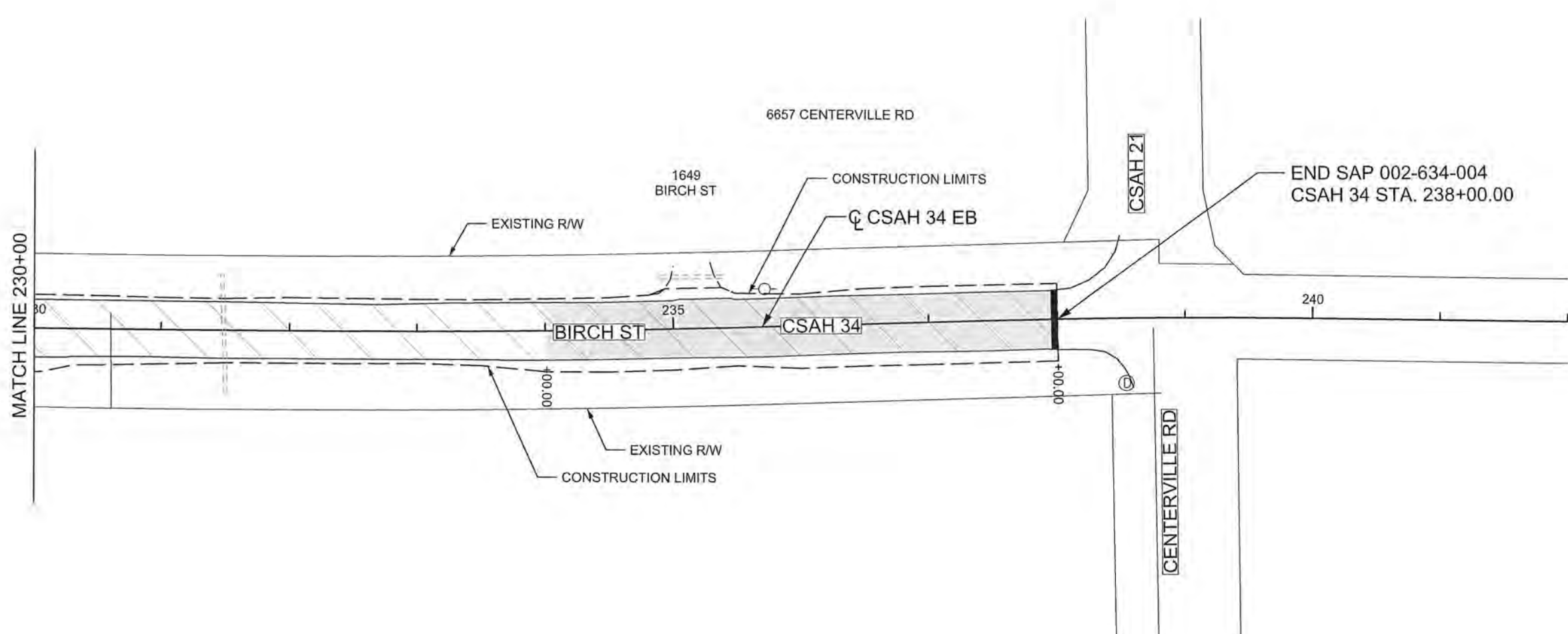
DRAWN BY: MP DATE: 03/26/19
DESIGN BY: MP DATE: 03/26/19
CHECKED BY: JEO DATE: 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

REMOVAL PLAN
STA 206+00 TO 230+00
Sheet 27 of 103 Sheets



LEGEND

	FULL DEPTH RECLAIM
	REMOVE RECLAIM MATERIAL 400' TRANSITION TO MATCH EXISTING BITUMINOUS - SEE PLAN & PROFILE
	EXISTING STREET APPROACH REMAINS INPLACE AND IS OVERLAYED
	REMOVE BITUMINOUS DRIVEWAY / BIT TRAIL
	REMOVE CONCRETE DRIVEWAY
	REMOVE / REPLACE PEDESTRIAN RAMP
	MILL JOINT
	EXISTING CULVERT REMAINS IN PLACE
	CULVERT REPLACEMENT (QTY 2) STA. 164+75

NOTE: POSSIBLE PERF. PIPE BELOW E/M
APPROX. STA. 111+32 TO 137+00
BOTH SIDES OF ROAD
USE CAUTION DURING RECLAIM

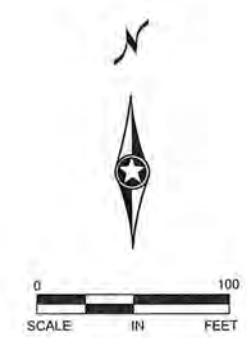
SYMBOLS:

	ROAD CORE
	CATCH BASIN
	MANHOLE
	GATE VALVE
	HYDRANT
	POWER POLE
	LIGHT POLE
	UTILITY BOX

EXISTING ROAD CORES
BIT. AND AGG. BASE DEPTHS ARE APPROXIMATE
CONTRACTOR TO FIELD VERIFY

NUM.	STA.	LOC.	DES.	BIT.	GR.
CORE #1	114+10	18' RT	RTL	4.0"	6.0"
CORE #2	153+50	11' RT	THROUGH LANE	4.5"	6.0"
CORE #3	209+00	5.0' RT	PAINTED MED.	8.0"	6.0"

ANOKA COUNTY MAKES NO WARRANTY TO
THE DEPTHS OF THE ROAD CORES. CORES
ARE INCLUDED FOR INFO ONLY. IT IS THE
RESPONSIBILITY OF THE CONTRACTOR TO
VERIFY PAVEMENT AND AGGREGATE DEPTHS.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\000000000_RM1_P6.dgn 04/19/2019 1:32:42 PM

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: NICHOLAS DOBDA

SIGNATURE: *Nicholas Dobda*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



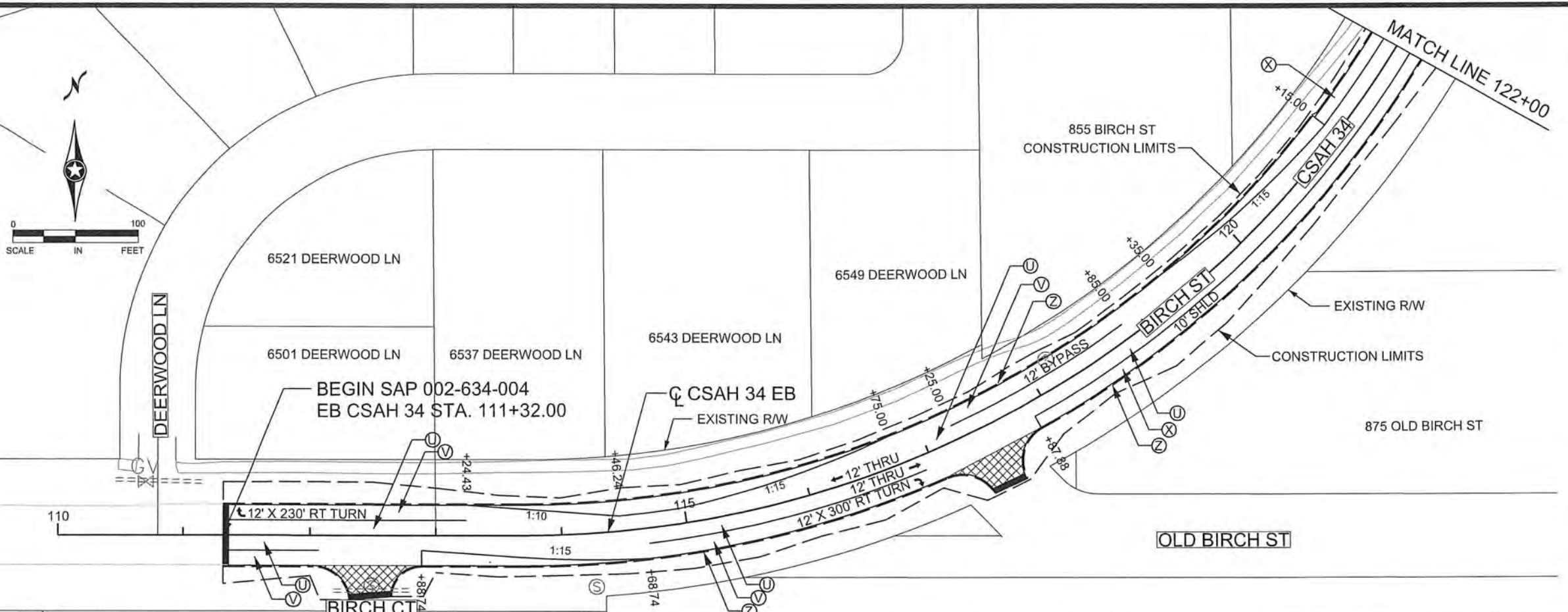
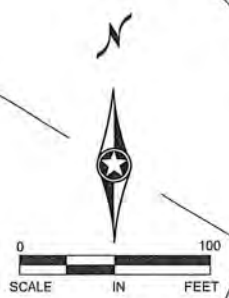
**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

REMOVAL PLAN

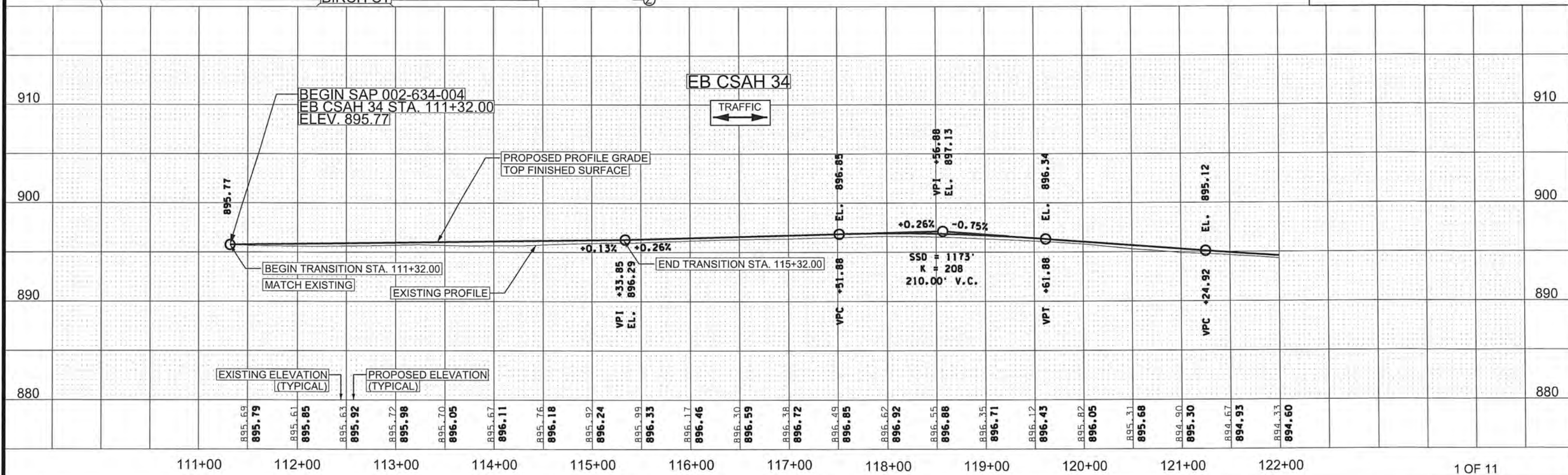
STA 230+00 TO END

Sheet 28 of 103 Sheets



CONSTRUCTION LEGEND	
Ⓚ	12.0' PAVED THROUGH LANE
Ⓛ	12.0' PAVED RT TURN / BYPASS LANE
Ⓜ	13.0' PAVED LT TURN LANE
Ⓧ	10.0' PAVED SHOULDER
Ⓨ	8.0' PAVED SHOULDER
Ⓩ	1.0' AGGREGATE SHOULDER
Ⓛ	BITUMINOUS ENTRANCE
ⓐ	CONCRETE ENTRANCE
ⓓ	CONC. CURB & GUTTER DESIGN B424
ⓖ	GRAVEL ENTRANCE
ⓓ	CONCRETE PEDESTRIAN RAMP
ⓍⓍⓍ	OVERLAY STREET APPROACH
—	MILL JOINT
----	CULVERT REPLACEMENT (QTY 2) STA. 164+75
=====	EXISTING CULVERT REMAINS INPLACE
SYMBOLS:	
□	CATCH BASIN
Ⓢ	MANHOLE
ⓐ	GATE VALVE
Ⓜ	HYDRANT
Ⓛ	POWER POLE
Ⓛ	LIGHT POLE
Ⓧ	UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



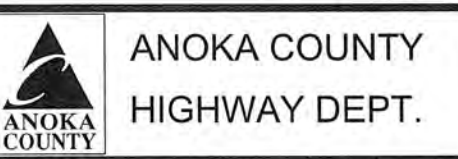
NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\00000000_PP1_P1.dgn 04/19/2019 1:31:42 PM

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: NICHOLAS DORDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49046

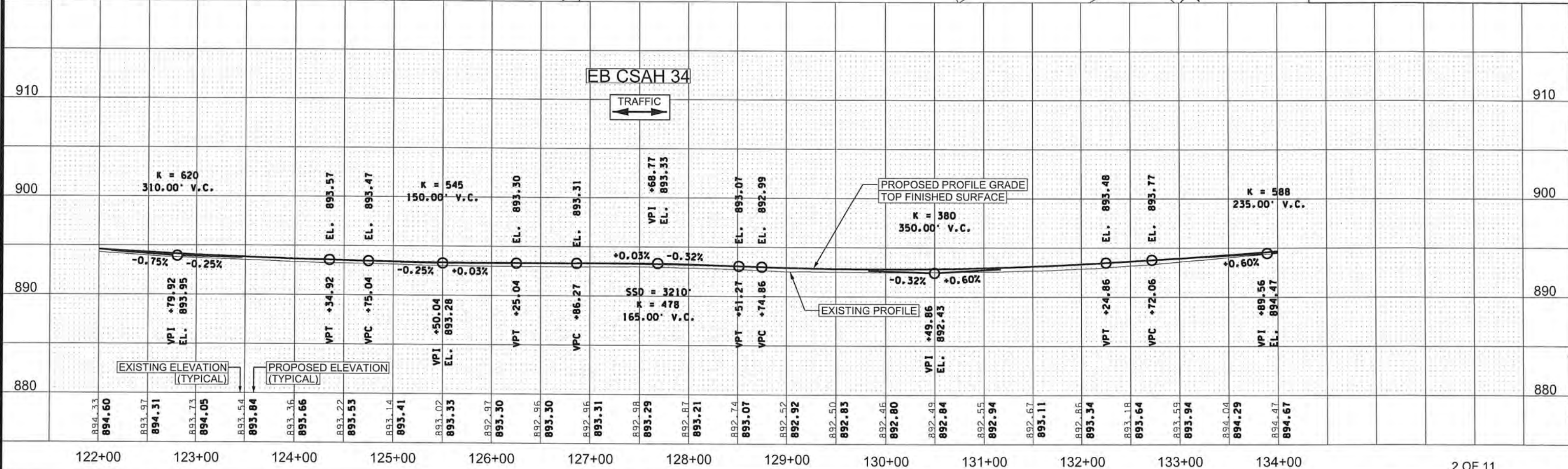
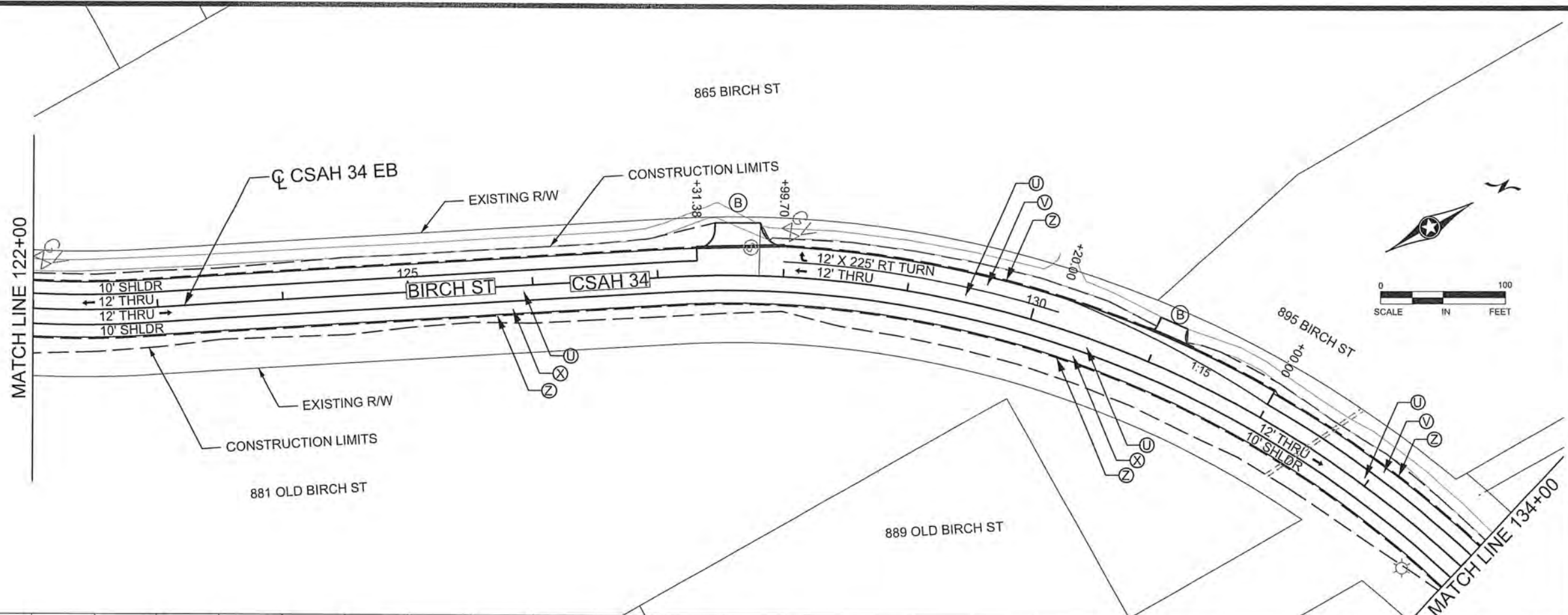
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 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
 ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN
 AND PROFILE
 STA 111+32.00 TO 122+00.00
 Sheet 29 of 103 Sheets

- CONSTRUCTION LEGEND**
- (U) 12.0' PAVED THROUGH LANE
 - (V) 12.0' PAVED RT TURN / BYPASS LANE
 - (W) 13.0' PAVED LT TURN LANE
 - (X) 10.0' PAVED SHOULDER
 - (Y) 8.0' PAVED SHOULDER
 - (Z) 1.0' AGGREGATE SHOULDER
 - (B) BITUMINOUS ENTRANCE
 - (C) CONCRETE ENTRANCE
 - (D) CONC. CURB & GUTTER DESIGN B424
 - (G) GRAVEL ENTRANCE
 - (PR) CONCRETE PEDESTRIAN RAMP
 - XXXXX OVERLAY STREET APPROACH
 - MILL JOINT
 - ==== CULVERT REPLACEMENT (QTY 2) STA. 164+75
 - ===== EXISTING CULVERT REMAINS INPLACE
- SYMBOLS:**
- CATCH BASIN
 - ⊙ MANHOLE
 - ⊗ GATE VALVE
 - ⊙ HYDRANT
 - ⊙ POWER POLE
 - ⊙ LIGHT POLE
 - ⊗ UTILITY BOX
- ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_PP1_P2.dgn 04/19/2019 1:31:46 PM

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: NICHOLAS DOBDA

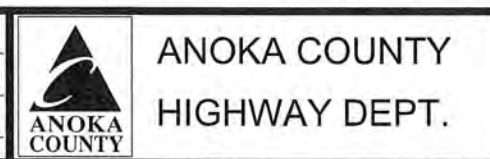
SIGNATURE: *[Signature]*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN AND PROFILE

STA 122+00 TO 134+00

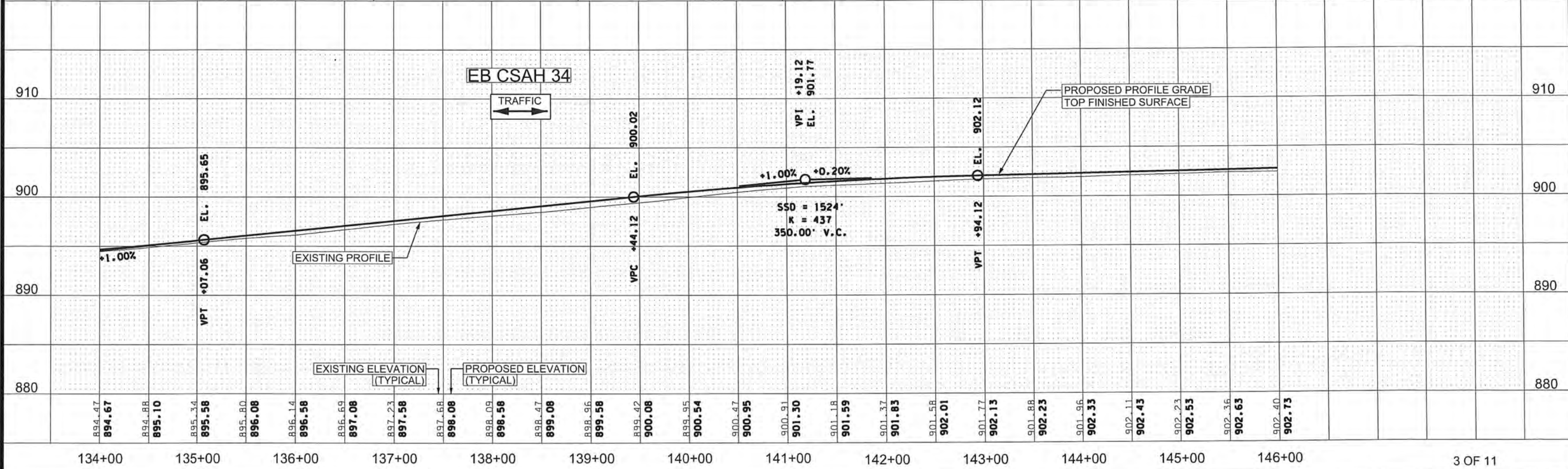
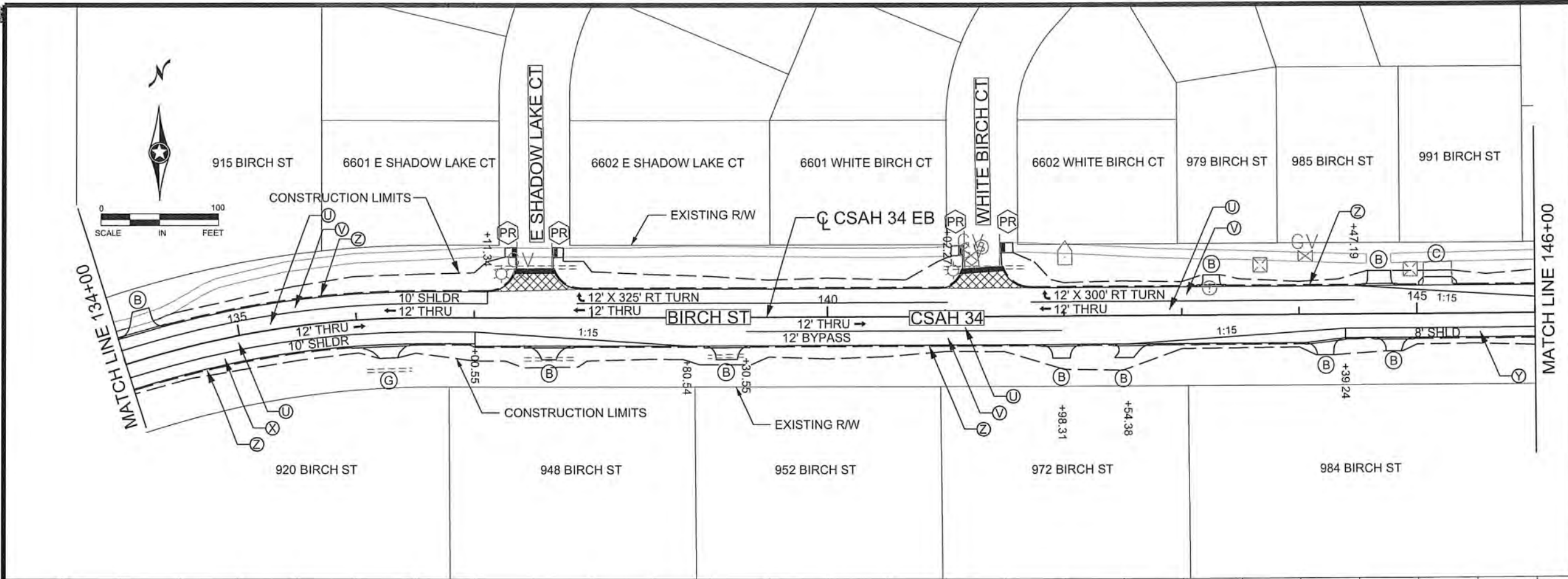
Sheet 30 of 103 Sheets

CONSTRUCTION LEGEND

- ⊙ 12.0' PAVED THROUGH LANE
- ⊙ 12.0' PAVED RT TURN / BYPASS LANE
- ⊙ 13.0' PAVED LT TURN LANE
- ⊙ 10.0' PAVED SHOULDER
- ⊙ 8.0' PAVED SHOULDER
- ⊙ 1.0' AGGREGATE SHOULDER
- ⊙ BITUMINOUS ENTRANCE
- ⊙ CONCRETE ENTRANCE
- ⊙ CONC. CURB & GUTTER DESIGN B424
- ⊙ GRAVEL ENTRANCE
- ⊙ CONCRETE PEDESTRIAN RAMP
- ⊙ OVERLAY STREET APPROACH
- MILL JOINT
- CULVERT REPLACEMENT (QTY 2) STA. 164+75
- EXISTING CULVERT REMAINS INPLACE

- SYMBOLS:**
- CATCH BASIN
 - ⊙ MANHOLE
 - ⊙ GATE VALVE
 - ⊙ HYDRANT
 - ⊙ POWER POLE
 - ⊙ LIGHT POLE
 - ⊙ UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\00000000_PP1_P3.dgn 04/19/2019 1:31:50 PM

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: NICHOLAS DOBDA

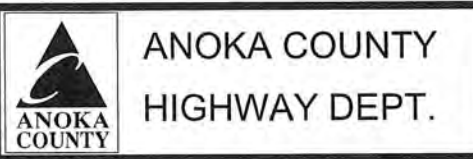
SIGNATURE: *Nicholas Dobda*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19

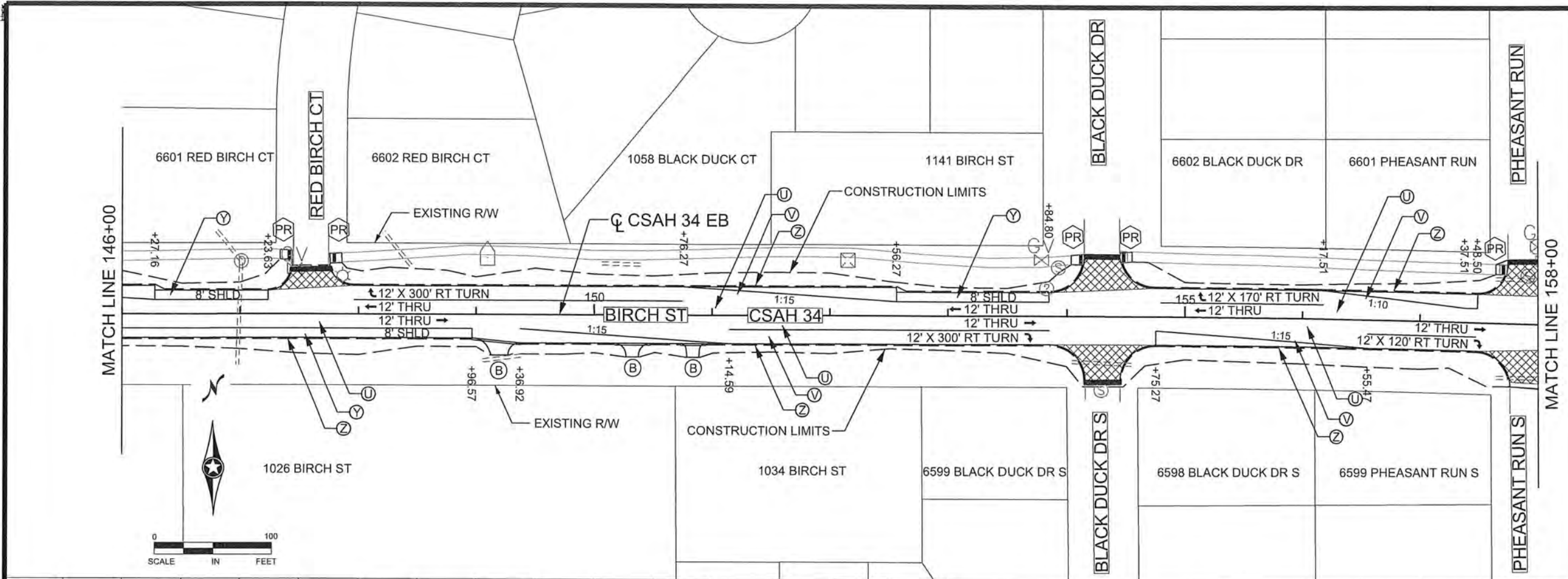


ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN AND PROFILE

STA 134+00 TO 146+00

Sheet 31 of 103 Sheets



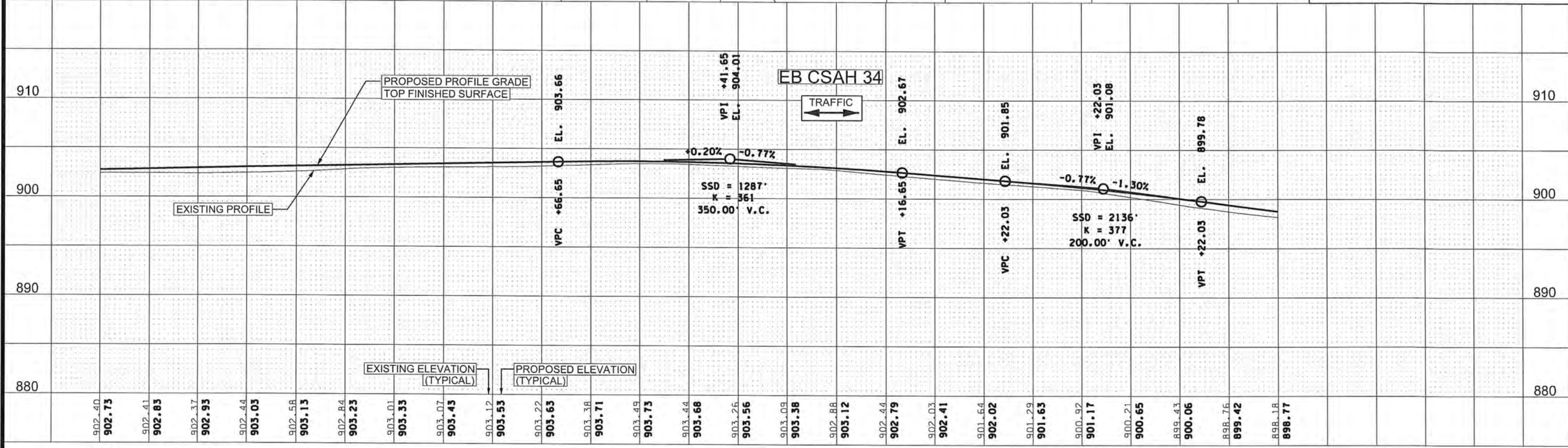
CONSTRUCTION LEGEND

- ⊕ 12.0' PAVED THROUGH LANE
- ⊖ 12.0' PAVED RT TURN / BYPASS LANE
- ⊗ 13.0' PAVED LT TURN LANE
- ⊗ 10.0' PAVED SHOULDER
- ⊗ 8.0' PAVED SHOULDER
- ⊗ 1.0' AGGREGATE SHOULDER
- ⊖ BITUMINOUS ENTRANCE
- ⊖ CONCRETE ENTRANCE
- ⊖ CONC. CURB & GUTTER DESIGN B424
- ⊖ GRAVEL ENTRANCE
- ⊖ CONCRETE PEDESTRIAN RAMP
- ⊖ OVERLAY STREET APPROACH
- MILL JOINT
- CULVERT REPLACEMENT (QTY 2) STA. 164+75
- EXISTING CULVERT REMAINS INPLACE

SYMBOLS:

- CATCH BASIN
- ⊙ MANHOLE
- ⊗ GATE VALVE
- ⊙ HYDRANT
- ⊙ POWER POLE
- ⊙ LIGHT POLE
- ⊙ UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



146+00 147+00 148+00 149+00 150+00 151+00 152+00 153+00 154+00 155+00 156+00 157+00 158+00 4 OF 11

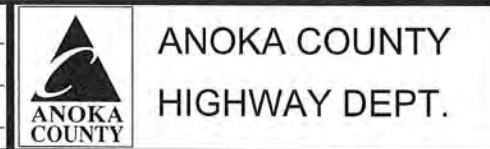
NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_PP1_P4.dgn 04/19/2019 1:31:54 PM

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: NICHOLAS DOBDA
 SIGNATURE: *Nicholas Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
 ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN AND PROFILE
 STA 146+00 TO 158+00
 Sheet 32 of 103 Sheets

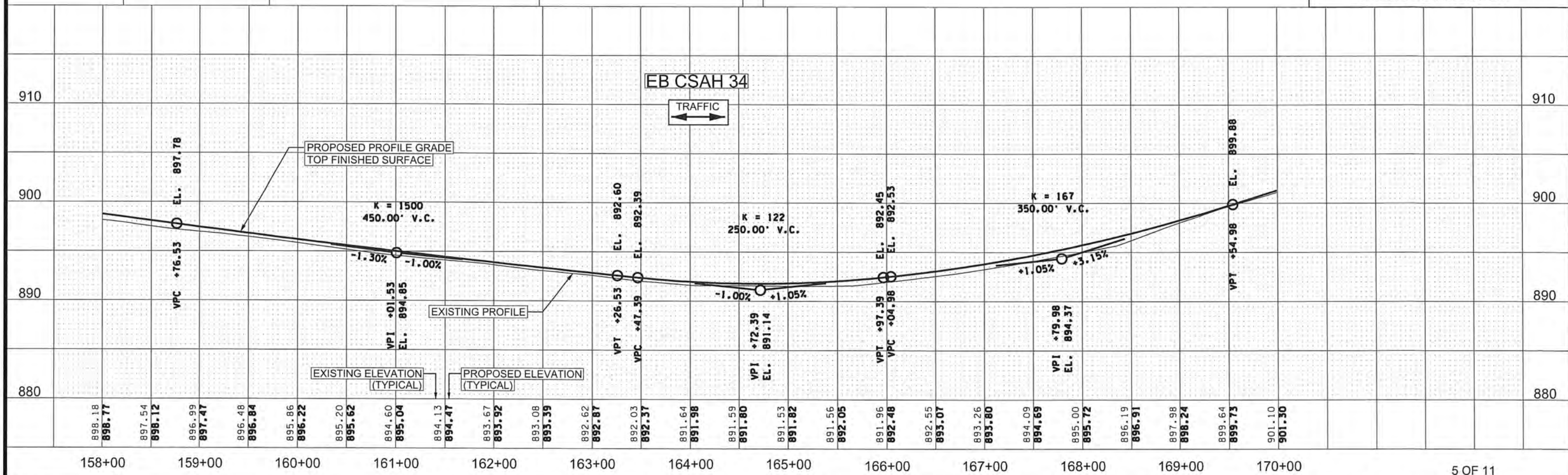
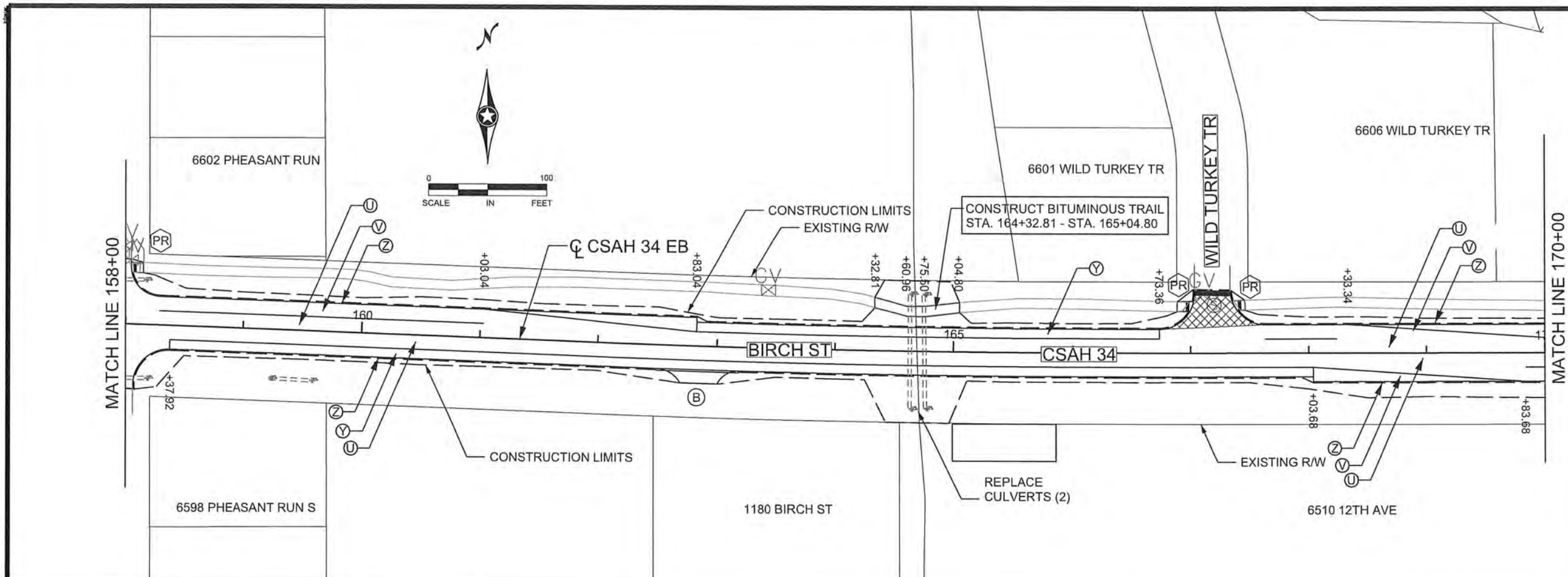
CONSTRUCTION LEGEND

- ⓪ 12.0' PAVED THROUGH LANE
- Ⓛ 12.0' PAVED RT TURN / BYPASS LANE
- Ⓜ 13.0' PAVED LT TURN LANE
- Ⓧ 10.0' PAVED SHOULDER
- Ⓨ 8.0' PAVED SHOULDER
- Ⓩ 1.0' AGGREGATE SHOULDER
- ⓑ BITUMINOUS ENTRANCE
- ⓒ CONCRETE ENTRANCE
- ⓓ CONC. CURB & GUTTER DESIGN B424
- ⓖ GRAVEL ENTRANCE
- ⓓ CONCRETE PEDESTRIAN RAMP
- ▨ OVERLAY STREET APPROACH
- MILL JOINT
- CULVERT REPLACEMENT (QTY 2) STA. 164+75
- EXISTING CULVERT REMAINS INPLACE

SYMBOLS:

- CATCH BASIN
- Ⓢ MANHOLE
- Ⓧ GATE VALVE
- Ⓜ HYDRANT
- Ⓞ POWER POLE
- Ⓢ LIGHT POLE
- Ⓜ UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\00000000_PP1_P5.dgn 04/19/2019 1:31:58 PM

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: NICHOLAS DOBDA

SIGNATURE: *[Signature]*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

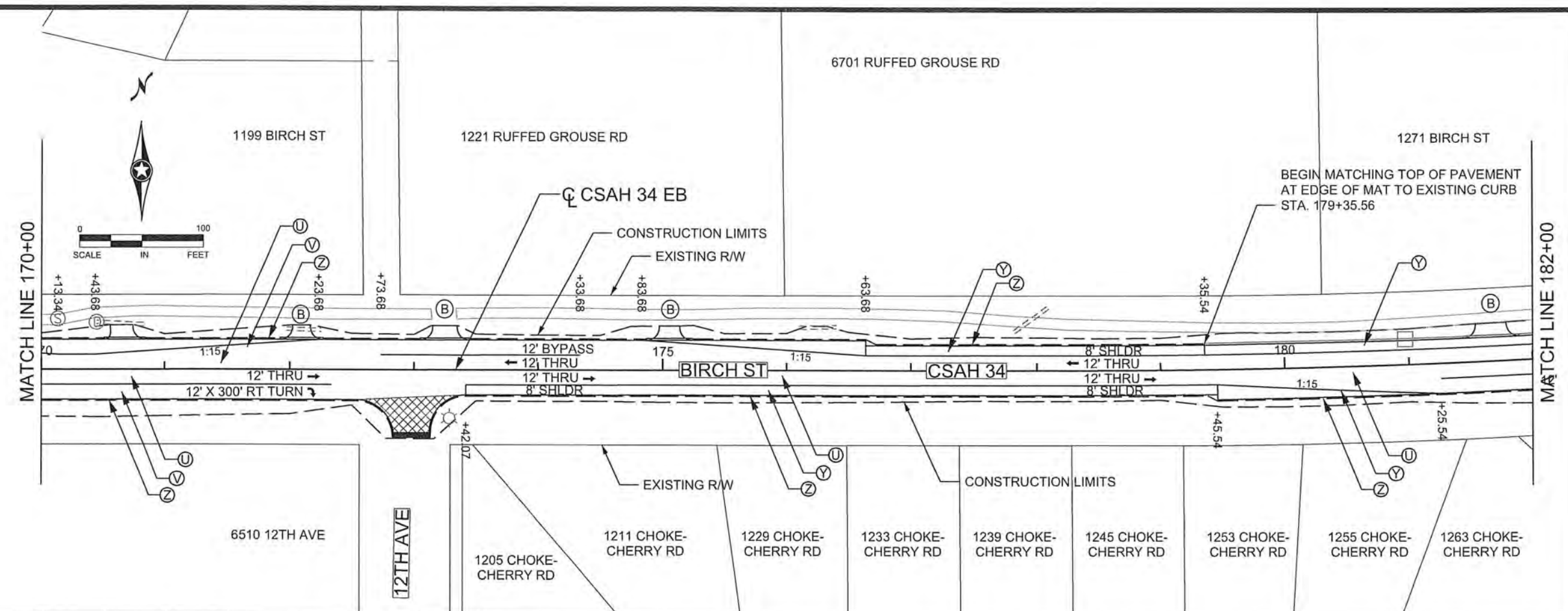
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CHECKED BY: JEO DATE: 04/05/19

ANOKA COUNTY
HIGHWAY DEPT.

