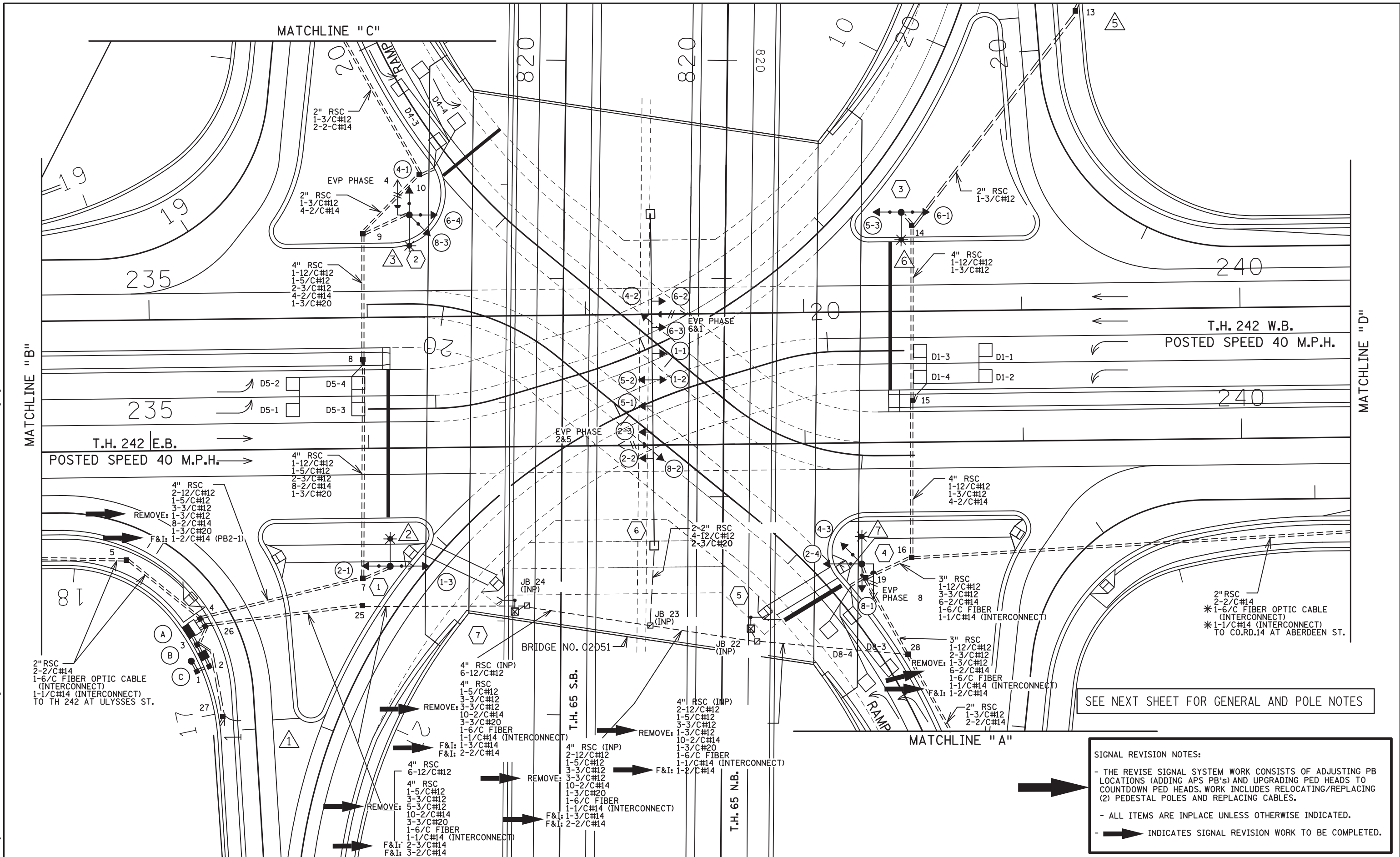


PLOTTED/REVISED: 14-DEC-2023

DISTRICT *: Metro
PLOT NAME: I735544_sgl_34
FILENAME: Projects\DM_FOS\0650000\Traffic\Signals\I7.00_21174-CSAH_14_125th_Ave_NE_I735544PENDING\I735544_sgl.dgn



SEE NEXT SHEET FOR GENERAL AND POLE NOTES

SIGNAL REVISION NOTES:

- THE REVISE SIGNAL SYSTEM WORK CONSISTS OF ADJUSTING PB LOCATIONS (ADDING APS PB'S) AND UPGRADING PED HEADS TO COUNTDOWN PED HEADS. WORK INCLUDES RELOCATING/REPLACING (2) PEDESTAL POLES AND REPLACING CABLES.
- ALL ITEMS ARE INPLACE UNLESS OTHERWISE INDICATED.
- INDICATES SIGNAL REVISION WORK TO BE COMPLETED.

BY	DATE	REVISIONS

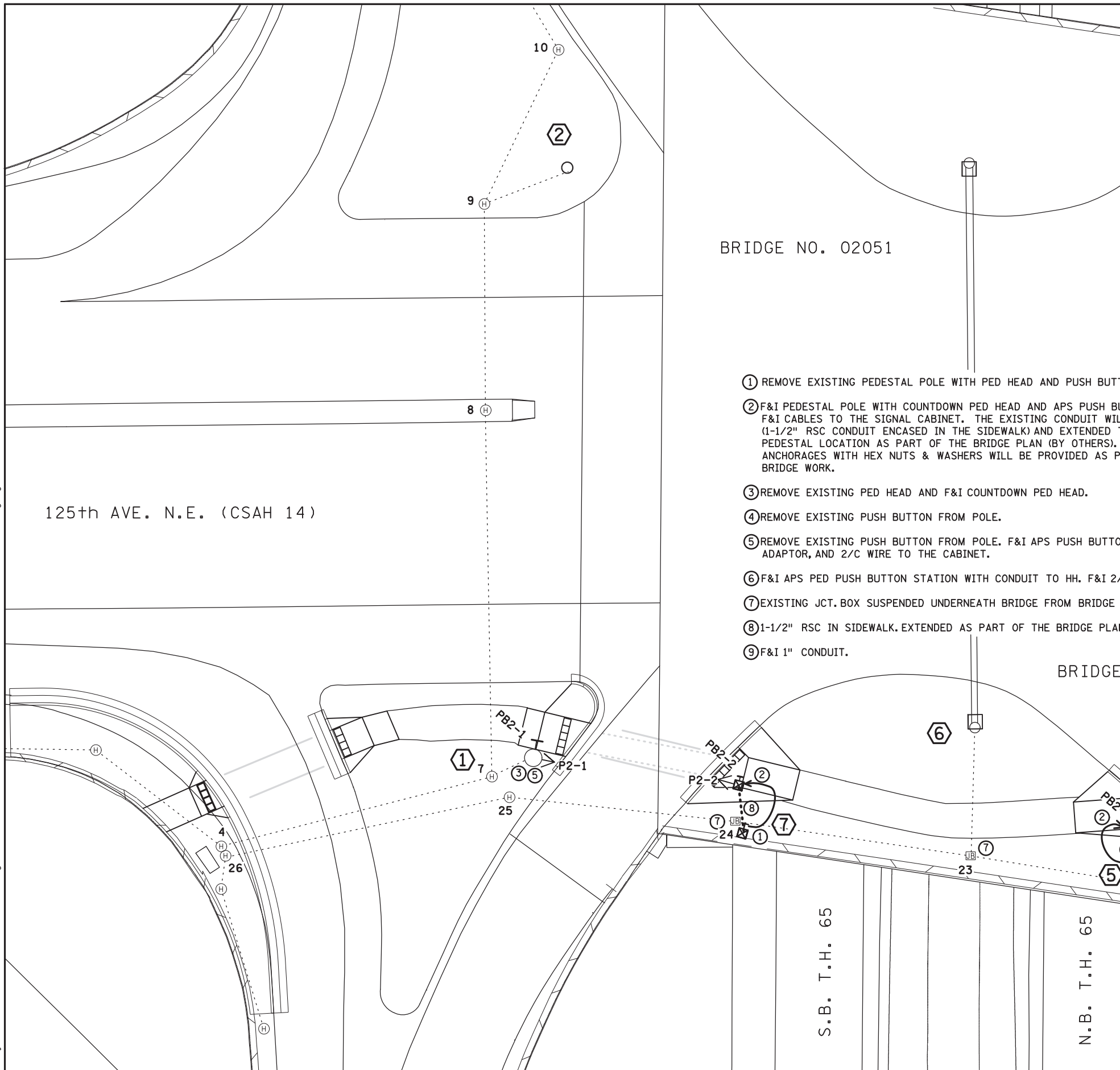
SYSTEM ID: 1735544 T.E. 103231
 METER ADDRESS:
 OLD SYSTEM ID:

**REVISE SIGNAL SYSTEM "J"
 INTERSECTION LAYOUT
 TH 65 AT 125th AVE. N.E. (CSAH 14)
 IN CITY OF BLAINE, ANOKA COUNTY**

S.P. 002-632-021, S.P. 106-020-040, S.P. 106-125-009
 DRAWN BY: CDB CKD BY: CDB DATE: 10/10/23
 CERTIFIED BY LIC. NO. 26829 DATE: 12/8/23
 STATE PROJ. NO. 0208-165 (T.H. 65) SHEET NO. SS38 OF SS87 SHEETS

PLOTTED/REVISED: 14-DEC-2023

DISTRICT *: Metro
PLOT NAME: I735544_sgl_324
FILENAME: Projects\DM_FOS\065\00000\Traffic\Signals\T.00_21174-CSAH_14\125th_Ave_NE_I735544-PENDING\T35544_sgl.dgn

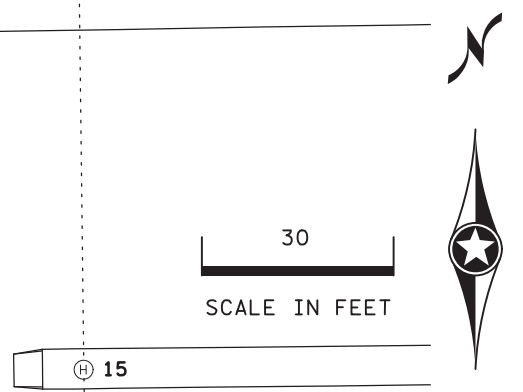


- NOTES:
1. THIS SIGNAL WORK LAYOUT SHEET IS INTENDED AS AN OVERVIEW OF THE SIGNAL WORK REQUIRED. SEE THE INTERSECTION LAYOUT AND WIRING DIAGRAM SHEETS FOR DETAILED SIGNAL REVISION WORK.
 2. THE EXISTING SIGNAL MOUNTING IS ONE-WAY MOUNTS ON POLES AND BRACKETING ON PEDESTALS.
 3. ALL ITEMS ARE INPLACE UNLESS NOTED.
 4. ALL CONCRETE WORK ON THE BRIDGE, AND ALL WORK REQUIRED TO EXTEND CONDUIT TO THE (2) NEW SIGNAL PEDESTAL LOCATIONS (POLES 5 & 7), IS INCLUDED AS PART OF THE BRIDGE PLAN.
 5. NEW APS PUSH BUTTONS REQUIRE 2/C SHIELDED CABLE. WHERE OLD PUSH BUTTONS ARE USING CABLES OTHER THAN 2/C, NEW 2/C CABLE WILL NEED TO BE FURNISHED AND INSTALLED FOR NEW APS BUTTONS. THE EXISTING CABLES SHALL BE ABANDONED OR REMOVED.
 6. THE SIGNAL IS OPERATED AND MAINTAINED BY ANOKA COUNTY.
 7. PEDESTRIAN CURB RAMPS, CONCRETE WORK, AND STRIPING PLAN ARE INCLUDED IN THE ROADWAY SECTION OF THE PLAN. SEE THE INTERSECTION DETAILS FOR MORE INFORMATION.

