



STORMWATER

CIVIL

FLOODING

STRUCTURAL

REMEDIAL

20250174



REVISION 01

PROPOSED STORMWATER DRAINAGE PLANS

Proposed Alterations And Additions Development
14-18 Maclaurin Avenue East Hills 2213

Reference
20250174-DA-SW-DWG-01

Client
1418 MACLAURIN AVENUE

Architect
Deboke Visualisation



| Drawing Register | | |
|------------------|-----------------------------------|----------|
| Number | Name | Revision |
| S100 | Cover Sheet | 01 |
| S101 | Specifications Sheet | 01 |
| S200 | Ground Floor Plan and Details | 01 |
| S201 | Roof Plan and Details | 01 |
| S400 | Erosion and Sediment Control Plan | 01 |

General Notes

- 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.
- 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.
- 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.
- 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.
- Setting out dimensions and levels shown on the drawings shall be verified by the contractor.
- All materials shall be in accordance with the requirements of the relevant codes and the by-laws and ordinances of the relevant building authorities.
- 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.
- No trees shall be removed, cutback or relocated without the written instruction from the superintendent.
- Where new works abut existing the contractor shall ensure that a smooth even profile, free from abrupt changes is obtained.
- All works shall be carried out in accordance with the details shown on the drawings and these specifications.
- Design Levels given are to finished surface level and inclusive of topsoil. (topsoil depth varies)
- The contractor shall arrange all survey set out to be carried out by a registered surveyor.
- 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.
- 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.
- The position of services as recorded by the authority at the time of installation may not reflect changes in the physical environment after installation.
- 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.
- 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.
- 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.
- The contractor shall prepare accurate work-as-executed drawings following the completion of all works.
- It is the contractor's responsibility to have in place & maintain traffic facilities at all times during construction.
- Contractor to provide workshop coordinated drawings prior to commencing works on site. Workshop drawings to be reviewed and approved by design engineer.

Stormwater Notes

- Contractor must verify all dimensions & existing levels, services & structures on site prior to commencement of work.
- 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.
- Where subsoil drainage lines pass under floor slabs & vehicular pavements, slotted uPVC sewer grade pipe shall be used.
- Charged lines to be sewer grade & sealed.
- All pipes to have min 150mm cover if located within property.
- All pits in driveways to be concrete & all pits in landscaped areas may be plastic.
- Pits less than 600mm deep may be brick, precast or concrete.
- All balconies & roofs to be drained & to have safety overflows in accordance with relevant Australian standards.
- All grates to have child proof locks.
- All drainage works to avoid tree roots.
- Council's issued footway design levels to be incorporated into the finished levels once issued by council.
- All works shall be in accordance with NCC BCA 2019 & A.S.3500.3.
- 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.
- 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.).
- All pipe junctions, bends & tapers up to & including Ø450 shall be via purpose made fittings.
- Contractor to supply & install all fittings including various pipe adaptors to ensure proper connection between dissimilar pipe work.
- 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.
- Bedding shall be type H1 (U.N.O.), in accordance with current relevant Australian standards.
- Where stormwater lines pass under floor slabs, sewer grade rubber ring joints are to be used.
- All pipes in covered balconies to be Ø65 uPVC cast in concrete slab.
- 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
- Contractor to provide a break / open void in rail / balustrade for stormwater emergency overflow.
- All enclosed areas/planter boxes be fitted with floor wastes.
- Downpipes to be checked by architect & plumber prior to construction.
- Provide 3.0m length of Ø100 subsoil drainage pipe wrapped in fabric sock, at upstream end of each pit.
- 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.
- 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.
- 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.
- 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
- Existing services shown in approximate locations only. Confirm exact locations and depths on site prior to commencing work.
- Coordinate the installation of new services with all new & existing services & structural provisions as determined on site.
- 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.
- 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.
- Lay and joint all pipes in accordance with the manufacturer's recommendations and AS3725-2007 'design for installation of buried concrete pipes'.
- Allow to test all pipes and pits to local authority's requirements.
- Excavate trenches and stockpile all material for inspection with regard to reuse for trench backfill. Remaining material to be removed from site.
- 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.

