

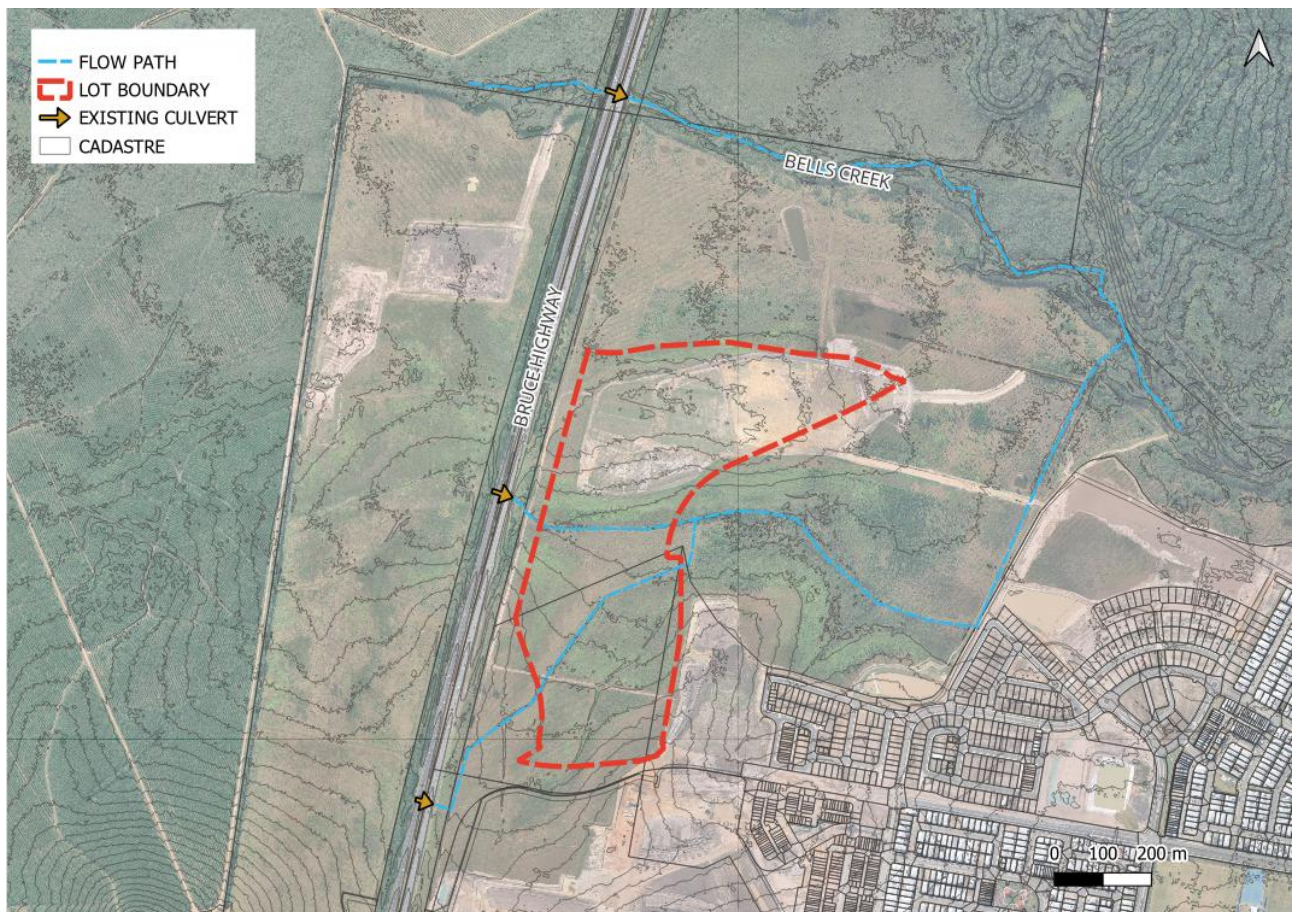


FIGURE 1-1 EXISTING TOPOGRAPHY

1.3 Proposed Development

The proposed development for Aura Precinct 13 comprises commercial and industrial allotments, internal road infrastructure, stormwater management infrastructure, and associated open space areas.

Stormwater runoff from the proposed development will be collected within the internal drainage network and conveyed north towards Bells Creek North via the proposed sediment basins, bioretention systems, and downstream drainage infrastructure. External catchment flows associated with the Bruce Highway drainage network will also be conveyed north through the proposed highway buffer located along the western portion of Precinct 13.

The proposed development layout has been developed to integrate with the broader Aura regional drainage framework and surrounding infrastructure, including the proposed Bruce Highway Interchange works.

The proposed development layout is shown in **Figure 1-2** below. Refer **Section 2.4.3** for details of development areas included within this analysis.

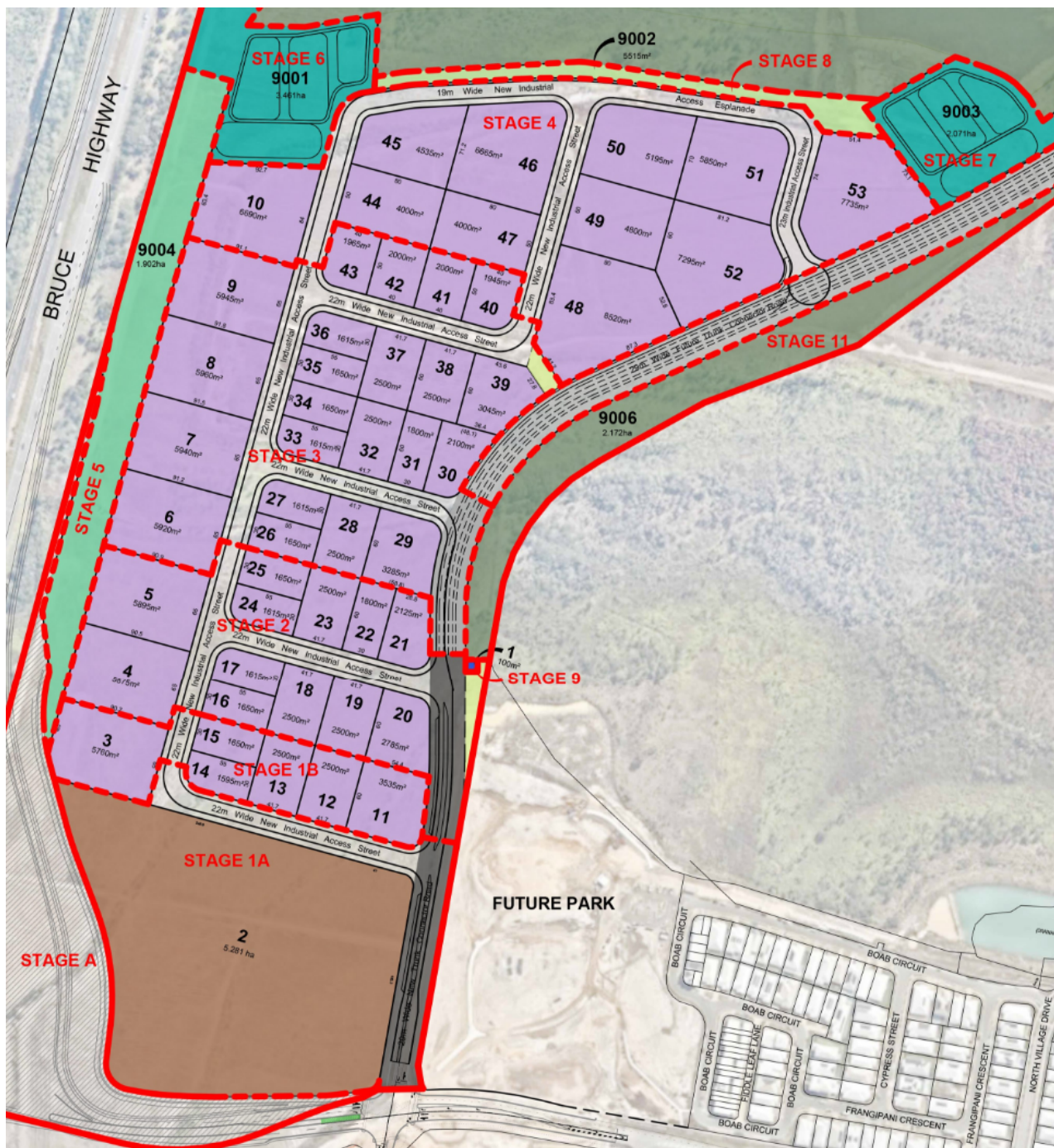


FIGURE 1-2: AURA PRECINCT 13 CONCEPT PLAN

2 STORMWATER QUALITY MANAGEMENT

The proposed stormwater quality management strategy for Aura Precinct 13 adopts an end-of-line treatment approach incorporating sediment basins and bioretention systems to treat runoff generated from the proposed development prior to discharge into the downstream receiving waterway (Bells Creek North). The proposed strategy has been developed in accordance with the broader *Aura Development Stormwater Management Plan* (DesignFlow & BMT 2019) and adopts the operational phase stormwater quality objectives applicable to the Bells Creek catchment.

The proposed stormwater quality treatment devices are located along the northern boundary of Precinct 13, with devices separated into east and west, sized to treat their respective contributing catchment.

The strategy has considered the proposed development layout, surrounding drainage infrastructure, regional flood behaviour, external catchment flows associated with the Bruce Highway drainage network, and environmental constraints applicable to the site.

This section discusses:

- The identification of key stormwater pollutants associated with the proposed development.
- The Water Quality Objectives (WQO's) identified for the catchment.
- Proposed measures to mitigate the increase in pollutant export.
- Modelling of the proposed measures and comparison to the identified WQO's.

2.1 Pollutants of Concern

Typical key pollutants expected to be generated during the operational (post-construction) phase of the planned development are listed as follows, with those presented in capitals being the key pollutants to be targeted for treatment:

- | | |
|--|---|
| ■ LITTER | ■ Heavy metals (associated with fine sediments) |
| ■ SEDIMENT | ■ Surfactants |
| ■ Oxygen demanding substances (possibly present) | ■ Organochlorines & organophosphates |
| ■ NUTRIENTS (N & P) | ■ Thermal pollution |
| ■ Pathogens / Faecal coliforms | ■ pH altering substances |
| ■ Hydrocarbons | |

Only the key pollutants will be further addressed in this report; however, the treatment train developed will provide a level of mitigation to other pollutant loads. As heavy metals will predominantly be associated with fine sediment, controls proposed to reduce total suspended solids will also reduce loads of heavy metals.

2.2 Water Quality Objectives

The stormwater quality design objectives (or WQO's) adopted for Aura Precinct 13 have been sourced from the *Aura Development Stormwater Management Plan* (DesignFlow & BMT, 2019). The adopted operational phase stormwater quality objectives are applicable to the Bells Creek catchment and were developed to protect the environmental values of downstream receiving waters associated with Bells Creek and Pumicestone Passage.

Pumicestone Passage and the estuarine sections of Bells Creek have significant environmental value and are identified as environmentally sensitive receiving environments. As part of the broader Aura stormwater management investigations, enhanced stormwater quality objectives were developed to achieve a "no worsening" stormwater quality outcome for downstream receiving waters.

The adopted stormwater quality objectives exceed the standard post-construction stormwater management design objectives typically adopted for urban development and have been developed specifically for the broader Aura development in response to the environmental significance of the receiving environment. The pollutant load reduction WQO's are stated in **TABLE 2-1** below.

TABLE 2-1 WATER QUALITY OBJECTIVES (FROM UNMITIGATED DEVELOPMENT)

POLLUTANT	TOTAL SUSPENDED SOLIDS (TSS)	TOTAL PHOSPHORUS (TP)	TOTAL NITROGEN (TN)	GROSS POLLUTANTS (GP)
Load Reduction	95%	89%	68%	90%

2.3 Stormwater Quality Management Strategy

A stormwater quality management strategy employing Stormwater Quality Improvement Devices (SQID's) has been formulated to capture and mitigate the expected increase in pollutant loads in runoff generated from the development. To achieve the adopted Operational Phase Stormwater Quality Objectives (WQO's) applicable to the Bells Creek catchment, the proposed treatment train incorporates western and eastern sediment basins and downstream end-of-line bioretention systems to treat runoff generated from the site prior to discharge into Bells Creek North.

Details of the proposed stormwater treatment systems adopted within the stormwater quality management strategy are provided in the following sections.

2.3.1 Rainwater Tanks

Rainwater tanks are required for all Commercial and Industrial lots in accordance with the broader *Aura Development Water Management Plan* (DesignFlow & BMT 2019). Specific requirements for each lot include providing rainwater tanks at a minimum rate of 1.0kL per toilet/urinal or 25kL/ha, with a minimum tank size of 5kL. Rainwater tanks are required to be plumbed in for reuse in non-potable applications such as toilet flushing and outdoor irrigation.

2.3.2 Litter Baskets

Litter baskets are proposed to treat on-lot flows from all industrial lots. It has been assumed that each industrial lot will include a minimum of one (1) 900x900mm AtlanTrap (or approved equivalent).

Future detailed design of the lot may undertake amendments to this requirement (such as adopting an alternative style/brand of litter basket, or including multiple devices), provided it achieves a comparable level of treatment.

Litter baskets are not proposed to be required within the public roadways or commercial lots. All litter baskets are to be private infrastructure, owned and maintained by the property owner, such that there is no maintenance burden upon Council.

2.3.3 Sediment Basins

Sediment basins provide pre-treatment of stormwater runoff through the settlement of coarse sediment and associated pollutants prior to discharge into downstream stormwater treatment systems. Sediment basins assist in reducing sediment loading to downstream bioretention systems and improving the long-term operational performance of stormwater quality treatment infrastructure.

