

MINNESOTA DEPARTMENT OF TRANSPORTATION ANOKA COUNTY

CONSTRUCTION PLAN FOR BITUMINOUS RECLAMATION AND OVERLAY, CONSTRUCT RIGHT TURN LANES AND BY-PASS LANES

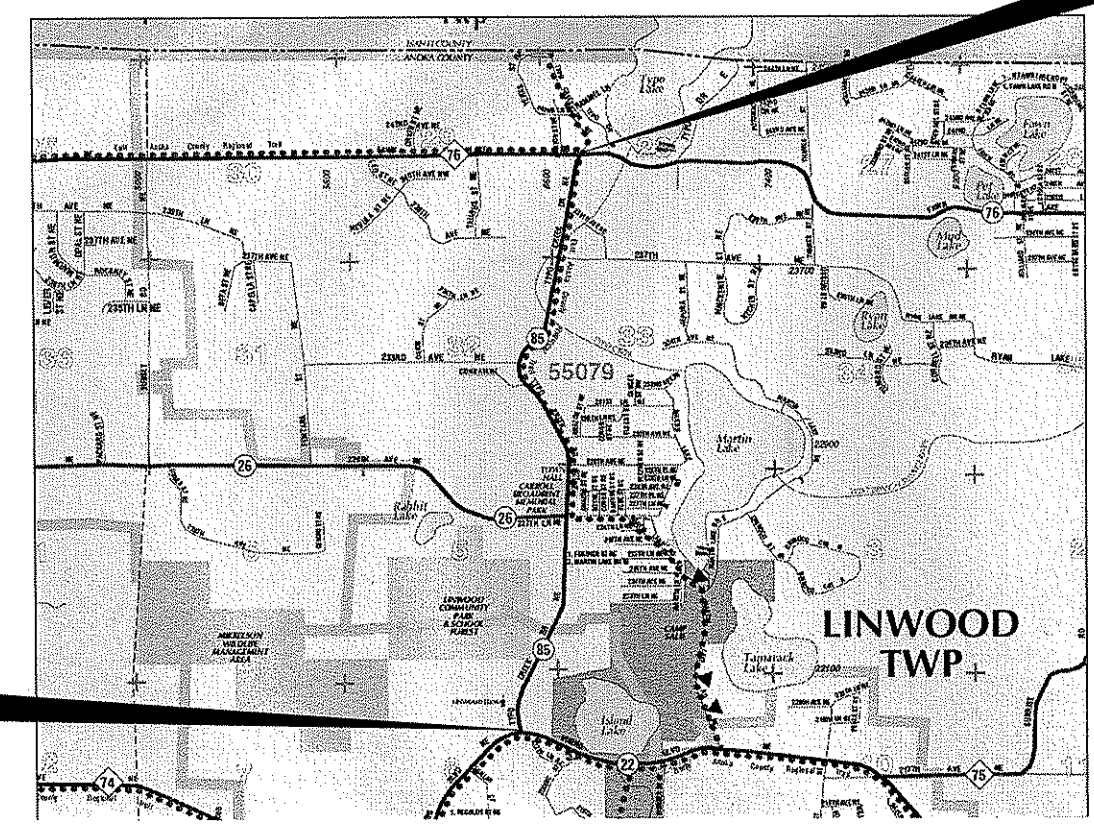
LOCATED ON C.S.A.H. 85 BETWEEN C.S.A.H. 22 AND C.S.A.H. 76

COUNTY PROJ. NO. 11-25-85

C.S.A.H. 85

| | | |
|-------------------|------------|-------------|
| GROSS LENGTH | 15781 FEET | 2.989 MILES |
| BRIDGES-LENGTH | 0.00 FEET | 0.000 MILES |
| EXCEPTIONS-LENGTH | 0.00 FEET | 0.000 MILES |
| NET LENGTH | 15781 FEET | 2.989 MILES |

END C.P. 11-25-85
C.S.A.H. 85 STA. 167+40



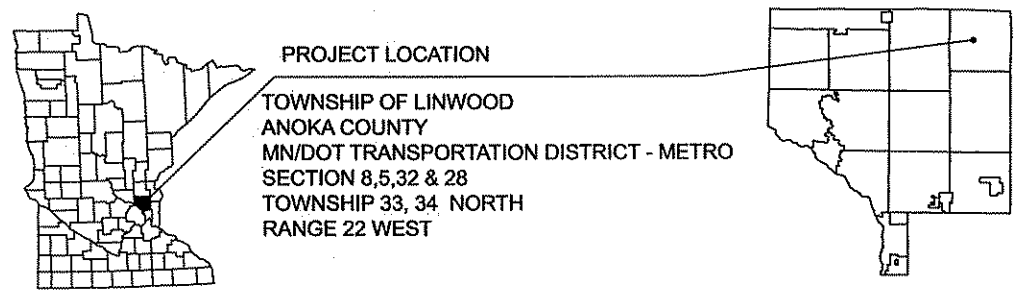
BEGIN C.P. 11-25-85
C.S.A.H. 85 STA. 9+59

TOWNSHIP OF
LINWOOD

THIS PLAN CONTAINS 22 SHEETS
DESIGN DESIGNATION

| | |
|----------------------------------|------------------|
| ESAL 20 | 000 |
| R VALUE | 000 |
| ADT (2006) = | 1729 |
| Proj. ADT (2026) = | 2420 |
| Proj. HCADT (2026) = | 2420 |
| Soil Factor | NA |
| 10 TON DESIGN | |
| Functional Classification | B MINOR ARTERIAL |
| No. of Traffic Lanes | <u>2</u> |
| No. of Parking Lanes | <u>0</u> |
| Design Speed | 50/55 MPH N/A |
| Based on Stopping Sight Distance | N/A |
| Height of eye | 3.5' |
| Height of object | 2.0' |
| Design Speed not achieved at: | N/A |
| STA. 9+59 TO STA. 167+40 | MPH 50/55 |

- ### 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
- PLAN: 0' to 100'
- PROFILE HORIZONTAL: 0' to 100'
- VERTICAL: 0' to 10'
- X-SECTIONS HORIZONTAL: 0' to 10'
- VERTICAL: 0' to 10'



| NO | DATE | BY | CKD | APPR | REVISION |
|---|------|----|-----|------|----------|
| | | | | | |
| NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\TITLE_SHEET.dgn 03/05/2012 10:28:57 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 CABENHEAD
SIGNATURE: *[Signature]*
DATE: 3/5/12 LICENSE NO. 40416

DRAWN BY: CSO DATE: 2/18/2011
DESIGN BY: CSO DATE: 2/18/2011
CHECKED BY: JO DATE: _____

**ANOKA COUNTY
HIGHWAY DEPT.**

STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
CITY PROJECT NO. _____
COUNTY PROJECT NO. 11-25-85

TITLE SHEET

Sheet 1 of 22 Sheets

Approved: *[Signature]* 3/5/2012
ANOKA COUNTY ENGINEER

STATEMENT OF ESTIMATED QUANTITIES

| ITEM NO. | ITEM | NOTES | UNIT | TOTAL EST. QUANT. |
|----------|--|--------|----------|-------------------|
| 2011.601 | CONSTRUCTION SURVEY | | LUMP SUM | |
| 2021.501 | MOBILIZATION | | LUMP SUM | 1 |
| 2104.501 | REMOVE PIPE CULVERTS | 15, 16 | LIN FT | 96 |
| 2104.503 | REMOVE CONCRETE DRIVEWAY PAVEMENT | 11 | SQ FT | 435 |
| 2104.503 | REMOVE BITUMINOUS DRIVEWAY PAVEMENT | 11 | SQ FT | 427 |
| 2104.511 | SAWING CONCRETE PAVEMENT (FULL DEPTH) | | LIN FT | 14 |
| 2104.513 | SAWING BITUMINOUS PAVEMENT (FULL DEPTH) | | LIN FT | 317 |
| 2104.523 | SALVAGE SIGN TYPE C | | EACH | 28 |
| 2104.523 | SALVAGE SIGN TYPE D | | EACH | 3 |
| 2105.525 | TOPSOIL BORROW (LV) | 5 | CU YD | 193 |
| 2105.602 | CONSTRUCT TURN LANE | 12 | EACH | 9 |
| 2105.602 | CONSTRUCT BYPASS LANE | 12 | EACH | 5 |
| 2123.503 | MOTOR GRADER | 13 | HOUR | 10 |
| 2130.501 | WATER | 14 | M-GAL | 168 |
| 2211.501 | AGGREGATE BASE CLASS 5 | 10, 9 | TON | 2806 |
| 2221.501 | AGGREGATE SHOULDERING CLASS 5 | 9 | TON | 526 |
| 2232.501 | MILL BITUMINOUS SURFACE (2.0") | | SQ YD | 300 |
| 2331.604 | BITUMINOUS PAVEMENT RECLIMATION | 2 | SQ YD | 70576 |
| 2357.502 | BITUMINOUS MATERIAL FOR TACK COAT | | GAL | 2777 |
| 2360.501 | TYPE SP 12.5 WEARING COURSE MIX (4,B) | 1,9,11 | TON | 243 |
| 2360.501 | TYPE SP 12.5 WEARING COURSE MIXTURE(4,B) | 18 | TON | 15172 |
| 2501.511 | 48" CS PIPE CULVERT | 16 | LIN FT | 52 |
| 2501.515 | 24" CS PIPE APRON | 16 | EACH | 2 |
| 2501.515 | 48" CS PIPE APRON | 16 | EACH | 2 |
| 2503.603 | 24" HDPE PIPE SEWER | 16 | LIN FT | 52 |
| 2511.501 | RANDOM RIPRAP CLASS II | 17 | CU YD | 25 |
| 2531.507 | 6" CONCRETE DRIVEWAY PAVEMENT | 11 | SQ YD | 17 |
| 2535.501 | BITUMINOUS CURB (MODIFIED) | 6,7 | LIN FT | 2630 |
| 2540.602 | INSTALL MAIL BOX SUPPORTS | | EACH | 59 |
| 2563.601 | TRAFFIC CONTROL | 3,4 | LUMP SUM | 1 |
| 2564.533 | FURNISH SIGN PANNEL TYPE C | | SQ FT | 177.25 |
| 2564.536 | INSTALL SIGN PANEL TYPE C | | EACH | 5 |
| 2564.536 | INSTALL SIGN PANEL TYPE D | | EACH | 3 |
| 2573.508 | BITUMINOUS LINED FLUME | 19 | SQ YD | 69 |
| 2575.523 | EROSION CONTROL BLANKET, CATEGORY 3 | 17 | SQ YD | 14 |
| 2575.571 | RAPID STABILIZATION METHOD 3 | 5 | M-GAL | 18 |
| 2581.501 | REMOVABLE PREFORMED PLASTIC MARKING | 8 | LIN FT | 1262 |
| 2582.502 | 4" SOLID LINE WHITE-EPOXY | 9 | LIN FT | 33441 |
| 2582.502 | 4" BROKEN LINE WHITE-EPOXY | 9 | LIN FT | 200 |
| 2582.502 | 4" SOLID LINE YELLOW - EPOXY | 9 | LIN FT | 1100 |
| 2582.502 | 4" BROKEN YELLOW LINE-EPOXY | 9 | LIN FT | 1180 |
| 2582.502 | 4" DOUBLE SOLID LINE YELLOW-EPOXY | 9 | LIN FT | 9626 |

NOTES:

- 1 USED FOR PAVING DRIVEWAYS AND STREET APPROACHES
- 2 ITEM INCLUDES THE REMOVAL OF BITUMINOUS CURB
- 3 ALL TRAFFIC CONTROL DEVICES AND METHODS SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL
- 4 ROAD WORK AHEAD, DO NOT PASS, PASS WITH CARE, NO CENTERLINE STRIPE, BUMP AND BUMP AHEAD SIGNS TO BE IN PLACE AT THE START OF RECLAIM AND OVERLAY OPERATIONS
- 5 ITEM FOR BEHIND BITUMINOUS CURB
- 6 SHALL BE INSTALLED WITH SAME OPERATION AS MAINLINE BITUMINOUS WEAR COURSE
- 7 BITUMINOUS TONS TO CREATE BIT CURB SHALL BE PAID UNDER 2360.501 WEARING COURSE MIX (4,E)
- 8 SHALL BE PLACED AFTER EACH DAYS PAVING OPERATION
- 9 SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING
- 10 ITEM INCLUDES ADDING CLASS 5 TO MAINLINE AT 112+00 TO 114+00 (FOR LEVELING PRIOR TO PAVING BASE COURSE), ALSO ADDING 2" TO SHOULDER AFTER MAINLINE BASE PAVING IS COMPLETE
- 11 CONTRACTORS RESPONSIBILITY TO CONTACT OWNER 48 HOURS BEFORE STARTING OPERATION
- 12 INCLUDES TIME AND MATERIAL TO CONSTRUCT ITEM. 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 (TAB F) NOTE -BITUMINOUS BASE AND WEAR COURSE IS NOT INCLUDED IN THIS ITEM
- 13 INCLUDES TIME TO REMOVE EXCESS RECLAIMED MATERIAL AT BEGINNING AND END OF RECLAIM AREAS TO MATCH EXISTING BITUMINOUS HEIGHT
- 14 FOR DUST CONTROL AT ENGINEERS REQUEST
- 15 INCLUDES APRON IN LENGTH
- 16 TO BE DONE UNDER TRAFFIC, PAID FOR UNDER TRAFFIC CONTROL
- 17 FLUMES
- 18 INCLUDES SAFETY EDGE CONSTRUCTION
- 19 AT END OF BITUMINOUS CURB, DOWN STREAM SIDE

BASIS OF PLANNED QUANTITIES

| ITEM NO. | | |
|----------|--|-------------------------------|
| 2357.502 | BITUMINOUS MATERIAL FOR TACK COAT | .05-GAL / SQ YD |
| 2360.501 | TYPE SP 12.5 WEARING COURSE MIX (4, B) | 115/SQ.YD./IN THICKNESS |
| 2211.501 | AGGREGATE BASE CLASS 5 | CU YDS * 1.8 = TONS |
| 2221.501 | AGGREGATE SHOULDERING CLASS 5 | CU YDS * 1.8 = TONS |
| 2581.501 | REMOVABLE PREFORMED PLASTIC MARKING | 2' AT 50' INTERVALS FOR SKIPS |

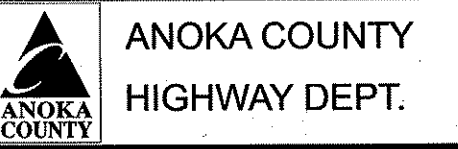
| NO | DATE | BY | CHKD | APPR | REVISION |
|----|------|----|------|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\SEQ.dgn 03/01/2012 11:07:37 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: 3/2/12 LICENSE NO. 40416

