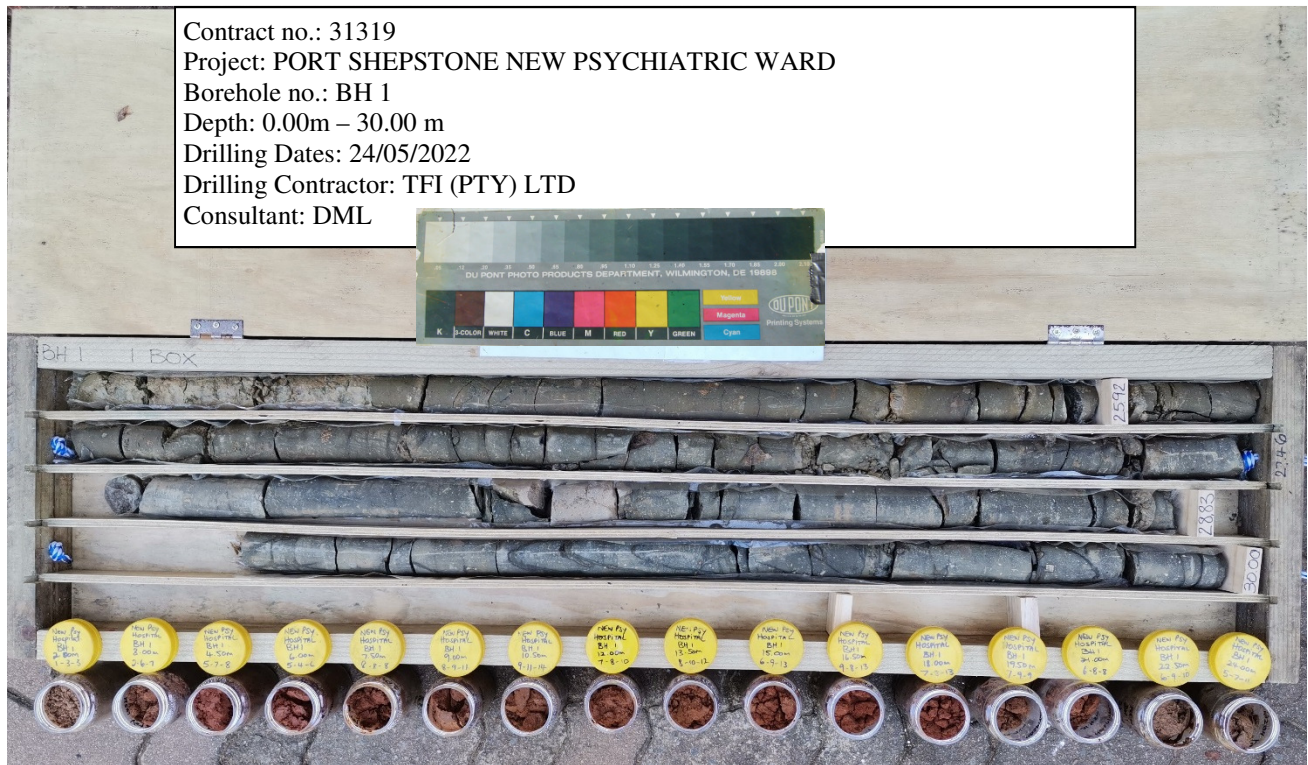


APPENDIX E
Deep Geotechnical Investigation

BOREHOLE 1

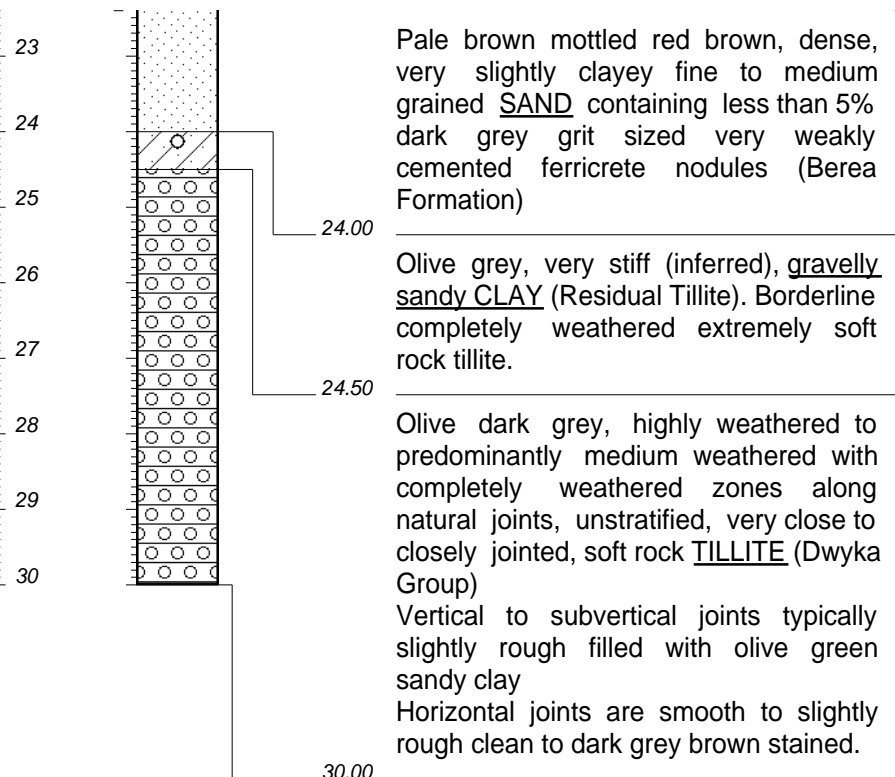
BOX 1 OF 1

Contract no.: 31319
Project: PORT SHEPSTONE NEW PSYCHIATRIC WARD
Borehole no.: BH 1
Depth: 0.00m – 30.00 m
Drilling Dates: 24/05/2022
Drilling Contractor: TFI (PTY) LTD
Consultant: DML





SPT				51
NX				
SPT				ref
NWD4	98	98	23	>20
NWD4	101	101	17	20
NDW4	95	95	32	15
NWD4	87	87	0	>20



NOTES

- 1) End of hole at 30.00 m.
- 2) Groundwater measured at 19.60m (Recorded on the 16.06.2022)

