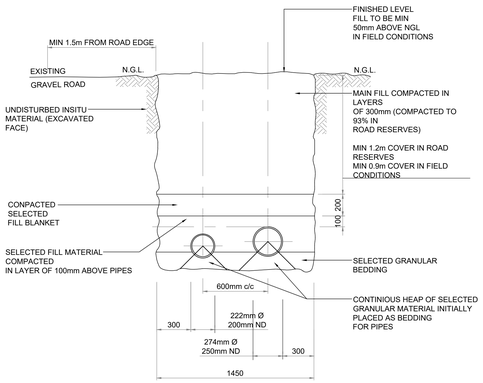
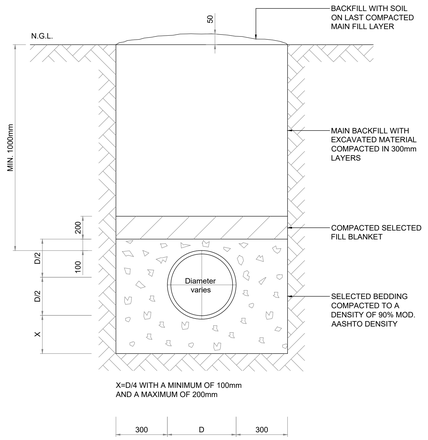


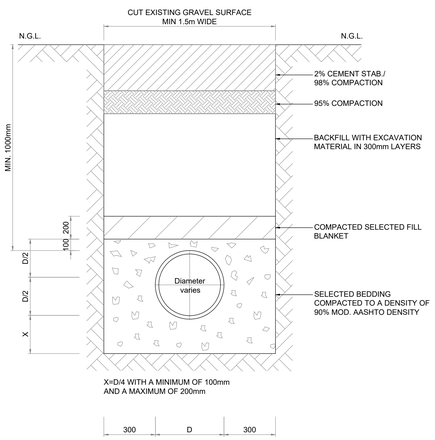
TYPICAL DETAIL FOR TWO PIPES IN ONE TRENCH

NOT TO SCALE



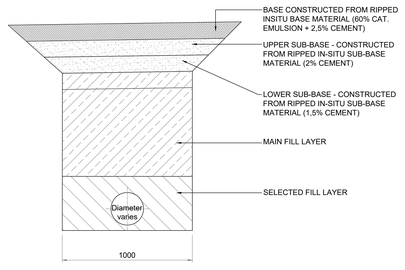
CLASS B BEDDING FOR FLEXIBLE PIPES

NOT TO SCALE



CLASS B BEDDING FOR FLEXIBLE PIPES IN GRAVEL ROAD CROSSINGS (OPTION 2)

NOT TO SCALE



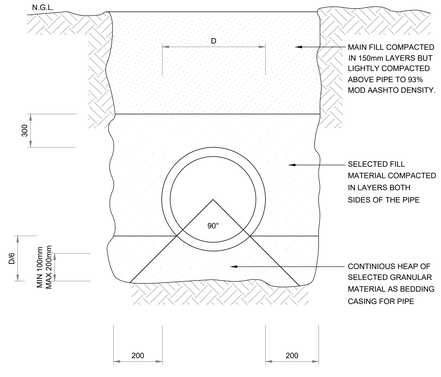
DETAIL OF EXCAVATION AND BACKFILLING OF PIPELINE CROSSING EXISTING MINOR ROAD SURFACES ONLY WHERE SPECIFIED ON DRAWINGS

N.T.S.

GRADING SPECIFICATION OF MATERIALS

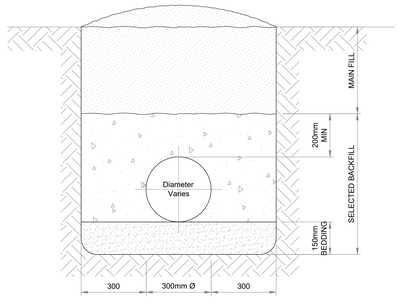
MAIN FILL
DEPTH VARIES - COMPACTED IN 150mm LAYERS AT OPTIMUM MOISTURE CONTENT TO 93% MOS AASHTO DENSITY UNDER ROAD CROSSINGS STABILISED WITH 5% CEMENT 100% SMALLER THAN 150mm, PI<12, CBR>15

SELECTED FILL MATERIAL
FILL COMPACTED AT OPTIMUM MOISTURE CONTENT IN 150mm LAYERS TO 93% MOS AASHTO DENSITY STABILISED WITH 5% CEMENT 100% THROUGH 30mm SIEVE. PI<6.



