

TRAFFIC SIGNAL NOTES

A. NEW EQUIPMENT

1. ALL SIGNAL HEADS MOUNTED ON CANTILEVER ARMS SHALL BE POLYCARBONATE. BACKPLATES SHALL BE REQUIRED ON ALL SIGNAL HEADS.
2. ALL SIGNAL HEADS SHALL BE LIGHT EMITTING DIODES (LED).
3. CABINET SHALL BE BASE MOUNTED. A DISCONNECT BREAKER FOR EACH CIRCUIT SHALL BE INSTALLED IN A RAINPROOF (NEMA 3R), LOCKED CABINET ON A STANCHION NEXT TO OR BELOW THE METER SOCKET. RECOMMEND OPTION #2 FROM STANDARD E-175. POWER SHALL BE OBTAINED FROM CIRCUITS PROVIDED BY CITY OF BARRE NEAR CABINET LOCATION.
4. ALL SIGNAL EQUIPMENT SHALL BE PAINTED FLAT BLACK IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

B. SIGNAL OPERATION

1. SIGNAL TIMING SHOWN ON THE PLANS SHALL BE IMPLEMENTED AT THE COMPLETION OF THE TRAFFIC SIGNAL CONSTRUCTION. SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING IN THE FIELD BASED ON TRAFFIC PATTERNS AND CONDITIONS.
2. THE SIGNAL SHALL BEGIN WITH PHASES 2 & 6 FOLLOWING FLASHING OPERATIONS.
3. PEDESTRIAN MOVEMENTS ARE CONCURRENT WITH AUDIBLE INDICATIONS.

C. TRAFFIC SIGNAL CONDUIT

1. ALL TRAFFIC SIGNAL WIRED CONDUIT SHALL BE 3-INCH OR 4-INCH PVC, SCHEDULE 80.
2. WHEN CONDUIT IS PLACED BELOW THE TRAVELED ROADWAY, IT SHALL BE PLACED IN AN 8-INCH PVC ELECTRICAL CONDUIT SLEEVE, SCHEDULE 80.

D. OPTICAL VEHICLE DETECTION

1. ALL OPTICAL DETECTION CABLES SHALL BE LABELED WITH THE PHASE NUMBERS AND APPROACH DIRECTION CONTROLLED BY THE OPTICAL DETECTION UNIT (PHASE 1&6, WB)
2. ALL PROGRAMMED DETECTION ZONES SHALL FAIL IN THE 'ON' MODE.
3. NO SPLICES SHALL BE PERMITTED IN THE OPTICAL DETECTION CABLES.
4. VIDEO DETECTION ZONES SHALL BEGIN AT 5 FEET IN FRONT OF THE STOP LINE AND EXTEND AT LEAST 40 FEET.
5. FINAL VIDEO DETECTION CAMERA AIM AND DETECTION ZONE PLACEMENT SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND THE RESIDENT ENGINEER.

E. GENERAL

1. THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS AND MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY PROVIDER (CITY OF BARRE) TO PROVIDE A PERMANENT POWER SUPPLY TO THE SIGNAL EQUIPMENT.
2. SEE THE CONTROLLER ID PLAQUE DETAIL ON THIS SHEET.
3. INTERSECTION SHALL BE INTERCONNECTED WITH THE INTERSECTION AT N. MAIN ST./WASHINGTON ST. AND ELM ST./N. MAIN ST. ANTENNA SHALL BE SECURELY MOUNTED TO MAST ARM POLE EXTENSION OR AS DIRECTED BY THE RESIDENT ENGINEER.
4. INTERSECTION SHALL INCLUDE AN EMERGENCY VEHICLE PREEMPTION SYSTEM AS APPROVED BY THE CITY OF BARRE FIRE DEPARTMENT.
 PREEMPT #3 - RECEIVER 1 CALLS PHASES 1 & 6
 PREEMPT #4 - RECEIVER 2 CALLS PHASES 2
 PREEMPT #5 - RECEIVER 3 CALLS PHASE 8

