

CONSULTANTS:

**45TH & HILLSIDE
 INTERSECTION IMPROVEMENT**



DETECTOR NUMBER	LOOP OR DETECTION ZONE SIZE	VIDEO DETECTION	RADAR DETECTION	LOOP DETECTION	TIMINGS (SEC)		MODE		PHASE CALLED	NO. OF CHANNELS	COMMENTS
					STRETCH	DELAY	PULSE	PRESENCE			
11	6'x55'	X				2.0	X	X	1	1	
12	6'x6'		X				X		1	1	92' From Stop Bar
21	6'x55'	X					X	X	2	1	
22	6'x6'		X				X		2	1	92' From Stop Bar
23	6'x6'		X		0.5		X		2	1	260' From Stop Bar
31	6'x55'	X				2.0	X	X	3	1	
32	6'x6'		X				X		3	1	92' From Stop Bar
41, 42	6'x55'	X						X	4	2	
43	6'x55'	X				12.0		X	4	1	
44, 45	6'x6'		X				X		4	2	92' From Stop Bar
46	6'x6'		X			12.0	X		4	1	92' From Stop Bar
47, 48	6'x6'		X		0.5		X		4	2	260' From Stop Bar
51	6'x55'	X				2.0	X	X	5	1	
52	6'x6'		X				X		5	1	92' From Stop Bar
53	6'x6'		X		0.5		X		5	1	260' From Stop Bar
61	6'x55'	X					X	X	6	1	
62	6'x55'	X				12.0		X	6	2	
63, 64	6'x6'		X				X		6	2	92' From Stop Bar
65	6'x6'		X		0.5		X		6	1	260' From Stop Bar
71	6'x55'	X				2.0	X	X	7	1	
72	6'x6'		X				X		7	1	92' From Stop Bar
81	6'x55'	X						X	8	1	
82	6'x55'	X				12.0		X	8	1	
83, 84	6'x6'		X				X		8	2	92' From Stop Bar
85, 86	6'x6'		X		0.5		X		8	2	260' From Stop Bar
P1	6'x6'			X		20.0	X	X	-	1	Pre-Emption 1
P2	6'x6'			X		20.0	X	X	-	1	Pre-Emption 2

PHASE	MINIMUM INITIAL	UNIT EXTENSION	SUGGESTED TIMINGS (SEC.)		PEDESTRIAN			CLEARANCE	
			MAXIMUM GREEN		WALK	FDW	SDW	YELLOW	ALL RED
			A.M.	P.M.					
1	6	2.0	10	8	-	-	-	4.0	2.2
2	6	2.0	32	30	-	-	-	3.8	2.4
3	6	2.0	10	8	-	-	-	3.8	2.6
4	6	2.0	30	26	-	-	-	3.9	2.6
5	6	2.0	11	8	-	-	-	3.8	2.0
6	6	2.0	32	30	-	-	-	4.0	2.4
7	6	2.0	10	20	-	-	-	3.9	2.6
8	6	2.0	32	14	-	-	-	3.8	2.0

