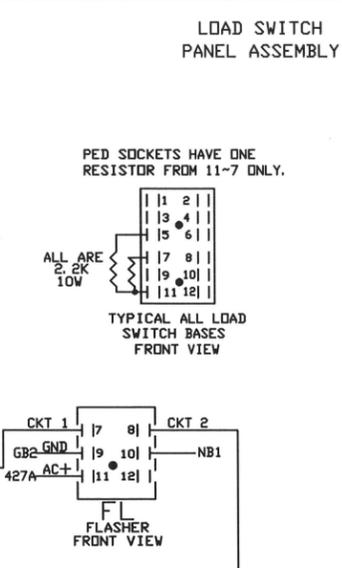


LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CONT	1	2	3	4	5	6	7	8	2P	4P	6P	8P		
PLAN														

IN	GREEN / WALK	10	62A	69A	76A	82A	102A	109A	116A	122A	72A	85A	112A	125A
YELLOW/PED CLR	8	63A	70A	77A	83A	103A	110A	117A	123A	142B	144B	146B	148B	
RED/DON'T WALK	6	64A	71A	78A	84A	104A	111A	118A	124A	73A	86A	113A	126A	
OUT	GREEN / WALK	7	201A	207A	213A	219A	225A	231A	237A	243A	249A	255A	261A	267A
YELLOW	5	FP1-13	FP2-13	FP3-13	FP4-13	FP5-13	FP6-13	FP7-13	FP8-13	251A	257A	263A	269A	
RED/DON'T WALK	3	FP1-1	FP2-1	FP3-1	FP4-1	FP5-1	FP6-1	FP7-1	FP8-1	253A	259A	265A	271A	
PWR	+24 VDC	9	<											60B
WE	CHASSIS GROUND	2	<											GB1
R	AC NEUTRAL	11	NB1	NB1	NB1	NB1	NB1	NB1						
	115 VAC	1	SB1	SB1	SB2	SB2	SB1	SB1	SB2	SB1	SB2	SB1	SB2	SB2



