

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The Hon Kristina Keneally MP
Minister for Planning

Sydney

2009

SCHEDULE 1

Application No:	06_0139 (as modified)
Proponent:	ThaQuarry Pty Ltd & ACN114 843 453 Pty Ltd
Approval Authority:	Minister for Planning
Land:	Lots 1, 2, 3 and 4 in DP 1145808, Eastern Creek in the Blacktown local government area
Project:	Eastern Creek Waste Project

Modification 1 - marked in red

Modification 2 - marked in blue

Land and Environment Court issued consent orders - marked in green

Modification 3 - marked in purple

Modification 4 - marked in taupe

Modification 5 - marked in orange

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	4
Obligation to Minimise Harm to the Environment	4
Terms of Approval	4
Limits on Approval	4
Dispute Resolution	4
Structural Adequacy	4
Demolition	5
Utilities	5
Protection of Public Infrastructure	5
Operation of Plant and Equipment	5
Progressive Submission of Documents	5
SPECIFIC ENVIRONMENTAL CONDITIONS	6
Waste	6
Landfill Construction and Operation	7
Soil, Water and Leachate Management	9
Air, Odour and Greenhouse Gas	10
Noise	11
Metrological Monitoring	12
Traffic, Transport and Access	12
Visual Amenity	14
Flora and Fauna Management	15
Heritage	16
REHABILITATION AND CLOSURE	16
ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING	17
Environmental Management	17
Reporting	18
Independent Environmental Audit	18
Access to Information	18
APPENDIX 1: SITE PLAN AND BUILDING ELEVATIONS	20
APPENDIX 2: GENERAL TERMS FOR THE PLANNING AGREEMENT	24
APPENDIX 3: CONTRIBUTION AREA / TOTAL OPERATIONAL AREA	25
APPENDIX 4: FINAL LANDFORM	26
APPENDIX 5: INDEPENDENT DISPUTE RESOLUTION PROCESS	27
APPENDIX 6: SITE PLANS AND DRAWINGS FOR THE PRE-SORT ENCLOSURE AND FUTURE STORMWATER PLAN	

DEFINITIONS

BCA	Building Code of Australia
Building Certificate	Building Certificate means a building certificate issued under Part 8 of the EP&A Act
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval
Council	Blacktown City Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
EA	Environmental assessment titled <i>Light Horse Business Centre</i> dated December 2008, the associated response to issues raised in submissions, dated 6 April 2009 and Preferred Project Report dated 26 June 2009.
EPA	Environmental Protection Authority
EP&A Act	<i>Environmental Planning & Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning & Assessment Regulation 2000</i>
EPL	Environmental Protection Licence
Evening	The period from 6pm to 10pm
Incident	An incident causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this approval
Land	In general, the definition of land is consistent with the definition in the EP&A Act.
Material harm to the environment	Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning
Mitigation	Activities associated with reducing the impacts of the project
Morning shoulder	The period from 6am to 7am on Monday to Saturday, and 6am to 8am on Sunday and Public Holidays
MPC	The enclosed Materials Processing Centre described in modification application 06_0139 Mod 4, including the operation of conveyors to external stockpiles, but not including operation of the conveyor and chute to the landfill in the quarry void
Night	The period from 10pm to 6am on Monday to Saturday, and 10pm to 6am on Sundays and Public Holidays
Non-Putrescible Waste	As defined by Schedule 2 of the <i>POEO Regulation</i>
Operations	Operations are triggered by the receipt of waste on site
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Putrescible Waste	As defined by Schedule 2 of the <i>POEO Regulation</i>
Precinct Plan	State Environmental Planning Policy No: 59 - Central Western Sydney Economic and Employment Lands - Employment Lands Precinct Plan - Eastern Creek Precinct dated 14 December 2005
Precinct Plan Road	As detailed in Section 10 of the Precinct Plan, in particular Figure 30 – Local Road Pattern.
Precinct Plan Stormwater Scheme	As detailed in Section 5 of the Precinct Plan, in particular Figure 11 – Stormwater Management Plan.
Project	The development described in the EA, which includes the continued use of unauthorised works on site
Proponent	ThaQuarry Pty Ltd & ACN114 843 453 Pty Ltd, or their successors
Reasonable	Reasonable relates to the application of judgment in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
Remediation	Activities associated with partially or fully repairing or rehabilitating the impacts of the project or controlling the environmental consequences of this impact
Feasible	Feasible relates to engineering considerations and what is practical to build
Secretary	Secretary of the Department, or nominee
Site	The land referred to in Schedule 1

Statement of Commitments

The Proponent's Statement of Commitments in the EA and
Statement of Commitments in Response to Submissions
dated 6 April 2009

VENM

Virgin Excavated Natural Material, as defined in the *Protection
of the Environment Operations Act 1997*

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the project.

Terms of Approval

2. The Proponent shall carry out the project in accordance with the:
 - a) EA;
 - b) Statement of Commitments;
 - c) site plan and building elevation drawings at Appendix 1 and Appendix 6;
 - d) Modification application 06_0139 Mod 1 with supporting document titled *Light Horse Business Centre, Environmental Assessment Report: Project Modification* prepared by Light Horse Business Centre, dated August 2010 and Additional Information, dated 6.9.2010 and 13.9.2010;
 - e) Modification application 06_0139 Mod 2 dated 9.11.10;
 - f) Modification application 06_0139 Mod 3 dated 10 May 2011 with supporting document titled *Light Horse Business Centre, Environmental Assessment Report: Modification 3, September 2011* prepared by Light Horse Business Centre (which contains 'LandPartners' operational landform plan, 'Martens' report for stormwater management, and building elevations);
 - g) Modification Application 06_0139 Mod 4 with supporting document titled the document titled S75W Modification 4, dated October 2013 and prepared by Urbis Pty Ltd; and
 - h) Modification Application MP 06_0139 Mod 5 and supporting documents titled Section 75W Report, Modification 5, dated 18 March 2015, prepared by Urbis Pty Ltd; Response to Submissions, dated 19 May 2015, prepared by Urbis Pty Ltd; and Spoil Management Plan, dated September 2015, prepared by Genesis Xero Waste.
- 2a. The construction of the buildings referred to in condition 8(a - c) are not approved, only the use of the buildings.
3. If there is any inconsistency between the above, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
 - a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this approval; and
 - b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

Limits on Approval

5. The Proponent shall not receive more than 2 million tonnes of materials at the site per calendar year.
6. Nothing in this approval gives affect to or approves those works being undertaken, structures or buildings, on the site, in the area currently leased to Hanson (see Figure 1.2 in the EA).

Dispute Resolution

7. In the event that a dispute arises between the Proponent and Council or a public authority, other than the Department, in relation to the reasonableness of any requirements proposed by Council or a public authority arising from the conditions of this approval, the matter can be referred by either party to the Secretary for resolution.

Note: If the dispute cannot be resolved in 28 days, the Secretary will refer the matter to an Independent Dispute Resolution Process (see Appendix 5).

Structural Adequacy

8. Prior to commencement of operations the Proponent shall obtain and provide copies of all necessary building certificates from Council to the Secretary, for the following works:
 - a) the weighbridge and associated infrastructure;
 - b) the amenities building adjacent to the MPC building; and
 - c) the new administration/office building adjacent the car parking area.

9. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structure are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

- 9a Construction works associated with the weighing silos, and conveyor and chute system shall be:
- a) the subject of appropriate certification from a qualified geotechnical and civil engineers; and
 - b) in accordance with the relevant Australian Standards.
- 9b No temporary structures such as demountable sheds or shipping containers are to be used as a substitute for any approved permanent structure. This does not prevent the use of demountable structures on site during construction.

Demolition

10. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*, or its latest version.

Utilities

11. Prior to the construction of any utility works, the Proponent shall obtain the relevant approvals from service providers and Council, including, but not limited to a Section 73 Compliance Certificate from Sydney Water.

Protection of Public Infrastructure

12. The Proponent shall:
- a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters, footpaths), in consultation with Council, and submit a copy of this report to the Department prior to the commencement of construction;
 - b) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
 - c) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Operation of Plant and Equipment

13. The Proponent shall ensure that all plant and equipment used on the site is:
- a) maintained in a proper and efficient condition; and
 - b) operated in a proper and efficient manner.

Staged Submission of Documents

14. With the approval of the **Secretary**, the Proponent may submit to the **Secretary** for approval any plan, strategy, study, or program required by this consent on a progressive basis.

Consultation & Approval Requirements

15. Where this approval requires the Proponent to prepare a plan, strategy, study, or program in consultation with a specified agency, the Proponent shall:
- a) provide a draft of the plan, strategy, study, or program to the relevant agency for comment/endorsement; and
 - b) amend the draft to take account of the comments provided by the agency, if any.
16. Where this approval requires the Proponent to submit a plan, strategy, study, or program to the **Secretary** or an agency for approval, the Proponent is required to obtain written approval from the **Secretary** or agency.

**SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS**

WASTE

Limits on Input

1. The Proponent shall not:
 - a) landfill more than 700,000 tonnes of non-putrescible waste per calendar year;
 - b) receive or landfill putrescible waste on site;
 - c) stockpile more than 50 tonnes of tyres on site at any one time;
 - d) stockpile more than 20,000 tonnes of green waste on site at any one time.
 - e) receive waste on site that is contaminated by chemicals and/ or pathogens that will not be rendered harmless by the process or that may constitute a health or environmental risk, including clinical and related waste and diseased carcasses; and
 - f) receive waste on site containing contaminants classified as hazardous waste, restricted waste (other than asbestos) or liquid waste under the POEO Act.

Waste Acceptance and Screening

2. The Proponent shall:
 - a) implement suitable procedures to:
 - ensure that the site does not accept wastes that are prohibited; and
 - screen incoming waste loads;
 - b) install suitable signs at the entry to the site, indicating the types of waste that are permitted to be accepted and those wastes that are prohibited; and
 - c) ensure that:
 - all waste sludges and wastes that are controlled under a tracking system have all the appropriate documentation prior to acceptance at the site;
 - staff receive adequate training in order to be able to recognise and handle hazardous or other unapproved wastes; and
 - Procedures and training requirements are integrated into the Environmental Management Strategy for the Project (See Schedule 5 condition 1).
3. The Proponent shall:
 - a) implement procedures to identify and handle asbestos waste. These procedures should be in accordance with National Occupational Health and Commission (Safe Work Australia's) Code of Practice & Guidance Notes for the Management & Control of Asbestos in WorkPlaces, relative guidelines and legislation from Workcover NSW and the POEO Regulation; and
 - b) integrate these procedures into the Environmental Management Strategy for the Project (See Schedule 5 condition 1).

3a The Proponent shall ensure that at no time is asbestos waste (as defined in the POEO Act) permitted to be placed in the conveyor/chute system for conveyance to the base of the landfill.

Limits on Outputs

4. Except for the following, the Proponent shall dispose of all outputs produced from the waste processing and/or resource recovery facility on site to the landfill:
 - a) Recyclables extracted and delivered off-site for resource recovery purposes;
 - b) Putrescible waste extracted from the input waste stream and lawfully disposed of off-site;
 - c) Restricted waste and hazardous waste extracted from the input waste stream and lawfully disposed of off-site; and
 - d) Output waste derived materials approved for use under the *Protection of the Environment Operations Act, 1997* and Regulation.

Monitoring

5. Within 12 months of the commencement of operations, the Proponent shall prepare and implement a **Waste Monitoring Program** for the Project. This Program must:
 - a) be prepared in consultation with EPA;
 - b) be prepared to the satisfaction of the Secretary; and
 - c) include a suitable program to monitor the:
 - quantity, type and source of waste received on site; and
 - quantity, type and quality of the outputs produced by the site.

LANDFILL CONSTRUCTION AND OPERATION

6. Prior to the commencement of operations, the Proponent shall install a floor and wall landfill liner within the former quarry void (below the weathered zone) unless otherwise agreed to by the **Secretary**. The specifications of the landfill liner shall be developed in consultation with **EPA** and submitted to the **Secretary** for approval prior to construction commencing.

*Note: the purpose of the landfill liner is to prevent the risk of potential leachate migration from the quarry void into groundwater aquifers. The **Secretary** will only vary the requirement for a ground and wall liner if additional groundwater investigations (specified by **EPA**) reveal an alternative solution to prevent the risk of leachate migration can be achieved.*

7. Prior to the commencement of operations the Proponent shall implement all slope stabilisation and risk control measures detailed in the 'Geotechnical Quarry Slope Stability Assessment' report prepared by Jeffery and Katauskas Pty Ltd dated 17 March 2008. The results from any survey monitoring or inclinometers installed at the north face landslip area should be included in the Annual Environmental Review requirements outlined in Schedule 5 condition 3.
8. The Proponent shall prepare and implement a **Landfill Plan** for the Project to manage the disposal of material into the void to ensure a suitable level of compaction occurs. The Plan must:
- be to the satisfaction of the **Secretary**;
 - be submitted within 12 months of commencing operations;
 - be submitted every 3 years during the life of the operation (coinciding with the independent environmental audit required at Schedule 4, condition 4); and
 - be submitted 12 months prior to the closure of the landfill;
 - be conducted by a suitably qualified, experienced, and independent engineer (or other relevant expert) whose appointment has been endorsed by the **Secretary**;
 - detail the proposed disposal methodology to achieve a suitable level of compaction;
 - include a criteria or level of compaction target for the landfill, with the view to types of uses post-land filling of the void;
 - outline a process to monitor the performance of the disposal methodology, compaction and settling rates; and
 - contingency measures should the rates not be achieved; and
 - procedures for reporting the components of this Plan.
9. The Proponent shall:
- minimise the exposed or cleared areas at the landfill;
 - fill the landfill cell in a systematic manner in accordance with the Landfill Plan in Schedule 3 condition 8, that maximises compaction rates;
 - cover all exposed landfilled waste with at least 150mm of VENM (or a suitable alternative) at the end of daily waste disposal and compaction activities or with intermediate cover comprising at least a 300mm thick layer of VENM if the resultant covered surface is to be left exposed for more than 90 days.

Leachate Management System

10. Prior to the commencement of construction of the leachate management system, the Proponent must submit a report to the **Secretary** for approval that is prepared in consultation with **EPA** and Sydney Water, providing design details of the proposed leachate collection, conveyance, extraction, storage, treatment and disposal systems for all aspects of the proposal's operations (landfill and materials processing centre / resource recovery facility), including but not limited to:
- a construction quality assurance (CQA) plan for the collection, conveyance and storage measures of leachate including details of the leachate barrier system proposed for any surface areas used for the direct impoundment of leachate;
 - details of the proposed leachate pre-treatment system, including its capacity;
 - a program for the installation and commissioning of the systems; and
 - details of the Proponent's proposed trade waste agreement with Sydney Water Corporation.
11. No waste may be received until the Proponent has constructed the proposed leachate collection system and the leachate treatment plant and has secured a trade waste agreement with Sydney Water Corporation for the disposal of treated leachate.

Windrow Management

12. The Proponent shall manage windrow composting operations in accordance with:
- AS 4454-2003: Composts, Soil Conditioners and Mulches, Appendix N;
 - Best practice guidelines for Composting Systems;
 - the most protective level of measures set out in the Environmental Guidelines for Composting & Related Organics Processing Facilities; or

- d) other practices approved by the EPA/EPA.

Litter Control

- 13. The Proponent shall:
 - a) Implement suitable measures to prevent the unnecessary proliferation of litter both on and off site; and
 - b) Inspect and clear the site and surrounding area, of litter on a daily basis.

Pest, Vermin, Feral Animal & Noxious Weed Management

- 14. The Proponent shall:
 - a) Implement suitable measures to manage pests, vermin, feral animals and declared noxious weeds on site and identify those measures in the Environmental Management Strategy for the Project (See Schedule 5 condition 1)
 - b) Inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin, feral animals or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area; and
 - c) Perform ongoing monitoring of weed infestation on and adjoining the site.

Security, Hazards & Risks

- 15. The Proponent shall:
 - a) prevent unauthorised entry to the site; and
 - b) install and maintain a perimeter stock fence and lockable security gates on site.
- 16. The Proponent shall:
 - a) Prepare an **Emergency & Fire Response Plan** for the site to the satisfaction of NSW Fire Brigade, which should include but not be limited to mitigation measures, and include the number of days material can be stored on site, prior to construction commencing and the plan being implemented;
 - b) implement suitable measures to minimise the risk of fire on site;
 - c) extinguish any fires on site promptly;
 - d) maintain adequate fire-fighting capacity on site: and
 - e) detail emergency evacuation procedures
- 16a The Proponent shall prepare detailed design plans for the conveyor/chute system. These plans shall:
 - a) be prepared by a suitably qualified engineer in consultation with the EPA;
 - b) be submitted to the Secretary for approval prior to the commencement of construction;
 - c) include the dimensions and gradients of the conveyor and chute;
 - d) include a fully enclosed conveyor/chute system;
 - e) include a waste drop height of no more than 3 metres between the end of the sock and the base of the quarry;
 - f) incorporate fine mist sprays at the discharge end of the chute to minimise dust; and
 - g) incorporate maintenance access points.
- 16b The Proponent shall prepare a Conveyor and Chute System Maintenance and Management Plan. The Plan shall:
 - a) be submitted to the Secretary for approval prior to the commencement of operation;
 - b) include a maintenance schedule;
 - c) detail contingency measures in the event that the system breaks down, or is not coping with the intended quantities of waste; and
 - d) detail contingency measures to remove asbestos waste from the system should it be detected.

SOIL, WATER AND LEACHATE MANAGEMENT

Discharge Limits

- 17. Except as may be expressly provided in an EPL for the project, the Proponent shall comply with Section 120 of the POEO Act.
- 18. Except as may be expressly provided in an EPL for the project, the Proponent shall discharge wastewater, including treated wastewater, to sewer, in accordance with a Trade Waste Agreement with Sydney Water.
- 19. The Proponent shall design and construct the sewer to the satisfaction of the Secretary, to a sufficient size and depth, so as to not preclude the orderly development of Lots 9 and 11 in DP

241859, or the construction of the Precinct Plan Road that will eventually traverse Lot 10 DP 241859.

Bunding

20. The Proponent shall store all chemicals, fuels and oils used on site in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. These bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection* manual.

Soil, Water and Leachate Management Plan

21. The Proponent shall prepare and implement a **Soil, Water and Leachate Management Plan** for the site to the satisfaction of the **Secretary**. This plan must:
- be submitted to the **Secretary** for approval prior to construction;
 - be prepared by a suitably qualified and experienced expert;
 - be prepared in consultation with the **EPA** and Council; and
 - include:
 - a site water balance;
 - an erosion and sediment control plan;
 - a stormwater management scheme;
 - a surface water, groundwater and leachate monitoring program; and
 - a surface water, groundwater and leachate response plan.
22. The site water balance must:
- include details of all water extracted, transferred, used and/or discharged by the development;
 - identify the source of all water collected or stored on the site, including rainfall, stormwater and groundwater;
 - describe the measures that would be implemented to minimise water use on site.
23. The erosion and sediment control plan must:
- be consistent with the requirements in the latest version of *Managing Urban Stormwater: Soils and Construction* (Landcom);
 - identify the activities on site that could cause soil erosion and generate sediment; and
 - describe what measures would be implemented to:
 - minimise soil erosion and the transport of sediment to downstream waters, including the location, function and capacity of any erosion and sediment control structures; and
 - maintain these structures over time.
24. The stormwater management scheme must:
- be consistent with the guidance in the latest version of *Managing Urban Stormwater: Council Handbook* (DEC); and
 - include the detailed plans for the proposed surface water management system.
- 25.
- A site stormwater management system shall be provided for the Total Operational Area prior to the final landform being established or filled to the lowest point of the rim of the quarry void area, whichever occurs sooner. The system shall be designed to attenuate post development flows to a maximum of the predevelopment flows over the range of storms from the critical 2 year ARI event up to and including the critical 100 year ARI event under all stages of development including final landform for each of the four catchments shown in the Precinct Plan (Quarry, Quarry North, Upper Angus Creek and Ropes Creek Tributary catchments). The site stormwater management system shall also comply with the stormwater quality management and Water Sensitive Urban Design (WSUD) criteria in the Precinct Plan.
 - For the purpose of calculating predevelopment flows, the predevelopment (rural) discharge rates are calculated from the catchment delineation shown in the Precinct Plan. The predevelopment catchment area for the Total Operational Area are summarised in Table 1 below.
 - The predevelopment catchment flows for the Total Operational Area are calculated to be consistent with Council's proposed Precinct Plan stormwater infrastructure calculations. The predevelopment catchment flows are to be determined using the predevelopment catchment parameters listed in Table 1 below for use in the XP-RAPTS hydrologic software, Council will provide the predevelopment discharges for the Total Operational Area.
 - The design rainfall data used in the hydrologic calculations must be in accordance with Council's current Engineering Guide for Development.

- e) The catchment parameters utilised in the design shall be in accordance with the Council's current Engineering Guide for Development and represents the actual developed catchment conditions including size, slope, impervious and pervious areas, time of concentration (if appropriate) and flow travel times.
- f) The design of the site stormwater management system shall be consistent with the proposed Precinct Plan road system and downstream stormwater systems. Details of how the system will connect to and discharge into the downstream systems are to be provided with the detailed design of the system.
- g) The design of the site stormwater management system shall incorporate a contingency to meet a sensitive analysis of the system in relation to climate change in accordance with best practice at the time the design is prepared.
- h) The design calculations, detailed design plans and inspection, operation, monitoring and maintenance plan for the site stormwater management system shall be prepared in consultation with OEH and Council and submitted to the **Secretary** for approval prior to implementation and shall include any staging requirements/ assumptions. Detailed design plans shall comply with Council's Engineering Guide for Development Engineering Drawings requirements and shall be provided to the **Secretary** within 3 years of the Project Approval (ie. by 2 November 2012) or when a development proposal is lodged for the subject land, whichever is the sooner.
- i) Inspection, monitoring and maintenance reports are to be provided to Council annually after the system is established and include details of the inspection, monitoring/ testing (as required) and maintenance activities conducted to demonstrate that the system is operating in accordance with the approved design performance standard.
- j) Note: Should minor adjustments to the Total Operational Area be approved in future (typically less than 10% of the overall Operational Area), then the permissible predevelopment discharges must be recalculated in accordance with the parameters listed in Table 1 and an amended site stormwater management system design prepared, submitted to, approved by the **Secretary** and implemented in conjunction with the adjustment.
- k) The approved Total Operational Area site stormwater management system shall be constructed, owned, maintained in proper and efficient condition and operated in a proper and efficient manner by the developer at no cost to Council. Suitable restrictions on use satisfactory to and approved by the **Secretary**, shall be created over the title of the Total Operational Area to effect these requirements.

Table 1 Predevelopment Catchment Parameters

	Quarry	Quarry North	Upper Angus Ck	Ropes Creek Tributary
Area (ha)	17.61	11.95	15.60	7.25
Initial Rainfall loss (mm)	25	25	25	25
Continuing Rainfall loss (mm/hr)	2.5	2.5	2.5	2.5
Impervious percentage	5%	5%	5%	5%
Vectored Slopes (%)	5.0	5.0	5.0	3.0
Pern (Manning's 'n')	0.04	0.05	0.04	0.04

- 25a. The Proponent shall prepare an Interim Stormwater Management Plan for the pre-sort enclosure, to the satisfaction of the **Secretary**. The plan must:
 - a) be prepared in consultation with Council;
 - b) include details and specifications for the detention basins in Catchment G (as shown in Proposed Future Stormwater Management Plan, Drawing No. SKC077, Issue P6, dated 26 October 2015; and letter from Genesis Xero Waste to Blacktown City Council, dated 4 November 2015); and
 - c) satisfy the requirements of *Council's Engineering Guide for Development (2005)* and *Blacktown Development Control Plan 2015*.
- 25b. The Proponent shall construct the pre-sort enclosure in accordance with the Interim Stormwater Management Plan approved by the **Secretary** (as revised and approved by the **Secretary** from time-to-time) unless otherwise agreed by the **Secretary**.
- 25c. Prior to the commencement of construction of the pre-sort enclosure, the Proponent shall provide a temporary washdown facility for construction concrete trucks, which is to be located and constructed to prevent concrete wash from entering the Ropes Creek catchment.

26. Delete

27. The surface water, groundwater, and leachate monitoring program must:
- be generally consistent with the guidance in benchmark techniques 4, 5, 6, 7 and 8 of Appendix A of the EPA's *Environmental Guidelines for Solid Waste Landfills* (1996, or the relevant sections of the latest version of the guideline); and
 - include:
 - baseline data;
 - details of the proposed monitoring network; and
 - the parameters for testing and respective trigger levels for action under the surface water, groundwater and leachate response plan (see below).
28. The surface water, groundwater and leachate response plan must:
- include a protocol for the investigation, notification and mitigation of any exceedances of the respective trigger levels; and
 - describe the array of measures that could be implemented to respond to any surface or groundwater contamination that may be caused by the development.

Spoil Management

- 28a. The Proponent shall carry out bulk earthworks approved by Modification Application MP 06_0139 Mod 5 in accordance with the Spoil Management Plan Reference SMP 010915 dated September 2015 prepared by Genesis Xero Waste (subject to any revisions to the Spoil Management Plan that may be approved by the Secretary from time to time).

AIR, ODOUR AND GREENHOUSE GAS

Air Quality Impact Assessment Criteria

29. The Proponent shall ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 1 to 3 at any residence on, or on more than 25 percent of, any privately owned land.

Table 1: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³

Table 2: Short term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³

Table 3: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS/NZS 3580.10.1-2003: *Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method*.

Offensive Odour

30. The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.
31. If the Independent Environmental Audit (see Condition 7 of Schedule 5) recommends that the green waste area (see plan in Appendix 1) be enclosed to reduce the odour impacts of the project, then the Proponent shall enclose the area to the satisfaction of the Secretary within the timeframe specified by the Secretary.

- 31a The Proponent shall ensure that each green waste bay has an individual cover and aerobic equipment fitted to reduce odour and the generation of leachate.

