STORMWATER

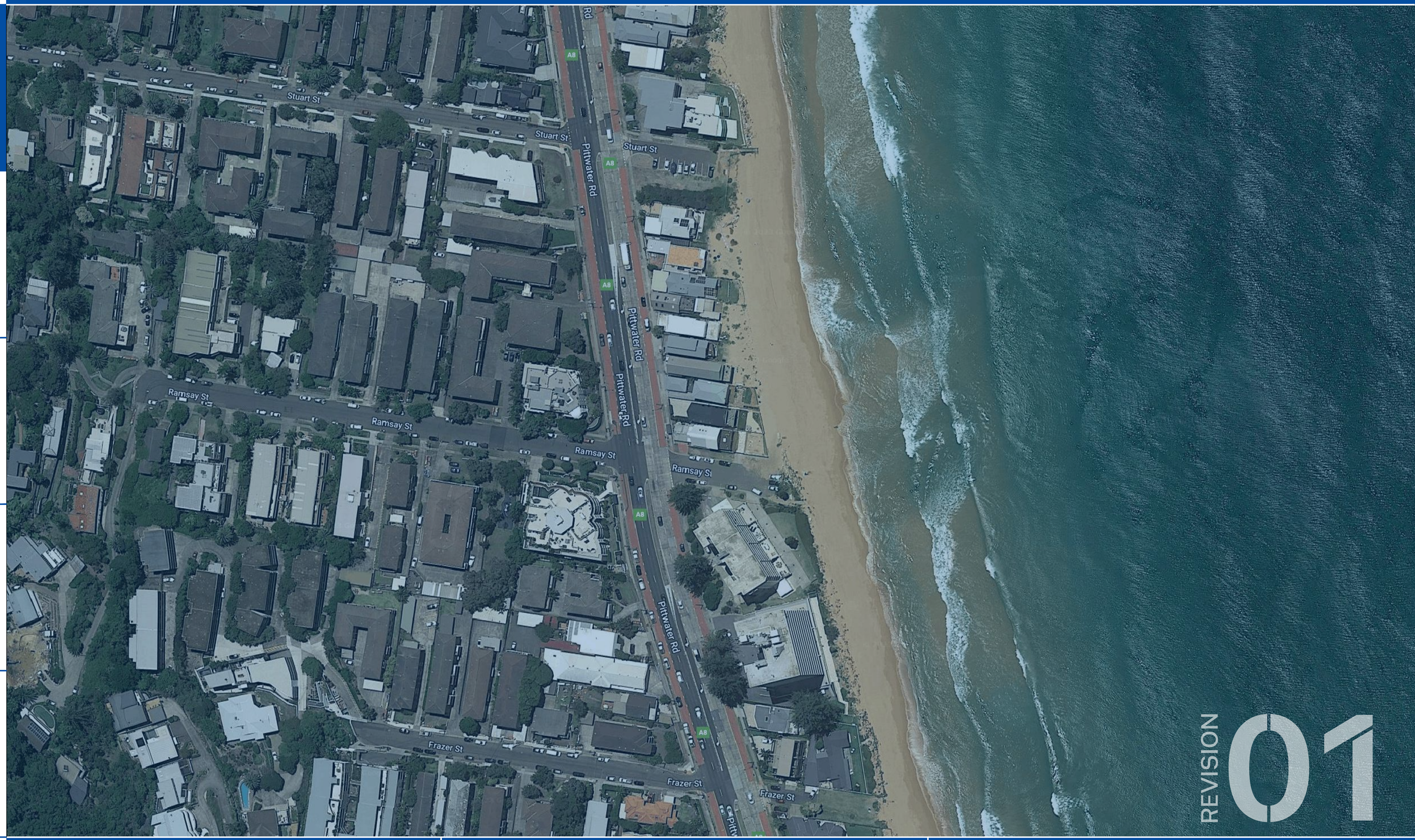
CIVIL

FLOODING

STRUCTURAL

REMEDIAL

20230277



PROPOSED STORMWATER DRAINAGE PLANS

Proposed Residential Development
1130 Pittwater Road Collaroy 2097

Reference
20230277-S4.55-SW-DWG-01

Client
Azzwic

Architect
Map Architects

deboke
ENGINEERING CONSULTANTS

Drawing Register

Number	Name	Revision
S100	Cover Sheet	01
S101	Specifications Sheet	01
S200	Basement Floor Plan	01
S201	Ground Floor Plan	01
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DBYD DECLARATION

BEFORE YOU DIG www.byda.com.au

DIAL BEFORE YOU DIG SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON SITE

TM: TRADE MARK OF THE ASSOCIATION OF DIAL BEFORE YOU DIG SERVICES LTD. USED UNDER LICENSE.

SERVICES NOTE

SERVICES SHOWN ON PLAN ARE INDICATIVE, EXACT DEPTH AND LOCATION TO BE CONFIRMED ONSITE. CONTRACTOR TO CARRY OUT DIAL BEFORE YOU DIG APPLICATION AND ENGAGE A REGISTERED SURVEYOR TO PEG OUT ALL EXISTING SERVICES PRIOR TO ANY WORK COMMENCING ONSITE.

ABBREVIATIONS

Ø or DIA	DIAMETER
CO	CLEAR OUT
DDO	DISH DRAIN OUTLET
DP	DOWNPIPE
e	EXISTING
FFL	FINISHED FLOOR LEVEL
GTD	GRATED TRENCH DRAIN
GSIP	GRATED SURFACE INLET PIT
IL	INVERT LEVEL
KIP	KERB INLET PIT
NGL	NATURAL GROUND LEVEL
OFP	OVERLAND FLOWPATH
OSD	ON-SITE DETENTION
RCP	REINFORCED CONCRETE PIPE
RL	REDUCED LEVEL
RWT	RAINWATER TANK
SW	STORMWATER
SWP	STORMWATER PIT
SWRM	STORMWATER RISING MAIN
SWS	STORMWATER SUMP
TOK	TOP OF KERB
TOW	TOP OF WALL
uPVC	UNPLASTICISED POLYVINYL CHLORIDE

General Notes

1. All work shall be carried out in accordance with council's requirements, building code of Australia, NSW code of practice and the to the relevant service codes.
2. These drawings shall be read in conjunction with all architectural and other consultants' drawings and specifications and with such other written instructions as may be issued during the course of the contract. All discrepancies shall be referred to the superintendent for decision before proceeding with the work.
3. All dimensions shown on the drawings are in millimeters (u.n.o.). Dimensions shall not be obtained by scaling of these drawings. Use figured dimensions only.
4. Benchmarks have been established where indicated on the drawings. All levels are to Australian height datum A.H.D.). The contractor shall undertake all necessary survey work to ensure that the works are constructed to design line and level.
5. Setting out dimensions and levels shown on the drawings shall be verified by the contractor.
6. All materials shall be in accordance with the requirements of the relevant codes and the by-laws and ordinances of the relevant building authorities.
7. It is the contractor's responsibility to provide all safety fences, warning signs, traffic diversions and the like during construction. All works to comply with work health and safety requirements and other relevant authority safety requirements.
8. No trees shall be removed, cutback or relocated without the written instruction from the superintendent.
9. Where new works abut existing the contractor shall ensure that a smooth even profile, free from abrupt changes is obtained.
10. All works shall be carried out in accordance with the details shown on the drawings and these specifications.
11. Design Levels given are to finished surface level and inclusive of topsoil. (topsoil depth varies)
12. The contractor shall arrange all survey set out to be carried out by a registered surveyor.
13. Care is to be taken when excavating near existing services. No mechanical excavations are to be undertaken over telecommunications or electrical services. Hand excavate in these areas.
14. The locations of underground services shown on the drawing have been plotted from diagrams provided by service authorities. This information has been prepared solely for the authorities own use and may not necessarily be updated or accurate.
15. The position of services as recorded by the authority at the time of installation may not reflect changes in the physical environment after installation.
16. Deboke Engineering Consultants do not guarantee that the services information shown on the drawing shows more than the presence or absence of services, and will accept no liability for inaccuracies in the services information shown from any cause whatsoever.
17. It is the contractor's responsibility to obtain from the utility services authorities a current copy of underground services search for the location of all existing services prior to commencement of any work and notify any conflict with the drawings immediately. Clearance shall be obtained from the relevant regulatory authority. Contractor to keep copy of underground services search on site at all times. Any damages to services or services adjustments shall be carried out by the contractor or relevant authority at the contractor's expense.
18. Visit the site before submitting the final tender price to assess 'on site' conditions. Failure to do so will forfeit any claim for not being aware of conditions affecting the tender.
19. The contractor shall prepare accurate work-as-executed drawings following the completion of all works.
20. It is the contractor's responsibility to have in place & maintain traffic facilities at all times during construction.
21. Contractor to provide workshop coordinated drawings prior to commencing works on site. Workshop drawings to be reviewed and approved by design engineer.