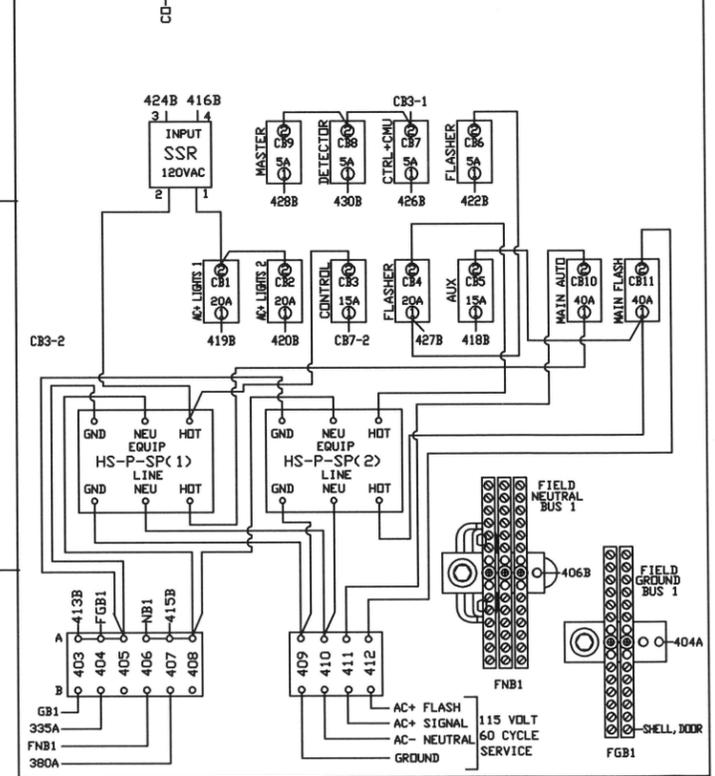
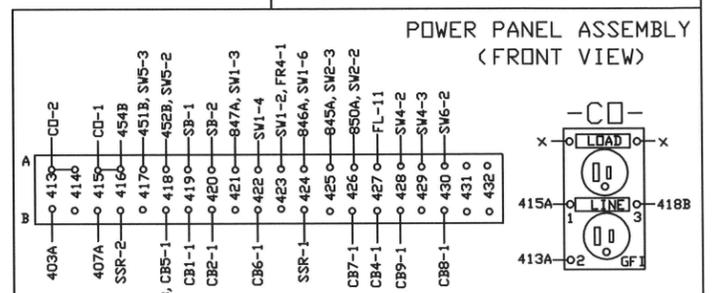
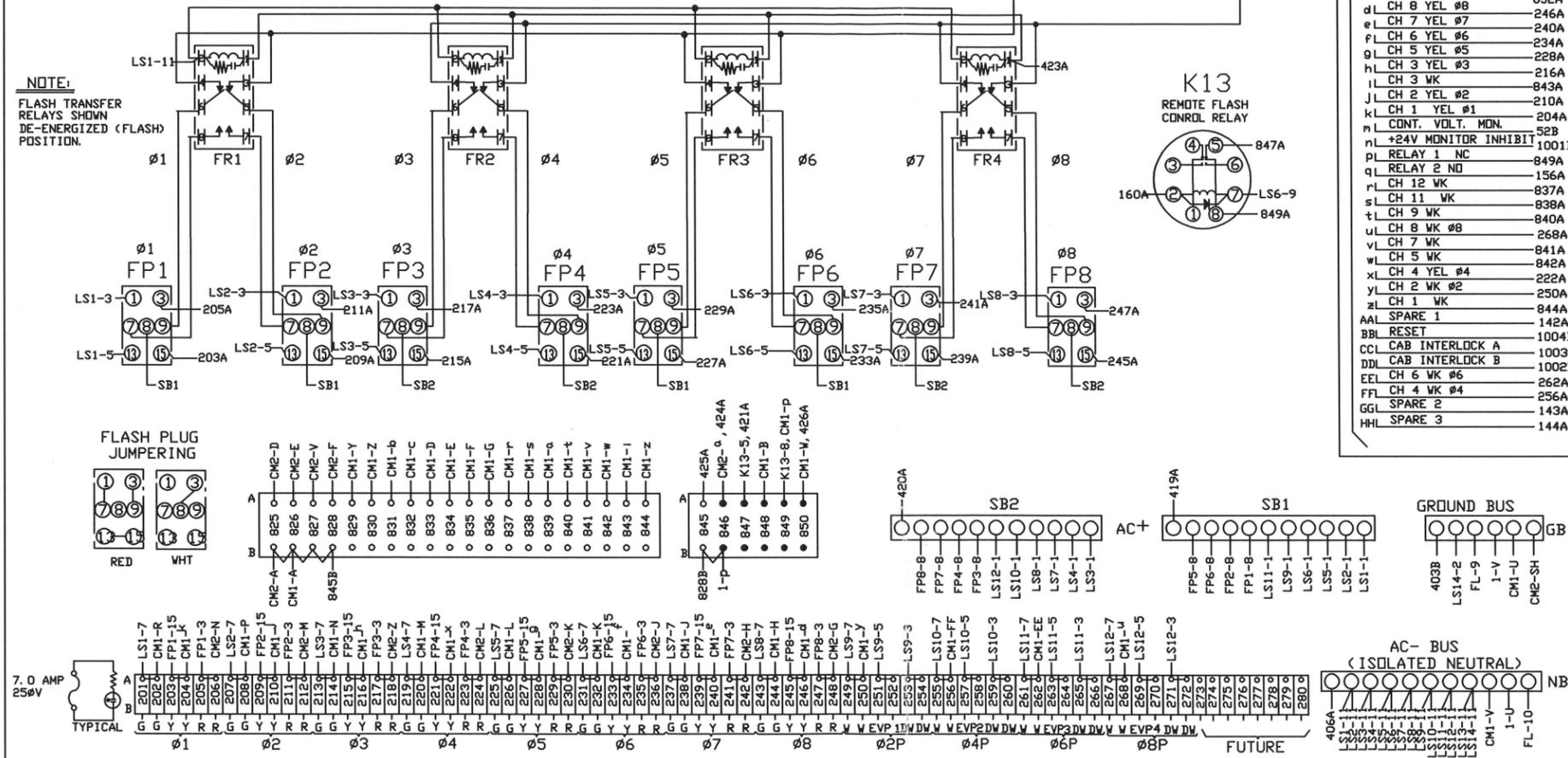
### NEMA 12CH CONFLICT MONITOR