Legend

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RAINWATER TANK LINES
- >

>

STORMWATER LINE
- SSD

SSD

SUBSOIL LINE
- SWRM

SWRM

STORMWATER RISING MAIN
- HL

HL

HIGH LEVEL STORMWATER LINE
- OF

OF

OVERFLOW LINE
- e

e

EXISTING STORMWATER LINE
- SW

SW

AUTHORITY STORMWATER LINE
- S

S

AUTHORITY SEWER LINE
- W

W

AUTHORITY WATER LINE
- G

G

AUTHORITY GAS LINE
- E

E

AUTHORITY ELECTRICITY LINE
- UE

UE

AUTHORITY UNDERGROUND ELECTRICITY LINE
- FO

FO

AUTHORITY FIBRE OPTIC LINE
- TEL

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
- OFF

OVERLAND FLOW PATH
- RWO

RAINWATER OUTLET
- CO

CLEAR OUT POINT
-]

CAPPING
- DOWNPIPE DROP
- DP

DOWNPIPE
- FSL

SPOT LEVELS
- ▲

BENCHMARK

DBYD DECLARATION



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 | GRADED TRENCH DRAIN |
| GSIP | GRADED SURFACE INLET PIT |
| IL | INVERT LEVEL |
| KIP | KERB INLET PIT |
| NGL | NATURAL GROUND LEVEL |
| OFF | 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 |

Erosion and Sediment Control Notes

- Before earthworks can commence the erosion & sediment control measures must be in place.
- During the construction period, these control measures will need to be inspected & maintained regularly, especially after storm events, by the contractor.
- All work is to be carried out to prevent erosion, contamination & sedimentation of the storage site, surrounding areas & drainage systems.
- Minimize disturbed area covered with natural vegetation. Only those areas directly required for construction are to be disturbed.
- Install erosion/sediment control measures prior to commencement of construction or excavation operations.
- 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.
- Isolate existing stormwater pits with straw bales or silt traps to filter all incoming flows.
- Do not stockpile excavated material on the roadway.
- Divert clean water from undisturbed areas around the working areas.
- 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.
- 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 (poee 1997) and shall be approved by local council.
- 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.
- After rain, inspect, clean, and repair if required, temporary erosion & sediment control measures.
- Remove temporary erosion & sediment control measures when they are no longer required.
- Comply with the requirements of Landcom's Managing Urban Stormwater - Soil and Construction 'The Blue Book' latest edition
- The erosion & sediment control plan provided is only indicative. The contractor should prepare a detailed ESCP suitable for the specific site conditions

|  | Project No. 20250174-DA-SW-DWG-01 | Drawing No. S101 | <table><tr><th>Rev.</th><th>Description</th><th>Design</th><th>Date</th></tr><tr><td>01</td><td>Issued For Development Application (DA)</td><td>EZ</td><td>25-04-2025</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table> | Rev. | Description | Design | Date | 01 | Issued For Development Application (DA) | EZ | 25-04-2025 | | | | | | | | | | | | |  | 1418 MACLAURIN AVENUE | Project Proposed Alterations And Additions Development Application Development Application Address 14-18 MacLaurin Avenue East Hills 2213 LGA CANTERBURY-BANKSTOWN Council | <table><tr><th>Drawn</th><th>CS</th><th>Designed</th><th>EZ</th></tr><tr><td>Reviewed</td><td>AA</td><td>Date</td><td>25-04-2025</td></tr><tr><td>Approved</td><td>AA</td><td>Date</td><td>25-04-2025</td></tr></table> | Drawn | CS | Designed | EZ | Reviewed | AA | Date | 25-04-2025 | Approved | AA | Date | 25-04-2025 | <table><tr><th>Discipline</th><th>Consultant</th><th>Reference</th><th>Revision</th><th>Date</th></tr><tr><td>Architect</td><td>Deboke Visualisation</td><td>23058</td><td>----</td><td>13.03.2025</td></tr><tr><td>Surveyor</td><td>ISA Surveyors</td><td>----</td><td>----</td><td>03.03.2025</td></tr><tr><td>Landscape</td><td></td><td></td><td></td><td></td></tr><tr><td>Geotechnical</td><td></td><td></td><td></td><td></td></tr><tr><td>Structural</td><td></td><td></td><td></td><td></td></tr><tr><td>Hydraulic/Fire</td><td></td><td></td><td></td><td></td></tr><tr><td>Mechanical</td><td></td><td></td><td></td><td></td></tr></table> | Discipline | Consultant | Reference | Revision | Date | Architect | Deboke Visualisation | 23058 | ---- | 13.03.2025 | Surveyor | ISA Surveyors | ---- | ---- | 03.03.2025 | Landscape | | | | | Geotechnical | | | | | Structural | | | | | Hydraulic/Fire | | | | | Mechanical | | | | |  E admin@deboke.com.au W deboke.com.au A 17 William Street Ryde NSW 2112 P 02 9188 0688 COPYRIGHT This drawing and the information shown hereon is the property of deboke engineering consultants and may not be used for any purposes than for which supplied. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Architect | Deboke Visualisation | 23058 | ---- | 13.03.2025 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Hydraulic/Fire | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mechanical | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Title Specifications Sheet | Scale | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General Notes

