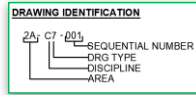


ENGINEERING

Issue No: 2  
Date: 2022/03/15



DRAWINGS INCLUDED IN THIS ISSUE  
DRAWINGS PREVIOUSLY ISSUED

JV Drg Number	Rev	DWS Number	Area	Description
2A-C-3-001	T1		GENERAL	LAYOUT PLAN
2A-C-6-001	T1		GENERAL	STANDARD DETAILS - CONTRACT NAME BOARD
2A-C-6-002	T1		GENERAL	STANDARD DETAILS - TYPICAL STRUCTURAL DETAILS - SH1
2A-C-6-003	T1		GENERAL	STANDARD DETAILS - TYPICAL STRUCTURAL DETAILS SH2
2A-C-6-004	T1		GENERAL	STANDARD DETAILS - TYPICAL STRUCTURAL DETAILS SH3
2A-C-6-005	T1		GENERAL	STANDARD DETAILS - TYPICAL STRUCTURAL DETAILS - SH4
2A-C-6-006	T1		GENERAL	STANDARD DETAILS - TYPICAL STRUCTURAL NOTES
2A-C-6-007	T1		GENERAL	CIVILS TYPICAL DETAILS: RESERVOIR SAFETY DETAILS
2A-C-6-008	T1		GENERAL	BALANCING RESERVOIR: TYPICAL DRAWINGS EMBANKMENT DETAIL SHEET 1
2A-C-6-009	T1		GENERAL	BALANCING RESERVOIR: STANDARD DRAWINGS EMBANKMENT DETAIL SHEET 2
2A-C-6-010	T1		GENERAL	BALANCING RESERVOIR: STANDARD DRAWINGS LINER ANCHORING DETAIL
2A-C-6-011	T1		GENERAL	BALANCING RESERVOIR: STANDARD DRAWINGS LINER FIXING DETAIL
2A-C-6-012	T1		GENERAL	CIVILS TYPICAL DETAILS: STORMWATER CANAL DETAILS SHEET 1
2A-C-6-013	T1		GENERAL	CIVILS TYPICAL DETAILS: STORMWATER CANAL DETAILS SHEET 2
2A-C-6-014	T1		GENERAL	CIVILS TYPICAL DETAILS: UNDERDRAIN TYPICAL DETAILS
2A-C-6-015	T1		GENERAL	TYPICAL DETAILS: MANHOLES AND CULVERTS
2A-C-6-016	T1		GENERAL	TYPICAL DETAILS: CULVERTS
2A-C-6-017	T1		GENERAL	TYPICAL DETAILS: ENCASEMENT DETAILS
2A-C-6-018	T1		GENERAL	CIVILS TYPICAL DETAILS: CANALS AND ANCHORS
2A-C-6-019	T1		GENERAL	CIVILS TYPICAL DETAILS: CANALS
2A-C-6-020	T1		GENERAL	CIVIL TYPICAL DETAILS: POTABLE & FIRE WATER
2A-C-6-050	T1		GENERAL	RESERVOIR: TYPICAL UPSTREAM ACCESS STAIRS - LAYOUT AND SECTIONS
2A-C-6-100	T1		GENERAL	STANDARD DETAIL - 16 STRAND GAMEPROOF FENCE (1.8M HIGH)
2A-C-6-101	T1		GENERAL	STANDARD DETAIL - 7 STRAND STOCKPROOF FENCE (1.25M HIGH)
2A-C-6-102	T1		GENERAL	STANDARD DETAIL - 21 STRAND GAMEPROOF FENCE (2.4M HIGH)
2A-C-6-103	T1		GENERAL	STANDARD DETAIL - STOCK AND GAMEPROOF FENCE NOTES
2A-C-6-104	T1		GENERAL	STANDARD DETAIL - TYPICAL ROAD DEVIATION DETAIL FOR WORK NEXT TO THE ROAD
2A-C-6-105	T1		GENERAL	STANDARD DETAIL - TYPICAL ROAD DEVIATION DETAILS FOR HALF OPEN TRENCH ROAD CROSSINGS
2A-C-6-106	T1		GENERAL	STANDARD DETAIL - ACCESS ROAD DETAILS
2A-C-6-107	T1		GENERAL	STANDARD DETAIL - ACCESS ROAD DETAILS
2A-C-6-110	T1		GENERAL	STANDARD DETAIL - PIPE BEDDING AND PROTECTION
2A-C-6-111	T1		GENERAL	STANDARD DETAIL - PIPE BEDDING AND PROTECTION
2A-C-6-114	T1		GENERAL	STANDARD DETAIL - PIPELINE AND ACCESS ROAD
2A-C-6-115	T1		GENERAL	STANDARD DETAIL - TYPICAL JACKED ROAD AND RAIL CROSSING
2A-C-6-116	T1		GENERAL	STANDARD DETAIL - EROSION BERM
2A-C-6-117	T1		GENERAL	STANDARD DETAIL - EROSION PROTECTION: RENO MATTRESS AND GABION PROTECTION
2A-C-6-118	T1		GENERAL	STANDARD DETAIL - 14 STRAND MESH TYPE GAME FENCE (1.8m HIGH)
2A-C-6-119	T1		GENERAL	STANDARD DETAIL - 20 STRAND MESH TYPE GAME FENCE (2.4m HIGH)
2A-C-6-125	T1		GENERAL	STANDARD DETAIL - TYPICAL CHAMBER DETAILS
2A-C-6-127	T1		GENERAL	STANDARD DETAIL - NOTES APPLICABLE TO PIPE SPECIALS, VALVES, METERS AND ACCESS LADDERS
2A-C-6-141	T1		GENERAL	STANDARD DETAIL - SINGLE AIR VALVE INSTALLATION - GENERAL LAYOUT
2A-C-6-142	T1		GENERAL	STANDARD DETAIL - SINGLE AIR VALVE INSTALLATION - PIPE SPECIALS
2A-C-6-143	T1		GENERAL	STANDARD DETAIL - SINGLE AIR VALVE INSTALLATION - PIPE SPECIALS
2A-C-6-144	T1		GENERAL	STANDARD DETAIL - DOUBLE AIR VALVE INSTALLATION - GENERAL LAYOUT
2A-C-6-145	T1		GENERAL	STANDARD DETAIL - DOUBLE AIR VALVE INSTALLATION - PIPE SPECIALS
2A-C-6-146	T1		GENERAL	STANDARD DETAIL - ACCESS INSTALLATION - GENERAL LAYOUT
2A-C-6-147	T1		GENERAL	STANDARD DETAIL - ACCESS INSTALLATION - PIPE SPECIALS
2A-C-6-148	T1		GENERAL	STANDARD DETAIL - SINGLE SCOUR VALVE INSTALLATION: DN 1600mm TO DN 1400mm - PLAN, SECTION AND DETAILS
2A-C-6-149	T1		GENERAL	STANDARD DETAIL - SINGLE SCOUR VALVE INSTALLATION: DN 1600mm TO DN 1400mm - PIPE SPECIALS
2A-C-6-151	T1		GENERAL	STANDARD DETAIL - SINGLE SCOUR VALVE INSTALLATION: DN 1100 mm - DN 900mm - PLAN, SECTION AND DETAILS
2A-C-6-152	T1		GENERAL	STANDARD DETAIL - SINGLE SCOUR VALVE INSTALLATION: DN 1100 mm - DN 900mm - PIPE SPECIALS
2A-C-6-153	T1		GENERAL	STANDARD DETAIL - DOUBLE SCOUR VALVE AND ISOLATING VALVE INSTALLATION: DN 1200mm - PLAN AND ROOF SLABS
2A-C-6-154	T1		GENERAL	STANDARD DETAIL - DOUBLE SCOUR VALVE AND ISOLATING VALVE INSTALLATION: DN 1200mm - SECTION AND DETAIL
2A-C-6-155	T1		GENERAL	STANDARD DETAIL - DOUBLE SCOUR VALVE AND ISOLATING VALVE INSTALLATION: DN 1200mm - PIPE SPECIALS
2A-C-6-156	T1		GENERAL	STANDARD DETAIL - DOUBLE SCOUR VALVE AND ISOLATING VALVE INSTALLATION: DN 900mm - PLAN AND DETAILS
2A-C-6-157	T1		GENERAL	STANDARD DETAIL - DOUBLE SCOUR VALVE AND ISOLATING VALVE INSTALLATION: DN 900mm - SECTION AND DETAIL
2A-C-6-158	T1		GENERAL	STANDARD DETAIL - DOUBLE SCOUR VALVE AND ISOLATING VALVE INSTALLATION: DN 900mm - PIPE SPECIALS
2A-C-6-159	T1		GENERAL	STANDARD DETAIL - SCOUR VALVE, ISOLATING VALVE AND AIR VALVE INSTALLATION: DN 1200mm - PLAN AND DETAILS
2A-C-6-160	T1		GENERAL	STANDARD DETAIL - SCOUR VALVE, ISOLATING VALVE AND AIR VALVE INSTALLATION: DN 1200mm - SECTION AND DETAIL
2A-C-6-161	T1		GENERAL	STANDARD DETAIL - SCOUR VALVE, ISOLATING VALVE AND AIR VALVE INSTALLATION: DN 1200mm - PIPE SPECIALS
2A-C-6-162	T1		GENERAL	STANDARD DETAIL - SCOUR VALVE, ISOLATING VALVE AND AIR VALVE INSTALLATION: DN 900mm - PLAN AND DETAILS
2A-C-6-163	T1		GENERAL	STANDARD DETAIL - SCOUR VALVE, ISOLATING VALVE AND AIR VALVE INSTALLATION: DN 900mm - SECTION AND DETAILS
2A-C-6-164	T1		GENERAL	STANDARD DETAIL - SCOUR VALVE, ISOLATING VALVE AND AIR VALVE INSTALLATION: DN 900mm - PIPE SPECIALS
2A-C-6-168	T1		GENERAL	STANDARD DETAIL - FLOW METER INSTALLATION - PLAN, SECTION AND DETAILS
2A-C-6-169	T1		GENERAL	STANDARD DETAIL - FLOW METER INSTALLATION - DETAILS AND PIPE SPECIALS
2A-C-6-170	T1		GENERAL	STANDARD DETAIL - HIGH-LIFT RISING MAIN: NON-RETURN VALVE AND ISOLATING VALVE INSTALLATION - PLAN AND SECTION
2A-C-6-171	T1		GENERAL	STANDARD DETAIL - HIGH-LIFT RISING MAIN: NON-RETURN VALVE AND ISOLATING VALVE INSTALLATION - DETAILS AND PIPE SPECIALS
2A-C-6-172	T1		GENERAL	GRAVITY MAIN - MEDUPI OFF-TAKE: FLOW CONTROL OFF-TAKE INSTALLATION - PLAN, SECTION AND DETAILS
2A-C-6-173	T1		GENERAL	GRAVITY MAIN - MEDUPI OFF-TAKE: FLOW CONTROL OFF-TAKE INSTALLATION - DETAIL AND PIPE SPECIALS
2A-C-6-178	T1		GENERAL	GRAVITY MAIN - FLOW METER INSTALLATION AT OFF-TAKES - PLAN, SECTION AND DETAILS
2A-C-6-179	T1		GENERAL	GRAVITY MAIN - FLOW METER INSTALLATION AT OFF-TAKES - DETAIL AND PIPE SPECIALS
2A-C-6-185	T1		GENERAL	STANDARD DETAIL - STRAINER DETAIL
2A-C-6-190	T1		GENERAL	STANDARD DETAIL - FARMER OFF-TAKE - GENERAL LAYOUT
2A-C-6-191	T1		GENERAL	STANDARD DETAIL - FARMER OFF-TAKE - PIPE SPECIALS
2A-E-1-001	T1		GENERAL	GENERAL - SMALL POWER AND LIGHTING - LEGEND
2A-E-1-003	T1		GENERAL	GENERAL - LV & MV SINGLE LINE DIAGRAM SYMBOLS
2A-E-2.1-001	T1		GENERAL	GENERAL - P&ID - SYMBOLS AND LEGEND
2A-E-2.3-001	T1		GENERAL	STANDARD DETAIL - FLOW METER CHAMBER - SINGLE LINE DIAGRAM
2A-E-2.3-002	T1		GENERAL	STANDARD DETAIL - FLOW CONTROL CHAMBER - SINGLE LINE DIAGRAM
2A-E-2.3-003	T1		GENERAL	STANDARD DRAWING - GUARD HOUSE - SINGLE LINE DIAGRAM
2A-E-2.3-004	T1		GENERAL	STANDARD DRAWING - ISOLATION VALVE CHAMBER - SINGLE LINE DIAGRAM
2A-E-2.3-005	T1		GENERAL	STANDARD DRAWING - DISCHARGE (NON-RETURN VALVE) - SINGLE LINE DIAGRAM
2A-E-2.3-006	T1		GENERAL	STANDARD DRAWING - INSTRUMENTATION HUT - SINGLE LINE DIAGRAM
2A-E-2.3-007	T1		GENERAL	INSTRUMENT HUT - UPS STANDARD CONFIGURATION - SINGLE LINE DIAGRAM
2A-E-2.3-010	T1		GENERAL	STANDARD DRAWING - FIRE PUMP HOUSE - SINGLE LINE DIAGRAM
2A-E-2.6-001	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: TYPICAL CABLE TRENCH
2A-E-2.6-002	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: SACP AND ACM AT INSULATED CHAMBER
2A-E-2.6-003	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: TYPICAL FOREIGN SERVICE BOND
2A-E-2.6-004	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: TYPICAL CONCRETE BUNKER DETAIL
2A-E-2.6-005	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: TYPICAL CONCRETE BUNKER DETAIL
2A-E-2.6-006	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: TYPICAL SHALLOW VERTICAL ANODE INSTALLATION
2A-E-2.6-007	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: PIPE GRADIENT POTENTIAL CONTROL MAT - NEW CHAMBERS
2A-E-2.6-008	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: BONDING AND THERMIT WELD
2A-E-2.6-009	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: CONNECTION PANEL FOR CONTINUITY BONDING
2A-E-2.6-010	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: COUPON DETAILS FOR TEST STATIONS
2A-E-2.6-011	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: DETAILS OF INSULATING JOINT
2A-E-2.6-012	T1		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: PANEL CONNECTION DETAILS
2A-E-2.6-013	T2		GENERAL	STANDARD DETAIL - CATHODIC PROTECTION: DETAILS OF INSULATING JOINT
2A-E-3-002	T1		GENERAL	STANDARD DETAIL - FLOW METER CHAMBER - LIGHTING AND SMALL POWER LAYOUT
2A-E-3-005	T1		GENERAL	STANDARD DETAIL - FLOW CONTROL CHAMBER - SMALL POWER AND LIGHTING LAYOUT
2A-E-3-006	T1		GENERAL	STANDARD DRAWING - GUARD HOUSE - LIGHTING SMALL POWER LAYOUT
2A-E-3-008	T1		GENERAL	STANDARD DRAWING - DISCHARGE (NON-RETURN) VALVE CHAMBER - LIGHTING AND SMALL POWER LAYOUT
2A-E-3-009	T1		GENERAL	STANDARD DRAWING - DISCHARGE ISOLATION VALVE CHAMBER - LIGHTING AND SMALL POWER
2A-E-3-010	T1		GENERAL	STANDARD DRAWING - INSTRUMENTATION HUT - LIGHTING AND SMALL POWER LAYOUT
2A-E-3-011	T1		GENERAL	STANDARD DRAWING - FIRE PUMP HOUSE - LIGHTING AND SMALL POWER LAYOUT
2A-E-5-001	T1		GENERAL	NKP SITES CCTV BASIC BLOCK DIAGRAM - LAN LAYOUT WITH CONNECTION TO MAIN INDUSTRIAL ETHERNET NETWORK SWITCH
2A-E-5-002	T1		GENERAL	STANDARD DETAIL - BLOCK DIAGRAM - TYPICAL MCWAP-2 MICROWAVE RADIO SYSTEM
2A-E-5-004	T1		GENERAL	STANDARD DETAIL - PRIMARY FIBER OPTIC SINGLE MODE NETWORK AND SECONDARY BROADBAND WIRELESS RADIO NETWORK LAYOUT
2A-E-5-005	T1		GENERAL	STANDARD DETAIL - CCTV AND ACCESS CONTROL NETWORK LAYOUT

