



NORTHERN SYDNEY
Seascope
Suite 7 22-27 Fisher Rd
Dee Why NSW 2099

BLUE MOUNTAINS
Shop 1
274 Macquarie Rd
Springwood NSW 2777

TAYLORCONSULTING.NET.AU

CONSULTING ENGINEERS
Civil
Structural
Stormwater & Flood

26 September 2024

Chief Executive Officer
Northern Beaches Council
725 Pittwater Road
DEE Why NSW 2099

Address of the Project: **6 Coronation Street, Mona Vale**

Description of Project: **Stormwater Management Plan - Alterations and Additions**

With reference to the Development Application for the above property, please find enclosed a copy of the site Stormwater Management Plan, **STORM-1**, and Stormwater Management Details, **STORM-2**, for your perusal.

The stormwater plan shows runoff collected from the proposed and existing roof areas, connecting to the kerb and gutter in Coronation Street via the proposed drainage system. The side discharge has been reduced to suit the flow connection for a single outlet utilising on-site detention.

Note that it is proposed to provide a detention tank adjacent to the site's southern boundary. Analysis was conducted using DRAINS Modelling Software and in accordance with Section 9.3.1 Onsite Stormwater Disposal Requirements Region 1 – Northern Catchments of the Northern Beaches Council Water Management For Development Policy.

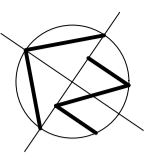
This is to certify that the Stormwater Management Plan layout as shown on **STORM-1** and **STORM-2** by Taylor Consulting Civil & Structural Engineers has been designed in accordance with section 3.1.2, 'Drainage', of the Building Code of Australia Housing Provision, AS/NZS 3500.3.2 – Stormwater Drainage and Northern Beaches Council's Water Management for Development Policy.

Should you require any further information please contact the undersigned.

Yours faithfully
TAYLORCONSULTING.NET.AU

D.M.Schaefer - Director
B.E Civil (Hons) M.I.E. Aust. N.E.R.





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.

BENCHMARK NAIL IN TOP OF KERB R.L. 22.48 (A.H.D.)

150 WIDE GRATED DRAIN

PROVIDE 2/Ø100 P.V.C. OUTLETS TO KERB AT 1% MIN. AND 150mm APART

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

450 SQ. BOUNDARY PIT GRATE R.L. - 22.50
INVERT R.L. - 22.10
SUMP R.L. - 21.90
WITH TRASH SCREEN FOR POLLUTION CONTROL

100 WIDE GRATED DRAIN

PROVIDE 'SPS TRUFLO 100mm WITH ALL-PURPOSE PLANTER BOX ADAPTER' OR EQUIVALENT TO BALCONY AREAS (TYP)

PROVIDE ATLANTIS DRAINAGE CELL UNDERLAY (OR EQUIVALENT) TO DRAIN PLANTER BASE (TYP). PLANTER BASE DRAINAGE LAYOUT TO FUTURE SEPARATE DETAIL.

PROVIDE 100 WIDE 'GAP' IN HOB FOR EMERGENCY OVERFLOW (TYP)

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

PROVIDE STRAMIT 150 HALF ROUND EAVES GUTTERS OR APPROVED EQUIVALENT 7700mm² (MIN) EAVES GUTTER

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

PROVIDE 'SPS 130mm SQUARE VARI-LEVEL VERTICAL DRAIN WITH 100mm OUTLET' OR EQUIVALENT TO BALCONY AREAS (TYP)

PROVIDE 200 WIDE BY 150 DEEP RAIN HEAD WITH Ø100 OUTLET FROM BASE AND PROVISION FOR EMERGENCY OVERFLOW (TYP)

NOTE: Ø100 'CHARGED' DOWNPIPES TO HAVE INSPECTION OPENING IN LOW POINT OF LINE FOR MAINTENANCE & CLEANING (TYP)

STORMWATER DETENTION TANK
STORAGE VOLUME = 5000 LITRES
STORAGE LENGTH = 2700mm
STORAGE WIDTH = 1050mm
STORAGE DEPTH = 1860mm
TANK FLOOR = R.L. 25.20
PROVIDE Ø100 LOW LEVEL CONNECTION TO BOUNDARY PIT

NOTE: Ø100 DOWNPIPE (TYP). ALL DOWNPIPES DRAINING TO DETENTION STORAGE TANK TO BE WATERTIGHT TO 10m MIN. ABOVE THE TOP OF THE DETENTION TANK (TYP)

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.

