

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 _____

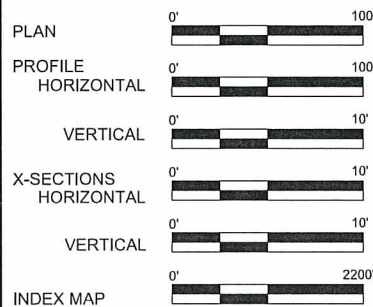
- BUILDING (One Story Frame) _____
- F-FRAME C-CONCRETE _____
- S-STONE T-TILE _____
- B-BRICK ST-STUCCO _____

- 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 _____
- WATERMAIN _____
- TELEPHONE CABLE IN CONDUIT _____
- ELECTRIC CABLE IN CONDUIT _____
- TELEPHONE MANHOLE _____
- ELECTRIC MANHOLE _____
- BURIED TELEPHONE CABLE _____
- BURIED ELECTRIC CABLE _____
- SEWER (Sanitary or Storm) _____
- SEWER MANHOLE _____

SCALES



MINNESOTA DEPARTMENT OF TRANSPORTATION ANOKA COUNTY

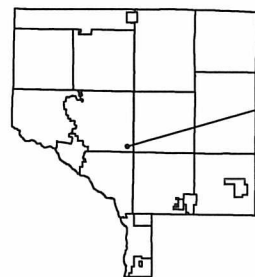
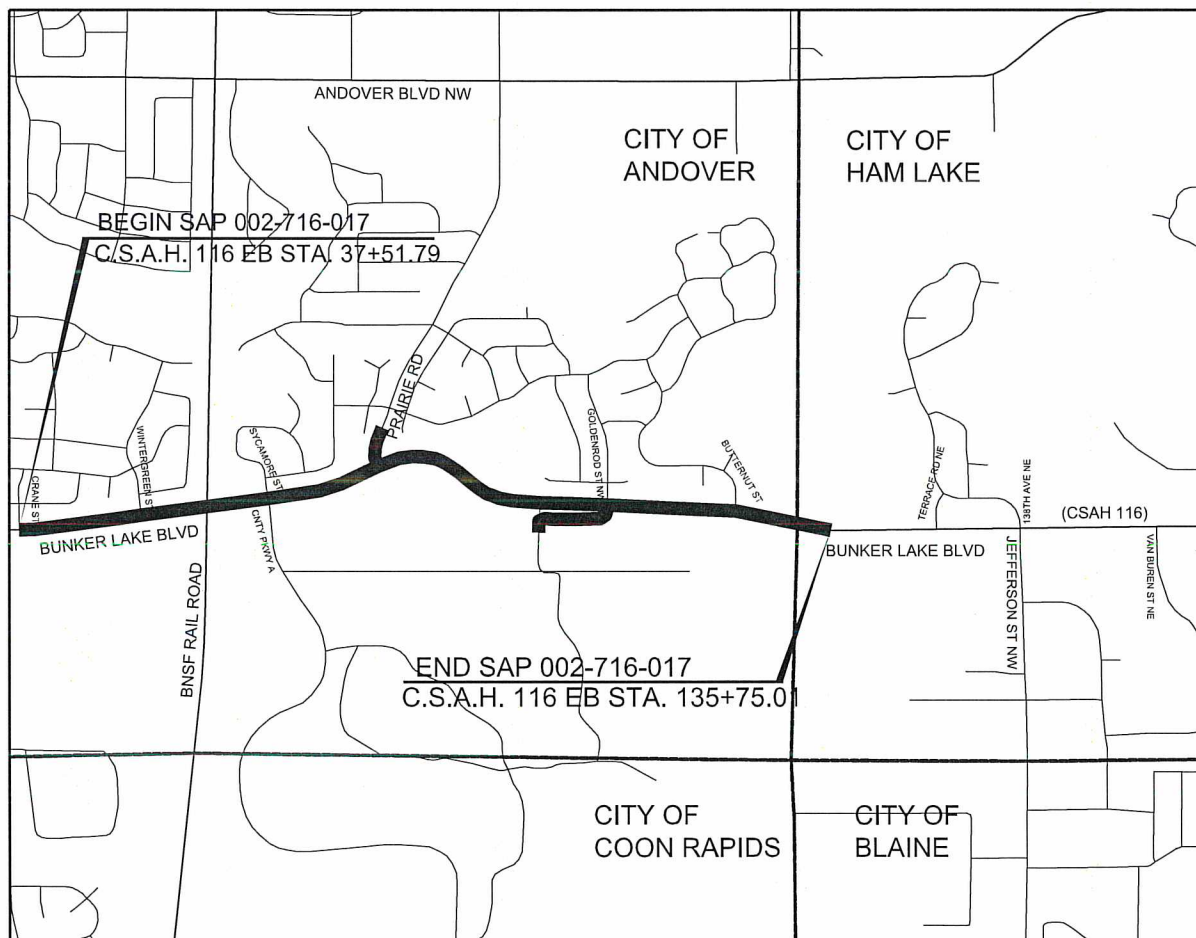
CONSTRUCTION PLAN FOR _____ TREE CLEARING _____

LOCATED ON C.S.A.H. 116 BETWEEN CRANE ST. AND 1,200' EAST OF BUTTERNUT ST.

COUNTY PROJ. NO. SAP 002-716-017

C.S.A.H. 116

GROSS LENGTH	9,823.22	FEET	1.860	MILES
BRIDGES-LENGTH	0.00	FEET	0.00	MILES
EXCEPTIONS-LENGTH	0.00	FEET	0.00	MILES
NET LENGTH	9,823.22	FEET	1.860	MILES



PROJECT LOCATION

CITY OF ANDOVER
ANOKA COUNTY
MN/DOT TRANSPORTATION DISTRICT - METRO
SECTIONS 35 & 36
TOWNSHIP 32 NORTH
RANGE 24 WEST

MINN. PROJ. NO. _____

GOVERNING SPECIFICATIONS

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

ALL TRAFFIC CONTROL DEVICES 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.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2 - 3	GENERAL LAYOUT
4	STATEMENT OF ESTIMATED QUANTITIES
5 - 6	TABULATION CHARTS
7 - 13	INPLACE TOPOGRAPHY AND REMOVAL PLAN

THIS PLAN CONTAINS 13 SHEETS

Approved 1/6/2016 David O. Benke
CITY OF ANDOVER ENGINEER

Approved 1/6/2016 Thomas P. Colby
CITY OF HAM LAKE ENGINEER

Approved 1/8/2016 [Signature]
ANOKA COUNTY ENGINEER

REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY 1/12/2016
DISTRICT STATE AID ENGINEER

APPROVED FOR STATE AID FUNDING 1/12/2016
STATE AID ENGINEER

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-716-15\Plan\002-716-0171 Title.dgn 01/06/2016 9:24:25 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: ZACHARY BORGERDING
SIGNATURE: [Signature]
DATE: 1/6/2016 LICENSE NO. 52598

DRAWN BY ZB DATE 12-18-15
DESIGN BY ZB DATE 12-18-15
CHECKED BY GP DATE 12-18-15

ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

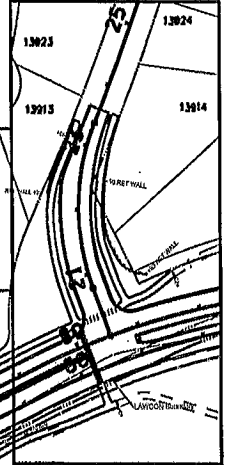
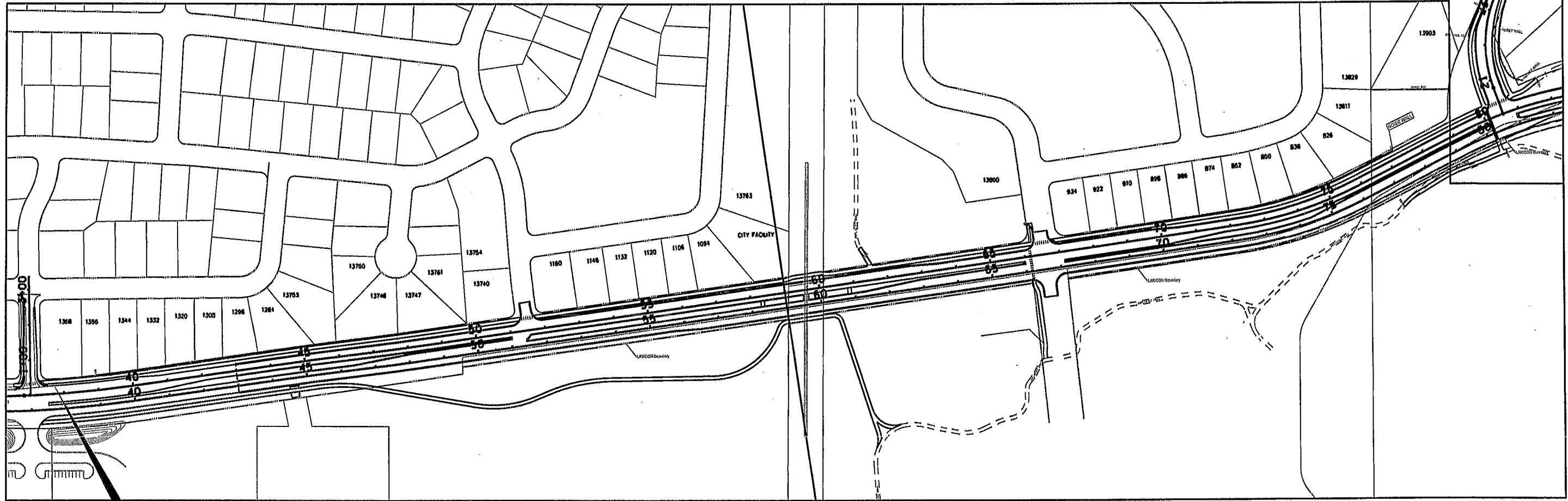
TITLE SHEET

