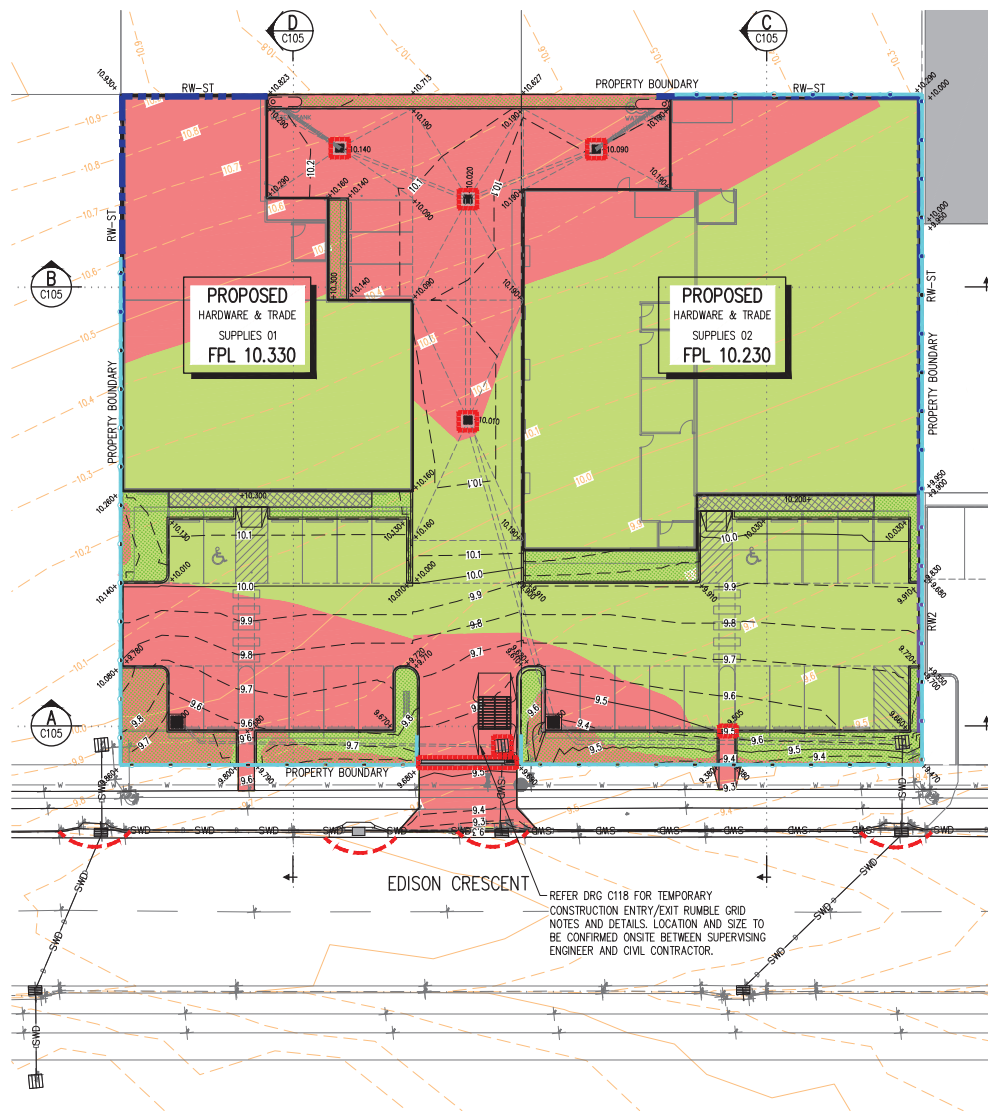


LEGEND EARTHWORKS QUANTITIES		
	STRIP (100mm)	303m ³
	EARTHWORKS CUT	199m ³
	EARTHWORKS FILL	352m ³
	EARTHWORKS BALANCE	153m ³ (IMPORT)

QUANTITIES NOTE

ALL VOLUMES ARE COMPLETE IN PLACE (TIGHT)
 NO ALLOWANCE FOR FOUNDATIONS
 NO ALLOWANCE FOR SERVICE TRENCHES
 NO ALLOWANCE FOR COMPACTION
 NO ALLOWANCE FOR BULKING



EARTHWORKS LEGEND

- 11.00 EXISTING CONTOUR (MAJOR)
- 11.50 EXISTING CONTOUR (MINOR)
- 7.00 PROPOSED EARTHWORKS CONTOURS (MAJOR 0.5m)
- 6.50 PROPOSED EARTHWORKS CONTOURS (MINOR 0.1m)
- x RL 9.81 FINISHED EARTHWORKS LEVEL
- RW-ST PROPOSED BUILDING RETAINING WALL REFER STRUCTURAL DRAWINGS FOR DETAILS
- RW1 OR RW2 PROPOSED BLOCK RETAINING RETAINING WALL REFER DRG C110 FOR DETAILS
- SILT FENCE (REFER DRG C117 FOR DETAILS)
- INLET TREATMENT (REFER DRG C119 FOR DETAILS)
- ON-GRADE KERB INLET SEDIMENT TRAP (REFER DRG C119 FOR DETAILS)

DRAWN	CP	DESIGNED	THN	CHECKED	ACF
PROJECT ENGINEER	THN	DESIGN VERIFICATION			
PROJECT DIRECTOR	ACF	DATE			

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8	29/11/22	BIO-BASIN REMOVED	KR
7	03/08/22	EARTHWORKS PAD LEVELS REVISED	EL
6	06/07/22	ISSUED FOR APPROVAL	EL
5	03/05/22	ISSUED FOR APPROVAL	EL
4	09/03/22	LAYOUT UPDATED	EL
3	17/02/22	LAYOUT UPDATED	EL
2	09/02/22	FOR APPROVAL	EL
1	22/12/21	FOR APPROVAL	GP
REV	DATE	AMENDMENT	RWT
AMENDMENTS			
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NEWLINK PROPERTY GROUP			

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PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
 LOTS 1189-1190
 EDISON CRESCENT,
 BARINGA, QLD, 4551

TITLE
EARTHWORKS LAYOUT PLAN

PLANS AND DOCUMENTS
 referred to in the PDA
 DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3

Date: 16 December 2022



Queensland
 Government

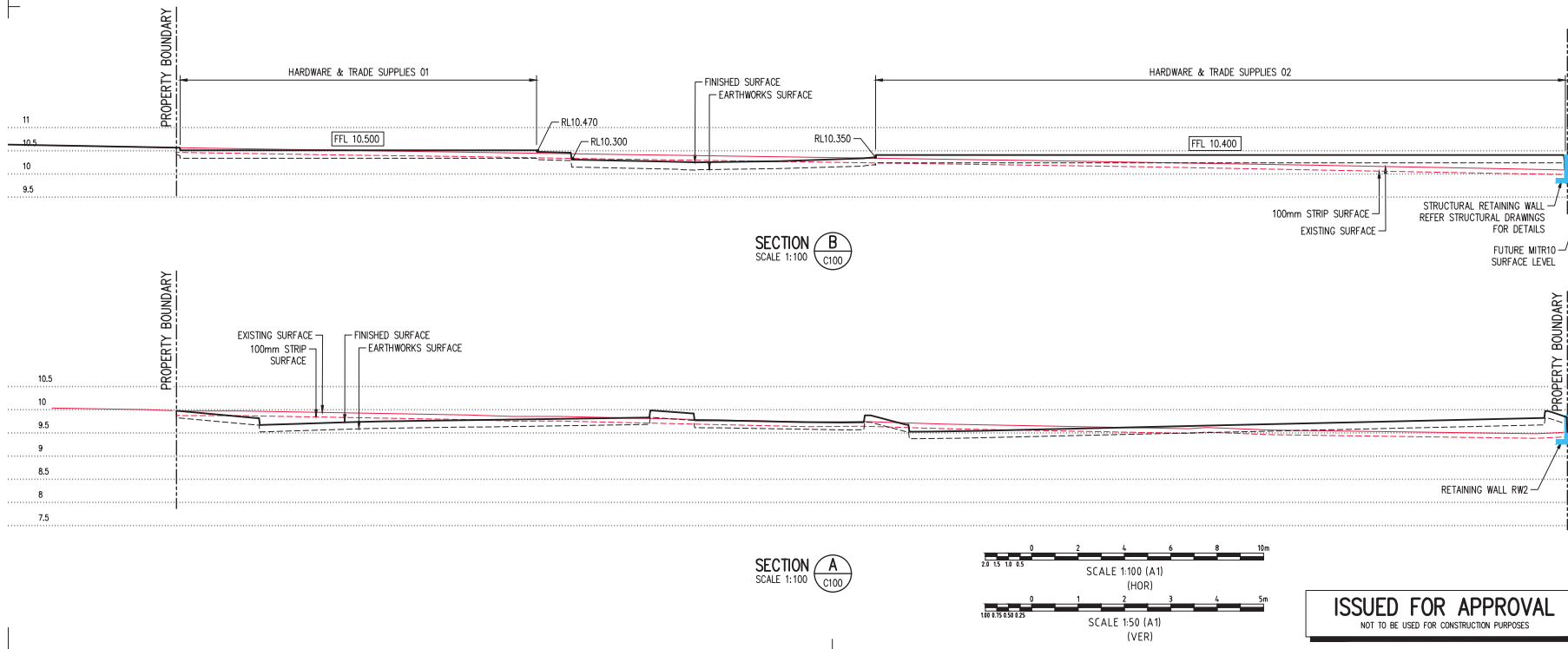
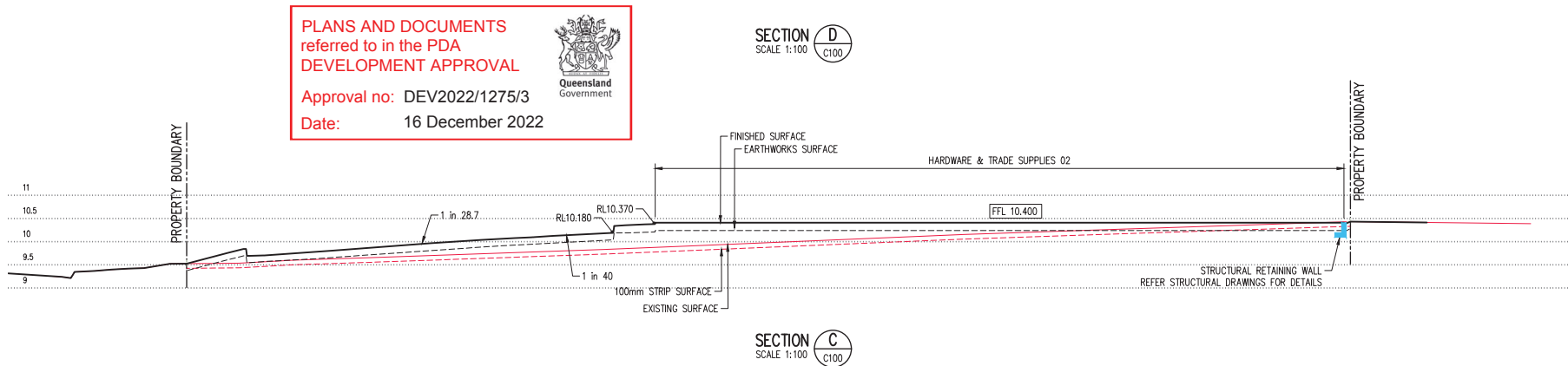
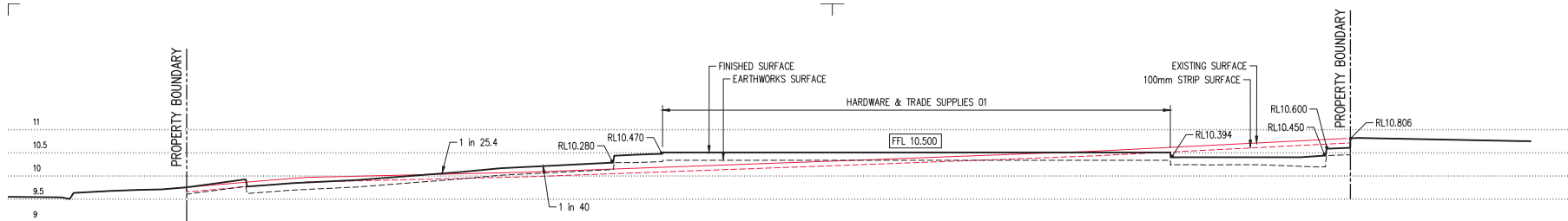
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 SCALE 1:200 (A1)

