Erskine Park Waste and Resource Management Facility

Modification to approved SSD 7075

Environmental Assessment Report

Cleanaway

May 2018

Version	Date	Status	Author
1.0	20/03/2018	Draft	Brian Cullinane
2.0	19/04/2018	Final Draft	Brian Cullinane
3.0	29/04/2018	Final	Brian Cullinane

Contents

1. Introduction 1
   1.1 Background 1
   1.2 Site location and context 1
   1.3 Site description 1
   1.4 SSD 7075 Modification 1 2
   1.5 SSD 7075 Modification 2 2
   1.6 SSD 7075 Proposed Modification 3 2
   1.7 Applicant 2
   1.8 Document Purpose 2
2. Consultation 7
3. Description of the Proposed Modification 8
   3.1 Introduction 8
   3.2 Manual Sort line 8
      3.2.1 Introduction 8
      3.2.2 Substantially the same development 8
      3.2.3 Waste Avoidance and Resource Recovery Act 2001 9
      3.2.4 Benefits of manual sort line 10
   3.3 Minor extension of hardstand 11
   3.4 Driver rest area 11
   3.5 Additional car parking 11
   3.6 Retain landfill access 11
   3.7 Temporary truck trailer parking in load-out area 12
   3.8 Elevation of Tri-stack Fans and Route for Odour Management System Ducting 12
   3.9 Layout of office 12
   3.10 External roof access stair 13
   3.11 Removal of translucent wall sheeting 13
   3.12 Relocation of rainwater harvesting tanks and removal of Stage 2 product bunkers 13
   3.13 Raise canopy on eastern elevation 13
   3.14 Inclusion of Mains Switch Board (MSB) room on northern elevation 13
   3.15 Updated Site Plans 13
   3.16 Changes to Development Consent Conditions 13
4. Environmental Assessment of Proposed Modification 14
   4.1 Introduction 14
   4.2 Air quality / odour 14
   4.3 Noise 14

4.4 Surface Water 15
4.5 Other 15
4.5.1 Traffic 15
4.5.2 Socio-economic 15
4.5.3 Visual 15
4.5.4 Waste 16
4.5.5 Other 16
5. Assessment under Section 4.55 (1A) 17
6. Section 4.15 of the Act - Evaluation 18
6.1 Section 4.15 (1)(A)(i) – Environmental Planning Instruments 18
6.2 Section 4.15 (1)(a)(ii) – Draft Environmental Planning Instruments 18
6.3 Section 4.15 (1)(a)(iii) – Development Control Plans 18
6.4 Section 4.15 (1)(a)(iiia) – Planning Agreements 18
6.5 Section 4.15 (1)(a)(iv) – Any matter Prescribed by the Regulations 19
6.6 Section 4.15 (1)(a)(v) – Coastal Zone 19
6.7 Section 4.15 (1)(b) Impact on the Environment 19
6.8 Section 4.15 (1)(c) Site Suitability 19
6.9 Section 4.15 (1)(e) The Public Interest 19
7. Summary and Conclusion 20
8. References 21
Appendix A: Amended Plans 22
Appendix B: Odour Assessment 26
Appendix C: Noise Assessment 27
Appendix D: Surface Water Assessment 28

Figure 1 Site Location in its Regional Context 4
Figure 2 Development Site 5
Figure 3 Site Location and Surrounding Environment 6
Figure 4 Reinstatement of access road at south-east corner 12

1. Introduction

1.1 Background

The Planning Assessment Commission (PAC), acting as delegate of the Minister for Planning, approved an application for the Erskine Park Waste and Resource Management Facility (WRMF) Staged Development Application (SSD 7075) on the 5 October 2016, comprising:

- A concept plan for a Waste and Resource Management Facility with a maximum processing capacity of 300,000 tpa. All waste received at the WRMF shall enter the Waste Transfer Station (Stage 1), up to 150,000 tpa of this waste may be recycled at the Resource Recovery Facility (Stage 2)
- Construction and operation of the Stage 1 Waste Transfer Station with a maximum processing capacity of 300,000 tpa.

The WRMF will be developed in two stages, the first being a Waste Transfer Station (WTS) and the second being a Resource Recovery Facility (RRF). An Environmental Impact Statement (EIS) was prepared to support the application for the WRMF Concept Proposal and the Stage 1 WTS. A separate EIS for the Stage 2 RRF will be developed at a later date.

The WTS will receive commercial and household waste from the Western Sydney region which would subsequently be transported to a licensed waste management facility off site. A proportion of the waste received at the WTS would be diverted through a basic resource recovery process within the Stage 1 WTS and a more advanced resource recovery process in the RRF for recycling and recovery of saleable products. The design capacity of the completed WRMF is 300,000 tonnes per annum, inclusive of both stages.

1.2 Site location and context

The site location and context are shown in Figures 1 – 3. The site is located approximately 11 kilometres south-east of Penrith, in western Sydney, NSW. The site is located at 85 – 87 Quarry Road, Erskine Park and identified as Lot 1 in Deposited Plan (DP) 1140063 in the Penrith Local Government Area (LGA). The title comprises approximately 3.5 hectares.

1.3 Site description

The existing weighbridges and weighbridge office on site is currently used by Cleanaway to support the ongoing Erskine Park Landfill operations that is located adjacent to the site (Lot 4, DP 1094504).

Construction works have commenced on site under the approved SSD 7075 and includes earthworks and demolition of buildings, car parks, sheds, laydown areas, weighbridge and sealed roads and clearing of minor vegetation.

The topography of the site is relatively flat, sloping gently to the west, with an elevation of approximately 60 metres Australian Height Datum (AHD). South Creek, which is part of the Hawkesbury-Nepean catchment, is located approximately 1.5km to the west of the site.

The site gains vehicular access from the adjoining Quarry Road. The area surrounding the site is primarily industrial land uses, including Stramit Building Products and Hasbro to the north, Dutt Transport, Viscount Plastics, Dincel Construction Systems, Devondale Dairy and Stockland to the south, Cleanaway Depot to the west, and the Cleanaway Erskine Park Landfill to the east.

The nearest residential dwellings are located within the suburb of St. Clair, approximately 0.7 km to the north of the site, and rural-residential properties located in Orchard Hills, approximately 0.7 km to the west of the site.

1.4 SSD 7075 Modification 1

An application to modify SSD 7075 was approved by the Department of Planning on 25th August 2017. Modification 1 made changes to the staging of the development, layout of car and truck parking and load out-bays, capacity of the stormwater management system, reduction in overall site levels and changes to the ramps accessing the landfill.

1.5 SSD 7075 Modification 2

An application to modify SSD 7075 was approved by the Department of Planning on 26th February 2018. Modification 2 made minor changes to the site levels, the interface with landfill access ramps and car parking.

1.6 SSD 7075 Proposed Modification 3

The proposed modification (Modification 3) seeks approval to modify the approved SSD 7075 to provide for:

- the inclusion of a manual sort line in the Waste Transfer Station building as part of approved basic resource recovery in Stage 1
- an increase the number of car parks in Stage 1 to cater for the increase in employment associated with introduction of the manual sort line
- the extension of hardstand area to the north of the inbound access area for un-tarping of trailers to allow for inspection of loads prior to accessing the weighbridge
- provision of a driver rest area in the southern driveway
- a number of other detailed design matters.

1.7 Applicant

The Erskine Park development site is owned by Cleanaway Waste Management Ltd (Cleanaway). Cleanaway is the applicant for the Modification. The relevant postal address is:

Attn: Paul Antony, NSW Engineering Manager

Cleanaway

85-87 Quarry Road, Erskine Park, NSW, 2759

PO Box 804, St Marys, NSW, 1790

1.8 Document Purpose

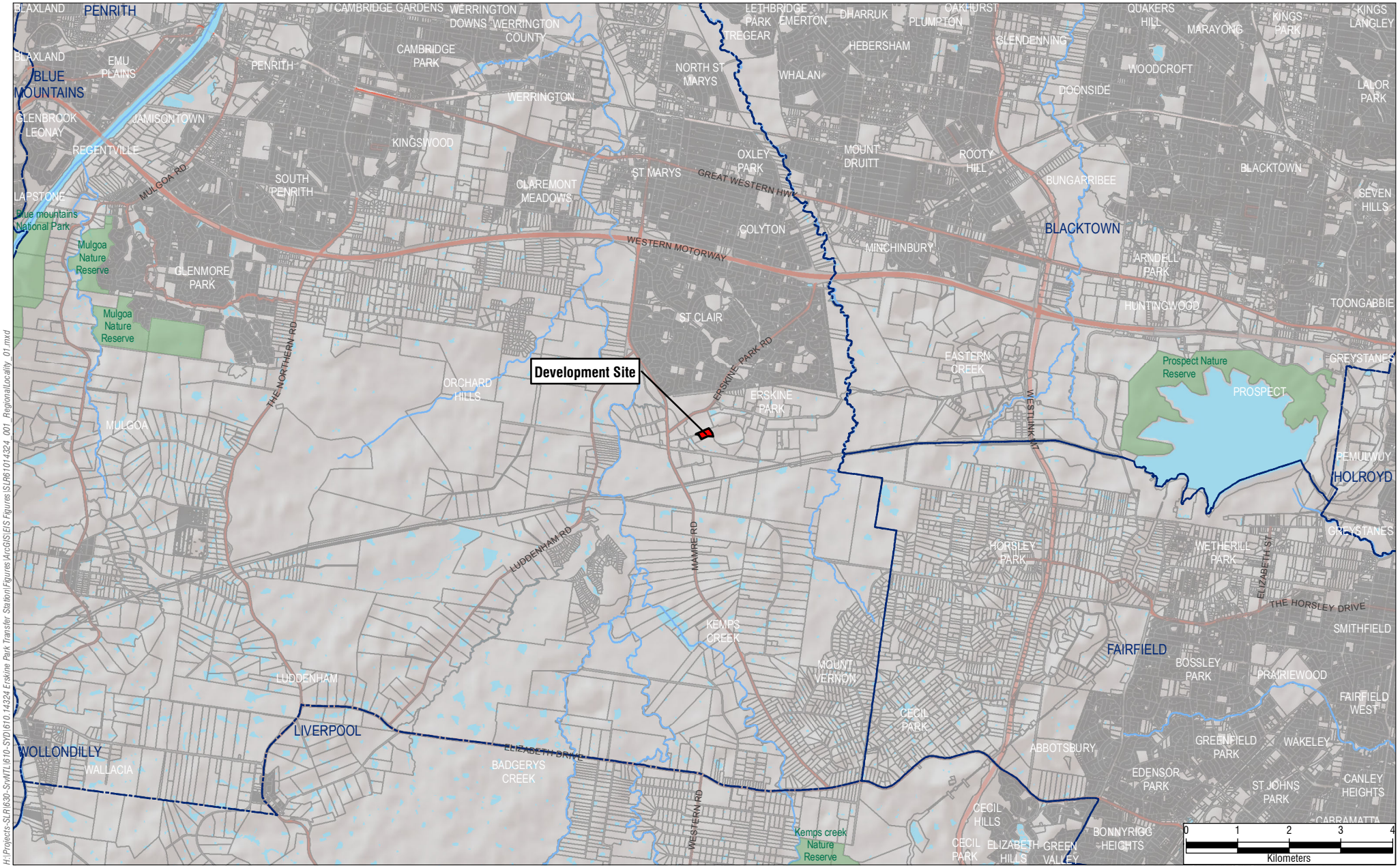
This Environmental Assessment (EA) has been prepared on behalf of the applicant Cleanaway Waste Management Limited (Cleanaway) by EME Advisory. The EA supports an application under Section 4.55 (1A)[1] of the Environmental Planning and Assessment Act, 1979 (EP&A Act) to modify development consent for SSD 7075. The application is being made to the consent authority, the Minister for Planning. The application has been prepared in accordance with the provisions of the EP&A Act and the Environmental Planning and Assessment Regulation 2000 (EP&A Reg.).