Sheet 1 of 13 Sheets

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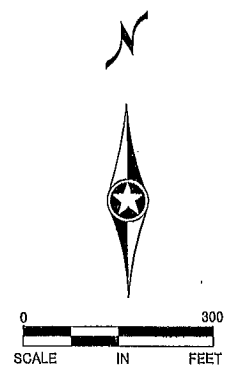
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BEGIN S.A.P. 002-716-017
 C.S.A.H. 116 STA. 37+51.79
 BEGIN TREE REMOVAL

LEGEND

XXX INPLACE TOPOGRAPHY AND REMOVAL PLAN SHEET NUMBER



1 OF 2

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-716-15\Plan\002-716-017_2_GEN1.dwg 01/04/2016 8:22:16 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: ZACHARY BORGERDING
 SIGNATURE: *Zac Borgerding*
 DATE: 1/4/16 LICENSE NO. 52698

DRAWN BY: ZB DATE: 12-16-16
 DESIGN BY: ZB DATE: 12-16-16
 CHECKED BY: GP DATE: 12-16-16

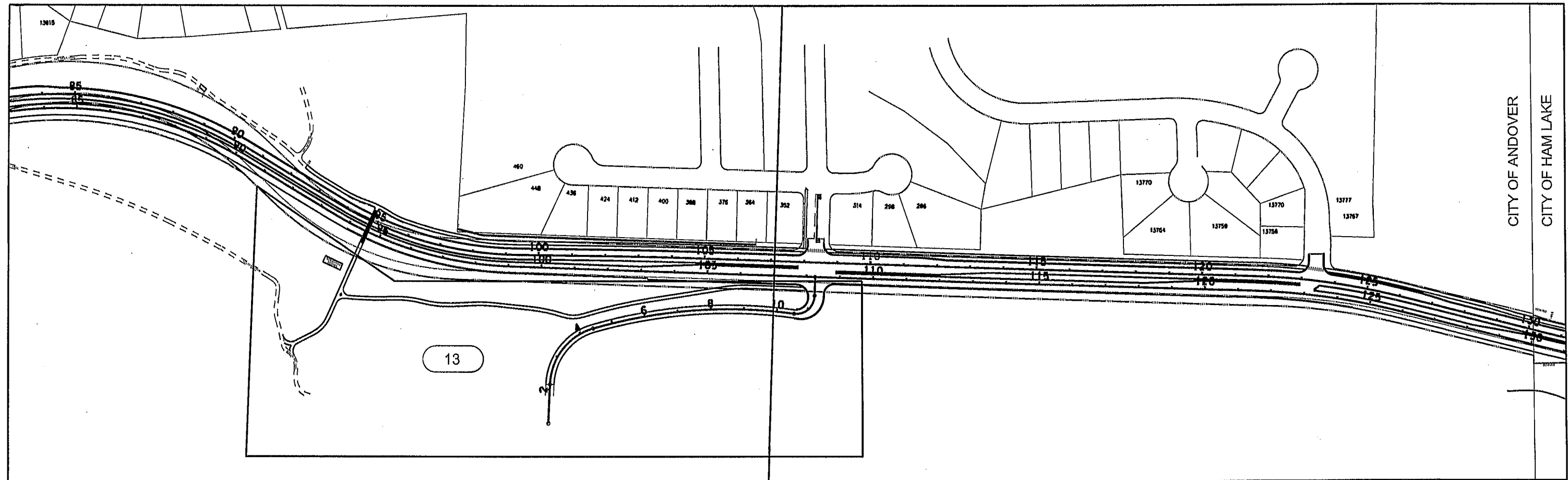
ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

GENERAL LAYOUT
 Sheet 2 of 13 Sheets

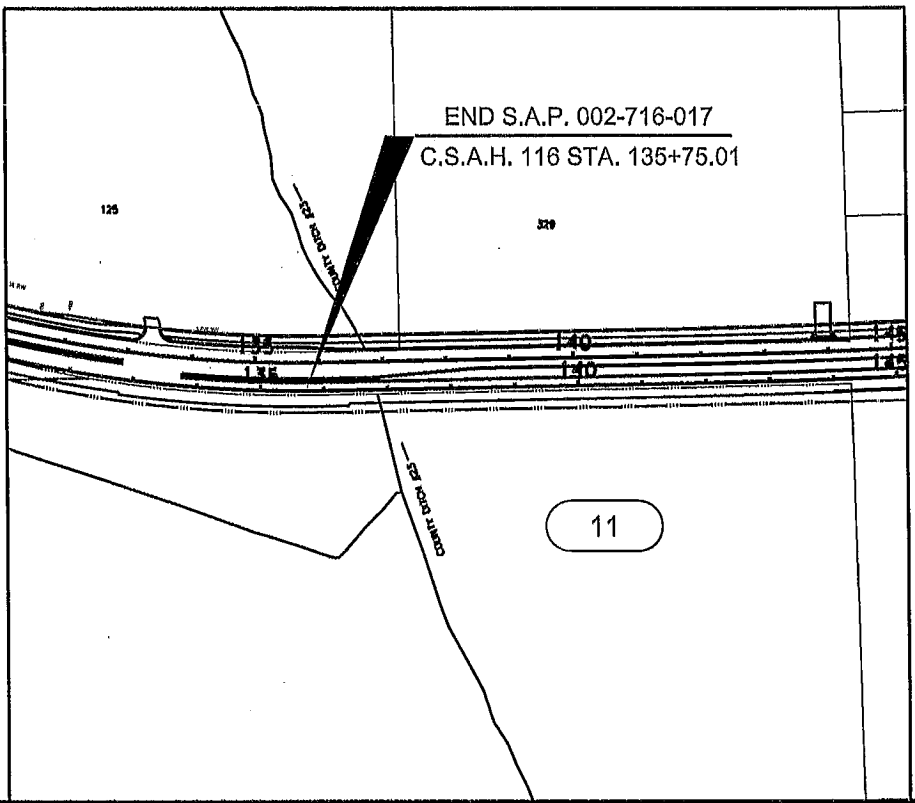
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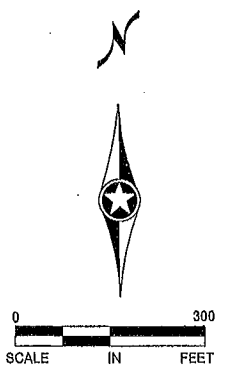
13

CITY OF ANDOVER
CITY OF HAM LAKE



END S.A.P. 002-716-017
C.S.A.H. 116 STA. 135+75.01

11



2 OF 2

LEGEND

XXX INPLACE TOPOGRAPHY AND REMOVAL PLAN SHEET NUMBER

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: ZACHARY BERGERDING
 SIGNATURE: *Zachary Bergerding*
 DATE: 1/4/16 LICENSE NO. 62988

DRAWN BY: ZB DATE: 12-18-15
 DESIGN BY: ZB DATE: 12-18-15
 CHECKED BY: GP DATE: 12-18-15

ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

GENERAL LAYOUT

Sheet 3 of 13 Sheets

NO	DATE	BY	CHKD	APPR	REVISION

NAME: P:\02-716-15\Plan\002-716-017\3_GEN2.dgn 01/04/2016 8:22:17 AM

STATEMENT OF ESTIMATED QUANTITIES						
TAB	NOTE	ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITY	STATE AID PARTICIPATING
						COUNTY OF ANOKA SAP 002-716-017
		2021.501	MOBILIZATION	LUMP SUM	1	1
A	(1),(2)	2101.501	CLEARING	ACRE	7.7	7.7
A	(1),(2)	2101.502	CLEARING	TREE	317	317
A	(1),(2)	2101.506	GRUBBING	ACRE	7.7	7.7
A	(1),(2)	2101.507	GRUBBING	TREE	246	246
	(3)	2123.509	DOZER	HOUR	40	40
		2563.601	TRAFFIC CONTROL	LUMP SUM	1	1
		2575.571	RAPID STABILIZATION METHOD 3	M GALLON	76	76

NOTES:

- (1) CLEARING AND GRUBBING SHALL BE STAKED IN FIELD BY THE ENGINEER.
- (2) ALL REMOVAL ITEMS SHALL BE DISPOSED OFF-SITE. NO DISPOSAL SHALL BE ALLOWED WITHIN THE ROADWAY RIGHT-OF-WAY OR EASEMENTS.
- (3) ITEM FOR SHAPING DISTURBED LAND DUE TO GRUBBING OPERATIONS.
- * PER SPECIAL PROVISION S-26, DETERMINATION AND EXTENSION OF CONTRACT TIME, TREE CLEARING AND GRUBBING MUST BE COMPLETED BY MARCH 31 2016.

