

SIGNING
 F&I OVERHEAD TYPE D SIGNS, SEE DETAILS. (SEPARATE PAY ITEM).
 F&I OVERHEAD TYPE R10-12 (24" X 30") SIGN ON MAST ARM POLE 1 AND 3.
 PEDESTRIAN PUSH BUTTON SIGNS TYPE 10-4b (9" X 12") WITH SYMBOL MESSAGE.

SIGNAL SYSTEM OPERATION
 THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
 PHASE 1 AND 5 ARE EXCLUSIVE/PERMISSIVE LEFT TURNS.
 PHASES 1 AND 5 ARE NON-LOCKED DETECTION.
 PHASES 2,3,4,6 AND 8 ARE LOCK DETECTION.
 PHASES 2 & 6 ARE ON VEHICLE RECALL.

1-6PR#19 DIRECT BURIED SEE INTERCONNECT SHEET xx

(A) EQUIPMENT PAD - SEE DETAILS
 SERVICE CABINET EXTEND INTO H.H.1
 4" RSC
 4-3/C #12
 EXTEND INTO H.H.16
 4" RSC
 3-1/C #4

(1) PA90 POLE FOUNDATION
 TYPE PA90-A-35-D40-10 (DAVIT AT 350")
 2 - SWING AWAY HINGES
 2 - ONE WAY SIGNALS OVERHEAD MOUNTED (0 FT, 18 FT FROM END)
 1 - TYPE 10A POLE MOUNTED AT 0°
 1 - TYPE 10A POLE MOUNTED AT 270°
 2 - PEDESTRIAN PUSH BUTTONS AT 0° AND 270°
 1 - EVP DETECTOR, CONFIRMATORY AND LIGHT OVERHEAD MOUNTED AT 6 FT FROM END OF MAST ARM
 LIGHT (PHASE 1,6) MOUNTED 6 FT FROM END OF MAST ARM
 LUMINAIRE - 200 WATT HPS AT 350°
 EXTEND INTO H.H.2
 4" RSC
 2 - 12/C #12
 4 - 3/C #12
 1 - 3/C #20

BETWEEN SERVICE AND CONTROLLER CABINET
 2" RSC
 2-1/C #6
 1-1/C #6 (BARE)
 EXTEND FROM H.H.16 TO SERVICE POLE
 4" RSC WITH DRAIN TILE AND 3-2/C TDW
 3-1/C #4
 TO BE COMPLETED BY POWER COMPANY

(B) INPLACE POWER POLE
(C) THE BACK OF THE LOOP DETECTOR SHALL BE PLACED 120' FROM THE CROSS WALK

(2) PA100 POLE FOUNDATION
 TYPE PA100-A-40-D40-10 (DAVIT AT 350")
 2 - SWING AWAY HINGES
 2 - ONE WAY SIGNALS OVERHEAD MOUNTED (0 FT, 18 FT FROM END)
 1 - TYPE 10A POLE MOUNTED AT 0°
 1 - TYPE 10A POLE MOUNTED AT 270°
 2 - PEDESTRIAN PUSH BUTTONS AT 0° AND 270°
 1 - EVP DETECTOR, CONFIRMATORY AND LIGHT OVERHEAD MOUNTED AT 6 FT FROM END OF MAST ARM
 LIGHT (PHASE 3,8) MOUNTED 6 FT FROM END OF MAST ARM
 LUMINAIRE - 200 WATT HPS AT 350°
 EXTEND INTO H.H.5
 4" RSC
 2 - 12/C #12
 4 - 3/C #12
 1 - 3/C #20