SITE IS LOCATED IN CANTERBURY-BANKSTOWN COUNCIL.

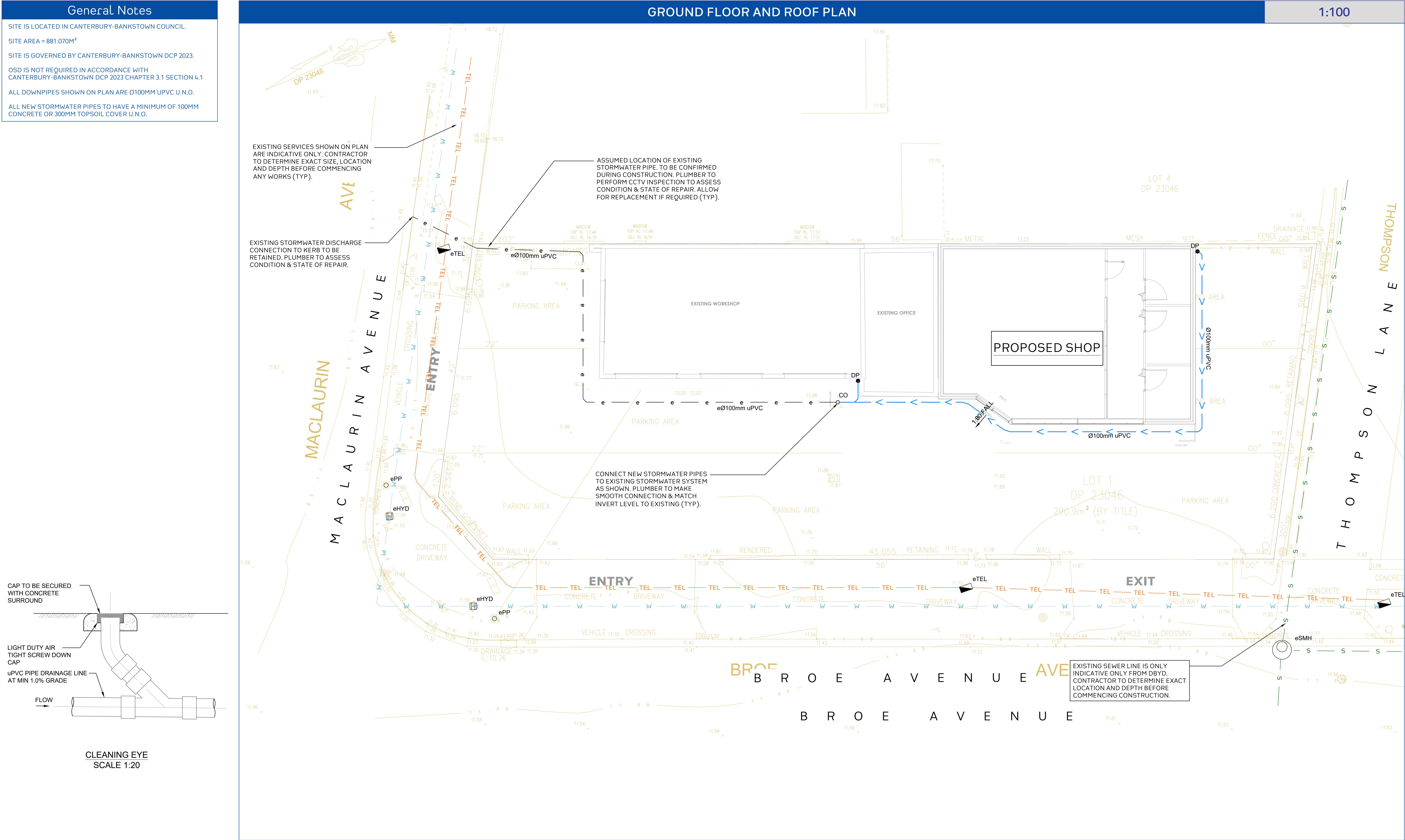
SITE AREA = 881.070M²

SITE IS GOVERNED BY CANTERBURY-BANKSTOWN DCP 2023.

OSD IS NOT REQUIRED IN ACCORDANCE WITH CANTERBURY-BANKSTOWN DCP 2023 CHAPTER 3.1 SECTION 4.1

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.



| | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------|-------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|------------|-----------|----------------------|------------|-----------|------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Project No. 20250174-DA-SW-DWG-01 | Drawing No. S200 | Rev. | Description | Design | Date |  | 1418 MACLAURIN AVENUE | Project Proposed Alterations And Additions Development Application Development Application Address 14-18 MacLaurin Avenue East Hills 2213 LGA CANTERBURY-BANKSTOWN Council | Drawn | CS | Designed | EZ | Discipline | Consultant | Reference | Revision | Date |  E admin@deboke.com.au W deboke.com.au A 17 William Street Ryde NSW 2112 P 02 9188 0688 COPYRIGHT This drawing and the information shown hereon is the property of deboke engineering consultants and may not be used for any purposes than for which supplied. |