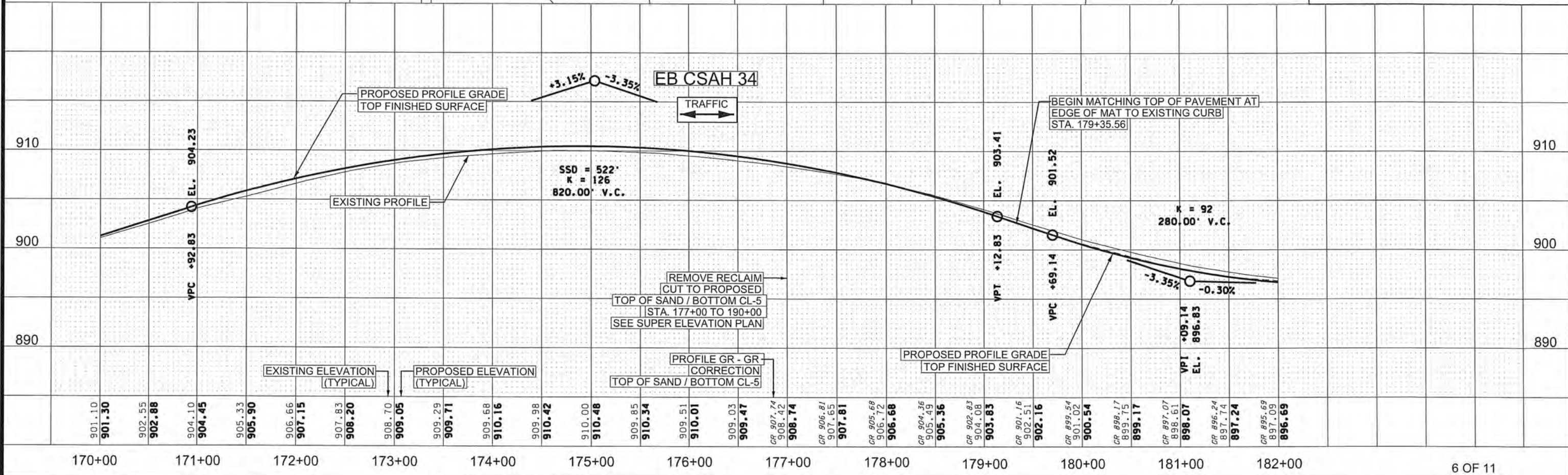
ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN AND PROFILE
STA 158+00 TO 170+00
Sheet 33 of 103 Sheets



CONSTRUCTION LEGEND	
U	12.0' PAVED THROUGH LANE
V	12.0' PAVED RT TURN / BYPASS LANE
W	13.0' PAVED LT TURN LANE
X	10.0' PAVED SHOULDER
Y	8.0' PAVED SHOULDER
Z	1.0' AGGREGATE SHOULDER
B	BITUMINOUS ENTRANCE
C	CONCRETE ENTRANCE
D	CONC. CURB & GUTTER DESIGN B424
G	GRAVEL ENTRANCE
PR	CONCRETE PEDESTRIAN RAMP
[Hatched Box]	OVERLAY STREET APPROACH
[Dashed Line]	MILL JOINT
[Dashed Line]	CULVERT REPLACEMENT (QTY 2) STA. 164+75
[Dotted Line]	EXISTING CULVERT REMAINS INPLACE
SYMBOLS:	
[Square]	CATCH BASIN
[Circle]	MANHOLE
[Circle with X]	GATE VALVE
[House]	HYDRANT
[Circle with dot]	POWER POLE
[Star]	LIGHT POLE
[Square with X]	UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



901.10	901.30	902.55	902.88	904.10	904.45	905.33	905.90	906.66	907.15	907.83	908.20	908.70	909.05	909.29	909.71	909.68	910.16	909.98	910.42	910.00	910.48	909.85	910.34	909.51	910.01	909.03	909.47	907.74	908.42	908.74	906.81	907.65	907.81	906.68	906.12	906.68	904.36	905.49	905.49	905.36	902.83	904.08	903.83	901.16	902.15	902.16	901.02	900.54	899.17	899.75	899.17	897.07	898.61	896.24	897.74	897.24	895.69	897.09	896.69
170+00	171+00	172+00	173+00	174+00	175+00	176+00	177+00	178+00	179+00	180+00	181+00	182+00																																															

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\000000000_PP1_P6.dgn 04/19/2019 1:32:02 PM

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: NICHOLAS DOBDA

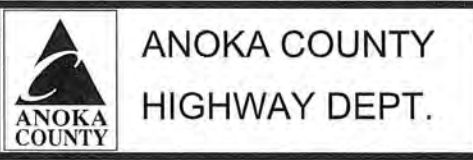
SIGNATURE: *[Signature]*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN AND PROFILE

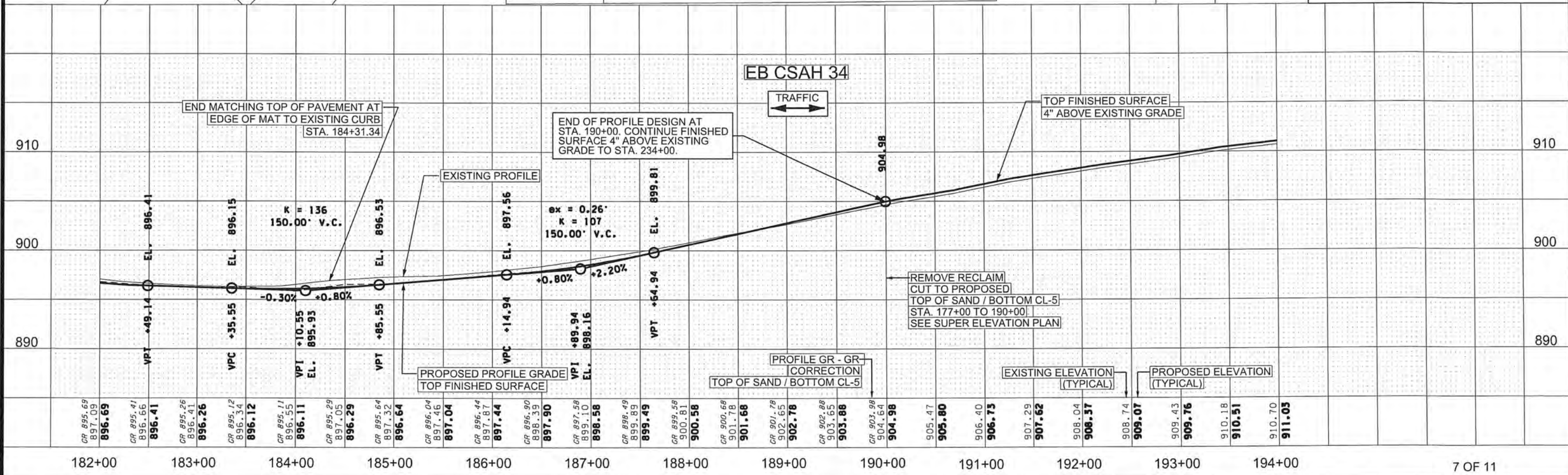
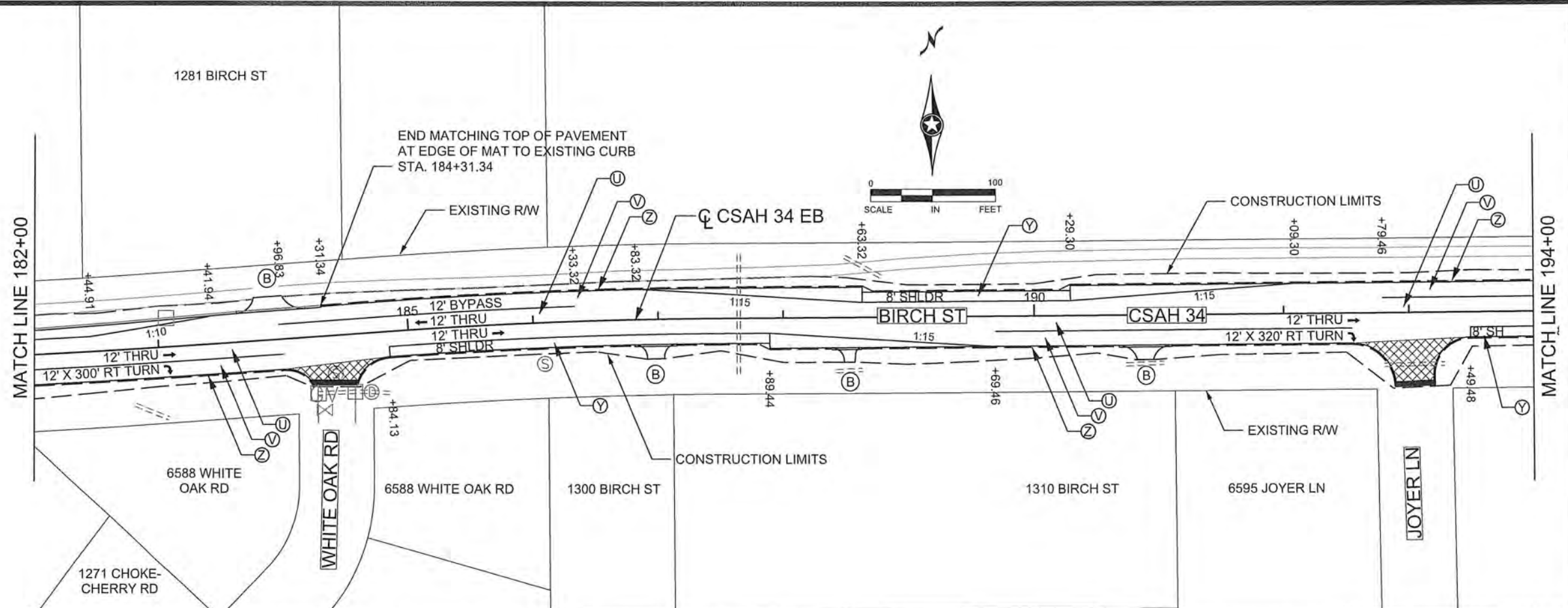
STA 170+00 TO 182+00

Sheet 34 of 103 Sheets

CONSTRUCTION LEGEND

- ⊙ 12.0' PAVED THROUGH LANE
- ⊙ 12.0' PAVED RT TURN / BYPASS LANE
- ⊙ 13.0' PAVED LT TURN LANE
- ⊙ 10.0' PAVED SHOULDER
- ⊙ 8.0' PAVED SHOULDER
- ⊙ 1.0' AGGREGATE SHOULDER
- ⊙ BITUMINOUS ENTRANCE
- ⊙ CONCRETE ENTRANCE
- ⊙ CONC. CURB & GUTTER DESIGN B424
- ⊙ GRAVEL ENTRANCE
- ⊙ CONCRETE PEDESTRIAN RAMP
- ⊙ OVERLAY STREET APPROACH
- MILL JOINT
- CULVERT REPLACEMENT (QTY 2) STA. 164+75
- EXISTING CULVERT REMAINS INPLACE

- SYMBOLS:
- CATCH BASIN
 - ⊙ MANHOLE
 - ⊙ GATE VALVE
 - ⊙ HYDRANT
 - ⊙ POWER POLE
 - ⊙ LIGHT POLE
 - ⊙ UTILITY BOX
- ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\00000000_PP1_P7.dgn 04/19/2019 1:32:06 PM

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: NICHOLAS DOBDA

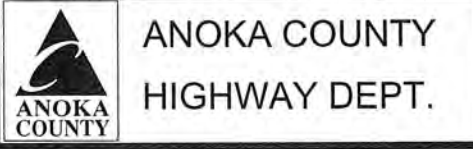
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DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
SAP 002-634-004

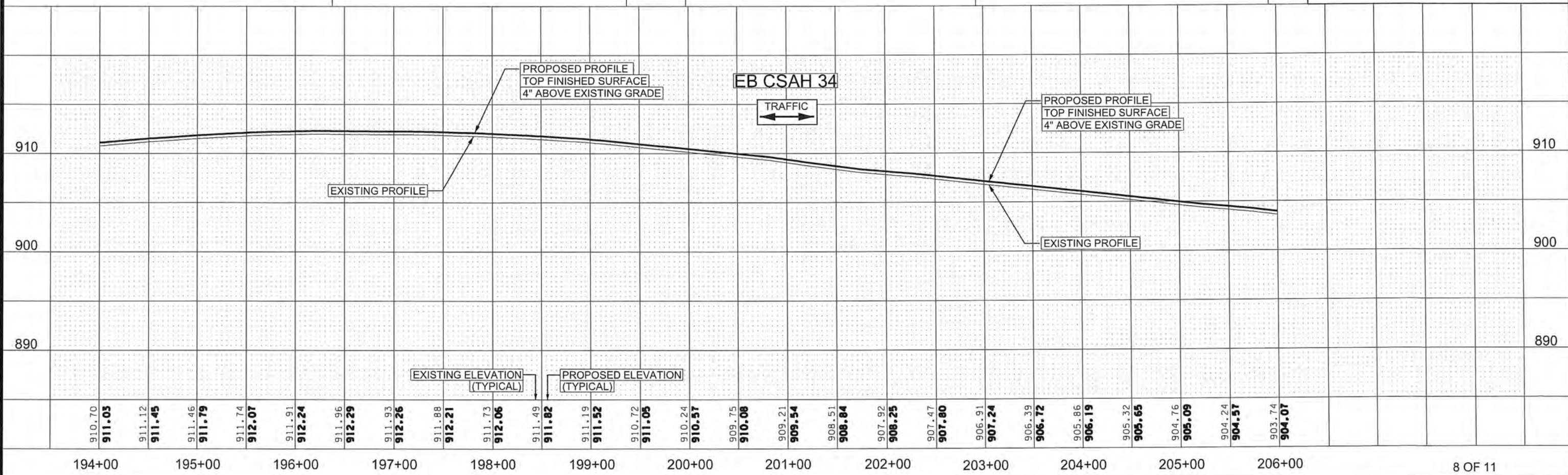
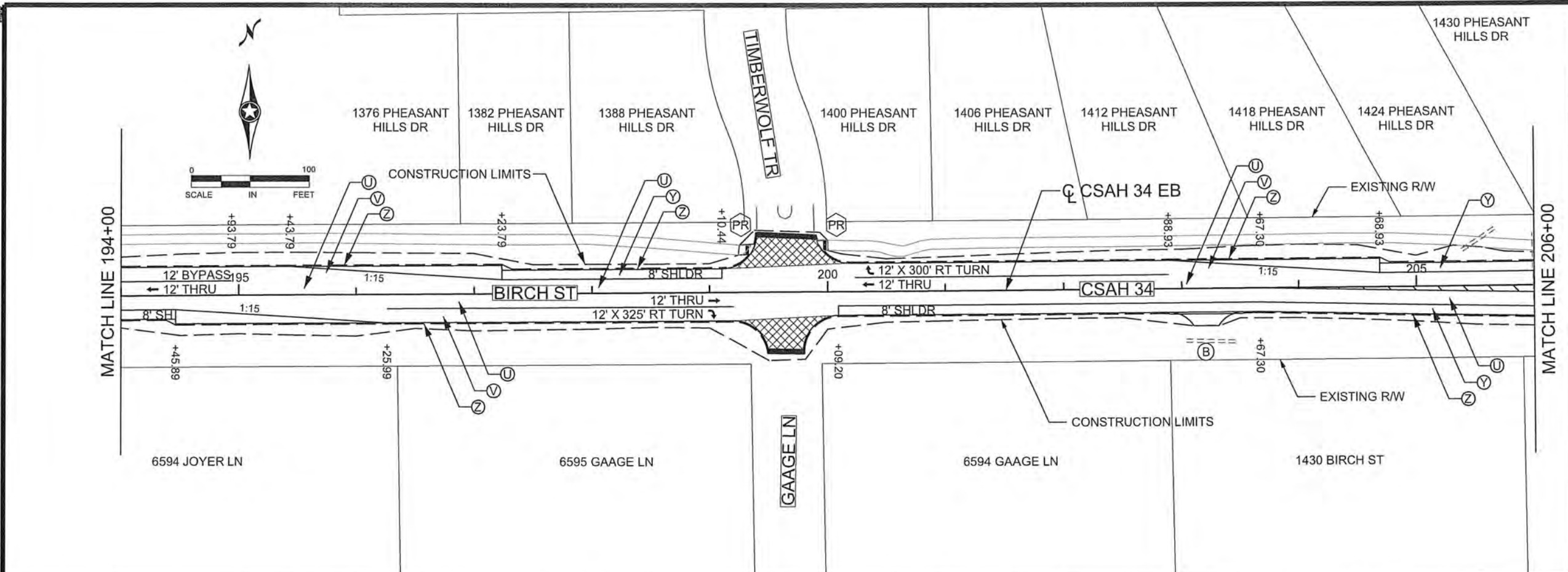
CONSTRUCTION PLAN AND PROFILE
STA 182+00 TO 194+00
Sheet 35 of 103 Sheets

CONSTRUCTION LEGEND

- ⊙ 12.0' PAVED THROUGH LANE
- ⊙ 12.0' PAVED RT TURN / BYPASS LANE
- ⊙ 13.0' PAVED LT TURN LANE
- ⊙ 10.0' PAVED SHOULDER
- ⊙ 8.0' PAVED SHOULDER
- ⊙ 1.0' AGGREGATE SHOULDER
- ⊙ BITUMINOUS ENTRANCE
- ⊙ CONCRETE ENTRANCE
- ⊙ CONC. CURB & GUTTER DESIGN B424
- ⊙ GRAVEL ENTRANCE
- ⊙ CONCRETE PEDESTRIAN RAMP
- ▨ OVERLAY STREET APPROACH
- MILL JOINT
- CULVERT REPLACEMENT (QTY 2) STA. 164+75
- ==== EXISTING CULVERT REMAINS INPLACE

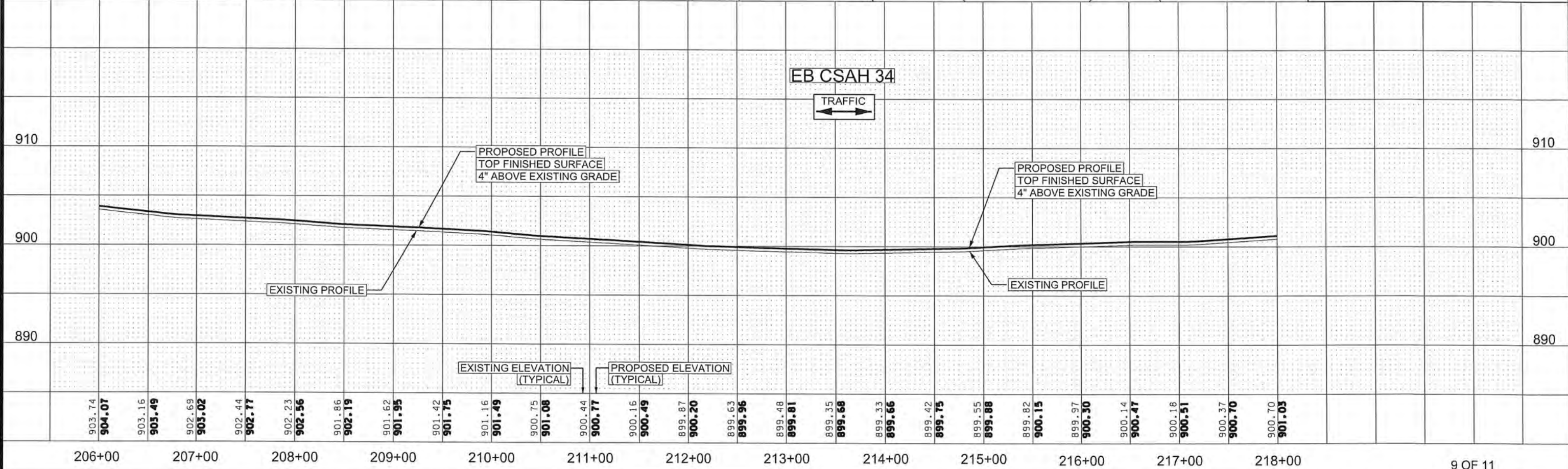
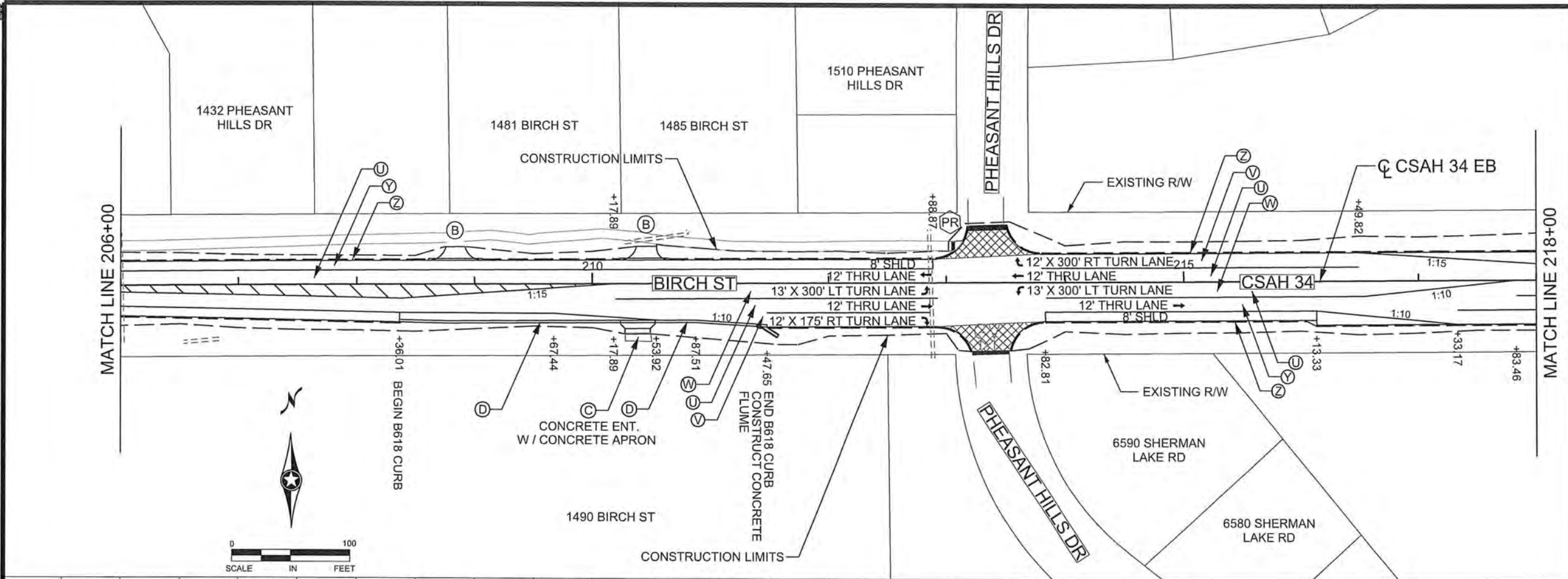
- SYMBOLS:**
- CATCH BASIN
 - ⊙ MANHOLE
 - ⊙ GATE VALVE
 - ⊙ HYDRANT
 - ⊙ POWER POLE
 - ⊙ LIGHT POLE
 - ⊙ UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

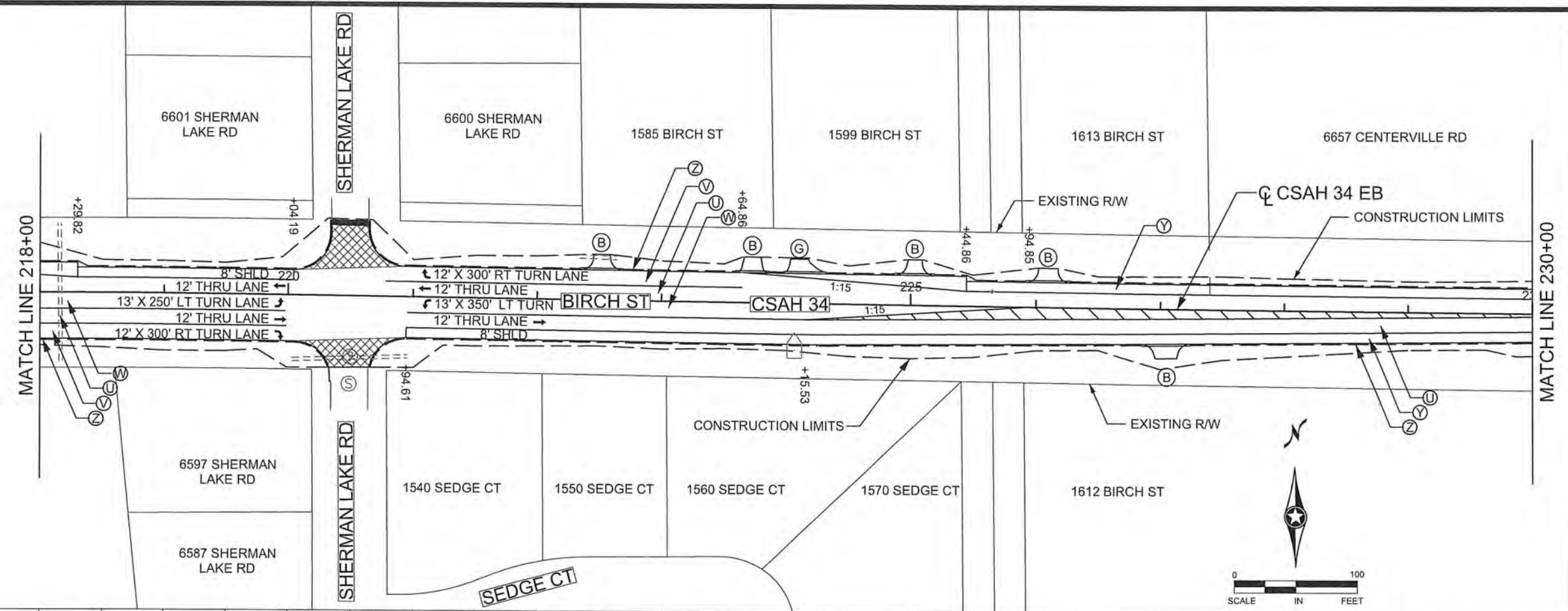


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- CONSTRUCTION LEGEND**
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 - Ⓥ 12.0' PAVED RT TURN / BYPASS LANE
 - Ⓦ 13.0' PAVED LT TURN LANE
 - Ⓧ 10.0' PAVED SHOULDER
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 - ⓓ CONCRETE PEDESTRIAN RAMP
 - ▨ OVERLAY STREET APPROACH
 - MILL JOINT
 - ▬▬▬ CULVERT REPLACEMENT (QTY 2) STA. 164+75
 - ▬▬▬▬ EXISTING CULVERT REMAINS INPLACE
- SYMBOLS:**
- CATCH BASIN
 - Ⓢ MANHOLE
 - ⓍⓎ GATE VALVE
 - Ⓜ HYDRANT
 - Ⓞ POWER POLE
 - Ⓢ LIGHT POLE
 - Ⓧ UTILITY BOX
- ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

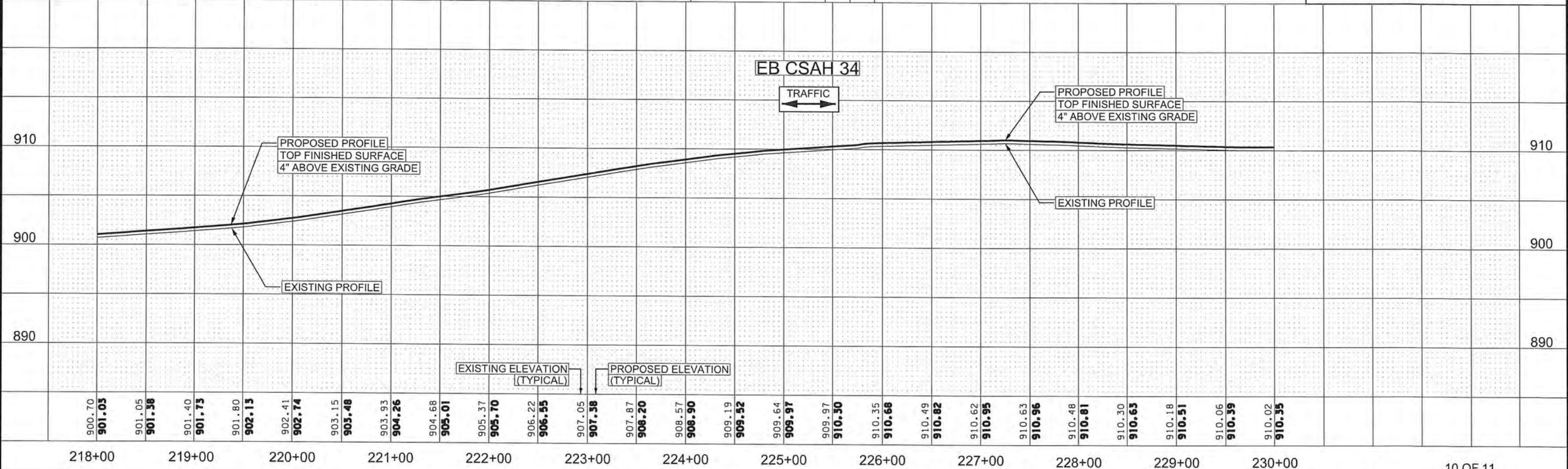


<p>NO. DATE BY CKD APPR REVISION</p> <p>NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_PP1_P9.dgn 04/19/2019 1:32:14 PM</p>	<p>I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p>PRINT NAME: NICHOLAS DOBDA</p> <p>SIGNATURE: <i>[Signature]</i></p> <p>DATE: 4/22/19 LICENSE NO. 49046</p>	<p>DRAWN BY: MP DATE: 03/26/19</p> <p>DESIGN BY: MP DATE: 03/26/19</p> <p>CHECKED BY: JEO DATE: 04/05/19</p>	<p>ANOKA COUNTY HIGHWAY DEPT.</p>	<p>ANOKA COUNTY SAP 002-634-004</p>	<p>CONSTRUCTION PLAN AND PROFILE</p> <p>STA 206+00 TO 218+00</p> <p>Sheet 37 of 103 Sheets</p>
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CONSTRUCTION LEGEND	
Ⓚ	12.0' PAVED THROUGH LANE
Ⓛ	12.0' PAVED RT TURN / BYPASS LANE
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Ⓢ	GRAVEL ENTRANCE
Ⓣ	CONCRETE PEDESTRIAN RAMP
Ⓤ	OVERLAY STREET APPROACH
—	MILL JOINT
----	CULVERT REPLACEMENT (QTY 2) STA. 164+75
----	EXISTING CULVERT REMAINS INPLACE
SYMBOLS:	
□	CATCH BASIN
Ⓢ	MANHOLE
Ⓝ	GATE VALVE
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Ⓟ	POWER POLE
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Ⓡ	UTILITY BOX

ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.



10 OF 11

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: NICHOLAS DOBDA SIGNATURE: <i>N. Dobda</i> DATE: 4/22/19 LICENSE NO. 49046	DRAWN BY: MP DATE: 03/26/19 DESIGN BY: MP DATE: 03/26/19 CHECKED BY: JEO DATE: 04/05/19	<p>ANOKA COUNTY HIGHWAY DEPT.</p>	ANOKA COUNTY SAP 002-634-004 CONSTRUCTION PLAN AND PROFILE STA 218+00 TO 230+00 Sheet 38 of 103 Sheets
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NO DATE BY CKD APPR REVISION
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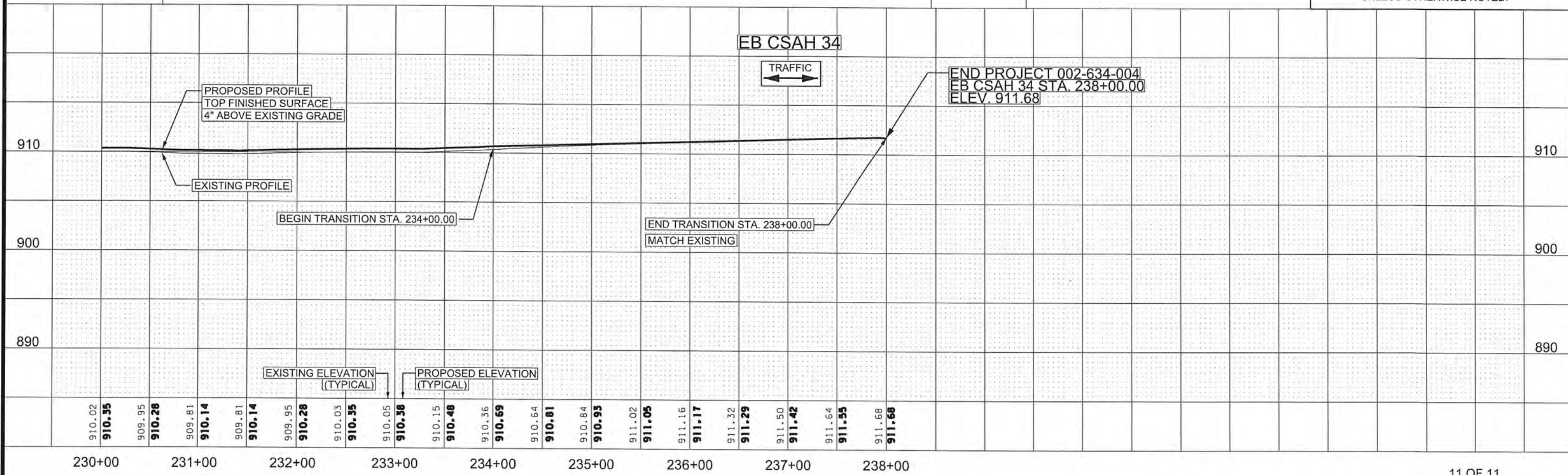
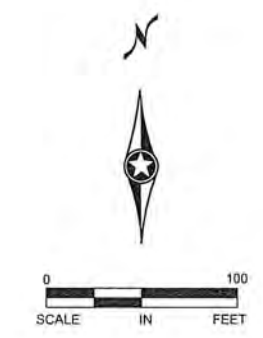
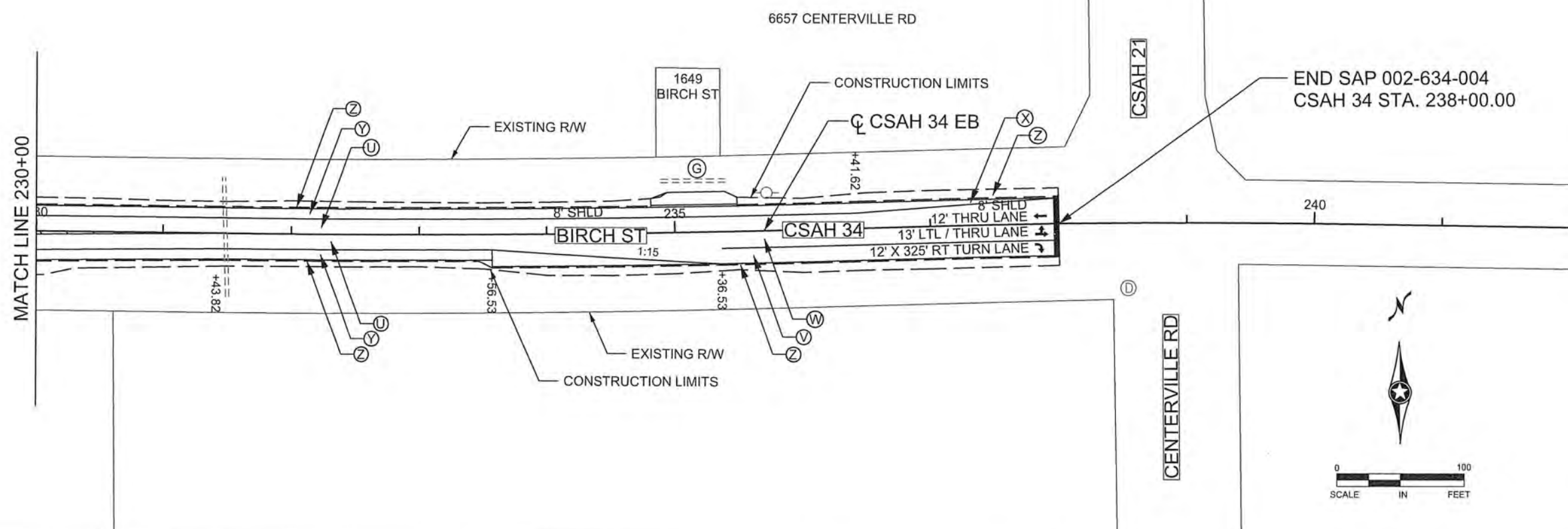
CONSTRUCTION LEGEND

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- CULVERT REPLACEMENT (QTY 2) STA. 164+75
- ==== EXISTING CULVERT REMAINS INPLACE

SYMBOLS:

- CATCH BASIN
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- Ⓛ LIGHT POLE
- Ⓜ UTILITY BOX

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

PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19




ANOKA COUNTY
HIGHWAY DEPT.

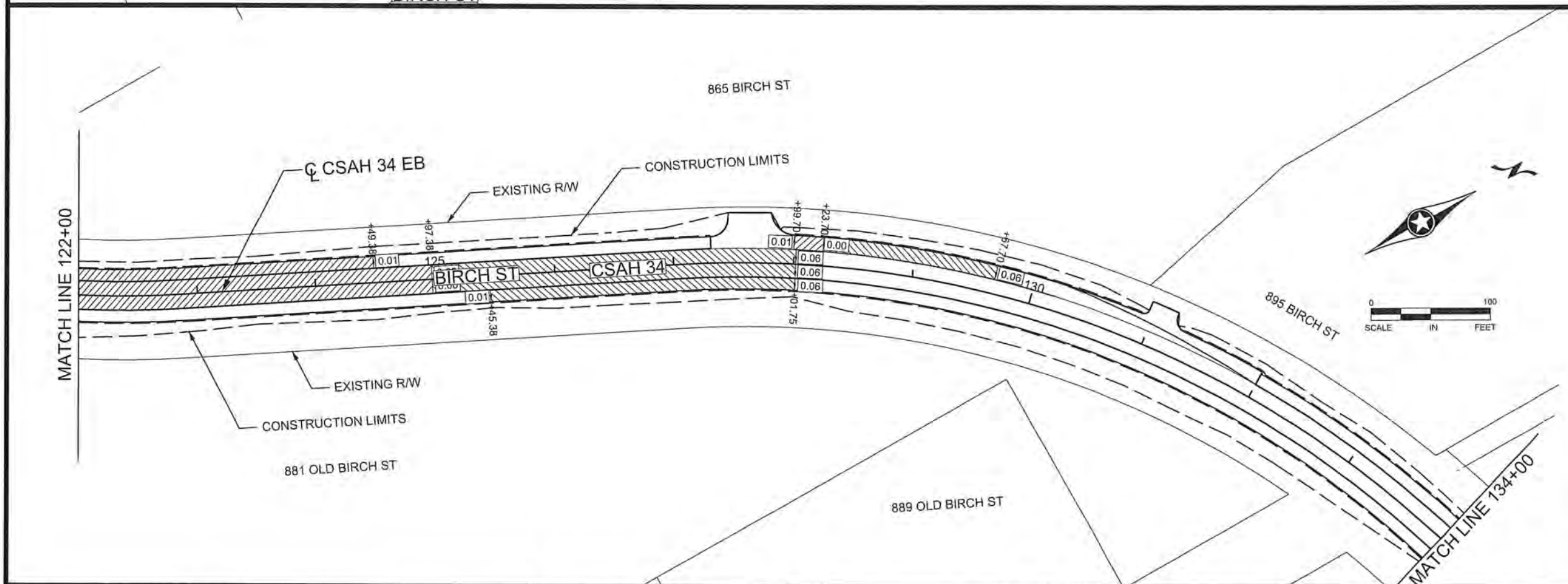
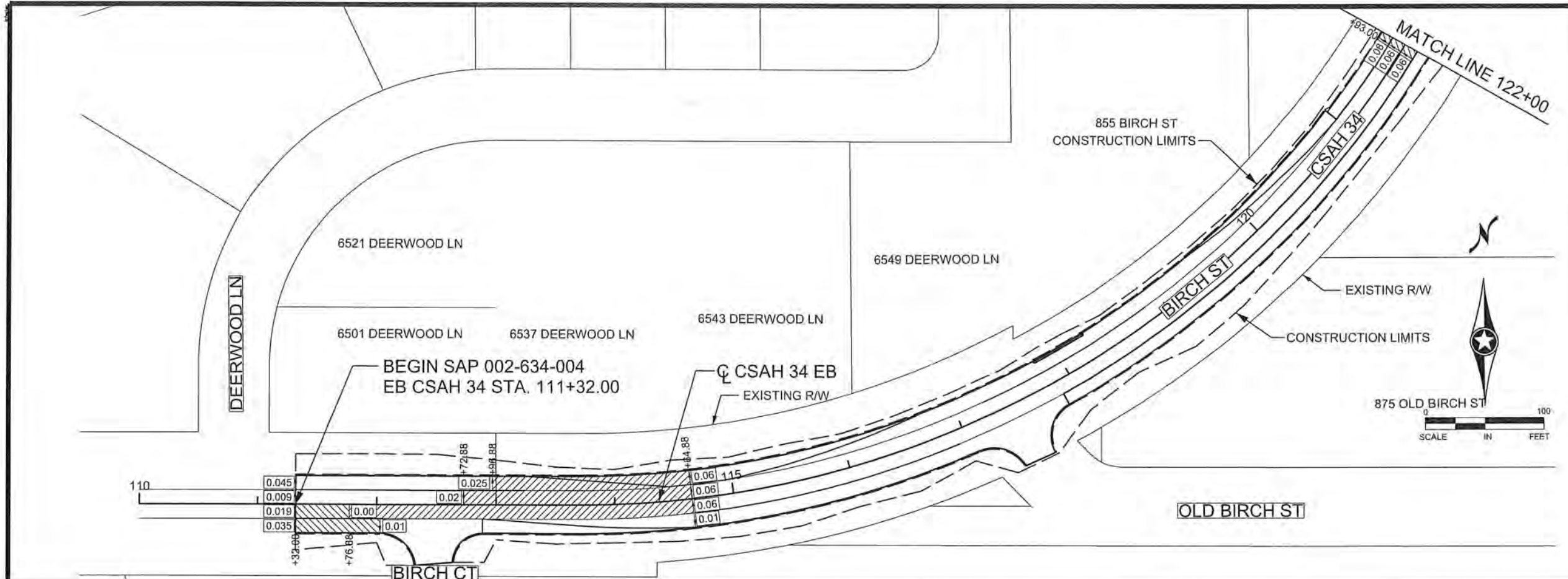
ANOKA COUNTY SAP 002-634-004

CONSTRUCTION PLAN AND PROFILE
 STA 230+00 TO 238+00
 Sheet 39 of 103 Sheets

LEGEND

 SUPERELEVATION TRANSITION

ALL CROSS SLOPES ARE IN FEET PER FEET.

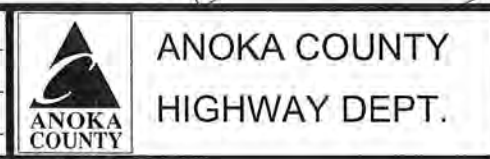


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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *Nicholas Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JED DATE: 04/05/19



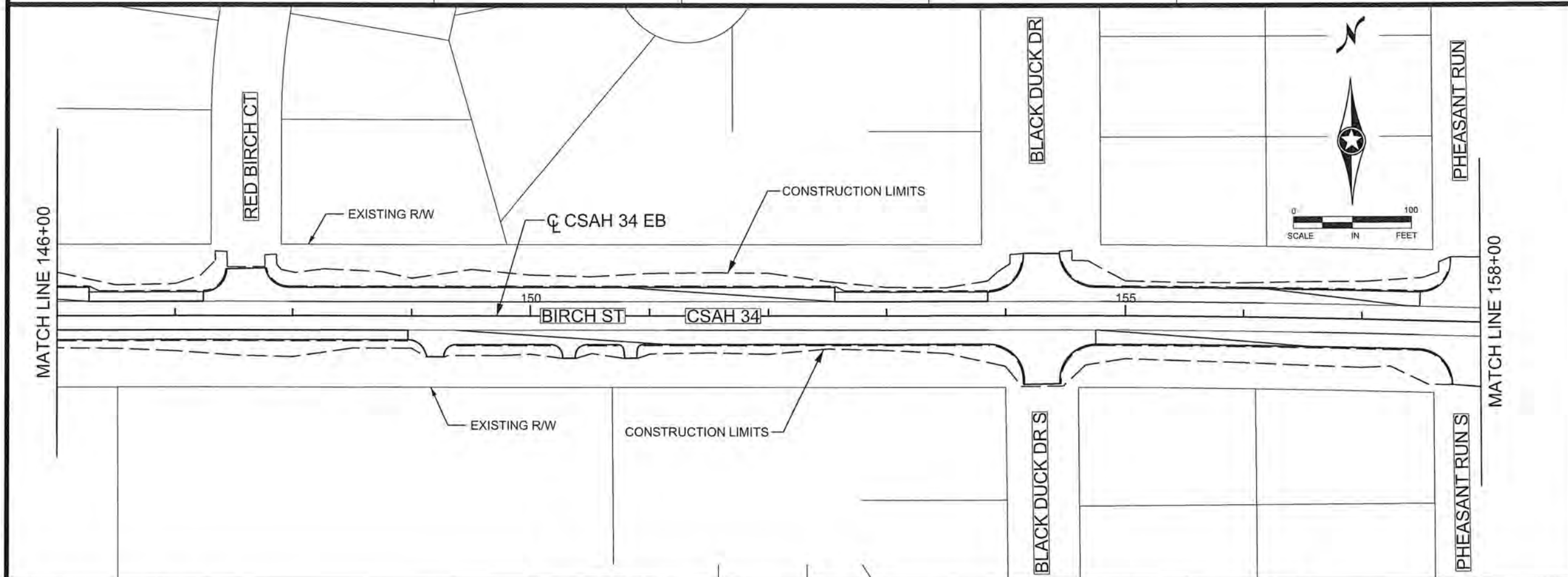
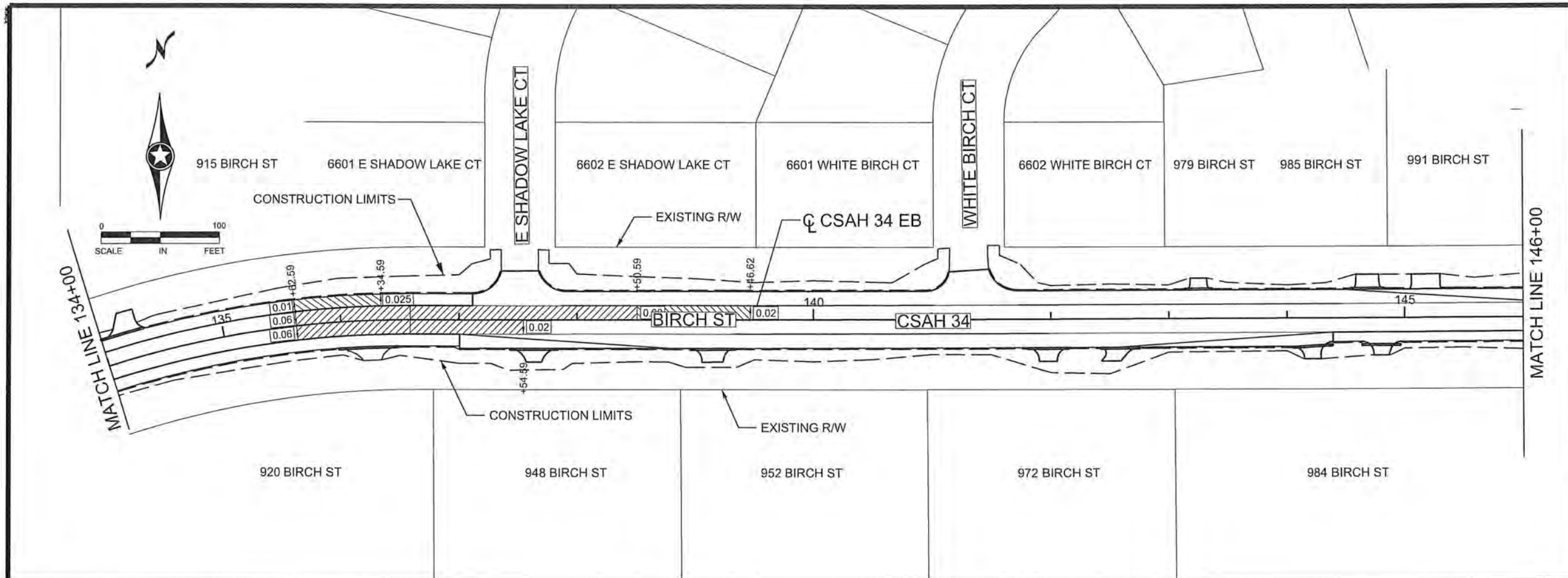
ANOKA COUNTY SAP 002-634-004

SUPERELEVATION PLAN
 STA 111+32 TO 134+00
 Sheet 40 of 103 Sheets

LEGEND

 SUPERELEVATION TRANSITION


ALL CROSS SLOPES ARE IN FEET PER FEET.



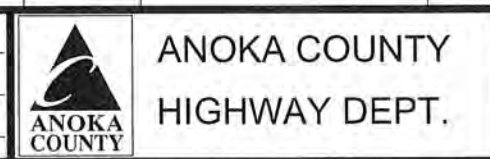
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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: 
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/28/19
 CHECKED BY: JEO DATE: 04/05/19



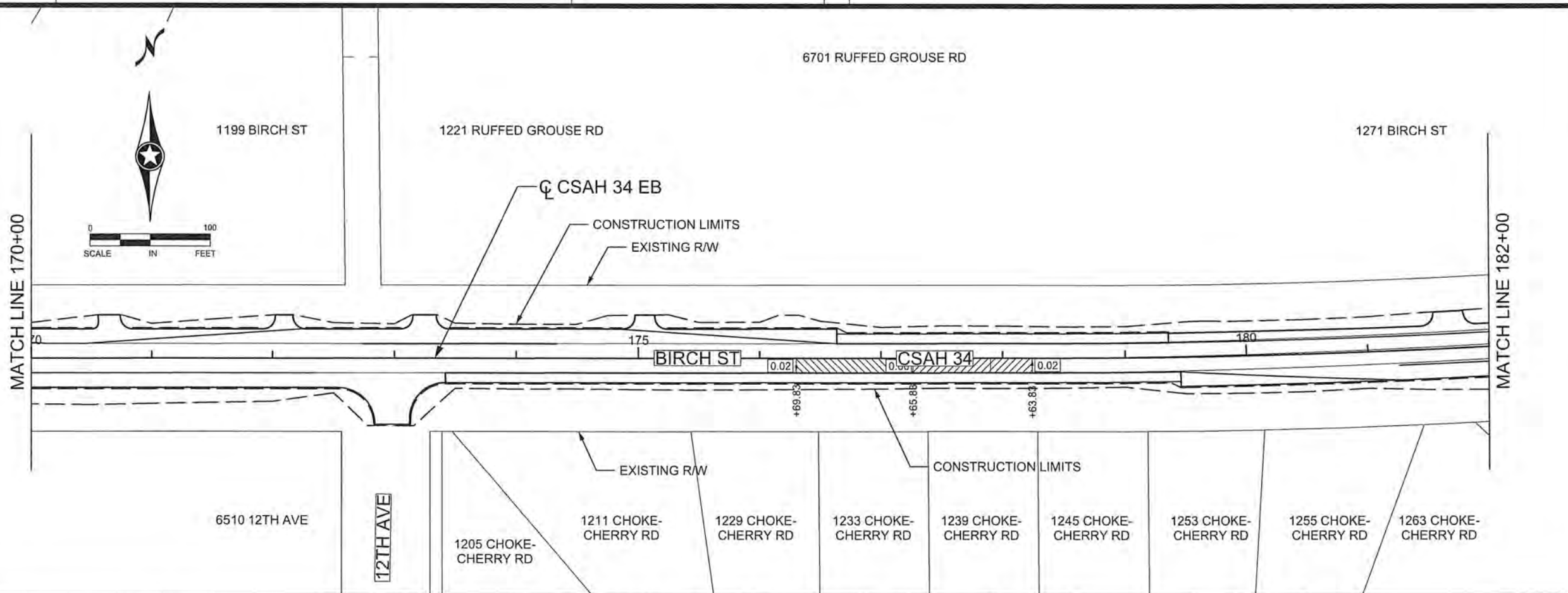
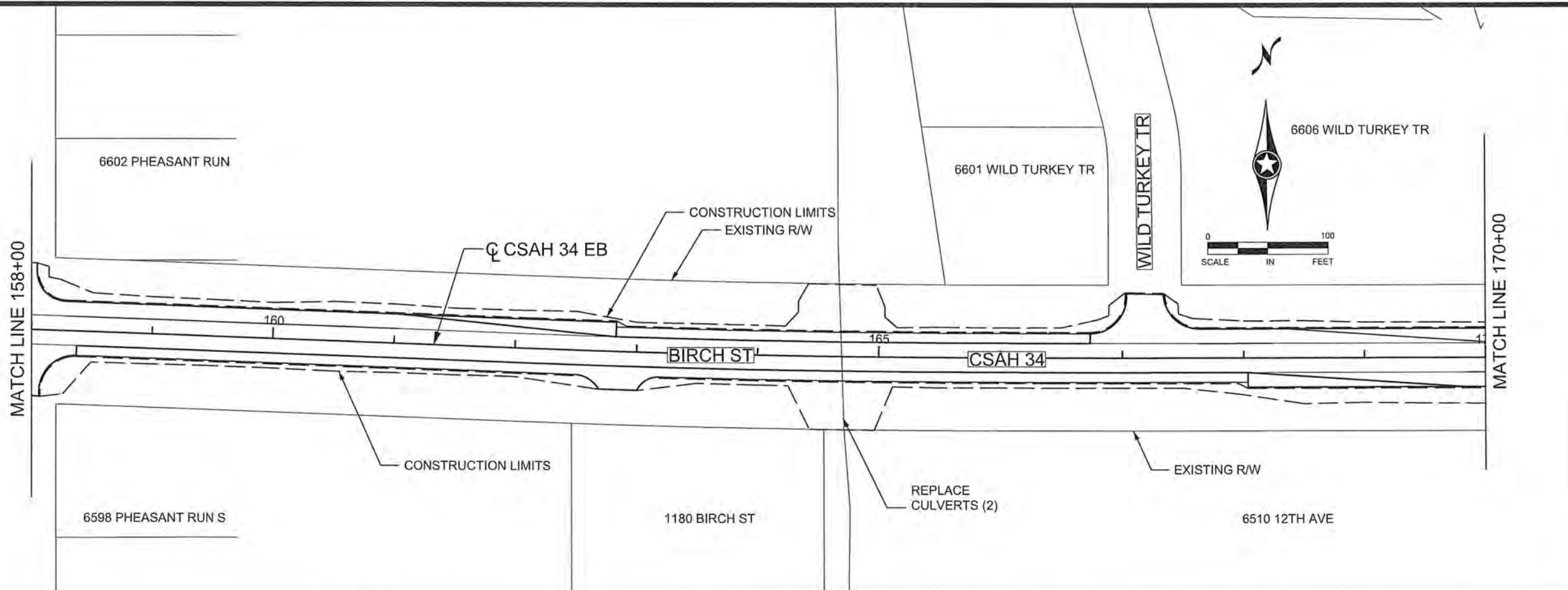
ANOKA COUNTY SAP 002-634-004

SUPERELEVATION PLAN
 STA 134+00 TO 158+40
 Sheet 41 of 103 Sheets

LEGEND

 SUPERELEVATION TRANSITION

ALL CROSS SLOPES ARE IN FEET PER FEET.