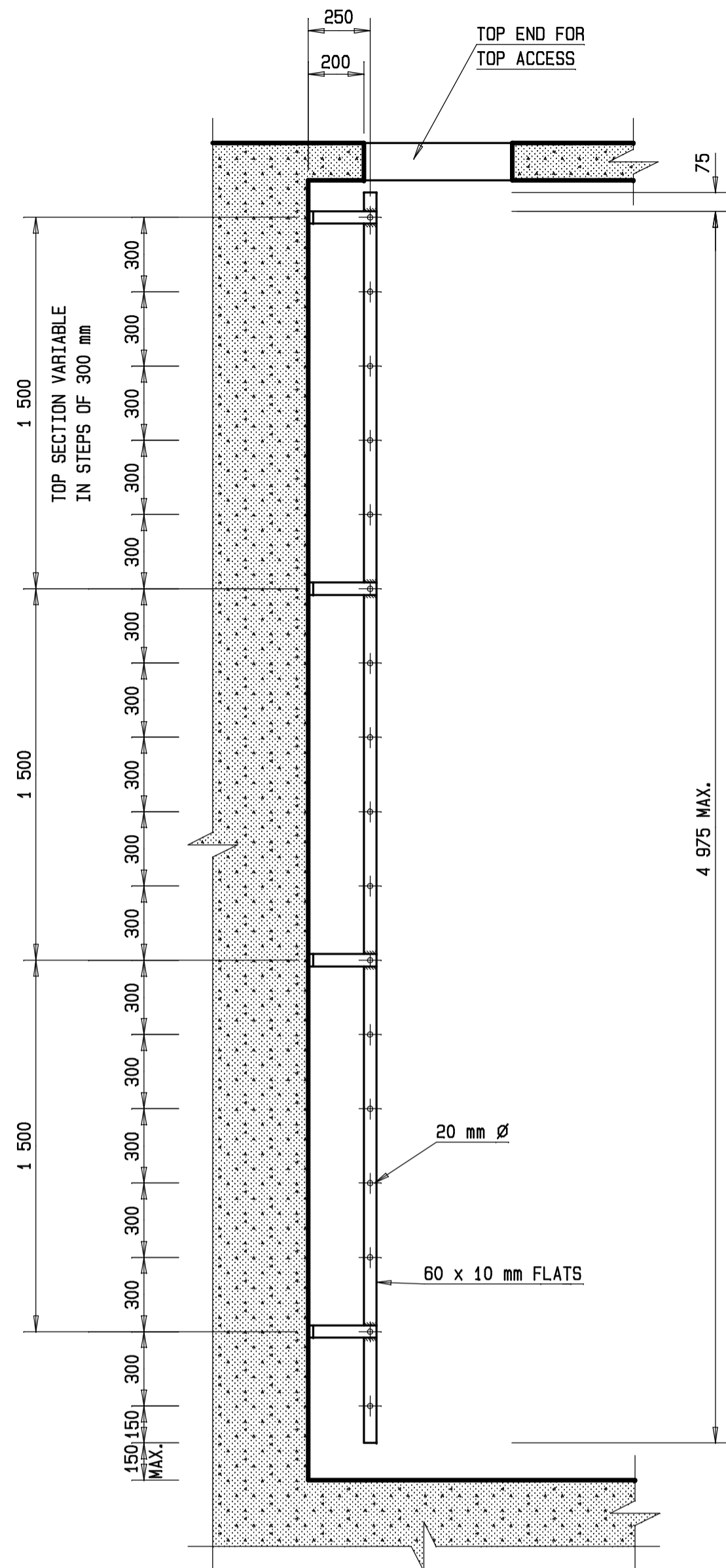
JV Drg Number	Rev	DWS Number	Area	Description
2A-E-6-001	T1		GENERAL	STANDARD DETAIL - TYPICAL LOOP DIAGRAM
2A-E-6-002	T1		GENERAL	STANDARD DETAIL - TYPICAL JUNCTION BOX
2A-E-6-003	T1		GENERAL	STANDARD DETAIL - CONTROL LOOP FOR HIGH-LIFT FLOW RATE CONTROL
2A-E-6-004	T1		GENERAL	STANDARD DETAIL - TYPICAL LOOP DIAGRAM - ON, OFF VALVE
2A-E-6-005	T1		GENERAL	STANDARD DETAIL - TYPICAL LOOP DIAGRAM - MODULATING VALVE
2A-E-6-006	T1		GENERAL	STANDARD DETAIL - TYPICAL LOOP DIAGRAM - MODULATING VALVE
2A-E-6-007	T1		GENERAL	GENERAL - TYPICAL MV CABLE TRENCH
2A-E-6-008	T1		GENERAL	GENERAL - TYPICAL LV CABLE TRENCH
2A-M-1-002	T1		GENERAL	GENERAL - HVAC LEGEND
2A-M-2.1-001	T1		GENERAL	PROCESS FLOW DIAGRAM
2A-M-3-001	T1		GENERAL	STANDARD DRAWING - GUARD HOUSE - HVAC LAYOUT
2A-M-3-002	T1		GENERAL	STANDARD DRAWING - GUARD HOUSE - FIRE PROTECTION AND STATUTORY SIGNANGE LAYOUT
2A-M-3-003	T1		GENERAL	STANDARD DRAWING - INSTRUMENT HUT - HVAC LAYOUT
2A-M-3-004	T1		GENERAL	STANDARD DRAWING - INSTRUMENTATION HUT - FIRE PROTECTION AND STATUTORY EMERGENCY SIGNANGE LAYOUT
2A-P-1-001	O2		GENERAL	DOCUMENT & PLANT NUMBERING SYSTEM
2A-P-2-001	T2		GENERAL	PROJECT STRUCTURE DIAGRAM
2B-C-3-001	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: SITE LAYOUT
2B-C-3-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: PIPEWORK - GENERAL ARRANGEMENT
2B-C-3-004	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: PROPOSED RIVER DIVERSION
2B-C-3-010	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: FIRE WATER LAYOUT
2B-C-3-011	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: POTABLE WATER LAYOUT
2B-C-3-012	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: SEWER LAYOUT
2B-C-3-013	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: STORMWATER LAYOUT
2B-C-4-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: PIPEWORK - SECTIONS
2B-C-5-002	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: PIPEWORK SUCTION - MATERIAL TAKE-OFF TABLE
2B-C-5-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: PIPEWORK: DELIVERY - MATERIAL TAKE-OFF TABLE
2B-C-5-010	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: STORMWATER DETAILS
2B-C-7-100	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: ISOMETRIC VIEW OF SITE
2B-C-7-101	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: NORTH, EAST, SOUTH AND WEST - 3D ISOMETRIC VIEWS
2B-C-7-200	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: OVERALL STRUCTURAL LAYOUT
2B-C-7-201	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: BOULDER TRAP
2B-C-7-202	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: GRAVEL TRAP 1
2B-C-7-203	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: GRAVEL TRAP 2
2B-C-7-204	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: SAND TRAP - DOWNSTREAM CROSS SECTION
2B-C-7-205	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: SAND TRAP - UPSTREAM CROSS SECTION
2B-C-7-206	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: SAND TRAP - LONG SECTION
2B-C-7-207	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: PORTION 1 (SEDIMENT TRAPS)
2B-C-7-208	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: PORTION 2 (SAND TRAPS)
2B-C-7-209	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: PORTION 3 (FLUSHING CANAL WITH PUMP STATION BASEMENT)
2B-C-7-210	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: 3D VIEW OF FLUSHING CANAL WITH PUMP STATION BASEMENT
2B-C-7-211	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: DIVERSION WORKS: SEDIMENT TRAP CROSS SECTION
2B-C-7-300	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: LOW-LIFT PUMPING STATION: 3D VIEWS
2B-C-7-301	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: LOW-LIFT PUMPING STATION: GROUND FLOOR PLAN
2B-C-7-302	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: LOW-LIFT PUMPING STATION: CROSS SECTIONS SHEET 1
2B-C-7-303	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: LOW-LIFT PUMPING STATION: CROSS SECTIONS SHEET 2
2B-C-7-304	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: LOW-LIFT PUMPING STATION: CROSS SECTIONS SHEET 3
2B-C-7-350	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: LOW-LIFT PUMPING STATION: FIRE WATER PUMP ROOM
2B-C-7-400	T1		ABSTRACTION WORKS	DIVERSION WEIR: PLAN LAYOUT
2B-C-7-401	T1		ABSTRACTION WORKS	DIVERSION WEIR: CROSS SECTIONS SHEET 1
2B-C-7-402	T1		ABSTRACTION WORKS	DIVERSION WEIR: CROSS SECTIONS SHEET 2
2B-C-7-403	T1		ABSTRACTION WORKS	DIVERSION WEIR: CROSS SECTIONS SHEET 3
2B-C-7-450	T1		ABSTRACTION WORKS	DIVERSION WEIR: JOINT LAYOUT
2B-C-7-451	T1		ABSTRACTION WORKS	DIVERSION WEIR: JOINT DETAILS
2B-C-7-452	T1		ABSTRACTION WORKS	DIVERSION WEIR: JOINT DETAILS
2B-C-7-500	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - OVERALL LAYOUT OF GROUND IMPROVEMENT
2B-C-7-501	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - 3D VIEWS OF GROUND IMPROVEMENT
2B-C-7-502	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WEIR SHEET 1
2B-C-7-503	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WEIR SHEET 2
2B-C-7-504	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WEIR SHEET 3
2B-C-7-505	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WEIR SHEET 4
2B-C-7-506	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WEIR SHEET 5
2B-C-7-507	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - PUMPING STATION SHEET 1
2B-C-7-508	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WORKS SHEET 1
2B-C-7-509	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - DIVERSION WORKS SHEET 2
2B-C-7-510	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: EARTHWORKS AND GROUND IMPROVEMENT - RETAINING WALL 1
2B-C-7-600	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: FISHWAY - PLAN VIEW
2B-C-7-601	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: FISHWAY - ELEVATIONS
2B-C-7-602	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: FISHWAY - SECTIONS SHEET 1
2B-C-7-603	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: FISHWAY - SECTIONS SHEET 2
2B-C-7-604	T1		ABSTRACTION WORKS	ABSTRACTION WORKS: FISHWAY - SECTIONS SHEET 3
2B-C-9-100	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: GROUND FLOOR PLAN
2B-C-9-103	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: ROOF PLAN
2B-C-9-105	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: SECTION A-A & SECTION D-D
2B-C-9-106	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: SECTION B-B & SECTION C-C
2B-C-9-120	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: FRONT ELEVATION
2B-C-9-121	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: REAR ELEVATION
2B-C-9-122	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: SIDE ELEVATIONS
2B-C-9-125	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION: ROLLER SHUTTER SCHEDULE, DOOR & WINDOW SCHEDULES
2B-E-2.1-001	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - P&ID - PUMP SET 1
2B-E-2.1-002	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - P&ID - PUMP SET 2
2B-E-2.1-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - P&ID - PUMP SET 3
2B-E-2.1-019	T1		ABSTRACTION WORKS	DIVERSION WORKS - P&ID
2B-E-2.2-001	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - MV SWITCHGEAR - BASIC ARCHITECTURE OVERVIEW
2B-E-2.2-002	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - PROTECTION AND CONTROL BLOCK DIAGRAM FOR 11 KV MAIN INCOMERS
2B-E-2.2-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - PROTECTION AND CONTROL BLOCK DIAGRAM FOR 11 KV FEEDERS
2B-E-2.2-004	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - PROTECTION AND CONTROL BLOCK DIAGRAM FOR 11 KV BUSBAR AND PROTECTION SCHEME
2B-E-2.2-005	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - PROTECTION BLOCK DIAGRAM FOR BUS COUPLER AND BUS SECTION
2B-E-2.2-006	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - QUALITY OF SUPPLY AND ENERGY METERING PANEL LAYOUT
2B-E-2.3-001	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - NORMAL MAIN LV BOARD - SINGLE LINE DIAGRAM
2B-E-2.3-002	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - EMERGENCY MAIN LV BOARD - SINGLE LINE DIAGRAM
2B-E-2.3-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - MOTOR CONTROL CENTRE - SINGLE LINE DIAGRAM
2B-E-2.3-004	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - SINGLE LINE DIAGRAM 2B-SU-1 - 11/3.3KV SUB STATION
2B-E-2.3-005	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GUARD HOUSE - SINGLE LINE DIAGRAM
2B-E-2.3-006	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - LIGHTING AND SMALL POWER - SINGLE LINE DIAGRAM
2B-E-2.3-007	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - UPS 1 DB - SINGLE LINE DIAGRAM
2B-E-2.3-008	T1		ABSTRACTION WORKS	STANDARD DETAIL - FLOW METER - SINGLE LINE DIAGRAM
2B-E-2.3-009	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - VALVE CHAMBERS - SINGLE LINE DIAGRAM
2B-E-2.4-001	T1		ABSTRACTION WORKS	DIVERSION WORKS - CCTV AND ACCESS CONTROL - SITE LAYOUT
2B-E-2.4-002	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - CABLE BLOCK DIAGRAM
2B-E-2.4-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - MV & LV SYSTEM - BLOCK DIAGRAM
2B-E-3-001	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - SITE LAYOUT - LIGHTING AND POWER LAYOUT
2B-E-3-005	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - LIGHTING LAYOUT
2B-E-3-006	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - SMALL POWER LAYOUT
2B-E-3-007	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - FIRE DETECTION PLANS
2B-E-3-009	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - MV CABLE ROUTES AND LAYOUTS
2B-E-3-010	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - CONDUIT LAYOUT
2B-E-3-011	T1		ABSTRACTION WORKS	DIVERSION WORKS - SMALL POWER LAYOUT
2B-E-3-012	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - SITE LAYOUT - LV AND MV ELECTRICAL SITE LAYOUT
2B-E-3-013	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - SITE LAYOUT - LV AND MV ELECTRICAL RETICULATION LAYOUT
2B-M-2.1-001	T1		ABSTRACTION WORKS	LOW LIFT PUMPING STATION - CHILLED WATER PIPE SCHEMATIC
2B-M-3-001	T1		ABSTRACTION WORKS	LOW LIFT PUMPING STATION - GROUND FLOOR - HVAC LAYOUT
2B-M-3-002	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - FIRE PROTECTION AND STATUTORY EMERGENCY SIGNANGE LAYOUT
2B-M-3-003	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - FIRE WATER RETICULATION LAYOUT
2B-M-3-004	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - GAS SUPPRESSION LAYOUT
2B-M-3-005	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GUARD HOUSE - HVAC LAYOUT
2B-M-3-006	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GUARD HOUSE - FIRE PROTECTION AND STATUTORY SIGNANGE LAYOUT
2B-M-3-007	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - ROOF PLAN - SMOKE VENTILATION
2B-M-3-008	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - GROUND FLOOR - FIRE WATER RETICULATION LAYOUT
2B-M-3-009	T1		ABSTRACTION WORKS	LOW-LIFT PUMPING STATION - SDP FIRE PROTECTION PLAN

JV Drg Number	Rev	DWS Number	Area	Description
2B-M	6-001	T1		ABSTRACTION WORKS
2C-C	1-001	T1		LOW-LIFT PUMPING STATION - PUMP ROOM DETAIL
2C-C	3-001	T1		LOW-LIFT RISING MAIN - PIPELINE DATA SHEET
2C-C	3-001	T2		LOW-LIFT RISING MAIN - LOCALITY PLAN
2C-C	3-050	T1		ACCESS ROAD: KEY PLAN, LOCALITY PLAN AND LIST OF DRAWINGS
2C-C	4-001	T1		LOW-LIFT RISING MAIN - COMPLETE LONGITUDINAL SECTION AND HYDRAULIC PROFILE
2C-C	4-002	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 1
2C-C	4-003	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 2
2C-C	4-004	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 3
2C-C	4-005	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 4
2C-C	4-006	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 5
2C-C	4-007	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 6
2C-C	4-008	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 7
2C-C	4-009	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 1
2C-C	4-010	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 9
2C-C	4-011	T1		LOW-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 10
2C-C	4-050	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (1 OF 8)
2C-C	4-051	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (2 OF 8)
2C-C	4-052	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (3 OF 8)
2C-C	4-053	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (4 OF 8)
2C-C	4-054	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (5 OF 8)
2C-C	4-055	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (6 OF 8)
2C-C	4-056	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (7 OF 8)
2C-C	4-057	T1		ACCESS ROAD - GEOMETRIC LAYOUTS AND LONGITUDINAL SECTIONS (8 OF 8)
2C-C	5-011	T1		LOW-LIFT RISING MAIN - FLOW METER INSTALLATION - PLAN AND SECTION
2C-C	5-012	T1		LOW-LIFT RISING MAIN - FLOW METER INSTALLATION - DETAILS AND PIPE SPECIALS
2C-C	5-015	T1		LOW-LIFT RISING MAIN - NON-RETURN VALVE AND ISOLATING VALVE INSTALLATION - PLAN, SECTION AND DETAIL
2C-C	5-016	T1		LOW-LIFT RISING MAIN - NON-RETURN VALVE AND ISOLATING VALVE INSTALLATION - DETAILS AND PIPE SPECIALS
2C-C	5-020	T1		LOW-LIFT RISING MAIN - SCOUR VALVE INSTALLATION - PLAN
2C-C	5-021	T1		LOW-LIFT RISING MAIN - SCOUR VALVE INSTALLATION - SECTIONS AND ROOF PLAN
2C-C	5-022	T1		LOW-LIFT RISING MAIN - SCOUR VALVE INSTALLATION - PIPE SPECIALS
2C-C	5-025	T1		LOW-LIFT RISING MAIN - FLOW METER AND NON-RETURN VALVE LAYOUT AT CH 267 - PLAN AND SECTION
2C-C	5-026	T1		LOW-LIFT RISING MAIN - FLOW METER AND NON-RETURN VALVE LAYOUT AT CH 267 - PIPE SPECIALS
2C-C	5-030	T1		LOW-LIFT RISING MAIN - END POINT OF RISING MAIN AT SEDIMENTATION WORKS - PLAN AND SECTION
2C-C	5-031	T1		LOW-LIFT RISING MAIN - ISOLATING VALVE INSTALLATION AT SEDIMENTATION WORKS - PLAN, SECTION AND DETAIL
2C-C	5-032	T1		LOW-LIFT RISING MAIN - ISOLATING VALVE INSTALLATION AT SEDIMENTATION WORKS - PIPE SPECIALS
2C-C	5-050	T1		ACCESS ROAD - TYPICAL CROSS SECTION AND PAVEMENT DESIGN
2C-C	5-051	T1		LOW-LIFT RISING MAIN - GUARDRAIL DETAILS: TYPICAL DETAILS
2C-C	5-052	T1		LOW-LIFT RISING MAIN - GUARDRAIL TERMINAL SECTIONS
2C-C	6-001	T1		LOW-LIFT RISING MAIN - STANDARD DETAILS TYPICAL - TYPICAL SERVITUDE CROSS SECTION
2D-C	3-001	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: SITE LAYOUT
2D-C	3-002	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: LOCALITY PLAN
2D-C	3-003	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - PIPEWORK - GENERAL ARRANGEMENT
2D-C	4-001	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - PIPEWORK - DN2000 DISCHARGE MANIFOLD: PLAN AND LONG SECTION
2D-C	4-002	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - RESERVOIR 1: PIPEWORK - PLAN AND SECTION
2D-C	4-003	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - RESERVOIR 2: PIPEWORK - PLAN AND SECTION
2D-C	4-004	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - RESERVOIR 3: PIPEWORK - PLAN AND SECTION
2D-C	4-81	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: RING ROAD
2D-C	4-82	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: RING ROAD LAYOUT
2D-C	5-001	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: DAM 1 LONG-SECTION
2D-C	5-002	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: DAM 2 LONG-SECTION
2D-C	5-003	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: DAM 3 LONG-SECTION
2D-C	5-004	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: CROSS-SECTION
2D-C	5-005	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: UNDERDRAIN PLAN LAYOUT
2D-C	5-006	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR OVERFLOW CANAL
2D-C	5-007	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR STORMWATER CHANNEL: LONG-SECTION SHEET 1
2D-C	5-008	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR STORMWATER CHANNEL: LONG-SECTION SHEET 2
2D-C	5-011	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: BULK EARTHWORKS PLAN
2D-C	5-012	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: BULK EARTHWORKS - GENERAL DETAILS
2D-C	5-013	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: INLET MANIFOLD - LAYOUT
2D-C	5-014	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: INLET MANIFOLD - SECTION AND SCHEDULE
2D-C	5-015	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: DISTRIBUTION PIPE - LAYOUT
2D-C	5-016	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: DISTRIBUTION PIPE - SECTIONS
2D-C	5-017	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: DISTRIBUTION PIPE - SCHEDULE
2D-C	5-019	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: EARTHWORKS PLAN
2D-C	5-020	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: BULK EARTHWORKS SETTING OUT
2D-C	5-021	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - RESERVOIR 1: VALVE AND SCOUR CHAMBER PIPE DETAILS AND MATERIAL OFF-TAKE TABLE
2D-C	5-022	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - RESERVOIR 2: VALVE AND SCOUR CHAMBER PIPE DETAILS AND MATERIAL OFF-TAKE TABLE
2D-C	5-023	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - RESERVOIR 3: VALVE AND SCOUR CHAMBER PIPE DETAILS AND MATERIAL TAKE-OFF TABLE
2D-C	5-024	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - PIPEWORK - CHAMBER DETAILS AND MATERIAL OFF-TAKE TABLE
2D-C	5-025	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: LATERAL OVERFLOW - LAYOUT AND SECTION 1
2D-C	5-026	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: LATERAL OVERFLOW - LAYOUT AND SECTION 2
2D-C	5-027	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: STORMWATER GABION OUTLET
2D-C	5-030	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: DESILTING PIPE LONG SECTION SHEET 1
2D-C	5-031	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: DESILTING PIPE LONG SECTION SHEET 2
2D-C	5-032	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: DESILTING PIPE LONG SECTION SHEET 3
2D-C	5-200	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: OUTLET CHAMBER - CONCRETE DETAILS - PLAN, SECTION AND DETAILS
2D-C	5-201	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: SCOUR CHAMBER - CONCRETE DETAILS - PLAN, SECTION AND DETAILS
2D-C	5-050	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: UNDERDRAIN CHAMBER 1
2D-C	5-051	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: UNDERDRAIN CHAMBER 1 & 3
2D-C	7-005	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: 3D VIEWS
2D-C	7-006	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: SUB SURFACE DRAINAGE AND DETAILS
2D-C	7-007	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: PLAN LAYOUT PORTION 1
2D-C	7-008	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: PLAN LAYOUT PORTION 2
2D-C	7-009	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: LONG SECTIONS
2D-C	7-010	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: CROSS SECTIONS
2D-C	7-011	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: INLET - DETAIL LAYOUT AND SECTION
2D-C	7-012	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: FEEDER - DETAIL LAYOUT AND SECTION
2D-C	7-020	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS: DESILTING CHUTE - LAYOUT AND SECTION
2D-C	7-100	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - INLET STRUCTURE 1, 2 AND 3: LAYOUT AND SECTION
2D-C	7-101	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - INLET STRUCTURES 1, 2 AND 3: DETAILS
2D-C	7-102	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - OVERFLOW STRUCTURE 1: PLAN VIEW AND SECTION
2D-C	7-103	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - OVERFLOW STRUCTURE 2: PLAN VIEW AND SECTION
2D-C	7-104	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - OVERFLOW STRUCTURE 3: PLAN VIEW AND SECTION
2D-C	7-105	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - OVERFLOW STRUCTURE: DETAILS
2D-C	7-106	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - DISCHARGE STRUCTURE 1, 2 AND 3: CONCRETE DETAILS
2D-C	7-107	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - ACCESS RAMP - LAYOUT AND SECTIONS
2D-C	7-120	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR: TYPICAL RESERVOIR ACCESS BRIDGE (3 OFF) PLAN AND SECTIONS
2D-C	7-130	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - DESILTING PIPE STILING BASIN CONCRETE DETAILS
2D-C	7-140	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR STANDARD DRAWINGS - DOWNSTREAM ACCESS STAIRCASE SHEET 1
2D-C	7-141	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR STANDARD DRAWINGS - DOWNSTREAM ACCESS STAIRCASE SHEET 2
2D-E	2.1-001	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS - P&ID
2D-E	2.1-002	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR - P&ID
2D-E	2.3-001	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR & SEDIMENTATION WORKS - OUTDOOR MINI-SUBSTATION 1 - SINGLE LINE DIAGRAM
2D-E	2.3-002	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIR & SEDIMENTATION WORKS - OUTDOOR MINI-SUBSTATION 2 - SINGLE LINE DIAGRAM
2D-E	2.3-003	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS - VALVE CHAMBER - SINGLE LINE DIAGRAM
2D-E	2.4-001	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - SEDIMENTATION WORKS - CABLE BLOCK DIAGRAM
2D-E	2.4-002	T1		BALANCING RESERVOIR AND SEDIMENTATION WORKS - BALANCING RESERVOIRS - CABLE BLOCK DIAGRAM
2E-C	3-001	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: SITE PLAN LAYOUT
2E-C	3-002	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: FIRE WATER LAYOUT
2E-C	3-003	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: FIRE WATER LAYOUT
2E-C	3-004	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: POTABLE WATER LAYOUT
2E-C	3-005	T1		HIGH-LIFT PUMPING STATION - HILPS ROADS AND STORMWATER - SITE LAYOUT
2E-C	3-006	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION - PIPEWORK - GENERAL ARRANGEMENT
2E-C	3-007	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: SEWER WATER LAYOUT
2E-C	3-010	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: ESKOM SUBSTATION SITE LAYOUT
2E-C	4-001	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION - PIPEWORK - SECTIONS
2E-C	4-080	T1		LAYOUTS: HIGH LIFT PUMP STATION RING ROAD
2E-C	5-001	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION: BULK EARTHWORKS SHEET 1 OF 1
2E-C	5-002	T1		HIGH-LIFT PUMPING STATION - HIGH-LIFT PUMPING STATION - PIPEWORK SUCTION - MATERIAL TAKE-OFF TABLE

