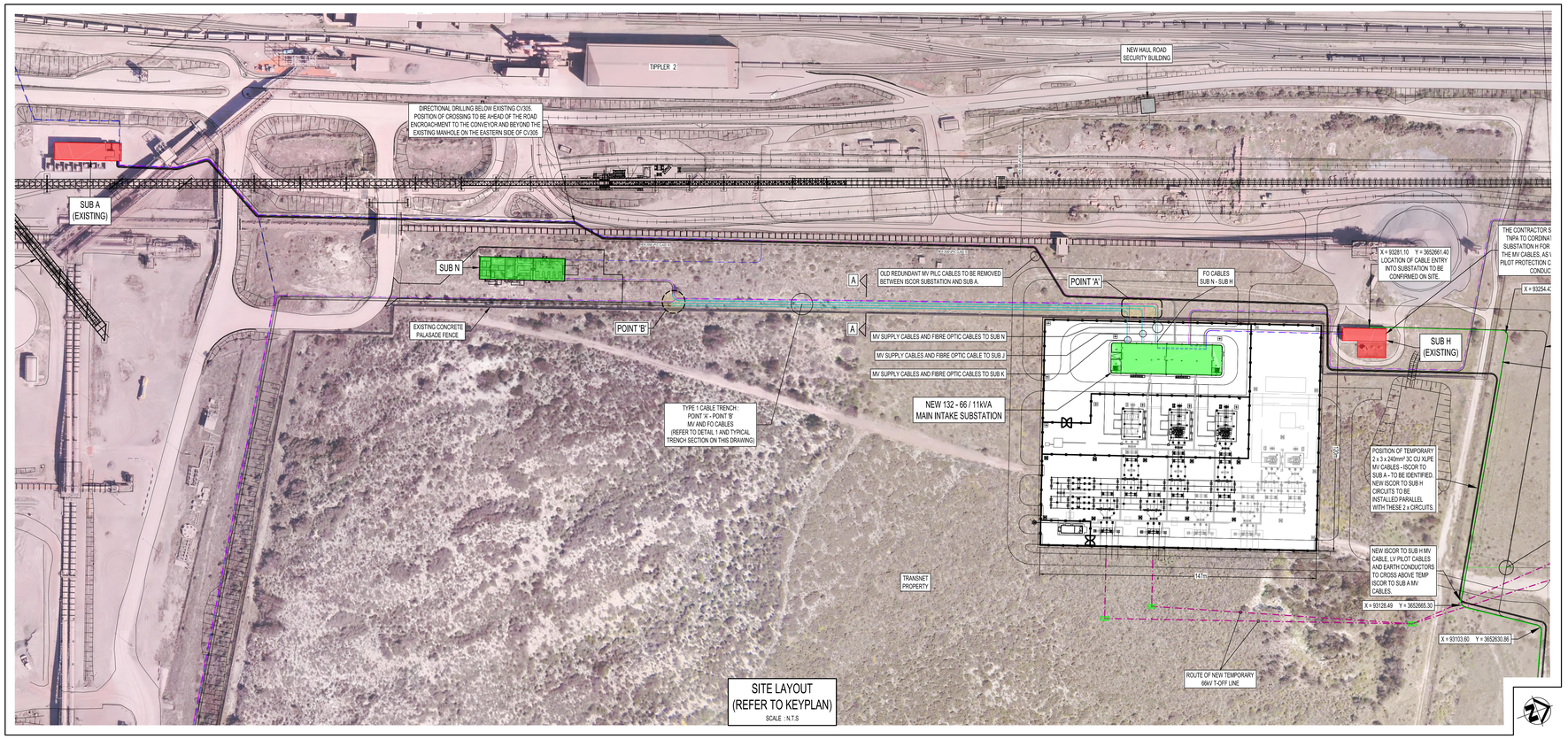
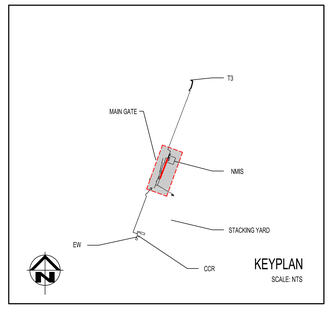


