

NOTES:

- 1) SEE SPECIAL PROVISIONS FOR CONTRACTORS RESPONSIBILITY FOR THE LOCATION OF UTILITIES.
- 2) ALL SIGNAL FACES SHALL HAVE BACKGROUND SHIELDS.
- 3) SEE SPECIAL PROVISIONS FOR ANOKA COUNTY SERVICE CABINET DETAILS.
- 4) ALL HANDHOLES SHALL BE CONCRETE WITH TYPE 'C' COVERS.
- 5) LOOP DETECTOR WIRES SHALL BE CROSS LINKED POLYETHYLENE (XLP) IN 1" N.M.C. .SEE SPECIAL PROVISIONS AND DETAILS.
- 6) ALL PEDESTRIAN INDICATIONS SHALL BE 12"x12".
- 7) HUBS FOR POLE MOUNTED SIGNAL INDICATIONS SHALL BE PROVIDED ON 4 SIDES OF MAST ARM POLES. SEE SPECIAL PROVISIONS
- 8) DIRECTIONAL SIGN TO BE FURNISHED AND INSTALLED ON MAST ARMS AT POLES 1, 2, 3 AND 5. SEE SPECIAL PROVISIONS.
- 9) PEDESTRIAN PUSH BUTTON SIGNS TO BE FURNISHED AND INSTALLED BY OTHERS.

1 TYPE P90-A-30
P90 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 10B-POLE MOUNTED 90°
TYPE 10B-POLE MOUNTED 270°
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO H.H.11:
3"R.S.C.
2-12/c#12
1-3/c#12

2 TYPE P90-A-25
P90 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 10B-POLE MOUNTED 90°
TYPE 10B-POLE MOUNTED 270°
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO H.H.4:
3"R.S.C.
2-12/c#12
1-3/c#12

5 TYPE P90-A-30
P90 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 10B-POLE MOUNTED 90°
TYPE 10B-POLE MOUNTED 270°
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO H.H.12:
3"R.S.C.
2-12/c#12
1-3/c#12

3 TYPE P90-A-25
P90 POLE FOUNDATION
ONE WAY SIGNAL-OVERHEAD
TYPE 10B-POLE MOUNTED 90°
TYPE 10B-POLE MOUNTED 270°
EXTEND INTO H.H.8:
3"R.S.C.
2-12/c#12

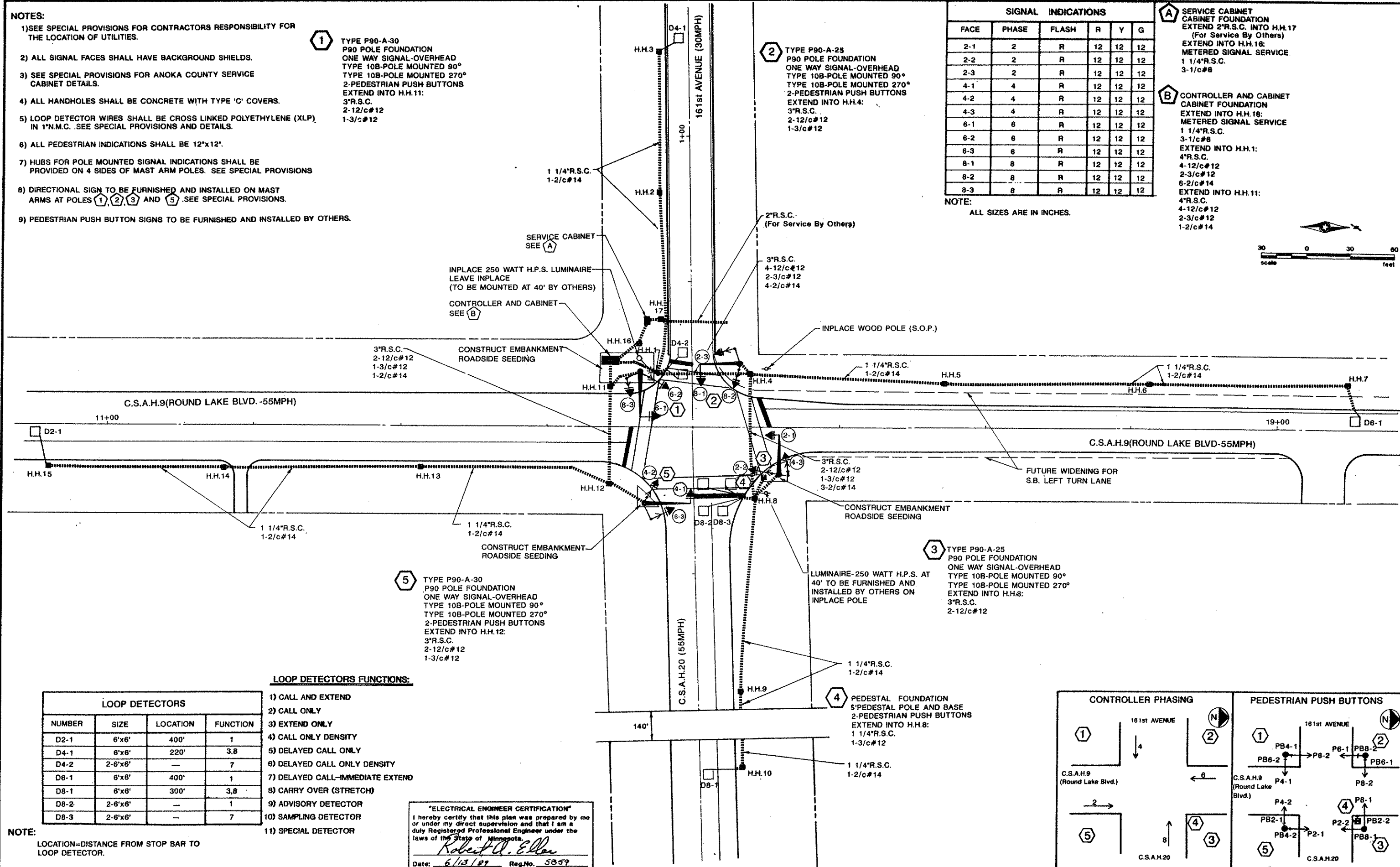
4 PEDESTAL FOUNDATION
5"PEDESTAL POLE AND BASE
2-PEDESTRIAN PUSH BUTTONS
EXTEND INTO H.H.8:
1 1/4"R.S.C.
1-3/c#12

SIGNAL INDICATIONS						
FACE	PHASE	FLASH	R	Y	G	
2-1	2	R	12	12	12	
2-2	2	R	12	12	12	
2-3	2	R	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	R	12	12	12	
6-2	6	R	12	12	12	
6-3	6	R	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 SIZES ARE IN INCHES.

A SERVICE CABINET
CABINET FOUNDATION
EXTEND 2"R.S.C. INTO H.H.17
(For Service By Others)
EXTEND INTO H.H.16:
METERED SIGNAL SERVICE
1 1/4"R.S.C.
3-1/c#8

B CONTROLLER AND CABINET
CABINET FOUNDATION
EXTEND INTO H.H.16:
METERED SIGNAL SERVICE
1 1/4"R.S.C.
3-1/c#8
EXTEND INTO H.H.1:
4"R.S.C.
4-12/c#12
2-3/c#12
6-2/c#14
EXTEND INTO H.H.11:
4"R.S.C.
4-12/c#12
2-3/c#12
1-2/c#14



LOOP DETECTORS FUNCTIONS:

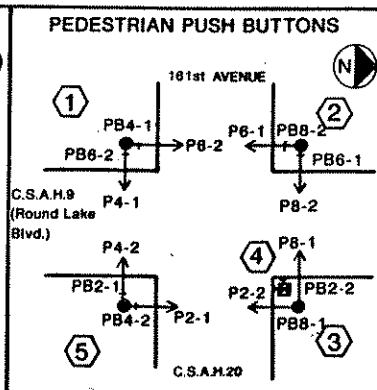
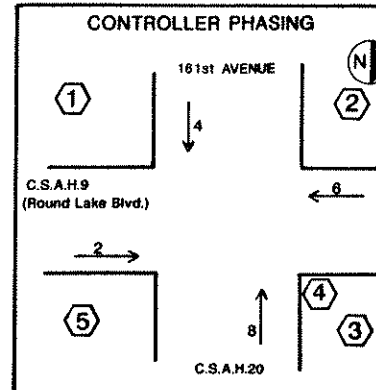
NUMBER	SIZE	LOCATION	FUNCTION
D2-1	6'x6'	400'	1
D4-1	6'x6'	220'	3,8
D4-2	2-6'x6'	—	7
D6-1	6'x6'	400'	1
D8-1	6'x6'	300'	3,8
D8-2	2-6'x6'	—	1
D8-3	2-6'x6'	—	7

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

NOTE:
LOCATION=DISTANCE FROM STOP BAR TO LOOP DETECTOR.