Dust

32. The Proponent shall implement all reasonable and feasible measures to minimise the dust generated by the project.
33. The Proponent shall seal all internal haul roads within the operational area of the project (see Operational Area at Appendix 3), with the exception of haul roads within the quarry void itself.
34. Prior to the commencement of operations, the Proponent shall ensure that water sprays or appropriate dust suppression measures identified in the EA are implemented within the site to provide effective dust suppression to all dust generating activities, including but not limited to dust generated by:
- crushing, screening and/or sorting operations;
 - vehicles moving on unpaved surfaces; and
 - the unloading of dry waste material.
35. During construction, the Proponent shall ensure that:
- all trucks entering or leaving the site with loads have their loads covered; and
 - the trucks associated with the project do not track dirt onto the public road network.

Greenhouse Gas Emissions

36. The Proponent shall implement all reasonable and feasible measures to minimise:
- energy use on site; and
 - the scope 1, 2 and 3 greenhouse gas emissions produced on site, to the satisfaction of the Secretary.

Air Quality, Odour and Greenhouse Gas Management Plan

37. The Proponent shall prepare and implement an **Air Quality, Odour and Green House Gas Management Plan** for the project to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with EPA by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary, and submitted to the Secretary for approval within 3 months of the date of this approval;
 - describe in detail the measures that would be implemented on site to control the odour and air quality impacts of the project, and to ensure that these controls remain effective over time;
 - identify triggers for remedial action;
 - include a program for monitoring the air quality and odour impacts of the project including a real-time dust monitor to measure dust emissions during operation;
 - Identify the number and location of continuous monitoring points for fine particulates (PM10) during each stage of works, ensuring sufficient representation of the relevant sensitive receptors at each stage of the proposed works;
 - Include development and identification of PM10 concentration trigger levels at which:
 - Dust management actions must be taken, and specification of the relevant actions; and
 - Works at the site must cease.
 - Include a program for monitoring subsurface gas, surface gas emission, and gas accumulation in general accordance with the guidance in sections 15-18 of Appendix A of the DEC's Environmental Guidelines for Solid Waste Landfills; and
 - Include a protocol for remediating uncontrolled landfill gas emissions.

NOISE

Noise Impact Assessment Criteria

38. The Proponent shall ensure that noise from the project does not exceed the noise limits in Table 4.

Table 4: Noise Impact Assessment Criteria

Location	Day LA _{eq(15 minute)} dB(A)	Evening LA _{eq(15 minute)} dB(A)	Morning Shoulder LA _{eq(15 minute)} dB(A)
Any receiver	37	36	36

- 38a. Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the latest version of the *NSW Industrial Noise Policy*.

Hours of Operation

39. The Proponent shall comply with the restrictions in Table 5.

Table 5: Construction and Operation Hours for the Project

Activity	Day	Time
Construction	Monday – Friday	7:00am to 6:00pm
	Saturday	8:00am to 4:00pm
	Sunday and Public Holidays	Nil
Operation	Monday – Friday	7:00am to 6:00pm
	Saturday, Sunday and Public Holidays	8:00am to 4:00pm

- 39a. Operating hours of the conveyor and chute system are to be restricted to the facility's operational hours as defined in condition 39 of Schedule 3.
- 39b. Waste deliveries shall be restricted to the facility's operational hours as defined in condition 39 of Schedule 3.
- 39c. Notwithstanding condition 39 of Schedule 3, the MPC may be operated during the extended hours of 6am to 10pm Monday to Friday, and 6am to 4pm Weekends and Public Holidays.
- 39d. Prior to the commencement of earthworks for the pre-sort enclosure, the Proponent shall install a temporary, non-earthen noise barrier on top of the quarry spoil pile which is sufficient in height to shield engine, excavation and truck loading noise associated with excavating the spoil pile. The barrier shall remain in place until the spoil pile provides sufficient noise shielding to the west and it shall be removed prior to the issue of an Occupation Certificate for the pre-sort enclosure. The barrier must not be comprised of shipping containers.

Monitoring

40. The Proponent shall prepare and implement a Noise Monitoring Program for the development, in consultation with EPA, and to the satisfaction of the Secretary. This program must be submitted to the Secretary for approval prior to commencement of operations, and include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval.

METROLOGICAL MONITORING

41. For the life of the Project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the latest version of *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

TRAFFIC, TRANSPORT & ACCESS

Access

42. Access to the Project from Archbold Road is not permitted.
43. Access to the Project shall be via Old Wallgrove Road or Wonderland Drive, via the public Precinct Plan Road network, wherever a public road is available.
44. To facilitate both the construction of the sewer that will service the Project and the Precinct Plan Road that will eventually traverse Lot 10 DP241859, the Proponent shall grant access in favour of the owners of Lots 9 and 11 in DP241859, across Lot 10 DP 241859.

Precinct Plan Roads

45. Within five years from the date of this approval or when an adjoining land owner is building a precinct road to a common boundary (whichever is sooner), the Proponent shall design and construct, to the satisfaction of Council, those parts of the Precinct Plan Road network that

ultimately fall within the operational area of the facility (See Appendix 3). These precinct roads shall be dedicated to council, at no charge, to form part of the public road network.

46. When a Precinct Plan road is constructed, the Proponent shall design and construct any new vehicular connections to the Precinct Plan Road, to the satisfaction of Council.

Internal Roads and Parking

47. The Proponent shall:
- ensure that all internal site paved, trafficable or parking areas on site complies with AS2890.1 and/or AS2890.2 or their latest versions; and
 - construct at least 50 parking spaces for employees and visitors with at least 2% of those spaces provided for disabled drivers, clearly marked and signposted.

- 47a. Prior to the issue of an Occupation Certificate for the pre-sort enclosure, the Proponent shall construct an additional 10 parking spaces for employees and visitors to the pre-sort enclosure with at least 2 of the spaces provided for disabled drivers, clearly marked and signposted.

48. The Proponent shall ensure that vehicles associated with the project do not park or queue on the public road network at any time.

Local and Regional Road Network Contributions

- 49.
- By 22 November 2014, the Proponent shall contribute toward the acquisition, design and construction of the Precinct Plan Road know as 'Quarry Link Road' between Old Wallgrove Road ad Wonderland Drive and Bridge B1 forming part of the Quarry Link Road.
 - The contribution shall be the amount set out in the Table below or as approved by the Secretary under paragraph c), whichever is the lesser.

Contribution	
R1 Quarry Link Road	\$560,213.00
B1 Bridge	\$413,412.00

- The final contribution payable by the Proponent under this Condition 49 shall be subject to approval of the Secretary. The Secretary's consideration of an appropriate level of contribution shall be on the basis of a costs base date of March 2010 and considers:
 - the level of contribution made by all other landowners within the Eastern Creek Precinct Plan;
 - the level of contribution against the Land Acquisition (Just Terms Compensation) Act 1991;
 - a independent verification from a quantity surveyor on the cost of the works, whose appointment has been approved by the Secretary;
 - the level of contribution against the Total Operational Area of the project (See Appendix 3);
 - any submissions made by the Proponent or Council in relation to the contribution.
- The contribution is to be indexed in accordance with the following formula:

$$= \frac{\$C_c \times \text{CPI (at time of payment)}}{(\text{March 2010})}$$

Where:

\$C_c id the contribution expresses in dollars

CPI of the Consumer Price Index (All Groups Index) for Sydney issued by the Australian Statistician.

50. The Proponent must enter into a Planning Agreement in accordance with the terms of its offer dated 25 November 2011 within 1 month after public notification has been given in accordance with section 93G.

Transport Code of Conduct

51. The Proponent shall prepare and implement a Transport Code of Conduct for the development to the satisfaction of the Secretary. This protocol must:
- be submitted to the Secretary for approval prior to the commencement of operations;
 - be prepared in consultation with the RTA and Blacktown Council; and
 - describe the measures that would be implemented to:
 - minimise the impacts of the development on the local and regional road network, including traffic noise.

VISUAL AMENITY

Lighting

52. The Proponent shall ensure that the lighting associated with the project:
- complies with the latest version of *AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting*; and
 - is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

Amenity Berms

53. The Proponent shall prepare design details for the visual screens, impervious barriers and amenity berms being implemented for the facility, having regard to adjoining landowners. This design detail must be submitted to the **Secretary** for approval prior to the commencement of construction or regrading of the amenity berms, visual screens or impervious barriers.
54. Prior to the commencement of operations, the Proponent shall:
- construct and maintain, for the duration of the operations, amenity berms, impervious barriers and visual screens around the perimeter of the operational area (as detailed in the EA, the sit plan at Appendix 1 and Schedule 3, Condition 53 above);
 - retain the existing amenity berm to the north east of the quarry void at the perimeter;
 - vegetate the berms in accordance with the Landscape and Vegetation Management Plan at Schedule 3, condition 59;
 - maintain the height of the amenity berms at no less than 10 metres; and
 - conduct all earth works required to reshape the amenity berms on site, without impacting on adjoining landowners.
55. No stockpile on site should exceed the height of the berms, impervious barriers or visual screens.

Signage and Fencing

56. The Proponent shall not install any signage or fencing on site without the written approval of the **Secretary**. In seeking this approval the Proponent shall:
- submit detailed plans of the proposed signage or fencing, which have been prepared in consultation with Council; and
 - demonstrate that the proposed signage or fencing is consistent with the relevant requirements from Council.

FLORA AND FAUNA MANAGEMENT

57. The Proponent shall not disturb those areas identified as Conservation Areas in the Precinct Plan and identified and mapped in the EA.
58. The Proponent must comply with Clean up notices issued by the Environment Protection Authority to the Proponent in relation to creek rehabilitation and reinstatement work within Lot 2 DP 262213.

Landscape and Vegetation Management Plan

59. The Proponent shall prepare and implement a **Landscape and Vegetation Management Plan** for the project to the satisfaction of the **Secretary**. This plan must:
- be prepared in consultation with **NOW** and Council and be submitted to the **Secretary** for approval within 3 months of this approval;
 - be prepared in accordance with **NOW's Guidelines for Controlled Activities – Vegetation Management Plans**; and
 - include:
 - a Landscape Plan for the project, which identifies screen plantings to minimise visual impacts, particularly on the amenity berms;
 - detailed plans and procedures to:
 - restore and maintain the waterways and riparian zones of the Ropes Creek Tributary on the site;
 - manage weeds in the vicinity of the riparian zones;
 - integrate works into the proposed landscaping for the rest of the site;
 - manage impacts on fauna; and
 - monitor the performance of the proposed restoration works.

- d) Provide details on how those areas identified as Conservation Areas in the Precinct Plan shall be actively managed for conservation purposes including;
 - improving the quality of the vegetation in these areas
 - measure to control pests vermin, and noxious weeds; and
 - measures to control access.

HERITAGE

- 60. The Proponent shall not disturb those areas identified as High Sensitivity in McDonald 2005.
- 61. The Proponent shall prepare and implement an **Aboriginal Heritage Management Plan**, in consultation with the **OEH**, and to the satisfaction of the **Secretary**. The Plan must:
 - a) be submitted to the **Secretary** for approval prior to the commencement of construction;
 - b) be prepared by a suitably qualified archaeologist;
 - c) be consistent with the management principles defined in McDonald 2005;
 - d) include a strategy for the salvage and long term management of salvaged objects;
 - e) include procedures for topsoil stripping and sub-surface excavation works in areas of moderate sensitivity and supervision by a qualified archaeologist;
 - f) identify procedures to be followed should previously unidentified objects be uncovered or additional impacts to sites be identified;
 - g) measures to protect Aboriginal heritage values of those areas marked high sensitivity in McDonald 2005; and
 - h) include a procedure for continued consultation with Aboriginal stakeholders.

SCHEDULE 4 REHABILITATION AND CLOSURE

Final Landform

1. The final landform for the landfill shall generally be in accordance with the plan at Appendix 4. All earth works required to reach this final landform shall be conducted on site, without impacting on adjoining landowners.

Rehabilitation / Closure Plan

2. Upon cessation of landfilling, the Proponent shall decommission the landfill and rehabilitate the site. The Proponent shall prepare and implement a **Rehabilitation and Closure Plan**. This plan must:
 - a) Be prepared in consultation with EPA, and Council
 - b) Be prepared by a suitably qualified and experienced expert;
 - c) Be submitted to the Secretary for approval within 3 years of commencement of operations;
 - d) Define the objectives and criteria for rehabilitation and closure;
 - e) Investigate options for the future use of the site;
 - f) Describe the measures that would be implemented to achieve the specified objectives and criteria for the rehabilitation and closure;
 - g) Calculate the cost of implementing these measures; and
 - h) Describe how the performance of these measures would be monitored over time.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the **Secretary**. The Strategy must:
 - a) be submitted to the **Secretary** for approval prior to the commencement of construction;
 - b) provide the strategic framework for environmental management of the project;
 - c) identify the statutory approvals that apply to the project;
 - d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
 - e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - respond to any non-compliance; and
 - respond to emergencies;
 - f) include:
 - copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and
 - a clear plan depicting all the monitoring currently being carried out within the project area.

Management Plan Requirements

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
 - a) detailed baseline data;
 - b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria;
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
 - c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - d) a program to monitor and report on the:
 - impacts and environmental performance of the project;
 - effectiveness of any management measures (see c above);
 - e) a contingency plan to manage any unpredicted impacts and their consequences;
 - f) a program to investigate and implement ways to improve the environmental performance of the project over time;
 - g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
 - h) a protocol for periodic review of the plan.

Annual Review

3. By the end of December 2010, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the **Secretary**. This review must:
 - a) describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;
 - b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the EA;
 - c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - d) identify any trends in the monitoring data over the life of the project;

- e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
- f) describe what measure will be implemented over the next year to improve the environmental performance of the project.

Revision of Strategies, Plans & Programs

- 4. Within 3 months of the submission of an:
 - a) audit under condition 7 of schedule 5;
 - b) incident report under condition 5 of schedule 5; and
 - c) annual review under condition 3 of schedule 5,
 the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the **Secretary**.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

- 4b. Within 3 months of any modification to this approval, the Proponent shall review, and if necessary, revise the strategies, plans, and programs required under this approval to the satisfaction of the **Secretary**.

REPORTING

Incident

- 5. The Proponent shall notify the **Secretary** and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the **Secretary** and any relevant agencies with a detailed report on the incident.

Regular

- 6. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the **Secretary**.

INDEPENDENT ENVIRONMENTAL AUDIT

- 7. Within 6 months of the commencement of operation, and every 2 years thereafter, unless the **Secretary** directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
 - a) be conducted by suitably qualified, experienced and independent team of experts (including an odour expert), whose appointment has been endorsed by the **Secretary**;
 - b) include consultation with the relevant agencies;
 - c) include a full odour audit of the project, taking into consideration the relevant technical guidelines and any odour complaints made since the previous audit;
 - d) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any assessment, plan or program required under these approvals);
 - e) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and
 - f) recommend measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under these approvals.

*Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the **Secretary**.*

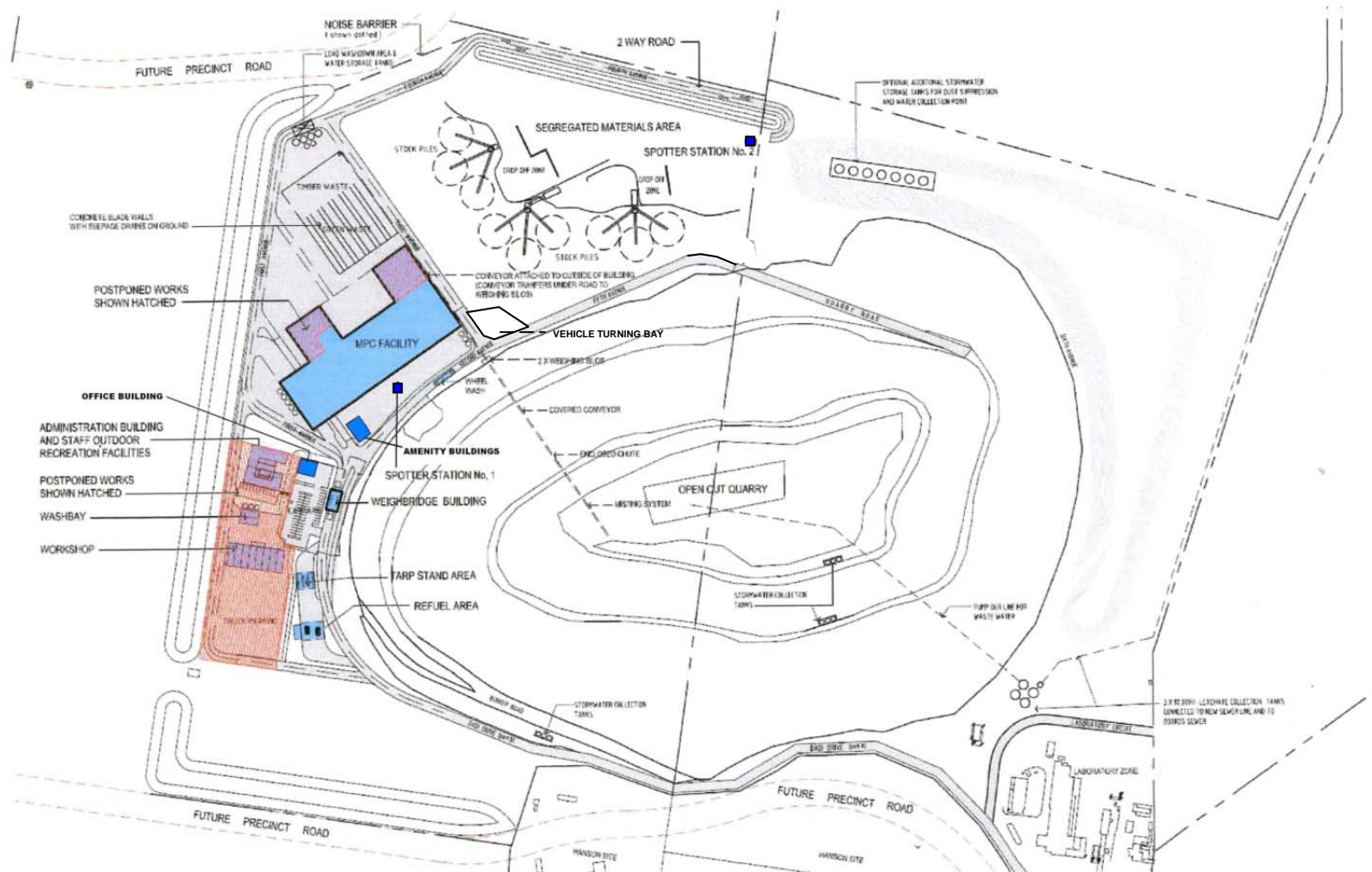
- 8. Within 6 weeks of the completing of this audit, or as otherwise agreed by the **Secretary**, the Proponent shall submit a copy of the audit report to the **Secretary**, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

- 9. From the end of 2009, the Proponent shall make the following information publicly available on its website:
 - a) a copy of all current statutory approvals;
 - b) a copy of the current environmental management strategy and associated plans and programs;

- c) a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
- d) a complaints register, which is to be updated on a monthly basis;
- e) a copy of any Annual Reviews (over the last 5 years);
- f) a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and
- g) any other matter required by the [Secretary](#).

