CHANNEL C/L COORDINATES		
NO.	Y	X
C1	-94718,803	3656207,577
C2	-94720,785	3656204,412
C3	-94722,429	3656196,327
C4	-94728,201	3656175,852
C5	-94729,413	3656171,282
C6	-94733,732	3656155,618
C7	-94736,59	3656150,150
C7	-94740,54	3656128,934
C9	-94736,202	3656098,724
C10	-94734,671	3656088,000
C11	-94728,819	3656066,776
C12	-94728,122	3656060,455
C13	-94723,818	3656055,229
C14	-94725,268	3656049,798
C15	-94724,777	3656041,365
C16	-94711,727	3656020,897
C17	-94719,365	3656016,027
C18	-94667,215	3656226,024
C19	-94596,04	3656036,438
C20	-94556,569	3655937,000
C21	-94531,572	3655875,497
C22	-94661,362	3655974,833
C23	-94620,607	3655914,829
C24	-94519,794	3655662,408
C25	-94507,151	3655617,079
C26	-94506,544	3655585,508
C27	-94457,333	3655437,085
C28	-94458,342	3655665,205
C29	-94441,256	3655640,419
C30	-94376,379	3655467,693
C35	-94697,390	3656080,311
C36	-94703,890	3656079,074
C37	-94697,348	3656076,828
C38	-94703,066	3656074,549

PLEASE NOTE:
CHANNEL COORDINATES ARE GIVEN FOR CENTER OF CHANNEL.

INFILTATION CHANNEL NO.	1
WIDTH	2 m
LENGTH	12 m
DEPTH	2 m

*SEE DETAIL 1 BELOW

INFILTATION CHANNEL NO.	2
WIDTH	2 m
LENGTH	50 m
DEPTH	2 m

*SEE DETAIL 1 BELOW

INFILTATION CHANNEL NO.	3
WIDTH	1 m
LENGTH	30 m
DEPTH	1 m

*SEE DETAIL 2 BELOW

INFILTATION CHANNEL NO.	4
WIDTH	1 m
LENGTH	35 m
DEPTH	1 m

*SEE DETAIL 2 BELOW

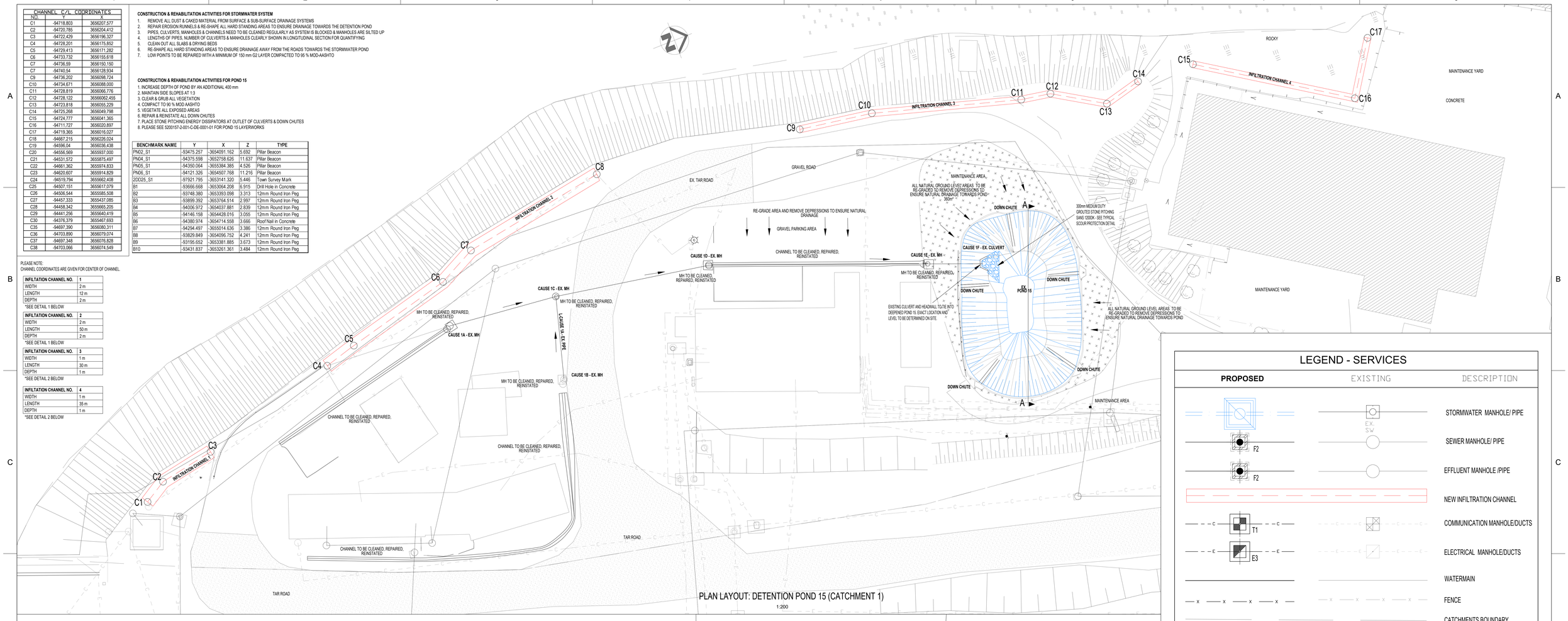
CONSTRUCTION & REHABILITATION ACTIVITIES FOR STORMWATER SYSTEM

