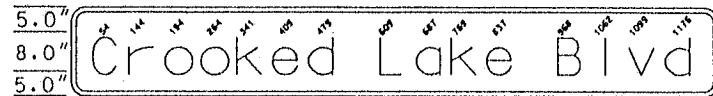
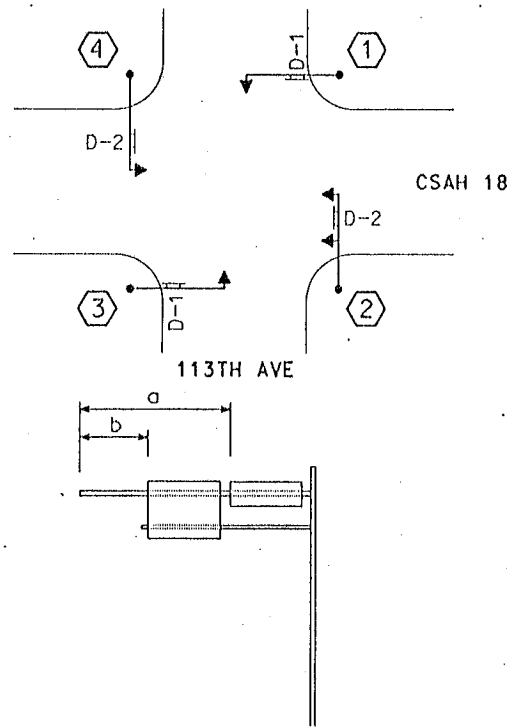
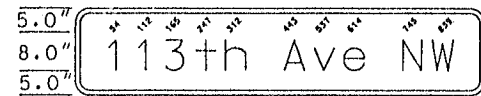


SIGN PANEL LAYOUT



128" X 18", 3" R, 1.0" B, D-1
LINE 1 117.26 : 8"-6" E MOD



98" X 18", 3" R, 1.0" B, D-2
LINE 1 87.21 : 8"-6" E MOD

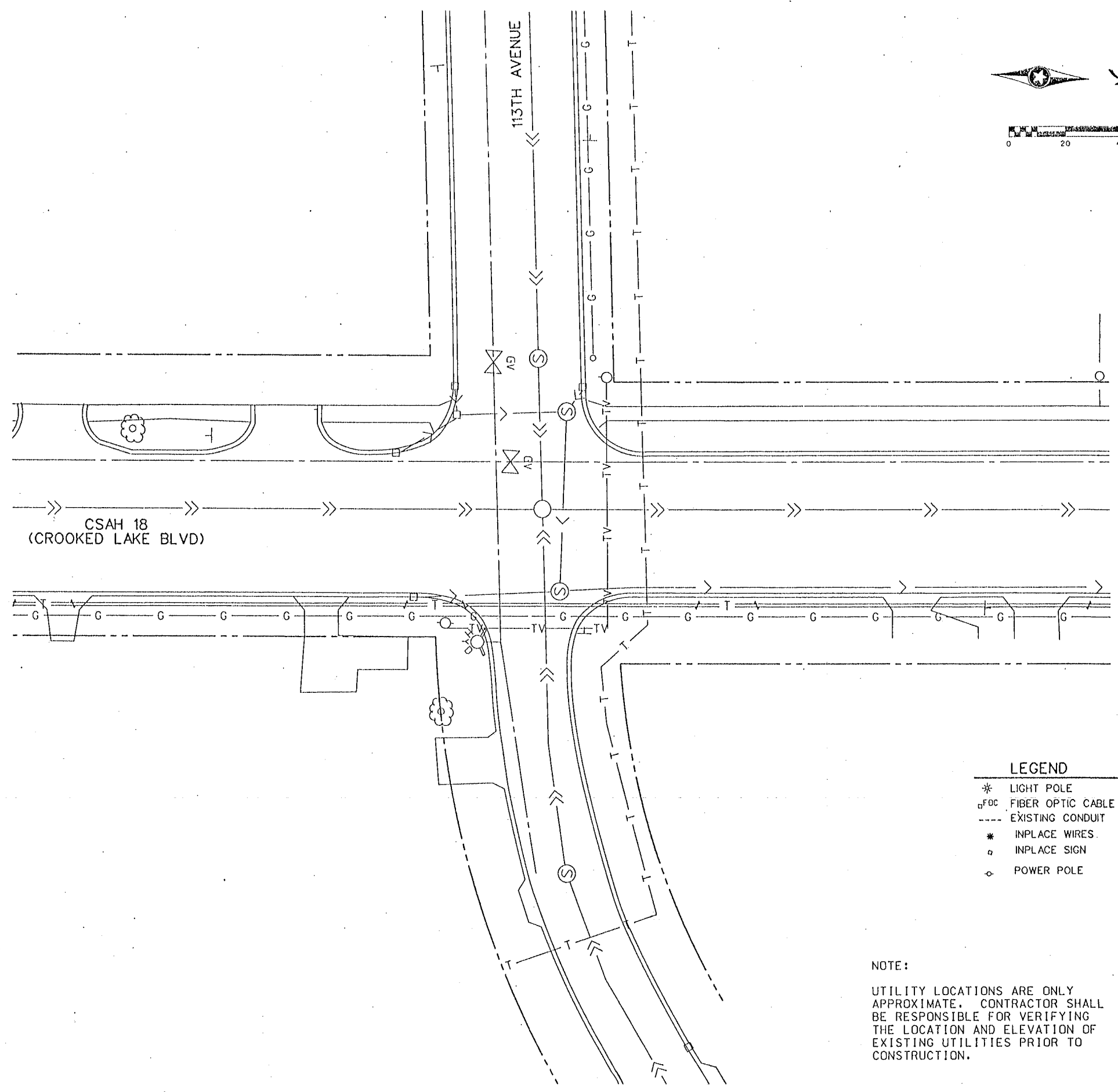
TYPE D SIGNS

Sign Panel	Size	No. Req.	No. Posts per Sign	Post Spacing	Sq. Ft. per Sign	Pole No.	Location on Mastarm ①	
							a	b
D-1	128"x18"	2	2	24"	16.0	1	2	
D-2	98"x18"	2	2	45"	12.25	2	2	
						4	2	

① SEE DETAIL

GENERAL NOTES

1. Color - White legend and border on green background, fully reflectorized.
2. Corners extending beyond the border shall not be trimmed.
3. See Standard Signs Manual for arrow and overlay details.
4. For structural details, Type D Signs, see Standard Signs Manual, page 105A & B.
5. For type D Stringer and panel- Joint Detail, see Standard Signs Manual.



LEGEND

- * LIGHT POLE
- FOC FIBER OPTIC CABLE
- EXISTING CONDUIT
- * INPLACE WIRES
- INPLACE SIGN
- POWER POLE

NOTE:
UTILITY LOCATIONS ARE ONLY APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

<p>ENGINEER'S CERTIFICATE: THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p><i>Ronald B. Bray</i> RONALD B. BRAY 01/20/94</p>	<p>SCALE: AS NOTED</p> <p>PLAN BY: [] DESIGN BY: [] CHK: [] CTR: [] CHECKED BY: [] COMM. NO.: [] RBB: [] RECORD COPY BY: [] DATE: []</p>	<p>REVISION NO. [] EXPLANATION [] DATE []</p>	<p>SIGNING AND UTILITIES SHEET C.S.A.H. 18 (CROOKED LAKE BLVD) AND 113TH AVENUE NW C.P. 98-08-18 COON RAPIDS, MINNESOTA</p>	<p>Ort CSM Schelen & Mayeron & Associates, Inc. Engineers - Architects - Planners - Surveyors 300 Park Place Center - 575 W. 1st Avenue Minneapolis, MN 55415-1228 - 612-966-3775</p>	<p>S.A.P. 02-618-18 C.P. 93-08-18</p>	<p>PLAN NO. 2</p>
--	---	--	---	--	---	-----------------------

LOOP DETECTORS			
NUMBER	SIZE	FUNCTION	LOCATION
D2-1	6' X 6'	1	260'
D4-1	6' X 6'	3/8	120'
D4-2	6' X 6'	7	5'
D4-3	2-6' X 6'	1	5'
D5-1	2-6' X 6'	10/11	20' 50'
D5-2	2-6' X 6'	10/11	5' 35'
D6-1	6' X 6'	1	260'
D8-1	6' X 6'	3/8	120'
D8-2	2-6' X 6'	7	5'

