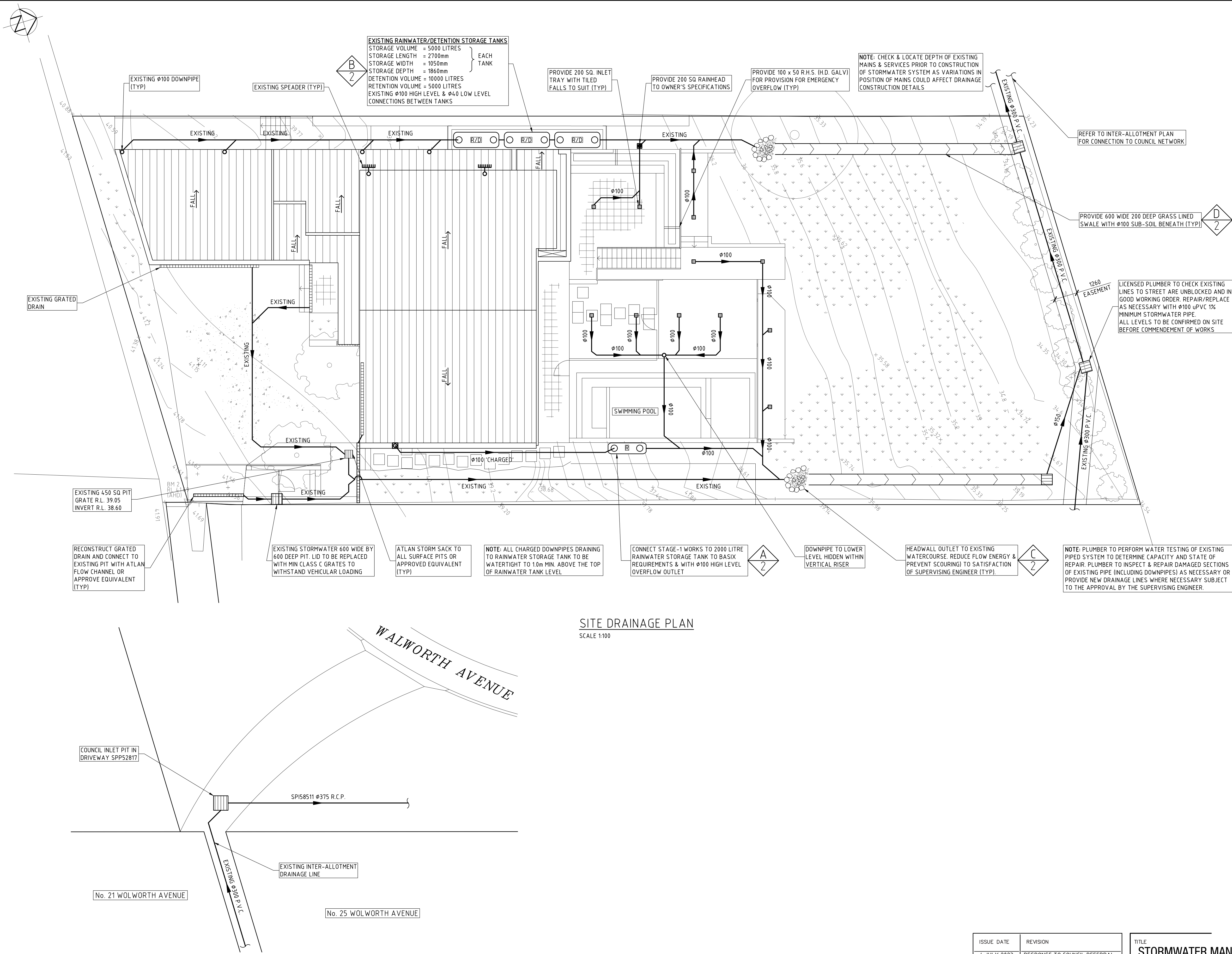




SITE DRAINAGE PLAN
SCALE 1:100

INTER-ALLOTMENT CONNECTION PLAN
SCALE 1:100
NOTE: SHOWING INTER-ALLOTMENT CONNECTION TO COUNCIL DRAINAGE SYSTEM

DRAINAGE NOTES

- + DENOTES EXISTING GROUND LEVEL
- FALL STORMWATER PIPES AT 1% MIN UNLESS OTHERWISE NOTED
- SUB-SOIL DRAINAGE TO BE CONNECTED TO THE SITE DRAINAGE SYSTEM AS NECESSARY.
- SURFACE GRATES 300 SQ. UNLESS OTHERWISE NOTED
- ALL STORMWATER PIPES TO HAVE SOLVENT CEMENT WATERTIGHT JOINTS.
- CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS
- INSPECTIONS MUST BE UNDERTAKEN BY THIS OFFICE (BY PRIOR ARRANGEMENT WITH ENGINEER) DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS
- ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD
- REMOVE REDUNDANT DRAINAGE PITS AND SEAL PIPES
- PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER. CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE
- APPROVED PRE-CAST PITS MAY BE USED
- ALL PIPES TO BE LAID ON COMPACTED FINE CRUSHED ROCK OR SAND BEDDING 75mm THICK & PIPES BACKFILLED WITH COMPACTED SAND TO 300mm ABOVE TOP OF PIPE, ELSE ATTACHED TO UNDERSIDE OF STRUCTURE AT 600mm c/c AS NECESSARY
- PIPE ROUTES SHOWN ARE INDICATIVE ONLY AND SHOULD BE AS NECESSARY ACCORDING TO SITE CONDITIONS, TREE POSITIONS ETC. CONFIRM SIGNIFICANT CHANGES IN PIPES SYSTEM DETAILS WITH SUPERVISING ENGINEER PRIOR TO COMMENCEMENT OF DRAINAGE CONSTRUCTION WORKS
- CONTRACTOR SHALL ENSURE THAT SERVICES TO BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED. CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS WHERE REQUIRED. ONCE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS
- STORMWATER SYSTEM REQUIRES SIGNIFICANT MAINTENANCE DUE TO POTENTIAL HIGH POLLUTANT LOAD. FILTERS AND POLLUTANT TRAPS SHOULD BE CHECKED AFTER LARGE STORM EVENTS AND CLEANED EVERY 6 MONTHS
