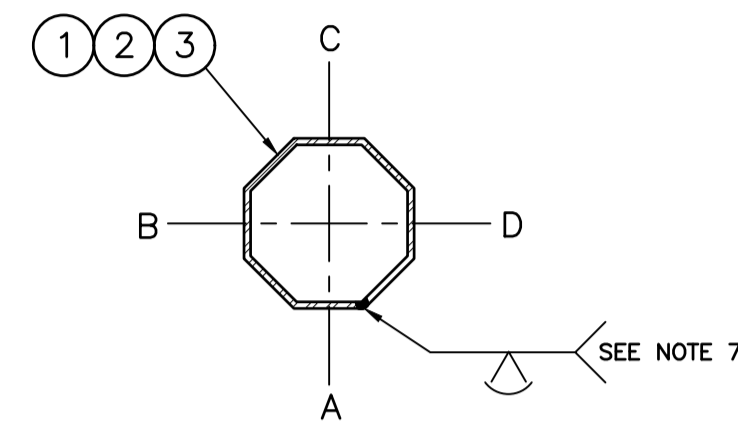
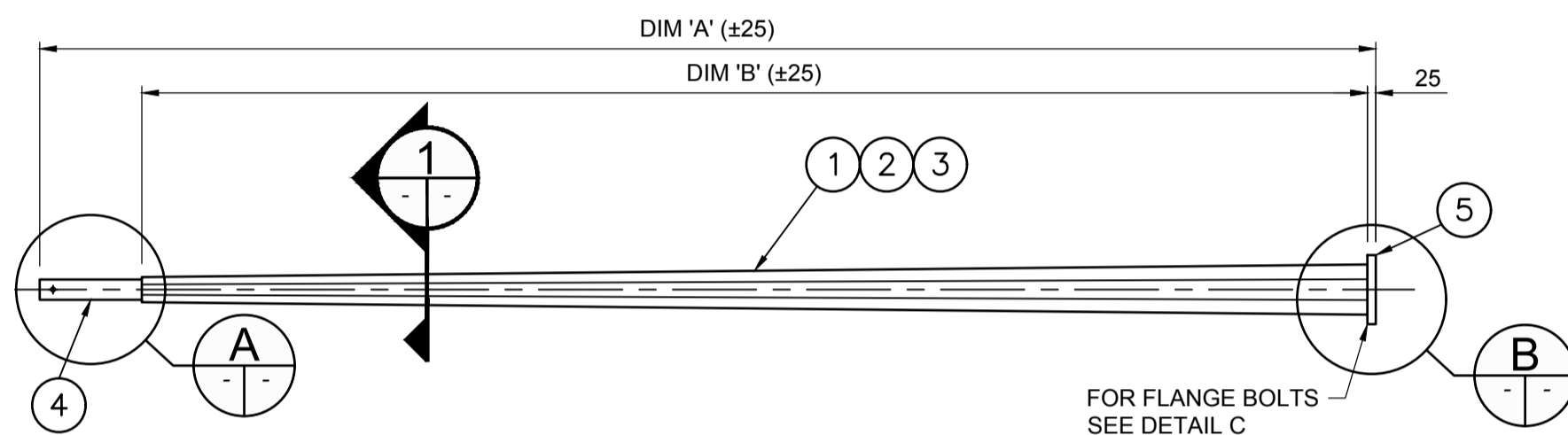


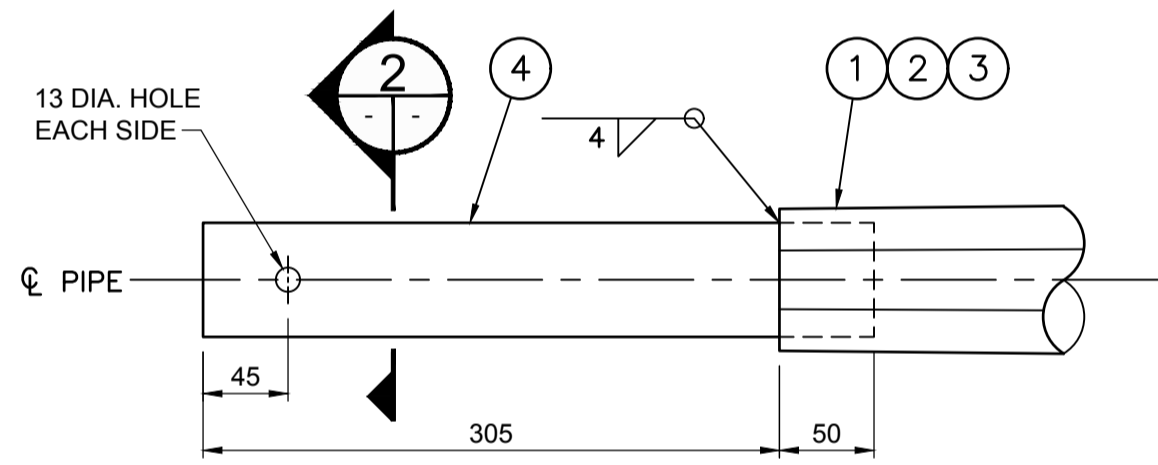
| STRUCTURE TYPE CODE | DESCRIPTION    | DIM. 'A' | DIM. 'B' |
|---------------------|----------------|----------|----------|
| 8                   | 8' SIGNAL ARM  | 2633     | 2303     |
| 12                  | 12' SIGNAL ARM | 3853     | 3523     |
| 16                  | 16' SIGNAL ARM | 5072     | 4742     |