LOCATION-DISTANCE FROM STOP LINE TO DETECTOR

FUNCTIONS:

- 1 - CALL AND EXTEND
- 2 - CALL ONLY
- 3 - EXTEND ONLY
- 4 - CALL ONLY DENS
- 5 - DLY CALL ONLY
- 6 - DLY CALL ONLY DENSITY
- 7 - DLY CALL IMMEDIATE EXTEND
- 8 - CARRY OVER
- 9 - ADVISORY
- 10 - CALL Ø5 DURING Ø4 & Ø8 GRN
- 11 - EXTEND Ø2 & Ø5

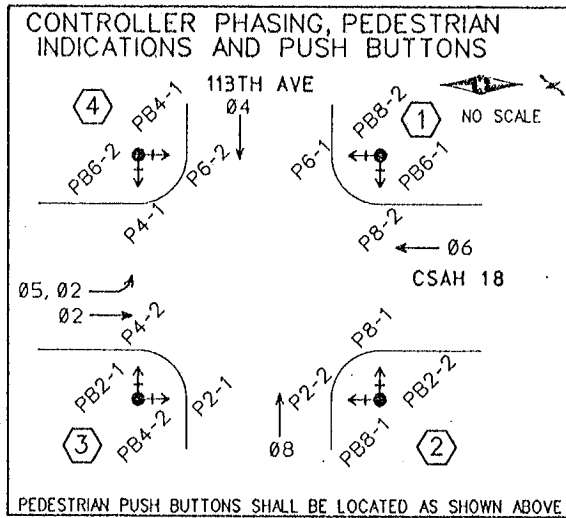
NOTES:

- 1) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED MATERIALS:
- 2) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
- 3) EACH LUMINAIRE SHALL HAVE A PEC AND CHECK SWITCH.
- 4) SEE SHEET NO. 5 AND SPECIAL PROVISIONS FOR SERVICE CABINET DETAILS.
- 5) DIRECTIONAL SIGNS (TYPE D) TO BE FURNISHED AND INSTALLED ON MAST ARMS AT POLES 1, 2, 3 AND 4 AND SHALL BE CONSIDERED INCIDENTAL.
- 6) SEE SPECIAL PROVISIONS FOR HANDHOLE TYPE.
- 7) SEE SPECIAL PROVISIONS FOR CONTRACTORS RESPONSIBILITY FOR LOCATION OF UTILITIES.
- 8) ALL PEDESTRIAN INDICATIONS SHALL BE 12" X 12".
- 9) ALL SIGNAL FACES SHALL BE 12 INCH 3 SECTION R-Y-G, EXCEPT FACES (2-3) AND (2-4) WHICH SHALL BE 12 INCH 5 SECTION R-Y-G-YLTA-GLTA.
- 10) ALL VEHICLE SIGNAL INDICATIONS SHALL USE GLASS LENSES.
- 11) CONCRETE PED RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN QUADRANTS, AS SHOWN ON THE PLAN, AND SHALL BE CONSIDERED INCIDENTAL TO THE SIGNAL SYSTEM CONSTRUCTION.

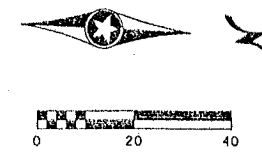
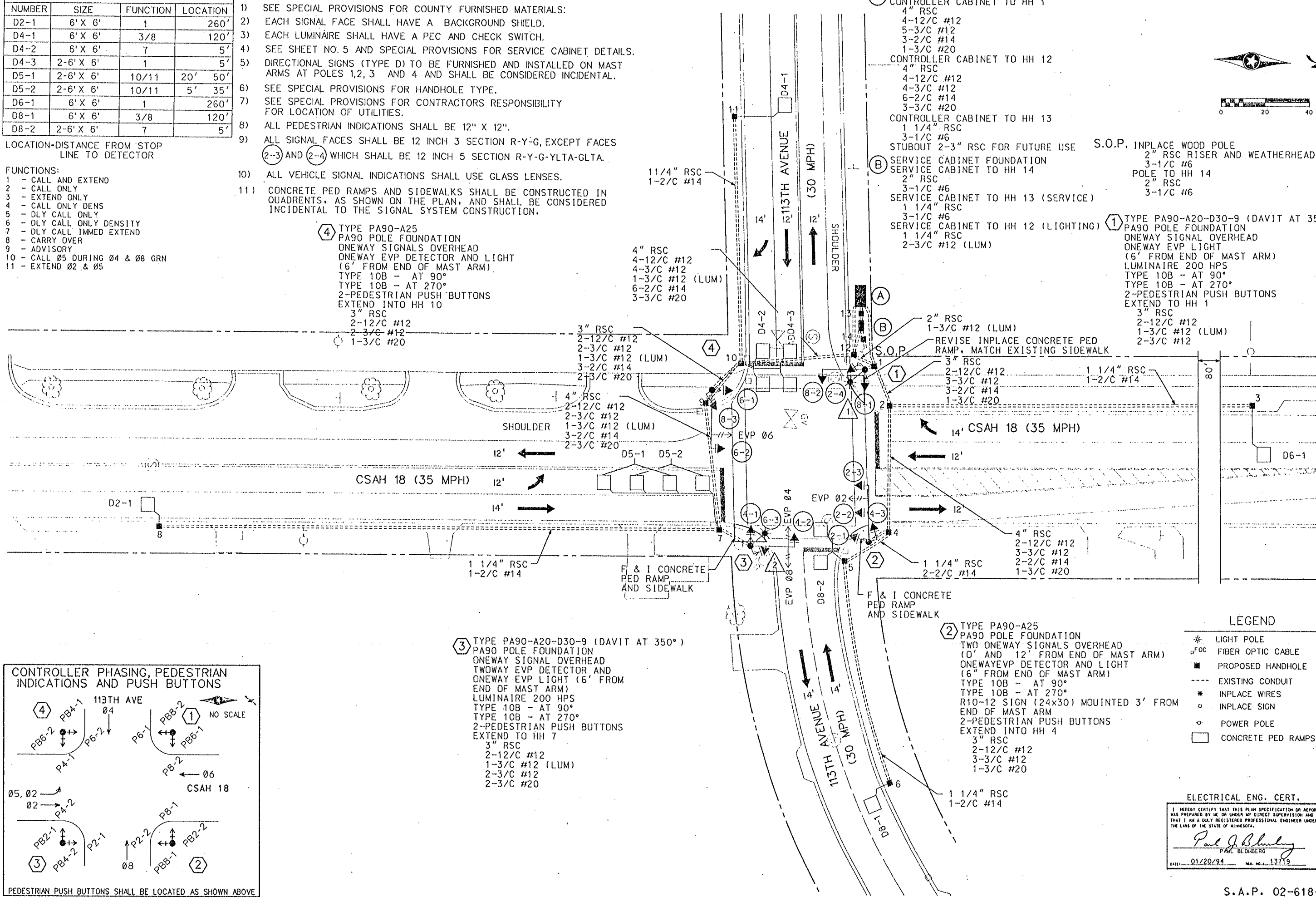
④ TYPE PA90-A25
PA90 POLE FOUNDATION
ONEWAY SIGNALS OVERHEAD
ONEWAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM)
TYPE 10B - AT 90°
TYPE 10B - AT 270°
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO HH 10
3" RSC
2-12/C #12
2-3/C #12
1-3/C #20

③ TYPE PA90-A20-D30-9 (DAVIT AT 350°)
PA90 POLE FOUNDATION
ONEWAY SIGNAL OVERHEAD
TWOWAY EVP DETECTOR AND
ONEWAY EVP LIGHT (6' FROM
END OF MAST ARM)
LUMINAIRE 200 HPS
TYPE 10B - AT 90°
TYPE 10B - AT 270°
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO HH 7
3" RSC
2-12/C #12
1-3/C #12 (LUM)
2-3/C #12
2-3/C #20

② TYPE PA90-A25
PA90 POLE FOUNDATION
TWO ONEWAY SIGNALS OVERHEAD
ONEWAY EVP DETECTOR AND LIGHT
(6" FROM END OF MAST ARM)
TYPE 10B - AT 90°
TYPE 10B - AT 270°
R10-12 SIGN (24X30) MOUNTED 3' FROM
END OF MAST ARM
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO HH 4
3" RSC
2-12/C #12
3-3/C #12
1-3/C #20



PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED AS SHOWN ABOVE



LEGEND

- * LIGHT POLE
- o FOC FIBER OPTIC CABLE
- PROPOSED HANDHOLE
- EXISTING CONDUIT
- * INPLACE WIRES
- o INPLACE SIGN
- o POWER POLE
- CONCRETE PED RAMPS

ELECTRICAL ENG. CERT.

