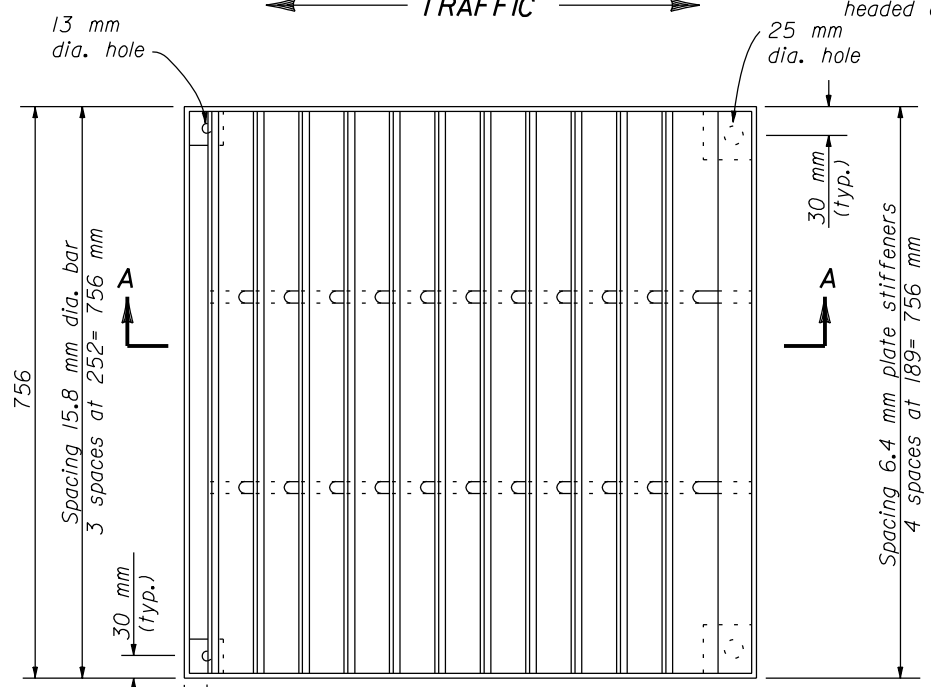
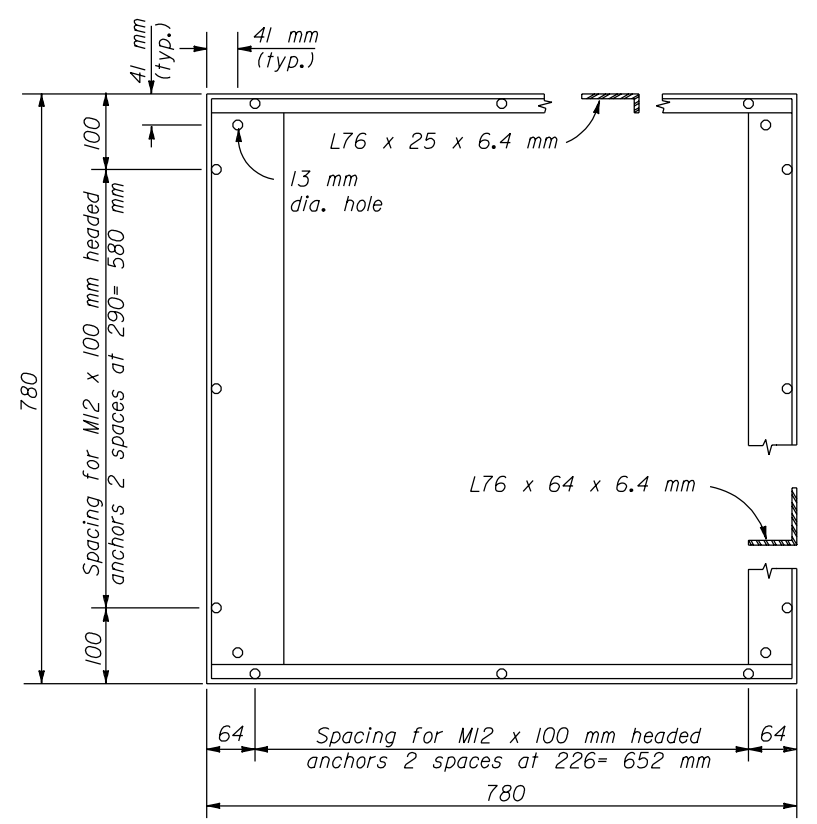


