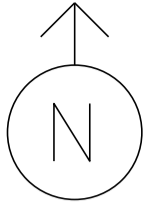
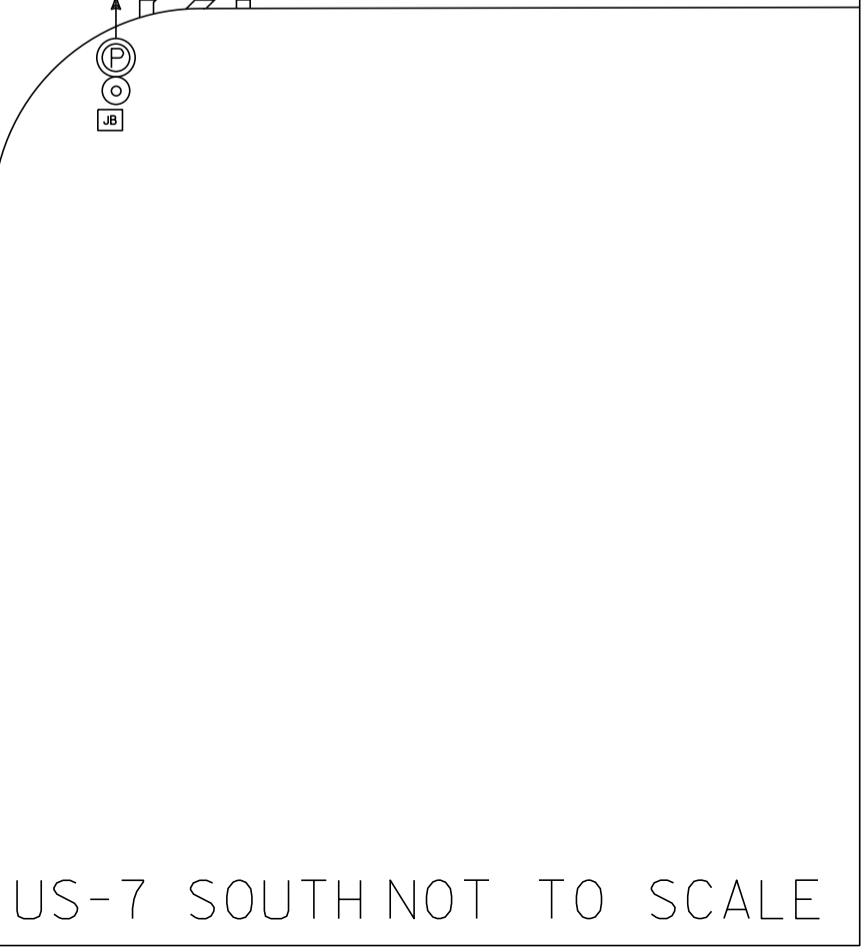
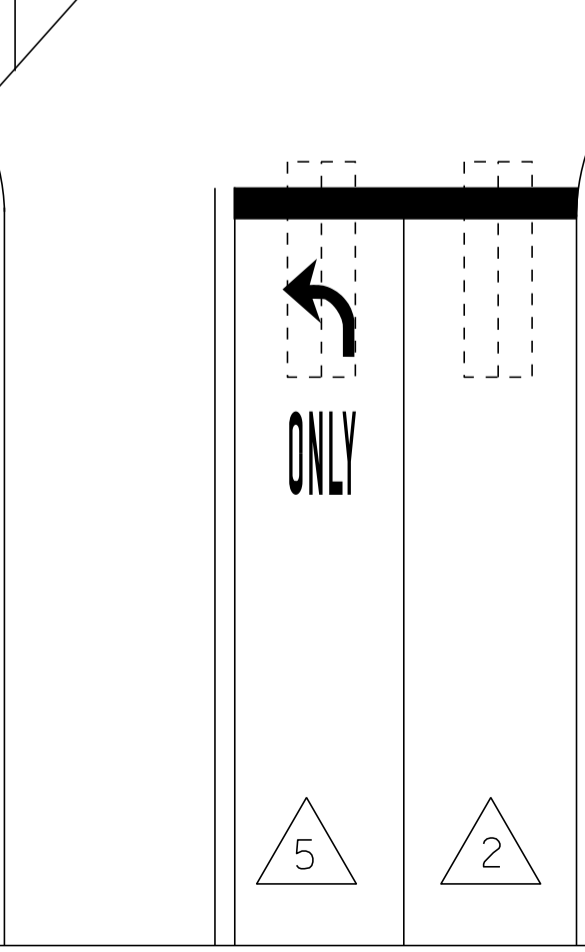
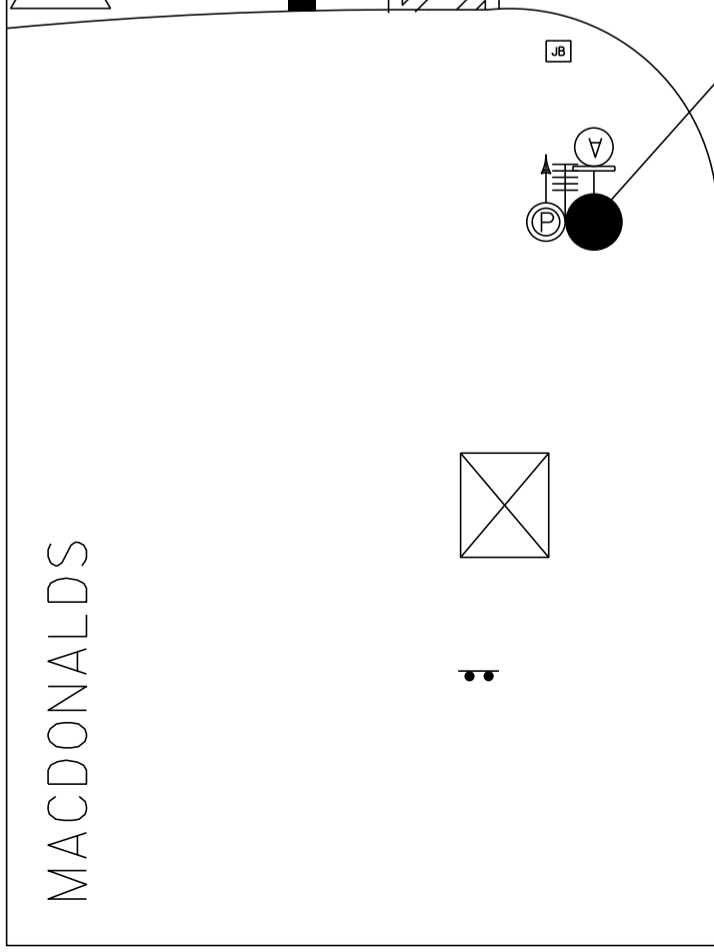
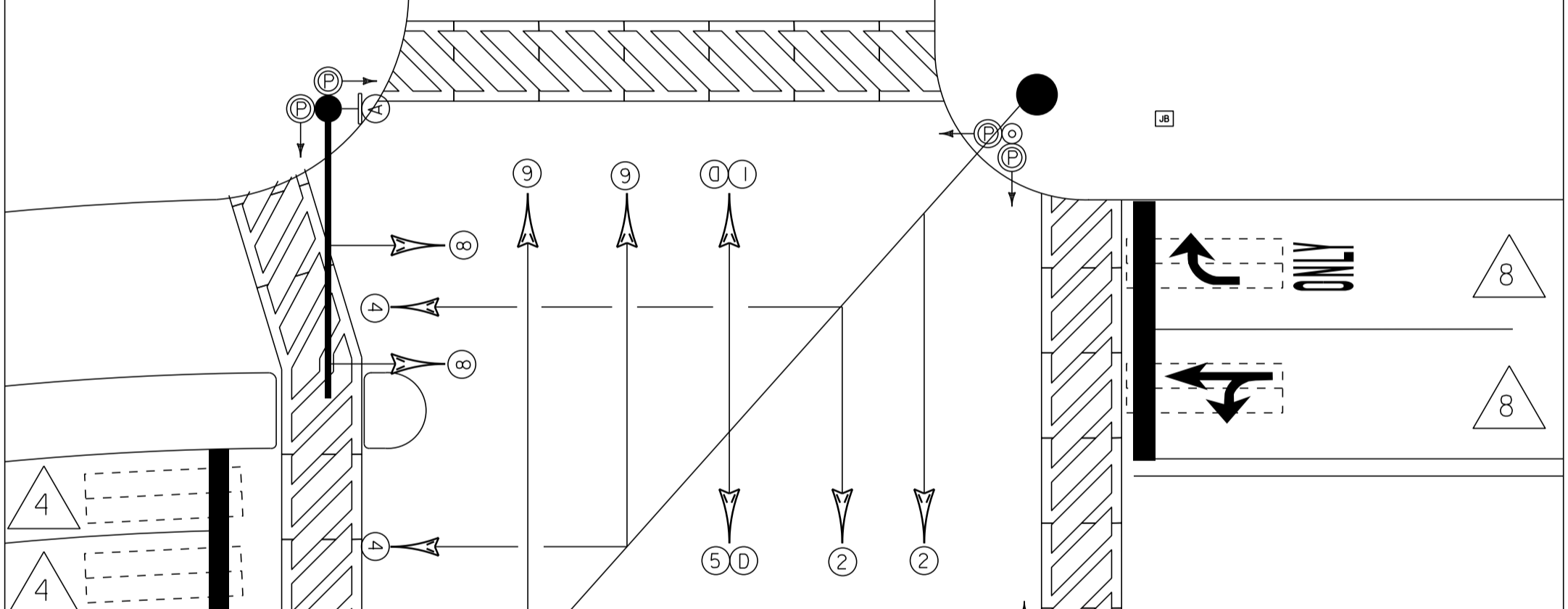
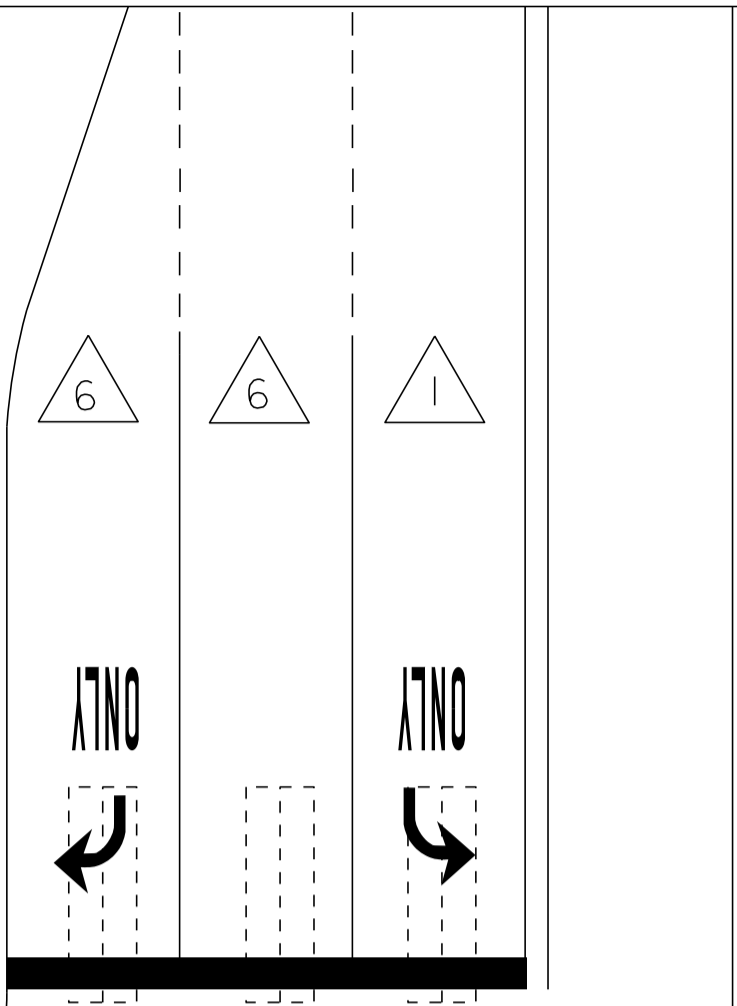