The key constraints to be considered for sediment basins include:

- Providing sufficient permanent pool volume and surface area to achieve effective coarse sediment settlement and pre-treatment.
- Incorporating high-flow bypass structures and overflow arrangements for major storm events.
- Achieving suitable hydraulic flow distribution into the downstream bioretention systems.
- Ensuring sufficient fall between inlet structures, permanent pool levels, outlet structures, and downstream drainage infrastructure.
- The overall basin footprint, including maintenance access requirements, batter slopes, inlet and outlet structures, and integration with surrounding earthworks levels.
- Providing adequate maintenance access for sediment removal and ongoing operational maintenance activities.

The final design of the sediment basins shall be generally in accordance with the relevant Water by Design guidelines.

2.3.4 Bioretention Systems

Bioretention systems utilise sandy loam soil-based media to filter runoff. Sediment particles and suspended solids are trapped within vegetation and on the surface of the filter media, while micro-organisms and vegetation remove dissolved nutrients (nitrogen and phosphorus) through biological uptake processes. Subsoil drainage provided below the filter media allows for the treated runoff to discharge from bioretention systems, where it is connected to local stormwater drainage swales.

The key constraints to be considered for end-of-line bioretention basins include:

- Incorporating either underground or surface features to enable high flow bypass around the basin (i.e. greater than the 1 year ARI design flow).
- The depth of the drainage network from the design surface, given the drainage network must outlet onto the surface of the bioretention system's filter media.
- Ensuring there is sufficient elevation difference between the surface of the filter media and the downstream outlet to incorporate the depth of the filter media and drainage layers.
- The overall basin footprint, considering the filter media area, allowance for pre-treatment of sediment (e.g. sediment pond), maximum allowable batter slope, retaining wall properties (if applicable), and the height difference between filter media surface and surrounding design surface; and
- Providing adequate maintenance access. The maximum allowable filter media area per bioretention system and the layout of access locations must be considered.
- Flow into the bioretention basins must be evenly dispersed as to not create dead zone where vegetation cannot be established.
- Include outlet control infrastructure to enable elevated saturated zone within basin during initial period of plant establishment.

The final design of the bioretention systems shall be generally in accordance with the latest version of Healthy Waterways Bioretention Technical Design Guidelines.

An example bioretention system configuration is provided in **Figure 2-1**.

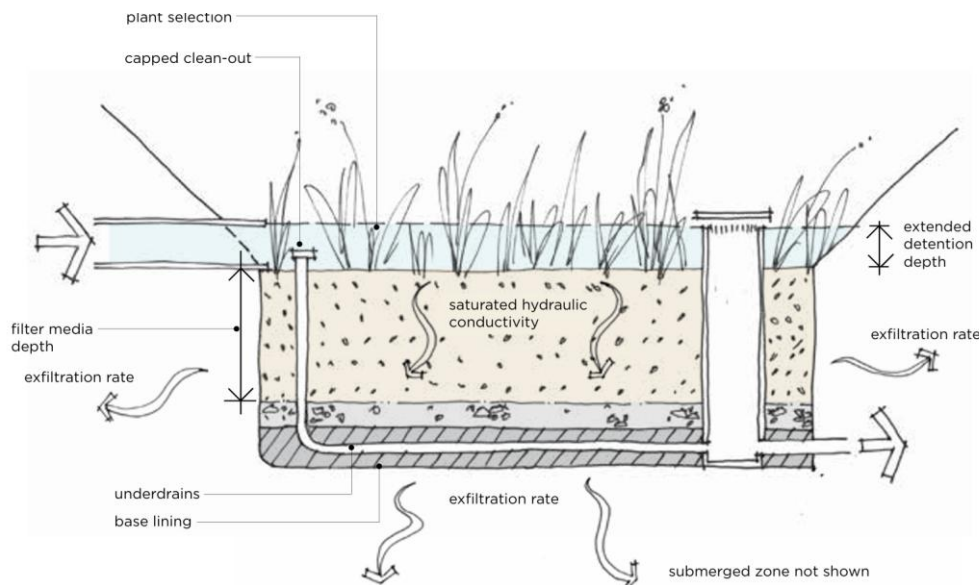


FIGURE 2-1 BIORETENTION FILTER CONFIGURATION (HEALTHY WATERWAYS)

2.4 Stormwater Quality Modelling

Stormwater quality modelling of the proposed development has been undertaken using the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) Version 6.4.0, developed by the Cooperative Research Centre for Catchment Hydrology (CRCCH). MUSIC enables the conceptualisation of pollutant transfer through a stormwater drainage system and assists in quantifying the effectiveness of the proposed stormwater quality management strategy. MUSIC provides quantitative modelling for Total Suspended Solids (TSS), Total Phosphorus (TP), Total Nitrogen (TN), and Gross Pollutants (GP).

The MUSIC model was developed generally in accordance with the Healthy Land and Water MUSIC Modelling Guidelines (2018). The following sections discuss the model configuration adopted for the assessment.

2.4.1 MUSIC Modelling Methodology

The MUSIC model was setup generally in accordance with the Healthy Land and Water *MUSIC Modelling Guidelines* (2018) and the adopted rainfall and evaporation data utilised within the MUSIC model is consistent with the broader Aura stormwater quality investigations and regional assessments previously undertaken for the development. Subsequent sections discuss the model configuration adopted for the analysis. Refer to **Figure 2-2** below:

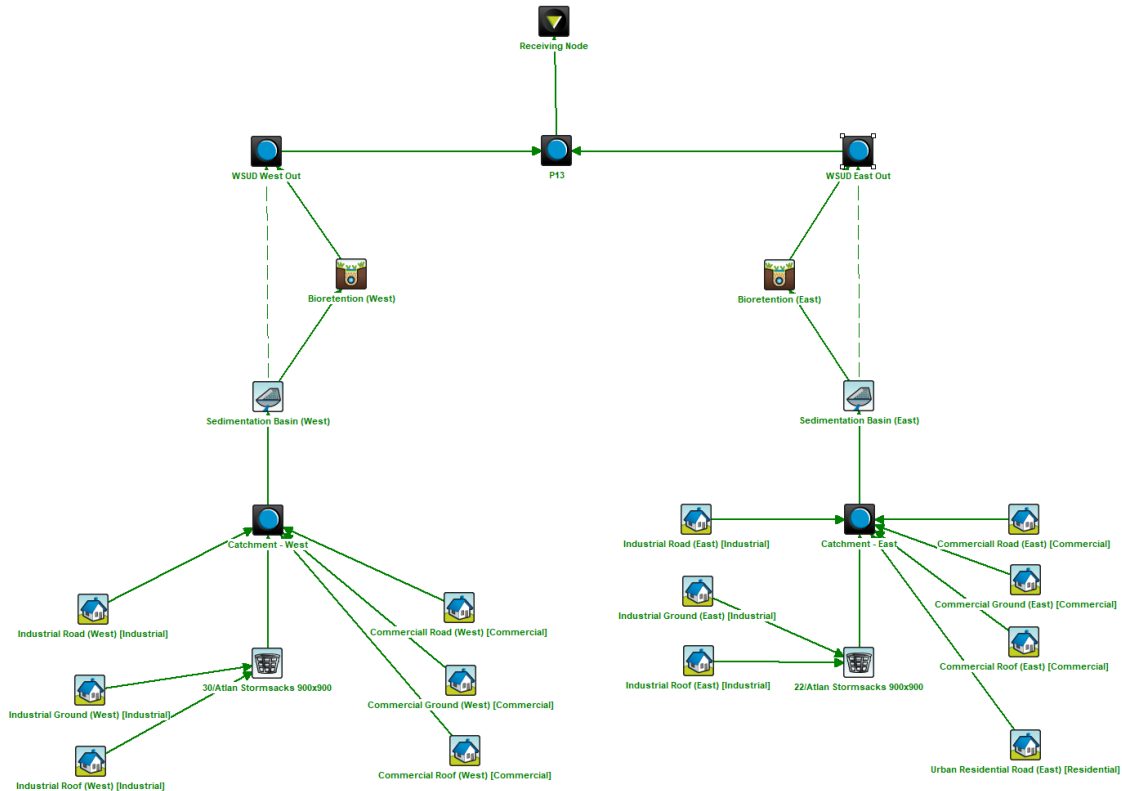


FIGURE 2-2 MUSIC MODEL CONFIGURATION

2.4.2 Meteorological Data

Six minutes pluviographic data was sourced from the Bureau of Meteorology (BOM) for the Caloundra WTP Station (No. 40496). In accordance with Table A1.1 from the MUSIC Modelling Guidelines (2018), the 10-year period from 1st January 1997 to 31st December 2006 was adopted for the rainfall duration. The mean annual rainfall for this period is 1,348mm. Monthly evapotranspiration data for the 10-year period was sourced from the MUSIC Modelling Guidelines (2018) and entered into the MUSIC Model. The mean annual potential evapotranspiration value adopted was 1,628mm.

2.4.3 Catchment Delineation and Land Uses Breakdown

The proposed development catchments adopted within the MUSIC modelling assessment have been delineated in accordance with the conceptual layout and proposed drainage network for Aura Precinct 13. Catchments were further broken down by land use (commercial, industrial and urban residential road) before being further broken down into source nodes for differing surface types (road, roof and ground), discussed further in **Section 2.4.4**.

Water quality catchments and proposed land uses are presented in **Figure 2-3** below.

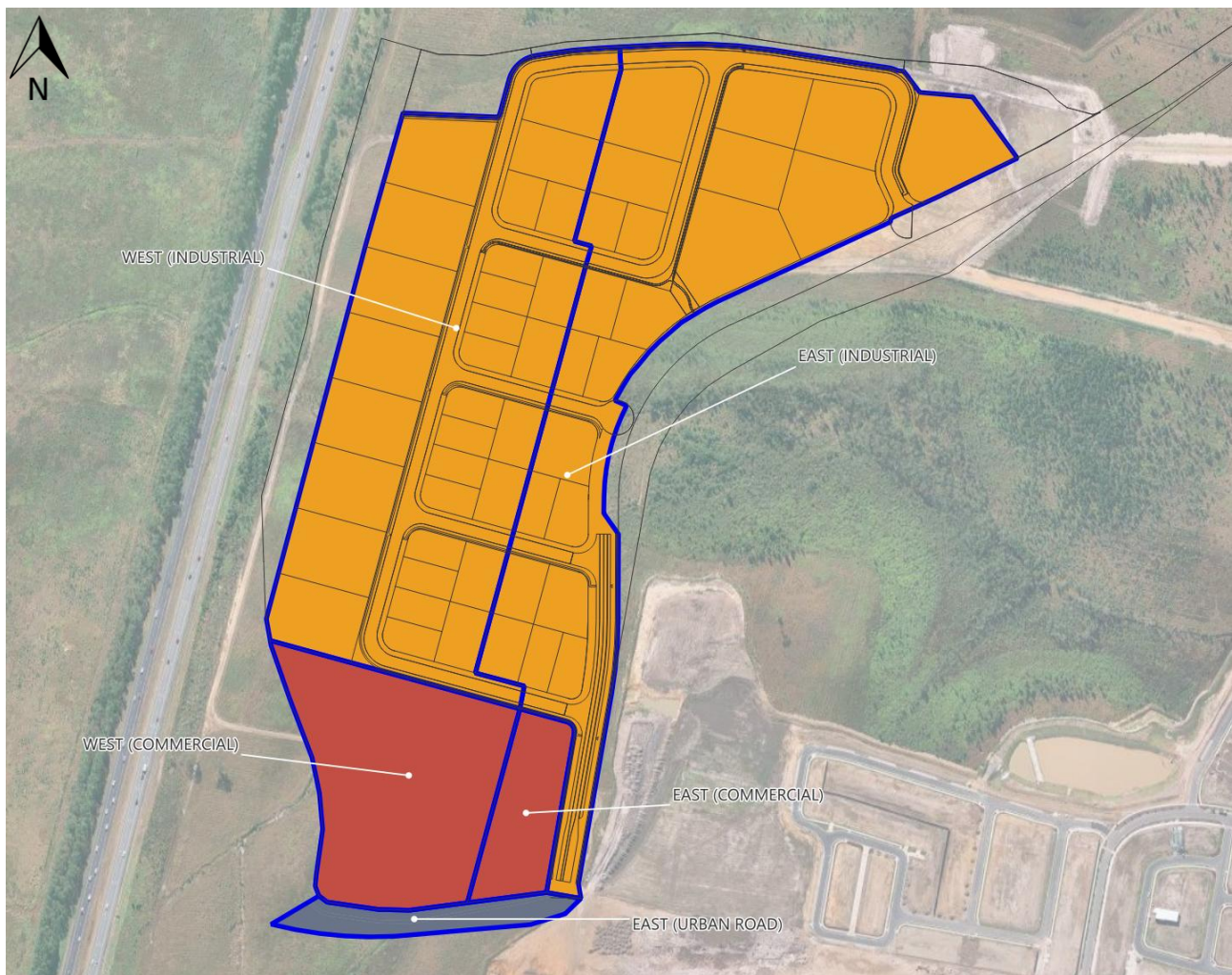


FIGURE 2-3 STORMWATER QUALITY – POLLUTANT SOURCE AREAS

It is noted that the 'Urban Road' catchment is located outside of the Precinct 13 boundary. It has been included within this investigation as it contributes untreated runoff from the urban residential road reserve to the south. Latest design information from the Bruce Highway Interchange works were adopted in delineating this catchment area.

2.4.4 Source Node Configuration

Within the MUSIC model, source nodes represent the catchments of the proposed development. Runoff and pollutants (contained within the runoff) are generated by the source nodes.

The split catchment source node approach has been adopted in accordance with Section 3.3.2 of the MUSIC Modelling Guidelines, which divides each catchment into different surface types for road, roof and ground.

The adopted source node configuration and surface-type breakdown were established in accordance with Table 3.4 and Table 3.6 of the MUSIC Modelling Guidelines (2018). The adopted land use classifications for the development includes Commercial, Industrial, and Urban Residential land uses.

The adopted split catchment surface type proportions are as follows:

- Road: 30%
- Roof: 50%
- Ground: 20%

The MUSIC model catchment delineation and surface types that has been adopted for configuring source nodes are presented in **Figure 2-3** and **Table 2-2**.

