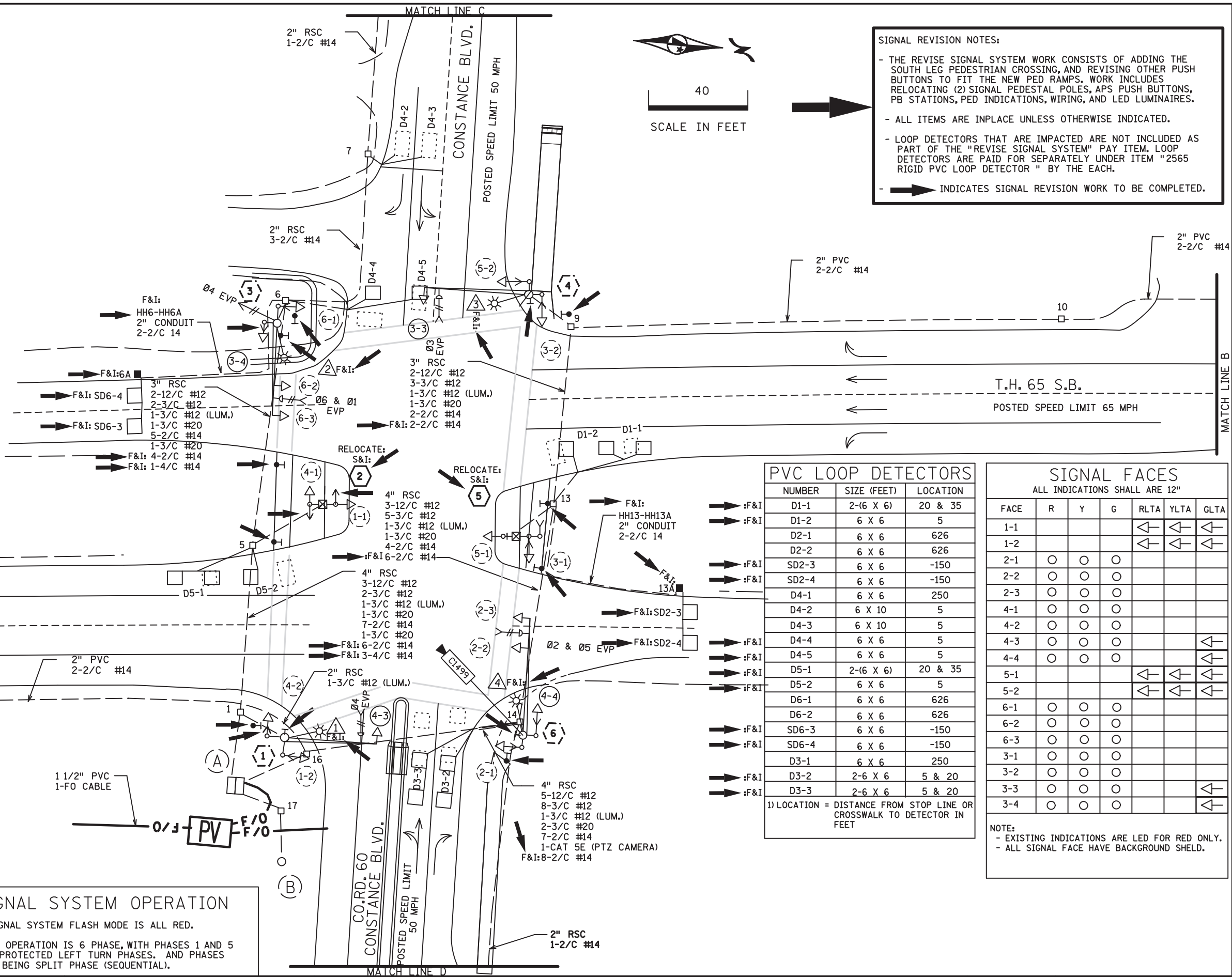
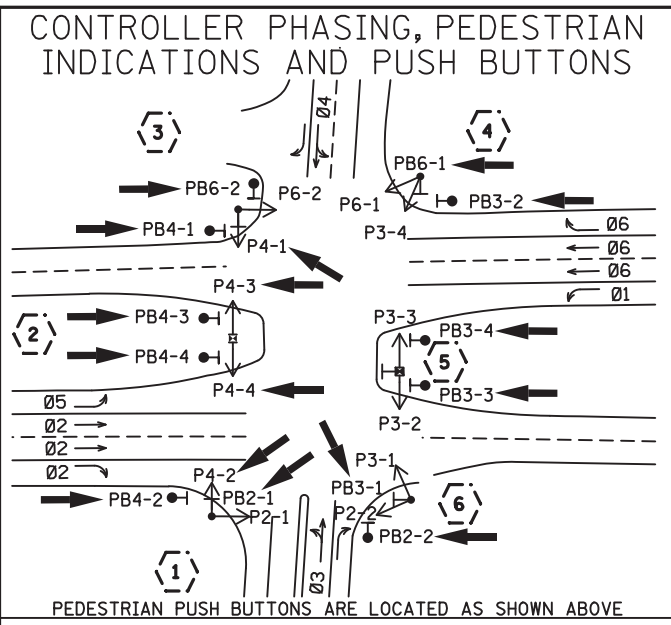


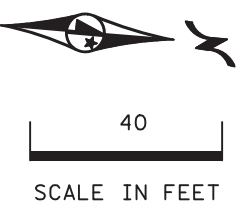
PLOTTED/REVISED: 14-DEC-2023

DISTRICT #: Metro
PLOT NAME: T2183A_SGL_52
FILENAME: Projects\DM_FOS\065\00000\Traffic\Signals\2177_2183_Constance Blvd 1735546\PENDING\T2183A_SGL.DGN



SIGNAL REVISION NOTES:

- THE REVISE SIGNAL SYSTEM WORK CONSISTS OF ADDING THE SOUTH LEG PEDESTRIAN CROSSING, AND REVISING OTHER PUSH BUTTONS TO FIT THE NEW PED RAMPS. WORK INCLUDES RELOCATING (2) SIGNAL PEDESTAL POLES, APS PUSH BUTTONS, PB STATIONS, PED INDICATIONS, WIRING, AND LED LUMINAIRES.
- ALL ITEMS ARE INPLACE UNLESS OTHERWISE INDICATED.
- LOOP DETECTORS THAT ARE IMPACTED ARE NOT INCLUDED AS PART OF THE "REVISE SIGNAL SYSTEM" PAY ITEM. LOOP DETECTORS ARE PAID FOR SEPARATELY UNDER ITEM "2565 RIGID PVC LOOP DETECTOR" BY THE EACH.
- INDICATES SIGNAL REVISION WORK TO BE COMPLETED.



PVC LOOP DETECTORS		
NUMBER	SIZE (FEET)	LOCATION
D1-1	2-(6 X 6)	20 & 35
D1-2	6 X 6	5
D2-1	6 X 6	626
D2-2	6 X 6	626
SD2-3	6 X 6	-150
SD2-4	6 X 6	-150
D4-1	6 X 6	250
D4-2	6 X 10	5
D4-3	6 X 10	5
D4-4	6 X 6	5
D4-5	6 X 6	5
D5-1	2-(6 X 6)	20 & 35
D5-2	6 X 6	5
D6-1	6 X 6	626
D6-2	6 X 6	626
SD6-3	6 X 6	-150
SD6-4	6 X 6	-150
D3-1	6 X 6	250
D3-2	2-6 X 6	5 & 20
D3-3	2-6 X 6	5 & 20

1) LOCATION = DISTANCE FROM STOP LINE OR CROSSWALK TO DETECTOR IN FEET

SIGNAL FACES						
ALL INDICATIONS SHALL ARE 12"						
FACE	R	Y	G	RLTA	YLTA	GLTA
1-1				←	←	←
1-2				←	←	←
2-1	○	○	○			
2-2	○	○	○			
2-3	○	○	○			
4-1	○	○	○			
4-2	○	○	○			
4-3	○	○	○			
4-4	○	○	○			←
5-1				←	←	←
5-2				←	←	←
6-1	○	○	○			
6-2	○	○	○			
6-3	○	○	○			
3-1	○	○	○			
3-2	○	○	○			
3-3	○	○	○			←
3-4	○	○	○			←

NOTE:
- EXISTING INDICATIONS ARE LED FOR RED ONLY.
- ALL SIGNAL FACE HAVE BACKGROUND SHIELD.

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. AND PHASES 3 & 4 BEING SPLIT PHASE (SEQUENTIAL).