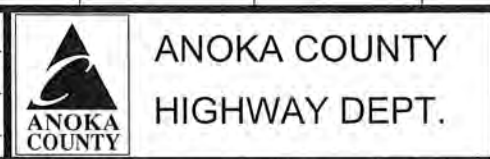


NO	DATE	BY	CKD	APPR	REVISION

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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *Nicholas Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



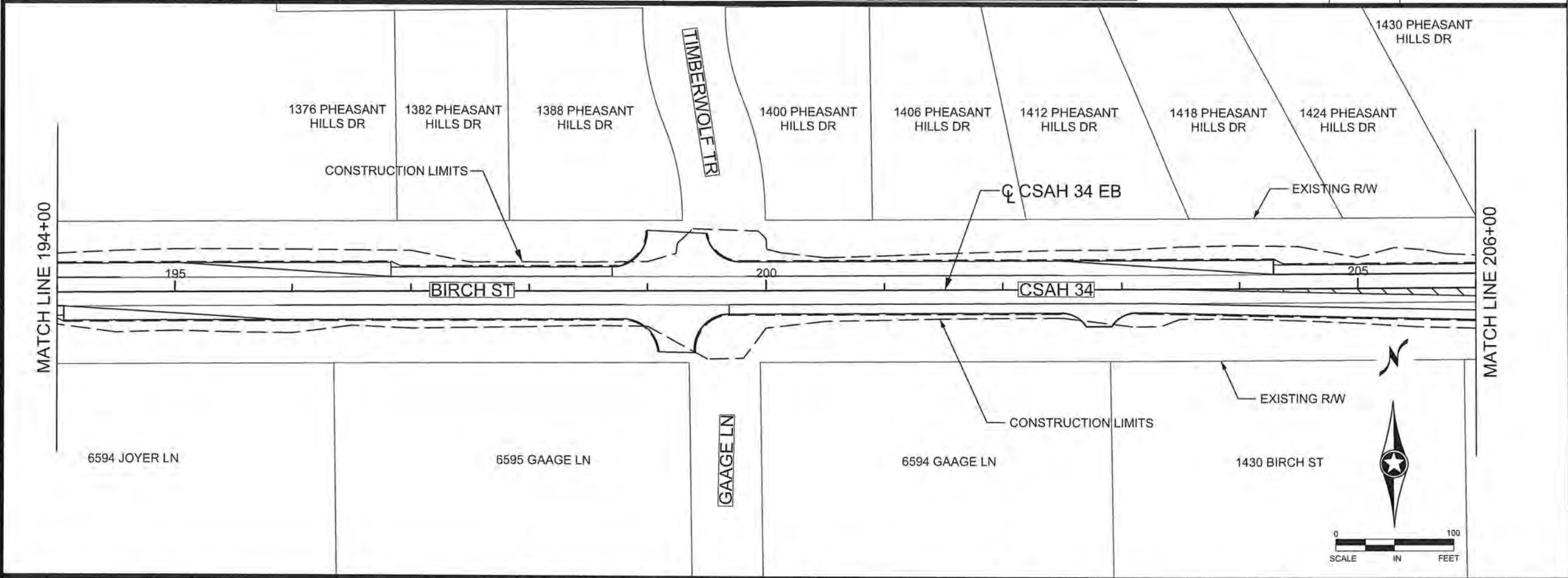
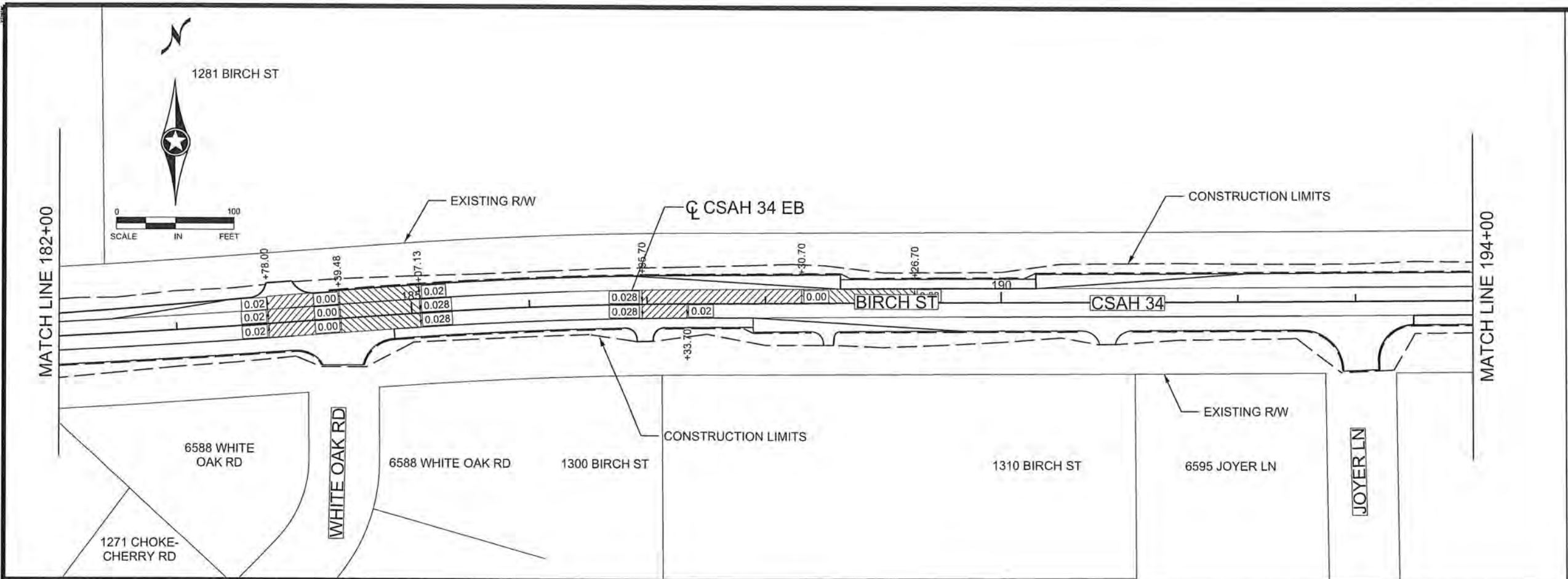
ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

SUPERELEVATION PLAN
 STA 158+00 TO 182+00
 Sheet 42 of 103 Sheets

LEGEND

 SUPERELEVATION TRANSITION

ALL CROSS SLOPES ARE IN FEET PER FEET.




NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_SE1_P4.dgn 04/19/2019 2:43:22 PM

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: NICHOLAS DOBDA


SIGNATURE: 

DATE: 4/22/19 LICENSE NO. 49045

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19

 ANOKA COUNTY HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

SUPERELEVATION PLAN

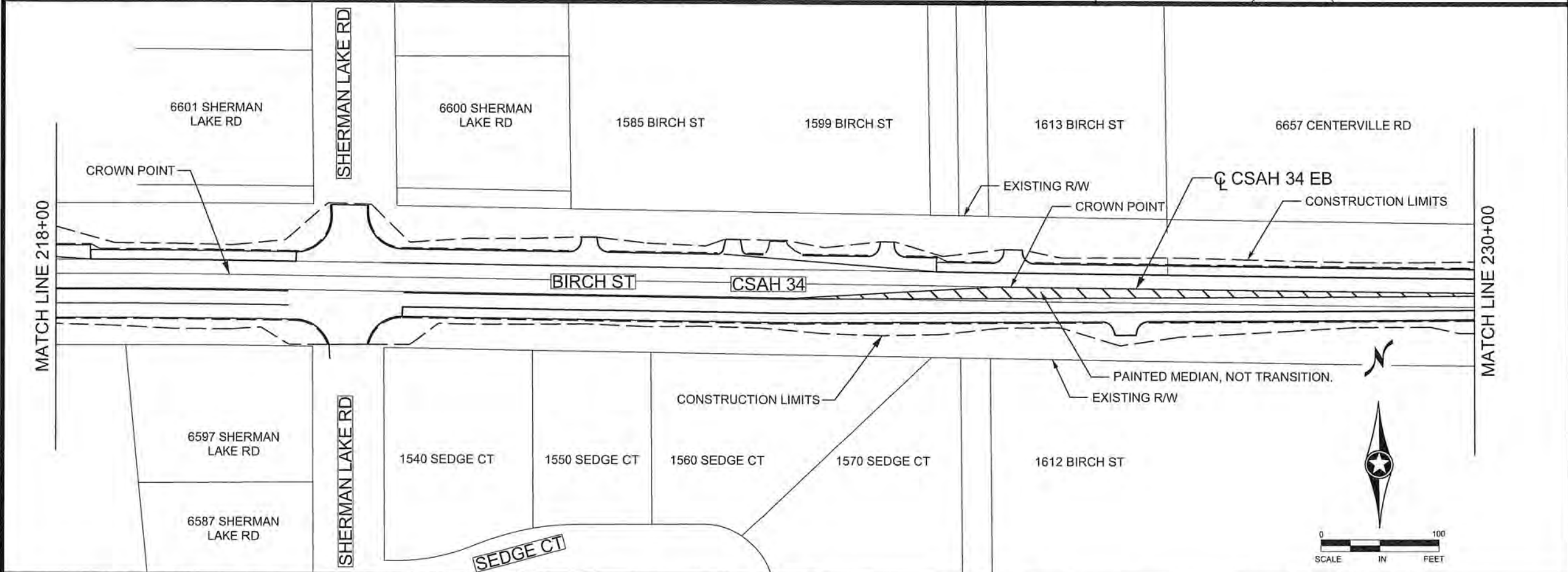
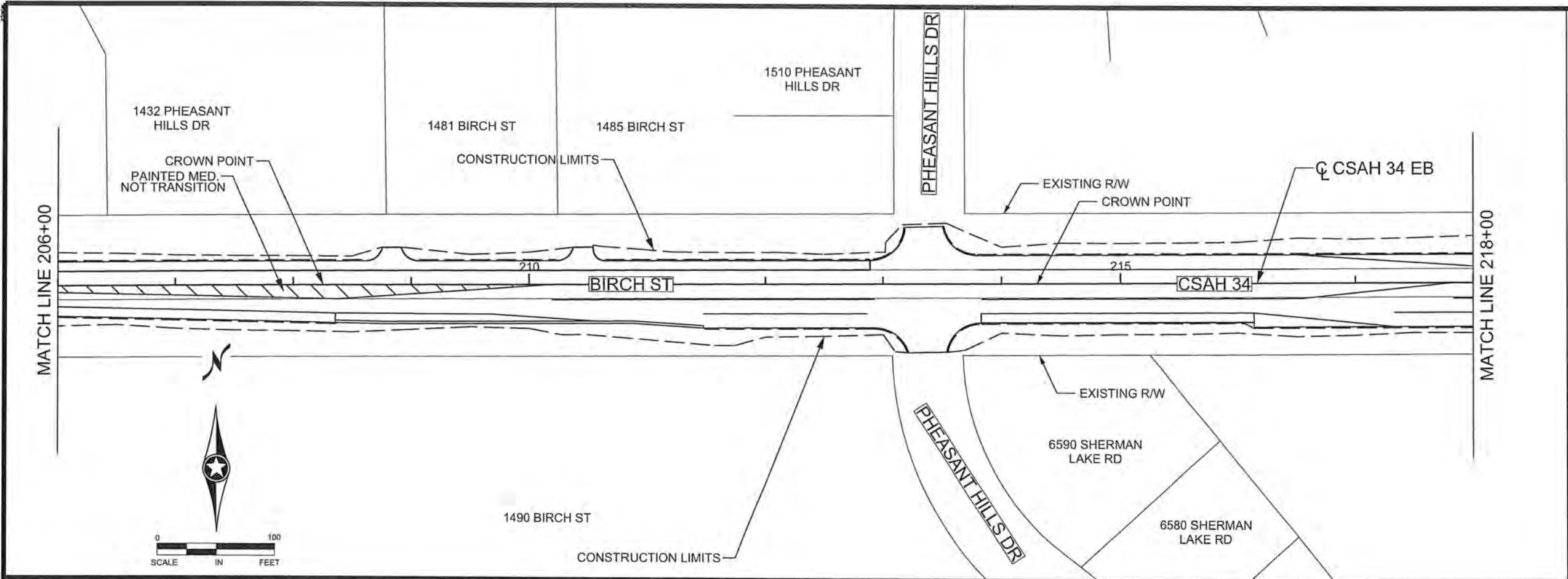
STA 182+00 TO 206+00

Sheet 43 of 103 Sheets


LEGEND

 SUPERELEVATION TRANSITION

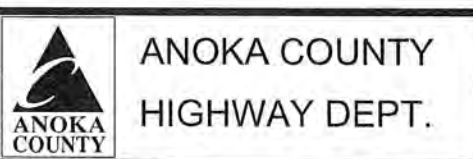
ALL CROSS SLOPES ARE IN FEET PER FEET.



1	4/19/2019	JCF	NJD	LABELLED CROWN PT'S AND ADDED PAINTED BUBBLE NOTE.
NO	DATE	BY	CKD	APPR
NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_SE1_P5.dgn 04/19/2019 1:32:58 PM				

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
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 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
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 CHECKED BY: JEO DATE: 04/05/19



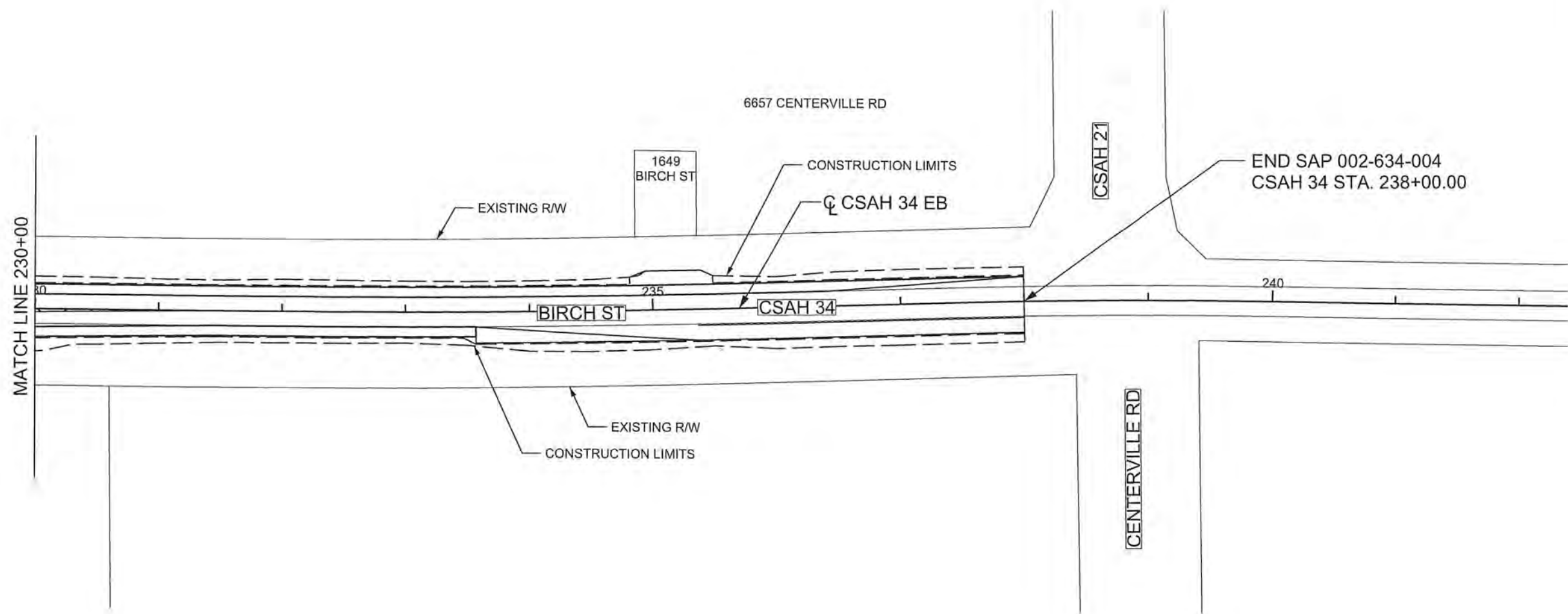
ANOKA COUNTY SAP 002-634-004

SUPERELEVATION PLAN
 STA 206+00 TO 230+00
 Sheet 44 of 103 Sheets

LEGEND

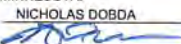
 SUPERELEVATION TRANSITION

ALL CROSS SLOPES ARE IN FEET PER FEET.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_SE1_P6.dgn 04/19/2019 1:33:01 PM

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
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DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

SUPERELEVATION PLAN
 STA 230+00 TO END
 Sheet 45 of 103 Sheets

PROJECT LOCATION AND GENERAL INFORMATION

THIS PROJECT IS LOCATED ON CSAH 34 EAST OF DEERWOOD LANE AND WEST OF CENTERVILLE ROAD IN THE CITY OF LINO LAKES. THE PROJECT LIES IN RICE CREEK WATERSHED DISTRICT, WITH RESHANAU LAKE, CENTERVILLE LAKE AND RICE CREEK WITHIN A MILE OF THE LOCATION.

THIS PROJECT BEGINS ABOUT 50 FT EAST OF DEERWOOD LANE AND EXTENDS TO CENTERVILLE ROAD. THE PROJECT WILL PRIMARILY CONSIST OF RECLAIMING AND OVERLAYING EXISTING BITUMINOUS PAVEMENT, PLACING AGGREGATE BASE, REPLACING EXISTING DRIVEWAY APPROACHES, AND INCORPORATES SOME SHOULDER REDUCTION AND SOME MINOR SHOULDER EXPANSION, AND ADDS SOME CONCRETE CURB AND GUTTER.

THIS PROJECT WILL DISTURB 19.16 ACRES OF SOILS AND CREATE POTENTIAL FOR SEDIMENT DISCHARGE FROM THE SITE.

TRAINING REQUIREMENTS

THE CONTRACTOR WILL ENSURE COMPLIANCE WITH THE TRAINING REQUIRED IN PART 111.A.2 OF THE GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY.

THE INDIVIDUALS TRAINED AND THE TRAINING RECEIVED WILL BE RECORDED IN THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED.

LONG TERM OPERATION AND MAINTENANCE

ANOKA COUNTY AND THE CITY OF LINO LAKES STREET DIVISION ARE RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT.

Tim Payne
City of Lino Lakes
TPayne@linolakes.us
600 Town Center Parkway
Lino Lakes, MN 55014
651-982-2455

RECEIVING SURFACE WATERS, DISCHARGE TO IMPAIRED WATERS & SPECIAL WATERS

THE FOLLOWING TABLE IDENTIFIES ALL SURFACE WATERS WITHIN 1 MILE OF THE PROJECT DISTURBED SOIL BOUNDARIES, WHICH WILL RECEIVE STORMWATER RUNOFF FROM THE CONSTRUCTION SITE, DURING OR AFTER CONSTRUCTION.

STORMWATER FROM A DISCHARGE POINT ON THE PROJECT THAT FLOWS TO A SURFACE WATER IDENTIFIED AS IMPAIRED AND/OR SPECIAL MUST INCLUDE THE FOLLOWING ADDITIONAL BMP REQUIREMENTS:

- 1) ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 2) TEMPORARY SEDIMENT BASINS OR PERMANENT PONDS MUST BE USED FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5+) OR MORE ACRES DISTURBED AT ONE TIME.

RECEIVING SURFACE WATERS WITHIN 1 MILE OF PROJECT		
NAME OF WATER BODY	SPECIAL	IMPAIRED
RESHANAU LAKE	NO	YES
CENTERVILLE LAKE	NO	YES
RICE CREEK	?	?
WETLAND	?	?

DISTURBED SOIL AREA

TOTAL DISTURBED SOILS AREA FOR THIS PROJECT IS 19.16 ACRES

IMPERVIOUS SOIL AREA

EXISTING AREA OF IMPERVIOUS SURFACE IS 15.10 ACRES.

POST CONSTRUCTION AREA OF IMPERVIOUS SURFACE IS 14.92 ACRES.

SOIL TYPES

THE PREDOMINANT SOIL TYPE FOUND ON THIS PROJECT IS _____

SEDIMENT CONTROL PRACTICES

TEMPORARY STOCKPILED TOPSOIL BERMS MUST INCLUDE PERIMETER BMPs AS PROVIDED IN THE PLAN AT LOCATIONS WHERE CONSTRUCTION STORMWATER DRAINS FROM THE PROJECT.

IN ORDER TO MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, THERE SHALL BE NO UNBROKEN SLOPE LENGTH GREATER THAN 75 FEET FOR SLOPES WITH A GRADE OF 1:3 OR STEEPER.

ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPs DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL DISCHARGE TO THE INLET HAVE BEEN STABILIZED.

VEHICLE TRACKING OF SEDIMENT FROM THE CONSTRUCTION SITE MUST BE MINIMIZED. STREET SWEEPING MUST BE USED IF SEDIMENT IS BEING TRACKED OFF THE CONSTRUCTION SITE.

POLLUTION PREVENTION MEASURES

THE CONTRACTOR WILL IMPLEMENT THE POLLUTION PREVENTION MANAGEMENT MEASURES AS DIRECTED IN THE NPDES PERMIT PART IV.F AS PERTAINING TO SOLID WASTE, HAZARDOUS MATERIALS, EXTERNAL TRUCK WASHING, AND CONCRETE WASHOUT ON-SITE.

THESE MANAGEMENT MEASURES FOR POLLUTION PREVENTION WILL BE STRICTLY ENFORCED.

CONSTRUCTION PHASING

SILT FENCE AND/OR OTHER SUITABLE PERIMETER BMPs AS PROVIDED IN THE PLANS WILL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY. CONSTRUCTION WILL BE REQUIRED TO BE PHASED SO THAT ALL DOWN GRADIENT SEDIMENT CONTROL MEASURES ARE INSTALLED PRIOR TO OR IN CONJUNCTION WITH ANY SOIL DISTURBING ACTIVITIES.

WHEN TOPSOIL IS DISTURBED, THE TOPSOIL WILL BE STRIPPED AND STOCKPILED IN SOIL BERMS AT THE TOE OF THE STRIPPED SLOPES ALONG THE PROJECT LIMITS. TEMPORARY VEGETATION WILL BE ESTABLISHED ON THE STOCKPILED TOPSOIL BERMS WITH RAPID STABILIZATION AS PROVIDED IN THE PLAN. STOCKPILED TOPSOIL BERMS WILL NOT BE PLACED IN ANY STORMWATER CONVEYANCES.

AFTER STRIPPING THE TOPSOIL, THE EXPOSED SOIL INSLOPES WILL BE STABILIZED WITH DISK ANCHORED TYPE 3 MULCH AND SEED WITHIN 7 DAYS OR RAPID STABILIZATION 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

TEMPORARY SEDIMENT BASINS

THIS ROAD CONSTRUCTION PROJECT AS DESIGNED DOES NOT MEET ANY OF THE TEMPORARY SEDIMENT BASIN DISTURBED AREA THRESHOLD REQUIREMENTS. IF PERMANENT POND LOCATIONS ARE CONSTRUCTED PRIOR TO DISCHARGE, TEMPORARY SEDIMENT BASINS WILL NOT BE REQUIRED.

PERMANENT STORMWATER MANAGEMENT SYSTEM

ALL STORMWATER MUST BE DISCHARGED IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING WATERS OR ON DOWNSLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING A SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.

THIS ROAD CONSTRUCTION PROJECT HAS A DECREASE IN IMPERVIOUS AREA.

PROJECT CONTACTS

MPCA	NPDES	LAURAL MEZNER	218-316-3889
MPCA	EMERGENCY	STATE DUTY OFFICER	800-422-0798
DNR	NOT REQUIRED		
COE	NOT REQUIRED		
ANOKA COUNTY DESIGN SWPPP PREPARATION	U OF MN DESIGN OF SWPPP EXPIRES 5/22	AICHELE PRITCHARD	763-324-3162
ANOKA COUNTY PROJECT REPRESENTATIVE	U OF MN SITE MANAGEMENT EXPIRES 5/20	HARRY GRAMS	763-324-3114
EROSION CONTROL SUPERVISOR (CONTRACTOR)			

EROSION PREVENTION PRACTICES


ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. FOR ALL AREAS WHERE DISTURBED SOILS DRAIN TO AN IMPAIRED OR SPECIAL WATER, THE EXPOSED SOIL MUST BE STABILIZED NO LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS CEASED. SEE THE IMPAIRED & SPECIAL WATERS SECTION SPECIAL OR IMPAIRED WATER.

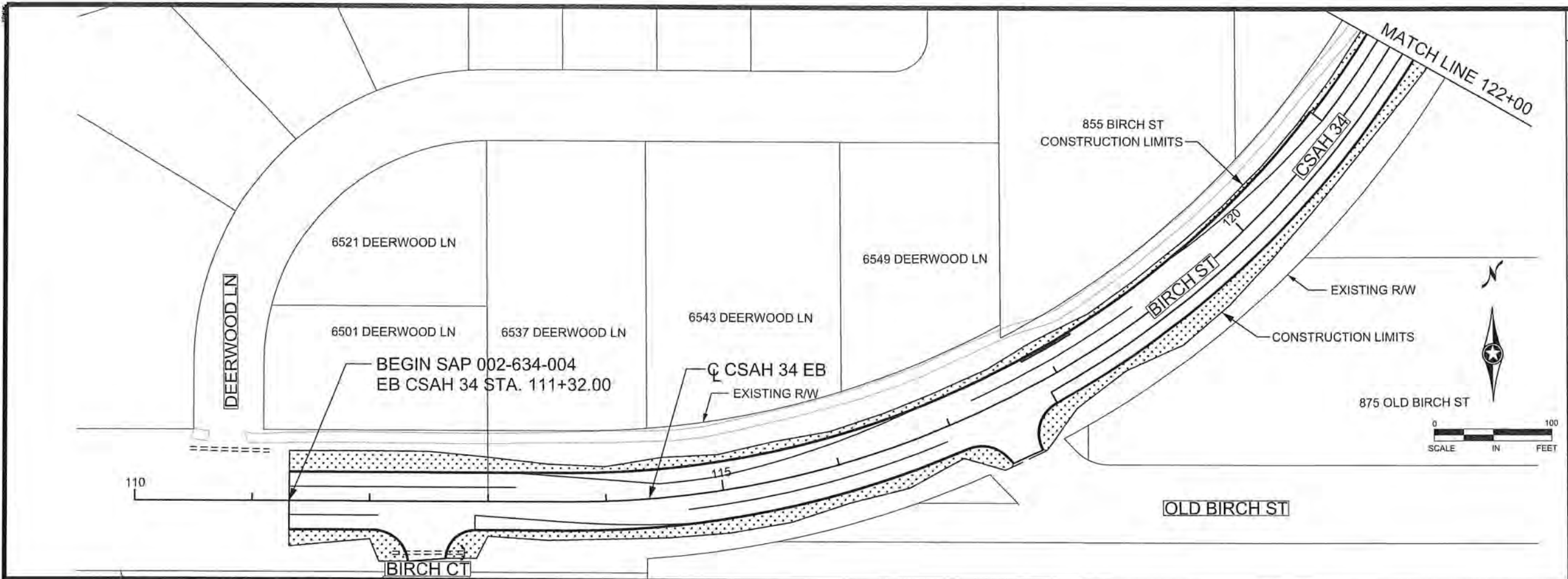
THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER.

PIPE CULVERT OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER. THIS WILL INCLUDE DRAINAGE DITCHES THAT DRAIN WATER FROM ANY PORTION OF THE CONSTRUCTION SITE.

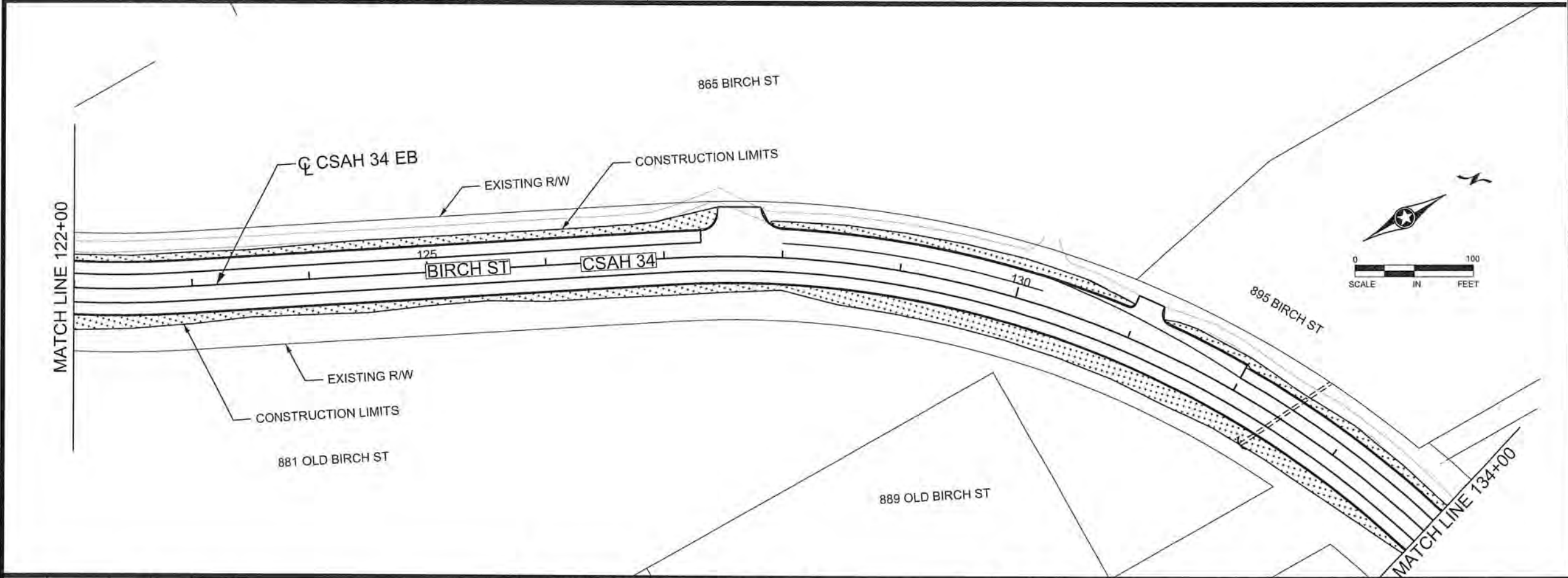
LOCATION OF SWPPP REQUIREMENTS

REQUIREMENT	PLAN		MnDOT SPECIFICATION	SPECIAL PROVISION
	TITLE	LOCATION		
NPDES PERMIT COMPLIANCE			1701, 1702, & 1717	1717 (AIR, LAND & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT)
CERTIFIED PERSONNEL IN EROSION AND SEDIMENT CONTROL SITE MANAGEMENT			1506, 1717, & 2573	1717 (AIR, LAND & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT)
CHAIN OF RESPONSIBILITY	AGENCY CONTACTS	SHEET 46	1506, 1717, & 2573	
PROJECT SCHEDULE / WEEKLY EROSION & SEDIMENT CONTROL SCHEDULE / COMPLETING INSPECTION / MAINTENANCE LOG	AGENCY CONTACTS	SHEET 46	1717 & 2573	1717 (AIR, LAND & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT)
SWPPP PREPARATION	AGENCY CONTACTS	SHEET 46		
SITE MAP / RECEIVING WATERS / DIRECTION OF FLOW	EROSION CONTROL PLAN	SHEETS 48 - 53	1717	
PROJECT SPECIFIC CONSTRUCTION STAGING	STAGING PLANS		1717	1717 (AIR, LAND & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT) 1806 (DETERMINATION AND EXTENSION OF CONTRACT TIME)
TEMPORARY EROSION AND SEDIMENT CONTROL BMP LOCATIONS, INSTALLATION, TIMING OF INSTALLATION AND TYPE OF BMP	EROSION CONTROL PLAN, TABULATION CHARTS	SHEETS 48 - 53, SHEET #TB9	2573 & 2525	2575 (RAPID STABILIZATION SPECIFICATION)
ADDITIONAL TEMPORARY AND/OR PERMANENT EROSION AND SEDIMENT CONTROL BMPs NOT PROVIDED OR SHOWN IN THE PLAN	SWPPP NARRATIVE	SHEETS 46 - 47	1717, 2573, & 2575	1717 (AIR, LAND & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT) 2575 (RAPID STABILIZATION SPECIFICATION)
MAINTENANCE OF EROSION AND SEDIMENT CONTROL DEVICES, REMOVAL OF TRACKED SEDIMENT, REMOVAL OF DEVICES			1717 & 2573	1514 (MAINTENANCE DURING CONSTRUCTION) 1717 (LAND AIR & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT)
DEWATERING			2105.3B, & 2451.3C	DEWATERING MAY ALSO REQUIRE DNR PERMIT. NO DEWATERING IS ANTICIPATED FOR THIS PROJECT
FINAL STABILIZATION	TURF ESTABLISHMENT PLAN, TABULATION CHARTS	SHEETS 48 - 53 SHEET #TB9	1717, 2573, & 2575	1717 (AIR, LAND & WATER) 1717 (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT)
TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS	EROSION CONTROL DETAILS	SHEETS 48 - 53	2575	2575 (RAPID STABILIZATION SPECIFICATION)
PERMANENT EROSION CONTROL DETAILS	EROSION CONTROL DETAILS	SHEETS 48 - 53	2575	2575 (CONTROLLING EROSION AND ESTABLISHING VEGETATION)

<p>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.</p> <p>PRINT NAME: NICHOLAS DOBDA</p> <p>SIGNATURE: <i>Nicholas Dobda</i></p> <p>DATE: 4/22/19 LICENSE NO. 49046</p>					<p>DRAWN BY: MP DATE: 03/26/19</p> <p>DESIGN BY: MP DATE: 03/28/19</p> <p>CHECKED BY: JEO DATE: 04/05/19</p>	 <p>ANOKA COUNTY HIGHWAY DEPT.</p>	<p>ANOKA COUNTY SAP 002-634-004</p>	<p>SWPPP NARRATIVE</p> <p>Sheet 46 of 103 Sheets</p>		
NO	DATE	BY	CKD	APPR	REVISION	<p>NAME: P:\19-01-00\CSAH_34_CSAH49-CSAH21\Plan\000000000_SWPPP.dgn 04/09/2019 10:05:54 AM</p>				



LEGEND	
	INPLACE CATCH BASIN
	INPLACE MANHOLE
	INPLACE APRON
	INPLACE CULVERT
	PROPOSED CULVERT
	SILT FENCE TYPE MACHINE SLICED
	RIPRAP (CLASS II UNLESS OTHERWISE NOTED)
	SOD APRON INLET OR OUTLET
	INLET PROTECTION FOR CATCH BASINS
	CULVERT END CONTROLS
	SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10 MULCH TYPE 1 DISC ANCHORING
	EROSION CONTROL BLANKET CATEGORY 0 SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10



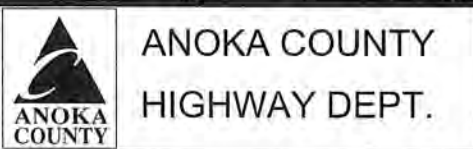
- NOTES**
1. THE CONTRACTOR SHALL CONSTRUCT WASHED GRAVEL ENTRANCES AT POINTS OF EXIT FROM THE WORK AREA ONTO EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
 2. SILT FENCE SHALL FOLLOW A SINGLE CONTOUR AS CLOSELY AS POSSIBLE.
 3. SILT FENCE SHALL BE CLEANED OUT OR REPLACED WHEN SEDIMENT REACHES 8" OR $\frac{1}{3}$ OF SILT FENCE HEIGHT.
 4. WHEN SEDIMENT DEPOSITS IN A WATER OF THE STATE, THE MATERIAL MUST BE REMOVED WITHIN 7 DAYS.
 5. IF SILT DEPOSITS IN THE ANOKA COUNTY RIGHT-OF-WAY, THE CONTRACTOR IS RESPONSIBLE FOR ITS REMOVAL.
 6. EROSION CONTROL BLANKET, TO BE USED AT CULVERT APRONS, SHALL BE CATEGORY 0.
 7. ALL GRADED AREAS ARE TO BE REVEGETATED WITHIN 14 DAYS OF THE COMPLETION OF GRADING.

NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_EC1_P1.dgn 04/19/2019 1:31:13 PM					

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.

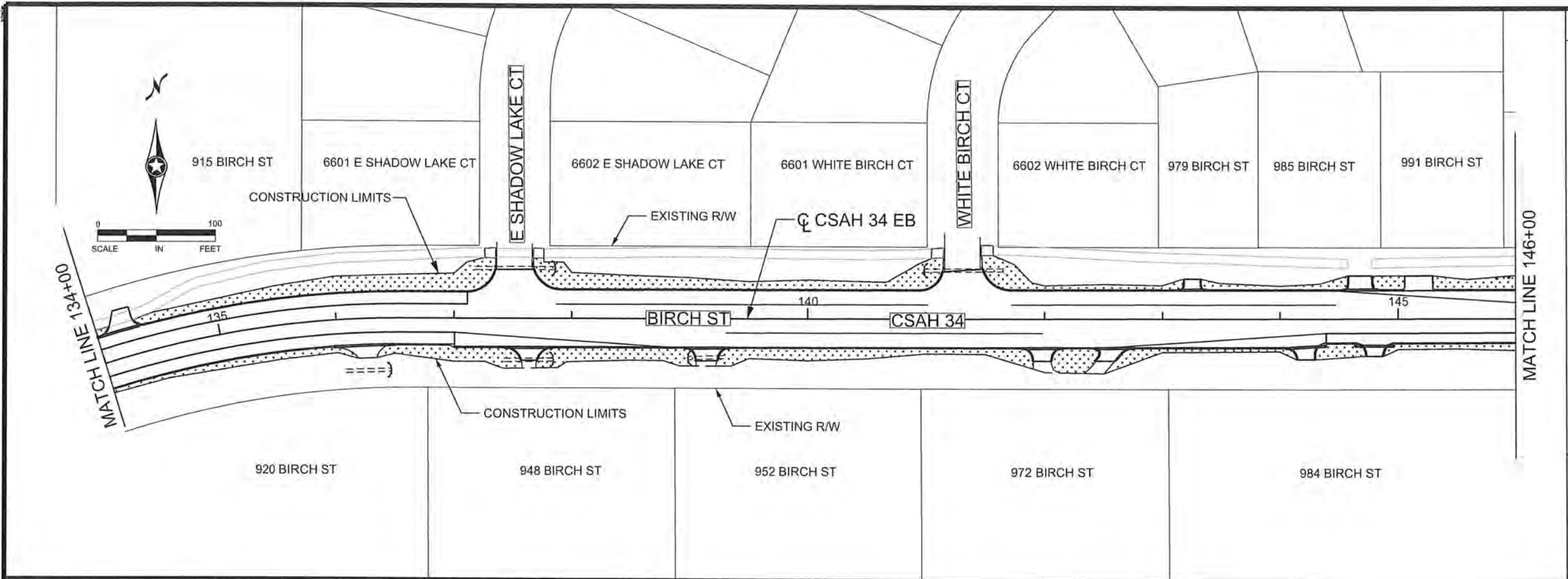
PRINT NAME: NICHOLAS DOBDA
 SIGNATURE:
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19

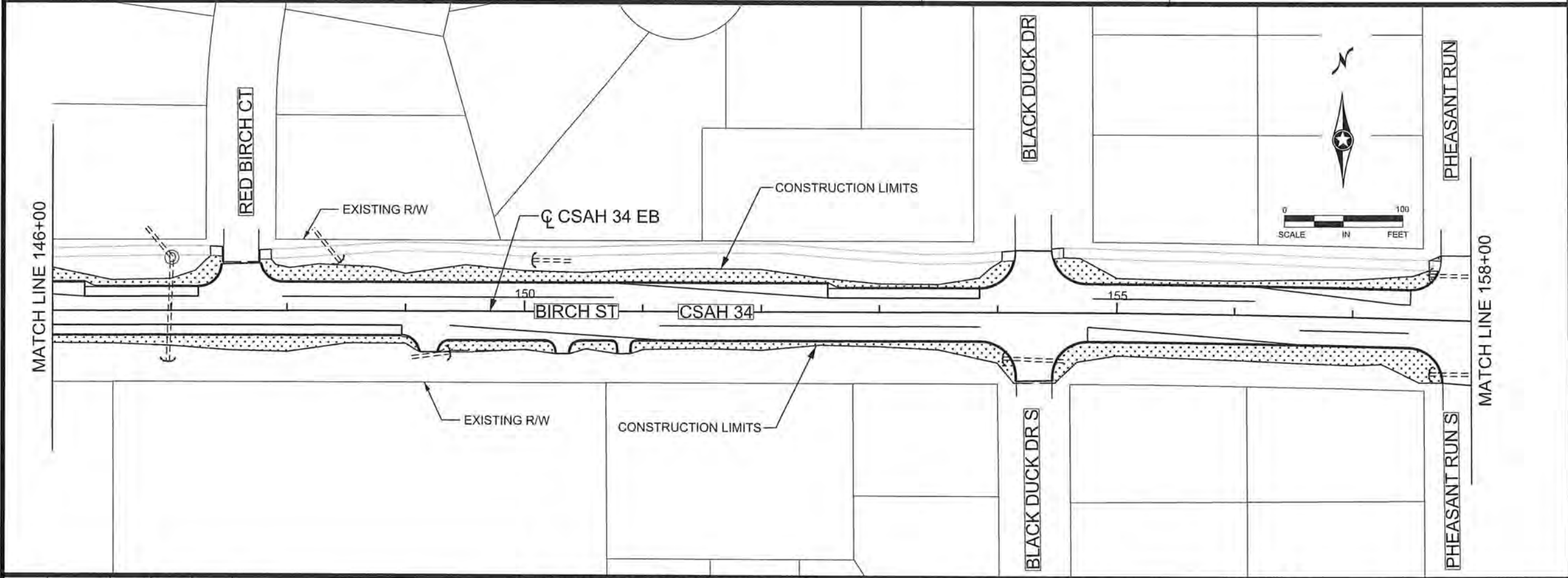


ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

EROSION CONTROL PLAN
 STA 111+32 TO 134+00
 Sheet 48 of 103 Sheets



LEGEND	
	INPLACE CATCH BASIN
	INPLACE MANHOLE
	INPLACE APRON
	INPLACE CULVERT
	PROPOSED CULVERT
	SILT FENCE TYPE MACHINE SLICED
	RIPRAP (CLASS II UNLESS OTHERWISE NOTED)
	SOD APRON INLET OR OUTLET
	INLET PROTECTION FOR CATCH BASINS
	CULVERT END CONTROLS
	SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10 MULCH TYPE 1 DISC ANCHORING
	EROSION CONTROL BLANKET CATEGORY 0 SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10



- NOTES**
1. THE CONTRACTOR SHALL CONSTRUCT WASHED GRAVEL ENTRANCES AT POINTS OF EXIT FROM THE WORK AREA ONTO EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
 2. SILT FENCE SHALL FOLLOW A SINGLE CONTOUR AS CLOSELY AS POSSIBLE.
 3. SILT FENCE SHALL BE CLEANED OUT OR REPLACED WHEN SEDIMENT REACHES 8" OR $\frac{1}{3}$ OF SILT FENCE HEIGHT.
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 5. IF SILT DEPOSITS IN THE ANOKA COUNTY RIGHT-OF-WAY, THE CONTRACTOR IS RESPONSIBLE FOR ITS REMOVAL.
 6. EROSION CONTROL BLANKET, TO BE USED AT CULVERT APRONS, SHALL BE CATEGORY 0.
 7. ALL GRADED AREAS ARE TO BE REVEGETATED WITHIN 14 DAYS OF THE COMPLETION OF GRADING.

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_EC1_P2.dgn 04/19/2019 1:31:18 PM

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: NICHOLAS DOBDA

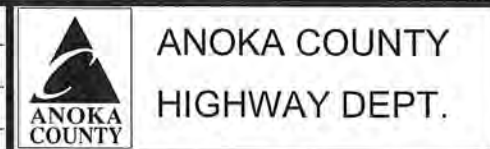
SIGNATURE:

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19

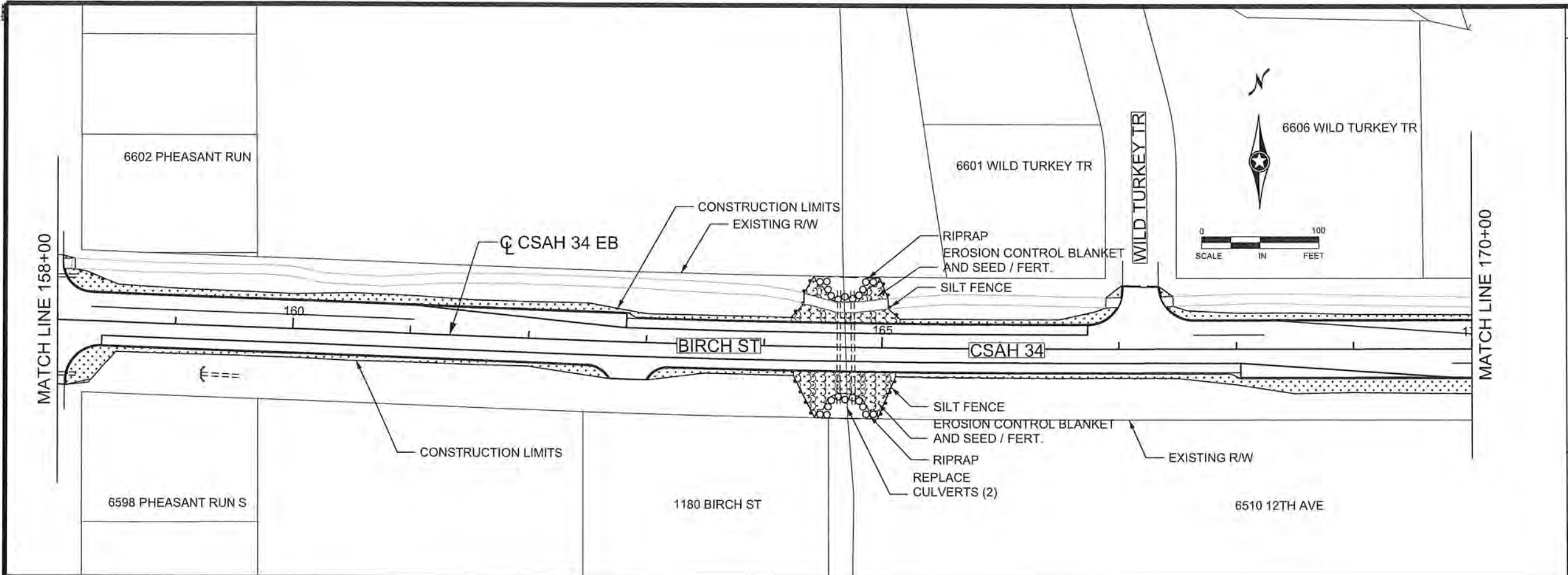


ANOKA COUNTY SAP 002-634-004

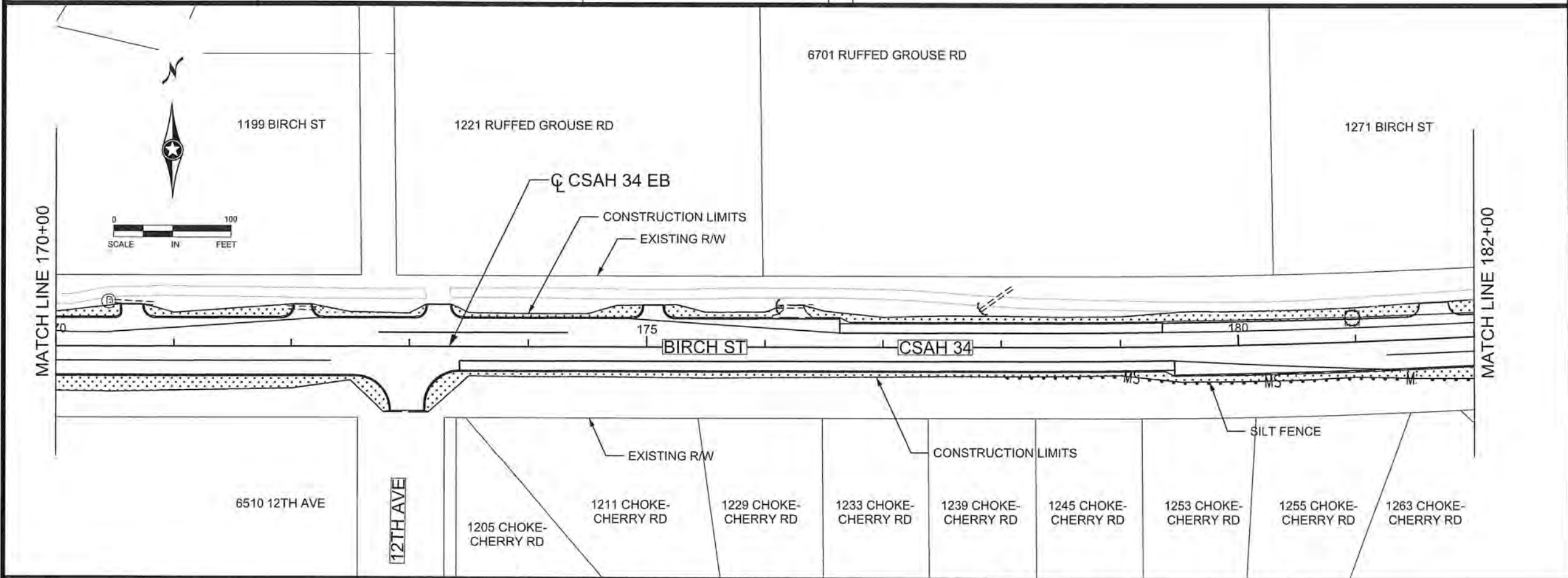
EROSION CONTROL PLAN

STA 134+00 TO 158+00

Sheet 49 of 103 Sheets



LEGEND	
	INPLACE CATCH BASIN
	INPLACE MANHOLE
	INPLACE APRON
	INPLACE CULVERT
	PROPOSED CULVERT
	SILT FENCE TYPE MACHINE SLICED
	RIPRAP (CLASS II UNLESS OTHERWISE NOTED)
	SOD APRON INLET OR OUTLET
	INLET PROTECTION FOR CATCH BASINS
	CULVERT END CONTROLS
	SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10 MULCH TYPE 1 DISC ANCHORING
	EROSION CONTROL BLANKET CATEGORY 0 SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10



- NOTES**
1. THE CONTRACTOR SHALL CONSTRUCT WASHED GRAVEL ENTRANCES AT POINTS OF EXIT FROM THE WORK AREA ONTO EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
 2. SILT FENCE SHALL FOLLOW A SINGLE CONTOUR AS CLOSELY AS POSSIBLE.
 3. SILT FENCE SHALL BE CLEANED OUT OR REPLACED WHEN SEDIMENT REACHES 8" OR $\frac{1}{3}$ OF SILT FENCE HEIGHT.
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 6. ALL GRADED AREAS ARE TO BE REVEGETATED WITHIN 14 DAYS OF THE COMPLETION OF GRADING.

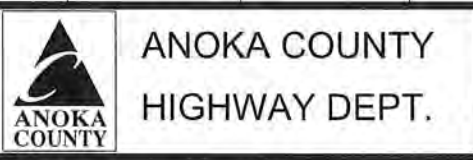
NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\000000000_EC1_P3.dgn 04/19/2019 1:31:22 PM

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.

