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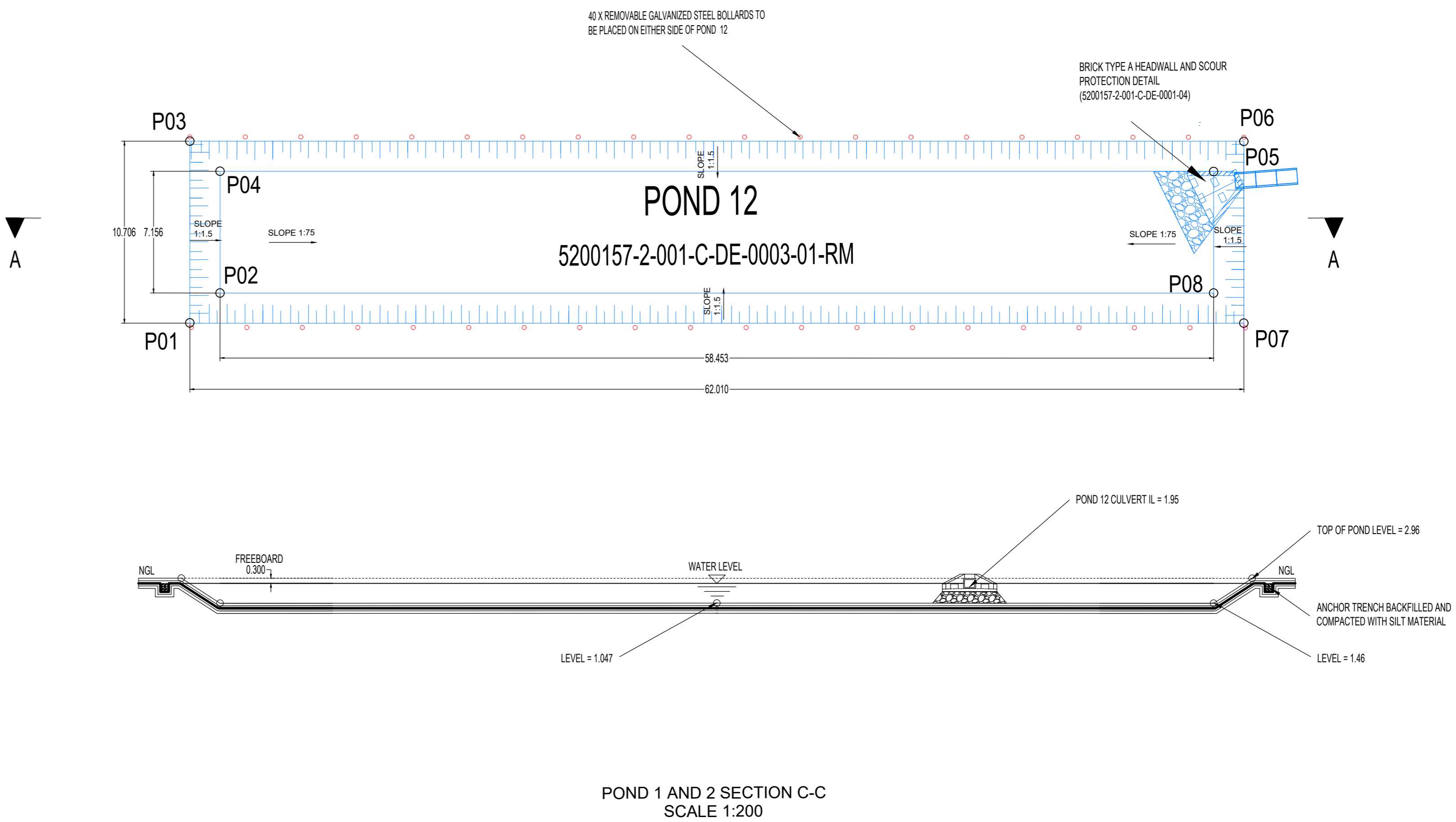
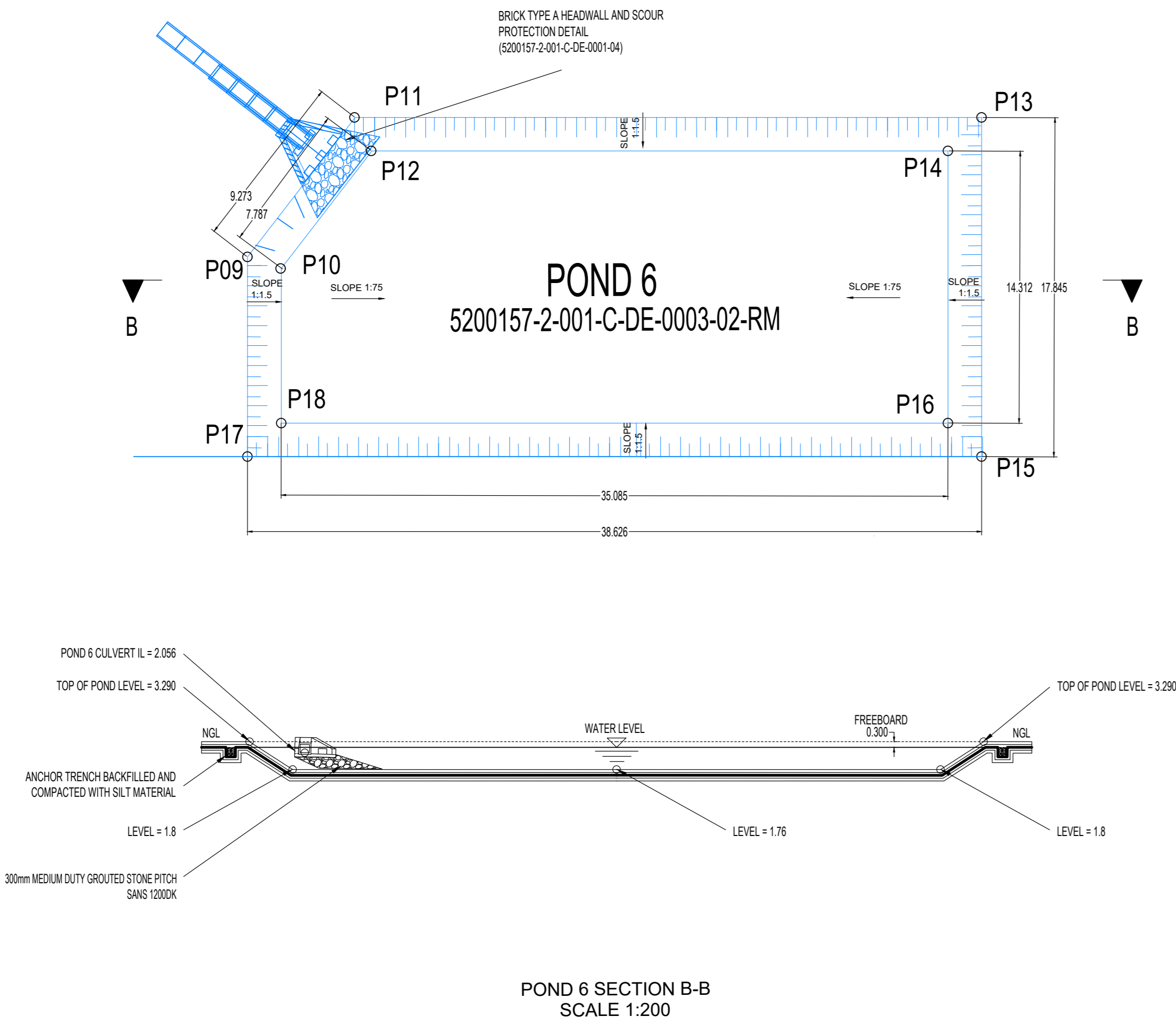