BY	DATE	REVISIONS	SYSTEM ID: 1735546	T.E. 103234	S.P.002-632-021, S.P.106-020-040, S.P.106-125-009	DRAWN BY:HRL	CKD BY:CDB	DATE:10/10/23
			METER ADDRESS: 16299 HIGHWAY 65		CERTIFIED BY:	LIC. NO. 26829	DATE: 12/8/23	
			OLD SYSTEM ID: 21183		STATE PROJ.NO. 0208-165 (T.H.65)			SHEET NO. SS56 OF SS87 SHEETS

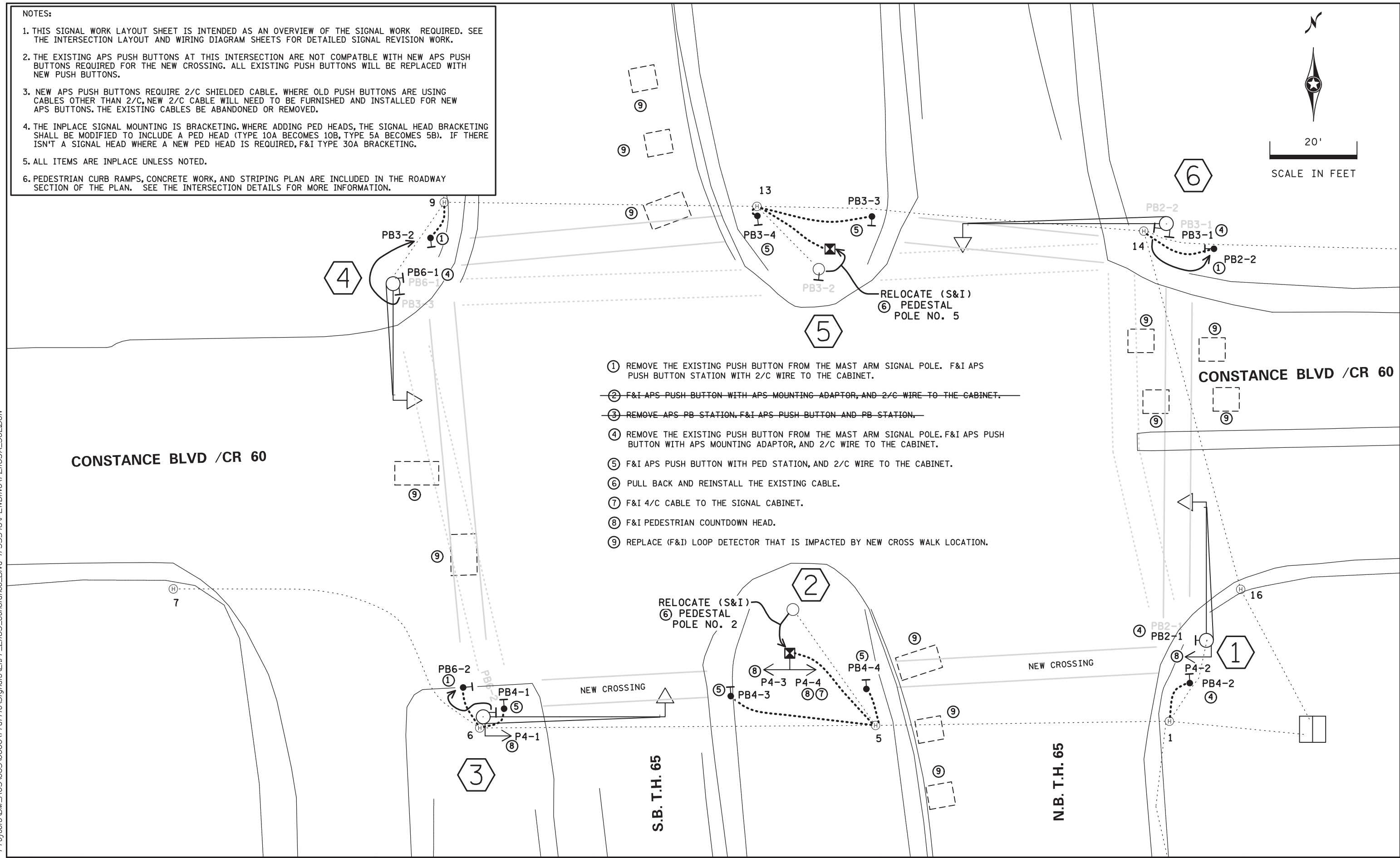
REVISE SIGNAL SYSTEM "M" INTERSECTION LAYOUT
TH 65 AT CO. RD. 60 (CONSTANCE BLVD.)
HAM LAKE, ANOKA COUNTY

PLOTTED/REVISED: 3-NOV-2023

DISTRICT #: Metro
 IPLOT NAME: T2183A_SGL_50
 FILENAME: Projects\DM_FOS\065\0000\Traffic\Signals\2177_2183_Constance_Bldd 1735546\PENDING\T2183A_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 APS PUSH BUTTONS AT THIS INTERSECTION ARE NOT COMPATIBLE WITH NEW APS PUSH BUTTONS REQUIRED FOR THE NEW CROSSING. ALL EXISTING PUSH BUTTONS WILL BE REPLACED WITH NEW PUSH BUTTONS.
3. 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 BE ABANDONED OR REMOVED.
4. THE INPLACE SIGNAL MOUNTING IS BRACKETING. WHERE ADDING PED HEADS, THE SIGNAL HEAD BRACKETING SHALL BE MODIFIED TO INCLUDE A PED HEAD (TYPE 10A BECOMES 10B, TYPE 5A BECOMES 5B). IF THERE ISN'T A SIGNAL HEAD WHERE A NEW PED HEAD IS REQUIRED, F&I TYPE 30A BRACKETING.
5. ALL ITEMS ARE INPLACE UNLESS NOTED.
6. PEDESTRIAN CURB RAMPS, CONCRETE WORK, AND STRIPING PLAN ARE INCLUDED IN THE ROADWAY SECTION OF THE PLAN. SEE THE INTERSECTION DETAILS FOR MORE INFORMATION.



- ① REMOVE THE EXISTING PUSH BUTTON FROM THE MAST ARM SIGNAL POLE. F&I APS PUSH BUTTON STATION WITH 2/C WIRE TO THE CABINET.
- ② F&I APS PUSH BUTTON WITH APS MOUNTING ADAPTOR, AND 2/C WIRE TO THE CABINET.
- ③ REMOVE APS PB STATION, F&I APS PUSH BUTTON AND PB STATION.
- ④ REMOVE THE EXISTING PUSH BUTTON FROM THE MAST ARM SIGNAL POLE. F&I APS PUSH BUTTON WITH APS MOUNTING ADAPTOR, AND 2/C WIRE TO THE CABINET.
- ⑤ F&I APS PUSH BUTTON WITH PED STATION, AND 2/C WIRE TO THE CABINET.
- ⑥ PULL BACK AND REINSTALL THE EXISTING CABLE.
- ⑦ F&I 4/C CABLE TO THE SIGNAL CABINET.
- ⑧ F&I PEDESTRIAN COUNTDOWN HEAD.
- ⑨ REPLACE (F&I) LOOP DETECTOR THAT IS IMPACTED BY NEW CROSS WALK LOCATION.