DRAWN BY CSO DATE 2/18/2011
 DESIGN BY CSO DATE 2/18/2011
 CHECKED BY JO DATE

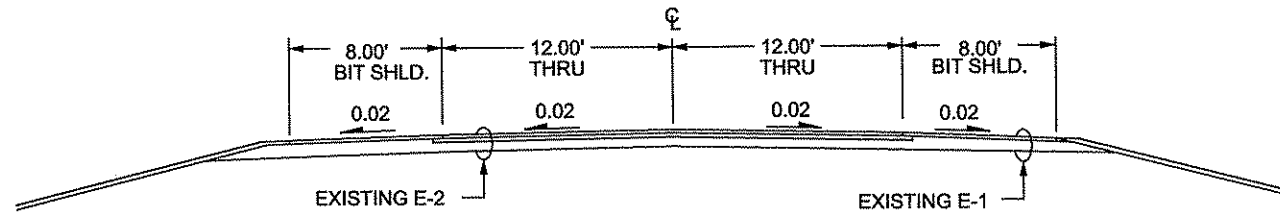


STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

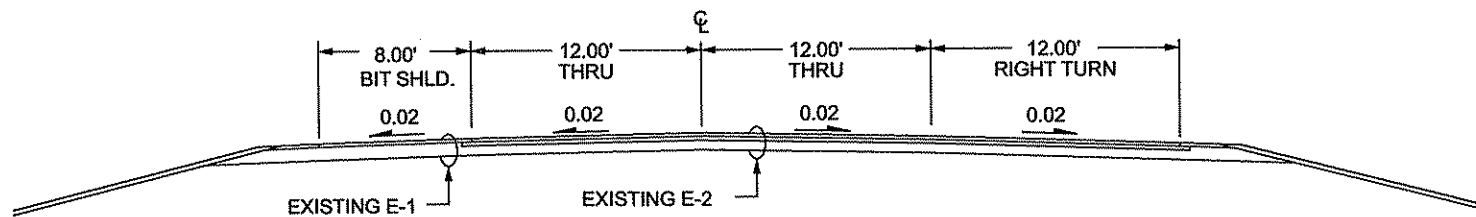
STATEMENT OF ESTIMATED QUANTITIES

Sheet 2 of 22 Sheets

C.S.A.H. 85
EXISTING TYPICAL SECTION
 STA. 14+39 - STA. 63+12
 STA. 68+00 - STA. 162+60

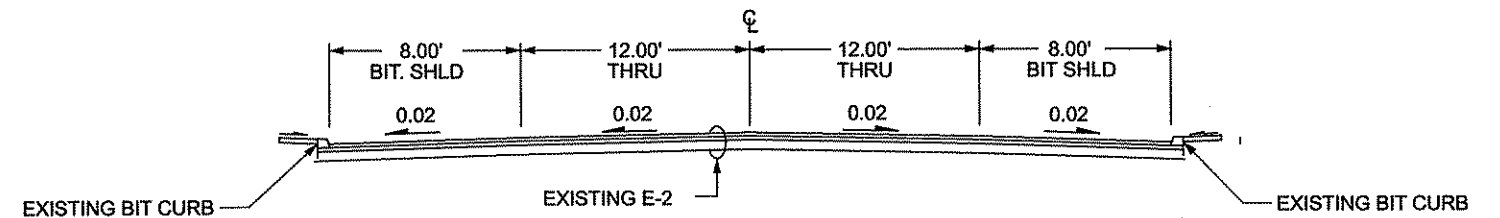


C.S.A.H. 85
EXISTING RIGHT TURN LANE
 STA. 9+59 - STA. 14+39
 STA. 63+12 - STA. 68+00
 STA. 162+60 - STA. 167+40

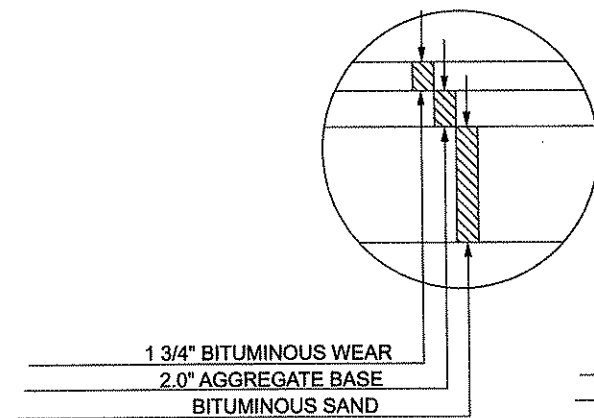


C.S.A.H. 85
EXISTING ROAD WITH BIT CURB

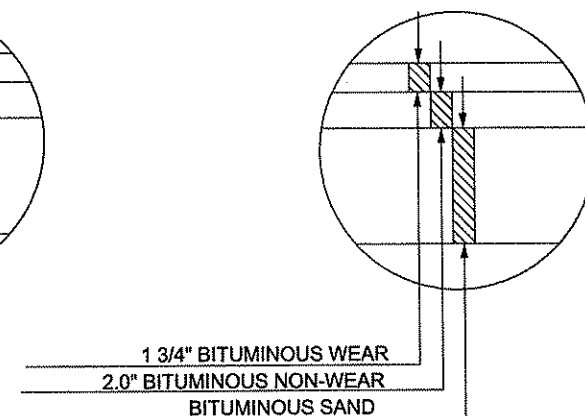
- STA. 56+50 - STA. 58+55 RT
- STA. 69+00 - STA. 72+82 LT
- STA. 75+75 - STA. 79+75 LT
- STA. 78+10 - STA. 78+95 RT
- STA. 79+35 - STA. 81+19 RT
- STA. 95+35 - STA. 96+35 RT
- STA. 96+67 - STA. 97+69 RT
- STA. 97+00 - STA. 98+53 LT
- STA. 123+56 - STA. 125+25 RT
- STA. 124+30 - STA. 125+44 LT
- STA. 125+65 - STA. 127+76 RT
- STA. 135+10 - STA. 137+65 LT



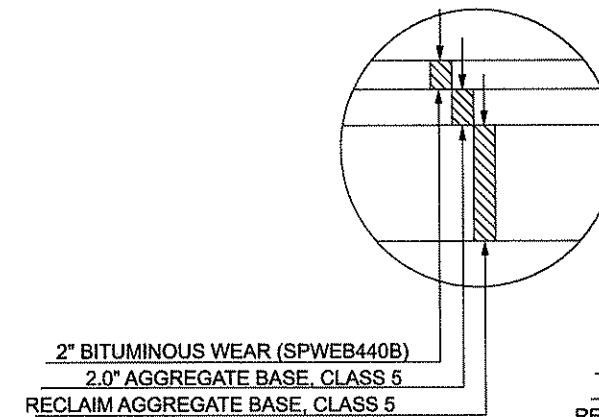
**EXISTING "E-1" SHOULDER
 PAVEMENT DESIGN**



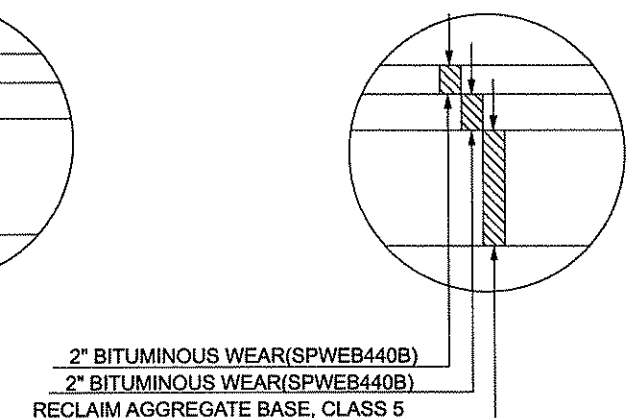
**EXISTING "E-2" MAINLINE
 PAVEMENT DESIGN**



**DESIGN "F-1" MAINLINE
 PAVEMENT DESIGN**



**DESIGN "F-2" MAINLINE
 PAVEMENT DESIGN**

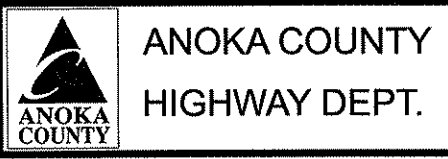


| NO | DATE | BY | CHKD | APPR | REVISION |
|----|------|----|------|------|----------|
| | | | | | |
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\TS.dgn 02/27/2012 12:54:57 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 CABENHEAD
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

DRAWN BY: CSO DATE: 2/18/2011
 DESIGN BY: CSO DATE: 2/18/2011
 CHECKED BY: JO DATE: _____

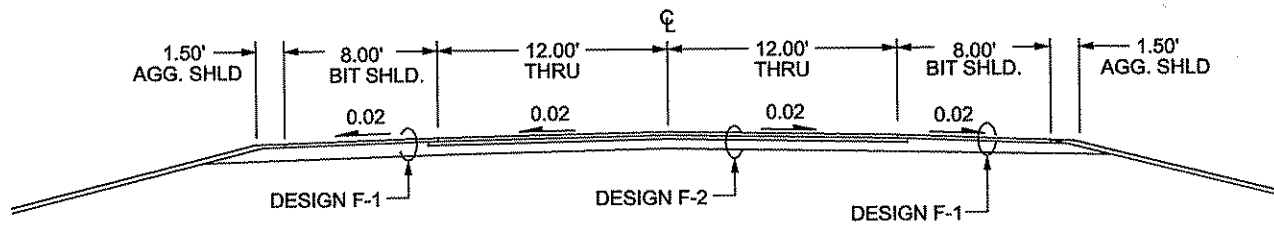


STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

C.S.A.H. 85
PROPOSED TYPICAL SECTION

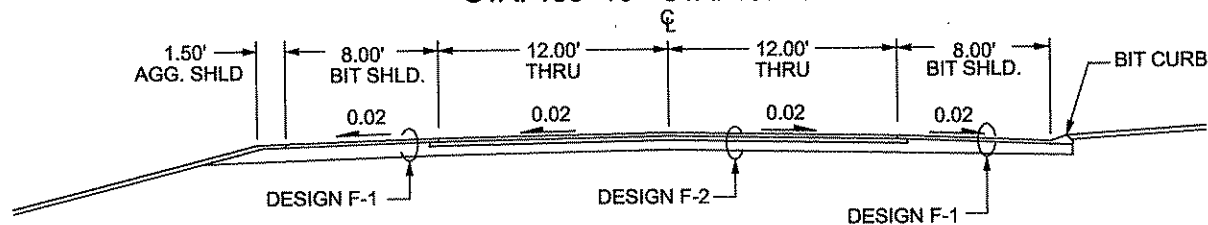
STA. 9+59 - STA. 167+40

EXCEPT: RIGHT TURN LANE, BY-PASS LANES & BIT. CURB SECTION



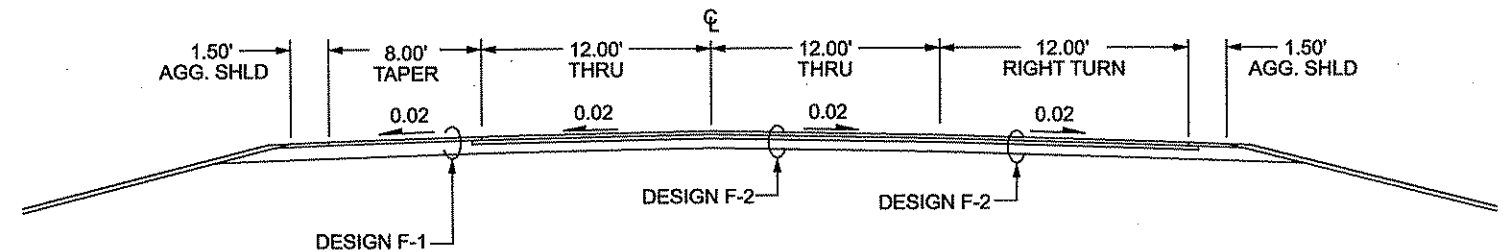
C.S.A.H. 85
PROPOSED BITUMINOUS CURB SECTION

- STA. 56+50 - STA. 58+55 RT
- STA. 69+00 - STA. 72+82 LT
- STA. 75+75 - STA. 79+75 LT
- STA. 78+10 - STA. 78+95 RT
- STA. 79+35 - STA. 81+19 RT
- STA. 95+35 - STA. 96+35 RT
- STA. 96+67 - STA. 97+69 RT
- STA. 97+00 - STA. 98+53 LT
- STA. 123+56 - STA. 125+25 RT
- STA. 124+30 - STA. 125+44 LT
- STA. 125+65 - STA. 127+76 RT
- STA. 135+10 - STA. 137+65 LT



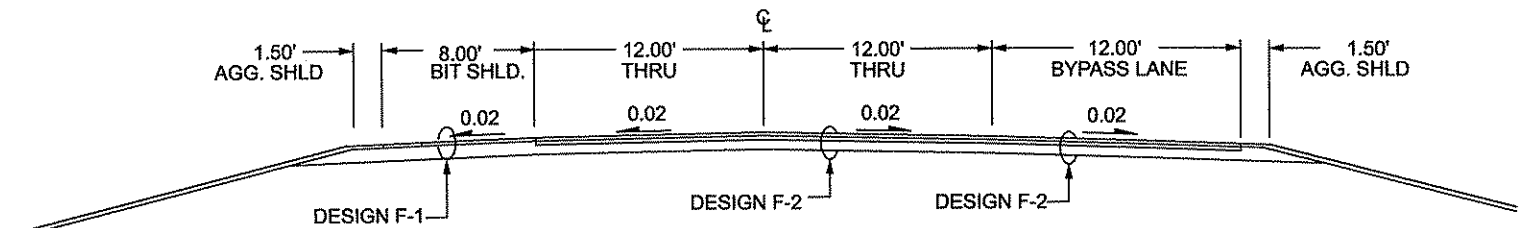
C.S.A.H. 85
PROPOSED TURN LANE SECTION

- STA. 9+59 - STA. 14+39
- STA. 16+24 - STA. 21+04
- STA. 68+30 - STA. 73+10
- STA. 63+12 - STA. 67+92
- STA. 76+67 - STA. 81+47
- STA. 82+64 - STA. 97+44
- STA. 104+93 - STA. 109+73
- STA. 109+91 - STA. 114+71
- STA. 123+56 - STA. 128+36
- STA. 135+37 - STA. 140+17
- STA. 151+80 - STA. 156+60
- STA. 162+60 - STA. 167+40



C.S.A.H. 85
PROPOSED BYPASS LANE SECTION

- STA. 12+44 - STA. 18+64
- STA. 85+04 - STA. 91+24
- STA. 107+22 - STA. 112+31
- STA. 125+96 - STA. 132+16
- STA. 148+00 - STA. 154+20



| NO | DATE | BY | CKD | APPR | REVISION |
|---|------|----|-----|------|----------|
| | | | | | |
| NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\TS.dgn | | | | | |
| 02/27/2012 12:55:02 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: CHARLES CABENHEAD
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

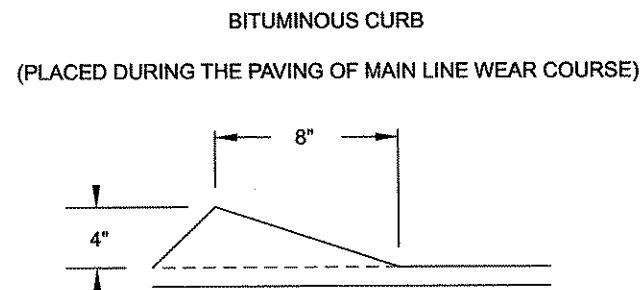
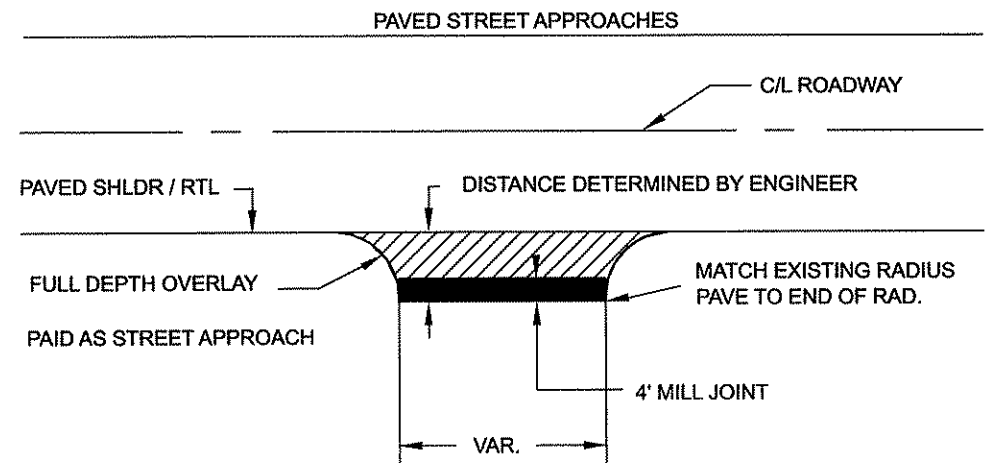
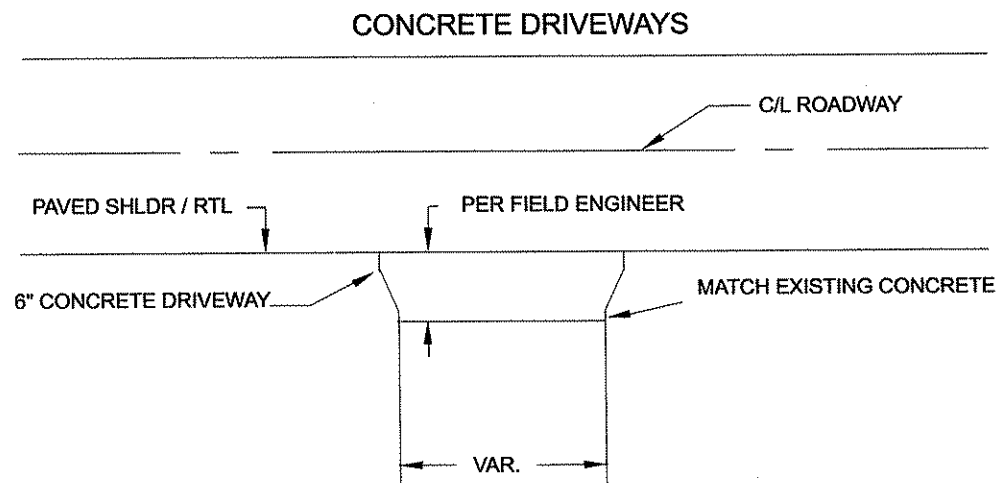
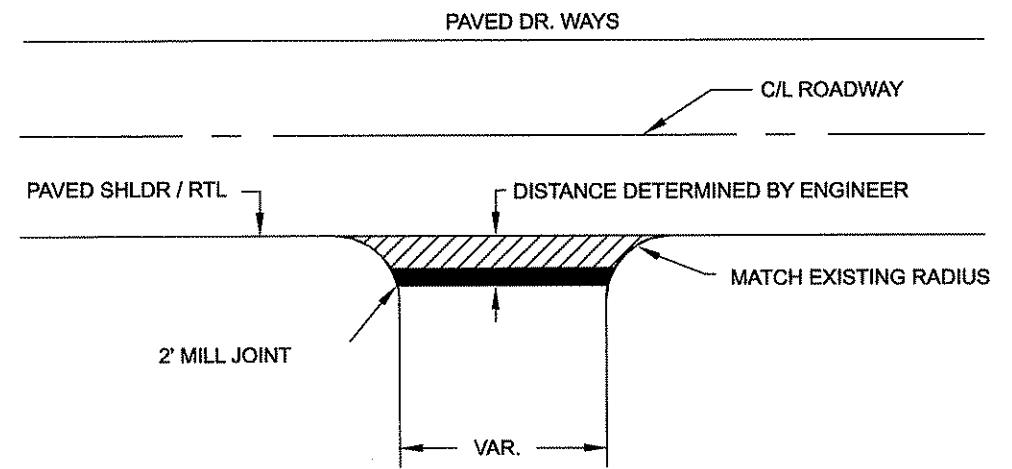
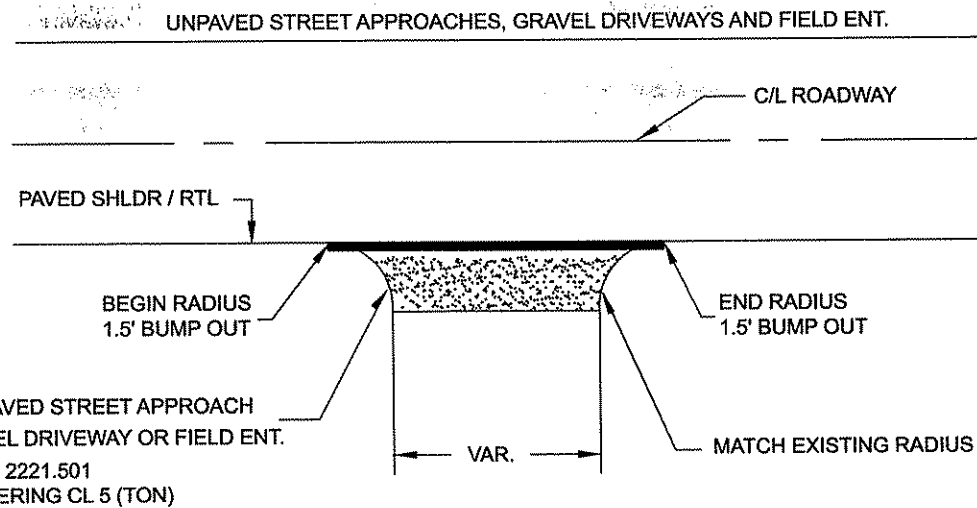
DRAWN BY CSO DATE 2/18/2011
 DESIGN BY CSO DATE 2/18/2011
 CHECKED BY JO DATE