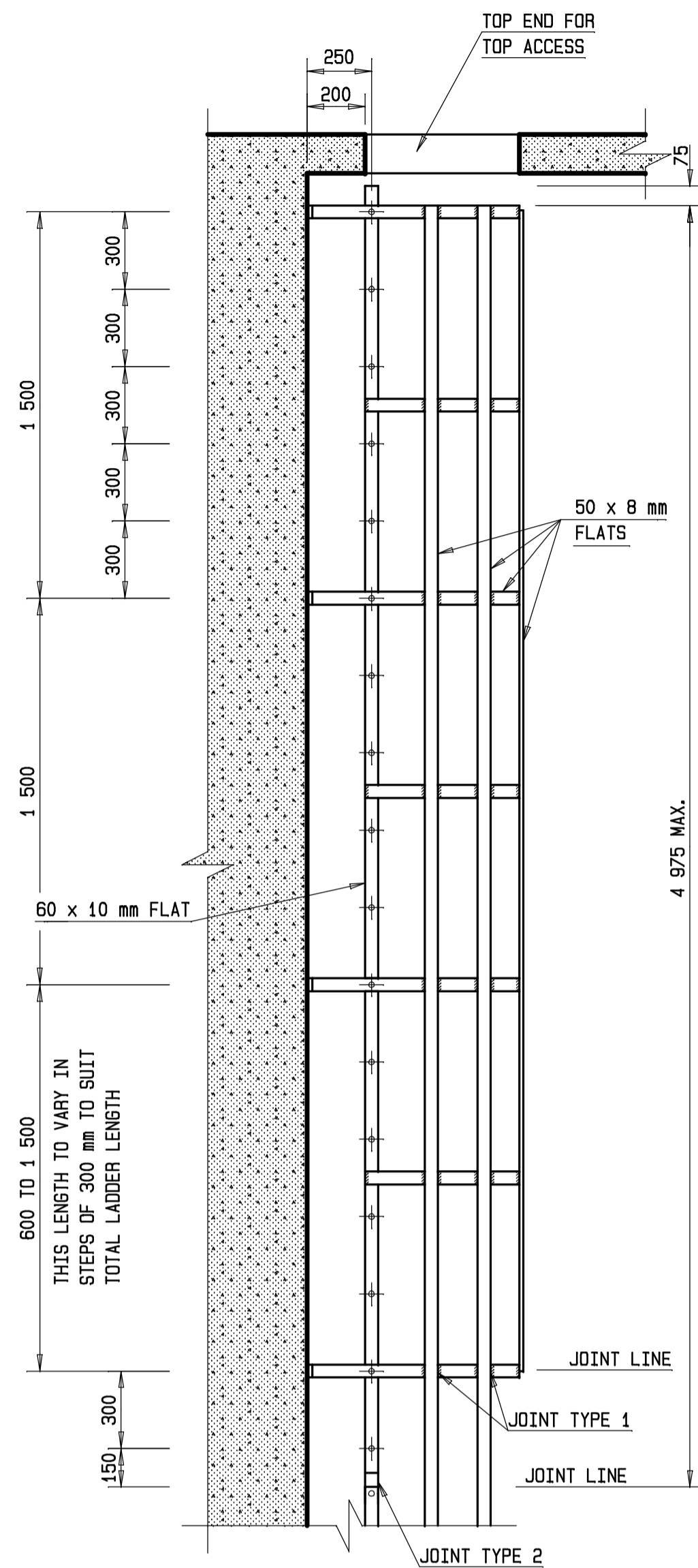
JV Dwg Number	Rev	DWS Number	Area	Description
2E-C-5-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - PIPEWORK DELIVERY - MATERIAL TAKE-OFF TABLE
2E-C-5-010	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SEWER LONG SECTION
2E-C-5-050	T2		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OUTLET PIPEWORK - KEYPLAN
2E-C-5-051	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OUTLET PIPEWORK - LAYOUT AND SECTION
2E-C-5-055	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - FIRE WATER INSTALLATION - PLAN, SECTIONS AND DETAIL
2E-C-5-056	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - FIRE WATER INSTALLATION - ROOF SLABS AND PIPE SPECIALS
2E-C-5-080	T1		HIGH-LIFT PUMPING STATION	STORMWATER TYPICAL DETAIL: KERB INLETS
2E-C-5-081	T1		HIGH-LIFT PUMPING STATION	STORMWATER TYPICAL DETAIL: JUNCTION BOXES (1 OF 2)
2E-C-5-082	T1		HIGH-LIFT PUMPING STATION	STORMWATER TYPICAL DETAIL: JUNCTION BOXES (2 OF 2)
2E-C-7-101	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - ISOMETRIC VIEW
2E-C-7-104	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - BASEMENT LEVEL LAYOUT PLAN
2E-C-7-105	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - BASEMENT LEVEL PORTION 1: LAYOUT PLAN
2E-C-7-106	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - BASEMENT LEVEL PORTION 2: LAYOUT PLAN
2E-C-7-107	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CABLE ROOM: LAYOUT
2E-C-7-108	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR LAYOUT PLAN
2E-C-7-109	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR PORTION 1: LAYOUT PLAN
2E-C-7-110	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR PORTION 2: LAYOUT PLAN
2E-C-7-111	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CROSS SECTIONS: SHEET 1
2E-C-7-112	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CROSS SECTIONS: SHEET 2
2E-C-7-113	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CROSS SECTIONS: SHEET 3
2E-C-7-114	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CROSS SECTIONS: SHEET 4
2E-C-7-119	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - MECHANICAL ISLAND AND TRENCH LAYOUT PLAN
2E-C-7-120	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CHANNEL TRENCH DETAILS
2E-C-9-100	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR PLAN: PART 1 OF 2
2E-C-9-101	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR PLAN: PART 2 OF 2
2E-C-9-102	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - ROOF PLAN: PART 1 OF 2
2E-C-9-103	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - ROOF PLAN: PART 2 OF 2
2E-C-9-105	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SECTION A-A: SHEET 1 OF 2
2E-C-9-106	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SECTION A-A: SHEET 2 OF 2
2E-C-9-107	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SECTION B-B
2E-C-9-120	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - EAST ELEVATION
2E-C-9-121	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - NORTH & SOUTH ELEVATIONS
2E-C-9-122	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - WEST ELEVATION: PART 1 OF 2
2E-C-9-123	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - WEST ELEVATION: PART 2 OF 2
2E-C-9-125	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - DOOR & WINDOW SCHEDULES, ROLLER SHUTTER DETAILS
2E-E-2.1-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - P&ID - PUMP SET 1
2E-E-2.1-002	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - P&ID - PUMP SET 2
2E-E-2.1-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - P&ID - PUMP SET 3
2E-E-2.1-004	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - P&ID - PUMP SET 4
2E-E-2.1-005	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - P&ID - VALVE CHAMBERS
2E-E-2.2-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - MV SWITCHGEAR - BASIC ARCHITECTURE OVERVIEW
2E-E-2.2-002	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - PROTECTION AND CONTROL BLOCK DIAGRAM FOR 11kV MAIN INCOMMERS
2E-E-2.2-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - PROTECTION AND CONTROL BLOCK DIAGRAM FOR 11kV FEEDERS
2E-E-2.2-004	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - PROTECTION AND CONTROL BLOCK DIAGRAM FOR 11kV BUSBAR ARC PROTECTION SCHEME
2E-E-2.2-005	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - PROTECTION BLOCK DIAGRAM FOR BUSBAR COUPLER AND BUS SECTION
2E-E-2.2-006	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - QUALITY OF SUPPLY & ENERGY - METERING PANEL LAYOUT
2E-E-2.3-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - NORMAL MAIN LV BOARD - SINGLE LINE DIAGRAM
2E-E-2.3-002	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - EMERGENCY LV MAIN BOARD - SINGLE LINE DIAGRAM
2E-E-2.3-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - MOTOR CONTROL CENTRE - SINGLE LINE DIAGRAM
2E-E-2.3-004	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - 11/6.6 kV SUB STATION - SINGLE LINE DIAGRAM
2E-E-2.3-008	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OUTDOOR MINI-SUBSTATION 3 - SINGLE LINE DIAGRAM
2E-E-2.3-009	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - NORMAL MAIN LV BOARD-2 - SINGLE LINE DIAGRAM
2E-E-2.3-011	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OCC - LV BOARD - SINGLE LINE DIAGRAM
2E-E-2.3-012	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION UPS 3 SINGLE LINE DIAGRAM
2E-E-2.3-013	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - UPS 1 DB - SINGLE LINE DIAGRAM
2E-E-2.3-014	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OCC - UPS 2 DB - SINGLE LINE DIAGRAM
2E-E-2.4-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - MV & LV SYSTEM - BLOCK DIAGRAM
2E-E-2.4-002	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CABLE BLOCK DIAGRAM
2E-E-2.4-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CCTV AND ACCESS CONTROL - SITE LAYOUT
2E-E-3-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SITE LIGHTING LAYOUT - POWER CABLES AND LIGHTING LAYOUT
2E-E-3-002	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR AND CABLE ROOM LAYOUT - LIGHTING LAYOUT
2E-E-3-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND AND BASEMENT FLOOR - SMALL POWER LAYOUT
2E-E-3-005	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR - MV CABLE ROUTES AND LAYOUTS
2E-E-3-008	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR - FIRE DETECTION PLANS
2E-E-3-009	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SITE PLAN - LV & MV ELECTRICAL RETICULATION - SHEET 1 OF 2
2E-E-3-009	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - SITE PLAN - LV & MV ELECTRICAL RETICULATION - SHEET 2 OF 2
2E-E-3-010	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OPERATION AND CONTROL CENTRE - LIGHTING LAYOUT
2E-E-3-011	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OPERATION AND CONTROL CENTRE - POWER LAYOUT
2E-E-3-013	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OPERATION AND CONTROL CENTRE - GROUND FLOOR FIRE DETECTION PLANS
2E-E-3-014	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR - CONDUIT LAYOUT
2E-M-2.1-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - CHILLED WATER PIPE SCHEMATIC
2E-M-3-001	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR - HVAC LAYOUT
2E-M-3-002	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - FIRE PROTECTION AND STATUTORY EMERGENCY SIGNAGE LAYOUT
2E-M-3-003	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR-GAS SUPPRESSION LAYOUT
2E-M-3-004	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GUARD HOUSE HVAC LAYOUT
2E-M-3-006	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OPERATION AND CONTROL CENTRE GROUND FLOOR - HVAC LAYOUT
2E-M-3-007	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OPERATION AND CONTROL CENTRE GROUND FLOOR - FIRE PROTECTION AND STATUTORY EMERGENCY SIGNAGE LAYOUT
2E-M-3-009	T1		HIGH-LIFT PUMPING STATION	BALANCING RESERVOIR - SDP FIRE PROTECTION PLAN
2E-M-3-010	T1		HIGH-LIFT PUMPING STATION	HIGH LEVEL PUMP STATION - ROOF PLAN SMOKE VENTILATION
2E-M-3-011	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - GROUND FLOOR - FIRE WATER RETICULATION LAYOUT
2E-M-3-013	T1		HIGH-LIFT PUMPING STATION	HIGH-LIFT PUMPING STATION - OPERATION AND CONTROL CENTRE GROUND FLOOR - FIRE WATER RETICULATION LAYOUT
2F-C-1-001	T3		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PIPELINE DATA SHEET
2F-C-3-001	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - LOCALITY PLAN
2F-C-4-001	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - COMPLETE LONGITUDINAL SECTION AND HYDRAULIC PROFILE
2F-C-4-002	T2		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 1
2F-C-4-003	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 2
2F-C-4-004	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 3
2F-C-4-005	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 4
2F-C-4-006	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 5
2F-C-4-007	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 6
2F-C-4-008	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 7
2F-C-4-009	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 8
2F-C-4-010	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 9
2F-C-4-011	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 10
2F-C-4-012	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 11
2F-C-4-013	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 12
2F-C-4-014	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 13
2F-C-4-015	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 14
2F-C-4-016	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 15
2F-C-4-017	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 16
2F-C-4-018	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 17
2F-C-4-019	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 18
2F-C-4-020	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 19
2F-C-4-021	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 20
2F-C-4-022	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 21
2F-C-4-023	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 22
2F-C-4-024	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 23
2F-C-5-001	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - JACKED SLEEVE ROAD CROSSING - D1649 AT CH 2 130
2F-C-5-005	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - BREAK PRESSURE TANK AND DROP CHAMBERS - BREAK PRESSURE TANK - PLAN, SECTION AND DETAILS
2F-C-5-006	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - BREAK PRESSURE TANK AND DROP CHAMBERS - DROP CHAMBERS 1 AND 2: PLAN, SECTIONS AND DETAILS
2F-C-5-010	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - OVERFLOW CHAMBER AT BREAK PRESSURE RESERVOIR - DISCHARGE PIPE LAYOUT AND LONGITUDINAL SECTION
2F-C-5-011	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN - OVERFLOW CHAMBER - PLAN, SECTION, DETAIL AND PIPE ITEM SCHEDULE
2F-C-6-001	T1		HIGH-LIFT RISING MAIN	HIGH-LIFT RISING MAIN & GRAVITY MAIN: STANDARD DETAILS TYPICAL - TYPICAL SERVITUDE CROSS SECTION
2G-C-3-001	T1		BREAK PRESSURE RESERVOIR (BPR)	BREAK PRESSURE RESERVOIR: SITE LAYOUT
2G-C-5-001	T1		BREAK PRESSURE RESERVOIR (BPR)	BREAK PRESSURE RESERVOIR: BULK EARTHWORKS SITE LAYOUT
2G-C-5-002	T1		BREAK PRESSURE RESERVOIR (BPR)	BREAK PRESSURE RESERVOIR: BULK EARTHWORKS SETTING OUT
2G-C-5-003	T1		BREAK PRESSURE RESERVOIR (BPR)	DAM 1 LONG-SECTION
2G-C-5-004	T1		BREAK PRESSURE RESERVOIR (BPR)	DAM 2 LONG-SECTION
2G-C-5-005	T1		BREAK PRESSURE RESERVOIR (BPR)	DAM 3 LONG-SECTION



