

NOTE: CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS

PROVIDE 2/ø100 P.V.C. OUTLETS TO KERB AT 1% MIN. AND 150mm APART

450 SQ. BY 600 DEEP BOUNDARY PIT

DENOTES NEW ø100 DOWNPIPE

RELOCATE EXISTING RAINWATER TANK TO STUDIO WALL AS SHOWN

PROVIDE STRAMIT 150 HALF ROUND EAVES GUTTERS OR APPROVED EQUIVALENT 7700mm<sup>2</sup> (MIN) EAVES GUTTER (TYP)

PROVIDE 100 WIDE GRATED DRAIN TO CONCRETE PATHWAY WITH FALLS TO SUIT (TYP)

PROVIDE 200 SQ. INLET TRAY TO REAR TERRACE WITH TILED FALLS TO SUIT TO CONNECT INTO OSD TANK BELOW (TYP)

200 WIDE BY 100 DEEP BOX GUTTER WITH 1% FALL TO OUTLET AND WITH PROVISION FOR EMERGENCY OVERFLOW

STORMWATER DETENTION TANK  
STORAGE VOLUME = 17,500 LITRES  
STORAGE DEPTH = 700mm  
TANK FLOOR = R.L. 49.80  
PROVIDE ø150 LOW LEVEL CONNECTION TO BOUNDARY PIT

400 WIDE BY 250 DEEP BOX GUTTER WITH 1% FALL TO OUTLETS AND WITH PROVISION FOR EMERGENCY OVERFLOW

PROVIDE PIT WITH CAPPED END CONNECTION TO CHARGED LINE TO ALLOW FOR PERIODICAL FLUSHING AND MAINTENANCE (TYP)

PROVIDE 2500 LITRE RAINWATER STORAGE TANK TO BASIX REQUIREMENTS & WITH ø100 HIGH LEVEL OVERFLOW OUTLET TO STORMWATER DETENTION TANK

300 SQ. BY 450 DEEP MAX SURFACE INLET PIT  
NOTE: ALL PITS TO HAVE 2.0m LONG SUB-SOIL TAIL INLET

PROVIDE SPREADER FOR DISCHARGE OF RUNOFF FROM UPPER TO LOWER ROOF AREA (TYP)

PROVIDE 150 WIDE GRATED DRAIN

NOTE: PLUMBER TO PERFORM WATER TESTING OF EXISTING PIPED SYSTEM TO DETERMINE CAPACITY AND STATE OF REPAIR. PLUMBER TO INSPECT & REPAIR DAMAGED SECTIONS OF EXISTING PIPE (INCLUDING DOWNPIPES) AS NECESSARY OR PROVIDE NEW DRAINAGE LINES WHERE NECESSARY SUBJECT TO THE APPROVAL BY THE SUPERVISING ENGINEER.

PROVIDE ø100 SUB-SOIL DRAINAGE LINE IN AGGREGATE SURROUND AND CONNECT TO HARDLINE AS NECESSARY

BENCHMARK NAIL IN TOP OF KERB  
R.L. 52.58 (A.H.D.)

SOUTHERN CROSS WAY

COOLALIE PLACE

SITE DRAINAGE PLAN  
SCALE 1:100

#### 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 (IN 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.

#### OSD SYSTEM DESIGN DATA

##### EXISTING SITE FLOWS (STATE OF NATURE)

100 YR ARI = 36 l/s  
5 YR ARI = 15 l/s

##### DEVELOPED SITE FLOWS

100 YR ARI = 29 l/s  
5 YR ARI = 15 l/s

##### DETENTION SYSTEM DATA

AREA DRAINING TO THE TANK = 392 m<sup>2</sup>  
IMPERVIOUS AREA DRAINING TO OSD = 284 m<sup>2</sup>  
MAX 100 YR TWL = R.L. 50.27  
ORIFICE DIAM = 83 mm  
SSR = 16 m<sup>3</sup>

NOTE: THE ANALYSIS WAS CONDUCTED USING DRAINS MODELLING SOFTWARE IN ACCORDANCE WITH SECTION 9.3.2 OF THE NORTHERN BEACHES COUNCIL WATER MANAGEMENT FOR DEVELOPMENT POLICY.

#### STORMWATER SYSTEM DESIGN DATA

##### SITE DATA

SITE AREA = 805.3 m<sup>2</sup> (100%)  
PROPOSED IMPERVIOUS AREA = 477.6 m<sup>2</sup> (59%)  
PROPOSED LANDSCAPED AREA = 327.7 m<sup>2</sup> (41%)  
EXISTING IMPERVIOUS AREA = 399.5 m<sup>2</sup> (50%)  
EXISTING LANDSCAPED AREA = 405.8 m<sup>2</sup> (50%)

