



ResourceCo RRF Pty Ltd
Landscape Management Plan
Wetherill Park RRF

February 2018

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Appendices

Appendix A – Landscape design

Definitions

Term	Definition
Accredited laboratory	a testing laboratory accredited by the National Association of Testing Authorities, Australia (NATA) or a similar accreditation authority, or otherwise granted recognition by NATA, either solely or in conjunction with one or more other persons.
Applicant	ResourceCo RRF Pty Ltd
C&D	Construction and demolition
Construction and Demolition Waste	Waste arising from commercial or industrial premises, refurbishments and demolition and construction work
EfWP	NSW Energy from Waste Policy
EfWMP	Energy from Waste Management Plan
EIS	Environmental Impact Statement titled <i>Waste and Resource Management Facility</i> SSD 15-7256, ResourceCo Pty Ltd, 35-37 Franck Street, Wetherill Park, prepared by Nexus Environmental Planning Pty Ltd dated 8 March 2016
EMS	Environmental Management System
EPA	Environment Protection Authority
EPL	Environment Protection Licence issued by the EPA under the POEO Act
Load	the quantity of waste material delivered to the stockpile by truck, bin or trailer
Minister	Minister for Planning (or delegate)
NATA	National Association of Testing Authorities
OEMP	Operational Environmental Management Plan
Operation	The receipt, removal or processing of waste
PEF	Process Engineered Fuel
Personal Protective Equipment (PPE)	equipment and clothing that is used or worn by an individual person to protect themselves against, or minimise their exposure to, workplace risks. It includes items such as facemasks and respirators, coveralls, goggles, helmets, gloves and footwear
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
PROC	Procedure
Processing	the complete recycling process, including inspection of incoming loads, removal of extraneous material, crushing and blending of different materials to create a recycled product.
QC	Quality control
RTS	Response to Submissions titled <i>Response to Submissions Waste and Resource Management Facility</i> SSD 15-7256, ResourceCo Pty Ltd, 35-37 Frank Street, Wetherill Park, prepared by Nexus Environmental Planning Pty Ltd, dated 28 November 2016
SOP	Standard operating procedure
Waste	As defined in the POEO Act and includes any materials receive or processed on the site

1. Introduction

1.1 Overview

ResourceCo RRF Pty Ltd (ResourceCo) is the operator of the Wetherill Park Resource Recovery Facility (the facility) located at 35-37 Frank Street, Wetherill Park.

The facility comprises a waste and resource management operation which processes relevant waste materials to recover products including aggregates, metal, timber and to manufacture solid recovered fuel (Processed Engineered Fuel or PEF).

This Landscape Management Plan is one of a suite of plans that governs the operation of the facility.

1.2 Purpose

This Landscape Management Plan has been developed to:

- Provide details of the landscaping works on site
- Describe the monitoring and maintenance measures to manage revegetation and landscaping works

The Landscape Management Plan provides an overall framework for landscape management during operation. It has been developed to satisfy the requirements of:

- Condition B45 of the Development Consent for SSD 7256 dated 10 April 2017
- the commitments made in the Environmental Impact Statement titled 'Waste and Resource Management Facility' SSD 15-7256, ResourceCo Pty Ltd, 35-37 Frank Street, Wetherill Park, prepared by Nexus Environmental Planning Pty Ltd dated 8 March 2016 (EIS)
- the commitments made in the Response to Submissions titled 'Response to Submissions Waste and Resource Management Facility' SSD 15-7256, ResourceCo Pty Ltd, 35-37 Frank Street, Wetherill Park, prepared by Nexus Environmental Planning Pty Ltd, dated 28 November 2016 (RTS)
- ResourceCo's Environmental Management System (EMS), including ISO14001
- applicable legislation and regulatory requirements
- requirements of relevant government agencies

In the event of any inconsistency in the above documents, the Development Consent prevails.

1.3 Project description

The Waste and Resource Management Facility Project, as defined in the EIS includes the following key built elements:

- Industrial sheds for housing the facility operations
- Processing equipment capable of converting up to 250,000 tonnes of relevant waste materials per year into approximately 150,000 tonnes of PEF and over 75,000 tonnes of reusable commodities such as metal, aggregates and timber.
- Workshop, office and staff amenities
- Vehicular access and internal roadways, weighbridge and 42 car parking spaces in two car parking areas

- Stormwater management system for collection of water for reuse in the processing system, and dust suppression or treatment and discharge from the site, including a 300 kL underground stormwater storage tank and two above ground tanks with combined capacity of 27 kL.
- 30 kL diesel fuel tank

1.4 Environmental management system

1.4.1 ResourceCo corporate EMS

This Landscape Management Plan has been developed and will be implemented in accordance with ResourceCo's corporate EMS. This EMS has been developed, implemented and certified in accordance with the International Standard for Environmental Management Systems AS/NZS ISO 14001 (Certification No. 2012017).