BASIS OF QUANTITIES		
SPEC NO	DESCRIPTION	RATE
2575	RAPID STABILIZATION METHOD 3	500SF / TREE OR MEASURED AREA
2575	RAPID STABILIZATION METHOD 3	6000 GALLONS / ACRE

PLATE NO.	STANDARD PLATES
8001I	STANDARD BARRICADES

INDEX OF TABULATIONS		
TAB	SHEET	DESCRIPTION
A	5,6	CLEARING AND GRUBBING

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE GOPHER STATE ONE CALL EXCAVATION NOTICE SYSTEM REQUIRED BY MINNESOTA STATUTE, CHAPTER 216D FOR ALL UNDERGROUND UTILITY LOCATIONS.

NO	DATE	BY	CHKD	APPR	REVISION

NAME: P:\02-716-15\Plan\002-716-0174_SEQ.dgn 01/08/2016 11:25:41 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: ZACHARY BORGERDING
 SIGNATURE: *Zachary Borgerding*
 DATE: 1/6/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-18-15
 DESIGN BY: ZB DATE: 12-18-15
 CHECKED BY: GP DATE: 12-18-15



ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

STATEMENT OF ESTIMATED QUANTITIES

CLEARING & GRUBBING SPEC (2101)								A
ALIGNMENT	STATION TO STATION	OFFSET				NOTES		
		LEFT LIN FT	RIGHT LIN FT	CLEARING (TREE)	GRUBBING (TREE)		CLEARING (ACRE)	GRUBBING (ACRE)
CSAH 116 EB	43+47.19		65	1	1			
CSAH 116 EB	45+06.36		46	1	1			
CSAH 116 EB	45+93.46	45+99.67	23 - 27	2	2			
CSAH 116 EB	46+49.28		50	1	1			
CSAH 116 EB	46+76.93		40	1	1			
CSAH 116 EB	46+90.68		20	1	1			
CSAH 116 EB	47+08.72		37	1	1			
CSAH 116 EB	47+15.52		52	1	1			
CSAH 116 EB	47+20.22		42	1	1			
CSAH 116 EB	47+39.24	47+40.00	21-27	2	2			
CSAH 116 EB	47+43.14		38	1	1			
CSAH 116 EB	47+52.06		64	1	1			
CSAH 116 EB	47+64.95	47+84.28	32-42	4	4			
CSAH 116 EB	47+66.06		73	1	1			
CSAH 116 EB	47+74.29		63	1	1			
CSAH 116 EB	48+10.77		80	1	1			
CSAH 116 EB	48+12.52		66	1	1			
CSAH 116 EB	48+19.51		48	1	1			
CSAH 116 EB	48+26.66		34	1	1			
CSAH 116 EB	48+32.11		47	1	1			
CSAH 116 EB	48+32.66		63	1	1			
CSAH 116 EB	48+51.01		45	1	1			
CSAH 116 EB	48+52.60		95	1	1			
CSAH 116 EB	48+55.66		75	1	1			
CSAH 116 EB	48+62.94		115	3	1		Park Trail	
CSAH 116 EB	48+64.24		46	1	1			
CSAH 116 EB	48+65.51	48+67.48	72 - 73	1	2			
CSAH 116 EB	48+68.85		58	1	1			
CSAH 116 EB	48+69.42		92	1	1			
CSAH 116 EB	48+92.00	48+98.22	71	2	2			
CSAH 116 EB	49+01.56	49+22.59	92 - 110	7	7			
CSAH 116 EB	49+02.25	49+04.03	120 - 127	2	2		Park Trail	
CSAH 116 EB	49+15.73		50	1	1			
CSAH 116 EB	49+33.06		99	1	1			
CSAH 116 EB	49+38.31		31	2	1			
CSAH 116 EB	49+38.41		139	1	1			
CSAH 116 EB	49+93.18		80	1	1			
CSAH 116 EB	50+40.87	50+66.21	91 - 131	7	7			
CSAH 116 EB	50+87.12	51+42.69	83 - 132	24	14			
CSAH 116 EB	54+15.89		40	1	1			
CSAH 116 EB	54+57.01		35	4	1			
CSAH 116 EB	55+35.63	55+40.87	33 - 35	3	2			
CSAH 116 EB	55+55.22	58+71.85	16 - 177			0.5	0.5	
CSAH 116 EB	55+65.58		19	1	1			
CSAH 116 EB	58+69.96		42	4	1			
CSAH 116 EB	58+82.03		61	1	1			
CSAH 116 EB	59+96.43	60+30.61	50 - 70			0.05	0.05	
CSAH 116 EB	62+10.98	63+31.53	42 - 79			0.15	0.15	
CSAH 116 EB	64+20.58		63	1	1			
CSAH 116 EB	70+61.77	70+66.06	21 - 26	3	3			
CSAH 116 EB	70+91.74	70+93.74	29 - 32	2	2			
CSAH 116 EB	71+12.22		45	1	1			
CSAH 116 EB	72+79.89		34	5	1			
CSAH 116 EB	72+90.01		30	5	1			
CSAH 116 EB	72+99.90		30	5	1			
CSAH 116 EB	73+28.83	73+45.04	31 - 33	3	3			
CSAH 116 EB	74+70.26		38	1	1			
CSAH 116 EB	74+88.03		38	1	1			
CSAH 116 EB	75+09.27		36	2	1			
CSAH 116 EB	75+21.25		30	1	1			
CSAH 116 EB	75+29.11		32	1	1			
CSAH 116 EB	75+65.33	75+68.97	37 - 41	4	3			
CSAH 116 EB	75+82.11		38	1	1			

CLEARING & GRUBBING SPEC (2101)								A
ALIGNMENT	STATION TO STATION	OFFSET				NOTES		
		LEFT LIN FT	RIGHT LIN FT	CLEARING (TREE)	GRUBBING (TREE)		CLEARING (ACRE)	GRUBBING (ACRE)
CSAH 116 EB	76+19.36		42	1	1			
CSAH 116 EB	76+48.19		30	1	1			
CSAH 116 EB	76+97.31	78+13.84	58 - 81			0.1	0.1	
CSAH 116 EB	78+10.85	78+32.83	45 - 63	8	5			
CSAH 116 EB	78+56.68	78+73.99	52 - 60	5	3			
CSAH 116 EB	79+17.89	79+39.61	40 - 65	8	8			
CSAH 116 EB	80+08.79		43	1	1			
CSAH 116 EB	80+22.31	80+29.40	33 - 36	3	3			
CSAH 116 EB	80+69.17		25	2	1			
CSAH 116 EB	80+92.92		34	1	1			
CSAH 116 EB	81+04.97		26	1	1			
CSAH 116 EB	81+32.66	82+23.21	13 - 41			0.1	0.1	
CSAH 116 EB	82+49.76	85+62.62	10	43		0.45	0.45	
CSAH 116 EB	85+68.08	87+14.10	27	26		0.2	0.2	
CSAH 116 EB	90+17.90		20	1	1			
CSAH 116 EB	90+43.95	95+57.38	29 - 416			0.9	0.9	
CSAH 116 EB	90+58.28		40	5	1			
CSAH 116 EB	90+81.63		46	5	1			
CSAH 116 EB	90+88.11	90+89.24	34 - 38	2	2			
CSAH 116 EB	90+98.23		43	1	1			
CSAH 116 EB	91+11.42		43	1	1			
CSAH 116 EB	91+54.30		53	1	1			
CSAH 116 EB	96+00.01		68	1	1			
CSAH 116 EB	97+11.39	98+18.63	107 - 130			0.05	0.05	
CSAH 116 EB	97+14.27	99+52.13	36 - 59			0.15	0.15	
CSAH 116 EB	98+91.10	99+42.47	105 - 114			0.05	0.05	
CSAH 116 EB	100+90.87	101+79.23	97 - 133			0.1	0.1	
CSAH 116 EB	100+91.23	101+92.98	38 - 43			0.05	0.05	
CSAH 116 EB	102+13.56		175	1	1		Park Entrance	
CSAH 116 EB	102+81.11		107	1	1		Park Entrance	
CSAH 116 EB	103+29.62		52	1	1			
CSAH 116 EB	103+40.07		151	1	1		Park Entrance	
CSAH 116 EB	103+45.22	105+60.85	127 - 161			0.2	0.2	
CSAH 116 EB	103+67.50		70	1	1		Park Entrance	
CSAH 116 EB	104+86.74		52	1	1			
CSAH 116 EB	105+80.05	105+80.83	138 - 140	4	2		Park Entrance	
CSAH 116 EB	105+98.48		47	1	1			
CSAH 116 EB	106+20.91	108+01.96	118 - 161			0.2	0.2	
CSAH 116 EB	106+63.52		52	1	1			
CSAH 116 EB	107+25.16		81	1	1		Park Trail	
CSAH 116 EB	107+56.57		93	1	1		Park Entrance	
CSAH 116 EB	108+42.95	108+57.76	130 - 145			0.05	0.05	
CSAH 116 EB	108+57.33		73	2	1			
CSAH 116 EB	110+85.06		28	1	1			
CSAH 116 EB	111+31.96	116+84.05	26 - 50			0.45	0.45	
CSAH 116 EB	116+98.85	117+52.76	24 - 47			0.05	0.05	
CSAH 116 EB	121+51.31		42	2	1			
CSAH 116 EB	122+35.29		31	1	1			
CSAH 116 EB	123+08.84		33	1	1			
CSAH 116 EB	123+31.19		31	1	1			
CSAH 116 EB	123+49.49		37	1	1			
CSAH 116 EB	123+57.83		34	1	1			
CSAH 116 EB	126+34.58	129+87.82	22 - 36			0.25	0.25	
CSAH 116 EB	130+23.41	135+75.01	4 - 163			1.25	1.25	
CSAH 116 EB	130+69.87		25	2	1			
PROJECT SUBTOTAL				208	166	5.3	5.3	


