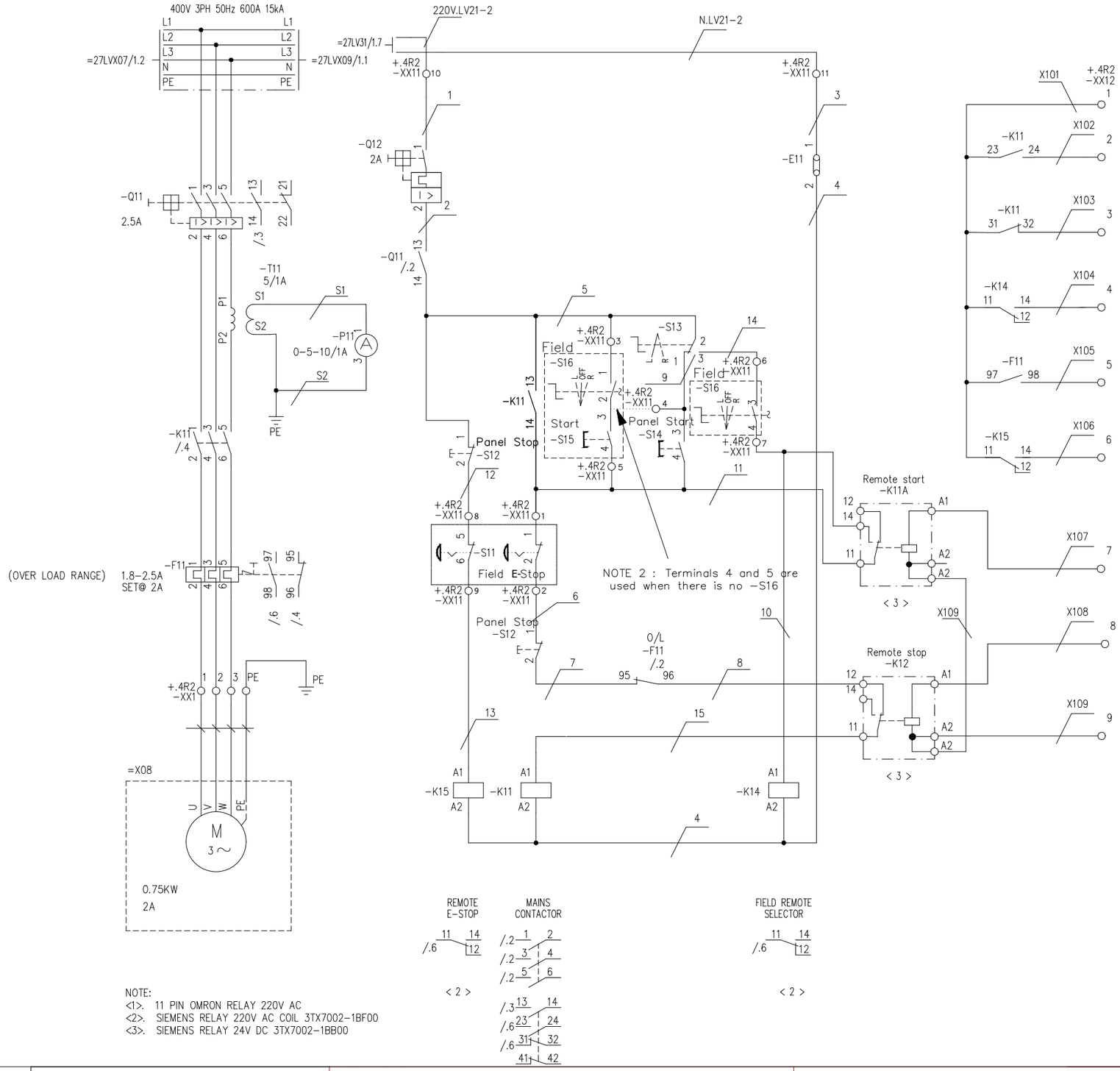



| REFERENCES | |
|---|---|
| DWG NUMBER | DESCRIPTION |
| | |

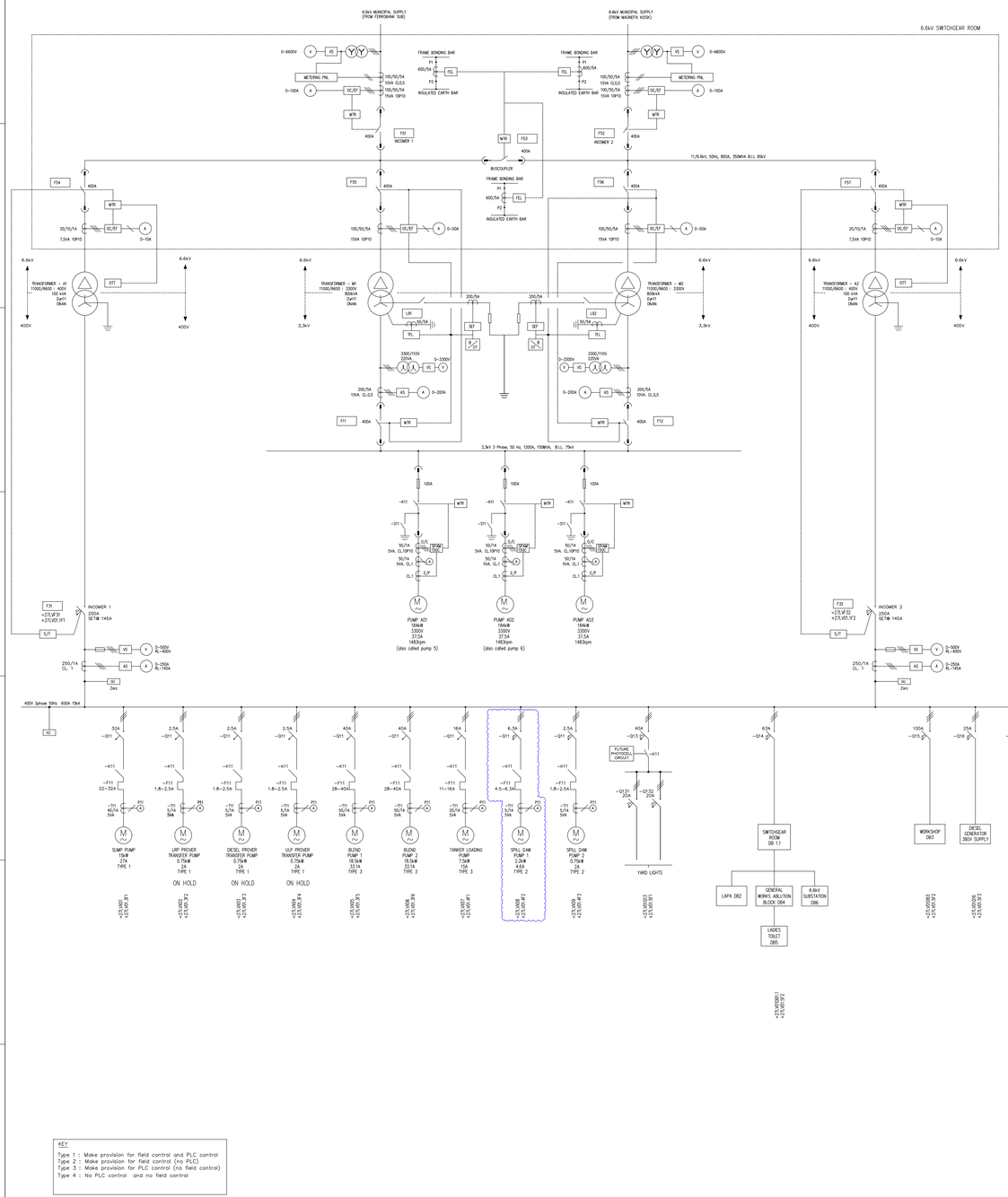
| REVISIONS | | | | | |
|---|---|---|---|---|---|
| REV | BY | DATE | DESCRIPTION | CHK | APP |
| A | A.Z | 11/09/2024 | REPLACED TITLE BLOCK WITH TPL'S NEW TITLE BLOCK | | |

