

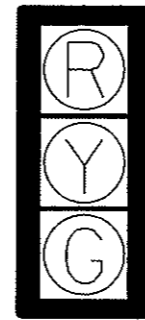
Conductors		Cable 1 (12-12)		Cable 2 (12-12)		Cable 3 (12-12)		Cable 4 (12-12)		Head	Indication
Base	Tracer	Head	Indication	Head	Indication	Head	Indication	Head	Indication	Head	Indication
1	Black		Spare		Spare		Spare		Spare		
2	White		Neutral		Neutral		Neutral		Neutral		
3	Red	1, 2	Red	3, 4, 5	Red	6, 7	Red	8, 9, 10	Red		
4	Green		Ground		Ground		Ground		Ground		
5	Orange	1, 2	Yellow	3, 4, 5	Yellow	6, 7	Yellow	8, 9, 10	Yellow		
6	Blue	1, 2	Green	3, 4, 5	Green	6, 7	Green	8, 9, 10	Green		
7	White	Black	Spare		Spare		Spare		Spare		
8	Red	Black	P1	Don't walk	P4	Don't walk	P5	Don't walk	P8	Don't walk	
9	Green	Black	P1	Walk	P4	Walk	P5	Walk	P8	Walk	
10	Orange	Black	P2	Don't walk	P3	Don't walk	P6	Don't walk	P7	Don't walk	
11	Blue	Black	P2	Walk	P3	Walk	P6	Walk	P7	Walk	
12	Black	White		Spare		Spare		Spare		Spare	

Detector loops

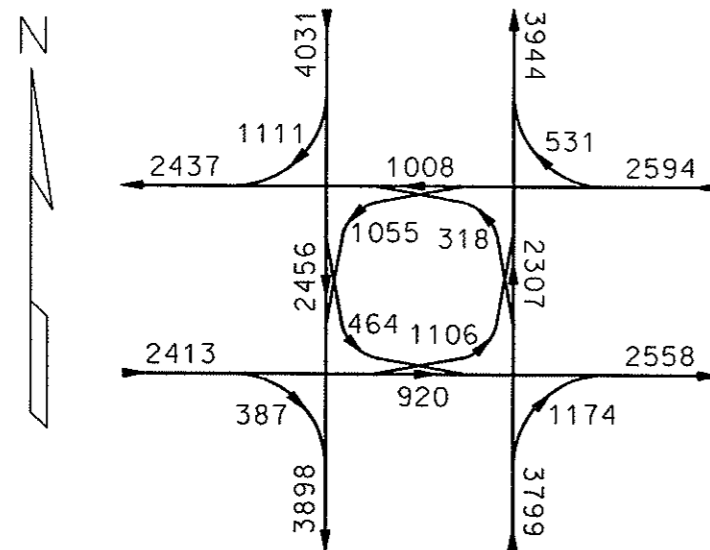
Loop No.	Amplifier No.	No. of turns	Size	Type of loop	Conductor LF	Saw slot LF	Microloop dbi probe set ea
1	1	3	6' x 6'	Calling	120	39	-
2	1	3	6' x 6'	Calling	96	27	-
3	2	-	-	Passage	-	-	1
4	2	-	-	Passage	-	-	1
5	3	3	6' x 6'	Calling	136	47	-
6	3	3	6' x 6'	Calling	114	36	-
7	4	-	-	Passage	-	-	1
8	4	-	-	Passage	-	-	1
9	5	3	6' x 6'	Calling	122	40	-
10	5	3	6' x 6'	Calling	100	29	-
11	6	-	-	Passage	-	-	1
12	6	-	-	Passage	-	-	1
13	7	3	6' x 6'	Calling	120	39	-
14	7	3	6' x 6'	Calling	98	28	-
15	8	-	-	Passage	-	-	1
16	8	-	-	Passage	-	-	1
Total					906	285	8



Heads P1, P2, P3, P4, P5, P6, P7, & P8 (12" lenses)

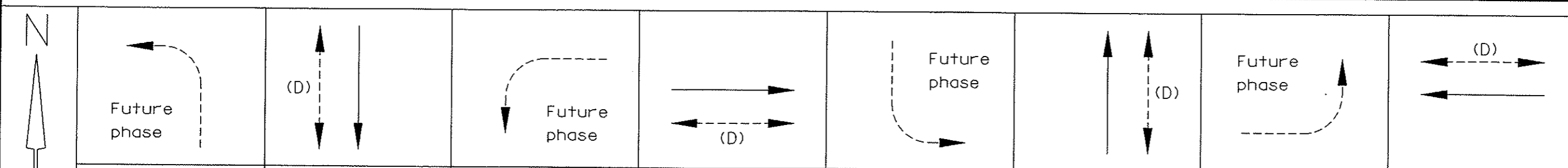


Heads 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 (12" lenses)



Estimated 1997 ADT

Traffic signals
 Conductors, heads, detector loops, and traffic volumes
 6th Av SE (ND 1806) & 3rd St SE
 Mandan, ND



Head No.	Phase 1				Phase 2				Phase 3				Phase 4				Phase 5				Phase 6				Phase 7				Phase 8							
	R/W	Clear to Ø			R/W	Clear to Ø			R/W	Clear to Ø			R/W	Clear to Ø			R/W	Clear to Ø			R/W	Clear to Ø			R/W	Clear to Ø			R/W	Clear to Ø						
1					G	Y	(C)	Y																												
2					G	Y	(C)	Y																												
3																																				
4																									G	Y	(C)	Y								
5																									G	Y	(C)	Y								
6																					G	Y	(C)	Y												
7																					G	Y	(C)	Y												
8									G	Y	(C)	Y																								
9									G	Y	(C)	Y																								
10									G	Y	(C)	Y																								

On phase	Non-conflicting phase allowed to time concurrently
1	Future phase
2	6
3	Future phase
4	8
5	Future phase
6	2
7	Future phase
8	4

Blank squares denote a red indication.

(C) When one phase is on alone, any nonconflicting phase may start timing concurrently without a clearance interval. (See Chart "A")

(D) Only upon pedestrian actuation.

Traffic signals
 Controller phasing
 6th Av SE (ND 1806) &
 3rd St SE
 Mandan, ND