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INSTALL CONDUIT AS SHOWN ON INTERSECTION DRAWING. KEEP TOP SMOOTH AND FLUSH WITH TOP OF SLAB, ESPECIALLY AT CLEAT BEARINGS.

FILL OPENINGS AROUND ANCHOR BOLTS AND CONDUITS WITH GROUT.

PLAN VIEW

SECTION "B-B"

INSTALL CONDUIT AS SHOWN ON THE INTERSECTION DRAWING

18" SQUARE PRECAST SLAB TYPE "S" (DWG F-004)

FILL OPENINGS AROUND ANCHOR BOLTS AND CONDUITS WITH GROUT KEEPING TOP SMOOTH AND FLUSH WITH TOP OF SLAB, ESPECIALLY AT CLEAT BEARINGS.

NOTE:
1. 3000 PSI CONCRETE TO BE USED.
2. FOR MIDBLOCK POLE LOCATIONS DISTANCE SHALL BE 36" FROM THE FACE OF CURB.
3. FOR NUMBER OF ANCHORS, THREAD SIZE AND COUPLINGS IN EACH ASSEMBLY SEE DWG F-007.
4. SHALLOW FOUNDATIONS SHALL UTILIZE 12" RAD. CONDUIT BENDS.

TYPICAL "S-14A" FOUNDATION
FORMERLY F-1 FOUNDATION
FORMER DWG LG-126S

SHALLOW FOUNDATIONS
FOR S-1a AND S-14 POLES

TYPICAL "S" & "T" FOUNDATIONS FOR "S-1a" AND "T-1" POLES
FORMER DWG LG-170S

NOTES:

1. 3000 PSI CONCRETE TO BE USED.
2. FOR MODEL POLE LOCATIONS DISTANCE SHALL BE 36" FROM THE FACE OF CURB.
3. FOR NUMBER OF ANCHORS, THREAD SIZE AND COUPLINGS IN EACH ASSEMBLY SEE DWG F-007.
4. SHALLOW FOUNDATIONS SHALL UTILIZE 12" RAD. CONDUIT BENDS.
**PLAN VIEW**

- **Foundation**: VARIES, SEE STANDARD FOOTING TABLE
- **Pole**: VARIES, SEE STANDARD FOOTING TABLE
- **Face of Curb**: 2'-0" MIN. (FOR SHALLOW FOOTINGS ONLY)
- **Curb or Sidewalk**: 2'-8" (SEE NOTE 9)
- **undisturbed earth**: 3" MIN. COVER (TYP.)
- **2" Pipe Nipples**: 8" LONG
- **4) 1 1/4"-7 ANCHOR BOLT ASSEMBLY (DWG F-007) (SEE NOTE 8)**

**Typical Cross-Section Showing Method of Preparing Foundation for Present Pole Installation**

- **Top of Foundation**: FACE OF CURB OR SIDEWALK (SEE NOTE 7)
- **Top of Curb or Sidewalk**: 2" Pipe Nipples 8" LONG
- **No. 4 Rebar max 6" OFF-CENTER
- **2" conduit bend (SWG-F-005) OR AS PER SPECIFICATIONS.**
- **3" MIN. COVER (TYP.)**

**Typical Cross-Section Showing Method of Preparing Foundation for Future Pole Installation**

- **Top of Curb or Sidewalk**: 2" Pipe Nipples 8" LONG
- **No. 4 Rebar max 6" OFF-CENTER
- **2" conduit bend (SWG-F-005) OR AS PER SPECIFICATIONS.**
- **3" MIN. COVER (TYP.)**

**Notes:**
1. Concrete shall be 3,000 PSI test concrete.
2. Concrete shall be poured against undisturbed earth.
3. Footings over existing subsurface structure shall be founded directly on the roof of the substructure with no intermediate layer of soil.
4. Where required, top of pole may be offset as shown in Plan View in direction of reference curb line only.
5. Cap unused nipples and plug others with oakum and seal.
6. Locate door of transformer base as directed by engineer.
7. Sidewalks must be in accordance with standard specifications of New York City Dept of Transportation.
8. For modification of standard anchor bolts for installation in shallow footings, all cold bends shall be uniform and a minimum radius of 10 inches.
9. For mobilized pole locations, distance shall be 36" from the face of curb.
10. Rebars shall be used with spread foundation only, placed no more than 6" OFF-CENTER to form perpendicular lathing pattern.

**Typical Footing Details**

- **Standard Footing Table**
  - **M-2 or M-2A Poles with**
    - 5'-0" MIN. DEPTH: 3'-0"x3'-0" (M2-5S)
    - 6'-0" MIN. DEPTH: 4'-0"x4'-0" (M2-5T)
    - 7'-0" MIN. DEPTH: 5'-9"x5'-9" (M2-3S)
    - 8'-0" MIN. DEPTH: 7'-0"x7'-0" (M2-3T)
    - 9'-0" MIN. DEPTH: 7'-0"x7'-0" (M2-2S)
    - 10'-0" MIN. DEPTH: 8'-9"x8'-9" (M2-2T)

**Notes:**
1. Use above "standard footing table" unless otherwise directed by the engineer.
2. Numbers in parentheses designate type of footing.
NOTES:
1. LOCATION FOUNDATION MUST BE APPROVED BY NYCDOT.
2. ANCHOR BOLT PROJECTION ABOVE FOUNDATION SHALL BE 3-1/2" TO 4-1/2"
3. CONDUIT PROJECTION ABOVE FOUNDATION SHALL BE 1" TO 4"
4. CONTINUOUS TINNED COPPER GROUNDING WIRE SHALL BE CONNECTED TO EACH ANCHOR BOLT WITH BRONZE GROUNDING CONNECTOR BEFORE CONTINUING DOWN TO THE GROUND PLATE
5. SHALL COMPLY WITH NYCDOT SPECIFICATION 46C UNLESS NOTED

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD               L.I.C. N.Y.11101
NEW YORK CITY

CABINETS FOUNDATION

PLAN

SECTION

SIDE VIEW
FRONT VIEW
BACK VIEW
BOTTOM VIEW

NEMA "P" AND "R" CABINETS

ANCHOR BOLT ASSEMBLY WITH DOUBLE BREAKAWAY ROD COUPLINGS. (DWG F-007)

1" CONDUCTIVE CONCRETE

2" ELBOWS WITH DOUBLE BREAKAWAY COUPLINGS (DWG F-005)
(2 PCS IN EACH DIRECTION)

22" X 44-1/2" X 48"
24"
30"
40-3/4"
44-1/2"
5 1/4"
66-1/4" FOR "P" TYPE
77-1/4" FOR "R" TYPE

28"X46"X1/4" GALVANIZED STEEL GROUNDING PLATE INCASED IN CONDUCTIVE CONCRETE

6' OF SIZE 4 AWG SINGLE STRAND TINNED COPPER GROUNDING WIRE ABOVE FOUNDATION. CONNECT GROUNDING WIRE TO GROUNDING POINT.

BRONZE GROUNDING CONNECTOR UL LISTED FOR UNDERGROUND USE (ONE PER BOLT)
18" SQUARE PRECAST SLAB - TYPE "S"
(FORMER LG-169S)

NOTE:
1. 3000 PSI CONCRETE TO BE USED.
M-2 FOUNDATION WITH STEEL CYLINDER
(FORMER DWG LB-146345)

NOTE:
1. FOR DETAILS ON M-2 FOUNDATION, SEE DWG F-002.

32" DIA. X 9" HIGH #8 GAGE STEEL CYLINDER. SEE DETAIL 'A'.
2" SQUARE PRECAST CONCRETE SLAB TYPE "M"

2" CONDUIT

UPPER PART OF COUPLING FLUSH WITH TOP PART OF CYLINDER
UPPER PART OF COUPLING FLUSH WITH BOTTOM PART OF CYLINDER

(4) 1 1/4"-7 ANCHOR BOLT ASSEMBLY WITH DOUBLE BREAKING RODS COUPLING (DWG F-007)

15 GAGE STEEL CYLINDER

PLAN

ELEVATION DETAIL 'A'

32" DIAMETER X 9" HIGH STEEL CYLINDER
(FORMER DWG LG-75b)
STANDARD 2" STEEL PIPE BEND (GALVANIZED)
ASSEMBLY "B"
(4 REQUIRED PER POLE)
FOR "M-2A" POLE

ASSEMBLY "C"
(4 REQUIRED PER POLE)
FOR "S-14A" & STREET LIGHT POLES

ASSEMBLY "D"
(3 REQUIRED PER POLE)
FOR "S-1" & "T-1" POLES

NOTE:
1. HEX BOLT COUPLINGS SHALL BE GREASED OR ANTI-SIEZE COMPOUNDED
GROUNDING DETAIL FOR RETROFIT
(FORMER DWG LB-14005S)

GROUNDING DETAIL FOR NEW INSTALLATION
CONDUIT INSTALLATION AT "EL" COLUMN

- 2\" PIPE, AS PER CONTRACT, WITH ENTRANCE CAP OR WEATHERHEAD ON TOP (LENGTH OF PIPE VARIES)
- INSULATING JOINT
- 2\" PIPE, AS PER CONTRACT, WITH ENTRANCE CAP OR WEATHERHEAD ON TOP (LENGTH OF PIPE VARIES)
- CONCRETE GUARD
- TOP OF SIDEWALK OR ROADWAY

REMARKS:

- PVC DUCT TO FIT. CEMENT ALL AROUND WITH MINIMUM COVERING OF 2\" FOR FULL LENGTH OF PVC DUCT AND COUPLINGS
- PVC COUPLING FOR 2\" DUCT
- REAM COUPLING AND CUT DOWN
- STEEL COUPLING
- EDGE OF COLUMN BASE
NOTES:
1. FOOTING IS FOR SHALLOW DEPTH INSTALLATION ONLY.
2. FOR TYPICAL 2'x2' FOUNDATION, DRILL HOLES IN EXISTING CONCRETE AND INSERT 3/8" REBAR PRIOR TO POURING CONCRETE.
3. MONOLITIC 4'x4' FOUNDATION DOES NOT NEED REBAR.
4. HDPE OR GALVANIZED STEEL CONDUIT.
NOTES:

1. FOOTING IS FOR SHALLOW DEPTH INSTALLATION ONLY.
2. FOR TYPICAL 2'x2' FOUNDATION, DRILL HOLES IN EXISTING CONCRETE AND INSERT 3/8" REBAR PRIOR TO POURING CONCRETE.
3. MONOLITHIC 4'x4' FOUNDATION DOES NOT NEED REBAR.
4. ANCHOR BOLT ASSEMBLY SHALL BE MADE OF GALVANIZED STEEL.
5. FOR RETROFIT APPLICATIONS USE 5/8"-11 x 7-1/2" LONG STAINLESS STEEL ANCHOR BOLTS SET IN HILTI ADHESIVE HIT-HY 200, OR EQUAL.

PEDESTAL BASE

1-1/4" CONDUIT

VIEW "A-A"

TYPICAL 2'x2' FOUNDATION

VIEW "B-B"

TYPICAL 4'x4' FOUNDATION

DETAIL "A" (N.T.S.)

ANCHOR BOLT ASSEMBLY

(SET OF 4)
OUTLINE OF POLE BASE

OUTLINE OF POLE SHAFT

VERTICAL REBAR

"C"

PLAN

ELEVATION

NOTES:

1. ANCHOR BOLTS, NUTS AND WASHERS SHALL COMPLY WITH ASTM 307 STANDARD.

2. REINFORCEMENT IS NOT REQUIRED FOR POLES SUPPORTING MAST ARMS UP TO 35'. WHEN REQUIRED, IT SHALL BE 40,000 PSI AND COMPLY WITH ASTM 615 STANDARD. VERTICAL REBAR LENGTH SHALL BE "A" FEET. HORIZONTAL REBARS SHALL BE VERTICALLY SPACED 12" OFF CENTER. ALL REBARS SHALL BE SIZE 5 (5/8" DIAMETER). REBAR CAGE SHALL BE CENTERED IN THE FOUNDATION.

3. CONDUITS SHALL BE 2" OR 3" AS PER ENGINEER.
ELEVATION THRU CAGE

SIDE ELEVATION

NOTES:
1. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE ASTM F1554 Gr55 HOT DIPPED GALVANIZED (SEE DWG F-007 ASSEMBLY "D").
2. CONDUITS SHALL BE 2 INCH. TWO CONDUITS SHALL FACE DIRECTION OF THE FEED, AND ONE SHALL FACE CURB. HOWEVER, THERE SHALL BE NO LESS THEN THREE ELBOWS IN FOUNDATION.
3. ALLOWABLE SOIL BEARING PRESSURE = 5000 psf.
4. f'c = 3000 psi
5. ALL REINFORCEMENT SHALL BE #4 BARS, GRADE 60.
6. FOUNDATION SIZE 2 FT X 2 FT X 4 FT SHALL NOT HAVE CAGE REINFORCEMENT.

FOUNDATION TABLE

<table>
<thead>
<tr>
<th>CONFIGURATION</th>
<th>L</th>
<th>W</th>
<th>T</th>
<th>NO. OF MAIN BAR TOP &amp; BOTTOM (L)</th>
<th>NO. OF MAIN BAR TOP &amp; BOTTOM (R)</th>
<th>CAGE REBAR TYPE A</th>
<th>CAGE REBAR TYPE B (1FT HORIZONTAL LEG AT BOTTOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQUARE TYPE 1</td>
<td>2'</td>
<td>2'</td>
<td>2'</td>
<td>N/A</td>
<td>N/A</td>
<td>6</td>
<td>2 EACH - 2 SIDES</td>
</tr>
<tr>
<td>SQUARE TYPE 2</td>
<td>3'</td>
<td>3'</td>
<td>2'</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>2 EACH - 2 SIDES</td>
</tr>
<tr>
<td>RECTANGLE TYPE 3</td>
<td>3'</td>
<td>3'</td>
<td>2'</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>2 EACH - 2 SIDES</td>
</tr>
<tr>
<td>RECTANGLE TYPE 4</td>
<td>4'</td>
<td>4'</td>
<td>2'</td>
<td>20</td>
<td>5</td>
<td>3</td>
<td>2 EACH - 2 SIDES</td>
</tr>
<tr>
<td>RECTANGLE TYPE 5</td>
<td>5'</td>
<td>5'</td>
<td>2'</td>
<td>18</td>
<td>6</td>
<td>4</td>
<td>2 EACH - 2 SIDES</td>
</tr>
</tbody>
</table>

KEY:
- TYPE A BARS
- TYPE B BARS
- T TOP
- B BOTTOM

REVISION

NEW YORK CITY

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BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C. N.Y. 11101

REAL TIME PASSANGER INFORMATION (RTPI) Sign
POLE FOUNDATION

DRAWING NO. F-013
**REFERENCE DRAWINGS:**

- M-2 MAST ARM ARRANGEMENT DRAWING - MA-001
- M-2 MAST ARM ASSEMBLY DRAWING - MA-002
- M-2 MAST ARM DETAILS OF PARTS - MA-003
- THE ROD ELBOW AND SIGNAL SUSPENSION CASTING DETAILS - MA-004
- DETAILS OF "M-2A" POLE TRANSFORMER BASE - MA-008
- "M-2A" POLE ANCHOR BASE—BOLT COVER AND SPRING NUTS DETAILS - MA-009

**NOTES:**

1. BASE COVER ORNAMENTAL CASTINGS FOR THE "M-2A" SHAFT SHALL BE CAST IRON.
2. CAPITAL TIE ROD FINIALS & POLE TOP FINALS SHALL BE ALUMINUM.
3. BASE COVER EXTENSION TO BE OMITTED ON "M-2A" POLE WITH N.Y.C. TRAFFIC CONTROLLER CABINET.

**SCALE:**

3/4" = 1' - 0"

**DEPARTMENT OF TRANSPORTATION**

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34-02 QUEENS BLVD               L.I.C., N.Y. 11101

OLD DRAWING NO.:  P-001_1

NEW YORK CITY

"M-2A" POLE WITH CAST IRON CASTING
& 20' TRAFFIC SIGNAL MAST ARM

REVISION

05/011 CR - REPLACED IN CADD
05/1910 CR - LD-1065 CREATED
}

**DRAWING NO.:** P-001_1
NOTES:
1. ALL ORNAMENTAL CASTINGS FOR THE "M-2A" SHAFT, BASE COVER, CAPITAL, TIE ROD FINIAL, POLE TOP FINIAL, ETC. SHALL BE CAST IRON.
2. BASE COVER EXTENSION TO BE OMITTED ON "M-2A" POLE WITH N.Y.C. TRAFFIC CONTROLLER CABINET.
EXISTING BOLT 1/2"-13x1". ALL 4 BOLTS ARE TO BE PLACED TO THIS POINT PRIOR TO INSTALLATION OF CAP. AFTER CAP IS IN PLACE, 4 BOLTS SHALL BE TURNED ALL THE WAY IN.