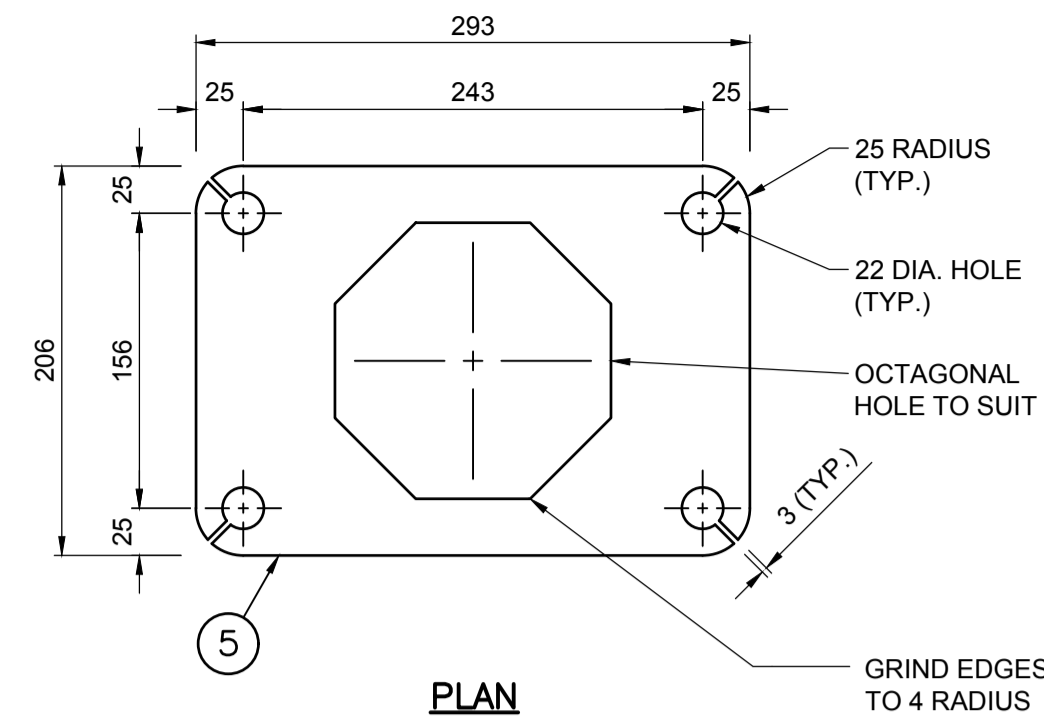
SECTION 1  
NTS



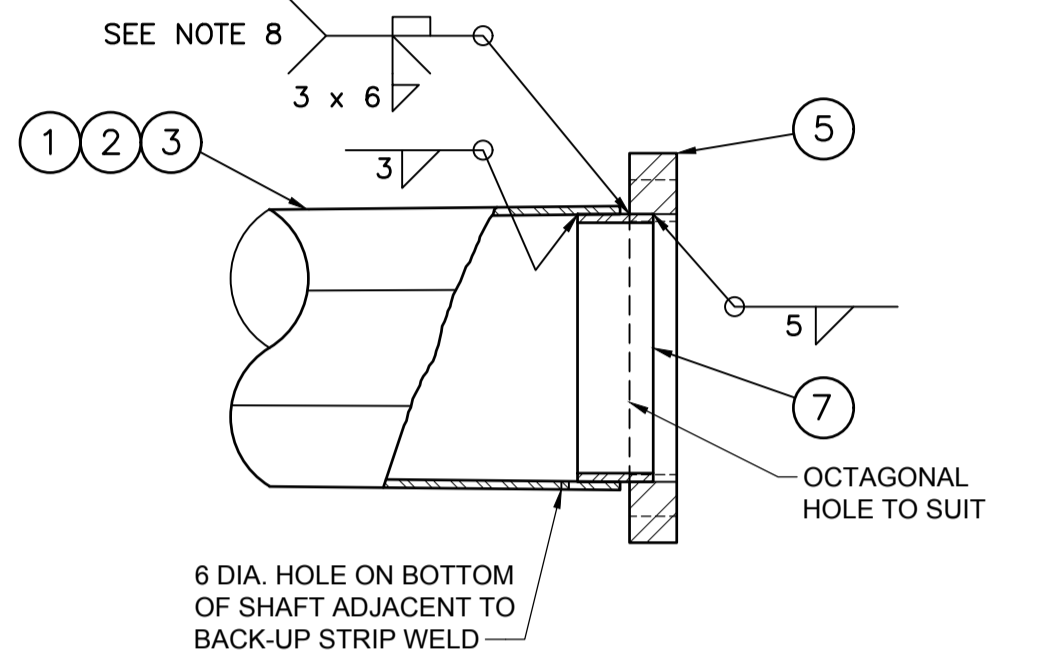
REACH ARM ELEVATION  
NTS



DETAIL A  
NTS

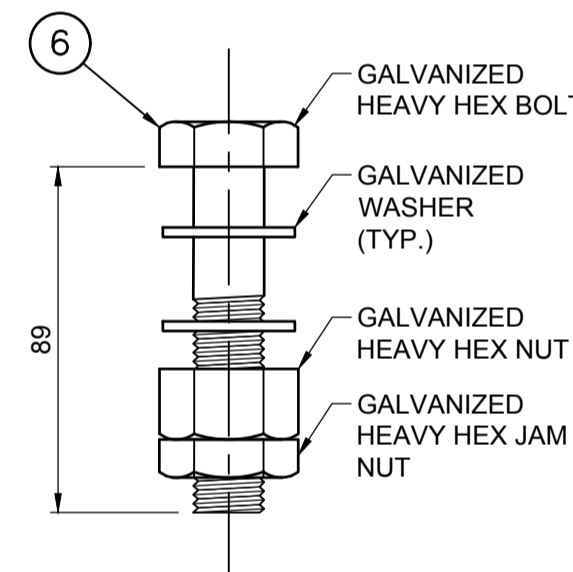


PLAN



SECTION

DETAIL B  
NTS



DETAIL C  
NTS

BILL OF MATERIALS

| MK. NO.                              | QTY. REQ'D. | DESCRIPTION             | SIZE                     | MATERIAL               | REMARKS      | LINE NO. |
|--------------------------------------|-------------|-------------------------|--------------------------|------------------------|--------------|----------|
| <b>2.438 m (8') SIGNAL ARM - 8</b>   |             |                         |                          |                        |              |          |
|                                      |             | OCTAGONAL SECTION SHAFT | 114 A/F - 73 A/F x 3.038 | CSA G40.21 350W        |              | 1        |
| 1                                    | 1           | OCTAGONAL SECTION SHAFT | 114 A/F - 73 A/F x 3.038 | CSA G40.21 350W        |              | 2        |
| 4                                    | 1           | PIPE TENON              | 60.3 O.D. x 3.91 x 355   | ASTM A53 GR. B SCH. 40 |              | 3        |
| 5                                    | 1           | FLANGE PLATE            | 25 x 206 x 293           | CSA G40.21 300W        |              | 4        |
| 6                                    | 4           | FLANGE BOLTS            | 19 (3/4") DIA. x 89      | ASTM A325              | SEE DETAIL C | 5        |
| 7                                    | 1           | BACK-UP STRIP PLATE     | 4.554 x 40               | CSA G40.21 350W        |              | 6        |
|                                      |             |                         |                          |                        |              | 7        |
| <b>3.658 m (12') SIGNAL ARM - 12</b> |             |                         |                          |                        |              |          |
| 2                                    | 1           | OCTAGONAL SECTION SHAFT | 133 A/F - 73 A/F x 3.038 | CSA G40.21 350W        |              | 8        |
