

CONVENTIONAL SYMBOLS

- Section Line _____
- Quarter Line _____
- Sixteenth Line _____
- Property Line _____
- R/W Boundary R/W _____
- Existing D.O.T. R/W Line _____
- And Other Road R/W's _____
- Railroad R/W _____
- Private Easement _____
- Temporary Easement T. E. _____
- Building Removal Easement B. R. E. _____
- R/W Parcel Number 3 _____
- Access Control o _____
- Access Opening o _____
- Cast Iron Monument or 2"x2" D.O.T. Iron Pipe with Aluminum Cap _____
- 3/4" D.O.T. Iron Pin _____
- Other Iron Monument _____
- Concrete or Stone Monument _____
- R/W Boundary Corner _____

UTILITY SYMBOLS

- POWER POLE LINE
- TELEPHONE OR TELEGRAPH POLE LINE
- JOINT TELEPHONE AND POWER ON POWER POLE
- ON TELEPHONE POLES
- ANCHOR
- STREET LIGHT
- PEDESTAL (TELEPHONE CABLE TERMINAL)
- GAS MAIN
- WATER MAIN
- CONDUIT
- TELEPHONE CABLE IN CONDUIT
- ELECTRIC CABLE IN CONDUIT
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- BURIED TELEPHONE CABLE
- BURIED ELECTRIC CABLE
- AERIAL TELEPHONE CABLE
- SEWER (SANITARY OR STORM)
- SEWER MANHOLE



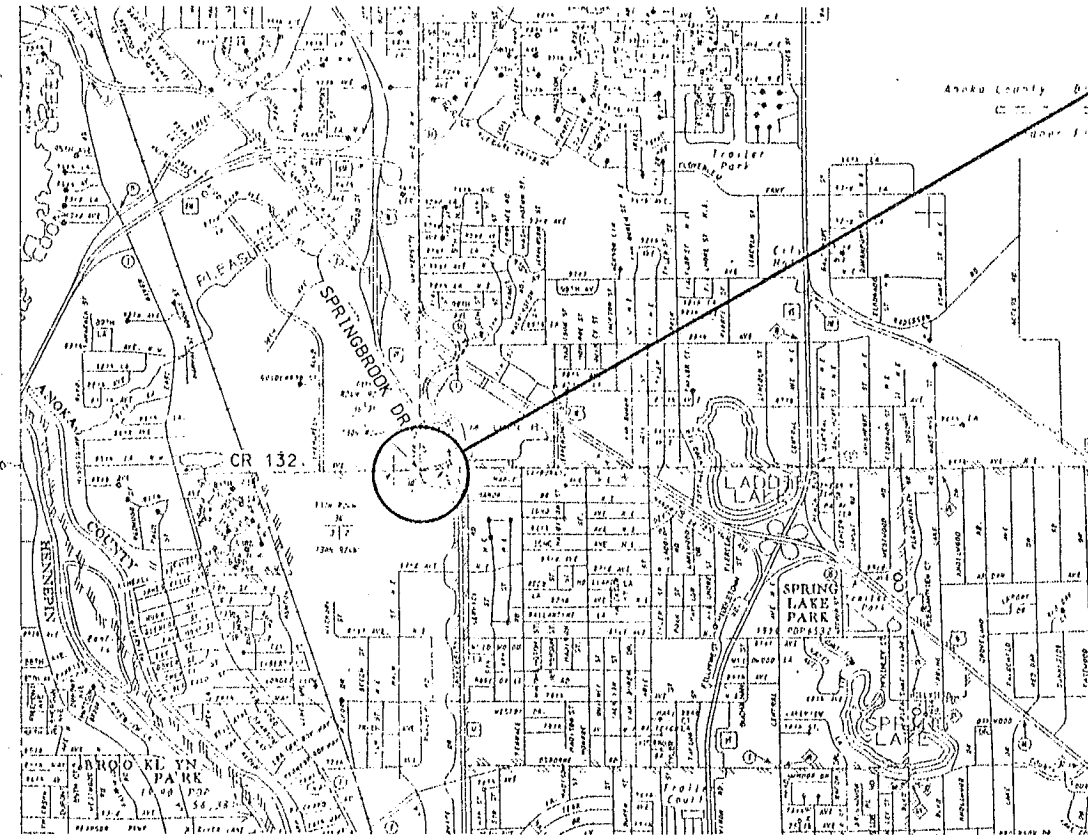
CONSTRUCTION OF FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM IN THE CITIES OF FRIDLEY, COON RAPIDS, & BLAINE, ANOKA COUNTY, MINNESOTA AT COUNTY ROAD 132 AND SPRINGBROOK DRIVE

SYMBOLS

- EOG CONNECTION
- EVP DETECTOR DIRECTION
- LUMINAIRE NO.
- SIGNAL BASE NO.
- SIGNAL FACE NO.
- SPLICE

INDEX

PAGE	DESCRIPTION
1	TITLE SHEET
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3	INTERSECTION LAYOUT
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5	SERVICE EQUIPMENT PAD AND CONTROLLER PAD DETAILS
6	MISC. DETAILS AND STANDARD PLATES



PROJECT LOCATION
C.P. 93-06-132
M.S.A.P. 114-130-02 (COON RAPIDS)
M.S.A.P. 127-341-03 (FRIDLEY)
COUNTY ROAD 132 &
SPRINGBROOK DRIVE

ANOKA COUNTY
HIGHWAY DEPARTMENT

SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS AMENDED BY THE JANUARY 2, 1991 SUPPLEMENTAL SPECIFICATION SHALL GOVERN.

- Approved William R. Ott CITY OF COON RAPIDS ENGINEER DATE 2/11/94
- Approved John F. Lee CITY OF FRIDLEY ENGINEER DATE 2/4/94
- Approved Charles L. Lattin CITY OF BLAINE ENGINEER DATE 2/11/94
- Approved Lawrence K. Knudsen ANOKA COUNTY ENGINEER DATE 2/4/94
- Recommended for Approval Mary L. Beringer METRO ASSISTANT DIVISION ENGINEER STATE AID DATE 1/5/94
- Recommended for Approval _____ STATE AID PLANS AND SPECS ENGINEER DATE _____
- Approved Julius Skellman STATE AID ENGINEER DATE 4/8/94