"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.
Robert A. E. Ellor
Date: 6/13/87 Reg.No. 5859

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.
Robert A. E. Ellor
Date: 6/13/87 Reg.No. 5859



NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED



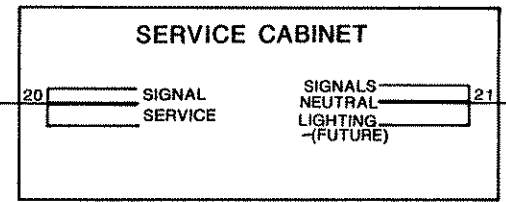
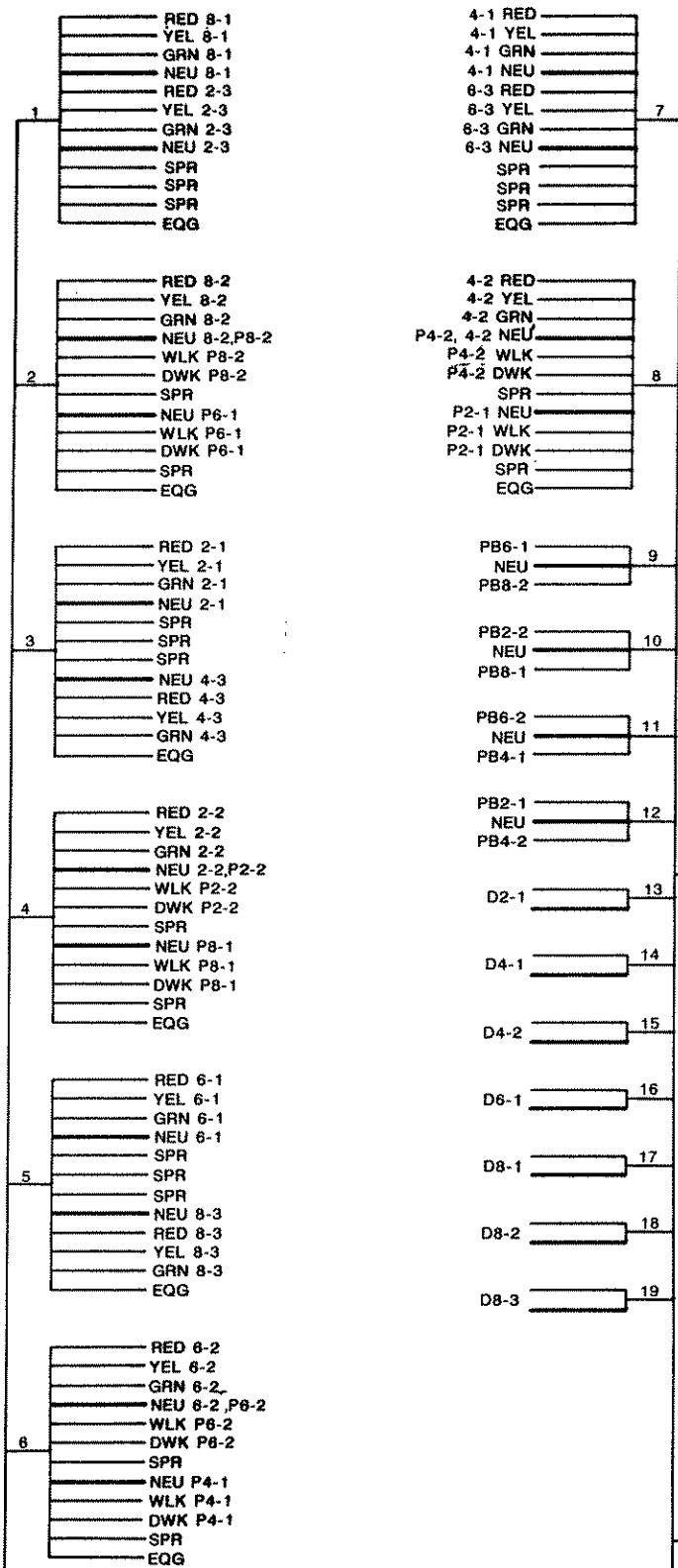
ANOKA COUNTY
C.P.88-29-09

SIGNAL SYSTEM "A"
INTERSECTION LAYOUT
C.S.A.H.9(ROUND LAKE BLVD.) AT
C.S.A.H.20(161ST AVE.)

FILE NO. 89181	2
DATE 3/28/90	9

BASE OVERLAY DRC INC.

CONTROLLER CABINET



"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.
Robert A. Elden
 Date: 6/13/97 Reg.No. 5859

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.
John Van Wormer
 Date: 7/16/97 Reg.No. 9089



ANOKA COUNTY
 C.P.88-29-09

SIGNAL SYSTEM 'A'
FIELD WIRING DIAGRAM
 C.S.A.H.9(Round Lake Blvd.) AT C.S.A.H.20(161st AVE)

FILE NO. 89181
 DATE 3/28/90
 3
 9

CONDUCTOR COLOR CODING

R	BLK	2-1/C#4
O	WH	2-1/C#6
BL		2-17/C#10
WH	R	
R/BLK	W	3/C#12
O/BLK	BLK	
BL/BLK	BLK	2/C#14
WH/BLK	CLEAR	
BLK		
BLK/WH	R OR O	
G/BLK	WH OR YEL	3/C#20
G	BLK OR BL	

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

NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED

BASE OVERLAY DRG. NO.

- NOTES:**
- SEE SPECIAL PROVISIONS FOR CONTRACTORS RESPONSIBILITY FOR THE LOCATION OF UTILITIES
 - ALL SIGNAL FACES SHALL HAVE BACKGROUND SHIELDS.
 - LUMINAIRE WITH P.E.C. AND CHECK SWITCH.
 - SEE SPECIAL PROVISIONS FOR ANOKA COUNTY SERVICE CABINET DETAILS.
 - ALL HANDHOLES SHALL BE CONCRETE WITH TYPE 'C' COVERS.
 - LOOP DETECTOR WIRES SHALL BE CROSS LINKED POLYETHYLENE (XLP) IN 1" N.M.C. SEE SPECIAL PROVISIONS AND DETAILS.
 - PEDESTRIAN INDICATIONS P2-1, P2-2, P6-1 AND P6-2 SHALL BE 9"x9" ALL OTHER PEDESTRIAN INDICATIONS SHALL BE 12"x12"
 - SEE SPECIAL PROVISIONS FOR DETAILS ON WOOD POLE ANCHORS.
 - SEE DETAIL SHEET 6 FOR WOOD POLE, SPAN WIRE MOUNTING AND PEDESTRIAN PUSH BUTTON DETAILS.