CLEARING & GRUBBING GENERAL NOTES:
- TREES WITHIN THE CONSTRUCTION LIMITS WILL BE DESIGNATED FOR REMOVAL BY THE ENGINEER.
- REMOVAL OF MISCELLANEOUS SHRUBS AND LANDSCAPING SHALL BE CONSIDERED INCIDENTAL
- AREA QUANTITIES ARE 110% OF THE MEASURED AREA

NO	DATE	BY	CHKD	APPR	REVISION
NAME: P:\02-716-15\Plan\002-716-0174_SEQ.dgn					
01/04/2016 8:22:23 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: ZACHARY BORGERDING
SIGNATURE: *Zachary Borgerding*
DATE: 1/11/16 LICENSE NO. 52999

DRAWN BY: ZB DATE: 12-16-15
DESIGN BY: ZB DATE: 12-16-15
CHECKED BY: GP DATE: 12-16-15

ANOKA COUNTY
HIGHWAY DEPT.



SAP 002-716-017

TABULATION CHARTS

Sheet 5 of 13 Sheets


CLEARING & GRUBBING SPEC (2101)								A	
ALIGNMENT	STATION TO STATION	OFFSET		CLEARING LIN FT (TREE)	GRUBBING LIN FT (TREE)	CLEARING (ACRE)	GRUBBING (ACRE)	NOTES	
		LEFT LIN FT	RIGHT LIN FT						
CSAH 116 WB	37+55.34			48		1	1		
CSAH 116 WB	37+90.60			44		1	1		
CSAH 116 WB	42+75.32	43+73.79	43 - 47	9	9				
CSAH 116 WB	44+54.88	44+58.58	44 - 46	4	3				
CSAH 116 WB	44+73.09			50		1	1		
CSAH 116 WB	44+93.49			45		2	1		
CSAH 116 WB	45+97.09	46+14.81		29		5	3		
CSAH 116 WB	46+29.87	46+31.80		39		2	2		
CSAH 116 WB	46+91.90			37		1	1		
CSAH 116 WB	47+78.79			43		1	1		
CSAH 116 WB	48+09.40			40		1	1		
CSAH 116 WB	48+11.76			53		1	1		
CSAH 116 WB	48+19.47			57		2	1		
CSAH 116 WB	48+22.05			54		1	1		
CSAH 116 WB	48+47.52			51		1	1		
CSAH 116 WB	48+59.96			56		1	1		
CSAH 116 WB	48+91.22	48+92.40	57 - 58	2	2				
CSAH 116 WB	49+59.69			49		1	1		
CSAH 116 WB	50+06.59			52		1	1		
CSAH 116 WB	50+19.51			51		1	1		
CSAH 116 WB	50+92.16	51+08.98	43 - 46	5	3				
CSAH 116 WB	53+06.46	53+67.04	27 - 29	11	13				
CSAH 116 WB	70+31.84			54		1	1		
CSAH 116 WB	75+09.51	75+19.28	56 - 57	5	5				
CSAH 116 WB	75+37.50			51		1	1		
CSAH 116 WB	75+55.60	75+59.96	60 - 64	3	2				
CSAH 116 WB	75+72.92			63		1	1		
CSAH 116 WB	75+76.30			51		1	1		
CSAH 116 WB	75+87.21			52		1	1		
CSAH 116 WB	76+02.62			51		1	1		
CSAH 116 WB	76+31.36			59		1	1		
CSAH 116 WB	76+87.42	77+11.16	71 - 124			0.05	0.05		
CSAH 116 WB	77+63.82	77+76.08	88 - 92	4	4				
CSAH 116 WB	77+82.55	78+67.97	80 - 213			0.25	0.25		
CSAH 116 WB	79+11.77		143	1	1				
CSAH 116 WB	79+66.05		87	1	1				
CSAH 116 WB	80+94.65	81+46.58	76 - 289			0.2	0.2	PRAIRIE	
CSAH 116 WB	88+29.22	88+67.02	69 - 95			0.05	0.05		
CSAH 116 WB	88+51.36	88+77.49	104 - 140			0.05	0.05		
CSAH 116 WB	90+64.88	93+84.21	43	4		0.3	0.3		
CSAH 116 WB	92+66.04	97+23.34	27 - 65			0.45	0.45		
CSAH 116 WB	94+13.74			2	1				
CSAH 116 WB	94+46.93	104+33.62	44	14		0.8	0.8		
CSAH 116 WB	104+40.52		16		2				
CSAH 116 WB	104+79.18		30		1				
CSAH 116 WB	105+15.03		29		1				
CSAH 116 WB	112+49.48	114+70.41	15 - 42			0.2	0.2		
CSAH 116 WB	116+79.00		21		1				
CSAH 116 WB	116+23.31		19		1				
CSAH 116 WB	116+67.28		19		1				
CSAH 116 WB	117+48.47	117+66.36	26 - 34		1	6			
CSAH 116 WB	117+76.84		22		5	1			
CSAH 116 WB	117+84.09		34		1	1			
CSAH 116 WB	118+73.91		29		5	1			
CSAH 116 WB	119+22.86		18		5	1			
CSAH 116 WB	120+48.56		41		5	1			
CSAH 116 WB	120+92.26	121+49.89	32 - 55			0.05	0.05		
CSAH 116 WB	124+12.61		30		2	1			
CSAH 116 WB	125+32.75		42		1	1			
PROJECT SUBTOTAL						109	90	2.4	2.4
PROJECT TOTAL						317	246	7.7	7.7

CLEARING & GRUBBING GENERAL NOTES:
- TREES WITHIN THE CONSTRUCTION LIMITS WILL BE DESIGNATED FOR REMOVAL BY THE ENGINEER.
- REMOVAL OF MISCELLANEOUS SHRUBS AND LANDSCAPING SHALL BE CONSIDERED INCIDENTAL
- AREA QUANTITIES ARE 110% OF THE MEASURED AREA

NO	DATE	BY	CKD	APPR	REVISION
NAME: P:\02-716-15\Plan\002-716-017\A_SEQ.dgn 01/04/2016 8:22:31 AM					

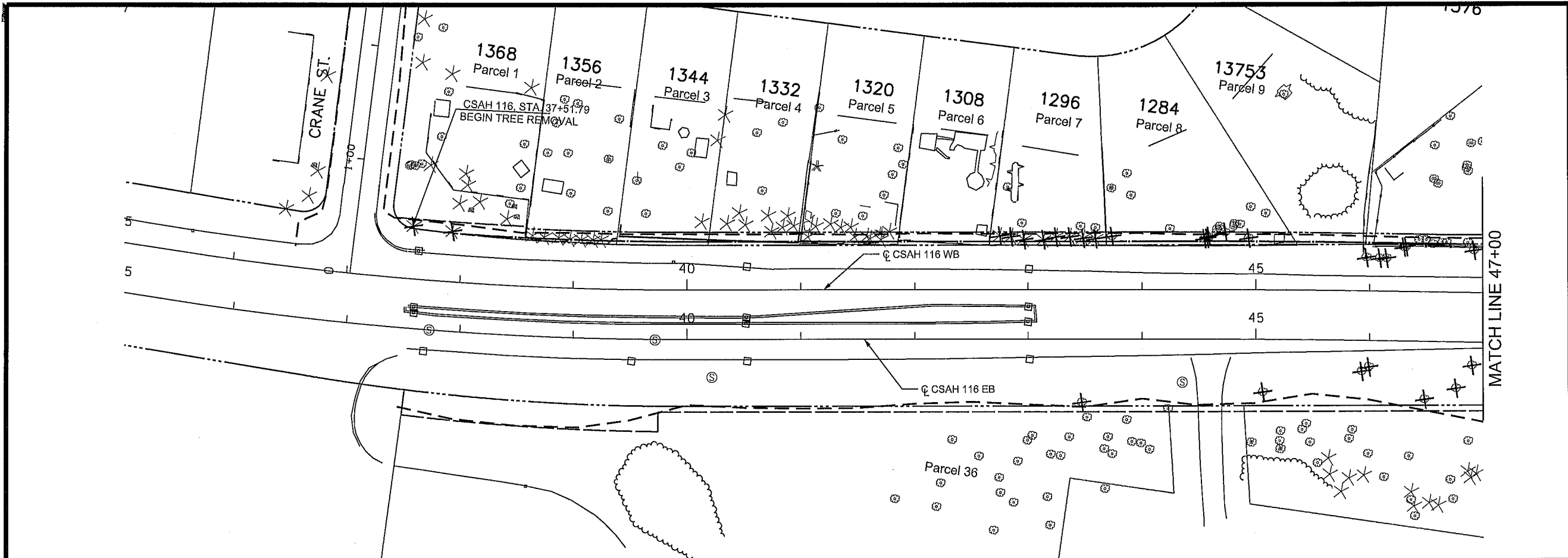
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: ZACHARY BORGERDING
SIGNATURE: *Zac Borgerding*
DATE: 1/4/16 LICENSE NO. 62598

