

# TRAFFIC SIGNAL NOTES

## A. NEW SIGNAL EQUIPMENT

1. ALL SIGNAL HEADS SHALL BE 12" POLYCARBONATE. THE SIGNAL HEADS SHALL HAVE FLAT BLACK HOUSINGS AND VISORS.
2. ALL SIGNAL HEADS SHALL HAVE BLACK LOUVERED BACK PLATES.
3. THE TRAFFIC SIGNAL CONTROLLER AND RELATED EQUIPMENT SHALL BE AN ECONOLITE ASC/3-2100 (NEMA TS2) IN A NEMA P44 TRAFFIC CONTROL CABINET WITH 15" BASE EXTENSION INSTALLED AT THE LOCATION SHOWN ON PLANS. THE CONCRETE BASE FOR THE CONTROLLER CABINET SHALL HAVE A 18" X 12" OPENING FOR TRAFFIC SIGNAL CONDUIT LOCATED IN THE CENTER. THE OPENING SHALL BE FILLED WITH STONE AND UNUSED CONDUIT PLUGGED WITH STEEL WOOL BEFORE PLUG SEAL IS INSTALLED. TRAFFIC CONTROL CABINET SHALL BE ORIENTED SO THAT THE DOOR DOES NOT FACE THE ROADWAY.
4. ALL SIGNAL HEADS SHALL HAVE RED, YELLOW AND GREEN LED SIGNALS WITH A VISIBLE BEAM SPREAD OF 80 DEGREES OFF AXIS.
5. ALL SIGNAL EQUIPMENT SHALL BE PAINTED FLAT BLACK IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
6. ALL SIGNAL EQUIPMENT AND MAST ARM SIGNS SHALL HAVE SAFETY CABLES.
7. A BYPASS SWITCH WILL BE REQUIRED ON THE METER SOCKET TO ALLOW FOR MAINTENANCE ON THE METER.
8. 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. A SECONDARY DISCONNECT SHALL BE INSTALLED ON THE CONTROLLER CABINET FOR MAINTENANCE PURPOSES.

## B. SIGNAL OPERATION

1. SWITCH-OVER TO NEW SIGNAL SYSTEM SHALL NOT BE DONE DURING PEAK TRAFFIC PERIODS. UNIFORMED TRAFFIC OFFICERS SHALL CONTROL TRAFFIC DURING SWITCH-OVER.
2. ALL SIGNALS SHALL DWELL ON THE VT 100 THRU MOVEMENT.
3. THE VT 100 THRU PHASE SHALL BE USED FOR THE START-UP PHASE FOLLOWING FLASHING OPERATION.
4. SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING IN THE FIELD BASED ON TRAFFIC OBSERVATION AND/OR ADDITIONAL FIELD STUDIES. ADJUSTMENTS REQUESTED BY THE ENGINEER SHALL BE MADE WITHIN A 48 HOUR PERIOD AND PAYMENT SHALL BE INCIDENTAL TO ITEM 678.15. SIGNAL TIMING CHANGES INVOLVING THE EXISTING COORDINATED TRAFFIC SIGNALS SHALL BE MADE IN COLLABORATION WITH THE TRAFFIC DESIGN SECTION COORDINATED THROUGH THE ENGINEER.

## C. PULLBOXES AND JUNCTION BOXES

1. PULLBOXES AND JUNCTION BOXES ARE DETAILED ON STANDARD E-173. MINIMUM JUNCTION BOX SIZE SHALL BE 18" x 12" x 12", OR LARGER AS REQUIRED BY THE ELECTRICAL CODE.
2. THE LOGO ON PULLBOXES AND JUNCTION BOXES SHALL BE "TRAFFIC SIGNAL" EXCEPT THE LOGO ON THE THE JUNCTION BOX AT STA 27+41 SHALL BE "STREET LIGHTING".
3. ALL PULLBOXES / JUNCTION BOXES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 678.

## D. TRAFFIC SIGNAL CONDUIT

1. ALL TRAFFIC SIGNAL WIRED CONDUIT SHALL BE 2-INCH SCHEDULE 80 PVC.
2. WHEN CONDUIT IS PLACED BELOW THE ROADWAY OR ACROSS SIDE ROADS, IT SHALL BE PLACED IN A STEEL SLEEVE, SIZE AS SHOWN ON THE PLANS.
3. TRAFFIC SIGNAL WIRED CONDUIT SHALL ENTER THE CONTROLLER CABINET THROUGH THE OPENING IN THE CONCRETE BASE, CONDUIT SHALL NOT BE CAST IN CONCRETE.
4. ALL TRAFFIC SIGNAL CONDUIT WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 678.

