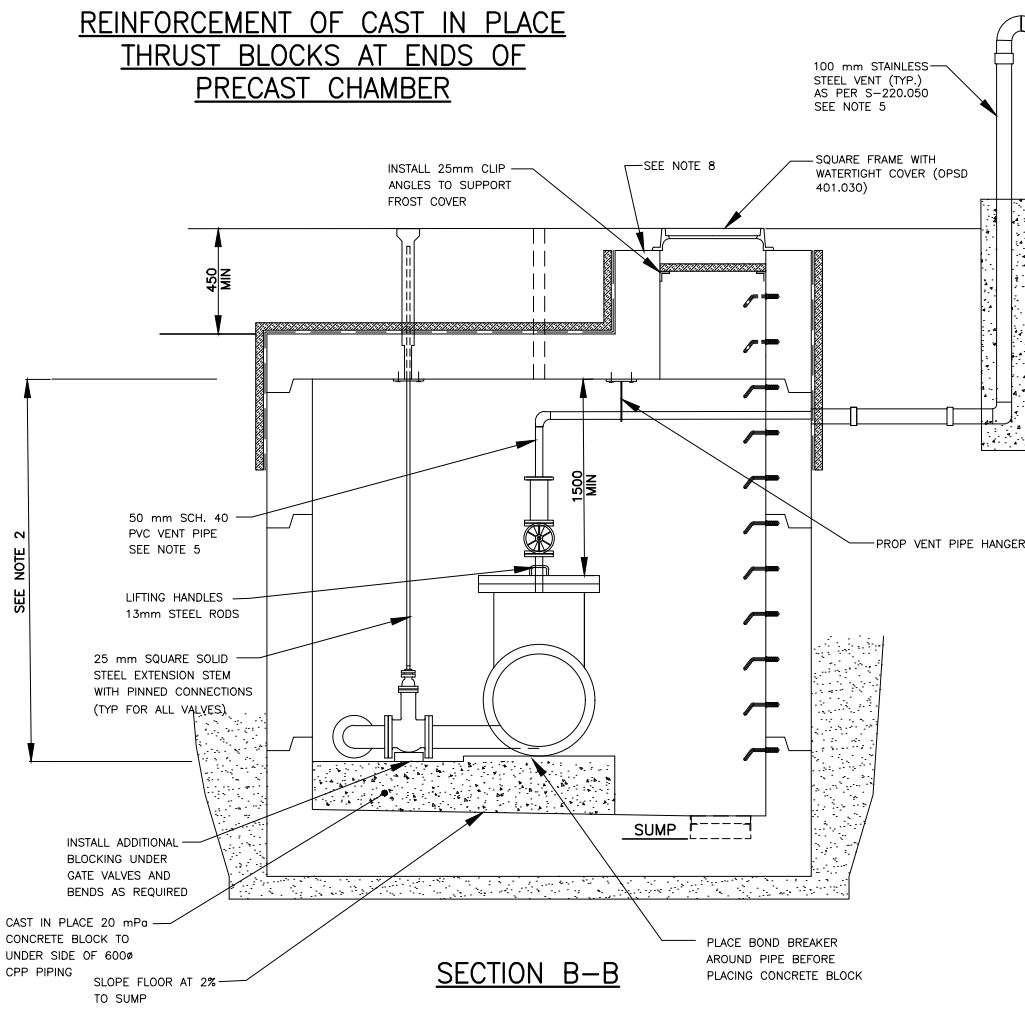