Erosion and Sediment Control Notes

1. Before earthworks can commence the erosion & sediment control measures must be in place.
2. During the construction period, these control measures will need to be inspected & maintained regularly, especially after storm events, by the contractor.
3. All work is to be carried out to prevent erosion, contamination & sedimentation of the storage site, surrounding areas & drainage systems.
4. Minimize disturbed area covered with natural vegetation. Only those areas directly required for construction are to be disturbed.
5. Install erosion/sediment control measures prior to commencement of construction or excavation operations.
6. Provide silt fence/straw bale barriers to the low side of all exposed earth excavations. Tie sediment fencing material to cyclone wire security fence. Sediment control fabric shall be an approved material (eg. Humes propex silt stop) standing 300mm above ground & extending 150mm below ground.
7. Isolate existing stormwater pits with straw bales or silt traps to filter all incoming flows.
8. Do not stockpile excavated material on the roadway.
9. Divert clean water from undisturbed areas around the working areas.
10. Construction entry/exit shall be via the location noted on the drawing. Contractor shall ensure all droppable soil & sediment is removed prior to construction traffic exiting site. Contractor shall ensure all construction traffic entering and leaving the site do so in a forward direction.
11. Treat the stormwater runoff with suspended solids so the discharge water quality to council stormwater drainage system has a maximum concentration of suspended solids that does not exceed 50 milligrams per litre in accordance with the protection of the environment operation act (poeo 1997) and shall be approved by local council
12. Adopt temporary measures as may be necessary for erosion & sediment control, including but not limited to the following: -
- Drains: temporary drains and catch drains.
- Spreader banks or other structures: to disperse concentrated runoff.
- Silt traps: construction and maintenance of silt traps to prevent discharge of scoured material to downstream areas.
13. After rain, inspect, clean, and repair if required, temporary erosion & sediment control measures.
14. Remove temporary erosion &sediment control measures when they are no longer required.
15. Comply with the requirements of Landcom's Managing Urban Stormwater - Soil and Construction 'The Blue Book' latest edition
16. The erosion & sediment control plan provided is only indicative. The contractor should prepare a detailed ESCP suitable for the specific site conditions

Stormwater Notes

1. Contractor must verify all dimensions & existing levels, services & structures on site prior to commencement of work.
2. Plans to be read in conjunction with approved Architectural, Landscape, Structural, Hydraulic, & other services drawings & specifications. If any discrepancies exist between the drawings, the builder shall report the discrepancies to the engineer prior to commencement of any works.
3. Where subsoil drainage lines pass under floor slabs & vehicular pavements, slotted uPVC sewer grade pipe shall be used.
4. Charged lines to be sewer grade & sealed.
5. All pipes to have min 150mm cover if located within property.
6. All pits in driveways to be concrete & all pits in landscaped areas may be plastic.
7. Pits less than 600mm deep may be brick, precast or concrete.
8. All balconies & roofs to be drained & to have safety overflows in accordance with relevant Australian standards.
9. All grates to have child proof locks.
10. All drainage works to avoid tree roots.
11. Council's issued footway design levels to be incorporated into the finished levels once issued by council.
12. All works shall be in accordance with NCC BCA 2019 & A.S.3500.3.
13. Care to be taken around existing sewer. Structural advice required for sewer protection against additional loading from new pits, pipes, retaining walls & OSD basin water levels.
14. All ø300 drainage pipes & larger shall be class 2 approved spigot & socket RCP pipes with rubber ring joints (U.N.O.). All drainage pipes up to & including ø225 shall be sewer grade uPVC with solvent weld joints (U.N.O.).
15. All pipe junctions, bends & tapers up to & including ø450 shall be via purpose made fittings.
16. Contractor to supply & install all fittings including various pipe adaptors to ensure proper connection between dissimilar pipe work.
17. All connections to existing drainage pits shall be made in accordance with the NCC BCA 2019 and relevant Australian Standards. The internal wall of the pit at the point of entry shall be cement rendered to ensure a smooth finish.
18. Bedding shall be type H1 (U.N.O.), in accordance with current relevant Australian standards.
19. Where stormwater lines pass under floor slabs, sewer grade rubber ring joints are to be used.
20. All pipes in covered balconies to be ø65 uPVC cast in concrete slab.
21. Ø65 PVC @ min 1.0% Ø90 PVC @ min 1.0%
Ø100 PVC @ min 1.0% Ø150 PVC @ min 1.0%
Ø225 PVC @ min 0.5% Ø300 PVC @ min 0.4%
Unless Noted Otherwise
22. Contractor to provide a break / open void in rail / balustrade for stormwater emergency overflow.
23. All enclosed areas/planter boxes be fitted with floor wastes.
24. Downpipes to be checked by architect & plumber prior to construction.
25. Provide 3.0m length of ø100 subsoil drainage pipe wrapped in fabric sock, at upstream end of each pit.
26. All the cleaning eyes (or inspection eyes) for the underground pipes must be taken up to the finished ground level for easy identification & maintenance purposes.
27. All sub-soil drainage shall be provided with a filter sock. The subsoil drainage shall be installed in accordance with details to be provided by the landscape architect.
28. Prior to commencing any works, the builder shall ensure that the invert levels of where the site stormwater system connects into the council's kerb/drainage system matched the design levels. Any discrepancies shall be reported to the design engineer immediately.
29. For stormwater drainage pipes that exceed 1:5 grade, reinforced concrete anchor blocks shall be installed. Anchor blocks to be constructed to specifications set out in AS3500.3-2003 section 8.10
30. Existing services shown in approximate locations only. Confirm exact locations and depths on site prior to commencing work.
31. Coordinate the installation of new services with all new & existing services & structural provisions as determined on site.
32. All pipework is to be tested in accordance with the requirements as set out in AS3500.3-2003. All in-ground pipework to be inspected by the superintendent under test conditions prior to backfilling. Backfilling and bedding to AS3500.3-2003.
33. Pipes shall be true to grades shown and aligned so that the centre of the inlet pipe intersects with the centre of the outlet pipe at the downstream face of the pit.
34. Lay and joint all pipes in accordance with the manufacturer's recommendations and AS3725-2007:'design for installation of buried concrete pipes'.
35. Allow to test all pipes and pits to local authority's requirements.
36. Excavate trenches and stockpile all material for inspection with regard to reuse for trench backfill. Remaining material to be removed from site.
37. Backfill pipes with imported fill. Provide 200mm side support and 150mm overlay above pipe crown. Trench fill above the embedment zone to the underside of the road pavement or the footway shall be as follow:-

Under roadway
Trench fill material shall consist of imported fill as specified herein of either high grade compaction sand or approved crushed road gravel conforming to TfNSW QA specification 3051 or similar.