| | Title Ground Floor Plan and Details | 01 | Issued For Development Application (DA) | EZ | 25-04-2025 | Reviewed | | | | AA | Date | 25-04-2025 | Architect | Deboke Visualisation | 23058 | ---- | 13.03.2025 | | |
| | Scale  SCALE 1:100 ON ORIGINAL SIZE | | | | | Approved | | | | AA | Date | 25-04-2025 | Surveyor | ISA Surveyors | ---- | ---- | 03.03.2025 | | |
| | | | | | | Andrew Arida B.E Civil/Structural MIEAust (NO: 5579488) Professional Engineer (PRE0000268) Design Practitioner (DEP0000455) | | | | Landscape | | | | | | | | | |
| | | | | | |  | | | | Geotechnical | | | | | | | | | |
| | | | | | | | | | | Structural | | | | | | | | | |
| | | | | | | | | | | Hydraulic/Fire | | | | | | | | | |
| | | | | | | | | | | Mechanical | | | | | | | | | |

Roof Notes

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).

Box Gutter Notes

THE FOLLOWING REQUIREMENTS MUST APPLY;
- THE MINIMUM WIDTH ALLOWED FOR DOMESTIC PROJECTS IS 200MM. FOR COMMERCIAL PROJECTS THE MINIMUM ALLOWABLE WIDTH IS 300MM.

- BOX GUTTERS MUST BE STRAIGHT, (NO BENDS).

- SIDES MUST BE VERTICAL.

- CONSTANT WIDTH.

- MUST HAVE A CONSTANT SLOPE BETWEEN 1:40 AND 1:200.

- DOWN PIPE MUST BE VERTICAL FROM SUMP (NOT TO THE SIDE).

- MINIMUM SUMP LENGTH IS 400MM.

