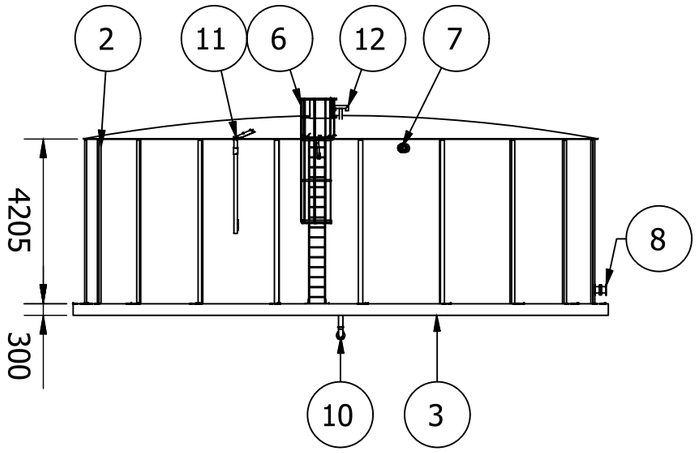
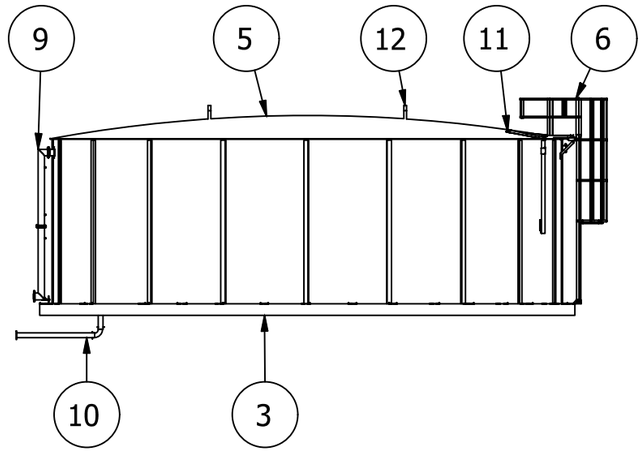
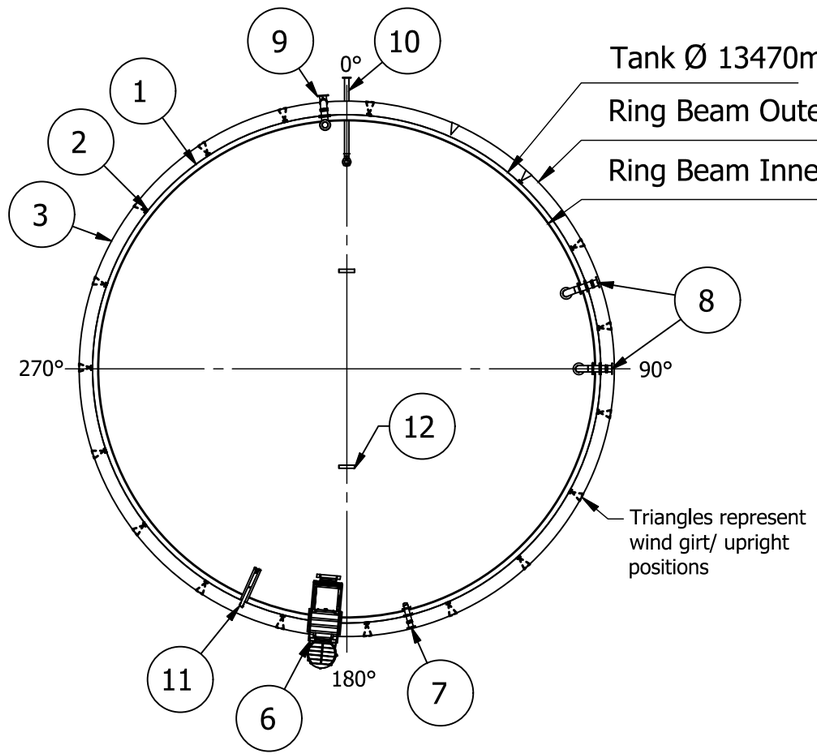


FRONT ELEVATION



LEFT SIDE ELEVATION



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	Tank Wall Panels	Zincalume Steel Panels, Steel Grade G300, with AZ150 Heavy Duty Coating.
2	19	Wind Girts/Uprights & Covers	Wind Girts are made from 2.4 mm hot dipped galvanised sheet metal. Punched and bent into profile
3	1	Concrete Ring Beam	Reinforced, 25MPa min.
4	1	Truss Set (Not Shown)	Made from SHS (300 MPa min) and EA steel. Hot dipped galvanised after fabrication. Roof rated to withstand a 67m/s wind load.
5	1	Dome Roof	Zincalume corrugated sheets, 0.47 mm thick, Grade G550, with AZ150 coating.
6	1	Tank Access - 600mm	Fixed, c/w internal & external ladders, safety cage, platform, access hatch & hand rails.
7	1	Inlet - 160NB	Internal deflector, external flange.
8	2	Outlet - 160NB	Internal anti-vortex (Standard), external flange c/w pipe closure.
9	1	Overflow - 200NB	Internal Bell Mouth, external Downpipe with flanged termination complete with 2 x pipe clamps.
10	1	Scour, Floor Mount - 150NB	Internal flange, external flange c/w pipe closure.
11	1	Water Level Indicator	Mechanical (half height reading)
12	2	Ventilator	Static, 76 x 76 SHS.