ISSUED FOR APPROVAL
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SCALE AT A1
 1:200

PROJECT No. 221407
 DRAWING No. C100
 ISSUE 8

ORIGINAL SHEET SIZE A1-594 x 841mm
 0 10 20 30 40 50 90



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3
Date: 16 December 2022

Queensland
Government

DRAWN: CP, DESIGNED: THN, CHECKED: ACF
PROJECT ENGINEER: THN, DESIGN VERIFICATION:
PROJECT DIRECTOR: ACF, DATE:
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6	03/08/22	SURFACE GRADING REVISED	EL
5	06/07/22	ISSUED FOR APPROVAL	EL
4	03/05/22	ISSUED FOR APPROVAL	EL
3	10/03/22	LAYOUT REVISED	EL
2	10/02/22	FOR APPROVAL	EL
1	22/12/21	FOR APPROVAL	GP
REV DATE			AMENDMENT
AMENDMENTS			INT.
CLIENT			
NEWLINK PROPERTY GROUP			

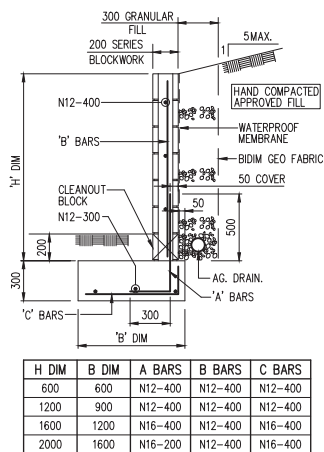
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PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
EARTHWORKS SECTIONS

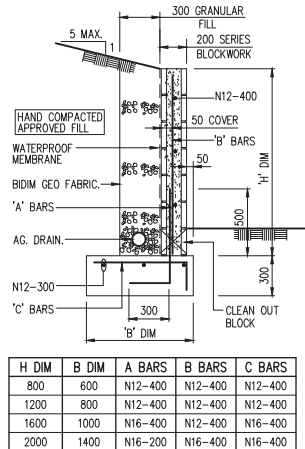
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SCALE AT A1
1:100H, 1:50V
PROJECT No: 221407, DRAWING No: C105, ISSUE: 6
ORIGINAL SHEET SIZE: A1-594 x 841mm
0 10 20 30 40 50 90



DESIGN CRITERIA
8 kPa EQUIVALENT FLUID PRESSURE
21/25mm BACKFILL DENSITY
MAX 1:5 SLOPE BEHIND WALL
MIN. ALLOWABLE BEARING CAPACITY.....100kPa

RETAINING WALL RW1 DETAIL



DESIGN CRITERIA
8 kPa EQUIVALENT FLUID PRESSURE
21/25mm BACKFILL DENSITY
MAX 1:5 SLOPE BEHIND WALL
MIN. ALLOWABLE BEARING CAPACITY.....100kPa

RETAINING WALL RW2 DETAIL

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3

Date: 16 December 2022



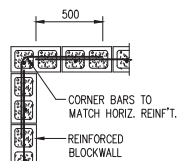
DRAWN: CP	DESIGNED: THN	CHECKED: ACF
PROJECT ENGINEER: THN	DESIGN VERIFICATION:	
PROJECT DIRECTOR: ACF	DATE:	

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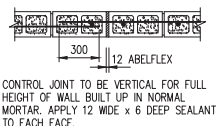
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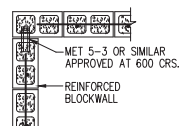
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3	10/03/22	RW2 ADDED	EL
2	10/02/22	FOR APPROVAL	EL
1	22/12/21	FOR APPROVAL	GP
REV DATE	AMENDMENT		INT.
AMENDMENTS			
CLIENT			
NEWLINK PROPERTY GROUP			



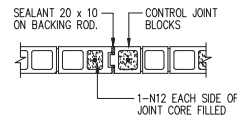
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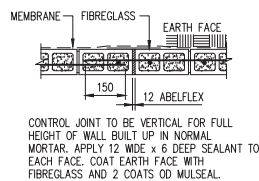
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(RECOMMEND EVERY 7.5m)



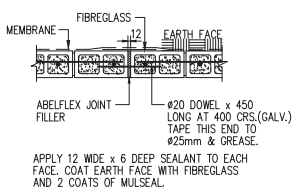
CONTROL JOINT CORNER



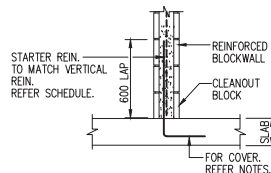
BLOCKWORK CONTROL JOINT
NOT REQUIRED IN BOND BEAMS



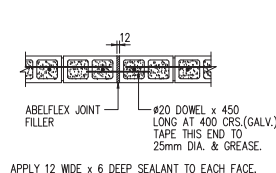
RETAINING WALL CONTROL JOINT
(RECOMMEND EVERY 7.5m)



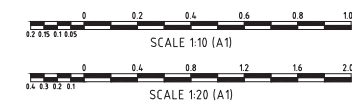
RETAINING WALL EXPANSION JOINT



STARTER BAR DETAIL



BLOCKWALL EXPANSION JOINT



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LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
EARTHWORKS DETAILS

SCALE AT A1 AS SHOWN		
PROJECT No.	DRAWING No.	ISSUE
221407	C110	4
ORIGINAL SHEET SIZE A1-594 x 841mm		
0 10 20 30 40 50		90

EROSION AND SEDIMENT CONTROL MANAGEMENT PLAN
GENERAL NOTES – SHEET 1 OF 2

General

1. Additional erosion and sediment control measures must be implemented and a revised Erosion and Sediment Control Plan (ESCP) must be submitted for approval in the event that site conditions change significantly from those considered within the ESCP.
2. Additional erosion and sediment control measures must be implemented and a revised Erosion and Sediment Control Plan (ESCP) must be submitted for approval in the event that the implemented works fail to achieve the stated 'objective' of the ESCP, the local government ESC standard, or the State's environmental protection requirements. (alternative to above)
3. Where there is a high probability that serious or material environmental harm may occur as a result of sediment leaving the site, appropriate additional erosion and sediment control measures must be implemented such that all reasonable and practicable measures are being taken to prevent or minimise such harm. Only those works necessary to minimise or prevent environmental harm shall be conducted on-site prior to approval of the amended Erosion and Sediment Control Plan (ESCP).
4. Where there is a high probability that serious or material environmental harm may occur as a result of sediment leaving the site, a new or amended Erosion and Sediment Control Plan (ESCP) must be submitted for approval. Only those works necessary to minimise or prevent environmental harm shall be conducted on-site prior to approval of the new or amended ESCP. (alternative to above)
5. In circumstances where it is considered necessary to prepare an amended Erosion and Sediment Control Plan (ESCP), and where the delivery of such an amended ESCP is not imminent, then all necessary new or modified erosion and sediment control works must be in accordance to [name of document]. Upon approval of the amended ESCP, all works must be implemented in accordance with the amended plan.

Land clearing

6. Land clearing must be delayed as long as practicable and must be undertaken in conjunction with development of each stage of works, unless otherwise approved by [insert name or title].
7. All reasonable and practicable efforts must be taken to delay the removal of, or disturbance to, existing ground cover (organic or inorganic) prior to land-disturbing activities.
8. Bulk tree clearing must occur in a manner that minimises disturbance to existing ground cover (organic or inorganic).
9. Bulk tree clearing and grubbing of the site must be immediately followed by specified temporary stabilisation measures (e.g. temporary grassing, or mulching) prior to commencement of each stage of construction works.
10. Disturbance to natural watercourses (including bed and banks) and their associated riparian zones must be limited to the minimum practicable.
11. No land clearing shall be undertaken unless preceded by the installation of adequate drainage and sediment control measures, unless such clearing is required for the purpose of installing such measures, in which case, only the minimum clearing required to install such measures shall occur.
12. Land clearing must be limited to 5m from the edge of proposed constructed works, 2m of essential construction traffic routes, and a total of 10m width for construction access, unless otherwise approved by designer.
13. Prior to land clearing, areas of protected vegetation, and significant areas of retained vegetation must be clearly identified (e.g. with high-visibility tape, or light fencing) for the purposes of minimising the risk of unnecessary land clearing.
14. All reasonable and practicable measures must be taken to minimise the removal of, or disturbance to, those trees, shrubs and ground covers (organic or inorganic) that are intended to be retained.
15. All land clearing must be in accordance with the Federal, State and local government Vegetation Protection/Preservation requirements and/or policies.
16. Land clearing is limited to the minimum practicable during those periods when soil erosion due to wind, rain or surface water is possible.
17. Land clearing must not extend beyond that necessary to provide up to eight (8) weeks of site activity during those months when the expected rainfall erosivity is less than 100, six (6) if between 100 and 285, four (4) weeks if between 285 and 1500, and two (2) weeks if greater than 1500.
18. Land clearing must not extend beyond that necessary to provide up to eight (8) weeks of site activity during those months when the actual or average rainfall is less than 45mm, six (6) if between 45 and 100mm, four (4) weeks if between 100 and 225mm, and two (2) weeks if greater than 225mm. (alternative to above)

Site access

19. Prior to the commencement of site works, the location of the site access point(s) must be verified with the designer.
20. Site access must be restricted to the minimum practical number of locations.
21. Site exit points must be appropriately managed to minimise the risk of sediment being tracked onto sealed, public roadways.
22. Stormwater runoff from access roads and stabilised entry/exit points must drain to an appropriate sediment control device.

Soil and stockpile management

23. All reasonable and practicable measures must be taken to obtain the maximum benefit from existing topsoil, including:
- (i) Where the proposed area of soil disturbance does not exceed 2500m², and the topsoil does not contain undesirable weed seed, the top 100mm of soil located within areas of proposed soil disturbance (including stockpile areas) must be stripped and stockpiled separately from the remaining soil.
- (ii) Where the proposed area of soil disturbance exceeds 2500m², and the topsoil does not contain undesirable weed seed, the top 50mm of soil must be stripped and stockpiled separately from the remaining topsoil, and spread as a final surface soil.
- (iii) In areas where the topsoil contains undesirable weed seed, the affected soil must be suitably buried or removed from the site.

24. Stockpiles of erodible material that has the potential to cause environmental harm if displaced, must be:
- (i) Appropriately protected from wind, rain, concentrated surface flow and excessive up-slope stormwater surface flows.
- (ii) Located at least 2m from any hazardous area, retained vegetation, or concentrated drainage line.
- (iii) Located up-slope of an appropriate sediment control system.
- (iv) Provided with an appropriate protective cover (synthetic, mulch or vegetative) if the materials are likely to be stockpiled for more than 28 days.
- (v) Provided with an appropriate protective cover (synthetic, mulch or vegetative) if the materials are likely to be stockpiled for more than 10 days during those months that have a high erosion risk.
- (vi) Provided with an appropriate protective cover (synthetic, mulch or vegetative) if the materials are likely to be stockpiled for more than 5 days during those months that have an extreme erosion risk.
25. A suitable flow diversion system must be established immediately up-slope of a stockpile of erodible material that has the potential to cause environmental harm if displaced, if the up-slope catchment area draining to the stockpile exceeds 1500m².

