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23 November 2026

Our Ref: 2025-0031 Wonga Beach Resort
DSC Ref: CA 2025_5878/1

Chief Executive Officer
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To: enquiries@douglas.qld.gov.au (By Email)

jenny.elphinstone@douglas.qld.gov.au (Assessing Officer)

Dear Jenny Elphinstone,

Response to Council's Further Issues Letter – Preliminary Approval and Development Permit for a Material Change of Use (Resort Complex) – 18 Oasis Drive, Wonga Beach (Lot 2 on SP259953)

1.0 Introduction

This submission responds to Council's Further Issues Letter dated 30 October 2026 concerning the proposed Wonga Beach Resort.

Our records indicate that the decision period expires on 27 November 2026. The applicant seeks a decision within that period.

1.1 Site history and application process

The applicant seeks approval based on the site's resort history and urban location, the design response, tourism diversification and the economic and community benefits identified in the supporting material. The departures from the scheme's residential land use and scale outcomes are acknowledged and addressed below, together with the planning reasons supporting the development permit and site-specific variation.

The approximately 4.988-hectare property previously accommodated a resort known at different times as Oz Oasis, Redbacks and Daintree Palms. Following demolition of the buildings and infrastructure, the land has remained vacant. The planning scheme, which commenced in January 2018, includes the land in the Low Density Residential Zone and

Precinct 2 of the Coastal Communities Local Plan. Council also records that an earlier approval anticipated seven residential lots.

The former resort use provides historical context for the proposed renewal of this substantial urban landholding. Its reactivation would deliver investment, employment and productive use of vacant land. The proposed scale and design are assessed on their current planning merits, alongside the economic evidence and the Shire's changed circumstances.

The principal application milestones are:

- 19 December 2025: Council received the combined application for a preliminary approval including a variation request, and a development permit for a Resort Complex.
- 7 January 2026: the applicant responded to Council's 5 January Action Notice. Council records that the application became properly made on 28 January 2026.
- 4 February 2026: Council issued its information request. A further applicant response concerning the opportunity to withdraw correspondence followed on 1 June 2026.
- 3 June 2026: the information request response provided the REA Economic and Social Impact Assessment, revised planning and architectural material, engineering responses, landscape documentation and the architect's visual assessment.
- June to August 2026: additional State referral material was prepared, including the civil response dated 15 June 2026; public notification occurred and the response to submissions document was prepared on 27 August 2026.
- 30 October 2026: Council issued the further issues letter now being addressed.

This timeline highlights the significant time elapsed since lodgement, including almost five months between the applicant's information request response on 3 June 2026 and Council's further issues letter dated 30 October 2026. While State referral and public notification processes progressed during this period, the timing of Council's further advice has prolonged the resolution of outstanding matters. With the application now approaching 12 months since lodgement, the applicant seeks timely finalisation of the assessment and a decision within the current decision period.

1.2 Assessment approach and changed circumstances

1.2.1 Decision-making framework and planning merits

The application is impact assessable. Section 45(5) of the *Planning Act 2016* provides for assessment against the applicable assessment benchmarks and consideration of other relevant matters, including planning need and the relevance of those benchmarks in changed circumstances. Section 60(3), subject to section 62, enables Council to approve the application following that assessment. The identified departures therefore fall to be considered as part of the overall assessment of the proposal's planning merits.

The variation request is subject to the separate assessment required by section 61 of the *Planning Act 2016*, including the MCU assessment result, consistency with the remaining planning instrument, effects on later submission rights and prescribed matters. Section 32 of the *Planning Regulation 2017* provides the relevant common material and State planning

considerations. The applicant relies on the site specific planning justification and defined scope of the proposal in support of that assessment.

Employment, tourism diversification, local expenditure and renewal of a former resort site provide public planning benefits. Together with the design response and technical material, these benefits support approval despite the identified scheme departures.

1.2.2 Economic circumstances since 2018

The Strategic Framework was prepared around an economic structure in which the Mossman Mill and sugar industry remained important anchors. Section 3.2.1.7(1) states:

"The tourism and sugar industries are the principal determinants of economic activity, employment and population growth in Douglas Shire."

Section 3.8.2(1) describes the mill as the Shire's primary economic driver. The mill's closure in 2024 represents a material change to that context. The REA assessment identifies the loss of approximately 150 direct mill jobs and impacts on around 80 growers. The Queensland Government's May 2026 announcement of transition funding also expressly recognises the local collapse of sugar cane following the closure and the need to develop alternative economic opportunities.

Council's 16 June 2026 budget announcement identifies a planning scheme review responding to declining traditional industries and emerging economic opportunities. These changed circumstances are relevant to the application. The resort would advance the Strategic Framework's investment, employment and economic resilience objectives within an established settlement.

1.2.3 Public notification

The response to submissions dated 27 August 2026 records 45 submission documents: nine in favour, including two conditional supports; 31 expressly opposed; and five neutral. Of the opposing submissions, 26 comprised substantially repeated pro-forma objections.

Public notification identified both support for investment and employment and concerns about character, servicing and residential amenity. These matters have informed the applicant's design refinements and responses.

The northern and southern interface improvements, landscaping and proposed operational controls respond to the amenity concerns raised in submissions.

1.2.4 Support from Indigenous representatives

We are advised that, following public notification, Indigenous representatives hand-delivered letters of support to elected members, recognising the resort's potential to showcase local Indigenous heritage and traditions.

The proposed interpretation facilities provide an opportunity to share local heritage through engagement with Traditional Owners and Indigenous representatives, adding a cultural-tourism benefit to the project's economic contribution.

1.3 Proposed on-site staff accommodation

In response to Council's comments on staffing and parking, the amended proposal includes on-site staff accommodation. Culverting part of the southern drain would provide access to a small triangular area in the south-eastern corner of the site, outside the Coastal Management District. The proposed staff accommodation would provide up to 25 rooms with private ensuites and 12 dedicated ground-floor parking spaces. It would support resort operations and reduce the need for staff to commute.

The engineering plans have been updated to reflect the proposed changes. The full architectural set has yet to be revised. The applicant's preference is for Council to proceed to a decision, with any approval subject to a condition requiring the applicant to submit updated architectural plans to Council's satisfaction. If Council requires the architectural plans before making its decision, the applicant can update the full set once Council confirms its in-principle support for the proposed changes in writing.

2.0 Applicant Response to Further Issues Letter

2.1 Item 1: Scale, mass, bulk and form

2.1.1 Council's request

"The development needs to be of a scale, mass, bulk and form that is commensurate to the local community and suburb. Where larger mass, bulk and scale are proposed, the larger elements need to be located to the centre of the development and screened by more consistently scaled development. The development needs to be significantly setback from the boundaries and roadways."

2.1.2 Applicant Response to Item 1:

Council relies on Strategic Framework section 3.4.5.1(5), which seeks predominantly low-rise detached housing in low density residential areas. The proposed 66 accommodation units, central facilities and elevated circulation introduce a different built form and intensity. The approximately 12-metre height described in the lodged planning report exceeds the Local Plan's 8.5-metre acceptable outcome, and the two accommodation levels over an undercroft require assessment against its two-storey form. The following design measures address these departures.

The response combines centrally located larger facilities, separate villa clusters, building separation and integrated landscaping. Further northern and southern interface refinements improve screening opportunities and soften views from neighbouring properties.

Distribution of buildings and larger elements

The 66 accommodation units are distributed among 33 villa clusters, each with two accommodation levels over an undercroft. The restaurant, conference, wellness, interpretation and principal guest facilities are grouped centrally, with the smaller accommodation elements around the perimeter.

This arrangement responds to Council's request to concentrate larger elements centrally. The separate villa clusters provide visual breaks and planting opportunities, while the inward

adjustment of the northern ring-road increases the landscape buffer to adjoining residential land.

Elevated form and landscape integration

The elevated design maintains opportunities for ground-level drainage and landscaping while limiting earthworks. The State referral response describes targeted filling and shallow detention excavations. These measures inform the proposed building levels and allow planting beneath and between built elements.

The landscape strategy combines retained vegetation, boundary planting, undercroft gardens, green roofs and hanging gardens. Advanced and ex-ground stock specified in the June response would establish early screening, supplemented as planting matures. Building separation and boundary planting provide the principal residential buffer.

Northern and southern interface refinements

The northern ring-road has been moved inward to increase the landscape buffer to adjoining residential land. This allows layered planting to reduce the prominence of the elevated structure and filter views towards neighbouring properties.

Culverting part of the southern drain would increase the usable landscape area and allow a more continuous screening treatment than the open drain and its batters. The coordinated drainage and landscape design would soften the southern interface while retaining hydraulic capacity and maintenance access.

The applicant supports conditions securing hydraulic performance, appropriate planting and maintenance access.