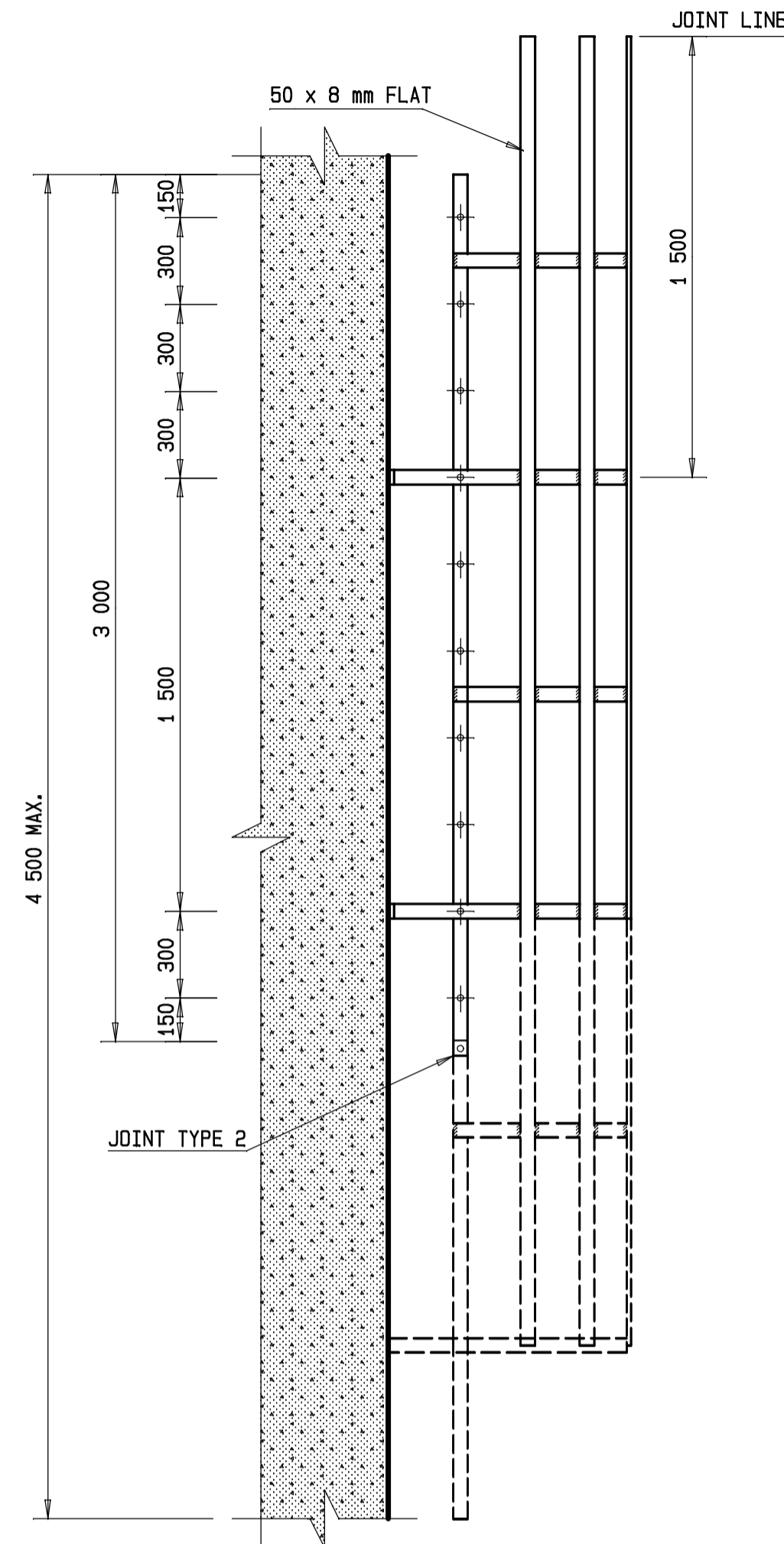
JV Drg Number	Rev	DWS Number	Area	Description	
2H-C-4-062	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 61	
2H-C-4-063	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 62	
2H-C-4-064	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 63	
2H-C-4-065	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 64	
2H-C-4-066	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 65	
2H-C-4-067	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 66	
2H-C-4-068	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 67	
2H-C-4-069	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 68	
2H-C-4-070	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 69	
2H-C-4-071	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 70	
2H-C-4-072	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 71	
2H-C-4-073	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 72	
2H-C-4-074	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 73	
2H-C-4-075	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 74	
2H-C-4-076	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 75	
2H-C-4-077	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 76	
2H-C-4-078	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 77	
2H-C-4-079	T1		GRAVITY MAIN	GRAVITY MAIN - PLAN AND LONGITUDINAL SECTION - SHEET 78	
2H-C-5-001	T1		GRAVITY MAIN	GRAVITY MAIN - JACKED SLEEVE ROAD CROSSING - ROAD R510-3 (PIPELINE CH 260)	
2H-C-5-002	T1		GRAVITY MAIN	GRAVITY MAIN - JACKED SLEEVE ROAD CROSSING - ROAD R510-3 (PIPELINE CH 18.360)	
2H-C-5-003	T1		GRAVITY MAIN	GRAVITY MAIN - JACKED SLEEVE ROAD CROSSING - D2701 AT CH 30.825	
2H-C-5-004	T2		GRAVITY MAIN	GRAVITY MAIN - ROAD CROSSING - D175 AT CH 63.250	
2H-C-5-005	T1		GRAVITY MAIN	GRAVITY MAIN - ROAD CROSSING - D1925 AT CH 69.950	
2H-C-5-006	T1		GRAVITY MAIN	GRAVITY MAIN - JACKED SLEEVE ROAD CROSSING - D1675 AT CH 86.350	
2H-C-5-007	T2		GRAVITY MAIN	GRAVITY MAIN - JACKED SLEEVE ROAD CROSSING - ROAD D1675 AT MEDUPI OFF-TAKE	
2H-C-5-020	T1		GRAVITY MAIN	GRAVITY MAIN - MATLABAS RIVER CROSSING AT CH 42.000	
2H-C-5-021	T1		GRAVITY MAIN	GRAVITY MAIN - ACCESS CHAMBER AT MATLABAS RIVER CROSSING AT CH 42.000	
2H-C-5-025	T2		GRAVITY MAIN	GRAVITY MAIN - MEDUPI OFF-TAKE (SUPPLY B): LAYOUT AND LONGITUDINAL SECTION	
2H-C-5-030	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA & GROOTEGELUK OFF-TAKES (SUPPLY A) - KEYPLAN	
2H-C-5-031	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA & GROOTEGELUK OFF-TAKES - FLOW CONTROL CHAMBER - GENERAL LAYOUT	
2H-C-5-032	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA OFF-TAKE - FLOW CONTROL INSTALLATION - PLAN AND SECTION	
2H-C-5-033	T1		GRAVITY MAIN	GRAVITY MAIN - GROOTEGELUK OFF-TAKE - FLOW CONTROL INSTALLATION - PLAN AND SECTION	
2H-C-5-034	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA & GROOTEGELUK OFF-TAKES - PIPE SPECIALS	
2H-C-5-035	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA & GROOTEGELUK OFF-TAKES - PIPE SPECIALS	
2H-C-5-036	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA & GROOTEGELUK OFF-TAKES - ROOF SLABS LAYOUT AND DETAILS	
2H-E-2.1-001	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END - OFF-TAKE A - P&ID	
2H-E-2.1-002	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END - OFF-TAKE B - P&ID	
2H-E-2.3-001	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END TAKE-OFF A - OUDOOR MINI-SUB - SINGLE LINE DIAGRAM	
2H-E-2.3-002	T1		GRAVITY MAIN	TAKE-OFF A - FLOW CONTROL CHAMBER - SINGLE LINE DIAGRAM 1 OF 2	
2H-E-2.3-002	T1		GRAVITY MAIN	TAKE-OFF A - FLOW CONTROL CHAMBER - SINGLE LINE DIAGRAM 2 OF 2	
2H-E-2.4-001	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END - OFF-TAKE A - CABLE BLOCK DIAGRAM	
2H-E-2.4-002	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END - OFF-TAKE B - CABLE BLOCK DIAGRAM	
2H-E-2.4-003	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END - OFF-TAKE A - CCTV AND ACCESS CONTROL - SITE LAYOUT	
2H-E-2.4-004	T1		GRAVITY MAIN	GRAVITY MAIN BPR TO END - OFF-TAKE B - CCTV AND ACCESS CONTROL - SITE LAYOUT	
2H-E-3-001	T1		GRAVITY MAIN	GRAVITY MAIN - MATIMBA & GROOTEGELUK OFF-TAKES - SMALL POWER LAYOUT	
2I-C-7-200	T1		ANCILLIARY BUILDING WORKS	ANCILLIARY BUILDING WORKS - OPERATIONS AND CONTROL CENTRE - COVERED PARKING FOUNDATION LAYOUT AND DETAILS	
2I-C-7-201	T1		ANCILLIARY BUILDING WORKS	ANCILLIARY BUILDING WORKS - OPERATIONS AND CONTROL CENTRE - COVERED PARKING STRUCTURAL STEEL ROOF LAYOUT AND SECTIONS	
2I-C-9-002	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: GROUND FLOOR PLAN	
2I-C-9-003	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: ROOF PLAN	
2I-C-9-004	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: SECTIONS	
2I-C-9-005	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: ELEVATIONS	
2I-C-9-006	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: DOOR SCHEDULE	
2I-C-9-007	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: WINDOW SCHEDULE	
2I-C-9-008	T1		ANCILLIARY BUILDING WORKS	OPERATIONS & CONTROL CENTER: STRIP SECTIONS	
2I-C-9-050	T1		ANCILLIARY BUILDING WORKS	ANCILLIARY BUILDING WORKS - GUARD HOUSE: GROUND FLOOR PLAN, WINDOW & DOOR SCHEDULES	
2I-C-9-051	T1		ANCILLIARY BUILDING WORKS	ANCILLIARY BUILDING WORKS - GUARD HOUSE: SECTION A-A, FRONT & REAR ELEVATIONS	
2I-C-9-052	T1		ANCILLIARY BUILDING WORKS	ANCILLIARY BUILDING WORKS - GUARD HOUSE: SIDE ELEVATIONS	
2I-C-9-053	T1		ANCILLIARY BUILDING WORKS	ANCILLIARY BUILDING WORKS - GUARD HOUSE: STRIP SECTIONS	
			<b>DWS TYPE DRAWINGS</b>		
		0	125 769/97	GENERAL	TYPE DRAWING - DETAIL OF GALVANIZED MILD STEEL LADDER
		0	125 770/97	GENERAL	TYPE DRAWING - DETAIL OF GALVANIZED MILD STEEL LADDER
		0	125/771/97	GENERAL	TYPE DRAWING - DETAIL OF GALVANIZED MILD STEEL LADDER
		0	131 012/97 ME	GENERAL	TYPE DRAWING - 3CR12 INLET AND OUTLET VENTILATORS - GENERAL ASSEMBLY
		1	131 013/98 ME	GENERAL	TYPE DRAWING - 3CR12 INLET AND OUTLET VENTILATORS - DETAILS
		0	137 079/01 ME	GENERAL	TYPE DRAWING - STANDARD 900 x 600 mm 3CR12 MANHOLE - ASSEMBLY AND PARTS LIST
		0	137 080/01 ME	GENERAL	TYPE DRAWING - STANDARD 900 x 600 mm 3CR12 STEEL MANHOLE - DETAILS OF FRAME AND COVER
		0	137 081/01 ME	GENERAL	TYPE DRAWING - STANDARD 900 x 600 mm 3CR12 STEEL MANHOLE - DETAILS OF PARTS
		0	160 592/10	GENERAL	3m HIGH INNER FENCE
		0	160 593/10	GENERAL	3m HIGH INNER FENCE
		0	160 594/10	GENERAL	3m HIGH INNER FENCE
		0	160 595/10	GENERAL	3m HIGH OUTER FENCE
		0	160 596/10	GENERAL	3m HIGH OUTER FENCE
		0	160 597/10	GENERAL	3m HIGH OUTER FENCE
		0	160 598/10	GENERAL	3m HIGH OUTER FENCE
		0	160 599/10	GENERAL	INNER AND OUTER FENCE WELDED MESH ATTACHEMENT TO STRAINING WIRES AND POSTS
		0	167 766/13	GENERAL	MATERIALS LIST: 3m HIGH INNER AND OUTER FENCE
		0	167 767/13	GENERAL	3m HIGH FENCE FOR IMPORTANT WORKS
		0	167 768/13	GENERAL	3m HIGH FENCE FOR IMPORTANT WORKS HINGED GATE
		0	167 768/13	GENERAL	3m HIGH FENCE FOR IMPORTANT WORKS DETAILS
		0	167 769/13	GENERAL	MATERIALS LIST 3m HIGH FENCE FOR IMPORTANT WORKS



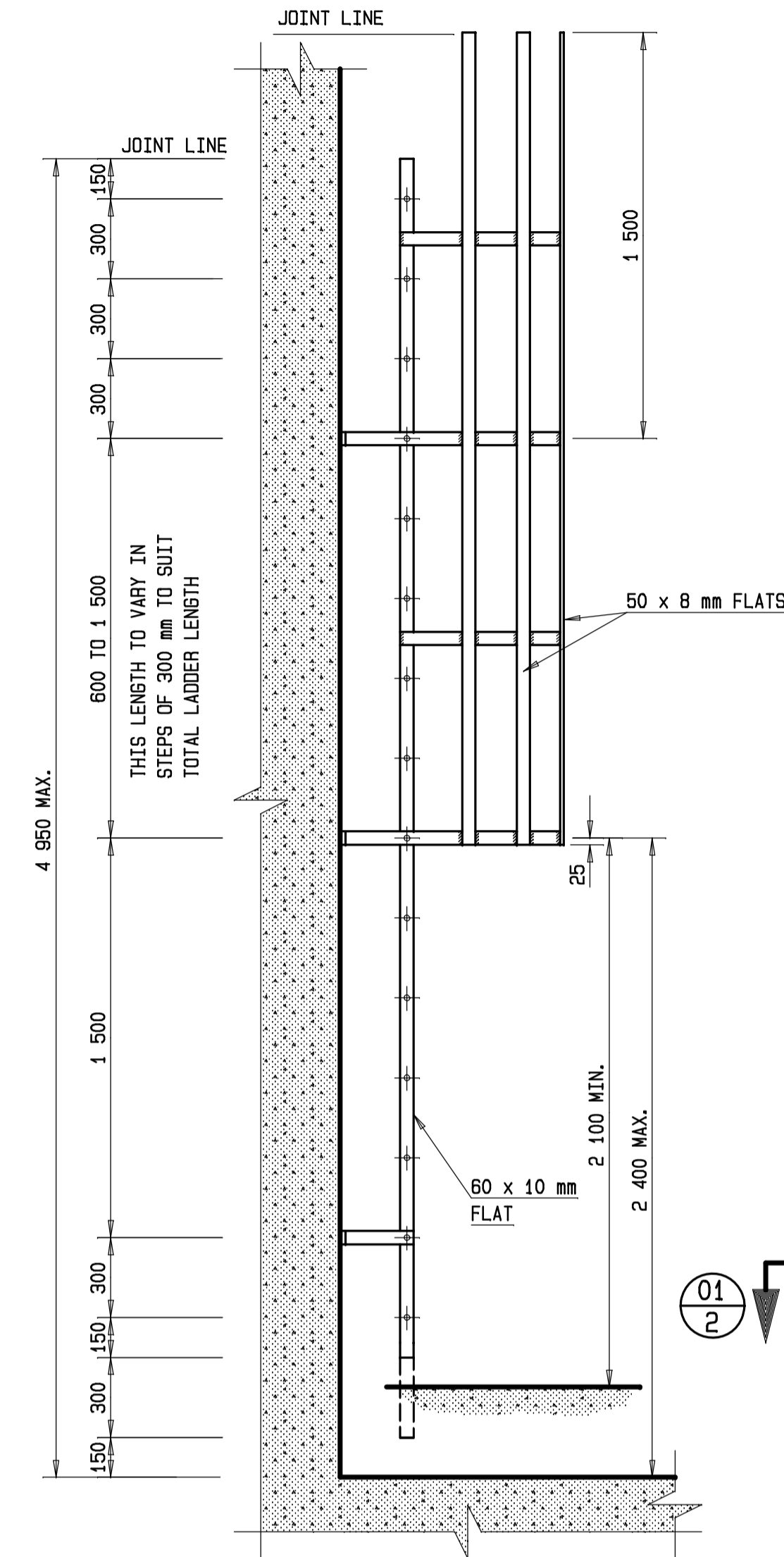
**TYPE 'A'**  
LADDER WITHOUT SAFETY HOOP  
SCALE 1:20



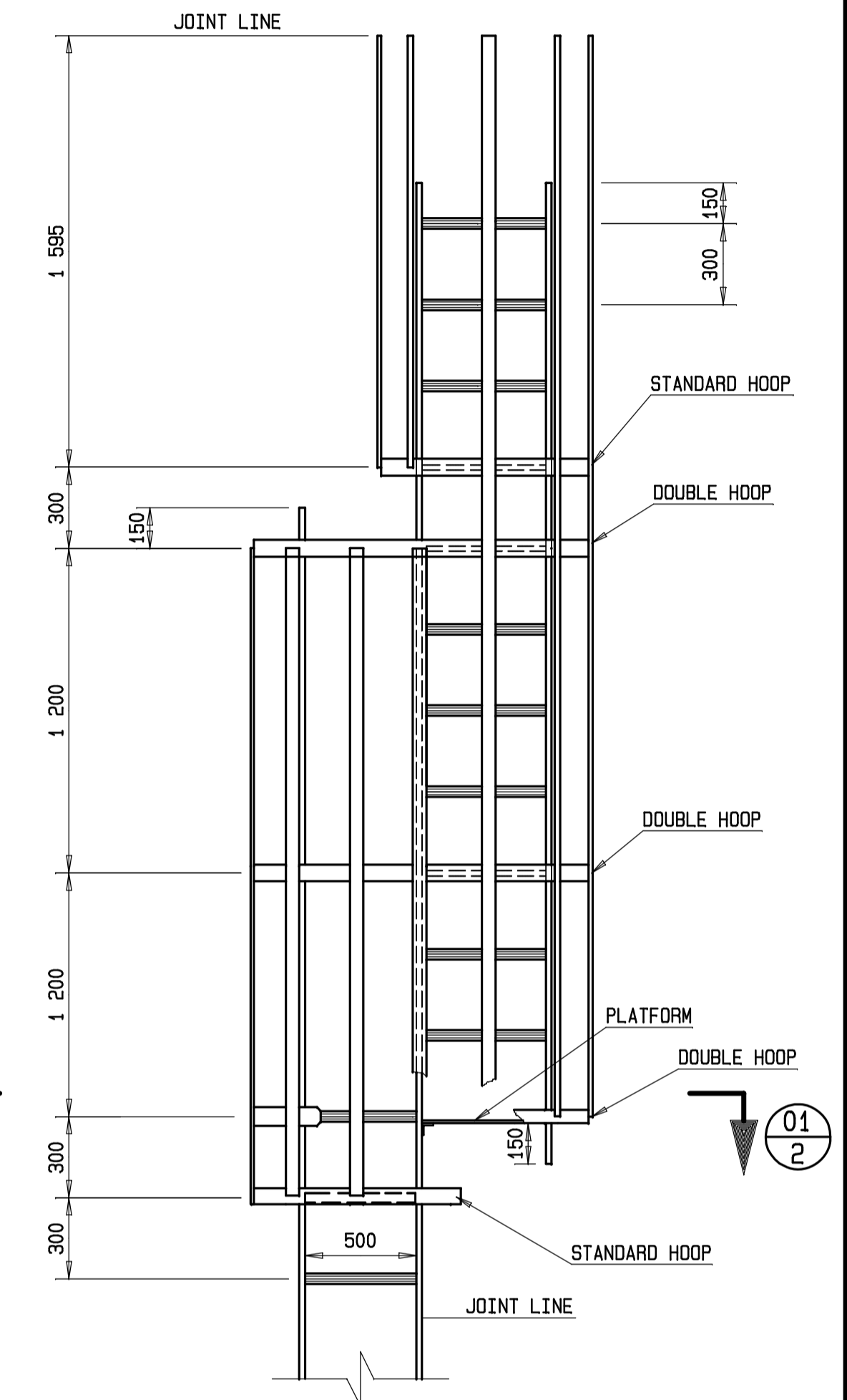
**TOP SECTION**  
SCALE 1:20



**INTERMEDIATE SECTION TYPE 'B'**  
SCALE 1:20



**BASE SECTION**  
SCALE 1:20



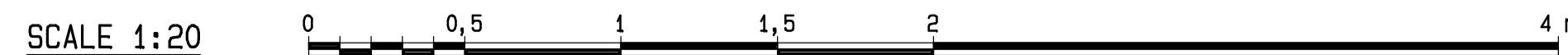
**INTERMEDIATE SECTION**  
WITH RESTING PLATFORM  
SCALE 1:20

**SECTION**  
SECTION NUMBER  
07  
3  
SHEET NUMBER

**NOTE:**  
DETAILS FOR DOUBLE HOOP THE SAME AS FOR STANDARD HOOP BUT WITH STRAIGHT CENTRE SECTIONS OF 485 mm ADDED. ONE EXTRA SAFETY STRAP TO BE FITTED IN CENTRE.

**TYPE 'B'**  
LADDER WITH SAFETY HOOP  
SCALE 1:20

THIS DRAWING SUPERSEDES DRG. REG. NO'S. 69 031/78 AND 69 032/78.



3/3	TYPE DRAWING : DETAIL OF GALVANISED MILD STEEL LADDER	125 771/97
2/3	TYPE DRAWING : DETAIL OF GALVANISED MILD STEEL LADDER	125 770/97
SHEET	DESCRIPTION	OTHER NO. REG. No.
LIST OF DRAWINGS		

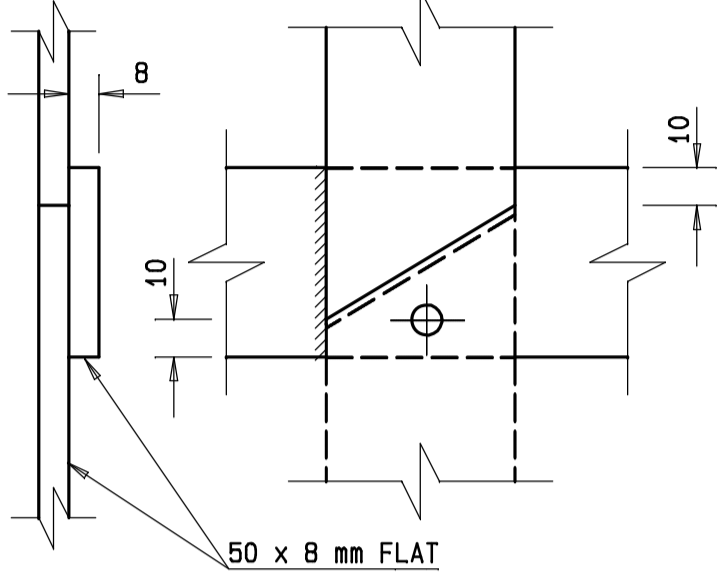
REVISION			
MOD No.	DATE	DESCRIPTION	FOR DKA
1.	01/00	DRAWING REDRAWN	R. H.