TABLE 2-2		MUSIC SOURCE NODE AREAS		
CATCHMENT NAME	CATCHMENT AREA (ha)	ROAD (ha)	ROOF (ha)	GROUND (ha)
West (Commercial)	4.005	1.202	2.003	0.801
West (Industrial)	12.051	3.615	6.025	2.410
East (Commercial)	1.146	0.344	0.573	0.229
East (Industrial)	11.584	3.475	5.792	2.317
East (Urban Road)	0.736	0.736	-	-

Refer to **Appendix B** for the MUSIC catchment source node and landuses.

Fraction impervious values adopted for each surface type were configured in accordance with the MUSIC Modelling Guidelines (2018) and are summarised in **TABLE 2-3** below:

TABLE 2-3 FRACTION IMPERVIOUS (TABLE 3.6) MUSIC GUIDELINES

SURFACE TYPE	COMMERCIAL	INDUSTRIAL	URBAN RESIDENTIAL
	PERCENT IMPERVIOUS (%)	PERCENT IMPERVIOUS (%)	PERCENT IMPERVIOUS (%)
ROAD	75	75	70
ROOF	100	100	-
GROUND	80	60	-

2.4.5 Drainage Link Configuration

No routing was adopted for drainage links within the MUSIC model. This assumes flows and associated pollutants from all parts of the catchment arrive at the treatment nodes at the same time. This is conservative as it means that MUSIC may overestimate the overflow volumes.

Primary and secondary drainage links were set for flows entering and exiting the sediment basins. Primary drainage links into the bioretention basins from the sediment basins set flows with a maximum flow rate equivalent to the 63% AEP (1yr ARI) flow. Flows in excess of the 63% AEP event bypass the bioretention basins through the adoption of a bypass weir within the sediment basin, represented using secondary drainage links.

2.4.6 Treatment Node Configuration

Treatment nodes have been configured generally in accordance with MUSIC Modelling Guidelines (2018). A summary of the configuration is provided in the following sections.

2.4.6.1 Rainwater Tanks

The beneficial effect of rainwater tanks and associated reuse has been excluded from MUSIC modelling. Tank volumes and reuse rates cannot be accurately determined at the concept design level, as they are dependent on final building design including number of toilets installed. This approach is in line with previously completed modelling undertaken for industrial and commercial areas elsewhere within the Aura development.

2.4.6.2 Litter Baskets

All industrial lots have been modelled to include a minimum of one (1) 900x900mm AtlanTrap (formerly StormSack) litter basket within the individual allotment, treating all roof and ground water from the lot.

Litter baskets were modelled with the following parameters:

TABLE 2-4 LITTER BASKET CONFIGURATION PARAMETERS

PARAMETER	WESTERN CATCHMENT	EASTERN CATCHMENT
Number of Industrial Lots	30	22
High Flow Bypass (m³/s)¹	1.17	0.858
TSS Reduction Efficiency²		45%
TP Reduction Efficiency²		47%
TN Reduction Efficiency²		25%
Gross Pollutant Reduction Efficiency²		100%

1 – Based on 39L/s bypass flow for each 900x900mm pit.

2 – Reduction efficiencies applied to flows under high flow bypass flow only. Reduction efficiencies consistent with SQIDEP certification.

2.4.6.3 Sediment Basins

Sediment basins are proposed within the western and eastern portions of Aura Precinct 13 as part of the adopted end-of-line stormwater quality treatment strategy. The sediment basins provide pre-treatment of stormwater runoff prior to discharge into the downstream bioretention systems by facilitating settlement of coarse sediment and reducing sediment loading to the filter media areas. Additionally, the conceptual design of the sediment basins allows for even distributed flows into each bioretention basin. Future detailed design and construction tolerances must be tightly controlled to ensure all basins receive flow equally, ensuring long term plant health.

The proposed sediment basins have been designed to accept the 10% AEP event (SSP2-4.5 at year 2100 climate conditions). This is consistent with the minor design storm required for the pit and pipe drainage design of the precinct. Drainage design flows above the 10% AEP event are not proposed to enter the sediment basin. 63% AEP event (SSP2-4.5 at year 2100 climate conditions) drainage design flows will be allowed to enter the bioretention basin area. All remaining flows will exit the sediment basin via a highflow bypass weir.

The conceptual sediment basin design parameters adopted for the MUSIC modelling assessment are summarised in **Table 2-5** below.

TABLE 2-5 SEDIMENT BASIN CONFIGURATION PARAMETERS

CATCHMENT NAME	WESTERN CATCHMENT SEDIMENT BASIN	EASTERN CATCHMENT SEDIMENT BASIN
Permanent Pool Surface Area (m²)	1,280	1,080
Permanent Pool Depth (m)	1.5	1.5
Permanent Pool Volume (m³)¹	1,423	1,168
Sediment Basin Inflows (10% AEP – SSP2-4.5 @ 2100)	6.5m ³ /s	5.5m ³ /s
Bioretention Basin Inflows (63% AEP – SSP2-4.5 @ 2100)	3.0 m ³ /s	2.5 m ³ /s

1 – Based on assumed 1 to 3 length to width ratio and 1in3 underwater batters.

2.4.6.4 Bioretention Nodes

The breakdown of bioretention filter area for each bioretention basin are summarised **Table 2-6** below.

TABLE 2-6 BIORETENTION BASIN FILTER DETAILS

CATCHMENT NAME	BIORETENTION FILTER AREA (m ²)
Western Catchment Bio Basin	5,250
Eastern Catchment Bio Basin	4,350
TOTAL	9,600

Bioretention node configuration properties are presented below in **Table 2-7**.

TABLE 2-7 BIORETENTION SYSTEM NODE CONFIGURATION DETAILS

PARAMETER	ADOPTED VALUE BIORETENTION SYSTEMS	NOTES
High Flow Bypass	63% AEP Event	Refer to Table 2-5
Low Flow Bypass	0 m ³ /s	Default
Extended Detention Depth	300mm	
Surface Area	Variable	Refer to Table 2-6
Unlined Filter Media	0.01	Assumes filter is lined
Saturated Hydraulic Conductivity	200 mm/hr	As per MUSIC Modelling Guidelines
Filter Depth	600 mm	As per MUSIC Modelling Guidelines
TN Content of Filter Media	400 mg/kg	As per MUSIC Modelling Guidelines
Orthophosphate Content of Filter Media	30 mg/kg	As per MUSIC Modelling Guidelines
Exfiltration Rate	0 mm/hr	Assumes no exfiltration
Based Lined	Yes	Assumes no exfiltration
Vegetation Properties	Vegetated with Effective Nutrient Removal Plants	
Overflow Weir Width	100	

2.5 Modelling Results

The results of the MUSIC model are summarised in below **Table 2-8**, **Table 2-9** and **Table 2-10**. Pollutant load reductions are from unmitigated development.

TABLE 2-8 MUSIC MODELLING RESULTS - WEST

POLLUTANT	WQO (Load Reduction)	SOURCE LOAD (kg/year)	RESIDUAL LOAD (kg/year)	POLLUTANT REDUCTION (%)
Total Suspended Solids	95%	31,500	1,510	95.2%
Total Phosphorus	89%	70.1	7.74	89.0%
Total Nitrogen	68%	469	133	71.6%
Gross Pollutants	90%	4,340	1.18	100%

TABLE 2-9 MUSIC MODELLING RESULTS - EAST

POLLUTANT	WQO (Load Reduction)	SOURCE LOAD (kg/year)	RESIDUAL LOAD (kg/year)	POLLUTANT REDUCTION (%)
Total Suspended Solids	95%	28,300	1,420	95.0%
Total Phosphorus	89%	58.3	6.2	89.4%
Total Nitrogen	68%	369	109	70.4%
Gross Pollutants	90%	3,610	0.833	100%

TABLE 2-10 MUSIC MODELLING RESULTS – RECEIVING NODE

POLLUTANT	WQO (Load Reduction)	SOURCE LOAD (kg/year)	RESIDUAL LOAD (kg/year)	POLLUTANT REDUCTION (%)
Total Suspended Solids	95%	59,800	2,930	95.1%
Total Phosphorus	89%	128	13.9	89.1%
Total Nitrogen	68%	838	242	71.1%
Gross Pollutants	90%	7,950	2.01	100%

The results confirm that the proposed stormwater quality management strategy achieves the required pollutant export reduction necessary to meet the Precinct 13 water quality objectives.

2.6 Concept Design

The conceptual stormwater quality management strategy for Aura Precinct 13 incorporates sediment basins, end-of-line bioretention systems and associated drainage infrastructure. Additionally, rainwater tank and litter basket requirements are also required to be integrated within the future on-lot development.

The proposed stormwater treatment systems have been conceptually located within the western and eastern portions of the site to provide treatment of runoff generated from the contributing development catchments prior to discharge into Bells Creek North.

The conceptual design has been developed having regard to the proposed development layout, regional flood behaviour, surrounding infrastructure interfaces, external catchment flows associated with the Bruce Highway drainage network, maintenance access requirements, and environmental constraints applicable to the site.

The conceptual arrangement of the proposed stormwater quality treatment infrastructure and contributing catchments is presented in **Appendix C**.

2.6.1 Bioretention Basin Sizing

Under the previous Bioretention Technical Design Guidelines, Version 1.1 (Healthy Land & Water 2014) the maximum cell size identified for bioretention filter area was 800m². Previous guidelines were primarily driven by construction methodology, being that drainage, transition layer and filter media would be installed using extended reach excavators.

Since the 2014 release of the Bioretention Technical Design Guideline, construction methodologies have shifted within the industry towards the use of slinger trucks, which sling the required material into the bioretention basin from a further distance. Previous bioretention basin works onsite within the Aura development have proved this to be an effective construction technique.

In line with this industry shift, Healthy Land & Water has updated this requirement in the latest version of their Bioretention Technical Design Guidelines, Version 1.2 (dated April 2026). Under the latest version of the guidelines, the maximum bioretention cell size has been revised to be 3,000m². This upper limit will be adopted within the Precinct 13 bioretention basin design.

With increased cell size of the bioretention basin, the distribution of flows within the cell becomes the new governing design constraints. The risk being that uneven distribution of flows within the basin can cause plant death insufficient surface flows are received. Section 3.5.7 of the revised design guidelines specifically addresses this concern and provides design guidelines to achieve acceptable outcomes. The guidelines identify that the adoption of a unsaturated Type 2 Sealed system (as proposed) requires the inclusion of flow distribution channels within the basin. Future detailed design shall be in accordance with Section 3.5.7 of the Bioretention Technical Design Guidelines (Version 1.2), ensuring appropriate flow distribution is provided.

In addition to the above measures, it is planned that the constructed bioretention basins will include all infrastructure necessary to convert the basin into a saturated system if needed in the future. This infrastructure will be provided to aid initial plant establishment following construction, however serves as a secondary risk management tool enabling enhanced control over outlet levels should plant die off within the basin be experienced.

2.6.2 General Constrains and Design Outcomes

A number of constraints and considerations influence the conceptual WSUD designs for Aura Precinct 13. These include:

- Bioretention Basins and Sediment Basins to be immune from inundation from the 63% AEP (1yr ARI) regional flood levels (regional flood modelling provided by BMT).
- Environmental constraints associated with adjacent waterway corridors and habitat areas.
- Maintenance access requirements for sediment basins, bioretention systems, and associated drainage infrastructure.

- Limiting design flows into sediment basins and bioretention basins to ensure the protection of vegetation and long term performance.

The final configuration and sizing of the proposed stormwater treatment systems will be confirmed during future detailed design and operational works stages. All works shall be in accordance with the relevant design guidelines.

3 REGIONAL FLOOD AND PEAK FLOW MANAGEMENT

At present, the northern extent of Precinct 13 includes an interim decanting basin, providing peak flow mitigation for Bells Creek North. Under the development of Precinct 13 this interim basin will be removed (filled). In accordance with BMT's Aura Flood Risk Management Report (2026), no ultimate peak flow mitigation is required to be provided within the Precinct 13 development extent.

To ensure a satisfactory level of peak flow mitigation is achieved for Bells Creek (North), the filling of Precinct 13 will be undertaken as part of a coordinated sequence of works associated with the Bruce Highway Interchange. Included within these works is the completion of the upstream Western Detention Basin (WDB). The WDB provides significant reductions in flood levels upstream (west) of the Bruce Highway, and enables the removal of the P13 interim basin, filling of P13 and filling of the remainder of Precinct 12. The completion of these works will be designed, documented and approved separately to this development application.

3.1 Regional Flood Levels

The 2026 revision of the Flood Risk Management Report (BMT) includes updated Climate Change assumptions in accordance with Australian Rainfall and Runoff Version 4.2. The adoption of SSP3-7.0 (3.6 Degree of Warming) has been considered for the setting of minimum development levels, which is in accordance with the interim guidance provided by Sunshine Coast Council on ARR Climate Change Considerations (dated 21 May 2025).

Regional flood levels informing the concept bulk earthworks levels have been taken from the following BMT model scenario:

- BMT Post-Developed Flood Model, Version 353
- 1% AEP event with SSP3-7.0 climate change assumption at year 2100

4 CONCLUSION

Egis Consulting Pty Ltd has prepared this Stormwater Management Plan (SMP) in support of Development Application for Aura Precinct 13.

This report has:

- Identified the adopted Operational Phase Stormwater Quality Objectives (WQO's) applicable to the Bells Creek catchment from the Aura Development Stormwater Management Plan prepared by DesignFlow & BMT (2019).
- Proposed a stormwater quality management strategy utilising sediment basins and end-of-line bioretention systems to treat runoff generated from the proposed development prior to discharge into Bells Creek North.
- Presented the MUSIC modelling methodology, source node configuration, treatment node configuration, and adopted modelling assumptions in accordance with the Healthy Land and Water MUSIC Modelling Guidelines (2018).
- Identified the rainwater tank requirements applicable to future commercial and industrial development within Precinct 13 in accordance with the Aura Development Stormwater Management Plan.
- Demonstrated through MUSIC modelling that the proposed stormwater quality treatment strategy achieves the adopted WQO's for Total Suspended Solids (TSS), Total Phosphorus (TP), Total Nitrogen (TN), and Gross Pollutants (GP).
- Considered the broader regional flood management strategy and drainage framework applicable to Precinct 13, including external catchment flows associated with the Bruce Highway drainage network and regional flood behaviour established by the BMT flood investigations.
- Identified the conceptual configuration and key design considerations applicable to the proposed sediment basins and bioretention systems.