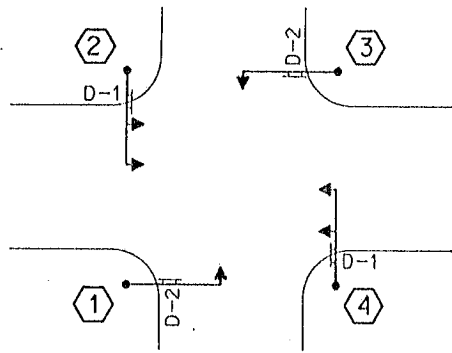
DESIGN DESIGNATION	DESIGN DESIGNATION
M.S.A.S. 130 (SPRINGBROOK DR.) M.S.A.P. 114-130-02	M.S.A.S. 341 (SPRINGBROOK DR.) M.S.A.P. 127-341-03
ADT 1994 = 5,600 ADT 2014 = 8,400 4 LANES 0 PARKING DESIGN SPEED = 30 MPH COLLECTOR - HIGH DENSITY	ADT 1994 = 4,700 ADT 2014 = 7,050 2 LANES 2 PARKING LANES DESIGN SPEED = 30 MPH COLLECTOR - HIGH DENSITY
DESIGN DESIGNATION COUNTY ROAD 132 (85TH AVENUE) C.P. 93-06-132, M.S.A.P. 114-130-02, M.S.A.P. 127-341-03	
R _____ NA ADT (Current Year) 1994 = <u>9,357</u> ADT (Future Year) 2014 = <u>15,807</u> DHV (Design Hr. Vol.) = <u>NA</u> D (Directional Distr.) = <u>50/50</u> % T (Heavy Commercial) = <u>NA</u> % SOIL FACTOR _____ NA	EN18 (20) _____ NA Design Speed <u>40</u> MPH Based on _____ NA Sight Distance Height of eye _____ NA Height of object _____ NA Design Speed not achieved at: _____ NA Functional Classification <u>Arterial-High Density</u> No. of Traffic Lanes <u>4</u> No. of Parking Lanes <u>0</u> Ton Design _____ NA

ESTIMATED QUANTITIES			
ITEM NO.		UNIT	TOTAL
2565.511	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM	SIGNAL SYSTEM	1 *
0564.602	SIGN PANELS INTERNALLY ILLUMINATED	EACH	* *

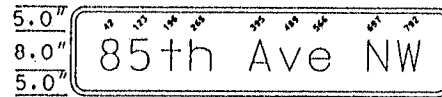
* - FUNDING SPLIT: 25% C.P. 93-06-132, (ANOKA COUNTY LOCAL FUNDS) 25% M.S.A.P. 114-130-02, 25% M.S.A.P. 127-341-03, 25% LOCAL FUNDS (12.5% Fridley, 6.25% Coon Rapids, 6.25% Blaine)
* * - FUNDING SPLIT: 50% FRIDLEY LOCAL FUNDS, 50% COON RAPIDS LOCAL FUNDS
MSAP 114-130-02, MSAP 127-341-03, C.P. 93-06-132

EXPLANATION
 REVISION NO. DATE
 SCALE: AS NOTED
 PLAN BY: C.W.
 CHECKED BY: R.B.B.
 DESIGN BY: CTR
 COMM. NO.: 511-00
 RECORD COPY BY: DATE
 I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF IT COMPLIES WITH THE LAWS OF THE STATE OF MINNESOTA.
David B. Brey
 ANOKA COUNTY ENGINEER
 DATE: 01/20/94 REG. NO. 18327
 TITLE SHEET
 COUNTY ROAD 132 (85TH AVE. NW)
 AND SPRINGBROOK DRIVE
 C.P. 93-06-132
 FRIDLEY/COON RAPIDS/BLAINE, MN
 Orr Schelen & Mayerson Associates, Inc.
 Engineers - Architects - Planners - Surveyors
 300 Park Place Center # 575 Wayzata Boulevard
 Minneapolis, MN 55416-1228 # 612-595-5775
 PLAN NO. 1

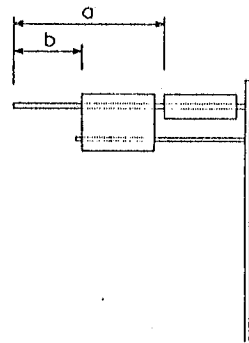
SIGN PANEL LAYOUT



106" X 18", 3" R, 1.0" B, D-1
LINE 1 96.1 : 8"-6" E MOD



92" X 18", 3" R, 1.0" B, D-2
LINE 1 83.65 : 8"-6" E MOD



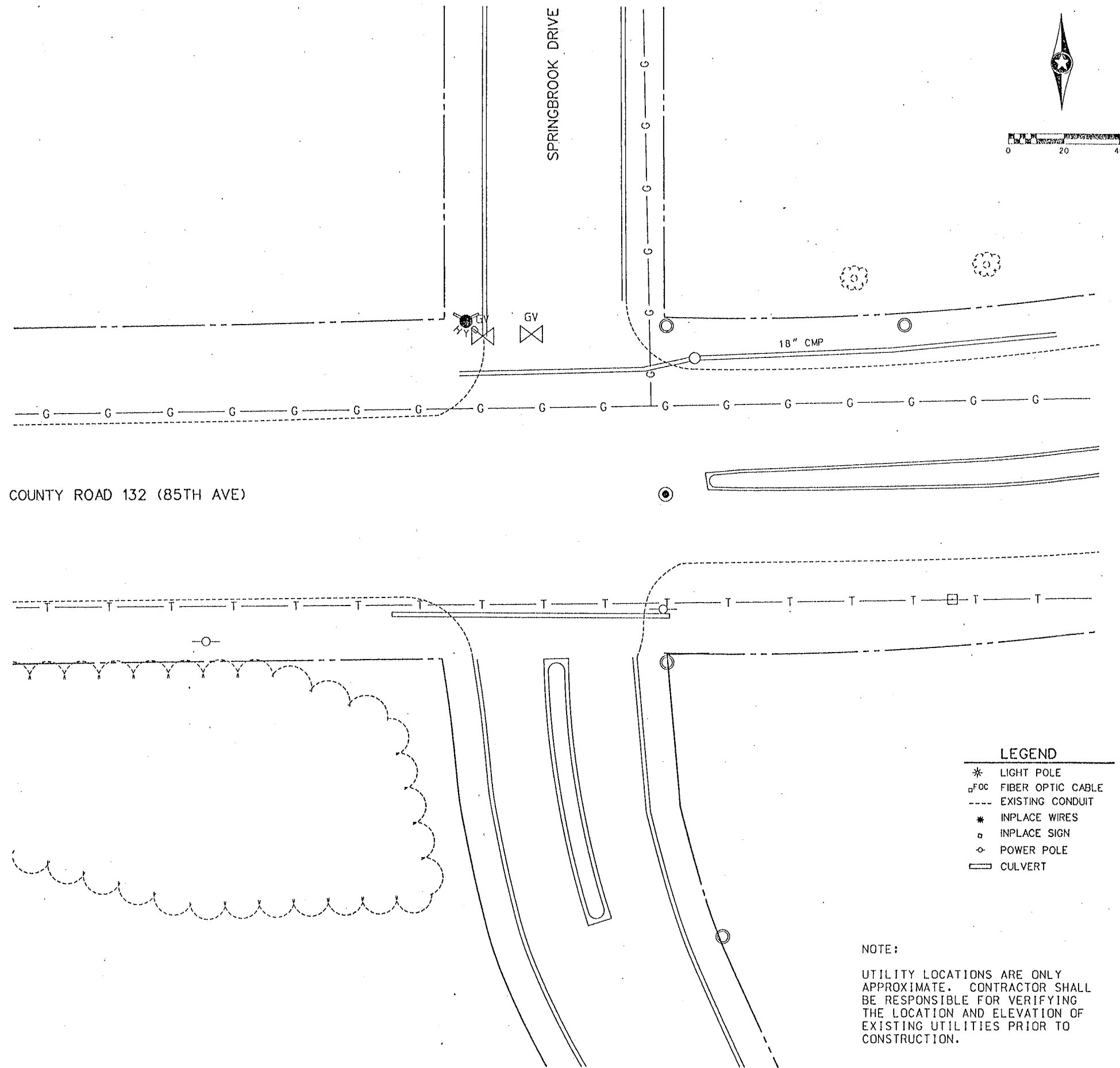
INTERNALLY ILLUMINATED SIGN

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	106"x18"	2	SEE NOTE 2	SEE NOTE 2	13.25	2	16	
D-2	92"x18"	2	SEE NOTE 2	SEE NOTE 2	11.5	1	14	