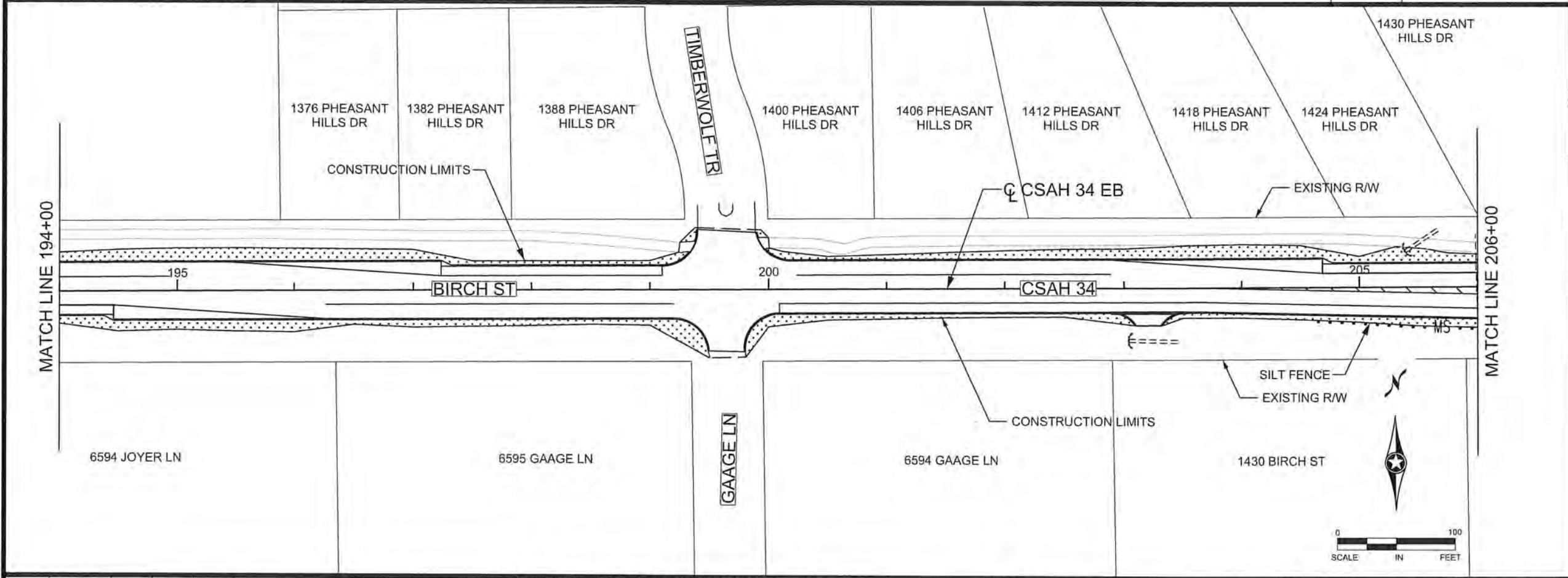
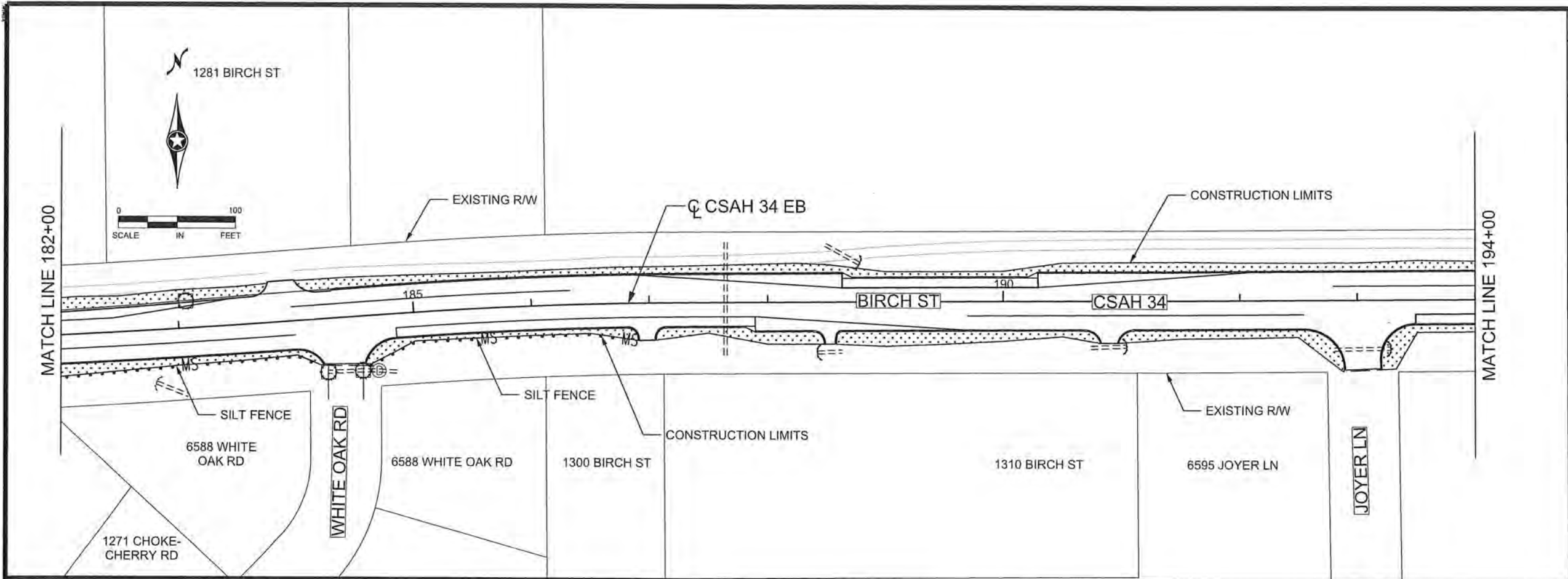
PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *N. Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

EROSION CONTROL PLAN
 STA 158+00 TO 182+00
 Sheet 50 of 103 Sheets



LEGEND	
	INPLACE CATCH BASIN
	INPLACE MANHOLE
	INPLACE APRON
	INPLACE CULVERT
	PROPOSED CULVERT
	SILT FENCE TYPE MACHINE SLICED
	RIPRAP (CLASS II UNLESS OTHERWISE NOTED)
	SOD APRON INLET OR OUTLET
	INLET PROTECTION FOR CATCH BASINS
	CULVERT END CONTROLS
	SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10 MULCH TYPE 1 DISC ANCHORING
	EROSION CONTROL BLANKET CATEGORY 0 SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10

NOTES

1. THE CONTRACTOR SHALL CONSTRUCT WASHED GRAVEL ENTRANCES AT POINTS OF EXIT FROM THE WORK AREA ONTO EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
2. SILT FENCE SHALL FOLLOW A SINGLE CONTOUR AS CLOSELY AS POSSIBLE.
3. SILT FENCE SHALL BE CLEANED OUT OR REPLACED WHEN SEDIMENT REACHES 8" OR $\frac{1}{3}$ OF SILT FENCE HEIGHT.
4. WHEN SEDIMENT DEPOSITS IN A WATER OF THE STATE, THE MATERIAL MUST BE REMOVED WITHIN 7 DAYS.
5. IF SILT DEPOSITS IN THE ANOKA COUNTY RIGHT-OF-WAY, THE CONTRACTOR IS RESPONSIBLE FOR ITS REMOVAL.
6. ALL GRADED AREAS ARE TO BE REVEGETATED WITHIN 14 DAYS OF THE COMPLETION OF GRADING.

NO	DATE	BY	CKD	APPR	REVISION
NAME: P:19-01-00CSAH_34_(CSAH49-CSAH21)Plan\000000000_EC1_P4.dgn 04/19/2019 1:31:25 PM					

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: NICHOLAS DOBDA

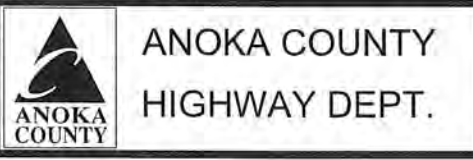
SIGNATURE: *Nicholas Dobda*

DATE: 4/22/19 LICENSE NO: 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19

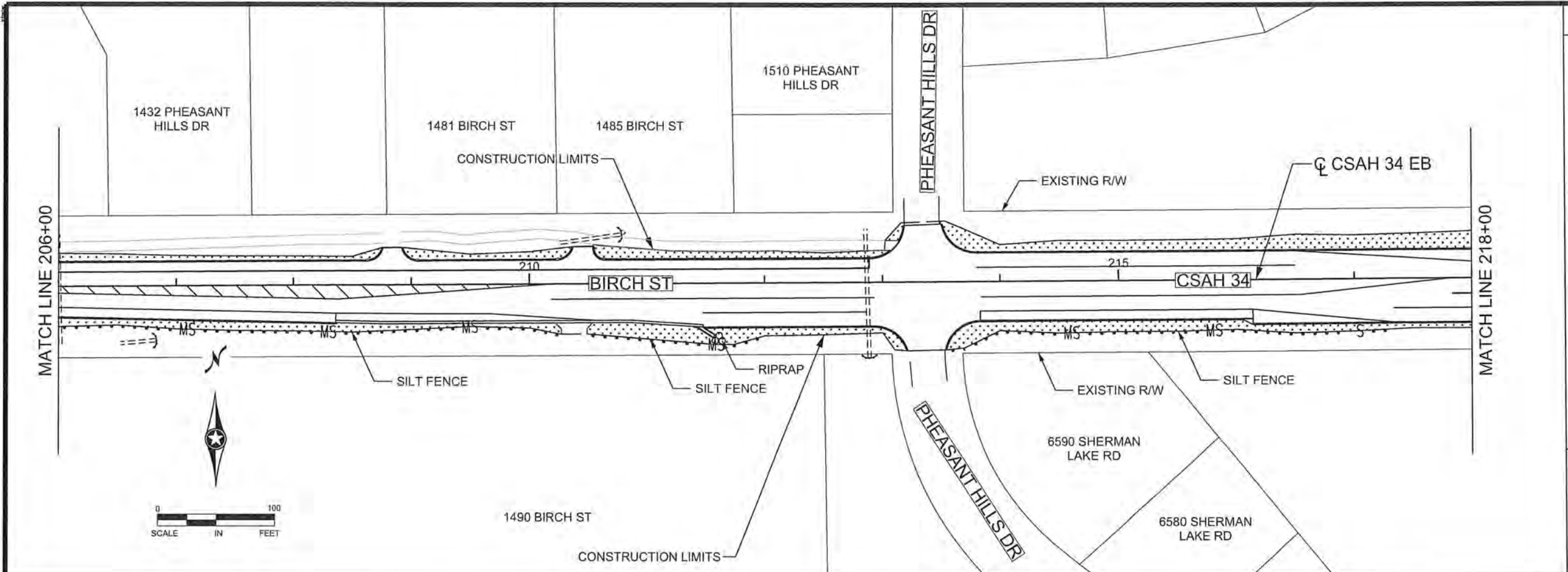


ANOKA COUNTY SAP 002-634-004

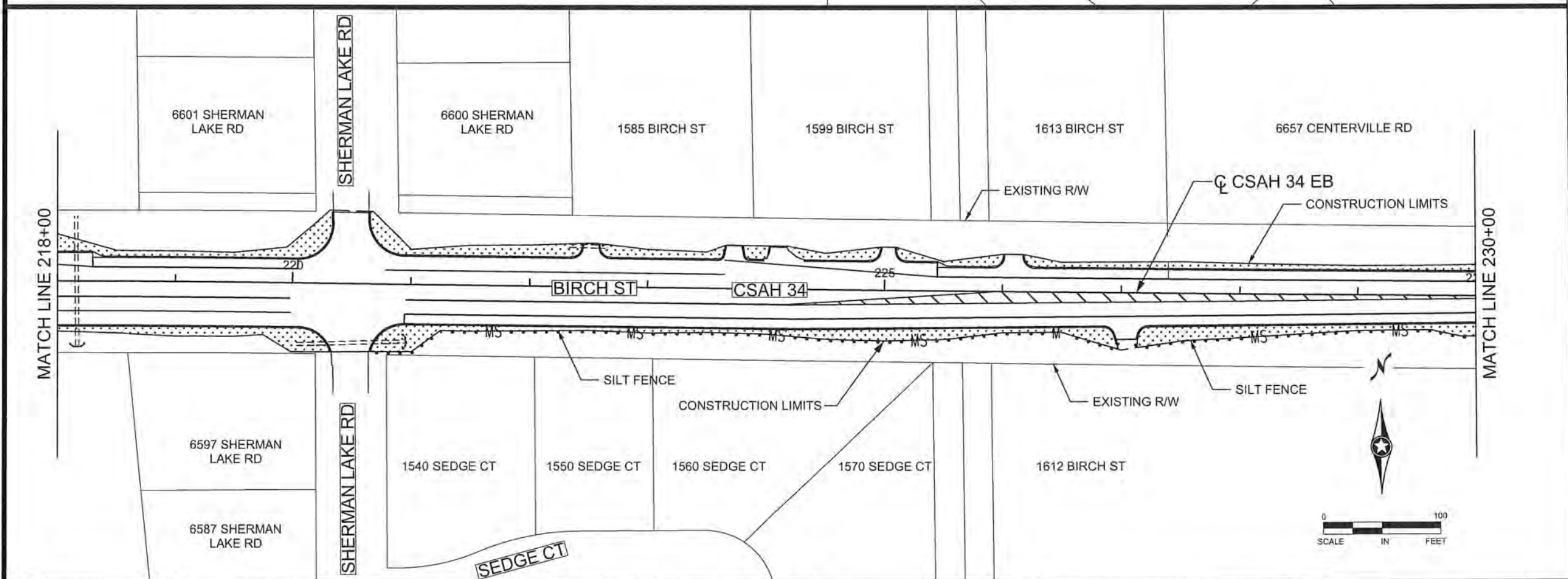
EROSION CONTROL PLAN

STA 182+00 TO 206+00

Sheet 51 of 103 Sheets



LEGEND	
	INPLACE CATCH BASIN
	INPLACE MANHOLE
	INPLACE APRON
	INPLACE CULVERT
	PROPOSED CULVERT
	SILT FENCE TYPE MACHINE SLICED
	RIPRAP (CLASS II UNLESS OTHERWISE NOTED)
	SOD APRON INLET OR OUTLET
	INLET PROTECTION FOR CATCH BASINS
	CULVERT END CONTROLS
	SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10 MULCH TYPE 1 DISC ANCHORING
	EROSION CONTROL BLANKET CATEGORY 0 SEED MIX 25-131 FERTILIZER TYPE 3 22-5-10

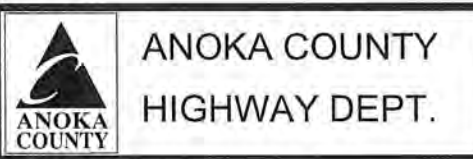


- NOTES**
1. THE CONTRACTOR SHALL CONSTRUCT WASHED GRAVEL ENTRANCES AT POINTS OF EXIT FROM THE WORK AREA ONTO EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
 2. SILT FENCE SHALL FOLLOW A SINGLE CONTOUR AS CLOSELY AS POSSIBLE.
 3. SILT FENCE SHALL BE CLEANED OUT OR REPLACED WHEN SEDIMENT REACHES 8" OR $\frac{1}{3}$ OF SILT FENCE HEIGHT.
 4. WHEN SEDIMENT DEPOSITS IN A WATER OF THE STATE, THE MATERIAL MUST BE REMOVED WITHIN 7 DAYS.
 5. IF SILT DEPOSITS IN THE ANOKA COUNTY RIGHT-OF-WAY, THE CONTRACTOR IS RESPONSIBLE FOR ITS REMOVAL.
 6. ALL GRADED AREAS ARE TO BE REVEGETATED WITHIN 14 DAYS OF THE COMPLETION OF GRADING.

1	4/17/2019	JCF	NJD	ADDED RIPRAP TO FLUME
NO	DATE	BY	CKD	APPR
REVISION				
NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\00000000_EC1_P5.dgn 04/19/2019 1:31:29 PM				

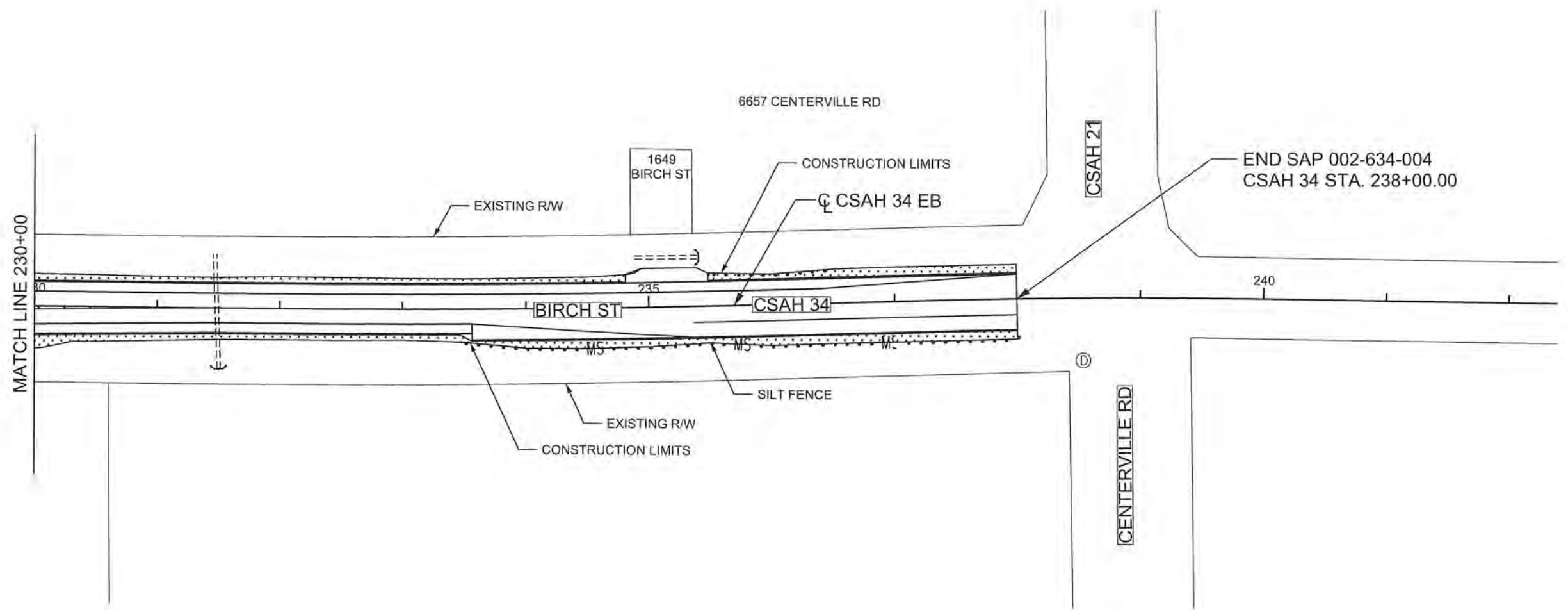
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: NICHOLAS DOBDA
 SIGNATURE: *Nicholas Dobda*
 DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19
 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEQ DATE: 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

EROSION CONTROL PLAN
 STA 206+00 TO 230+00
 Sheet 52 of 103 Sheets



LEGEND

- INPLACE CATCH BASIN
- INPLACE MANHOLE
- ▷ INPLACE APRON
- == INPLACE CULVERT
- == PROPOSED CULVERT
- MS← SILT FENCE TYPE MACHINE SLICED
- ⊗ RIPRAP (CLASS II UNLESS OTHERWISE NOTED)
- Ⓢ SOD APRON INLET OR OUTLET
- INLET PROTECTION FOR CATCH BASINS
- ⌒ CULVERT END CONTROLS
- SEED MIX 25-131
FERTILIZER TYPE 3 22-5-10
MULCH TYPE 1
DISC ANCHORING
- EROSION CONTROL BLANKET
CATEGORY 0
SEED MIX 25-131
FERTILIZER TYPE 3 22-5-10

NOTES

1. THE CONTRACTOR SHALL CONSTRUCT WASHED GRAVEL ENTRANCES AT POINTS OF EXIT FROM THE WORK AREA ONTO EXISTING BITUMINOUS PAVEMENT AS DIRECTED BY THE ENGINEER.
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6. ALL GRADED AREAS ARE TO BE REVEGETATED WITHIN 14 DAYS OF THE COMPLETION OF GRADING.

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_EC1_P6.dgn 04/19/2019 1:44:21 PM

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: NICHOLAS DOBDA

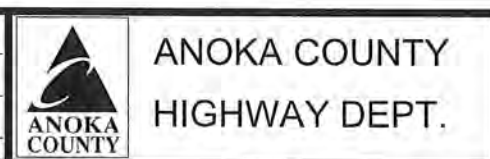
SIGNATURE: *[Signature]*

DATE: 4/22/19 LICENSE NO. 49046

DRAWN BY: MP DATE: 03/26/19

DESIGN BY: MP DATE: 03/26/19

CHECKED BY: JEO DATE: 04/05/19



ANOKA COUNTY SAP 002-634-004

EROSION CONTROL PLAN

STA 230+00 TO END

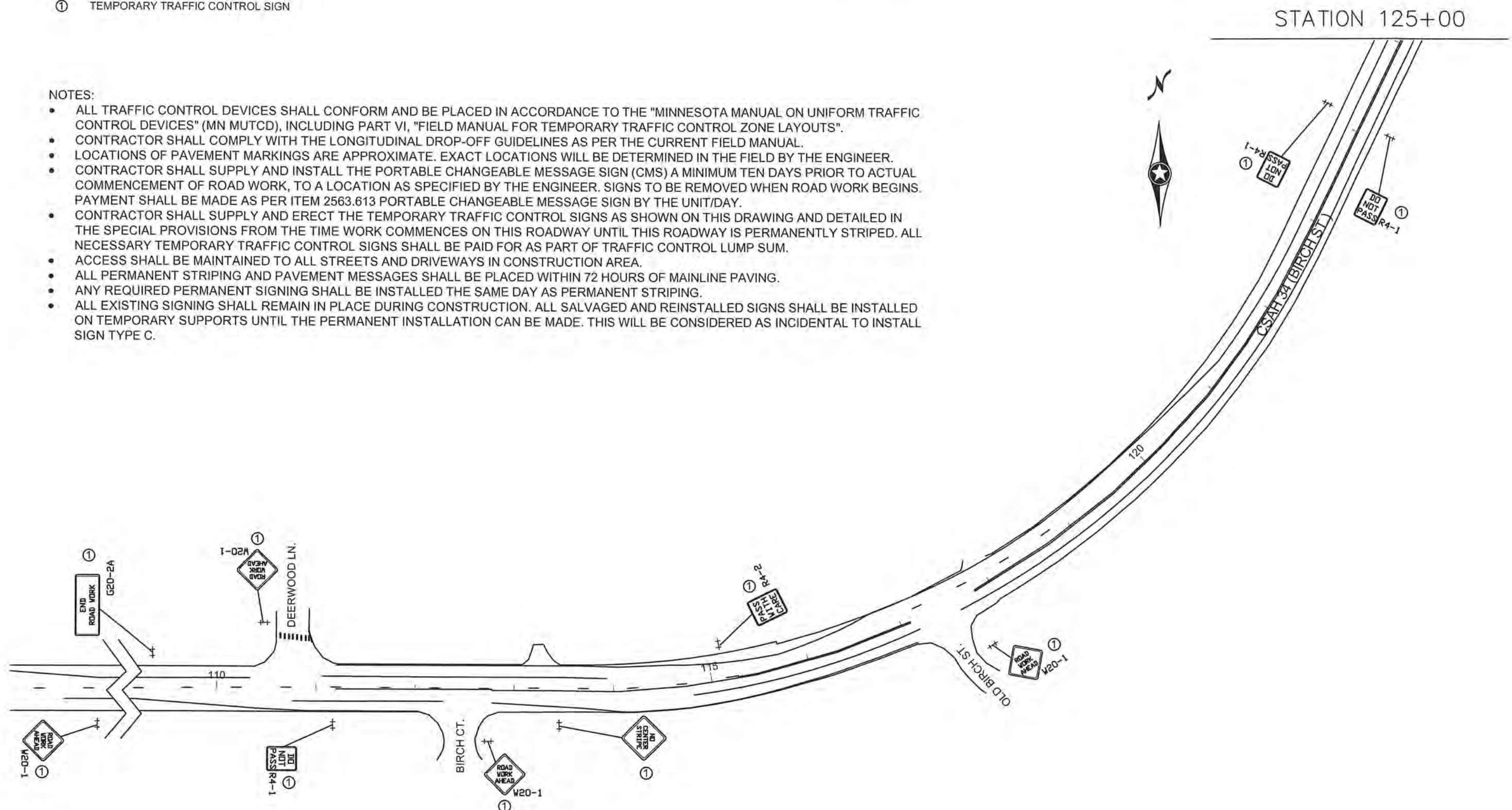
Sheet 53 of 103 Sheets

NOTES:

- ① TEMPORARY TRAFFIC CONTROL SIGN

NOTES:

- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
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NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. FISCHER
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 20235

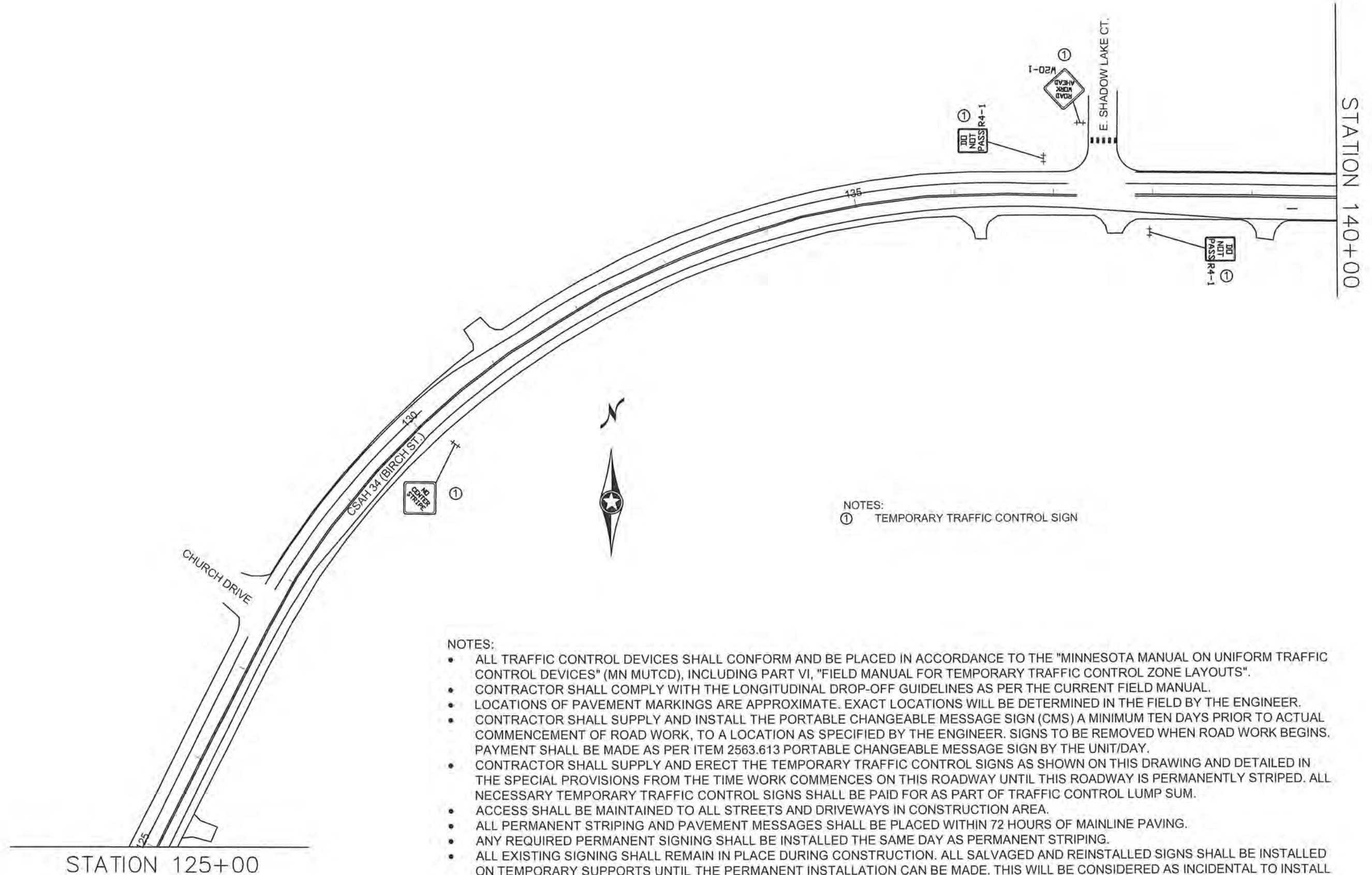
DRAWN BY: TMV DATE: 03/29/19
 DESIGN BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. 002-634-004
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. _____

TRAFFIC CONTROL PLAN
 Sheet 54 of 103 Sheets



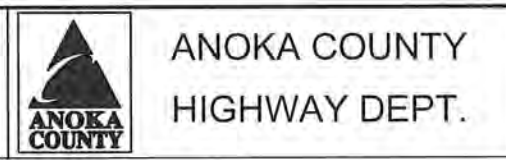
NOTES:
 ① TEMPORARY TRAFFIC CONTROL SIGN

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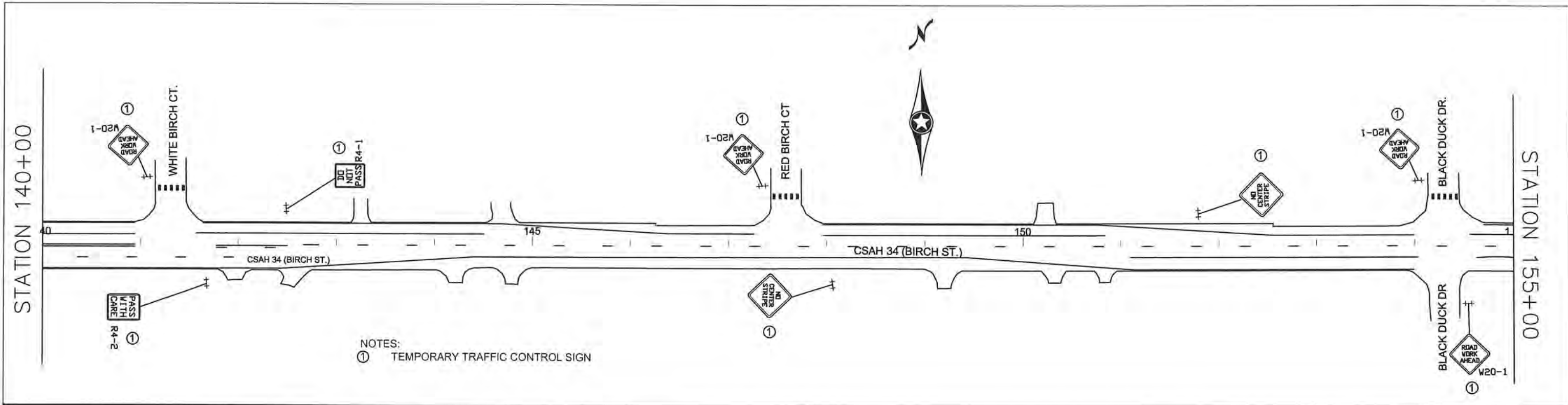
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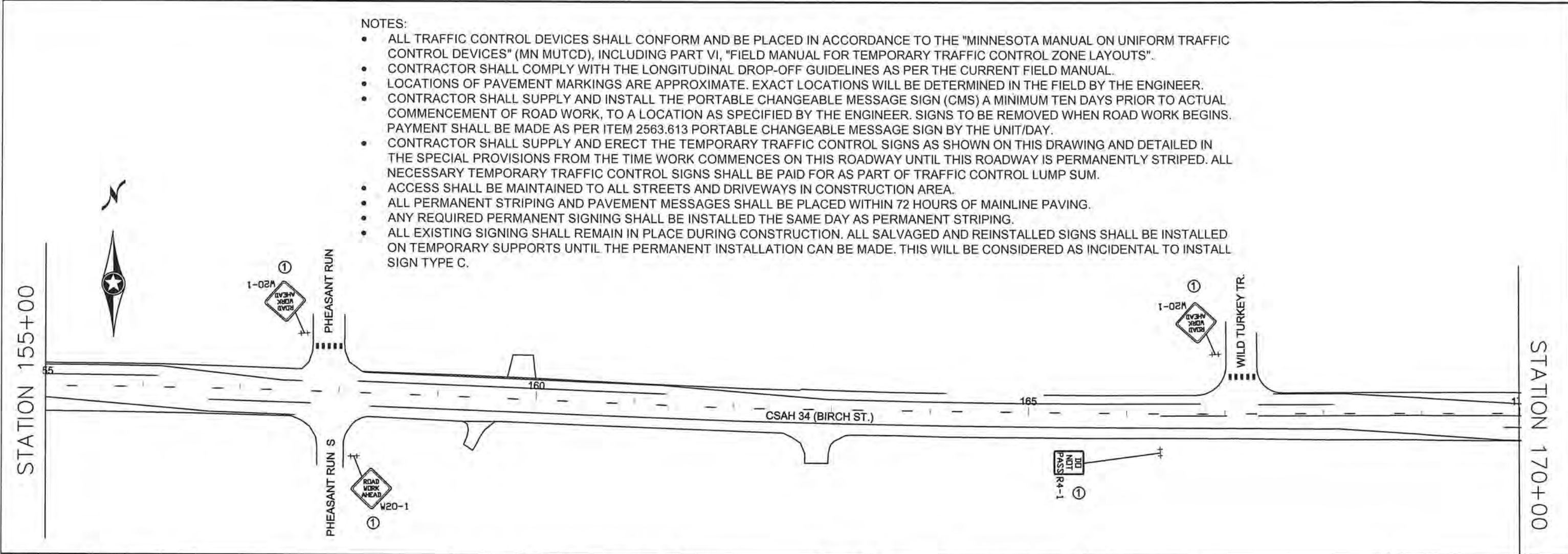


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 COUNTY PROJECT NO. _____

TRAFFIC CONTROL PLAN
 Sheet 55 of 103 Sheets



NOTES:
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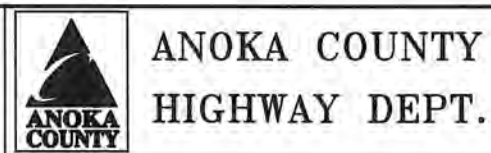
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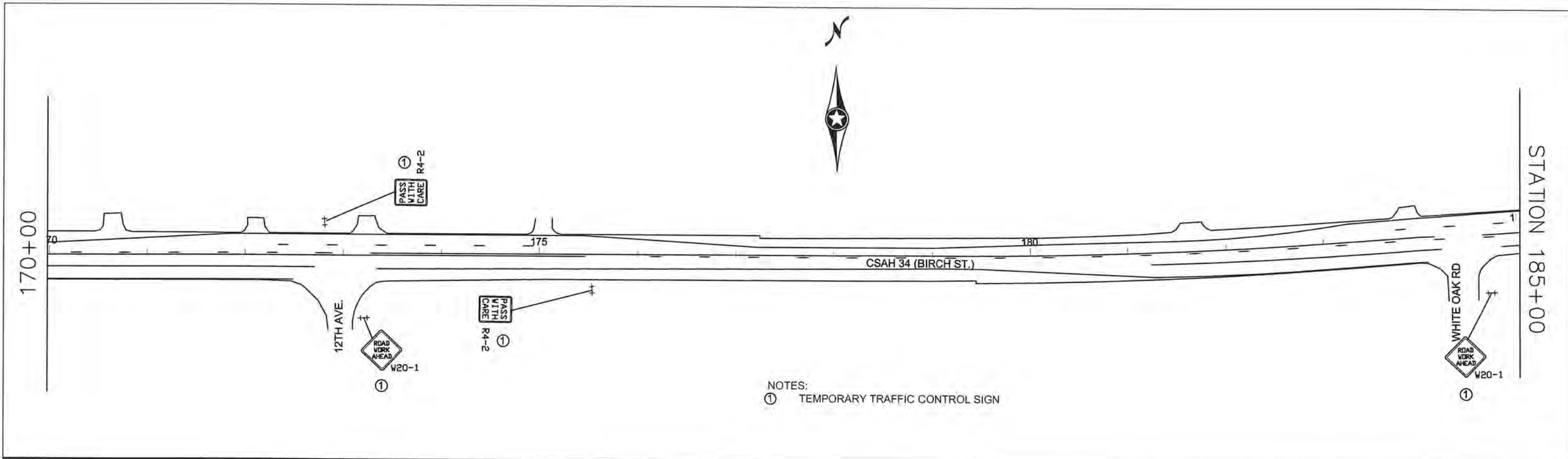
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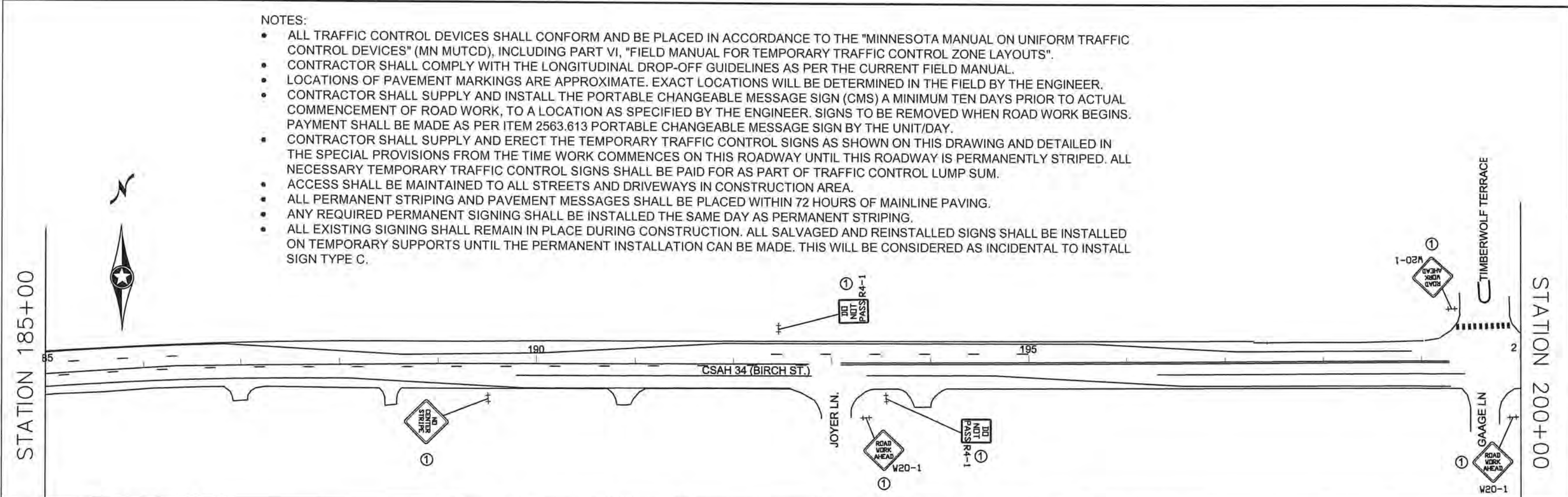
TRAFFIC CONTROL PLAN
 Sheet 56 of 103 Sheets

FILE: P:118-01-00\CSAH 34\Traffic Control.dwg



NOTES:
 ① TEMPORARY TRAFFIC CONTROL SIGN

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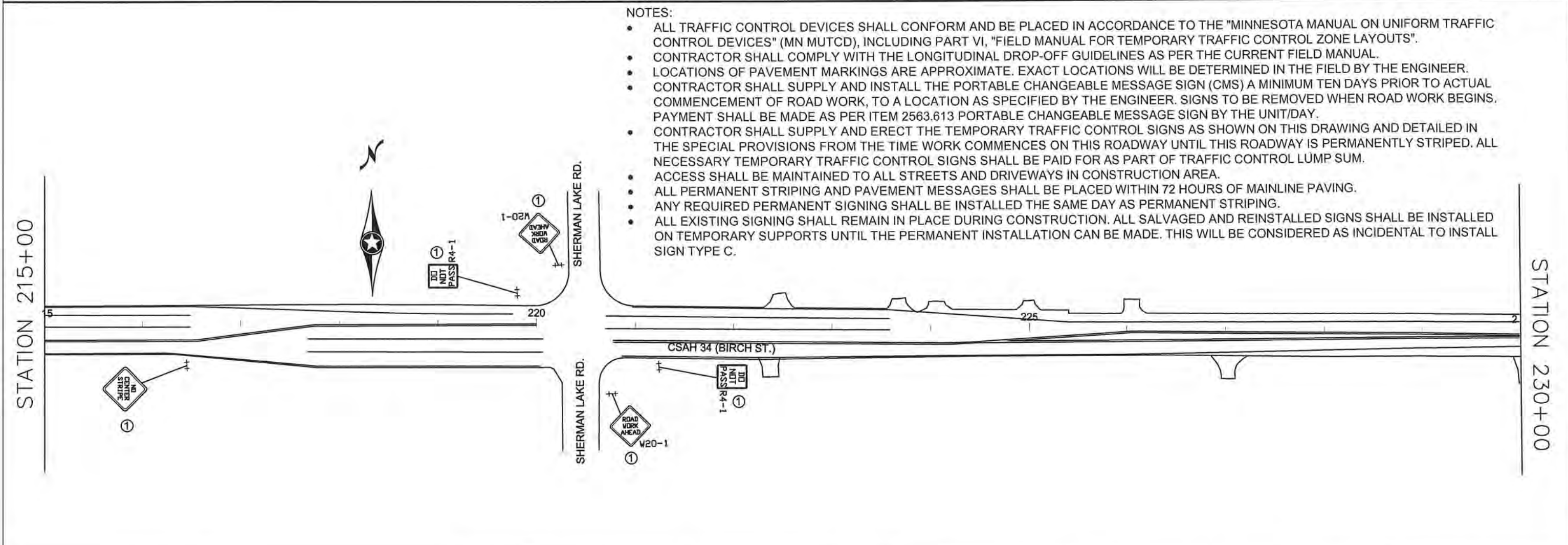
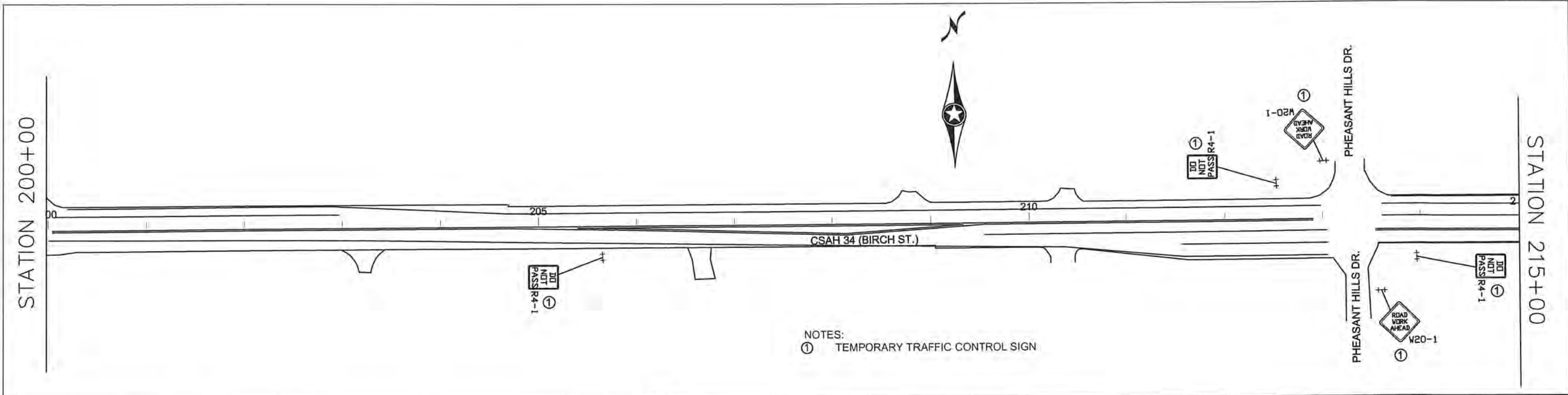
**ANOKA COUNTY
 HIGHWAY DEPT.**

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TRAFFIC CONTROL PLAN
 Sheet 57 of 103 Sheets

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:118-01-001CSAH 34Traffic Control.dwg



NO	DATE	BY	CKD	APPR	REVISION

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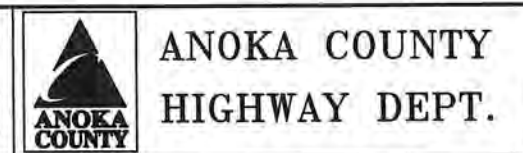
SIGNATURE: *[Signature]*

DATE: 4/22/19 LICENSE NO. 20235

DRAWN BY: TMV DATE: 03/29/19

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STATE PROJECT NO. _____

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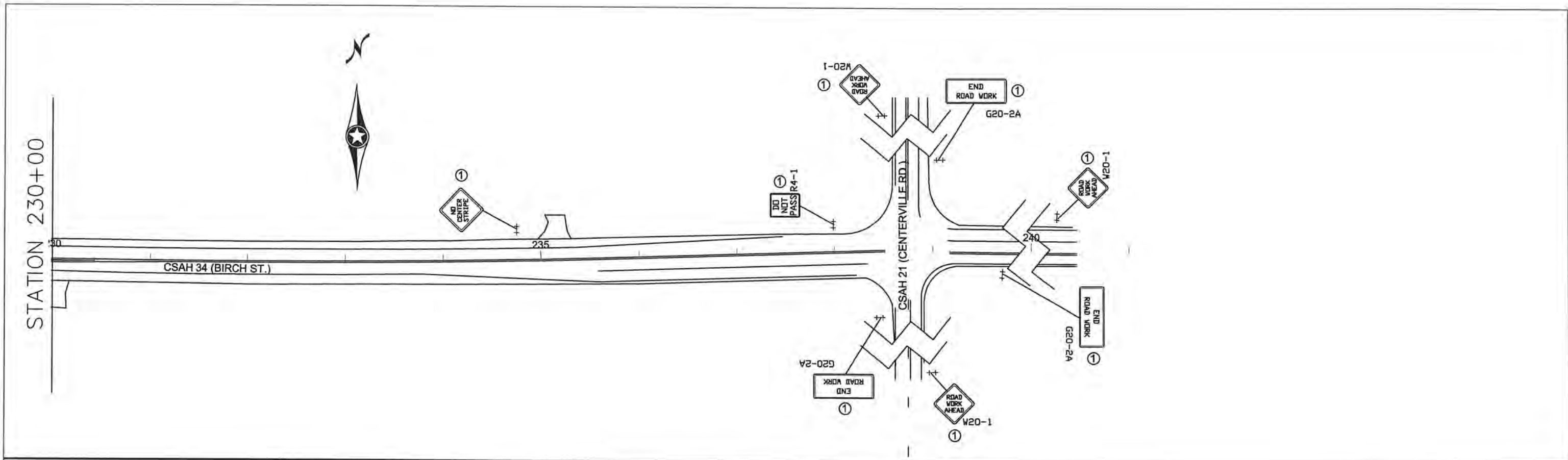
STATE AID PROJECT NO. _____

COUNTY PROJECT NO. _____

TRAFFIC CONTROL PLAN

Sheet 58 of 103 Sheets

NAME: P:\19-01-00\CSAH 341Traffic Control.dwg



NOTES:
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ANOKA COUNTY
HIGHWAY DEPT.

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TRAFFIC CONTROL PLAN
 Sheet 59 of 103 Sheets

TEMPORARY TRAFFIC CONTROL SIGNS						
M.U.T.C.D. CODE	SIZE	PANEL AREA	INSERT	QUANTITY		MOUNTING HEIGHT (to pavement edge) FT.
		FT. ²		No.	POST	
W8-12	48" x 48"	16.00		7	2	7.0'
R4-1	24" x 30"	5.00		14	1	7.0'
R4-2	24" x 30"	5.00		4	1	7.0'
G20-2A	48" x 24"	8.00		4	2	7.0'
W8-1A	48" x 48"	16.00		AS NEEDED		
W8-1A	48" x 48"	16.00		AS NEEDED		
W8-8	48" x 48"	16.00		AS NEEDED		
W8-9	48" x 48"	16.00		AS NEEDED		
	48" x 48"	16.00		AS NEEDED		
W8-11	48" x 48"	16.00		AS NEEDED		
W20-1	48" x 48"	16.00		AS NEEDED (ESTIMATED 24)		
REFLECTORIZED REBOUNDABLE DRUM				AS NEEDED		


CHANGEABLE MESSAGE BOARD - MESSAGE SEQUENCE LAYOUT

		R	O	A	D		
		W	O	R	K		
		B	E	G	I	N	S


	<	D	A	T	E	>	
	E	X	P	E	C	T	
	D	E	L	A	Y	S	

CMS sign to be installed a minimum of ten days prior to actual commencement of road work. Signs to be removed when road work begins.

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 **ANOKA COUNTY**
HIGHWAY DEPT.

STATE PROJECT NO. _____
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PERMANENT PAVEMENT MARKING PLAN
NOTES AND GUIDELINES

GENERAL INFORMATION:

THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. ANOKA COUNTY HIGHWAY DEPARTMENT 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.

MULTI COMPONENT (MULTI COMP):

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 TREATMENT AND/OR LAITANCE ON LOW SPEED (SPEED LIMIT 35 MPH OR LESS) URBAN PORTLAND CEMENT CONCRETE ROADWAYS. SANDBLAST CLEANING SHALL BE USED FOR ALL MULTI COMP PAVEMENT MARKINGS.

THE MULTI COMP MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEANS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE MULTI COMP RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.

A MULTI COMP RESIN LINE SHALL BE APPLIED WITH A MINIMUM THICKNESS OF 20 MILS (WET) AND 4" WIDE. GLASS BEADS SHALL BE APPLIED AT A MINIMUM RATE OF 25LBS POUNDS PER GALLON RATE SUFFICIENT TO ACHIEVE AN ACCEPTABLE NO-TRACK SYSTEM.

