

INPLACE SIGNAL NOTES:

- 1) ALL VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS ARE LED (INCLUDING COUNTDOWN TIMER "HAND/WALKING PERSON" PEDESTRIAN SIGNALS).
- 2) ALL PEDESTRIAN PUSH BUTTONS ARE SOLID-STATE PUSH BUTTONS.

INPLACE NMC LOOP DETECTORS

NUMBER	SIZE (FT.)	LOCATION	FUNCTION
D1-1	4-8x6	AS SHOWN	1
D2-1	3-8x6	330'	1
D3-1	4-8x6	AS SHOWN	1
D3-2	4-8x6	AS SHOWN	1
D4-1	6x6	180'	3,8
D4-2	6x6	180'	3,8
D4-3	6x12&6x10	0' & 10'	7
D4-4	2-6x6	0' & 15'	1
D4-5	2-6x6	0' & 15'	1
D5-1	2-6x6	15' & 45'	1
D5-2	2-6x6	0' & 30'	1
D5-3	2-6x6	15' & 45'	1
D5-4	2-6x6	0' & 30'	1
D6-1	3-6x6	330'	1
D7-1	2-6x6	20' & 50'	1
D7-2	2-6x6	5' & 35'	1
D7-3	2-6x6	20' & 50'	1
D7-4	2-6x6	5' & 35'	1
DB-1	6x6	330'	3,8
DB-2	6x6	330'	3,8
DB-3	2-6x6	AS SHOWN	1
DB-4	2-6x6	AS SHOWN	1
DB-5	2-6x6	AS SHOWN	1
DB-6	6x6	AS SHOWN	7

- FUNCTIONS:
- 1) CALL & EXTEND
 - 3) EXTEND ONLY
 - 7) DELAYED CALL, IMMEDIATE EXTEND
 - 8) CARRY OVER (STRETCH)
- NOTE: LOCATION=DISTANCE FROM STOP BAR TO FRONT OF LOOP DETECTOR.

H.H.15 TO H.H.16:
1 1/4"R.S.C.-INPLACE
1-2/c#14

H.H.14 TO H.H.15:
4"R.S.C.-INPLACE
2-12/c#12
2-3/c#12
5-2/c#14

H.H.12A TO H.H.15:
3"R.S.C.-INPLACE
4-2/c#14

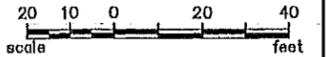
H.H.11 TO H.H.20:
1 1/4"R.S.C.-INPLACE
2-2/c#14
1-3/c#20

H.H.10 TO H.H.11:
2"R.S.C.-INPLACE
5-2/c#14
1-3/c#20

H.H.9 TO H.H.10:
4"R.S.C.-INPLACE
3-12/c#12
3-3/c#12
5-2/c#14
2-3/c#20
2-1/c#10 (LUM)

MATCH LINE "AAA" - SEE NEXT SHEET

MATCH LINE "CCC" - SEE NEXT SHEETS



(B) INPLACE (MAINTAIN INPLACE) SERVICE CABINET CABINET FOUNDATION EXTENDED INTO H.H.1: METERED SIGNAL SERVICE 1 1/4"R.S.C. 3-1/c#6 EXTENDED INTO H.H.1: UNMETERED STREET LIGHT SERVICE 1 1/4"R.S.C. 4-1/c#10 (LUM) BETWEEN H.H.1 AND H.H.2: 2"R.S.C. 4-1/c#10 (LUM) STUB OUT 2"R.S.C. (FOR SERVICE BY CONNEXUS)

H.H.2 TO H.H.3:
4"R.S.C.-INPLACE
8-12/c#12
4-3/c#12
12-2/c#14
3-3/c#20
2-1/c#10 (LUM)
2"R.S.C.-INPLACE
1-6 Pr.#19

H.H.2 TO H.H.18:
H.H.18 TO H.H.19:
1 1/4"R.S.C.-INPLACE
2-2/c#14
1-3/c#20

NOTE: THIS PLAN SHEET IS BEING PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