Note:
- Nozzle & accessory positions are for representation only, please indicate final positions if required.
- All external flanges are SANS 1123: 1000/3.
- All dimensions in mm unless otherwise specified.
- Standard potable water liner.
- Drawing not to scale.
- Projects to select the appropriate pipe closure for each designated nozzle.

Rev.	By	Date	Revisions	Approved
5				
4				
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1				

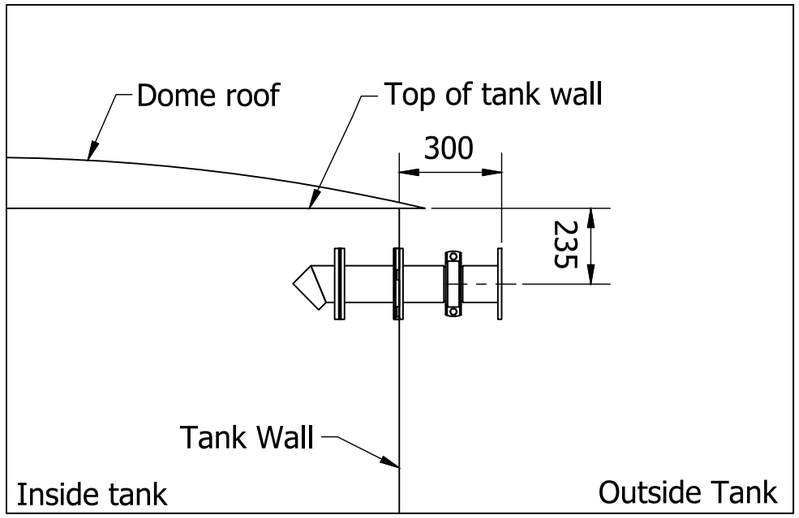
Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