- A** SERVICE CABINET
CABINET FOUNDATION
EXTEND 2" R.S.C. TO INPLACE SPLICE BOX
3-1/c#6 SOLID COPPER CABLE (S.O.P.)
(For Service By Others)
EXTEND INTO H.H.14:
METERED SIGNAL SERVICE
1 1/4" R.S.C.
3-1/c#6
UNMETERED STREET LIGHT SERVICE
1" R.S.C.
2-1/c#10
BETWEEN H.H.13 AND H.H.14:
2" R.S.C.
2-1/c#10
- B** CONTROLLER AND CABINET
CABINET FOUNDATION
EXTEND INTO H.H.14:
METERED SIGNAL SERVICE
1 1/4" R.S.C.
3-1/c#6
EXTEND INTO H.H.1:
4" R.S.C.
4-2/c#14
EXTEND INTO H.H.13:
2-3" R.S.C.
8-12/c#12
5-3/c#12
6-2/c#14

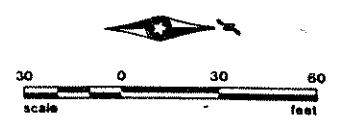
- 1** 45' WOOD POLE-CLASS 2
2-DOWN GUYS, METAL GUARDS, AND SCREW ANCHORS
TYPE 10B-WOOD POLE MOUNTED (8-3)
TYPE 10B-WOOD POLE MOUNTED (8-2)
LUMINAIRE-250 WATT H.P.S. AND MAST ARM
2-PEDESTRIAN PUSH BUTTONS AND SIGNS
METAL JUNCTION BOX
2" R.S.C. RISER AND WEATHERHEAD ABOVE JUNCTION BOX
1-12/c#12
EXTEND INTO H.H.13:
2" R.S.C. RISER BELOW JUNCTION BOX
2-12/c#12
1-3/c#12
EXTEND INTO H.H.13:
2-3" R.S.C. RISERS AND WEATHERHEADS
6-12/c#12
4-3/c#12
6-2/c#14
2-1/c#10

- 4** 45' WOOD POLE-CLASS 2
2-DOWN GUYS, METAL GUARDS, AND SCREW ANCHORS
TYPE 10B-WOOD POLE MOUNTED (1-2)
TYPE 10B-WOOD POLE MOUNTED (4-2)
2-PEDESTRIAN PUSH BUTTONS AND SIGNS
METAL JUNCTION BOX
3" R.S.C. RISER AND WEATHERHEAD ABOVE JUNCTION BOX
3-12/c#12
1-3/c#12
2-2/c#14
EXTEND INTO H.H.10:
1 1/4" R.S.C. RISER BELOW JUNCTION BOX
2-2/c#14

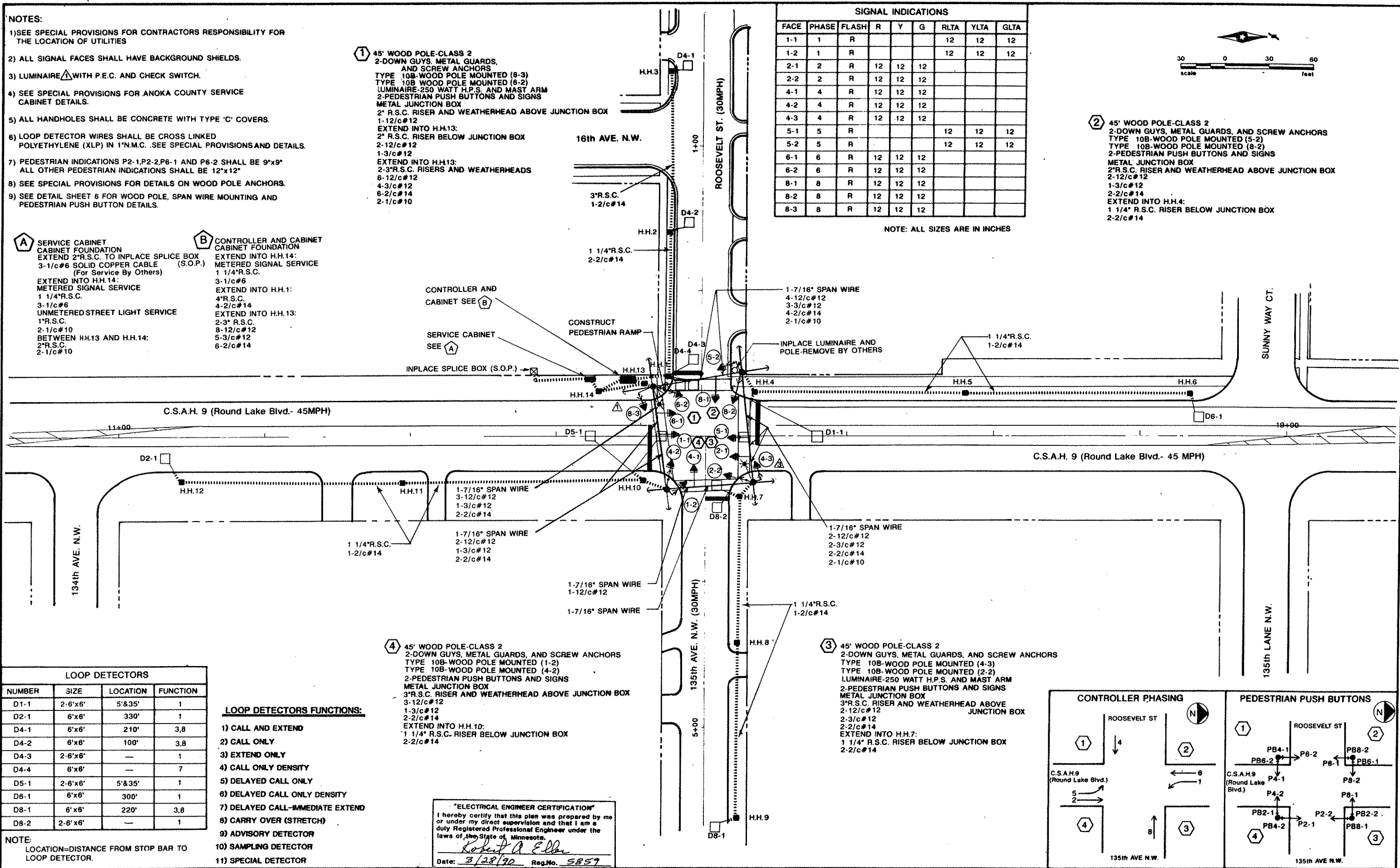
- 3** 45' WOOD POLE-CLASS 2
2-DOWN GUYS, METAL GUARDS, AND SCREW ANCHORS
TYPE 10B-WOOD POLE MOUNTED (4-3)
TYPE 10B-WOOD POLE MOUNTED (2-2)
LUMINAIRE-250 WATT H.P.S. AND MAST ARM
2-PEDESTRIAN PUSH BUTTONS AND SIGNS
METAL JUNCTION BOX
3" R.S.C. RISER AND WEATHERHEAD ABOVE JUNCTION BOX
2-12/c#12
2-3/c#12
2-2/c#14
EXTEND INTO H.H.7:
1 1/4" R.S.C. RISER BELOW JUNCTION BOX
2-2/c#14

SIGNAL INDICATIONS									
FACE	PHASE	FLASH	R	Y	G	RLTA	YLTA	GLTA	
1-1	1		R				12	12	12
1-2	1		R				12	12	12
2-1	2		R	12	12	12			
2-2	2		R	12	12	12			
4-1	4		R	12	12	12			
4-2	4		R	12	12	12			
4-3	4		R	12	12	12			
5-1	5		R				12	12	12
5-2	5		R				12	12	12
6-1	6		R	12	12	12			
6-2	6		R	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 SIZES ARE IN INCHES



- 2** 45' WOOD POLE-CLASS 2
2-DOWN GUYS, METAL GUARDS, AND SCREW ANCHORS
TYPE 10B-WOOD POLE MOUNTED (5-2)
TYPE 10B-WOOD POLE MOUNTED (8-2)
2-PEDESTRIAN PUSH BUTTONS AND SIGNS
METAL JUNCTION BOX
2" R.S.C. RISER AND WEATHERHEAD ABOVE JUNCTION BOX
2-12/c#12
1-3/c#12
2-2/c#14
EXTEND INTO H.H.4:
1 1/4" R.S.C. RISER BELOW JUNCTION BOX
2-2/c#14