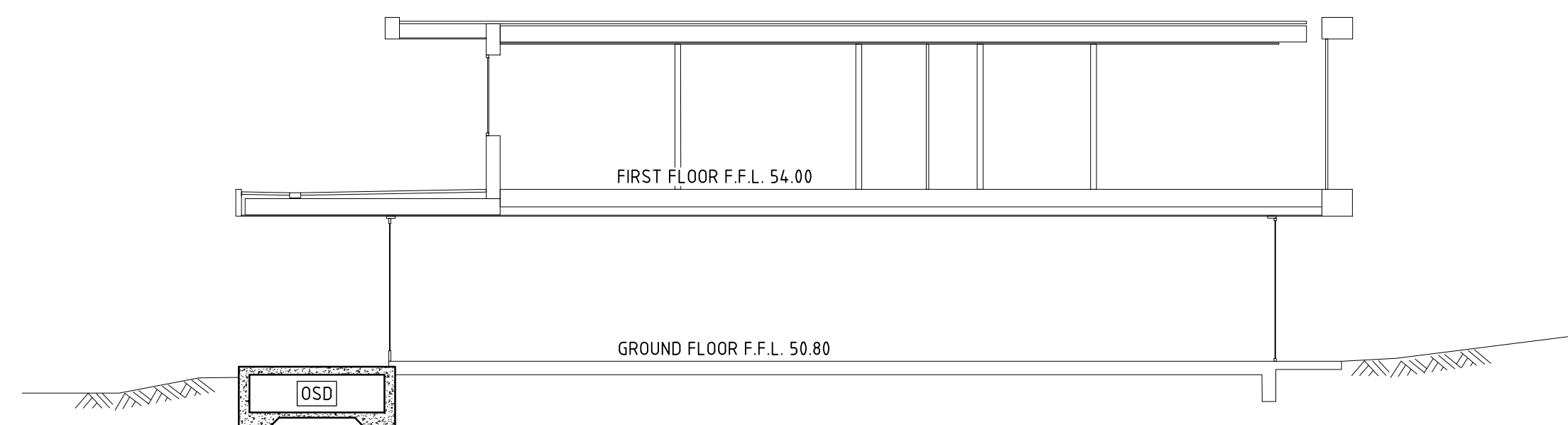
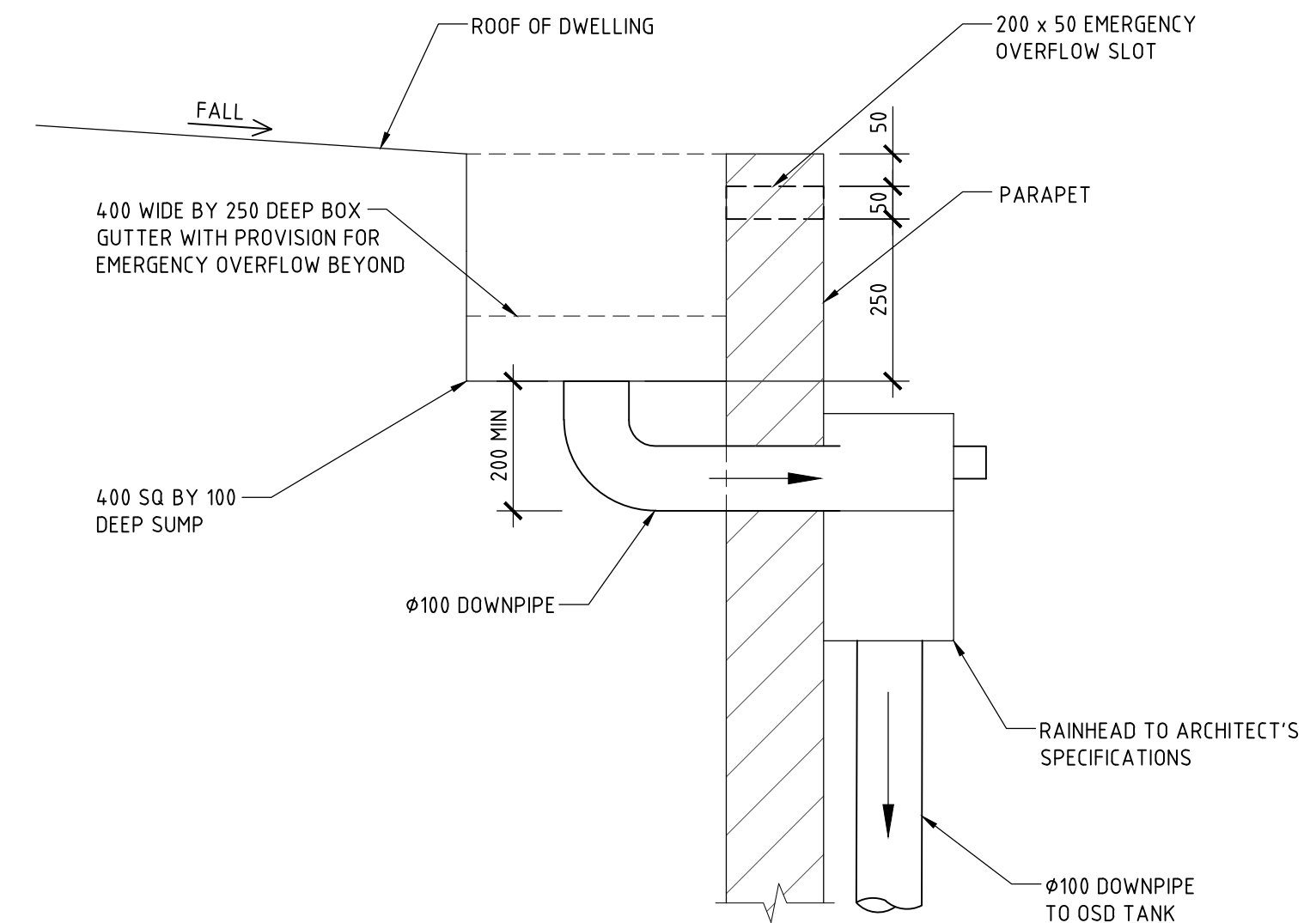
