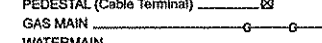
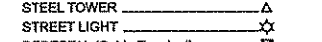
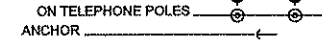
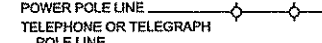
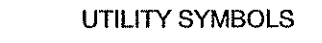
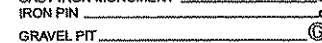
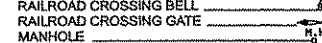
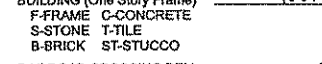
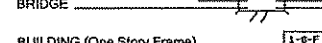
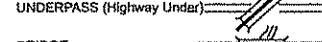
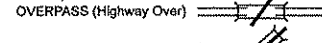
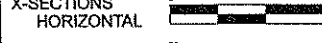
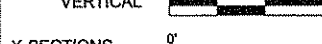
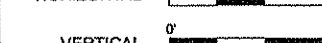
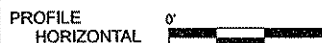
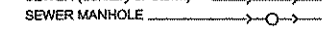
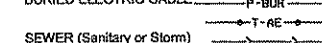
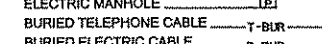
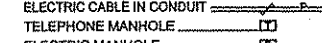
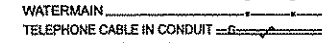
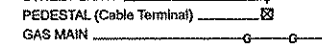
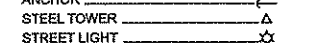
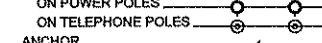
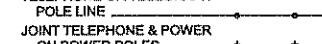


PLAN SYMBOLS

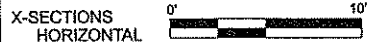
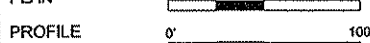
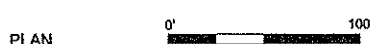
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- TOWNSHIP OR RANGE LINE _____
- SECTION LINE _____
- QUARTER LINE _____
- SIXTEENTH LINE _____
- RIGHT OF WAY LINE _____
- SLOPE EASEMENT _____
- EXISTING RIGHT OF WAY _____
- PROPERTY LINE _____
- CORPORATE OR CITY LIMITS _____
- RETAINING WALL _____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



UTILITY SYMBOLS



SCALES



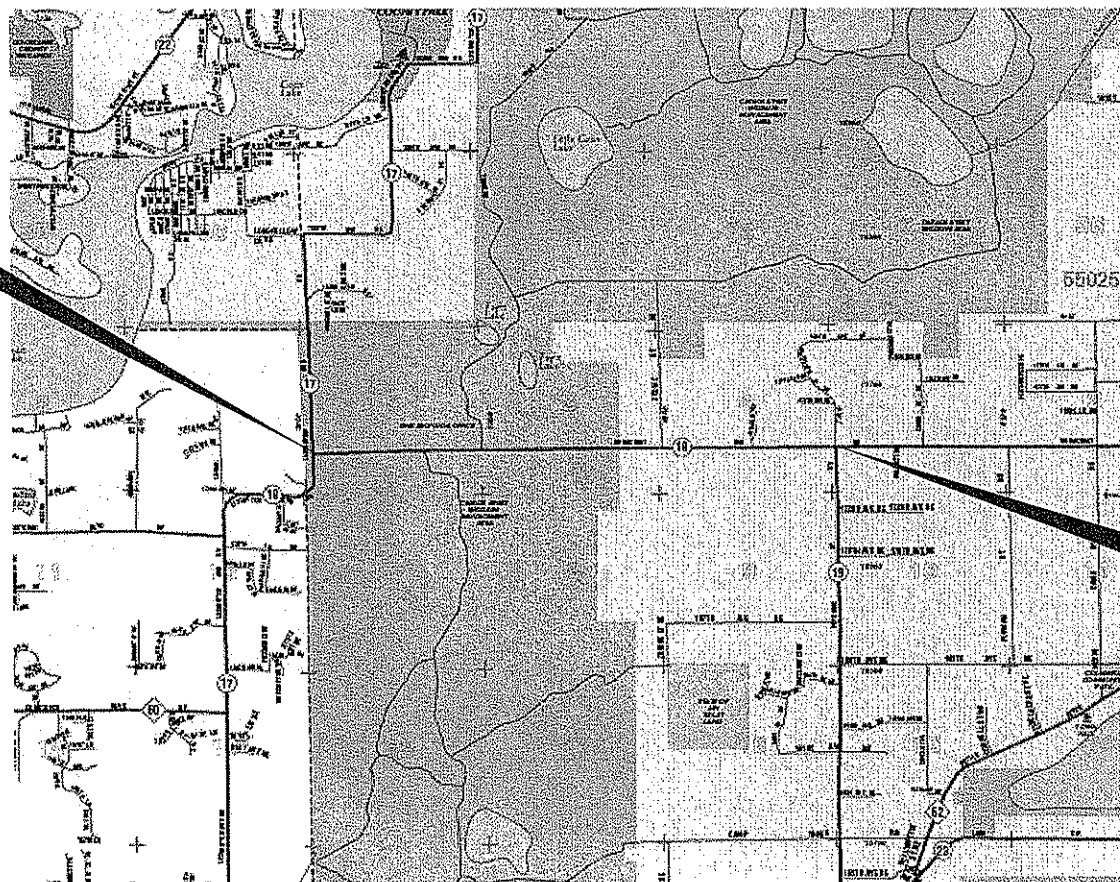
MINNESOTA DEPARTMENT OF TRANSPORTATION ANOKA COUNTY

CONSTRUCTION PLAN FOR RECLAIM BITUMINOUS AND OVERLAY

LOCATED ON C.S.A.H. 18 BETWEEN C.S.A.H. 17 AND CR 19

COUNTY PROJ. NO. C.P. 11-15-18
C.S.A.H. 18

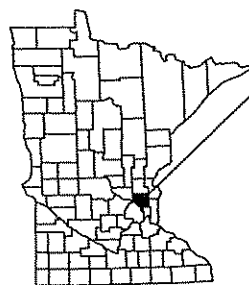
GROSS LENGTH 15940 FEET 3.019 MILES
BRIDGES LENGTH 0.00 FEET 0.000 MILES
EXCEPTIONS-LENGTH 0.00 FEET 0.000 MILES
NET LENGTH 15940 FEET 3.019 MILES



CITY OF COLUMBUS

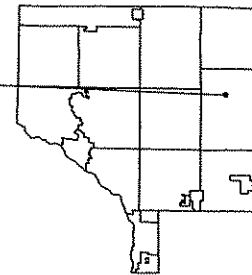
BEGIN C.P. 11-15-18
C.S.A.H. 18 STA. 10+10

END C.P. 11-15-18
C.S.A.H. 18 STA. 169+50



PROJECT LOCATION

CITY OF COLUMBUS
ANOKA COUNTY
MN/DOT TRANSPORTATION DISTRICT - METRO
SECTION 5 AND 6
TOWNSHIP 32 NORTH
RANGE 22 WEST



GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE INSTALLED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MNMUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."

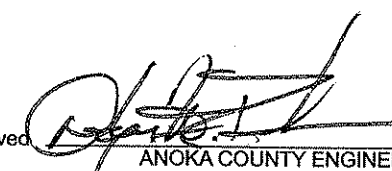
INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	CALCULATIONS FOR TURN LANES AND BYPASSES
4 - 6	TYPICAL SECTIONS
7 - 8	MISCELLANEOUS DETAILS
9 - 14	CONSTRUCTION PLAN
15 - 22	SIGNING & STRIPING TAB & DETAILS

THIS PLAN CONTAINS 22 SHEETS
DESIGN DESIGNATION

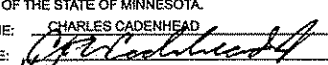
ESAL 20	753300
R VALUE	50
ADT (2009) =	5450
Proj. ADT (2029) =	8175
Proj. HCADT (2029) =	NA
Soil Factor	NA
9 TON DESIGN	

Functional Classification MINOR EXPANDER
No. of Traffic Lanes 2 No. of Parking Lanes 0
Design Speed 55 MPH N/A
Based on Stopping Sight Distance
Height of eye 3.5' Height of object 2.0'
Design Speed not achieved at:
STA. TO STA. MPH


Approved  4/7/20 11
ANOKA COUNTY ENGINEER

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan1 Title.dgn 04/05/2011 3:16:10 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: CHARLES CADENHEAD
SIGNATURE: 
DATE: 4/5/11 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/2/11
DESIGN BY: KPR DATE: 1/2/11
CHECKED BY: JO DATE:

 ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
CITY PROJECT NO. _____
COUNTY PROJECT NO. 11-15-18

TITLE SHEET
Sheet 1 of 22 Sheets

CSAH18		STATEMENT OF ESTIMATED QUANTITIES		
ITEM NO.	ITEM	NOTE NO.	UNIT	TOTAL EST. QUANT.
2021.501	MOBILIZATION		LUMP SUM	1
2104.501	REMOVE PIPE SEWERS		LIN FT	140
2104.509	REMOVE PIPE APRON		EACH	5
2104.523	SALVAGE SIGN TYPE C		EACH	3
2105.525	TOPSOIL BORROW (LV)		CU YD	181
2105.602	CONSTRUCT TURN LANE	6	EACH	2
2105.602	CONSTRUCT BYPASS	6	EACH	2
2123.503	MOTOR GRADER		HOUR	60
2123.521	PNEUMATIC-TIRED ROLLER		HOUR	60
2130.501	WATER		M-GAL	3
2211.501	AGGREGATE BASE CLASS 5	3	TON	2643
2221.501	AGGREGATE SHOULDERING CLASS 5	4	TON	1115
2232.501	MILL BITUMINOUS SURFACE (2") (JOINTS)	1	SQ YD	132
2331.604	BITUMINOUS PAVEMENT RECLAMATION		SQ YD	72176
2357.502	BITUMINOUS MATERIAL FOR TACK COAT		GALLON	2422
2360.501	TYPE SP 12.5 WEARING COURSE MIX (4,B)	2, 5	TON	70
2360.501	TYPE SP 12.5 WEARING COURSE MIX (4,E)		TON	8260
2360.502	TYPE SP 12.5 NON WEAR COURSE MIX (4,B)		TON	5429
2501.511	15" CS PIPE CULVERT		LIN FT	140
2501.515	15" GS PIPE APRON		EACH	4
2501.515	36" RC PIPE APRON		EACH	1
2501.561	36" RC PIPE CULVERT DES 3006 CL V		LIN FT	8
2501.602	TRASH GUARD FOR 36" PIPE APRON		EACH	1
2503.602	CONNECT TO EXISTING STORM SEWER		EACH	1
2540.602	INSTALL MAIL BOX SUPPORT	10	EACH	13
2563.601	TRAFFIC CONTROL	1, 8, 9	LUMP SUM	1
2564.533	FURNISH SIGN PANEL TYPE C		SQ FT	38.5
2564.536	INSTALL SIGN PANEL TYPE C		EACH	2
2573.602	CULVERT PROTECTION		EACH	6
2581.501	REMOVABLE PREFORMED PLASTIC MARKING	7	LIN FT	1198
2582.502	4" SOLID LINE WHITE - EPOXY	9	LIN FT	18884
2582.502	4" BROKEN LINE WHITE-EPOXY	9	LIN FT	120
2582.502	4" SOLID LINE YELLOW-EPOXY	9	LIN FT	2942
2582.502	4" BROKEN LINE YELLOW-EPOXY	9	LIN FT	3170

NOTES:

- LOCATION TO BE DETERMINED BY ENGINEER.
- CONTRACTORS RESPONSIBILITY TO CONTACT OWNER 48 HOURS BEFORE STARTING OPERATION.
- LEVELING SHOULDER UP TO MAINLINE BASE COURSE.
- MATERIAL FOR FINISHED GRAVEL SHOULDERS AND GRAVEL ENTRANCES.
- ITEM USED FOR PAVING DRIVEWAYS AND STREET APPROACHES.
- INCLUDES ALL TIME AND MATERIAL TO CONSTRUCT ITEM AS SHOWN IN PLAN AND AS DIRECTED BY ENGINEER. COMMON EXCAVATION, SELECT GRANULAR, AGGREGATE BASE CLASS 5, SILT FENCE, EROSION CONTROL BLANKET CATEGORY 3, SEED & DOZER / MOTOR GRADER TIME TO CONSTRUCT TURN / BY-PASS LANE NOTE -BITUMINOUS BASE AND WEAR COURSE IS NOT INCLUDED IN THIS ITEM.
- SHALL BE PLACED AFTER EACH DAYS PAVING OPERATION.
- DO NOT PASS, PASS WITH CARE, NO CENTERLINE STRIPE, BUMP AND BUMP AHEAD SIGNS TO BE INPLACE AT THE START OF RECLAIM AND OVERLAY OPERATIONS.
- SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLTION OF MAINLINE WEAR COURSE PAVING.
- MAILBOXES TO BE INSTALLED AT THE EXISTING MAILBOX LOCATION. MAILBOX REMOVAL / INSTALLATION, INCIDENTAL TO ITEM.