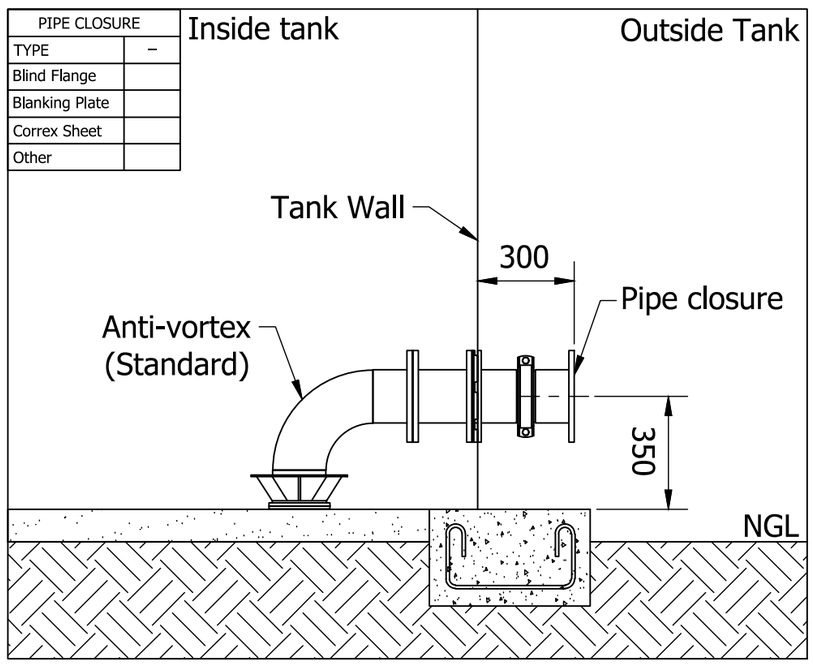
Title: TANK & ACCESSORIES

Dwg No: BC/KT/TA/001
Rev: 00
Description:
Sheet: 1 /2

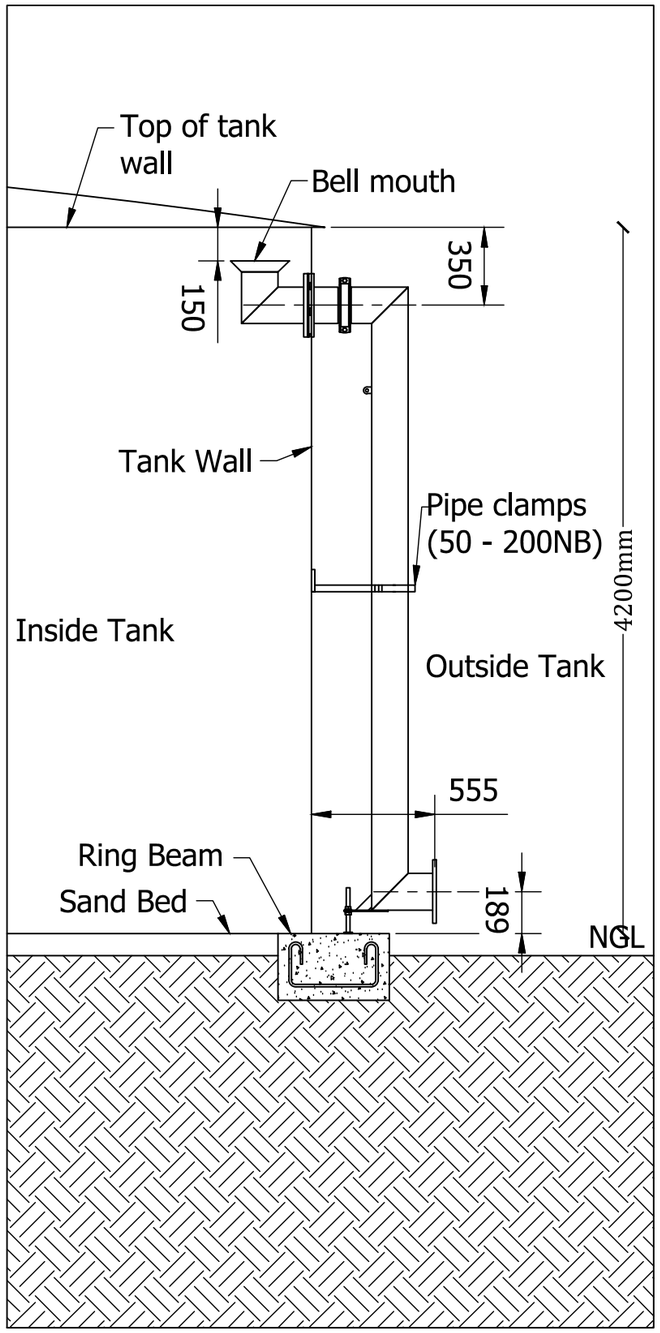


ITEM 7 (INLET - 100NB)

PIPE CLOSURE	
TYPE	–
Blind Flange	
Blanking Plate	
Correx Sheet	
Other	

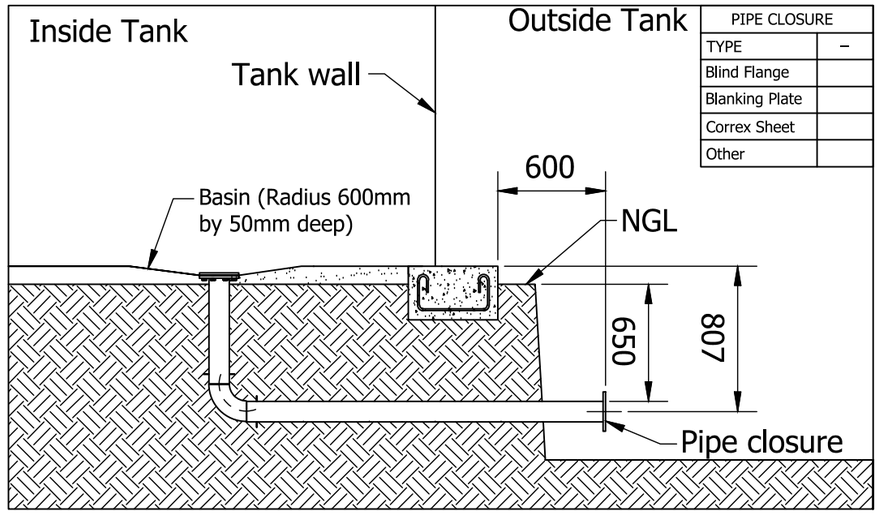


ITEM 8 (OUTLET - 150NB)

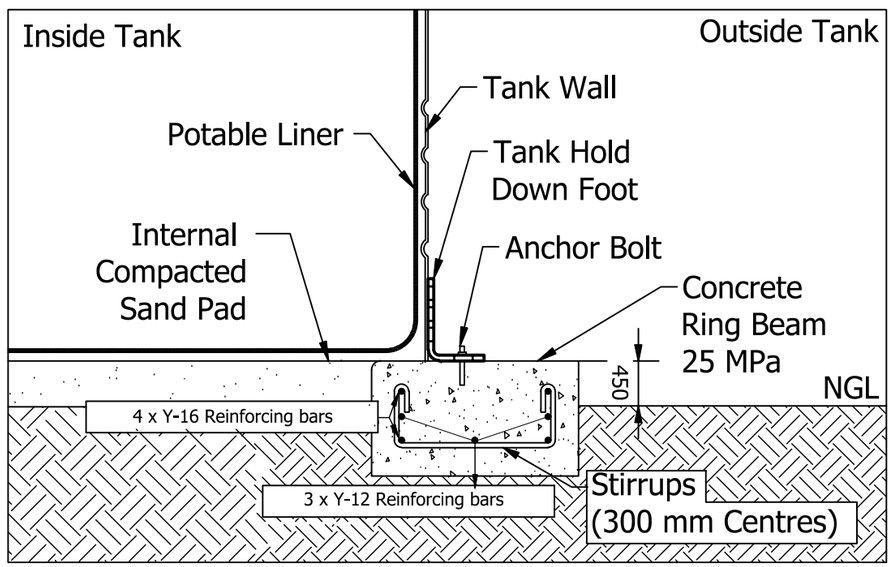


ITEM 9 (OVERFLOW - 150NB)

PIPE CLOSURE	
TYPE	–
Blind Flange	
Blanking Plate	
Correx Sheet	
Other	



ITEM 10 (SCOUR - 100NB)



TANK FASTENING & RING BEAM DETAIL

Rev.	By	Date	Revisions	Approved
5				
4				
3				
2				
1				

Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

Title: TANK & ACCESSORIES

Dwg No: BC/KT/TA/002
Rev: 00
Description:
Sheet: 2 /2

CONCRETE RING BEAM NOTES AND GUIDELINES

1. This document contains the minimum required dimensions and guidelines and is not to be used for construction unless officially issued by an approved engineer or company representative

2. Ring beam sizes shown are suitable for geographic areas which do not experience wind speeds exceeding 43 m/s (154.8 km/h). Should wind speeds in excess of this be expected, then special designs must be prepared.

5. It is very important to ensure that foundation conditions comply to the following mimimums.
Minimum requirements:
- Safe bearing capacity should equal or exceed 100 kPa
- The founding material must be stable
- Hand float top surface

6. Most sands and gravels that have been compacted to 100 kPa or more will be adequate, provided that there is stable soil underneath.