I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

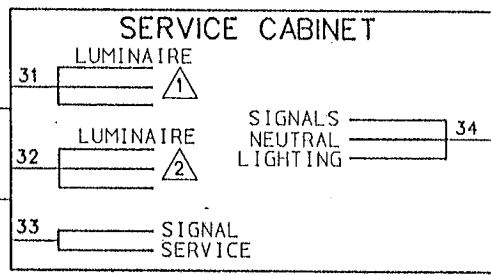
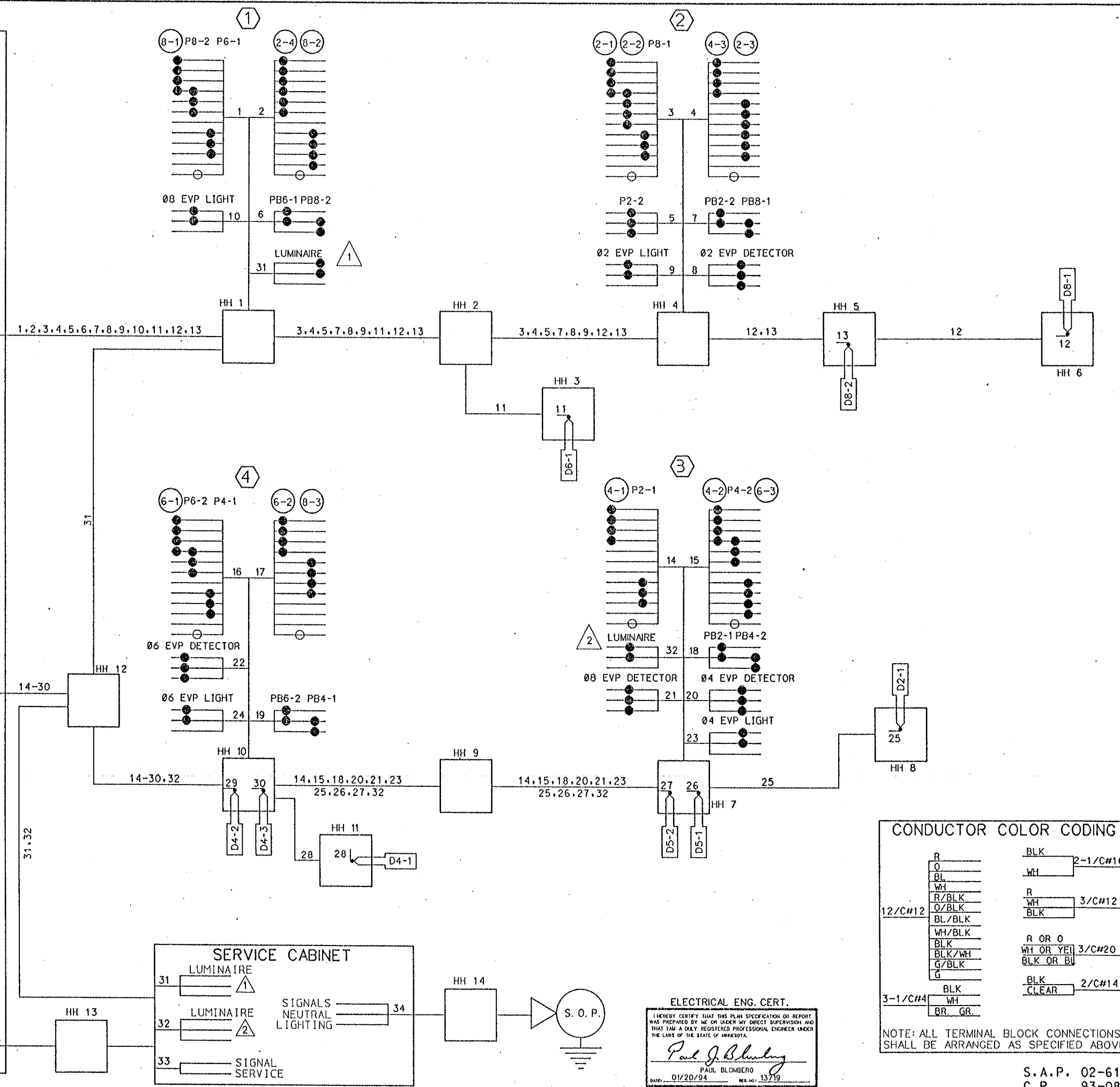
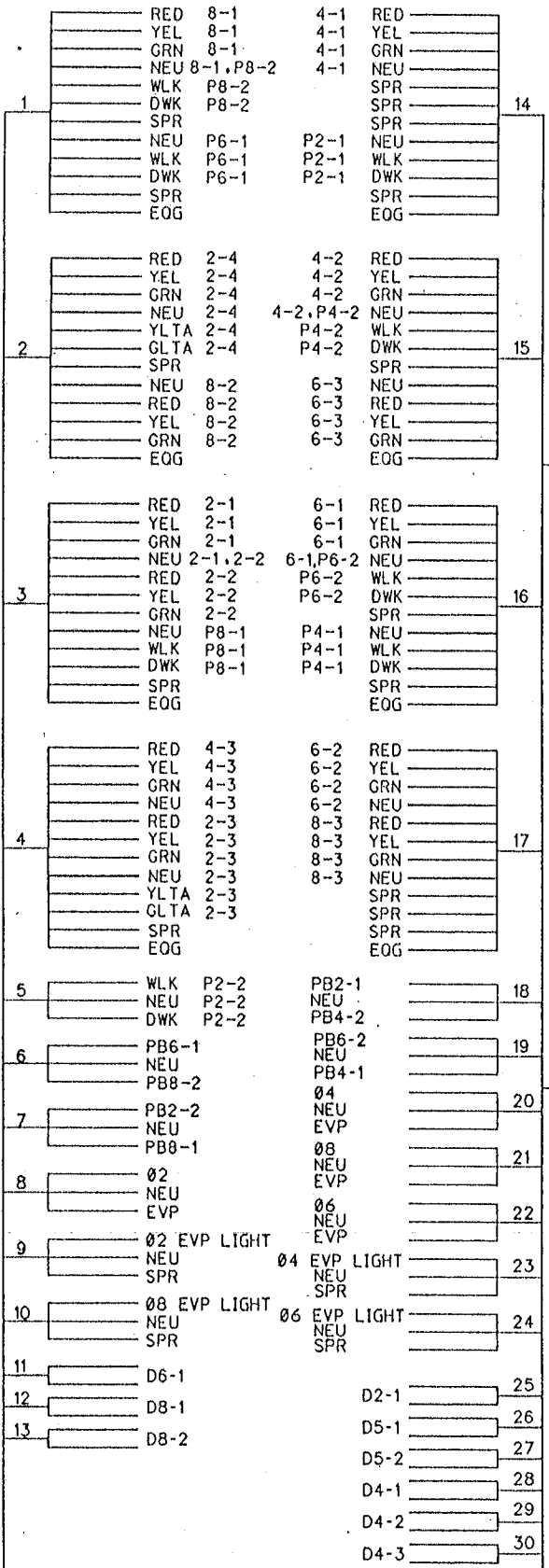
Paul J. Blomberg
PAUL BLOMBERG
DATE: 01/20/94 REG. NO. 13719

INTERSECTION LAYOUT
C.S.A.H. 18 (CROOKED LAKE BLVD)
AND 113TH AVENUE NW
C.P. 98-08-18
COON RAPIDS, MINNESOTA

Ort Schelen
Mayeron &
Associates, Inc.
Engineers - Architects - Planners - Surveyors
300 Park Place Center - 575 Wayzata Boulevard
Minneapolis, MN 55416-1228 - 612-996-0775

PLAN NO. 3

CONTROLLER CABINET



ELECTRICAL ENG. CERT.
 I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Paul J. Blomberg
 PAUL BLOMBERG
 DATE: 01/20/94 REG. NO. 13719

CONDUCTOR COLOR CODING

R	BLK	2-1/C#10
O	WH	
BL		
WH		
R/BLK	R	3/C#12
O/BLK	WH	
BL/BLK	BLK	
WH/BLK		
BLK	R OR O	
BLK/WH	WH OR YEL	3/C#20
G/BLK	BLK OR BL	
G		
BLK	BLK	2/C#14
WH	CLEAR	
BR. GR.		