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

TYPICAL SECTIONS
 Sheet 4 of 22 Sheets



EXISTING BITUMINOUS CURB (LIP) TO BE RECLAIMED WITH SHOULDER
PROPOSED BITUMINOUS CURB (LIP) TO BE PAID UNDER ITEM NO. 2535.501

DRIVEWAYS TO BE PAVED IN SEPERATE OPERATION OTHER THAN MAINLINE WEAR.
PAID AS STREET APPROACH WEAR

| NO | DATE | BY | CHKD | APPR | REVISION |
|--|------|----|------|------|----------|
| | | | | | |
| NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\Details.dgn | | | | | |
| 02/27/2012 11:39:35 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: *Charles Gadenhead*
DATE: 3/2/12 LICENSE NO. # 40416

DRAWN BY CSO DATE 2/18/2011
DESIGN BY CSO DATE 2/18/2011
CHECKED BY JO DATE

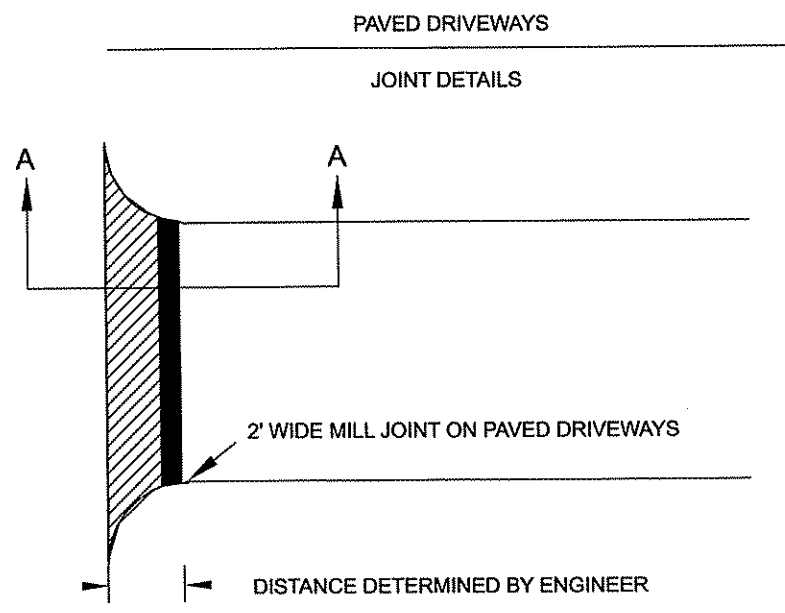


ANOKA COUNTY
HIGHWAY DEPT.

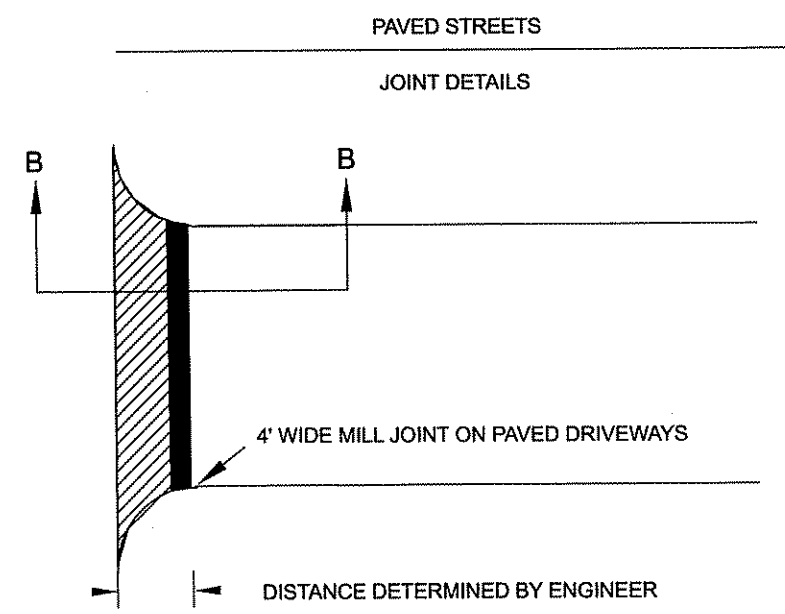
STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
CITY PROJECT NO. _____
COUNTY PROJECT NO. 11-25-85

MISCELLANEOUS DETAILS

Sheet 5 of 22 Sheets



DRIVEWAYS TO BE PAVED IN SEPERATE OPERATION OTHER THAN MAINLINE WEAR.
PAID AS DRIVEWAY/STREET APPROACH WEAR



OVERLAY EXISTING STEET APPROACH, DO NOT RECLAIM
STREETS TO BE PAVED IN SEPERATE OPERATION OTHER THAN MAINLINE WEAR.
PAID AS DRIVEWAY/STREET APPROACH WEAR

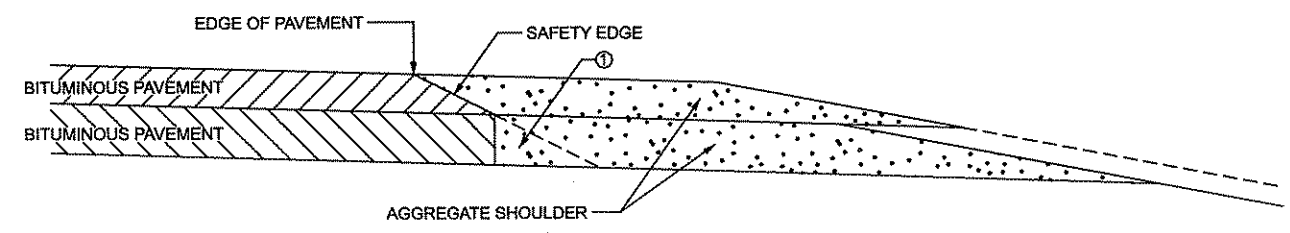
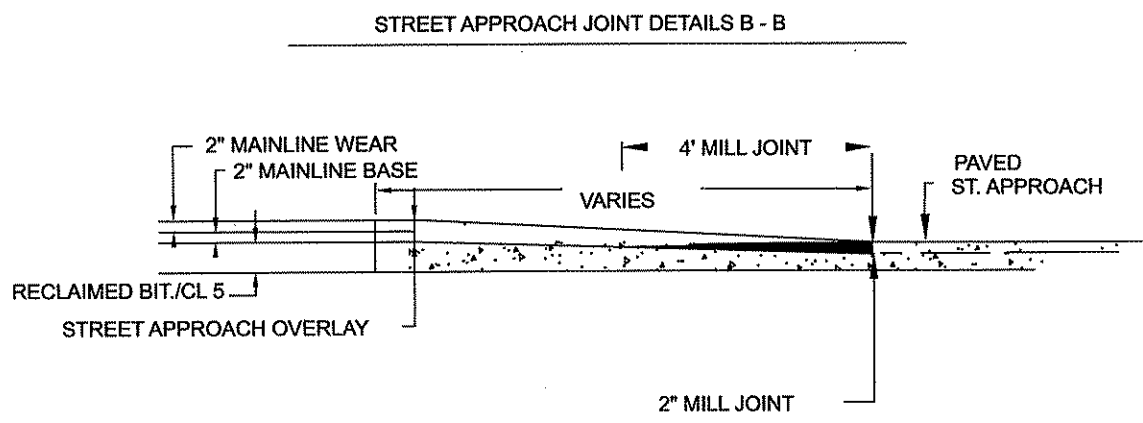
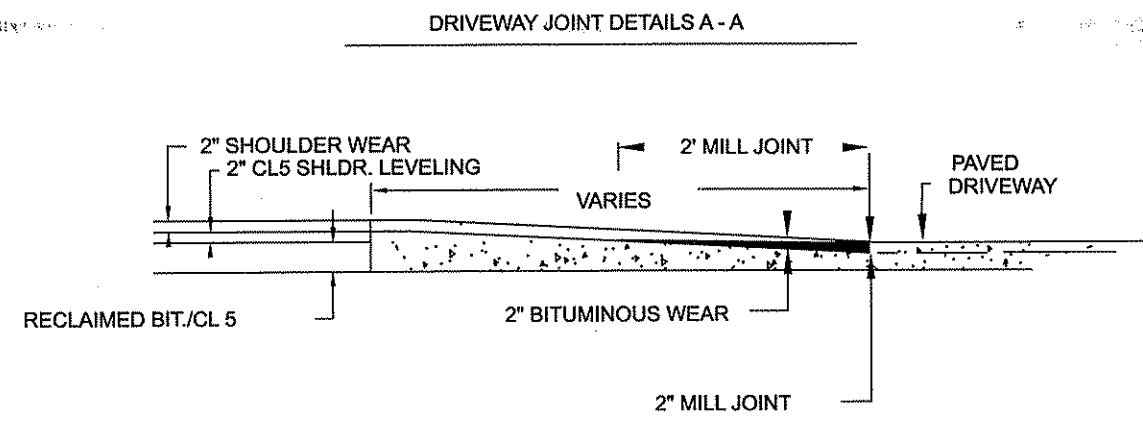


FIGURE B
BITUMINOUS PAVEMENT

① OPTIONAL DESIGN EXTENDS SAFETY EDGE DEEPER
THAN 6" AND WIDER THAN 10.5". SEE SPECAIL PROVISIONS FOR DETAILS.

| NO | DATE | BY | CKD | APPR | REVISION |
|---|------|----|-----|------|----------|
| | | | | | |
| NAME: P:112-01-00.CSAH_85_(CSAH22-CR76)PlantDetails.dgn | | | | | |
| 02/27/2012 11:39:38 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: CHARLES CADENHEAD
SIGNATURE: *[Signature]*
DATE: 3/2/12 LICENSE NO. #40416

DRAWN BY CSO DATE 2/18/2011
DESIGN BY CSO DATE 2/18/2011
CHECKED BY JO DATE



STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
CITY PROJECT NO. _____
COUNTY PROJECT NO. 11-25-85

MISCELLANEOUS DETAILS

Sheet 6 of 22 Sheets

| RIGHT TURN LANES AND BY-PASS LANES CALCULATIONS | | | | | | | | | | | | |
|---|---------|---------|--------|-------------|------------|-------------|-----------------|-------------|-----------------|---------------|---------------------|---------------------------------|
| RIGHT TURN LANE LOCATION | STATION | STATION | LENGTH | EXRTA WIDTH | COMMON EX | | SELECT GRANULAR | | CLASS 5 (CU YD) | DOZER (HOURS) | SILT FENCE (LIN FT) | EROSION CONTROL BLANKET (SQ YD) |
| | | | | | DEPTH (FT) | VOLUME (CY) | DEPTH (FT) | VOLUME (CY) | | | | |
| CSAH 22 | 9+59 | 14+39 | 480 | EXISTING | | | | | | | | |
| LINWOOD ELEM | 16+24 | 21+04 | 480 | 4 | 0.5 | 26.3 | 0.26 | 58.9 | 36 | 2 | 540 | 213 |
| CSAH 26 | 68+30 | 73+10 | 480 | 4 | 0.5 | 39.3 | 0.52 | 94.2 | 36 | 2 | 60 | 213 |
| 227TH | 63+12 | 67+92 | 480 | EXISTING | | | | | | | | |
| 229TH | 76+67 | 81+47 | 480 | 4 | 0.5 | 32.5 | 0.03 | 4.6 | 36 | 2 | 60 | 213 |
| 230TH | 82+64 | 87+44 | 480 | 4 | 0.5 | 17.0 | 0.01 | 1.6 | 36 | 2 | 60 | 213 |
| 232ND | 104+93 | 109+73 | 480 | 4 | 0.5 | 27.8 | -1.05 | 0.0 | 36 | 2 | 0 | 213 |
| 233RD | 109+91 | 114+71 | 480 | 4 | 0.5 | 21.9 | -0.68 | 0.0 | 36 | 2 | 0 | 213 |
| 235TH | 123+56 | 128+36 | 480 | 4 | 0.5 | 26.9 | 0.15 | 0.0 | 36 | 2 | 60 | 213 |
| 237TH | 135+37 | 140+17 | 480 | 4 | 0.5 | 12.2 | 1.09 | 240.7 | 36 | 2 | 540 | 213 |
| 239TH | 151+80 | 156+60 | 480 | 4 | 0.5 | 14.6 | 1.47 | 299.2 | 36 | 2 | 540 | 213 |
| CR 76 | 162+60 | 167+40 | 480 | EXISTING | | | | | | | | |

| BY-PASS LANE LOCATION | STATION | STATION | LENGTH | EXRTA WIDTH | COMMON EX | | SELECT GRANULAR | | CLASS 5 (CU YD) | DOZER (HOURS) | SILT FENCE (LIN FT) | EROSION CONTROL BLANKET (SQ YD) |
|-----------------------|---------|---------|--------|-------------|------------|-------------|-----------------|-------------|-----------------|---------------|---------------------|---------------------------------|
| | | | | | DEPTH (FT) | VOLUME (CY) | DEPTH (FT) | VOLUME (CY) | | | | |
| LINWOOD ELEM | 12+44 | 18+64 | 620 | 4 | 0.5 | 21.5 | 0.55 | 167.5 | 46 | 3 | 680 | 276 |
| 230TH | 85+04 | 91+24 | 620 | 4 | 0.5 | 20.0 | 0.44 | 99.0 | 46 | 3 | 680 | 276 |
| 233RD | 107+22 | 112+31 | 620 | 4 | 0.5 | 12.7 | 1.23 | 335.7 | 46 | 3 | 680 | 276 |
| 235TH | 125+96 | 132+16 | 620 | 4 | 0.5 | 8.2 | -0.33 | 0.0 | 46 | 3 | 0 | 276 |
| 239TH | 148+00 | 154+20 | 620 | 4 | 0.5 | 15.0 | 1.12 | 305.2 | 46 | 3 | 680 | 276 |

