

PVC LOOP DETECTORS				
NUMBER	SIZE (FT.)	LOCATION	FUNCTION	STATUS
D1-1	2-6x6	10' & 40'	1	1
D1-2	2-6x6	-5' & 25'	1	2
D2-1, D2-2	6x6	400'	1	INPLACE
D3-1	2-6x6	15' & 45'	1	INPLACE
D3-2	2-6x6	0' & 30'	1	INPLACE
D4-1, D8-1	6x6	120'	3	INPLACE
D4-2, D8-2	3-6x6	-10', 5', 20'	7	INPLACE
D5-1	2-6x6	10' & 40'	1	1
D5-2	2-6x6	-5' & 25'	1	2
D6-1, D6-2	6x6	400'	1	INPLACE
D7-1	2-6x6	0' & 30'	1	INPLACE
D7-2	6x6	15'	1	INPLACE
D8-3	2-6x6	0' & 15'	1	INPLACE

LOOP DETECTORS FUNCTIONS:

- 1) CALL AND EXTEND
- 3) EXTEND ONLY
- 7) DELAYED CALL, IMMEDIATE EXTEND

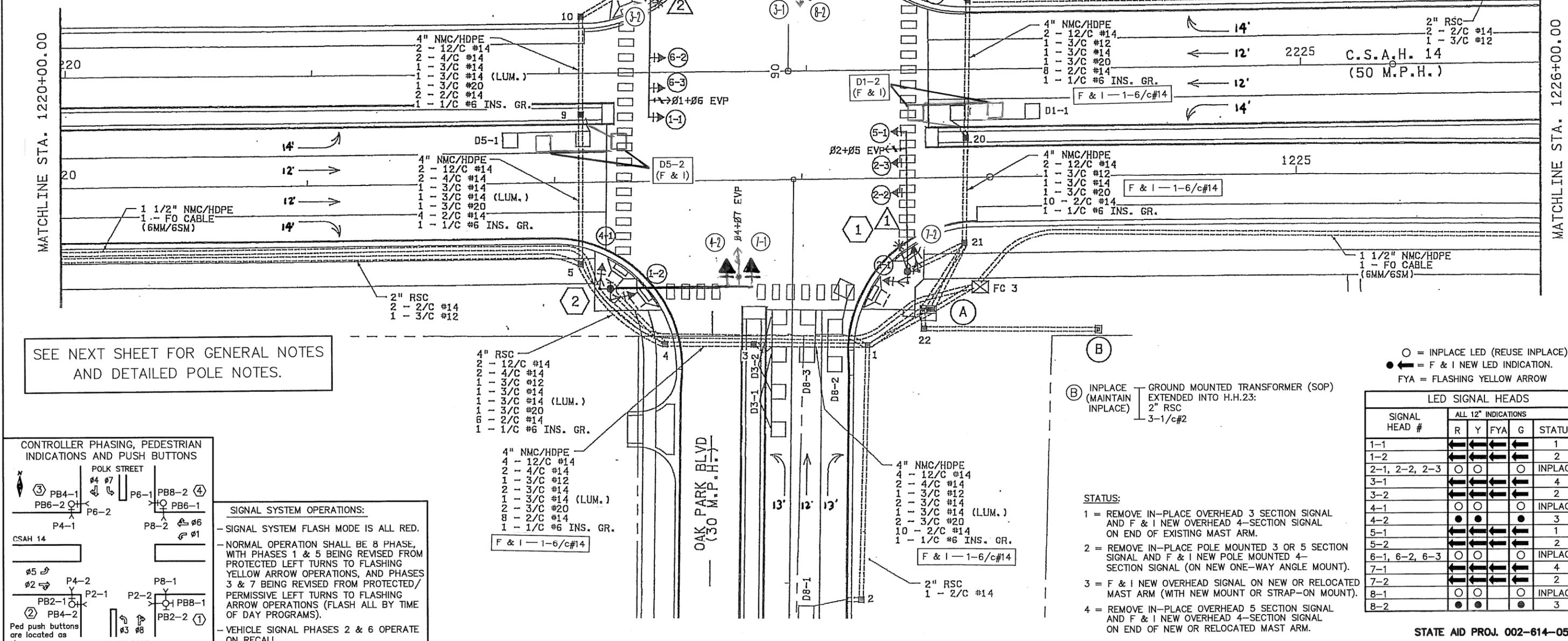
LOOP DETECTOR STATUS:

1 = DETACH EXISTING FRONT (10') LOOP DETECTOR FROM EXISTING LEAD-IN CABLE AND SPLICE TO EXISTING BACK (40') LOOP DETECTOR AND BACK LEAD-IN CABLE (F & I NEW SPLICE KIT). PROTECT EXISTING 10'/40' LOOP DETECTORS IN ROADWAY.

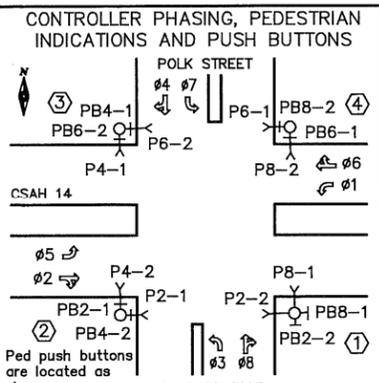
2 = FURNISH & INSTALL NEW PVC LOOP DETECTORS AT -5' AND 25' FROM STOP BAR. SPLICE THESE NEW LOOP DETECTORS TO EXISTING FRONT LEAD-IN CABLE (F & I NEW SPLICE KIT).

LOCATION = DISTANCE FROM STOP BAR TO FRONT OF DETECTOR.

NOTE: WHEN INSTALLING NEW LOOP DETECTORS D1-2 AND D5-2, ENSURE THAT ALL EXISTING LOOP DETECTOR ROADWAY CONDUITS (TO D1-1 AND D5-1) ARE EXACTLY LOCATED & PROTECTED DURING NEW LOOP INSTALLATION. ANY DAMAGE TO THESE EXISTING LOOP DETECTORS (ALL CONDUITS, WIRING, SPLICE KITS) DUE TO CONTRACTOR LOOP DETECTOR INSTALLATION WORK WILL REQUIRE CONTRACTOR TO FULLY REPLACE THE DAMAGED PVC LOOP DETECTORS ALL AT NO EXPENSE TO THE COUNTY.



SEE NEXT SHEET FOR GENERAL NOTES AND DETAILED POLE NOTES.



SIGNAL SYSTEM OPERATIONS:

- SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION SHALL BE 8 PHASE, WITH PHASES 1 & 5 BEING REVISED FROM PROTECTED LEFT TURNS TO FLASHING YELLOW ARROW OPERATIONS, AND PHASES 3 & 7 BEING REVISED FROM PROTECTED/PERMISSIVE LEFT TURNS TO FLASHING YELLOW ARROW OPERATIONS (FLASH ALL BY TIME OF DAY PROGRAMS).
- VEHICLE SIGNAL PHASES 2 & 6 OPERATE ON RECALL.

(B) INPLACE (MAINTAIN INPLACE) GROUND MOUNTED TRANSFORMER (SOP) EXTENDED INTO H.H.23:
 2" RSC
 3-1/c#2

- STATUS:**
- 1 = REMOVE IN-PLACE OVERHEAD 3 SECTION SIGNAL AND F & I NEW OVERHEAD 4-SECTION SIGNAL ON END OF EXISTING MAST ARM.
 - 2 = REMOVE IN-PLACE POLE MOUNTED 3 OR 5 SECTION SIGNAL AND F & I NEW POLE MOUNTED 4-SECTION SIGNAL (ON NEW ONE-WAY ANGLE MOUNT).
 - 3 = F & I NEW OVERHEAD SIGNAL ON NEW OR RELOCATED MAST ARM (WITH NEW MOUNT OR STRAP-ON MOUNT).
 - 4 = REMOVE IN-PLACE OVERHEAD 5 SECTION SIGNAL AND F & I NEW OVERHEAD 4-SECTION SIGNAL ON END OF NEW OR RELOCATED MAST ARM.