Throughout the operation of the facility, ResourceCo will undertake periodic reviews and audits of the works to ensure the corporate commitments are fulfilled. ResourceCo's EMS, as implemented at the facility, will be periodically audited as part of the corporate EMS re-certification and ongoing validation process.

1.4.2 Wetherill Park Resource Recovery Facility OEMP

This Landscape Management Plan is a sub-plan to the Wetherill Park Resource Recovery Facility Operational Environmental Management Plan (OEMP). The OEMP is based on the ISO14001 Environmental Management System, which provides for continual improvement in environmental performance.

The OEMP is intended as an over-arching environmental management document that forms the basis for development of detailed sub plans (such as this) and procedures for managing specific environmental aspects and impacts. It includes a number of subordinate environmental planning and management instruments (e.g. sub plans, procedures, instructions, forms etc.) that will be implemented during operation of the facility.

The scope and interaction of this document within the OEMP document framework is illustrated in Figure 1.

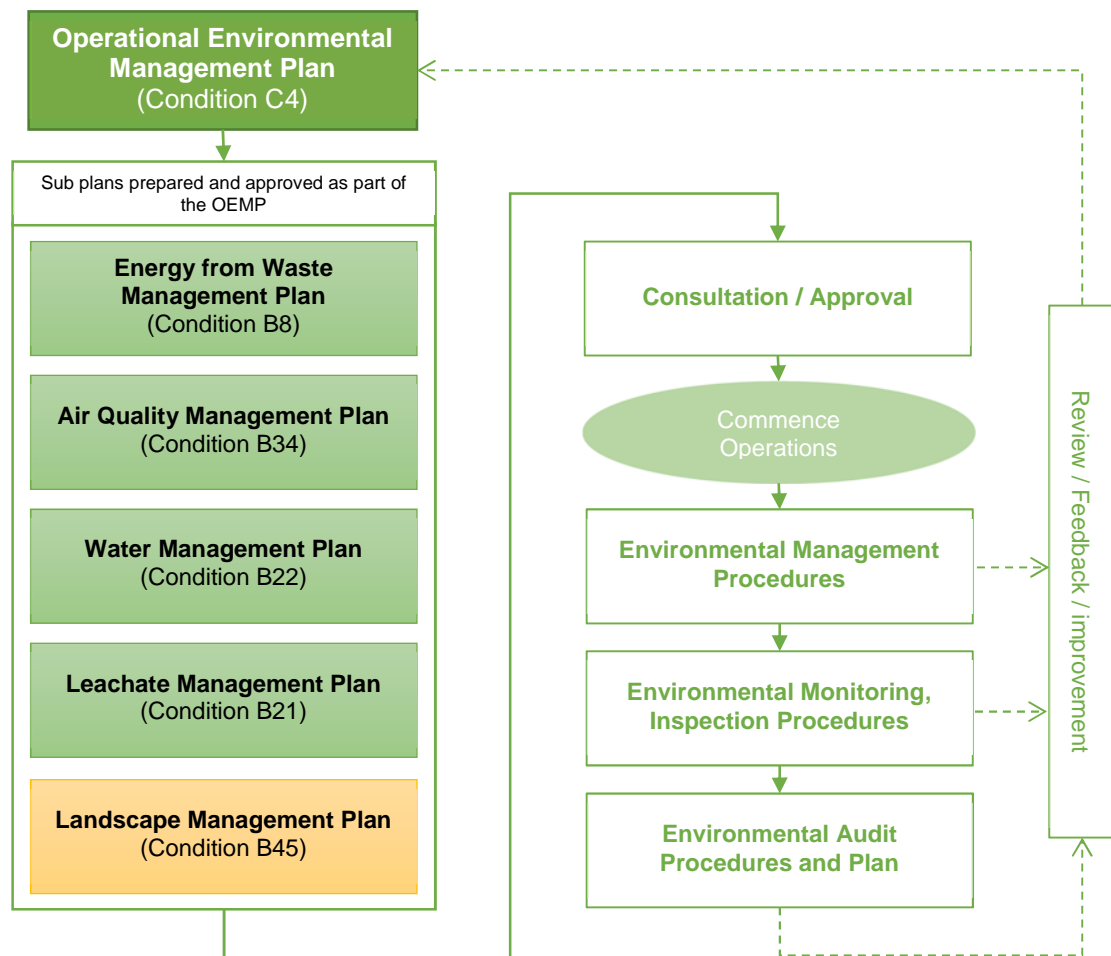


Figure 1 Operational environmental management document structure

1.4.3 Sub plans

In accordance with the Conditions of Approval, a number of sub plans are required to document ResourceCo's management approach to identified risks (e.g. air quality, water and leachate). These sub plans identify potential impacts as they relate to the operation of the facility (as defined in the EIS and RTS) and outline the physical and management safeguards, mitigation measures, responsibilities and monitoring requirements to be implemented to minimise potential impacts on the environment.