NOTE:
DOZER, MOTOR GRADER, AND PNEUMATIC-TIRED ROLLER ARE INCIDENTAL TO CONSTRUCTING RIGHT TURN LANES AND BY-PASS LANES
SEEDING, SEED MIXTURE 240 AND FERTILIZER TYPE 3 ARE INCIDENTAL TO EROSION CONTROL BLANKET

| CONSTRUCT. BYPASS LANE | STATION | EXISTING EM | EXISTING SH.PI. | EXISTING SH. PI. LOCATION | EXISTING DITCH BOTTOM | EXISTING DITCH BOTTOM LOCATION |
|------------------------|-------------|-------------|-----------------|---------------------------|-----------------------|--------------------------------|
| LINWOOD ELEM | BEGIN BY LN | 12+44 | 912.65 | 911.90 | 4.00 | 909.30 |
| | | 12+59 | 912.80 | 911.83 | 4.00 | 909.29 |
| | | 13+11 | 912.50 | 911.89 | 4.60 | 909.11 |
| | | 13+65 | 912.33 | 911.89 | 5.00 | 908.77 |
| | | 14+17 | 912.11 | 911.60 | 4.20 | 908.68 |
| | | 14+70 | 911.87 | 911.56 | 4.10 | 908.31 |
| | | 15+22 | 911.66 | 911.46 | 3.20 | 908.75 |
| | | 15+74 | 911.44 | 909.93 | 4.10 | 908.51 |
| | | 16+47 | 911.18 | 910.59 | 3.40 | 908.29 |
| | | 17+07 | 910.83 | 910.42 | 2.70 | 908.31 |
| | | 17+56 | 910.55 | 910.28 | 1.70 | 908.32 |
| | | 18+12 | 910.30 | 910.02 | 1.60 | 907.30 |
| | END BY LN | 18+64 | 910.22 | 909.87 | 2.30 | 907.23 |
| 230TH | BEGIN BY LN | 85+04 | 909.56 | 909.01 | 3.60 | 907.70 |
| | | 85+43 | 909.03 | 908.64 | 3.70 | 907.03 |
| | | 85+94 | 908.19 | 907.86 | 3.70 | 905.83 |
| | | 86+38 | 907.71 | 907.06 | 3.70 | 904.08 |
| | | 86+90 | 906.79 | 906.26 | 2.90 | 904.25 |
| | | 87+33 | 906.11 | 905.59 | 3.00 | 903.01 |
| | | 87+83 | 905.20 | 904.55 | 3.00 | 901.98 |
| | | 88+33 | 904.43 | 903.79 | 3.80 | 900.73 |
| | | 88+83 | 903.27 | 902.83 | 3.30 | 900.05 |
| | | 89+36 | 902.56 | 901.77 | 2.80 | 898.90 |
| | | 89+88 | 901.83 | 900.91 | 4.30 | 898.05 |
| | | 90+38 | 900.76 | 900.46 | 4.00 | 897.27 |
| | | 90+94 | 899.93 | 899.07 | 4.00 | 896.56 |
| | END BY LN | 91+24 | 899.36 | 898.68 | 4.00 | 896.35 |
| 233RD | BEGIN BY LN | 107+22 | 906.32 | 905.84 | 2.50 | 904.80 |
| | | 107+66 | 906.40 | 906.12 | 3.30 | 905.70 |
| | | 108+13 | 906.11 | 905.39 | 5.40 | 904.53 |
| | | 108+46 | 905.53 | 904.65 | 2.40 | 902.76 |
| | | 108+98 | 904.75 | 903.79 | 2.40 | 901.20 |
| | | 109+48 | 904.00 | 903.41 | 1.30 | 900.63 |
| | | 109+99 | 903.35 | 902.35 | 3.40 | 900.09 |
| | | 110+51 | 902.44 | 901.60 | 2.20 | 899.69 |
| | | 110+94 | 901.73 | 900.80 | 3.40 | 899.08 |
| | | 111+50 | 900.46 | 899.91 | 2.30 | 898.01 |
| | | 111+99 | 899.38 | 898.84 | 1.80 | 896.90 |
| | | 112+46 | 898.64 | 898.07 | 3.20 | 895.48 |
| | | 112+94 | 898.12 | 897.54 | 2.60 | 895.50 |
| | END BY LN | 112+31 | 897.87 | 897.25 | 2.60 | 895.61 |
| 235TH | BEGIN BY LN | 125+96 | 901.60 | 901.02 | 4.30 | 900.13 |
| | | 126+13 | 902.16 | 901.26 | 4.60 | 899.88 |
| | | 127+19 | 902.40 | 901.72 | 4.30 | 899.06 |
| | | 127+69 | 902.48 | 901.58 | 5.00 | 898.65 |
| | | 128+39 | 902.48 | 901.36 | 4.50 | 898.65 |
| | | 128+82 | 902.20 | 901.20 | 4.10 | 897.95 |
| | | 129+30 | 901.99 | 901.19 | 4.10 | 898.68 |
| | | 129+82 | 901.55 | 900.60 | 4.90 | 898.30 |
| | | 130+31 | 901.40 | 899.96 | 5.80 | 897.48 |
| | | 130+80 | 901.43 | 900.64 | 4.00 | 897.93 |
| | | 131+34 | 901.63 | 900.74 | 3.80 | 898.04 |
| | | 131+88 | 902.10 | 901.10 | 3.40 | 898.17 |
| | END BY LN | 132+16 | 903.19 | 902.35 | 3.50 | 898.85 |
| 239TH | BEGIN TN LN | 148+00 | 902.52 | 901.80 | 2.70 | 899.01 |
| | | 148+51 | 903.15 | 902.52 | 2.60 | 899.48 |
| | | 148+98 | 903.48 | 902.84 | 3.00 | 899.68 |
| | | 149+49 | 903.80 | 903.10 | 3.00 | 900.03 |
| | | 149+97 | 904.10 | 903.34 | 2.70 | 900.99 |
| | | 150+46 | 904.35 | 903.10 | 2.70 | 901.15 |
| | | 150+98 | 904.70 | 904.38 | 2.10 | 901.46 |
| | | 151+43 | 905.01 | 904.58 | 2.10 | 901.81 |
| | | 151+77 | 905.25 | 904.96 | 3.60 | 902.29 |
| | | 152+41 | 905.53 | 904.99 | 3.50 | 902.24 |
| | | 152+87 | 905.75 | 905.19 | 3.60 | 902.54 |
| | | 153+38 | 906.01 | 905.59 | 2.90 | 902.88 |
| | | 153+97 | 906.28 | 905.57 | 2.90 | 903.43 |
| | END BY LN | 154+20 | 906.52 | 905.74 | 2.90 | 903.61 |

| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\Details.dgn 02/27/2012 11:39:42 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: 3/2/12 LICENSE NO. 40416

DRAWN BY CSO DATE 2/18/2011
 DESIGN BY CSO DATE 2/18/2011
 CHECKED BY JO DATE



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

RIGHT TURN LANE & BY-PASS LANE TABS
 Sheet 7 of 22 Sheets

| CONSTRUCT TURN LANE | STATION | EXISTING EM | EXISTING SH.PI. | EXISTING SH. PI. LOCATION | EXISTING DITCH BOTTOM | EXISTING DITCH BOTTOM LOCATION | |
|------------------------|-------------|---------------------|-----------------|---------------------------|-----------------------|--------------------------------|--------------|
| CSAH 22 | BEGIN TN LN | 9+59 | | | | | |
| | END TN LN | 14+39 | | | | | |
| | | NO NEW WIDTH NEEDED | | | | | |
| LINWOOD ELEM | BEGIN TN LN | 16+24 | 912.38 | 911.83 | 3.40 | 910.22 14.80 | |
| | | 16+51 | 911.67 | 911.04 | 3.70 | 909.22 18.00 | |
| | | 17+05 | 911.56 | 911.56 | 3.60 | 908.93 16.70 | |
| | | 18+12 | 911.52 | 911.13 | 5.80 | 908.05 19.20 | |
| | | 18+64 | 911.29 | 911.03 | 4.00 | 908.33 17.90 | |
| | | 19+19 | 911.19 | 910.93 | 4.00 | 908.05 18.90 | |
| | | 19+70 | 910.97 | 910.80 | 2.20 | 908.30 17.60 | |
| | | 20+74 | 910.68 | 910.51 | 3.40 | 908.62 13.60 | |
| | | END TN LN | 21+04 | 910.52 | 910.35 | 3.60 | 908.20 13.70 |
| | CSAH 26 | BEGIN TN LN | 68+30 | 914.62 | | | 914.28 17.90 |
| | | | 68+45 | 914.47 | 914.22 | 5.10 | 914.04 18.40 |
| | | 68+99 | 914.64 | 916.46 | 2.40 | 915.89 12.80 | |
| | | 69+53 | 914.96 | 914.90 | 3.20 | 916.20 11.30 | |
| | | 70+06 | 915.25 | 915.57 | 3.80 | 916.63 11.80 | |
| | | 70+57 | 915.56 | 915.63 | 2.80 | 917.21 13.00 | |
| | | 71+09 | 915.81 | 915.72 | 3.10 | 916.56 10.10 | |
| | | 71+63 | 915.90 | 915.78 | 2.40 | 916.79 11.90 | |
| | | 72+16 | 915.90 | 915.93 | 3.90 | 916.24 11.70 | |
| | | 72+67 | 915.60 | 915.40 | 4.10 | 914.24 15.80 | |
| | | END TN LN | 73+10 | 915.19 | 914.92 | 4.00 | 913.30 15.70 |
| 227TH | BEGIN TN LN | 63+12 | | | | | |
| | END TN LN | 67+92 | | | | | |
| | | NO NEW WIDTH NEEDED | | | | | |
| 229TH | BEGIN TN LN | 76+67 | 914.06 | 913.41 | 3.40 | 912.47 11.10 | |
| | | 77+14 | 914.13 | 913.67 | 4.10 | 912.96 12.40 | |
| | | 77+66 | 914.11 | 913.66 | 6.10 | 913.74 12.00 | |
| | | 78+18 | 913.74 | 913.81 | 3.20 | 914.85 11.80 | |
| | | 78+84 | 913.47 | 913.50 | 3.20 | 914.70 11.90 | |
| | | 79+33 | 913.38 | 913.36 | 3.00 | 914.28 13.50 | |
| | | 79+83 | 913.36 | 913.52 | 3.30 | 915.05 11.50 | |
| | | 80+31 | 913.23 | 913.29 | 4.10 | 914.12 12.00 | |
| | | 80+79 | 913.01 | 912.99 | 3.50 | 912.80 12.50 | |
| | | END TN LN | 81+47 | 912.98 | 912.68 | 5.80 | 912.17 17.10 |
| | 230TH | BEGIN TN LN | 82+64 | 912.84 | 912.27 | 3.90 | 909.64 15.00 |
| | | 83+06 | 912.81 | 912.52 | 3.20 | 909.82 15.50 | |
| | | 83+56 | 912.34 | 911.97 | 3.50 | 909.81 14.60 | |
| | | 84+04 | 912.22 | 911.65 | 4.40 | 909.58 15.30 | |
| | | 84+55 | 911.87 | 911.12 | 4.40 | 908.88 14.10 | |
| | | 85+04 | 911.20 | 910.32 | 4.30 | 908.24 16.00 | |
| | | 85+54 | 910.34 | 909.64 | 4.20 | 907.40 15.40 | |
| | | 86+04 | 909.30 | 908.66 | 3.90 | 906.92 14.50 | |
| | | 86+39 | 908.76 | 908.08 | 4.20 | 905.30 14.60 | |
| | | 86+74 | 907.61 | 907.48 | 4.30 | 905.12 14.70 | |
| | | 86+99 | 907.31 | 906.35 | 3.60 | 904.13 14.90 | |
| | END TN LN | 87+44 | 906.48 | 905.82 | 4.00 | 903.65 14.50 | |
| 232ND | BEGIN TN LN | 104+93 | 908.13 | 907.58 | 5.30 | 906.58 16.00 | |
| | | 105+32 | 908.15 | 907.40 | 4.50 | 905.81 16.10 | |
| | | 105+81 | 908.35 | 907.93 | 3.90 | 906.68 9.10 | |
| | | 106+31 | 908.47 | 908.09 | 4.70 | 907.57 9.50 | |
| | | 106+83 | 908.42 | 908.05 | 2.80 | 907.65 7.50 | |
| | | 107+41 | 908.15 | 908.09 | 4.20 | 907.66 11.70 | |
| | | 107+86 | 907.81 | 907.33 | 6.00 | 906.63 12.10 | |
| | | 108+38 | 907.32 | 907.02 | 5.70 | 906.24 11.30 | |
| | | 108+84 | 906.75 | 906.23 | 5.30 | 904.91 11.20 | |
| | | 109+33 | 906.36 | 905.68 | 6.20 | 904.20 13.80 | |
| | | END TN LN | 109+73 | 905.76 | 905.20 | 7.00 | 903.61 17.80 |
| 233RD | BEGIN TN LN | 110+91 | 903.86 | 903.87 | 5.00 | 903.87 10.00 | |
| | | 111+54 | 902.20 | 901.72 | 4.90 | 900.75 15.00 | |
| | | 112+06 | 901.30 | 900.64 | 3.50 | 899.18 14.60 | |
| | | 112+56 | 900.32 | 899.72 | 4.40 | 897.85 15.20 | |
| | | 113+06 | 899.70 | 899.11 | 4.00 | 897.20 14.30 | |
| | | 113+57 | 899.23 | 898.67 | 4.40 | 896.43 13.70 | |
| | | 114+09 | 898.92 | 898.30 | 5.40 | 895.72 14.20 | |
| | | 114+55 | 898.75 | 898.34 | 4.20 | 895.33 16.90 | |
| | | 115+05 | 898.27 | 897.90 | 4.50 | 895.49 14.50 | |
| | | 115+63 | 897.47 | 896.66 | 6.00 | 894.10 16.40 | |
| | | END TN LN | 115+71 | 897.07 | 896.06 | 5.20 | 894.00 15.00 |

| CONSTRUCT TURN LANE | STATION | EXISTING EM | EXISTING SH.PI. | EXISTING SH. PI. LOCATION | EXISTING DITCH BOTTOM | EXISTING DITCH BOTTOM LOCATION | |
|------------------------|-------------|---------------------|-----------------|---------------------------|-----------------------|--------------------------------|--------------|
| 235TH | BEGIN TN LN | 123+56 | 900.65 | 900.20 | 9.00 | 900.01 14.50 | |
| | | 124+20 | 901.00 | 900.80 | 2.40 | 902.16 14.30 | |
| | | 124+71 | 900.71 | 900.89 | 2.50 | 902.53 12.00 | |
| | | 125+23 | 902.45 | 901.45 | 3.80 | 902.82 12.10 | |
| | | 125+73 | 902.45 | 901.23 | 3.90 | 902.17 11.30 | |
| | | 126+19 | 901.88 | 902.14 | 2.80 | 903.15 12.00 | |
| | | 126+69 | 902.29 | 902.25 | 3.50 | 903.59 11.70 | |
| | | 127+18 | 902.60 | 902.44 | 2.80 | 904.15 12.40 | |
| | | 127+69 | 902.81 | 902.68 | 3.10 | 904.63 13.00 | |
| | | END TN LN | 128+36 | 902.60 | 902.41 | 4.70 | 902.73 10.40 |
| | 237TH | BEGIN TN LN | 135+37 | 908.95 | 908.54 | 2.00 | 906.03 16.40 |
| | | 135+87 | 909.13 | 908.69 | 2.40 | 906.41 15.70 | |
| | | 136+37 | 909.22 | 908.79 | 2.20 | 906.20 15.70 | |
| | | 136+83 | 909.03 | 908.73 | 1.40 | 905.98 16.40 | |
| | | 137+30 | 908.80 | 908.07 | 3.40 | 905.39 15.20 | |
| | | 137+77 | 908.42 | 907.73 | 2.80 | 905.14 14.90 | |
| | | 138+27 | 907.88 | 906.83 | 4.00 | 904.64 16.00 | |
| | | 138+75 | 907.35 | 906.21 | 4.70 | 904.18 16.30 | |
| | | 139+24 | 906.44 | 905.83 | 1.80 | 903.23 16.00 | |
| | | 139+73 | 905.28 | 904.84 | 3.30 | 902.64 13.90 | |
| | | END TN LN | 140+17 | 904.85 | 904.38 | 4.00 | 902.32 12.00 |
| 239TH | BEGIN TN LN | 151+80 | 904.86 | 904.76 | 4.00 | 904.42 12.00 | |
| | | 152+07 | 904.91 | 904.71 | 2.60 | 903.25 16.00 | |
| | | 152+52 | 905.05 | 904.43 | 3.50 | 902.11 15.60 | |
| | | 153+01 | 905.30 | 904.66 | 2.20 | 902.41 13.20 | |
| | | 153+50 | 905.65 | 905.20 | 2.40 | 902.60 13.70 | |
| | | 154+00 | 905.94 | 905.42 | 2.60 | 903.15 14.10 | |
| | | 154+49 | 906.17 | 905.64 | 2.10 | 903.45 12.70 | |
| | | 154+97 | 906.42 | 906.04 | 1.80 | 903.40 15.40 | |
| | | 155+56 | 908.94 | 908.54 | 3.40 | 904.05 16.10 | |
| | | 155+96 | 907.17 | 906.72 | 2.10 | 904.35 14.30 | |
| | | 156+44 | 907.38 | 906.92 | 1.70 | 904.74 12.00 | |
| | END TN LN | 156+60 | 907.43 | 907.00 | 2.00 | 904.80 13.00 | |
| CR 76 | BEGIN TN LN | 162+60 | | | | | |
| | END TN LN | 167+40 | | | | | |
| | | NO NEW WIDTH NEEDED | | | | | |

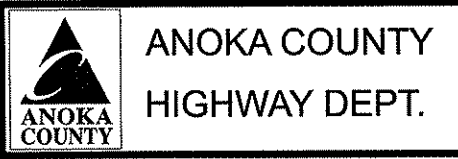
| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\PlantDetails.dgn 02/27/2012 11:39:46 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 CAPENHEAD
SIGNATURE: *[Signature]*
DATE: 3/2/12 LICENSE NO. 40416

