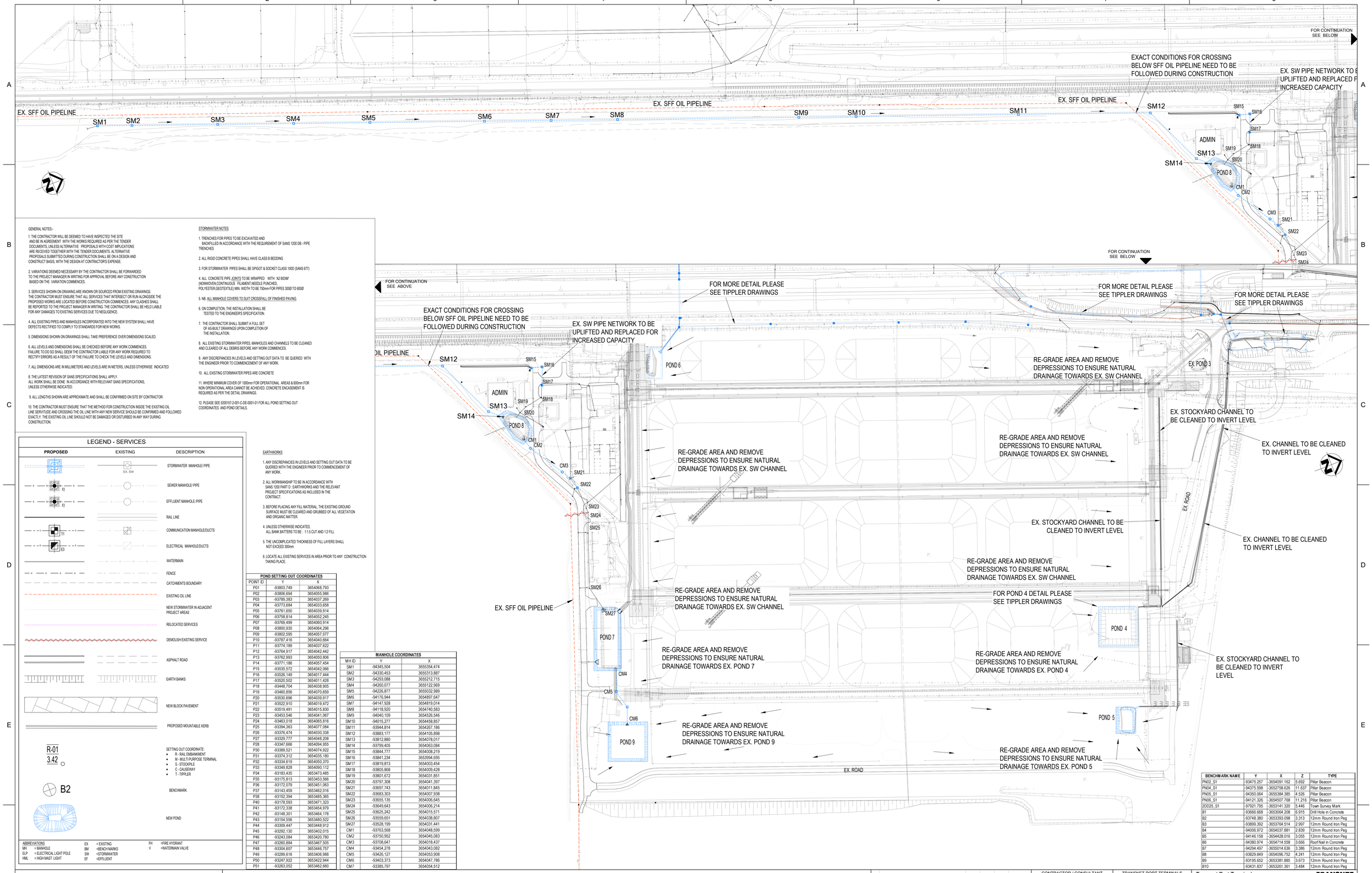

GENERAL NOTES:-

1. THE CONTRACTOR WILL BE DEEMED TO HAVE INSPECTED THE SITE AND BE IN AGREEMENT WITH THE WORKS REQUIRED AS PER THE TENDER DOCUMENTS, UNLESS ALTERNATIVE PROPOSALS WITH COST IMPLICATIONS ARE RECEIVED TOGETHER WITH THE TENDER DOCUMENTS. ALTERNATIVE PROPOSALS SUBMITTED DURING CONSTRUCTION SHALL BE ON A DESIGN AND CONSTRUCT BASIS, WITH THE DESIGN AT CONTRACTOR'S EXPENSE.