VEHICLE DETECTION

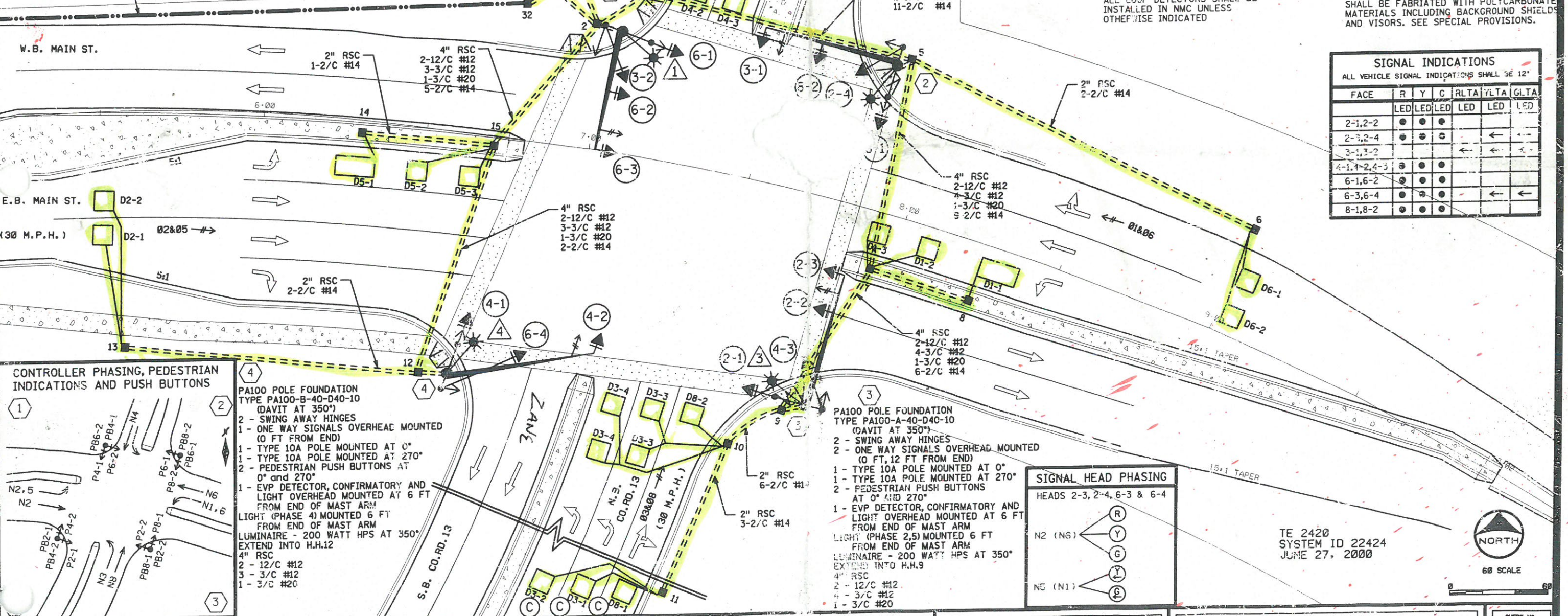
NO.	SIZE (FT)	FUNCTION	LOCATION
D1-1	6x12	3	AS SHOWN
D1-2, D1-3	6x6	1	AS SHOWN
D2-1, D2-2	6x6	1	AS SHOWN
D3-1, D3-2	(2) 6x6	3	120
D3-3, D3-4	6x6	1	AS SHOWN
D4-1	6x6	1	120
D4-2	6x6	7	AS SHOWN
D4-3	6x6	1	AS SHOWN
D5-1	6x12	3	AS SHOWN
D5-2	6x6	1	AS SHOWN
D6-1, D6-2	6x6	1	AS SHOWN
D8-1	6x6	1	120
D8-2	6x6	7	AS SHOWN

LOOP FUNCTION:
 (1) = CALL & EXTEND
 (3) = EXTEND ONLY
 (7) = DELAY CALL - IMMEDIATE EXTEND
 ALL LOOP DETECTORS SHALL BE INSTALLED IN NMC UNLESS OTHERWISE INDICATED

- NOTES:**
- POLE AND DETECTOR LOCATIONS WILL BE VERIFIED IN THE FIELD BY THE TRAFFIC ENGINEER PRIOR TO INSTALLATION.
 - A " HALF COUPLING SHALL BE FURNISHED APPROXIMATELY 6' FROM END OF THE MAST ARM ON EACH POLE.
 - ALL PEDESTRIAN INDICATIONS SHALL BE ONE-SECTION HAND/WALKING PERSON INDICATIONS AND THE SYMBOLS SHALL BE ILLUMINATED WITH LED'S. SEE SPECIAL PROVISIONS.
 - ALL SIGNAL FACES SHALL HAVE BACKGROUND SHIELDS.
 - EACH LUMINAIRE SHALL HAVE A PHOTO ELECTRIC CELL AND STREET LIGHT CHECK SWITCH.
 - ALL VEHICLE INDICATIONS SHALL BE ILLUMINATED WITH LED'S. SEE SPECIAL PROVISIONS.
 - ALL NEW LOOPS SHALL BE INSTALLED IN NMC EXCEPT AS NOTED IN CHART.
 - SEE DETAIL SHEET FOR PAVEMENT AND CROSSWALK MARKINGS.
 - ALL VEHICLE AND PEDESTRIAN INDICATIONS SHALL BE FABRICATED WITH POLYCARBONATE MATERIALS INCLUDING BACKGROUND SHIELDS AND VISORS. SEE SPECIAL PROVISIONS.

