Our ref: M2022
QA: sj.ap

30 June 2023

Office of the Coordinator-General
Department of State Development
PO Box 15517
CITY EAST QLD 4002
Via: *State Development Areas Application Portal*

Attention: David Stolz – Office of the Coordinator-General

Dear Sir/ Madam,

Re: Development Application seeking a Development Permit for Material Change of Use – Medium Impact Industry (Plastic Product Manufacturing Factory), and Environmentally Relevant Activity 12 (1) - Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum), on land described as Lot 7 on SP338023 and located at 40 Penelope Road, Stuart

Milford Planning act on behalf of Gough Plastics Pty Ltd and hereby formally submit the enclosed development application for Material Change of Use – Medium Impact Industry (Plastics Products Manufacturing Factory) and Environmentally Relevant Activity 12 (1) - Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum), on the abovementioned land.

Section 2.3 of the Guidance for State Development Area (SDA) Applications in Cleveland Bay Industrial Park (CBIP) (February 2022) details the applicable assessment fees within CBIP. In accordance with the fee waiver provided by the Coordinator-General on 22 December 2020 and valid until 22 December 2023, the following uses do not require a fee to be paid for the SDA application for material change of use:

(a) freight terminal
(b) infrastructure facility
(c) medium impact industry
(d) research and technology industry
(e) transport depot
(f) utility installation
(g) warehouse

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As noted above, the use associated with this development application do not require a fee to be paid.

In view of the above, no fee has been paid upon lodgement of this application.

Proceeding

An Early Referral Agency Response Request (ERER) was not obtained from Council in advance of the application being lodged with the OCG, because Council is nominated as the referral agency for the ERA component of the application. In view of this, the OCG will refer the development application to Council to seek comments in relation to the ERA application and any areas of non compliance with the nominated assessment benchmarks in the TSDA Development Scheme.

We look forward to receipt of a written notice from the Coordinator-General confirming the application has been properly made and that additional information is not required to assess the development application.

If you have any questions regarding this correspondence, please do not hesitate to contact the undersigned on TEL: (07) 4724 0095.

Yours sincerely,

MILFORD PLANNING

Sarah Jones

SENIOR TOWN PLANNER

Enclosed: Development application package.

MILFORD PLANNING

Client:
Gough Property Group Pty Ltd

Date:
June 2023

Project Ref:
M2020

Development Application

Project:

Material Change of Use - Medium Impact Industry (Plastic Product Manufacturing Factory) and Environmentally Relevant Activity 12 (1) - Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum)

Property Details:

40 Penelope Road, Stuart
Lot 7 on SP338024
(Cleveland Bay Industrial Park Western Precinct)

DOCUMENT CONTROL

Project Description:	Material Change of Use - Medium Impact Industry (Plastic Product Manufacturing Factory) and Environmentally Relevant Activity 12 (1) - Plastic product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum)
Client:	Gough Property Group Pty Ltd
Date:	30 June 2023
Contact:	Sarah Jones

Quality Assurance	**Issue: Final**	**Version: 1**
	 Sarah Jones SENIOR TOWN PLANNER	 George Milford DIRECTOR
	AUTHOR	**REVIEWER**

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1.0 INTRODUCTION

This town planning report has been prepared in support of a development application seeking a Development Permit for Material Change of Use – Medium Impact Industry (Plastic Product Manufacturing Factory) and Environmentally Relevant Activity 12 (1) – Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum), on land described as Lot 7 on SP338023 and located at 40 Penelope Road, Stuart (Cleveland Bay Industrial Park Western Precinct).

This report provides the following information with respect to the assessment of the development proposal:

- overview of the site and surrounding area;
- description of the proposal;
- overview of legislation relevant to the development application;
- assessment of the proposal against relevant legislation; and
- conclusions and recommendations.

The subject land is located within the bounds of the Townsville State Development Area (TSDA) and will be assessed under the *TSDA Development Scheme 2019* (TSDA Development Scheme). The land is identified as being within the Medium Impact Industry Precinct of the TSDA Development Scheme.

In accordance with the TSDA Development Scheme, the level of assessment for a Material Change of Use in the Medium Impact Industry Precinct is 'SDA assessable development'. In accordance with Schedule 2 of the TSDA Development Scheme, the Coordinator-General will confirm whether the application is properly made and the stages of the assessment process that will apply to the application.

The necessary SDA Application Form has been submitted as part of the electronic lodgement process of this development application. Land owner's consent for this development application is included in **Appendix 1**.

2.0 SITE AND SURROUNDING AREA

2.1 Site Details

Specific details pertaining to the subject site are incorporated in the following **Table 2.1**.

Table 2.1 – Site Characteristics

Street Address	40 Penelope Road, Stuart (Cleveland Bay Industrial Park Western Precinct) (refer **Appendix 2**)
Real Property Description	Lot 7 on SP338023 (refer **Appendix 2**)
Property Owner	Gough Property Group Pty Ltd (refer **Appendix 1**)
Site Area	2 ha
Street Frontage	Penelope Road.
Current Use	Vacant land
Zoning	Medium Impact Industry Precinct
Local Heritage Register	The site is not listed on the Local Heritage Register.
Easement	Drainage easement running adjacent to the rear boundary of Lot 7.
Topography	The site has generally even topography.
Existing Infrastructure	The property will be connected to Council's reticulated water and wastewater services.
SARA Mapping	The properties are identified as being located within the following State Assessment and Referral Agency (SARA) mapping overlays (refer **Appendix 3**): ▪ Townsville priority ports precinct (being port industry and commerce precinct and environmental management precinct). ▪ Within 25 m of a State Controlled Road.
Referral Agencies	The Coordinator-General will determine and advise of any applicable referral agencies.
Planning Instrument	*TSDA Development Scheme 2019*

2.2 Subject Site

The subject site is located on recently registered Lot 7 on SP338023 within the Cleveland Bay Industrial Park (CBIP) Western Precinct at Heleen Downs Road and Penelope Road. The subject site will comprise of a regular shaped allotments with a total area of 2 ha.

The CBIP Western Precinct is currently under construction and has been specifically designed to accommodate future industrial development and includes:

- the construction of a Penelope Road which has been designed to accommodate heavy vehicles;
- connection to Council's reticulated water and sewerage network;
- lot levels above the defined Q100 (1% AEP) flood level; and

- relative flat allotments which accommodate drainage in line with the CBIP Western Precinct stormwater management strategy.

2.3 Surrounding Area

The subject site is surrounded by a variety of existing urban and industrial development and activities. These uses include:

- the Port of Townsville located to the north;
- the Townsville residential suburbs located to the west;
- the Bruce Highway and Flinders Highway located to the south, with a range of industrial existing industrial uses including:
    - Aurizon Stuart intermodal freight facility;
    - Aurizon locomotive and rolling stock maintenance facility;
    - Glencore Xstrata copper refinery;
    - JBS Australia abattoir;
    - Origin Energy Mt Stuart peaking generator plant;
    - Pacific National rail freight terminal;
    - Sun Metals Zinc refinery;
    - Sun metals solar farm;
    - Townsville City Council landfill;
    - Townsville Correctional Centre; and
- the Townsville landfill site, wastewater treatment plant, an abattoir and the Sun Metals zinc refinery (and associated solar farm).

2.4 Early Referral Agency Request

An Early Referral Agency Response Request (ERER) was not obtained from Council in advance of the application being lodged with the OCG, because initially the intent was to lodge a combined application for the MCU and ERA. Further, the areas of non-compliance with the applicable benchmarks, are very similar to those associated with other approved end users and we note that Council has accepted these non-compliances through ERER approvals that have been issued.

3.0 DESCRIPTION OF PROPOSAL

3.1 Overview

This report details an application seeking a Development Permit for Material Change of Use – Medium Impact Industry (Plastic Product Manufacturing Factory) and Environmentally Relevant Activity 12 (1) - Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum), on land described as Lot 7 on SP338023 and located at 40 Penelope Road, Stuart (Cleveland Bay Industrial Park Western Precinct).

3.2 Proposed Development

Gough Property Group Pty Ltd are seeking to expand existing operations in Townsville with the establishment of a proposed plastic product manufacturing factory on Lot 7 in CBIP (western Precinct). The factory will manufacture plastic products such as water storage tanks, waterless toilet systems, durable general storage containers, and other plastic products. The production of plastic products will occur indoors with the external hardstand used for storage purposes and truck parking only.

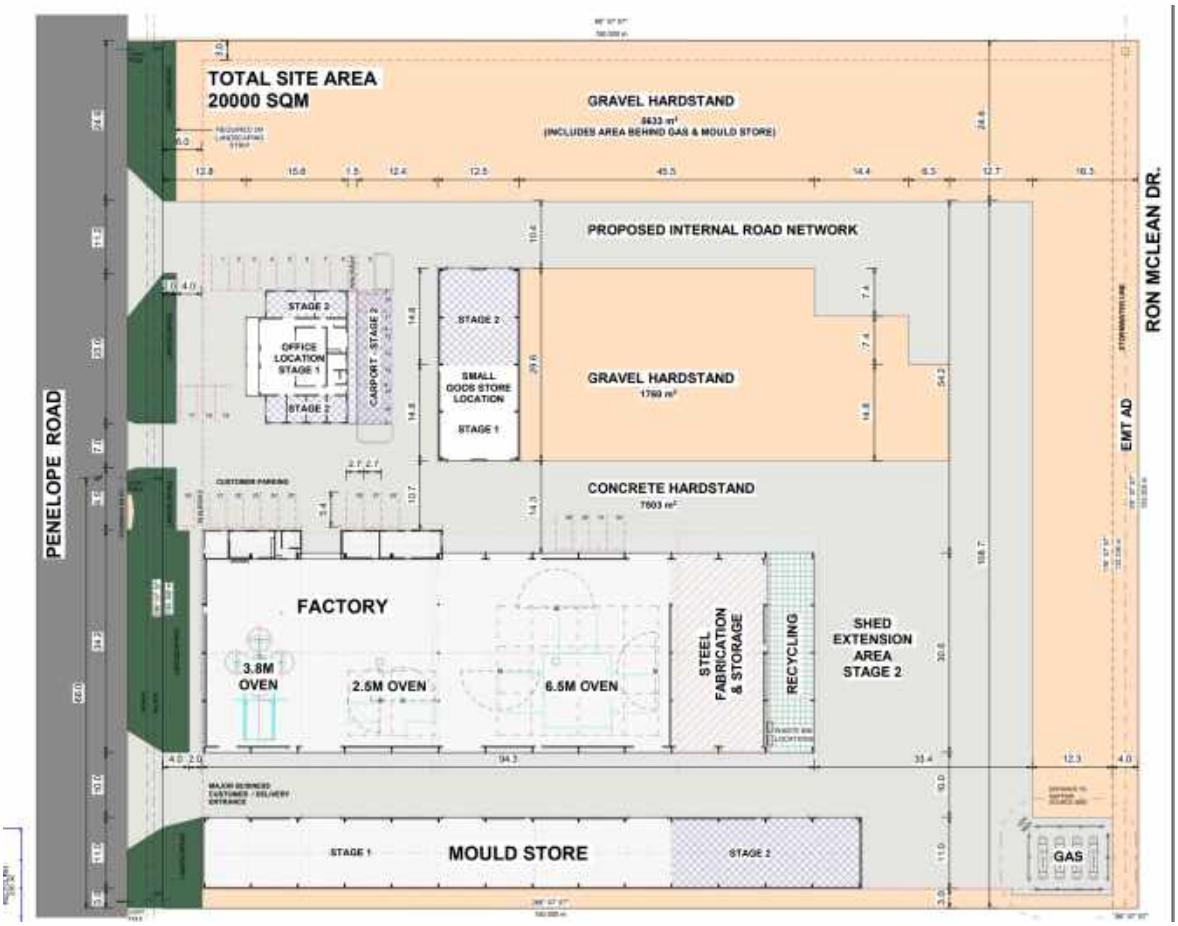


Figure 1 – Development Site Layout (Source: Proposal Plans prepared by GVD Building Design)

The proposed additional factory will allow the Applicant to efficiently service its customers and major infrastructure projects. The project will transform Gough Plastics and the broader Northern Australia plastic manufacturing sector in three key areas:

- new state of the art triple shuttle rotomoulding oven, with three arms;
- shredding and recycling of plastic products over Stages 1 and 2; and
- the purchase of an Enterprise Resource Planning (ERP) System which will assist in streamlining process and improving productivity.

As well as custom moulding and fabricating customer produce, Gough Plastics product range also includes rainwater tanks, storage boxes, undertray water tanks and toolboxes, conveyor belt covers, side guards and trays, water tanks, cartage/ transporter tanks, feed and water troughs and the like.

3.3 Definition of Proposed Uses

The proposed development is defined as a Warehouse and Transport Depot under the development scheme.

A Medium Industry use *means the use of premises for industrial activities that include the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring, treating of products and have one or more of the following attributes:*

(a) potential for noticeable impacts on sensitive land uses due to offsite emissions including aerosol, fume, particle, smoke, odour and noise;
(b) generates high traffic flows in the context of the locality or road network;
(c) generates an elevated demand on local infrastructure network;
(d) potential for noticeable offsite impacts in the event of fire, explosion or toxic release;
(e) onsite controls are required for emissions and dangerous goods risks;
(f) the use is primarily undertaken indoors; and
(g) evening or night activities are undertaken indoors and not outdoors.

3.4 Development Plans

The development proposal is illustrated in the following proposal plan and perspectives prepared by GVD Building Design (refer **Appendix 4**):

- Street View – DA1 21012GP Issue A.
- Site Development Plan – DA2 21012GP Issue A.
- Factory – DA3 21012GP Issue A.
- Factory Elevations – DA4 21012GP Issue A.
- Office Layout and Elevations – DA5 21012GP Issue A.
- Small Goods Layout and Elevations DA6 21012GP Issue A.

The proposed development will be established over two stages consisting of the follow components:

- factory area (2,179.92 m^2), a steel fabrication and storage area (455.94 m^2) and recycling area (220.32 m^2) Stage 1;
- factory extension approximately 1,022 m^2 – Stage 2;
- training office (70.20 m^2) on the northern elevation of the factory;
- lunchroom with a GFA of 51.30 m^2 on the northern elevation of the factory;
- mould store - Stage 1 (795.85 m^2) and Stage 2 (321.03 m^2);
- small goods store Stage 1 (185 m^2) and Stage 2 (185 m^2);
- administration office Stage 1 (162.94 m^2) and Stage 2 (105.76 m^2);
- industrial style buildings, maximum height of 9.9 m;
- administration building, maximum height of 4.8 m;
- concrete hardstand area (7,503 m^2);
- gravel hardstand area (7,393 m^2);
- major business customer/ delivery entrance from Penelope Road;
- off street sale customer entrance from Penelope Road;
- exit for all customers to Penelope Road;
- 32 car parking spaces;
- above ground gas tanks in a bunded area; and
- 8m to 12 m landscaping strip along the Penelope Road frontage either side of the access points to the site.

3.5 Description of Operations

The project will transform Gough Plastics and the broader plastic manufacturing sector in three key areas:

- new state of the art triple shuttle rotomoulding oven, with three arms;
- shredding and recycling of plastic products over Stages 1 and 2; and
- the purchase of an Enterprise Resource Planning (ERP) System which will assist in streamlining process and improving productivity.

As well as custom moulding and fabricating customer produce, Gough Plastics product range also includes rainwater tanks, storage boxes, undertray water tanks and toolboxes, conveyor belt covers, side guards and trays, water tanks, cartage/ transporter tanks, feed and water troughs and the like.

The plastic products are produced through rotational moulding, which is a low pressure process at the start station. The moulds are fixed to rotational arms, the plastic powder is poured into the moulds, once the moulds are sealed the arms rotate in three different dimensions, the arms rotate through an oven, which heats the moulds through the cook circle, the arms then rotate to the cooling station and once cooled the arms rotate back to the start station, where the plastic

products are removed from the moulds. The following link is to a video which clearly illustrates and explains the rotational moulding process - https://www.youtube.com/watch?v=q2xE-VfAjmE.

In terms of the three ovens within in the proposed factory these will vary in size. The ovens burn gas to create heat, and the hot air is pushed out of the building via a chimney. There is no odour as such, just the gas being burnt to create heat, as per above, so very similar to an extra large BBQ. The following link illustrates and provides an explanation around how the proposed ovens will operate - https://stprotomachinery.com/machines/3-sided-shuttle/.

Factory and Mould Store

The proposed factory and the mould store will be located within the southern portion of the site either side of the major suppliers entrance and driveway. The proposed factory will include three ovens for the rotational moulding process, a steel fabrication and storage area and recycling area. There is an area to the east of the factory which that will accommodate the shed extension as part of Stage 2. The plastic moulds will be transferred from the proposed factory to the proposed mould store. There is an ancillary office and a lunchroom with a patio to the north west of the proposed factory.

Figure 2 – Factory and Mould Store (Source: Proposal Plans prepared by GVD Building Design)

Office

The proposed office will be located in the south west portion of the site in between the customer entrance and major customers exit. The proposed office building will be developed over two stages as follows:

- Stage 1 – office 162.94 m^2 and porch 23.98 m^2; and
- Stage 2 – office 52.88 m^2, office B 52.88 m^2 and carport 140.69 m^2.

Figure 3 – Office (Source: Proposal Plans prepared by GVD Building Design)

Small Goods Store

The proposed small goods store will be located to the east of the proposed office. The proposed office building will be developed over two stages as follows:

- Stage 1 – 183.78 m^2; and
- Stage 2 – 183.78 m^2.

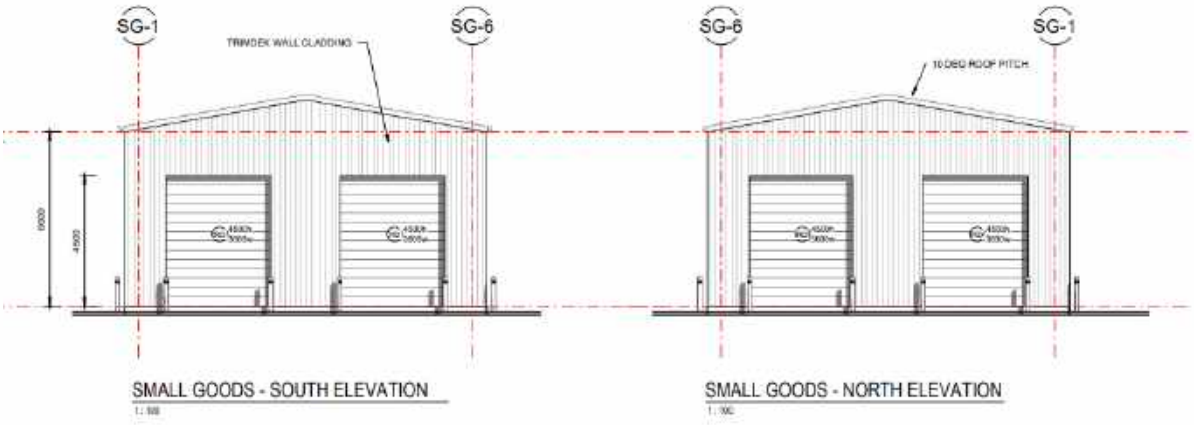


Figure 4 – Small Goods Store (Source: Proposal Plans prepared by GVD Building Design)

Number of Employees

Stage 1

Factory 26 and Office 7.

Stage 2

Factory 33 and Office 10 (inclusive of the numbers for Stage 1).

Hours of Operation

The operating hours of the uses associated with the proposed development will be 7 am to 11 pm, five days a week. Hours of operation are split over two eight hour shifts.

Site Access, Traffic Movement and Car Parking

Site Access

Truck access to the subject site will be via separate entry and exit crossover to and from Penelope Road that will be constructed adjacent to the western boundary of the subject site.

A separate car entry and exit crossover is proposed from and to Penelope Road and will be centrally located on the western boundary of Lot 7 to service office and the car parking spaces.

All points of access are considered safe and efficient and will be designed and constructed in accordance with the relevant standards.

Traffic Movement

The site and layout have been designed so that it can accommodate the anticipated vehicle types in terms of A-triples, A-Doubles and B-Doubles.

For Stage 1 the following traffic movements are anticipated:
Three customers per day so 6 traffic movements (90% of sales are via email) and five trucks per day so potentially 10 traffic movements.

33 employees, so 66 vehicle movements, split over two shifts.

For Stage 2 the following employee traffic movements are anticipated:
Five customers per day so 10 traffic movements (90% of sales are via email), 8 trucks per day so 16 traffic movements.

43 employees, so 86 vehicle movements per day.

The traffic movements for Stage 2 are inclusive of those for Stage 1.

Car Parking

Trucks associated with proposed development will parking on hardstand areas within the site. 32 car parking spaces are proposed, six of which will be dedicated to customers and a carport over spaces 10 to 16 will be constructed as part of Stage 2.

Water and Sewerage Infrastructure

As part of the development of the CPIB Western Precinct, the subject site will have the capability to be connected to Council's reticulated water network and sewerage infrastructure. The services delivered as part of the subdivision are considered adequate to meet the demands of the proposed development.

Stormwater

NCE have undertaken a stormwater quality assessment associated with the Industrial Development located at Lot 7 on Penelope Road, Cleveland Bay Industrial Estate, refer to **Appendix 5**.

The findings of this assessment are summarised below:

- *Local runoff from the buildings and hardstand areas will be conveyed into proposed SPEL-Hydrochannel systems via overland sheet flow and discharge into the outlet pit via underground pipe system.*
- *The stormwater quality assessment is undertaken for both stages Stage 1 and Stage 2 of the development works. Whilst 24 linear meters of proposed SPEL-Hydrochannel provide adequate treatment for Stage 1, when Stage 2 works are completed, an additional 5 linear meters of hydrochannel will need to be installed to provide adequate treatment for the entire development.*
- *TCC's water quality objectives have been met and it has been demonstrated that non-worsening will occur with regards to the total suspended solids, phosphorus, nitrogen and gross pollutants by using SPEL Hydrochannel stormwater treatment system.*
- *Northern Consulting Engineers have been advised by the developer of the Cleveland Bay Industrial Park, that all S/W Quantity mitigation requirements for the Industrial Estate (based upon an impervious coverage of 90%) have been incorporated into the initial subdivisional works, therefore no additional quantity mitigation assessment has been completed as part of this report.*

Landscaping

The subject site is located within an industrial park with larger lots tailored for industrial end users that require a large area and or footprint for their operations and industrial activities. Like with other end users within CBIP, the proposed development will involve the use of heavy vehicles that require adequate swept paths to be able to manoeuvre safely and efficiently on site. As a consequence of the industrial setting and proposed operations, landscaping will be provided along the front boundary either side of the points of access to the site.

3.6 Environmentally Relevant Activity

Manufacturing plastic in the volume proposed is a prescribed Environmentally Relevant Activity (ERA), in accordance with Schedule 2, Part 2, Item 12 of the *Environmental Protection Regulation 2019*:

- ERA 12 (1) Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum).

The above ERA is nominated as a concurrence Environmental Authority (EA) in Schedule 2 of the *Environmental Regulation 2019* and is one that is devolved to Council. As this ERA is devolved to Council, in accordance with Schedule 10, Part 5, Division 4, Table 1 of the *Planning Regulation 2017*, Townsville City Council is nominated as the referral agency for the EA component. The OCG will refer the application to Council as part of the assessment process.

The proposed development against section 580(4)(b) of the *Environmental Protection Act,* as matters the referral agency must assess the development against is provided in Section 8 of this report and refer to **Appendix 15** for the duly completed Development Application Form 1 for an ERA.

3.7 Noise

All manufacturing operations will occur within the proposed factory building. The proposed manufacturing process will generate noise levels that are ordinarily associated with a medium impact industry use. There are existing background noise generating sources in close proximity to the site including other industrial uses and a State-controlled road.

Any EA issued will contain appropriate standard conditions that will detail acceptable noise levels that should not be exceeded.

3.8 Dust

The Applicant has advised that there will be no dust emission from the proposed manufacturing operations and processes, with the manufacturing process occurring within the proposed factory building. The proposed will include an internal sealed concrete driveway, to minimise dust emission from vehicle movements through the site. It is noted that any EA issued will contain appropriate standard conditions that detail acceptable dust levels that should not be exceeded.

3.9 Odour

The Applicant has advised that there will be no odour emission from the proposed manufacturing operations and processes, with the manufacturing process occurring within the proposed factory building. In terms of the ovens, gas is burnt to create heat, as noted above.

3.10 Waste

Any waste from the manufacturing process will be recycling or removed from site by a licenced waste collector.

4.0 RELEVANT LEGISLATION

4.1 Commonwealth Legislation

The application is not subject to assessment against Commonwealth legislation. It is not anticipated that development of this land will trigger assessment against the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC), as it is not anticipated that the development will significantly impact upon a matter of national environmental significance.

4.2 State Development and Public Works Organisation Act 1971

The *State Development and Public Works Organisation Act 1971* (SDPWOA) regulates development within State Development Areas (SDA). Under Section 79 of the SDPWOA, all SDAs require a development scheme which overrides local government and State government planning instruments.

Part 3 of the *State Development and Public Works Organisation (State Development Areas) Regulation 2009* declares the TSDA Development Scheme as being the relevant instrument for the assessment of development within the TSDA.

4.3 Assessment Manager and Planning Scheme

In accordance with the provisions of the TSDA Development Scheme, the proposed development requires approval for a Material Change of Use – Transport Depot, Service Station (Unmanned Diesel Service Station, Fuel Storage Areas, Low Impact Industry and Two Warehouses. The Assessment Manager for this this application is the Coordinator-General.

4.4 Potential Referral Agencies

Pursuant to Schedule 2, Part 2.1, Item 4 of the TSDA Development Scheme, the Coordinator-General will identify and nominate the referral agencies relevant to the application following lodgement.

As the development application involves a devolved ERA, we would expect Coordinator-General to identify Townsville City Council (Council) as a referral agency, given Council would be involved in such application if it were assessable under the *Planning Act 2016*, and will be actively involved in the future development of the land. For the purposes of this development application, we have included an assessment of the relevant planning scheme assessment benchmarks and State Development Assessment Provisions (SDAP) modules as though the application were assessed under the *Planning Act 2016.* Assessment against these criteria is provided as the assessment benchmarks of the *TSDA Development Scheme 2019* may not cover all aspects that the referral agencies would consider in their assessment of the proposal.

4.5 State Planning Policies

The subject site is identified as being located within the following State Planning Policy (SPP) mapping layers (refer **Appendix 6**):

- Development and construction – State development area;
- Natural hazards risk and resilience – Flood hazard area – Level 1;
- Natural hazards risk and resilience – Flood hazard – Local government Flood Mapping Area;
- Transport Infrastructure – State controlled Road;
- Strategic airports and aviation facilities – Wildlife hazard buffer zone;
- Strategic airports and aviation facilities – Height restriction zone 90 m;
- Strategic ports – Priority ports; and
- Priority ports – Townsville priority port precincts.

It is considered that an assessment against the SPP relevant to the aspects identified on the subject site is not required. In particular, all aspects of the SPP are already addresses in the relevant assessment criteria for the TSDA Development Scheme, relevant SDAP modules and appropriately integrated into the *Townsville City Plan 2014*, with all of the relevant matters from these instruments being assessed in the development application.

4.6 North Queensland Regional Plan

The North Queensland Regional Plan (Regional Plan) was implemented in March 2020, with the intent of capitalising on the growth, prosperity and diversity of the region by supporting a vibrant economy, generating jobs, improving business investment, protecting our natural environment, and encouraging tourism and lifestyle opportunities over the next 25 years. The vision of the Regional Plan will be realised through a series of goals and the proposed development is considered to align with the four regional goals.

The proposed development is considered to be consistent with the regional goals, outcomes and policies of the Regional Plan, in particular in supporting future economic development and prosperity for the region by supporting key supply chains and the Port of Townsville, whilst managing key environmental values and water quality outputs within the site. On this basis, no detailed assessment has been undertaken against the Regional Plan in this development application.

The subject site is not located within a Priority Agriculture Area and is within the Townsville Urban Area.

4.7 Sustainable Ports Development Act 2015

The TSDA Development Scheme is consistent with the masterplan for the priority Port of Townsville 2019 and the Port overlay for the priority Port of Townsville 2020 under the *Sustainable Ports Development Act 2015*. On this basis, no further assessment has been undertaken in relation to these planning instruments or legislation.

4.8 Environmental Protection Regulation 2019

In accordance with the *Environmental Protection Regulation 2019*, Section 21 (2) nominates the following as benchmarks for a material change of use for a concurrence ERA devolved to Council:

- *an environmental objective assessment against the environmental objectives and performance outcomes stated in schedule 8, part 3, division 2; and*
- *the standard criteria.*

5.0 TSDA DEVELOPMENT SCHEME ASSESSMENT

5.1 Introduction

This section of the report provides an assessment against the relevant provisions of the TSDA Development Scheme 2019. The subject land is designated within the Medium Impact Industry Precinct of the TSDA.

An assessment against the following sections of the scheme has been provided:

- Strategic Vision and Overall Objectives of the TSDA Development Scheme;
- Preferred Development Intent for the Medium Impact Industry Precinct; and
- SDA Wide Assessment Criteria.

The subject site is entirely contained within the Medium Impact Industry Precinct of the TSDA Development Scheme. As such, it is considered that the proposed development aligns with the precinct designations nominated in the TSDA Development Scheme and the intent for Cleveland Bay Industrial Park. Assessment against the outcomes and preferred development intent of the Medium Impact Industry Precinct has been undertaken.

5.2 TSDA Vision and Overall Objectives

Section 2.2 and 2.3 of the TSDA Development Scheme establishes the Strategic Vision and Overall Objectives for development in the TSDA.

The vision for the TSDA is to:

(a) be the preferred location in North Queensland for the establishment of industrial development of regional. State and national significance, including supporting infrastructure, which is reliant on direct access to one or more of the Port of Townsville, national freight rail and major road networks;

(b) ensure development of the Townsville SDA occurs in a logical sequence and is equally focused on the short- and long-term economic benefits to the region and the State;

(c) facilitate the continued operation and future expansion of existing industrial operations and regionally significant extractive industries;

(d) facilitate a coordinated approach to the delivery of infrastructure and maximise the efficient use of existing and future port, road, rail and ancillary infrastructure;

(e) recognise and protect environmental, cultural heritage and community values; and

(f) contribute to maintaining the outstanding universal value of the Great Barrier Reef World Heritage Area.

The strategic vision is supported by the overall objectives for development and preferred development intents of development precincts within the TSDA. The overall objectives for development within the TSDA, include:

(a) capitalises on the Townsville SDA's strategic location, supports the role and function of the Port of Townsville and stimulates economic growth;

(b) ensures lots are appropriately sized to accommodate preferred development;

(c) ensures the integrity and functionality of the Townsville SDA is maintained and protected from incompatible development;

(d) avoids or minimises adverse impacts on sensitive land uses;

(e) ensure design, construction and operation is consistent with current best practice;

(f) avoids adverse impacts on environmental, cultural heritage and community values, or minimises, mitigates or offsets impacts where they cannot be avoided;

(g) uses water and energy efficiently and minimises potential impacts on water quality and climate change;

(h) manages impacts of air quality on the capacity of the Townsville airshed;

(i) uses land and infrastructure efficiently and does not compromise or adversely impact on infrastructure, infrastructure corridors and future development opportunities;

(j) is adequately serviced by infrastructure, generally in accordance with established infrastructure planning;

(k) manages the risks associated with natural hazards, to protect people and property;

(l) achieves appropriate levels of flood immunity consistent with current best practice; and

(m) ensures no net worsening of flood levels on land for existing and potential urban uses and on environmental values.

The proposed development is considered to be consistent with the strategic vision and overall objectives. The proposed development will establish an industrial use within the subject site, which is consistent with the intent of the Medium Impact Industry Precinct and the wider CBIP development. Establishing a Medium Impact Industry Use is consistent with the vision and development intent for the TSDA and will contribute in evolving the area into a thriving industrial precinct of local, regional and national significance, and with strong connection and accessibility to key transport infrastructure and supply chains.

It should be noted that the proposed development is consistent with the TSDA Vision and TSDA Overall Outcomes, in that:

- the proposed development will contribute to the broadening and diversification of economic opportunities within the North Queensland Region by providing a transport depot and transport and aviation support uses in a strategic location;
- the proposal involves establishing an industrial use in the Medium Impact Industry Precinct within the recently development CBIP Western Precinct;

- the subject site has been chosen based on its size, close proximity to the Bruce Highway and Townsville Port Access Road and access to services such as the highway and Council reticulated water and sewer infrastructure;
- the subject site is not located in close proximity to sensitive receptors;
- the Applicant has more than 30 years' experience within the plastic manufacturing industry with existing facilities on Townsville, Mount Isa ad Rockhampton; and
- the site layout has utilised the land to accommodate purpose built structures and hardstand areas, whilst ensuring appropriate stormwater quality management measures will ensure any stormwater runoff from the site will meet the relevant stormwater quality objectives.

5.3 Medium Impact Industry Precinct

As detailed within Section 2.4.3 of the TSDA Development Scheme, the preferred development intent for the Medium Impact Industry Precinct is as follows:

(a) this precinct is to accommodate medium impact industrial development that:
  (i) includes the manufacturing and processing of products that are associated with identifiable and measurable impacts;
  (ii) requires buffers from sensitive land uses;
  (iii) is reliant on and maximises the use of key transport and supply chain infrastructure;
(b) transport, freight and logistics industries are accommodated in locations with key rail and road linkages, including the section of the precinct adjoining the existing intermodal facility south of Marrett Street;
(c) the scale, intensity and bulk of industrial development is appropriate for the location having regard to its proximity to adjacent sensitive land uses, e.g. the residential areas of Cluden and Wulguru;
(d) the expansion of existing uses within the precinct will be supported where appropriate; and
(e) only one intersection from the Townsville Port Access Road to this precinct will be supported.

Defined uses that support the preferred development intent are:
(i) freight terminal;
(ii) infrastructure facility;
(iii) medium impact industry;
(iv) research and technology industry;
(v) transport depot;
(vi) utility installation; and
(vii) warehouse.

The proposed development is considered to be compliant with preferred land use intent of the Medium Impact Industry Precinct. Particularly, the proposed development:

- involves establishing a Medium Impact Industry Use on the subject site, which is considered to be consistent with the preferred development intent within the Medium Impact Industry Precinct of the TSDA;
- is heavily reliant on being located in close proximity to key transport and supply chain infrastructure (i.e. port, road and rail network) for ease of access to the site.
- the subject site is strategically located in close proximity to existing transport network and is able to accommodate heavy vehicle access (e.g. triple road trains, etc.), that the proposed end users can readily service;
- has appropriate separation distances from closest sensitive land uses. Noting the subject site is appropriately buffered from sensitive land uses. Particularly the residential area and caravan park to the west, which are buffered by the balance allotment and the riparian corridor of Stuart Creek, thus minimising the potential for adverse impacts to sensitive land uses. The proposed development is considered compatible with the other existing and future end users within CBIP; and
- will not require an additional access point onto TPAR and it will utilise the Penelope Road to the west of the subject site and TPAR intersection constructed to facilitate the wider CPIB industrial estate.

5.4 SDA Wide Assessment Criteria

Section 2.5 of the TSDA Development Scheme provides assessment criteria which supports the strategic vision, overall objectives and the preferred land use intent for the precincts.

A thorough response to this assessment criteria is provided in **Appendix 7**. Overall, it is considered that the proposed development is compliant with the outcomes sought by the SDA Wide Assessment Criteria.

6.0 STATE DEVELOPMENT ASSESSMENT PROVISIONS (SDAP)

6.1 Introduction

The SDAP provides the assessment framework to address each of the jurisdictions identified within Schedule 10 of the *Planning Regulation 2017*. The SDAP comprises State Codes that correlate to each of the assessment jurisdictions detailed within the regulation.

The assessment criteria for the TSDA Development Scheme indicates that the new development is to demonstrate consistency with relevant legislation. It is therefore considered relevant to assess the proposed development against the SDAP modules that would be triggered if the application were lodged under the provision of the *Planning Act 2016*. Whilst the proposed development would not trigger assessment under the provisions of the *Planning Act 2016*, an assessment against State code 1: Development in a State-controlled road environment has been included following advice provided by the Coordinator-General.

Assessment against State Code 1 is provided below.

6.2 State Code 1: Development in a State-Controlled Road Environment

The proposed development requires assessment against State code 1: Development in a State-controlled road environment.

The purpose of this code is to *protect State-controlled roads, future State-controlled roads and other infrastructure in State-controlled roads from adverse impacts of development and the safety of people using, and living and working near, State-controlled roads.*

Specifically, this code seeks to ensure:

(1) development does not create a safety hazard for users of a State-controlled road, by increasing the likelihood or frequency of fatality or serious injury;

(2) development does not compromise the structural integrity of State-controlled roads, road transport infrastructure or road works;

(3) development does not result in a worsening of the physical condition or operating performance of state-controlled roads and the surrounding road network;

(4) development does not compromise the State's ability to construct State-controlled roads and future State-controlled roads, or significantly increase the cost to construct state-controlled roads and future State-controlled roads;

(5) development does not compromise the state's ability to maintain and operate State-controlled roads, or significantly increase the cost to maintain and operate State-controlled roads;

(6) development does not compromise the structural integrity of public passenger transport infrastructure located on State-controlled roads or compromise the operating performance of public passenger transport services on State-controlled roads; and

(7) the community is protected from significant adverse impacts resulting from environmental emissions generated by vehicles using State-controlled roads.

Response

The proposed development is considered to comply with the purpose sought by this State code. In particular, the subject site will be accessed via Penelope Road and not Ron Mclean Drive, therefore it is not anticipated that the proposed development will compromise the structural integrity of the State-controlled infrastructure. Furthermore, the proposed development aligns with approval associated with the CPIB Western Precinct subdivision and associated accepted reporting.

Performance Outcomes and Acceptable Outcomes

The proposed development achieves compliance with the applicable performance outcomes and acceptable outcomes of the State code, where relevant to the type of development. Further assessment against the applicable benchmarks can be found at **Appendix 8**.

7.0 PLANNING INSTRUMENTS

7.1 Introduction

This section of the report provides an assessment of the proposed development against the applicable benchmarks of the *Townsville City Plan 2014* (the planning scheme) given Townsville City Council is anticipated to be a Referral Agency for the application and will provide for a more streamlined assessment for Council.

In addition, addressing the relevant assessment benchmarks of the City Plan 2014 can be taken as an assessment against the SPP, given they have been appropriately integrated into the planning scheme. Note, an assessment against the Medium Impact Industry Code has been included following advice provided by the Coordinator-General.

Based on the above, the proposed development has been assessed the following City Plan 2014 codes:

- Special Purpose Zone Code;
- Medium Impact Industry Zone Code (refer **Appendix 9**);
- Healthy Waters Code (refer **Appendix 10**);
- Landscape Code (refer **Appendix 11**);
- Traffic Impact, Access and Parking Code (refer **Appendix 12**);
- Works Code (refer **Appendix 13**); and
- Flood Hazard Overlay Code (refer **Appendix 14**).

Section 7 of this report provides an assessment against the overall outcomes of the relevant planning scheme codes.

7.2 Special Purpose Zone Code

The subject land is designated in the Special Purpose Zone of the City Plan 2014 and is nominated for assessment against the Special Purpose Zone Code.

The purpose of the Special Purpose Zone is *to facilitate industrial development that is of regional, State and national significance*.

The purpose of the code will be achieved through the following overall outcomes:

(a) the Townsville State Development Area accommodates a wide range of large-scale industry uses, particularly those which support or have a nexus with the Port of Townsville and minerals processing;

(b) other non-industrial uses are those which are ancillary to or directly support the industrial functions of the area, and are limited in extent;

(c) *the intrusion of incompatible uses, or uses which may be more appropriately accommodated in other zones, is avoided to protect the availability of land for industrial purposes and the viability and efficient operation of existing and future industry uses;*

(d) *the impacts of development are managed to ensure public health and safety;*

(e) *development avoids significant adversely effects on water quality and the natural environment;*

(f) *development does not adversely affect the safe and efficient operation of Department of Defence landholdings;*

(g) *development is safe and legible, and designed to establish safe and efficient movement systems;*

(h) *lot sizes provide for a range of large format industrial uses and discourage take up of land for smaller activities better suited to other zones;*

(i) *opportunities for energy efficiency through groupings and relationships between industries accommodated where possible; and*

(j) *development is adequately serviced by infrastructure and maximises the efficient use of existing and planned infrastructure.*

Response

It is considered the proposed development is consistent with overall outcomes of the Special Purpose Zone Code. Particularly:

- the proposed development is appropriately located within the CBIP Western Precinct industrial estate which, has been designed to accommodate medium impact industrial uses such, along with warehouses and transport depots;
- the purpose of the development is to establish a plastic product manufacturing factory over the subject site. The proposed development will be appropriately situated within the CBIP estate and is consistent with the intent of the TSDA Medium Impact Industry Precinct and the Development Scheme;
- the proposed development is able to be appropriately serviced by essential infrastructure established to service the new industrial estate through the subdivision development;
- the proposed development has been designed to ensure stormwater generated on site is appropriately treated prior to leaving the site and entering the wider stormwater network associated with the CBIP. As detailed in the Stormwater Quality Management Plan prepared by NCE, the proposed onsite stormwater management regime is designed to ensure that there is a net improvement in stormwater quality, in line with the requirements of the SPP water quality objectives (refer **Appendix 5**); and
- the proposed development is sufficiently separated from Department of Defence landholdings and is unlikely to cause adverse impacts to Department of Defence operations.

7.3 Medium Impact Industry Zone Code

Whilst the subject site is located within the Special Purpose Zone, given the nature of the proposed development and advice provided by the Coordinator-General, the proposal has been assessed against the Medium Impact Industry Zone Code.

The particular purpose of this code is to:

a) *facilitate the safe and efficient use of land for a range of industrial activities; and*
b) *ensure development does not detract from the function and viability of centres, and minimises impacts on the amenity of nearby sensitive uses.*

The purposes of the code will be achieved through a range of outcomes including:

a) *the zone accommodates a wide range of industrial uses that are likely to have some potential for off-site impacts, including manufacturing, transport, storage, outdoor sales and other uses which require larger sites in locations separated from sensitive land uses;*
b) *other non-industrial uses are those which are ancillary to or directly support the industrial functions of the area, and are limited in extent;*
c) *the zone does not accommodate uses which are primarily oriented to retail sales and which are more appropriately located in centres, such as shops, shopping centres, showrooms, or retail based hardware supplies;*
d) *the intrusion of incompatible uses, or uses which may be more appropriately accommodated in other zones, is avoided to protect the availability of land for industrial purposes and the viability and efficient operation of existing and future industry uses;*
e) *the impacts of development are managed to ensure public health and safety and achieve acceptable levels of amenity for nearby sensitive land uses;*
f) *development avoids significant adverse effects on water quality and the natural environment;*
g) *development does not adversely affect the safe and efficient operation of nearby Department of Defence landholdings;*
h) *development is safe and legible, and designed to establish safe and efficient movement systems;*
i) *lot sizes provide for a range of large format industrial uses and discourage take up of land for smaller scale activities better suited to the Low impact industry zone; and*
j) *development makes a positive contribution to the public domain, particularly along major roads.*

Response

The proposal is considered consistent with the purpose and overall outcomes of the Medium Impact Industry Zone Code. Particularly:

- the purpose of the development is to establish a plastic product manufacturing factory to build on existing operations in Townsville and to service the region. The proposed

development will be appropriately situated within CBIP (Western Precinct) industrial estate and is consistent with the intent of the TSDA Medium Impact Industry Precinct;

- the subject site is of a suitable size to comfortably accommodate the proposed use and is appropriately separated from the nearest sensitive receptors;
- the proposal has been designed to ensure the development will avoid significant adverse effects on water quality and the natural environment; and
- the site layout has been designed to accommodate safe and efficient vehicle movement across the subject site.

Refer to **Appendix 9** for further assessment against the Medium Impact Industry Zone Code.

7.4 Healthy Waters Code

The proposed development is nominated for assessment against the Healthy Waters Code.

The purpose of the Healthy Waters Code is *to ensure development manages stormwater and wastewater as part of the integrated total water cycle and in ways that help protect the environmental values specified in the Environmental Protection (Water) Policy 2009*.

The purpose of the code will be achieved through the following overall outcomes:

(a) environmental values of receiving water are protected from adverse development impacts arising from altered stormwater quality and altered stormwater flow;

(b) environmental values of receiving water are protected from waste water impacts;

(c) environmental values of receiving water are protected from development impacts arising from the creation or expansion of non-tidal man-made waterways such as urban lakes;

(d) potential adverse impacts on the natural and built environment, including infrastructure and human health as a result of acid sulfate soils are avoided;

(e) public health and safety are protected and damage or nuisance caused by stormwater is avoided;

(f) stormwater is designed to maintain or recreate natural hydrological processes and minimise run-off;

(g) whole of lifecycle costs of infrastructure are minimised; and

(h) well-designed developments are responsive to receiving water quality.