○ = INPLACE LED (REUSE INPLACE).
 ● ← = F & I NEW LED INDICATION.
 FYA = FLASHING YELLOW ARROW

SIGNAL HEAD #	ALL 12" INDICATIONS				STATUS
	R	Y	FYA	G	
1-1	←	←	←	←	1
1-2	←	←	←	←	2
2-1, 2-2, 2-3	○	○	○	○	INPLACE
3-1	←	←	←	←	4
3-2	←	←	←	←	2
4-1	○	○	○	○	INPLACE
4-2	●	●	●	●	3
5-1	←	←	←	←	1
5-2	←	←	←	←	2
6-1, 6-2, 6-3	○	○	○	○	INPLACE
7-1	←	←	←	←	4
7-2	←	←	←	←	2
8-1	○	○	○	○	INPLACE
8-2	●	●	●	●	3

DRAWN BY:	JMG	
DESIGNER:	JMG	
CHECKED BY:	JMG	
DESIGN TEAM		
NO.	BY	DATE

REVISIONS		

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.

John M. Gray
 Name: John M. Gray, PE
 Lic. No. 22457
 Date: August 21, 2020

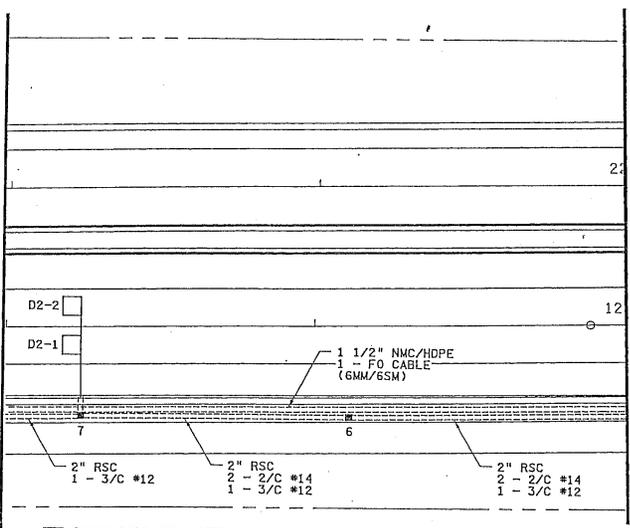
SEH
 PHONE: (651) 490-2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110

ANOKA COUNTY
CITY OF BLAINE

REVISE SIGNAL SYSTEM 'A'
INTERSECTION LAYOUT
 CSAH 14 (125TH AVE) AT OAK PARK BLVD/POLK ST

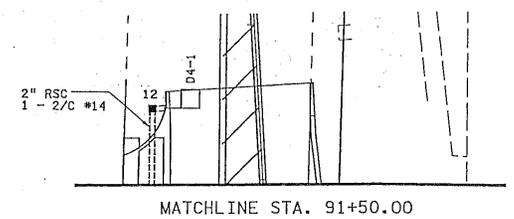
STATE AID PROJ. 002-614-050
 FILE NO. ANOKC 153781
5
55

MATCHLINE STA. 1218+00.00
SEE SHEET NO. 05TR31



MATCHLINE STA. 1220+00.00

- (A) EQUIPMENT PAD - SEE DETAIL
SERVICE CABINET
CONTROLLER AND CABINET
2 - 4" RSC TO HH 1:
4 - 12/C #14
2 - 4/C #14
2 - 3/C #12
2 - 3/C #14
2 - 3/C #20
13 - 2/C #14
1 - 1/C #6 INS. GR.
2 - 4" RSC TO HH 21:
4 - 12/C #14
2 - 4/C #14
1 - 3/C #12
2 - 3/C #14
2 - 3/C #20
12 - 2/C #14
1 - 1/C #6 INS. GR.
1 1/2" NMC/HDPE TO
FIBER CABINET WITH:
1 - FO PIGTAIL
3" RSC STUBBED OUT
CAPPED BOTH ENDS
2" RSC TO SERVICE CABINET
2 - 1/C #6
1 - 1/C #6 INS. GR.
SERVICE CABINET TO HH 1:
2" RSC
1 - 3/C #14 (LUM.)
SERVICE CABINET TO HH 21:
2" RSC
1 - 3/C #14 (LUM.)
SERVICE CABINET TO HH 22:
2" RSC
3 - 1/C #2



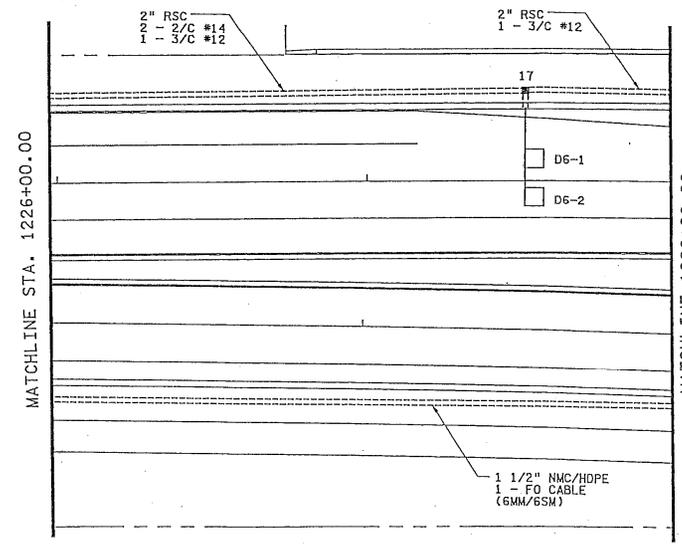
- (B) SOP - GROUND MOUNT TRANSFORMER
2" RSC TO HH 23:
3 - 1/C #2

- 1 PA100 POLE FOUNDATION
TYPE PA100-A-55-D40-9 (DAVIT AT 350 DEG)
2-SWING AWAY HINGES
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
2-STRAIGHT MOUNT SIGNALS OVERHEAD
AT 11' AND 23'
2-ANGLE MOUNT SIGNALS AT 90 DEG AND 180 DEG
2-ANGLE MOUNT C. D. PED INDS AT 90 DEG AND 180 DEG
1-ONE WAY EVP DETECTOR AND
CONFIRMATORY LIGHT (PHASES 2+5)
LUMINAIRE-250W HPS
1-PB AND SIGN (LT ARROW)(PB8-1)
1-PB AND SIGN (RT ARROW)(PB2-2)
1-TYPE D SIGN "OAK PARK BLVD/POLK ST"
1-R6-1L SIGN "ONE WAY"
1-R6-1R SIGN "ONE WAY"
EXTEND INTO HH 21:
3" RSC
2 - 12/C #14
2 - 4/C #14
1 - 3/C #14
1 - 3/C #14 (LUM.)
1 - 3/C #20
2 - 2/C #14
1 - 1/C #6 INS. GR.

- 3 PA100 POLE FOUNDATION
TYPE PA100-A-55-D40-9 (DAVIT AT 350 DEG)
2-SWING AWAY HINGES
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
2-STRAIGHT MOUNT SIGNALS OVERHEAD
AT 11' AND 23'
2-ANGLE MOUNT SIGNALS AT 90 DEG AND 180 DEG
2-ANGLE MOUNT C. D. PED INDS AT 90 DEG AND 180 DEG
1-ONE WAY EVP DETECTOR AND
CONFIRMATORY LIGHT (PHASES 1+6)
LUMINAIRE-250W HPS
1-PB AND SIGN (RT ARROW)(PB4-1)
1-PB AND SIGN (LT ARROW)(PB6-2)
1-TYPE D SIGN "POLK ST/OAK PARK BLVD"
1-R6-1L SIGN "ONE WAY"
1-R6-1R SIGN "ONE WAY"
EXTEND INTO HH 10:
3" RSC
2 - 12/C #14
2 - 4/C #14
1 - 3/C #14
1 - 3/C #14 (LUM.)
1 - 3/C #20
2 - 2/C #14
1 - 1/C #6 INS. GR.