APPENDIX 1 - SITE PLAN & BUILDING ELEVATIONS



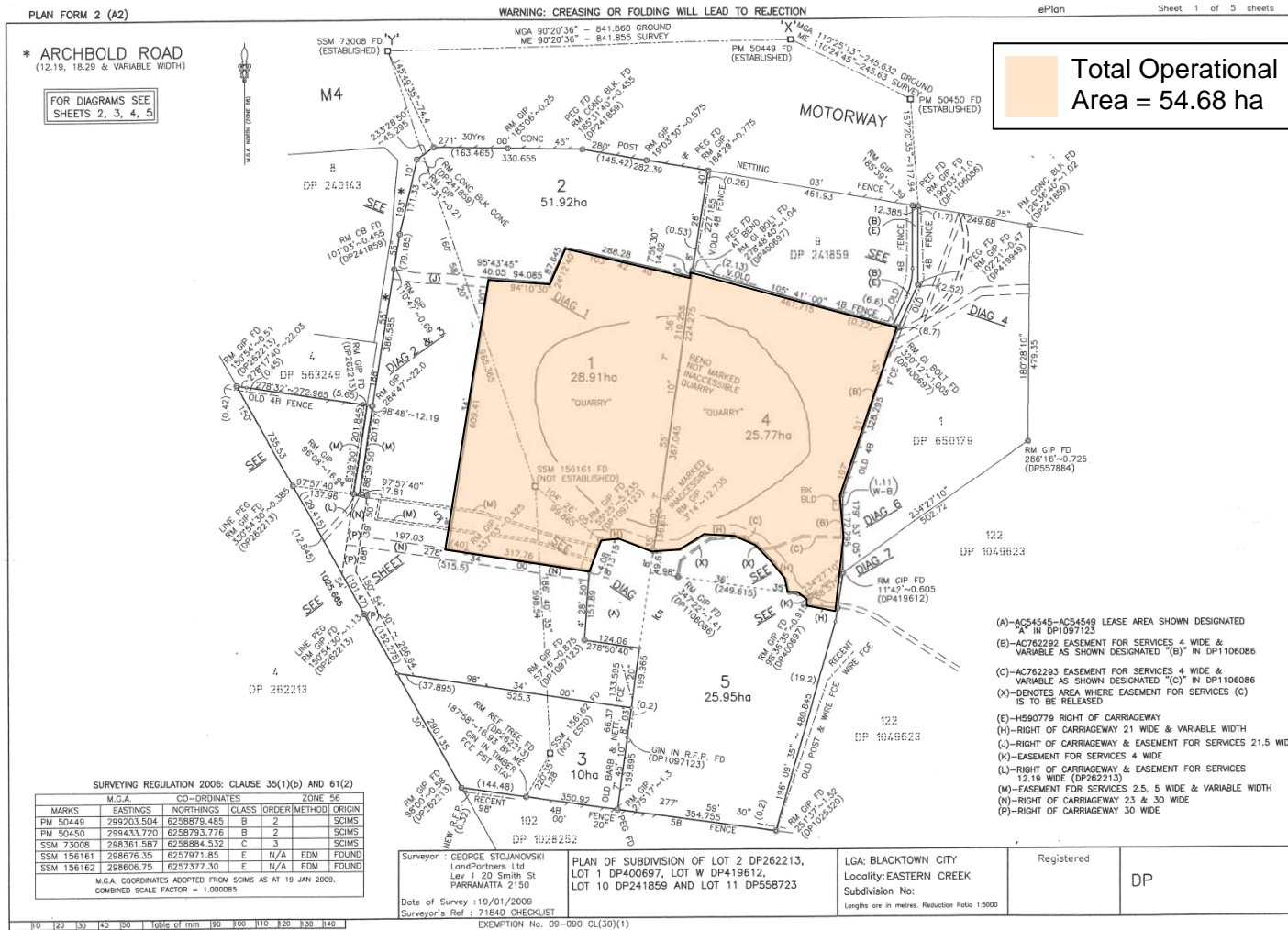


APPENDIX 2

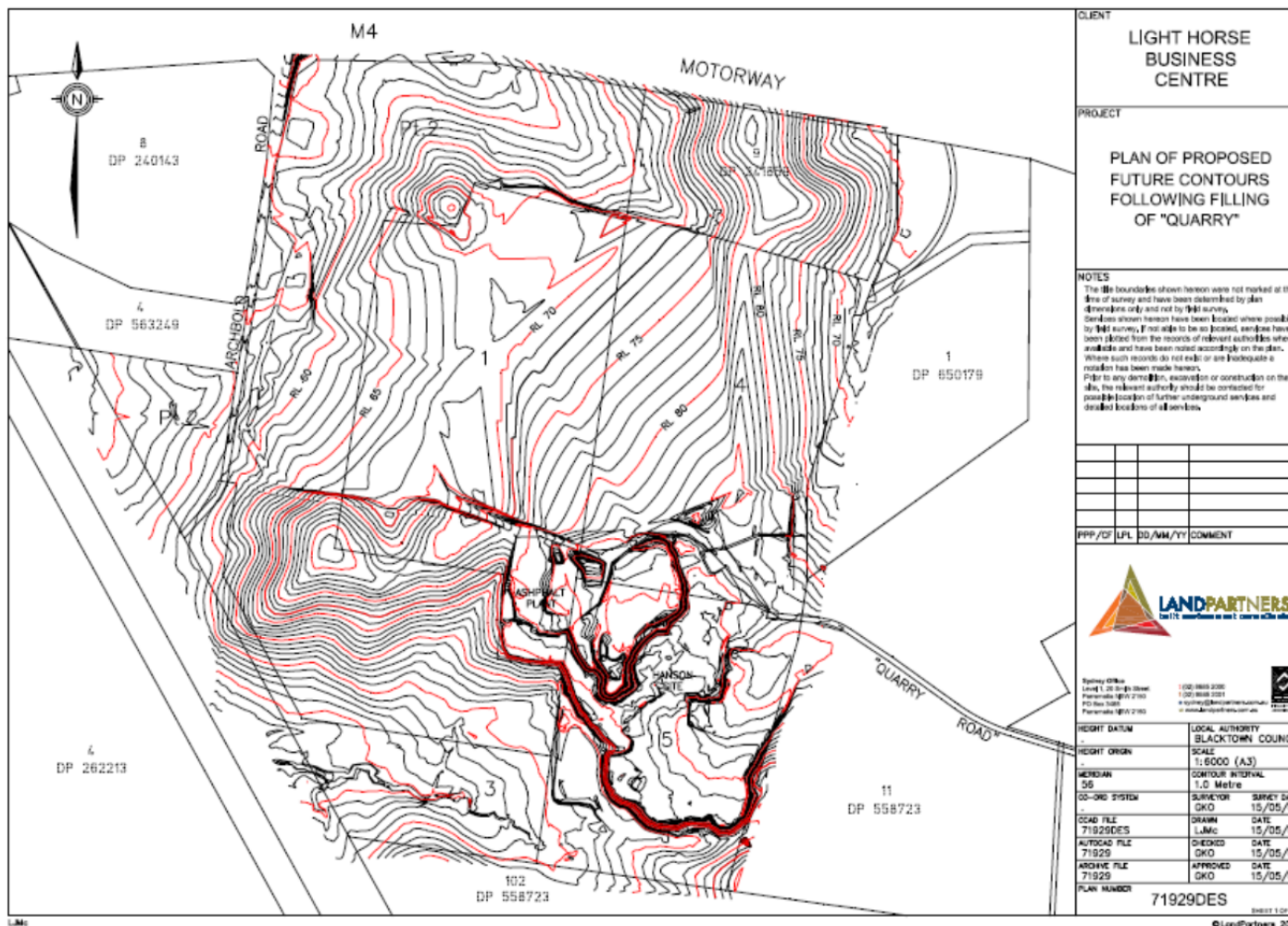
Delete

APPENDIX 3

Operational Area

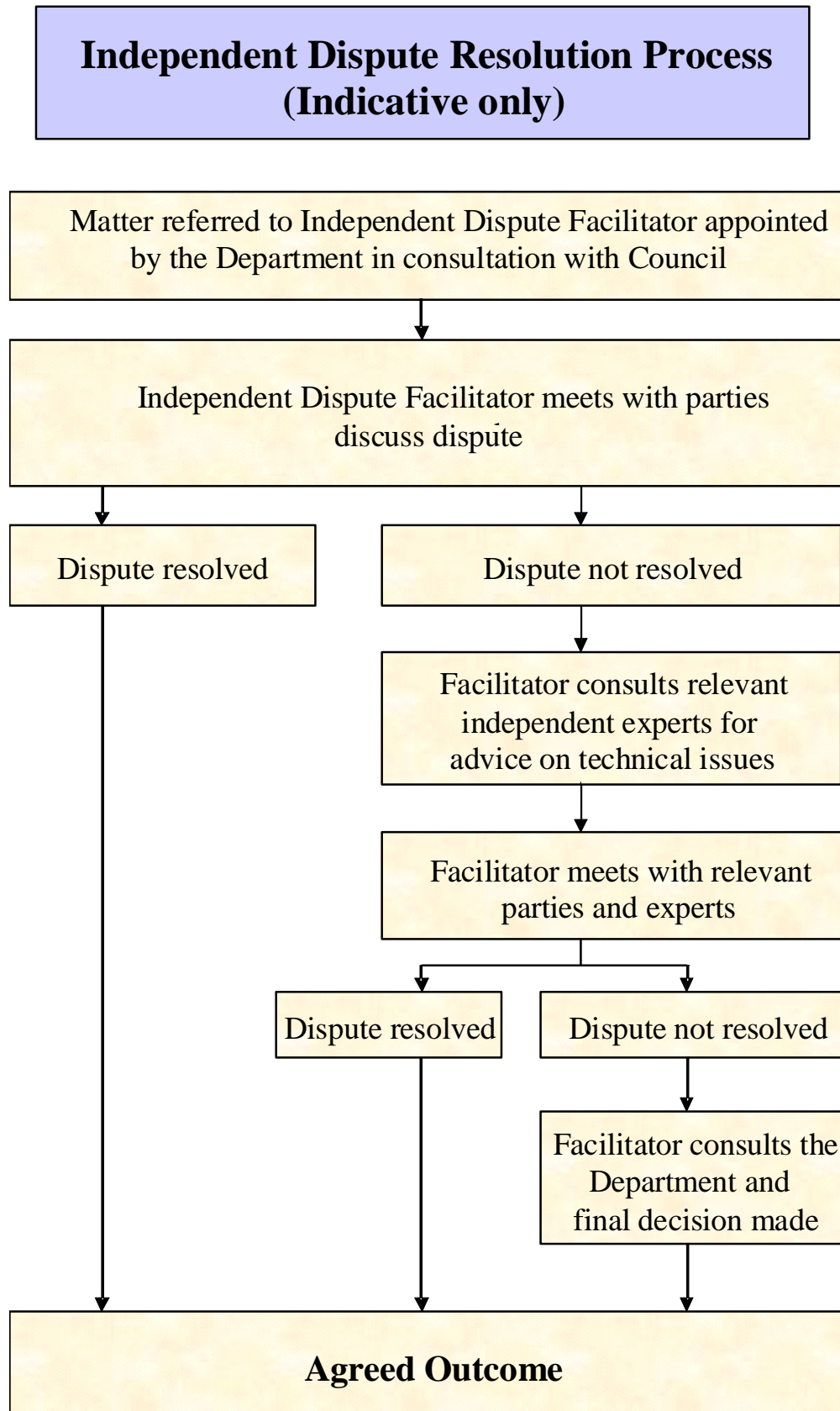


APPENDIX 4 Final Landform

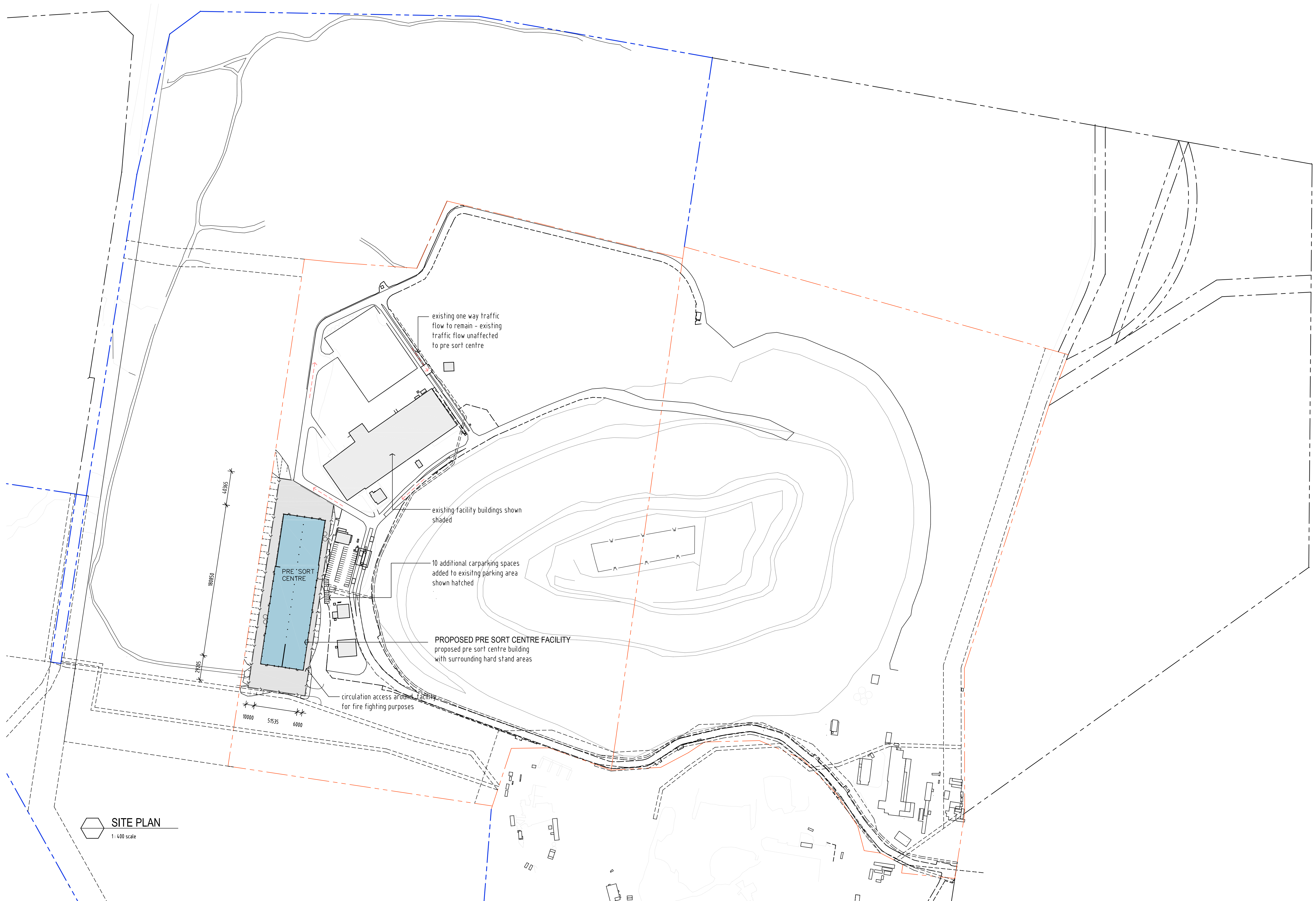


CLIENT																
LIGHT HORSE BUSINESS CENTRE																
PROJECT																
PLAN OF PROPOSED FUTURE CONTOURS FOLLOWING FILLING OF "QUARRY"																
NOTES																
<p>The title boundaries shown herein were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.</p> <p>Services shown herein have been located where possible by field survey, if not able to be so located, services have been plotted from the records of relevant authorities where available and have been noted accordingly on the plan. Where such records do not exist or are inadequate a notation has been made herein.</p> <p>Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.</p>																
<table border="1"> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>																
PPP/DP LPL DD/MM/YY COMMENT																
<p>Survey Office: Land 1.00 (A3) Sheet Parade 10/11 2100 PO Box 1000 Parade 10/11 2100</p> <p>100 000 000 1:100 000 000 A survey/plan/contour/plan in accordance with the</p>																
HEIGHT DATUM	LOCAL AUTHORITY															
HEIGHT ORIGIN	BLACKTOWN COUNCIL															
MERIDIAN	SCALE															
56	1:6000 (A3)															
CO-ORD SYSTEM	CONTOUR INTERVAL															
OKO	1.0 Metre															
OCAD FILE	DRAWN DATE															
71929DES	LJM 15/05/09															
AUTOCAD FILE	CHECKED DATE															
71929	OKO 15/05/09															
ARCHIVE FILE	APPROVED DATE															
71929	OKO 15/05/09															
PLAN NUMBER	71929DES															
SHEET 1 OF 1																
© LandPartners 2009																

APPENDIX 5:
Independent Dispute resolution Process



APPENDIX 6:
site plans and drawings for the pre-sort enclosure and future stormwater plan



DO NOT SCALE OF DRAWING - DIMENSIONS & LEVELS TO BE VERIFIED PRIOR TO COMMENCEMENT OF WORK WITH FIGURED DIMENSIONS IN PREFERENCE TO SCALED DIMENSIONS.
MATERIALS AND WORKMANSHIP TO BE IN STRICT ACCORDANCE WITH ALL RELEVANT S.A.A. STANDARDS, BCA AND LOCAL AUTHORITIES REQUIREMENTS.
THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS THE PROPERTY OF THE AUTHOR. THIS DRAWING MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE GIVEN AUTHORITY OF AXIS ARCHITECTURAL Pty Ltd.

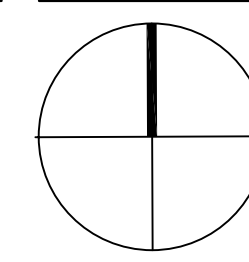
0 20 40 60 80 100 200m
Scale 1: 2000

Issue	Date	Amendment
B	09/12/14	issued for authority approval
C	12/12/14	building location adjusted to suit topography
D	19/02/15	site boundary to Genisis Xero Waste site highlighted in red
E	19/02/15	total site boundary highlighted in blue
F	16/03/15	boundary through pit included in existing Genisis Xero Waste recycling site
G	18/05/15	10 carspaces added and additional notation for fire truck access

Notes



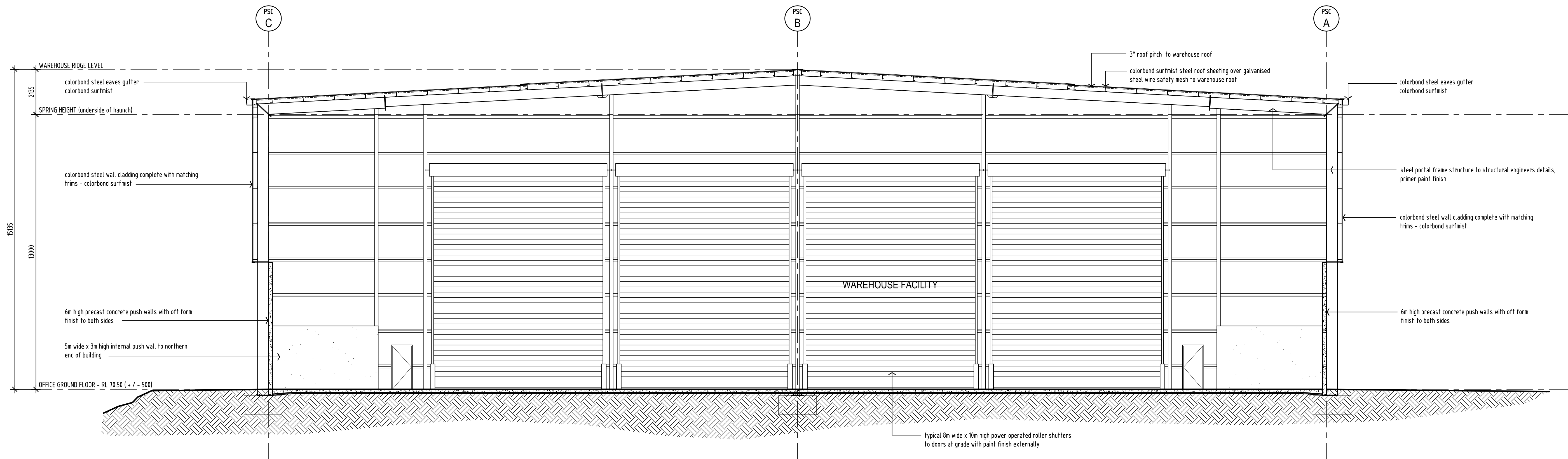
AXIS ARCHITECTURAL
4 / 112 Cronulla Street, Cronulla NSW 2230
p + 02 9523 7858 / m + 0414 954 405
e + david@axisarchitects.com.au
AXIS ARCHITECTURAL Pty Ltd - ABN 18 086 853 316
Nominated Architect - David McDonald NSW ARB No. 7997



Project:
PRE SORT CENTRE BUILDING
HONEYCOMB DRIVE, EASTERN CREEK, NSW
Client:
GENISIS XERO WASTE

Drawing:
PRE SORT CENTRE SITE PLAN
Drawn: AA
Date: October 2014
Scale: 1: 2000 @ A1
Project No:
141002
Drawing No:
DA / A 101
Issue:
G





TYPICAL CROSS SECTION
1:100 scale



EXISTING RECYCLING FACILITY

PROPOSED PRE-SORT CENTRE BUILDING



PROPOSED PRE-SORT CENTRE BUILDING

EXISTING RECYCLING FACILITY



EXISTING RECYCLING FACILITY

PROPOSED PRE-SORT CENTRE BUILDING



EXISTING RECYCLING FACILITY

PROPOSED PRE-SORT CENTRE BUILDING

DO NOT SCALE OF DRAWING - DIMENSIONS & LEVELS TO BE VERIFIED PRIOR TO COMMENCEMENT OF WORK WITH FIGURED DIMENSIONS IN PREFERENCE TO SCALED DIMENSIONS.
MATERIALS AND WORKMANSHIP TO BE IN STRICT ACCORDANCE WITH ALL RELEVANT S.A.A. STANDARDS, BCA AND LOCAL AUTHORITIES REQUIREMENTS.
THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS THE PROPERTY OF THE AUTHOR. THIS DRAWING MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE GIVEN AUTHORITY OF AXIS ARCHITECTURAL, Pty Ltd.

0 20 40 60 80 100 200m

Scale 1: 2000

Issue	Date	Amendment
A	09/12/14	issued for authority approval
B	12/12/14	re-issued for authority approval

Notes



AXIS ARCHITECTURAL
4 / 112 Cronulla Street, Cronulla NSW 2230
p + 02 9523 7858 / m + 0414 954 405
e + david@axisarchitects.com.au
AXIS ARCHITECTURAL, Pty Ltd - ABN 18 086 853 316
Nominated Architect - David McDonald NSW ARB No. 7997

Project:
PRE SORT CENTRE BUILDING
HONEYCOMB DRIVE, EASTERN CREEK, NSW
Client:
GENESIS XERO WASTE

Drawing:
PRE SORT CENTRE PERSPECTIVES
Drawn: AA
Date: October 2014
Scale: -
Project No:
141002
Drawing No:
DA / A 501
Issue:
B

PROPOSED PRE-SORT CENTRE BUILDING

EXISTING RECYCLING FACILITY



DO NOT SCALE OF DRAWING - DIMENSIONS & LEVELS TO BE VERIFIED PRIOR TO COMMENCEMENT OF WORK WITH FIGURED DIMENSIONS IN PREFERENCE TO SCALED DIMENSIONS.
MATERIALS AND WORKMANSHIP TO BE IN STRICT ACCORDANCE WITH ALL RELEVANT S.A.A. STANDARDS, BCA AND LOCAL AUTHORITIES REQUIREMENTS.
THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS THE PROPERTY OF THE AUTHOR. THIS DRAWING MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE GIVEN AUTHORITY OF AXIS ARCHITECTURAL, Pty Ltd.
0 20 40 60 80 100 200m
Scale 1: 2000

Issue	Date	Amendment
A	12/12/16	issued for authority approval

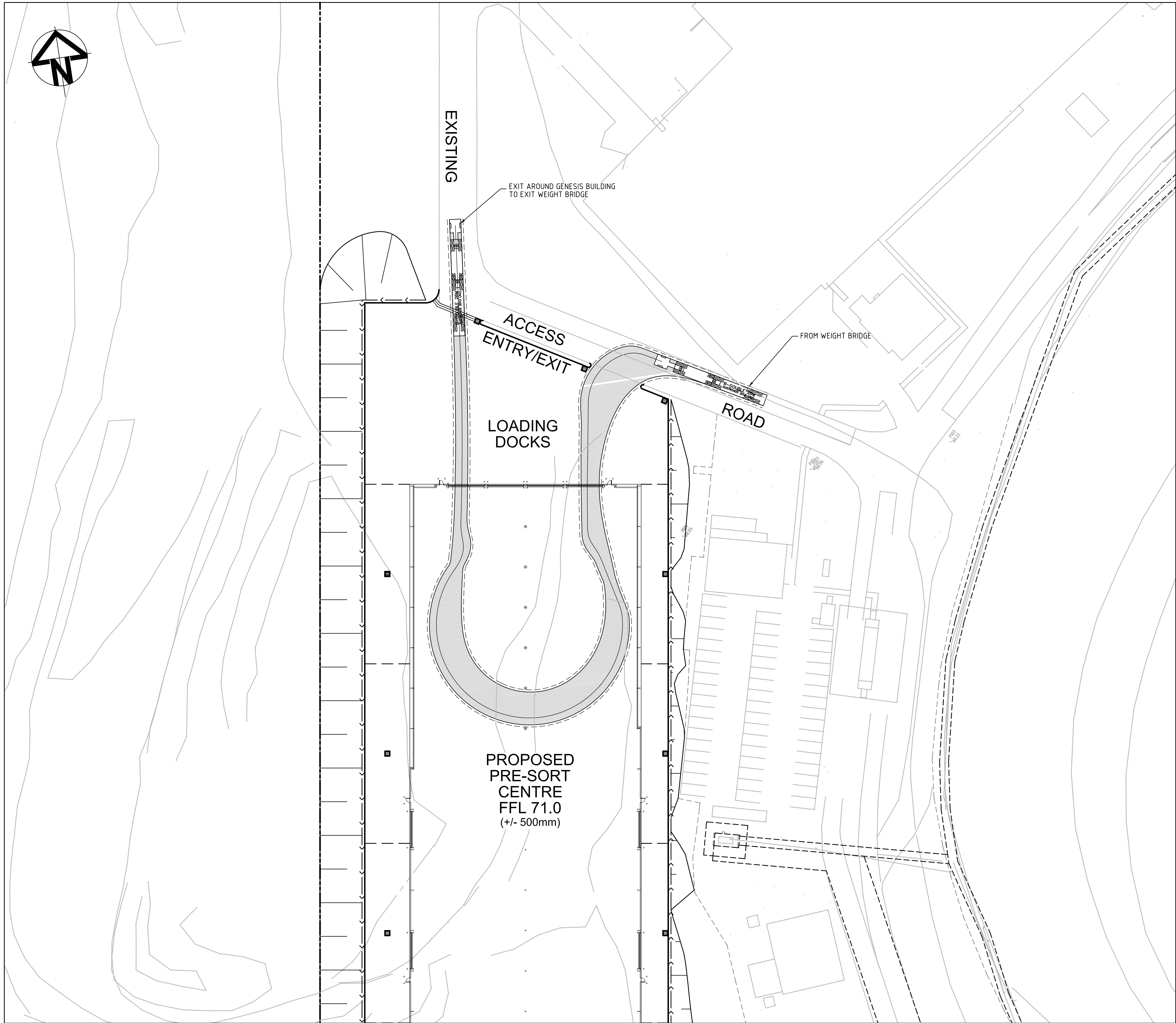
Notes



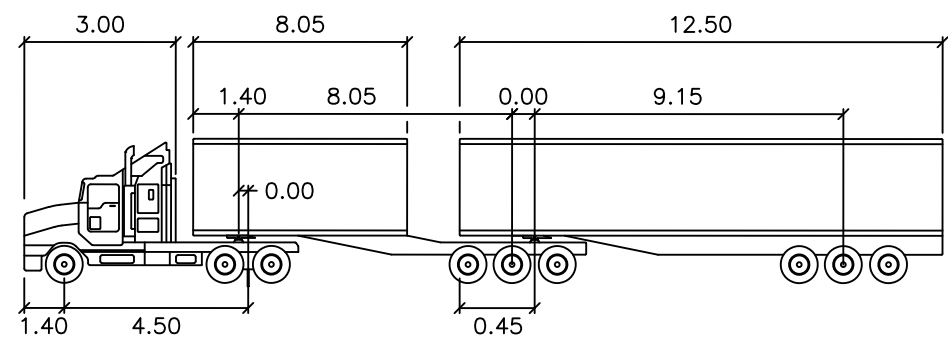
AXIS ARCHITECTURAL
4 / 112 Cronulla Street, Cronulla NSW 2230
p + 02 9523 7858 / m + 0414 954 405
e + david@axisarchitects.com.au
AXIS ARCHITECTURAL, Pty Ltd - ABN 18 086 853 316
Nominated Architect - David McDonald NSW ARB No. 7997

Project:
PRE SORT CENTRE BUILDING
HONEYCOMB DRIVE, EASTERN CREEK. NSW
Client:
GENESIS XERO WASTE

Drawing:
PRE SORT CENTRE SITE IMAGE
Drawn: AA
Date: October 2016
Scale: -
Project No:
141002
Drawing No:
DA / A 601
Issue:
A



B-DOUBLE TURN PATH
SCALE 1:500



B-DOUBLE 26M meters
Tractor Width : 2.50 Lock to Lock Time : 6.0
Trailer Width : 2.50 Steering Angle : 23.4
Tractor Track : 2.50 Articulating Angle : 70.0
Trailer Track : 2.50

A	ISSUED FOR INFORMATION	15-05-15
Issue	Description	Date

Bar Scales
1: 500 @ A1 1: 1000 @ A3

THIS DRAWING CANNOT BE
COPIED OR REPRODUCED IN
ANY FORM OR USED FOR ANY
OTHER PURPOSE OTHER THAN
THAT ORIGINALLY INTENDED
WITHOUT THE WRITTEN
PERMISSION OF AT&L

Client
DIAL A DUMP

Scales	1 : 750	Drawn	FX
		Designed	FX
Grid	MGA	Checked	AM
Height Datum	AHD	Approved	

Project
PRE SORT CENTRE EASTERN CREEK
Title
TURN PATH

Civil Engineers and Project Managers		
Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status	FOR INFORMATION	A1
Drawing No.	Project No.	Issue
SKC03	14-232	A

PRE SORT CENTRE

PROPOSED CIVIL WORKS

FOR S75W APPROVAL

DRAWING LIST

GENERAL

- DAC001 COVER SHEET AND LOCALITY PLAN
- DAC002 NOTES AND LEGENDS

BULK EARTHWORKS

- DAC003 BULK EARTHWORKS CUT AND FILL PLAN

TYPICAL SECTIONS

- DAC004 TYPICAL SECTIONS SHEET 1
- DAC005 TYPICAL SECTIONS SHEET 2

SITEWORKS AND STORMWATER DRAINAGE PLAN

- DAC010 GENERAL ARRANGEMENT PLAN
- DAC011 SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1
- DAC012 SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2
- DAC013 SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 3

PAVEMENT PLANS

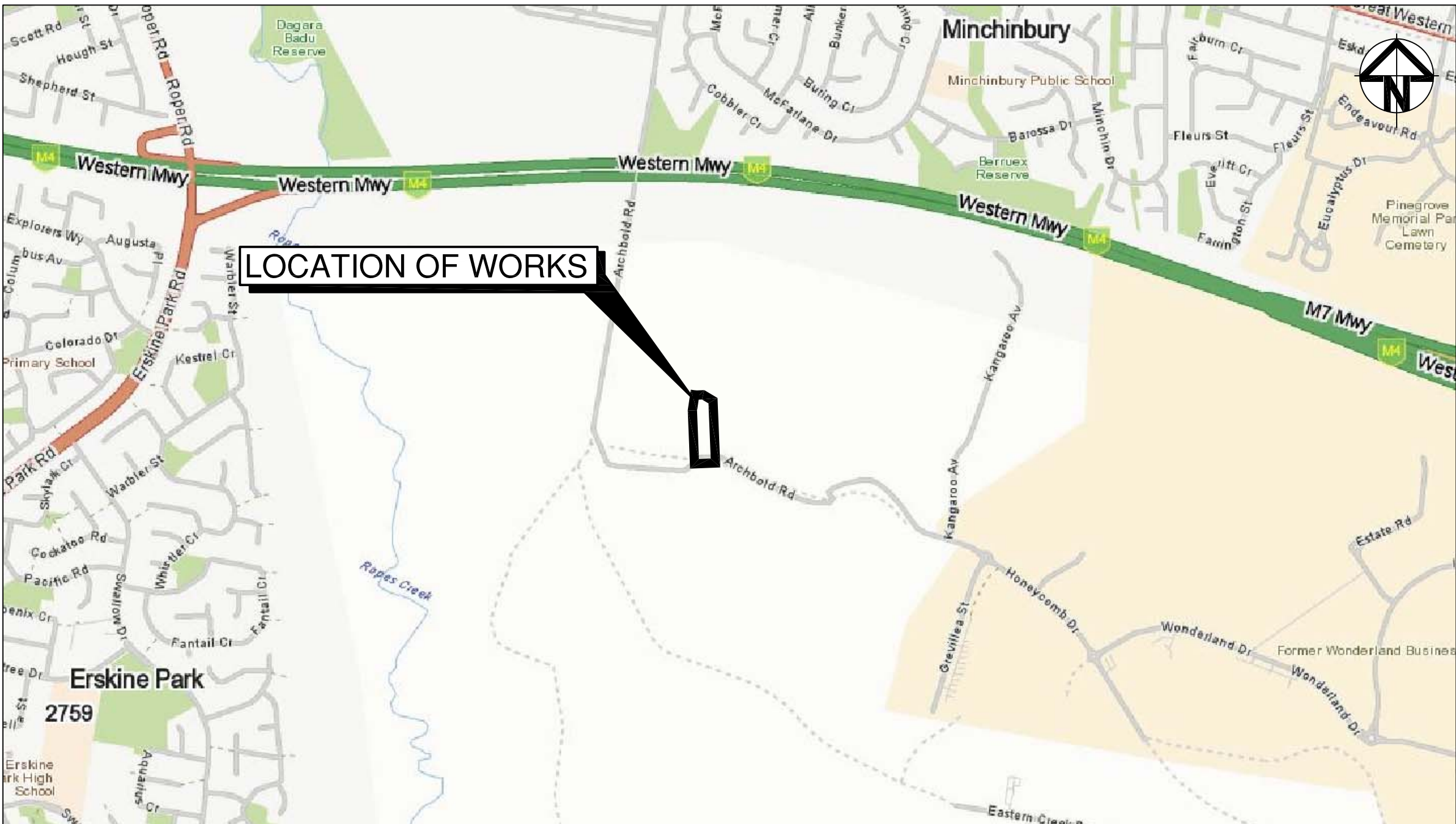
- DAC020 PAVEMENT PLAN

EROSION AND SEDIMENTATION CONTROL


- DAC021 EROSION AND SEDIMENTATION CONTROL PLAN

SITEWORKS DETAILS

- DAC030 SITEWORKS DETAILS
- DAC031 DRAINAGE DETAILS



LOCALITY PLAN
N.T.S

		Bar Scales	THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L	Client DIAL A DUMP	Scales		Drawn	FX	Project PRE SORT CENTRE EASTERN CREEK	Civil Engineers and Project Managers  Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
					NTS	Designed	FX					
					Grid	MGA	Checked	AM				
					Height Datum	AHD	Approved					
								Title COVER SHEET AND LOCALITY PLAN	Status		FOR APPROVAL	A1
									Drawing No.	Project No.	Issue	
									DAC001	14-232	B	
B	ISSUED FOR APPROVAL				03-03-15							
A	ISSUED FOR APPROVAL				15-12-14							
Issue	Description				Date							

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY LAND PARTNERS, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT AT & L.