Response

The proposed development is considered consistent with the purpose and overall outcomes of the Healthy Waters Code.

The proposed stormwater arrangement will direct treated stormwater from the subject site into the wider stormwater arrangement provided by the wider CBIP Western Precinct development.

This involves discharge points to Penelope Road to the east and the stormwater easement (comprising of manmade wetlands) located to the west.

The SBSMP prepared by NCE confirms the treatment measures required to be installed for various aspects of the proposed development to ensure it will achieve the State Planning Policy (SPP) Stormwater Management Design Objectives (refer **Appendix 5**).

A detailed assessment against the applicable benchmarks of the Healthy Waters Code is provided in **Appendix 10**.

7.5 Landscape Code

The proposed development is nominated for assessment against the Landscape Code. The purpose of the Landscape Code is *to ensure landscaping in both the private and public domains is designed and constructed to a high standard, provides a strong contribution to the city image, is responsive to the local character, site and climatic conditions and remains fit for purpose over the long-term.*

The purpose of the code will be achieved by the following overall outcomes:

(a) a high quality streetscape and on-site landscape enhances the character of the city;

(b) landscape design is used to integrate the natural and built form elements of the site and the locality;

(c) landscape elements create a legible and attractive street frontage, and enhance the continuity of the streetscape;

(d) screening is used to soften built form, mitigate adverse aesthetic impacts and provide privacy and character;

(e) plant species and landscaping materials are suited to the Dry Tropics' cyclone prone climate;

(f) plant species, landscape materials and surface treatments are suited to their intended function and user requirements;

(g) plant species, landscaping materials and surface treatments are designed to remain attractive, fit for purpose and be cost effective to maintain over the long-term;

(h) landscape design facilitates an accessible, safe and comfortable environment for all users; and

(i) significant on-site vegetation is retained, protected and integrated into the site design wherever practicable.

Response

The proposal is considered consistent with the purpose and overall outcomes of the Landscape Code. Particularly:

- the proposed development incorporates an 8 m to 12 m landscaping strip along the frontage of the site, either side of the proposed crossovers, which will assist in softening the hard landscape and built form and contribute to the streetscape;
- landscaping will be provided internal to the subject site in the form of garden beds and turf;
- landscaping is anticipated to incorporate species suited to the local area; and
- landscaping is anticipated to incorporate species that are suited to their intended function and use of the site.

Further details on the proposed landscaping can be provided as part of an operational work development application. A detailed assessment against the applicable benchmarks of the Landscaping Code is provided in **Appendix 11**.

7.6 Traffic Impact, Access and Parking Code

The proposed development is nominated for assessment against the provisions of the Transport Impact, Access and Parking Code.

The purpose of the Transport Impact, Access and Parking Code is *to ensure appropriate provision for transport and end of trip facilities, and to facilitate, as far as practicable, an environmentally sustainable transport network.*

The purpose of the code will be achieved through the following overall outcomes:

(a) the function, safety and efficiency of the transport network are optimised;

(b) pedestrians (including people with a disability) and cyclists are provided with a high level of accessibility, safety, amenity and convenience within a development site and on-site facilities are integrated with external walking and cyclist networks and public transport nodes;

(c) the use of public transport is facilitated wherever appropriate;

(d) access, parking, servicing and associated manoeuvring areas are designed to be safe, functional and meet the reasonable demands generated by the development;

(e) access, parking, servicing and associated manoeuvring areas do not detract from streetscape character, and are designed to discourage crime and antisocial behaviour; and

(f) adverse impacts on the environment and the amenity of the locality are avoided.

Response

The proposal is considered consistent with the purpose and overall outcomes of the Transport Impact, Access and Parking Code. Particularly:

- the proposed development does not adversely impact on the surrounding road network and is consistent with the anticipated traffic included in the Traffic Impact Assessment undertaken to support the wider CBIP development;
- the proposed development will not adversely impact on the public transport network;
- the proposed internal layout has been designed to accommodate safe and efficient onsite swept paths to accommodate for heavy vehicles anticipated to be utilised on site. Particularly, the design ensures all vehicles intended to use the site can enter and exit the site in forward gear;
- the proposed development is designed to provide adequate sight lines for vehicles and pedestrians at ingress and egress location and throughout the site;
- the public transport network and infrastructure is not adversely impacted by the development;
- adequate parking spaces for trucks and cars will be provided on site with 32 car parking spaces provided throughout the two stages of the proposed development; and
- appropriate landscaping will be provided to ensure the streetscape amenity and aesthetic quality of the site is retained.

A detailed assessment against the applicable benchmarks of the Transport Impact, Access and Parking Code is provided in **Appendix 12**.

7.7 Works Code

The proposed development is nominated for assessment against the Works Code.

The purpose of the Works Code is *to ensure development is provided with a level of infrastructure which maintains or enhances community health, safety and amenity and which avoids or minimises impacts on the natural environment.*

The purpose of the code will be achieved through the following overall outcomes:

(a) premises are provided with a level of service which is appropriate to the intended character and function of the zone;

(b) risk to life and property is avoided;

(c) development does not detract from environmental values, including the quality of receiving waters;

(d) development does not detract from the desired character and amenity of the locality;

(e) the integrity and quality of existing infrastructure is maintained;

(f) access, parking, streets and pedestrian and cycle paths are provided to standards that ensure safe, convenient and efficient operation of movement networks;

(g) development facilitates an efficient provision of infrastructure and use of resources; and

(h) whole of life cycle costs for infrastructure are minimised.

Response

The proposal is considered consistent with the purpose and overall outcomes of the Works Code. Particularly:

- the proposed development will connect to the future Council water and sewer network to be constructed as part of the CBIP development which has been designed to have sufficient capacity to accommodate the proposed of the industrial subdivision;
- new site accesses will be constructed in accordance with relevant Council standards;
- the proposed stormwater management regime has been designed to ensure that the quality of receiving waters maintains the environmental values of receiving waters in accordance with relevant standards. A SBSMP prepared by NCE (refer **Appendix 5**);
- the proposed will be connected to the electricity and telecommunications network;
- the site layout has been designed to support the vehicle movements in terms of access, internal manoeuvring areas and parking areas for future development traffic anticipated over the site; and
- given the proposed development is located within an industrial subdivision, it is not considered necessary or appropriate to provide specific pedestrian or cyclist facilities.

Further details of infrastructure servicing arrangements will be provided as part of future operational work application, as required. A detailed assessment against the applicable benchmarks of the Works Code is provided in **Appendix 13**.

7.8 Flood Hazard Overlay Code

The proposed development is in an area identified as having low and medium flood hazard on OM-06.1 of the planning scheme and is therefore nominated for assessment against the Flood Hazard Overlay Code.

The purpose of the Flood Hazard Overlay Code is to ensure that development in the Flood Hazard Overlay Zone is planned, designed, constructed and operated to:

(a) manage development outcomes in flood hazard areas so that risk to life, property, community, economic activity and the environment during future flood events is minimised; and

(b) ensure that development does not increase the potential for flood damage on-site or to other property.

The purpose of the code will be achieved through the following overall outcomes:

(a) development is compatible with the nature of the flood hazard except where there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal;

(b) where development is not compatible with the nature of the flood hazard and there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal:

(c) development minimises as far as practicable the adverse impacts from the hazard; and

(d) does not result in unacceptable risk to people or property;

(e) wherever practicable, facilities with a role in emergency management and vulnerable community services are located and designed to function effectively during and immediately after flood hazard event;

(f) development maintains the safety of people and minimises the potential damage to property from flood events on the development site; and

(g) development does not result in adverse impacts on people's safety, the environment or the capacity to use land within the floodplain.

Response

The proposed development is consistent with the purpose and intent of the Flood Hazard Overlay Code. Particularly, the allotment will be raised above the 1% AEP flood level to achieve flood immunity for industrial uses on the land, as part of the wider CBIP development approval requirements. This will ensure people and property will be protected in a potential flood event.

Refer to **Appendix 14** for further assessment against the Flood Hazard Overlay Code.

8.0 ENVIRONMENTAL PROTECTION REGULATION 2019

This section of the report provides an assessment of the proposed development against the applicable benchmarks of the *Environmental Protection Regulation 2019*, as the proposed development involves ERA 12 (1) which is a devolved ERA to Council. The completed Development Application Form 1 for an ERA is within **Appendix 15**.

8.1 Operational Assessment

Schedule 8 Part 3, Division 1 contains the environmental objectives and performance benchmarks the development needs to be assessed, which include the following:

- Air;
- Water;
- Wetland;
- Noise;
- Waste; and
- Land.

Air

Environmental Objective

The activity will be operated in a way that protects the environmental values of air.

Performance Outcomes

1 There is no discharge to air of contaminants that may cause an adverse effect on the environment from the operation of the activity.

2 All of the following—

(a) fugitive emissions of contaminants from storage, handling and processing of materials and transporting materials within the site are prevented or minimised;

(b) contingency measures will prevent or minimise adverse effects on the environment from unplanned emissions and shut down and start up emissions of contaminants to air;

(c) releases of contaminants to the atmosphere for dispersion will be managed to prevent or minimise adverse effects on environmental values.

Response

The proposed development will be established on lands that are within the Medium Impact Industry Precinct of the TSDA. The proposed development will not result in the discharge of air contaminants that will cause an adverse impact on the environment. The Applicant has a duty of care to manage operations on site so not to cause a nuisance on environmental values.

Water

Environmental Objective

The activity will be operated in a way that protects environmental values of waters.

Performance Outcomes

1 There is no actual or potential discharge to waters of contaminants that may cause an adverse effect on an environmental value from the operation of the activity.

2 All of the following—

(a) the storage and handling of contaminants will include effective means of secondary containment to prevent or minimise releases to the environment from spillage or leaks;

(b) contingency measures will prevent or minimise adverse effects on the environment due to unplanned releases or discharges of contaminants to water;

(c) the activity will be managed so that stormwater contaminated by the activity that may cause an adverse effect on an environmental value will not leave the site without prior treatment;

d) the disturbance of any acid sulfate soil, or potential acid sulfate soil, will be managed to prevent or minimise adverse effects on environmental values;

(e) acid producing rock will be managed to ensure that the production and release of acidic waste is prevented or minimised, including impacts during operation and after the environmental authority has been surrendered;

(f) any discharge to water or a watercourse or wetland will be managed so that there will be no adverse effects due to the altering of existing flow regimes for water or a watercourse or wetland;

(g) for a petroleum activity, the activity will be managed in a way that is consistent with the coal seam gas water management policy, including the prioritisation hierarchy for managing and using coal seam gas water and the prioritisation hierarchy for managing saline waste;

(h) the activity will be managed so that adverse effects on environmental values are prevented or minimised.

Response

The proposed development will be established on lands that are within the Medium Impact Industry Precinct of the TSDA. The site is not within close proximity to areas comprising environmental values in terms of water and given the manufacturing operations will occur within the factory building, it is not considered that the proposed development will have impacts beyond the site.

Wetlands

Environmental Objective

The activity will be operated in a way that protects the environmental values of groundwater and any associated surface ecological systems.

Performance Outcomes

1 Both of the following apply—

(a) there will be no direct or indirect release of contaminants to groundwater from the operation of the activity;

(b) there will be no actual or potential adverse effect on groundwater from the operation of the activity.

2 The activity will be managed to prevent or minimise adverse effects on groundwater or any associated surface ecological systems. Note— Some activities involving direct releases to groundwater are prohibited under section 41 of this regulation.

Response

There are no wetlands/ waterways of State interest, within the immediate locality of the site, further, refer to the response provided for environmental values of water.

Noise

Environmental Objective

The activity will be operated in a way that protects the environmental values of the acoustic environment.

Performance Outcomes

1 Sound from the activity is not audible at a sensitive receptor.

2 The release of sound to the environment from the activity is managed so that adverse effects on environmental values, including health and wellbeing and sensitive ecosystems, are prevented or minimised.

Response

The manufacturing process will occur within the manufacturing factory and from a process and operations perspective there will be no adverse impact on the environmental values of the acoustic environment. Further the Applicant has a duty of care under the *Environmental Protection Act 1994* and *Environmental Protection (Noise) Policy 2019 and,* to ensure noise levels associated with onsite activities and operations do not exceed the permitted levels.

Waste

Environmental Objective

Any waste generated, transported, or received as part of carrying out the activity is managed in a way that protects all environmental values.

Performance Outcomes

1 Both of the following apply—

(a) waste generated, transported or received is managed in accordance with the waste and resource management hierarchy under the Waste Reduction and Recycling Act 2011;

(b) if waste is disposed of, it is disposed of in a way that prevents or minimises adverse effects on environmental values.

Response

General day to day waste will be recycled or form normal waste.

Any packing waste material associated with plastic power and products being received to the site, will be appropriately managed in accordance with the waste and resource management hierarchy under the *Waste Reduction and Recycling Act 2011*. Any waste will be disposed of in a way that prevents or minimises adverse effects on environmental values.

Land

Environmental Objective

The activity is operated in a way that protects the environmental values of land, including soils, subsoils, landforms and associated flora and fauna.

Performance Outcomes

1 There is no actual or potential disturbance or adverse effect to the environmental values of land as part of carrying out the activity.

2 All of the following apply—

(a) activities that disturb land, soils, subsoils, landforms and associated flora and fauna will be managed in a way that prevents or minimises adverse effects on the environmental values of land;

b) areas disturbed will be rehabilitated or restored to achieve sites—

(i) that are safe and stable; and

(ii) where no environmental harm is being caused by anything on or in the land; and

(iii) that are able to sustain an appropriate land use after rehabilitation or restoration;

(c) the activity will be managed to prevent or minimise adverse effects on the environmental values of land due to unplanned releases or discharges, including spills and leaks of contaminants; and

(d) the application of water or waste to the land is sustainable and is managed to prevent or minimise adverse effects on the composition or structure of soils and subsoils.

Response

The site is located within the Medium Impact Industry Precinct and there are no environmental values of land, landforms and associated flora and fauna associated with the subject site. The manufacturing of the plastic products will be undertaken in the proposed factory building and all associated materials will be appropriately stored on site so not to impact on the environmental values of land.

8.2 Standard Criteria

The standard criteria, are a series of considerations defined in Schedule 4 Dictionary of the *Environmental Protection Act 2008*. These criteria must be considered under Section 176 of the *Environmental Protection Act 2008* as part of deciding the Environmental Authority application.

The standard criteria are outlined below:

(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment:

(i) the precautionary principle;

(ii) intergenerational equity; and

(iii) conservation of biological diversity and ecological integrity.

Precautionary Principle

The proposed development is for a proposed Plastic Product Manufacturing Factory, with the manufacturing occurring within the factory. The proposed use does not pose threats of serious or irreversible environmental damage. The proposed use involves the manufacturing of plastic product within the factory, which will house three different sized ovens. Plastic products will be appropriately stored on site.

Intergenerational Equity

It is not considered that approving the application will adversely impact upon future generations, as the proposed development is for a plastic product manufacturing factory that will not cause irreversible environmental harm, with manufacturing occurring within the factory building.

Conservation or Biological Diversity and Ecological Integrity

It is not considered that approving the application will adversely impact upon conservation or biological diversity and ecological integrity, as the proposed development is for a plastic product manufacturing factory that will not cause irreversible environmental harm, with manufacturing occurring within the factory building.

9.0 CONCLUSIONS AND RECOMMENDATIONS

This proposal details a development application seeking a Development Permit for Material Change of Use – Medium Impact Industry – Plastic Product Manufacturing Factory and Environmentally Relevant Activity 12 (1) Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum), on land described as Lot 7 on SP338023 and located at 40 Penelope Road, Stuart (Cleveland Bay Industrial Park Western Precinct).

The proposed development is consistent with the strategic and preferred intent of the locality and results in an appropriate development outcome for the site.

In summary, the proposed development is recommended for approval based on the following reasons:

- the proposal offers an outcome consistent with the newly developed CBIP Western Precinct;
- the proposal is consistent with the outcomes sought by the TSDA Development Scheme;
- the proposal is consistent with the outcomes sought by the applicable referral agencies; and
- the proposed development will be serviced by new purpose-built infrastructure and will realise the benefits and efficiencies resulting from the land's strategic location and proximity to the Bruce Highway and TPAR.

Given the above we ask the Coordinator-General **approve** the development subject to reasonable and relevant conditions.

MILFORD PLANNING

Appendix 1

Our ref: M2022

6 June 2023

Office of the Coordinator-General
Department of State Development, Tourism and Innovation
PO Box 15517
CITY EAST QLD 4002

Attention: **Office of the Coordinator-General**

Dear Sir/ Madam,

Re: **Land Owner Consent**

Under the provisions of the *State Development and Public Works Organisation Act 1971* and *Townsville State Development Area Development Scheme*, **GOUGH PROPERTY GROUP PTY LTD A.C.N. 641 377 488**, being the registered owner of **Lot 7 SP338023** and located at **40 Penelope Road, Cluden**, do hereby authorise and confirm the engagement and appointment of Milford Planning to act on our behalf with respect to the procurement of all development approvals for the aforementioned land.

Date	6th	JUNE	2023
	Day	**Month**	**Year**
Signature			
Name	IAN GOUGH	SIMON GOUGH	
Position	DIRECTOR	DIRECTOR.	

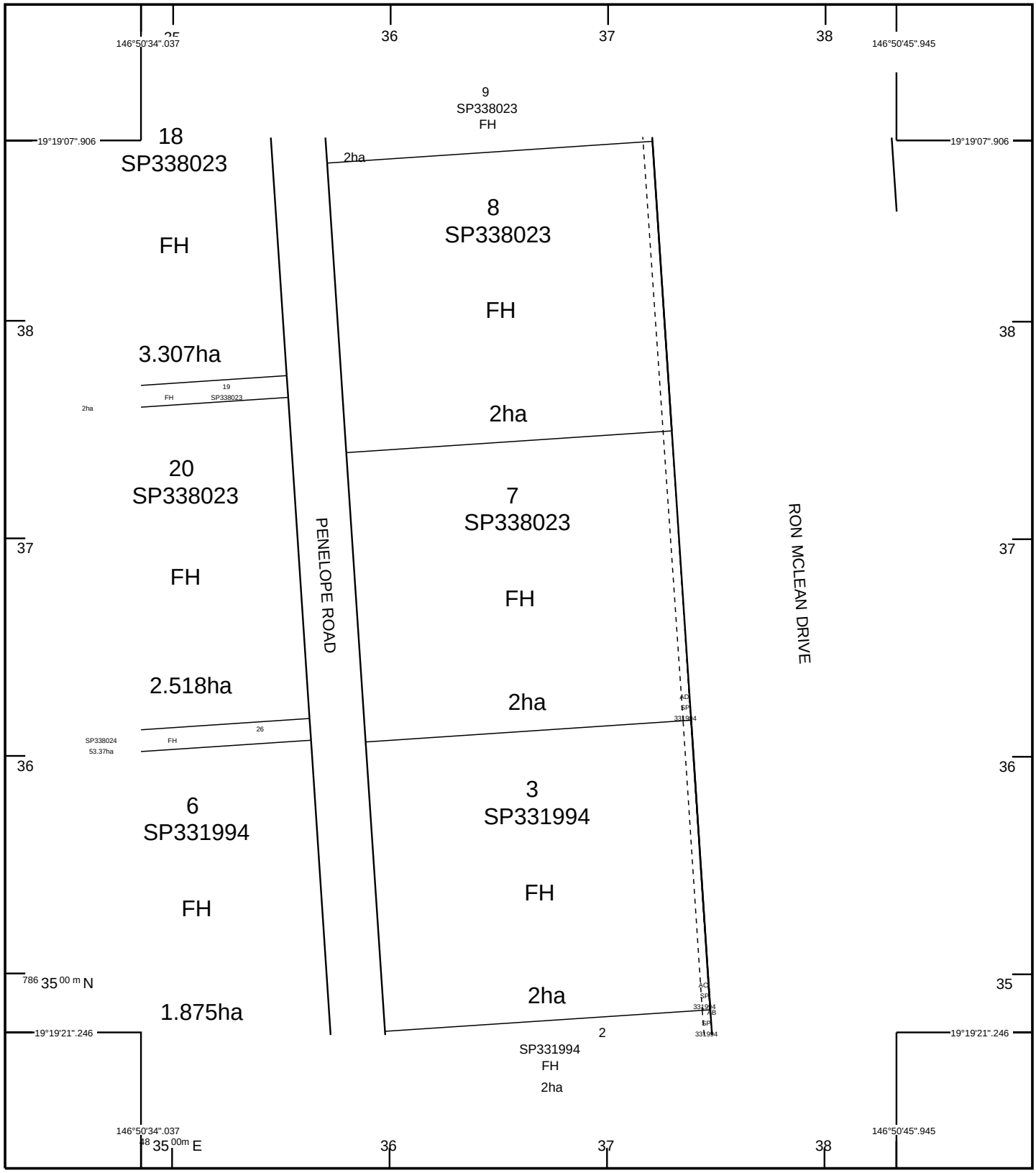
Note

Where registered owner is a company the ACN must be included and accompanied by:
(a) the signature of either:
- two directors of the company;
- a director and a company secretary of the company; or
- if a proprietary company that has a sole director who is also the sole company secretary, that director; **or**

(b) the company seal (if the company has a common seal) witnessed by:
- two directors of the company;
- a director and a company secretary of the company; or
- for a propriety company that has a sole director who is also the sole company secretary, that director.

MILFORD PLANNING

Appendix 2



STANDARD MAP NUMBER
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HORIZONTAL DATUM:GDA94 ZONE:55 SCALE 1 : 2500

SmartMap

An External Product of
SmartMap Information Services

Based upon an extraction from the
Digital Cadastral Data Base

MAP WINDOW POSITION &
NEAREST LOCATION

146°50'39".991
19°19'14".576
STUART
1.09 KM

SUBJECT PARCEL DESCRIPTION

DCDB

Lot/Plan	7/SP338023
Area/Volume	2ha
Tenure	FREEHOLD
Local Government	TOWNSVILLE CITY
Locality	STUART
Segment/Parcel	51403/100

CLIENT SERVICE STANDARDS

PRINTED 30/06/2023

DCDB 29/06/2023

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For further information on SmartMap products visit
https://www.qld.gov.au/housing/buying-owning-home/property-land-valuations/smartmaps

GDA

Queensland Government

MILFORD PLANNING

Drawing
Site Aerial

Property
40 Penelope Road, Clueden
Lot 7 on SP338023

Drawing Number	Issue	Sheet
M2020-SK-01	A	1
Date	**Author**	**Reviewer**
23.5.23	MA	SJ

Legend
- Cadastre
- Subject Site
- Easements

Scale (A3 Original)
1:800

0 6 12 18 24 30 m

Sources
Milford Planning GIS (2023)
DCDB extract – State of Queensland (2023)
Aerial imagery – Bing (2023)

Disclaimer
Areas and dimensions are approximate only and are subject to site survey.

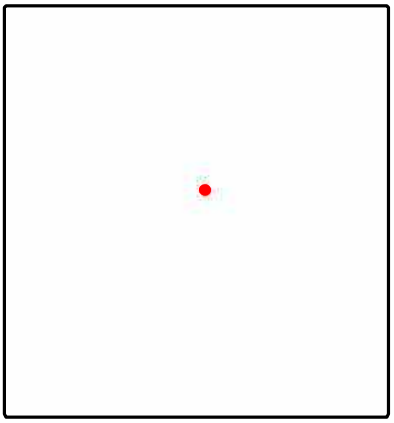
MILFORD PLANNING

Appendix 3

State Assessment and Referral Agency

Date: 30/06/2023

Queensland Government

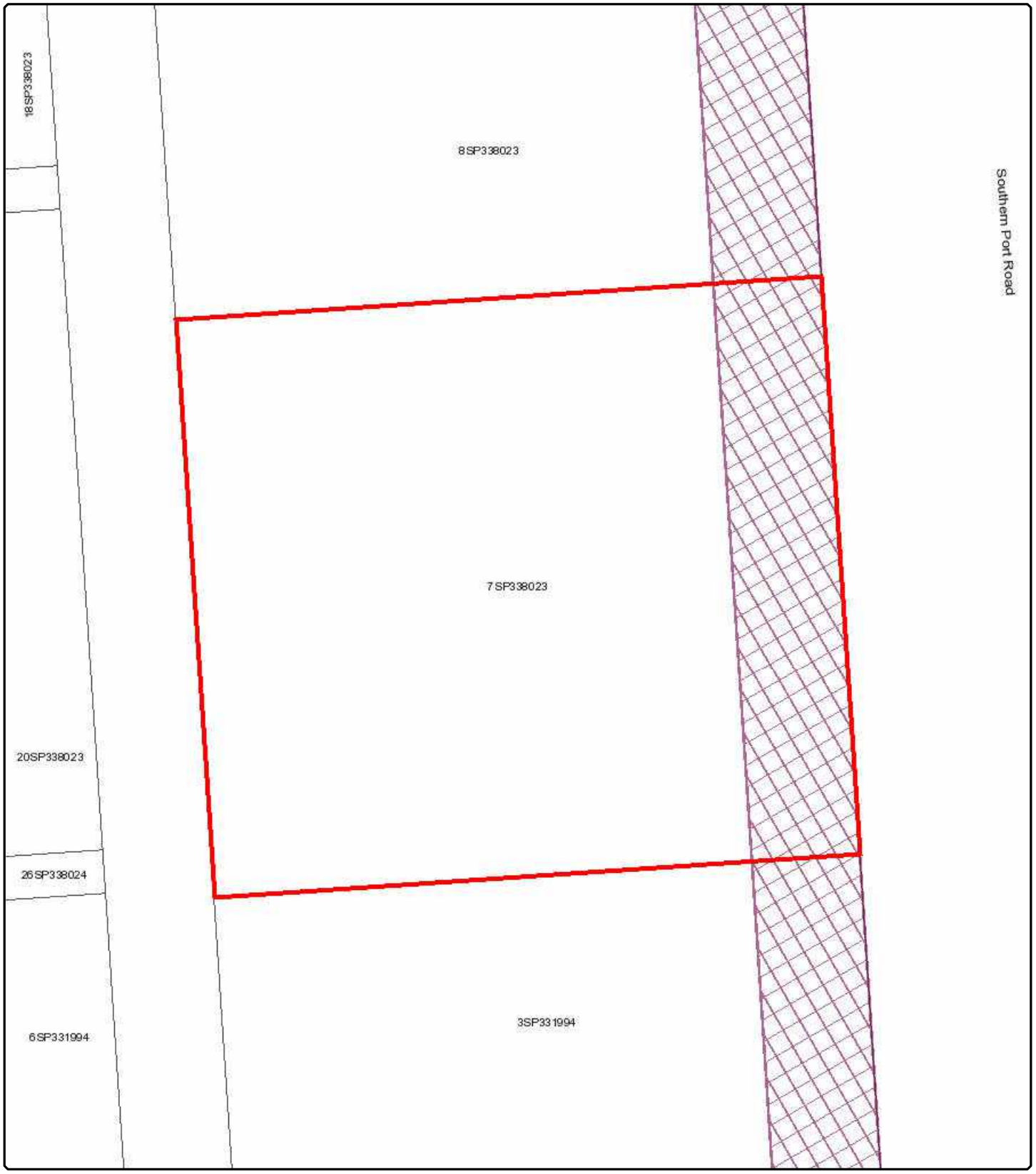


Matters of Interest for all selected Lot Plans

Townsville priority port precincts
State-controlled road
Area within 25m of a State-controlled road

Matters of Interest by Lot Plan

Lot Plan: 7SP338023 (Area: 20000 m^2)
Townsville priority port precincts
State-controlled road
Area within 25m of a State-controlled road



State Assessment and Referral Agency

Date: 30/06/2023

Queensland Government

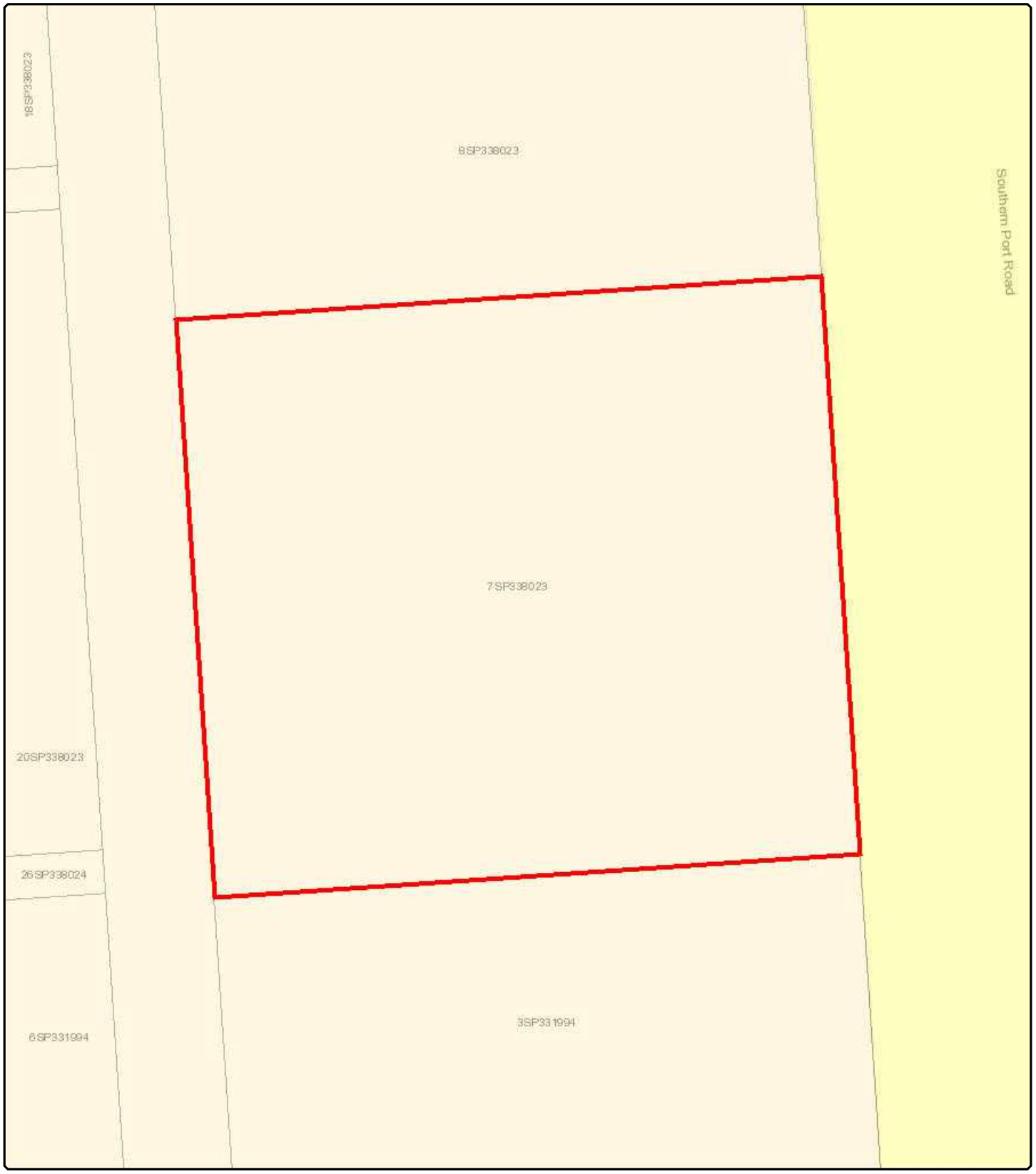
Legend

Area within 25m of a State-controlled road

Area within 25m of a State-controlled road

0 20 40 60 80

Metres



State Assessment and Referral Agency

Date: 30/06/2023

Queensland Government

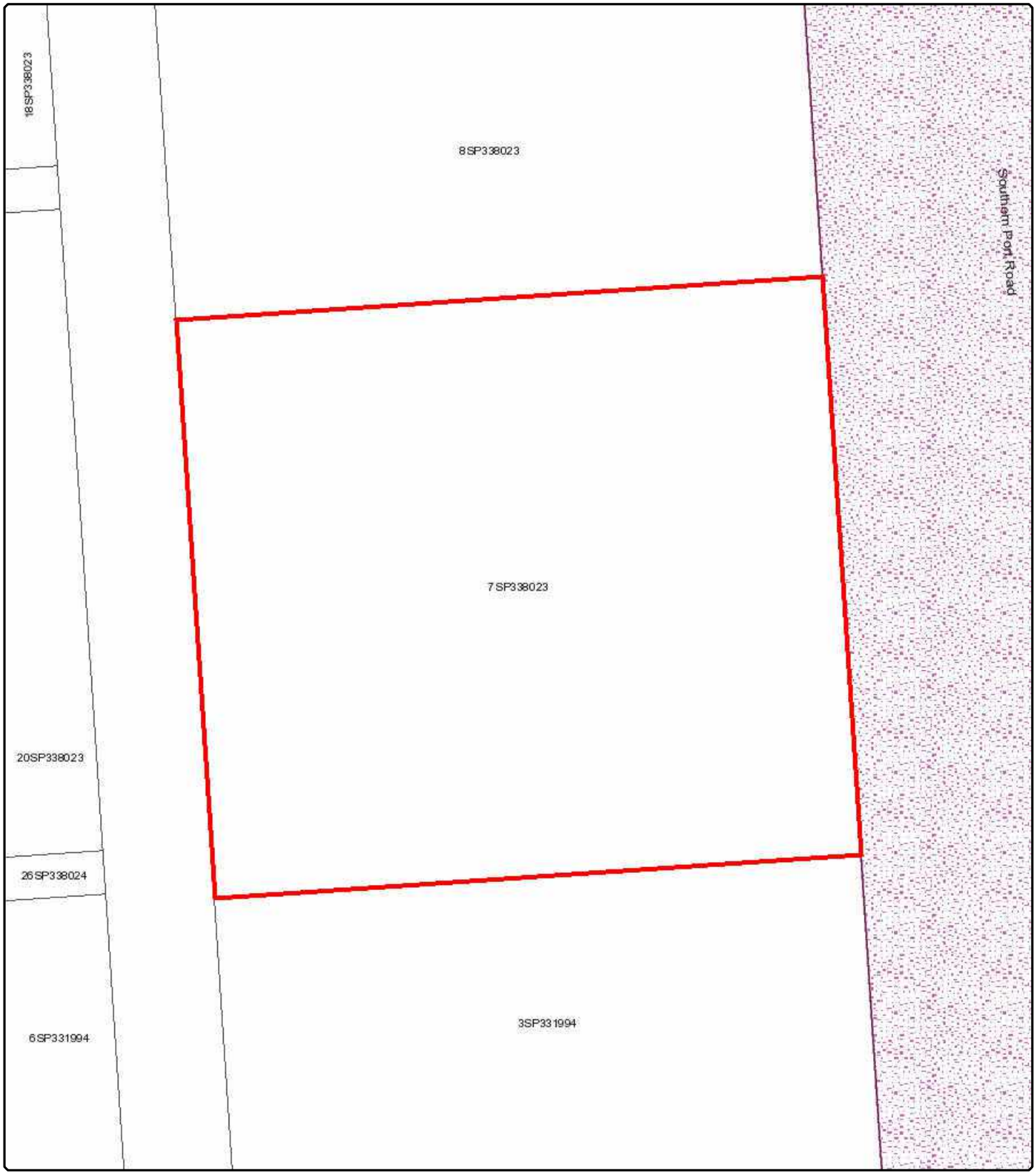
0 20 40 60 80

Metres

Legend

Townsville priority port precincts

- Environmental management
- Infrastructure and supply chain corridors
- Interface
- Marine
- Marine infrastructure
- Marine services and recreation
- Port industry and commerce



State Assessment and Referral Agency

Date: 30/06/2023

Queensland Government

Legend

State-controlled road

State-controlled road

0 20 40 60 80

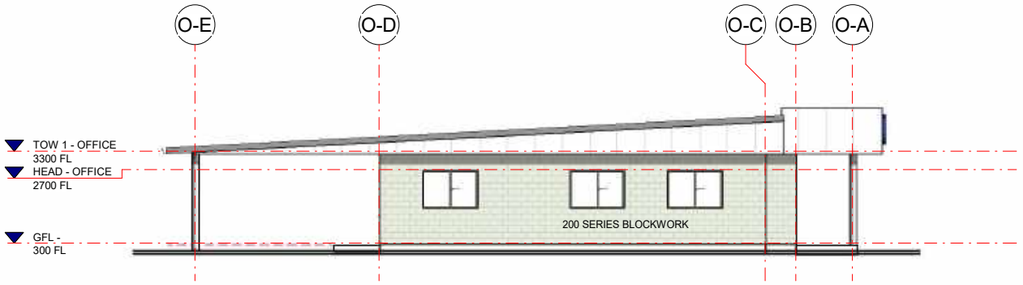
Metres

MILFORD PLANNING

Appendix 4

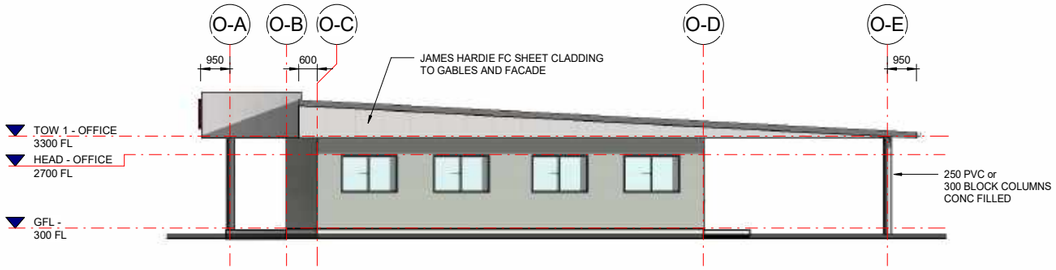
OFFICE - FRONT ELEVATION - WEST

1 : 100



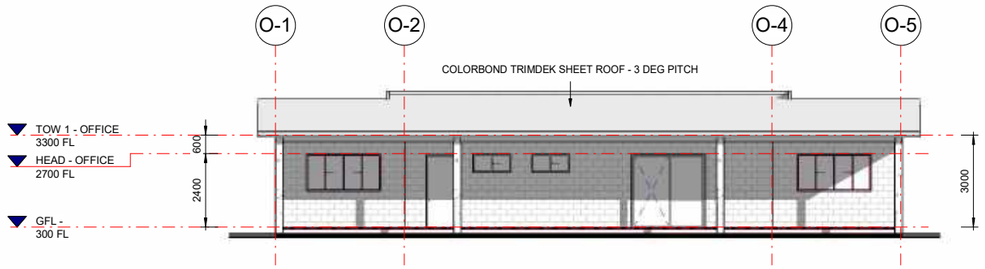
OFFICE - NORTH ELEVATION

1 : 100



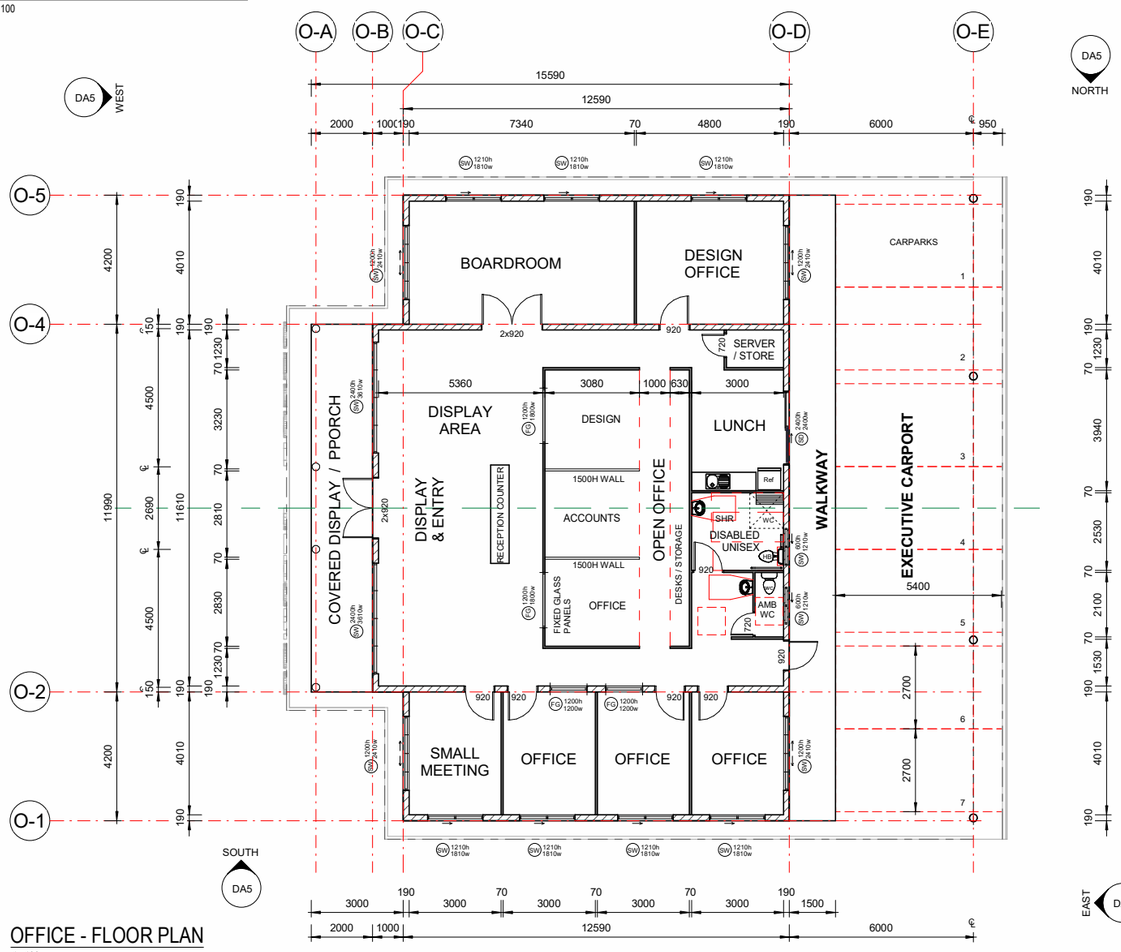
OFFICE - SOUTH ELEVATION

1 : 100



OFFICE - EAST ELEVATION

1 : 100

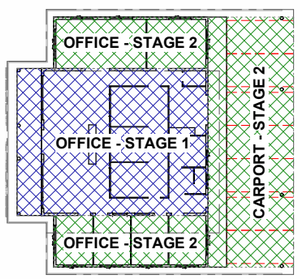


OFFICE - FLOOR PLAN

1 : 100

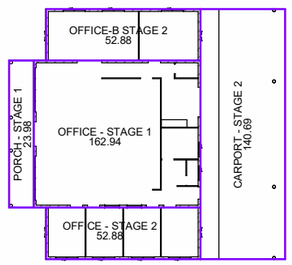
OFFICE PERSPECTIVE

FLOOR AREAS	
NAME	AREA
CARPORT - STAGE 2	140.69
OFFICE - STAGE 1	162.94
PORCH - STAGE 1	23.98
OFFICE-B STAGE 2	52.88
OFFICE - STAGE 2	52.88
SMALL GOODS - STAGE 2	183.78
SMALL GOODS - STAGE 1	183.78
Grand total	800.93