The sub plans (including this plan) required according to the Conditions of Approval are shown in Figure 1. Additionally, this shows the sub plans that are to be approved as part of the OEMP and those that are to be approved and/or consulted upon separately.

1.4.4 Procedures and forms

In addition to the environmental management documents nominated above, ResourceCo uses a suite of additional processes and procedures for its EMS. These management tools (described below) are referred to in this Landscape Management Plan and/or the individual sub plans:

- Procedures (PROC) and Safe Operating Procedures (SOP) – provide instructions to ResourceCo staff and subcontractors to guide the completion of tasks required during the operation of the facility. The implementation of these PROCs and SOPs will ensure consistency in approach and quality of results. Specific procedures are developed for management issues including Job Safety and Environmental Analysis (JSEA) for reviewing

works to identify hazards and appropriate control measures, and environmental monitoring etc.

- Environment-related forms (FORM) are used to document environmental issues, actions and/or performance against requirements. Typical forms include incident reporting, inspection checklists, audit protocols, complaints/feedback reports etc.

1.5 Consultation and approval process

1.5.1 Landscape Management Plan compliance with the Conditions of Approval

Table 1 lists the key requirements of Condition B45 and indicates where these requirements are addressed within this Landscape Management Plan or other documents.

Table 1 Conditions of Approval requirements

Condition requirements	Response/reference
Condition B45	
Prior to the commencement of operations, the Applicant must prepare a Landscape Management Plan to manage the landscaping works on-site, to the satisfaction of the Secretary. The plan must form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The plan must:	Section 1.5.2
(a) describe the species to be planted on-site	Section 5.2
(b) describe the monitoring and maintenance to manage revegetation and landscaping works	Section 6
(c) be consistent with the Applicants Management and Mitigation Measures in Appendix 2	Landscaping works/plans referred to in this plan are consistent with the Tree management commitment in the Management and Mitigation Measures

1.5.2 Consultation and approval

In accordance with Condition B45, this Landscape Management Plan is required to be prepared to the satisfaction of the Secretary of the Department of Planning and Environment.

3. Existing landscaping and vegetation

There is no vegetation located on the main part of the site, however there is some vegetation located at the Frank Street frontage of the site. The existing landscape character to this frontage is poor and currently comprised of only turf and various tree species in relatively modest condition.

5. Proposed landscaping

5.1 Landscape design/plans

A landscape plan has been developed to create a quality landscaped area in the Frank Street streetscape, which will also assist with improving the visual appeal of the facility.

17 trees in relatively poor condition will be removed to accommodate new hardscape areas and subsequent earthworks and new vegetation plantings.

5.2 Species to be planted

Detailed landscape plans are provided in Appendix A. These also provide information on the species to be planted on-site in the Plant Schedule on Drawing 0215-0954 LD 200. Species to be planted include:

- Spotted Gum
- London Plan
- Orange Jessamine
- Indian Hawthorn
- Lomandra Verday
- Liriope Just Right
- Sapphire Buffalo

6. Monitoring, maintenance measures and evaluation

This section outlines the program that will be implemented to evaluate the landscape management plan and determine compliance with key performance indicators.

6.1.1 Key performance indicators/targets

The performance indicators/targets are:

- Landscaping and vegetation maintained in accordance with the Landscape Design (Appendix A)
- No weeds on site

6.1.2 Monitoring and maintenance

Table 2 provides a summary of the monitoring and maintenance measures to manage revegetation and landscaping works.

Table 2 Summary of landscape monitoring and maintenance measures

Monitoring and maintenance activity	Frequency
Landscape watering and maintenance	Seasonally - as required
Periodic checks of landscaping areas to assess degree of weed infestation, health of planted trees, shrubs and grasses and the presence of appropriate erosion and sedimentation controls	6 monthly
Weed control	Yearly as a minimum

7. Records and reporting

Environmental management records generated will be identified, collected and stored in accordance with ResourceCo's quality management system. Reporting and review will include the following:

- Any landscape management issues will be reported at toolbox or site meetings
- A record of all inspections, weed control and maintenance activities will be kept on file

Monitoring results and records generated will be identified, collected and stored in accordance with ResourceCo's quality management system.