This report demonstrates that the proposed stormwater quality management strategy adequately mitigates pollutant export from the proposed development and achieves the adopted stormwater quality objectives applicable to the Bells Creek catchment.

Peak flow and regional flood management requirements have also been confirmed.

5 RECOMMENDATIONS

It is recommended that the stormwater management strategies proposed within this report are approved and adopted for detailed design phase of the development.

6 LIMITATIONS

This report has been documented for the purposes of development approval and supporting future detailed design.

Construction stage water quality management is not included as part of this documentation. Water quality management during construction will be required as part of future construction works. This management strategy will be defined and documented by others during later phases of the project.

7 REFERENCES

Aura Development, Stormwater Management Plan, Design Flow & BMT 2019.

R.003060.002.01 Aura Flood Risk Management Report 2026, BMT 2026.

MUSIC Modelling Guidelines, Healthy Land and Water 2018.

Bioretention Technical Design Guidelines (Version 1.1), Healthy Land and Water 2014.

Bioretention Technical Design Guidelines (Version 1.2), Healthy Land and Water 2026.

APPENDIX C: EGIS ENGINEERING DRAWINGS

Egis Consulting Pty Ltd

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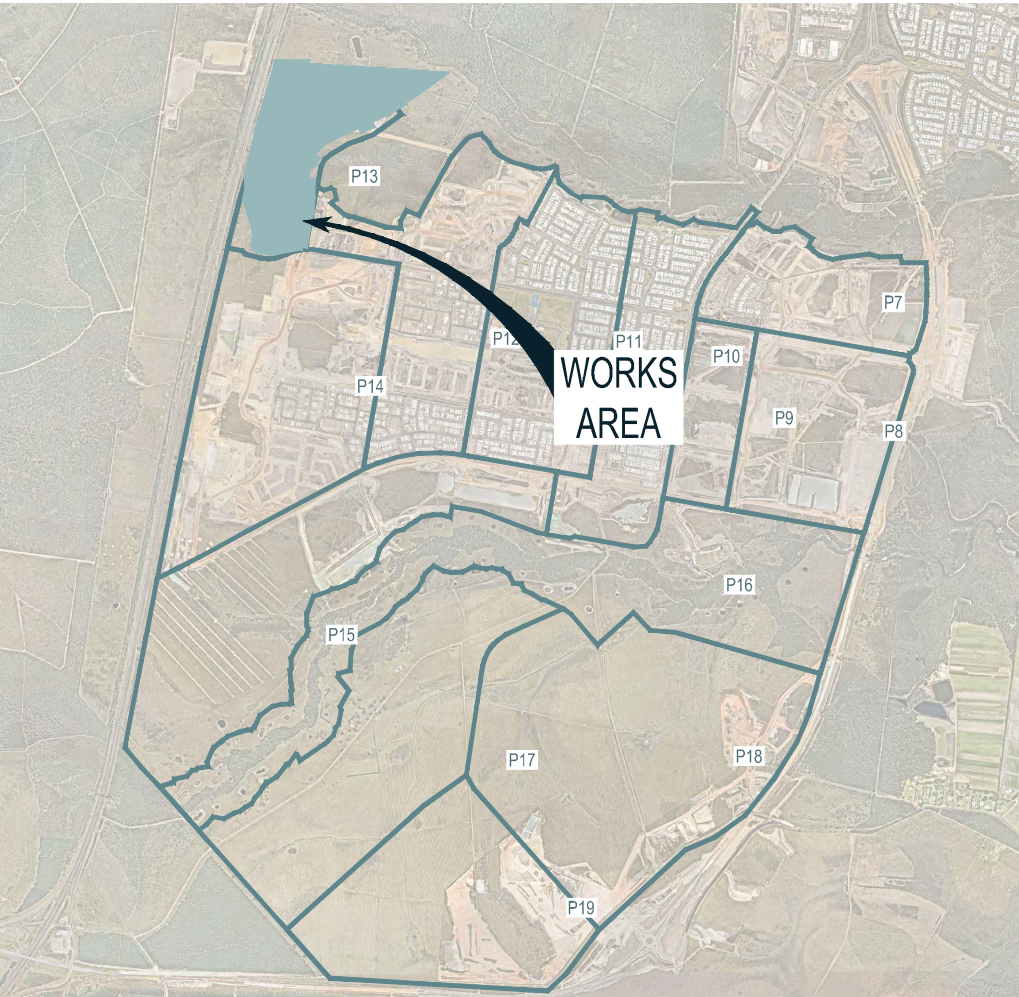


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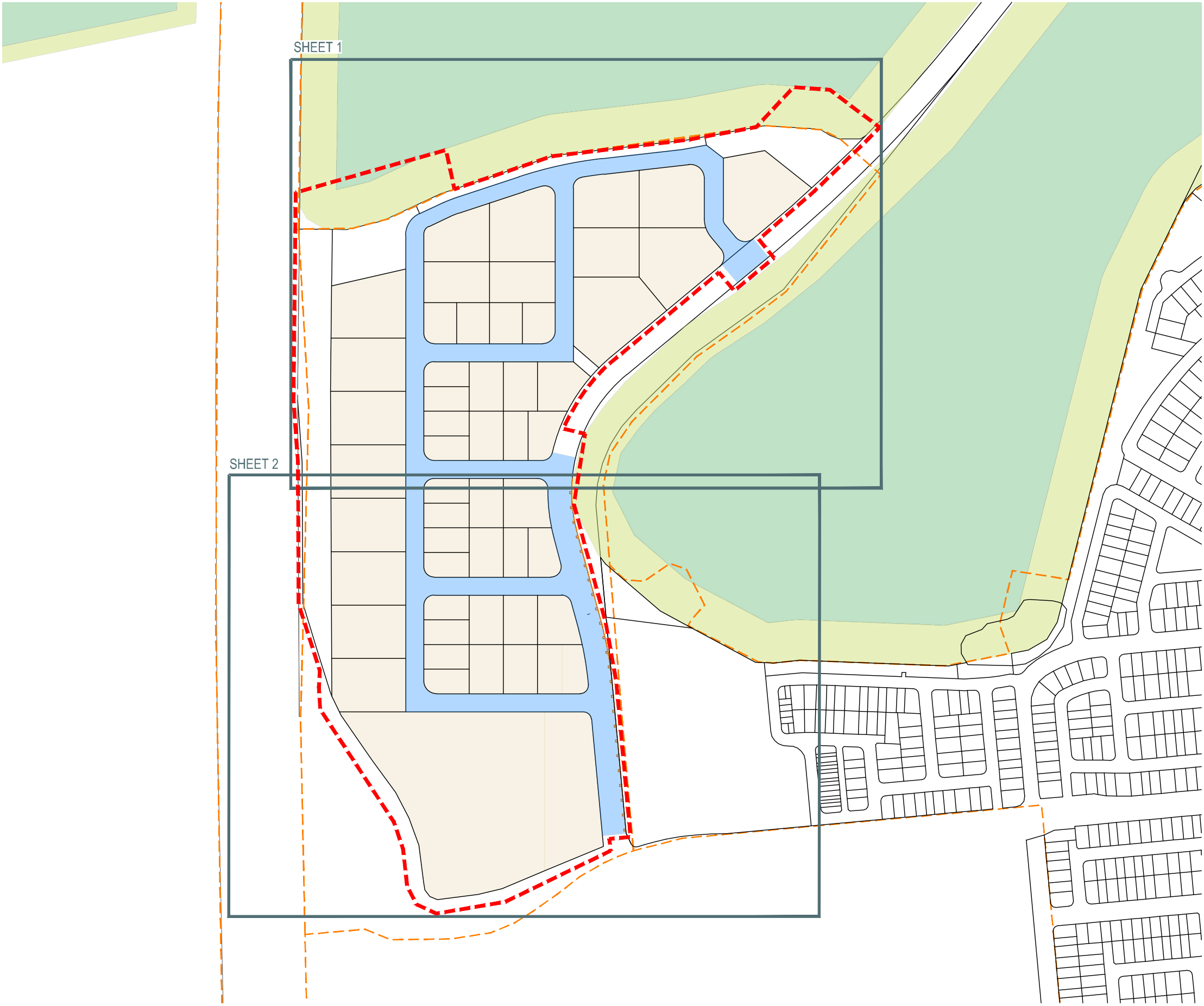
PRECINCT 13

DA APPLICATION

STOCKLAND DEVELOPMENTS PTY LTD



DRG NO	REVISION	DRAWING TITLE
EARTHWORKS		
3100-000	-	COVER SHEET
3100-010	-	OVERALL LAYOUT PLAN
3100-020	-	BULK EARTHWORKS LAYOUT PLAN SHEET 1 OF 3
3100-021	-	BULK EARTHWORKS LAYOUT PLAN SHEET 2 OF 3
3100-022	-	BULK EARTHWORKS LAYOUT PLAN SHEET 3 OF 3
ROADWORKS		
3100-040	-	ROADWORKS LAYOUT PLAN SHEET 1 OF 2
3100-041	-	ROADWORKS LAYOUT PLAN SHEET 2 OF 2
3100-042	-	ROADWORKS STANDARD CROSS SECTIONS
3100-043	-	WESTERN DRIVE LONGITUDINAL SECTION
3100-044	-	ROAD A LONGITUDINAL SECTION SHEET 1 OF 3
3100-045	-	ROAD A LONGITUDINAL SECTION SHEET 2 OF 3
3100-046	-	ROAD A & D LONGITUDINAL SECTION SHEET 3 OF 3
3100-047	-	ROAD B & C LONGITUDINAL SECTION
STORMWATER		
3100-200	-	STORMWATER LAYOUT PLAN SHEET 1 OF 2
3100-201	-	STORMWATER LAYOUT PLAN SHEET 2 OF 2
3100-202	-	STORMWATER OUTLET CHANNEL DETAIL SHEET 1 OF 2
3100-203	-	STORMWATER OUTLET CHANNEL DETAIL SHEET 2 OF 2
SERVICES		
3100-300	-	OVERALL SERVICES LAYOUT PLAN SHEET 1 OF 2
3100-301	-	OVERALL SERVICES LAYOUT PLAN SHEET 2 OF 2
3100-302	-	LOT 2 SERVICING DETAIL PLAN
MISCELLANEOUS		
3100-400	-	SWEPT PATH DETAIL PLAN SHEET 1 OF 2
3100-401	-	SWEPT PATH DETAIL PLAN SHEET 2 OF 2
3100-500	-	WSUD DETAIL PLAN SHEET 1 OF 2
3100-501	-	WSUD DETAIL PLAN SHEET 2 OF 2



LEGEND

- PRECINCT BOUNDARY
- PROPOSED STAGE BOUNDARY
- SHEET BOUNDARY
- PROPOSED ROADWORKS
- PROPOSED LOTS
- FROG ZONE
- FROG BUFFER

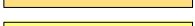
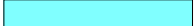
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INITIAL	DES	DRN	CHK	APP	DATE	For Approval		0 150 300 450 600 750 900 1050 1200		STOCKLAND DEVELOPMENTS PTY LTD		AURA PRECINCT 13 DA APPLICATION		OVERALL LAYOUT PLAN	
ISSUE	JW	JH	OH	OH	03.08.26	APPROVED		SCALE 1:1500 (A1)		© 2025 Egis Consulting Pty Ltd		AURA		PROJECT No.	
AMENDMENT						BY: OLIVER HARTIGAN RPEQ NO: 27508		SCALE 1:3000 (A3)		www.egis-group.com		DRAWING No.		REVISION	
NO.						SIGN: DATE: 03.08.26						17-000331		3100-010	
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DISCLAIMER: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.