TRANSNET pipelines

# WITBANK SPILL DAM PUMP X08 SCHEMATIC DIAGRAM

| PROJECT NAME | | | |
|---|---|---|---|
| DRAWN | A.Z | REF. | – |
| TRACED | CAD | DATE | 11-09-2024 |
| CHECKED | Z.M | APPROVED | Z.M |
| SCALE | N.T.S. | | |
| ORIGINAL No. | G5200-U4027-S159(1.0) | | REV |
| EDMS No. | PL 122738 | | A |

A3




**DB1 SWITCHGEAR ROOM (ESSENTIAL SUPPLIES)**

1. LAB, KITCHEN & DIESEL GEN ROOM PLUGS
2. LAB & CONTROL ROOM PLUGS
3–9. BLANK
10. COMMS ROOM FAN
11. SECURITY LIGHTS
12. CONTROL ROOM LIGHTS
13. TEST FOR LIGHT MAST – BYPASS
14. LAMP MAST CONTROL
15. 3PH LIGHT MAST SUPPLY
16–18. SPARE 3 PH 5A
19. CONTROL & SWITCHROOM PLUGS
20. COMMS ROOM PLUGS
21–22. E/L
23. PLUGS IN CONTROL ROOM ON FLOOR
24–25. BLANK
26. SPARE 5kVA UPS & METERING
27. BLANK
28. REPEATER CHARGER (REDUNDANT)
29. SECURITY LIGHT
30. CLOCK (REDUNDANT)
31. SWITCH ROOM LIGHTS
32. CONTROL ROOM LIGHTS
33. CONTROL ROOM LIGHTS
34–36. 3PH LIGHT MAST SUPPLY
37. FANS IN LAB
38. PLUGS IN CONTROL ROOM
39–42. E/L
43. BLANK
44. SENSOR MAST POLE BYPASS SWITCH
45. FORM CONCENTRATE PUMP HOUSE
46. SECURITY LIGHTS
47. BELL
48. AIR CON/WARNING & SECURITY LIGHT CONTROL
49. COMMS ROOM LIGHTS
50. GEN. ROOM LIGHTS
51. LAB, TOILET, KITCHEN LIGHTS
52–54. 3PH LIGHTS MAST SUPPLY

**WORKSHOP DB 3**

1. WORKSHOP LIGHTS
2. WORKSHOP PLUGS
3. BLANK
4. E/L
5–7. SPARE 3 PH 5A
8–12. BLANK
13. WORKSHOP HEATER
14. WORKSHOP HEATER
15. 3PH WORKSHOP HEATER SUPPLY
16. FIRE CUB LIGHTS
17. OFFICE PLUGS
18. BLANK
19. E/L
20–22. SPARE 3 PH 5A
23. GEYSER
24. GEYSER ISOLATOR
25. 3PH COMPRESSOR SUPPLY
26. HEATER OFFICE
27. HEATER OFFICE
28. 3PH HEATER OFFICE SUPPLY
29–30. PLUGS & LAB LIGHTS
31. LAB PLUGS
32. SPARE 30A
33–35. BLANK
36. FAN IN LAB
37. OFFICE HEATER THERMOSTAT
38. BLANK
39. HEATER OFFICE & LAB
40. HEATER OFFICE & LAB
41. 3 PH HEATER OFFICE & LAB SUPPLY

**DB1.1 SWITCHGEAR ROOM**

1–3. SPARE 3 PH 20A
4. ISOLATOR
5–9. BLANK
10–12. SPARE 3 PH 20A
13. SPARE (PREVIOUSLY SECURITY KIOSK SUPPLY)
14. 6.6kV SUBSTATION SUPPLY DB6
15. SPARE
16–21. 3 PH ABLUTION BLOCK + FEMALE TOILET SUPPLY DB4
22. CONTROL ROOM AIR CON
23. LAPA SUPPLY DB2
24–27. BLANK

**LAPA DB2**

1. E/L
2. FLOOD
3. FISH POND PUMP
4. LIGHTS
5. SPARE 15A
6. ROOF FAN
7–8. BLANK

**GENERAL WORKS ABLUTION BLOCK DB4**

1. LIGHTS
2. PLUGS
3–6. E/L
7. LADIES TOILET SUPPLY DB5
8–9. SPARE
10. ISOLATOR GEYSER
11. HEATER
12–18. BLANK
19. ISOLATOR GEYSER
20. GEYSER

**LADIES TOILET DB5**

1. E/L
2. PLUGS
3. GEYSER
4. LIGHTS
5–7. BLANK

**6.6kV SUBSTATION DB6**

1. MAINS SWITCH
2–3. E/L
4–5. BLANK
6. PLUGS
7. LIGHTS
8–9. BLANK

**LEGEND**

- H.R.C. FUSE
- VOLTMETER SELECTOR SWITCH
- VOLTMETER
- AMMETER, MAXIMUM DEMAND
- CURRENT TRANSFORMER
- CIRCUIT BREAKER INSTANTANEOUS
- CABLE TERMINATION
- DIRECT ON LINE STARTER
- SOFT STARTER
- 3 PHASE SQUIRREL CAGE MOTOR
- TRANSFORMER/CVT
- ISOLATING FUSE-SWITCH FOR ON-LOAD SWITCHING
- CIRCUIT BREAKER INSTANTANEOUS AND OVER LOAD PROTECTION

| | |
|---|---|
| E/F | EARTH TRIP |
| VS | VOLTMETER SELECTOR SWITCH |
| AS | AMMETER SELECTOR SWITCH |
| OTT | OIL TEMP TRIP–TRIPR |
| MTR | MASTER TRIP RELAY |
| OC/EF | OVERCURRENT /EARTH FAULT PROTECTION |
| REF | RESTRICTED EARTH FAULT |
| SEF | SENSITIVE EARTH FAULT |
| TEL | TANK EARTH LEAKAGE–TRPR |
| hrs | RUNNING HOUR METER |
| FEL | FRAME EARTH LEAKAGE |

| REFERENCES | |
|---|---|
| DWG NUMBER | DESCRIPTION |

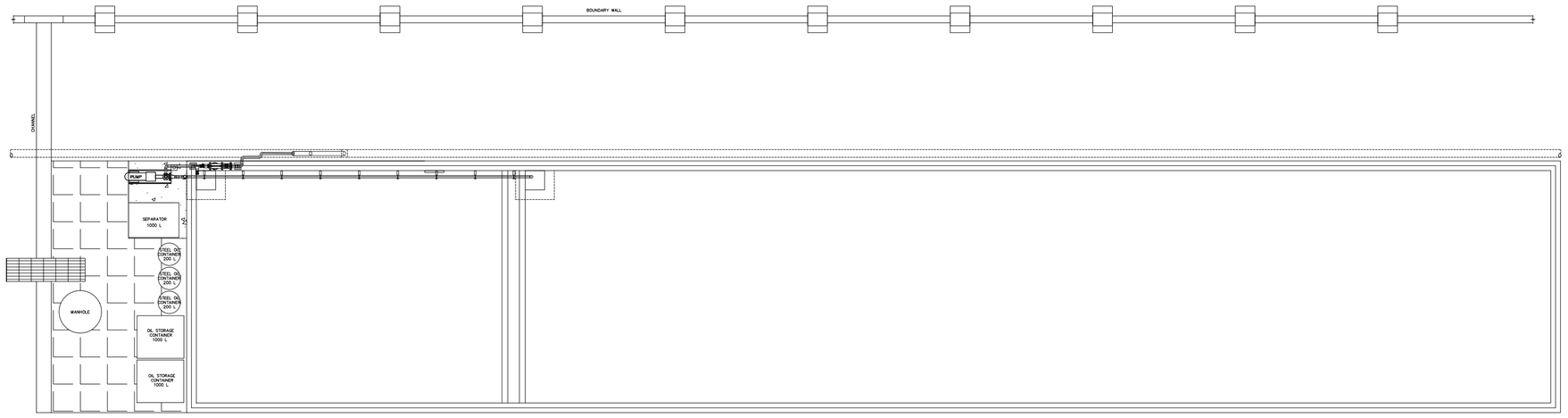
| REVISIONS | | | | | |
|---|---|---|---|---|---|
| REV | BY | DATE | DESCRIPTION | CHK | APP |
| A | A.Z | 11/09/2024 | REPLACED TITLE BLOCK WITH TPL'S NEW TITLE BLOCK | | |