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

OSM
 Orr Schelen Scheron & Mayeron Associates, Inc.
 Engineers - Architects - Planners & Surveyors
 300 Park Place Center • 575 Wyalma Boulevard
 Minneapolis, MN 55415-1228 • 612-596-5775

WIRING DIAGRAM
C.S.A.H.18 (CROOKED LAKE BLVD)
AND 118TH AVENUE NW
C.P. 93-08-18
COON RAPIDS, MINNESOTA

DESIGN BY: CTR
 CHECKED BY: RBB
 RECORD COPY BY: DATE

SCALE: AS NOTED
 PLAN BY: CTR
 DATE: 01/20/94

REVISION NO. EXPLANATION

DATE: 01/20/94

S.A.P. 02-618-18
 C.P. 93-08-18

PLAN NO. 4

ANOKA COUNTY MINNESOTA

CONSTRUCTION PLANS FOR TRAFFIC SIGNAL SYSTEM

C.S.A.H. 18 (CROOKED LAKE BLVD.) AT 113th AVE. N.W.

GOVERNING SPECIFICATIONS

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 INTERSECTION LAYOUT
- 3 FIELD WIRING DIAGRAM
- 4 UTILITIES
- 5 DETAILS

Recommended for Approval _____

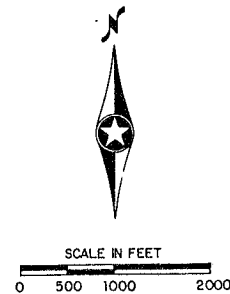
Recommended for Approval _____ CITY ENGINEER

Recommended for Approval _____ COUNTY ENGINEER

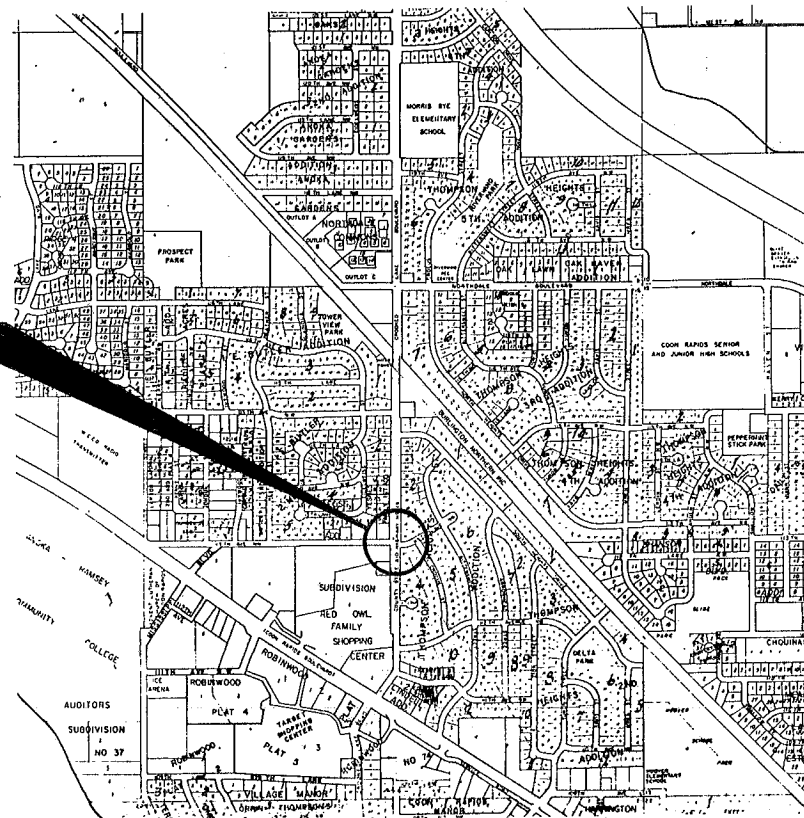
Recommended for Approval _____ DISTRICT STATE AID ENGINEER

Recommended for Approval _____ DIRECTOR, TRAFFIC ENGINEERING

APPROVED _____ DIRECTOR OFFICE OF STATE AID



PROJECT LOCATION



COON RAPIDS, MINNESOTA

ESTIMATED QUANTITIES

PROJECT NO.	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	2585.511	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM	SIGNAL SYSTEM	1

"ELECTRICAL ENGINEER CERTIFICATION"
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Date: _____ Reg.No. _____

SURVEY	CHECKED BY:	NO.	DATE	REVISIONS
DESIGN M.K.	GWW		1/24	Per Anoka County
DRAWN M.K.			1/27	Per Mn/Dot

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.



SHORT - ELLIOTT - HENDRICKSON, INC.
Saint Paul, Minnesota • Chippewa Falls, Wisconsin

SIGNAL SYSTEM
TITLE SHEET

S.A.P. 02-618-18

CROOKED LAKE BLVD. (C.S.A.H. 18) AT 113th AVE. N.W.

FILE NO.:
86103
DATE
1-31-86

1
5

NOTES:

- 1) ALL LOOP DETECTORS ARE IN 1" N.M.C. (SEE DETAILS).
- 2) SEE SPECIAL PROVISIONS FOR INSTALLATION OF STEEL GUARD POSTS.
- 3) SEE SPECIAL PROVISIONS FOR CONTRACTORS RESPONSIBILITY FOR THE LOCATION OF UTILITIES.
- 4) LOOP DETECTORS/CONDUCTORS SHALL BE CROSS LINKED POLYETHYLENE(XLP). SEE SPECIAL PROVISIONS.
- 5) DIRECTIONAL SIGNS TO BE INSTALLED ON MAST ARMS AT (2) AND (4). SEE SPECIAL PROVISIONS.
- 6) PEDESTRIAN INDICATIONS SHALL BE 12" x 12" FOR CROSSINGS OF CROOKED LAKE BOULEVARD AND 9" x 9" FOR CROSSINGS OF 113th AVE.
- 7) LUMINAIRE SHALL HAVE P.E.C. AND TEST SWITCH.

SIGNAL INDICATIONS					
FACE	PHASE	FLASH	R	Y	G
2-1	2	Y	12	12	12
2-2	2	Y	12	12	12
2-3	2	Y	12	12	12
4-1	4	R	12	12	12
4-2	4	R	12	12	12
4-3	4	R	12	12	12
6-1	6	Y	12	12	12
6-2	6	Y	12	12	12
6-3	6	Y	12	12	12
8-1	8	R	12	12	12
8-2	8	R	12	12	12
8-3	8	R	12	12	12

NOTE: ALL INDICATION SIZES ARE IN INCHES.