- IF THE SIDE OVERFLOW (SPITTER) LENGTH IS GREATER THAN 450MM, THE MINIMUM ALLOWABLE SLOPE FOR THE SPITTER IS 1:10.

| Box Gutter Maximum Allowable Lengths | | | |
|--------------------------------------|---------------------------|----------------|------------------------------|
| Material | Base Metal Thickness (mm) | Max Length (m) | Minimum Expansion Space (mm) |
| ALUMINIUM | 0.90 | 12 | 50 |
| COPPER | 0.60 | 9 | 50 |
| COPPER | 0.80 | 15 | 50 |
| COPPER | 1.00 | 26 | 50 |
| STEEL COLORBOND ZINACLUME | 0.55 | 20 | 50 |
| STEEL | 0.75 | 25 | 50 |
| STAINLESS STEEL | 0.55 | 20 | 50 |
| PVC | - | 10 | 30 |
| ZINC | 0.80 | 10 | 50 |

ROOF PLAN

1:100

RETAIN DRAINAGE FOR EXISTING ROOF. PLUMBER TO INVESTIGATE THE STATE OF REPAIR.

DENOTES DIRECTION OF FALL IN BOX GUTTER (TYP). BOX GUTTER DEED WITH 1:100 FALL (TYP).

DENOTES HIGH POINT IN BOX GUTTER (TYP).

ENSURE ADEQUATE OVERFLOW PROVISIONS HAVE BEEN INSTALLED IN CASE OF PIPE BLOCKAGES (TYP).

RAINHEAD TO BE INSTALLED AT LOW POINT OF BOX GUTTER AND FITTED WITH AN EMERGENCY OVERFLOW.

STANDARD RAINWATER HEAD SECTION NOT TO SCALE

EXISTING ROOF

A

B

BOX GUTTER SHALL BE CONTINUOUS TO RAINHEAD (TYP).

ROOF AREA DRAINING TO BOX GUTTER. REFER TO TABLE FOR FURTHER DETAILS (TYP).

DOWNPIPE.

DR-25mm

WR

LR

DR

DP

RH

O/F

2° FALL

2° FALL

2° FALL

2° FALL

| Box Gutter Details | | | | | | | | | | |
|--------------------|-----------|-------------|---------------------------------------------------|--------------|--------------|-----------------------|-----------------------|----------------------|-----------------------|----------------------|
| Catchment | Area (m2) | Slope (DEG) | Type | Runoff (L/s) | Suggested DP | Box Gutter Width (mm) | Box Gutter Depth (mm) | Depth of RWH (mm) DR | Length of RWH (mm) LR | Width of RWH (mm) WR |
| A | 73.162 | 2.0 | RAINWATER HEAD AT END OF BOX GUTTER WITH OVERFLOW | 4.13 | Ø100mm | 300 | 117 | 125 | 120 | 300 |
| B | 129.991 | 2.0 | RAINWATER HEAD AT END OF BOX GUTTER WITH OVERFLOW | 7.16 | Ø100mm | 300 | 143 | 193 | 120 | 300 |

deboke

CIVIL

Project No.
20250174-DA-SW-DWG-01

Drawing No.
S201

Title
Roof Plan and Details

Scale
0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

Rev.

Description

Design

Date

01

Issued For Development Application (DA)

EZ

25-04-2025

deboke

VISUALISATION

Architect

1418 MACLAURIN AVENUE

Client

Project
Proposed Alterations And Additions Development

Application
Development Application

Address
14-18 MacLaurin Avenue East Hills 2213

LGA
CANTERBURY-BANKSTOWN Council

Drawn

CS

Designed

EZ

Reviewed

AA

Date

25-04-2025

Approved

AA

Date

25-04-2025

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

| Discipline | Consultant | Reference | Revision | Date |
|----------------|----------------------|-----------|----------|------------|
| Architect | Deboke Visualisation | 23058 | ---- | 13.03.2025 |
| Surveyor | ISA Surveyors | ---- | ---- | 03.03.2025 |
| Landscape | | | | |
| Geotechnical | | | | |
| Structural | | | | |
| Hydraulic/Fire | | | | |
| Mechanical | | | | |