2. VARIATIONS DEEMED NECESSARY BY THE CONTRACTOR SHALL BE FORWARDED TO THE PROJECT MANAGER IN WRITING FOR APPROVAL BEFORE ANY CONSTRUCTION BASED ON THE VARIATION COMMENCES.

3. SERVICES SHOWN ON DRAWING ARE KNOWN OR SOURCED FROM EXISTING DRAWINGS. THE CONTRACTOR MUST ENSURE THAT ALL SERVICES THAT INTERSECT OR RUN ALONGSIDE THE PROPOSED WORKS ARE LOCATED BEFORE CONSTRUCTION COMMENCES. ANY CLASHES SHALL BE REPORTED TO THE PROJECT MANAGER IN WRITING. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGES TO EXISTING SERVICES DUE TO NEGLIGENCE.

4. ALL EXISTING PIPES AND MANHOLES INCORPORATED INTO THE NEW SYSTEM SHALL HAVE DEFECTS RECTIFIED TO COMPLY TO STANDARDS FOR NEW WORKS.

5. DIMENSIONS SHOWN ON DRAWINGS SHALL TAKE PREFERENCE OVER DIMENSIONS SCALED.

6. ALL LEVELS AND DIMENSIONS SHALL BE CHECKED BEFORE ANY WORK COMMENCES. FAILURE TO DO SO SHALL DEEM THE CONTRACTOR LIABLE FOR ANY WORK REQUIRED TO RECTIFY ERRORS AS A RESULT OF THE FAILURE TO CHECK THE LEVELS AND DIMENSIONS.

7. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS, UNLESS OTHERWISE INDICATED

8. THE LATEST REVISION OF SANS SPECIFICATIONS SHALL APPLY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH RELEVANT SANS SPECIFICATIONS, UNLESS OTHERWISE INDICATED.

9. ALL LENGTHS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED ON SITE BY CONTRACTOR.

10. THE CONTRACTOR MUST ENSURE THAT THE METHOD FOR CONSTRUCTION INSIDE THE EXISTING OIL LINE SERVITUDE AND CROSSING THE OIL LINE WITH ANY NEW SERVICE SHOULD BE CONFIRMED AND FOLLOWED EXACTLY. THE EXISTING OIL LINE SHOULD NOT BE DAMAGED OR DISTURBED IN ANY WAY DURING CONSTRUCTION.

STORMWATER NOTES

1. TRENCHES FOR PIPES TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE REQUIREMENT OF SANS 1200 DB - PIPE TRENCHES

2. ALL RIGID CONCRETE PIPES SHALL HAVE CLASS B BEDDING

3. FOR STORMWATER PIPES SHALL BE SPIGOT & SOCKET CLASS 100D (SANS 677)

4. ALL CONCRETE PIPE JOINTS TO BE WRAPPED WITH 'A2 BIDIM' (NONWOVEN,CONTINUOUS FILAMENT,NEEDLE PUNCHED, POLYESTER,GEOTEXTILE) MIN. WIDTH TO BE 750mm FOR PIPES 3000 TO 6000

5. NB. ALL MANHOLE COVERS TO SUIT CROSSFALL OF FINISHED PAVING.

6. ON COMPLETION, THE INSTALLATION SHALL BE TESTED TO THE ENGINEERS SPECIFICATION.

7. THE CONTRACTOR SHALL SUBMIT A FULL SET OF AS-BUILT DRAWINGS UPON COMPLETION OF THE INSTALLATION.

8. ALL EXISTING STORMWATER PIPES, MANHOLES AND CHANNELS TO BE CLEANED AND CLEARED OF ALL DEBRIS BEFORE ANY WORK COMMENCES.

9. ANY DISCREPANCIES IN LEVELS AND SETTING OUT DATA TO BE QUERIED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.

10. ALL EXISTING STORMWATER PIPES ARE CONCRETE

11. WHERE MINIMUM COVER OF 1000mm FOR OPERATIONAL AREAS & 600mm FOR NON OPERATIONAL AREA CANNOT BE ACHIEVED. CONCRETE ENCASEMENT IS REQUIRED AS PER THE DETAIL DRAWINGS.