EXISTING UNDERGROUND SERVICES NOTES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.

AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.

CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.

CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

STORMWATER DRAINAGE NOTES

- STORMWATER DESIGN CRITERIA:
(A) AVERAGE RECURRENCE INTERVAL:
100 YEARS- ROOFED AREAS TO SURCHARGE PIT
120 YEARS- EXTERNAL PAVEMENTS
(B) RAINFALL INTENSITIES:
TIME OF CONCENTRATION- 5 MINUTES
100 YEARS= 218 mm/hr
120 YEARS= 107 mm/hr
(C) RUNOFF COEFFICIENTS:
ROOF AREAS: C₁₀₀ =10
EXTERNAL PAVEMENTS: C₂₀ =10
- PIPES 300 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
- EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED.
- ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
- PIPES TO BE INSTALLED TO TYPE HS3 (ROAD) HS2 (LOTS) SUPPORT IN ACCORDANCE WITH AS 3725 (1989) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL. COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND AS/NZS 3500 3.2 (1998).
- PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY AT & L.
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
- CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- GRATES AND COVERS SHALL CONFORM TO AS 3996.
- ALL INTERNAL PIT DIMENSIONS TO CONFORM TO AS3500.3 TABLE 8.2.
- AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

SITEWORKS NOTES

- ORIGIN OF LEVELS:- REFER SURVEY NOTES.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL. COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- ASPHALTIC CONCRETE SHALL CONFORM TO RMS. SPECIFICATION R116.
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS. FORM 3051 (UNBOUND), RMS. FORM 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF BASECOURSE MATERIAL PLACED.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS. FORM 3051, 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1. FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF SUB-BASE COURSE MATERIAL PLACED.
- AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH RMS. FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
- SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THE SITE SUPERINTENDENT/ENGINEER WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED.
- ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
a. LOCAL AUTHORITY REQUIREMENTS
b. EPA REQUIREMENTS
c. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
- MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

- WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:

- INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
- CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
- INSTALL SEDIMENT BASIN AS SHOWN ON PLAN
- INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
- UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL

- STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
- ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
(A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
(B) ENSURING THAT NOTHING IS NAILED TO THEM
(C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
(i) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER
(ii) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
(iii) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

WORKS LEGEND

EXISTING

- SURFACE LEVEL
- CONTOUR
- FENCE
- TREE
- EXISTING BOUNDARY

PROPOSED

- PROPOSED BOUNDARY
- PROPOSED CONTOUR
- PROPOSED SURFACE LEVEL

● RL 62.75

- KERB AND GUTTER
- INTEGRAL KERB
- KERB ONLY
- DISH DRAIN

- VEHICLE CROSSING

- PRAM RAMP
- STORMWATER PIT WITH GRATE AND LINE

- uPVC STORMWATER PIPE

- STORMWATER PIT REFERENCE NUMBER


- KERB INLET PIT
- KERB INLET PIT (SAG)
- JUNCTION PIT WITH INFILL
- SURFACE INLET PIT WITH INFILL

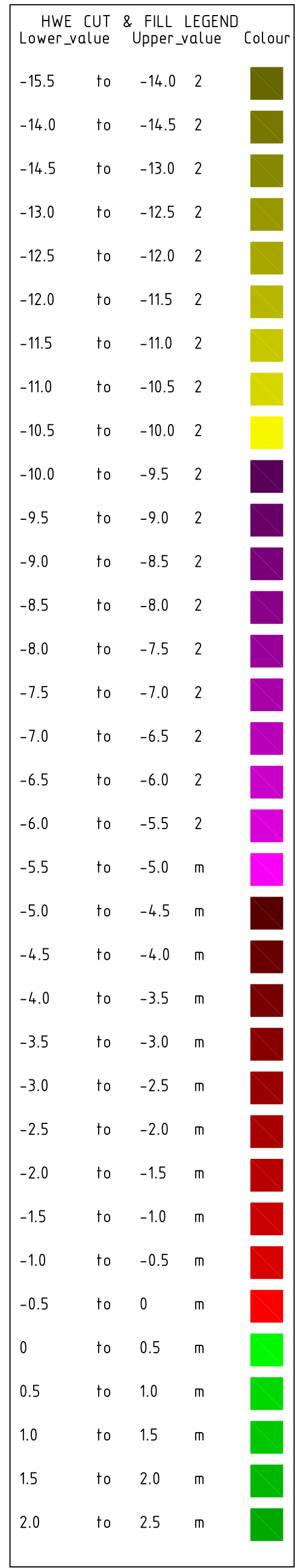
- GRATED DRAIN
- HEADWALL
- OPEN SWALE DRAIN
- SAFETY BARRIER
- RETAINING WALL
- BATTER

- BATTER SLOPE

EXISTING SERVICES

- EXISTING GAS
- EXISTING WATER
- EXISTING STORMWATER
- EXISTING ELECTRICAL HIGH VOLTAGE


		Bar Scales	THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L	Client	DIAL A DUMP	Scales		Project		Civil Engineers and Project Managers											
						NTS	Drawn	FX	PRE SORT CENTRE EASTERN CREEK		<div><div>Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au Info@atl.net.au</div></div>										
							Designed	FX													
						Grid	MGA	Checked	AM												
						Height Datum	AHD	Approved													
										Title		NOTES AND LEGENDS		Status		FOR APPROVAL	A1				
B	ISSUED FOR APPROVAL					03-03-15	Date														
A	ISSUED FOR APPROVAL					15-12-14															
Issue	Description					Date															



TOTAL:	CUT	127,200m ³
	FILL	3,900m ³
	SURPLUS SPOIL	123,300m ³

THE SURPLUS SPOIL FROM THE ABOVE TABLE IS INTENDED TO BE PLACED AND COMPACTED WITHIN THE FUTURE EFW SITE

1. STRIPPING AND STOCKPILING OF EXISTING TOP SOIL
2. BULKING FACTORS OF REMOVED CUT
3. REMOVAL OF EXISTING BUILDING SLABS AND PAVEMENTS
4. REMOVAL AND/OR REMEDIATION OF ANY EXISTING UNCONTROLLED
FILL
5. PROPOSED LANDSCAPING
6. STORMWATER AND UTILITIES TRENCHING
7. EXISTING DAMS OR WATER BODIES WHERE BY THE BASE HAS NOT
BEEN SURVEYED DUE TO THE PRESENCE OF WATER AT TIME OF
SURVEY



at&I

Civil Engineers and Project Managers

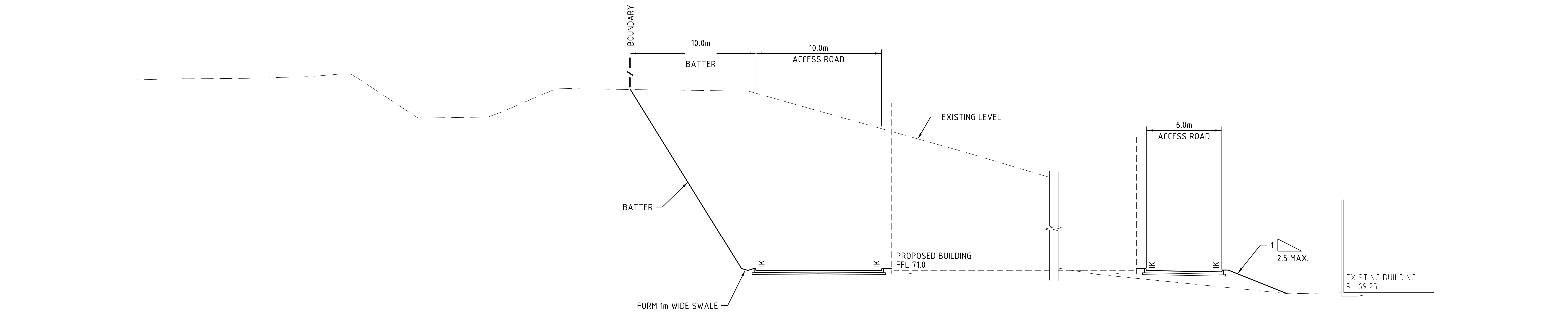
Suite 702, 154 Pacific Hwy
St Leonards NSW 2065

ABN 96 120 882 405

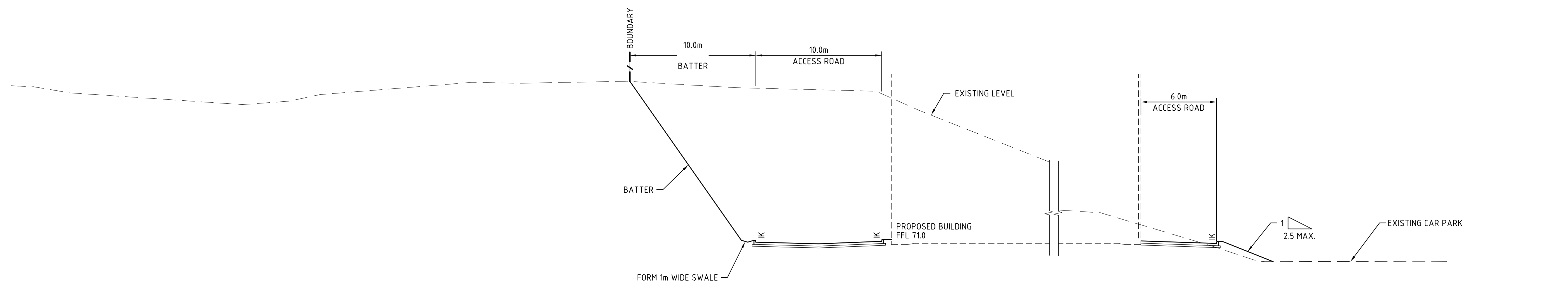
Tel: 02 9439 1777

Fax: 02 9460 8413

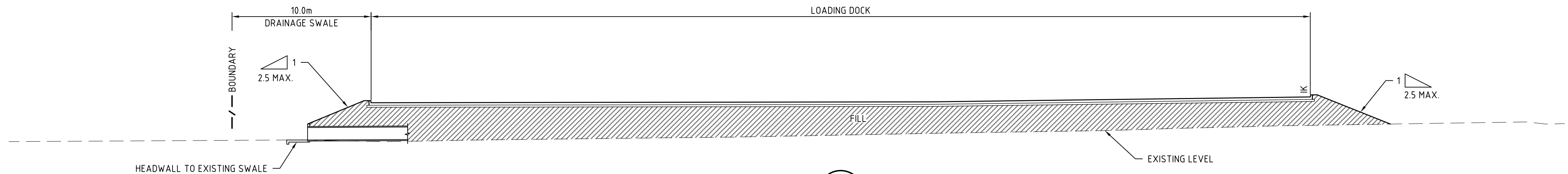
www.atl.net.au
info@atl.net.au



SECTION 1
1 : 200
DAC010, DAC011

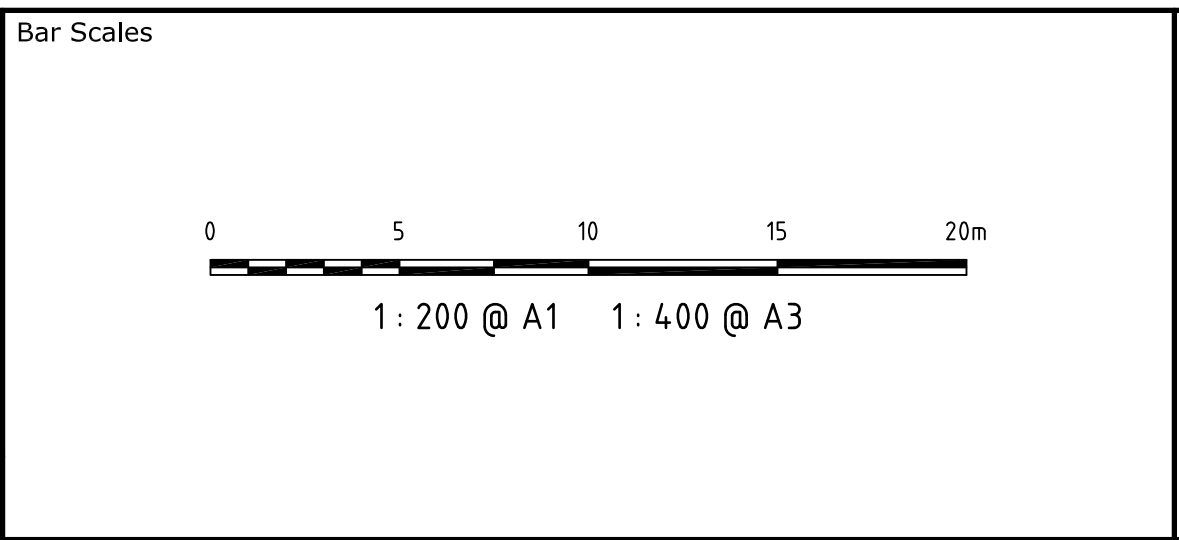


SECTION 2
1 : 200
DAC010, DAC012



SECTION 3
1 : 200
DAC010, DAC013

B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date



THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L

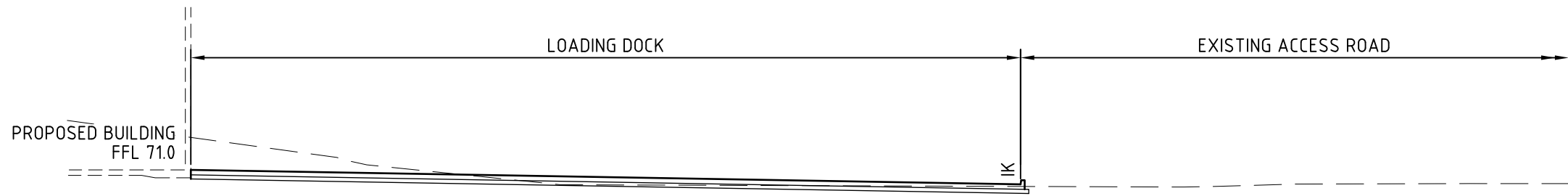
Client

DIAL A DUMP

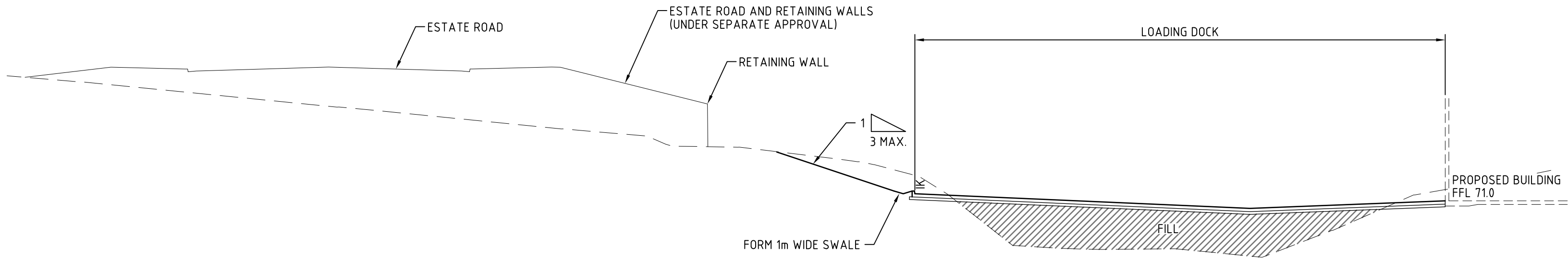
Scales	1 : 200	Drawn	FX
		Designed	FX
Grid	MGA	Checked	AM
Height Datum	AHD	Approved	

Project	PRE SORT CENTRE EASTERN CREEK
Title	TYPICAL SECTIONS SHEET 1

Civil Engineers and Project Managers		
at&l Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status	FOR APPROVAL	A1
Drawing No.	Project No.	Issue
DAC004	14-232	B

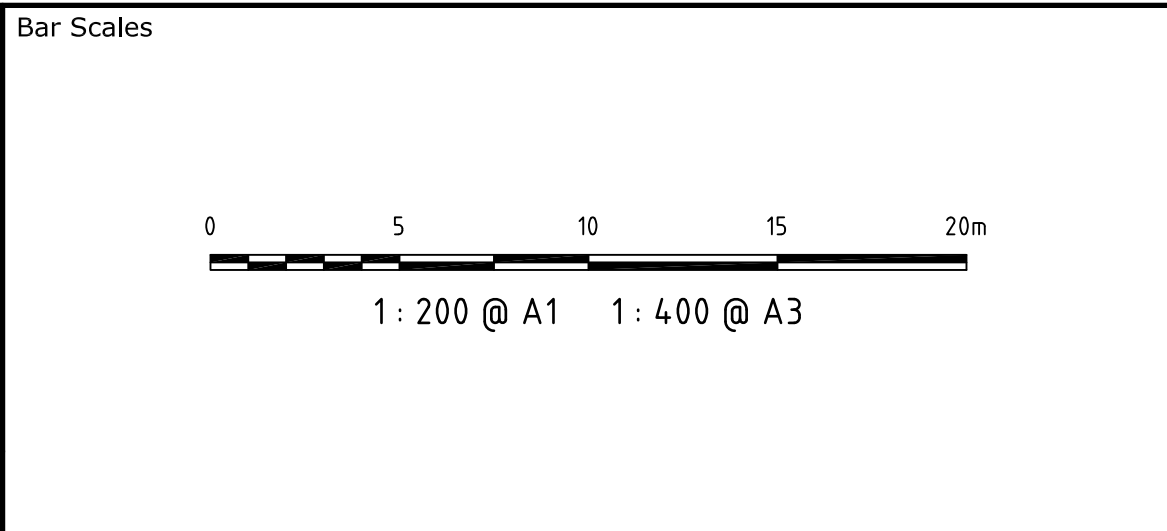


SECTION 4
1 : 200
DAC010, DAC011



SECTION 5
1 : 200
DAC010, DAC013

B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date



THIS DRAWING CANNOT BE
COPIED OR REPRODUCED IN
ANY FORM OR USED FOR ANY
OTHER PURPOSE OTHER THAN
THAT ORIGINALLY INTENDED
WITHOUT THE WRITTEN
PERMISSION OF AT&L

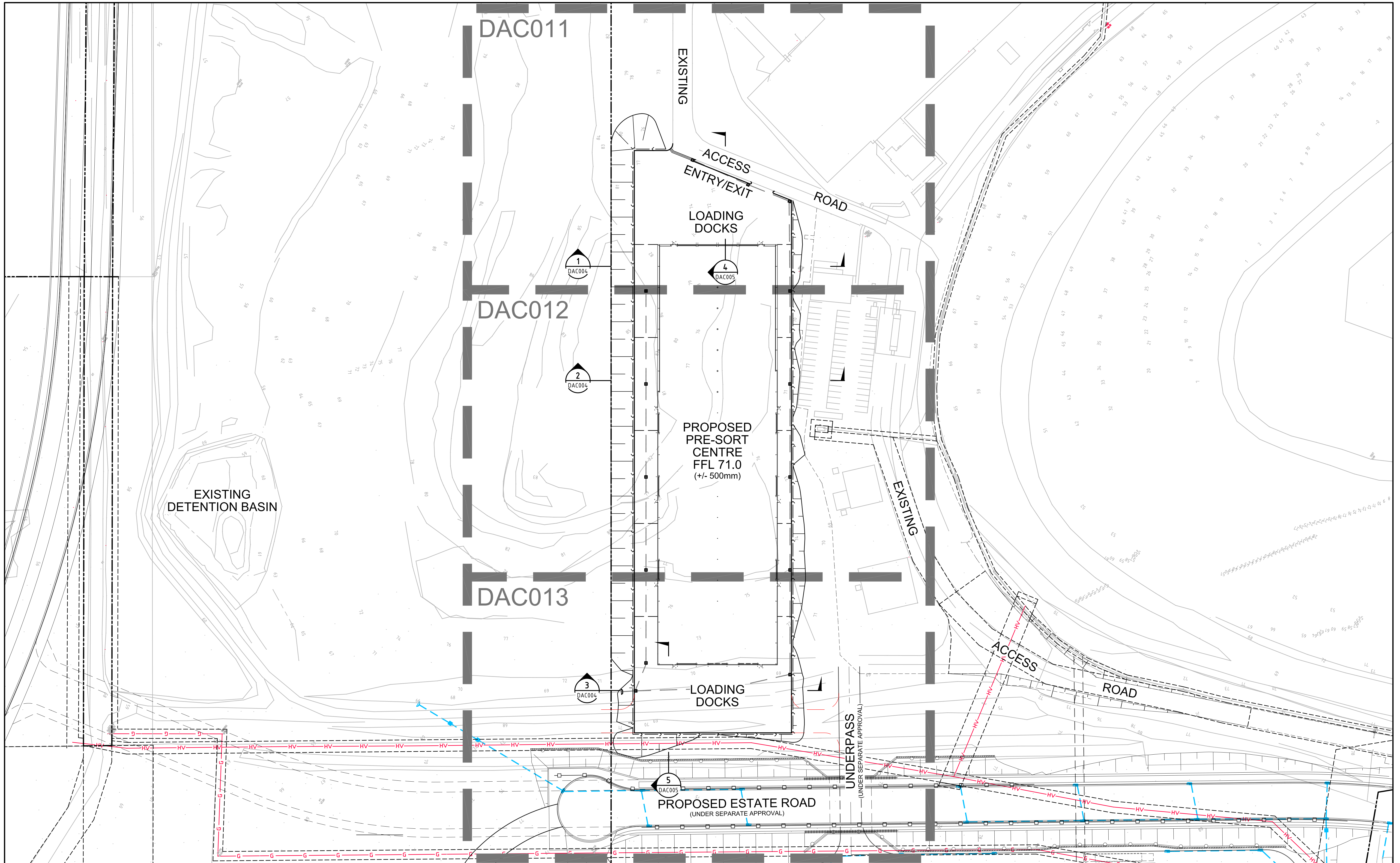
Client

DIAL A DUMP

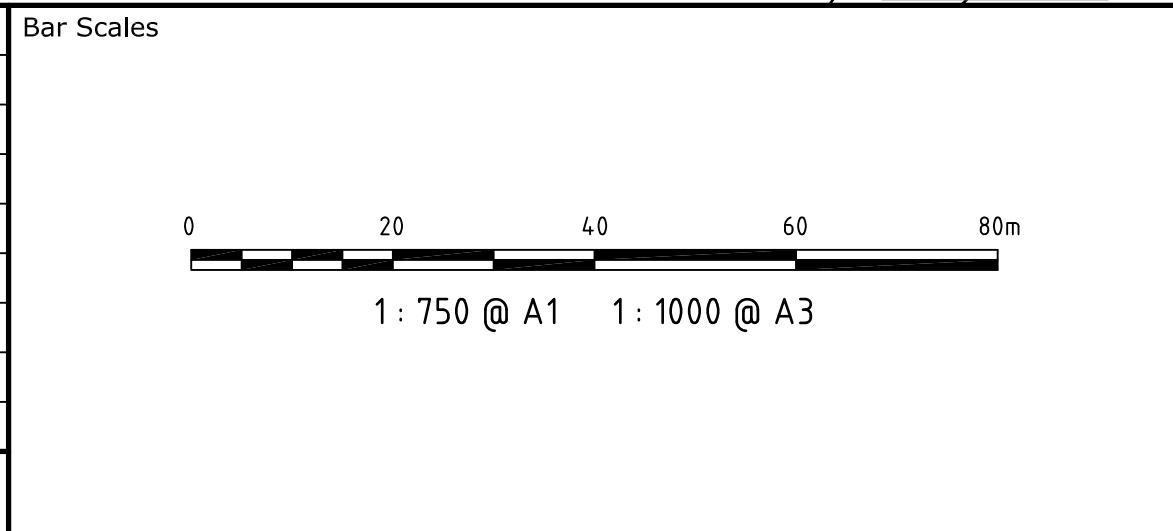
Scales	1 : 200	Drawn	FX
		Designed	FX
Grid	MGA	Checked	AM
Height Datum	AHD	Approved	