7. Should there be any doubt about the stability or strength of the foundation, site specific professional engineering advice must be sought.

8. In areas with corrosive soil conditions, special protective measures should be used.

9. Ring beam width and depth are tank model dependant and allow for specialised jacking when required. Ring beam dimensions must not be altered for any unapproved reason and without any consultation from the supplier.

10. Not to scale

CONSTRUCTION TOLERANCES

Outside Diameter	+ 20 mm - 0 mm
Inside Diameter	+ 0 mm - 20 mm
Level of top surface	+/- 2 mm over any 2 m sector of circumference measured/surveyed at tank wall final position. +/- 4 mm over entire ring beam

ST15 CONCRETE RING BEAM & STIRRUP DIMENSIONS

Ring Beam Outer Diameter Ø	14170 mm
Ring Beam Inner Diameter Ø	12670 mm
Ring Beam Width	750 mm
Ring Beam Depth	750 mm
Stirrup Width	650 mm
Stirrup Depth	650 mm
Height of Tank	4200 mm

Approved for Construction

Name	Sign	Date	Designation

Rev.	By	Date	Revisions	Approved
5				
4				
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Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

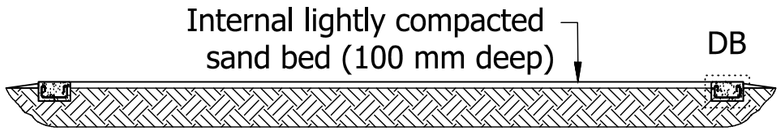
ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