This EA provides:

- The name and address of the applicant
- A description of the project as approved
- A brief description of the site and locality, including the address and particulars of title
- A description of the approvals process
- Details regarding consultation undertaken for this DA Modification
- A description of the proposed modifications to the development consent

[1] Recent changes to the Environmental Planning & Assessment Act 1979 have led to renumbering of sections of the Act. Section 4.55 was previously referred to as Section 96.

- A description of the expected impacts of the modification
- A comparison of the proposed modification with the approved development including any changes to environmental impacts
- A statement of who the application is being made to
- An assessment of relevant environmental planning considerations under Sections 4.55 and 4.15 of the EP&A Act, including compliance with relevant planning instruments and controls, environmental impacts, site suitability and the public interest
- Summary and conclusions.



H:\Projects\SLR\630-SYM\TL\610-SYD\610.14324 Erskine Park Transfer Station\Figures\ArcGIS\EIS Figures\SLR610.14324_001_RegionalLocality_01.mxd

SLR

2 LINCOLN ST
LANE COVE
NEW SOUTH WALES 2066
AUSTRALIA
T: 61 2 9427 8100
F: 61 2 9427 8200
www.slrconsulting.com

Project No.:	610.14324
Date:	11/08/2015
Drawn by:	KC
Scale:	1:100,000
Sheet Size:	A4
Projection:	GDA 1994 MGA Zone 56

Notes:
1. All features are approximate only and subject to detailed survey.
2. Aerial Imagery courtesy Nearmap.
3. DCDB courtesy NSW LPI.

Transpacific Industries Group LTD

Erskine Park Waste Transfer Facility

Site Location in Regional Context

FIGURE 1

H:\Projects\SLR\630-SYD\610.14324 Erskine Park Transfer Station\Figures\ArcGIS\EIS Figures\SLR610.14324_002_DevSite_02.mxd

SLR

2 LINCOLN ST
LANE COVE
NEW SOUTH WALES 2066
AUSTRALIA
T: 61 2 9427 8100
F: 61 2 9427 8200
www.slrconsulting.com

Project No.:	610.14324
Date:	07/09/2015
Drawn by:	KC
Scale:	1:1,500
Sheet Size:	A4
Projection:	GDA 1994 MGA Zone 56

Notes:
1. All features are approximate only and subject to detailed survey.
2. Aerial Imagery courtesy Nearmap.
3. DCDB courtesy NSW LPI.

Transpacific Industries Group LTD

Erskine Park Waste Transfer Facility

Development Site

FIGURE 2

H:\Projects\SLR\630-SYD\610.14324 Erskine Park Transfer Station\Figures\ArcGIS\EIS Figures\SLR610.14324_003_SurroundingEnviron_01.mxd

SLR

2 LINCOLN ST
LANE COVE
NEW SOUTH WALES 2066
AUSTRALIA
T: 61 2 9427 8100
F: 61 2 9427 8200
www.slrconsulting.com

Project No.:	610.14324
Date:	14/08/2015
Drawn by:	KC
Scale:	1:15,000
Sheet Size:	A4
Projection:	GDA 1994 MGA Zone 56

Notes:
1. All features are approximate only and subject to detailed survey.
2. Aerial Imagery courtesy Nearmap.
3. DCDB courtesy NSW LPI.

Transpacific Industries Group LTD

Erskine Park Waste Transfer Facility

Site Location and Surrounding Environment

FIGURE 3

2. Consultation

A pre-application meeting was held with the Department of Planning and Environment on 11th December 2017 in relation to Modification 2, which also indicated Cleanaway's intention to lodge a future application – Modification 3 – once the design details had been confirmed.

Cleanaway has also notified Penrith City Council of its intention to lodge Modification 3.

3. Description of the Proposed Modification

3.1 Introduction

This modification application under Section 4.55 (1A) of the EP&A Act seeks approval from the Minister for Planning for the following minor changes to the Concept Plan and the Stage 1 Waste Transfer Station.

3.2 Manual Sort line

3.2.1 Introduction

The proposed modification seeks approval for the introduction of a manual sort line to enable basic resource recovery in the Waste Transfer Station. This would involve using mobile plant on the floor of the Waste Transfer Station to physically separate and stockpile material to be recovered as described in the original EIS and Modification 1. The material would then be passed through a manual sort line which would involve placing the material on to an infeed conveyor, passing through a pre-screen to screen out larger materials followed by manual sorting by workers stationed along the sort line and recovery of ferrous material using a magnet.

Recovered material would be transferred out of the Waste Transfer Station for distribution to market with residual material from the basic resource recovery process transferred out for transport to licensed waste processing facilities or landfill along with other waste material in accordance with the approved project.

The introduction of the sort line would not impact on the storage duration for putrescible waste in the transfer station. The project as described in the EIS indicates:

"Typically, waste would be stored on site for no longer than one day before being transported off-site. This would help to minimise odour emissions associated with the breakdown of organic materials over longer time periods."

The project description was updated in Modification 1 to provide for basic resource recovery which would involve:

"Non-putrescible recyclables would be stored on site for approximately 2 – 3 days until sufficient product is accumulated for efficient transport off-site."

Putrescible waste, being the main waste source contributing to odour emissions, would continue to be stored on site for no longer than one day before being transported off site, in line with the original project description and the strategy for minimising odour emissions.

3.2.2 Substantially the same development

The proposal to include a manual sort line in the Stage 1 Waste Transfer Station would be substantially the same development as the development as originally granted consent.

The original consent was for a Concept Proposal for a Waste and Resource Management Facility (WRMF) and a Stage 1 Waste Transfer Station.

A Stage 2 Resource Recovery Facility (RRF) would be subject to a separate detailed development application, however, an indicative scope for the Stage 2 RRF was described in the Concept Proposal, and included an advanced resource recovery process:

"Selected waste materials would be received from the WTS via conveyor and/or hopper before being mechanically and/or manually sorted and stockpiled in separate designated bays (for example, wood, plastics, metals, etc.). Mechanical processing equipment within the RRF is likely to include a combination of shredders, screens, magnets, density separators, baling equipment and optical sorters. Importantly, there would not be any biological processing undertaken within the Resource Management Facility."

The Stage 1 Waste Transfer Station EIS made provision for basic resource recovery:

"Waste deemed suitable would be sorted by a floor sorting process, with mobile plant only such as a wheeled excavator/material handler for picking out recyclable materials".

The concept of basic resource recovery was further explained in Modification 1, to include:

"Cleanaway would incorporate basic resource recovery (processing) of dry (non-putrescible) waste from commercial and industrial waste received in the Stage 1 Reception and Transfer area. Mobile plant would be used to sort through the waste and select and separate dry material suitable for processing. Mobile machinery that would be used for the sorting process may include wheeled excavator/s and/or material handlers. Recyclables would be stored in separate designated bins or product bunkers, located against the south-west wall of the Reception and Transfer area. Non-putrescible recyclables would be stored on site for approximately 2 – 3 days until sufficient product is accumulated for efficient transport off-site."

The inclusion of basic resource recovery involving sorting within a Waste Transfer Station is supported by the definitions of a Waste Transfer Station in the Standard Instrument – Principal Local Environmental Plan which is referenced by the State Environmental Planning Policy Infrastructure (ISEPP) 2007 and the State Environmental Planning Policy State and Regional Development (SRD SEPP) 2011.

The definition of a Waste Transfer Station in the Standard Instrument is:

*"**waste or resource transfer station** means a building or place used for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport."*

The proposal to include a sort line in the Stage 1 Waste Transfer Station is consistent with the concept of basic resource recovery described in the EIS and further explained in Modification 1, and the definition of Waste Transfer Station in the Standard Instrument. Therefore, the proposed modification is substantially the same development as the development as originally granted consent, being a Waste Transfer Station with basic resource recovery.

3.2.3 Waste Avoidance and Resource Recovery Act 2001

The proposal is also supported by the Waste Avoidance and Resource Recovery Act 2001 (WARR Act) which promotes waste avoidance and resource recovery. The NSW Environment Protection Authority's (EPA's) Waste Avoidance and Resource Recovery Strategy (WARR Strategy) 2014-21, prepared under the WARR Act, provides a clear framework for waste management to 2021 and sets a number of objectives and targets applicable to municipal solid waste (MSW), commercial and industrial (C&I) and construction and demolition (C&D) sectors. The targets relevant to the Erskine Park Waste and Resource Management Facility (WRMF) are included in Table 1.

Table 1: Waste recycling and recovery targets – WARR Strategy 2014-2021

Theme	Target
Increase recycling	By 2021–22, increase recycling rates for: • municipal solid waste from 52% (in 2010–11) to 70% • commercial and industrial waste from 57% (in 2010–11) to 70% • construction and demolition waste from 75% (in 2010–11) to 80%
Divert more waste from landfill	By 2021–22, increase the waste diverted from landfill from 63% (in 2010–11) to 75%

Source: EPA's WARR Strategy 2014-21

Constrained capacity for the management of residual waste has been highlighted in the WARR Strategy as a key issue due to the diminishing supply of approved landfill capacity in the Sydney Metropolitan Area and the low likelihood of new and expanded landfills. In order to address this capacity shortfall, the WARR Strategy identifies the need for increased recycling and recovery of waste to meet growing demands. Critical to meeting this demand is the availability of waste treatment capacity.

At a regional level, the Western Sydney Regional Organisation of Councils (WSROC), of which Penrith City Council is a part, produced the Western Sydney Regional Waste Avoidance and Resource Recovery Strategy 2014-2017. The WSROC Region (comprising the 10 Councils that make up the Western Sydney Regional Organisation of Councils) has a population of just over 1.6 million people, representing almost one third of the total Sydney population. Population forecasts published in the Metropolitan Strategy for Sydney indicate that Sydney's population will grow by 1.6 million people in the next 20 years with 900,000 of this population growth occurring in Western Sydney. The domestic waste generation in the WSROC region was reported to be nearly 700,000 tonnes in 2011/12 and is expected to grow to more than 800,000 tonnes per annum by 2020/21. The strategy has developed the following targets in line with the State-wide WARR targets, which are relevant to the proposed modification:

- Work towards reducing regional waste generation from current generation of 7.8 kg/capita/week to 7.5 kg/capita/week by 2021
- Gradually improve the regional resource recovery rate to 58% by 2017 and 70% by 2021 (currently 53%);
- Work towards achieving the WARR target for diversion of waste from landfill by 2021

The strategy presented an infrastructure gap analysis for the region to identify the potential future shortfall in waste treatment and disposal capacity within the region. One of the key challenges identified by the strategy is the availability of facilities within a reasonable distance of the region. The modelling presented in the strategy identifies a potential shortfall of organic and residual treatment capacity in the region of approximately 300,000 tonnes by 2021. The proposed modification would contribute to meeting the targets of both the State and Regional WARR strategies with regard to diverting waste from landfill and providing much needed infrastructure for the management of residual waste.

