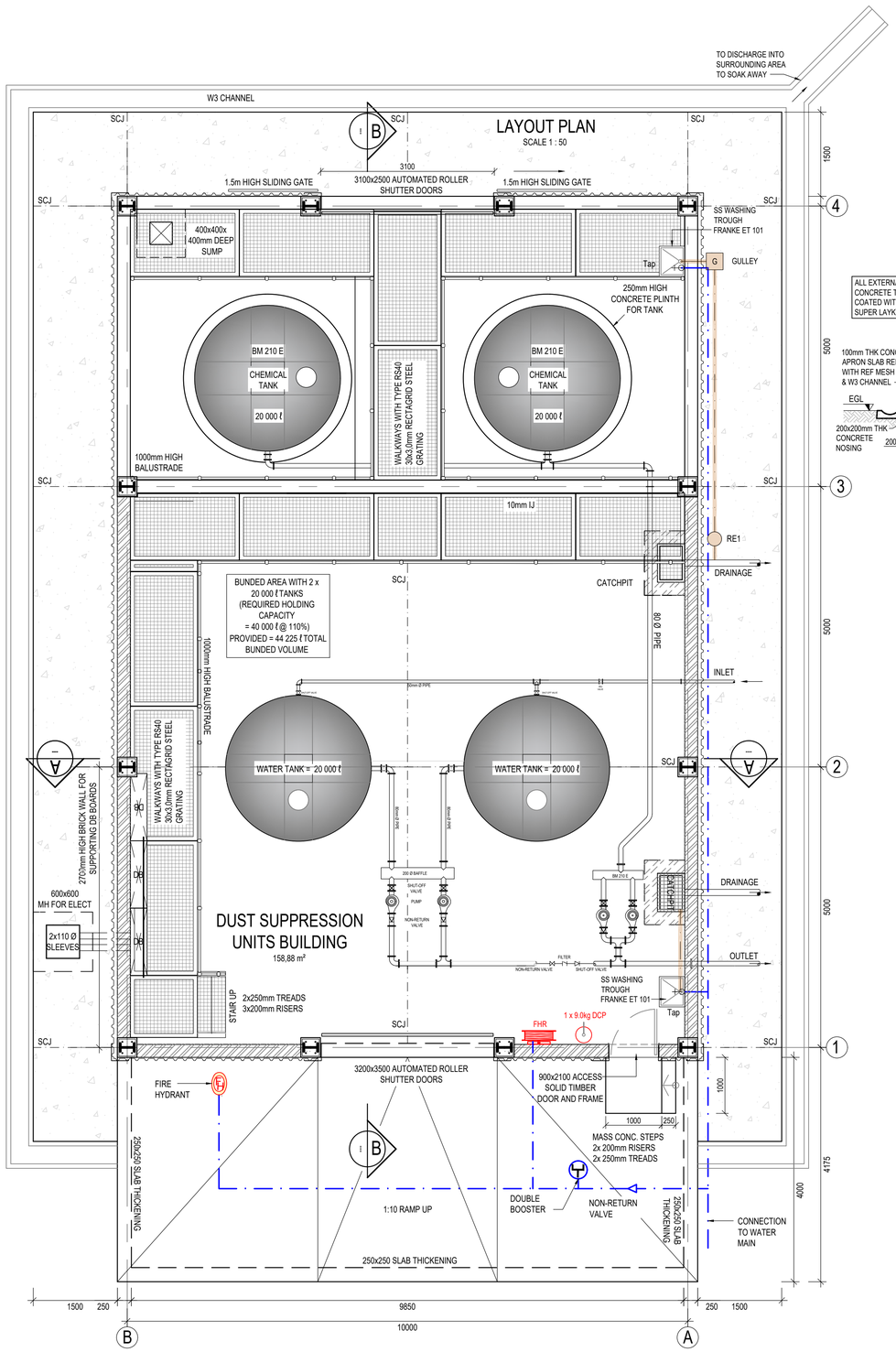
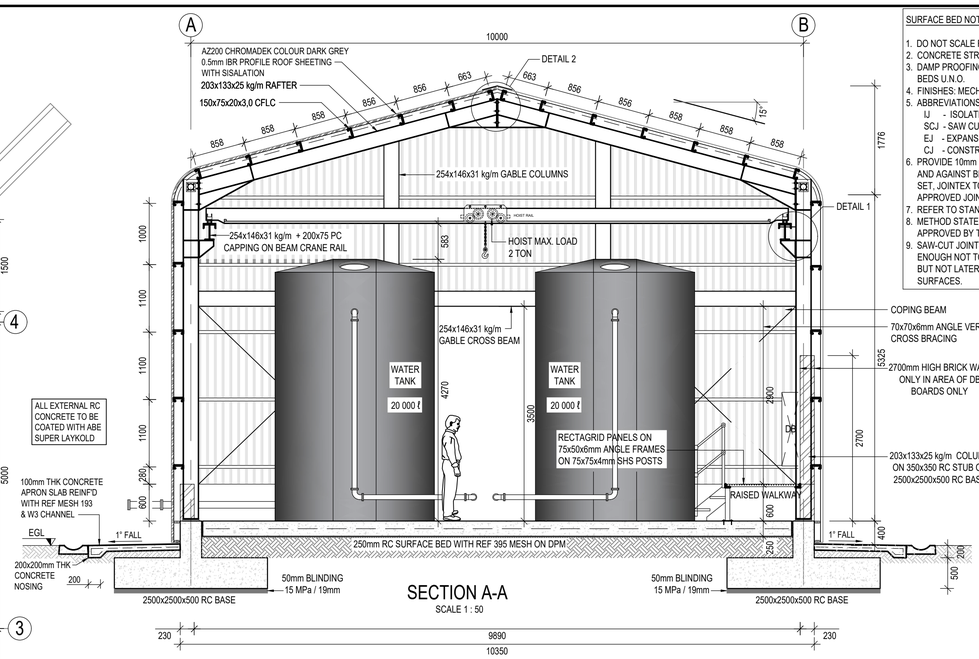