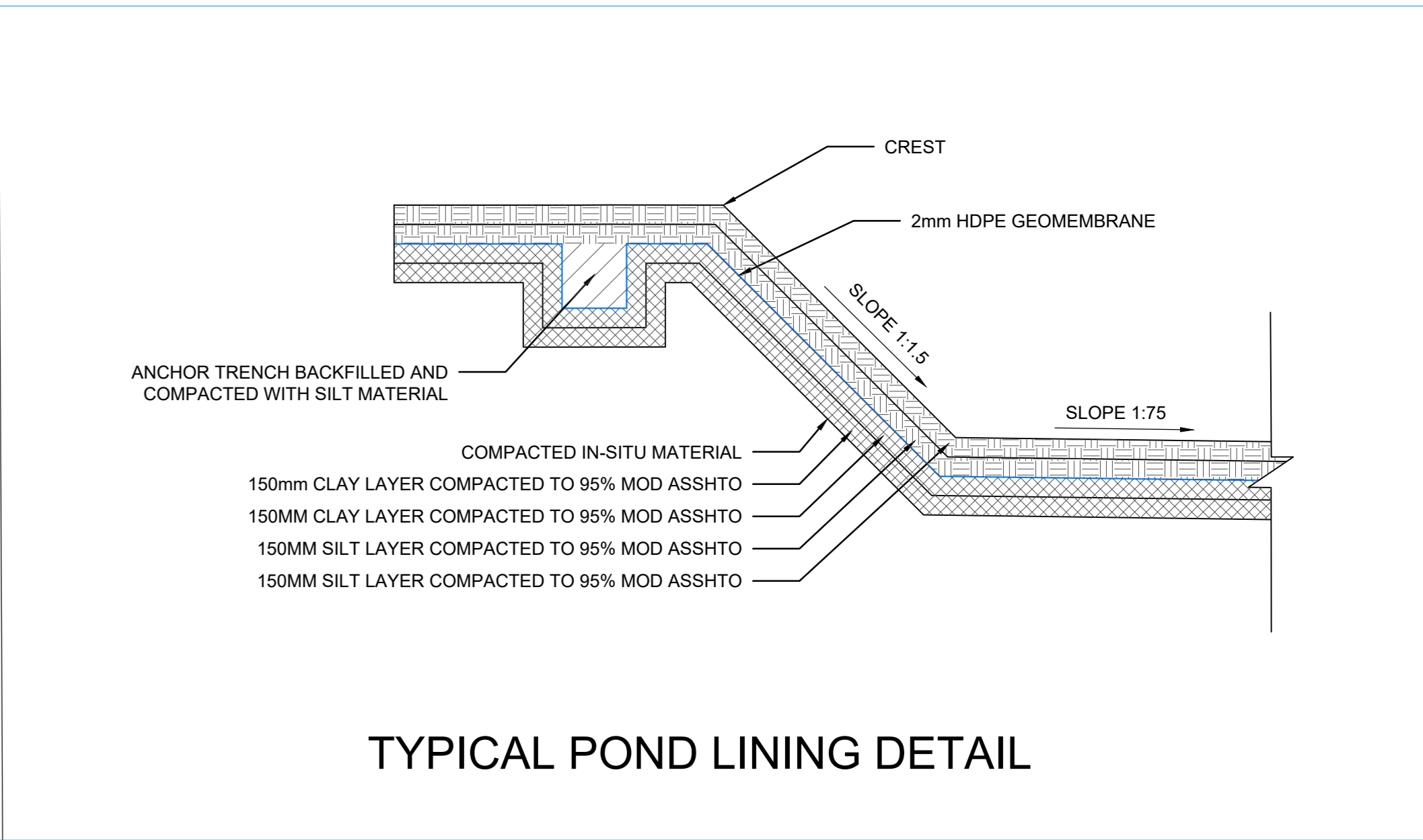
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F



