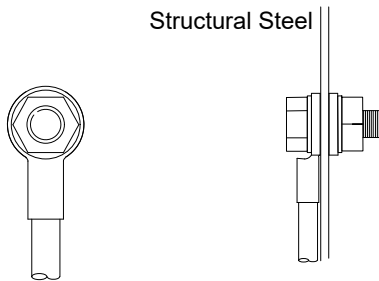
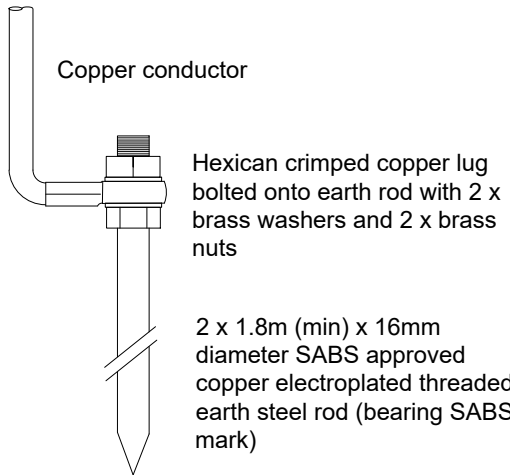
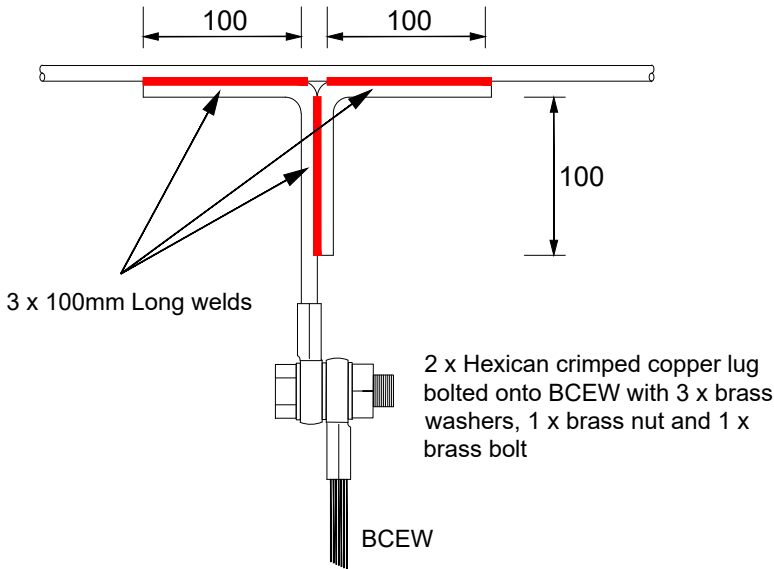
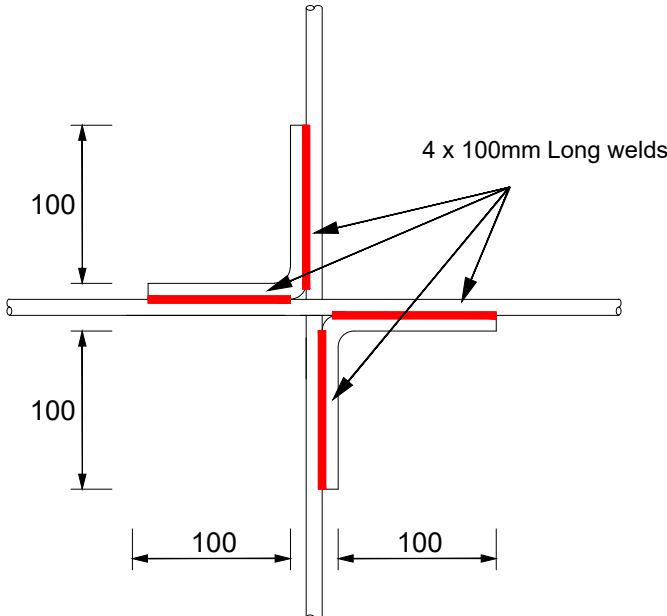
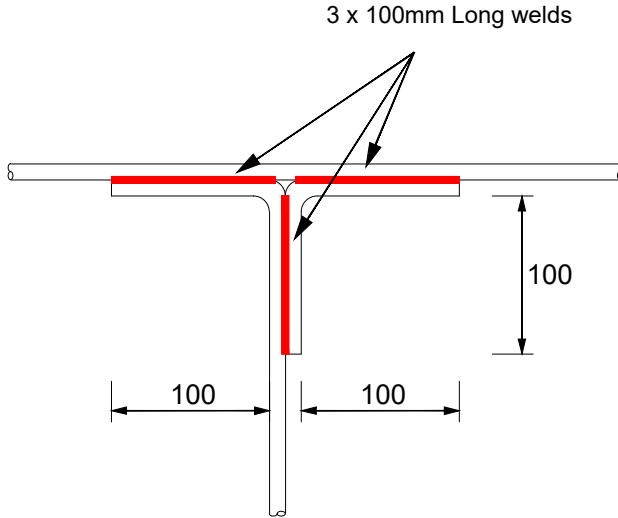
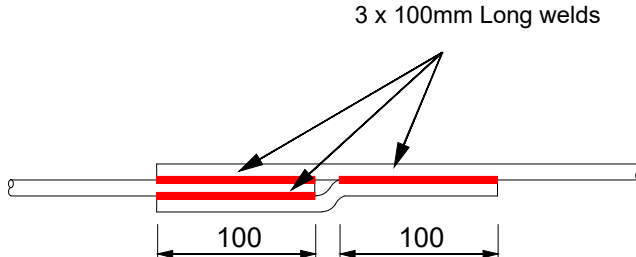
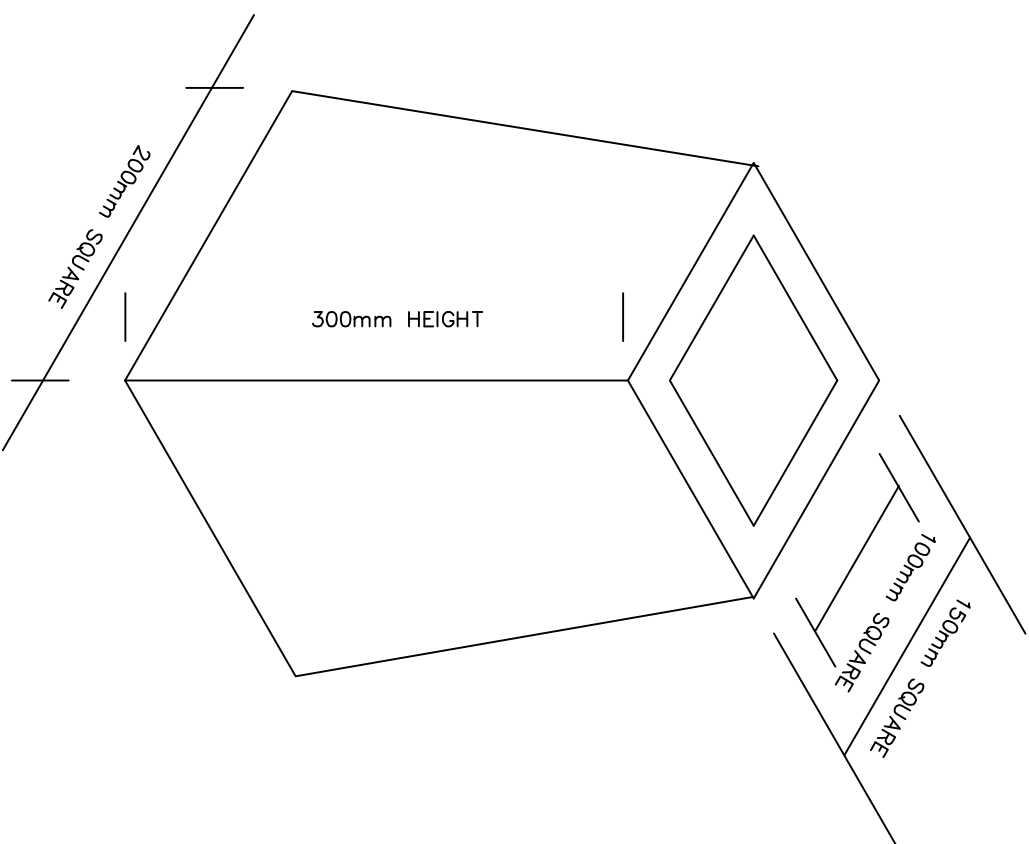
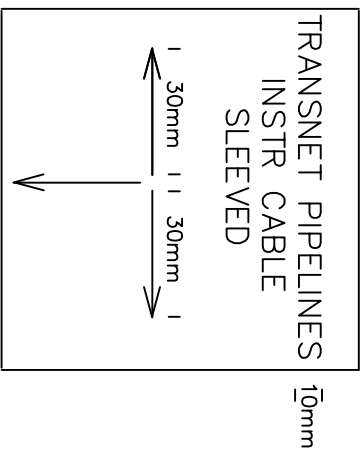
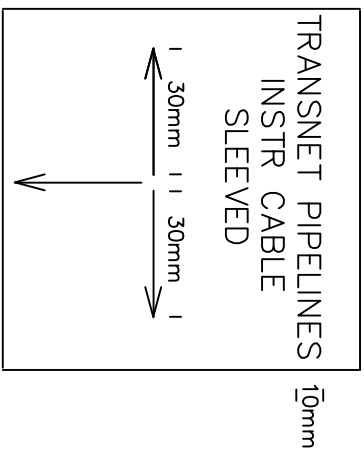