CLEARANCE DESIGN SPEEDS:
 45TH STREET = 40 MPH
 HILLSIDE AVENUE = 40 MPH

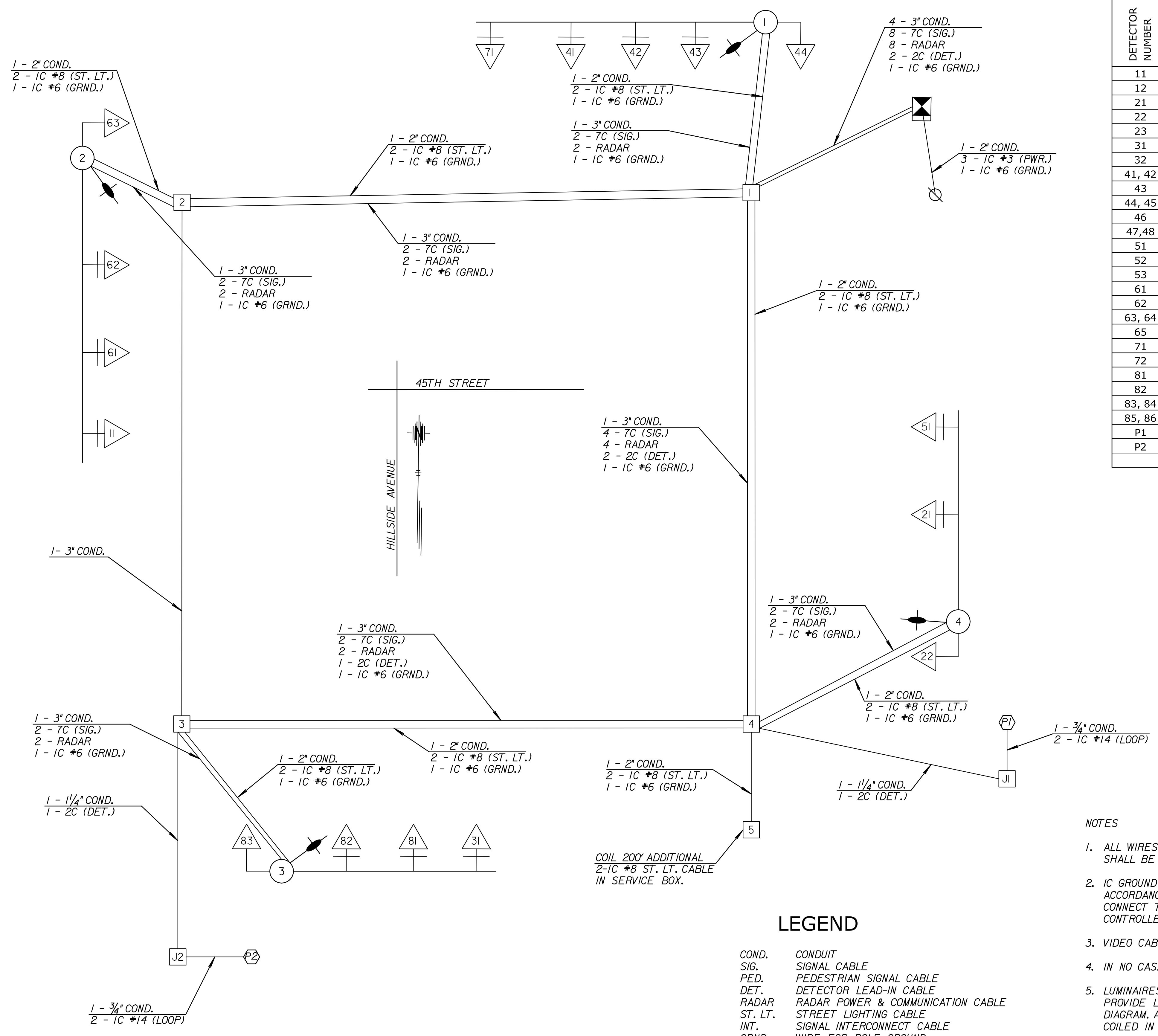
EMERGENCY FLASH	
PHASE	INDICATION
1	Dark
2	Red
3	Dark
4	Red
5	Dark
6	Red
7	Dark
8	Red

NOTES

- ALL WIRES SHALL BE AWG #14 UNLESS SPECIFIED OTHERWISE. ALL WIRE SHALL BE SOLID WIRE. STRANDED WIRE IS NOT ALLOWED.
- IC GROUND WIRE SHALL BE #6 AWG GREEN SOLID COPPER WIRE IN ACCORDANCE WITH ASTM B-3, BONDED TO CONDUIT. GROUND WIRE SHALL CONNECT TO EACH GROUND ROD AT EVERY POLE, SERVICE BOX AND CONTROLLER TO FORM A COMPLETE CIRCUIT.
- VIDEO CABLES SHALL RUN CONTINUOUS. NO SPICES WILL BE ALLOWED.
- IN NO CASE SHALL MORE THAN 60% OF AN CONDUIT BE FILLED.
- LUMINAIRES WILL BE INSTALLED BY OTHERS (WESTAR). CONTRACTOR SHALL PROVIDE LUMINAIRE ARMS, LUMINAIRES AND WIRING AS SHOWN ON THE WIRING DIAGRAM. AN ADDITIONAL 200' OF IC #8 STREET LIGHT CABLE SHALL BE COILED IN SERVICE BOX #5 LOCATED NEAR THE SERVICE POINT.
- STREET LIGHTING CABLE SHALL BE SPLICED IN SERVICE BOXES. THE SPLICE SHALL BE MADE WATERPROOF.

LEGEND

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|---------|-----------------------------------|
| COND. | CONDUIT |
| SIG. | SIGNAL CABLE |
| PED. | PEDESTRIAN SIGNAL CABLE |
| DET. | DETECTOR LEAD-IN CABLE |
| RADAR | RADAR POWER & COMMUNICATION CABLE |
| ST. LT. | STREET LIGHTING CABLE |
| INT. | SIGNAL INTERCONNECT CABLE |
| GRND. | WIRE FOR POLE GROUND |
| COAX. | COAXIAL CABLE |
| FUT. | FUTURE CABLE |
| LOOP | LOOP DETECTOR WIRE |



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PROJ NO: 87 N-0616-01
 SCALE: N.T.S.
 DATE: 10/9/2017
 DESIGNED BY: CCB
 DRAWN BY: CCB
 CHECKED BY: SGE

SHEET TITLE:
 TRAFFIC SIGNAL
 WIRING DIAGRAM

SHEET NO.
 104
 SHEET 104 OF 166