BASIS OF PLANNED QUANTITIES

2211.501	AGGREGATE BASE CLASS 5	CU YDS * 1.8 = TONS
2221.501	AGGREGATE SHOULDERING CLASS 5	CU YDS * 1.8 = TONS
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	.05 GAL / SQ YD
2360.501	TYPE SP 12.5 WEARING COURSE (SPWEB440E) 2" THICK	115 LBS/SQYD/IN THICKNESS
2360.502	TYPE SP 12.5 NON-WEARING COURSE (SPNWB440b) 2" THICK	115 LBS/SQYD/IN THICKNESS
2581.501	REMOVABLE PREFORM PLASTIC MARKINGS	2' AT 50' INTERVALS FOR SKIPS

NO	DATE	BY	CKD	APPR	REVISION
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04/05/2011 3:22:14 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: CHARLES CADENHEAD

SIGNATURE: *[Signature]*

DATE: 4/8/11 LICENSE NO. 40418

DRAWN BY: KPR DATE: 1/21/11

DESIGN BY: KPR DATE: 1/21/11

CHECKED BY: JO DATE:



STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

CITY PROJECT NO. _____

COUNTY PROJECT NO. 11-15-18

ESTIMATED AVERAGE DEPTH FOR RT. TURN LANES AND BYPASSES USING ELEVATION AT EDGE OF MAT, SHOULDER PI, AND DITCH											
DNR RT TURN LANE			INDUS RT TURN LANE			DNR BYPASS			INDUS BYPASS		
EM	SH PI	BOTTOM	EM	SH PI	BOTTOM	EM	SH PI	BOTTOM	EM	SH PI	BOTTOM
906.07	905.77	902.98	905.50	905.41	901.71	906.16	906.05	903.34	905.65	905.49	902.06
906.25	905.96	903.22	905.56	905.41	901.99	906.21	906.06	903.03	905.56	905.54	902.65
906.38	906.15	903.66	905.36	905.16	901.72	906.15	906.08	903.81	905.45	905.41	902.12
906.40	906.16	903.73	905.34	905.20	901.66	906.26	906.22	903.89	905.30	905.15	902.05
3625.10	3624.04	3613.59	3621.76	3621.18	3607.08	3624.78	3624.41	3614.07	3621.96	3621.59	3608.88
906.28	906.01	903.40	905.44	905.30	901.77	906.20	906.10	903.52	905.49	905.40	902.22
AVERAGE DEPTH		2.88	AVERAGE DEPTH		3.67	AVERAGE DEPTH		2.68	AVERAGE DEPTH		3.27
minus 0.5'		2.38	minus 0.5'		3.17	minus 0.5'		2.18	minus 0.5'		2.77

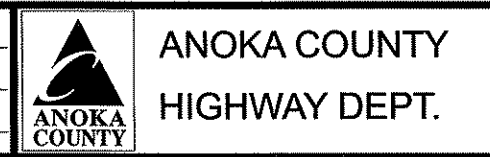
ESTIMATED QUANTITIES FOR RT. TURN LANES AND BYPASSES														
CONSTRUCT TURN LANES (CARLOS AVERY ENTRANCE)														
STATION	STATION	LENGTH	WIDTH	COMMON EX		WIDTH	SELECT GRANULAR		WIDTH	CLASS 5		DOZER (HOURS)	SILT FENCE (LF)	EROSION CONTROL BLANKET (SY)
				DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)			
43+65	48+45	480.0	10.3	0.5	91.6	4.0	2.4	169.2	4.0	0.5	35.6	8.0	530.0	867.0
CONSTRUCT TURN LANES (INDUS ST.)														
STATION	STATION	LENGTH	WIDTH	COMMON EX		WIDTH	SELECT GRANULAR		WIDTH	CLASS 5		DOZER (HOURS)	SILT FENCE (LF)	EROSION CONTROL BLANKET (SY)
				DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)			
145+45	150+25	480.0	12.4	0.5	110.2	4.0	3.2	225.4	4.0	0.5	35.6	8.0	518.0	851.0
CONSTRUCT BYPASS (CARLOS AVERY ENTRANCE)														
STATION	STATION	LENGTH	WIDTH	COMMON EX		WIDTH	SELECT GRANULAR		WIDTH	CLASS 5		DOZER (HOURS)	SILT FENCE (LF)	EROSION CONTROL BLANKET (SY)
				DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)			
39+84	46+04	620.0	17.7	0.5	203.2	4	2.2	200.2	4	0.5	45.9	8.0	675.0	1100.0
CONSTRUCT BYPASS (INDUS ST.)														
STATION	STATION	LENGTH	WIDTH	COMMON EX		WIDTH	SELECT GRANULAR		WIDTH	CLASS 5		DOZER (HOURS)	SILT FENCE (LF)	EROSION CONTROL BLANKET (SY)
				DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)		DEPTH	VOLUME (CY)			
141+66	147+86	620.0	12.4	0.5	142.4	4	2.8	254.4	4	0.5	45.9	8.0	683.0	1116.0

NO	DATE	BY	CHKD	APPR	REVISION
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7:46:15 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: CHARLES CADENHEAD
SIGNATURE: *[Signature]*
DATE: 4/8/11 LICENSE NO. 40418

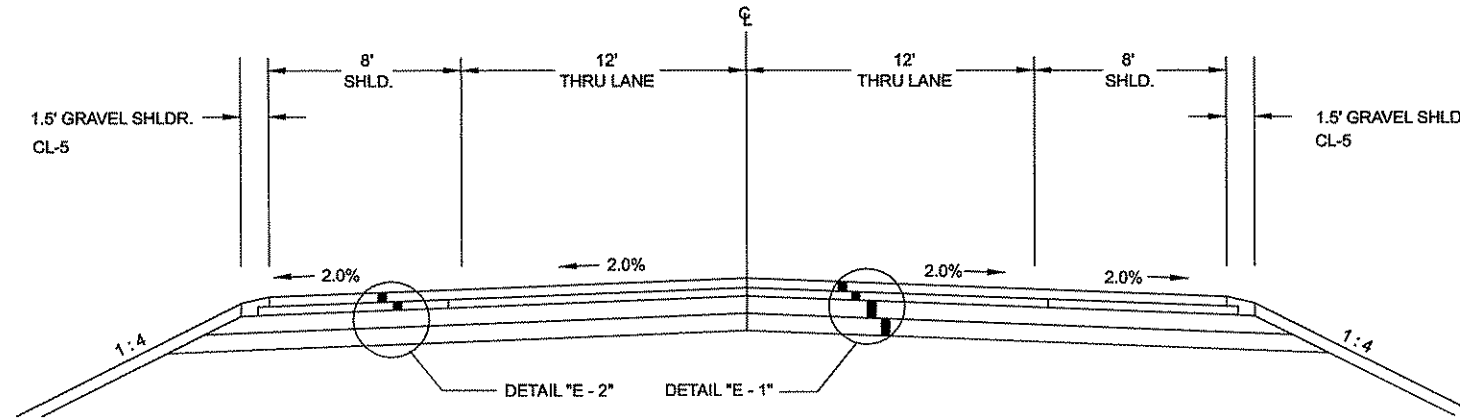
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DESIGN BY: KPR DATE: 1/21/11
CHECKED BY: JO DATE: _____



STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
CITY PROJECT NO. _____
COUNTY PROJECT NO. 11-15-18

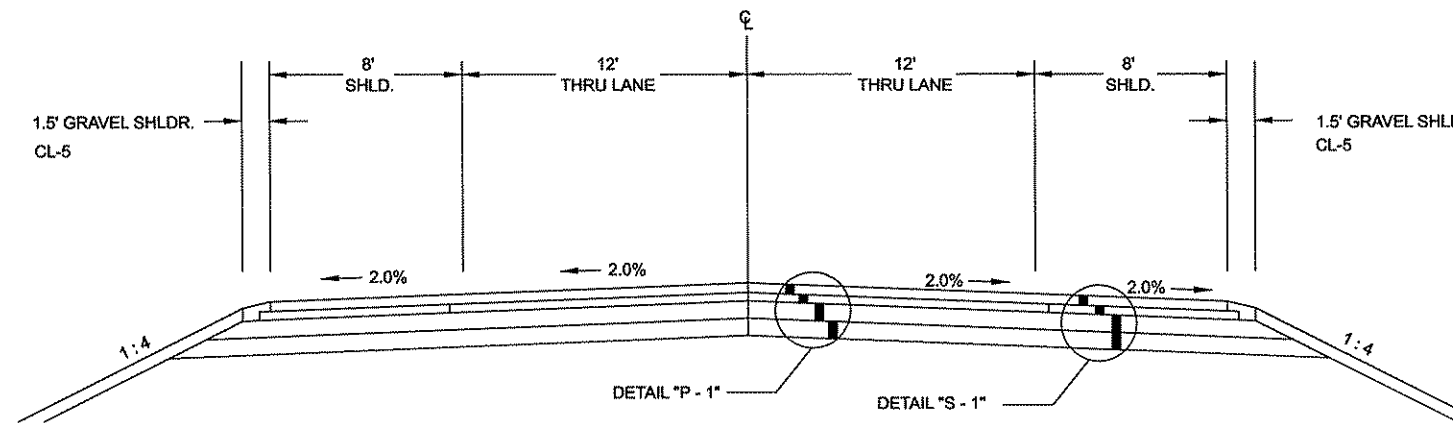
EXISTING TYPICAL SECTION

STA. 10+10 - STA 163+80

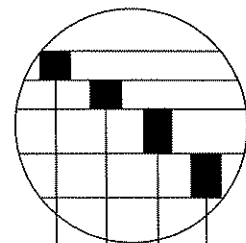


PROPOSED TYPICAL SECTION

STA. 10+10 - 34+84, STA 48+45 -141+66, STA 150+25 -163+90, STA 168+70 -169+50

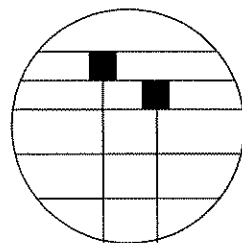


DETAIL "E - 1"



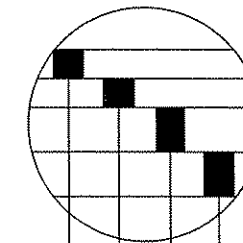
- 1.5" 2341 WEAR COURSE
- 2.0" 2331 BINDER COURSE
- 5.0" CL - 5A AGG. BASE
- 5.0" CL - 4A AGG. BASE

DETAIL "E - 2"



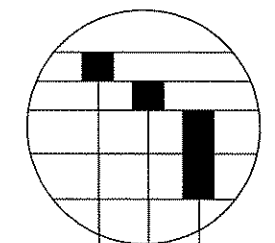
- 1.5" 2331 SHOULDER COURSE
- 2.0" CL - 5A AGG. BASE

DETAIL "P - 1"



- 2" TYP SP 12.5 WEARING COURSE (SPWEB440E)
- 2" TYPE SP 12.5 NON WEARING COURSE (SPNWB440B)
- RECLAIM EXISTING BIT / AGG. BASE
- EXISTING AGG. BASE

DETAIL "S - 1"



- 2" TYP SP 12.5 WEARING COURSE (SPWEB440E)
- 2" AGGREGATE BASE CL - 5 LEVELING
- RECLAIM EXISTING BIT / AGGREGATE BASE

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\DETAILS.dgn 03/18/2011 7:47:32 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/21/2011
 DESIGN BY: KPR DATE: 1/21/2011
 CHECKED BY: JO DATE: _____



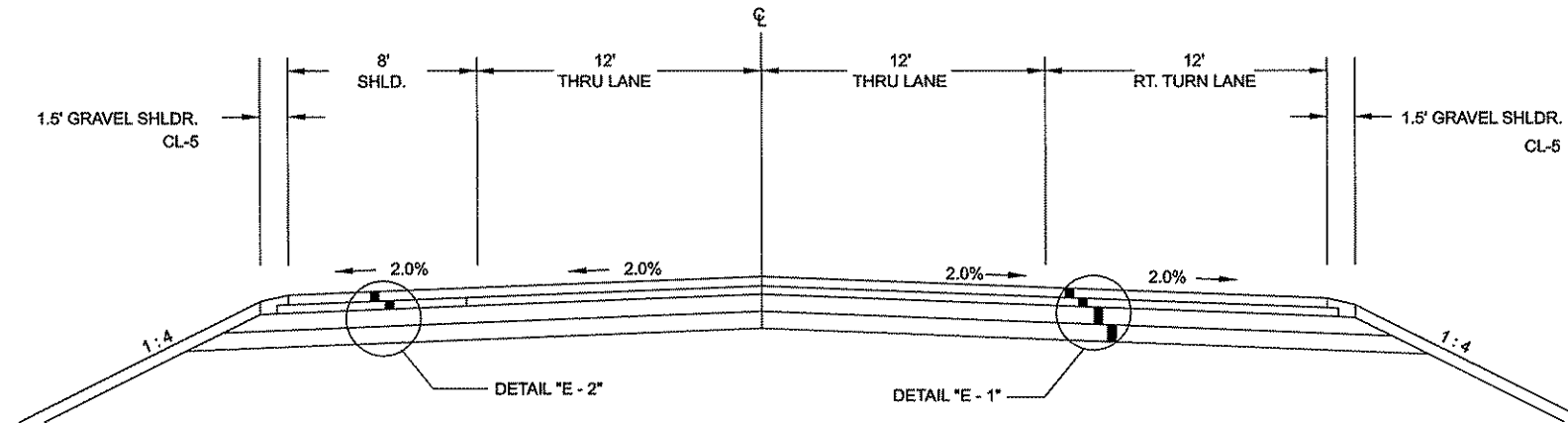
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