												EARTH MAT SYSTEM GENERAL NOTES:																																																																																																																																		
1. STEEL STRUCTURE BONDING  Copper conductor hexican crimped lug, 1 x stainless steel bolt, 1 x stainless steel nut, 2 x stainless steel washers												2. EARTH SPIKE CONNECTION  Hexican crimped copper lug bolted onto earth rod with 2 x brass washers and 2 x brass nuts 2 x 1.8m (min) x 16mm diameter SABS approved copper electroplated threaded earth steel rod (bearing SABS mark)												3. BCEW CONNECTION  3 x 100mm Long welds 2 x Hexican crimped copper lug bolted onto BCEW with 3 x brass washers, 1 x brass nut and 1 x brass bolt BCEW												4. EARTH MAT CROSS JOINT  4 x 100mm Long welds												5. EARTH MAT T-JOINT  3 x 100mm Long welds												6. EARTH MAT EXTENSION JOINT  3 x 100mm Long welds												DESIGNER RESP. ENG PROJ. MANAGER CLIENT <table><tr><td>ROLE</td><td>NAME</td><td>SIGN</td><td>DATE</td></tr></table>				ROLE	NAME	SIGN	DATE	DRAWING APPROVAL STATUS																																																														
																																																																												ROLE	NAME	SIGN	DATE																																																															
PROJECT: TRANSNET PIPELINES HW FIRE A3 TITLE: TYPICAL EARTH MAT SYSTEM JOINTS, WELDING AND EARTH SPIKE CONNECTION DETAIL				SCALE NTS CAD FILE: HO1436-TPL_2024_09_0008_77334_RFP-FAT-0001 PROJECT No: 11364				CHECKED: GM DESIGN-DRAWN: GM - RM DRAWING No: 11364-A1029				APPROVED: BJ DATE: 2025-10-22 REV: B				GREYJONES (PTY) LTD. GREYJONES (PTY) LTD. admin@greyjones.co.za www.greyjones.co.za (031) 816 9386				REVISIONS <table><tr><th>REV</th><th>DATE</th><th>BY</th><th>CHK</th><th>DESCRIPTION</th></tr><tr><td>A</td><td>2025-10-22</td><td>RM</td><td>GM</td><td>ISSUED FOR ACCEPTANCE</td></tr><tr><td>B</td><td>2026-02-13</td><td>RM</td><td>GM</td><td>TPL REVIEW COMMENTS INCLUDED</td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>				REV	DATE	BY	CHK	DESCRIPTION	A	2025-10-22	RM	GM	ISSUED FOR ACCEPTANCE	B	2026-02-13																																					RM	GM	TPL REVIEW COMMENTS INCLUDED																																									TRANSNET pipelines PROJECT NAME HW FIRE <table><tr><td>DRAWN</td><td> </td><td>REF.</td><td> </td></tr><tr><td>TRACED</td><td> </td><td>DATE</td><td> </td></tr><tr><td>CHECKED</td><td> </td><td>APPROVED</td><td> </td></tr><tr><td>SCALE</td><td> </td><td> </td><td> </td></tr><tr><td colspan="2">TPL DRAWING No.</td><td> </td><td> </td></tr><tr><td> </td><td> </td><td>REV</td><td> </td></tr></table>				DRAWN		REF.		TRACED		DATE		CHECKED		APPROVED		SCALE				TPL DRAWING No.						REV	
																								REV	DATE	BY	CHK	DESCRIPTION																																																																																																																		
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TPL DRAWING No.																																																																																																																																														
		REV																																																																																																																																												

[illegible]

NOTES:

1. NAME PLATE AFFIXED WITH SS SCREWS
 2. TEXT SIZE 10mm STAMPED LETTERING
 3. LABEL DIRECTION ARROWS TO MATCH CABLE DIRECTION
3. MARKER COLOR SPECS:

MV – BRILLIANT GREEN (RAL 6002)
 LV – BLACK (RAL 9005)
 INSTR – LIGHT BLUE (RAL 5012)

Rev	Remarks	Appr	Date	Chkd	Date	Design	Date
003	TRF LOGO ALTERED, RAL CODES ADDED	BB	10/4/4/13	CM	10/4/13		
002	MATERIAL SPEC ALTERED	PMET	10/6/02	CM	10/6/02		
001	AS APPROVED	PMET	02/7/96	CM	02/7/96		

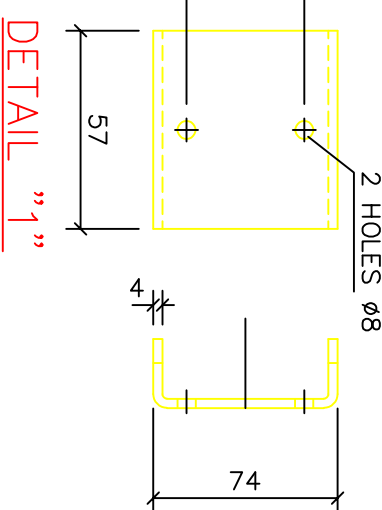
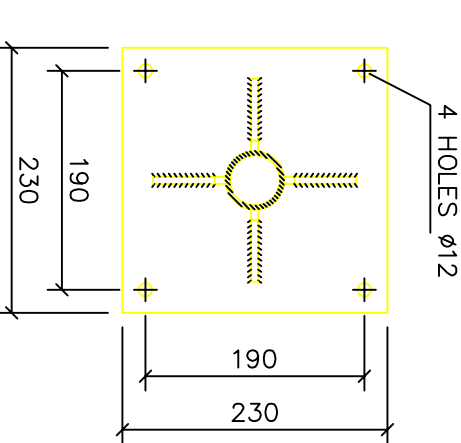
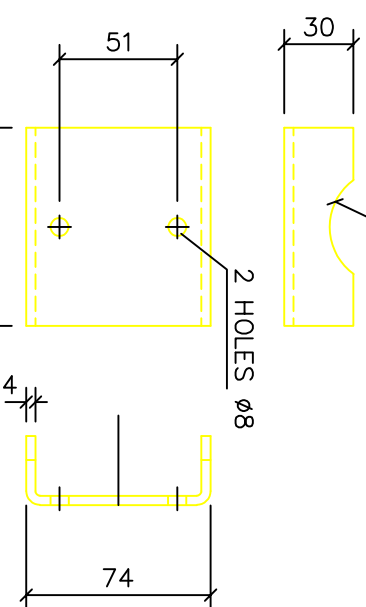
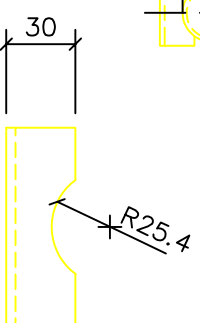
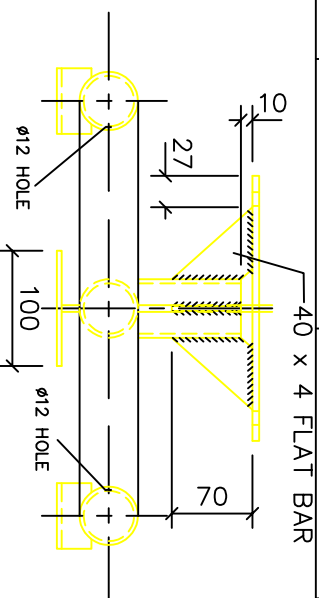
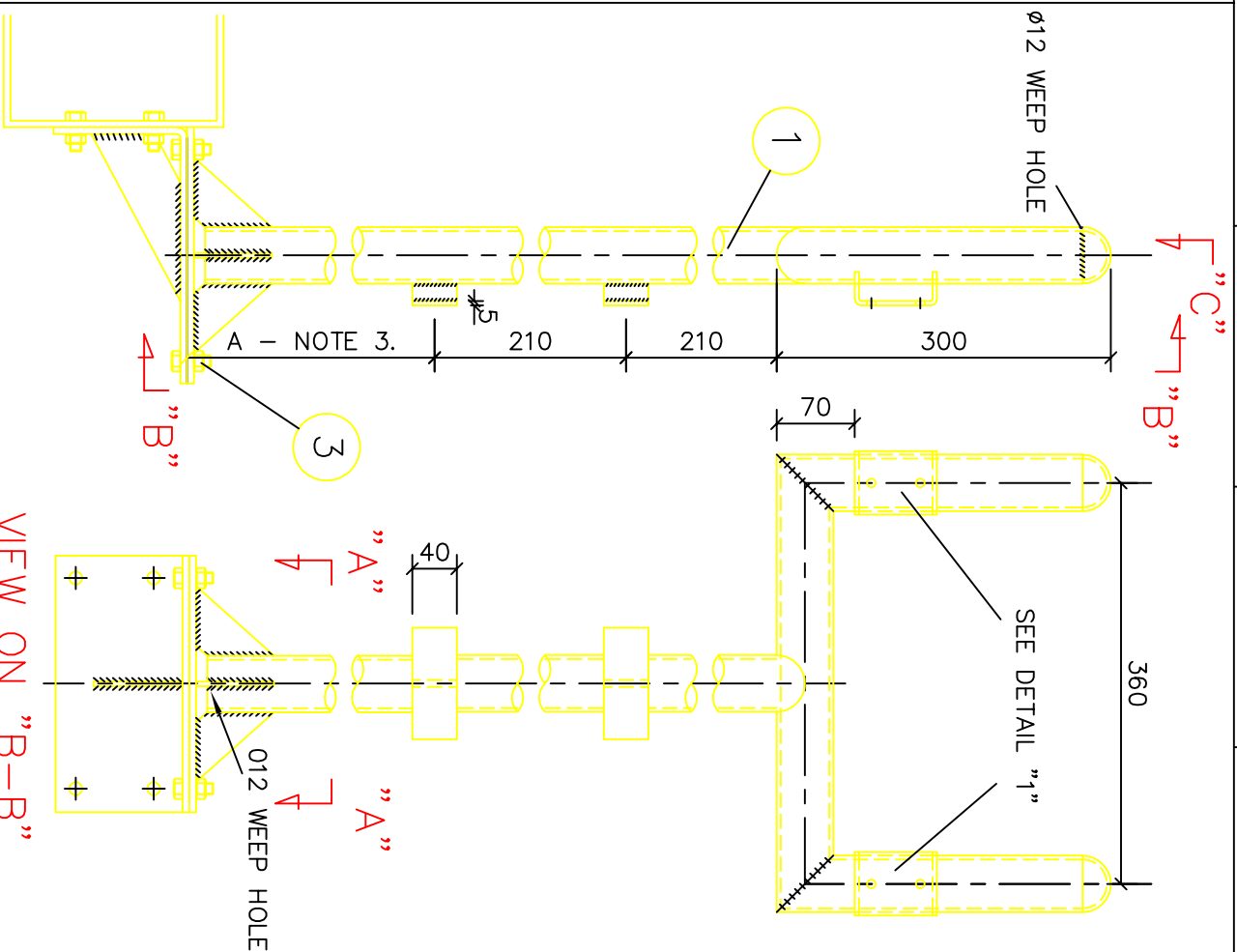


TRANSNET
pipelines

CABLE CONCRETE MARKER SPECIFICATION

HOOK-UP

DRAWN	CM	REF.	727-00102BLNRK
TRACED	CAD	DATE	10/04/13
CHECKED		APPROVED	BB
SCALE		NTS	
DRAWING No.		REV	
PL		3	



VIEW ON "B-B"

SECTION "A-A"