| 4                                    | 1           | PIPE TENON              | 60.3 O.D. x 3.91 x 355   | ASTM A53 GR. B SCH. 40 |              | 9        |
| 5                                    | 1           | FLANGE PLATE            | 25 x 206 x 293           | CSA G40.21 300W        |              | 10       |
| 6                                    | 4           | FLANGE BOLTS            | 19 (3/4") DIA. x 89      | ASTM A325              | SEE DETAIL C | 11       |
| 7                                    | 1           | BACK-UP STRIP PLATE     | 4.554 x 40               | CSA G40.21 350W        |              | 12       |
|                                      |             |                         |                          |                        |              | 13       |
|                                      |             |                         |                          |                        |              | 14       |
| <b>4.877 m (16') SIGNAL ARM - 16</b> |             |                         |                          |                        |              |          |
| 3                                    | 1           | OCTAGONAL SECTION SHAFT | 146 A/F - 73 A/F x 3.038 | CSA G40.21 350W        |              | 15       |
| 4                                    | 1           | PIPE TENON              | 60.3 O.D. x 3.91 x 355   | ASTM A53 GR. B SCH. 40 |              | 16       |
| 5                                    | 1           | FLANGE PLATE            | 25 x 206 x 293           | CSA G40.21 300W        |              | 17       |
| 6                                    | 4           | FLANGE BOLTS            | 19 (3/4") DIA. x 89      | ASTM A325              | SEE DETAIL C | 18       |
| 7                                    | 1           | BACK-UP STRIP PLATE     | 4.554 x 40               | CSA G40.21 350W        |              | 19       |
|                                      |             |                         |                          |                        |              | 20       |
|                                      |             |                         |                          |                        |              | 21       |