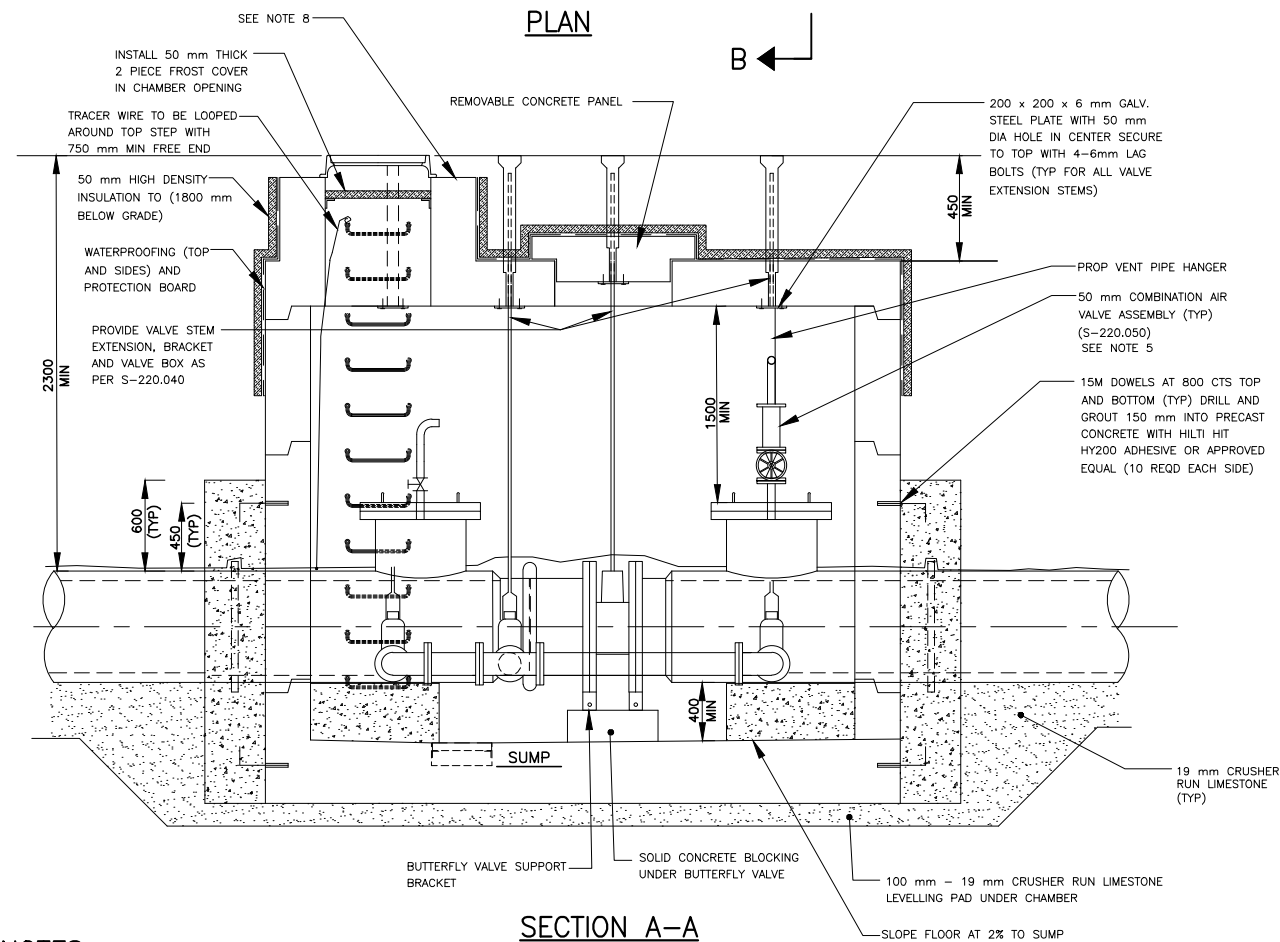