VIEW ON C

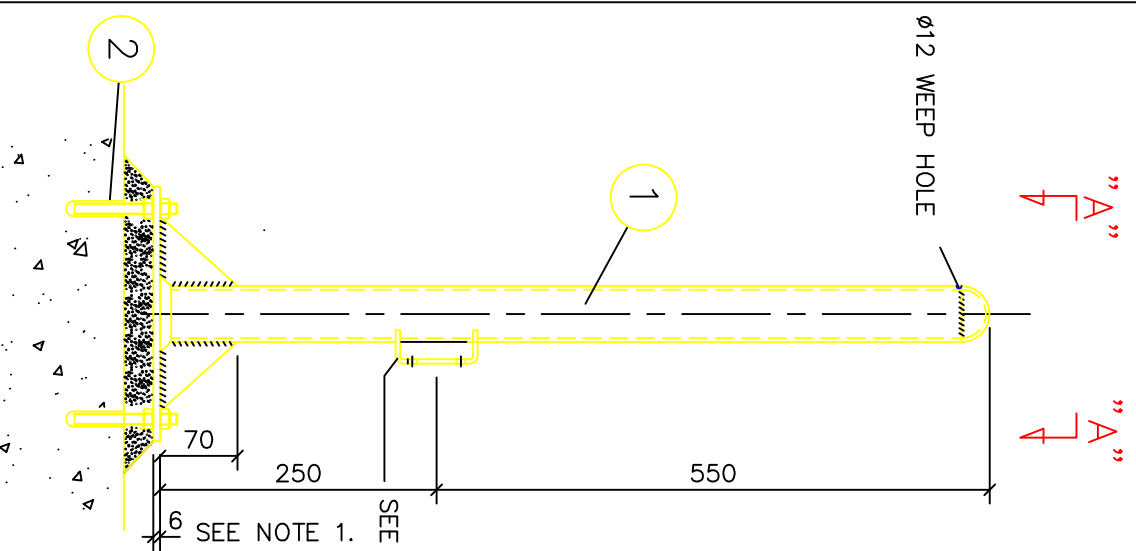
DETAIL "1"

NOTES:			
1. ALL WELDING DONE TO BE CONTINUOUS FILLET 4-5mm			
2. ITEM TO BE HOT DIP GALV. ACC. TO SABS 763 SPEC.			
3. LENGTH DETERMINED ON SITE.			
ITEM	QTY.	MATERIAL	DESCRIPTION
1	4	COM. STEEL 43A	TUBE STRUCTURAL NOM. SIZE 50.8 x 3.5
3	4	COM. STEEL ZINC PL.	BOLT M10 x 20
3.1	4	COM. STEEL ZINC PL.	NUT (HEX) M10
3.2	4	COM. STEEL ZINC PL.	WASHER (FLAT) M10
3.3	4	COM. STEEL ZINC PL.	WASHER (SPRING) M10

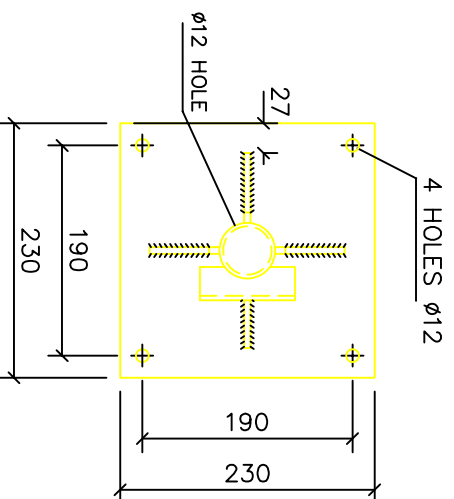


INSTRUMENT STAND
DUAL INSTRUMENT

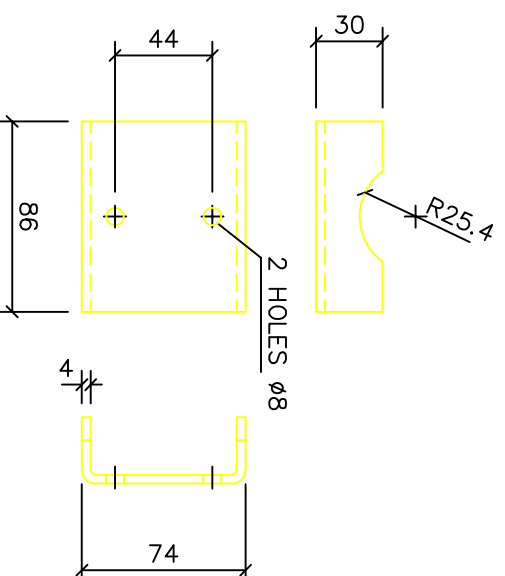
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RO	AS BUILT	G.M	22.5.97	S.J	22.5.97	W.B	22.5.97	INSTRUMENT STAND - DOUBLE			
								DRAWN	L.V.	REF	
								TRACED	CAD	DATE	JAN 1997
								CHECKED	W.B	APPR	G.M.
								SCALE	NONE		
SIEMENS DRAWING No.								DRAWING No.			
(3)G52001-H2151-1086								727-002-INSTAND			
								REV			
								01			



SEE NOTE 4.



SECTION "A-A"



DETAIL "1"

[illegible]

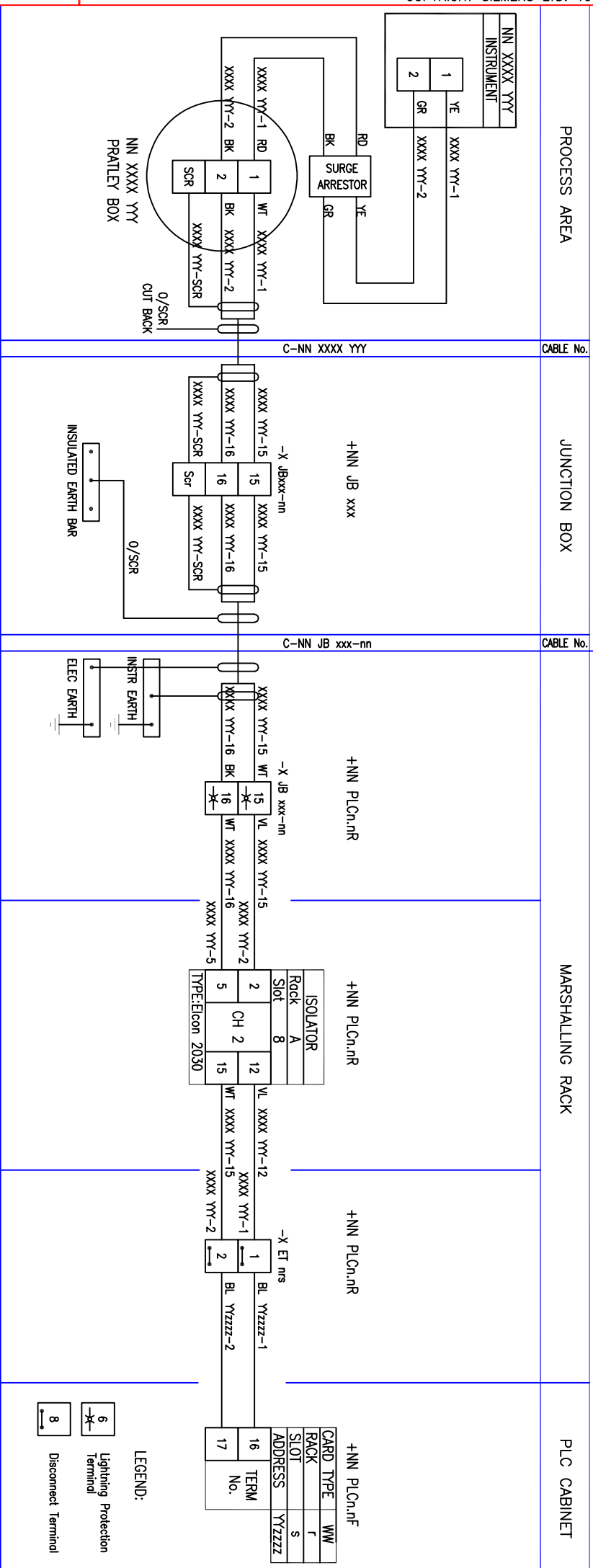
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SIEMENS DRAWING No.		Sht 1 of 1		=		PETRONET DRAWING No.	
(3)G52001-H2151-I087		+					

INSTRUMENT STAND
SINGLE INSTRUMENT

PROJECT NAME:			
INSTRUMENT STAND - SINGLE			
DRAWN	L. V.	REF	
TRACED	CAD	DATE	JAN 1997
CHECKED	W/B	APPR.	G.M.
SCALE		NONE	
DRAWING No.		REV.	
727-003-INSTAND		01	

FIELD

CONTROL ROOM



LOOP SPECIFICATIONS

1. INSTRUMENT TAG NUMBER : NN XXXX YY		3. INSTRUMENT J/B ID : + NN JB xxx		5. PLC PANEL LOCATION IDENTIFIER: +NN PLCn,nR		6. PLC CORE IDENT: YYzzzz-1		7. PLC TERM RAIL LABEL -X ET ns	
Where NN represents Pump Station ID XXXX YY represents Instr Functional Design Example : 17 TT121		Where xxx represents unique ID based on the associated Device Group Example : +17 JB P01 for Group P01 Example : +17 JB 12 for Routing Group		Where + denotes Location Identifier NN denotes Pump Station ID PLCn denotes PLC Panel ID R denotes Rear F=Front Example : +17 PLC01.1R		Where YY represents Signal Type I=Digital Inp IW=Analog Inp Q=Digital Out QW=Analog Out zzzz denotes S/W Address -1 denotes Terminal No. Example : I 7.3 -1		Where -X denotes Terminal Rail ET denotes Remote I/O ET=located in PLC Panel ETL=located in LV Panel n denotes PLC ID No. r denotes ET Rock No. s denotes ET Slot No. Example : -X ET 124	
2. INSTR CABLE CORE IDENT : XXXX YY-n		4. J/B TERMINAL LABEL : -X JB xxx-n							
Where XXXX YY represents Instr Functional Design n represents the Terminal Number into which the core is terminated. Example : TT121-1		Where -X denotes a Terminal Rail -nn denotes Signal Type A=Analog D=Digital Example : -X JB P01-A							

Rev		Remarks		Date		D No.		=	
0.2		ITEMS CLARIFIED		10/04/2001		W No.		+	
0.1		CABLE SCREENS ALTERED		20/09/2000		SCALE : NTS		SHT	
0.0		STANDARDS		20/09/2000		PL		1 of 1	
Appr		Date		Date		Design		REV	