- PLUMBING AND DRAINAGE WORKS TO COMPLY WITH AS-3500, THE NATIONAL DRAINAGE & PLUMBING CODE
- WHERE POSSIBLE DRAINAGE LINES SHALL BE LAID IN AREAS PREVIOUSLY DISTURBED BY OTHER SITE WORKS AND FOLLOW TOPOGRAPHICAL FEATURES TO REDUCE IMPACT AND AVOID TREE ROOTS
- THIS STORMWATER MANAGEMENT PLAN HAS BEEN PREPARED FOR SUBMISSION TO COUNCIL/CERTIFIER AND DOES NOT NECESSARILY CONTAIN ALL APPROPRIATE INFORMATION TO ENABLE FOR ISSUE TO PLUMBER/BUILDER FOR CONSTRUCTION. CONTACT TAYLOR CONSULTING FOR MORE INFORMATION

RAINWATER RE-USE NOTES AND SPECIFICATIONS

- ROOF WATER ONLY TO BE DRAINED TO THE RAINWATER STORAGE TANK
- THE RAINWATER STORAGE TANK NEEDS TO BE CONNECTED FOR RE-USE AS REQUIRED BY THE OWNER
- RAINWATER STORAGE TANK TO BE CONFIGURED IN ACCORDANCE WITH SYDNEY WATER SPECIFICATIONS 'GUIDELINES FOR RAINWATER TANK ON RESIDENTIAL PROPERTIES'
- PROVIDE MAINS 'TOP-UP' SUPPLY TO RAINWATER TANK. MAINS TOP-UP ZONE TO BE BASED ON THE DAILY NON-POTABLE USAGE THAT MAY BE EXPECTED FROM THE TANK
- PROVIDE A MECHANICAL PUMPING ARRANGEMENT (ON SOUND-PROOF HOUSING) TO PUMP SUPPLIERS SPECIFICATION TO SUIT INTENDED USAGE OF RAINWATER STORAGE. PUMPING ARRANGEMENTS MUST COMPLY WITH EPA GUIDELINES
- INLETS TO RAINWATER TANK MUST BE SCREENED TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR INSECTS
- A SIGN MUST BE AFFIXED TO THE RAINWATER TANK CLEARLY STATING THAT THE WATER IN THE TANK IS RAINWATER AND IS NOT TO BE USED FOR HUMAN CONSUMPTION
- RAINWATER TANK TO BE PLACED ON A STRUCTURALLY ADEQUATE BASE IN ACCORDANCE WITH THE MANUFACTURER'S OR STRUCTURAL ENGINEER'S DETAILS
- THE TANK MUST NOT BE INSTALLED OVER ANY MAINTENANCE STRUCTURE OR FITTINGS USED BY A PUBLIC AUTHORITY
- RAINWATER TANK AND ASSOCIATED PLUMBING WORKS TO BE INSTALLED AND CONFIGURED BY A LICENSED PLUMBER. PUMP TO BE INSTALLED BY A LICENSED ELECTRICIAN