Drill Type	Mat. Rec (%)	Core Rec (%)	RQD (%)	Fract. Freq.	SPT (N)	Smpl. (MPa)	Depth (m)
------------	--------------	--------------	---------	--------------	---------	-------------	-----------

CONTRACTOR : TFI (PTY) LTD

MACHINE : TONE170

DRILLED BY : A.Z

PROFILED BY : AM

TYPE SET BY : AM

SETUP FILE : BOREHOLE LOG.SET

INCLINATION : VERTICAL

DIAM : NA

DATE : 28 MAY 2022

DATE : 15 JUNE 2022

DATE : 22/06/2022 12:38

TEXT : C:\DOTIN\BMASTER.DOC

ELEVATION :

X-COORD :

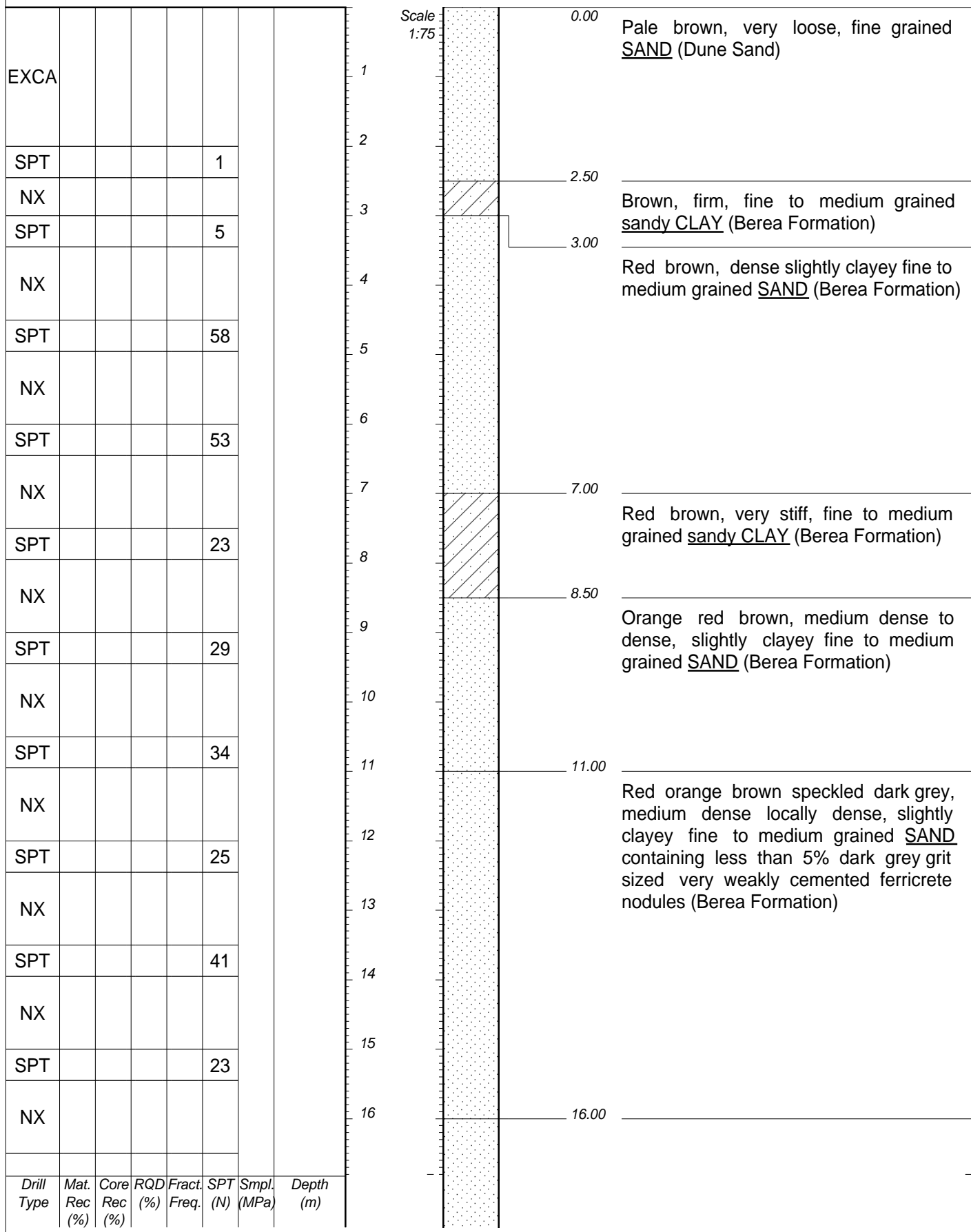
Y-COORD :