TIMING AND PHASING

	PHASE 2+6				PHASE 8				PHASE 1+6				FLASHING OPERATION
	VEHICLE	MINIMUM	MAXIMUM	MAXIMUM2	VEHICLE	MINIMUM	MAXIMUM	MAXIMUM2	VEHICLE	MINIMUM	MAXIMUM	MAXIMUM2	
OFF PEAK REST OF DAY	-	4	4	4	-	4	4	4	-	4	4	4	
AM PEAK 7-9 AM	-	4	4	4	-	4	4	4	-	4	4	4	
PM PEAK 3-6 PM	-	4	4	4	-	4	4	4	-	4	4	4	

FACE	PHASE 2+6	PHASE 8	PHASE 1+6	FR (ARROW)
FACE 1	R R R R	R R R R	G Y R	FR (ARROW)
FACE 2	G Y R Y R	R R R R	R R R R	FY
FACE 6	G Y R G G	R R R R	G G G	FY
FACE 8	R R R R	R R R R	G Y R Y R	FR
PED (E-W)	DW DW DW DW	FDDW FDDW	DW DW DW DW	B
PED (N-S)	FDDW FDDW	DW DW DW DW	DW DW DW DW	B

W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. NORTHBOUND LEFT-TURN SHALL OPERATE UNDER PROTECTED LEFT-TURN PHASING.

PROGRAM PERIODS OF OPERATION

	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	AM												PM											
SUNDAY																								
MONDAY	4	1	2														3							4
TUESDAY	4	1	2														3							4
WEDNESDAY	4	1	2														3							4
THURSDAY	4	1	2														3							4
FRIDAY	4	1	2														3							4
SATURDAY																								

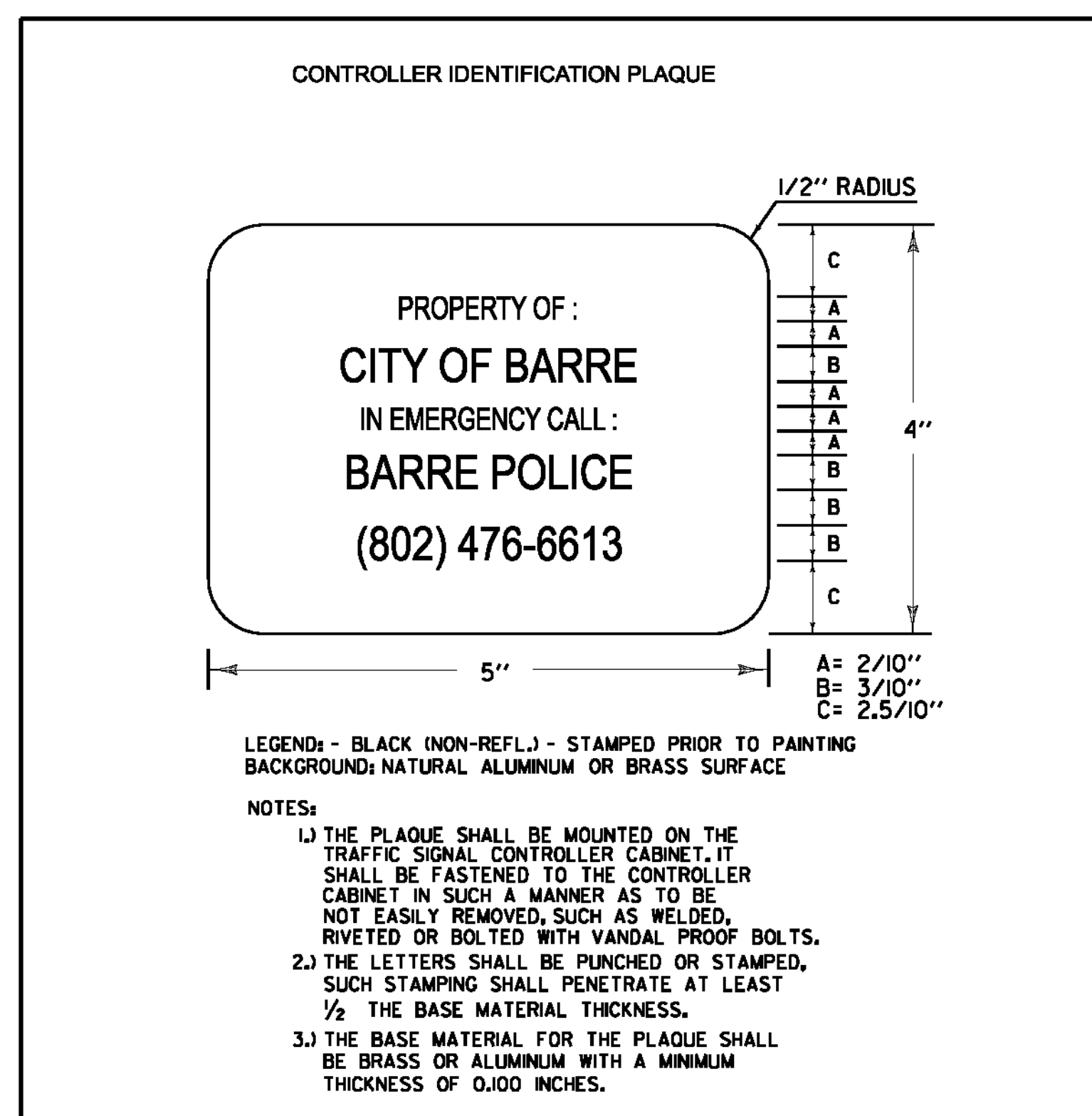
NOTES:

- PLAN 1 - MIDDAY (MAXIMUM 1): 6:00 AM TO 7:00 AM, M-F
 9:00 AM TO 3:00 PM, M-F
 6:00 PM TO 10:00 PM, M-F
- PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F
- PLAN 3 - PM PEAK (MAXIMUM 2): 3:00 PM TO 6:00 PM, M-F
- PLAN 4 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 6:00 AM, M-F
 10:00 PM TO MIDNIGHT, M-F
 ALL DAY SATURDAYS AND SUNDAYS

COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

	PLAN 1	PLAN 2	PLAN 3	PLAN 4
CYCLE LENGTH	80	90	80	FREE
COS	111	121	131	-
OFFSET	28	25	43	-
SPLIT TIME 01	20	19	17	-
SPLIT TIME 02	35	45	38	-
SPLIT TIME 03	0	0	0	-
SPLIT TIME 04	25	26	25	-
SPLIT TIME 05	0	0	0	-
SPLIT TIME 06	55	64	55	-
SPLIT TIME 07	0	0	0	-
SPLIT TIME 08	0	0	0	-

COORDINATION NOTES:
 1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED PHASE (02 & 06)



LEGEND: - BLACK (NON-REFL.) - STAMPED PRIOR TO PAINTING BACKGROUND; NATURAL ALUMINUM OR BRASS SURFACE

NOTES:

- 1.) THE PLAQUE SHALL BE MOUNTED ON THE TRAFFIC SIGNAL CONTROLLER CABINET. IT SHALL BE FASTENED TO THE CONTROLLER CABINET IN SUCH A MANNER AS TO BE NOT EASILY REMOVED, SUCH AS WELDED, RIVETED OR BOLTED WITH VANDAL PROOF BOLTS.
- 2.) THE LETTERS SHALL BE PUNCHED OR STAMPED, SUCH STAMPING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
- 3.) THE BASE MATERIAL FOR THE PLAQUE SHALL BE BRASS OR ALUMINUM WITH A MINIMUM THICKNESS OF 0.100 INCHES.

NORTH/SOUTH MAIN ST AND PROSPECT ST/CHURCH ST

PROJECT NAME: BARRE CITY
 PROJECT NUMBER: FECC F 026-(134) C/1

FILE NAME: z09B240_TSPS3A.dgn
 PROJECT LEADER: G. BAKOS
 DESIGNED BY: DMP / MDS
 TRAFFIC SIGNAL PLAN 3, SHEET 2

PLOT DATE: 4/5/2010
 DRAWN BY: DMP / JAR
 CHECKED BY:
 SHEET 59 OF 95

DATUM	
VERTICAL	NAVD 1929
HORIZONTAL	NAD 27