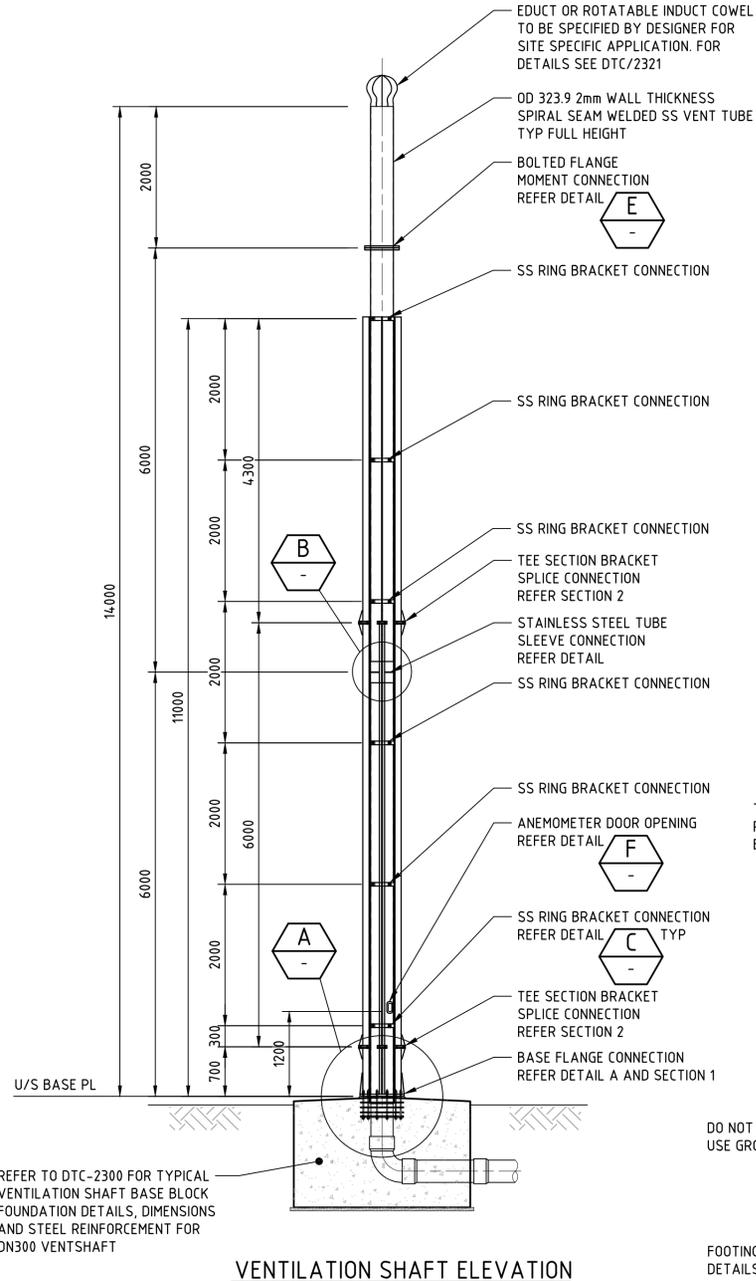


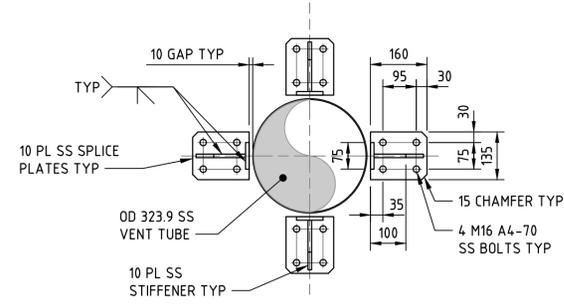
THIS DRAWING MAY ONLY BE USED IN THE COURSE OF AND FOR THE PURPOSE OF CREATING SYDNEY WATER ASSETS. USE THIS DRAWING WITH CARE. THE USER IS RESPONSIBLE FOR THE CORRECT APPLICATION OF THIS DRAWING.