HOLE No: BH 2

BOREHOLE 2

BOX 1 OF 1





BOREHOLE 3

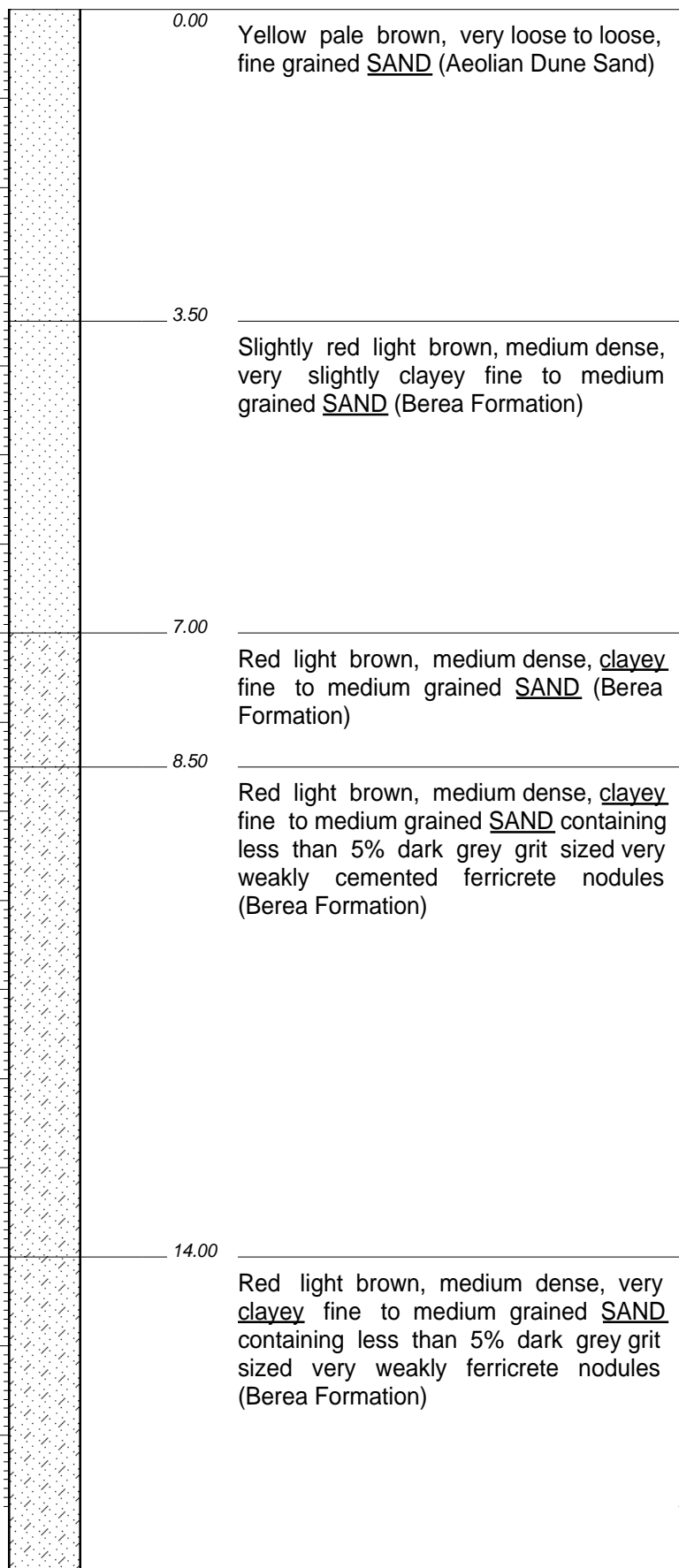
BOX 1 OF 1

Contract no.: 31319
Project: PORT SHEPSTONE NEW PSYCHIATRIC WARD
Borehole no.: BH 3
Depth: 0.00 m – 24.41 m
Drilling Dates: 31/05/2022
Drilling Contractor: TFI (PTY) LTD
Consultant: DML