- (2) TYPE P90-A-25-D40-9
P90 POLE FOUNDATION
LUMINAIRE-400 WATT H.P.S.(APPROX. 350°)
ONE WAY SIGNAL-OVERHEAD
TYPE 20C-POLE MOUNTED 270°
2 PEDESTRIAN PUSH BUTTONS AND SIGNS
2 STEEL GUARD POSTS
EXTEND INTO H.H.10
3" R.S.C.
2-12/c#12
1-3/c#12
2-1/c#10

- (1) TYPE P80-A-20
P 80 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 20C-POLE MOUNTED 270°
2 PEDESTRIAN PUSH BUTTONS AND SIGNS
2 STEEL GUARD POSTS
EXTEND INTO H.H.7
3" R.S.C.
2-12/c#12
1-3/c#12

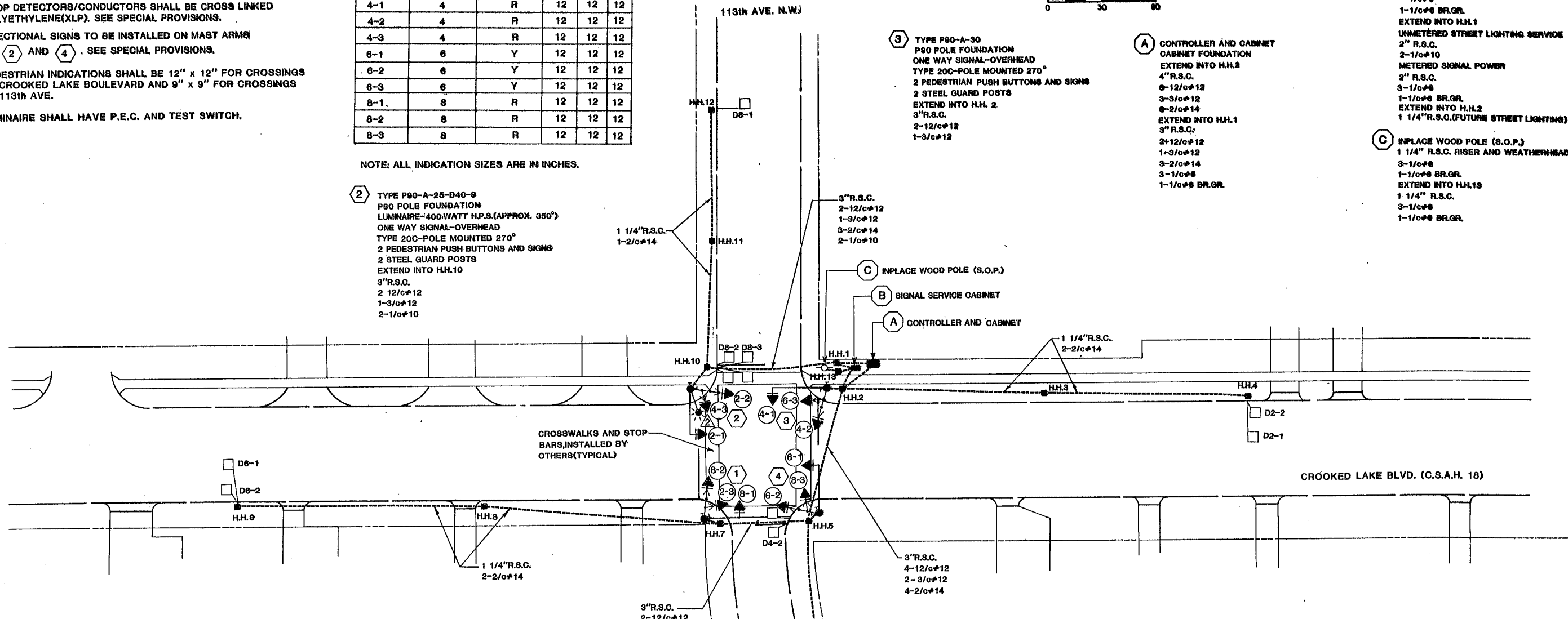
- (4) TYPE P90-A-25
P90 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 20C-POLE MOUNTED 270°
2 PEDESTRIAN PUSH BUTTONS AND SIGNS
2 STEEL GUARD POSTS
EXTEND INTO H.H.5
3" R.S.C.
2-12/c#12
1-3/c#12

- (3) TYPE P90-A-30
P90 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 20C-POLE MOUNTED 270°
2 PEDESTRIAN PUSH BUTTONS AND SIGNS
2 STEEL GUARD POSTS
EXTEND INTO H.H. 2
3" R.S.C.
2-12/c#12
1-3/c#12

- (A) CONTROLLER AND CABINET
CABINET FOUNDATION
EXTEND INTO H.H.2
4" R.S.C.
6-12/c#12
3-3/c#12
6-2/c#14
EXTEND INTO H.H.1
3" R.S.C.
2+12/c#12
1-3/c#12
3-2/c#14
3-1/c#6
1-1/c#6 BR.GR.

- (B) SIGNAL SERVICE CABINET
EXTEND INTO H.H.19
2" R.S.C.
3-1/c#6
1-1/c#6 BR.GR.
EXTEND INTO H.H.1
UNMETERED STREET LIGHTING SERVICE
2" R.S.C.
2-1/c#10
METERED SIGNAL POWER
2" R.S.C.
3-1/c#6
1-1/c#6 BR.GR.
EXTEND INTO H.H.2
1 1/4" R.S.C.(FUTURE STREET LIGHTING)

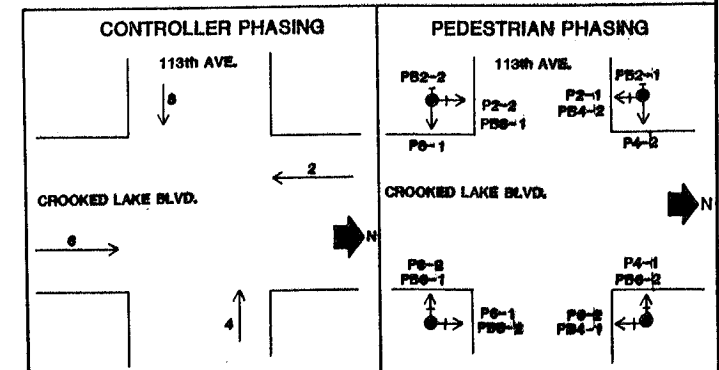
- (C) INPLACE WOOD POLE (S.O.P.)
1 1/4" R.S.C. RISER AND WEATHERHEAD
3-1/c#6
1-1/c#6 BR.GR.
EXTEND INTO H.H.19
1 1/4" R.S.C.
3-1/c#6
1-1/c#6 BR.GR.



LOOP DETECTORS				
NUMBER	SIZE	FUNCTION	DISTANCE	NO. OF TURNS
D2-1	6'x6'	1	235'	3
D2-2	6'x6'	1	235'	3
D4-1	6'x6'	3&8	110'	3
D4-2	2-6'x6'	7	-	3
D6-1	6'x6'	1	250'	3
D6-2	6'x6'	1	250'	3
D8-1	6'x6'	3&8	145'	3
D8-2	2-6'x6'	7	-	3
D8-3	2-6'x6'	1	-	3

FUNCTIONS:

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



SURVEY:	CHECKED BY:	NO.	DATE	REVISIONS
DESIGN: M.K.	G.V.W.		1/24	Per Anoka County
DRAWN: G.M.			1/27	Per Min/Dot