① SEE DETAIL

GENERAL NOTES

1. Color - White legend and border on green background, fully reflectorized.
2. INTERNALLY ILLUMINATED SIGN - SEE SPECIAL PROVISIONS FOR STRUCTURAL AND MOUNTING DETAILS, WIRING DETAILS, ECT.



LEGEND

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

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

<p>DATE: _____</p> <p>REVISION NO. _____</p> <p>DATE: _____</p>	<p>SCALE: AS NOTED</p> <p>PLAN BY: _____</p> <p>CHK: _____</p> <p>DESIGN BY: _____</p> <p>CTR: _____</p> <p>CHECKED BY: _____</p> <p>RBS: _____</p> <p>COMD. NO.: _____</p> <p>RECORD COPY BY: _____</p> <p>DATE: _____</p>	<p>EXPLANATION</p>	<p>ENGINEER'S CERTIFICATE: THAT THE 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 style="text-align: right;"> RONALD S. BRAY ME. NO. 18327 APR. 01/20/94 </p>
<p>SIGNING AND UTILITIES SHEET</p> <p>COUNTY ROAD 132 (85TH AVE NW)</p> <p>AND SPRINGBROOK DRIVE</p> <p>C.P. 93-06-132</p> <p>FRIDLEY/COON RAPIDS/BLAINE, MN</p>			<p>DR. Schelen & Associates, Inc.</p> <p>Engineers ■ Architects ■ Planners ■ Surveyors</p> <p>300 Park Place Center ■ 5755 Wazata Boulevard</p> <p>Minneapolis, MN 55416-1223 ■ 612-586-5775</p>
<p>MSAP 114 - 130 - 02, MSAP 127 - 341 - 03, C.P. 93-06-132</p>			<p>PLAN NO.</p> <p style="font-size: 2em;">2</p>

LOOP DETECTORS			
NUMBER	SIZE	FUNCTION	LOCATION
D1-1	6' X 6'	10	5'
D1-2	6' X 24'	3	AS SHOWN
D2-1	6' X 6'	1	370'
D2-2	6' X 6'	1	370'
D4-1	6' X 6'	3/8	120'
D4-2	6' X 6'	3/8	120'
D4-3	6' X 6'	7	5'
D4-4	6' X 6'	1	5'
D5-1	6' X 6'	10	5'
D5-2	6' X 24'	3	AS SHOWN
D6-1	6' X 6'	1	260'
D6-2	6' X 6'	1	260'
D8-1	6' X 6'	3/8	120'
D8-2	6' X 6'	3/8	120'
D8-3	6' X 6'	7	5'
D8-4	6' X 6'	1	5'

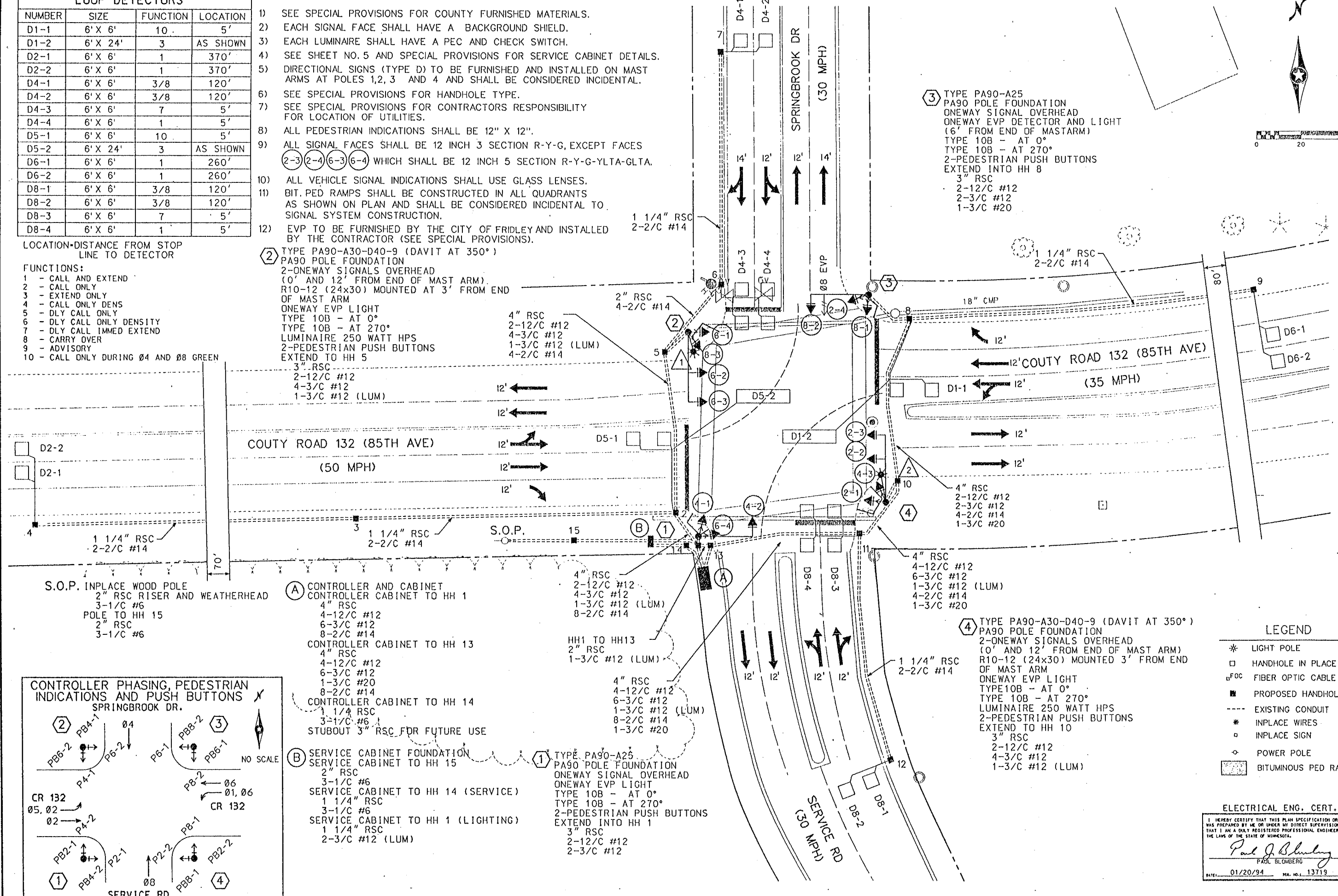
NOTES:

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

LOCATION-DISTANCE FROM STOP LINE TO DETECTOR

- FUNCTIONS:
- CALL AND EXTEND
 - CALL ONLY
 - EXTEND ONLY
 - CALL ONLY DENS
 - DLY CALL ONLY
 - DLY CALL ONLY DENSITY
 - DLY CALL IMMED EXTEND
 - CARRY OVER
 - ADVISORY
 - CALL ONLY DURING Ø4 AND Ø8 GREEN

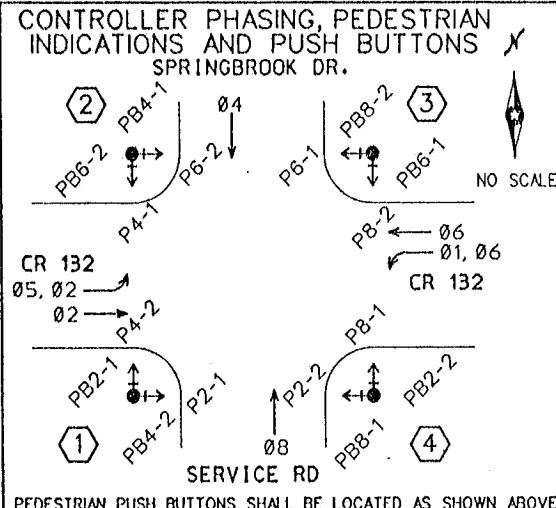
② TYPE PA90-A30-D40-9 (DAVIT AT 350°)
 PA90 POLE FOUNDATION
 2-ONEWAY SIGNALS OVERHEAD (0' AND 12' FROM END OF MAST ARM)
 R10-12 (24x30) MOUNTED AT 3' FROM END OF MAST ARM
 ONEWAY EVP LIGHT
 TYPE 10B - AT 0°
 TYPE 10B - AT 270°
 LUMINAIRE 250 WATT HPS
 2-PEDESTRIAN PUSH BUTTONS
 EXTEND TO HH 5
 3" RSC
 2-12/C #12
 4-3/C #12
 1-3/C #12 (LUM)



③ TYPE PA90-A25
 PA90 POLE FOUNDATION
 ONEWAY SIGNAL OVERHEAD
 ONEWAY EVP DETECTOR AND LIGHT (6' FROM END OF MASTARM)
 TYPE 10B - AT 0°
 TYPE 10B - AT 270°
 2-PEDESTRIAN PUSH BUTTONS
 EXTEND INTO HH 8
 3" RSC
 2-12/C #12
 2-3/C #12
 1-3/C #20

④ TYPE PA90-A30-D40-9 (DAVIT AT 350°)
 PA90 POLE FOUNDATION
 2-ONEWAY SIGNALS OVERHEAD (0' AND 12' FROM END OF MAST ARM)
 R10-12 (24x30) MOUNTED 3' FROM END OF MAST ARM
 ONEWAY EVP LIGHT
 TYPE 10B - AT 0°
 TYPE 10B - AT 270°
 LUMINAIRE 250 WATT HPS
 2-PEDESTRIAN PUSH BUTTONS
 EXTEND TO HH 10
 3" RSC
 2-12/C #12
 4-3/C #12
 1-3/C #12 (LUM)

① TYPE PA90-A25
 PA90 POLE FOUNDATION
 ONEWAY SIGNAL OVERHEAD
 ONEWAY EVP LIGHT
 TYPE 10B - AT 0°
 TYPE 10B - AT 270°
 2-PEDESTRIAN PUSH BUTTONS
 EXTEND INTO HH 1
 3" RSC
 2-12/C #12
 2-3/C #12



- LEGEND
- * LIGHT POLE
 - HANDHOLE IN PLACE
 - FOC FIBER OPTIC CABLE
 - PROPOSED HANDHOLE
 - - - EXISTING CONDUIT
 - * INPLACE WIRES
 - INPLACE SIGN
 - POWER POLE
 - BITUMINOUS PED RAMPS