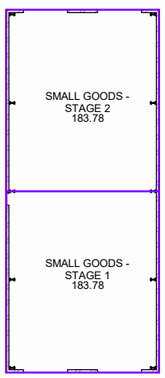
OFFICE - STAGING PLAN

1 : 250



FLOOR AREA PLAN

1 : 250



BUILDING DESIGN
MEDIUM RISE
QBCC LIC.- No. 15212191
NOTE: DRAWINGS IN PDF FORMAT MAY NOT BE TO CORRECT SCALE

Building Design Queensland MEMBER

448 BAYSWATER ROAD
MT LOUISA
PO Box 7645 GARBUTT 4814
PH: 07 47743314
admin@gvdbuildingdesign.com

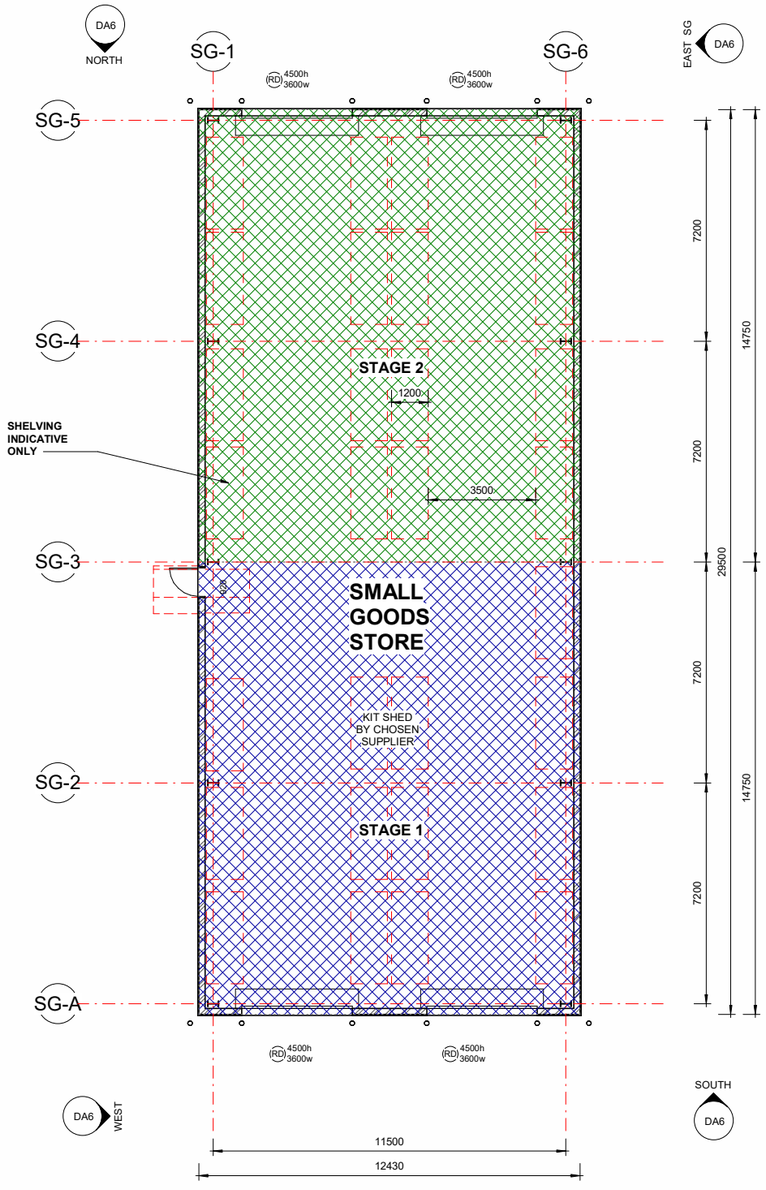
AMENDMENTS	No.	Description	Date	Issued by
	A	DA DRAWINGS	11.5.23	GVD

BUILDER:

CLIENT: GOUGH PLASTICS
ADDRESS: LOT 7 ON PENELOPE ROAD - CLEVELAND BAY

DRN: GVD | DATE: 11.5.23 | PHASE: DA
ISSUE: A | SCALE: As indicated
SH No: DA5 | JOB No: 21012GP

GVD BUILDING DESIGN



SMALL GOODS - FLOOR PLAN

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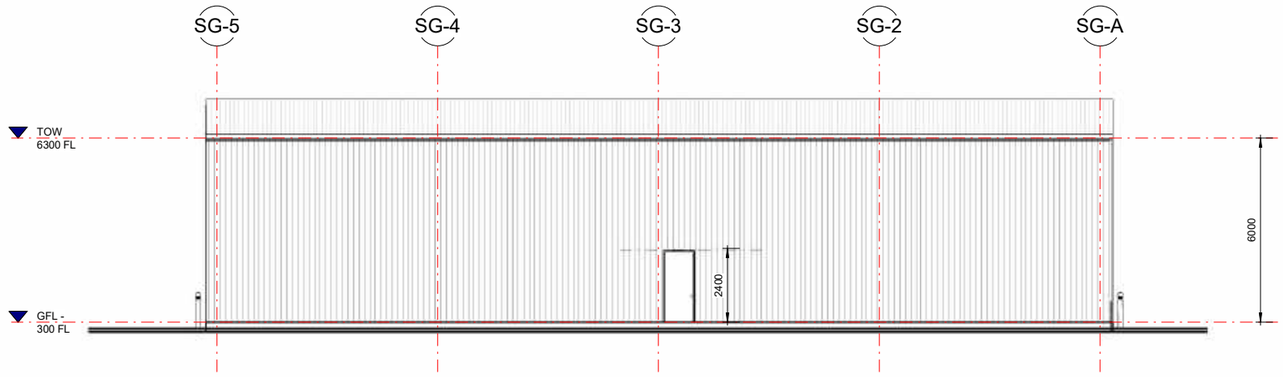

SMALL GOODS - WEST ELEVATION

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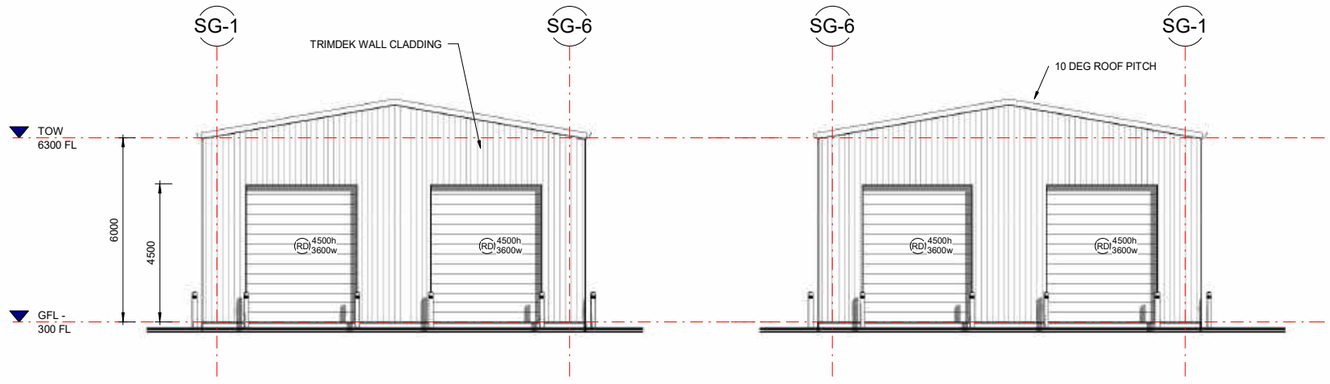
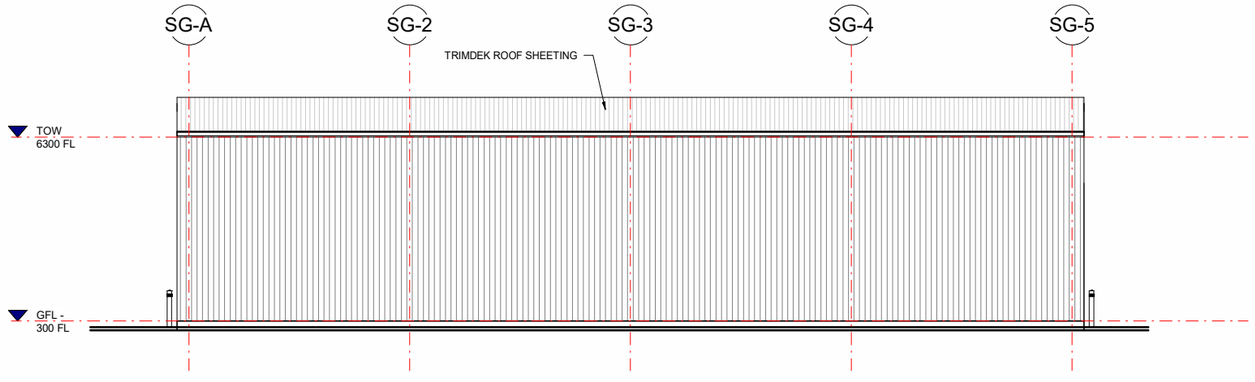


SMALL GOODS - SOUTH ELEVATION

1 : 100

SMALL GOODS - NORTH ELEVATION

1 : 100



SMALL GOODS - EAST ELEVATION

1 : 100

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MEDIUM RISE
QBCC LIC.- No. 15212191
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AMENDMENTS	No.	Description	Date	Issued by
	A	DA DRAWINGS	11.5.23	GVD

BUILDER:

CLIENT: GOUGH PLASTICS

ADDRESS: LOT 7 ON PENELOPE ROAD - CLEVELAND BAY

DRN: GVD | DATE: 11.5.23 | PHASE: DA

ISSUE: A | SCALE: 1 : 100

SH No: DA6 | JOB No: 21012GP

GVD BUILDING DESIGN

PROPOSED OFFICE & FACTORY

FOR GOUGH PLASTICS
40 PENELOPE ROAD STUART - CBIP
CLEVELAND BAY INDUSTRIAL PRECINCT

DRAWING LIST			
SHEET	SHEET NAME	DRAWN BY	REVISION
DA1	COVER SHEET	GVD	A
DA2	SITE LAYOUT	GVD	A
DA3	FACTORY	GVD	A
DA4	FACTORY ELEVATION & 3D	GVD	A
DA5	OFFICE	GVD	A
DA6	SMALL GOODS STORE	GVD	A

3D - SITE DEVELOPMENT OVERVIEW

STREET VIEW 1

STREET VIEW 2

BUILDING DESIGN
MEDIUM RISE
QBCC LIC.- No. 15212191
NOTE: DRAWINGS IN PDF FORMAT MAY NOT BE TO CORRECT SCALE

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admin@gvdbuildingdesign.com

AMENDMENTS	No.	Description	Date	Issued by
	A	DA DRAWINGS	11.5.23	GVD

BUILDER:

CLIENT: GOUGH PLASTICS
ADDRESS: 40 PENELOPE ROAD STUART - CBIP CLEVELAND BAY INDUSTRIAL PRECINCT

DRN: GVD | DATE: 11.5.23 | PHASE: DA
ISSUE: A | SCALE:
SH No: DA1 | JOB No: 21012GP

GVD BUILDING DESIGN

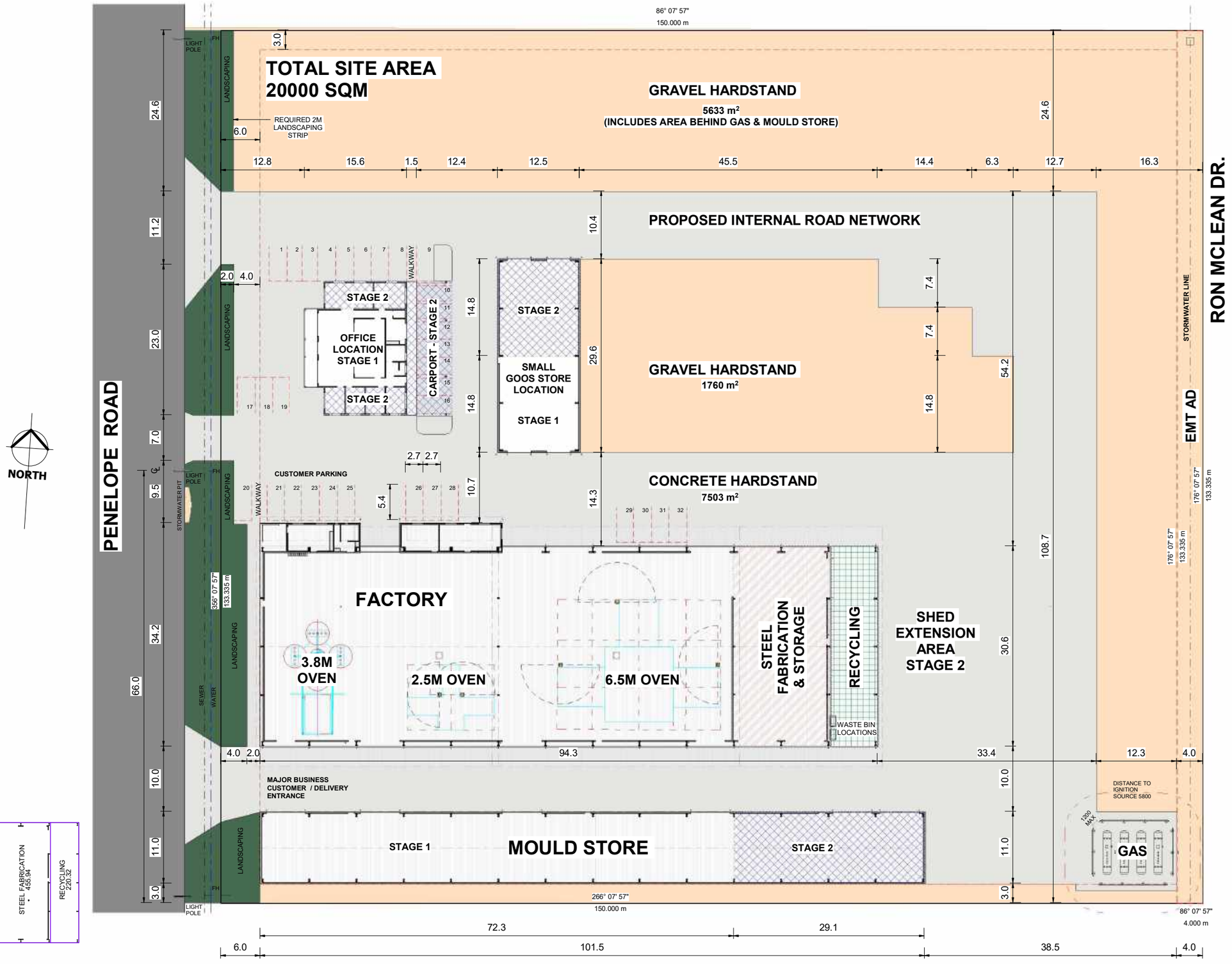
PLANNING ASSESSMENT

STATE DEVELOPMENT PLANNING AREA
USE : MEDIUM IMPACT INDUSTRY
ASSESSMENT LEVEL: (TBC)

PROPERTY DESCRIPTION

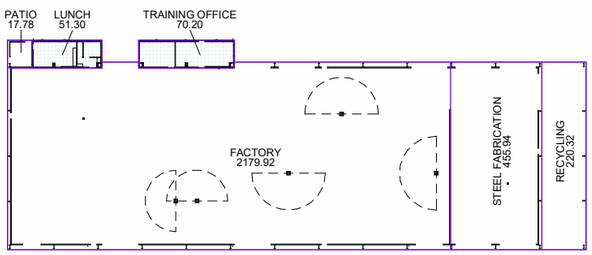
40 PENELOPE ROAD STUART
LOT No 7 on PLAN No: SP 338023

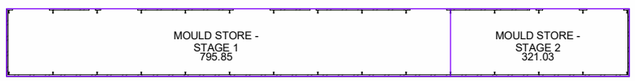
TOTAL SITE AREA :	20000 sqm
TOTAL BUILDING AREA :	4912.39 sqm
STAGE 1 BUILDING AREA:	4162.5 sqm
STAGE 2 BUILDING AREA:	749.89 sqm
CONCRETE HARDSTAND:	7503 sqm
GRAVEL HARDSTAND:	7393 sqm
LANDSCAPING:	191.61sqm
CAR PARKING SUPPLIED :	32 CARPARKS



NORTH

FLOOR AREAS	
NAME	AREA
FACTORY	2179.92
STEEL FABRICATION	455.94
RECYCLING	220.32
TRAINING OFFICE	70.20
LUNCH	51.30
PATIO	17.78
MOULD STORE - STAGE 1	795.85
MOULD STORE - STAGE 2	321.03
Grand total	4112.34





DEVELOPMENT AREA PLAN
1 : 500

SITE DEVELOPMENT PLAN
1 : 300

BUILDING DESIGN MEDIUM RISE
QBCC LIC.- No. 15212191
NOTE: DRAWINGS IN PDF FORMAT MAY NOT BE TO CORRECT SCALE

Building Design Queensland MEMBER

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PO Box 7645 GARBUTT 4814
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admin@gvdbuildingdesign.com

AMENDMENTS

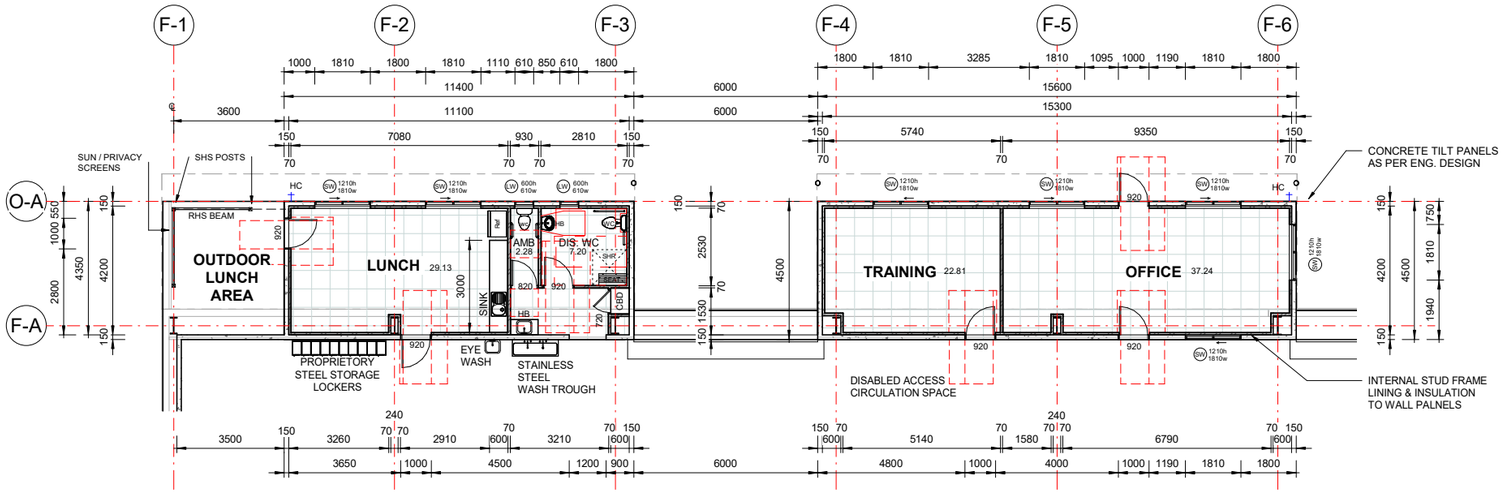
No.	Description	Date	Issued by
A	DA DRAWINGS	11.5.23	GVD

BUILDER

CLIENT: GOUGH PLASTICS
ADDRESS: 40 PENELOPE ROAD STUART - CBIP
CLEVELAND BAY INDUSTRIAL PRECINCT

DRN: GVD | DATE: 11.5.23 | PHASE: DA
ISSUE: A | SCALE: As indicated
SH No: DA2 | JOB No: 21012GP

GVD BUILDING DESIGN



CALLOUT A - FACTORY FACILITIES

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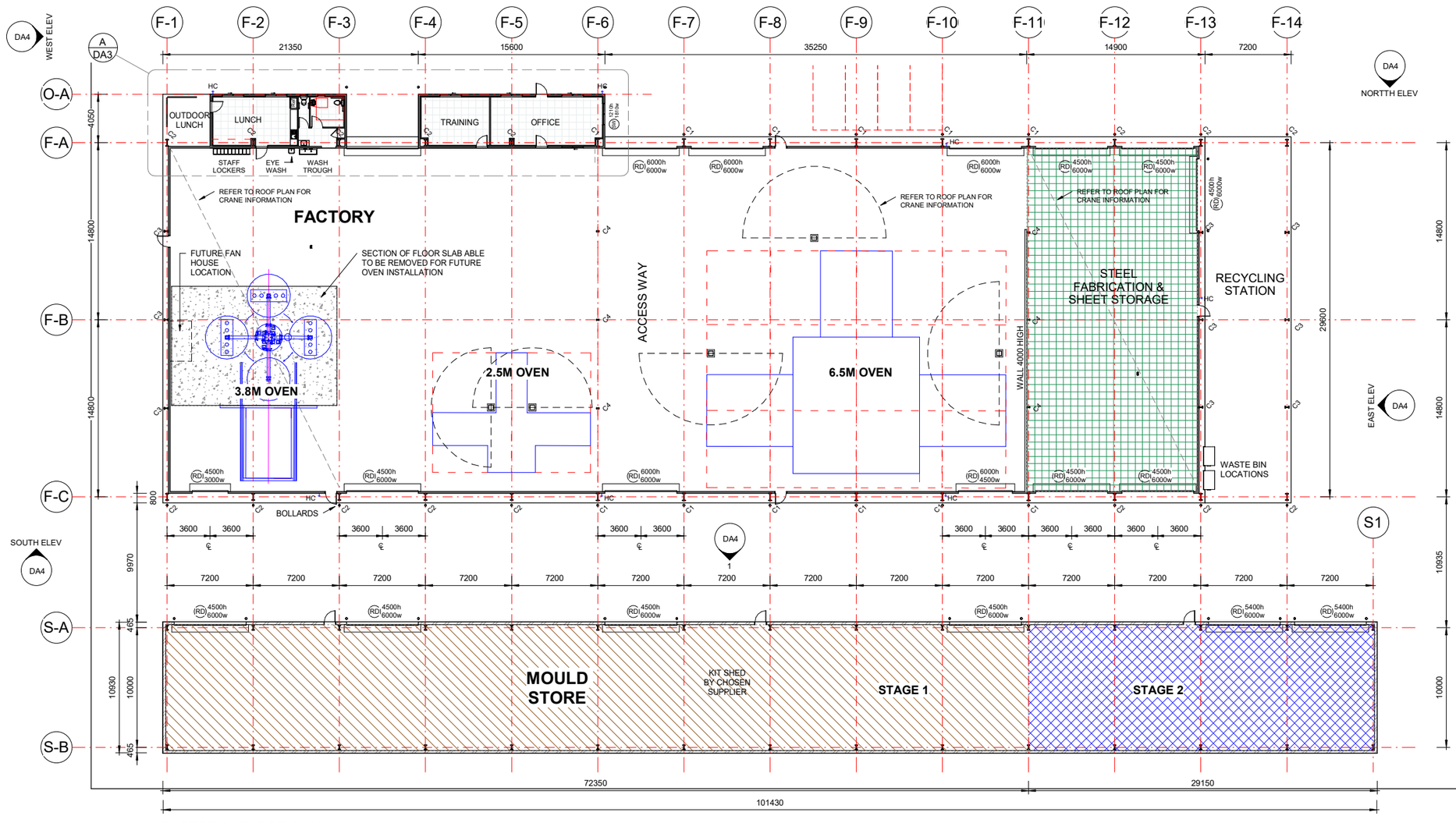

FACTORY - FLOOR PLAN

1 : 200

BUILDING DESIGN
MEDIUM RISE
QBCC LIC.- No. 15212191
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MT LOUISA
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AMENDMENTS

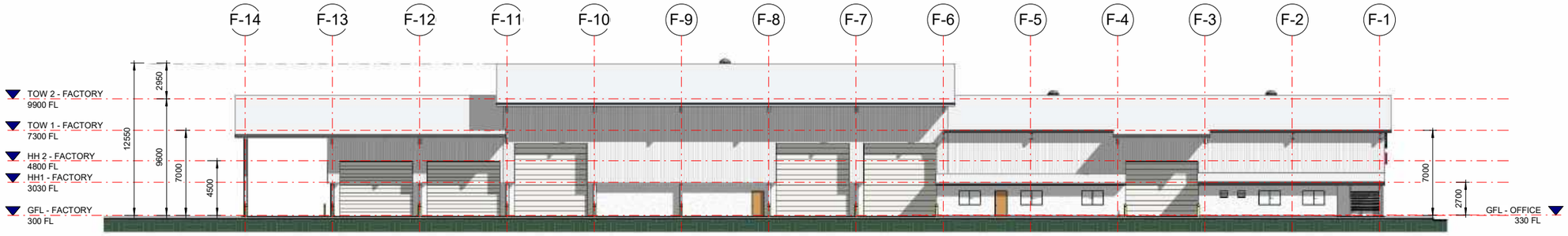
No.	Description	Date	Issued by
A	DA DRAWINGS	11.5.23	GVD

BUILDER:

CLIENT: GOUGH PLASTICS
ADDRESS: 40 PENELOPE ROAD STUART - CBIP
CLEVELAND BAY INDUSTRIAL PRECINCT

DRN: GVD | DATE: 11.5.23 | PHASE: DA
ISSUE: A | SCALE: As indicated
SH No: DA3 | JOB No: 21012GP

GVD BUILDING DESIGN



FACTORY - NORTH ELEVATION

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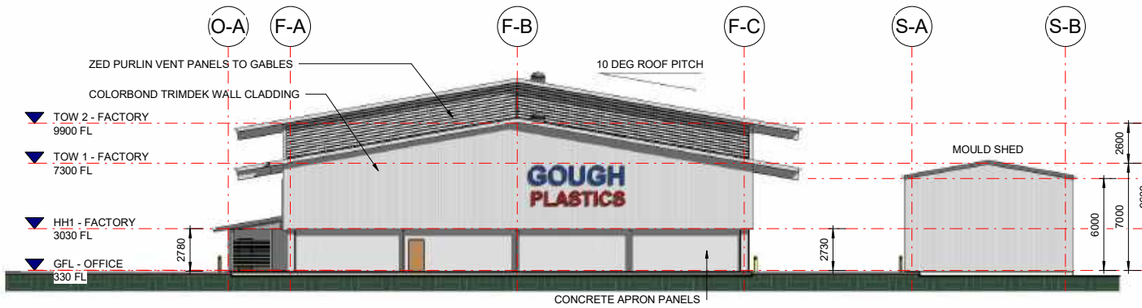

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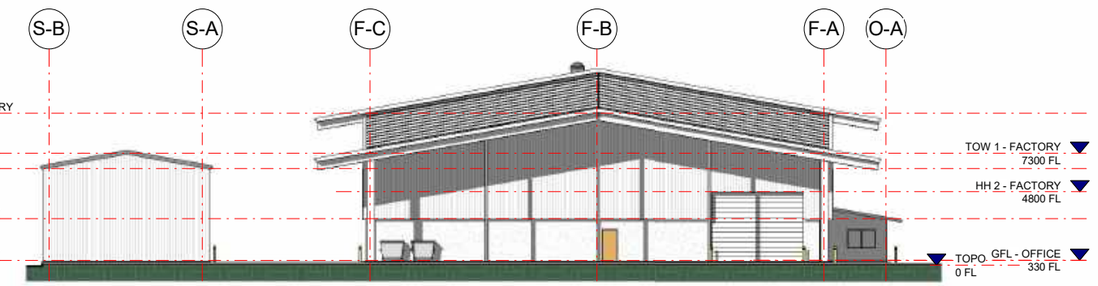

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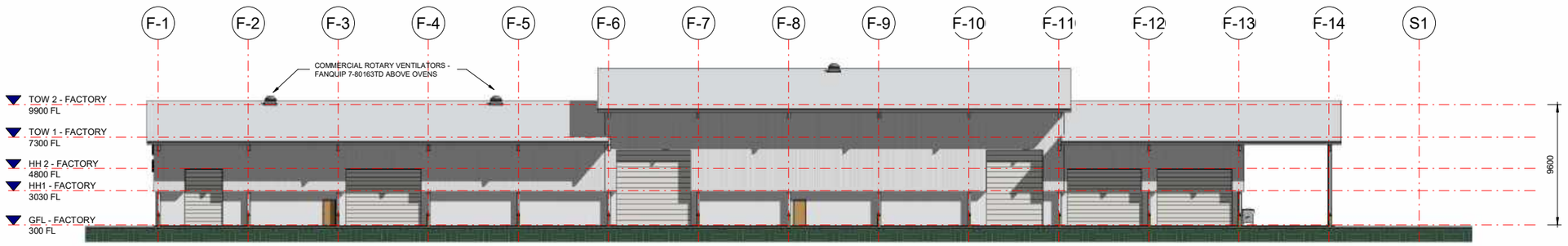

FACTORY - SOUTH ELEVATION

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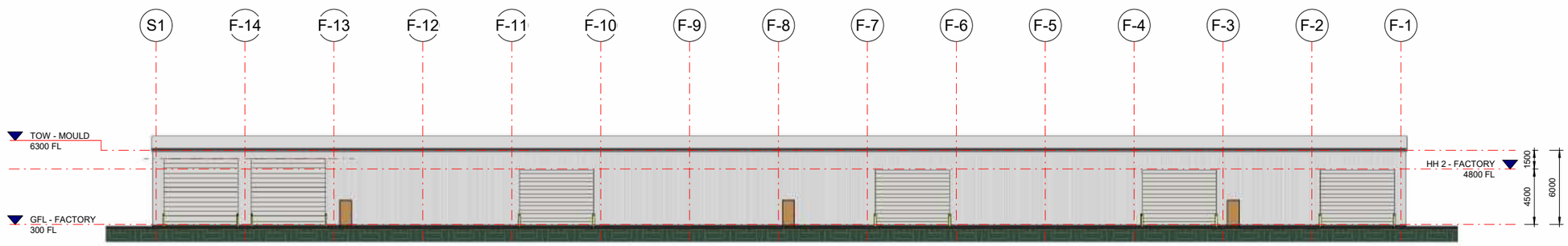

MOULD SHED - NORTH ELEVATION

1 : 200

BUILDING DESIGN
MEDIUM RISE
QBCC LIC.- No. 15212191
NOTE: DRAWINGS IN PDF FORMAT MAY NOT BE TO CORRECT SCALE

Building Design Queensland MEMBER

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MT LOUISA
PO Box 7645 GARBUTT 4814
PH: 07 47743314
admin@gvdbuildingdesign.com

AMENDMENTS

No.	Description	Date	Issued by
A	DA DRAWINGS	11.5.23	GVD

BUILDER:

CLIENT: GOUGH PLASTICS

ADDRESS:
40 PENELOPE ROAD STUART - CBIP
CLEVELAND BAY INDUSTRIAL PRECINCT

DRN: GVD	DATE: 11.5.23	PHASE: DA
ISSUE: A	SCALE: 1 : 200	
SH No: DA4	JOB No: 21012GP	

GVD BUILDING DESIGN

MILFORD PLANNING

Appendix 5

NORTHERN CONSULTING engineers

CIVIL & STRUCTURAL ENGINEERS

STORMWATER QUALITY ASSESSMENT

PROPOSED INDUSTRIAL DEVELOPMENT AT
LOT 7 ON PENELOPE ROAD – CLEVELAND BAY
INDUSTRIAL ESTATE

FOR
GOUGH PLASTICS

JOB No: **MJ2350**

Doc Ref: **MJ2350_SW_Quality_Rep**

Phone: 07 4725 5550
Fax: 07 4725 5850
Email: mail@nceng.com.au
50 Punari Street Currajong Qld 4812
Milton Messer & Associates Pty Ltd
ACN 100 817 356 ABN 34 100 817 356

DOCUMENT CONTROL

Rev	Author	Reviewed	Approved		Date	Issued To:	Purpose
A	Irem Guney	Derek Saw	Derek Saw - RPEQ 7363		24/05/2023	Gough Plastics	Stormwater Quality Management to support MCU application

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICIES

1.0 INTRODUCTION

1.1 Background

Northern Consulting Engineers (NCE) have been commissioned by Gough Plastics to prepare a stormwater quality assessment for the proposed industrial development at Lot 7 on Penelope Road, Cleveland Bay Industrial Estate. **Figure 1-1**Error! Reference source not found. shows the location of the site in context to the surrounding properties extracted from Queensland Globe.

Figure 1-1 Location of development in context to the surrounding properties

The following report has been produced to support a development application for Material Change of Use (MCU). The purpose of this report is to demonstrate how the proposed development can be achieved by addressing:

- Identify stormwater system to pick up run-off and upstream catchment flows and convey to a lawful point of discharge;
- Assessment of stormwater quality treatment in accordance with the State Planning Policy (SPP) and Townsville City Plan, including preparation of MUSIC model.

The information provided in this report is based on the following layout plan and documents which are provided as appendices to this report;

- Proposed Site Layout, reference 21012GP, dated 11/05/23, issue A, prepared by GVD Building Design provided in (**Appendix A**).

- SPEL-Hydrochannel Product Brochure provided in **Appendix B**.

1.2 Proposed Development

The proposed development is an industrial development at the Cleveland Bay Industrial Precinct for Gough Plastics. The total expected developed area of the site encompasses approximately 2.0 ha and will consist of the following components:

- Concrete & Gravel Hardstand

- Carparks

- Industrial Buildings/Office and Mould Store

- Landscaping areas

Proposed site layout is shown on below **Figure 1-2** and proposed development drawings by GVD Building Design are provided in **Appendix A**.

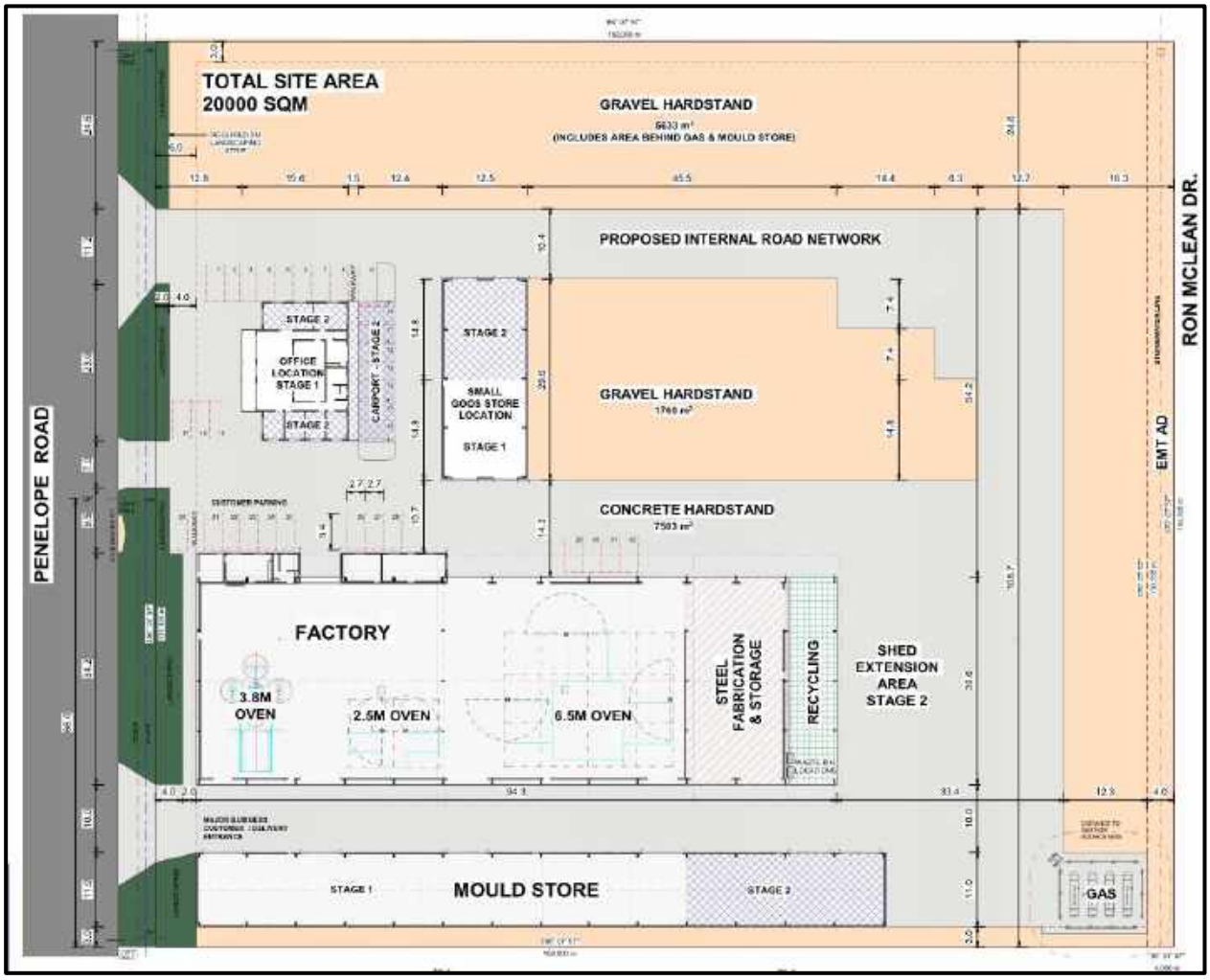

Figure 1-2 Proposed Site Layout by GVD Building Design

1.3 Quantity

Northern Consulting Engineers have been advised by the developer of the Cleveland Bay Industrial Park, that all S/W Quantity mitigation requirements for the Industrial Estate (based upon an impervious coverage of 90%) have been incorporated into the initial subdivisional works, therefore no additional quantity mitigation assessment has been completed as part of this report.

Please refer to **Appendix C** for related correspondence.

1.4 Quality

All stormwater treatment trains have been modelled with the aid of MUSIC version 6.3.0. The catchments have been modelled in accordance with the following:

- "MUSIC Modelling Guidelines November 2018 – Consultation Draft", Water by Design (2018);
- Townsville Aero, 6 Minute Time Step From 3/03/1953 To 31/03/2010;
- Water by Design MUSIC Modelling Guidelines Source Nodes (Split) utilising modified percent impervious area & pollutant concentration;
- No drainage routing between nodes;
- Water by Design MUSIC Modelling Guidelines Recommended MUSIC Rainfall-Run-off Parameters SEQ for industrial land use.

1.4.1 Stormwater Quality Objectives

The design intent for the system is to meet the current TCC Planning Scheme water quality targets, namely:

- 80% TSS Reduction
- 65% TP Reduction
- 40% TN Reduction
- 90% Gross Pollutants Reduction

In the event that the above targets are not achievable, the design intent is to ensure that the post development water quality discharging the site is equal to or better than the pre-development quality. Treatment targets shall be reached before water leaves the lot.

1.4.2 MUSIC Modelling

Pollutant loads for the development have been modelled primarily using "split" land use and references the MUSIC Modelling Guidelines November 2018 for the pollutant parameters for industrial surface types. **Table 1-1** depicts the source nodes and their imperviousness adopted in the assessment. The pollutant generation parameters adopted are shown in **Figure 1-4** with **Figure 1-5** depicting the rainfall-run-off parameters.

Below is the modelling concept adopted:

- The modelling has been assessed for post development.

- The proposed development has been assessed in two (2) stages that defines the model catchments. They are indicatively shown on **Figure 1-3**. Each zone has been assessed based only on the area that shall be developed using a "split" catchment method.

- The following describes the practical application / operation of each zone:

- Catchment Area 1 (Stage 1): includes runoff from Building, Offices (including stage 2), Mould Store, Concrete & Gravel Hardstand (including carparks) areas which are defined as 100% impervious. All the run-off from the areas overland sheet flow into proposed treatment system SPEL-Hydrochannel prior to leaving the catchment. Treated run-off from the hydrochannels will be conveyed to the outlet pit via underground pipe system.

- Catchment Area 2 (Stage 2-Provisional) – Conservative approach has been followed and the runoff from future gravel hardstand area defined as 100% impervious. Similar arrangement to Stage 1, all the run-off will overland sheet flow and be captured into provisional pit/channel located at the downstream of the development area. SPEL Hydrochannels are proposed to be inserted into the pit/channel for the required water quality treatment. Eventually, the treated water will be conveyed to the outlet pit (downstream field inlet pit) at the northeast corner of the development area.

- The proposed quality treatment device SPEL-Hydrochannel brochure is provided in **Appendix B.**
- Treatment nodes and properties are described on **Table 1-2**.
- Exfiltration rate of 0 mm/hr which are lower than the values nominated in ARR 2019 recommendations.

The MUSIC model setup described above and the proposed indicative treatment train layout and site layout required to meet the treatment objectives and application is depicted in **Figure 1-6 .**

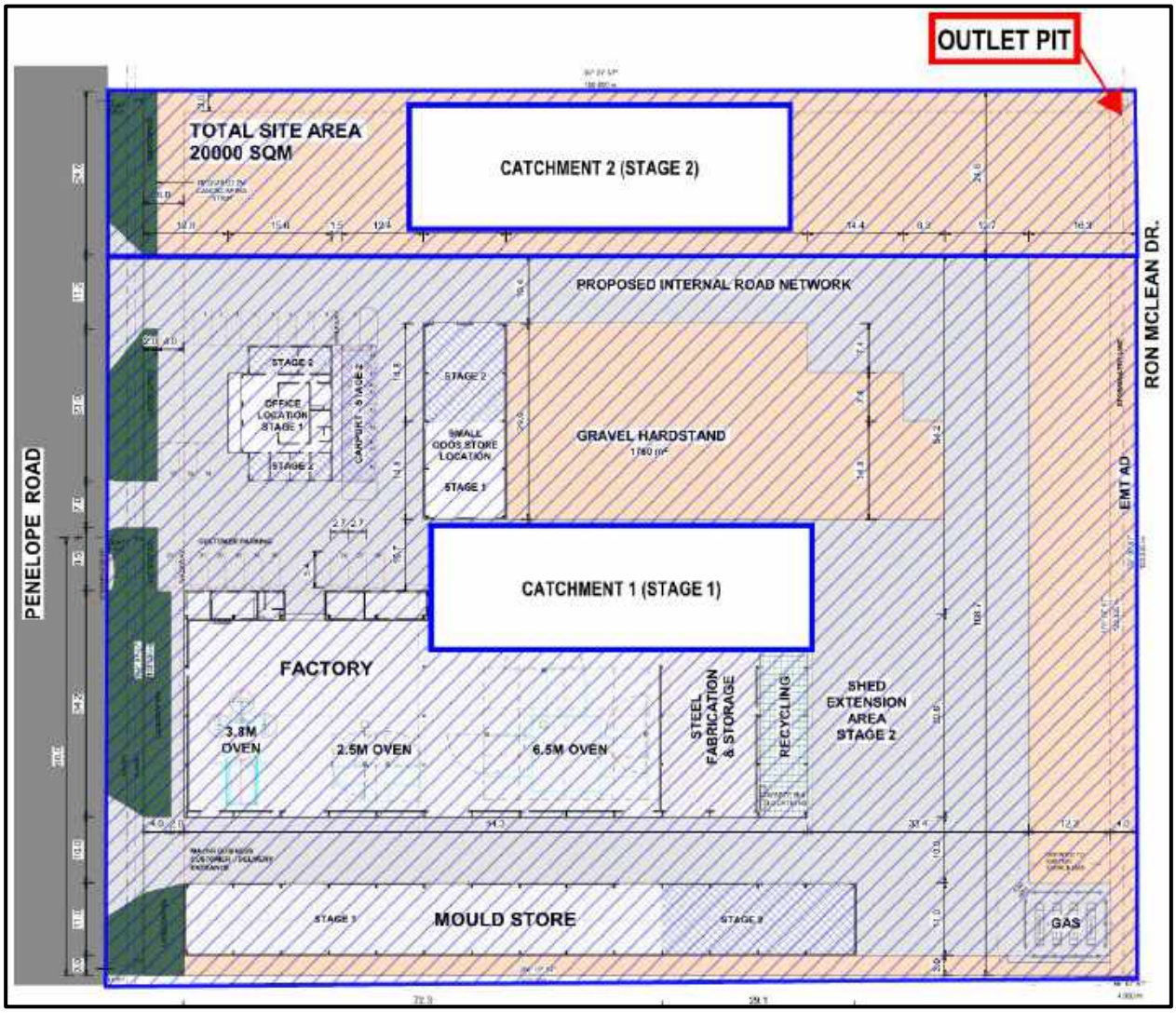

Figure 1-3 MUSIC Modelling Catchment Areas

Table 1-1 Music Source Nodes

Node Name	Zoning/Surface Type	Surface Area (ha)	Impervious (%)	Buffer Area (%)
Catchment Area 1				
Hardstand/Carpark	Industrial	0.929	100	-
Building	Industrial	0.300	100	-
Offices	Industrial	0.070	100	-
Mould Store & Gas	Industrial	0.130	100	-
Catchment Area 2				
Gravel Hardstand	Industrial	0.320	100	-

TABLE 3.9 POLLUTANT EXPORT PARAMETERS FOR SPLIT CATCHMENT LAND USE (LOG^{10} VALUES)

FLOW TYPE	SURFACE TYPE	TSS LOG^{10} VALUES		TP LOG^{10} VALUES		TN LOG^{10} VALUES	
		MEAN	ST. DEV	MEAN	ST. DEV	MEAN	ST. DEV
URBAN RESIDENTIAL							
Baseflow parameters	Roof	N/A	N/A	N/A	N/A	N/A	N/A
	Roads	1.00	0.34	-0.97	0.31	0.20	0.20
	Ground level	1.00	0.34	-0.97	0.31	0.20	0.20
Stormflow parameters	Roof	1.30	0.39	-0.89	0.31	0.26	0.23
	Roads	2.43	0.39	-0.30	0.31	0.26	0.23
	Ground level	2.18	0.39	-0.47	0.31	0.26	0.23
INDUSTRIAL							
Baseflow parameters	Roof	N/A	N/A	N/A	N/A	N/A	N/A
	Roads	0.78	0.45	-1.11	0.48	0.14	0.20
	Ground level	0.78	0.45	-1.11	0.48	0.14	0.20
Stormflow parameters	Roof	1.30	0.44	-0.89	0.36	0.25	0.32
	Roads	2.43	0.44	-0.30	0.36	0.25	0.32
	Ground level	1.92	0.44	-0.59	0.36	0.25	0.32
COMMERCIAL							
Baseflow parameters	Roof	N/A	N/A	N/A	N/A	N/A	N/A
	Roads	0.78	0.39	-0.60	0.50	0.32	0.30
	Ground level	0.78	0.39	-0.60	0.50	0.32	0.30
Stormflow parameters	Roof	1.30	0.38	-0.89	0.34	0.37	0.34
	Roads	2.43	0.38	-0.30	0.34	0.37	0.34
	Ground level	2.16	0.38	-0.39	0.34	0.37	0.34

Figure 1-4 MUSIC recommended rainfall run-off parameters SEQ extracted from MUSIC Modelling Guidelines November 2018

PARAMETER	LAND USE			
	URBAN RESIDENTIAL	COMMERCIAL AND INDUSTRIAL	RURAL RESIDENTIAL	FORESTED
RAINFALL THRESHOLD (MM)	1	1	1	1
SOIL STORAGE CAPACITY (MM)	500*	18	98	120
INITIAL STORAGE (% CAPACITY)	10	10	10	10
FIELD CAPACITY (MM)	200	80	80	80
INFILTRATION CAPACITY COEFFICIENT A	211	243	84	200
INFILTRATION CAPACITY COEFFICIENT B	5.0	0.6	3.3	1.0
INITIAL DEPTH (MM)	50	50	50	50
DAILY RECHARGE RATE (%)	28	0	100	25
DAILY BASEFLOW RATE (%)	27	31	22	3
DAILY DEEP SEEPAGE RATE (%)	0	0	0	0

Figure 1-5 MUSIC recommended rainfall run-off parameters SEQ extracted from MUSIC Modelling Guidelines November 2018

Table 1-2 Treatment Node Properties in MUSIC

Cathments	*SPEL Items*
Catchment 1 (Stage 1)	24 l/m - 0.5l per linear meter (l/m) treatment
Catchment 2 (Stage 2 Provisional)	5 l/m - 0.5l per linear meter (l/m) treatment to be inserted into downstream pit (1m x 1.5m) - details to be confirmed by the Supplier during detailed design.