BRIDGE NO. 02051

- 1 REMOVE EXISTING PEDESTAL POLE WITH PED HEAD AND PUSH BUTTON.
- 2 F&I PEDESTAL POLE WITH COUNTDOWN PED HEAD AND APS PUSH BUTTON. F&I CABLES TO THE SIGNAL CABINET. THE EXISTING CONDUIT WILL BE EXPOSED (1-1/2" RSC CONDUIT ENCASED IN THE SIDEWALK) AND EXTENDED TO THE NEW PEDESTAL LOCATION AS PART OF THE BRIDGE PLAN (BY OTHERS). DRILLED ANCHORAGES WITH HEX NUTS & WASHERS WILL BE PROVIDED AS PART OF THE BRIDGE WORK.
- 3 REMOVE EXISTING PED HEAD AND F&I COUNTDOWN PED HEAD.
- 4 REMOVE EXISTING PUSH BUTTON FROM POLE.
- 5 REMOVE EXISTING PUSH BUTTON FROM POLE. F&I APS PUSH BUTTON, APS MOUNTING ADAPTOR, AND 2/C WIRE TO THE CABINET.
- 6 F&I APS PED PUSH BUTTON STATION WITH CONDUIT TO HH. F&I 2/C WIRE TO THE CABINET.
- 7 EXISTING JCT. BOX SUSPENDED UNDERNEATH BRIDGE FROM BRIDGE DECK.
- 8 1-1/2" RSC IN SIDEWALK. EXTENDED AS PART OF THE BRIDGE PLAN WORK.
- 9 F&I 1" CONDUIT.

BRIDGE NO. 02051



CITY OF BLAINE

BY	DATE	REVISIONS

SYSTEM ID: T.E. 103231
 METER ADDRESS:
 OLD SYSTEM ID:

REVISE SIGNAL SYSTEM "J"
 SIGNAL WORK LAYOUT
 T.H. 65 AT 125th AVE. NE (CSAH 14)

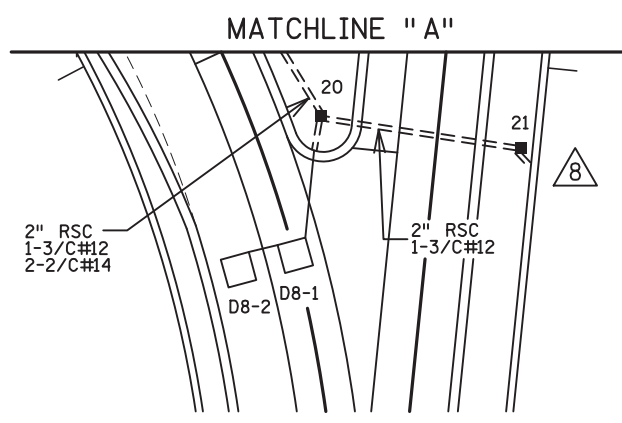
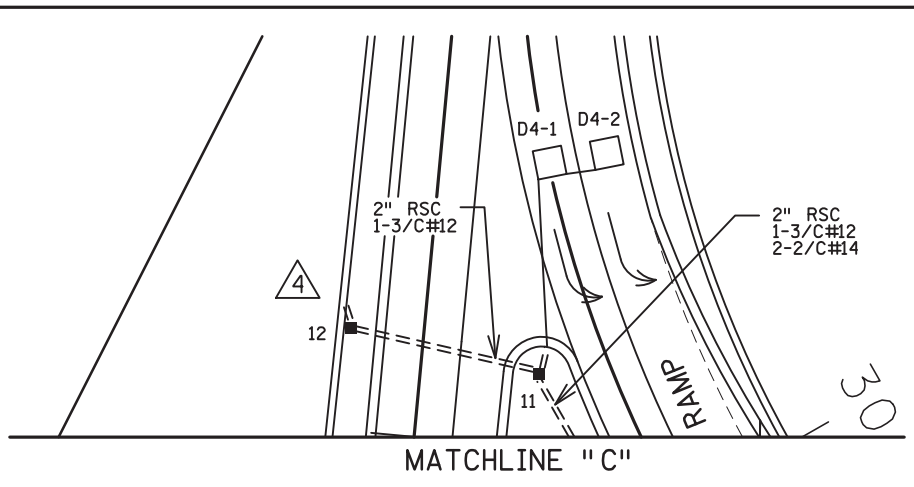
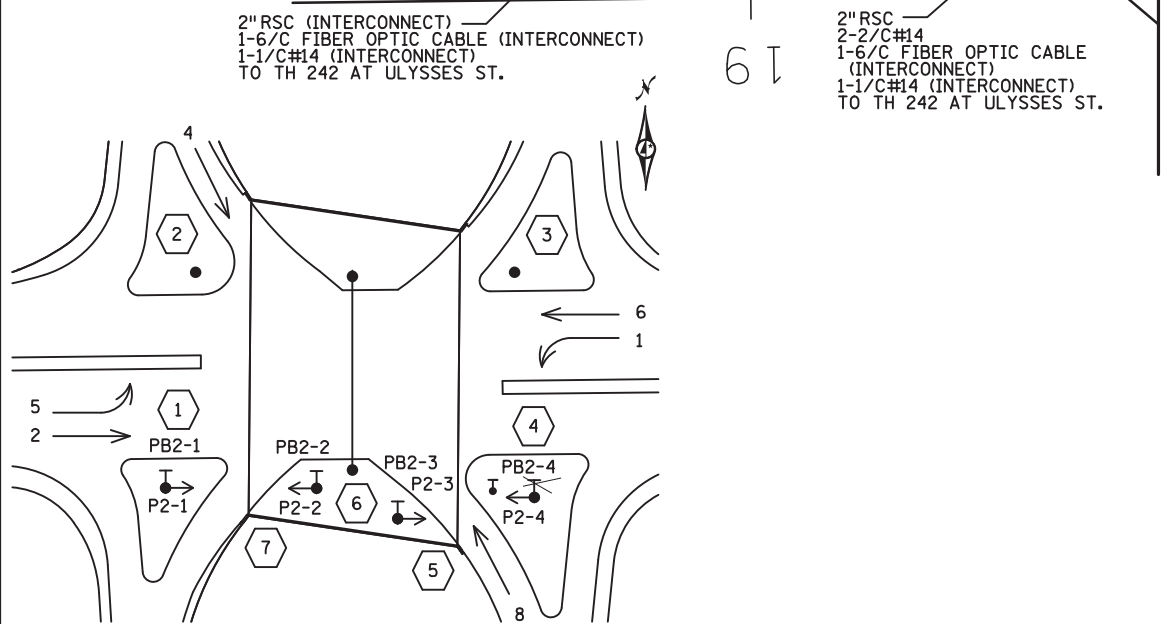
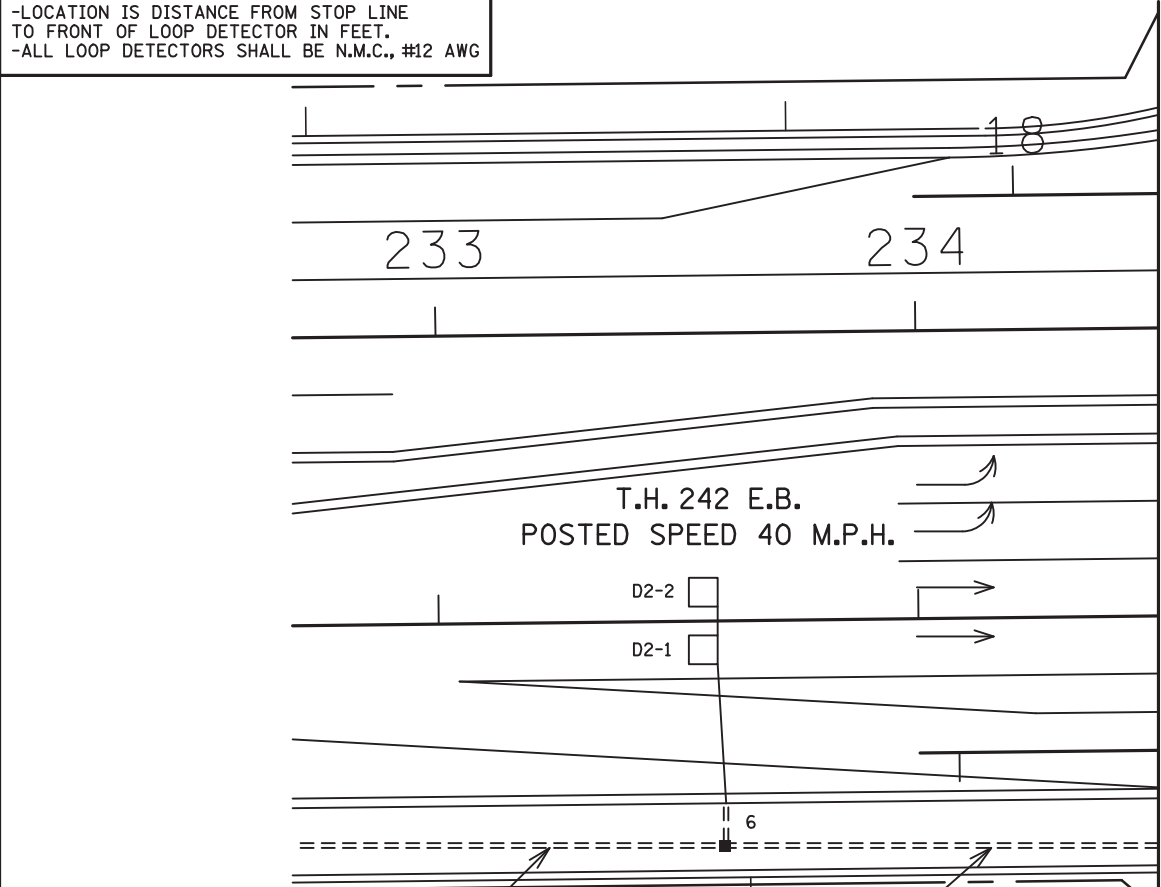
S.P. 002-632-021, S.P. 106-020-040, S.P. 106-125-009
 DRAWN BY: CDB CKD BY: CDB DATE: 10/10/23
 CERTIFIED BY: *Gregory Ken* LIC. NO. 26829 DATE: 12/8/23
 STATE PROJ. NO. 0208-165 (T.H. 65) SHEET NO. SS36 OF SS87 SHEETS