Installation Instructions for Shaft Extension for "M-2A" Pole

The procedure shall be as follows:

1. Place secure temporary clamp under top traffic pole clamp "D2" and "B2".
2. Remove "B2" half clamp facing signal.
3. Release load from pole by moving back clamp "D2" and cross arm together with tie rods etc. sufficiently to permit shaft extension to slide on (using sufficient rigging).
4. Slide shaft extension in place and drive down to top of temporary clamp.
5. Relax back clamp "D2" and cross arm together with tie rods etc. to original position.
6. Replace half clamp "B2" facing signal and tighten bolts securely making sure shaft extension is squeezed tight against.
7. Remove temporary clamp under "D2" and "B2" and all other rigging.

IN NO WAY SHALL THIS TRAFFIC POLE BE DISTURBED EXCEPT AS SPECIFIED ABOVE.

Notes:

1. Mat'l of shaft extension: Low Alloy High Strength Steel, Corten, NAX, Mayari, or equal.
2. Hardware: Furnish 4 washers (detail "B") with each shaft extension, mat'l: AL-6061 or AL-1100.
3. Finish: Shaft extension and pole plate assembly to be hot dipped galv. after fabrication.
4. No hardware other than the 4 washers is required with each shaft extension.
5. N.I.C.: Not in contract i.e. not furnished.
6. For alternative to detail "A", see DWG J-5255.
7. For 15 1/2" shaft extension see DWG P-004.
**TERMINAL PANEL**

- **Drill 7/16" diameter holes for (4) 3/8" carriage bolts-1 1/4" long with lock washer, hex nut, and acorn nut. Each hole must be stainless steel. Type 316 (17-4 ph) bolts into the holes to obtain complete bearing for heads. Fasteners furnished by contractor.**

**NOTES:**

1. **All pipe threading to be straight machine threading-11 1/2 threads per inch (class 2F).**
2. **Round both inside edges of all pipe nipples and chase nipple.**
3. **Connection straps to be 1 1/2" x 1/4" of aluminum alloy 6063-T6.**
4. **Neoprene seal gasket shall be 2 1/8" OD x 3/4" ID x 1/8" thick.**

**SCALE:** 1 1/4" = 1'-0"
NOTES:
1. ALL BANDS TO BE FABRICATED FROM 1 1/2"x1/4" TYPE 6063-T52 ALUMINUM ALLOY
2. ALL DIMENSIONS ± 1/16"
3. BAND FOR MOTOROLA BOX

<table>
<thead>
<tr>
<th>M BAND</th>
<th>U</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3 1/2&quot;</td>
<td>2 11/16&quot;</td>
<td>8 7/16&quot;</td>
<td>10 7/16&quot;</td>
<td>11 13/16&quot;</td>
<td>9 5/16&quot;</td>
</tr>
<tr>
<td>B</td>
<td>3 3/8&quot;</td>
<td>3 1/2&quot;</td>
<td>8 1/8&quot;</td>
<td>10 1/8&quot;</td>
<td>11 11/16&quot;</td>
<td>7 7/8&quot;</td>
</tr>
<tr>
<td>C</td>
<td>3 1/4&quot;</td>
<td>0&quot;</td>
<td>8 7/8&quot;</td>
<td>9 7/8&quot;</td>
<td>11 3/4&quot;</td>
<td>7 1/4&quot;</td>
</tr>
<tr>
<td>D</td>
<td>3 3/8&quot;</td>
<td>4 11/16&quot;</td>
<td>7 1/2&quot;</td>
<td>9 3/4&quot;</td>
<td>11&quot;</td>
<td>7 1/4&quot;</td>
</tr>
</tbody>
</table>

X REMARKS:
2 1 1/16" | 4 3/8" | 6 1/2" | 6 1/4" | 10"   | 6 1/4"
NOTES:
1. ALL BANDS TO BE FABRICATED FROM 1 1/2"x1/4" TYPE 6063-T52 ALUMINUM ALLOY
2. ALL DIMENSIONS ± 1/16"
NOTES:
1. ALL UNMARKED DRAFT TO BE 2 DEG. MATERIAL-ALUMINUM ALLOY 4-350-TS SEMI-PERM. OR PERMANENT MOLD CASTING, FINISH AS CAST. TOLERANCE UNLESS OTHERWISE SPECIFIED TO BE ±1/32." (4) 1"-8 H.D. GALV. STEEL BOLT ASS'YS. SHALL BE FURNISHED WITH SHOE BASE BOLT DESIGN AS SHOWN IN DETAIL.
2. SEE P-009_1, P-009_2, AND P-009_3, FOR IDENTIFICATION DETAILS AND LOCATION NOTE.
3. SEE DRAWING P-009_3 FOR SECTION "B-B," "C-C," "D-D," AND BOLT DETAIL.

FOR REMOVAL ONLY
SINGLE ARM DAVIT SHAFT EXTENSION
ON "M-2A" POLE

NOTES:
1. ALL DAVIT SHAFT EXTENSIONS SHALL BE ASSEMBLABLE.
2. "M-2A POLE", MAST ARM AND TRAFFIC SIGNAL ASSEMBLIES ARE NOT PART OF CONTRACT.
3. FOR MORE INFORMATION SEE STREET LIGHTING DWG. J-5208B.

TWIN ARM DAVIT SHAFT EXTENSION
SCALE: 1" = 1'-0"

TRANSITION FORM OCTAGONAL
TO ROUND SHAPE

SECTION "A-A"
SECTION "B-B"
SECTION "C-C"

DETAIL "A"

DETAIL "B"

DETAIL "C"

SCALE: 1/4" = 1'-0"

SEE DETAILS "A" AND "B"

SEE DETAILS "A" AND "B"

SEE DETAILS "A" AND "B"

BOTTOM OF DAVIT SHAFT EXTENSION

BOTTOM OF DAVIT SHAFT EXTENSION

BOTTOM OF DAVIT SHAFT EXTENSION

6.05" (O.D.)

6.36" ± .04"

6.11"
1. 3/4" THRU-BOLT ASSEMBLY SHALL CONSIST OF ONE THRU-BOLT, TWO HEX NUTS, ONE FLAT WASHER AND ONE LOCK WASHER, ALL IN STAINLESS STEEL.
NOTES:
1. THE POLE AND CASTING AS DEPICTED ON THIS DRAWING ARE DESIGNED FOR THE ATTACHMENT OF A NYC DOT BUS LOLLIPOP SIGN. ANY OTHER ATTACHMENTS OR MODIFICATIONS MADE TO THIS POLE CONFIGURATION SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK.
2. POLE TOP CASTING SHALL CONFORM TO ASTM A536, GRADE 65-45-12, WITH A YIELD STRENGTH OF FY = 45 KSI.
3. CASTING AT TOP OF POLE SHALL BE WELDED TO POLE TOP WITH BOLT HOLE IN CASTING ALIGNED SO NYC DOT BUS SIGN IS PERPENDICULAR TO CURB.
4. MEDALLION THRU BOLT FOR ATTACHMENT OF NYC DOT LOLLIPOP SIGN SHALL HAVE LOCKTITE THREADLOCKER BLUE 242, OR APPROVED EQUAL, APPLIED TO THREADS.
5. FOR NYC DOT RTPI POLE DETAILS, SEE DWG P-014_1
REAL TIME PASSANGER INFORMATION (RTPI) SIGN

POLE - GENERAL ASSEMBLY 3 OF 4

DISPLAY PLATE OPENS 90' FOR DISPLAY MOUNTING

MOUNTING BOLTS
1/4" SS, 1 1/4' LONG
QTY: 8

SILICONE WASHER
FITTED TO HOUSING
QTY: 8

NEW YORK CITY

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
NEW YORK CITY

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

REVISION

REAL TIME PASSENGER INFORMATION (RTPI) SIGN
POLE - GENERAL ASSEMBLY 4 OF 4

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
1. The vertical distance by the section of the sign shall be determined as follows:
   A. Clearance - 7' from the centerline to the bottom of the sign.
   B. Minimum 8' above the top of the sign.
   C. 7' from any obstruction, bridge or overpass, or any other objects.
   D. 5' from any obstruction, bridge or overpass, or any other objects.
   E. 7' from any obstruction, bridge or overpass, or any other objects.
   F. 7' from any obstruction, bridge or overpass, or any other objects.

2. The horizontal clearance to the edge of the sign shall be determined as follows:
   A. Should be 12' or less than 12' from the edge of the road.
   B. Should be a 12' or less than 12' from the edge of the road.
   C. Should be 12' or less than 12' from the edge of the road.
   D. Should be 12' or less than 12' from the edge of the road.
   E. Should be 12' or less than 12' from the edge of the road.
   F. Should be 12' or less than 12' from the edge of the road.

POSTS WITH BREAKAWAY ASSEMBLIES

NON-BREAKAWAY POSTS

NYSDOT MULTI POST SIGN
POSITIONING ON HIGHWAYS

NEW YORK CITY

REVOLUTION

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y.11101

NYSDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
1. PEDESTAL BASE, SHAFT AND TOP CAP SHALL BE FINISHED WITH RAL 7040 WINDOW GREY PAINT. FINISHING TO HAVE ELECTRICAL CHARACTERISTICS MEASURING A RESISTANCE GREATER THAN 20 MEGOHMS.

2. ANTI-SEIZE LUBRICANT TO BE APPLIED TO ALL THREADS SURFACES.

3. PEDESTAL BASE ASSEMBLY SHALL INCLUDE THE FOLLOWING PARTS:
   - (1) ANODIZED ALUMINUM SHAFT
   - (1) HINGED PLASTIC BASE ACCESS HOLE COVER WITH S.S. HARDWARE
   - ANCHOR BOLT KIT: (4) 5/8"-11 x 7-1/2" LONG S.S. ANCHOR BOLTS, (4) 5/8" FLAT S.S. WASHERS AND NUTS
   - (1) 1/4"-20 X 3/8" STAINLESS STEEL SOCKET SET SCREWS
   - CABLE TETHER KIT: (1) 5/16"-18 X 7" LONG S.S. BOLT, (2) 5/8" FLAT S.S. WASHERS, (1) 1/2" S.S. LOCK WASHER, (1) 1/2"-13 S.S. TEMPER RESISTANT NUT, (1) 1/8"-18 S.S. THREAD NUT, (1) 1/4"-20 S.S. SOCKET SET SCREWS

4. SHAFT ASSEMBLY SHALL INCLUDE THE FOLLOWING PARTS:
   - (1) 4" DIA. X 48" LONG SCHEDULE 40 ALUMINUM SHAFT WITH 4-6" MPT THREAD AT BOTTOM

5. TOP CAP ASSEMBLY SHALL INCLUDE THE FOLLOWING PARTS:
   - (1) 4-1/2" DIA. PLASTIC CAP
   - (3) 1/4"-20 X 3/8" LONG S.S. HEX. SET SCREWS
NOTES:

CONTRACTOR SHALL INSTALL ONE OF THE FOLLOWING TRAFFIC SIGNAL MAST ARM ASSEMBLIES ON "M-2A" POLE AS DIRECTED:

1. TRAFFIC SIGNAL MAST ARM ASSEMBLY 20'-0" LONG
   - MA-002

2. TRAFFIC SIGNAL MAST ARM ASSEMBLY 20'-0" LONG WITH 5'-0" EXTENSION
   - MA-005

REFERENCE DRAWINGS:

1. "M-2" TRAFFIC SIGNAL MAST ARM ASSEMBLY DRAWING - MA-001
2. OCTAGONAL SHAFT - LOW ALLOY-HIGH STRENGTH STEEL - 18'-5 1/2" LONG, 1/4" THICK WALL, 2 31/32" DIA. EXCEPT FLATS (APPROX. 9 3/16" ACROSS ROUNDED CORNERS), TOP IS 6" ACROSS FLATS (APPROX. 6 7/16" ACROSS ROUNDED CORNERS). TOP OF SHAFT IS 8 1/2" ACROSS FLATS (APPROX. 9 3/16" ACROSS ROUNDED CORNERS). BOTTOM OF SHAFT IS 6" ACROSS FLATS (APPROX. 6 7/16" ACROSS ROUNDED CORNERS).
3. CROSS ARM - 3 1/2" DIA. EXTRA STRONG STEEL PIPE
4. TIE RODS

NEW YORK CITY DEPARTMENT OF TRANSPORTATION
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34-02 QUEENS BLVD L.I.C., N.Y. 11101

REVISION

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BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C., N.Y. 11101

"M-2A" POLE & 20' TRAFFIC SIGNAL MAST ARM ARRANGEMENT DRAWING

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"M-2A" POLE & 20' TRAFFIC SIGNAL MAST ARM ARRANGEMENT DRAWING

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"M-2A" POLE & 20' TRAFFIC SIGNAL MAST ARM ARRANGEMENT DRAWING

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"M-2A" POLE & 20' TRAFFIC SIGNAL MAST ARM ARRANGEMENT DRAWING

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"M-2A" POLE & 20' TRAFFIC SIGNAL MAST ARM ARRANGEMENT DRAWING

NEW YORK CITY DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C., N.Y. 11101
UV RESISTANT PLASTIC BUSHING IN END - SAME AS IN WEATHERHEAD WASHERS

PART "F2A" (DWG MA-003)

15° 45°

PART "C2" (DWG MA-003)

1 1/4"x1 3/4" CABLE INLET - ROUND BOTH EDGES, INSIDE & OUTSIDE TO AVOID CUTTING CABLE INSULATION.

1 1/4" SCHED. 80 LOW ALLOY-HIGH STRENGTH STEEL PIPE (ROUND INSIDE EDGES)

CABLE OUTLET

Cable Outlet

CROSS ARM

MAST ARM

PART "A2" (DWG MA-003)

HINGE: 3/4"x1 1/2" LG. HEX. HEAD MACH. BOLT - WITH HEX. NUT - 2 PLAIN WASHERS & COTTER PIN (ALL STAINLESS STEEL THREAD 1 3/8" LG.)

DETAIL - "F"

SECTION "D-D"

SCALE: 1" = 1'

OUTSIDE OF SHAFT AT CAP CONNECTION

SCALE: 1" = 1'

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"M-2A" POLE & 25' TRAFFIC SIGNAL MAST ARM
ASSEMBLY DRAWING

NEW YORK CITY

SCALE: 3" = 1'

NEW YORK CITY TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020

OLD DRAWING NO.

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

REVISED DWG.

REVISED DWG

REVISED DWG

REVISED DWG

REVISED DWG

REVISED DWG

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REVISED DWG

REVISED DWG

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

REVISED DWG.

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MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

REVISED DWG.

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REVISED DWG

REVISED DWG

REVISED DWG

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.

MA-002_2

ASSEMBLY DRAWING

SCALE: N.T.S.
TRAFFIC SIGNAL SUSPENSION ASSEMBLY

NOTES:
2. STANDARD TOLERANCES.
3. ALL PIPE THREADS TO BE N.P.S.M. (STRAIGHT MACHINE).

- 1/8" DIA. S.S. COTTER PIN
- (4) 1/16" TH. S.S. WASHERS
- 5/8"x2 1/4" LG. HEX. HEAD UNEPTHREADED BOLT WITH (4) 1/16" THICK WASHERS AND 1/8" DIA. COTTER PIN (ALL STAINLESS STEEL) ALWAYS ASSEMBLED WITH HEADS OF BOLTS ON SIDE NEAR CABLE LOOP.

- 2 1/2" OD x 3/8" THICK UV RESISTANT PLASTIC BUSHING WITH 1-1/8" DIA. HOLE AT THE CENTER. BREAK BOTH EDGES OF HOLE 2 R/G.
- (2) 1/4"-20x5/8" ST. STEEL SQ HEAD CUP POINT SET SCREWS - EQUALLY SPACED.

- 1 1/2" LG. SCH. 40 STAINLESS STEEL WELDED PIPE NIPPLE - WITH CONTINUOUS CLASS 2A "NPSM" THREADING FOR CONNECTION TO THE JUNCTION BOX IN THE SIGNAL MOUNTING ASSEMBLY (SMOOTH EDGES).