CM1	CM2
SHI SHELL GROUND GB1	A AC+ II 825B
A AC+ I 826B	B DELAY RELAY COMM 55B
B RELAY 1 NO 848A	C DELAY RELAY NO 55B
C RELAY 2 NC 141A	D CH 12 GRN 833A
D CH 12 GRN 833A	E CH 11 GRN 834A
E CH 11 GRN 834A	F CH 10 GRN 835A
F CH 10 GRN 835A	G CH 9 GRN 836A
G CH 9 GRN 836A	H CH 8 GRN 837A
H CH 8 GRN 837A	I CH 7 GRN 838A
I CH 7 GRN 838A	J CH 6 GRN 839A
J CH 6 GRN 839A	K CH 5 GRN 840A
K CH 5 GRN 840A	L CH 4 GRN 841A
L CH 4 GRN 841A	M CH 3 GRN 842A
M CH 3 GRN 842A	N CH 2 GRN 843A
N CH 2 GRN 843A	P CH 1 GRN 844A
P CH 1 GRN 844A	R +24V MONITOR I 145A
R +24V MONITOR I 145A	S SPARE 2 146A
S SPARE 2 146A	T LOGIC GROUND 53B
T LOGIC GROUND 53B	U CHASSIS GROUND SHELL
U CHASSIS GROUND SHELL	V AC-NEUTRAL NB1
V AC-NEUTRAL NB1	W RELAY 1 COMMON AC+ 850A
W RELAY 1 COMMON AC+ 850A	X RELAY 2 COMMON (LG) 54B
X RELAY 2 COMMON (LG) 54B	Y CH 12 YEL 829A
Y CH 12 YEL 829A	Z CH 11 YEL 830A
Z CH 11 YEL 830A	a CH 10 YEL 831A
a CH 10 YEL 831A	b CH 9 YEL 832A
b CH 9 YEL 832A	c CH 8 YEL 833A
c CH 8 YEL 833A	d CH 7 YEL 834A
d CH 7 YEL 834A	e CH 6 YEL 835A
e CH 6 YEL 835A	f CH 5 YEL 836A
f CH 5 YEL 836A	g CH 4 YEL 837A
g CH 4 YEL 837A	h CH 3 YEL 838A
h CH 3 YEL 838A	i CH 2 YEL 839A
i CH 2 YEL 839A	j CH 1 YEL 840A
j CH 1 YEL 840A	k CH 12 YEL 841A
k CH 12 YEL 841A	l CH 11 YEL 842A
l CH 11 YEL 842A	m CH 10 YEL 843A
m CH 10 YEL 843A	n CH 9 YEL 844A
n CH 9 YEL 844A	o CH 8 YEL 845A
o CH 8 YEL 845A	p CH 7 YEL 846A
p CH 7 YEL 846A	q CH 6 YEL 847A
q CH 6 YEL 847A	r CH 5 YEL 848A
r CH 5 YEL 848A	s CH 4 YEL 849A
s CH 4 YEL 849A	t CH 3 YEL 850A
t CH 3 YEL 850A	u CH 2 YEL 851A
u CH 2 YEL 851A	v CH 1 YEL 852A
v CH 1 YEL 852A	w +24V MONITOR INHIBIT 1001B
w +24V MONITOR INHIBIT 1001B	x RELAY 1 NC 849A
x RELAY 1 NC 849A	y CH 12 WK 156A
y CH 12 WK 156A	z CH 11 WK 837A
z CH 11 WK 837A	aa CH 10 WK 838A
aa CH 10 WK 838A	ab CH 9 WK 840A
ab CH 9 WK 840A	ac CH 8 WK 841A
ac CH 8 WK 841A	ad CH 7 WK 842A
ad CH 7 WK 842A	ae CH 6 WK 843A
ae CH 6 WK 843A	af CH 5 WK 844A
af CH 5 WK 844A	ag CH 4 WK 845A
ag CH 4 WK 845A	ah CH 3 WK 846A
ah CH 3 WK 846A	ai CH 2 WK 847A
ai CH 2 WK 847A	aj CH 1 WK 848A
aj CH 1 WK 848A	ak SPARE 1 142A
ak SPARE 1 142A	al CAB INTERLOCK A 1004B
al CAB INTERLOCK A 1004B	am CAB INTERLOCK B 1003B
am CAB INTERLOCK B 1003B	an CH 6 WK 849A
an CH 6 WK 849A	ao CH 5 WK 256A
ao CH 5 WK 256A	ap CH 4 WK 844A
ap CH 4 WK 844A	aq SPARE 2 143A
aq SPARE 2 143A	ar SPARE 3 144A
ar SPARE 3 144A	

### CONFLICT MONITOR MATRIX PROGRAMMING INSTRUCTIONS

1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10-11-12  
 1-3 2-4 3-5 4-6 5-7 6-8 7-9 8-10-11-12  
 1-4 2-5 3-6 4-7 5-8 6-9 7-10 8-11-12  
 1-5 2-6 3-7 4-8 5-9 6-10-11 8-12  
 1-6 2-7 3-8 4-9 5-10-11-12 CH5-0\_5  
 1-7 2-8 3-9 4-10-11-12 CH6-0\_6  
 1-8 2-9 3-10-11-12 CH7-0\_7  
 1-9 2-10 3-11-12 CH8-0\_8  
 1-10-11 3-12 CH9-0\_9  
 1-11-12 CH10-0\_10  
 1-12 CH11-0\_11  
 CH12-0\_12

CHANNEL-0 COMBINATIONS NOT PINNED WITH MATRIX JUMPERS CONSTITUTE CONFLICTING MOVEMENTS. TO PROGRAM, CIRCLE PERMISSIVE COMBINATIONS AND INSTALL JUMPERS ON CORRESPONDING PINS ON THE PROGRAM CARD.