PETRONET



LIMITED
JOHANNESBURG

REG No 01/07514/06

LOOP DIAGRAM FOR INSTRUMENTATION
STANDARD SPECIFICATION

IAT Document Number

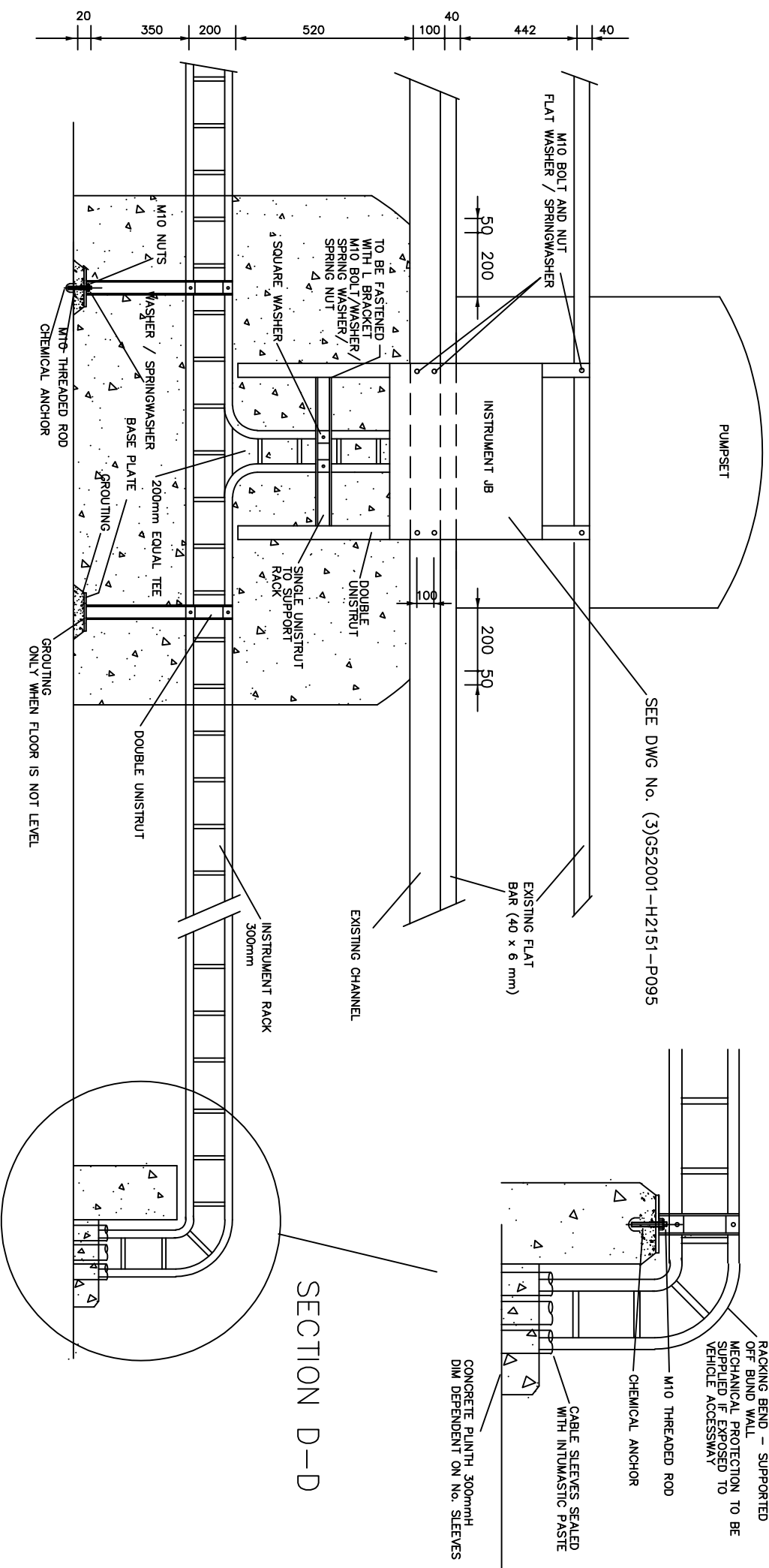
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PETRONET Document Number

PL



RACKING TYPICAL OVER BUND WALLS



SECTION D-D

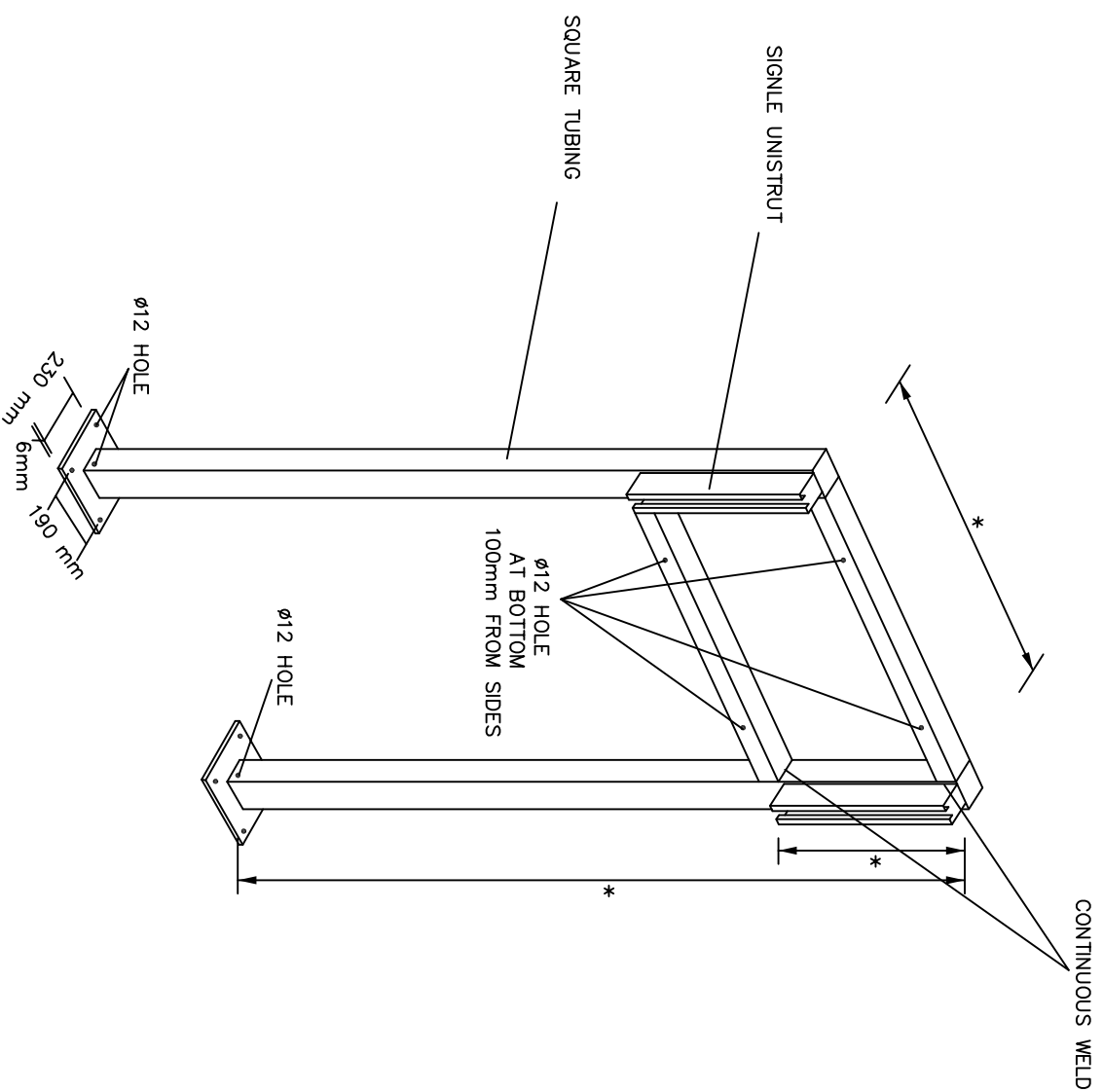
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SIEMENS DRAWING No.		Sht. 1 of 1	=		PETRONET DRAWING No.			
(3)G52001-L4001-P920		+						

 PETRONET				
HOOK-UP				
TYPICAL CABLE RACKING LAYOUTS INCLUSIVE OF OVER BUND WALLS				

PROJECT NAME: RACKING LAYOUT TYPICAL				
DRAWN	L.V.	REF		
RACED	CAD	DATE	JAN 1997	
CHECKED	W/B	APPR.	G.M.	
SCALE		NONE		
DRAWING No.				
727-009-RACK TYPICAL		REV	0.3	



HOOK-UP
TYPICAL CABLE RACKING LAYOUTS
INCLUSIVE OF OVER BUND WALLS



- NOTES :

1. SQUARE TUBING : COM. STEEL 43A NOMINAL SIZE 50 x 3.5 mm
2. STAND TO BE HOT DIP GALVANISED AFTER MANUFACTURING
3. * LENGTHS TO BE DETERMINED AS REQUIRED
4. CHEMICAL ANCHOR REQUIRED