BY	DATE	REVISIONS

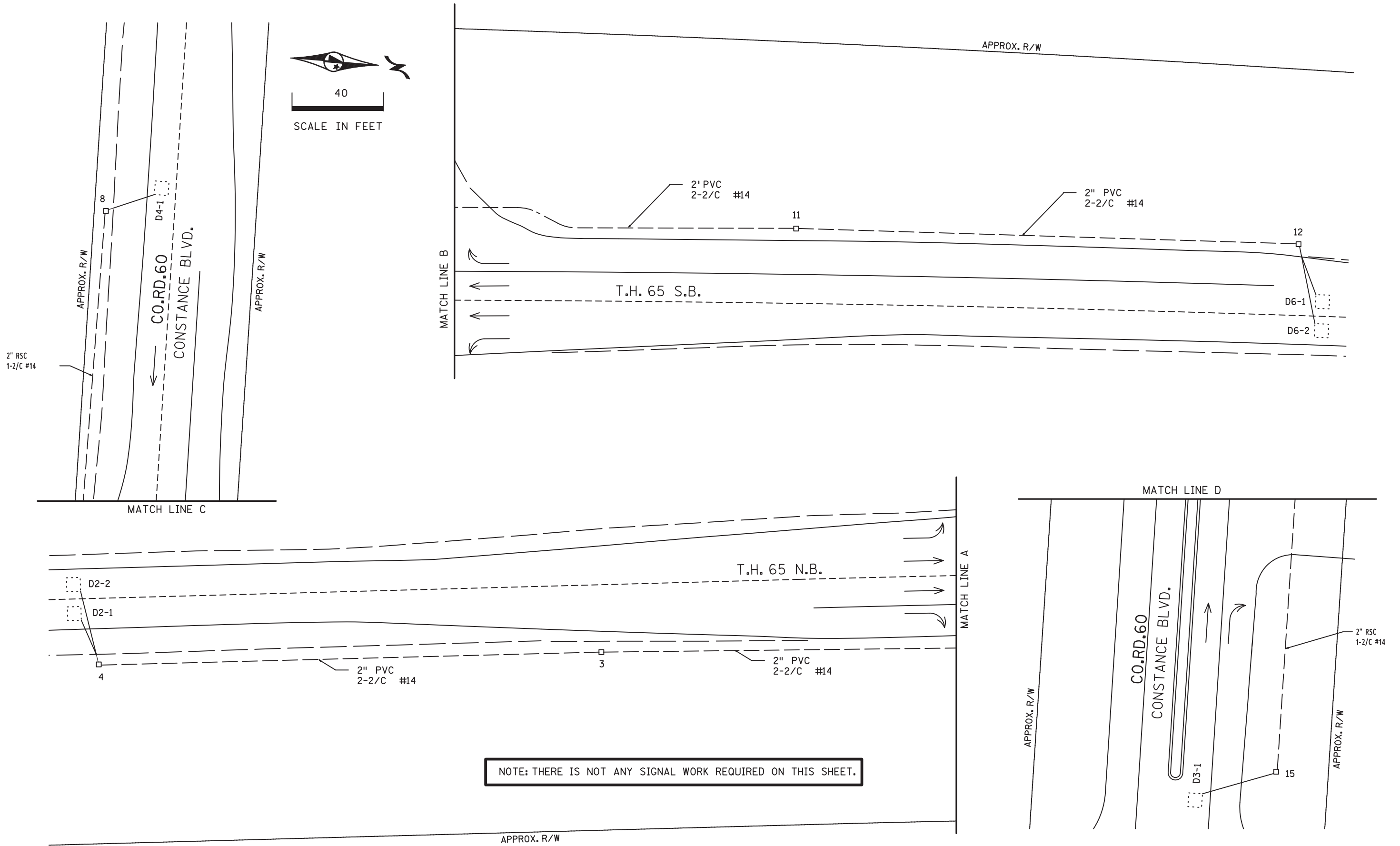
SYSTEM ID: T.E. 103234
 METER ADDRESS:
 OLD SYSTEM ID:

**SIGNAL WORK LAYOUT
 REVISE SIGNAL SYSTEM "M"
 T.H. 65 AT CONSTANCE BLVD / CR 60
 IN THE CITY OF HAM LAKE**

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 Kern* LIC. NO. 26829 DATE: 10/12/23
 STATE PROJ. NO. 0208-165 (T.H. 65) SHEET NO. SS54 OF SS87 SHEETS

PLOTTED/REVISED: 3-NOV-2023

DISTRICT #: Metro
PLOT NAME: T2183A_SGL_53
FILENAME: Projects\DM_FOS\06500000\Traffic\Signals\2177_2183_Constance_Bldg\1735546\PENDING\T2183A_SGL.DGN



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

BY	DATE	REVISIONS

SYSTEM ID: 1735546 T.E. 103234
 METER ADDRESS: 16299 HIGHWAY 65
 OLD SYSTEM ID: 21183

REVISE SIGNAL SYSTEM "M"
MATCH LINE
TH 65 AT CO. RD. 60 (CONSTANCE BLVD.)
HAM LAKE, ANOKA COUNTY.

S.P.002-632-021, S.P.106-020-040, S.P.106-125-009
 DRAWN BY: HRL 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. SS57 OF SS87 SHEETS

PLOTTED/REVISED: 14-DEC-2023

DISTRICT *: Metro
PLOT NAME: T2183A_SGL_54
FILENAME: Projects\DM_FOS\0650000\Traffic\Signal\2177_2183_Constance_Bldg\735546\Pending\T2183A_SGL.dgn

3 PA90 POLE FOUNDATION
 TYPE PA90-A-40-D40-9 (DAVIT AT 355)
 2-SWING AWAY HINGES
 2-ONE WAY SIGNALS OVERHEAD AT 0' AND 11'
 F&I: 1-C. D. PED HEAD AT 90 (P4-1) (USE SPARES ON CABLE 13)
 (TYPE 10A POLE MOUNTED AT 90 (3-4) BECOMES
 TYPE 10B POLE MOUNTED AT 90 (3-4)(P4-1))
 TYPE 10B POLE MOUNTED AT 180 (6-1)(P6-2)
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASES 6&1
 ONE WAY EVP DETECTOR PHASE 4
 REMOVE: LUMINAIRE-200 W HPS
 F&I: 1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 1-SIGN TYPE R6-1R (ONE WAY)
 1-SIGN TYPE R6-1L (ONE WAY)
 REMOVE: PED PUSH BUTTON AND SIGN (R10-4b)
 EXTEND INTO HH 6
 3" RSC
 2-12/C #12
 2-3/C #12
 1-3/C #12 (LUM.)
 1-3/C #20

F&I PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB6-2)
 EXTEND INTO HH 6:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

F&I PED PB STATION
 1-APS PB AND SIGN
 (LT ARROW) (PB4-1)
 EXTEND INTO HH 6:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

RELOCATE: (S&I) 2

REMOVE: PEDESTAL FOUNDATION
 F&I: PEDESTAL FOUNDATION DESIGN 8112
 S&I: 13' PEDESTAL POLE PLUS BASE TYPE 6A (1-1, 4-1)
 F&I: 2-C. D. PED HEADS (P4-3 P4-4) -
 (MODIFY TYPE 6A ALUMINUM BRACKETING TO TYPE 6C)
 REMOVE: 2-R9-3a SIGNS (NO PED) FACING POLES 1 & 3
 EXTEND INTO HH 5
 REMOVE: 3" RSC
 F&I: 3" CONDUIT
 S&I: 1-12/C #12
 F&I: 1-4/C 14 (P4-4)

F&I PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB4-3)
 EXTEND INTO HH 5:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

F&I PED PB STATION
 1-APS PB AND SIGN
 (LT ARROW) (PB4-4)
 EXTEND INTO HH 5:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

A EQUIPMENT PAD
 SERVICE CABINET
 CONTROLLER CABINET AND CONTROLLER
 SERVICE CABINET TO CONTROLLER CABINET
 2" RSC
 2-1/C #6
 1-1/C #6 INS. GR.
 SERVICE CABINET TO HH 1
 2" RSC
 2-3/C #12 (LUM.)
 SERVICE CABINET TO HH 17
 2" RSC
 3-1/C #2

CONTROLLER CABINET TO HH 16
 4" RSC
 5-12/C #12
 8-3/C #12
 2-3/C #20
 7-2/C #14
 1-CAT 5E (PTZ CAMERA)
 1-COM CABLE
 1-COAXIAL CABLE
 F&I: 8-2/C #14

CONTROLLER CABINET TO HH 1
 2-3" RSC
 4-12/C #12
 5-3/C #12
 1-5/C #12
 2-3/C #20
 9-2/C #14
 1-3/C #20
 F&I: 8-2/C #14
 F&I: 1-4/C #14

CONTROLLER CABINET TO TMS PULL VAULT
 1 1/2" CONDUIT INSIDE EXISTING 3" RSC:
 1-6SM FIBER OPTIC

B SOP WOOD POLE
 2" RSC RISER WITH
 WEATHERHEAD
 2" RSC TO HH 17
 WITH 3-1/C #2

SIGNAL REVISION NOTES:
 - THE REVISE SIGNAL SYSTEM WORK CONSISTS OF ADDING THE SOUTH LEG PEDESTRIAN CROSSING, AND REVISING OTHER PUSH BUTTONS TO FIT THE NEW PED RAMPS. WORK INCLUDES RELOCATING (2) SIGNAL PEDESTAL POLES, APS PUSH BUTTONS, PB STATIONS, PED INDICATIONS, WIRING, AND LED LUMINAIRES.
 - ALL ITEMS ARE INPLACE UNLESS OTHERWISE INDICATED.
 - LOOP DETECTORS THAT ARE IMPACTED ARE NOT INCLUDED AS PART OF THE "REVISE SIGNAL SYSTEM" PAY ITEM. LOOP DETECTORS ARE PAID FOR SEPARATELY UNDER ITEM "2565 RIGID PVC LOOP DETECTOR " BY THE EACH.
 - INDICATES SIGNAL REVISION WORK TO BE COMPLETED.