EXISTING OSD SYSTEM DESIGN DATA

IT HAS BEEN DETERMINED THROUGH DRAINS HYDRAULIC MODELLING SOFTWARE THAT THE EXISTING DETENTION STORAGE VOLUME IS ADEQUATE TO REDUCE STORMWATER FLOWS TO BELOW EXISTING SITE FLOW LEVELS. THE CURRENT SITE DETENTION VOLUME IS 9.0m³

THE FOLLOWING OSD SYSTEM DESIGN DATA INDICATES THE ADEQUACY OF THE EXISTING SYSTEM. NOTE, EXISTING ORIFICE TO BE REPLACED BY A 40mm ORIFICE (38mm MODELLED IN DRAINS)

EXISTING SITE FLOWS

5 YR ARI = 22 l/s
20 YR ARI = 36 l/s
100 YR ARI = 52 l/s

DEVELOPED SITE FLOWS

5 YR ARI = 21 l/s
20 YR ARI = 33 l/s
100 YR ARI = 47 l/s

DETENTION SYSTEM DATA

EXISTING IMPERVIOUS AREA = 273.1 m² (22%)
EXISTING PERVIOUS AREA = 942.4 m² (78%)
PROPOSED IMPERVIOUS AREA = 609.0 m² (50%)
PROPOSED PERVIOUS AREA = 666.5 m² (50%)
AREA DRAINING TO OSD TANK = 183 m² (15% TOTAL SITE AREA)
PROPOSED IMPERVIOUS AREA DRAINING TO OSD TANK = 183 m² (100% OF AREA DRAINING TO OSD TANK)
PROPOSED PERVIOUS AREA DRAINING TO OSD TANK = 0 m² (0% OF AREA DRAINING TO OSD TANK)
AREA BYPASSING OSD TANK = 1032 m² (85% TOTAL SITE AREA)
PROPOSED IMPERVIOUS AREA BYPASSING OSD TANK = 395.7% (38% OF AREA BYPASSING OSD TANK)
PROPOSED PERVIOUS AREA BYPASSING OSD TANK = 636 m² (62% OF AREA BYPASSING OSD TANK)
ORIFICE DIAMETER = 40 mm
EXISTING ON-SITE DETENTION STORAGE = 10 m³