Project		Title
PRE SORT CENTRE EASTERN CREEK		
		TYPICAL SECTIONS SHEET 2

Civil Engineers and Project Managers		
at&l Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status	FOR APPROVAL	A1
Drawing No.	Project No.	Issue
DAC005	14-232	B



B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date

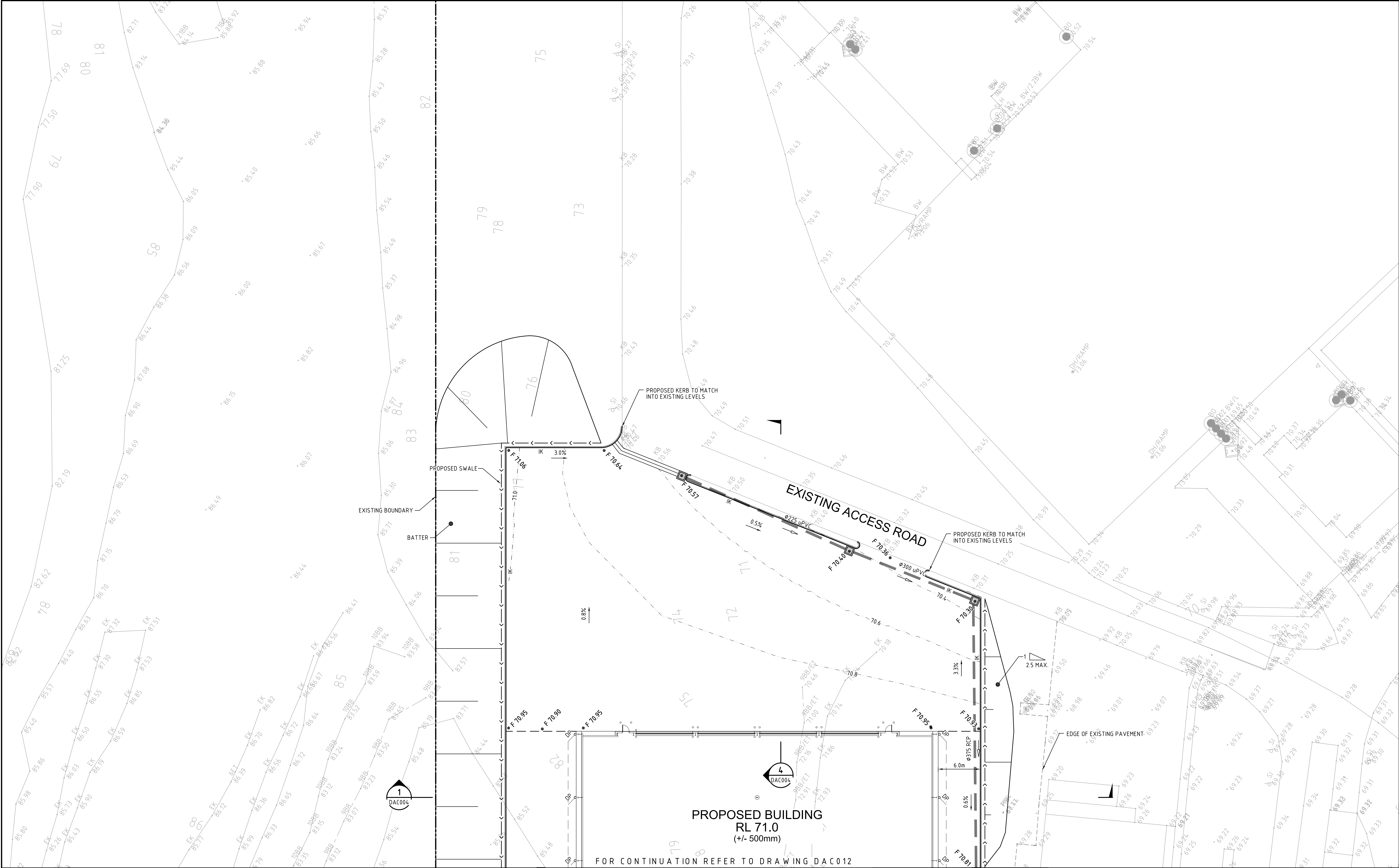


THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L	Client
DIAL A DUMP	

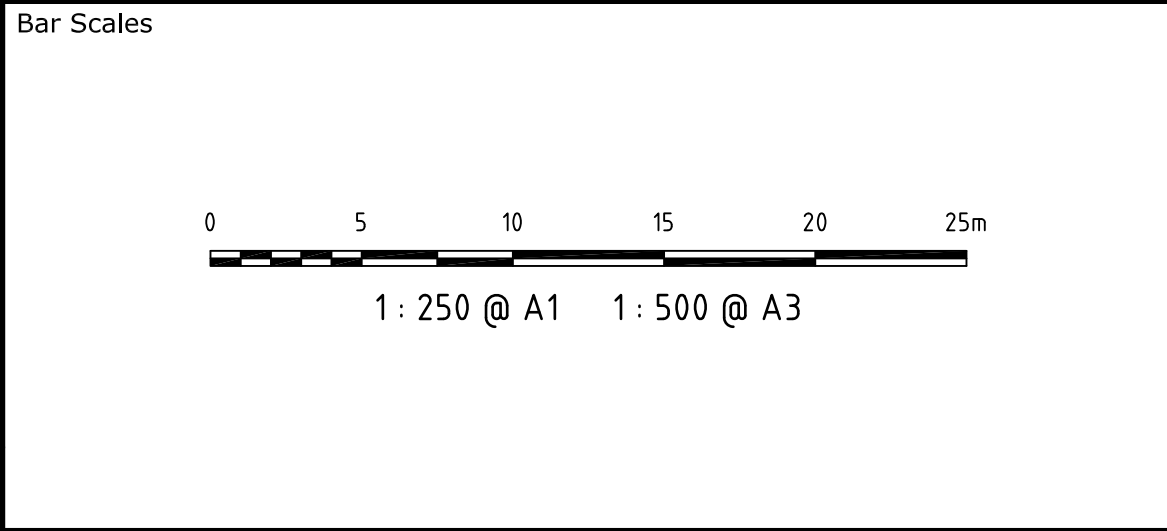
Scales	1 : 750	Drawn	FX
		Designed	FX
Grid	MGA	Checked	AM
Height Datum	AHD	Approved	

Project	PRE SORT CENTRE EASTERN CREEK
Title	GENERAL ARRANGEMENT PLAN

Civil Engineers and Project Managers		
at&l		
Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status	FOR APPROVAL	A1
Drawing No.	Project No.	Issue
DAC010	14-232	B



B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date



THIS DRAWING CANNOT BE
COPIED OR REPRODUCED IN
ANY FORM OR USED FOR ANY
OTHER PURPOSE OTHER THAN
THAT ORIGINALLY INTENDED
WITHOUT THE WRITTEN
PERMISSION OF AT&L

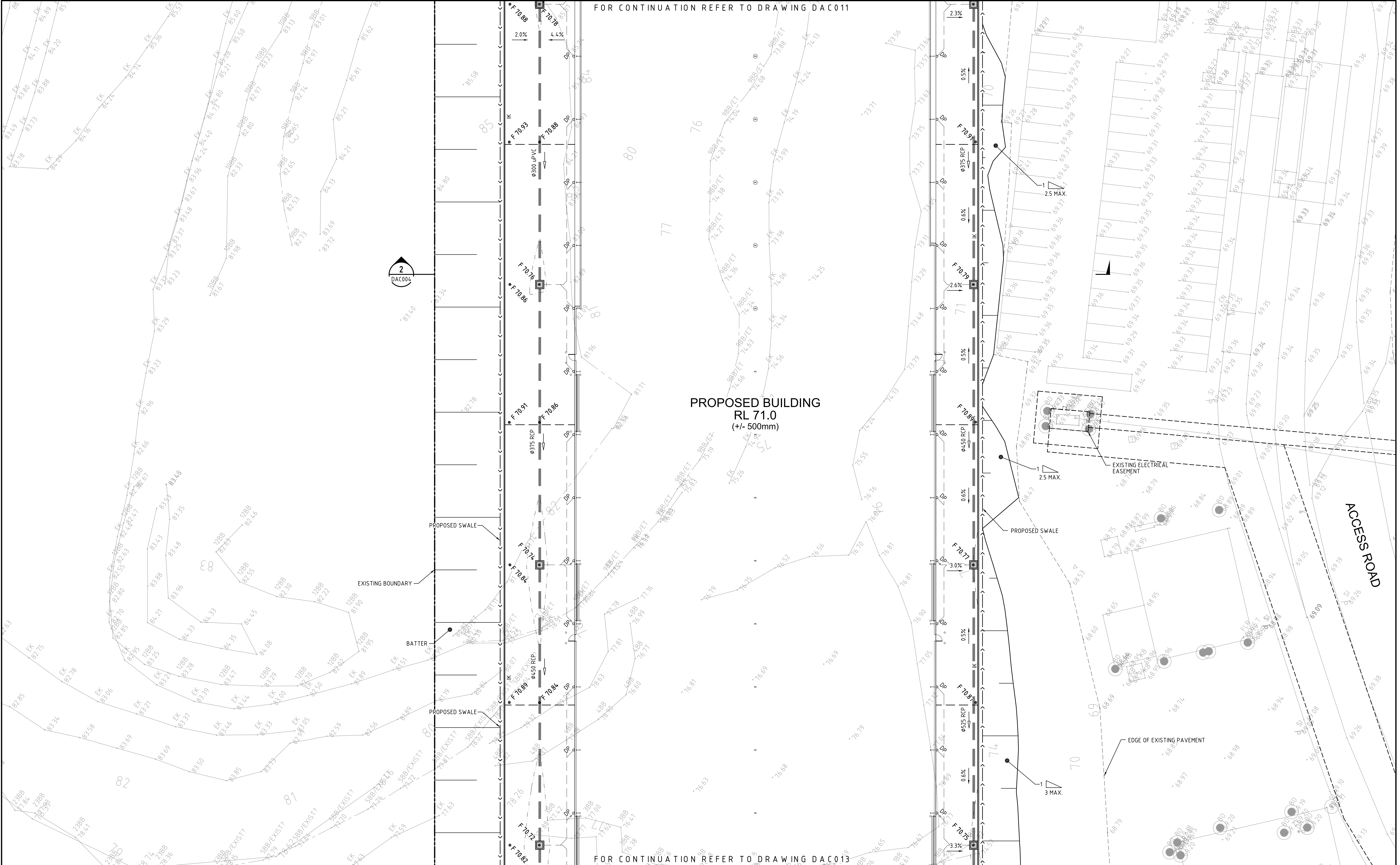
Client

DIAL A DUMP

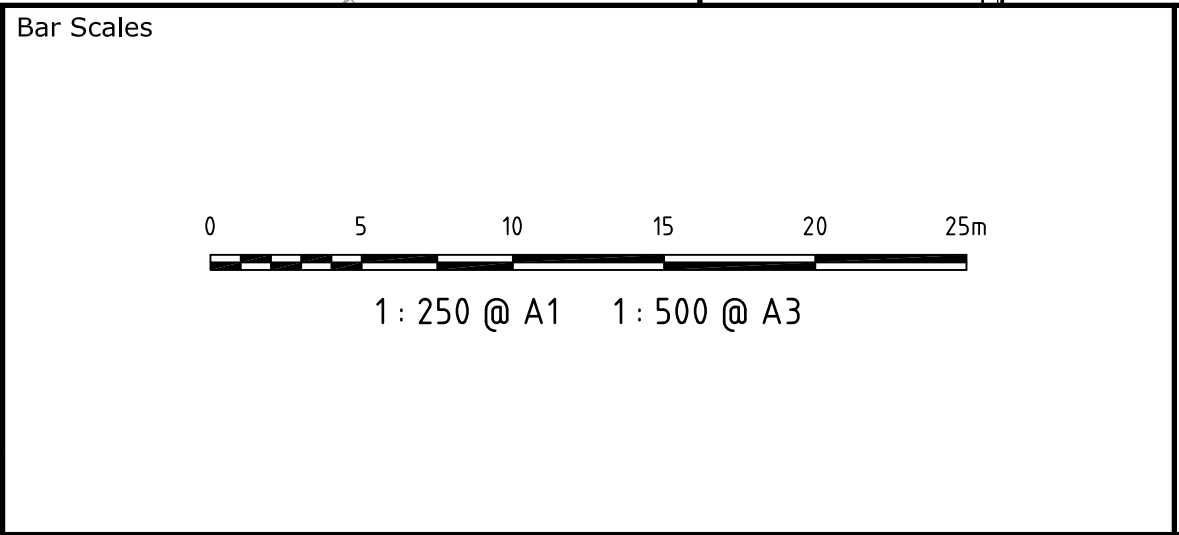
Scales	1 : 250	Drawn	FX
		Designed	FX
Grid	MGA	Checked	AM
Height Datum	AHD	Approved	

Project	PRE SORT CENTRE EASTERN CREEK
Title	SITWORKS AND STORMWATER DRAINAGE PLAN - SHEET 1

Civil Engineers and Project Managers		
at&L		
Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status	FOR APPROVAL	A1
Drawing No.	Project No.	Issue
DAC011	14-232	B



B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date



THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L

Client

DIAL A DUMP

Scales	1 : 250	Drawn	FX
		Designed	FX
Grid	MGA	Checked	AM
Height Datum	AHD	Approved	

Project

PRE SORT CENTRE EASTERN CREEK

Title

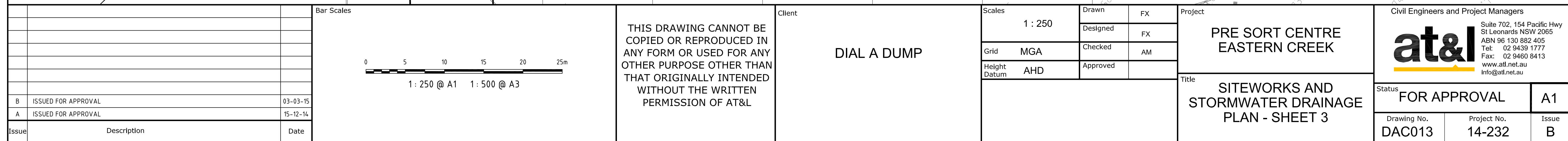
SITeworks AND STORMwater DRAINAGE PLAN - SHEET 2

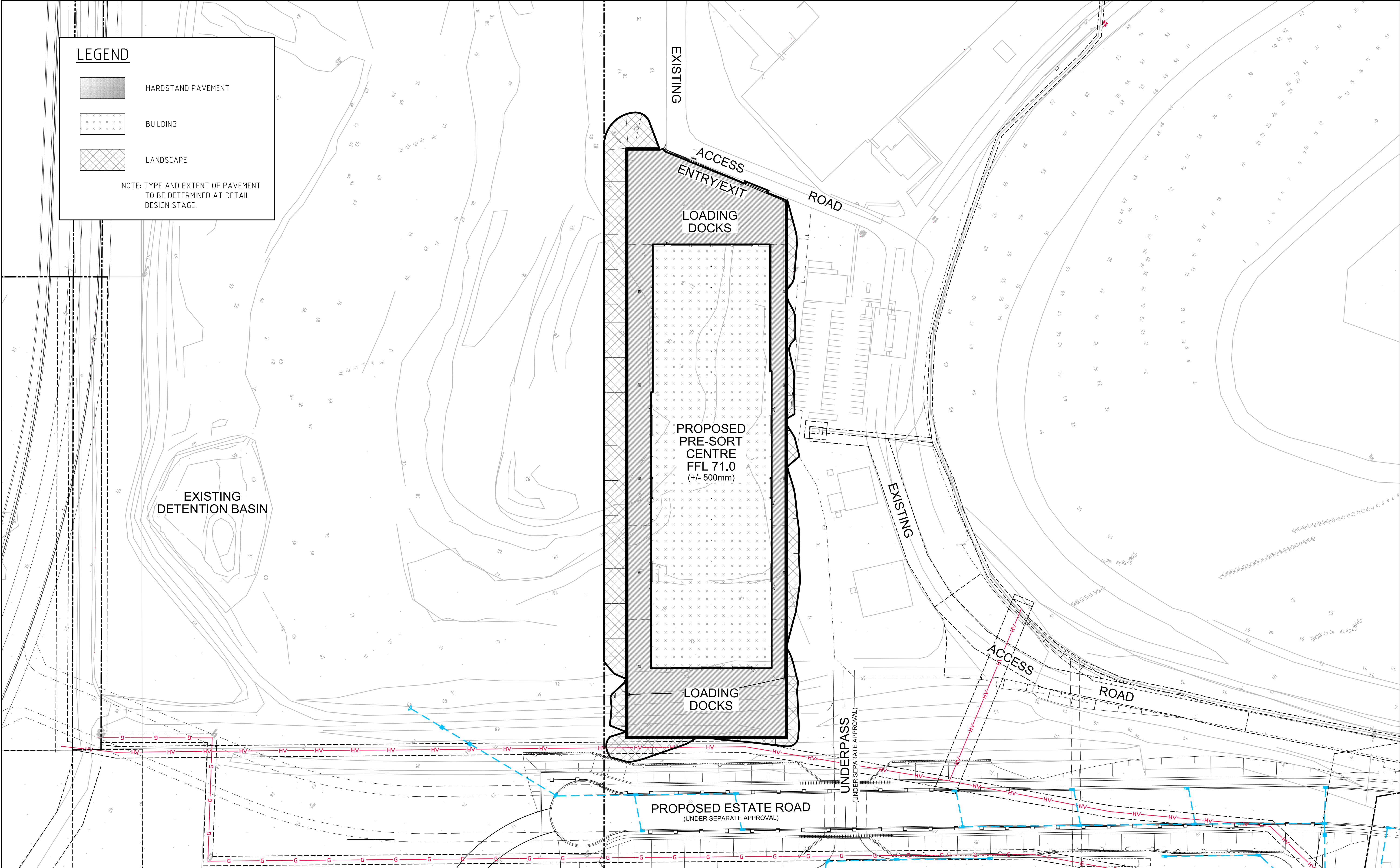
Civil Engineers and Project Managers

at&l

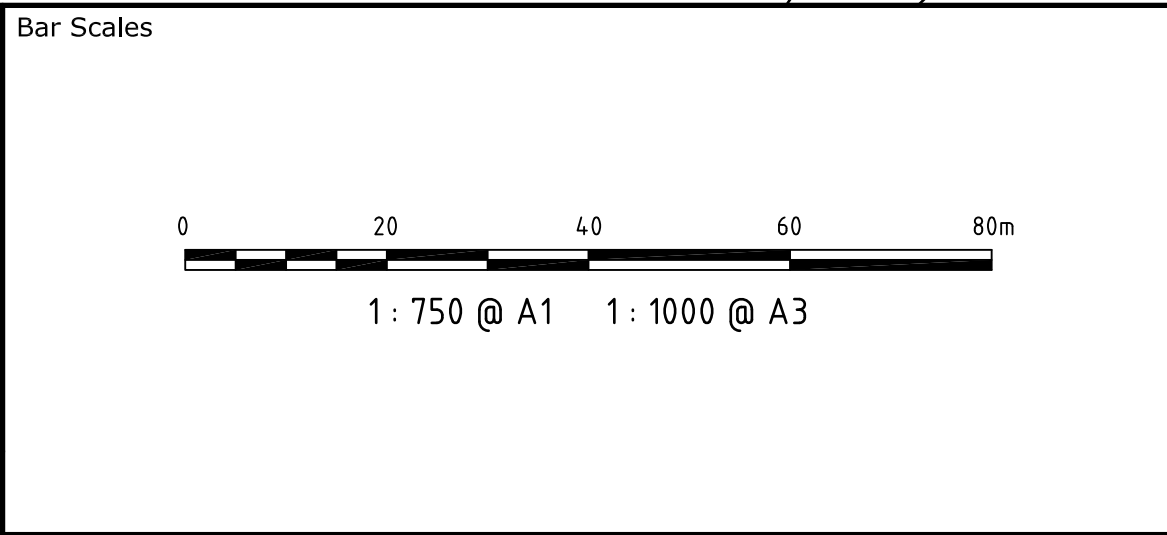
Suite 702, 154 Pacific Hwy
St Leonards NSW 2065
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9460 8413
www.atl.net.au
info@atl.net.au

Status	FOR APPROVAL	A1
Drawing No.	DAC012	Issue
Project No.	14-232	B





B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date



THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L

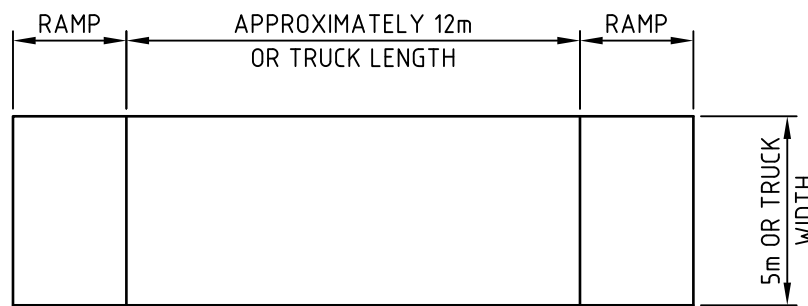
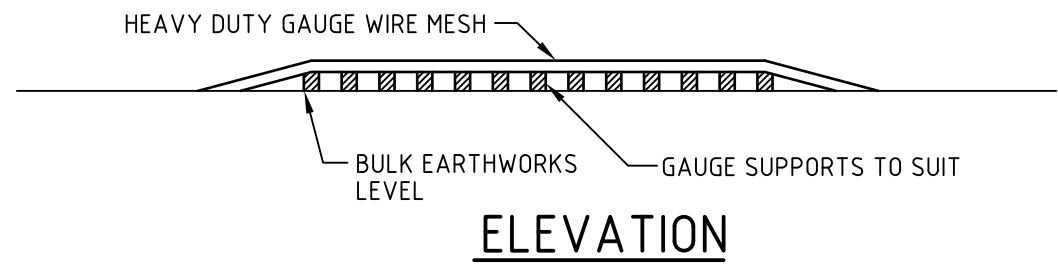
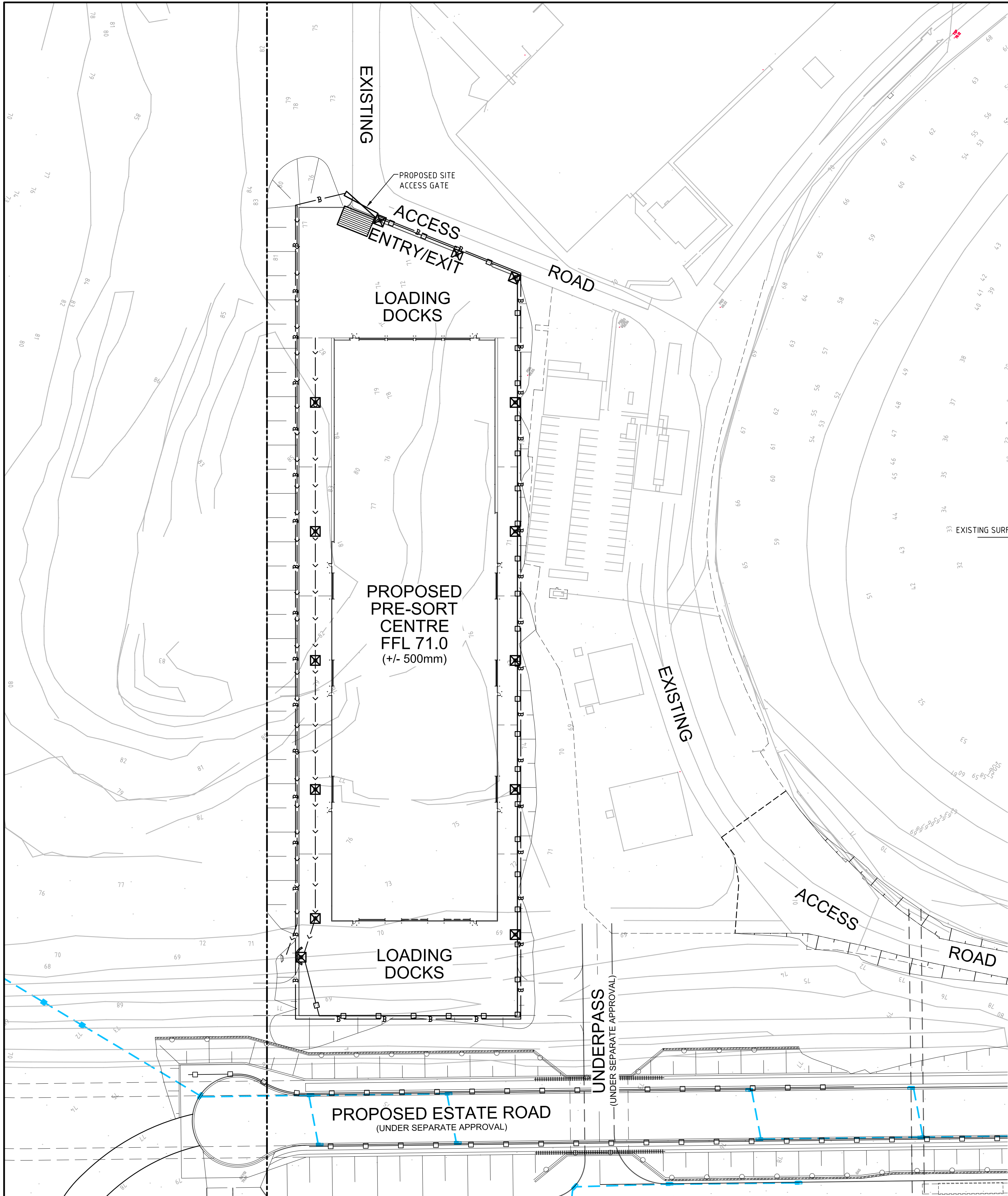
Client