- 2 1/2" OD x 3/8" THICK UV RESISTANT PLASTIC BUSHING WITH 1-1/8" DIA. HOLE AT THE CENTER. BREAK BOTH EDGES OF HOLE 2 R/G.
- (2) #8-32x3/4" LG. ST. STEEL RD. HEAD SCREWS

- 15/16" DIA. S.S. COTTER PIN
- (4) 1/16" TH. S.S. WASHERS
- 5/8"x2 1/4" LG. HEX. HEAD UNEPTHREADED BOLT WITH (4) 1/16" THICK WASHERS AND 1/8" DIA. COTTER PIN (ALL STAINLESS STEEL) ALWAYS ASSEMBLED WITH HEADS OF BOLTS ON SIDE NEAR CABLE LOOP.

- 2 1/2" OD x 3/8" THICK UV RESISTANT PLASTIC BUSHING WITH 1-1/8" DIA. HOLE AT THE CENTER. BREAK BOTH EDGES OF HOLE 2 R/G.
- (2) 1/4"-20x5/8" ST. STEEL SQ HEAD CUP POINT SET SCREWS - EQUALLY SPACED.
2 1/8" 1 1/4" 3 1/2" 5 1/4" 7/8" 1 1/4" 7/8" 1 1/4" 0.690" DIA. 0.800" DIA. 4 1/16" DIA.

DETAIL "E" SECTION "E-E"

CONCENTRIC LINK - PART "K2A"

TIE ROD ELBOW - PART "J2A"

NOTES:
1. MATERIAL: SAND-CAST ALUMINUM ALLOY 356-T6
2. STANDARD TOLERANCES.
3. ALL PIPE THREADS TO BE N.P.S.M. (STRAIGHT MACHINE)
WEATHERHEAD - PART "L2A"

NOTE: ALL INSIDE EDGES TO BE ROUNDED

1 1/2" I.D. 1 1/2" LONG S.S. PIPE NIPPLE

SIDE VIEW

-view "D-D"

SAME AS DETAIL "B" FOR PART "J2A"

REVISION

09/1966 LC-305 CREATED
03/1967 LC-305 REVISION
11/1970 LC-305 REVISION
04/2011 LC-305 REVISION
10/2015 UPDATE TO 5 SUSPENSION HOLE WEATHERHEAD

WEATHERHEAD - PART "L2A"

NOTE: ALL INSIDE EDGES TO BE ROUNDED

SIDE VIEW

-back view

SIDE VIEW

-1 1/2" I.D. 1 1/2" LONG S.S. PIPE NIPPLE

SIDE VIEW

-2-TAPPED HOLES FOR #8-32X3/4" SCREWS

SIDE VIEW

-2 TAPPED HOLES FOR #8-32X3/4" SCREWS

SIDE VIEW

-1 1/2" I.D. 1 1/2" LONG S.S. PIPE NIPPLE

SIDE VIEW

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SIDE VIEW

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SIDE VIEW

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SIDE VIEW

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SIDE VIEW

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SIDE VIEW

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SIDE VIEW

-2 TAPPED HOLES FOR #8-32X3/4" SCREWS

SIDE VIEW

-2 TAPPED HOLES FOR #8-32X3/4" SCREWS

SIDE VIEW

-2 TAPPED HOLES FOR #8-32X3/4" SCREWS
**NEW 5'-0" EXTENSION**

- **EXISTING TIE RODS**
- **EXISTING 3" DIA. PIPE**
- **M-2A SHAFT**
- **EXISTING MAST ARM**
- **3" PIPE**
- **2 1/2" PIPE**
- **2 1/2" long pipe sleeve. (round outside edges and smooth inside edges)**
- **3 1/2" Pipe**
- **3/4" DIA. HOLE (2 REQ.)**

**MACHINE 3 1/2" PIPE TO 3 1/2" I.D. - ROUND PASSAGE EDGE TO GLIDE UNHINDERED ONTO EXISTING 2" MAST ARM PIPE**

**3/16" CONTINUOUS WELD ALL AROUND**

**3" PIPE**

- **1/2" PIPE**
- **3/8" THICK PLATE**

**EXISTING 5/8" TIE ROD**

- **3 1/2" PIPE**
- **3/4" DIA. HOLE (2 REQ.)**

**NOTES:**

1. **ALL PIPES SHALL BE SCHEDULE 40.**
2. **ALL STEEL IN 2" MAST ARM EXTENSION SHALL BE HIGH-STRENGTH LOW-ALLOY.**
3. **AFTER FABRICATION, ENTIRE MAST ARM EXTENSION ASSEMBLY SHALL BE HOT DIP GALVANIZED. GALVANIC COATING SHALL NOT HINDER ASSEMBLING IT TO THE MAST ARM.**

---

**VIEW C-C**

**SECTION D-D**

**SECTION B-B**

**VIEW A-A**
**TRAFFIC SIGNAL MAST ARM FOR WOOD POLES "MAW-15" ASSEMBLY**

**NOTE:**

1. ITEMS MARKED "FURNISHED BY OTHERS" ARE TO BE FURNISHED BY THE CONSTRUCTION CONTRACTOR AT TIME OF ERECTION. THESE BOLT ASSEMBLIES SHALL BE MANUFACTURED FROM STEEL AS PER ASTM SPECIFICATIONS A-325-61T AND ELECTRO-GALVANIZED.

2. ACTUAL HOLE HEIGHT OF TIE ROD DEPENDS ON FIELD CONDITIONS. MAST ARM MUST BE LEVELLED.

**WOOD POLE**

**TOP OF SIDEWALK OR CURB**

**MAST ARM - 3" STEEL PIPE**

**TIE ROD**

**PLAN**

**SCALE: 1/4" = 1'**

**BRACE ANGLES**

2"x1 1/2"x3/16"x4'-0" LG.

**TIE ROD**

1 1/2"x3/16" PLATE - WELDED TO PIPE ON 3 SIDES (NOT AT BENT PLATE)

**MAST ARM - 2" ST'D STEEL PIPE**

**SCALE: 1/4" = 1'**

**TIE ROD**

5/8" DIA. TIE ROD (3/4" I.D. EYE ON EACH END - WELDED CLOSED)

**5/8"-13x4" LG. GALVANIZED SQ. HEAD LAG SCREWS (FURNISHED BY OTHERS)**

**5/8"-11 SQ. HEAD BOLT WITH (2) 2" SQ. x 1/4" TH. WASHERS (FURNISHED BY OTHERS)**

**5/8"-11 SQ. HEAD BOLT WITH (2) 2" SQ. x 1/4" TH. WASHERS AND HEX NUT (ALL GALVANIZED) (FURNISHED BY OTHERS)**
3 CLEATS MAY BE OBTAINED FROM OCTAGONAL CUTOUT.
1 3/8" DIA. HOLE AT CENTER OF EACH CLEAT. 4 CLEATS REQ'D.

SECTION "B-B"

ELEVATION - SECTION
SCALE: 3"=1'

SECTION "A-A"

CONTINUOUS WELDS ALL AROUND

SECTION "C-C"

DETAL "A"

3 @ 2 9/16"

VIEW "D-D"

DETAIL OF SHIM
12 RBQD. 1/16" THICK

16" SQUARE + 1/4"

SEE DETAIL OF NUT RETAINER

1 1/2" 3"

4" LONG WELDS ON INSIDE OF ALL CORNERS AT BOTTOM OF BASE

CONTINUOUS WELDS ALL AROUND

1/4" PLATE

TOP EDGE OF LATCH PLATE 3/4" LONG

3 @ 2 9/16" STEEL HINGE

7/16" DIA HOLE

7/16" SQUARE HOLE

CONTINUOUS WELDS ALL AROUND

8 1/16" DOOR OPENING

3/4" BREAK TOP EDGE

B C L

CHAMFER CORNER

7/16" DIA HOLE

APPROX OF SIDE OF TRANSFORMER BASE

7/16" SQUARE HOLE

DETAIL OF NUT RETAINER

FLAT WELDED TO TRANSFORMER BASE

SCALE: 6"=1'

DETAIL "A"

3 CLEATS MAY BE OBTAINED FROM OCTAGONAL CUTOUT. 1 3/8" DIA. HOLE AT CENTER OF EACH CLEAT. 4 CLEATS REQ'D.
SCALE: 2"=1'

"M-2A" POLE TRANSFORMER BASE DETAIL

REVISION

NEW YORK CITY

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
"M-2A" POLE TRANSFORMER BASE DETAIL
AS NOTED
LC-306
MA-008

NEW YORK CITY

SCALE: 6"=1'

OLD DRAWING NO.
MA-008

DRAWING NO.
LC-306

DATE
04/2011

CREATED
04/2011

REPLICATED IN CADD
09/1966

09/1966

DESIGNATION
CL

GPI
NOTES:
1. TWO INDEPENDENT STRAPS SHALL BE INSTALLED IN EACH GROOVE OF ALL HUBS FOR ALL SIGNAL MOUNTINGS.
2. STRAPS SHALL BE STAINLESS STEEL, AISI TYPE 301.
3. STAGGER HOLES IN POLE FOR CABLE FOR TRAFFIC SIGNALS MOUNTED AT THE SAME ELEVATION.
NOTES:

1. Tunnel visors for 8" signals shall be 12" long.
2. Tunnel visors for 12" signals shall be 16" long.
3. All signals shall be LED incandescent look.

12 INCH VEHICLE SIGNAL

8 INCH VEHICLE SIGNAL
NOTES:

1. FOR TWO-WAY ASSEMBLY SUBSTITUTE CLOSURES LC-4 FOR MOUNTING BRACKETS ON THIS CENTERLINE.
2. THE DRAWING ALLOWS DRAWINGS SPIDER-1 MS AND DRAWING LC-23 REVEALED AT "A".
3. SIGNAL HEADS MAY BE ROTATED AROUND CENTERS OF CONNECTIONS.
4. A THIN COAT OF "MOLYKOTE ANTI-SEIZE THREAD COMPOUND" FOR CORROSIONS OR APPROVED EQUIVALENT SHALL BE USED ON ALL THREADING IN ALUMINUM-THREADED CONNECTIONS.
5. FOR TWO-WAY ASSEMBLY SUBSTITUTE CLOSURES LC-8-4 FOR MOUNTING BRACKETS ON THIS CENTERLINE.
6. THREE-WAY "MS" SPIDER ASSEMBLY

PARTS LIST

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>DRAWING NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY - &quot;1MS&quot;</td>
<td>SE-009</td>
</tr>
<tr>
<td>3-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY - &quot;2MS&quot;</td>
<td>SE-013</td>
</tr>
<tr>
<td>1-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY - &quot;3MS&quot;</td>
<td>SE-010</td>
</tr>
<tr>
<td>TWO-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY - &quot;4MS&quot;</td>
<td>SE-012</td>
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</table>

NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BUREAU OF TRAFFIC OPERATIONS

120 QUEENS BLVD

L.I.C., N.Y. 11101
ONE-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY

**PARTS LIST**

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>DRAWING NO.</th>
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<tbody>
<tr>
<td>1</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-8-2)</td>
<td>1</td>
<td>SE-008</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot; DIE CAST AL. PIPE LOCKNUT</td>
<td>1</td>
<td>SE-010</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot; DIE CAST AL. SEPARATED LOCKING RING</td>
<td>1</td>
<td>SE-008</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;x2&quot; LONG DIE CAST AL. CLOSURE CAP (LC-8-6)</td>
<td>1</td>
<td>SE-011</td>
</tr>
<tr>
<td>5</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot;ODX1/8&quot;TH (N.I.C*)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

* * NOT IN CONTRACT

---

**DEPARTMENT OF TRANSPORTATION**
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD               L.I.C.,N.Y.11101

**NEW YORK CITY**

**MAST ARM TRAFFIC SIGNAL MOUNTING ASSEMBLY "1MS" - DETAIL**

**REVISED TO DRAWING NO.**

<table>
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<tr>
<th>OLD DRAWING NO.</th>
<th>NEW DRAWING NO.</th>
<th>DESCRIPTION</th>
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<tr>
<td>SE-004_2</td>
<td>SE-004_2</td>
<td>UPDATED PARTS LIST</td>
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</table>

**UPDATED PARTS LIST**

**DRAWN BY**

**DRAWN ON**

**CHECKED BY**

**REMARKS**

**SCALE**

**6" x 1'-0"**
THE EXTENDED TWO-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY "E2MS" IS SIMILAR TO THE "2MS" ASSEMBLY EXCEPT THAT:

1. THE ALUMINUM PIPE MEASURES 1 1/2"x8 3/4" (INSTEAD OF 4" IN "2MS")
2. THE EXTENDED TWO-WAY SIGNAL HEAD STEEL TIE IS 23" CENTER TO CENTER (INSTEAD OF 14" IN "2MS")

FOR "E2MS" PARTS LIST SEE DWG. SE-004_6.

NOTES:

"N.I.C." (NOT SUPPLIED)
THREE-WAY MAST ARM SIGNAL MOUNTING ASSEMBLY

NOTES:

1. THE ALUMINUM PIPE MEASURES 1 1/2"X8 3/4" (INSTEAD OF 4" IN "3MS")
2. THE EXTENDED THREE-WAY SIGNAL HEAD STEEL TIE IS 23" CENTER TO CENTER (INSTEAD OF 14" IN "2MS")

FOR "3MS" PARTS LIST SEE DWG. SE-004_6.

*N.I.C. (NOT SUPPLIED)
### Parts List

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>FOUR-WAY AL. JUNCTION BOX (LC-23-1)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>AL. JUNCTION BOX COVER (LC-23-2)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot;x4' LONG SCHEDULE 40 AL. PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED 15/8 IN. WITH TWO SERRATED BORES</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1 1/2&quot;x2&quot; LONG DIE CAST AL. SERRATED LOCKING RING</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-8-2)</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>1 1/2&quot;x1 1/2&quot; LONG SCHEDULE 40 AL. PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED TEE WITH TWO SERRATED BORES</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CLOSURE CAP (LC-8-6)</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>1 1/2&quot;x5/8&quot; LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot;ODx1 7/8&quot;IDx1/8&quot;TH (N.I.C.*</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>#10-24x5/8&quot; LONG ST. STEEL FILLISTER HEAD MACHINE SCREW</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>1/4&quot;-20x7/16&quot; LONG ST. STEEL SOCKET HEAD SET SCREW</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>*N.I.C.- (NOT SUPPLIED)</td>
<td>4</td>
</tr>
</tbody>
</table>

### Notes:

- The extended four-way mast arm signal mounting assembly "E4MS" is similar to the "4MS" assembly except that:
  - The aluminum pipe measures 1 1/2"x8 3/4" (instead of 4" in "4MS")
  - The extended four-way signal head steel tie is 23" center to center (instead of 14" in "2MS")

For "E2MS" parts list see DWG. SE-004_6.
NOTES:

1. FOR ASSEMBLIES OF SPIDER SEE DWG. SE-004.

2. TOLERANCES, UNLESS OTHERWISE NOTED, TO BE ± 0.01" FOR DECIMAL DIMENSIONS, ± 1/32" FOR MACHINING DIMENSIONS, ± 1/16" FOR CASTING DIMENSIONS, AND ± 1/2° FOR ANGULAR DIMENSION.

3. PIPE THREADS FOR ALL PIPE FITTINGS TO BE NPSM (STRAIGHT MACHINE).

4. COVER TO BE PUNCHED OUT OF #11 GAUGE ALUMINUM SHEETING, ALUMINUM 5454, INCLUDING HOLES.
12 SERRATIONS EQUALLY SPACED AT 5° FOR 1.500" PIPE

NOTE:
FEMALE SERRATION ON TOP CENTERLINE

SECTION A-A
N.Y.L.