Site management

26. All office facilities and operational activities must be located such that any liquid effluent (e.g. process water, wash-down water, effluent from equipment cleaning, or plant watering), can be totally contained and treated within the site.
27. The construction schedule must aim to minimise the duration that any and all areas of soil are exposed to the erosive effects of wind, rain and surface water.
28. Land-disturbing activities must be undertaken in accordance with the Erosion and Sediment Control Plan (ESCP) and associated development conditions.
29. Land-disturbing activities must be undertaken in such a manner that allows all reasonable and practicable measures to be undertaken to:
- (i) allow stormwater to pass through the site in a controlled manner and at non-erosive flow velocities up to the specified design storm discharge;
- (ii) minimise soil erosion resulting from rain, water flow and/or wind;
- (iii) minimise adverse effects of sediment runoff, including safety issues;
- (iv) prevent, or at least minimise, environmental harm resulting from work-related soil erosion and sediment runoff;
- (v) ensure that the value and use of land/properties adjacent to the development (including roads) are not diminished as a result of the adopted ESC measures.
30. All erosion and sediment control measures must conform to the standards and specifications contained in:
- (i) the development approval condition issued by the relevant local authority; and
- (ii) the approved ESCP and supporting documentation; or
- (iii) the latest version of the applicable local authority erosion and sediment control standards if the standards and specifications are not contained in the approved ESCP.
31. Any works that may cause significant soil disturbance and are ancillary to any activity for which regulatory body approval is required, must not commence before the issue of that approval.
32. Additional and/or alternative ESC measures must be implemented in the event that site inspections, the site's Monitoring and Maintenance Program, or the regulatory authority, identifies that unacceptable off-site sedimentation is occurring as a result of the work activities.
33. Additional and/or alternative ESC measures must be implemented in the event that the designer, identifies that unacceptable off-site sedimentation is occurring as a result of the work activities. (alternative to above)
34. Land-disturbing activities must not cause unnecessary soil disturbance if an alternative construction process is available that achieves the same or equivalent outcomes at an equivalent cost.
35. Sediment (including clay, silt, sand, gravel, soil, mud, cement and ceramic waste) deposited off the site as a direct result of an on-site activity, must be collected and the area appropriately cleaned/rehabilitated as soon as reasonable and practicable, and in a manner that gives appropriate consideration to the safety and environmental risks associated with the sediment deposition.
36. Wherever reasonable and practicable, brick, tile and masonry cutting must be carried out on a pervious surface, such as grass, or open soil, or in such a manner that all sediment-laden runoff is prevented from discharging into a gutter, drain, or water body.
37. Adequate waste collection bins must be provided on-site and maintained such that potential and actual environmental harm resulting from such material waste is minimised.
38. Concrete waste and chemical products, including petroleum and oil-based products, must be prevented from entering an internal water body, or an external drain, stormwater system, or water body.
39. All flammable and combustible liquids, including all liquid chemicals if such chemicals could potentially be washed or discharged from the site, are stored and handled on-site in accordance with relevant standards such as AS1940 The storage and handling of flammable and combustible liquids.
40. Trenches not located within roadways must be backfilled, capped with topsoil, and compacted to a level at least 75mm above adjoining ground level and appropriately stabilised.
41. All stormwater, sewer line and other service trenches, not located within roadways, must be mulched and seeded, other otherwise appropriately stabilised within 7 days after backfill.
42. No more than 150m of a stormwater, sewer line or other service trench must be to open at any one time.
43. Site spoil must be lawfully disposed of in a manner that does not result in ongoing soil erosion or environmental harm.
44. All fill material placed on site must comprise only natural earth and rock, and is to be free of contaminants, be free draining, and be compacted in layers not exceeding 300mm to 90% modified maximum dry density in accordance with AS1289.

Drainage control

45. All drainage control measures must be applied and maintained in accordance with the ESCMP.
46. Wherever reasonable and practicable, stormwater runoff entering the site from external areas, and non-sediment laden (clean) stormwater runoff entering a work area or area of soil disturbance, must be diverted around or through that area in a manner that minimises soil erosion and the contamination of that water for all discharges up to the specified design storm discharge.
47. During the construction period, all reasonable and practicable measures must be implemented to control flow velocities in such a manner that prevents soil erosion along drainage paths and at the entrance and exit of all drains and drainage pipes during all storms up to the relevant design storm discharge.
48. To the maximum degree reasonable and practicable, all waters discharged during the construction phase must discharge onto stable land, in a non-erosive manner, and at a legal point of discharge.
49. Wherever reasonable and practicable, 'clean' surface waters must be diverted away from sediment control devices and any untreated, sediment-laden waters.
50. During the construction period, roof water must be managed in a manner that minimises soil erosion throughout the site, and site wetness within active work areas.
51. All erosion control measures must be applied and maintained in accordance with the ESCMP.
52. The application of liquid-based dust suppression measures must ensure that sediment-laden runoff resulting from such measures does not create a traffic or environmental hazard.
53. All temporary earth banks, flow diversion systems, and embankments associated with constructed sediment basins must be machine-compacted, seeded and mulched for the purpose of establishing a temporary vegetative cover within 10 days after grading.
54. Unprotected slope lengths must not exceed 80m, or an equivalent vertical fall of 3m during the entire construction period.
55. Unprotected slope lengths must not exceed 80m, or an equivalent vertical fall of 3m prior to specified shutdown periods or when rainfall is expected to exceed 45mm within a 24 hour period, or the monthly rainfall is expected to exceed 90mm.
56. The construction and stabilisation of earth batters steeper than 6:1 (H:V) must be staged such that no more than 3 vertical-metres of any batter is exposed to rainfall at any instant.
57. Synthetic reinforced erosion control mats and blankets must not be placed within, or adjacent to, riparian zones and watercourses if such materials are likely to cause environmental harm to wildlife or wildlife habitats.
58. A minimum 60% ground cover must be achieved on all non-completed earthworks exposed to accelerated soil erosion if further construction activities or soil disturbances are likely to be suspended for more than 30 days during those months when the expected rainfall erosivity is less than 60; minimum 70% cover within 30 days if between 60 and 100; minimum 70% cover within 20 days if between 100 and 285; minimum 75% cover within 10 days if between 285 and 1500; and minimum 80% cover within 5 days if greater than 1500.
59. A minimum 60% ground cover must be achieved on all non-completed earthworks exposed to accelerated soil erosion if further construction activities or soil disturbances are likely to be suspended for more than 30 days during those months when the expected rainfall is less than 30mm; minimum 70% cover within 30 days if between 30 and 45mm; minimum 70% cover within 20 days if between 45 and 100mm; minimum 75% cover within 10 days if between 100 and 225mm; and minimum 80% cover within 5 days if greater than 225mm. (alternative to above)

Sediment control

60. All sediment control measures must be applied and maintained in accordance with the ESCMP.
61. Optimum benefit must be made of every opportunity to trap sediment within the work site, and as close as practicable to its source.
62. Sediment traps must be installed and operated to both collect and retain sediment.
63. The potential safety risk of a proposed sediment trap to site workers and the public must be given appropriate consideration, especially those devices located within publicly accessible areas.
64. All reasonable and practicable measures must be taken to prevent, or at least minimise, the release of sediment from the site.
65. Suitable all-weather maintenance access must be provided to all sediment control devices.
66. Sediment control devices must be de-silted and made fully operational as soon as reasonable and practicable after a sediment-producing event, whether natural or artificial, if the device's sediment retention capacity falls below 75% of its design retention capacity.
67. Materials, whether liquid or solid, removed from sediment control devices during maintenance or decommissioning, must be disposed of in a manner that does not cause ongoing soil erosion or environmental harm.
68. As-Constructed plans must be prepared for all for constructed sediment basins and associated emergency spillways. Such plans must appropriately verify the basin's dimensions, levels and volumes, and must be submitted to the designer within 14 calendar days of the construction of each basin.
69. Constructed sediment basins must be maintained and fully operational throughout the construction period and until each basin's catchment area achieves 70% ground cover on all soil surfaces.
70. Settled sediment must be removed from sediment basins when the volume of the sediment exceeds the designated sediment storage volume, or the design maximum sediment storage elevation.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3

Date: 16 December 2022



ISSUED FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

DRAWN	EL	DESIGNED	THN	CHECKED	ACF
PROJECT ENGINEER	THN	DESIGN VERIFICATION			
PROJECT DIRECTOR	ACF	DATE			

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NOTES:

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1	06/07/22	FOR APPROVAL	EL
REV	DATE	AMENDMENT	INT.

AMENDMENTS

CLIENT

NEWLINK PROPERTY GROUP



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BARINGA, QLD, 4551

TITLE
EROSION AND SEDIMENT
CONTROL NOTES AND
DETAILS – SHEET 1 OF 5

SCALE AT A1

NOT TO SCALE

PROJECT No. DRAWING No. ISSUE

221407 C115 1

ORIGINAL SHEET SIZE A1-594 x 841mm

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EROSION AND SEDIMENT CONTROL MANAGEMENT PLAN
GENERAL NOTES – SHEET 2 OF 2

Site rehabilitation

71. All disturbed areas identified as very low, low, medium, high, or extreme erosion risk must be suitably stabilised within 30, 30, 20, 10 or 5 days respectively, or prior to anticipated rainfall, whichever is the greater, from the day that soil disturbances on the area have been finalised.
72. A minimum 60% ground cover must be achieved on all completed earthworks exposed to accelerated soil erosion within 30 days during those months when the expected rainfall erosivity is less than 60; minimum 70% cover within 30 days if between 60 and 100; minimum 70% cover within 20 days if between 100 and 285; minimum 75% cover within 10 days if between 285 and 1500; and minimum 80% cover within 5 days if greater than 1500.
73. A minimum 60% ground cover must be achieved on all completed earthworks exposed to accelerated soil erosion within 30 days during those months when the expected rainfall is less than 30mm; minimum 70% cover within 30 days if between 30 and 45mm; minimum 70% cover within 20 days if between 45 and 100mm; minimum 75% cover within 10 days if between 100 and 225mm; and minimum 80% cover within 5 days if greater than 225mm. (alternative to above)
74. No completed earthwork surface must remain denuded for longer than 60 days.
75. The type of ground cover applied to completed earthworks is compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
76. Unless otherwise directed by the designer or where directed by the approved revegetation plan, topsoil must be placed at a minimum depth of 75mm on slopes 4:1 (H:V) or flatter, and 50mm on slopes steeper than 4:1.
77. The pH (soil:water 1:5) of the topsoil must be between 6.5 and 8.5 prior to initiating the establishment of vegetation.
78. The pH level (soil:water 1:5) of topsoil must be adequate to enable establishment and growth of the specified vegetation.
79. Soil ameliorants must be added to the soil in accordance with the approved landscape/revegetation plans and/or soil analysis.
80. Soil density/compaction must be adjusted prior to seeding/planting in accordance with project earthworks specifications.
81. Temporary site stabilisation procedures must commence at least 30 days prior to the nominated site shutdown date. At least 70% stable cover of all unstable and/or disturbed soil surfaces must be achieved prior to any shutdown period. The stabilisation works must not rely upon the longevity of non-vegetated erosion control blankets, or temporary soil binders.
82. All unstable or disturbed soil surfaces must be adequately stabilised against erosion (minimum 70%) prior to commencement of use, or survey plan endorsement.

Sediment basin rehabilitation

83. Required drainage, erosion and sediment control measures during the decommissioning and rehabilitation or a sediment basin must comply with some standards specified for the normal construction works.
84. Upon decommissioning of a sediment basin, all water and sediment must be removed from the basin prior to removal of the embankment (if any). Any such material, liquid or solid, must be dispose of in a manner that will not create an erosion or pollution hazard.
85. A basin's catchment conditions associated with the staged decommissioning of the basin from a Type 1 to a Type 2 sediment trap must comply with the specified sediment control standard.
86. If an alternative, permanent, outlet structure is to be constructed prior to stabilisation of the up-slope catchment area, then this outlet structure must not be made operational if it will adversely affect the required operation of the sediment basin.
87. The permanent stormwater treatment features (e.g. vegetation and filtration media) must be appropriately protected from the adverse effects of sediment runoff.
88. A sediment basin must not be decommissioned until all up-slope site stabilisation measures have been implemented and are appropriately working to control soil erosion and sediment runoff in accordance with the specified ESC standard.
89. Immediately prior to the construction of the permanent stormwater treatment device, appropriate flow bypass conditions must be established to prevent sediment-laden water entering the device.
90. Immediately following the construction of the filter media of the permanent stormwater treatment device, the filter media must be covered by heavy-duty filter cloth (minimum bidum A44 or equivalent) and a minimum 200mm layer of earth or sacrificial filter media. Such earth and filter cloth must not be removed from the device until suitable surface conditions being achieved within the basin's catchment area.
91. Immediately following the construction of a proposed wetland or bioretention basin an appropriate Type 2 sediment trap must be installed in a manner to prevent sediment intrusion into the device.
92. The minimum sediment control standard for the protection of the permanent stormwater treatment device during the construction and maintenance phases is a Type 2 sediment trap. (alternative to above)
93. Plant establishment within the permanent stormwater treatment device must be delayed until sediment intrusion into the device is suitably under control.
94. Upon suitable conditions being achieved within the basin's catchment area, the operational features of the permanent stormwater treatment system must be made fully operational (i.e. maintenance and/or reconstruction as required).
95. The permanent stormwater treatment features of the rehabilitated basin must not be made operational until all up-slope site stabilisation measures have been implemented and are appropriately working to control soil erosion and sediment runoff in accordance with the specified ESC standard. (alternative to above)
96. Upon the approval of [insert authority], the newly constructed permanent stormwater treatment features of the basin may be made operations if such actions do not prevent the site from operating at the required sediment control standard. (alternative to above)

Site monitoring

97. All water quality data, including dates of rainfall, dates of testing, testing results and dates of water release, must be kept in an on-site register. The register is to be maintained up to date for the duration of the approved works and be available on-site for inspection by the relevant local authority on request.
98. At nominated instream water monitoring sites, a minimum of 3 water samples must be taken and analysed, and the average result used to determine quality.
99. Sediment basin water quality samples must be taken at a depth no greater than 200mm above the level of settled sediment.
100. All environmentally relevant incidents must be recorded in a field log that must remain accessible to all relevant regulatory authorities.