3.2.4 Benefits of manual sort line

The proposal to include a manual sort line would enable the basic resource recovery sorting process to be carried out more efficiently, allowing material to be sorted into separate waste streams that meet market requirements, thereby increasing the proportion of waste recovered and diverted from landfill.

It will also enable detailed auditing of material composition which assists with understanding where the waste can be diverted to. For example, an option to divert waste material to a nearby facility manufacturing waste derived fuel requires a detailed understanding of the characteristics of the diverted waste stream to comply with the requirements of the NSW EPA's Energy from Waste Policy 2015. The detailed understanding of the diverted waste material will also allow the design of the Stage 2 resource recovery process to be tailored to the specific characteristics of the diverted material.

This will ultimately increase the amount of diversion from landfill, with remaining NSW landfill capacity expected to come under increased pressure as a result of the anticipated introduction of a Queensland landfill levy.

The proposal has beneficial environmental outcomes by increasing the proportion of the waste that it is recovered and therefore diverted from landfill. An assessment of the air quality and noise impacts resulting from the proposal has been undertaken and concludes that the impacts are minor. This is discussed further in Section 5.

The proposal would also increase the employment related to Stage 1 from approximately 10 employees to 25 employees.

The incorporation of basic resource recovery in the WTS does not replace the advanced and highly automated resource recovery proposed for the Stage 2 RRF. It remains Cleanaway's intention to submit the Stage 2 RRF EIS and development application at a later date.

The proposed modification is substantially the same development as the development as originally granted consent, being a Waste Transfer Station with basic resource recovery, and has minor environmental impacts.

3.3 Minor extension of hardstand

The proposed modification would include an additional area of hardstand adjacent to the inbound access road to allow for un-tarping of trailers. This provides in-bound waste vehicles that require un-tarping with a safe place to do so and avoid other in-bound waste delivery vehicles from queuing before entering the weighbridge. The additional hardstand area is approximately 300m^2 which is a minor addition in the context of the overall site development.

The additional hardstand would have a negligible impact on surface water run-off and there is additional capacity in the detention basin to deal with any potential surface water impacts from the proposed modification (see Section 4.4 and Appendix D for further details).

The proposed modification is substantially the same development as the development as originally granted consent, being a Waste Transfer Station with basic resource recovery. The proposed modification involves minor changes to the overall extent of hardstand and would involve a negligible impact to surface water management on site.

3.4 Driver rest area

The proposed modification would include the provision of a driver rest area located in the area southern driveway to the west of the load-out area. The driver rest station would be a modular or container cabin, approximately 12 m by 3 m, and provide kitchen, dining and toilet facilities for drivers.

The driver rest area would provide an important safety benefit by allowing drivers to recuperate between journeys. No more than three drivers are expected to utilise the driver rest area at any given time.

The proposed modification is substantially the same development as the development originally granted consent, being a Waste Transfer Station with basic resource recovery. The driver rest area is located in an area of the site already marked for development, ie the southern driveway. The cabin will connect into utilities either existing or being planned for the development of the site and would not involve any change to the area of hardstand already approved. Safety barriers would be provided around the cabin to protect it from potential impact by truck movements. Drivers walking to the rest area would be protected from truck movements through the use of jersey barriers and dedicated walkways as shown in drawings in Appendix A. The swept path drawings, provided in Appendix A, also indicate that there is sufficient room for trucks to maneuver safely past the driver rest area and the walking routes to and from the area.

The proposed changes are minor when considered in the overall context of the project. They have negligible changes to environmental impact, provide safety and amenity benefits to drivers, and are substantially the same project as that for which consent was originally granted.

3.5 Additional car parking

The proposal to add a sort line would lead to an increase in employment and visits to the site by servicing and maintenance personnel. Along with the continued operation of the landfill, this would require an increase in the quantity of car parking for Stage 1 to 37 from the approved 21. The overall car parking provision for the Concept Proposal would not change. The area required for the additional car park is already part of the approved hardstand area. Additional employee and service / maintenance related traffic would be negligible in the context of the overall traffic movements on the Erskine Park road network.

The proposed modification is substantially the same development as the development as originally granted consent and would involve negligible environmental impacts.

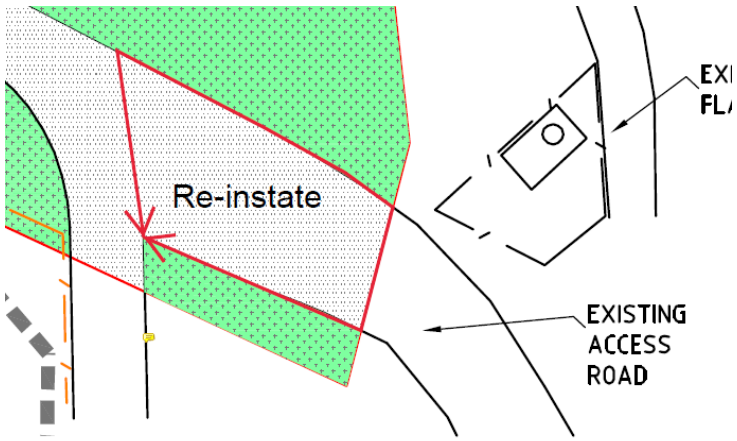
3.6 Retain landfill access

Modification 1 provided for a new exit ramp from the landfill to the development site in the south east corner of the site, and a minor redesign of the of the exit ramp in the north-east corner close to the leachate treatment plant.

Modification 2 provided an increase in the level of the access ramps to provide a better and safer tie-in to the revised site levels, relocated the ramps closer to the site boundaries and reinstated a landfill access close to the northern boundary of the site.

Modification 3 proposes to reinstate a section of the access road between the existing landfill access road and the new landfill exit ramp in the south-east corner as shown by the red boundary in Figure 4. This area was shown as landscaped area in Modification 1. The current proposed modification would reinstate the access using an unsealed road and would not therefore impact the area of hardstand or impervious surface area on the site.

Figure 4 Reinstatement of access road at south-east corner



3.7 Temporary truck trailer parking in load-out area

The approved project provides for the temporary parking of load-out trucks and trailers in the load-out area. The arrangements for temporary truck and trailer parking in this area will be formalised using line markings to allow for the safe use of this area by drivers leaving their trucks to access the rest area cabin (see Section 3.4).

Temporary parking of load-out trucks and trailers relates to the time when drivers would use the driver rest area. It would not impact on the amount of waste stored at the Waste Transfer Station or the length of time that waste is stored.

Modification 1 provided for the deferment of two of the three load-out tunnels. If a further tunnel is required, it would be via separate modification application, which would confirm removal of the truck parking bays.

3.8 Elevation of Tri-stack Fans and Route for Odour Management System Ducting

The detailed design of all elements of the Odour Manager System led to minor variations on final RL for the tri-stack fans and the route for external ducting to tap into the wet scrubber treatment system along the northern wall of the waste transfer station. As a result, the RL of the tri-stack fans has changed from the originally approved RL 68.677 to RL69.660. A brief discussion on potential visual impacts associated with the changed RL is provided in Section 5.

3.9 Layout of office

The detailed design of the office has been refined to allow for the provision of a weighbridge booth to assist in the operations of the in-bound weighbridge. The refinement would lead to a minor increase in the area of the office of 8m^2. This would not change the overall area of hardstand for the site.

3.10 External roof access stair

The stairs to access the roof area for maintenance activities has been re-oriented to reflect the originally approved layout and to provide a more workable solution for maintenance activities.

3.11 Removal of translucent wall sheeting

The translucent wall sheeting would be removed from the design of the building to ensure the building has sufficient structural integrity to accommodate the provision of roof mounted solar panels in the future. Additional LED lighting will be installed within the shed to offset any loss of natural light.

3.12 Relocation of rainwater harvesting tanks and removal of Stage 2 product bunkers

The rainwater harvesting tanks, fire suppression tanks and pump house have been relocated from the northern elevation to the eastern elevation. The relocation results in the removal of the product bunkers on the eastern elevation which are part of the approved Concept Plan and would have formed part of the scope of the future Stage 2 DA.

3.13 Raise canopy on eastern elevation

The canopy on the eastern elevation is being raised by 500mm to provide for better clearance for truck movements and the operation of the roller shutter doors. The revised canopy height is below the ridge line of the transfer station building and would not have any visual impacts.

3.14 Inclusion of Mains Switch Board (MSB) room on northern elevation

The mains switch board (MSB) is a necessary part of any electrical installation and is generally where the service protection device and supply authority metering equipment is located. The modification application clarifies the location of the MSB room on the northern elevation.

3.15 Updated Site Plans

The proposed changes are shown on the updated site plans in Appendix A which show the changes to the approved Concept Plan and the Stage 1 Waste Transfer Station. These plans are intended to replace the plans included in Appendix 1 of development consent SSD 7075, as modified by Modification 2.

3.16 Changes to Development Consent Conditions

The increase in the number of car parking spaces requires a change in condition Schedule C, B30 (a) as follows:

B30 The Applicant must ensure that:

(a) A total of 37 car parking spaces, including one accessible car parking are provided.

4. Environmental Assessment of Proposed Modification

4.1 Introduction

The key environmental issues raised a result of the proposed modification are air quality / odour, and noise. Detailed technical assessments for air quality / odour and noise have been prepared and are provided in Appendix B and C respectively, with the main outcomes summarised here.

4.2 Air quality / odour

An air quality assessment was undertaken (refer Appendix B) to consider the addition of a manual sort line in the Waste Transfer Station for a scenario of 30% of the approved 300,000 tpa of incoming dry material waste fraction diverted for resource recovery through a sort line.

The assessment concludes that the addition of sorting in the Stage 1 Waste Transfer Station would see a marginally higher risk of adverse odour impact at the adjacent industrial neighbor to the north-east. The modelling indicates full compliance with the EPA 2 Odour Unit (OU) criterion at nearest residential receptors.

The assessment notes that the largest contributor to the predicted odour impact at the adjacent industrial neighbour is fugitive emissions through the opening of the building doors, and therefore mitigation strategies should focus on maximising fugitive emission containment and treatment prior to dispersion. This is in line with the existing approved strategy of:

- Containment: containment of dust and odour within the building fabric using fast acting doors and an air extraction system.
- Internal air management: the installation of a dust suppression (misting) system to control internal dust concentrations.
- Air pollution control: the operation of a supplementary air pollution control device (a wet scrubber), required to achieve the design standard with the plant operating at full capacity in the normal operations scenario, or during the emergency operations scenario.
- Emission control: the use of dilution fans to maximise the dispersion and dilution of the extracted, and scrubbed, air.

It is acknowledged in the approved project and conditions of approval that actual odour emissions rates from the Waste Transfer Station should be verified during the initial operating period. Verification of odour emissions rates would allow the modelled predictions to be tested, and if necessary, additional mitigation incorporated as provided for in Condition of Consent B12 (post-operation Odour Audit).

If more enhancement to containment is verified as a requirement of the post odour audit during the operational period, then there is the ability to implement further containment controls around the door openings, for example, an airlock-style system such as air curtains or other appropriately engineered systems.

4.3 Noise

An updated noise impact assessment (refer Appendix C) assessed the noise impacts from the proposed modification against the requirements of the Noise Policy for Industry (NPfI) (note: the noise assessment also assessed the impacts from inclusion of an electric shredder in the Waste Transfer Station. This does not form part of the scope of the proposed modification but may be included by Cleanaway at a future date and would be subject to a separate modification application). The NPfI requires an assessment against amenity criteria, intrusiveness criteria and sleep disturbance criteria.

