

# STREET LIGHTING DETAILS



LUMINAIRE TYPE:  
LENS FINISH: DROP LENS GLASS  
HOUSING: ALUMINUM

LAMP TYPE:  
TYPE: 250W HIGH PRESSURE SODIUM  
LUMENS: 28500

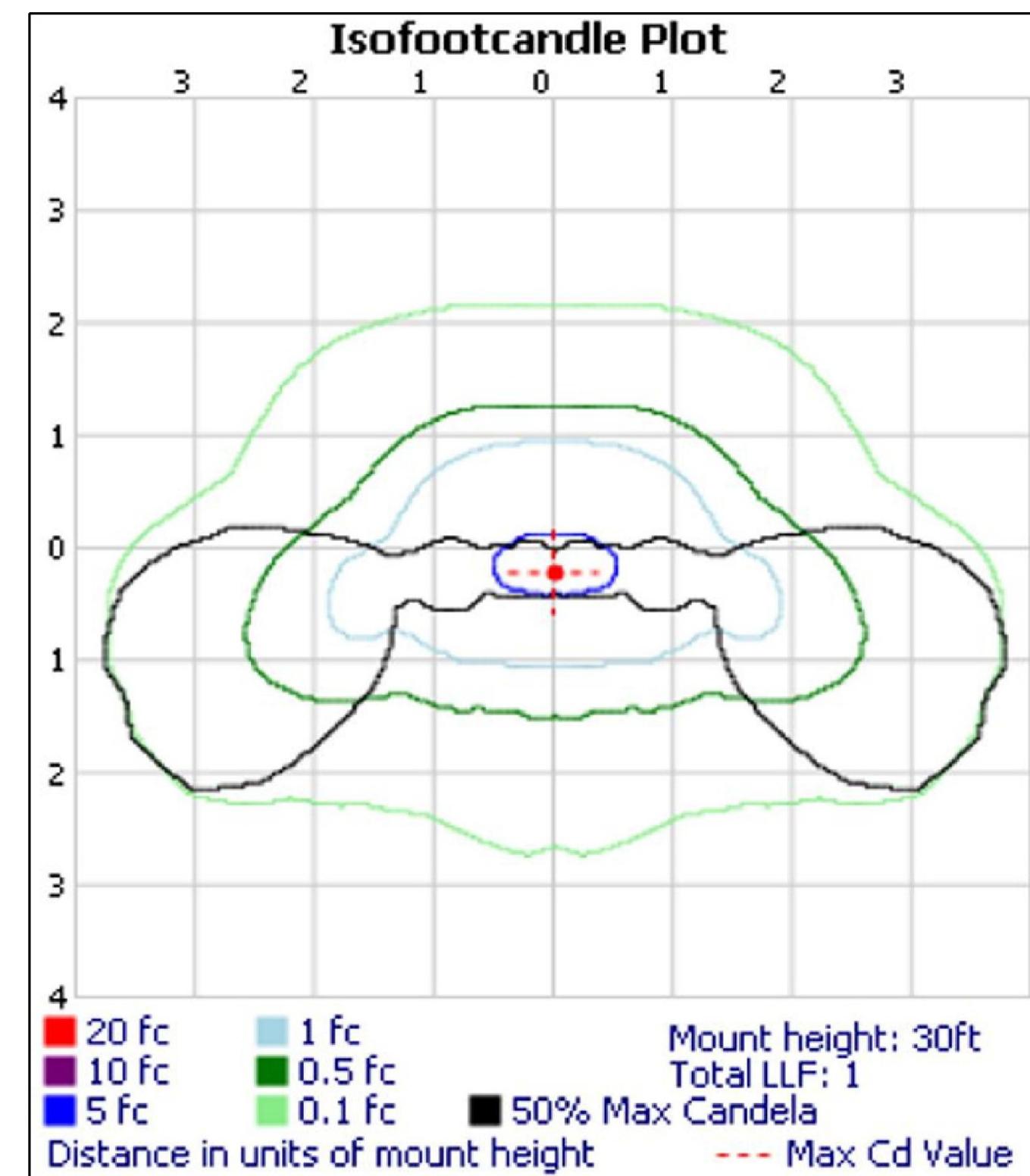
ANSI/IES TYPE:  
MEDIUM, TYPE III, FULL CUT-OFF OPTICS

LUMINAIRE:  
AMERICAN ELECTRIC LIGHTING  
125 25S R3 FG HP

LAMP:  
250W HPS

MOUNTING HEIGHT:  
9.0 M

## ISOFOOTCANDLE PLOT



### CONCRETE BASES

WHEN CONCRETE BASES ARE INSTALLED IN SLOPING GROUND, THE GREATEST EXPOSED HEIGHT TO KEEP ALL OF THE TOP ABOVE GROUND MUST BE DOUBLED AND THEN ADDED TO THE MINIMUM DEPTH FOR THE TOTAL BASE DEPTH.

CARE SHOULD BE TAKEN WHERE CONCRETE BASES, DRAINAGE STRUCTURES OR UTILITIES ARE CLOSE TOGETHER.

### POLES, ANCHOR BASES AND ARM

ALL NEW STREET LIGHTS POLES AND LUMINAIRE ARMS SHOULD BE ALUMINUM IN ACCORDANCE WITH SUBSECTION 753.01(B).

ALL STREET LIGHT POLES SHALL HAVE A FRANGIBLE OR BREAKAWAY DEVICE (TRANSFORMER BASE, UNLESS NOTED ON THE PLANS).