4 PA90 POLE FOUNDATION
 TYPE PA90-A-25-D40-9 (DAVIT AT 350)
 2-SWING AWAY HINGES
 ONE WAY SIGNAL OVERHEAD AT 0'
 2-TYPE 10B POLE MOUNTED AT 90 AND 180 (P6-1) (P3-4)
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASE 8
 REMOVE: LUMINAIRE-200 W HPS
 F&I: 1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 REMOVE: 2-PED PUSH BUTTONS AND SIGNS (R10-4b)
 F&I: 1-APS PUSH BUTTON & SIGN (LT ARROW) (PB6-1)
 F&I: 1-APS PUSH BUTTON MOUNTING ADAPTOR
 EXTEND INTO HH 9
 3" RSC
 2-12/C #12
 3-3/C #12
 1-3/C #12 (LUM.)
 1-3/C #20
 F&I: 1-2/C 14 (PB6-1)

F&I PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB3-2)
 EXTEND INTO HH 9:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

RELOCATE: (S&I) 5

REMOVE: PEDESTAL FOUNDATION
 F&I: PEDESTAL FOUNDATION DESIGN 8112
 S&I: 13' PEDESTAL POLE PLUS BASE TYPE 6C
 REMOVE: PED PUSH BUTTON AND SIGN (R10-4b)
 EXTEND INTO HH 13
 REMOVE: 3" RSC
 F&I: 3" CONDUIT
 S&I: 1-12/C #12
 S&I: 2-3/C #12

F&I PED PB STATION
 1-APS PB AND SIGN
 (LT ARROW) (PB3-4)
 EXTEND INTO HH 13:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

F&I PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB3-3)
 EXTEND INTO HH 13:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

6 PA100 POLE FOUNDATION
 TYPE PA100-A-45
 1-X6-350/CAM 400 EXTENSION (MOUNTED AT 350 DEG)
 (INCLUDES LIGHTNING ROD, 7/16" GROUND BRAID AND GROUND ROD)
 1-VIDEO CAMERA WITH MOUNT
 2-SWING AWAY HINGES
 2-ONE WAY SIGNALS OVERHEAD AT 0' AND 11'
 2-TYPE 10B POLE MOUNTED AT 90 AND 180
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASES 2&5
 REMOVE: LUMINAIRE-200 W HPS
 F&I: 1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 1-SIGN TYPE R6-1R (ONE WAY)
 1-SIGN TYPE R6-1L (ONE WAY)
 REMOVE: 2-PED PUSH BUTTONS AND SIGNS (R10-4b)
 F&I: 1-APS PUSH BUTTON & SIGN (LT ARROW) (PB3-1)
 F&I: 1-APS PUSH BUTTON MOUNTING ADAPTOR
 EXTEND INTO HH 14
 3" RSC
 2-12/C #12
 3-3/C #12
 2-3/C #12 (LUM.)
 1-3/C #20
 1-7/16" GROUNDING BRAID TO GROUND ROD IN HH 14:
 1-CAT 5E (PTZ CAMERA)
 F&I: 1-2/C 14 (PB3-1)

F&I PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB2-2)
 EXTEND INTO HH 14:
 1" CONDUIT
 1-2/C 14
 1-1/C 6 INS. GR.

BY	DATE	REVISIONS

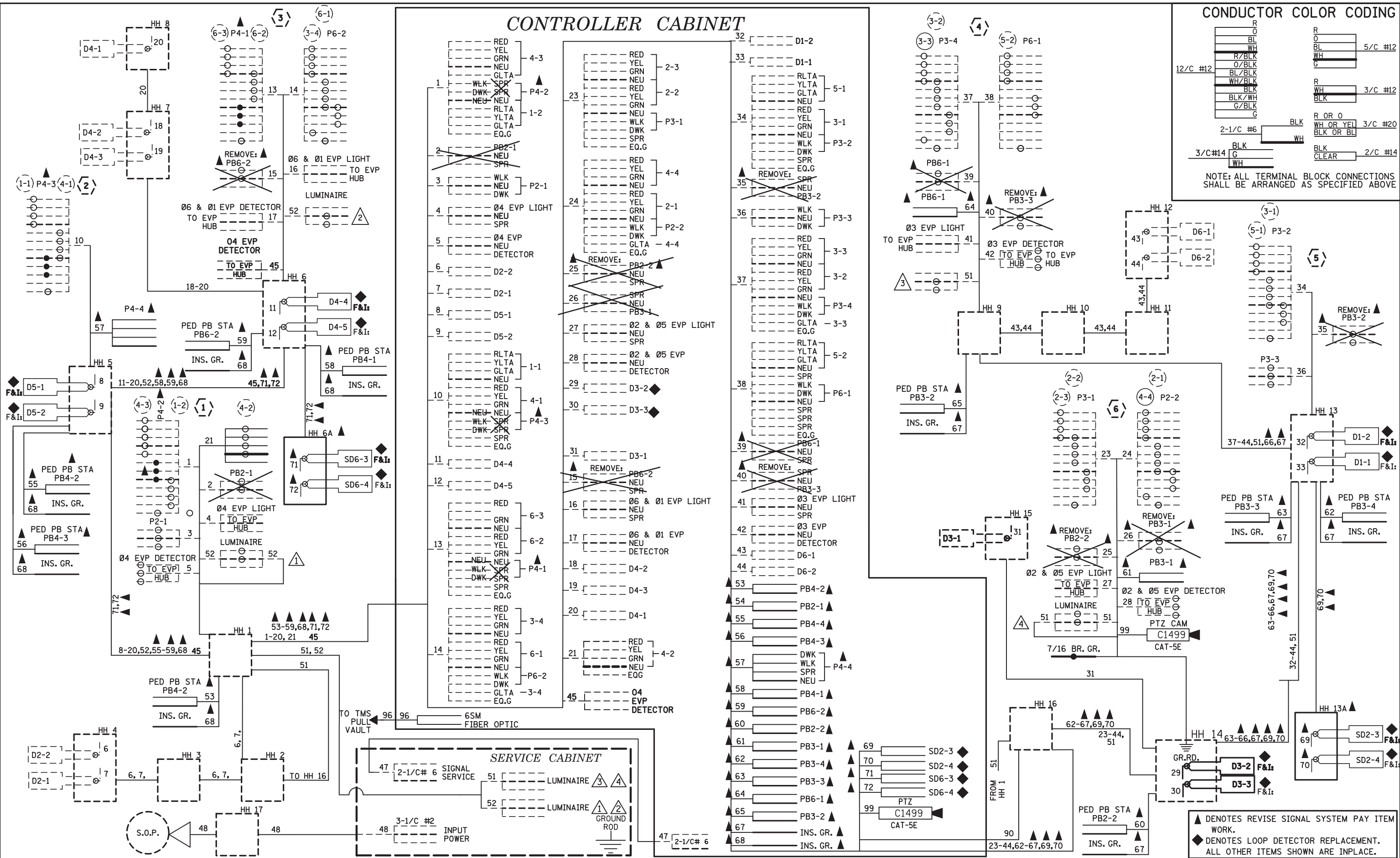
SYSTEM ID: 1735546 T.E. 103234
 METER ADDRESS: 16299 HIGHWAY 65
 OLD SYSTEM ID: 21183