SERRATED CONNECTION FOR
SIGNAL SECTION TOP

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

NEW YORK CITY
NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
SE-006_1
LB-634S

DRAWING NO.
REVISION
DESCRIPTION
BY
DATE

07/2011 GPI REPLACED IN CADD
12/2006 GSH LB-634S CREATED
02/1965 DSH
AS NOTED
2011 LB-634S
**NOTE:**
MALE SERRATION ON TOP CENTERLINE

2" I.D. SERRATED BOSS
2.437" O.D. SERRATED BOSS
0.125" GROOVE
2.687" DIA.
1.942" DIA. ± .005"

0.095"
0.075"
0.078"

0.0515"
0.044"
0.022"

72 SERRATIONS EQUALLY SPACED AT 5° FOR 1.5" PIPE

SECTION A-A
TOP VIEW

SECTION ALONG CENTER LINE OF FEMALE SERRATION
FRONT VIEW OF SERRATIONS (OUTSIDE VIEW)

DETAIL OF SERRATIONS
SCALE 1" = 0.100"

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD               L.I.C., N.Y. 11101

NEW YORK CITY
NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020

OLD DRAWING NO.
DRAWING NO.
SE-006_2

SERRATED CONNECTION FOR SIGNAL SECTION BOTTOM

DRAWING NO.      NO      DESCRIPTION
LB-635S

REVISION

DSH
REPLICATED IN CADD

07/2011
GPI
LB-635S CREATED

02/1965
DSH
LB-635S CREATED
NOTE:
1. MATERIAL: ALUM. BASE ALLOY DIE CASTING COMMERCIAL DESIGNATION NO.13
2. RADIUS: CORNER & FILLET 1/16"  
3. DRAFT ALLOWANCE: 2° IN NO CASE SHALL DRAFT DECREASE WALL OR RIB THICKNESS SPECIFIED.  
4. 1/8" RAISED CHARACTERS.  
5. CASTING SHALL BE SOUND FREE FROM BLOW HOLES, SCALDS, PIPE, BULGES, DENTS, AND CRACKS.  
6. DEBUR & BREAK ALL SHARP EDGES.  
7. ALL INSIDE EDGES SHALL BE CHAMFERED

FOR REMOVAL ONLY

DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 34-02 QUEENS BLVD L.I.C., N.Y. 11101

NEW YORK CITY

REVISION
05/22/19 305 FOR REMOVAL ONLY 01/1967 DSH
07/01/19 305 REPLACED IN CAD 05/1967 DSH
05/2006 305 REVISED 05/2006 DSH
07/2011 305 REVISED TMD & NOTES 05/2020 DSH
05/2020 305 FOR REMOVAL ONLY 01/1967 DSH

NC:\Projects\NYCDOT\Traffic\Bureau of Traffic Operations\Traffic Signal Standard Drawings\Jul 2020\SE-007_1

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, JUL 2020

SE-007_1

LB-639S

LB-639S CREATED 01/1967 DSH

CHANGED LENGTH OF THREADING 05/1967 DSH

REVISED TMD & NOTES 05/2020 DSH

FOR REMOVAL ONLY
**NOTES:**

1. MATERIAL: ALUM. BASE ALLOY DIE CASTING
   COMMERCIAL DESIGNATION NO. 13

2. CORNER & FILLET 1/16" RADIUS

3. DRAFT ALLOWANCE 2°, IN NO CASE SHALL DRAFT DECREASE WALL OR RIB THICKNESS SPECIFIED.

4. 1/8" RAISED CHARACTERS.

5. CASTING SHALL BE SOUND FREE FROM BLOW HOLES, SCALES, BURRS, DENTS, AND CRACKS.

6. DEBURR & BREAK ALL SHARP EDGES.

7. ALL INSIDE EDGES SHALL BE CHAMFERED
1 1/2" DIE CAST SERRATED LOCKING RING DETAIL

SERRATED RING
SCALE: 1" = 1'-0"

SECTION A-A

SECTION B-B

TOP VIEW OF 72 TEETH SERRATED RING

OUTSIDE FRONT VIEW OF MALE SERRATION

SECTION ALONG CENTER LINE OF MALE SERRATION

DETAIL OF SERRATIONS
SCALE: 1" = 0.001"
1. ALL EDGES TO BE SLIGHTLY ROUNDED FOR SAFETY.
2. The top and bottom of the nut shall have smooth, flush, parallel surfaces.
3. The pipe lock nut shall be die cast with the contractor retaining possession of the die,

NOTES:
NOTES:

1. 5/8" LONG CLOSURE CAP (LC-8-4) SHALL BE POLYCARBONATE.
2. 1-3/8" AND 2" LONG CLOSURE CAPS (LC-8-5 AND LC-8-6) SHALL BE DIE CAST OF ALUMINUM ALLOY #13.
3. A THIN COAT OF "MOLYKOTE ANTI SEIZE THREAD COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREADED CONNECTIONS.

1 1/2" DIA. MAX

1 1/2" NPSM, 11-1/2 THREADS PER INCH (CLASS 2 FIT)

5/8" LONG CLOSURE CAP
(LC-8-4)

1 3/8" LONG CLOSURE CAP
(LC-8-5)

2" LONG CLOSURE CAP
(LC-8-6)

UNDERCUT 1 3/4" O.A.

SMOOTH FLUSH SURFACE (TYPICAL)

ROUND Inside EDGE OF OPENING

CHAMFER

04/1965 DR
07/2006 DR
07/2011 G1
03/2020 GPI
04/1993 JBC
09/2006 LG-168-S
07/2011 GPI

LB14254S REPLACED
LB-14254S REPLACED
LG-168-S CREATED
LB-14254S REPLACED

SE-011

5/8" POLYCARBONATE CLOSER CAP

1 1/2" CLOSURE CAPS DETAIL

1'-0" = 1'-0"

NEW YORK CITY

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

OLD DRAWING NO.

DRAWING NO.

SE-011
NOTE:

1. 1 1/2" SCHEDULE 40 STAINLESS STEEL WELDED PIPE NIPPLE - 1 1/2" LONG - WITH CONTINUOUS CLASS 2A "NPSM" THREADING FOR CONNECTION TO THE JUNCTION BOX IN THE SIGNAL MOUNTING ASSEMBLY. (SMOOTH INSECT EDGES)
NOTES:

1. SIGNAL HEAD TIES, INCLUDING OPENINGS, SHALL BE STAMPED OUT OF #11 GAGE SHEETING (U.S. STANDARD).  

SEE DETAIL "A"
NOTE:
1. EXTENDED SIGNAL HEAD TIES SHALL BE STAMPED OUT OF 1/8" THICK SHEETING
### Two-Way Slipfitter Assembly - "2SPA"
- **View "A-A"**

### Three-Way Slipfitter Assembly - "3SPA"
- **Scale: 1 1/2" = 1'-0"**

### Four-Way Slipfitter Assembly - "4SPA"
- **Scale: 1 1/2" = 1'-0"**

### Parts List

<table>
<thead>
<tr>
<th>Description</th>
<th>Drawing No.</th>
<th>QTY. Req'd for Assembly</th>
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<tbody>
<tr>
<td><strong>Die Cast Al. Slipfitter &quot;1SA&quot;</strong></td>
<td>SE-015</td>
<td>1</td>
</tr>
<tr>
<td><strong>Die Cast Al. Slipfitter &quot;4S&quot;</strong></td>
<td>SE-018</td>
<td>1</td>
</tr>
<tr>
<td>1 1/2&quot; 1/4&quot; long Schedule 40 Al. Pipe, 1 1/2 NPSM 1/4&quot; threaded on both ends</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1 1/2&quot; Schedule 40 Al. Pipe, 1 1/2 NPSM 1 1/4&quot; threaded on one end (N.I.C.)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1 1/2&quot; Die Cast Al. Serrated Tee with two Serrated Bosses</td>
<td>SE-007</td>
<td>1</td>
</tr>
<tr>
<td>1 1/2&quot; 3/4&quot; long Die Cast Al. or base metal (LC-8-2)</td>
<td>SE-009</td>
<td>1</td>
</tr>
<tr>
<td>1 3/4&quot; Die Cast Al. Pipe Nut</td>
<td>SE-010</td>
<td>1</td>
</tr>
<tr>
<td>1 3/4&quot; Die Cast Al. Serrated Locking Ring</td>
<td>SE-008</td>
<td>1</td>
</tr>
<tr>
<td>1 3/4&quot; long Die Cast Al. Closure Cap (LC-8-4)</td>
<td>SE-011</td>
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<tr>
<td>Neoprene Seal Washer 2 3/4&quot; OD x 1 7/8&quot; ID x 1/8&quot; TH</td>
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<td><strong>Two-Way &quot;2SPA&quot; Signal Head Steel Tie Assembly</strong></td>
<td>SE-013-S</td>
<td>1</td>
</tr>
<tr>
<td>3/8&quot;-16 x 1&quot; long St. Steel SQ. Head Cup Point Screw (&quot;D&quot;)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Four-Way Signal Head Steel Tie</strong></td>
<td>SE-013-S</td>
<td>1</td>
</tr>
<tr>
<td>1 1/2&quot; x 3 1/2&quot; long St. Steel 1/2&quot; Head Cup Point Screw (&quot;C&quot;)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Four-Way Signal Head Steel Tie Assembly</strong></td>
<td>SE-013-S</td>
<td>1</td>
</tr>
</tbody>
</table>

### Notes:
1. Signal heads may be rotated around centers of connections.
2. A thin coat of "Molykote Anti-Seize Thread Compound" by Dow Corning, or approved equal, shall be used on all threading in aluminum threaded connections.

---

**One-Way Pole Signal Mounting Assembly - "1SA"**
- **Scale: 3" = 1'-0"**

**"2SPA", "3SPA", and "4SPA" Pole Signal Mounting Assemblies**
- **Scale: 3" = 1'-0"**

---

**Drawing Information**
- **Department of Transportation**
  - **Bureau of Traffic Operations**
  - **34-02 Queens Blvd, L.I.C. N.Y. 11101**
- **New York City**
- **NYCDOT Traffic Signal Standard Drawings, Jun 2020**
- **Old Drawing No.**
  - **SE-014_1**
- **Latest Revision**
  - **05/2020**
  - **By DR**
  - **Updated parts list**
- **Copy**
  - Updated parts list
  - LC-314-S created
  - LC-314-S revised
  - LC-314-S updated
  - LC-314-S updated
  - LC-314-S updated
  - LC-314-S updated
  - LC-314-S updated
  - LC-314-S updated

---

**Revisions**
- **05/2020**
  - Updated parts list
- **07/2006**
  - Redrawn to LC-314-D
- **01/2015**
  - "SPA" tie, center pipe & updated "4S" & "5S"
- **07/2011**
  - Replicated in CAD
  - Redrawn LC-314-S to LC-314-D
  - Set screw "X" was 1/8" long
- **07/2012**
  - LC-314-S created

---

**Specifications**
- **Scale:**
  - 3" = 1'-0"
# One-Way Pole Signal Mounting Assembly - "1SA"

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Die Cast Al. Slip Fitter &quot;1SA&quot; SE-010 1</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot;x3/4&quot; Long Die Cast Al. Chase Nipple (LC-8-2) SE-009 1</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot; Die Cast Al. Pipe Locknut SE-016 1</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;x2&quot; Long Die Cast Al. Closure Cap (LC-8-6) SE-011 1</td>
</tr>
<tr>
<td>5</td>
<td>Neoprene Seal Washer 2 3/4&quot;ODx1 7/8&quot;IDx1/8&quot;TH (N.I.C.) SE-011 1</td>
</tr>
<tr>
<td>D</td>
<td>3/8&quot;-16x1&quot; Long St. Steel Sq. Head Hollow Nuts Set Screw SE-011 4</td>
</tr>
</tbody>
</table>

* - Not in contract

---

**Diagram Description:**

- PART 1: Die Cast Al. Pipe Locknut
- PART 2: 1 1/2"x3/4" Long Die Cast Al. Chase Nipple
- PART 3: Neoprene Seal Washer
- PART 4: 1 1/2" Die Cast Al. Pipe Locknut
- PART 5: 1 1/2"x2" Long Die Cast Al. Closure Cap

---

**Part List:**

- SE-010: Die Cast Al. Slip Fitter "1SA" (1)
- SE-009: 1 1/2"x3/4" Long Die Cast Al. Chase Nipple (LC-8-2) (1)
- SE-016: 1 1/2" Die Cast Al. Pipe Locknut (1)
- SE-011: 1 1/2"x2" Long Die Cast Al. Closure Cap (LC-8-6) (1)
- SE-011: Neoprene Seal Washer 2 3/4"ODx1 7/8"IDx1/8"TH (N.I.C.) (1)
- SE-011: 3/8"-16x1" Long St. Steel Sq. Head Hollow Nuts Set Screw (4)

---

**Drawing Details:**

- Drawing No.: SE-014_2
- Created Date: 03/2020
- Updated Parts List: 03/2020
- Created By: GPI
- Revised By: GPI

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

NEW YORK CITY

**Scale:** 6" x 1/4"
NOTES:

1. SIGNAL HEADS MAY BE ROTATED AROUND CENTERS OF CONNECTIONS.

2. A THIN COAT OF "MOLYKOTE ANTI-SIEZE THREAD COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREAD CONNECTIONS.

PARTS LIST

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>DRAWING NO</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DIE CAST AL. SLIP FITTER &quot;4S&quot;</td>
<td>SE-016</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot; OD 14&quot; LONG SCHEDULE 40 AL. PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>SE-007</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot; DIE CAST AL. SERRATEDTEE WITH TWO SERRATED BOSSES</td>
<td>SE-009</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;X 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LCA-2)</td>
<td>SE-010</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>1 1/2&quot; DIE CAST AL. PIPE LOCKNUT</td>
<td>SE-011</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED LOCKING RINGS</td>
<td>SE-012</td>
<td>1</td>
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<tr>
<td>7</td>
<td>1 1/2&quot; OD LONG DIE CAST AL. CLOSING TEE (LCA-3)</td>
<td>SE-013</td>
<td>2</td>
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<tr>
<td>8</td>
<td>1 1/2&quot;X 3/4&quot; LONG AL. SINGLE-ENDED CLOSURE CAP (LCA-6-4)</td>
<td>SE-014</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>NEOPRENE SEAL WASHERS 2 3/4&quot;ODx1 7/8&quot;IDx1/8&quot;TH</td>
<td>SE-015</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
<td>SE-016</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>3/8&quot;-16x1&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
<td>SE-017</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>1 1/2&quot; SCH 40 AL. CENTER PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON ONE END**</td>
<td>SE-018</td>
<td>1</td>
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<tr>
<td>13</td>
<td>1 1/2&quot; OD 10&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
<td>SE-019</td>
<td>3</td>
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</table>

* - TWO-WAY "SPA" SIGNAL HEAD STEEL "TIE ASSEMBLY.
** - PIPE LENGTH TO BE DETERMINED BY FIELD CONDITIONS.
NOTES:

1. SIGNAL HEADS MAY BE ROTATED AROUND CENTERS OF CONNECTIONS.

2. A THIN COAT OF "MOLYKOTE ANTI-SIEZE THREAD COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREAD CONNECTIONS.
### Parts List

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>DRAWING NO.</th>
<th>QTY.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>D/E CAST AL. SLIP FITTER &quot;4A&quot;</td>
<td>SE-016</td>
<td>1</td>
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<tr>
<td>2</td>
<td>1 1/2&quot; x 4' LONG REDUCER, 3 1/4&quot; OD AL PIPE, 1 1/2&quot; NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>SE-007</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED TEES WITH TWO SERRATED BOSSES</td>
<td>SE-009</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot; x 3 1/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-3-4)</td>
<td>SE-010</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>1 1/2&quot; DIE CAST AL. PIPE LOCKNUT</td>
<td>SE-011</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED LOCKING RING</td>
<td>SE-012</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>1 1/2&quot; x 3 1/4&quot; LONG DIE CAST AL. CLOSURE CAP (LC-3-4)</td>
<td>SE-013</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>1 1/2&quot; x 2&quot; LONG DIE CAST AL. SERRATED LOCKING RING</td>
<td>SE-014</td>
<td>4</td>
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<tr>
<td>9</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot; ODx1 7/8&quot; IDx1/8&quot; TH</td>
<td>SE-015</td>
<td>5</td>
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<tr>
<td>10</td>
<td>FOUR-WAY SIGNAL HEAD STEEL PIECE</td>
<td>SE-016</td>
<td>1</td>
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<tr>
<td>A</td>
<td>3/8&quot;-16x1&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
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<tr>
<td>C</td>
<td>1 1/2&quot; x 5/8&quot; LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
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<tr>
<td>D</td>
<td>1 1/2&quot; x 3 1/4&quot; LONG SCHEDULE 40 AL. PIPE, 1 1/2&quot; NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED BOSSES</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>1 1/2&quot; DIE CAST AL. PIPE LOCKNUT</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED LOCKING RING</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>1 1/2&quot; x 3 1/4&quot; LONG DIE CAST AL. CLOSURE CAP (LC-3-4)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>1 1/2&quot; x 2&quot; LONG DIE CAST AL. SERRATED LOCKING RING</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot; ODx1 7/8&quot; IDx1/8&quot; TH</td>
<td>5</td>
<td></td>
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<tr>
<td>K</td>
<td>FOUR-WAY SIGNAL HEAD STEEL PIECE</td>
<td>1</td>
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<tr>
<td>L</td>
<td>3/8&quot;-16x1&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>24</td>
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</tr>
<tr>
<td>M</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. Signal heads may be rotated around centers of connections.
2. A thin coat of "Molykote Anti-Seize Thread Compound" by Dow Corning, or approved equal, shall be used on all threading in aluminum threaded connections.