- 2 PA100 POLE FOUNDATION
TYPE PA100-A-50
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
2-SIGNALS AT 90 DEG AND 180 DEG
2-ANGLE MOUNT C.D. PED INDS AT 90 DEG AND 180 DEG
1-ONE WAY EVP DETECTOR AND
CONFIRMATORY LIGHT (PHASES 4+7)
1-PB AND SIGN (RT ARROW)(PB4-2)
1-PB AND SIGN (LT ARROW)(PB2-1)
1-TYPE D SIGN "125TH AVE NE"
1-R10-12 SIGN
1-R6-1L SIGN "ONE WAY"
1-R6-1R SIGN "ONE WAY"
EXTEND INTO HH 4:
3" RSC
2 - 12/C #14
1 - 3/C #14
1 - 3/C #20
1 - 2/C #14
1 - 1/C #6 INS. GR.

- 4 PA100 POLE FOUNDATION
TYPE PA100-A-45
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
2-ANGLE MOUNT SIGNALS AT 90 DEG AND 180 DEG
2-ANGLE MOUNT C.D. PED INDS AT 90 DEG AND 180 DEG
1-ONE WAY EVP DETECTOR AND
CONFIRMATORY LIGHT (PHASES 3+8)
1-PB AND SIGN (LT ARROW)(PB6-1)
1-PB AND SIGN (RT ARROW)(PB8-2)
1-TYPE D SIGN "125TH AVE NE"
1-R10-12 SIGN
1-R6-1L SIGN "ONE WAY"
1-R6-1R SIGN "ONE WAY"
EXTEND INTO INP. HH 15:
3" RSC
2 - 12/C #14
1 - 3/C #14
1 - 3/C #20
2 - 2/C #14
1 - 1/C #6 INS. GR.



MATCHLINE STA. 1226+00.00

MATCHLINE STA. 1228+00.00
SEE SHEET NO. 05TR32

RELEASED FOR CONSTRUCTION

VP I on NVP_5VCO0261434_05tr25.dgn

NO	DATE	BY	CHKD	APPR

I hereby certify that this plan, specification, or report 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: **GEORGE M. STUEMPF IG**
George M. Stuempf IG
 Date: **7/13/11** License: **21849**

ANKA COUNTY RELEASED FOR CONSTRUCTION

George M. Stuempf IG
 ANKA COUNTY

SR Consulting Group, Inc.
C.S. McCrossan

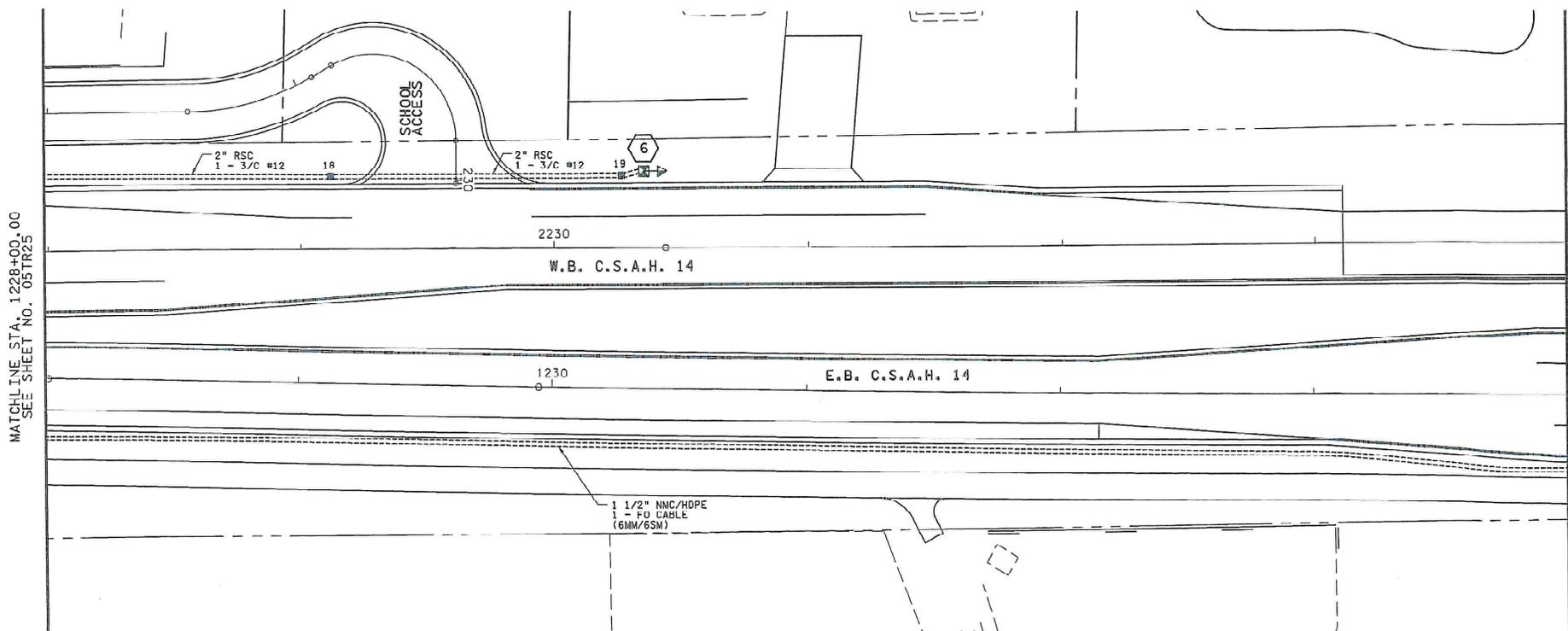
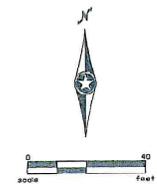


CSAH 14 DESIGN BUILD (SAP 002-614-034)
 MATCHLINE LAYOUT
 CSAH 14 & OAK PARK BLVD/POLK ST NE (SYSTEM "E")
 C.S.A.H. 14
 DESIGN PACKAGE #05

SHEET
 05TR25
 OF
 05TR37

7287
EAST

6 PEDESTAL FOUNDATION
(MNDOT STANDARD PLATE NO. 8112F)
PEDESTAL POLE, BASE, FLASHER REACONS,
FLASHER CABINET AND SIGNS-BY OTHERS
EXTEND INTO HH 19:
2" RSC
1 - 3/C #12



MATCHLINE STA. 1228+00.00
SEE SHEET NO. 05TR25

MATCHLINE STA. 1234+00.00

- NOTES:
1. ALL ITEMS ARE F. & I.
 2. THE EXACT LOCATION OF HANDHOLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD.
 4. THE CONTRACTOR SHALL LOCATE AND VERIFY INPLACE UTILITIES PRIOR TO COMMENCING WORK. SEE UTILITY PLANS.

RELEASED FOR CONSTRUCTION

10:45:15 AM
9/11/2011
\\P1an\DP_5\CD0261434_051432.dgn

NO	DATE	BY	CHK	APPR

I hereby certify that this plan, specification, or report 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: GEORGE M. STUEMPF 1G
Date: 9/11/11 License #: 21849