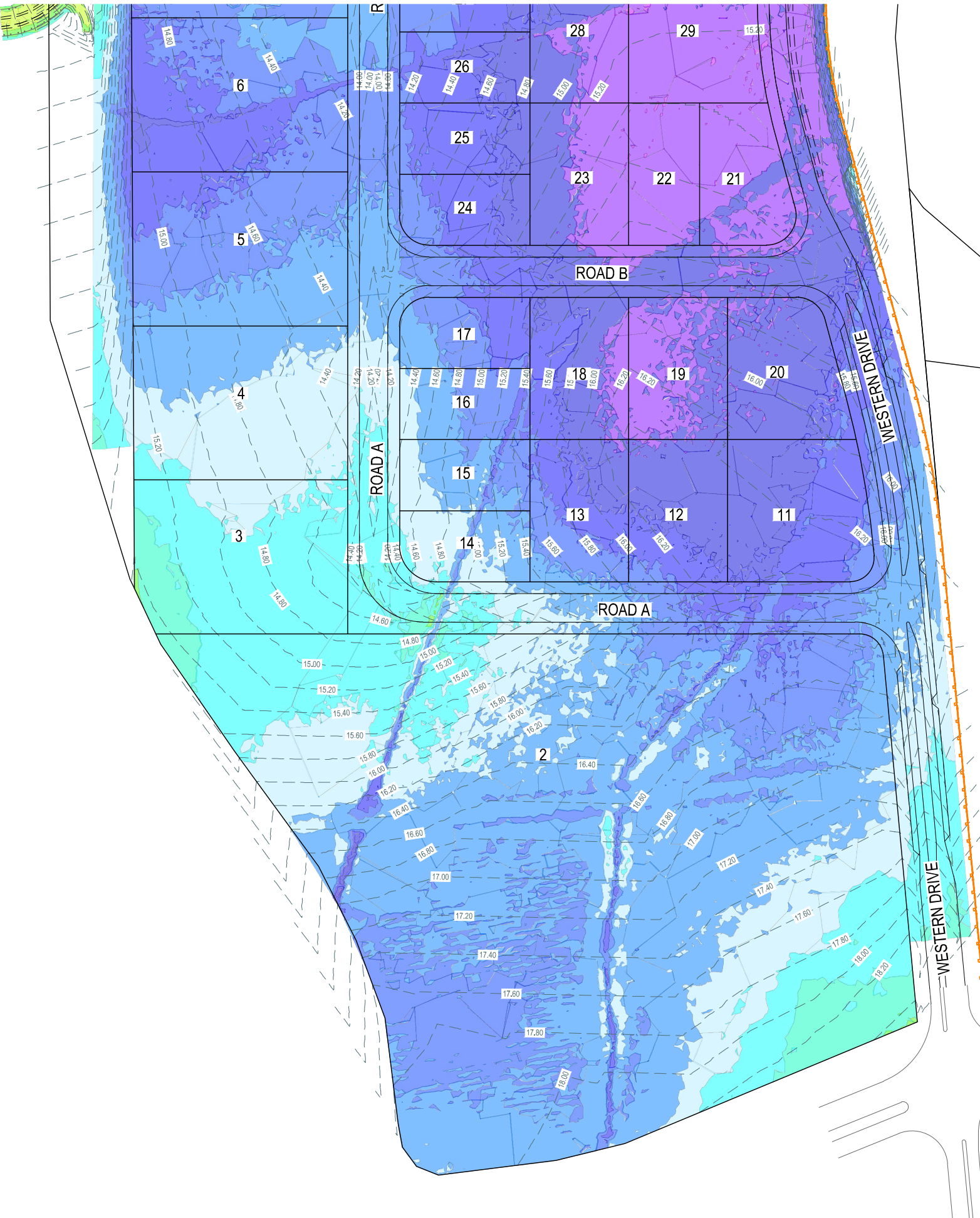


- VOLUMES ARE RAW FIGURES ONLY, NO COMPACTION FACTORS HAVE BEEN APPLIED
- VOLUMES DO NOT CONSIDER BOXING

LEGEND

- | PROPOSED WORKS BOUNDARY | | PROPOSED 2.5m MAX CONCRETE SLEEPER WALL | |
|---|---------------------|---|---------------------|
|  | |  | 1.0m - 1.5m OF FILL |
|  | |  | 1.5m - 2.0m OF FILL |
|  | OVER 3.0m OF CUT |  | 2.0m - 2.5m OF FILL |
|  | 3.0m - 2.5m OF CUT |  | 2.5m - 3.0m OF FILL |
|  | 2.5m - 2.0m OF CUT |  | 3.0m - 3.5m OF FILL |
|  | 2.0m - 1.5m OF CUT |  | 3.5m - 4.0m OF FILL |
|  | 1.5m - 1.0m OF CUT |  | 4.0m - 4.5m OF FILL |
|  | 1.0m - 0.5m OF CUT |  | 4.5m - 5.0m OF FILL |
|  | 0.5m - 0.0m OF CUT |  | OVER 5.0m OF FILL |
|  | 0.0m - 0.5m OF FILL | | |
|  | 0.5m - 1.0m OF FILL | | |

DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS	STATUS	SCALE	CLIENT	PROJECT	DRAWING TITLE
JW	JH	OH	OH	03.08.26		For Approval	0 10 20 30 40 50 60 70 80 SCALE 1:1000 (A1) SCALE 1:2000 (A3)	STOCKLAND DEVELOPMENTS PTY LTD	AURA PRECINCT 13 DA APPLICATION	BULK EARTHWORKS LAYOUT PLAN SHEET 1 OF 3
						APPROVED		egis © 2025 Egis Consulting Pty Ltd www.egis-group.com		
						BY: OLIVER HARTIGAN RPEQ No: 27508		Stockland AURA		
						SIGN: DATE: 03.08.26				PROJECT No. 17-000331 DRAWING No. 3100-020 REVISION -



LEGEND

	PROPOSED WORKS BOUNDARY		
	PROPOSED 2.5m MAX CONCRETE SLEEPER WALL		
	OVER 3.0m OF CUT		1.0m - 1.5m OF FILL
	3.0m - 2.5m OF CUT		1.5m - 2.0m OF FILL
	2.5m - 2.0m OF CUT		2.0m - 2.5m OF FILL
	2.0m - 1.5m OF CUT		2.5m - 3.0m OF FILL
	1.5m - 1.0m OF CUT		3.0m - 3.5m OF FILL
	1.0m - 0.5m OF CUT		3.5m - 4.0m OF FILL
	0.5m - 0.0m OF CUT		4.0m - 4.5m OF FILL
	0.0m - 0.5m OF FILL		4.5m - 5.0m OF FILL
	0.5m - 1.0m OF FILL		OVER 5.0m OF FILL

INITIAL	DES	DRN	CHK	APP	DATE
ISSUE	JW	JH	OH	OH	03.08.26
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AMENDMENT DETAILS	
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STATUS
For Approval
APPROVED
BY: OLIVER HARTIGAN RPEQ NO: 27508
SIGN: DATE: 03.08.26

SCALE
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SCALE 1:1000 (A1) SCALE 1:2000 (A3)

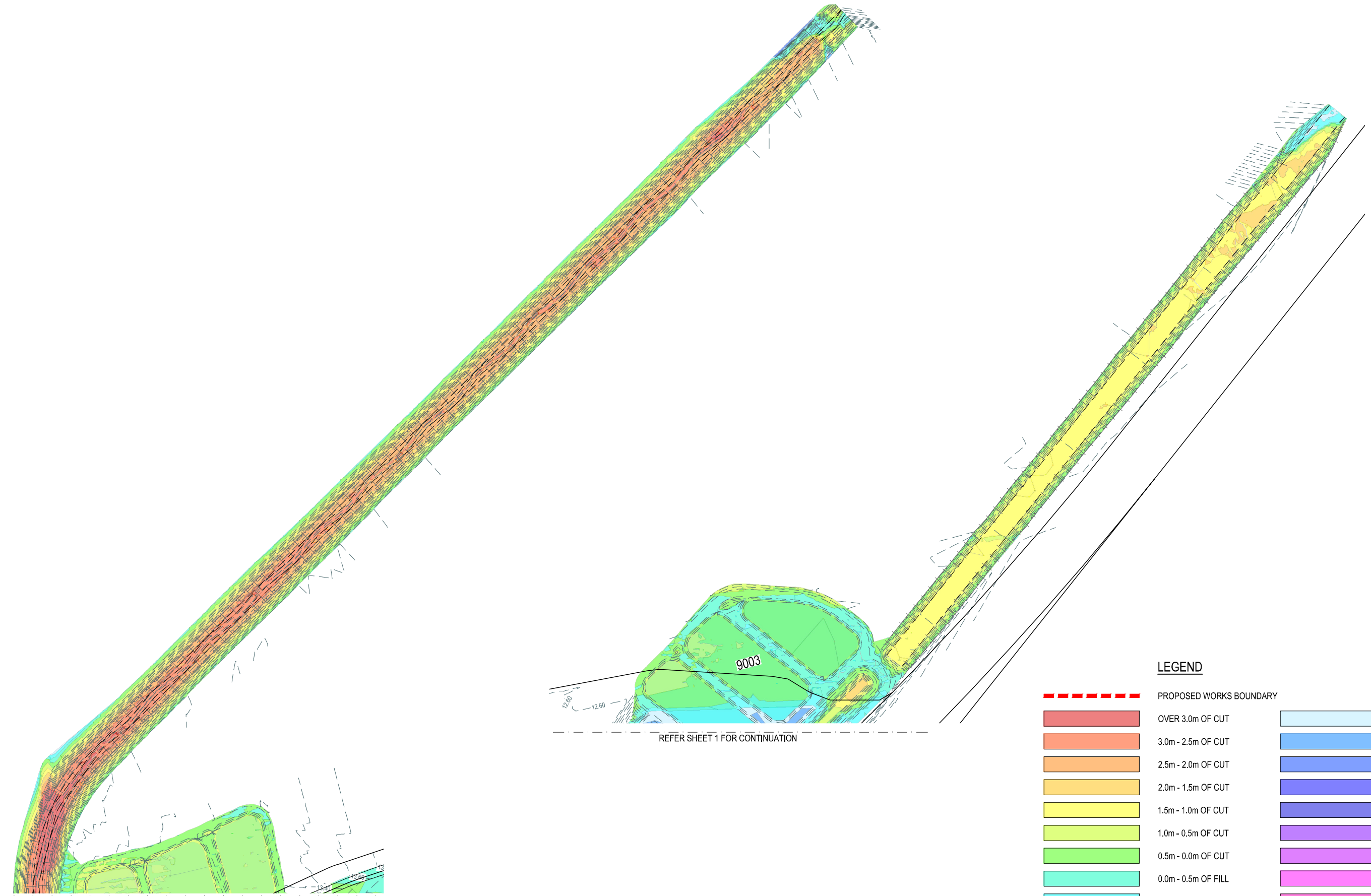
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www.egis-group.com

CLIENT
STOCKLAND DEVELOPMENTS PTY LTD

PROJECT
AURA PRECINCT 13 DA APPLICATION

DRAWING TITLE
BULK EARTHWORKS LAYOUT PLAN SHEET 2 OF 3
PROJECT No. 17-000331 DRAWING No. 3100-021 REVISION -

DISCLAIMER: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.

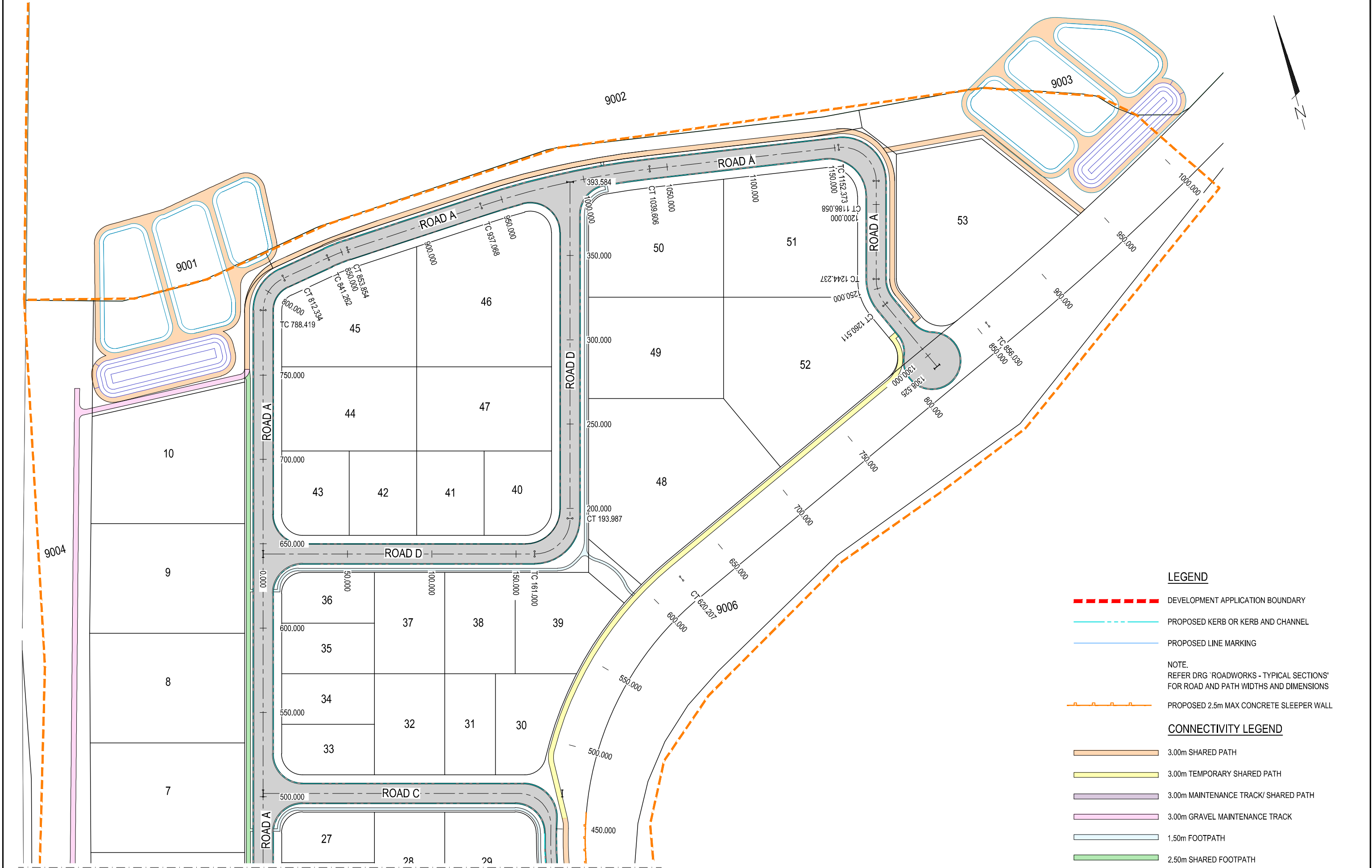


REFER SHEET 1 FOR CONTINUATION

REFER SHEET 1 FOR CONTINUATION

LEGEND

PROPOSED WORKS BOUNDARY			
	OVER 3.0m OF CUT		1.0m - 1.5m OF FILL
	3.0m - 2.5m OF CUT		1.5m - 2.0m OF FILL
	2.5m - 2.0m OF CUT		2.0m - 2.5m OF FILL
	2.0m - 1.5m OF CUT		2.5m - 3.0m OF FILL
	1.5m - 1.0m OF CUT		3.0m - 3.5m OF FILL
	1.0m - 0.5m OF CUT		3.5m - 4.0m OF FILL
	0.5m - 0.0m OF CUT		4.0m - 4.5m OF FILL
	0.0m - 0.5m OF FILL		4.5m - 5.0m OF FILL
	0.5m - 1.0m OF FILL		OVER 5.0m OF FILL