TRANSNET pipelines

# WITBANK
## SINGLE LINE DIAGRAM

| | | | |
|---|---|---|---|
| PROJECT NAME | | | |
| DRAWN | A.Z | REF. | – |
| TRACED | CAD | DATE | 11–09–2024 |
| CHECKED | Z.M | APPROVED | Z.M |
| SCALE | N.T.S. | | |
| ORIGINAL No. | G52001–U4027–S899(1.0) | | REV |
| EDMS No. | PL 122739 | | A |

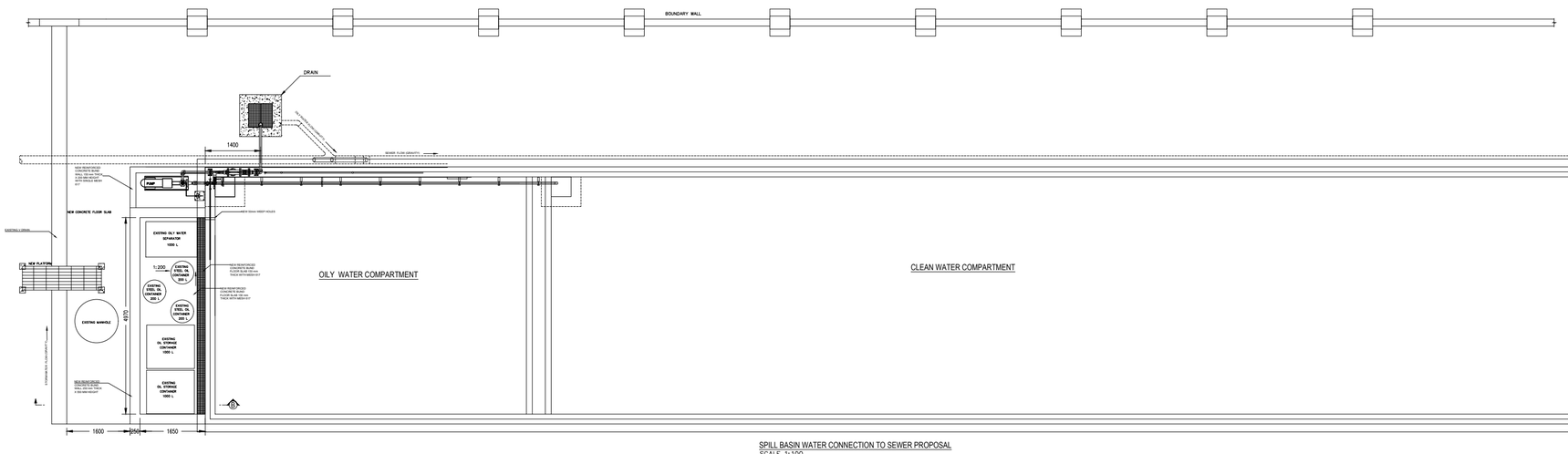
A1



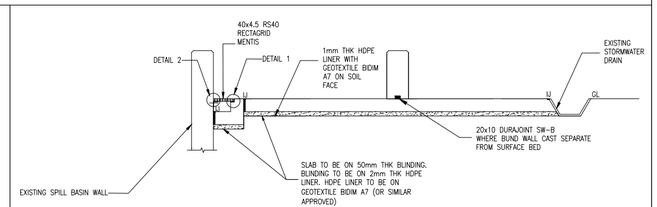

CURRENT SPILL BASIN WATER CONNECTION TO SEWER
SCALE 1:100

# GENERAL NOTES :

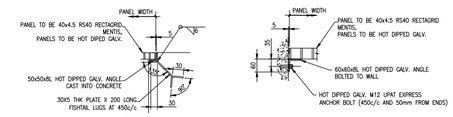
1. CONCRETE MATERIALS SHALL CONFORM TO SANS 10100 PART 2.
2. ALL BUILDING WORKS TO BE IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION
3. ALL CONCRETE WORK TO BE IN ACCORDANCE TO SANS 2001
10. ALL MEASUREMENTS ARE IN MILLIMETRES
11. CONCRETE SLAB STRENGTH IS 30MPa
12. BLINDING STRENGTH IS 15 MPa
15. INSITU GROUND MUST BE COMPACTED TO 95% MOD AASHTO. IF DENSITY CANNOT BE ATTAINED THE INSITU MATERIAL MUST BE REMOVED TO A DEPTHE OF 300mm AND REPLACED WITH SELECTED FILL
8. ALL MEASUREMENTS TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION




SPILL BASIN WATER CONNECTION TO SEWER PROPOSAL
SCALE 1:100

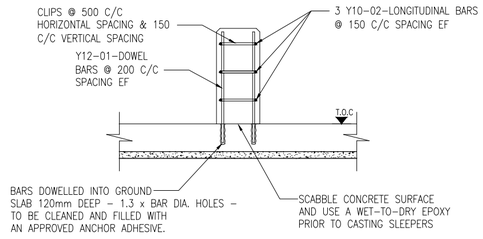



SECTION A
SCALE 1: 50




DETAIL 1
SCALE 1:NTS

DETAIL 2
SCALE 1:NTS




REINFORCEMENT DETAILS BUND WALL
SCALE 1: 25

| REVISIONS | | | |
|---|---|---|---|
| | AH | 02-03-2017 | |

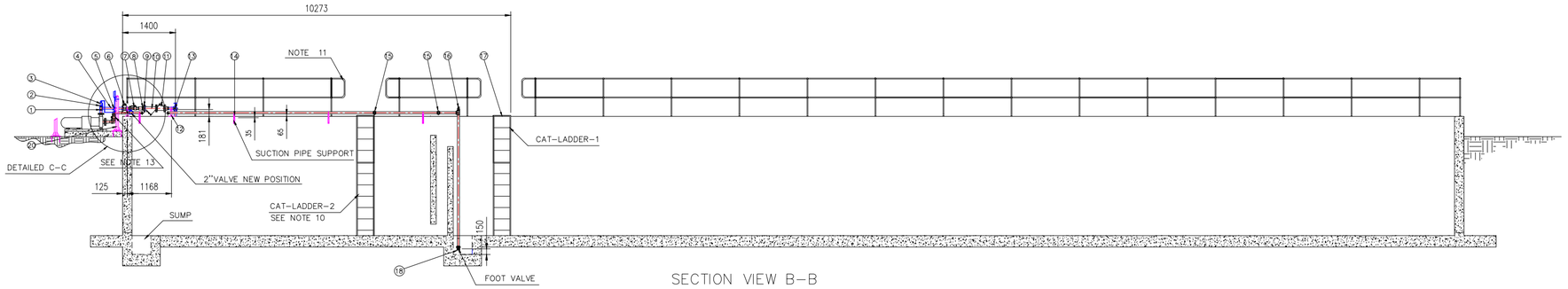
TRANSNET pipelines

WIR SPILL BASIN

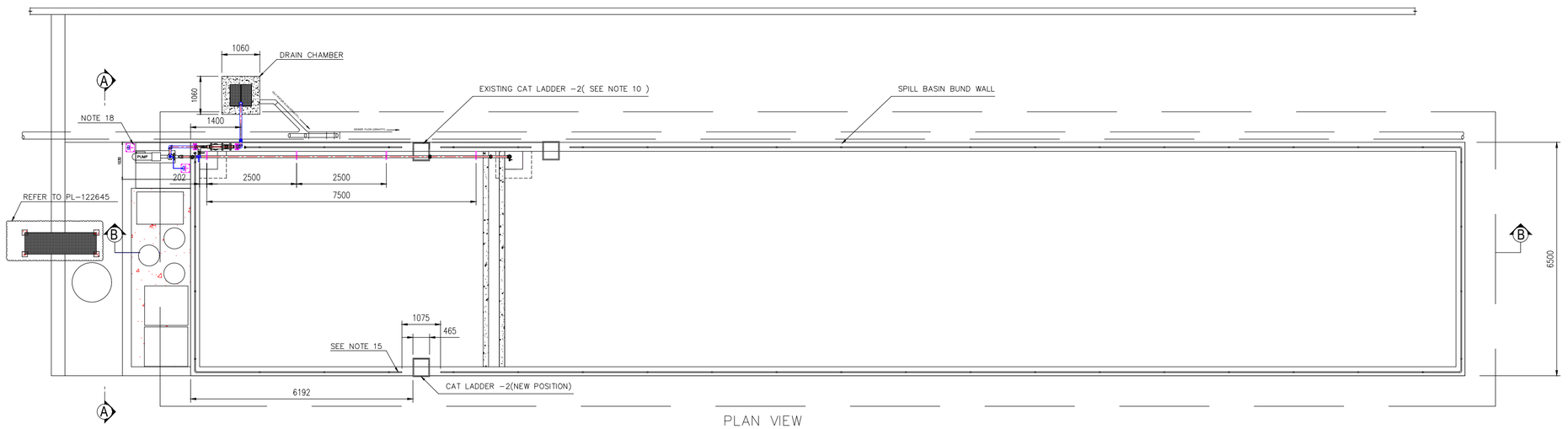
SPILL BASIN CONNECTION TO SEWER LAYOUT

| PROJECT NAME | WIR SPILL BASIN | | |
|---|---|---|---|
| DRAWN | K.N. | REF. | REF |
| TRACED | CAD | DATE | 04-07-2023 |
| CHECKED | | APPROVED | |
| SCALE | 1: 1 | | |
| DRAWING No. PL 122645 SHEET 2 | | | REV B |

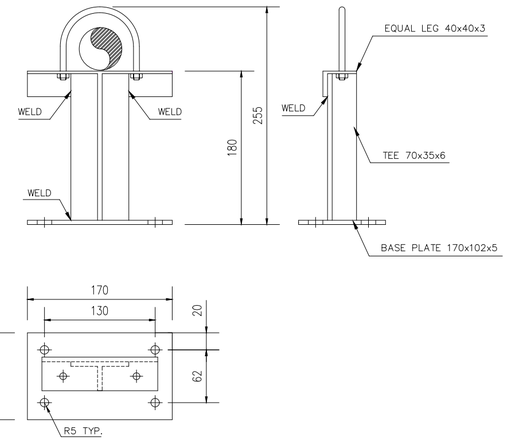
A2



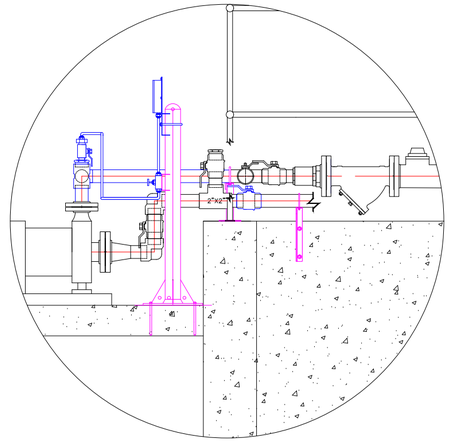

SECTION VIEW B-B



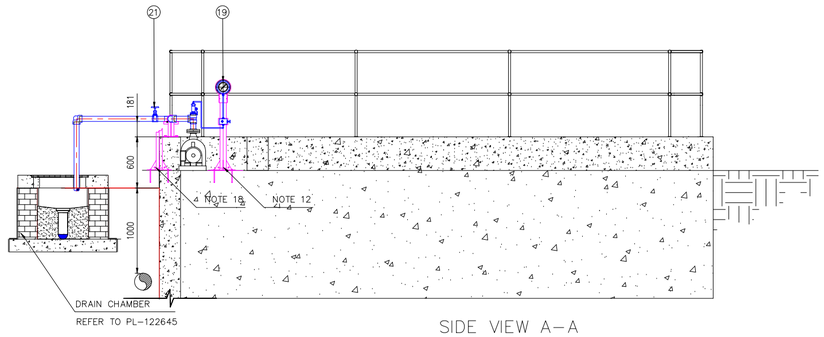

PLAN VIEW



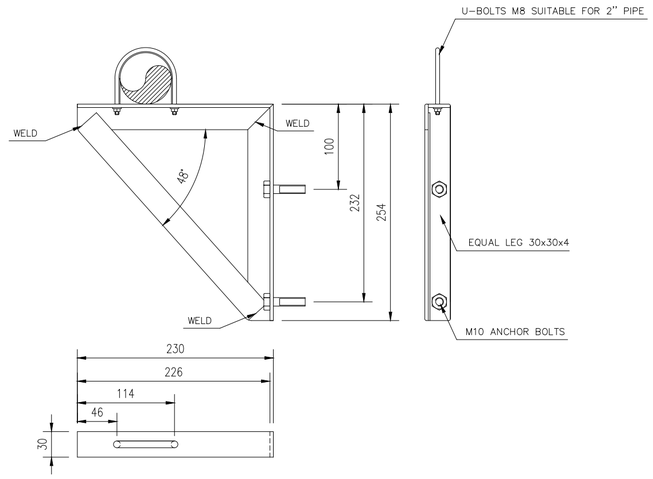

ITEM 12: CLAMPED STANCHION PIPE SUPPORT DETAILED DRAWING
SCALE 1:5



DETAILED C-C
SCALE 1:20




SIDE VIEW A-A
SCALE 1:50




ITEM 14: PIPE SUPPORT DETAILED DRAWING
SCALE 1:5

| ITEM | DESCRIPTION | NO PER ASS. | DRG. NO STORE ITEM SPEC. NO | REMARKS |
|---|---|---|---|---|
| 21 | ø2" GATE VALVE, NPT ASTM 105 | 1 | | PURCHASE |
| 20 | PRESSURE GAUGE STAND | 1 | | FREE ISSUE |
| 19 | ø1/2" PRESSURE GAUGE | 1 | | SEE NOTE 17 |
| 18 | ø2 FOOT VALVE 150# | 1 | | EXISTING |
| 17 | CAT-LADDER | 2 | | EXISTING |
| 16 | ø1" BALL VALVE, NPT ASTM 105 | 1 | | EXISTING |
| 15 | ø2 UNION CL 3000 FT NPT ASTM A105 | 1 | | EXISTING |
| 14 | SUCTION PIPE SUPPORT WITH CLAMPS | 4 | | SEE NOTE 16 |
| 13 | ø2" ELBOW 90 SCRD GALV MI SABS 509 | 3 | SABS 509 | PURCHASE |
| 12 | STANCHION PIPE SUPPORT WITH CLAMP | 2 | | SEE NOTE 16 |
| 11 | ø3" METER,150# | 1 | | EXISTING |
| 10 | ø3" Y STRAINER,150# | 1 | | EXISTING |
| 9 | ø3" SLIP-ON FLANGE,150# | 2 | | EXISTING |
| 8 | ø2"xø3" PIPE CON. REDUCER | 2 | | EXISTING |
| 7 | ø2"BALL VALVE NPT,3000, ASTM A105 | 2 | | EXISTING |
| 6 | ø2" PUMP PRIMING VALVE# | 1 | | EXISTING |
| 5 | ø1/2" NEEDLE VALVE NPT | 1 | | PURCHASE |
| 4 | ø2" PIPE MED CL WELDED SABS 62 GAL. | 4M | | PURCHASE |
| 3 | ø1/2" BALL VALVE NPT ,ASTM A105 | 1 | | PURCHASE |
| 2 | ø2"xø1/2"HEX PIPE NIPPLE,NPT,3000,ASTM A105 | 1 | ASME B36.10M | PURCHASE |
| 1 | ø2" EQUAL TEE,ASTM A105, ASME B16.11 3000# | 1 | | PURCHASE |