PLOTTED/REVISED: 3-NOV-2023

DISTRICT #: Metro
 PLOT NAME: I735544_sgl_35
 FILENAME: Projects\DM_FOS\06500000\Traffic\Signals\I7.00_21174-CSAH_14\I25th_Ave_NE_I735544-PENDING\I735544_sgl.dgn

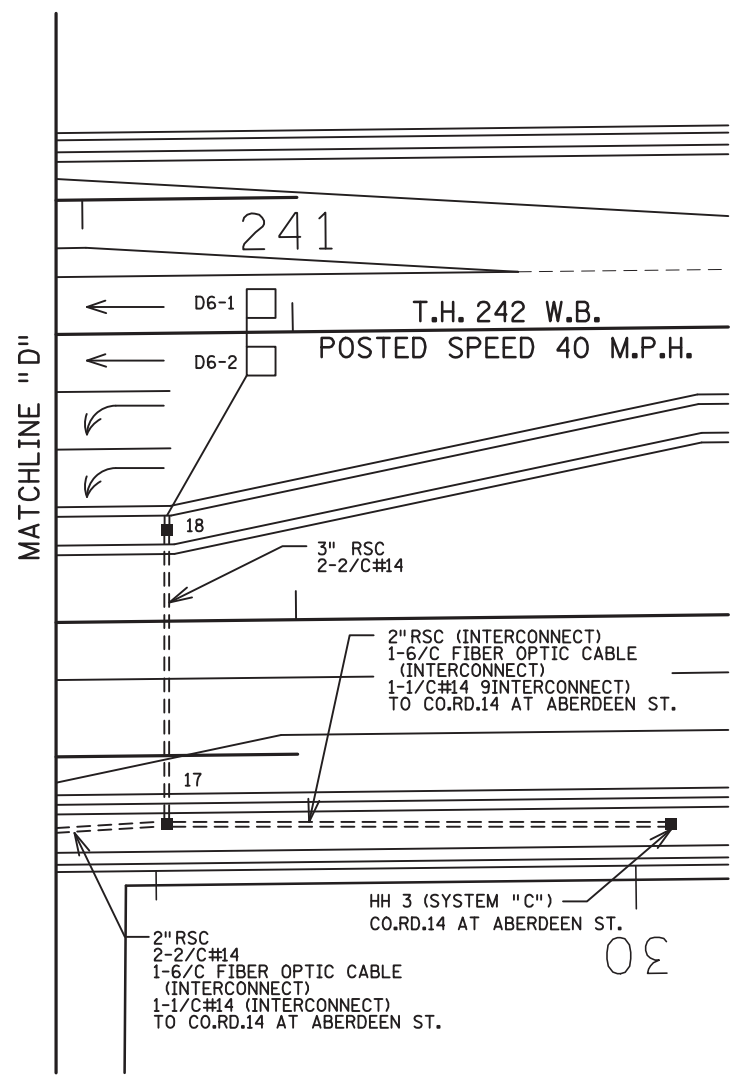
LOOP DETECTOR CHART			
NUMBER	SIZE (FT)	LOCATION	FUNCTION
D1-1,D1-2	6X6	40'	1
D1-3,D1-4	6X6	10'	1
D2-1,D2-2	6X6	250'	1
D4-1,D4-2	6X6	120'	3 & 8
D4-3,D4-4	2-6X6	10'&40'	1
D5-1,D5-2	6X6	40'	1
D5-3,D5-4	6X6	10'	1
D6-1,D6-2	6X6	250'	1
D8-1, D8-2	6X6	120'	3 & 8
D8-3,D8-4	2-6X6	10'&40'	1

- LOOP DETECTORS FUNCTIONS:
- 1) CALL AND EXTEND
 - 2) CALL ONLY
 - 3) EXTEND ONLY
 - 4) CALL ONLY DENSITY
 - 5) DELAYED CALL ONLY
 - 6) DELAYED CALL ONLY DENSITY
 - 7) DELAYED CALL- IMMEDIATE EXTEND
 - 8) CARRY OVER (STRETCH)
 - 9) ADVISORY DETECTOR
 - 10) SAMPLING DETECTOR
 - 11) SPECIAL DETECTOR



SIGNAL FACES			
FACE	R	Y	G
1-1,1-2,1-3	←	←	←
2-1,2-2,2-3,2-4	●	●	●
4-1,4-2,4-3	←	←	←
5-1,5-2,5-3	←	←	←
6-1,6-2,6-3,6-4	●	●	●
8-1,8-2,8-3	←	←	←

-ALL SIGNAL INDICATIONS SHALL BE 12"
 -ALL SIGNAL INDICATIONS SHALL BE LED
 -ALL SIGNAL FACES SHALL HAVE A BACKGROUND SHIELD



SEE NEXT SHEET FOR GENERAL AND POLE NOTES

NOTE: THERE IS NOT ANY SIGNAL WORK REQUIRED ON THIS SHEET.

BY	DATE	REVISIONS	SYSTEM ID: 1735544	T.E. 103231	S.P.002-632-021,S.P.106-020-040,S.P.106-125-009	DRAWN BY:CDB	CKD BY:CDB	DATE:10/10/23
			METER ADDRESS:		CERTIFIED BY <i>Gregory Ken</i>	LIC. NO. 26829	DATE: 10/12/23	
			OLD SYSTEM ID:		STATE PROJ.NO. 0208-165 (T.H.65) SHEET NO. SS39 OF SS87 SHEETS			

PLOTTED/REVISED: 14-DEC-2023

DISTRICT *: Metro
PLOT NAME: I735544_sgl_36
FILENAME: Projects\DM_FOS\0650000\Traffic\Signals\I7.00_21174-CSAH_14_125th_Ave_NE_I735544-PENDING\I735544_sgl.dgn

A E.B. STA. 235+17, 83' RT.
INSTALL CONTROLLER CABINET (FURNISHED BY ANOKA COUNTY)
CABINET FOUNDATION
3/4" PVC CONDUIT STUBBED OUT
(CAPPED AT BOTH ENDS FOR FUTURE TELEPHONE LINE)
2-3" RSC STUBBED OUT (THREADED AND CAPPED BOTH ENDS)
EXTEND INTO HH 3:
METERED SIGNAL SERVICE
2" RSC
3-1/C#6
EXTEND INTO HH 4:
3" RSC
2-12/C#12
1-5/C#12
2-3/C#12
REMOVE: 1-3/C#12
F&I: 1-2/C#14
10-2/C#14
1-3/C#20
1-6/C FIBER OPTIC CABLE (INTERCONNECT)
1-1/C#14 (INTERCONNECT)

EXTEND INTO HH 26:
3" RSC
1-5/C#12
1-3/C#12

REMOVE: 5-3/C#12
F&I: 2-3/C#14
F&I: 3-2/C#14
10-2/C#14
3-3/C#20
1-6/C FIBER OPTIC CABLE (INTERCONNECT)
1-1/C#14 (INTERCONNECT)

B E.B. STA. 235+22, 94' RT.
SERVICE CABINET
CABINET FOUNDATION
EXTEND INTO HH 1 VIA HH 2:
2" RSC
3-1/C#2
EXTEND INTO HH 3:
2" RSC
METERED SIGNAL SERVICE
3-1/C#6
METERED LUMINAIRE SERVICE
4-3/C#12
BETWEEN HH 26 AND HH 4:
2" RSC
2-3/C#12
BETWEEN HH 3 AND HH 27:
2" RSC
2-3/C#12
BETWEEN HH 3 AND HH 26:
2" RSC
4-3/C#12

C S.O.P. GROUND MOUNTED TRANSFORMER TO BE
FURNISHED AND INSTALLED BY CONNEXUS ENERGY
(LOCATION SHOWN IS APPROXIMATE)
EXTEND INTO HH 1:
2" RSC
3-1/C#2

2 W.B. STA. 236+20, 47' LT.
PA85 POLE FOUNDATION
TYPE PA85-D40-9 (DAVIT AT 0°)
3-ONE WAY SIGNALS POLE MOUNTED
AT 180°, 270° AND 315° (SEE DETAIL)
LUMINAIRE 250W HPS
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (POLE MOUNTED)
2-(R9-3a) SIGNS FACING POLES #1 AND #3
EXTEND INTO HH 9:
3" RSC
1-12/C#12
1-5/C#12
3-3/C#12
1-3/C#20

1 E.B. STA. 235+31, 127' RT.
1-LIGHTING UNIT TYPE 6B-40
EXTEND INTO HH 27:
2" RSC
2-3/C#12

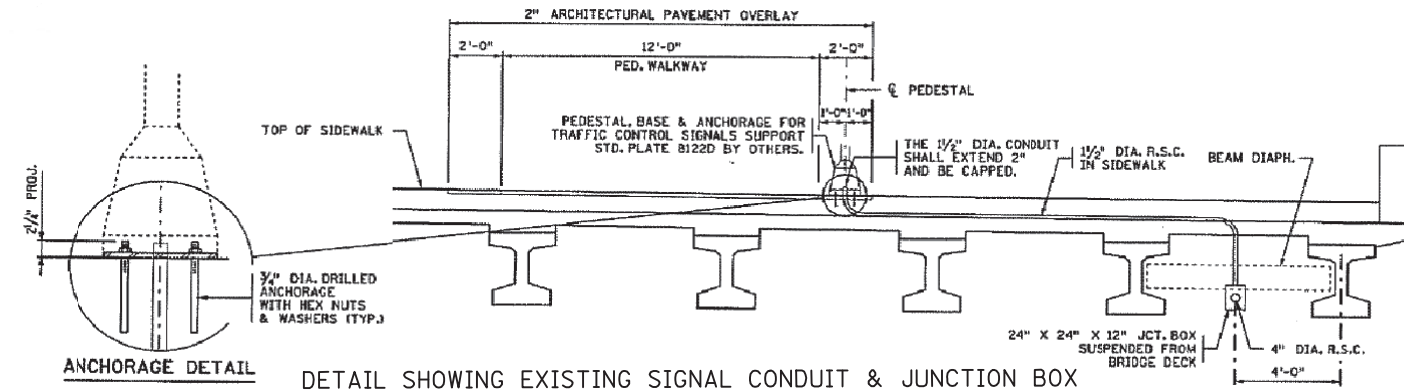
4 W.B. STA. 235+46, 158' LT.
1-LIGHTING UNIT TYPE 6B-40
EXTEND INTO HH 12:
2" RSC
1-3/C#12