---

**Elevation**

**Four-Way Slipfitter Assembly**

**Parts List**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART 1</td>
</tr>
<tr>
<td>PART 2</td>
</tr>
<tr>
<td>PART 3</td>
</tr>
<tr>
<td>PART 4</td>
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<td>PART 5</td>
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<td>PART 6</td>
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<td>PART 7</td>
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<tr>
<td>PART 8</td>
</tr>
<tr>
<td>PART 9</td>
</tr>
<tr>
<td>PART 10</td>
</tr>
</tbody>
</table>

**View "A-A"**

---

**Notes:**

1. Signal heads may be rotated around centers of connections.
2. A thin coat of "Molykote Anti-Seize Thread Compound" by Dow Corning, or approved equal, shall be used on all threading in aluminum threaded connections.
NOTES:

1. ADDITIONAL SET OF 4 UNTAPPED BOSSES WITH DIMPLES TO SECURE "4S" ASSEMBLY TO THE POLE IS OPTIONAL.

1. 1/2" x 3/8" POLYCARBONATE LONG CLOSURE CAP (16 G A-4)

2. NEREOPE SEAL WASHER 2-WAY 30° FILLET

3. DRILL & TAP FOR 1/4-20 x 1/2" LTD. SQ. HEAVY CUP POINT SET SCREW (9/16" SCREWS REQUIRED)

4. DRILL & TAP FOR 3/8-16 x 1" LTD. SQ. HOLLOW NOSE CUP SET SCREW (3/4" SCREWS REQUIRED)

OUTSIDE VIEW OF SERRATIONS

SECTIONAL - ELEVATION "A-A"

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C., N.Y. 11101

OLD DRAWING NO.

SCALE:
6" = 1'-0"

TRAFFIC SIGNAL ASSEMBLIES "SPA"

NEW YORK CITY

DRAWING NO.
LC-313-S

REVISED:
6/1/2020
SE-016

NOTES:

1. ADDITIONAL SET OF 4 UNTAPPED BOSSES WITH DIMPLES TO SECURE "4S" ASSEMBLY TO THE POLE IS OPTIONAL.

SECTIONAL - ELEVATION "A-A"

OUTSIDE VIEW OF SERRATIONS

NOTES:

1. ADDITIONAL SET OF 4 UNTAPPED BOSSES WITH DIMPLES TO SECURE "4S" ASSEMBLY TO THE POLE IS OPTIONAL.
PARTS LIST

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1/2&quot;W8 1/4&quot; LON N.P. SCH 40 AL PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot; DIE CAST AL SERRATED TEE WITH TWO SERRATED BOSSES</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot;X 1 3/4&quot; LONG DIE CAST AL CHASSE NIPPLE (LC-8-2)</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;X5/8&quot; LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot; ODX1 7/8&quot; TH (N.I.C)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1/4-20X1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>6</td>
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</table>

NOTES:
1. SIGNAL HOUSING MAY BE ROTATED AROUND CENTER OF CONNECTION.
2. A THIN COAT OF "MYLORD ANTI-SIEZE COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREADED CONNECTIONS.

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD               L.I.C., N.Y. 11101
NOTES:
1. SIGNAL HOUSING MAY BE ROTATED AROUND CENTER OF CONNECTION.
2. A THIN COAT OF "MYLOKOTE ANTI-SIEZE COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREADED CONNECTIONS.

PARTS LIST

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1/2&quot;x8 3/4&quot; LONG SCHEDULE 40 AL. PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON BOTH ENDS</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED TEE WITH TWO SERRATED BOSSES</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-8-2)</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;x3/8&quot; LONG POLYCARBONATE CLOSURE CAP (LCA4)</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot; ODx1 7/8&quot;TH (N.I.C)*</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>1/4&quot;x20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>12</td>
</tr>
</tbody>
</table>

* - NOT IN CONTRACT (N.I.C.)
NOTE:
1. LAWTON HUB ASSEMBLIES SHOULD BE ORDERED IN PAIRS WITH ONE 3/4" PIPE NIPPLE FOR EACH PAIR.

THE DRAWING SUPERSEDES DRAWING LC-35 (REV. 8-24-67)

DETAIL OF 3/4" PIPE NIPPLE
ONE REQUIRED FOR EACH PAIR OF HUB

PARTS LIST

<table>
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<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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<tbody>
<tr>
<td>1</td>
<td>DIE CAST HUB</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3/4&quot; SCHEDULE 40 ALUM. PIPE</td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>1/4&quot;-20X1/2&quot; ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>2</td>
</tr>
</tbody>
</table>

CONNECTION TO POLE AT CABLE ENTRANCE

STAINLESS STEEL STRAP

SECTION ELEVATION “A-A”
VARIES (11” MIN., 11 3/4” MAX)

WOOD POLE

PART 7

SIGNAL HEAD

(N.I.C.)

PART 6

PART 5

PART 4

PART 3

1” LG THREADING

"C"

PART 2

"B"

PART 1

"A"

NOTES:

1. ALUMINUM PLATES AND PIPING SHALL BE 6061-T6 ALLOY.

2. THREADING ON ENDS OF PIPING SHALL BE NPSM THREADING, 11 1/2 THREADS PER INCH, 3/4” LONG, UNLESS OTHERWISE NOTED.

3. THREADS TO BE LUBRICATED WITH A THIN COAT OF "MOLYCOTE ANTI-SIEZE THREAD COMPOUND" BY DOW CORNING CORP. OR APPROVED EQUAL.

**- NOT IN CONTRACT (N.I.C)**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>TOP BRACKET CONNECTION</td>
</tr>
<tr>
<td>2</td>
<td>BOTTOM BRACKET CONNECTION</td>
</tr>
<tr>
<td>3</td>
<td>DIE CAST AL. PLAIN TEE</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot; NPSM LONG SCHEDULE 40 AL. PIPE, 11 1/2&quot; THREAD ON ONE END</td>
</tr>
<tr>
<td>5</td>
<td>1 1/2&quot; NPSM LONG SCHEDULE 40 AL. PIPE, 11 1/2&quot; THREAD ON ONE END</td>
</tr>
<tr>
<td>6</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED TEE WITH TWO SERRATED BOSSES</td>
</tr>
<tr>
<td>7</td>
<td>1 1/2&quot; NPSM LONG DIE CAST AL. CHASE NIPPLE (LC-8-2)</td>
</tr>
<tr>
<td>8</td>
<td>1 1/2&quot; NPSM LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
</tr>
<tr>
<td>9</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot; OD X 1 7/8&quot; ID X 1/8&quot; TH (N.I.C)</td>
</tr>
<tr>
<td>10</td>
<td>1/4&quot;-20 X 1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
</tr>
<tr>
<td>11</td>
<td>3/8&quot;-16 X 1/2&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
</tr>
<tr>
<td>12</td>
<td>1/2&quot; X 4&quot; GAL. STEEL LAG SCREW (N.I.C)</td>
</tr>
</tbody>
</table>

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C. N.Y. 11101

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020

REVISION

1. SE-013_3 CR UPDATED PARTS LIST
2. SE-013_3 CR CHANGED TITLES, NOTES AND PARTS LIST
3. 10/1974 JBC REDUCED TITLES, NOTES AND PARTS LIST
4. 08/2011 GPI REDUCED TITLES, NOTES AND PARTS LIST
5. 06/2020 DR UPDATED PARTS LIST

SCALE 3" X 1-1/2"
### PARTS LIST

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TOP BRACKET CONNECTION</td>
</tr>
<tr>
<td>2</td>
<td>BOTTOM BRACKET CONNECTION</td>
</tr>
<tr>
<td>3</td>
<td>DIE CAST AL. PLAIN TEE</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot; 1/2&quot; NPSM THREADS, 11 1/2 THREADS PER INCH, 3/4&quot; LONG</td>
</tr>
<tr>
<td>5</td>
<td>1 1/2&quot; 1/2&quot; NPSM THREADS ON ONE END</td>
</tr>
<tr>
<td>6</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED TEE WITH TWO SERRATED BOSSES</td>
</tr>
<tr>
<td>7</td>
<td>1 1/2&quot; 1/2&quot; NPSM THREADS, 11 1/2 THREADS PER INCH, 3/4&quot; LONG</td>
</tr>
<tr>
<td>8</td>
<td>1 1/2&quot; 1/2&quot; NPSM THREADS, 11 1/2 THREADS PER INCH, 3/4&quot; LONG</td>
</tr>
<tr>
<td>9</td>
<td>NITRILE SEAL WASHER 2 3/8&quot; OD x 1 7/8&quot; ID x 1/8&quot; TH</td>
</tr>
<tr>
<td>10</td>
<td>1 1/2&quot; 1/2&quot; NPSM THREADS ON BOTH ENDS</td>
</tr>
<tr>
<td>11</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
</tr>
<tr>
<td>12</td>
<td>3/8&quot;-16x1&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
</tr>
<tr>
<td>13</td>
<td>1/2&quot;x4&quot; GAL. STEEL LAG SCREW</td>
</tr>
<tr>
<td>14</td>
<td>1 1/2&quot;x8&quot; SCHEDULE 40 AL. PIPE, 11 1/2 NPSM 3/4&quot; THREADED ON ONE END</td>
</tr>
<tr>
<td>15</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-8-2)</td>
</tr>
<tr>
<td>16</td>
<td>1 1/2&quot;x5/8&quot; LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
</tr>
<tr>
<td>17</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
</tr>
<tr>
<td>18</td>
<td>3/8&quot;-16x1&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
</tr>
<tr>
<td>19</td>
<td>1/2&quot;x4&quot; GAL. STEEL LAG SCREW</td>
</tr>
</tbody>
</table>

**NOTES:**

1. ALUMINUM PLATES AND PIPING SHALL BE 6061-T6 ALLOY.
2. THREADING ON ENDS OF PIPING SHALL BE NPSM THREADING, 11 1/2 THREADS PER INCH, 3/4" LONG, UNLESS OTHERWISE NOTED.
3. THREADS TO BE LUBRICATED WITH A THIN COAT OF "MOLYCOTE ANTI-SIEZE THREAD COMPOUND" BY DOW CORNING CORP. OR APPROVED EQUAL.

### REVOLUTION

| DEPARTMENT OF TRANSPORTATION |
|-----------------------------|------------------|
| BUREAU OF TRAFFIC OPERATIONS |
| 34-02 QUEENS BLVD            |
| L.I.C. N.Y.11101             |

### BRACKET MOUNTING ASSEMBLY

- DEPARTMENT OF TRANSPORTATION
- BUREAU OF TRAFFIC OPERATIONS
- 34-02 QUEENS BLVD L.I.C. N.Y.11101
- SCALE: 3" = 1'-0"
- OLD DRAWING NO.: SE-019_2
- NEW YORK CITY
- LC: 310-S
- DESCRIPTION: FOR VEHICLE SIGNALS ON WOOD POLES "2WP"
- DRAWING NO.: SE-019_3
- DATE: 10/1974
- CREATOR: JBC
- CHANGED TITLES, NOTES AND PARTS LIST
- REPLICATION IN CAD
- UPDATED PARTS LIST
- DRAWING NO.: SE-019_3
- REVISION: 1
- UPDATE DATE: 11/1966
- DATE: 10/1974
- DATE: 08/2011
- DATE: 06/2020
- DESCRIPTION: CHANGED TITLES, NOTES AND PARTS LIST
- DESIGNER: GPI
- REVISED DATE: 08/2011
- DESIGNER: DR
- UPDATED PARTS LIST
- OLD DRAWING NO.: SE-019_2
- NEW DRAWING NO.: LC-310-S
- DATE: 06/2020
- DESIGNER: SE-019_2
- DESCRIPTION: FOR VEHICLE SIGNALS ON WOOD POLES "2WP"
**NOTES:**

1. **ALUMINUM PIPE AND PLATES SHALL BE 6061-T6 ALLOY.**
2. **PIPE THREADING SHALL BE NPSM THREADING, 1 1/2 THREADS PER INCH.**
3. **WELDING SHALL BE HELIARC WELDING.**
4. **PAINT POWDER COAT BRACKET PER FED SPEC.**
5. **PLAIN TEE COULD BE SUBSTITUTED WITH 1 1/2" CAST AL. SERRATED TEE AND 1 1/2" THREADED HIGH IMPACT PLASTIC INSULATING BUSHING OZ/GEDEY'S # BB-150 OR EQUAL.**

---

**BOARD OF TRANSPORTATION**
**BUREAU OF TRAFFIC OPERATIONS**
**34-02 QUEENS BLVD L.I.C., N.Y. 11101**

**REVISION**

1. 06/2020 OR RADIUS CHANGE TO 6"
2. 06/2020 OR REPRICTION IN CAST W
3. 06/1997 ADJ ADDED PLAIN TEE DETAIL
4. 06/1997 ADJ ADDED PLAIN TEE DETAIL
5. 11/1990 ADJ LB-1022-5 CREATED

**DRAWING NO.**

**NEW YORK CITY**

**SCALE**

**OLD DRAWING NO.**

**DRAWING NO.**

**DESCRIPTION**

**SE-019_3**
NOTES:
1. NYC DESIGNATION "VB-2P".
2. 47,000 PSI TENSILE STRENGTH AND DIE-CAST ALUMINUM CONSTRUCTION ON FITTINGS.
3. CHASE NIPPLES AVAILABLE IN ALUMINUM, BRONZE & CAST IRON.
4. TAPPED 1 1/2"-11 1/2" NPSM.
5. 1/4"-20x1/2" LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW ON ALL 1 1/2" OPENINGS.
6. PAINT BRACKET POWDER-COATED PER FED SPEC 595B#13538.
PARTS LIST

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>DRAWING NO.</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1/2&quot;x17&quot; long schedule-stm pipe, 1/2&quot; NPSM 3/4&quot; threaded on both ends</td>
<td>SE-007_2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot; die cast al. serrated tee with two serrated bosses</td>
<td>SE-009</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot;x1 3/4&quot; long die cast al. chase nipple (LC-8-2)</td>
<td>SE-011</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot; die cast al. chase nipple (LC-8-2)</td>
<td>SE-011</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Neoprene seal washer 2 3/4&quot; OD x 1 7/8&quot; ID x 1/8&quot; TH (for top bracket only) (N.I.C.*); 1/4&quot;-20x1/2&quot; long st. steel sq. head hollow nose set screw</td>
<td>SE-021</td>
<td>1 1/2&quot; die cast al. chase nipple (LC-8-2)</td>
</tr>
</tbody>
</table>

* - NOT IN CONTRACT (N.I.C.)

NOTES:
1. Signal housing may be rotated around center of connection.
2. A thin coat of "Molykote anti seize thread compound" by Dow Corning, or approved equal, shall be used on all threading in aluminum threaded connections.

ELEVATION

SECTION "A-A"

PEDESTRIAN SIGNAL MOUNTING
ASSEMBLY "VB-P"

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

NEW YORK CITY
1. SIGNAL HOUSING MAY BE ROTATED AROUND CENTER OF CONNECTION.