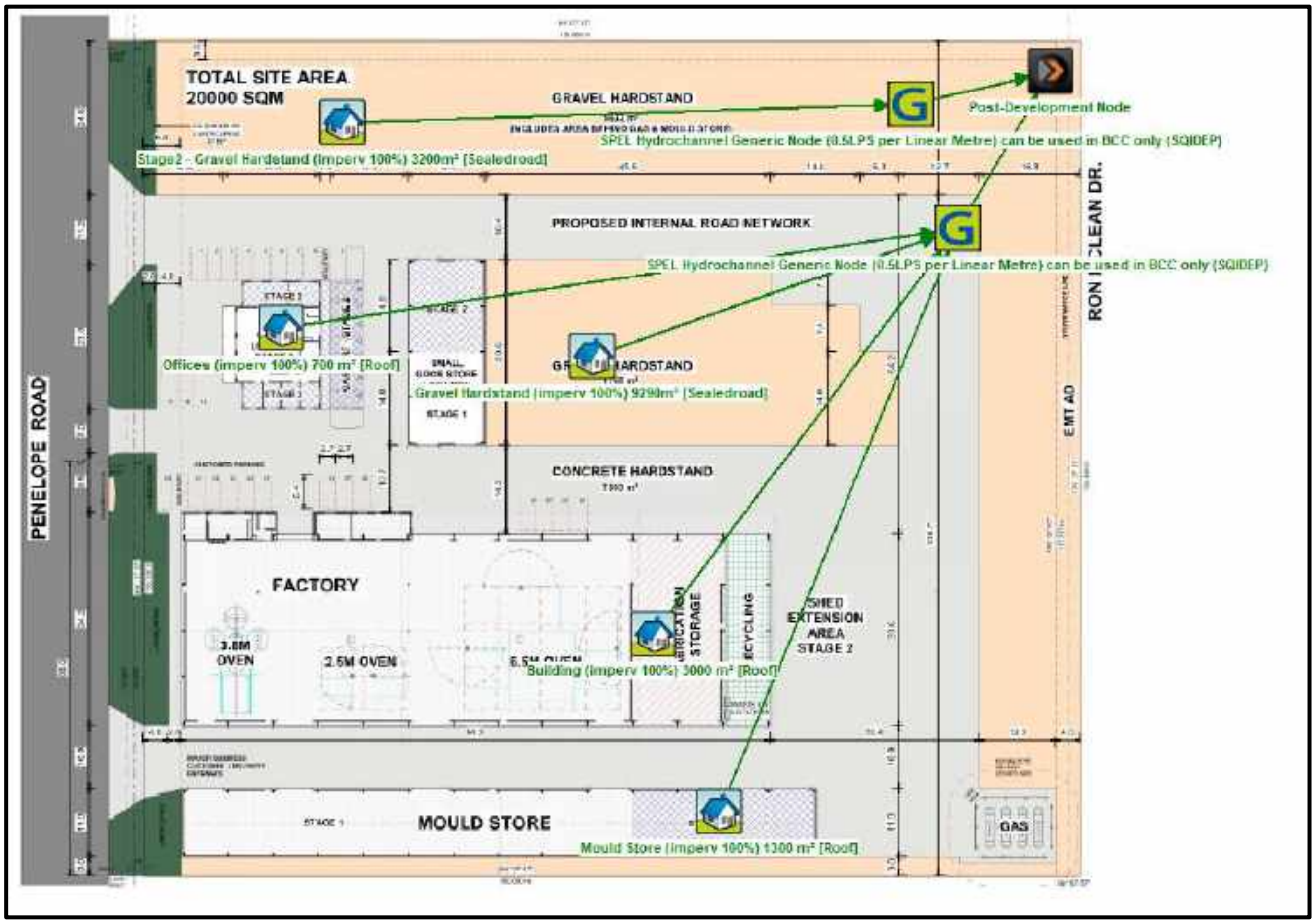

Figure 1-6 MUSIC Treatment Train and Site Layout

Table 1-3 summarises the results of the assessment. It is evident that the water quality leaving the site post development meets the quality objectives set by TCC.

Table 1-3 Music Treatment Train Effectiveness

Description	Sources	Residual Load	% Reduction	TCC Treatment %
Flow (ML/yr)	9.96	9.96	0	
Total Suspended Solids (kg/yr)	3.13E+03	480	85	80
Total Phosphorus (kg/yr)	5.42	1.89E+00	65	65
Total Nitrogen (kg/yr)	22.7	8.29	64	40
Gross Pollutants (kg/yr)	233	1.28E+00	99	90

2.0 CONCLUSION

NCE have undertaken a stormwater quality assessment associated with the Industrial Development located at Lot 7 on Penelope Road, Cleveland Bay Industrial Estate. The findings of this assessment are summarised below:

- Local runoff from the buildings and hardstand areas will be conveyed into proposed SPEL-Hydrochannel systems via overland sheet flow and discharge into the outlet pit via underground pipe system.

- The stormwater quality assessment is undertaken for both stages Stage 1 and Stage 2 of the development works. Whilst 24 linear meters of proposed SPEL-Hydrochannel provide adequate treatment for Stage 1, when Stage 2 works are completed, an additional 5 linear meters of hydrochannel will need to be installed to provide adequate treatment for the entire development.

- TCC's water quality objectives have been met and it has been demonstrated that non-worsening will occur with regards to the total suspended solids, phosphorus, nitrogen and gross pollutants by using SPEL Hydrochannel stormwater treatment system.

- Northern Consulting Engineers have been advised by the developer of the Cleveland Bay Industrial Park, that all S/W Quantity mitigation requirements for the Industrial Estate (based upon an impervious coverage of 90%) have been incorporated into the initial subdivisional works, therefore no additional quantity mitigation assessment has been completed as part of this report.

APPENDIX A

Proposed Site Layout, reference 21012GP, dated 11/05/23, issue A, prepared by GVD Building Design

PROPOSED OFFICE & FACTORY

FOR GOUGH PLASTICS
40 PENELOPE ROAD STUART - CBIP
CLEVELAND BAY INDUSTRIAL PRECINCT

DRAWING LIST			
SHEET	SHEET NAME	DRAWN BY	REVISION
DA1	COVER SHEET	GVD	A
DA2	SITE LAYOUT	GVD	A
DA3	FACTORY	GVD	A
DA4	FACTORY ELEVATION & 3D	GVD	A
DA5	OFFICE	GVD	A
DA6	SMALL GOODS STORE	GVD	A

3D - SITE DEVELOPMENT OVERVIEW

STREET VIEW 1

STREET VIEW 2

BUILDING DESIGN
MEDIUM RISE
QBCC LIC.- No. 15212191
NOTE: DRAWINGS IN PDF FORMAT MAY NOT BE TO CORRECT SCALE

Building Design Queensland MEMBER

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MT LOUISA
PO Box 7645 GARBUTT 4814
PH: 07 47743314
admin@gvdbuildingdesign.com

AMENDMENTS	No.	Description	Date	Issued by
	A	DA DRAWINGS	11.5.23	GVD

BUILDER:

CLIENT: GOUGH PLASTICS
ADDRESS: 40 PENELOPE ROAD STUART - CBIP CLEVELAND BAY INDUSTRIAL PRECINCT

DRN: GVD | DATE: 11.5.23 | PHASE: DA
ISSUE: A | SCALE:
SH No: DA1 | JOB No: 21012GP

GVD BUILDING DESIGN

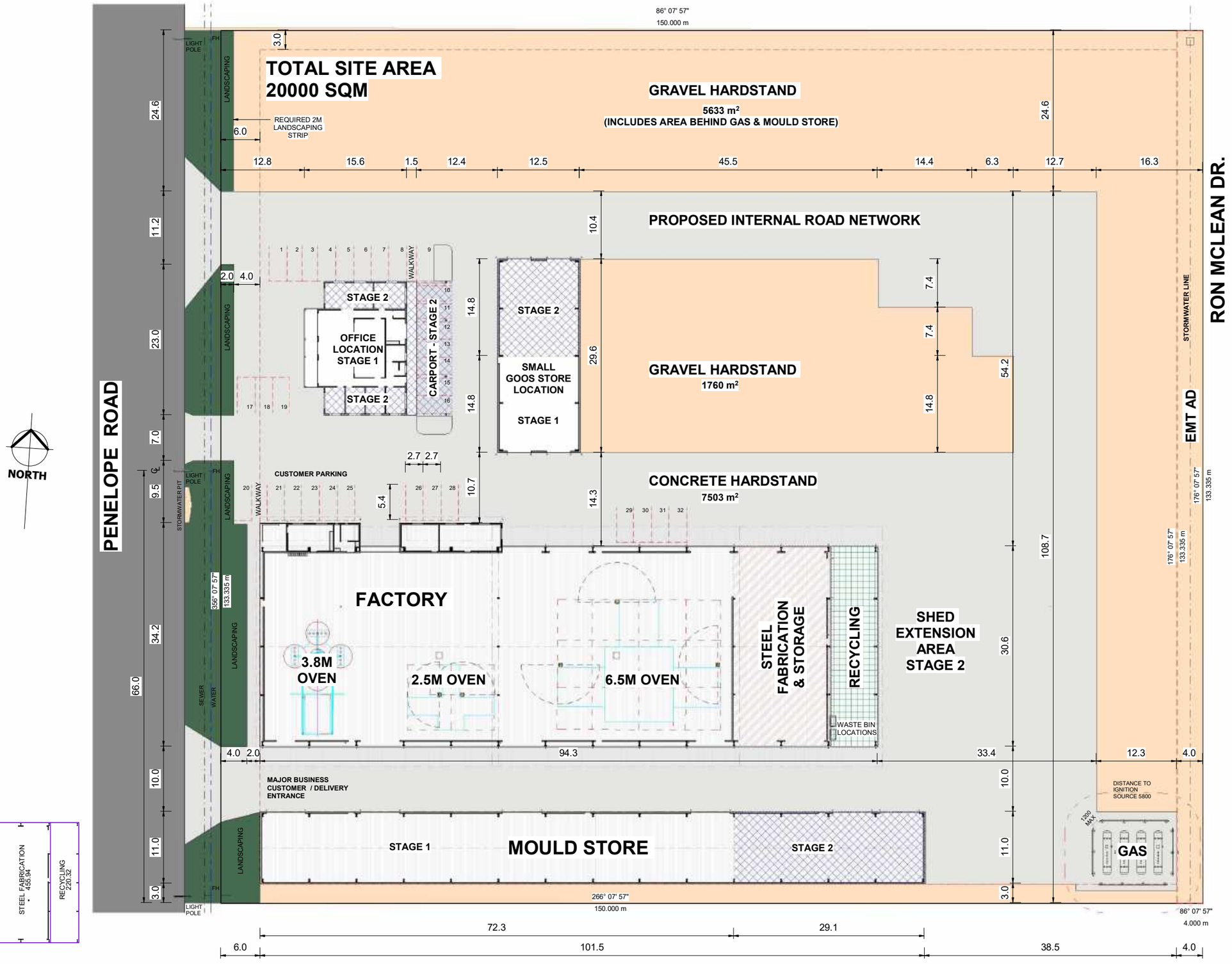
PLANNING ASSESSMENT

STATE DEVELOPMENT PLANNING AREA
USE : MEDIUM IMPACT INDUSTRY
ASSESSMENT LEVEL: (TBC)

PROPERTY DESCRIPTION

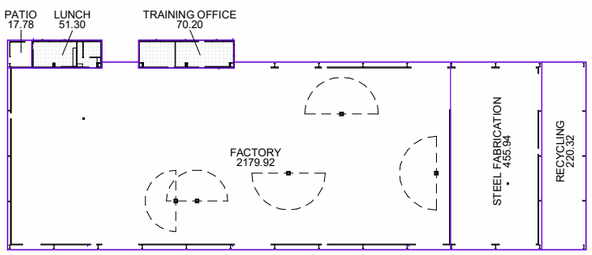
40 PENELOPE ROAD STUART
LOT No 7 on PLAN No: SP 338023

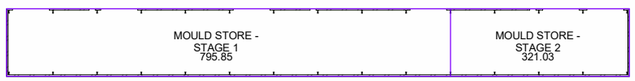
TOTAL SITE AREA :	20000 sqm
TOTAL BUILDING AREA :	4912.39 sqm
STAGE 1 BUILDING AREA:	4162.5 sqm
STAGE 2 BUILDING AREA:	749.89 sqm
CONCRETE HARDSTAND:	7503 sqm
GRAVEL HARDSTAND:	7393 sqm
LANDSCAPING:	191.61sqm
CAR PARKING SUPPLIED :	32 CARPARKS



NORTH

FLOOR AREAS	
NAME	AREA
FACTORY	2179.92
STEEL FABRICATION	455.94
RECYCLING	220.32
TRAINING OFFICE	70.20
LUNCH	51.30
PATIO	17.78
MOULD STORE - STAGE 1	795.85
MOULD STORE - STAGE 2	321.03
Grand total	4112.34





DEVELOPMENT AREA PLAN
1 : 500

SITE DEVELOPMENT PLAN
1 : 300

BUILDING DESIGN MEDIUM RISE
QBCC LIC.- No. 15212191
NOTE: DRAWINGS IN PDF FORMAT MAY NOT BE TO CORRECT SCALE

Building Design Queensland MEMBER

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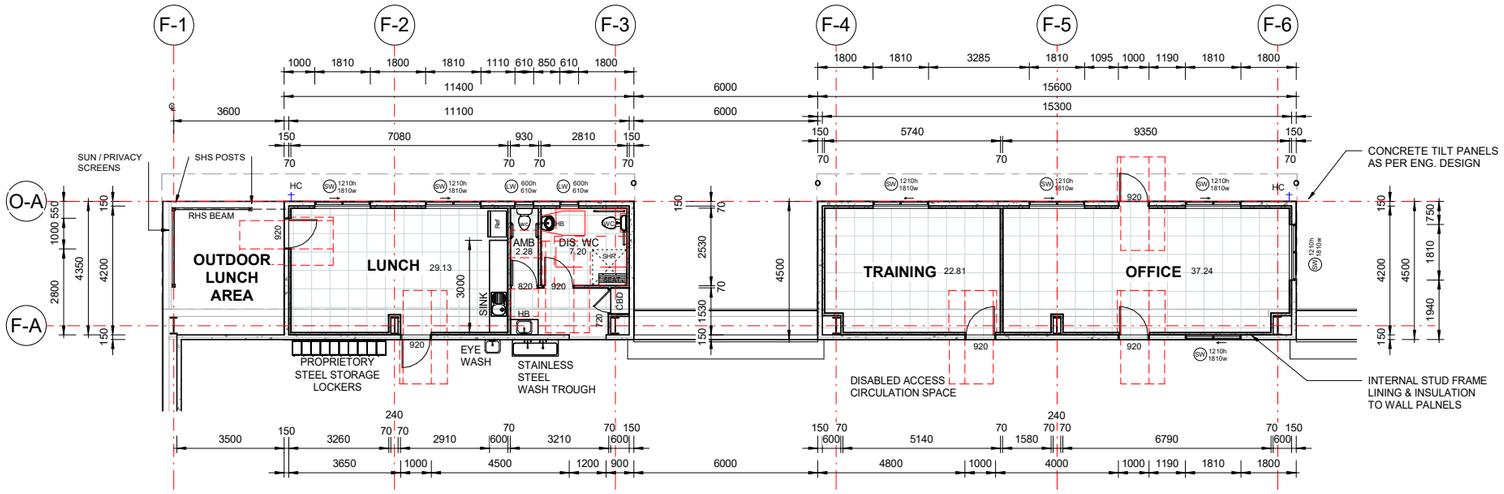
ISSUE: A | SCALE: As indicated
SH No: DA2 | JOB No: 21012GP

GVD BUILDING DESIGN



CALLOUT A - FACTORY FACILITIES

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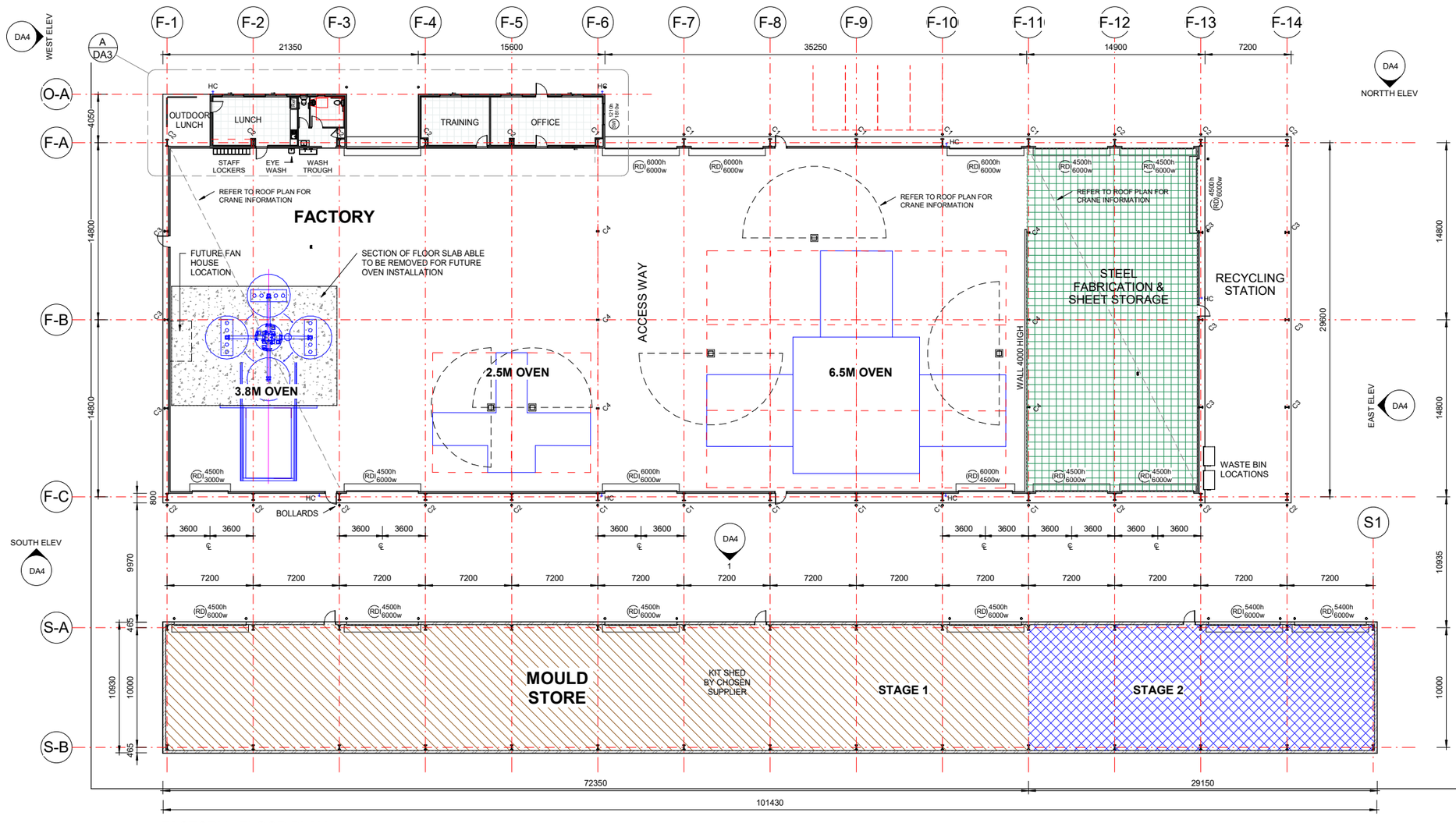

FACTORY - FLOOR PLAN

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ISSUE: A | SCALE: As indicated
SH No: DA3 | JOB No: 21012GP

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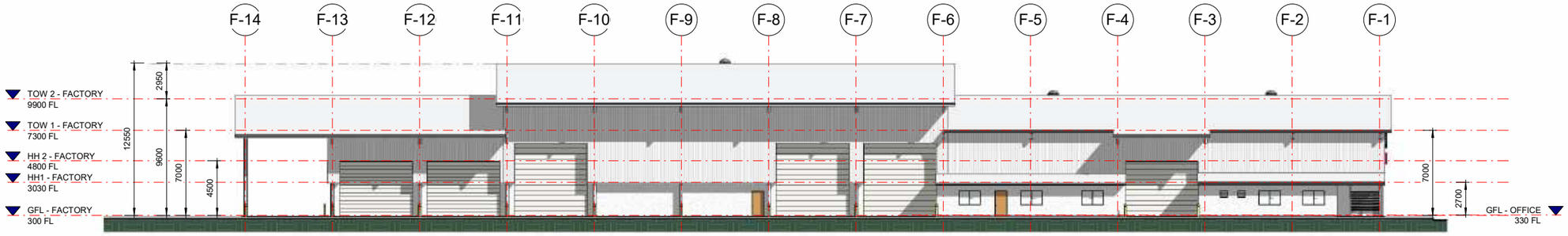

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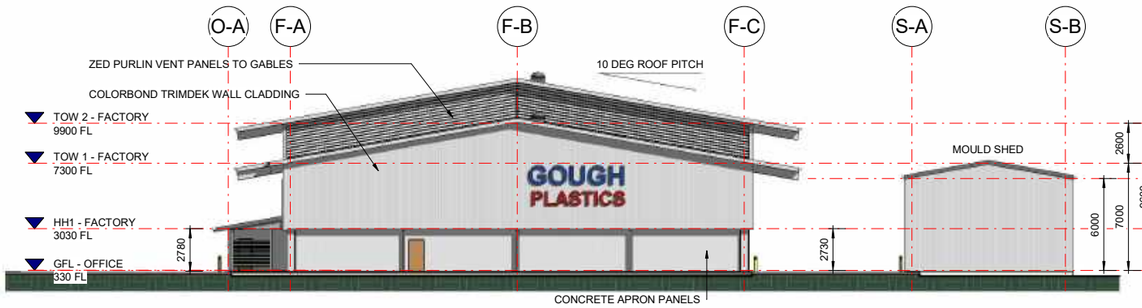

FACTORY - WEST ELEVATION

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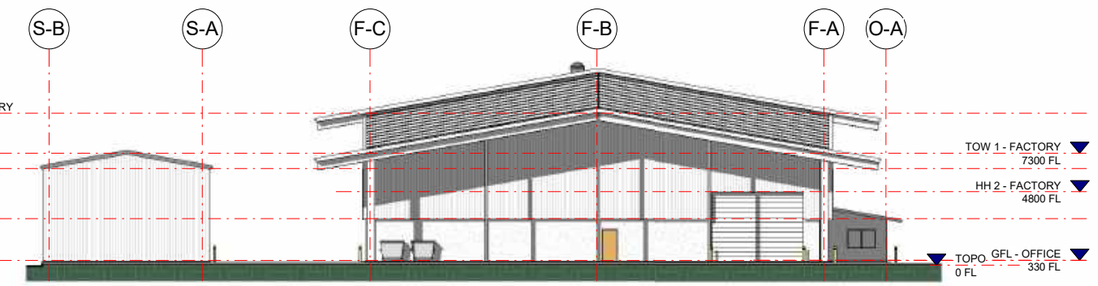

FACTORY - EAST ELEVATION

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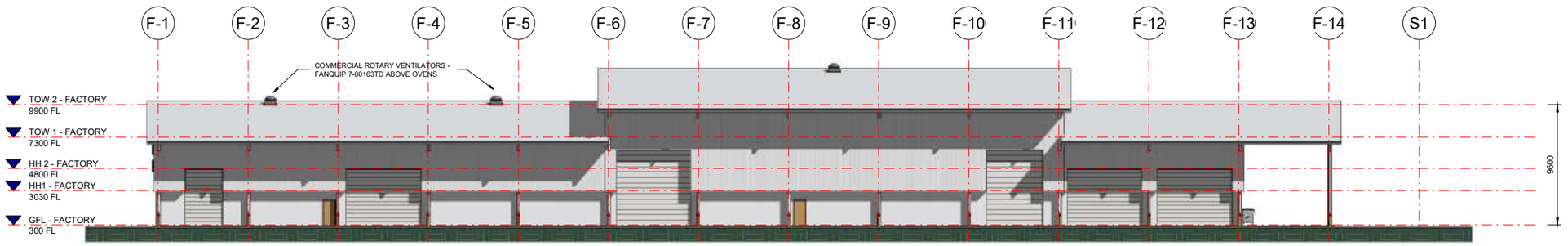

FACTORY - SOUTH ELEVATION

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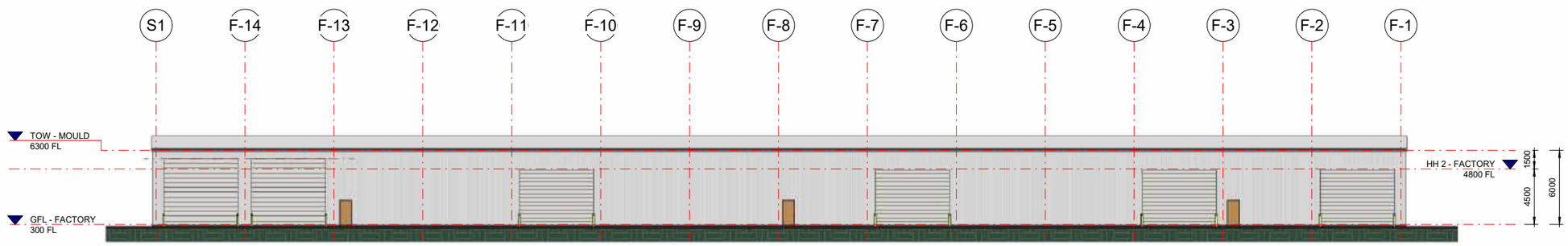

MOULD SHED - NORTH ELEVATION

1 : 200

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DRN: GVD	DATE: 11.5.23	PHASE: DA
ISSUE: A	SCALE: 1 : 200	
SH No: DA4	JOB No: 21012GP	

GVD BUILDING DESIGN

APPENDIX B

SPEL-Hydrochannel Product Brochure

SPEL Hydrochannel

Stormwater filtration treatment in grated drains

spelstormwater
joy in water

spel.com.au

The Hydrochannel is an insert that can be placed inside a channel grated drain of 300mm wide, and at least 450mm deep. It is designed for areas that would benefit from at source stormwater treatment, which would otherwise be bypassed.

This allows stormwater from high traffic areas (car parks and roads), industrial areas and metal roofs to be cleaned at site level, and then discharged safely to ground or surface water bodies locally.

The SPEL Hydrochannel's modular design means that the stormwater is treated in two steps:

1. Solids and particulates are settled in the first step.
2. Dissolved contaminants are then absorbed in the filter matrix.

FEATURES

The Hydrochannel filters and binds pollutants like hydrocarbons, heavy metals as well as total phosphorus (TP) and total nitrogen (TN). The pollutants can then be disposed of safely and easily.

- Stormwater treatment of surface levels.
- Gross pollutant sediment, and nutrient capture.
- Insert into 300mm wide channel drain.
- Sites with little CR flat grade.
- No underground vault for cartridges.
- Quick and easy installation and maintenance

Technical data

Module Length: 1000mm

Module Width: 300mm

Minimum Depth; 450mm

Tested Treatment Efficiencies*

Pollutant	Efficiency
Gross Pollutants (GP)	100%
Total Suspended Solids (TSS)	88%
Total Phosphorus (TP)	69%
Total Nitrogen (TN)	67%
Petroleum Hydrocarbon	0%

*Contact Spel to confirm approved performance for the project LGA

HOW IT WORKS

Modular design for ecological line drainage

The innovative modular design is based on a standard 300mm channel & trench grate width.

There is no need to make site specific or bespoke design amendments to the channel drainage runs.

The modular interior of the HydroChannel:

The Sedimentation Chamber removes coarse constituents, such as gravel, leaves and other solids. The rubber seal to the outside ensures no waters can by-pass this chamber within the channel.

The modular interior of the SPEL HydroChannel:

- The baffle is placed on the foundation the granular filter bag's where the dissolved pollutants are removed
- The sedimentation box is fixed with four locking pins so no water can pass by the box

HOW IT WORKS

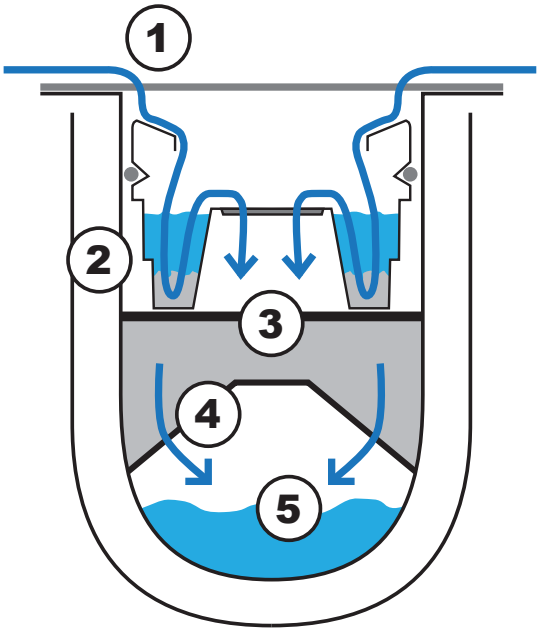
Section of the SPEL HydroChannel:

1) Water comes from the surface to the SPEL HydroChannel

2) The sedimentation chamber removes coarse solids, such as gravels, chippings, leaves and other solids. The rubber seal ensures a water tight seal is maintained.

3-4) The pre-treated water pass through the granular filter bag, and the organic and inorganic pollutants are removed.

5) The filtered water flows over the baffle into the free flow area of the channel. It can then be re-used, or discharged to surface or ground water via infiltration.



Modular Design

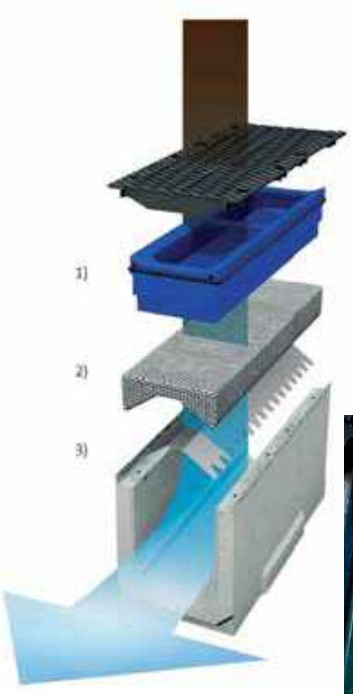
Based on the innovative filtration solution is the concrete nominal width of 300mm. Planners are not required to make any alternations in the drainage plan if they want to treat the water with the HydroChannel.

The modular interior of the HydroChannel:

1) The sedimentation box is primary treatment capturing solids such as stones, leaves, and suspended particles on. The rubber lip ensures sealing around the edges – for the reliable differentiation for subsequent filtration.

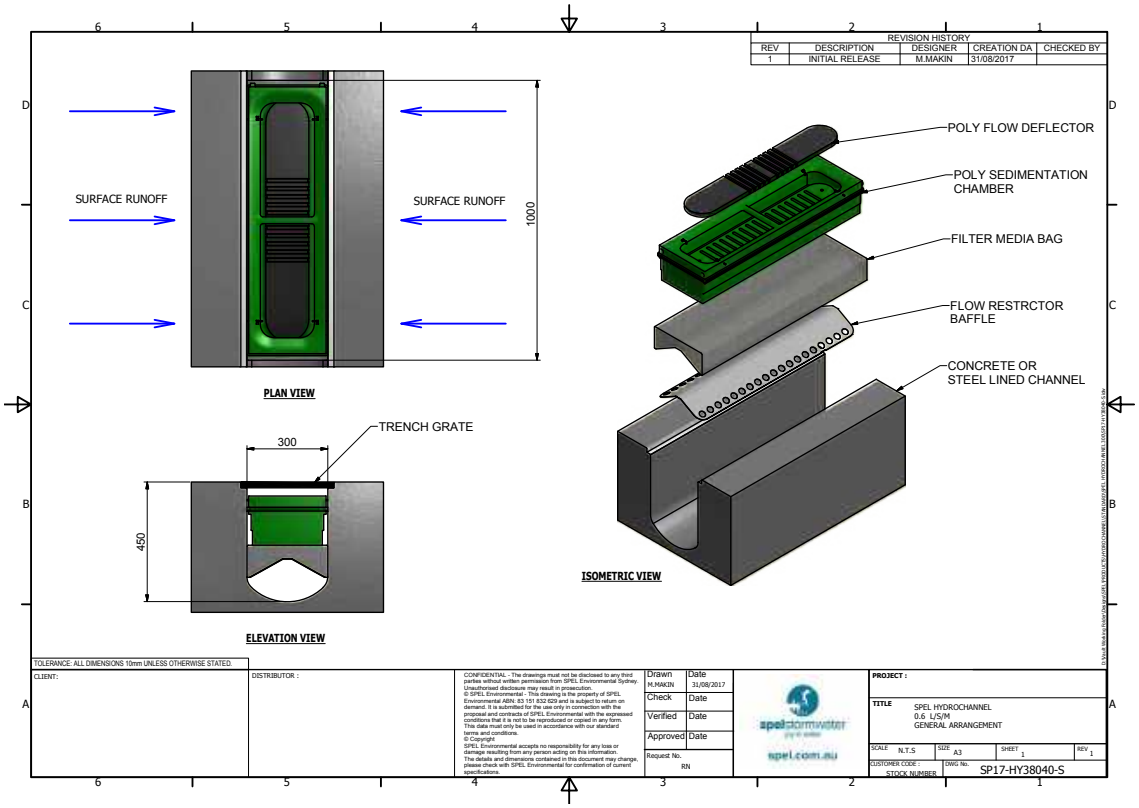
2) The pretreated rainwater passes through the granular-filter-pad and the organic and inorganic pollutants will be filtered from the water.

3) The filtered water flows over the baffle into the free flow area of the channel and is discharged per normal site requirements.

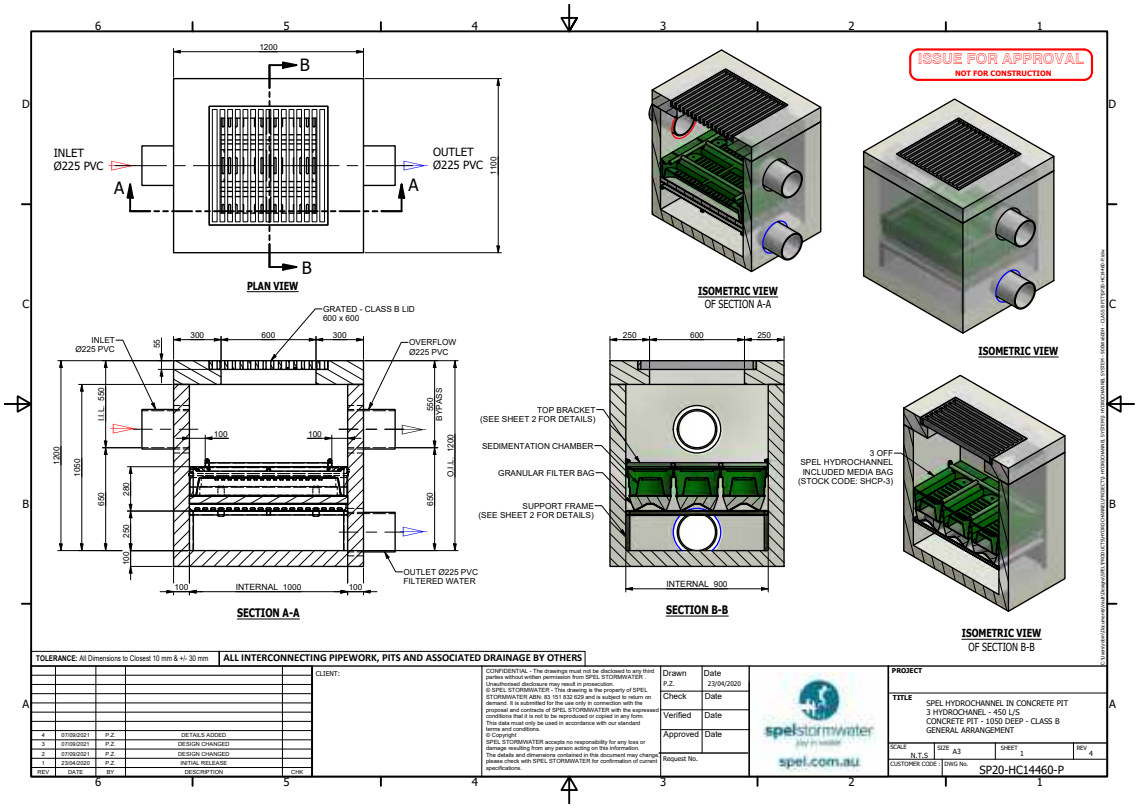


DRAWINGS

Hydrochannel



Hydrochannel IN A PIT



SPEL Hydrochannel

Stormwater filtration treatment in grated drains

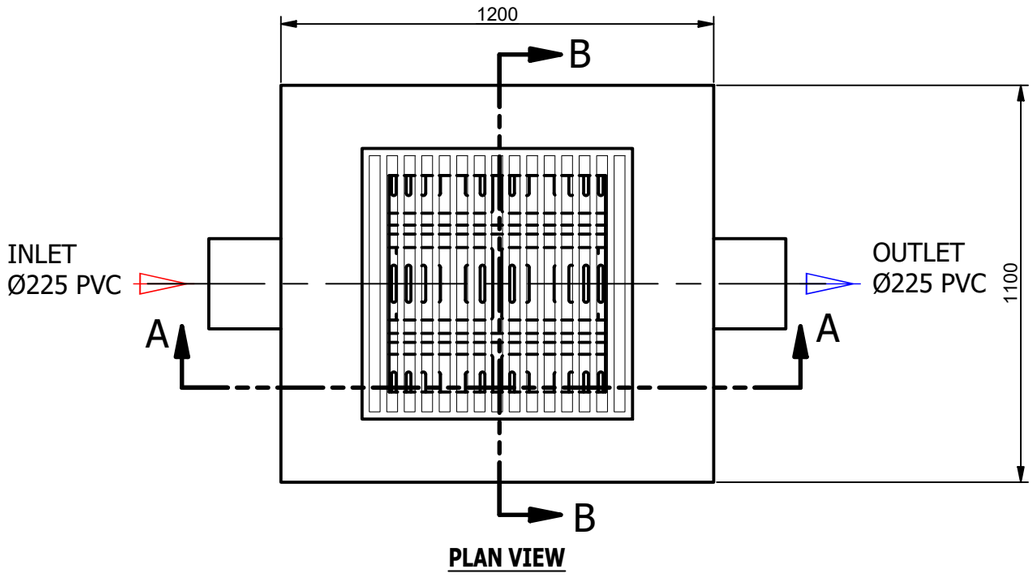
NSW HEAD OFFICE 100 Silverwater Rd, Silverwater NSW 2128 PO Box 7138, Silverwater NSW 1811 P: +61 2 8705 0255 P: 1300 773 500 E: nsw.sales@spel.com.au	**QLD MAIN OFFICE** 130 Sandstone Pl, Parkinson QLD 4115 P: +61 7 3271 6960 P: 1300 773 500 I E: qld.sales@spel.com.au **QLD SUNSHINE COAST BRANCH** 19-27 Fred Chaplin Circuit, Bells Creek, QLD 4551 P: 1300 773 500 I E: qld.sales@spel.com.au	**VIC & TAS OFFICE** 897 Wellington Rd Rowville VIC 3178 P: +61 3 5274 1336 P: 1800 810 139 I E: sales@spel.com.au **VIC GEELONG BRANCH** 70 Technology Close, Corio, P: +61 3 5274 1336 P: 1800 810 139 I E: sales@spel.com.au
SA OFFICE 9 Hampden Road, Mount Barker SA 5251 P: 1300 773 500 E: sales@spel.com.au	**WA OFFICE** 2 Modal Crescent Canning Vale WA 6155 P: +61 8 9350 1000 P: 1800 335 550 E: sales@spel.com.au	**NZ OFFICE AUCKLAND** 100 Montgomerie Road Airport Oaks P: +64 9 276 9045 E: sales@spel.com.au
NZ OFFICE WANGANUI 43 Heads Road Wanganu New Zealand P: +64 6 349 0088 I E: sales@spel.com.au	**NZ OFFICE WELLINGTON** 41 Raiha St Porirua Wellington New Zealand P: +64 4 239 6006 I E: sales@spel.com.au	**PHILIPPINES OFFICE METRO MANILA** Unit 2210 Lumiere Residences Pasig Boulevard, Pasig City P: +61 2 8705 0255 P: 1300 773 500 E: sales@spel.com.au
SINGAPORE OFFICE 512 Chai Chee Lane, #06-04 Bedok Industrial Estate, Singapore 469028 P: +61 2 8705 0255 P: 1300 773 500 I E: sales@spel.com.au	**UK OFFICE UNITED KINGDOM** Lancaster Rd Shrewsbury SY1 3NQ UK P: +44 (0)1743 445200 I E: sales@spel.com.au	**USA OFFICE CLEVELAND** 4548 Industrial Parkway Cleveland, Ohio 44135 P: +61 2 8705 0255 P: 1300 773 500 E: sales@spel.com.au

We believe clean water is a right not a privilege and we work to ensure a joy in water experience for you with your children and grandchildren.