REVISE SIGNAL SYSTEM "M"
 INTERSECTION NOTES
 TH 65 AT CO. RD. 60 (CONSTANCE BLVD.)
 HAM LAKE, ANOKA COUNTY

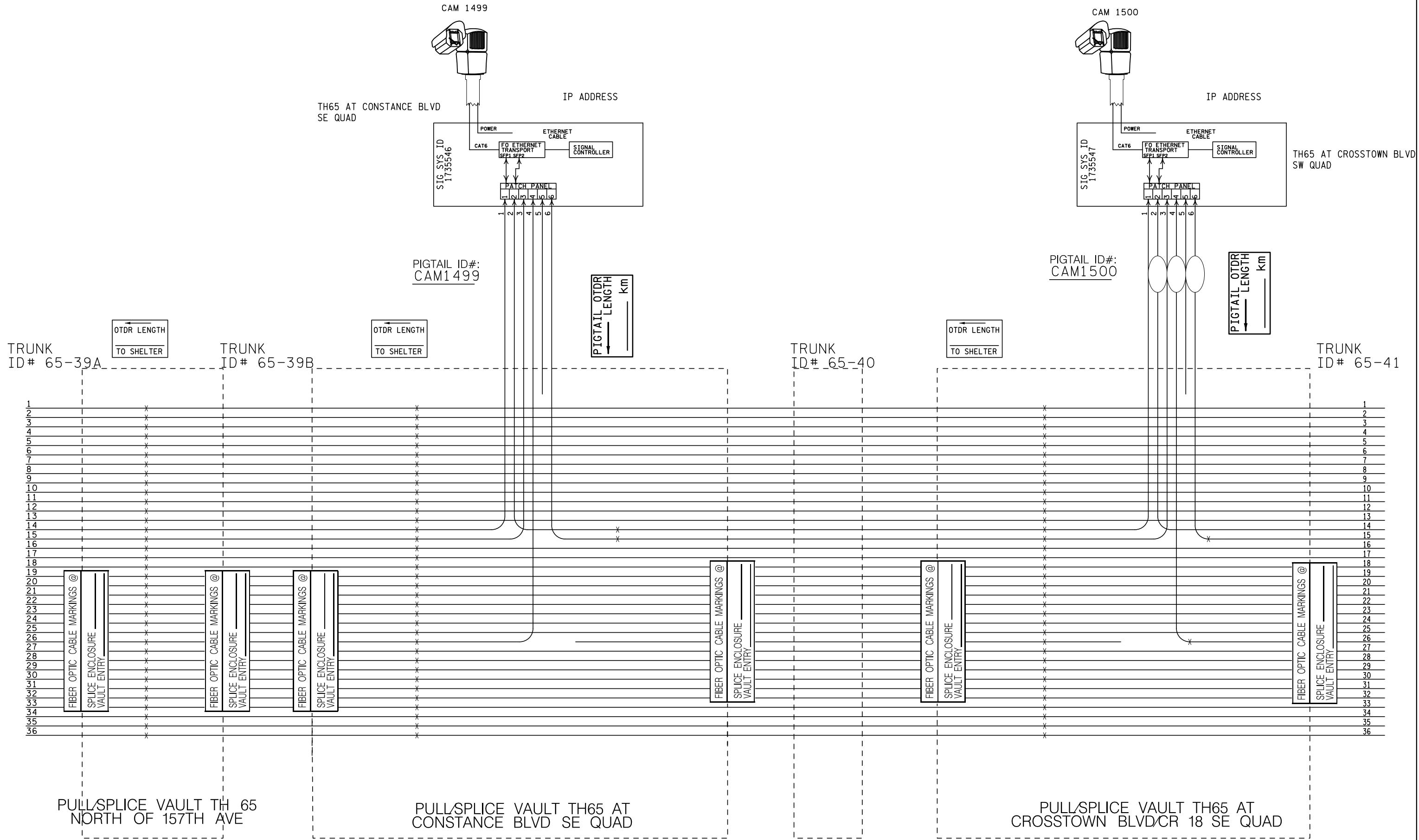
S.P. 002-632-021, S.P. 106-020-040, S.P. 106-125-009
 DRAWN BY: HRL CKD BY: CDB DATE: 10/10/23
 CERTIFIED BY *Gregory Ken* LIC. NO. 26829 DATE: 12/11/23
 STATE PROJ. NO. 0208-165 (T.H.65) SHEET NO. SS58 OF SS87 SHEETS

PLOTTED/REVISED: 14-DEC-2023

DISTRICT *: Metro
PLOT NAME: T21B3A_SGL_55
FILENAME: Projects\DM_POS\06500000\Traffic\Signal\2177_21B3_Constance_Bldg\7355546\PENDING\T21B3A_SGL.DGN

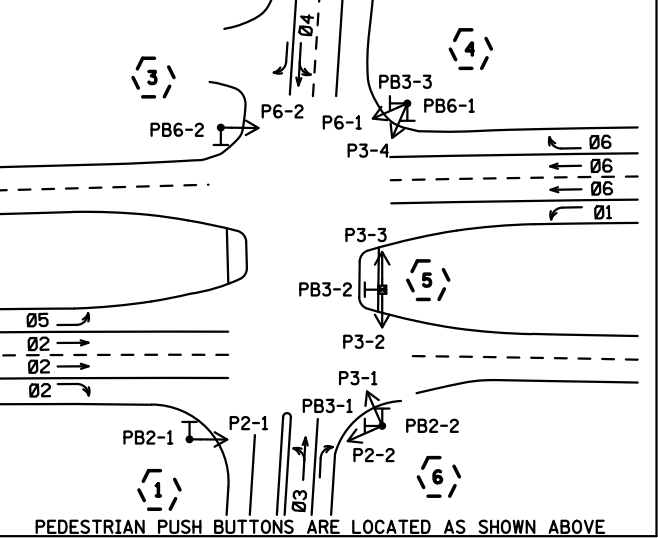


BY	DATE	REVISIONS	SYSTEM ID: 1735546	T.E. 103234	S.P. 002-632-021, S.P. 106-020-040, S.P. 106-125-009	DRAWN BY: HRL	CKD BY: CDB	DATE: 10/10/23
			METER ADDRESS: 16299 HIGHWAY 65 <td></td> <td>CERTIFIED BY: <i>Gregory Ken</i></td> <td>LIC. NO. 26829</td> <td>DATE: 12/8/23</td> <td></td>		CERTIFIED BY: <i>Gregory Ken</i>	LIC. NO. 26829	DATE: 12/8/23	
			OLD SYSTEM ID: 21183		STATE PROJ. NO. 0208-165 (T.H.65)	SHEET NO. SS59 OF SS87 SHEETS		

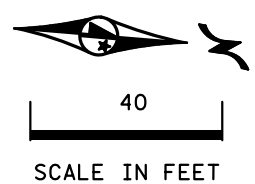


SP 002-632-021, SP 106-020-040, SP 106-125-009

CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



PEDESTRIAN PUSH BUTTONS ARE LOCATED AS SHOWN ABOVE



PLOTTED/REVISED: 8/6/2013

MATCH LINE A

DISTRICT #: METRO
IPLOT NAME: LAYOUT
PATH & FILENAME: IP_PWP-d0781323YT2183A_SGLDGN

BY	DATE	REVISIONS
		AS-BUILT PLAN SP 0207-94

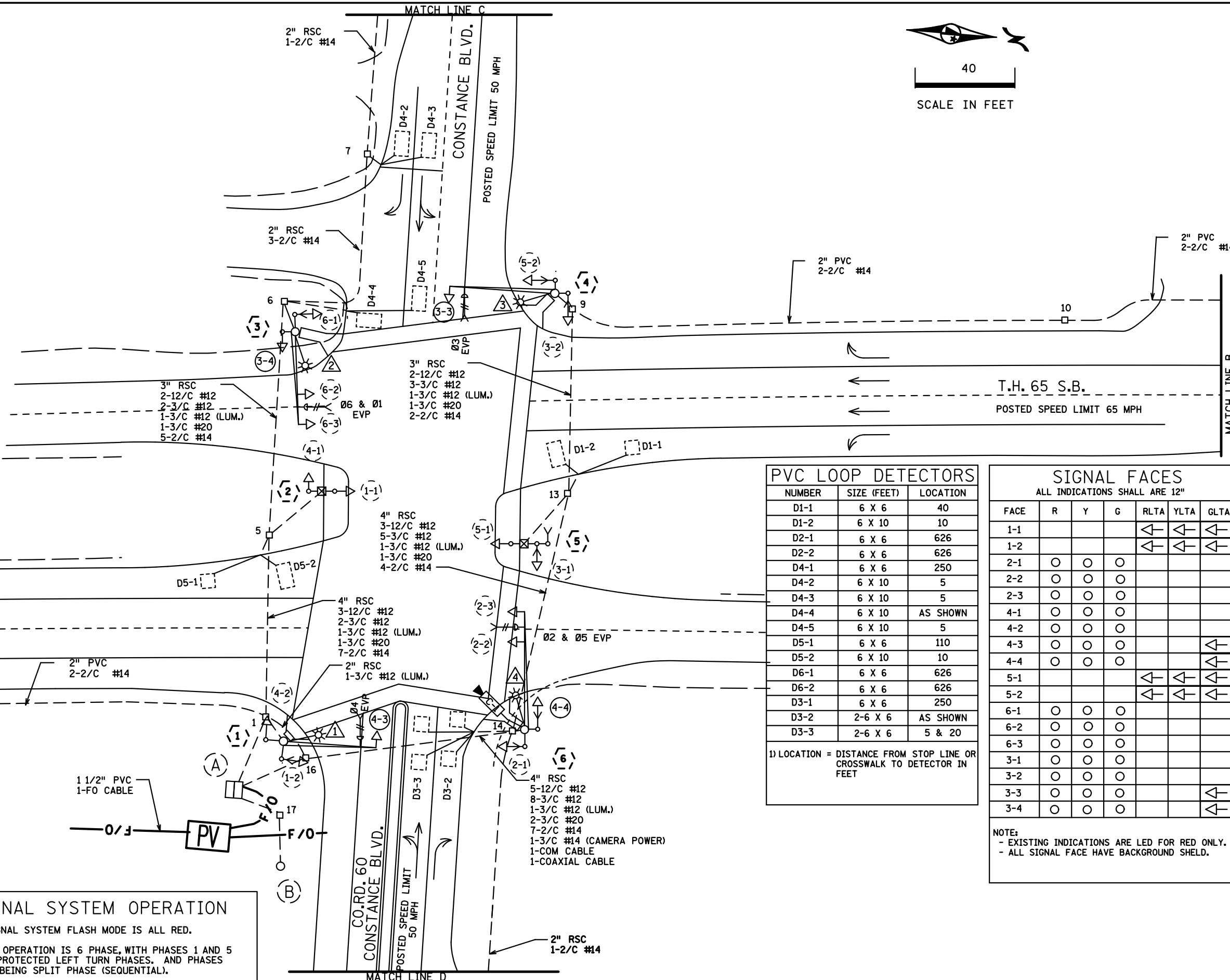
SYSTEM ID: 21183	T.E.
METER ADDRESS: 16299 HIGHWAY 65	
MASTER ID:	T.E.