LEGEND

- DEVELOPMENT APPLICATION BOUNDARY
- PROPOSED KERB OR KERB AND CHANNEL
- PROPOSED LINE MARKING
- NOTE.
REFER DRG 'ROADWORKS - TYPICAL SECTIONS'
FOR ROAD AND PATH WIDTHS AND DIMENSIONS
- PROPOSED 2.5m MAX CONCRETE SLEEPER WALL

CONNECTIVITY LEGEND

- 3.00m SHARED PATH
- 3.00m TEMPORARY SHARED PATH
- 3.00m MAINTENANCE TRACK/ SHARED PATH
- 3.00m GRAVEL MAINTENANCE TRACK
- 1.50m FOOTPATH
- 2.50m SHARED FOOTPATH

INITIAL	DES	DRN	CHK	APP	DATE
JW	JH	OH	OH	03.08.26	

AMENDMENT DETAILS

STATUS

For Approval

APPROVED

BY: OLIVER HARTIGAN RPEQ NO: 27508

SIGN: DATE: 03.08.26

SCALE

0 10 20 30 40 50 60 70 80

SCALE 1:1000 (A1) SCALE 1:2000 (A3)

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CLIENT

STOCKLAND DEVELOPMENTS PTY LTD

Stockland AURA

PROJECT

AURA PRECINCT 13 DA APPLICATION

DRAWING TITLE

ROADWORKS LAYOUT PLAN SHEET 1 OF 2

PROJECT No. 17-000331 DRAWING No. 3100-040 REVISION -

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- LEGEND**
- DEVELOPMENT APPLICATION BOUNDARY
-
- PROPOSED KERB OR KERB AND CHANNEL

CONNECTIVITY LEGEND3.00m SHARED PATH3.00m TEMPORARY SHARED PATH3.00m MAINTENANCE TRACK/ SHARED PATH3.00m GRAVEL MAINTENANCE TRACK1.50m FOOTPATH2.50m SHARED FOOTPATH

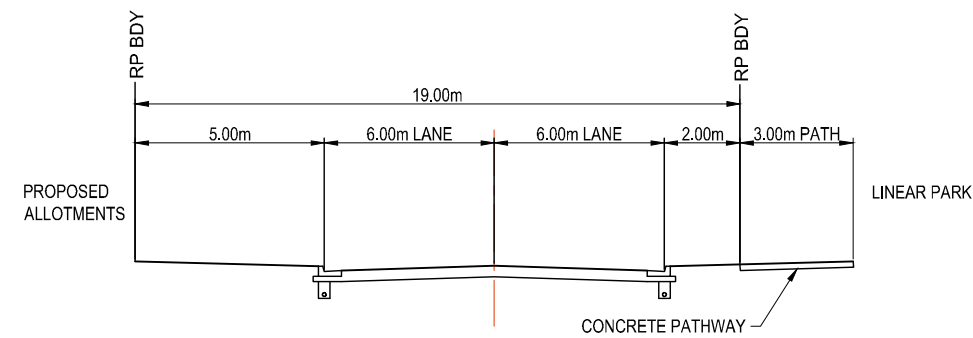
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INITIAL ISSUE	DES	DRN	CHK	APP	DATE	For Approval		0 10 20 30 40 50 60 70 80 SCALE 1:1000 (A1) SCALE 1:2000 (A3)		STOCKLAND DEVELOPMENTS PTY LTD		AURA PRECINCT 13 DA APPLICATION		ROADWORKS LAYOUT PLAN SHEET 2 OF 2	
						APPROVED				Stockland				PROJECT No. 17-000331	
						BY: OLIVER HARTIGAN RPEQ NO: 27508				AURA				DRAWING No. 3100-041	
						SIGN: DATE: 03.08.26								REVISION -	

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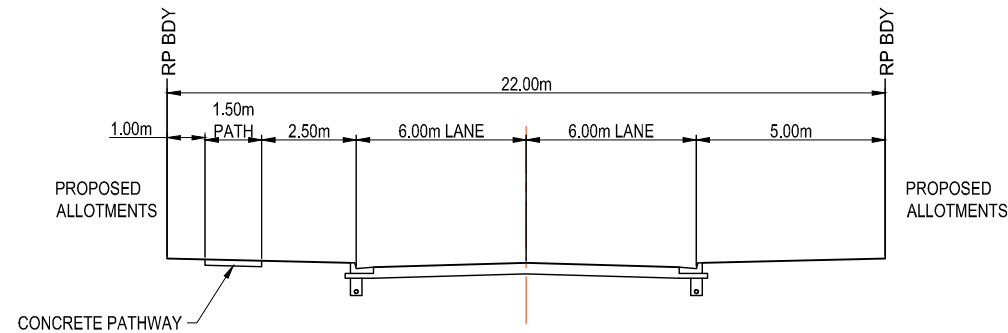
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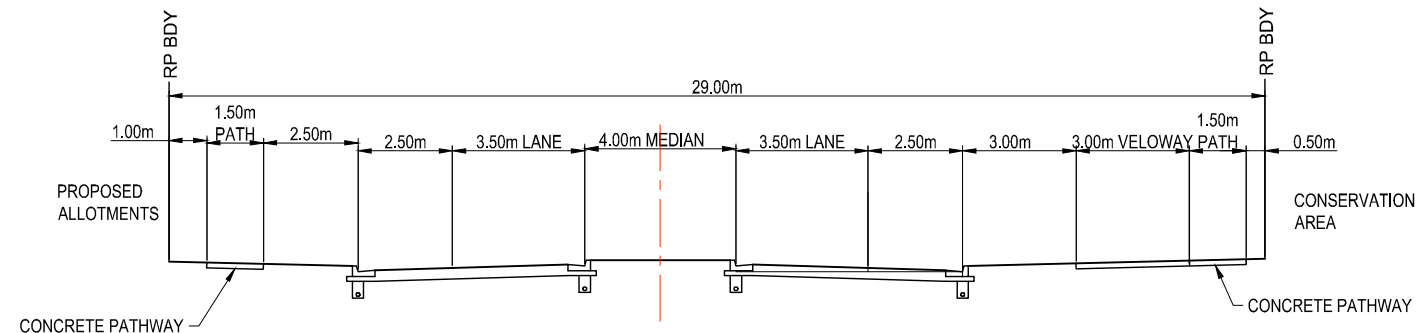
www.egis-group.com



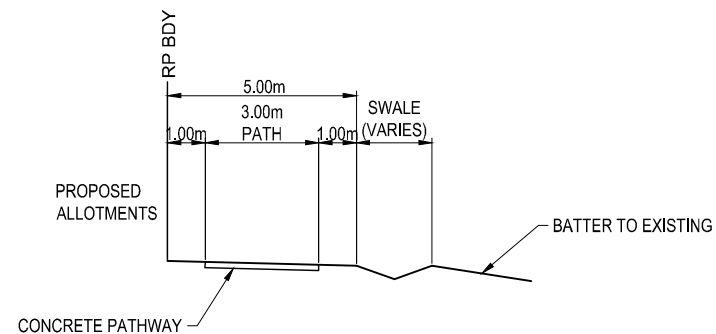
19.00m INDUSTRIAL ACCESS ESPLANADE
SCALE 1 : 100 (A1)



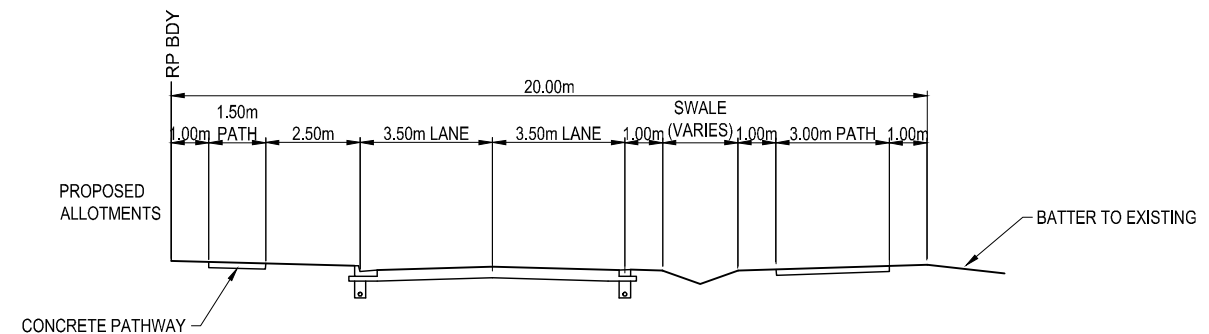
22.00m INDUSTRIAL ACCESS STREET
SCALE 1 : 100 (A1)



29.00m TRUNK CONNECTOR ROAD
SCALE 1 : 100 (A1)



5.00m INTERIM TRUNK CONNECTOR ROAD
SCALE 1 : 100 (A1)



17.00m INTERIM TRUNK CONNECTOR ROAD
SCALE 1 : 100 (A1)

INITIAL	DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS		STATUS		SCALE		CLIENT		PROJECT		DRAWING TITLE	
JW	JH	OH	OH	03.08.26				For Approval		0 1 2 3 4 5 6 7 8 SCALE 1:100 (A1) SCALE 1:200 (A3)		STOCKLAND DEVELOPMENTS PTY LTD		AURA PRECINCT 13 DA APPLICATION		ROADWORKS STANDARD CROSS SECTIONS	
								APPROVED				Stockland AURA				PROJECT No. 17-000331	
								BY: OLIVER HARTIGAN RPEQ NO: 27508								DRAWING No. 3100-042	
								SIGN: DATE: 03.08.26								REVISION -	

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DATUM R.L.0.000

ROAD GRADING	VC 100 (R = 7314.92) -1.87% -0.50%									
CUT (-) \ FILL (+)										
LHS LIP LEVEL										
RHS LIP LEVEL										
DESIGN										
EXISTING SURFACE										
CHAINAGES	0.000	17.951								
	20.000	17.552								
	40.000	17.015	17.807	17.625	17.665	0.792				
	60.000	16.458	17.434	17.252	17.292	0.976				
	80.000	16.202	17.087	16.906	16.946	0.885				
	100.000	15.585	16.796	16.615	16.655	1.211				
	110.000	15.236	16.671	16.489	16.529	1.435				
	120.000	15.042	16.559	16.378	16.418	1.517				
	140.000	14.672	16.377	16.196	16.236	1.705				
	160.000	14.451	16.250	16.069	16.108	1.799				
	180.000	14.190	16.150	15.969	16.008	1.960				
	185.787	14.071	16.121	15.940	15.980	2.050				
	200.000	13.892	16.050	15.868	15.908	2.158				
	220.000	13.611	15.950	15.768	15.809	2.339				
	240.000	13.271	15.850	15.669	15.709	2.579				
	253.782	13.045	15.781	15.600	15.640	2.736				
	260.000	13.007	15.750	15.568	15.608	2.743				
	280.000	12.739	15.650	15.469	15.509	2.911				
	293.178	12.380	15.584	15.403	15.443	3.204				
	300.000	12.074	15.550	15.354	15.376	3.476				
	306.529	12.174	15.517	15.337	15.343	3.343				
	320.000	12.042	15.450	15.301	15.301	3.408				
	330.721	11.829	15.396	15.272	15.272	3.568				
	340.000	11.763	15.350	15.247	15.247	3.587				
	344.072	11.711	15.330	15.236	15.236	3.619				
	360.000	11.778	15.250	15.159	15.164	3.472				
	370.797	11.511	15.196	15.105	15.137	3.685				
	374.715	11.384	15.176	15.085	15.133	3.792				
	380.000	11.328	15.150	15.058	15.133	3.822				
	400.000	11.194	15.050	14.959	15.125	3.856				
	420.000	11.163	14.950	14.858	14.858	3.787				
	440.000	11.082	14.850	14.758	14.758	3.768				
	460.000	11.322	14.750	14.659	14.658	3.428				
	472.470	11.293	14.688	14.596	14.596	3.395				
	480.000	11.261	14.650	14.558	14.559	3.389				
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	520.000	11.522	14.450		2.928					
	540.000	11.848	14.350		2.502					
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	571.558	12.383	14.192		1.809					
	580.000	12.568	14.150		1.582					
	581.155	12.615	14.144		1.529					
	585.975	12.630	14.120		1.490					
	600.000	12.908	14.050		1.142					
	605.833	13.110	14.021		0.910					
	620.000	13.428	13.950		0.522					
HORIZONTAL ALIGNMENT	-399.000mR -100.000mR 100.000mR 206.000mR -206.000mR 206.000mR -206.000mR 206.000mR -206.000mR 206.000mR									

Western Drive Interim
HORIZ SCALE: 1000
VERTICAL SCALE: 100

INITIAL ISSUE	DES JW	DRN JH	CHK OH	APP OH	DATE 03.08.26	AMENDMENT DETAILS	STATUS	SCALE	CLIENT	PROJECT	DRAWING TITLE		
AMENDMENT HISTORY							For Approval	012345678 SCALE 1:100 (A1) 01020304050607080 SCALE 1:200 (A3)	 © 2025 Egis Consulting Pty Ltd www.egis-group.com  Stockland  AURA	AURA PRECINCT 13 DA APPLICATION	WESTERN DRIVE LONGITUDINAL SECTION		
							APPROVED						
							BY: OLIVER HARTIGAN RPEQ NO: 27508						
							SIGN: DATE: 03.08.26						
				</									

DISCLAIMER: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.