<b>DEPARTMENT OF WATER AFFAIRS REPUBLIC OF SOUTH AFRICA</b>	
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001	SEDIBENG BUILDING 185 SCHOEMAN STREET PRETORIA (012) 336-7500
<b>P. YAKO</b> DIRECTOR GENERAL	
CHECKED: J. C. SWANEPOEL	DESIGN: J. C. SWANEPOEL
ENGINEER:	DRAWN: J. C. SWANEPOEL/CADDIE
DATE:	DATE:
EXTERNAL APPROVAL: DATE:	DATE:
CHIEF ENGINEER / APP (Pr. Eng): DATE:	DIRECTOR (Pr. Eng): DATE:

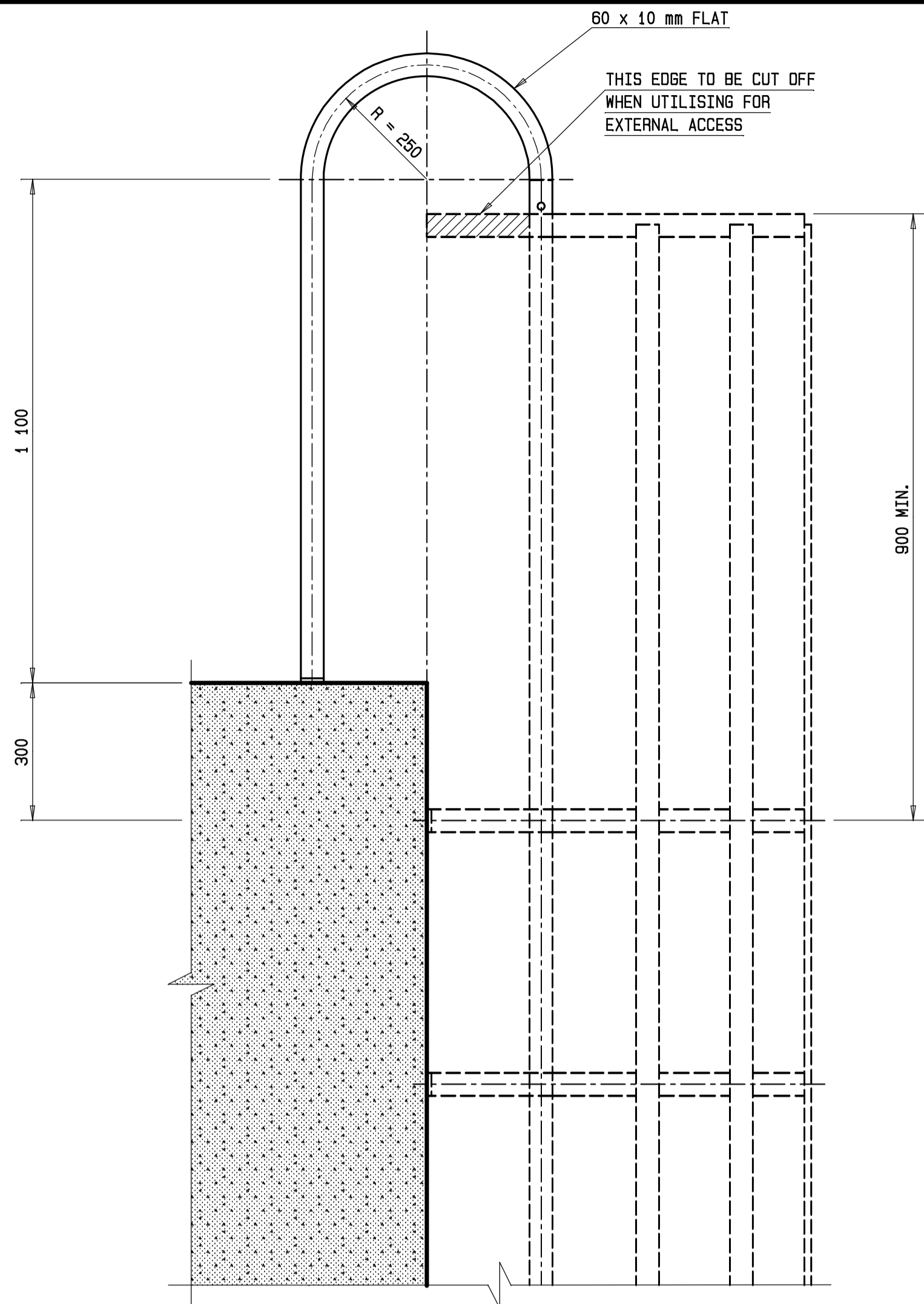
<b>TYPE</b>			
<b>TYPE DRAWING</b>			
DETAIL OF GALVANIZED MILD STEEL LADDER			
PROVINCE:	DISTRICT:	KEYCODES: TYP : SFY : LDR : DET : LYD	OTHER NUMBER
LOCALITY No. 1: -	TENDER/ CONTRACT No.	SHEET REG. No.	REV.
CALCULATION FILE: -		1 OF 3	125 769/97 00

ITEM NO.	LENGTH OF LADDER	NO. OFF	LADDER TYPE	d1	d2	COMMENTS

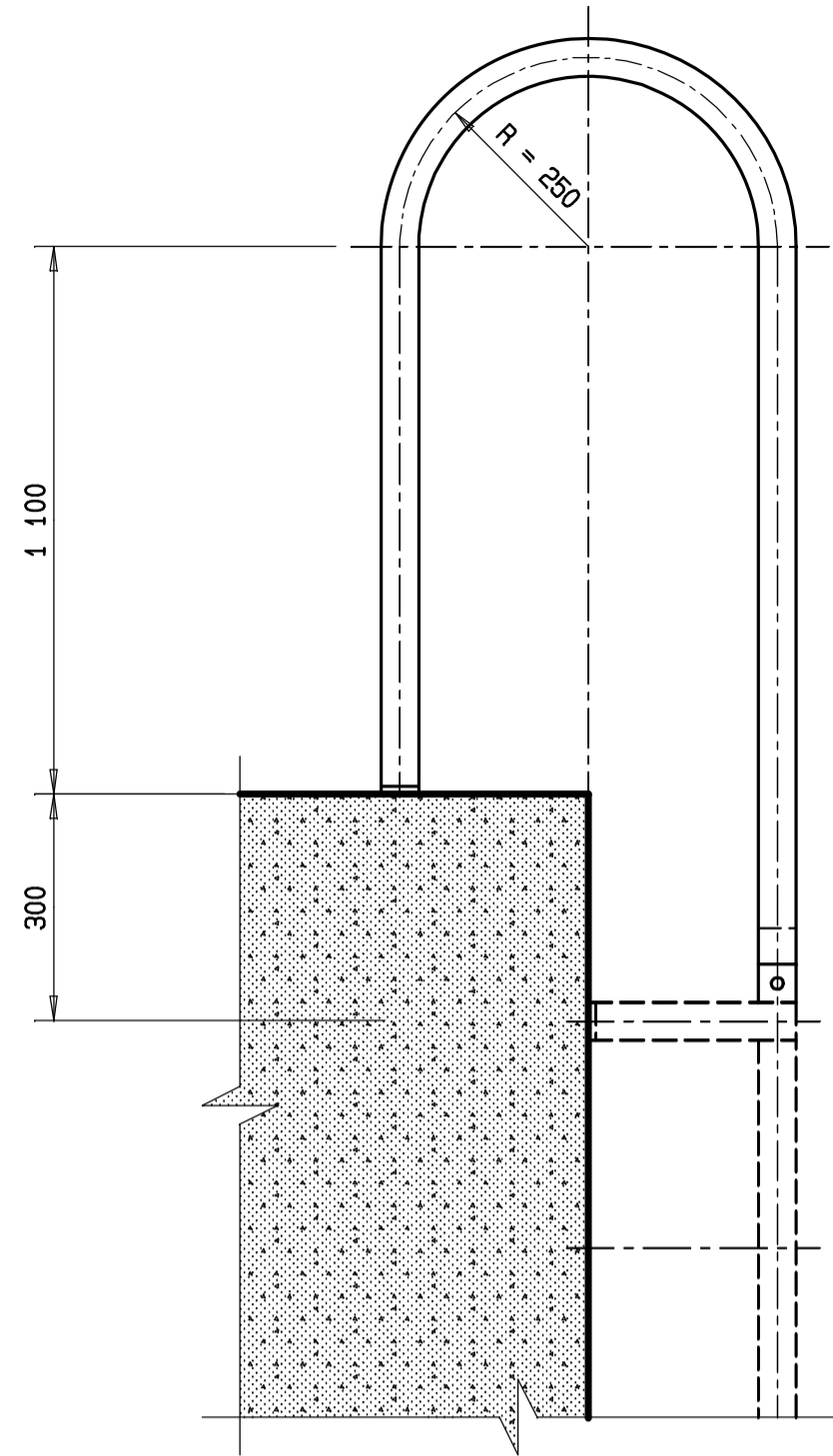
**NOTE:**  
 DETAILS FOR DOUBLE HOOP THE SAME AS FOR STANDARD HOOP BUT WITH STRAIGHT CENTRE SECTIONS OF 485 mm ADDED. ONE EXTRA SAFETY STRAP TO BE FITTED IN CENTRE.



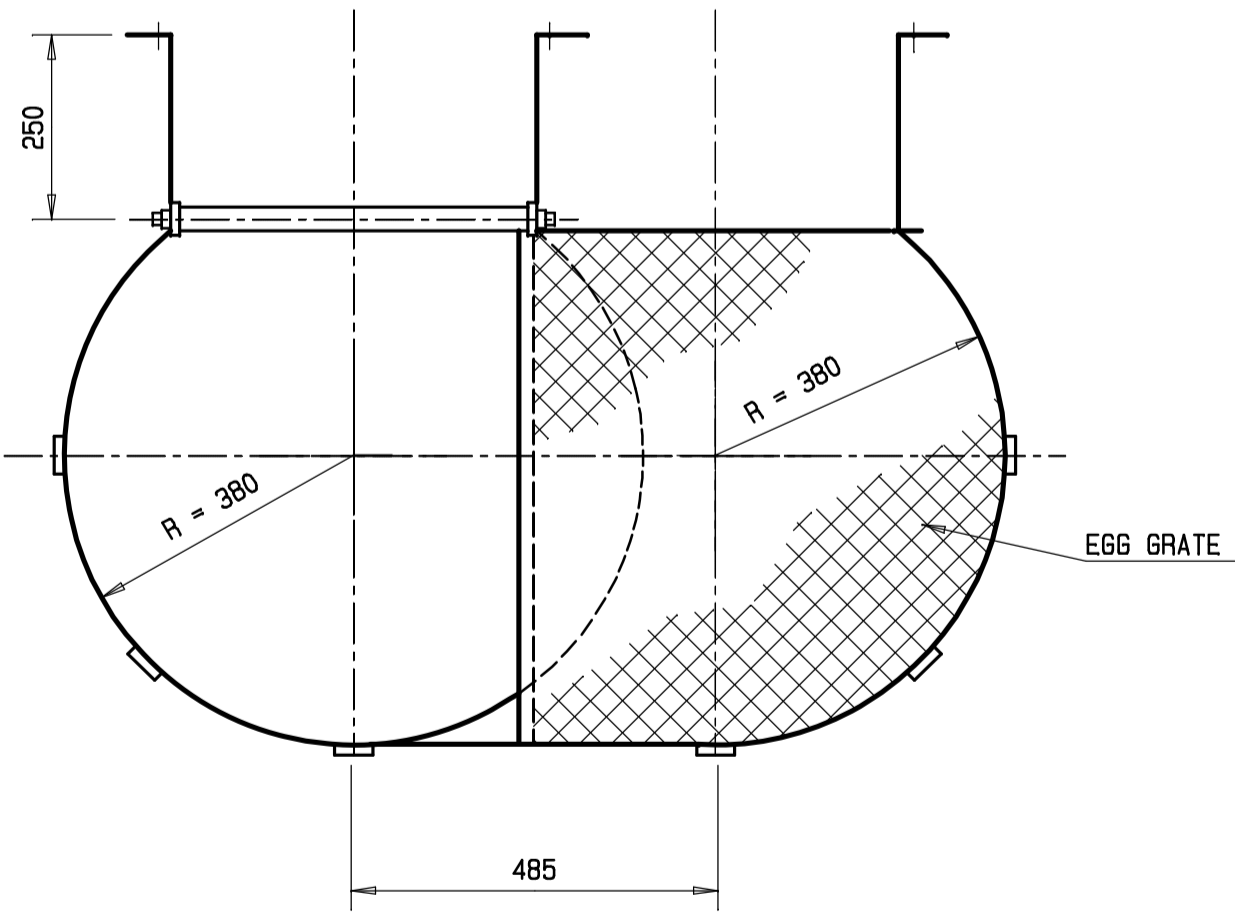
**JOINT TYPE 1**  
 SCALE 1:2



**TOP HANDRAIL SECTION FOR EXTERNAL ACCESS**  
 NTS



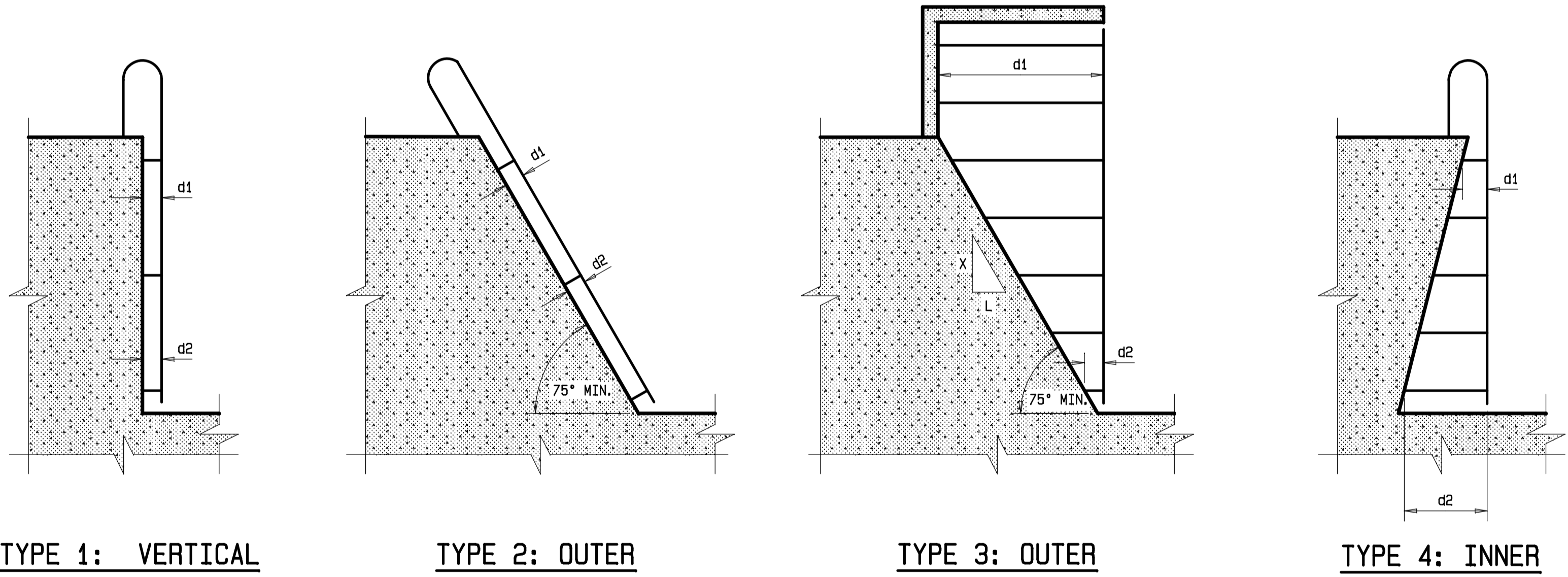
**TOP HANDRAIL SECTION FOR EXTERNAL ACCESS**  
 NTS



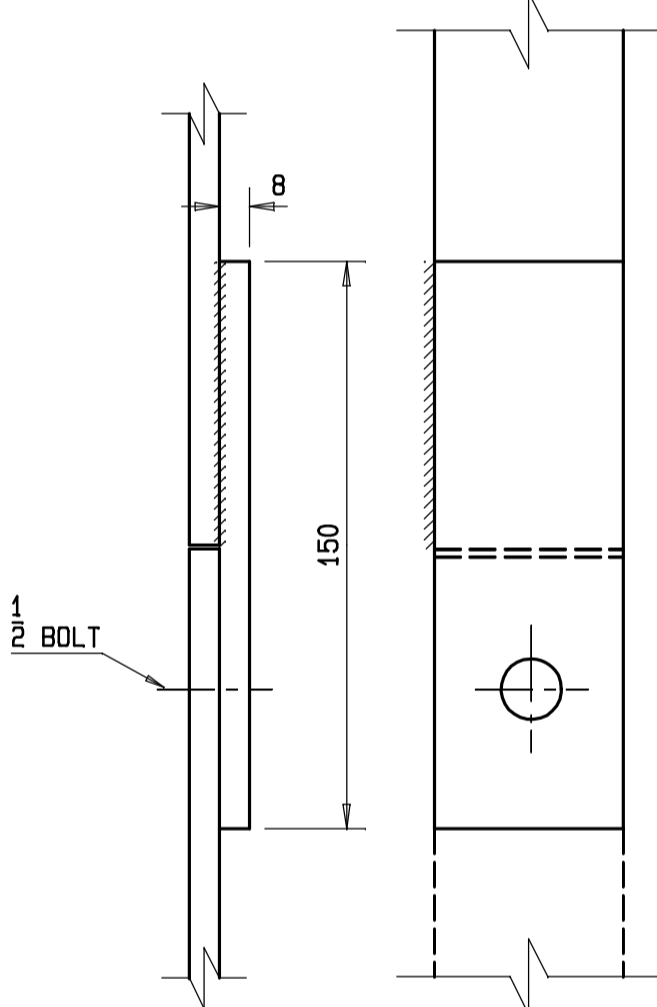
**SECTION 01-01**

SHOWING THE PLATFORM AND PLAN OF DOUBLE HOOP

SCALE 1:10



**WALL CONDITION**  
 NTS



**JOINT TYPE 2**  
 SCALE 1:2

THIS DRAWING SUPERSEDES DRG. REG. NO'S. 69 031/78 AND 69 032/78.

3/3	TYPE DRAWING : DETAIL OF GALVANISED MILD STEEL LADDER	125 771/97
1/3	TYPE DRAWING : DETAIL OF GALVANISED MILD STEEL LADDER	125 769/97
SHEET	DESCRIPTION	OTHER NO. REG. No.
LIST OF DRAWINGS		

REVISION			FOR	DKA
MOD No.	DATE	DESCRIPTION		
1.	01/00	DRAWING REDRAWN	R. H.	

DEPARTMENT OF WATER AFFAIRS  
 REPUBLIC OF SOUTH AFRICA

HEAD OFFICE  
 CIVIL ENGINEERING  
 PRIVATE BAG X313  
 PRETORIA 0001

SEDIBENG BUILDING  
 185 SCHOEMAN STREET  
 PRETORIA  
 (012) 336-7500

P. YAKO  
 DIRECTOR GENERAL

DESIGN: J.C. SWANEPOEL  
 CHECKED: J.C. SWANEPOEL DATE: DRAWN: J.C. SWANEPOEL/CADDIE

ENGINEER: DATE: EXTERNAL APPROVAL: DATE:

CHIEF ENGINEER / APP (Pr. Eng): DATE: DIRECTOR (Pr. Eng): DATE:

**TYPE**

**TYPE DRAWING**

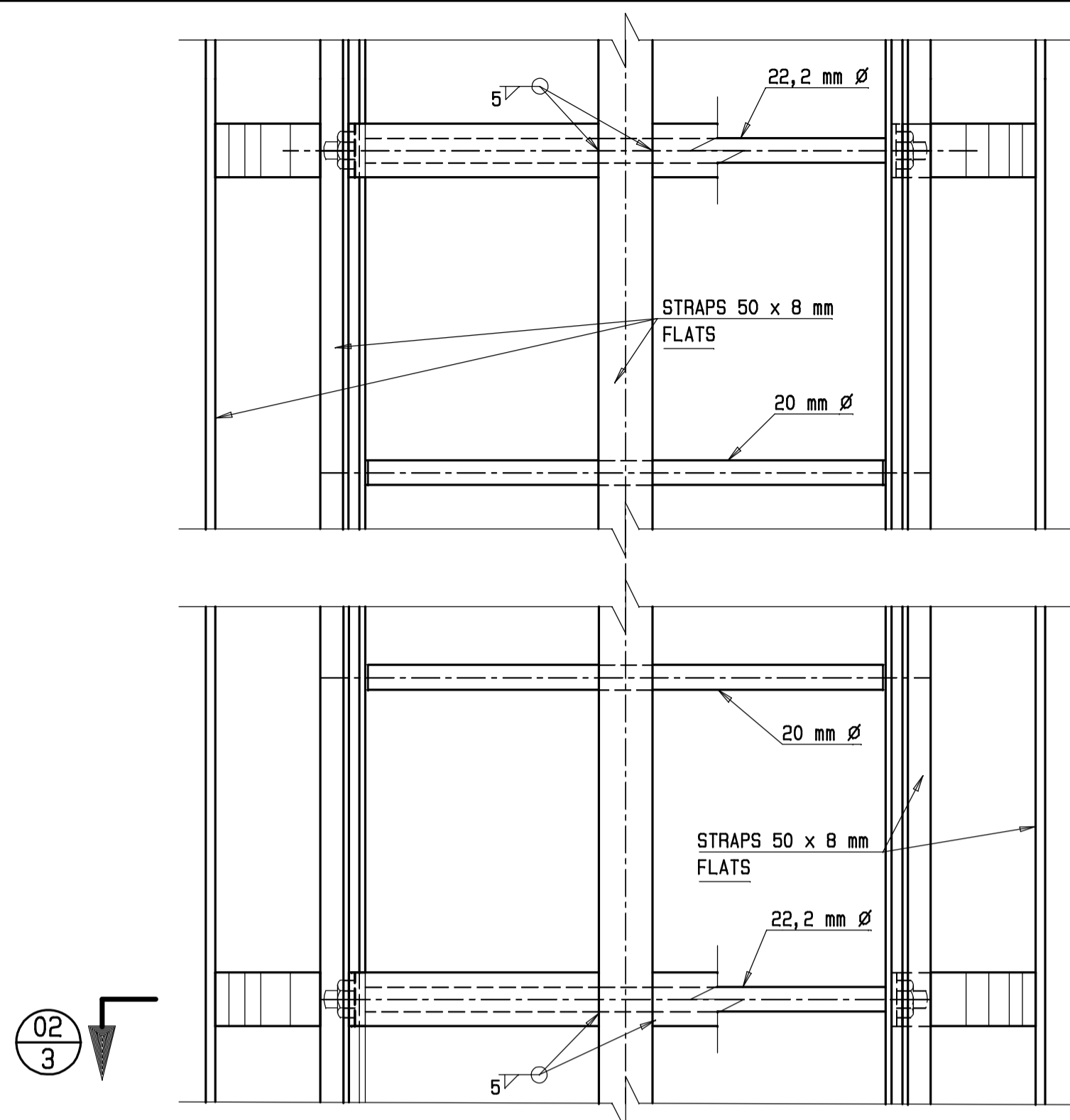
DETAIL OF GALVANIZED MILD STEEL LADDER

PROVINCE: DISTRICT: KEYCODES: TYP : SFY : LDR : DET : LYD OTHER NUMBER

LOCALITY No. 1: TENDER/ CONTRACT No. SHEET REG. No. REV.