DRAWN BY: ZB DATE: 12-16-15
DESIGN BY: ZB DATE: 12-10-15
CHECKED BY: GP DATE: 12-16-15



**ANOKA COUNTY
HIGHWAY DEPT.**

SAP 002-716-017

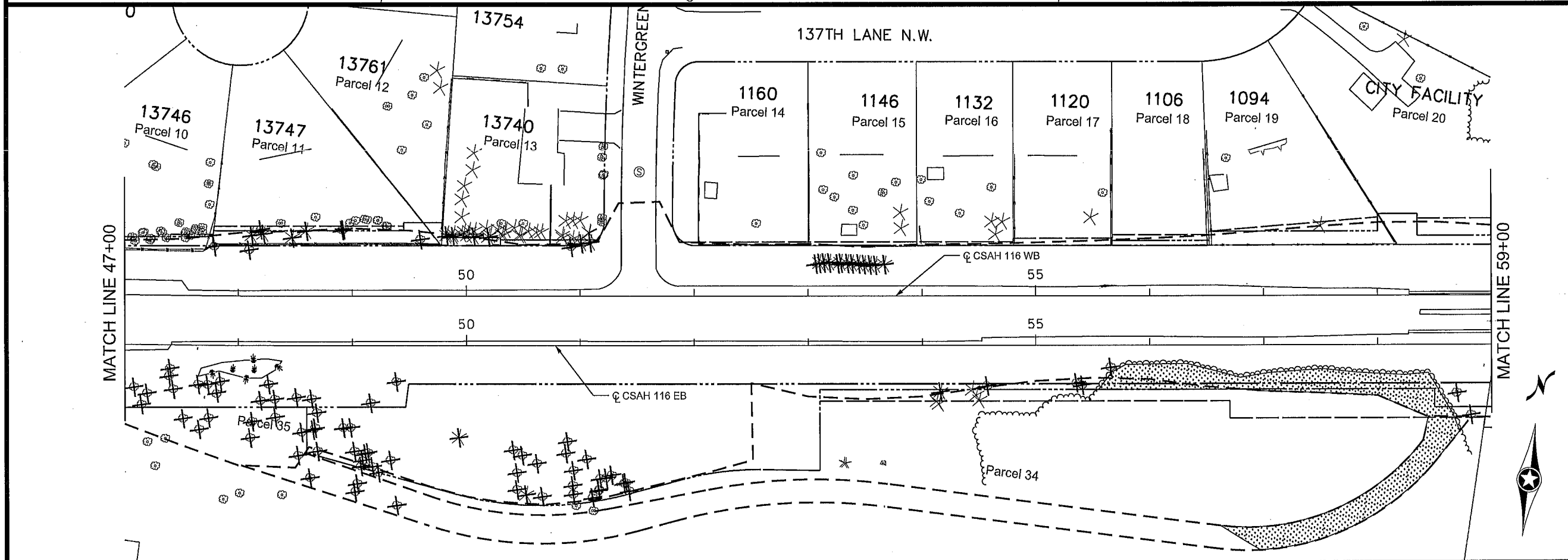


LEGEND

- CLEAR & GRUB (ACRE)
- TREE REMOVAL BY EACH
- CONSTRUCTION LIMIT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

N

SCALE IN FEET



REMOVAL NOTES

THE CONTRACTOR SHALL PERFORM ALL CLEARING AND GRUBBING AS DIRECTED AND MARKED IN THE FIELD BY THE ENGINEER. THE CONTRACTOR SHALL OTHERWISE PROTECT ALL EXISTING TREES NOT SPECIFICALLY MARKED FOR REMOVAL.

APPROXIMATELY 0.55 ACRES OF TREES ARE WITHIN A WETLAND BOUNDARY. THE TREES WITHIN THESE AREAS WILL NEED PRIOR APPROVAL BY ENGINEER BEFORE REMOVAL.

DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.

N

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-716-15\Plan\002-716-017\5_REM1.dgn 01/07/2016 7:11:32 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: ZACHARY BORGERDING

SIGNATURE: *Zachary Borgerding*

DATE: 1/7/16 LICENSE NO. 52698

DRAWN BY: ZB DATE: 12-16-15

DESIGN BY: ZB DATE: 12-16-15

CHECKED BY: GP DATE: 12-18-15

ANOKA COUNTY
HIGHWAY DEPT.

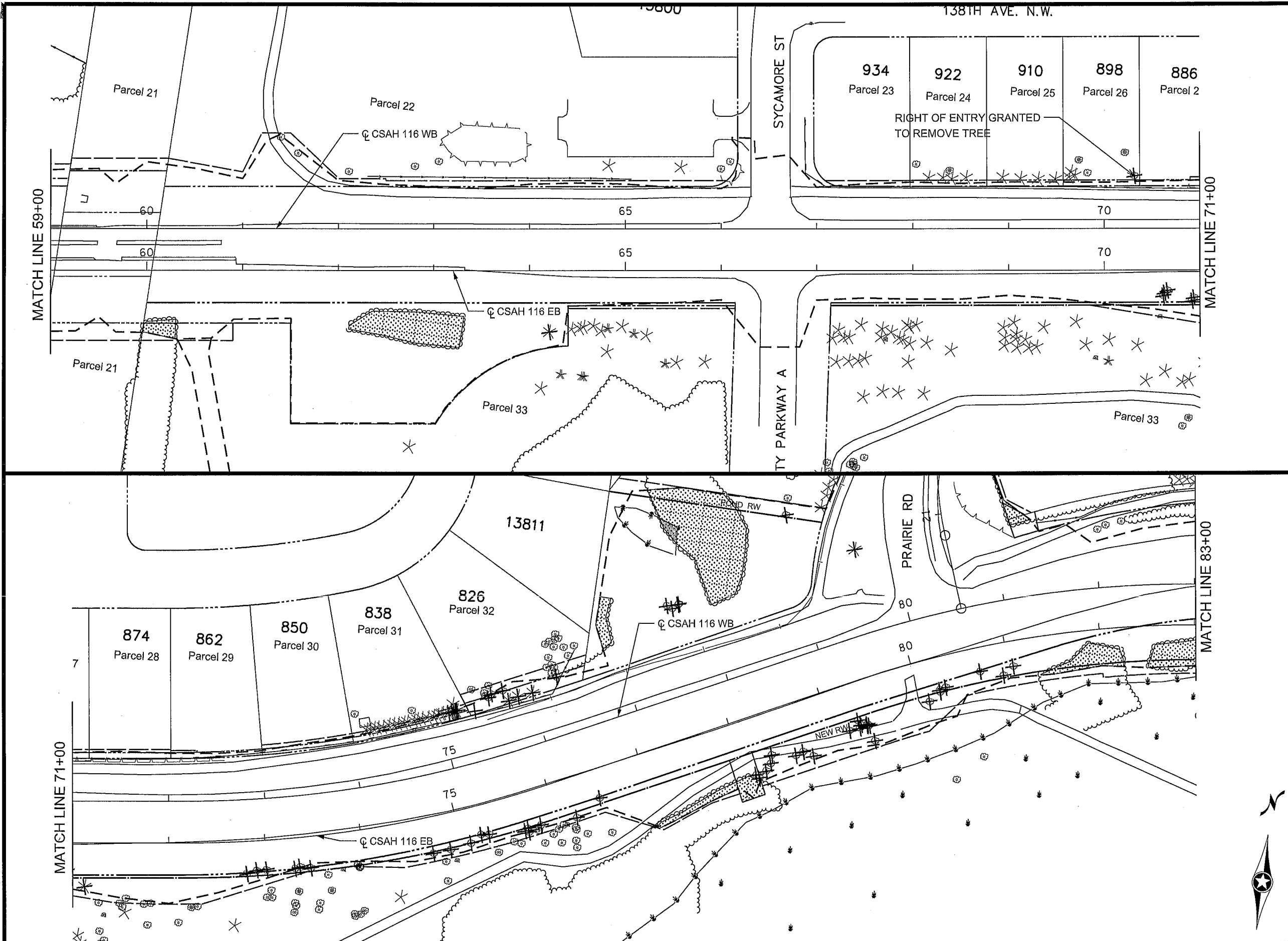
SAP 002-716-017

1 OF 7

REMOVAL PLAN

STA 37+51.79 TO 59+00.00

Sheet 7 of 13 Sheets



LEGEND

- CLEAR & GRUB (ACRE)
- TREE REMOVAL WITHIN WETLAND BOUNDARY
- TREE REMOVAL BY EACH
- CONSTRUCTION LIMIT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

N

0 100
SCALE IN FEET

REMOVAL NOTES

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DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.