(A) INPLACE (MAINTAIN INPLACE) CABINET FOUNDATION CONTROLLER AND CABINET EXTENDED INTO H.H.1: METERED SIGNAL SERVICE 2"R.S.C. CABINET TO H.H.2: 3"R.S.C. AND 4"R.S.C. 8-12/c#12 1-5/c#12 1-5/c#12 6-3/c#12 22-2/c#14 6-3/c#20 1-6 Pr.#19

INPLACE (MAINTAIN INPLACE) CABINET TO H.H.13: 4"R.S.C. 7-12/c#12 2-3/c#12 2-2/c#14 1-6 SM FO CABLE BETWEEN H.H.2 AND H.H.13: 3"R.S.C. 1-5/c#12 2-3/c#12 4-2/c#14 2-3/c#20 2-1/c#10 (LUM)

H.H.13 TO H.H.59 (NORTH): INPLACE CONDUIT 1-6 SM FO CABLE (TO CSAH 9/135TH AVE)

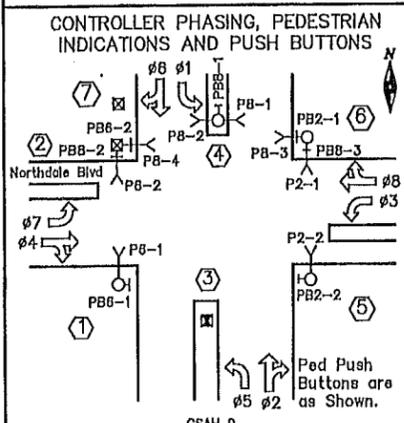
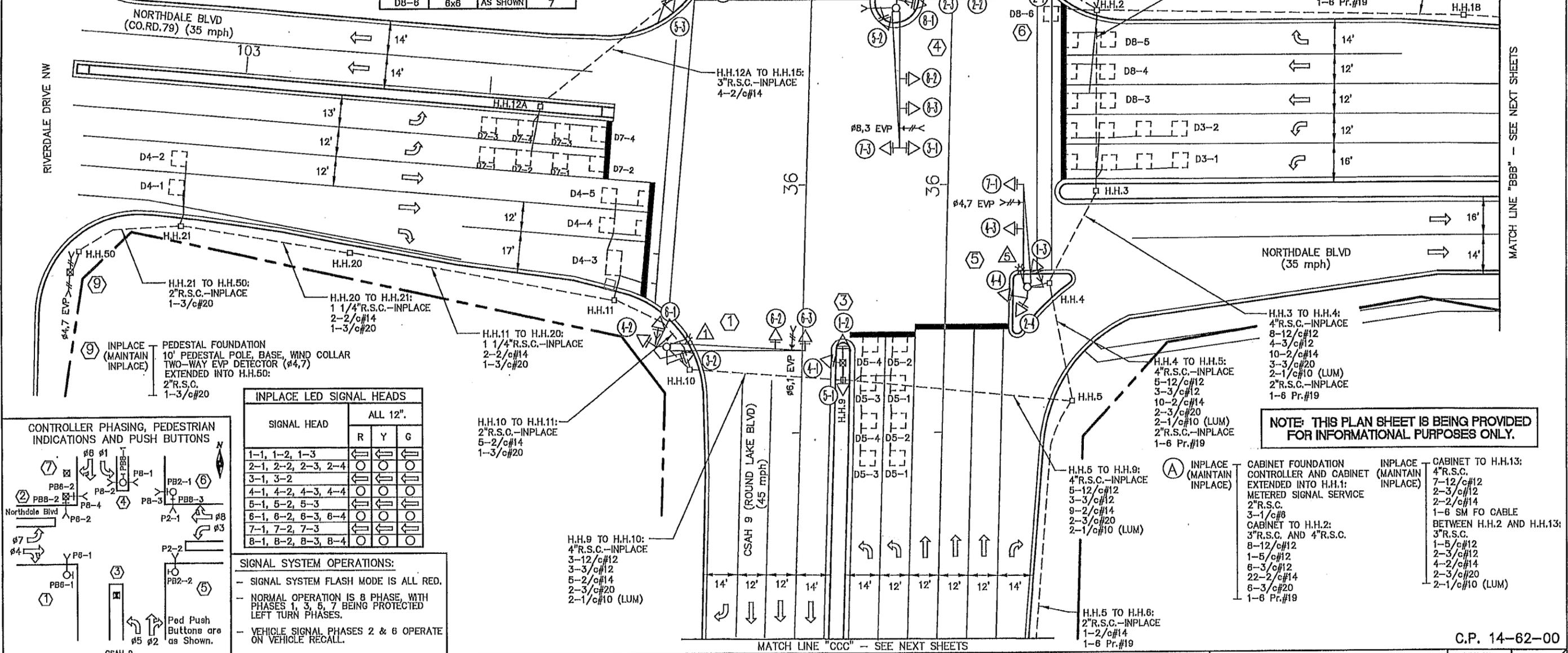
H.H.13 TO H.H.14:
4"R.S.C.-INPLACE
5-12/c#12
1-5/c#12
3-3/c#12
6-2/c#14
1-3/c#20

