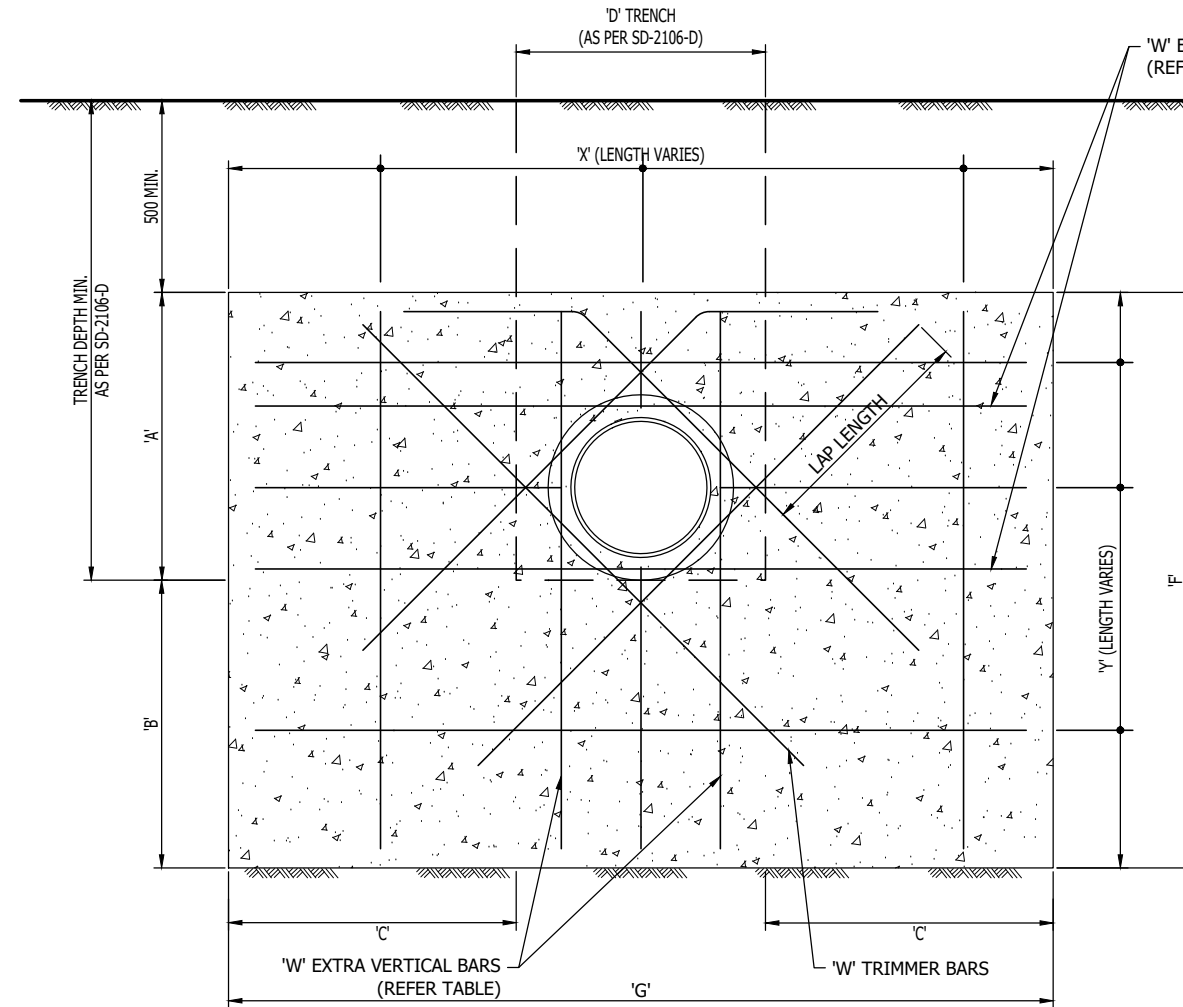
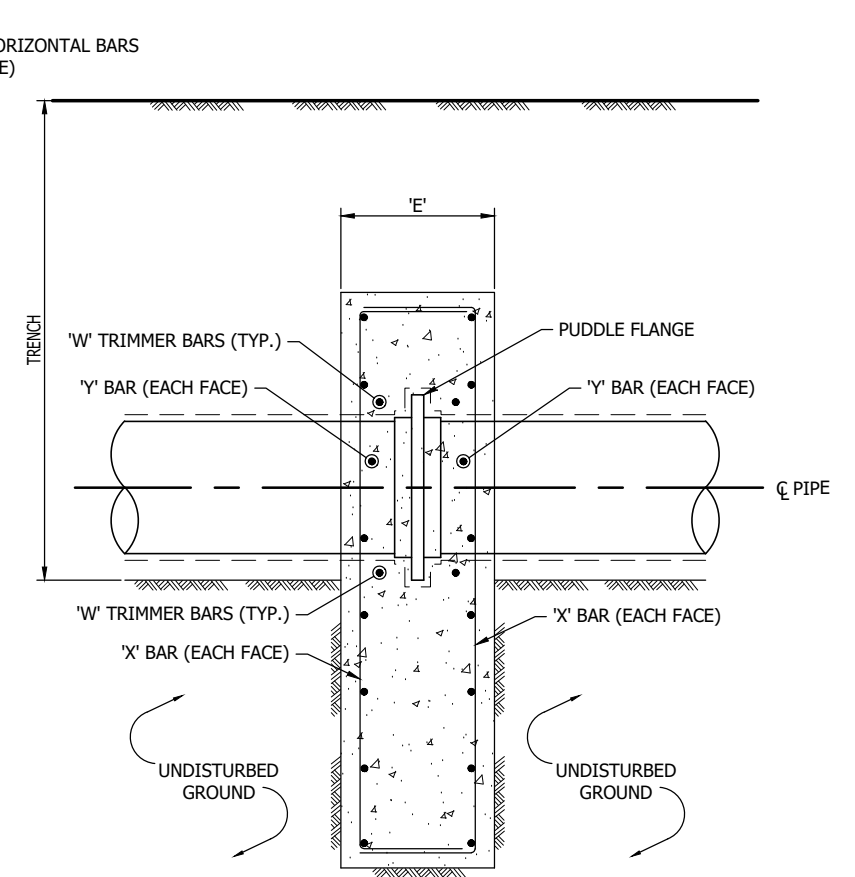