The operational noise assessment assessed noise impact from the operation of the facility including introduction of a manual sort line. A number of scenarios were modelled to represent worst case operational scenarios and different meteorological conditions.

The assessment concluded that the operational noise emissions from the Waste Transfer Station, including the proposed modification, are predicted to be below or to meet the intrusive and amenity noise trigger levels at all of the noise assessment locations. Compliance is predicted for daytime, evening and night-time.

A review of noise events from the operations of the Waste Transfer Station shows that the noise levels comply with the EPA's sleep disturbance screening criterion.

It is noted whilst the sleep disturbance screening criteria are clearly met, the reversing alarms from truck movements might be audible. In the event that reversing alarm noise is considered to be a source of disturbance, the alarm noise level should be checked against the appropriate regulatory and health and safety requirements and the necessary mitigating action taken to achieve an acceptable noise reduction without compromising safety standards.

In conclusion, with the addition of the sort line to the Waste Transfer Station the operations would be within the compliance levels determined in accordance with EPA's NPfI.

4.4 Surface Water

The introduction of a truck parking area will add a new area of hardstand of approximately 300m^2. The total site area is 3.72 Ha and constitutes 86% impervious surface. The introduction of the parking area results in an increase of impervious area to a total of 87%.

An assessment of the effect on the documented stormwater management system has been made using DRAINS hydrologic and hydraulic modelling software and is detailed in Appendix D. It is noted that the increase in impervious area is associated with the catchment being attenuated and treated by the open stormwater management basin located on the north-west corner of the site.

The DRAINS modelling has confirmed that the increase in stormwater runoff from changing the pervious area to being impervious results in an approximate increase of 1% and the increase in basin volume required is 1.5m^3 or approximately 0.4% of the total volume provided. Further the 3mm increase in water surface level due to the 1.5m^3 additional storage volume can be accommodated within the provided detention system with sufficient freeboard to the basin bund level.

Given the above, the minor increase in attenuation storage due to the additional impervious area is considered negligible and can be managed within the stormwater management basin as currently designed.

4.5 Other

4.5.1 Traffic

The introduction of the sort line with lead to an increase in the number of employees which will lead to an increase in employee and visitor related traffic and parking. Additional parking has been provided on-site to cater for the additional employees and visitors. There will be a minor increase in employee-related trips to and from the site which will have a negligible impact on road network capacity.

The number of inbound waste delivery vehicles and outbound waste transfer vehicles will not change as a result of the proposed modification.

4.5.2 Socio-economic

An increase in the number of employees in the Stage 1 Waste Transfer Station from 10 to 25 as a result of the introduction of the manual sort line and the continued operation of the landfill will have positive socio-economic benefits in the surrounding area by providing additional employment opportunities and supporting demand for local services.

4.5.3 Visual

The minor increase in the RL of the tri-stack fans has the potential to change visual impacts. The fans are located on the northern end of the Waste Transfer Station building. The views from the residential areas to the north of

the building are long distance views obscured by existing industrial structures as described in the visual impact assessment accompanying the original EIS. This, combined with the minor increase in RL, will lead to a negligible change to visual impact.

4.5.4 Waste

The introduction of the sort line will allow an increase in the proportion of waste being recovered and diverted from landfill, contributing to the aims of the Waste Avoidance and Resource Recovery Act 2001 (WARR Act).

4.5.5 Other

The proposed modification would not lead to any other changes to impacts already assessed through the approved project.

5. Assessment under Section 4.55 (1A)

For the purposes of this assessment it is understood the nature of changes would be considered by the Minister (as the consent authority) under Section 96(1A) of the EP&A Act.

Section 96(1A) states:

> *(1A) Modifications involving minimal environmental impact A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:*
>
> *(a) it is satisfied that the proposed modification is of minimal environmental impact, and*
>
> *(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and*
>
> *(c) it has notified the application in accordance with:*
>
> *(i) the regulations, if the regulations so require, or*
>
> *(ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*
>
> *(d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.*

As discussed earlier, the proposed modifications are substantially the same development as the development for which consent was originally granted, being a Waste Transfer Station with basic resource recovery. The proposed modifications have been assessed as having negligible or minor environmental impacts which can be managed within existing management and mitigation measures.

6. Section 4.15 of the Act - Evaluation

In accordance with the requirements of Section 96 of the EP&A Act an evaluation based on the requirements of Section 79C has been undertaken.

6.1 Section 4.15 (1)(A)(i) – Environmental Planning Instruments

The key matters under Section 79C(1)(a)(i) of the EP&A Act are Local Environmental Plans (LEPs), Regional Environmental Plans (REPs) (now known as SEPPs) and State Environmental Policies (SEPPs).

State Environmental Planning Policies (SEPPs)

The following SEPPs were evaluated:

- SEPP No. 33 Hazardous and Offensive Development (SEPP 33);
- SEPP (Western Sydney Employment Area) 2009 (WSEA SEPP) – zoning;
- State Environmental Planning Policy (Infrastructure) 2007;
- SEPP No. 55 Remediation of Land;
- SEPP (State and Regional Development) 2011;
- SEPP No.64 Advertising and Signage Explanatory Information;

From this review it was determined the DA Modification application does not trigger any new assessable consideration under any SEPP, which was considered in the EIS and issuing of development consent SSD 7075 and subsequent modification.

Regional Environmental Plans (REPs)

The Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997) was considered in the original application and subsequent modification. However, as the current proposed modification does not impact on the surface water assessment, the REP has not been considered further for the purposes of this modification.

Local Environmental Plans (LEPs)

Local Environment Plans (LEPs) were not considered relevant for this evaluation. The WSEA SEPP prevails over relevant Local Environment Plans (LEP) and therefore the Penrith LEP is not relevant to the Development.

6.2 Section 4.15 (1)(a)(ii) – Draft Environmental Planning Instruments

The application is not considered to trigger any new assessable consideration under any draft environmental planning instruments that were deemed acceptable in the EIS assessment.

6.3 Section 4.15 (1)(a)(iii) – Development Control Plans

Section 18 of the WSEA SEPP states that a development proposal for a specific site, whether lodged with the NSW Government or the local council, may only be lodged once a Development Control Plan (DCP) is in place for the land. Although the Penrith 2010 DCP exists for the area, Clause 11 of the SRD SEPP states that DCPs do not apply to SSD Projects. Clause 7 of the SRD SEPP also states that in the event of an inconsistency between the SRD SEPP and another environmental planning instrument, the SRD SEPP prevails to the extent of the inconsistency. Consequently, a DCP is not relevant to the modification application.

Notwithstanding, the development has been designed to take into consideration the requirements of the Penrith Council DCP (2014).

6.4 Section 4.15 (1)(a)(iiia) – Planning Agreements

There is no Voluntary Planning Agreement (VPA) or other arrangement under EP&A Act Section 93F or in relation to the project site or SSD 7075.

6.5 Section 4.15 (1)(a)(iv) – Any matter Prescribed by the Regulations

The application is not considered to trigger any new assessable consideration under the Environmental Planning and Assessment Regulation 2000 (EP&A Regs) which was considered acceptable in the EIS and issuing of SSD 7075.

6.6 Section 4.15 (1)(a)(v) – Coastal Zone

The site is not impacted by the Coastal Protection Act 1979 and this DA Modification application will not alter this.

6.7 Section 4.15 (1)(b) Impact on the Environment

An assessment of environmental impacts of the modified Development is provided in Section 5, above.

6.8 Section 4.15 (1)(c) Site Suitability

The site is suitable for the proposed modifications. Only minor modifications are proposed to the development. The site would remain suitable for the development as modified.

6.9 Section 4.15 (1)(e) The Public Interest

The proposed modifications are in the public interest. The proposed modifications would lead to an increase in the proportion of waste recovered and diverted from landfill with associated environmental benefits for the Western Sydney region. The proposed modifications also contribute to the safe and efficient operation of the site.

The modifications improve the feasibility of the project from Cleanaway's perspective and are designed in a way that does not change impacts compared to what was assessed in the EIS, RtS and Modifications.

The proposed modifications are necessary to allow the development to proceed and deliver the following benefits to the public:

- Increases the proportion of waste recovered and diverted from landfill which assists in meeting the goals of the WARR Act
- Provides additional employment opportunities
- Supports the development of an important piece of waste infrastructure for the Western Sydney Region
- Provides safety and amenity benefits for truck drivers

7. Summary and Conclusion

The Planning Assessment Commission (PAC), acting as delegate of the Minister for Planning, approved an application for the Erskine Park Waste and Resource Management Facility (WRMF) Staged Development Application (SSD 7075) on the 5 October 2016, comprising:

- A concept plan for a Waste and Resource Management Facility with a maximum processing capacity of 300,000 tpa. All waste received at the WRMF shall enter the Waste Transfer Station (Stage 1), up to 150,000 tpa of this waste may be recycled at the Resource Recovery Facility (Stage 2)
- Construction and operation of the Stage 1 Waste Transfer Station with a maximum processing capacity of 300,000 tpa.

The Stage 2 RRF would be subject to a separate future Development Application.

An application to modify the SSD was approved in August 2017 (Modification 1) with a second modification approved in February 2018 (Modification 2).

The current proposed modification includes the introduction of a manual sort line into the Stage 1 Waste Transfer Station to increase the efficiency of the sorting process and the proportion of waste recovered from the Waste Transfer Station, reducing the proportion of waste sent to landfill and helping to meet the goals of the WARR Act. Recovered material would be transferred out of the Waste Transfer Station for distribution to market with residual material from the basic resource recovery process transferred out for transport to licensed waste processing facilities or landfill along with other waste material in accordance with the approved project.

The manual sort line is consistent with the concept of basic resource recovery described in the EIS and subsequent modifications and the definitions of Waste Transfer Station in the Standard Instrument.

The proposed modification also includes a minor increase in the area of hardstand to allow for trailer un-tarping, provision of a driver rest area and an increase in car parking to accommodate the additional staff numbers associated with the operation of the sort line. A number of detailed design matters are also addressed.

The proposed modifications would be substantially the same development as the project as originally granted consent, being a Waste Transfer Station incorporating basic resource recovery through sorting.

The potential impacts from the proposed modification relate to odour / air quality and noise associated with the introduction of the manual sort line. An odour / air quality and noise assessment have been undertaken and conclude that the impacts are within criteria when existing management and mitigation measures are applied. Existing conditions of consent provide for the post-operation verification of odour emissions and implementation of additional mitigation measures if required. A surface water assessment was also prepared which confirmed that existing stormwater detention system has sufficient capacity to deal with the minor increase in stormwater run-off associated with the increase in hardstand area associated with the truck parking area.

The proposed modifications would cause negligible to minor environmental impacts with any risks managed through existing management and mitigation measures. The proposed modifications are necessary to achieve a workable site layout that would allow the waste facility to operate safely, meet design objectives and function efficiently. The introduction of a manual sort line for basic resource recovery will improve environmental performance by increasing the proportion of waste being diverted from landfill while potentially meeting the needs of upcoming alternate waste processing facilities in the region.

The proposed modifications were assessed against the requirements of Section 4.15 of the EP&A Act. The modifications were determined not to impact on any Planning Instruments, Development Control Plans, Planning Agreement or matters prescribed in the EP&A Regulations.