5 W.B. STA. 239+26, 143' LT.
1-LIGHTING UNIT TYPE 6B-40
EXTEND INTO HH 13:
2" RSC
1-3/C#12

8 E.B. STA. 254+00, 158' RT.
1-LIGHTING UNIT TYPE 6B-40
EXTEND INTO HH 21:
2" RSC
1-3/C#12

3 W.B. STA. 238+45, 46' LT.
PA85 POLE FOUNDATION
TYPE PA85-D40-9 (DAVIT AT 0°)
2-ONE WAY SIGNALS POLE MOUNTED
AT 90° AND 270° (SEE DETAIL)
LUMINAIRE 250W HPS
2-(R9-3a) SIGNS FACING POLE #2 AND #4
EXTEND INTO HH 14:
3" RSC
1-12/C#12
2-3/C#12

4 E.B. STA. 238+25, 56' RT.
PA85 POLE FOUNDATION
TYPE PA85-D40-9 (DAVIT AT 0°)
3-ONE WAY SIGNALS POLE MOUNTED
AT 180°, 270° AND 315° (SEE DETAIL)
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (POLE MOUNTED)
LUMINAIRE 250W HPS
REMOVE: 1-STRAIGHT MOUNT PED INDICATION POLE MOUNTED AT 270° (P2-4)
F&I: 1-STRAIGHT MOUNT C.D. PED HEAD POLE MOUNTED AT 270° (P2-4)
(RE-USE EXITING MOUNTING)
REMOVE: 1-PEDESTRIAN PUSHBUTTON AND SIGN (PB2-4)(R10-4b) (1EA. RIGHT)
1-(R9-3a) SIGN FACING POLE #3
EXTEND INTO HH 19:
3" RSC
1-12/C#12
1-5/C#12
3-3/C#12
REMOVE: 1-3/C#12
1-3/C#20



REMOVE: **7** E.B. STA. 236+66, 76' RT.
13' PEDESTAL AND BASE
1-PEDESTRIAN INDICATION POLE MOUNTED AT 270°
1-PEDESTRIAN PUSH BUTTON AND SIGN
(R10-4b)(1EA. RIGHT)
EXTEND INTO JUNCTION BOX 24 (BY OTHERS):
1 1/2" RSC (BY OTHERS)
2-3/C#12

F&I: **7** PEDESTAL MOUNTED TO BRIDGE SIDEWALK
(COORDINATE WITH THE BRIDGE WORK CONTRACTOR. THE ANCHORAGES
WILL BE INCLUDED AS PART OF THE BRIDGE WORK.)
PEDESTAL POLE AND BASE (DESIGN 8112)
TYPE 4A (8' POLE PLUS BASE)
1-C. D. PED HEAD (ON TOP) (P2-2)
1-APS PB AND SIGN (RT ARROW) (PB2-2)
1-1/2" CONDUIT TO JUNCTION BOX 24: (BY OTHERS)
1-3/C 14 (P2-2)
1-2/C 14 (PB2-2)
1-1/C 6 INS. GR.
(F&I CABLES BACK TO THE CABINET- THE EXISTING CABLES CAN BE REMOVED)

6 E.B. STA. 237+27, 54' RT.
OVERHEAD TRAFFIC SIGNAL SUPPORT AND BASE (SEE DETAIL SHEETS)
10-ONE WAY SIGNALS OVERHEAD
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASES 2&5
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASES 6&1
2- TYPE D SIGNS
EXTEND INTO JUNCTION BOX 23 (BY OTHERS):
2-2" RSC (BY OTHERS)
4-12/C#12
2-3/C#20

SIGNAL REVISION NOTES:

- THE REVISE SIGNAL SYSTEM WORK CONSISTS OF ADJUSTING PB LOCATIONS (ADDING APS PB'S) AND UPGRADING PED HEADS TO COUNTDOWN PED HEADS. WORK INCLUDES RELOCATING/REPLACING (2) PEDESTAL POLES AND REPLACING CABLES.
- ALL ITEMS ARE INPLACE UNLESS OTHERWISE INDICATED.
- **➔** INDICATES SIGNAL REVISION WORK TO BE COMPLETED.

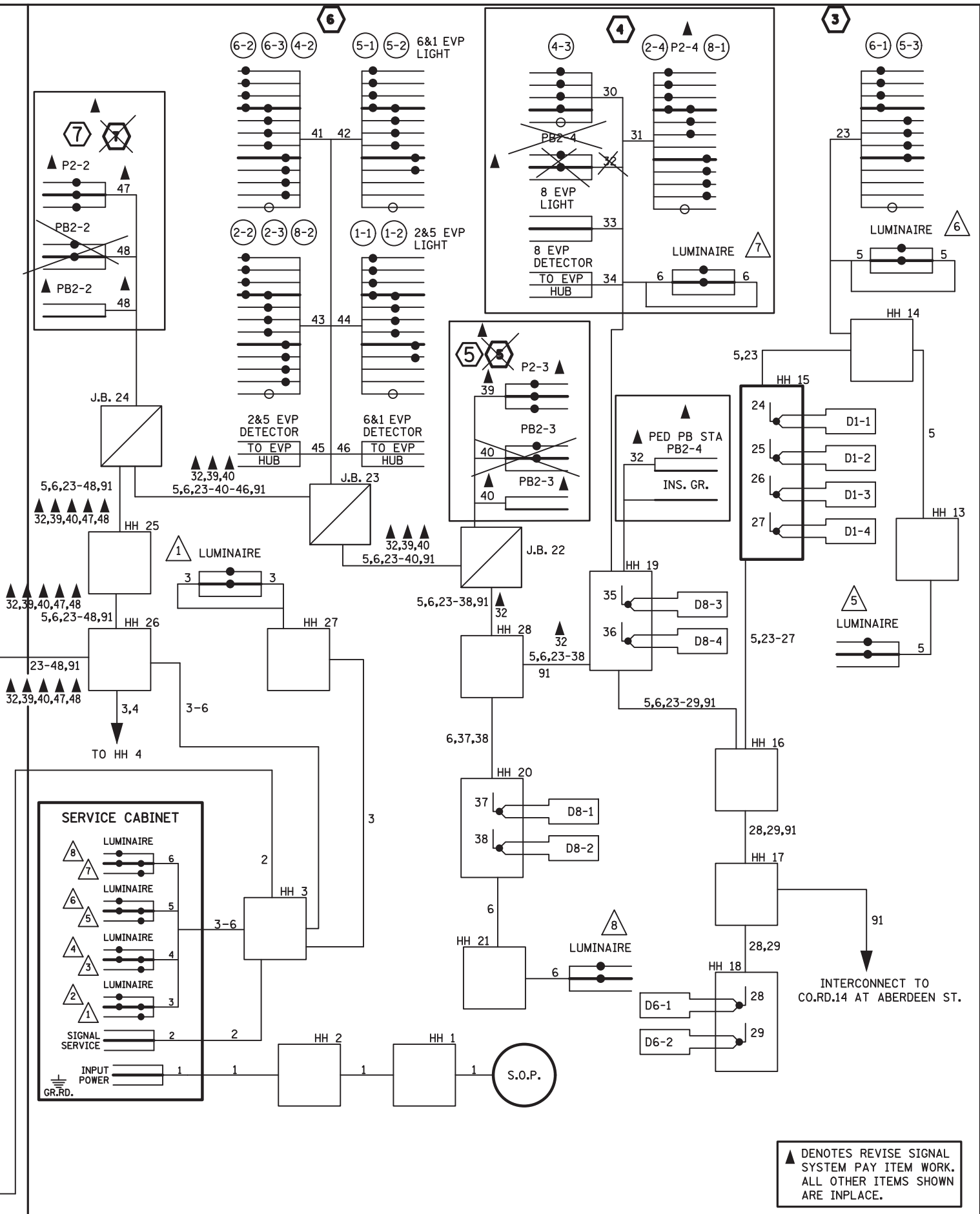
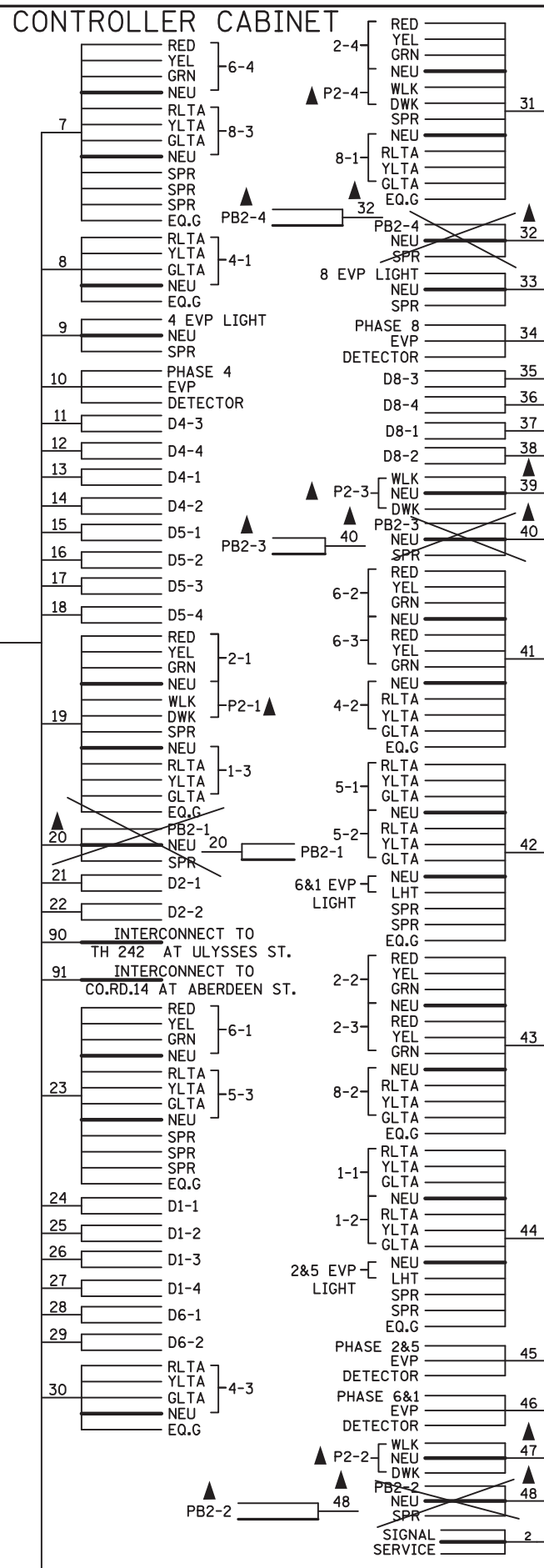
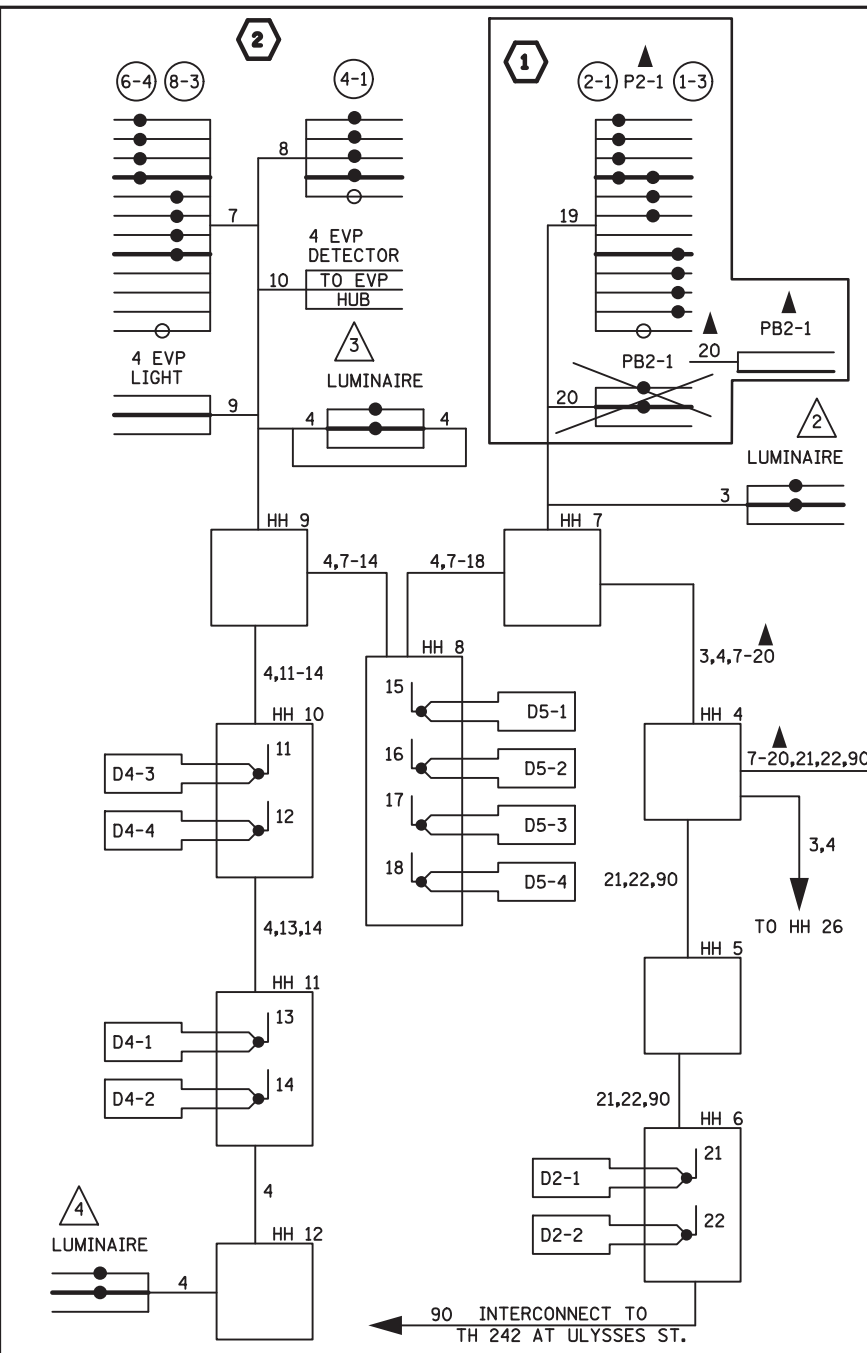
REMOVE: **5** E.B. STA. 237+75, 85' RT.
13' PEDESTAL AND BASE
1-PEDESTRIAN INDICATION POLE MOUNTED AT 90°
1-PEDESTRIAN PUSH BUTTON AND SIGN
(R10-4b)(1EA. LEFT)
EXTEND INTO JUNCTION BOX 22 (BY OTHERS):
1 1/2" RSC (BY OTHERS)
2-3/C#12