TYPICAL SECTION

Sheet 4 of 22 Sheets

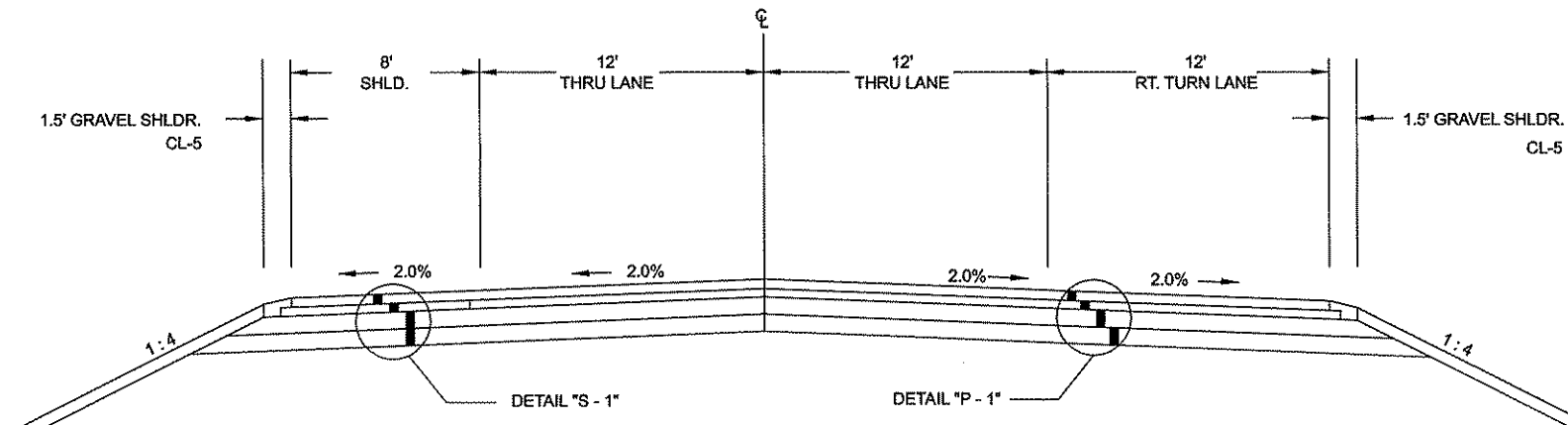
EXISTING TYPICAL SECTION (RT. TURN LANE EB.)

STA. 163+80 - 168+60



PROPOSED TYPICAL SECTION (RT. TURN LANE EB.)

STA. 163+80 - 168+60



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18 (17-19)\Plan\DETAILS.dgn 03/18/2011 7:48:13 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/16 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/21/2011
 DESIGN BY: KPR DATE: 1/21/2011
 CHECKED BY: JO DATE: _____



**ANOKA COUNTY
 HIGHWAY DEPT.**

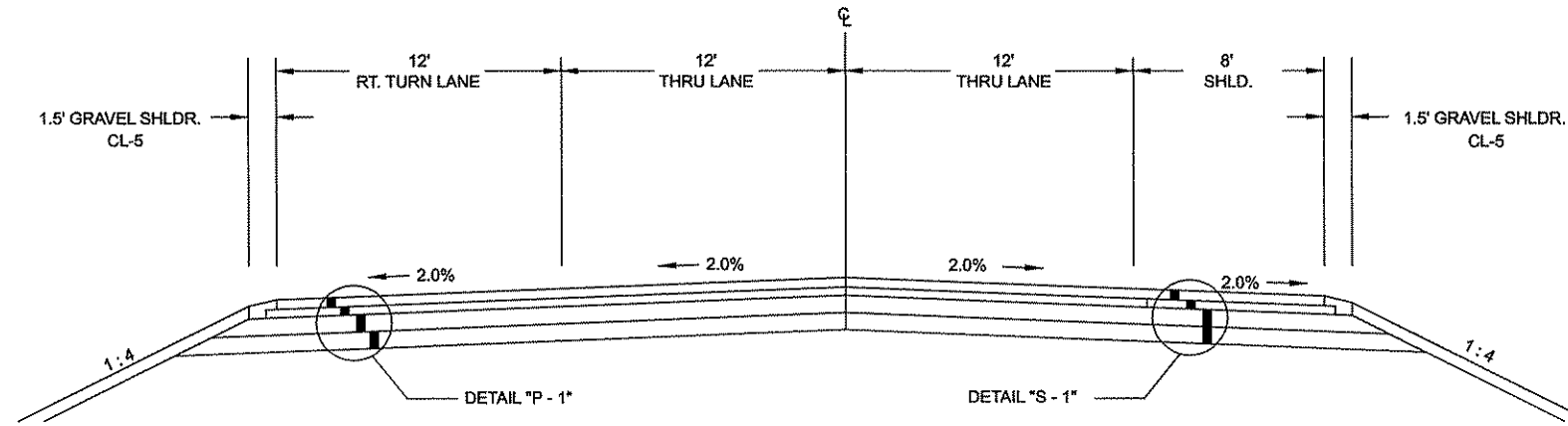
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

TYPICAL SECTION

Sheet 5 of 22 Sheets

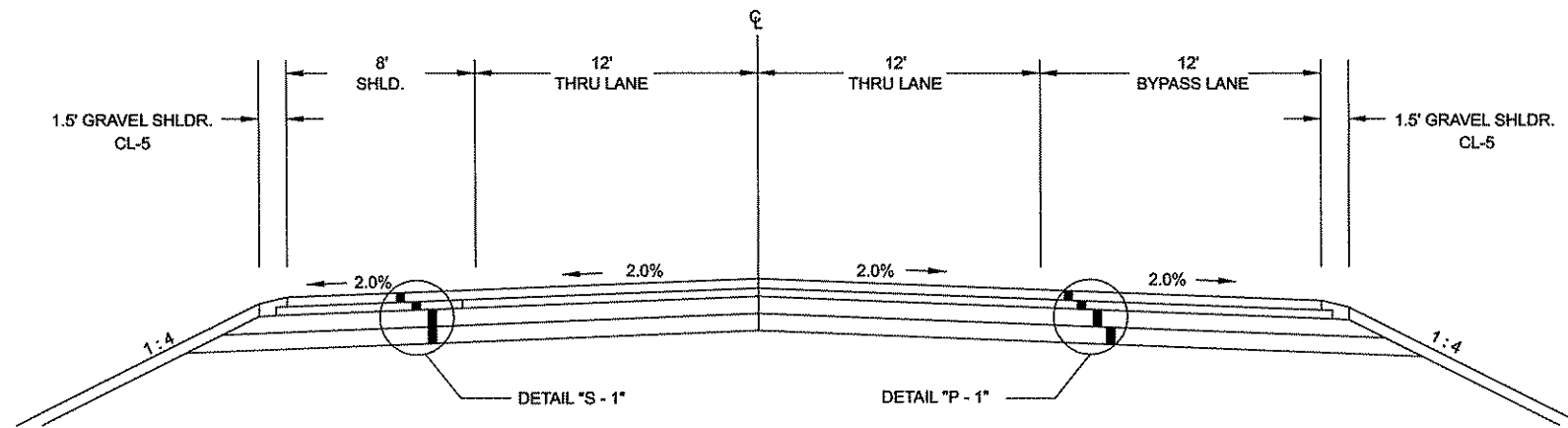
PROPOSED TYPICAL SECTION (RT TURN LANE WB. IN BYPASS AREA)

STA. 46+04 - 48+45, 147+86 - 150+25



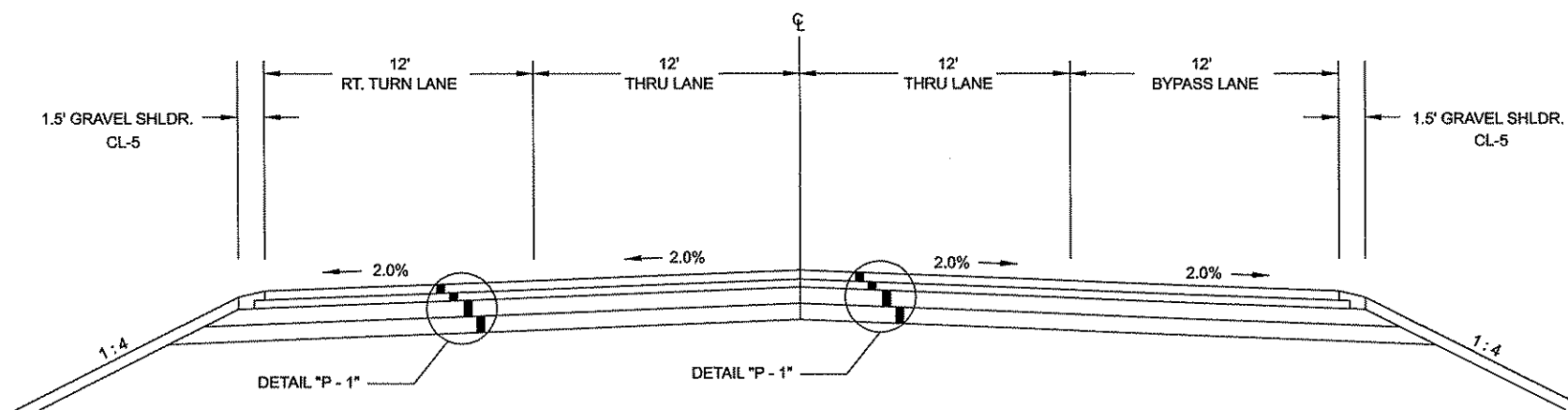
PROPOSED TYPICAL SECTION (BYPASS LANE EB)

STA. 39+84 - 43+65, 141+66 - 145+45



PROPOSED TYPICAL SECTION (BYPASS LANE AND RT. TURN LANE)

STA. 43+65 - 46+04, 145+45 - 147+86



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_16_(17-19)\Plan\DETAILS.dgn 03/18/2011 7:48:52 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/16 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/21/2011
 DESIGN BY: KPR DATE: 1/21/2011
 CHECKED BY: JO DATE:



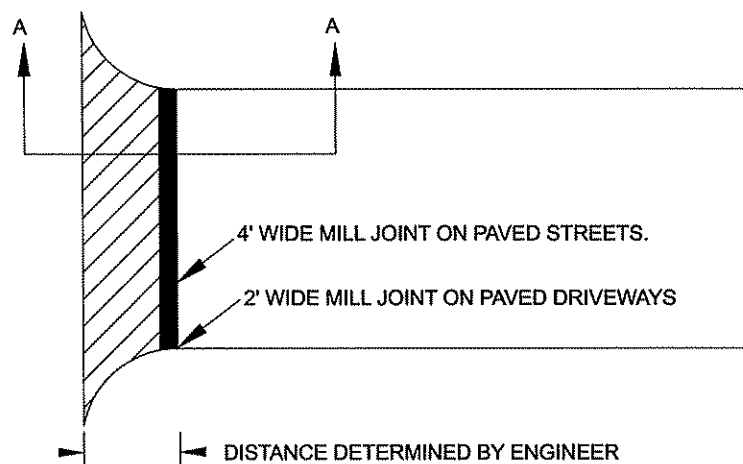
**ANOKA COUNTY
HIGHWAY DEPT.**

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

TYPICAL SECTION
 Sheet 6 of 22 Sheets

PAVED DRIVEWAYS / PAVED STREETS

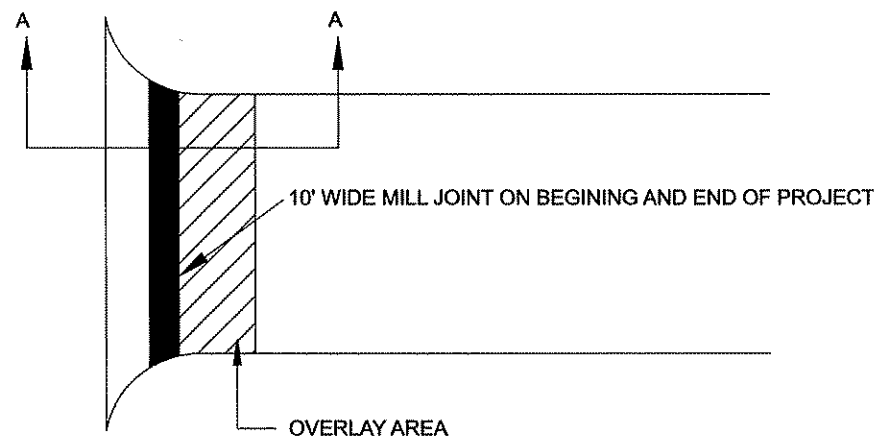
JOINT DETAILS



DRIVEWAYS BUMPED OUT TO BE PAVED WITH MAINLINE, PAID AS MAINLINE.
 DRIVEWAYS PAVED IN DIFFERENT OPERATION FROM MAIN LINE PAVING PAID AS ST./DR. APPROACH.
 STREETS PAID AS ST./DR. APPROACH.