OPERATIONS SHALL BE CONDUCTED ONLY WHEN THE ROAD PAVEMENT SURFACE TEMPERATURES ARE 50 DEGREES FAHRENHEIT OR GREATER.

PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.

PREFORMED THERMOPLASTIC:

THE PREFORMED THERMOPLASTIC MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS ON CLEAN AND DRY SURFACES. SEE SPECIAL PROVISIONS FOR PREFORMED THERMOPLASTIC MARKING SPECIFICATIONS.

PAINT:

AT THE TIME OF APPLYING THE MARKING MATERIAL, THE APPLICATION AREA SHALL BE FREE OF CONTAMINATION. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE PRIOR TO THE LINE APPLICATION IN A MANNER AND TO THE EXTENT REQUIRED BY THE ENGINEER.

GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE PAINT LINE.

EXCEPT WHEN USED AS A TEMPORARY MARKING, PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN AIR TEMPERATURE IS 50 DEGREES FARHENHEIT OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONDITIONS CAUSE A FILD OR DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.

THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

PAVEMENT MARKING TABULATION		
ITEM	UNIT	TOTAL QUANTITY
REMOVALS - 3'x6' ZEBRA CROSSWALK	SQ FT	0
4" SOLID LINE WHITE - MULTI COMP	LIN FT	31918
2 8" DOTTED LINE WHITE - MULTI COMP	LIN FT	186
4" SOLID LINE YELLOW - MULTI COMP	LIN FT	200
4" SOLID DOUBLE LINE YELLOW - MULTI COMP	LIN FT	11540
1 4" BROKEN LINE YELLOW - MULTI COMP	LIN FT	460
24" SOLID LINE YELLOW - PREFORMED THERMOPLASTIC (PMS*)	LIN FT	275
24" SOLID LINE WHITE - PREFORMED THERMOPLASTIC (PMS*)	LIN FT	24
3'x6' ZEBRA CROSSWALK - PREFORMED THERMOPLASTIC	SQ FT	414
PAVEMENT MESSAGE (LEFT ARROW) - PREFORMED THERMOPLASTIC (PMS*)	SQ FT	124
PAVEMENT MESSAGE (RIGHT ARROW) - PREFORMED THERMOPLASTIC (PMS*)	SQ FT	109

1 10' STRIPE, 40' GAP

2 3' STRIPE, 12' GAP

* PAVEMENT MARKING SPECIAL

SYMBOLS & MATERIALS LEGEND

█ CROSSWALK BLOCK WHITE-POLY PREFORM

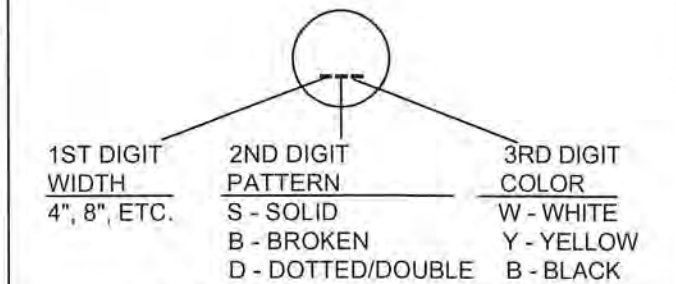
↩ PAVEMENT MESSAGE (LEFT ARROW)
POLY PREFORM

STRIPING KEY

○ CIRCLE - MULTI COMP □ SQUARE - POLY PREFORM THERMOPLASTIC

△ TRIANGLE - PAINT

⬠ PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING



EXAMPLE: (4SW) = 4" SOLID LINE WHITE - MULTI COMP

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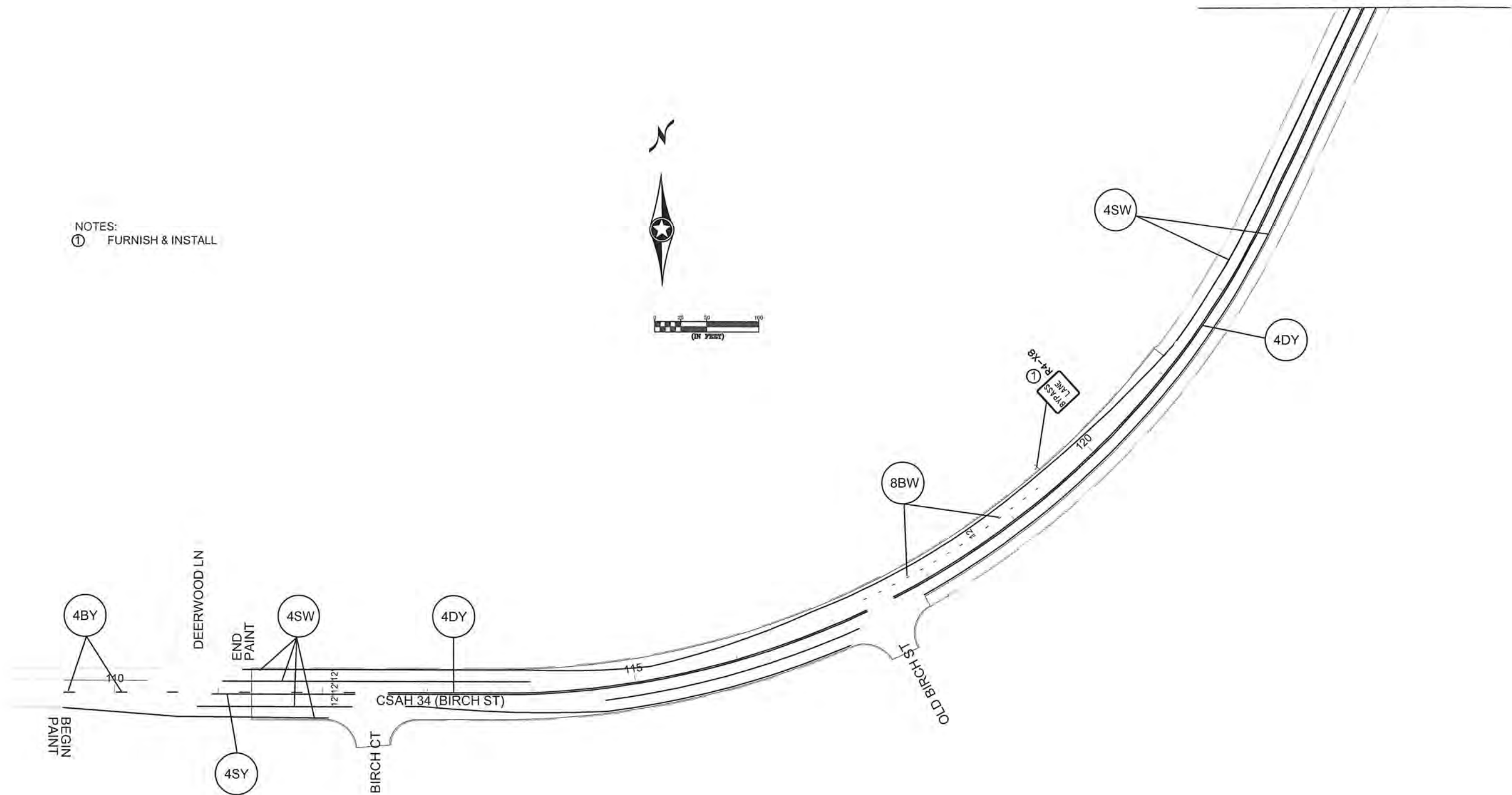
ANOKA COUNTY
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PERMANENT MARKING
TABULATION
 Sheet 61 of 103 Sheets

STATION 125+00

NOTES:
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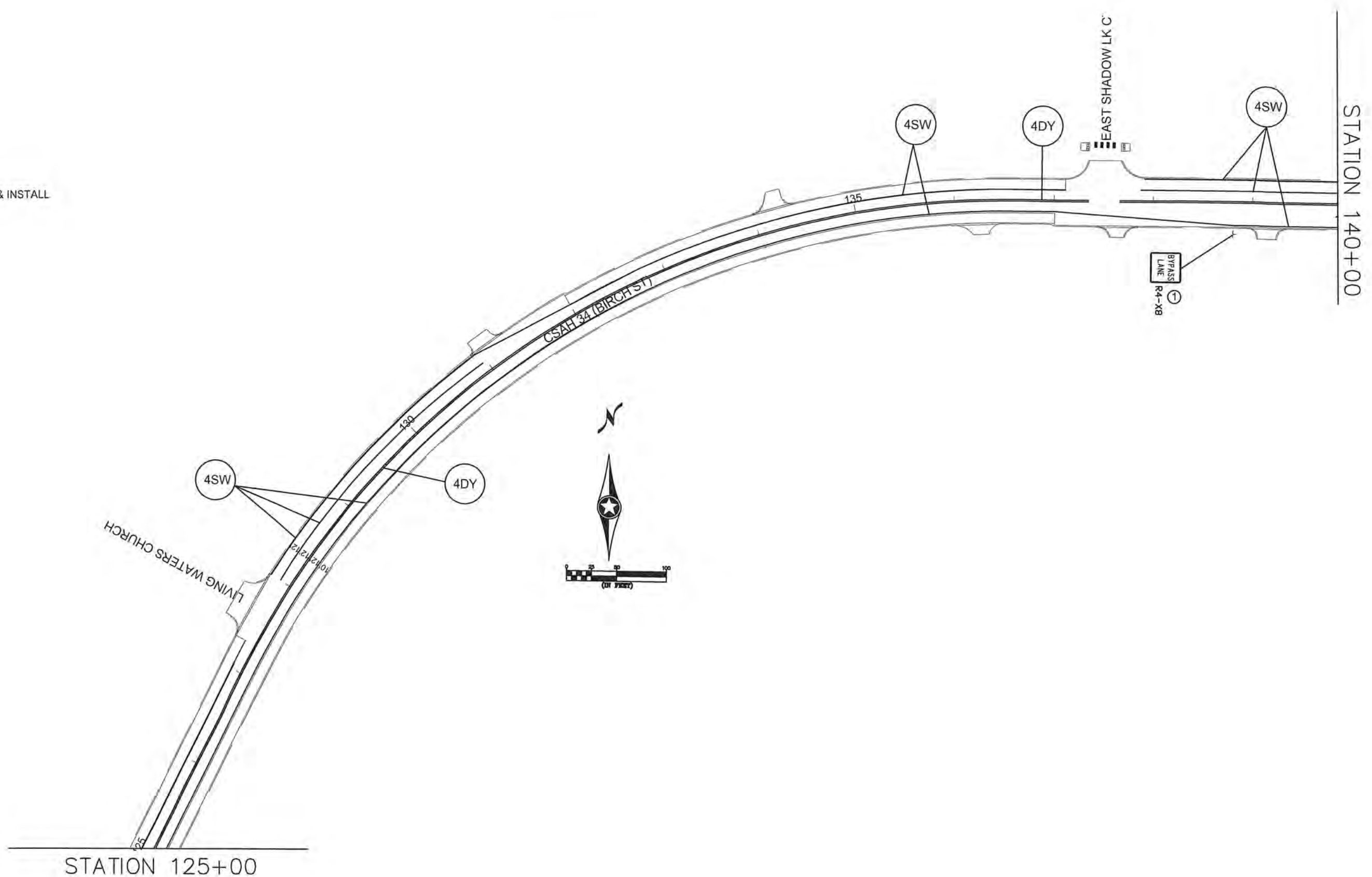


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PERMANENT SIGNING
 & STRIPING PLAN
 Sheet 62 of 103 Sheets

NOTES:
 ① FURNISH & INSTALL



NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. WEISCHER
 SIGNATURE: *[Signature]*
 DATE: 1/22/19 LICENSE NO. 20235

DRAWN BY: TMV DATE: 01/03/19
 DESIGN BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

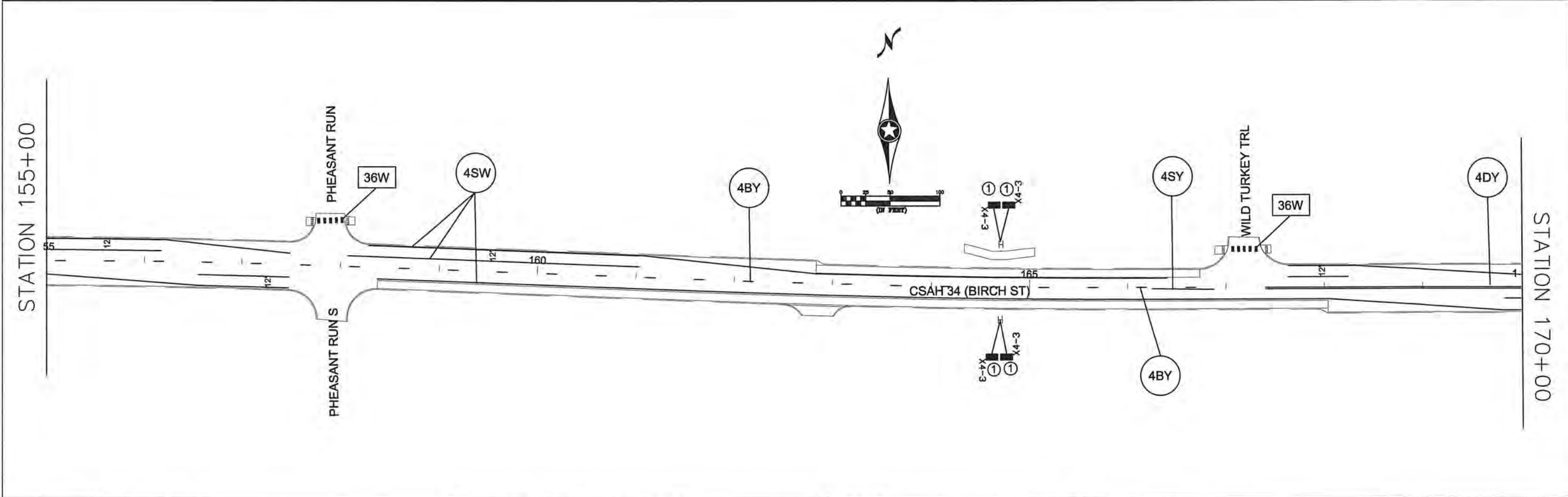
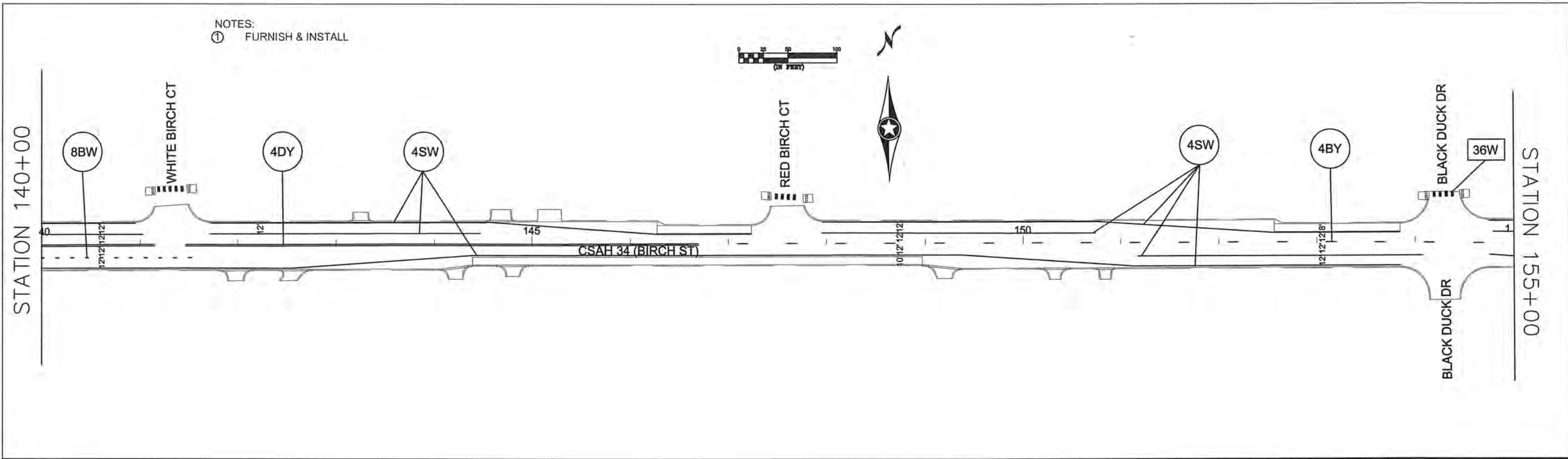


ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. 002-634-004
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. _____

PERMANENT SIGNING
 & STRIPING PLAN
 Sheet 63 of 103 Sheets

NAME: P:119-01-001CSAH 34Perm Signing & Striping.dwg

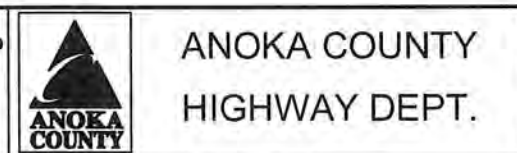


NO.	DATE	BY	CKD	APPR	REVISION

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

PRINT NAME: DOUGLAS W. FISCHER
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 20235

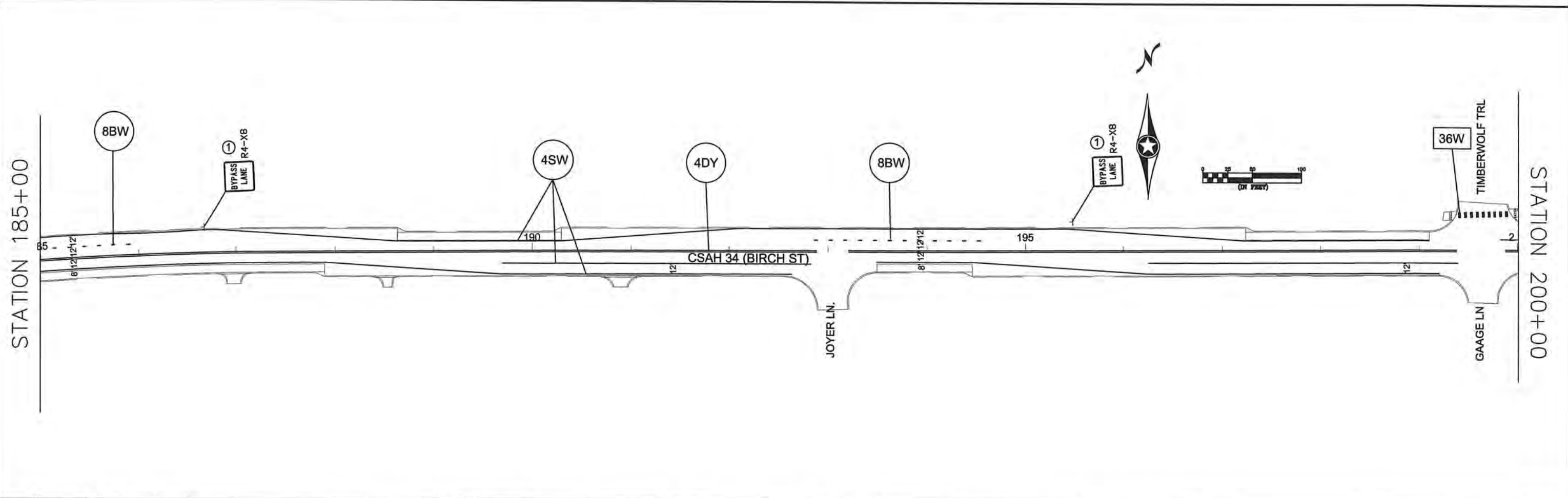
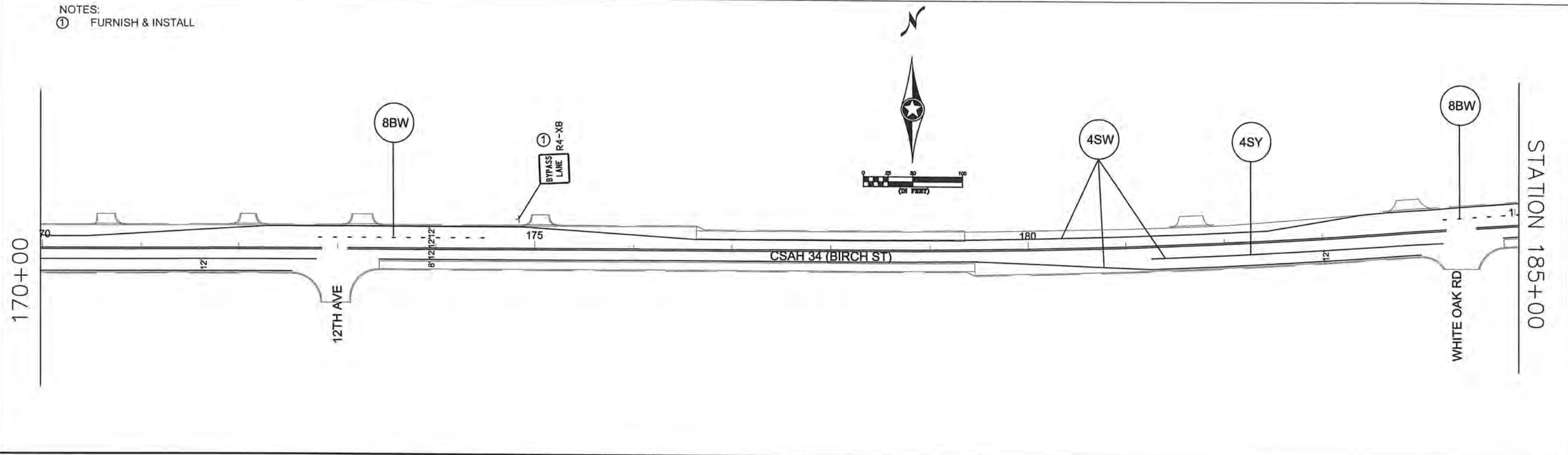
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 DESIGN BY: _____ DATE _____
 CHECKED BY: _____ DATE _____



STATE PROJECT NO. _____
 STATE AID PROJECT NO. 002-634-004
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. _____

PERMANENT SIGNING & STRIPING PLAN
 Sheet 64 of 103 Sheets

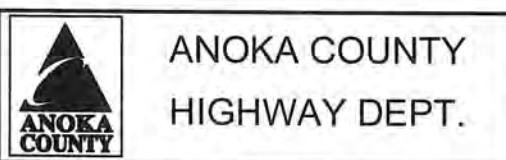
NOTES:
 ① FURNISH & INSTALL



NO	DATE	BY	CKD	APPR	REVISION

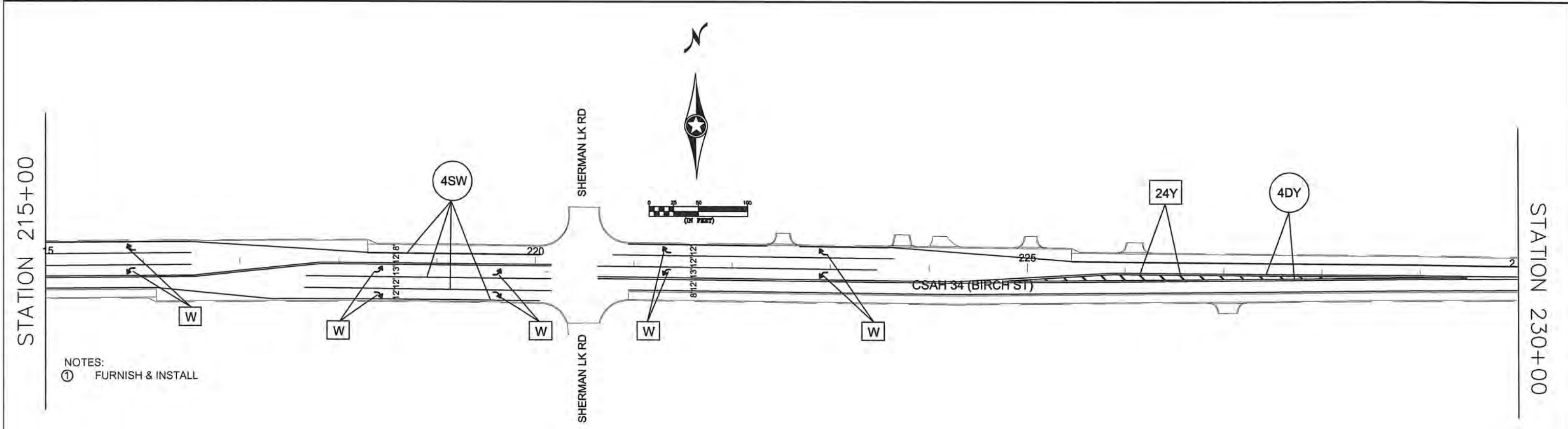
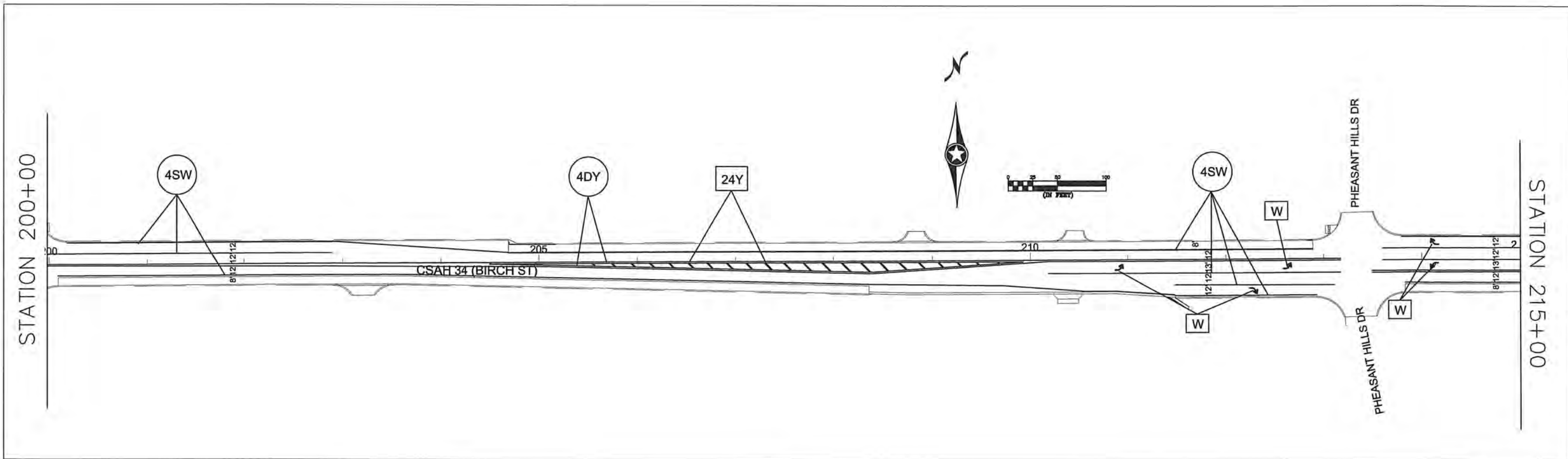
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. FISCHER
 SIGNATURE: *[Signature]*
 DATE: 1/27/19 LICENSE NO. 20235

DRAWN BY: TMV DATE: 01/03/19
 DESIGN BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____



STATE PROJECT NO. _____
 STATE AID PROJECT NO. 002-634-004
 COUNTY PROJECT NO. _____

PERMANENT SIGNING & STRIPING PLAN
 Sheet 65 of 103 Sheets



NOTES:
 ① FURNISH & INSTALL

NO	DATE	BY	CKD	APPR	REVISION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. FISCHER
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 LICENSE NO. 20235

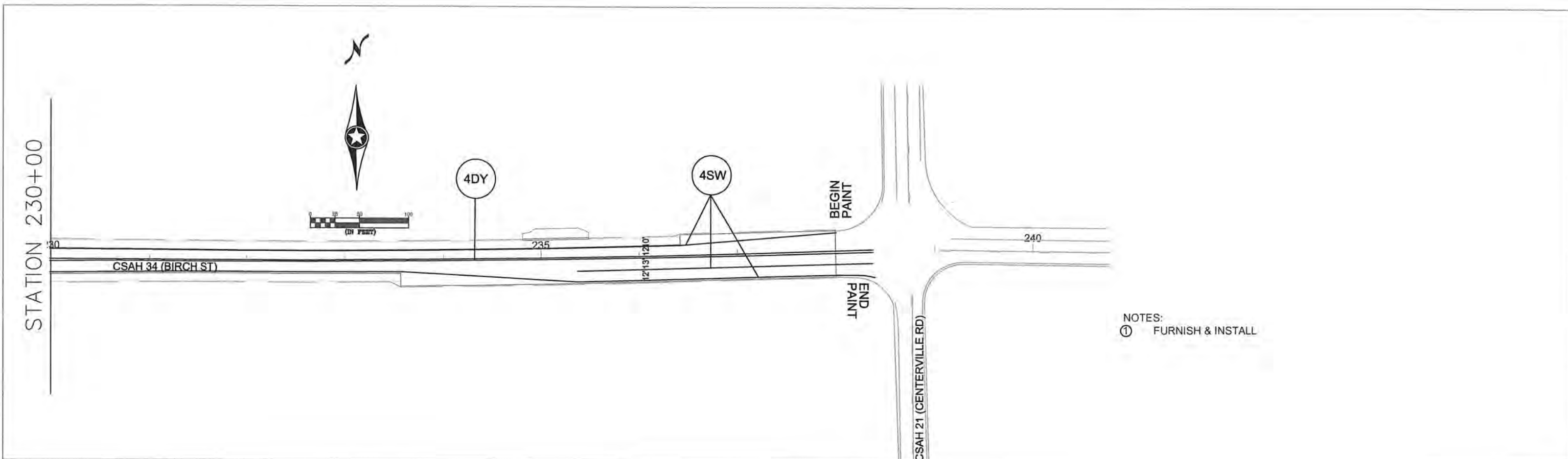
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 DESIGN BY: DATE
 CHECKED BY: DATE



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. 002-634-004
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PERMANENT SIGNING
 & STRIPING PLAN
 Sheet 66 of 103 Sheets



J FURNISH & INSTALL SIGN PANELS TYPE C

M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY	PANEL AREA SQ FT	TOTAL AREA SQ FT	MOUNTING POST PER INSTALLATION	MOUNTING HEIGHT To pavement edge
R4-x8	30" x 30"		5	6.25	31.25	1	7.0'
TOTAL TYPE C SIGN SQ FT					31.25		

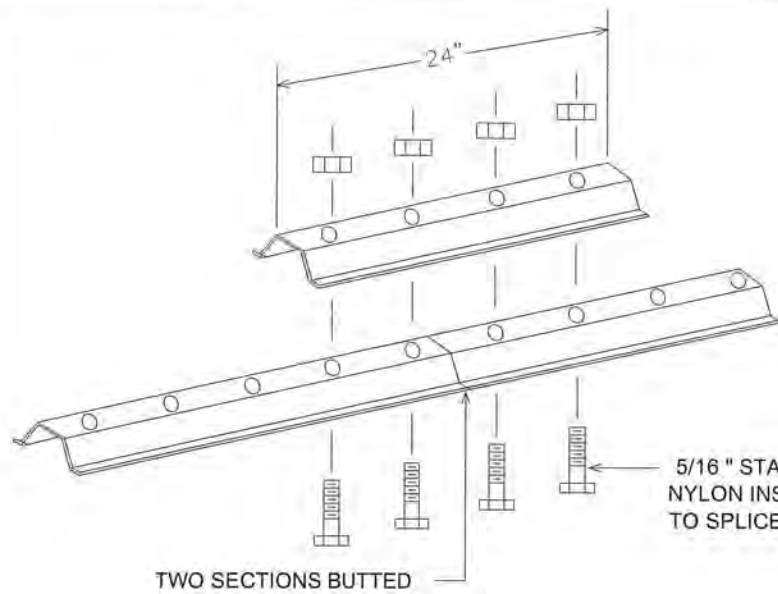
J FURNISH & INSTALL SIGN PANELS MARKERS

M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY	PANEL AREA SQ FT	TOTAL AREA SQ FT	MOUNTING POST PER INSTALLATION	MOUNTING HEIGHT To pavement edge
X4-3	6" x 12"		4	0.50	2.00	1	4.0'
TOTAL MARKER SIGNS SQ FT					2.00		
PROJECT TOTAL SQ FT					33.25		

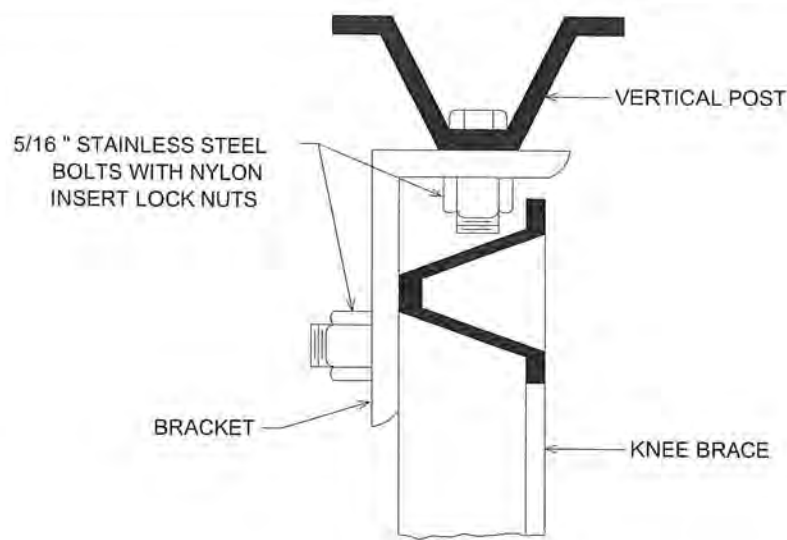
- NOTES:**
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL" FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
 - LOCATIONS OF ALL PERMANENT STRIPING AND PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 - ALL MAINLINE PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
 - SEE PERMANENT SIGN TABULATIONS FOR ADDITIONAL INFORMATION.
 - ALL SEGMENT STRIPE LINES SHALL BE EPOXY. PERMANENT MESSAGES AND ARROWS SHALL BE PREFORMED THERMOPLASTIC.
 - ALL SIGNS SHALL BE FURNISHED AND INSTALLED UNLESS OTHERWISE NOTED.
 - ALL SALVAGED SIGNS SHALL REMAIN IN PRISTINE CONDITION DURING REMOVAL AND INSTALLATION. SHALL BE PAID BY THE EACH ASSEMBLY, WHEN REINSTALLATION IS REQUIRED.
 - PROVIDE AND INSTALL A NEW SIGN STRUCTURE FOR TYPE C AND MARKERS AND INSTALL SALVAGED SIGN PANELS AS REQUIRED USING NEW NUTS, BOLTS AND WASHERS.
 - INSTALL SALVAGED SIGN ASSEMBLIES TO THE MOUNTING HEIGHTS AS SHOWN ON THE TABULATION.

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: DOUGLAS WEISCHER SIGNATURE: DATE: 1/22/19 LICENSE NO. 20235					DRAWN BY: TMV DATE: 01/03/19 DESIGN BY: _____ DATE: _____ CHECKED BY: _____ DATE: _____		ANOKA COUNTY HIGHWAY DEPT.	STATE PROJECT NO. _____ STATE AID PROJECT NO. 002-634-004 COUNTY PROJECT NO. _____	PERMANENT SIGNING & STRIPING PLAN Sheet 67 of 103 Sheets	
NO	DATE	BY	CKD	APPR	REVISION					

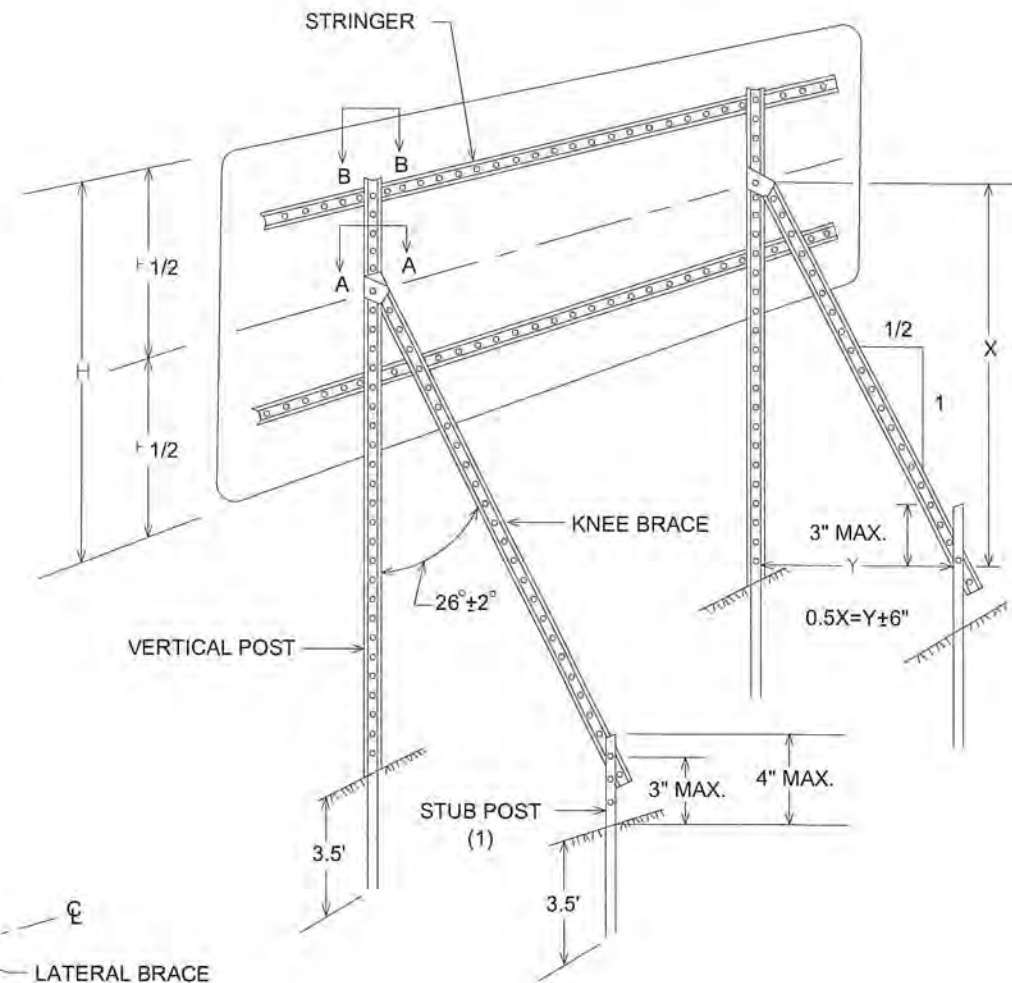
NAME: P:\119-01-00\CSAH 34\Perm Signing & Striping.dwg



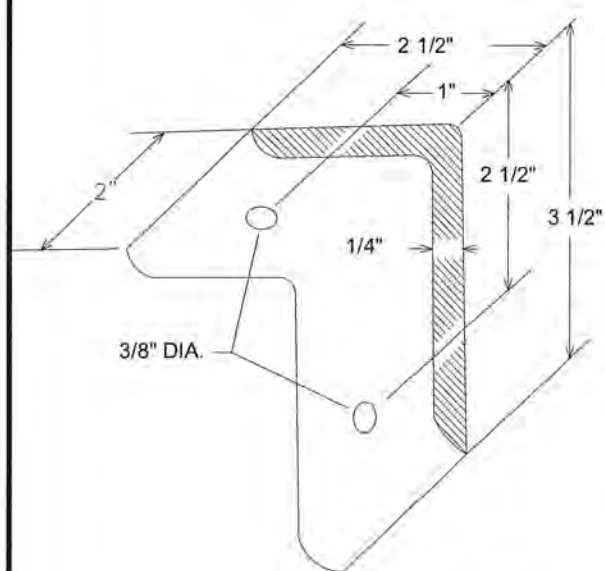
LATERAL BRACE OR STRINGER
SPLICE DETAIL (EXPLODED VIEW)



SECTION A-A

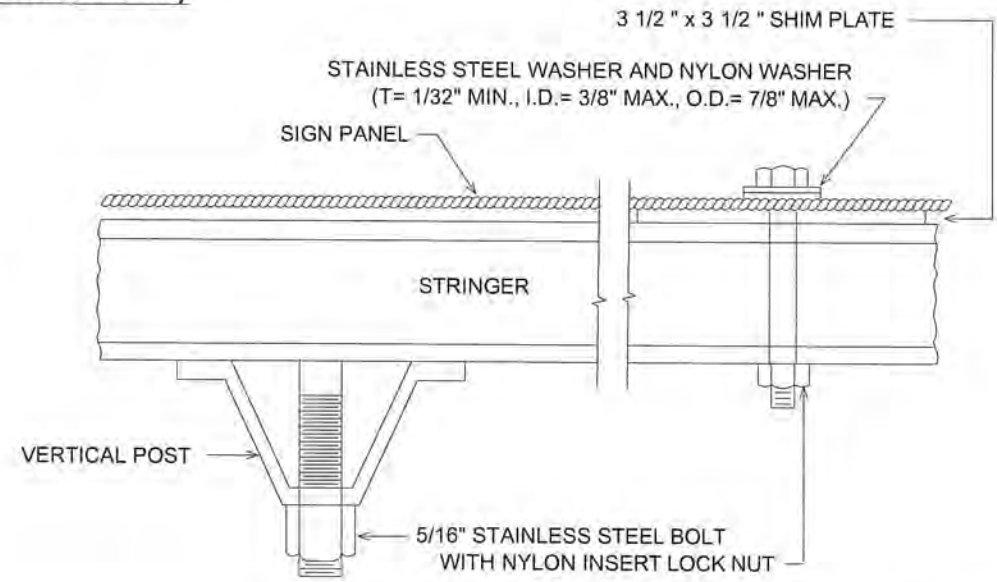


TYPICAL "A-FRAME" INSTALLATION
TYPE "D" SIGNS

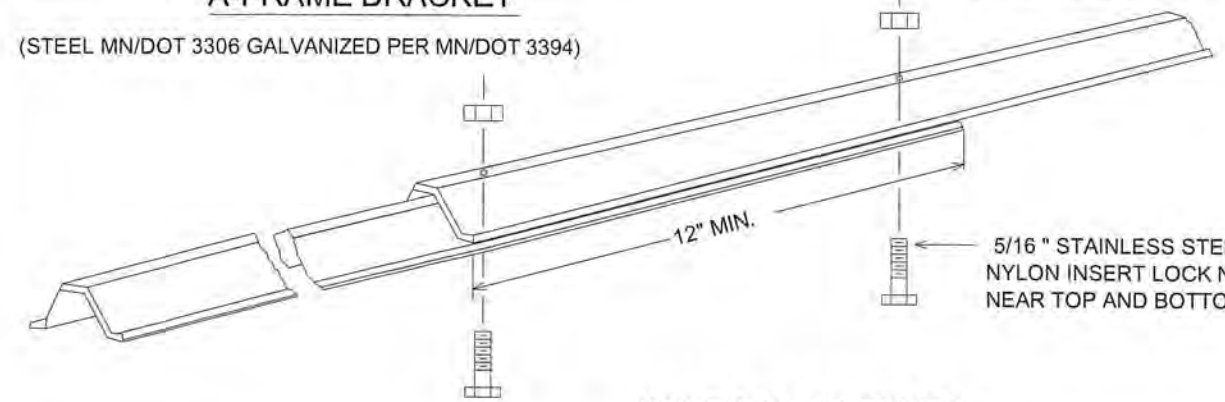


A-FRAME BRACKET

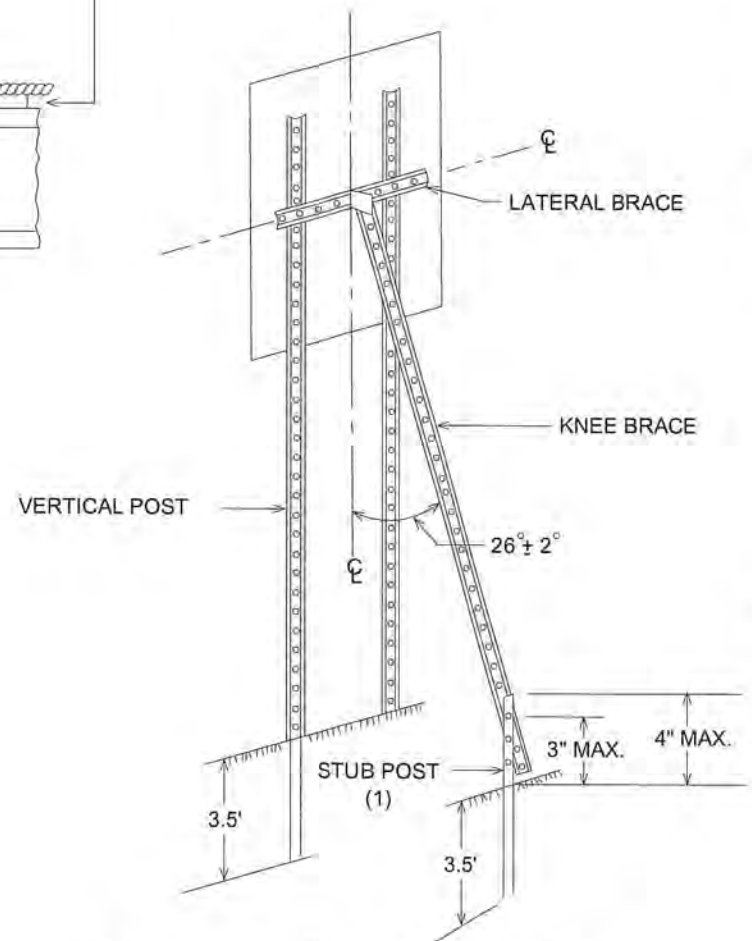
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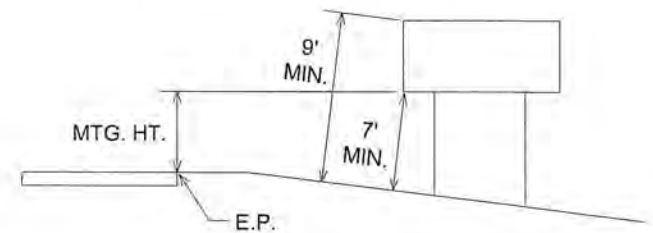
SECTION B-B



KNEE BRACE SPLICE



TYPICAL "A-FRAME" INSTALLATION
TYPE "C" SIGNS



TYPICAL MOUNTING

(1) OFFSET STUB POST 1' TOWARD ROADWAY
RELATIVE TO VERTICAL POST.