F&I: **5** PEDESTAL MOUNTED TO BRIDGE SIDEWALK
(COORDINATE WITH THE BRIDGE WORK CONTRACTOR. THE ANCHORAGES
WILL BE INCLUDED AS PART OF THE BRIDGE WORK.)
PEDESTAL POLE AND BASE (DESIGN 8112)
TYPE 4A (8' POLE PLUS BASE)
1-C. D. PED HEAD (ON TOP) (P2-3)
1-APS PB AND SIGN (LT ARROW) (PB2-3)
1-1/2" CONDUIT TO JUNCTION BOX 22: (BY OTHERS)
1-3/C 14 (P2-3)
1-2/C 14 (PB2-3)
1-1/C 6 INS. GR.
(F&I CABLES BACK TO THE CABINET- THE EXISTING CABLES CAN BE REMOVED)

BY	DATE	REVISIONS	SYSTEM ID: 1735544	T.E. 103231	REVISE SIGNAL SYSTEM "J" POLE NOTES TH 65 AT 125th AVE. N.E. (CSAH 14) IN CITY OF BLAINE, ANOKA COUNTY	S.P. 002-632-021, S.P. 106-020-040, S.P. 106-125-009	DRAWN BY: CDB	CKD BY: CDB	DATE: 10/10/23
			METER ADDRESS:			CERTIFIED BY: <i>Gregory Kern</i>	LIC. NO. 26829	DATE: 12/8/23	
			OLD SYSTEM ID:			STATE PROJ. NO. 0208-165 (T.H.65) SHEET NO. SS40 OF SS87 SHEETS			

PLOTTED/REVISED: 3-NOV-2023

DISTRICT #: Metro
PLOT NAME: 1735544_sgl_37
FILENAME: Projects\DM_FOS\0650000\Traffic\Signal\17.00_21174-CSAH_14_125th_Ave_NE_1735544-PENDING\1735544_sgl.dgn



CONDUCTOR COLOR CODE

TO SIGNAL CABINET	TO DEVICE
3/C#20 R OR O WH OR YEL BLK OR BL	12/C#12 R O BL WH R/BLK O/BLK BL/BLK WH/BLK BLK BLK/WH G/BLK
2/C#14 BLK CLR	7/C#14 CABLE R O BL WH Y BLK/BRN
2-1/C BLK WH	5/C#14 CABLE R O BL WH BLK
6PR#19	4/C#14 CABLE R O BL WH BLK
	3/C#12 CABLE R O BL WH BLK

BASE OF POLE OR PEDESTAL

TO SIGNAL CABINET	TO DEVICE
3/C#20 R OR O WH OR YEL BLK OR BL	5-SECTION SIGNAL INDICATION R O BL WH Y BLK/BRN GLTA SPR
2/C#14 BLK CLR	3 & 4-SECTION SIGNAL INDICATION R O BL WH BLK GLTA
2-1/C BLK WH	PEDESTRIAN INDICATION R O BL WH BLK SPR
6PR#19	EVP/PB/FLASHER R O BL WH BLK NEU

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE.

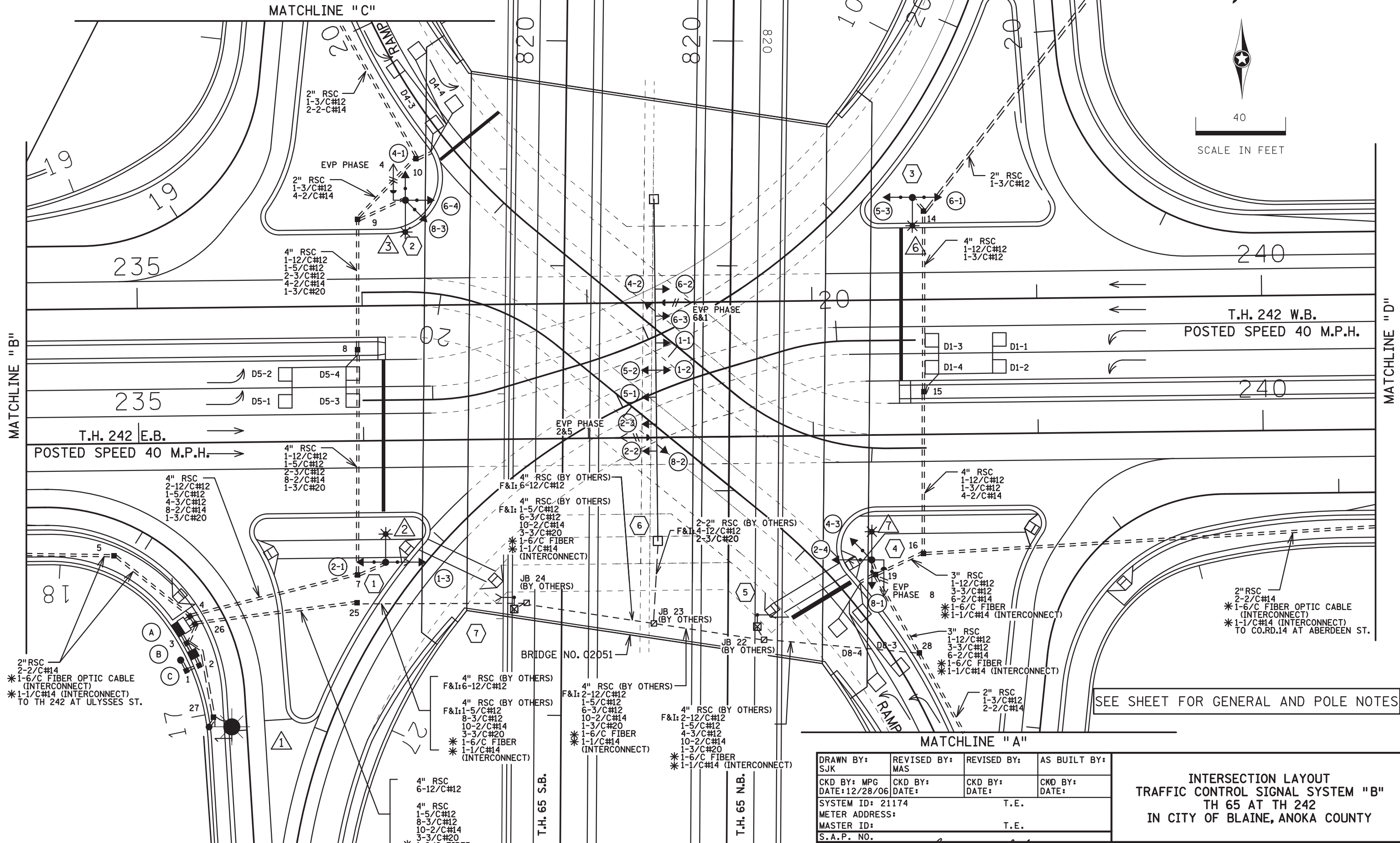
BY	DATE	REVISIONS

SYSTEM ID: 1735544 T.E. 103231
METER ADDRESS:
OLD SYSTEM ID:

**REVISE SIGNAL SYSTEM "J"
FIELD WIRING DIAGRAM**
TH 65 AT 125th AVE. N.E. (CSAH 14)
IN CITY OF BLAINE, ANOKA COUNTY

S.P. 002-632-021, S.P. 106-020-040, S.P. 106-125-009
DRAWN BY: CDB CKD BY: CDB DATE: 10/10/23
CERTIFIED BY: *Gregory Ken* LIC. NO. 26829 DATE: 10/12/23
STATE PROJ. NO. 0208-165 (T.H.65) SHEET NO. SS41 OF SS87 SHEETS

▲ DENOTES REVISE SIGNAL SYSTEM PAY ITEM WORK. ALL OTHER ITEMS SHOWN ARE INPLACE.