Evidence of visual and privacy performance

The Charles Wright Architects Visual Amenity Assessment dated May 2026 addresses the northern boundary through drawings A920, A921, A923 and A924; the southern boundary through A920, A921 and A922; the western interface through A925; and nearby residential views through A930. The assessment concludes that retained vegetation, articulated building forms and supplementary landscaping filter views and mitigate overlooking. It also identifies substantial existing canopy along the eastern and western interfaces. These findings support the proposed approach to visual integration and privacy.

The ring-road adjustment and proposed culvert build on the assessed landscape and separation measures. The applicant supports their incorporation into the approved plans and landscape requirements to secure the intended amenity benefits. The Applicant would accept an amendment to design condition securing these adjustments.

Oasis Drive and operational amenity

The Oasis Drive entry provides for a landscaped arrival retaining the public north–south pedestrian and cycle link. Centrally located guest facilities separate principal activity areas from adjoining homes. Conditions addressing entry landscaping, pedestrian visibility, lighting, noise and resort operations would protect residential amenity.

The applicant supports enforceable requirements for landscape establishment and maintenance, privacy and operation of the restaurant, bar, conference and servicing areas. Together, these controls and the design refinements support the proposed scale and form on this site.

2.2 Item 2: Planning reasons supporting the variation

2.2.1 Council's request

"Identify planning reasons that support the variation against the Planning Scheme Framework, Local Plan and zone despite the conflicts."

2.2.2 Applicant Response to Item 2:

The following addresses the identified departures and the broader strategic and site-specific reasons supporting approval.

Residential character and land use

"Areas identified for low density residential development provide predominantly low-rise detached dwelling houses to maintain the low density character of the area."

Strategic Framework, section 3.4.5.1(5). The proposed resort departs from the residential use, height and built form contemplated by this provision. The site's former resort use, substantial consolidated area and the design response outlined under Item 1 provide the site-specific context for supporting that departure.

"Residential areas are used for residential purposes. Non-residential uses are provided, only where they support the local community, and where such uses do not detract from the residential amenity of the area."

Strategic Framework, section 3.4.5.1(3). The resort's tourism function is acknowledged. Its local employment, procurement and cultural-tourism opportunities provide benefits to the community, while the proposed siting, landscape treatment and operational controls address its relationship with neighbouring residential uses.

Tourism location and intensity

"Major tourist accommodation and entertainment areas will continue to focus in the Port Douglas Town Centre."

Strategic Framework, section 3.8.3.1(4). Council also refers to section 3.8.3.1(5), which seeks tourism elsewhere in the Shire at an appropriate scale, respecting environmental quality and comprising activities of limited size, extent and intensity generally based on appreciation of the natural environment. The applicant acknowledges the departure associated with the resort's scale. Its coastal setting, nature and wellness focus, distribution of buildings and integrated landscaping provide a distinct tourism offer, supported by the economic evidence and the site-specific design response. The proposal complements Port Douglas's principal tourism role through diversification of the Shire's accommodation and visitor experiences.

Coastal Communities Local Plan

"The purpose of the Coastal communities local plan code is to provide for attractive residential areas in the Shire as an alternative to Mossman and Port Douglas."

"protect residential communities from incursion by tourist accommodation and facilities".

Section 7.2.2.3(1) and overall outcome (2)(b) contain these provisions. Precinct 2 outcome 7.2.2.3(5)(a) also states that *"development consists of low density residential housing and open space. Other uses are not facilitated within the precinct".* The proposed resort departs from these land-use outcomes. The following sections explain the planning reasons supporting that departure and the Local Plan outcomes retained through design and approval controls.

Zone and settlement implications

Council refers to the Tourism Zone Code outcomes concerning appropriate scale, integration with tourist attractions and protection of local, scenic, cultural and historic character. The application seeks a variation providing use rights consistent with the Tourist Accommodation Zone. The proposal responds to the scale and character principles raised by Council through its separate accommodation clusters, centrally located facilities, landscape integration and connection to the locality's natural and cultural attractions.

Section 3.4.5(2), cited in Council's water-supply comments, seeks to contain growth and increased density within existing zoned land and approvals. The proposed resort occupies an existing urban landholding within Wonga Beach. This supports the settlement containment objective, with the proposed scale and intensity justified by the site's characteristics, the design response and the public benefits described in this submission.

Support within the Strategic Framework

The proposal also advances Strategic Framework objectives for tourism diversification, investment, employment and development within established settlement boundaries. These outcomes form part of the overall assessment alongside the identified departures.

Economic resilience and tourism investment

Section 3.1(4) states that the Strategic Framework in its entirety represents the scheme's policy intent. Its residential and tourism location provisions are therefore considered alongside the following economic, investment and environmental objectives.

Section 3.8.1(2): "The Shire's economic base will be broadened to improve employment opportunities and to provide resilience to any future adverse economic, social and environmental conditions."

The resort would generate employment and expenditure in the northern Shire following the mill's closure, broadening local opportunities and diversifying tourism activity.

Section 3.2.2.3(2): "This planning scheme will promote Douglas Shire as a place to invest and conduct appropriately planned and environmentally responsible businesses."

Section 3.2.2.3(1) also seeks a broader economic base and greater resilience, including building small business and tourism opportunities. Section 3.8.2.1(1)(c) and (d) supports participation in the global tropical tourism market and infrastructure strengthening the Shire as a destination and regional gateway. The proposal's premium accommodation, wellness and interpretive facilities respond to those objectives, with opportunities for local suppliers and tourism operators.

Section 3.8.3.1(1): "Development that contributes to the tourism industry and complements and promotes the Shire's natural assets is facilitated."

This outcome also requires sensitivity to the tourism appropriate to each part of the Shire. The coastal setting, Mossman–Daintree location, landscape integration and proposed cultural interpretation support a locally responsive tourism offer, with the design and amenity measures outlined above addressing its scale and interfaces.

Containing development within the existing settlement

Section 3.2.1.6(5): "each of the Shire's communities are contained within well-defined urban boundaries, designated towns, villages and other settlement areas".

Sections 3.2.2.1(1)(d) and 3.2.2.4(1)(d) seek containment of urban growth and the best use of land already allocated for urban purposes. Sections 3.4.1(2) and 3.4.2.1(4) consolidate coastal settlements and conserve coastal land outside existing urban areas. The proposed resort reuses a former developed site within Wonga Beach and the Urban Footprint identified in the application. It directs investment to existing urban land and retains the surrounding Rural-zoned agricultural land for its intended purposes.

The environmental and engineering material addresses coastal and servicing constraints, while retained vegetation and supplementary planting support the site's landscape integration.

Availability of suitable sites for tourism investment

Tourism investment and diversification objectives must also be considered against the land realistically available to accommodate them. The applicant is not aware of a suitably zoned and available alternative site within Port Douglas or the wider Douglas Shire capable of accommodating a resort of the proposed scale and character.

The accommodation, wellness and interpretation facilities, recreation areas and extensive landscaping require a substantial consolidated site. Zoning alone does not establish suitability: land area, setting, existing development, environmental constraints and development capacity are also relevant.

The subject land combines approximately 4.988 hectares within an established settlement, a coastal setting, former resort use and proximity to the Mossman–Daintree tourism corridor. Its size supports separate villa clusters, centrally located larger facilities and integrated landscaping.

The strategic preference for major tourism development in Port Douglas must be considered alongside this opportunity to provide a distinct coastal resort experience and extend visitor expenditure and employment into the northern Shire.

The land's availability, site characteristics and forecast public benefits support a site-specific variation that advances the scheme's tourism and economic objectives within an existing urban area.

Alignment with Destination 2045

The proposal also responds to the Queensland Government's Destination 2045: Delivering Queensland's Tourism Future, released in June 2025. The strategy seeks to double annual visitor expenditure to $84 billion by 2045 and encourages private sector investment in new and revitalised tourism infrastructure, experiences and attractions.

The resort would contribute through renewed investment in a former resort site, new accommodation and facilities, and local employment and expenditure. Its nature, wellness and cultural interpretation offerings would broaden the Shire's visitor experiences and complement Port Douglas's accommodation market.

Destination 2045 provides contemporary strategic support for these benefits, considered alongside the design response, technical assessments and identified scheme departures.

Correspondence from Tourism Tropical North Queensland dated 13 July 2026, provided to Council, supports the project's investment and visitor-dispersal outcomes:

> *"The type of investment proposed by the Wonga Beach Resort is ideally suited to helping our region not only attract high-value travellers, but to attract more investment in luxury visitor experiences.*
>
> *A key aspiration of the Destination Management Plan is to better disperse visitors across the region which the further development of Wonga Beach would support, providing new opportunities for visitor expenditure to be shared across the community.*
>
> *TTNQ supports the type and style of development proposed by the Wonga Beach Resort Project"*

Economic evidence and tourism diversification

The REA Economic and Social Impact Assessment, supplied in response to Council's request, assesses a premium coastal resort focused on nature, wellness and cultural experiences. Its market analysis identifies a different offer from the larger Port Douglas accommodation market and from rainforest lodges and self-contained holiday houses. It concludes that Port Douglas is likely to retain its primary tourism and accommodation role, while the resort would support visitor dispersal and expenditure along the Mossman–Daintree corridor.