ANOKA COUNTY RELEASED FOR CONSTRUCTION
Date: 9/11/11 ANOKA COUNTY



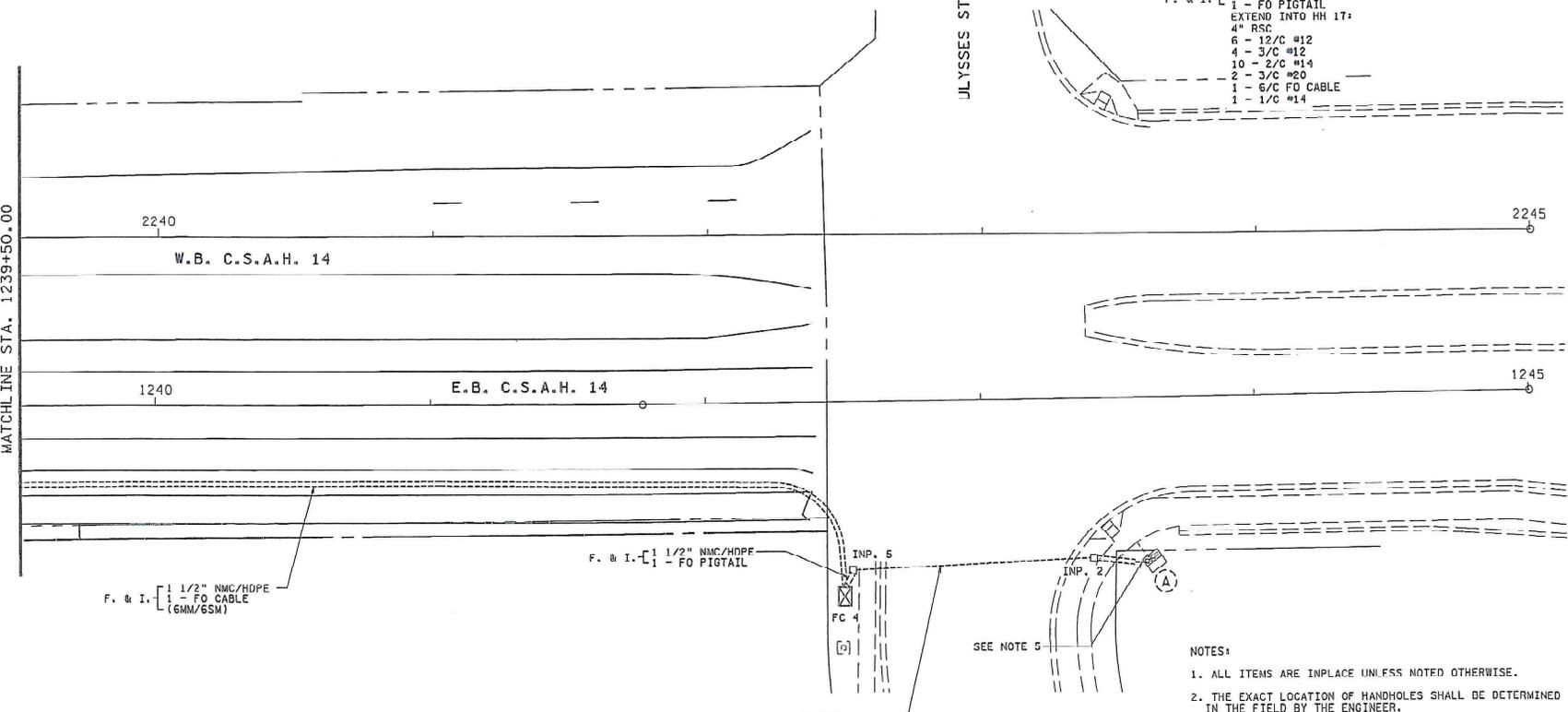
CSAH 14 DESIGN BUILD (SAP 002-614-034)
INTERCONNECT AND SCHOOL FLASHER LAYOUT
(STAGES 2 AND 3)
C.S.A.H. 14
DESIGN PACKAGE #05

SHEET
05TR32
OF
05TR37



- (A) CONTROLLER CABINET
 CABINET FOUNDATION
 3/4" PVC CONDUIT STUBBED OUT (CAPPED AT BOTH ENDS
 FOR FUTURE TELEPHONE LINE)
 3" RSC STUBBED OUT (THREADED AND CAPPED BOTH ENDS)
 EXTEND INTO INP. HH 11
 METERED SIGNAL SERVICE
 2" RSC
 3 - 1/C #6
 4" RSC
 EXTEND INTO INP. HH 21
 4" RSC
 5 - 12/C #12
 1 - 5/C #12
 6 - 3/C #12
 9 - 2/C #14
 3 - 3/C #20
 EXTEND INTO INP. HH 17:
 3" RSC (STUBBED OUT)
 3" RSC (SEE NOTE 5)
 1 - FO PIGTAIL
 EXTEND INTO HH 17:
 4" RSC
 6 - 12/C #12
 4 - 3/C #12
 10 - 2/C #14
 2 - 3/C #20
 1 - 5/C FO CABLE
 1 - 1/C #14

MATCHLINE STA. 1239+50.00



F. & I. - 1/2" NMC/HDFE
 - FO CABLE
 (6MM/6SM)

F. & I. - 1/2" NMC/HDFE
 - FO PIGTAIL

4" RSC
 4 - 12/C #12
 6 - 3/C #12
 4 - 2/C #14
 3 - 3/C #20
 F. & I. - 1 - FO PIGTAIL

SEE NOTE 5

NOTES:

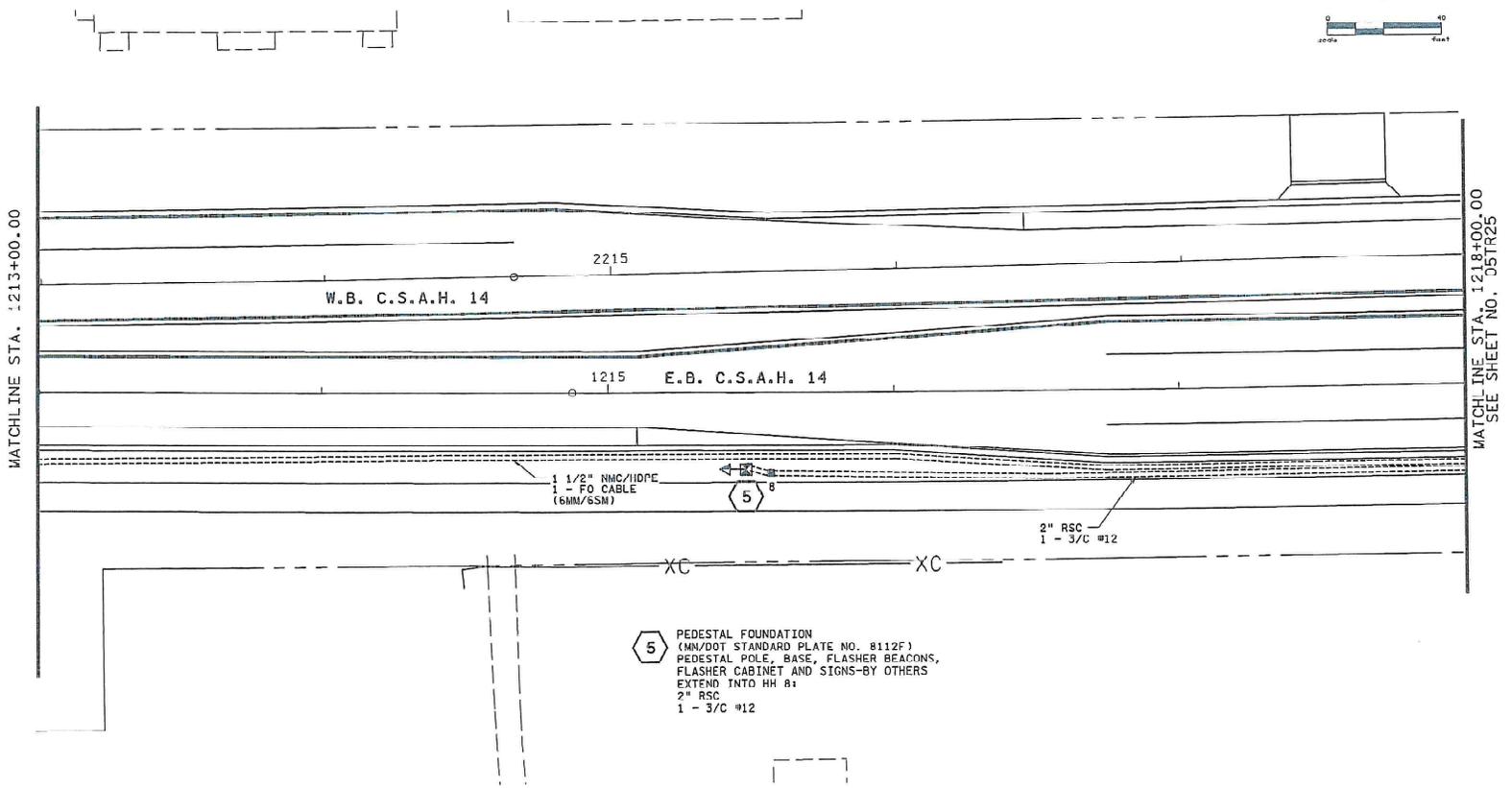
1. ALL ITEMS ARE INPLACE UNLESS NOTED OTHERWISE.
2. THE EXACT LOCATION OF HANDHOLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD.
4. SEE FOR INFORMATION ONLY SHEET FOR INPLACE ITEMS.
5. TIE NEW 3" TO EXISTING 3" STUB OUT.
6. THE CONTRACTOR SHALL LOCATE AND VERIFY INPLACE UTILITIES PRIOR TO COMMENCING WORK. SEE UTILITY PLANS.