2. A THICKER COAT OF "MOLYKOTE ANTI SEIZE THREAD COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREADED CONNECTIONS.
NOTES:

1. VISOR LENGTH SHOULD BE DETERMINED AS PER ENGINEER.
NOTES:

1. ALL SURFACES OF PARTS SHOULD BE SPRAYED WITH BLACK FLAT PAINT.

2. TOLERANCES SHOULD BE ± 1/16" UNLESS OTHERWISE SPECIFIED.

3. MATERIAL: ROLLED PLATE. THICKNESS = 0.02".
NOTES:
1. ALL SURFACES OF PARTS SHOULD BE SPRAYED WITH BLACK FLAT PAINT.
2. TOLERANCES SHOULD BE ± 1/16" UNLESS OTHERWISE SPECIFIED.
3. MATERIAL: ROLLED PLATE. THICKNESS = 0.02".
NOTES:
1. ALL SURFACES OF PARTS SHOULD BE SPRAYED WITH BLACK FLAT PAINT.
2. TOLERANCES SHOULD BE ± 1/16" UNLESS OTHERWISE SPECIFIED.
3. MATERIAL: ROLLED PLATE. THICKNESS = 0.02".
NOTE:

1. VIEW CUT-OFF OPTIONS FOR GEOMETRICALLY PROGRAMMABLE LOUVERS COULD BE BUT NOT LIMITED TO 7°, 8°, 9°, 11°, 13°, 15°, 23.5°, 43°.
NOTES:

1. TRAFFIC SIGNAL SHALL BE CENTERED OVER TRAFFIC LANE, OR AS PER ENGINEER IN CHARGE.

2. TO AVOID CORROSION, MAST ARM SHALL NOT BE DRILLED. ALL ELECTRICAL CABLES RUN ON EXTERIOR OF MAST ARM HOUSED IN 3/4” PVC CONDUIT. PVC CONDUIT SHALL BE CONTINUOUS, FROM POLE TO SIGNAL HOUSING LEAVING ENOUGH EXPOSED CABLE FOR CONNECTIONS.
MOUNTING INFORMATION

- MOUNTING ON METAL POLE
- MOUNTING ON WOOD POLE

**Top View**
- NAVIGATOR
- 5/16" THREADED ROD
- 1/2" COUPLING
- 1/2" STRAIGHT LIQUID TIGHT CONNECTOR
- 1/2" LIQUID TIGHT FLEXIBLE CONDUIT (LENGTH AS PER FIELD CONDITIONS)

**Side View**
- 1/2" LIQUID TIGHT FLEXIBLE CONDUIT
- DRILL 7/8" HOLE AT THE BOTTOM COVER FOR 1/2" STRAIGHT LIQUID TIGHT CONNECTOR

**MOUNTING ON WOOD POLE**
- 1/2" LIQUID TIGHT FLEXIBLE CONDUIT
- BOTTOM CONDUIT CONN. ON WOOD POLE APP.
## CORD END CONNECTOR

**Scale:** 1'-0" = 1'-0"

### TRADE SIZE

<table>
<thead>
<tr>
<th>TRADE SIZE</th>
<th>&quot;A&quot;</th>
<th>&quot;B&quot;</th>
<th>&quot;C&quot;</th>
<th>CABLE RANGE</th>
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<tbody>
<tr>
<td>1/2</td>
<td>1.762</td>
<td>380</td>
<td>978</td>
<td>1.05'-3.50'</td>
</tr>
<tr>
<td></td>
<td>1.762</td>
<td>380</td>
<td>978</td>
<td>2.05'-4.72'</td>
</tr>
<tr>
<td>3/4</td>
<td>2.290</td>
<td>380</td>
<td>1.230</td>
<td>3.85'-7.50'</td>
</tr>
<tr>
<td></td>
<td>2.290</td>
<td>380</td>
<td>1.230</td>
<td>2.05'-4.72'</td>
</tr>
<tr>
<td>1 1/4</td>
<td>2.180</td>
<td>400</td>
<td>1.810</td>
<td>5.10'-7.50'</td>
</tr>
<tr>
<td></td>
<td>2.180</td>
<td>400</td>
<td>1.810</td>
<td>3.85'-7.50'</td>
</tr>
<tr>
<td>1 1/2</td>
<td>0.600</td>
<td>710</td>
<td>2.080</td>
<td>UNIVERSAL**</td>
</tr>
</tbody>
</table>

(*) HUMMEL, HD8-64016Y1 (COMES WITH SOLID GROMMET) OR EQUAL
(**: HUMMEL, SOLID GROMMET #1.089.3699.19 OR EQUAL

### NOTE:

1. TO ACCEPT CABLE, SOLID GROMMET SHALL BE DRILLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
4 1/2" POLE CAP (DOME)

1/4"-20x1/2" ST. STEEL SQ. HEAD SET SCREWS (3 REQ.)

4" DIA. x 60" LONG SCHEDULE 40 GALVANIZED STEEL PEDESTAL POLE

STEEL FLANGE BASE WITH 12 3/4" BOLT CIRCLE FOR 3/4" ANCHOR BOLTS

1/4" BOLT & 4-14 WIRE, 600V ALUMINUM GROUNDING LUG

NOTES:
1. ANCHOR BOLT ASSEMBLY SHALL BE MADE OF GALVANIZED STEEL.
NOTES:

1. ALL LEDS MUST BE INCANDESCENT LOOK TYPE AND BE APPROVED BY NYCDOT, AND FOLLOW NYCDOT SPECIFICATION 7B LED SIGNAL MODULE.

2. THE BIKE LANE SYMBOL SHALL BE AS ILLUSTRATED ON THIS DRAWING, OR APPROVED EQUAL.

3. THE BIKE SYMBOL SHALL BE A MASK TYPE OF CONSTRUCTION USING A HIGH QUALITY 3 MIL FLEXIBLE VINYL RATED FOR OUTDOOR USE AND UNAFFECTED BY SUN LIGHT (UV RAYS). THE MATERIAL SHALL HAVE A PERMANENT ACRYLIC PRESSURE SENSITIVE ADHESIVE. THE MATERIAL SHALL BE RESISTANT TO WATER, HUMIDITY, AND MOST PETROLEUM BASED SOLVENTS, WITH A SERVICE RANGE TEMPERATURE OF -40°F TO +200°F. THE PRODUCT LIFE OF THE VINYL SHALL BE EQUAL TO THE LIFE OF THE LED SIGNAL MODULE AND BE WARRANTED FOR NOTLESS THAN 7 YEARS.
PARTS LIST

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
<th>DRAWING NO.</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-007_2</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-2)</td>
<td>SE-009</td>
<td>2</td>
</tr>
<tr>
<td>SE-011</td>
<td>1 1/2&quot;x3/4&quot; LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
<td>SE-011</td>
<td>2</td>
</tr>
<tr>
<td>SE-019_3</td>
<td>NEROPRENE SEAL WASHER 2 3/4&quot; OD x 1 7/8&quot; ID x 1/8&quot; TH (FOR TOP BRACKET ONLY) (N.I.C.)</td>
<td>SE-019_3</td>
<td>1</td>
</tr>
<tr>
<td>SE-019_3</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. PLAIN TEE</td>
<td>SE-019_3</td>
<td>1</td>
</tr>
<tr>
<td>SE-019_3</td>
<td>3/8&quot;-16x1&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
<td>SE-019_3</td>
<td>4</td>
</tr>
<tr>
<td>SE-019_3</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>SE-019_3</td>
<td>4</td>
</tr>
<tr>
<td>SE-019_3</td>
<td>1/2&quot;x4&quot; GAL. STEEL LAG SCREW (N.I.C.)</td>
<td>SE-019_3</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTES:

1. SIGNAL HOUSING MAY BE ROTATED AROUND CENTER OF CONNECTION.
2. A THIN COAT OF "MOLYKOTE ANTI SEIZE THREAD COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREADED CONNECTIONS.

* - NOT IN CONTRACT (N.I.C.)
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1/2&quot;x11&quot; LONG SCHEDULE 80 AL. PIPE, 11 1/2 NPSM, 3/4&quot; THREADED ON BOTH ENDS</td>
<td>6</td>
<td>SE-007_2</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED TEE WITH TWO SERRATED BOSSES</td>
<td>4</td>
<td>SE-008</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot;x1 3/4&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-8-2)</td>
<td>4</td>
<td>SE-010</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;x5/8&quot; LONG POLYCARBONATE CLOSURE CAP (LC-6-4)</td>
<td>0</td>
<td>SE-011</td>
</tr>
<tr>
<td>5</td>
<td>120 DEGREE &quot;Y&quot; FITTING</td>
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<td>SE-020</td>
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<td>6</td>
<td>NEOPRENE SEAL WASHER 2 1/4&quot; OD x 1 3/8&quot; ID x 1/8&quot; TH (FOR TOP BRACKET ONLY) (IN LC)</td>
<td>2</td>
<td>SE-019_3</td>
</tr>
<tr>
<td>7</td>
<td>20 DEGREE &quot;T&quot; FITTING</td>
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<td>SE-019_3</td>
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<tr>
<td>8</td>
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<td>BOTTOM BRACKET CONNECTION</td>
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<tr>
<td>10</td>
<td>DIE CAST AL. PLAIN TEE</td>
<td>1</td>
<td>SE-019_3</td>
</tr>
<tr>
<td>11</td>
<td>&quot;A&quot; 1/4-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>10</td>
<td>SE-019_3</td>
</tr>
<tr>
<td>12</td>
<td>&quot;B&quot; 3/8-16x1&quot; LONG ST. STEEL SQ. HEAD CUP POINT SET SCREW</td>
<td>1</td>
<td>SE-019_3</td>
</tr>
<tr>
<td>13</td>
<td>&quot;C&quot; 5/8&quot;x4&quot; GAL. STEEL LAG SCREW (N.I.C.)</td>
<td>4</td>
<td>SE-019_3</td>
</tr>
</tbody>
</table>

* - NOT IN CONTRACT (N.I.C.)

### NOTES:

1. SIGNAL HOUSING MAY BE ROTATED AROUND CENTER OF CONNECTION.
2. A THIN COAT OF "MOLYKOTE ANTI SEIZE THREAD COMPOUND" BY DOW CORNING, OR APPROVED EQUAL, SHALL BE USED ON ALL THREADING IN ALUMINUM THREADED CONNECTIONS.
NOTES:
1. MATERIAL: ALUM. BASE ALLOY DIE CASTING
   COMMERCIAL DESIGNATION NO.13
2. RADIUS - CORNER & FILLET 1/16"
3. DRAFT ALLOWANCE 2°, IN NO CASE SHALL DRAFT DECREASE WALL OR RIB THICKNESS SPECIFIED.
4. 1/8" RAISED CHARACTER.
5. CASTING SHALL BE SOUND FREE FROM BLOW HOLES, SCALES, FINES, BURRS, DENTS, AND CRACKS.
6. DEBURR & BREAK ALL SHARP EDGES.
7. ALL INSIDE EDGES SHALL BE CHAMFERED
**PARTS LIST**

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1/2&quot;x48&quot; LONG SCHEDULE 40 AL. PIPE, 1 1/2 NPSM FULLY THREADED</td>
<td>SE-009</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1 1/2&quot;x48&quot; LONG SCHEDULE 40 AL. NOTCHED COUPLING, 1 1/2 NPSM FULLY THREADED</td>
<td>SE-008</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1 1/2&quot; DIE CAST AL. SERRATED LOCKING RING</td>
<td>SE-011</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1 1/2&quot;x36&quot; LONG DIE CAST AL. CHASE NIPPLE (LC-8-2A)</td>
<td>SE-008</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot;OD x 7/8&quot;ID x 1/16&quot;TH (N.I.C.)</td>
<td>SE-008</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1 1/2&quot;x36&quot; LONG DIE CAST AL. CLOSURE CAP (LC-8-5)</td>
<td>SE-011</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>SE-009</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>NEOPRENE SEAL WASHER 2 3/4&quot;OD x 7/8&quot;ID x 1/16&quot;TH (N.I.C.)</td>
<td>SE-008</td>
<td>1</td>
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<td>9</td>
<td>1/4&quot;-20x1/2&quot; LONG ST. STEEL SQ. HEAD HOLLOW NOSE SET SCREW</td>
<td>SE-009</td>
<td>1</td>
</tr>
</tbody>
</table>

* - NOT IN CONTRACT (N.I.C.), SUPPLIED BY OTHERS.

**NOTCHED COUPLING**

**SCALE** 1"=1'-0"

**DRILL AND TAP 4 HOLES**

1/4"-20 NC AND SUPPLY 4 SET SCREWS 1/4"-20x1/2"

**LONG SS HOLLOW NARROW SQUARE HEAD**

**SCALE** 6" = 1'-0"
NOTE:

1. TO SECURE TEMPORARY CONCRETE PYLON TO CONCRETE SURFACE USE 3/4" CONCRETE ANCHOR BOLTS.

PLAN VIEW

SECTION "A-A"

SCALE 3/4" = 1'-0"

3000 PSI TEST CONCRETE VS. CLASS 1 CONCRETE (1:3:4)

CONDUIT BENDS

SEE DETAIL A

ANCHOR BRACKET DETAIL

SCALE 3/4" = 1'-0"

NOTE:

1. TO SECURE TEMPORARY CONCRETE PYLON TO CONCRETE SURFACE USE 3/4" CONCRETE ANCHOR BOLTS.
NOTES:
1. PIPE TO BE 1 1/2" x 10' GALV. STEEL.
2. BASE TO INCLUDE 2 BAGS OF STONE 200 LBS EA.
3. 2X4'S TO BE USED FOR FRAMING.
4. CONTRACTORS IDENTIFICATION TO BE STENCILED ON OUTSIDE OF BASE WITH 3" MIN LETTERING HEIGHT.
NOTES:

1. LIST OF SUGGESTED MOUNTING HARDWARE SUPPLIED BY INSTALLER:
   - 5'-5/16" GALVANIZED CHAIN
   - 2 3/8"x1 1/2" SS BOLTS WITH SS FLAT WASHER
   - 1 3/8" SS LOCK NUT NYLON INSERT TYPE
   - 3 1/2" SS U BOLT WITH SS FLAT WASHERS AND NYLON LOCK NUT

2. PART FOR THE STRAP ARE AS FOLLOWS:
   - 12" STAINLESS STEEL BANDING WITH BUCKEL
   - PLUS FOUR SIGN BRACKET WITH 5/16"x1/2" SCREW AND BRIDGEPORT 2110-5 CONDUIT HANGER WITH INSULATOR
   - 3 1/2" SS U BOLT WITH SS FLAT WASHERS AND NYLON LOCK NUT

3. STRAPS ON SIGN BRACKET - CAT SB022

1/2" WEATHERTIGHT CONNECTOR

4 CONDUCTOR CABLE

SPEED SIGN UNIT ONLY
FOR AMERICAN SIGNAL SPEED SIGN

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD               L.I.C., N.Y. 11101
NOTES:

1. LIST OF SUGGESTED MOUNTING HARDWARE SUPPLIED BY INSTALLER:
   - 6'-5/16" GALVANIZED CHAIN
   - 2 3/8"x1 1/2" SS BOLTS WITH SS FLAT WASHER
   - 1 3/8" SS LOCK NUT NYLON INSERT TYPE
   - 3 1/2" SS U BOLT WITH SS FLAT WASHERS AND NYLON LOCK NUT

2. PART FOR THE STRAP ARE AS FOLLOWS:
   - 12" STAINLESS STEEL BANDING WITH BUCKEL
   - PLUS FOUR SIGN BRACKET WITH 5/16"x1/2" SCREW AND BRIDGEPORT 2110-S CONDUIT HANGER WITH INSULATO
   - 3 1/2" SS U BOLT WITH SS FLAT WASHERS AND NYLON LOCK NUT

3. STRAPS ON SIGN BRACKET - CAT 5B022

4. JUNCTION BOX SHALL BE MOUNTED ON THE POLE CLOSE TO MAST ARM

NEW YORK CITY

SPEED SIGN UNIT FOR SPEED CHECK DISPLAYS

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C. N.Y.11101

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020

SPEED SIGN UNIT

MISC-002_2

FOR SPEED CHECK DISPLAYS

REVISION

NEW YORK CITY

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C. N.Y.11101

SPEED SIGN UNIT

MISC-002_2
NOTES:

1. FOUNDATION FOR TAPPERED STEEL SHAFT ASSEMBLY SHALL BE AS PER DWG H-3788.

2. STEEL TRANSFORMER BASE SHALL BE AS PER STREET LIGHTING SPEC DWG H-3722.
NOTES:

1. TRAFFIC SIGNAL SHALL BE CENTERED OVER TRAFFIC LANE, OR AS PER ENGINEER.

2. IF THE ASSEMBLY IS MOUNTED ON A 5' MAST ARM EXTENSION, THE SIGNAL CABLE SHALL BE ROUTED THROUGH THE MAST ARM AND J2A. TO AVOID CORROSION, MAST ARM SHALL NOT BE DRILLED. ALL ELECTRICAL CABLES RUN ON EXTERIOR OF MAST ARM SHALL BE HOUSED IN 3/4" PVC CONDUIT WHICH SHALL BE CONTINUOUS, FROM POLE TO SIGNAL HOUSING LEAVING ENOUGH EXPOSED CABLE FOR CONNECTIONS AND ATTACHED WITH BANDING (SEE DWG AI-004). PVC CONDUIT SHALL BE SECURED TO MAST ARM WITH 3/4" STAINLESS STEEL BANDING AND BUCKLES SPACED NO MORE THAN 36" APART.