SURFACE BED NOTES:

1. DO NOT SCALE FROM THIS DRAWING.
2. CONCRETE STRENGTH AT 28 DAYS SHALL BE 30 MPa / 19mm
3. DAMP PROOFING MEMBRANE TO BE INSTALLED UNDER SURFACE BEDS U.N.O.
4. FINISHES: MECHANICAL POWER FLOATED
5. ABBREVIATIONS:
   IJ - ISOLATION JOINTS
   SCJ - SAW CUT JOINT
   EJ - EXPANSION JOINT
   CJ - CONSTRUCTION JOINT
6. PROVIDE 10mm IJ AROUND ALL CONCRETE COLUMNS, STEEL COLUMNS AND AGAINST BRICK AND CONCRETE WALLS. AFTER CONCRETE HAS SET, JOINTEX TO BE RAKED OUT 10mm DEEP AND SEALED WITH APPROVED JOINT SEALANT
7. REFER TO STANDARD DETAILS FOR IJ, SCJ, EJ AND CJ.
8. METHOD STATEMENT FOR POURING OF SURFACE BED PANELS TO BE APPROVED BY THE ENGINEER.
9. SAW-CUT JOINTS SHALL BE DONE AS SOON AS CONCRETE IS FIRM ENOUGH NOT TO DAMAGE THE EDGES, USUALLY BETWEEN 6-16 HOURS, BUT NOT LATER THAN 48 HOURS. JOINTS TO BE REPEATED IN FINISHED SURFACES.

