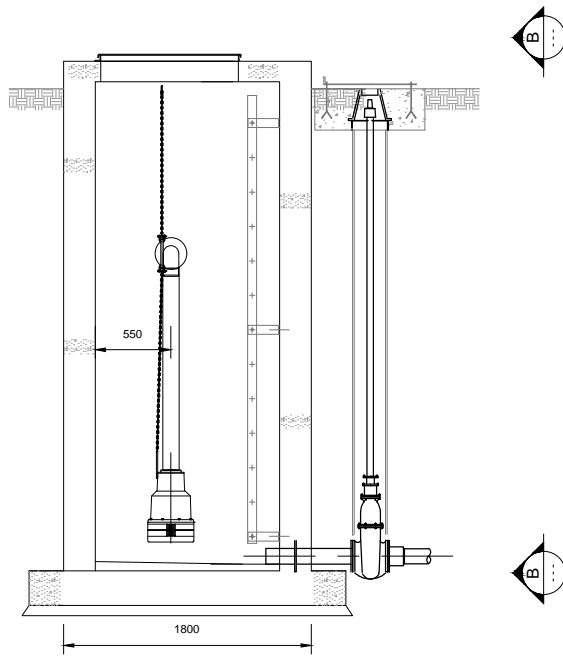
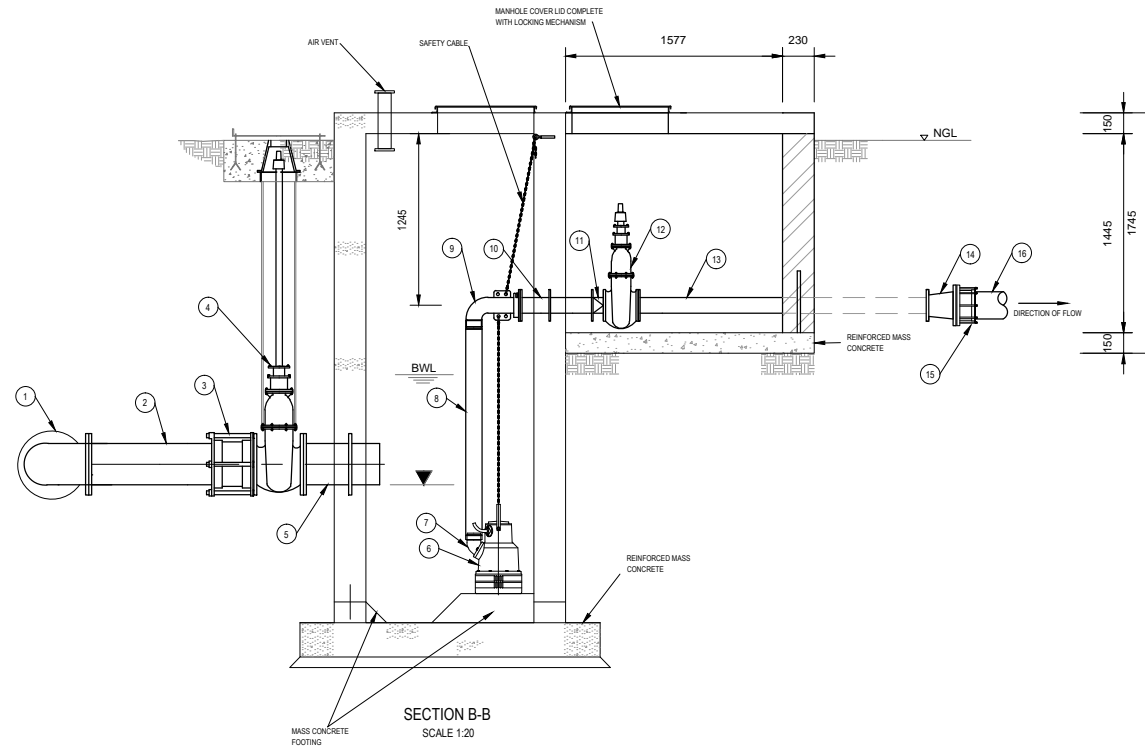