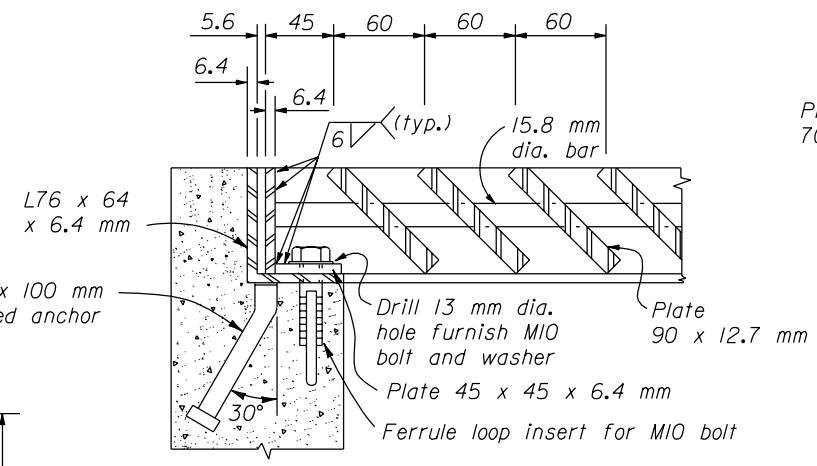
**SECTION A-A**  
TRAFFIC



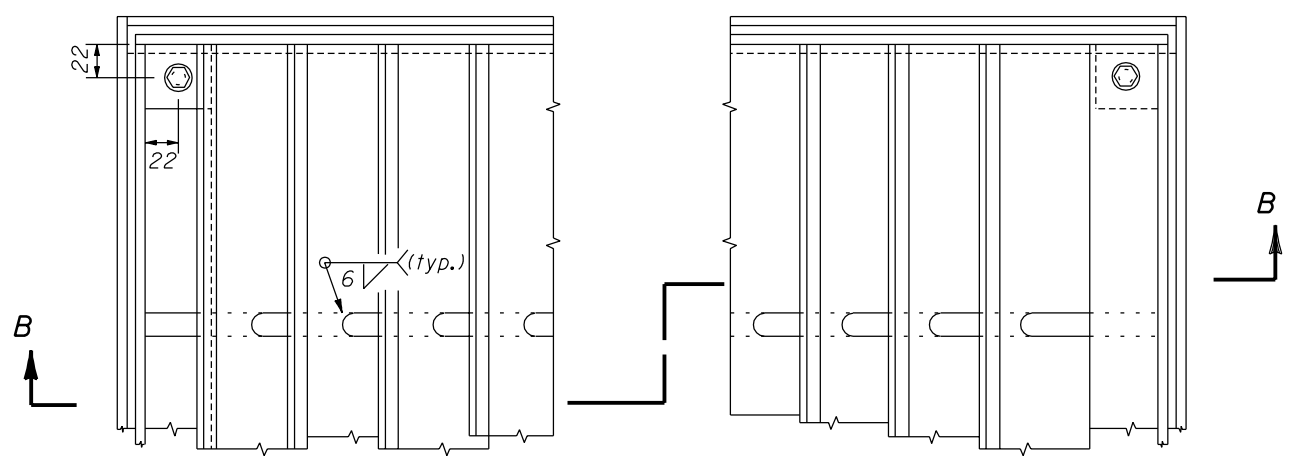
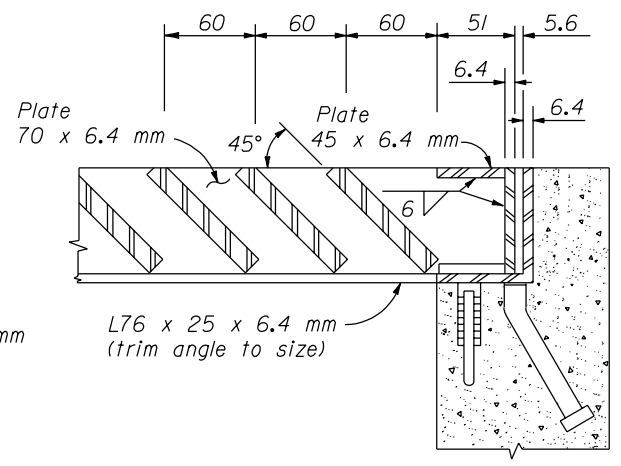
**GRATE DETAILS**