Other than roadway
Trench material excavated shall consist of select fill as specified herein and shall not contain more than 20% of stones of size between 25mm and 75mm and none larger than 75mm. Prior to use of the excavated material it shall be inspected and approved by the engineer.

38. Compact bedding. Embedment and trench fill materials as follow:-

Embedment:-
For granular fill material (non-cohesive soil) e.g. Coarse aggregate fill, the density index (id) shall be not less than 70%.

Trench fill:-
For granular material (non cohesive soils). The density index (id) shall be not less than 70%. For non-granular fill material (cohesive soils), the dry density ratio (rd) shall be not less than 95%.

39. Existing services
Utility information shown on the plans is not intended to depict more than the presence of any services. Actual locations should be verified by hand excavation prior to construction.
40. The contractor shall allow for the capping off, excavation and removal (if required) of all existing services in areas affected by the works.
41. The contractor shall ensure that services to all buildings not affected by the works are not disrupted at all times. The contractor shall construct temporary services to maintain existing supply to buildings remaining where required. Once the works are complete and commissioned the contractor shall remove all such temporary services and make good all disturbed areas.
42. Existing pipes which form no part of the drainage system shall be removed or sealed as indicated on the plans.
43. Where downpipes pass under floor slabs, sewer grade uPVC with rubber ring joints are to be used.
44. Minimum grade to drainage pipes to be 1% (U.N.O.), min. Size 100mm diameter (U.N.O.).
45. Pipe installation under trafficable areas shall be in accordance with concrete pipe association of Australia publication "concrete pipe selection & installation" type HS3 support.
46. Equivalent strength FRC pipes may be used subject to authority approval.
47. Minimum pipe cover to be 600mm under trafficable areas and 300mm elsewhere (U.N.O.).
48. Contractor to supply and install all fittings and specials including various pipe adaptors to ensure proper connection between dissimilar pipework.
49. Provide cleaning eyes to all downpipes not directly connected to pits.
50. Stormwater drainage connections to council's system shall be to the requirements and the satisfaction of the local council.
51. Drainage pits
Pits deeper than 1200mm to be fitted with step irons at 300 centres to AS1657-2013:'fixed platforms, walkways, stairways and ladders - design, construction and installation'.
52. All exposed edges to be rounded with 20mm radius, or chamfered 20mm x 20mm.
53. Pit reinforcement - mesh SL82 lap to be 400mm min. Clear cover 40 mm. Cast against blinding or formwork. Corner returns may be fabric or equivalent bars.
54. Benching to be half outgoing pipe depth. Concrete for benching to be 20mpa mass concrete.
55. Approved precast pits may be used.
56. 100mm diameter hole for subsoil drainage outlet to be located 100mm above invert of all inlet pipes. Subsoil drainage to extend for a distance of 3m upstream of pit (at each inlet trench) with the upstream end sealed.
57. Pit grate, frames and solid covers shall be Class B in non traffic areas and Class D in trafficable areas in accordance with AS3996.
58. Maximum front entry pipe:-
a. Straight entry - ø750
b. Skew entry 45° - ø525
59. Subsoil drainage
Subsoil pipes shall be laid at a min grade of 0.5% (U.N.O.).
60. Additional subsoil drainage shall be laid to suit site conditions and groundwater presence as directed.
61. Subsoil pipes shall be laid behind kerbs in cut areas of the site.
62. Grates to pits in footpath areas shall be heel safe complying with the disabled access code
63. Contractor to provide workshop coordinated drawings prior to commencing works on site. Workshop drawings to be reviewed and approved by design engineer.
64. All external area to have a minimum 1% fall to outlets provided.
65. Provide overflows to all areas to architect's specifications.
66. All rainwater outlets to open areas shall be SPS TRUFLO type TIA100F unless noted otherwise. Do not install balcony outlets or similar in areas subject to direct rainfall.

Legend

- RAINWATER TANK LINES
- STORMWATER LINE
- SSD — SUBSOIL LINE
- SWRM — STORMWATER RISING MAIN
- HL — HIGH LEVEL STORMWATER LINE
- OF — OVERFLOW LINE
- e — EXISTING STORMWATER LINE
- SW — AUTHORITY STORMWATER LINE
- S — AUTHORITY SEWER LINE
- W — AUTHORITY WATER LINE
- G — AUTHORITY GAS LINE
- E — AUTHORITY ELECTRICITY LINE
- UE — AUTHORITY UNDERGROUND ELECTRICITY LINE
- FO — AUTHORITY FIBRE OPTIC LINE
- TEL — AUTHORITY COMMS LINE
- FENCE LINE
- GRATED SURFACE INLET PIT
- JUNCTION PIT
- KERB INLET PIT
- EXISTING KERB INLET PIT
- eTEL — EXISTING TELSTRA PIT
- eHYD — EXISTING HYDRANT
- eSV — EXISTING STOP VALVE
- ePP — EXISTING POWER POLE
- eSMH — EXISTING SEWER MANHOLE
- OFP — OVERLAND FLOW PATH
- RWO — RAINWATER OUTLET
- CO — CLEAR OUT POINT
- CAPPING
- DOWNPIPE DROP
- DP — DOWNPIPE
- FSL — SPOT LEVELS
- BENCHMARK

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Project No. 20230277-S4.55-SW-DWG-01
Drawing No. S101
Title: Specifications Sheet
Scale

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

MAP ARCHITECTS — Architect

azzwic. experience true partnership — Client

Project: Proposed Residential Development
Application: Section 4.55
Address: 1130 Pittwater Road Collaroy 2097
LGA: NORTHERN BEACHES Council.

Drawn	AA	Designed	ZZ
Reviewed	JD	Date	12-12-2024
Approved	AA	Date	12-12-2024

Andrew Arida
B.E Civil/Structural
MIEAust (NO: 5579488)
Professional Engineer (PRE0000268)
Design Practitioner (DEP0000455)

Discipline	Consultant	Reference	Revision	Date
Architect	Map Architects	----	H	28.11.2024
Surveyor	TTS Total Surveying Solutions	----	----	04.11.2022
Landscape	Contour Landscape Architecture	----	B	25.08.2023
Geotechnical				
Structural	Aspect Project Management	A2404-16	A	18.09.2024
Hydraulic/Fire	Goldfish & Bay Construction	24148	----	11.10.2024
Mechanical				

