

TRAFFIC SIGNAL NOTES

A. NEW EQUIPMENT

- ALL SIGNAL HEADS MOUNTED ON CANTILEVER ARMS SHALL BE POLYCARBONATE. BACKPLATES SHALL BE REQUIRED ON ALL SIGNAL HEADS. SIGNAL HEADS SHALL BE EQUIPPED TO PERMIT SPAN WIRE MOUNTING IN ADDITION TO RIGID MOUNTING.
- ALL SIGNAL HEADS SHALL BE LIGHT EMITTING DIODES (LED).
- CABINET SHALL BE POLE MOUNTED. DISCONNECT SWITCH AND METER SHALL BE ATTACHED TO THE EXTERIOR OF THE CABINET ON THE SIDE FURTHEST FROM TRAFFIC. POWER SOURCE SHALL BE UNDERGROUND FEED. RECOMMEND OPTION #5 FROM STANDARD E-175.
- ALL SIGNAL EQUIPMENT SHALL BE PAINTED FLAT BLACK, IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- CONTRACTOR SHALL DESIGN SIGNAL POLES AND FOUNDATIONS TO SUPPORT THE VARIOUS LOADING CONDITIONS EXPECTED FOR THE EQUIPMENT. THE INITIAL INSTALLATION SHALL CONSIST OF CANTILEVER MAST ARMS WITH SIGNAL HEADS, SIGNS, OPTICAL DETECTION EQUIPMENT, AND PREEMPTION EQUIPMENT WITH ALL WIRING TO BE INSTALLED AERIALY BETWEEN POLE EXTENSION ARMS AS SHOWN ON SHEET 48. THE SIGNAL POLES AND FOUNDATIONS SHALL ALSO BE DESIGNED TO SUPPORT A SPAN WIRE SIGNAL SYSTEM, WITHOUT CANTILEVER MAST ARMS ATTACHED, WITH THE OPTICAL DETECTION EQUIPMENT MOUNTED TO THE SIGNAL POLE UPRIGHT (TO BE INSTALLED/MODIFIED IN A SUBSEQUENT CONTRACT BY OTHERS) AS SHOWN ON SHEET 51.

B. SIGNAL OPERATION

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

C. TRAFFIC SIGNAL CONDUIT

- ALL TRAFFIC SIGNAL CONDUIT SHALL BE 3-INCH PVC, SCHEDULE 80.

D. OPTICAL VEHICLE DETECTION

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

E. GENERAL

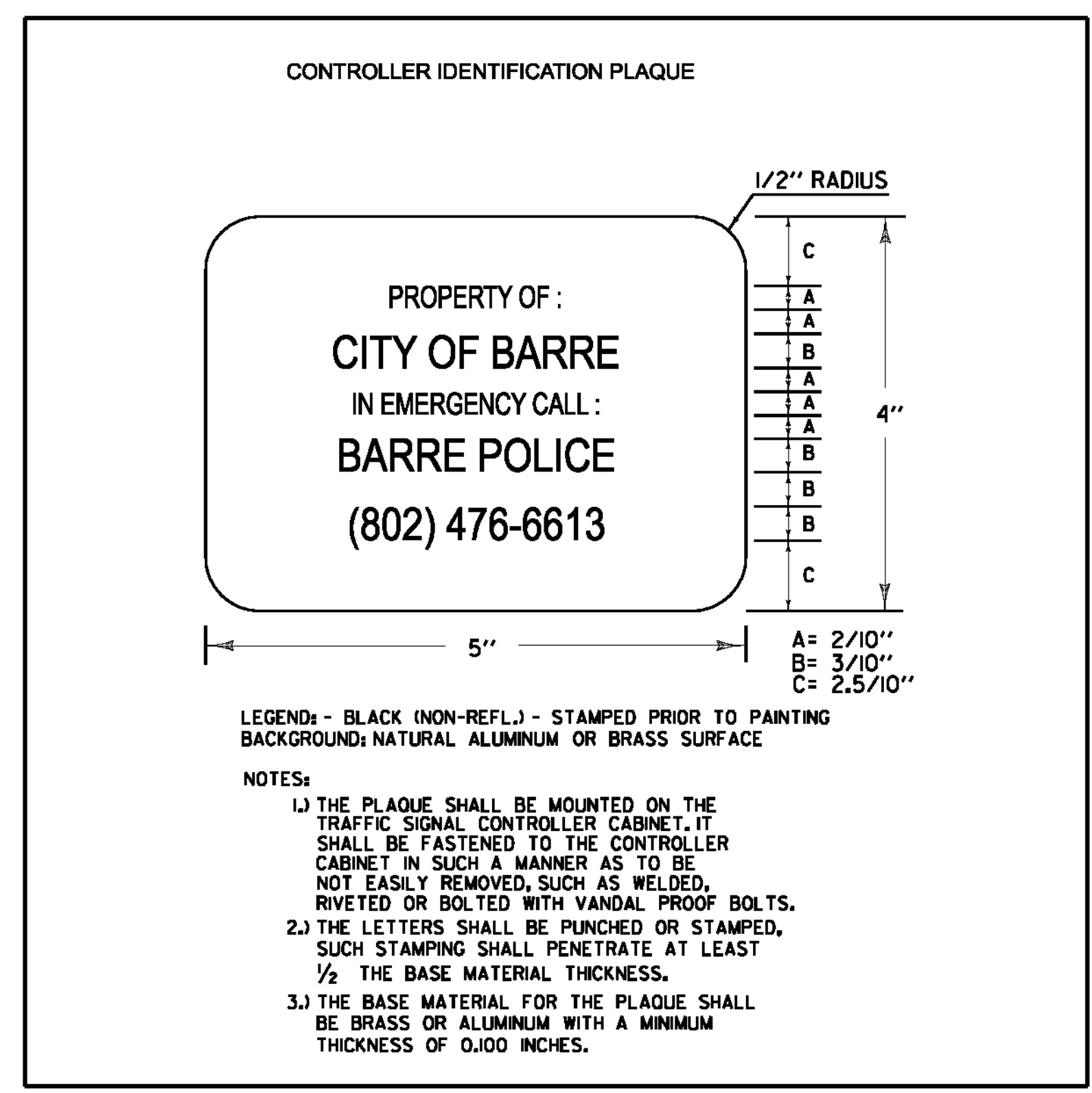
- THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS AND MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY COMPANY TO PROVIDE A PERMANENT POWER SUPPLY TO THE SIGNAL EQUIPMENT.
- SEE THE CONTROLLER ID PLAQUE DETAIL ON THIS SHEET.
- INTERSECTION SHALL BE INTERCONNECTED WITH THE INTERSECTION AT MAPLE AVENUE AND SUMMER STREET VIA WIRELESS RADIO SYSTEM. ANTENNA SHALL BE SECURELY MOUNTED TO MAST ARM POLE EXTENSION OR AS DIRECTED BY THE ENGINEER.
- 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 & 5
 - PREEMPT #5 - RECEIVER 3 CALLS PHASE 8
 - PREEMPT #6 - RECEIVER 4 CALLS PHASE 4