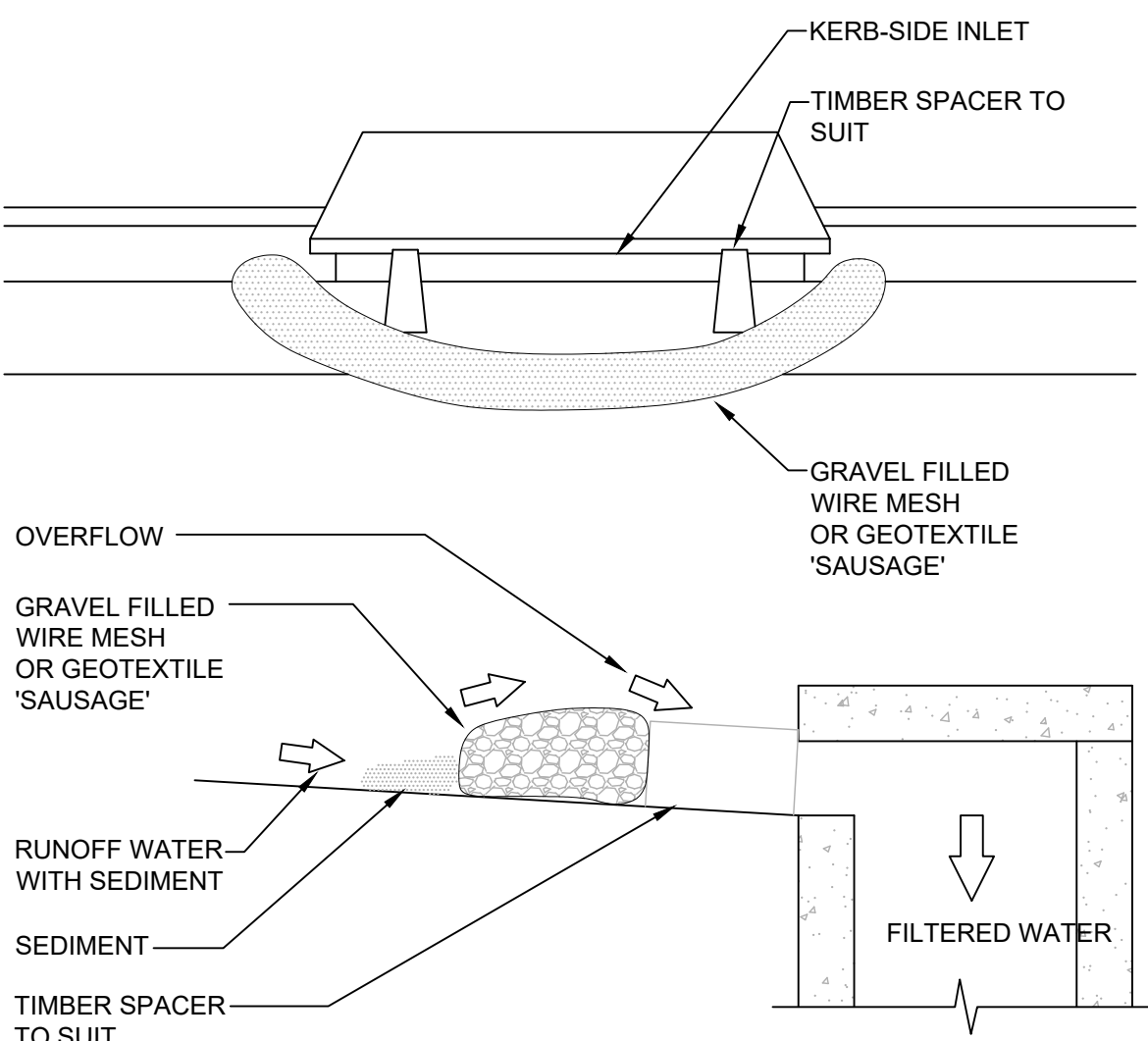
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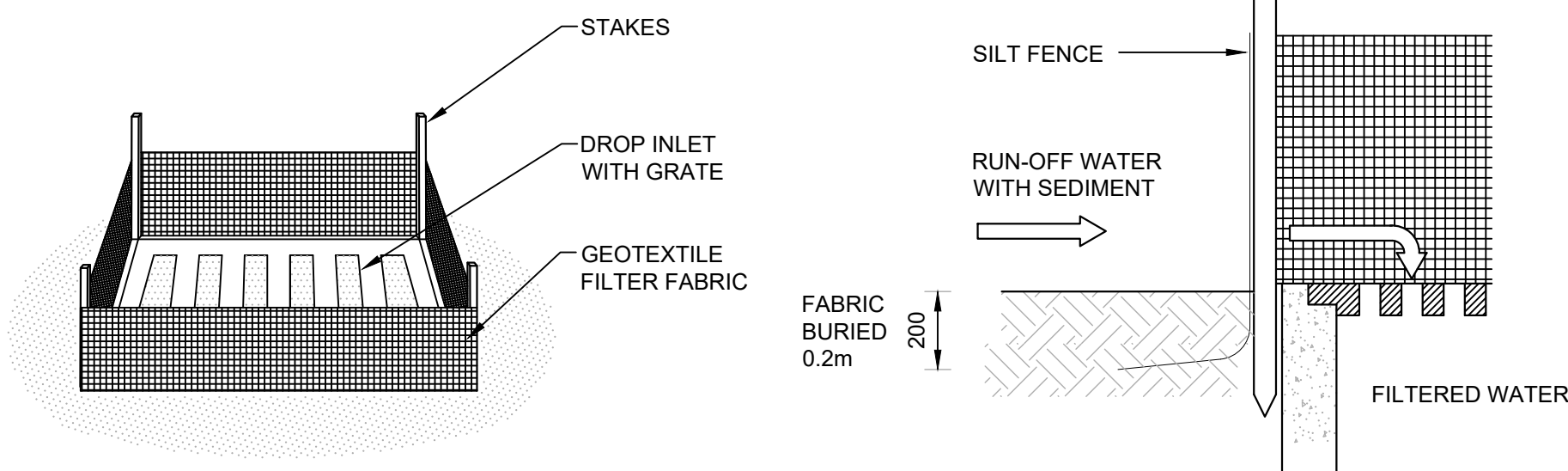
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1:200