N

NO	DATE	BY	CKD	APPR	REVISION

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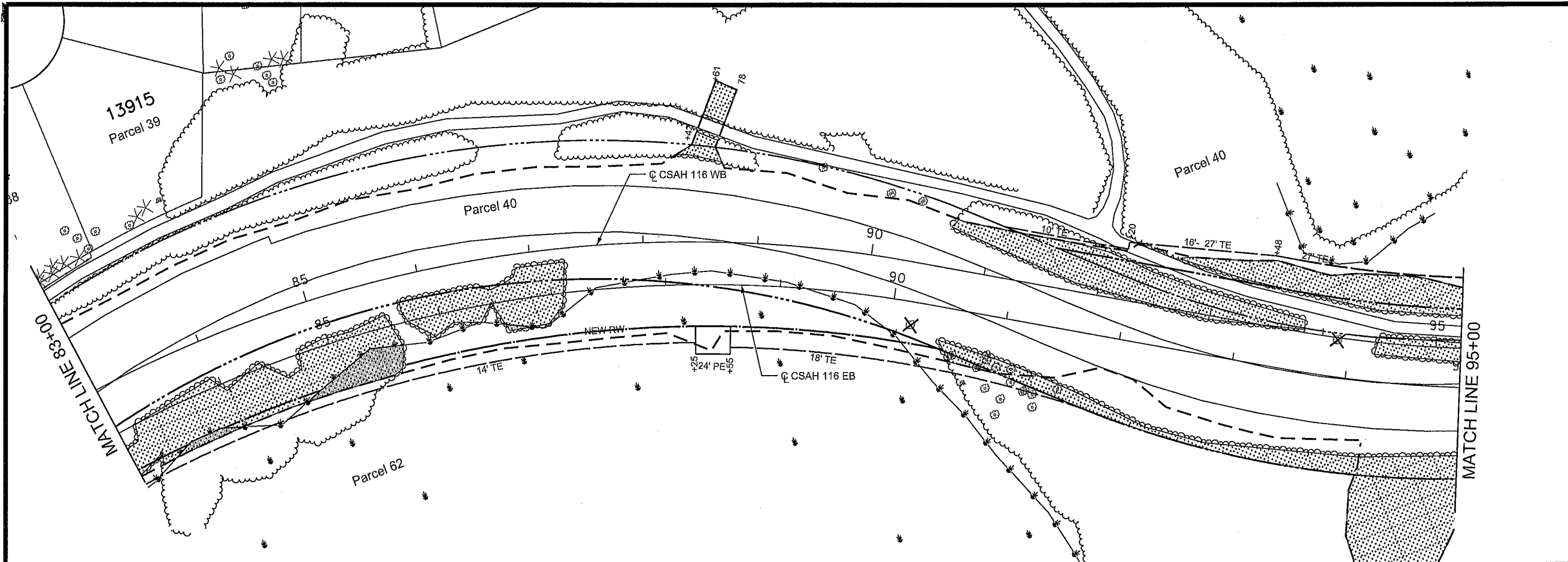
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 SIGNATURE: *Zachary Borgerding*
 DATE: 11/7/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-16-15
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 CHECKED BY: GP DATE: 12-16-15

**ANOKA COUNTY
HIGHWAY DEPT.**

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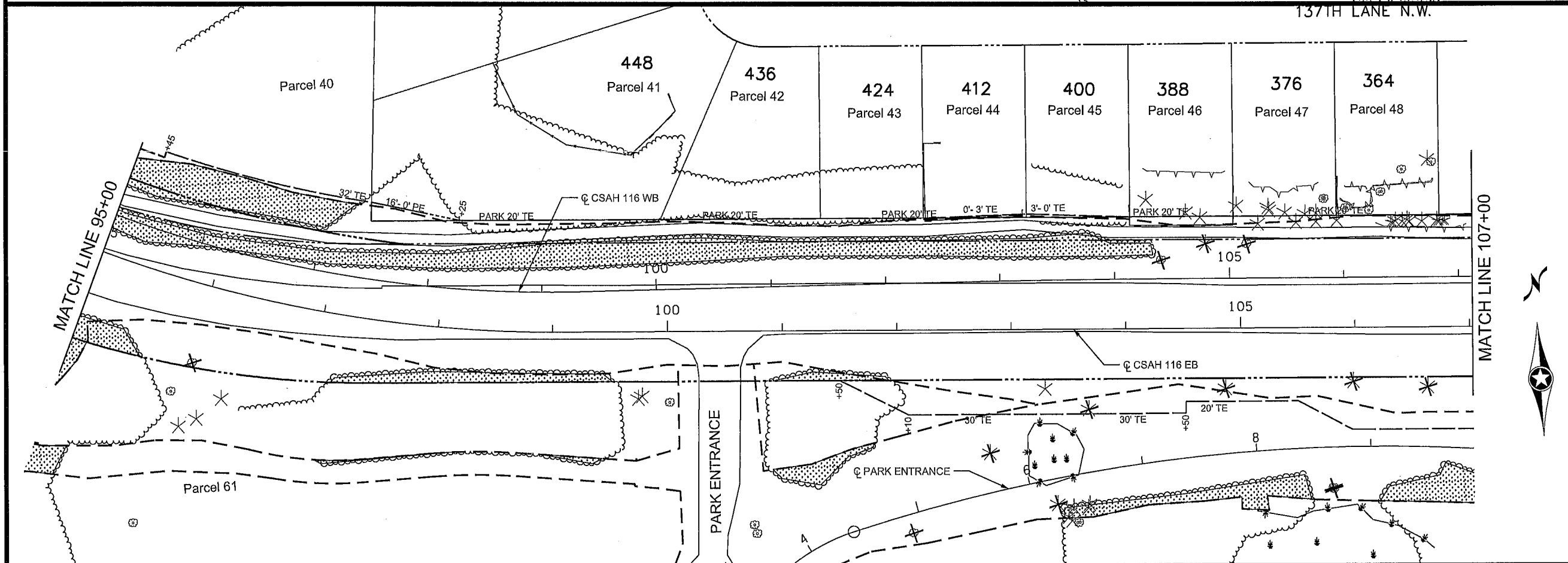
REMOVAL PLAN
 STA 59+00.00 TO 83+00.00
 Sheet 8 of 13 Sheets



LEGEND

- CLEAR & GRUB (ACRE)
- TREE REMOVAL WITHIN WETLAND BOUNDARY
- TREE REMOVAL BY EACH
- CONSTRUCTION LIMIT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

0 100
 SCALE IN FEET



REMOVAL NOTES

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DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.

3 OF 7

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-716-15\Plan\002-716-0177_REM3.dgn 01/07/2016 7:11:38 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: ZACHARY BORGERDING
 SIGNATURE: *Zachary Borgerding*
 DATE: 1/7/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-16-15
 DESIGN BY: ZB DATE: 12-16-15
 CHECKED BY: GP DATE: 12-16-15

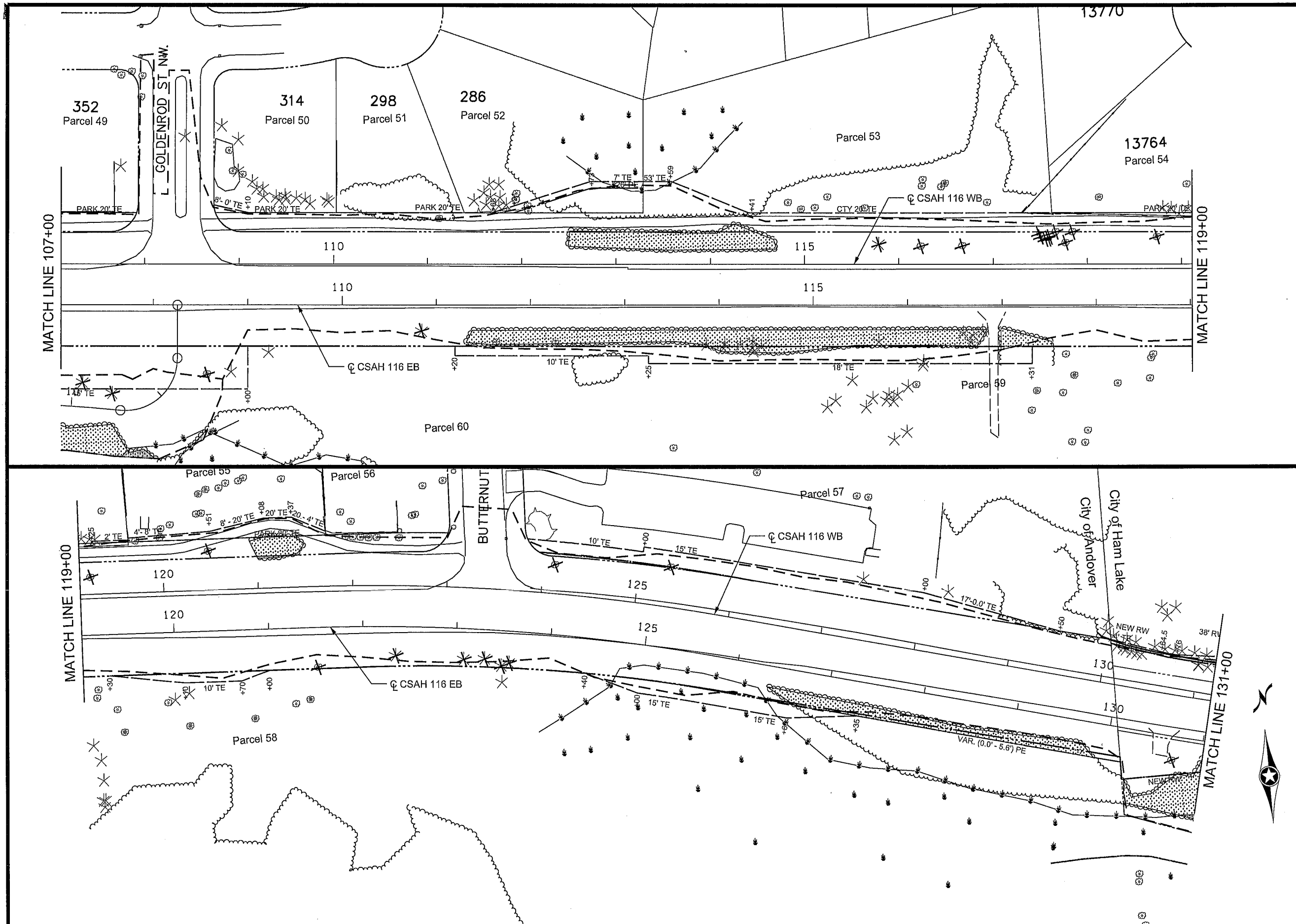
ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