MS # 501



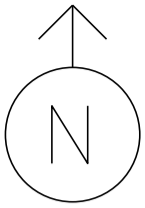
US-7 NORTH

- PEDESTAL POST
- PEDESTRIAN SIGNAL
- L.E.D REGULATORY SIGN
- CONTROL BOX
- MAST ARM
- COORDINATION
- LOOP DETECTION
- JUNCTION BOX
- LUMINAIRE
- STANCHION
- =
- =

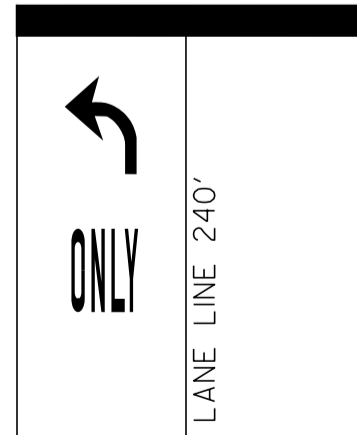
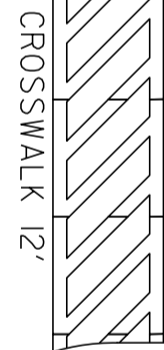
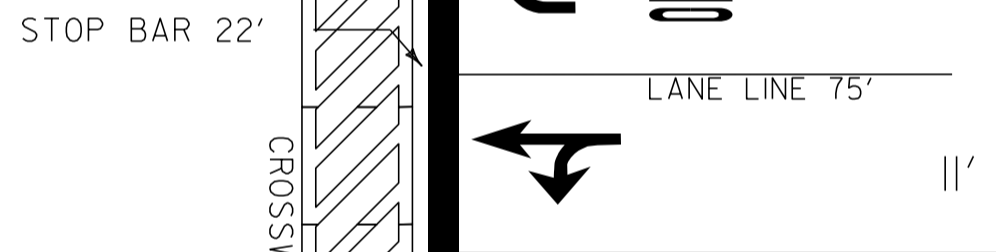
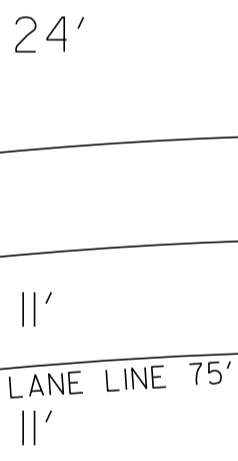
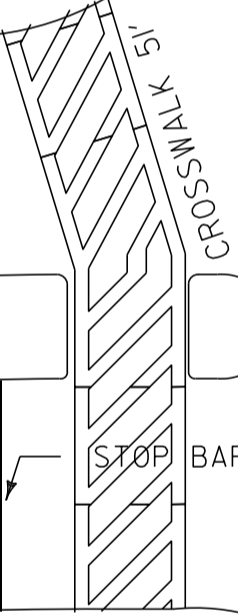
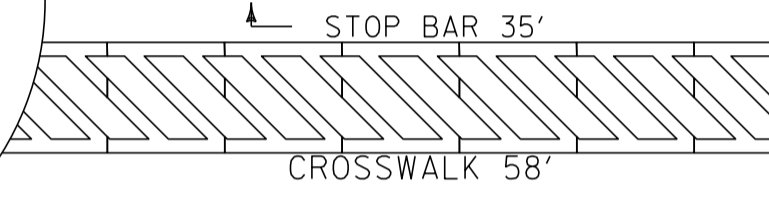
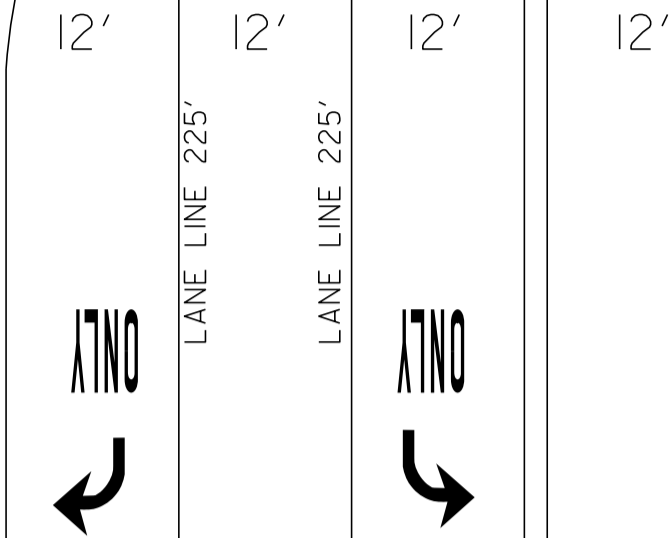