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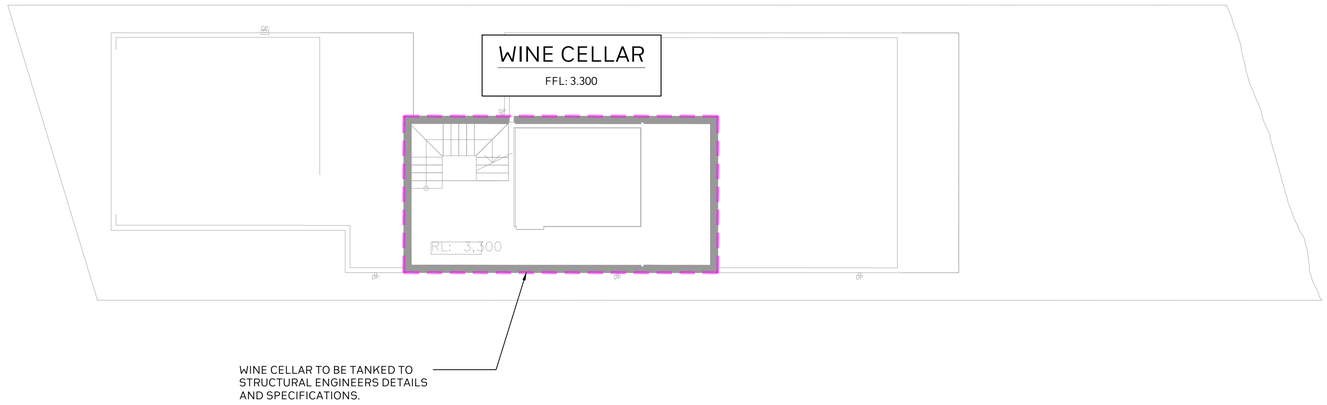
BASEMENT PLAN

1:100



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Project No. 20230277-S4.55-SW-DWG-01
Drawing No. S200
Title Basement Floor Plan
Scale 0m 1 2 3 4 5 SCALE 1:100 ON ORIGINAL SIZE
N

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

MAP ARCHITECTS
Architect

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Client

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Application Section 4.55
Address 1130 Pittwater Road Collaroy 2097
LGA NORTHERN BEACHES Council

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General Notes

SITE IS LOCATED IN NORTHERN BEACHES COUNCIL.

STORMWATER PLANS TO BE READ IN CONJUCTION WITH APPROVED DA: DEVELOPMENT APPLICATION NO. DA2022/1538

SITE AREA = 385.70m²

SITE IS GOVERNED BY NORTHERN BEACHES COUNCIL DCP 2021.

THE SITE IS LOCATED ADJACENT TO A WATERCOURSE, AND THE INCREASED IMPERVIOUS AREA IS 20M2(5.6%), CONSIDERED NEGOTIABLE. AS SUCH, OSD SYSTEM IS INAPPROPRIATE FOR THIS DEVELOPMENT.

CONTRACTOR TO INSTALL ABOVE GROUND RAINWATER TANK TO COLLECT REQUIRED ROOF AREA IN ACCORDANCE WITH BASIX CERTIFICATE.

RAINWATER TANK TO BE EQUIPPED WITH FIRST FLUSH AND MOSQUITO PREVENTION DEVICES.

ALL DOWNPIPES SHOWN ON PLAN ARE Ø100mm uPVC U.N.O.

ALL NEW STORMWATER PIPES TO HAVE A MINIMUM OF 100mm CONCRETE OR 300mm TOPSOIL COVER U.N.O.

Key Notes

1. ALL EXISTING STORMWATER PIPES AND DOWNPIPES ARE TO BE RETAINED U.N.O (TYP). PLUMBER TO ASSESS CONDITION AND STATE OF REPAIR. ALLOW FOR REPLACEMENT IF REQUIRED.

2. CONTRACTOR TO ENSURE LOCATION OF NEW DWELLING DOES NOT ADVERSELY IMPACT EXISTING STORMWATER SYSTEM. IF SO, CONTRACTOR TO CONTACT STORMWATER ENGINEER PRIOR TO COMMENCING ANY WORKS.

3. CONTRACTOR PERMITTED TO CONNECT TO EXISTING STORMWATER SYSTEM IF FOUND TO BE IN GOOD CONDITION DURING CONSTRUCTION. STORMWATER ENGINEER TO BE CONTACTED PRIOR TO COMMENCING ANY WORKS WHICH VARY FROM THE APPROVED STORMWATER PLANS.

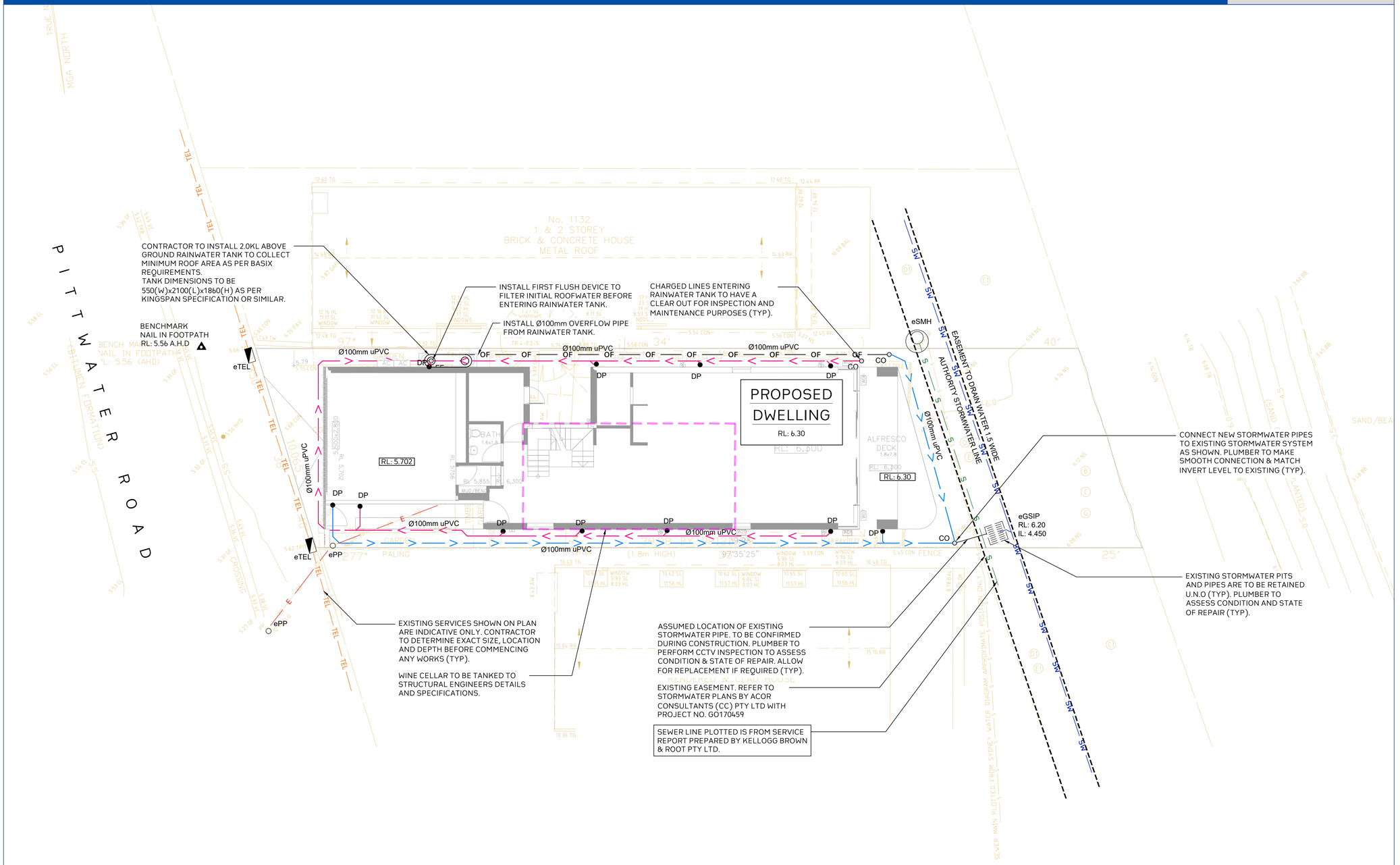
4. IF EXISTING STORMWATER SYSTEM IS CONNECTED TO SEWER, CONTRACTOR IS TO RECTIFY STORMWATER DESIGN AND CREATE A NEW CONNECTION AS PER COUNCIL SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONTRACTOR TO CONTACT STORMWATER ENGINEER PRIOR TO COMMENCING ANY WORKS.