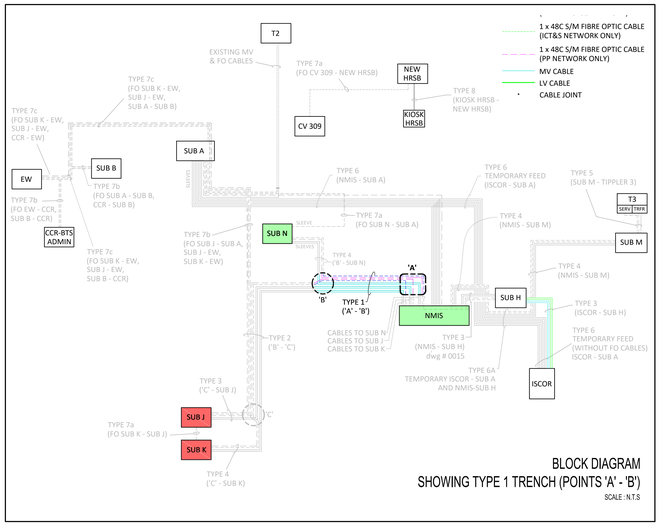
SITE LAYOUT
(REFER TO KEYPLAN)
SCALE : N.T.S

LEGEND:

- EXISTING SUBSTATION
- NEW SUBSTATION
- TRANSNET PROPERTY
- EXISTING 11kV MV CABLE
- NEW 11kV MV SUPPLY CABLES
- NEW 600/1000V LV CABLE
- NEW FIBRE OPTIC COMMS CABLES
- EXISTING 66kV OVERHEAD LINES
- RELOCATED SECTION OF EXISTING ESKOM BLOUWATER-ISCOR 66kV LINES - COMPLETED
- NEW TEMPORARY 66kV T-OFF LINE
- NEW 66kV OVERHEAD LINE T-OFF POINT - TO NEW MAIN INTAKE SUBSTATION
- APPROXIMATE CONNECTION POINT OF NEW 11kV MV CABLE(S) ONTO EXISTING 11kV MV SUPPLY CABLE(S)
- KIOSK HAUL ROAD SECURITY BUILDING