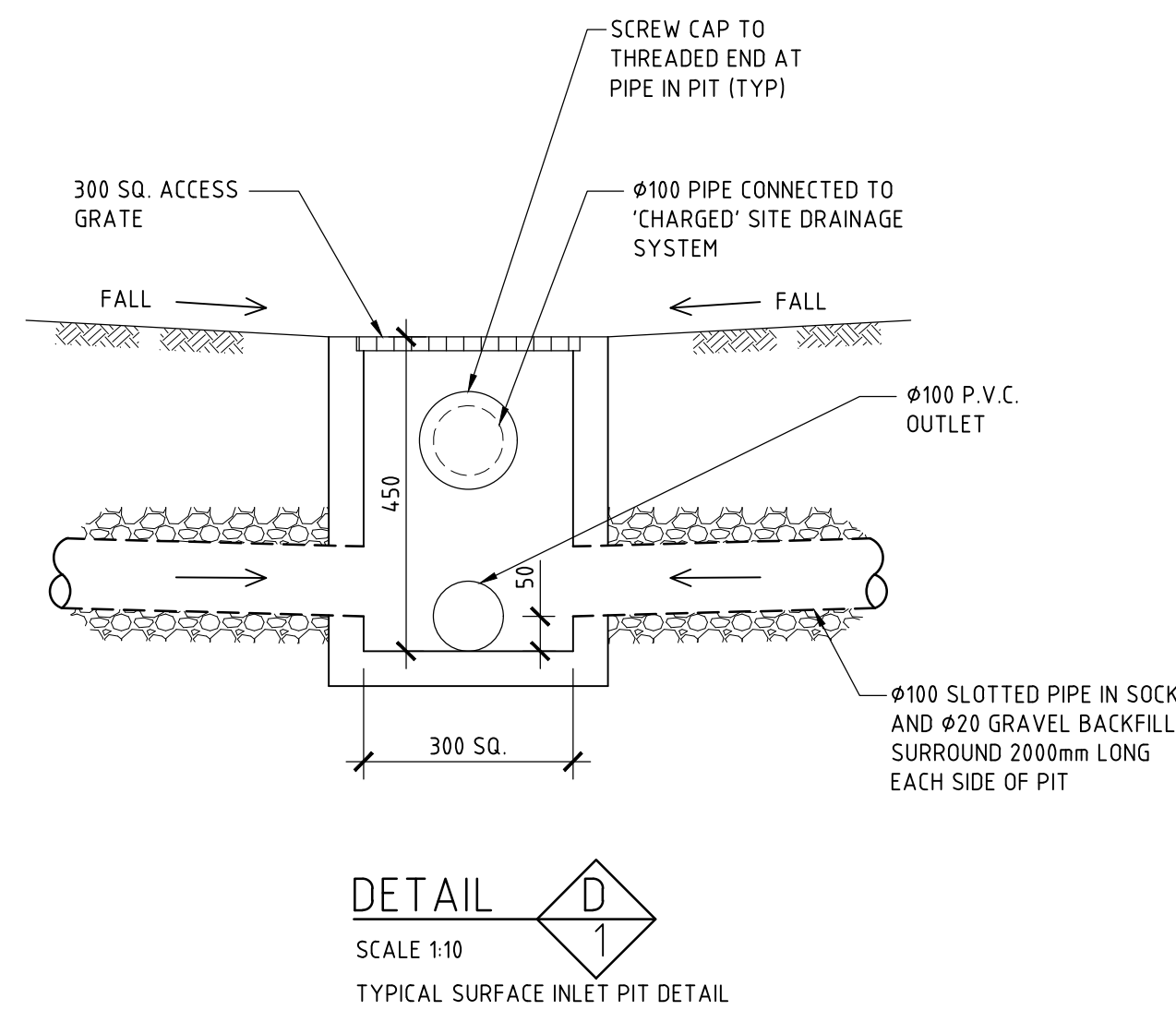
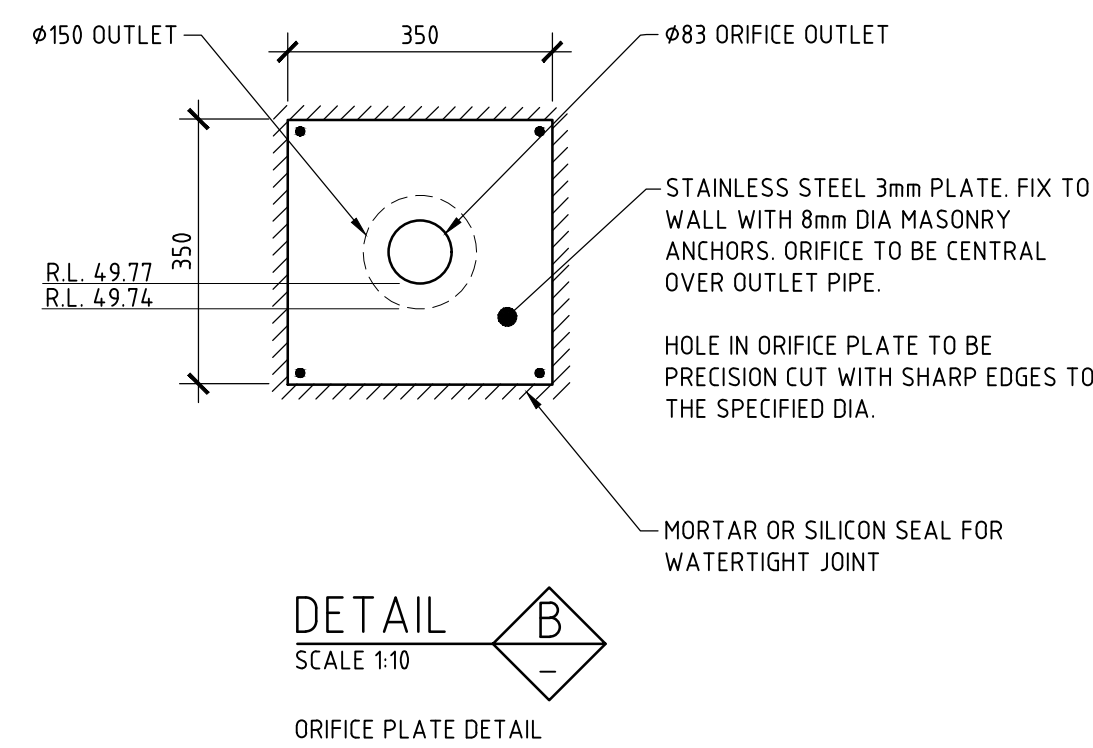