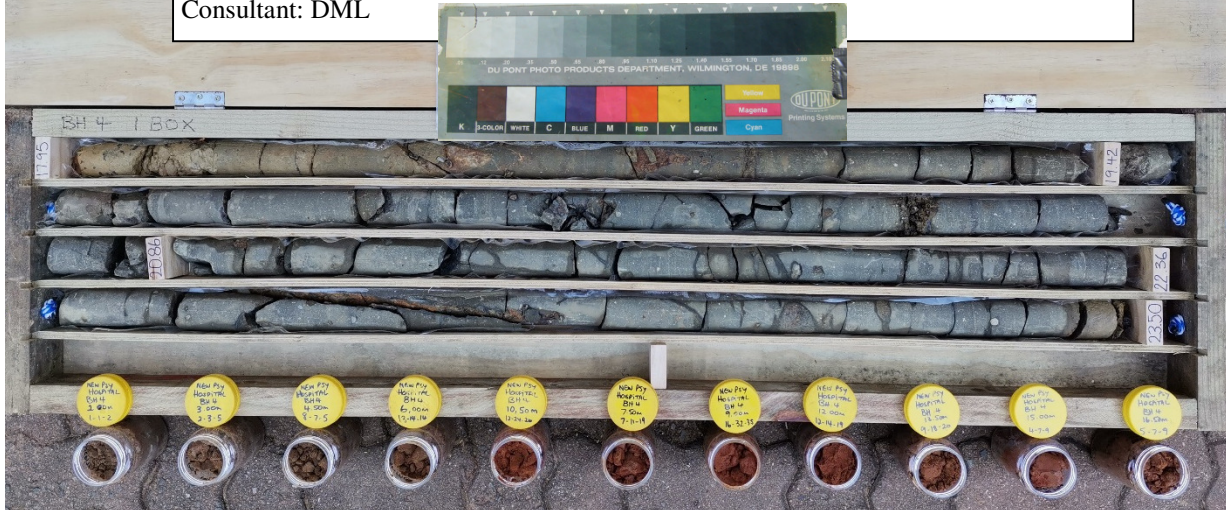
EXCA							
SPT					3		
NX							
SPT					8		
NX							
SPT					12		
NX							
SPT					28		
NX							
SPT					30		
NX							
SPT					67		
NX							
SPT					50		
NX							
SPT					33		
NX							
SPT					38		
NX							
SPT					16		
NX							
Drill Type	Mat. Rec (%)	Core Rec (%)	RQD (%)	Fract. Freq.	SPT (N)	Smpl. (MPa)	Depth (m)