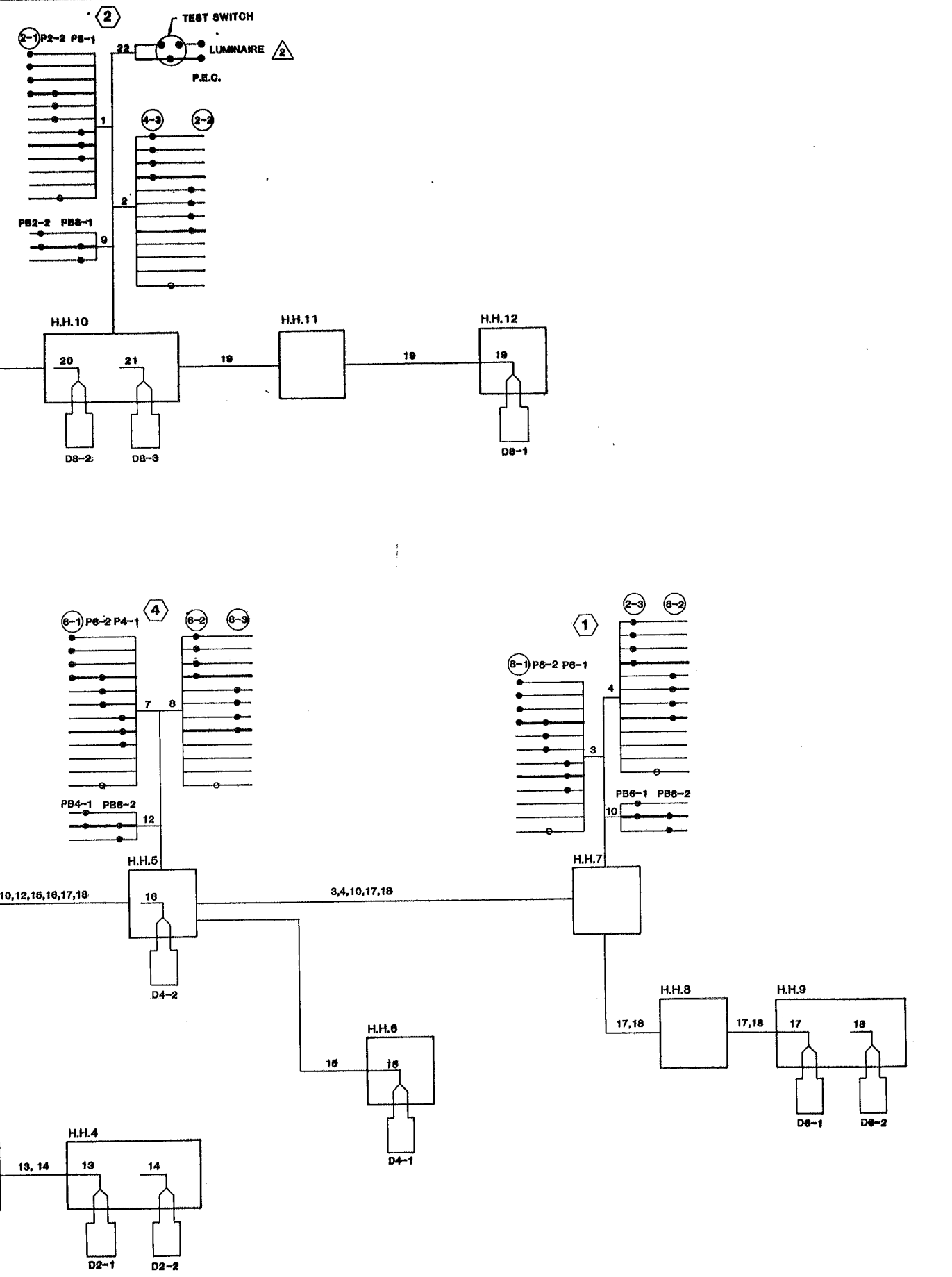
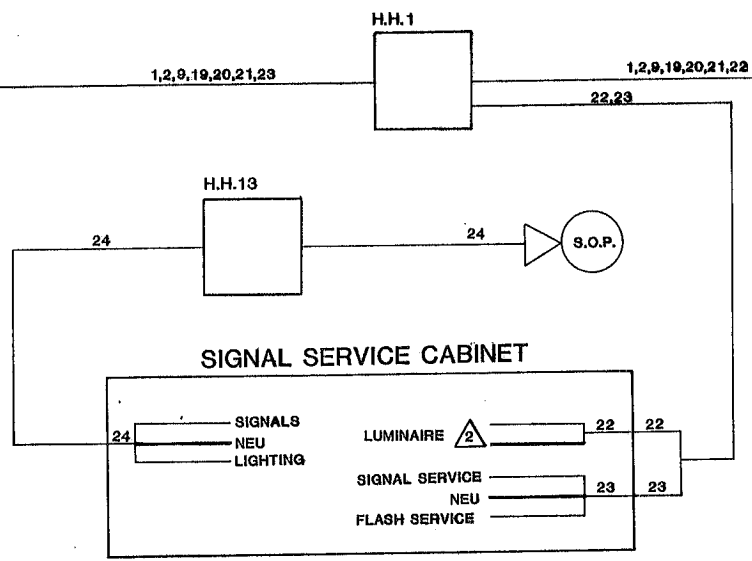
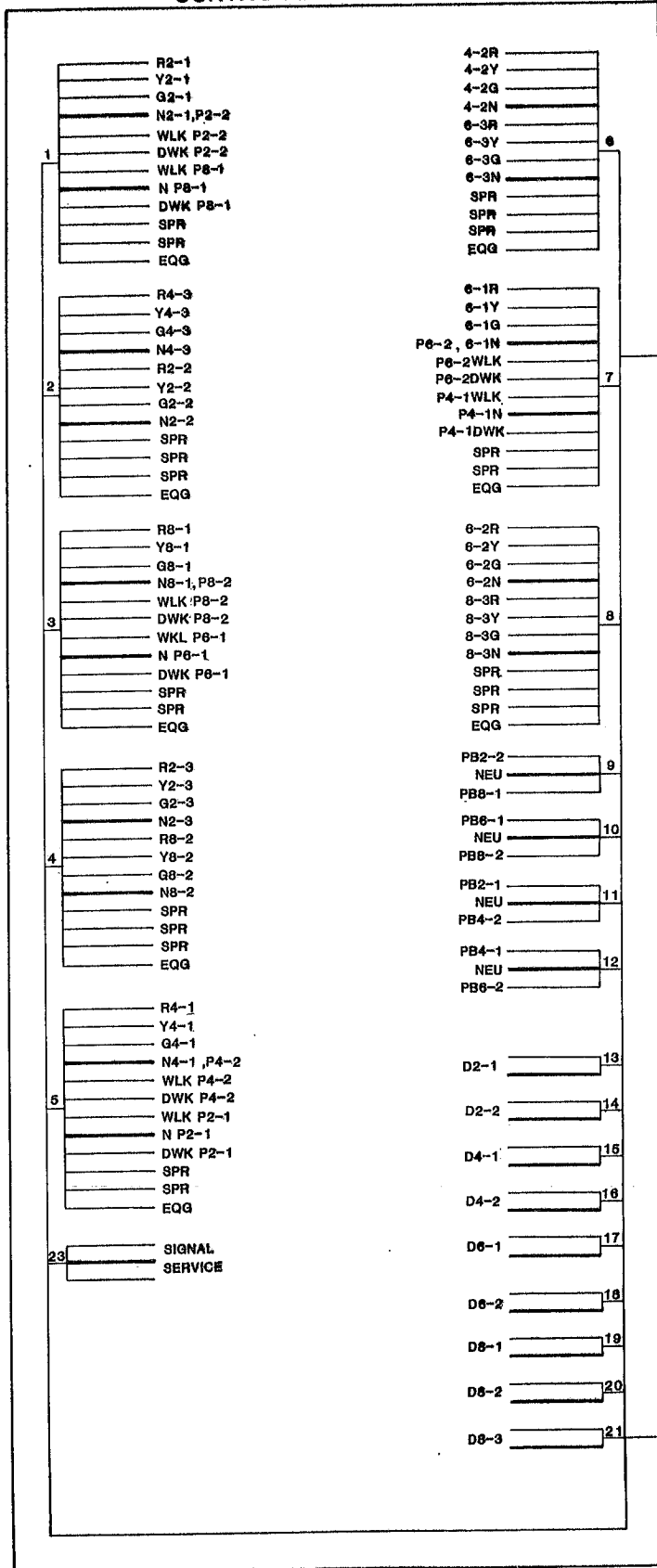
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE: _____ REG. NO. 9089

SEH SHORT - ELLIOTT - HENDRICKSON, INC.
Saint Paul, Minnesota • Chippewa Falls, Wisconsin

SIGNAL SYSTEM INTERSECTION LAYOUT
CROOKED LAKE BLVD. (C.S.A.H. 18) AT 113th AVE. N.W.

