**GENERAL NOTE**

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

CONFIGURATION WITH HEAD NUMBERS

3-H	3-V	4-VLFY
R Y G	R 3, 4, 5 / Y 8, 9, 10 / G 11, 13 / 14, 16	R / Y / FY / G 1, 2 / 6, 7
12, 15		

MONOTUBE STRUCTURE NUMBERS

SB5	S-70-0353
SB10	S-70-0354

NOTE: SIGNAL HEADS # 1 & # 6 REQUIRE TUNNEL VISORS

STH 76
45 MPH Posted Speed Limit

2" COMMUNICATION CONDUIT (to S70-0679)

190' TO NEAR RIGHT SIGNAL
350' TO NEAR RIGHT SIGNAL
470' TO NEAR RIGHT SIGNAL

470' TO NEAR RIGHT SIGNAL
350' TO NEAR RIGHT SIGNAL
190' TO NEAR RIGHT SIGNAL

Overlap "A"
Overlap "C"

STH 76
45 MPH Posted Speed Limit

Green Valley Road

Updated 10-27-2016 (Added Communications Conduit)

LEGEND

PULL BOX 12" X 24"	⊕
PULL BOX 24" X 36"	◑
SIGNAL STANDARD, PEDESTAL BASE	
SIGNAL POLE, MONOTUBE ARM	
LUMINAIRE	
CONTROL CABINET BASE	⊠
2" CONDUIT (unless otherwise noted)	— — —
SIGNAL HEAD NUMBER MOUNTING CONFIGURATION	
LOOP DETECTOR (in 1 " conduit)	
LUMINAIRE (under permit)	

TRAFFIC CONTROL SIGNAL
STH 76 & GREEN VALLEY ROAD
TOWN OF VINLAND
WINNEBAGO COUNTY

SIGNAL NO. 70-1301   CONTROLLER TYPE: EPAC TS1

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 10-31-08   Robert J. Schuurmans
REGION TRAFFIC ENGINEER

APPROVED
Date 11-3-2008   Joanna L. Bush
STATE TRAFFIC ENGINEER

REGION CONTACT: RJS
DESIGNED BY: RJS
REVISED BY: RJS

PAGE 1 OF 2

REVISION

Rev. No.	ADD MONOTUBES & FYA			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
2	Date	By	Date	By
	5-6-2015	RJS	7-1-2015	JLB
12-4-09	CHANGE PHASES 1 & 5 FROM PROTECTED ONLY, TO PROTECTED/PERMISSIVE, DUE TO SPEED LIMIT CHANGE.			

PROJECT NO: 3700-30-06   HWY: STH 76   COUNTY: WINNEBAGO   TRAFFIC CONTROL SIGNAL S70-1301   SHEET   E

SEQUENCE OF OPERATION

Phase indicators (top row): Ø1 = left-turn arrow · Ø2 = OL "A" (left arrow) · Ø3 = NOT USED · Ø4 = down arrow

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **		Ø2 R/W	Ø2 CLEAR TO **		Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	6, 7	G	-	-		-	-			-	-	-
Ø2	3, 4, 5	R	R	R	G	Y	R			R	R	R
Ø3												
Ø4	11, 12, 13	R	R	R	R	R	R			G	Y	R
Ø5	1, 2	-	-	-	-	-	-			-	-	-
Ø6	8, 9, 10	R	R	R	R	R	R			R	R	R
Ø7												
Ø8	14, 15, 16	R	R	R	R	R	R			R	R	R
OL "A"	6, 7	-	Y	R	FY	Y	R			R	R	R
OL "B"												
OL "C"	1, 2	R	R	R	R	R	R			R	R	R
OL "D"												

Phase indicators (bottom row): Ø5 = left-turn arrow · Ø6 = OL "C" (arrow) · Ø7 = NOT USED · Ø8 = up arrow

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **		Ø6 R/W	Ø6 CLEAR TO **		Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	6, 7	-	-	-	-	-	-			-	-
Ø2	3, 4, 5	R	R	R	R	R	R			R	R
Ø3											
Ø4	11, 12, 13	R	R	R	R	R	R			R	R
Ø5	1, 2	G	-	-	-	-	-			-	-
Ø6	8, 9, 10	R	R	R	G	Y	R			R	R
Ø7											
Ø8	14, 15, 16	R	R	R	R	R	R			G	Y R
OL "A"	6, 7	R	R	R	R	R	R			R	R
OL "B"											
OL "C"	1, 2	-	Y	R	FY	Y	R			R	R
OL "D"											

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION — CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1				6x30	2
12	2	X			1	1				6x30	2
21	3	X			2	2				6x20	5
22	4	X			2	2			X	6x20	4
23	5	X			2	2				6x20	4
41	6	X			4	4		X		4x30	2
42	7	X			4	4		X		4x30	2
51	8	X			5	5				6x30	2
52	9	X			5	5				6x30	2
61	10	X			6	6				6x20	5
62	11	X			6	6			X	6x20	4
63	12	X			6	6				6x20	4
81	13	X			8	8		X		4x30	3
82	14	X			8	8		X		4x30	3
83	15	X			8	8				6x30	3

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/Ø	PHASE RECALL	PHASE ACTIVE
1				YES
2			MIN	YES
3				
4				YES
5				YES
6			MIN	YES
7				
8				YES

OVERLAP SPECIAL

	Protected	Permissive
OL "A"	1	2
OL "B"		
OL "C"	5	6
OL "D"		

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 or 6	2, 4, 8
2	5 or 6	1, 4, 8
3		
4	8	1, 2, 5, 6
5	1 or 2	4, 6, 8
6	1 or 2	4, 5, 8
7		
8	4	1, 2, 5, 6

TYPE OF INTERCONNECT/COMMUNICATION

CELL MODEM	
CLOSED LOOP	
TWISTED PAIR*	
FIBER OPTIC*	x
FIBER OPTIC (ETHERNET)	
RADIO	

TYPE OF COORDINATION

NONE	
TBC	x
TRAFFIC RESPONSIVE	
ADAPTIVE	

*LOCATION OF MASTER CONTROLLER NO: S70-2011
SIGNAL SYSTEM *: SS-0119

TYPE OF LIGHTING

BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	x
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT

NONE	x
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
3M	
LIFT BRIDGE	
QUEUE DETECTOR	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE FOR HAND CONTROL.
5. STREET LIGHT BOARD WITH HEAVY DUTY CONTACTOR REQUIRED FOR THE LUMINAIRES.

Updated 10-27-2016 (Added Communications Conduit)

STH 76 & GREEN VALLEY ROAD
TOWN OF VINLAND
WINNEBAGO COUNTY

SIGNAL NO. 70-1301
CONTROLLER TYPE: EPAC TS1
DATE: 7-1-2015   PAGE NO. 2 OF 2

PROJECT NO: 3700-30-06 | HWY: STH 76 | COUNTY: WINNEBAGO | SEQUENCE OF OPERATIONS S70-1301 | SHEET | E

FILE NAME : F:\d3_traffi\S-1301.rev2.dgn   PLOT DATE : 27-OCT-2016 10:19   PLOT BY : dotc5s   PLOT NAME : S-1301.seq.rev2.up PLOT SCALE : 40:1   WISDOT/CADDS SHEET 42