Legend

- RAINWATER TANK LINES
- STORMWATER LINE
- SW — AUTHORITY STORMWATER LINE
- S — AUTHORITY SEWER LINE
- E — AUTHORITY ELECTRICITY LINE
- TEL — AUTHORITY COMMS LINE
- e — EXISTING STORMWATER LINE
- EXISTING EASEMENT
- GRATED SURFACE INLET PIT
- eTEL — EXISTING TELSTRA PIT
- ePP — EXISTING POWER POLE
- eSMH — EXISTING SEWER MANHOLE
- RWO — RAINWATER OUTLET
- CO — CLEAR OUT POINT
- DOWNPIPE DROP
- DP — DOWNPIPE
- BENCHMARK

GROUND FLOOR PLAN

1:100



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Project No.	20230277-S4.55-SW-DWG-01
Drawing No.	S201
Title	Ground Floor Plan
Scale	SCALE 1:100 ON ORIGINAL SIZE

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

Architect: MAP ARCHITECTS

Client: azzwic. experience true partnership

Project Proposed Residential Development

Application Section 4.55

Address 1130 Pittwater Road Collaroy 2097

LGA NORTHERN BEACHES Council

Drawn	AA	Designed	ZZ
Reviewed	JD	Date	12-12-2024
Approved	AA	Date	12-12-2024

Andrew Arida
B.E Civil/Structural
MIEAust (NO: 5579488)
Professional Engineer (PRE0000268)
Design Practitioner (DEP0000455)

Discipline	Consultant	Reference	Revision	Date
Architect	Map Architects	----	H	28.11.2024
Surveyor	TTS Total Surveying Solutions	----	----	04.11.2022
Landscape	Contour Landscape Architecture	----	B	25.08.2023
Geotechnical				
Structural	Aspect Project Management	A2404-1b	A	18.09.2024
Hydraulic/Fire	Goldfish & Bay Construction	24148	----	11.10.2024
Mechanical				

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Roof Notes

INSTALL 50mm uPVC SPITTER PIPES 20mm ABOVE SURFACE LEVEL FOR BALCONY AND CONCRETE ROOF AREAS TO ALLOW FOR EMERGENCY OVERFLOW INCASE OF BLOCKAGES DURING HEAVY STORMS. PLUMBER TO CONFIRM LOCATION DURING CONSTRUCTION.

ALL BUILDING AND HYDRAULIC SERVICES TO BE PROPERLY CO-ORDINATED WITH STORMWATER PIPES AND ENSURE NO CLASHES ARE PRESENT DURING CONSTRUCTION (TYP).

STORMWATER PIPE ARRANGEMENT TO BE CO-ORDINTED WITH STRUCTURAL SLAB AND BEAMS WHERE REQUIRED (TYP).

BALCONY, TERRACE & CONCRETE ROOF AREAS TO SLOPE TOWARDS RAINWATER OUTLETS WHERE REQUIRED (TYP).

ARROW DENOTES THE SLOPE OF FINISHED SURFACE LEVEL (TYP).

DOWNPIPES SHOWN ON PLAN ARE TO BE Ø100mm uPVC U.N.O. (TYP).

PROPOSED DOWNPIPE LOCATIONS ARE NOMINAL AND TO BE CONFIRMED DURING CONSTRUCTION (TYP).

INSTALL DOWNPIPE WITH SPREADER (IF REQUIRED) TO DISPERSE STORMWATER ONTO LOWER ROOF AREAS EFFECTIVELY.

PROVIDE SURFACE DRAINAGE FOR ALL CONCRETE AND BALCONY ROOF AREAS WHERE REQUIRED.

LYSAGHT® gutter areas and downpipes.

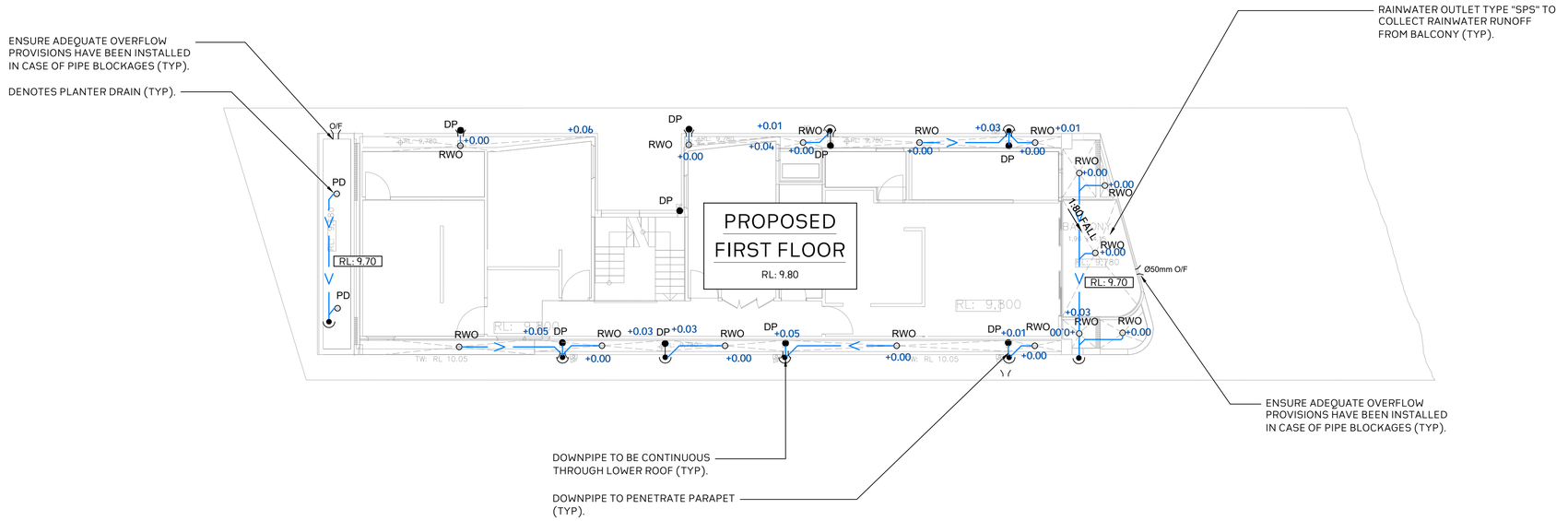
Minimum standard downpipe sizes to suit gutters (gutter gradient ≥ 1:500)

	Slotted	Effective # cross section	Round (diameter)	Rectangular or square
	YES/NO	mm^2	mm	mm
Quad Hi-front	YES	5255	90	100x50
	NO	5809	90	100x50
Quad Lo-front	NO	6165	90	100x50
SHEERLINE®	YES	7600	100	100x75
	NO	8370	§	100x75
TRIMLINE®	YES	6244	90	100x50
	NO	7800	100	100x75
150 Half Round	YES	4675	90	100x50
	NO	7042	100	100x75
150 Half Round Flat Back	YES	4602	90	100x50
	NO	7042	100	100x75
Half Round 100	NO	4300	75	100x50*
Half Round 125	NO	6300	90	100x50'
Half Round 150	NO	9200	§	100x75*
Half Round 200	NO	14500	§	§
Half Round 250	NO	24500	§	§
Half Round 300	NO	35300	§	§

Values calculated in accordance with AS/NZS 3500.3.
§ Non standard downpipe and nozzle/pop is required.
* Non standard nozzle/pop is required to suit rectangular downpipe.