REFER TO INSTRUCTION

12/15/16 AM
 9/11/2011
 ...NPIanVDP_SVC00261434_051R34.dgn

I hereby certify that this plan, specification, or report 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: GEORGE M. STUEWPF IG Date: <i>12/15/16</i> License #: 21849				ANOKA COUNTY RELEASED FOR CONSTRUCTION Date: <i>12/15/16</i> ANOKA COUNTY				CSAH 14 DESIGN BUILD (SAP 002-614-034) INTERCONNECT AND SCHOOL FLASHER LAYOUT (STAGES 2 AND 3) C.S.A.H. 14 DESIGN PACKAGE #05		SHEET 05TR34 OF 05TR37	
NO	DATE	BY	CHK	APPR							

2287
WJF



5 PEDESTAL FOUNDATION
(MM/DOT STANDARD PLATE NO. 8112F)
PEDESTAL POLE, BASE, FLASHER BEACONS,
FLASHER CABINET AND SIGNS-BY OTHERS
EXTEND INTO HH #1:
2" RSC
1 - 3/C #12

- NOTES:
1. ALL ITEMS ARE F. & I.
 2. THE EXACT LOCATION OF HANDHOLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD.
 4. THE CONTRACTOR SHALL LOCATE AND VERIFY INPLACE UTILITIES PRIOR TO COMMENCING WORK. SEE UTILITY PLANS.

RELEASED FOR CONSTRUCTION

10/26/11 AN
\\P1an\DP_5\CD0261434_05tr-31.dgn

NO	DATE	BY	CHK	APPD

I hereby certify that this plan, specification, or report 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: GEORGE M. STUEMPF IG

Date: 9/27/11 License # 21349

ANOKA COUNTY RELEASED FOR CONSTRUCTION

George M. Stuempf
Date: 9/27/11 ANOKA COUNTY

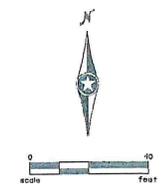


CSAH 14 DESIGN BUILD (SAP 002-614-034)
INTERCONNECT AND SCHOOL FLASHER LAYOUT
(STAGES 2 AND 3)
C.S.A.H. 14
DESIGN PACKAGE #05

SHEET
05TR31
OF
05TR37

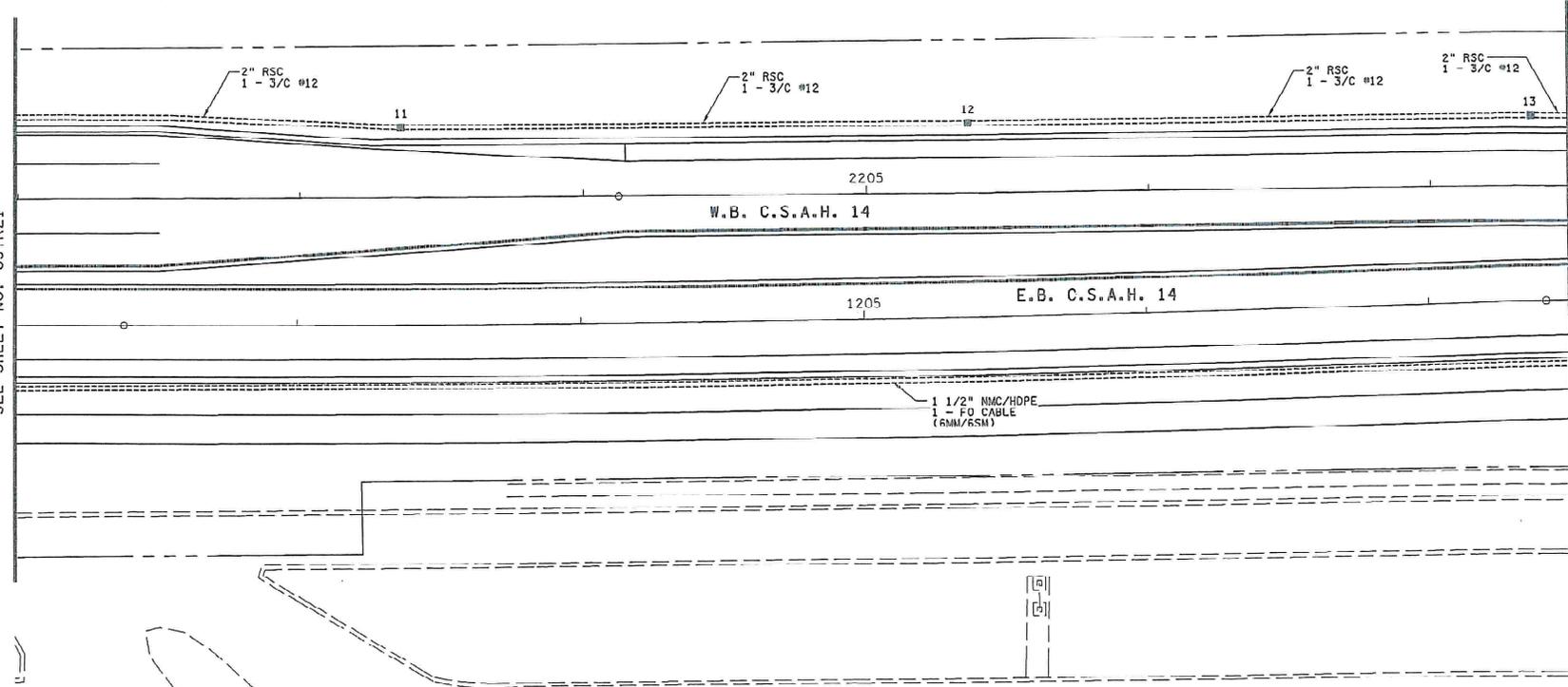
7057

W.C.T



MATCHLINE STA. 1202+00.00
SEE SHEET NO. 05TR21

MATCHLINE STA. 1207+50.00



NOTES:

1. ALL ITEMS ARE F. & I.
2. THE EXACT LOCATION OF HANDHOLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD.
4. THE CONTRACTOR SHALL LOCATE AND VERIFY INPLACE UTILITIES PRIOR TO COMMENCING WORK. SEE UTILITY PLANS.

RELEASED FOR CONSTRUCTION

10/15/12 AM
12/11/2011
...NPI on VDP_5XCD0261434_05TR29.dgn

NO	DATE	BY	CHK	APPR

I hereby certify that this plan, specification, or report 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: **GEORGE M. STUEMPF IG**

Date: *9/2/10* License # **21849**

ANOKA COUNTY RELEASED FOR CONSTRUCTION

George M. Stuempf

Date: *9/2/10* ANOKA COUNTY

SRH **C.S. McCrossan**
Consulting Group, Inc.