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. REMOVE ALL SHARP EDGES.
3. ANCHOR BOLTS TO BE USED ON PIPE SUPPORTS MOUNTING.
4. MATERIAL TO BE CARBON STEEL UNLESS SPECIFIED.
5. ALL PIPING, PIPE SUPPORTS TO BE GALVANIZED AS PER ASTM A123.
6. ALL THREADED FITTING SHALL BE CLASS 3000 AS PER PIPING MATERIAL CLASSES SPECIFICATION_01 (TRANSNET PIPELINES).
7. M10 ANCHOR BOLTS TO BE USED ON ALL PIPE SUPPORTS.
8. SUCTION PIPE SUPPORTS TO BE BRACED WITH METAL PLATE TO ENSURE EQUAL BALANCE.
9. SUCTION PIPE SUPPORTS TO BE 2500 MM APART AS INDICATED IN THE DRAWING.
10. EXISTING CAT-LADDER-2 TO BE MOVED TO NEW POSITION AS SPECIFIED IN THE DRAWING.
11. HAND RAIL GAP TO BE CLOSED BY A CONTRACTOR.
12. GAUGE STAND TO BE USED AS PER TRANSNET PIPELINES SPECIFICATION (REFER TO DRAWING 2684358-E-TMI-IN-DX-004).
13. 2" BALL VALVE(PUMP SUCTION) TO BE MOVED TO NEW POSITION.
14. CLEARANCE ON THE FOOT VALVE TO BE 150 MM FROM THE SUMP FLOOR.
15. A CONTRACTOR TO MODIFY HAND RAIL TO ACCOMMODATE CAT LADDER-2.
16. ALL PIPE SUPPORTS TO BE MANUFACTURED.
17. PRESSURE GAUGE TO BE PURCHASED ,MC&I TO PROVIDE DATA SHEET.
18. EXISTING ELECTRICAL E-STOP TO BE RELOCATED TO NEW POSITION.

LEGENDS:

NEW PIPE SUPPORT

NEW PIPING

HAND RAIL & LADDER

| REVISIONS | | | |
|---|---|---|---|
| REV | DRAWN | DATE | REVISION DESCRIPTION |
| A | T.N | 03-03-2023 | ISSUED FOR DISCUSSIONS |
| B | T.N | 03-31-2023 | ISSUED FOR REVIEW |
| C | T.N | 03-03-2023 | ISSUED FOR RED-LINE COMMENTS |
| D | T.N | 01-06-2023 | UPDATED TO INCLUDE RED-LINE COMMENTS |
| E | T.N | 12-06-2023 | ISSUED FOR TENDER J.D |

TRANSNET pipelines

WITBANK SPILL BASIN PIPING
OILY WATER DISCHARGE-GA

| PROJECT NAME | | | |
|---|---|---|---|
| DRAWN | TN | REF. | REF |
| TRACED | CAD | DATE | 09-02-2023 |
| CHECKED | C.M | APPROVED | Z.M. |
| SCALE | 1:100 | | |
| DRAWING No. PL 122625 | | | REV E |

A2

FOR TENDER PURPOSES

# Centrifugal Pump Data Sheet

TRANSNET

| | | |
|---|---|---|
| Sheet | 1 of 3 | Revision: A |
| Item Tag Number (s) | | X09 |
| Job No. | | Witbank Oily water pump skid – spill basin to sewer. |

| | | |
|---|---|---|
| Process: | Craig Mcconnachie | Date 12.06.2024 |
| Mechanical: | Janie de Beer/Barry Trotter | Date 12.06.2024 |
| Control: | N/A | Date N/A |
| Plant: | N/A | Date N/A |
| Other: | N/A | Date N/A |

| *Applicable to (mark with "**x**")* | | |
|---|---|---|
| | *X* | *Request For Quotation* |
| | | *Purchase* |
| | | *As built* |

| | | | | | | |
|---|---|---|---|---|---|---|
| 01 | *Note: Information to be completed by:* | ○ Purchaser | ☐ Supplier | ◇ By Both | | |
| 02 | **Applicable standard:** | | | | | |
| 03 | ○ | API 610 10th Edition | X | ASME | - | |
| 04 | ○ | DIN | - | Other | - | |
| 05 | ○ | Service: | Oily water to sewer / Hydrocarbon Product to sump | | | |
| 06 | ○ | Liquid | Oily water / Hydrocarbons | | | |
| 07 | ☐ | No of pumps required: | 1 | | | |
| 08 | ☐ | Size and type: | Pump Vendor to confirm nozzle sizes | | | |
| 09 | ☐ | Serial no: | | | | |
| 10 | ☐ | Pump MFR: | | | | |
| 11 | ○ | No motor driven: | 1 | ○ | No turbine driven: | N/A |
| 12 | ○ | Pump item no: | X08 | ○ | Pump item no: | N/A |
| 13 | ○ | Motor item no: | X08 | ○ | Turbine item no: | N/A |
| 14 | ☐ | Motor provided by: | Vendor | ○ | Turbine provided by: | N/A |
| 15 | ☐ | Motor mounted by: | Vendor | ○ | Turbine mounted by: | N/A |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 16 | ○ **Liquid** | | | ○ **Operating conditions** | | | ○ **Site conditions** | | |
| 17 | Pumping Conditions: | | | Capacity and Discharge Pressure | | | Site Conditions | | |
| 18 | Min: 0 °C | Norm: amb °C | Max: 45 °C | Norm: 25 m³/h | | Rated: 20 m³/h | Max. Temp: | 36 °C | |
| 19 | SP GR @ PT | | 0.997 @ 20°C | Discharge pressure (kPa) | | 1000 | Min. Temp: | 0 °C | |
| 20 | Vapour pressure @ PT | | 4.25 kPa abs | | | | Max. Rel. hum. | 100 % | |
| 21 | Viscosity @ PT | | 1cP @ 20°C | | | | Min. Rel. hum. | 8 % | |
| 22 | Liquid Information | | | Suction Pressures: | | | Altitude: | 1753m amsl | |
| 23 | Hazardous: | Yes | | Max Suction Press: | kPa | 30 | Outdoor | x | |
| 24 | Health rating: | 2 | | Rated: Suction Press: | kPa | -30 | Unheated | x | |
| 25 | Flammable rating: | 3 | | DIFF press | kPa | 1000 | Sun | x | |
| 26 | | | | DIFF head | m | 100 | Area class Zone ** | 2 | |
| 27 | See note 4,5 and 6. | | | NPSHA | m | 3.2 | Temp | T3 | |
| 28 | | | | HYDR power | kW | Vendor | Group | IIA | |
| 29 | | | | Operation: | | | | | |
| 30 | | | | Intermittent | | X | | | |
| 31 | | | | Continuous | | | | | |
| 32 | | | | If intermittent number of starts per day: up to 24 | | | | | |
| 33 | | | | Installation in Parallel: No | | | | | |
| 34 | | | | Installation in Series: No | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |
| 37 | | | | | | | | | |
| 38 | | | | | | | | | |
| 39 | | | | | | | | | |