## E. VIDEO DETECTION CAMERAS

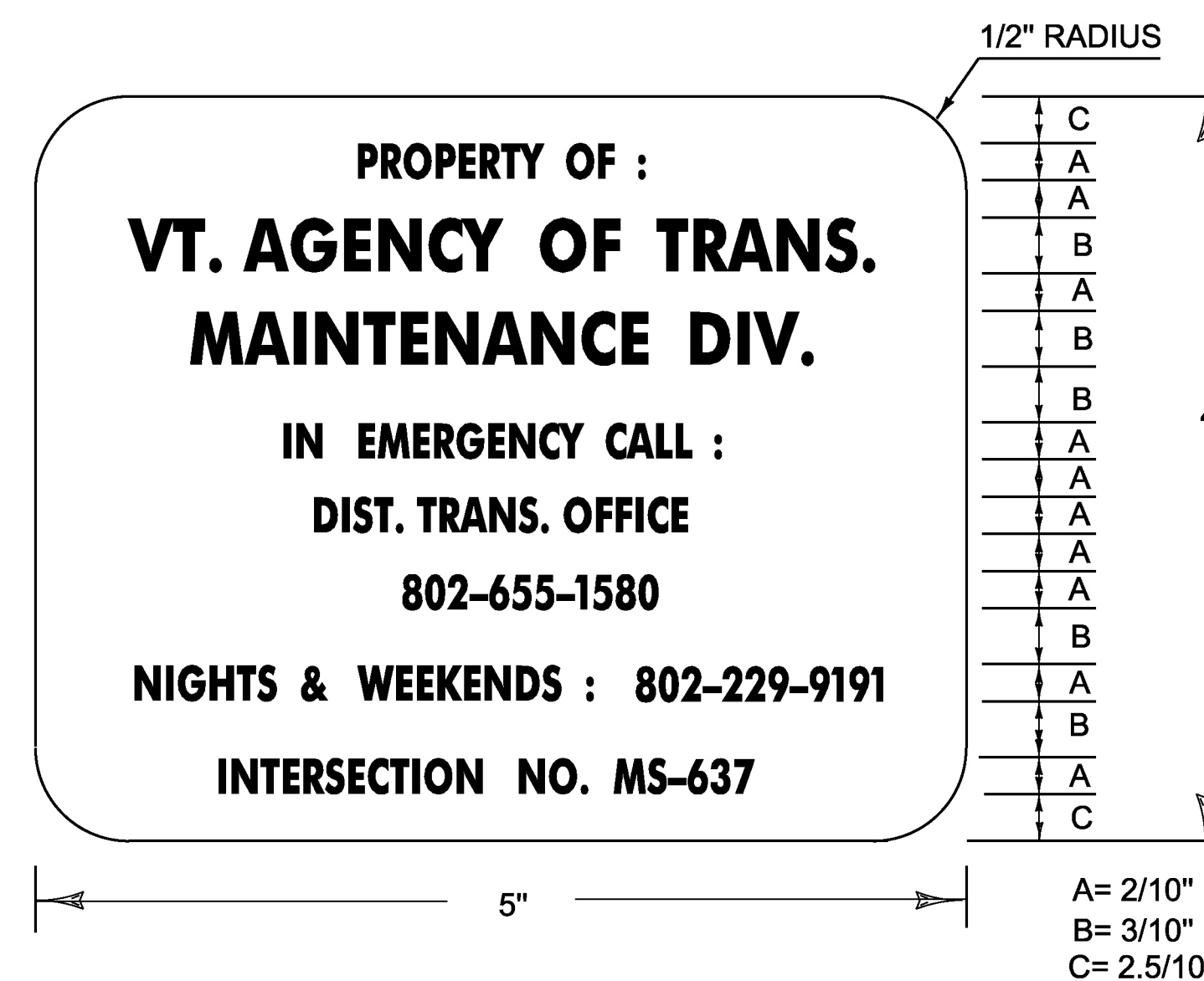
1. VIDEO VEHICLE DETECTORS SHALL BE PLACED SO THAT OCCLUSION IS MINIMIZED AND PHASING IS NOT AFFECTED.
2. VIDEO VEHICLE DETECTION AREAS SHALL EXTEND 5 FT PAST THE STOP BAR.
3. VIDEO VEHICLE DETECTION SYSTEM SHALL BE ECONOLITE AUTOSCOPE ENCORE OR ITERIS VERSICAM OR TRAFICON VIP SERIES.
4. VIDEO VEHICLE DETECTORS SHALL BE WIRED WITHOUT ANY SPLICES FROM THE CAMERA TO THE CONTROLLER.