RAIL EMBANKMENT POND SETTING OUT COORDINATES		
Position X	Position Y	RAIL EMBANKMENT POND ID
94140.747	-3654672.579	P01
94141.774	-3654670.306	P02
94150.765	-3654668.863	P03
94148.883	-3654667.816	P04
94128.137	-3654653.071	P05
94123.882	-3654651.180	P06
94119.156	-3654651.449	P07
94121.438	-3654651.496	P08
93811.367	-3653860.623	P09
93809.028	-3653851.789	P10
93803.961	-3653845.645	P11
93803.332	-3653847.603	P12
93772.542	-3653855.889	P13
93774.911	-3653867.940	P14
93778.622	-3653873.696	P15
93779.691	-3653871.406	P16
93814.935	-3653860.500	P17
93812.667	-3653856.448	P18

GENERAL NOTES:

- 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 SUBMITTED TOGETHER WITH THE TENDER DOCUMENTS. ALTERNATIVE PROPOSALS SUBMITTED DURING CONSTRUCTION SHALL BE ON A DESIGN AND CONSTRUCT BASIS, WITH THE DESIGN AT CONTRACTORS EXPENSE.
- 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.
- 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.
- ALL EXISTING PIPES AND MANHOLES INCORPORATED INTO THE NEW SYSTEM SHALL HAVE DEFECTS RECTIFIED TO COMPLY TO STANDARDS FOR NEW WORKS.
- DIMENSIONS SHOWN ON DRAWINGS SHALL TAKE PREFERENCE OVER DIMENSIONS SCALED.
- ALL LEVELS AND DIMENSIONS SHALL BE CHECKED BEFORE ANY WORK COMMENCES. FAILURE TO DO SO SHALL OBLIGATE THE CONTRACTOR LIABLE FOR ANY WORK REQUIRED TO RECTIFY ERRORS AS A RESULT OF THE FAILURE TO CHECK THE LEVELS AND DIMENSIONS.
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS, UNLESS OTHERWISE INDICATED.
- THE LATEST REVISION OF SANS SPECIFICATIONS SHALL APPLY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH RELEVANT SANS SPECIFICATIONS, UNLESS OTHERWISE INDICATED.
- ALL LENGTHS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED ON SITE BY CONTRACTOR.