8. References

SLR Consulting Australia Pty Ltd (SLR), 2015, *Erskine Park Resource Management Facility, Staged SSD (SSD – 7075) Concept Plan and Stage 1 Waste Transfer Station, Environmental Impact Statement.*

SLR Consulting Australia Pty Ltd (SLR), 2016, *Erskine Park Resource Management Facility, Staged SSD (SSD – 7075) Concept Plan and Stage 1 Waste Transfer Station, Response to Submissions*

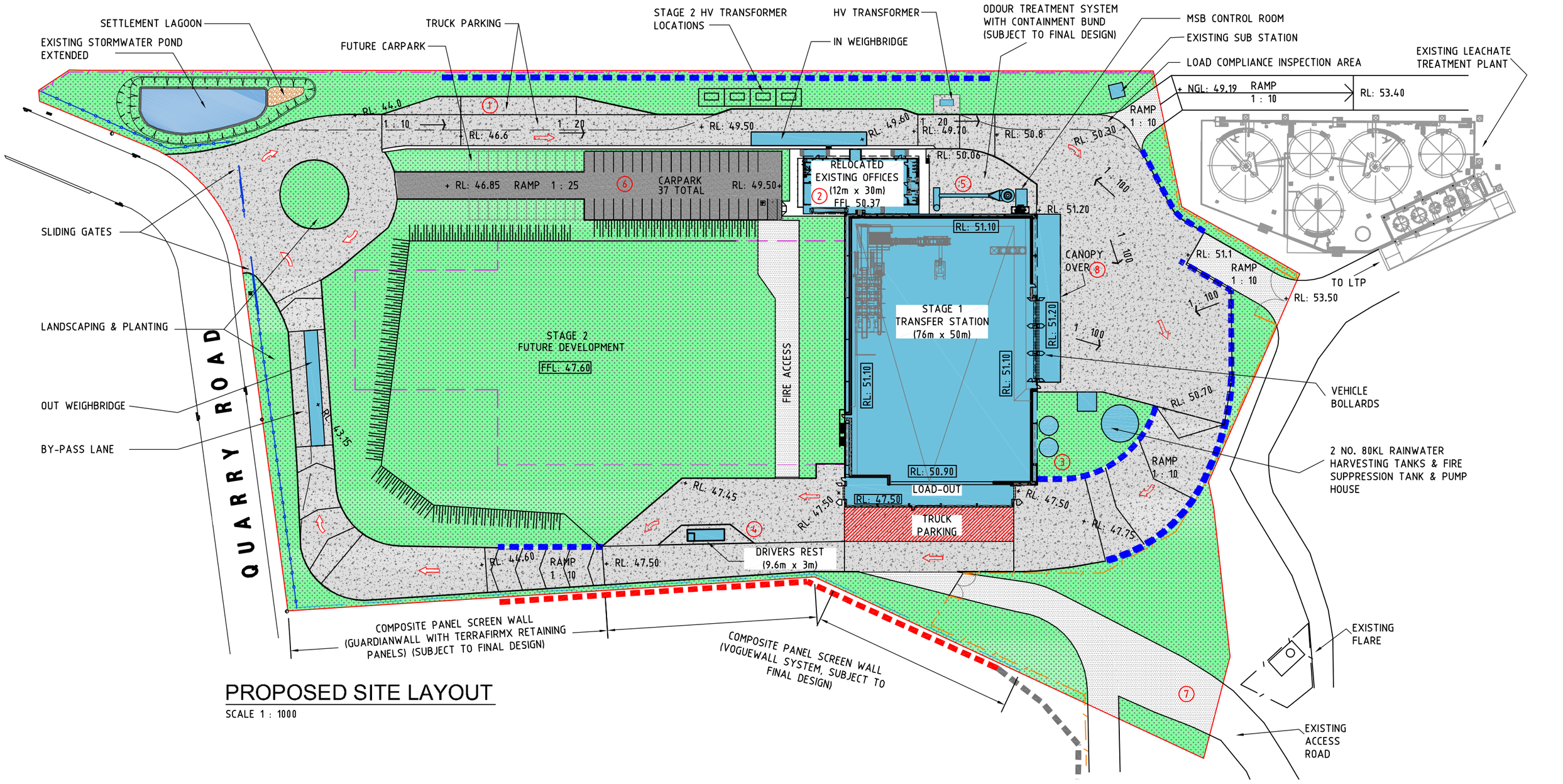
SLR Consulting Australia Pty Ltd (SLR), 2017, *Erskine Park Resource Management Facility, Staged SSD (SSD – 7075) Concept Plan and Stage 1 Waste Transfer Station, Modification Environmental Assessment*

EME Advisory Pty Ltd (EME), 2018, *Erskine Park Resource Management Facility, Staged SSD (SSD-7075) Concept Plan and Stage 1 Waste Transfer Station, Modification Environmental Assessment*

Appendix A: Amended Plans

Drawing Reference	Description
Planning Drawings	
003	Proposed site layout – Stage 1 – Mod 3
023	North and south elevations – Mod 3
024	East and west elevations – Mod 3
103	Site layout concept plan – full site development – Mod 3
Explanatory Drawings	
003	Line marking and signage for walking routes
003	Swept path analysis – B-double inbound
003	Swept path analysis – B-double outbound
003	Swept path analysis – semi-trucks exiting landfill

Planning Drawings



PROPOSED SITE LAYOUT

SCALE 1 : 1000

LEGEND

- DEVELOPMENT BOUNDARY
- ASPHALT HARDSTAND
- CONCRETE HARDSTAND
- GRAVEL HARDSTAND
- LANDSCAPED AREAS
- TRAFFIC DIRECTIONS
- EXISTING FENCELINE
- 1.5M HIGH NEW BLACK PALISADE FENCE
- CHAIN LINK FENCE
- 2.4M HIGH NEW COMPOSITE PANEL SCREEN WALL
- EXISTING RETAINING WALL REMOVED/MODIFIED
- PROPOSED RETAINING WALL

SCHEDULE OF CHANGES

1. ADDITIONAL TRUCK PARKING TO NTH DRIVEWAY
2. OFFICE LAYOUT REVISED
3. PROPOSED STAGE 2 ADDITION DELETED, 2x80KL RW TANKS NOTED
4. DRIVERS REST ADDED TO STH DRIVEWAY
5. NTH ELEVATION DUCT WORK REVISED
6. ADDITIONAL STAGE 1 CAR PARKING
7. EXISTING ACCESS ROAD IN STH WEST RETAINED
8. EAST CANOPY RAISED BY 500MM

PROJECT :

ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

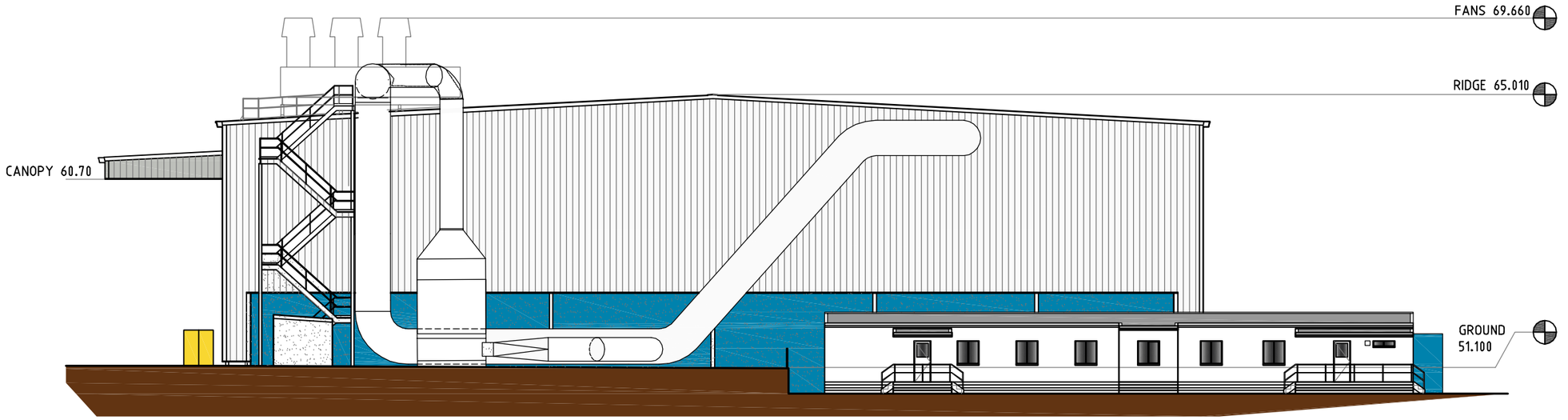
ARCHITECTS DOCUMENTATION:

NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

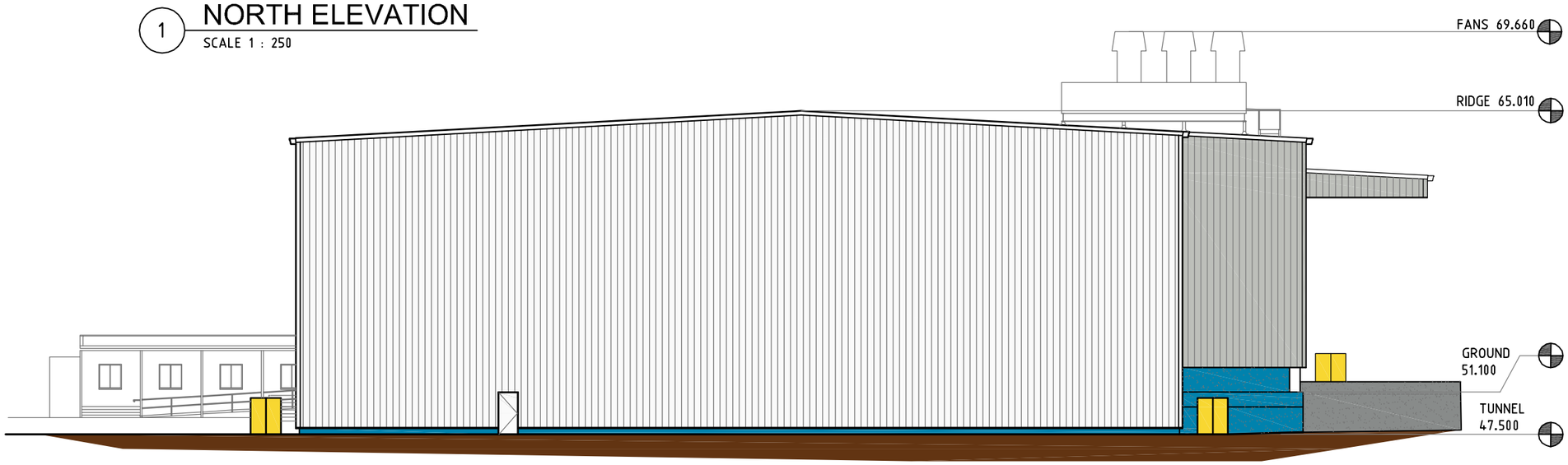
PROPOSED SITE LAYOUT - STAGE 1 - MOD 3

DEVELOPMENT CONSENT

DATE	MARCH 2018
SCALE	AS SHOWN @ A3
PLOT SCALE	1 : 1
DRWG. No.	17567
DOCUMENTATION	JH
DRAWN	JH
CHECKED	ND
SHEET. No.	003
REV.	18



1 NORTH ELEVATION
SCALE 1 : 250



2 SOUTH ELEVATION
SCALE 1 : 250

Cladding:
External sheet, walls: 0.42BMT Colourbond Trimdeck vertical trapezoidal metal sheeting, incorporating flush louvres and steel doors as required to match adjacent cladding.