STRUCTURAL STEEL NOTES:

1. ALL DIMENSIONS AND LEVELS SHALL BE CHECKED ON SITE BEFORE SHOP DRAWINGS COMMENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. A COMPLETE SET OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION COMMENCES. SHOP DRAWINGS WILL ONLY BE CHECKED FOR COMPLIANCE WITH DESIGN INTENT. NO DIMENSIONAL CHECKS, CHECKS ON CLEATS, BOLTS, WELDS AND GUSSETS WILL BE DONE. ONLY SIZES OF STRUCTURAL MEMBERS, CONNECTIONS AND SPLICES WILL BE CHECKED ALSO WITH REGARD TO DESIGN INTENT. FINAL DIMENSIONS AND THE CORRECT FITTING OF MEMBERS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.
3. STRUCTURAL STEELWORK SHALL BE COMPLETED BY THE MANUFACTURER (I.E. CLEANED AND COATED WITH THE SPECIFIED PRIMER IN THE WORKSHOP OR HOT DIP GALVANIZED WITH/WITHOUT A DUPLEX) BEFORE TRANSPORTATION TO SITE.
4. ALL HOT ROLLED, PLATES, SECTIONS AND CHS (CIRCULAR HOLLOW SECTIONS) STRUCTURAL STEELWORK SHALL BE GRADE S355JR (PREVIOUSLY GRADE 350WA), EXCEPT COLD-FORMED OPEN STEEL SECTIONS, WHICH SHALL HAVE A MINIMUM YIELD STRESS OF 240 MPa.
5. NO STEEL OF GRADE Q345 SHALL BE ACCEPTED.
6. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZING THE STRUCTURE AND MAINTAINING IT IN THE CORRECT POSITION DURING ERECTION. WHERE TEMPORARY BRACING OR PROPPING IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, ERECTION, MAINTENANCE AND REMOVAL (WHERE NECESSARY) OF SUCH SUPPORTS. IF SPLICES IN TRUSSES ARE REQUIRED DUE TO TRANSPORT, PROPOSALS OF THIS SHALL BE SUBMITTED TO THE ENGINEER AT AN EARLY STAGE FOR WRITTEN APPROVAL.
7. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED-GALVANIZED GRADE 8.8 U.N.O.
8. WELDS SHALL CONFORM TO SANS 0167 AWS SPECIFICATIONS
9. ALL STRUCTURAL STEELWORK SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH SANS 1200 H (STRUCTURAL STEELWORK) AND SANS 10162 (STRUCTURAL USE OF STEEL).
10 SEE ARCHITECTURAL DRAWINGS FOR FINAL COLOR OF STRUCTURAL STEELWORK U.N.O.PAINT SPECIFICATION SHEET.
11. A CERTIFICATE FROM THE STEEL MANUFACTURER IN WHICH THE GRADE OF THE STRUCTURAL STEEL IS VERIFIED SHALL BE HANDED TO THE ENGINEER FOR APPROVAL PRIOR TO ANY MANUFACTURING COMMENCES.
13. QUALITY CONTROL ON WELDING SHALL BE AS PER THE STRUCTURAL NOTES
14. STEEL SURFACES OF ALL STEEL SHALL BE PREPARED TO A PREPARATION GRADE P3 (VERY THOROUGH PREPARATION) ACC. TO SANS 8501-3:2008 IRRELEVANT OF THE TYPE OF CORROSION PROTECTION SPECIFIED.

CORROSION PROTECTION NOTES:

1. REFER TO TRANSNET PORT TERMINALS ANNEXURE E-EEAM-Q-008 CORROSION PROTECTION (HE9_2_8VER 17) FOR CORROSION AND PAINT SPECIFICATIONS

FOUNDATIONS AND EARTHWORKS NOTES :