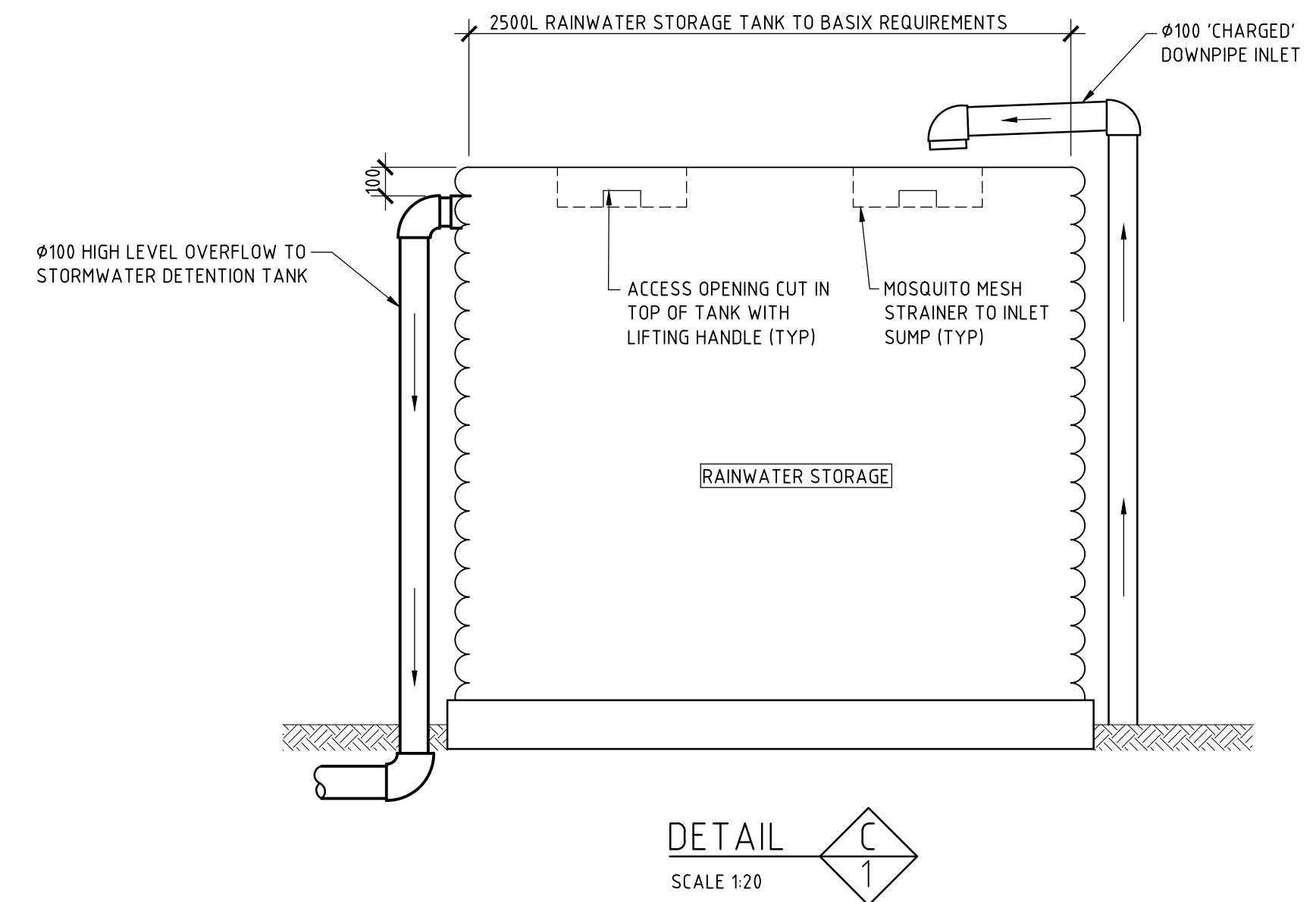
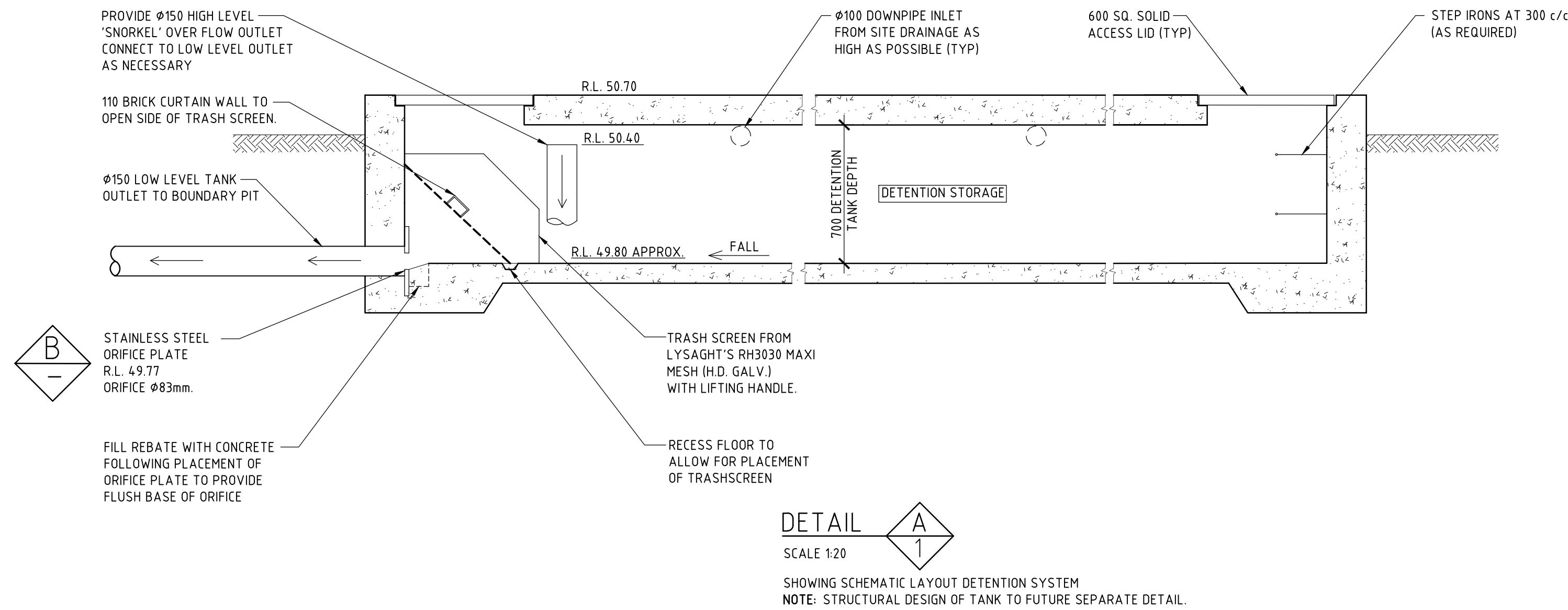
ISSUE DATE	REVISION
27 MAY 2025	PERGOLA BOX GUTTER ADDED TO SUIT ARCHITECT'S COMMENTS