REMOVAL PLAN

STA 83+00.00 TO 107+00.00

Sheet 9 of 13 Sheets



LEGEND

- CLEAR & GRUB (ACRE)
- TREE REMOVAL WITHIN WETLAND BOUNDARY
- TREE REMOVAL BY EACH
- CONSTRUCTION LIMIT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

N

0 100
SCALE IN FEET

REMOVAL NOTES

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DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.

N

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: ZACHARY BORGERDING

SIGNATURE: *Zac Bergerd*

DATE: 1/7/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-16-15

DESIGN BY: ZB DATE: 12-16-15

CHECKED BY: GP DATE: 12-16-15

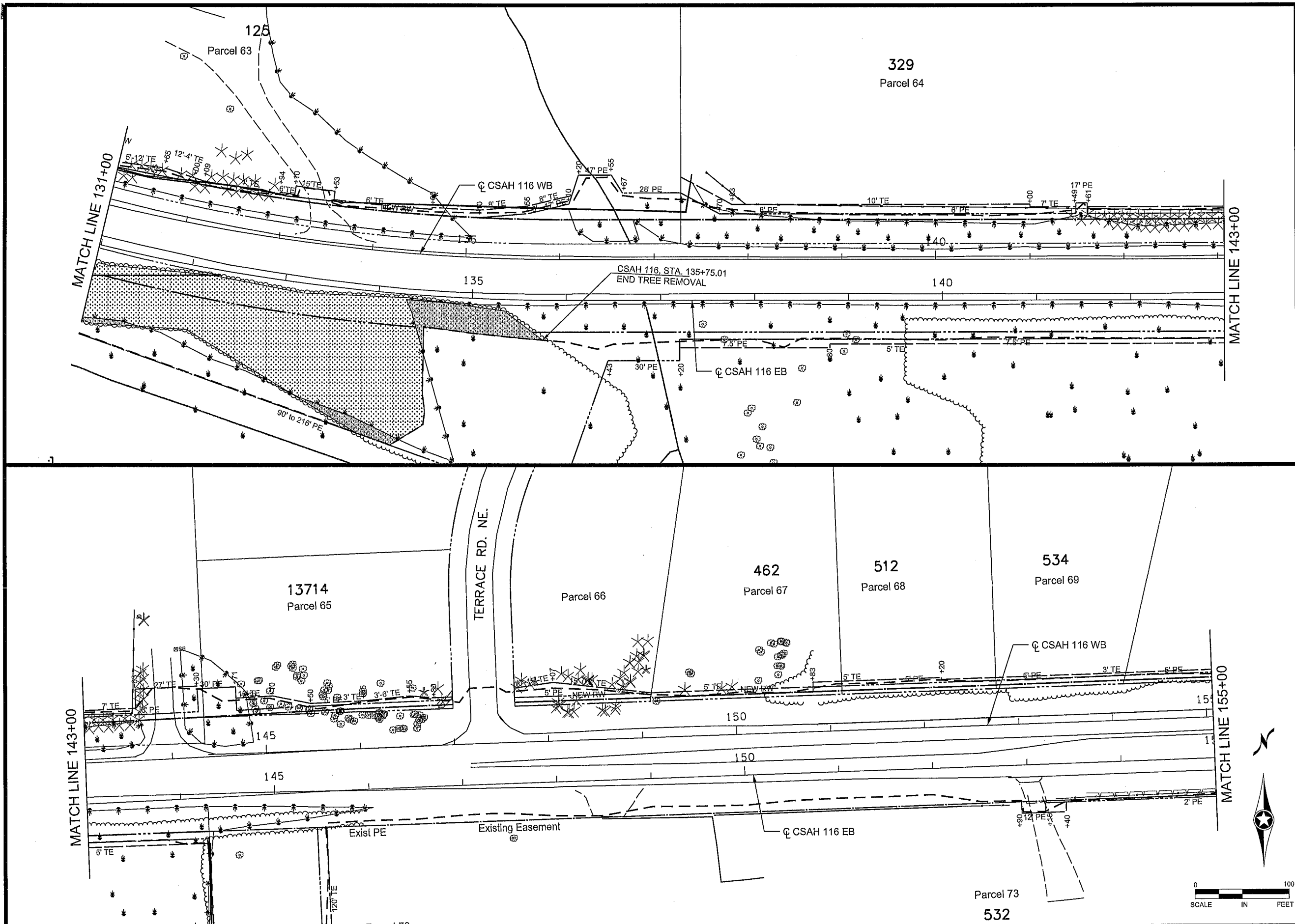
ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

REMOVAL PLAN

STA 107+00.00 TO 131+00.00

Sheet 10 of 13 Sheets



LEGEND

- CLEAR & GRUB (ACRE)
- TREE REMOVAL WITHIN WETLAND BOUNDARY
- TREE REMOVAL BY EACH
- CONSTRUCTION LIMIT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

N

0 100
SCALE IN FEET

REMOVAL NOTES

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DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.

N

0 100
SCALE IN FEET

5 OF 7

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: ZACHARY BORGERDING

SIGNATURE: *Zac Borgerding*

DATE: 11/7/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-16-15

DESIGN BY: ZB DATE: 12-19-15

CHECKED BY: GP DATE: 12-16-15

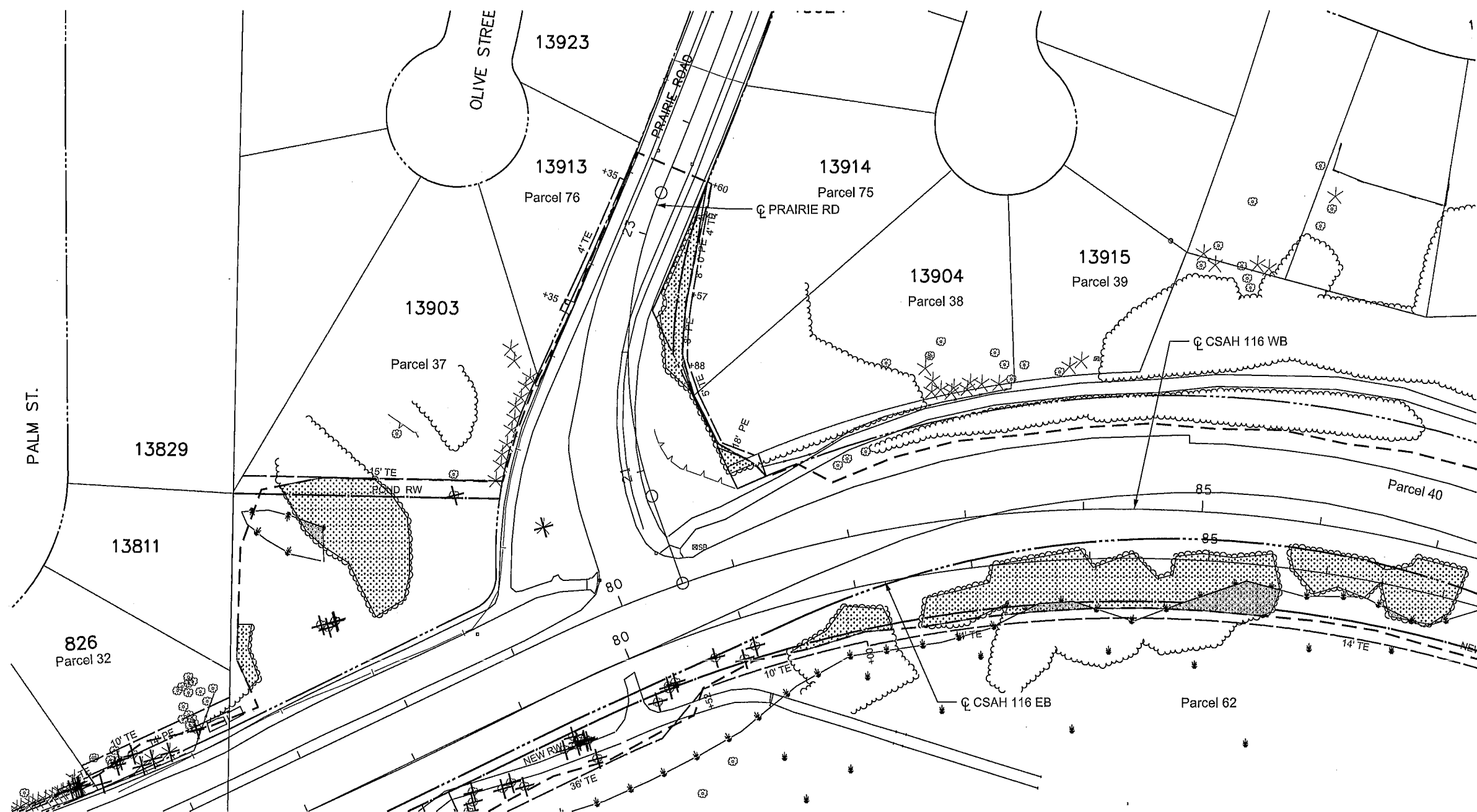
ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