## F. MAST ARM FOUNDATIONS

1. SEE THE CONTRACT DOCUMENTS FOR THE GEOTECHNICAL ANALYSIS.

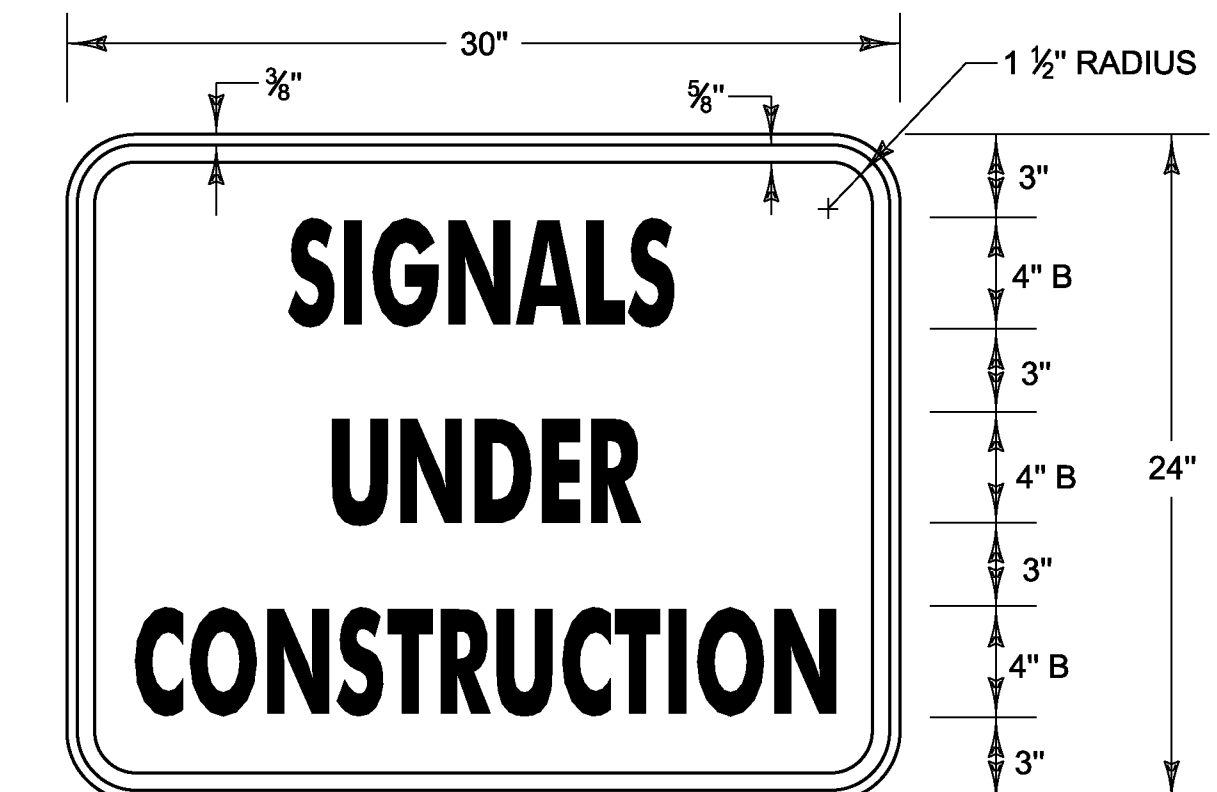
## G. GENERAL

1. TRAFFIC SIGNAL HEADS SHALL BE SECURELY COVERED UNTIL THEY ARE FULLY OPERATIONAL.
2. THE CONTRACTOR SHALL ACQUIRE ALL THE NECESSARY PERMITS AND MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY COMPANY TO PROVIDE A PERMANENT POWER SUPPLY TO THE TRAFFIC SIGNAL EQUIPMENT, IF APPLICABLE. THE ROUTING OF POWER TO THE INTERSECTION SHALL BE SUCH THAT THE STATE HAS FULL RESPONSIBILITY FROM THE TRANSFORMER THROUGH THE SIGNAL. NO INTERVENING OWNERSHIP/ RESPONSIBILITY SHALL BE ALLOWED.
3. ALL ELECTRICAL WORK INCLUDING WIRING SHALL BE DONE BY A LICENSED ELECTRICIAN AND OVERSEEN BY A MASTER ELECTRICIAN.



### CONTROLLER PLAQUE DETAIL

NOT TO SCALE



MATERIALS: SEE STD. E-144  
COLORS: TEXT & BORDER - BLACK  
BACKGROUND - ORANGE (RETROREFLECTIVE SHEETING)

### CONSTRUCTION SIGN DETAIL

NOT TO SCALE  
TO BE INSTALLED ON ROAD WORK AHEAD SIGN POSTS.

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

## NOTES:

- 1.) THE PLAQUE SHALL BE MOUNTED ON ALL TRAFFIC SIGNAL CONTROLLER CABINETS. 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.

PROJECT NAME: WATERBURY  
PROJECT NUMBER: NHG SGNL(43)

FILE NAME: t13b018traf.dgn  
PROJECT LEADER: P. COBURN  
DESIGNED BY: I. DEGUTIS  
TRAFFIC SIGNAL PROJECT NOTES 1

PLOT DATE: 12/31/2013  
DRAWN BY: I. DEGUTIS  
CHECKED BY: M. LACROIX  
SHEET 10 OF 17