3. PREFERRED CABLE ENTRY OF THE ASSEMBLY IS IN UPPER SERRATED TEE. IF THE FINAL INSTALLED POSITION OF THE ASSEMBLY RESULTS IN THE LOWER SERRATED TEE BEING CLOSER TO THE MAST ARM, THE CABLE ENTRY CAN BE THROUGH THE LOWER SERRATED TEE.

4. 1 1/4" CORD GRIP SHALL BE NON-METALLIC, UV AND WEATHER RESISTANT WITH GROMMET ACCEPTING 7 TO 16 CONNECTOR AWG#14 NYC SIGNAL CABLES WITH DIAMETER RANGE OF 0.51"-0.79" (HUMMEL HSK-K #1.209.5401.71 OR EQUAL). FOUR CONDUCTOR AWG#14 NYC SIGNAL CABLE IS NOT TO BE USED IN THIS INSTALLATION.

PARTS LIST

<table>
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<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tr>
<td>SE-007_2</td>
<td>1 1/2&quot;x46 1/2&quot; LONG SCHEDULE 40 AL. PIPE, 11 1/2 NPSM 1 1/4&quot; THREADED ON BOTH ENDS</td>
</tr>
<tr>
<td>SE-009</td>
<td>1 3/4&quot; MAST ARM EXTENSION</td>
</tr>
<tr>
<td>SE-011</td>
<td>2 1/2&quot;X1 3/8&quot; LONG DIE CAST AL. ChASE NIPPLE (LC-8-2A)</td>
</tr>
<tr>
<td>SE-014</td>
<td>1 1/2&quot;x5/8&quot; LONG POLYCARBONATE CLOSURE CAP (LC-8-4)</td>
</tr>
<tr>
<td>MISC-003_2</td>
<td>20' MAST ARM</td>
</tr>
<tr>
<td>MISC-003_2</td>
<td>5' MAST ARM EXTENSION</td>
</tr>
</tbody>
</table>

SCHOOL ZONE FLASHER ON 5' MAST ARM EXTENSION

SCHOOL ZONE FLASHER ON MONOTUBE MAST ARM

SCHOOL ZONE FLASHER ASSEMBLY

EXTENDED MOUNT CLAMP
NOTES:
1. 15'-6" MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE BOTTOM OF THE TRANSFORMER BASE.
2. STEEL HINGE SUPPLIED BY MANUFACTURER.
4. TO ACHIEVE MIN CLEARANCE, "M-2A" POLE MAY HAVE TO BE INSTALLED ON FOUNDATION RAISED WITH STEEL CYLINDER (SEE DWG F-005).
5. FOUNDATION TO HAVE MINIMUM THREE ELBOWS.
6. VENDOR TO PROVIDE SHOP DRAWINGS FOR ALL MAST ARM LENGTHS.
ACCESSORY UNIT (NOT SHOWN IN FRONT VIEW)

TAP FOR 1/2" PIPE (NPSM)

SPOT CAST (TOP & BOTTOM)

DRILLED FOR CLEARANCE FOR 1/4"-20 MACHINE SCREWS

DRILLED AND TAPPED FOR 12-24 NC MACHINE SCREWS

TAP FOR 1/2" PIPE (NPSM)

ACCESSORY UNIT

ISOMETRIC VIEW

TOP VIEW

1 7/8"

3 1/8"

3 3/8"

SIDE VIEW

FRONT VIEW

PUSH BUTTON POLE MOUNT

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020

NEW YORK CITY

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C. N.Y. 11101

SCALE: 1'-0" = 1'-0"

REVISION

OLD DRAWING NO.

NEW DRAWING NO.

LB-840S

MISC-006

CREATED

REPLICATED IN CADD

REPLACED BY CADD

DATE

DESCRIPTION
BOND TO EXISTING GROUND CONDUCTOR OR ELECTRODE, OR INSTALL GROUNDING CLAMP FOR RMC (IF REQUIRED)

WATERPROOF IN-LINE FUSE HOLDER AND 30 A FUSE (AC+). SEE NOTE 4

CONNECT TO NEUTRAL (AC-)

NOTES:

1. ACTUAL FIELD CONDITIONS WILL VARY. ADJUST MOUNTING HEIGHTS AS REQUIRED SO THAT CAMERA IS PLACED AS HIGH ON THE POLE AS PRACTICAL WHILE MAINTAINING AN UNOBSTRUCTED VIEW AND MIN. 6" CLEARANCE TO EXISTING DEVICE.

2. COORDINATE POLE PENETRATION LOCATIONS WITH EXISTING HOLES IN CABINET, CCTV MOUNTING ARM AND POLE ADAPTER.

3. ALL CABINET MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST NYCDOT SPECIFICATION FOR ASTC CABINETS.

4. REQUIRE 24 HR 120 VAC SERVICE AT BASE OF POLE. TO BE PROVIDED BY NYCDOT (UNMETERED)

TYPICAL CCTV CAMERA AND CABINET INSTALLATION SHOWN ON STREET LIGHT WITH OCTAGONAL FABRICATED STEEL POLE AND LUMINAIRE
NOTES:

1. FOR CAST FRAME AND STEEL COVER SEE DWG. MISC-008_2.
2. PLUG UNUSED INSERTS WITH 5/16"-18 x 1 1/4" LONG WELL GREASED CAP SCREW.
3. PROVIDE EXTRA KNOCKOUTS, IF NECESSARY, TO AGREE WITH INTERSECTION DRAWINGS.
4. CONCRETE SHALL CONSIST OF 1 PART HIGHGRADE PORTLAND CEMENT, 2 PARTS CLEAN SHARP SAND OR TRAP ROCK, GRANITE OR GRAVEL SCREENINGS, 4 PARTS HARD CRUSHED ROCK OR GRAVEL (1" SIZE) - FRESH WATER.

TOP VIEW
(WITHOUT METALLIC FRAME AND COVER)

TYPICAL CONDUIT INSTALLATION

APPROVED STIFF WATERPROOFING COMPOUND - CONDUITS TO MOVE FREELY THRU BOX WALLS.

CAP

2" CONDUIT

TOP VIEW

EXTRA KNOCKOUT IN TYPE 2418 BOX ONLY FOR "MK" DETECTOR

SECTION "A - A"

FILL RECESSES WITH GROUT AFTER FRAME IS FINALLY IN PLACE

WATER ROOFING

2 INSERTS ON VERTICAL CENTERLINE OF EACH SIDE OF BOX.

2 KNOCKOUTS ON EACH SIDE

4" X 4"

TOP OF SIDEWALK

8"

2 1/2"

GROUT

CAP

WELDED WIRE MESH - # 4 WIRE ON 4 SIDES AND BOTTOM

2'-2"

4" ±

1 1/4"

BROKEN STONE DRAIN (BY CONTRACTOR)

2" CONDUIT

APPROVED STIFF WATERPROOFING COMPOUND - CONDUITS TO MOVE FREELY THRU BOX WALLS.

SEAL

OMIT LOWER INSERT AT KNOCKOUT

NOTES:

1. FOR CAST FRAME AND STEEL COVER SEE DWG. MISC-008_2.
2. PLUG UNUSED INSERTS WITH 5/16"-18 x 1 1/4" LONG WELL GREASED CAP SCREW.
3. PROVIDE EXTRA KNOCKOUTS, IF NECESSARY, TO AGREE WITH INTERSECTION DRAWINGS.
4. CONCRETE SHALL CONSIST OF 1 PART HIGHGRADE PORTLAND CEMENT, 2 PARTS CLEAN SHARP SAND OR TRAP ROCK, GRANITE OR GRAVEL SCREENINGS, 4 PARTS HARD CRUSHED ROCK OR GRAVEL (1" SIZE) - FRESH WATER.
NOTES:
1. FOR DETAIL OF PRECAST CONCRETE TRAFFIC SIDEWALK BOX SEE DRAWING MISC-008_1.
2. ALL SCREWS IN COVER SHALL BE 3/8" HEX. HEAD, 7/8" LONG OF STAINLESS STEEL OR MONEL.
3. LETTERING IN COVER TO BE 1/8" RAISED LETTERS IN A 1/16" RECESS.
4. FRAME AND COVER DIMENSIONS MAY VARY WITHIN NORMAL FOUNDRY TOLERANCES.
5. FRAME AND COVER TO BE HOT - DIPPED GALVANIZED.
NOTES:
1. FINISH TO BE PAINTED, RED OXIDE. ASTM A36 STEEL.
2. DIMENSIONS MAY VARY SUBSTANTIALLY TO DEAL WITH EXISTING FIELD CONDITIONS.
BOLT GASKET

1 7/8" ID
2 1/2" OD
.125" THICK

NEOPRENE FLAME AND OIL RESISTANT
DURAMETER IS SHORE A50
TEMP RANGE IS -65 TO +260 F

GASKET

1 7/8" ID
2 1/2" OD
.364" ID
1 1/2" OD
.125" THICK
6" SQ. FLANGE PLATE

3/4" DIAMETER HOLE (TYPICAL)

SQUARE POLE WELDED TO PLATE (POLE SIZE WILL VARY)

6"x6"x3/8" FLANGE PLATE

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C. N.Y. 11101

NEW YORK CITY

SCALE: 1'-0" = 1'-0"

OLD DRAWING NO.

DRAWING NO.

REVISION

2020

MISC-012

NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
NOTE: PLACE THE LOOP WIRE NEAR THE CENTER OF THE CORNER TO ALLOW THE SEALANT TO FLOW ON BOTH SIDES OF THE WIRE.

NOTE: USE SHORT (1") PIECE OF FLEXIBLE NEOPRENE RUBBER OR PLASTIC TUBING OR RUBBER FOAM SEALER STRIPS AT 2") CRETS TO HOLD LOOP WIRES IN PLACE UNTIL SEALER SETS. DO NOT USE SHARP OBJECTS TO HOLD LOOP WIRES IN PLACE UNTIL SEALER SETS.

NOTE: THE NUMBER OF TURNS, LENGTH, WIDTH, AND/OR SPECIAL CONFIGURATION OF THE LOOP SHALL BE AS SPECIFIED ON THE PLANS. FOLLOW DETAIL A (TYP.) CROSSING PAVEMENT JOINTS OR CRACKS OR IN A CROSSING OTHER CRACKS AS DIRECTED BY THE ENGINEER.

NOTE: PLACE THE LOOP WIRE NEAR THE CENTER OF THE CORNER TO ALLOW THE SEALANT TO FLOW ON BOTH SIDES OF THE WIRE.

NOTE: USE SHARP (1") PIECE OF FLEXIBLE NEOPRENE RUBBER OR PLASTIC TUBING OR RUBBER FOAM SEALER STRIPS AT 2") CRETS TO HOLD LOOP WIRES IN PLACE UNTIL SEALER SETS. DO NOT USE SHARP OBJECTS TO HOLD LOOP WIRES IN PLACE UNTIL SEALER SETS.

NOTE: THE NUMBER OF TURNS, LENGTH, WIDTH, AND/OR SPECIAL CONFIGURATION OF THE LOOP SHALL BE AS SPECIFIED ON THE PLANS. FOLLOW DETAIL A (TYP.) CROSSING PAVEMENT JOINTS OR CRACKS OR IN A CROSSING OTHER CRACKS AS DIRECTED BY THE ENGINEER.

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NOTE: THE NUMBER OF TURNS, LENGTH, WIDTH, AND/OR SPECIAL CONFIGURATION OF THE LOOP SHALL BE AS SPECIFIED ON THE PLANS. FOLLOW DETAIL A (TYP.) CROSSING PAVEMENT JOINTS OR CRACKS OR IN A CROSSING OTHER CRACKS AS DIRECTED BY THE ENGINEER.

NOTE: THE NUMBER OF TURNS, LENGTH, WIDTH, AND/OR SPECIAL CONFIGURATION OF THE LOOP SHALL BE AS SPECIFIED ON THE PLANS. FOLLOW DETAIL A (TYP.) CROSSING PAVEMENT JOINTS OR CRACKS OR IN A CROSSING OTHER CRACKS AS DIRECTED BY THE ENGINEER.
NOTES:
1. ACTUAL FIELD CONDITIONS WILL VARY.
2. PROVIDE SLACK COIL TO ALLOW RS-232 CONNECTOR TO BE CONNECTED TO LAPTOP COMPUTER BY MAINTENANCE STAFF.
3. REQUIRE 24 HR 120 VAC SERVICE AT BASE OF POLE. TO BE PROVIDED BY NYCDOT (UNMETERED).
4. AT THE POLE BASE, THE RS-232 CABLE SHALL BE TERMINATED WITH A FEMALE DB-9 CONNECTOR WITH PROTECTIVE COVER.
5. CABLE IN ACCORDANCE WITH NYCDOT SPECIFICATION FOR 120V POWER SUPPLY CABLE.
6. MOUNTED WITHIN 12"x10"x6" DP NORMAL SIZE NEMA 4x NON-METALLIC ENCLOSURE.
NOTES:
1. MAXIMUM SIGN PANEL HEIGHT IS 36".
2. ASTRO BRACKETS AND HINGED SIGN BRACKETS TO SUPPORT A MINIMAL LOAD OF 400 POUNDS EACH, TO INCLUDE A SAFETY FACTOR OF 2.
3. DESIGN WIND SPEED IS 90 MPH.
4. MAST ARM AND ALL CONNECTIONS SHALL SUPPORT LOADS PROVIDED IN TABLE INDICATED THIS DRAWING.
5. MAST ARM LOCATION SHALL BE DETERMINED IN THE FIELD TO PROVIDE A ROADWAY CLEARANCE OF 15'-6" MIN. TO ALL TRAFFIC SIGNS.
6. ASTRO BRACKETS AND HINGED SIGN CONNECTORS SHALL BE DESIGNED FOR LOADS INDICATED ON THIS DRAWING IN TABLE INDICATED THIS DRAWING. CALCULATIONS SHALL BE PROVIDED SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
7. MAST ARM IS DESIGNED FOR A TOTAL SIGNAGE AREA OF 30 S.F. SIGNS COULD BE INSTALLED AS ONE OR MULTIPLE BUT NOT TO EXCEED MAXIMUM AREA OF 30 S.F.
8. ALL BOLTS SHALL BE ASTM A325.
9. MAST ARM AND HORIZONTAL MOUNTING BAR SHALL CONFORM TO ASTM A53, TYPE E, GRADE B. FY = 35 KSI.
10. STRUCTURAL STEEL SHALL CONFORM TO ASTM A709, GRADE 50.
11. ALL WELDING SHALL BE IN ACCORDANCE WITH NYS STEEL CONSTRUCTION MANUAL AND AASHTO D1.5, BRIDGE WELDING CODE.
12. ALL POLES, MAST ARMS AND CONNECTIONS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM 123.
13. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
14. LENGTH OF MOUNTING BAR SHALL BE 10'-0" WITH ASTRO AND HINGED BRACKETS SPACED EQUALLY ALONG MOUNTING BAR.
15. FOR SECTION "B-B", SEE DWG. MISC-016_2.
16. SEE NYCDOT STANDARDS TRAFFIC SIGNAL DRAWINGS SHEET MA-001 FOR DETAILS OF "M-2A" POLE.
**ASSEMBLY PROCEDURE:**

1. Install inner hub to existing "M-2A" pole. CL of hub shall be at location indicated on plans.
2. Fasten inner hub to "M-2A" pole using self-tapping screws through holes in plates provided.
3. Install outer clamp / splice connection.
4. Install mast arm to splice connection.
5. Install sign mounting bar. Length determined by NYCDOT sign group.
6. Install signs using appropriate number of fasteners as specified in table.
7. Mast arm bracket shall be fabricated to accommodate a 6" rise over 20 feet of mast arm length.
8. All dimensions are based on the arm bracket installed at the location on the NYCDOT standard "M-2A" pole as shown on DWG. MISC-016_1. Contractor shall verify the dimensions prior to fabrication.

**SECTION "D-D"**

**Mast Arm Splice**

- ASTM A709

**CL Splice**

- MAST ARM
- 6" DIA.
- SCHEDULE 40

**1/4" Flanged Splice Plate**

- TYP.

**1/2" Thick Stiffener Plate**

- TYP.

**OUTER CLAMP CUT FROM 8" DIA. EXTRA STRONG PIPE WITH 1/2" WALL THICKNESS**

- 1 1/2" x 1/2" TAB (TYP.)

**COPY DRAWING**

- TYP.

**ELEVATION VIEW**

**SECTION "B-B"**

**Monotube Overhead Mast Arm Bracket**

- 7 1/2" DIA. CL "M-2A" Pole

**CL Mast Arm Splice**

- 7 1/2" DIA. SCHEDULE 80

**1/2" Thick Stiffener Plates (TYP.)**

- TYP.