INTERSECTION LAYOUT
TH 65 AT CO. RD. 60 (CONSTANCE BLVD.)
HAM LAKE, ANOKA COUNTY

S.A.P. NO.	DRAWN BY: BAM	CKD BY: CDB	DATE: 05-23-11
CERTIFIED BY: <i>Michael P. Gelinsky</i>	LIC. NO. 19863	DATE: 05-23-11	
STATE PROJ. NO. 0207-94 (T.H.65) SHEET NO. SS68 OF SS88 SHEETS			

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. AND PHASES 3 & 4 BEING SPLIT PHASE (SEQUENTIAL).



PVC LOOP DETECTORS

NUMBER	SIZE (FEET)	LOCATION
D1-1	6 X 6	40
D1-2	6 X 10	10
D2-1	6 X 6	626
D2-2	6 X 6	626
D4-1	6 X 6	250
D4-2	6 X 10	5
D4-3	6 X 10	5
D4-4	6 X 10	AS SHOWN
D4-5	6 X 10	5
D5-1	6 X 6	110
D5-2	6 X 10	10
D6-1	6 X 6	626
D6-2	6 X 6	626
D3-1	6 X 6	250
D3-2	2-6 X 6	AS SHOWN
D3-3	2-6 X 6	5 & 20

1) LOCATION = DISTANCE FROM STOP LINE OR CROSSWALK TO DETECTOR IN FEET

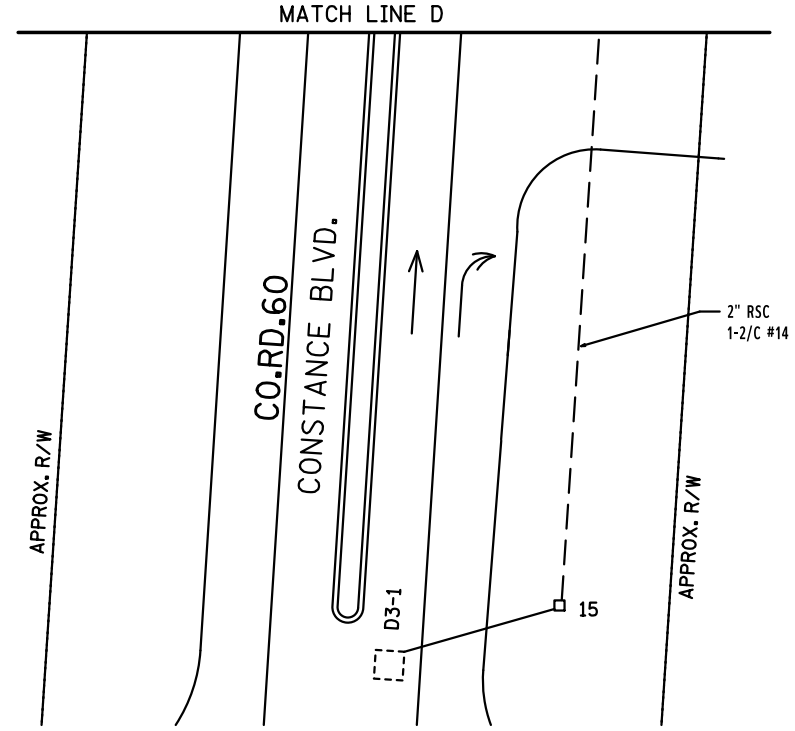
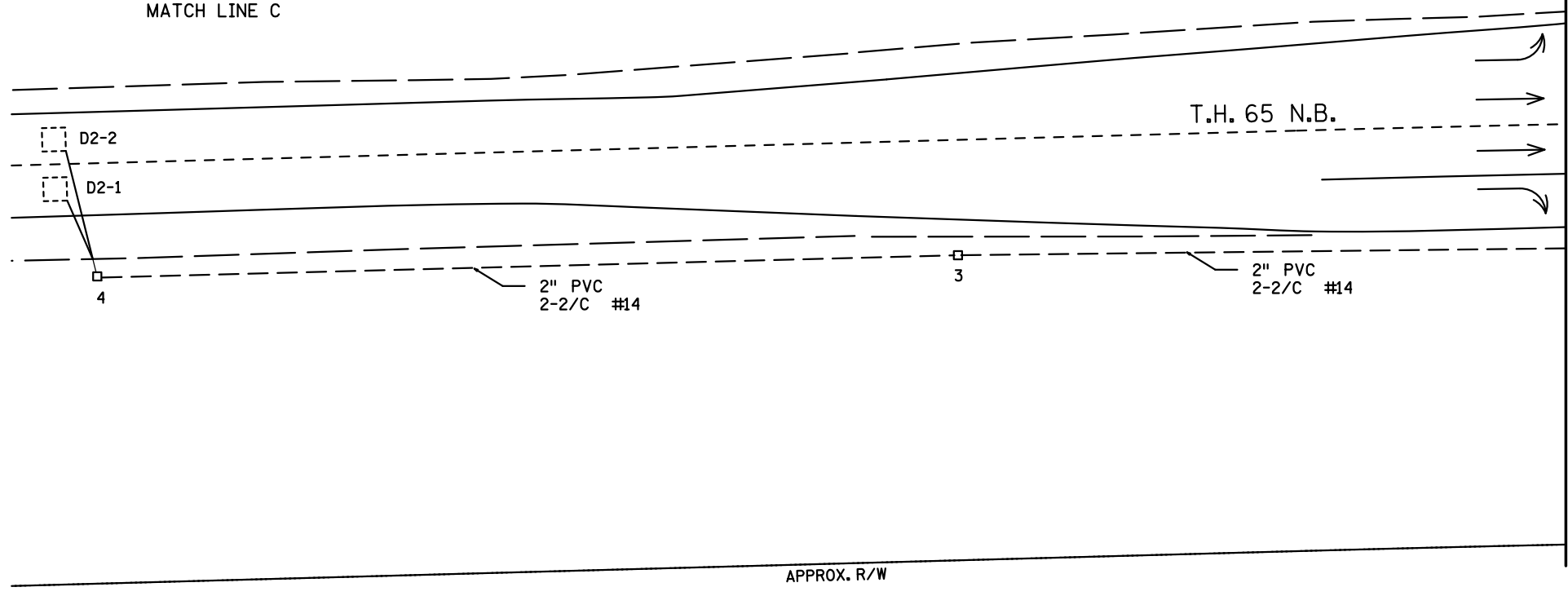
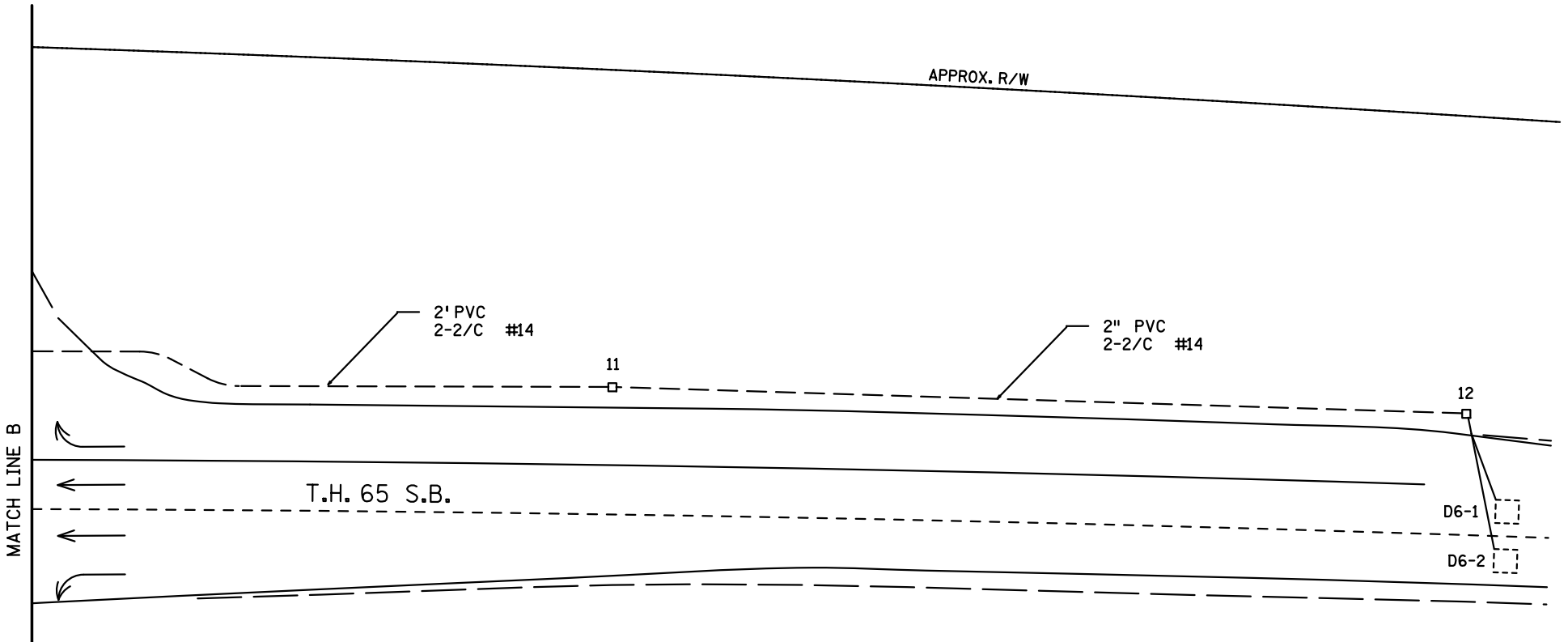
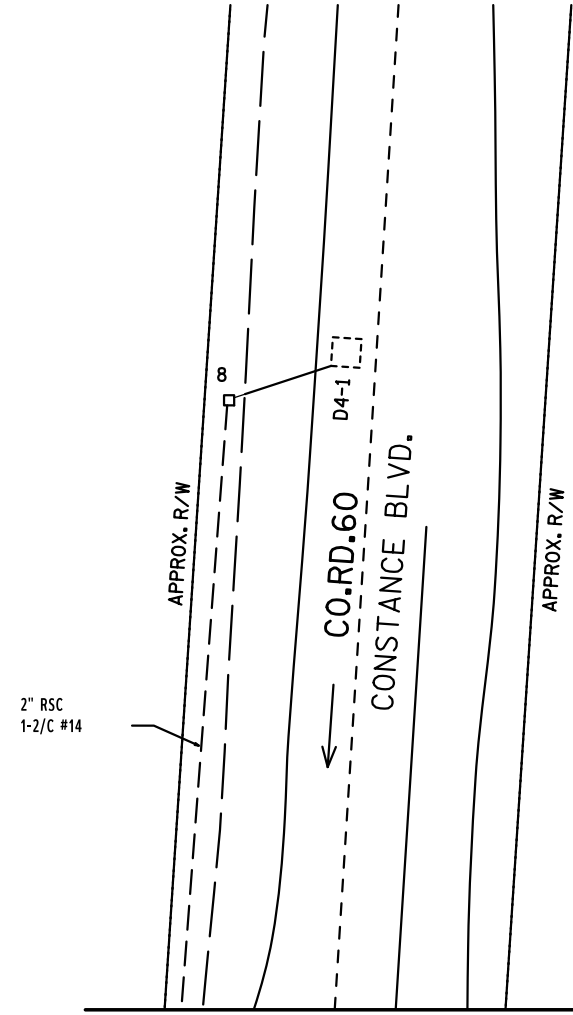
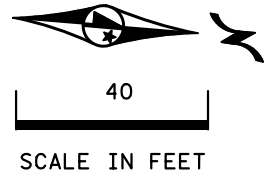
SIGNAL FACES
ALL INDICATIONS SHALL ARE 12"