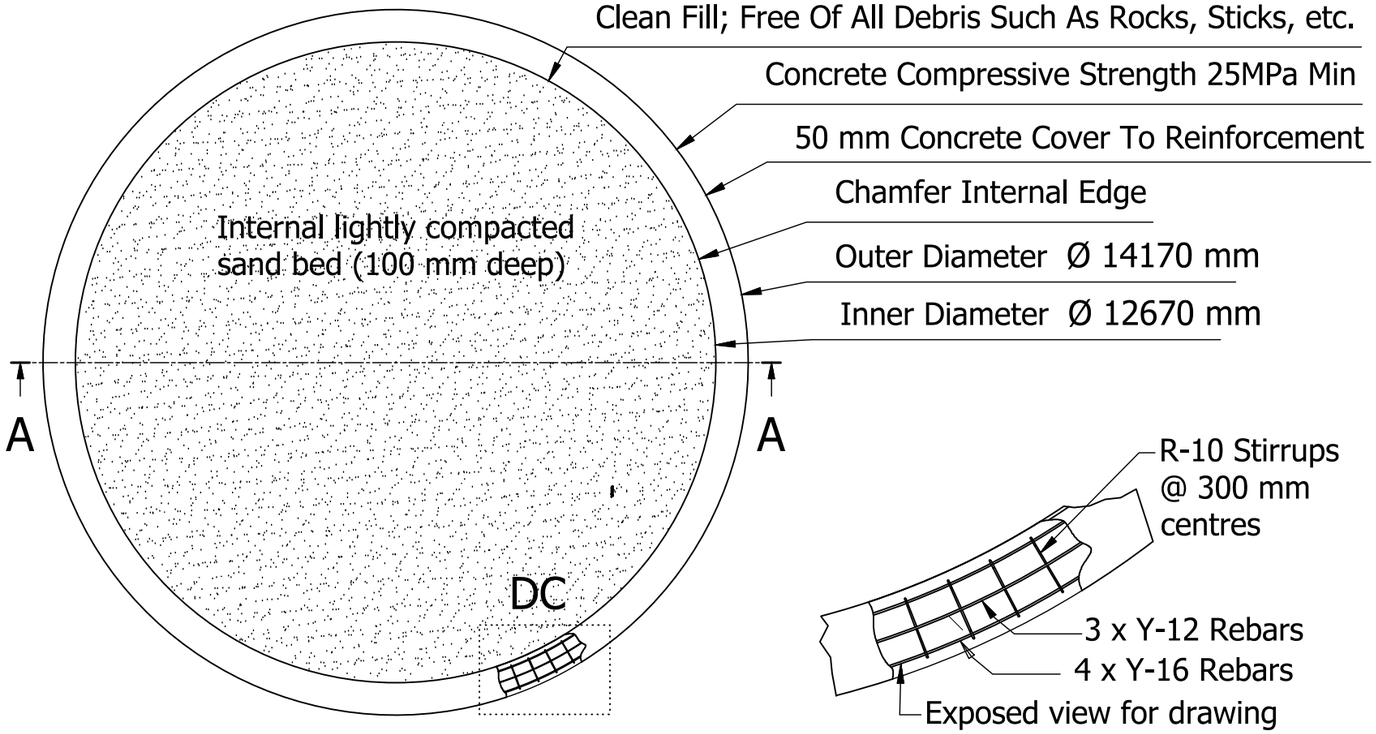
Title: CONCRETE RING BEAM, REINFORCED

Dwg No: BC/KT/RB/003
Rev: 00
Description:
Sheet: 1/2

ST15 CONCRETE RING BEAM - NOT TO SCALE



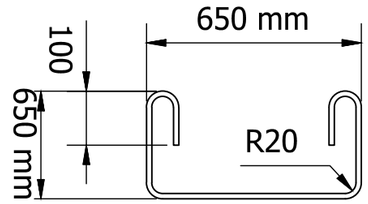
SECTIONAL FRONT VIEW ON A-A



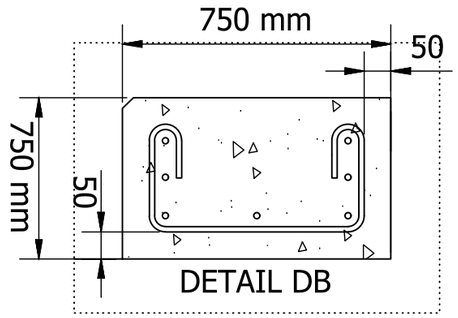
PLAN VIEW

DETAIL DC

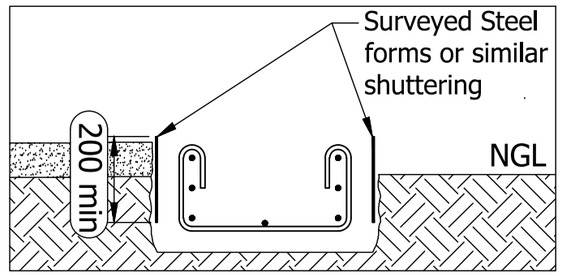
Approved for Construction			
Name	Sign	Date	Designation



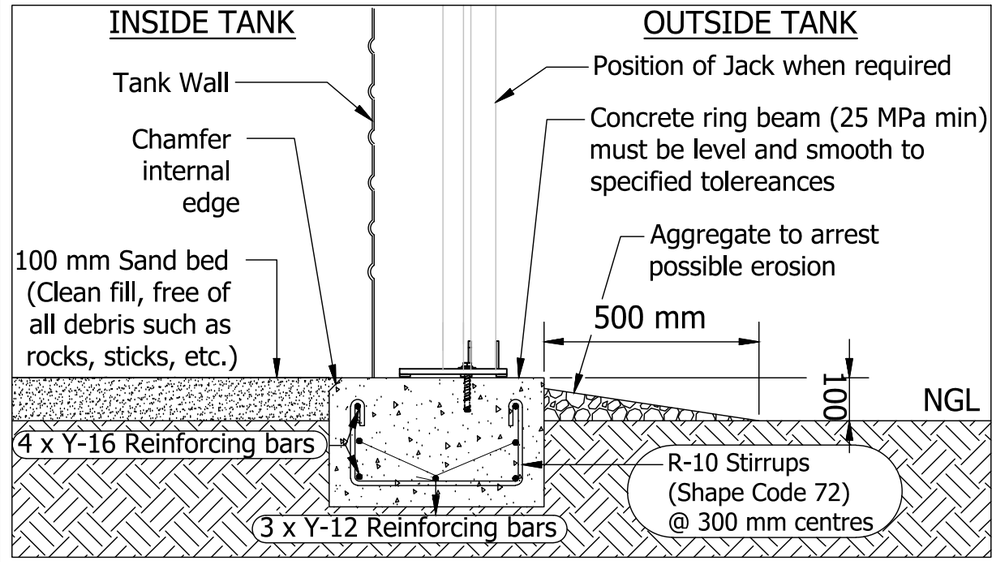
R-10 STIRRUP DIMENSIONS
(SANS 282: 2011, SHAPE CODE 72)



CONCRETE RING BEAM
WIDTH & DEPTH
(NOT TO SCALE)



FORMED SURFACES



FINISHED RING BEAM DETAIL

Rev.	By	Date	Revisions	Approved
5				
4				
3				
2				
1				

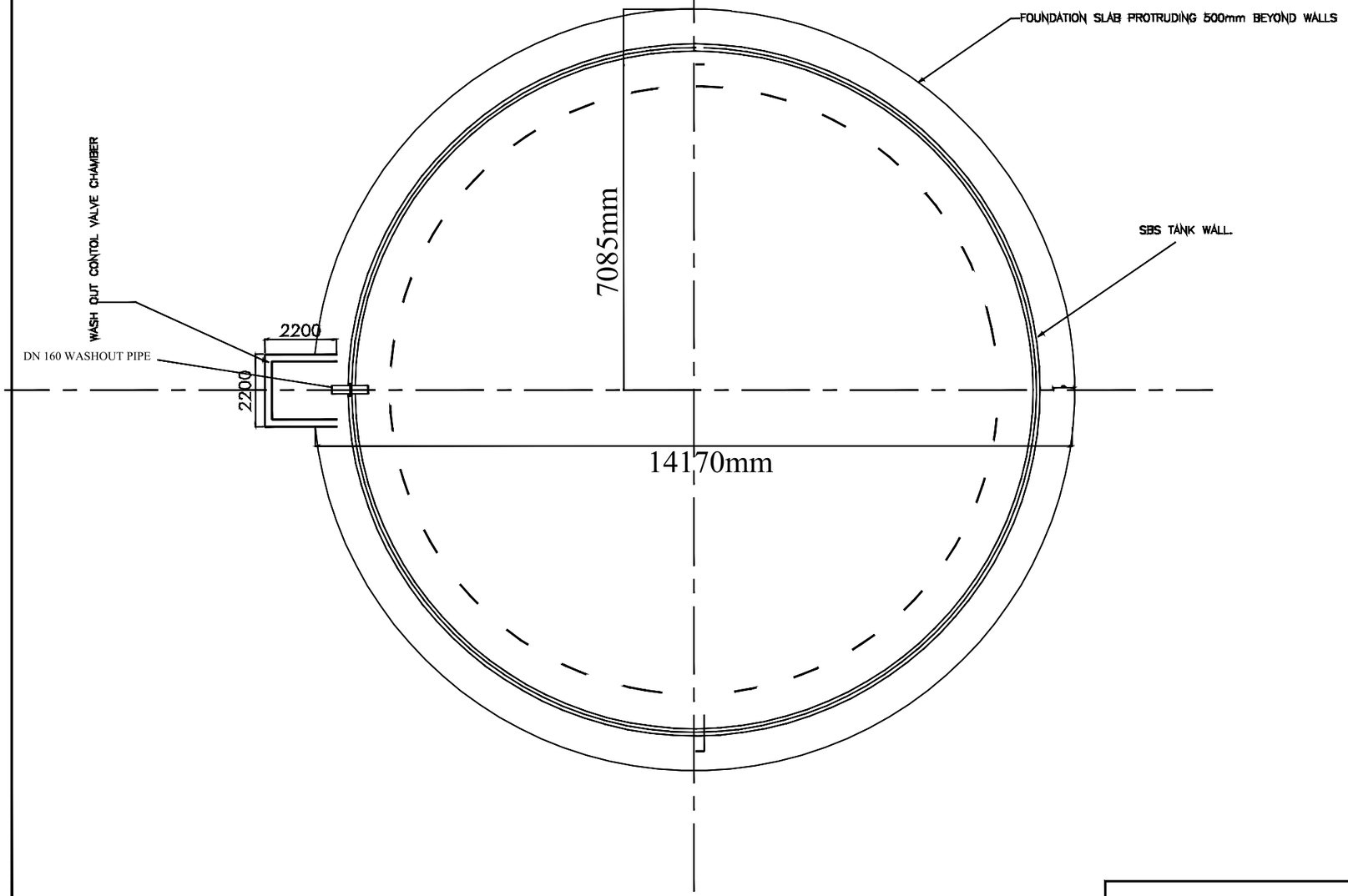
Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

