



LEGEND - SERVICES

PROPOSED	EXISTING	DESCRIPTION
[Symbol]	[Symbol]	STORMWATER MANHOLE PIPE
[Symbol]	[Symbol]	SEWER MANHOLE PIPE
[Symbol]	[Symbol]	PROPOSED STORMWATER PIPE: 150mm Ø (Ø=Ø)
[Symbol]	[Symbol]	STIPPLER MANHOLE PIPE
[Symbol]	[Symbol]	RAIL LINE
[Symbol]	[Symbol]	COMMUNICATION MANHOLE/DUCTS
[Symbol]	[Symbol]	ELECTRICAL MANHOLE/DUCTS
[Symbol]	[Symbol]	WATERWAY
[Symbol]	[Symbol]	FENCE
[Symbol]	[Symbol]	CATCHMENT BOUNDARY
[Symbol]	[Symbol]	EXISTING CURVE
[Symbol]	[Symbol]	NEW STORMWATER ALTERNATE PROJECT AREA
[Symbol]	[Symbol]	RELAYED SERVICE
[Symbol]	[Symbol]	DEMOLISHING SERVICE
[Symbol]	[Symbol]	ASPHALT ROAD
[Symbol]	[Symbol]	GRAVEL DRIVE

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 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.
- 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 DRAWINGS ARE KNOWN OR SOURCED FROM EXISTING DRAWINGS. THE CONTRACTOR MUST ENSURE THAT ALL SERVICES THAT INTERSECT OR RUN ALONGSIDE THE PROPOSED WORK 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 DEEM 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.

STORMWATER NOTES:

- TRENCHES FOR PIPES TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE REQUIREMENT OF SANS 1200 DB - PIPE TRENCHES.
- ALL RIGID CONCRETE PIPES SHALL HAVE CLASS B BEDDING UNLESS STATED OTHERWISE.
- FOR STORMWATER PIPES SHALL BE SPOUT & SOCKET CLASS 1000 (SANS 677).
- ALL CONCRETE PIPE JOINTS TO BE WRAPPED WITH 4250mm NONWOVEN CONTINUOUS FILAMENT REINFORCED POLYESTER (GEOTEXTILE) MIN. WIDTH TO BE 700mm FOR PIPES 3000 TO 5000.
- NR. ALL MANHOLE COVERS TO SUIT CROSS-ALL 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 CLEANED 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 CLERED 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 ENCASMENT IS REQUIRED AS PER THE DETAIL DRAWINGS.

CONSTRUCTION & REHABILITATION ACTIVITIES FOR STORMWATER SYSTEM:

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

CONSTRUCTION & REHABILITATION ACTIVITIES FOR POND 1, POND 2 AND POND 4:

- FOR RESPECTIVE POND DETAIL REFER TO DRAWING 5200157-2-001-C-DE-0002-01.
- CLEAR ALL GRUB & VEGETATION.
- COMPACT TO 95% MOD AASHTO.
- REPAIR & REINSTATE ALL DOWN CHUTES IF APPLICABLE.
- PLACE STONE PITCHING ENERGY DISSIPATORS AT OUTLET OF CULVERTS & DOWN CHUTES.
- DETENTION POND TO BE CONSTRUCTED TO NEW APPROVED LAYERS/WORKS.
- PLEASE SEE 5200157-2-001-C-DE-0002-01 FOR POND 1, POND 2 AND POND 4 LAYERS/WORKS.

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.

DRAWING NO.	REFERENCE
5200157-2-001-C-LA-0002-01	TIPPLER - STORMWATER TIPPLER GENERAL LAYOUT AND KEY PLAN
5200157-2-001-C-LA-0002-02	TIPPLER - LAYOUT DETAIL SHEET 1 OF 3
5200157-2-001-C-LA-0002-03	TIPPLER - LAYOUT DETAIL SHEET 2 OF 3
5200157-2-001-C-LA-0002-04	TIPPLER - LAYOUT DETAIL SHEET 3 OF 3
5200157-2-001-C-DE-0002-01	TIPPLER - STORMWATER LONGSECTION SHEET 1 OF 3
5200157-2-001-C-DE-0002-02	TIPPLER - STORMWATER LONGSECTION SHEET 2 OF 3
5200157-2-001-C-DE-0002-03	TIPPLER - STORMWATER LONGSECTION SHEET 3 OF 3
5200157-2-001-C-DE-0002-04	TIPPLER - POND 1, POND 2 AND POND 4 CROSS SECTION DETAIL
5200157-2-001-C-DE-0002-05	TIPPLER - TYPICAL STORMWATER MANHOLE DETAIL S&D AND S&S

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5200157-2-001-C-LA-0002-01	TIPPLER - STORMWATER TIPPLER GENERAL LAYOUT AND KEY PLAN
5200157-2-001-C-LA-0002-02	TIPPLER - LAYOUT DETAIL SHEET 1 OF 3
5200157-2-001-C-LA-0002-03	TIPPLER - LAYOUT DETAIL SHEET 2 OF 3
5200157-2-001-C-LA-0002-04	TIPPLER - LAYOUT DETAIL SHEET 3 OF 3
5200157-2-001-C-DE-0002-01	TIPPLER - STORMWATER LONGSECTION SHEET 1 OF 3
5200157-2-001-C-DE-0002-02	TIPPLER - STORMWATER LONGSECTION SHEET 2 OF 3
5200157-2-001-C-DE-0002-03	TIPPLER - STORMWATER LONGSECTION SHEET 3 OF 3
5200157-2-001-C-DE-0002-04	TIPPLER - POND 1, POND 2 AND POND 4 CROSS SECTION DETAIL
5200157-2-001-C-DE-0002-05	TIPPLER - TYPICAL STORMWATER MANHOLE DETAIL S&D AND S&S

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