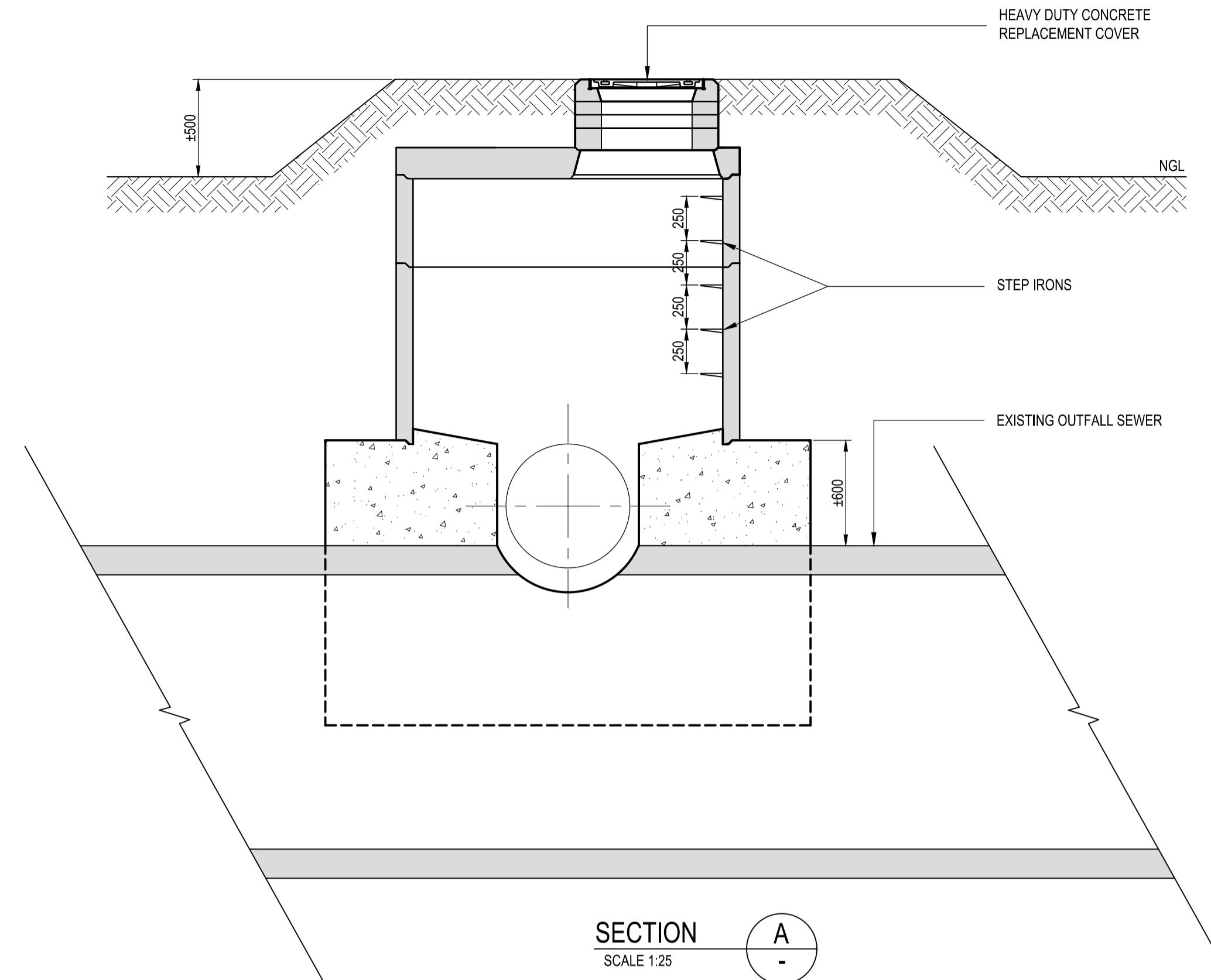


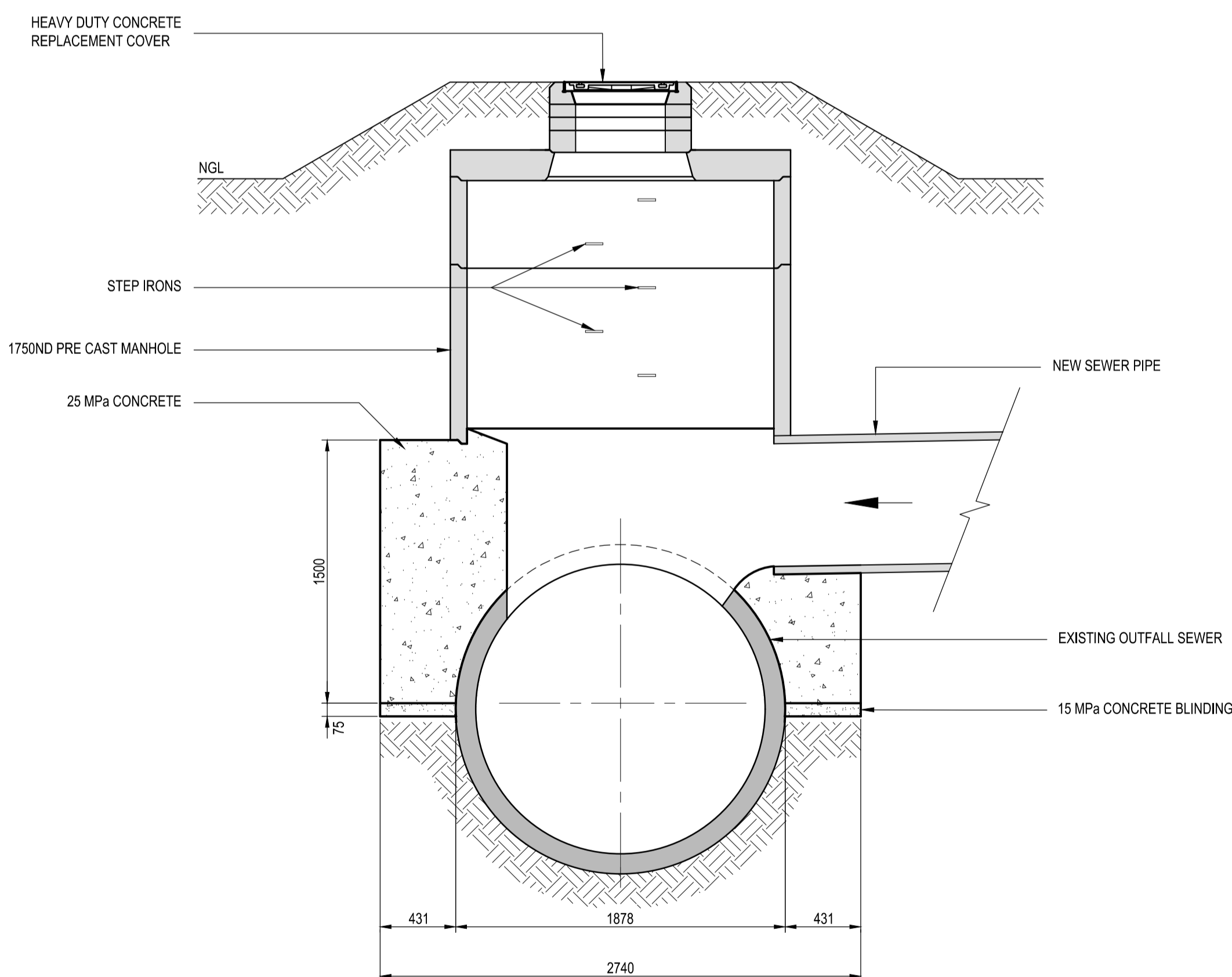
PLAN

SCALE 1:25



SECTION A

SCALE 1:25



SECTION B

SCALE 1:25

NOTES AND SPECIFICATIONS

GENERAL

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN mm (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:
 REINFORCED CLASS 30/19
 THRUST BLOCKS CLASS 20/19
 BLINDING CLASS 15/19
 FLOOR SCREED SAND : CEMENT = 3 : 1
10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT (APPROVED BY THE DESIGNER).
12. SEWERS INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWING.

PARTICULAR:

1. CONCRETE MANHOLES TO BE OF DOLOMITIC ORIGIN
2. CHANNELING & BENCHING IN MANHOLES & CULVERT SECTIONS TO BE OF GRANDOLITHIC CONCRETE & MUST BE CONSTRUCTED WITH A FINAL THICKNESS OF 25mm FOR CHANNELING & 50mm FOR BENCHING
3. CONCRETE COVER TO ALL REBAR TO BE 40mm MINIMUM
4. CONCRETE SECTIONS MUST BE FIXED WITH AN APPROVED EPOXY SEALER
5. FACTORY MADE MANHOLE SECTIONS TO BE IN ACCORDANCE WITH SANS 1294
6. NO PART OF THE MANHOLE MAY BE FINISHED OFF WITH CEMENT-WASH OR MORTAR
