

TRAFFIC SIGNAL NOTES

A. NEW EQUIPMENT

- ALL SIGNAL HEADS MOUNTED ON SPAN WIRES SHALL BE POLYCARBONATE. BACKPLATES SHALL BE INSTALLED ON HEADS FACING EAST AND WEST (AS NOTED IN THE LIST OF MAJOR EQUIPMENT), DEPENDING ON AM OR PM VISIBILITY. PEDESTRIAN HEADS SHALL BE HEAVY DUTY ALUMINUM.
- ALL CONTROLLERS SHALL BE ECONOLITE BRAND.
- A DISCONNECT BREAKER FOR EACH CIRCUIT SHALL BE INSTALLED IN A RAINPROOF (NEMA 3R), LOCKED CABINET ON THE STRAIN POLE BELOW THE METER SOCKET. SEE VTrans STANDARD E-175M AND USE OPTION #5.
- ALL SIGNAL HEAD INDICATIONS INCLUDING PEDESTRIAN (WALK/DON'T WALK) INDICATIONS SHALL BE LED'S.
- THE CONCRETE PAD NORMALLY PLACED BELOW THE CABINET (AS SHOWN ON STD E-171BM) IS NOT REQUIRED ON THIS PROJECT DUE TO THE BRICK PAVERS TO BE INSTALLED IN THIS AREA.
- IF IT IS NECESSARY TO MOUNT 2 PEDESTRIAN SIGNS AND BUTTONS 90° TO EACH OTHER ON THE PEDESTRIAN POLES, ONE BUTTON SHALL BE MOUNTED AT A HEIGHT OF 1067 mm, WITH THE SIGN MOUNTED ABOVE, AS SHOWN ON VTrans STD. E-170M. THE SECOND BUTTON SHALL BE MOUNTED AT 990 mm, WITH THE SIGN PLACED BELOW THE BUTTONS. THEY CANNOT BE MOUNTED AT THE SAME HEIGHT BECAUSE THE SIGNS ARE TOO WIDE FOR THE PEDESTRIAN POSTS.

B. SIGNAL OPERATION

- SWITCH-OVER FROM EXISTING TO REPLACEMENT SIGNALS SHALL NOT BE DONE DURING PEAK TRAFFIC PERIODS. UNIFORMED TRAFFIC OFFICERS SHALL CONTROL TRAFFIC DURING SWITCH-OVER.
- ALL SIGNALS SHALL DWELL ON ROUTE 7 THRU MOVEMENT UNLESS OTHERWISE NOTED.
- THE ROUTE 7 THRU PHASE SHALL BE USED FOR THE START-UP PHASE FOLLOWING FLASHING OPERATION, UNLESS OTHERWISE NOTED.

C. TRAFFIC SIGNAL CONDUIT

- ALL TRAFFIC SIGNAL CONDUIT SHALL BE PVC.
- MINIMUM CONDUIT SIZE SHALL BE 50 mm OR AS SHOWN ON THE PLANS. SEE CHART ON STANDARD E-172M FOR DESIGN VALUES.
- WHEN CONDUIT IS PLACED BELOW THE ROADWAY OR ACROSS SIDE ROADS, IT SHALL BE PLACED IN A 150 mm MINIMUM PVC ELECTRICAL SLEEVE, AS SHOWN ON THE PLANS.
- WHEN INSTALLING CONDUIT ON THE EXISTING UTILITY POLE, IT SHALL BE MOUNTED ON STANDOFF BRACKETS, AS DETAILED ON STANDARD E-175M.