DATUM	
VERTICAL	NAVD 1929
HORIZONTAL	NAD 27

TIMING AND PHASING

	PHASE 2+6 (DWELL)				PHASE 4+8				PHASE 1+5				FLASHING OPERATION
	VEHICLE	MINIMUM	MAXIMUM	PED ACT	VEHICLE	MINIMUM	MAXIMUM	PED ACT	VEHICLE	MINIMUM	MAXIMUM	PED ACT	
OFF PEAK REST OF DAY	-	-	-	-	-	-	-	-	-	-	-	-	
AM PEAK 7-9 AM	-	-	-	-	-	-	-	-	-	-	-	-	
PM PEAK 4-6 PM	-	-	-	-	-	-	-	-	-	-	-	-	
FACE 1	R	R	R	R	R	R	R	R	G	Y	R		FR (ARROW)
FACE 2	G	Y	R		R	R	R	R	R	R	R		FY
FACE 4	R	R	R	R	G	Y	R		R	R	R		FR
FACE 4A	R	R	R	R	G	Y	R		R	R	R		FR
FACE 5	R	R	R	R	R	R	R	R	G	Y	R		FR (ARROW)
FACE 6	G	Y	R		R	R	R	R	R	R	R		FY
FACE 8	R	R	R	R	G	Y	R		R	R	R		FR
FACE 8A	R	R	R	R	G	Y	R		R	R	R		FR
PED (N-S)	D	W	D	W	F	D	D	W	D	W	D	W	B
PED (E-W)	F	D	D	W	D	W	D	W	D	W	D	W	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. EASTBOUND AND WESTBOUND LEFT-TURNS SHALL OPERATE UNDER LEADING PROTECTED ONLY 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																					
TUESDAY	4	1	2																					
WEDNESDAY	4	1	2																					
THURSDAY	4	1	2																					
FRIDAY	4	1	2																					
SATURDAY																								

NOTES:
 PLAN 1 - MIDDAY (MAXIMUM D): 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 D): 7:00 AM TO 9:00 AM, M-F
 PLAN 3 - PM PEAK (MAXIMUM D): 3:00 PM TO 6:00 PM, M-F
 PLAN 4 - OFFPEAK (MAXIMUM D): 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	80	80	FREE
COS	111	121	131	-
OFFSET	41	39	45	-
SPLIT TIME 01	11	11	14	-
SPLIT TIME 02	37	37	34	-
SPLIT TIME 03	0	0	0	-
SPLIT TIME 04	32	32	32	-
SPLIT TIME 05	20	27	21	-
SPLIT TIME 06	28	21	27	-
SPLIT TIME 07	0	0	0	-
SPLIT TIME 08	32	32	32	-

COORDINATION NOTES:
 1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED GREEN PHASE (04 & 08)

NORTH MAIN ST AND MAPLE AVE / RT 62

PROJECT NAME:	BARRE CITY	FILE NAME:	z09B240_TSPSIA.dgn	PLOT DATE:	4/5/2010
PROJECT NUMBER:	FEGC F 026-(134) C/1	PROJECT LEADER:	G. BAKOS	DRAWN BY:	DMP / JAR
DESIGNED BY:	DMP / MDS	TRAFFIC SIGNAL PLAN 1, SHEET 2	CHECKED BY:		
				SHEET	49 OF 95