APPROXIMATE VENT SHAFT ITEM MASS	
ITEM	APPROX MASS (kg)
BASE FLANGE CONNECTION	70
6m TEE SECTION BRACKET (TYP PER BRACKET - 4 REQD)	84
4.3m TEE SECTION BRACKET (TYP PER BRACKET - 4 REQD)	62
VENT TUBE BOTTOM SPOOL PIECE	102
VENT TUBE MIDDLE SPOOL PIECE	116
VENT TUBE TOP SPOOL PIECE	52

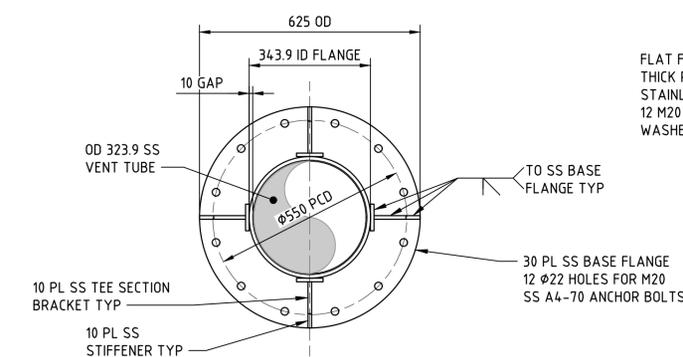
- NOTES:**
- ALL VENT SHAFTS - CLASS 1 STAINLESS STEEL VENT PIPE SHALL BE TO ASTM A312. ALL STAINLESS STEEL COMPONENTS ARE GRADE 316.
  - ALL BOLTS TO BE GRADE A4-70 AND SHALL BE TIGHTENED AS PER 'TYPE TB' REQUIREMENTS UNO. ASSEMBLY TORQUE M16 = 180Nm, M20 = 350Nm.
  - ALL WELDS SHALL BE FSW TO AS1544.6 UNO.
  - BOLTS SHALL BE TIGHTENED USING A TORQUE WRENCH IN THE TIGHTENING SEQUENCE BELOW. SEQUENCE SHALL BE COMPLETED FIRST FOR 50% AND REPEATED FOR 100% OF FINAL TIGHTENING TORQUE. SEE NOTE 20 ON DTC/2320 FOR BOLT LUBRICATION REQUIREMENTS.
  - FLANGES SHALL BE FACTORY FILLET WELDED TO THE PIPES TO AS 1554.6.
  - ALL WELDS ARE TO BE FACTORY WELDED WITH:
    - SUB-SURFACE (INTERNAL) QUALITY: CATEGORY 1
    - SURFACE (EXTERNAL) WELD QUALITY: CLASS A
    - SURFACE CONDITION: SURFACE CONDITION II-CLEANED AS PER AS/NZS 1554.6 - WELDING STAINLESS STEELS FOR STRUCTURAL PURPOSES. THE ATMOSPHERE WITHIN VENTILATION SHAFTS IS CONSIDERED TO BE CORROSIVE IN REGARD TO AS1554.6.
  - E316LXX ELECTRODES TO BE USED.
  - NON-DESTRUCTIVE EXAMINATION OF WELDS SHALL BE TO AS1554.6 TABLE 7.4 FOR WELD CATEGORY 1A AND ALL FLANGE WELDS SHALL BE EXAMINED BY LIQUID PENETRANT OR RADIOGRAPHY/ULTRASONIC.
  - ALL WELDS ARE TO BE FACTORY PICKLED AND PASSIVATED IN ACCORDANCE WITH ASTM A380.



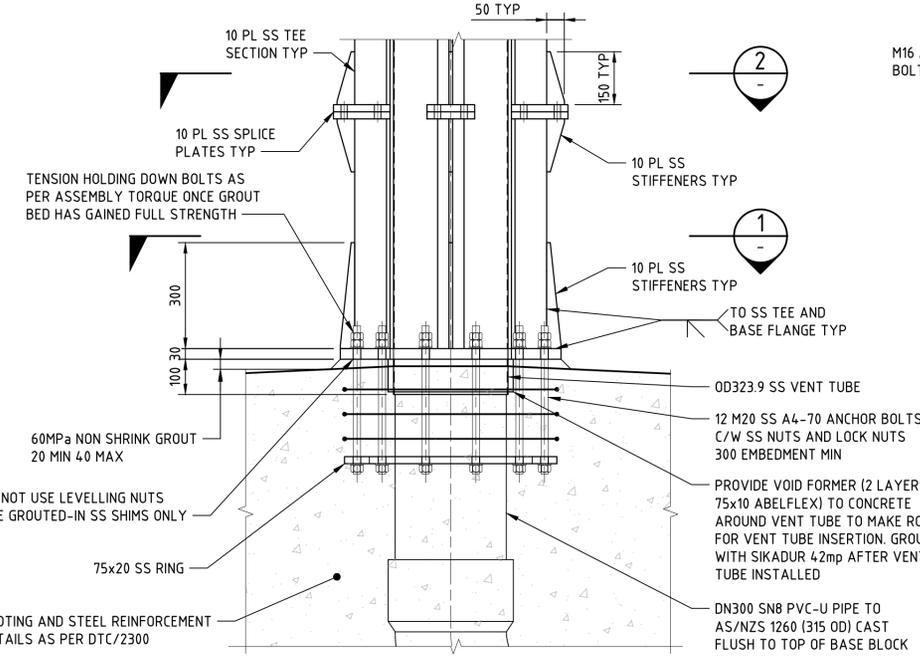
**VENTILATION SHAFT ELEVATION**  
SCALE 1:50