Site maintenance

101. All erosion and sediment control measures, including drainage control measures, must be maintained in proper working order at all times during their operational lives.
102. All temporary erosion and sediment control measures, including drainage control measures, must be fully operational and maintained in proper working order at all times during the maintenance period as specified by the designer.
103. All temporary erosion and sediment control measures, including drainage control measures, must be removed after achieving a satisfactory 'off-maintenance inspection' by relevant local authority.
104. All drainage, erosion and sediment control measures must be inspected:
- (i) at least daily (when work is occurring on-site);
 - (ii) at least weekly (when work is not occurring on-site);
 - (iii) within 24 hours of expected rainfall; and
 - (iv) within 18 hours of a rainfall event of sufficient intensity and duration to cause runoff on-site).
105. Washing/flushing of sealed roadways must only occur where sweeping has failed to remove sufficient sediment and there is a compelling need to remove the remaining sediment (e.g. for safety reasons). In such circumstances, all reasonable and practicable sediment control measures must be used to prevent, or at least minimise, the release of sediment into receiving waters. Only those measures that will not cause safety and property flooding issues shall be employed. Sediment removed from roadways must be disposed of in a lawful manner that does not cause ongoing soil erosion or environmental harm.
106. Sediment removed from sediment traps and places of sediment deposition must be disposed of in a lawful manner that does not cause ongoing soil erosion or environmental harm.
107. Maintenance mowing of all road shoulders, table drains, batters and other surfaces likely to experience accelerated soil erosion must aim to leave the grass length no shorter than 50mm where reasonable and practicable.
108. Maintenance mowing must be done in a manner that will not damage the profile of formed, soft edges, such as the crest of earth embankments.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3
Date: 16 December 2022



ISSUED FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

DRAWN	EL	DESIGNED	THN	CHECKED	ACF
PROJECT ENGINEER	THN	DESIGN VERIFICATION			
PROJECT DIRECTOR	ACF			DATE	

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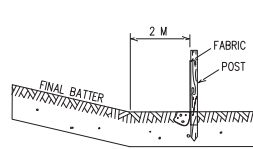
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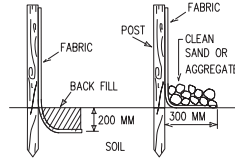
PROJECT
**PROPOSED COMMERCIAL
DEVELOPMENT**
LOTS 1189–1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
**EROSION AND SEDIMENT
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DETAILS – SHEET 2 OF 5**

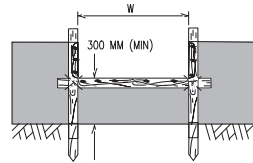
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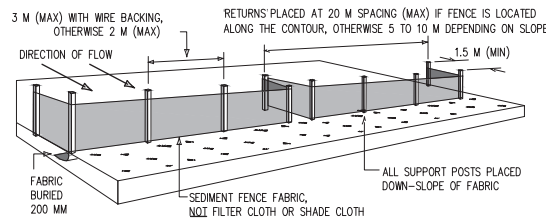
LOCATION OF FENCE RELATIVE TO BASE OF SLOPE



ANCHORING BASE OF FABRIC



SPILL-THROUGH WEIR



INSTALLATION OF SEDIMENT FENCE

SEDIMENT FENCE NOTES

MATERIALS

FABRIC: POLYPROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 700MM IN WIDTH AND A MINIMUM UNIT WEIGHT OF 140GSM. ALL FABRICS TO CONTAIN ULTRAVIOLET INHIBITORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).

FABRIC REINFORCEMENT: WIRE OR STEEL MESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200MM.

SUPPORT POSTS/STAKES: 1500MM2 (MIN) HARDWOOD, 2500MM2 (MIN) SOFTWOOD, OR 1.5KG/M (MIN) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

INSTALLATION

1. REFER TO APPROVED PLANS FOR LOCATION, EXTENT, AND REQUIRED TYPE OF FABRIC (IF SPECIFIED). IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, FABRIC TYPE, OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.

2. TO THE MAXIMUM DEGREE PRACTICAL, AND WHERE THE PLANS ALLOW, ENSURE THE FENCE IS LOCATED:
(i) TOTALLY WITHIN THE PROPERTY BOUNDARIES;

(ii) ALONG A LINE OF CONSTANT ELEVATION WHEREVER PRACTICAL;
(iii) AT LEAST 2M FROM THE TOE OF ANY FILLING OPERATIONS THAT MAY RESULT IN SHIFTING SOIL/FILL DAMAGING THE FENCE.

3. INSTALL RETURNS WITHIN THE FENCE AT MAXIMUM 20M INTERVALS IF THE FENCE IS INSTALLED ALONG THE CONTOUR, OR 5 TO 10M MAXIMUM SPACING (DEPENDENT ON SLOPE) IF THE FENCE IS INSTALLED AT AN ANGLE TO THE CONTOUR. THE RETURNS SHALL CONSIST OF EITHER:
(i) V-SHAPED SECTION EXTENDING AT LEAST 1.5M UP THE SLOPE; OR
(ii) SANDBAG OR ROCK/AGGREGATE CHECK

DAM A MINIMUM 1/3 AND MAXIMUM 1/2 FENCE HEIGHT, AND EXTENDING AT LEAST 1.5M UP THE SLOPE.

4. ENSURE THE EXTREME ENDS OF THE FENCE ARE TURNED UP THE SLOPE AT LEAST 1.5M, OR AS NECESSARY, TO MINIMISE WATER BYPASSING AROUND THE FENCE.

5. ENSURE THE SEDIMENT FENCE IS INSTALLED IN A MANNER THAT AVOIDS THE CONCENTRATION OF FLOW ALONG THE FENCE, AND THE UNDESIRABLE DISCHARGE OF WATER AROUND THE ENDS OF THE FENCE.

6. IF THE SEDIMENT FENCE IS TO BE INSTALLED ALONG THE EDGE OF EXISTING TREES, ENSURE CARE IS TAKEN TO PROTECT THE TREES AND THEIR ROOT SYSTEMS DURING INSTALLATION OF THE FENCE. DO NOT ATTACH THE FABRIC TO THE TREES.

7. UNLESS DIRECTED BY THE SITE SUPERVISOR OR THE APPROVED PLANS, EXCAVATE A 200MM WIDE BY 200MM DEEP TRENCH ALONG THE PROPOSED FENCE LINE, PLACING THE EXCAVATED MATERIAL ON THE UP-SLOPE SIDE OF THE TRENCH.

8. ALONG THE LOWER SIDE OF THE TRENCH, APPROPRIATELY SECURE THE STAKES INTO THE GROUND SPACED NO GREATER THAN 3M IF SUPPORTED BY A TOP SUPPORT WIRE OR WIRE MESH BACKING, OTHERWISE NO GREATER THAN 2M.

9. IF SPECIFIED, SECURELY ATTACH THE SUPPORT WIRE OR MESH TO THE UP-SLOPE SIDE OF THE STAKES WITH THE MESH EXTENDING AT LEAST 200MM INTO THE EXCAVATED TRENCH. ENSURE THE MESH AND FABRIC IS ATTACHED TO THE UP-SLOPE SIDE OF THE STAKES EVEN WHEN DIRECTING A FENCE AROUND A CORNER OR SHARP CHANGE OF DIRECTION.

10. WHEREVER POSSIBLE, CONSTRUCT THE SEDIMENT FENCE FROM A CONTINUOUS ROLL OF FABRIC. TO JOIN FABRIC EITHER:
(i) ATTACH EACH END TO TWO OVERLAPPING STAKES WITH THE FABRIC FOLDING AROUND THE ASSOCIATED STAKE ONE TURN, AND WITH SCALE N.T.S.

THE TWO STAKES TIED TOGETHER WITH WIRE; OR
(ii) OVERLAP THE FABRIC TO THE NEXT ADJACENT SUPPORT POST.

11. SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 12.5MM STAPLES, OR TIE WIRE AT MAXIMUM 150MM SPACING.

12. SECURELY ATTACH THE FABRIC TO THE SUPPORT WIRE/MESH (IF ANY) AT A MAXIMUM SPACING OF 1M.

13. ENSURE THE COMPLETED SEDIMENT FENCE IS AT LEAST 450MM, BUT NOT MORE THAN 700MM HIGH. IF A SPILL-THROUGH WEIR IS INSTALLED, ENSURE THE CREST OF THE WEIR IS AT LEAST 300MM ABOVE GROUND LEVEL.

14. BACKFILL THE TRENCH AND TAMP THE FILL TO FIRMLY ANCHOR THE BOTTOM OF THE FABRIC AND MESH TO PREVENT WATER FROM FLOWING UNDER THE FENCE.

ADDITIONAL REQUIREMENTS FOR THE INSTALLATION OF A SPILL-THROUGH WEIR

1. LOCATE THE SPILL-THROUGH WEIR SUCH THAT THE WEIR CREST WILL BE LOWER THAN THE GROUND LEVEL AT EACH END OF THE FENCE.

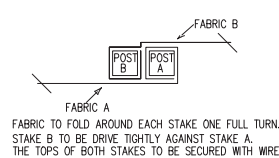
2. ENSURE THE CREST OF THE SPILL-THROUGH WEIR IS AT LEAST 300MM THE GROUND ELEVATION.

3. SECURELY TIE A HORIZONTAL CROSS MEMBER (WEIR) TO THE SUPPORT POSTS/STAKES EACH SIDE OF THE WEIR. CUT THE FABRIC DOWN THE SIDE OF EACH POST AND FOLD THE FABRIC OVER THE CROSS MEMBER AND APPROPRIATELY SECURE THE FABRIC.

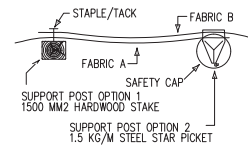
4. INSTALL A SUITABLE SPLASH PAD AND/OR CHUTE IMMEDIATELY DOWN-SLOPE OF THE SPILL-THROUGH WEIR TO CONTROL SOIL EROSION AND APPROPRIATELY DISCHARGE THE CONCENTRATED FLOW PASSING OVER THE WEIR.

NOTES:

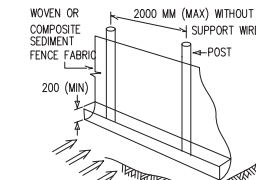
1. SEDIMENT FENCE TO BE INSTALLED ALONG A LINE OF CONSTANT GROUND ELEVATION WHEREVER PRACTICAL.
2. BOTH END OF THE SEDIMENT FENCE TO EXTEND UP THE SLOPE AT LEAST 1M.
3. SUPPORT POST TO BE SPACED A MAXIMUM 2M UNLESS THE FENCE IS SUPPORTED BY A TOP WIRE OR WIRE MESH BACKING, IN WHICH CASE 3M MAXIMUM SPACING.
4. FENCE RETURNS SHALL BE INSTALLED AT MAXIMUM 20M SPACING IF FENCE IS INSTALLED ALONG THE CONTOUR, OTHERWISE 5 TO 10M MAXIMUM SPACING.
5. MINIMUM 4 STAPLES OR THE WIRES PER STAKE.