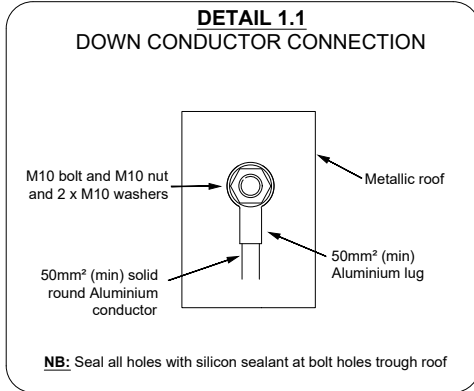
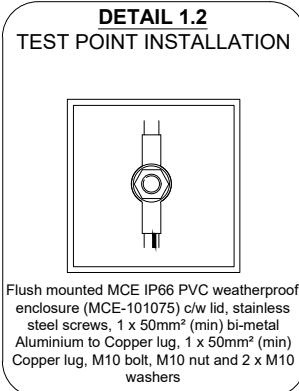
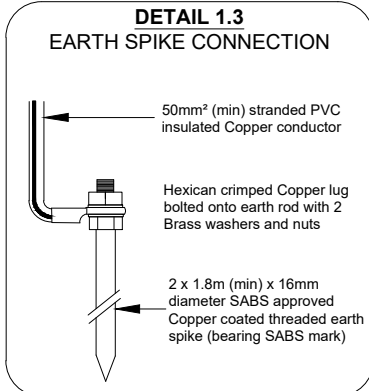
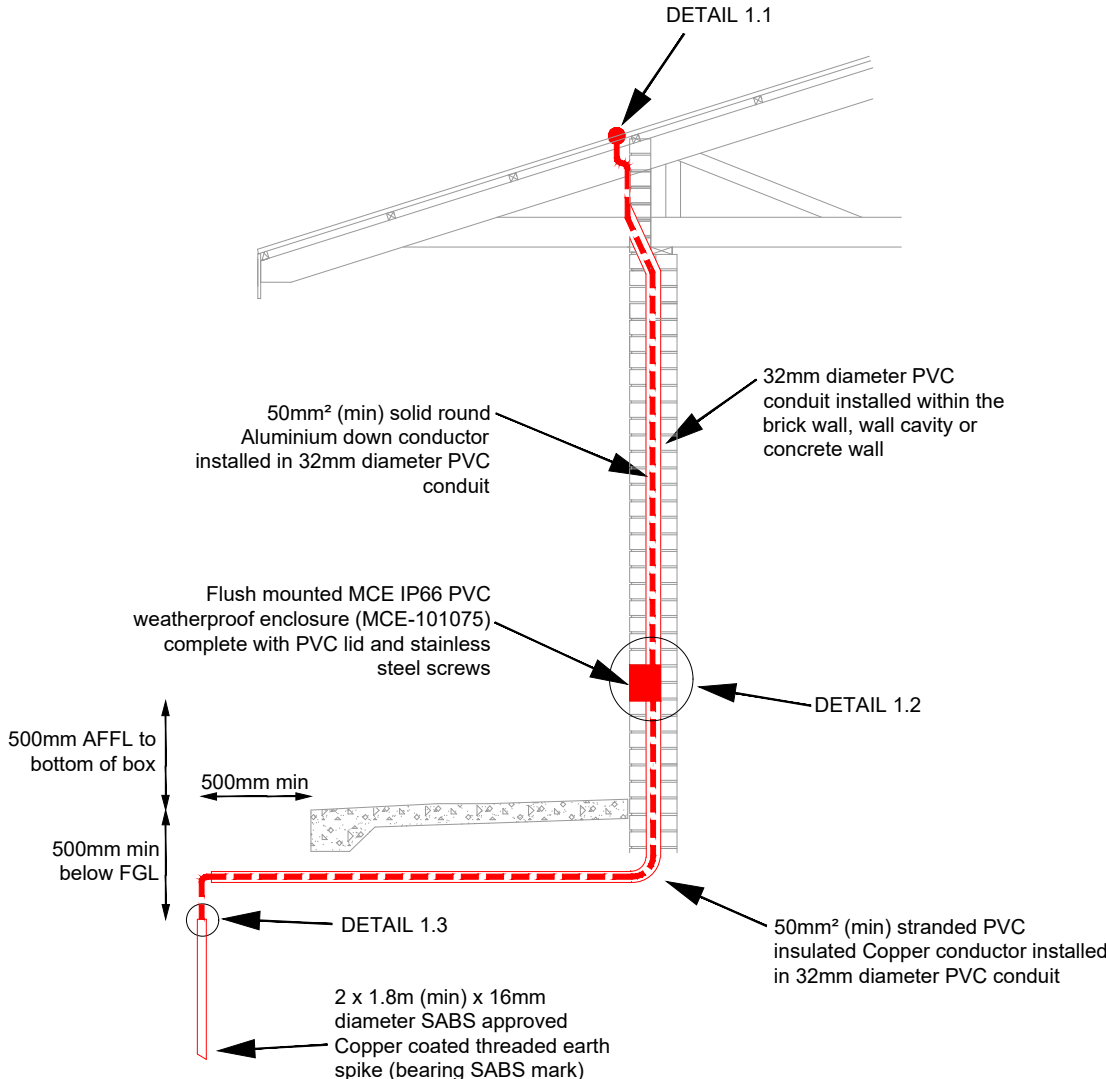
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0.2	AS APPROVED	W/F	1.9.99	W/F	1.9.99	W/F	5.8.99	
SIEMENS DRAWING No.		Sht. 1 of 1	=		PETRONET DRAWING No.			
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**PETRONET**

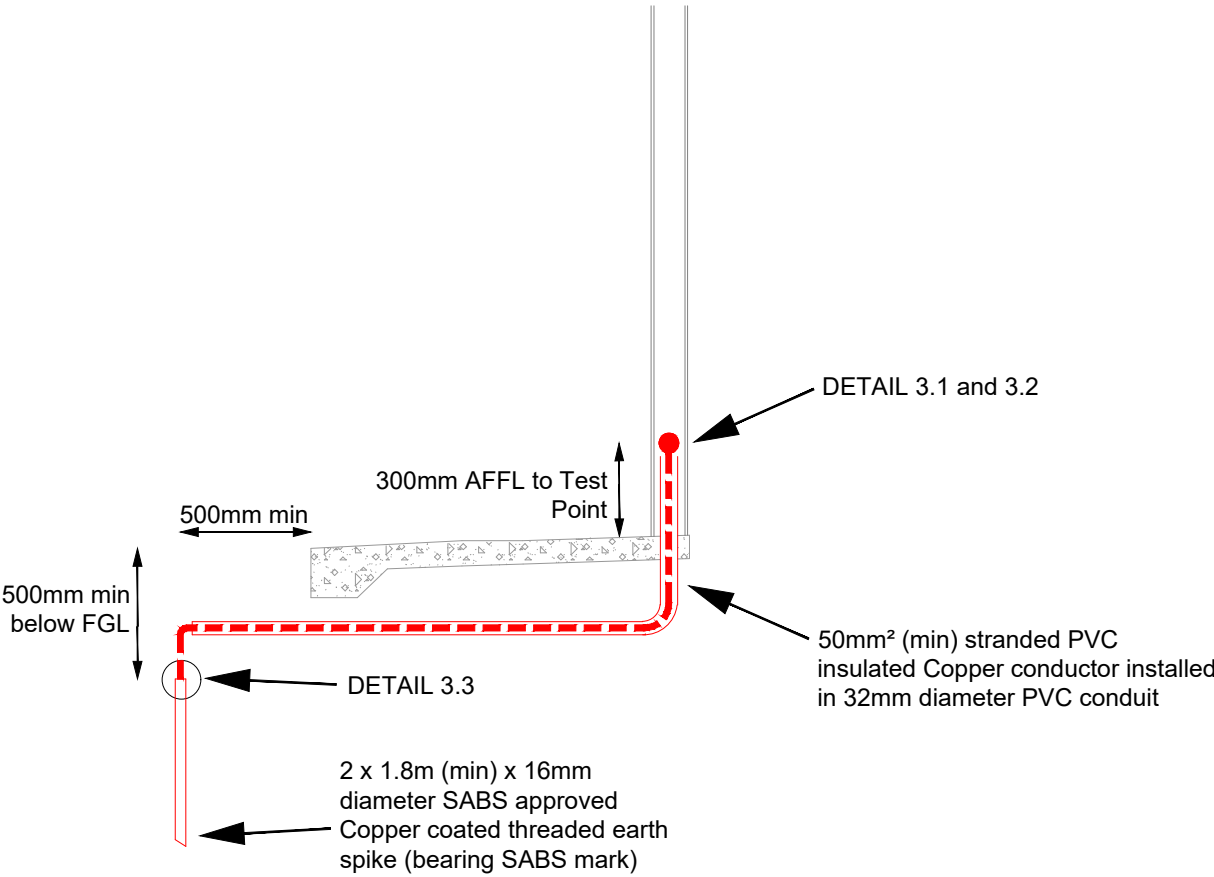
HOOK-UP

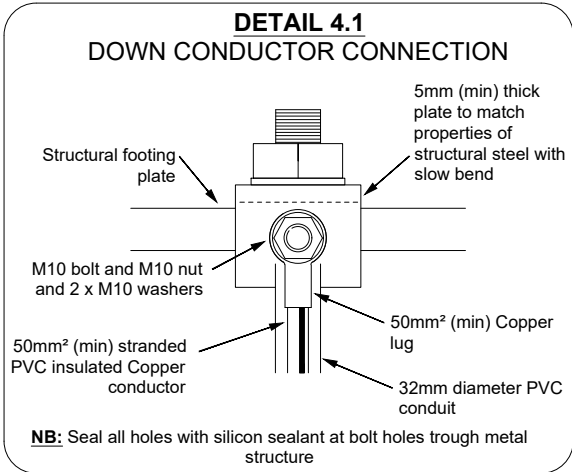
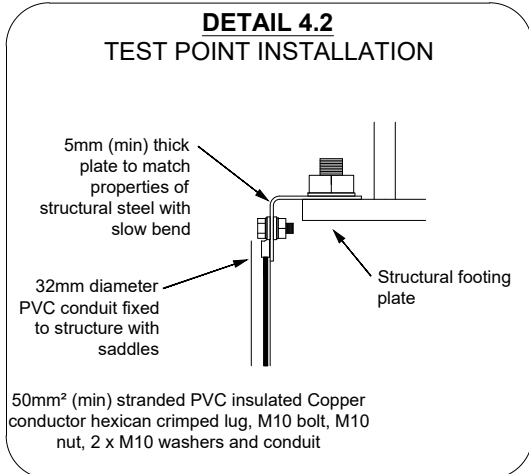
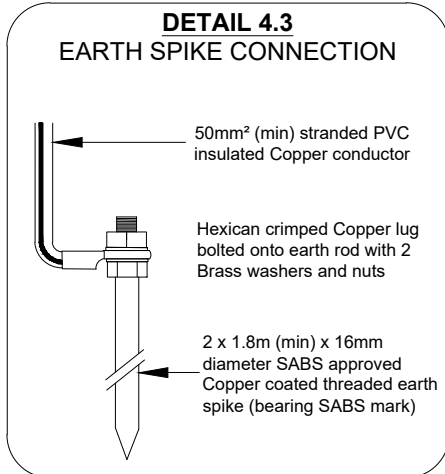
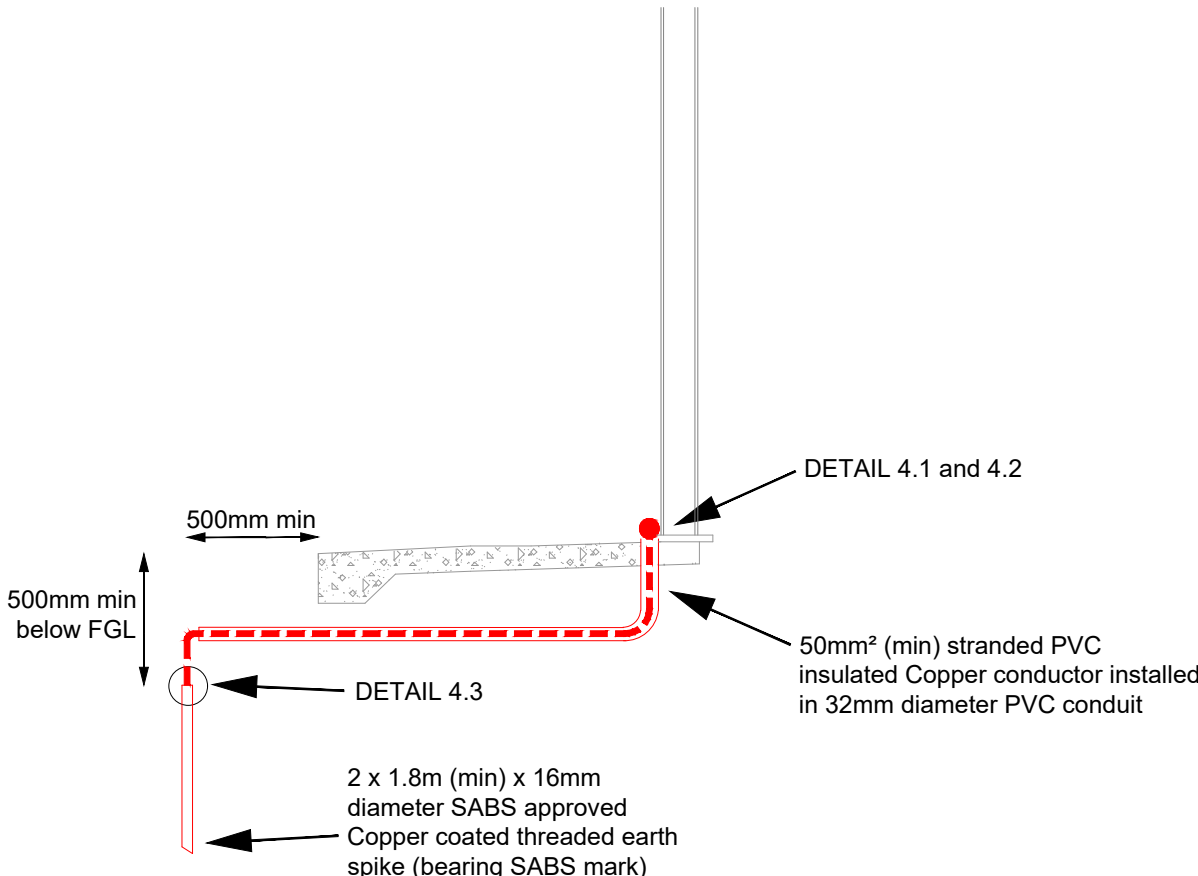
FOR JUNCTION BOX STAND DETAILS