H.H.3 TO H.H.4:
4"R.S.C.-INPLACE
8-12/c#12
4-3/c#12
10-2/c#14
3-3/c#20
2-1/c#10 (LUM)
2"R.S.C.-INPLACE
1-6 Pr.#19

H.H.4 TO H.H.5:
4"R.S.C.-INPLACE
5-12/c#12
3-3/c#12
10-2/c#14
2-3/c#20
2-1/c#10 (LUM)
2"R.S.C.-INPLACE
1-6 Pr.#19

H.H.5 TO H.H.9:
4"R.S.C.-INPLACE
5-12/c#12
3-3/c#12
9-2/c#14
2-3/c#20
2-1/c#10 (LUM)

H.H.5 TO H.H.6:
2"R.S.C.-INPLACE
1-2/c#14
1-6 Pr.#19



INPLACE LED SIGNAL HEADS

SIGNAL HEAD	ALL 12"		
	R	Y	G
1-1, 1-2, 1-3	←	←	←
2-1, 2-2, 2-3, 2-4	○	○	○
3-1, 3-2	←	←	←
4-1, 4-2, 4-3, 4-4	○	○	○
5-1, 5-2, 5-3	←	←	←
6-1, 6-2, 6-3, 6-4	○	○	○
7-1, 7-2, 7-3	←	←	←
8-1, 8-2, 8-3, 8-4	○	○	○

- SIGNAL SYSTEM OPERATIONS:
- SIGNAL SYSTEM FLASH MODE IS ALL RED.
 - NORMAL OPERATION IS 8 PHASE, WITH PHASES 1, 3, 5, 7 BEING PROTECTED LEFT TURN PHASES.
 - VEHICLE SIGNAL PHASES 2 & 6 OPERATE ON VEHICLE RECALL.

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, PE
 Name: John M. Gray, PE
 Lic. No. 22457
 Date: August 25, 2015