CSAH 14 DESIGN BUILD (SAP 002-614-034)

INTERCONNECT AND SCHOOL FLASHER LAYOUT
(STAGES 2 AND 3)
C.S.A.H. 14
DESIGN PACKAGE #05

SHEET
05TR29
OF
05TR37

NOTES:

- 1) ALL ITEMS OF THIS SIGNAL SYSTEM ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE, UNLESS OTHERWISE NOTED ON PLANS.
- 2) ALL HANDHOLES ARE PVC HANDHOLES WITH METAL FRAMES AND COVERS AND ARE INPLACE (REUSE AND MAINTAIN INPLACE).
- 3) ALL PEDESTRIAN SIGNAL HEADS ARE ONE-SECTION LED "HAND/WALKING PERSON" COUNTDOWN TIMER INDICATIONS AND ARE INPLACE (REUSE AND MAINTAIN INPLACE).
- 4) ALL LOOP DETECTORS ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE AND OPERATIONAL, EXCEPT AS FOLLOWS: CONTRACTOR SHALL FURNISH AND INSTALL NEW LOOP DETECTORS D1-2 AND D5-2 IN PVC PER DETAILS INCLUDED ELSEWHERE IN THESE PLANS. LOOP DETECTOR WIRES FOR NEW LOOP DETECTORS SHALL BE CROSS-LINKED POLY-ETHYLENE (XLP) #12 AWG IN 3/4" NMC. SEE SPECIAL PROVISIONS.
- 5) ANY DAMAGE TO INPLACE TRAFFIC SIGNAL FACILITIES (CONDUIT, CABLES, HANDHOLES, SIGNAL POLES, ETC.), DUE TO TRAFFIC SIGNAL REVISION WORK, SHALL BE REPAIRED BY CONTRACTOR TO SATISFACTION OF THE ENGINEER, AT NO EXPENSE TO THE COUNTY.
- 6) CONTRACTOR SHALL MAINTAIN OPERATION OF THE SIGNAL SYSTEM AT ALL TIMES, EXCEPT AS OTHERWISE APPROVED BY ENGINEER.
- 7) ALL NEW VEHICULAR SIGNAL HEADS SHALL HAVE BACKGROUND SHIELDS FURNISHED & INSTALLED BY CONTRACTOR. ALL INPLACE VEHICULAR SIGNAL HEADS BEING REUSED AS PART OF REVISE SIGNAL SYSTEM "A" HAVE BACKGROUND SHIELDS (REUSE AND MAINTAIN INPLACE).
- 8) LOCATION OF NEW LOOP DETECTORS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 9) F & I = NEW, FURNISH AND INSTALL.
S & I = INPLACE, SALVAGE AND INSTALL.
- 10) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED MATERIALS TO BE INSTALLED AND MADE OPERATIONAL BY CONTRACTOR.
- 11) ALL NEW VEHICULAR SIGNAL HOUSINGS, BACKGROUND SHIELDS AND VISORS SHALL BE FABRICATED USING BLACK POLYCARBONATE MATERIALS. SEE SPECIAL PROVISIONS.
- 12) SEE SPECIAL PROVISIONS & DETAILS REGARDING NEW TYPE C SIGN PANELS TO BE FURNISHED AND INSTALLED BY CONTRACTOR, AND INPLACE TYPE D SIGN PANELS TO BE SALVAGED AND REINSTALLED BY CONTRACTOR (ALL INCLUDED AS PART OF PAY ITEM FOR ITEM NO. 2565-REVISE SIGNAL SYSTEM A).
- 13) SEE SPECIAL PROVISIONS REGARDING WORK TO RAISE OVERHEAD SIGNAL HEADS ON MAST ARM 1 (INCLUDED AS PART OF PAY ITEM FOR ITEM NO. 2565-REVISE SIGNAL SYSTEM A).

① INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION
 TYPE PA100-A-55-D40-9 (DAVIT AT 350 DEG)
 PA100 SWING-AWAY HINGES
 LUMINAIRE-250 W HPS
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' & 23'
 1-ANGLE MOUNT SIGNAL-POLE MOUNTED 180 DEG (2-1)
 2-SETS CD PED SIGNALS (ANGLE MOUNTED) AT 90/180 DEG
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
 TYPE D SIGN PANEL-OVERHEAD AT 32'
 ONE WAY EVP DETECTOR AND LIGHT AT 6' (Ø2,5)
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
 EXTENDED INTO H.H.21:
 3" RSC
 2-12/c#14
 2-4/c#14
 1-3/c#14
 1-3/c#20
 2-2/c#14
 1-3/c#14 (LUM)
 1-1/c#6 (GRD)

INPLACE (REMOVE) ONE WAY SIGNAL AND MOUNT-OVERHEAD AT 0' (OLD 5-1)
 ONE WAY SIGNAL AND MOUNT-POLE MOUNTED 90 DEG (OLD 4-3)
 F & I 1-ONE WAY SIGNAL AND ANGLE MOUNT-OVERHEAD AT 0' (NEW 5-1)
 1-ONE WAY SIGNAL AND ANGLE MOUNT-POLE MOUNTED 90 DEG (NEW 7-2)
 R10-X12 SIGN PANEL-ADJACENT TO 5-1
 ADJUST MAST ARM/POLE SO THAT ALL OVERHEAD SIGNAL HEADS ARE 17 FEET ABOVE GROUND LINE TO BOTTOM OF BACKGROUND SHIELD (SEE SPECIAL PROVISIONS)

② INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION
 TYPE PA100-A-D40-9 MAST ARM POLE (DAVIT AT 350 DEG)
 LUMINAIRE-250 W HPS
 1-ANGLE MOUNT SIGNAL-POLE MOUNTED 180 DEG (4-1)
 2-SETS CD PED SIGNALS (ANGLE MOUNTED) AT 90/180 DEG
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
 EXTENDED INTO H.H.4:
 3" RSC
 2-12/c#14
 1-3/c#14
 1-3/c#20
 2-2/c#14
 1-3/c#14 (LUM)
 1-1/c#6 (GRD)

INPLACE (REMOVE) ONE WAY SIGNAL AND MOUNT-OVERHEAD (OLD 4-2, 5-SECTION)
 ONE WAY SIGNAL AND MOUNT-POLE MOUNTED 90 DEG (OLD 1-2)
 R10-12 SIGN PANEL-OVERHEAD
 INPLACE (S & I) 50-FOOT MAST ARM (RELOCATE TO POLE 4)
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD AT 6' (Ø4,7)
 TYPE D SIGN PANEL-OVERHEAD AT 28' (D-1)
 INSTALL 55-FOOT MAST ARM (WITH MID-MOUNTS AT 11' AND 23' FROM END OF MAST ARM) - FURNISHED BY COUNTY
 F & I 1-ONE WAY SIGNAL AND ANGLE MOUNT-OVERHEAD AT 0' (NEW 7-1)
 1-ONE WAY SIGNAL AND STRAIGHT MOUNT-OVERHEAD AT 11' (NEW 4-2)
 1-ONE WAY SIGNAL AND ANGLE MOUNT-POLE MOUNTED 90 DEG (NEW 1-2)
 CAP UNUSED MID-MAST ARM MOUNT AT 23'
 R10-X12 SIGN PANEL-ADJACENT TO 7-1
 1-6/c#14

③ INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION
 TYPE PA100-A-55-D40-9 (DAVIT AT 350 DEG)
 PA100 SWING-AWAY HINGES
 LUMINAIRE-250 W HPS
 2-STRAIGHT MOUNT SIGNALS-OVERHEAD AT 11' & 23'
 1-ANGLE MOUNT SIGNAL-POLE MOUNTED 180 DEG (6-1)
 2-SETS CD PED SIGNALS (ANGLE MOUNTED) AT 90/180 DEG
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
 TYPE D SIGN PANEL-OVERHEAD AT 32'
 ONE WAY EVP DETECTOR AND LIGHT AT 6' (Ø6,1)
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
 EXTENDED INTO H.H.10:
 3" RSC
 2-12/c#14
 2-4/c#14
 1-3/c#14
 1-3/c#20
 2-2/c#14
 1-3/c#14 (LUM)
 1-1/c#6 (GRD)

INPLACE (REMOVE) ONE WAY SIGNAL AND MOUNT-OVERHEAD AT 0' (OLD 1-1)
 ONE WAY SIGNAL AND MOUNT-POLE MOUNTED 90 DEG (OLD 8-3)
 F & I 1-ONE WAY SIGNAL AND ANGLE MOUNT-OVERHEAD AT 0' (NEW 1-1)
 1-ONE WAY SIGNAL AND ANGLE MOUNT-POLE MOUNTED 90 DEG (NEW 3-2)
 R10-X12 SIGN PANEL-ADJACENT TO 1-1