PROJECT NAME:			
JUNCTION BOX STAND DETAIL			
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TRACED	CAD	DATE	1.9.99
CHECKED	W/F	APPR.	PNET
SCALE	NONE		
DRAWING No.			
727-010-J/B STAND		REV	0.2

	1	2	3	4	5	6	7	8	9	10		11	12	
A	1. METALLIC ROOFS (NEW BUILDINGS) DETAIL 1.1 DOWN CONDUCTOR CONNECTION  DETAIL 1.2 TEST POINT INSTALLATION  DETAIL 1.3 EARTH SPIKE CONNECTION  											EARTH MAT SYSTEM GENERAL NOTES: 1. Earth mat systems shall be continuous runs with limited joints. 2. The complete detail design, installation, testing and commissioning of all earth mat systems remains the responsibility of the Contractor and the Contractor shall therefore take additional measures if necessary to ensure compliance. 3. The Contractor must be ELPA accredited and shall submit proof thereof the Engineer. 4. The Contractor shall issue a certificate of compliance (COC) for each earth mat system complete with design and applicable compliant material sheets to the Engineer. 5. Earth mat system shall be minimum 10mm (min) diameter solid hard drawn copper the correct amount of 100mm welding connections at each crossing and joint. 6. All earth spikes shall be 1800mm long (min) x 16mm diameter (min) SABS approved copper coated threaded rods (bearing SABS mark). 7. The Contractor shall liaise in advance with the Main Contractor for installation of all PVC conduits and all auxiliaries. 8. The Contractor shall take additional measures to ensure that all earth mat systems and installations has limited or no exposure to the public. 9. Lightning protection shall comply with the latest edition of SANS 10313. 10. Only written dimensions shall be used. The Contractor shall verify all dimensions on site. All dimensions indicated are in mm. 11. The Contractor shall consult the Civil Engineer / Architect / Structural Engineer drawings for final levels. 12. The installation remains the responsibility of the Contractor and the Contractor shall therefore take additional measures if necessary to ensure compliance. 13. The Contractor shall identify any and all existing services prior to excavation. 14. "Equivalent" or "Similar Approved" shall have the same meaning and the Engineer shall evaluate the quality to be equal or better than the brand name quoted. 15. All cable connections shall be fitted with a "star" or serrated washer in addition to the back-nut, to ensure good earth contact. 16. Where earth rods are paralleled in a group to reduce the earth resistance to the permissible value, the earth rods shall be spaced apart for a distance at least equal to their buried depth length.		
B														
C														
D														
E														
F														
G														
H	PROJECT: TRANSNET PIPELINES		SCALE NTS	CHECKED: GM	APPROVED: BJ	GREYJONES (PTY) LTD. GREYJONES (PTY) LTD. admin@greyjones.co.za www.greyjones.co.za (031) 816 9386	REVISIONS				TRANSNET pipelines	PROJECT NAME HW FIRE		
	HW FIRE		CAD FILE: HO1436-TPL_2024_09_0008 _77334_RFP-FAT-0001	DESIGN-DRAWN: GM - RM	DATE: 2025-10-22		REV	DATE	BY	CHK		DESCRIPTION	DRAWN	REF.
	TITLE: TYPICAL LIGHTNING PROTECTION INSTALLATION DETAILS - DETAIL 1 - METALLIC ROOFS (NEW BUILDINGS)		PROJECT No: 11364	DRAWING No: 11364-A1030	REV: B		A	2025-10-22	RM	GM		ISSUED FOR ACCEPTANCE	TRACED	DATE

												EARTH MAT SYSTEM GENERAL NOTES:											
												1. Earth mat systems shall be continuous runs with limited joints. 2. The complete detail design, installation, testing and commissioning of all earth mat systems remains the responsibility of the Contractor and the Contractor shall therefore take additional measures if necessary to ensure compliance. 3. The Contractor must be ELPA accredited and shall submit proof thereof the Engineer. 4. The Contractor shall issue a certificate of compliance (COC) for each earth mat system complete with design and applicable compliant material sheets to the Engineer. 5. Earth mat system shall be minimum 10mm (min) diameter solid hard drawn copper the correct amount of 100mm welding connections at each crossing and joint. 6. All earth spikes shall be 1800mm long (min) x 16mm diameter (min) SABS approved copper coated threaded rods (bearing SABS mark). 7. The Contractor shall liaise in advance with the Main Contractor for installation of all PVC conduits and all auxiliaries. 8. The Contractor shall take additional measures to ensure that all earth mat systems and installations has limited or no exposure to the public. 9. Lightning protection shall comply with the latest edition of SANS 10313. 10. Only written dimensions shall be used. The Contractor shall verify all dimensions on site. All dimensions indicated are in mm. 11. The Contractor shall consult the Civil Engineer / Architect / Structural Engineer drawings for final levels. 12. The installation remains the responsibility of the Contractor and the Contractor shall therefore take additional measures if necessary to ensure compliance. 13. The Contractor shall identify any and all existing services prior to excavation. 14. "Equivalent" or "Similar Approved" shall have the same meaning and the Engineer shall evaluate the quality to be equal or better than the brand name quoted. 15. All cable connections shall be fitted with a "star" or serrated washer in addition to the back-nut, to ensure good earth contact. 16. Where earth rods are paralleled in a group to reduce the earth resistance to the permissible value, the earth rods shall be spaced apart for a distance at least equal to their buried depth length.											
												DESIGNER RESP. ENG PROJ. MANAGER CLIENT ROLE NAME SIGN DATE											
												DRAWING APPROVAL STATUS											
PROJECT: TRANSNET PIPELINES HW FIRE A3 TITLE: TYPICAL LIGHTNING PROTECTION INSTALLATION DETAILS - DETAIL 2 - NON-METALLIC ROOFS (NEW BUILDINGS)												SCALE NTS CAD FILE: HO1436-TPL 2024_09_0008 _77334_RFP-FAT-0001		CHECKED: GM DESIGN-DRAWN: GM - RM		APPROVED: BJ DATE: 2025-10-22		GREYJONES (PTY) LTD. GREYJONES (PTY) LTD. admin@greyjones.co.za www.greyjones.co.za (031) 816 9386		REVISIONS REV DATE BY CHK DESCRIPTION A 2025-10-22 RM GM ISSUED FOR ACCEPTANCE B 2026-02-13 RM GM TPL REVIEW COMMENTS INCLUDED			
												TRANSNET pipelines		PROJECT NAME HW FIRE DRAWN REF. TRACED DATE CHECKED APPROVED SCALE TPL DRAWING No. REV									