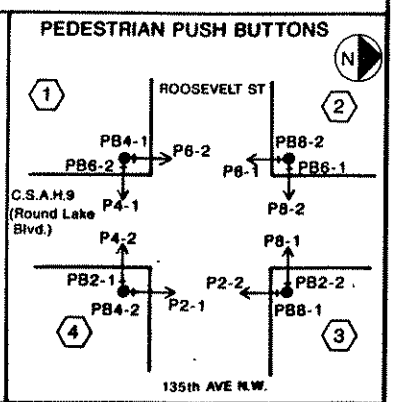
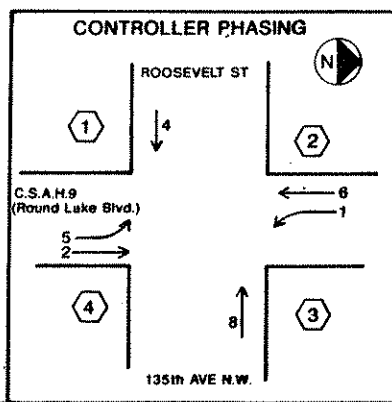


LOOP DETECTORS			
NUMBER	SIZE	LOCATION	FUNCTION
D1-1	2-6'x6'	5'&35'	1
D2-1	6'x6'	330'	1
D4-1	6'x6'	210'	3,8
D4-2	6'x6'	100'	3,8
D4-3	2-6'x6'	-	1
D4-4	6'x6'	-	7
D5-1	2-6'x6'	5'&35'	1
D6-1	6'x6'	300'	1
D8-1	6'x6'	220'	3,8
D8-2	2-6'x6'	-	1

- LOOP DETECTORS FUNCTIONS:**
- CALL AND EXTEND
 - CALL ONLY
 - EXTEND ONLY
 - CALL ONLY DENSITY
 - DELAYED CALL ONLY
 - DELAYED CALL ONLY DENSITY
 - DELAYED CALL-IMMEDIATE EXTEND
 - CARRY OVER (STRETCH)
 - ADVISORY DETECTOR
 - SAMPLING DETECTOR
 - SPECIAL DETECTOR

"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.
Robert A. Ellen
Date: 3/28/90 Reg. No. 5859

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.
Shawn W. Wimmer
Date: 3/28/90 Reg. No. 9089



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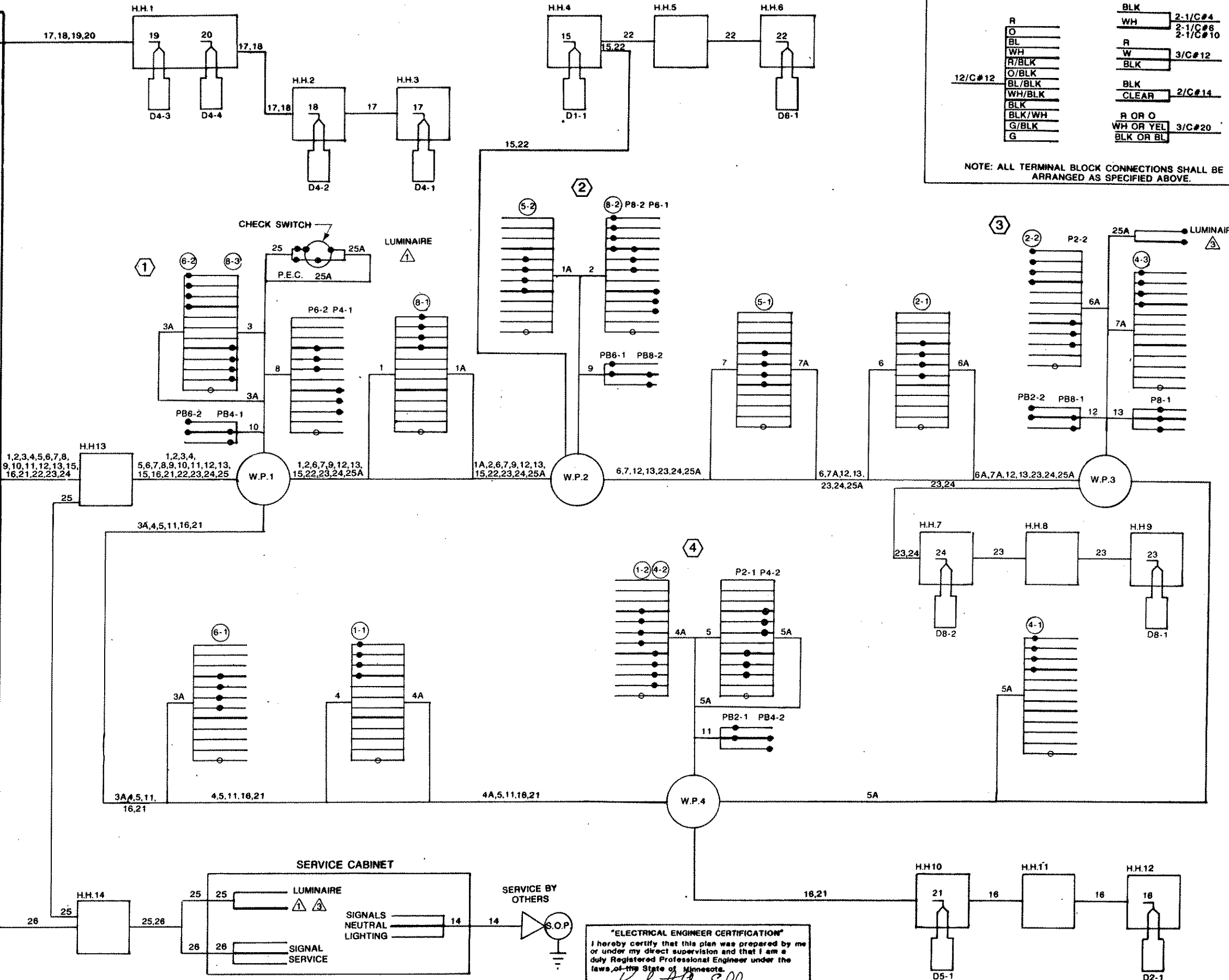
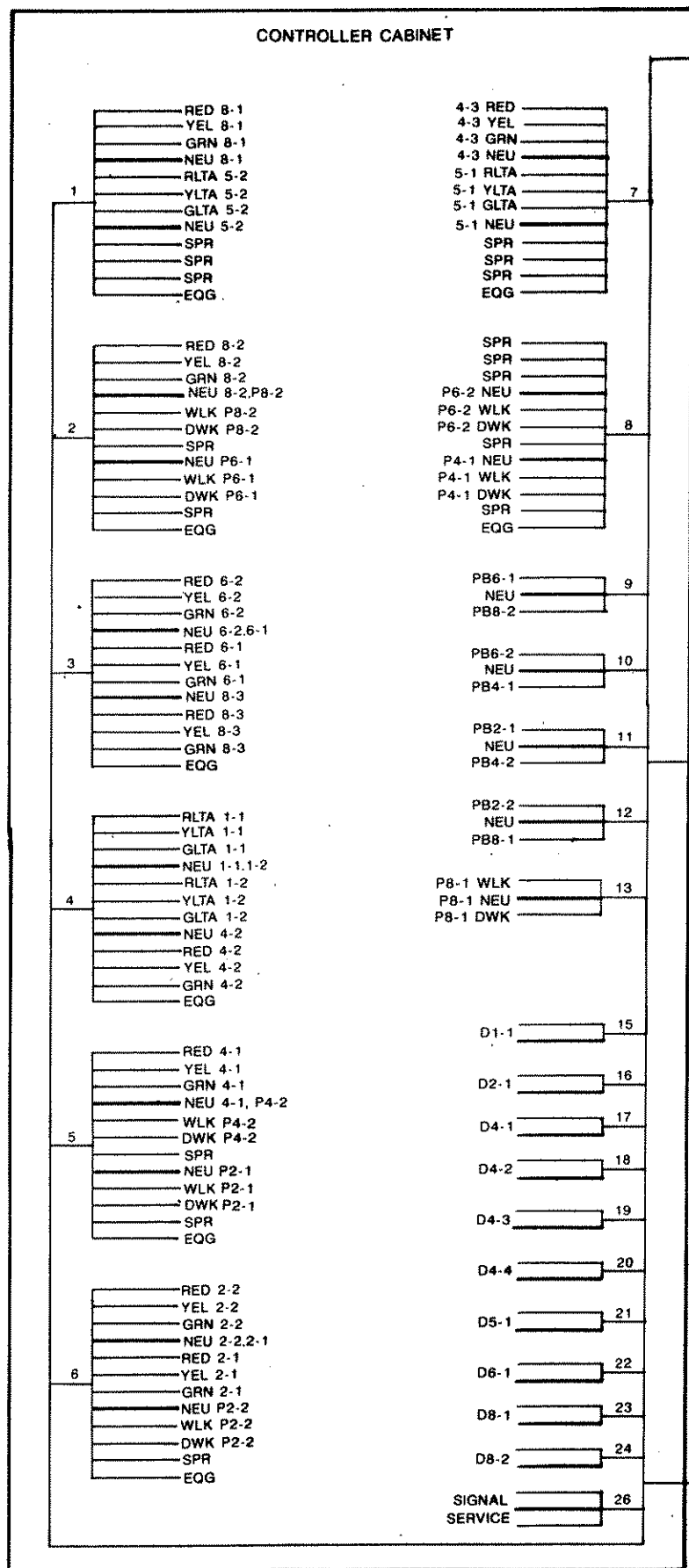
ANOKA COUNTY
C.P. 88-28-09