FIRST FLOOR PLAN

1:100



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Project No. 20230277-S4.55-SW-DWG-01
Drawing No. S202
Title: First Floor Plan
Scale: SCALE 1:100 ON ORIGINAL SIZE (0m 1 2 3 4 5)

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

MAP ARCHITECTS — Architect

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Drawn	AA	Designed	ZZ
Reviewed	JD	Date	12-12-2024
Approved	AA	Date	12-12-2024

Andrew Arida
B.E Civil/Structural
MIEAust (NO: 5579488)
Professional Engineer (PRE0000268)
Design Practitioner (DEP0000455)

Discipline	Consultant	Reference	Revision	Date
Architect	Map Architects	----	H	28.11.2024
Surveyor	TTS Total Surveying Solutions	----	----	04.11.2022
Landscape	Contour Landscape Architecture	----	B	25.08.2023
Geotechnical				
Structural	Aspect Project Management	A2404-16	A	18.09.2024
Hydraulic/Fire	Goldfish & Bay Construction	24148	----	11.10.2024
Mechanical				

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Roof Notes

DOWNPIPES SHOWN ON PLAN ARE TO BE Ø100mm COLORBOND

PROPOSED DOWNPIPE LOCATIONS ARE NOMINAL AND TO BE CONFIRMED DURING CONSTRUCTION (TYP).

LYSAGHT® gutter areas and downpipes.

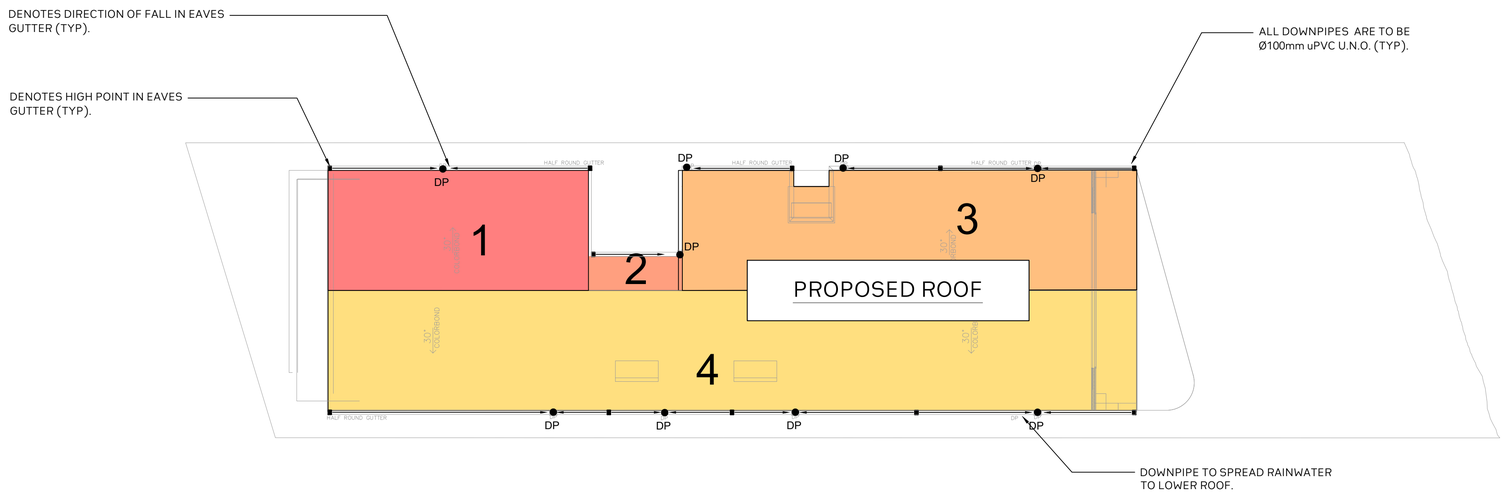
Minimum standard downpipe sizes to suit gutters (gutter gradient ≥ 1:500)

	Slotted	Effective # cross section	Round (diameter)	Rectangular or square
	YES/NO	mm^2	mm	mm
Quad Hi-front	YES	5255	90	100x50
	NO	5809	90	100x50
Quad Lo-front	NO	6165	90	100x50
SHEERLINE®	YES	7600	100	100x75
	NO	8370	§	100x75
TRIMLINE®	YES	6244	90	100x50
	NO	7800	100	100x75
150 Half Round	YES	4675	90	100x50
	NO	7042	100	100x75
150 Half Round Flat Back	YES	4602	90	100x50
	NO	7042	100	100x75
Half Round 100	NO	4300	75	100x50*
Half Round 125	NO	6300	90	100x50'
Half Round 150	NO	9200	§	100x75*
Half Round 200	NO	14500	§	§
Half Round 250	NO	24500	§	§
Half Round 300	NO	35300	§	§

Values calculated in accordance with AS/NZS 3500.3.
§ Non standard downpipe and nozzle/pop is required.
* Non standard nozzle/pop is required to suit rectangular downpipe.

ROOF PLAN

1:100



Downpipe And Eaves Gutters

Catchment	Area (m2)	Slope (DEG)	Type	Runoff (L/s)	Suggested DP	Number Required	Gutter Area (mm^2)	Minimum Gutter Width (mm)	Minimum Gutter Depth (mm)
1	33.311	30.0	Half Round 150	1.82	Ø100mm	1	7823	125	65
2	3.404	30.0	Half Round 150	0.19	Ø100mm	1	1148	125	20
3	57.50	30.0	Half Round 150	3.11	Ø100mm	3	6728	125	64
4	103.364	30.0	Half Round 150	7.48	Ø100mm	4	6999	125	66

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Project No. 20230277-S4.55-SW-DWG-01
Drawing No. S203
Title Roof Plan
Scale 0m 1 2 3 4 5 SCALE 1:100 ON ORIGINAL SIZE

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

Architect: MAP ARCHITECTS

Client: azzwic. experience true partnership

Project: Proposed Residential Development
Application: Section 4.55
Address: 1130 Pittwater Road Collaroy 2097
LGA: NORTHERN BEACHES Council

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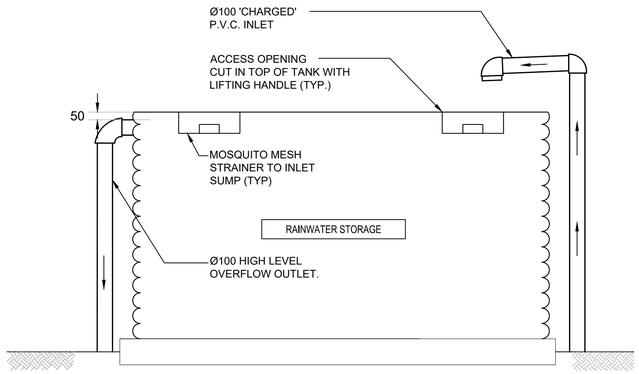
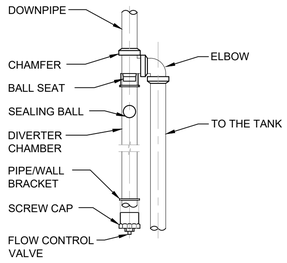