DIAL A DUMP

Scales	1 : 750	
	Grid	MGA
	Height Datum	AHD
Drawn	Designed	FX
	Checked	AM
	Approved	

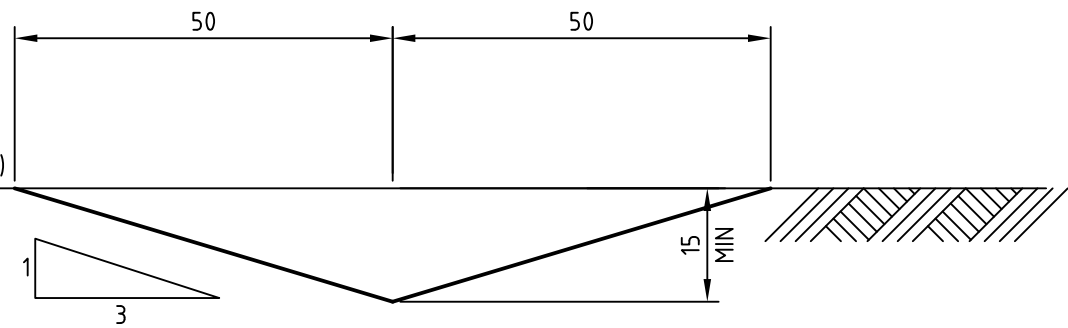
Project		Title
PRE SORT CENTRE EASTERN CREEK		
PAVEMENT PLAN		

Civil Engineers and Project Managers		
at&l		
Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status	FOR APPROVAL	A1
Drawing No.	Project No.	Issue
DAC020	14-232	B

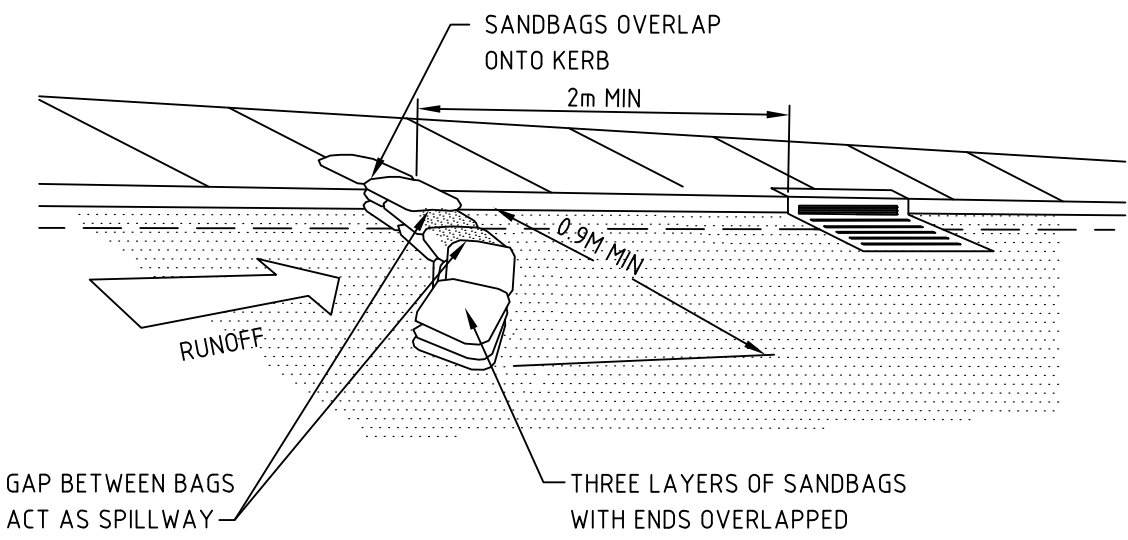


TEMPORARY CONSTRUCTION EXIT
(WASH DOWN DETAIL)

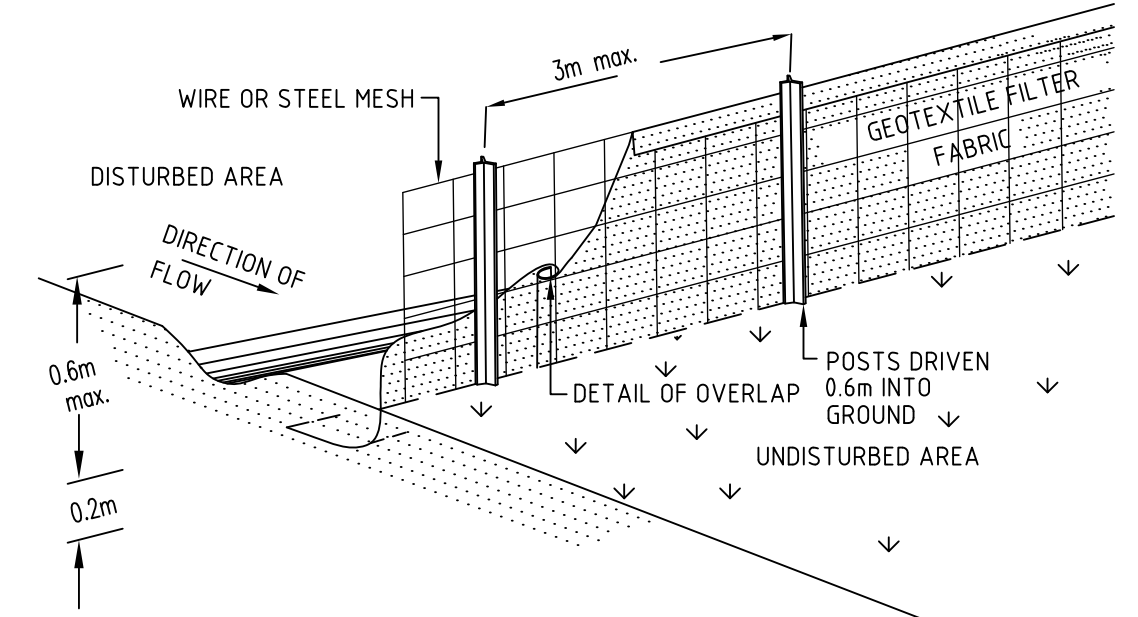
SCALE 1:200
THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. THIS MAY REQUIRE REPAIR AND OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY.



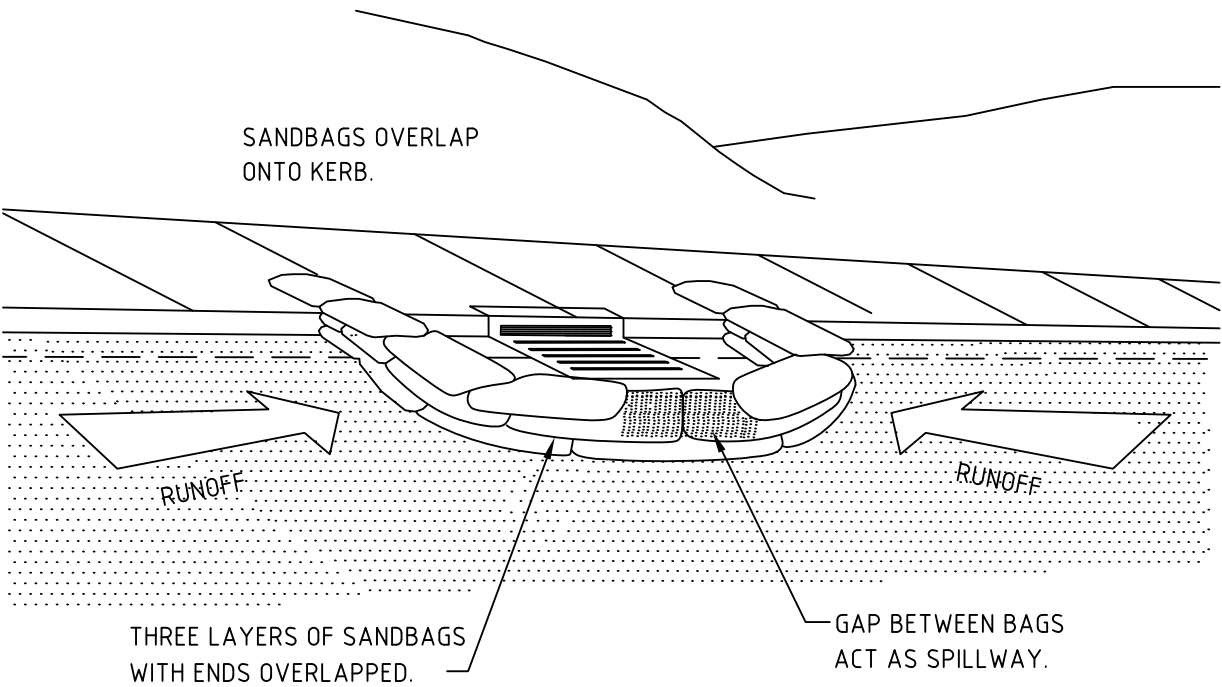
DIVERSION SWALE
(MIN FALL 1%)
SCALE 1:10



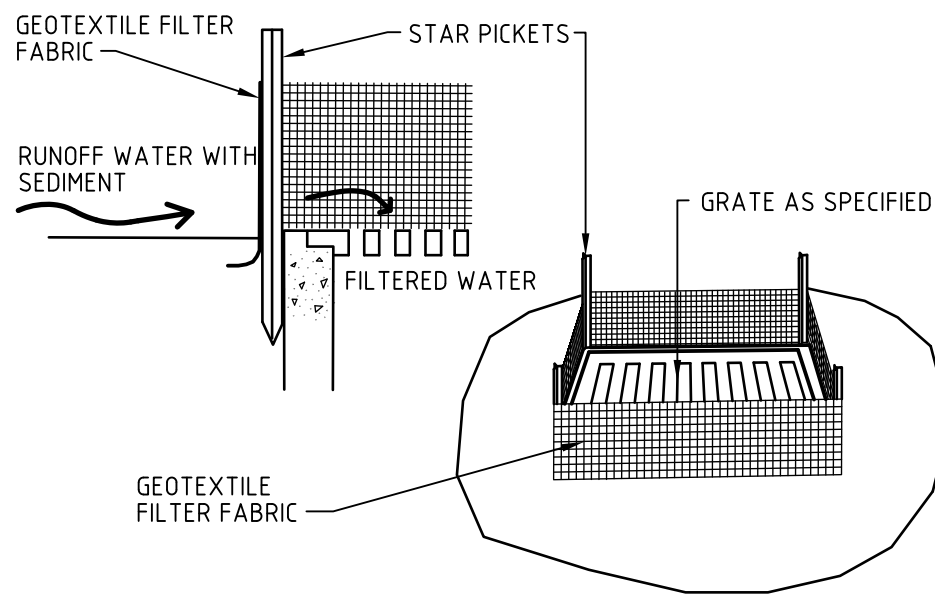
MESH AND GRAVEL INLET FILTER
FOR KERB INLET ON GRADE



SEDIMENT FENCE
NTS



SANDBAG SEDIMENT TRAP
FOR KERB INLET AT LOWPOINT
NTS



GEOTEXTILE INLET FILTER PIT SURROUND
NTS

Bar Scales		
0 20 40 60 80m		
1 : 750 @ A1 1 : 1000 @ A3		
B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date