TRAFFIC SIGNAL SYSTEM INTERSECTION LAYOUT
C.S.A.H. 9 (Round Lake Blvd.) AT ROOSEVELT ST. (135th Ave.)
FILE NO. 89182
DATE 3/28/90
4
9

CONDUCTOR COLOR CODING

R	BLK	2-1/C#4
O	WH	2-1/C#6
BL	R	2-1/C#10
WH	W	3/C#12
R/BLK	BLK	
O/BLK	BLK	2/C#14
BL/BLK	CLEAR	
WH/BLK	R OR O	
BLK	WH OR YEL	3/C#20
BLK/WH	BLK OR BL	
G/BLK		
G		

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



"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.
Robert A. Ellor
 Date: 3/28/90 Reg. No. 5857

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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.
Glenn Tom Warner
 Date: 3/28/90 Reg. No. 9089



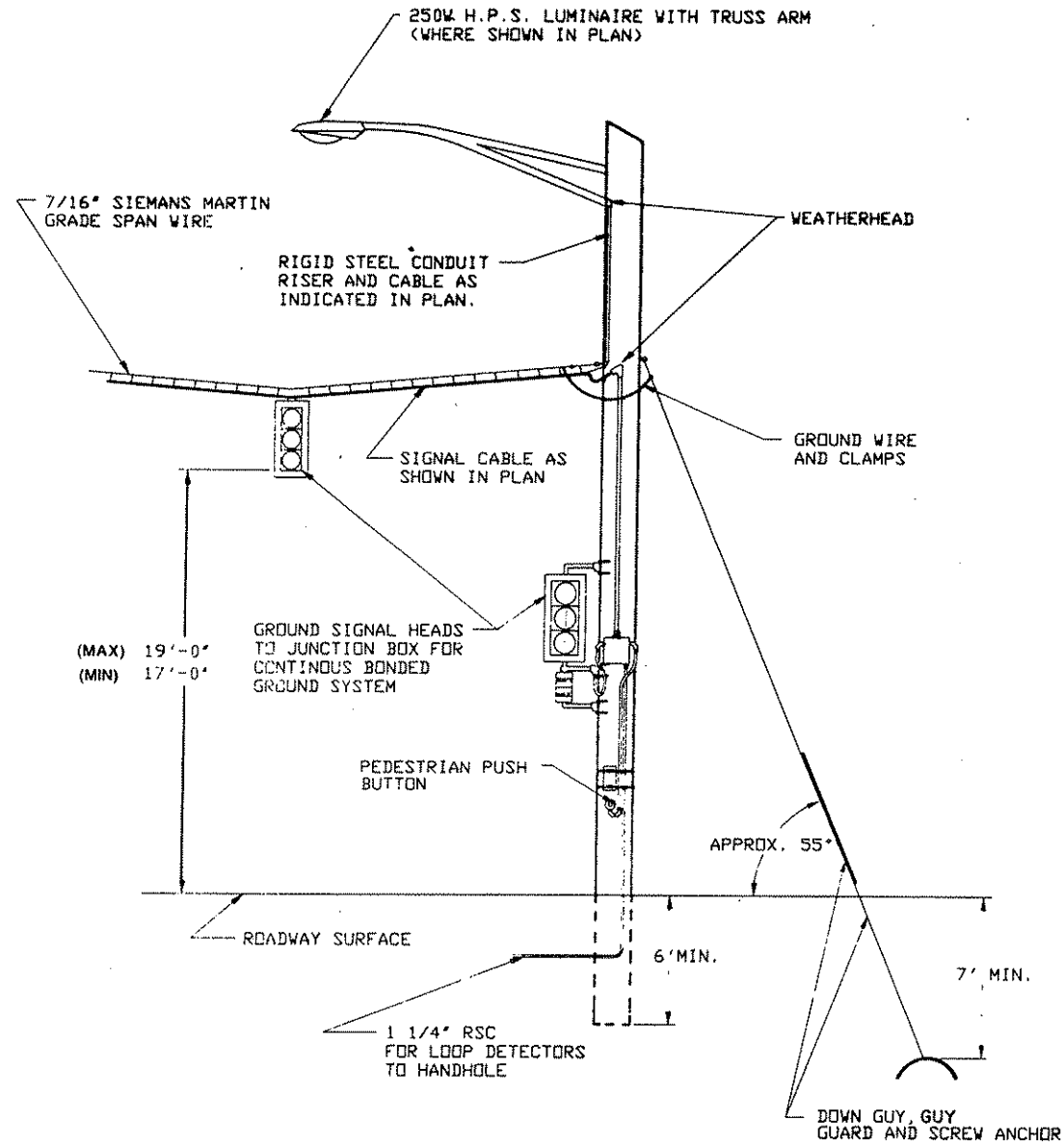
ANOKA COUNTY
 C.P. 88-28-09

TRAFFIC SIGNAL SYSTEM
 FIELD WIRING DIAGRAM
 C.S.A.H. 9 (Round Lake Blvd.) AT
 ROOSEVELT ST. (135th Ave.)

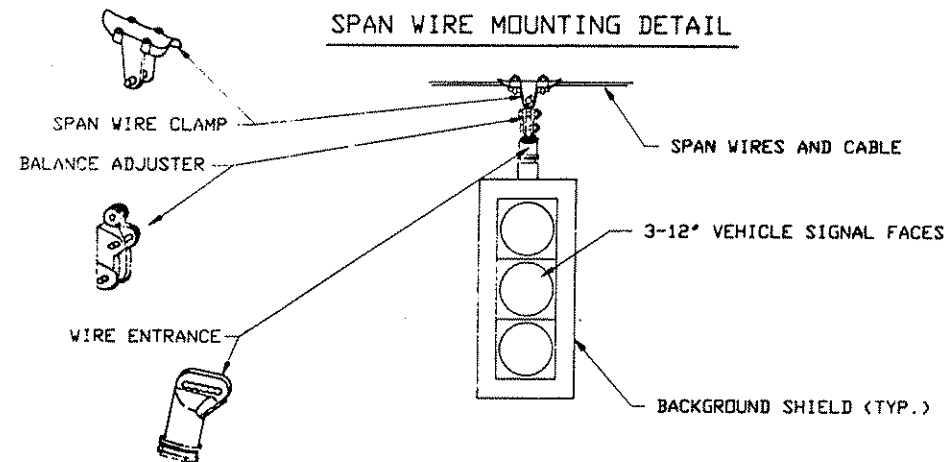
FILE NO.	89182
DATE	3/28/90
	5
	9

BASE OVERLAY DRG. NO.