The proposed interpretation facilities and support conveyed by Indigenous representatives further strengthen the opportunity for cultural tourism grounded in the locality.

REA models the following impacts within Douglas Shire. Construction values cover the total approximately 18-month construction period; operating values are annual. Totals include direct and flow-on effects.

Measure	Construction total	Annual operation
Economic output	$161.8 million	$50.4 million
Gross Regional Product	$54.4 million	$25.2 million
Wages and salaries	$31.0 million	$11.9 million
Employment	367 FTE person-years	149 ongoing FTE

Direct construction employment is forecast at 156 FTE person-years. Annual operational forecasts comprise 73 direct FTE in resort activity, 17 direct FTE from induced tourism expenditure elsewhere and further flow-on employment, totalling 149 FTE across the local economy. This total is not the resort's on-site staffing complement.

The forecasts assume 65% occupancy, an average room rate of $2,500 and 30% displacement of activity from competitors or visitors who would otherwise visit the region. The report records recent average market occupancy of 51.2%. These assumptions reflect the differentiated premium product and target market assessed by REA.

GRP measures value added after intermediate inputs; output measures broader economic activity. Read with the report's assumptions and methodology, the forecasts indicate substantial potential employment and expenditure benefits.

REA also identifies opportunities for training, local procurement and cultural enterprise, extending the project's benefits to businesses and workers across the northern Shire.

Local Plan outcomes supported by the proposal

Despite the acknowledged land-use departure in Precinct 2, the proposal supports environmental, landscape, access and infrastructure outcomes through its design and proposed approval controls.

Section 7.2.2.3(2)(e), (f) and (g) seeks to protect agricultural land, sensitive coastal areas, coastal processes and Rural-zoned cane land. The proposal directs development to an existing urban site, retaining the surrounding agricultural land for its intended purposes. The landscape strategy and supporting coastal material address the site's foreshore setting and environmental values.

Section 7.2.2.3(5)(b), PO6 and PO7 protect the western pedestrian and cycle link and seek to retain the separation of Oasis Drive and Marlin Drive. The applicant's access strategy retains the public link and provides for resort access without establishing a routine through-road between those streets. Section 7.2.2.3(5)(c) and PO8 support foreshore setbacks and vegetation retention, while PO2 and PO4 support landscape character and complementary planting. These outcomes are reflected in the proposal's landscape-led approach to the site.

The applicant supports the Local Plan's objectives for hazard management, stormwater flow paths and water-sensitive design under section 7.2.2.3(5)(d), PO5 and PO10, together with the public foreshore-access objective in PO9. The engineering and access material submitted with the application addresses these matters. The applicant supports appropriate approval requirements securing the drainage, environmental and public-access outcomes associated with the development.

Site-specific basis for the variation

The site's former resort use, substantial consolidated area, urban location, differentiated tourism offer and forecast economic benefits distinguish this application and support a site-specific variation.

The application material and 1 June 2026 response support the requested variation. The applicant supports an approval that clearly defines the authorised development and applicable planning provisions, read together with the resort design and the reasons advanced in this submission.

The resort proposal and variation request have been subject to public notification. The submissions received and the applicant's response form part of the material before Council.

Approval controls would secure the authorised use and scale, landscape interfaces, operational amenity, public access, environmental protection and infrastructure delivery.

2.3 Item 3: Water Supply

2.3.1 Council's request

"Provide further detail that clearly determines the capacity and flow rate necessary and that such augmentation can be provided, together with an agreed method of supply for the delivery of this infrastructure."

2.3.2 Applicant Response to Item 3:

Refer to attached Proactive Consulting Engineers Pty Ltd, Council Request for Further Information Response Report, dated 17 November 2026 and included under Attachment 1.

2.4 Item 4: Water Supply

2.4.1 Council's request

"Confirm how fire fighting supply will be provided to the development in accordance with the FNQROC Development Manual Guidelines. In particular, the requirement to provide 30L/s fire flows for 4-hour duration."

2.4.2 Applicant Response to Item 4:

Refer to attached Proactive Consulting Engineers Pty Ltd, Council Request for Further Information Response Report, dated 17 November 2026 and included under Attachment 1.

2.5 Item 5: Water Supply

2.5.1 Council's request

"Provide the drawings and area take offs relied on in determining the water harvesting area in the calculations."

2.5.2 Applicant Response to Item 5:

Refer to attached Proactive Consulting Engineers Pty Ltd, Council Request for Further Information Response Report, dated 17 November 2026 and included under Attachment 1.

2.6 Item 6: Water Supply

2.6.1 Council's request

"Provide advice and details on how the water will be harvested from the solar panels given the typical nature of panels is that they are discrete panels with no guttering or collection system.

The advice should confirm how the 90% efficiency adopted in the calculations will be achieved having regard to the individual elements associated with panels."

2.6.2 Applicant Response to Item 6:

Refer to attached Proactive Consulting Engineers Pty Ltd, Council Request for Further Information Response Report, dated 17 November 2026 and included under Attachment 1.

2.7 Item 7: Onsite Waste Water Treatment

2.7.1 Council's request

"Provide an updated sewage disposal assessment that includes the non-residential sewage generated from the development and confirm any implications for the proposed infrastructure sizing."

2.7.2 Applicant Response to Item 7:

Refer to attached Proactive Consulting Engineers Pty Ltd, Council Request for Further Information Response Report, dated 17 November 2026 and included under Attachment 1.

2.8 Item 8: Onsite Waste Water Treatment

2.8.1 Council's request

"Provide the drawings and area take offs relied on in determining the disposal area metrics in the calculations.

The advice should confirm that the water harvesting areas (solar panels) are not included in the sewage disposal area figures.

The advice should also confirm the adopted disposal areas are achievable and include all setbacks and separation distances required under the Australian Standards. In particular, confirm that disposal is permitted near roof garden edges and adjacent water harvesting areas where contamination risks exist."

2.8.2 Applicant Response to Item 8:

Refer to attached Proactive Consulting Engineers Pty Ltd, Council Request for Further Information Response Report, dated 17 November 2026 and included under Attachment 1.

2.9 Item 9: Traffic

2.9.1 Council's request

"Provide turn path assessments for access to on-site parking spaces and for circulation within the site. The turn path assessment must include appropriate clearances to columns and structures.

The central pillars within the circulating roadways appear to create site distance and safety hazards for vehicles turning into villa parking modules from opposing lanes."

2.9.2 Applicant Response to Item 9:

Refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.10 Item 10: Traffic

2.10.1 Council's request

"Provide site distance assessments and commentary on safety for the roadway with central pillars."

2.10.2 Applicant Response to Item 10:

Refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.11 Item 11: Traffic

2.11.1 Council's request

"Provide further detail to address the following specific traffic concerns.

a. The layout proposes a single-entry point for all traffic from Oasis Drive into the site. Initial interactions with reception appear to be via level 1. The layout appears to funnel all traffic, including return traffic from reception, into the central building ground floor. The traffic report does not address how separation of guests from staff, service vehicles, delivery vehicles and buses will be managed.

b. The single entry road arrangement does not provide any layoff areas for service vehicles or delivery vehicles in the event of conflict or queueing. Further advice on these operational issues is required as this appears to require layout considerations to an already constrained internal circulation geometry that is configured around columns.

c. Significant conflict appears to occur within the proposed circulation layout at the access into the central building ground floor including the bus movements, which the turn path assessment indicates will conflict with traffic flow around the central building roundabout, as detailed below.



d. In addition, the turn radii appear off the central roundabout appear very tight for manoeuvring traffic. Noting this it is unclear how legible the correct vehicle path will be to visitors. This is a further concern for traffic conflict and the safe and efficient functionality of the main access point.

e. Support columns in adjacent median areas and behind kerbs (or lane lines), plus structures including lift wells are noted as constraints to the access circulation layout. It remains unclear how the above geometry concerns and traffic conflicts could be resolved in detail design."

2.11.2 Applicant Response to Item 11:

Refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.12 Item 12: Parking

2.12.1 Council's request

"Clearly define the location and number of on-site parking provided within the site layout for at least the following user categories, having regard to the level of service expected for the proposed resort facility including;

a. Check-in parking for resort guests;

b. Check in parking for villa guests;

c. Staff parking for 74 staff (as identified in the submitted Traffic report);

d. Sufficient visitor parking for the conference centre, restaurant and any day visitors to the resort;

d. On site bus parking (shuttle and coach);

e. Coach bus loading and unloading area;

f. Service vehicle parking; and

g. Delivery vehicles (including restaurant, hotel, back of house supplies)."

2.12.2 Applicant Response to Item 12:

Refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.13 Item 13: Parking

2.13.1 Council's request

"Undertake a sensitivity analysis that adopts more conventional traffic generation rates to understand the potential impacts to the external network or provide origin of traffic assumptions."