**1/2" Thick Splice Plate (TYP.)**

- TYP.

**OUTER CLAMP**

- C

**LIP PLATE**

- X

**SECTION "C-C" (TOP) INNER HUB DETAIL**

- 7 5/8" DIA.
- 6 1/32" TOP
- 6 7/32" BOT

**2 1/4" x 1/4" Thick Connector Plates (TYP.)**

- TYP.

**SECTION "E-E" (BOT) INNER HUB DETAIL**

- 7 5/8" DIA.
- "M-2A" POLE

**LIP PLATE**

- SEE NOTE B

**INNER HUB BOTTOM PLATE**

- SEE NOTE B

**INNER HUB 1" TOP PLATE**

- CONT.

**INNER HUB 1" BOTTOM PLATE**

- 1" THICK TOP PLATE OF INNER HUB
- 1 1/2" THICK BOTTOM PLATE OF INNER HUB

**OUTER CLAMP**

- "M-2A" POLE

- 7 1/8" x 1/2" LIP PLATE

**SECTION "X-X" (HALF CONNECTOR)**

- 6 1/32" TOP
- 6 7/32" BOT

**INNER HUB DETAIL**

- 7 5/8" DIA.

**INNER HUB DETAIL**

- TYP.

**SECTION "F-F" INNER HUB DETAIL**

- 7 5/8" DIA.
- "M-2A" POLE

**INNER HUB BOTTOM PLATE**

- 1" THICK BOTTOM PLATE OF INNER HUB

**INNER HUB 1" TOP PLATE**

- 1/4" CONNECTOR PLATE (TYP.)

**TAPPERED "M-2A" POLE SEE NOTE B**

- TYP.
NOTES:
1. ACCESS POINTS AND REPEATERS SHOULD BE MOUNTED NO HIGHER THAN 20 FEET OFF THE GROUND.
2. ACCESS POINTS AND REPEATERS SHOULD BE WITHIN 150 FEET OF WIRELESS SENSORS.
3. WHEN ACCESS POINTS AND REPEATERS ARE USED IN FACE-TO-FACE CONFIGURATION, DISTANCES AMONG THEM SHOULD NOT BE OVER 1,000 FEET.
4. WHEN ACCESS POINTS AND REPEATERS ARE USED IN BACK-TO-BACK CONFIGURATION, DISTANCES AMONG THEM SHOULD NOT BE OVER 400 FEET.
5. CABLE CONNECTION BETWEEN TRAFFIC SIGNAL CONTROLLER AND ACCESS POINT SHOULD NOT BE LONGER THAN 300 FEET.
NOTES:

1. WIDTH OF TRENCH MUST BE NO LESS THAN 12" WIDE.

2. FULL DEPTH DRY MIX CONCRETE TO BE 3200 PSI TEST CONCRETE TO BE INSTALLED TO A HEIGHT OF MINIMUM OF 4" BELOW THE TOP OF EXISTING ASPHALT BASE.

3. EPOXY EXISTING CONCRETE BASE BEFORE ADDING DRY MIX CONCRETE. BRUSH AND SWEEP CLEAN BEFORE APPLYING EPOXY.

4. CONCRETE TO BE MIXED GRADUALLY AND THOROUGHLY ON SITE WITH A PORTABLE MIXER. ONE 80 LB BAG PER 3 LITERS OF WATER, OR SIX 80 LB BAGS PER 5 GAL OF WATER.

5. COMPACTED CLEAN GRANULAR ITEM 4 TO MAXIMUM OF 6" FROM BOTTOM OF TRENCH AND SHALL BE DAMPENED PRIOR TO ADDING DRY MIX.

6. ANY BENDS MUST BE SQUARED OFF ON THE OUTSIDE OF THE BEND AND CUT STRAIGHT ON THE INSIDE TO CONCRETE A SQUARE OR RECTANGULAR RESTORATION. NO IRREGULAR SHAPE CUTS.

7. ALL ROADWAY CUTS SHALL BE SAW CUTS.

8. DRY MIX SHALL BE DEPOSITED IN 2 HORIZONTAL LIFTS. EACH LIFT SHALL BE ENTIRELY COMPACTED. REFLECTIVE CRACKING MEMBRANE TO BE PLACED OVER FULL SAW CUT FOR BASE (6" WITH 3" OVERHANG).

9. PLATING SHALL BE NECESSARY WHERE THE TOP OF THE CONDUIT IS LESS THAN 18" BELOW GRADE. STEEL PLATE SHALL BE 8" WIDE NO LESS THAN 1/4" THICK AND BE 8" ABOVE THE HEIGHT OF THE CONDUIT.
NOTES:

1. NORMAL LOCAL LAW 14 (LL-14) CUTBACKS ON THE BASE.

2. FULL CORNER QUADRANT RESTORATION FOR ALL QUADRANTS THAT WERE EXCAVATED.
**Receptacle Panel**

- **J1**, **J2**, **J3**, **J4**
- **L** (Line), **N** (Neutral), **G** (Ground)
- **From DIN Panel**

**Power Panel**

- **CB1 15A**
- **Load**
- **A**, **B**, **C**
- **SE**

**SS1 Surge Suppressor**

- **LINE**, **NEU**, **GND**

**Tag**, **AWG Size**, **Color**:
- **A**: 14, BLACK
- **B**: 14, WHITE
- **C**: 14, GREEN
3" LONG 50 AMP COPPER PLATED STEEL PLIER-TYPE CLIP WITH BLACK INSULATED HANDLES (MUELLER BU-46A-0 OR EQUAL)

BLACK ANDERSON TYPE POWER CONNECTOR (APP 5916G4 & 5915 OR EQUAL)

3 WIRE SIZE 16 AWG POWER CORD WITH NEMA 5-15P PLUG

600 VAC RATED HEAT SHRINKABLE TUBING TO MEET UL STANDARD 224 (ALPHA FIT221 OR EQUAL)

BLACK (OR BROWN)

BLUE AND WHITE (OR GREEN AND YELLOW/GREEN)

BLACK ANDERSON TYPE POWER CONNECTOR (APP 5915 & 5915 OR EQUAL)

NEW YORK CITY TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
NOTES:

1. All conduits to be installed 24 inches below grade, or what field conditions allow.
2. All wires to be XLP (as per NYCDOT Street Light Specification 700).
3. Wires from the city box to equip to be labeled as followed:
   1 - Bus Shelter = BUS
   2 - Money Exchange Machine = MEM
   3 - Wayfinder = WF
4. Tag specs as per NYCDOT Street Light General Specification 2.5.
5. Grounding wire shall be attached to the grounding bolt in city box.
6. Split bolt connectors to be used for neutral and ground connections in city box.
7. For cable specifications see NYCDOT Specifications 4B & 4C.
24-INCH COVER AND RING
FOR FIBER OPTIC MANHOLE

NOTES:
1. MANUFACTURER MARKINGS ON COVER AND RING ARE ACCEPTABLE.
24"x6" SKIN KNOCKOUT TYP. OF 4 (SEE NOTE 1)

2 RECESSED LIFT HOOKS IN TOP OF WALL. 2 TON MIN.

(2) 1-1/2" DIA. OPENING FOR DRAINAGE

6"x6" WELDED WIRE MESH, OR AS DIRECTED BY ENGINEER. LOCATED ON THE CENTER THIRD OF THE WALL EXCEPT AT KNOCKOUTS

#4 REBAR AT 6" O.C. E.W., OR AS DIRECTED BY ENGINEER

#4 REBAR AT 6" O.C. E.W., OR AS DIRECTED BY ENGINEER

RECESSED LIFT HOOKS TYP. 2. MINIMUM 1 TON

NOTES:

1. ACTUAL SIZE AND LOCATION OF KNOCKOUTS TO BE DETERMINED BY THE CONTRACTOR AND AS FIELD CONDITIONS PERMIT.
2. MANUFACTURED IN ACCORDANCE WITH NYSDOT 723-45
3. COMPRESSIVE STRENGTH MIN 3626 PSI @ 28 DAYS 704-03
4. AIR CONTENT 5.0-9.0% 704-03
5. ANTICIPATED METHOD OF CURING - RETENTION CURING AS PER 704-03
6. TOLERANCES AS PER NYSDOT 723-45 INSIDE DIMENSIONS NO GREATER THAN 7/16"
7. MARKING OF PIECES AS PER 723-45
8. LIFTING DEVICES AS SHOWN- MANUFACTURED AND RATED BY OUTSIDE VENDOR
9. METHOD OF MAINTAINING CONCRETE COVER OVER REINFORCING STEEL TO BE AS PER 704-03
10. REBAR ASTM A-615 GRADE 60 709-01
URGENT MESSAGE
WHEN FLASHING

TRAFFIC INFO
TUNE RADIO TO
XXX AM

NEW YORK CITY
NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020
PUSH BUTTON FOR BUS ARRIVALS AUDIO PLATE
WITH BRAILLE MESSAGE AND RAISED LETTERS MOUNTED ON TOTEM

NOTES:
1. BRAILLE MESSAGE AND RAISED LETTERING TO COMPLY WITH CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN.
NYCDOT TRAFFIC SIGNAL STANDARD DRAWINGS, Jun 2020

WAYFINDER

TOTEM GENERAL ASSEMBLY 1 OF 2

REVISION

WAYFINDER

TOTAL GENERAL ASSEMBLY 1 OF 2

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y. 11101

NEW YORK CITY

SCALE

OLD DRAWING NO.

DRAWING NO.

0

01008

0

WAY CREATED

DATE

DESCRIPTION

N.T.S.

N.A.

MISC-028_2

Power Isolation switch external to control cabinet
Power supply connection via umbilical cable and IP68 rated connector
Access panel 5/S Brushed 120 grit
LED Screen
Glass RF display and map panel
Acrylic Beacon

Access holes to release all access panels

3/4" stainless steel side plates

2.25 [57.2mm]

6.25 [160mm]

FFL

FFL

Front Elevation

Section A - A

Glazing panel in open position

Isometric View with access panels removed

Antennas

Exhaust Vents

LED Screen

Inlet Vents

Electrical enclosure with heater exchange and power isolation switch
NOTES

1. Item 1 n free issue to the foundation install sub contractor
   The plate must be installed level at round

2. Fit item 3 [Skirt Panel] before fitting item 4 [Steel Access Panel]

3. The leveling bolts are to set the totem true and plumb and secured with the lock nuts

4. The 2" diameter electrical conduits are to pass through these two holes

Item | Quantity | Drawing Number | Description |
--- | --- | --- | --- |
1 | 1 | PEL-6477-03-075 | SGS Totem Leveling Plate |
2 | 1 | PEL-6477-03-035 | SGS Totem Framework Assembly |
3 | 2 | PEL-6477-02-040 | SGS Skirt Panel Welded Assembly |
4 | 2 | PEL-6477-02-030 | SGS Steel Access Panel Welded Assembly |
5 | 2 | PEL-6477-01-038 | SGS Glazing Panel Assembly - All Blooded |
6 | 1 | PEL-6477-01-037 | SGS Lifting Fixture Assembly |

Notes:
1. Secure flange nuts 56 and 57 with socket Nutb lok 24/3
2. Fix mounting brackets to items 30, 31 and 32 before fitting the totem

REVISION

NEW YORK CITY
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD
L.I.C., N.Y.11101

WAYFINDER
TOTEM GENERAL ASSEMBLY 2 OF 2

SCALE | OLD DRAWING NO. | DRAWING NO. | DATE | BY | DESCRIPTION
--- | --- | --- | --- | --- | ---
N.T.S. | N/A | MISC-028_3 | N/A | N/A | N/A
NOTES:

1. UNITS ARE MILLIMETERS
NOTES:

1. UNITS ARE MILLIMETERS

MATERIALS:
- HOUSING: ALUMINIUM
- FRONT FRAME: STAINLESS STEEL
- SCREEN: TOUGHENED 3mm AIR CLASS
- FIXINGS: STAINLESS STEEL

FINISH:
- FRONT FRAME: BLCK RAL 9005 30% GLOSS
- HOUSINGS: NATURAL
- FIXINGS: NATURAL

- 6 x 10 C25k TORK x 16
  FRONT: ACCESS TO LED &
  CONTROLLER BOARD

DRAWING NO.

REVISION

DESCRIPTION

BY

DATE

NO

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34-02 QUEENS BLVD
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WAYFINDER
LED DISPLAY ASSEMBLY

NEW YORK CITY

REVISION

WAYFINDER
LED DISPLAY ASSEMBLY

NEW YORK CITY

SCALE

OLD DRAWING NO.

DRAWING NO.

N.T.S.

N/A

MIC-028_5
Recommended torque for mounting is 4.018 N.m or 41 kgf.cm

Maximum torque for mounting is 9.8 N.m or 100 kgf.cm

NOTES:
1. UNITS ARE MILLIMETERS
SECTION "A-A"

15"W x 6'd ADJUSTABLE SHELF

WITH 3" AIR GAP ON THE BACK

SECTION "B-B"

15"W x 6'h ADJUSTABLE SHELF WITH 3" AIR GAP ON THE BACK

RECEPTACLE MODULE

POWER MODULE

BLANK PANEL MODULE WITH 35MM LOW PROFILE 5-1/2" DIN RAIL

END BRACKET

SERVICE ENTRANCE TERMINAL BLOCKS

SURGE SUPPRESSOR

35MM SLOTTED LOW PROFILE 5-1/2" LONG DIN RAIL

POWER MODULE

SCALE 6"=1'

RECEPTACLE MODULE

SCALE 6"=1'

RECEPTACLE MODULE

POWER MODULE

ADJUSTABLE SHELF

NEW YORK CITY

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
34-02 QUEENS BLVD L.I.C., N.Y. 11101

FIBER OPTIC CABINET ASSEMBLY
- MODULES ARRANGEMENT

MISC-030_1

07/2019

CREATED

NEW YORK CITY

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34-02 QUEENS BLVD L.I.C., N.Y. 11101

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07/2019

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MISC-030_1

07/2019

CREATED
NOTES:

1. The banner size will be either eight feet by three feet or eight feet by eighteen inches.
2. The flexible banner bracket must react to wind load not wind speed and be able to rotate to deflect wind speed greater than 25 MPH and to reposition to its original configuration with wind speeds less than 25 MPH.
3. The flexible banner bracket must meet or exceed the latest AASHTO structural design requirement - topographic category of 1, structure class 1 with a 350-year MRI and exposure category C.
4. The flexible banner bracket shall be made out of aluminum and powder coated to reduce exposure to the elements.
5. All moving and stationary parts associated with the entire banner bracket itself should be of corrosion resistant materials to water, salt-air, oxidation, etc.
6. Springs, cams, or other means used for re-centering of the banner bracket must be made of a non-corroding material with access for periodic lubrication, such as stainless steel.
NOTES:

1. ANTENNA AND CABLE HARNESS TO BE SHIPPED PRE-INSTALLED TO ALUMINUM BRACKET. MOUNTING HARDWARE SHIPPED LOOSE.
2. ALL MATERIAL SHALL BE ROHS COMPLIANT.
3. ANTENNA SHALL BE FACING AWAY FROM TRAFFIC.
NOTES:

1. ALL MATERIAL SHALL BE ALUMINUM 6063-T6 IN MILL FINISH.
TRAFFIC SIGNAL ON "M-2A" POLE

TRAFFIC SIGNAL ON "M-2A" COMBO POLE
WITH 15-1/2" SHAFT EXTENSION

TRAFFIC SIGNAL ON "M-2A" COMBO POLE
WITH 180° TWIN ARM TYPE T SHAFT EXTENSION

DOUBLE ARM TRAFFIC SIGNALS ON "M-2A" POLE
1. SENSOR AND SHELL ASSEMBLY
2. ADJUSTING SENSOR INSTALLATION HIGHT
3. CLEANING SENSOR HOLE
4. INITIAL EPOXY APPLICATION
5. PLACING THE SENSOR
6. FILLING SENSOR HOLE WITH EPOXY
7. FILLING SENSOR HOLE WITH EPOXY UNTIL LEVELED WITH ROAD SURFACE
8. INSTALLED SENSOR

WIRELESS SENSOR INSTALLATION PROCEDURE

1. ORIENTATION OF CHISEL CUTS TO SENSOR
2. CHISEL CUTS
3. PRYING UPWARD TO LOOSEN SENSOR SHELL TOP
4. REMOVING SENSOR SHELL TOP
5. REMOVING SENSOR
6. REMOVED SENSOR

WIRELESS SENSOR REMOVAL PROCEDURE