TITLE  
**STORMWATER MANAGEMENT PLAN**  
**1 COOLALIE PLACE, ALLAMBIE HEIGHTS**

DRAWN: MDB  
ENGINEER: DMS  
DATE: 19 MAY 2025  
CHECKED: [Signature]  
SCALE: @ A1  
1:100  
BY: BE Civil (Hons) MIE Aust.



DRAWING NO.  
**STORM-1A**



**MAIN DWELLING LONG-SECTION**  
SCALE 1:100  
SHOWING LOCATION OF OSD TANK

ISSUE DATE	REVISION
27 MAY 2025	DETAIL FOR PERGOLA BOX GUTTER ADDED

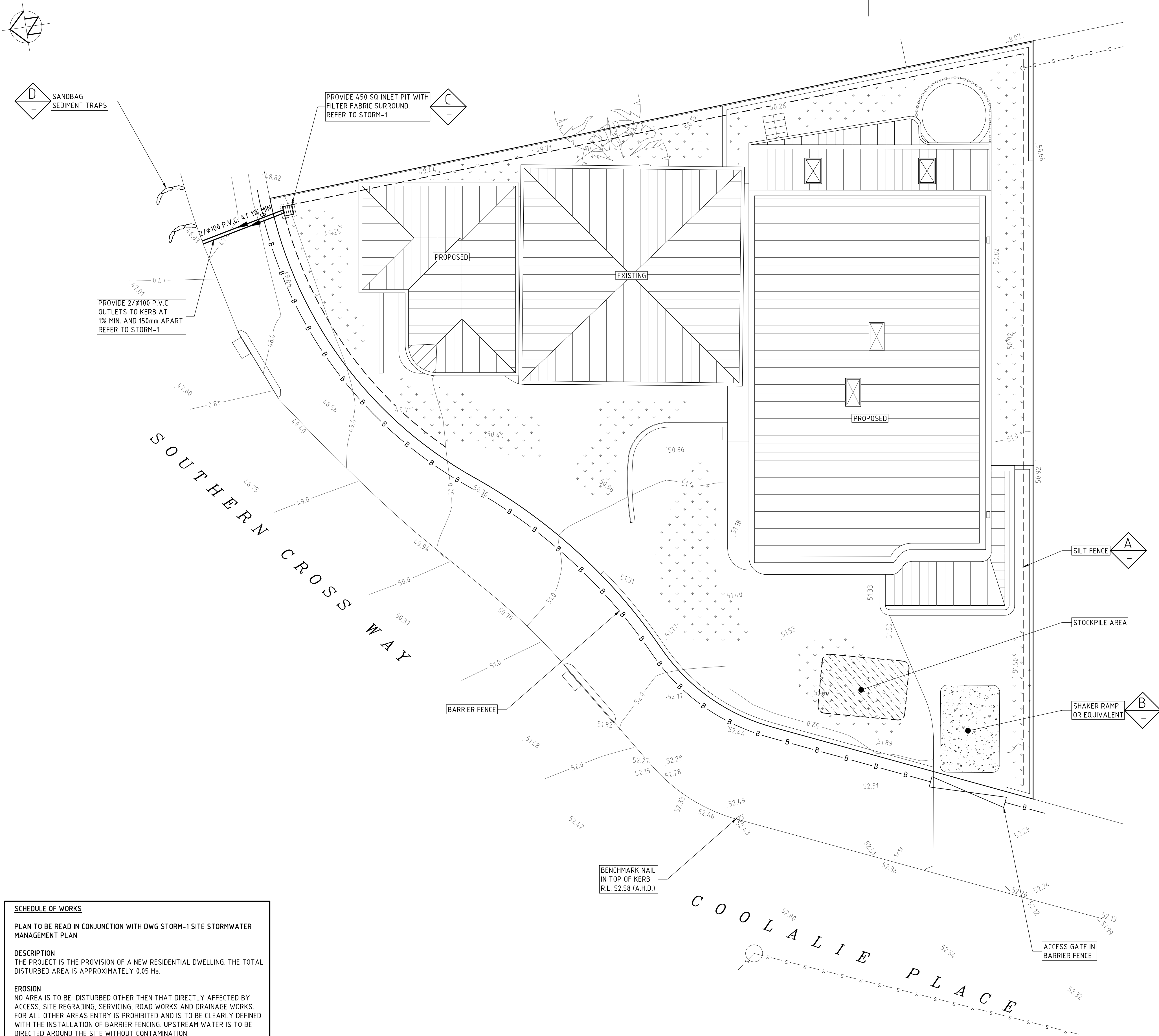
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DRAWN	DATE	CHECKED	SCALE
MDR	19 MAY 2025	<i>[Signature]</i>	1:100 1:20 1:10
ENGINEER	DMS	BE Civil (Hons) MIE Aust.	

**TAYLOR**

STORM-2/A

DRAWING NO.





#### SCHEDULE OF WORKS

PLAN TO BE READ IN CONJUNCTION WITH DWG STORM-1 SITE STORMWATER MANAGEMENT PLAN

#### DESCRIPTION

THE PROJECT IS THE PROVISION OF A NEW RESIDENTIAL DWELLING. THE TOTAL DISTURBED AREA IS APPROXIMATELY 0.05 Ha.

#### EROSION

NO AREA IS TO BE DISTURBED OTHER THEN THAT DIRECTLY AFFECTED BY ACCESS, SITE REGRADING, SERVICING, ROAD WORKS AND DRAINAGE WORKS. FOR ALL OTHER AREAS ENTRY IS PROHIBITED AND IS TO BE CLEARLY DEFINED WITH THE INSTALLATION OF BARRIER FENCING. UPSTREAM WATER IS TO BE DIRECTED AROUND THE SITE WITHOUT CONTAMINATION.

#### SEDIMENT CONTROL

CONTROL WILL BE VIA THE INSTALLATION OF SILT FENCES AS SHOWN ON PLAN. STOCK PILES ARE TO BE LOCATED IN AREAS SHOWN ON THE PLAN (CLEAR OF SERVICING, WATERCOURSES, ROAD AND DRAINAGE WORKS) AND PROVIDED WITH SILT FENCES ON THEIR DOWNSTREAM SIDE.