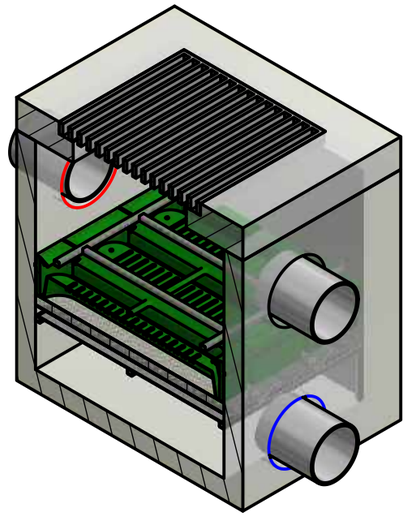
spelstormwater
joy in water

100 Silverwater Rd, Silverwater NSW 2128 Australia
Phone: (02) 8705 0255
Email: sales@spel.com.au
spel.com.au

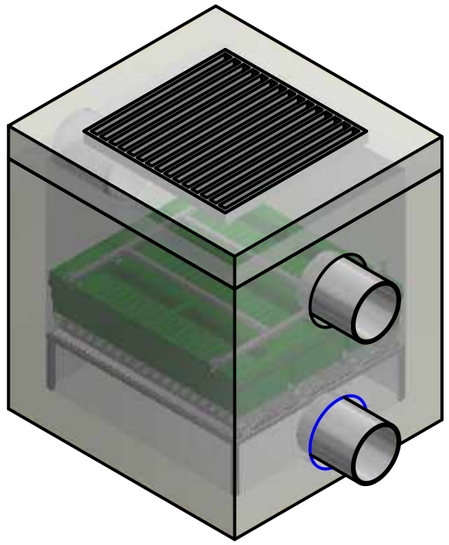
ISSUE FOR APPROVAL
NOT FOR CONSTRUCTION



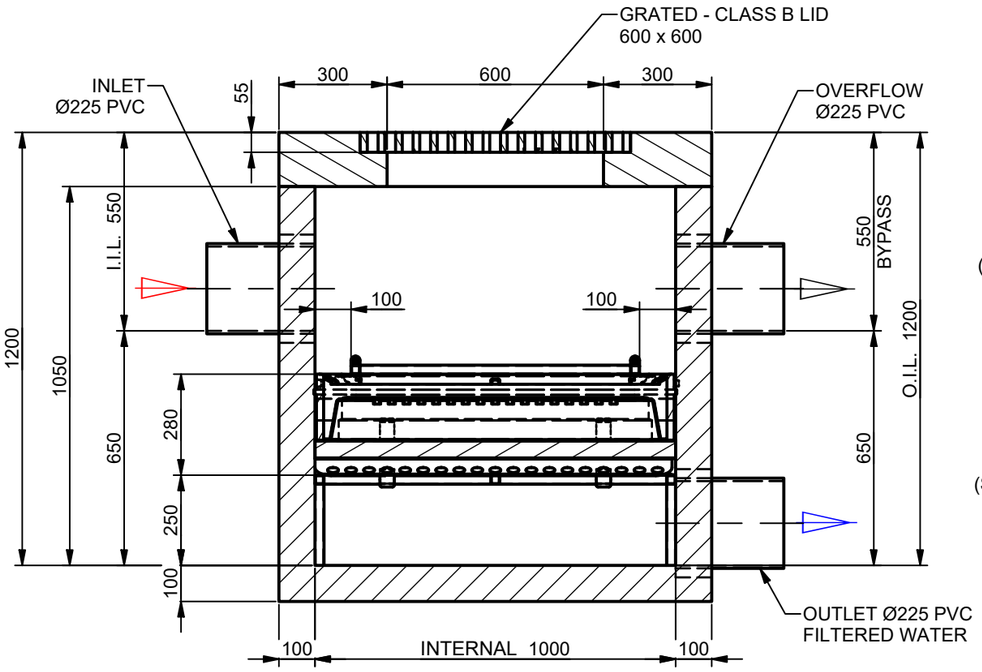
PLAN VIEW



ISOMETRIC VIEW
OF SECTION A-A



ISOMETRIC VIEW



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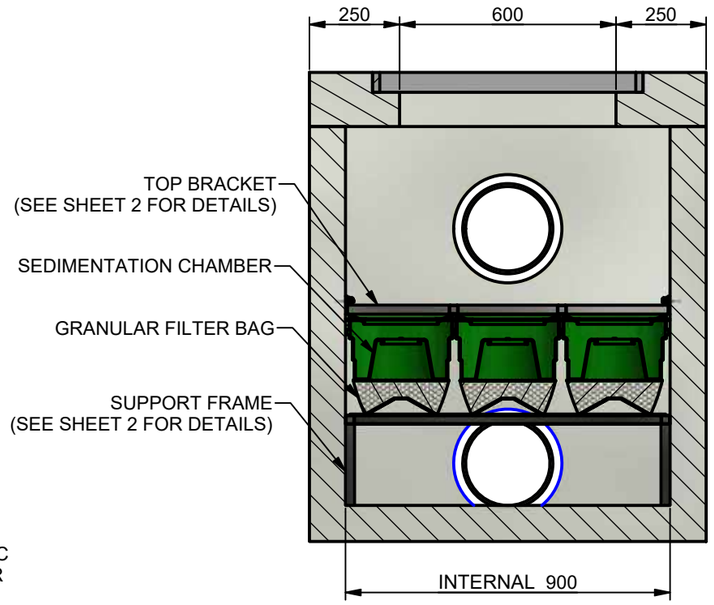
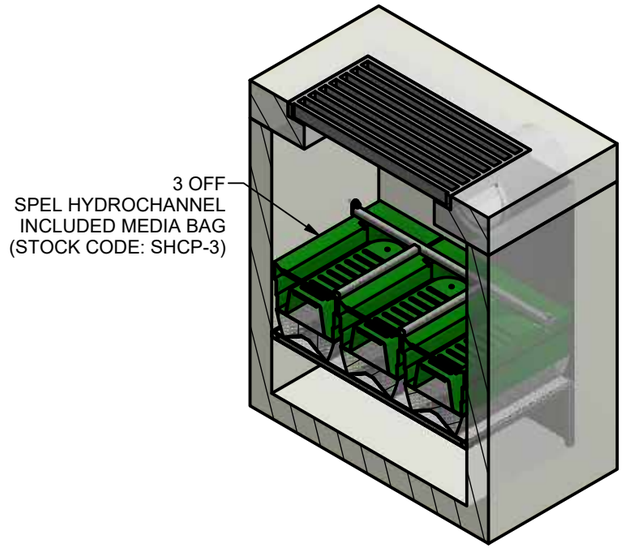


SECTION B-B



ISOMETRIC VIEW
OF SECTION B-B

TOLERANCE: All Dimensions to Closest 10 mm & +/- 30 mm

ALL INTERCONNECTING PIPEWORK, PITS AND ASSOCIATED DRAINAGE BY OTHERS

REV	DATE	BY	DESCRIPTION	CHK
4	07/09/2021	P.Z.	DETAILS ADDED	
3	07/09/2021	P.Z.	DESIGN CHANGED	
2	07/09/2021	P.Z.	DESIGN CHANGED	
1	23/04/2020	P.Z.	INITIAL RELEASE	

CLIENT:

Drawn P.Z.	Date 23/04/2020
Check	Date
Verified	Date
Approved	Date
Request No.	

spelstormwater
joy in water
spel.com.au

PROJECT

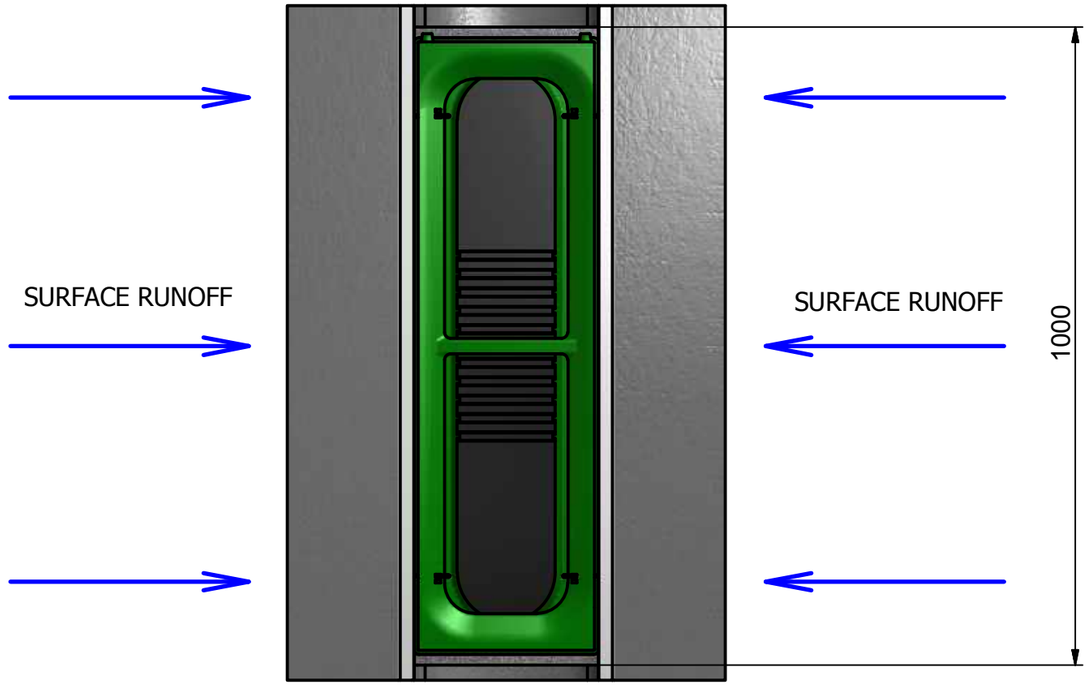
TITLE
SPEL HYDROCHANNEL IN CONCRETE PIT
3 HYDROCHANEL - 450 L/S
CONCRETE PIT - 1050 DEEP - CLASS B
GENERAL ARRANGEMENT

SCALE	SIZE	SHEET	REV
N.T.S	A3	1	4

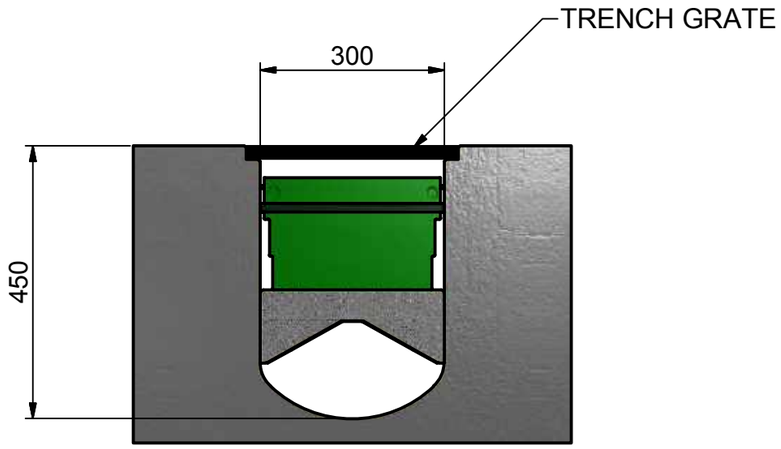
CUSTOMER CODE :
DWG No. SP20-HC14460-P

C:\Users\robin\Documents\Vault\Designs\SPEL\PRODUCTS\HYDROCHANNEL\PROJECT\3 HYDROCHANNEL SYSTEM\3 HYDROCHANNEL SYSTEM - 900Wx600H - CLASS B PIT\SP20-HC14460-P.idw

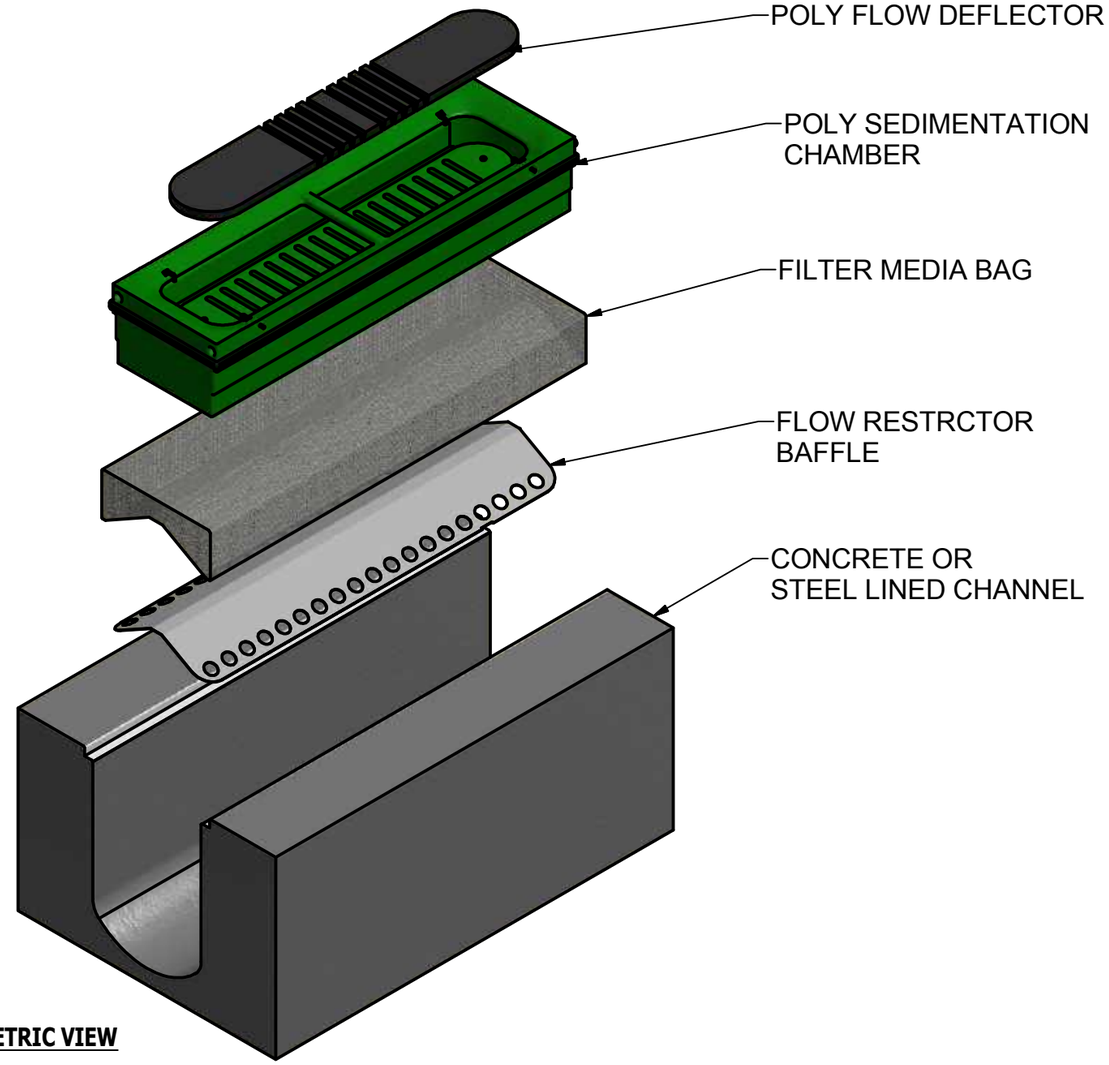
REVISION HISTORY				
REV	DESCRIPTION	DESIGNER	CREATION DA	CHECKED BY
1	INITIAL RELEASE	M.MAKIN	31/08/2017	



PLAN VIEW



ELEVATION VIEW



ISOMETRIC VIEW

For More Details Please Refer to
Spel Environment - Thunda-Flo / Hydrochannel

D:\Vault Working Folder\Designs\SPEL\PRODUCTS\HYDROCHANNEL\STANDARD\SPEL HYDROCHANNEL 300\SP17-HY38040-S.idw

TOLERANCE: ALL DIMENSIONS 10mm UNLESS OTHERWISE STATED.

CLIENT:

DISTRIBUTOR :

Drawn	M.MAKIN	Date 31/08/2017
Check		Date
Verified		Date
Approved		Date
Request No.	RN	

spelstormwater
joy in water
spel.com.au

PROJECT :

TITLE SPEL HYDROCHANNEL
0.6 L/S/M
GENERAL ARRANGEMENT

SCALE	SIZE	SHEET	REV
N.T.S	A3	1	1

CUSTOMER CODE : STOCK NUMBER

DWG No. SP17-HY38040-S

APPENDIX C

Flood Model Certification – Quantity Mitigation
(Venant Solutions)

Derek Saw

From: Derek Saw
Sent: Thursday, 15 September 2022 1:26 PM
To: Andrew Wallace; John Single (john.single@nceng.com.au)
Subject: MJ2350 - RE: M1234 - Clarification of flood reporting/modelling for CBIP

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: FileChimp

Response letter to George and CBIP for your review

Good morning George,

Thank you for issuing the Venant Solutions letter dated 9th September 2022, ref: MJ: L.M00260.02.06.docx

In summary the letter states within the last 2 paragraphs:

- The Mike Flood model, approved as part of the Development Approval, does not contain an adjustment to reflect a change in the fraction impervious over the developed allotments.
- An XP-RAFTS model was completed that included a change in the fraction Impervious (The value of which is still not provided).
- The letter appears to contradict the first statement in that it advises that the revised (to account for increase in fraction impervious) XP-RAFTS model was developed to inform the MIKE-FLOOD model.
- This XP-RAFTS assessment identified an increase in peak run-off from the development site.
- The XP-RAFTS model also identified a small drop in the peak flow in Stuart Creek, which was 'not unexpected' due to the change in duration over the development site and the location within the catchment.
- The Langtree Consulting report indicated approximately 40% of the development will drain directly to Stuart Creek along Ron Mclean Drive. However this does not appear to be reflected within the flood mapping.
- The last line of the letter states ***"Therefore additional on-site detention beyond that already provided by the compensatory storage is not required".*** This is what NCE will rely upon to move forward and complete the BA works.
- The letter is co-signed by Richard Gale (Engineer) and reviewer Dr Mark Jempson (RPEQ)

DEREK SAW | DIRECTOR | M: 0409 000 895 | E: derek.saw@nceng.com.au

NORTHERN CONSULTING ENGINEERS

TOWNSVILLE OFFICE
50 Punari Street, Currajong
TOWNSVILLE QLD 4812
Ph: 07 4725 5550
W: www.nceng.com.au

SUNSHINE COAST OFFICE
Unit 1, 60 Hoopers Road,
KUNDA PARK QLD 4556
northernconsulting

GLADSTONE OFFICE
Suite 2, 4/69 Goondoon St
GLADSTONE QLD 4680

From: George Milford <gmilford@milfordplanning.com.au>
Sent: Wednesday, 14 September 2022 10:56 PM
To: Ian Gough <ig@gough.com.au>
Cc: Derek Saw <derek.saw@nceng.com.au>; John Single <john.single@nceng.com.au>; Cleveland Bay Industrial Park Admin <admin@cbip.com.au>; Sarah Jones <sjones@milfordplanning.com.au>
Subject: Re: M1234 - Clarification of flood reporting/modelling for CBIP

'Evening all -

Please see attached the advice that CBIP's engineer (Langtree) has procured explaining the strategy dealing with the fraction impervious assumptions for the flood modelling.

The outcome of this advice is consistent with the Council/State (including peer review) decision to approve and accept the flood modelling completed for CBIP.

I expect that this now satisfactorily deals with this issue and puts us in a position to be able to proceed with advancing the DA documentation.

Please feel free to call me directly to discuss any aspect of this as needed.

Thanks,

George Milford | DIRECTOR

MILFORD PLANNING

(07) 4724 0095 | www.milfordplanning.com.au
15 Allen Street, South Townsville Q 4810

On Wed, 7 Sept 2022 at 22:26, George Milford <gmilford@milfordplanning.com.au> wrote:

> Dear Ian –
>
> Thanks very much for your time on the phone today - it was good to talk this over.
>
> As discussed:
>
> 1.) I confirm that I have provide all of the available flood information to NCE. This was provided on the 17th of last month. There is no further information that exists that relates to this. This is the same information that the Council and State used to assess and approve the project.
> 2.) Following discussion with John Single (of NCE), I have a clearer picture of NCE's specific concern/information needed. This information is not contained in the existing flood report and never has been.
> 3.) Penny and I had a meeting yesterday with CBIP's civil engineer to discuss the matter and understand how this issue has been dealt with. At CBIP's request he is working with the CBIP flood engineers to provide an explanation about how this issue has been addressed with the approved flood work completed to date.
> 4.) I expect we will have this advice back from CBIP's engineer's within a week.
>
> The combined advice from CBIP's engineers is that the matter raised by NCE has been considered in the design of the subdivision, and there is no need for on-site detention on the individual lots (which is absolutely the consistent with CBIP's intent with all other service aspects of this development). That being the case, if timeframes are pressing, it may be worthwhile having NCE proceed with the stormwater quality modelling on this basis (and obviously the outstanding information will be available shortly and certainly prior to their work being finalised).
>
> I will let you know as soon as I have this additional material from CBIP's engineers.
>
> Feel free to call to discuss.
>
> Thanks,
>
> **George Milford** | DIRECTOR

MILFORD PLANNING

(07) 4724 0095 | www.milfordplanning.com.au
15 Allen Street, South Townsville Q 4810

Venant Solutions Pty Ltd
Level 1, Suite 101
26-30 Rokeby St Collingwood
VIC 3066, Australia
PO Box 877 Macleod
VIC 3085, Australia
P. 03 9089 6700
ABN. 15 166 193 219
www.venantsolutions.com.au

Our Ref: MJ: L.M00260.02.06.docx

9 September 2022

Langtree Consulting
L1, 14 Ingham Road
West End QLD 4810
brett@langtreeconsulting.com

Dear Brett

RE: TOWNSVILLE STATE DEVELOPMENT AREA CBIP19 – FLOOD IMPACT ASSESSMENT OF DEVELOPMENT STAGING

Background

Previously Venant Solutions prepared a flood impact assessment report (of the Cleveland Bay Industrial Park (the Site) (*L.M00260.01.pdf*). That report assessed the floodplain fill required for the full development of the Site and included various mitigation options. Langtree Consulting subsequently requested a flood impact assessment of the proposed staging scenarios including the proposed mitigation option (compensatory earthworks). As the design and staging scenarios has evolved Venant Solutions issued a further six reports (*L.M00260.02.pdf*, *L.M00260.02.01.pdf*, *L.M00260.02.02.pdf*, *L.M00260.02.04.pdf, L.M00260.02.05 and L.M00260.02.06*). This report is an update to L.M00260.02.06 to include commentary on the fraction imperviousness of the Site. The report is otherwise unchanged from L.M00260.02.06 and hence the results of staging scenarios and compensatory earthworks including a bund across the compensatory earthworks are unchanged. It should be read in conjunction with the initial report (*L.M00260.01.pdf)* to gain an understanding the assessment methodology.

There are five proposed stages of development and these were assessed using the MIKE FLOOD hydraulic model. Each stage was assessed with the proposed compensatory earthworks that would be built alongside that stage; the assessment was cumulative in the sense that Stage 2 included Stage 1, Stage 3 include Stage 1 and 2 etc. The change in the 1% AEP flood level for each of the five stages are presented in Figure 1 to 5 respectively. Also shown in these figures are the proposed filling and associated compensatory earthworks for each stage and the maximum flood levels.

The final staging scenario (Stage 5) has expanded the development compared to the previous report (*L.M00260.02.05.pdf*). It extends further to the north and has slightly larger compensatory earthworks (*BULK EARTHWORKS MASTER REV H.dwg*). In the final staging scenario shown in the previous report there was a bund with a height of 4.3 m AHD at the northern end of the compensatory earthworks. The bund was tied into areas of 4.3 m AHD or higher on either end and was intended to prevent increases in flood level of more than 10 mm in the Southern Port Road corridor to the north of the Site. This bund is still in place and its location can be seen in Figure 5. However the two separate 375 mm pipes have been moved next to one another and a notch opening has been made in the bund to allow the water to drain more quickly after a flood event. The notch opening has the following specifications:

- Base at 1.96 m AHD;
- Base width of 1.2 m;
- 1:2 batters to the top of bund at 4.3 m AHD, giving a top width of approximately 10 m.

The lemon shade represents areas where there is no change in flood level within a ±10 mm tolerance. The green shades represent areas where there would be reductions in flood level in accordance with the magnitude shown in in the legend, and the orange/red shades represent areas where the flood level would be increased. The pink shade identifies areas that would

currently be inundated but would be flood free with the development in place (was wet now dry) and the blue shade shows the reverse (was dry now wet).

Stages 1 and 2 have no impact on flood levels in the greater floodplain, only on the road reserve at the southern end of the Site. Stage 3 shows a small redistribution of flow to the west around the compensatory earthworks. Stage 4 and the associated earthworks cause reductions in flood level to the south of the earthworks and small areas of increase to the north of them. Stage 5 diverts flow from the north-west of the Site to the north, but the increases in flood level do not reach the Southern Port Road reserve. No stage of the development causes an increase in flood level on private land external to the site.

The previous assessment (*L.M00260.02.02.pdf*) showed small increases in flood level (0.01 m to 0.02 m) in the road reserve at the southern end of the Site during Stages 1 to 3. This assessment showed these increases were slightly greater, with increases of 0.025 m in Stages 1 to 3. Stage 4 shows an increase of 0.015 m, while Stage 5 shows no increases. These increases do not affect the existing road and would not materially impact on any future road works.

Table 1 shows the 1% AEP flood levels adjacent to the lots of the proposed development. If the flood level varies along the boundary of the lot, the highest level along the boundary is shown. Some of the lots do not have level shown because the flood is not adjacent to those lots. Flood levels are provided for information for each lot even if that particular lot will not be developed in a particular stage.

As noted earlier, the flood impact assessment methodology is documented in *L.M00260.01.pdf*. In the earlier stages of the design evolution onsite basins were proposed to manage stormwater runoff and hence the fraction imperviousness of the site was not adjusted as there would be in increases in peak runoff from the Site. As the design evolved large basins were proposed as part of the compensatory earthworks and were then further expanded to provide additional fill material.

The Site drainage design documented in the Langtree Consulting report (*Cleveland Bay Industrial Park Engineering Services Report, Reconfiguring a Lot – Western Precinct, Lot 1 on SP315832 & Lot 5 on SP273456*) shows that about 60% of the developed Site (Lots 4-6, 14-20, 50, 51 and part of 13) will drain to the basins and 40% will drain directly to Stuart Creek along Ron McLean Drive. The inflow boundaries to the MIKE-FLOOD model were not adjusted to represent the change fraction imperviousness in the developed case. However, the change was assessed in the XP-RAFTS model by increasing the fraction impervious but without including the proposed storage; the XP-RAFTS model was used to generate flow boundaries for the MIKE-FLOOD model. The XP-RAFTS model with modified fraction impervious values at the Site showed an increased runoff from the Site but a small drop in the peak flow rate in Stuart Creek which is the receiving waterway. In the existing conditions the peak 1% AEP flow in Stuart Creek immediately downstream of the Site is 803.2 m^3/s and with the development it is 802.5 m^3/s.

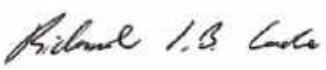
The negligible change in peak flow was not unexpected given the minor contribution of the Site to the total catchment; the Site area is 1% of the total catchment. Also the Site is towards the bottom of the catchment and hence the peak flow from the Site occurs well before the peak from the main catchment. The urbanisation of the Site increases the response time from the Site and hence the runoff from the Site enters Stuart Creek slightly earlier than pre-development conditions. Therefore additional on-site detention beyond that already provided by the compensatory storage is not required.

Table 1 Maximum 1% AEP Flood Levels next to Lots

Lot	Stage 1 1% AEP Flood Level (m AHD)	Stage 2 1% AEP Flood Level (m AHD)	Stage 3 1% AEP Flood Level (m AHD)	Stage 4 1% AEP Flood Level (m AHD)	Stage 5 1% AEP Flood Level (m AHD)
Lot 50 on SP273456	N/A	N/A	N/A	N/A	N/A
Lot 51 on SP273456	6.79	6.78	6.78	6.77	6.75
Lot 1 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 2 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 3 on SP315832	6.33	6.33	6.33	6.33	6.33
Lot 4 on SP315832	6.71	6.71	6.71	6.70	6.67
Lot 5 on SP315832	6.71	6.71	6.70	6.70	6.67
Lot 6 on SP315832	6.70	6.71	6.70	6.70	6.67
Lot 7 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 8 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 9 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 10 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 11 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 12 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 13 on SP315832	4.93	4.93	4.93	4.93	5.25
Lot 14 on SP315832	5.23	5.23	5.23	5.39	5.37
Lot 15 on SP315832	5.61	5.61	5.60	5.40	5.40
Lot 16 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 17 on SP315832	6.05	6.05	6.03	5.99	5.76
Lot 18 on SP315832	N/A	N/A	N/A	N/A	N/A
Lot 19 on SP315832	6.48	6.48	6.48	6.47	6.42
Lot 20 on SP315832	6.68	6.68	6.67	6.67	6.64

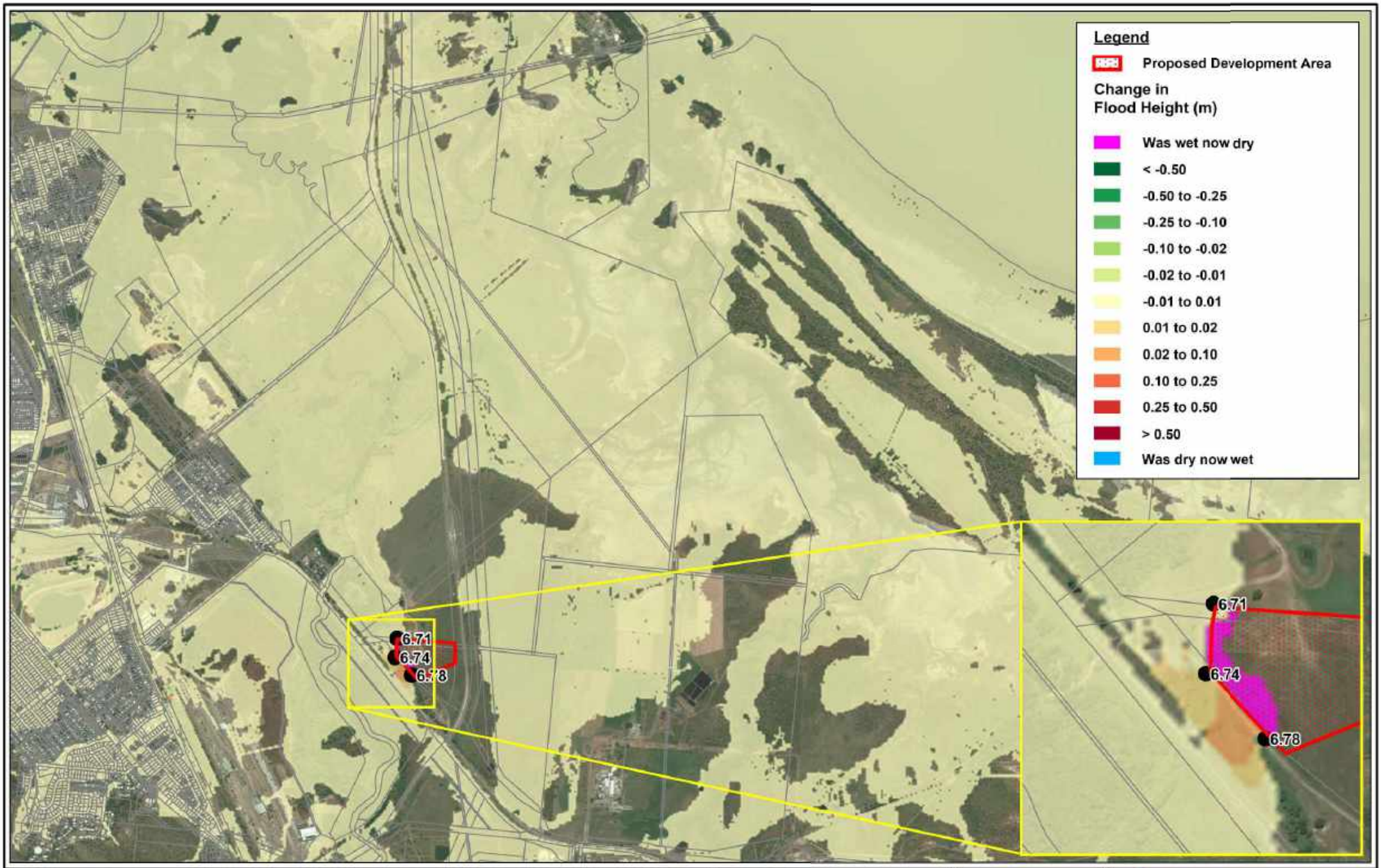
In conclusion the compensatory earthworks for each stage sufficiently mitigate the offsite impacts so that there are no significant offsite increases in flood level for any stage of the development.

Yours faithfully,



Richard Gale
Engineer
Venant Solutions

Dr Mark Jempson (RPEQ)
Director (Reviewer)
Venant Solutions



Title: Townsville SDA CBIP19 - Stage 1
Change in Peak Flood Level - 1% AEP

Figure: 1

Rev: A

N

0 0.5 1km
Approx. Scale

This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

Filepath: S:\Projects\M00260.MJ.Townsville_SDA\GIS\Drawings\L.M00260.002.03\Fig1_Dif_LowerStuart_100y24h_d050-e008_hMax.WOR

By: RG Date: Nov 2021

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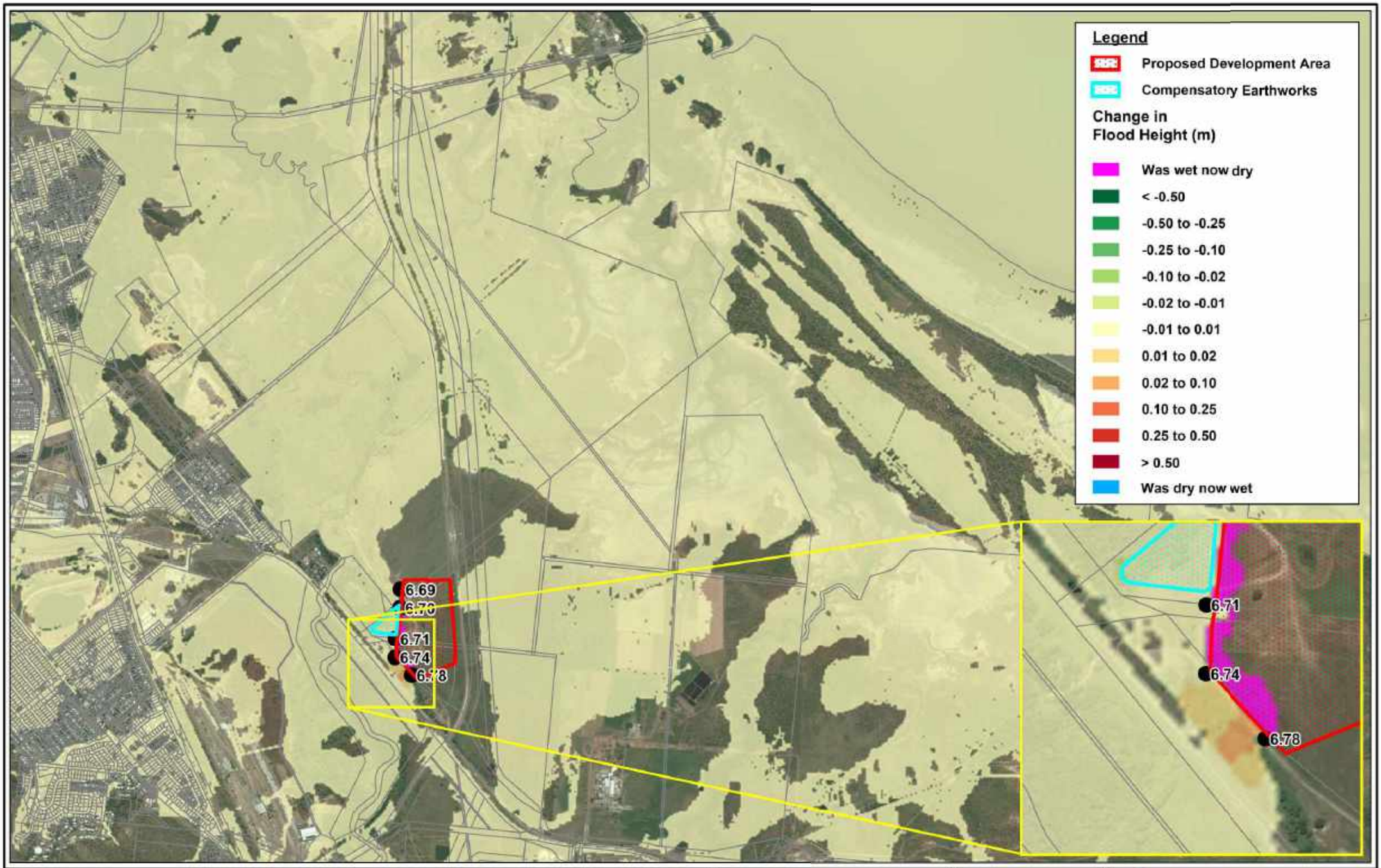

Title: Townsville SDA CBIP19 - Stage 2
Change in Peak Flood Level - 1% AEP

Figure: 2

Rev: A

N

0 0.5 1km
Approx. Scale

This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

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By: RG Date: Nov 2021

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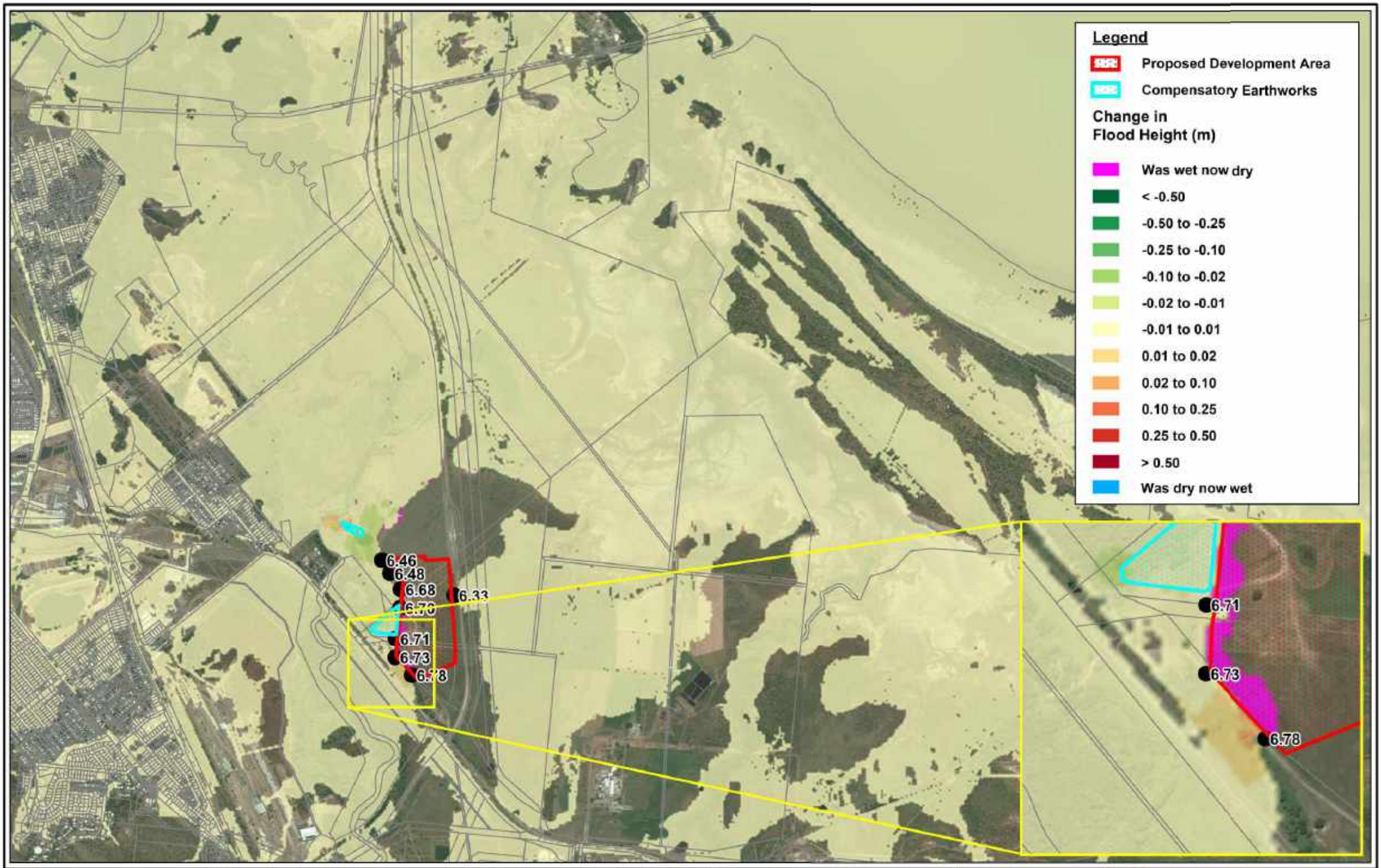

Title: Townsville SDA CBIP19 - Stage 3 Change in Peak Flood Level - 1% AEP	Figure: 3	Rev: A	N 0 0.5 1km Approx. Scale	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.VenantSolutions.com.au
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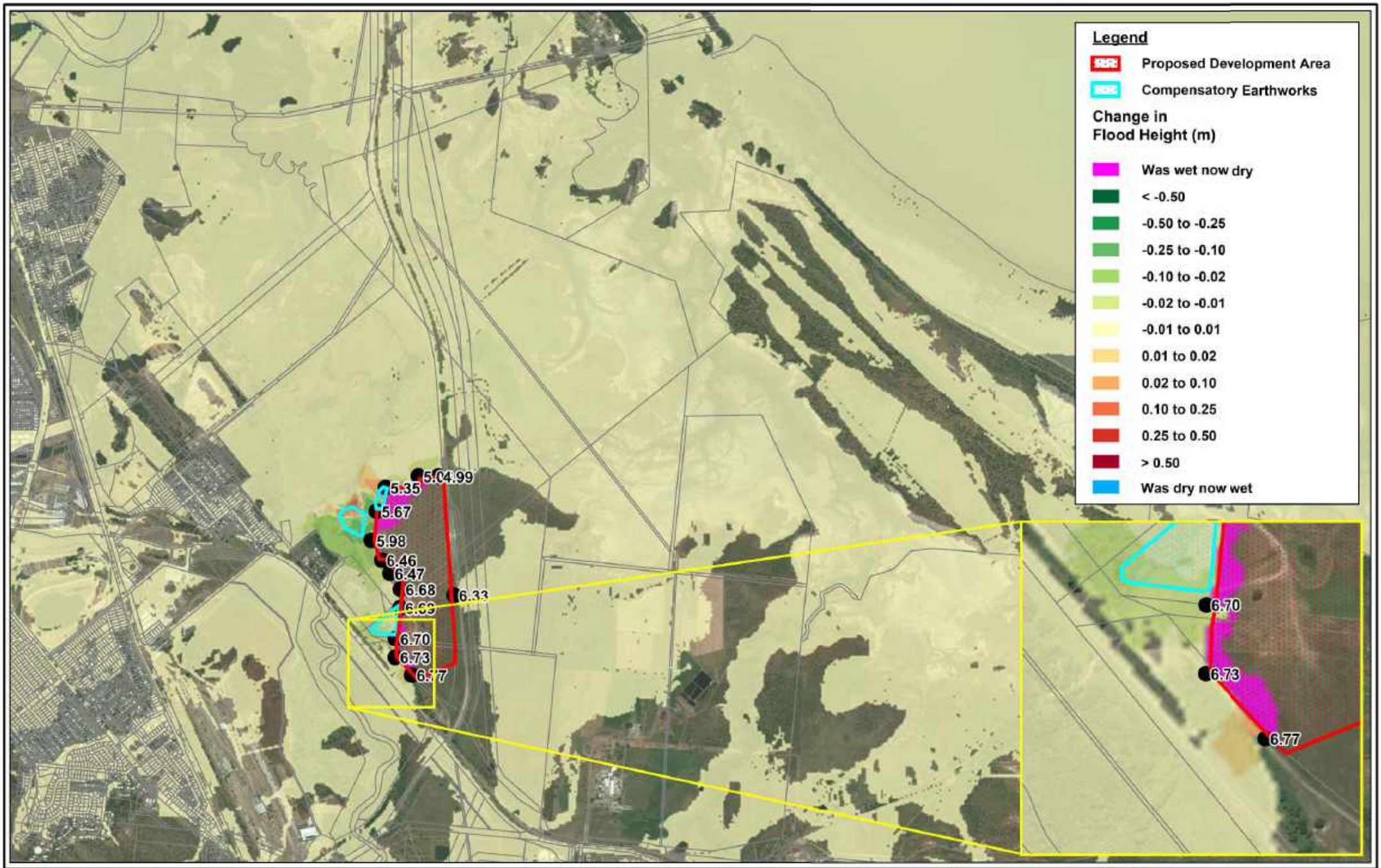