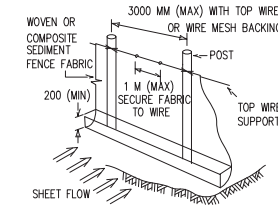
JOINING FABRIC – METHOD 1



JOINING FABRIC – METHOD 2



INSTALLATION WITHOUT BACKING SUPPORT



INSTALLATION WITH TOP WIRE SUPPORT

MAINTENANCE

1. INSPECT THE SEDIMENT FENCE AT LEAST WEEKLY AND AFTER ANY SIGNIFICANT RAIN. MAKE NECESSARY REPAIRS IMMEDIATELY.
2. REPAIR ANY TORN SECTIONS WITH A CONTINUOUS PIECE OF FABRIC FROM POST TO POST.
3. WHEN MAKING REPAIRS, ALWAYS RESTORE THE SYSTEM TO ITS ORIGINAL CONFIGURATION UNLESS AN AMENDED LAYOUT IS REQUIRED OR SPECIFIED.
4. IF THE FENCE IS SAGGING BETWEEN STAKES, INSTALL ADDITIONAL SUPPORT POSTS.
5. REMOVE ACCUMULATED SEDIMENT IF THE SEDIMENT DEPOSIT EXCEEDS A DEPTH OF 1/3 THE HEIGHT OF THE FENCE.
6. DISPOSE OF SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
7. REPLACE THE FABRIC IF THE SERVICE LIFE OF THE EXISTING FABRIC EXCEEDS 6-MONTHS.

REMOVAL

1. WHEN DISTURBED AREAS UP-SLOPE OF THE SEDIMENT FENCE ARE SUFFICIENTLY STABILISED TO RESTRAIN EROSION, THE FENCE MUST BE REMOVED.
2. REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
3. REHABILITATE/REVEGETATE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

SEDIMENT FENCE

- (d) NOT TO BE LOCATED IN AREAS OF CONCENTRATED FLOW.
- (b) NORMALLY LOCATED ALONG THE CONTOUR WITH A MAXIMUM CATCHMENT AREA 0.6 HA PER 100M LENGTH OF FENCE.
- (c) WOVEN FABRICS ARE PREFERRED, NON-WOVEN FABRICS MAY BE USED ON SMALL WORK SITES, I.E. OPERATIONAL PERIOD LESS THAN 6 MONTHS OR ON SITES WHERE SIGNIFICANT SEDIMENT RUNOFF IS NOT EXPECTED.
- (d) WHERE FENCES NEED TO BE LOCATED ACROSS THE CONTOUR THE LAYOUT SHALL CONFORM TO 'TYPICAL LAYOUT ACROSS GRADE'.
- (e) FENCES ARE REQUIRED 2m MIN FROM TOE OF CUT OR FILL BATTERS, WHERE NOT PRACTICAL ONE FENCE CAN BE AT THE TOE WITH A SECOND FENCE 1m MIN AWAY. FENCE SHOULD NOT BE LOCATED PARALLEL WITH TOE IF CONCENTRATION OF FLOW WILL OCCUR BEHIND THE FENCE. TEMP CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP.
- (d) ADJACENT STORMWATER RUNOFF TO BE DIVERTED AWAY FROM ENTRY/EXIT.
- (b) WHEEL – WASH OR SPRAY UNIT MAY BE REQUIRED DURING WET WEATHER.

PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3

Date: 16 December 2022



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DESIGNED	THN	CHECKED	ACF
PROJECT ENGINEER	THN	DESIGN VERIFICATION	
PROJECT DIRECTOR	ACF	DATE	

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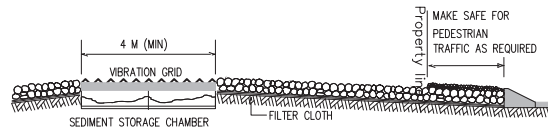
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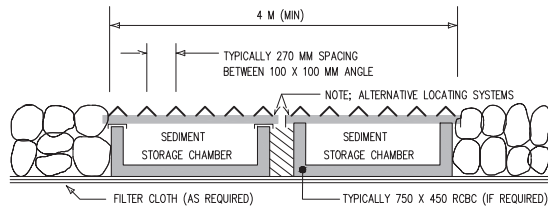
PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
LOTS 1189–1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS – SHEET 3 OF 5

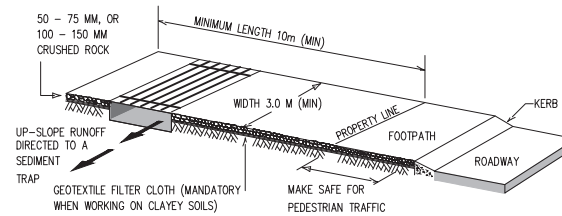
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TYPICAL PROFILE OF A VIBRATION GRID



TYPICAL PROFILE OF THE VIBRATION PANELS



TYPICAL LAYOUT OF A VIBRATION GRID

TEMPORARY CONSTRUCTION ENTRY/EXIT RUMBLE GRID NOTES

MATERIALS

ROCK: WELL GRADED, HARD, ANGULAR, EROSION RESISTANT ROCK, NOMINAL DIAMETER OF 50 TO 75mm (SMALL DISTURBANCES) OR 100 TO 150mm (LARGE DISTURBANCES). ALL REASONABLE MEASURES MUST BE TAKEN TO OBTAIN ROCK OF NEAR UNIFORM SIZE.

FOOTPATH STABILISING AGGREGATE: 25 TO 50mm GRAVEL OR AGGREGATE.

GEOTEXTILE FABRIC: HEAVY-DUTY, NEEDLE-PUNCHED, NON-WOVEN FILTER CLOTH (BIDIM A24 OR EQUIVALENT).

INSTALLATION

1. REFER TO APPROVED PLANS FOR LOCATION AND DIMENSIONAL DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.

2. CLEAR THE LOCATION OF THE VIBRATION GRID, REMOVING STUMPS, ROOTS AND OTHER VEGETATION TO PROVIDE A FIRM FOUNDATION SO THAT THE ROCK IS NOT PRESSED INTO SOFT GROUND. CLEAR SUFFICIENT WIDTH TO ALLOW PASSAGE OF LARGE VEHICLES, BUT CLEAR ONLY THAT NECESSARY FOR THE EXIT. DO NOT CLEAR ADJACENT AREAS UNTIL THE REQUIRED EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE.

3. GRADE THE LOCATION OF THE VIBRATION GRID SO THAT RUNOFF FROM THE UNIT WILL NOT FLOW INTO THE STREET, BUT WILL FLOW TOWARDS AN APPROPRIATE SEDIMENT-TRAPPING DEVICE.

4. ENSURE THAT THE INSTALLATION OF THE VIBRATION GRID HAS ADEQUATE SEDIMENT STORAGE VOLUME UNDER THE GRID. WHERE NECESSARY, INSTALL SUITABLE PRECAST SEDIMENT COLLECTION CHAMBERS.

5. PLACE A ROCK PAD/RAMP FORMING A MINIMUM 200mm THICK LAYER OF CLEAN, OPEN-VOID ROCK OVER THE ROADWAY BETWEEN THE VIBRATION GRID AND THE SEALED STREET TO PREVENT TYRES FROM PICKING UP MORE SOIL AFTER THEY HAVE BEEN CLEANED.

6. THE TOTAL LENGTH OF THE VIBRATION GRID AND ROCK RAMPS SHOULD BE AT LEAST 15m WHERE PRACTICABLE, AND AS WIDE AS THE FULL WIDTH OF THE ENTRY OR EXIT AND AT LEAST 3m. THE ROCK RAMP SHOULD COMMENCE AT THE EDGE OF THE OFF-SITE SEALED ROAD OR PAVEMENT.

7. FLARE THE END OF THE ROCK PAD WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES DO NOT TRAVEL OVER UNPROTECTED SOIL.

8. IF THE FOOTPATH IS OPEN TO PEDESTRIAN MOVEMENT, THEN COVER THE COARSE ROCK WITH FINE AGGREGATE OR GRAVEL, OR OTHERWISE TAKE WHATEVER MEASURES ARE NEEDED TO MAKE THE AREA SAFE.

MAINTENANCE

1. INSPECT VIBRATION GRID PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED PERIODS OF RAINFALL, AFTER SIGNIFICANT RUNOFF-PRODUCING RAINFALL, OR OTHERWISE AT FORTNIGHTLY INTERVALS.

2. IF SAND, SOIL, SEDIMENT OR MUD IS TRACKED OR WASHED ONTO THE ADJACENT SEALED ROADWAY, THEN SUCH MATERIAL MUST BE PHYSICALLY REMOVED, FIRST USING A SQUARE-EDGED SHOVEL, AND THEN A STIFF-BRISTLED BROOM, AND THEN BY A MECHANICAL VACUUM UNIT, IF AVAILABLE.

3. IF NECESSARY FOR SAFETY REASONS, THE ROADWAY SHALL ONLY BE WASHED CLEAN AFTER ALL REASONABLE EFFORTS HAVE BEEN TAKEN TO SHOVEL AND SWEEP THE MATERIAL FROM THE ROADWAY.

4. WHEN THE VOIDS BETWEEN THE ROCK BECOMES FILLED WITH MATERIAL AND THE EFFECTIVENESS OF THE ROCK RAMPS ARE REDUCED TO A POINT WHERE SEDIMENT IS BEING TRACKED OFF THE SITE, A NEW 100mm LAYER OF ROCK MUST BE ADDED AND/OR THE ROCK PAD MUST BE EXTENDED.

5. ENSURE ANY ASSOCIATED DRAINAGE CONTROL MEASURES ARE MAINTAINED IN ACCORDANCE WITH THEIR DESIRED OPERATIONAL CONDITION.

6. DISPOSE OF SEDIMENT AND DEBRIS IN A MANNER THAT WILL NOT CREATE AN EROSION OR POLLUTION HAZARD.

REMOVAL

1. THE VIBRATION GRID SHOULD BE REMOVED ONLY AFTER IT IS NO LONGER NEEDED AS A SEDIMENT CONTROL DEVICE.

2. REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

3. RE-GRADE AND STABILISE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

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Approval no: DEV2022/1275/3

Date: 16 December 2022



DRAWN: EL	DESIGNED: THN	CHECKED: ACF
PROJECT ENGINEER: THN	DESIGN VERIFICATION:	
PROJECT DIRECTOR: ACF	DATE:	

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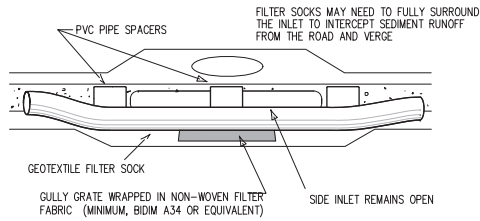
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PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

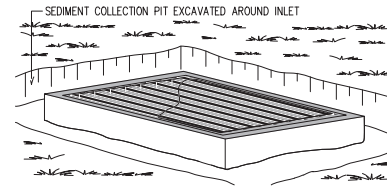
TITLE
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 4 OF 5

SCALE AT A1		
NOT TO SCALE		
PROJECT No.	DRAWING No.	ISSUE
221407	C118	1
ORIGINAL SHEET SIZE A1-594 x 841mm		
		

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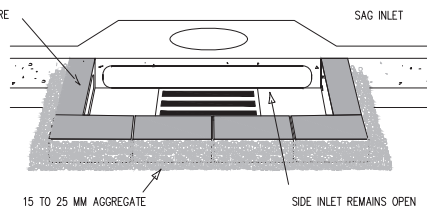


FILTER SOCK SEDIMENT TRAP ON A SAG INLET

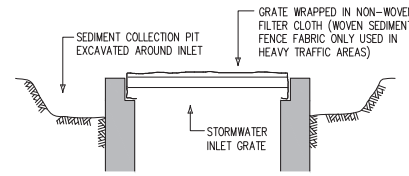


FABRIC WRAP DROP INLET PROTECTION WITH TRENCH

OPEN CONCRETE BLOCKS LOCKED IN PLACE WITH TIMBER CHOCKS AND COVERED WITH WIRE MESH



BLOCK AND AGGREGATE TYPE SEDIMENT TRAP ON A SAG INLET



TYPICAL DETAILS OF EXCAVATED SEDIMENT COLLECTION TRENCH

STORMWATER GULLY SEDIMENT TRAP (SAG INLET) NOTES

INSTALLATION

1. REFER TO APPROVED PLANS FOR LOCATION AND INSTALLATION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
2. ENSURE THAT THE INSTALLATION OF THE SEDIMENT TRAP WILL NOT CAUSE UNDESIRABLE SAFETY OR FLOODING ISSUES.
3. INSTALL SEDIMENT TRAP IN ACCORDANCE WITH STANDARD DRAWING SUPPLIED WITH THE APPROVED PLAN, OR AS DIRECTED BY THE SITE SUPERVISOR.
4. ENSURE THE SEDIMENT TRAP FULLY ENCLOSES THE KERB INLET. USE APPROPRIATE SPACERS TO ENSURE THE SEDIMENT TRAP DOES NOT BLOCK THE SIDE-ENTRY INLET.
5. IF NECESSARY, INSTALL ADDITIONAL ON-GRADE KERB INLET SEDIMENT TRAPS UP-SLOPE OF THE SAG INLET TO ADEQUATELY RETAIN THE EXPECTED QUANTITY OF SEDIMENT RUNOFF.
6. TAKE ALL NECESSARY MEASURE TO MINIMISE THE SAFETY RISK CAUSED BY THE STRUCTURE.