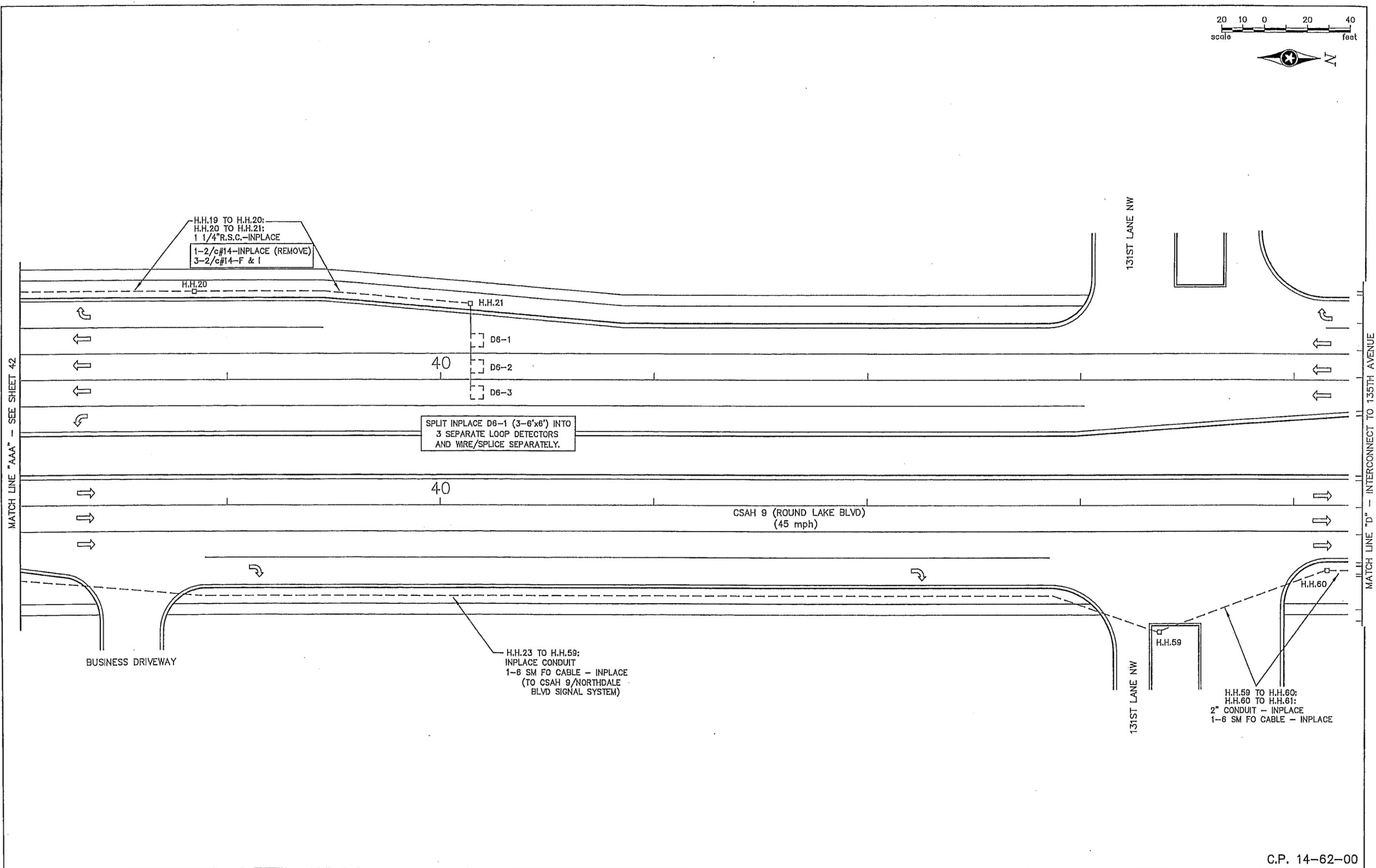
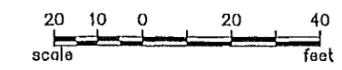
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 PHONE: (651) 490-2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110

ANOKA COUNTY,
 MINNESOTA
 CITY OF COON RAPIDS

INPLACE SIGNAL SYSTEM "D"
 "FOR INFORMATION ONLY"
 CSAH 9 (ROUND LAKE BLVD NW)
 AT NORTHDAL BLVD/CO RD.78

FILE NO.
 ANOKO 133855
 DATE
 08/25/2015
 48
 52

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H.H.19 TO H.H.20:
H.H.20 TO H.H.21:
1 1/4" R.S.C. - INPLACE
1-2/c#14 - INPLACE (REMOVE)
3-2/c#14 - F & I

SPLIT INPLACE D6-1 (3-6"x6") INTO
3 SEPARATE LOOP DETECTORS
AND WIRE/SPLICE SEPARATELY.