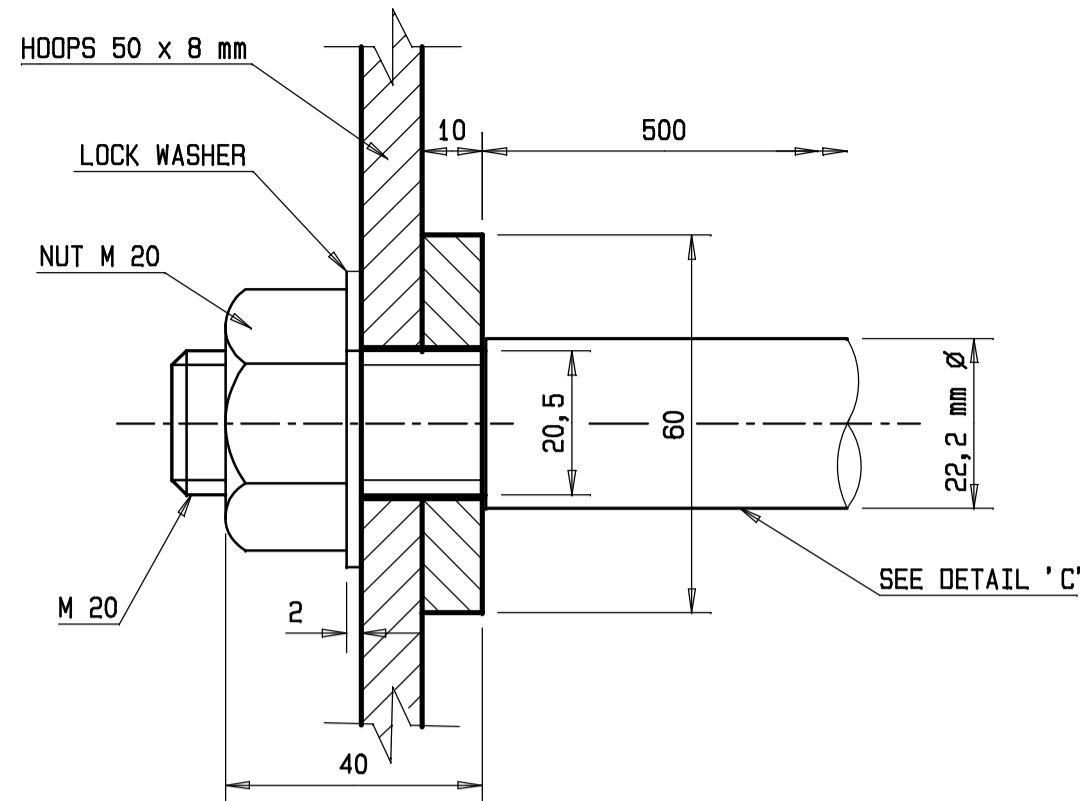
CALCULATION FILE: 2 OF 3 125 770/97 00





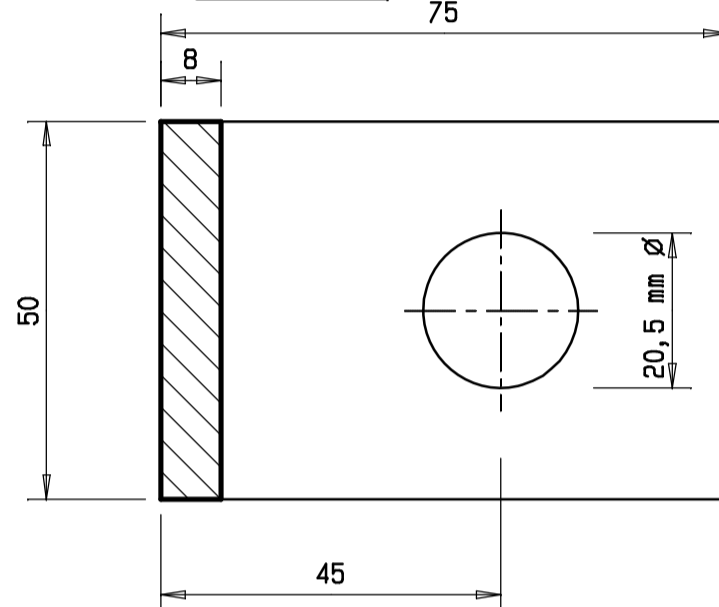
**FRONT VIEW**

SCALE 1:5



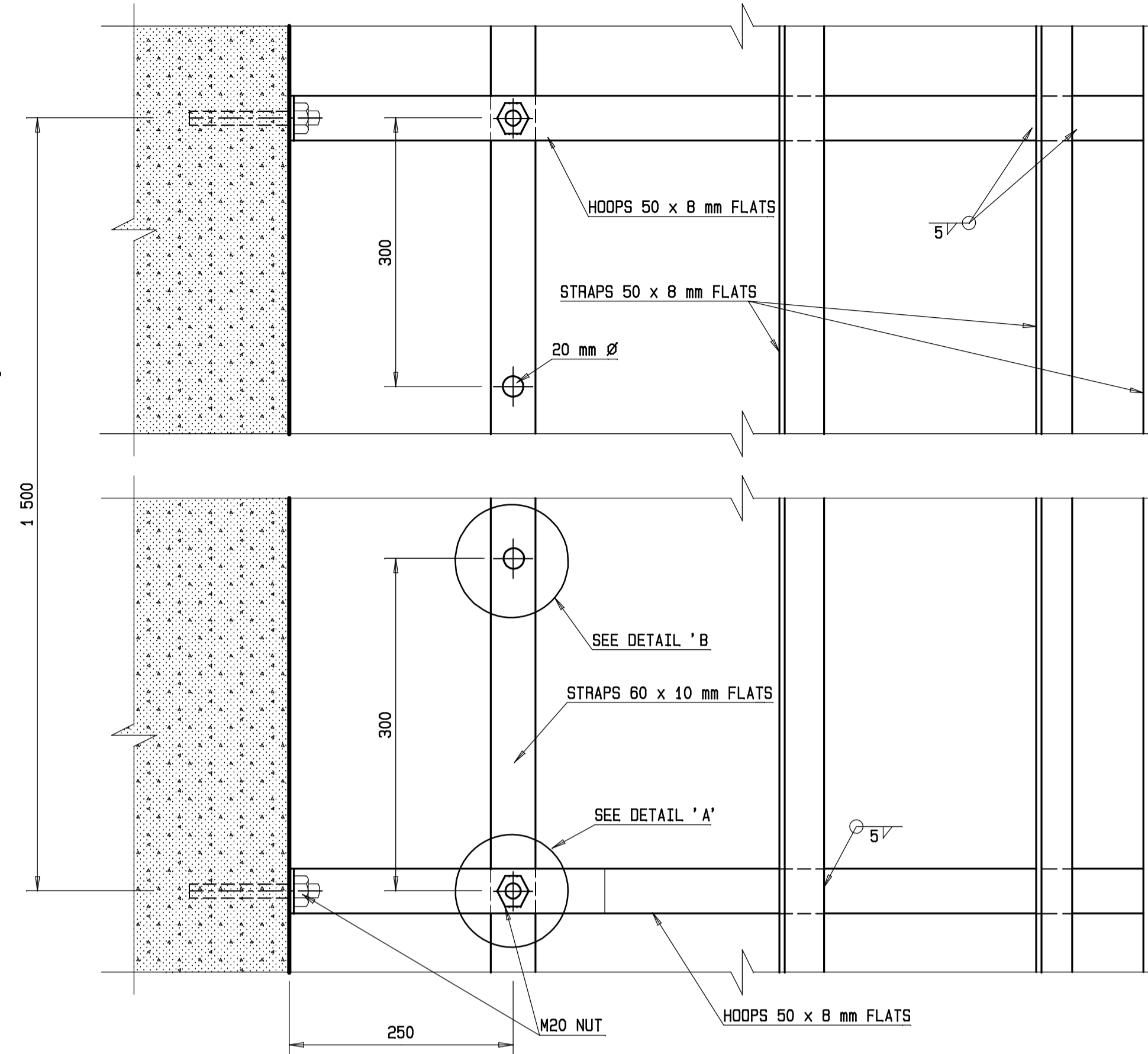
**DETAIL 'A'**

SCALE 1:1



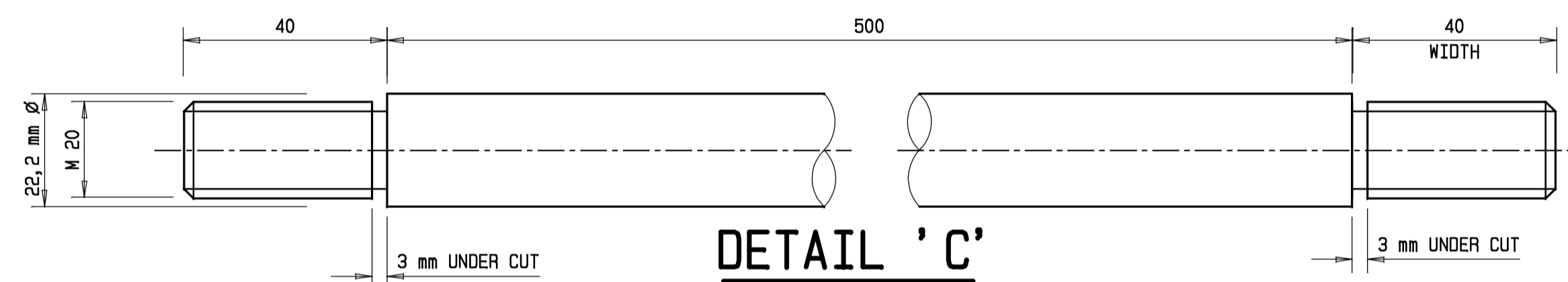
**SECTION 03-03**

SCALE 1:1



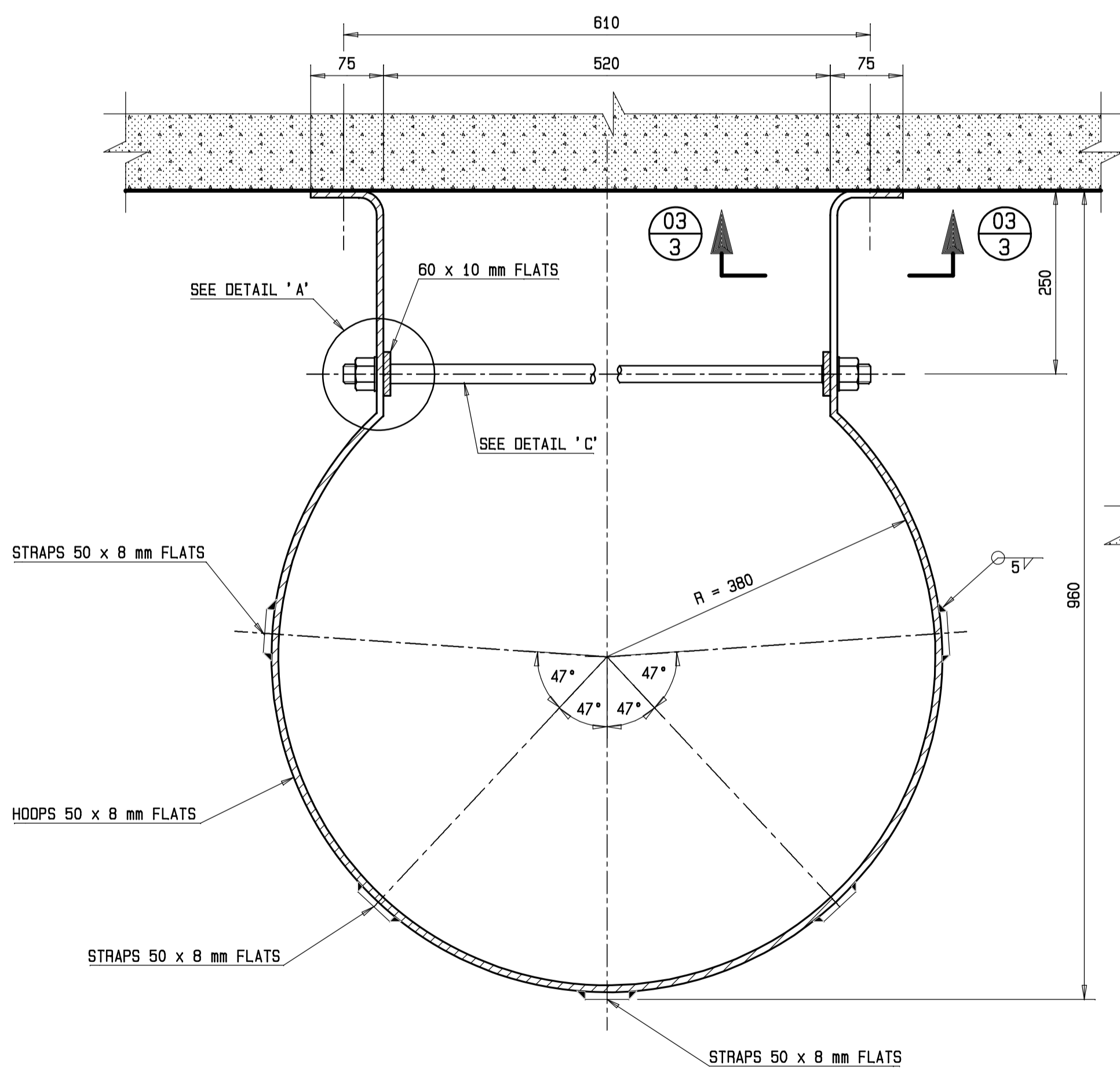
**SIDE VIEW**

SCALE 1:5



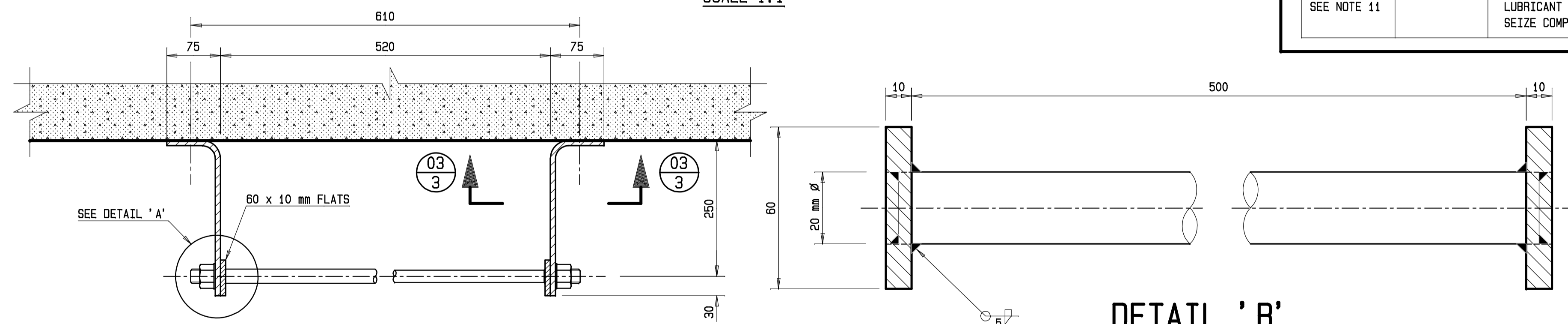
**DETAIL 'C'**

SCALE 1:1



**SECTION 02-02**

SCALE 1:5



**LADDER WITHOUT SAFETY HOOP**

SCALE 1:5

**DETAIL 'B'**

SCALE 1:1

**NOTES:**

- FOR LADDER SCHEDULE SEE DRAWING REG. NO. 125 770/95.
  - LADDERS LONGER THAN 5 m SHALL BE FITTED WITH HOOPS.
  - FOR LADDERS WITH LENGTHS BETWEEN 5,6 m AND 8,7 m SHORTEN TOP AND BASE SECTION BY 1,5 m.
  - FOR ALL LADDERS LONGER THAN 6 m AN INTERMEDIATE PLATFORM IS REQUIRED AT MAXIMUM SPACING 6 m.
  - ALL LADDER DETAILS SHALL CONFORM TO SABS O162. THE MANUFACTURER WILL BE REQUIRED TO DESIGN THE WALL SUPPORTS.
  - BRACKETS FOR TYPE 'A' LADDER TO BE DESIGNED SO THAT IT WILL BE RIGID AFTER TIGHTENING OF TIE BAR.
  - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. REG. NO'S. 125 769/97 AND 125 770/97.
  - ALL ITEMS TO BE HOT DIP GALVANISED TO 90 MICRON EQUIVALENT THICKNESS IN ACCORDANCE WITH SABS SPEC. NO. 1461.
  - ALL WELDING AND GALVANISING TO BE DONE IN WORKSHOP. ASSEMBLY OF ITEMS ON SITE ONLY. SCREWING IN OF NUTS ON RUNGS TO BE CHECKED IN THE WORKSHOP AFTER GALVANISING. WELDS SHALL BE CONTINUOUS - SEAL.
  - MILD STEEL SHALL BE GRADE 300 M.
  - ALL ANCHORS IN CONCRETE SHALL BE STAINLESS STEEL TO ASTM A240 GRADE 316.
- SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ANCHORS BE INSTALL TO THE CORRECT LEVEL AND DEPTH. ANCHORS SHALL NOT BE CUT AFTER INSTALLATION WITHOUT PRIOR INSPECTION AND APPROVAL BY THE ENGINEER.
- TO AVOID A GALVANIC REACTION (STAINLESS STEEL/GALVANISING) UNDER WET CONDITIONS, THE NUT AND WASHER SHALL BE FBE COATED. WHERE NECESSARY CAPS SHALL BE SPECIFIED BY THE CORROSION ENGINEER.

12. FASTENERS, WASHERS AND ANCHORS IN CONCRETE TO BE AS THE TABLE BELOW:

ELEMENT	MATERIAL	PROTECTION	MINIMUM DFT (um)
FASTENERS WASHERS	MILD STEEL	HOT-DIP GALVANISED - PLUS THREADS COATED WITH MOLYBDENUM DISULPHIDE LUBRICANT OR WAX	45
	STAINLESS STEEL 304	THREADS COATED WITH MOLYBDENUM DISULPHIDE LUBRICANT OR NICKEL ANTI-SEIZE COMPOUND	UNIFORM COVER
ANCHORS IN CONCRETE SEE NOTE 11	SS 316	THREADS COATED WITH MOLYBDENUM DISULPHIDE LUBRICANT OR NICKEL ANTI-SEIZE COMPOUND	UNIFORM COVER

SECTION NUMBER
07/3
SHEET NUMBER
3

THIS DRAWING SUPERSEDES DRG. REG. NO'S. 69 031/78 AND 69 032/87

SHEET	DESCRIPTION	OTHER No.	REG. No.
1/3	TYPE DRAWING: DETAIL OF GALVANISED MILD STEEL LADDER		125 769/97
2/3	TYPE DRAWING: DETAIL OF GALVANISED MILD STEEL LADDER		125 770/97
LIST OF DRAWINGS			

REVISION			
MOD No.	DATE	DESCRIPTION	FOR DKA
1.	01/00	DRAWING REDRAWN	C.S.