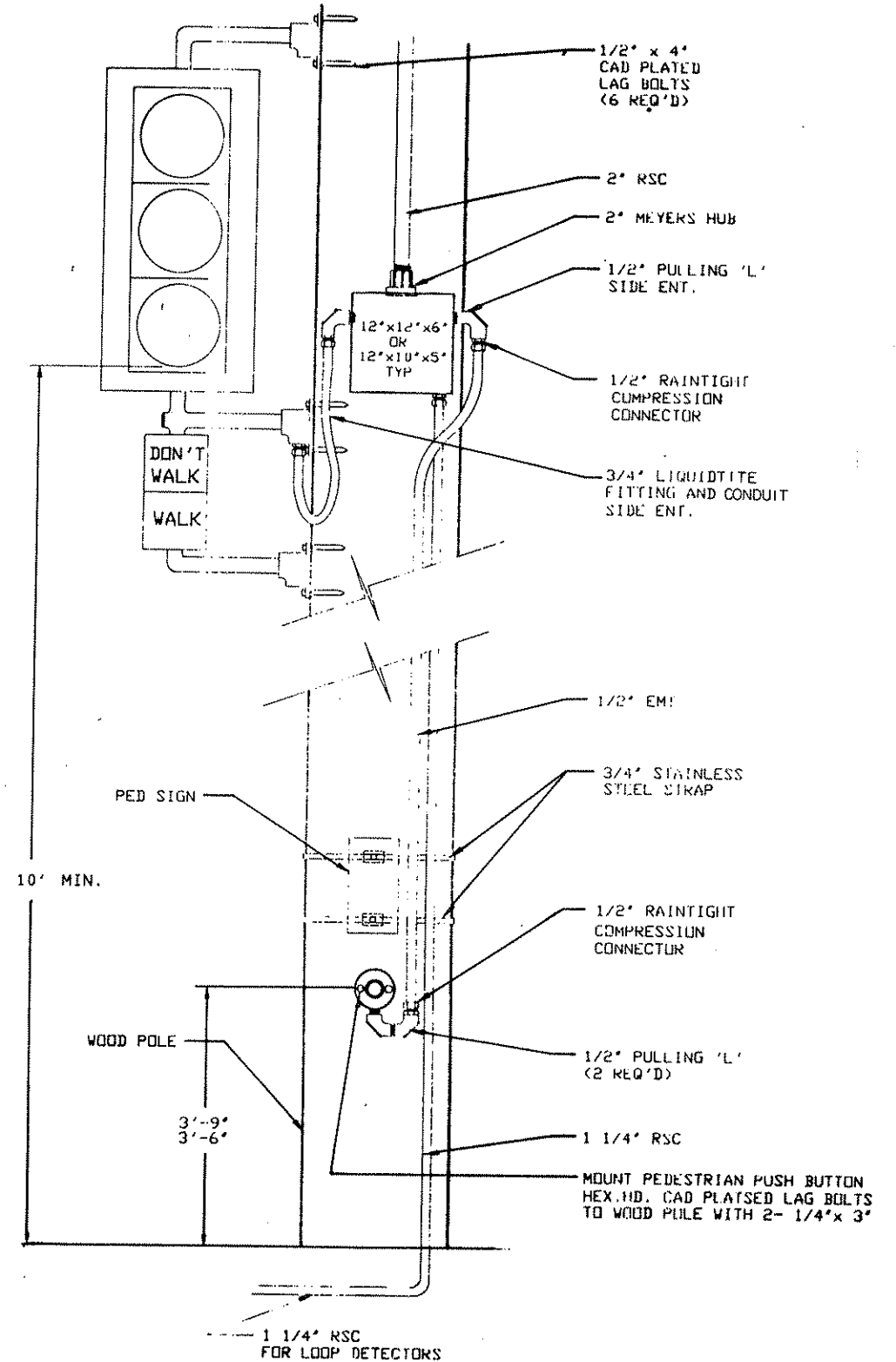
TEMPORARY POLE DETAIL



SPAN WIRE MOUNTING DETAIL



PED BUTTON WIRING DETAIL



SIGNAL SYSTEM "B"

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.
John Van Wormer
 Date 3.14.90 Reg. No. 9089



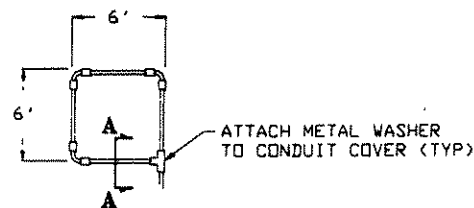
ANOKA COUNTY
 C.P. 88-28-09

TRAFFIC SIGNAL SYSTEM
 DETAILS
 C.S.A.H.9 (ROUND LAKE BLVD) AT
 ROOSEVELT ST (135th AVE)

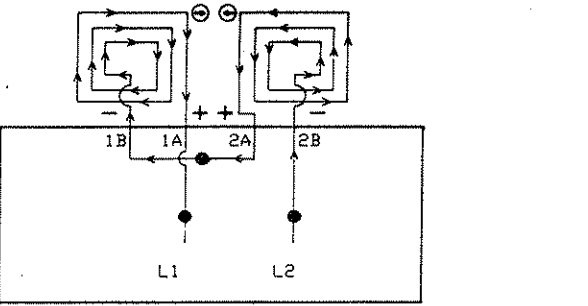
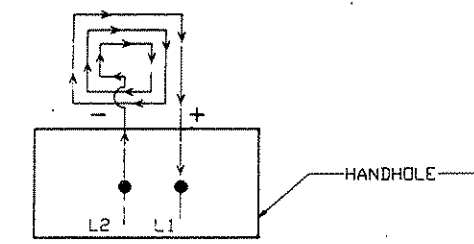
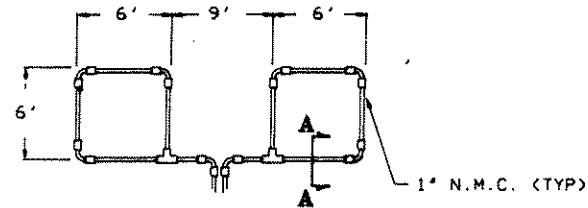
FILE NO. 89182
 DATE 3/28/90
 6
 9

NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED

LOOP DETECTOR DETAIL 'A'
 PLAN VIEW (NOT TO SCALE)
 (LOOP PHASING FOR SINGLE CONNECTION)

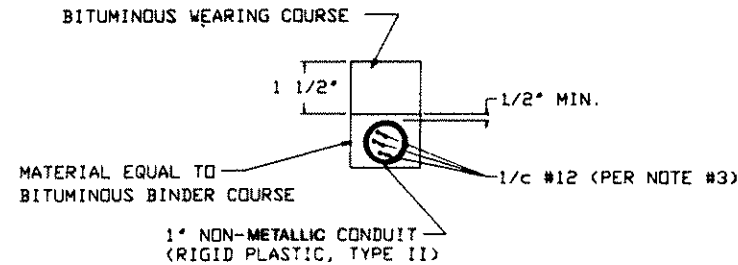


LOOP DETECTOR DETAIL 'B'
 PLAN VIEW (NOT TO SCALE)
 (LOOP PHASING FOR SERIES CONNECTION)

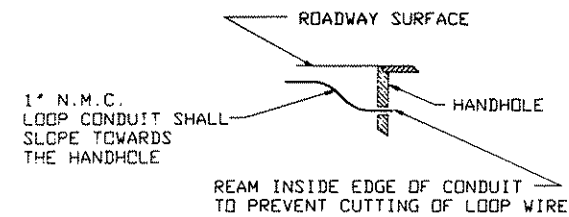


LOOP CONNECTIONS SHALL BE LABELED AND SPLICED IN THE HANDHOLE AS FOLLOWS:
 L1 TO 1A, 1B TO 2A, AND 2B TO L2.