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 766.6 m² (100%)
PROPOSED IMPERVIOUS AREA = 433.1 m² (56%)
PROPOSED LANDSCAPED AREA = 333.5 m² (44%)

NORTHERN BEACHES COUNCIL - REGION 1 NORTHERN CATCHMENTS

TOTAL INCREASE IN IMPERVIOUS AREA = 50m²; OSD REQUIRED

OSD SYSTEM DESIGN DATA

EXISTING SITE FLOWS

5 YR ARI = 14 l/s
100 YR ARI = 34 l/s

DEVELOPED SITE FLOWS

5 YR ARI = 14 l/s
100 YR ARI = 30 l/s

DETENTION SYSTEM DATA

AREA DRAINING TO THE TANK = 166.7 m²
MAX. 100YR TWL = RL 26.97
ORIFICE DIAM = 4.0 mm (MODELED AT 35 mm)
SSR = 4.73 m³

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 766.6 m² (100%)
PROPOSED IMPERVIOUS AREA = 433.1 m² (56%)
PROPOSED LANDSCAPED AREA = 333.5 m² (44%)
EXISTING IMPERVIOUS AREA = 218.9 m² (29%)
EXISTING LANDSCAPED AREA = 547.7 m² (71%)

ISSUE DATE	REVISION

TITLE