FACE	R	Y	G	RLTA	YLTA	GLTA
1-1				◀	◀	◀
1-2				◀	◀	◀
2-1	○	○	○			
2-2	○	○	○			
2-3	○	○	○			
4-1	○	○	○			
4-2	○	○	○			
4-3	○	○	○			◀
4-4	○	○	○			◀
5-1				◀	◀	◀
5-2				◀	◀	◀
6-1	○	○	○			
6-2	○	○	○			
6-3	○	○	○			
3-1	○	○	○			
3-2	○	○	○			
3-3	○	○	○			◀
3-4	○	○	○			◀

NOTE:
- EXISTING INDICATIONS ARE LED FOR RED ONLY.
- ALL SIGNAL FACE HAVE BACKGROUND SHIELD.

PLOTTED/REVISED: 8/6/2013

DISTRICT #: METRO
IPLOT NAME: MATCH LINE
PATH & FILENAME: IP_PWP-d0781323YT2183A_SGLDGN



BY	DATE	REVISIONS
		AS-BUILT PLAN SP 0207-94

SYSTEM ID: 21183 T.E.
 METER ADDRESS: 16299 HIGHWAY 65
 MASTER ID: T.E.

MATCH LINES
 TH 65 AT CO.RD. 60 (CONSTANCE BLVD.)
 HAM LAKE, ANOKA COUNTY

STATE PROJ.NO. 0207-94 (T.H.65) SHEET NO. SS69 OF SS88 SHEETS

PLOTTED/REVISED: 8/6/2013

DISTRICT #: METRO
 IPLOT NAME: NOTES
 PATH & FILENAME: IP_PWP-d0781323YT2183A_SGLDGN

① PA90 POLE FOUNDATION
 TYPE PA90-A-30-D40-9 (DAVIT AT 350)
 2-SWING AWAY HINGES
 ONE WAY SIGNAL OVERHEAD AT 0'
 TYPE 10A POLE MOUNTED AT 180
 TYPE 10B POLE MOUNTED AT 90
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASE 4
 LUMINAIRE-200 W HPS
 PED PUSH BUTTON AND SIGN (R10-4b)
 EXTEND INTO HH 1
 3" RSC
 1-12/C #12
 3-3/C #12
 2-3/C #12 (LUM.)
 1-5/C #12
 1-3/C #20

② PEDESTAL FOUNDATION
 13' PEDESTAL POLE PLUS BASE
 TYPE 6A
 2-R9-3a SIGNS (NO PED) FACING POLES 1 & 3
 EXTEND INTO HH 5
 3" RSC
 1-12/C #12

③ PA90 POLE FOUNDATION
 TYPE PA90-A-40-D40-9 (DAVIT AT 355)
 2-SWING AWAY HINGES
 2-ONE WAY SIGNALS OVERHEAD AT 0'
 AND 11'
 TYPE 10A POLE MOUNTED AT 90
 TYPE 10B POLE MOUNTED AT 180
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASES 6&1
 LUMINAIRE-200 W HPS
 1-SIGN TYPE R6-1R (ONE WAY)
 1-SIGN TYPE R6-1L (ONE WAY)
 PED PUSH BUTTON AND SIGN (R10-4b)
 EXTEND INTO HH 6
 3" RSC
 2-12/C #12
 2-3/C #12
 1-3/C #12 (LUM.)
 1-3/C #20

④ PA90 POLE FOUNDATION
 TYPE PA90-A-25-D40-9 (DAVIT AT 350)
 2-SWING AWAY HINGES
 ONE WAY SIGNAL OVERHEAD AT 0'
 2-TYPE 10B POLE MOUNTED AT 90 AND 180
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASE 8
 LUMINAIRE-200 W HPS
 2-PED PUSH BUTTONS AND SIGNS (R10-4b)
 EXTEND INTO HH 9
 3" RSC
 2-12/C #12
 3-3/C #12
 1-3/C #12 (LUM.)
 1-3/C #20

⑤ PEDESTAL FOUNDATION
 13' PEDESTAL POLE PLUS BASE
 TYPE 6D
 PED PUSH BUTTON AND SIGN
 (R10-4b)
 EXTEND INTO HH 13
 3" RSC
 1-12/C #12
 2-3/C #12