2.13.2 Applicant Response to Item 13:

Refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.14 Item 14: Parking

2.14.1 Council's request

"Clarify how the internal roadway, and vehicle movements, are accommodated around the supporting columns that are centred in the roadway area. In particular, how the roadway operates during times of flood when the upper-level road is nominated to provide for guest and other parking (as stated in the applicant's report)."

2.14.2 Applicant Response to Item 14:

Refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.15 Item 15: Parking

2.15.1 Council's request

"Provide the design for the internal roadway system that incorporates the requirement from the Concurrence Agency that no building be constructed in the Coastal Management District."

2.15.2 Applicant Response to Item 15:

The applicant's position is that the concurrence agency response does not preclude the proposed elevated internal access within the Coastal Management District. Council has sought clarification from SARA on this interpretation. The internal roadway design is to comply with the applicable concurrence agency requirements.

2.16 Item 16: Design Plans

2.16.1 Council's request

"Provide Council with certainty that the development can meet the Concurrence Agency requirement by way of amended plans."

2.16.2 Applicant Response to Item 16:

The position outlined under Item 15 applies. The design plans are to reflect the applicable concurrence agency requirements for development within the Coastal Management District.

2.17 Item 17: Design Plans

2.17.1 Council's request

"Clarify the availability and the extent of public access through the development that achieves the Local Plan requirement."

2.17.2 Applicant Response to Item 17:

The proposed development retains the existing north–south pedestrian and cycle link between Old Wonga and New Wonga.

Informal use of private land to reach the esplanade should not, of itself, be treated as establishing a public right of access. Recognised public routes are distinguished from informal access across the site.

Charles Wright Architects' Overall Site Plan A016, submitted with the information request response, identifies public beach access via Bells Close. Existing public access via Marlin Drive and Yumba Close would be maintained, with separate private beach access for resort guests.

These arrangements maintain public connectivity and an appropriate level of access to the esplanade and beach.

2.18 Item 18: Design Plans

2.18.1 Council's request

"Provide an amended design that reduce the height, scale and impact to be commensurate with existing and expected development in the locality and the need for a pedestrian scale of the development adjacent to Oasis Drive. The amended design and associated landscaping need to include the required maintenance accesses for the existing drain on the land."

2.18.2 Applicant Response to Item 18:

The applicant acknowledges Council's concerns regarding building height and scale, residential amenity and the pedestrian environment along Oasis Drive. As outlined in the response to Item 1, the design addresses these matters through the siting and separation of buildings, architectural treatment and landscaping. Two further refinements strengthen this response. The northern section of the elevated ring road would be moved further into the site, and part of the southern drain would be culverted to provide a more continuous landscaped interface while retaining maintenance access.

The larger shared facilities are located centrally, with smaller villa clusters around the perimeter. This arrangement places the greatest building mass away from the site boundaries and provides space for planting between buildings. The applicant acknowledges the height departure. The elevated form allows ground-level drainage to be maintained, improves flood resilience and limits the need for earthworks. These benefits should be considered alongside the visual effects assessed in the submitted Visual Amenity Assessment. The building height does not extend above the canopy height of existing mature vegetation to the east and west of the site.

External lighting and the foreshore

Council considers that lighting from the development would extend beyond the foreshore trees and relies on the architect's illustration to support that conclusion. The illustration shows the buildings in perspective. It does not model the direction or intensity of light emitted from the buildings, or the distance that light would travel. It also omits the high level of illumination already provided by street lighting along the road frontage, as well as lighting from nearby residences. The illustration therefore provides no reliable basis for comparing the proposal with existing night-time conditions or for concluding that light from the development would illuminate the foreshore beyond the trees.

External lighting would provide safe access for guests and staff at the resort entrance and along internal roads, parking areas and pedestrian paths. All external fittings, including those at elevated levels on the central building, would direct light downwards onto the surfaces requiring illumination. Building elements would shield the light sources and provide indirect illumination, while landscaping would provide additional screening and help diffuse light. Timers or dimming controls could also be used where appropriate to reduce lighting levels during periods of low activity.

The applicant supports a condition of approval requiring an external lighting plan to be submitted to Council for endorsement before installation. The plan would identify the location, mounting height, orientation, shielding and operating controls of the fittings and include lighting calculations showing the predicted extent of light spill, particularly from the elevated areas of the central building towards the foreshore. The condition could also require the lighting to be designed, installed and operated in accordance with the applicable Australian Standards and the endorsed plan to avoid light nuisance at adjoining properties and along the foreshore. This would give Council a measurable basis for assessing light spill and directly address the concern raised.

Oasis Drive frontage and drainage access

At Oasis Drive, entry landscaping, boundary treatments, pedestrian connections and low-glare lighting would provide an appropriately scaled arrival for pedestrians. The applicant supports conditions securing these frontage treatments, maintaining pedestrian sightlines and retaining the public north–south pedestrian and cycle link.

The drainage and landscape designs would be coordinated to maintain hydraulic capacity and provide screening while keeping maintenance routes clear. Culverting part of the southern drain would allow more continuous planting along this interface. A drainage easement would secure access to the drainage infrastructure.

East of the culvert, the proposed easement could include a maintenance corridor at least 5 m wide along the northern bank of the open drain. Access from the west is proposed via Marlin Drive. Planting would be located clear of the maintenance routes described in the response to Item 19.

For these reasons, the applicant considers that the proposed building arrangement, frontage treatments, lighting controls and drainage access arrangements address Council's concerns and support the proposed height and scale without a general reduction in building height.

Further engineering detail is provided in the *Response to Douglas Shire Council RFI No. 2*, prepared by Clive Steele Partners Pty Ltd and dated 14 November 2026 (Attachment 2).

2.19 Item 19: Design Plans

2.19.1 Council's request

"Provide a minimum 5m maintenance corridor along the northern bank of the drain corridor to ensure maintenance can be undertaken to minimise risks to the site. Alternatively, provide a suitable design that suitably relocates the east-west alignment of the drain on the land."

2.19.2 Applicant Response to Item 19:

The proposal includes culverting an east–west section of the drain. This would reduce vegetation and bank maintenance along that section, with inspection and maintenance access incorporated into the culvert and surrounding surface design.

A drainage easement in favour of Council would secure access to the culvert, inlet, outlet and maintenance points. This arrangement is proposed in place of a separate continuous 5 m corridor beside the culverted section.

East of the culvert, the drainage easement would encompass the remaining open drain and a minimum 5 m maintenance corridor along its northern bank. Access to the western section is proposed from Marlin Drive.

The combined culvert, easement and maintenance corridor arrangement provides an alternative to a continuous 5 m corridor along the entire drain or relocation of its alignment. The applicant supports conditions requiring detailed engineering plans to demonstrate hydraulic capacity and practical maintenance access, with the easement extent and maintenance responsibilities documented before commencement of the relevant works.

For further engineering responses, refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

2.20 Item 20: Design Plans

2.20.1 Council's request

*"*Provide advice of the proposed tenure for the drain*."*

2.20.2 Applicant Response to Item 20:

The drain is proposed to remain within the site, subject to a drainage easement in favour of Council securing drainage, inspection and maintenance rights.

The proposed easement terms would accommodate crossings by the landowner and authorised users to reach parts of the site separated by the drain. Approved crossings would maintain drainage capacity, accommodate the intended loading and preserve Council's maintenance access.

The easement terms would document responsibilities for the culvert and crossing infrastructure, protecting the drainage function while maintaining practical access within the site.

2.21 Item 21: Design Plans

2.21.1 Council's request

"Provide advice on the viability of piling and potential impacts of the piling on adjacent residents. This should include expected duration of piling."

2.21.2 Applicant Response to Item 21:

The foundation system and construction methodology have not been finalised. Piling is one option; alternatives, including pad footings, remain subject to geotechnical investigation and structural design. Selection will depend on ground conditions, building requirements, contractor methodology and cost.

A piling duration or impact assessment based on an unconfirmed method would be speculative. These matters are appropriately resolved during detailed design once the foundation system is established.

The applicant proposes a condition requiring a Construction Management Plan to be submitted to and endorsed by Council before building approval. The plan would identify the construction methodology and, where piling is required, its duration, noise and vibration impacts, mitigation and monitoring. It would also address construction hours, resident notification and complaints management.

This approach would secure construction impact controls informed by the final engineering design and construction methodology.

For further engineering responses, refer to attached Clive Steele Partners Pty Ltd, Response to Douglas Shire Council RFI No. 2, dated 14 November 2026 and included under Attachment 2.

3.0 Conclusion

This concludes the formal Applicant Response to Council's Further Advice Letter.

Should you require any further information, please do not hesitate to contact Kelly Reaston on 0400 974 688 or at kelly@kellyreaston.com.au, or alternatively Daniel Favier on 0418 826 560 or at daniel@kellyreaston.com.au.