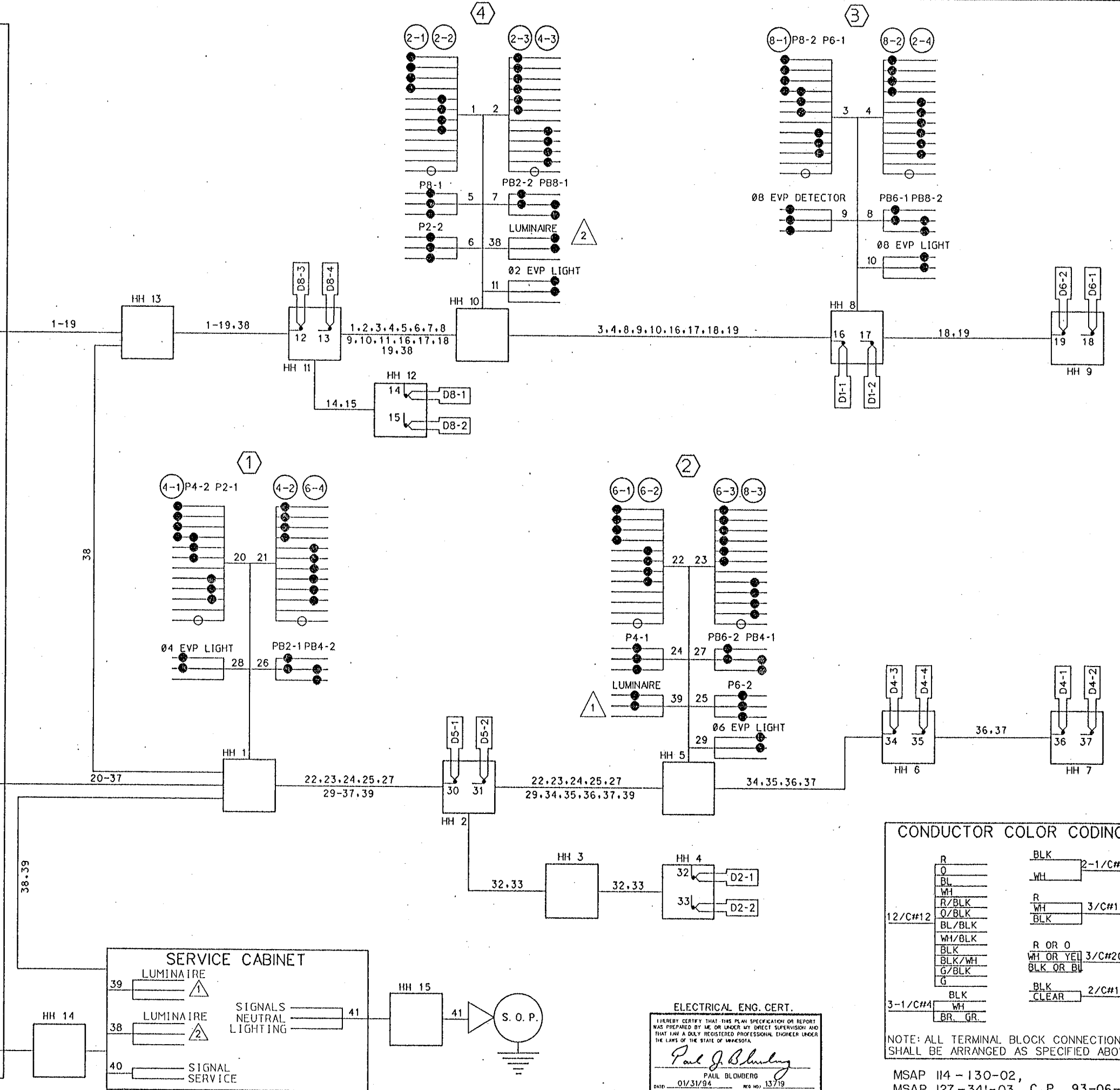
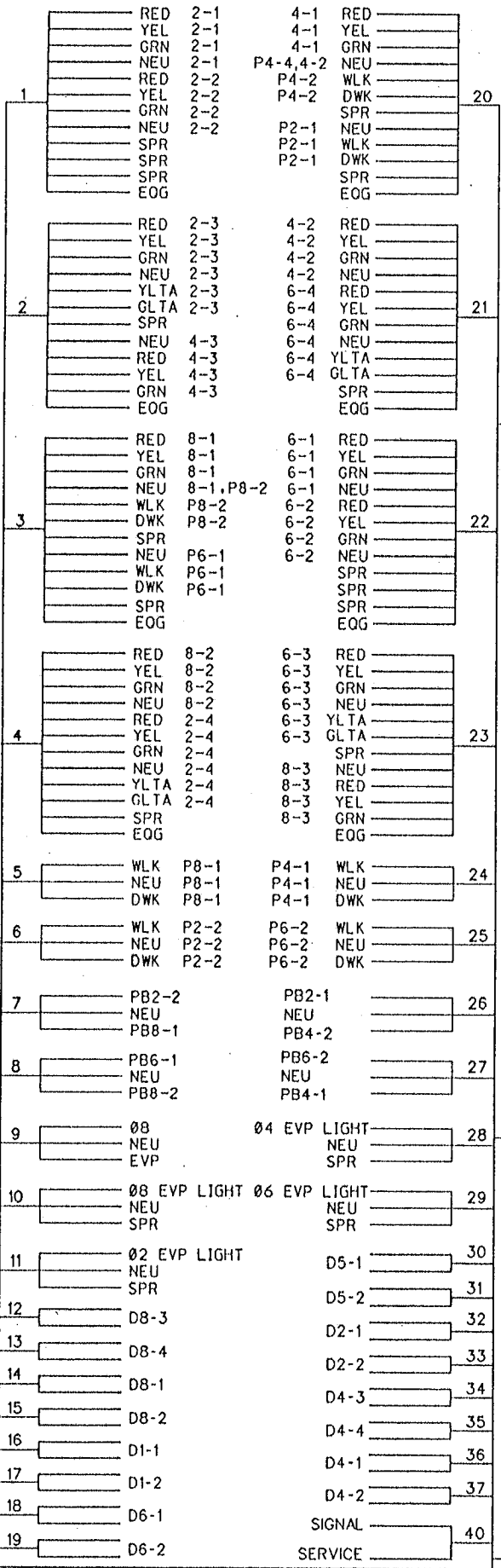
ELECTRICAL ENG. CERT.
 I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Paul J. Bloomberg
 PAUL BLOMBERG
 DATE: 01/20/94 REG. NO.: 13719

INTERSECTION LAYOUT
 COUNTY ROAD 132 (85TH AVE NW)
 AND SPRINGBROOK DRIVE
 FRIDLEY/COON RAPIDS/BLAINE, MN

CSM
 Orr Schelen
 Schelen & Associates, Inc.
 Engineers & Architects - Planners & Surveyors
 300 First Place Center • 5775 Wayzata Boulevard
 Minneapolis, MN 55416-1228 • 612-336-3775

PLAN NO. 3

CONTROLLER CABINET



CONDUCTOR COLOR CODING

R	BLK	2-1/C#10
O	WH	
BL		
WH	R	3/C#12
R/BLK	WH	
O/BLK	BLK	
BL/BLK		
WH/BLK	R OR O	
BLK	WH OR YEL	3/C#20
BLK/WH	BLK OR BL	
G/BLK		
G		
	BLK	2/C#14
	CLEAR	
3-1/C#4	BLK	
	WH	
	BR	GR

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 DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Paul J. Blomberg
 PAUL BLOMBERG
 DATE: 01/31/94 REG NO: 13719