Bar Scales		
0 20 40 60 80m		
1 : 750 @ A1 1 : 1000 @ A3		

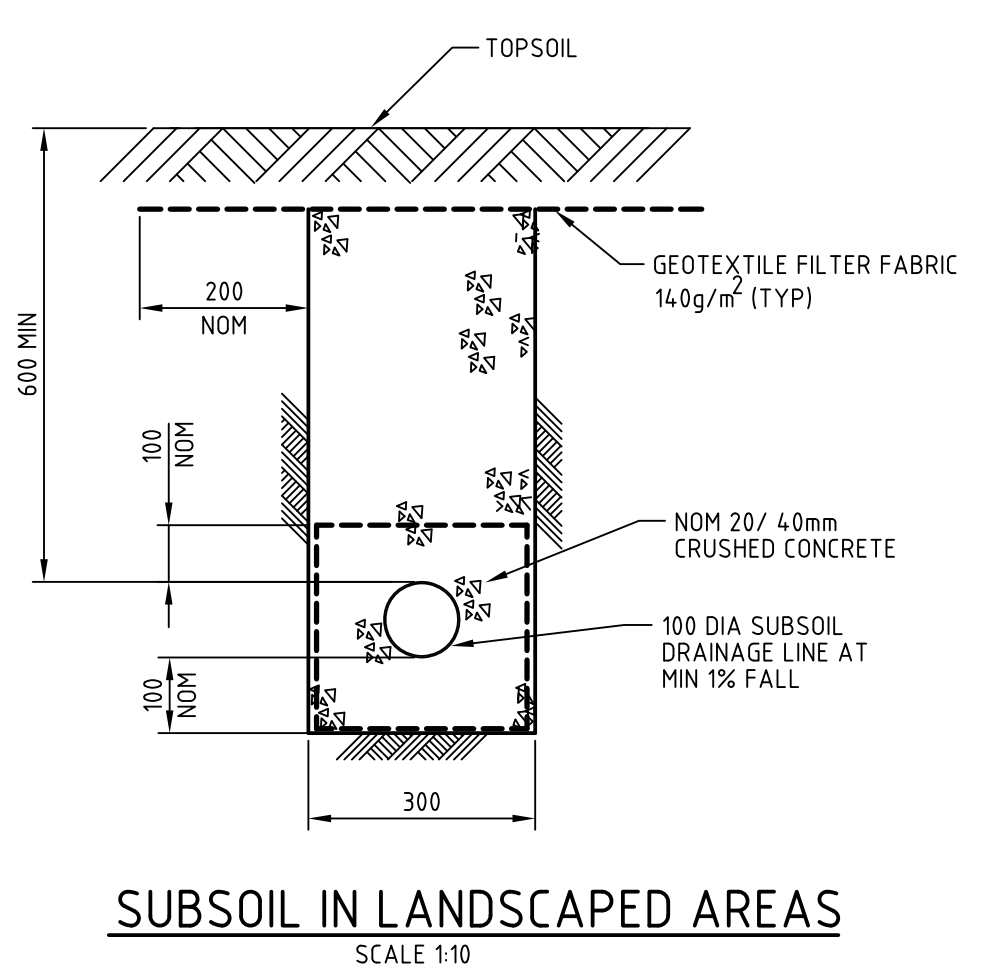
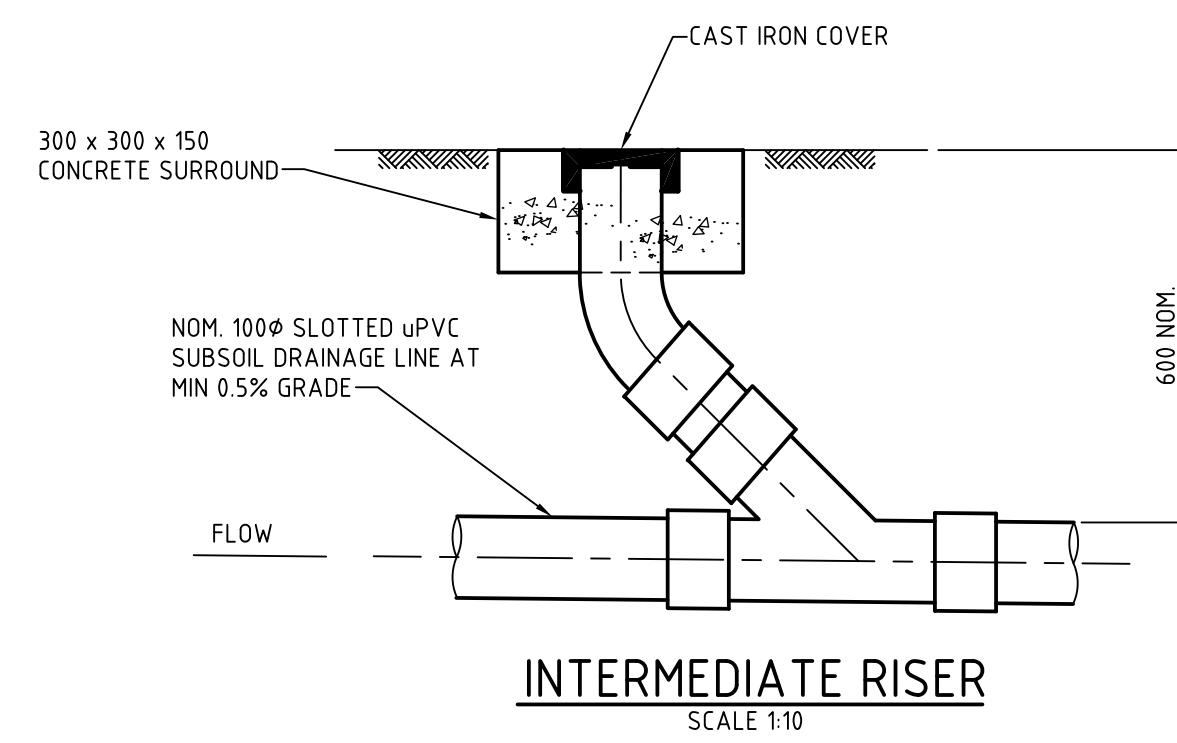
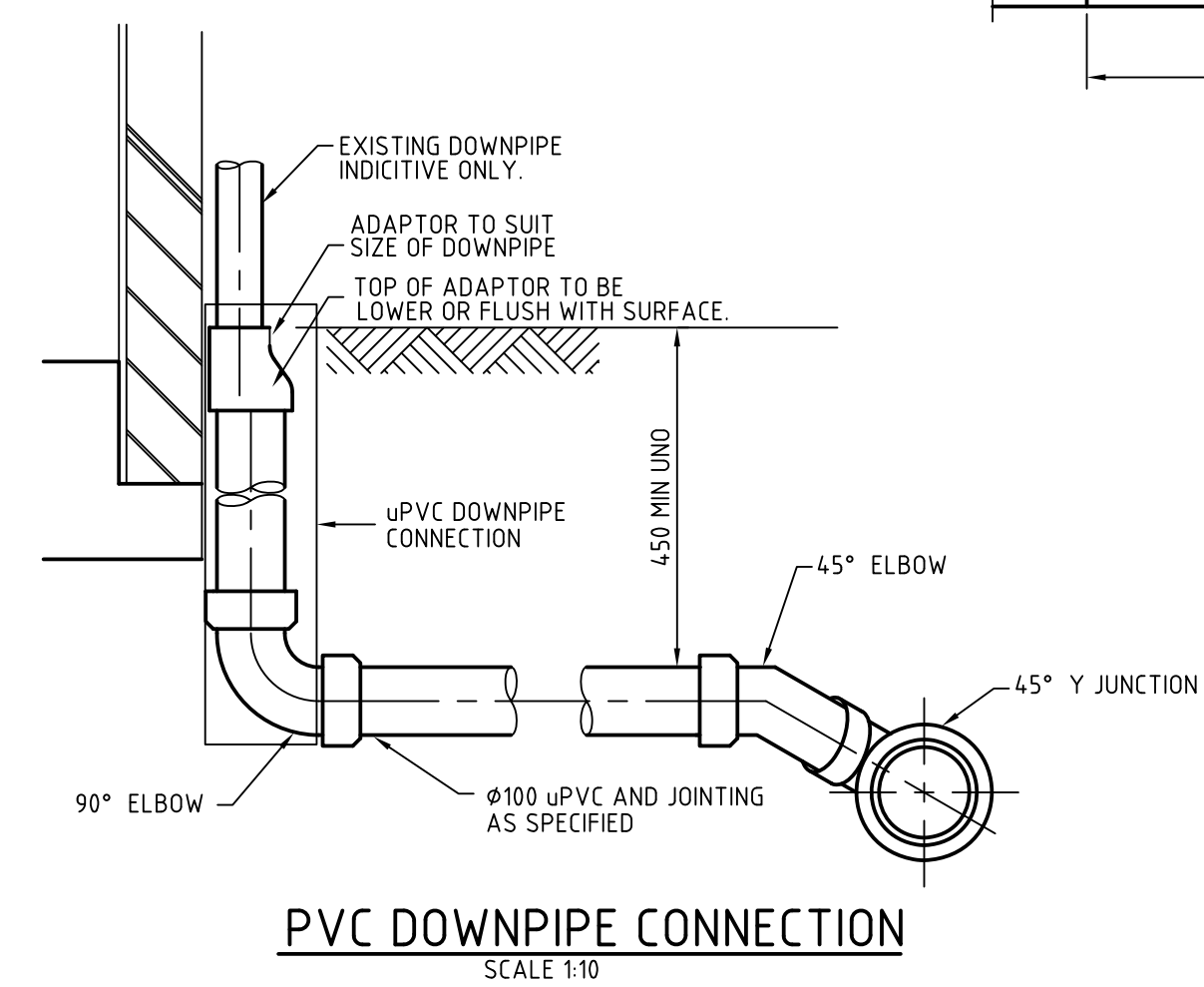
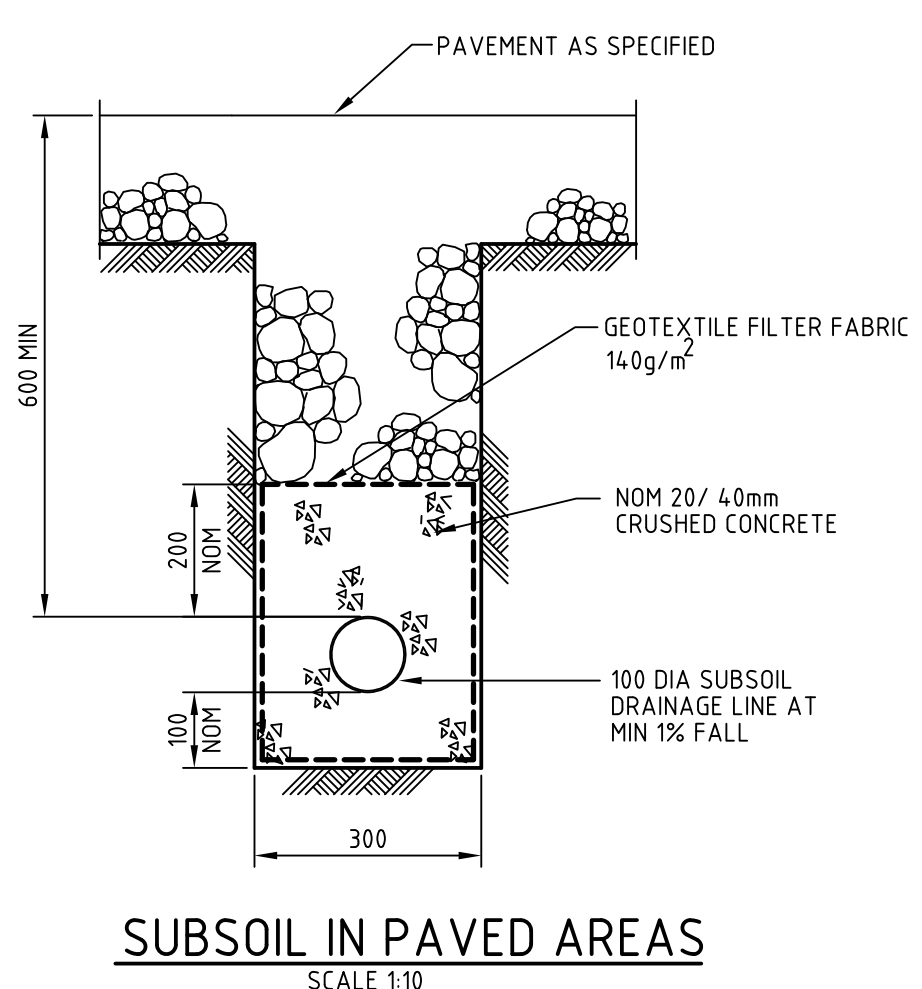
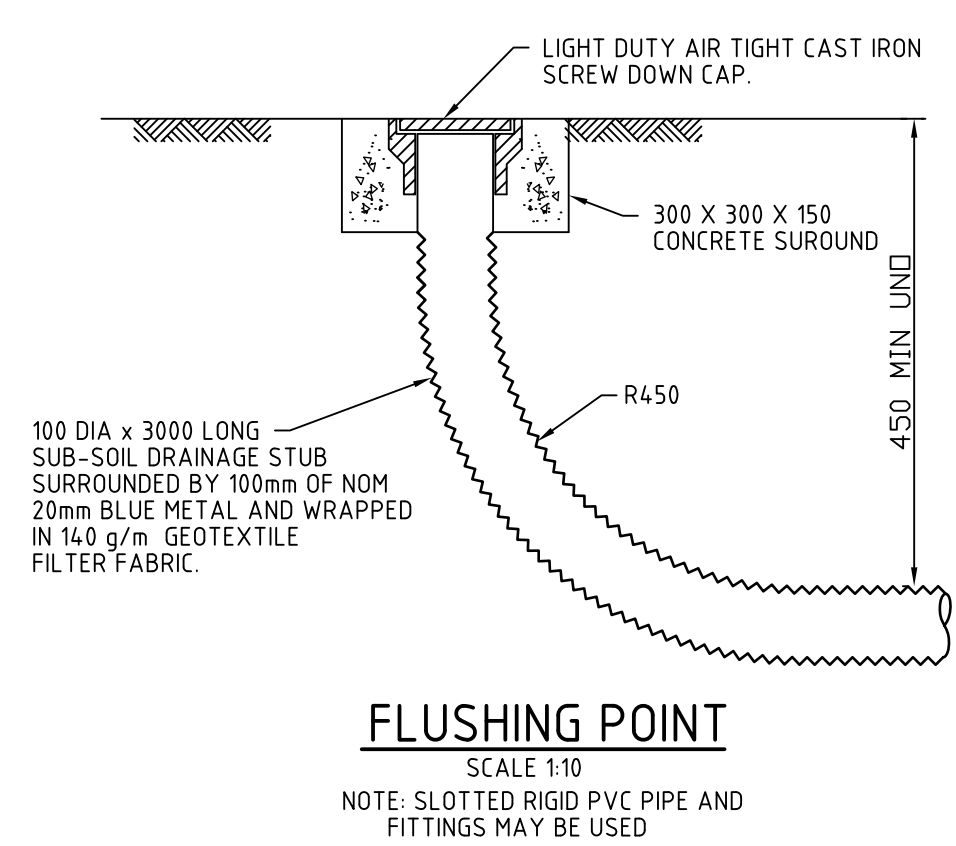
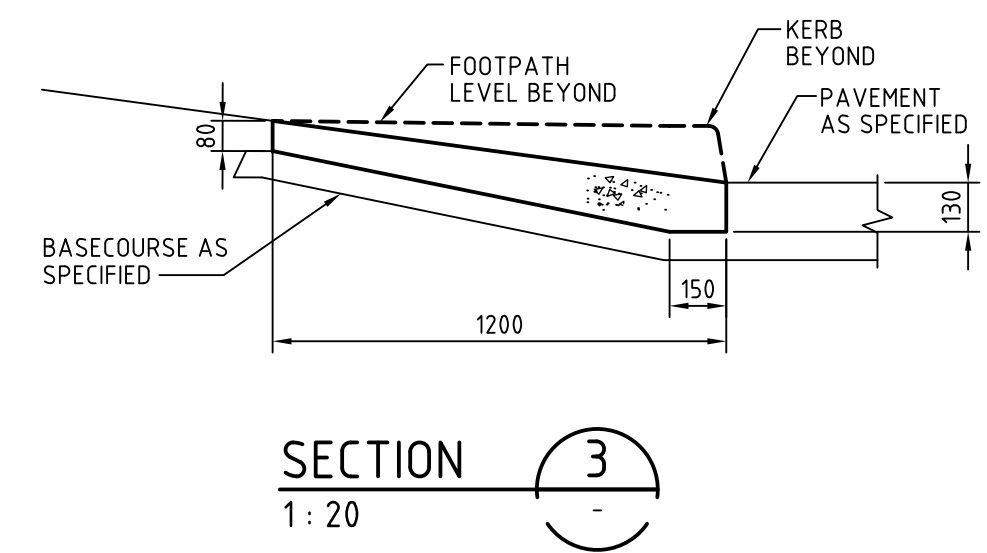
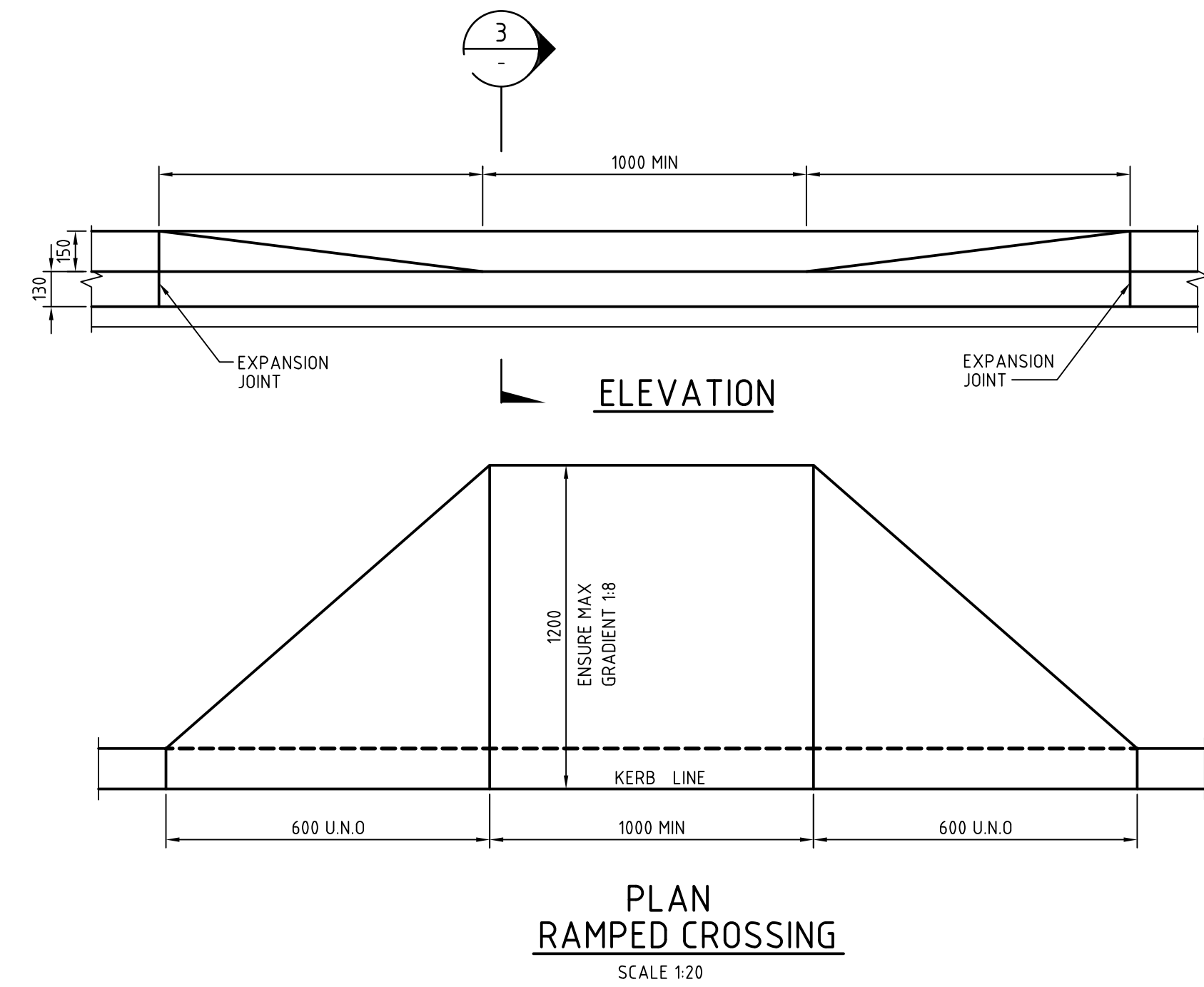
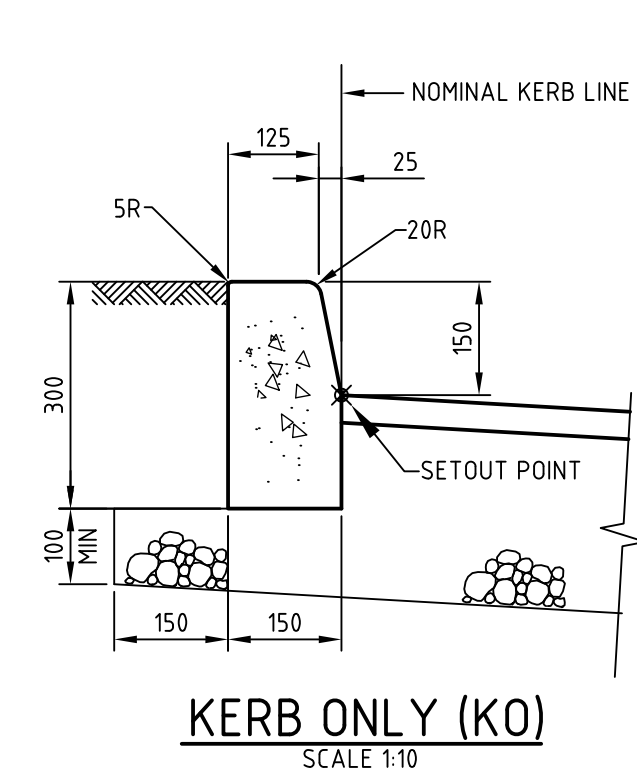
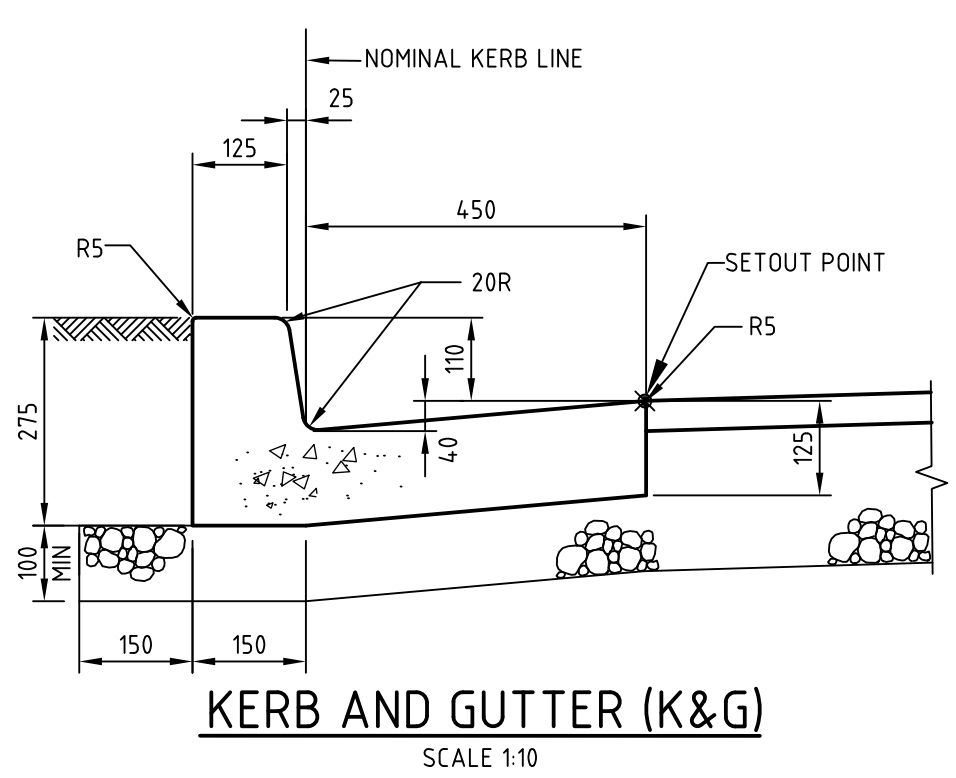
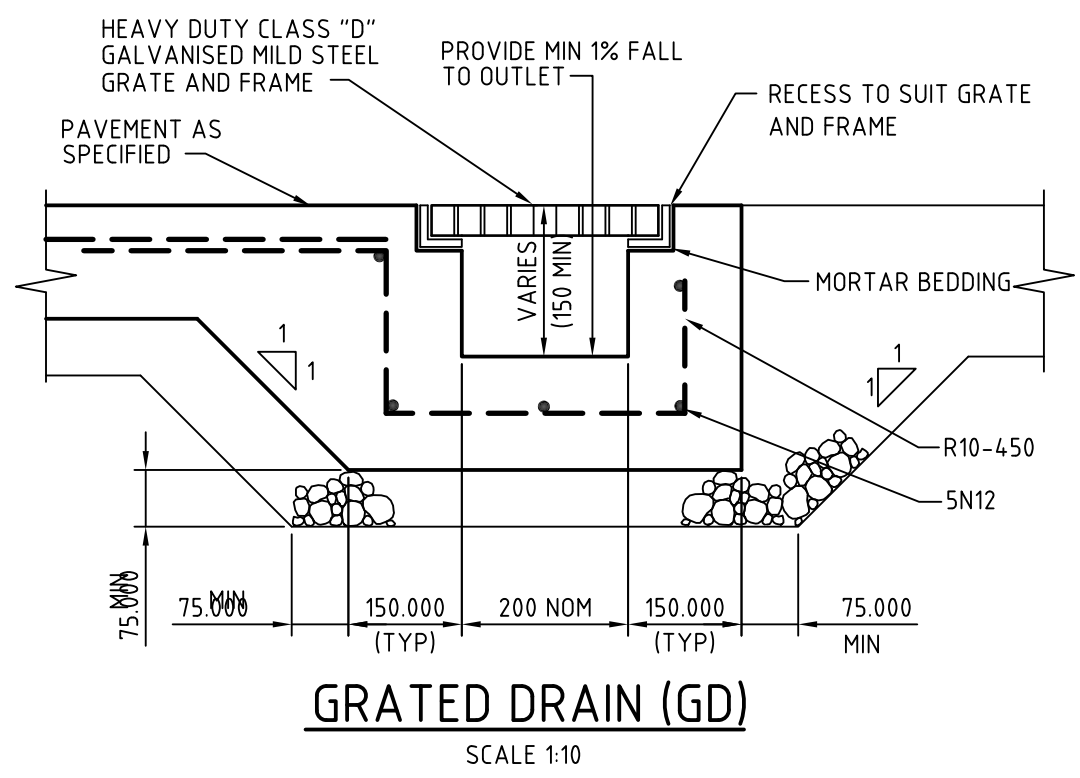
THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L

Client
DIAL A DUMP

Scales 1 : 750	Drawn	FX
	Designed	FX
	Checked	AM
	Approved	
Grid MGA		
Height Datum AHD		

Project PRE SORT CENTRE EASTERN CREEK	
Title EROSION AND SEDIMENT CONTROL PLAN	

Civil Engineers and Project Managers at&l Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status FOR APPROVAL	A1	
Drawing No. DAC021	Project No. 14-232	Issue B



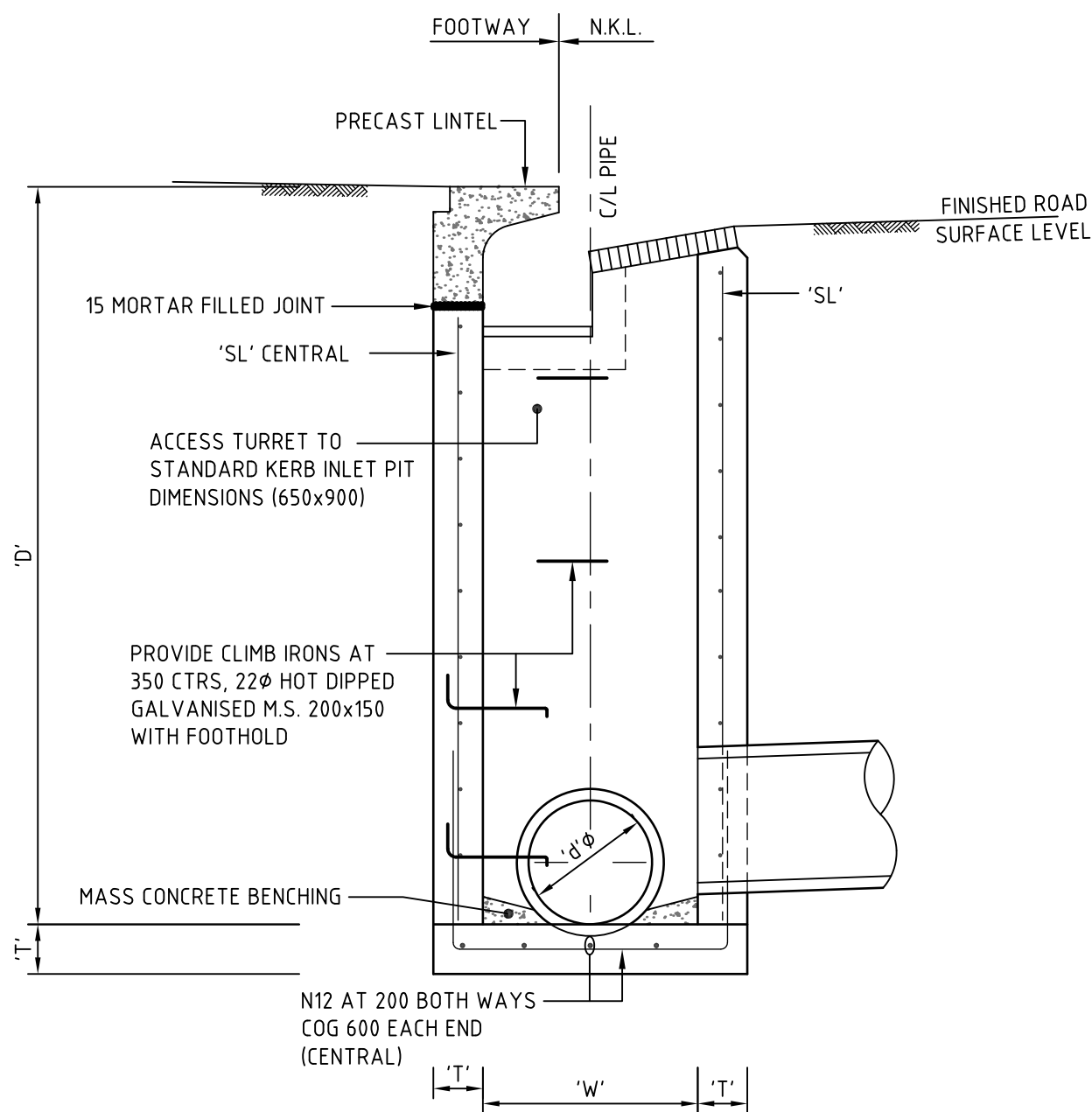
B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14
Issue	Description	Date

Bar Scales	

THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L	Client DIAL A DUMP
--	----------------------------------

Scales 1 :10 1 :20	Drawn	FX	Project PRE SORT CENTRE EASTERN CREEK
	Designed	FX	
Grid MGA	Checked	AM	
Height Datum AHD	Approved		
			Title SITWORKS DETAILS

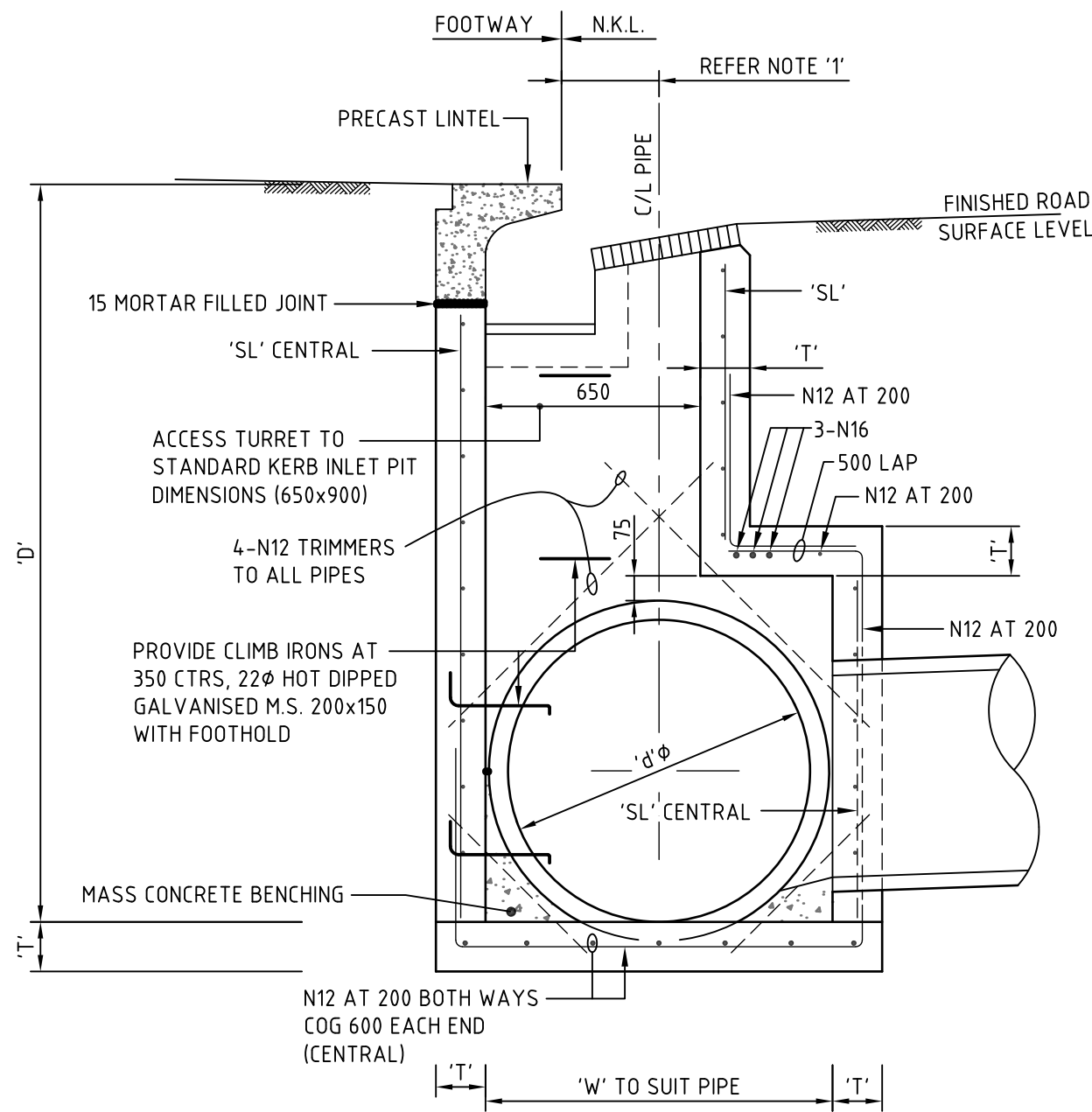
Civil Engineers and Project Managers at&I Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au		
Status FOR APPROVAL	A1	
Drawing No. DAC030	Project No. 14-232	Issue B



PIT TYPE 'A' DETAIL
STANDARD GRATED KERB INLET PIT
FOR PIPES UP TO 525Ø

SCALE: 1:20

PIPE DIA. 'ØØ'	WIDTH 'W'	DEPTH 'D'	WALL 'T'	FABRIC/COV 'SL'
375	650	800	150	SL72
	650	1200	150	SL72
	650	1600	150	SL72
	650	2000	150	SL72
	650	2400	150	SL72
450	650	800	150	SL72
	650	1200	150	SL72
	650	1600	150	SL72
	650	2000	150	SL72
	650	2400	150	SL72
525	650	800	150	SL72
	650	1200	150	SL72
	650	1600	150	SL72
	650	2000	150	SL72
	650	2400	150	SL72



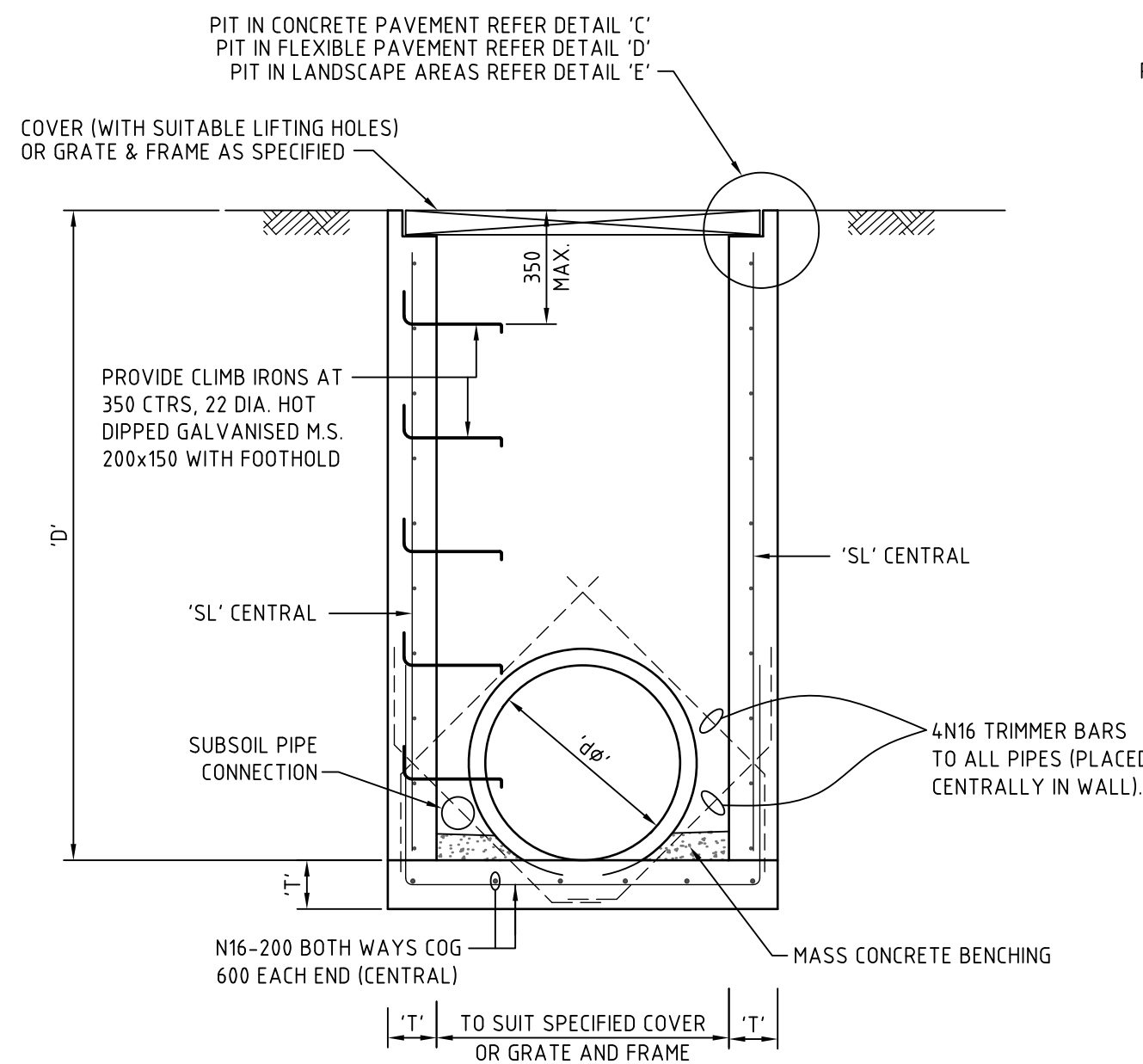
PIT TYPE 'B' DETAIL
STANDARD GRATED KERB INLET PIT
FOR PIPES FROM 600Ø TO 1350Ø

(ENLARGED CHAMBER)