DATUM R.L. 1.000

ROAD GRADING

CUT (-) \ FILL (+)

LHS LIP LEVEL

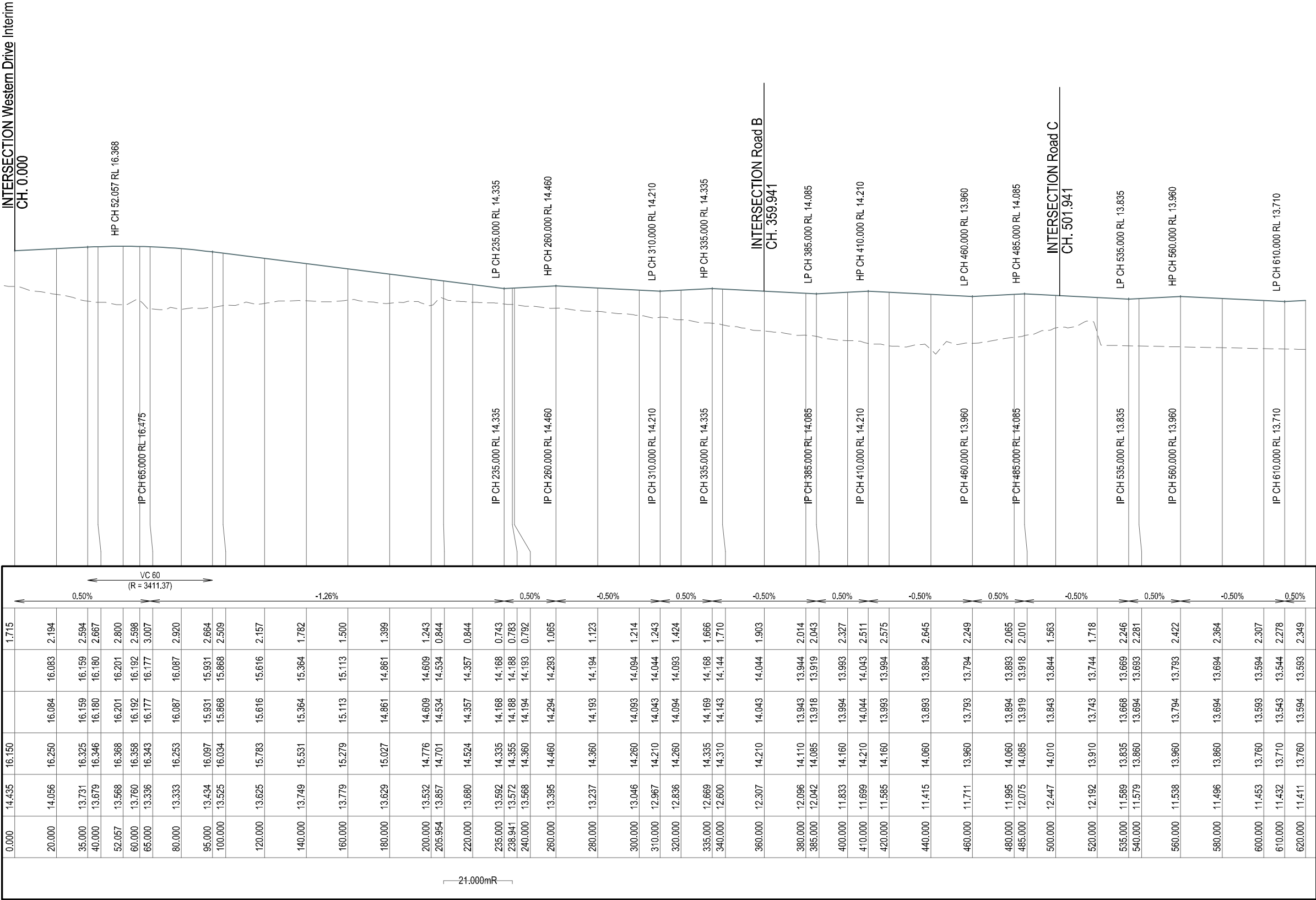
RHS LIP LEVEL

DESIGN

EXISTING
SURFACE

CHAINAGES

HORIZONTAL ALIGNMENT



Road A
HORIZ SCALE: 1000
VERTICAL SCALE: 100

INITIAL	DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS				
ISSUE	JW	JH	OH	OH	03.08.26					

STATUS	
For Approval	
APPROVED	
BY: OLIVER HARTIGAN	RPEQ NO: 27508
SIGN:	DATE: 03.08.26

SCALE	
0 1 2 3 4 5 6 7 8 SCALE 1:100 (A1)	0 10 20 30 40 50 60 70 80 SCALE 1:200 (A3)
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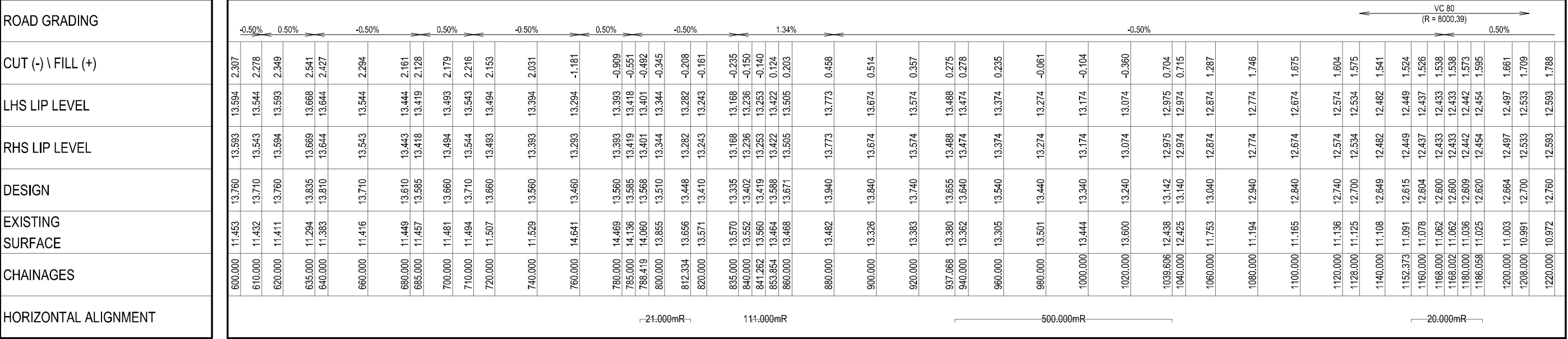


CLIENT
STOCKLAND DEVELOPMENTS PTY LTD

PROJECT
AURA PRECINCT 13 DA APPLICATION

DRAWING TITLE		
ROAD A LONGITUDINAL SECTION SHEET 1 OF 3		
PROJECT No. 17-000331	DRAWING No. 3100-044	REVISION -

DATUM R.L.0.000



Road A
HORIZ SCALE: 1000
VERTICAL SCALE: 100

INITIAL

ISSUE

DES

DRN

CHK

APP

DATE

JW	JH	OH	OH	03.08.26

AMENDMENT DETAILS

STATUS

For Approval

APPROVED

BY: OLIVER HARTIGAN RPEQ NO: 27508

SIGN: DATE: 03.08.26

SCALE

0 1 2 3 4 5 6 7 8

SCALE 1:100 (A1)

SCALE 1:200 (A3)

0 10 20 30 40 50 60 70 80

SCALE 1:1000 (A1)

SCALE 1:2000 (A3)

CLIENT

STOCKLAND DEVELOPMENTS PTY LTD

Stockland

AURA

PROJECT

AURA PRECINCT 13 DA APPLICATION

DRAWING TITLE

ROAD A LONGITUDINAL SECTION SHEET 2 OF 3

PROJECT No.

DRAWING No.

REVISION

17-000331

3100-045

-

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DATUM R.L.0.000

ROAD GRADING

CUT (-) \ FILL (+)

LHS LIP LEVEL

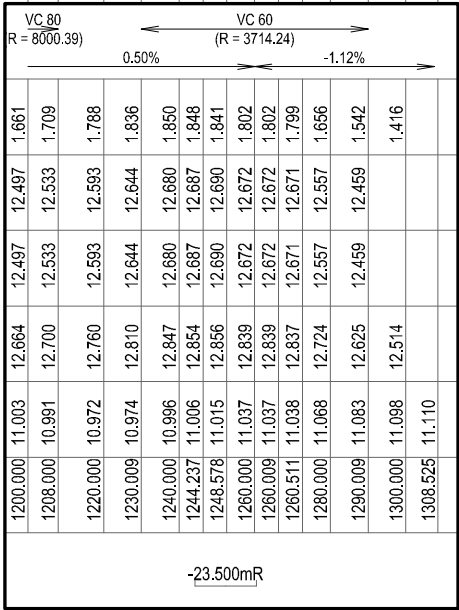
RHS LIP LEVEL

DESIGN

EXISTING
SURFACE

CHAINAGES

HORIZONTAL ALIGNMENT



DATUM R.L.1.000

ROAD GRADING

CUT (-) \ FILL (+)