TYPICAL ABOVE GROUND
RAINWATER TANK
NOT TO SCALE

LEGEND:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK
BACKGROUND

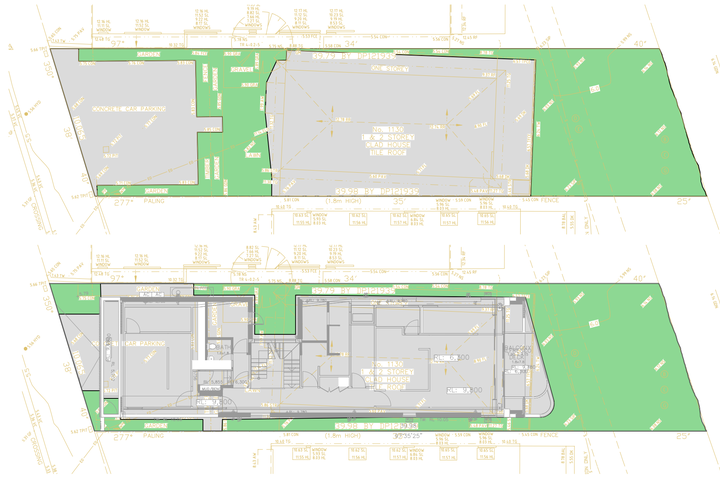
RAINWATER SIGN
SCALE 1:10



FIRST FLUSH DIVERTER
SCALE 1:20

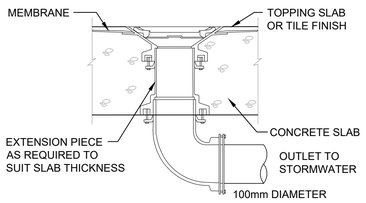
CATCHMENT PLAN

1:200

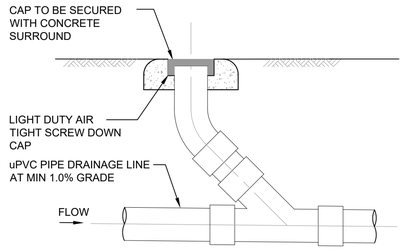


PRE DEVELOPMENT		
TERRAIN	AREA (m^2)	PERCENTAGE (%)
IMPERVIOUS	227.777	59.305
PERVIOUS	156.297	40.695
TOTAL	384.07	100.000

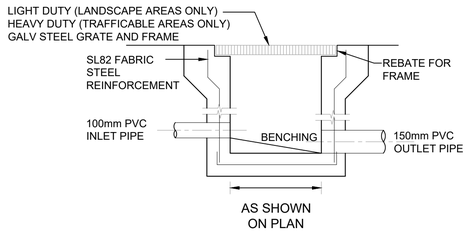
PROPOSED SITE		
TERRAIN	AREA (m^2)	PERCENTAGE (%)
IMPERVIOUS	236.742	61.645
PERVIOUS	147.300	38.355
TOTAL	384.04	100.000



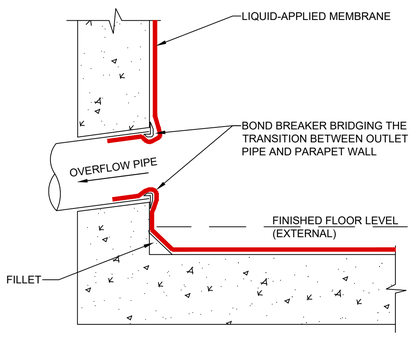
RAINWATER OUTLET
NOT TO SCALE



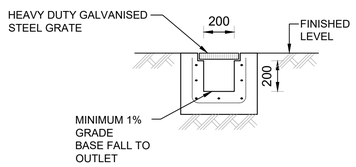
CLEANING EYE
SCALE 1:20



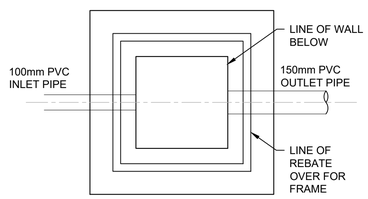
SECTION



PARAPET/HOB OVERFLOW DETAIL
NOT TO SCALE

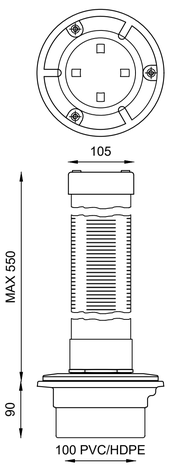


GRATED TRENCH DRAIN
SCALE 1:20



PLAN WITHOUT GRATE

STORMWATER PIT
SCALE 1:20



PLANTER DRAIN DETAIL
SCALE 1:20

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Project No. 20230277-S4.55-SW-DWG-01
Drawing No. S300
Title Details Sheet
Scale 0m 0.2 0.4 0.6 0.8 1.0
SCALE 1:20 ON ORIGINAL SIZE

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

MAP ARCHITECTS
Architect

azzwic. experience true partnership
Client

Project
Proposed Residential Development

Application
Section 4.55

Address
1130 Pittwater Road Collaroy 2097

LGA
NORTHERN BEACHES Council

Drawn	AA	Designed	ZZ
Reviewed	JD	Date	12-12-2024
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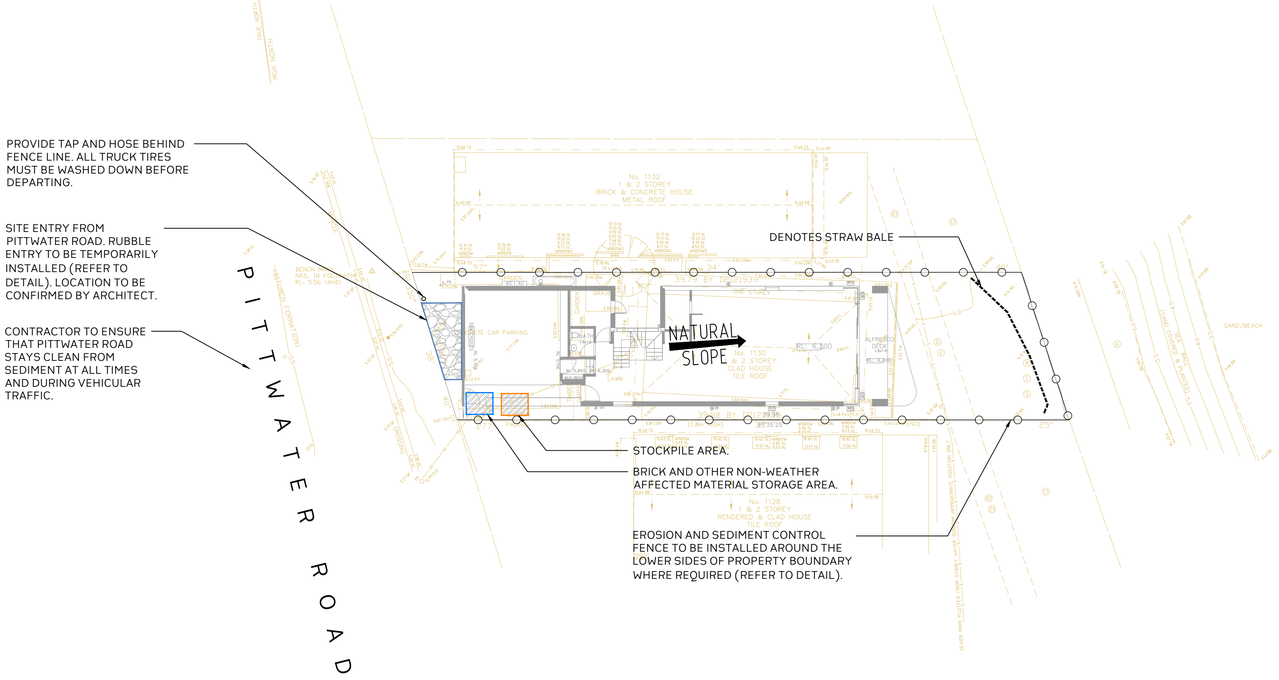
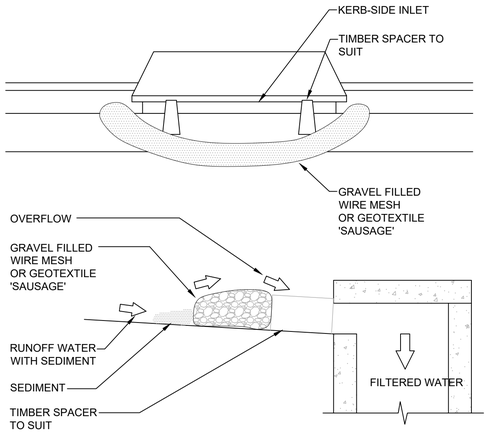
EROSION & SEDIMENT CONTROL PLAN

