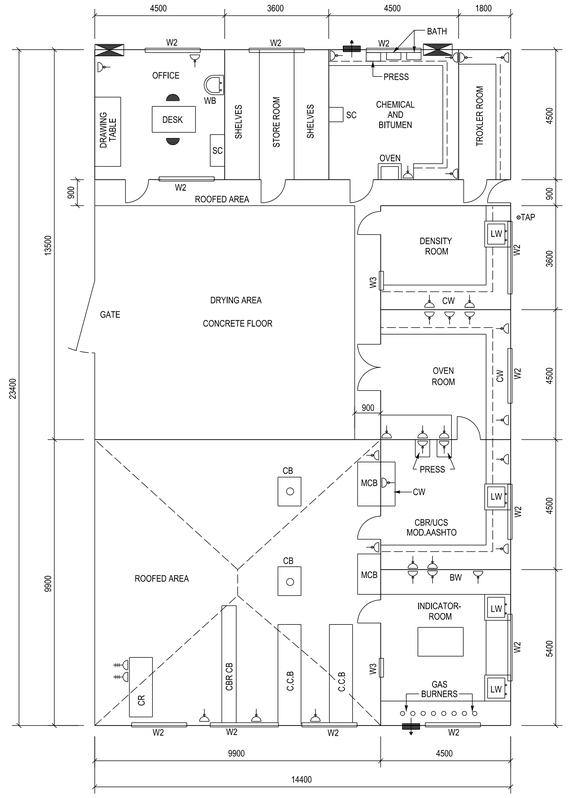
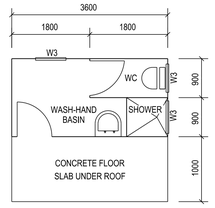


LABORATORY AND SITE OFFICE

N.T.S.

AREA (PER UNIT):

LABORATORY	: 109.35m²
OFFICE	: 20.25m²
OPEN CONCRETE FLOOR SLABS	: 191.16m²
ROOF OVER OPEN CONCRETE FLOOR SLABS	: 118.26m²
ABLUTION UNIT	: 6.48m²
STORE ROOM	: 16.20m²
OPEN CONCRETE FLOOR SLABS (ABLUTION)	: 3.60m²
ROOF OVER OPEN CONCRETE FLOOR SLABS (ABLUTION):	3.60m²



LABORATORY ABLUTION UNIT

N.T.S.

NOTES :