H.H.23 TO H.H.59:
INPLACE CONDUIT
1-6 SM FO CABLE - INPLACE
(TO CSAH 9/NORTHDALE
BLVD SIGNAL SYSTEM)

H.H.59 TO H.H.60:
H.H.60 TO H.H.61:
2" CONDUIT - INPLACE
1-6 SM FO CABLE - INPLACE

S:\AE\ANOKA\COMMON\SIGALS\2015_INTERCONNECT\2015\BASE.DWG 08/17/2015

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

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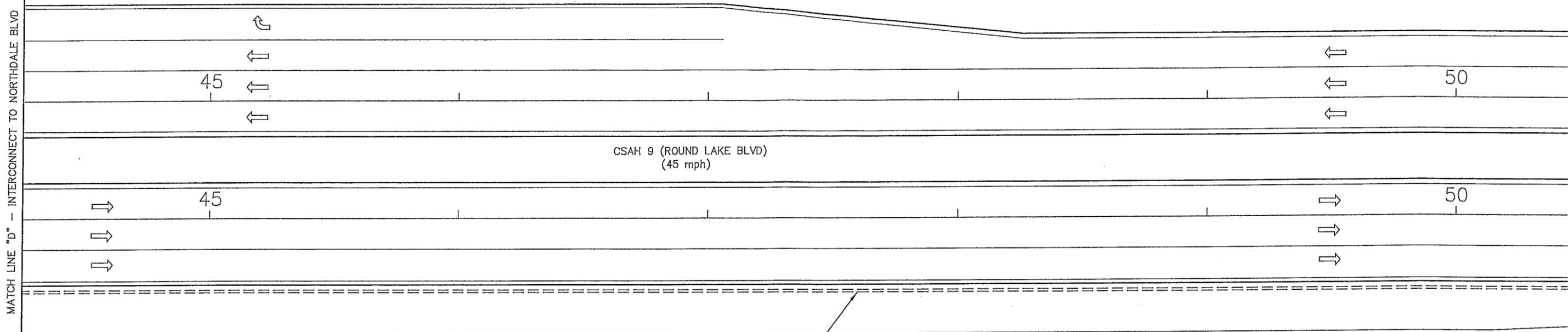
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ST. PAUL, MN 55110