Kind regards



Kelly Reaston | Director

Attachment 1

Proactive Consulting Engineers Pty Ltd

Council Request for Further Information

Response Report

dated 17 November 2026

KELLY REASTON

kr

DEVELOPMENT & PROPERTY SERVICES

WONGA BEACH RESORT DEVELOPMENT

COUNCIL REQUEST FOR FURTHER INFORMATION (RFI) RESPONSE REPORT

Integrated Water Supply, Solar Rainwater Harvesting, Fire Services & Onsite Wastewater Engineering Assessment (ERA 63) — Revision G

Document Control Field	Project & Statutory Submission Specification
Project Name	Wonga Beach Resort Development (33 Apartment Pods, Central Facility & Lagoon Precinct)
Site Location	Wonga Beach, Douglas Shire Council, Far North Queensland
Document Reference	WBR-IWM-RFI-007 — Revision G (Douglas Shire Council RFI Response Issue)
Date of Issue	17 November 2026
RFI Items Addressed	Water Supply & Fire Services (Items 3, 4, 5 & 6) | Onsite Wastewater Treatment & Dispersal (Items 7 & 8)
Governing Standards	FNQROC Development Manual, Queensland Plumbing & Wastewater Code (QPWC), Environmental Protection Act 1994 (ERA 63), ADWG, AS/NZS 1546.3, AS/NZS 1547:2012, AS/NZS 3500 & AS 2419.1

1.0 Executive Overview & Council RFI Compliance Matrix

This engineering response report addresses Douglas Shire Council's Request for Further Information (RFI Items 3 to 8) regarding municipal water supply augmentation, FNQROC firefighting flow compliance, solar rainwater harvesting mechanics, and onsite wastewater treatment and land dispersal (ERA 63) for the Wonga Beach Resort Development.

KEY PLANNING & ENGINEERING CLARIFICATION FOR COUNCIL OFFICERS

1. Zero Municipal Network Augmentation Required: Through 4,429 m² of solar canopy rainwater harvesting (8,171.5 kL/year) and an Australian Drinking Water Guidelines (ADWG) potable treatment plant, net town mains consumption is reduced by 70.6% to just 5.60 kL/day annual average (2,043.6 kL/year)—saving 5,511.9 kL/year (73.0%) compared to a standard 30-house medium-density subdivision on the same land. Town water top-up is delivered via a trickle-fill buffered connection with zero peak-hour network draw.

2. Zero Wastewater Dispersed on Roofs, Roadways, or Elevated Planters: Council's concern regarding contamination of rainwater catchments arose from earlier preliminary drafts. This Revision G design confirms that zero recycled wastewater is dispersed on roofs, roadways, or elevated planters. All elevated planters (~1,200 m²) are irrigated solely with harvested rainwater, while 100% of Class A polished effluent is dispersed exclusively at ground level via subsurface drip irrigation across 11,250 m² of landscaped area.

RFI Item	Council Officer Query Summary	Engineering Response Summary & Report Reference
Item 3	Determine necessary town water capacity/flow rate, confirm augmentation needs, and define agreed method of supply delivery.	Net annual town water demand is 2,043.6 kL/year (5.60 kL/day avg; 0.00 kL/day wet season) via a controlled trickle-fill connection (0.25–0.50 L/s) into the Central Plant Room buffer—requiring zero trunk main augmentation (Section 2.1).
Item 4	Confirm firefighting water supply compliance with FNQROC Development Manual (30 L/s for 4-hour duration = 432,000 L).	Provided on-site via a dedicated 500,000 L compartmentalized sub-lagoon fire tank (+68,000 L margin), elevated electric hydrant pumps (≥ 1.2 m above flood level), rainwater make-up, and western service road booster assembly per Drawing SKF-1 (Section 2.2).

RFI Item	Council Officer Query Summary	Engineering Response Summary & Report Reference
Item 5	Provide drawings and area take-offs relied upon in determining the 4,429 m² solar rainwater harvesting catchment area.	Complete precinct area schedule totaling 4,429 m² across V1 (768 m²), V2 (912 m²), V3 (792 m²), Central Facility (748 m²), and Level 1 Walkway (1,209 m²) cross-referenced to architectural roof/canopy plans (Section 2.3). Refer to the attached Hydraulic Services drawing SKH-1 and 2
Item 6	Detail how rainwater is harvested from discrete solar panels and validate the 0.90 (90%) collection efficiency.	PV modules are mounted over a continuous, watertight profiled metal sub-deck / integrated BIPV tray system with perimeter box gutters, leaf guards, and first-flush diverters—achieving ≥ 0.90 collection efficiency (Section 2.4). Refer also to the attached Hydraulic Services drawing SKH-2
Item 7	Updated sewage assessment including non-residential uses (pool backwash, restaurant, staff, conference, day spa) and prolonged wet-weather saturation contingency.	Full residential + non-residential flow model totals 24.39 kL/day avg (37.52 kL/day peak; 18.75 kL/day wet season). Supported by 880.0 kL enclosed storage (46.9 days wet-season holding), automated soil-moisture cutoffs, and tanker pump-out contingency (Section 3.1–3.3).
Item 8	Provide disposal area take-offs, confirm solar panel areas are excluded, and verify AS/NZS 1547 setbacks and separation from rainwater harvesting.	Confirms 11,250 m² ground-level subsurface drip area (8,250 m² pod gardens + 3,000 m² east site) excludes all 4,429 m² solar roofs and elevated planters, maintaining full AS/NZS 1547 setbacks (Section 3.4). Refer to the attached Hydraulic Services drawing SKH-4

2.0 Part A — Water Supply & Fire Services Response (RFI Items 3–6)

2.1 RFI Item 3: Town Water Capacity, Flow Rate, Augmentation & Method of Supply

Although the site lies within Douglas Shire Council's designated water supply area, the resort has been engineered as a self-reliant integrated water cycle precinct so that existing Wonga Beach reticulation mains do not require trunk augmentation to service domestic operations or peak firefighting loads:

- **Gross vs. Net Town Water Demand:** Gross indoor potable water demand across the 33 accommodation pods (210-guest cap, WELS 4–5-star fixtures), Conference Centre/Day Spa, and Restaurant Facility averages 18.30 kL/day (6,679.8 kL/year), peaking at 28.16 kL/day. Harvesting 4,429 m² of solar canopy yields 8,171.5 kL/year of rainwater—supplying 100% of non-potable demands (3,341.0 kL/year) and providing 4,636.2 kL/year (net) of ADWG-filtered potable water. Net town mains draw averages just 5.60 kL/day (2,043.6 kL/year), with zero town water draw during the 5-month wet season.

- **73.0% Lower Municipal Draw Than Zoned Medium-Density Housing:** If developed for 30 medium-density dwellings (90 permanent residents at 230 L/person/day FNQ residential average), council town mains demand would be 20.70 kL/day year-round (7,555.5 kL/year). The proposed resort reduces net draw on Council's network by 5,511.9 kL/year (73.0%).

- **Agreed Method of Supply (Trickle-Fill Buffered Connection — Zero Peak Surge):** Rather than drawing peak instantaneous domestic flows directly from Council's street main, the town water connection feeds a dedicated air-gapped break tank / buffered potable manifold in the Central Building ground-floor plant room via a flow-restricted trickle-fill valve capped at 0.25 to 0.50 L/s (15–30 L/min) during dry-season low-storage periods (< 15% rainwater reserve). Variable-speed booster pumps inside the plant room draw from the 80,000 L ADWG-treated rainwater tank and parallel buffered potable supply to meet instantaneous resort fixture peaks—eliminating any hydraulic pressure drop or network augmentation requirement on Council's Wonga Beach mains.

Site Water Balance Component	Peak Design (kL/day)	Dry Season (80%) (kL/day)	Annual Avg (65%) (kL/day)	Wet Season (50%) (kL/day)	Annual Total (kL/year)
Type V1 Accommodation Pods (12 Pods)	3.23	2.58	2.10	1.62	766.5
Type V2 Accommodation Pods (12 Pods)	6.46	5.17	4.20	3.23	1,533.0
Type V3 Accommodation Pods (9 Pods)	6.06	4.85	3.94	3.03	1,437.2
Housekeeping BOH Allowance (20 Staff)	0.30	0.24	0.20	0.15	71.2
Conference Centre, Day Spa & Gym	5.60	4.48	3.64	2.80	1,327.4
Restaurant, Bars & Commercial Kitchens	6.51	5.21	4.23	3.25	1,544.5
Total Gross Resort Potable Water Demand	**28.16**	**22.53**	**18.30**	**14.08**	**6,679.8**
Less: ADWG Filtered & Treated Rainwater	—	—	-12.70	-14.08	-4,636.2 (70.6%)
Net Town Mains Water Required (Proposed Resort)	**0.25–0.50 L/s trickle**	**—**	**5.60**	**0.00**	**2,043.6 (29.4%)**
Benchmark: 30-House Medium-Density Housing (90 res @ 230 L/p/d)	—	20.70	20.70	20.70	7,555.5 (100%)
Net Municipal Town Water Savings vs. Housing	**—**	**—**	**-15.10**	**-20.70**	**-5,511.9 (-73.0%)**

2.2 RFI Item 4: Firefighting Supply Compliance (FNQROC 30 L/s for 4 Hours)

To satisfy the FNQROC Development Manual and AS 2419.1 requirement of 30 L/s for a 4-hour duration (30 L/s × 14,400 seconds = 432,000 litres) without imposing a 30 L/s instantaneous draw onto Council's Wonga Beach town water main, the resort provides a dedicated, self-contained on-site fire storage and pumping system (refer to Drawing SKF-1):

- **Dedicated 500,000 Litre Sub-Lagoon Fire Storage Tank:** A lined, compartmentalised 500,000 L concrete fire water storage tank is located underneath the Lagoon Pool—providing a 68,000 L (15.7%) capacity surplus above the mandatory 432,000 L FNQROC 4-hour requirement. Internal sectional baffling allows half of the tank to be isolated for routine inspection and maintenance while retaining compliant firefighting reserve.