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H	PROJECT: TRANSNET PIPELINES HW FIRE A3		SCALE NTS CAD FILE: HO1436-TPL_2024_09_0008_77334_RFP-FAT-0001 PROJECT No: 11364	CHECKED: GM DESIGN-DRAWN: GM - RM DRAWING No: 11364-A1032	APPROVED: BJ DATE: 2025-10-22 REV: B	GREYJONES (PTY) LTD. GREYJONES (PTY) LTD. admin@greyjones.co.za www.greyjones.co.za (031) 816 9386	REVISIONS <table><tr><th>REV</th><th>DATE</th><th>BY</th><th>CHK</th><th>DESCRIPTION</th></tr><tr><td>A</td><td>2025-10-22</td><td>RM</td><td>GM</td><td>ISSUED FOR ACCEPTANCE</td></tr><tr><td>B</td><td>2026-02-13</td><td>RM</td><td>GM</td><td>TPL REVIEW COMMENTS INCLUDED</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>		REV	DATE	BY	CHK	DESCRIPTION	A	2025-10-22	RM	GM	ISSUED FOR ACCEPTANCE	B	2026-02-13	RM	GM	TPL REVIEW COMMENTS INCLUDED																										TRANSNET  pipelines PROJECT NAME HW FIRE <table><tr><td>DRAWN</td><td></td><td>REF.</td><td></td></tr><tr><td>TRACED</td><td></td><td>DATE</td><td></td></tr><tr><td>CHECKED</td><td></td><td>APPROVED</td><td></td></tr><tr><td>SCALE</td><td></td><td></td><td></td></tr><tr><td colspan="2">TPL DRAWING No.</td><td>REV</td><td></td></tr></table>	DRAWN		REF.		TRACED		DATE		CHECKED		APPROVED		SCALE				TPL DRAWING No.		REV	
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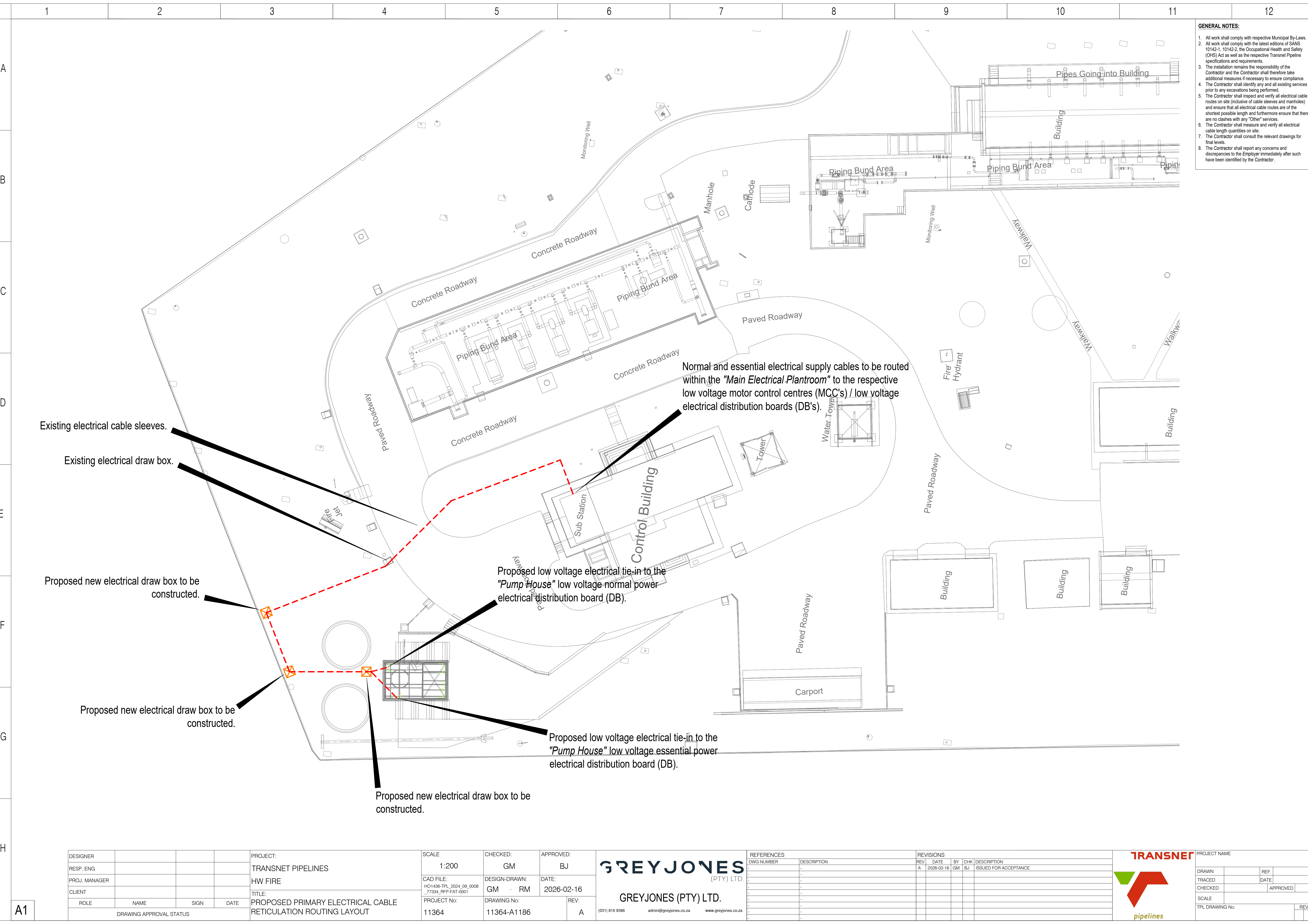
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H	PROJECT: TRANSNET PIPELINES HW FIRE A3		SCALE NTS CAD FILE: HO1436-TPL_2024_09_0008 _77334_RFP-FAT-0001 PROJECT No: 11364	CHECKED: GM DESIGN-DRAWN: GM - RM DRAWING No: 11364-A1033	APPROVED: BJ DATE: 2025-10-22 REV: B	GREYJONES (PTY) LTD. GREYJONES (PTY) LTD. admin@greyjones.co.za www.greyjones.co.za (031) 816 9386	REVISIONS <table><tr><th>REV</th><th>DATE</th><th>BY</th><th>CHK</th><th>DESCRIPTION</th></tr><tr><td>A</td><td>2025-10-22</td><td>RM</td><td>GM</td><td>ISSUED FOR ACCEPTANCE</td></tr><tr><td>B</td><td>2026-01-13</td><td>RM</td><td>GM</td><td>TPL REVIEW COMMENTS INCLUDED</td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>	REV	DATE	BY	CHK	DESCRIPTION	A	2025-10-22	RM	GM	ISSUED FOR ACCEPTANCE	B	2026-01-13	RM	GM	TPL REVIEW COMMENTS INCLUDED																										TRANSNET pipelines PROJECT NAME HW FIRE <table><tr><td>DRAWN</td><td></td><td>REF.</td><td></td></tr><tr><td>TRACED</td><td></td><td>DATE</td><td></td></tr><tr><td>CHECKED</td><td></td><td>APPROVED</td><td></td></tr><tr><td>SCALE</td><td></td><td></td><td></td></tr><tr><td colspan="2">TPL DRAWING No.</td><td>REV</td><td></td></tr></table>	DRAWN		REF.		TRACED		DATE		CHECKED		APPROVED		SCALE				TPL DRAWING No.		REV	
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B	DETAIL 5.1 DOWN CONDUCTOR CONNECTION DETAIL 5.2 TEST POINT INSTALLATION DETAIL 5.3 EARTH SPIKE CONNECTION DETAIL NOTES - Secure 50mm² (min) solid round Aluminium conductor with Aluminium cable cleats, fixed to the parapet walls with Rockset Cement. Cable cleats shall be fixed at max 1m spacings along the route of the Aluminium conductor. - Joint solid round Aluminium conductors together with 50mm² Aluminium C-Connectors. - Perimeter conductors to be installed 50mm from parapet wall outer edges with slow bends. - Expansion settings to be done at every 8m section. - All joints on perimeter or ridge conductor to be approved by Engineer PRIOR to installation. - Down conductor shall be 50mm² (min) solid round Aluminium conductor in 32mm diameter conduit. Joint Aluminium down conductor to the Copper conductors by means of a bi-metal crimp lugs (Aluminium crimp to Copper lug).																															
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DESIGNER			
RESP. ENG			
PROJ. MANAGER			
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ROLE	NAME	SIGN	DATE

 TRANSNET <i>pipelines</i>	PROJECT NAME		HW FIRE	
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REV	DATE	BY	CHK	DESCRIPTION
A	2025-10-22	RM	GM	ISSUED FOR ACCEPTANCE
B	2026-02-13	RM	GM	TPL REVIEW COMMENTS INCLUDED



DESIGNER			
RESP. ENG			
PROJ. MANAGER			
CLIENT			
ROLE	NAME	SIGN	DATE
DRAWING APPROVAL STATUS			

PROJECT:	TRANSNET PIPELINES
	HW FIRE
TITLE:	PROPOSED PRIMARY ELECTRICAL CABLE RETICULATION ROUTING LAYOUT

SCALE	1:200	CHECKED:	GM	APPROVED:	BJ
CAD FILE:	HO1436-TPL_2024_09_0008_77334_RFP-FAT-0001	DESIGN-DRAWN:	GM - RM	DATE:	2026-02-16
PROJECT No:	11364	DRAWING No:	11364-A1186	REV:	A

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(031) 816 9386 admin@greyjones.co.za www.greyjones.co.za

REFERENCES		REVISIONS	
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BY	CHK	DESCRIPTION
GM	BJ	ISSUED FOR ACCEPTANCE