**ANOKA COUNTY,
MINNESOTA**
CITY OF COON RAPIDS

REVISE SIGNAL SYSTEM 'D'
INTERSECTION LAYOUT
CSAH 9 (ROUND LAKE BLVD NW)
AT NORTHDALE BLVD/CO.RD.78

C.P. 14-62-00

FILE NO. ANOKC 133655	44
DATE 08/25/2015	52

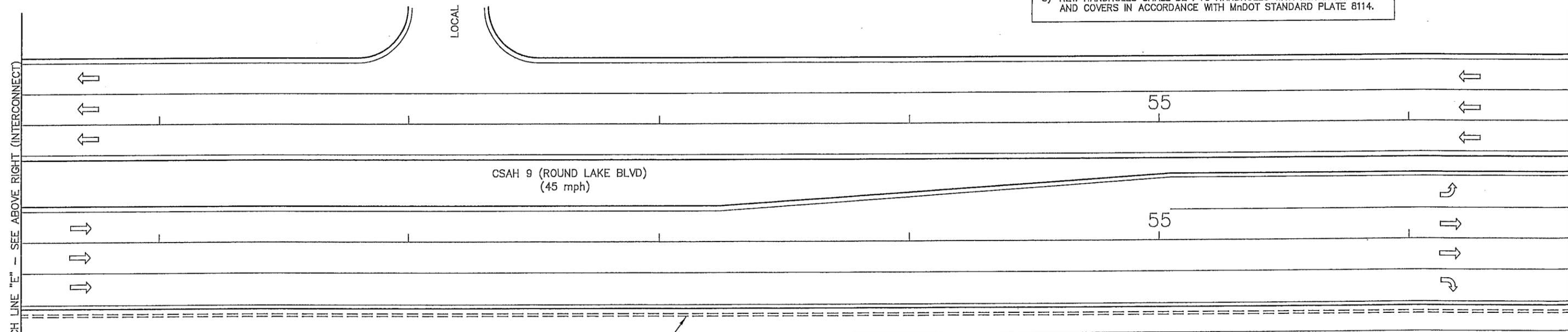


H.H.60 TO H.H.61:
 (**) 2" CONDUIT-F & I
 (**) 1-6 SM FIBER-OPTIC CABLE-F & I

INTERCONNECT NOTES:

- 1) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE "ONE CALL EXCAVATION NOTICE SYSTEM" (TELEPHONE NUMBER 651-454-0002) AS REQUIRED BY MINNESOTA STATUTE 2160.
- 2) (**) DENOTES ITEMS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR UNDER ITEM NO. 2565 (TRAFFIC CONTROL INTERCONNECTION "B"). SEE STATEMENT OF ESTIMATED QUANTITIES AND SPECIAL PROVISIONS.
- 3) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS IN ACCORDANCE WITH MNDOT STANDARD PLATE 8114.

LOCAL STREET



H.H.60 TO H.H.61:
 (**) 2" CONDUIT-F & I
 (**) 1-6 SM FIBER-OPTIC CABLE-F & I

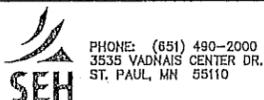
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S.P. 002-030-007

DRAWN BY: JMG	1	JMG	10/14	RECORD DRAWING
DESIGNER: JMG				
CHECKED BY: JMG				
DESIGN TEAM	NO.	BY	DATE	REVISIONS

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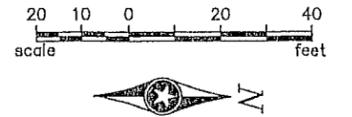
JMG
 Name: John M. Gray, PE
 Date: May 8, 2014 Lic. No. 22457



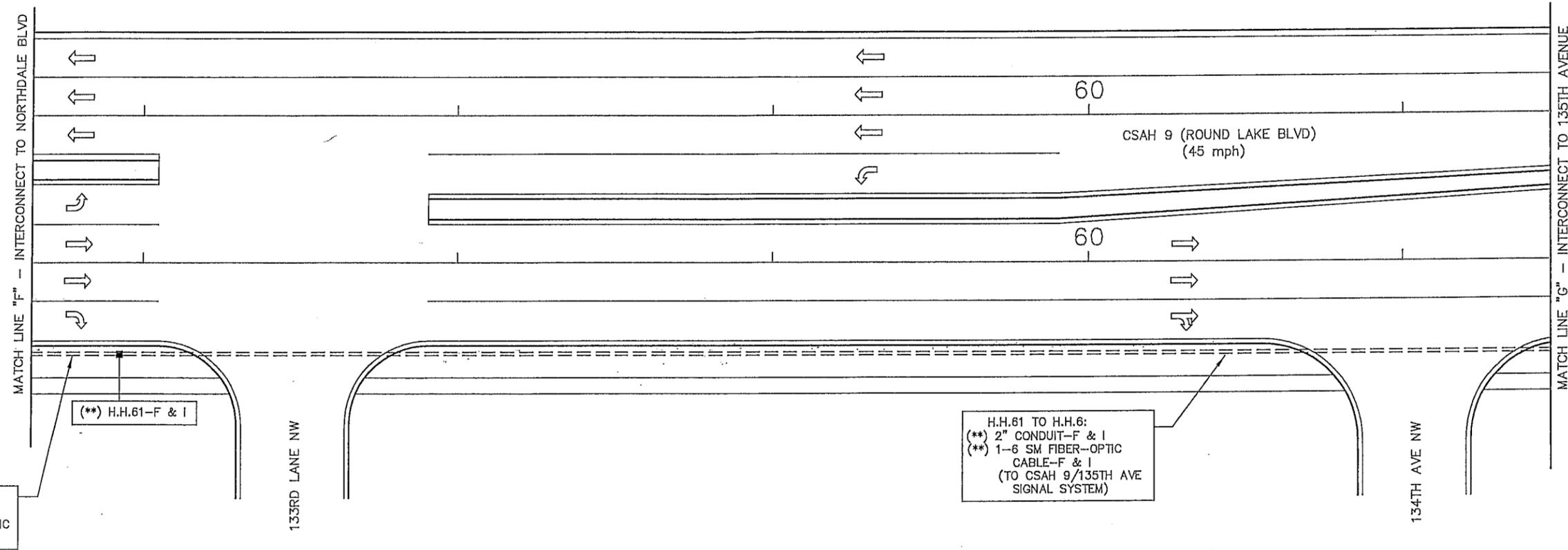
ANOKA COUNTY, MINNESOTA
 ANDOVER, COON RAPIDS