- NOTES: 1. PED BUTTON RETURNS MUST BE TERMINATED AT PBP1-PBP8.  
 2. JUMPERS 335A-337A AND 340A-342A, ARE TO BE ADDED AS NEEDED FOR EVP.  
 3. 305, 310, 315, 320, 325, 330, 335, 340, 347, 352, 357, 362, 367 AND 372 ARE INTERCONNECTED BY THE MOUNTING RAIL.  
 4. [ ] = FUTURE CONNECTIONS FOR POWER SUPPLY TO SENSITIVITY PBP'S.

#### TIGHTENING TORQUE SPECIFICATIONS

SCREW SIZE	6-32	8-32	10-32
POUND INCHES	12	16	25.9
BLCK TYPE	SAK56	RK6-10	SAK35N
POUND INCHES	10.5	16	35
BLCK TYPE	ND-36		
POUND INCHES	35		

#### EVP VERIFY LIGHTS

CABLE	CONTR. CHAN.	PHASES	POLE#	TERM
13	3	1-6	1	251
49	4	2-5	3	257
23	5	3-8	2	263
38	6	4-7	4	269

#### EVP TYPICAL SENSOR WIRE COLORS

SIGNAL	DC++	DC-	GN
YEL	GRN	BLU	BLK
CLR	RED	BLK	BLK
WHT	RED	BLK	BLK

#### EVP SENSORS

CABLE	DISCR. CHAN.	PHASES	POLE#	SIGNAL	DC++	DC-	GN
14	1	1-6	1	333	334	337	
50	2	2-5	3	336	334	337	
40	3	3-8	2	338	339	342	
25, 39	4	4-7	4	341	339	342	

#### VEHICLE SIGNALS

CABLE	SIGNAL	TERMINAL	G	Y	R
11	1-1	201	203	205	
36	1-2	202	204	206	
45	2-1, 2-3		207	209	211
46	2-2		208	210	212
21	3-1	213	215	217	
11	3-2	214	216	218	
10, 35	4-1, 4-3		219	221	223
34	4-2, 4-4		220	222	224
47	5-1	225	227	229	
21	5-2	226	228	230	
9	6-1, 6-3		231	233	235
10	6-2		232	234	236
36	7-1	237	239	241	
47	7-2	238	240	242	
46, 20	8-1, 8-3		243	245	247
19	8-2, 8-4		244	246	248

#### VEH DETECTORS

CABLE	DET	TERMINAL
28, 29	1-1, 1-2	303, 304
30, 31	1-3, 1-4	306, 307
61	2-1	345, 346
62	2-2	348, 349
41, 42	3-1, 3-2	313, 314
43, 44	3-3, 3-4	316, 317
7	4-1	355, 356
8	4-2	358, 359
15	4-3	360, 361
16	4-4	363, 364
55, 56	5-1, 5-2	308, 309
57, 58	5-3, 5-4	311, 312
26	6-1	350, 351
27	6-2	353, 354
17	7-1	318, 319
18	7-2	321, 322
53	8-1	323, 324

#### PED PUSHBUTTONS

CABLE	PPB	TERMINAL	RETURN
37	PPB2-1	301	PBP1
48	PPB2-2	301	PBP1
22	PPB6-1	343	PBP3
12	PPB6-2	343	PBP3
48	PPB8-1	344	PBP4
22	PPB8-2	344	PBP4

#### PED SIGNALS

CABLE	SIGNAL	TERMINAL	W	DW
35	P2-1	249	253	
45	P2-2	250	254	
20	P6-1	261	265	
9	P6-2	262	266	
46	P8-1	267	271	
19	P8-2	268	272	

#### VEH DETECTORS

CABLE	DET	TERMINAL
54	8-2	326, 327
51	8-3	328, 329
52	8-4	331, 332
32	D-1	365, 366
33	D-2	368, 369
59	D-3	370, 371
60	D-4	373, 374

SIGNAL HEAD NEUTRALS TO BE TERMINATED ON FNB1  
 LOOP LEAD IN DRAIN WIRES ARE TO BE CONNECTED TO GREEN/YEL TERMINAL BLOCKS ONLY

3018

REV. STATUS

REV	DATE	DESCRIPTION
1	12/20/02	INITIAL RELEASE
2	01/15/03	REVISED TO ADD PBP'S
3	02/10/03	REVISED TO ADD PBP'S

ACT Electronics, Inc.

CSAH #10 AT CSAH #51

TITLE: MNDOT 2002 'R' & 'P' CABINET

SIZE: PARTS

DRAWN: HFD

SCALE: FILE: ACTR0011 REV: SHEET 1 OF 3



