

| ARM LENGTH | ROUND POLES |      |        | FOUNDATION TYPE |
|------------|-------------|------|--------|-----------------|
|            | D8          | D19  | # THK. |                 |
| FT.        | IN.         | IN.  | IN.    |                 |
| 20         | 10.0        | 7.5  | .179   | 30-A            |
| 24         | 11.0        | 8.5  | .179   | 30-A            |
| 28         | 11.5        | 9.0  | .179   | 30-A            |
| 32         | 12.0        | 9.5  | .179   | 30-A            |
| 36         | 12.5        | 10.0 | .179   | 30-A            |
| 40         | 12.0        | 9.5  | .239   | 30-B            |
| 44         | 12.5        | 10.0 | .239   | 30-B            |
| 48         | 13.0        | 10.5 | .239   | 30-B            |

| ARM LENGTH | ROUND ARMS |      |     |        |        |
|------------|------------|------|-----|--------|--------|
|            | L1         | D1   | D2  | # THK. | RISE   |
| FT.        | FT.        | IN.  | IN. | IN.    |        |
| 20         | 19.1       | 6.5  | 3.8 | .179   | 1'-9"  |
| 24         | 23.1       | 7.5  | 4.3 | .179   | 1'-10" |
| 28         | 27.1       | 8.0  | 4.2 | .179   | 1'-11" |
| 32         | 31.0       | 9.0  | 4.7 | .179   | 2'-1"  |
| 36         | 35.0       | 9.5  | 4.6 | .179   | 2'-4"  |
| 40         | 39.0       | 9.5  | 4.1 | .239   | 2'-8"  |
| 44         | 43.0       | 10.0 | 4.1 | .239   | 2'-11" |
| 48         | 47.0       | 10.5 | 4.1 | .239   | 3'-4"  |

D8 = POLE BASE O.D.

D19= POLE TOP O.D. W/OUT LUMINAIRE

D1 = ARM BASE O.D.

D2 = ARM END O.D.

L1 = SHAFT LENGTH

L = NOMINAL ARM LENGTH

# THICKNESS SHOWN ARE MINIMUMS, THICKER MATERIALS MAY BE USED.

### SHIPPING PARTS LIST

#### POLES

| NOMINAL ARM LENGTH | 19' POLES WITHOUT LUMINAIRE   |          |
|--------------------|---|----------|
|                    | SHIP EACH POLE WITH THE FOLLOWING HARDWARE ATTACHED : ENLARGED HAND HOLE, POLE CAP, FIXED ARM CONNECTION BOLTS AND WASHERS. |          |
| FT.                | DESIGNATION   | QUANTITY |
| 20                 | 20-80   |          |
| 24                 | 24-80   |          |
| 28                 | 28-80   |          |
| 32                 | 32-80   |          |
| 36                 | 36-80   |          |
| 40                 | 40-80   |          |
| 44                 | 44-80   |          |
| 48                 | 48-80   |          |

#### TRAFFIC SIGNAL ARMS 1 PER POLE

| NOMINAL ARM LENGTH | TYPE I ARM (1 SIGNAL)   |          | TYPE II ARM (2 SIGNAL)  |          | TYPE III ARM (3 SIGNAL)  |          |
|--------------------|---|----------|---|----------|--|----------|
|                    | SHIP EACH TYPE I ARM WITH THE FOLLOWING HARDWARE ATTACHED : 1 CGB CONNECTOR |          | SHIP EACH TYPE II ARM WITH THE FOLLOWING HARDWARE ATTACHED : 1 BRACKET ASSEMBLY AND 2 CGB CONNECTOR |          | SHIP EACH TYPE III ARM WITH THE FOLLOWING HARDWARE ATTACHED : 2 BRACKET ASSEMBLY AND 3 CGB CONNECTOR |          |
| FT.                | DESIGNATION   | QUANTITY | DESIGNATION   | QUANTITY | DESIGNATION  | QUANTITY |
| 20                 | 20 I -80  |          | 20 II -80   |          |  |          |
| 24                 | 24 I -80  |          | 24 II -80   |          |  |          |
| 28                 | 28 I -80  |          | 28 II -80   |          | 28 III -80   |          |
| 32                 |   |          | 32 II -80   |          | 32 III -80   |          |
| 36                 |   |          | 36 II -80   |          | 36 III -80   |          |
| 40                 |   |          |   |          | 40 III -80   |          |
| 44                 |   |          |   |          | 44 III -80   |          |
| 48                 |   |          |   |          | 48 III -80   |          |