EARTHWORKS

- ANY DISCREPANCIES IN LEVELS AND SETTING OUT DATA TO BE QUERIED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
- ALL WORKMANSHIP TO BE IN ACCORDANCE WITH SANS 1200 PART D: EARTHWORKS AND THE RELEVANT PROJECT SPECIFICATIONS AS INCLUDED IN THE CONTRACT.
- BEFORE PLACING ANY FILL MATERIAL, THE EXISTING GROUND SURFACE MUST BE CLEARED AND GRUBBED OF ALL VEGETATION AND ORGANIC MATTER.
- UNLESS OTHERWISE INDICATED, ALL BANK BATTERS TO BE: 1:1.5 CUT AND 1:2 FILL.
- THE UNCOMPLICATED THICKNESS OF FILL LAYERS SHALL NOT EXCEED 300mm.
- LOCATE ALL EXISTING SERVICES IN AREA PRIOR TO ANY CONSTRUCTION TAKING PLACE.

STORMWATER NOTES


- TRENCHES FOR PIPES TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE REQUIREMENT OF SANS 1200 D6 - PIPE TRENCHES.
- ALL RIGID CONCRETE PIPES SHALL HAVE CLASS B BEDDING UNLESS STATED OTHERWISE.
- FOR STORMWATER PIPES SHALL BE SPIGOT & SOCKET CLASS 1000 (SANS 877).
- ALL CONCRETE PIPE JOINTS TO BE WRAPPED WITH 12 B00M (NONWOVEN, CONTINUOUS FILAMENT NEEDLE PUNCHED, POLYESTER GEOTEXTILES) MIN. WIDTH TO BE 750mm FOR PIPES 3000 TO 6000.
- NB: ALL MANHOLE COVERS TO SUIT CROSSFALL OF FINISHED PAVING.
- ON COMPLETION, THE INSTALLATION SHALL BE TESTED TO THE ENGINEER'S SPECIFICATION.
- THE CONTRACTOR SHALL SUBMIT A FULL SET OF AS-BUILT DRAWINGS UPON COMPLETION OF THE INSTALLATION.
- ALL EXISTING STORMWATER PIPES, MANHOLES, CHANNELS AND ANY OTHER STORMWATER INFRASTRUCTURE TO BE CLEARED AND CLEARED OF ALL DEBRIS BEFORE ANY WORK COMMENCES. ALL DAMAGED EXISTING STORMWATER INFRASTRUCTURE SHALL BE REINSTATED TO ORIGINAL CONDITION.
- ANY DISCREPANCIES IN LEVELS AND SETTING OUT DATA TO BE QUERIED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
- ALL EXISTING STORMWATER PIPES ARE CONCRETE UNLESS STATED OTHERWISE.
- 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.

PLAN AND CROSS SECTION OF POND 12 AND POND 6  
SCALE: 1:200

5200157-2-001-C-LA-0003-01-RM	RAIL EMBANKMENT - STORMWATER RAIL EMBANKMENT GENERAL LAYOUT
5200157-2-001-C-LA-0003-02-RM	RAIL EMBANKMENT - STORMWATER RAIL EMBANKMENT LAYOUT 1:500 SHEET 1 OF 3
5200157-2-001-C-LA-0003-03-RM	RAIL EMBANKMENT - STORMWATER RAIL EMBANKMENT LAYOUT 1:500 SHEET 2 OF 3
5200157-2-001-C-LA-0003-04-RM	RAIL EMBANKMENT - STORMWATER RAIL EMBANKMENT LAYOUT 1:500 SHEET 3 OF 3
5200157-2-001-C-SE-0003-01-RM	RAIL EMBANKMENT - RAIL EMBANKMENT LONGSECTION SHEET 1 OF 6
5200157-2-001-C-SE-0003-02-RM	RAIL EMBANKMENT - RAIL EMBANKMENT LONGSECTION SHEET 2 OF 6
5200157-2-001-C-SE-0003-03-RM	RAIL EMBANKMENT - RAIL EMBANKMENT LONGSECTION SHEET 3 OF 6
5200157-2-001-C-SE-0003-04-RM	RAIL EMBANKMENT - RAIL EMBANKMENT LONGSECTION SHEET 4 OF 6
5200157-2-001-C-SE-0003-05-RM	RAIL EMBANKMENT - RAIL EMBANKMENT LONGSECTION SHEET 5 OF 6
5200157-2-001-C-SE-0003-06-RM	RAIL EMBANKMENT - RAIL EMBANKMENT LONGSECTION SHEET 6 OF 6
5200157-2-001-C-DE-0003-01-RM	RAIL EMBANKMENT - POND 12 AND POND 6 CROSS SECTION DETAIL
5200157-2-001-C-DE-0003-02-RM	RAIL EMBANKMENT - GRD CHANNEL AND MANHOLE DETAIL
5200157-2-001-C-DE-0003-03-RM	RAIL EMBANKMENT - KERB DETAIL AND SUBSOL COLLECTOR DRAIN
DRAWING NO.	REFERENCE

NOTES:

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

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PORT OF SALDANHA

TIPLER AREA

POND 12 AND POND 6

DETAILS

PROJECT NUMBER: 5200157-2-001-C-DE-0003-01-00 RM