9. Review and improvement

9.1 Review of the Landscape Management Plan

The Landscape Management Plan will be reviewed on a regular basis to ensure that it accurately reflects the ResourceCo EMS and conforms to applicable legislative and other requirements. The frequency of review will be at least annually as part of the OEMP review, or more frequently, as a result of a significant non-conformance or as directed by the Secretary of the Department of Planning and Environment or other authority.

At the conclusion of the review process, any recommendations for change, or improvement, to EMS will be reflected through amendments to the relevant system element including the OEMP, other sub plans, procedures or forms.

An assessment will be undertaken of the proposed documentation change against the Conditions of Approval (including development consent, EIS and RTS).

Minor changes to the documentation will be approved by the appropriate manager. The revised documents will be managed in accordance with ResourceCo's quality management system – including document control and communication of changes to relevant staff.

Major documentation changes to the documentation will be reviewed by senior management and if deemed necessary, approval will be sought from the Department of Planning and Environment. Approved revised documents will be managed in accordance with ResourceCo's quality management system – including document control and communication of changes to relevant staff.

Table 3 lists the types of amendments that would be considered minor and major, and the approval process.

Table 3 Landscape Management Plan approval process

Review trigger	Amendment type	DPE approval	Examples
Minor amendments and corrections	-	No	Changes to system processes without change to environmental outcome Minor changes to operational processes without change to environmental outcomes
In response to environmental incidents	Minor	No	Poor weed control
	Major	Yes	Non-compliance with EPL
Audit findings	Minor	No	Change to procedure to improve a process
	Major	Yes	Non-compliance with a Condition of Approval
Request by government agency	Minor or major	Yes	-
Annual review findings	Minor	No	Non-compliance with a target

9.2 Non-conformance, corrective and preventative action

Non-conformances, including those of an environmental nature, shall be identified through verification processes such as monitoring, inspections, audits and reviews as well as through the receipt of complaints and incidents and near misses. All ResourceCo personnel can raise a non-conformance. In summary, the management process is:

- When a non-conformance issue is detected, the corrective and preventative actions are entered on a CAR (Corrective Action Request) form. In addition, the CAR assigns responsibilities for actions to a manager for close-out and the timing for completion.
- The CAR is entered into the CAR register for recording and tracking progress of follow-up and close-out.
- Upon satisfactory completion of all corrective actions and follow-on preventative actions (e.g. revision of documented procedures), the CAR is closed-out by the responsible staff member.
- The environmental CARs will be reviewed monthly and during the regular review meetings.
- During the annual environmental review, CAR statistics will be assessed and trends analysed.

10. References

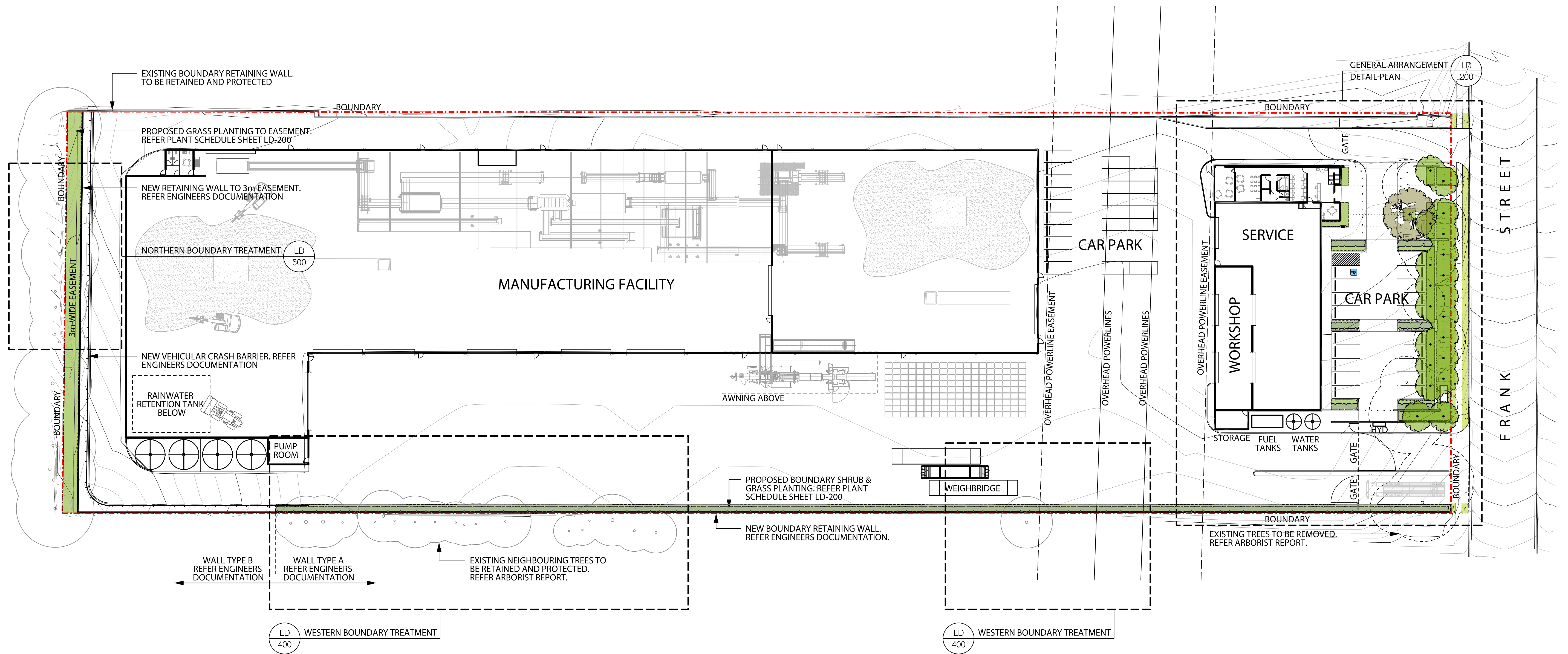
Nexus Environmental Planning Pty Ltd (2016) Environmental Impact Statement titled 'Waste and Resource Management Facility' SSD 15-7256, ResourceCo Pty Ltd, 35-37 Frank Street, Wetherill Park