TYPE C & D SIGN
STRUCTURAL DETAILS

NO	DATE	BY	CKD	APPR	REVISION

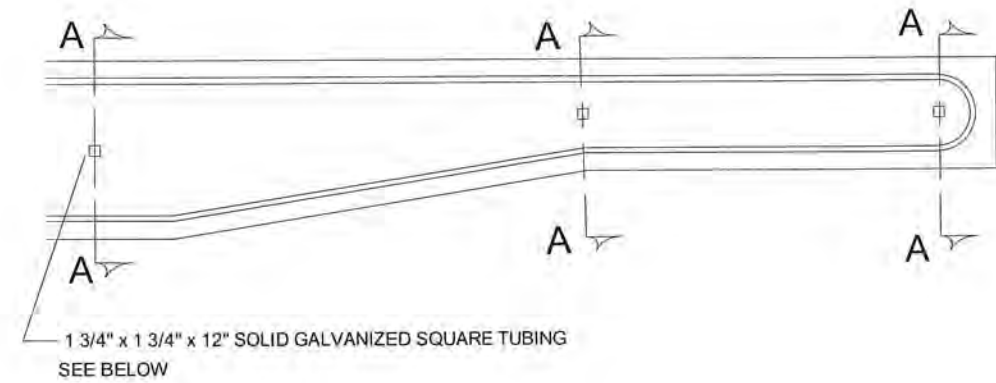
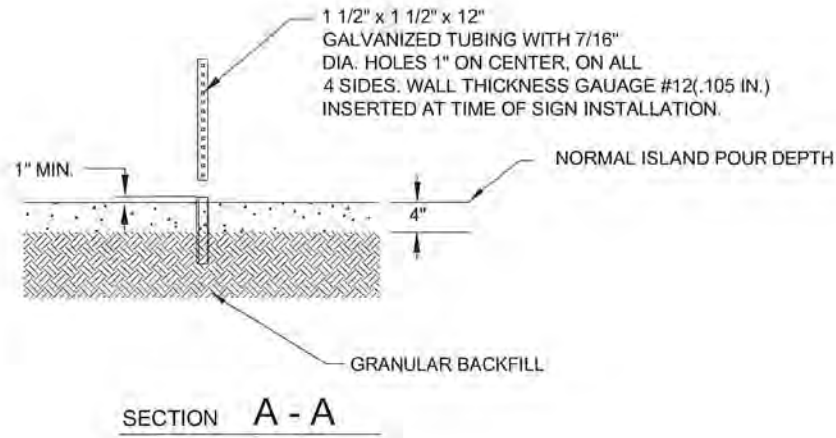
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. FISCHER, P.E.
 SIGNATURE: *Douglas W. Fischer*
 DATE: 4/22/19 REG. NO. 20235

DRAWN BY: TMV DATE: 01/03/19
 DESIGN BY: DATE:
 CHECKED BY: DATE:
 ANOKA COUNTY

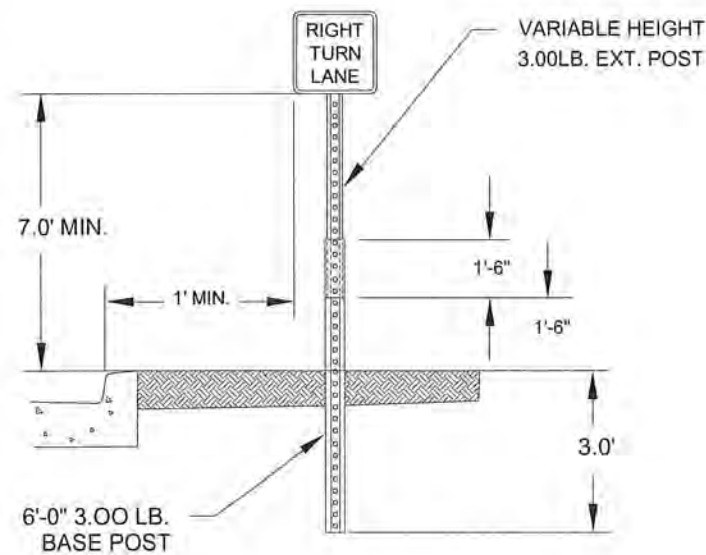
ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO.
 STATE AID PROJECT NO. 002-634-004
 STATE AID PROJECT NO.
 COUNTY PROJECT NO.
 SIGNING & STRIPING
 DETAILS

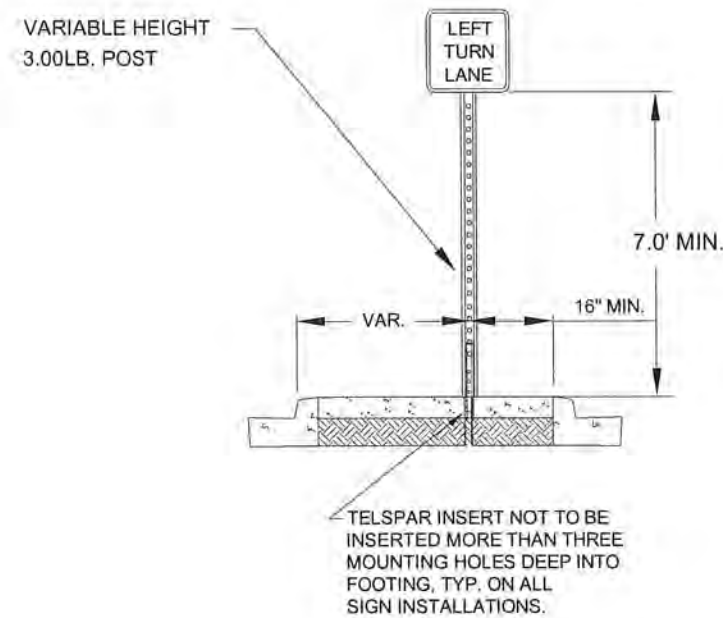
Sheet 68 of 103 Sheets



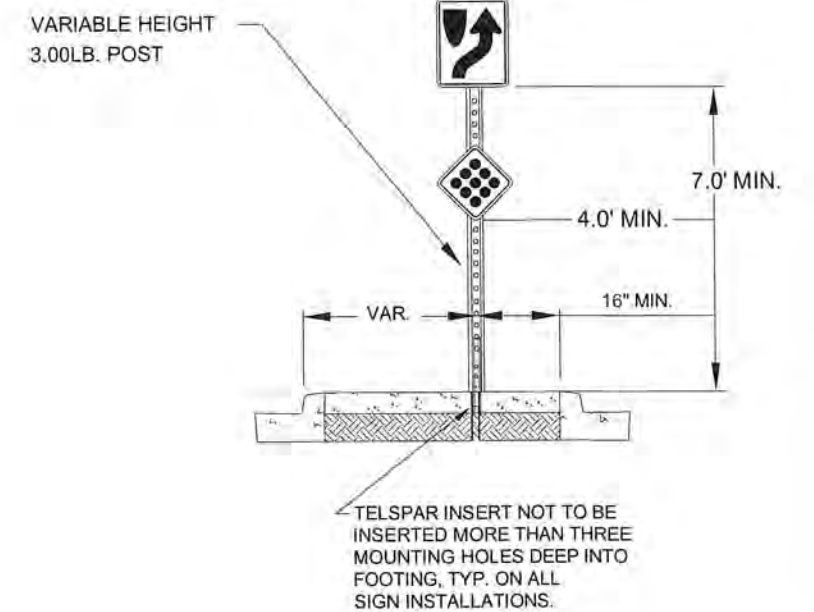
GROUND POST MOUNT SIGN
INSTALLATION TYPICAL



ISLAND MOUNT BREAK-AWAY SIGN
INSTALLATION TYPICAL



ISLAND MOUNT BREAK-AWAY SIGN
INSTALLATION TYPICAL
KEEP RIGHT/CLUSTER



NO	DATE	BY	CKD	APPR	REVISION

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

PRINT NAME: DOUGLAS W. FISCHER, P.E.

SIGNATURE: *[Signature]*

DATE: 4/2/19 REG. NO. 20235

DRAWN BY: TMV DATE 01/03/19

DESIGN BY: DATE

CHECKED BY: DATE



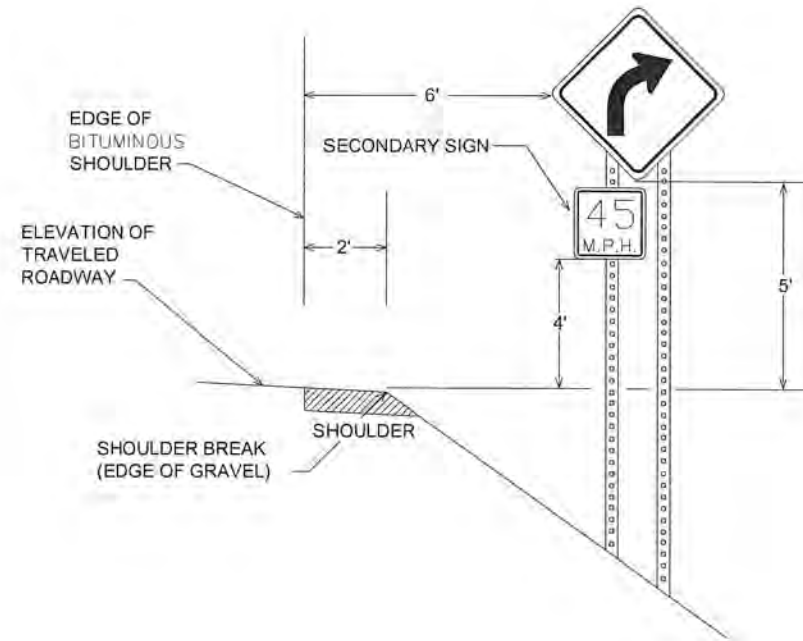
ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
STATE AID PROJECT NO. 002-634-004
STATE AID PROJECT NO. _____
COUNTY PROJECT NO. _____

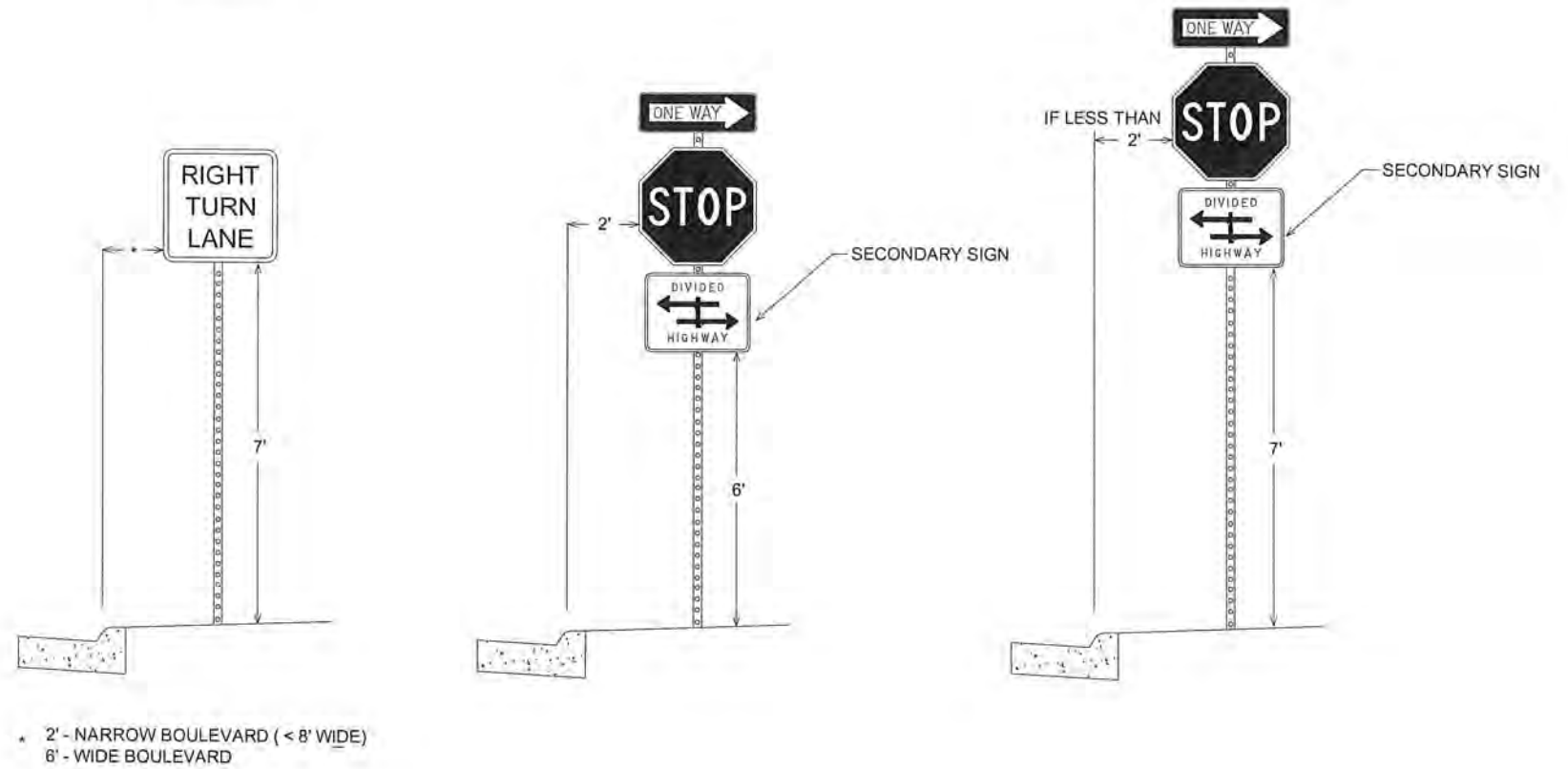
SIGNING & STRIPING
DETAILS

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TYPICAL SIGN PLACEMENT
(RURAL)



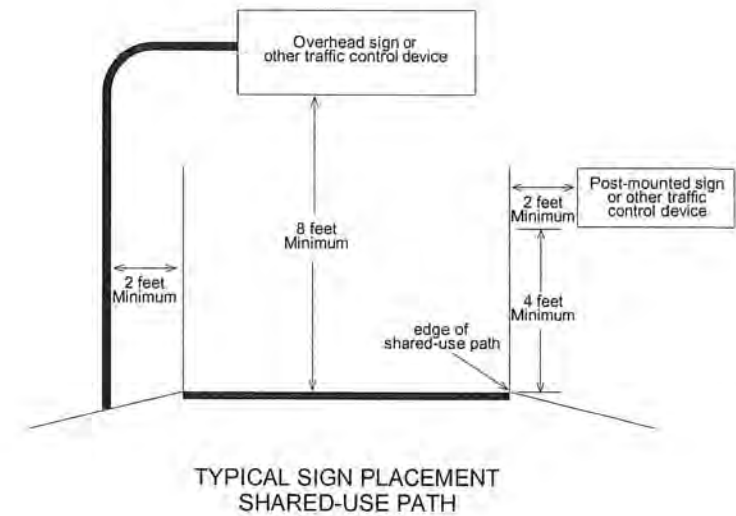
TYPICAL SIGN PLACEMENT
(URBAN)



* 2' - NARROW BOULEVARD (< 8' WIDE)
8' - WIDE BOULEVARD

NOTES:

- ALL DIMENSIONS ARE MINIMUMS
- MAINTAIN A CLEAR DISTANCE OF 2' BETWEEN SIGNS AND BITUMINOUS TRAIL
- 7' SIGN CLEARANCE IF A CLEAR DISTANCE OF 2' BETWEEN SIGNS AND BITUMINOUS TRAIL CANNOT BE MAINTAINED



NO	DATE	BY	CKD	APPR	REVISION

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 PRINT NAME: DOUGLAS W. FISCHER, P.E.
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 REG. NO. 20235

DRAWN BY: TMV DATE: 01/03/19
 DESIGN BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

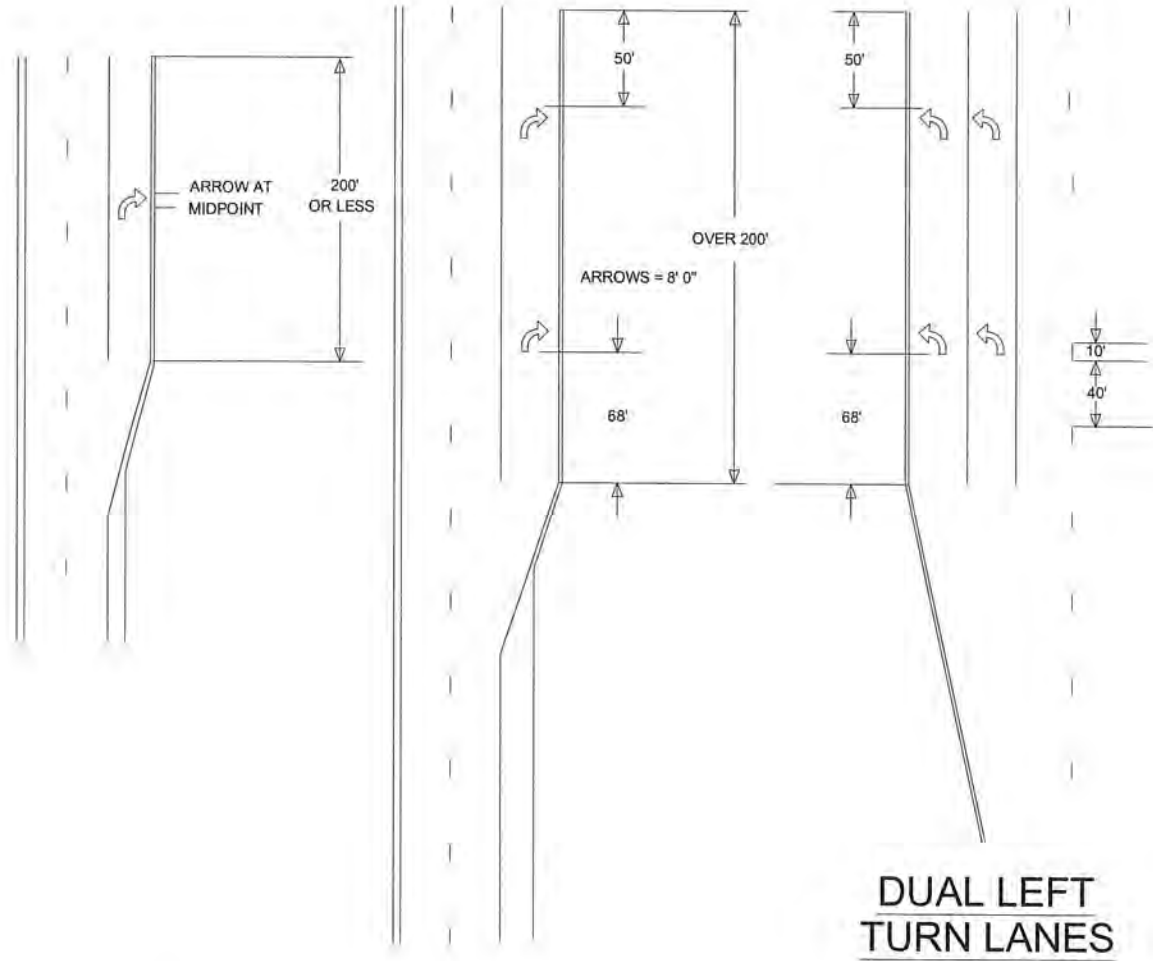


ANOKA COUNTY
HIGHWAY DEPT.

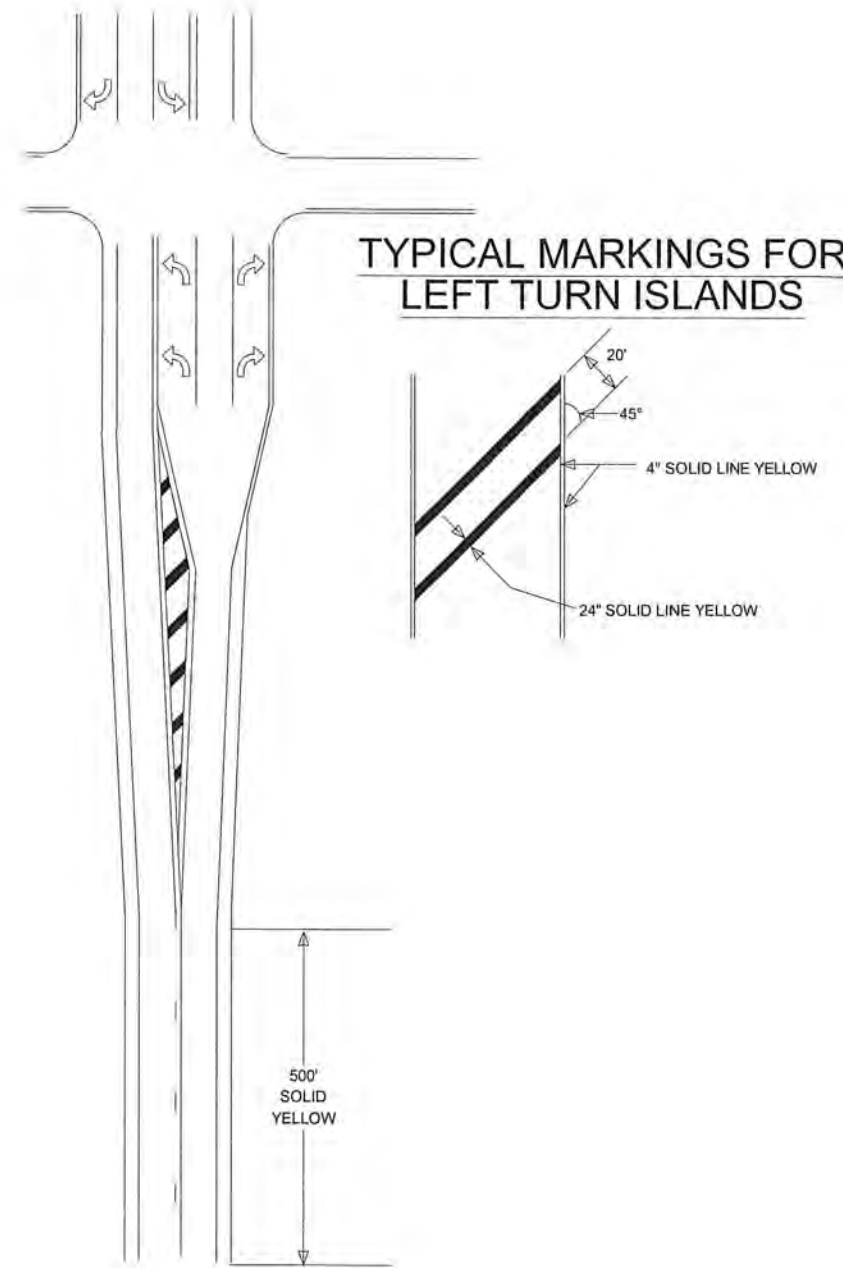
STATE PROJECT NO. _____
 STATE AID PROJECT NO. 002-634-004
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. _____

SIGNING & STRIPING
DETAILS

**TYPICAL MESSAGE PLACEMENT
FOR TURN LANES**



**TYPICAL MARKINGS FOR
LEFT TURN ISLANDS**



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. FISCHER, P.E.
 SIGNATURE: *[Signature]*
 DATE: 4/22/19 REG. NO. 20235

DRAWN BY: TMV DATE 01/03/19
 DESIGN BY: DATE
 CHECKED BY: DATE



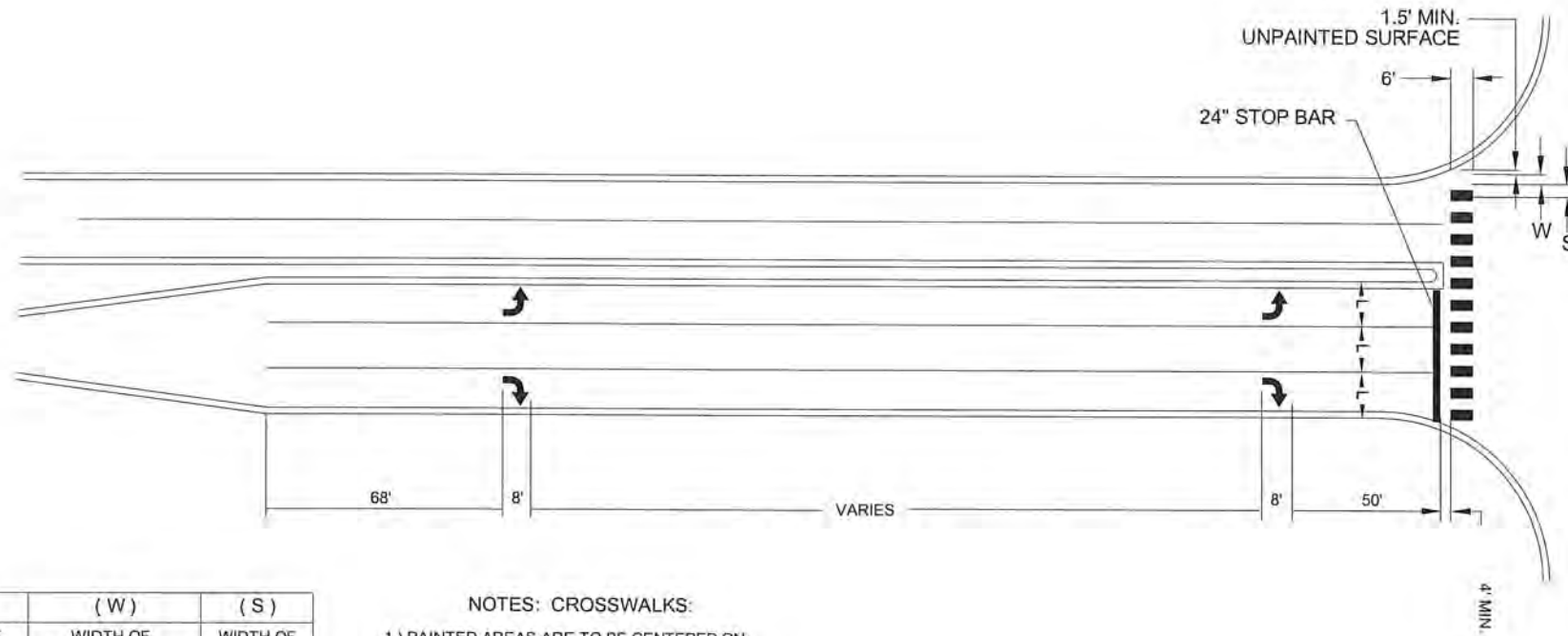
ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
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SIGNING & STRIPING
 DETAILS

NO	DATE	BY	CKD	APPR	REVISION

MARKINGS FOR PEDESTRIAN CROSSWALKS



(L)	(W)	(S)
WIDTH OF INSIDE LANE	WIDTH OF PAINTED AREAS	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: CROSSWALKS:

- 1.) PAINTED AREAS ARE TO BE CENTERED ON CENTER AND LANE LINES, EVEN IF INTERSECTION IS NOT ALIGNED.
- 2.) LOCATION OF ZEBRA CROSSWALKS AND STOP BARS, SIGNAL LOOPS AND PED RAMPS ARE APPROXIMATE. FINAL LOCATIONS ARE TO BE DETERMINED AND FIELD VERIFIED DURING CONSTRUCTION BY THE FIELD ENGR.
- 3.) ZEBRA CROSSWALKS ARE TO BE PARALLEL TO THE DRIVING LANE OR LANES, EVEN IF THE STREET IS ON AN ANGLE TO THE INTERSECTION.
- 4.) A MIN. OF 1.5' (450mm) CLEAR DISTANCE MUST BE LEFT ADJACENT TO THE CURB. IF LAST PAINTED AREA FALLS INTO THIS AREA, IT MUST BE OMITTED.
- 5.) ON TWO LANE STREETS, USE SPACING SHOWN FOR AN 11' (3.3mm) INSIDE LANE.

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

PRINT NAME: DOUGLAS W. FISCHER, P.E.

SIGNATURE: *[Signature]*

DATE: 4/22/19 REG. NO. 20235

DRAWN BY: TMV DATE: 01/03/19

DESIGN BY: DATE

CHECKED BY: DATE

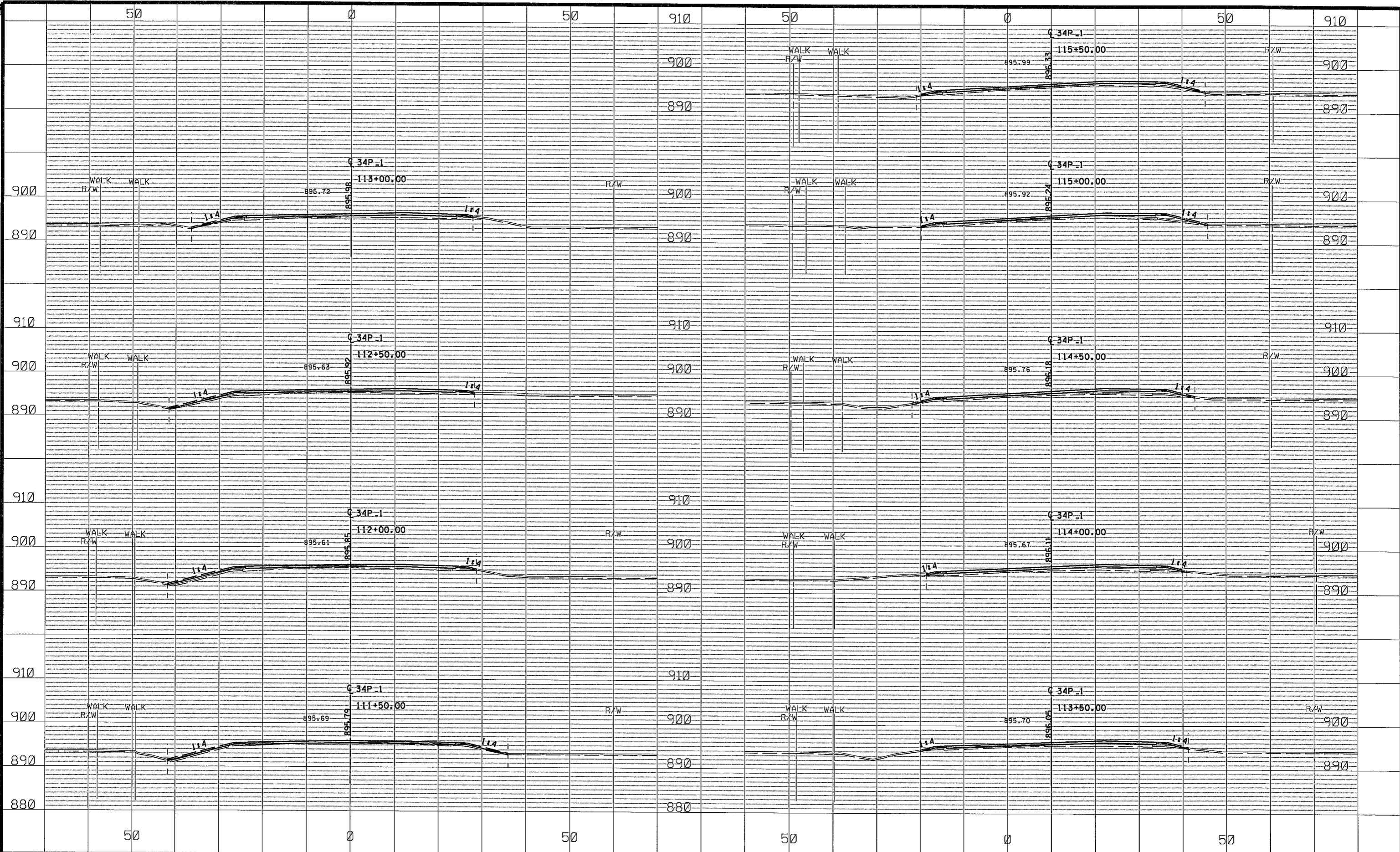


ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
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STATE AID PROJECT NO. _____
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SIGNING & STRIPING
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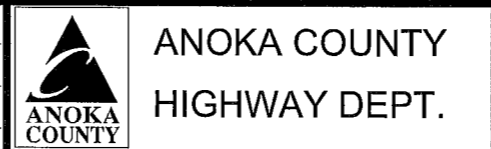
NO	DATE	BY	CKD	APPR	REVISION



NO	DATE	BY	CKD	APPR	REVISION
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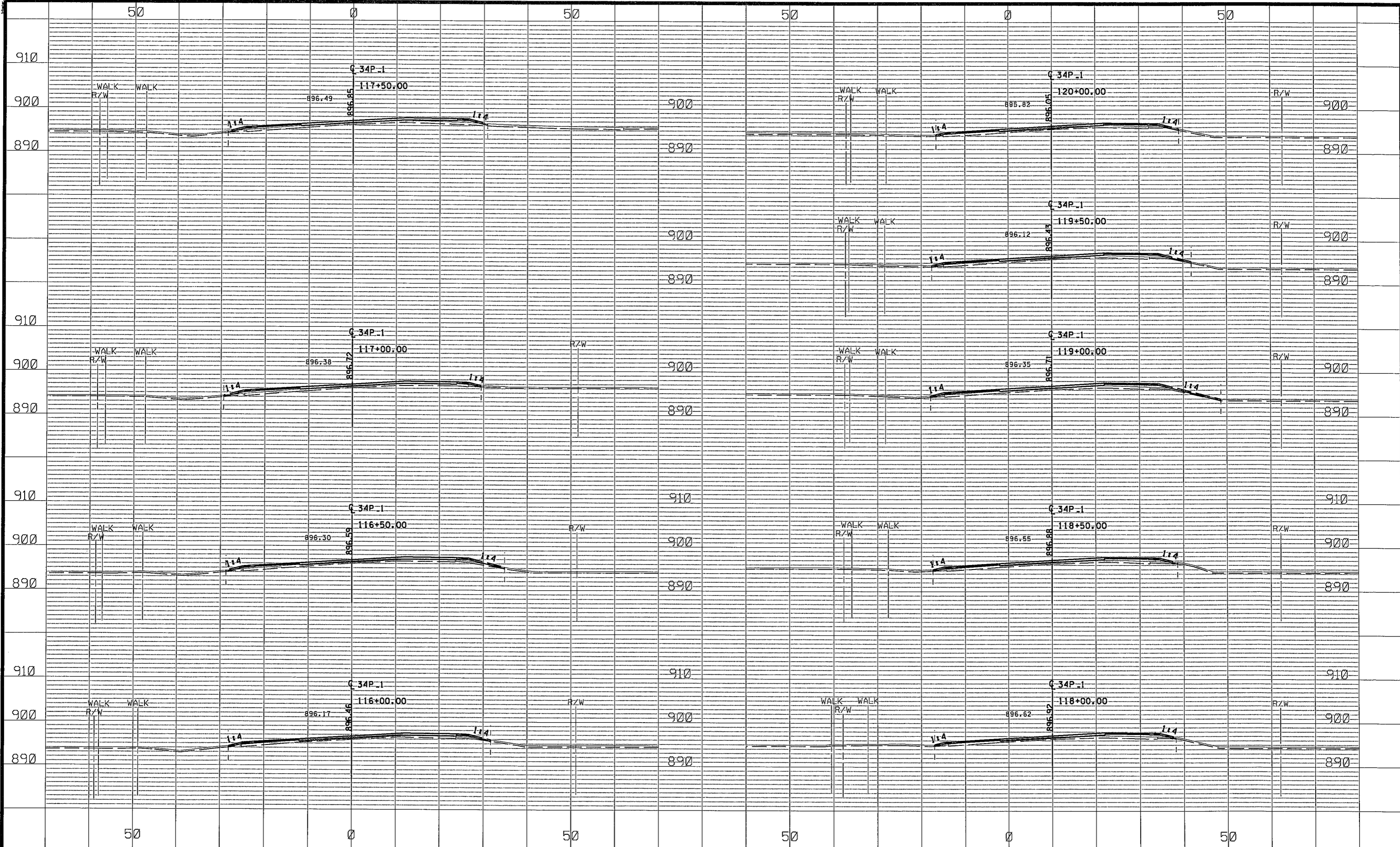
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DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



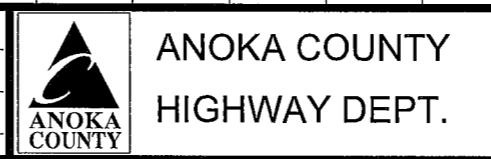
ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 111+50.00 TO 115+50.00
 Sheet 73 of 103 Sheets



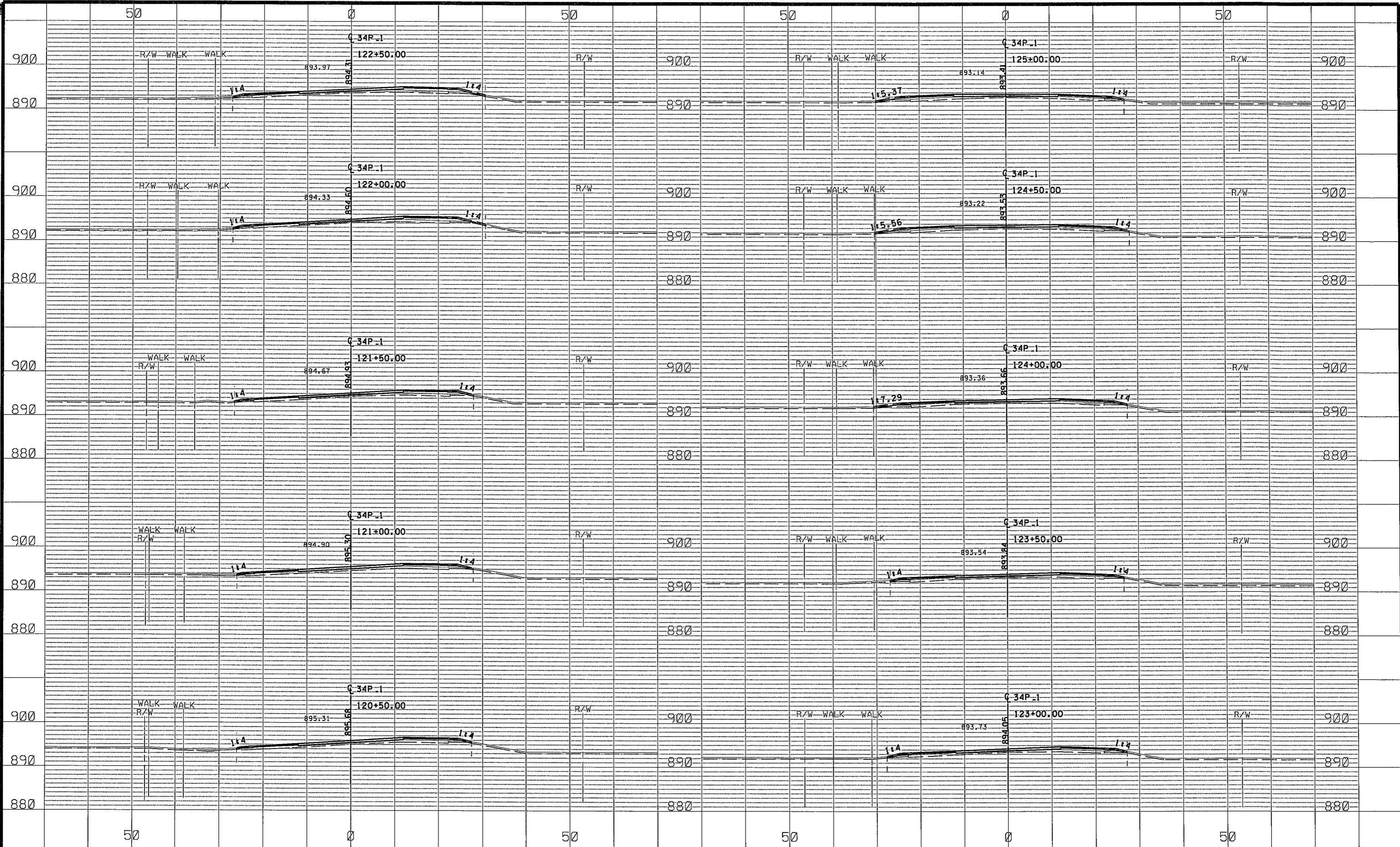
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DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



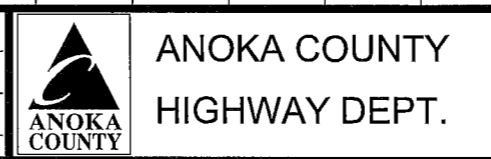
ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 116+00.00 TO 120+00.00
 Sheet 74 of 103 Sheets



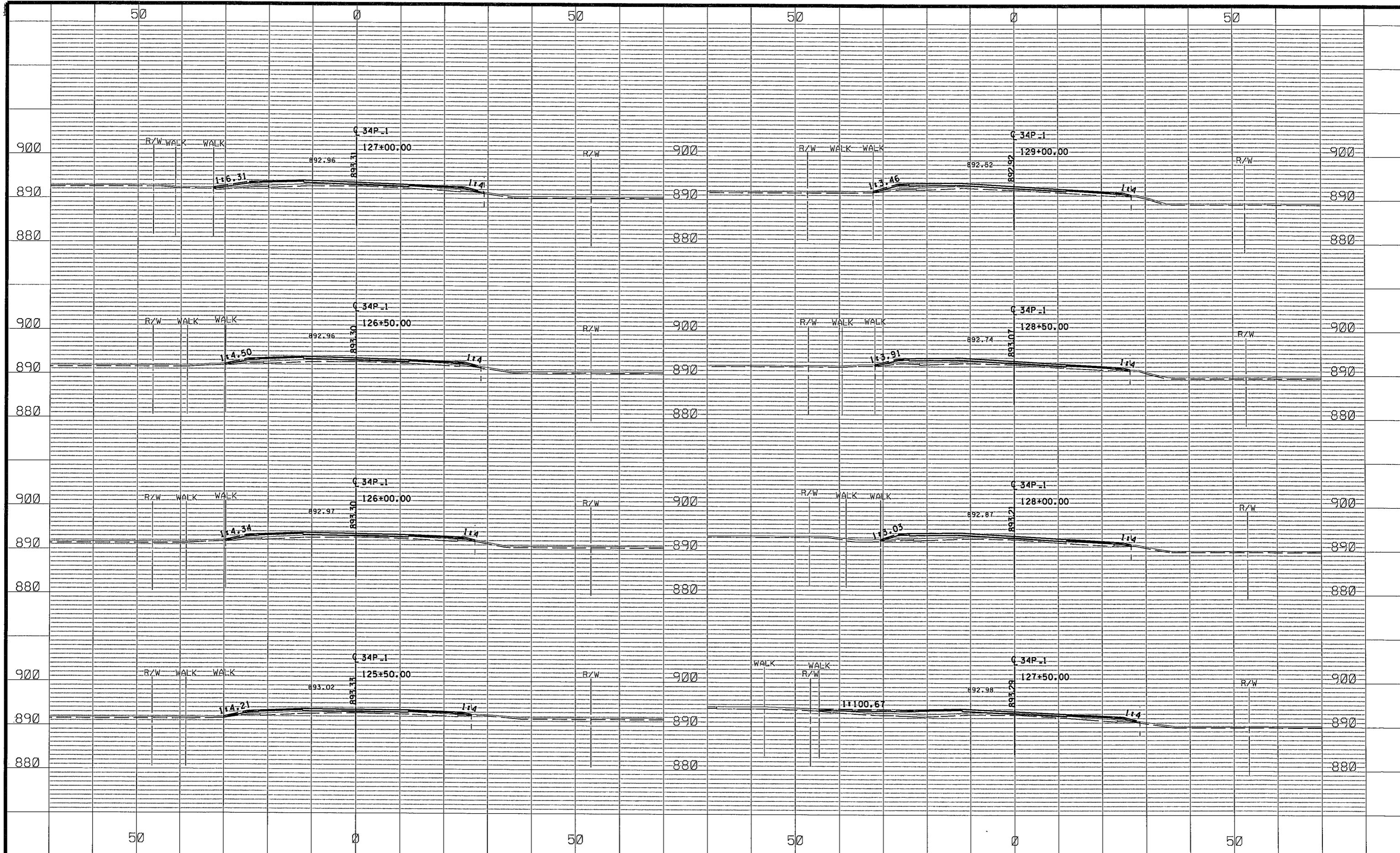
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DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



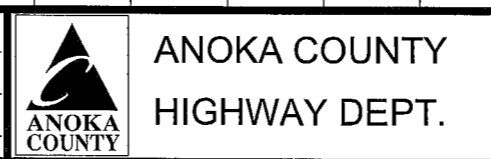
ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 120+50.00 TO 125+00.00
 Sheet 75 of 103 Sheets



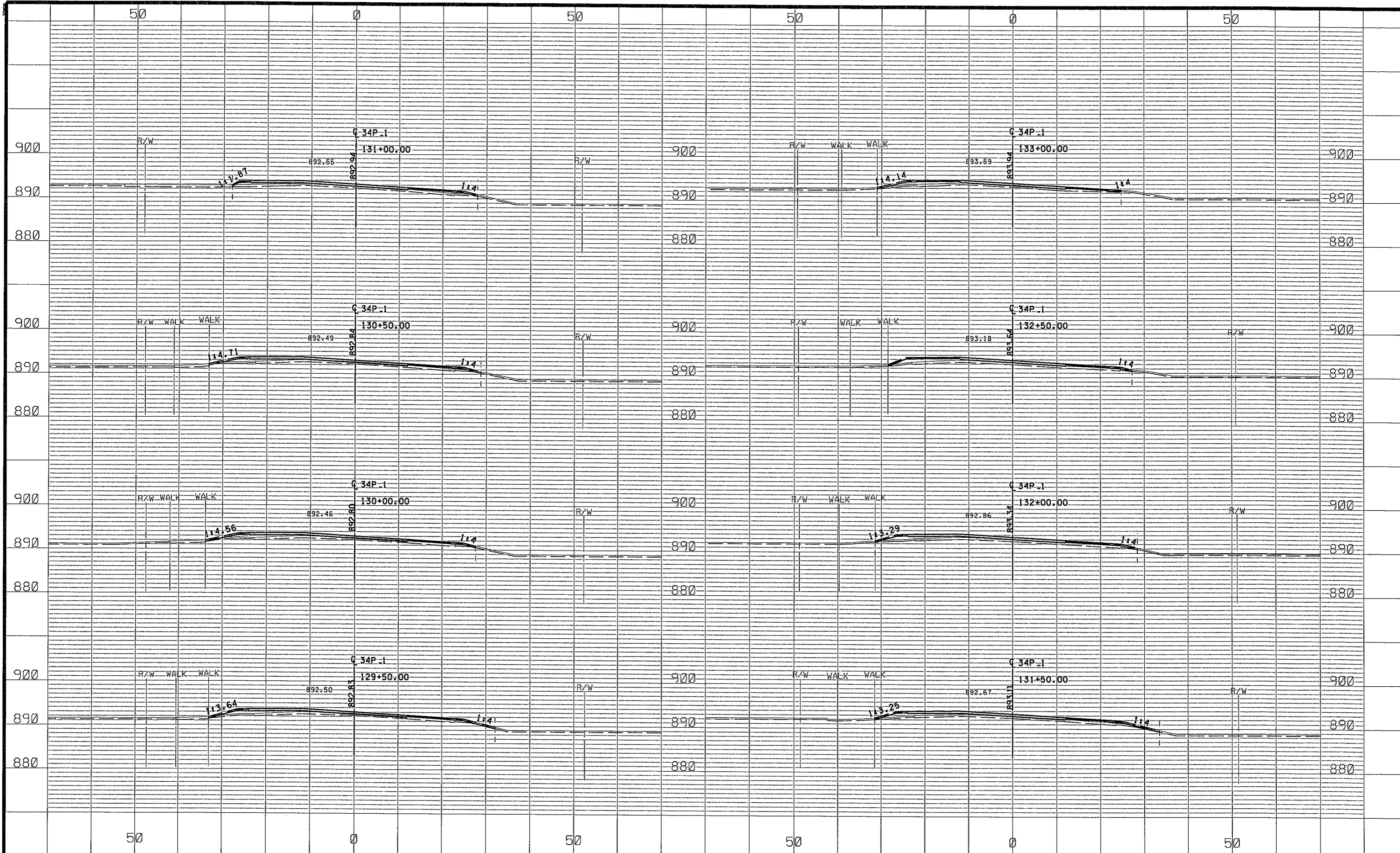
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DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 125+50.00 TO 129+00.00
 Sheet 76 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CSAH_34_(CSAH49-CSAH21)\Plan\0000000000_XS_P1.dgn 04/09/2019 10:28:02 AM

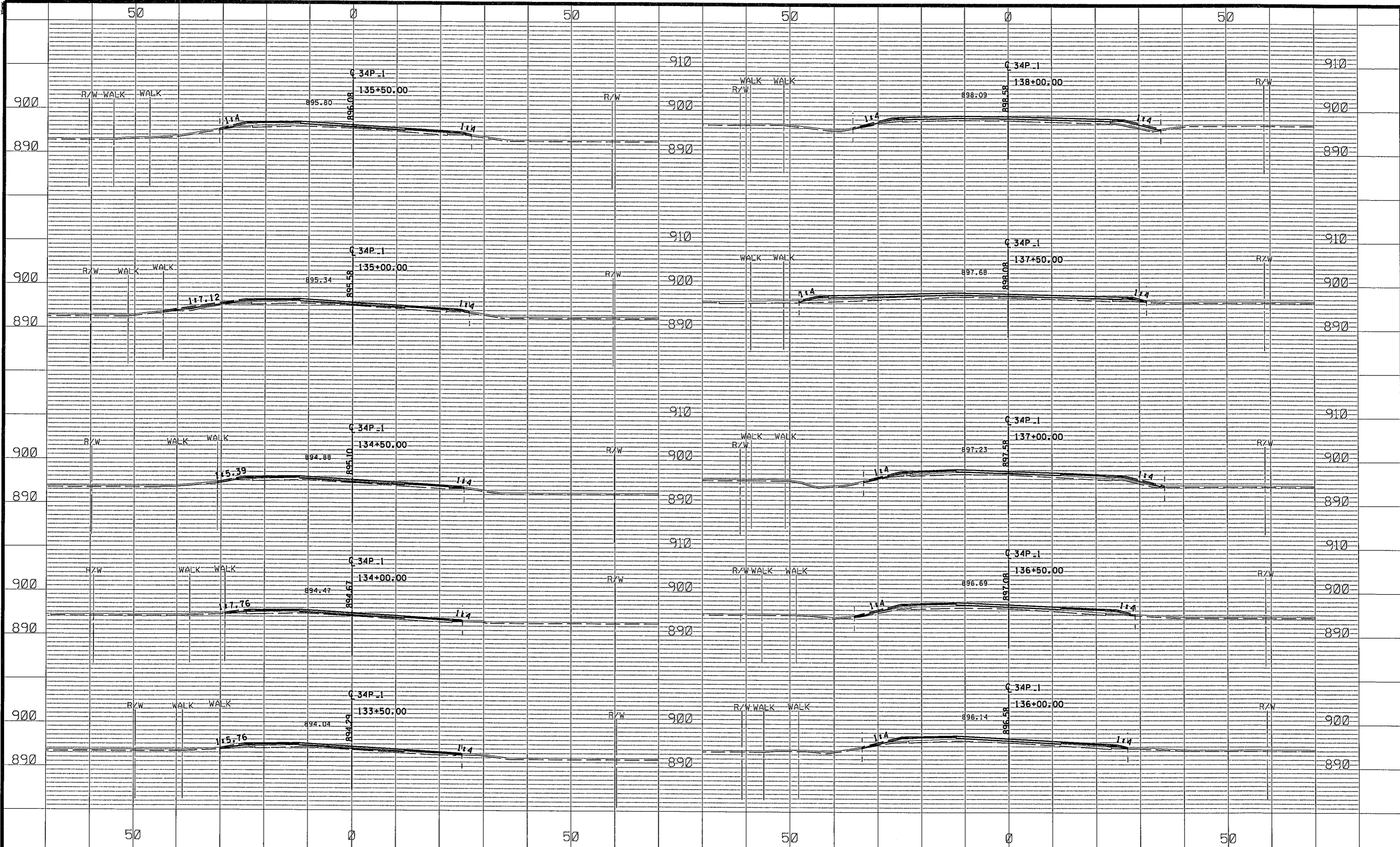
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ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

