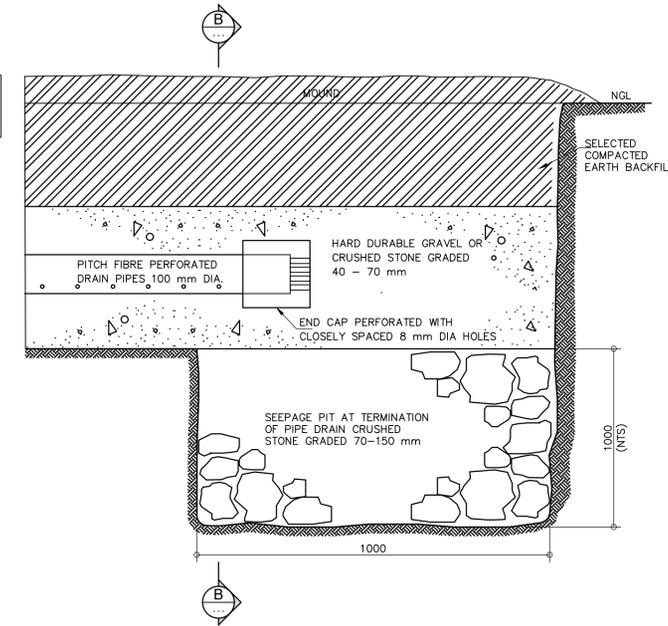
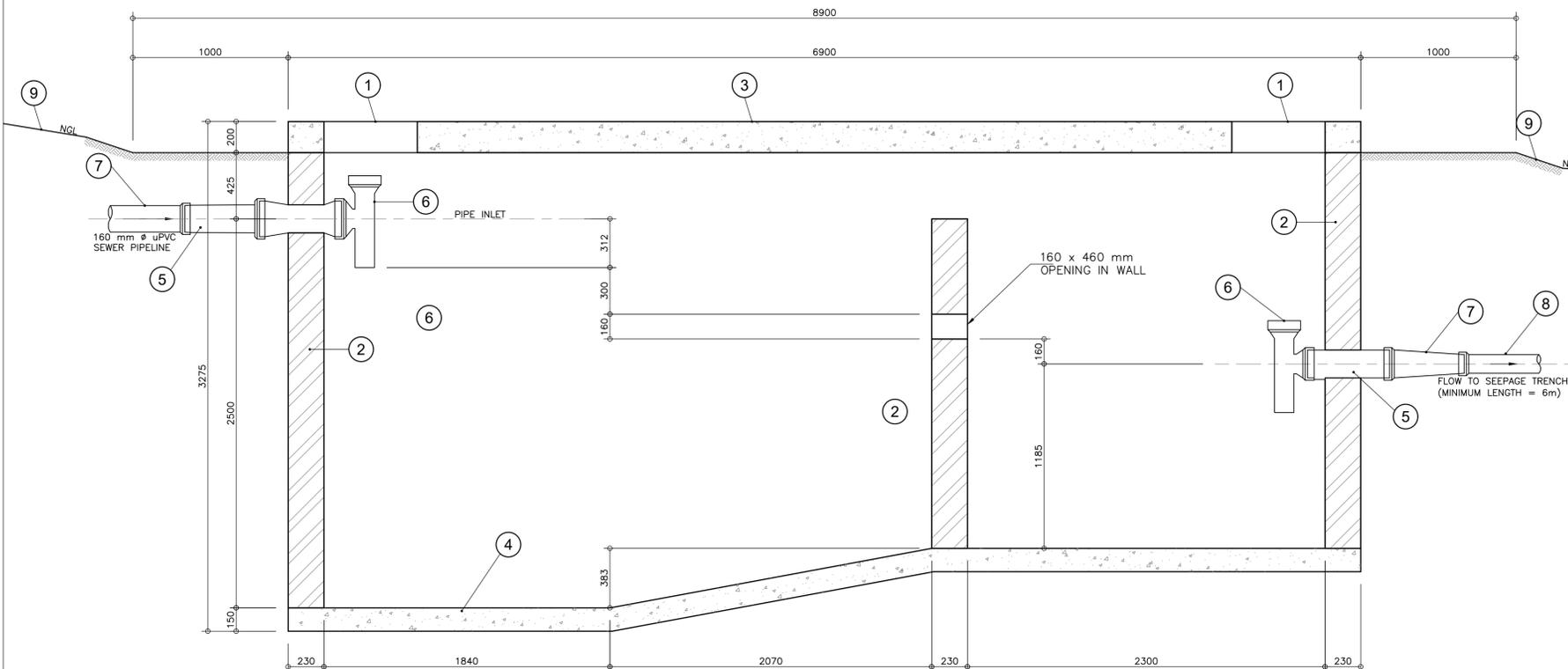