CROSS SECTION A-A



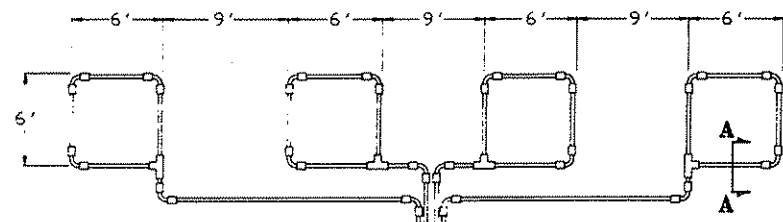
DRAINAGE DETAIL



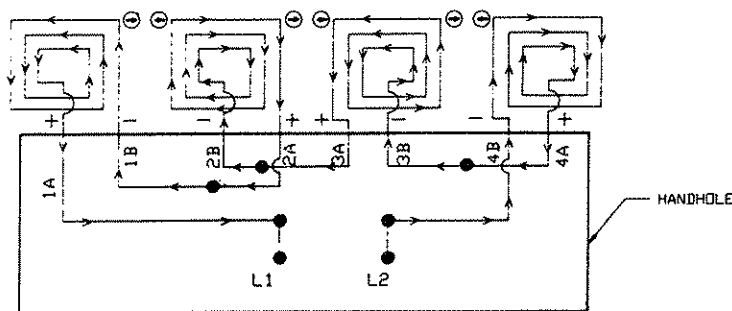
LOOP DETECTOR WIRING NOTES:

- 1) ALL CORNERS SHALL BE 90° CONDUIT BENDS
- 2) CONNECT WIRES IN HANDHOLES USING WESTERN UNION SPLICE, SOLDERED, TAPED, & WATERPROOFED.
- 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) N.M.C. DESIGNATES NON-METALLIC CONDUIT (SPEC. 3803)
- 6) LOOPS 6'x6' THRU 6'x14' SHALL HAVE (3) TURNS.
- 7) LOOPS 6'x15' AND LARGER SHALL HAVE TWO (2) TURNS.

LOOP DETECTOR DETAIL 'C'
 PLAN VIEW (NOT TO SCALE)
 (LOOP PHASING FOR SERIES CONNECTION)

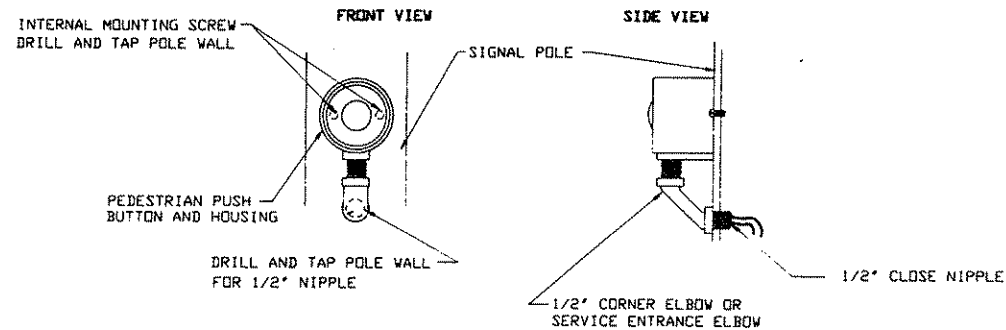


LOOP RETURN CONDUITS MAY BE PLACED IN COMMON TRENCH. (TYP)



LOOP CONNECTIONS SHALL BE LABELED AND SPLICED IN THE HANDHOLE AS FOLLOWS:
 L1 TO 1A, 1B TO 2A, 2B TO 3A, 3B TO 4A AND 4B TO L2.
 SPLICE CONTROL CABLE TO L1 & L2 IN HANDHOLE. ALL CONDUCTORS SHALL BE TAGGED IN HANDHOLE (1A, 1B, ETC.)

PEDESTRIAN PUSH BUTTON DETAIL (SIGNAL SYSTEM "A")



ABBREVIATIONS EQUIPMENT AND INDICATIONS

- RED - RED
- YEL - YELLOW
- GRN - GREEN
- W/LK - WALK
- NEU - NEUTRAL
- DVK - DON'T WALK
- LUM - LUMINAIRE
- DNL - DOWNLIGHT
- H.H. - HANDHOLE
- EGG - EQUIPMENT GROUND
- R.S.C. - RIGID STEEL CONDUIT
- GLTA - GREEN LEFT TURN ARROW
- YRTA - YELLOW RIGHT TURN ARROW
- D2-1(eg) - DETECTOR-PHASE*2'
- GR.R - GROUND ROD
- SER. - SERVICE
- P2 - 2 PEDESTRIAN INDICATIONS
- 2-1(eg) - SIGNAL HEADS-PHASE*2'
- SPR. - SPARE CONNECTORS
- N.M.C. - NON METALLIC CONDUIT
- E.V.P. - EMERGENCY VEHICLE PRE-EMPTION
- J.B. - JUNCTION BOX
- V.P. - WOOD POLE
- P.E.C. - PHOTOELECTRIC CELL

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 HAND HOLE
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
8126 C	P-100 POLE FOUNDATION
8130 D	SAW CUT LOOP DETECTORS
0004 A	SPECIFICATION REFERENCE
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

LEGEND OF SYMBOLS

- CONTROLLER AND SERVICE EQPT NOS. _____
- SIGNAL BASE NO. _____
- 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 INDICATORS _____
- PEDESTRIAN INDICATORS IN PLACE _____
- PEDESTRIAN PUSH BUTTONS 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 _____
- CENTERLINE _____
- EDGE OF ROADWAY _____
- SHOULDERLINE _____
- CURB LINE _____
- STOP BAR _____

CONDUCTOR COLOR CODE

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

NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED

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.
Alan Van Worman
 Date 3/28/90 Reg No. 9089



ANOKA COUNTY
 C.P. 88-28-09
 C.P. 88-29-09

TRAFFIC SIGNAL SYSTEM DETAILS
 SIGNAL SYSTEMS "A" AND "B"