- **Elevated Electric Fire Hydrant Pumps (Flood-Immune):** Dedicated electric fire hydrant pumps reticulate pressurised fire water to external hydrants across the site. All fire pumps and controllers are mounted on an elevated structural platform at least 1.2 metres above finished ground level, ensuring full immunity above the 1% AEP flood and storm-tide hazard level.

- **Automated Rainwater Make-Up Supply:** Continuous level-controlled make-up water to keep the 500,000 L fire tank at 100% capacity is supplied directly from the resort's 2,077.0 kL rainwater storage network (with automated air-gapped town mains fallback).

- **Western Service Road Hydrant Booster & Tank Suction Line (Drawing SKF-1):** A fire brigade hydrant booster assembly and essential services hardstand are located on the service road along the western boundary immediately prior to the Level 1 ramp (subject to Queensland Fire Department review and approval). A dedicated large-bore tank suction main extends from the 500,000 L storage tank directly to the booster connection for fire appliance drafting.

- **Supplementary Town Main Boundary Hydrant:** In addition to the 500,000 L dedicated fire tank system, a supplementary fire service connection is extended from the street town main to a boundary hydrant adjacent to the booster assembly to facilitate fire brigade operational preferences.

2.3 RFI Item 5: Solar Rainwater Catchment Area Take-Offs & Drawing Schedule

The 4,429 m² net rainwater harvesting catchment area is derived exclusively from the horizontal plan projection of the elevated solar PV canopy roofs across the five resort building zones (excluding all ground surfaces, roads, swimming pools, and elevated garden planters). Applying Wonga Beach's mean annual rainfall (2,050 mm/year: 1,650 mm wet season Dec–Apr; 400 mm dry season May–Nov) and a 0.90 runoff coefficient yields 8,171.5 kL/year:

Refer to the attached Hydraulic Services drawing SKH-2

Building / Canopy Zone	Architectural Drawing Ref (For Attachment)	Net Horizontal Catchment (m²)	Wet Season Yield (1,650 mm)	Dry Season Yield (400 mm)	Annual Harvest (kL/year)
Type V1 Apartments (12 Pods)	AR-ROOF-V1 / SK-RWH-01	768 m²	1,140.5 kL	276.5 kL	1,417.0 kL
Type V2 Apartments (12 Pods)	AR-ROOF-V2 / SK-RWH-01	912 m²	1,354.3 kL	328.3 kL	1,682.6 kL
Type V3 Apartments (9 Pods)	AR-ROOF-V3 / SK-RWH-01	792 m²	1,176.1 kL	285.1 kL	1,461.2 kL
Central Facility Roof	AR-ROOF-CF / SK-RWH-02	748 m²	1,110.8 kL	269.3 kL	1,380.1 kL
Level 1 Walkway Solar Canopy	AR-ROOF-WK / SK-RWH-02	1,209 m²	1,795.4 kL	435.2 kL	2,230.6 kL
TOTAL SITE CATCHMENT	**Site Roof & Canopy Plan SK-RWH-00**	**4,429 m²**	**6,577.1 kL**	**1,594.4 kL**	**8,171.5 kL**

2.4 RFI Item 6: Solar Panel Rainwater Collection Mechanics & 0.90 Runoff Efficiency

Council officers noted that conventional stand-off solar panels mounted above open frames have gaps between individual modules and lack integrated guttering. At Wonga Beach Resort, the solar arrays are designed as an engineered waterproof canopy roof system rather than open-frame racks:

- **Continuous Impervious Sub-Deck & Integrated Flashing Trays:** All solar PV modules across the apartment pods, Central Facility, and Level 1 walkways are mounted directly over a continuous, fall-graded Colorbond Ultra / marine-grade profiled metal roofing sub-deck (or interlocking Building-Integrated Photovoltaic [BIPV] watertight aluminium drainage extrusions). Rainwater falling onto the glass PV module surfaces—and any water passing through the 15–20 mm inter-module expansion joints—is captured 100% by the underlying impervious metal deck.
  Refer to the attached Hydraulic Services drawing SKH-2

- **High-Capacity Perimeter Box Gutters & Leaf Protection:** The impervious sub-deck discharges at a minimum 3°–5° fall into oversized marine-grade perimeter box gutters fitted with fine stainless-steel ember/leaf mesh guards, preventing tropical leaf ingress and overflow during intense Far North Queensland cloudbursts.

- **Validation of 0.90 (90%) Collection Efficiency:** Under AS/NZS 3500.3 and Queensland rainwater harvesting guidelines, impervious glass and sheet-metal roofs achieve a hydraulic runoff coefficient of 0.95 to 0.98. Adopting 0.90 (90%) conservatively accounts for initial wetting losses (0.5 mm per storm event), minor wind-driven spray at canopy edges, and automated vortex/standpipe first-flush diversion (0.2–0.5 L/m² diverted to ground soakage

at the start of rainfall events) prior to entering the 2,077.0 kL dual-tier rainwater storage tanks (33 × 35 kL AG + 33 × 24 kL BG pod tanks; 80 kL AG + 50 kL BG Central Building tanks).

3.0 Part B — Onsite Wastewater Treatment & Dispersal Response (RFI Items 7 & 8)

3.1 Clarification of Elevated Gardens vs. Ground-Level Effluent Dispersal

Council's RFI raised valid concerns regarding earlier preliminary concepts that suggested dispersing treated wastewater onto elevated gardens, Level 1 walkways, or roof structures adjacent to rainwater harvesting zones. This Revision G design formally eliminates all elevated effluent dispersal and establishes complete physical and hydraulic separation:

- **Zero Recycled Effluent on Roofs, Roadways, or Elevated Planters:** In strict compliance with the Queensland Plumbing and Wastewater Code (QPWC) and ERA 63, no treated wastewater is piped above ground level. All rooftop gardens, Level 1 walkway planters, and raised podium beds (~1,200 m²) are irrigated exclusively with harvested rainwater via subsurface drip lines under 100 mm coarse organic mulch, with waterproof planter membranes and sealed under-drains piped to the wastewater collection loop so zero planter drainage can ever enter stormwater or rainwater tanks.

- **100% Ground-Level Subsurface Drip Dispersal:** All treated, Class A polished effluent is dispersed exclusively at ground level via root-barrier, pressure-compensating subsurface drip irrigation installed 100–150 mm beneath finished soil/mulch level across 11,250 m² of dedicated coastal landscaping.
  Refer to the attached Hydraulic Services drawing SKH-4

3.2 RFI Item 7: Complete Residential & Non-Residential Sewage Assessment (ERA 63)

In accordance with RFI Item 7, the site wastewater balance explicitly incorporates all residential accommodation units alongside every non-residential facility on-site—including pool filter backwash/cartridge wash-down, the Restaurant and commercial kitchens, Conference Centre guests, Day Spa/Gymnasium users, and all resort/housekeeping/facility staff:

- **Mandatory WELS 4–5 Star Fixtures & Unreduced Biological Mass Sizing:** All buildings incorporate certified WELS 4–5 star fixtures (≤ 6.5 L/min showers, ≤ 4.5 L/min taps, 4.5/3.0 L dual-flush WCs, ≥ 4.5-star washers), justifying a 90.0 L/person/day hydraulic rate for resort guests (210-guest cap). All biological reactors are sized for 100% unreduced AS/NZS 1546.3 organic and nutrient mass loadings (70 g BOD_5, 70 g TSS, and 15 g Total Nitrogen per person/day).

- **Near-Zero-Backwash Pool Filtration (1.92 kL/day Peak; 1.25 kL/day Avg):** Saltwater chlorinators and sand filters are excluded. The 33 apartment pools (12,000 L each) use oversized 150–200 sq. ft. pleated cartridge filters + UV-C + liquid chlorine, washed at a central bunded bay (~100 L/cartridge every 3–4 months). The 1,000,000 L Lagoon Pool uses a perlite Regenerative Media Filter (RMF) + liquid chlorine/CO_2 + UV/Ozone, purging ~800–1,200 L every 3–5 weeks. All pool wash/purge water passes through a 10,000–15,000 L baffled settlement and dechlorination tank (< 0.1 mg/L Cl_2) prior to metered transfer to the wastewater system.