④ INPLACE (MAINTAIN INPLACE) PA100 POLE FOUNDATION
 TYPE PA100-A-D40-9 MAST ARM POLE (DAVIT AT 350 DEG)
 LUMINAIRE-250 W HPS
 1-ANGLE MOUNT SIGNAL-POLE MOUNTED 180 DEG (8-1)
 2-SETS CD PED SIGNALS (ANGLE MOUNTED) AT 90/180 DEG
 2-PEDESTRIAN PUSH BUTTONS & SIGNS (R10-3e)
 2-R6-1 SIGN PANELS-POLE MOUNTED 0/180 DEG
 EXTENDED INTO H.H.15:
 3" RSC
 2-12/c#14
 1-3/c#14
 1-3/c#20
 2-2/c#14
 1-3/c#14 (LUM)
 1-1/c#6 (GRD)

INPLACE (REMOVE) 45-FOOT MAST ARM
 ONE WAY SIGNAL AND MOUNT-OVERHEAD (OLD 4-2, 5-SECTION)
 ONE WAY SIGNAL AND MOUNT-POLE MOUNTED 90 DEG (OLD 1-2)
 R10-12 SIGN PANEL-OVERHEAD
 INPLACE (S & I) 50-FOOT MAST ARM (RELOCATED FROM POLE 2)
 ONE WAY EVP DETECTOR AND LIGHT-OVERHEAD AT 6' (Ø8,3)
 TYPE D SIGN PANEL-OVERHEAD AT 28' (D-2)
 F & I 1-ONE WAY SIGNAL AND ANGLE MOUNT-OVERHEAD AT 0' (NEW 3-1)
 1-ONE WAY SIGNAL AND STRAP-ON MID-MAST ARM MOUNT-OVERHEAD AT 11' (NEW 8-2)
 1-ONE WAY SIGNAL AND ANGLE MOUNT-POLE MOUNTED 90 DEG (NEW 5-2)
 R10-X12 SIGN PANEL-ADJACENT TO 3-1
 1-6/c#14

DRAWN BY:	JMG			
DESIGNER:	JMG			
CHECKED BY:	JMG			
DESIGN TEAM				

NO.	BY	DATE	REVISIONS

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.

John M. Gray
 Name: John M. Gray, PE
 Lic. No. 22457
 Date: August 21, 2020

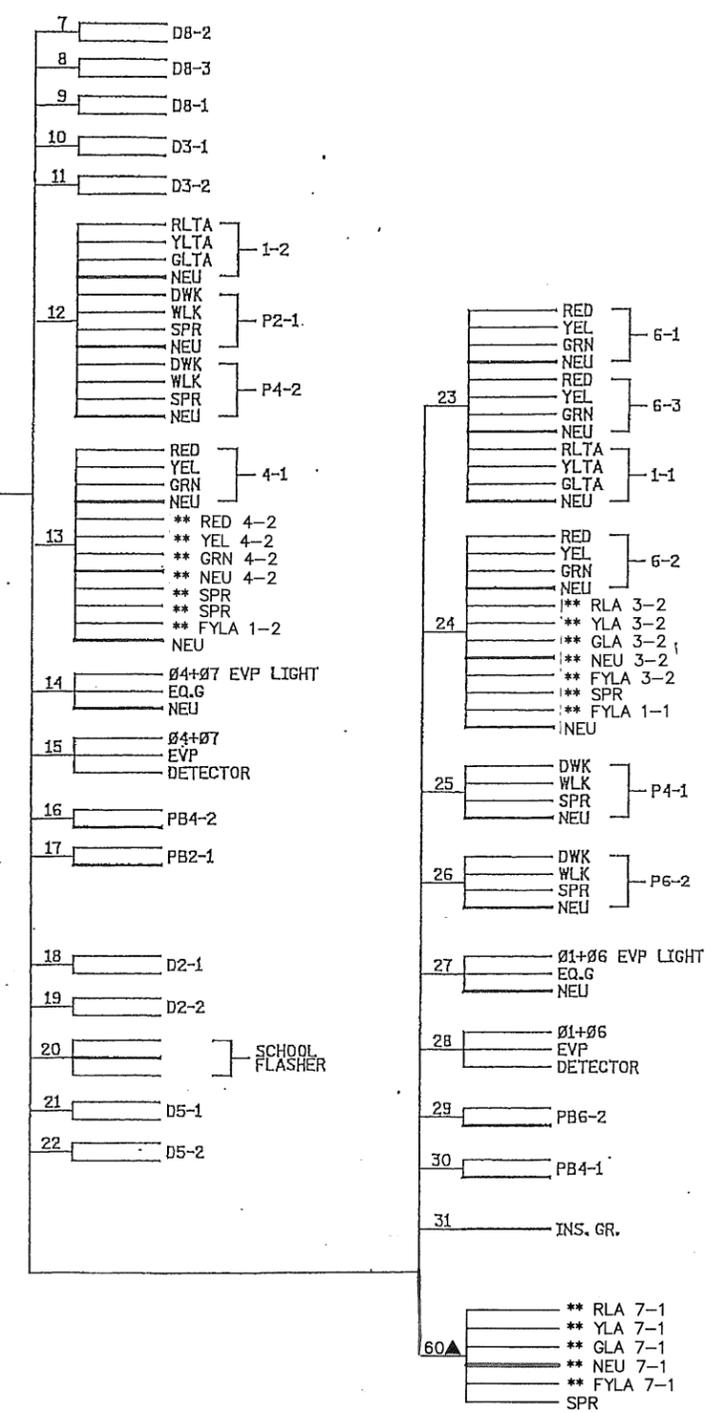
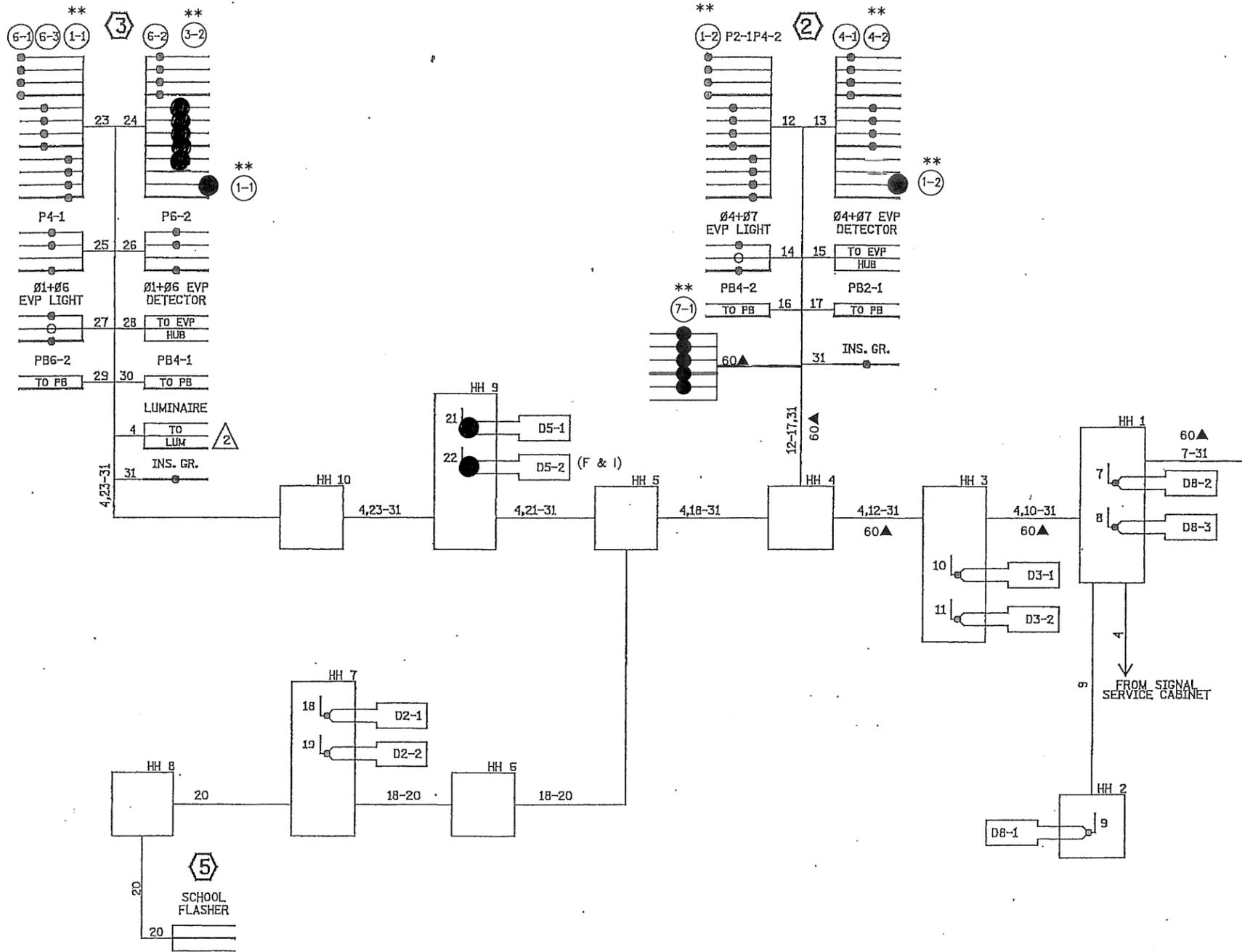
SEH
 PHONE: (651) 490-2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110