MAINTENANCE

1. INSPECT ALL SEDIMENT TRAPS DAILY AND IMMEDIATELY AFTER RUNOFF-PRODUCING RAINFALL. MAKE REPAIRS AS NEEDED.
2. REMOVE COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
3. ENSURE SEDIMENT DOES NOT ENTER THE STORMWATER DRAIN DURING DE-SILTING OPERATIONS AND MAINTENANCE OF THE TRAP.
4. SEDIMENT ON THE ROAD SHALL BE REMOVED IMMEDIATELY IF IT REPRESENTS A SAFETY HAZARD.

REMOVAL

1. WHEN THE UP-SLOPE DRAINAGE AREA HAS BEEN STABILISED, REMOVE ALL MATERIALS INCLUDED DEPOSITED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

MATERIALS

FABRIC (LIGHT TRAFFIC AREAS):
HEAVY-DUTY, NEEDLE-PUNCHED, NON-WOVEN FILTER CLOTH (BIDM A34 OR EQUIVALENT).

FABRIC (HEAVY TRAFFIC AREAS):
POLY-PROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN REINFORCED FABRIC. THE FABRIC WIDTH SHOULD BE AT LEAST 700mm, WITH A MINIMUM UNIT WEIGHT OF 140GSM. FABRICS SHOULD CONTAIN ULTRAVIOLET INHIBITORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).

INSTALLATION

1. REFER TO APPROVED PLANS FOR LOCATION AND DIMENSIONAL DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
2. ENSURE THAT THE INSTALLATION OF THE SEDIMENT TRAP WILL NOT CAUSE UNDESIRABLE SAFETY OR FLOODING ISSUES.
3. SELECT THE APPROPRIATE FABRIC FOR THE SITE CONDITIONS.

STORMWATER FIELD INLET SEDIMENT TRAP NOTES

REMOVAL

1. WHEN THE UP-SLOPE DRAINAGE AREA HAS BEEN STABILISED, REMOVE ALL MATERIALS INCLUDED DEPOSITED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

4. WRAP THE FABRIC AROUND OR OVER THE STORMWATER INLET GRATE IN SUCH A MANNER THAT PREVENTS ANY WATER ENTERING THE STORMWATER INLET WITHOUT PASSING THROUGH THE FABRIC.

5. ENSURE ALL OTHER FLOW ENTRY POINTS ARE COVERED WITH FABRIC SUCH THAT WATER CANNOT ENTER THE STORMWATER INLET WITHOUT PASSING THROUGH A SUITABLE FILTER.

6. TAKE ALL NECESSARY MEASURE TO MINIMISE SAFETY OR FLOODING RISK CAUSED BY OPERATION OF THE SEDIMENT TRAP.

MAINTENANCE

1. INSPECT THE BARRIER AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT AND MAKE REPAIRS AS NEEDED TO THE SEDIMENT TRAP.
2. REMOVE COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
3. REPLACE THE FABRIC IF IT IS TORN OR DAMAGED.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED IMMEDIATELY IF THEY REPRESENT A SAFETY RISK.

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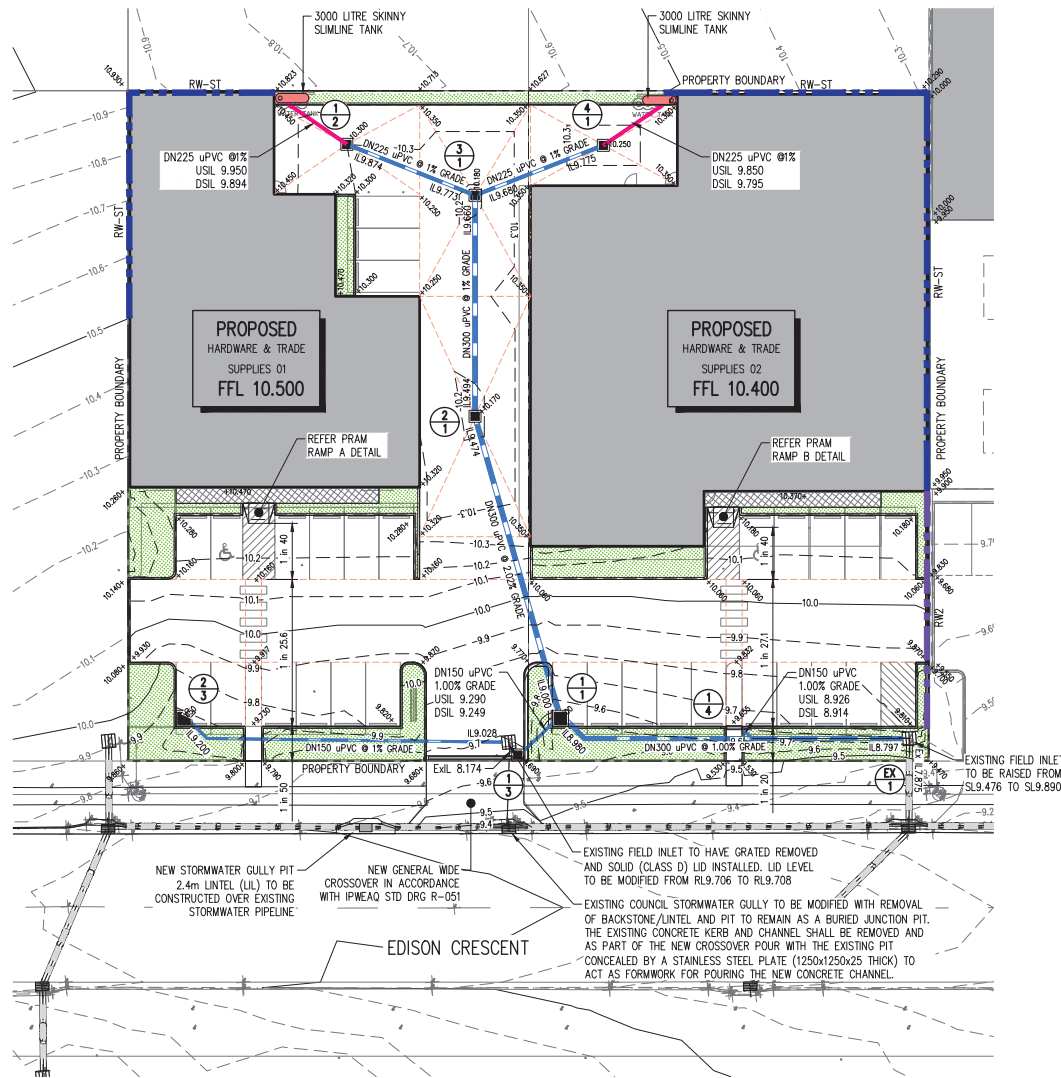
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PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS — SHEET 5 OF 5

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SCALE AT A1		
NOT TO SCALE		
PROJECT No.	DRAWING No.	ISSUE
221407	C119	1
ORIGINAL SHEET SIZE A1-594 x 841mm		



LEGEND

	PROPERTY BOUNDARY
	EXISTING STORMWATER DRAINAGE
	PROPOSED STORMWATER PIPE
	PROPOSED STORMWATER GULLY PIT
	PROPOSED STORMWATER MANHOLE
	PIT NO. LINE NO.
	PROPOSED ROOFWATER PIPE (BY OTHERS)
	100# PVC IRRIGATION SERVICE CONDUIT
	600x600 STORMWATER FIELD INLET PIT FITTED WITH OCEAN PROTECT OCEANGUARD WITH OIL/HYDROCARBON ABSORBENT LINING
	FINISHED SURFACE LEVEL
	PROPOSED FINISHED SURFACE CONTOURS (MAJOR 1m)
	PROPOSED FINISHED SURFACE CONTOURS (MINOR 0.5m)
	PROPOSED BUILDING RETAINING WALL REFER STRUCTURAL DRAWINGS FOR DETAILS
	PROPOSED BLOCK RETAINING WALL REFER DRG C110 FOR DETAILS

DRAWN	CP	DESIGNED	THN	CHECKED	ACF
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10/29/12/22	BIO-BASIN REMOVED	KR
9/03/08/22	SURFACE GRADING REVISED	EL
8/06/07/22	ISSUED FOR APPROVAL	EL
7/18/05/22	'V' GRATE REMOVED	
6/03/05/22	ISSUED FOR APPROVAL	EL
5/28/04/22	INFO REQUEST RESPONSE	
4/09/03/22	LAYOUT UPDATED	EL
3/17/02/22	LAYOUT UPDATED	EL
2/07/02/22	FOR APPROVAL	EL
1/22/12/21	FOR APPROVAL	GP

REV DATE AMENDMENT

AMENDMENTS

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PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
FINISHED GRADING AND STORMWATER LAYOUT PLAN

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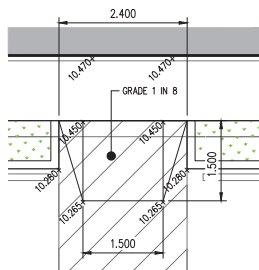
0 4 8 12 16 20m
SCALE 1:200 (A1)

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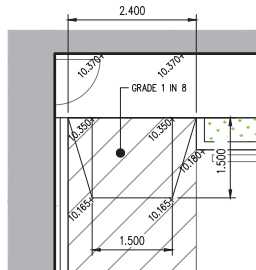
SCALE AT A1		
1:200; 1:50		
PROJECT No.	DRAWING No.	ISSUE
221407	C200	10

ORIGINAL SHEET SIZE A1-594 x 841mm

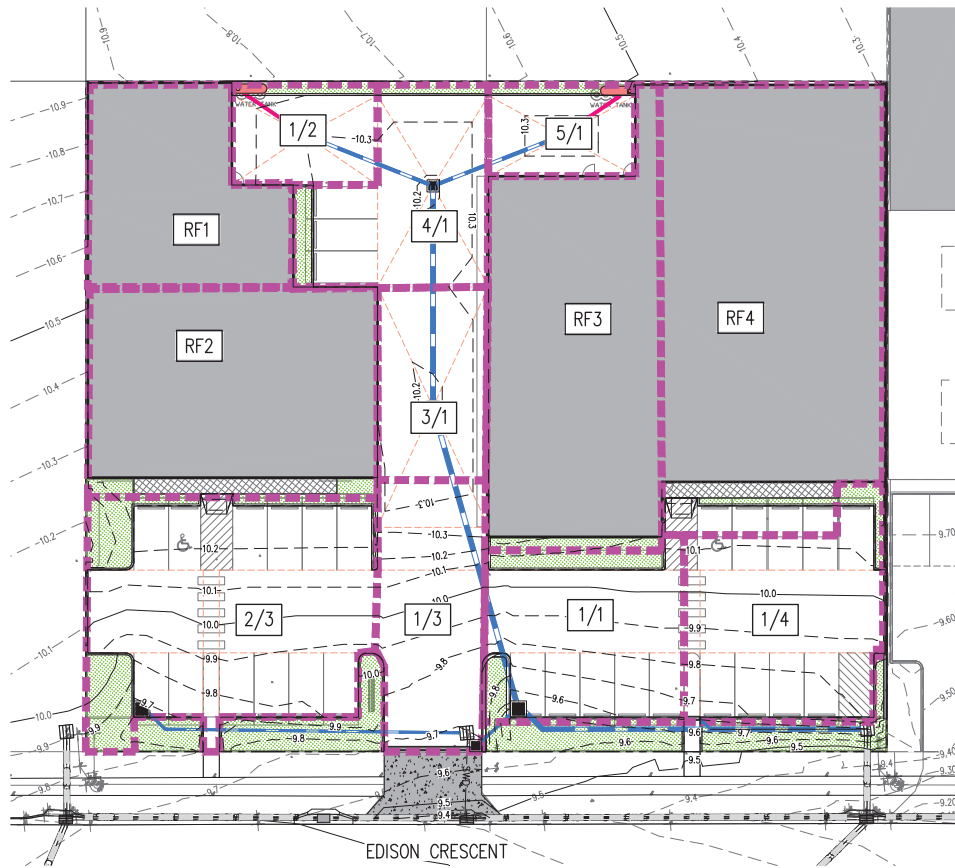
0 10 20 30 40 50 90



PRAM RAMP A DETAIL
SCALE 1:50



PRAM RAMP B DETAIL
SCALE 1:50



CATCHMENT AREAS

STRUCT	AREA (ha)
RF1	0.0200
RF2	0.0339
RF3	0.0386
RF4	0.0515
1/1	0.0194
2/1	0.0119
3/1	0.0175
4/1	0.0068
1/2	0.0082
1/3	0.0164
2/3	0.0359
1/4	0.0196