Title: CONCRETE RING BEAM, REINFORCED

Dwg No: BC/KT/RB/004
Rev: 00
Description:
Sheet: 2/2



FOUNDATION LAYOUT

1. Concrete mix:– Unless otherwise specified the concrete shall be a 1:1.5:3 mix and shall give min. work cube strength or 18N/mm2 at 7 days and 25N/mm2 at 28 days.

2. Aggregates in coarse and fine to be clean and devoid of foreign matter comply with BS 882. with maximum aggregate size of 20mm

3.Steel must be high tensile deformed type 2 with characteristic strenght of not less than 425N/mm2

4. Steel placing:– No concreting shall be done until the placing of steel reinforcement has been inspected and approved by a site Engineer.

5. Concrete cover:– Unless otherwise specified min. cover over main bars to be 50mm for foundation,25mm for slabs,30mm for beam and 40mm for column.

6. Construction breaks and shuttering stripping time to be directed and approved by site Engineer.

7. Curing:– The exposed surface of the concrete shall be kept moist for a min. period of 7 days after placing.

8. Any disagreement should be immediately specified to this office before placing.

9.Water proofing (Internally):–Provide 20mm thick rendering added sealocrete waterproofing compound as per sealocrete hand book. or approved equivalent

10.The foundations have been designed for soil with bearing capacity of 100kn/m2, actual bearing soil capacity to be confirmed on site.

Approved for Construction			
Name	Sign	Date	Designation

Rev.	By	Date	Revisions	Approved
5				
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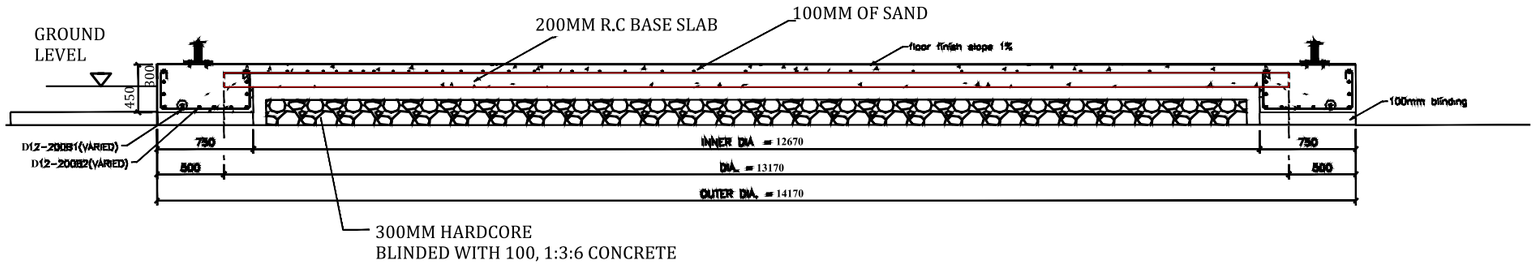
Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