Title: Townsville SDA CBIP19 - Stage 4
Change in Peak Flood Level - 1% AEP

Figure: 4

Rev: A

N

0 0.5 1km
Approx. Scale

This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

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By: RG Date: Dec 2021

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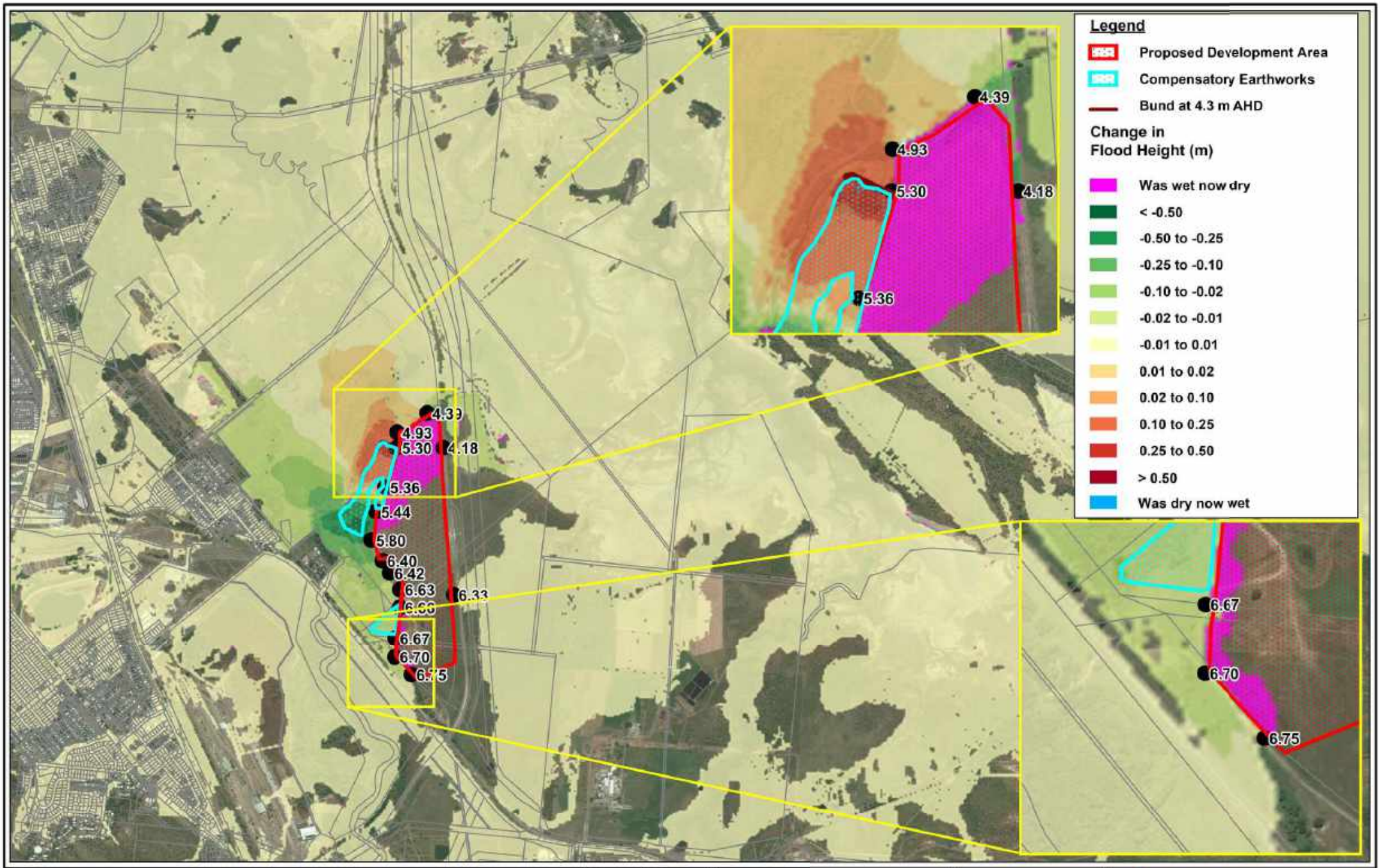

Title: Townsville SDA CBIP19 - Stage 5 Change in Peak Flood Level - 1% AEP	Figure: 5	Rev: A	N 0 0.5 1km Approx. Scale	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.VenantSolutions.com.au
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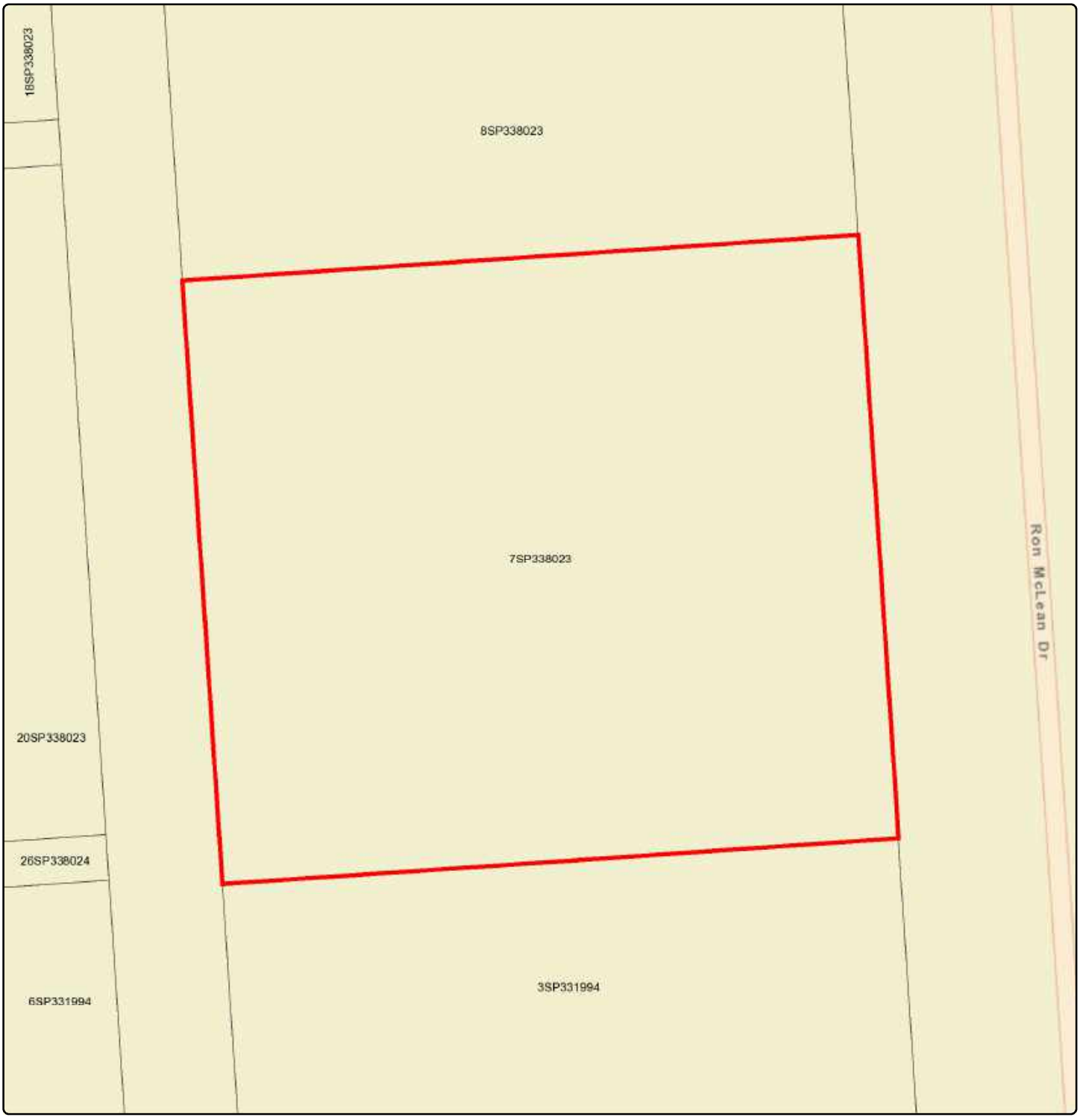
MILFORD PLANNING

Appendix 6

State Planning Policy - Lot Plan Search

Making or amending a local planning instrument
and designating land for community infrastructure

Date: 20/06/2023



Location Diagram

Queensland Government

0 20 40 60 80

Metres

Disclaimer: This map has been prepared with due care based on the best available information at the time of publication. However, the State of Queensland (acting through the department) makes no representations, either express or implied, that the map is free from errors, inconsistencies or omissions. Reliance on information contained in this map is the sole responsibility of the user. The State disclaims responsibility for any loss, damage or inconvenience caused as a result of reliance on information or data contained in this map.

State Planning Policy mapping layers - consolidated list for all selected Lot Plans

(Note: Please refer to following pages for State Interests listed for each selected Lot Plan)

DEVELOPMENT AND CONSTRUCTION
- State development area

NATURAL HAZARDS RISK AND RESILIENCE
- Flood hazard area - Level 1 - Queensland floodplain assessment overlay*
- Flood hazard area - Local Government flood mapping area*

TRANSPORT INFRASTRUCTURE
- State-controlled road

STRATEGIC AIRPORTS AND AVIATION FACILITIES
- Wildlife hazard buffer zone
- Height restriction zone 90m

STRATEGIC PORTS
- Priority ports

PRIORITY PORTS
- Townsville priority port precincts

Queensland Government

State Planning Policy mapping layers for each selected Lot Plan

Lot Plan: 7SP338023 (Area: 20000 m^2)
DEVELOPMENT AND CONSTRUCTION
- State development area
NATURAL HAZARDS RISK AND RESILIENCE
- Flood hazard area - Level 1 - Queensland floodplain assessment overlay*
- Flood hazard area - Local Government flood mapping area*
TRANSPORT INFRASTRUCTURE
- State-controlled road
STRATEGIC AIRPORTS AND AVIATION FACILITIES
- Wildlife hazard buffer zone
- Height restriction zone 90m
STRATEGIC PORTS
- Priority ports
PRIORITY PORTS
- Townsville priority port precincts

MILFORD PLANNING

Appendix 7

TSDA DEVELOPMENT SCHEME 2019 – SDA WIDE ASSESSMENT CRITERIA

SDA Wide Assessment Criteria	Response
Infrastructure and Services	
1. Development maximises infrastructure efficiency and minimises infrastructure costs for infrastructure associated with telecommunications, transport, water, wastewater, recycled water and energy.	**Complies** The proposed development will utilise new infrastructure services constructed to support the wider CBIP Western Precinct development. The proposed development will utilise new infrastructure services constructed to support the wider CBIP Western Precinct development.
2. Development plans for and manages impacts on existing and future known telecommunications, transport, water, wastewater, recycled water and energy networks.	**Complies** The CBIP Western Precinct has been designed appropriately to service future industrial end users. Therefore, the proposed development is not anticipated to result in an impact on infrastructure services provided. All future works to achieve essential infrastructure service to the proposed development will be undertaken in accordance with relevant standards.
3. Development is adequately serviced by telecommunications, transport, water, wastewater, recycled water and energy networks as relevant.	**Complies** The proposed development will be appropriately connected to infrastructure services provided as part for CBIP Western Precinct development. Further detail will be provided as part of a future operational works development application.
4. Development incorporates waste minimisation practices and considers refuse collection or disposal.	**Complies** The proposed development will be appropriately connected to Council's reticulated sewerage network and will be accessible for refuse collection and disposal via the local road network (being Penelope Road). The proposed development will incorporate appropriate waste management practices to ensure waste generated is in accordance with relevant requirements.
5. Development avoids or minimises adverse impacts on existing or proposed State or local government infrastructures services.	**Complies** It is considered that the proposed development will not have any adverse impact on existing or proposed State or local government infrastructure, given the proposed infrastructure connections will be suitable and appropriate to service the anticipated demand rates. The approved CBIP Western Precinct has been designed to accommodate end users of the nature proposed and therefore there will be sufficient capacity within the networks to accommodate the proposed development.
6. Development provides for and protects the safe and efficient function of the Bruce Highway, the North Coast rail line and Townsville Port Access Road.	**Complies** The proposed development is not anticipated to impact the existing function of the Bruce Highway, the North Coast rail line and Townsville Port Access Road. Particularly, as the anticipated vehicle types and daily trips is consistent with the assumption of the approved Traffic Impact Assessment prepared by Langtree Consultants to support the wider CBIP development. Refer to Section 3.2 of the Development Application Report. Further the

SDA Wide Assessment Criteria	Response
	proposed development will not have direct access to the Bruce Highway or Townsville Port Access Road and will utilise existing rail crossings as required. Furthermore, the proposed development will utilise the new Heleen Downs Road, Penelolpe road and Townsville Port Access Road intersection, all of which have been designed to accommodate traffic anticipated by industrial uses.
Emissions	
1. Development is designed to avoid or minimise: (a) Adverse impacts from air, noise and other emissions that will affect the health and safety, wellbeing and amenity of communities and individuals (b) Conflicts arising from (but not limited to), spray drift, odour, noise, dust, light spill, smoke or ash emissions with sensitive and/or incompatible land uses.	**Complies** The proposed development has been designed and will be operated in an appropriate manner to avoid and minimise adverse impacts from air, noise and other emissions that will affect the health and safety, wellbeing and amenity of communities and individuals. For example, a water truck will be utilised where required for dust suppression purposes, during construction. Once operational, the manufacturing activities/ processes will be wholly contained with the factory building. The subject site is sufficiently buffered from sensitive land uses, particularly the residential area and caravan park to the west, which is buffered by the balance allotment and the riparian corridor of Stuart Creek, thus minimising the potential for adverse impacts to sensitive land uses.
2. Development supports the achievement of the relevant acoustic and air quality objectives of the Environmental Protection (Noise) Policy 2008 and the Environmental (Air) Protection Policy 2008.	**Complies** It is considered the proposed development will be capable of meeting the acoustic and air quality objectives in the *Environmental Protection Policy 2008* given the separation distance and buffering between the development and surrounding sensitive receptors. There will be limited emissions in terms of noise and air due to the machinery and processes associated with manufacturing plastic products.
3. Development with the potential to impact on the air quality of Townsville will be expected to conduct air shed modelling, in accordance with the current best practice, to demonstrate compliance with air quality standards.	**Complies** The proposed development is not anticipated to have any impacts on the air quality of Townsville and will be operated in accordance with current best practice and the air quality standards. The Applicant has an existing operational factory within Townsville that operates in accordance with the required standards and EA requirements.
Contaminated Land	
1. Development on land likely to be contaminated or recorded on the Environmental Management Register or Contaminated Land Register does not adversely impact on human health or the environmental by exposure, management, or movement of contaminants.	**Complies** The subject site is not known to be included on the Contaminated Land Register (CLR) or Environmental Management Register (EMR). Given the historic use of the subject land as predominantly vacant land and grazing, it is unlikely to be included on the contaminated land register.
2. Where required, develop a strategy to manage any existing contamination and the potential for additional contamination such	**Complies** The proposed development is unlikely to cause any contamination and the subject site is not known to be contaminated.

SDA Wide Assessment Criteria	Response
that human health are not adversely impacted.	While it is unlikely to be encountered, any contaminated land identified during the construction phase will be remediated as required, and this can be managed through conditions of approval and future operational works.
Acid Sulfate Soils	
1. Development, in accordance with current best practice, is to: (a) Avoid the disturbance of acid sulfate soils (ASS) or (b) Ensure that the disturbance of ASS avoids or minimises the mobilisation and release of acid and metal contaminants.	**Complies** The proposed development is not anticipated to encounter acid sulfate soils. Particularly as the land has undergone bulk earthworks to ensure the site is above the defined Q100 (1 % AEP) flood level, no extensive earthworks are required to prepare the site for the proposed bulk storage and transport depot. If the event acid sulfate soils are disturbed during construction, best practices measures will be implemented to treat and removed acid sulfate soil from site.
Climate Change	
1. Development minimises emission of greenhouse gases and demonstrates how it will adapt to projected climate change conditions.	**Complies** Given the nature of the proposed use, the development is anticipated to result in minimal greenhouse gas emissions given it is a plastic product manufacturing factory.
Transport	
1. Increased traffic arising from development is either able to be accommodated within existing road networks or works are undertaken to minimise adverse impacts on existing and future uses and road network.	**Complies** Traffic generated from the proposal is considered to be appropriate for the current road networks. Particularly, as the anticipated vehicle types and daily trips is consistent with the assumption of the approved Traffic Impact Assessment prepared by Langtree Consultants to support the wider CBIP development. The Traffic Impact Assessment prepared approved as part of the wider CBIP development identified the Western Precinct to involve an hourly peak of 228 vehicles/ hour. Based on the above description of the development, the proposed use is considered to be consistent with the Traffic Impact Assessment. The peak am and pm traffic times are likely to reflect start and finish times for the proposed uses.
2. Local road networks within the Townsville SDA are to be designed to accommodate the proposed vehicle type and predicted traffic volumes associated with the development and the precincts.	**Complies** Penelope Road, Heleen Downs Road and Townsville Port Access Road has been designed as part of the wider CBIP development to accommodate the anticipated vehicle types and predicted traffic volumes associated with the proposed development.
3. Development is designed to facilitate safe and efficient vehicular ingress and egress and does not unduly impact on the safe and efficient operation of transport infrastructure.	**Complies** The proposed site plan has been designed to appropriately accommodate anticipated vehicle types and ensure safe entry, exit and movement within the subject site.

SDA Wide Assessment Criteria	Response
	It is considered the proposed site access and egress crossovers will not unduly impact on the safe and efficient operation of external road, rail or transport infrastructure, as the operation of the proposed development is consistent with the approved Traffic Impact Assessment prepared by Langtree Consulting to support the wider CBIP development.
4. Adequate car parking for the number and nature of vehicles expected are provided on site.	**Complies** The proposed development has incorporated sufficient car parking to accommodate the nature of the use and anticipated volumes of traffic to the subject site.
Environment, Cultural Heritage and Community	
1. Environmental values, cultural heritage values, and community values of the premises on which the development is undertaken, and immediate surrounds, are identified and managed, consistent with current best practice.	**Complies** The subject site is located within a newly developed CBIP Western Precinct industrial estate which has been designed to take into consideration potential nearby environmental values, cultural heritage values and community values. Therefore, the subject site does not contain environmental values, cultural heritage values and community values.
2. Development is designed and sited to: (a) Avoid adverse impacts on environmental values including matters of local, State and national environmental significance, or where adverse impacts cannot be avoided, impacts are minimised, mitigated or offset. (b) Maintain ecological connectivity and processes. (c) Maintain the outstanding values of the Great Barrier Reef World Heritage Area (d) Avoid adverse impacts on cultural heritage and community values, or where adverse impacts cannot be avoided, impacts are minimised, mitigated or offset.	**Complies** The subject site does not contain any matters of local State or national environmental significance as it is located within a newly developed CBIP Western Precinct industrial estate which has been designed to take into consideration potential nearby environmental values. A stormwater quality management plan has been prepared by NCE (refer **Appendix 5**) to ensure stormwater quality existing the site is of an appropriate standard. Therefore, the proposed development is not anticipated to adversely impact on the values of the Great Barrier Reef.
3. Environmental offsets are provided in accordance with the relevant commonwealth or State environmental offset framework.	**Not Applicable** The subject site does not contain any matters of local State or national environmental significance as it is located within a newly developed CBIP Western Precinct industrial estate which has been designed to take into consideration potential nearby environmental values.
4. Environmental offsets should be accommodated within the Environmental Management Precinct before seeking solutions external to the Townsville SDA.	**Not Applicable** The subject site does not contain any matters of local State or national environmental significance as it is located within a newly developed CBIP Western Precinct industrial estate which has been designed to take into consideration potential nearby environmental values. Given the above, offsets are not considered necessary as no environmental values will be impacted by the proposal.
5. Where the development requires a buffer to mitigate the impact of development, that	**Not Applicable**

SDA Wide Assessment Criteria	Response
buffer must be accommodated within the development site.	The proposed development footprint does not require a buffer to accommodate development within the site.
Engineering and Design Standards	
1. Development is designed and constructed in accordance with relevant engineering and design standards (and any subsequent revisions to the relevant standards) stated in able 8 below. Alternative innovative solutions that demonstrate compliance with the relevant standards are encouraged.	**Complies** The proposed development will be designed constructed in accordance with the relevant engineering standards outlined within the assessment criteria. It is recommended that compliance with relevant standards is conditioned as part of any development approval and managed through future operational work applications.
Other Government Matters	
1. Development is to demonstrate consistency with any other relevant legislative requirements for the development to proceed and operate. Development, to the extent practicable, is to be consistent with regional plans, the State Planning Policy, and the State Development Assessment Provisions where the State interests articulated by thee instruments are likely to be affected by the development.	**Complies** The development is considered to be consistent with the relevant legislation and State Planning Policies. It has been demonstrated that the proposed development is consistent with: ▪ the relevant State referral requirements and SDAP modules that would be triggered by the *Planning Act 2016* as outlined in Section 6 of the town planning report; and ▪ the applicable benchmarks of the planning scheme. It is noted that an assessment has been undertaken against the *Townsville City Plan 2014* rather than the State Planning Policies. The reason for this is that the *Townsville City Plan 2014* is considered to appropriately integrate the relevant State Planning Policies and will provide for a more streamlined assessment for Townsville City Council as a referral agency. Council is nominated as the referral agency for the devolved ERA 12(1), so will assess any area of non compliance through the required referral phase. The areas of non compliance are similar to those that Council have accepted for other end users and have been appropriately addressed in the respective code responses.
Energy and Water Efficiency	
1. Building, site design and layout maximises energy efficiency having regard to: (a) Building orientation and passive solar design. (b) Maximising opportunities for cross ventilation. (c) Appropriate shade treatments. (d) Landscaping treatments to the western side of building.	**Complies** The subject site is of a substantial size to accommodate appropriate separation distances between building and accommodated cross ventilation. Given the industrial nature of the site, landscaping has been limited to the road frontage. However the overall site layout maximises energy efficiencies wherever possible.
2. Water efficiency is optimised through the use of alternative water supply sources, including: (a) Rainwater harvesting systems. (b) Recycled water source.	**Complies** The subject site will connect to Council's reticulated water network.

SDA Wide Assessment Criteria	Response
	The Proponent may contemplate alternative water supply options in the future to supplement the use of Council's reticulated water network.
Visual Impacts	
1. Visual impacts of buildings, retaining structures or other development are minimised through building design, landscaping or other mitigation when viewed from a publicly accessible view point such as major roads, public parks or Cleveland Bay.	**Complies** The development has been appropriately designed for the uses and associated activities proposed and will implement landscaping along the street frontage. The subject site is unlikely to be visible from a public accessible view point (i.e. Port Access Road) or Cleveland Bay, given the future industrial lots located to east.
2. Development incorporates high quality urban design and landscape treatments particularly for those areas highly visible from public roads.	**Complies** The proposed development's design is consistent with industrial uses. The proposed development generally incorporates landscaping along the road frontages, which will assist in softening the build form of the site. Landscaping internal to the development will include a mix of garden beds and turf, to break up the hardstand areas.
Built Form	
1. The scale, character and built form of development contributes to a high standard of amenity.	**Complies** The proposed development involves an appropriate design which is consistent with industrial uses and has been design in accordance with relevant building design guidelines to ensure built form is to a high standard of amenity.
2. Development must incorporate crime prevention through environmental design (CPTED) principles.	**Complies** The proposal has been designed to ensure appropriate CPTED principles have been incorporated. For example, the development will implement appropriate fencing and lighting.
Reconfiguring a Lot	
1. Development provides lawful, safe and practical access.	**Not Applicable** The proposed development does not involve reconfiguring a lot.
2. Infrastructure is provided generally in accordance with established infrastructure planning	**Not Applicable** The proposed development does not involve reconfiguring a lot.
3. Lot sizes are adequate to accommodate a development footprint consistent with the preferred development intent of each precinct. A range of lot sizes is preferred to accommodate development in each precinct. Minimum lot sizes for development precincts are generally consistent with the following: (a) Low Impact Industry Precinct – 1 hectare (ha). (b) Medium Impact Industry Precinct – 2ha. (c) High Impact Industry Precinct – 25h. (d) Port Industry Precinct – 2ha.	**Not Applicable** The proposed development does not involve reconfiguring a lot.
4. Further subdivision of the Environmental Management, Infrastructure Corridors, and Resources Precincts is not supported, unless being undertaken for operational,	**Not Applicable** The proposed development does not involve reconfiguring a lot.

SDA Wide Assessment Criteria	Response
management or regulatory purposes, or if there is an overriding need.	
Landscaping	
1. Development provides landscaping that: (a) Minimises the visual impacts of the development. (b) Incorporates at least 50% local species. (c) Maintains and enhances significant vegetation. (d) Is low maintenance.	**Complies** The proposal involves the implementation appropriate landscaping to minimise the visual impacts of development. The proposed development incorporates an 8 m to 10 m wide landscaping strip along the road frontage. Landscaping internal to the development will include a mix of planting and turf, to break up the hardstand areas. The landscaping is anticipated to involve climate appropriate low maintenance species and can be managed through conditions and future operational work applications.
Natural Hazards – Flooding, including Storm Tide Inundation	
1. Development, in accordance with current best practice: (a) Achieves an appropriate level of flood immunity (b) Does not adversely affect existing flow rates, flood heights or cause or contribute to other flooding impacts on upstream, downstream or adjacent properties or the State transport network. This includes potential impacts from changes to stormwater flows and local flooding. (c) Avoids, minimises or mitigates adverse impacts from flooding to protect people and property, and enhances the community's resilience to flooding. (d) Supports, and does not hinder disaster management capacity and capabilities. (e) Avoids risks to public safety and the environment from the location of the storage of hazardous materials and the release of these materials as a result of a natural hazard.	**Complies** The proposed development has been designed taking into consideration best practice measures. In particular, earthworks associated with the development of the subdivision of the land has been undertaken to ensure the land is above the 1% AEP flood level. As appropriate flood immunity has been achieved, the proposed development will only require earthworks to prepare the site for the end use (i.e. building pads, stormwater infrastructure, etc). The development is not considered to hinder disaster management capacity and capabilities.
2. Where development includes flood mitigation works: (a) Development may consider flood mitigation works within the Environmental Management Precinct where it cannot otherwise be accommodated within the development precinct. Development will demonstrate that the extent of such works must be proportional to the flood balance and must not restrict the development of other land. (b) Any flood mitigation works are to integrate environmental, cultural heritage and stormwater management outcomes.	**Complies** The proposed development does not involve the construction of flood mitigation work. Rather, the design will utilise the flood mitigation measure constructed to support the wider CBIP Western Precinct development. For example, the proposed stormwater management regime of the site will be discharged to Penelope Road and the stormwater easement located on land to the rear of the subject site.

SDA Wide Assessment Criteria	Response
Natural Hazards - Other	
1. Development, in accordance with current practice: (a) Identifies relevant natural hazards that may impact upon the development. (b) Appropriately manages risk associated with identified hazards. (c) Avoids increasing severity of the natural hazard. (d) For coastal hazards, avoid erosion prone areas wherever possible.	**Complies** The subject site is identified a containing low and medium flood hazard areas under the Townsville City Plan. However, the wider CBIP Western Precinct has resulted in Lot 20 being constructed to be above the defined Q100 (1 %) flood level. Therefore, the proposed development is considered to have been designed to minimise impacts by potential natural hazards associated with the land. Furthermore, the proposed development is not situated in an area that is susceptible to other natural hazards. The proposed built form will be subject to build approvals and will be designed and constructed in accordance with relevant requirements to ensure the development is not susceptible or considered 'high risk' in natural hazard events such as a bushfire or cyclone. The proposed development is considered compatible with the risk and nature of potential natural hazards. Appropriate preparation methods will be applied in the event of natural hazard and relevant warnings will be observed.
Water Quality	
1. Development is located, designed, constructed and operated to avoid or minimise adverse impacts on environmental values of receiving waters arising from: (a) Altered stormwater quality and hydrology. (b) Wastewater (other than contaminated stormwater and sewage). (c) The creation or expansion of non-tidal man-made waterways. (d) The release and mobilisation of nutrients and sediments.	**Complies** The proposal has been designed to ensure the development will be constructed and operated in a matter which will avoid or minimise adverse impacts on environmental values of receiving waters. In particular, a site based stormwater quality management plan has been prepared by NCE (refer **Appendix 5**), which demonstrate the stormwater quality has a minimal impact on environmental values and has avoided impact where possible. The proposed development has been designed to incorporate a combination of stormwater treatment devices, to provide stormwater quality treatment, which achieves the State Planning Policy (SPP) Stormwater Management Design Objectives. Overall, the proposed stormwater management regime effectively minimises adverse impacts from the proposed development and will assist in ensuring the environmental values of receiving waters are maintained.
2. Development encourages a precinct-wide stormwater management approach that achieves an improved water quality outcome.	**Complies** The proposed development and associated stormwater quality management plan is considered to appropriately integrate with the wider TSDA.

MILFORD PLANNING

Appendix 8

State code 1: Development in a state-controlled road environment

Table 1.1 Development in general

Performance outcomes	Acceptable outcomes	Response
Buildings, structures, infrastructure, services and utilities		
PO1 The location of the development does not create a safety hazard for users of the **state-controlled road.**	**AO1.1** Development is not located in a **state-controlled road**. AND **AO1.2** Development can be maintained without requiring access to a **state-controlled road**.	**Complies with AO1.1 and AO1.2** The proposed development is not located in a State-development road and can be maintained via access from Penelope Road.
PO2 The design and construction of the development does not adversely impact the **structural integrity** or physical condition of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	**Complies with PO2** The proposed development has been designed and will be constructed in a manner that does not adversely impact the structural integrity or physical condition of the State-controlled road or road transport infrastructure.
PO3 The location of the development does not obstruct **road transport infrastructure** or adversely impact the operating performance of the **state-controlled road**.	No acceptable outcome is prescribed.	**Complies with PO3** The proposed development will not obstruct road transport infrastructure or adversely impact the operating performance of the State-controlled road.
PO4 The location, placement, design and operation of advertising devices, visible from the **state-controlled road**, do not create a safety hazard for users of the **state-controlled road**.	No acceptable outcome is prescribed.	**Complies with PO4** The proposed development is not anticipated to result in the installation of advertising devices that are visible from a State-controlled road.
PO5 The design and construction of buildings and **structures** does not create a safety hazard	**AO5.1** Facades of buildings and **structures** fronting the **state-controlled road** are made of non-reflective materials.	**Complies with AO5.1, AO5.2, AO5.3 and AO5.4** The proposed development is anticipated to comply with the acceptable outcomes as:

Performance outcomes	Acceptable outcomes	Response
by distracting users of the **state-controlled road**.	AND **AO5.2** Facades of buildings and **structures** do not direct or reflect point light sources into the face of oncoming traffic on the **state-controlled road**. AND **AO5.3** External lighting of buildings and **structures** is not directed into the face of oncoming traffic on the **state-controlled road**. AND **AO5.4** External lighting of buildings and **structures** does not involve flashing or laser lights.	▪ the facades of buildings and structures are anticipated to utilise non-reflective materials; ▪ the facades of buildings and structures will not direct or reflect point light sources into oncoming traffic on a State-controlled road; ▪ external lighting associate with the development will not be directed into the face of oncoming traffic on the state-controlled road; and ▪ external lighting associate with the development will not involve flashing or laser lights.
PO6 Road, pedestrian and bikeway bridges over a **state-controlled road** are designed and constructed to prevent projectiles from being thrown onto the **state-controlled road**.	**AO6.1** Road, pedestrian and bikeway bridges over the **state-controlled road** include throw protection screens in accordance with section 4.11 of the Design Criteria for Bridges and Other Structures Manual, Department of Transport and Main Roads, 2020.	**Not Applicable** The proposed development does not involve a road, pedestrian and bikeway bridges over a State-controlled road.
Landscaping		
PO7 The location of landscaping does not create a safety hazard for users of the **state-controlled road**.	**AO7.1** Landscaping is not located in a **state-controlled road**. AND **AO7.2** Landscaping can be maintained without requiring access to a **state-controlled road**. AND	**Complies with AO7.1, AO7.2 and AO7.3** All landscaping associated with the proposed development will be contained within the subject site.

Performance outcomes	Acceptable outcomes	Response
	AO7.3 Landscaping does not block or obscure the sight lines for vehicular access to a **state-controlled road**.	
Stormwater and overland flow		
PO8 Stormwater run-off or overland flow from the development site does not create or exacerbate a safety hazard for users of the **state-controlled road**.	No acceptable outcome is prescribed.	**Complies with PO8** Stormwater run-off or overland flow from the development site will not create or exacerbate a safety hazard for users of the State-controlled road, refer to **Appendix 5** and the SQA prepared by NCE.
PO9 Stormwater run-off or overland flow from the development site does not result in a material worsening of the operating performance of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	**Complies with PO9** Stormwater runoff or overland flow from the development site is not anticipated to result in a material worsening of the operating performance of the State-controlled road or road transport infrastructure.
PO10 Stormwater run-off or overland flow from the development site does not adversely impact the **structural integrity** or physical condition of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	**Complies PO10** Stormwater run-off or overland flow from the development site is not anticipated to adversely impact the structural integrity or physical condition of the State-controlled road or road transport infrastructure.
PO11 Development ensures that stormwater is lawfully discharged.	**AO11.1** Development does not create any new points of discharge to a **state-controlled road.** AND **AO11.2** Development does not concentrate flows to a **state-controlled road**. AND **AO11.3** Stormwater run-off is discharged to a **lawful point of discharge**. AND	**Complies with AO11.1, AO11.2, AO11.3 and AO11.4** The proposed development will ensure all water is lawfully discharged.

Performance outcomes	Acceptable outcomes	Response
	AO11.4 Development does not worsen the condition of an existing **lawful point of discharge** to the **state-controlled road**.	
Flooding		
PO12 Development does not result in a material worsening of flooding impacts within a **state-controlled road**.	**AO12.1** For all flood events up to 1% **annual exceedance probability**, development results in negligible impacts (within +/- 10mm) to existing flood levels within a **state-controlled road**. AND **AO12.2** For all flood events up to 1% **annual exceedance probability**, development results in negligible impacts (up to a 10% increase) to existing peak velocities within a **state-controlled road**. AND **AO12.3** For all flood events up to 1% **annual exceedance probability**, development results in negligible impacts (up to a 10% increase) to existing time of submergence of a **state-controlled road**.	**Complies with AO12.1, AO12.2 and AO12.3** The proposed development is not anticipated to result in an in a material worsening of flooding impacts within a State-controlled road.
Drainage Infrastructure		
PO13 Drainage infrastructure does not create a safety hazard for users in the **state-controlled road**.	**AO13.1** Drainage infrastructure is wholly contained within the development site, except at the **lawful point of discharge**. AND **AO13.2** Drainage infrastructure can be maintained without requiring access to a **state-controlled road**.	**Complies AO13.1 and AO13.2** Drainage infrastructure associated with the proposed development is not anticipated to create a safety hazard for users in the State-controlled road.

Performance outcomes	Acceptable outcomes	Response
PO14 Drainage infrastructure associated with, or within, a **state-controlled road** is constructed, and designed to ensure the **structural integrity** and physical condition of existing drainage infrastructure and the surrounding drainage network.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the installation of drainage infrastructure associated with or within a State-controlled road.

Table 1.2 Vehicular access, road layout and local roads

Performance outcomes	Acceptable outcomes	Response
Vehicular access to a state-controlled road or within 100 metres of a state-controlled road intersection		
PO15 The location, design and operation of a **new or changed access** to a **state-controlled road** does not compromise the safety of users of the **state-controlled road**.	No acceptable outcome is prescribed.	**Not Appliable** The proposed development is not located within 100 m of a State-controlled intersection.
PO16 The location, design and operation of a **new or changed access** does not adversely impact the **functional requirements** of the **state-controlled road**.	No acceptable outcome is prescribed.	**Not Appliable** The proposed development is not located within 100 m of a State-controlled intersection.
PO17 The location, design and operation of a **new or changed access** is consistent with the **future intent** of the **state-controlled road**.	No acceptable outcome is prescribed.	**Not Appliable** The proposed development is not located within 100 m of a State-controlled intersection.
PO18 New or changed access is consistent with the access for the relevant **limited access road policy**: 1. **LAR 1** where direct access is prohibited; or 2. **LAR 2** where access may be permitted, subject to assessment.	No acceptable outcome is prescribed.	**Not Appliable** The proposed development is not located within 100 m of a State-controlled intersection.
PO19 New or changed access to a **local road** within 100 metres of an intersection with a **state-controlled road** does not compromise the safety of users of the **state-controlled road**.	No acceptable outcome is prescribed.	**Not Appliable** The proposed development is not located within 100 m of a State-controlled intersection.
PO20 New or changed access to a **local road** within 100 metres of an intersection with a **state-controlled road** does not adversely impact on the operating performance of the intersection.	No acceptable outcome is prescribed.	**Not Appliable** The proposed development is not located within 100 m of a State-controlled intersection.

Performance outcomes	Acceptable outcomes	Response
Public passenger transport and active transport		
PO21 Development does not compromise the safety of users of **public passenger transport infrastructure**, **public passenger services** and **active transport infrastructure**.	No acceptable outcome is prescribed.	**Complies with PO21** The proposed development is not anticipated to compromise the safety of users of public passenger transport infrastructure, public passenger services and active transport infrastructure.
PO22 Development maintains the ability for people to access **public passenger transport infrastructure, public passenger services** and **active transport infrastructure**.	No acceptable outcome is prescribed.	**Complies with PO22** The proposed development is anticipated to maintain the ability for people to access public passenger transport infrastructure, public passenger services and active transport infrastructure.
PO23 Development does not adversely impact the operating performance of **public passenger transport infrastructure, public passenger services** and **active transport infrastructure**.	No acceptable outcome is prescribed.	**Complies with PO23** The proposed development is not anticipated to adversely impact the operating performance of public passenger transport infrastructure, public passenger services and active transport infrastructure.
PO24 Development does not adversely impact the **structural integrity** or physical condition of **public passenger transport infrastructure** and **active transport infrastructure**.	No acceptable outcome is prescribed.	**Complies with PO24** The proposed development is not anticipated to adversely impact the structural integrity or physical condition of public passenger transport infrastructure and active transport infrastructure.

Table 1.3 Network impacts

Performance outcomes	Acceptable outcomes	Response
PO25 Development does not compromise the safety of users of the **state-controlled road** network.	No acceptable outcome is prescribed.	**Complies with PO25** Traffic generated from the proposal is considered to be appropriate for the current road networks. Particularly, as the anticipated vehicle types and daily trips is consistent with the assumption of the approved Traffic Impact Assessment prepared by Langtree Consultants to support the wider CBIP development. The Traffic Impact Assessment prepared approved as part of the wider CBIP development identified the Western Precinct to involve an hourly peak of 228 vehicles/ hour. Based on the above description of the development, the proposed use is considered to be consistent with the Traffic Impact Assessment.
PO26 Development ensures **no net worsening** of the operating performance of the **state-controlled road** network.	No acceptable outcome is prescribed.	**Complies with PO26** Refer to response to PO25.
PO27 Traffic movements are not directed onto a **state-controlled road** where they can be accommodated on the **local road** network.	No acceptable outcome is prescribed.	**Complies with PO27** Refer to response to PO25.
PO28 Development involving haulage exceeding 10,000 tonnes per year does not adversely impact the pavement of a **state-controlled road**.	No acceptable outcome is prescribed.	**Complies with PO28** Refer to response to PO25.
PO29 Development does not impede delivery of **planned upgrades** of **state-controlled roads**.	No acceptable outcome is prescribed.	**Complies with PO29** Refer to response to PO25.
PO30 Development does not impede delivery of **corridor improvements** located entirely within the **state-controlled road corridor**.	No acceptable outcome is prescribed.	**Complies with PO30** Refer to response to PO25.

Table 1.4 Filling, excavation, building foundations and retaining structures

Performance outcomes	Acceptable outcomes	Response
PO31 Development does not create a safety hazard for users of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the undertaking earthworks of the establishment of building foundations or retaining structure within or in close proximity to a State-controlled road.
PO32 Development does not adversely impact the operating performance of the **state-controlled road**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the undertaking earthworks of the establishment of building foundations or retaining structure within or in close proximity to a State-controlled road.
PO33 Development does not undermine, damage or cause subsidence of a **state-controlled road**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the undertaking earthworks of the establishment of building foundations or retaining structure within or in close proximity to a State-controlled road.
PO34 Development does not cause ground water disturbance in a **state-controlled road**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the undertaking earthworks of the establishment of building foundations or retaining structure within or in close proximity to a State-controlled road.
PO35 Excavation, boring, piling, blasting and fill compaction do not adversely impact the physical condition or **structural integrity** of a **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the undertaking earthworks of the establishment of building foundations or retaining structure within or in close proximity to a State-controlled road.
PO36 Filling and excavation associated with the construction of **new or changed access** do not compromise the operation or capacity of existing drainage infrastructure for a **state-controlled road.**	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not involve the undertaking earthworks of the establishment of building foundations or retaining structure within or in close proximity to a State-controlled road.

Table 1.5 Environmental emissions

Statutory note: Where a **state-controlled road** is co-located in the same transport corridor as a railway, the development should instead comply with Environmental emissions in State code 2: Development in a railway environment.

Performance outcomes	Acceptable outcomes	Response
Reconfiguring a lot		
Involving the creation of 5 or fewer new residential lots adjacent to a state-controlled road or type 1 multi-modal corridor		
PO37 Development minimises free field noise intrusion from a **state-controlled road.**	**AO37.1** Development provides a noise barrier or earth mound which is designed, sited and constructed: 1. to achieve the maximum free field acoustic levels in reference table 2 (item 2.1); 2. in accordance with: a. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020. OR **AO37.2** Development achieves the maximum free field acoustic levels in reference table 2 (item 2.1) by **alternative noise attenuation measures** where it is not practical to provide a noise barrier or earth mound. OR **AO37.3** Development provides a **solid gap-free fence** or other **solid gap-free structure** along the full extent of the boundary closest to the **state-controlled road**.	**Not Applicable** The proposed development does not involve reconfiguring a lot.

Performance outcomes	Acceptable outcomes	Response
Involving the creation of 6 or more new residential lots adjacent to a state-controlled road or type 1 multi-modal corridor		
PO38 Reconfiguring a lot minimises free field noise intrusion from a **state-controlled road.**	**AO38.1** Development provides noise barrier or earth mound which is designed, sited and constructed: 1. to achieve the maximum free field acoustic levels in reference table 2 (item 2.1); 2. in accordance with: a. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020. OR **AO38.2** Development achieves the maximum free field acoustic levels in reference table 2 (item 2.1) by **alternative noise attenuation measures** where it is not practical to provide a noise barrier or earth mound.	**Not Applicable** The proposed development does not involve reconfiguring a lot.
Material change of use (accommodation activity)		
Ground floor level requirements adjacent to a state-controlled road or type 1 multi-modal corridor		
PO39 Development minimises noise intrusion from a **state-controlled road** in **private open space**.	**AO39.1** Development provides a noise barrier or earth mound which is designed, sited and constructed: 1. to achieve the maximum free field acoustic levels in reference table 2 (item 2.2) for **private open space** at the ground floor level; 2. in accordance with:	**Not Applicable** The proposed development does not involve an accommodation activity.

Performance outcomes	Acceptable outcomes	Response
	a. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020. OR **AO39.2** Development achieves the maximum free field acoustic level in reference table 2 (item 2.2) for **private open space** by **alternative noise attenuation measures** where it is not practical to provide a noise barrier or earth mound.	
PO40 Development (excluding a **relevant residential building** or **relocated building)** minimises noise intrusion from a **state-controlled road** in **habitable rooms** at the facade.	**AO40.1** Development (excluding a **relevant residential building** or **relocated building**) provides a noise barrier or earth mound which is designed, sited and constructed: 1. to achieve the maximum building façade acoustic level in reference table 1 (item 1.1) for **habitable rooms**; 2. in accordance with: a. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019;	**Not Applicable** The proposed development does not involve an accommodation activity.