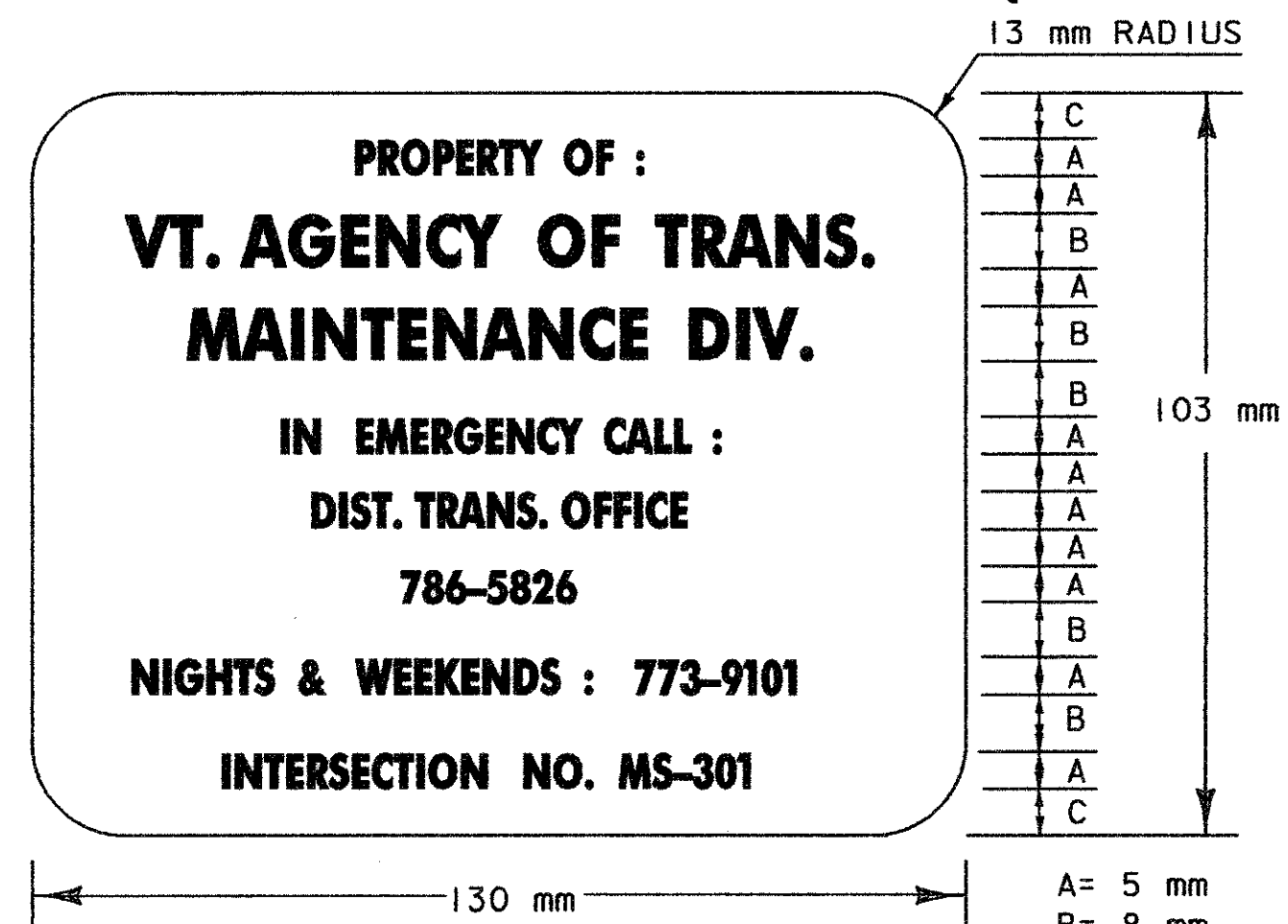
D. REMOVAL OF EXISTING EQUIPMENT

- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT (POLES, SIGNAL HEADS, SPAN WIRE, POSTS, PULL BOXES, CABLE, CONDUIT, TRAFFIC SIGNS, GUARDRAIL AND POSTS, ETC.) AND ANY UNWANTED EQUIPMENT (INCLUDING ALL TYPE B SIGNS AND DAMAGED GUARDRAIL) SHALL BE DISPOSED OF BY THE CONTRACTOR. ANY EQUIPMENT THAT IS DAMAGED OR LOST BY THE CONTRACTOR DURING REMOVAL SHALL BE REPAIRED OR REPLACED, TO THE SATISFACTION OF THE AGENCY, AT THE CONTRACTORS EXPENSE.
- REMOVAL OF EQUIPMENT SHALL INCLUDE THE REMOVAL OF CONCRETE STRAIN POLE AND OVERHEAD SIGN BASES TO A POINT 300 mm BELOW GRADE, AND BACKFILL OF THE HOLES WITH MATERIAL SIMILAR TO EXISTING SOIL.
- PAYMENT FOR REMOVAL AND DISPOSAL OF EXISTING SIGNAL EQUIPMENT SHALL BE SUBSIDIARY TO ITEM 678.15

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 AND STREET LIGHTING 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.
- THE EXISTING OVERHEAD POWER SERVICE SHALL BE REMOVED AFTER THE SIGNAL IS SWITCHED OVER.
- A UNIFORMED TRAFFIC OFFICER SHALL DIRECT TRAFFIC WHEN ONE-WAY TRAFFIC EXISTS ON ANY APPROACH. THIS INCLUDES, BUT IS NOT LIMITED TO, LOOP CUTTING OPERATIONS.
- UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM THE BEST AVAILABLE SOURCES, AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. SHOULD ANY UTILITY BE DAMAGED DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE REPAIRS AND RESTORATION OF SERVICE WITH THE AFFECTED UTILITY(S).

