## NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- 2. THE DESIGN SHALL BE BASED UPON AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" CURRENT AT THE TIME THE PROJECT IS ADVERTISED AND A TOTAL COMBINED LUMINAIRE WEIGHT OF 326 KG (720 LBS.) AND HAVING A TOTAL PROJECTED AREA OF 7.3 SQ M (24 SQ. FT.).
- 3. ALL TOWER SHAFT COMPONENTS, INCLUDING, BUT NOT LIMITED TO THE SHAFT SECTIONS, BASE PLATE, LADDER CLIPS, HANDHOLE DOOR, HANDHOLE REINFORCING, RAIN GUTTER, AND BASE PLATE, SHALL BE FABRICATED FROM HIGH-STRENGTH, LOW ALLOY, STEEL WITH A MINIMUM YIELD STRENGTH OF 345 K PA (50,000 PSD) ACCORDING TO AASHTO M 223 (ASTM A 572 GRBO)
- 4. THE ELECTRIC MOTOR, MOTOR GEAR REDUCER, WINCH DRUM ASSEMBLY AND AUTOMATIC SHUTOFF SWITCH OF THE LOWERING DEVICE SHALL BE ACCESSIBLE FROM THE FRONT OF THE TOWER FOR EASY REMOVAL AND MAINTENANCE, ALL COMPONENTS SHALL BE REMOVABLE THROUGH THE HANDHOLE.
- 5. THE LIGHT TOWER SHAFT SHALL HAVE LADDER CLIPS. CLIPS SHALL BEGIN 1.8 M (6 FT.) ABOVE THE BASE PLATE WITH ALTERNATE 900 (36 INCH) AND 250 (10 INCH) SPACING THEREAFTER, FOR THE ENTIRE LENGTH. THE TOP 3 M (10 FT.) OF THE POLE SHAFT SHALL HAVE 3 SETS OF CLIPS. EACH SET OF CLIPS SHALL BE 120 DEGREES APART. CLIPS SHALL BE 6 X 50 (0.25 X 2 INCHES) WELDED TO THE SHAFT TO PRODUCE A SLOT 15.9 (0.625 INCHES) DEEP AND 41.3 (1.625 INCHES) LONG. THE TOP INSIDE EDGE SHALL BE CHAMFERED.
- 6. A COPPER BONDING JUMPER SHALL BOND SLIP-FIT POLE SECTIONS TOGETHER WITH A FLAT COPPER MESH AND STAINLESS STEEL GROUND LUGS.
- 7. ALL TOWER SHAFT HARDWARE, SUCH AS GROUND LUGS, JUNCTION BOXES, HARDWARE FOR THE HANDHOLE DOOR, INCLUDING THE HANDLE/LATCH MECHANISM, HINGE AND DOOR STOP, SHALL BE STAINLESS STEEL. ALL CONDUIT AND CONDUIT FITTINGS SHALL BE PVC COATED GALVANIZED STEEL.
- 8. THE ENTIRE TOWER INCLUDING THE SHAFT, HANDHOLE, HANDHOLE DOOR, BASE PLATE AND ALL OTHER ELEMENTS WELDED TO THE SHAFT SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123) AND THEN PAINTED AS SPECIFIED. THE LUMINAIRE RING SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- THE FINISH COAT SHALL BE FEDERAL STANDARD COLOR NUMBER 16307 (HANFORD GREY). COLOR SAMPLE TO BE SUBMITTED FOR APPROVAL
- ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEC BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MILI-181765/1.
- 11. PRIOR TO DELIVERY, THE TOWER AND ALL ITS COMPONENTS SHALL BE "INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE IN THE PRESENCE OF THE ENGINEER. ANY PARTS FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED.
- 12. THE LIGHT TOWER SHALL BE STRAIGHT AND CENTERED ON ITS
  LONGITUDINAL AXIS, UNDER NO-WIND CONDITIONS, SO WHEN EXAMINED WITH A
  TRANSIT FROM ANY DIRECTION, THE DEVIATION FROM THE NORMAL SHALL NOT
  EXCEED 2 MM IN 1 M (1/8 IN. IN 3 FT) WITHIN ANY 1.5 M (5 FT)
  OF HEIGHT, WITH TOTAL DEVIATION NOT TO EXCEED 75 (3 IN.) FROM
  THE VERTICAL AXIS THROUGH THE CENTER OF THE POLE BASE.
- 13. PVC CONDUIT WILL NOT BE ALLOWED.
- 14. THE NUMBER OF COUNTER WEIGHTS TO BE SUPPLIED AS A PART OF THE LIGHT TOWER PAY ITEM IS

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REVISIONS	ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME DATE	TEETIOTO DEL MITMENT OF THOMOS ON THE CONT
	HIGH MAST LIGHT TOWER
	27m TO 36m (90FT TO 120FT)
	SHEET 1 OF 3
	:
	SCALE: VERT. NONE DRAWN BY
	DATE CHECKED BY

SLIP-FITTED -DRIP GUTTER TO DIRECT WATER/DEBRIS & WELDED AWAY FROM TOWER. SECTIONS SUPPORT CARLES DETAIL "D" ON (SHEET 2 OF 3) POWER CABLE WITH CORD GRIP (TYP.) TRANSITION PLATE REINFORCED HANDHOLE. ASSEMBLY WITH POSITIVE VISIBLE INDICATION THAT 305×914×229 (12"×36"×9") W/DOOR AND TIGHT COMPRESSIVE PROPER SEATING FORCE SEAL TUBULAR GASKET AS SPECIFIED. HAS BEEN APPLIED. WHOLE ASSEMBLY AND INDICATOR SHALL BE VISIBLE WITHIN AS REOUIRE LADJUSTABLE STAINLESS STEEL DRAW LATCH. HANDHOLE PROVIDE PADLOCK PROVISIONS SEE HANDHOLE DOOR DETAIL.SHEFT 3 ELECTRICAL POWER DISTRIBUTION AND LOWERING DEVICE CONTROLS IN NEMA 4 ENCLOSURE. MOTOR, CLUTCH, REDUCER, AND WINCH ASSEMBLY - HOIST CARLE WATERTIGHT SEALED BUSHING -BASE PLATE SLIP-FITTED JOINT 1.5 TIMES O.D. OF 2 STAINLESS STEEL BANDS BOTTOM OF THE UPPER SECTION (TYP.) AROUND BASE PLATE TO POWER CORD AND PLUG : HOLD SCREEN IN PLACE. STAINLESS STEEL EXPANDED SCREEN WITH MESH SIZE OF 6.4 (0.25") OR LESS. 50.8 (2") TOP OF FOUNDATION AS TAPERED STEEL SHAFT 76.2 (3") MIN. 190.5 (7.5") DIA. AT TOP MIN. 609.6 (24") DIA. AT BOTTOM ANCHOR BOLT (QUANTITY AS REQUIRED) DETAIL- "A" 3 CABLE LOWERING & SUPPORT MECHANISM SHOWN. DRILLED HOLE 65 (2%") DIA. FOR ANCHOR BOLT (TYP.) 8 EQUALLY SPACED HOLES REQUIRED BASE PLATE I.D. --762 (30") ANCHOR BOLT CIRCLE DIA. BASE PLATE O.D. LADDER CLIP (TYP.) ALL NOT \_\_\_\_ 254 (IO') TYP. FUTURE JUNCTION-CCTV COMPONENT ---- 914.4 (36") TYP. BOX STANDOFFS AS SPECIFIED SEE HANDHOLE DOOR DETAIL FOR DOOR AND LATCH INFORMATION, SHEET 3 SECTION - A-A

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REVISION DATE: 08/04/03