Wastewater Source / Precinct	Design Occupancy & Non-Residential Basis	Peak Design (kL/day)	Dry Season (80%) (kL/day)	Annual Avg (65%) (kL/day)	Wet Season (50%) (kL/day)	Annual Volume (kL/year)
Type V1 Pods (12 Pods)	48 physical beds (capped) @ 90 L/p/d	3.88	3.10	2.52	1.94	919.8
Type V2 Pods (12 Pods)	96 physical beds (capped) @ 90 L/p/d	7.75	6.20	5.04	3.88	1,839.6
Type V3 Pods (9 Pods)	90 physical beds (capped) @ 90 L/p/d	7.27	5.82	4.73	3.63	1,724.6
Housekeeping & Resort Staff	20 housekeeping/grounds staff @ 25 L/shift/d	0.50	0.40	0.33	0.25	118.6
Conference Centre & Day Spa (Plant #1)	210 conf. guests, 74 spa/gym users, 5 staff + 400 L/d spa	7.62	6.10	4.95	3.81	1,808.1
Restaurant, Bar & Kitchens (Plant #2)	240 patrons, 39 kitchen/bar/serving staff + 450 L/d kitchen	8.58	6.86	5.58	4.29	2,035.6
Pool Filter Wash & RMF Purge	33 cartridge wash bay + Lagoon RMF (dechlorinated)	1.92	1.54	1.25	0.95	456.2
TOTAL SITE WASTEWATER FLOW	**All Residential & Non-Residential Streams**	**37.52**	**30.02**	**24.39**	**18.75**	**8,902.6**

3.3 Treatment Train & Prolonged Wet-Weather / Monsoon Storage Contingency

To address Council's concern regarding multi-day rain events and prolonged monsoonal saturation across Wonga Beach's coastal sand swales, the wastewater system combines secondary biological treatment, Class A tertiary polishing, and 880,000 litres of enclosed wet-weather storage:

- **Primary & Secondary Biological Treatment:** Each accommodation pod has an aerated secondary treatment unit (similar to a Taylex ABS 2000NR, 2,000 L/day capacity) discharging to sealed cluster pump wells. The Central Building features two dedicated above-ground treatment plants located in screened garden beds at the ground-level roundabouts (Plant #1 for Conference/Spa; Plant #2 for Restaurant/Kitchens with upstream grease arrestors).
  Refer to the attached Hydraulic Services drawing SKH-3 & 4

- **Central Class A Polishing Bank & 880.0 kL Enclosed Storage:** All treated effluent is pumped to an 80,000 L buffer tank in the plant room beneath the Lagoon Pool, passed through a central Class A polishing filter bank (5 µm auto-backwash media filtration, Granular Activated Carbon, and validated ≥ 40 mJ/cm² UV disinfection), and stored in an 800,000 L underground greywater tank beneath the Lagoon Pool (total enclosed storage = 880.0 kL).
  Refer to the attached Hydraulic Services drawing SKH-3

- **46.9 Days of Zero-Discharge Monsoon Holding Capacity:** Automated soil-moisture sensors and a rain-gauge cutoff halt subsurface irrigation whenever coastal soils reach field capacity. At wet-season low occupancy (18.75 kL/day), the 880.0 kL enclosed storage holds 46.9 consecutive days of inflow (exceeding the 45-day Far North Queensland monsoon benchmark of 843.8 kL) without discharging a drop to saturated sand swales. In the unlikely event of an extreme > 47-day continuous saturation event, an emergency liquid-waste tanker pump-out point at the Lagoon plant room provides failsafe off-site transfer to Mossman STP.

- **Cyclone & Storm-Surge Protection:** All sub-lagoon tanks, cluster pump wells, and above-ground treatment units have watertight sealed lids/vents above the 1% AEP storm-tide level and non-return check valves on irrigation headers to prevent seawater back-flow during cyclones.

3.4 RFI Item 8: Ground-Level Disposal Area Take-Offs & AS/NZS 1547 Setbacks

In direct response to RFI Item 8, it is formally confirmed that zero solar panel roof areas (4,429 m²) and zero elevated/roof planters are included in the wastewater disposal area calculations. All 11,250 m² of disposal area is located at ground level:

Ground-Level Dispersal Zone	Civil / Landscape Drawing Ref	Available Ground Area (m²)	Adopted Coastal Loading Rate	Daily Dispersal Capacity	Hydraulic Allocation & Margin
Accommodation Pod Gardens (33 Pods × 250 m² each)	LA-IRR-01 / SK-WW-01	8,250 m²	5.0 mm/day (5.0 L/m²/d)	41.25 kL/day (1,250 L/pod)	Absorbs 100% of pod flows (12.62 kL/d avg; 19.40 kL/d peak) & 100% single-pod fill (360–900 L/d).
Eastern Site Grass & General Planting Area	LA-IRR-02 / SK-WW-01	3,000 m²	5.0 mm/day (5.0 L/m²/d)	15.00 kL/day	Disperses Central Building & pool wash flows (11.78 kL/d avg; peak surge buffered by 800 kL tank).
TOTAL GROUND-LEVEL DISPOSAL AREA	**Site Disposal Plan SK-WW-00**	**11,250 m²**	**5.0 mm/day (Conservative)**	**56.25 kL/day**	**231% of avg daily flow (24.39 kL/d) and 150% of peak flow (37.52 kL/d).**

- **Realistic Coastal Sand Loading Rate (5.0 mm/day):** While AS/NZS 1547 nominates up to 11.0 mm/day for free-draining Category 1 coastal sands, a conservative Design Irrigation Rate (DIR) of 5.0 mm/day (5.0 L/m²/day) is adopted—requiring only 4,878 m² on an average day and 7,504 m² on a peak day against 11,250 m² available. Pulse-dosed 1.6 L/hr root-barrier subsurface drippers (100–150 mm depth) match coastal evapotranspiration and prevent vertical nutrient leaching.
  Refer to the attached Hydraulic Services drawing SKH-4

- **Mandatory AS/NZS 1547 & QPWC Setbacks Verified:** All ground-level subsurface drip zones strictly maintain: ≥ 1.5 m (level) to ≥ 3.0 m (upslope) from ground-floor building footings and slab edges; ≥ 1.5–3.0 m from property boundaries; ≥ 0.5–1.5 m from pedestrian paths; ≥ 6.0 m from all plunge pools and the Lagoon Pool; and ≥ 10.0–30.0 m from the two 350 m² stormwater retention ponds, the 3,600 m² main lake, and the coastal high-water mark. Because all rainwater harvesting occurs on elevated solar canopy roofs (≥ 3.5 m to 7.0 m above ground) and all effluent is dispersed 100–150 mm underground, zero cross-contamination pathway exists.
  Refer to the attached Hydraulic Services drawing SKH-4

4.0 Attached Drawings

The following drawings are attached to complement the details provided above.

Fire Services

1. SKF-1 REV A FIRE SERVICES-FIRE STORAGE TANK_FIRE PUMPS_BOOSTER LOCATIONS -

Hydraulic Services

1. SKH-1 REV A HYD SERVICES RAINWATER STORAGE AND POTABLE WATER RETICULATION
2. SKH-2 REV A HYD SERVICES SOLAR PANELS AND RAINWATER HARVESTING AREAS
3. SKH-3 REV A HYD SERVICES WASTE WATER STORAGE AND DISTRIBUTION
4. SKH-4 REV A HYD SERVICES - WASTE WATER GRD LEVEL DISTRIBUTION

Proactive Consulting Engineers Pty Ltd



Gino Fabris
Director
Practising Registered Professional Engineer of Queensland
REPQ: No 06041

LEGEND

- FACILITIES BUILDING / GREEN ROOF
- V1-V3 VILLA APARTMENTS/ GREENROOF
- WATER BODIES LAKE / CREEK
- DB — WATER BODIES DETENTION BASIN
- LAGOON POOL
- COVERED WALKWAY
- DRIVEWAY / WALKWAY
- ROADS (EXISTING)
- TURF — LANDSCAPE_TURF (GRASS AREA)
- LANDSCAPE_P.U.G. (POD UNDERCROFT GARDENS)
- LANDSCAPE_G.B (GENERAL PLANTING AREA)
- LANDSCAPE_E.V (EXISTING VEGETATION)
- LANDSCAPE_ PROPOSED TREES & PALMS