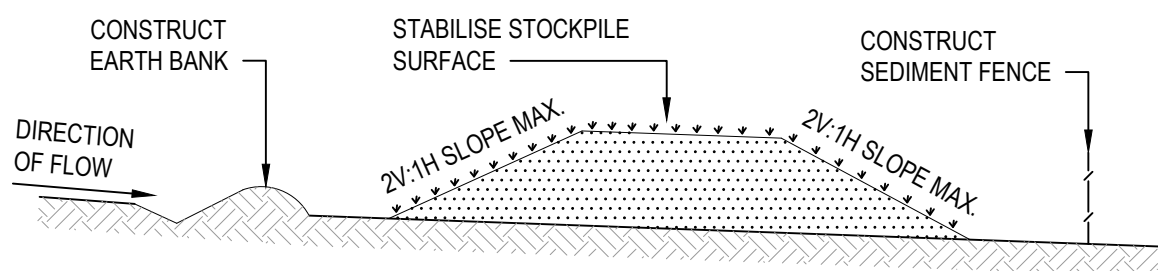


1. INSTALL KERB INLET FILTERS TO KERB INLETS ONLY AT SAG POINTS OR AS SHOWN ON PLAN
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET.
5. MAINTAIN THE OPENING WITH SPACER BLOCKS.
6. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
7. 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.