# Centrifugal Pump Data Sheet

TRANSNET

| | | |
|---|---|---|
| Sheet | 2 of 3 | Revision: A |
| Item Tag Number (s) | | X09 |
| Job No. | | Witbank Oily water pump skid – spill basin to sewer. |

| | | |
|---|---|---|
| Process: | Craig Mcconnachie | Date 12.06.2024 |
| Mechanical: | Janie de Beer/Barry Trotter | Date 12.06.2024 |
| Control: | N/A | Date N/A |
| Plant: | N/A | Date N/A |
| Other: | N/A | Date N/A |

**☐ Performance**

| | | | | | | |
|---|---|---|---|---|---|---|
| Proposal curve No: | | Min continuous flow | 20 $m^3/h$ Assume vendor to confirm | NPSH required: | | $mH_20$ |
| Speed | r/min | Thermal: | Stable | 3% Head drop: | | m |
| Efficiency | % | Max head @ rated temp: | m | Suction specific speed: | | |
| Rated power | kW | Max power: | kW | | | |

**☐ Construction**

| *Nozzle ** | *Size* | *Class* | *Facing* | *Location* | *Miscellaneous connection* | *Size* | *Location* |
|---|---|---|---|---|---|---|---|
| Suction | 2" (tbc) | 150 | RF | End | Drain | (tbc) | Casing bottom |
| Discharge | 2" (tbc) | 150 | RF | Top | Vent | N/A | Discharge piping |
| | | | | | Press gauge | N/A | Discharge piping |

**☐ Casing mount:**

| | | | |
|---|---|---|---|
| Centreline | | Bracket | |
| Near centreline | | In-line | |
| Vertical | | Sump | |
| Vertical barrel | | Foot | |

**☐ Casing split:**

| | | | |
|---|---|---|---|
| Axial | | Radial | |

**☐ Casing type:**

☐ Diffuser

| | | | |
|---|---|---|---|
| Double | | Volute | |

☐ Staggered

| | | | |
|---|---|---|---|
| Single | | Volute | |

**○ Max allowable press kPa:**

| | | |
|---|---|---|
| At 15°C | 1900 | kPa |
| At norm pump temp: | 1900 | kPa |
| Hydro test press | 2375 | kPa |

**☐ Impeller**

| | | | |
|---|---|---|---|
| **Open** | | **Close** | |
| Diameter | (mm) | | |
| Rotation (Viewed from Coupling Guard) | | | |
| Clock Wise | | Counter Clock Wise | |
| Overhung | | Between Bearings | |

**◇ Seal Mechanism:**

| | | | |
|---|---|---|---|
| Packing: | | Mechanical Seal | X |

**☐ Packing:**

| | |
|---|---|
| MFR: | |
| Type: | |
| Size/no rings: | |

**☐ Pump sealing:**

| | | | |
|---|---|---|---|
| Single | | Dual | |
| Cartridge Type: (Yes/no) | | | |
| Pusher | (Yes/no) | | |
| Non pusher | (Yes/no) | | |
| Bellow | (Yes/no) | | |
| Multi spring | (Yes/no) | | |
| API Class code: | | | |
| Manufacturer: | | | |
| Mode: | | | |
| Manufacturer Code: | | | |

**☐ Coupling:**

| | |
|---|---|
| Type: | |
| Model: | |
| **Driver half-coupling mounted by:** | |
| Pump MFR | |
| Driver MFR | |
| Gland type/material: | |

**☐ Gland plate taps required:**

| | |
|---|---|
| Quench | |
| Flush | |
| Drains | |
| Vent | |

**☐ Coupling Guard:**

| | |
|---|---|
| Non-sparking material | X |
| Brass | |
| Bronze | |
| Other specify: | |

**☐ Bearing:**

| | |
|---|---|
| Type/Number | |
| Radial | |
| Thrust | |

**☐ Materials**

| | | | | | |
|---|---|---|---|---|---|
| ○ MDMT: | 0 | | | | |
| ☐ API 610 Table G-I & H-I Class: S-1 #2 | | ☐ Case / imp wear rings: | | **Baseplate: Fabricated** | |
| ☐ Barrel / case: | | ☐ Sleeve: | | ☐ Material / type: | |
| ☐ Impeller: | | ☐ Shaft: | | ☐ API 610 Std No: | |

# Centrifugal Pump Data Sheet

TRANSNET

| | | |
|---|---|---|
| Sheet | 3 of 3 | Revision: A |
| Item Tag Number (s) | | X09 |
| Job No. | | Witbank Oily water pump skid – spill basin to sewer. |

| | | |
|---|---|---|
| Process: | Craig Mcconnachie | Date 12.06.2024 |
| Mechanical: | Janie de Beer/Barry Trotter | Date 12.06.2024 |
| Control: | N/A | Date N/A |
| Plant: | N/A | Date N/A |
| Other: | N/A | Date N/A |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 88 | ◇ **Inspection and test** | | | | | | |
| 89 | Shop inspection (Yes/No) | | | | | | Yes |
| 90 | Material certificate (Yes/No) | | | | | | Yes |
| 91 | Dismantle and inspection after test (Yes/No) | | | | | | No |
| 92 | Casting repair procedure approval required #4 (Yes/No) | | | | | | No |
| 93 | Performance Test #9 | | | | | | Yes |
| 94 | Hydrostatic pressure test #10 | | | | | | Yes |
| 95 | Inspection required for nozzle welds #5 (Yes/No) if yes indicate applicable NDE below | | | | | | N/A |
| 96 | MT | N/A | | PT | N/A | | |
| 97 | Inspection required for castings #6 (Yes/No) if yes indicate applicable NDE below | | | | | | Yes |
| 98 | RT | | | UT | X | | |
| 99 | Inspection required for weld to casing #6 (Yes/No) if yes indicate applicable NDE below | | | | | | Yes |
| 101 | MT | X | | PT | | | |
| 102 | RT | | | UT | | | |