Nexus Environmental Planning Pty Ltd (2016) Response to Submissions titled 'Response to Submissions Waste and Resource Management Facility' SSD 15-7256, ResourceCo Pty Ltd, 35-37 Frank Street, Wetherill Park

Tract Consultants (2016) 35-37 Frank Street, Wetherill Park- Landscape design Statement

Appendices

Appendix A – Landscape design



LEGEND

	BOUNDARY		EXISTING TREES ON NEIGHBOURING PROPERTY TO BE RETAINED AND PROTECTED. REFER ARBORIST REPORT.
	EXISTING ELECTRICAL EASEMENT & HIGH VOLTAGE OVERHEAD POWERLINES		EXISTING TREES TO BE REMOVED. REFER ARBORIST REPORT.
	PROPOSED BUILDING / FACILITY		PROPOSED NATIVE TREES
	EXISTING RETAINING WALL TO EASTERN BOUNDARY		PROPOSED FEATURE TREE
	PROPOSED RETAINING WALL TO NORTHERN AND WESTERN BOUNDARIES		PROPOSED SHRUB PLANTING
	PROPOSED FUEL TANKS		PROPOSED GRASSES & GROUNDCOVERS
	PROPOSED ABOVE GROUND WATER TANKS		PROPOSED TURF
	PEDESTRIAN AND VEHICULAR SECURITY GATES, POST AND FENCING		
	PROPOSED PAD-MOUNT ELECTRICAL SUB-STATION		

SITE WIDE GENERAL ARRANGEMENT PLAN

RESOURCE CO | 35 - 37 FRANK STREET, WETHERILL PARK

SCALE 1:400 @ A1
0 4 8 20m

PROJ./DRG.NO. 0215-0954 LD 100

REV. D DRAWN BM

APP'D. GG

DATE 25.08.2016

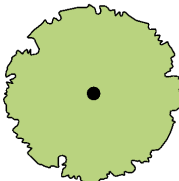




Tract



LEGEND

- 1 IN-SITU CONCRETE FOOTPATH
- 2 PRECAST PAVERS
- 3 PRECAST SETTS
- 4 ECO-TRIHEX PERMIABLE PAVERS
- 5 EXISTING BOUNDARY RETAINING WALL TO BE RETAINED
- 6 NEW BOUNDARY RETAINING WALL. REFER ENGINEERS DETAIL
- 7 MASONRY WALL WITH FENCING
- 8 MASONRY WALL
- 9 HYDRANT / BOOSTER
- 11 BOLLARDS
- 12 BENCH SEAT
- 13 PEDESTRIAN AND VEHICULAR SECURITY GATES, POST AND FENCING
- 14 PARKING BAY MARKERS AND WHEELSTOPS
- 15 INTERCOM / SWIPE CARD PILLAR
- 16 EXISTING TREES (17 No.) TO BE REMOVED (SHOWN DASHED). REFER ARBORIST REPORT.