LHS LIP LEVEL

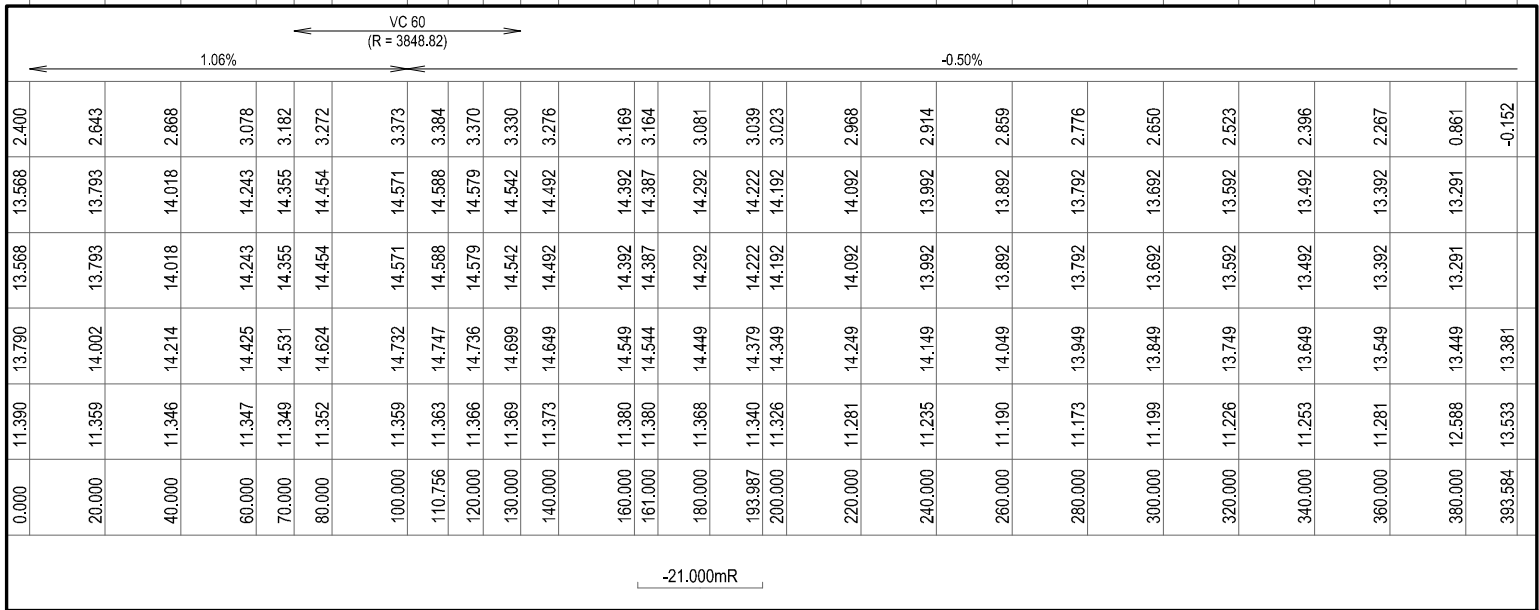
RHS LIP LEVEL

DESIGN

EXISTING
SURFACE

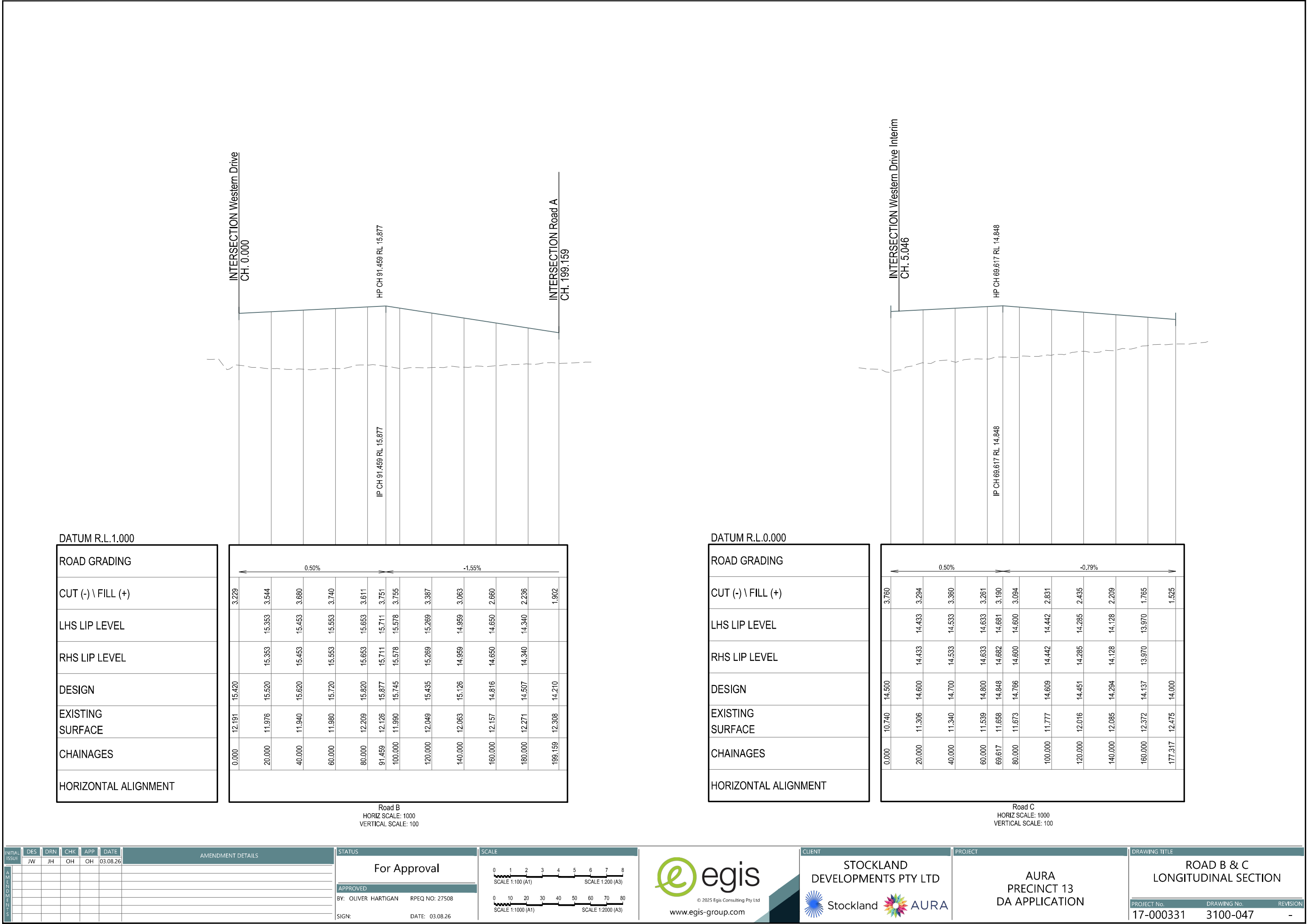
CHAINAGES

HORIZONTAL ALIGNMENT



INITIAL ISSUE	DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS				STATUS		SCALE		CLIENT		PROJECT		DRAWING TITLE		
	JW	JH	OH	OH	03.08.26					For Approval		0 1 2 3 4 5 6 7 8 SCALE 1:100 (A1) SCALE 1:200 (A3)		STOCKLAND DEVELOPMENTS PTY LTD		AURA PRECINCT 13 DA APPLICATION		ROAD A & D LONGITUDINAL SECTION SHEET 3 OF 3		
										APPROVED		0 10 20 30 40 50 60 70 80 SCALE 1:1000 (A1) SCALE 1:2000 (A3)		Stockland				PROJECT No. 17-000331 DRAWING No. 3100-046 REVISION -		
										BY: OLIVER HARTIGAN RPEQ NO: 27508				AURA						
										SIGN: DATE: 03.08.26										

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INITIAL	DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS		STATUS		SCALE		CLIENT	PROJECT	DRAWING TITLE	
JW	JH	OH	OH	03.08.26				For Approval		0 10 20 30 40 50 60 70 80 SCALE 1:1000 (A1) SCALE 1:2000 (A3)		STOCKLAND DEVELOPMENTS PTY LTD	AURA	STORMWATER LAYOUT PLAN SHEET 1 OF 2	
								APPROVED				Stockland		PROJECT No. 17-000331	
								BY: OLIVER HARTIGAN RPEQ NO: 27508				DRAWING No. 3100-200		REVISION	
								SIGN: DATE: 03.08.26						-	

DISCLAIMER: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.



LEGEND

DEVELOPMENT APPLICATION BOUNDARY

PROPOSED STORMWATER CATCHMENTS

INITIAL
ISSUE

DES

DRN

CHK

APP

DATE

JW

JH

OH

OH

03.08.26

AMENDMENT DETAILS

STATUS

For Approval

APPROVED

BY: OLIVER HARTIGAN RPEQ NO: 27508

SIGN:

DATE: 03.08.26

SCALE

01020304050607080

SCALE 1:1000 (A1)

SCALE 1:2000 (A3)

CLIENT

STOCKLAND
DEVELOPMENTS PTY LTD

StocklandAURA

PROJECT

AURA
PRECINCT 13
DA APPLICATION

DRAWING TITLE

STORMWATER
LAYOUT PLAN
SHEET 2 OF 2

PROJECT No.

DRAWING No.

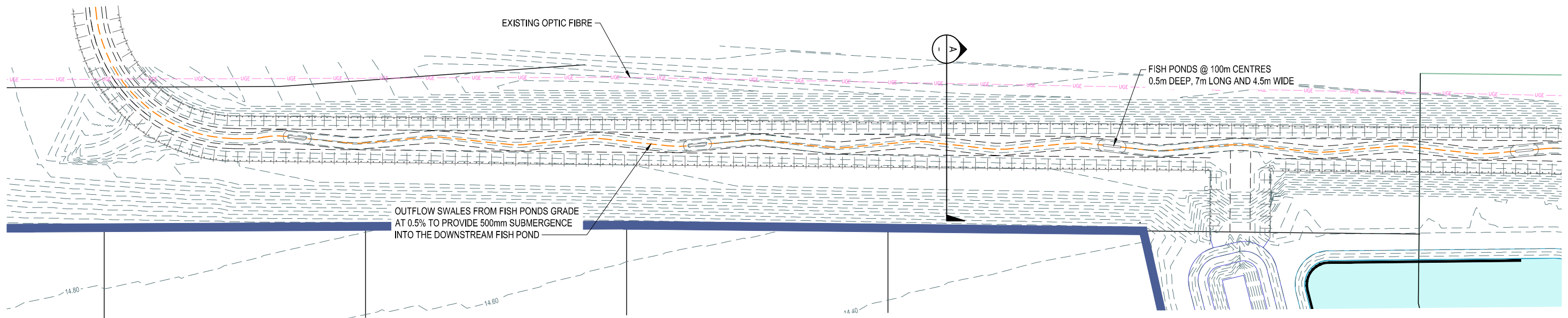
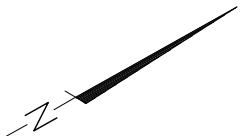
REVISION

17-000331

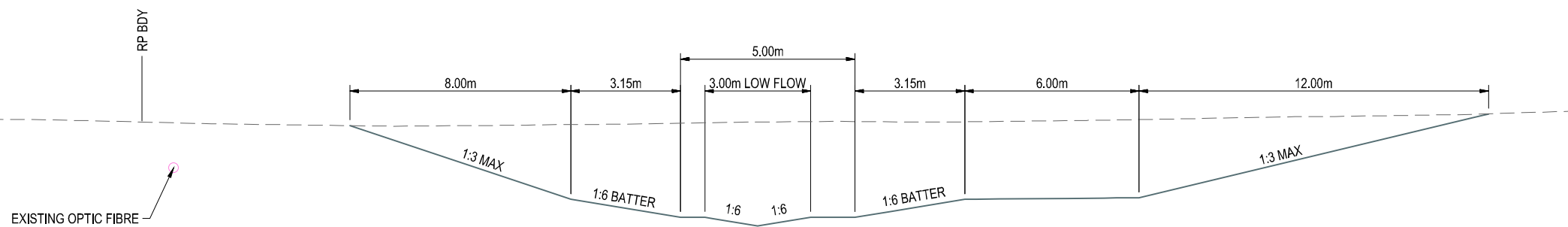
3100-201

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REFER SHEET 2 FOR CONTINUATION



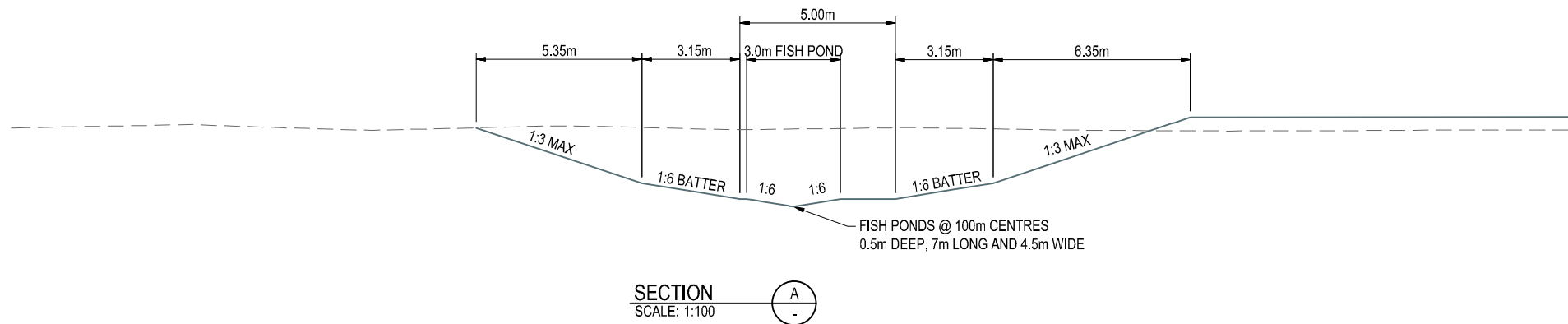
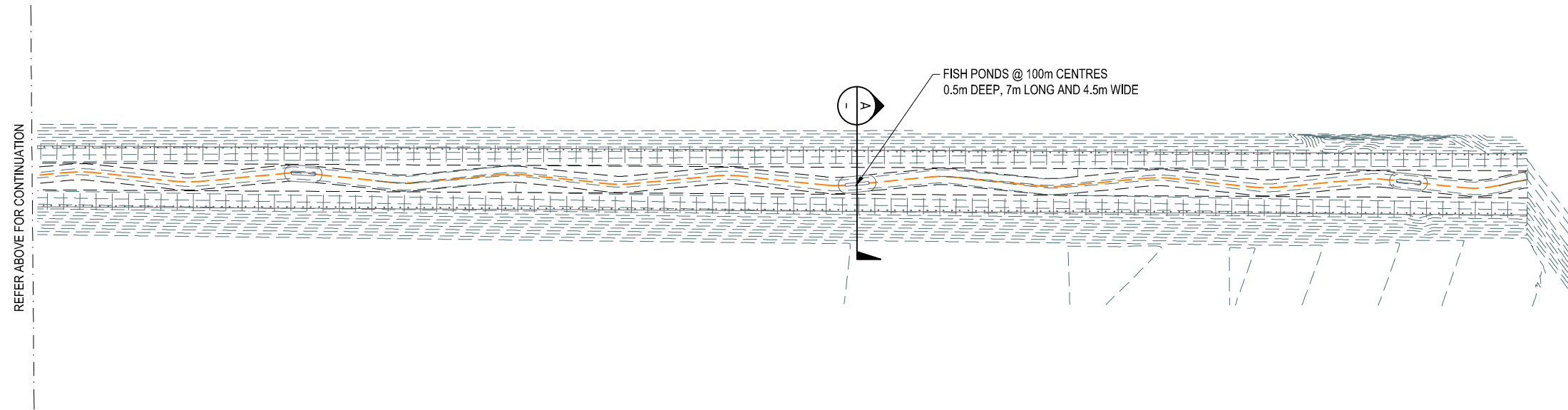
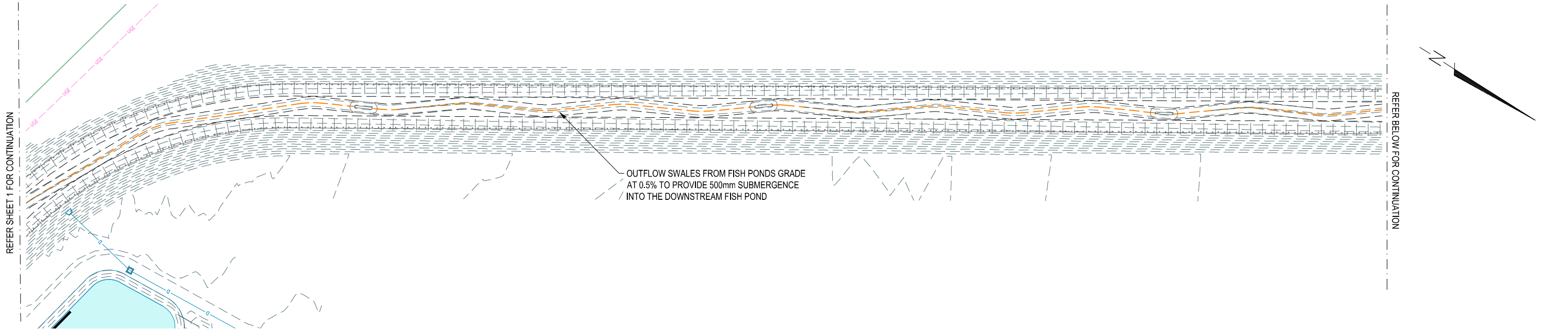
SECTION A-A
SCALE: 1:100

LEGEND

- DEVELOPMENT APPLICATION BOUNDARY
- PROPOSED STORMWATER LINE/KERB INLETS/MANHOLES
- PROPOSED BIO BASIN (END OF LINE)
- PROPOSED FISH PONDS

INITIAL	DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS		STATUS		SCALE		CLIENT		PROJECT		DRAWING TITLE			
JW	JH	OH	OH	03.08.26				For Approval		0 5 10 15 20 25 30 35 40 SCALE 1:500 (A1) SCALE 1:1000 (A3)		egis © 2025 Egis Consulting Pty Ltd www.egis-group.com		STOCKLAND DEVELOPMENTS PTY LTD		AURA PRECINCT 13 DA APPLICATION		STORMWATER OUTLET CHANNEL DETAIL SHEET 1 OF 2	
								APPROVED				Stockland		AURA		PROJECT No. 17-000331 DRAWING No. 3100-202 REVISION -			
								BY: OLIVER HARTIGAN RPEQ NO: 27508											
								SIGN: DATE: 03.08.26											

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- LEGEND**
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INITIAL	DES	DRN	CHK	APP	DATE	AMENDMENT DETAILS		STATUS		SCALE		CLIENT	PROJECT	DRAWING TITLE	
JW	JH	OH	OH	03.08.26				For Approval		0 5 10 15 20 25 30 35 40 SCALE 1:500 (A1) SCALE 1:1000 (A3)		STOCKLAND DEVELOPMENTS PTY LTD		STORMWATER OUTLET CHANNEL DETAIL SHEET 2 OF 2	
								APPROVED				Stockland AURA		PROJECT No. 17-000331	
								BY: OLIVER HARTIGAN RPEQ NO: 27508				AURA PRECINCT 13 DA APPLICATION		DRAWING No. 3100-203	
								SIGN: DATE: 03.08.26						REVISION -	

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