FILE NO. 89181-82	7
DATE 3/28/90	9

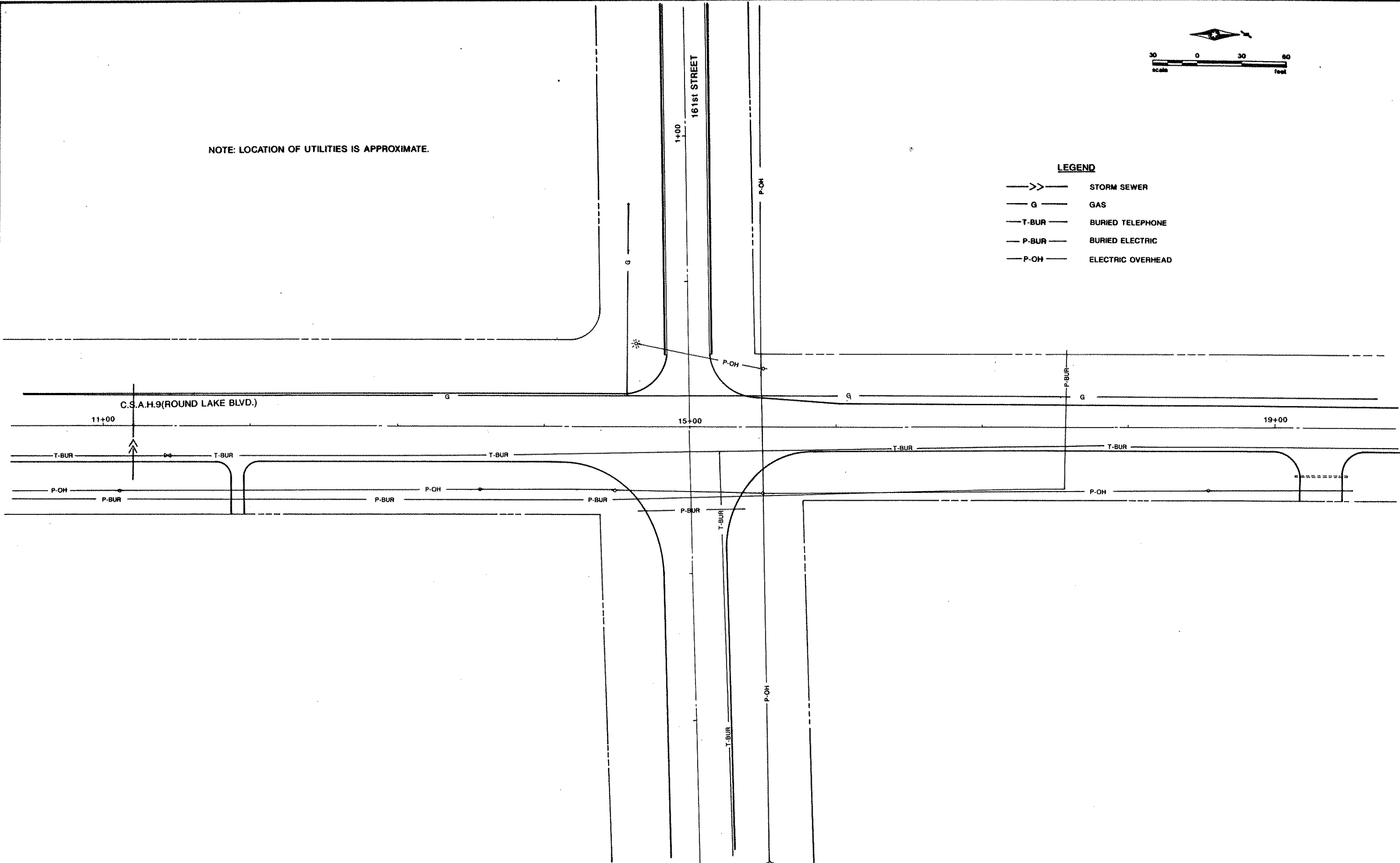
BASE OVERLAY DRG NO.



NOTE: LOCATION OF UTILITIES IS APPROXIMATE.

LEGEND

- >>— STORM SEWER
- G — GAS
- T-BUR — BURIED TELEPHONE
- P-BUR — BURIED ELECTRIC
- P-OH — ELECTRIC OVERHEAD



NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED

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 Date 3/28/90 Reg. No. 9089

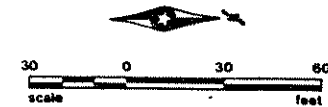


ANOKA COUNTY
C.P.88-29-09

TRAFFIC SIGNAL SYSTEM
UTILITY
C.S.A.H.9(ROUND LAKE BLVD.) AT 161st STREET

FILE NO. 89181	8
DATE 3/28/90	9

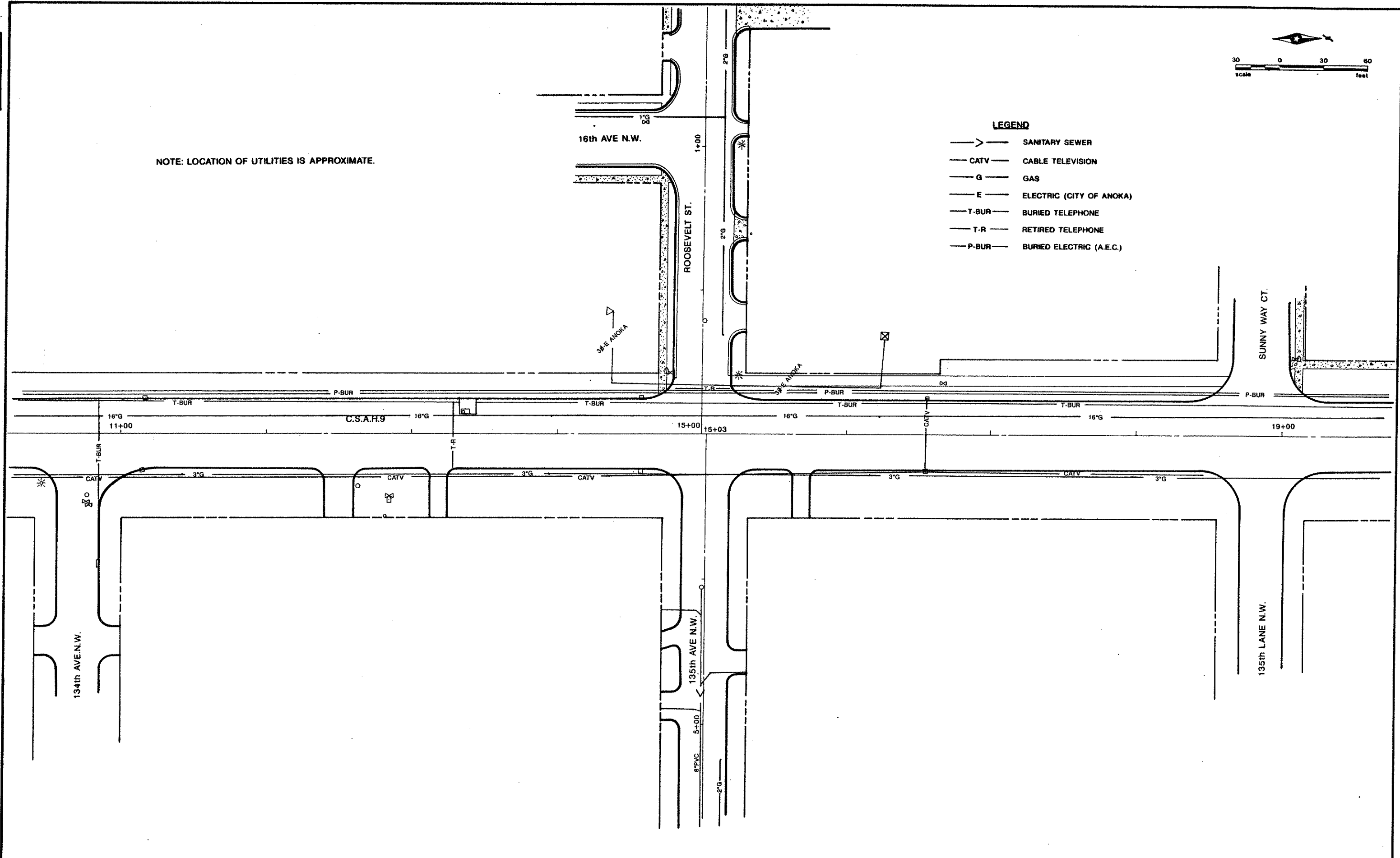
BASE OVERLAY DRG NO.



NOTE: LOCATION OF UTILITIES IS APPROXIMATE.

LEGEND

- >— SANITARY SEWER
- CATV — CABLE TELEVISION
- G — GAS
- E — ELECTRIC (CITY OF ANOKA)
- T-BUR — BURIED TELEPHONE
- T-R — RETIRED TELEPHONE
- P-BUR — BURIED ELECTRIC (A.E.C.)



NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED

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 Date: 3/28/90 Reg No. 9089



ANOKA COUNTY
 C.P.88-28-09

TRAFFIC SIGNAL SYSTEM
 UTILITY
 C.S.A.H.9(Round Lake Blvd.) AT
 ROOSEVELT ST.(135th Ave.)

FILE NO.	89182	9
DATE	3/28/90	9