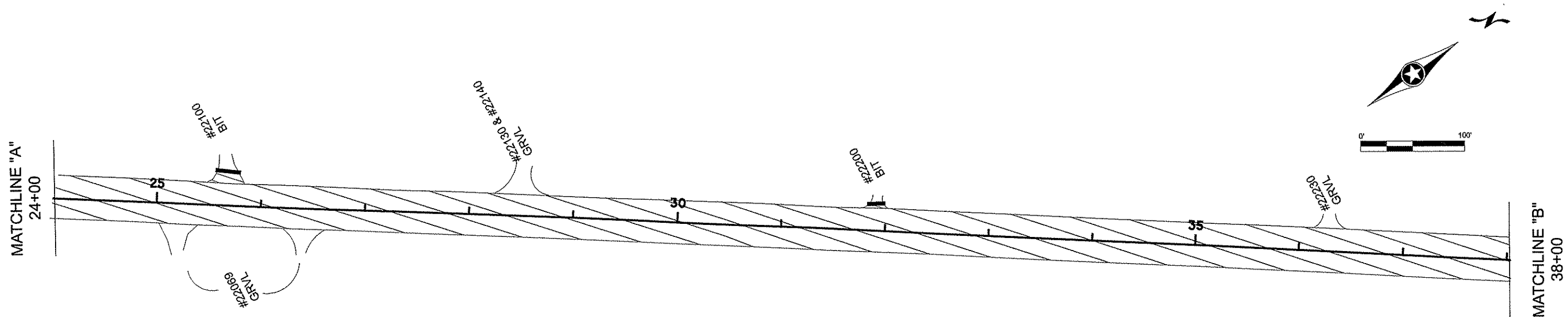
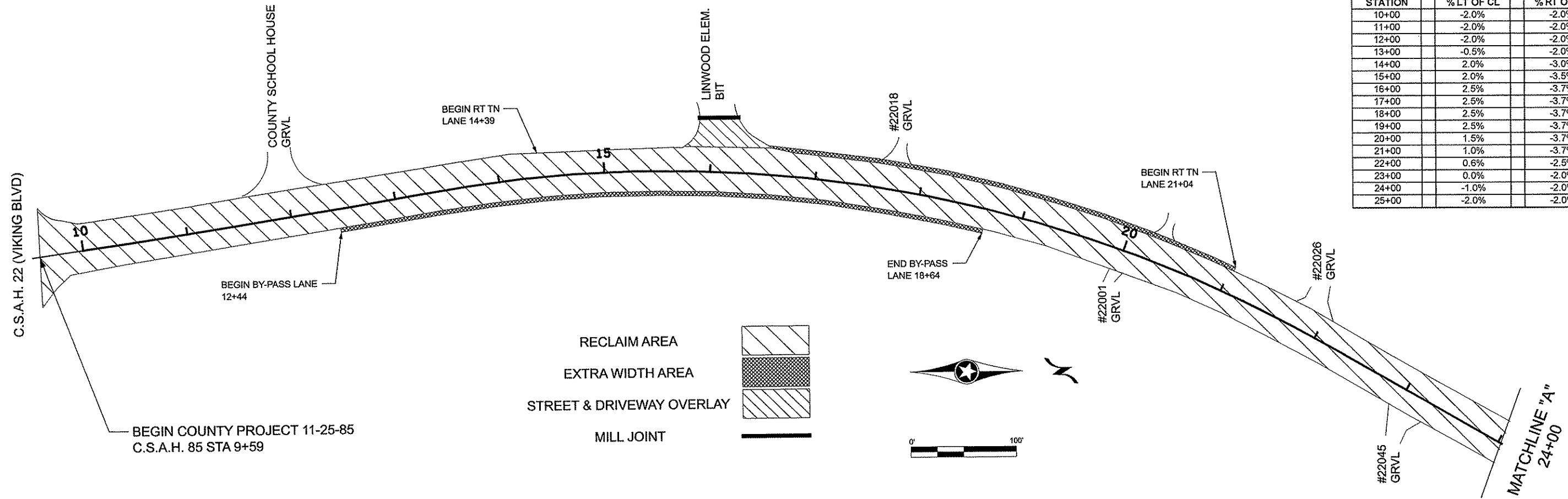
DRAWN BY: CSO DATE: 2/18/2011
DESIGN BY: CSO DATE: 2/18/2011
CHECKED BY: JO DATE: _____



STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
CITY PROJECT NO. _____
COUNTY PROJECT NO. 11-25-85

RIGHT TURN LANE & BY-PASS LANE TABS
Sheet 8 of 22 Sheets

| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 10+00 | -2.0% | -2.0% |
| 11+00 | -2.0% | -2.0% |
| 12+00 | -2.0% | -2.0% |
| 13+00 | -0.5% | -2.0% |
| 14+00 | 2.0% | -3.0% |
| 15+00 | 2.0% | -3.5% |
| 16+00 | 2.5% | -3.7% |
| 17+00 | 2.5% | -3.7% |
| 18+00 | 2.5% | -3.7% |
| 19+00 | 2.5% | -3.7% |
| 20+00 | 1.5% | -3.7% |
| 21+00 | 1.0% | -3.7% |
| 22+00 | 0.6% | -2.5% |
| 23+00 | 0.0% | -2.0% |
| 24+00 | -1.0% | -2.0% |
| 25+00 | -2.0% | -2.0% |



| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\Plan.dgn 01/12/2012 10:32:02 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: 3/2/12 LICENSE NO. 40416

DRAWN BY CSO DATE 2/18/2011
 DESIGN BY CSO DATE 2/18/2011
 CHECKED BY JO DATE



ANOKA COUNTY
HIGHWAY DEPT.

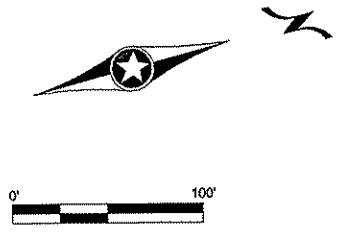
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CONSTRUCTION PLAN
 STA 9+59 TO 38+00
 Sheet 9 of 22 Sheets

MATCHLINE "B"
38+00

MATCHLINE "C"
50+00

| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 37+00 | -2.0% | -2.0% |
| 38+00 | -2.0% | -2.0% |
| 39+00 | -2.2% | -2.0% |
| 40+00 | -2.5% | -2.0% |
| 41+00 | -4.1% | -1.0% |
| 42+00 | -6.0% | 0.0% |
| 43+00 | -6.0% | 1.3% |
| 44+00 | -6.0% | 2.5% |
| 45+00 | -6.0% | 2.5% |
| 46+00 | -6.0% | 1.7% |
| 47+00 | -5.5% | 1.0% |
| 48+00 | -5.4% | 0.0% |
| 49+00 | -2.2% | -1.0% |
| 50+00 | -2.0% | -1.5% |
| 51+00 | -2.0% | -2.0% |



#22261
BIT

#22343
BIT

#22349
GRVL

CONNEXUS ENERGY
SUBSTATION
GRVL

REMOVE AND REPLACE
24" HDPE PIPE SEWER

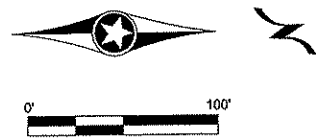
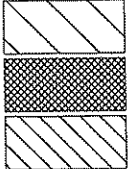
MATCHLINE "C"
50+00

MATCHLINE "D"
64+00

BITUMINOUS CORE
4" BITUMINOUS
2" BIT SAND

BITUMINOUS CORE (IN SHOULDER)
1 3/4" BITUMINOUS
2" BASE AGGREGATE

RECLAIM AREA
EXTRA WIDTH AREA
STREET & DRIVEWAY OVERLAY
MILL JOINT



#22436
GRVL

#22500
BIT

#22521 & #22541
GRVL

BEGIN BIT CURB
56+50

END BIT CURB
58+55

#22561 & #22571
GRVL

BEGIN RT TN
LANE 63+12

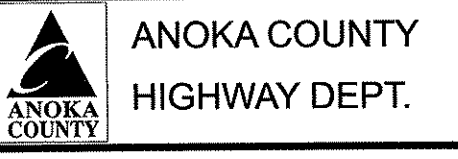
#22600
GRVL

| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\PlantPlan.dgn 01/12/2012 10:32:07 AM

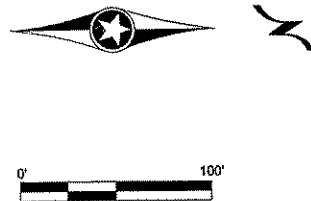
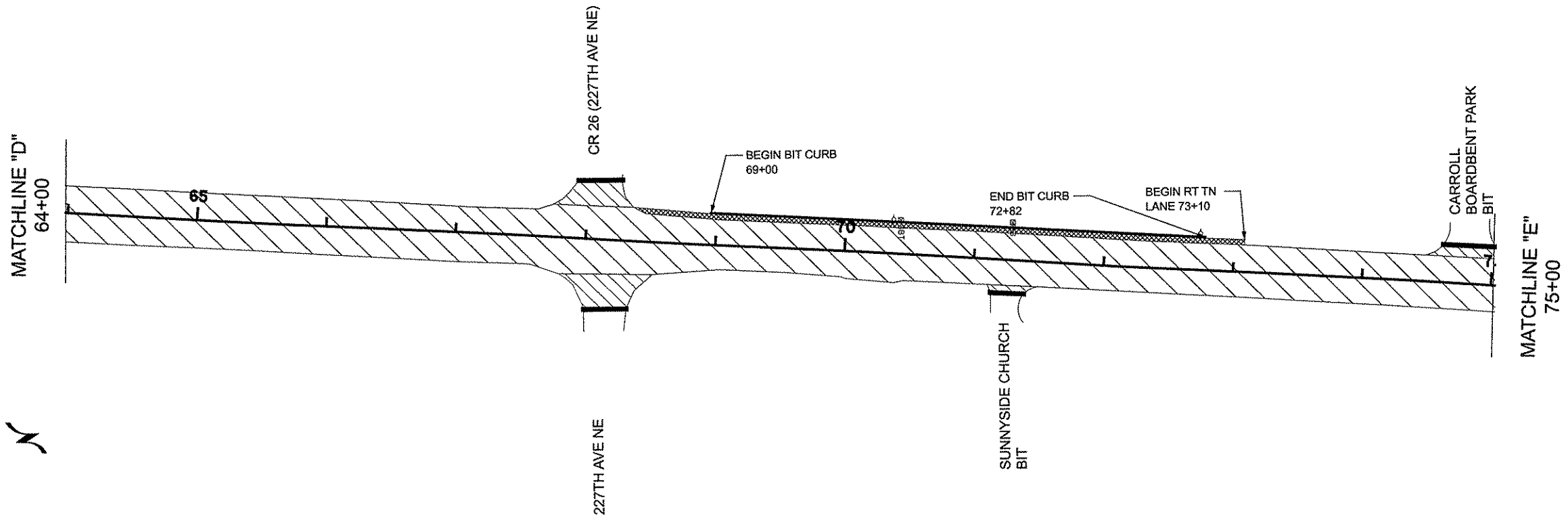
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: CHARLES GARDENHEAD
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

DRAWN BY: CSO DATE: 2/18/2011
 DESIGN BY: CSO DATE: 2/18/2011
 CHECKED BY: JO DATE: _____

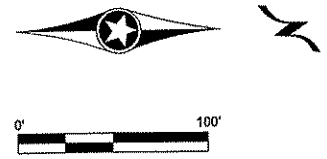
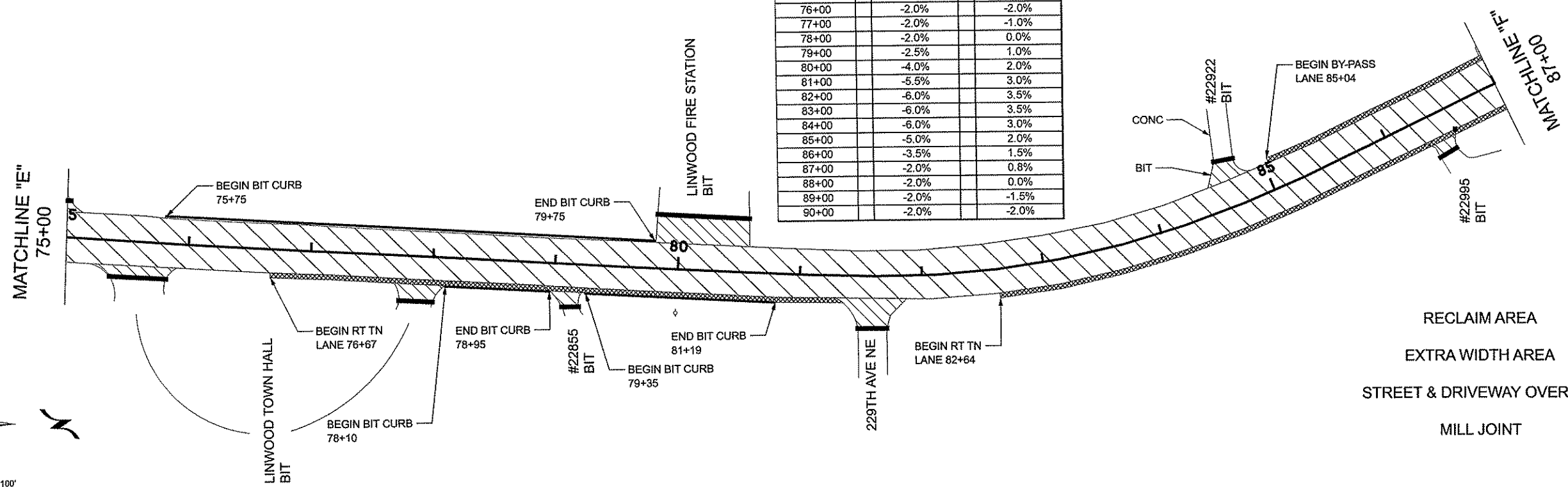


STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CONSTRUCTION PLAN
 STA 38+00 TO 64+00
 Sheet 10 of 22 Sheets



| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 76+00 | -2.0% | -2.0% |
| 77+00 | -2.0% | -1.0% |
| 78+00 | -2.0% | 0.0% |
| 79+00 | -2.5% | 1.0% |
| 80+00 | -4.0% | 2.0% |
| 81+00 | -5.5% | 3.0% |
| 82+00 | -6.0% | 3.5% |
| 83+00 | -6.0% | 3.5% |
| 84+00 | -6.0% | 3.0% |
| 85+00 | -5.0% | 2.0% |
| 86+00 | -3.5% | 1.5% |
| 87+00 | -2.0% | 0.8% |
| 88+00 | -2.0% | 0.0% |
| 89+00 | -2.0% | -1.5% |
| 90+00 | -2.0% | -2.0% |



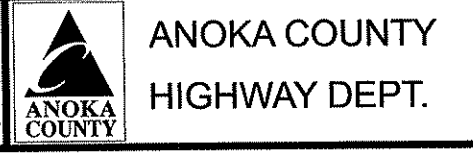
| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\Plan.dgn 01/12/2012 10:32:11 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.

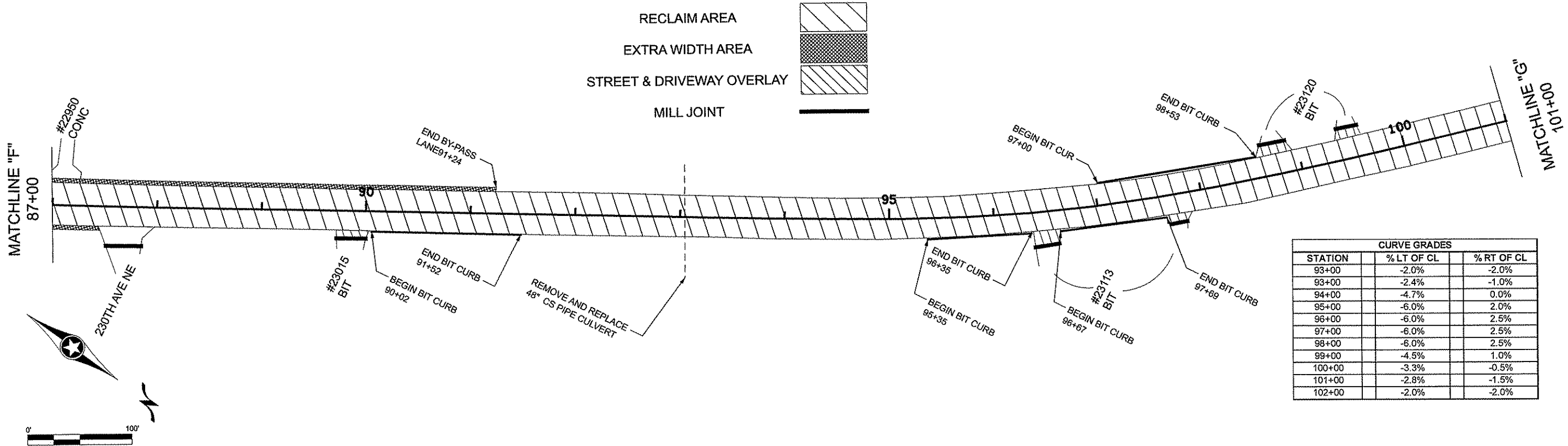
PRINT NAME: CHARLES CADENHEAP
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

DRAWN BY: CSO DATE: 2/18/2011
 DESIGN BY: CSO DATE: 2/18/2011
 CHECKED BY: JO DATE:



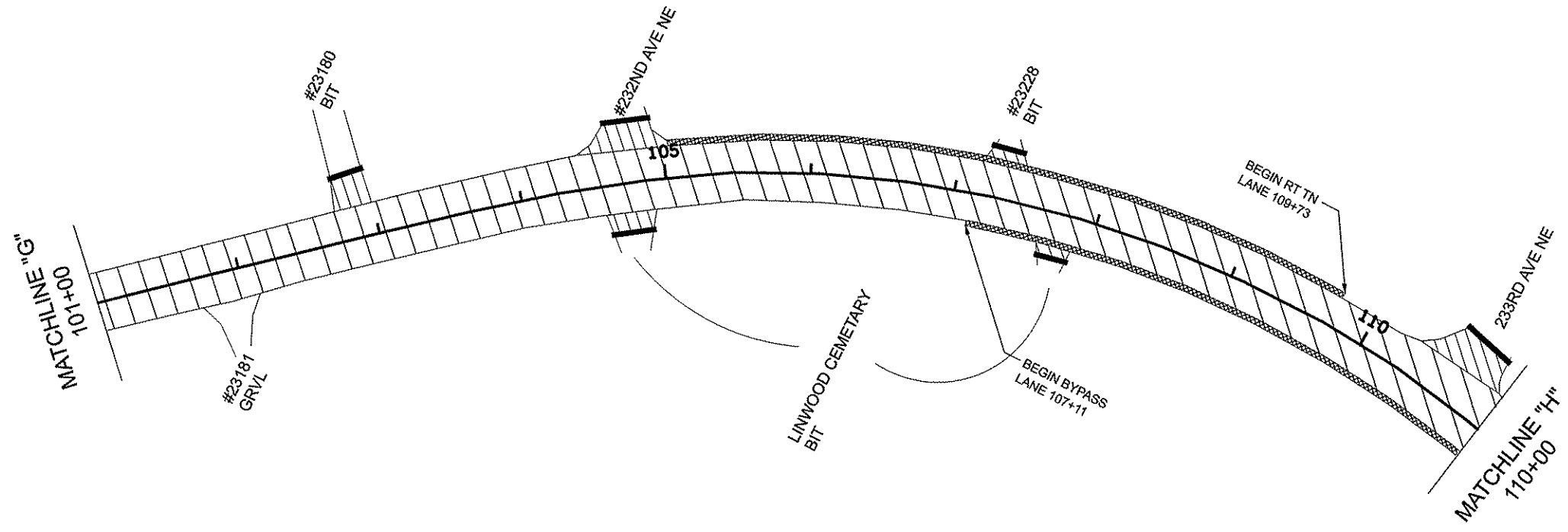
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CONSTRUCTION PLAN
 STA 64+00 TO 87+00
 Sheet 11 of 22 Sheets



| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 93+00 | -2.0% | -2.0% |
| 93+00 | -2.4% | -1.0% |
| 94+00 | -4.7% | 0.0% |
| 95+00 | -6.0% | 2.0% |
| 96+00 | -6.0% | 2.5% |
| 97+00 | -6.0% | 2.5% |
| 98+00 | -6.0% | 2.5% |
| 99+00 | -4.5% | 1.0% |
| 100+00 | -3.3% | -0.5% |
| 101+00 | -2.8% | -1.5% |
| 102+00 | -2.0% | -2.0% |

| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 102+00 | -2.0% | -2.0% |
| 103+00 | -0.4% | -3.0% |
| 104+00 | 1.3% | -4.0% |
| 105+00 | 2.4% | -5.0% |
| 106+00 | 3.5% | -6.0% |
| 107+00 | 3.5% | -6.0% |
| 108+00 | 3.5% | -6.0% |
| 109+00 | 3.5% | -6.0% |
| 110+00 | 3.5% | -6.0% |
| 111+00 | 3.5% | -6.0% |
| 112+00 | 3.5% | -6.0% |
| 113+00 | 3.5% | -6.0% |
| 114+00 | 3.5% | -6.0% |
| 115+00 | 3.5% | -5.0% |
| 116+00 | 2.7% | -3.5% |
| 117+00 | 1.0% | -2.0% |
| 118+00 | -1.3% | -0.5% |
| 119+00 | -3.9% | 1.0% |



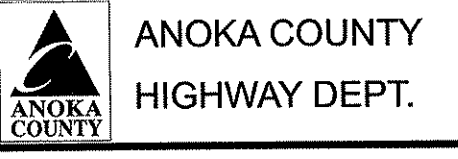
| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85 (CSAH22-CR76)\PlantPlan.dgn 01/12/2012 10:32:15 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: 3/2/12 LICENSE NO. 42416

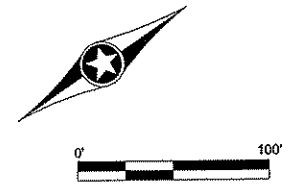
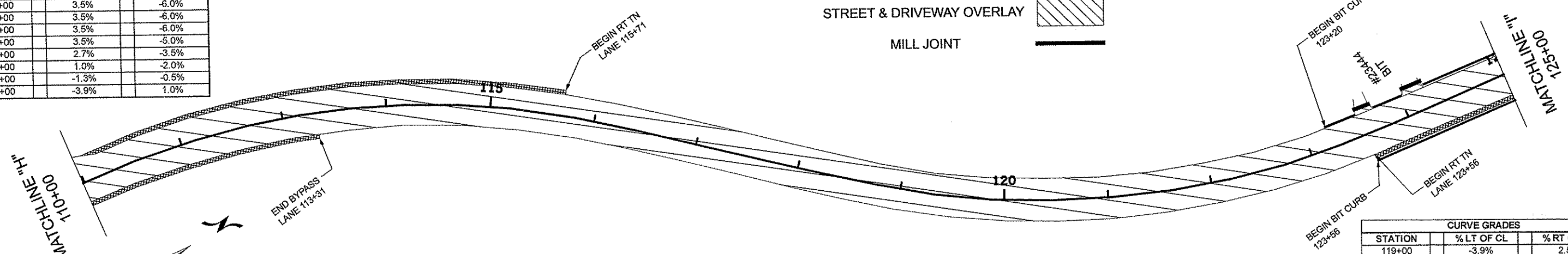
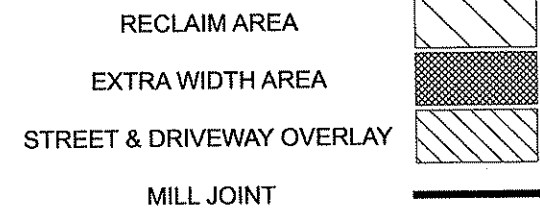
DRAWN BY: CSO DATE: 2/18/2011
 DESIGN BY: CSO DATE: 2/18/2011
 CHECKED BY: JO DATE:



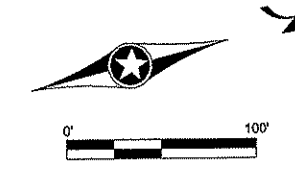
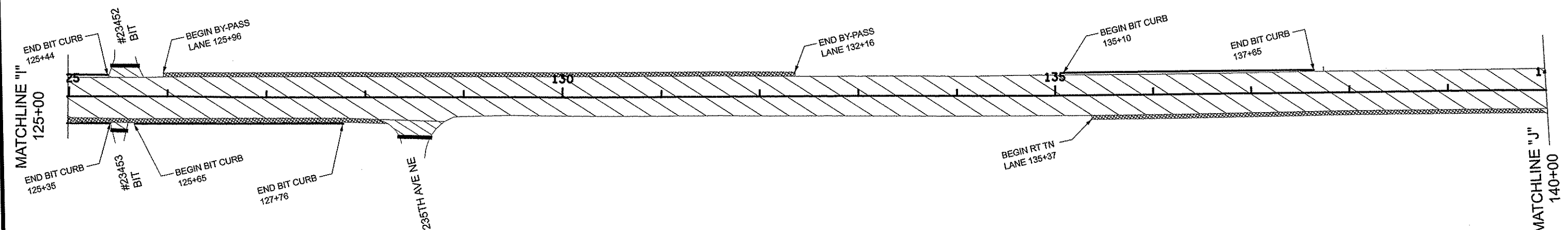
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CONSTRUCTION PLAN
 STA 87+00 TO 110+00
 Sheet 12 of 22 Sheets

| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 102+00 | -2.0% | -2.0% |
| 103+00 | -0.4% | -3.0% |
| 104+00 | 1.3% | -4.0% |
| 105+00 | 2.4% | -5.0% |
| 106+00 | 3.5% | -6.0% |
| 107+00 | 3.5% | -6.0% |
| 108+00 | 3.5% | -6.0% |
| 109+00 | 3.5% | -6.0% |
| 110+00 | 3.5% | -6.0% |
| 111+00 | 3.5% | -6.0% |
| 112+00 | 3.5% | -6.0% |
| 113+00 | 3.5% | -6.0% |
| 114+00 | 3.5% | -6.0% |
| 115+00 | 3.5% | -5.0% |
| 116+00 | 2.7% | -3.5% |
| 117+00 | 1.0% | -2.0% |
| 118+00 | -1.3% | -0.5% |
| 119+00 | -3.9% | 1.0% |



| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 119+00 | -3.9% | 2.5% |
| 120+00 | -6.0% | 4.0% |
| 121+00 | -6.0% | 5.0% |
| 122+00 | -6.0% | 5.0% |
| 123+00 | -6.0% | 3.5% |
| 124+00 | -4.2% | 2.0% |
| 125+00 | -2.4% | 0.5% |
| 126+00 | -2.0% | -1.0% |
| 127+00 | -2.0% | -2.0% |



| NO | DATE | BY | CKD | APPR | REVISION | |
|----|------|----|-----|------|----------|--|
| | | | | | | |

NAME: P:\112-01-00\CSAH_85_(CSAH22-CR76)\Plan\Plan.dgn 01/12/2012 10:32:19 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: 3/12/12 LICENSE NO. 40416

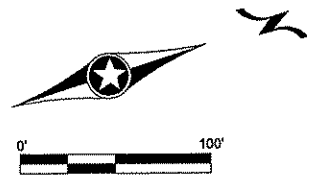
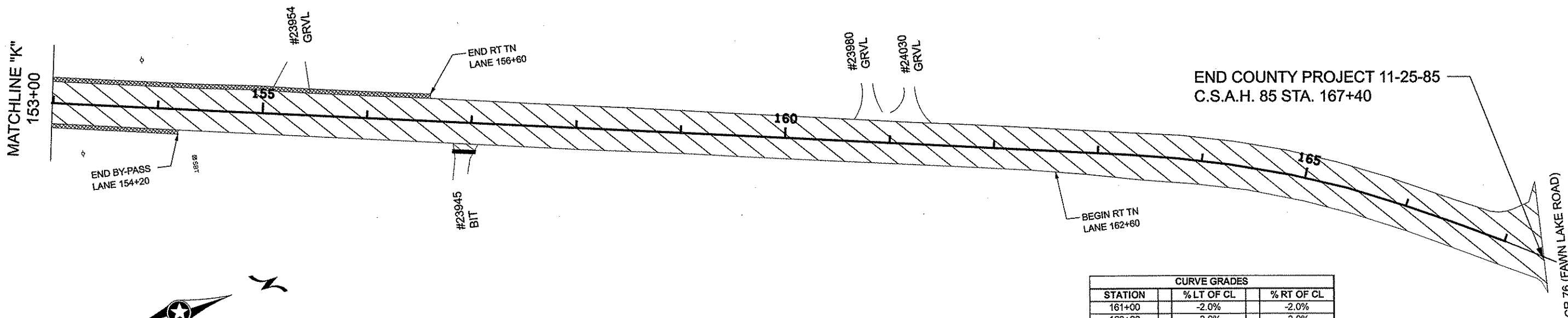
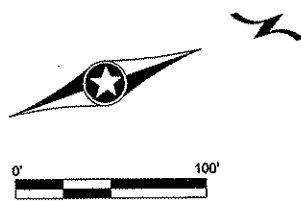
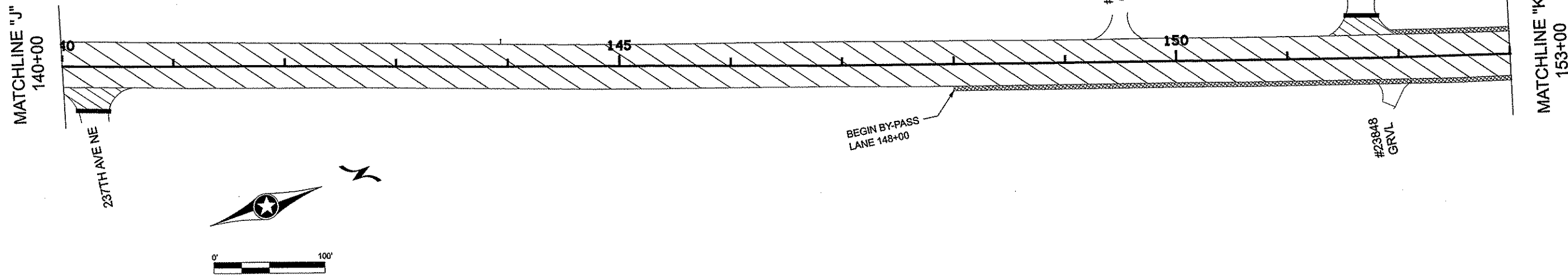
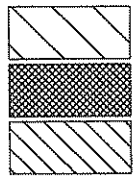
DRAWN BY: CSO DATE: 2/18/2011
 DESIGN BY: CSO DATE: 2/18/2011
 CHECKED BY: JO DATE:

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CONSTRUCTION PLAN
 STA 110+00 TO 140+00
 Sheet 13 of 22 Sheets

RECLAIM AREA
 EXTRA WIDTH AREA
 STREET & DRIVEWAY OVERLAY
 MILL JOINT



END COUNTY PROJECT 11-25-85
 C.S.A.H. 85 STA. 167+40

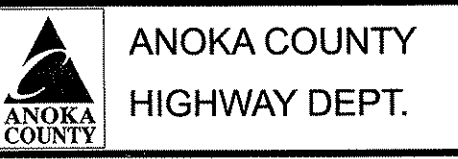
| CURVE GRADES | | |
|--------------|------------|------------|
| STATION | % LT OF CL | % RT OF CL |
| 161+00 | -2.0% | -2.0% |
| 162+00 | -2.0% | -2.0% |
| 163+00 | -0.5% | -3.0% |
| 164+00 | 1.3% | -4.0% |
| 165+00 | 2.0% | -5.0% |
| 166+00 | 0.0% | -4.0% |
| 167+00 | -1.0% | -2.0% |

| NO | DATE | BY | CHKD | APPR | REVISION |
|----|------|----|------|------|----------|
| | | | | | |

NAME: P:\12-01-00\CSAH_85_(CSAH22-CR76)\Plan\Plan.dgn
 02/27/2012 1:00:30 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: 2/27/12 LICENSE NO. 40416

DRAWN BY CSO DATE 2/18/2011
 DESIGN BY CSO DATE 2/18/2011
 CHECKED BY JO DATE



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CONSTRUCTION PLAN
 STA 140+00 TO 167+40
 Sheet 13A of 22 Sheets

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.

EPOXY:

THE ROAD SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE ENGINEER JUST PRIOR TO APPLICATION. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. NEW PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE 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 EPOXY PAVEMENT MARKINGS.

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

AN EPOXY RESIN LINE 4" WIDE AND 15 MILL THICKNESS (WET), REQUIRES AN APPLICATION RATE OF ONE (1) GALLON OF COMPONENTS FOR 320 FEET OF LINE. GLASS BEADS SHALL BE APPLIED AT A POUND 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.

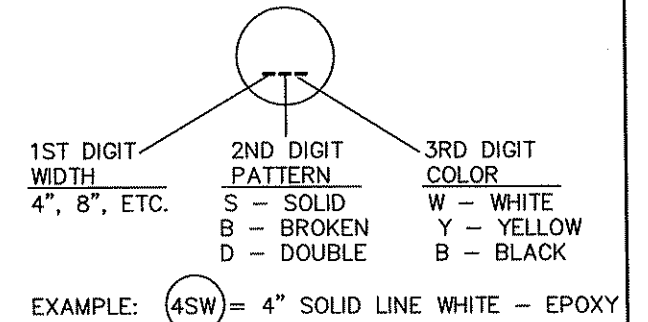
| PERMANENT PAVEMENT MARKING TABULATION | | |
|--|----------|--------|
| Item | Quantity | Units |
| 4" Double Solid Line Yellow - Epoxy | 9626 | Lin Ft |
| 4" Solid Line Yellow - Epoxy | 1100 | Lin Ft |
| 4" Broken Yellow Line - Epoxy (10 ft stripe / 40 ft gap) | 1180 | Lin Ft |
| 4" Solid Line White - Epoxy | 33441 | Lin Ft |
| 4" Broken Line White - Epoxy (10 ft stripe / 40 ft gap) | 200 | Lin Ft |

SYMBOLS & MATERIALS LEGEND

- CROSSWALK BLOCK WHITE PREFORMED THERMOPLASTIC
- ↩ PAVEMENT MESSAGE (LEFT ARROW) PREFORMED THERMOPLASTIC

STRIPING KEY

- CIRCLE - EPOXY
- SQUARE PREFORMED THERMOPLASTIC
- △ TRIANGLE - PAINT
- ⬠ PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING

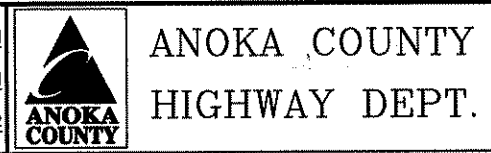


| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: T:\Traffic\dwg\CSAH 85\Perm pmt mtrg guide notes_guidelines.dwg