REMOVAL PLAN

STA 131+00.00 TO 155+00.00

Sheet 11 of 13 Sheets



LEGEND	
	CLEAR & GRUB (ACRE)
	TREE REMOVAL WITHIN WETLAND BOUNDARY
	TREE REMOVAL BY EACH
	CONSTRUCTION LIMIT
	TEMPORARY EASEMENT
	PERMANENT EASEMENT

REMOVAL NOTES

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DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.



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: ZACHARY BORGERDING

SIGNATURE: *Zac Borgerding*

DATE: 1/7/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-16-15

DESIGN BY: ZB DATE: 12-16-15

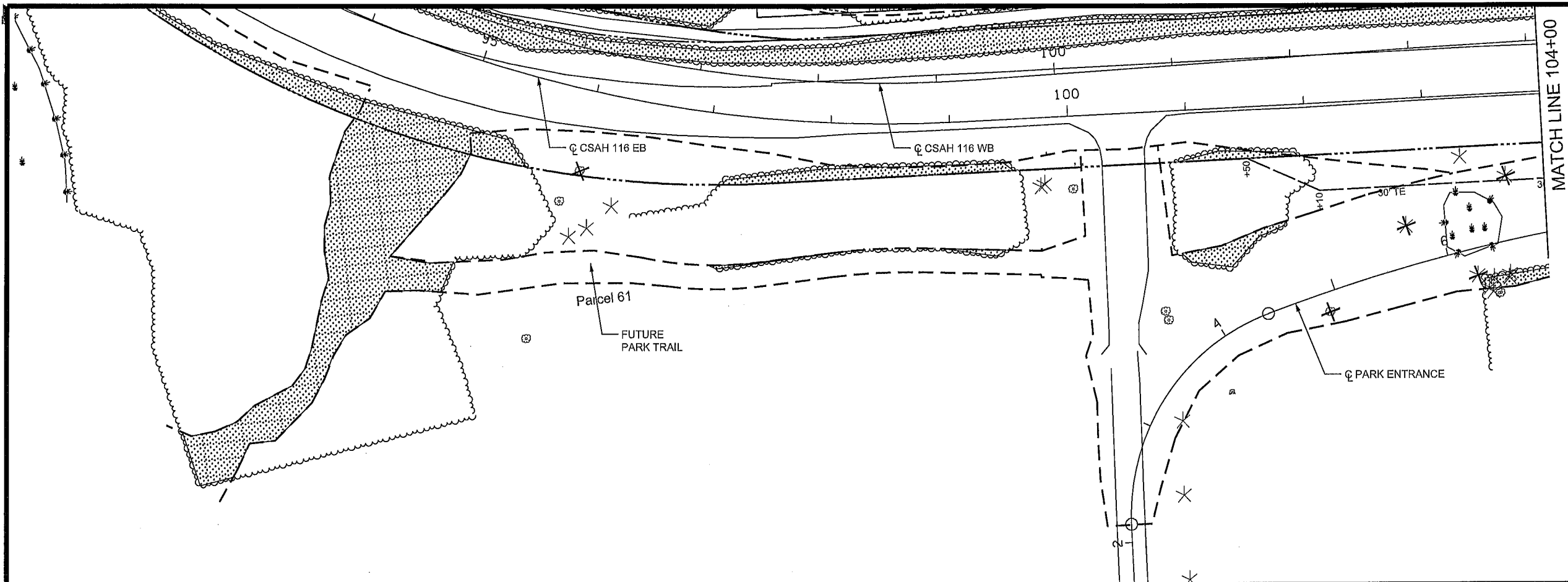
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ANOKA COUNTY
HIGHWAY DEPT.

SAP 002-716-017

Sheet 12 of 13 Sheets

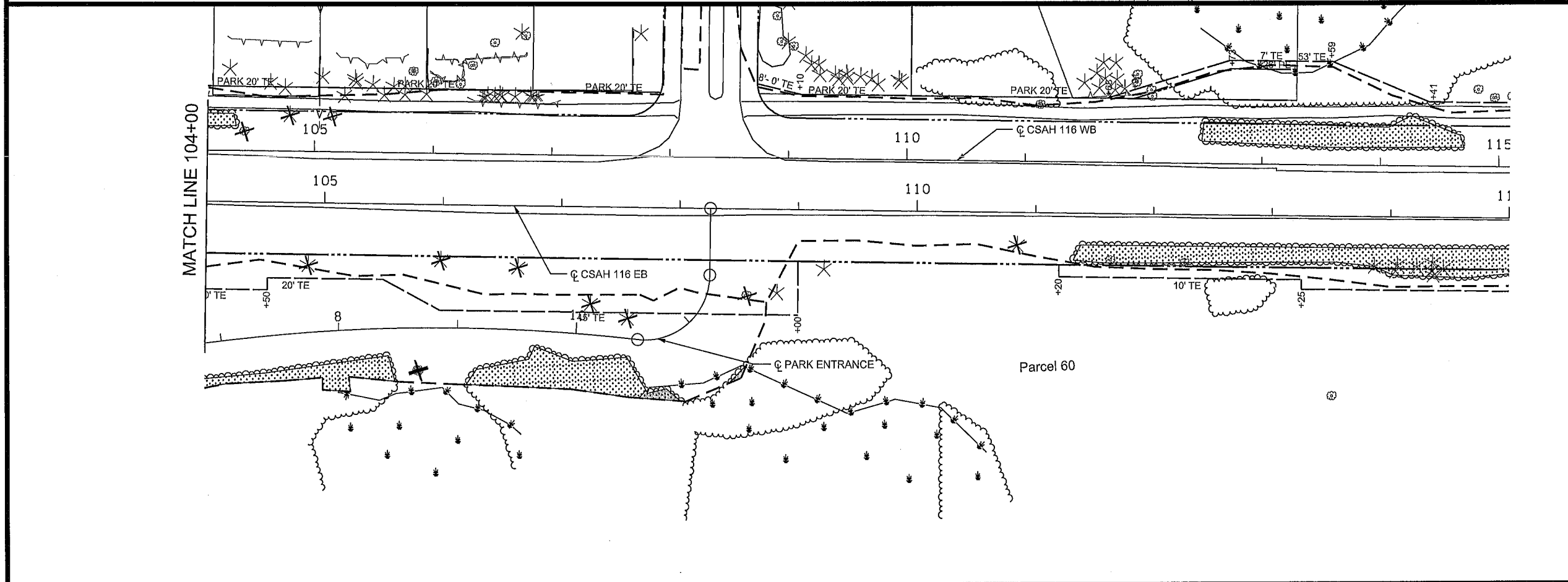
REMOVAL PLAN
PRAIRIE ROAD



LEGEND

- CLEAR & GRUB (ACRE)
- TREE REMOVAL WITHIN WETLAND BOUNDARY
- TREE REMOVAL BY EACH
- CONSTRUCTION LIMIT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

0 100
SCALE IN FEET



REMOVAL NOTES

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DISTURBED AREAS TO BE STABILIZED WITH RAPID STABILIZATION METHOD 3.

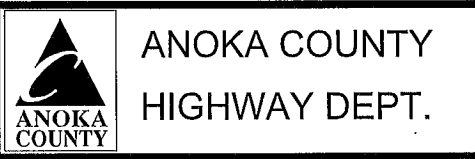
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PRINT NAME: ZACHARY BORGERDING
SIGNATURE: *Zac Borgerding*
DATE: 1/7/16 LICENSE NO. 52598

DRAWN BY: ZB DATE: 12-16-15
DESIGN BY: ZB DATE: 12-16-15
CHECKED BY: GP DATE: 12-18-15



SAP 002-716-017

REMOVAL PLAN
PARK TRAIL AND PARK ENTRANCE
Sheet 13 of 13 Sheets