US-7 SOUTH NOT TO SCALE

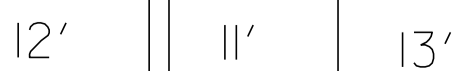
MS # 501



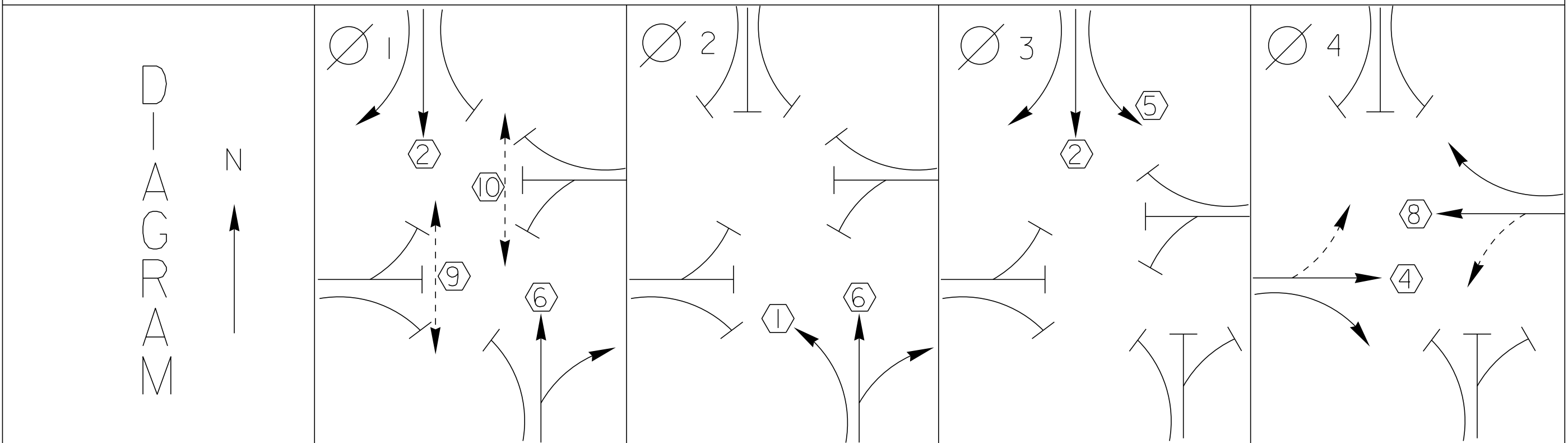
US-7 NORTH



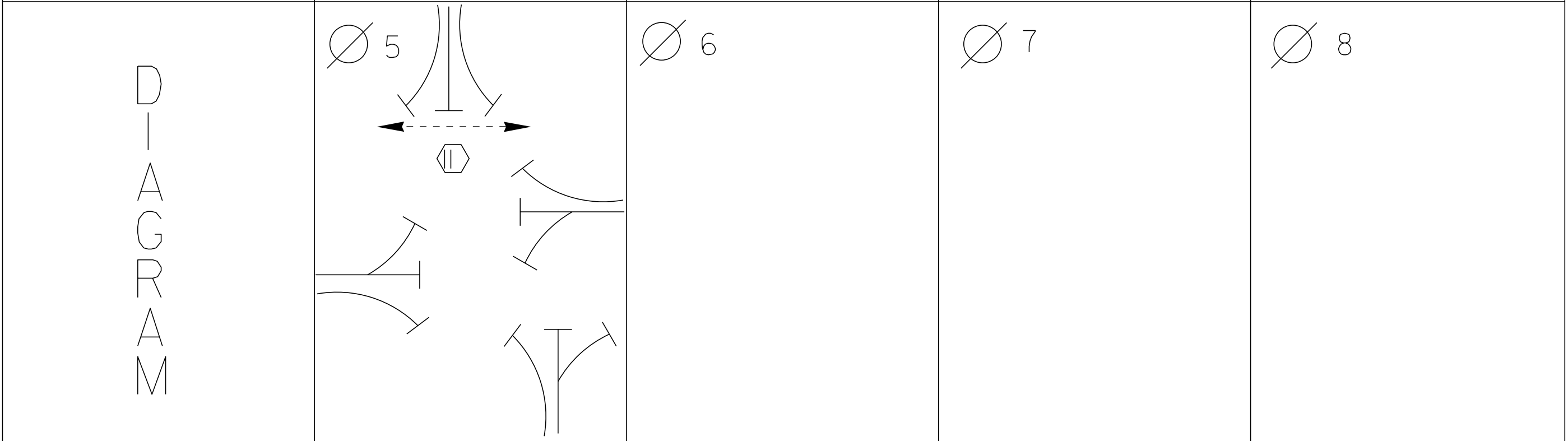
MACDONALDS



US-7 SOUTH NOT TO SCALE



TIMING	$G =$ $Y =$	$G =$ $Y =$	$G =$ $Y =$	$G =$ $Y =$
--------	----------------	----------------	----------------	----------------



TIMING	$G =$ $Y =$	$G =$ $Y =$	$G =$ $Y =$	$G =$ $Y =$
--------	----------------	----------------	----------------	----------------



CYCLE LENGTH, C= _____ S



PROPERTY OF :
VT. AGENCY OF TRANS.
MAINTENANCE DIV.
IN EMERGENCY CALL :
DIST. TRANS. OFFICE
655 - 1580
NIGHTS & WEEKENDS : 250 - 0163
INTERSECTION NO. MS-501

DANGER
115 VOLTS A.C.