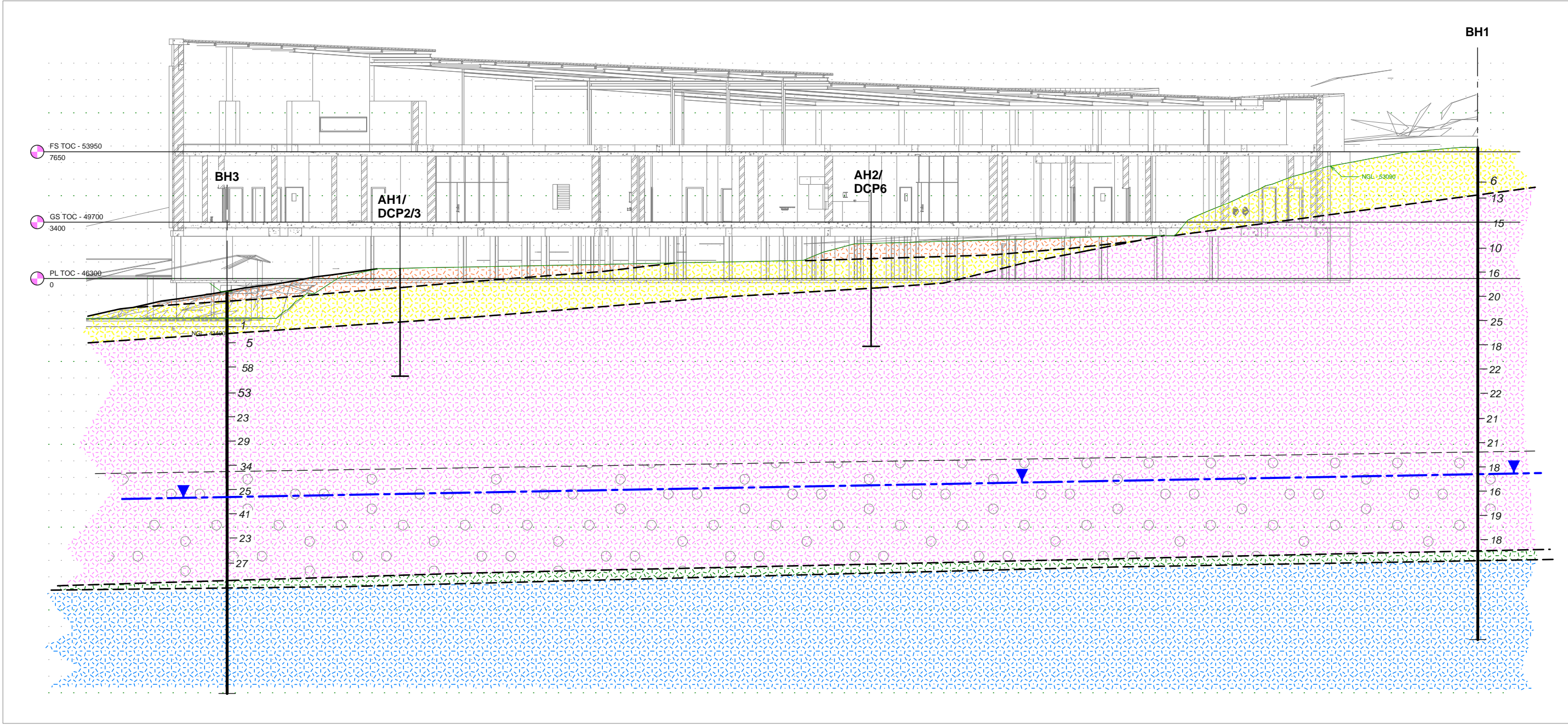
Scale
1:75

BOREHOLE 4

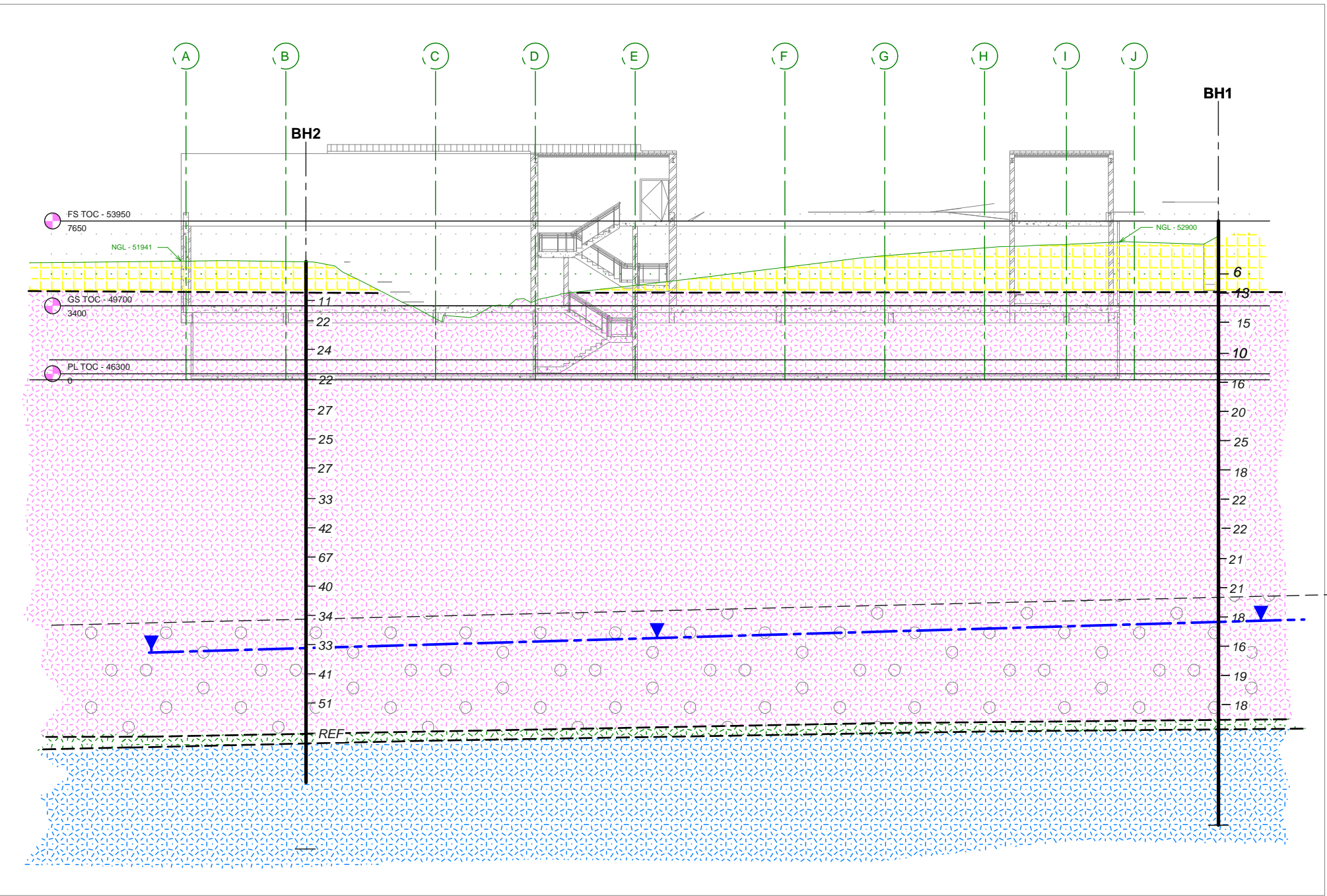
BOX 1 OF 1

Contract no.: 31319
Project: PORT SHEPSTONE NEW PSYCHIATRIC WARD
Borehole no.: BH 4
Depth: 0.00 m – 23.50 m
Drilling Dates: 26/05/2022
Drilling Contractor: TFI (PTY) LTD
Consultant: DML