1. REFER THE CONCRETE NOTES.
2. ALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR ENGINEER BEFORE PLACING OF ANY CONCRETE FOUNDATION, BLINDING, WATERPROOFING OR GEOFABRIC MEMBRANE.
3. LEVELS OF BASES AS SHOWN ARE PRELIMINARY AND HAVE TO BE CONFIRMED BY THE GEOTECHNICAL ENGINEER OR ENGINEER ON SITE TO OBTAIN THE SPECIFIED BEARING PRESSURE. WHERE EXCAVATION LEVELS HAVE TO BE LOWERED, THE TOP LEVEL OF THE BASE SHOULD BE KEPT AS SHOWN AND THE BLINDING LAYER THICKENED. SIZE AND REINFORCING MAY BE ALTERED BY THE ENGINEER IF REQUIRED.
4. NO FOUNDATION SHALL BE CAST ON EITHER NON-ENGINEERED FILL OR BACKFILL MATERIAL. PORTIONS THAT ARE OVER-EXCAVATED BEYOND THE DEPTH REQUIRED BY THE GEOTECHNICAL ENGINEER, TO BE FILLED WITH MASS CONCRETE (15MPA / 38MM) AT CONTRACTOR'S EXPENSE.
5. A 50mm THICK BLINDING LAYER OF 15 MPa/19mm SHALL BE CAST UNDER ALL REINFORCED FOUNDATIONS.
6. ALL FOUNDATIONS ARE PLACED SYMMETRICALLY BELOW COLUMNS AND BRICKWORK U.N.O.
7. NO BACKFILLING BEHIND RETAINING WALLS IS TO BE DONE BEFORE THE ENGINEER GIVES WRITTEN APPROVAL. WHERE APPLICABLE, BACKFILLING SHALL BE DONE SIMULTANEOUSLY ON BOTH SIDES OF WALLS TO MINIMIZE THE RELATIVE HEIGHT DIFFERENCE IN SOIL LEVELS.
8. MANUAL COMPACTION OF SOIL IS TO TAKE PLACE WITHIN 500mm OF WALLS.

BRICKWORK & BLOCKWORK NOTES:

1. ALL BRICKWORK / BLOCKWORK SHOWN ON ENGINEER'S DRAWINGS ARE LOAD BEARING U.N.O. OR SHOWN FOR CLARITY PURPOSES.
2. ALL LOADBEARING, HOLLOW BLOCK WORK TO BE FILLED WITH GRADE 15 MPA/19MM MASS CONCRETE.
3. ALL SETTING OUT OF BRICKWORK / BLOCKWORK TO BE DONE FROM ARCHITECT'S DRAWINGS.
4. REFER TO THE ARCHITECT'S DRAWINGS FOR GENERAL LAYOUT OF BRICKWORK OR BLOCKWORK AND CONTROL JOINTS IN BRICKWORK OR BLOCKWORK.
5. THE MINIMUM CRUSHING STRENGTH OF ALL LOADBEARING BRICKWORK/ BLOCKWORK SHALL BE 14MPA U.N.O. AND NON-LOADBEARING BRICKWORK/BLOCKWORK 7MPA U.N.O. THE MINIMUM CRUSHING STRENGTH OF MORTAR SHALL BE AS FOR CLASS II MORTAR IN ACCORDANCE WITH TABLE 1 SABS 0164 UNLESS INDICATED OTHERWISE ON DRAWINGS.
7. BRICKFORCE:
7.1 ALL BRICK FORCE SHALL BE GALVANIZED.
7.2 LOAD BEARING BRICKWORK SHALL BE REINFORCED WITH AN APPROVED BRICKFORCE EVERY SECOND LAYER AND NON-LOADBEARING BRICKWORK EVERY FOURTH LAYER U.N.O.
7.3 LOAD BEARING BLOCKWORK SHALL BE REINFORCED WITH APPROVED BRICKFORCE EVERY LAYER AND NON-LOADBEARING BLOCK WORK EVERY SECOND LAYER U.N.O.
7.2 IN ADDITION, CONTINUOUS BRICKFORCE IS REQUIRED IN EVERY LAYER FOR THE FIRST FOUR LAYERS ABOVE AND BELOW THE TOP OF FOUNDATIONS & SLABS, OVER WINDOWS AND DOOR OPENINGS, EXTENDING AT LEAST 1m BEYOND BOTH SIDES OF THE OPENING. MINIMUM LAPS TO BE 300mm. OUTSIDE WIRE OF BRICKFORCE TO BE CONTINUOUS AT CORNERS.
8. NON-LOAD BEARING BRICKWORK/BLOCKWORK MAY NOT BE BUILT CLOSER THAN 10mm FROM THE SOFFITS AND SIDES OF BEAMS AND SLABS U.N.O AND ONLY AFTER ALL PROPS HAVE BEEN REMOVED. REFER TO STANDARD DETAILS.
9. WHERE BRICKWORK/BLOCKWORK AND CONCRETE JOIN, V-JOINTS ARE TO BE MADE THROUGH THE TOTAL THICKNESS OF THE PLASTERWORK.
10 LOADBEARING BRICKWORK OVER SLABS IS TO BE COMPLETED BEFORE THE NON-LOADBEARING BRICKWORK UNDER SLABS.
11. PLACE 2 LAYERS OF 3-PLY MALTHOID BETWEEN SLAB SOFFITS AND LOAD BEARING BRICKWORK OR BLOCKWORK.
12. ALL BRICKWORK SHALL BE FIXED TO CONCRETE & STEEL COLUMNS BY MEANS OF HOOP IRON EVERY FOURTH COURSE AND BLOCKWORK EVERY SECOND COURSE.
13. IN CAVITY WALLS, WALL TIES SHALL JOIN THE LEAVES AND SHALL BE EMBEDDED IN MASONRY JOINTS AT RIGHT ANGLES TO THE LEAVES AS THE WORK PROGRESSES.
14. THE NUMBER OF WALL TIES PER m² OF WALLING SHALL BE:
15.1 75mm > CAVITY - 3.7 TIES/m²
15.2 75mm < CAVITY < 100mm - 4,5 TIES/m²
15.3 100mm < CAVITY < 150mm - 5.0 TIES/m²
16. ENSURE THAT EACH TIE IS EMBEDDED TO A DEPTH OF AT LEAST 50mm IN THE MORTAR JOINT OF EACH LEAF.
17. CLAY BRICKS TO BE WETTED BEFORE BEING USED BUT CONCRETE BRICKS AND BLOCKS TO BE KEPT DRY BEFORE BEING USED.
18. ALL CHASES SHALL BE VERTICAL AND SHALL NOT BE GREATER THAN 25mm DEEP BY 40mm WIDE. A MAXIMUM OF 750mm LONG HORIZONTAL CHASE WILL BE ACCEPTED. NO DIAGONAL CHASES WILL BE ACCEPTED.
19. ALL CLAY BRICKS FOR GENERAL BUILDING WORK BELOW DAMP-PROOF COURSE OR UNDER DAMP CONDITIONS OR BELOW GROUND LEVEL; PLASTERED OR UN-PLASTERED, SHALL BE 14MPa NFX (NON-FACING EXTRA) BRICKS.
20. USE DE HOOP RED SMOOTH FACE BRICK (FBS) FOR ALL BRICKWORK.

CONCRETE NOTES:

1. CONCRETE STRENGTH AT 28 DAYS SHALL BE:
   BLINDING - 15 MPa / 19mm
   MASS - 10 MPa / 38mm
   FOUNDATIONS - 25 MPa / 26mm
   COLUMNS - 40 MPa / 19mm
   CAVITY WALL INFILL - 15 MPa / 19mm
   SURFACE BEDS - 30 MPa / 19mm
2. NO CONCRETE SHALL BE POURED UNTIL THE EXCAVATION, BLINDING FORMWORK AND/OR REINFORCEMENT ETC. HAS BEEN INSPECTED AND APPROVED IN WRITING BY THE ENGINEER. ENGINEER TO BE GIVEN A MINIMUM OF 48-HOURS' NOTICE OF SUCH AN INSPECTION.
3. THE CONTRACTOR MUST CO-ORDINATE ALL SERVICES DRAWINGS FOR DETAILS AND POSITIONS OF OPENINGS AND SLEEVES REQUIRED FOR STORMWATER, SEWERAGE, DRAINAGE, ELECTRICAL MECHANICAL AND OTHER SERVICES. DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF ENGINEER AND OTHER RELEVANT PARTIES.
4. THE CONTRACTOR MUST OBTAIN PERMISSION FROM THE ENGINEER BEFORE ANY OPENINGS OR SERVICES, WHICH ARE NOT INDICATED ON THE DRAWINGS, MAY BE INTRODUCED THROUGHOUT ANY STRUCTURAL ELEMENT OR CLOSE TO ANY COLUMN.
5. CURING OF CONCRETE SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH SANS 1200 G CLAUSE 5.5.8. THE CONTRACTOR TO PROVIDE A METHOD STATEMENT, TO BE APPROVED BY ENGINEER, FOR THE CURING PROCEDURES OF THE VARIOUS ELEMENTS CONCERNED BUT ALL SURFACES TO BE KEPT CONTINUOUSLY DAMP FOR AT LEAST 7 DAYS AFTER CASTING. CONCRETE SLABS TO BE COVERED WITH MOIST SAND OR COVERED WITH PLASTIC MEMBRANE DURING THIS PERIOD. CONCRETE COLUMNS TO BE WRAPPED IN A PLASTIC MEMBRANE DURING THIS PERIOD.
6. STRIPPING TIMES OF SHUTTERING AND PROPPING SHALL BE IN ACCORDANCE WITH SANS 1200 G CLAUSES 5.2.5 AND TABLE 2 AS REPRODUCED IN THE STRUCTURAL NOTES AND SPECIFICATIONS.
7. PROPPING MAY ONLY BE REMOVED ONCE A SUSPENDED SLABS OR BEAMS HAVE OBTAINED THEIR 28 DAY STRENGTH. U.N.O. ALL SUSPENDED SLABS AND BEAMS TO BE BACK-PROPPED FOR TWO (2) COMPLETED LEVELS BELOW THE PROPPED LEVEL OF THE RELEVANT BEAM OR SLAB.
8. DOWNSTAND AND UPSTAND BEAM DIMENSIONS ARE GIVEN AS
   A x B WHERE
   A = WIDTH OF BEAM
   B = TOTAL DEPTH OF BEAM INCLUDING SLAB THICKNESS
8. CONCRETE POURED IN EXCESS OF THREE METERS HIGH WILL NOT BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
9. ALL COLUMNS ARE PLACED SYMMETRICALLY ON GRID LINES U.N.O.
10. 20x20mm CHAMFERS TO ALL VISIBLE EDGES U.N.O.
11. 100mm KICKERS FOR COLUMNS AND WALLS HAVE BEEN ALLOWED FOR IN THE REINFORCING LENGTHS. THEY SHALL BE CAST WITH THE SAME STRENGTH AS THE CONCRETE ELEMENTS BELOW THEM AND THOROUGHLY COMPACTED AND CURED.

NO	DESCRIPTION
B1	2500x2500x500 RC BASE
B2	1000x1000x500 RC BASE
B3	700x250 RC STRIP FOOTING
BM1	1700x230 UPSTAND / DOWNSTAND RC BEAM
C1	350x350mm RC STUB COLUMN
C2	254x146x31 kg/m COLUMN
C3	180 IPE



NOTES / LEGEND

REINFORCING NOTES:

1. MINIMUM CONCRETE COVER TO REINFORCING AS FOLLOWS U.N.O.:
   FOUNDATIONS - 75mm
   COLUMNS (UNDER DAMP COURSE) - 50mm to stirrups
   SLABS (INTERNAL) - 20mm
2. MINIMUM LAPS FOR ALL REINFORCEMENT TO BE:
   Y10.....500 Y20.....1000
   Y12.....600 Y25.....1250
   Y16.....800 Y32.....1600
3. REINFORCEMENT TO BE LAYERED:

WALLS		SLABS	
VERT - NF1	VERT - FF1	T2	T1
HORS - NF2	HORS - FF2	B2	B1
EXPOSED SIDE (NEAR FACE)	SOIL SIDE (FAR FACE)		

4. ABBREVIATIONS:
   NF1/NF2 - NEAR FACE
   FF1/FF2 - FAR FACE
   ALT - ALTERNATE
   ABR - ALTERNATE BARS REVERSED
   ADD - ADDITIONAL/EXTRA
   B - BOTTOM
   T - TOP
   STG - STAGGERED
   EF - EACH FACE
   T.O.C - TOP OF CONCRETE
9. SOME REINFORCING BARS EXCEED NORMAL MANUAL HANDLING GUIDELINES FOR WEIGHT. MECHANICAL ASSISTANCE WILL BE REQUIRED TO PLACE AND FIX THESE BARS.
10. NO HEAT TREATMENT OR CUTTING OF STEEL WITHOUT WRITTEN APPROVAL OF THE ENGINEER, SHALL BE ALLOWED.
11. REINFORCEMENT MUST BE THOROUGHLY CLEANED OF ALL DIRT, GREASE, BITUMINOUS MATERIAL, SCALE AND LOOSE RUST

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT | REG. NO. | DATE

AMENDMENTS CODE

A,B,C.../ : BEFORE TENDER
T0 / : TENDER DRAWING
0,1,2.../ : AFTER TENDER
Z / : AS BUILT

/A : BY CLIENT
/B : BY ARCHITECT
/C : BY MECHANICAL OR ELECTRICAL
/D : BY BVI
/E : BY OTHER ( )

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
05/05/2026	G.B.	T1/D	FOR TENDER

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OFFICES

PROVINCE	OFFICE	☎	E-MAIL
Gauteng	Tshwane	(012) 940-1111	pta@bvigp.co.za
	Polokwane	(015) 291-5400	plk@bvilp.co.za
Free State	Bloemfontein	(051) 447-2127	bfn@bvifs.co.za
	Welkom	(057) 353-2489	wel@bvifs.co.za
Northern Cape	Upington	(054) 337-6600	upt@bvinc.co.za
	Springbok	(027) 712-8990	spk@bvinc.co.za
KwaZulu Natal	Durban	(031) 266-8382	dbn@bvikzn.co.za
	Empangeni	(035) 772-4112	emp@bvikzn.co.za
Eastern Cape	Port Elizabeth	(041) 373-4343	pe@bvisec.co.za
	East London	(043) 726-1444	pe2@bvisec.co.za
Western Cape	Cape Town	(021) 527-7000	cpt@bviwc.co.za

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Registration no. 1998/000157/07

CLIENT

TRANSNET

PROJECT

TRANSNET ORE TERMINAL
40 000 ℓ
DUST SUPPRESSION BUILDING

CONTRACT NO: CPT 1216472.001

DRAWING TITLE

PROPOSED NEW DUST SUPPRESSION UNITS BUILDING - PLAN, ELEVATION AND SECTIONS

APPROVED BY BVI

20100118

ENGINEER/TECHNOLOGIST | REG. NO. | DATE

SCALE	A1 @ 1:50	DRAWN	G.BERGSTEDT
DESIGNED	J.DE LANGE	CHECKED	J.DE LANGE

PLAN NUMBER	REVISION NO.	DATE SAVED
32887.00-201-03	T1	6 May 2026

0 10 50 100

O:\PROJECTS DRAWINGS\32000 - 32999\32887.00\STRUCTURAL\TENDER DRAWINGS\32887.00-201-01 REV T1.DWG