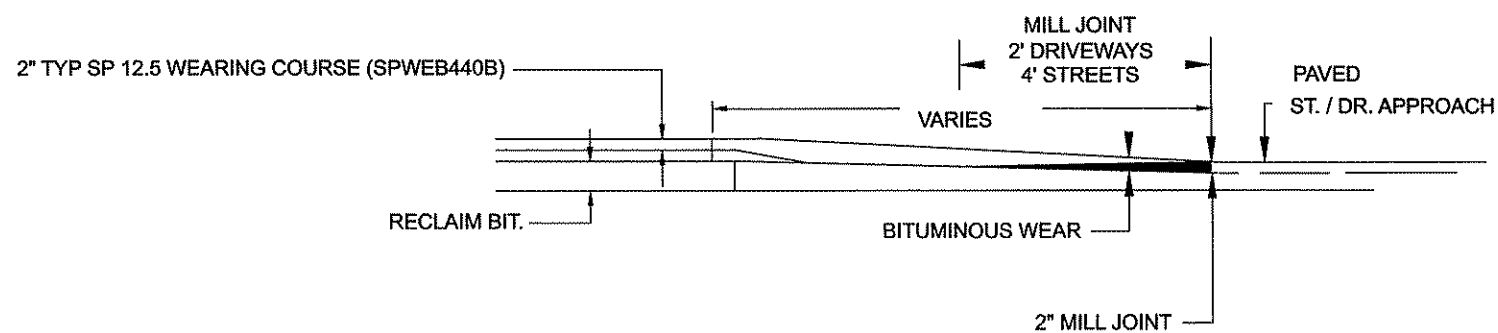
MAINLINE

JOINT DETAILS



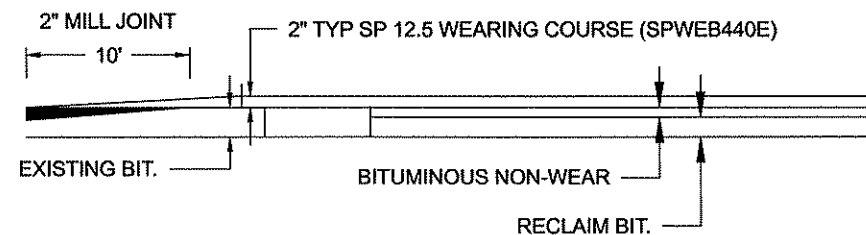
GRADING NEEDED TO TIE NONWEAR INTO EXISTING PAVING. TO BE PAID UNDER 2123.503 MOTOR GRADER HOURS

JOINT DETAILS A - A



PAID AS STREET APPROACH

JOINT DETAILS A - A



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\DETAILS.dgn 03/18/2011 7:49:28 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY KPR DATE 1/21/2011
 DESIGN BY KPR DATE 1/21/2011
 CHECKED BY JO DATE

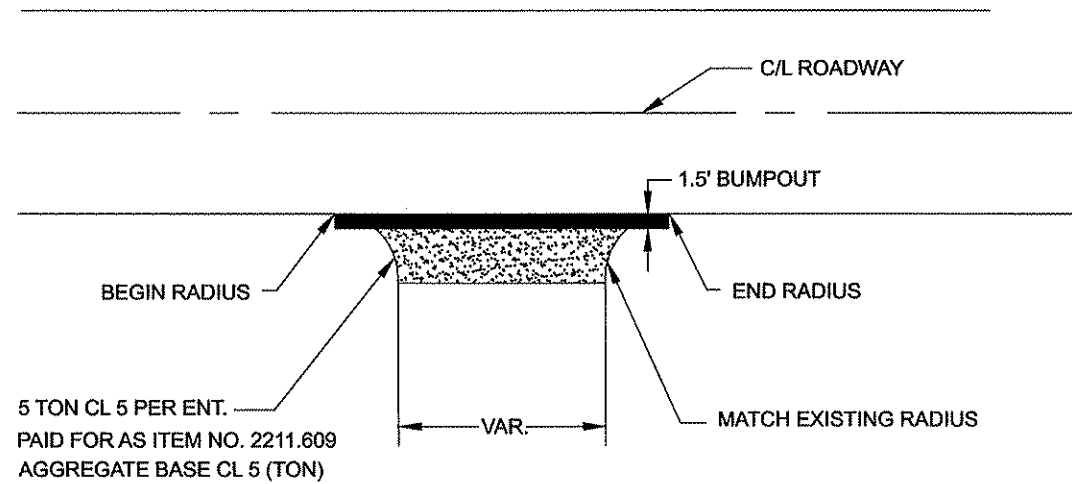


ANOKA COUNTY
 HIGHWAY DEPT.

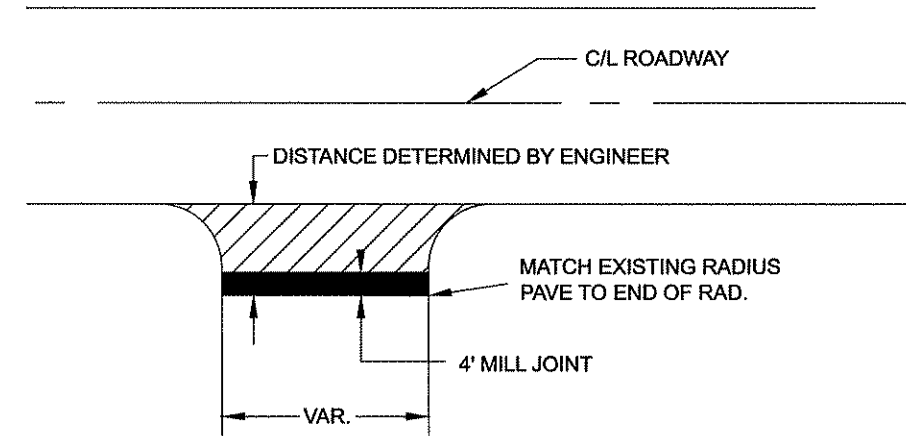
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

MISCELLANEOUS DETAILS
 Sheet 7 of 22 Sheets

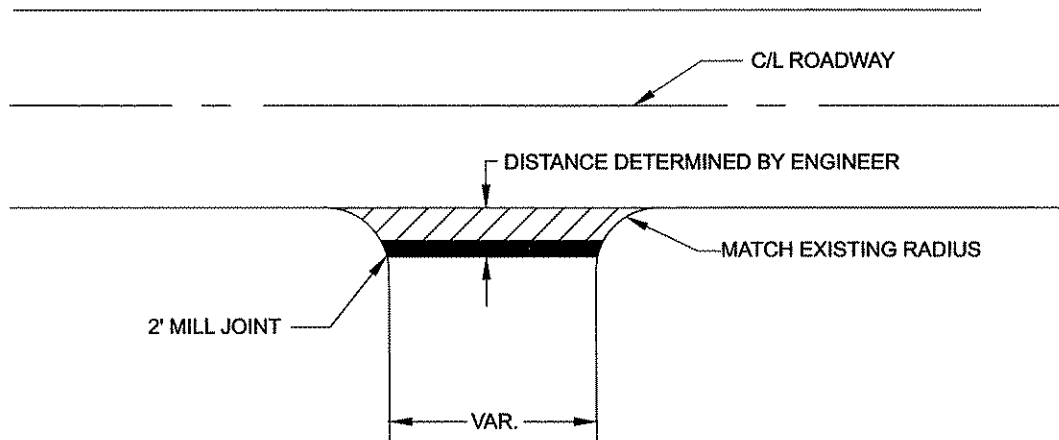
GRAVEL DR. WAYS AND FEILD ENT.



PAVED STREET APPROACHES



PAVED DR. WAYS



DRIVEWAYS BUMPED OUT AND PAVED WITH MAINLINE PAID AS MAINLINE.
 DRIVEWAYS PAVED IN DIFFERENT OPERATION FROM MAIN LINE PAVING PAID AS ST./DR. APPROACH.

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\DETAILS.dgn 03/18/2011 7:50:01 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: *[Date]* LICENSE NO. 40416

DRAWN BY KPR DATE 1/21/2011
 DESIGN BY KPR DATE 1/21/2011
 CHECKED BY JO DATE

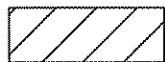


ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

MISCELLANEOUS DETAILS
 Sheet 8 of 22 Sheets

RECLAIM AREA



DRIVEWAYS AND APPROACHES



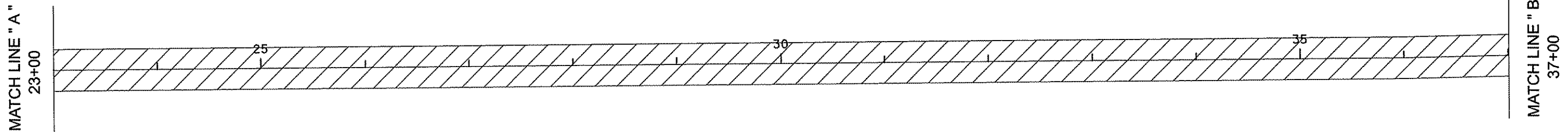
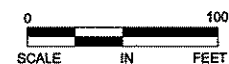
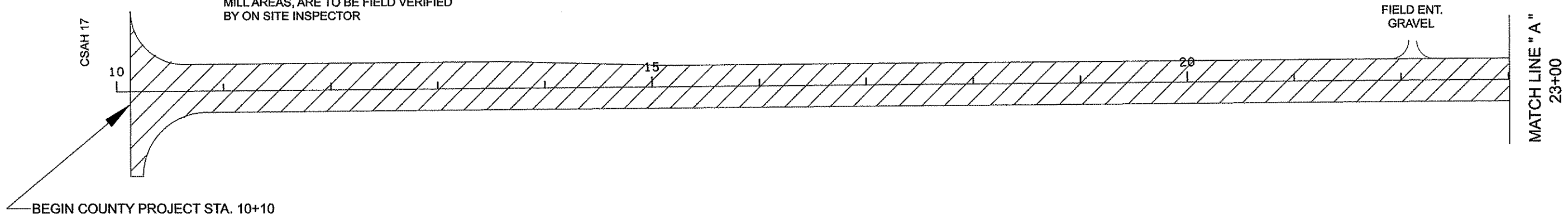
EXTRA WIDTH FOR BYPASS AND TURN LANE CONSTRUCTION



MILL JOINT LOCATION



*NOTE: ALL MILL JOINT LOCATIONS AND MILL AREAS, ARE TO BE FIELD VERIFIED BY ON SITE INSPECTOR



1 OF 6

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\plan.dgn 03/18/2011 8:01:54 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.