12. PLEASE SEE 5200157-2-001-C-DE-0001-01 FOR ALL POND SETTING OUT COORDINATES AND POND DETAILS.

LEGEND - SERVICES

PROPOSED	EXISTING	DESCRIPTION
	EX. SW	STORMWATER MANHOLE/ PIPE
F2		SEWER MANHOLE/ PIPE
F2		EFFLUENT MANHOLE /PIPE
		RAIL LINE
T1		COMMUNICATION MANHOLE/DUCTS
E3		ELECTRICAL MANHOLE/DUCTS
		WATERMAIN
		FENCE
		CATCHMENTS BOUNDARY
		EXISTING OIL LINE
		NEW STORMWATER IN ADJACENT PROJECT AREAS
		RELOCATED SERVICES
		DEMOLISH EXISTING SERVICE
		ASPHALT ROAD
		EARTH BANKS
		NEW BLOCK PAVEMENT
		PROPOSED MOUNTABLE KERB
R-01 3.42		SETTING OUT COORDINATE: • R - RAIL EMBANKMENT • M - MULTI PURPOSE TERMINAL • S - STOCKPILE • C - CAUSEWAY • T - TIPPLER
B2		BENCHMARK
		NEW POND

ABBREVIATIONS			
MH	= MANHOLE	EX	= EXISTING
ELP	= ELECTRICAL LIGHT POLE	BM	=BENCH MARKS
HML	= HIGH MAST LIGHT	SW	=STORMWATER
		EF	=EFFLUENT
		FH	=FIRE HYDRANT
		V	=WATERMAIN VALVE

EARTHWORKS

1. ANY DISCREPANCIES IN LEVELS AND SETTING OUT DATA TO BE QUERIED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.

2. ALL WORKMANSHIP TO BE IN ACCORDANCE WITH SANS 1200 PART D : EARTHWORKS AND THE RELEVANT PROJECT SPECIFICATIONS AS INCLUDED IN THE CONTRACT.

3. BEFORE PLACING ANY FILL MATERIAL, THE EXISTING GROUND SURFACE MUST BE CLEARED AND GRUBBED OF ALL VEGETATION AND ORGANIC MATTER.

4. UNLESS OTHERWISE INDICATED, ALL BANK BATTERS TO BE : 1:1.5 CUT AND 1:2 FILL

5. THE UNCOMPLICATED THICKNESS OF FILL LAYERS SHALL NOT EXCEED 300mm

6. LOCATE ALL EXISTING SERVICES IN AREA PRIOR TO ANY CONSTRUCTION TAKING PLACE.

POND SETTING OUT COORDINATES

POINT ID	Y	X
P01	-93803.749	3654068.793
P02	-93806.694	3654055.986
P03	-93789.383	3654037.269
P04	-93773.684	3654033.658
P05	-93761.650	3654039.914
P06	-93758.814	3654052.245
P07	-93769.499	3654060.914
P08	-93800.935	3654064.296
P09	-93802.595	3654057.077
P10	-93787.416	3654040.664
P11	-93774.189	3654037.622
P12	-93764.917	3654042.442
P13	-93762.993	3654050.806
P14	-93771.186	3654057.454
P15	-93535.572	3654042.066
P16	-93526.149	3654017.444
P17	-93520.502	3654011.428
P18	-93448.704	3654038.905
P19	-93460.856	3654070.659
P20	-93530.696	3654039.917
P21	-93522.910	3654019.472
P22	-93519.491	3654015.830
P23	-93453.546	3654041.067
P24	-93463.018	3654065.816
P25	-93394.363	3654077.084
P26	-93376.474	3654030.338
P27	-93329.777	3654048.208
P28	-93347.666	3654094.955
P30	-93389.521	3654074.922
P31	-93374.312	3654035.180
P32	-93334.619	3654050.370
P33	-93349.828	3654090.112
P34	-93183.435	3653473.485
P35	-93175.813	3653453.566
P36	-93172.079	3653451.063
P37	-93143.459	3653462.016
P38	-93152.394	3653485.365
P40	-93178.593	3653471.323
P41	-93172.338	3653454.979
P42	-93148.301	3653464.178
P43	-93154.556	3653480.522
P44	-93309.447	3653448.912
P45	-93292.130	3653402.015
P46	-93243.084	3653420.780
P47	-93260.884	3653467.505
P48	-93304.607	3653446.757
P49	-93289.616	3653406.988
P50	-93247.922	3653422.944
P51	-93263.052	3653462.660

MANHOLE COORDINATES

MH ID	Y	X
SM1	-94345.504	3655354.474
SM2	-94330.453	3655313.887
SM3	-94293.088	3655212.715
SM4	-94260.077	3655122.969
SM5	-94226.877	3655032.989
SM6	-94176.944	3654897.647
SM7	-94147.928	3654819.014
SM8	-94118.920	3654740.583
SM9	-94040.109	3654526.546
SM10	-94015.277	3654458.857
SM11	-93944.814	3654267.186
SM12	-93883.177	3654105.898
SM13	-93812.880	3654078.017
SM14	-93799.405	3654063.084
SM15	-93844.777	3654008.219
SM16	-93841.234	3653994.695
SM17	-93819.813	3654003.454
SM18	-93805.868	3654009.428
SM19	-93801.672	3654031.851
SM20	-93797.308	3654041.397
SM21	-93697.743	3654011.845
SM22	-93683.303	3654007.938
SM23	-93655.135	3654006.645
SM24	-93649.643	3654006.214
SM25	-93625.242	3654015.571
SM26	-93559.651	3654038.807
SM27	-93528.199	3654031.441
CM1	-93763.568	3654048.599
CM2	-93750.952	3654045.083
CM3	-93708.647	3654018.437
CM4	-93454.278	3654043.082
CM5	-93426.127	3654053.908
CM6	-93403.373	3654047.786
CM7	-93385.797	3654054.512