TRAFFIC SIGNAL INTERCONNECT 'B' INTERSECTION LAYOUT
 CSAH 9 (ROUND LAKE BOULEVARD) (NORTHDALE BLVD TO 135TH AVENUE)

FILE NO. ANOKC 127407	12
DATE 05/08/2014	30



- INTERCONNECT NOTES:**
- 1) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE "ONE CALL EXCAVATION NOTICE SYSTEM" (TELEPHONE NUMBER 651-454-0002) AS REQUIRED BY MINNESOTA STATUTE 2160.
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 - 3) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS IN ACCORDANCE WITH MnDOT STANDARD PLATE 8114.



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DRAWN BY:	JMG	1	JMG	10/14
DESIGNER:	JMG			
CHECKED BY:	JMG			
REGIONAL TEAM		NO.	BY	DATE

REVISIONS				
NO.	BY	DATE	DESCRIPTION	APPROVED

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Date: May 8, 2014 Name: John M. Gray, PE
 Lic. No. 22457

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ANOKA COUNTY, MINNESOTA
 CITY OF ANDOVER

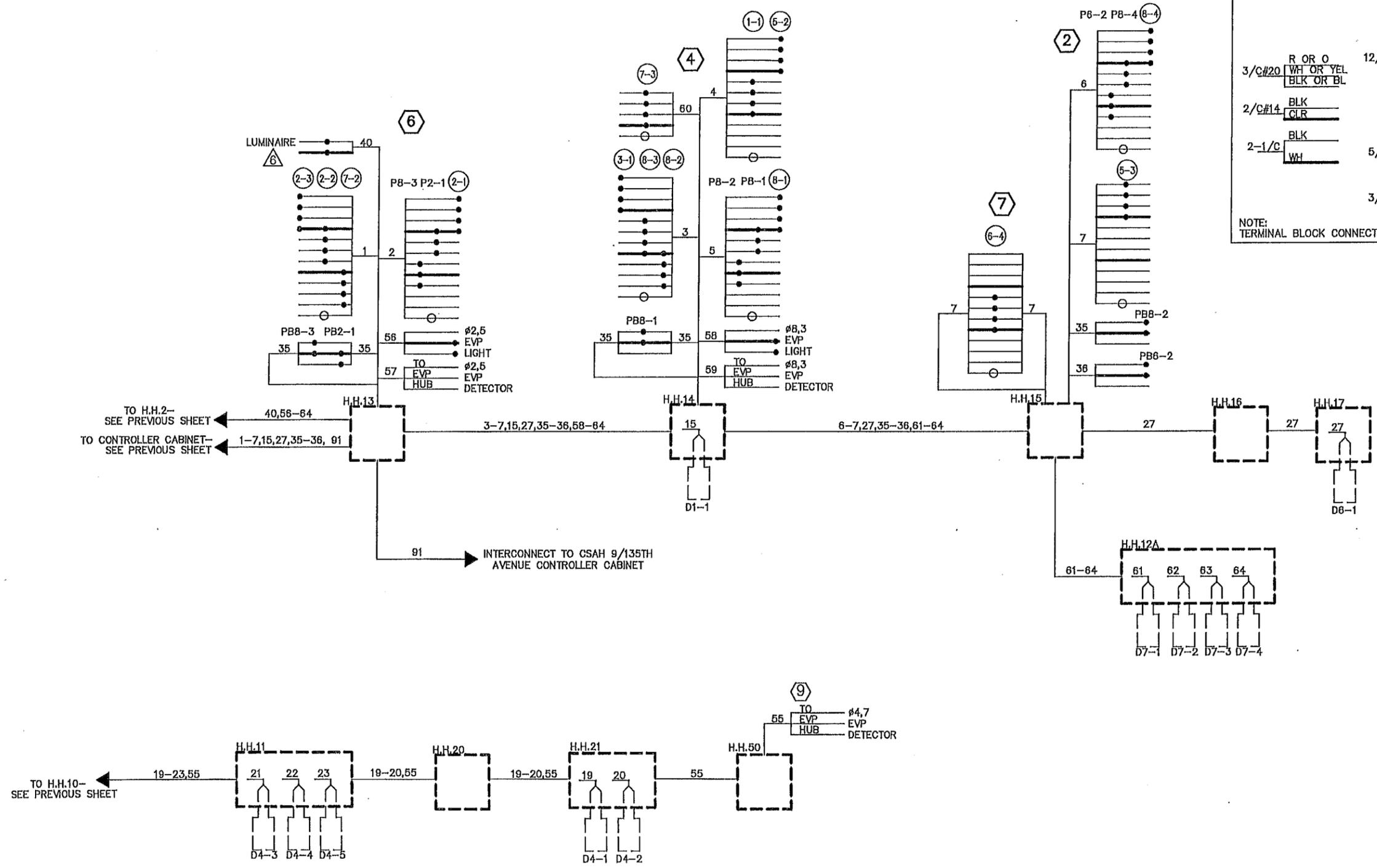
TRAFFIC SIGNAL INTERCONNECT 'B' INTERSECTION LAYOUT