PLANT SCHEDULE

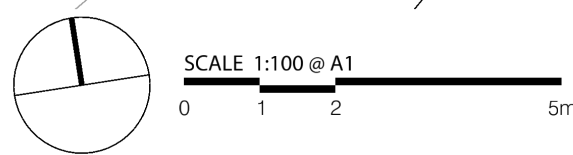
Sym	Botanical Name	Common Name	Size at Installation	Mature Size (H x W)	Spacing	Location
Trees						
	Corymbia maculata	Spotted Gum	2.4m (h), 50mm cal.	12 x 6m	As shown	Street Tree
	Platanus x acerifolia	London Plane	6.0m (h) 100mm cal.	14 x 10m	As shown	Courtyard
Shrubs						
	Murraya paniculata	Orange Jessamine	200mm pot	3.0 x 1.0m	1 / Lm	Western Boundary
	Raphiolepis indica 'Cosmic White'	Indian Hawthorn	300mm pot	1.5 x 1.5m	1 / Lm	Carpark
Grasses and Groundcovers (plant in groupings of 5, 7 or 9 and min. 300mm from edge of path)						
	Lomandra longifolia 'Verday'	Lomandra Verday	150mm pot	0.5 x 0.5m	6 / sqm	All Garden Beds
	Liriope muscari 'Just Right'	Liriope Just Right	150mm pot	0.5 x 0.5m	6 / sqm	
Turf						
	Sapphire Buffalo		N/A	N/A	N/A	Verge

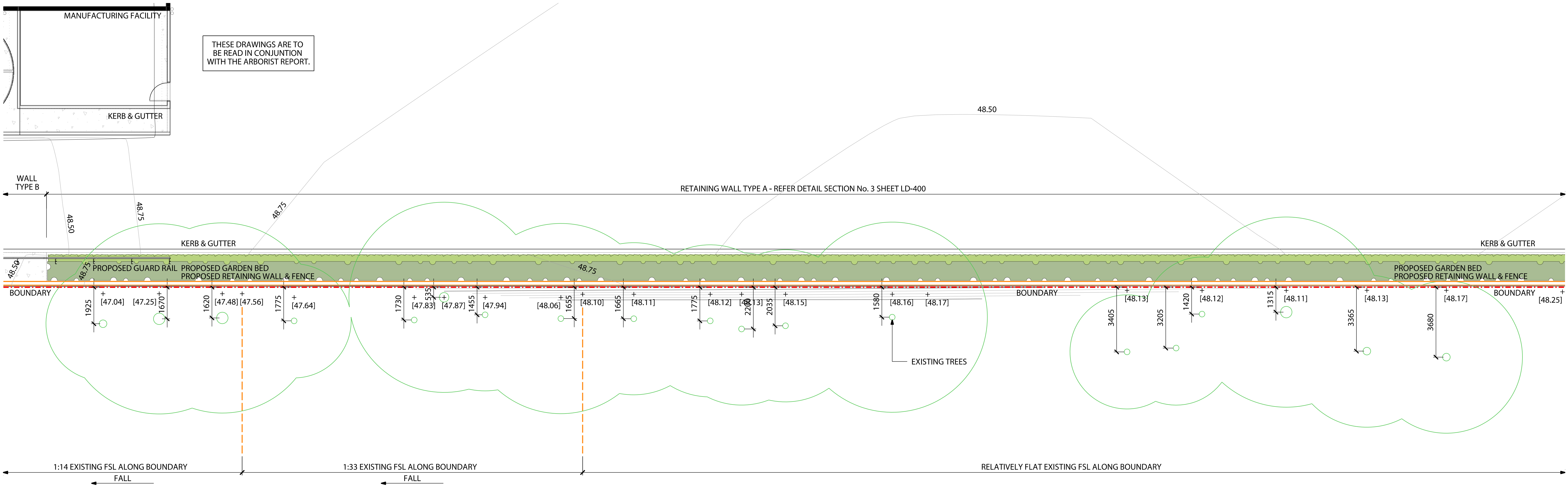
NOTE: VEHICULAR CONCRETE AREAS, CROSSOVERS, KERBS, GUTTERS, AND RAISED MEDIANS AS PER ENGINEERS DOCUMENTATION.