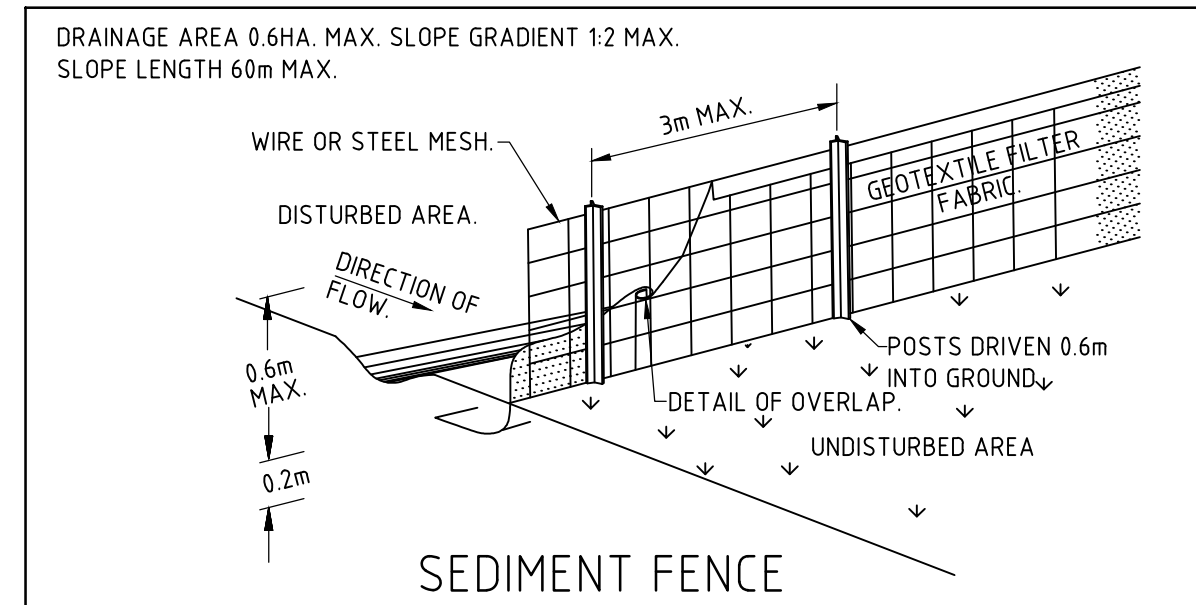
#### PHASING OF WORKS

1. INSTALL ALL BARRIER AND SILT FENCING. BARRIER FENCING MAY BE ERECTED AND REMOVED AS NECESSARY TO SUIT STAGING OF WORKS.
2. INSTALL ALL TEMPORARY DRAINAGE STRUCTURES AS NECESSARY.
3. STRIP & STOCKPILE TOPSOIL.
4. UNDERTAKE SITE DEVELOPMENT.
5. AS EARTHWORKS ARE COMPLETED THESE AREAS ARE TO BE TOPSOILED, SEEDED AND MULCHED OR PAVED WITHIN 20 WORKING DAYS.
6. ONLY AT THE COMPLETION OF WORKS AND STABILIZATION OF AREAS UPSTREAM ANY CONTROL DEVICES TO BE REMOVED.