SCALE IN FEET

T.H. 242 W.B.
POSTED SPEED 40 M.P.H.

T.H. 242 E.B.
POSTED SPEED 40 M.P.H.

2" RSC
2-2/C#14
*1-6/C FIBER OPTIC CABLE
(INTERCONNECT)
*1-1/C#14 (INTERCONNECT)
TO CO.RD.14 AT ABERDEEN ST.

SEE SHEET FOR GENERAL AND POLE NOTES

MATCHLINE "B"

MATCHLINE "D"

DRAWN BY: SJK	REVISED BY: MAS	REVISED BY:	AS BUILT BY:
CKD BY: MPG	CKD BY:	CKD BY:	CKD BY:
DATE: 12/28/06	DATE:	DATE:	DATE:
SYSTEM ID: 21174	T.E.		
METER ADDRESS:	T.E.		
MASTER ID:	T.E.		
S.A.P. NO.	T.E.		

**INTERSECTION LAYOUT
TRAFFIC CONTROL SIGNAL SYSTEM "B"
TH 65 AT TH 242
IN CITY OF BLAINE, ANOKA COUNTY**

CERTIFIED BY *Michael P. Lubinsky* LIC. NO. 19863 DATE: 2/22/2007
LICENSED PROFESSIONAL ENGINEER

A E.B. STA. 235+17, 83' RT.
 INSTALL CONTROLLER CABINET (FURNISHED BY ANOKA COUNTY)
 CABINET FOUNDATION
 3/4" PVC CONDUIT STUBBED OUT
 (CAPPED AT BOTH ENDS FOR FUTURE TELEPHONE LINE)
 F&I: 2-3" RSC STUBBED OUT (THREADED AND CAPPED BOTH ENDS)
 EXTEND INTO HH 3:
 METERED SIGNAL SERVICE
 2" RSC
 3-1/C#6
 EXTEND INTO HH 4:
 3" RSC
 2-12/C#12
 1-5/C#12
 2-3/C#12
 10-2/C#14
 1-3/C#20
 * 1-6/C FIBER OPTIC CABLE (INTERCONNECT)
 * 1-1/C#14 (INTERCONNECT)
 EXTEND INTO HH 26: EXTEND INTO HH 26:
 3" RSC 3" RSC
 1-5/C#12 6-12/C#12
 6-3/C#12
 10-2/C#14
 3-3/C#20
 * 1-6/C FIBER OPTIC CABLE (INTERCONNECT)
 * 1-1/C#14 (INTERCONNECT)

B F&I: E.B. STA. 235+22, 94' RT.
 F&I: SERVICE CABINET
 CABINET FOUNDATION
 EXTEND INTO HH 1 VIA HH 2:
 2" RSC
 3-1/C#2
 EXTEND INTO HH 3:
 2" RSC
 METERED SIGNAL SERVICE
 3-1/C#6
 METERED LUMINAIRE SERVICE
 4-3/C#12
 BETWEEN HH 26 AND HH 4:
 2" RSC
 2-3/C#12
 BETWEEN HH 3 AND HH 27:
 2" RSC
 2-3/C#12
 BETWEEN HH 3 AND HH 26:
 2" RSC
 4-3/C#12

1 E.B. STA. 236+09, 54' RT.
 PA85 POLE FOUNDATION
 TYPE PA85-D40-9 (DAVIT AT 0°)
 2-ONE WAY SIGNALS POLE MOUNTED
 AT 90° AND 270° (SEE DETAIL)
 LUMINAIRE 250W HPS
 1-PEDESTRIAN INDICATION POLE MOUNTED AT 90° (SEE DETAIL)
 1-PEDESTRIAN PUSHBUTTON AND SIGN
 (R10-4b) (1EA. LEFT)
 1-(R9-3a) SIGN FACING POLE #2
 EXTEND INTO HH 7:
 3" RSC
 1-12/C#12
 2-3/C#12

2 W.B. STA. 236+20, 47' LT.
 PA85 POLE FOUNDATION
 TYPE PA85-D40-9 (DAVIT AT 0°)
 3-ONE WAY SIGNALS POLE MOUNTED
 AT 180°, 270° AND 315° (SEE DETAIL)
 LUMINAIRE 250W HPS
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (POLE MOUNTED)
 2-(R9-3a) SIGNS FACING POLES #1 AND #3
 EXTEND INTO HH 9:
 3" RSC
 1-12/C#12
 1-5/C#12
 3-3/C#12
 1-3/C#20

3 W.B. STA. 238+45, 46' LT.
 PA85 POLE FOUNDATION
 TYPE PA85-D40-9 (DAVIT AT 0°)
 2-ONE WAY SIGNALS POLE MOUNTED
 AT 90° AND 270° (SEE DETAIL)
 LUMINAIRE 250W HPS
 2-(R9-3a) SIGNS FACING POLE #2 AND #4
 EXTEND INTO HH 14:
 3" RSC
 1-12/C#12
 2-3/C#12

4 E.B. STA. 238+25, 56' RT.
 PA85 POLE FOUNDATION
 TYPE PA85-D40-9 (DAVIT AT 0°)
 3-ONE WAY SIGNALS POLE MOUNTED
 AT 180°, 270° AND 315° (SEE DETAIL)
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (POLE MOUNTED)
 LUMINAIRE 250W HPS
 1-PEDESTRIAN INDICATION POLE MOUNTED AT 270° (SEE DETAIL)
 1-PEDESTRIAN PUSHBUTTON AND SIGN
 (R10-4b) (1EA. RIGHT)
 1-(R9-3a) SIGN FACING POLE #3
 EXTEND INTO HH 19:
 3" RSC
 1-12/C#12
 1-5/C#12
 4-3/C#12
 1-3/C#20

C S.O.P. GROUND MOUNTED TRANSFORMER TO BE
 FURNISHED AND INSTALLED BY CONNEXUS ENERGY
 (LOCATION SHOWN IS APPROXIMATE)
 EXTEND INTO HH 1:
 2" RSC
 3-1/C#2

5 E.B. STA. 237+75, 85' RT.
 13' PEDESTAL AND BASE (SEE SPECIAL PROVISIONS FOR
 PEDESTAL SUPPORT, ANCHORS AND BOLTS)
 1-PEDESTRIAN INDICATION POLE MOUNTED AT 90°
 1-PEDESTRIAN PUSH BUTTON AND SIGN
 (R10-4b)(1EA.LEFT)
 EXTEND INTO JUNCTION BOX 22 (BY OTHERS):
 1 1/2" RSC (BY OTHERS)
 F&I: 2-3/C#12

6 E.B. STA. 237+27, 54' RT.
 OVERHEAD TRAFFIC SIGNAL SUPPORT AND BASE (SEE DETAIL SHEETS)
 10-ONE WAY SIGNALS OVERHEAD
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASES 2&5
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT PHASES 6&1
 2- TYPE D SIGNS
 EXTEND INTO JUNCTION BOX 23 (BY OTHERS):
 2-2' RSC (BY OTHERS)
 F&I: 4-12/C#12
 2-3/C#20

7 E.B. STA. 236+66, 76' RT.
 13' PEDESTAL AND BASE (SEE SPECIAL PROVISIONS FOR
 PEDESTAL SUPPORT, ANCHORS AND BOLTS)
 1-PEDESTRIAN INDICATION POLE MOUNTED AT 270°
 1-PEDESTRIAN PUSH BUTTON AND SIGN
 (R10-4b)(1EA. RIGHT)
 EXTEND INTO JUNCTION BOX 24 (BY OTHERS):
 1 1/2" RSC (BY OTHERS)
 F&I: 2-3/C#12

1 E.B. STA. 235+31, 127' RT.
 1-LIGHTING UNIT TYPE 6B-40
 EXTEND INTO HH 27:
 2" RSC
 2-3/C#12

5 W.B. STA. 239+26, 143' LT.
 1-LIGHTING UNIT TYPE 6B-40
 EXTEND INTO HH 13:
 2" RSC
 1-3/C#12

4 W.B. STA. 235+46, 158' LT.
 1-LIGHTING UNIT TYPE 6B-40
 EXTEND INTO HH 12:
 2" RSC
 1-3/C#12

8 E.B. STA. 254+00, 158' RT.
 1-LIGHTING UNIT TYPE 6B-40
 EXTEND INTO HH 21:
 2" RSC
 1-3/C#12

GENERAL NOTES:

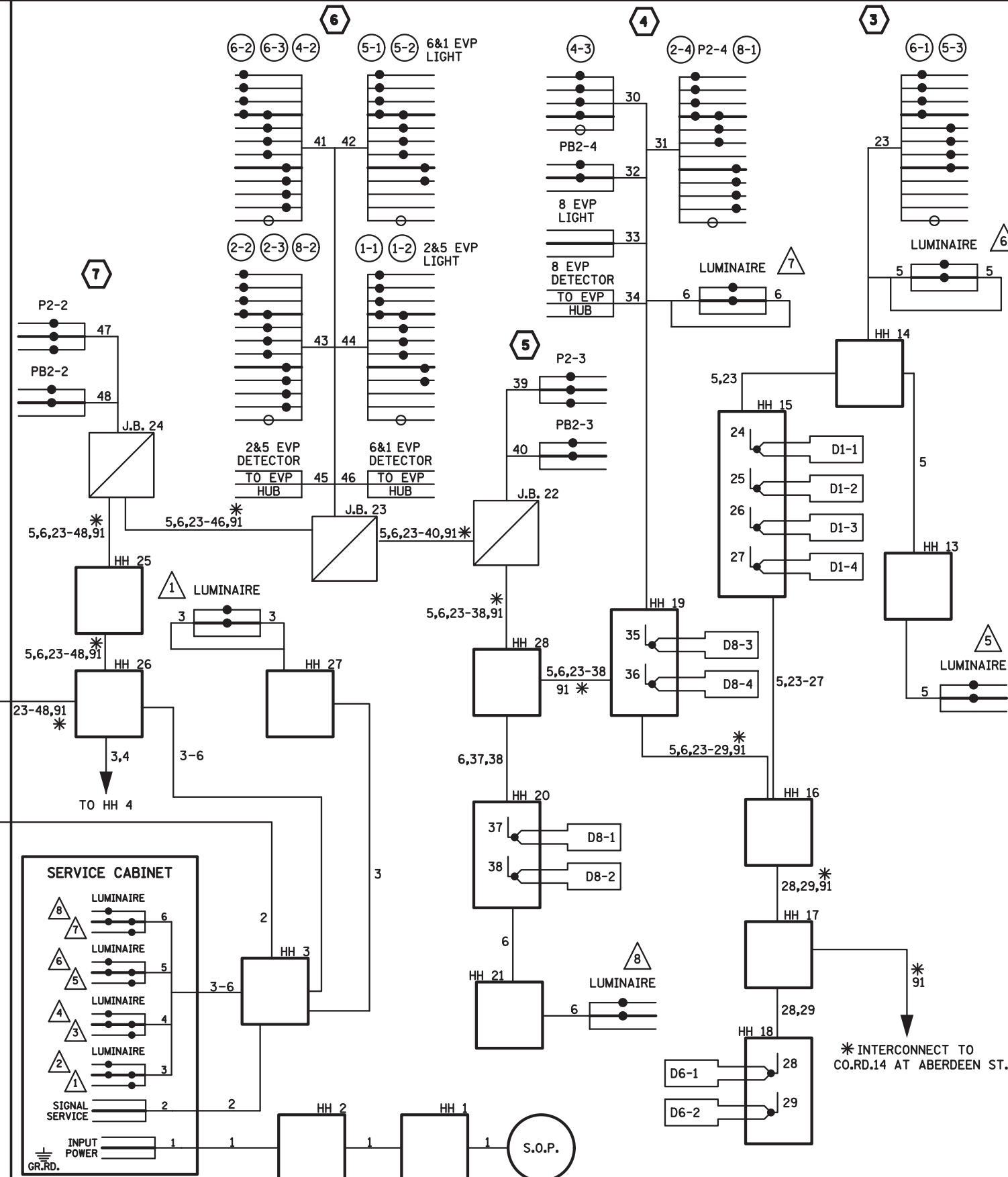
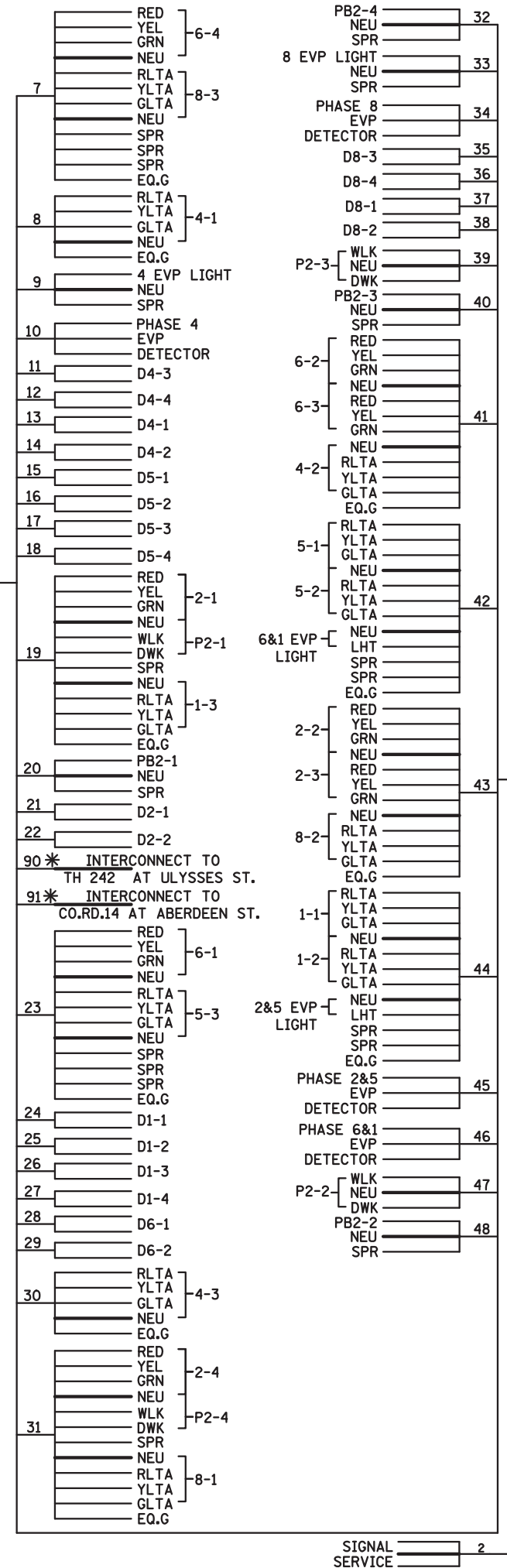
- 1) LOCATION OF POLES, CONTROLLER CABINET, SERVICE CABINET, LOOP DETECTORS AND HANDHOLES SHALL BE DETERMINED IN THE FIELD BY ANOKA COUNTY TRAFFIC PERSONNEL.
- 2) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED MATERIALS.
- 3) LOOP DETECTOR WIRES SHALL BE CROSS-LINKED POLYETHYLENE (XLP) IN 3/4" N.M.C. SEE SPECIAL PROVISIONS.
- 4) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS.
- 5) EACH SIGNAL FACE SHALL HAVE BACKGROUND SHIELD.
- 6) EACH PEDESTRIAN INDICATION SHALL BE ONE SECTION "FILLED" HAND/WALKING PERSON INDICATIONS.
- 7) ALL VEHICLE SIGNAL INDICATIONS, AND ALL PEDESTRIAN SIGNAL INDICATIONS SHALL BE LED.
- 8) SEE SPECIAL PROVISIONS AND DETAILS REGARDING SIGNS TO BE FURNISHED & INSTALLED BY CONTRACTOR (INCIDENTAL).
- 9) A 3/4" HALF COUPLING, 3/4" PIPE NIPPLE AND CONDUIT OUTLET BODY SHALL BE FURNISHED AND INSTALLED AS INDICATED
- 10) CONTRACTOR SHALL COORDINATE ALL TRAFFIC SIGNAL INSTALLATION WORK WITH ROAD CONSTRUCTION TO BE COMPLETED BY OTHERS AS PART OF ENTIRE PROJECT.
- 11) ALL MAST ARM POLE AND PEDESTAL POLE MOUNTED VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL BE MOUNTED USING ONE-WAY SIGNAL HEAD MOUNTS. SEE SPECIAL PROVISIONS.
- 12) ITEMS DENOTED BY (INTERCONNECT) SHALL BE PAID FOR AS PART OF THE INTERCONNECT SYSTEM PAY ITEM.
- 13) STRIPING IS TO BE COMPLETE BY OTHERS AND PAID FOR SEPARATELY. SEE STRIPING PLAN FOR REFERENCE.
- 14) INTERCONNECT ITEMS ARE DESIGNATED BY ~~AND~~ ARE PART OF THE INTERCONNECT PAY ITEM.
- 15) BRIDGE MOUNTED SIGNAL ITEMS ARE LABELED "BY OTHERS". AND ARE PAID FOR SEPERATELY. SEE BRIDGE PLAN FOR REFERENCE.
- 16) THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE POWER COMPANY TO ARRANGE FOR THE POWER CONNECTION.

DRAWN BY: MAS/SJK	REVISED BY:	REVISED BY:	AS BUILT BY:
CKD BY: MPG DATE: 12/28/06	CKD BY: DATE:	CKD BY: DATE:	CKD BY: DATE:
SYSTEM ID: 21174		T.E.	
METER ADDRESS:		T.E.	
MASTER ID:			
S.A.P. NO.			

GENERAL AND POLE NOTES
 TRAFFIC CONTROL SIGNAL SYSTEM "B"
 TH 65 AT TH 242
 IN CITY OF BLAINE, ANOKA COUNTY

CERTIFIED BY *Michael P. Subraby* LIC. NO. 19863 DATE: 3/11/2007
LICENSED PROFESSIONAL ENGINEER

CONTROLLER CABINET



CONDUCTOR COLOR CODE

TO SIGNAL CABINET		TO DEVICE	
3/C#20	R OR O WH OR YEL BLK OR BL	12/C#12	R O BL WH R/BLK O/BLK BLK/BLK WH/BLK BLK BLK/WH G/BLK G
2/C#14	BLK CLR	5/C#14	R O BL WH BLK GLTA
2-1/C	BLK WH	4/C#14	R BL WH G BLK SPR
6PR#19		2/C#14	BLK WH

BASE OF POLE OR PEDESTAL

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE.

DRAWN BY: SJK	REVISED BY: MAS	REVISED BY:	AS BUILT BY:
CKD BY: MPG	CKD BY:	CKD BY:	CKD BY:
DATE: 12/28/06	DATE:	DATE:	DATE:
SYSTEM ID: 21174	T.E.		
METER ADDRESS:	T.E.		
MASTER ID:	T.E.		
S.A.P. NO.			
CERTIFIED BY: <i>Michael P. Lubinsky</i>	LIC. NO. 19863	DATE: 2/22/2007	

WIRING DIAGRAM
TRAFFIC CONTROL SIGNAL SYSTEM "B"
TH 65 AT TH 242.
IN CITY OF BLAINE, ANOKA COUNTY

STATE PROJ. NO. 0208-123 (T.H. 65) SHEET NO. 668 OF 872 SHEETS

T21174_sgl

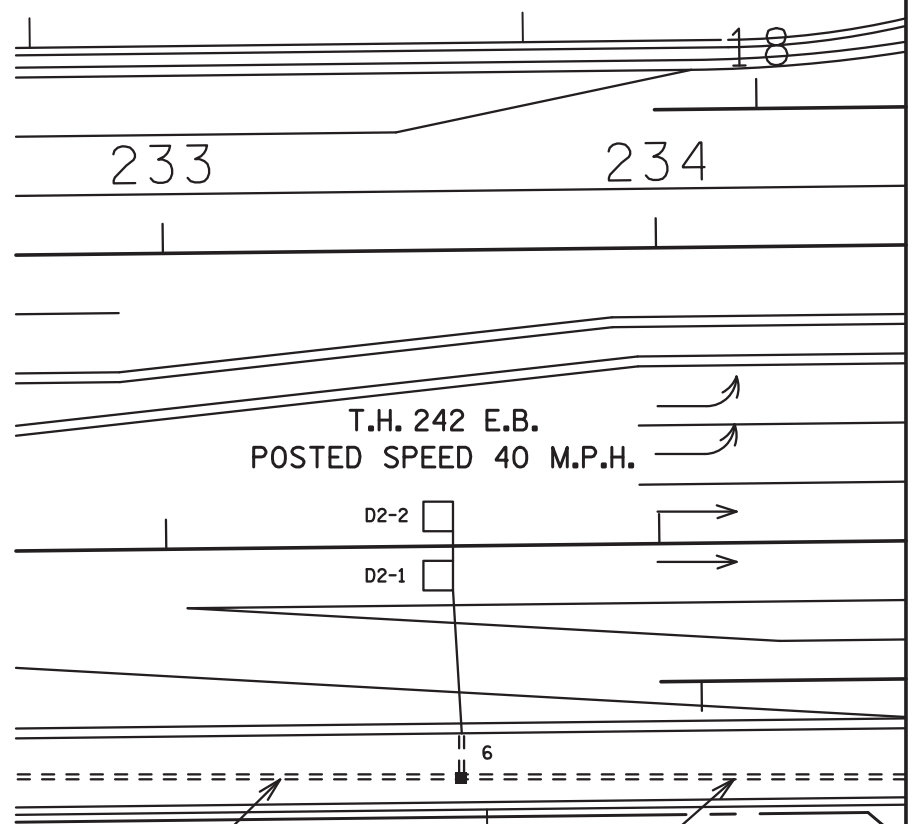
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LOOP DETECTOR CHART			
NUMBER	SIZE (FT)	LOCATION	FUNCTION
D1-1,D1-2	6X6	40'	1
D1-3,D1-4	6X6	10'	1
D2-1,D2-2	6X6	250'	1
D4-1,D4-2	6X6	120'	3 & 8
D4-3,D4-4	2-6X6	10'&40'	1
D5-1,D5-2	6X6	40'	1
D5-3,D5-4	6X6	10'	1
D6-1,D6-2	6X6	250'	1
D8-1, D8-2	6X6	120'	3 & 8
D8-3,D8-4	2-6X6	10'&40'	1