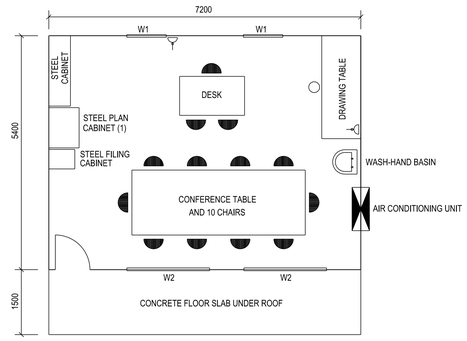
1. LABORATORY
1.1 220/250V 15-AMPERE PLUG POINTS ARE INDICATED BY:
1.2 THE OFFICE FLOOR SHALL BE 300mm HIGHER THAN THE LABORATORY FLOOR.
1.3 ALL WORK BENCHES SHALL BE OF CONCRETE AND THE UPPER SURFACE SHALL BE 920mm ABOVE FLOOR LEVEL.
1.4 ALL WORK BENCHES SHALL BE PROVIDED WITH SHELVES 390mm ABOVE FLOOR LEVEL.
1.5 WASH BASINS IN THE LABORATORY MUST BE CONCRETE EXCEPT FOR THOSE IN THE INDICATOR- AND P.I. SECTIONS WHERE AN ORDINARY KITCHEN TYPE SHALL BE PROVIDED.
1.6 ALL WASH BASINS SHALL BE PROVIDED WITH SWAN-NECK TYPE LABORATORY TAPS AND DRAIN PIPES.
1.7 400/231V 3-PHASE POWER SHALL BE PROVIDED AT POSITIONS AS INDICATED BY THE ENGINEER.
1.8 SHELVING ABOVE WORKING AREAS SHALL BE 1980mm ABOVE FLOOR LEVEL.
1.9 ALL FLOORS SHALL BE OF SUITABLY FINISHED CONCRETE.
1.10 OUTSIDE CONCRETE FLOORS SHALL BE SIMILARLY FINISHED.
1.11 POWER POINTS IN OVEN ROOMS SHALL BE 2000mm ABOVE FLOOR LEVEL.
1.12 CONCRETE BLOCKS IN THE OVEN ROOM. PI- AND BITUMEN SECTIONS SHALL BE 300mm IN HEIGHT.
2. WINDOW DETAIL
W1 : 910mm x 1520mm STEEL WINDOW FRAME.
W2 : 1910mm x 1520mm STEEL WINDOW FRAME.
W3 : 654mm x 1220mm STEEL WINDOW FRAME.
3. ABLUTION UNIT
3.1 THE W.C. SHALL BE PROVIDED WITH ONE GLASS ENAMEL WATER CLOSET SYSTEM WITH P.V.C.-SEAT AND LID, AND SHALL BE WELL VENTILATED.
4. THE OFFICE SHALL BE PROVIDED WITH THE FOLLOWING:
4.1 AN OFFICE DESK WITH A SURFACE AREA OF AT LEAST 1,5m² WITH SIX DRAWERS, TWO OF WHICH CAN BE LOCKED.
4.2 ONE STEEL GENERAL-PURPOSE CABINET WITH SHELF AREA OF AT LEAST 1,5m² AND A VOLUME OF 0,7m³. THE CABINET SHALL HAVE A LOCK WITH TWO KEYS.
4.3 ONE DRAWING TABLE WITH A SMOOTH TOP OF AT LEAST 2400mm x 900mm, AND THE UPPER SURFACE SHALL BE 950mm ABOVE FLOOR LEVEL.
4.4 SHELVING AS SPECIFIED BY THE ENGINEER.
4.5 TWO STURDY AND COMFORTABLE CHAIRS.
4.6 ONE HEIGHT-ADJUSTABLE DRAUGHTSMAN'S STOOL WITH PADDED SEAT AND BACKREST.
4.7 ONE AIR CONDITIONING UNIT AND ONE HEATER.
4.8 ALL THE NECESSARY POWER POINTS, LIGHTS,TAPS,DRAINS, SEWERAGE AND HOT- AND COLD WATER SUPPLY.
4.9 ONE WASH-HAND BASIN.

LEGEND:

CBR CB	- 4000 x 500 x 600 CBR CURING BATH
CB	- 200kg-1000 x 800 x 150 COMPACTION BLOCK (HAND COMPACTION)
CCB	- 3500 x 800 x 300 CONCRETE CURING BATH
CR	- CRUSHER
CW	- CONCRETE WORKBENCH
LW	- LABORATORY BASIN
SC	- STEEL CABINET
WB	- WASH-HAND BASIN
MCB	- 1200 x 1000 x 150 MECHANICAL COMPACTION BLOCK

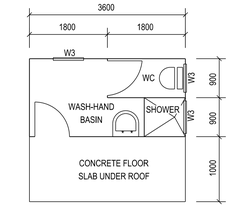
- SHELVES BELOW WORKBENCH
- AIR CONDITIONING UNIT
- EXTRACTOR FAN
- 400/231V 3-PHASE POWER POINTS.

DETAIL OF SITE LABORATORY AND LABORATORY ABLUTION UNIT



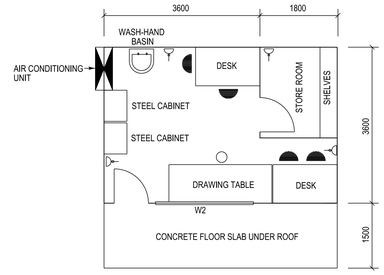
SITE OFFICE : TYPE 1

N.T.S.



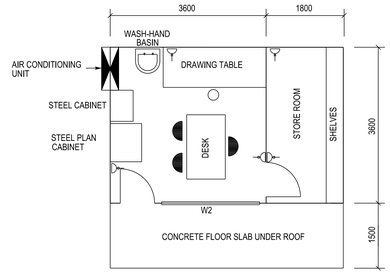
SITE ABLUTION UNIT

N.T.S.



SITE OFFICE : TYPE 2

N.T.S.



SITE OFFICE : TYPE 3

N.T.S.