CONTROLLER IDENTification PLAQUE



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

NOTES:

- 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.
- THE LETTERS SHALL BE PUNCHED OR STAMPED, OR ENGRAVED, SUCH STAMPING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
- THE BASE MATERIAL FOR THE PLAQUE SHALL BE BRASS OR ALUMINUM WITH A MINIMUM THICKNESS OF 3 mm.

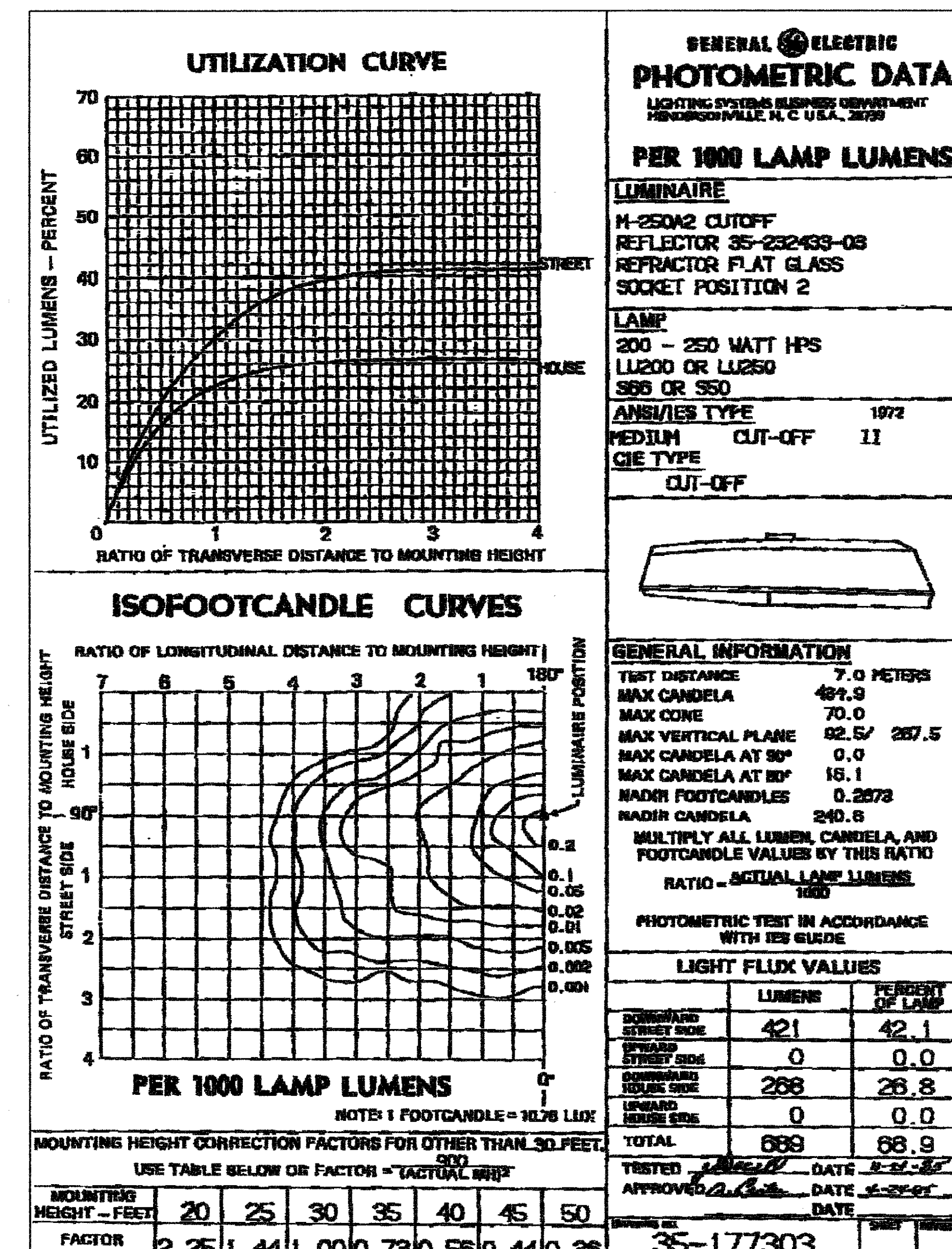
LIST OF MAJOR EQUIPMENT (ITEM 678.15)