PLANS AND DOCUMENTS
referred to in the PDA
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7	29/11/22	NORTH STAR UPDATED	KR
6	06/07/22	ISSUED FOR APPROVAL	EL
5	03/05/22	ISSUED FOR APPROVAL	EL
4	10/03/22	LAYOUT REVISED	EL
3	17/02/22	LAYOUT UPDATED	EL
2	07/02/22	FOR APPROVAL	THN
1	22/12/21	FOR APPROVAL	GP
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PROJECT
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DEVELOPMENT**
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
**STORMWATER DRAINAGE
CATCHMENT PLAN**

RATIONAL METHOD FLOW CALCULATIONS - GROUND CATCHMENTS (1420m²)

Catchment		1/1	2/1	3/1	4/1	1/2	1/3	2/3	1/4
Catchment Area (m ²)	A	194.0	118.0	175.0	68.0	82.0	164.0	359.0	196.0
Catchment Area (ha)	A	0.019	0.012	0.018	0.007	0.008	0.016	0.036	0.020
10-Year Coefficient of Discharge	C ₁₀	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Frequency Factor	F _F	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Coefficient of Discharge	C _F	0.945	0.945	0.900	0.900	0.900	0.900	0.900	0.900
	C _F	0.945	0.945	0.900	0.900	0.900	0.900	0.900	0.900
Average Rainfall Intensity (mm/hr)	I	229	229	229	229	229	229	229	229
Time of Concentration (min)	t _c	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Discharge (m ³ /s)	Q	0.012	0.007	0.010	0.004	0.005	0.009	0.021	0.011
Discharge (L/s)	Q	12	7	10	4	5	9	21	11

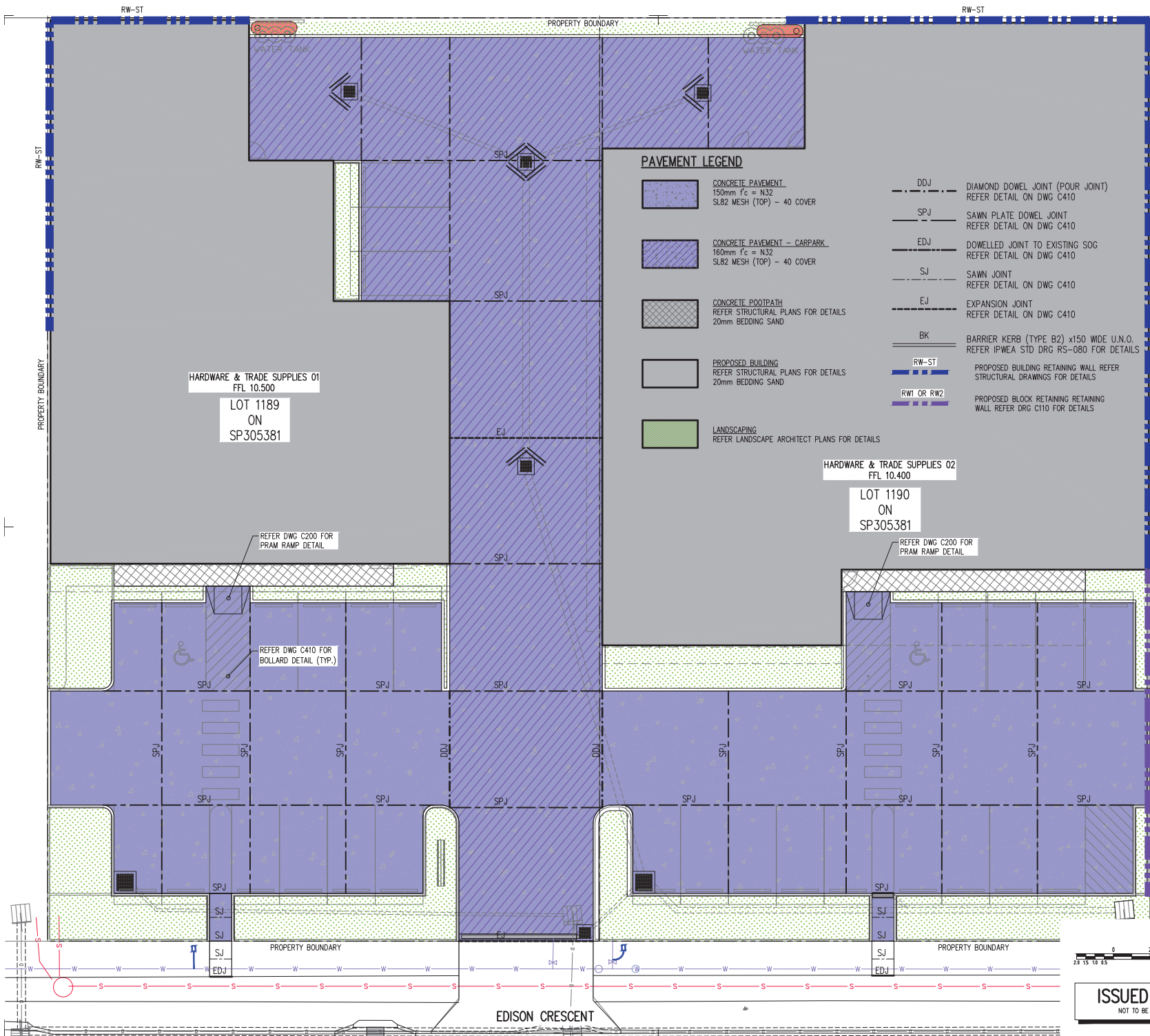
RATIONAL METHOD FLOW CALCULATIONS - ROOF CATCHMENTS (1440m²)

Catchment		RF1	RF2	RF3	RF4
Catchment Area (m ²)	A	200.0	339.0	386.0	515.0
Catchment Area (ha)	A	0.020	0.034	0.039	0.052
10-Year Coefficient of Discharge	C ₁₀	0.90	0.90	0.90	0.90
Frequency Factor	F _F	1.05	1.05	1.00	1.00
Coefficient of Discharge	C _F	0.945	0.945	0.900	0.900
	C _F	0.945	0.945	0.900	0.900
Average Rainfall Intensity (mm/hr)	I	262	262	262	262
Time of Concentration (min)	t _c	5.0	5.0	5.0	5.0
Discharge (m ³ /s)	Q	0.014	0.023	0.025	0.034
Discharge (L/s)	Q	14	23	25	34



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SCALE AT A1		
1:200		
PROJECT No.	DRAWING No.	ISSUE
221407	C205	7
ORIGINAL SHEET SIZE A1-594 x 841mm		



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3	29/11/22	BIO-BASIN REMOVED	EL
2	03/08/22	PRAM RAMP ADDED	EL
1	06/07/22	FOR APPROVAL	EL
REV	DATE	AMENDMENT	INIT
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PROJECT
PROPOSED COMMERCIAL DEVELOPMENT
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

TITLE
SITE WORKS AND SETOUT PLAN

SCALE 1:100 (A1)
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SCALE AT A1		
1:100		
PROJECT No.	DRAWING No.	ISSUE
221407	C400	3
ORIGINAL SHEET SIZE A1-594 x		
		

RAINWATER TANKS NOTE:

ALL RAINWATER TANKS ARE TO BE CONNECTED TO NON-POTABLE FIXTURES FOR RE-USE AND APPROVED UNDER A FUTURE PLUMBING APPROVAL.

EXISTING SERVICES NOTE:

- THE CONTRACTOR IS TO CONFIRM THE LOCATION OF ALL SERVICES AND CONTACT 'DIAL BEFORE YOU DIG' ON 1100 PRIOR TO COMMENCING CONSTRUCTION WORKS OR ORDERING MATERIAL.
- THE CONTRACTOR IS TO CONFIRM THE LOCATION AND LEVEL OF ALL SEWER AND DRAINAGE CONNECTION POINTS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS. THE SUPERVISING ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY INVERT LEVELS DIFFER TO LEVELS SHOWN ON ALL FARR ENGINEERS ASSOCIATES PLANS.
- EXISTING SERVICES SHOWN ON ALL FARR ENGINEERS ASSOCIATES PLANS ARE AS PER DETAILED SURVEY AND AVAILABLE COUNCIL DOCUMENTATION. LOCATIONS ARE TO BE CONFIRMED PRIOR TO COMMENCEMENT OF WORKS. ALL COUNCIL SERVICES ARE TO BE LOCATED AND CONFIRMED BY LOCAL AUTHORITY.
- A REPRESENTATIVE OF EACH SERVICE PROVIDER IS TO BE PRESENT ON SITE WHEN WORKING WITHIN 3.0m OF EACH SERVICE.

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1:60 AND MAXIMUM DEPTH OF PROPERTY CONNECTION AT 1.5m UNLESS OTHERWISE STATED. FOR JUNCTION DETAILS REFER SEQ-SEW-1106-1 TO SEQ-SEW-1106-7.

NOTE: REFER HYDRAULIC CONSULTANT PLANS FOR LOCATION OF SANITARY HOUSE DRAINAGE.

WASTE WASHDOWN NOTE:

THE WASTE WASHDOWN AREA SHALL BE BUNDED AND DISCHARGED TO THE PRIVATE SANITARY DRAINAGE SYSTEM UNDER A PLUMBING APPROVAL AND UNITYWATER CONNECTION APPROVAL.

PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL



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LEGEND

- S EXISTING SEWER MAIN
- ===== STORMWATER DRAINAGE
- W EXISTING WATER MAIN

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9	29/11/22	BIO-BASIN REMOVED	KR
8	06/07/22	ISSUED FOR APPROVAL	EL
7	09/06/22	ISSUED FOR APPROVAL	EL
6	02/06/22	AMENDED WASTE WASHDOWN NOTE	
5	03/05/22	ISSUED FOR APPROVAL	EL
4	09/03/22	LAYOUT UPDATED	EL
3	17/02/22	LAYOUT UPDATED	EL
2	10/02/22	FOR APPROVAL	EL
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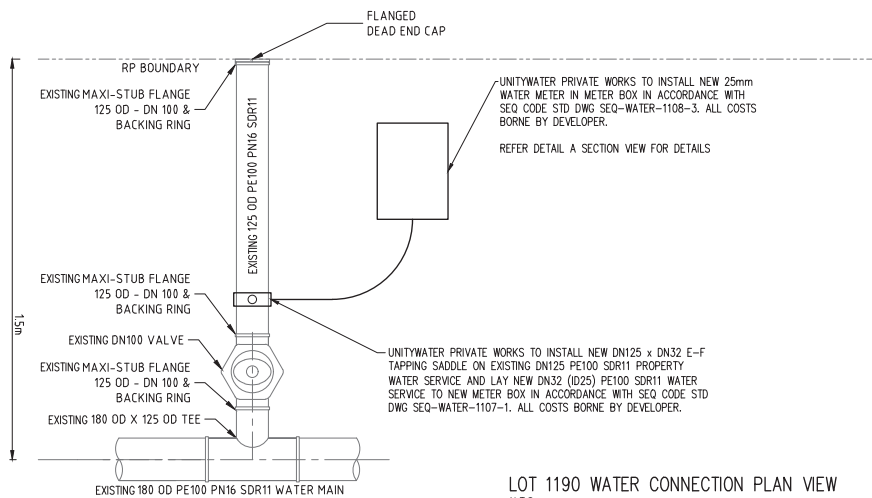
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TITLE
SEWER AND WATER
PROPERTY CONNECTION
LAYOUT PLAN