1:200



Legend

- SITE FENCE
- RUBBLE ENTRY
- STOCKPILE AREA
- SAUSAGE FILTER

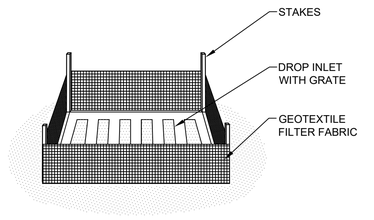


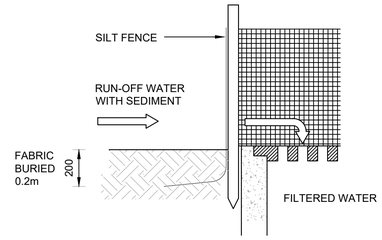
CONSTRUCTION NOTES:

1. INSTALL KERB INLET FILTERS TO KERB INLETS ONLY AT SAG POINTS OR AS SHOWN ON PLAN
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

GRAVEL INLET FILTER (SANDBAG)

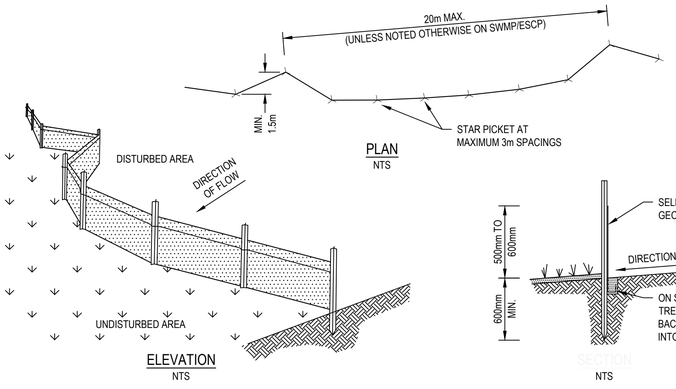
NTS





SUMP SEDIMENT TRAP

NTS

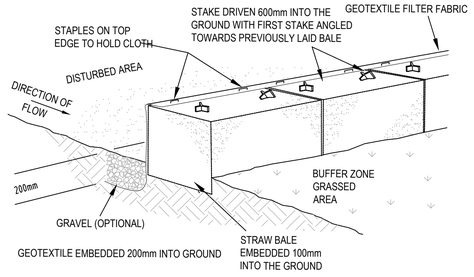


GENERAL CONSTRUCTION NOTES

1. CONSTRUCTION SEDIMENT FENCES AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE
2. DIVE 1.5m LONG STAR PICKETS INTO GROUND, 3m APART
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED
4. BACKFILL TRENCH OVER BASE OF FABRIC
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER
6. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP

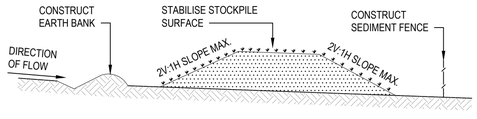
SEDIMENT FENCE

NTS



STRAW BALE & GEO FABRIC

NTS

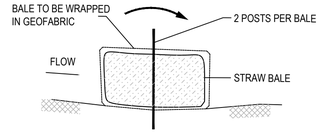


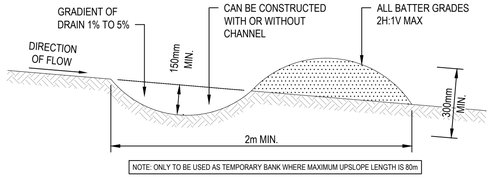
GENERAL CONSTRUCTION NOTES

1. LOCATE STOCKPILE AT LEAST 5m FROM EXISTING VEGETATION, CONCENTRATED WATER FLOWS, ROADS AND HAZARD AREAS
2. CONSTRUCT ON THE CONTOUR AS A LOW, FLAT, ELONGATED MOUND
3. WHERE THERE IS SUFFICIENT AREA TOPSOIL STOCKPILES SHALL BE LASS THAN 2m IN HEIGHT
4. REHANILITATE IN ACCORDANCE WITH THE SWMP/ESCP
5. CONSTRUCT EARTH BANK ON THE UPSLOPE SIDE TO DIVERT RUN OFF AROUND THE STOCKPILE AND A SEDIMENT FENCE 1 TO 2m DOWNSLOPE OF STOCKPILE

STOCKPILES

NTS



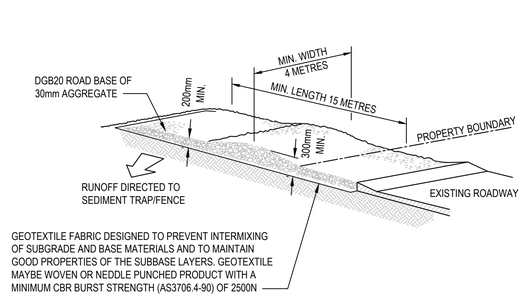


GENERAL CONSTRUCTION NOTES

1. CONSTRUCT WITH GRADIENT OF 1% TO 5%
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE
3. DRAINS TO BE CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED
4. EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE
5. PERMANENT OR TEMPORARY STABILISATION OF THE EARTH BANK TO BE COMPLETED WITHIN 10 DAYS OF CONSTRUCTION
6. ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO A SEDIMENT BASIN OR SIMILAR
7. DISCHARGE RUNOFF COLLECTED FROM UNDISTURBED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL SITE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED
8. COMPACT BANK WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS
9. EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDED NORMAL FLOW

EARTH BANK (LOW FLOW)

NTS



GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUBBASE LAYERS. GEOTEXTILE MAYBE WOVEN OR NEDDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500N

STABILISED SITE ACCESS CONSTRUCTION NOTES:

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE - PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO SEDIMENT FENCE.

STABILISED SITE ACCESS

NTS

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Project No. 20230277-S4.55-SW-DWG-01
Drawing No. S400
Title: Erosion and Sediment Control Plan
Scale: 0m 2 4 6 8 10 — SCALE 1:200 ON ORIGINAL SIZE
N

Rev.	Description	Design	Date
01	Issued For Section 4.55 (S4.55)	ZZ	12-12-2024

MAP ARCHITECTS — Architect

azzwic. experience true partnership — Client

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