1. REMOVE ALL DUST & CAKED MATERIAL FROM SURFACE & SUB-SURFACE DRAINAGE SYSTEMS
2. REPAIR EROSION RUNNELS & RE-SHAPE ALL HARD STANDING AREAS TO ENSURE DRAINAGE TOWARDS THE DETENTION POND
3. PIPES, CULVERTS, MANHOLES & CHANNELS NEED TO BE CLEANED REGULARLY AS SYSTEM IS BLOCKED & MANHOLES ARE SILTED UP
4. LENGTHS OF PIPES, NUMBER OF CULVERTS & MANHOLES CLEARLY SHOWN IN LONGITUDINAL SECTION FOR QUANTIFYING
5. CLEAN OUT ALL SLABS & DRYING BEDS
6. RE-SHAPE ALL HARD STANDING AREAS TO ENSURE DRAINAGE AWAY FROM THE ROADS TOWARDS THE STORMWATER POND
7. LOW POINTS TO BE REPAIRED WITH A MINIMUM OF 150 mm G2 LAYER COMPACTED TO 95 % MOD-AASHTO

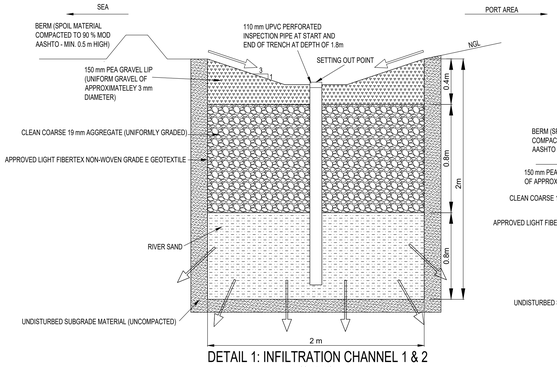
CONSTRUCTION & REHABILITATION ACTIVITIES FOR POND 15

1. INCREASE DEPTH OF POND BY AN ADDITIONAL 400 mm
2. MAINTAIN SIDE SLOPES AT 1:3
3. CLEAR & GRUB ALL VEGETATION
4. COMPACT TO 90 % MOD AASHTO
5. VEGETATE ALL EXPOSED AREAS
6. REPAIR & REINSTATE ALL DOWN CHUTES
7. PLACE STONE PITCHING ENERGY DISSIPATORS AT OUTLET OF CULVERTS & DOWN CHUTES
8. PLEASE SEE S200157-2-001-C-DE-0001-01 FOR POND 15 LAYERWORKS

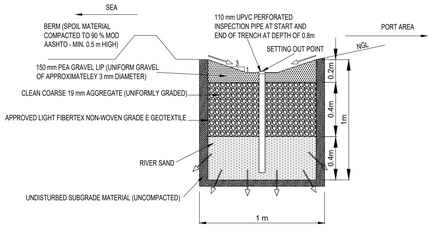
BENCHMARK NAME	Y	X	Z	TYPE
PN02_S1	-93475.257	-3654091.162	5.692	Pillar Beacon
PN04_S1	-94375.598	-3652758.626	11.637	Pillar Beacon
PN05_S1	-94350.064	-3655384.385	4.526	Pillar Beacon
PN06_S1	-94121.326	-3654507.768	11.216	Pillar Beacon
ZDD2S_S1	-97921.795	-3653141.320	5.446	Town Survey Mark
B1	-93666.668	-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