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

MSAP 114-130-02,
 MSAP 127-341-03, C.P. 93-06-132

REVISION NO. _____ DATE _____

SCALE: AS NOTED

DESIGN BY: _____

PLAN BY: _____

CHECKED BY: _____

COM. NO.: 511-400

RECORD COPY BY: _____

DATE: 01/31/94

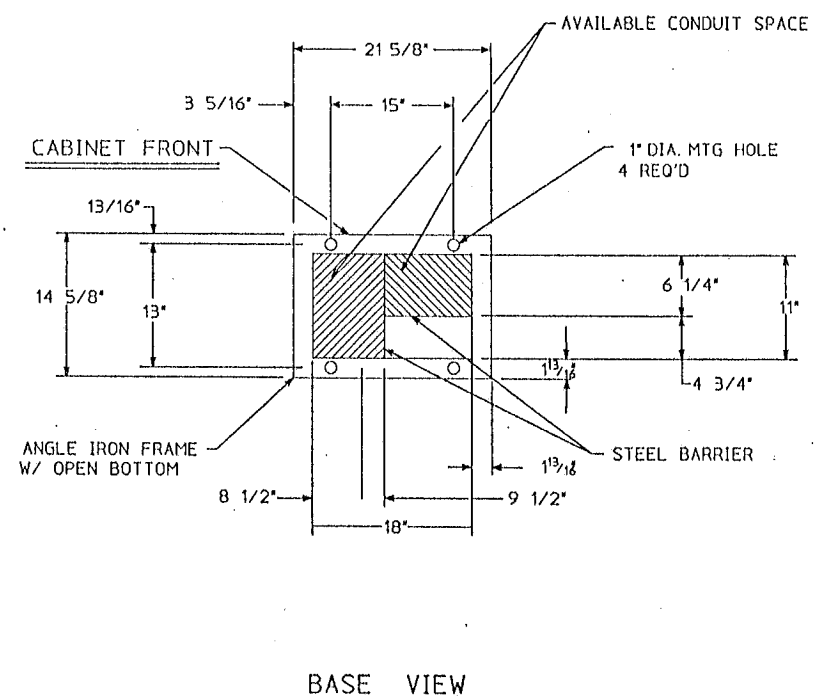
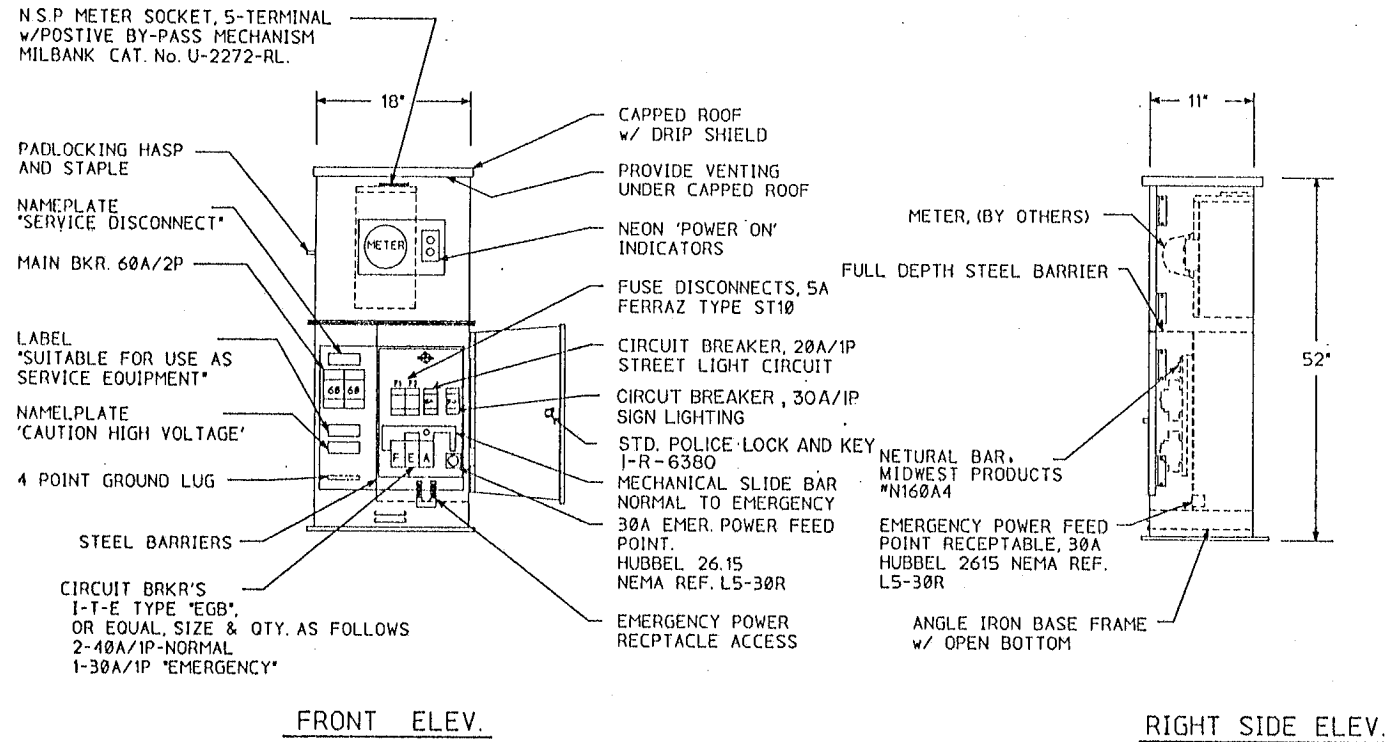
I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Ronald A. Berg
 RONALD A. BERG
 DATE: 01/31/94 REG NO: 19327

WIRING DIAGRAM
 COUNTY ROAD 182 (85TH AVE NW)
 AND SPRINGBROOK DRIVE
 C.P. 93-06-132
 FRIDLEY/COON RAPIDS/BLAINE, MN

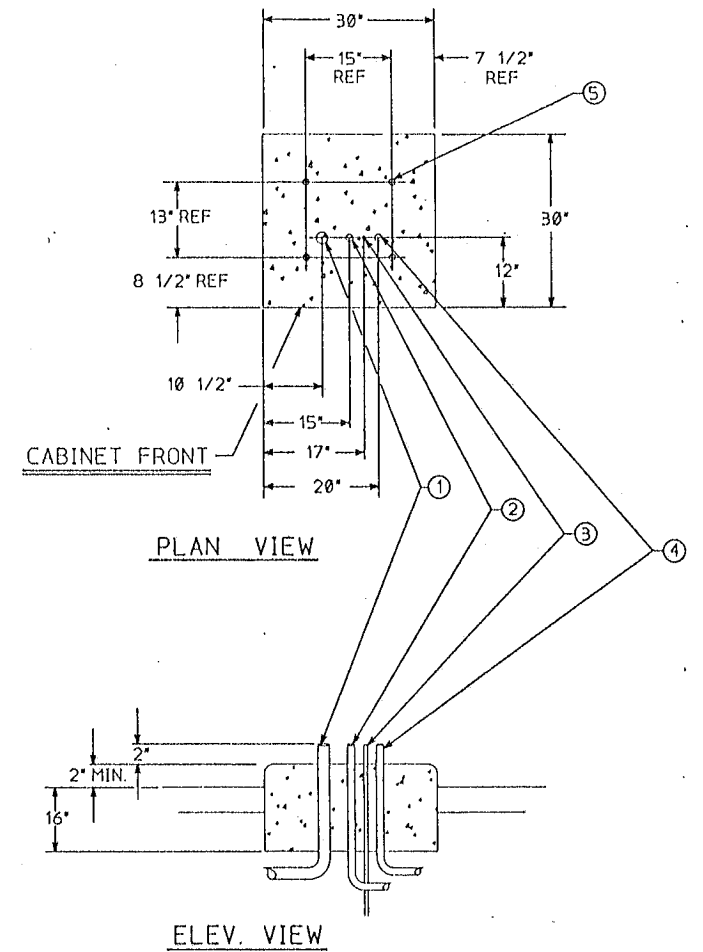
Ort Schelen
 Mayerton &
 Associates, Inc.
 Engineers - Architects - Planners - Surveyors
 300 Park Place Center - 5775 Wayzata Boulevard
 Minneapolis, MN 55416-1228 - 612-596-5775