DEPARTMENT OF WATER AFFAIRS  
REPUBLIC OF SOUTH AFRICA

HEAD OFFICE  
CIVIL ENGINEERING  
PRIVATE BAG X313  
PRETORIA 0001

SEDIBENG BUILDING  
185 SCHOEMAN STREET  
PRETORIA  
(012) 336-7500

P. YAKO  
DIRECTOR GENERAL

DESIGN: J.C. SWANEPOEL  
CHECKED: J.C. SWANEPOEL DATE: DRAWN: J.C. SWANEPOEL/CADDIE

ENGINEER: DATE: EXTERNAL APPROVAL: DATE:

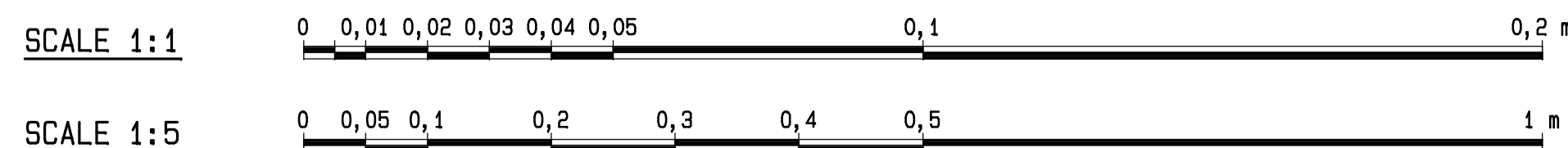
CHIEF ENGINEER / APP (Pr. Eng): DATE: DIRECTOR (Pr. Eng): DATE:

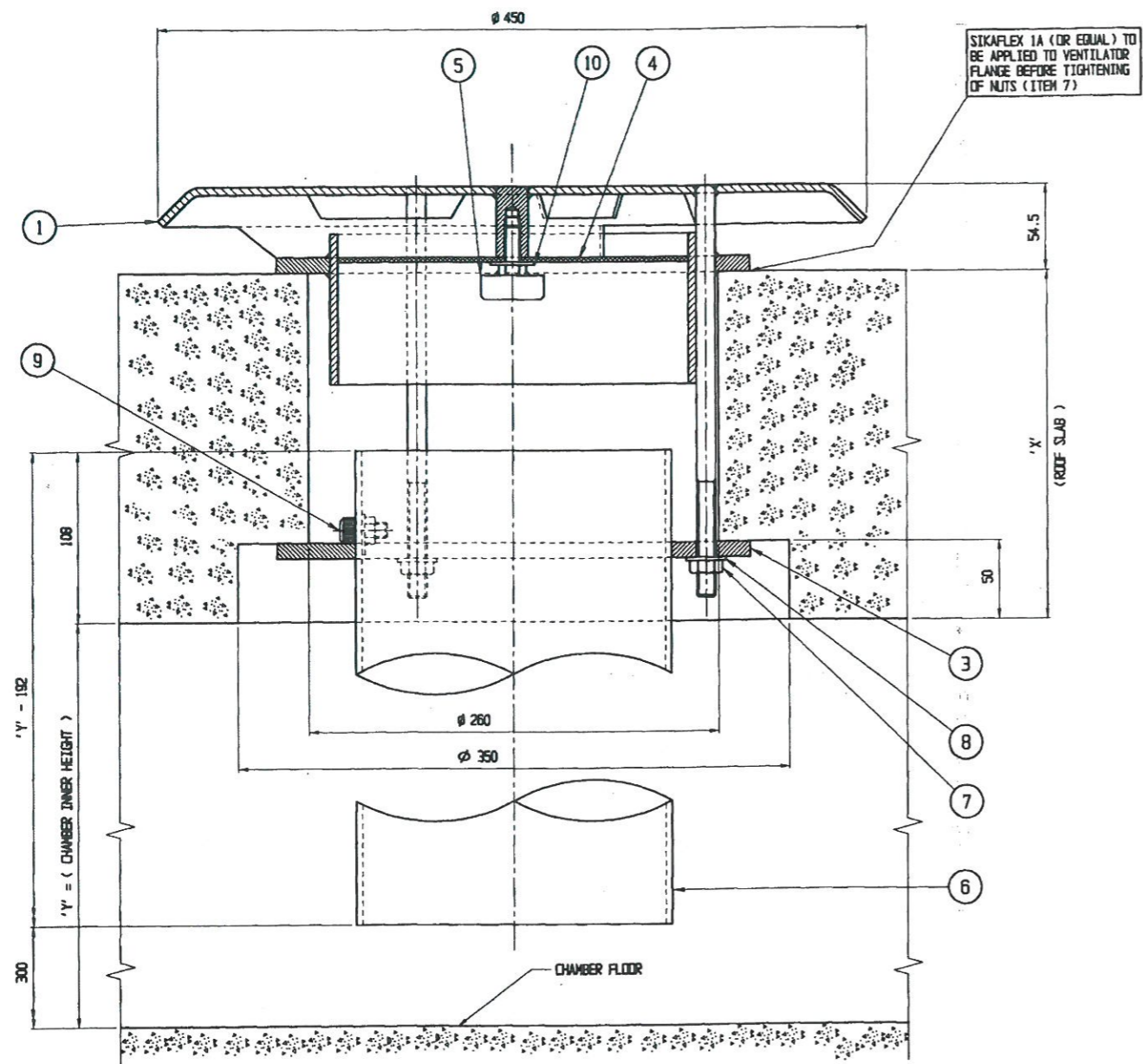
TYPE  
**TYPE DRAWING**  
DETAIL OF GALVANIZED MILD STEEL LADDER

PROVINCE: DISTRICT: KEYCODES: TYP: SFY: LDR: DET: - OTHER NUMBER

LOCALITY No. 1: - TENDER/ CONTRACT No. SHEET REG. No. REV.

CALCULATION FILE: - 3 OF 3 125 771/97 00



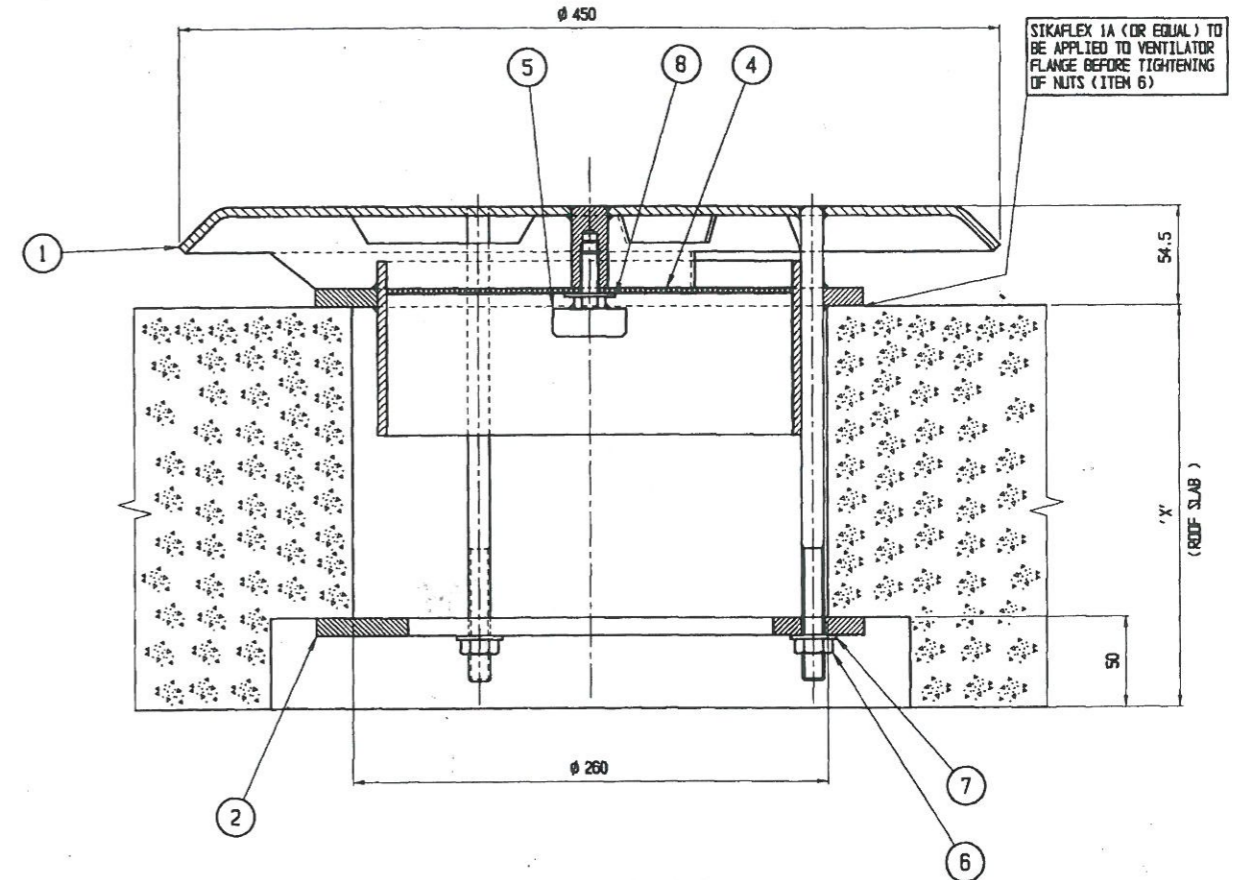


INLET VENTILATOR (WITH MPVC PIPE)  
(ITEM No. 2: NOT REQUIRED)  
SCALE 1:2

\* NOTE:  
QUANTITIES SHOWN IN PARTS LIST ARE FOR ONE INLET VENTILATOR ONLY

ITEM	DESCRIPTION	QTY	MATERIAL	DETAIL DRG.	ASSEMBLY DRG.	REMARKS
10	LARGE DIAMETER WASHER TO SUIT M10 SCREW	1	ST./STL. 304	STANDARD	131012/98 ME	
9	CAP SCREW: M12 x 25 LONG WITH NUT AND WASHER	3	ST./STL. 304	STANDARD	131012/98 ME	
8	WASHER TO SUIT M12 SCREW	3	ST./STL. 304	STANDARD	131012/98 ME	
7	HEX. NUT: M12	3	ST./STL. 316	STANDARD	131012/98 ME	
6	VENT PIPE	1	M.P.V.C.	131013/98 ME	131012/98 ME	CLASS 6
5	SCREEN	1	ST./STL. 316	131013/98 ME	131012/98 ME	
4	SCREEN	1	ST./STL. 304L	131013/98 ME	131012/98 ME	
3	INLET VENTILATOR FLANGE	1	3CR12	131013/98 ME	131012/98 ME	PICKLED AND REPASSIVATED
2	NOT REQUIRED					
1	VENTILATOR	1	3CR12 AND ST./STL. 304L	131013/98 ME	131012/98 ME	PICKLED AND REPASSIVATED

PARTS LIST FOR INLET VENTILATOR



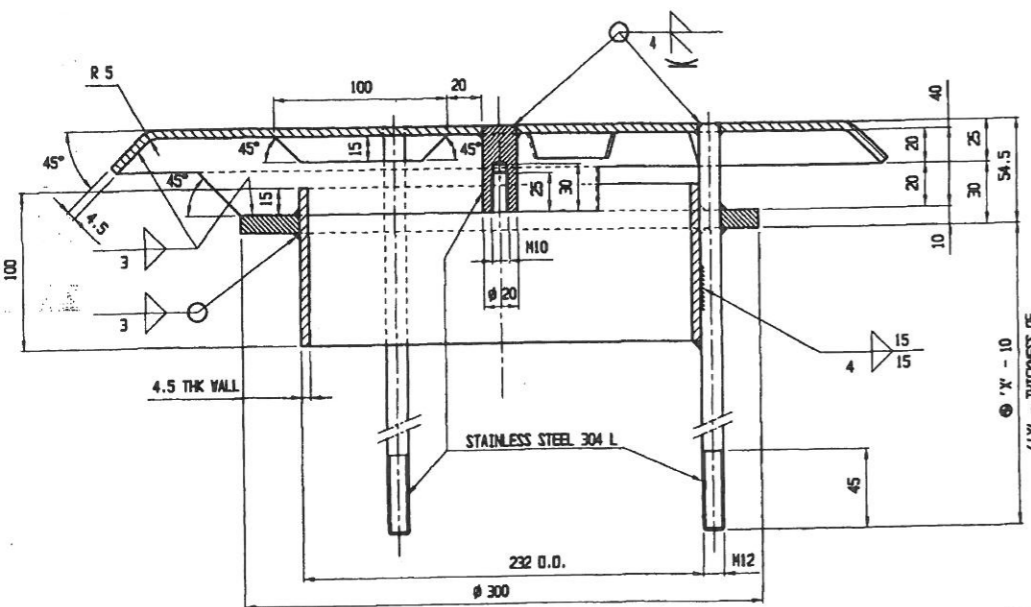
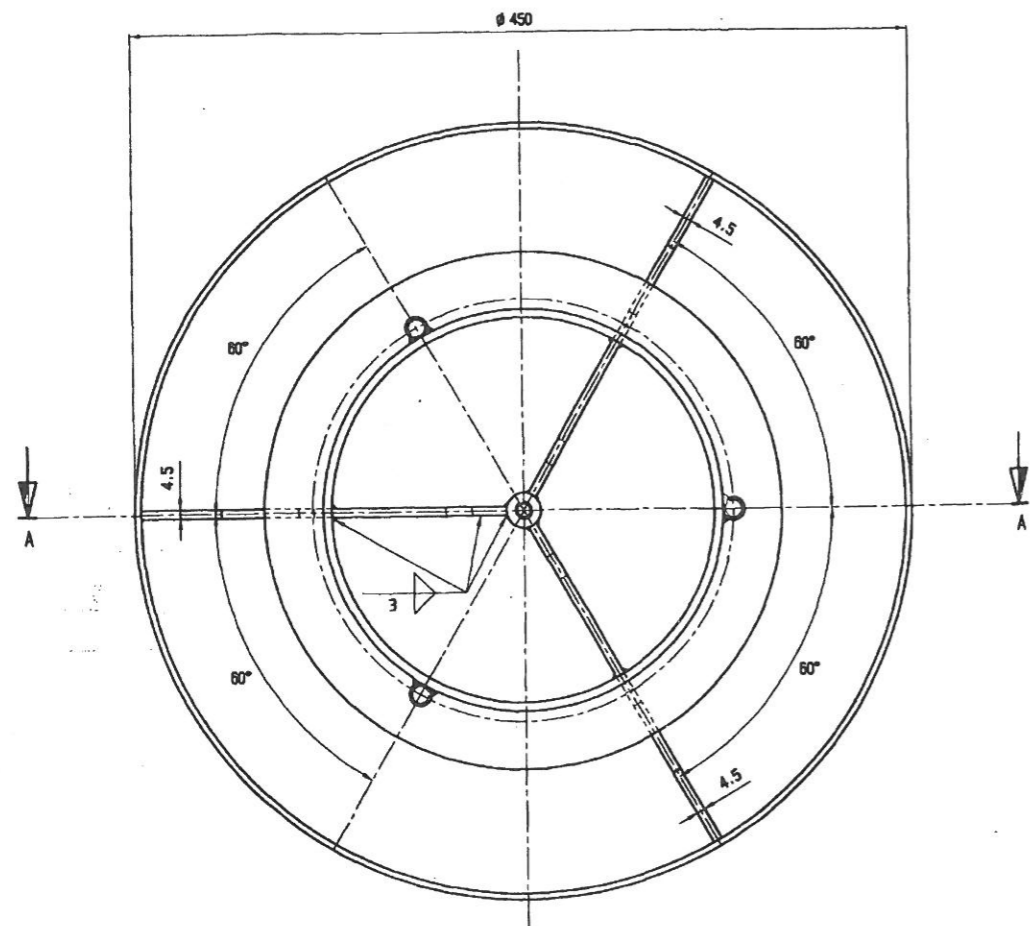
OUTLET VENTILATOR (WITHOUT MPVC PIPE)  
(ITEM No. 3: NOT REQUIRED)  
SCALE 1:2

\* NOTE:  
QUANTITIES SHOWN IN PARTS LIST ARE FOR ONE OUTLET VENTILATOR ONLY

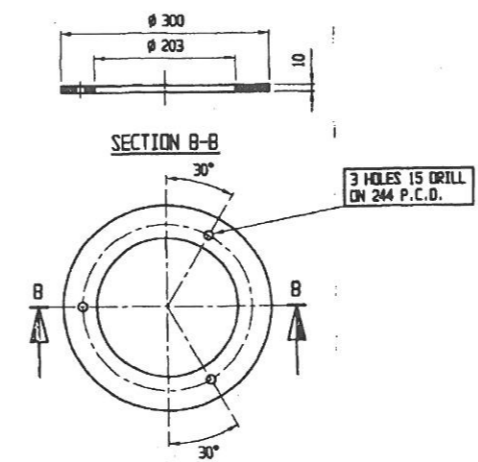
ITEM	DESCRIPTION	QTY	MATERIAL	DETAIL DRG.	ASSEMBLY DRG.	REMARKS
8	LARGE DIAMETER WASHER TO SUIT M10 SCREW	1	ST./STL. 304	STANDARD	131012/98 ME	
7	WASHER TO SUIT M12 SCREW	3	ST./STL. 304	STANDARD	131012/98 ME	
6	HEX. NUT: M12	3	ST./STL. 316	STANDARD	131012/98 ME	
5	SCREEN	1	ST./STL. 316	131013/98 ME	131012/98 ME	
4	SCREEN	1	ST./STL. 304L	131013/98 ME	131012/98 ME	
3	NOT REQUIRED					
2	OUTLET VENTILATOR FLANGE	1	3CR12	131013/98 ME	131012/98 ME	PICKLED AND REPASSIVATED
1	VENTILATOR	1	3CR12 AND ST./STL. 304L	131013/98 ME	131012/98 ME	PICKLED AND REPASSIVATED

PARTS LIST FOR OUTLET VENTILATOR

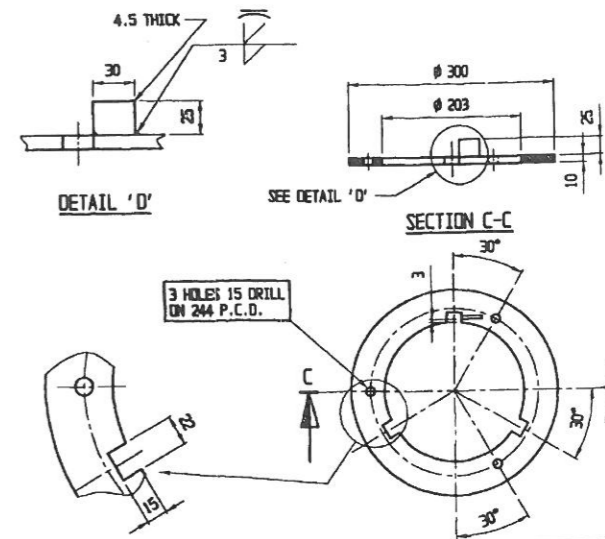
DO NOT SCALE DRAWING ALL DIMENSIONS IN MILLIMETRES REMOVE ALL SHARP EDGES	REVISION NO. DATE DESCRIPTION SIGN.	<b>DIRECTORATE: MECHANICAL &amp; ELECTRICAL ENGINEERING</b>		<b>REPUBLIC OF SOUTH AFRICA</b> <b>DEPARTMENT OF WATER AFFAIRS AND FORESTRY</b> DIRECTOR GENERAL: V. HILLIER	
	SCALE (mm) 0 5 10 100 PROJECTION (U.S.S.)	DESIGNED: P. VAN DALEN DRAWN: M.P. DIKORIE 18-10-1998 CHECKED: [Signature] 10/5/04 CALCULATIONS FILE: ME/DM ZZZ-03 LOCALITY No. DM ZZZ-03 TENDER No. / CONTRACT No.	TECHNICAL DESIGN SERVICES ENGINEER CHIEF ENGINEER (P.E.) DIRECTOR	KEY CODES: TYP YET ASD	TYPE TYPE DRAWING: 3CR12 INLET AND OUTLET VENTILATORS - GENERAL ASSEMBLY - PROVINCE: DISTRICT: OTHER No. SHEET 1 OF 2 REG.No.: 131012/98 ME



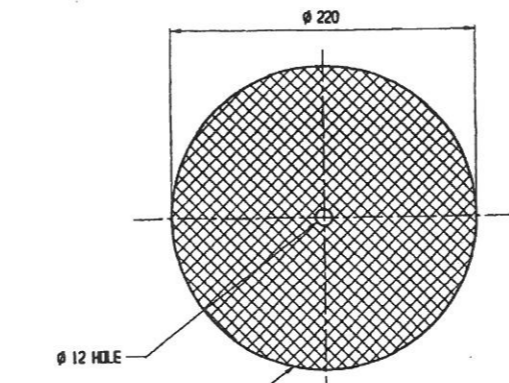
<b>1</b> VENTILATOR	
MATL: 3CR12 (U.D.S.)	MASS: ± 42 kg.
No. OFF: 1	SCALE: 1:2



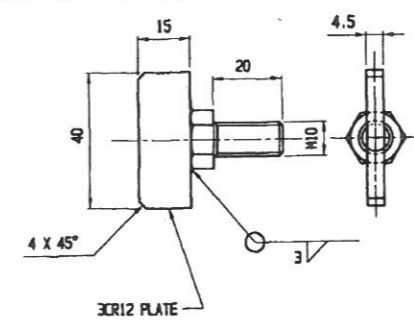
<b>2</b> OUTLET VENTILATOR FLANGE	
MATL: 3CR12	MASS: ± 3 kg.
No. OFF: 1	SCALE: 1:5



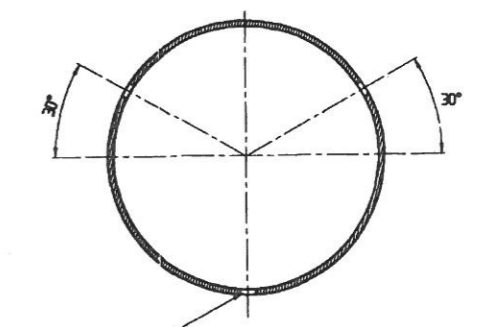
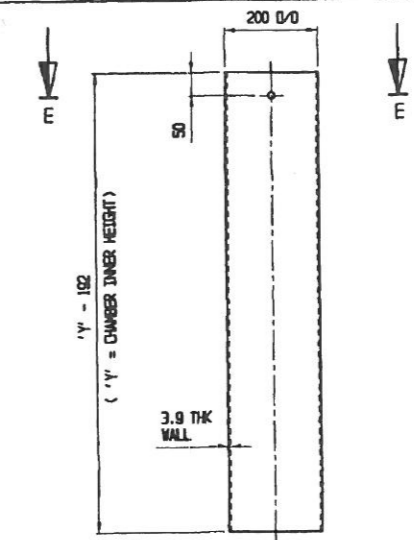
<b>3</b> INLET VENTILATOR FLANGE	
MATL: 3CR12	MASS: ± 3 kg.
No. OFF: 1	SCALE: 1:5, 2:5



<b>4</b> SCREEN	
MATL: STAINLESS STEEL 304 L	MASS: ± 0.2 kg.
No. OFF: 1	SCALE: 1:2.5



<b>5</b> SCREW	
MATL: ST. STEEL 316 (U.D.S.)	MASS: ± 0.02 kg.
No. OFF: 1	SCALE: 1:1



<b>6</b> VENT PIPE ('Y' = )	
MATL: M.P.V.C. (CLASS B)	MASS: ± 4 kg.
No. OFF: 1	SCALE: 1:2.5, 1:7.5

GENERAL DIMENSIONAL TOLERANCES (U.D.S.)  
DIMENSIONS ± 2 mm (MIN.)  
THICKNESS OF MATERIAL - AS MANUFACTURED

WELDING  
IDENTICAL WELDS SYMBOLISED ONCE ONLY  
CODED WELDERS TO BE UTILISED FOR WELDING OPERATIONS.