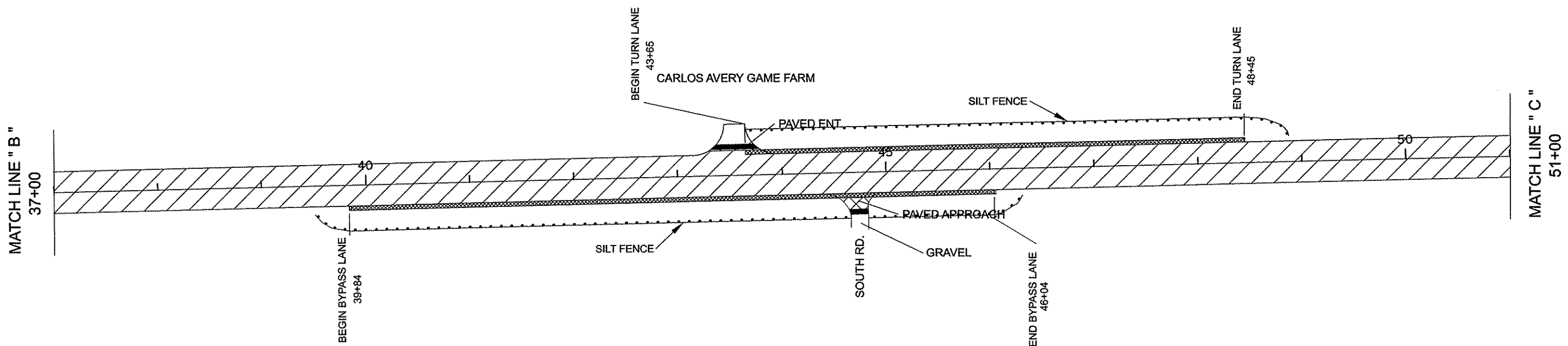
PRINT NAME: CHARLES CADEN HEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/21/11
 DESIGN BY: KPR DATE: 1/21/11
 CHECKED BY: JO DATE: _____

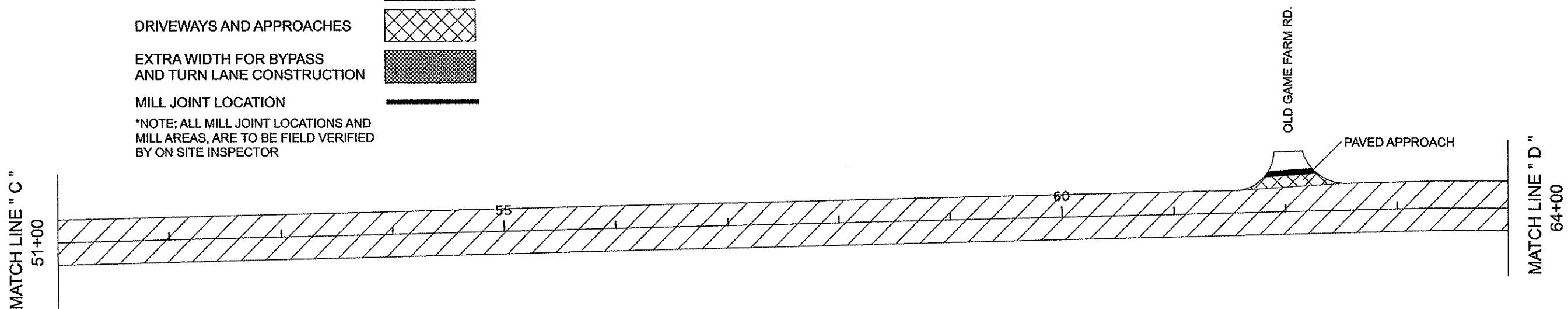


STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CONSTRUCTION PLAN
 STA 10+10 TO 37+00
 Sheet 9 of 22 Sheets



- RECLAIM AREA
 - DRIVEWAYS AND APPROACHES
 - EXTRA WIDTH FOR BYPASS AND TURN LANE CONSTRUCTION
 - MILL JOINT LOCATION
- *NOTE: ALL MILL JOINT LOCATIONS AND MILL AREAS, ARE TO BE FIELD VERIFIED BY ON SITE INSPECTOR



NO	DATE	BY	CRD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\plan.dgn 03/18/2011 8:02:46 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: CHARLES GADENHEAD
 SIGNATURE:
 DATE: 9/8/11 LICENSE NO. 48416

DRAWN BY: KPR DATE: 1/21/11
 DESIGN BY: KPR DATE: 1/21/11
 CHECKED BY: JO DATE: _____



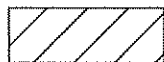
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CONSTRUCTION PLAN
 STA 37+00 TO 64+00
 Sheet 10 of 22 Sheets

MATCH LINE "D"
64+00

MATCH LINE "E"
78+00

RECLAIM AREA



DRIVEWAYS AND APPROACHES



EXTRA WIDTH FOR BYPASS
AND TURN LANE CONSTRUCTION



MILL JOINT LOCATION



*NOTE: ALL MILL JOINT LOCATIONS AND
MILL AREAS, ARE TO BE FIELD VERIFIED
BY ON SITE INSPECTOR



MATCH LINE "E"
78+00

MATCH LINE "F"
92+00



3 OF 6

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\plan.dgn 03/18/2011 8:03:18 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: CHALES CADENHEAD

SIGNATURE: *Chales Cadenhead*

DATE: 4/8/11 LICENSE NO. 40116

DRAWN BY: KPR DATE: 1/21/11

DESIGN BY: KPR DATE: 1/21/11

CHECKED BY: JO DATE:



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

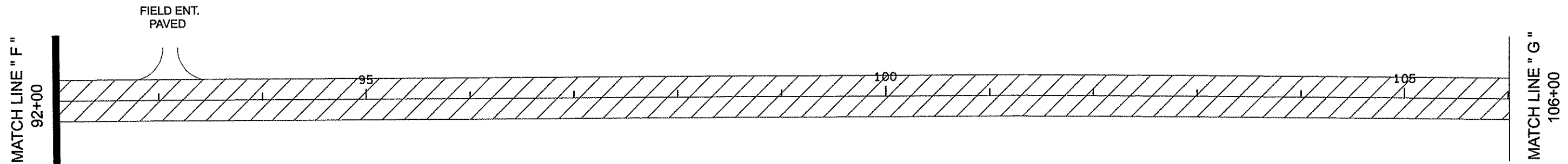
CITY PROJECT NO. _____

COUNTY PROJECT NO. 11-15-18

CONSTRUCTION PLAN

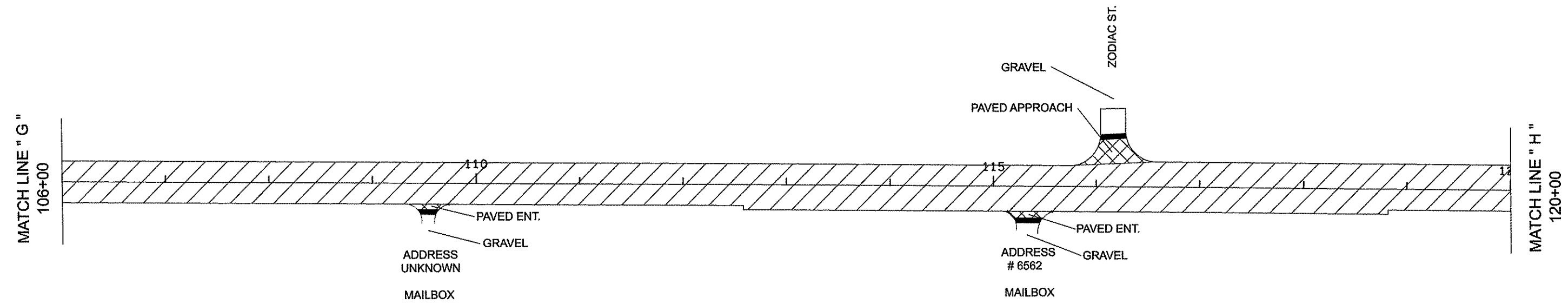
STA 64+00 TO 92+00

Sheet 11 of 22 Sheets



- RECLAIM AREA
- DRIVEWAYS AND APPROACHES
- EXTRA WIDTH FOR BYPASS AND TURN LANE CONSTRUCTION
- MILL JOINT LOCATION

*NOTE: ALL MILL JOINT LOCATIONS AND MILL AREAS, ARE TO BE FIELD VERIFIED BY ON SITE INSPECTOR



4 OF 6



NO	DATE	BY	CHKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plantplan.dgn 04/05/2011 3:27:55 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: CHARLES CADENHEAD
 SIGNATURE:
 DATE: 4/8/11 LICENSE NO. 40416

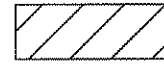
DRAWN BY: KPR DATE: 1/21/11
 DESIGN BY: KPR DATE: 1/21/11
 CHECKED BY: JO DATE: _____



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CONSTRUCTION PLAN
 STA 92+00 TO 120+00
 Sheet 12 of 22 Sheets

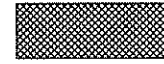
RECLAIM AREA



DRIVEWAYS AND APPROACHES



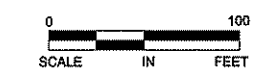
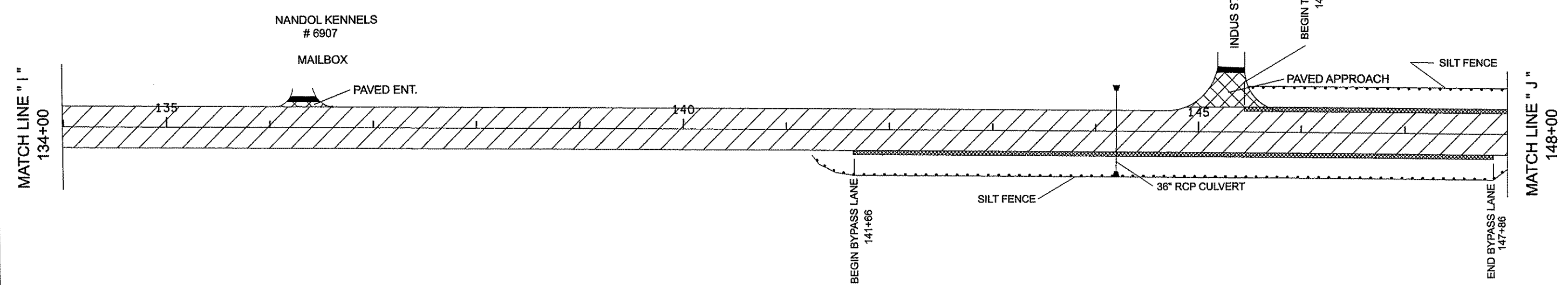
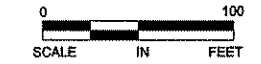
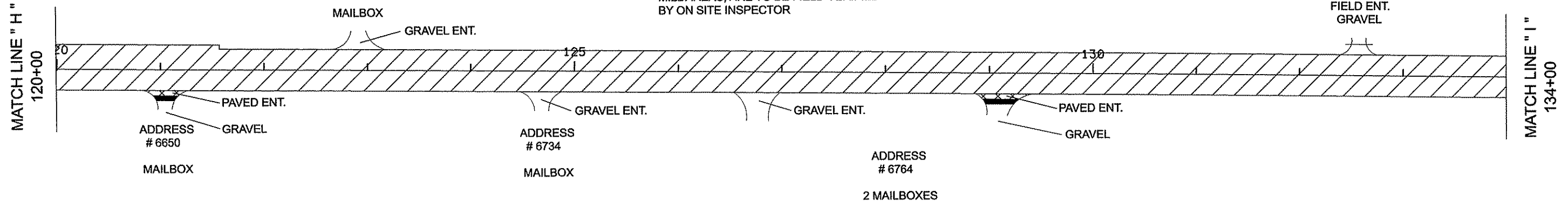
EXTRA WIDTH FOR BYPASS AND TURN LANE CONSTRUCTION



MILL JOINT LOCATION



*NOTE: ALL MILL JOINT LOCATIONS AND MILL AREAS, ARE TO BE FIELD VERIFIED BY ON SITE INSPECTOR



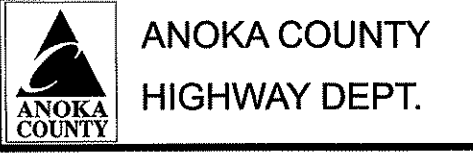
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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