TURN ON
6-30-07

2441187

WARNING
DO NOT OPERATE
CABINET WITHOUT
CMU / MMU



CONTROL EQUIP. ON

CONTROL EQUIP. OFF

AUTO

FLASH

STOP TIMING AUTO

STOP TIMING ON

ECONOLITE

QTY: 3 SETS

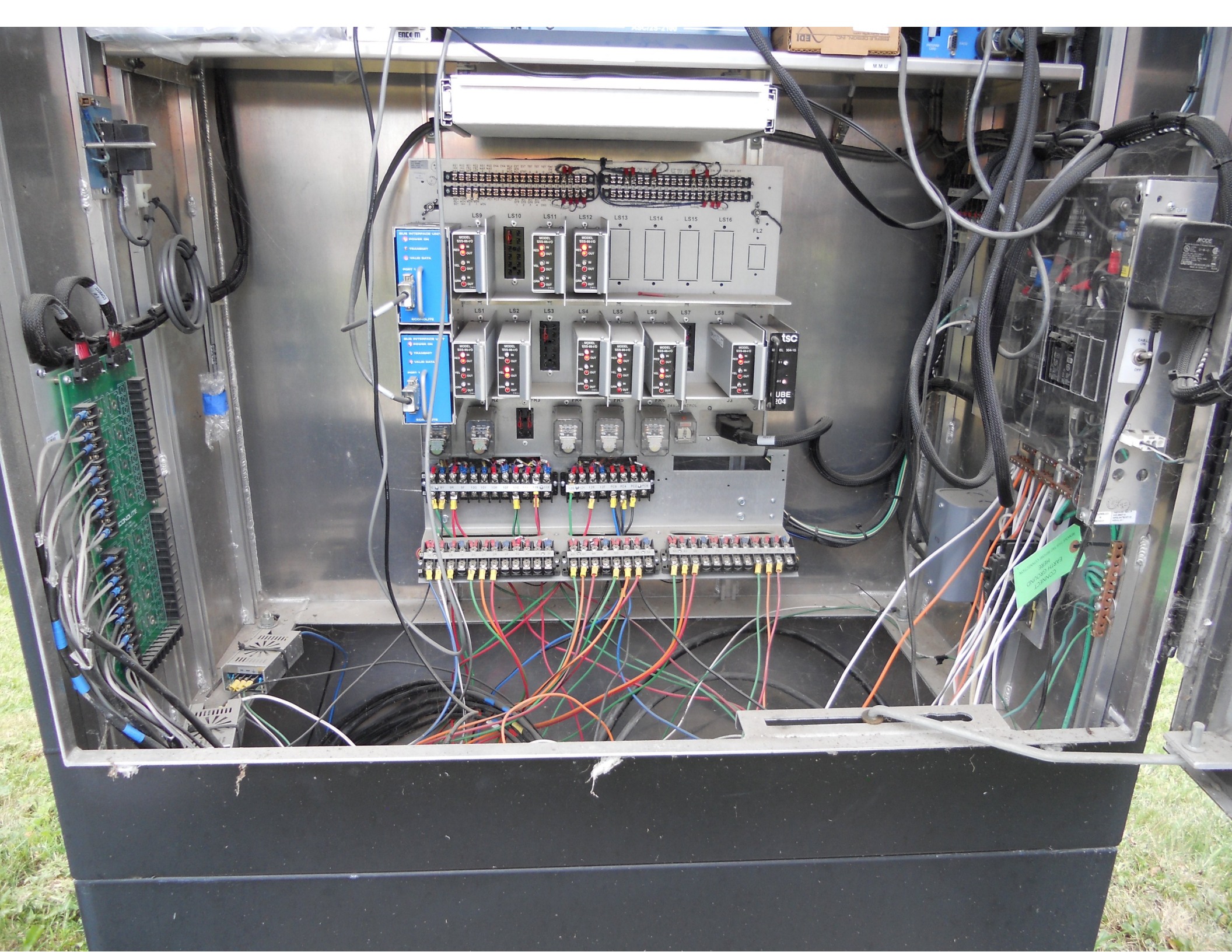
PRINTS FOR CABINET

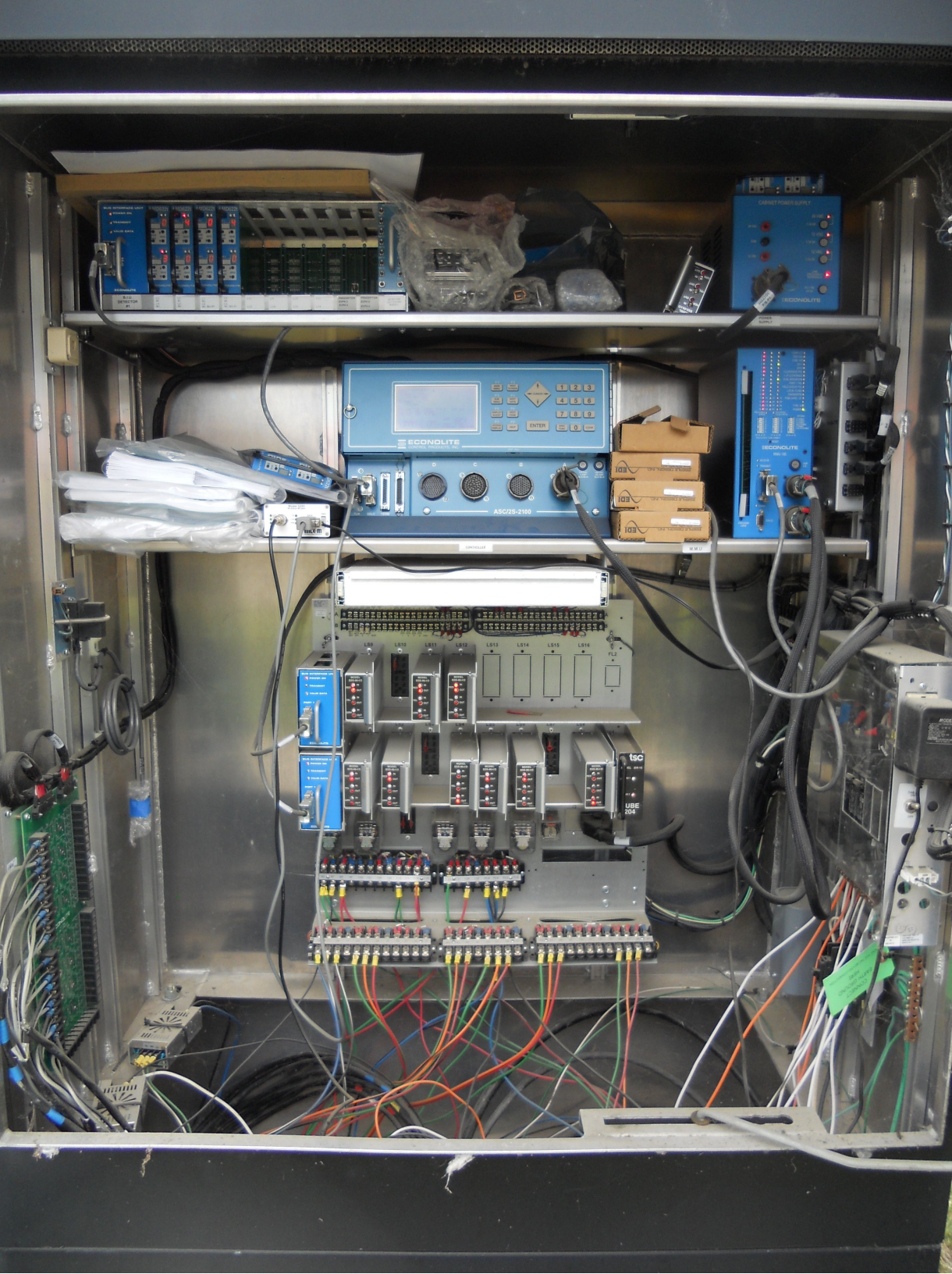
RISK NO

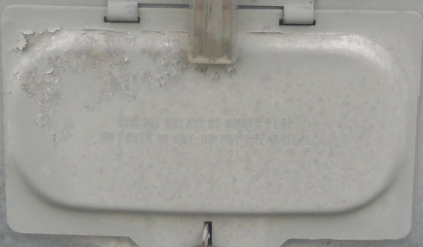
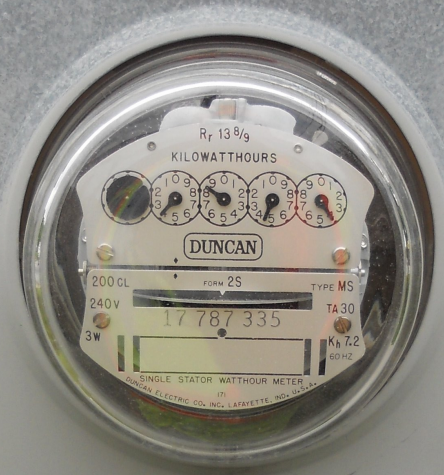
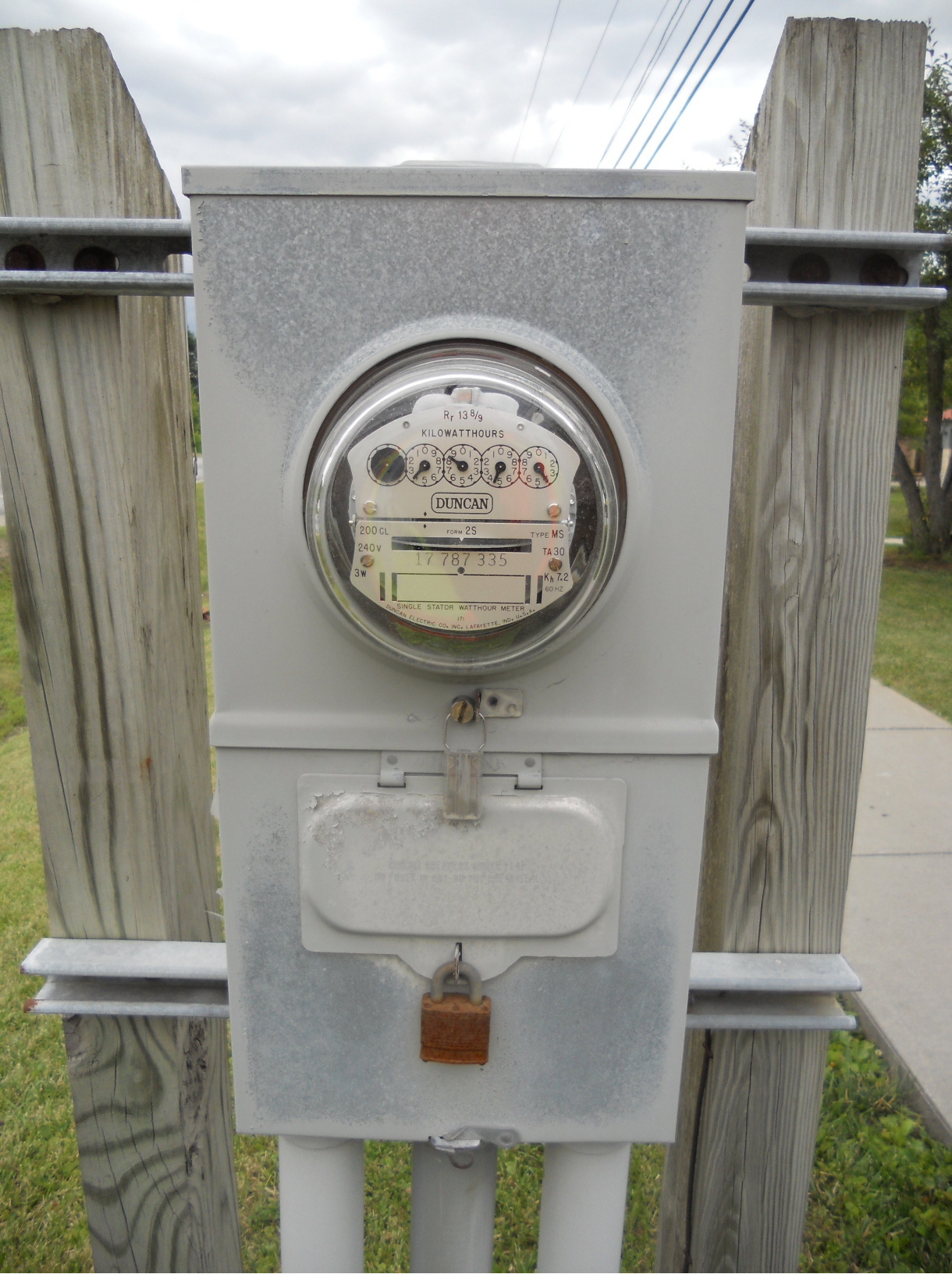
WELLINGS NO