#### ANCHOR BOLT ASSEMBLIES 1 PER POLE

| ANCHOR BOLT DIAMETER | ANCHOR BOLT LENGTH | EACH ANCHOR BOLT ASSEMBLY CONSISTS OF THE FOLLOWING: TOP AND BOTTOM TEMPLATES, 4 ANCHOR BOLTS, 8 NUTS, 8 FLAT WASHERS, 4 LOCK WASHERS AND 4 NUT ANCHOR DEVICES (TYPE 2) PER STANDARD DRAWING 10. |  |
|----------------------|--------------------|--|--|
|                      |                    | QUANTITY   | TEMPLATES MAY BE REMOVED FOR SHIPMENT. |
| 1-1/2"               | 3'-4"              |  |  |
| 1-3/4"               | 3'-10"             |  |  |

• SUPPLY "OPTION A" UNLESS OTHERWISE NOTED.

### GENERAL NOTES :

DESIGN CONFORMS TO 1975 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS AND INTERIM SPECIFICATIONS THERETO. DESIGN WIND SPEED EQUALS 80 MPH PLUS A 1.3 GUST FACTOR.

THE SPECIFIED LUMINAIRE LOAD APPLIED AT THE END OF THE LUMINAIRE ARM EQUALS 75 LBS. VERTICAL DEAD LOAD PLUS THE HORIZONTAL WIND LOAD ON AN EFFECTIVE PROJECTED AREA OF 1.5 SQ.FT. THE SPECIFIED SIGNAL LOAD APPLIED AT THE END OF THE TRAFFIC SIGNAL ARM EQUALS 180 LBS. VERTICAL DEAD LOAD PLUS THE HORIZONTAL WIND LOAD ON AN EFFECTIVE PROJECTED AREA OF 32.4 SQ.FT. (ACTUAL AREA TIMES DRAG COEFFICIENT).

FABRICATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND WITH THE DETAILS, DIMENSIONS, AND WELD PROCEDURES SHOWN HEREIN. WELD REFERENCES CALL FOR PREAPPROVED WELD PROCEDURES WHICH THE FABRICATOR MUST OBTAIN PRIOR TO FABRICATION. MISCELLANEOUS WELDS WHICH DO NOT CALL FOR PREAPPROVED WELD PROCEDURES ARE NEVERTHELESS SUBJECT TO REJECTION FOR POOR WORKMANSHIP, MATERIALS, FABRICATION TOLERANCES, AND SHIPPING PRACTICES SHALL MEET THE REQUIREMENTS OF THIS SHEET AND THE SPECIFICATIONS.

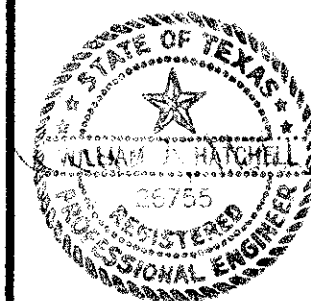
UNLESS OTHERWISE NOTED, ALL PARTS SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS.

SPECIAL DESIGNS REQUIRE SUBMISSION OF SHOP DRAWINGS IN ACCORDANCE WITH THE ITEM "STEEL STRUCTURES".

ALL MAST ARMS 35' AND GREATER IN LENGTH SHALL HAVE DAMPENING PLATES INSTALLED.

| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
|     |          |    |      |
|     |          |    |      |
|     |          |    |      |
|     |          |    |      |
|     |          |    |      |

DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 SCALE: \_\_\_\_\_  
 DATE: \_\_\_\_\_



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SINGLE MAST ARM  
 ASSEMBLIES  
 ( 80 MPH WIND ZONE )

SHEET NO. **N**  
 OF SHEETS  
 JOB NO.