Performance outcomes	Acceptable outcomes	Response
	c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020. OR **AO40.2** Development (excluding a **relevant residential building** or **relocated building**) achieves the maximum building façade acoustic level in reference table 1 (item 1.1) for **habitable rooms** by **alternative noise attenuation measures** where it is not practical to provide a noise barrier or earth mound.	
PO41 Habitable rooms (excluding a **relevant residential building** or **relocated building**) are designed and constructed using materials to achieve the maximum internal acoustic level in reference table 3 (item 3.1).	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve an accommodation activity.
Above ground floor level requirements (accommodation activity) adjacent to a state-controlled road or type 1 multi-modal corridor		
PO42 Balconies, podiums, and roof decks include: 1. a continuous **solid gap-free structure** or balustrade (excluding gaps required for drainage purposes to comply with the Building Code of Australia); 2. highly acoustically absorbent material treatment for the total area of the soffit above balconies, podiums, and roof decks.	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve an accommodation activity.
PO43 Habitable rooms (excluding a **relevant residential building** or **relocated building**) are designed and constructed using materials to achieve the maximum internal acoustic level in reference table 3 (item 3.1).	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve an accommodation activity.
Material change of use (other uses)		
Ground floor level requirements (childcare centre, educational establishment, hospital) adjacent to a state-controlled road or type 1 multi-modal corridor		
PO44 Development:	No acceptable outcome is provided.	**Not Applicable**

Performance outcomes	Acceptable outcomes	Response
1. provides a noise barrier or earth mound that is designed, sited and constructed: a. to achieve the maximum free field acoustic level in reference table 2 (item 2.3) for all **outdoor education areas** and **outdoor play areas**; b. in accordance with: i. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; ii. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; iii. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020; or 2. achieves the maximum free field acoustic level in reference table 2 (item 2.3) for all **outdoor education areas** and **outdoor play areas** by **alternative noise attenuation measures** where it is not practical to provide a noise barrier or earth mound.		The proposed development does not involve any of the other uses referenced.
PO45 Development involving a **childcare centre** or **educational establishment**: 1. provides a noise barrier or earth mound that is designed, sited and constructed: 2. to achieve the maximum building facade acoustic level in reference table 1 (item 1.2); 3. in accordance with: a. Chapter 7 integrated noise barrier design of the Transport Noise Management	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve any of the other uses referenced.

Performance outcomes	Acceptable outcomes	Response
Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020; or 4. achieves the maximum building facade acoustic level in reference table 1 (item 1.2) by **alternative noise attenuation measures** where it is not practical to provide a noise barrier or earth mound.		
PO46 Development involving: 1. **indoor education areas** and **indoor play areas**; or 2. sleeping rooms in a **childcare centre**; or 3. **patient care areas** in a **hospital** achieves the maximum internal acoustic level in reference table 3 (items 3.2-3.4).	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve any of the other uses referenced.
Above ground floor level requirements (childcare centre, educational establishment, hospital) adjacent to a state-controlled road or type 1 multi-modal corridor		
PO47 Development involving a **childcare centre** or **educational establishment** which have balconies, podiums or elevated **outdoor play areas** predicted to exceed the maximum free field acoustic level in reference table 2 (item 2.3) due to noise from a **state-controlled road** are provided with: 1. a continuous **solid gap-free structure** or balustrade (excluding gaps required for drainage purposes to comply with the Building Code of Australia);	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve any of the other uses referenced.

Performance outcomes	Acceptable outcomes	Response
2. highly acoustically absorbent material treatment for the total area of the soffit above balconies or elevated **outdoor play areas**.		
PO48 Development including: 1. **indoor education areas** and **indoor play areas** in a **childcare centre** or **educational establishment**; or 2. sleeping rooms in a **childcare centre**; or 3. **patient care areas** in a **hospital** located above ground level, is designed and constructed to achieve the maximum internal acoustic level in reference table 3 (items 3.2-3.4).	No acceptable outcome is provided.	**Not Applicable** The proposed development does not involve any of the other uses referenced.
Air, light and vibration		
PO49 Private open space, **outdoor education areas** and **outdoor play areas** are protected from air quality impacts from a **state-controlled road**.	**AO49.1** Each dwelling or unit has access to a **private open space** which is shielded from a **state-controlled road** by a building, **solid gap-free fence**, or other **solid gap-free structure**. OR **AO49.2** Each **outdoor education area** and **outdoor play area** is shielded from a **state-controlled road** by a building, **solid gap-free fence,** or other **solid gap-free structure**.	**Not Applicable** The proposed development does not involve any of the other uses referenced.

Performance outcomes	Acceptable outcomes	Response
PO50 Patient care areas within **hospitals** are protected from vibration impacts from a **state-controlled road** or **type 1 multi-modal corridor**.	**AO50.1 Hospitals** are designed and constructed to ensure vibration in the patient treatment area does not exceed a vibration dose value of $0.1m/s^{1.75}$. AND **AO50.2 Hospitals** are designed and constructed to ensure vibration in the ward of a **patient care area** does not exceed a vibration dose value of $0.4m/s^{1.75}$.	**Not Applicable** The proposed development does not involve any of the other uses referenced.
PO51 Development is designed and sited to ensure light from infrastructure within, and from users of, a **state-controlled road** or **type 1 multi-modal corridor**, does not: 1. intrude into buildings during night hours (10pm to 6am); 2. create unreasonable disturbance during evening hours (6pm to 10pm).	No acceptable outcomes are prescribed.	**Not Applicable** The proposed development does not involve any of the other uses referenced.

Table 1.6: Development in a future state-controlled road environment

Performance outcomes	Acceptable outcomes	Response
PO52 Development does not impede delivery of a **future state-controlled road**.	**AO52.1** Development is not located in a **future state-controlled road**. OR ALL OF THE FOLLOWING APPLY: **AO52.2** Development does not involve filling and excavation of, or material changes to, a **future state-controlled road**. AND **AO52.3** The intensification of lots does not occur within a **future state-controlled road**. AND **AO52.4** Development does not result in the landlocking of parcels once a **future state-controlled road** is delivered.	**Not Applicable** The proposed development does not located in a future State-controlled road.
PO53 The location and design of **new or changed access** does not create a safety hazard for users of a **future state-controlled road**.	**AO53.1** Development does not include **new or changed access** to a **future state-controlled road**.	**Not Applicable** The proposed development does not located in a future State-controlled road.
PO54 Filling, excavation, building foundations and **retaining structures** do not undermine, damage or cause subsidence of a **future state-controlled road**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not located in a future State-controlled road.
PO55 Development does not result in a material worsening of stormwater, flooding, overland flow or drainage impacts in a **future state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	**Not Applicable** The proposed development does not located in a future State-controlled road.
PO56 Development ensures that stormwater is lawfully discharged.	**AO56.1** Development does not create any new points of discharge to a **future state-controlled road**.	**Not Applicable** The proposed development does not located in a future State-controlled road.

Performance outcomes	Acceptable outcomes	Response
	AND **AO56.2** Development does not concentrate flows to a **future state-controlled road**. AND **AO56.3** Stormwater run-off is discharged to a **lawful point of discharge**. AND **AO56.4** Development does not worsen the condition of an existing **lawful point of discharge** to the **future state-controlled road**.	

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Appendix 9

Performance Outcome/Acceptable Outcomes		Response
Built Form		
PO1: Development is consistent with the scale of surrounding buildings.	**AO1.1:** Site cover does not exceed 80%.	**R1: Complies** The proposed development does not exceed 80% of the total site cover. Proposed buildings are to be set back a minimum of 6 m from street and road frontages.
	AO1.2: Buildings are set back from street and road frontages: a) within 20% of the average front setback of adjoining buildings; or b) where there are no adjoining buildings, 6m.	
PO2: Building entrances are legible and safe.	**AO2.1:** Pedestrian entries are visible from the primary street frontage and visitor car parking areas, and are separate to vehicle access points.	**R2: Complies** The proposed development involves entrances that are legible and safe. Particularly: ▪ a separate site access has been provided to service the site office; ▪ the site will be secured which will prevent unauthorised persons to access the site; ▪ the building will involve highly visible street numbering; and ▪ the development will involve external lighting sufficient to provide safe ingress and egress for site users.
	AO2.2: Doorway recesses in building facades are not of a size or configuration that would conceal a person, unless lighting, mirrors, transparent materials or angled approaches are included to offset the potential for impacts on safety.	
	AO2.3: Each building or tenancy is provided with a highly visible street and unit number respectively.	
	AO2.4: Premises are provided with external lighting sufficient to provide safe ingress and egress for site users.	
Amenity		
PO3: Utility elements (including refuse areas, outdoor storage, plant and equipment, loading and unloading areas) are screened from view from the street and sensitive land uses.	**AO3:** Utility elements are: a) located within or behind the building; or b) screened by a 1.8m high solid wall or fence; or c) behind landscaping having the same screening effect as a 1.8m screen fence.	**R3: Complies** The proposed development will ensure that utility elements are screened from view from the street and from sensitive land uses. As with other end users, no external storage will occur within the first 20 m of the front boundary of the site.
PO4: Landscaping is provided to create streetscapes which contribute positively to the city image, particularly along major roads and streets.	**AO4:** Landscaping is provided for a minimum depth of: a) 4m along an arterial or sub-arterial road; or b) 2m along any other road or street frontage.	**R4: Complies** The proposed development involves 8 m to 12 m wide landscaping strip along the frontage the site.

Performance Outcome/Acceptable Outcomes		Response
General		
PO5: Development minimises impacts on sensitive land uses having regard to noise, vibration, odour, dust, light or other emissions. Adverse impacts on the health, safety or amenity of nearby residential zoned land or other sensitive land uses are minimised.	**AO5.1:** Development achieves the noise generation levels set out in the *Environmental Protection (Noise) Policy 2008*.	**R5: Alternative Acceptable Outcome** The proposed development will operate in accordance with the relevant standards to minimise impacts in terms of noise, dust, vibration, odour, light and other emissions. All external areas are treated via bitumen, gravel concrete or landscaping. All crossovers and internal driveways will be concrete. Lighting associated with the development will be in accordance with the relevant Australian Standards.
	AO5.2: Development achieves the air quality objectives set out in the *Environmental Protection (Air) Policy 2008*.	
	AO5.3: Materials that are capable of generating air contaminants are wholly enclosed in storage bins.	
	AO5.4: All external areas are sealed, turfed or landscaped.	
	AO5.5: Light emanating from any source complies with A*ustralian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting*.	
	AO5.6: Outdoor lighting is provided in accordance with *Australian Standard AS 1158.1.1 — Road Lighting — Vehicular Traffic (Category V) Lighting — Performance and Installation Design Requirements*.	
PO6: Development provides for the collection, treatment and disposal of liquid wastes or sources of contamination such that off-site releases of contaminants do not occur.	**AO6.1:** Areas where potentially contaminating substances are stored or used, are roofed and sealed with concrete, asphalt or similar impervious substance and bunded.	**R6: Complies** If required, all potentially contaminated substances will be appropriately stored. If required roof water is to be piped away from any areas identified as being of potential contamination.
	AO6.2: Roof water is piped away from areas of potential contamination.	
PO7: The site layout and design: a) minimises earthworks; b) maximises retention of natural drainage patterns; and c) ensures existing drainage capacity is not reduced.	**AO7:** Development does not involve earthworks involving more than 100m^3.	**R7: Complies** Earthworks associated with the development will be minimised to achieve maximum retention of natural drainage patterns and to ensure the existing drainage capacity is not reduced.
Defence Land		
PO8: Development does not adversely affect the safe and efficient operation of nearby Department of Defence land.	**AO8:** All buildings and operational components of a use are setback not less than 100m from the closest boundary of land in the	**R8: Complies** The proposed development will not adversely affect the safe and efficient operation of the nearest defence land as it is located

Performance Outcome/Acceptable Outcomes		Response
	control of or used by the Department of Defence.	more than 4 km from the subject site.
Caretaker's Accommodation		
PO9: Development does not compromise the viability of the primary use of the site.	**AO9:** No more than one (1) caretaker's accommodation dwelling is established on the site.	**R9: Not Applicable** The proposed development does not involve caretaker's accommodation.
Ancillary Office Uses		
PO10: Offices are accommodated where they are ancillary to the primary industrial use on the site.	**AO10:** The area used for an office use does not exceed 250m^2 or 10% of the gross floor area, whichever is the lesser.	**R10: Alternative Acceptable Solution** The proposal involves a main office building with a GFA of approximately 270 m^2 and a training office attached to the factory with a GFA of 70.20 m^2. Given the area of the subject site and footprint of the development, the proposed office will be ancillary to the industrial use of the site. In the context of the planning scheme, the minimum lot size for the Medium Impact Industry Zone is 2,000m^2. So, 250 m^2 equates to 12.5% of a 2,000 m^2 lot. If you applied this same 12.5% office footprint principle to a 20,000 m^2 lot this would equate to 2,500 m^2. The GFA of the offices proposed totals 340.20 m^2, which equates to 1.7 % of the total site area, which is considered an acceptable area of the site to be utilised for ancillary office space.
For Assessable Development		
Uses		
PO11: Development within the zone facilitates: a) industrial activities whose impacts on sensitive land uses and the natural environment can be appropriately managed; or b) uses which require larger sites in locations that are separated from sensitive land uses, and are not more appropriately accommodated in other zones; or c) non-industrial uses which are small in scale and ancillary to or directly support the industrial functions of the area.		**R11: Complies** The purpose of the proposed development is to establish a plastic product manufacturing factory. The subject site was chosen by the Applicant due to the large area it offers and its strategic location in in terms of road infrastructure and the separating distances from sensitive receptors.
PO12: Development is not primarily oriented to retail sales, other than where involving an outdoor sales activity.		**R12: Not Applicable** The proposed development it not predominantly oriented to retail sales.

Performance Outcome/Acceptable Outcomes	Response
PO13: Development does not significantly detract from the availability or utility of land for industry purposes.	**R13: Complies** The purpose of the proposed development is to establish an industrial use. Therefore, the proposal will not detract from the availability or utility of land for industrial purposes.
Crime Prevention Through Environmental Design	
PO14: Site layout facilitates the security of people and property having regard to: a) opportunities for casual surveillance and sight lines; b) exterior building designs which promote safety and deter graffiti; c) adequate definition of uses and ownership; d) adequate lighting; e) appropriate signage and wayfinding; f) minimisation of entrapment locations; and g) building entrances, loading and storage areas being well lit and lockable after hours.	**R14: Complies** The proposal has been designed to ensure appropriate CPTED principles have been incorporated. For example, the development will implement appropriate fencing and lighting.
Community and Environmental Risk	
PO15: Development is designed and managed so that it provides appropriate protection for community health and safety, and avoids unacceptable risk to life and property.	**R15: Complies** The proposed development will adhere to the appropriate standards regarding protection of community health and safety and will implement appropriate measures to avoid unacceptable risks to life and property. The proponent has been operating for 30 years and will adopt their current management practices to the new site.
PO16: The site layout and design responds sensitively to on-site and surrounding drainage patterns and ecological values by: a) maximising retention of natural drainage patterns; b) ensuring existing drainage capacity is not reduced; c) maximising the retention or enhancement of existing vegetation and ecological corridors; and d) providing buffers to protect the ecological functions of waterways.	**R16: Complies** The subject site has been developed to ensure the land is above the defined Q100 (1% AEP) flood level as part of the CBIP Western Precinct subdivision approval. Therefore, the development will utilise the wider stormwater arrangement established as part of the industrial estate.

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Appendix 10

TOWNSVILLE CITY PLAN 2014 – HEALTHY WATERS CODE

Performance Outcomes/Acceptable Outcomes		Response
Stormwater Management - Protecting Water Quality		
PO1: Development contributes to the protection of environmental values and water quality objectives of receiving waters to the extent practicable.		**R1: Complies** The proposed development will implement appropriate stormwater quality management practices in order to contribute to the protection of relevant environmental values and water quality objectives to the extent practicable. The gas tanker will be bunded and runoff generated from this area will be conveyed to a SPEL treatment system, prior to the proposed lawful point of discharge. Refer to **Appendix 5** of the Development Application for a copy of the Stormwater Quality Assessment (SQA) prepared by NCE.
PO2: High Environmental Value Waters and slightly disturbed waters (shown on Figure 9.1 — High Environmental Value Waters and slightly disturbed waters) are protected from the impacts of development within their catchments. Existing water quality, habitat and biota values, flow regimes and riparian areas are maintained or enhanced.		**R2: Not Applicable** The subject site is not located adjacent to High Environmental Value Waters and slightly disturbed waters (shown on Figure 9.1 — High Environmental Value Waters and slightly disturbed waters).
PO3: The entry of contaminants into, and transport of contaminants in, stormwater is avoided or minimised.		**R3: Complies** The proposed development will incorporate appropriate stormwater quality treatment measures during the construction phase and operational phase of the proposed development. Further details in relation to these measures are outlined in SQA prepared by NCE**.**
PO4: Within the areas identified as potential acid sulfate soils on Figure 9.2 — Acid sulfate soils, the generation or release of acid and metal contaminants into the environment from acid sulfate soils is avoided by: a) not disturbing acid sulfate soils when excavating or otherwise removing soil or sediment, draining or extracting groundwater,	**AO4.1:** Development does not: a) involve excavating or removing 100m3 or more of soil and sediment at or below 5m AHD; or b) permanently or temporarily drain or extract groundwater or exclude tidal water resulting in the aeration of previously saturated acid sulphate soils; or	**R4: Complies** During the construction phase should the presence of Acid Sulfate Soils be identified on site, then a suitably qualified consultant, will be engaged to prepare a report and advise of the required treatment methods. A reasonable and relevant condition could be imposed if required.

Performance Outcomes/Acceptable Outcomes		Response
excluding tidal water or filling land; or b) where disturbance of acid sulfate soils cannot be avoided, development: i) neutralises existing acidity and prevents the generation of acid and metal contaminants; and ii) prevents the release of surface or groundwater flows containing acid and metal contaminants into the environment.	c) involve filling with 500m^3 or more with an average depth of 0.5m or greater that results in: i) actual acid sulfate soils being moved below the water table; or ii) previously saturated acid sulfate soils being aerated. OR **AO4.2:** Development manages waters so that: a) all disturbed acid sulfate soils are adequately treated and/or managed so that they can no longer release acid or heavy metals; b) the pH of all site any water including discharges and seepage to groundwater, is maintained between 6.5 and 8.5 (or an agreed pH in line with natural background); c) waters on the site, including discharges and seepage to groundwater, do not contain elevated levels of soluble metals; d) there are no visible iron stains, flocs or sums in discharge water; e) all reasonable preparations and actions are undertaken to ensure that aquatic health is safeguarded; and f) infrastructure such as buried services, pipes, culverts and bridges are protected from acid attack.	
PO5: Construction activities for the development avoid or minimise adverse impacts on stormwater quality or hydrological processes.		**R5: Complies** The proposed development will incorporate appropriate stormwater quality treatment measures during the construction phase and operational phase of the proposed development. Further details in relation to these measures are outlined in the SQA prepared by NCE, refer to

Performance Outcomes/Acceptable Outcomes		Response
		Appendix 4 of the Development Application.
Hydrological Processes		
PO6: The stormwater management system: a) retains natural waterway corridors and drainage paths; and b) maximises the use of natural channel design in constructed components.	**AO6.1:** All existing waterways and overland flow paths are retained. **AO6.2:** The stormwater management system is designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.9 Water Sensitive Urban Design Guidelines.	**R6: Complies** The findings of NCE's SQA are summarised below: ▪ *Local runoff from the buildings and hardstand areas will be conveyed into proposed SPEL-Hydrochannel systems via overland sheet flow and discharge into the outlet pit via underground pipe system.* ▪ *The stormwater quality assessment is undertaken for both stages Stage 1 and Stage 2 of the development works. Whilst 24 linear meters of proposed SPEL-Hydrochannel provide adequate treatment for Stage 1, when Stage 2 works are completed, an additional 5 linear meters of hydrochannel will need to be installed to provide adequate treatment for the entire development.* ▪ *TCC's water quality objectives have been met and it has been demonstrated that non-worsening will occur with regards to the total suspended solids, phosphorus, nitrogen and gross pollutants by using SPEL Hydrochannel stormwater treatment system.* ▪ *Northern Consulting Engineers have been advised by the developer of the Cleveland Bay Industrial Park, that all S/W Quantity mitigation requirements for the Industrial Estate (based upon an impervious coverage of 90%) have been incorporated into the initial subdivisional works, therefore no additional quantity mitigation*

Performance Outcomes/Acceptable Outcomes		Response
		assessment has been completed as part of this report. The stormwater management system is designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.9 Water Sensitive Urban Design Guidelines.
PO7: The development is designed to minimise run-off and peak flows by: a) minimising large areas of impervious material; and b) maximising opportunities for capture and reuse.		**R7: Complies** The NCE SQA provides an assessment of the stormwater quantity and quality for the proposed development and the measures and devices that need to be installed to appropriately management stormwater during the construction phase and the operational phase of the proposed development.
PO8: Stormwater management is designed to: a) protect in-stream ecosystems from the significant effects of increased run-off frequency by capturing the initial portion of run-off from impervious areas; and b) create conditions such that the frequency of hydraulic disturbance to in-stream ecosystems in developed catchments is similar to pre-development conditions.	**AO8:** The stormwater management system is designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 - SC6.4.3.9 Water Sensitive Urban Design Guidelines.	**R8: Complies** The stormwater management system will be designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 - SC6.4.3.9 Water Sensitive Urban Design Guidelines. Further details in relation to these measures are outlined in the SQMP prepared by NCE.
PO9: Stormwater management is designed to prevent exacerbated in-stream erosion downstream of a development site by controlling the magnitude and duration of sediment- transporting, erosion - causing flows.	**AO9:** The stormwater management system is designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.9 Water Sensitive Urban Design Guidelines and SC6.4.3.8 Stormwater Management Plans for Development.	**R9: Complies** The stormwater management system will be designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.9 Water Sensitive Urban Design Guidelines and SC6.4.3.8 Stormwater Management Plans for Development. Further details in relation to these measures are outlined in the SQA prepared by NCE.

Performance Outcomes/Acceptable Outcomes		Response
Stormwater Drainage Generally		
PO10: The proposed stormwater management system or site works does not adversely affect flooding or drainage characteristics of properties that are upstream, downstream or adjacent to the development site.	**AO10.1:** The development does not result in an increase in flood level or flood duration on upstream, downstream or adjacent properties. **AO10.2:** The stormwater management system is designed and constructed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 – SC6.4.4.4 Stormwater Drainage Design, SC6.4.3.9 Water Sensitive Urban Design Guidelines; and SC6.4.6.4 Stormwater Drainage.	**R10: Complies** The development will not result in an increase in flood level or flood duration on upstream, downstream or adjacent properties. The stormwater management system will be designed and constructed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 – SC6.4.4.4 Stormwater Drainage Design, SC6.4.3.9 Water Sensitive Urban Design Guidelines; and SC6.4.6.4 Stormwater Drainage. Further details in relation to these measures are outlined in the SQA prepared by NCE.
PO11: Development does not cause ponding, or changes in flows and velocities such that the safety, use and enjoyment of nearby properties are adversely affected.	**AO11:** The stormwater management system is designed and constructed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 – SC6.4.4.4 Stormwater drainage design; SC6.4.3.9 Water Sensitive Urban Design Guidelines; and SC6.4.6.4 Stormwater Drainage.	**R11: Complies** The proposed development will ensure the stormwater management system is designed and constructed in accordance with the Development manual planning scheme policy SC6.4 – SC6.4.4.4 Stormwater drainage design; SC6.4.3.9 Water sensitive urban design guidelines; and SC6.4.6.4 Stormwater drainage. Further details in relation to these measures are outlined in the SQA prepared by NCE.
PO12: The drainage network has sufficient capacity to safely convey stormwater run-off from the site.	**AO12:** Development is undertaken in accordance with the Development Manual Planning Scheme Policy No. SC6.4–SC6.4.4.4 Stormwater drainage design; SC6.4.6.4 Drainage structures and SC6.4.6.4 Stormwater drainage.	**R12: Complies** The proposed development will be undertaken in accordance with the Development manual planning scheme policy SC6.4 – SC6.4.4.4 Stormwater drainage design; SC6.4.6.5 Drainage structures and SC6.4.6.4 Stormwater drainage. Further details in relation to these measures are outlined in the SQA prepared by NCE.
PO13: The stormwater management system: a) provides for safe access and maintenance; and b) where relevant, provides for safe recreational use of stormwater management features.		**R13: Complies** The proposed stormwater management system, provide for safe access and maintenance by the Applicant.

Performance Outcomes/Acceptable Outcomes	Response
Point Source Waste Water Management (other than contaminated stormwater and sewage)	
PO14: Waste water is managed in accordance with a waste management hierarchy that: a) avoids waste water discharge to waterways; or b) if waste water discharge to waterways cannot practicably be avoided, minimises waste water discharge to waterways by re-use, recycling, recovery and treatment for disposal to sewer, surface water and groundwater.	**R14: Complies** The SQA clearly identifies the treatment systems required to treat run off from the various catchment associated with each of the proposed uses. The site will be connected to Council's reticulated wastewater network.
PO15: Any treatment and disposal of waste water to a waterway: a) protects the applicable water quality objectives for the receiving waters; and b) avoids adverse impact on ecosystem health of receiving waters.	**R15: Complies** The SQA clearly identifies the treatment systems required to treat run off from the various catchment associated with each of the proposed uses. The site will be connected to Council's reticulated wastewater network.
PO16: Development avoids or minimises and appropriately manages soil disturbance or altering natural hydrology in nutrient hazardous areas.	**R16: Not Applicable** The site is not within a nutrient hazardous area.
PO17: Waste water discharge to waterways is managed to avoid or minimise the release of nutrients of concern so as to minimise the occurrence, frequency and intensity of coastal algal blooms.	**R17: Complies** The SQA clearly identifies the treatment systems required to treat run off from the various catchment associated with each of the proposed uses. The site will be connected to Council's reticulated wastewater network.
Constructed Lakes and Artificial Waterways	
PO18-PO28 (AO18-AO28): This part of the code is not applicable to the proposed development, given the type and nature of the proposed development.	
Efficiency and Whole of Life Cycle Cost	
PO29: Life cycle costs are minimised, taking into account acquisition, construction, establishment, operation, monitoring, maintenance, replacement and disposal costs.	**R29: Complies** The proposed development will be staged across 2 Stages, so too maintain life cycle costs and ensure the development is conducted efficiently and effectively.
PO30: The design of the development allows for sufficient site area to accommodate an effective stormwater management system.	**R30: Complies** The subject development site is sufficient in size to provide sufficient area to accommodate for an effective stormwater management system, refer to the SQA prepared by NCE.
PO31: The proposal provides for the orderly development of stormwater infrastructure within a catchment, having regard to:	**R31: Complies** The proposed development will be staged across 2 stages, which will provide for the orderly

Performance Outcomes/Acceptable Outcomes		Response
a) existing capacity of stormwater infrastructure and ultimate catchment conditions; b) discharge for existing and future upstream development; and c) protecting the integrity of adjacent and downstream development.		development of stormwater infrastructure within each of the identified catchments.
PO32: Proposed stormwater infrastructure remains fit for purpose for the life of the development.		**R32: Complies** The proposed stormwater infrastructure will remain fit for purpose for the life of the development, through appropriate maintenance.
PO33: Proposed stormwater infrastructure can be easily accessed and can be maintained in a safe and cost effective way.	**AO33:** The stormwater management system is designed in accordance with the Development Manual Planning Scheme Policy No. SC6.4 – SC6.4.3.9 Water Sensitive Urban Design Guidelines and SC6.4.4.4 Stormwater Drainage Design.	**R33: Complies** The proposed stormwater management system, provide for safe access and maintenance by the Applicant.
Water Management in Reconfiguring a Lot		
PO34 (AO34): This part of the code is not applicable to the proposed development, given the type and nature of the proposed development.		
Ship-Sourced Pollutants		
PO35-PO38 (AO35-AO38): This part of the code is not applicable to the proposed development, given the type and nature of the proposed development.		

MILFORD PLANNING

Appendix 11

TOWNSVILLE CITY PLAN 2014 – LANDSCAPE CODE

Performance Outcomes/Acceptable Outcomes		Response
Landscape design and character		
PO1 The overall landscape design of both public and private spaces: (a) creates a sense of place that is consistent with the intended character of the streetscape, city or locality; and (b) is functional and designed to be visually appealing in the long-term as well as when first constructed.	**AO1** When the development is in an identified locality in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy, landscape design is in accordance with the requirements for that area. Otherwise, no acceptable outcome is nominated.	**R1: Complies** The landscape design within the proposed site will be functional to the site and will be designed to be visually appealing when first constructed and for the lifetime of the development. Landscaping is proposed along the road frontage given the location of the subject site within a newly established industrial precinct. If proposed, internal landscaping will be a mix of garden beds and turf around buildings.
PO2 Tree and plant selection ensures: (a) climatically appropriate landscaping; (b) creation of a diverse palette: in form, texture and seasonal colour; (c) longevity of plants and the form and function of landscaped areas; and (d) cost effective and convenient maintenance over the long-term.	**AO2.1** Species are selected from those listed in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy. **AO2.2** Plant species do not include undesirable species as listed in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R2: Complies** The species selection for the site will include those listed in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy. There will not be any plant species that are deemed undesirable per the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.
PO3 Where appropriate, provision is made for on-street planting that: (a) complements the local streetscape; (b) ensures visibility is maintained from entrances and exits to properties and at intersections; (c) establishes healthy vegetation of suitable species; (d) minimises the potential for vegetation to cause damage to persons, property or infrastructure; and (e) does not limit or hinder pedestrian or vehicular flow and movement.	**AO3** Street planting is provided that is consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R3: Complies** The proposed development will incorporate street planting external to the property boundary. However, it is noted that the developer of CBIP was not required to install street trees within CBIP.

Performance Outcomes/Acceptable Outcomes		Response
PO4 Streetscape treatments and paving form a functional and attractive component of the overall landscape scheme.	**AO4.1** All general streetscape elements are provided in accordance with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R4: Complies** Any general streetscape elements and streetscape pavement, within the proposed development will be in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and will be appropriate for the industrial setting of the subject site.
	AO4.2 Streetscape pavements are provided in accordance with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	
	AO4.3 Streetscape furniture is provided in accordance with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	
PO5 Landscaping within on-site open space areas is well-designed, having regard to its purpose and the provision of shading, climatic response, and the proportion of soft and hard elements.	**AO5.1** Selected tree species within communal recreation areas are to provide at least 30% shade coverage within 5 — 10 years of planting.	**R5: Not applicable** Communal recreation areas are not proposed to be included within the development, given the industrial nature of the proposed use.
	AO5.2 A minimum of 50% of landscaped areas are to be covered in soft landscaping (turf areas and planting beds), with at least 25% of that area being planting.	
PO6 Landscaping and embellishments in local recreational parks is fit for purpose and well-designed, having regard to shading, climatic response, and the proportion of soft and hard elements. Landscaping softens edges and creates an attractive interface with adjoining land.	**AO6** Landscaping and embellishments are provided that are consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R6: Not applicable** The proposed development does not involve a local recreational park space, given the industrial nature of the proposed use.
PO7 The use of hard surface treatments within private and public spaces do not detract from a high standard of amenity, and large unbroken areas of hardstand material is avoided.	**AO7** Surface treatments are provided that are consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R7: Complies** Surface treatments to be used within the proposed landscaped areas of the proposed development will remain consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and will be appropriate for the industrial setting.

Performance Outcomes/Acceptable Outcomes		Response
Edge Treatments		
PO8 Where provided, landscape design along site frontages is used to mitigate adverse aesthetic elements, provide privacy and reduce illumination impacts, while maintaining a safe environment for users.	**AO8** Landscaped areas along the frontage of a site consists of: (a) shade or rounded canopy trees that will provide a minimum of 50% shade to the frontage of the site within 5 years of planting; (b) shrubs that provide screening to blank walls and privacy as required; and (c) low shrubs and ground covers that reach a maximum height of 750mm at maturity.	**R8: Alternative Acceptable Outcome** The proposed landscaping area along the frontage of the proposed development will include shrubs and low shrubs. The landscaping will allow for aesthetic elements, privacy, and will maintain a safe environment for the site's end users. The site layout has been informed by the use and on site operations and activities. Landscaping is proposed along the road frontage of the subject site where feasible. If proposed any internal landscaping will be a mix of garden beds and turf along the front boundary.
PO9 Where appropriate, acoustic barriers and long fences along road frontages and within the development are screened or softened by landscaping or architectural embellishment to improve visual amenity of the development.	No acceptable outcome is nominated.	**R9: Not Applicable** The proposed development is industrial in nature and will be located within a newly established industrial precinct. As such, it is not considered that an acoustic barrier or fence will be required.
PO10 Where provided, landscaping along a side or rear boundary assists in maintaining privacy, screening unsightly or service elements and enhancing the appearance of the development from nearby premises.	**AO10.1** Screen planting is provided along the side or rear boundary of a site, which consists of: (a) either trees with a maximum spacing of 3m (measured from centres) and capable of providing a dense screen within 3 years of planting or screening shrubs capable of growing to a height of 3m within 2 years of planting; and (b) low shrubs and ground covers, where appropriate, to allow for complete covering of planting area. **AO10.2** A minimum of 25% of all trees are to grow above the height of the eaves of the equivalent second storey of the building.	**R10: Alternative Acceptable Outcome** The proposed development does not anticipate incorporating landscaping along the side and rear boundaries of the site, as on site operations require the use of the whole site, in particular for truck movements. The subject site is surrounded by industrial vacant lots or medium industry uses.
PO11 Landscaped areas along or near retaining walls, long unbroken walls, service areas and parking areas consist of an appropriate	**AO11** No acceptable outcome is nominated.	**R11: Not Applicable** The proposed development does not contain any retaining walls.

Performance Outcomes/Acceptable Outcomes		Response
combination and species of trees, shrubs and groundcovers to minimise the visual impact of these elements.		
PO12 Screening trees, shrubs, low shrubs, ground covers and vertical accent plants are appropriate for the space available, orientation and functional requirements of the area.	No acceptable outcome is nominated.	**R12: Complies** The proposed landscaping area for the proposed development will use a combination of trees, shrubs and low shrubs that are deemed appropriate for the space and will not result in overgrowth in these areas.
Maintenance, drainage, utilities, services and construction		
PO13 Plant selection and location protects the integrity and function of overhead and underground services.	Plant selection and location complies with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R13: Complies** The proposed landscaping area for the proposed development will comply with the plant selection and location requirements, per the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy, and will not compromise the integrity or function of nay overhead and underground services within the area.
PO14 Landscape elements do not adversely affect stormwater quantity or quality by ensuring: (a) the flow of water along overland flow paths is not restricted; (b) opportunities for water infiltration are maximised; and (c) areas of pavement, turf and mulched garden beds are appropriately located and adequately drained.	No acceptable outcome is nominated.	**R14: Complies** The proposed landscaping area within the proposed development are spaced appropriately apart and will be designed so they drain appropriately.
PO15 Landscaping works, design and materials used minimise maintenance costs and whole of life cycle costs.	No acceptable outcome is nominated.	**R15: Complies** The proposed landscaping to occur on site will utilise relevant works, designs and materials so that life cycle costs are minimised.
PO16 All turf areas on-site are accessible externally by standard lawn maintenance equipment and receive adequate sunlight for the turf species used.	No acceptable outcome is nominated. **Editor's note—**Applicants should refer to the Development manual planning scheme policy no. SC6.4 including SC6.4.3.6 Landscape policy to assist in demonstrating the outcome.	**R16: Not applicable** The proposed development does anticipate some limited turfed areas around buildings. All turfed areas will be planted with appropriate turf species and will be appropriately accessible for maintenance.
PO17 Drainage of podium planters	No acceptable outcome is nominated.	**R17: Not Applicable** Podium planters are not

Performance Outcomes/Acceptable Outcomes		Response
allows for flush out in future and are adequately drained.		proposed.
PO18 Irrigation is installed within private and public spaces to ensure the long-term viability and integrity of landscaped areas. Where provided, irrigation is designed to facilitate the efficient supply of water in accordance with micro-climatic conditions.	**AO18** Irrigation is provided accordance with the Development manual planning scheme policy no. SC6.4 including - SC6.4.3.6 Landscape policy.	**R18: Complies** The proposed landscaping along the frontage of the development may include necessary irrigation as per the Development manual planning scheme policy no. SC6.4 including - SC6.4.3.6 Landscape policy, so too ensure long-term viability of the landscaped areas or the Applicant will water the these areas as requires.
PO19 Limited on-site maintenance is achieved for private and public landscaping, by selecting plant species having regard to long life expectancy and minimal leaf litter drop, pruning, watering and fertilising requirements.	No acceptable outcome is nominated.	**R20: Complies** The plant species selected for the proposed landscaping area within the proposed development will have regards to long life expectancy and minimal leaf drop, pruning, watering and fertilizing requirements, reducing the on-site maintenance.
PO20 Container sizes and planting stock maturity is consistent with the intended role of the landscaping.	**AO20** Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R20: Complies** Container sizes and planting stock maturity will remain consistent with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.
PO21 Planting stocks are of a quality to ensure vigorous growth.	**AO21** Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.	**R21: Complies** Planting stocks included in the proposed landscaping area will be undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping, so too ensure vigorous growth.
PO22 Plants are protected and maintained to facilitate in-situ growth, vigour and quality form.	**AO22** Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.	**R22: Complies** Plants used for the proposed landscaping areas will be protected and maintained so too maintain longevity and quality form, through compliance of the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.
PO23 Site preparation works ensure a stable and enhanced landscape form.	**AO23** Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.	**R23: Complies** Preparation for the proposed landscaping areas within the proposed development ensures a stable and enhanced landscape form, through compliance of the Development manual planning scheme policy no. SC6.4 -

Performance Outcomes/Acceptable Outcomes		Response
		SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.
Sustainability		
PO24 Wherever possible, landscape design facilitates the retention of significant existing vegetation, both within and external to the site.	**AO24.1** Site design integrates and incorporates retained and significant trees and vegetation within and external to the site.	**R24: Complies** The proposed landscaping area within the proposed development will incorporate locally established trees and vegetation used previously within the surrounding region.
	AO24.2 Removed or damaged significant vegetation is replaced with mature vegetation of a comparable quantity and species.	
PO25 Appropriate site planning and construction management is undertaken to ensure the longevity and health of retained and significant trees and vegetation.	**AO25.1** Retained trees are protected by a tree protection zone (TPZ) and fenced along the canopy/drip line to comply with AS4970- 2009 Protection of Trees on Development Sites.	**R25: Complies** Where pruning and/or trimming work needs to occur, such works will be undertaken in accordance with AS4373 — Pruning of Amenity Trees and carried out by a qualified arborist.
	AO25.2 Any required pruning or trimming work is undertaken in accordance with AS4373 — Pruning of Amenity Trees and is carried out by a qualified arborist.	
	AO25.3 Retained and significant vegetation damaged during development or construction is treated to repair any damage to the extent practicable by a qualified arborist.	
	AO25.4 Protective measures and practices are employed for work adjacent to trees in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.5 Construction management.	
PO26 Landscape design optimises water and energy efficiency and responds appropriately to local conditions, by: (a) maximising the exposure to the prevailing summer breezes and the north-east winter morning sun; (b) minimising exposure to the prevailing winter winds and western summer sun; and (c) optimising shade to create useable and comfortable areas; (d) hydro-zoning planting.	No acceptable outcome is nominated.	**R26: Complies** The proposed landscaping areas within the proposed development site will be situated along the frontage of the site where maximization of exposure to the prevailing summer breezes and north-east winter morning sun occurs. Minimisation of exposure to prevailing winder winds and western summer sun will also occur as a result of the location of the proposed landscaping area.
PO27 Planting bed profiles and edging	**AO27** Planting beds are designed in	**R27: Complies**

Performance Outcomes/Acceptable Outcomes		Response
encourage plant viability, reduce erosion, control weed invasion, provide adequate water infiltration and ease of maintenance to support long-term plant viability and vigorous growth.	accordance with the Development manual planning scheme policy no. 6.4 - SC6.4.3.6 Landscape policy.	Planting beds are designed in accordance with the Development manual planning scheme policy no. 6.4 - SC6.4.3.6 Landscape policy.
PO28 Landscape buffering and species selection is consistent and compatible with any ecological values on or adjoining the site.	No acceptable outcome is nominated.	**R28: Complies** The proposed landscaping within the proposed development site will maintain species selection that is considered consistent and compatible with the ecological values surrounding the site.
PO29 Landscaping elements are provided within parking areas, along driveways and internal roadways to provide adequate shading, and safe and legible parking areas.	**AO29** Landscaping is provided in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.	**R29: Complies** The proposed landscaping areas within the proposed development will be situated in areas that are within close proximity to driveways and parking areas.
Safety		
PO30 Landscape design enhances community safety and reduces the potential for crime and antisocial behaviour. **Editor's note—**Applicants may find useful guidance in the Queensland Government's Crime Prevention through Environmental Design Guidelines for Queensland.	**AO30.1** Access to a site, parking area, buildings or public open space is well lit, free from obstructions and clearly defined by landscape treatments.	**R30: Complies** Access to the proposed development site, parking areas and buildings will be well lit and obstruction free. Such infrastructure will remain clearly defined.
	AO30.2 Trees with a minimum 1.8m of clear trunk (at maturity) are located along pathways, at building entries, within parking areas, on street corners, adjacent to street lighting and along driveways. Garden beds within the aforementioned areas consist of low shrubs and groundcovers that do not exceed 750mm in height.	
	AO30.3 Any solid wall or semi permeable fence is protected from graffiti through means of vertical landscaping or vandal resistant paint or artwork.	
PO31 Where appropriate and practicable, all elements of the landscape design are safe and provide accessibility for all abilities.	**AO31.1** Paving material, tactile indicators and construction complies with AS1428 - Design for Access and Mobility.	**R31: Complies** The site will be designed so that it is accessible for all abilities. Given the nature of the use it is not anticipated that there will be much foot traffic or pedestrians visiting the subject site.
	AO31.2 Pavement material or treatment clearly delineates between pedestrian and vehicular movement systems through contrasting materials, colours or	

Performance Outcomes/Acceptable Outcomes		Response
	level changes.	
	AO31.3 Hard landscaping materials are not highly reflective, or likely to create glare, slipperiness or other hazardous conditions.	

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Appendix 12

TOWNSVILLE CITY PLAN 2014 – TRANSPORT IMPACT, ACCESS AND PARKING CODE

Performance Outcome/Acceptable Outcomes		Response
Transport impact		
PO1: The development is located on roads that are appropriate for the nature of traffic generated, having regard to the safety and efficiency of the transport network, and the functions and characteristics identified of the road hierarchy. The road hierarchy is shown on Figure 9.5 — Road hierarchy existing and Figure 9.6 Road Hierarchy Future.		**R1: Complies** The proposed development will be located on roads that are appropriate for the nature of traffic generated, having regard to the safety and efficiency of the transport network, and the functions and characteristics identified of the road hierarchy.
PO2: Development does not compromise the orderly provision or upgrading of the transport network.		**R2: Complies** The proposed development will not compromise any provisions or upgrading of the surrounding transport network.
PO3: On-site transport network infrastructure (including roads, parking, access and public transport, pedestrian and cyclist facilities) appropriately integrates and connects with surrounding networks.		**R3: Complies** The proposed development will incorporate appropriately designed internal driveways, car parking spaces and access points to and from the external road network.
PO4: As far as practicable, development is designed to encourage travel by public transport, walking and cycling.		**R4: Not Applicable** The proposed development is industrial in nature, and it is not anticipated that the nature of the use will involve employees or visitors walking or cycling to the site.
Site access		
PO5: Access arrangements are appropriate for: a) the capacity of the parking area; b) the volume, frequency and type of vehicle usage; c) the function and characteristics of the access road and adjoining road network; and d) the safety and efficiency of the road network.	**AO5:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways and SC6.4.3.5 Carparking and Public Transport Facilities Guidelines.	**R5: Complies** The proposed development will provide multiple entry and exit access arrangements, across the site. Such access points will be provided in accordance with the current Development manual planning scheme policy SC6.4 — SC6.4.3.17 Driveways and SC6.4.3.5 Carparking and public transport facilities guidelines.
PO6: Where practical, access for cyclists and pedestrians is clearly distinguished from vehicle access.		**R6: Not applicable** The proposed development is industrial in nature, it is not anticipated that access for cyclists and pedestrians will be required.