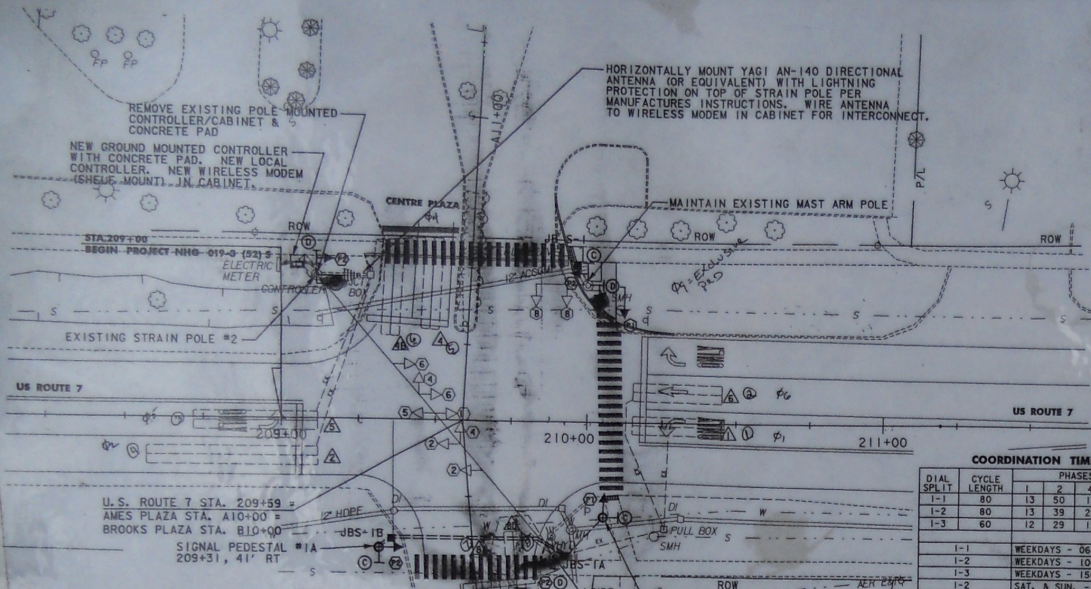
SR: 07-208-001











PVC ELECTRICAL CONDUIT SLEEVE	
LOCATION	DIAL
209+91, 53' LT - 209+96, 53' LT	6"
209+93, 44' RT - 209+95, 35' RT	8"

WIRED CONDUIT (PVC)			
NO.	DIAL	REMARKS	JUNCTION
1	1"	SIGNAL	209+93, 44' RT - 209+95, 35' RT
2	3"	LOOPS & SIGNALS	209+93, 35' RT - 209+95, 35' RT
1	2"	POWER	
1	2"	SIGNAL	
2	2"	LOOPS & SIGNAL	

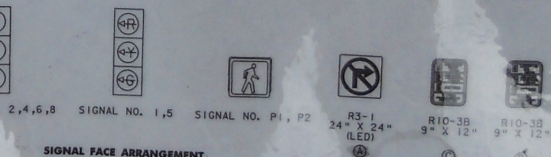
VEHICLE DETECTOR LOOPS										
LOOP NO.	LANE	CALL #	SIZE (FT)	TYPE & NO. TURNS	DELAY OR PRESENCE	INDUCTANCE CALC. ACT.	RESISTANCE CALC. ACT.	LEAKAGE TO GROUND	RECALL	
EXISTING	SB LT	1	6x30	QUAD - 2	PRESENCE					LOCK
EXISTING	NB TH, RT	2	6x55	QUAD - 1	PRESENCE					SOFT
EXISTING	EB TH, LT	4	6x30	QUAD - 2	PRESENCE					NON-LOCK
EXISTING	EB RT	4B	6x30	QUAD - 2	DELAY					NON-LOCK
EXISTING	NB LT	5	6x40	QUAD - 1	PRESENCE					LOCK
EXISTING	SB TH	6	6x70	QUAD - 2	PRESENCE					SOFT
EXISTING	WB TH, LT	8	6x30	QUAD - 2	PRESENCE					NON-LOCK
EXISTING	WB RT	8D	6x30	QUAD - 2	DELAY					NON-LOCK

COORDINATION TIMINGS (SECONDS)										
DIAL SPLIT	CYCLE LENGTH	PHASES								OFFSET
		1	2	4	5	6	8	SEC	%	
1-1	80	13	50	17	13	50	17	73	91	
1-2	80	13	39	28	13	39	28	5	6	
1-3	60	12	29	19	12	29	19	9	15	

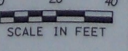
FOR ALL OTHER TIMES, THE INTERSECTION SHALL OPERATE IN FREE MODE (MAX 1).

CONTROLLER TIMINGS (SECONDS)										
PHASE	MIN. GREEN	PASSAGE	YELLOW	RED	MAX 2	MAX 1	WALK	FDW	DW	
1	6	2	4	2	15	15	-	-	-	
2	16	2	4	2	55	60	-	-	-	
4	8	2	4	2	30	30	-	-	-	
5	6	2	4	2	15	15	-	-	-	
6-PED 2	16	2	4	2	55	60	5	9	2	
8	8	2	4	2	30	30	-	-	-	
9	-	-	-	-	-	-	5	13	2	

NOTES: 1. TOO COORDINATION SHALL CALL SYSTEM TO MAX 2.
 2. MAX 1 SHALL BE IN EFFECT FOR FREE OPERATION.
 3. PHASES 2 AND 6 SHALL BE IN HARD RECALL DURING COORDINATION.
 4. DURING COORDINATION, MAXIMUM TIMES ON COORDINATION PHASES 2 AND 6 SHALL BE DISABLED.
 5. PED 2 SHALL BE RECALLED WITH PHASE 6.
 6. PHASE 9 SHALL BE CALLED ONLY UPON ACTIVATION OF PUSH BUTTONS FOR SIGNAL HEAD P1.