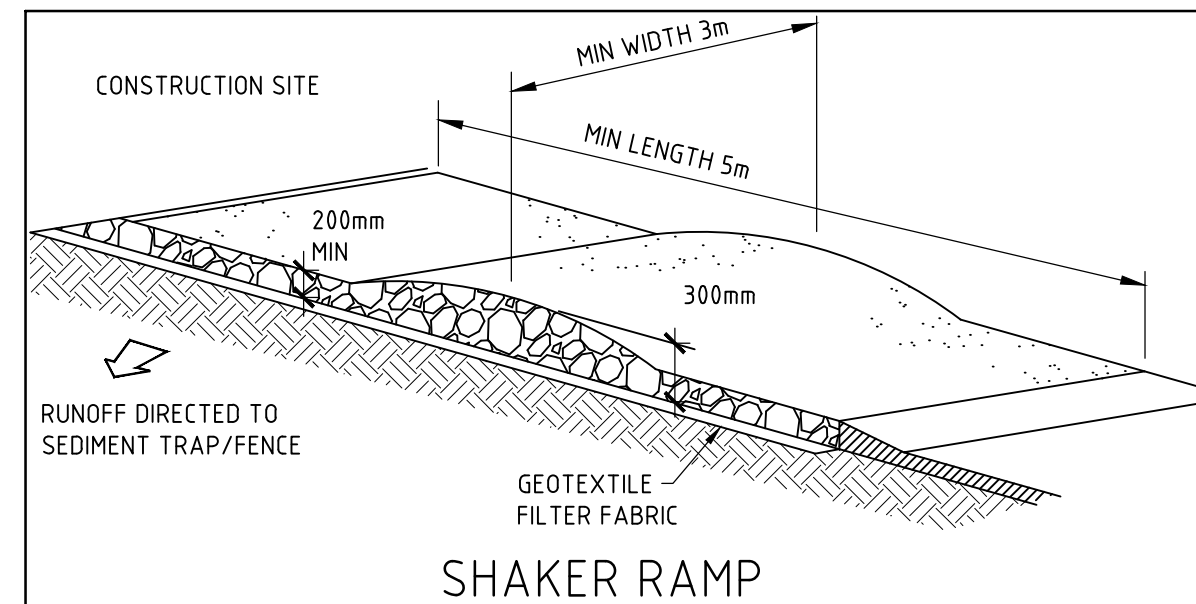
#### EROSION & SEDIMENT CONTROL PLAN

SCALE 1:100

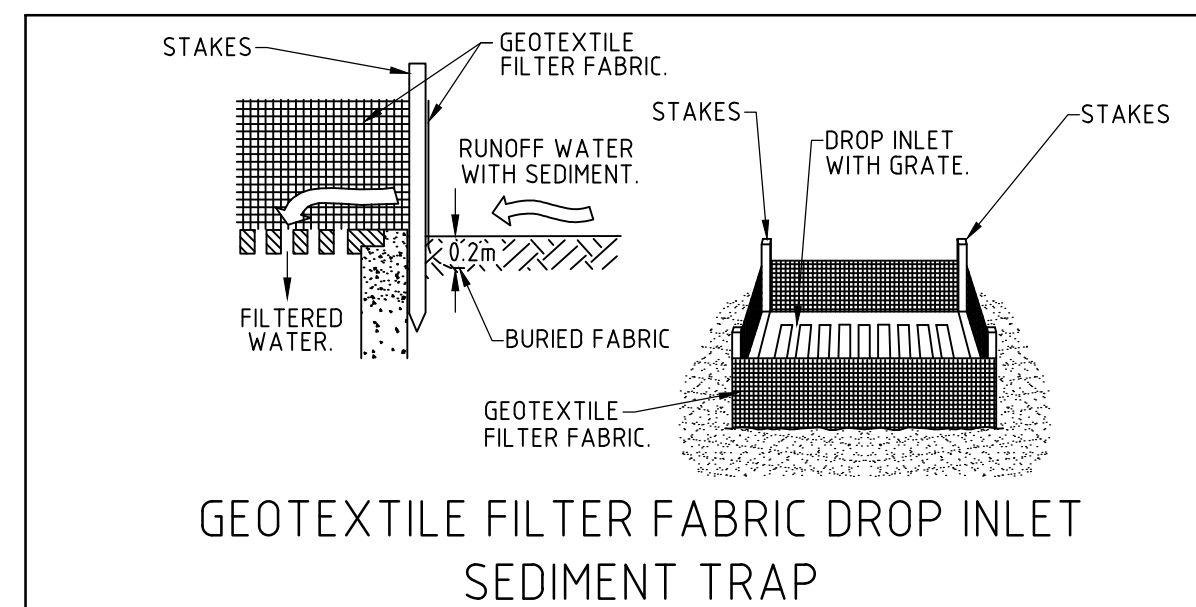
SHOWING TEMPORARY PROVISIONS FOR THE CONTROL OF SEDIMENT AND EROSION ON THE SITE DURING CONSTRUCTION



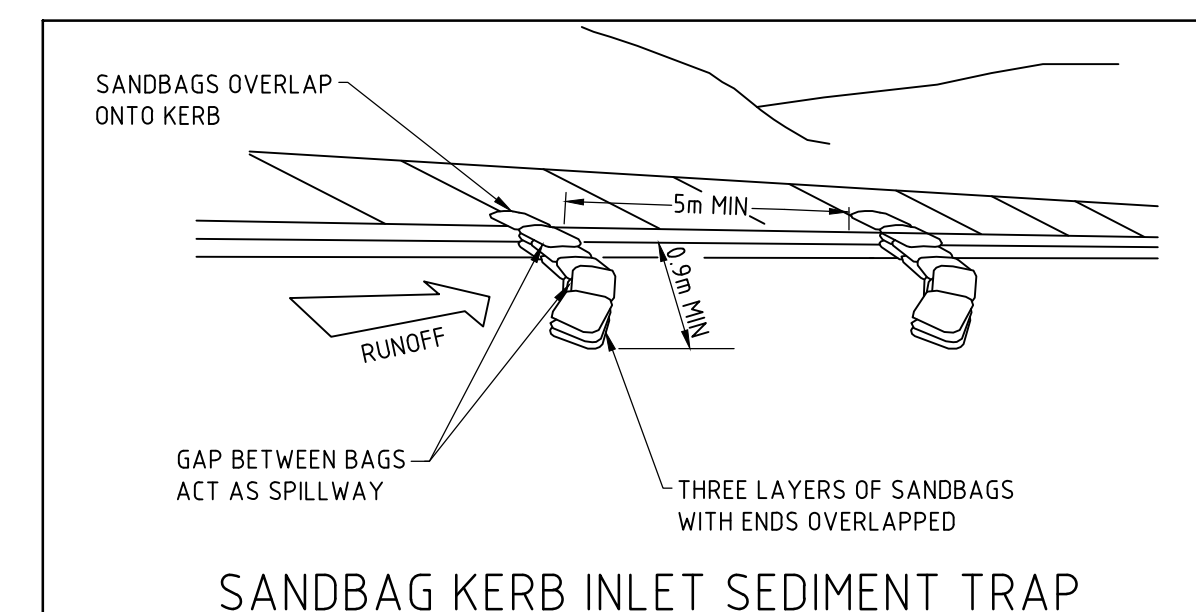
DETAIL A  
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DETAIL B  
NOT TO SCALE



DETAIL C  
NOT TO SCALE



DETAIL A  
NOT TO SCALE

ISSUE DATE	REVISION
27 MAY 2025	PLAN AMENDED TO SUIT LATEST ARCHITECTURAL PLANS

TITLE EROSION AND SEDIMENT CONTROL PLAN 1 COOLALIE PLACE, ALLAMBIE HEIGHTS			
DRAWN MDB	DATE 19 MAY 2025	CHECKED 	SCALE @ A1 1:100
ENGINEER DMS			



DRAWING NO  
STORM-3/A