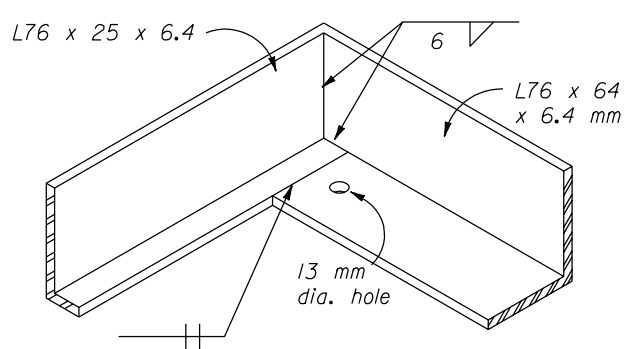
**FRAME DETAIL**



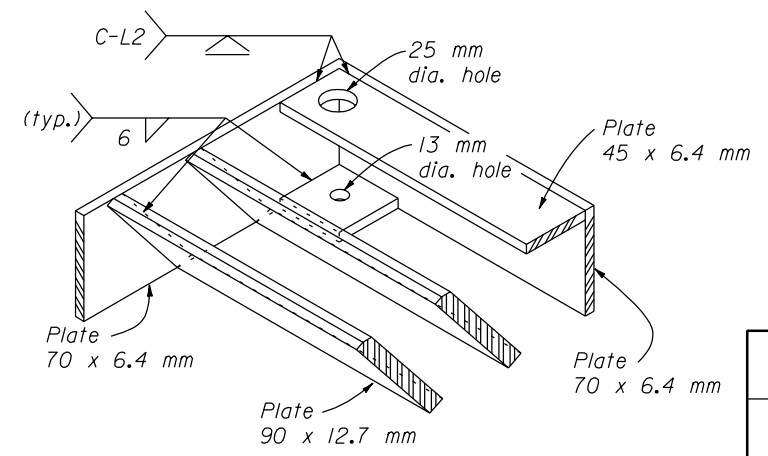
**SECTION B-B**



**FRAME AND GRATE DETAILS**



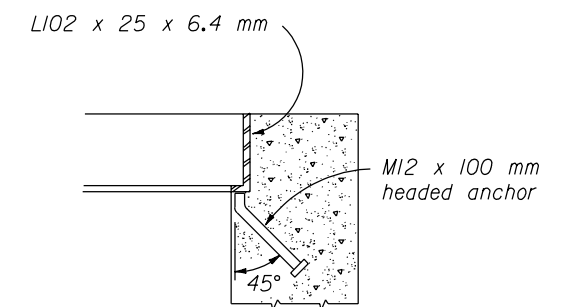
**FRAME CORNER DETAIL**



**GRATE CORNER DETAIL**

NO SCALE

- NOTE:**
- Dimensions not labeled are in millimeters.
  - STRUCTURAL STEEL: AASHTO M 183 (ASTM A 36M).
  - BOLTS & WASHERS: ASTM A 307, Galvanized.
  - THREADED CONCRETE ANCHOR: Ferrule loop inserts for M10 bolt or approved equal.
  - WELDING: Weld in conformance with the Standard Specifications. Unless otherwise indicated seal weld all joints with a minimum size fillet weld, based on material thickness. Grind smooth all contact surfaces. FINISH: Galvanized after fabrication.
  - Estimated weight, frame and grate (756 X 756 mm grate) 108 kg. Increase or decrease weight by 8.6 kg for each 60 mm increment.
  - Furnish hardware in the metric sizes shown. Equivalent imperial sizes may be used when metric sizes are not available.



**FRAME ANCHOR DETAIL**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL LANDS HIGHWAY

**METRIC STANDARD**

**METAL FRAME AND GRATE  
TYPE B**

STANDARD APPROVED FOR USE 3/1996  
REVISED: 8/1997

STANDARD  
**M604-3**

17 NOV 2000  
f:\standrow\metric\m604-3.dgn