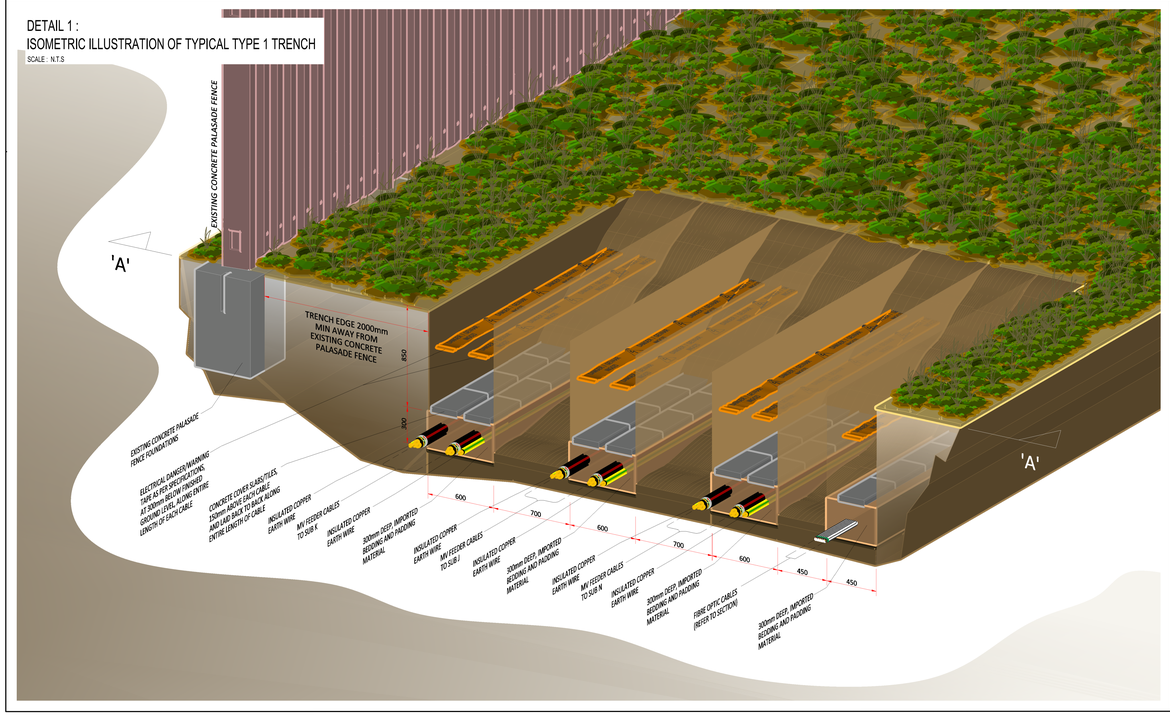


KEYPLAN
SCALE: NTS

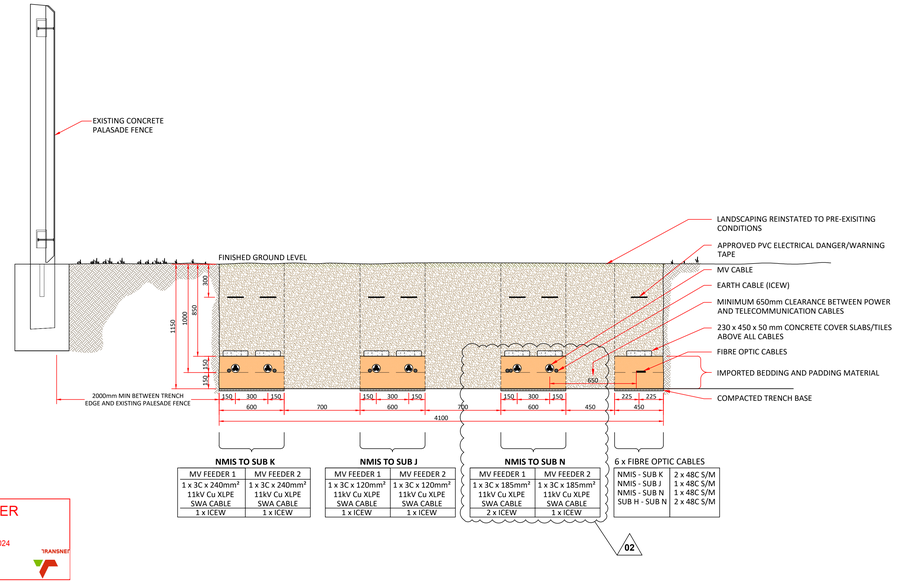


BLOCK DIAGRAM
SHOWING TYPE 1 TRENCH (POINTS 'A' - 'B')
SCALE : N.T.S

DETAIL 1 :
ISOMETRIC ILLUSTRATION OF TYPICAL TYPE 1 TRENCH
SCALE : N.T.S



TYPICAL SECTION DETAILS FOR TYPE 1 TRENCH - ("A - A")
SCALE : N.T.S



NMIS TO SUB K	
MV FEEDER 1	MV FEEDER 2
1 x 3C x 240mm² 11kV Cu XLPE SWA CABLE	1 x 3C x 240mm² 11kV Cu XLPE SWA CABLE
1 x ICEW	1 x ICEW

NMIS TO SUB J	
MV FEEDER 1	MV FEEDER 2
1 x 3C x 120mm² 11kV Cu XLPE SWA CABLE	1 x 3C x 120mm² 11kV Cu XLPE SWA CABLE
1 x ICEW	1 x ICEW

NMIS TO SUB N	
MV FEEDER 1	MV FEEDER 2
1 x 3C x 185mm² 11kV Cu XLPE SWA CABLE	1 x 3C x 185mm² 11kV Cu XLPE SWA CABLE
2 x ICEW	1 x ICEW

6 x FIBRE OPTIC CABLES	
NMIS - SUB K	2 x 48C S/M
NMIS - SUB J	1 x 48C S/M
NMIS - SUB N	1 x 48C S/M
SUB H - SUB N	2 x 48C S/M

MASTER
18-04-2024
AECOM
TRANSNET

ABBREVIATIONS:

NMIS	=	NEW MAIN INTAKE SUBSTATION
MV	=	MEDIUM VOLTAGE SUPPLY
ICEW	=	INSULATED COPPER EARTH WIRE
FO	=	FIBRE OPTIC CABLE
S/M	=	SINGLE MODE
3C	=	3 CORE
48C	=	48 CORE
CCR	=	CENTRAL CONTROL ROOM
EW	=	ELECTRONIC WORKSHOP
HRSB	=	HAUL ROAD SECURITY BUILDING
T1	=	TIPPLER 1
T2	=	TIPPLER 2
T3	=	TIPPLER 3

DRAWING NO.	REFERENCE
REFERENCE DRAWINGS	

NOTES:

1. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEC SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.
3. ANY NEW INFRASTRUCTURE AS SHOWN ON THIS DRAWING MAY CHANGE DURING THE CONSTRUCTION PHASE.
4. ALL NEW CABLE ROUTES SHALL BE FINALISED ON SITE, IN CONJUNCTION WITH THE EMPLOYER.
5. THE CONTRACTOR SHALL WORK IN CLOSE CO-ORDINATION WITH ALL OTHER APPLICABLE CONTRACTORS TO AVOID OR MINIMIZE ANY CROSSINGS/CLASHES AS FAR AS PRACTICALLY POSSIBLE.
6. FINAL CABLE ENTRIES/EXITS AT AND IN SUBSTATIONS TO BE CONFIRMED ON SITE WITH EMPLOYER.
7. REFER TO CIVIL DRAWINGS FOR SLEEVE/MANHOLE DETAILS
8. ALL BEDDING AND PADDING MATERIAL TO HAVE A FINAL DRY SOIL MEASURED THERMAL RESISTIVITY OF 0.7 K.m/W.
9. MV CABLES SIZES TO BE IN ACCORDANCE WITH THOSE SPECIFIED ON THE MV BLOCK AND SINGLE LINE DIAGRAMS.

REFER TO TECHNICAL SPECIFICATIONS REGARDING PROCEDURES TO BE UNDERTAKEN TO CONFIRM THE BEDDING AND PADDING MATERIAL REQUIRED SOIL THERMAL RESISTIVITY RATING, PRIOR TO INSTALLATION.

AECOM
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TYGER WATERFRONT
CARL CRONJÉ DRIVE
TEL: +27 (0)21 950 7500
FAX: +27 (0)21 950 7502
REG. No. 1966/006628/07

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
02	ISSUED FOR CONSTRUCTION ADDITIONAL ECC ADDED TO SUB N FEEDER 1	JF	CP	CP	2024-04-17
01	ISSUED FOR CONSTRUCTION. "HOLD" CLOUD NOTE ADDED.	DD	CP	CP	2018-04-18
00	ISSUED FOR CONSTRUCTION	DD	CP	CP	2018-03-19

REVISIONS

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CONTRACTOR / CONSULTANT			
TITLE	NAME	SIGN	DATE

OPERATING DIVISIONS			
TITLE	NAME	SIGN	DATE

TRANSNET CAPITAL PROJECTS			
TITLE	NAME	SIGN	DATE
DRAWN	JF		24 04 17
CHECKED	WS		24 04 17
DESIGNED	LK		24 04 17
CHECKED	CP		24 04 17

PR.ENG. / PR.TECH./PR. ARCH	
NAME	C PYM
SIGNATURE	24 04 17
REG. NUMBER	201270126
SCALE :	N.T.S

Transnet Capital Projects
TRANSNET LTD (TRADING AS TRANSNET CAPITAL PROJECTS) : REG. NO. 1990/000900/06
TABLE BAY BUILDING, TYGERBERG PARK,
163 LYS KRIGE DRIVE, PLATTEKLOOF,
8001
TEL: 021 940 1999
FAX: 086 677 2455

TRANSNET

PORT OF SALDANHA

IRON ORE TIPPLER 3 PROJECT
BULK POWER UPGRADE :
CABLE ROUTE TRENCH DETAILS
TYPE 1

PROJECT NUMBER	OD	FBS	DIS	TYPE	DRAWING NO.	SHEET	REV	ID
192470	12	30	E	DE	0012	01	02	AE

A0