WORKSHOP

DETAIL GENERAL ARRANGEMENT PLAN

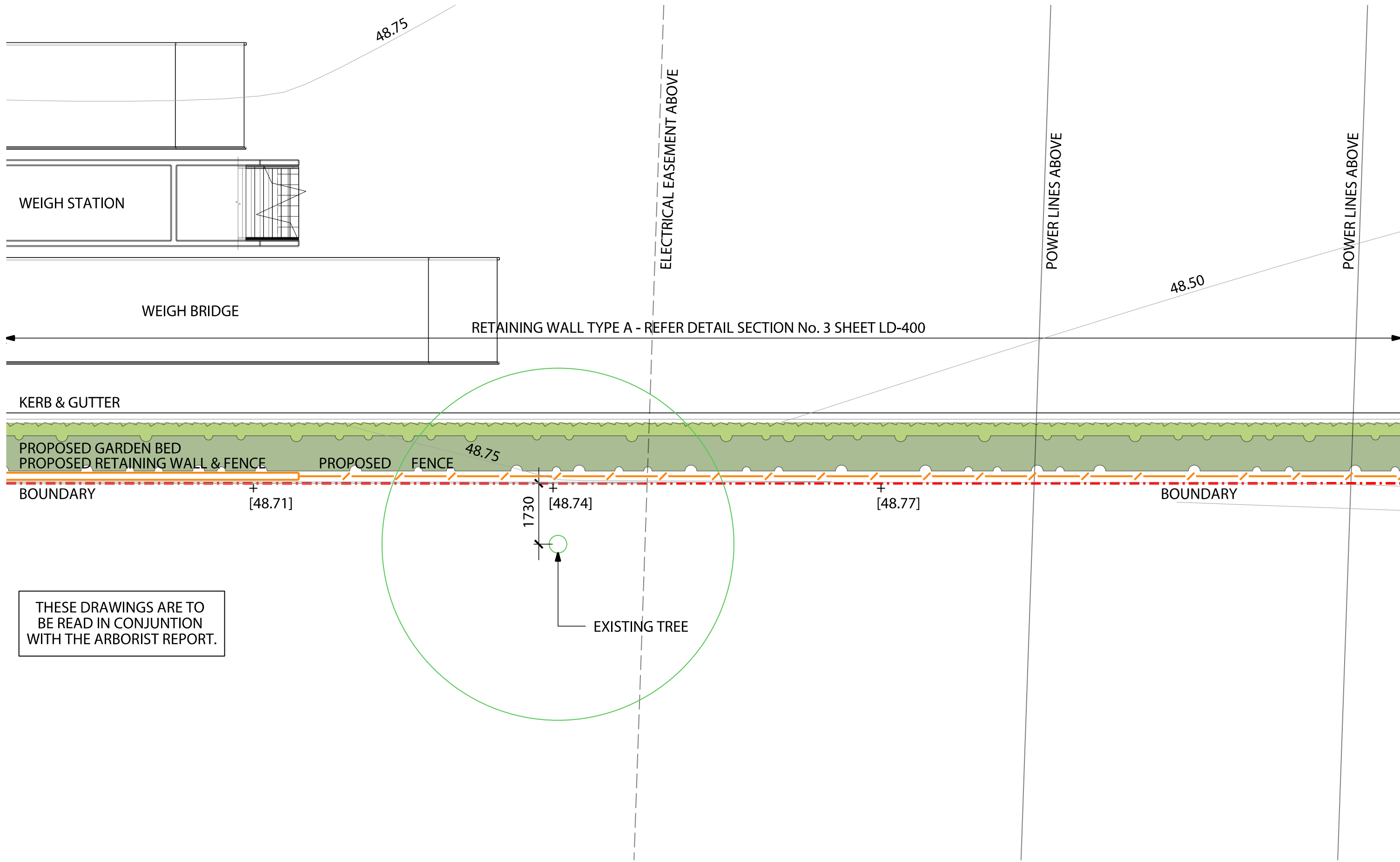
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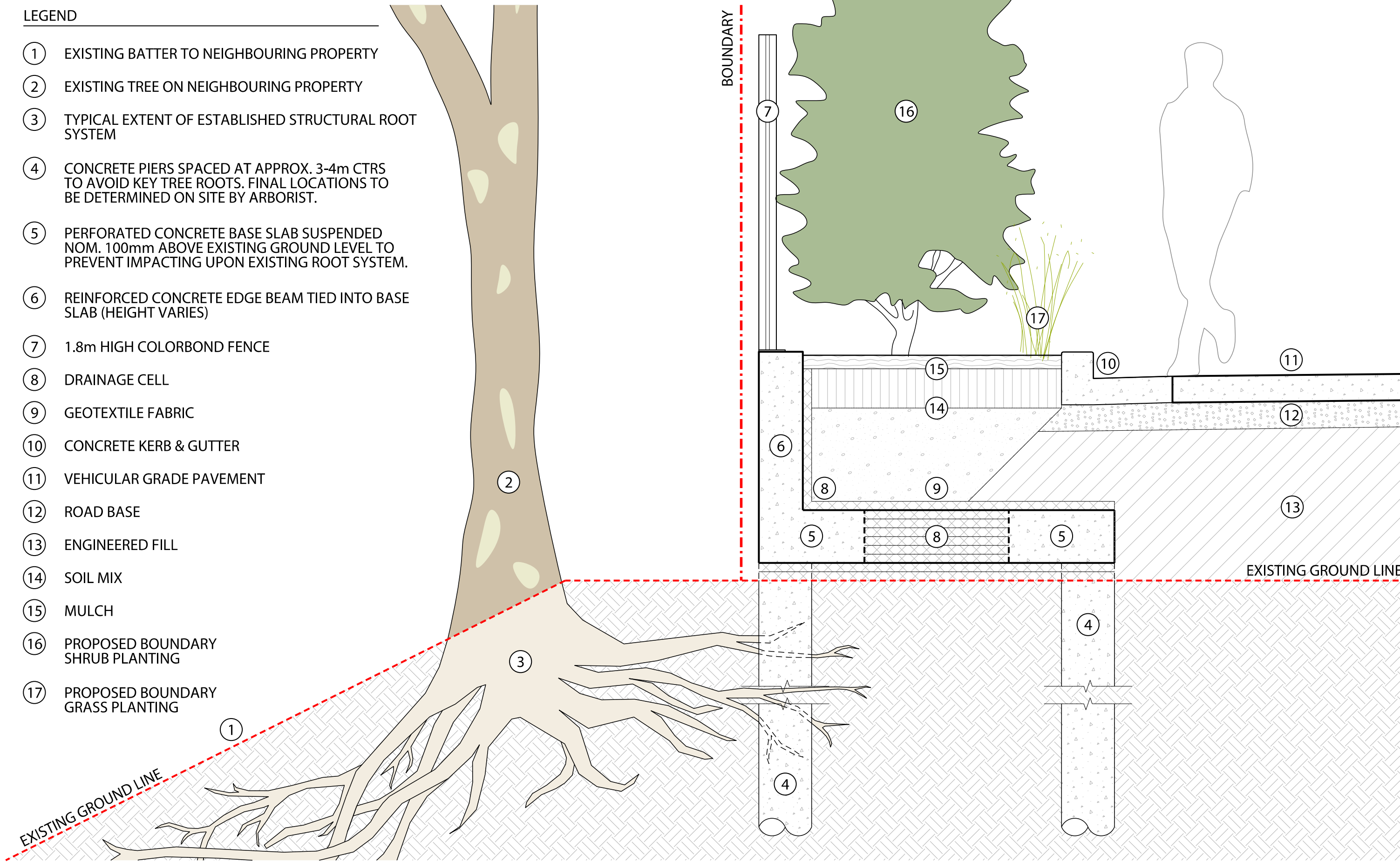
1 Western Boundary Study
Detail Plan 01