**STORMWATER MANAGEMENT PLAN
6 CORONATION STREET, MONA VALE**

DRAWN: LI
ENGINEER: JPL

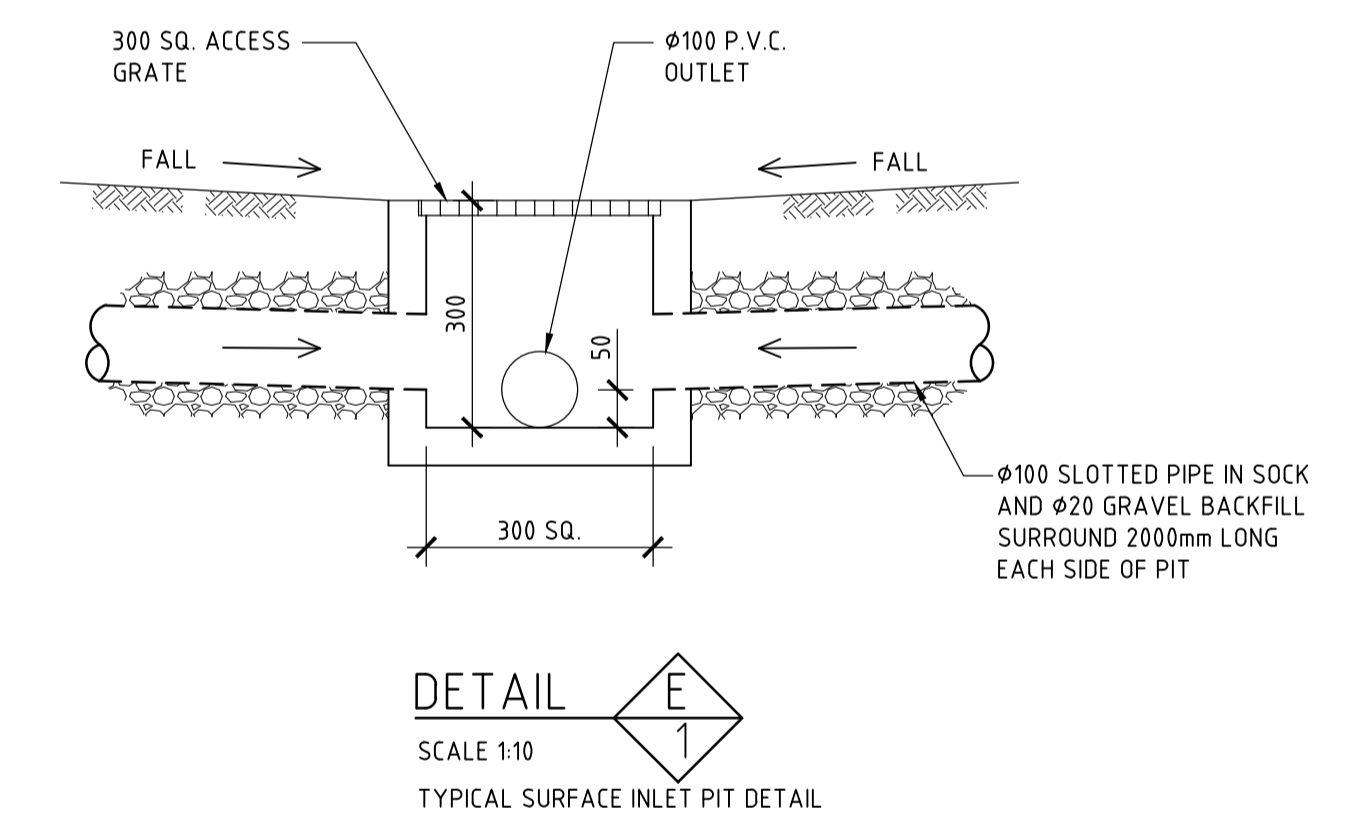
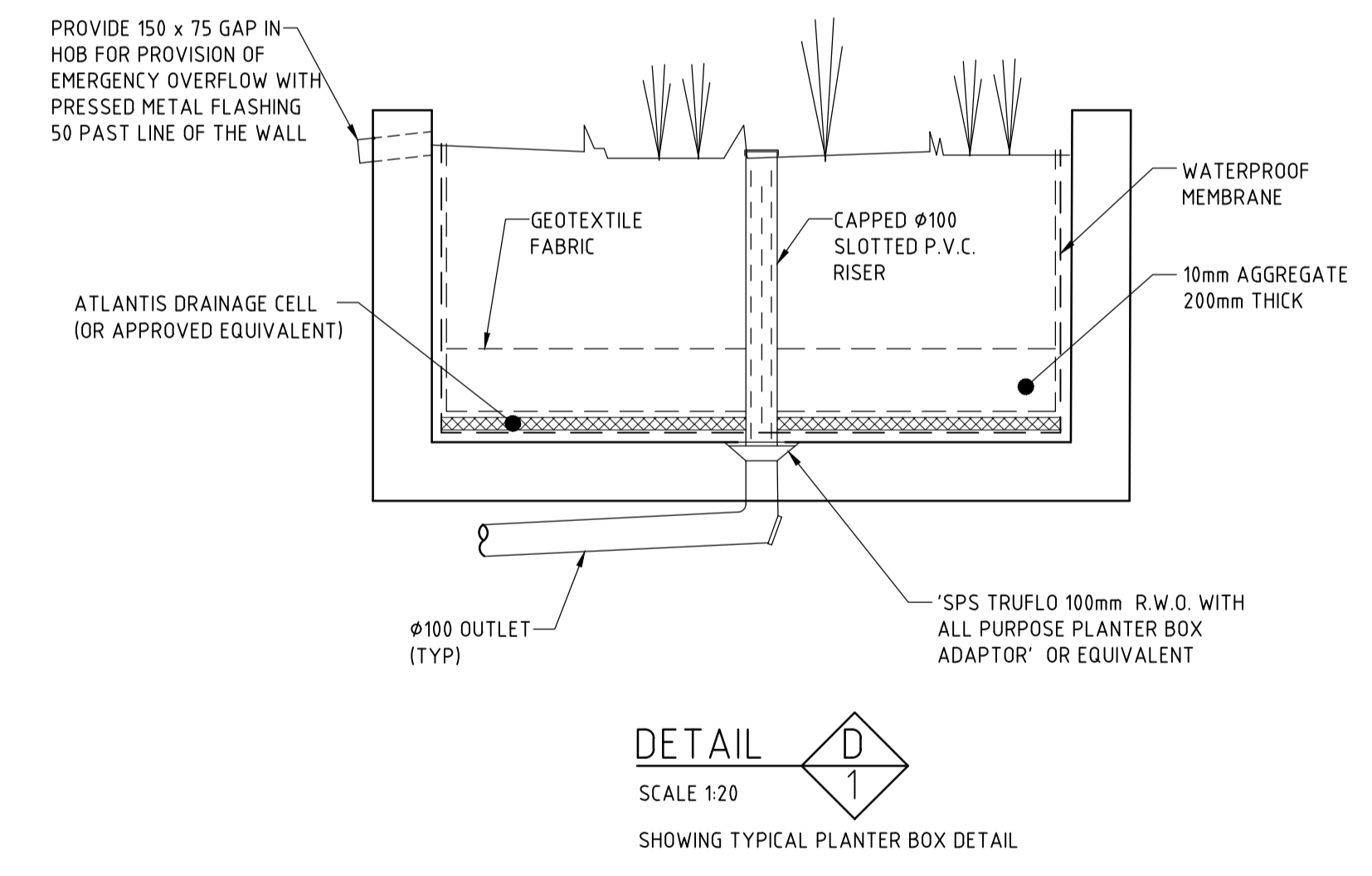
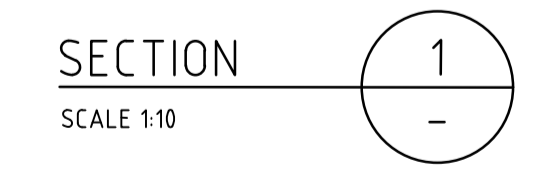
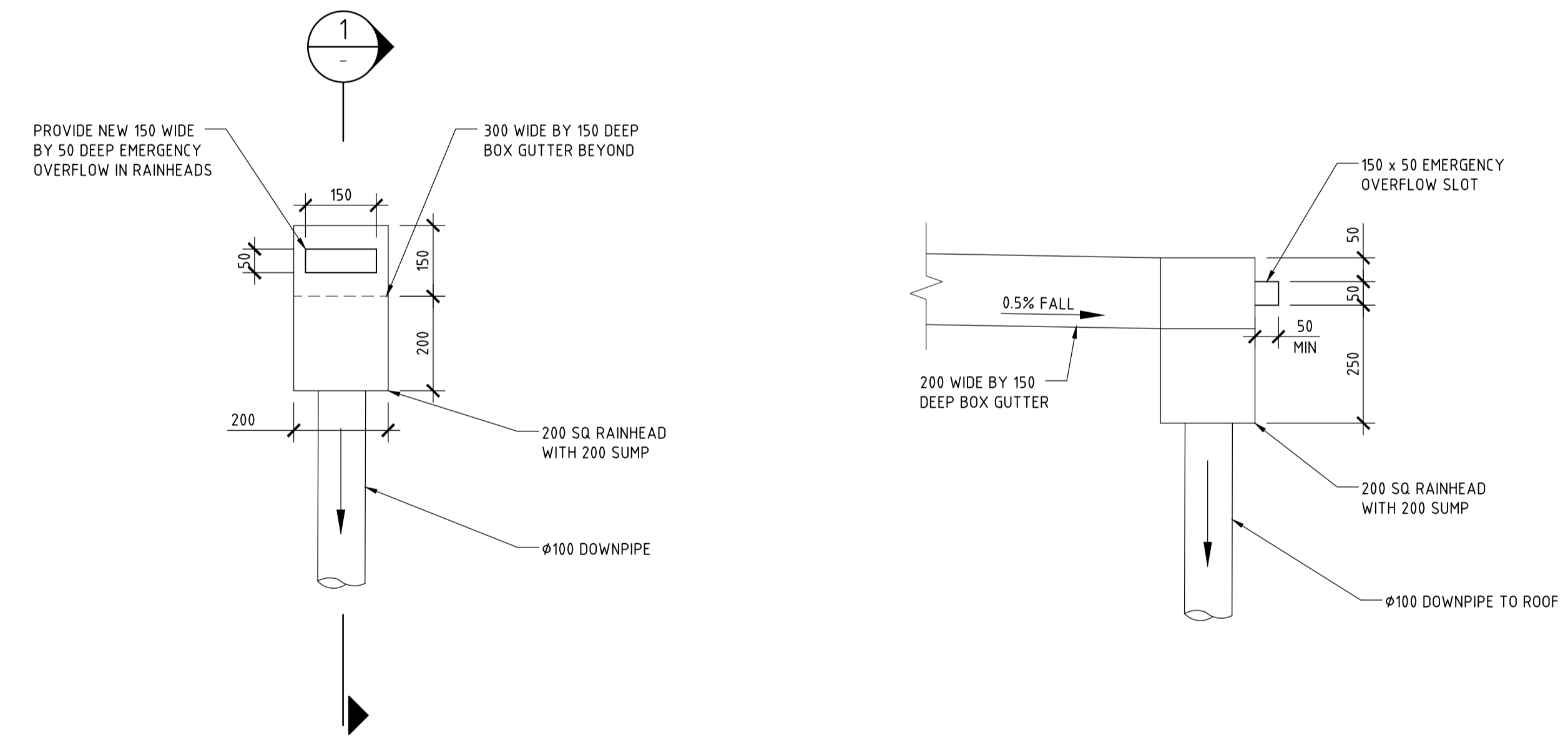
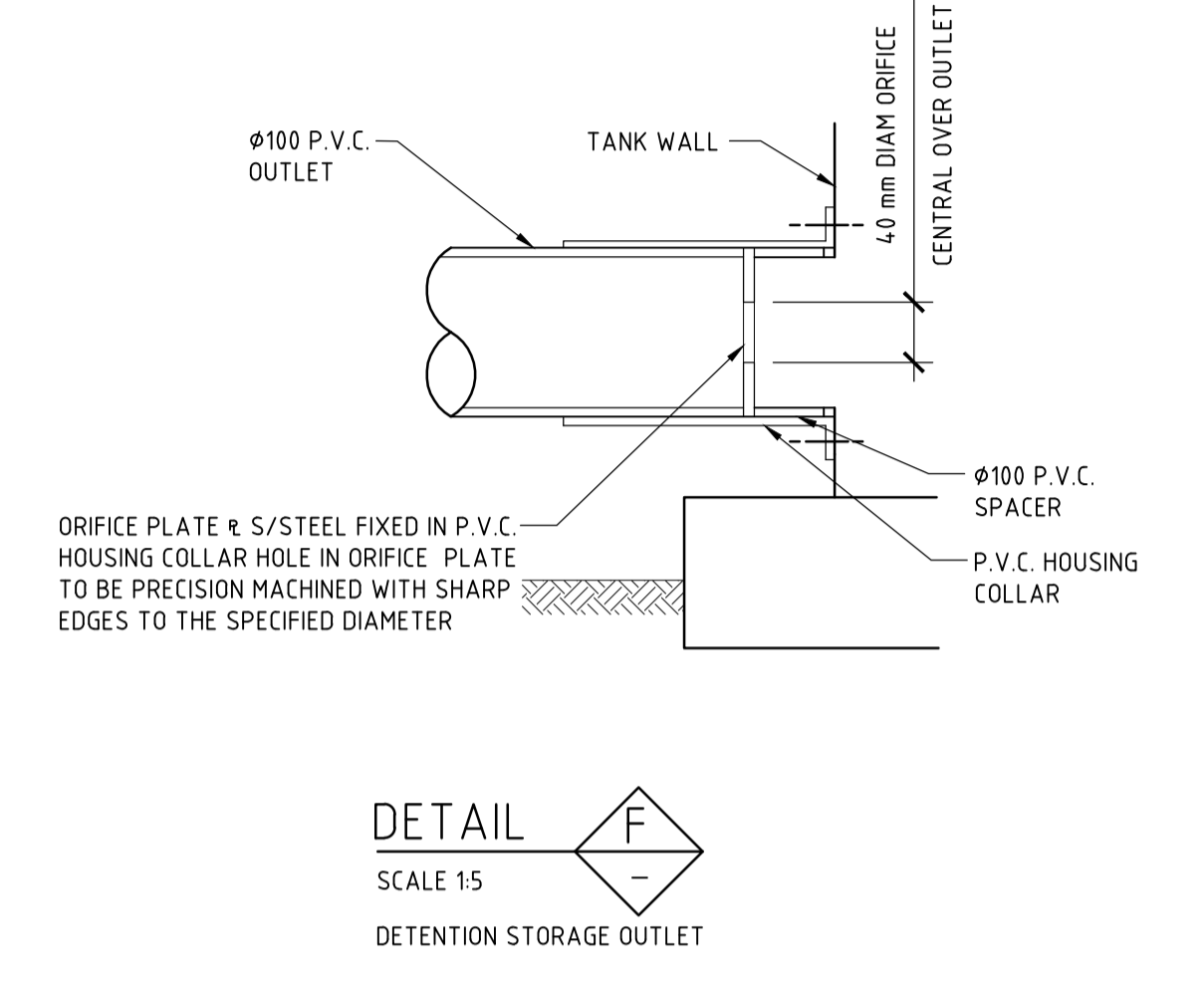