BENCHMARK NAME	Y	X	Z	TYPE
PN02_S1	-93475.257	-3654091.162	5.692	Pillar Beacon
PN04_S1	-94375.598	-3652758.626	11.637	Pillar Beacon
PN05_S1	-94350.064	-3655384.385	4.526	Pillar Beacon
PN06_S1	-94121.326	-3654507.768	11.216	Pillar Beacon
2DD25_S1	-97921.795	-3653141.320	5.446	Town Survey Mark
B1	-93666.668	-3653064.208	6.915	Drill Hole in Concrete
B2	-93748.380	-3653393.098	3.313	12mm Round Iron Peg
B3	-93899.392	-3653764.514	2.997	12mm Round Iron Peg
B4	-94006.972	-3654037.881	2.839	12mm Round Iron Peg
B5	-94146.158	-3654428.016	3.055	12mm Round Iron Peg
B6	-94380.974	-3654714.558	3.666	Roof Nail in Concrete
B7	-94294.497	-3655014.636	3.386	12mm Round Iron Peg
B8	-93829.849	-3654096.752	4.241	12mm Round Iron Peg
B9	-93195.652	-3653381.885	3.673	12mm Round Iron Peg
B10	-93431.837	-3653261.361	3.484	12mm Round Iron Peg

DRAWING NO.	DESCRIPTION
5200157-2-001-C-LA-0001-01	STOCKYARD AREA GENERAL LAYOUT
5200157-2-001-C-LA-0001-02	STOCKYARD AREA STORMWATER LAYOUT
5200157-2-001-C-LA-0001-03	DEMOLITION LAYOUT
5200157-2-001-C-SE-0001-01	STOCKYARD AREA STORMWATER LONG SECTIONS SHEET 1 OF 3
5200157-2-001-C-SE-0001-02	STOCKYARD AREA STORMWATER LONG SECTIONS SHEET 2 OF 3
5200157-2-001-C-SE-0001-03	STOCKYARD AREA STORMWATER LONG SECTIONS SHEET 3 OF 3
5200157-2-001-C-DE-0001-01	STOCKYARD AREA POND DETAILS
5200157-2-001-C-DE-0001-02	TYPICAL STORMWATER MANHOLE DETAILS
5200157-2-001-C-DE-0001-03	TYPICAL STORMWATER GRID INLET & CATCHPIT DETAILS
5200157-2-001-C-DE-0001-04	TYPICAL HEADWALL, SCOUR & CONCRETE ENCASEMENT DETAILS

REFERENCE DRAWINGS

NOTES:

a. MEASUREMENTS ARE BASED ON METRIC SYSTEM.
b. ALL LEVELS ARE IN METERS TO MEAN SEA LEVELS (MSL)
c. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
d. THE CONTRACTOR SHALL VERFIY ALL SERVICES OR CONDITIONS ON THE SITE AND NOTIFY THE ENGINEERING OF ANY VARIATIONS FROM DIMENSIONS BEFORE CONSTRUCTION.

NO.	DESCRIPTION	BY	CHKD	APP'D	DATE
00	ISSUED FOR CONSTRUCTION	HD	RM	RN	04/08/2023
0A	ISSUED FOR CLIENT APPROVAL	HD	RM	RN	28/10/2022

REVISIONS

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CONTRACTOR / CONSULTANT			
TITLE	NAME	SIGN	DATE

OPERATING DIVISIONS			
TITLE	NAME	SIGN	DATE

TRANSNET PORT TERMINALS			
TITLE	NAME	SIGN	DATE
DRAWN	HvdW		28 10 22
CHECKED	RM		28 10 22
DESIGNED	HvdW		28 10 22
CHECKED	RM		28 10 22

PR.ENG. / PR.TECH./PR. ARCH		
NAME	R. NAIDOO	DATE
SIGNATURE		04 08 23
REG. NUMBER	201070216	
SCALE :	AS SHOWN	

Transnet Port Terminals

PORT OF SALDANHA

SALDANHA STORMWATER MANAGEMENT
STOCKYARD AREA
STORMWATER LAYOUT

PROJECT NUMBER	OD	FBS	DIS	TYPE	DRAWING NO.	SHEET	REV	ID
A0	5200157	2	001	C	LA-0001	01	02	00 HD