- LOOP DETECTORS FUNCTIONS:
- 1) CALL AND EXTEND
 - 2) CALL ONLY
 - 3) EXTEND ONLY
 - 4) CALL ONLY DENSITY
 - 5) DELAYED CALL ONLY
 - 6) DELAYED CALL ONLY DENSITY
 - 7) DELAYED CALL- IMMEDIATE EXTEND
 - 8) CARRY OVER (STRETCH)
 - 9) ADVISORY DETECTOR
 - 10) SAMPLING DETECTOR
 - 11) SPECIAL DETECTOR

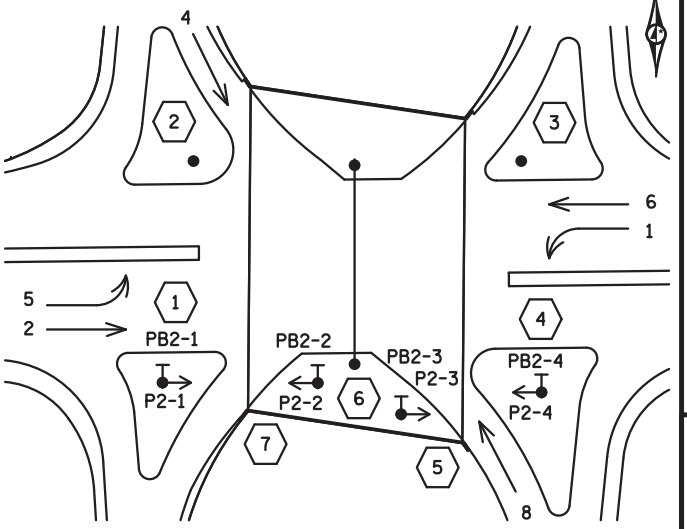
-LOCATION IS DISTANCE FROM STOP LINE TO FRONT OF LOOP DETECTOR IN FEET.
 -ALL LOOP DETECTORS SHALL BE N.M.C., #12 AWG



* 2" RSC (INTERCONNECT)
 * 1-6/C FIBER OPTIC CABLE (INTERCONNECT)
 * 1-1/C#14 (INTERCONNECT)
 TO TH 242 AT ULYSSES ST.

2" RSC 2-2/C#14
 * 1-6/C FIBER OPTIC CABLE (INTERCONNECT)
 * 1-1/C#14 (INTERCONNECT)
 TO TH 242 AT ULYSSES ST.

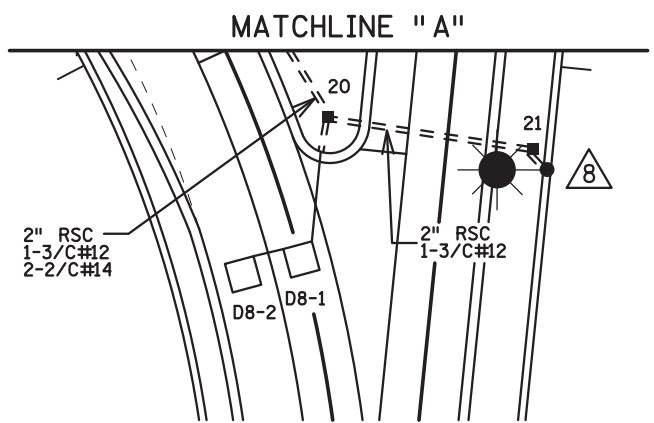
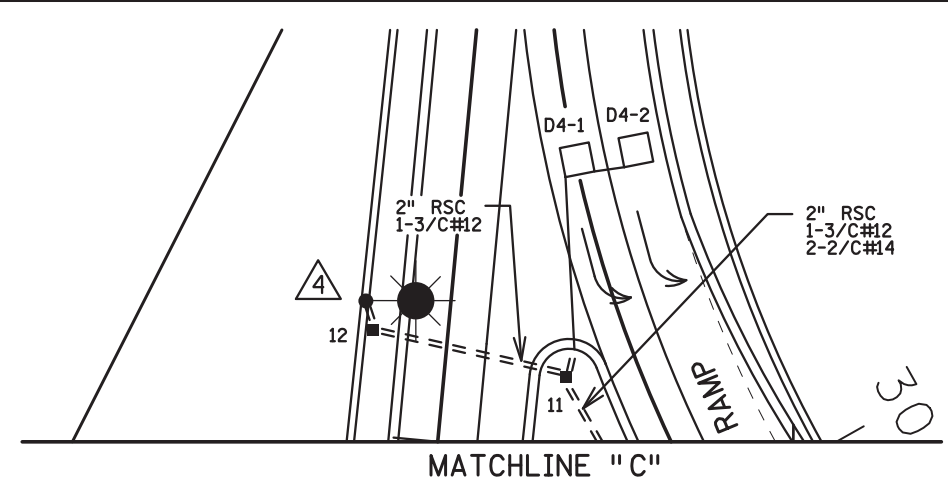
CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED AS SHOWN ABOVE

SIGNAL SYSTEM OPERATION

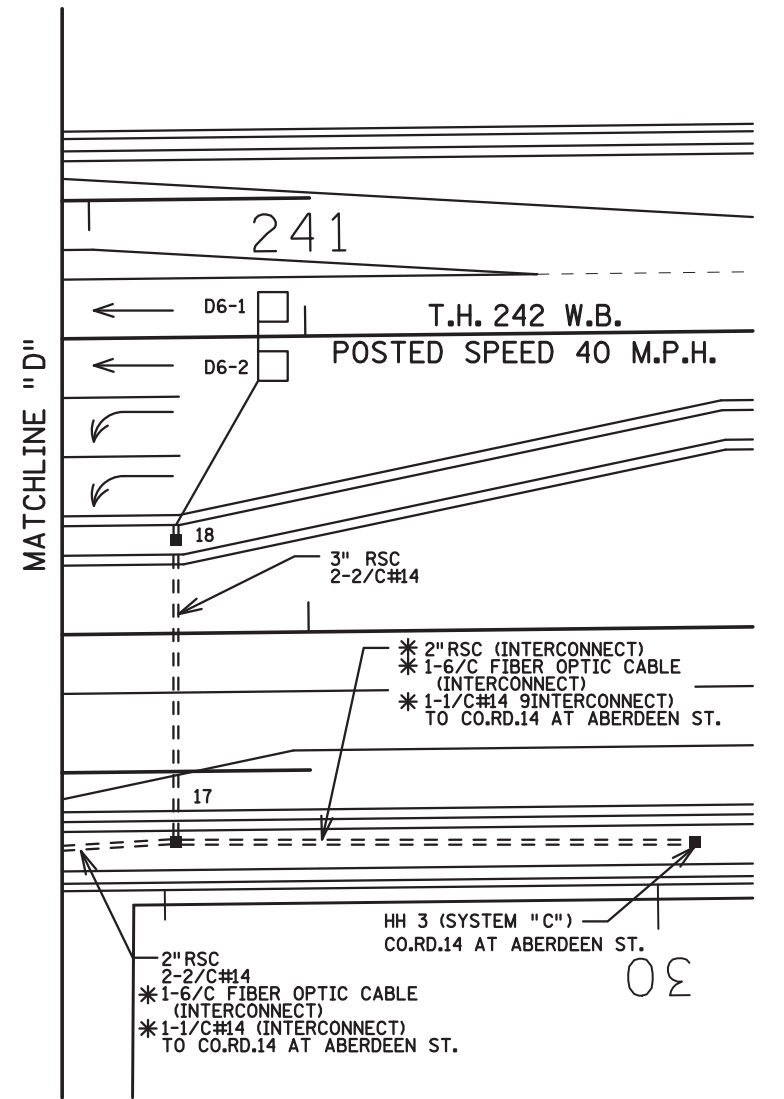
- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 6 PHASE, WITH PHASES 1 AND 5 BEING PROTECTED LEFT TURN PHASES.



SIGNAL FACES			
FACE	R	Y	G
1-1,1-2,1-3	←	←	←
2-1,2-2,2-3,2-4	●	●	●
4-1,4-2,4-3	←	←	←
5-1,5-2,5-3	←	←	←
6-1,6-2,6-3,6-4	●	●	●
8-1,8-2,8-3	←	←	←

-ALL SIGNAL INDICATIONS SHALL BE 12"
 -ALL SIGNAL INDICATIONS SHALL BE LED
 -ALL SIGNAL FACES SHALL HAVE A BACKGROUND SHIELD

SCALE IN FEET



SEE NEXT SHEET FOR GENERAL AND POLE NOTES

DRAWN BY: MAS	REVISED BY:	REVISED BY:	AS BUILT BY:
CKD BY:MPG DATE:12/28/06	CKD BY: DATE:	CKD BY: DATE:	CKD BY: DATE:
SYSTEM ID: 21174		T.E.	
METER ADDRESS:		T.E.	
MASTER ID:		T.E.	
S.A.P. NO.			

MATCHLINES AND CHARTS
 TRAFFIC CONTROL SIGNAL SYSTEM "B"
 TH 65 AT TH 242
 IN CITY OF BLAINE, ANOKA COUNTY

CERTIFIED BY: <i>Michael P. Subraby</i> LICENSED PROFESSIONAL ENGINEER	LIC. NO. 19863	DATE: 2/22/2007
STATE PROJ. NO. 0208-123 (T.H. 65)		SHEET NO. 667 OF 872 SHEETS