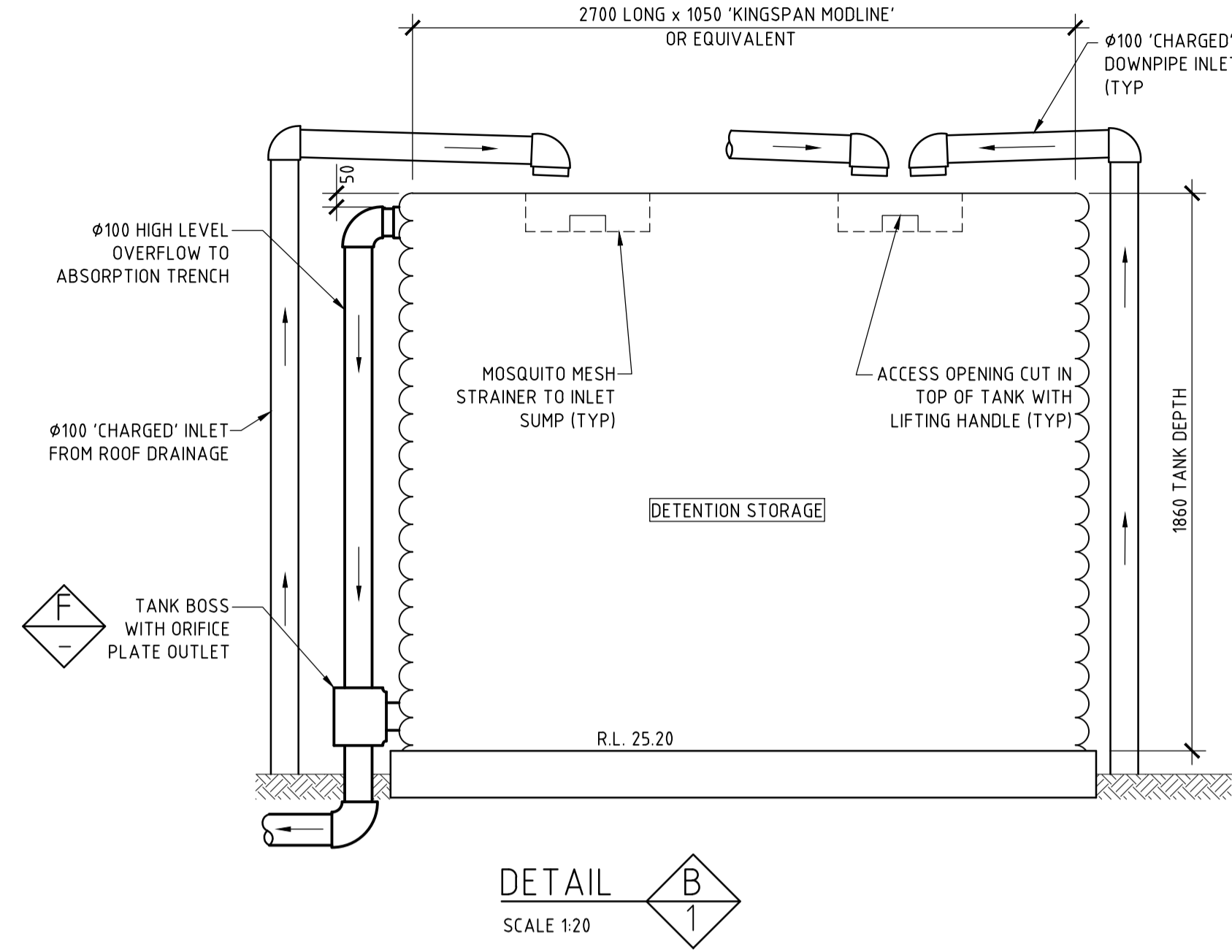
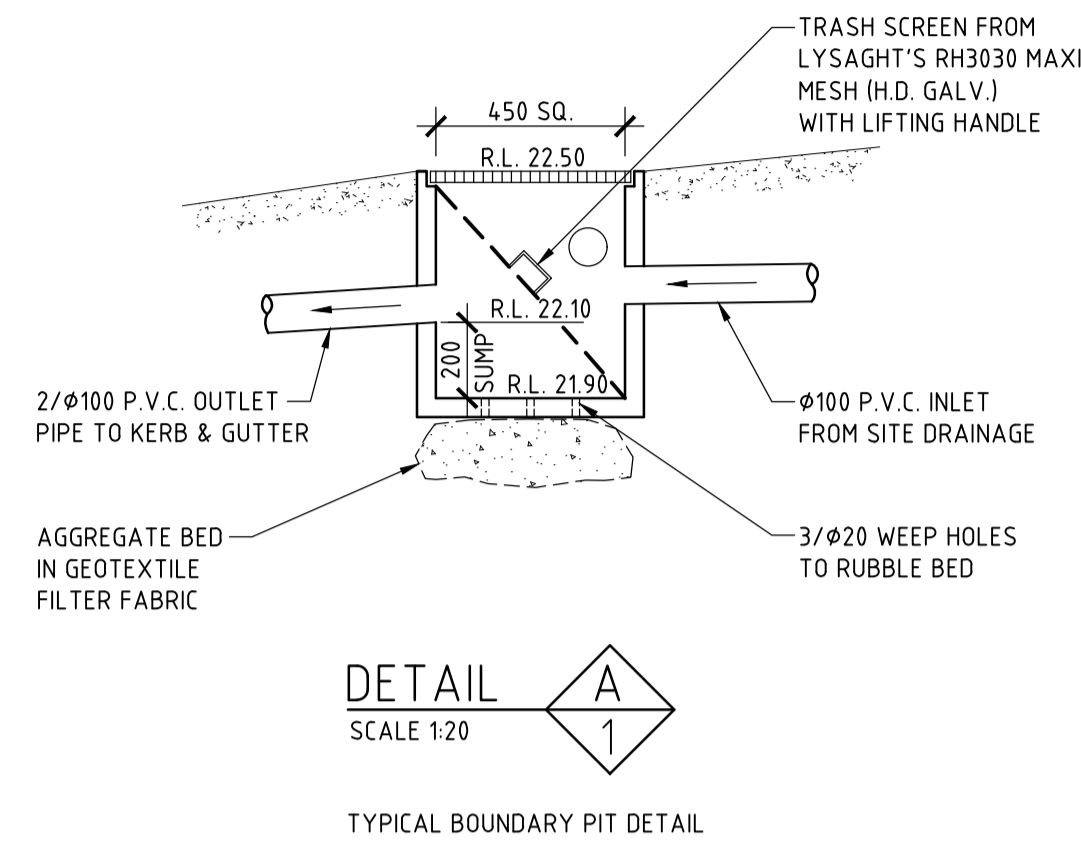
DATE: 26 SEPTEMBER 2024

CHECKED: [Signature]
BY: BE Civil (Hons) MIE Aust.

SCALE: A1
1:100

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CIVIL & STRUCTURAL ENGINEERS

DRAWING NO.
STORM-1



ISSUE DATE	REVISION

TITLE STORMWATER MANAGEMENT DETAILS 6 CORONATION STREET, MONA VALE			
DRAWN LI	DATE 26 SEPTEMBER 2024	CHECKED <i>[Signature]</i>	SCALE @ A1 1:20 1:10 1:5
ENGINEER JPL	BE Civil (Hons) MIE Aust.		

TAYLOR CONSULTING
CIVIL & STRUCTURAL ENGINEERS

DRAWING NO
STORM-2