SCALE: 1:20

PIPE DIA. 'ØØ'	WIDTH 'W'	DEPTH 'D'	WALL 'T'	FABRIC/COV 'SL'
600	850	1200	150	SL72
	850	1600	150	SL72
	850	2000	150	SL72
	850	2400	150	SL72
	850	2800	150	SL72
675	940	1200	150	SL72
	940	1600	150	SL72
	940	2000	150	SL72
	940	2400	150	SL72
	940	2800	150	SL72
750	1020	1200	150	SL72
	1020	1600	150	SL72
	1020	2000	150	SL72
	1020	2400	150	SL72
	1020	2800	150	SL72
825	1100	1600	150	SL72
	1100	2000	150	SL72
	1100	2400	150	SL72
	1100	2800	150	SL72
	1100	3200	150	SL72
900	1180	1600	150	SL72
	1180	2000	150	SL72
	1180	2400	150	SL72
	1180	2800	150	SL72
	1180	3200	150	SL72
1050	1345	1600	150	SL92
	1345	2000	150	SL92
	1345	2400	150	SL92
	1345	2800	150	SL92
	1345	3200	150	SL92
1200	1510	2000	150	SL102
	1510	2400	150	SL102
	1510	2800	150	SL102
	1510	3200	150	SL102
	1510	3600	150	SL102
1350	1690	2000	200	N12@150
	1690	2400	200	N12@150
	1690	2800	200	N12@150
	1690	3200	200	N12@150
	1690	3600	200	N12@150

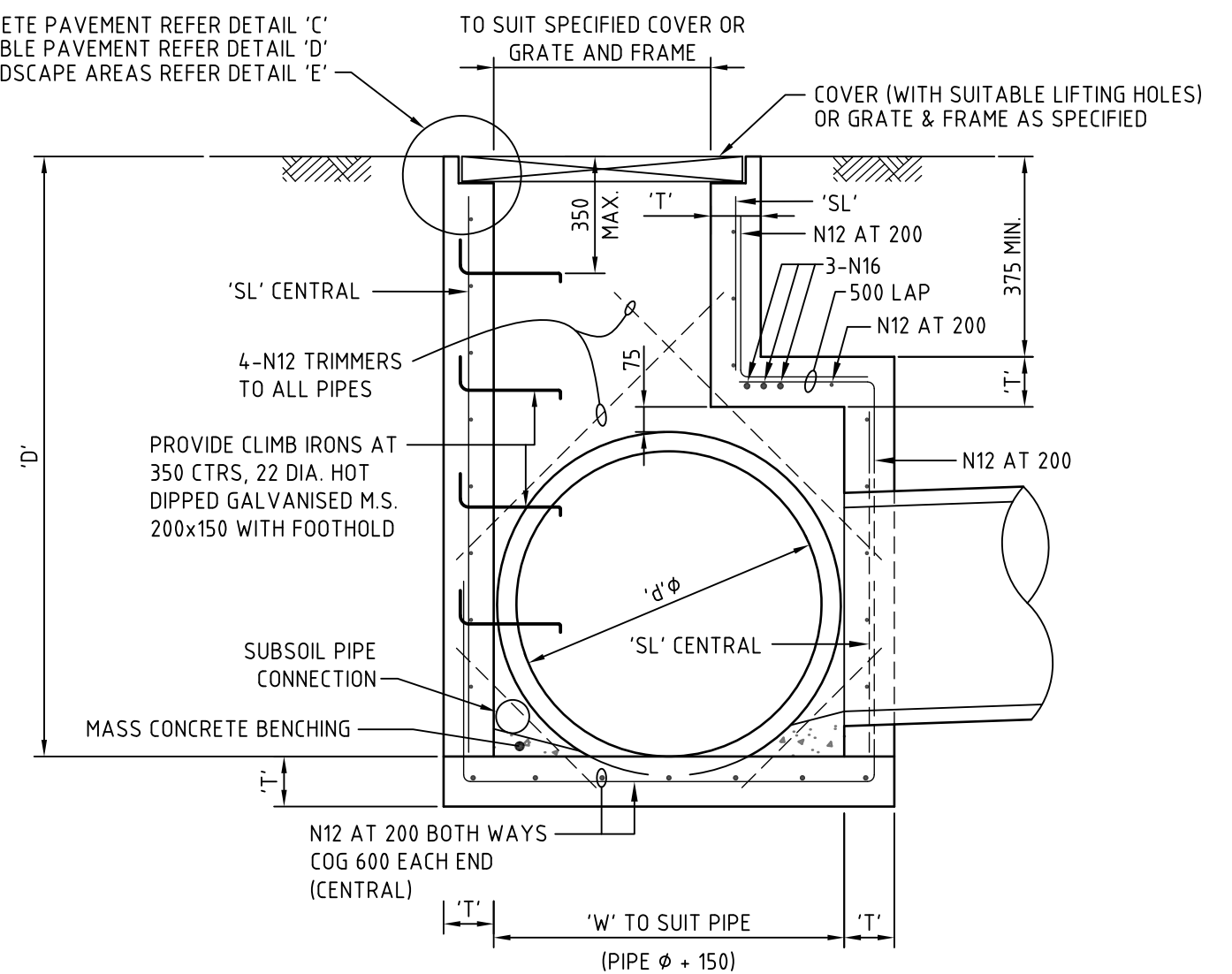
NOTE 1
150 FOR Ø600 DIA.
180 FOR Ø675 DIA.
220 FOR Ø750 DIA.
255 FOR Ø825 DIA.
370 FOR Ø1050 DIA.
445 FOR Ø1200 DIA.



PIT TYPE 'C' DETAIL
SURFACE INLET PIT
FOR PIPES UP TO 525Ø

SCALE: 1:20

PIPE DIA. 'ØØ'	WIDTH 'W'	DEPTH 'D'	WALL 'T'	FABRIC/COV 'SL'
375	650	800	150	SL72
	650	1200	150	SL72
	650	1600	150	SL72
	650	2000	150	SL72
	650	2400	150	SL72
450	650	800	150	SL72
	650	1200	150	SL72
	650	1600	150	SL72
	650	2000	150	SL72
	650	2400	150	SL72
525	650	800	150	SL72
	650	1200	150	SL72
	650	1600	150	SL72
	650	2000	150	SL72
	650	2400	150	SL72



PIT TYPE 'D' DETAIL
SURFACE INLET PIT
FOR PIPES FROM 600Ø TO 1350Ø

(ENLARGED CHAMBER)

SCALE: 1:20

PIPE DIA. 'ØØ'	WIDTH 'W'	DEPTH 'D'	WALL 'T'	FABRIC/COV 'SL'
600	850	1200	150	SL72
	850	1600	150	SL72
	850	2000	150	SL72
	850	2400	150	SL72
	850	2800	150	SL72
675	940	1200	150	SL72
	940	1600	150	SL72
	940	2000	150	SL72
	940	2400	150	SL72
	940	2800	150	SL72
750	1020	1200	150	SL72
	1020	1600	150	SL72
	1020	2000	150	SL72
	1020	2400	150	SL72
	1020	2800	150	SL72
825	1100	1600	150	SL72
	1100	2000	150	SL72
	1100	2400	150	SL72
	1100	2800	150	SL72
	1100	3200	150	SL72
900	1180	1600	150	SL72
	1180	2000	150	SL72
	1180	2400	150	SL72
	1180	2800	150	SL72
	1180	3200	150	SL72
1050	1345	1600	150	SL92
	1345	2000	150	SL92
	1345	2400	150	SL92
	1345	2800	150	SL92
	1345	3200	150	SL92
1200	1510	2000	150	SL102
	1510	2400	150	SL102
	1510	2800	150	SL102
	1510	3200	150	SL102
	1510	3600	150	SL102
1350	1690	2000	200	N12@150
	1690	2400	200	N12@150
	1690	2800	200	N12@150
	1690	3200	200	N12@150
	1690	3600	200	N12@150

NOTE

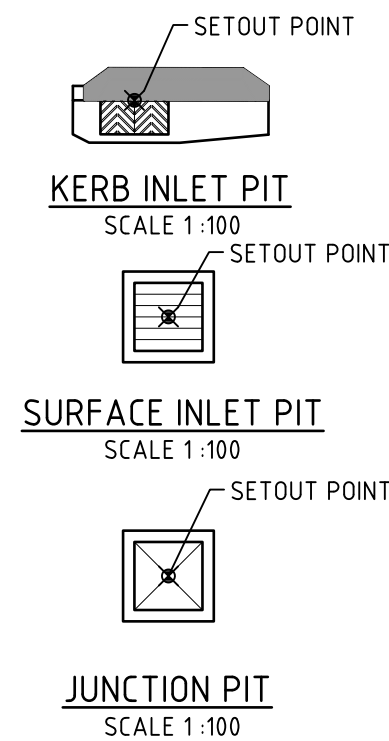
- FOR PIT SIZE REFER TO TABLE (900 MIN LONG).
- REINFORCING MESH IS TO BE BENT TO LAP 300 AROUND ALL CORNERS. VERTICAL BARS ARE NOT TO BE CUT. ALTERNATLY PROVIDE N12 "L" BARS (500x500) AT 400 VERTICAL CTS.
- COMPRESSIVE STRENGTH (F'c) FOR CAST IN SITU CONCRETE SHALL BE A MINIMUM 32 MPa AT 28 DAYS.
- TOP OF BENCHING SHALL BE 1/2 OF OUTLET PIPE DIAMETER.
- 100mm SUBSOIL DRAINAGE PIPE 3000 LONG WRAPPED IN FABRIC SOCK TO BE PROVIDE ADJACENT TO INLET PIPES.
- ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP.
- PIT GRATE TO BE 'WELDLOK' GULLY GRATE GG 78-50 OR APPROVED EQUIVALENT.
- DURING INSTALLATION OF GRATE AND FRAME CONTRACTOR IS TO ENSURE CLEARANCE BETWEEN LINTEL AND OPENED GRATE (REFER TO INSTALLATION TOLERANCE).
- PROVIDE STEP IRONS AS INDICATED FOR PITS DEEPER THAN 1200.
- N12 AT 200 CENTRAL MAY BE USED IN LEIU OF MESH. LAP 500 AT CORNERS

11. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

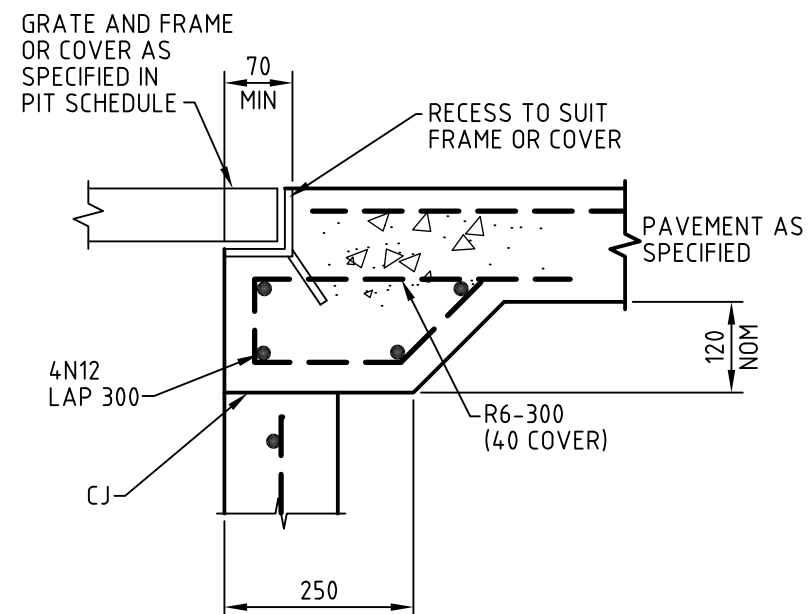
ELEMENT	f'c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

12. COVER - UNLESS NOTED OTHERWISE

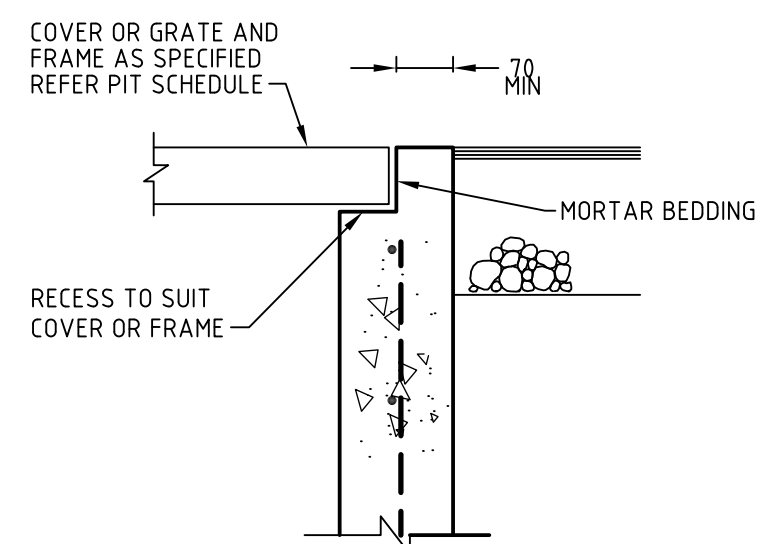
ELEMENT	INTERIOR	EXTERIOR
PITS		45mm
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		



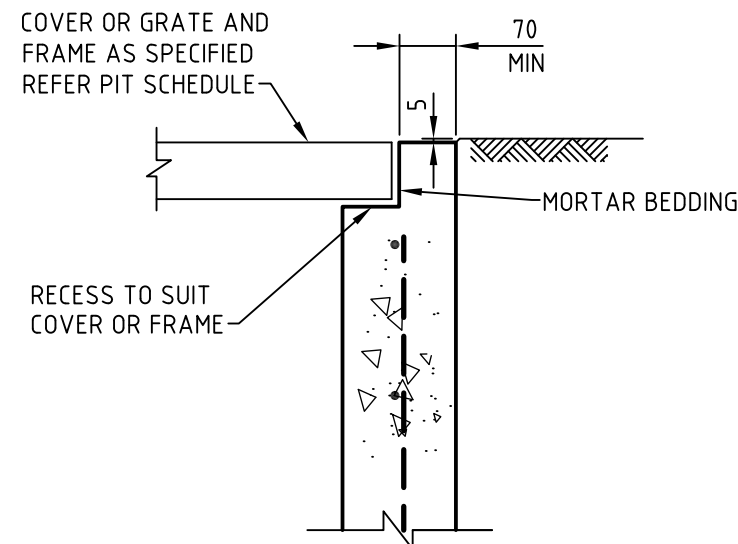
STORMWATER PIT
SETOUT POINTS



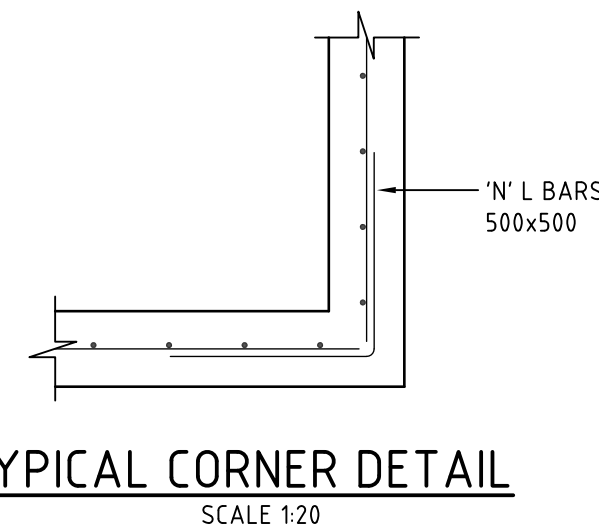
DETAIL "C"
SCALE 1:10



DETAIL "D"
SCALE 1:10



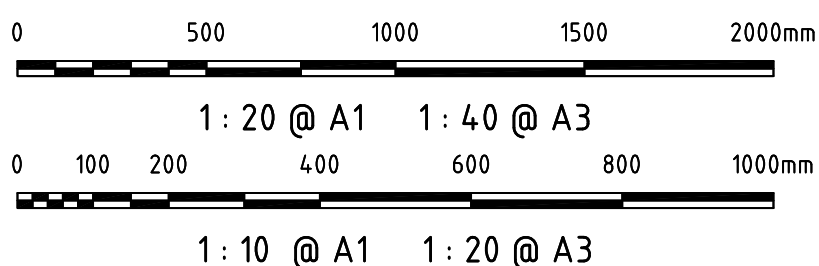
DETAIL "E"
SCALE 1:10



TYPICAL CORNER DETAIL
SCALE 1:20

Issue	Description	Date
B	ISSUED FOR APPROVAL	03-03-15
A	ISSUED FOR APPROVAL	15-12-14

Bar Scales



THIS DRAWING CANNOT BE
COPIED OR REPRODUCED IN
ANY FORM OR USED FOR ANY
OTHER PURPOSE OTHER THAN
THAT ORIGINALLY INTENDED
WITHOUT THE WRITTEN
PERMISSION OF AT&L

Client

DIAL A DUMP

Scales

1 :10
1 :20

Drawn

FX

Designed

FX

Grid

MGA

Checked

AM

Height

AHD

Approved

Project

PRE SORT CENTRE
EASTERN CREEK

Title

DRAINAGE
DETAILS

Civil Engineers and Project Managers

at&l
Suite 702, 154 Pacific Hwy
St Leonards NSW 2065
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9460 8413
www.atl.net.au
info@atl.net.au

Status

FOR APPROVAL

A1

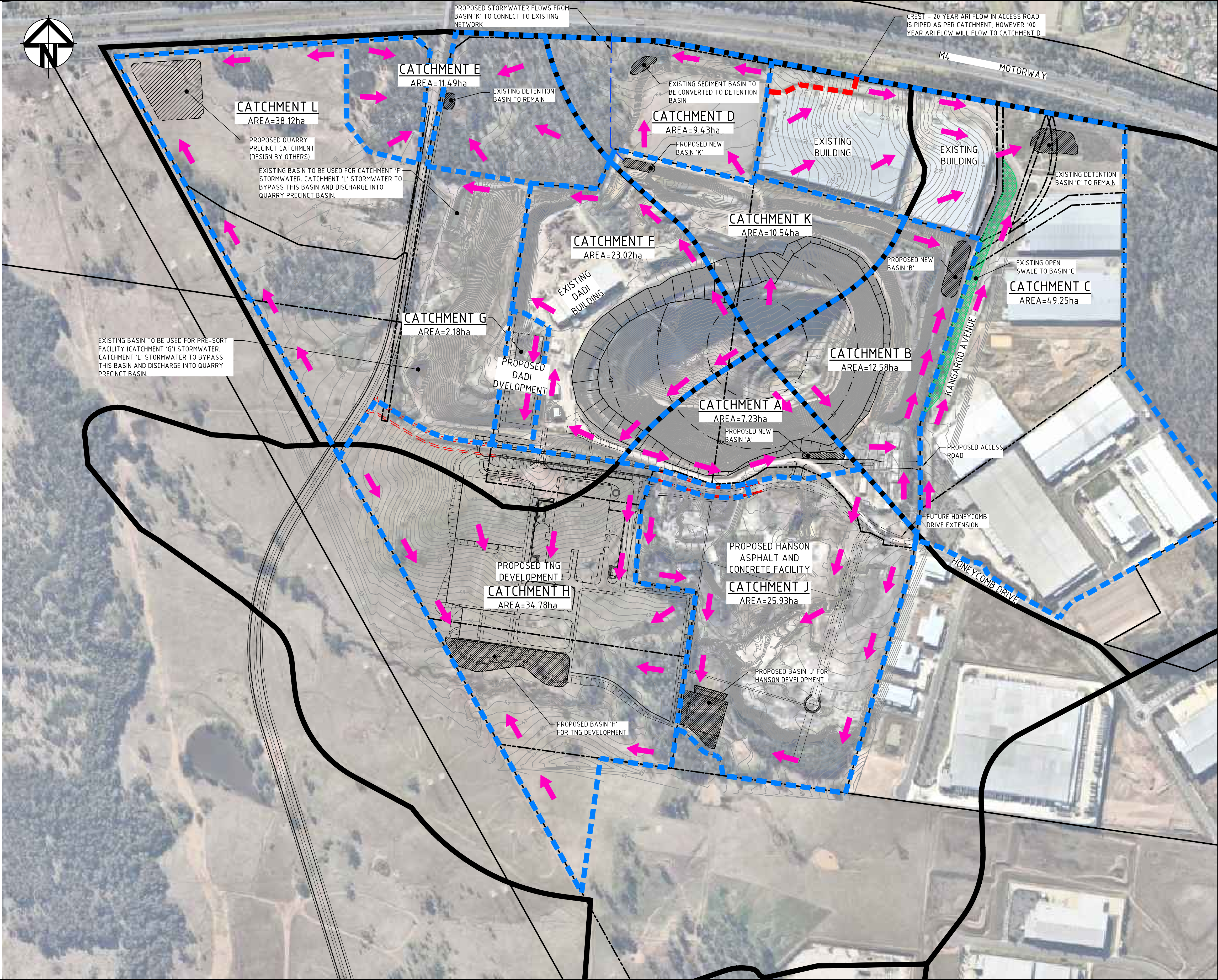
Drawing No.
DAC031

Project No.
14-232

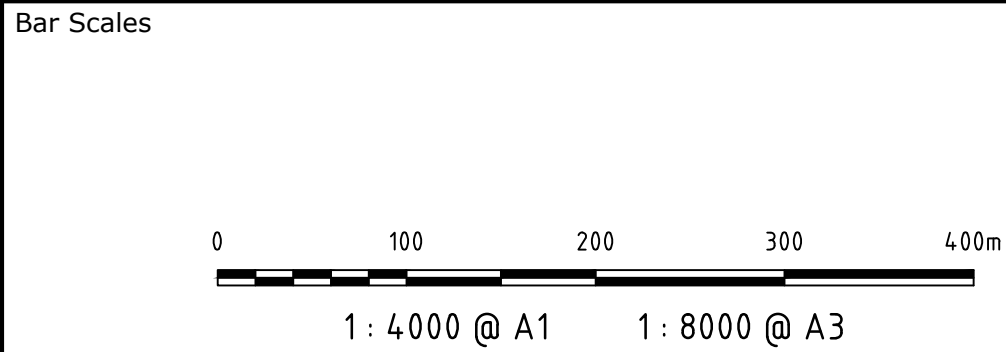
Issue
B

CATCHMENT	AREA	VOLUME REQUIRED FOR OSD	SURFACE AREA REQUIRED FOR BIO-RETENTION
A	7.23ha	2,510m³	730m²
B	12.58ha	4,300m³	1,320m²
C	49.25ha	-	-
D	9.43ha	3,300m³	950m²
E	11.49ha	-	-
F	23.02ha	8,300m³	2,400m²
G	2.18ha	760m³	220m²
H	34.78ha	12,080m³	3,510m²
J	25.93ha	UNKNOWN	UNKNOWN
K	10.54ha	3,600m³	1,070m²
L	38.12ha	13,250m³	3,840m²

- NOTE:
1. SIZE OF OSD/BIO-RETENTION BASINS BASED ON ASSUMPTION THAT CATCHMENT WILL BE 80% IMPERVIOUS AREA.
 2. CALCULATIONS AS PER BLACKTOWN CITY COUNCIL SEPP No.59.
 3. WSUD TARGET REDUCTION REQUIREMENTS;
 - 85% TOTAL SUSPENDED SOLIDS (TSS)
 - 65% TOTAL PHOSPHORUS (TP)
 - 45% TOTAL NITROGEN (TN)
 - 90% TOTAL HYDROCARBONS
 - 90% GROSS POLLUTANTS
 4. CATCHMENTS 'C' AND 'E' WILL NOT BE ALTERED. EXISTING BASINS ARE ASSUMED SUFFICIENT.
 5. CATCHMENT 'J' IS ASSUMED TO DRAIN TO BASIN 'J' AND HAS BEEN ASSIGNED ACCORDINGLY.



Issue	Description	Date
P6	ISSUED FOR INFORMATION	26-10-15
P5	ISSUED FOR INFORMATION	12-10-15
P4	ISSUED FOR INFORMATION	18-09-15
P3	ISSUED FOR INFORMATION	01-09-15
P2	ISSUED FOR INFORMATION	28-08-15
P1	ISSUED FOR INFORMATION	24-08-15



THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L



Client	Drawn	ASD
	Designed	ASD
	Checked	AT
	Approved	

Project	GENESIS XERO WASTE FACILITY EASTERN CREEK
Title	PROPOSED FUTURE STORMWATER MANAGEMENT PLAN

Civil Engineers and Project Managers	Status	A1
at&l	FOR INFORMATION NOT TO BE USED FOR CONSTRUCTION	
Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au	Drawing No.	Issue
	SKC007	P6
	Project No.	
	15-309	