PLAN LAYOUT: DETENTION POND 15 (CATCHMENT 1)
1:200



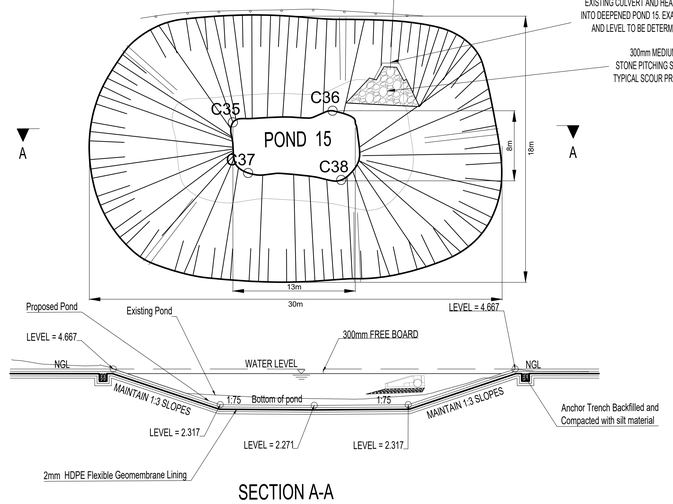
DETAIL 1: INFILTRATION CHANNEL 1 & 2
SCALE: NTS



DETAIL 2: INFILTRATION CHANNEL 3 & 4
SCALE: NTS

INFILTRATION CHANNEL NOTES

1. INSPECTION PIPE MUST BE LOCATED AT THE CENTRE OF THE CHANNEL
2. IT MUST HAVE A SCREW LID TO PREVENT WATER FROM FLOWING IN FROM THE TOP
3. THE BOTTOM OF THE CHANNEL MUST BE AT LEAST 600mm AWAY FROM THE WATER TABLE OR BEDROCK LAYER CONDITION
4. THE COARSE FILL MATERIAL MUST BE CAPPED WITH A GEOTEXTILE LAYER & COVERED WITH A LAYER OF TOPSOIL
5. THE TOP LAYERS OF THE TRENCH SHOULD BE PERIODICALLY CLEANED TO PREVENT UNDESIRABLE SEDIMENT BUILD UP
6. INFILTRATION CHANNEL TO MEET ALL DESIGN, CONSTRUCTION & MAINTENANCE GUIDLINES SET OUT IN THE SOUTH AFRICAN GUIDELINES FOR SUSTAINABLE DRAINAGE SYSTEMS



SECTION A-A
SCALE 1:200

POND 15

LEGEND - SERVICES

PROPOSED	EXISTING	DESCRIPTION
	EX. SW	STORMWATER MANHOLE/ PIPE
F2		SEWER MANHOLE/ PIPE
F2		EFFLUENT MANHOLE /PIPE
		NEW INFILTRATION CHANNEL
C T1 C	C C	COMMUNICATION MANHOLE/DUCTS
E E3 E	E E	ELECTRICAL MANHOLE/DUCTS
		WATERMAIN
x x x x	x x x x	FENCE
		CATCHMENTS BOUNDARY
		ASPHALT ROAD
		EARTH BANKS
		NEW V-DRAIN
		DEMOLISH EXISTING SERVICE
		NEW POND
C-01 3.42		SETTING OUT COORDINATE:
B1		BENCHMARK

- R - RAIL EMBANKMENT
- M - MULTI PURPOSE TERMINAL
- S - STOCKPILE
- C - CAUSEWAY
- T - TIPPLER

ABBREVIATIONS

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

S200157-2-001-C-GA-0005-01	GENERAL ARRANGEMENT
S200157-2-001-C-LA-0005-01	PLAN LAYOUT & DETAILS CATCHMENT AREA 1
S200157-2-001-C-LA-0005-02	PLAN LAYOUT & DETAILS CATCHMENT AREA 2
S200157-2-001-C-LA-0005-03	PLAN LAYOUT & DETAILS CATCHMENT AREA 3 & 4
S200157-2-001-C-DE-0001-02	TYPICAL STORMWATER MANHOLE DETAILS
S200157-2-001-C-DE-0001-03	TYPICAL STORMWATER GRID INLET & CATCHPIT DETAILS
S200157-2-001-C-DE-0001-04	TYPICAL HEADWALL, SCOUR & CONCRETE ENCASEMENT DETAILS
S200157-2-001-C-DE-0001-01	POND DETAILS
DRAWING NO.	**REFERENCE**

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	APPD	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			
OPERATING DIVISIONS					
TITLE	NAME	SIGN	DATE		

TRANSNET PORT TERMINALS					
TITLE	NAME	SIGN			
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	20107016				
SCALE	AS SHOWN				

Transnet Port Terminals

PORT OF SALDANHA

SALDANHA STORMWATER MANAGEMENT
CAUSEWAY AREA
PLAN LAYOUT & DETAILS
CATCHMENT AREA 1

PROJECT NUMBER							OD	FBS		DIS	TYPE	DRAWING NO.				SHEET		REV	ID
S	2	0	0	1	5	7	-	2	-	0	0	1	-	C	L	A	-	0	0	0	5	-	0	1	-	0	0	HD

SCALE A0