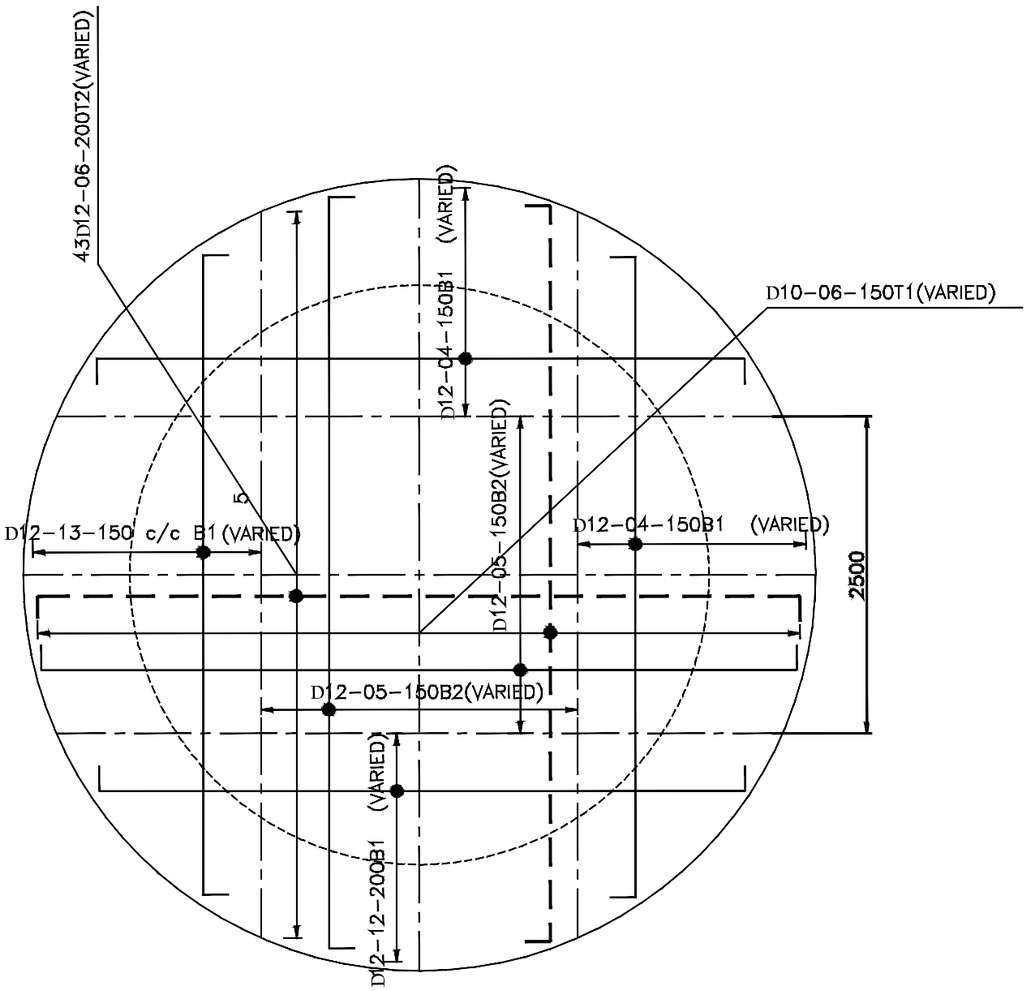
ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

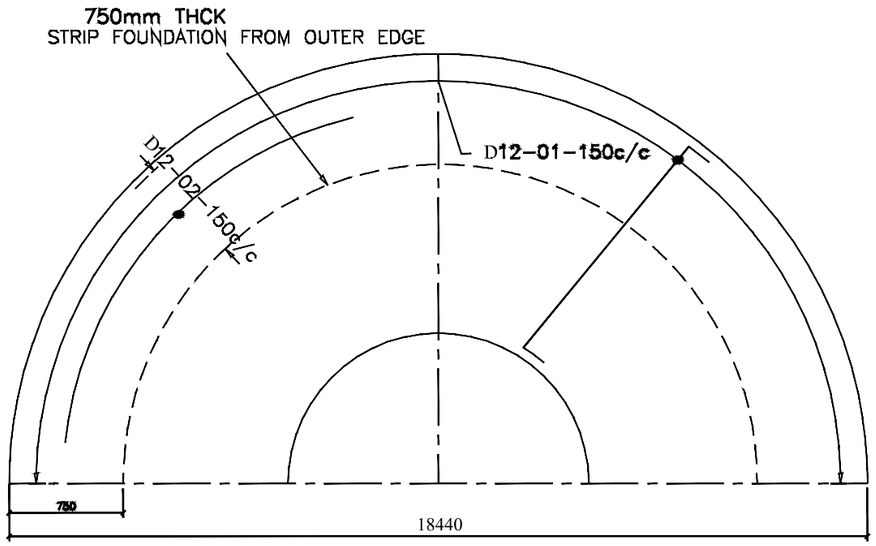
Title: FOUNDATION LAYOUT
Dwg No: BC/KT/FL/005
Rev: 00
Description:
Sheet: 1/2