⑥ PA100 POLE FOUNDATION
 TYPE PA100-A-45
 1-X6-350/CAM 400 EXTENSION (MOUNTED AT 350 DEG)
 (INCLUDES LIGHTNING ROD, 7/16" GROUND BRAID AND GROUND ROD)
 1-VIDEO CAMERA WITH MOUNT
 2-SWING AWAY HINGES
 2-ONE WAY SIGNALS OVERHEAD AT 0' AND 11'
 2-TYPE 10B POLE MOUNTED AT 90 AND 180
 ONE WAY EVP DETECTOR AND CONFIRMATORY
 LIGHT PHASES 2&5
 LUMINAIRE-200 W HPS
 1-SIGN TYPE R6-1R (ONE WAY)
 1-SIGN TYPE R6-1L (ONE WAY)
 2-PED PUSH BUTTONS AND SIGNS (R10-4b)
 EXTEND INTO HH 14
 3" RSC
 2-12/C #12
 3-3/C #12
 2-3/C #12 (LUM.)
 1-3/C #20
 1-7/16" GROUNDING BRAID TO GROUND ROD IN HH 14:
 1-3/C #14 (CAMERA POWER)
 1-COM CABLE
 1-COAXIAL CABLE

Ⓐ EQUIPMENT PAD
 SERVICE CABINET
 CONTROLLER CABINET AND CONTROLLER
 SERVICE CABINET TO CONTROLLER CABINET
 2" RSC
 2-1/C #6
 1-1/C #6 INS. GR.
 SERVICE CABINET TO HH 1
 2" RSC
 2-3/C #12 (LUM.)
 SERVICE CABINET TO HH 17
 2" RSC
 3-1/C #2
 CONTROLLER CABINET TO HH 16
 4" RSC
 5-12/C #12
 8-3/C #12
 2-3/C #20
 7-2/C #14
 1-3/C #14 (CAMERA POWER)
 1-COM CABLE
 1-COAXIAL CABLE
 CONTROLLER CABINET TO HH 1
 2-3" RSC
 4-12/C #12
 5-3/C #12
 1-5/C #12
 2-3/C #20
 9-2/C #14
 CONTROLLER CABINET TO TMS PULL VAULT
 1 1/2" CONDUIT INSIDE EXISTING 3" RSC:
 1-6SM FIBER OPTIC

Ⓑ SOP WOOD POLE
 2" RSC RISER WITH
 WEATHERHEAD
 2" RSC TO HH 17
 WITH 3-1/C #2

BY	DATE	REVISIONS	SYSTEM ID: 21183	T.E.	INTERSECTION NOTES TH 65 AT CO. RD. 60 (CONSTANCE BLVD.) HAM LAKE, ANOKA COUNTY	S.A.P. NO.	DRAWN BY: BAM	CKD BY: CDB	DATE: 05-23-11
		AS-BUILT PLAN SP 0207-94	METER ADDRESS: 16299 HIGHWAY 65			CERTIFIED BY: <i>Michael P. Gubinsky</i>	LIC. NO. 19863	DATE: 05-23-11	
			MASTER ID:	T.E.		LICENSED PROFESSIONAL ENGINEER			
						STATE PROJ. NO. 0207-94 (T.H.65)		SHEET NO. SS70 OF SS88 SHEETS	

PLOTTED/REVISED: 8/16/2013

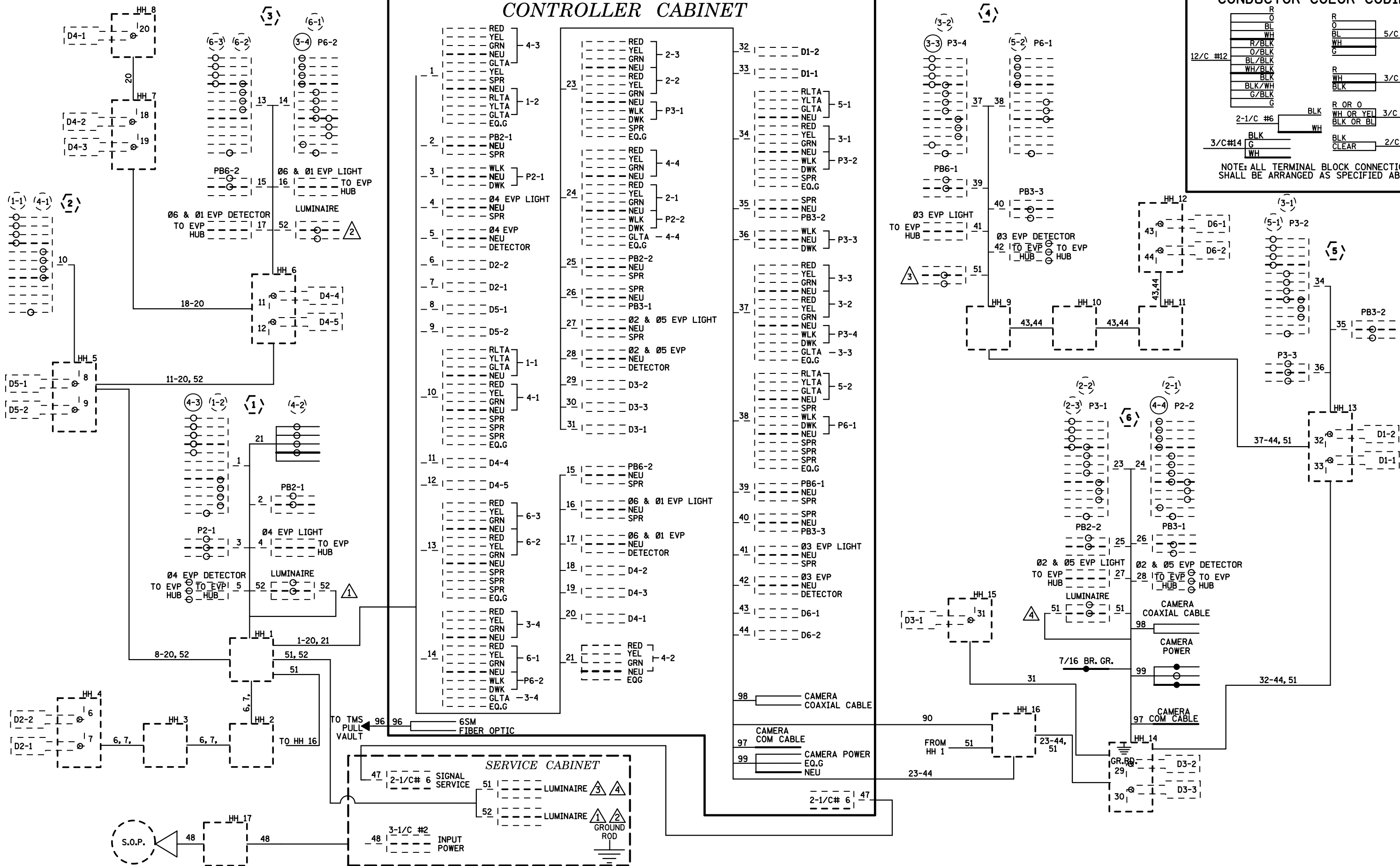
DISTRICT #: METRO
IPLOT NAME: WIRE
PATH & FILENAME: IP_PWP-d0781323YT2183A_SGLDGN

CONTROLLER CABINET

CONDUCTOR COLOR CODING

R	BLK	5/C #12
O	WH	
BL	WH	
R/BLK	WH	
O/BLK	WH	
BL/BLK	WH	
WH/BLK	WH	
BLK	WH	
BLK/WH	WH	
G/BLK	WH	
G	WH	
BLK	WH	
WH OR O	WH OR YEL	3/C #20
BLK OR BL	BLK OR BL	
BLK	CLEAR	2/C #14

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



BY	DATE	REVISIONS
		AS-BUILT PLAN SP 0207-94

SYSTEM ID: 21183 T.E.
 METER ADDRESS: 16299 HIGHWAY 65
 MASTER ID: T.E.

FIELD WIRING DIAGRAM
 TH 65 AT CO. RD. 60 (CONSTANCE BLVD.)
 HAM LAKE, ANOKA COUNTY.

S.A.P. NO. _____ DRAWN BY: BAM CKD BY: CDB DATE: 05-23-11
 CERTIFIED BY: *Michael P. Gubinsky* L.I.C. NO. 19863 DATE: 05-23-11
 STATE PROJ. NO. 0207-94 (T.H. 65) SHEET NO. SS71 OF SS88 SHEETS