Performance Outcome/Acceptable Outcomes		Response
PO7: Access is located and designed to provide safe and easy access to the site, having regard to its position, width and gradient.	**AO7:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways and SC6.4.4.8 Standard Drawings	**R7: Complies** Access to the site is to be provided in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.17 Driveways and SC6.4.4.8 Standard drawings.
PO8: All vehicles reasonably expected to use the site are able to travel the length of the driveway or driveway access without damage to vehicle or the driveway surface.	**AO8:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways and SC6.4.3.5 Carparking and Public Transport Facilities Guidelines.	**R8: Complies** Access to the site is to be provided in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.17 Driveways and SC6.4.3.5 Carparking and public transport facilities guidelines.
PO9: A driveway does not cause change in the level of a footpath that is unsafe or inaccessible for people with mobility difficulties.	**AO9:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways and SC6.4.4.8 Standard Drawings.	**R9: Complies** Driveway access to the site is to be provided in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.17 Driveways and SC6.4.4.8 Standard drawings.
PO10: Driveways are designed to withstand loadings from all vehicles reasonably expected to use the site.	**AO10:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways.	**R10: Complies** Driveways within the site are to be provided in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.17 Driveways.
PO11: A driveway does not allow water to pond on adjacent properties or adjacent buildings and does not allow water to enter a building or property.	**AO11:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways.	**R11: Complies** Driveways within the site are to be provided in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.17 Driveways.
PO12: Construction of a driveway does not damage or interfere with the location, function of or access to any services and infrastructure.	**AO12:** Access is provided in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.17 Driveways, SC6.4.3.5 Carparking and Public Transport Facilities Guidelines and SC6.4.4.8 Standard Drawings.	**R12: Complies** Driveways within the site are to be provided in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.17 Driveways, SC6.4.3.5 Carparking and public transport facilities guidelines, and SC6.4.4.8 Standard drawings.
PO13:	**AO13:**	**R13: Complies** All vehicles accessing the site

Performance Outcome/Acceptable Outcomes		Response
All vehicles reasonably expected to access the site can safely manoeuvre to allow vehicles to exit and enter in a forward motion.	Access is provided in accordance with the standards identified in Development Manual Planning Scheme Policy No. SC6.4 - SC6.4.3.17 Driveways, SC6.4.3.5 Carparking and Public Transport facilities guidelines and SC6.4.4.8 Standard drawings such that all vehicles reasonably expected to access the site, can exit and enter in a forward motion with no more than a three-point turn.	will be reasonably expected to access the site through the proposed entry and exist crossovers. Such access will be provided accordance with the standards identified in Development manual planning scheme policy no. SC6.4 - SC6.4.3.17 Driveways, SC6.4.3.5 Carparking and public transport facilities guidelines and SC6.4.4.8 Standard drawings
Pedestrian and cyclist facilities		
PO14: Provision is made for the safe and convenient movement of pedestrians on-site and connecting to the external network, having regard to desire lines, legibility, safety, topographical constraints, shading and other weather protection and equitable access arrangements.		**R14: Not applicable** The proposed development is industrial in nature, it is not anticipated that pedestrian and cyclist facilities will be required.
PO15: Provision is made for safe and convenient cycle movement to the site and within the site and connecting to the external network having regard to desire lines, users' needs, safety, topographical constraints and legibility.		**R15: Not applicable** The proposed development is industrial in nature, it is not anticipated that pedestrian and cyclist facilities will be required.
PO16: Car parking areas, pathways and other elements of transport network infrastructure are designed to enhance public safety by discouraging crime and antisocial behaviour, having regard to: a) provision of opportunities for casual surveillance; b) provision of lighting; c) the use of fencing to define public and private spaces, whilst allowing for appropriate sight lines; d) minimising potential concealment points and assault locations; e) minimising opportunities for graffiti and other vandalism; and f) restricting unlawful access to buildings and between buildings.		**R16: Not applicable** The proposed development is industrial in nature, it is not anticipated that pedestrian and cyclist facilities will be required.
Parking		
PO17: Provision is made for on-site vehicle parking to: a) meet the demand likely to be generated by the development; and b) avoid on street parking that would adversely impact on the safety or capacity of the road network or unduly impact on local amenity.	**AO17:** Car parking is provided in accordance with the standards identified in Parking Rates Planning Scheme Policy No. SC6.10.	**R17: Complies** Trucks associated with proposed development will parking on hardstand areas within the site. 32 car parking spaces are proposed, six of which will be dedicated to customers and a carport over spaces 10 to 16 will be constructed as part of Stage 2. The proposed parking is provided in accordance with the standards, which is sufficient spaces to accommodate for the amount and type of vehicle traffic likely to be generated by the

Performance Outcome/Acceptable Outcomes		Response
		proposed development.
PO18: Parking ensures access is provided for people with disabilities.	**AO18:** Car parking areas are designed in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.5 Car Parking and Public Transport Facilities Guidelines.	**R18: Complies** The proposed development will accommodate parking for people with disabilities through the implementation of a PWD parking spaces within the on-site parking area.
PO19: Where the nature of the proposed development creates a demand, provision is made for set-down and pick-up facilities by bus, taxis or private vehicle, which: a) are safe for pedestrians and vehicles; b) are conveniently connected to the main component of the development by pedestrian pathway; and c) provide for pedestrian priority and clear sight lines.		**R19: Not applicable** The proposed on-site parking spaces and arrangements are deemed to be sufficient for the demand expected from the proposal. Set-down and pick-up facilities are not anticipated to be required for this development.
PO20: Car parking and servicing areas are designed to: a) be clearly defined, marked and signed; b) be convenient and accessible; c) minimise large unbroken areas of hardstand to the extent practicable; d) be safe for vehicles, pedestrians and cyclists; e) provide shading; f) be located to encourage multi-purpose trip ends and minimise vehicle movements within the site; and g) minimise any adverse impacts on the amenity of surrounding land.		**R20: Complies** Parking and servicing areas within the site will be clearly defined, marked and signage installed. Access to the on-site parking will be conveniently located adjacent to proposed office building associated with each stage of the development.
PO21: Vehicle spaces have adequate dimensions to meet user requirements.	**AO21:** Car parking areas are designed in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 — SC6.4.3.5 Car parking and Public Transport Facilities Guidelines.	**R21: Complies** Vehicle spaces will have the adequate dimensions to meet user requirements, as per the standards identified in the Development manual planning scheme policy no. SC6.4 — SC6.4.3.5 Car parking and public.
PO22: Pavement is constructed to an appropriate standard.		**R22: Complies** Pavement constructed within the site will satisfy the current Australian Standards.
PO23: Parking and servicing areas are kept accessible and available for use as a car park at all times during the normal business hours of the activity.		**R23: Complies** All parking and servicing areas will be kept accessible and available at all times during hours of operation of the proposed development.
PO24: Visitor parking for accommodation activities remains accessible and useable to visitors at all times.		**R24: Not applicable** The proposed development does not involve any accommodation activities.

Performance Outcome/Acceptable Outcomes		Response
PO25: Multi-level car parking areas are designed, articulated and finished to make a positive contribution to the local external streetscape character, as well as the internal user experience of the facility ensuring way finding technologies and aesthetic treatments are provided.		**R25: Not applicable** The proposed development will not involve multi-level parking areas.
Servicing		
PO26: Provision is made for the on-site loading, unloading, manoeuvring and access by service vehicles that: a) are adequate to meet the demands generated by the development; b) are able to accommodate the design service vehicle requirements; and c) does not unduly impede vehicular, cyclist and pedestrian safety and convenience both within the site and external to the site.	**AO26:** Servicing areas are provided and designed in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 – SC6.4.3.5 Car parking and Public Transport Facilities Guidelines.	**R26: Complies** Servicing areas are provided and designed in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 – SC6.4.3.5 Car parking and public transport facilities guidelines.
PO27: Refuse collection vehicles are able to safely access on-site refuse collection facilities.	**AO27:** Refuse collection areas are provided and designed in accordance with the standards identified in the Development Manual Planning Scheme Policy No. SC6.4 – SC6.4.3.22 Waste Management Guidelines and SC6.4.3.5 Car Parking and Public Transport Facilities Guidelines.	**R27: Complies** Refuse collection vehicles will be able to safely access the on-site refuse collection facilities via the allocated refuse collection area. The proposed collection area is to be provided and designed in accordance with the standards identified in the Development manual planning scheme policy no. SC6.4 – SC6.4.3.22 Waste management guidelines and SC6.4.3.5 Car parking and public transport facilities guidelines.
PO28: Servicing arrangements minimise any adverse impact on the amenity of premises in the vicinity, having regard to operating hours, noise generation, proximity to sensitive uses, odour generation and dust.		**R28: Complies** Servicing arrangements will minimise any impacts on the amenity of the premises.

MILFORD PLANNING

Appendix 13

TOWNSVILLE CITY PLAN 2014 – WORKS CODE

Performance Outcome/Acceptable Outcomes		Response
Access and Parking		
PO1 to PO5 apply only to Accepted Development Subject to Requirements.		
Services and Utilities		
PO6 to PO10 apply only to Accepted Development Subject to Requirements.		
Service and Utilities		
PO11: A portable water supply is provided that is adequate for the needs of the intended use.	**AO11.1:** Where within an area designated for urban or rural residential development, the development is connected to council's reticulated water supply system in accordance with the development manual planning scheme policy no. SC6.4. OR **AO11.2:** Otherwise, the development is provided with an on-site water supply in accordance with the development manual planning scheme policy no. SC6.4. **AO11.3:** Water supply systems and connections are designed and constructed in accordance with the development manual planning scheme policy no. SC6.4-SC6.4.3.21 Townsville Water planning and design guidelines, SC6.4.3.23 Water and sewer network modelling guidelines, SC6.4.6.2 water supply and SC6.4.4.8 standard drawings.	**R11: Complies** The proposed development will be connected to the Council's reticulated water network. The water supply systems and connections of the proposed development are to be designed and constructed in accordance with Development manual planning scheme policy no. SC6.4-SC6.4.3.21 Townsville Water planning and design guidelines, SC6.4.6.2 Water supply and SC6.4.4.8 Standard drawings.
PO12: Wastewater treatment and disposal is provided that is appropriate for the level of demand generated, protects public health and avoids adverse impacts on environmental values.	**AO12.1:** Where within an area designated for urban development, the development is connected to the council's reticulated sewerage system in accordance with the Development manual planning scheme policy no. SC6.4-SC6.4.3.21 Townsville Water planning and design guidelines. OR **AO12.2:** Otherwise, on-site waste water treatment and disposal is provided which complies with the Development manual planning	**R12: R7: Complies** The proposed development will be connected to the Council's reticulated wastewater network. The wastewater systems and connections of the proposed development are to be designed and constructed in accordance with Development manual planning scheme policy no. SC6.4-SC6.4.3.21 Townsville Water planning and design guidelines, SC6.4.6.3 Sewerage systems and SC6.4.4.8 Standard drawings.

Performance Outcome/Acceptable Outcomes		Response
	scheme policy no. SC6.4-SC6.4.3.10 On-site sewerage facilities.	
	AO12.3: Waste water systems and connections are designed and constructed in accordance with the Development manual planning scheme policy no. SC6.4-SC6.4.3.21 Townsville Water planning and design guidelines, SC6.4.3.23 Water and sewer network modelling guidelines, SC6.4.6.3 Sewerage systems and SC6.4.4.8 Standard drawings.	
PO13: The design and management of the development integrates water cycle elements having regard to: a) reducing potable water demand; b) minimising wastewater production; c) minimising stormwater peak discharges and run-off volumes; d) maintaining natural drainage lines and hydrological regimes as far as possible; e) reusing stormwater and greywater is encouraged where public safety and amenity will not be compromised; and f) efficient use of water.	**AO13:** Integrated water management practices and infrastructure are implemented in accordance with development manual planning scheme policy no. SC6.4 – SC6.4.3.8 stormwater quality management plans for development and SC6.4.3.9 water sensitive urban design guidelines.	**R13: Complies** The Stormwater Quality Improvement Device (SQID's) proposed for the development include SPEL treatment system to provide stormwater quality treatment. The MUSIC modelling of the proposed treatment train demonstrates the SPP's Pollutant Load SMDO's are achieved. On this basis we recommend acceptance of the proposed treatment solution, refer **Appendix 5**.
PO14: The development is provided with an adequate energy supply which maintains acceptable standards of public health, safety, environmental quality and amenity.	**AO14:** For other than the Rural zone, premises are serviced by: a) an underground electricity supply approved by the relevant energy authority; or b) an overhead supply approved by the relevant energy authority where in the Rural residential zone, Special purpose zone or High impact industry zone or where on a lot of less than 2,500m^2 within an area where the existing supply is overhead.	**R14: Complies** The proposed development will be provided an adequate underground energy supply via Ergon Energy.
PO15: Premises are connected to a telecommunications service	**AO15:** The development is connected to telecommunications	**R15: Complies** The proposed development will be provided an adequate

Performance Outcome/Acceptable Outcomes		Response
approved by the relevant authority.	infrastructure in accordance with the standards of the relevant regulatory authority.	telecommunications service approved by the relevant authority.
PO16: Provision is made for future telecommunications services (for example fibre optic cable).	**No acceptable outcome**	**R16: Complies** If required, the proposed development allows for the provision of future telecommunications services, such infrastructure would have been provided as part of the RAL approval to facilitate connections for end users.
PO17: Where available, provision is made for reticulated gas.	**AO17:** Design and provision of reticulated gas is undertaken in accordance with the Development manual planning scheme policy no. SC6.4-SC6.4.3.20 Public lighting and utility services.	**R17: Not Applicable** The proposed development will not be connected to the reticulated gas network.
PO18: Adequate access is provided to public services and utilities for future maintenance.	**No acceptable outcome**	**R18: Complies** Adequate access will be afforded to any public services and utilities**.**
Earthworks		
PO19: Filling and excavation does not result in contamination of land or pose a health and safety risk.	**AO19:** Filling and excavation does not: a) use contaminated materials as fill; b) excavate contaminated material; and c) use waste material as fill.	**R19: Complies** Any excavating and filling through the construction phase of the proposed development, will not result in the use or excavation of contaminated material.
PO20: Earthworks result in stable landforms and structures.	**AO20:** Earthworks and the construction of retaining walls and batters are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).	**R20: Not Applicable** No retaining walls or batters are proposed.
PO21: Earthworks are undertaken in a manner that: a) maintains natural landforms as far as possible; and b) minimises height of retaining walls and batter faces.	**AO21.1:** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction). **AO21.2:** Retaining walls are designed and constructed: a) certified as stable by a Registered Professional Engineer of Queensland; and b) have a combined height of retaining wall and	**R21: Complies** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction). No retaining walls or batters are proposed.

Performance Outcome/Acceptable Outcomes		Response
	fence of not more than 2 metres.	
PO22: Earthworks do not unduly impact on amenity or privacy for occupants of the site or on adjoining land.	**No acceptable outcome**	**R22: Complies** Earthworks will not unduly impact on amenity or privacy for occupants of the site or on adjoining land.
PO23: Earthworks do not cause environmental harm.	**No acceptable outcome**	**R23: Complies** Earthworks will not cause environmental harm.
PO24: Filling or excavation does not worsen any flooding or drainage problems on the site or on neighbouring properties.	**AO24:** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).	**R24: Complies** Filling or excavation will not worsen any flooding or drainage problems on the site or on neighbouring properties.
PO25: Any structure used to restrain fill or excavation does not worsen drainage problems or cause surface water to be a nuisance to neighbouring properties.	**AO25:** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).	**R25: Not Applicable** No restraining structures are proposed for fill or excavation works.
PO26: Filling or excavation does not adversely affect sewer, stormwater or water utility infrastructure or access to them for maintenance purposes.	**AO26:** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).	**R26: Complies** Earthworks will be undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).
PO27: Filling or excavation does not prevent or create difficult access to any property.	**AO27:** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).	**R27: Complies** Earthworks will be undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.4.5 Earthworks (design) and SC6.4.6.10 Earthworks (construction).
PO28: Earthworks do not cause significant impacts through truck movements, dust or noise on the amenity of the locality in which the works are undertaken or along routes taken to transport the material and the transportation of materials minimises adverse impacts on the road network.	**AO28:** Earthworks are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.6.10 Earthworks (construction) and SC6.4.5 Construction management.	**R28: Complies** Earthworks will be undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.6.10 Earthworks (construction) and SC6.4.5 Construction management.
Movement Networks		
PO29: The following are provided along the full extent of the road frontage and to a standard that is appropriate to the function of the	**AO29:** Design and construction of external road works are undertaken in accordance	**R29: Not Applicable** The proposed development does not include the construction of external roads.

Performance Outcome/Acceptable Outcomes		Response
road or street and the character of the locality: a) paved roadway; b) appropriate pavement edging (including kerb and channel); c) pedestrian paths and cycleways; d) streetscaping and street tree planting; e) stormwater drainage; f) street lighting systems; and g) conduits to facilitate the provision of and other utility services.	with the Development manual planning scheme policy no. SC6.4.	
PO30: Provision is made in the road reserve for streetscaping, pedestrians and cyclists in a manner consistent with: a) the current and projected level of usage; b) the desired streetscape character; and c) activities which are anticipated to occur within the verge.	**AO30:** Streetscaping works, footpaths and cycle paths are provided in accordance with Development manual planning scheme policy no. SC6.4.	**R30: Complies** The subject site is within a newly established industrial precinct. The proposed use is not likely to attract pedestrians or cyclists, to require footpaths to be provided. Further there is limited road frontage to provide footpaths, given the multiple crossovers proposed.
PO31: Parking areas are designed and constructed in a manner that is sufficiently durable for the intended function, maintains all weather access and ensures the safe passage of vehicles, pedestrians and cyclists.	**AO31:** Parking area design and construction is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 — SC6.4.3.5 Car parking and public transport facilities guidelines.	**R31: Complies** Parking area design and construction will be undertaken in accordance with the Development manual planning scheme policy no. SC6.4 — SC6.4.3.5 Car parking and public transport facilities guidelines.
PO32: Movement networks can be easily and efficiently maintained.	**AO32:** Infrastructure is provided in accordance with the Development manual planning scheme policy no. SC6.4 — SC6.4.4.1 Geometric road design, SC6.4.3.13 Townsville road hierarchy and SC6.4.3.14 Traffic impact assessment guidelines.	**R32: Complies** Infrastructure will be provided in accordance with the Development manual planning scheme policy no. SC6.4 — SC6.4.4.1 Geometric road design, SC6.4.3.13 Townsville road hierarchy and SC6.4.3.14 Traffic impact assessment guidelines.
Waste Management		
PO33: Development provides adequate waste management facilities on site for the storage of waste and recyclable material in a manner which: a) is of adequate size to accommodate the expected amount of	**AO33:** Waste management facilities are provided in accordance with the Development manual planning scheme policy no. SC6.4 – SC6.4.3.22 Waste management guidelines.	**R33: Complies** Waste management facilities will be provided in accordance with the Development manual planning scheme policy no. SC6.4 – SC6.4.3.22 Waste management guidelines.

Performance Outcome/Acceptable Outcomes		Response
refuse to be generated by the use; b) is in a position that is conveniently accessible for collection at all times; c) is able to be kept in a clean, safe and hygienic state at all times; and d) minimises the potential for environmental harm, environmental nuisance and adverse amenity impacts.		
Construction Management		
PO34: Work is undertaken in a manner which does not cause unacceptable impacts on surrounding areas as a result of dust, odour, noise or lighting.	No acceptable outcome is nominated.	**R34: Complies** The proposed development is anticipated to occur across one stage, so too reduce any unacceptable impacts on the surrounding areas as a result of associated dust, odour, noise or lighting.
PO35: While undertaking development works, the site and adjoining road are maintained in a tidy, safe and hygienic manner.	No acceptable outcome is nominated.	**R35: Complies** During the construction phase stage of the proposal, maintenance of surrounding sites and roads will be kept in a tidy, safe and hygienic matter.
PO36: Traffic and parking generated during construction are managed to minimise impact on the amenity of the surrounding area.	No acceptable outcome is nominated.	**R36: Complies** Any traffic and parking generated during the construction stages at each stage will be managed to minimise amenity impacts to the surrounding area.
PO37: Council's infrastructure is not damaged by construction activities.	No acceptable outcome is nominated.	**R37: Complies** The proposed development will not damage any of Council's infrastructure during construction activities within the site.
PO38: The integrity of new infrastructure is maintained.	No acceptable outcome is nominated.	**R38: Complies** The proposed development will retain the integrity of all new infrastructure created at each stage of the proposal.
PO39: Construction activities and works are carried out in a manner which avoids damage to the environment, retained vegetation and impacts on fauna.	Construction activities and works are undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.5 Construction management.	**R39: Complies** All construction activities and works conducted at each stage of the proposal will be undertaken in accordance with the Development manual planning scheme policy no.

Performance Outcome/Acceptable Outcomes		Response
		SC6.4 - SC6.4.5 Construction management.
PO40: Vegetation cleared from a site is disposed of in a manner that maximises reuse and recycling and minimises impacts on public health and safety.	**AO40:** Construction activities and works are carried out in accordance with Development manual planning scheme policy no. SC6.4 - SC6.4.6.11 Clearing and grubbing.	**R40: Not applicable** The proposed area for the proposed development does not involve vegetation clearing requirements.

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Appendix 14

TOWNSVILLE CITY PLAN 2014 – FLOOD HAZARD OVERLAY CODE

Performance Outcomes/Acceptable Outcomes		Our Response
For assessable development		
PO1: Development in medium and high hazard areas is designed and located to minimise susceptibility to and potential impacts of flooding	**AO1.1:** Where the development is located within an area shown on Overlay Map OM-06.1 or 06.2 as medium hazard – further investigation area, new buildings containing habitable rooms: a) are sited on a part of the sire which is outside the medium hazard – further investigation area; or b) are sited on the highest part of the site. OR **AO1.2:** Where development is located within hazard area shown on Overlay Map OM-06.1 or 6.2: a) floor levels of all habitable rooms are a minimum of 300mm above the defined flood level; b) floor levels of all non-habitable rooms (other than class 10 buildings) are above the defined flood event; c) car parking spaces associated with non-residential development are located outside the high hazard areas identified on Overlay Map OM06.1 or 6.2; and d) underground car parks are designed to prevent the intrusion of flood waters by the incorporation of a bound or similar barrier with a minimum height of 300mm above the defined flood level.	**R1: Complies** Whilst the subject site is mapped as being impacted by low flood hazard, we note that extensive bulk earthworks have occurred to development the industrial subdivision resulting in the lot being above the defined Q100 (1% AEP) flood level. Therefore the proposed development is not anticipated to be impacted by flooding.
PO2: Development in high hazard areas does not significantly impede the flow of flood waters through the site or worsen flood flows external to the site.	**AO2.1:** Development in high hazard areas do not involve: a) filling with a height greater that 150mm; or b) block or solid walls or solid fences; or c) garden beds or other structures with a height more than 150mm; or	**R2: Not Applicable** The proposed development is not situated within an area mapped as having a high flood hazard.

Performance Outcomes/Acceptable Outcomes		Our Response
	d) the planning of dense shrub hedges.	
PO3: Development does not intensify use in high hazard areas, in order to avoid risks to people and property.	**AO3.1:** New Buildings are located outside High Hazard Areas identified on Overlay Map OM-06.1 or 06.2.	**R3: Not Applicable** The proposed development is not situated within an area mapped as having a high flood hazard.
	AO3.2: New lots or roads are not created within High Hazard Areas identified on Overlay Map OM-06.1 or 06.2.	
	AO3.3: Sites for non-permanent accommodation such as tents, cabins or caravans (whether intended for short or long-term accommodation) are located outside the High Hazard Areas identified on Overlay Map OM-06.1 or 06.2.	
PO4: Siting and layout of development maintains the safety of people and property in medium hazard areas.	**On existing lots** **AO4.1:** Floor levels for residential buildings are 300mm above the defined flood level.	**R4: Not Applicable** The site is not within the medium hazard area.
	AO4.2: Floor levels of non-residential buildings (other than class 10 buildings are above the defined flood level.	
	AO4.3: Underground car parks are designed to prevent the intrusion of flood waters by the incorporation of a bund or similar barrier with a minimum height of 300mm above the defined flood level.	
	AO4.4: Development for non-permanent accommodation such as tents, cabins or caravans (whether intended for short or long-term accommodation) are located outside the Medium Hazard Areas identified on Overlay Map OM-6.1 or 06.2.	
	Where reconfiguring a lot **AO4.5:** Where reconfiguring a lot, new lots contain designated building envelopes (whether or not for residential purposes) outside the Medium Hazard Areas identified on Overlay Map OM006.2 or 06.2 and those building envelopes are of a sufficient size to accommodate buildings associated with the development.	

Performance Outcomes/Acceptable Outcomes		Our Response
	AO4.6: In new subdivisions, arterial, sub-arterial or major collector roads are located above the 2% AEP flood level.	
	AO4.7: Reconfiguration of lots does not involve cul-de-sacs or dead end streets within Medium Hazard Areas identified on Overlay Map OM-06.1 or 06.2.	
PO5: Signage is provided within high and medium hazard areas to alert residents and visitors to the flood hazard.	**AO5:** Signage is provided on-site (regardless of whether land will be public or private ownership) to indicate depth at key hazard points, such as floodway crossings, entrances to low-lying reserves or car parks.	**R5: Not Applicable** The proposed development will not involve key hazard point. All lots can achieve access via Penelope Road.
PO6: Development within high and medium hazard areas ensures any changes to the depth, duration, velocity of flood waters are contained within the site.		**R6: Complies** Whilst the subject site is partly located within a medium hazard area, extensive bulk earthworks have occurred to development the industrial subdivision resulting in the lot being above the defined Q100 (1% AEP) flood level. Therefore the proposed development is anticipated to be consistent with the flood modelling undertaken to support the wider CBIP Western Precinct development.
PO7: Development within high and medium hazard areas does not directly, indirectly or cumulatively worsen flood characteristics outside the development site, having regard to: a) increased scour and erosion; or b) loss of flood storage; or c) loss of or changes to flow paths; or d) flow acceleration or retardation; or e) reduction in flood warning times.		**R7: Complies** Whilst the subject site is partly located within a medium hazard area, extensive bulk earthworks have occurred to development the industrial subdivision resulting in the lot being above the defined Q100 (1% AEP) flood level. Therefore the proposed development is anticipated to result in the directly, indirectly, or cumulatively worsen flood characteristics outside of the proposed site, including increased erosion, loss of flood storage, flow acceleration or retardation, or reduction in flood warning times.
PO8: Facilities with a role in emergency management and vulnerable community services are able to function effectively during and immediately after flood events.	**AO8:** The development is provided with the level of flood immunity set out in Table 8.2.6.3(b).	**R8: Not applicable** The proposed development does not involve emergency management or vulnerable community services.

Performance Outcomes/Acceptable Outcomes		Our Response
PO9: Public safety and the environment are not adversely affected by the detrimental impacts of flooding on hazardous materials manufactured or stored in bulk.	**AO9.1:** Development does not involve the manufacture or storage of hazardous materials within a High Flood Hazard Area identified on Overlay Map OM-06.1 or 06.2.	**R9: Complies** The proposed development does not involve the manufacturing or storage of any hazardous materials. However, if the storage of hazardous material occurs, it will be undertaken in an appropriate manner above the 0.2% AEP flood event.
	AO9.2: Within the Low or Medium Flood Hazard Area identified on Overlay Map OM-06.1 or 06.2, structures used for the manufacture or storage of hazardous materials in bulk are designed to prevent the intrusion of flood waters up to at least a 0.2% AEP flood event.	

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Appendix 15

Application form

Environmental Protection Act 1994

Development application Form 1 - Application details—attachment for an application for an environmental authority

This form is to be attached to the Development application Form 1 - Application details *when making a development application for prescribed environmentally relevant activities (ERAs). Under section 115 of the* Environmental Protection Act 1994 *(EP Act) the development approval (DA) application is taken to be an application for an environmental authority (EA) for the prescribed ERAs.*

It is recommended that prior to making an application for an environmentally relevant activity (ERA), you read the information on what to provide with an application. This information is located on the Business Queensland website at www.business.qld.gov.au (use the search term "Environmental licence"). This website also has a diagnostic tool called the "forms and fees finder" which will help identify any fees and supporting information you need to make an application.

Important notes:

- ☑ The application can't be to dredge or extract more than 10,000 tonnes of material a year in the North Stradbroke Island region. This is prohibited development under the Planning Regulation 2017.
- ☑ All applicants must be registered as suitable operators[1]. A suitable operator is a person or a corporation assessed under section 318I of the EP Act as being suitable to carry out an ERA and is listed on the suitable operator register[2].
- ☑ If more than one ERA is being applied for, the ERAs must be carried out as part of a single integrated operation. ERAs are carried out as a single integrated operation if::
  - the ERAs will be carried out under the day to day management of a single responsible individual (e.g. a site manager or operations manager); and
  - all of the ERAs are operationally interrelated, that is, the operation cannot function without all of the ERAs. Separate applications will need to be made for the ERAs that cannot be carried out as a single integrated operation; and
  - the ERA/s are, or will be, carried out at one or more places; and
  - the places where the ERAs will be carried out are close enough to make the integrated day to day management of the activities feasible.
- ☑ All the ERAs that will be on the EA must be prescribed ERAs. Prescribed ERAs are ERAs listed in schedule 2 of the Environmental Protection Regulation 2019.

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[1] Your EA application must be refused if you are not a registered suitable operator when the application is decided. To become a registered suitable operator, apply using the form "Application to be a registered suitable operator - ESR/2015/1771" (available at www.qld.gov.au, using the publication number ESR/2015/1771 as a search term).

[2] The register is available on the Queensland Government website at www.qld.gov.au, using the search term "suitable operator register".

Privacy statement

Where ERAs are administered by the Queensland Government:

The Department of Environment and Science and Department of Agriculture and Fisheries are collecting the information on this form to process your application for an EA. The collection is authorised under Chapter 5 of the EP Act.

Please note that the administering authority is required to keep this application on a register of documents open for inspection by members of the public under section 540 of the EP Act, and must permit a person to take extracts from the register pursuant to section 542 of the EP Act. Your personal information will not be otherwise disclosed to any other parties unless authorised or required by law. For queries about privacy matters please email privacy@des.qld.gov.au or telephone: 13 74 68.

Where ERAs are administered by a local government:

Contact the local government for their privacy information.

Pre-lodgement meeting

Where ERAs are administered by the Queensland Government:

You can arrange a pre-lodgement meeting through the Department of State Development, Infrastructure, Local Government and Planning prior to lodging this application if you have not already done so. For more information contact the Department of State Development, Infrastructure, Local Government and Planning (for contact details go to https://planning.dsdmip.qld.gov.au/planning/resources/regional-contacts).

Where ERAs are administered by a local government:

Contact the local government about pre-lodgement meetings.

The fields marked with an asterisk * are mandatory, if they are not completed then your application may be considered not properly made under the *Planning Act 2016*.

1. Applicant details

To nominate a site or application contact for this application please provide details at Questions 14 and 15.

Is there more than one applicant? *	☒ No—provide applicant's details below. ☐ Yes—provide the principal applicant's details below and all other applicants' details in Attachment 1—*"Joint applicants and appointment of principal applicant"*

Name - individual or contact person if applicant is a organisation*	Suitable Operator Reference Number*
Ian Gough	704894
Organisation name, including any trading name (*if an organisation)	ABN/ACN (*if an organisation)
Gough Industries Pty Ltd	ACN 010028547
Residential or registered business address (not a post office box)*	Phone*
883 Ingham Road, Bohle	
Postal address (if same as above, write "AS ABOVE")*	Facsimile
Email*	☒ Indicate if you want to receive correspondence via email
ig@gough.com.au	

1.1 Nomination of an agent for this application

I/we nominate the below agent to act on my/our behalf and to receive correspondence relating to this application.

Do you want to nominate an agent for this application?* ☐ No → Go to *Question* ***Error! Reference source not found.*** ☒ Yes → Complete the agent's details here.	
Name of agent – individual or contact person if agent is an organisation	
Sarah Jones	
Organisation name, including trading name if an organisation	ABN/ACN (if an organisation)
Milford Planning	31 162 988 132
Postal address	Phone
PO Box 5463	07 4724 0095
Email	☒ Indicate if you do not want to receive correspondence via email
info@milfordplanning.com.au	

2. Details of the ERA(s) that you want to operate

Please list all of the ERAs that will be undertaken on site, including:

- Any existing ERAs will continue to operate unchanged on the site (select "Existing" in the table below);
- ERAs that are proposed to be undertaken on the site as part of the application (select "New - DA" in the table below); and
- ERAs that are proposed to be undertaken on this site, that don't form part of this application as they do not require a DA (select "New - EA" in the table below).

Listing all the ERAs that will be undertaken on site will help enable them to all be included on the one EA

If the ERA has eligibility criteria and standard conditions[3], identify whether you can comply with them. Select "N/A" where there are no eligibility criteria and standard conditions for that ERA. If you cannot comply with all of the applicable standard conditions, select "no" and attach details of the standard conditions you cannot comply with.

ERA number*	Threshold*	Name of ERA*	New or existing ERA(s)	I can comply with the eligibility criteria*	I can comply with all the standard conditions*
12	1	Plastic Product Manufacturing (manufacturing more than 50 tonnes of plastic product, other than foam, composite plastic and rigid fibre-reinforced plastic per annum).	☒ New - DA ☐ New - EA ☒ Existing	☐ Yes ☒ N/A	☐ Yes ☒ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No
			☐ New - DA ☐ New - EA ☐ Existing	☐ Yes ☐ N/A	☐ Yes ☐ No

☒ The EA number for existing ERA(s) listed above is

If there are new ERAs and your existing EA is an amalgamated EA, the application for ERAs associated with the DA application will create a new EA for the new ERAs. An application to amalgamate the current and new EAs may then be required.

☐ I have attached details of the standard conditions that I cannot comply with.

3. Will the ERAs be carried out as a single integrated operation?

Will more than one ERA be operated at the location?*

[3] ERAs with eligibility criteria and standard conditions are listed at: www.business.qld.gov.au (use the search term "eligibility criteria").

☒ No	Go to *Question 4.*	
☐ Yes	Will any of the ERAs be operated as a single integrated operation (see definition on page one)?*	
	☐ No	Go to *Question 4.*
	☐ Yes	Provide details of the ERAs that are operated as a single integrated operation and supporting information showing they are a single integrated operation then go to *Question 4.*

4. Description of land where the ERA/s will be carried out

Where activities will be undertaken at more than one location, provide details in Attachment 2.

Number*	Street Name*	Suburb/Town*	Postcode*
40	Penelope Road	Stuart	
Real Property Description*		Specific area within the location ie GPS or other descriptor*	
Lot 7 Plan SP338023			
Port (*if applicable)		Project Name (*if applicable)	

5. Details of contaminated land

Is there a site management plan in effect for contaminated land that relates to the land that is the subject of this application?*			
☒ No	Go to *Question 6*.		
☐ Yes	Description of land*		
	Lot and plan number(s)		Local Government Area*
	Lot	Plan	
	Lot	Plan	
	Lot	Plan	
	Lot	Plan	

6. Environmental offsets

An environmental offset, under the *Environmental Offsets Act 2014*, may be required for an ERA where, despite all reasonable measures to avoid and minimise impacts on certain environmental matters, there is still likely to be significant residual impact on one or more of those matters.

You must verify the presence, whether temporary or permanent, of those environmental matters. For more information refer to the Queensland Environmental Offsets Policy and the Significant Residual Impact Guideline at the Queensland Government website at www.qld.gov.au, using the search term “environmental offsets”.

Will the ERA(s) being applied for result in a significant residual impact to a matter of State environmental significance (MSES)?*	
☒ No	Go to *Question 7*.
☐ Yes	You **must** attach supporting information that: 1. Details the magnitude and duration of the likely significant residual impact on each prescribed environmental matter (other than matters of local environmental significance) for the entire activity; and 2. Demonstrates that all reasonable measures to avoid and minimise impacts on each of those matters will be undertaken.

6.1 Notice of election

Has a notice of election been submitted to the administering authority, or is being submitted as part of this application?	
☐ No	Go to *Question 6.2*.
☐ Yes	☐ You can attach the notice of election, if it has not been submitted to the department. Go to *Question 6.3*.

6.2 Staged environmental offsets

Offset delivery can be staged, however for this to occur, the condition of any approved environmental authority needs to state that both the activity and the offset may be staged. As part of your notice of election for each stage under the *Environmental Offsets Act 2014*, you are required to provide a detailed assessment of the quantum of impact of that stage and the offset obligation requirement to be delivered for that stage.

Will the proposed ERA(s) and delivery of an environmental offset be undertaken in stages?	
☐ No	Go to *Question 6.3*
☐ Yes	You **must** attach supporting information that details of how the activity/activities are proposed to be staged.

6.3 Nature conservation environmental offset

Has another authority issued under the *Nature Conservation Act 1992* required an environmental offset for the same, or substantially the same, impact and the same, or substantially the same, MSES?	
☐ No	Go to *Question 6.4*
☐ Yes	Provide permit number:

6.4 Marine parks environmental offset

Has marine park permit issued under the *Marine Parks Act 2004* required an environmental offset for the same, or substantially the same, impact and the same, or substantially the same, MSES?	
☐ No	Go to *Question 7*
☐ Yes	☐ You **must** attach a copy of the marine park permit to this application.

7. Matters of national environmental significance

There are currently nine matters of national environmental significance (MNES) which have been defined in the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (EPBC Act). These are:

- world heritage properties
- national heritage places
- wetlands of international importance (listed under the Ramsar Convention)
- listed threatened species and ecological communities
- migratory species protected under international agreements
- Commonwealth marine areas
- the Great Barrier Reef Marine Park
- nuclear actions (including uranium mines)
- a water resource, in relation to coal seam gas development and large coal mining development

To determine whether the proposed ERA(s) will have a significant impact on MNES and for referral requirements, please refer to the guidance provided by the Federal Government's Department of Environment on **www.environment.gov.au**.

Would the carrying out of the proposed ERA(s) be likely to have a significant impact on a MNES?*	
☒ No	Go to *Question 9*.
☐ Yes	Has the proposal been referred to the Federal Department of Environment for formal assessment and approval? ☐ No → Go to *Question 8*. ☐ Yes → Go to *Question 7.1*.

7.1 EPBC Act approval for environmental offsets

Has an approval issued under the EPBC Act required an environmental offset for the same, or substantially the same, impact and the same, or substantially the same, MSES?	
☐ No	Go to *Question 8*.
☐ Yes	I have attached a copy of the approval under the EPBC Act.
	Are there any MNES which were assessed under the EPBC Act which are the same, or substantially the same as an MSES, but that were not conditioned in the approval? ☐ No → Go to Question *8* ☐ Yes → List these MNES:

8. Environmental impact statement under the *State Development and Public Works Organisation Act 1971*

Certain stages of the EA application process may not apply if the proposed activities were assessed as part of a coordinated project declared under the *State Development and Public Works Organisation Act 1971* (State Development Act), you are only required to answer Questions 8 to 8.1 if you have a current Co-ordinator General's (CG's) evaluation report for the project.

Has an environmental impact statement (EIS) process under State Development Act been completed?*		
☐ No	Go to *Question 9*.	
☐ Yes	What is the title and project name of the completed EIS?*	
	☐ The EIS was **completed for all activities** that are the subject of this application. ☐ The environmental risks or the way the activity/activities are proposed to be carried out **have not changed** since the EIS was completed. ☐ The environmental risks or the way the activity/activities are proposed to be carried out **have changed** since the EIS was completed.	
	☐ The EIS was **not completed for all activities** that are the subject of this application. ☐ The environmental risks or the way the activity/activities are proposed to be carried out **have not changed** since the EIS was completed. ☐ The environmental risks or the way the activity/activities are proposed to be carried out **have changed** since the EIS was completed.	
	Was the EIS completed for all activities that are the subject of this application?*	
	☐ No	Please list the activities that were not included in the EIS or attach documentation with this information to this application: ☐ I have attached the required supporting information.

	☐ Yes	

8.1 Coordinator-General's conditions

Are there CG's conditions that relate to the ERA(s) being applied for?*	
☐ No →	Go to *Question 9*.
☐ Yes →	Name of the CG's evaluation report:

9. Assessment of the environmental impact

This question is **not applicable if** an EIS process under the State Development Act has been completed for all the ERA(s) that are the subject of this application and the environmental risks of the activities **and** the way they are proposed to be carried out has not changed since the EIS was completed.

You must attach to this application an assessment of the likely impact of each new ERA (whether from the DA application or another new ERA you want included on the EA that does not require a DA) on environmental values (*if applicable), including:

- a description of the environmental values likely to be affected by each relevant activity
- details of any emissions or releases likely to be generated by each relevant activity
- a description of the risk and likely magnitude of impacts on the environmental values
- details of the management practices proposed to be implemented to prevent or minimise adverse impacts
- details of how the land the subject of the application will be rehabilitated after each relevant activity ceases

☒ I have attached an assessment of the environmental impact and specific supporting information.

10. Details of waste management

Describe the proposed measures for minimising and managing waste generated by the activity/ies below *
Refer to the Development Application prepared by Milford Planning

☒ I have attached the proposed measures.

11. Take effect date (when fees will commence being charged)

You may nominate when the EA will take effect should it be approved. The date the environmental authority takes effect will be the date from which you can commence the activities as well as the date your annual fees will commence to be charged (your anniversary date). Under section 200 of the EP Act, if a development permit for a material change of use under the *Planning Act 2016* or a State development area (SDA) approval is required in order to carry out the ERA, the EA cannot take effect until the development permit or SDA approval takes effect (known as taking effect pending development approval).

Note that where you are applying new ERAs, and your existing EA is an amalgamated EA, the application for ERAs associated with the DA application will create a new EA for the new ERAs. In this case you may wish to nominate a take effect date in the future which, post approval of this application, will provide you with enough time to amalgamate your current and new EAs. Amalgamating your EAs prior to the take effect date of your new EA will prevent you being required to pay the first annual fee for your new EA.

Do you want the EA to take effect on the decision date, nominated date, or pending development approval?*	
☒ Decision date	The take effect date will be the date of the decision.
☐ Nominated date	Details of nominated take effect date:

12. Nomination of site contact

An alternative contact nominated by the legal person which holds, or will in future hold, a relevant authority issued by the department. The department may direct correspondence relating to actual or potential compliance matters to the site contact.

Do you want to nominate a site contact?*		☐ No ☒ Yes, provide details below
Title* Mr	First Name* Ian	Surname* Gough
Email Address* igough@goughplastics.com.au		☒ Indicate if you want to receive correspondence via email
Phone		

13. Nomination of application contact

An alternative contact nominated by the legal person which has submitted, or will in future submit, applications to be assessed by the department. All departmental correspondence relating to the assessment of applications will be directed to the application contact, however, if the application results in the issuing of a relevant authority, the relevant authority will be sent to the applicant.

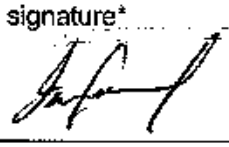
Name or Position*
Sarah Jones
Primary Phone*
07 4724 0095
Secondary Phone
Email Address*
info@milfordplanning.com.au

14. Applicant declaration

I declare that the information I have provided is true and correct. I understand that it is an offence under the *Environmental Protection Act 1994* to give information that I know is false, misleading or incomplete.

I will comply with all conditions on my environmental authority as well as any relevant provisions in the *Environmental Protection Act 1994*.

I understand that I am responsible for managing the environmental impacts of these activities, and that approval of this application is not an endorsement by the administering authority of the effectiveness of the management practices proposed or implemented.

Applicant's full name*	Applicant's position*
Ian Gough	Director
Applicant's signature* 	Date* 26 June 2023

Submit attachment, together with any additional information, with all relevant Development application Forms to the assessment manager for the development application.

Attachment 1

Joint applicants and appointment of principal applicant

We are joint applicants for this environmental authority application and hereby appoint _____ as the principal applicant to receive statutory documents relating to this application.

Name - individual or contact person if applicant is an organisation*	Suitable Operator Reference Number*
Organisation name, including trading name (*if an organisation)	ABN/ACN (*if an organisation)
Residential or registered business address (not a post office box)*	Phone*
Postal address (if same as above, state “AS ABOVE”) *	Facsimile
Email*	☐ Indicate if you want to receive correspondence via email
Signature*	Date*

Name - individual or contact person if applicant is an organisation*	Suitable Operator Reference Number*
Organisation name including trading name (*if an organisation)	ABN/ACN (*if an organisation)
Residential or registered business address (not a post office box)*	Phone*
Postal address (if same as above, state “AS ABOVE”)*	Facsimile
Email*	☐ Indicate if you want to receive correspondence via email
Signature*	Date*

Name - individual or contact person if applicant is an organisation*	Suitable Operator Reference Number*
Business name including trading name (*if an organisation)	ABN/ACN (*if an organisation)
Residential or registered business address (not a post office box)*	Phone*
Postal address (if same as above, state “AS ABOVE”)*	Facsimile
Email*	☐ Indicate if you want to receive correspondence via email
Signature*	Date*

Attachment 2

List of locations where the ERA(s) will be carried out.

Where there is more than one location list all locations and which ERA(s) will be conducted at each location.

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		

Number*	Street Name*	Suburb/Town*	Postcode*	ERA/s*
Real Property Description* Lot Plan		Specific area within the location ie GPS or other descriptor (*if applicable e.g. dredging)		