PLAN NO. 4

SIGNAL SERVICE CABINET



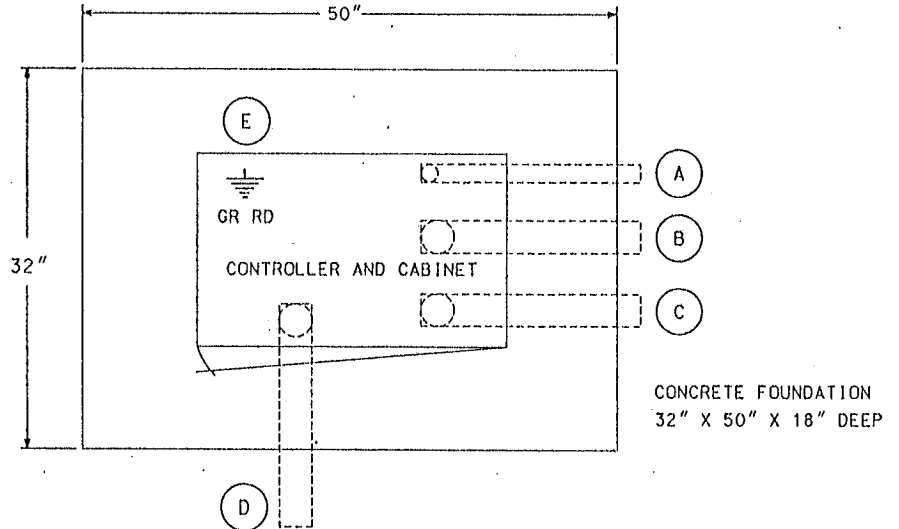
SERVICE CABINET FOUNDATION



CONSTRUCTION NOTES

ENCLOSURE SHALL BE FABRICATED FROM #12 GA. ALL WELDED COLD ROLLED STEEL FOR OUTDOOR WEATHER PROOF SERVICE. DOORS TO BE GASKETED, ALL HINGES, PINS AND LOCKS TO BE OF NON CORRODING CONSTRUCTION. CABINET TO BE PRIMED INSIDE AND OUT WITH RUST INHIBITTING PRIMER. FINISH PER MN/DOT #3527

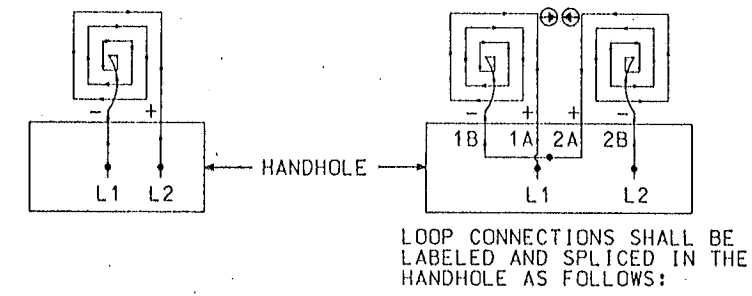
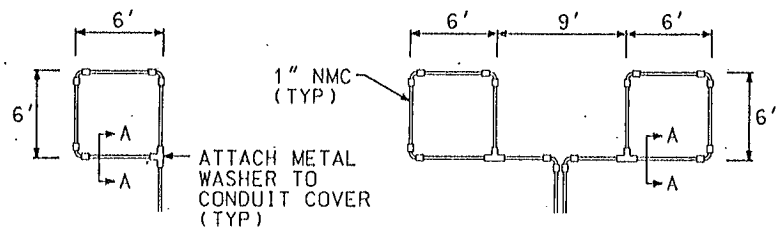
- (A) 1 1/4" R.S.C. FOR SERVICE CONNECTION TO HH 14
- (B) 4" R.S.C. TO HH 1
- (C) 4" R.S.C. TO HH 13
- (D) 3" R.S.C. STUBOUT, THREAD & CAP BOTH ENDS. (FOR FUTURE INTERCONNECT).
- (E) 5/8" DIA X 15' GROUND ROD



SEE INTERSECTION LAYOUT FOR CONDUIT & CABLE INFORMATION
CONTROLLER CABINET PAD LAYOUT
 NO SCALE

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 DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Paul J. Blumberg
 PAUL BLUMBERG
 DATE: 01/20/94 REG. NO.: 13719

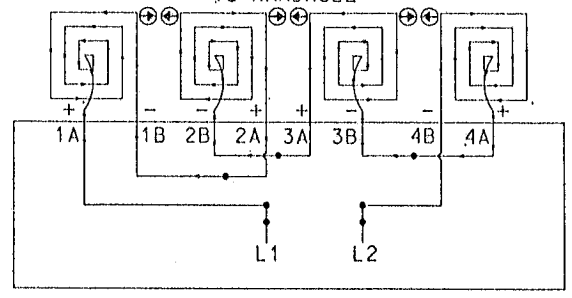
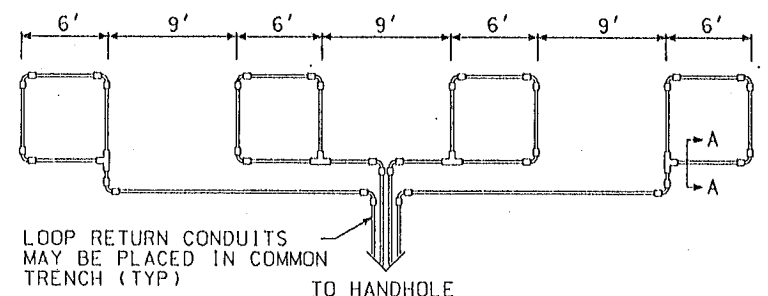
EXPLANATION	REVISION NO.	DATE
AS NOTED	SCALE:	DESIGN BY: CTR
		CHECKED BY: COAM: JCB
		DATE: 01/20/94
SERVICE EQUIP. AND CONTROLLER PAD COUNTY ROAD 182 (88TH AVE NW) AND SPRINGBROOK DRIVE C.P. 93-06-182 FRIDLEY/COON RAPIDS/BLAINE, MN		
ORT Schelen & Associates, Inc. Engineers - Architects - Planners - Surveyors 300 Park Place Center - 5775 W. 13th Avenue Minneapolis, MN 55416-1228 - 612-968-5775		
PLAN NO.	5	



L1 TO 1A
1B TO 2A
2B TO L2

LOOP DETECTOR
DETAIL 'A'
(LOOP PHASING FOR
SINGLE CONNECTION)

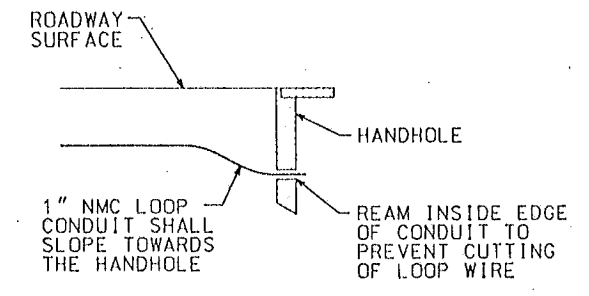
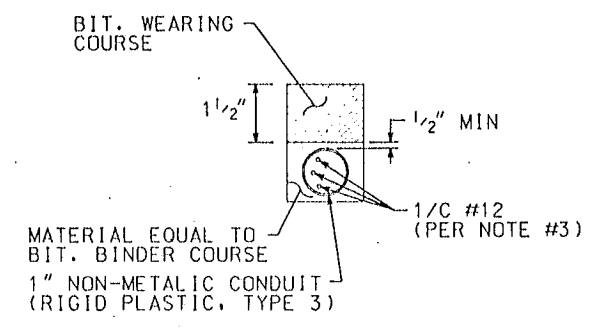
LOOP DETECTOR
DETAIL 'B'
(LOOP PHASING FOR
SERIES CONNECTION)



L1 TO 1A
1B TO 2A
2B TO 3A
3B TO 4A
4B TO L2

SPLICE CONTROL CABLE TO L1 & L2 IN HANDHOLE.
ALL CONDUCTORS SHALL BE TAGGED IN HANDHOLE
(1A, 1B, ECT)