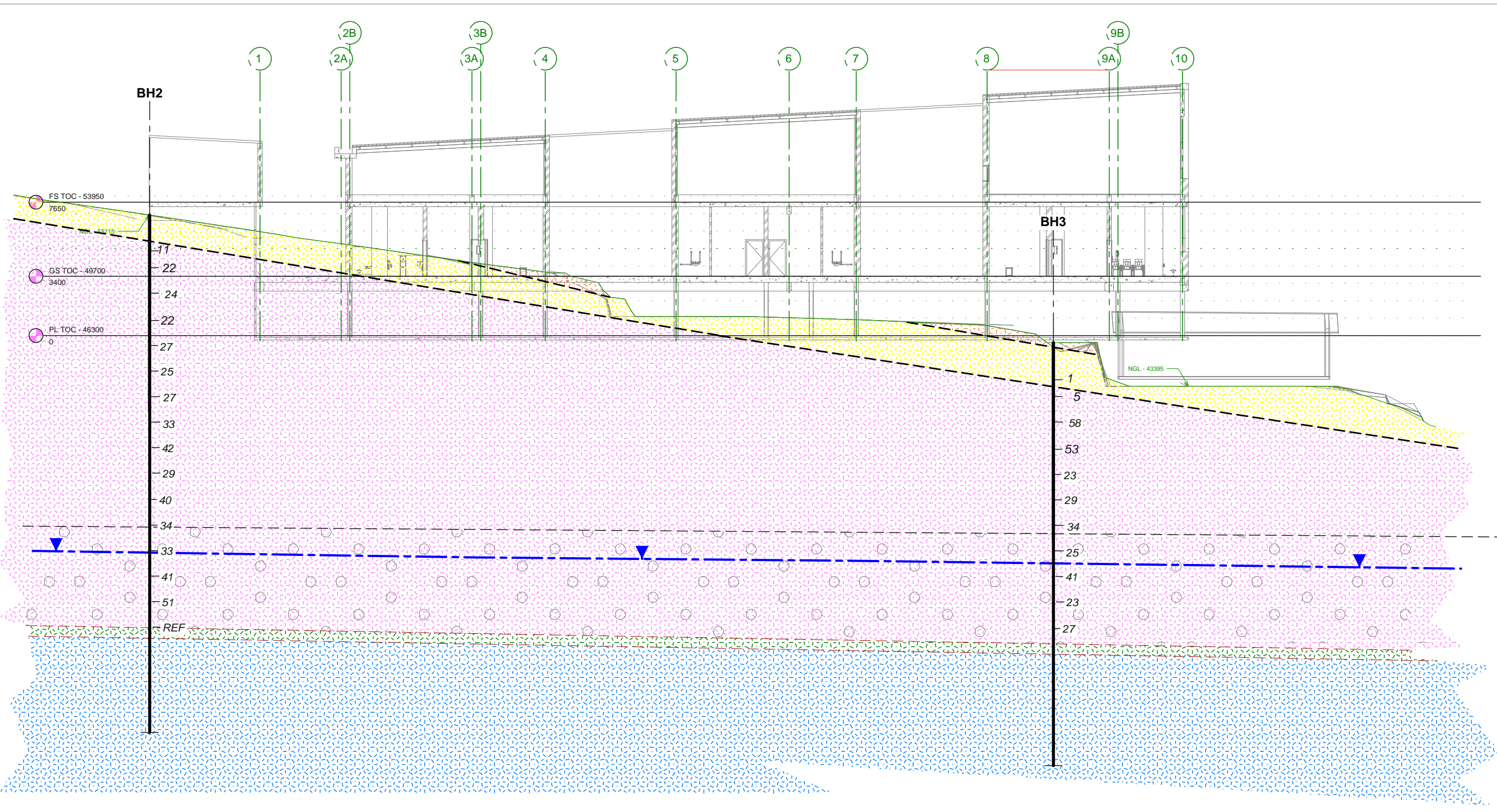




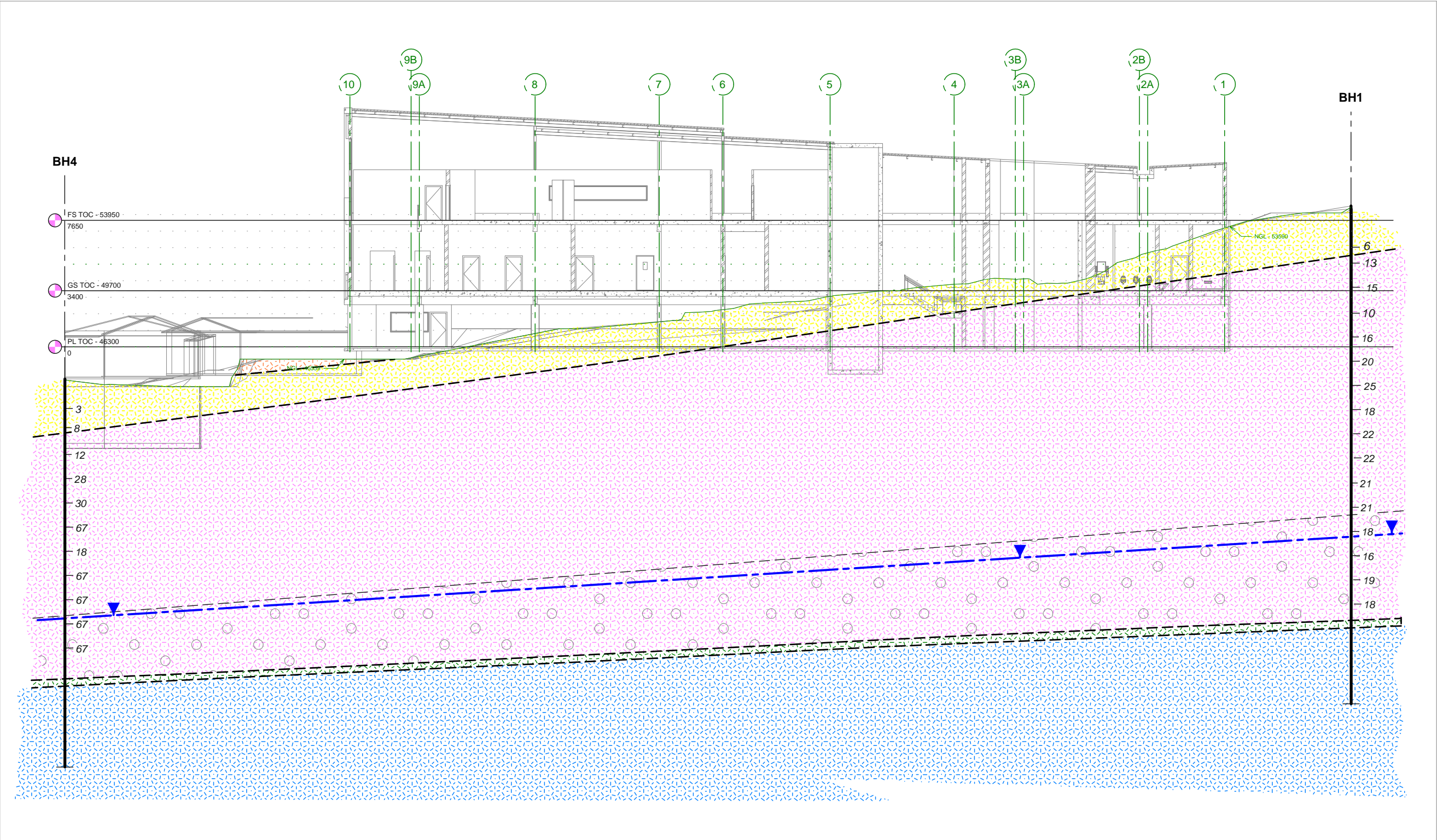
SECTION 1A - 10A



SECTION 1A - 1J



SECTION 1A - 10A



SECTION 1J - 10J

KEY

DUNE SAND DERIVED FILL - LIGHT GREY BROWN, ERY LOOSE, FINE GRAINED SAND.

DUNE SAND - PALE BROWN, VERY LOOSE TO LOOSE, FINE GRAINED SAND.

BEREA FORMATION - RED BROWN, PREDOMINATELY MEDIUM DENSE WITH ZONES OF DENSE AND LOCALISED LOOSE CONSISTENCIES, VERY SLIGHTLY CLAYEY SAND TO CLAYEY SAND.

BEREA FORMATION - RED BROWN BECOMING GREY PALE BROWN (LEACHED) MEDIUM DENSE TO DENSE, SLIGHTLY CLAYEY SAND CONTAINING TRACE (< 5%) QUANTITIES OF VERY WEAKLEY CEMENTED GRIT SIZED FERRICrete NODULES (INDICATING A FLUCTUATING GROUNDWATER TABLE).

RESIDUAL TILLITE - OLIVE GREY, INFERRED VERY STIFF, GRAVELLY SANDY CLAY, MATERIAL IS BORDERLINE COMPLETELY WEATHERED EXTREMELY SOFT ROCK.

WEATHERED TILLITE - OLIVE DARK GREY, HIGHLY TO PREDOMINATELY MEDIUM WEATHERED, VERY CLOSELY TO PREDOMINATELY CLOSELY JOINTED, SOFT ROCK.