**REINFORCING STEEL FOR THRUST BLOCK**  
 ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH C.S.A. G30.18M - GRADE 400.  
 CONTRACT ADMINISTRATOR TO INSPECT REBAR SIZE, SPACING, LOCATION AND QUANTITIES PRIOR TO POURING OF CONCRETE.  
 CONFORM TO REINFORCING STEEL MANUAL OF STANDARD PRACTICE BY REINFORCING STEEL INSTITUTE OF CANADA (RSIC).

**CONCRETE FOR THRUST BLOCK**  
 CONCRETE CONSTRUCTION SHALL CONFORM TO C.S.A. A 23M SERIES.  
 COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL NOT BE LESS THAN 30 MPa  
 CONCRETE SUBJECT TO FREEZE/THAW CYCLES TO HAVE 5% TO 7% AIR ENTRAINMENT.  
 CONCRETE COVER FOR REINFORCEMENT.

**REINFORCEMENT OF CAST IN PLACE THRUST BLOCKS AT ENDS OF PRECAST CHAMBER**



PIPE AND FITTING MATERIAL	
MARK	DESCRIPTION
1	600 mm CPP C301L WALL PIECE c/w 600 mm FLANGED BRANCH OUTLET (TOP) AND 150 mm BOTTOM TANGENT BRANCH OUTLET RESTRAINED SPIGOT x VICTAULIC STYLE 44 ENDS
2	VICTAULIC STYLE 44 COUPLING
3	600 mm ADAPTOR - 395 mm LONG FLANGE x VICTAULIC STYLE 44 ENDS
4	600 mm FLANGED BUTTERFLY VALVE
5	600 mm CPP C301L WALL PIECE c/w 600 mm FLANGED BRANCH OUTLET (TOP) AND 150 mm BOTTOM TANGENT BRANCH OUTLET FLANGE x RESTRAINED BELL ENDS
6	600 mm BLIND FLANGE COMPLETE WITH 50 mm IPT CENTRE OUTLET; 50 mm BALL VALVE AND 50 mm COPPER TAIL PIECE 500 mm LONG AND LIFTING HANDLES
7	600 mm FLANGED BRANCH OUTLET (TOP)
8	150 mm BOTTOM TANGENT FLANGED BRANCH OUTLET
9	150 mm FLANGED GATE VALVE (3 REQUIRED)
10	150 mm - 90° DI BEND - FLANGED (2 REQUIRED)
11	150 x 150 mm DI TEE - FLANGED
12	150 mm DI CEMENT LINED PIPING - PC 350 LENGTH TO SUIT - FLANGE x PLAIN END c/w FLANGE ADAPTOR
13	150 mm BLIND FLANGE
14	600 mm BLIND FLANGE c/w 50 mm FLANGED CENTRE OUTLET AND TWO LIFTING HANDLES
15	50 mm AIR VALVE ASSEMBLY c/w BRASS TEE AND ISOLATION VALVE - VENTED TO ATMOSPHERE (S-220.050)
16	19 mm THRUST FLANGE (PIPE OD + 300 mm) WELDED ALL AROUND

**NOTES:**

- MINIMUM CHAMBER SIZE TO BE 3600 X 3000 mm.
- INTERIOR DEPTH VARIES AS PER CONTRACT DESIGN DRAWINGS.
- PRECAST REINFORCED CONCRETE CHAMBER TO BE DESIGNED TO H2O LOADING.
- PRECAST REINFORCED CONCRETE CHAMBER STRUCTURAL SHOP DRAWINGS SHALL BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN ONTARIO.
- AIR VALVE ASSEMBLY AND VENT PIPE ARE REQUIRED WHEN THE FEEDERMAIN IS AT A HIGH POINT WITH VALVE CLOSED.
- BUTTERFLY VALVE TO BE INSTALLED SO THAT SEAT ADJUSTMENT SCREWS ARE FACING THE REMOVABLE SPOOL PIECE.
- USE BITUMINOUS PAPER TO BE USED AS A BOND BREAKER BETWEEN CONCRETE BLOCKING AND PIPING OR VALVES.
- ADJUSTMENT TO GRADE SHALL BE CONSTRUCTED OF PRECAST CONCRETE AND 1-3 MODULOC ADJUSTMENT UNITS UNDER FRAME AND COVER.
- ENGINEER TO DESIGN RESTRAINED JOINT LENGTHS APPROACHING AND LEAVING THE CHAMBER.
- TOP SLAB OF CHAMBER TO HAVE EMBEDDED LIFTING DEVICES FOR FUTURE REMOVAL AND REINSERTION IF REQUIRED.



WORKS DEPARTMENT

**600 mm BUTTERFLY VALVE AND PRECAST CONCRETE CHAMBER**

DWG. DATE: 1991 11  
 REVISION NO.: 14  
 REV. DATE: 2022 12  
 SCALE: N.T.S.

S-220.031