### LUMINAIRES

ALUMINUM, COBRA HEAD TYPE, 250 WATT HIGH PRESSURE SODIUM (HPS), TYPE X DISTRIBUTION, EQUIVALENT TO AMERICAN ELECTRIC LIGHTING CATALOG NO. 125 25S R3 FG HP.

LUMINAIRE SUBSTITUTIONS SHALL MEET THE ISOFOOTCANDLE DATA AND THE ILLUMINATION LEVELS AS SHOWN ON THIS PLAN.

### PULLBOXES

POLYMER CONCRETE AND REINFORCED FIBERGLASS U.L. LISTED PULLBOXES SHALL BE INSTALLED WITH HEAVY DUTY COVERS.

### CONDUIT SLEEVE

THE SLEEVE SHALL EXTEND TO WITHIN 600 MM OF THE SIDE OF A CONCRETE BASE OR PULLBOX. WHERE NO CONCRETE BASE OR PULLBOX IS PRESENT, THE SLEEVE SHALL EXTEND 1200 MM BEYOND THE OUTSIDE EDGE OF SHOULDER OR FACE OF CURB. BACKFILLING AROUND A SLEEVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. THE SLEEVE SHALL BE SCHEDULE 80.

### WIRE

ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR PULLBOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND SIZE AS SPECIFIED ON THE PLANS. ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.

### GROUNDING

ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR. RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUNDING CONDUCTOR. ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

### GENERAL

THE LOAD ON EACH BRANCH OF A THREE WIRE CIRCUIT SHALL BE AS BALANCED AS POSSIBLE. LOAD TO NEUTRAL.

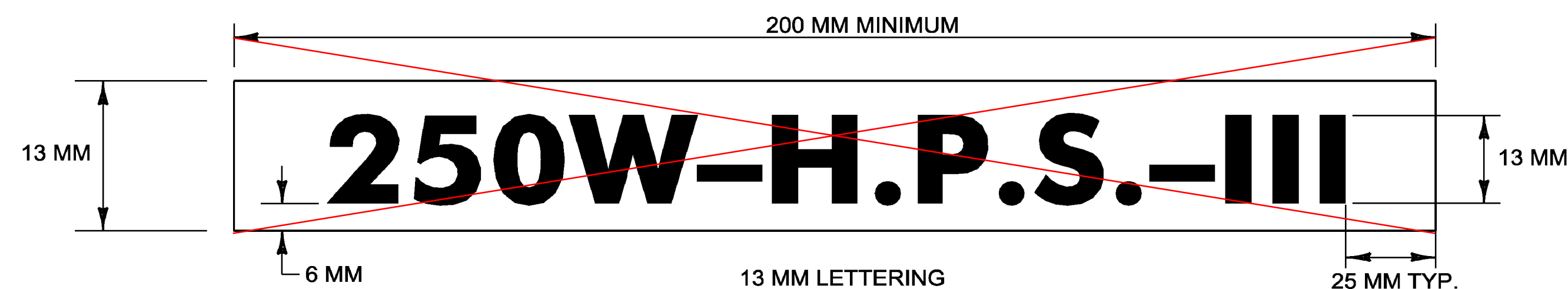
THE LAST CONCRETE POLE BASE AT THE END OF EACH CIRCUIT AND SOME PULLBOXES SHALL HAVE A CONDUIT SWEEP WITH CAP INSTALLED FOR FUTURE USE.

THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS AND MAKE ALL NECESSARY ARRANGEMENTS WITH THE BURLINGTON ELECTRIC DEPARTMENT TO PROVIDE A PERMANENT POWER SUPPLY TO THE STREET LIGHTING SYSTEM.

ALL CONNECTING HARDWARE (NUTS, BOLTS, ETC.) SHALL BE STAINLESS STEEL.

## DETAIL FOR TAGS ATTACHED TO STREET LIGHT POLES

NOT TO SCALE



LEGEND: BLACK OR WHITE (NON-REFLECTIVE) - STAMPED PRIOR TO PRINTING/PAINTING.  
BACKGROUND: NATURAL ALUMINUM OR FLAT BLACK SURFACE, THE SAME AS POLE FINISH.

### NOTES:

1. THE TAG SHALL BE MOUNTED ON ALL STREET LIGHT POLES IN SUCH A MANNER AS NOT TO BE EASILY REMOVED, SUCH AS WELDED, RIVETED, OR BOLTED WITH VANDAL PROOF BOLTS.
2. THE LETTERS SHALL BE PUNCHED, STAMPED, ENGRAVED, OR PHOTO-ETCHED. PUNCHING, STAMPING OR ENGRAVING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
3. THE BASE MATERIAL FOR THE TAG SHALL BE ALUMINUM WITH A MINIMUM THICKNESS OF 2.5 MM.
4. THE TAG SHALL BE ATTACHED TO THE POLE ABOVE THE HANDHOLE, 150 MM MAXIMUM, IF THE POLE HAS A TRANSFORMER BASE, ATTACH TAG TO COVER.

PROJECT NAME: CAMBRIDGE  
PROJECT NUMBER: STP 030-2(27)

FILE NAME: +78fi63frm.dgn  
PROJECT LEADER: JLS  
DESIGNED BY: MBL  
STREET LIGHTING DETAILS

PLOT DATE: 29-MAY-2012  
DRAWN BY: MBL  
CHECKED BY: JAD  
SHEET 59A OF 214