ANOKA COUNTY
 CITY OF BLAINE

REVISE SIGNAL SYSTEM "A"
POLE AND GENERAL NOTES
 CSAH 14 (125TH AVE) AT OAK PARK BLVD/POLK ST

CONTROLLER CABINET

CONTROLLER CABINET MATCHLINE



NOTES:

- 1) ALL CABLES AND CONDUCTORS ARE INPLACE & SHALL BE REUSED AS SHOWN, EXCEPT WHERE DENOTED BY ▲ (▲ = NEW CABLES AND CONDUCTORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF REVISE SIGNAL SYSTEM "A" WORK).
- 2) ● DENOTES NEW OR REVISED TERMINATIONS ON INPLACE OR NEW CABLES.
- 3) ** DENOTES REVISED TERMINATIONS/LABELING ON INPLACE CABLES & CONDUCTORS IN POLE BASES, HANDHOLES, AND IN CONTROLLER CABINET.
- 4) (F & I) DENOTES NEW LOOP DETECTORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.

2020FYL-BASE.DWG

DRAWN BY: JMG
 DESIGNER: JMG
 CHECKED BY: JMG

NO.	BY	DATE	REVISIONS

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.

John M. Gray
 Name: John M. Gray, PE
 Lic. No. 22457
 Date: August 21, 2020

SEH
 PHONE: (651) 490-2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110

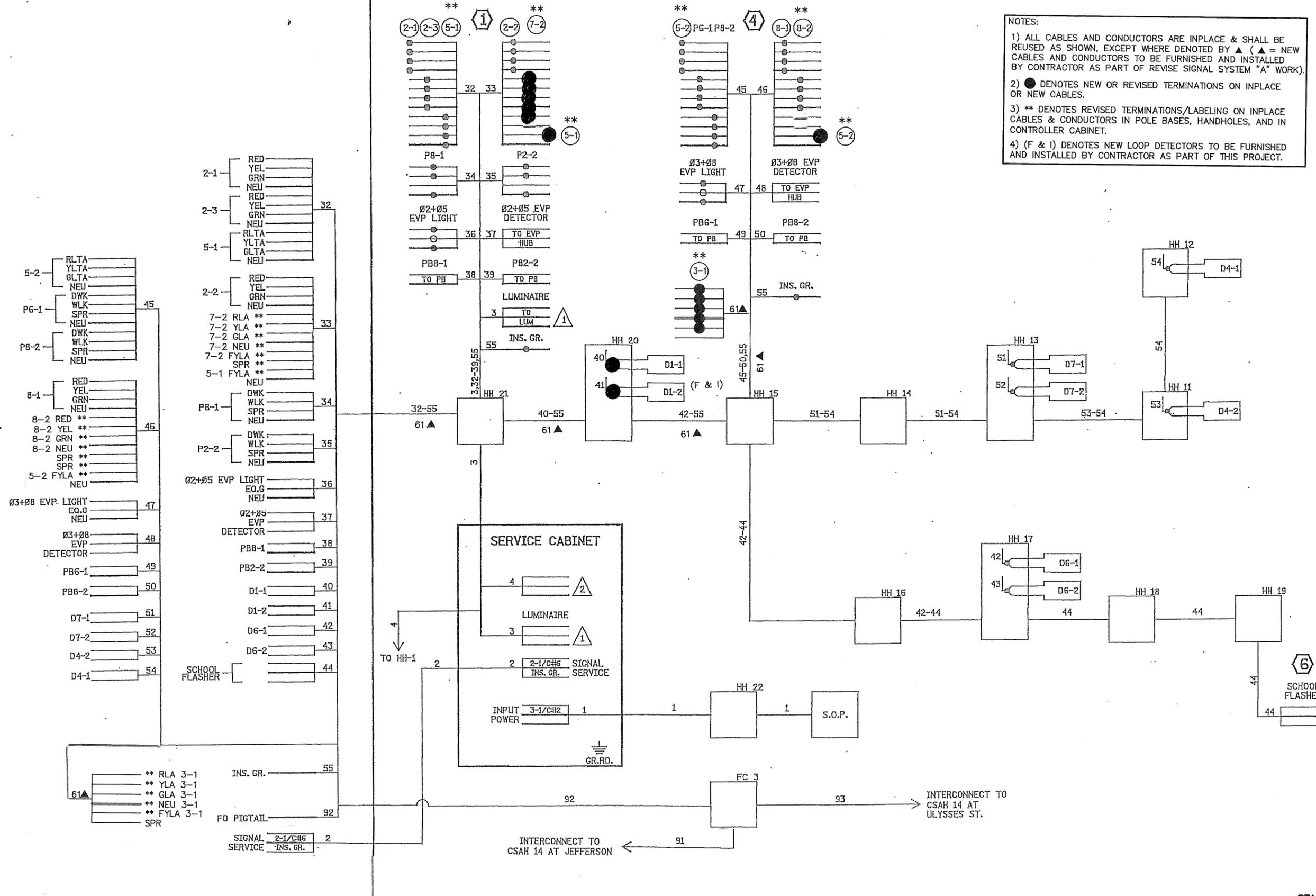
ANOKA COUNTY
 CITY OF BLAINE

REVISE SIGNAL SYSTEM "A"
 FIELD WIRING DIAGRAM
 CSAH 14 (125TH AVE) AT OAK PARK BLVD/POLK ST

FILE NO.
 ANOKC 153781

CONTROLLER CABINET

CONTROLLER CABINET MATCHLINE



- NOTES:
- 1) ALL CABLES AND CONDUCTORS ARE INPLACE & SHALL BE REUSED AS SHOWN, EXCEPT WHERE DENOTED BY ▲ (▲ = NEW CABLES AND CONDUCTORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF REVISE SIGNAL SYSTEM "A" WORK).
 - 2) ● DENOTES NEW OR REVISED TERMINATIONS ON INPLACE OR NEW CABLES.
 - 3) ** DENOTES REVISED TERMINATIONS/LABELING ON INPLACE CABLES & CONDUCTORS IN POLE BASES, HANDHOLES, AND IN CONTROLLER CABINET.
 - 4) (F & I) DENOTES NEW LOOP DETECTORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS PART OF THIS PROJECT.

2020FYL-BASED.DWG

DRAWN BY: JMG
 DESIGNER: JMG
 CHECKED BY: JMG

NO.	BY	DATE	REVISIONS

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.

John M. Gray
 Name: John M. Gray, PE
 Lic. No. 22457
 Date: August 21, 2020

SEH
 PHONE: (651) 490-2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110

ANOKA COUNTY
 CITY OF BLAINE

REVISE SIGNAL SYSTEM "A"
 FIELD WIRING DIAGRAM
 CSAH 14 (125TH AVE) AT OAK PARK BLVD/POLK ST

FILE NO.
 ANOKC 153781

8
 55

STATE AID PROJ. 002-614-050