SECTION DETAILS



DETAIL OF FLOOR REINFORCEMENT



DETAIL OF FOUNDATION REINFORCEMENT

Approved for Construction			
Name	Sign	Date	Designation

Rev.	By	Date	Revisions	Approved
5				
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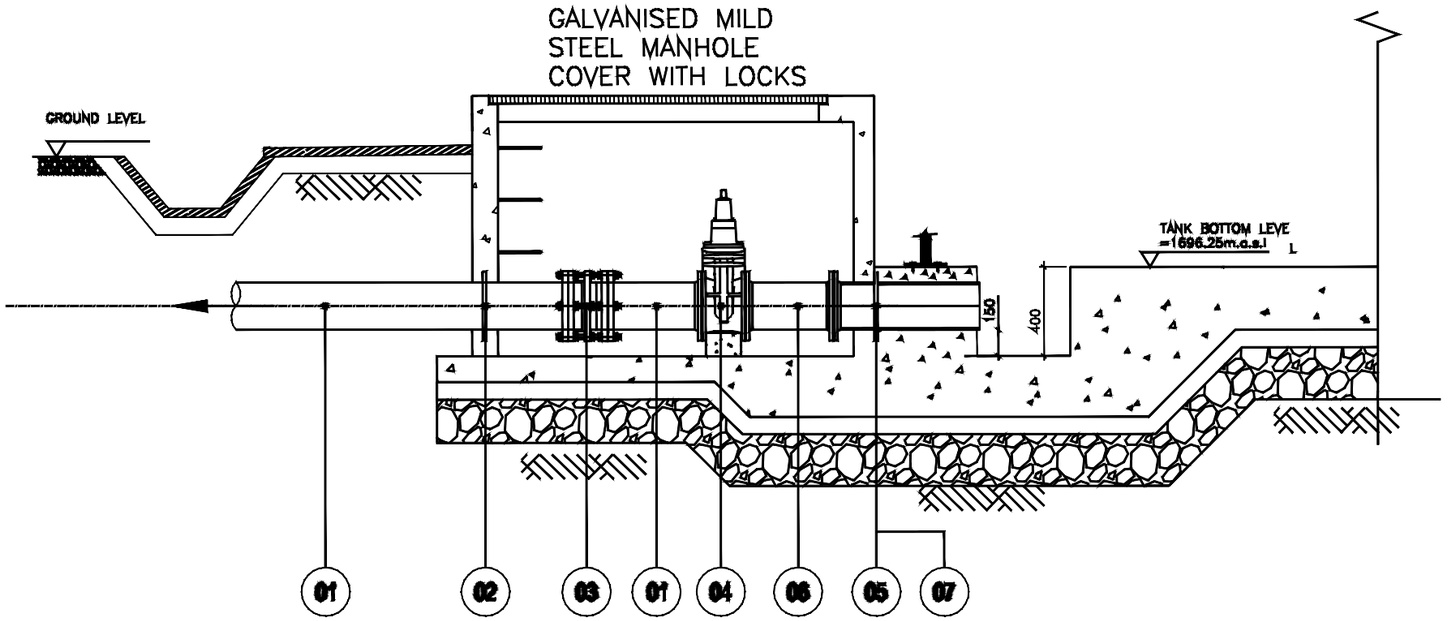
Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

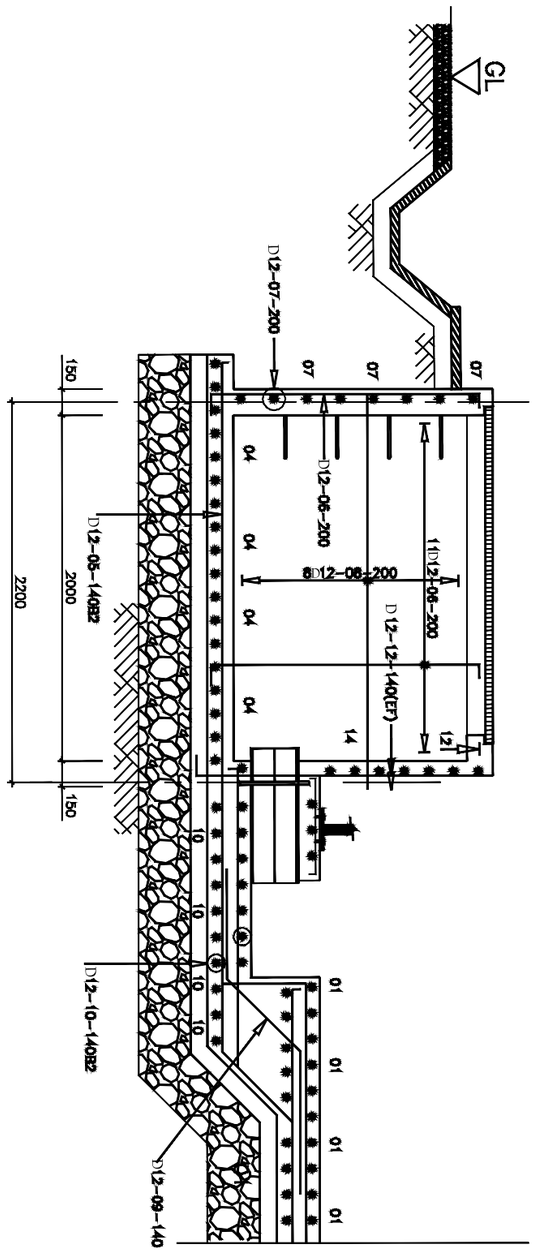
ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

Title: FOUNDATION LAYOUT
Dwg No: BC/KT/FL/006
Rev: 00
Description:
Sheet: 2/2



SCALE 1:20



SCHEDULE OF PIPES & FITTINGS

ID	Item	Quantity (Nos)
01	Steel Pipe, Flange-Spigot, Length to fit, PN16, DN160	02
02	Steel Wall Puddle flange for DN160 Pipeline	01
03	DCI Dismantling Piece, PN16, DN160	01
04	DCI Gate Valve, Flanged, PN16, DN160	01
05	Flange-Spigot Pipe, PN16, DN160, with Wall Puddle Flange	01
06	Flanged Pipe, Length to fit, PN16, DN160	01
07	Flange-Spigot Pipe, PN16, DN200, with Wall Puddle Flange	01

Rev.	By	Date	Revisions	Approved
5				
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Drawn: JT
Date: 16/09/2022
Approved: JN
Date: 16/09/2022

ENGINEERS:

TANA WATER WORKS DEVELOPMENT AGENCY
P.O BOX 1292 - 10100,
NYERI, KENYA

Title: WASHOUT DETAILS
Dwg No: BC/KT/WO/007
Rev: 00
Description:
Sheet: 1/1