External sheet, Roof: As wall construction incorporating 50mm insulation (perforated anticon foil backed fibreglass or equivalent) & safety wire mesh, & incorporate roof lights & PV panels.

External sheet: Cladding to roof & walls with integral translucent strip windows & louvres, to be finished from the Colorbond® Colour Range or similar approved.

Doors:
Steel & Glazed doors, metal louvres & chimney to be finished Polyester powder coating to the same RAL colours as adjacent cladding.

Cladding to offices/welfare:
To be insulated built up system, cladding profile & colour to match as rest of building.

Windows:
Polyester powder coated double glazed windows with 50% opening lights, utilising "solarglass" to avoid solar gain, & projecting solar shading to North & East elevations.

Finishes Key:
1 -Wall cladding to be Colorbond "Surfmist" colour.

2 - Window frames, door frames & Roller Shutter Doors - highlight colour to be Colorbond "Surfmist".

3 - Fascia gutters, downpipes, flue & roof to be Colourbond "Surfmist" colour.

4 - Below cladding to be fair faced concrete finish painted Dulux "Cleanaway Blue".

Roof Maintenance:
Roof to be fitted with suitable fall-arrest cable system with access walkways, or similar approved, for safe access to maintain, clean & inspect the roof, rooflights PV panels & guttering.

Fall-arrest system to comply with all current legislation, and be installed such that the roof does not leak.

Access to be by trained personel, with equipment stored within the office building.

PROJECT :
ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

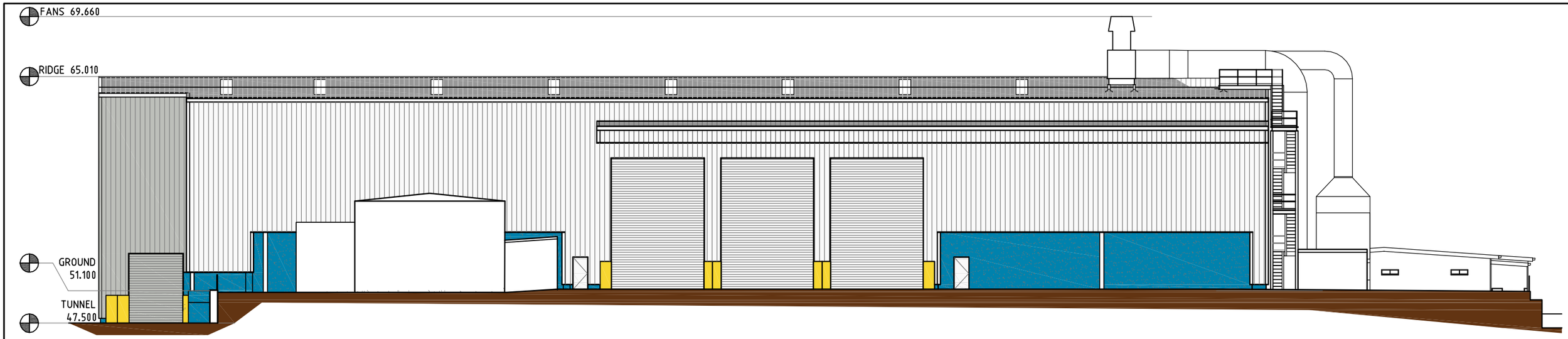
ARCHITECTS DOCUMENTATION:

NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

NORTH & SOUTH ELEVATIONS - MOD 3
DEVELOPMENT CONSENT

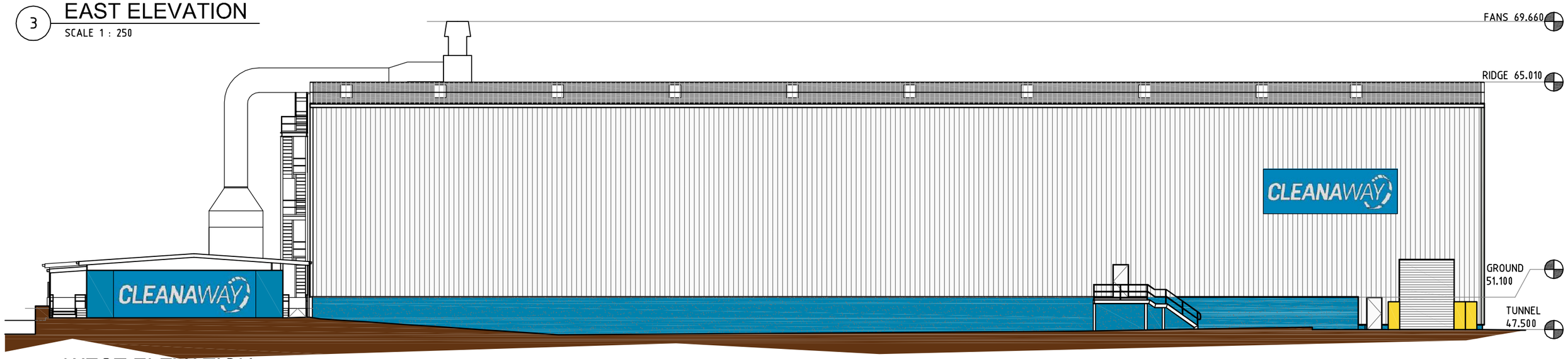
DATE MARCH 2018
SCALE AS SHOWN @ A3
PLOT SCALE 1 : 1

DRWG. No. 17567
DOCUMENTATION JH
DRAWN JH
CHECKED ND
SHEET. No. 023
REV. 08



3 EAST ELEVATION

SCALE 1 : 250



4 WEST ELEVATION

SCALE 1 : 250

Cladding:
External sheet, walls: 0.42BMT Colourbond Trimdeck vertical trapezoidal metal sheeting, incorporating flush louvres and steel doors as required to match adjacent cladding.

External sheet, Roof: As wall construction incorporating 50mm insulation (perforated anticon foil backed fibreglass or equivalent) & safety wire mesh, & incorporate roof lights & PV panels.

External sheet: Cladding to roof & walls with integral translucent strip windows & louvres, to be finished from the Colorbond® Colour Range or similar approved.

Doors:
Steel & Glazed doors, metal louvres & chimney to be finished Polyester powder coating to the same RAL colours as adjacent cladding.

Cladding to offices/welfare:
To be insulated built up system, cladding profile & colour to match as rest of building.

Windows:
Polyester powder coated double glazed windows with 50% opening lights, utilising "solarglass" to avoid solar gain, & projecting solar shading to North & East elevations.

Finishes Key:
1 -Wall cladding to be Colorbond "Surfmist" colour.

2 - Window frames, door frames & Roller Shutter Doors - highlight colour to be Colorbond "Surfmist".

3 - Fascia gutters, downpipes, flue & roof to be Colourbond "Surfmist" colour.

4 - Below cladding to be fair faced concrete finish painted Dulux "Cleanaway Blue".

Roof Maintenance:
Roof to be fitted with suitable fall-arrest cable system with access walkways, or similar approved, for safe access to maintain, clean & inspect the roof, rooflights PV panels & guttering.

Fall-arrest system to comply with all current legislation, and be installed such that the roof does not leak.

Access to be by trained personel, with equipment stored within the office building.

PROJECT :

ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE
MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

ARCHITECTS DOCUMENTATION:

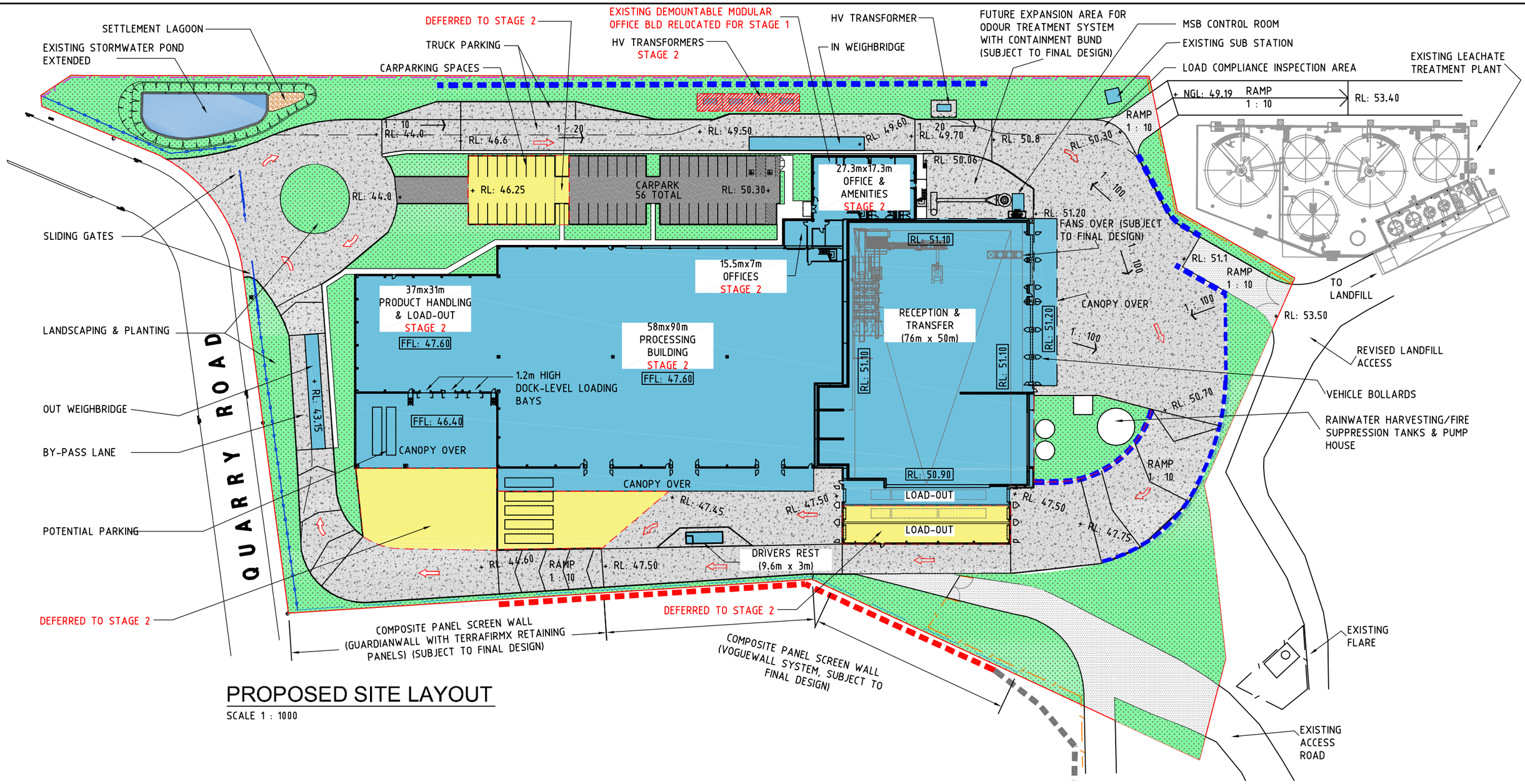
NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