RIGID PIPES ON A CLASS C BEDDING

NOT TO SCALE



NOTE:

REFER TO THE FOLLOWING SPECIFICATIONS:

- STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS OF CTMM SECTION 202 AND SECTION 402
- VOLUME 2 SECTION 6.2.2 SERIES 2 AND 4

TYPICAL CROSS SECTION OF PIPE TRENCH

(NOT APPLICABLE TO SECTIONS WHERE PIPELINE IS CONSTRUCTED IN STREETS)
N.T.S.

GENERAL NOTES

1. Do not scale this drawing. Work to figure by dimensions, only. Any discrepancies to be brought to the Engineers attention prior to implementation of any work.
2. Minimum concrete cube strength @ 28 days for blinding layer is to be 15MPA minimum concrete cube strength @ 28 days for walls, floor slabs, roof slabs, columns, foundations and external non-water retaining structure is to be 30MPA.
3. Concrete cover specifications are to be in accordance with the contract document design specifications.
4. Minimum cover to reinforcing all concrete members 25mm top & bottom.
 PWJ - partial wall vertical joint
 PFJ - partial floor joint
5. Engineer to inspect all reinforcement prior to casting concrete.
6. 20x20mm chamfer on all exposed concrete edges unless otherwise noted.
7. All steel flanges to S.A.B.S. 1123/77 table 1000/3 unless otherwise indicated.
8. Brick work:
 - All exposed external brickwork satin red facebrick.
 - All internal brickwork to be clay commons, plastered and painted acrylic pva white.
 - Outer face of internal brickwork skin to be bagged and bitumen painted.
 - Brickforce at windowsill level and wall plate level all around building.
 - N.B : 4 coarse brickforce above windows and doors.
 - DPC at floor and windowsill levels.
9. Plaster:
 - Cement plaster 12mm thick to internal vertical brick walls.
10. Painting:
 - Prepare and apply two coats bitumen paint on brick skin including working around wire ties.
 - Prepare and apply one coat plaster primer and two coats approved pva acrylic paint to internal walls, fibre cement fascia and barge board.
 - Clean with spirits of salts solution and apply two coats silicone-based brick dressing in strict accordance with the manufacturer's instructions to external face brick walling.
 - Prepare and apply one coat plaster primer and one coat universal undercoat and one coat approved eggshell enamel paint on fibre cement sills.
 - Etch and apply one coat zinc primer, one undercoat and two finishing coats approved universal gloss enamel paint on steel sashes, frames, and burglar bars.
 - Prepare, stop and apply two coats approved varnish on hardwood doors and frames.
 - prepare, knot prime stop, and apply one coat pink wood primer, one undercoat and two coats approved universal eggshell enamel paint on general surfaces of eaves timbers.
11. All steel pipe specials to be rilsan lined and coated to specifications.
12. All buried steel pipework & bolted connections to be 'denso' wrapped to specifications.
13. All puddle pipes to be tape wrapped to specifications.
14. All bolts & nuts to be hot dip galvanised, unless otherwise indicated.
15. All construction activities shall be executed to the Engineer's approval.
16. Setting out & final positioning of all steel pipework, including puddle pipes, to be confirmed by contractor on site, prior to fabrication and installation.

FOR TENDER

FUNDER:

water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF WATER AND SANITATION

Physical Address :
195 Francis Baard Street
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South Africa

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private Bag X4012

ENGINEER:

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E-mail Address : www.kufanikiwa.co.za
Website Link or Address : info@kufanikiwa.co.za

DRAWING REVISIONS

REV	DATE	DRAWN	CHECKED	DESCRIPTION

PROJECT NAME:

WESTERN HIGHVELD BULK WATER SCHEME

DRAWING TITLE:

TYPICAL TRENCHING DETAILS

RESPONSIBLE PERSONNEL.		SIGNATURE	DATE
DESIGNED	**S NGCOBO**		
DRAWN	**L JIYANA**		
CHECKED	**S MKHIZE**		
APPROVED	**AM NDLOVU**		
SCALE	**AS SHOWN**		

APPROVED ; CLIENT

SIGNATURE

DATE

PROJECT NUMBER	DRAWING NUMBER		
VU-WTR-21-006	306		
STAGE	SHEET SIZE	SHEET No.	REVISION
TENDER	A0	1 OF 1	0

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