7. TWO MANHOLE ACCESS SHAFTS MAY BE INSTRUCTED BY THE ENGINEER, ONE AT EACH END OF CULVERT SECTION
8. ENGINEER TO PROVIDE BENDING SCHEDULES FOR THE REINFORCEMENT
9. THE ROOF SLAB SHALL NOT BE FIXED TO THE RINGS WITH EPOXY BUT SHALL BE REMOVABLE FOR CLEANING PURPOSES. IT SHALL THEREFOR HAVE LIFTING LUGS CAST IN
10. STEP IRONS TO BE COPOLYMER POLYPROPYLENE ENCAPSULATED 12mm HIGH TENSILE STEEL BAR.



City of Ekurhuleni
WATER AND SANITATION DEPARTMENT

AMENDMENTS			
NR	DATE	APPROVED	DESCRIPTION

WATER AND SANITATION
APPROVED ON BEHALF OF:
OPERATIONS DIVISION

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTANT DETAILS TO BE PLACED HERE

DESIGNED

NAME:.....
SIGNATURE:..... DATE:.....

DRAWN

NAME:.....
SIGNATURE:..... DATE:.....

APPROVED

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTANT DRAWING NUMBER

CONTRACT No.

PROJECT No.

SHEET No.

PAPER SIZE
A1

SCALE

PROJECT TITLE
STANDARD GUIDELINE DRAWINGS

DRAWING TITLE
**STANDARD DRAWING: SEWER RETICULATION
TYPICAL SEWER MANHOLE CONNECTION
TO EXISTING OUTFALL SEWER**

COE DRAWING NUMBER
STD-SR-006