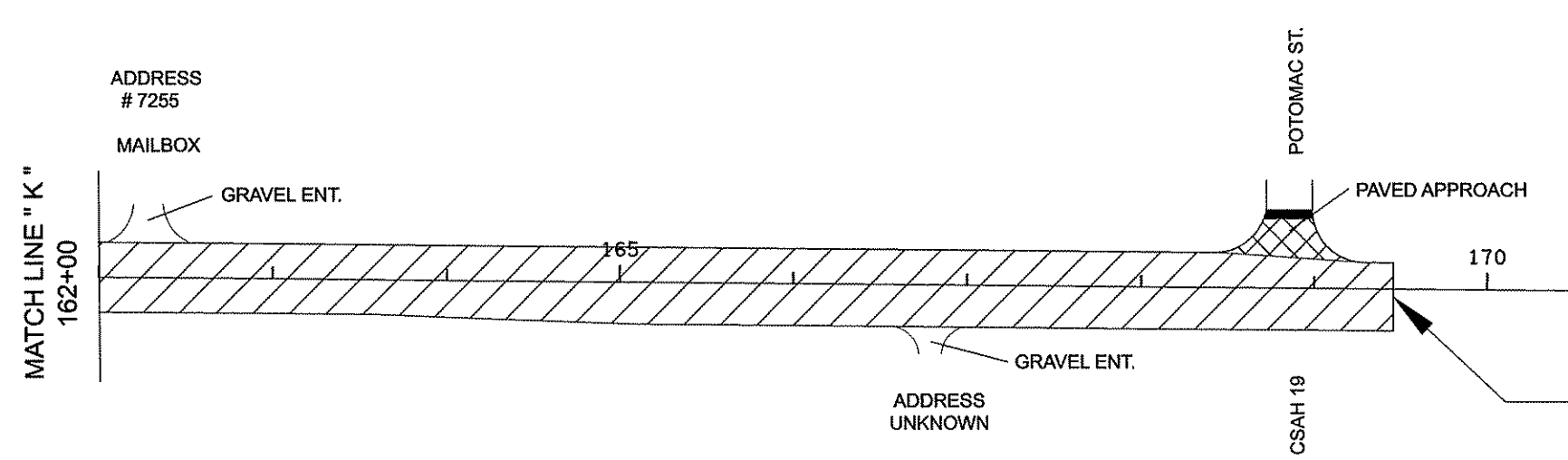
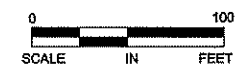
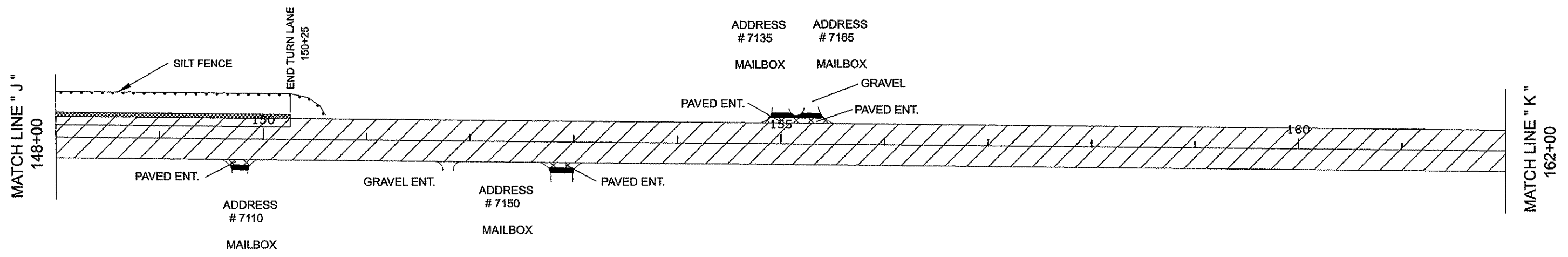
PRINT NAME: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/21/11
 DESIGN BY: KPR DATE: 1/21/11
 CHECKED BY: JO DATE:



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CONSTRUCTION PLAN
 STA 120+00 TO 148+00
 Sheet 13 of 22 Sheets



- RECLAIM AREA
 - DRIVEWAYS AND APPROACHES
 - EXTRA WIDTH FOR BYPASS AND TURN LANE CONSTRUCTION
 - MILL JOINT LOCATION
- *NOTE: ALL MILL JOINT LOCATIONS AND MILL AREAS, ARE TO BE FIELD VERIFIED BY ON SITE INSPECTOR



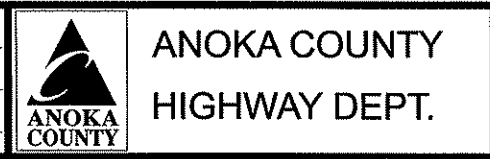
NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\10-01-00\CSAH_18_(17-19)\Plan\plan.dgn 03/18/2011 8:05:08 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.

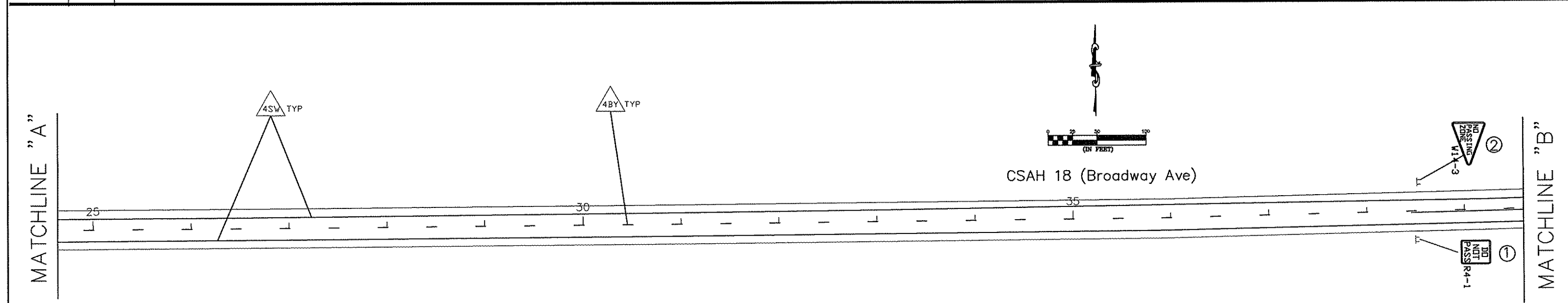
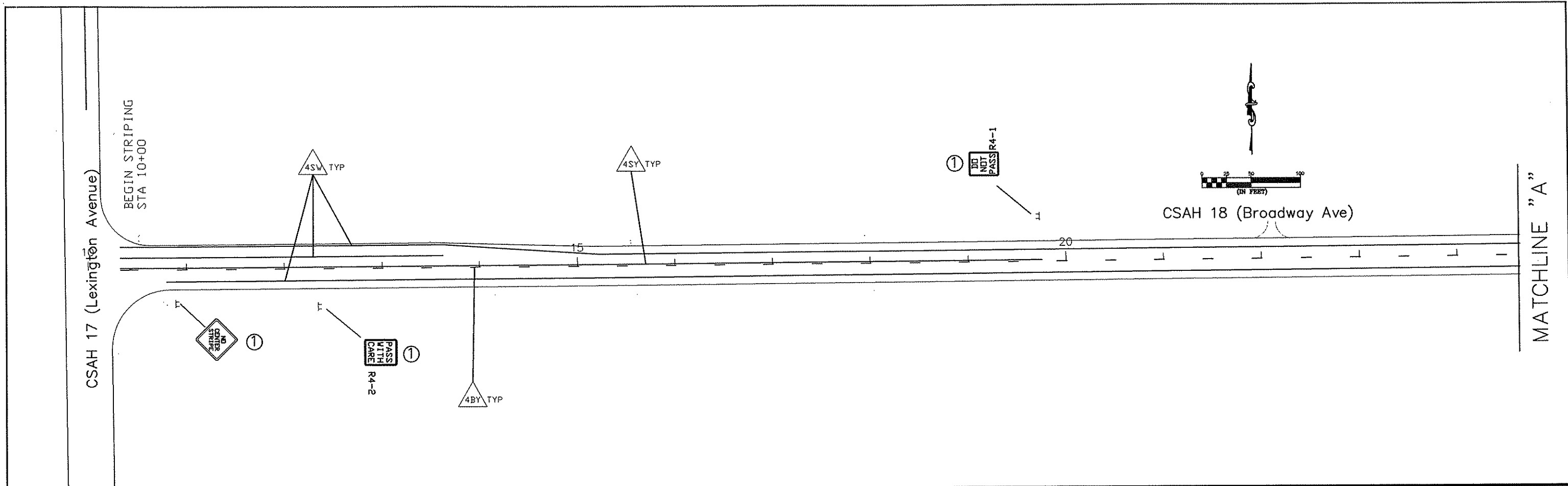
PRINT NAME: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: KPR DATE: 1/21/11
 DESIGN BY: KPR DATE: 1/21/11
 CHECKED BY: JO DATE:



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CONSTRUCTION PLAN
 STA 148+00 TO 169+50
 Sheet 14 of 22 Sheets



- NOTES:
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
 2. LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
 4. ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
 5. ALL PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.

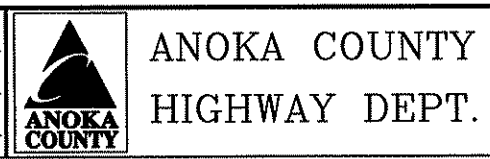
NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\Traffic\dwg\CSAH 18 (Crosstown Blvd)\11-15-18.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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 03/01/11 LICENSE NO. 40446

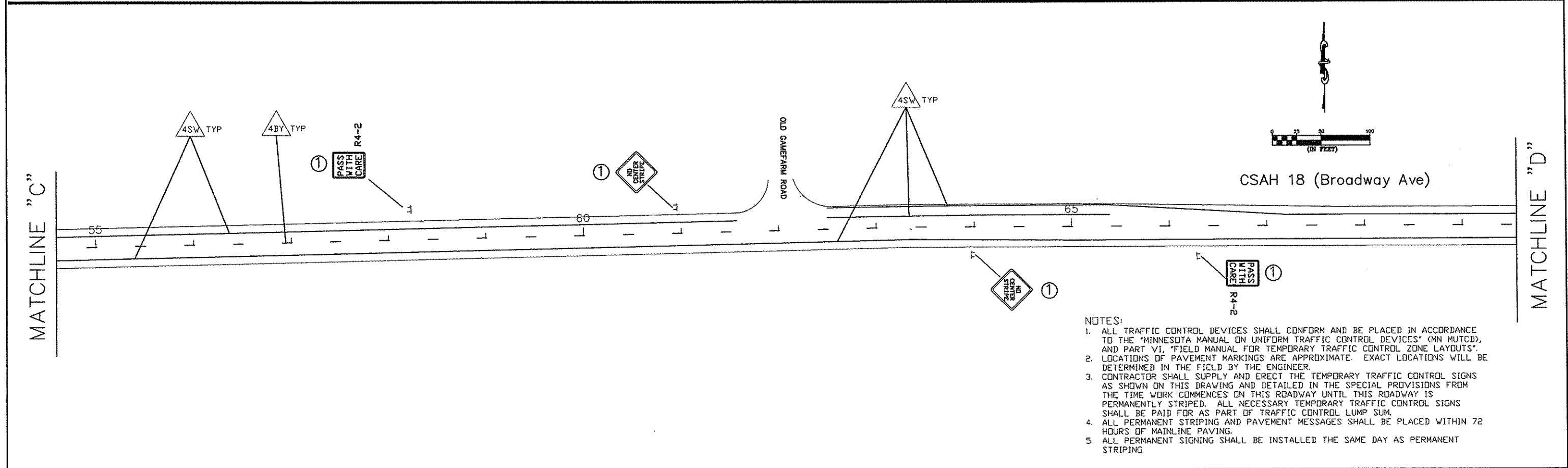
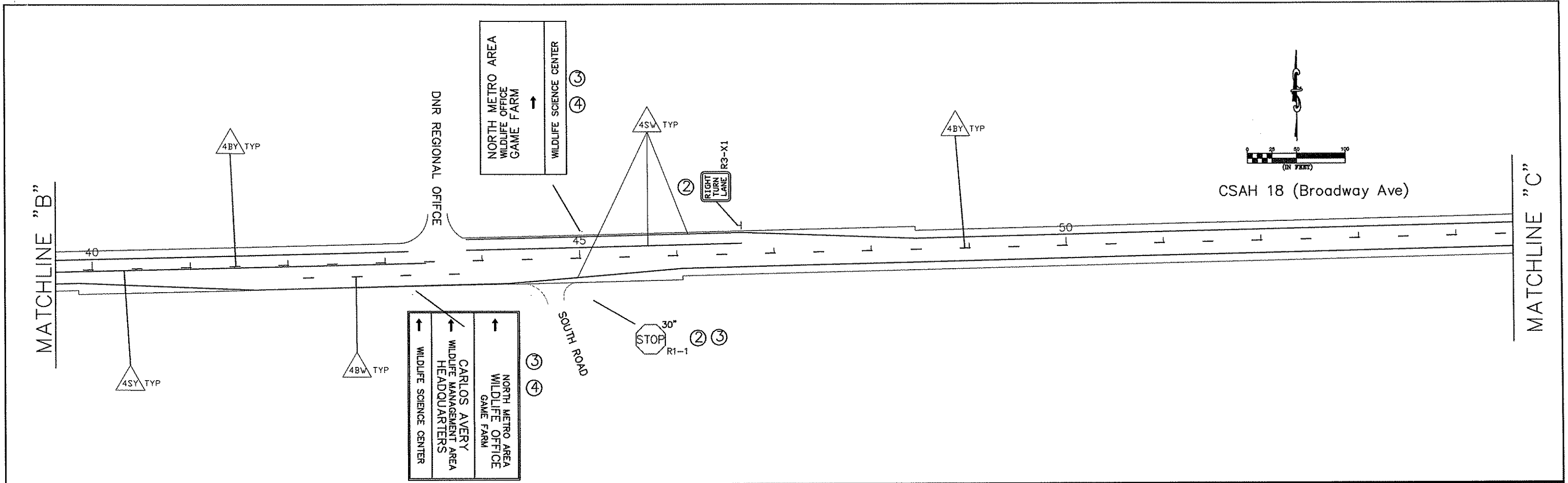
DRAWN BY: MTH DATE 03/01/11
 DESIGN BY: MTH DATE 01/20/11
 CHECKED BY: JR DATE 03/01/11



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CSAH 18 (BROADWAY AVE))
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

Sheet 15 of 22 Sheets



- NOTES:
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE 'MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (MNM MUTCD), AND PART VI, 'FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS'.
 2. LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
 4. ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
 5. ALL PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.