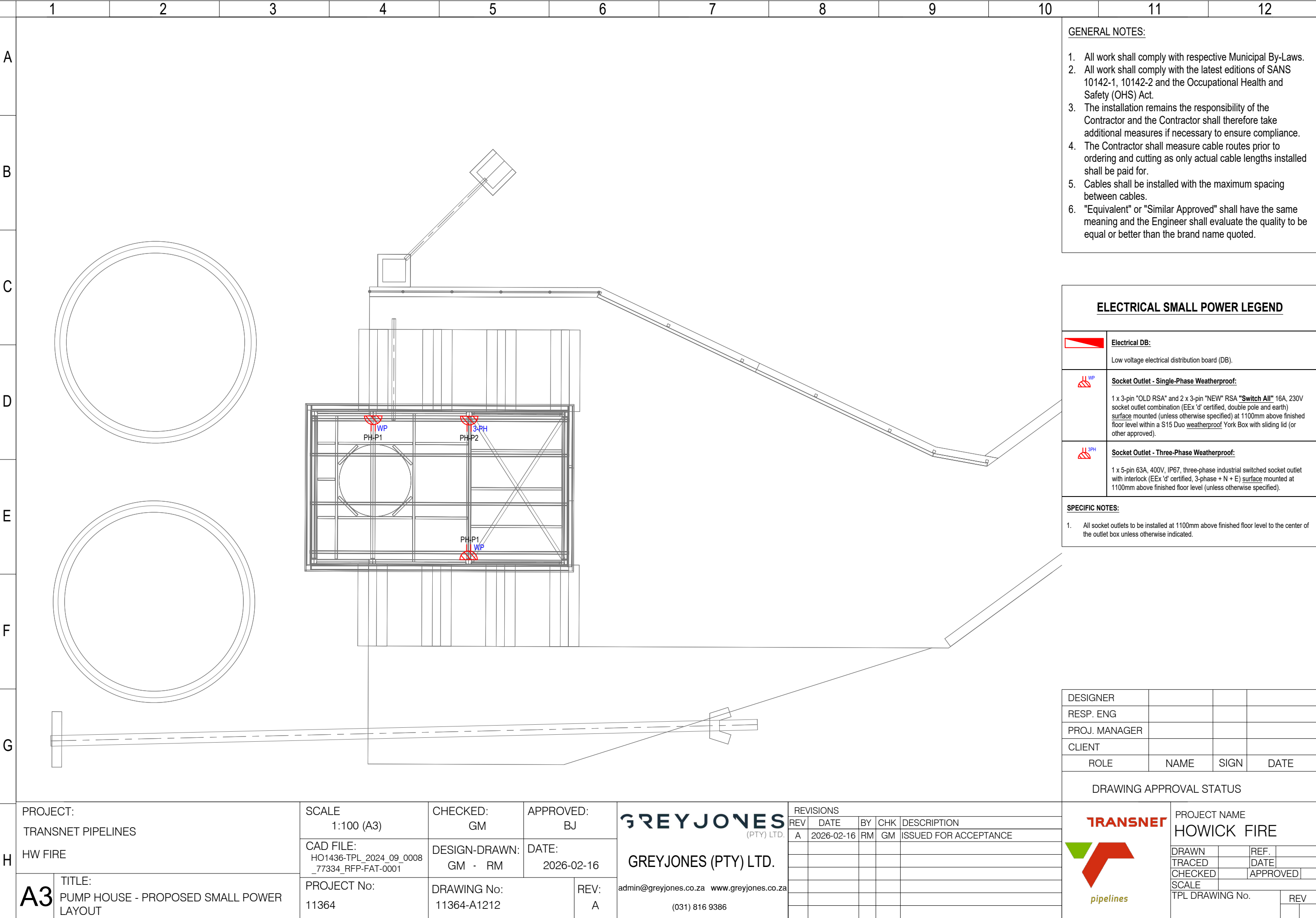
TRANSNET

pipelines

PROJECT NAME

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SCALE	
TPL DRAWING No.	REV



- GENERAL NOTES:**
1. All work shall comply with respective Municipal By-Laws.
 2. All work shall comply with the latest editions of SANS 10142-1, 10142-2 and the Occupational Health and Safety (OHS) Act.
 3. The installation remains the responsibility of the Contractor and the Contractor shall therefore take additional measures if necessary to ensure compliance.
 4. The Contractor shall measure cable routes prior to ordering and cutting as only actual cable lengths installed shall be paid for.
 5. Cables shall be installed with the maximum spacing between cables.
 6. "Equivalent" or "Similar Approved" shall have the same meaning and the Engineer shall evaluate the quality to be equal or better than the brand name quoted.

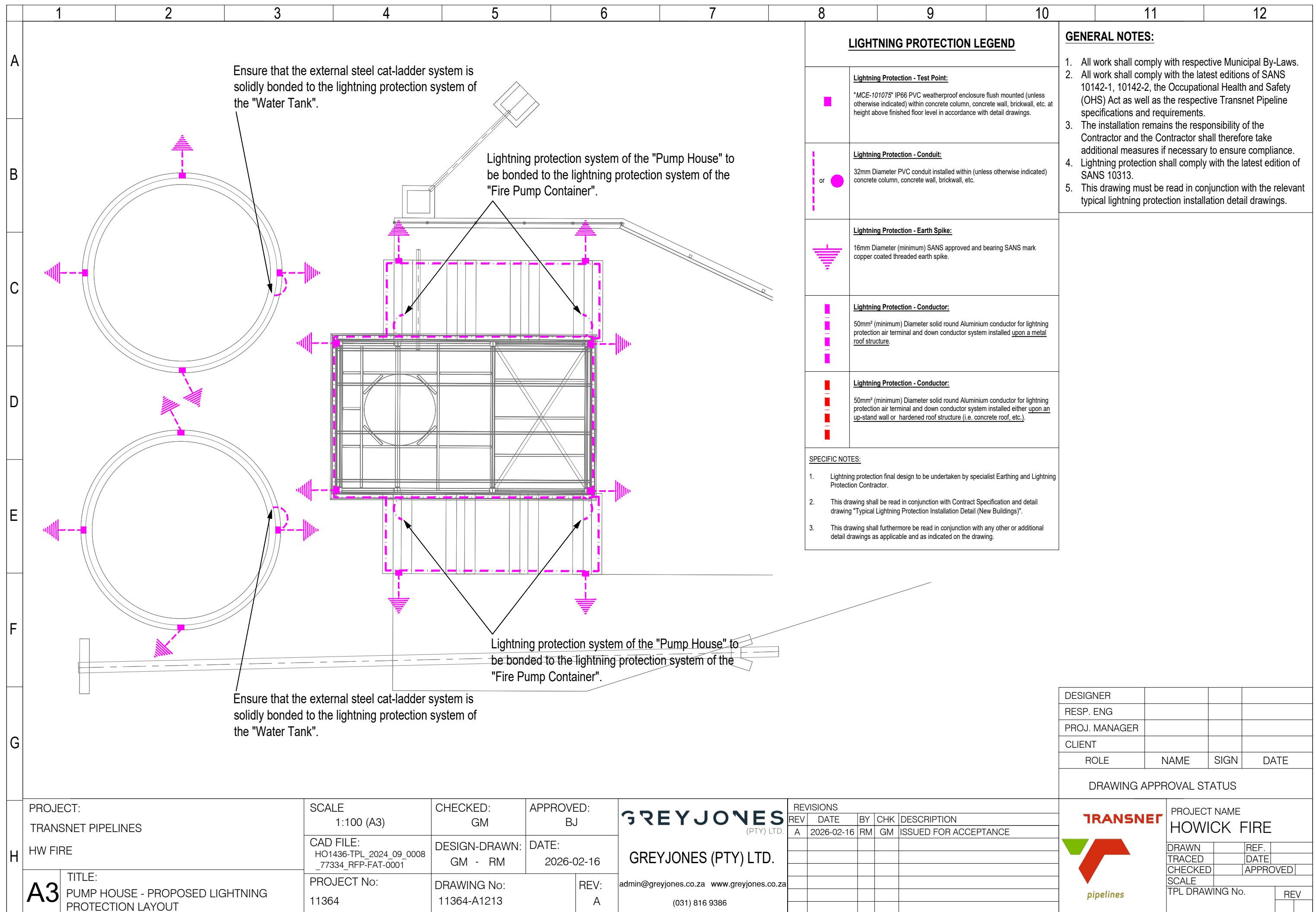
ELECTRICAL SMALL POWER LEGEND	
	<u>Electrical DB:</u> Low voltage electrical distribution board (DB).
	<u>Socket Outlet - Single-Phase Weatherproof:</u> 1 x 3-pin "OLD RSA" and 2 x 3-pin "NEW" RSA "Switch All" 16A, 230V socket outlet combination (EE'x'd' certified, double pole and earth) <u>surface</u> mounted (unless otherwise specified) at 1100mm above finished floor level within a S15 Duo <u>weatherproof</u> York Box with sliding lid (or other approved).
	<u>Socket Outlet - Three-Phase Weatherproof:</u> 1 x 5-pin 63A, 400V, IP67, three-phase industrial switched socket outlet with interlock (EE'x'd' certified, 3-phase + N + E) <u>surface</u> mounted at 1100mm above finished floor level (unless otherwise specified).
<u>SPECIFIC NOTES:</u> 1. All socket outlets to be installed at 1100mm above finished floor level to the center of the outlet box unless otherwise indicated.	

DESIGNER			
RESP. ENG			
PROJ. MANAGER			
CLIENT			
ROLE	NAME	SIGN	DATE

H

PROJECT: TRANSNET PIPELINES		SCALE 1:100 (A3)	CHECKED: GM	APPROVED: BJ	GREYJONES (PTY) LTD. GREYJONES (PTY) LTD. admin@greyjones.co.za www.greyjones.co.za (031) 816 9386	REVISIONS				
		CAD FILE: HO1436-TPL 2024_09_0008 _77334_RFP-FAT-0001	DESIGN-DRAWN: GM - RM	DATE: 2026-02-16		REV	DATE	BY	CHK	DESCRIPTION
TITLE: PUMP HOUSE - PROPOSED SMALL POWER LAYOUT		PROJECT No: 11364	DRAWING No: 11364-A1212	REV: A		A	2026-02-16	RM	GM	ISSUED FOR ACCEPTANCE

DRAWING APPROVAL STATUS			
	PROJECT NAME HOWICK FIRE		
	DRAWN	REF.	
	TRACED	DATE	
	CHECKED	APPROVED	
SCALE TPL DRAWING No.		REV	



This figure is a technical drawing titled "PROPOSED PRIMARY ELECTRICAL CABLE SLEEVE LAYOUT". It shows a site plan with various buildings, roads, and infrastructure. Key features include:

- Buildings:** Control Building, Pump House, Water Tower, Carport, and several other buildings.
- Roads:** Concrete Roadway, Paved Roadway, and a Railway track.
- Infrastructure:** Manhole, Cathode, Monitoring Well, Fire Hydrant, and a Sub Station.
- Proposed Electrical Layout:** Indicated by orange dashed lines and boxes. Callouts specify:
 - Existing electrical cable sleeves.
 - Existing electrical draw box.
 - Proposed new 2-qty 160mm diameter electrical cable sleeves to be installed between respective draw boxes.
 - Proposed new electrical draw box to be constructed.
 - Proposed new 2-qty 160mm diameter electrical cable sleeves to be installed between respective draw boxes.
 - Proposed new electrical draw box to be constructed.
 - Proposed low voltage electrical tie-in to the "Pump House" low voltage essential power electrical distribution board (DB).

The drawing includes a grid system (A-H vertically, 1-12 horizontally) and a detailed title block at the bottom left containing project information, scale (1:200), and approval signatures.

GENERAL NOTES:

- All work shall comply with respective Municipal By-Laws.
- All work shall comply with the latest editions of SANS 10142-1, 10142-2, the Occupational Health and Safety (OHS) Act as well as the respective Transnet Pipeline specifications and requirements.
- The installation remains the responsibility of the Contractor and the Contractor shall therefore take additional measures if necessary to ensure compliance.
- The Contractor shall identify any and all existing services prior to any excavations being performed.
- The Contractor shall inspect and verify all electrical cable routes on site (inclusive of cable sleeves and manholes) and ensure that all electrical cable routes are of the shortest possible length and furthermore ensure that there are no clashes with any "Other" services.
- The Contractor shall confirm the direction, quantity and diameter of all existing electrical cable sleeves and shall furthermore indicate the relevant information on "As-Built" drawings.
- The Contractor shall consult the relevant drawings for final levels.
- The Contractor shall report any concerns and discrepancies to the Employer immediately after such have been identified by the Contractor.
- The Contractor shall check all electrical cable sleeves for blockages and report such to the Employer immediately after such have been identified by the Contractor.