SIGNAL FACE ARRANGEMENT		
EXISTING	NEW	LEGEND
○	○	UTILITY POLE
○	○	LUMINAIRE
○	○	LIGHT OR WOOD POLE
○	○	STRAIN POLE
○	○	CONTROLLER CABINET
○	○	PULL BOX/JUNCTION BOX
○	○	SIGNAL HEAD
○	○	CONDUIT
○	○	VEHICLE LOOPS
○	○	PEDESTAL POST
○	○	SIGNS
○	○	DOUBLE JUNCTION BOX



- NOTES:
- EXISTING CONDITION DATA IS BASED ON LIMITED INFORMATION. ALL LAYOUT AND EQUIPMENT NEEDS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO ORDERING & INSTALLATION.
 - MOUNTING HEIGHT OF SIGN R3-1 SHALL BE 16' TO BOTTOM SIGN.
 - ALL NEW SIGNAL HEADS AND PEDESTRIAN SIGNALS SHALL BE LED. SIGN (A) SHALL BE LED.
 - ALL EXISTING SIGNAL EQUIPMENT THAT IS BEING REMOVED SHALL BE RETURNED TO THE VERMONT AGENCY OF TRANSPORTATION'S TRAFFIC SHOP AT THE CENTRAL GARAGE IN MONTPELIER AT THE COST OF THE CONTRACTOR. THE CONTRACTOR SHALL CALL THE TRAFFIC SHOP AT (802) 828-2680 TO ARRANGE A TIME TO DROP OFF THE EQUIPMENT.
 - ALL CONDUIT SLEEVES CROSSING PAVED ROADWAYS SHALL BE INSTALLED USING TRENCHLESS EXCAVATION. CONTRACTOR MAY REQUEST PERMISSION FROM RESIDENT ENGINEER TO USE TRENCH EXCAVATION IF SITE CONSTRAINTS EXIST. TRENCH EXCAVATION FOR ROUTE 7 CROSSINGS MAY BE REQUIRED TO BE DONE DURING EVENING HOURS, 6 PM - 6 AM. CONTRACTOR SHALL OBTAIN APPROVAL FOR NIGHT TIME WORK SEVEN DAYS IN ADVANCE FROM TOWN AND RESIDENT ENGINEER.

PLAN: 1-1 C = 88 SEC	PLAN: 1-2 C = 88 SEC	PLAN: 1-3 C = 68 SEC																																				
<table border="1"> <tr><td>01</td><td>02</td><td>04</td></tr> <tr><td>(7)(6)</td><td>(44)</td><td>(6)(11)(6)</td></tr> <tr><td>05</td><td>06</td><td>08</td></tr> <tr><td>(7)(6)</td><td>(44)</td><td>(6)(11)(6)</td></tr> </table>	01	02	04	(7)(6)	(44)	(6)(11)(6)	05	06	08	(7)(6)	(44)	(6)(11)(6)	<table border="1"> <tr><td>01</td><td>02</td><td>04</td></tr> <tr><td>(7)(6)</td><td>(44)</td><td>(6)(11)(6)</td></tr> <tr><td>05</td><td>06</td><td>08</td></tr> <tr><td>(7)(6)</td><td>(44)</td><td>(6)(11)(6)</td></tr> </table>	01	02	04	(7)(6)	(44)	(6)(11)(6)	05	06	08	(7)(6)	(44)	(6)(11)(6)	<table border="1"> <tr><td>01</td><td>02</td><td>04</td></tr> <tr><td>(6)(6)</td><td>(23)</td><td>(6)(13)</td></tr> <tr><td>05</td><td>06</td><td>08</td></tr> <tr><td>(6)(6)</td><td>(23)</td><td>(6)(13)</td></tr> </table>	01	02	04	(6)(6)	(23)	(6)(13)	05	06	08	(6)(6)	(23)	(6)(13)
01	02	04																																				
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(7)(6)	(44)	(6)(11)(6)																																				
05	06	08																																				
(7)(6)	(44)	(6)(11)(6)																																				
01	02	04																																				
(6)(6)	(23)	(6)(13)																																				
05	06	08																																				
(6)(6)	(23)	(6)(13)																																				
OFFSET = 73 SEC OR 91X	OFFSET = 5 SEC OR 6X	OFFSET = 9 SEC OR 15X																																				
FORCE OFF (**)	FORCE OFF (**)	FORCE OFF (**)																																				

AM NOON PM	AM NOON PM
53 189 156	110 1245 1164
56 1768 1557	427 315 457
2 114 120	5 38 154

2006 "AVERAGE WEEKDAY" HOURLY VOLUMES

CENTRE & BROOKS PLAZAS

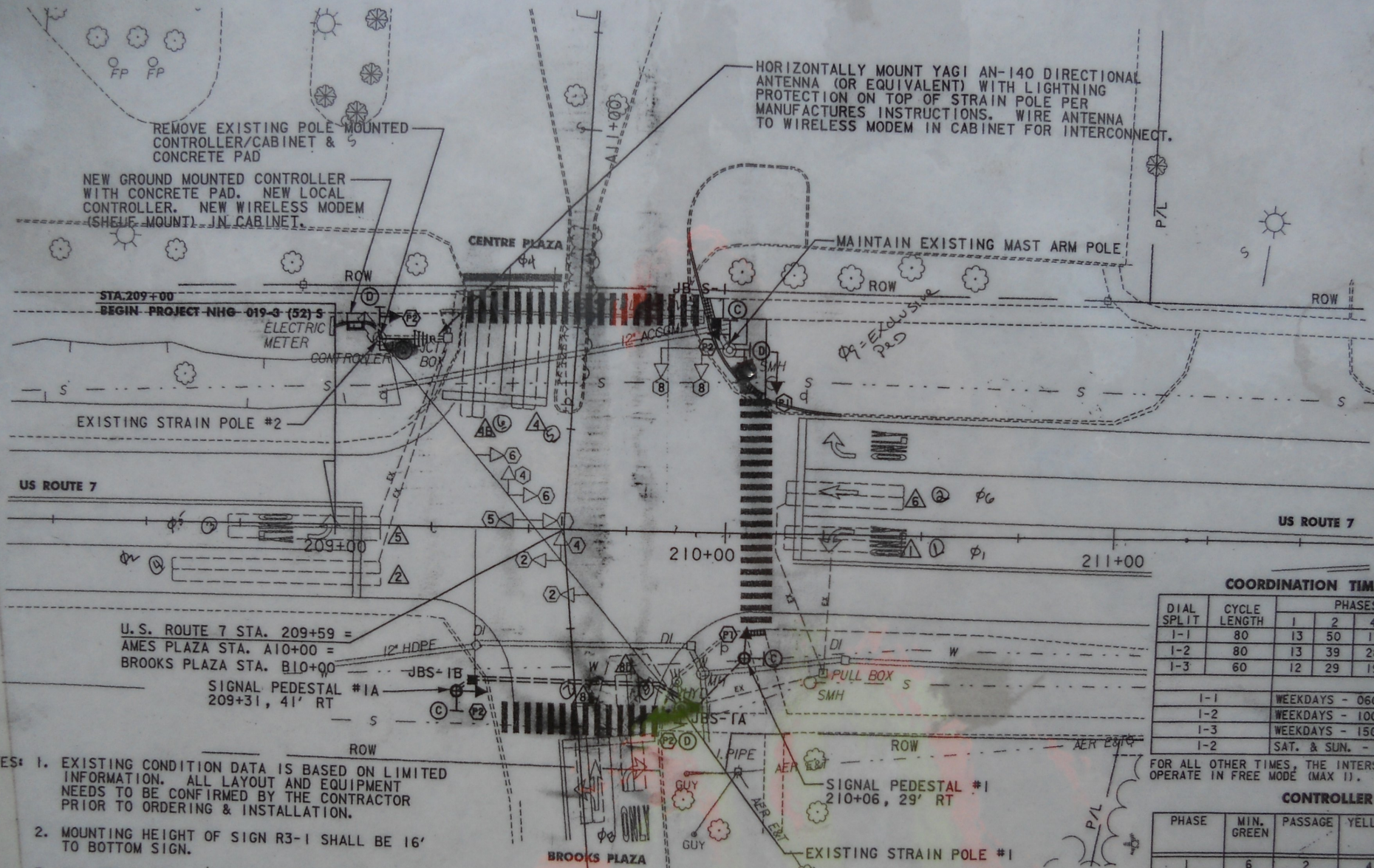
TRAFFIC SIGNAL DETAILS



PROJECT NAME: U.S. ROUTE 7/COURT STREET
 PROJECT NUMBER: NHG 019-3 (52)
 FILE NAME: trn-gms-019-3.dwg
 PROJECT LEADER: MGS
 DESIGNED BY: GGG