LOOP DETECTOR
DETAIL 'C'
(LOOP PHASING FOR
SERIES CONNECTION)



SECTION A-A

DRAINAGE DETAIL

LOOP DETECTOR WIRING

- 1) ALL CORNERS SHALL BE 90° CONDUIT BENDS.
- 2) CONNECT WIRES IN HANDHOLES USING SPLICE KIT METHOD DESCRIBED IN THE SPECIAL PROVISIONS.
- 3) LOOP DETECTOR WIRES SHALL BE #12 AWG CROSSED LINKED POLYETHYLENE (XLP). SEE SPECIAL PROVISIONS.
- 4) LOOP LEAD IN WIRES SHALL BE TWISTED A MIN. OF (5) TURNS PER FOOT THROUGH THE CONDUIT TO THE HANDHOLE.
- 5) NMC DESIGNATES NON-METALLIC CONDUIT (SPEC. 3803)
- 6) LOOPS 6' x 6' THRU 6' x 14' SHALL HAVE (4) TURNS.
- 7) LOOPS 6' x 15' AND LARGER SHALL HAVE (2) TURNS.

LEGEND OF SYMBOLS

CONTROLLER AND SERVICE EQUIP. NO's	①
SIGNAL BASE NO.	②
SIGNAL FACE NO.	③
LUMINAIRE NO.	④
CONTROLLER AND CABINET	⑤
CONTROLLER AND CABINET - IN PLACE	⑥
HANDHOLE	⑦
HANDHOLE - IN PLACE	⑧
RIGID STEEL CONDUIT (RSC)	⑨
RIGID STEEL CONDUIT (RSC) - IN PLACE	⑩
SIGNAL FACE WITH BACKGROUND SHIELD	⑪
SIGNAL FACE W/O BACKGROUND SHIELD	⑫
SIGNAL FACE - IN PLACE	⑬
PEDESTRIAN INDICATORS	⑭
PEDESTRIAN INDICATORS - IN PLACE	⑮
PEDESTRIAN PUSH BUTTONS ON PEDESTAL OR POLE	⑯
PEDESTRIAN PUSH BUTTON STATION	⑰
TRAFFIC SIGNAL PEDESTAL	⑱
TRAFFIC SIGNAL PEDESTAL - INPLACE	⑲
TRAFFIC SIGNAL POLE AND MAST ARM	⑳
TRAFFIC SIGNAL POLE AND MAST ARM - IN PLACE	㉑
STREET LIGHT POLE AND LUMINAIRE	㉒
STREET LIGHT POLE AND LUMINAIRE - IN PLACE	㉓
MAST ARM AND LUMINAIRE	㉔
MAST ARM AND LUMINAIRE - INPLACE	㉕
WOOD POLE	㉖
WOOD POLE - IN PLACE	㉗
SOURCE OF POWER	㉘
RAILROAD SIGNAL - IN PLACE	㉙
RIGHT OF WAY LINE	㉚
CENTERLINE	㉛
EDGE OF ROADWAY	㉜
SHOULDERLINE	㉝
CURB LINE	㉞
STOP BAR	㉟

ABBREVIATIONS

3-1(EG)	SIGNAL HEAD PHASE "3" - NO. "1"	O	ORANGE
BL	BLUE	O/BLK	ORANGE WITH BLACK TRACER
BL/BLK	BLUE WITH BLACK TRACER	P1-(EG)	PEDESTRIAN INDICATION PHASE "2"-NO. "1"
BLK	BLACK	PB	PUSH BUTTON
BLK/WH	BLACK WITH WHITE TRACER	PB-2(EG)	PUSH BUTTON PHASE "2"-NO. "1"
BR. GR.	BARE GROUND	PEC	PHOTOELECTRIC CELL
CH. SW.	CHECK SWITCH	PED	PEDESTRIAN
CLR	CLEAR	R	RED
D2-1(EG)	DETECTOR PHASE "2" - NO. "1"	R&S	REMOVE AND SALVAGE
DWK	DON'T WALK	R/BLK	RED WITH BLACK TRACER
EOG	EQUIPMENT GROUND	RLTA	RED LEFT TURN ARROW
EVP	EMERGENCY VEHICLE PRE-EMPTION	RRTA	RED RIGHT TURN ARROW
F&I	FURNISH AND INSTALL	RSC	RIGID STEEL CONDUIT
FL	FLASH/FLASHING	SOP	SOURCE OF POWER
G	GREEN	SPR	SPARE
G/BLK	GREEN WITH BLACK TRACER	ST. LHT.	STREET LIGHT
GLTA	GREEN LEFT TURN ARROW	STA	STATION
GRN	GREEN	SW	SWITCH
GR. R.	GROUND ROD	SWD	SWITCHED
GRTA	GREEN RIGHT TURN ARROW	TDW	TELEPHONE DROP WIRE
GTHA	GREEN THRU ARROW	WH	WHITE
HH	HANDHOLE	WH/BLK	WHITE WITH BLACK TRACER
HPS	HIGH PRESSURE SODIUM	WLK	WALK
JB	JUNCTION BOX	YEL	YELLOW
LUM	LUMINAIRE	YLTA	YELLOW LEFT TURN ARROW
NEU	NEUTRAL	YRTA	YELLOW RIGHT TURN ARROW
NMC	NONMETALLIC CONDUIT	YTHA	YELLOW THRU ARROW

THESE STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY	
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
* 8117 F	PRECAST CONCRETE HANDHOLE
8118 C	SERVICE EQUIPMENT AND POLE
* 8119 C	GROUND MOUNTED CABINET FOUNDATION
* 8120 J	PA85 AND PA90 POLE FOUNDATION
* 8121 C	TRANSFORMER BASE AND POLE BASE PLATE
8122 C	PEDESTAL AND PEDESTAL BASE
* 8123 C	POLE AND MAST ARM
* 8124 D	MAST ARM SIGNAL HEAD MOUNTS
8126 E	PA100 POLE FOUNDATION
* 0005 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3124 B	METAL APRON CONNECTION
3221 C	CORRUGATED STEEL PIPE COUPLING BAND
7035 J	CONCRETE WALK AND CURB RETURNS AT ENTRANCES
7100 F	CONCRETE CURB AND GUTTERS

* - APPLIES TO THIS PROJECT

EXPLANATION

REVISION NO. DATE

SCALE: AS NOTED

PLAN BY: DESIGN BY: CTR

CHEK BY: COMMAND: 511-400

CHECKED BY: RBB

RECORD COPY BY: DATE

1-1-1987

THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF IT COMPLETLY ACCURATE AND CORRECT.

Ronald L. Bray

RONALD L. BRAY

DATE: 01/20/94

MISC. DETAILS

COUNTY ROAD 132 (85TH AVE NW) AND SPRINGBROOK DRIVE

C.P. 93-06-132

FRIDLEY/COON RAPIDS/BLAINE, MN

Ort Schelen & Kayeron Associates, Inc.

Engineers - Architects - Planners - Surveyors

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PLAN NO. 6