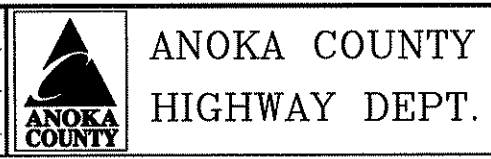
NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\Traffic\dwg\CSAH 18 (Crosstown Blvd)\11-15-18.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: CHARLES CADENHEAD
 SIGNATURE: *Charles Cadenhead*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: MTH DATE 03/01/11
 DESIGN BY: MTH DATE 01/20/11
 CHECKED BY: JIR DATE 03/01/11



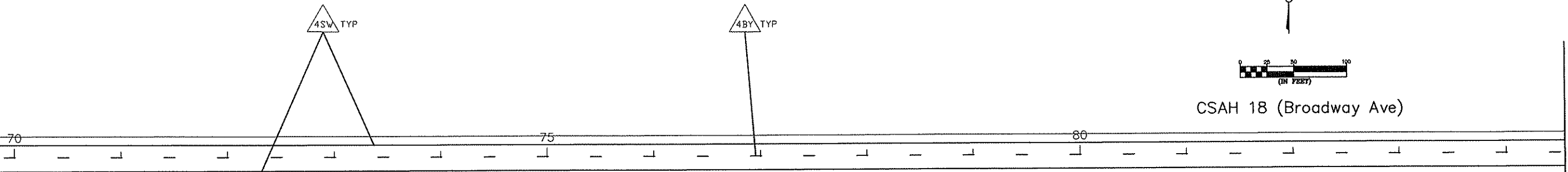
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CSAH 18 (BROADWAY AVE))
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

Sheet 16 of 22 Sheets

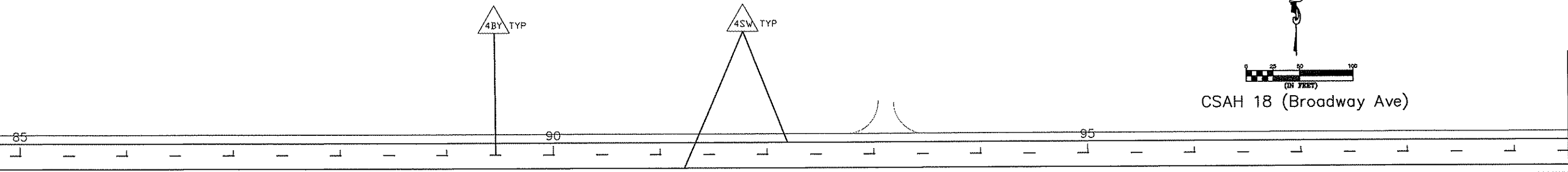
MATCHLINE "D"

MATCHLINE "E"



MATCHLINE "E"

MATCHLINE "F"



- NOTES:
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE 'MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (MN MUTCD), AND PART VI, 'FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS'.
 2. LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
 4. ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
 5. ALL PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.

NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\Traffic\dwg\CSAH 18 (Crosstown Blvd)\11-15-18.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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: *[Date]* LICENSE NO. 40116

DRAWN BY: MTH DATE 03/01/11
 DESIGN BY: MTH DATE 01/20/11
 CHECKED BY: JR DATE 03/01/11

ANOKA COUNTY
HIGHWAY DEPT.

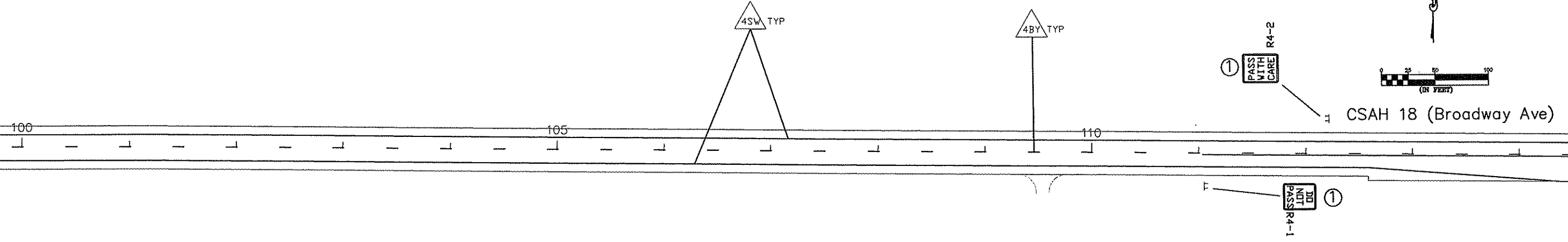
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

CSAH 18 (BROADWAY AVE))
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

Sheet 17 of 22 Sheets

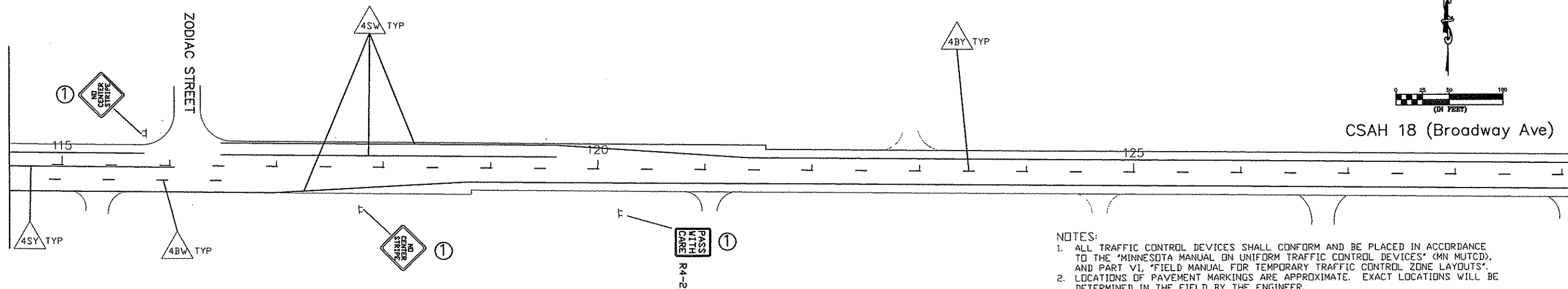
MATCHLINE "F"

MATCHLINE "G"



MATCHLINE "G"

MATCHLINE "H"



NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
2. LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
4. ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
5. ALL PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING

NO	DATE	BY	CHKD	APPR	REVISION

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PRINT NAME: CHARLES CADENHEAD
 SIGNATURE: *Charles Cadenhead*
 DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: MTH DATE 03/01/11
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ANOKA COUNTY
HIGHWAY DEPT.

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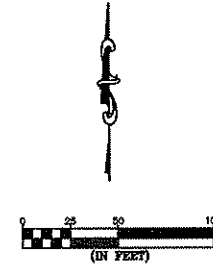
CSAH 18 (BROADWAY AVE))
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

Sheet 18 of 22 Sheets

MATCHLINE "H"

CSAH 18 (Broadway Ave)

MATCHLINE "I"

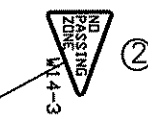


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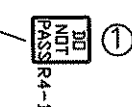
135

140

4BY TYP



②



①

4SY TYP

MATCHLINE "I"

INDUS STREET

4SW TYP



②

4BY TYP

145

150

155

4BW TYP

MATCHLINE "J"

NOTES:

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3. CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
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NO	DATE	BY	CHKD	APPR	REVISION

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PRINT NAME: CHARLES CADENHEAD

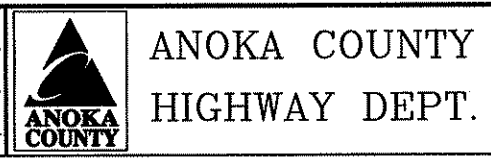
SIGNATURE: *[Signature]*

DATE: 4/8/11 LICENSE NO. 40416

DRAWN BY: MTH DATE 03/01/11.

DESIGN BY: MTH DATE 01/20/11.

CHECKED BY: JR DATE 03/01/11.



STATE PROJECT NO. _____

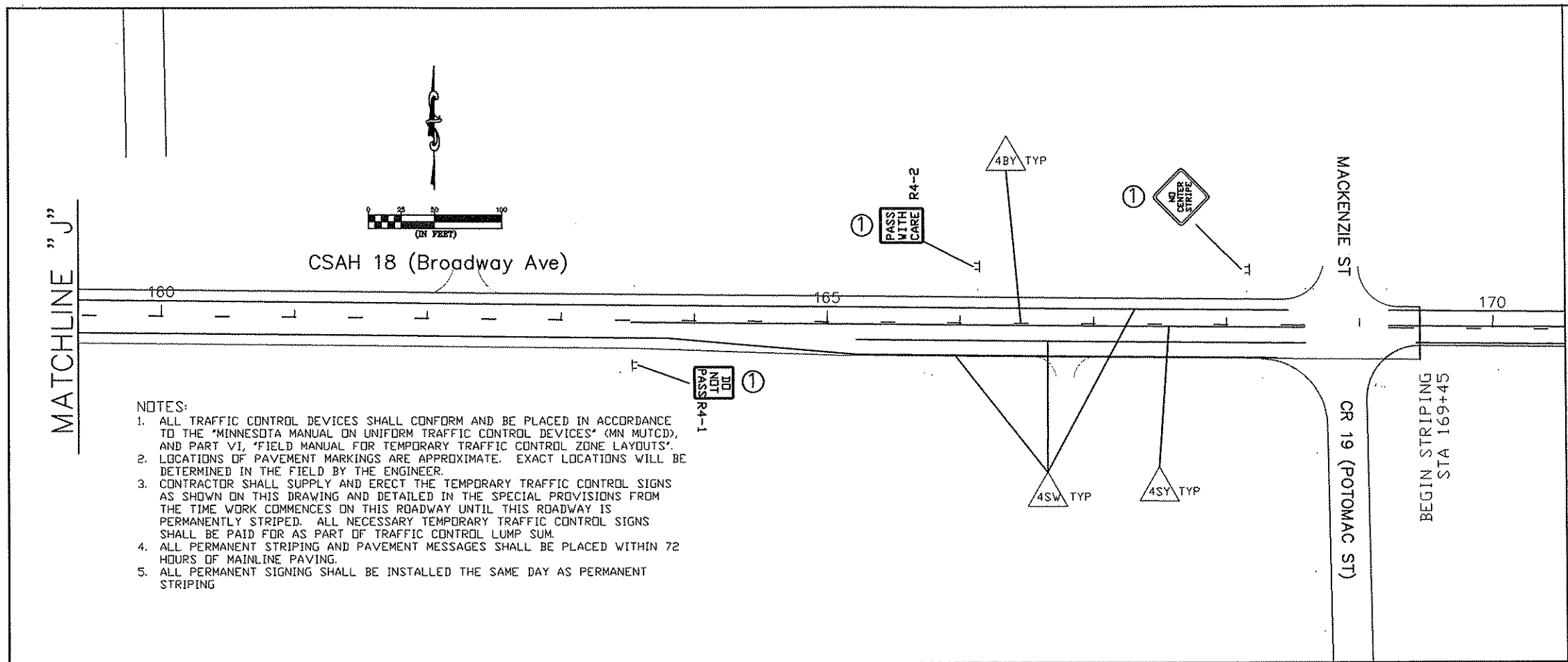
STATE AID PROJECT NO. _____

CITY PROJECT NO. _____

COUNTY PROJECT NO. 11-15-18

CSAH 18 (BROADWAY AVE))
TEMPORARY SIGNING
PERMANENT SIGNING, STRIPING
AND PAVEMENT MESSAGES

Sheet 19 of 22 Sheets



- NOTES:
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
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PERMANENT SIGNS
SIGN PANELS TYPE C

M. U. T. C. D. CODE	SIZE	PANEL AREA FT. ²	INSERT	QUANTITY		MOUNTING HEIGHT (to pavement base) FT.
				No.	POST	
R3-X1	24" x 30"	5.00	RIGHT TURN LANE	2	1	7.0'
W14-3	36" x 48"	11.125	NO PASSING ZONE	2	2	7.0'
TOTAL PANEL AREA		32.25				

TEMPORARY TRAFFIC CONTROL SIGNS

M. U. T. C. D. CODE	SIZE	PANEL AREA FT. ²	INSERT	QUANTITY		MOUNTING HEIGHT (to pavement base) FT.
				No.	POST	
WB-12	48" x 48"	16.00	NO CENTER STRIPE	6	2	7.0'
R4-1	24" x 30"	5.00	DO NOT PASS R4-1	3	1	7.0'
R4-2	24" x 30"	5.00	PASS WITH CARE R4-2	6	1	7.0'
WB-1A	48" x 48"	16.00	BUMP AHEAD	AS NEEDED		
WB-1A	48" x 48"	16.00	BUMP	AS NEEDED		
WB-8	48" x 48"	16.00	ROUGH ROAD	AS NEEDED		
WB-11	48" x 48"	16.00	UNEVEN LANES	AS NEEDED		