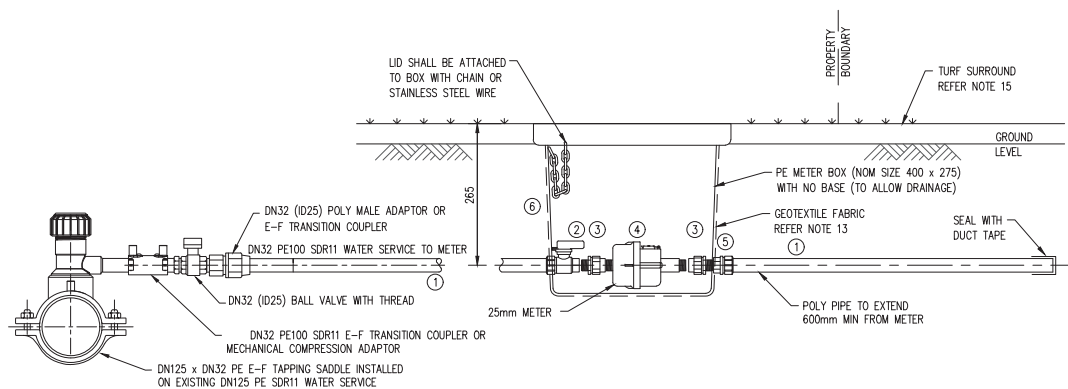
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PROJECT No. 221407
DRAWING No. C800
ISSUE 9

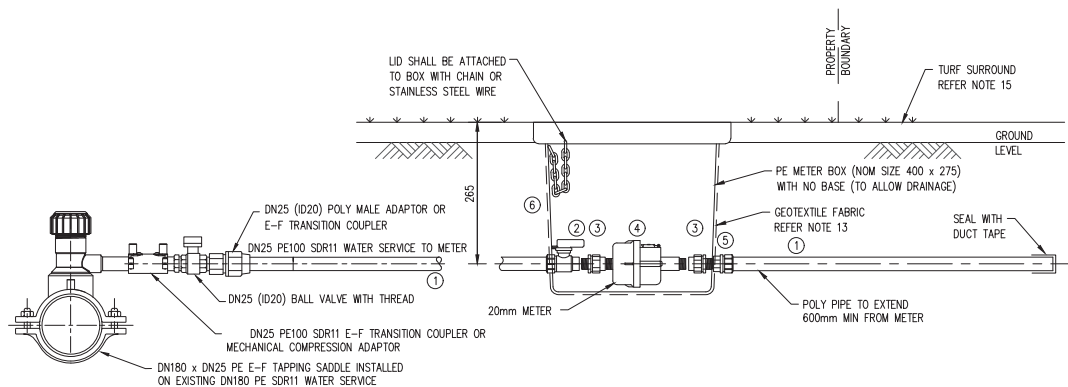
ORIGINAL SHEET SIZE A1-594 x 841mm
90



LOT 1190 WATER CONNECTION PLAN VIEW
N.T.S



LOT 1190 WATER CONNECTION SECTION VIEW
N.T.S



LOT 1189 WATER CONNECTION SECTION VIEW
N.T.S

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PROJECT DIRECTOR	ACF	DATE			

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1	09/06/22	FOR APPROVAL	EL
REVISION	DATE	AMENDMENT	INIT.
CLIENT			
NEWLINK PROPERTY GROUP			

FITTINGS SCHEDULE

ITEM	DESCRIPTION	No OFF AS REQ.
1	DN32 (ID25) PE100 SDR11 PIPE WITH BLUE STRIPE	
2	32mm x 25mm FEMALE/PE BRASS LOCKABLE BALL VALVE WITH HANDLE (REFER NOTE 9)	1
3	CONNECTION KIT (COMPRISES OF 2x DN25 BSP M/F BRASS UNIONS)	1
4	DN25 METER WITH DUAL CHECK VALVES (REFER NOTE 1)	1
5	OD32 PE TO DN25 MALE BRASS OR PLASTIC MECHANICAL CONNECTOR	1
6	PE METER BOX WITH LID (REFER NOTE 9)	

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77 ARCHITECTURE
LEVEL 1/129 MARGARET ST,
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PROJECT
**PROPOSED COMMERCIAL
DEVELOPMENT**
LOTS 1189-1190
EDISON CRESCENT,
BARINGA, QLD, 4551

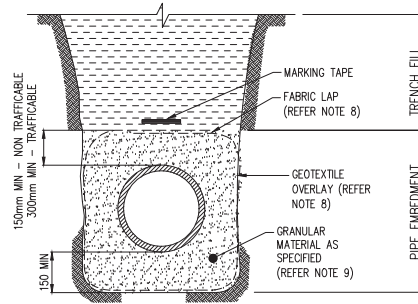
TITLE
**WATER PROPERTY
CONNECTION DETAIL PLAN
AND SECTIONS**

ISSUED FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

SCALE AT A1		
NOT TO SCALE		
PROJECT No.	DRAWING No.	ISSUE
221407	C801	1
ORIGINAL SHEET SIZE A1-594 x 841mm		

ASSET REGISTER – WATER RETICULATION

NAME OF ESTATE/ DEVELOPMENT		PROPOSED COMMERCIAL DEVELOPMENT			
SITE ADDRESS		LOT 1189 & 1190 EDISON CRES, BARINGA QLD 4551			
UNITYWATER APPROVAL NO.		-			
UNITYWATER APPROVAL DATE		-			
DEVELOPER		NEULINK PROPERTY GROUP			
JOB REFERENCE NUMBER		221407			
MAINS	DIAMETER	MATERIAL		LENGTH	
		DESIGN	CONSTRUCTED	DESIGN	CONSTRUCTED
SERVICES	DIAMETER	MATERIAL		LENGTH	
		DESIGN	CONSTRUCTED	DESIGN	CONSTRUCTED
METERS	DIAMETER	MATERIAL			
		DESIGN	CONSTRUCTED		



TYPE D SUPPORT – WITH GEOTEXTILE

TYPICAL TRENCH DETAIL

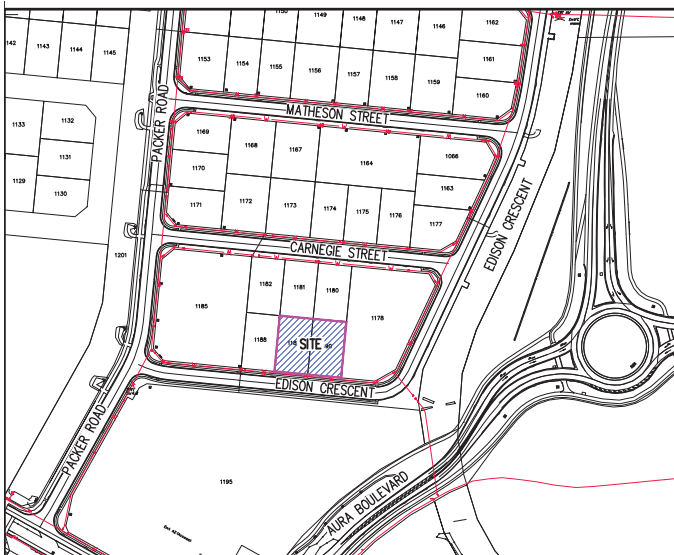
NOT TO SCALE

TRENCH BACKFILL REQUIREMENTS

- ALL WATER SERVICE TRENCHES SHALL BE PROVIDED WITH SEQ CODE TYPE D EMBEDMENT IN ACCORDANCE WITH TYPICAL TRENCH DETAIL.
- PIPE EMBEDMENT SHALL COMPRISE OF CLEAN 5–7mm SCREENINGS.
- PIPE EMBEDMENT SHALL BE OVERLAIN WITH A14 BIDM (GEOTEXTILE AND DETECTABLE MARKING TAPE).
- TRENCH BACKFILL SHALL BE LEAN MIX CONCRETE.

UNITYWATER NETWORK WORKS STANDARD WATER SUPPLY NOTES

- ALL DESIGN OF WATER SUPPLY NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE WATER SUPPLY CODE OF AUSTRALIA, SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION VERSION 1.3 (AUGUST 2019), PART 1: PLANNING AND DESIGN AND PART 3: DRAWINGS.
- ALL CONSTRUCTION OF WATER SUPPLY NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE WATER SUPPLY CODE OF AUSTRALIA, SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION VERSION 1.3 (AUGUST 2019), PART 2: CONSTRUCTION AND PART 3: DRAWINGS.
- ALL PRODUCTS AND MATERIALS USED IN CONSTRUCTION OF WATER SUPPLY NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE SOUTH EAST QUEENSLAND CODE ACCEPTED CIVIL INFRASTRUCTURE PRODUCTS AND MATERIAL LIST, AND THE MOST RECENT VERSION OF THE LIST IN EFFECT AT THE DATE OF THE CONSTRUCTION PRE-START MEETING.
- CONSTRUCTION WORKS SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO UNITYWATER'S WATER SUPPLY NETWORK.
- ALL LIVE WORKS ASSOCIATED WITH THE WATER SUPPLY NETWORK SHALL BE CARRIED OUT AT THE DEVELOPER'S COST BY QUOTATION REQUEST TO UNITYWATER PRIVATE WORKS ONLY.
- THE CONSTRUCTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT ASSET OWNERS AND AUTHORITIES BEFORE COMMENCING WORKS.
- PRIOR TO COMMENCEMENT OF ANY VARIATION WORKS, THE CONSTRUCTOR MUST FIRST OBTAIN APPROVAL FROM THE REGISTERED MAJOR CONNECTIONS CERTIFIER.



LOCALITY PLAN
NOT TO SCALE

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1275/3

Date: 16 December 2022



GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT URBAN UTILITIES SPECIFICATIONS AND STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORKS SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
- COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
- CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
- A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE STANDARD DRAWING FOR UNITYWATER.
- ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH UNITYWATER'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY UNITYWATER.
- ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
- TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. SEQ-WAT-1410-1.
- THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND LEVELS OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.

NOTES

- ALL DIMENSIONS ARE IN METERS UNLESS SHOWN OTHERWISE.
- INSTALL PIPEWORK PARALLEL TO PROPERTY BOUNDARIES.
- MAIN, SERVICE AND METER SHALL BE INSTALLED BY THE DEVELOPER.
- WRAP FLANGES AND BOLTS, WITH PETROLATUM TAPE SYSTEM IN ACCORDANCE WITH SEQ-WAT-1313.

PE PIPE

- PE PIPE MAY BE COLD BENT TO MAXIMUM RADIUS AS PER POP 202, STAKES OR OTHER SOURCES OF POINT LOADS SHALL NOT BE USED TO ASSIST IN BENDING THE PIPE.
- MAKE ALLOWANCE DURING CONSTRUCTION FOR EXPANSION AND CONTRACTION OF PE PIPE DUE TO TEMPERATURE CHANGES.
- ELECTROFUSION AND BUTT WELDING TO BE IN ACCORDANCE WITH WSA-01 (POLYETHYLENE CODE), BUTT WELDING IN TRENCHES IS NOT PERMITTED.
- ALL MECHANICAL COUPLINGS TO BE SELF-RESTRAINING.
- REFER SEQ-WAT-1409-1 FOR TYPICAL ARRANGEMENT.

VEGETATION PROTECTION

- TREES LOCATED ALONG THE FOOTPATH SHALL BE, WHERE POSSIBLE TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GRODLES SHALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GRODLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHOULD BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL

- TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

REHABILITATION

- PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
- PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

DRAWN	EL	DESIGNED	THN	CHECKED	ACF
PROJECT ENGINEER	THN	DESIGN VERIFICATION			
PROJECT DIRECTOR	ACF	DATE			

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PROPOSED COMMERCIAL DEVELOPMENT

LOTS 1189–1190
EDISON CRESCENT,
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TITLE
WATER PROPERTY
CONNECTION NOTES AND
DETAILS

SCALE AT A1

NOT TO SCALE

PROJECT No. DRAWING No. ISSUE

221407 C802 1

ORIGINAL SHEET SIZE A1-594 x 841mm

0 10 20 30 40 50 90