**SEPTIC TANK LAYOUT PLAN**  
SCALE 1 : 20

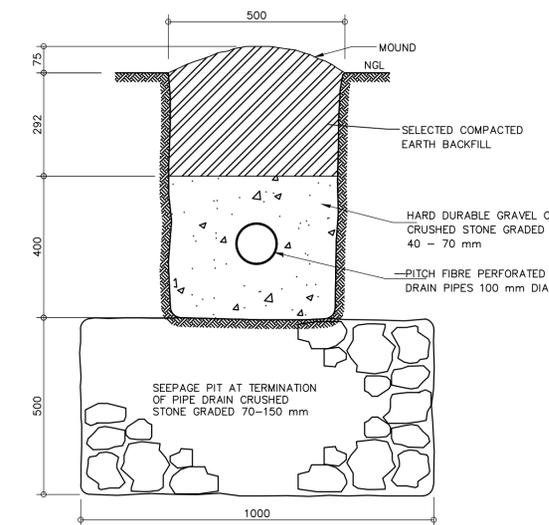
SEPTIC TANK EFFLUENT DISPOSAL DRAINS	
REF NO.	DESCRIPTION
1	600 mm x 600 mm MEDIUM DUTY CAST IRON MANHOLE COVER AND FRAME SABS 558 TYPE 6. (2 OFF)
2	SMOOTH FACE BRICKWORK (ALL EXPOSED SURFACES TO HAVE A 12 mm THICK PLASTER COAT. MORTAR SHALL CONSIST OF A 1:3 MIX RATIO)
3	200 mm THICK ROOF SLAB TO BE CLASS 25/20 CONCRETE AND HAVING REF. 395 MESH REINFORCEMENT IN TOP AND BOTTOM (50 mm COVER)
4	150 mm THICK FLOOR SLAB TO BE CLASS 25/20 CONCRETE AND HAVING REF. 395 MESH REINFORCEMENT IN BOTTOM (50 mm COVER)
5	160 mm Ø uPVC SEWER PIPE 600 mm LONG WITH SOCKET
6	160 mm Ø uPVC SEWER JUNCTION (90°) (2 OFF)
7	160 mm Ø x 110 mm Ø uPVC SEWER TAPER PIPE (2 OFF)
8	100 mm Ø PERFORATED PITCH FIBRE PIPE (TOTAL LENGTH 6 m)
9	TERRACE TO BE FORMED AROUND SEPTIC TANK WITH 1:3 CUT AND FILL SLOPES