EAST & WEST
ELEVATIONS - MOD 3

DEVELOPMENT CONSENT

DATE	MARCH 2018
SCALE	AS SHOWN @ A3
PLOT SCALE	1 : 1

DRWG. No.		SHEET. No.	REV.
17567	DOCUMENTATION JH DRAWN JH CHECKED ND	024	08



PROPOSED SITE LAYOUT

SCALE 1 : 1000

LEGEND

- DEVELOPMENT BOUNDARY
- ASPHALT HARDSTAND
- CONCRETE HARDSTAND
- GRAVEL HARDSTAND
- LANDSCAPED AREAS
- TRAFFIC DIRECTIONS
- EXISTING FENCELINE
- 1.5M HIGH NEW BLACK PALISADE FENCE
- CHAIN LINK FENCE
- 2.4M HIGH NEW COMPOSITE PANEL SCREEN WALL
- EXISTING RETAINING WALL REMOVED/MODIFIED
- PROPOSED RETAINING WALL

PROJECT :

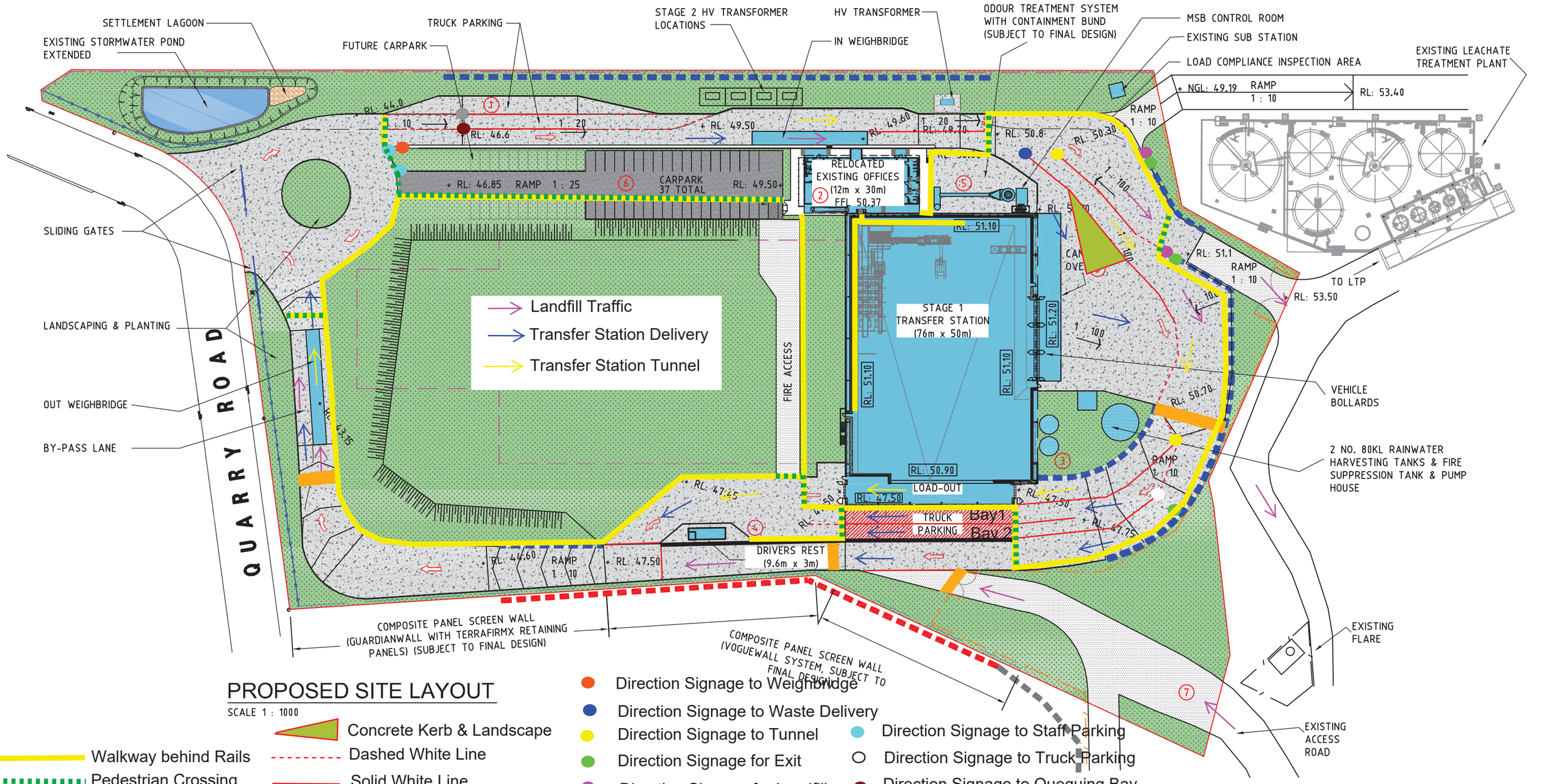
ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

ARCHITECTS DOCUMENTATION:
NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

SITE LAYOUT - CONCEPT PLAN		DATE	MARCH 2018
FULL SITE DEVELOPMENT - MOD 3		SCALE	AS SHOWN @ A3
DEVELOPMENT CONSENT		PLOT SCALE	1 : 1
DRWG. No. 17567	DOCUMENTATION JH DRAWN JH CHECKED ND	SHEET. No. 103	REV. 05

Explanatory Drawings



PROPOSED SITE LAYOUT

SCALE 1 : 1000

Concrete Kerb & Landscape
Walkway behind Rails
Dashed White Line
Pedestrian Crossing
Solid White Line
Jersey Barrier

Direction Signage to Weighbridge
Direction Signage to Waste Delivery
Direction Signage to Tunnel
Direction Signage for Exit
Direction Signage for Landfill
Speed Hump
Direction Signage to Staff Parking
Direction Signage to Truck Parking
Direction Signage to Quequing Bay
Direction Signage to Untarping Bay

LEGEND

- DEVELOPMENT BOUNDARY
- ASPHALT HARDSTAND
- CONCRETE HARDSTAND
- GRAVEL HARDSTAND
- LANDSCAPED AREAS
- TRAFFIC DIRECTIONS
- EXISTING FENCELINE
- 1.5M HIGH NEW BLACK PALISADE FENCE
- CHAIN LINK FENCE
- 2.4M HIGH NEW COMPOSITE PANEL SCREEN WALL
- EXISTING RETAINING WALL REMOVED/MODIFIED
- PROPOSED RETAINING WALL

SCHEDULE OF CHANGES

1. ADDITIONAL TRUCK PARKING TO NTH DRIVEWAY
2. OFFICE LAYOUT REVISED
3. PROPOSED STAGE 2 ADDITION DELETED, 2x80KL RW TANKS NOTED
4. DRIVERS REST ADDED TO STH DRIVEWAY
5. NTH ELEVATION DUCT WORK REVISED
6. ADDITIONAL STAGE 1 CAR PARKING
7. EXISTING ACCESS ROAD IN STH WEST RETAINED
8. EAST CANOPY RAISED BY 500MM

PROJECT :

ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

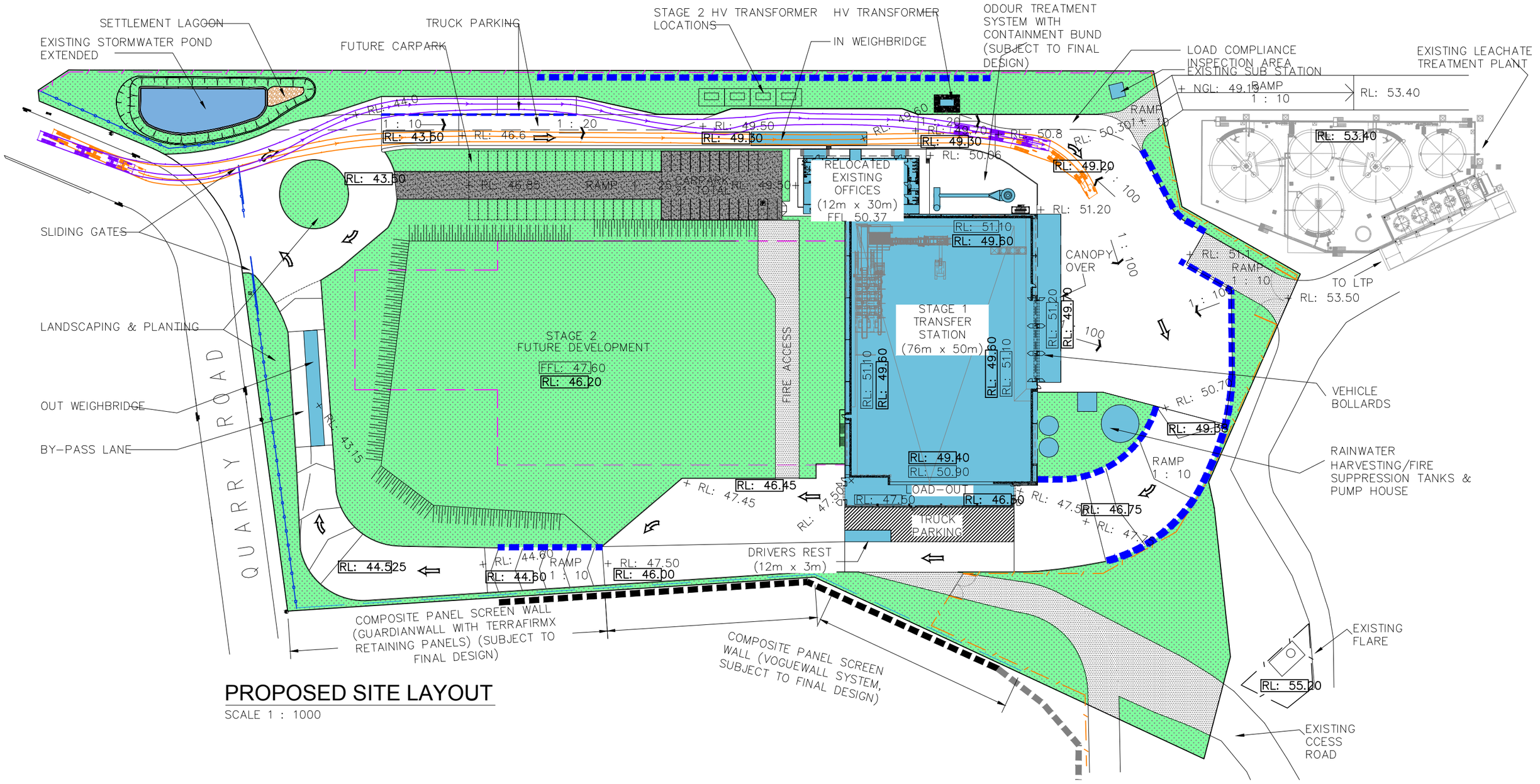
ARCHITECTS DOCUMENTATION:

NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

PROPOSED SITE LAYOUT - STAGE 1 - MOD 3

DEVELOPMENT CONSENT

DATE	MARCH 2018
SCALE	AS SHOWN @ A3
PLOT SCALE	1 : 1
DRWG. No.	17567
DOCUMENTATION	JH
DRAWN	JH
CHECKED	ND
SHEET. No.	003
REV.	18