ANCHOR BLOCK REINFORCEMENTS - PLAN  
N.T.S.



ANCHOR BLOCK REINFORCEMENTS - ELEVATION  
N.T.S.



ANCHOR BLOCK REINFORCEMENTS - SECTION  
N.T.S.

ANCHOR BLOCK AND REINFORCEMENT BAR DIMENSIONS

PIPE SIZE (DN)	DESIGN FORCE (kN)	ALLOWABLE HORIZONTAL SOIL BEARING PRESSURE (kPa)	REQUIRED BEARING AREA (m <sup>2</sup> )	DIMENSION 'A' (mm)	DIMENSION 'B' (mm)	DIMENSION 'C' (mm)	DIMENSION 'D' (mm) TRENCH WIDTH	DIMENSION 'E' (mm) OVERALL WIDTH	DIMENSION 'F' (mm) OVERALL HEIGHT	DIMENSION 'G' (mm) OVERALL LENGTH	TRIMMER REINFORCEMENT BARS 'W' (EACH FACE) (EACH SIDE OF PIPE)	VERTICAL BARS 'X' (EACH FACE)	HORIZONTAL BARS 'Y' (EACH FACE)	LAP LENGTH (mm)	CONCRETE GRADE (f <sub>c</sub> )
300	99	50	2.25	600	700	750	700	300	1300	2200	2N16	N16 @ 150	N16 @ 150	600	N32
600	396	50	9.00	900	1500	1500	1200	600	2400	4200	2N16	N16 @ 150	N16 @ 150	1000	N32