APPROXIMATE TOTAL MASS: 8' ARM - 30 kg  
12' ARM - 40 kg  
16' ARM - 52 kg

NOTES:

- ALL MATERIALS, EXCEPT STAINLESS STEEL ITEMS, SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123-09 (PLUS LATEST REVISIONS) WITH NET RETENTION OF 610 g/m<sup>2</sup>.
- PROVIDE RAISED IDENTIFICATION NUMBER WITH WELDING ELECTRODE AS PER SPECIFICATION, STRUCTURE TYPE CODE INDICATED IN TABLE THIS DRAWING.
- SHIP WITH BOLTS C/W NUTS AND WASHERS IN FLANGE.
- PROVIDE RAISED 'T' ON TOP OF ARM NEAR FLANGE PLATE USING WELDING ELECTRODE.
- GRIND ALL SHARP POINTS AND EDGES.
- TO BE USED WITH LIGHT AND MEDIUM DUTY SHAFTS.
- LONGITUDINAL SEAM WELD SHALL HAVE 60% MINIMUM PENETRATION EXCEPT WITHIN 150 mm OF FLANGE PLATE SHALL BE COMPLETE PENETRATION.
- EXTERIOR WELD JOINING ARM SHAFT TO FLANGE PLATE SHALL BE AN UNEQUAL LEG COMPLETE PENETRATION WELD WITH THE LONG LEG OF THE WELD ALONG THE ARM, TERMINATING AT 30" FROM THE ARM'S SURFACE.

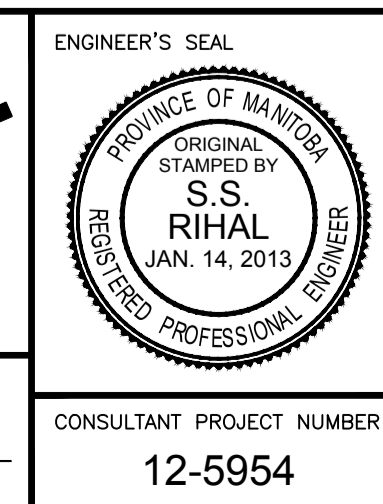
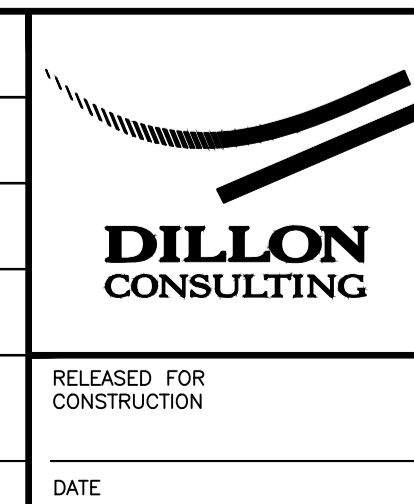
V:\Traffic Signals\7. Projects\7. Projects\Coordination\Product Specification Dwg\New folder\S-SD-08\_8', 12', 16' Traffic Signal & Pedestrian Corridor Arms.dwg



REDUCED DRAWING  
N.T.S.

| NO. | REVISIONS                    | DATE    | BY  | DATE |
|-----|------------------------------|---------|-----|------|
| 3   | REVISED BY DILLON CONSULTING | 1/10/14 | CDW |      |
| 2   | REVISED BY DILLON CONSULTING | 7/25/13 | CDW |      |
| 1   | ISSUED BY DILLON CONSULTING  | 1/14/13 | CDW |      |

|            |  |             |     |
|------------|--|-------------|-----|
| B.M. ELEV. |  | DESIGNED BY | CDW |
|            |  | DRAWN BY    | JGW |
|            |  | CHECKED BY  | SSR |
|            |  | APPROVED BY | -   |
|            |  | HOR. SCALE  | NTS |
|            |  | VERTICAL    | NTS |



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

8', 12', 16' TRAFFIC SIGNAL & PEDESTRIAN CORRIDOR ARMS

CITY DRAWING NUMBER: S-SD-08  
SHEET 8 OF 17  
CONSULTANT DRAWING NUMBER: N/A

CONSULTANT PROJECT NUMBER: 12-5954