**SECTION THROUGH SEEPAGE PIT**  
SCALE 1 : 10



**SECTION A-A**  
SCALE 1 : 20



**SECTION B-B**  
SCALE 1 : 10

- NOTES:**
- CONCRETE NOTES:**
- FOUNDATIONS**
- 1.1 EXCAVATIONS FOR FOUNDATIONS TO BE APPROVED BY THE ENGINEER BEFORE CONCRETE IS CAST.
  - 1.2 ALL FOUNDATIONS TO BE BUILT ON FIRM IN-SITU SOIL (NOT ON FILL).
  - 1.3 PILING LOGS TO BE USED TO RECORD DEPTH, DIAMETER, REINFORCING, DATE CAST, CUT OFF LEVEL, CONCRETE STRENGTH AND REFERENCE TO RELEVANT CUBES MADE FOR TESTING.
- CONCRETE**
- 2.1 CONCRETE CHARACTERISTIC 28-DAY STRENGTH:  
FOUNDATIONS ..... 25 MPa  
GROUND BEAMS ..... 25 MPa  
COLUMNS & WALLS ..... 25 MPa  
SURFACE BEDS (INTERNAL) ..... 25 MPa  
SURFACE BEDS (EXTERNAL) ..... 25 MPa  
SUSPENDED SLABS ..... 25 MPa
  - 2.2 NOMINAL CONCRETE AGGREGATE SIZE ..... 19mm
  - 2.3 ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP FOR AT LEAST 5 DAYS AFTER CASTING.
  - 2.4 ALL CONCRETE TO BE CONSTRUCTED TO THE SABS 1200-G PERMISSIBLE DEVIATION DEGREE OF ACCURACY CLASS II, UNLESS OTHERWISE SPECIFIED.
  - 2.5 CONCRETE CUBE TESTS TO BE SUBMITTED TO ENGINEER FOR APPROVAL.
- REINFORCEMENT**
- 3.1 ALL REINFORCEMENT TO BE CHECKED AND APPROVED BY THE ENGINEER BEFORE ANY CONCRETE IS CAST.
  - 3.2 LAP LENGTH TO REINFORCING TO BE MIN. 50 x SMALLER DIAMETER, UNLESS OTHERWISE NOTED.
  - 3.3 MINIMUM COVER TO REINFORCING:  
PILE CAPS & GROUND BEAMS ..... 50mm  
COLUMNS & WALLS ..... 30mm  
STRIP & PAD FOUNDATIONS ..... 50mm  
SUSPENDED SLABS ..... 30mm  
BEAMS TO SLABS ..... 30mm
  - 3.4 THE CONTRACTOR MUST TAKE PARTICULAR CARE TO ENSURE THAT THE SPECIFIED COVER TO ALL REINFORCEMENT HAS BEEN ATTAINED THROUGHOUT BEFORE THE ENGINEER IS CALLED TO SITE.
  - 3.5 REINFORCING YIELD STRENGTH:  
HIGH TENSILE Y ..... 450 MPa  
MILD STEEL Y ..... 250 MPa  
WELDED STEEL WIRE MESH ..... 485 MPa
- FORMWORK**
- 4.1 STRIPPING TIMES FOR:  
COLUMN AND WALL SHUTTERING ..... 1.5 DAYS  
SLAB PROPS ..... 14 DAYS  
BEAM PROPS ..... 21 DAYS
  - 4.2 CONCRETE FINISHES:  
SURFACE BEDS ..... POWER FLOAT  
SUSPENDED SLABS ..... WOOD FLOAT  
COLUMNS & WALLS ..... OFF SHUTTER  
BEAMS ..... OFF SHUTTER  
SLAB SOFFIT ..... OFF SHUTTER

DATE	NO.	REVISION / VARIATIONS	KUT
28.09.23	1	ISSUED FOR TENDER	BS

CLIENT:

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**  
CNR 113 BILLARD & 24 EXCELSIOR STREET  
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IMPLEMENTING AGENT:

**THE MVULA TRUST**  
A leading developmental NGO

ROP 6 RHODES DRIFT OFFICE PARK  
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PROJECT:  
**LIMPOPO DEPARTMENT OF EDUCATION**

**WATER, SANITATION AND FENCING PROGRAMME**

TITLE:  
**LAERSKOOL  
BYSONDERHEID  
SEPTIC TANK DETAILS**

DRAWING No.: **K1000-LB-018**

SCALE:	AS SHOWN	DESIGNED:	BS
		DRAWN:	KN
DATE:	SEPTEMBER 2023	APPROVED:	BS
REV. NO.	<b>1</b>		