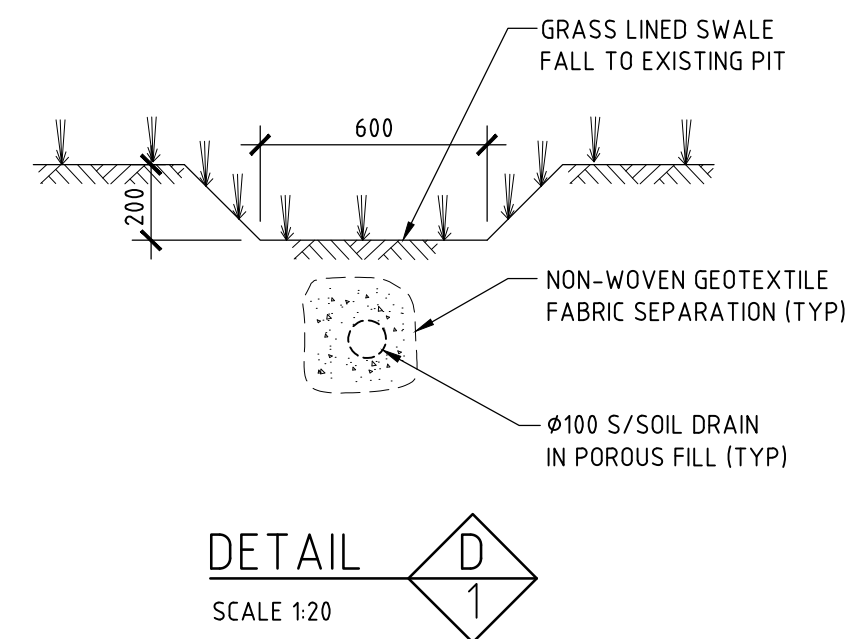
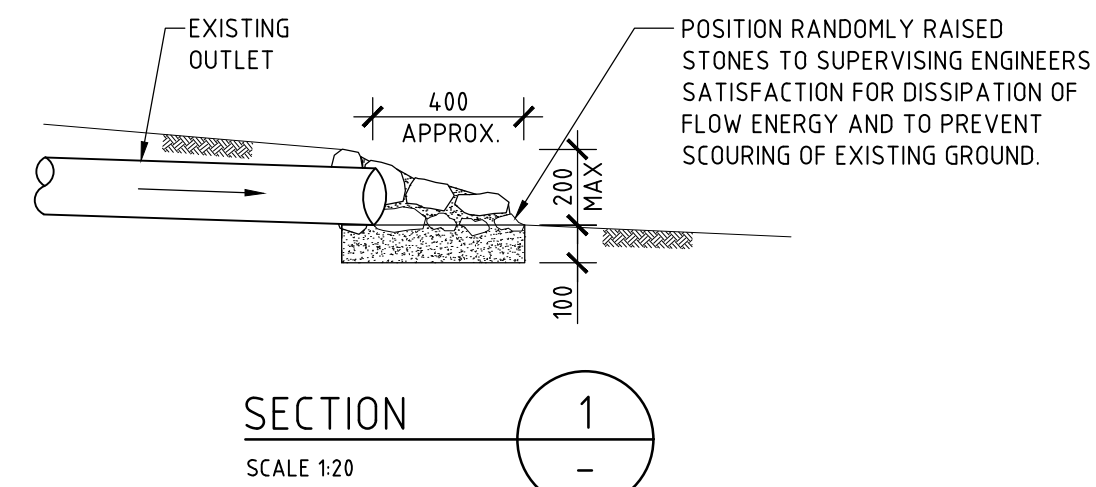
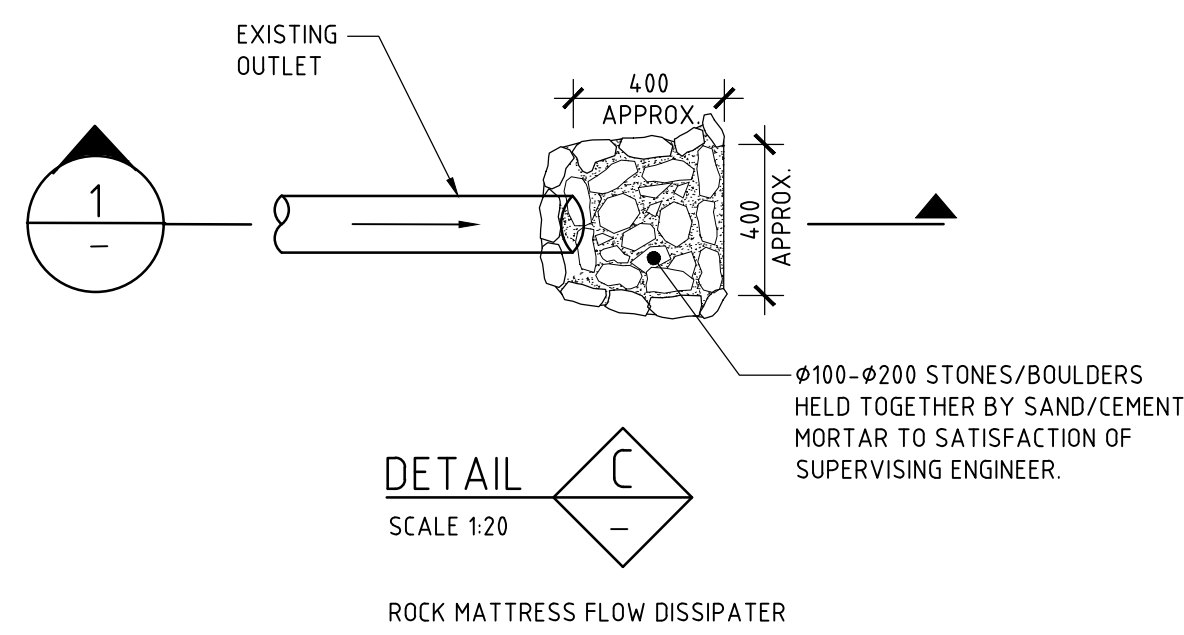
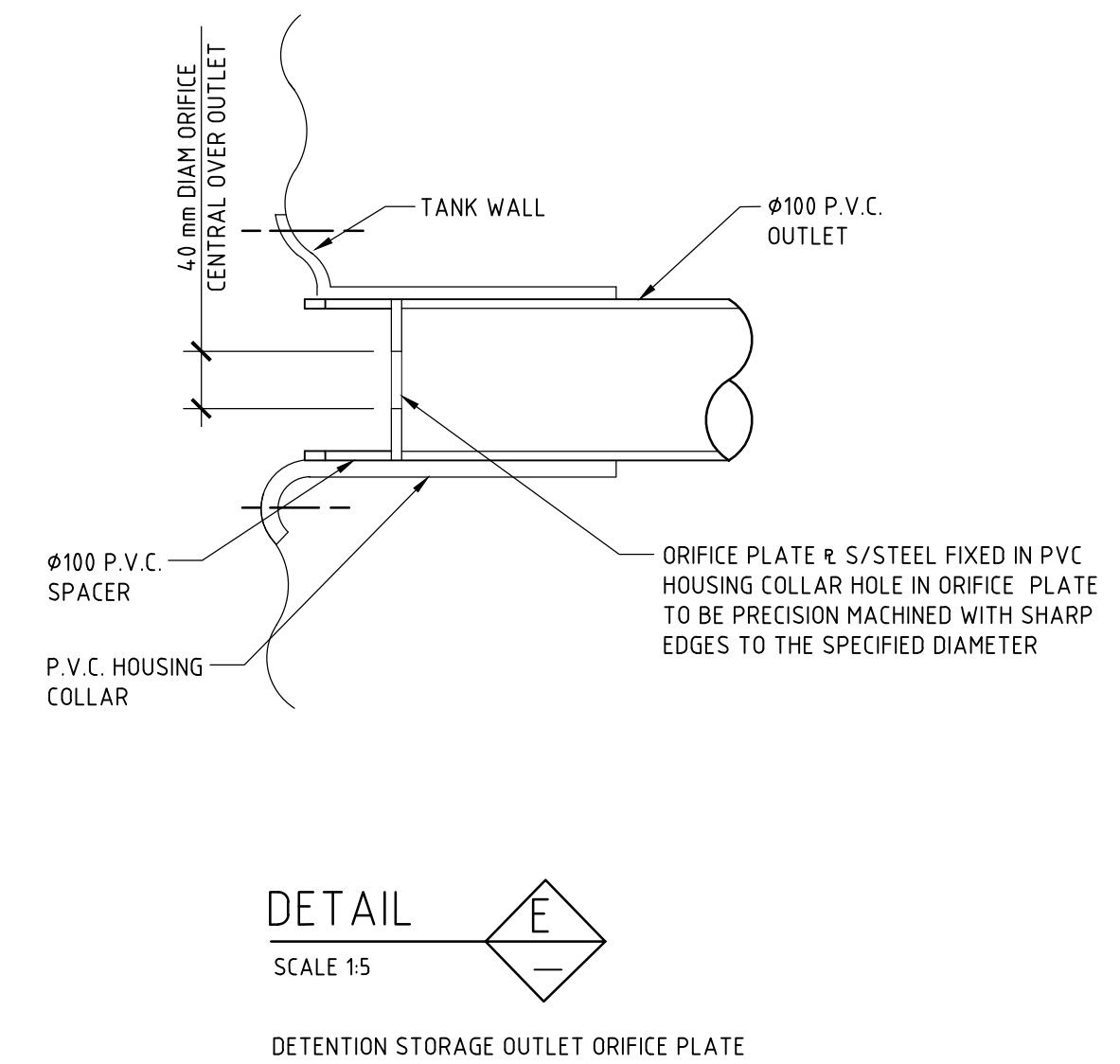
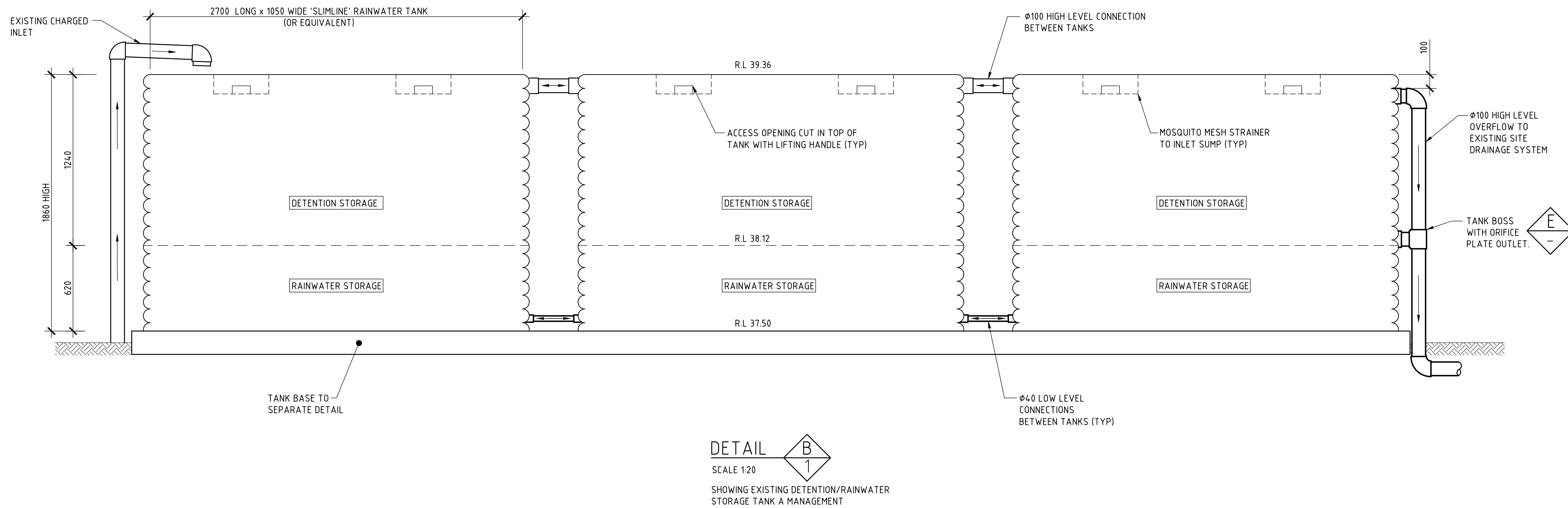