MATERIAL  
MATERIAL TO BE: 3CR12 No 1 FINISH (U.D.S.)  
STAINLESS STEEL TO BE GRADE: 304 L

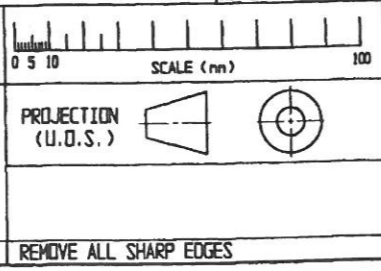
DO NOT SCALE DRAWING

SURFACE PROTECTION:  
AFTER FABRICATION ALL 3CR12 AND STAINLESS STEEL ITEMS TO BE PICKLED AND REPASSIVATED.

PROJECTION (U.D.S.)

ALL DIMENSIONS IN MILLIMETRES

REMOVE ALL SHARP EDGES



REV. NO.	DATE	DESCRIPTION	BY
1	18-05-2004	LENGTH OF M12 STUDS AT ITEM 1 ALTERED TO: 'X' - 5 (WAS 'X' + 45)	

**DIRECTORATE: MECHANICAL & ELECTRICAL ENGINEERING**

DESIGNED: P. VAN DALEN  
DRAWN: H.P. DIKHOE 16-10-1998  
CHECKED: [Signature] 19/5/2004  
CALCULATIONS FILE: HE/DM ZZZ-03  
LOCALITY No.: DM ZZZ-03  
TENDER No.:  
CONTRACT No.:

19/5/2004  
20/5/04

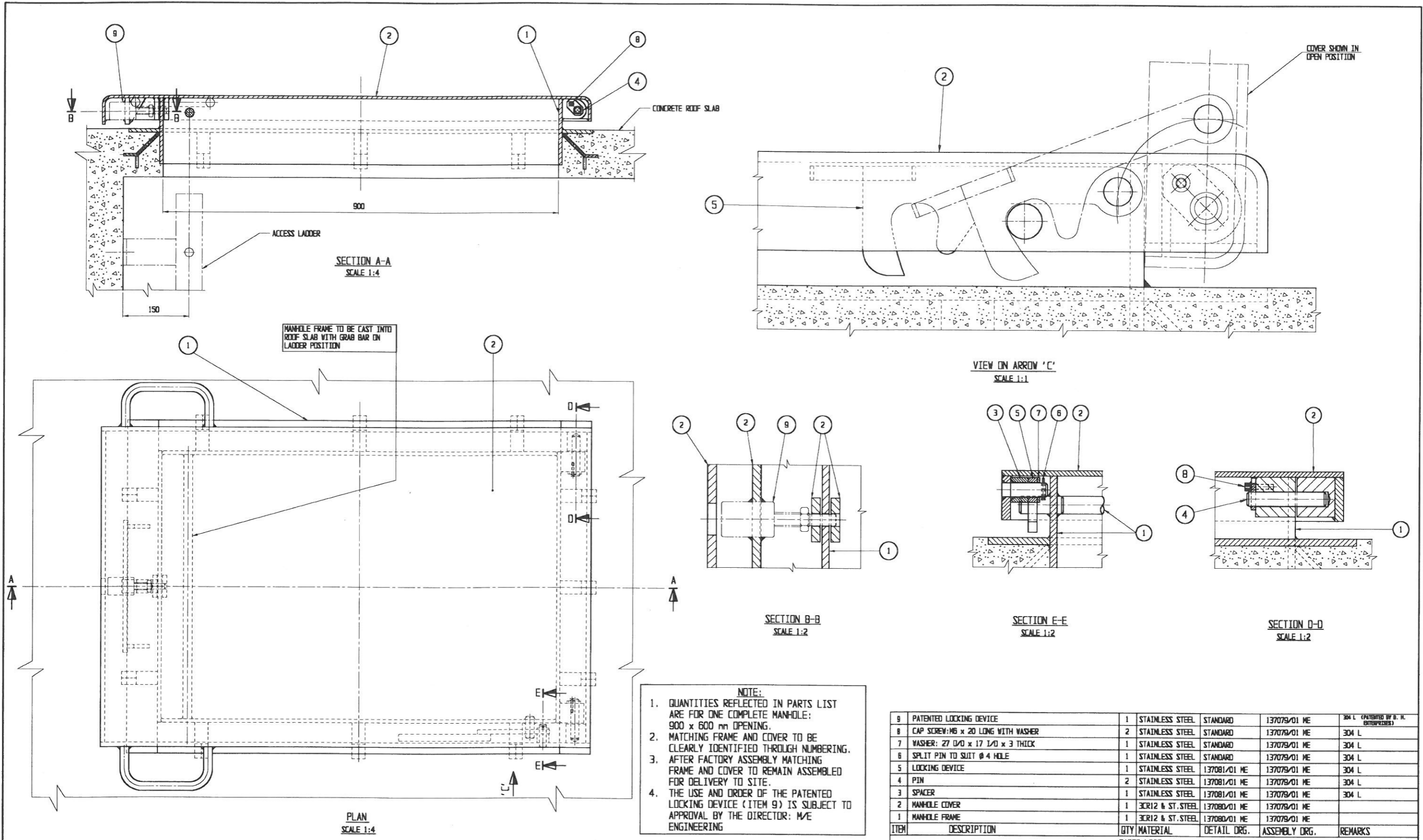
**REPUBLIC OF SOUTH AFRICA**  
**DEPARTMENT OF WATER AFFAIRS AND FORESTRY**  
DIRECTOR GENERAL: L. BULLOCK

TYPE  
TYPE DRAWING:  
3CR12 INLET AND OUTLET VENTILATORS  
- DETAILS -

PROVINCE:  
OTHER No.:

DISTRICT:  
REG.No.: 131013/98 ME

SHEET 2 OF 2



ITEM	DESCRIPTION	QTY	MATERIAL	DETAIL DRG.	ASSEMBLY DRG.	REMARKS
9	PATENTED LOCKING DEVICE	1	STAINLESS STEEL	STANDARD	137079/01 ME	304 L (PATENTED BY B. H. ENTERPRISES)
8	CAP SCREW: M8 x 20 LONG WITH WASHER	2	STAINLESS STEEL	STANDARD	137079/01 ME	304 L
7	WASHER: 27 Ø/Ø x 17 1/Ø x 3 THICK	1	STAINLESS STEEL	STANDARD	137079/01 ME	304 L
6	SPLIT PIN TO SUIT Ø 4 HOLE	1	STAINLESS STEEL	STANDARD	137079/01 ME	304 L
5	LOCKING DEVICE	1	STAINLESS STEEL	137081/01 ME	137079/01 ME	304 L
4	PIN	2	STAINLESS STEEL	137081/01 ME	137079/01 ME	304 L
3	SPACER	1	STAINLESS STEEL	137081/01 ME	137079/01 ME	304 L
2	MANHOLE COVER	1	3CR12 & ST. STEEL	137080/01 ME	137079/01 ME	
1	MANHOLE FRAME	1	3CR12 & ST. STEEL	137080/01 ME	137079/01 ME	

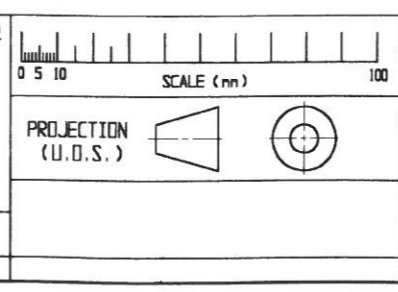
**CORROSION PROTECTION FOR UNDERSIDE (INSIDE) OF MANHOLE COVER (ITEM 2) AND MANHOLE FRAME (ITEM 1)**

**SURFACE PREPARATION:**  
REMOVE OIL AND CONTAMINANTS WITH A WATER SOLUBLE DEGREASER OR SOLVENT, WASH SURFACES WITH CLEAN WATER TO A "WATER BREAK FREE" SURFACE. ROUGH SURFACE WITH NON-METALLIC PAPER OR PADS. REMOVE ALL DUST AND DEBRIS BY VACUUM.

**APPLICATION:**  
APPLY ONE COAT OF MULTIPURPOSE ALUMINIUM MODIFIED EPOXY COATING ( CARBOMASTIC 15 ) TO ØFT 125-175 MICRONS IN ACCORDANCE WITH THE PRODUCT DATA SHEET.

**SURFACE PROTECTION:** AFTER FABRICATION ALL 3CR12 AND STAINLESS STEEL ITEMS TO BE PICKLED AND PASSIVATED, EXCEPT FOR SURFACES TO BE COATED

DO NOT SCALE DRAWING



REV. No.	DATE	DESCRIPTION	STGN.

**DIRECTORATE: MECHANICAL & ELECTRICAL ENGINEERING**

DESIGNED: G. BREED  
DRAWN: G. BREED 11-06-2001  
CHECKED: Breed 12/06/01  
CALCULATIONS FILE: ME/ DM ZZZ-03  
LOCALITY No. DM ZZZ-03  
TENDER No. / CONTRACT No.

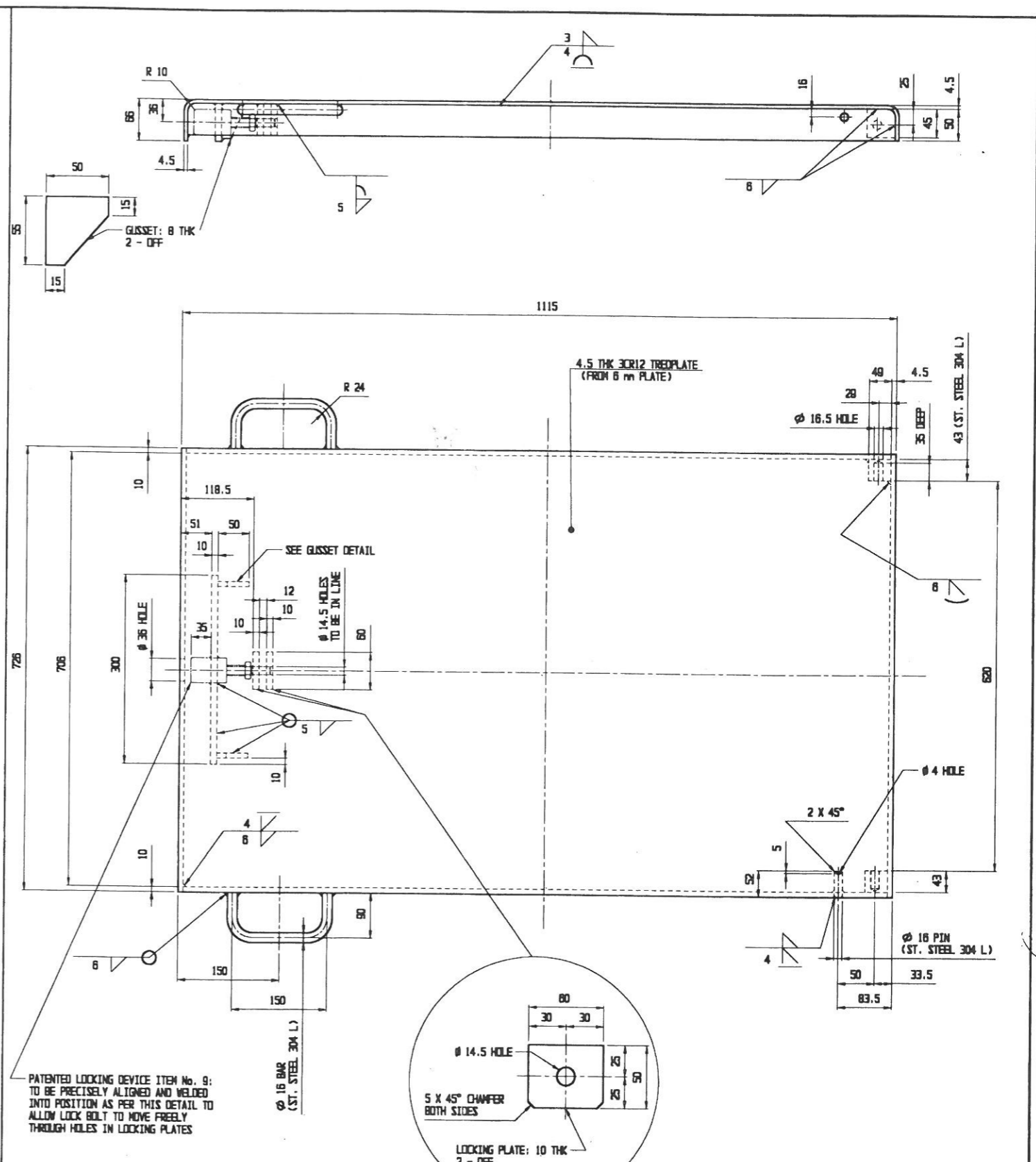
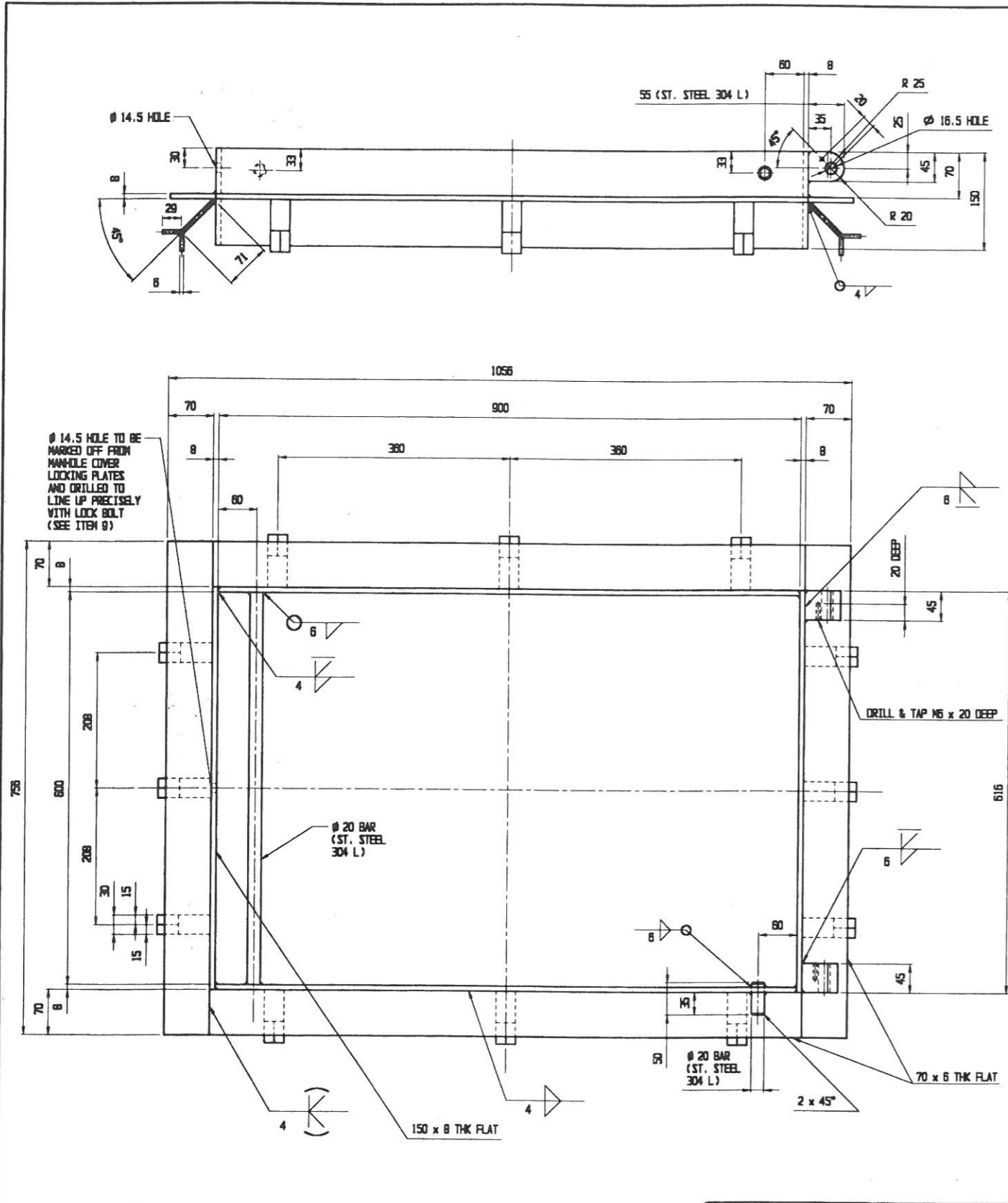
13/6/01  
13/6/01  
13/6/01

KEY CODES:  
TYP  
MAN  
CON  
ASD

**REPUBLIC OF SOUTH AFRICA**  
**DEPARTMENT OF WATER AFFAIRS AND FORESTRY**  
DIRECTOR GENERAL: H. BULLMAN

TYPE  
TYPE DRAWING:  
STANDARD 900 x 600 mm 3CR12 MANHOLE  
-ASSEMBLY AND PARTS LIST-

PROVINCE: DISTRICT:  
OTHER No. SHEET 1 OF 3 REG. No.: 137079/01 ME



1 MANHOLE FRAME  
 MATL: 304 L & ST. STEEL MASS: ± 85 Kg.  
 No. OFF: 1 SCALE: 1:4

2 MANHOLE COVER  
 MATL: 304 L & ST. STEEL MASS: ± 50 Kg.  
 No. OFF: 1 SCALE: 1:4, 1:2

GENERAL DIMENSIONAL TOLERANCES (U.D.S.)  
 DIMENSIONS UP TO 500 : ± 1 mm  
 DIMENSIONS ABOVE 500 TO 1000 : ± 2 mm  
 DIMENSIONS ABOVE 1000 : ± 3 mm  
 THICKNESS OF MATERIAL - AS MANUFACTURED

SURFACE PROTECTION: SEE DRG. REG. No. 137079/01 ME

WELDING  
 IDENTICAL WELDS SYMBOLISED ONCE ONLY.  
 CODED WELDERS TO BE UTILISED FOR WELDING OPERATIONS.

MATERIAL  
 MATERIAL TO BE 304 L No 1 FINISH (U.D.S.)  
 STAINLESS STEEL TO BE GRADE 304 L

DO NOT SCALE DRAWING

SCALE (mm) 0 5 10 100

PROJECTION (U.D.S.)

REMOVE ALL SHARP EDGES

REV	NO	DATE	DESCRIPTION	SIGN.

**DIRECTORATE-MECHANICAL & ELECTRICAL ENGINEERING**

DESIGNED: G. BREED  
 DRAWN: G. BREED 11-08-2001  
 CHECKED: [Signature] 12/01/01  
 CALCULATIONS FILE: ME/ DM ZZZ-03  
 LOCALITY No. DM ZZZ-03  
 TENDER No. / CONTRACT No.

REPUBLIC OF SOUTH AFRICA  
 DEPARTMENT OF WATER AFFAIRS AND FORESTRY  
 DIRECTOR GENERAL: L. BRILL

TYPE  
 TYPE DRAWING:  
 STANDARD 800 x 800 mm 304 L STEEL MANHOLE  
 -DETAILS OF FRAME AND COVER-

PROVINCE: DISTRICT:  
 OTHER No. SHEET 2 OF 3  
 DRG.No.: 137080/01 MB

VERBODEN  
 MICROFILMED