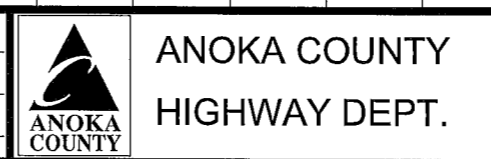
CROSS SECTIONS
 STA 129+50.00 TO 133+00.00
 Sheet 77 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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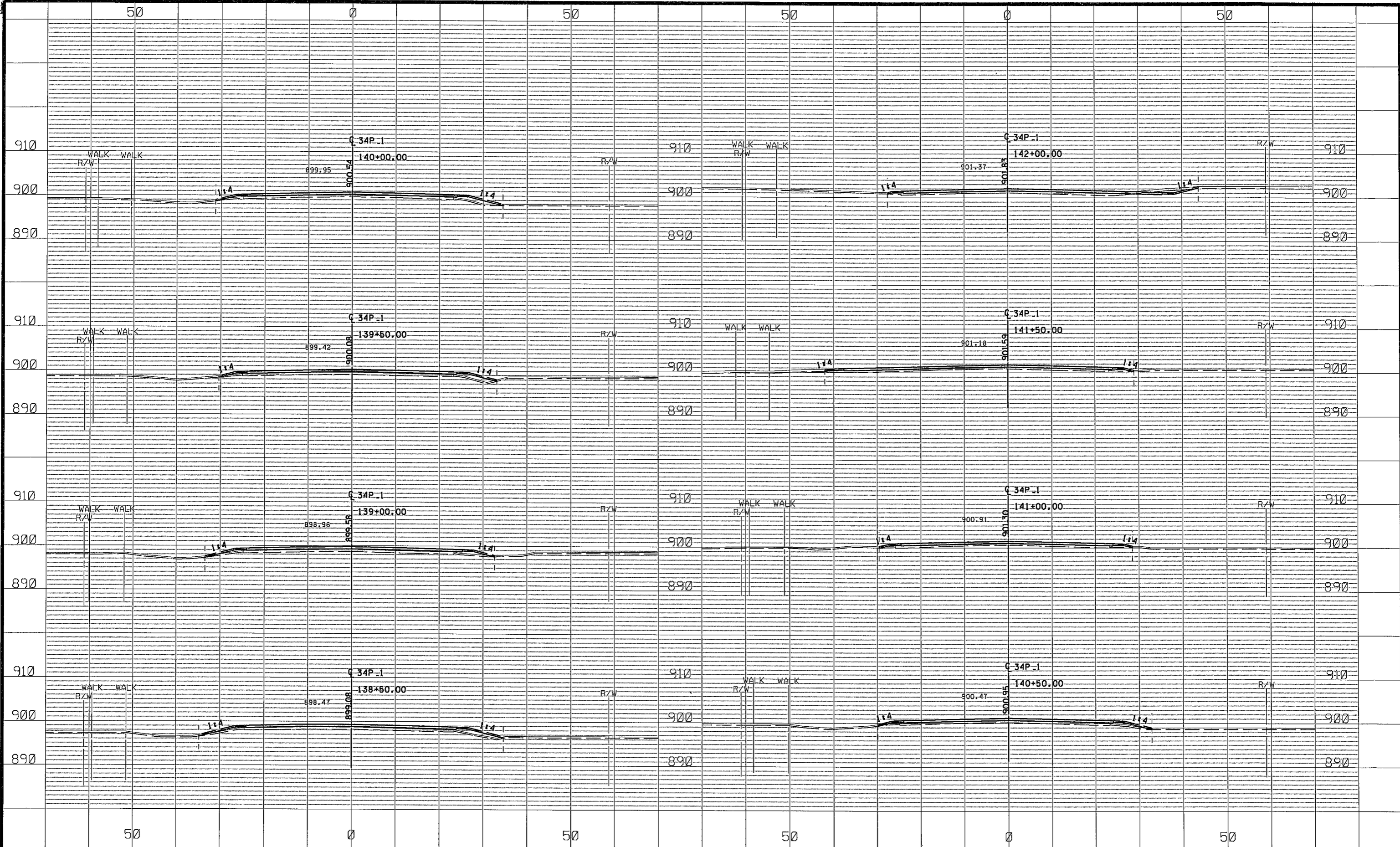
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 DESIGN BY MP DATE 03/28/19
 CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

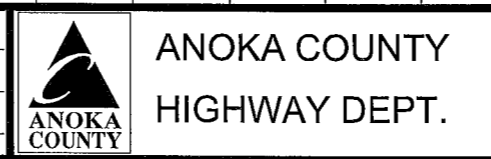
CROSS SECTIONS
 STA 133+50.00 TO 138+00.00
 Sheet 78 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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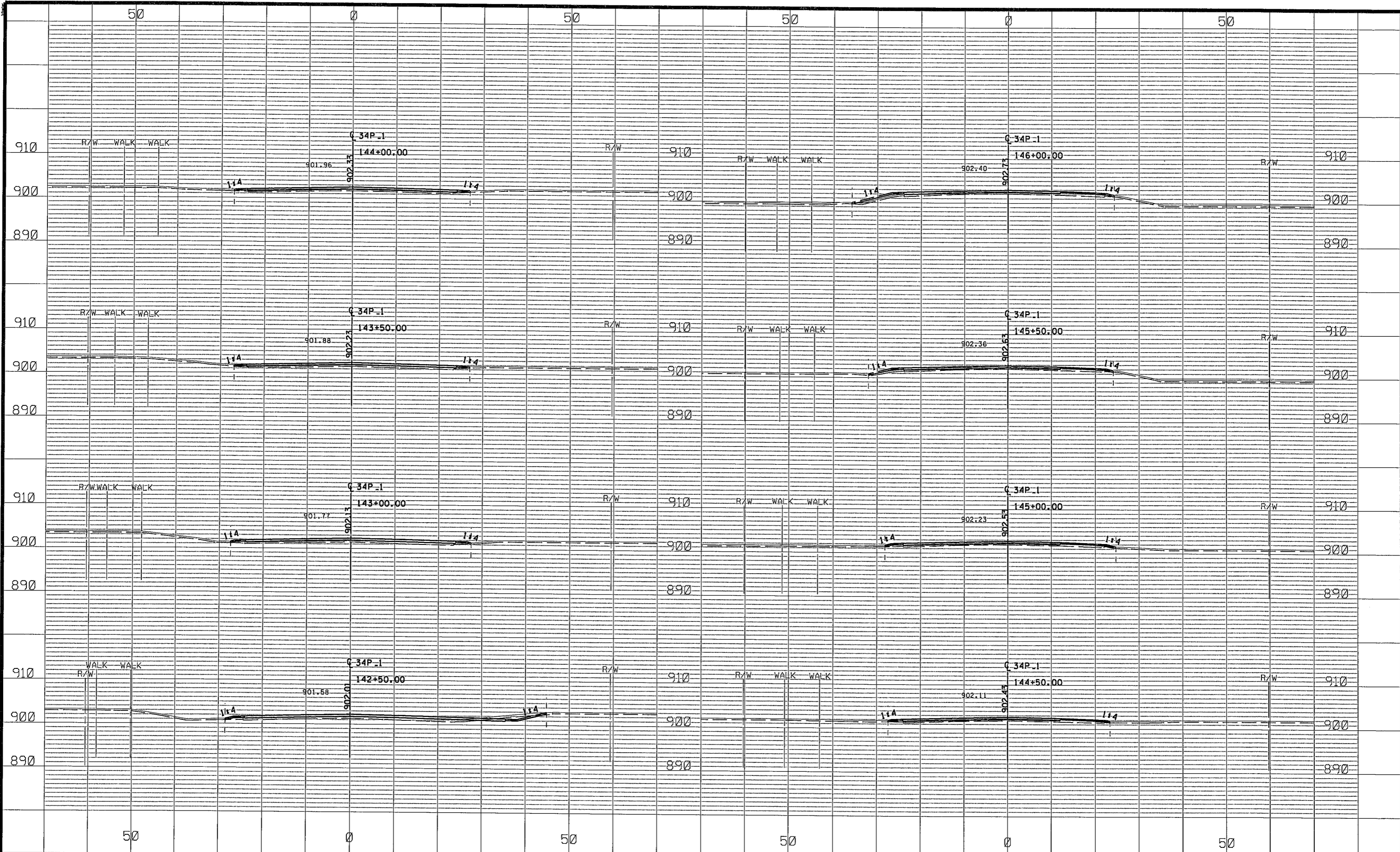
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DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 138+50.00 TO 142+00.00
 Sheet 79 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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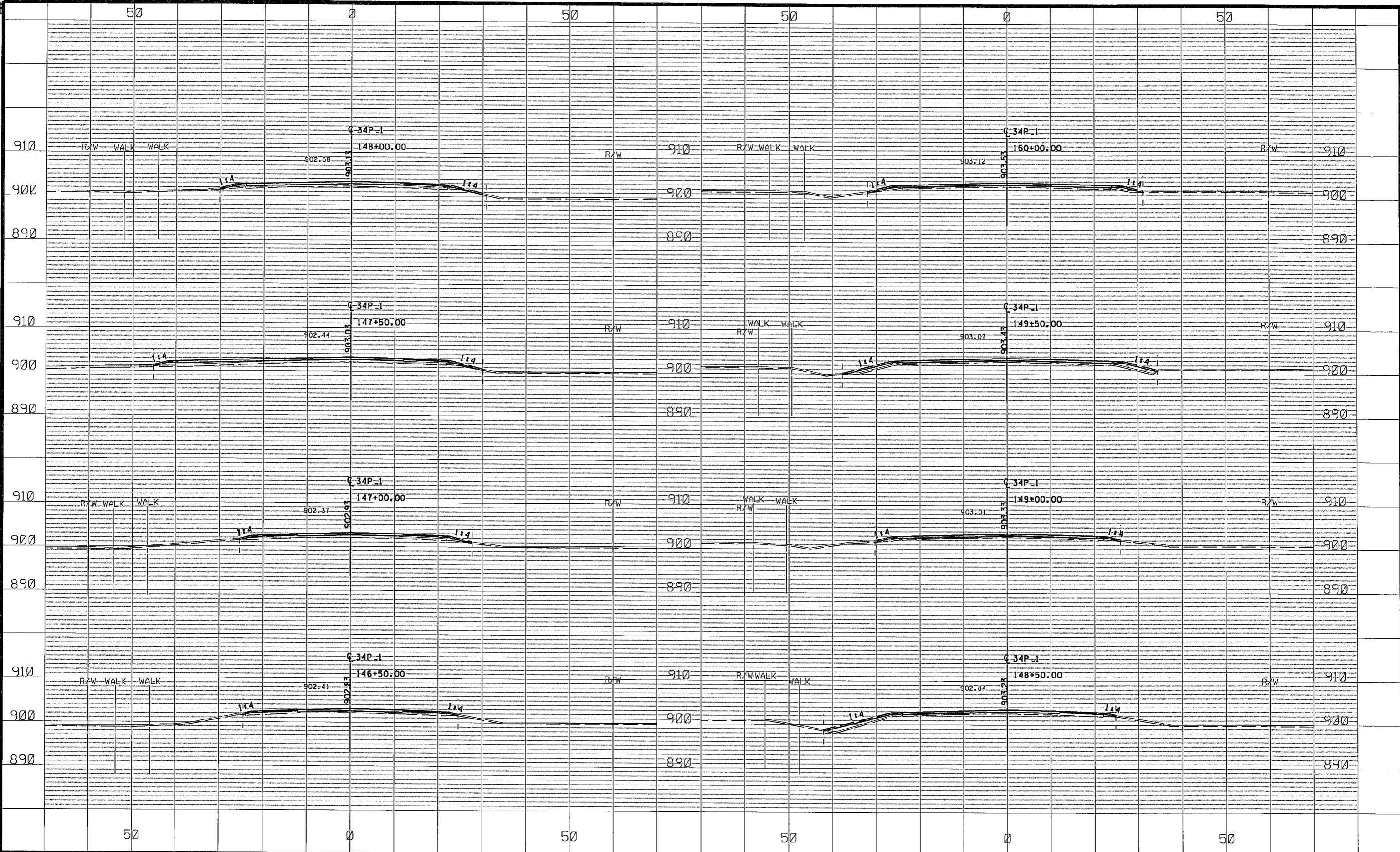
DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

ANOKA COUNTY SAP 002-634-004

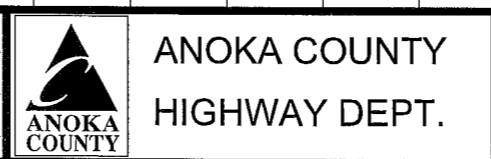
CROSS SECTIONS
 STA 142+50.00 TO 146+00.00
 Sheet 80 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

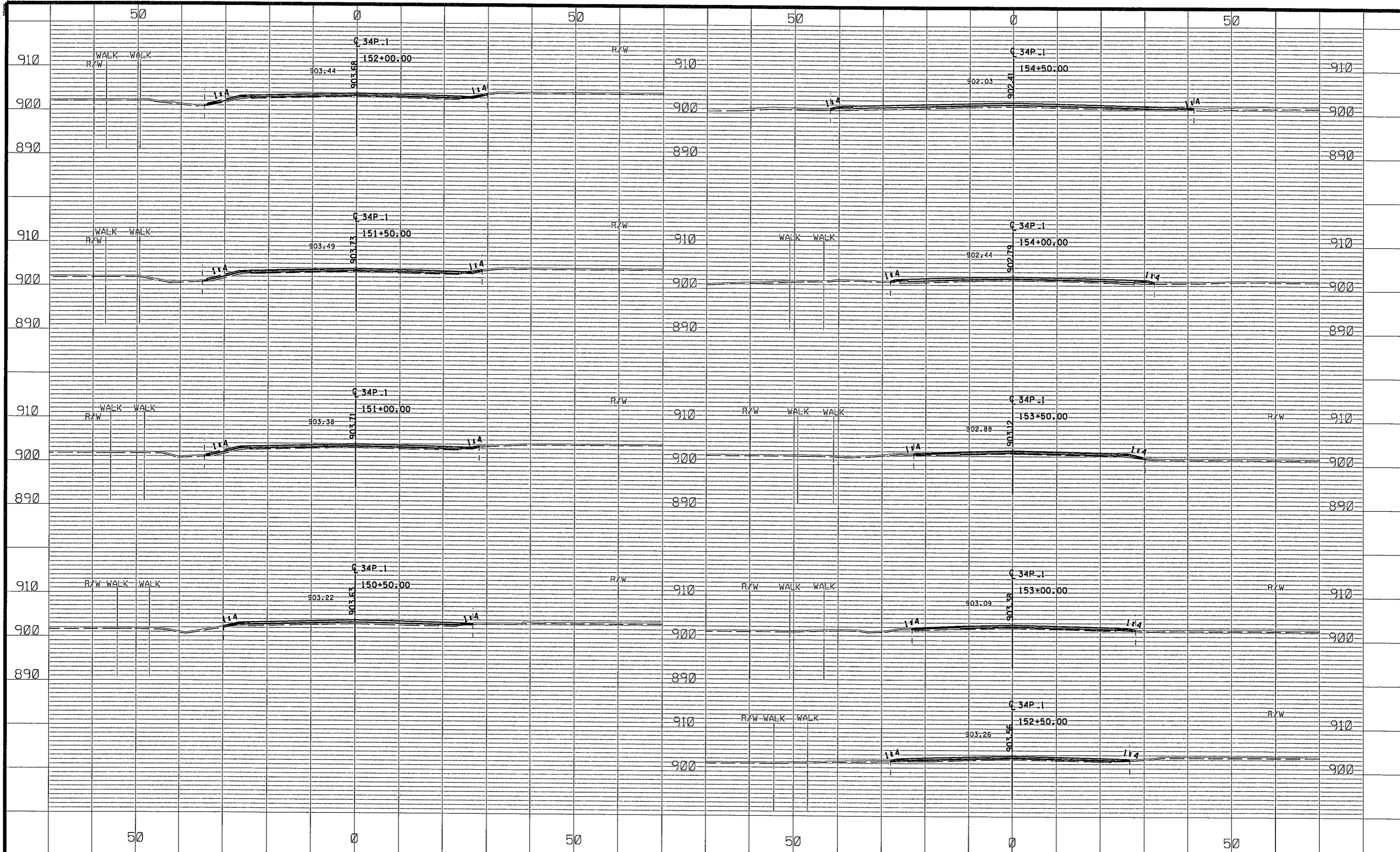
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DRAWN BY MP DATE 03/26/19
DESIGN BY MP DATE 03/26/19
CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
STA 146+50.00 TO 150+00.00
Sheet 81 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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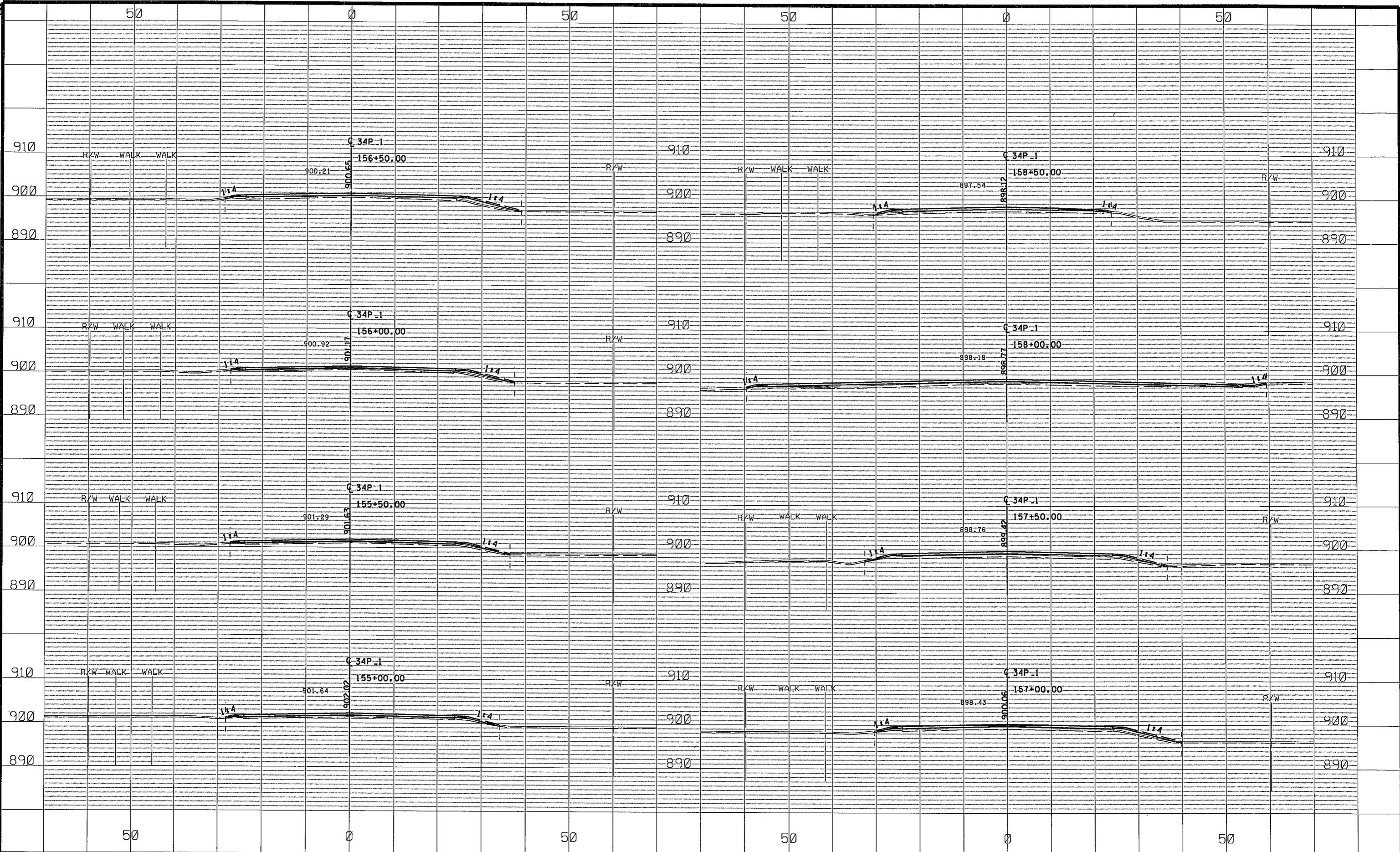
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 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 150+50.00 TO 154+50.00
 Sheet 82 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

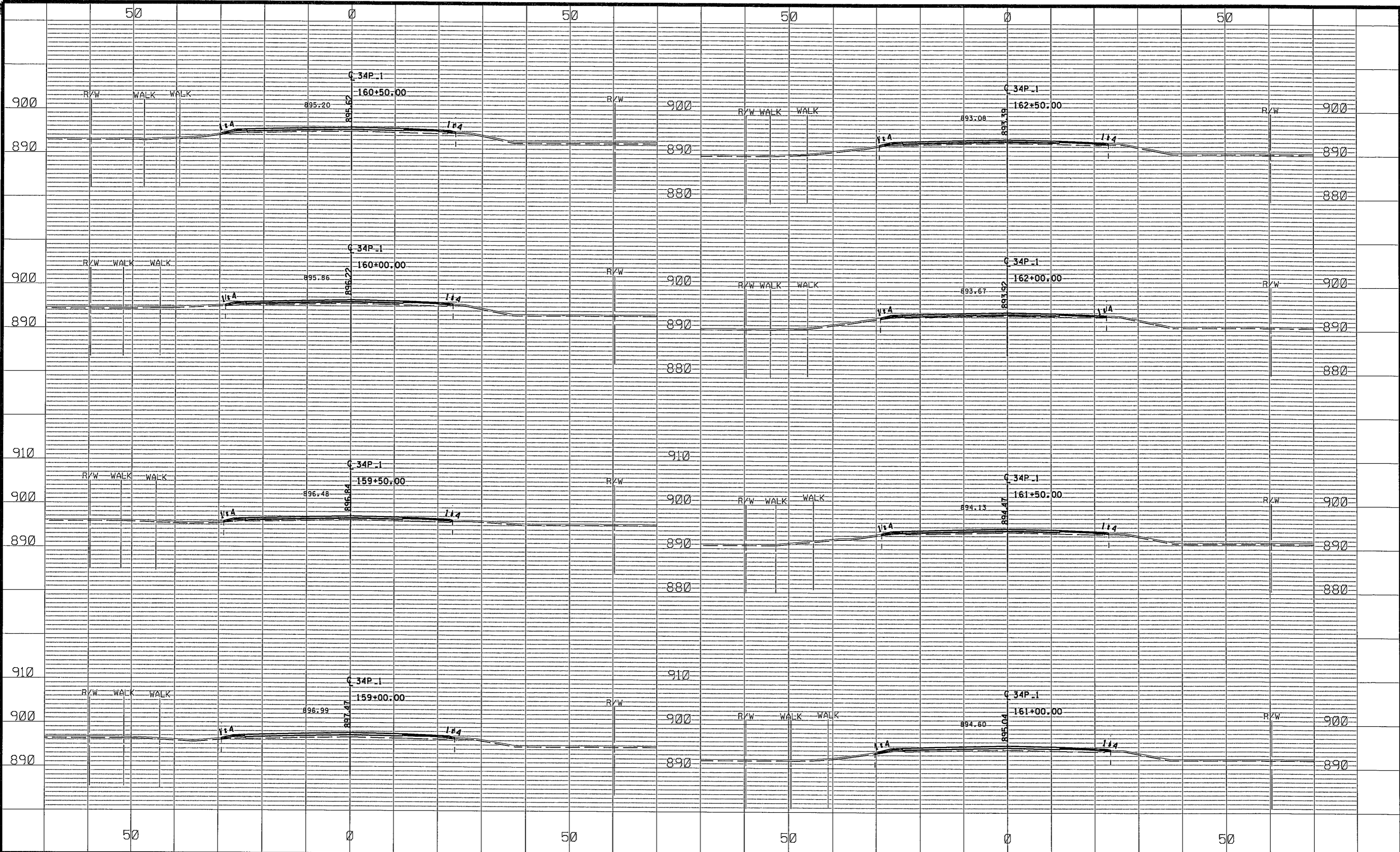
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DESIGN BY MP DATE 03/26/19
CHECKED BY JEO DATE 04/05/19



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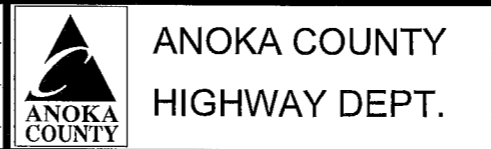
CROSS SECTIONS
STA 155+00.00 TO 158+50.00
Sheet 83 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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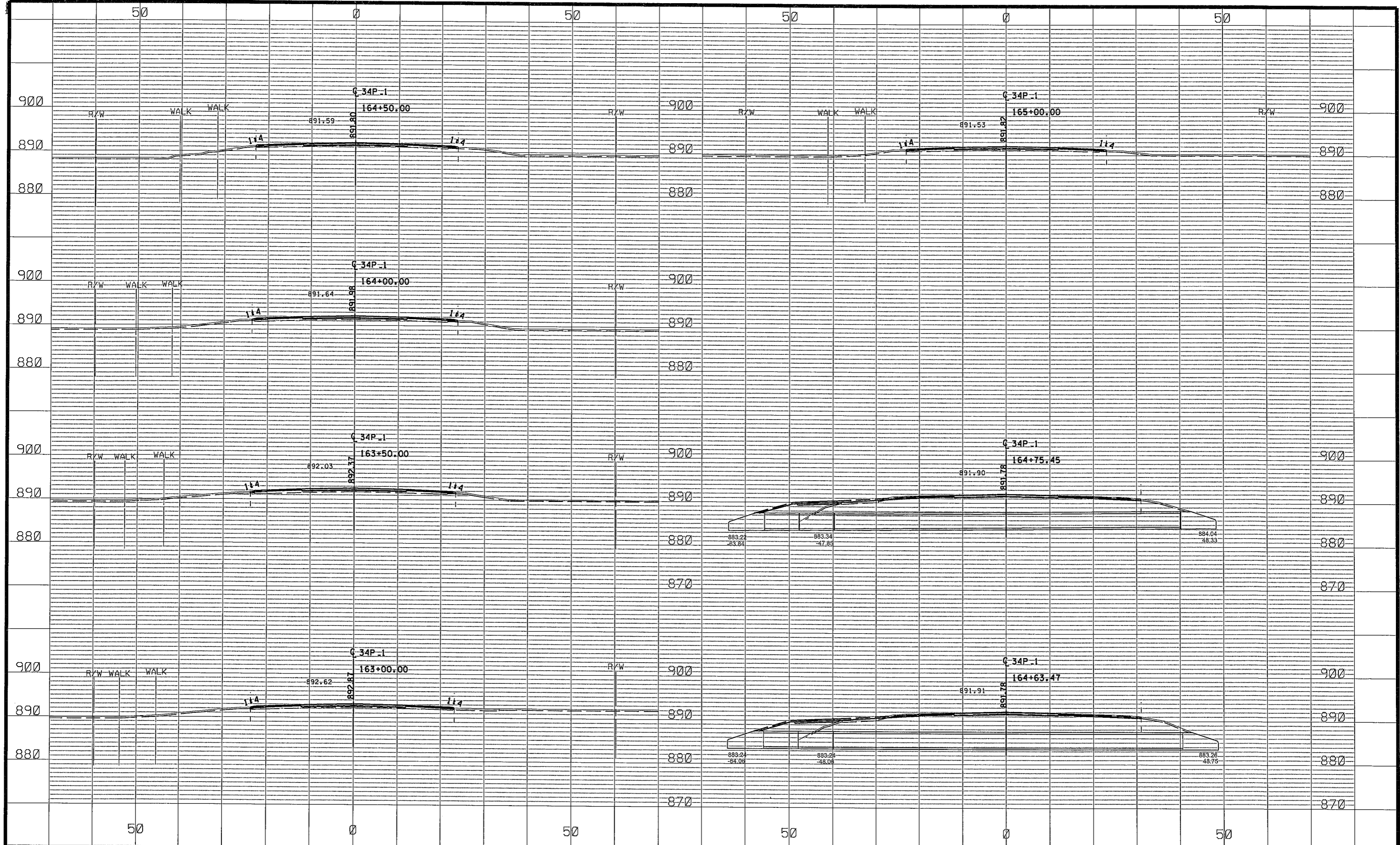
NO	DATE	BY	CKD	APPR	REVISION

DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 159+00.00 TO 162+50.00
 Sheet 84 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

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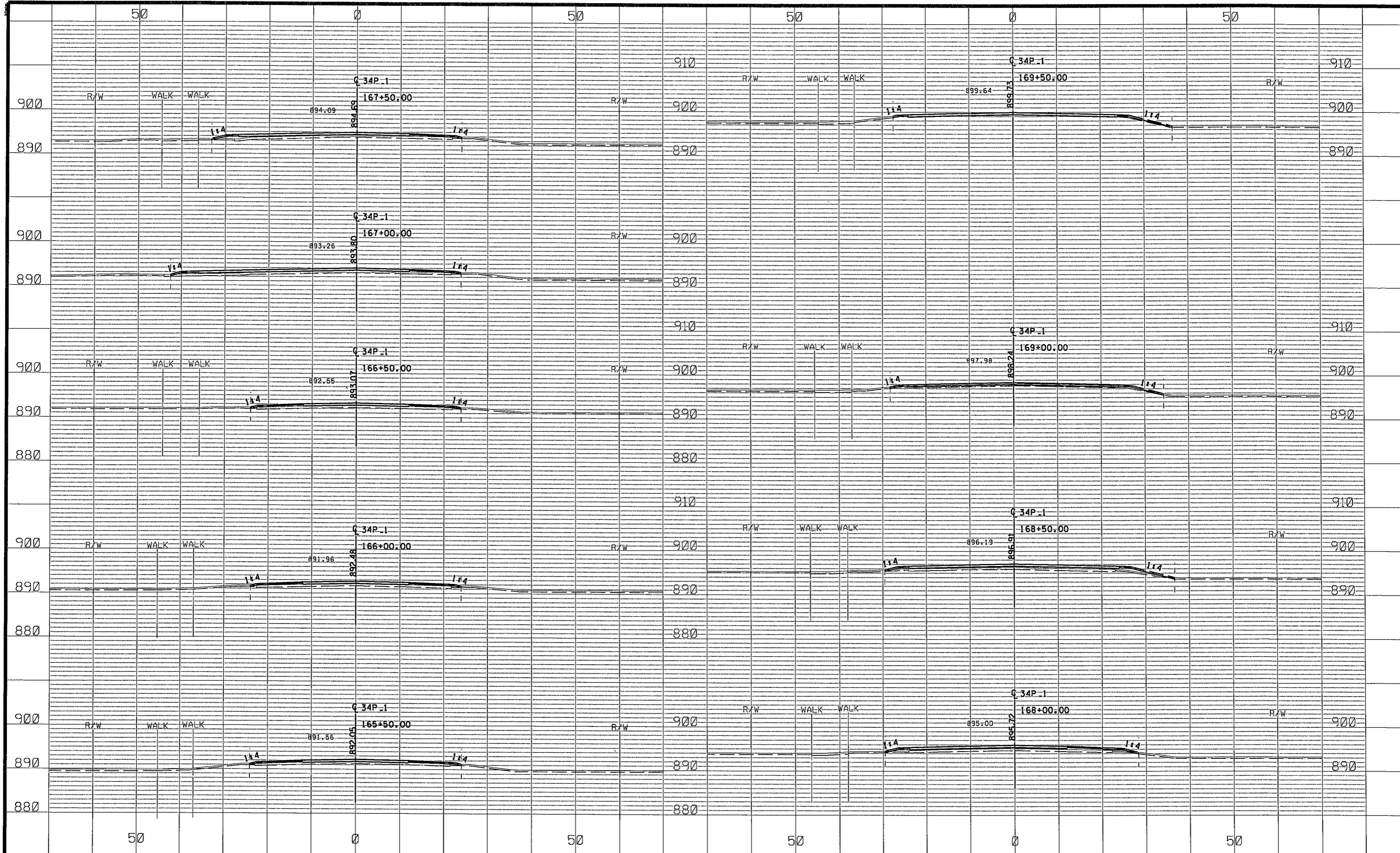
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 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 163+00.00 TO 165+00.00
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NO	DATE	BY	CKD	APPR	REVISION

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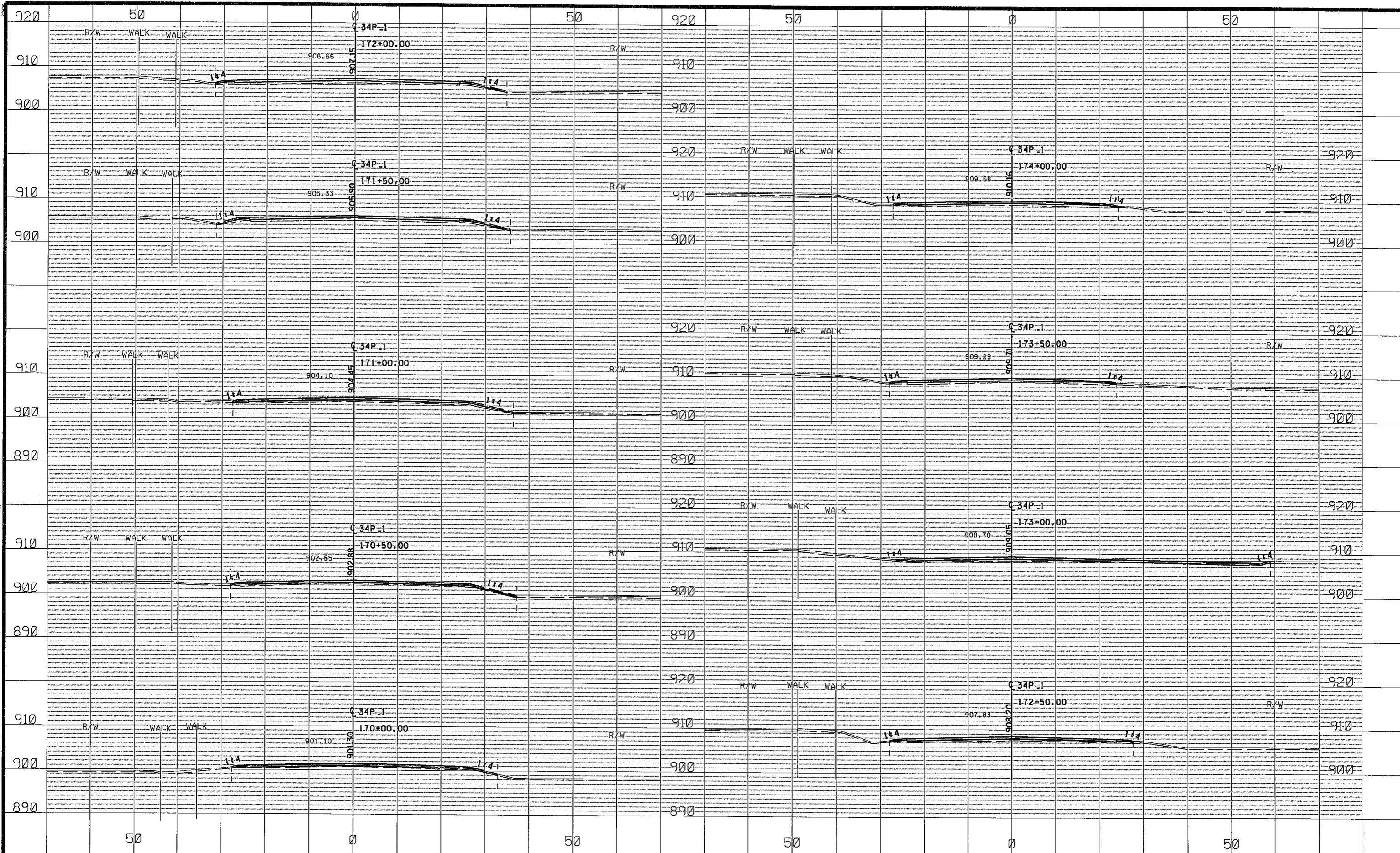
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 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 165+50.00 TO 169+50.00
 Sheet 86 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

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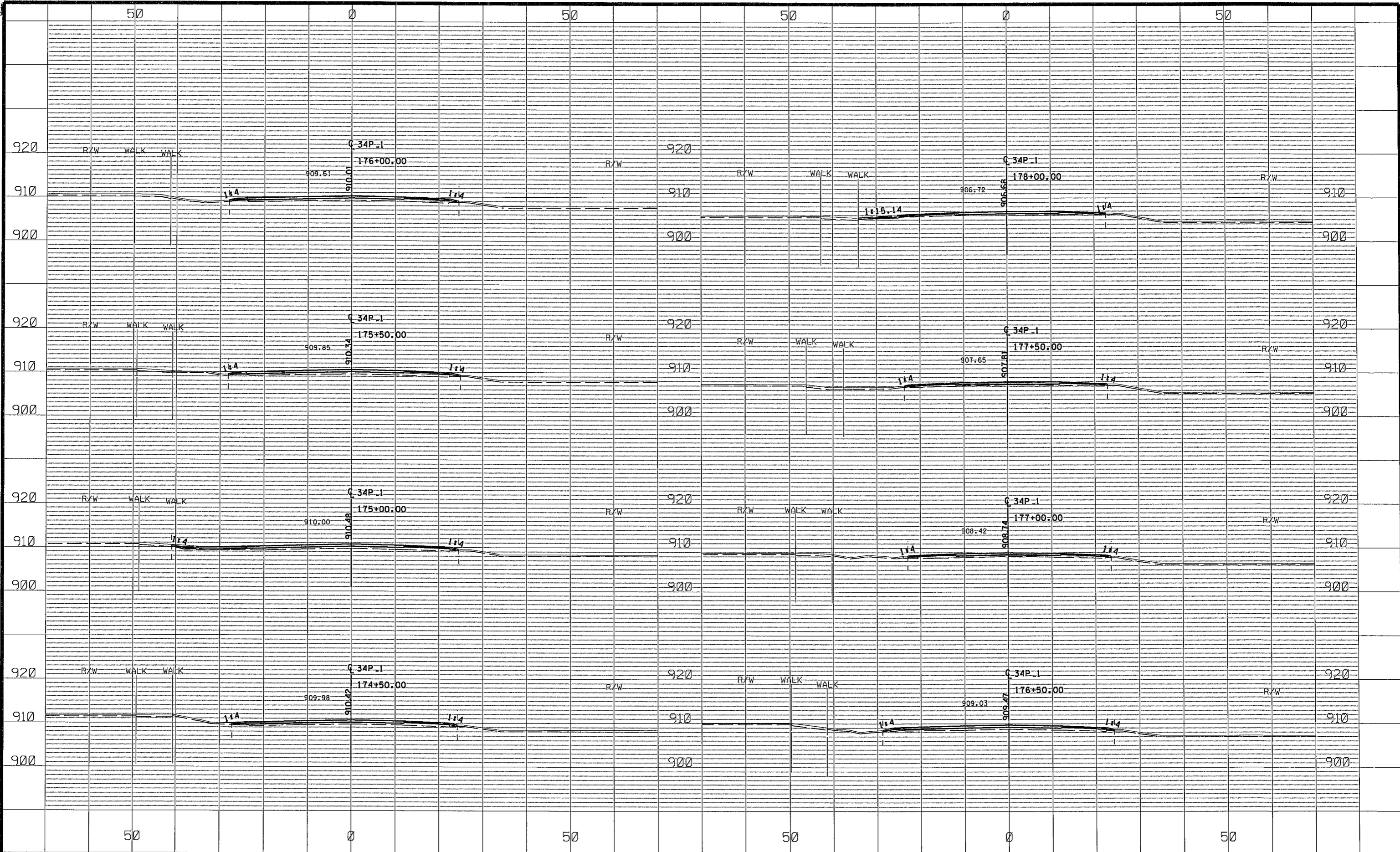
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 CHECKED BY JEO DATE 04/05/19



**ANOKA COUNTY
HIGHWAY DEPT.**

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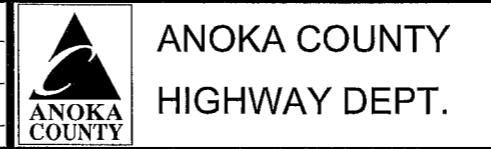
CROSS SECTIONS
 STA 170+00.00 TO 174+00.00
 Sheet 87 of 103 Sheets



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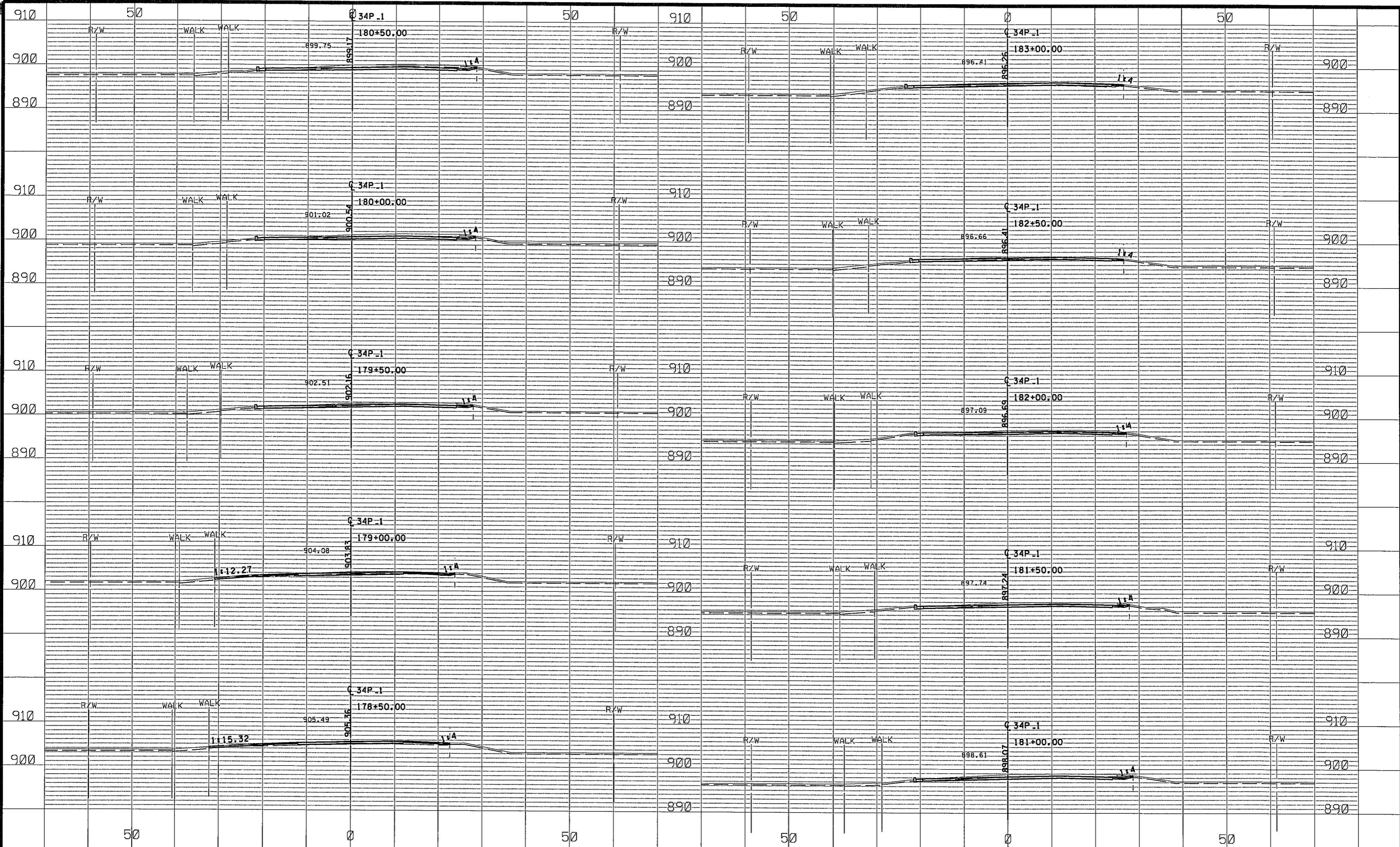
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 CHECKED BY JEO DATE 04/05/19



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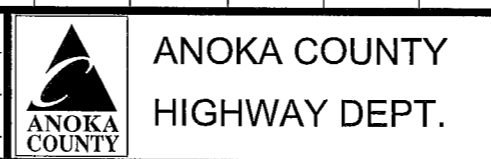
CROSS SECTIONS
 STA 174+50.00 TO 178+00.00
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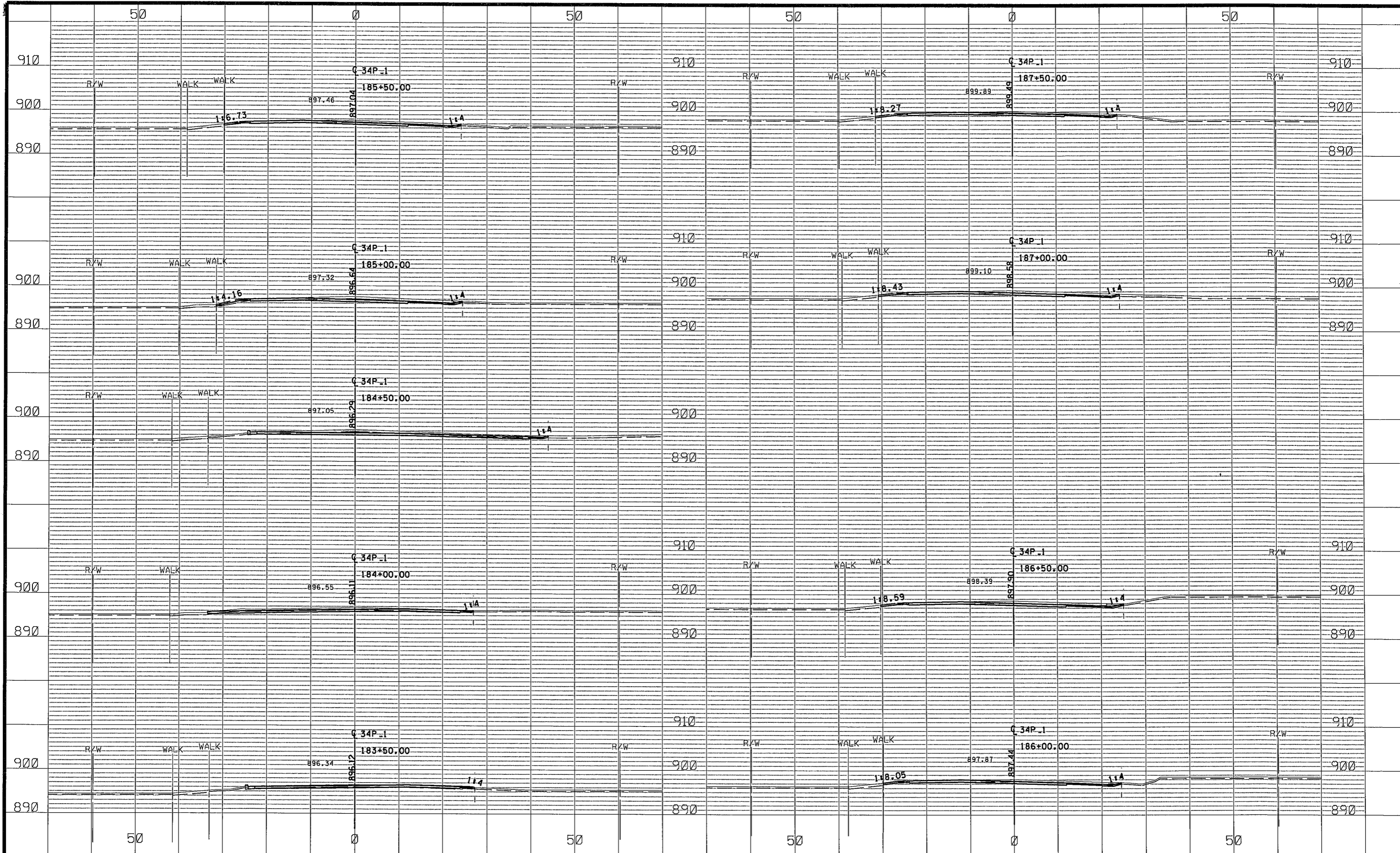
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 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 178+50.00 TO 183+00.00
 Sheet 89 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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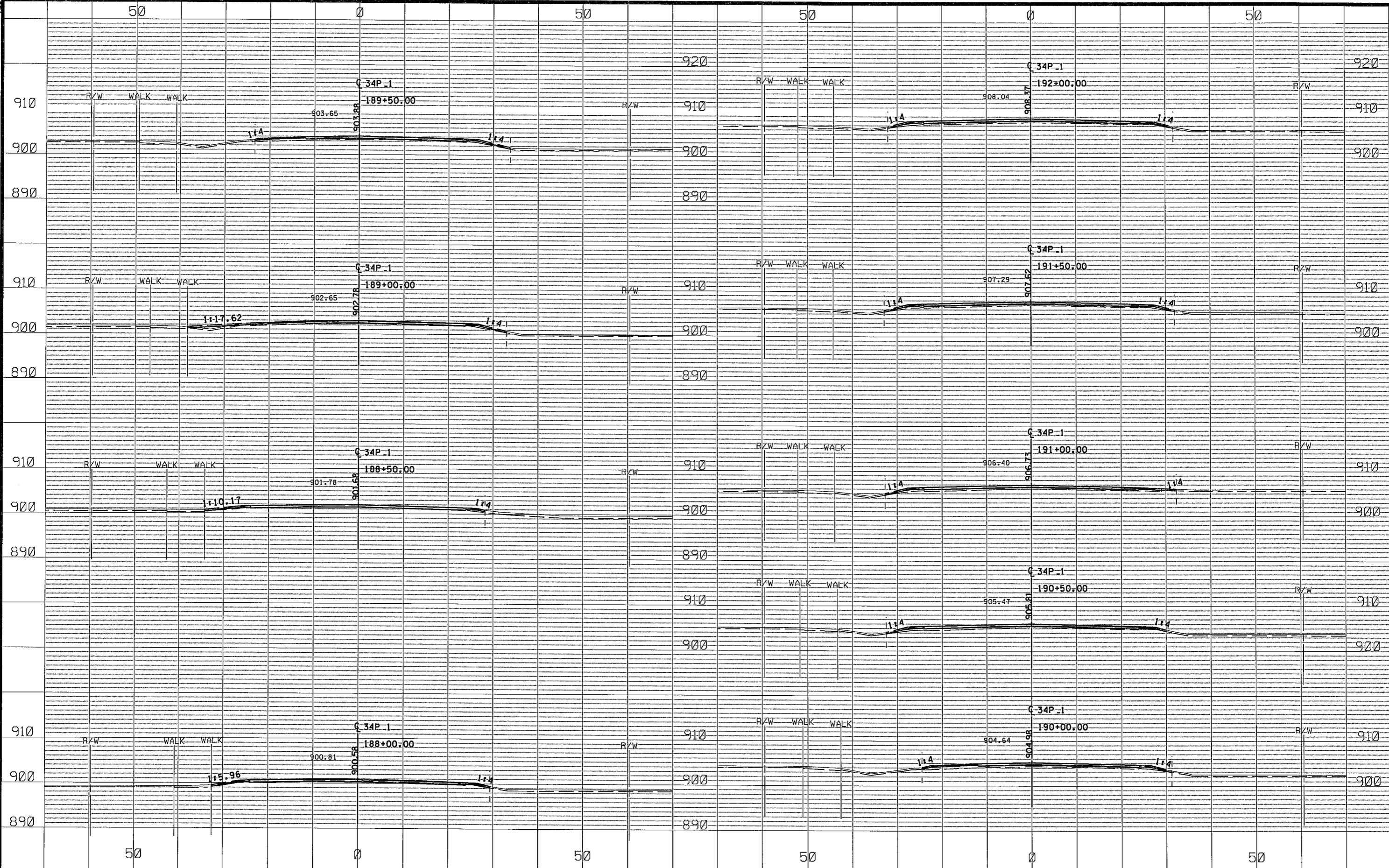
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 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.