FILE NO.:	2
DATE:	1-31-88
S.A.P. 02-618-18	5

CONTROLLER CABINET



SURVEY:	CHECKED BY:	NO.	DATE	REVISIONS
DESIGN: M.K.	GWV		1/24	Per Anoka County
DRAWN: G.N.			1/27	Per Mn/Dot

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: _____ REG. NO. 9089

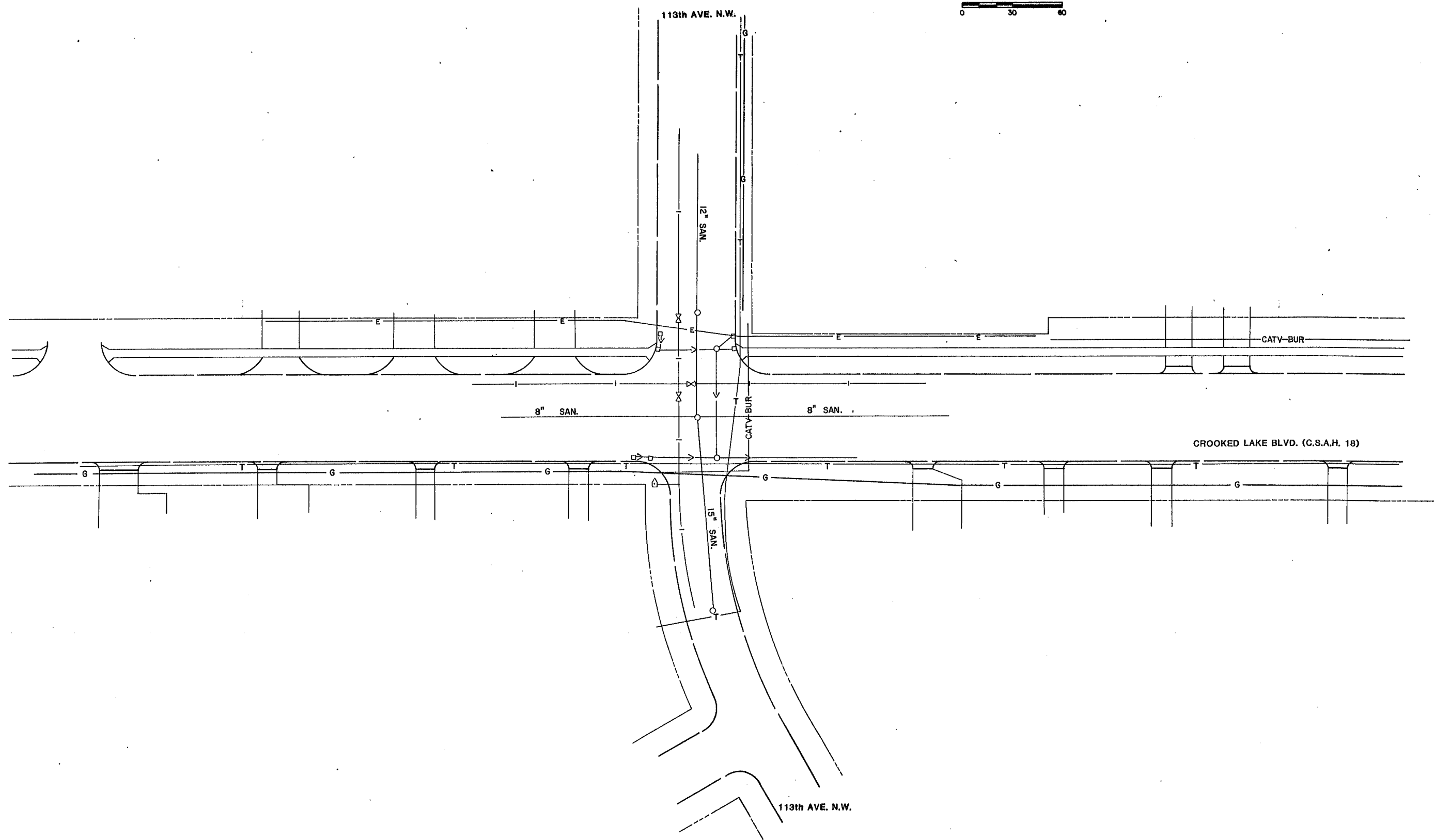
SHORT - ELLIOTT - HENDRICKSON, INC.
 Saint Paul, Minnesota • Chippewa Falls, Wisconsin

SIGNAL SYSTEM
FIELD WIRING DIAGRAM
 CROOKED LAKE BLVD. (C.S.A.H. 18) AT 113th AVE. N.W.

S.A.P. 02-618-18

FILE NO.:	86103
DATE:	1-31-86

5



SURVEY: DESIGN: M.K. DRAWN: G.N.	CHECKED BY: GVW	NO.	DATE	REVISIONS	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: _____ REG. NO. 9099
			1/24	Per Anoka County	
			1/27	Per Mn/Dot	

SEH SHORT - ELLIOTT - HENDRICKSON, INC.
 Saint Paul, Minnesota • Chippewa Falls, Wisconsin

SIGNAL SYSTEM UTILITIES
 CROOKED LAKE BLVD. (C.S.A.H. 18) AT 113th AVE. N.W.

S.A.P. 02-618-18

FILE NO.: 86103	4 5
DATE: 1-31-88	

LEGEND OF SYMBOLS

ABBREVIATIONS

- EQUIPMENT AND INDICATIONS**
- RED-R-RED
 - YEL-Y-YELLOW
 - GRN-G-GREEN
 - WLK-W-WALK
 - NEU-N-NEUTRAL
 - DWK-D-DON'T WALK
 - LUM-L-LUMINAIRE
 - DNL-D-DOWNLIGHT
 - H.H.-H-HANDHOLE
 - EGG-E-EQUIPMENT GROUND
 - R.S.C.-R-RIGID STEEL CONDUIT
 - GLTA-G-GREEN LEFT TURN ARROW
 - YRTA-Y-YELLOW RIGHT TURN ARROW
 - D2-1(eg)-D-DETECTOR-PHASE "2"
 - GR-R-GROUND ROD
 - SER.-S-SERVICE
 - PAI-P-PEDESTRAIN INDICATIONS
 - 2-1(eg)-S-SIGNAL HEADS-PHASE "2"
 - SPR.-S-SPARE CONDUCTORS
 - N.M.C.-N-NON METALLIC CONDUIT
 - E.V.P.-E-EMERGENCY VEHICLE PRE-EMPTION
 - J.B.-J-JUNCTION BOX
 - W.P.-W-WOOD POLE
 - P.E.C.-P-PHOTOELECTRIC CELL

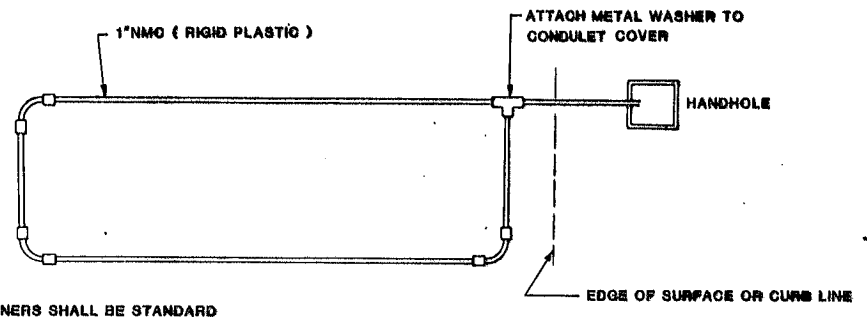
CONDUCTOR COLOR CODE

- R-RED
- O-ORANGE
- BL-BLUE
- WH-WHITE
- G-GREEN
- BLK-BLACK
- R/BLK -RED WITH BLACK TRACER
- O/BLK-ORANGE WITH BLACK TRACER
- BL/BLK-BLUE WITH BLACK TRACER
- WH/BLK- WHITE WITH BLACK TRACER
- BLK/WH-BLACK WITH WHITE TRACER
- G/BLK-GREEN WITH BLACK TRACER

SIGNAL BASE NO.	①
SIGNAL FACE NO.	⊕
LUMINAIRE NO.	⊙
CONTROLLER AND CABINET	□
CONTROLLER AND CABINET-IN PLACE	▣
HANDHOLE	■
HANDHOLE-IN PLACE	▣
RIGID STEEL CONDUIT (R.S.C.)	—
RIGID STEEL CONDUIT (R.S.C.)-IN PLACE	—
SIGNAL FACE WITH BACKGROUND SHIELD	→
SIGNAL FACE W/O BACKGROUND SHIELD	→
SIGNAL FACE-IN PLACE	→
PEDESTRIAN INDICATIONS	→
PEDESTRIAN INDICATIONS-IN PLACE	→
PEDESTRIAN PUSH BUTTON ON PEDESTAL OR POLE	□
PEDESTRIAN PUSH BUTTON STATION	□
TRAFFIC SIGNAL PEDESTAL	■
TRAFFIC SIGNAL PEDESTAL-IN PLACE	▣
TRAFFIC SIGNAL POLE AND MAST ARM	○
TRAFFIC SIGNAL POLE AND MAST ARM-IN PLACE	○
STREET LIGHT POLE AND LUMINAIRE	○
STREET LIGHT POLE AND LUMINAIRE-IN PLACE	○
MAST ARM AND LUMINAIRE	○
MAST ARM AND LUMINAIRE-IN PLACE	○
WOOD POLE	○
WOOD POLE-IN PLACE	○
SOURCE OF POWER	○
RAILROAD SIGNAL-IN PLACE	⊕
RIGHT OF WAY LINE	—
CENTER LINE	—
EDGE OF ROADWAY	—
SHOULDER LINE	—
CURB LINE	—
STOP BAR	—
CROSSWALK	—