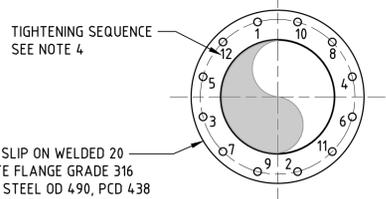
**SECTION 2 TEE SECTION BRACKET SPLICE**  
SCALE 1:10



**SECTION 1 BASE FLANGE**  
SCALE 1:10

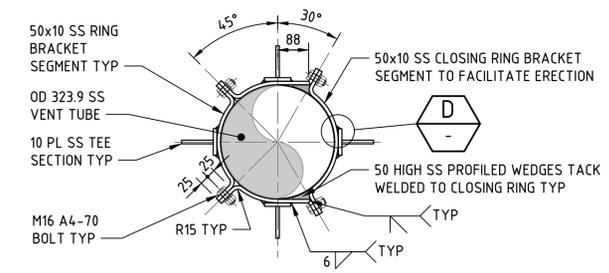


**DETAIL A BASE FLANGE CONNECTION**  
SCALE 1:10

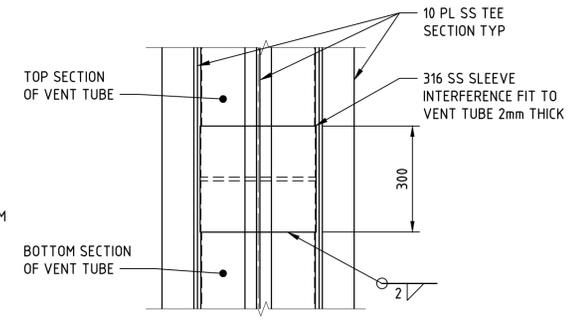


FLAT FACE SLIP ON WELDED 20 THICK PLATE FLANGE GRADE 316 STAINLESS STEEL OD 490, PCD 438 12 M20 A4-70 SS BOLTS WITH SS WASHER, NUT AND LOCK NUT

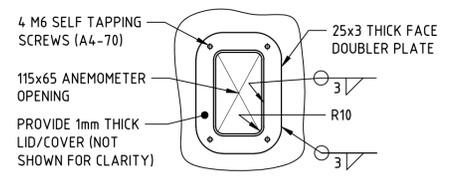
**DETAIL E PLAN - SS BOLTED FLANGE MOMENT CONNECTION**  
SCALE 1:10



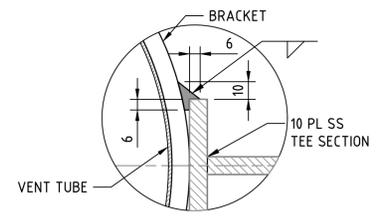
**DETAIL C PLAN - SS RING BRACKET CONNECTION**  
SCALE 1:10



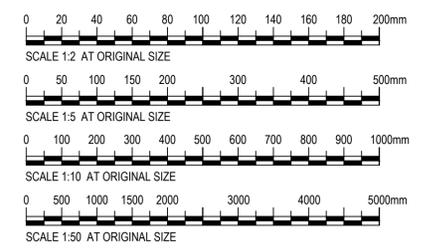
**DETAIL B STAINLESS STEEL TUBE SLEEVE CONNECTION**  
SCALE 1:10



**DETAIL F ANEMOMETER DOOR AND STRENGTHENING DETAIL**  
SCALE 1:5



**DETAIL D TYPICAL WELD DETAIL**  
SCALE 1:2



LETTER	DETAILS OF ISSUE / AMENDMENT	APP'D	DATE
A	ORIGINAL ISSUE	N.S.	13.03.25