PLOT DATE: 04/18/2006
 DRAWN BY: TPL
 CHECKED BY: GAE
 SHEET 27 OF 33

CONTRACT PLANS
 JANUARY 2006



- NOTES:
- EXISTING CONDITION DATA IS BASED ON LIMITED INFORMATION. ALL LAYOUT AND EQUIPMENT NEEDS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO ORDERING & INSTALLATION.
 - MOUNTING HEIGHT OF SIGN R3-1 SHALL BE 16' TO BOTTOM SIGN.
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 - ALL CONDUIT SLEEVES CROSSING PAVED ROADWAYS SHALL BE INSTALLED USING TRENCHLESS EXCAVATION

PLAN: 1-1
C = 80 SEC

OFFSET = 73 SEC OR 917

01	02	04
(7)(6)	(44)	(6)(11)(6)
05	06	08
(7)(6)	(44)	(6)(11)(6)

COORDINATION TIMINGS (SECOND)

DIAL SPLIT	CYCLE LENGTH	PHASES					
		1	2	4	5	6	
1-1	80	13	50	17	13	50	
1-2	80	13	39	28	13	39	
1-3	60	12	29	19	12	29	

TIME OF DAY

1-1	WEEKDAYS - 0600 TO 1000
1-2	WEEKDAYS - 1000 TO 1500
1-3	WEEKDAYS - 1500 TO 2200
1-2	SAT. & SUN. - 0600 TO 2200

FOR ALL OTHER TIMES, THE INTERSECTION SHALL OPERATE IN FREE MODE (MAX 1).

CONTROLLER TIMINGS (SEC)

PHASE	MIN. GREEN	PASSAGE	YELLOW	RED	MAX
1	6	2	4	2	15
2	16	2	4	2	55
4	8	2	4	2	30
5	6	2	4	2	15
6-PED 2	16	2	4	2	55
8	8	2	4	2	30
9	-	-	-	-	-

- NOTES:
- TOD COORDINATION SHALL CALL SYSTEM
 - MAX 1 SHALL BE IN EFFECT FOR FREE
 - PHASES 2 AND 6 SHALL BE IN HARD R
 - DURING COORDINATION, MAXIMUM TIME
 - PEDESTAL 2 SHALL BE CALLED WITH PHASE
 - PHASE 9 SHALL BE CALLED ONLY UPON