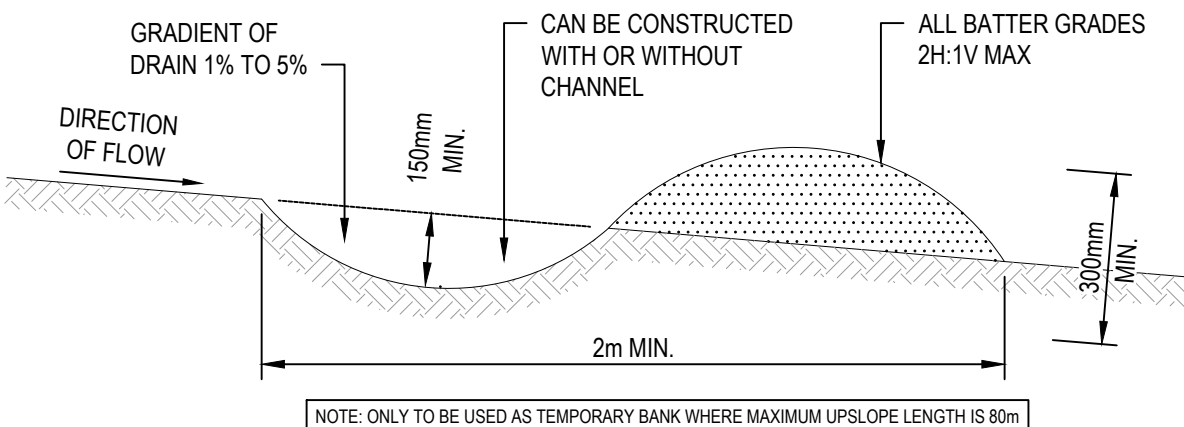
NTS



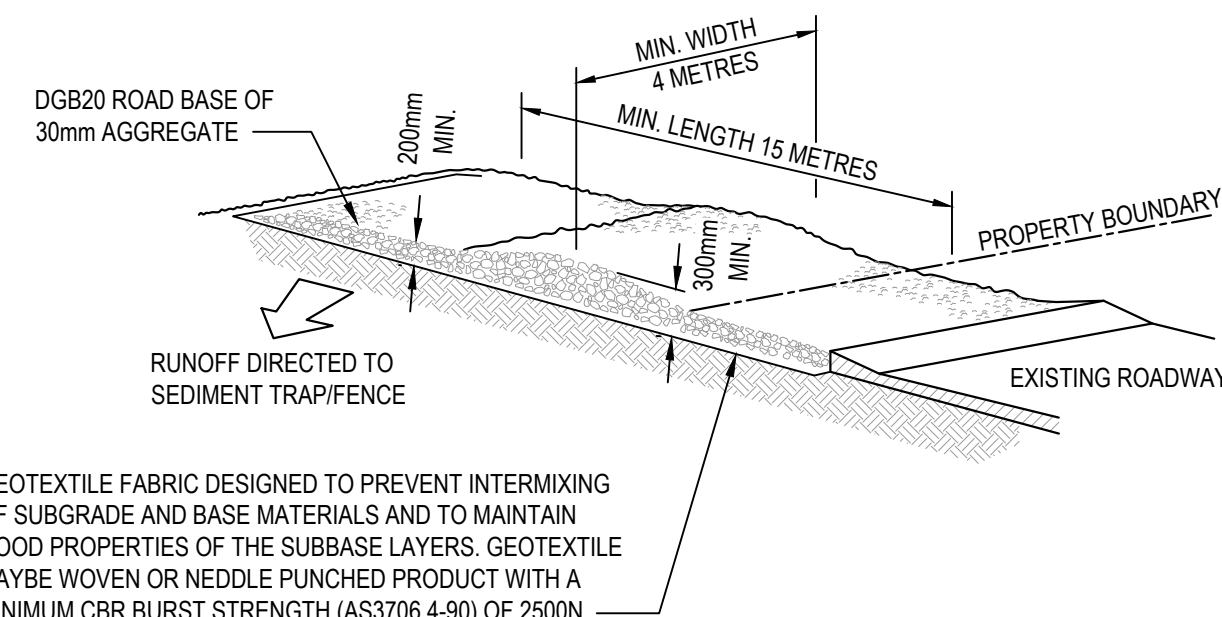
ENTS



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 LESS THAN 2m IN HEIGHT
4. REHABILITATE IN ACCORDANCE WITH THE SWMPP/SPS
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



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



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.

NTS