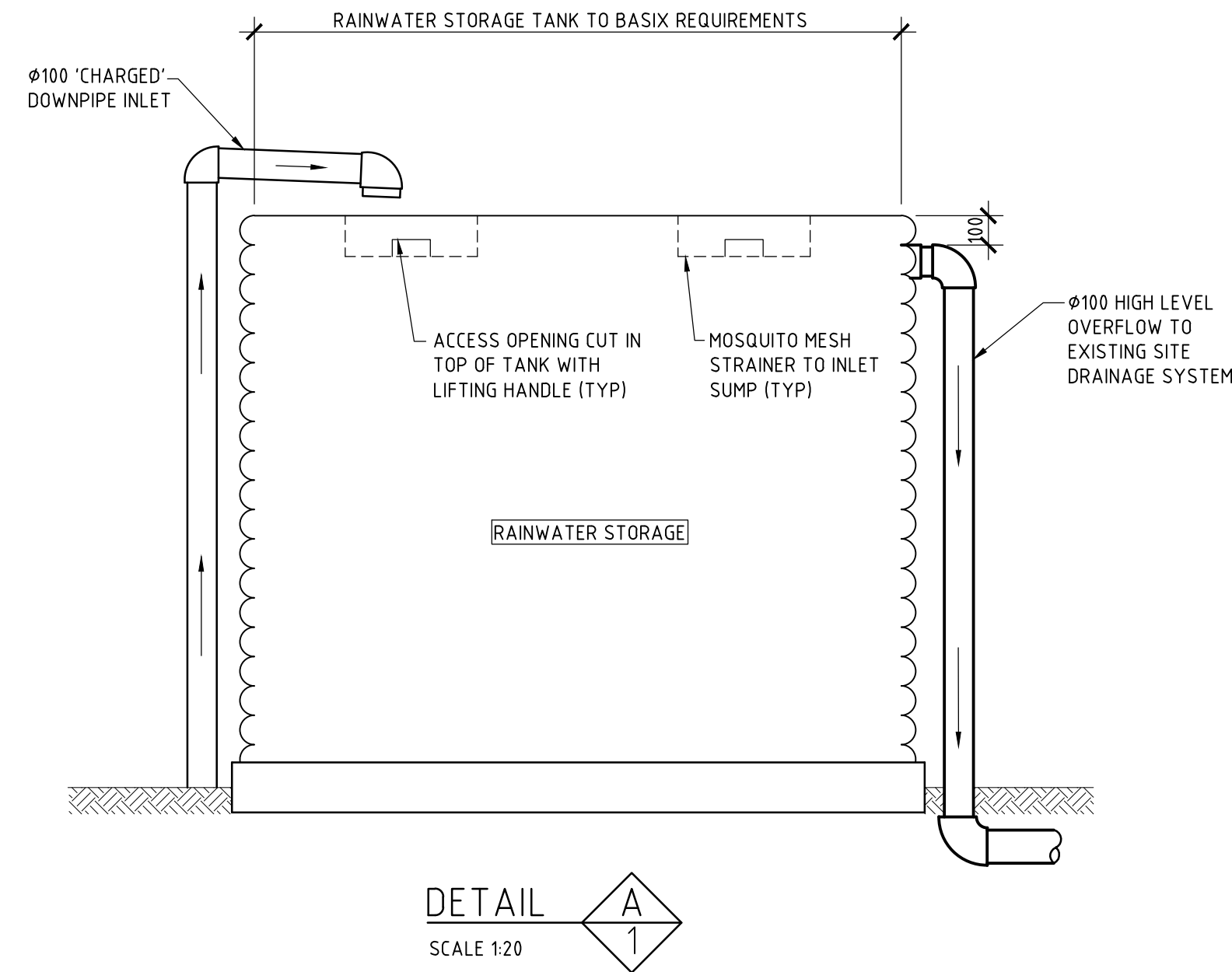
ISSUE DATE	REVISION
4 JULY 2023	RESPONSE TO COUNCIL REFERRAL

TITLE STORMWATER MANAGEMENT PLAN 16 GERTRUDE AVENUE, NEWPORT	
DRAWN JBP	DATE 26 OCTOBER 2022

CHECKED 	SCALE @ A1 1:100
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TAYLOR CONSULTING CIVIL & STRUCTURAL ENGINEERS

STORM-1/B



ISSUE	DATE	REVISION
1	21 JULY 2023	DETAILS C AND D ADDED

TITLE STORMWATER MANAGEMENT PLAN 16 GERTRUDE AVENUE, NEWPORT				TAYLOR CONSULTING CIVIL & STRUCTURAL ENGINEERS	STORM-2/A Revised 10/07/2023
DRAWN	DATE	CHECKED	SCALE		
JBP	4 JULY 2023	<i>[Signature]</i>	A1 1:20 1:5		
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