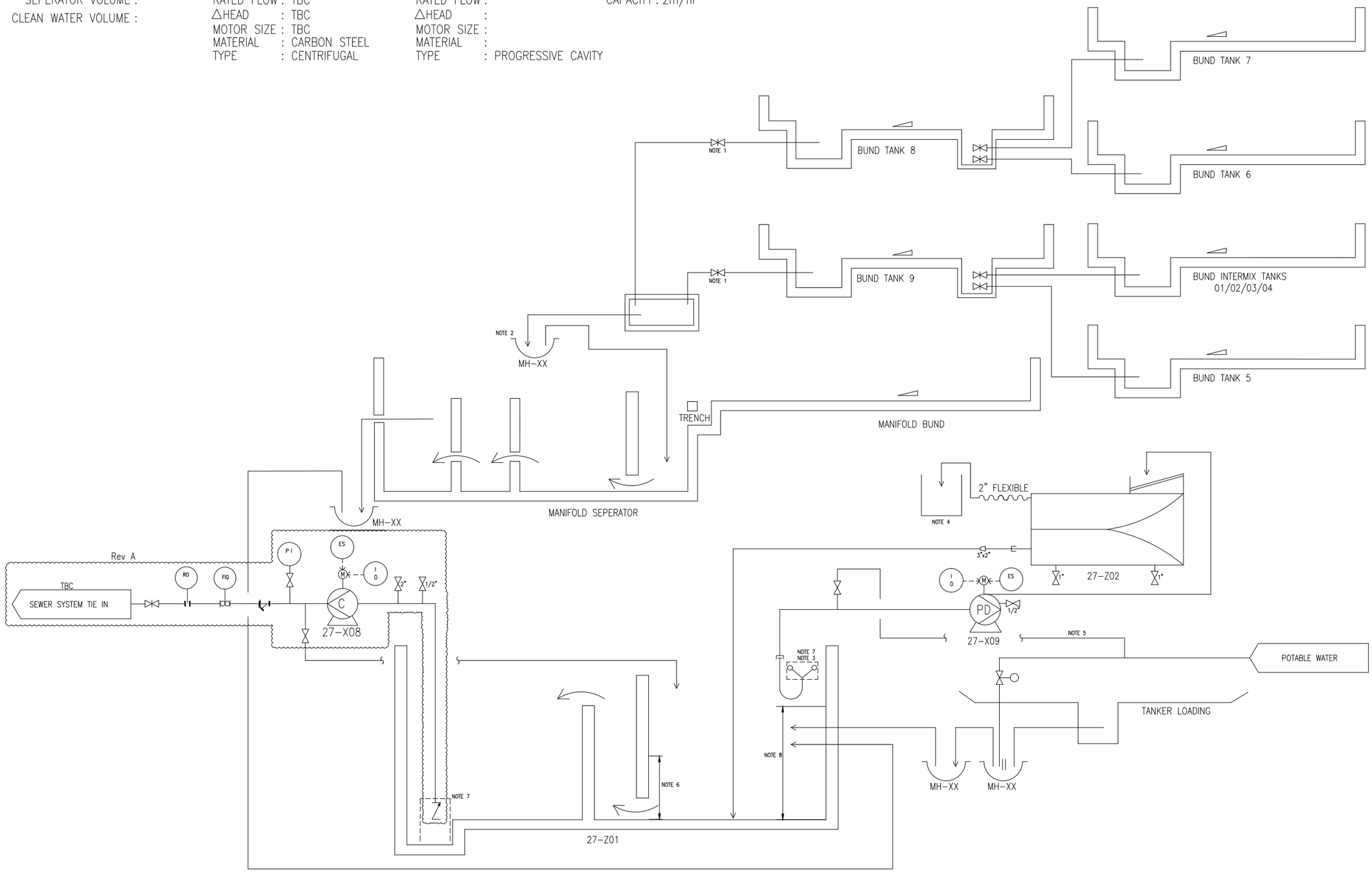
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 103 | ☐ **Motor driver** | | | | | | |
| 104 | Kilowatt | kW | Full load amps: | | | | |
| 105 | RPM | r/min | Locked rotor amps: | | | | |
| 106 | Frame: | | Insulation: | | | | |
| 107 | Volts/phase/hertz: | | Bearings: | | | | |
| 108 | Type: | | Lube: | | | | |
| 109 | Enclosure: | | Vertical shaft | Solid | | Hollow | |
| 110 | Temperature rise: | °C | Vertical thrust capacity, N | Up | | Down | |
| 111 | Manufacturer: | | | | | | |

| | | | |
|---|---|---|---|
| 112 | ☐ **Mass** | | |
| 113 | Mass of pump: | | kg |
| 114 | Mass of baseplate: | | kg |
| 115 | Mass of motor / turbine: | | kg |
| 116 | Mass of gear: | | kg |
| 117 | Total mass: | | kg |

| | |
|---|---|
| 118 | **Additional Information/Notes** |
| 119 | 1.API standard 610 10th Edition governs unless otherwise noted |
| 120 | 2. * Refer to ANSI B16.5 |
| 121 | 3. **Area classification according to SANS 10108 |
| | 4. Motor sizing to be based on end of curve conditions |
| | 5. Pump must be of a self-priming type |
| | 6. Operating conditions given for water. Pump can also be used to pump petrol to Sump Tank – SG 0.725 and vapour pressure of 75kPa. |
| 122 | ***Remarks:*** |
| 123 | #1 Specify any other upset conditions - None |
| 124 | #2 Material Class to be selected at MDMT |
| 125 | #3 Mechanical test run for 4 hours |
| 126 | #4 Casting repairs not permitted |
| 127 | #5 Welded nozzles not permitted |
| 128 | #6 Per Manufacturers Standard procedures |
| 129 | #7 Automatic re-circulation valve required |
| 130 | #8 Where a Standard and/or Specification are referred to, it shall mean the latest revision. |
| 131 | #9 Performance Test Certificate to be included in data book |
| 132 | #10 Hydrostatic pressure test Certificate to be included in data book |
| 133 | ***Documentation Required in Data Book*** |
| 134 | General Arrangement Drawings |
| 135 | As-Built Data Sheet |
| 136 | Sign off Quality Control Plan |
| 137 | Performance Test Certificate |
| 138 | Hydrostatic pressure test Certificate |
| 139 | Material Certificate 3.1 |
| 140 | Maintenance, Installation & Operational Manuals |
| 141 | Certificate of Conformity |

| | | | | |
|---|---|---|---|---|
| *A* | *02.09.2024* | *Issued for RFQ* | *Janie de Beer* | JdeBeer |

| 27-Z01 | 27-X09 | 27-X08 | 27-Z02 |
|---|---|---|---|
| SPILL BASIN | OILY WATER PUMP | CLEAN WATER PUMP | DRIZIT CPS 2000 |
| SEPERATOR VOLUME : | RATED FLOW : TBC | RATED FLOW : | CAPACITY : $2m^3/hr$ |
| CLEAN WATER VOLUME : | △HEAD : TBC | △HEAD : | |
| | MOTOR SIZE : TBC | MOTOR SIZE : | |
| | MATERIAL : CARBON STEEL | MATERIAL : | |
| | TYPE : CENTRIFUGAL | TYPE : PROGRESSIVE CAVITY | |




NOTES:

1. VALVES LOCATED INSIDE PRODUCT DELIVERY MANIFOLD
2. MANHOLE INSIDE MANIFOLD BUND,SURROUNDED BY RAISED XXXXXX
3. CAN BE MOVED TO CLEAN WATER COMPARTMENT IF REQUIRED
4. SUITABLE PORTABLE CONTAINER TO BE USED FOR OIL WASTE
4. PRIMING WATER LINE
5. VALVE TO BE USED AS PUMP PRIMING POINT
6. MINIMUM HEIGHT TO MAINTAIN FLASHBACK LEVEL TANKER LOADING
7. STRAINER CAGE TYPE SIZE MESH XXX
8. LEVEL TO BE MAINTAINED