NOTES:

1. 220/250V, 15A PLUG POINTS ARE INDICATED BY:
2. WINDOW DETAIL:
W1 : 910mm x 1520mm STEEL WINDOW FRAME.
W2 : 1910mm x 1520mm STEEL WINDOW FRAME.
W3 : 654mm x 1220mm STEEL WINDOW FRAME.
3. OFFICE TYPE 1 SHALL BE PROVIDED WITH THE FOLLOWING:
3.1 AN OFFICE DESK WITH A SURFACE AREA OF AT LEAST 1,5m² WITH SIX DRAWERS, TWO OF WHICH CAN BE LOCKED.
3.2 ONE STEEL GENERAL-PURPOSE CABINET WITH SHELF AREA OF AT LEAST 1,5m² AND A VOLUME OF 0,7m³. THE CABINET SHALL HAVE A LOCK WITH TWO KEYS.
3.3 ONE STEEL FILING CABINET WITH FOUR DRAWERS AND A LOCK WITH TWO KEYS. THE CABINET SHALL BE 1300mm HIGH, 460mm WIDE AND 600mm FROM FRONT TO BACK.
3.4 ONE DRAWING TABLE WITH A SMOOTH TOP OF AT LEAST 2400mm x 900mm, AND THE UPPER SURFACE SHALL BE 950mm ABOVE FLOOR LEVEL.
3.5 SHELVING AS SPECIFIED BY THE ENGINEER.
3.6 THREE STURDY AND COMFORTABLE CHAIRS.
3.7 ONE HEIGHT-ADJUSTABLE DRAUGHTSMAN'S STOOL WITH PADDED SEAT AND BACKREST.
3.8 ONE AIR CONDITIONING UNIT AND ONE HEATER.
3.9 ALL THE NECESSARY POWER POINTS, LIGHTS, TAPS, DRAINS, SEWERAGE AND HOT- AND COLD WATER SUPPLY.
3.10 ONE CONFERENCE TABLE (±4.0m X 1,5m) WITH TEN CHAIRS.
3.11 ONE STEEL PLAN CABINET, A0 SIZE (100 PLANS)
3.12 ONE WASH-HAND BASIN.
4. OFFICE TYPE 2 SHALL BE PROVIDED WITH THE FOLLOWING :
4.1 TWO OFFICE DESKS WITH A SURFACE AREA OF AT LEAST 1,5m² WITH SIX DRAWERS, TWO OF WHICH CAN BE LOCKED.
4.2 TWO STEEL GENERAL-PURPOSE CABINETS WITH SHELF AREA OF AT LEAST 1,5m² AND A VOLUME OF 0,7m³. THE CABINETS SHALL HAVE A LOCK WITH TWO KEYS.
4.3 ONE DRAWING TABLE WITH A SMOOTH TOP OF AT LEAST 2400mm x 900mm, AND THE UPPER SURFACE SHALL BE 950mm ABOVE FLOOR LEVEL.
4.4 SHELVING AS SPECIFIED BY THE ENGINEER.
4.5 FOUR STURDY AND COMFORTABLE CHAIRS.
4.6 ONE HEIGHT-ADJUSTABLE DRAUGHTSMAN'S STOOL WITH PADDED SEAT AND BACKREST.
4.7 ONE AIR CONDITIONING UNIT AND ONE HEATER.
4.8 ALL THE NECESSARY POWER POINTS, LIGHTS, TAPS, DRAINS, SEWERAGE AND HOT- AND COLD WATER SUPPLY.
4.9 ONE WASH-HAND BASIN.

NOTES:

5. OFFICE TYPE 3 SHALL BE PROVIDED WITH THE FOLLOWING :
5.1 AN OFFICE DESK WITH A SURFACE AREA OF AT LEAST 1,5m² WITH SIX DRAWERS, TWO OF WHICH CAN BE LOCKED.
5.2 ONE STEEL GENERAL-PURPOSE CABINET WITH SHELF AREA OF AT LEAST 1,5m² AND A VOLUME OF 0,7m³. THE CABINET SHALL HAVE A LOCK WITH TWO KEYS.
5.3 ONE DRAWING TABLE WITH A SMOOTH TOP OF AT LEAST 2400mm x 900mm, AND THE UPPER SURFACE SHALL BE 950mm ABOVE FLOOR LEVEL.
5.4 SHELVING AS SPECIFIED BY THE ENGINEER.
5.5 THREE STURDY AND COMFORTABLE CHAIRS.
5.6 ONE HEIGHT-ADJUSTABLE DRAUGHTMAN'S STOOL WITH PADDED SEAT AND BACK-REST.
5.7 ONE AIR CONDITIONING UNIT AND ONE HEATER.
5.8 ALL THE NECESSARY POWER POINTS, LIGHTS, TAPS, DRAINS, SEWERAGE AND HOT AND COLD WATER SUPPLY
5.9 ONE STEEL PLAN CABINET, A0 SIZE (100 PLANS)
5.10 ONE WASH-HAND BASIN.
6. ABLUTION UNIT:
6.1 THE W.C. SHALL BE PROVIDED WITH ONE GLASS ENAMEL WATER CLOSET SYSTEM WITH P.V.C.-SEAT AND LID, AND SHALL BE WELL VENTILATED.
6.2 THE OTHER PART SHALL BE PROVIDED WITH ONE SHOWER AND ONE GLASS ENAMEL WASH-HAND BASIN.
6.3 ALL THE NECESSARY TAPS, SEWERAGE AND HOT- AND COLD WATER SUPPLY.

AREA (PER UNIT):

OFFICE TYPE 1	: 38.88m²
OFFICE TYPE 2 AND 3	: 19.44m²
ABLUTION UNIT	: 6.48m²
OPEN CONCRETE FLOOR SLABS (OFFICE TYPE 1)	: 10.80m²
ROOF OVER OPEN CONCRETE FLOOR SLABS (OFFICE TYPE 1)	: 10.80m²
OPEN CONCRETE FLOOR SLABS (OFFICE TYPE 2 AND 3)	: 8.10m²
ROOF OVER OPEN CONCRETE FLOOR SLABS (OFFICE TYPE 2, 3)	: 8.10m²
OPEN CONCRETE FLOOR SLABS (ABLUTION)	: 3.60m²
ROOF OVER OPEN CONCRETE FLOOR SLABS (ABLUTION)	: 3.60m²

DETAIL OF SITE OFFICE AND ABLUTION UNIT

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. ALL LEVELS ARE IN METERS TO MEAN SEA LEVEL.
4. DRAWINGS MUST BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND GENERAL NOTES DRAWINGS.
5. IF APPLICABLE, DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECT'S DRAWINGS AND ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.

LOCALITY



LEGEND

SYMBOL	DESCRIPTION

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
E1	FOR TENDER	CL	WD	HVDM	18/07/2025

REVISIONS

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ZUTARI
IMPACT. ENGINEERED.

CONTRACTOR / CONSULTANT

TITLE	NAME	SIGN	DATE
DRAWN	C. LINDE		18 / 07 / '25
CHECKED	W. DAVEL		18 / 07 / '25
DESIGNED	C. LINDE		18 / 07 / '25
CHECKED	H. VAN DER MERWE		18 / 07 / '25

PR.ENG. / PR.TECH./PR. ARCH

NAME	H. VAN DER MERWE	DATE
SIGNATURE		
REG. NUMBER	201270065	
TITLE	PR. TECH ENG	

TRANSNET NATIONAL PORTS AUTHORITY

TITLE	NAME	SIGN	DATE
DRAWN			
CHECKED			
DESIGNED			
CHECKED			

PR.ENG. / PR.TECH./PR. ARCH

NAME		DATE
SIGNATURE		
REG. NUMBER		
SCALE	AS SHOWN	

TRANSNET

Transnet National Ports Authority

TRANSNET SOC Ltd : REG No. 1990/000900/30
NEWARK ROAD
RICHARDS BAY
TEL: 035 788 0067
PO BOX 181, RICHARDS BAY 3900, SOUTH AFRICA

PROJECT / AREA / ASSET / SUBJECT/DRAWING TITLE

PORT OF RICHARDS BAY

PORT ROADS REHABILITATION & UPGRADE (REPAIRS TO PORT ROADS)
SITE OFFICES AND LABORATORY LAYOUT

PAPER SIZE	TRANSNET DRW. NO.	REV.
A0	TBC	E1
	PROJECT DRG. NO.	REV.
	1006614-DRG-000-ZZ-CC-U006-A	T1