BUS INTERFACE UNIT
POWER ON
TRANSMIT
VALID DATA
PORT 1
SDS
CLC
ECONOLITE

LMD622t
DET FLT
CH 1
REFLECTOMETER
0
MODE
FREQ
SENS
DET FLT
CH 2
REFLECTOMETER
3
MODE
FREQ
SENS
ECONOLITE

LMD622t
DET FLT
CH 1
REFLECTOMETER
0
MODE
FREQ
SENS
DET FLT
CH 2
REFLECTOMETER
5
MODE
FREQ
SENS
ECONOLITE

LMD622t
DET FLT
CH 1
REFLECTOMETER
4
MODE
FREQ
SENS
DET FLT
CH 2
REFLECTOMETER
4
MODE
FREQ
SENS
ECONOLITE

LMD622t
DET FLT
CH 1
REFLECTOMETER
9
MODE
FREQ
SENS
DET FLT
CH 2
REFLECTOMETER
4
MODE
FREQ
SENS
ECONOLITE

B.I.U.
DETECTOR
#1

L3
Φ5
L4
Φ2

L1
Φ1
L2
Φ6

L7
Φ8
L8
Φ8 DELAY

L5
Φ4
L6
Φ4 DELAY

L11
L12

DETECTOR
#1





LEFT LANE
MUST
TURN LEFT

ROAD
AHEAD

55

WALSH

WALSH



























POLE 11E-8.0X21FT. - 55K51
ARM 11E-5.0X12FT. - 55K51
UNION METAL CORPORATION



ONLY ↑ ONLY

MT BEAR
Diner 37%



ONLY

904-559-5000
ROAD JAX FL 322













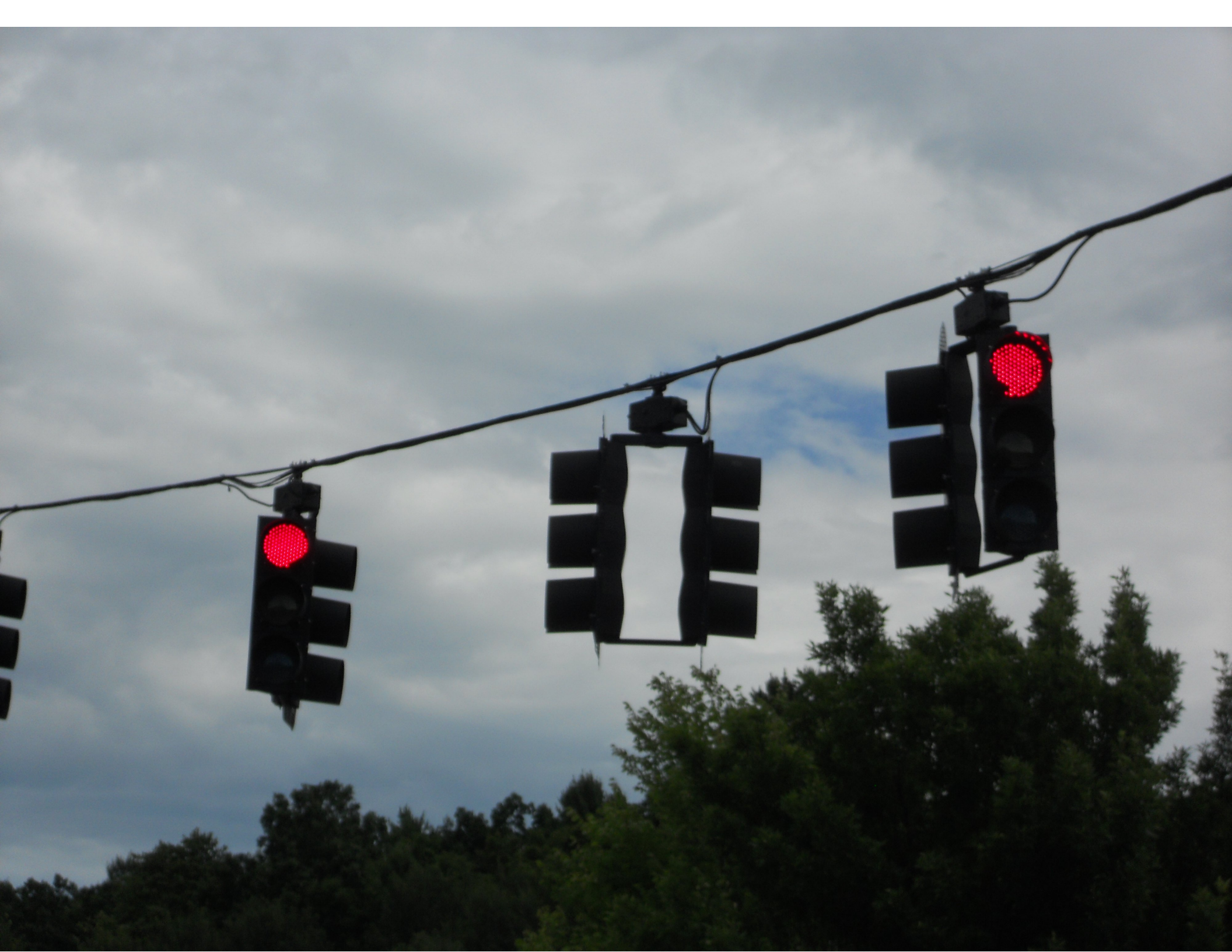


ONE WAY

ONLY

STOP
HERE ON
RED









2 SIDEWALK
WALK
3 SIDEWALK
CROSS
4 DON'T CROSS
5 DO CROSS
FOR CROSS
FOR STOP

ROAD
245

DEW
DRAINAGE & EROSION CONTROL





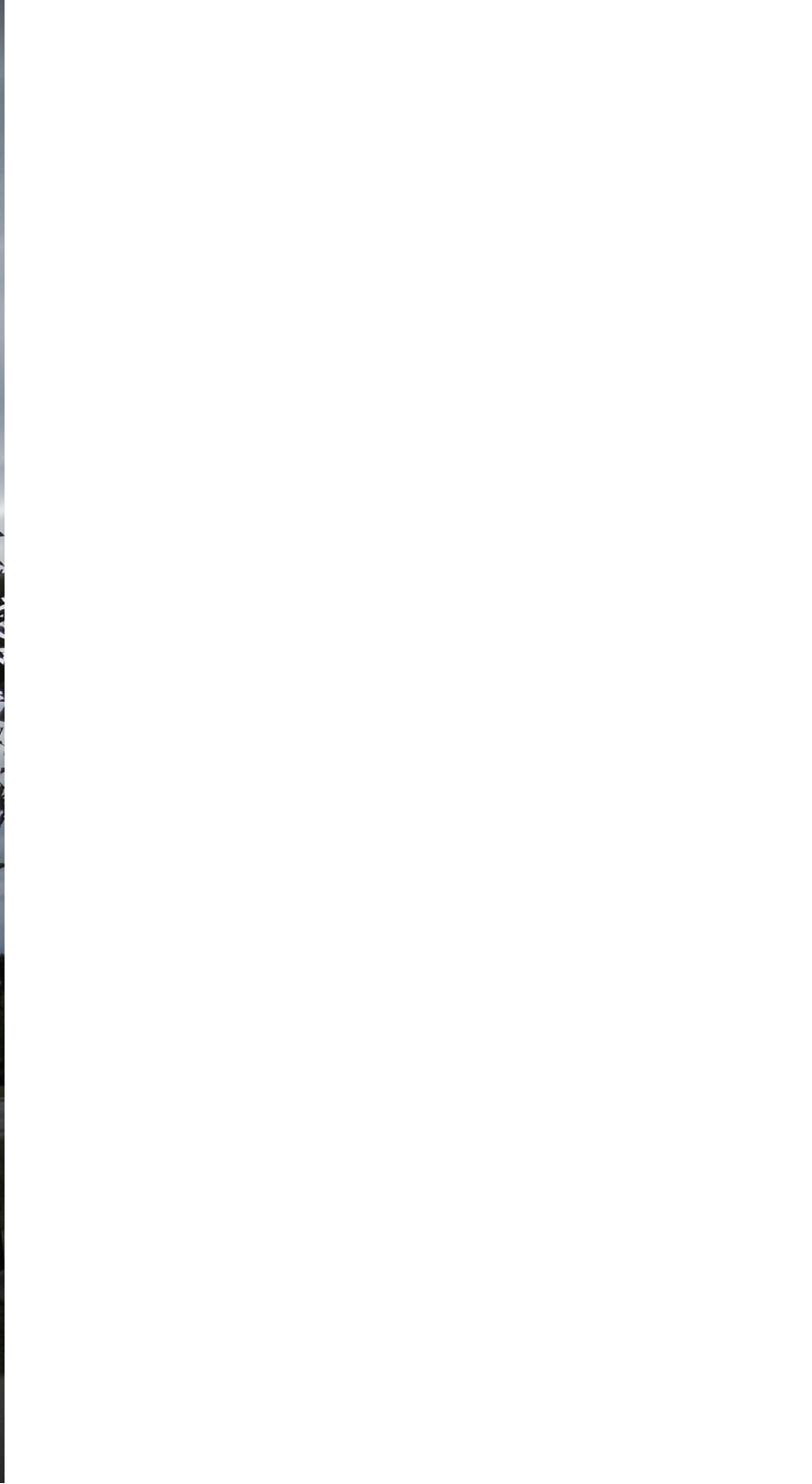
START CROSSING
Watch for
Vehicles

DON'T START
Watch Crossing
If Stopped

DON'T CROSS

← TO CROSS
PUSH BUTTON







10.75 1130
43K 2106A

Coordination Patterns

Pattern 1
 Cycle Length . . . 80 COS 111
 Offset 68
 Vehicle Permissive . . [1] 0 [2] 0
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO
 Splits: Phase 1- 13 2- 50 3- 0 4- 17
 Phase 5- 13 6- 50 7- 0 8- 17
 Phase 9- 20 10- 0 11- 0 12- 0 Split Sum: 0
 Split Extension/Ring [1] 0 [2] 0
 Split Demand Pattern [1] 0 [2] 0
 XRT Pattern. . . 0
 Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12
 Coord Phases . . . X . . . X
 Veh Recall
 Veh Max Recall
 Ped Recall
 Veh Omit
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

Pattern 2
 Cycle Length . . . 80 COS 211
 Offset 78
 Vehicle Permissive . . [1] 0 [2] 0
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO
 Splits: Phase 1- 13 2- 39 3- 0 4- 28
 Phase 5- 13 6- 39 7- 0 8- 28
 Phase 9- 20 10- 0 11- 0 12- 0 Split Sum: 0
 Split Extension/Ring [1] 0 [2] 0
 Split Demand Pattern [1] 0 [2] 0
 XRT Pattern. . . 0
 Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12
 Coord Phases . . . X . . . X
 Veh Recall
 Veh Max Recall
 Ped Recall
 Veh Omit
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

Pattern 3
 Cycle Length . . . 80 COS 311
 Offset 75
 Vehicle Permissive . . [1] 0 [2] 0
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO
 Splits: Phase 1- 13 2- 47 3- 0 4- 20
 Phase 5- 13 6- 47 7- 0 8- 20
 Phase 9- 20 10- 0 11- 0 12- 0 Split Sum: 0
 Split Extension/Ring [1] 0 [2] 0
 Split Demand Pattern [1] 0 [2] 0
 XRT Pattern. . . 0
 Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12
 Coord Phases . . . X . . . X
 Veh Recall
 Veh Max Recall
 Ped Recall
 Veh Omit
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

NIC Program Steps

Step	Program	Step Begins	Pattern	Override
1	1	0600	1	NO
2	1	1000	2	NO
3	1	1500	3	NO
4	1	2200	0	NO
5	2	0600	2	NO
6	2	2200	0	NO

TOD Program Steps

 Step 1 Program 1 Step Begins 0600

Flash. Dimming Enable.
 Red Rest Alt Veh Extension
 Spare 5. Det Log Enable.
 Spare 3. Spare 4
 Type 0 Dly Enable. . . Spare 2
 Det Diag Plan. . . . 0

Phase Number

	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable	X	X	.	X	X	X	.	X	X	.	.	.
Max 3 Enable
Veh Recall
Veh Max Recall
Ped Recall
Cond Service Inhibit.
Phase Omit
Special Function

Alt Sequence A B C D E F

 Step 2 Program 1 Step Begins 2200

Flash. Dimming Enable.
 Red Rest Alt Veh Extension
 Spare 5. Det Log Enable.
 Spare 3. Spare 4
 Type 0 Dly Enable. . . Spare 2
 Det Diag Plan. . . . 0

Phase Number

	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable
Max 3 Enable
Veh Recall
Veh Max Recall
Ped Recall
Cond Service Inhibit.
Phase Omit
Special Function

Alt Sequence A B C D E F

TOD Program Steps

 Step 3 Program 2 Step Begins 0600

Flash. Dimming Enable.
 Red Rest Alt Veh Extension
 Spare 5. Det Log Enable.
 Spare 3. Spare 4
 Type 0 Dly Enable. . . Spare 2
 Det Diag Plan. . . . 0

Phase Number

	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable	X	X	.	X	X	X	.	X
Max 3 Enable
Veh Recall
Veh Max Recall
Ped Recall
Cond Service Inhibit.
Phase Omit
Special Function

Alt Sequence A B C D E F

 Step 4 Program 2 Step Begins 2200

Flash. Dimming Enable.
 Red Rest Alt Veh Extension
 Spare 5. Det Log Enable.
 Spare 3. Spare 4
 Type 0 Dly Enable. . . Spare 2
 Det Diag Plan. . . . 0

Phase Number

	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable
Max 3 Enable
Veh Recall
Veh Max Recall
Ped Recall
Cond Service Inhibit.
Phase Omit
Special Function

Alt Sequence A B C D E F