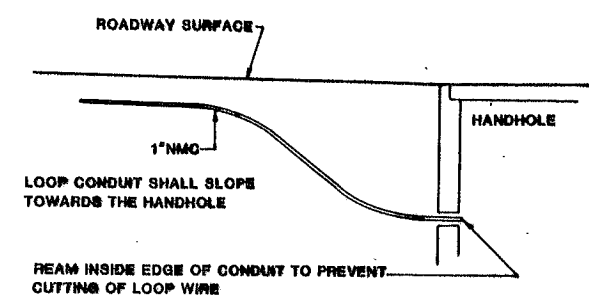
LOOP DETECTOR DETAIL "A"

PLAN VIEW
(NOT TO SCALE)



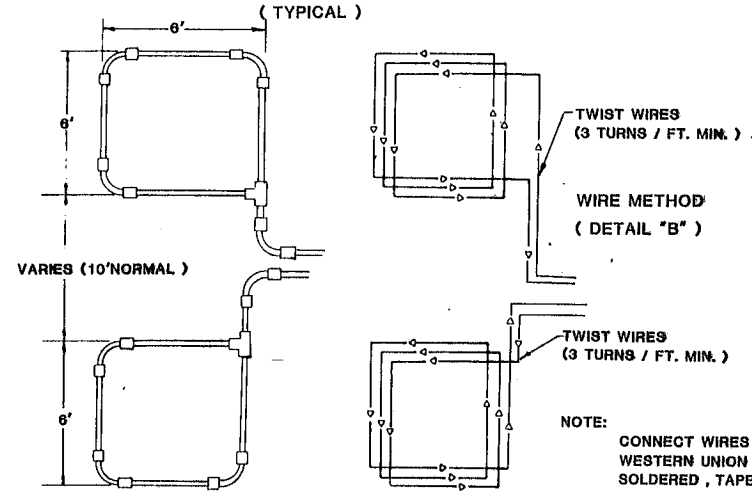
ALL CORNERS SHALL BE STANDARD 90° CONDUIT BENDS

DRAINAGE DETAILS



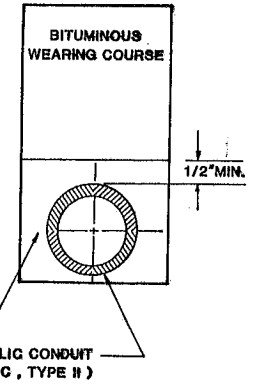
LOOP DETECTOR DETAIL "B"

PLAN VIEW
(NOT TO SCALE)



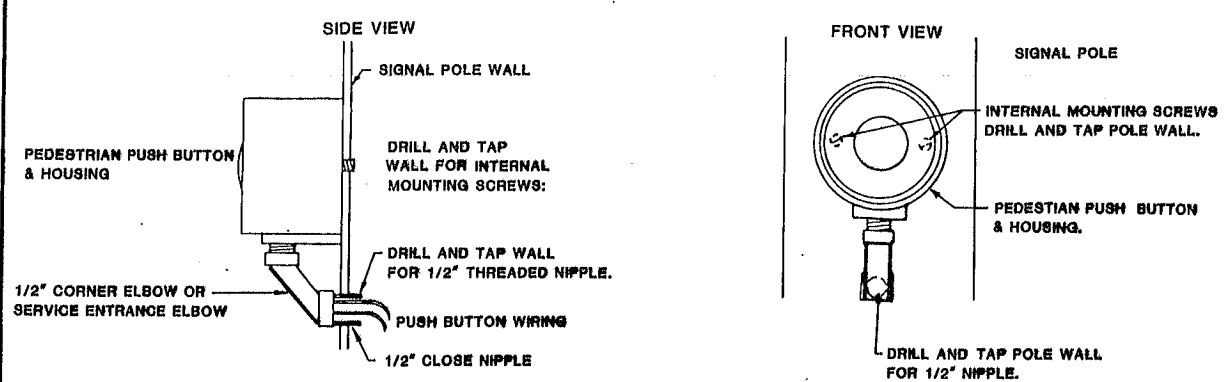
CONDUITS MAY BE PLACED IN COMMON TRENCH.

NOTE: LOOP DETECTOR WIRES SHALL BE CROSS LINKED POLYETHYLENE (XLP). SEE SPECIAL PROVISIONS.



MATERIAL EQUAL TO BITUMINOUS BINDER COURSE

PEDESTRIAN PUSH BUTTON MOUNTING DETAIL



CONDUCTOR COLOR CODING

R	BLK	2-1/C#6
O	WH	2-1/C#10
BL	R	
WH	W	3/C#12
R/BLK	BLK	
O/BLK	BLK	
BL/BLK	CLEAR	2/C#14
WH/BLK		
BLK	R OR O	
BLK/WH	WH OR YEL	3/C#20
G/BLK	BLK OR BL	
G		

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

CONDUIT INSTALLATION DETAIL FOR LOOP DETECTOR

LOOP DETECTOR CONDUITS ARE TO BE INSTALLED IN 3" CUT TRENCHES AS SHOWN ON PLANS. INSTALL EACH COMPLETE DETECTOR ASSEMBLY WITH THE DETECTOR WIRE PULLED THROUGH THE COMPLETE ASSEMBLY TO HANDHOLE. WHERE APPROPRIATE, PLACE DETECTOR CONDUIT IN BITUMINOUS BINDER COURSE PRIOR TO PLACEMENT OF THE WEARING COURSE. THE DEPTH OF THE TRENCH AND THE RESULTANT PLACEMENT OF THE DETECTOR CONDUIT SHALL BE SUCH THAT THE ENTIRE DETECTOR ASSEMBLY DRAINS INTO THE HANDHOLE. BACKFILL AND COMPACT THE TRENCHES WITH MATERIAL EQUIVALENT TO THE MATERIAL REMOVED.

STANDARD PLATES

PLATE NO.	DESCRIPTION
* 8110 C	TRAFFIC SIGNAL BRACKETING - POLE MOUNTED
8111 B	TRAFFIC SIGNAL BRACKETING - PEDESTAL MOUNTED
8112 C	PEDESTAL FOUNDATION
8113 C	MAGNETIC VEHICLE DETECTOR INSTALLATION
* 8115 C	PEDESTRIAN PUSH BUTTON INSTALLATION
* 8116 C	STEEL GUARD POST
* 8117 F	PRECAST CONCRETE HANDHOLE
* 8118 C	SERVICE EQUIPMENT AND POLE
* 8119 C	GROUND MOUNTED CABINET FOUNDATION
* 8120 H	P-80 AND P-90 POLE FOUNDATION
* 8121 B	TRANSFORMER BASE WITH POLE BASE PLATE
8122 C	PEDESTAL AND PEDESTAL BASE
* 8123 B	POLE AND MAST ARM
* 8124 D	SIGNAL HEAD MOUNTS
8125 A	SWING-AWAY HINGE
8126 C	P-100 POLE FOUNDATION
* 8130 D	SAW CUT LOOP DETECTORS

* THESE STANDARD PLATES APPLY TO THIS PLAN

SURVEY:	CHECKED BY:	NO.	DATE	REVISIONS
DESIGN: MK.	GVW		1/24	Per Anoka County
DRAWN: G.N.			1/27	Per Mn/Dot

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: _____ REG. NO. 0088

SEH SHORT - ELLIOTT - HENDRICKSON, INC.
Saint Paul, Minnesota • Chippewa Falls, Wisconsin

SIGNAL SYSTEM
DETAILS
CROOKED LAKE BLVD. (C.S.A.H. 18) AT 113th AVE. N.W.

S.A.P. 02-618-18

FILE NO.: 86103 5
DATE: 1-31-86 5