Item	Quantity	Units
4" Double Yellow Striping	0	Lin Ft
4" Solid Yellow Striping	2942	Lin Ft
4" Broken Yellow Striping	3170	Lin Ft
4" Solid White Striping	18884	Lin Ft
4" Broken White Striping	120	Lin Ft
24" Yellow Thermoplastic	0	Lin Ft
24" White Thermoplastic	0	Lin Ft
3'x6' Zebra Crosswalk Thermoplastic	0	SQ. FT
Right Turn Arrow Thermoplastic	0	Each
Left Turn Arrow Thermoplastic	0	Each
Thru/Right Turn Arrow Thermoplastic	0	Each
Thru Arrow Thermoplastic	0	Each

	4' SOLID LINE DOUBLE YELLOW PAINT		PAVEMENT MESSAGE RIGHT
	4' SOLID LINE YELLOW PAINT		PAVEMENT MESSAGE LEFT
	4' BROKEN LINE YELLOW PAINT		PAVEMENT MESSAGE THRU/RIGHT
	4' SOLID LINE WHITE PAINT		PAVEMENT MESSAGE THRU
	4' BROKEN LINE WHITE PAINT	SEE SPECIAL PROVISIONS	
	24" YELLOW PERMANENT PAVEMENT MESSAGE	①	TEMPORARY TRAFFIC CONTROL SIGN
	24" WHITE PERMANENT PAVEMENT MESSAGE	②	F & I PERMANENT SIGN
	3' x 6' ZEBRA CROSSWALK	③	SALVAGE PERMANENT SIGN
		④	RE-INSTALL PERMANENT SIGN

NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\Traffic\dwg\CSAH 18 (Crosstown Blvd)\11-15-18.dwg

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PRINT NAME: CHARLES CADENHEAD
 SIGNATURE:
 DATE: 4/8/11 LICENSE NO. 40416

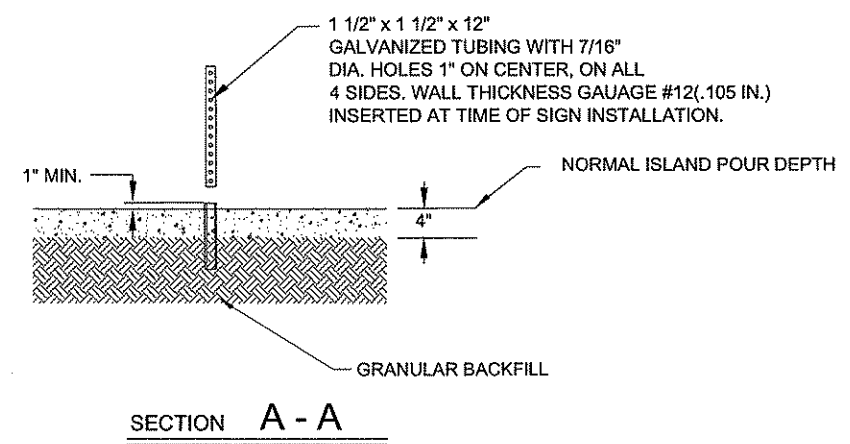
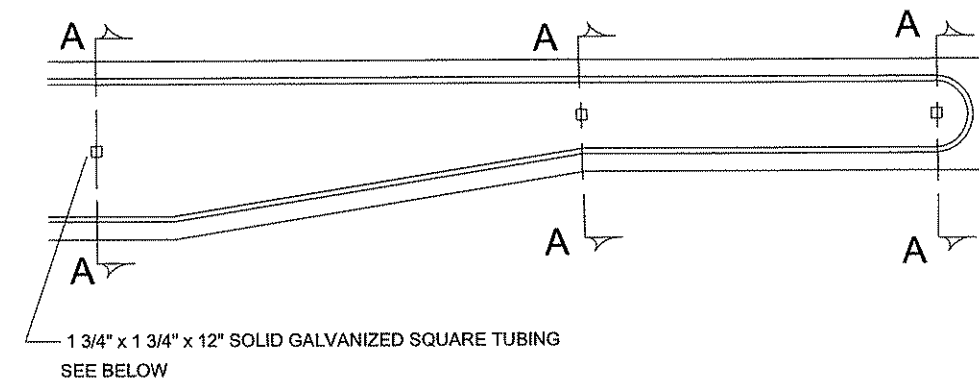
DRAWN BY: MTH DATE 03/01/11
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**ANOKA COUNTY
 HIGHWAY DEPT.**

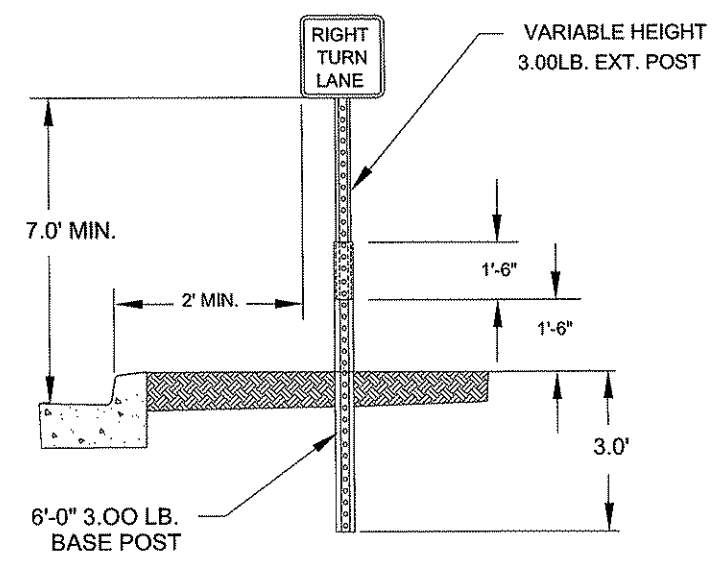
STATE PROJECT NO. _____
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CSAH 18 (BROADWAY AVE))
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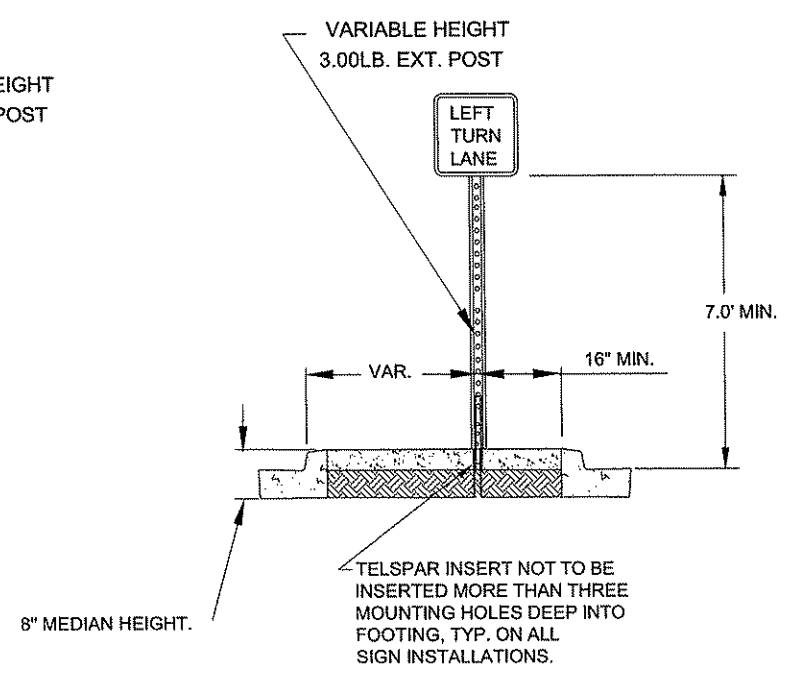
Sheet 20 of 22 Sheets



GROUND POST MOUNT SIGN
INSTALLATION TYPICAL



ISLAND MOUNT BREAK-AWAY SIGN
INSTALLATION TYPICAL



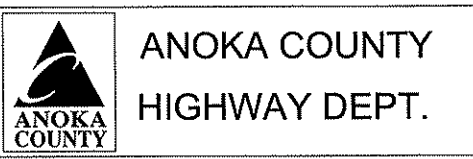
NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\Traffic\Dwg\CSAH 18 (Crosstown Blvd)\Sign&Stripe_Details.dwg

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PRINT NAME: **CHARLES CADENHEAD**
 SIGNATURE: *[Signature]*
 DATE: *1/21/11* LICENSE NO. 40416

DRAWN BY: MTH DATE: 1-21-11
 DESIGN BY: MTH DATE: 1-21-11
 CHECKED BY: JR DATE: 1-21-11

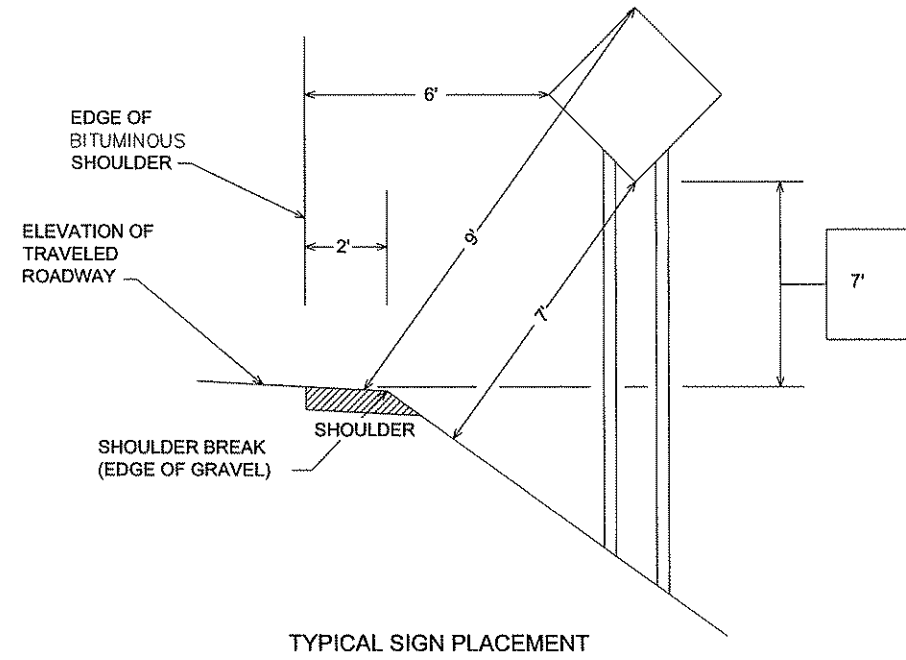


STATE PROJECT NO. _____
 STATE PROJECT NO. _____
 STATE PROJECT NO. _____
 COUNTY PROJECT NO. 11-15-18

SIGNING & STRIPING DETAILS

Sheet 21 of 22 Sheets

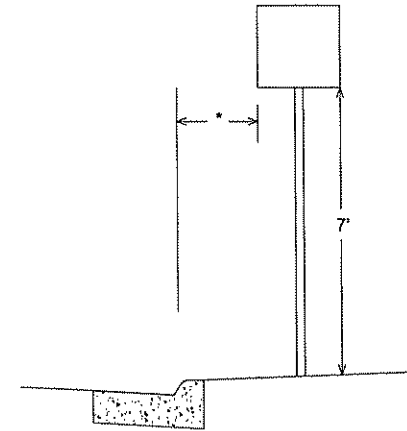
RURAL



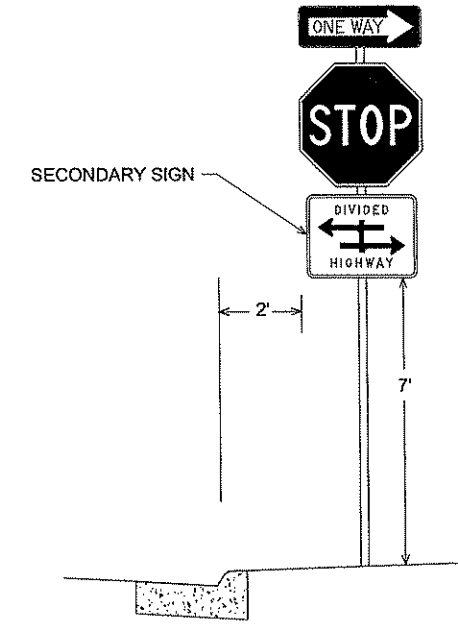
TYPICAL SIGN PLACEMENT

URBAN

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



TYPICAL SIGN PLACEMENT



NOTE:

- ALL DIMENSIONS ARE MINIMUMS
- MAINTAIN 2' CLEAR FROM SIGNS TO BITUMINOUS TRAIL

NO	DATE	BY	CHKD	APPR	REVISION

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ANOKA COUNTY
 HIGHWAY DEPT.

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SIGNING & STRIPING DETAILS
 Sheet 22 of 22 Sheets