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CROSS SECTIONS
 STA 183+50.00 TO 187+50.00
 Sheet 90 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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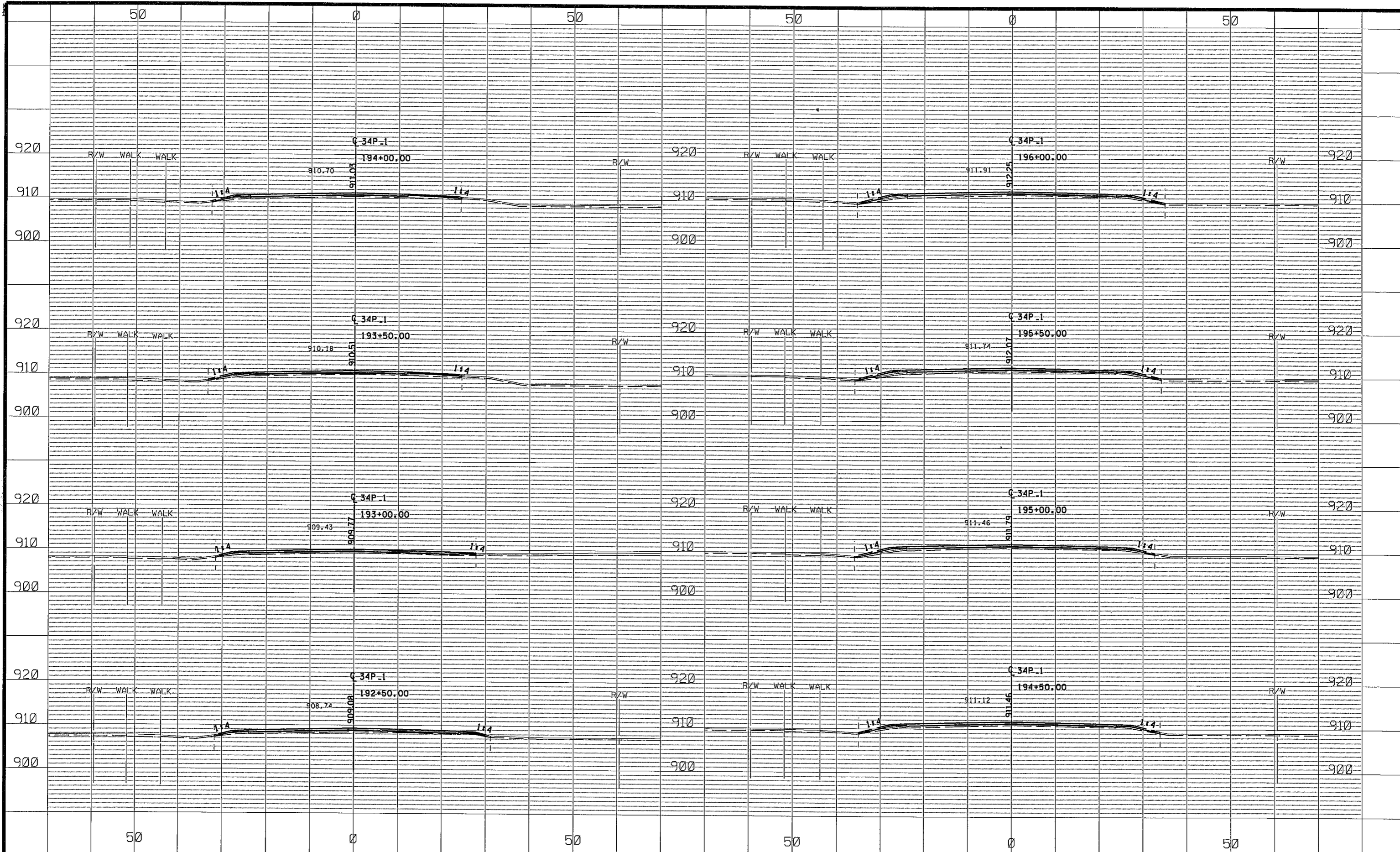
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 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/06/19



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CROSS SECTIONS
 STA 188+00.00 TO 192+00.00
 Sheet 91 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION
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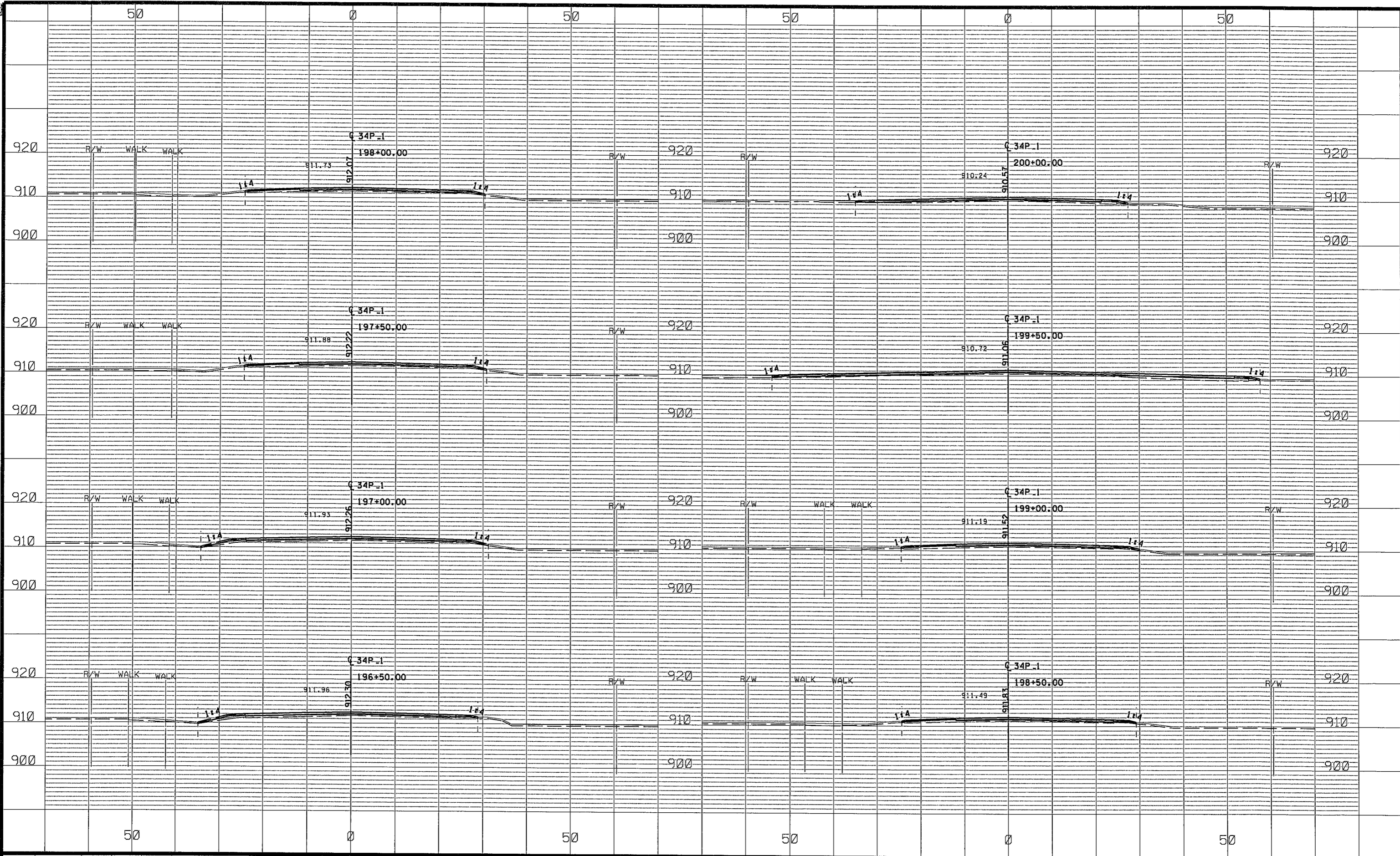
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 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



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 HIGHWAY DEPT.

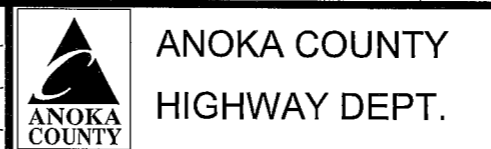
ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 192+50.00 TO 196+00.00
 Sheet 92 of 103 Sheets



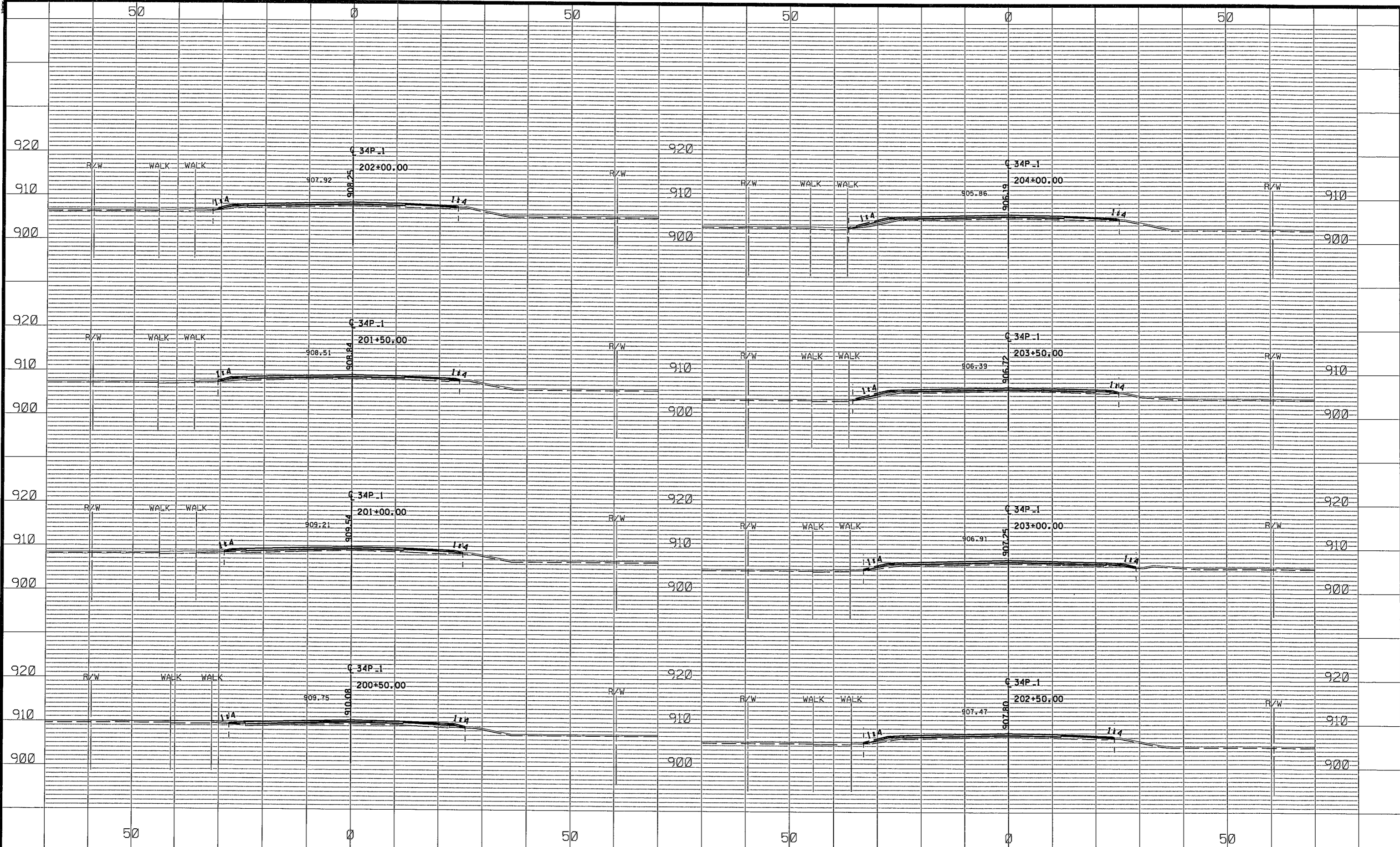
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 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 196+50.00 TO 200+00.00
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NO	DATE	BY	CKD	APPR	REVISION
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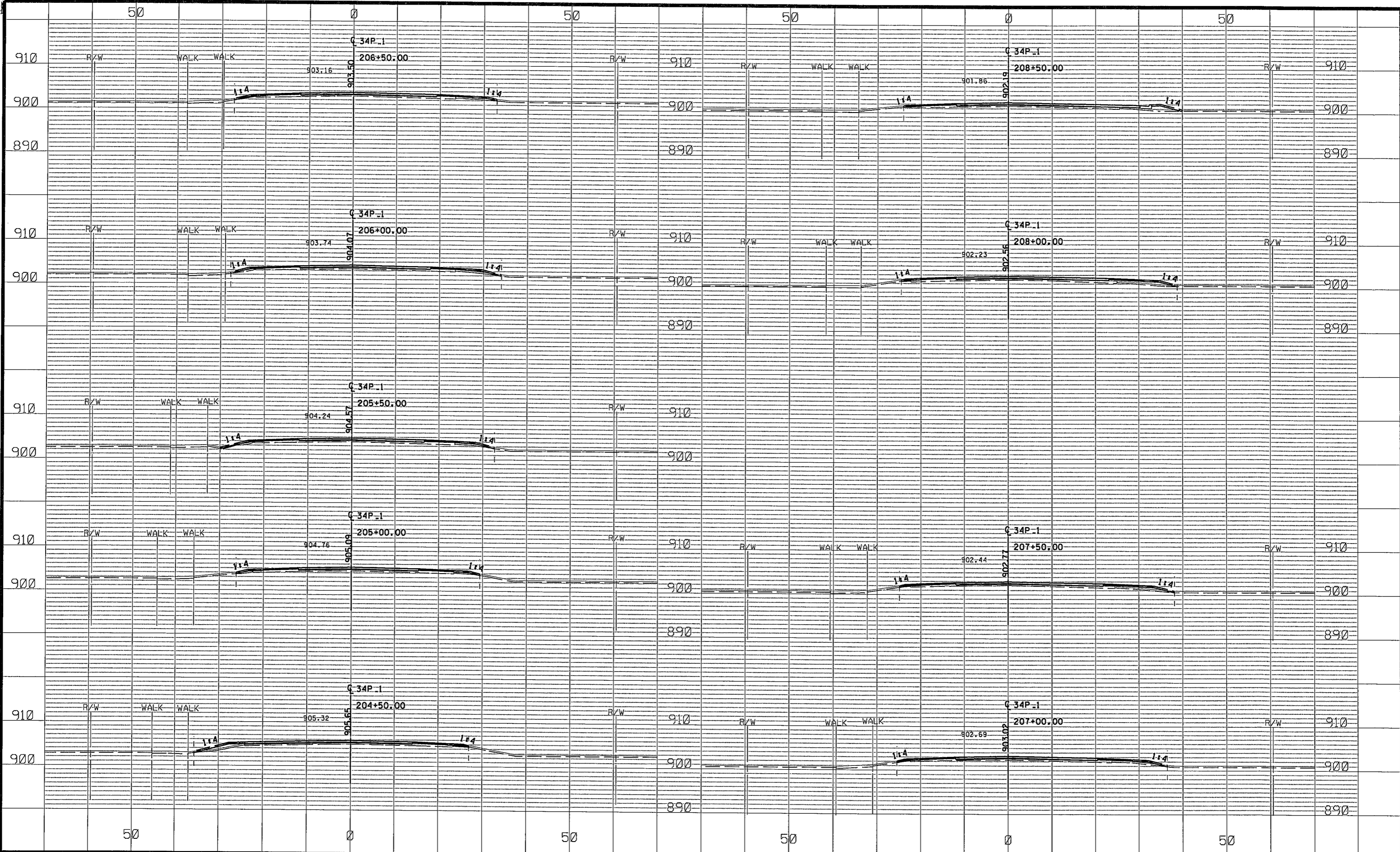
DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



**ANOKA COUNTY
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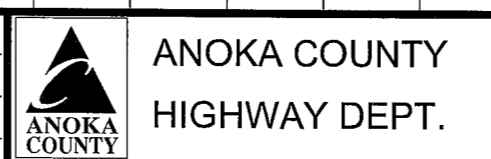
ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 200+50.00 TO 204+00.00
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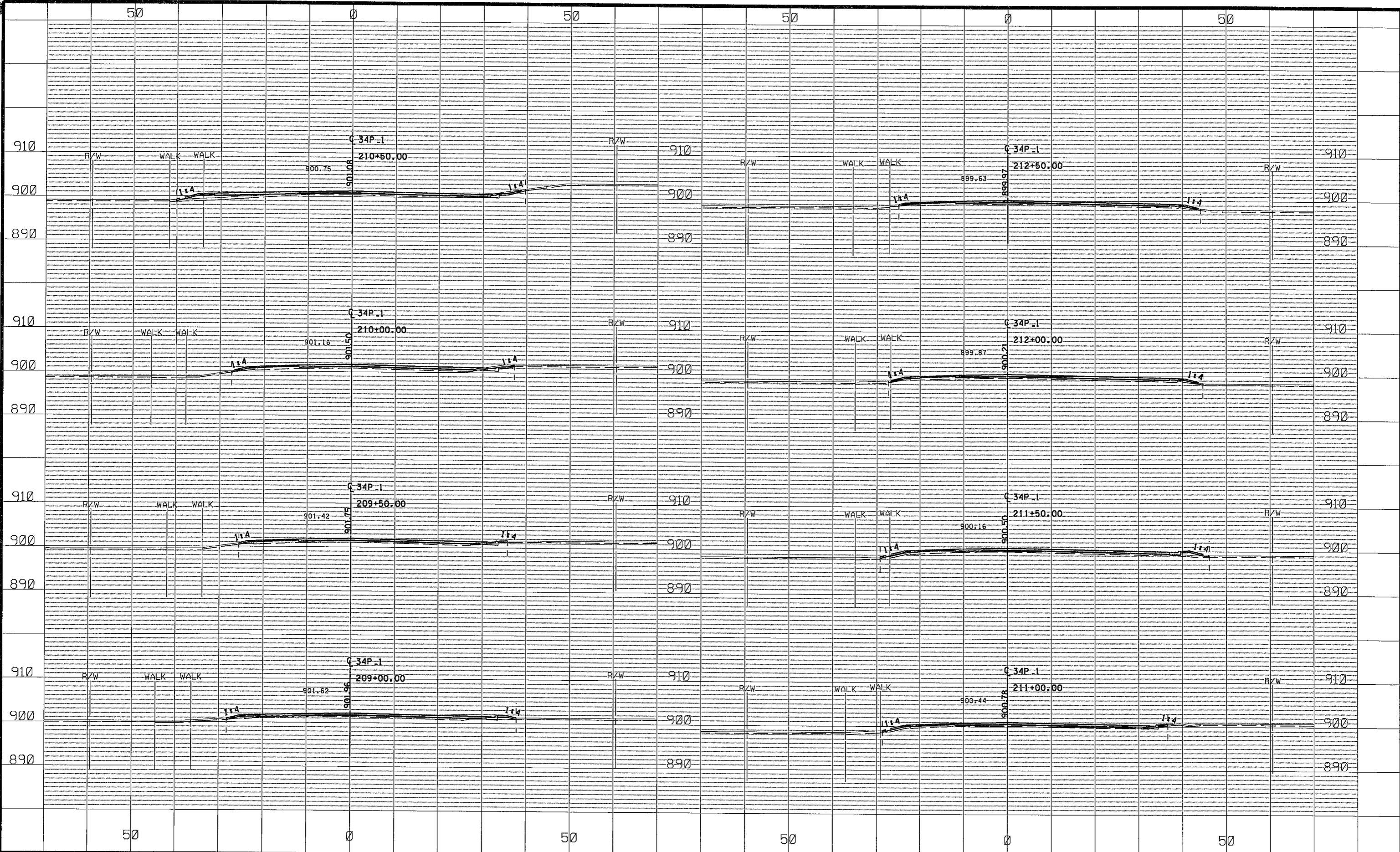
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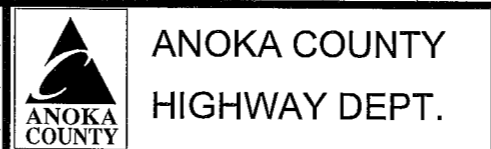
CROSS SECTIONS
 STA 204+50.00 TO 208+50.00
 Sheet 95 of 103 Sheets



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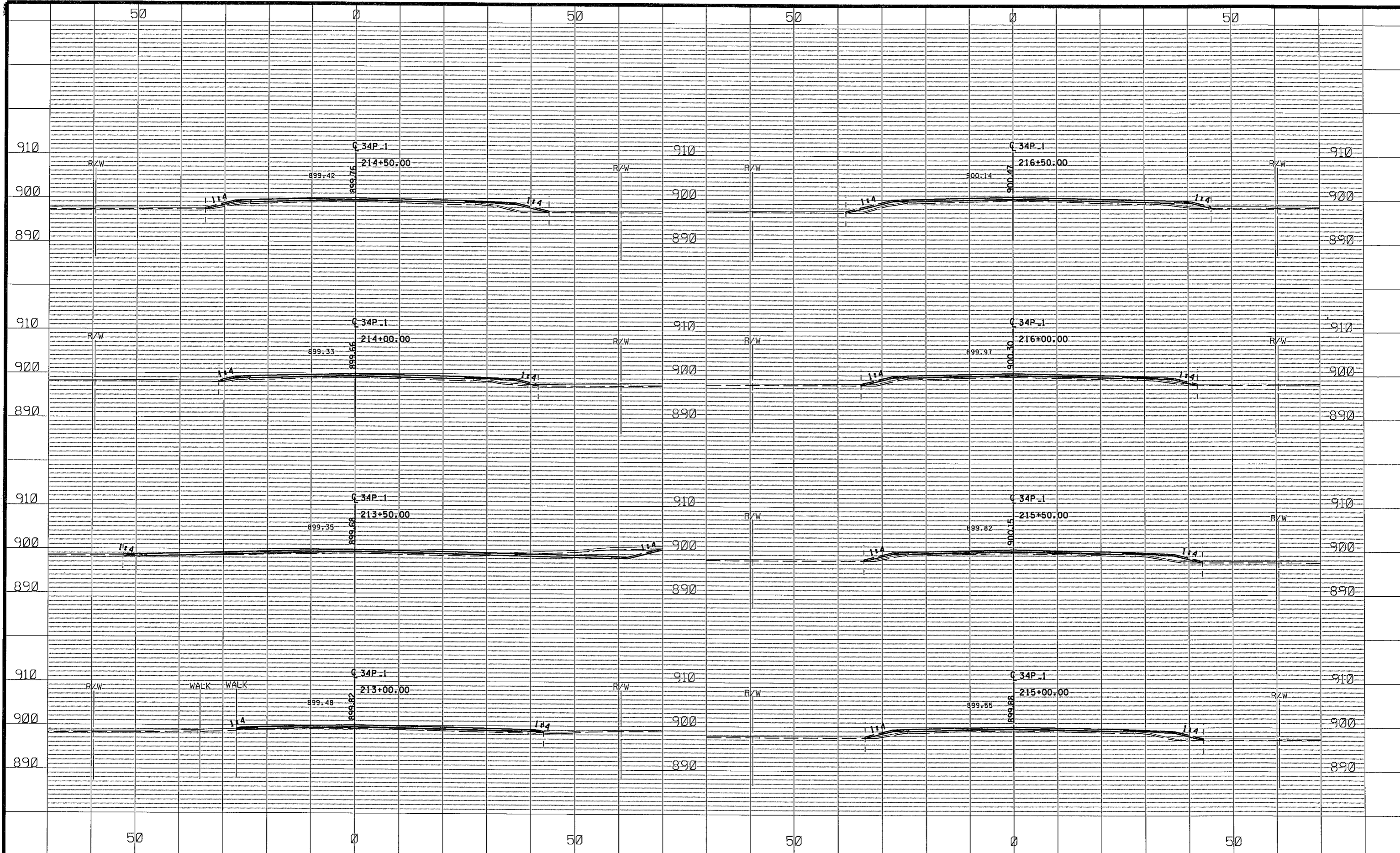
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 DESIGN BY MP DATE 03/26/19
 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 209+00.00 TO 212+50.00
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NO	DATE	BY	CKD	APPR	REVISION

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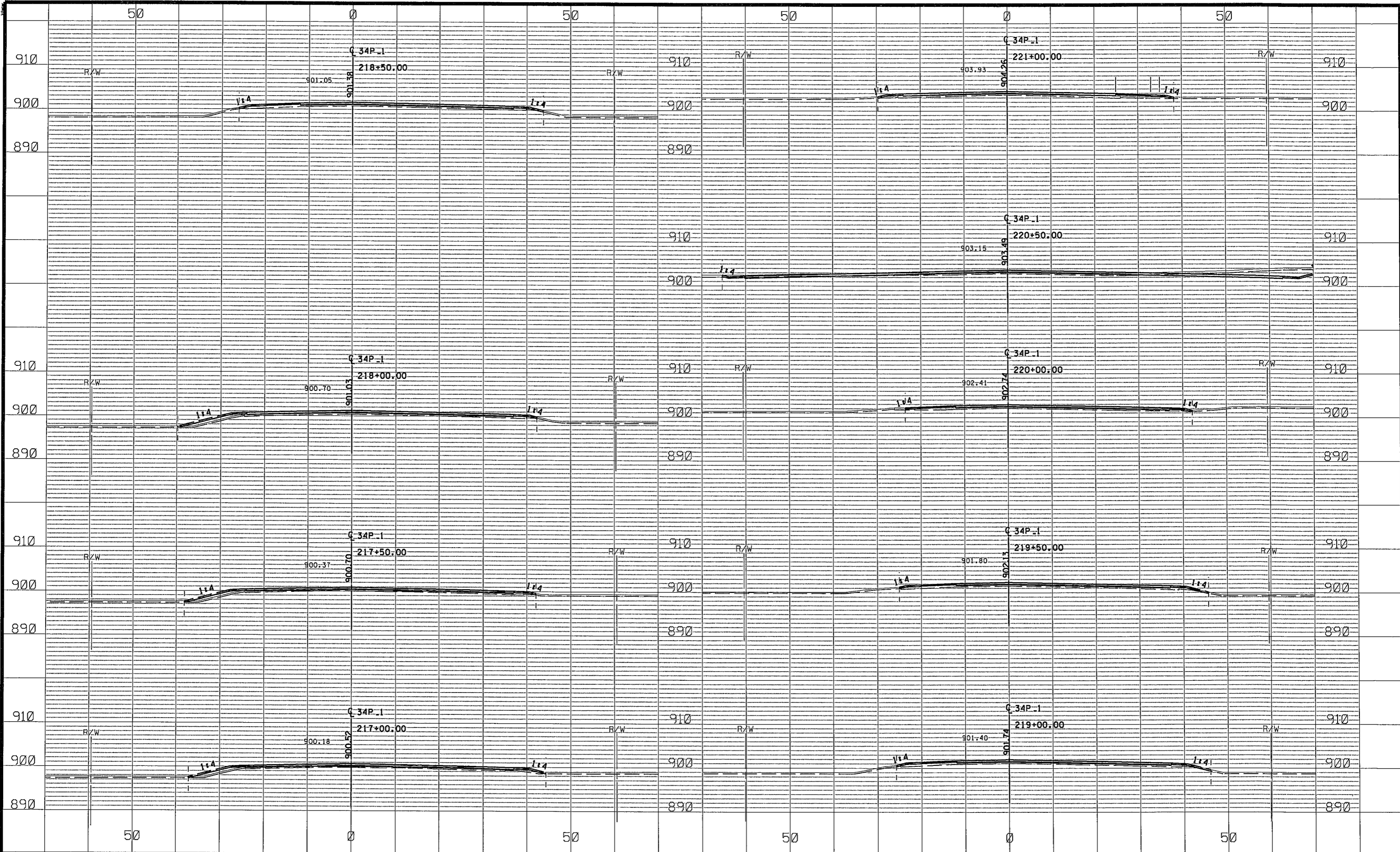
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 CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
HIGHWAY DEPT.

ANOKA COUNTY SAP 002-634-004

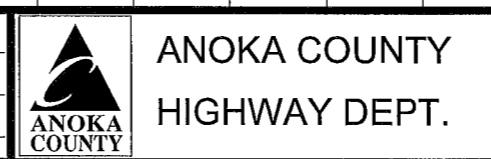
CROSS SECTIONS
 STA 213+00.00 TO 216+50.00
 Sheet 97 of 103 Sheets



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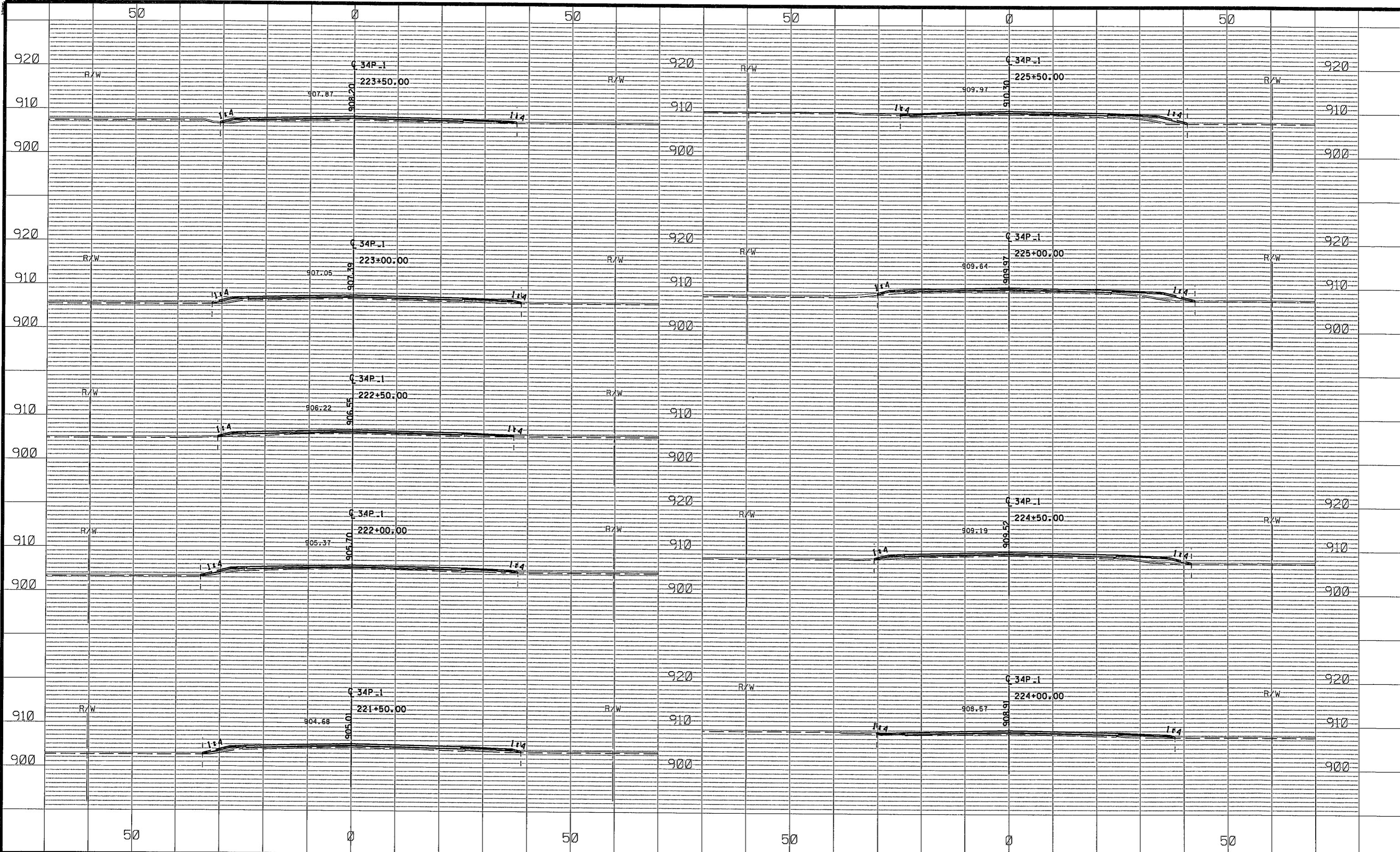
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DRAWN BY MP DATE 03/26/19
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 CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
 HIGHWAY DEPT.
 ANOKA COUNTY SAP 002-634-004

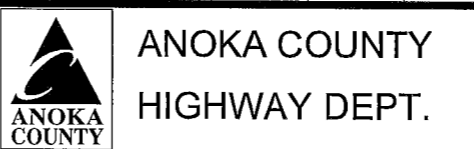
CROSS SECTIONS
 STA 217+00.00 TO 221+00.00
 Sheet 98 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

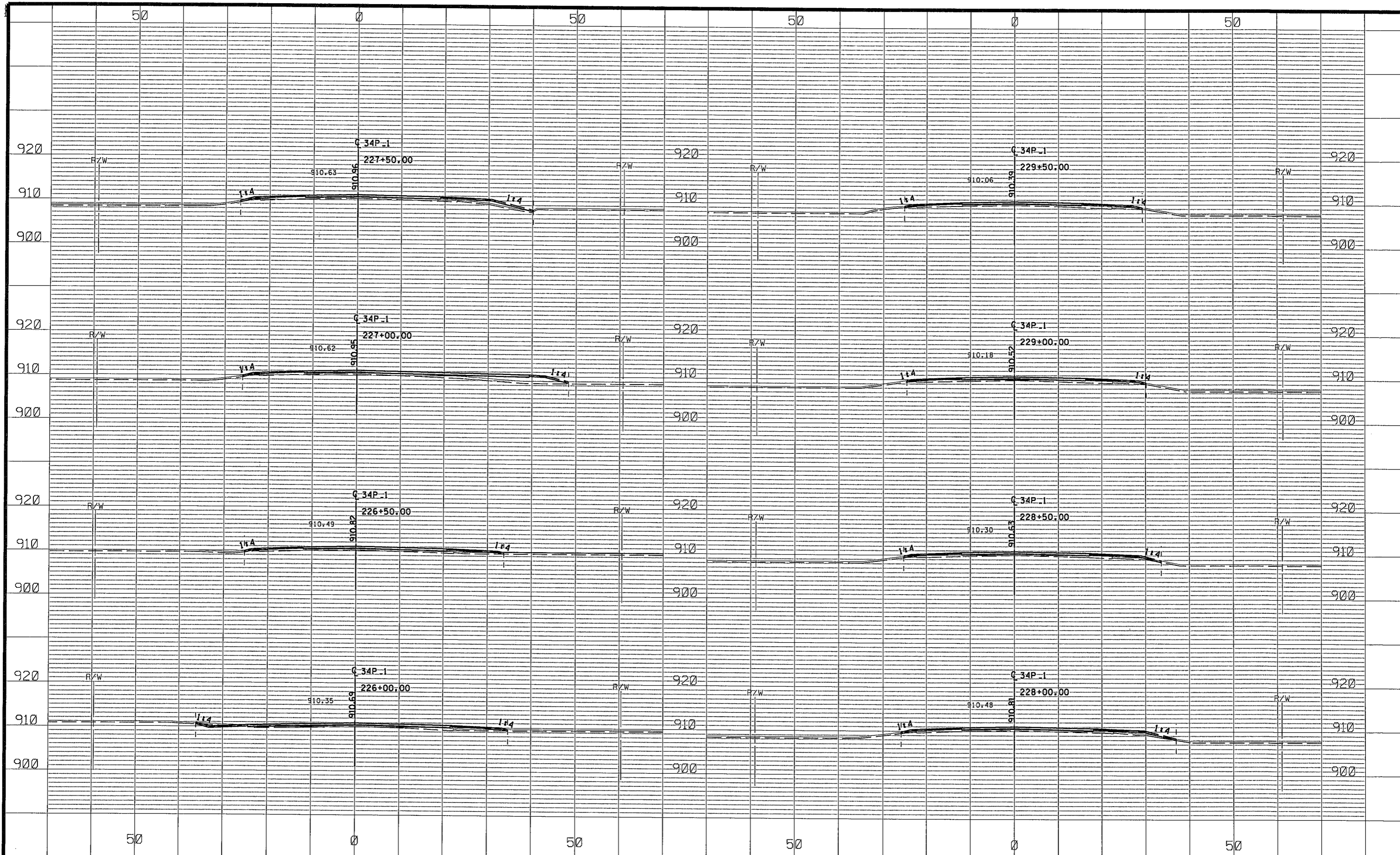
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ANOKA COUNTY SAP 002-634-004

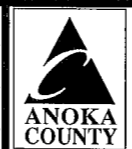
CROSS SECTIONS
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 Sheet 99 of 103 Sheets



NO	DATE	BY	CKD	APPR	REVISION

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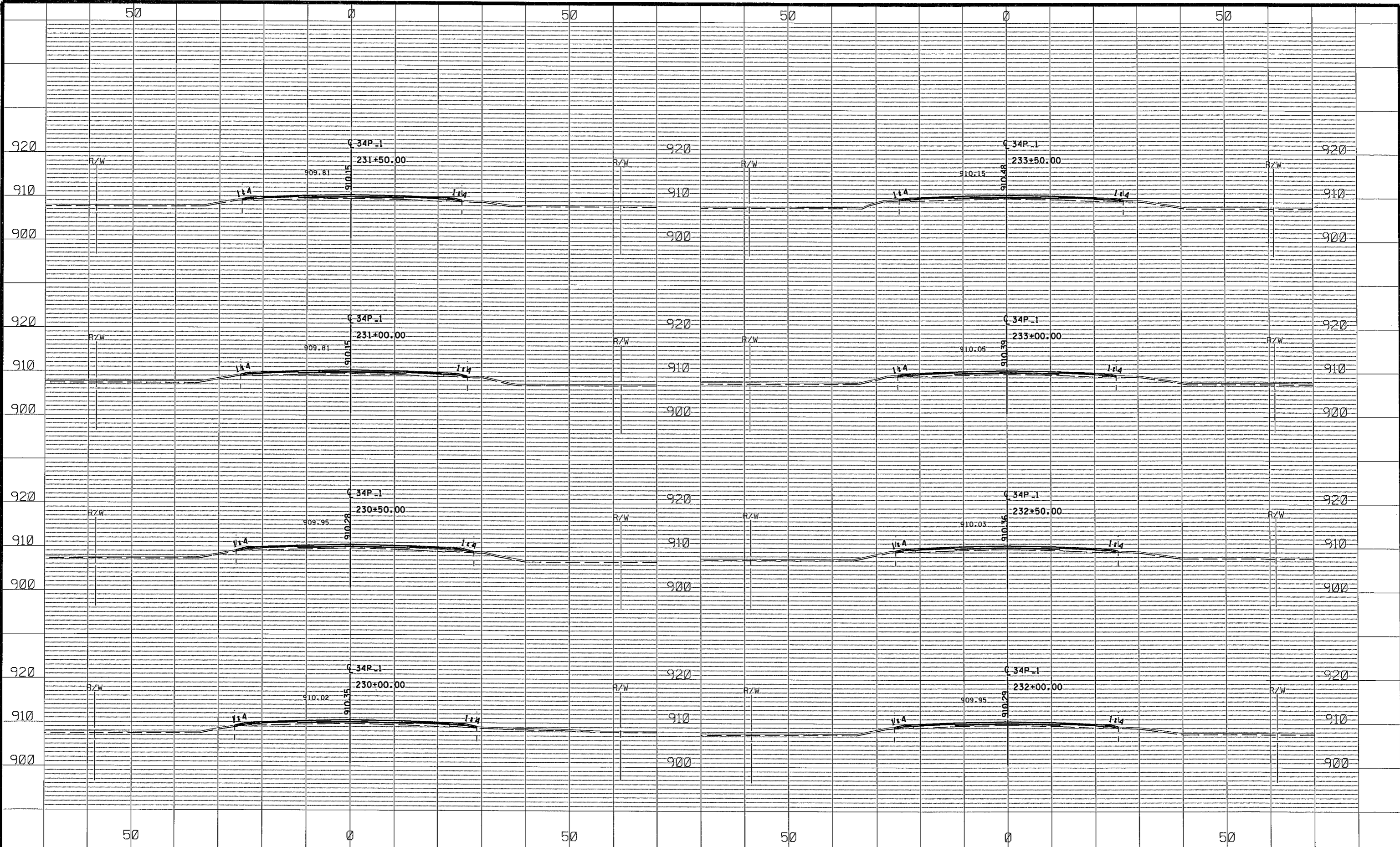
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DESIGN BY MP DATE 03/26/19
CHECKED BY JEO DATE 04/05/19



ANOKA COUNTY
HIGHWAY DEPT.

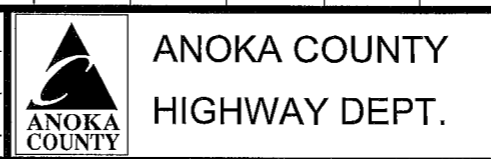
ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
STA 226+00.00 TO 229+50.00
Sheet 100 of 103 Sheets



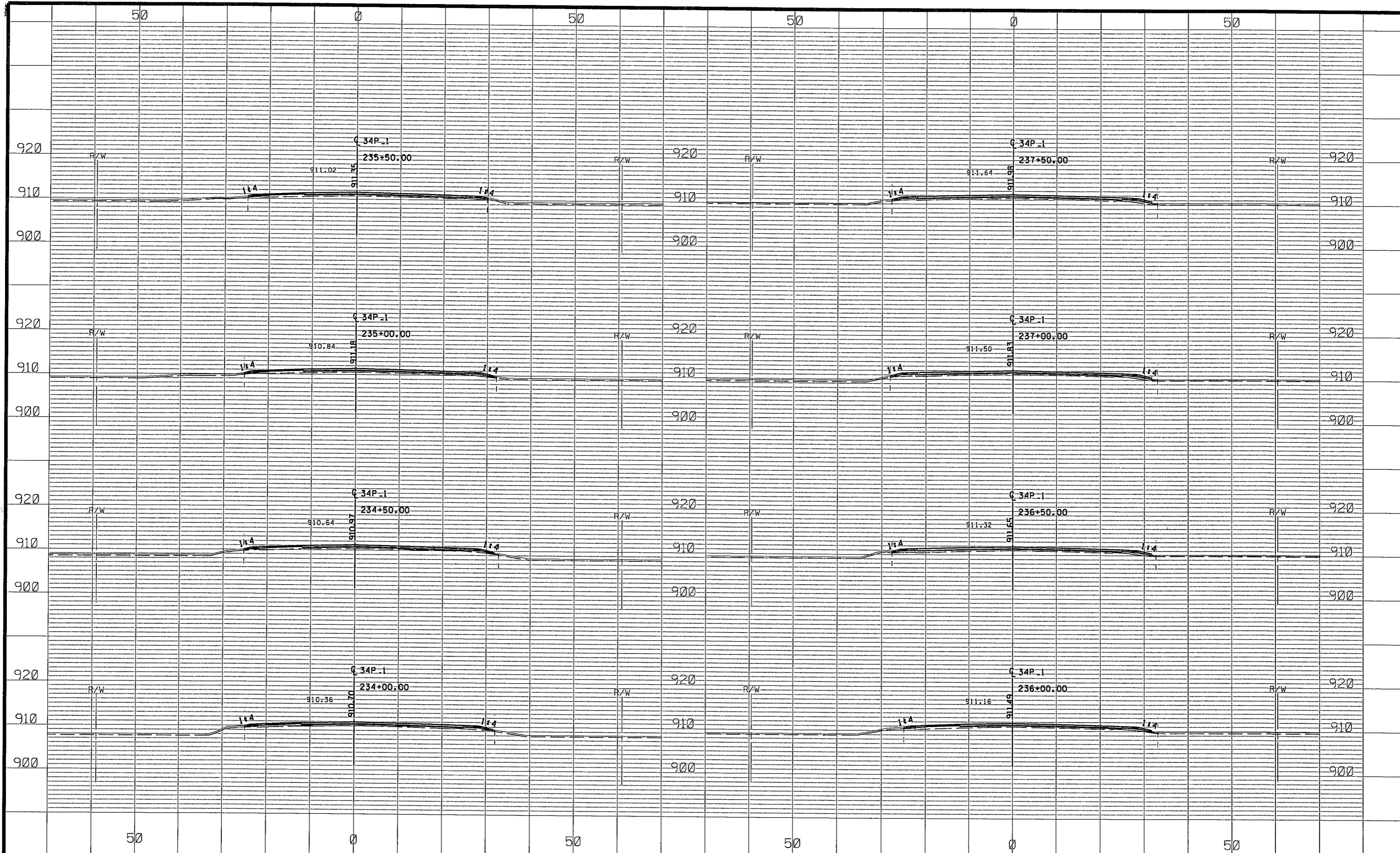
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DRAWN BY MP DATE 03/26/19
 DESIGN BY MP DATE 03/28/19
 CHECKED BY JEO DATE 04/05/19



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CROSS SECTIONS
 STA 230+00.00 TO 233+50.00
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NO	DATE	BY	CKD	APPR	REVISION
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04/09/2019 10:29:09 AM					

NO	DATE	BY	CKD	APPR	REVISION

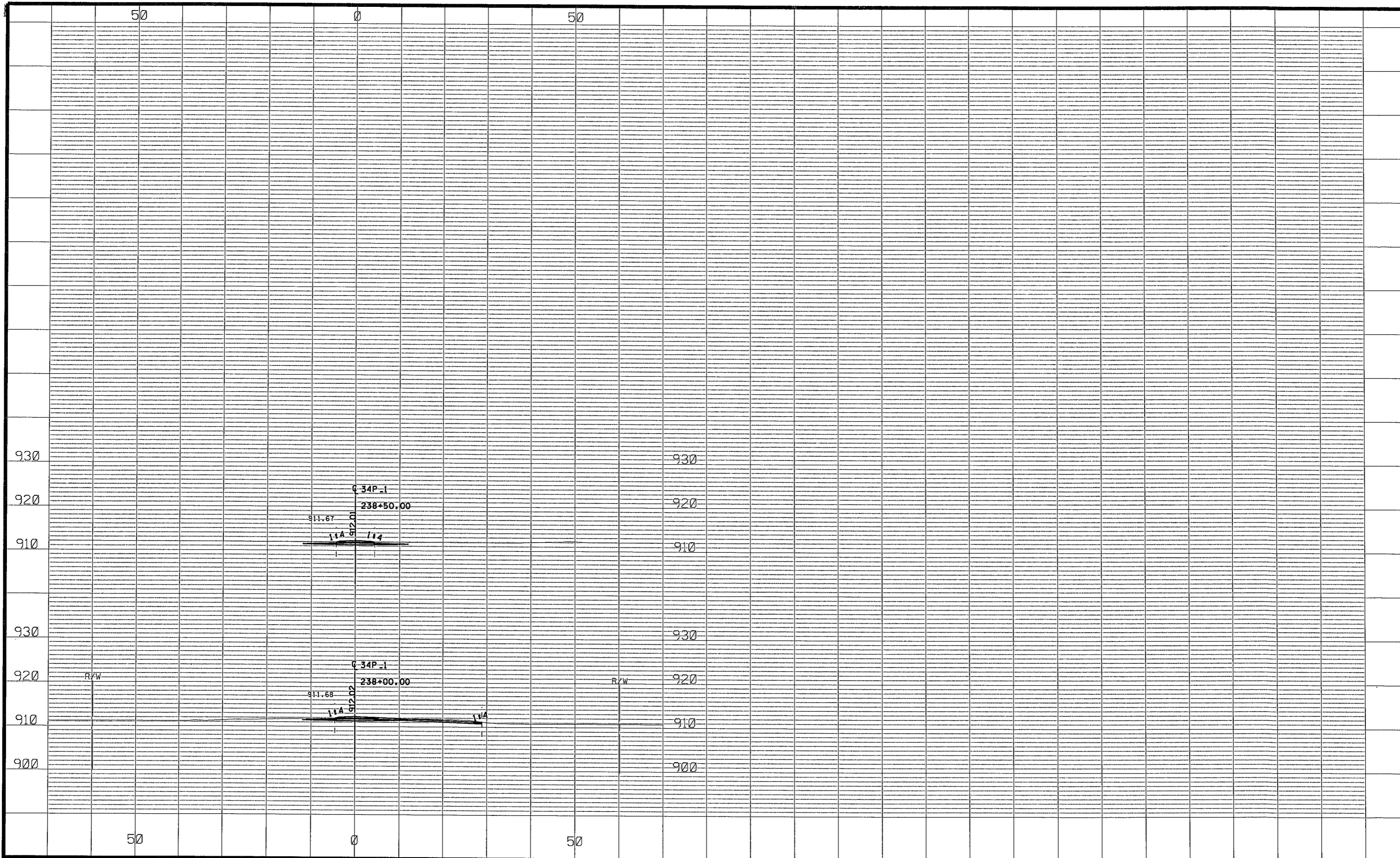
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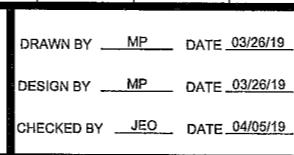
ANOKA COUNTY SAP 002-634-004

CROSS SECTIONS
 STA 234+00.00 TO 237+50.00
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NO	DATE	BY	CHKD	APPR	REVISION
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04/09/2019 10:29:12 AM					

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 DESIGN BY: MP DATE: 03/26/19
 CHECKED BY: JEO DATE: 04/05/19



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HIGHWAY DEPT.

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CROSS SECTIONS
 STA 238+00.00 TO 238+50.00
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