 CSAH 9 (ROUND LAKE BOULEVARD)
 (NORTHDAL BLVD TO 135TH AVENUE)

FILE NO.	ANOKC 127407	13
DATE	05/08/2014	30

S.P. 002-030-007

CONDUCTOR COLOR CODE			
TO SIGNAL CABINET		TO DEVICE	
R	RED	R	RED
O	YEL	O	YEL
BL	GRN	BL	GRN
WH	NEU	WH	NEU
R/BLK	YLTA	R/BLK	YLTA
O/BLK	GLTA	O/BLK	GLTA
BL/BLK	SPR	BL/BLK	SPR
WH/BLK		WH/BLK	
BLK		BLK	
BLK/WH		BLK/WH	
G/BLK		G/BLK	
G		G	
R		R	
O		O	
BL		BL	
WH		WH	
G		G	
R		R	
WH		WH	
BLK		BLK	

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



NOTE: THIS PLAN SHEET IS BEING PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

C.P. 14-62-00

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DRAWN BY: JMG
 DESIGNER: JMG
 CHECKED BY: JMG

NO.	BY	DATE	REVISIONS

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 Date: August 25, 2015
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ANOKA COUNTY, MINNESOTA
 CITY OF COON RAPIDS

INPLACE SIGNAL SYSTEM 'D' FOR INFORMATION ONLY
 CSAH 9 (ROUND LAKE BLVD NW) AT NORTHDAL BLVD/CORD.78

FILE NO. ANOKC 133865	52
DATE 08/25/2015	