INFERRED GROUNDWATER TABLE

AH2/DCP6

APPROX. POSITION OF HAND AUGER & DYNAMIC CONE. PENETROMETER TESTS FROM PREVIOUS 2011 GEOTECHNICAL INVESTIGATION

BH1

APPROX. POSITION OF BOREHOLES WITH SPT VALUES

NOTES

NO.	AMENDMENT	APPROVED	DATE
-----	-----------	----------	------

REVISIONS

CLIENT
**DEPARTMENT OF HEALTH
C/O DEPARTMENT OF WORKS**

DRENNAN MAUD (PTY) LTD
GEOTECHNICAL ENGINEERS & ENGINEERING GEOLOGISTS

reg. No. 2014/038872/07 info@drennanmaud.com
DURBAN HEAD OFFICE 68 Peter Mokaba Ridge P.O. Box 20464
Tolgate Mayville 4056
T: +27 31 201 8992 F: +27 31 201 7920

PROJECT
**PORT SHEPSTONE HOSPITAL
NEW PSYCHIATRIC WARD**

TITLE
**INFERRED GEOLOGICAL
CROSS SECTIONS**

CONSULTING ENGINEER	DESIGNED : K.G.
SIGNATURE:.....	DRAWN : S.P.
PR. NO.:.....	CHECKED : K.G.
DATE:.....	SCALE : 1:250
DRAWING NO. 31319-G01-I1	DATE : 15-7-2022
	REVISION



Locality Plan

KEY

- DCP10 APPROX. POSITION OF DYNAMIC CONE PENETROMETER TESTS
- BH1 APPROX. POSITION OF BOREHOLES
- AH1 APPROX. POSITION OF AUGER HOLES
- 10A 1J APPROX. POSITIONS OF GEOLOGICAL CROSS SECTIONS

LEGEND

- NEW MENTAL HEALTH UNIT
- COURTYARDS
- HVAC PLANT ROOM
- FUTURE PARKING GARAGE & NEW FACILITIES
- SITE OFFICE

Description: Erven 203, 204, 210 and 1591 Port Shepstone

Address : 7 Bazley Street, Port Shepstone

Site Description	Area
ERF 203	5059 sqm
ERF 204	1012 sqm
ERF 210	1012 sqm
ERF 1519	3800 sqm
Total	10883 sqm
Full Site Area	3,1552 he

Permitted Areas	
FAR	N/A
Coverage	N/A

Proposed Areas	
Parking Level	3224 sqm
Ground Floor	2655 sqm
First Floor	964 sqm
Total FAR	3619 sqm
Total Coverage	3410 sqm
Building Lines	N/A

Services Legend	
FH	Fire hydrant
CMH	Cable manhole
V	Valve
VMH	Valve manhole
EB	Electrical box
LP	Light pole
TP	Telephone pole
WM	Water meter
SMH	Sewer manhole
SWMH	Stormwater manhole

No.	Description	Date	By
A	Information only	17.02.2016	SG
A	For purpose of discussion	23.02.2016	SG
B	Adjusted retaining wall to be 700mm inclusive of finish. Passage door positions revised.	24.02.2016	SG
C	Increased size of basement parking. Adjusted DB positions. Increased size of lift.	15.03.2016	SG
D	Updated Structure	30.05.2016	SG
E	Service access revised.	25.09.2016	WP
F	Service entrances, circulation and site office & yard added.	14.01.2019	WP
G	Service access relocated.	12.03.2019	WP
H	Site service entrance adjusted. Entrance gate added. Fencing for hoarding added.	09.10.2019	WP
A2	new layout as per Clinical brief	17.09.2021	WP
A3	new layout as per Clinical brief	27.09.2021	WP
A4	HVAC Plant room size increased.	28.09.2021	WP
A4	Service road access & pedestrian ramp added.	01.10.2021	WP
A4	Site office added.	05.10.2021	WP
A5	List of existing buildings to be demolished added.	15.10.2021	WP
A6	Co-ordinates added to corner beacons. Sewer & stormwater manholes shown. Entrance points indicated. Boundary wall & fence heights added.	16.11.2021	WP
A7	Setting out point added from Grid A1	21.01.2022	WP
A8	Building footprint updated.	07.03.2022	WP
A9	new position of Afrox tank & water tank added. Chiller Plant Room updated. New retaining wall behind Casualty Ward added.	12.05.2022	WP

NO.	AMENDMENT	APPROVED	DATE
-----	-----------	----------	------

REVISIONS

CLIENT

DEPARTMENT OF HEALTH
C/O DEPARTMENT OF WORKS

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PROJECT

PORT SHEPSTONE HOSPITAL
NEW PSYCHIATRIC WARD

TITLE

SITE PLAN

CONSULTING ENGINEER	DESIGNED : K.G./S.G.
SIGNATURE:.....	DRAWN : S.P.
PR. NO.:.....	CHECKED : K.G.
DATE:.....	SCALE : NOT TO SCALE
DRAWING NO.	DATE : 15-7-2022

31319-G02-I1

REVISION

SITE PLAN
SCALE 1:500