EQUIPMENT	TOTALS
STRAIN POLES *	1
NEW 305 mm SIGNAL HEADS W/TUNNEL VISORS AND MOUNTING HARDWARE	1
SPAN-WIRE MOUNTED	2
TWO-WAY (FACES 4 & 8 HAVE BACKPLATES)	3 SECTION
FOUR WAY (FACES 4 & 8 HAVE BACKPLATES)	3 SECTION
SOLID-STATE KEYBOARD-ENTRY CONTROLLER AND CABINET POLE MOUNTED	1
METER AND DISCONNECT ON STRAIN POLE	1
MISCELLANEOUS EQUIPMENT, HARDWARE, ETC. TO COMPLETE INSTALLATION	1
PEDESTRIAN POSTS	3
ADA PEDESTRIAN PUSH BUTTON / SIGN ASSEMBLY	8
PEDESTRIAN AUDIO	4
WALK / DON'T WALK PEDESTRIAN HEADS (SINGLE FACE, SYMBOLIC TYPE W/150 mm SYMBOLS WITH RELATED MOUNTING HARDWARE:	4
PED. POST MOUNTED	4
SIGNAL POLE MOUNTED	4
PRIORITY CONTROL (PRE-EMPTION)	1
250 WATT HP. SODIUM TYPE II CUT OFF LUMMARE, SINGLE MEMBER BRACKET ARM	1

* EXISTING UTILITY POLE * TO BE MAINTAINED AS STRAIN POLE #1

NOTE: CONTRACTOR SHALL PROVIDE ALL MISC EQUIPMENT, HARDWARE, ECT TO COMPLETE INSTALLATION TO PROVIDE FOR A FULLY FUNCTIONAL SYSTEM

PHOTOMETRIC DATA



STREET LIGHTING

STRAIN POLE #2 SHALL HAVE A 250-WATT HIGH-PRESSURE SODIUM TYPE II CUTOFF LUMINAIRE MOUNTED ON A SINGLE MEMBER BRACKET ARM AT A 10.67 (OR AS DETERMINED BY ENGINEER) METER MOUNTING HEIGHT. THE LUMINAIRE, BRACKETS AND INCIDENTALS ARE PAID FOR UNDER ITEM 678.15. THE LUMINAIRE SHALL INCLUDE AN ALUMINUM HOUSING WITH EASY ACCESS TO THE BALLAST ASSEMBLY, PHOTOELECTRIC CONTROL, FILTERED OPTICAL ASSEMBLY, AND REGULATOR BALLAST FOR THE APPROPRIATE VOLTAGE. THE BALLAST SHALL BE MATCHED TO ITS STARTING CIRCUIT WIRING SHALL BE NEAT, BUNDLED, AND KEPT AWAY FROM EXCESS HEAT. THE LIGHT UTILIZATION AND MINIMUM FOOTCANDLES OF THE INSTALLED LUMINAIRE SHALL BE AT LEAST AS GREAT AS INDICATED ON THE GENERAL ELECTRIC PHOTOMETRIC DATA SHEET. THE LUMINAIRE SHALL BE AIMED DOWN TOWARD THE ROUTE 140 (WEST APPROACH) STOP BAR AREA AND INSTALLED AT AN ANGLE REFERENCED FROM THE SPAN WIRE AS INDICATED ON SPAN WIRE CROSS SECTION ON THE STRAIN POLE/FOOTING DETAIL SHEET - SINGLE INTERSECTION. SEE STANDARD DETAILS E-180AM AND E-180BM FOR INSTALLATION OF STREET LIGHTING.

NOTE:
ALL DIMENSIONS IN MILLIMETERS
EXCEPT WHERE OTHERWISE INDICATED



PROJECT NAME: WALLINGFORD
PROJECT NUMBER: NHG SGNL(26)S/STP ADAS(2)
FILE NAME: zc294frm.dgn PLOT DATE: 01/28/02
PROJECT LEADER: GAS DRAWN BY: MBL
DESIGNED BY: RAW / JCO CHECKED BY: GAS
TRAFFIC SIGNAL NOTES & DETAILS SHEET 15 OF 25

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