ANCHOR BLOCKS

- THIS DRAWING READ IN CONJUNCTION WITH SD-5002 % SD-5003-D. REFERRED TO SWC DTC DRAWINGS FOR ANCHORAGE DETAILS FOR PIPE SIZES DN100 - 300 NOT SPECIFIED IN THIS SHEET
- ASSUMED SOIL HORIZONTAL BEARING CAPACITIES OF 50 KPa AND 100 KPa RESPECTIVELY. THE CONTRACTOR REPORTED TO THE ENGINEER FOR REDESIGN OF THE ANCHOR BLOCK IF THE SOIL HORIZONTAL BEARING CAPACITY DEVIATES FROM WHAT IS ASSUMED.
- IF DEPTH OF ANCHOR BLOCKS IS NOT PRACTICABLE, DEPTH (OR LENGTH) REVISED PRIOR TO CONSTRUCTION, ENSURING EQUIVALENT BEARING AREA ACHIEVED WITH THE APPROVAL OF THE ENGINEER IN CHARGE. THE VALUE OF 'C' IS EQUAL SO THE PIPE MUST BE IN THE CENTRE OF THE ANCHOR BLOCK.
- ANCHOR BLOCKS ARE CAST AGAINST UNDISTURBED SOIL. IF NOT POSSIBLE, RE-COMPACT SOIL TO EXTENT OF EXCAVATION AFFECTED TO A STANDARD DRY DENSITY OF 95% MINIMUM.

GROUND CONDITIONS

- ANY CHANGES IN GROUND CONDITIONS OBSERVED DURING CONSTRUCTION, FROM THOSE ASSUMED OR DOCUMENTED, SHOULD BE REFERRED TO THE SUPERINTENDENT REPRESENTATIVE FOR APPROPRIATE ASSESSMENT AND COMMENT.
- THE CONSTRUCTOR SHALL VERIFY THE GEOLOGICAL CONDITIONS AND ASSUMPTIONS IN THE FIELD. THE CONSTRUCTOR SHALL ALLOW FOR CONSTRUCTION VERIFICATION AND PERFORMANCE MONITORING BY GEOTECHNICAL PERSONNEL DURING CONSTRUCTION.

REINFORCED CONCRETE

- ALL WORKMANSHIP AND MATERIALS IN ACCORDANCE WITH AS3600 CURRENT EDITION WITH AMENDMENTS.
- CONCRETE COMPONENTS AND QUALITY AS FOLLOWS:

SLUMP mm	MAX SIZE AGG mm	CEMENT TYPE	F <sub>c</sub> AT 28 DAYS - MPa
80-120	20	GP	32

- MINIMUM CLEAR CONCRETE COVER TO REINFORCEMENT INCLUDING TIES AND STIRRUPS 65mm.
- REINFORCEMENT IS REPRESENTED DIAGMATICALLY; IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
- SPLICES IN REINFORCEMENT MADE ONLY IN THE POSITIONS SHOWN OR AS APPROVED BY THE SUPERINTENDENT REPRESENTATIVE. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT AS SPECIFIED IN AS3600. COGS AND HOOKS STANDARD UNO.
- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE SUPERINTENDENT REPRESENTATIVE.
- PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE SUPERINTENDENT REPRESENTATIVE.
- REINFORCEMENT SYMBOLS:  
N - DENOTES GRADE 500N HIGH STRENGTH DEFORMED BARS TO AS4671.
- ALL REINFORCING FABRIC SHALL COMPLY WITH AS4671.
- ALL REINFORCEMENT SHALL BE INSPECTED BY THE SUPERINTENDENT REPRESENTATIVE OR ENGINEER PRIOR TO PLACING CONCRETE.
- ALL ABBREVIATIONS ARE IN ACCORDANCE WITH AS1100.

NOTE  
FOR GENERAL NOTES AND LEGEND REFER  
SMC DRAWING No. 30002750-WS-001

DESIGN

No.	REVISION	DATE	ENG CHECKED	VERIFIED	DESIGN AUTH
D	ICON WATER RESUBMISSION	07.05.2024	A.L.	A.C.	
C	ICON WATER RESUBMISSION	30.11.2023	A.L.	A.C.	
B	ISSUE FOR APPROVAL	11.11.2022	A.L.	A.C.	
A	ISSUE FOR REVIEW & COMMENT	16.09.2022	A.L.	A.C.	



Drawn: N.BROOKE-TAYLOR	Designed: M. HOSSEINI
Checked: A.CHANDRA	
Project Manager: T. VAN NIEKERK	
Contractor's Drawing No.: 3002750-WS-033	
Icon Water	
Concurred:	
Icon Water	
Design Authority:	

WILLIAM HOVELL DRIVE DUPLICATION  
TYPICAL THRUST BLOCK  
AND REINFORCEMENT DETAILS

Scale: AS SHOWN	Date:	Sheet No.:
Project No.: AS SHOWN	Tender No.:	
A1 3002750-WS-033		Rev D