1:100 @ A1



2 Western Boundary Study
Detail Plan 02

1:100 @ A1



3 Wall Type A to Western Boundary
Detail Section

1:20 @ A1

WESTERN BOUNDARY STUDY

RESOURCE CO | 35 - 37 FRANK STREET, WETHERILL PARK

PROJ./DRG.NO. 0215-0954 LD 400

REV. C

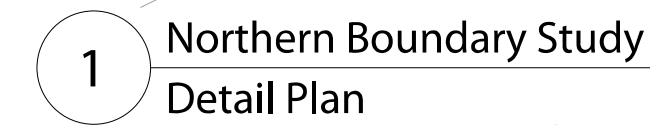
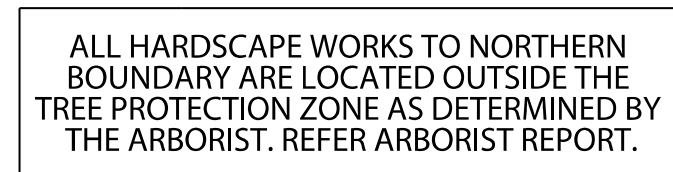
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APP'D. GG

DATE 25.08.2016

Tract

①	EXISTING BATTER TO NEIGHBOURING PROPERTY	⑦	1.8m HIGH CHAINMESH FENCE	⑭	SOIL MIX
②	EXISTING TREE ON NEIGHBOURING PROPERTY	⑩	CONCRETE KERB & GUTTER	⑮	MULCH
③	TYPICAL EXTENT OF ESTABLISHED STRUCTURAL ROOT SYSTEM	⑪	VEHICULAR GRADE PAVEMENT	⑯	PROPOSED BOUNDARY GRASS PLANTING
⑤	RETAINING WALL (HEIGHT VARIES). REFER ENGINEERS DOCUMENTATION.	⑫	ROAD BASE	⑰	VEHICULAR SAFETY BARRIER
		⑬	ENGINEERED FILL	⑱	PEDESTRIAN GRADE CONCRETE FOOTPATH



1:20 @ A1

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	A Montgomery	D Gamble		D Gamble		4/7/17
1	A Montgomery	D Gamble		D Gamble		22/2/18

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