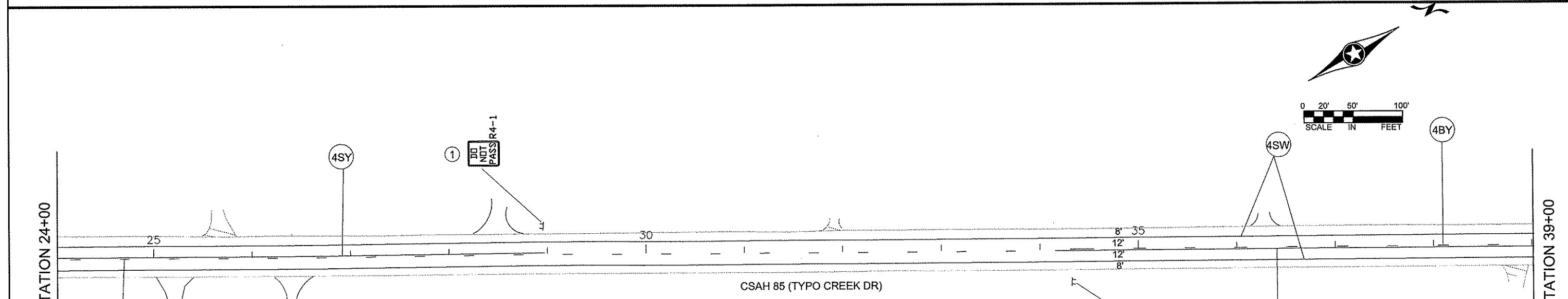
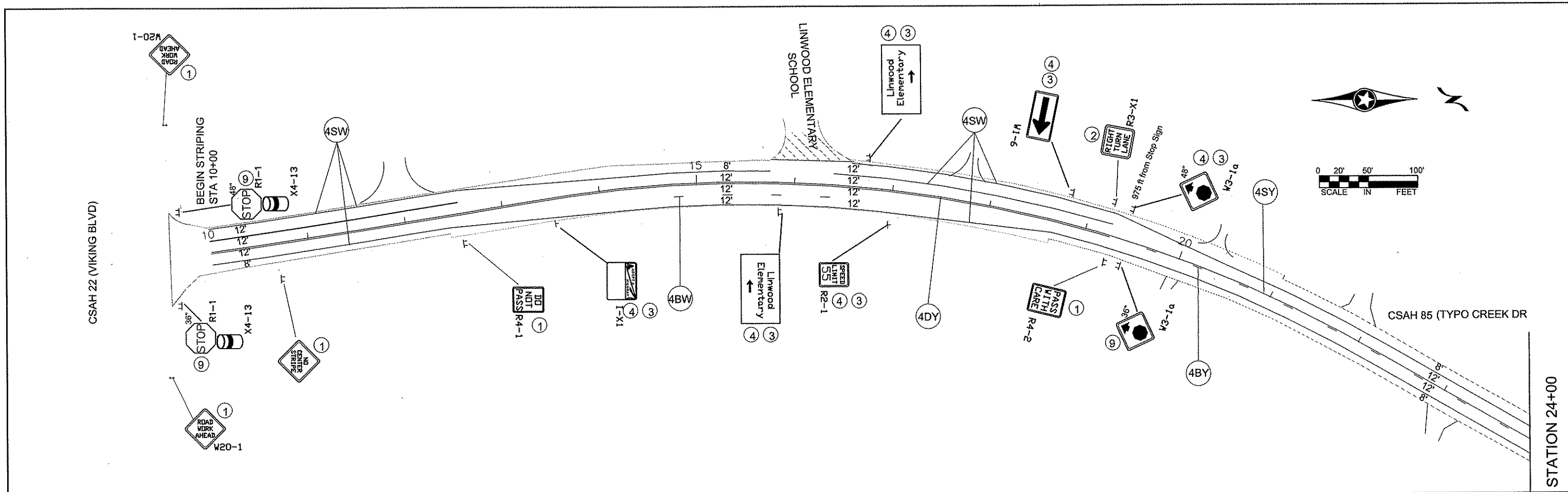
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

DRAWN BY: MTH DATE 12/01/2011
 DESIGN BY: MTH DATE 12/01/2011
 CHECKED BY: JR DATE 2/14/2012



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

PERMANENT MARKING TABULATION
 Sheet 14 of 22 Sheets



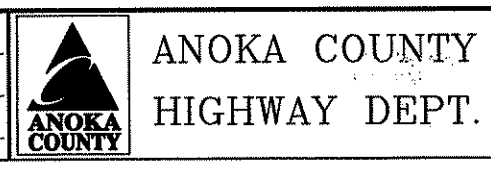
- NOTES:**
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
 - LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 - 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.
 - ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
 - ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.
 - ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. IF A SIGN IS TO BE SALVAGED AND REINSTALLED, IT SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE, AND THIS WILL BE CONSIDERED AS INCIDENTAL TO SIGN TYPE C REINSTALL INSTALLATION.

| 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

DRAWN BY: MTH DATE 1/20/12
 DESIGN BY: MTH DATE 1/20/12
 CHECKED BY: JR DATE 2/14/12



STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CSAH 85 (TYPO CREEK DR)
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

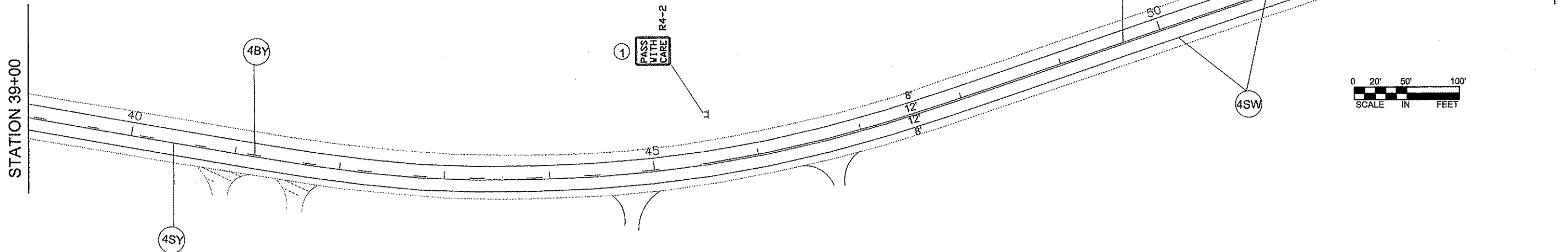
Sheet 15 of 22 Sheets

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 PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 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.
- ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. IF A SIGN IS TO BE SALVAGED AND REINSTALLED, IT SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE, AND THIS WILL BE CONSIDERED AS INCIDENTAL TO SIGN TYPE C REINSTALL INSTALLATION.

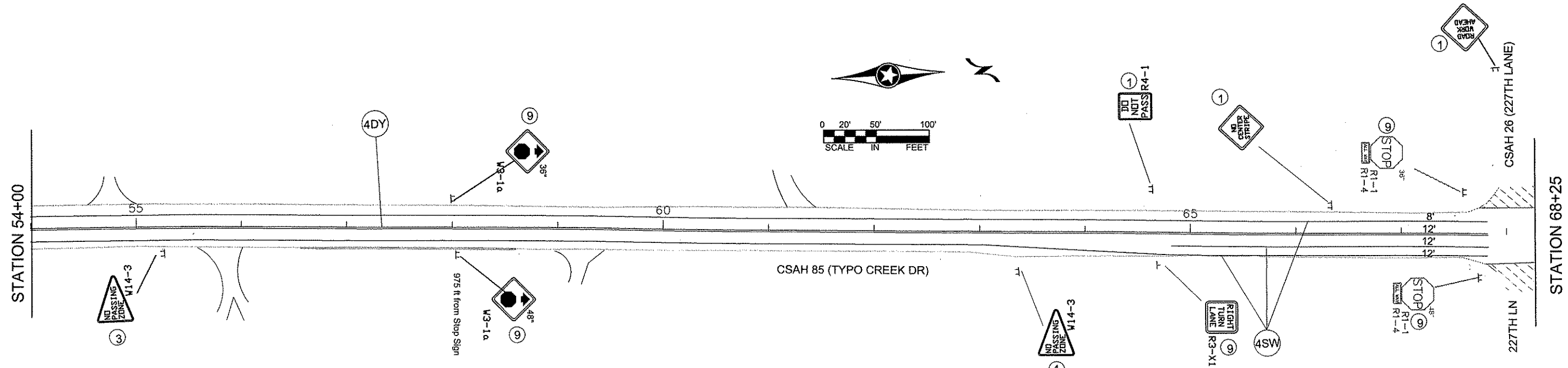
STATION 39+00

STATION 54+00



STATION 54+00

STATION 68+25



| 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: CHARLES CADENHEAD
 SIGNATURE: *[Signature]*
 DATE: 3/2/12 LICENSE NO. 40416

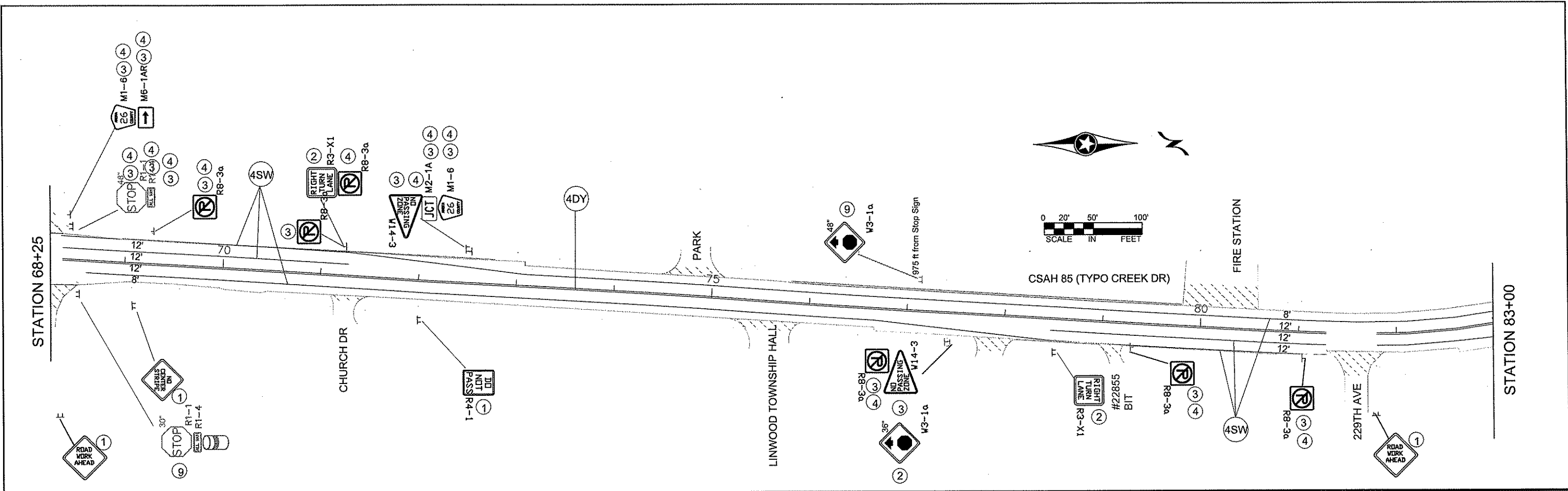
DRAWN BY: MTH DATE 1/20/12
 DESIGN BY: MTH DATE 1/20/12
 CHECKED BY: JR DATE 2/14/12



ANOKA COUNTY
 HIGHWAY DEPT.

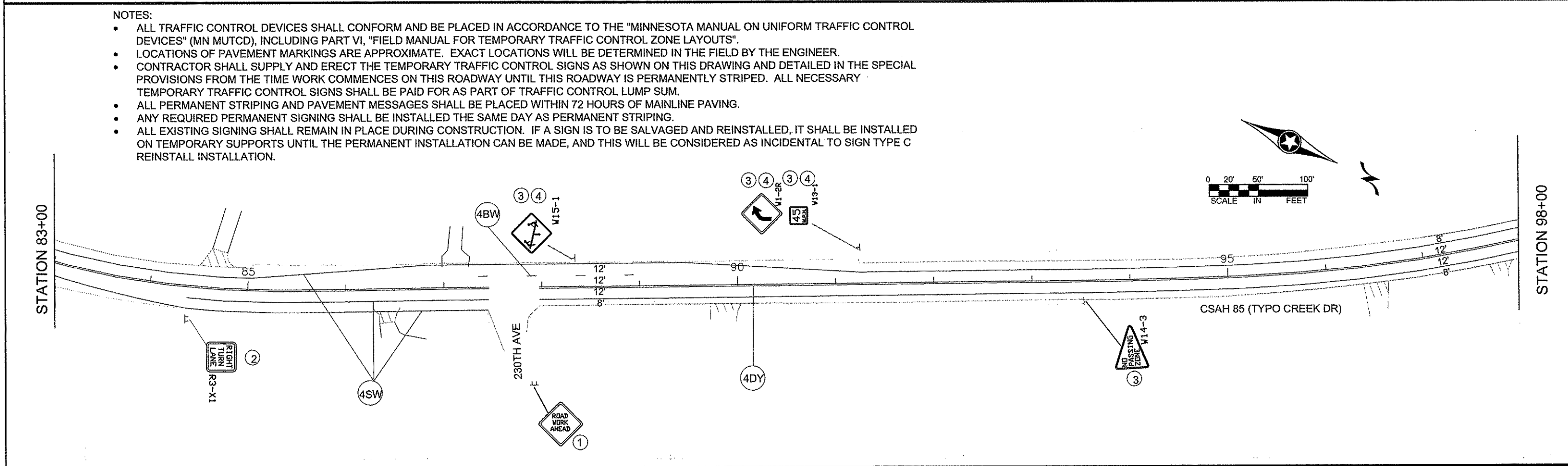
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CSAH 85 (TYPO CREEK DR)
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES
 Sheet 16 of 22 Sheets

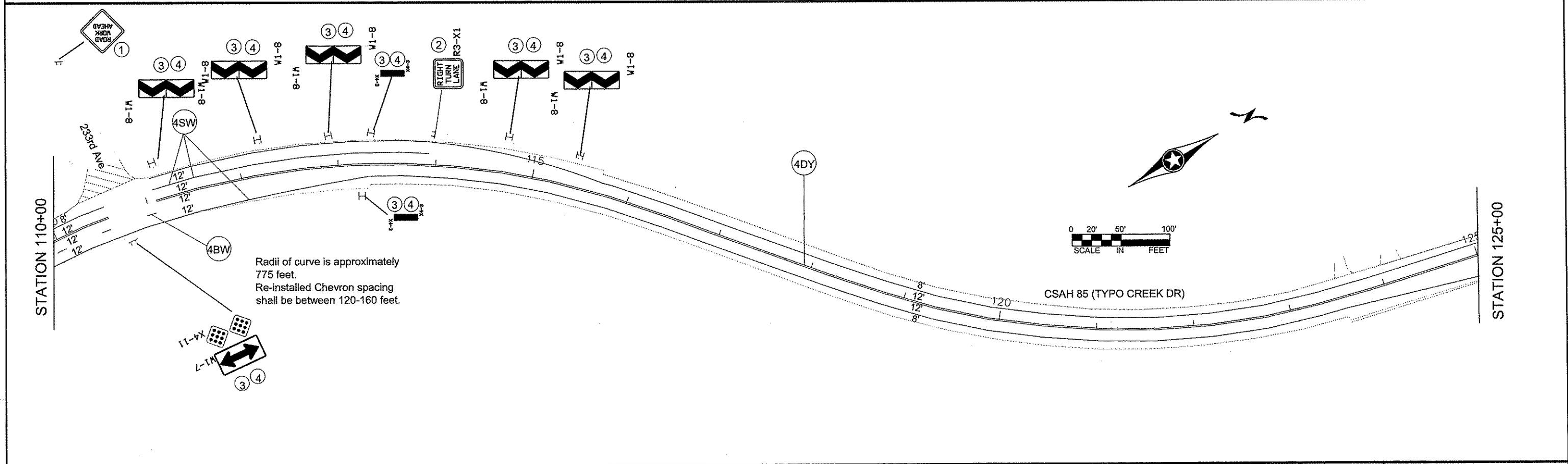
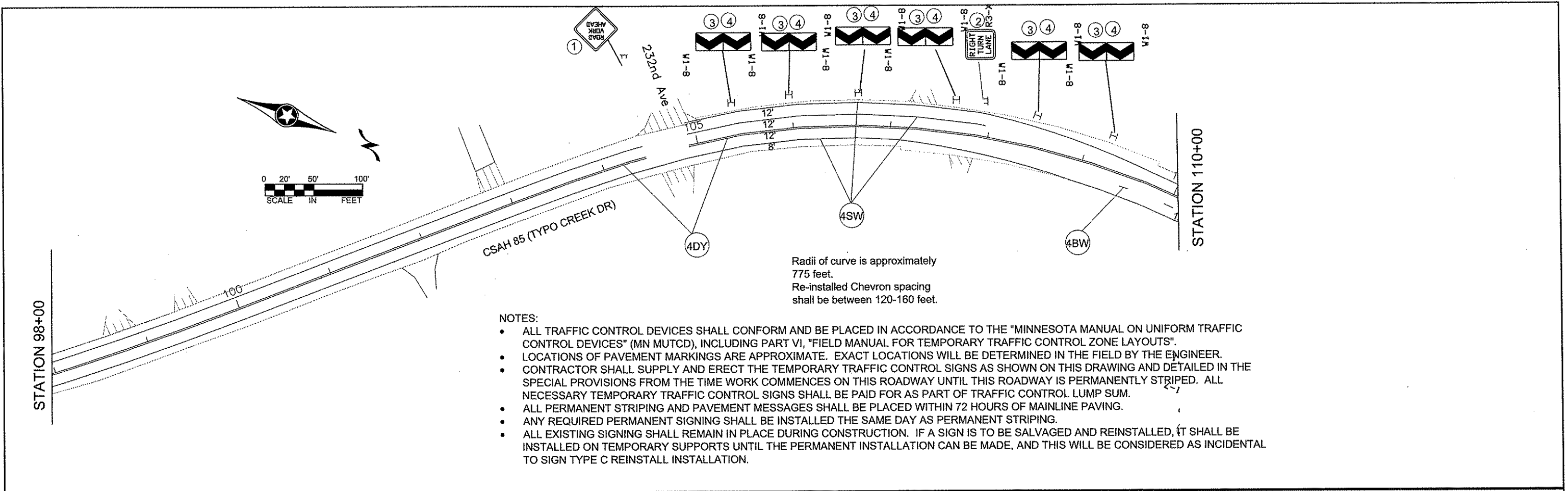


NOTES:

- 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 PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 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.
- ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. IF A SIGN IS TO BE SALVAGED AND REINSTALLED, IT SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE, AND THIS WILL BE CONSIDERED AS INCIDENTAL TO SIGN TYPE C REINSTALL INSTALLATION.