SIGNAL INDICATIONS
 ALL VEHICLE SIGNAL INDICATIONS SHALL BE 12"

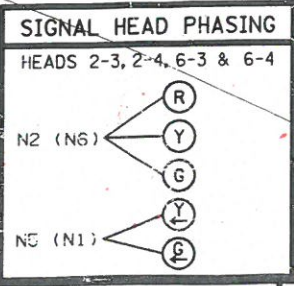
FACE	R	Y	G	RLTA	YLTA	GLTA
	LED	LED	LED	LED	LED	LED
2-1,2-2	●	●	●			
2-3,2-4	●	●	●	←	←	←
3-1,3-2				←	←	←
4-1,4-2,4-3	●	●	●			
6-1,6-2	●	●	●			
6-3,6-4	●	●	●	←	←	
8-1,8-2	●	●	●			



CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS

(1) PA100 POLE FOUNDATION
 TYPE PA100-B-40-D40-10 (DAVIT AT 350")
 2 - SWING AWAY HINGES
 1 - ONE WAY SIGNALS OVERHEAD MOUNTED (0 FT FROM END)
 1 - TYPE 10A POLE MOUNTED AT 0°
 1 - TYPE 10A POLE MOUNTED AT 270°
 2 - PEDESTRIAN PUSH BUTTONS AT 0° AND 270°
 1 - EVP DETECTOR, CONFIRMATORY AND LIGHT OVERHEAD MOUNTED AT 6 FT FROM END OF MAST ARM
 LIGHT (PHASE 4) MOUNTED 6 FT FROM END OF MAST ARM
 LUMINAIRE - 200 WATT HPS AT 350°
 EXTEND INTO H.H.12
 4" RSC
 2 - 12/C #12
 3 - 3/C #12
 1 - 3/C #20

(3) PA100 POLE FOUNDATION
 TYPE PA100-A-40-D40-10 (DAVIT AT 350")
 2 - SWING AWAY HINGES
 2 - ONE WAY SIGNALS OVERHEAD MOUNTED (0 FT, 12 FT FROM END)
 1 - TYPE 10A POLE MOUNTED AT 0°
 1 - TYPE 10A POLE MOUNTED AT 270°
 2 - PEDESTRIAN PUSH BUTTONS AT 0° AND 270°
 1 - EVP DETECTOR, CONFIRMATORY AND LIGHT OVERHEAD MOUNTED AT 6 FT FROM END OF MAST ARM
 LIGHT (PHASE 2,5) MOUNTED 6 FT FROM END OF MAST ARM
 LUMINAIRE - 200 WATT HPS AT 350°
 EXTEND INTO H.H.9
 4" RSC
 2 - 12/C #12
 4 - 3/C #12
 1 - 3/C #20



TE 2420
 SYSTEM ID 22424
 JUNE 27, 2000



DESIGNED BY: CHR DRAWN BY: BAS
 APPROVED BY: HDP JOB NUMBER: 808200J
 CAD DATE: 6-26-2000
 CAD FILE: ar:\oad\808200j\elg\808200j-elg-loy3.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 REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE: 6/26/00 REG. NO.: 12007

NO.	DATE	REVISION DESCRIPTION

1725 ENERGY PARK DRIVE
 ST. PAUL, MINNESOTA 55108
 (651) 644-4389
Howard R. Green Company
 CONSULTING ENGINEERS

CITY OF ELK RIVER
 TRAFFIC CONTROL SIGNAL SYSTEM
 ELK RIVER, MINNESOTA 2000

INTERSECTION LAYOUT S.A.P. 204-113-09
 MAIN ST. AND CO. RD. 13

SHEET NO.
 XX
 OF
 XX