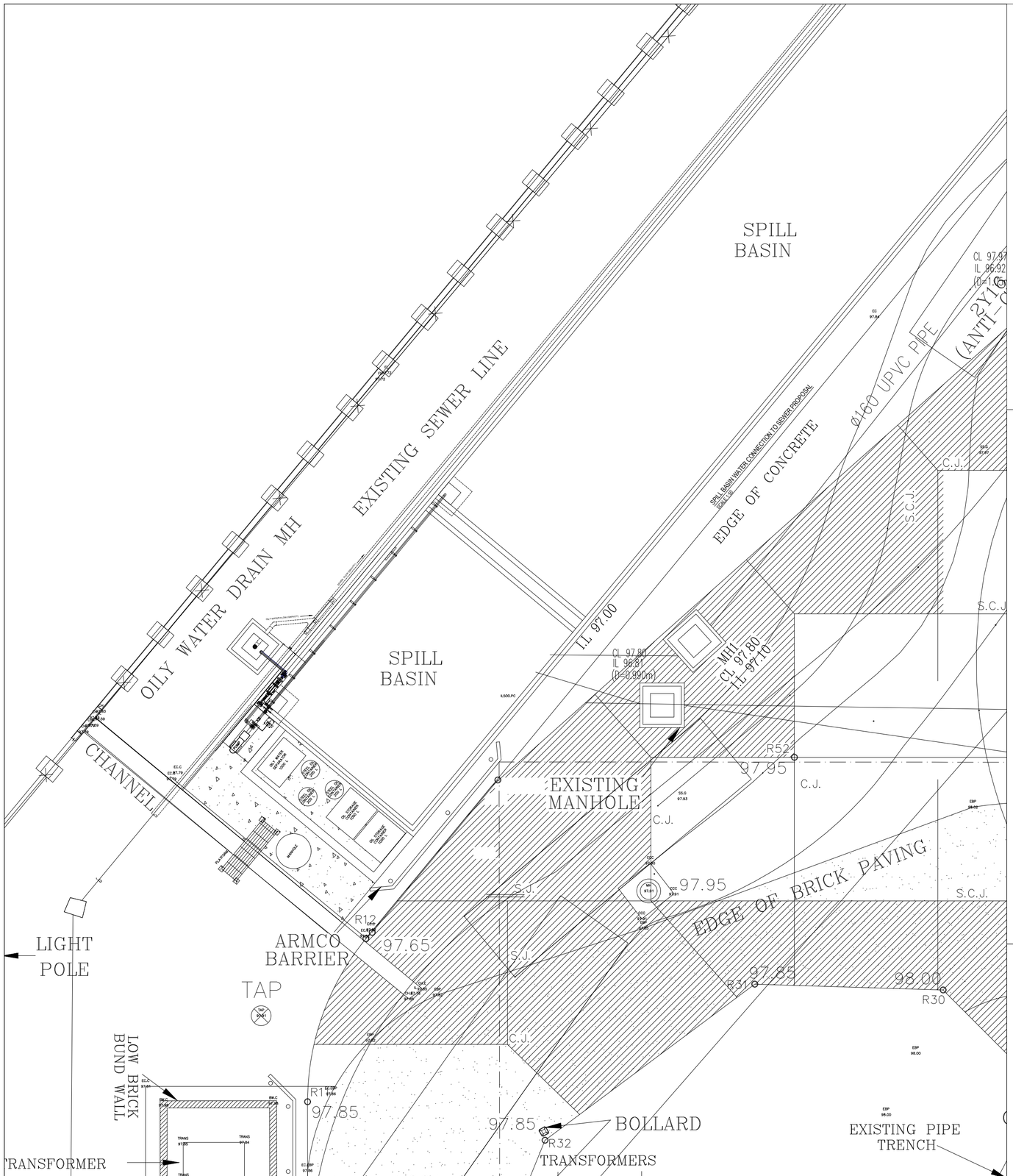
REVISIONS

| REV | BY | DATE | COMMENTS |
|---|---|---|---|
| B | A.Z | 21/05/2024 | ISSUED FOR DESIGN |
| A | A.Z | 12/09/2022 | ISSUED FOR HAZOP |

TRANSNET pipelines

WITBANK OILY WATER SYSTEM
P&ID

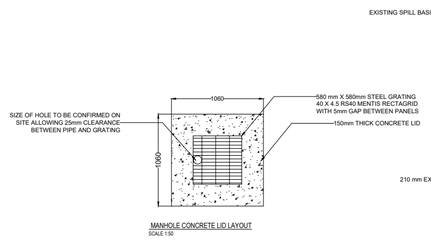
| PROJECT NAME | | | |
|---|---|---|---|
| DRAWN | A.Z | REF. | |
| TRACED | CAD | DATE | 12-09-2022 |
| CHECKED | C.M | APPROVED | Z.M C.M |
| SCALE | NTS | | |
| DRAWING No. PL 122591 | | REV | B |



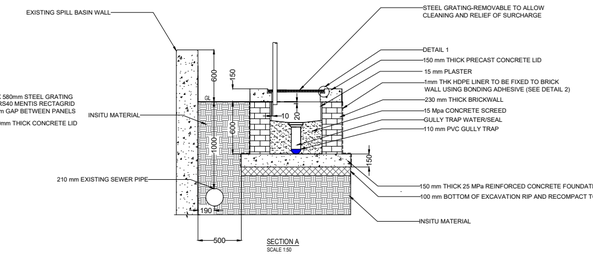

SITE LAYOUT
SCALE 1:100

# GENERAL NOTES :

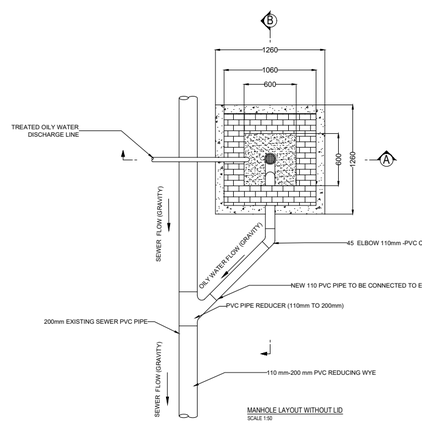
1. BRICKWORK:
   WALLS ABOVE CONCRETE FLOOR SLAB LEVEL FACE BRICKS (14MPa)
2. ALL LINTELS TO EXTEND MINIMUM 220mm PAST OPENINGS.
3. ALL BRICK WORK TO BE BUILT IN STRETCHER BOND.
4. WALL LEVELS AND FINISHING TO ADHERE TO REQUIREMENTS OF PRECAST ROOF SLAB INSTALLATION
5. PRECAST ROOF SLAB TO BE INSTALLED AS PER THE ROOF DRAWING DETAILS
6. CONCRETE MATERIALS SHALL CONFORM TO SANS 10100 PART 2.
7. ALL BUILDING WORKS TO BE IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION
9. ALL CONCRETE WORK TO BE IN ACCORDANCE TO SANS 2001
10. ALL MEASUREMENTS ARE IN MILLIMETRES
11. CONCRETE ROOF SLAB AND FOUNDATION SLAB STRENGTH IS 30MPa
12. BLINDING STRENGTH IS 15 MPa
13. MORTAR TO CONSIST OF 1 CEMENT TO 3 SAND
14. ALL BRICKWORK TO HAVE BRICKFORCE REINFORCING EVERY 4th COURSE
15. INSITU GROUND MUST BE COMPACTED TO 95% MOD AASHTO PRIOR TO MANHOLE BASE SLAB BEING CAST.IF DENSITY CANNOT BE ATTAINED THE INSITU MATERIAL MUST BE REMOVED TO A DEPTHE OF 300mm AND REPLACED WITH SELECTED FILL



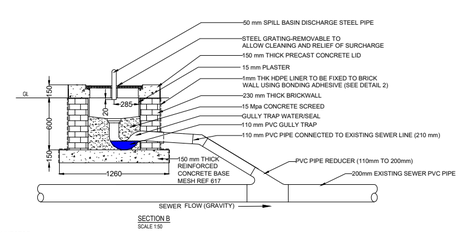

MANHOLE CONCRETE LID LAYOUT
SCALE 1:50




SECTION A
SCALE 1:50

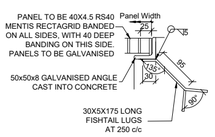



MANHOLE LAYOUT WITHOUT LID
SCALE 1:50




SECTION B
SCALE 1:50


DETAIL 2
HDPE Liner Fixed to the wall detail
SCALE 1:2




DETAIL 1
( Typical 30mm Grating Edge Support )
SCALE 1:2

| REVISIONS | | | |
|---|---|---|---|
| | AH | 02-03-2017 | |

TRANSNET pipelines

WIR SPILL BASIN DRAIN
PROPOSED MANHOLE DETAILS

| PROJECT NAME | WIR SPILL BASIN | | |
|---|---|---|---|
| DRAWN | K.N. | REF. | REF |
| TRACED | CAD | DATE | 21-03-2023 |
| CHECKED | S.C | APPROVED | Z.M. |
| SCALE | 1:1 | | |
| DRAWING No. | PL 122645 SHEET 1 | | REV B |

A2