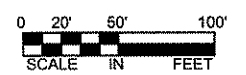
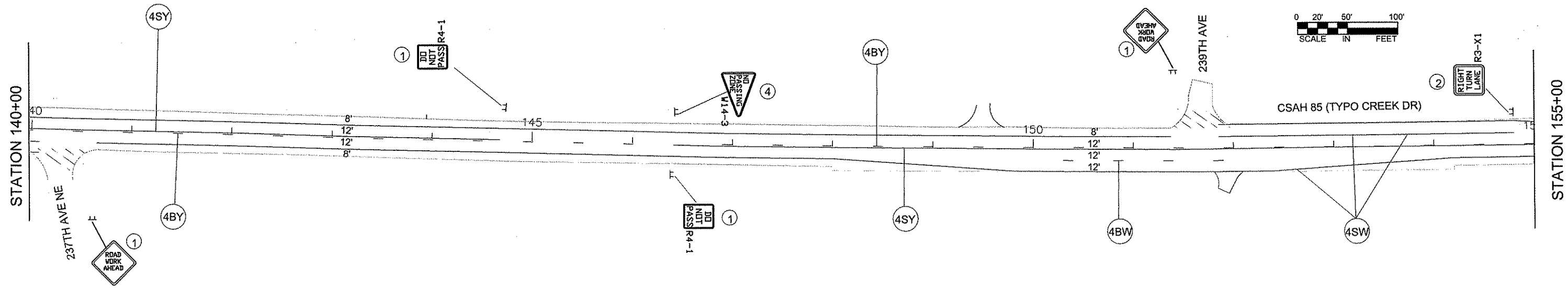
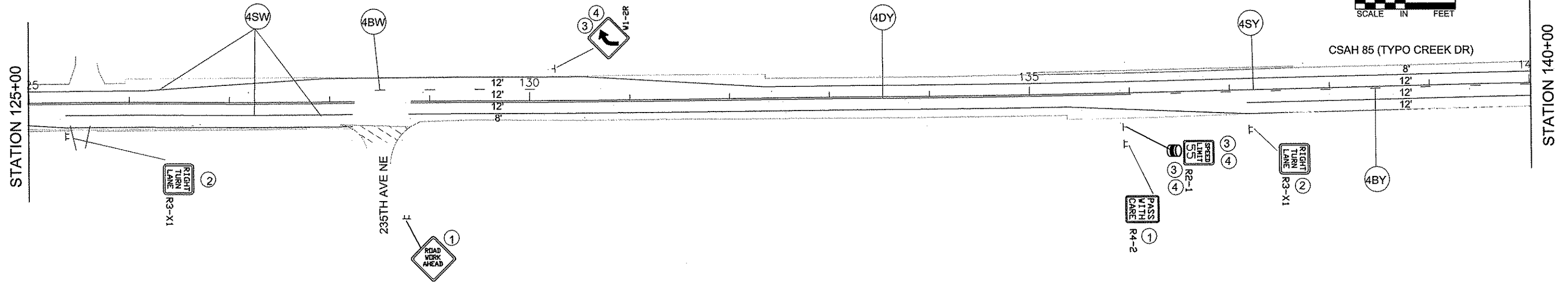
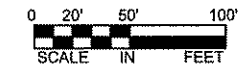
| | | | | | | | | | | | | |
|---|------|----|-----|------|--|--|---|--|---|--|---|--|
| I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: CHARLES CADENHEAD SIGNATURE: <i>[Signature]</i> DATE: 2/2/12 LICENSE NO. 40416 | | | | | DRAWN BY: MTH DATE 1/20/12 DESIGN BY: MTH DATE 1/20/12 CHECKED BY: JR DATE 2/14/12 | | ANOKA COUNTY HIGHWAY DEPT. | | STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ CITY PROJECT NO. _____ COUNTY PROJECT NO. 11-25-85 | | CSAH 85 (TYPO CREEK DR) TEMPORARY SIGNING PERMANENT SIGNING, STRIPING AND PAVEMENT MESSAGES Sheet 17 of 22 Sheets | |
| NO | DATE | BY | CKD | APPR | REVISION | | | | | | | |
| NAME: T:\Traffic\dwg\CSAH 85\2012 D\erlay.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: <i>[Signature]</i> DATE: 3/2/12 LICENSE NO. 40416 | | | | | DRAWN BY: MTH DATE 1/20/12 DESIGN BY: MTH DATE 1/20/12 CHECKED BY: JR DATE 2/14/12 | | ANOKA COUNTY HIGHWAY DEPT. | | STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ CITY PROJECT NO. _____ COUNTY PROJECT NO. 11-25-85 | | CSAH 85 (TYPO CREEK DR) TEMPORARY SIGNING PERMANENT SIGNING, STRIPING AND PAVEMENT MESSAGES Sheet 18 of 22 Sheets | |
| NO | DATE | BY | CKD | APPR | REVISION | | | | | | | |
| NAME: T:\Traffic\dwg\CSAH 85\2012 D\vertay.dwg | | | | | | | | | | | | |

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 PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 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.
- ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. IF A SIGN IS TO BE SALVAGED AND REINSTALLED, IT SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE, AND THIS WILL BE CONSIDERED AS INCIDENTAL TO SIGN TYPE C REINSTALL INSTALLATION.



| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

NAME: T:\Traffic\dwg\CSAH 85\2012 Overlay.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: 3/2/12 LICENSE NO. 40416

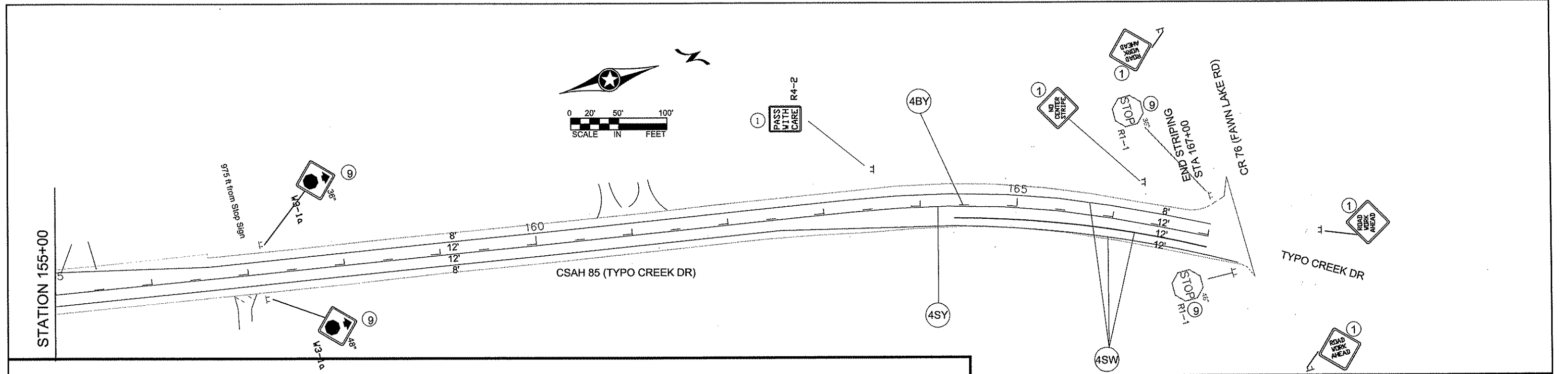
DRAWN BY: MTH DATE 1/20/12
 DESIGN BY: MTH DATE 1/20/12
 CHECKED BY: JR DATE 2/14/12

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CSAH 85 (TYPO CREEK DR)
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

Sheet 19 of 22 Sheets



| TEMPORARY TRAFFIC CONTROL SIGNS | | | | | | |
|---------------------------------|-----------|--------------------------------|--------|-----------------------------|------|---|
| M.U.T.C.D. CODE | SIZE | PANEL AREA FT. ² | INSERT | QUANTITY | | MOUNTING HEIGHT (TO PANELMENT EDGE) FT. |
| | | | | No. | POST | |
| W8-12 | 48" x 48" | 16.00 | | 4 | 2 | 7.0' |
| R4-1 | 24" x 30" | 5.00 | | 7 | 1 | 7.0' |
| R4-2 | 24" x 30" | 5.00 | | 4 | 1 | 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 | | |
| W8-11 | 48" x 48" | 16.00 | | AS NEEDED | | |
| W20-1 | 48" x 48" | 16.00 | | AS NEEDED (ESTIMATED 14) | | |

| F & I PERMANENT SIGNS | | | | | | | |
|-----------------------|-----------|--------------------------------|--------|----------|------|---|--------------------------------------|
| M.U.T.C.D. CODE | SIZE | PANEL AREA FT. ² | INSERT | QUANTITY | | MOUNTING HEIGHT (TO PANELMENT EDGE) FT. | TOTAL PANEL AREA FT. ² |
| | | | | No. | POST | | |
| R3-X1 | 30" x 30" | 6.25 | | 9 | 1 | 7.00 | 56.25 |
| W3-1a | 36" x 36" | 9.00 | | 1 | 2 | 7.00 | 9.00 |
| TOTAL PANEL AREA | | | | | | | 65.25 |

SEE SPECIAL PROVISIONS

- ① TEMPORARY TRAFFIC CONTROL SIGN
- ② F & I PERMANENT SIGN
- ③ SALVAGE PERMANENT SIGN
- ④ RE-INSTALL PERMANENT SIGN
- ⑤ INPLACE - RETAIN

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 PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 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.
- ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. IF A SIGN IS TO BE SALVAGED AND REINSTALLED, IT SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE, AND THIS WILL BE CONSIDERED AS INCIDENTAL TO SIGN TYPE C REINSTALL INSTALLATION.

| SALVAGE AND RE-INSTALL PERMANENT SIGNS | | | | | | | |
|--|----|---------------------|---------------------|---------------------|---------------------|--------------------------|-------|
| STATION | | SALVAGE SIGN TYPE C | SALVAGE SIGN TYPE D | INSTALL SIGN TYPE C | INSTALL SIGN TYPE D | SIGN NUMBER | NOTES |
| | | EACH | EACH | EACH | EACH | | |
| 13+50 | Rt | | 1 | | 1 | Adopt | |
| 16+00 | Rt | | 1 | | 1 | School | |
| 16+70 | Lt | | 1 | | 1 | School | |
| 17+00 | Rt | 1 | | 1 | | R2-1 | |
| 18+80 | Lt | 1 | | 1 | | W1-6 | |
| 19+20 | Lt | 1 | | 1 | | W3-1 | |
| 51+00 | Lt | 1 | | | | W14-3 | |
| 55+20 | Rt | 1 | | | | W14-3 | |
| 63+30 | Rt | | | 1 | | W14-3 | |
| 68+50 | Lt | 1 | | 1 | | R1-1 / R1-4 / delineator | |
| 68+50 | Lt | 1 | | 1 | | M1-6 / M6-1AR | |
| 69+30 | Lt | 1 | | 1 | | R8-3a | |
| 71+30 | Lt | 1 | | 1 | | R8-3a | |
| 72+50 | Lt | 1 | | 1 | | W14-3 / M2-1a / M1-6 | |
| 77+40 | Rt | 1 | | 1 | | R8-3a | |
| 77+40 | Rt | | | | | | W14-3 |
| 79+30 | Rt | 1 | | 1 | | R8-3a | |
| 81+00 | Rt | 1 | | 1 | | R8-3a | |
| 88+30 | Lt | 1 | | 1 | | W15-1 | |
| 91+30 | Lt | 1 | | 1 | | W1-2RW13-1 | |
| 93+60 | Rt | 1 | | | | W14-3 | |
| 105+40 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 106+00 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 106+70 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 107+60 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 108+40 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 109+30 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 110+70 | Rt | 1 | | 1 | | W1-7 / x4-2 / x4-2 | |
| 111+20 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 112+20 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 112+90 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 112+20 | Rt | 1 | | 1 | | X4-3 / x4-3 | |
| 112+30 | Lt | 1 | | 1 | | X4-3 / x4-3 | |
| 114+70 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 115+40 | Lt | 1 | | 1 | | W1-8 / W1-8 | |
| 130+20 | Lt | 1 | | 1 | | W1-2R | |
| 135+90 | Rt | 1 | | 1 | | R2-1/terminal post | |
| 146+40 | Lt | | | 1 | | W14-3 | |
| TOTAL | | 32 | 3 | 31 | 3 | | |

| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |

NAME: T:\Traffic\dwg\CSAH 85\2012 Overlay.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: 7/2/12 LICENSE NO. 40416

DRAWN BY: MTH DATE 1/20/12
 DESIGN BY: MTH DATE 1/20/12
 CHECKED BY: JR DATE 2/14/12



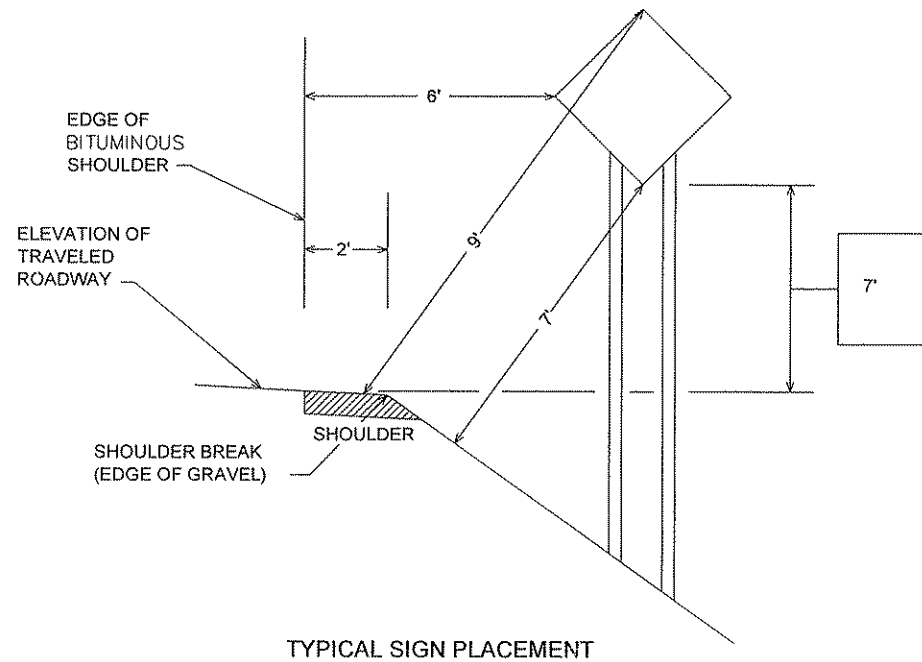
ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

CSAH 85 (TYPO CREEK DR)
 TEMPORARY SIGNING
 PERMANENT SIGNING, STRIPING
 AND PAVEMENT MESSAGES

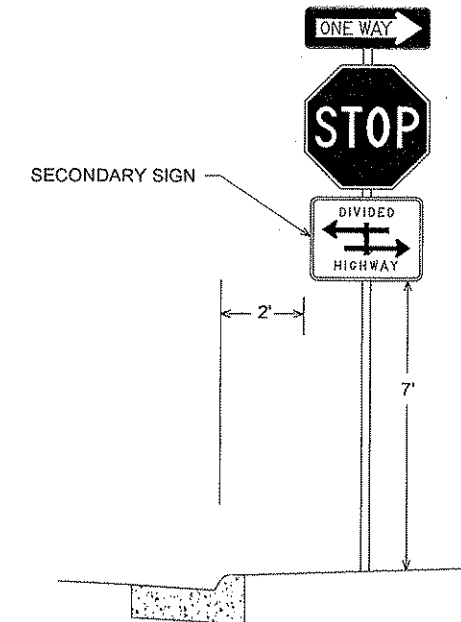
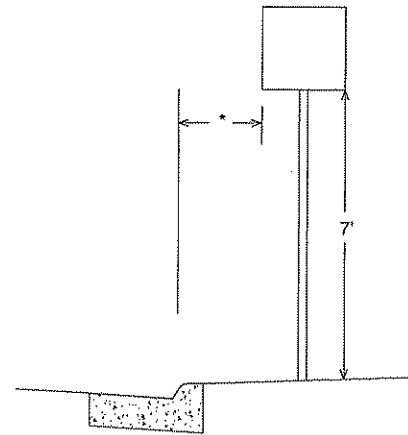
Sheet 21 of 22 Sheets

RURAL



URBAN

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



NOTE:

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

| NO | DATE | BY | CKD | APPR | REVISION |
|----|------|----|-----|------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

NAME: T:\Traffic\Dwg\CSAH 18 (Crosstown Blvd)\Sign&Stripe_Details.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: 5/2/12 LICENSE NO. 40416

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



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE PROJECT NO. _____
 STATE PROJECT NO. _____
 COUNTY PROJECT NO. 11-25-85

SIGNING & STRIPING DETAILS
 Sheet 22 of 22 Sheets