PLAN VIEW
SCALE 1:20



SECTION A - A
SCALE 1:20



SECTION B-B
SCALE 1:20

GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS.
- ALL MATERIAL TO BE SANS APPROVED.
- BACKFILL MATERIAL TO BE COMPACTED TO 90% MOD. AASHTO DENSITY IN LAYERS NOT EXCEEDING 150mm THICK.
- CHAMBER NUMBER TO BE STENCILED ON OUTSIDE EXPOSED VERTICAL FACE USING 100mm SIZE LETTERING AND APPROVED ROAD MARKING PAINT.
- ALL FLANGES SHALL BE RATED AND DRILLED TO SANS 1123: TABLE 1600/3.
- DAMAGE TO INTERNAL LINING MUST BE REPAIRED ACCORDING TO MANUFACTURERS SPECIFICATION.
- DAMAGE TO EXTERNAL PIPE COATING MUST BE REPAIRED ACCORDING TO MANUFACTURERS SPECIFICATION.
- 50mm BLINDING TO BE PROVIDED UNDER ALL FOUNDATIONS UNLESS OTHERWISE STATED.

DENSO WRAPPING NOTES:

- NOTE: WRAP SECTIONS OF THE PIPE THROUGH WALL WITH DENSO ULTRAFLEX OR SIMILAR APPROVED:
 - WIRE BRUSH TO ST 2 STANDARD. IF NECESSARY, CLEAN PIPE WITH WHITE SPIRIT.
 - PRIME WITH DENSO PRIMER 'D' OR SIMILAR APPROVED AND CURE FOR 30 MINUTES.
 - WRAP WITH DENSO ULTRAFLEX (55% OVERLAP), WRAPPING TO EXTEND 150mm PAST THE FACE OF THE WALL ON EACH SIDE.
- ALL BURIED FLANGED CONNECTIONS AND BOLTS SHALL BE PROTECTED BY WRAPPING IN A DENSO CLINGWRAP SYSTEM, OR SIMILAR APPROVED, AS PER THE MANUFACTURERS SPECIFICATIONS. THE SURFACES TO BE PRIMED AND THEN COATED WITH A MASTIC LAYER AND WRAPPED WITH THE APPROPRIATE TAPE TO ENSURE THE COMPLETE JOINT IS PROTECTED AGAINST CORROSION.

MASONRY NOTE:

BRICK FORCE AT VERTICAL CENTRES NOT EXCEEDING 425mm IN ALL SUPERSTRUCTURE WALLS WITH ADDITIONAL LAYERS AS FOLLOWS:
 - IN EVERY COURSE IN ALL FOUNDATION MASONRY.
 - IN TWO COURSES IMMEDIATELY ABOVE FLOOR SLAB.
 - IN TWO COURSES IMMEDIATELY BELOW WINDOWS/ OPENINGS EXTENDING 600mm BEYOND OPENING.
 - IN EVERY COURSE ABOVE ALL LINTELS EXTENDING 600mm BEYOND OPENINGS.

ALL MASONRY TO BE CONSTRUCTED IN STRETCHER BOND, AND USING CLAY MASONRY UNITS OF MIN 10MPa IN STRENGTH USING CLASS 2 MORTAR.

CONCRETE AND REINFORCING NOTE:

- MIN. COVER TO REINFORCEMENT = 40mm
- LAP LENGTH = 45 x DIA. OF BAR
- NOTATION FOR CALLING UP BARS:

2	-	Y16	-	103	-	100	-	FF
NO. OF BARS		BAR MARK		BAR TYPE AND DIA.		SPACING		POSITION
- CONCRETE:
 - WALLS, BASE SLAB & PLINTH = 25/19 MPA
 - BLINDING CONCRETE = 15/19 MPA
 - BLINDING REQUIRED WHEN ORDERED BY ENGINEER
- FINISHES:
 - CONSTRUCTION OF CHAMBER TO SANS 2001-CC1.
 - EXCAVATION TO SANS 1200D.
 - DEGREE OF ACCURACY 2 APPLIES TO ALL PARTS OF THE WORKS.
- CEMFLEX BY SIKA OR SIMILAR APPROVED WATERPROOFING TO BE APPLIED TO EXTERNAL SURFACE BELOW NGL WERE DEEMED NECESSARY BY ENGINEER ON SITE.
- ALL EXPOSED EDGES TO RECEIVE 25 x 25 CHAMFER

STEEL NOTE:

- ALL CONSTRUCTION TO COMPLY WITH SANS 10162-1-2005 AND THE SOUTH AFRICAN STEEL CONSTRUCTION HANDBOOK
- ALL STEEL WORK TO BE GRADE 300WA AND TO BE HOT DIPPED GALVANISED.
- ALL WELDS TO BE MINIMUM 6mm FILLET WELDS

FOR TENDER

3095-W-910



SCHEDULE OF FITTINGS		NOMINAL Ø (mm)										
No.	Description	Quantity	RA 1	RA 2	RA 3	RA 4	RA 5	RA 6	RA 7	RA 8	RA 9	RA 10
1	STEEL BEND, FLANGED ONE END, PLAIN ENDED THE OTHER	1	315	160	250	200	160	160	315	250	250	90
2	STEEL PIPE, FLANGED ONE END, PLAIN ENDED THE OTHER	1	315	160	250	200	160	160	315	250	250	90
3	VIKING JOHNSON OR SIMILAR APPROVED FLANGE ADAPTOR	1	300	150	250	200	150	150	300	250	250	80
4	CAP TOP RESILIENT SEAL GATE VALVE (RSV) WITH AN EXTENSION AS SPECIFIED ON DWG 3095-W-902	1	300	150	250	200	150	150	300	250	250	80
5	STEEL PIPE WITH CENTRAL PUDDLE FLANGE	1	315	160	250	200	160	160	315	250	250	90
6	SUBMERSIBLE CENTRIFUGAL SUMP PUMP, AS PER PROJECT SPECIFICATIONS WITH FLANGED/DUCKSFOOT END TO SUIT	1										
7	API OR SIMILAR APPROVED LONG RADIUS FLANGED STEEL BEND	1	150	100	150	150	100	100	150	150	150	80
8	API OR SIMILAR APPROVED FLANGED STEEL PIPE, LENGTH TO BE CONFIRMED ON SITE, APPROXIMATELY 2000mm	8	150	100	150	150	100	100	150	150	150	80
9	API OR SIMILAR APPROVED LONG RADIUS FLANGED STEEL BEND	9	150	100	150	150	100	100	150	150	150	80
10	FLANGED STEEL PIPE WITH CENTRAL PUDDLE FLANGE	10	150	100	150	150	100	100	150	150	150	80
11	COAXIAL TYPE NON-RETURN VALVE (WATER TYPE), PREMIER OR SIMILAR APPROVED	1	150	100	150	150	100	100	150	150	150	80
12	FLANGED RSV GATE VALVE CL10 WITH NON-RISING SPINDLE AND SPINDLE EXTENSION PIECE	1	150	100	150	150	100	100	150	150	150	80
13	FLANGD STEEL PIPE WITH CENTRAL PUDDLE FLANGE	1	150	100	150	150	100	100	150	150	150	80
14	FLANGED STEEL REDUCER	1	150x300	100x150	150x250	150x200	100x150	100x150	150x300	150x250	150x250	
15	VIKING JOHNSON OR SIMILAR APPROVED STEEL TO uPVC FLANGE ADAPTOR	1	300	150	250	200	150	150	300	250	250	80
16	uPVC RISING MAIN TO BOOSTER PUMP STATION	1	315	160	250	200	160	160	315	250	250	90

A	FOR TENDER PURPOSES	T.B	29 AUG 2013
No	DESCRIPTION	NAME	DATE

CLIENT:

Department:
Rural Development & Land Reform
REPUBLIC OF SOUTH AFRICA

Department of Rural Development & Land Reform

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APPROVED:
CAPACITY:
DATE:

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SCALE ON A1: AS SHOWN DATE: 29 AUGUST 2013
DRAWN: T. BAIER DESIGNED: T. BAIER
DRAWING No. 3095-W-910 CHECKED: A. BUTLER
APPROVED ON BEHALF OF JGI: SIMON JOHNSON
CAPACITY: EXECUTIVE ASSOCIATE
DATE: 29 AUGUST 2013
Designed and detailed under the controls established by our quality management system that meets the requirements of ISO 9001:2008 which has been independently certified by DEKRA Certification under certificate number 90006862

PROJECT: NSUZE IRRIGATION SCHEME:
EASTERN PORTION
TITLE: TYPICAL PUMP STATION
ABSTRACTION STRUCTURE

TYPICAL PUMP STATION ABSTRACTION STRUCTURE DRAWING