PROPOSED SITE LAYOUT

SCALE 1 : 1000

LEGEND

- DEVELOPMENT BOUNDARY
- ASPHALT HARDSTAND
- CONCRETE HARDSTAND
- GRAVEL HARDSTAND
- LANDSCAPED AREAS
- TRAFFIC DIRECTIONS
- EXISTING FENCELINE
- 1.5M HIGH NEW BLACK PALISADE FENCE
- CHAIN LINK FENCE
- 2.4M HIGH NEW COMPOSITE PANEL SCREEN WALL
- EXISTING RETAINING WALL
- REMOVED/MODIFIED PROPOSED RETAINING WA
- RL: ??.?? ORIGINAL S96 APPROVED LEVELS
- RL: ??.?? PROPOSED NEW LEVELS

PROJECT :

ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

ARCHITECTS DOCUMENTATION:

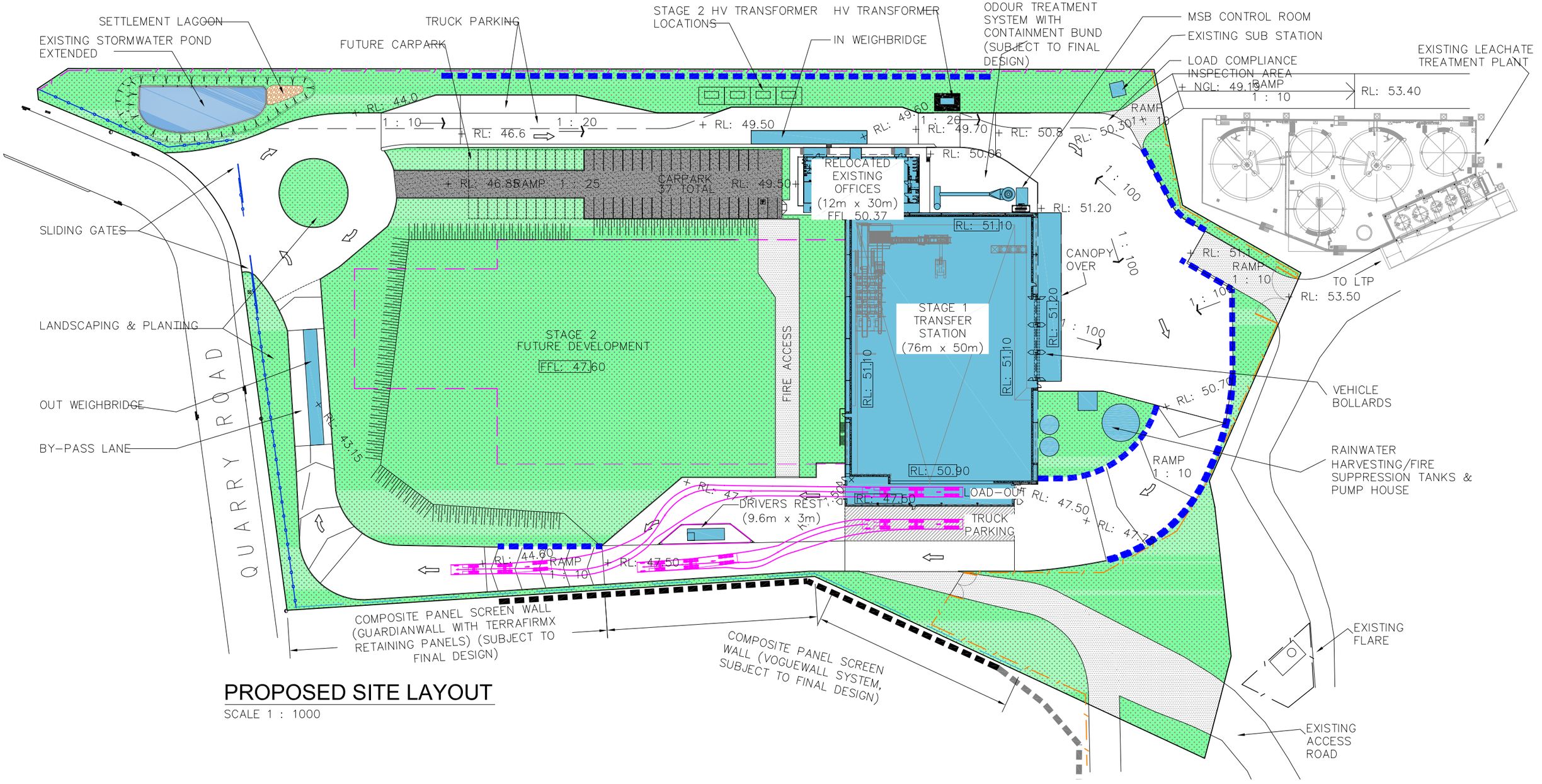
.\naLOGO.bmp

NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

PROPOSED SITE LAYOUT - STAGE 1

DEVELOPMENT CONSENT

DATE	MARCH 2018
SCALE	AS SHOWN @ A3
PLOT SCALE	1 : 1
DRWG. No.	17567
DOCUMENTATION	JH
DRAWN	JH
CHECKED	ND
SHEET. No.	003
REV.	15



PROPOSED SITE LAYOUT

SCALE 1 : 1000

LEGEND

- DEVELOPMENT BOUNDARY
- ASPHALT HARDSTAND
- CONCRETE HARDSTAND
- GRAVEL HARDSTAND
- LANDSCAPED AREAS
- TRAFFIC DIRECTIONS
- EXISTING FENCELINE
- 1.5M HIGH NEW BLACK PALISADE FENCE
- CHAIN LINK FENCE
- 2.4M HIGH NEW COMPOSITE PANEL SCREEN WALL
- EXISTING RETAINING WALL
- REMOVED/MODIFIED PROPOSED RETAINING WA

PROJECT :

ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

ARCHITECTS DOCUMENTATION:

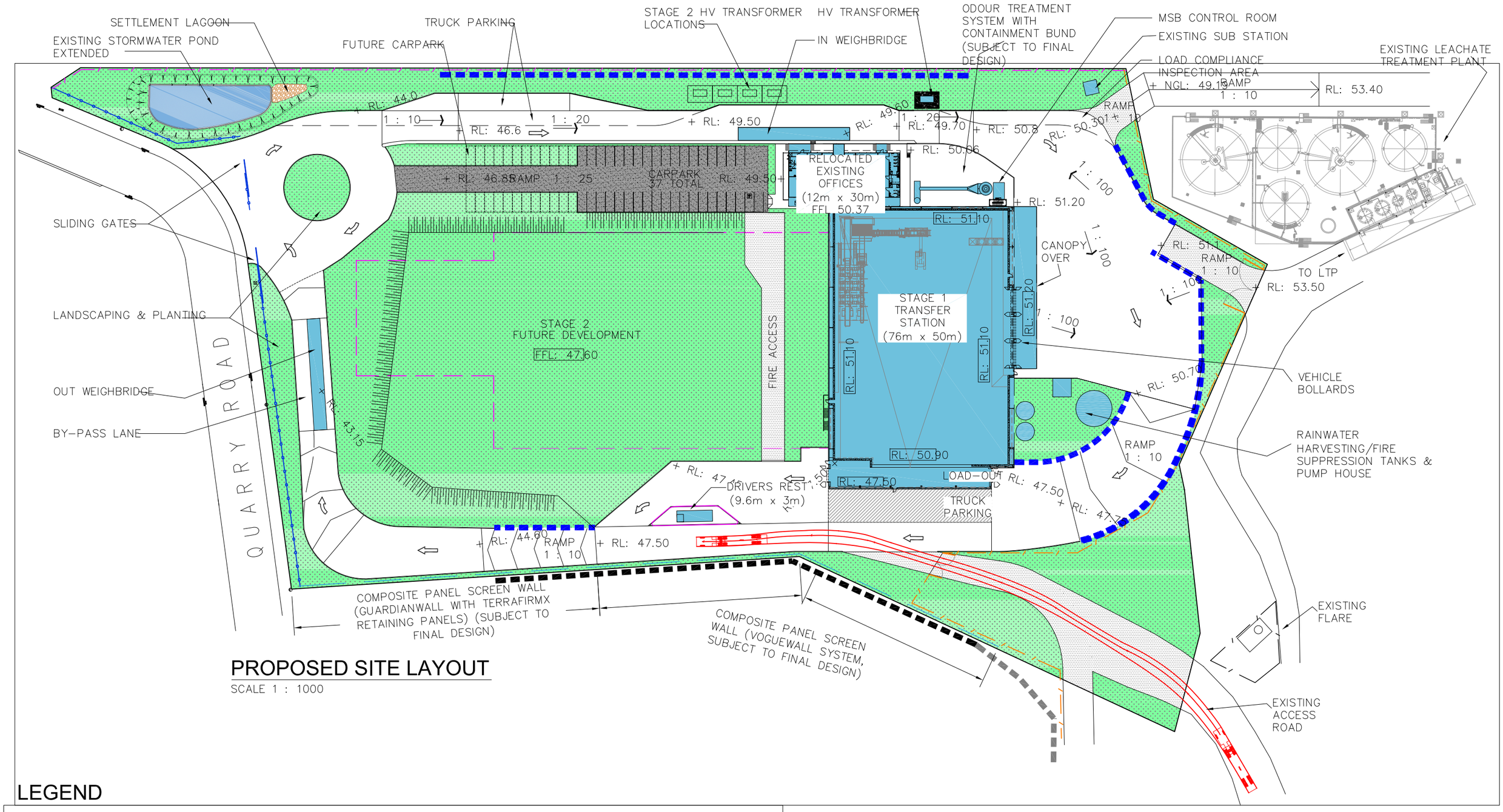
.\naLOGO.bmp

NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

PROPOSED SITE LAYOUT - STAGE 1 - MOD 3

DEVELOPMENT CONSENT

DATE	MARCH 2018
SCALE	AS SHOWN @ A3
PLOT SCALE	1 : 1
DRWG. No.	17567
DOCUMENTATION	JH
DRAWN	JH
CHECKED	ND
SHEET. No.	003
REV.	17



PROPOSED SITE LAYOUT

SCALE 1 : 1000

LEGEND

- DEVELOPMENT BOUNDARY
- ASPHALT HARDSTAND
- CONCRETE HARDSTAND
- GRAVEL HARDSTAND
- LANDSCAPED AREAS
- TRAFFIC DIRECTIONS
- EXISTING FENCELINE
- 1.5M HIGH NEW BLACK PALISADE FENCE
- CHAIN LINK FENCE
- 2.4M HIGH NEW COMPOSITE PANEL SCREEN WALL
- EXISTING RETAINING WALL
- REMOVED/MODIFIED PROPOSED RETAINING WA

PROJECT :

ERSKINE PARK RMF - STAGE 1
WASTE TRANSFER STATION
FOR
CLEANAWAY WASTE MANAGEMENT LTD

CLEANAWAY
Making a sustainable future possible

ARCHITECTS DOCUMENTATION:

.\naLOGO.bmp

NICHOLAS & ALEXANDER ARCHITECTS
37 Bevan Street, Albert Park, 3206
Tel: 9696 5822
Email: naarch@bigpond.net.au
A.C.N. 070 432 932

PROPOSED SITE LAYOUT - STAGE 1 - MOD 3

DEVELOPMENT CONSENT

DATE	MARCH 2018
SCALE	AS SHOWN @ A3
PLOT SCALE	1 : 1
DRWG. No.	17567
DOCUMENTATION	JH
DRAWN	JH
CHECKED	ND
SHEET. No.	003
REV.	17

Appendix B: Odour Assessment

Appendix C: Noise Assessment

Appendix D: Surface Water Assessment