EXISTING TOWN MAINS
EXISTING STREET HYDRANT
PROPOSED WATER METERS
EXISTING SITE WATER SUPPLY
IN GROUND TOWN WATER FIRE SERVICE.
OASIS DRIVE
EXISTING FOOTPATH
EXISTING SAND TRACK TO BEACH RETAINED. NO VEHICLE ACCESS.
PROPOSED SAND TRACK FOR PUBLIC ACCESS TO BEACH.
PROPOSED SAND TRACK ACCESS TO BEACH.
ROAD OVER LAKE
LAKE
DETENTION BASIN 1
DETENTION BASIN 2
FIRE PUMP ROOM PUMPS MOUNTED 1M ABOVE GROUND LEVEL
POOL PUMPS, FILTERS AND RAIN WATER PUMPS AND FILTRATION
HYDRANT SYSTEM WATER STORAGE TANK 600,000L
RAIN WATER STORAGE 125,000L
POOL BALLAST TANK 120,000 L
CENTRAL BUILDING
LOADING / SERVICE
POTABLE SUPPLY TO CENTRAL BUILDING ON UNDERSIDE OF LEVEL 1 WALKWAY
EXTEND EXISTING ROAD TO 6M FOR SHARED VEHICLE ACCESS ROAD
NEW ROAD
900mm WIDE PEDESTRAIN ZONE ON SHARED VEHICLE ACCESS ROAD
EXISTING FOOTPATH
TOWN WATER HYDRANT SUPPLY LOCATION IF REQUIRED BY FIRE BRIGRADE.
HYDRANT BOOSTER
EMERGENCY VEHICLE LOCATION
UNDERGROUND TANK WATER SUPPLY TO BOOSTER AND BOOSTED WATER SUPPLY TO HYDRANT SYSTEM.
UNDERGROUND HYDRANT TANK SUCTION PIPE / TANK WATER SUPPLY TO HYDRANT BOOSTER AND BOOSTED WATER SUPPLY TO HYDRANT SYSTEM.
E.V.
G.B.
P.U.G.
V1
V2
V3

UNDERCROFT (LU)
GROSS BUILDING AREA (GBA) AND GROSS FLOOR AREA (GFA)

AREA NAME	LEVEL	ZONE NAME	GBA TOTAL (sqm)	QTY	GFA (sqm)
VILLA APARTMENTS	LU	WATER TANK	493	33	-
			493 m²		
CENTRAL-	LU	ENTRY LOBBY	593	1	-
FACILITY-	LU	LOGOON POOL TANK	55	1	-
BUILDING	LU	POOL PLANT	55	1	-
	LU	WASTE RECYCLING	48	1	-
			751 m²		
TOTAL			**1241 m²**		

UNDERCROFT (LU)
PARKING AND CIRCULATION

AREA NAME	LEVEL	ZONE NAME	GBA	QTY	GFA
CIRCULATION / ROAD	LU	COVERED VEHICLE CIRCULATION RING.	4734	-	-
CENTRAL CIRCULATION / ROAD	LU	COVERED ROUNDABOUTS AND ROADS	1783	-	
CENTRAL FACILITY BUILDING	LU	COVERED PARKING SPACES	1889	49 TOTAL	-
VILLA APARTMENT	LU	COVERED PARKING SPACES	6561	122 TOTAL	

PLAN _ UNDERCROFT

1:500 @ A1

FIRE SERVICES
FIRE STORAGE TANK, FIRE PUMPS, BOOSTER LOCATION & INCOMING WATER SUPPLY

WONGA RESORT

WONGA BEACH, QLD

OVERALL PLAN _ UNDERCROFT

Scale

Date 18/05/2026

TOWN PLANNING

N

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JOB NO. 5306

DRAWING NO. SKF-1

REV A

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LEGEND

- FACILITIES BUILDING / GREEN ROOF
- V1-V3 VILLA APARTMENTS/ GREENROOF
- WATER BODIES LAKE / CREEK
- DB WATER BODIES DETENTION BASIN
- LAGOON POOL
- COVERED WALKWAY
- DRIVEWAY / WALKWAY
- ROADS (EXISTING)
- TURF LANDSCAPE_TURF (GRASS AREA)
- LANDSCAPE_P.U.G. (POD UNDERCROFT GARDENS)
- LANDSCAPE_G.B (GENERAL PLANTING AREA)
- LANDSCAPE_E.V (EXISTING VEGETATION)
- LANDSCAPE_ PROPOSED TREES & PALMS

EXISTING SAND TRACK TO BEACH RETAINED. NO VEHICLE ACCESS.

PROPOSED SAND TRACK FOR PUBLIC ACCESS TO BEACH.

PROPOSED SAND TRACK ACCESS TO BEACH.

POTABLE WATER RETICULATION RING MAIN ON UNDERSIDE OF APPARTMENT PODS.

ABOVE GROUND RAIN WATER TANK UNDER POOL ON ALL ACCOMMODDATION PODS. 35,000L AVERAGE STORAGE CAPACITY.

IN GROUND BALANCE PIPE CONNECTING ALL INGROUND RAIN WATER TANKS

EXISTING TOWN MAINS

WATER METERS

NEW TOWN MAINS SUPPY TO RUN ON UNDERSIDE OF LEVEL 1 WALKWAY TO FILTRATION PLAN IN PLANTROOM ON UNDERSIDE OF LAGOON POOL

IN GROUND BALANCE PIPE CONNECTING ALL INGROUND RAIN WATER TANKS

80,000LITRE RAIN WATER STORAGE BUFFER TANK

FIRE PUMP ROOM PUMPS MOUNTED 1M ABOVE GROUND LEVEL

POOL PUMPS, FILTERS AND RAIN WATER PUMPS AND FILTRATION

HYDRANT SYSTEM WATER STORAGE TANK 450,000L

POOL BALLAST TANK 120,000 L

CENTRAL BUILDING ON UNDERSIDE OF LEVEL 1 WALKWAY

LOADING / SERVICE

RAINWATER / POTABLE WATER FILTRATION SYSTEM

POTABLE WATER RETICULATION RING MAIN ON UNDERSIDE OF APPARTMENT PODS.

35,000 LITRE INGROUND SEALED RAIN WATER TANK (TYPICAL FOR ALL ACCOMMODATION PODS

2 OFF 60000 SEALED IN GROUND RAIN WATER STORAGE TANKS

EXISTING FOOTPATH

NEW ROAD

EXTEND EXISTING ROAD TO 6M FOR SHARED VEHICLE ACCESS ROAD

900mm WIDE PEDESTRAIN ZONE ON SHARED VEHICLE ACCESS ROAD

OASIS DRIVE

LAKE

DETENTION BASIN 1

DETENTION BASIN 2

ROOL

CENTRAL BUILDING

E.V.

G.B.

P.U.G.

V1 24kL

V2 24kL

V3 24kL

UNDERCROFT (LU)
GROSS BUILDING AREA (GBA) AND GROSS FLOOR AREA (GFA)

AREA NAME	LEVEL	ZONE NAME	GBA TOTAL (sqm)	QTY	GFA (sqm)
VILLA APARTMENTS	LU	WATER TANK	493	33	-
			493 m²		
CENTRAL-	LU	ENTRY LOBBY	593	1	-
FACILITY-	LU	LOGOON POOL TANK	55	1	-
BUILDING	LU	POOL PLANT	55	1	-
	LU	WASTE RECYCLING	48	1	-
			751 m²		
TOTAL			**1241 m²**		

UNDERCROFT (LU)
PARKING AND CIRCULATION

AREA NAME	LEVEL	ZONE NAME	GBA	QTY	GFA
CIRCULATION / ROAD	LU	COVERED VEHICLE CIRCULATION RING.	4734	-	-
CENTRAL CIRCULATION / ROAD	LU	COVERED ROUNDABOUTS AND ROADS	1783	-	
CENTRAL FACILITY BUILDING	LU	COVERED PARKING SPACES	1889	49 TOTAL	-
VILLA APARTMENT	LU	COVERED PARKING SPACES	6561	122 TOTAL	

PLAN _ UNDERCROFT

1:500 @ A1

HYDRAULIC SERVICES
RAIN WATER STORAGE AND DISTRIBUTION
POTABLE WATER RETICULATION RING MAIN

WONGA RESORT

WONGA BEACH, QLD

OVERALL PLAN _ UNDERCROFT

Scale

Date 18/05/2026

TOWN PLANNING

N

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JOB NO. 5306

DRAWING NO. SKH-1

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THE IMAGES ABOVE INDICATE A TYPICAL COMMERCIAL INSTALLATION OF SOLAR PANELS ON A GREEN ROOF, INCORPORATING A STANDARD METHOD FOR HARVESTING RAINWATER FROM THE PANELS. FINAL STRUCTURAL AND MOUNTING DETAILS TO BE DETERMINED DURING THE DESIGN PHASE, TAKING INTO ACCOUNT THE CLIMATIC CONDITIONS OF THE SITE.

TYPICAL SOLAR PANEL ARRAY

76m2 76m2 64m2 76m2 104m2 55m2 188m2 76m2 88m2 88m2 88m2 88m2 64m2 64m2 104m2 180m2 64m2 76m2 76m2 76m2 64m2

64m2 76m2 76m2 64m2 46m2 127m2 64m2 64m2 76m2 88m2 84m2 88m2 64m2 374m2 88m2 64m2 136m2 76m2 374m2 88m2 76m2

PLAN _ ROOF LEVEL

1:500 @ A1

MINIMUM TOTAL SOLAR PANEL RAIN HARVESTING AREA

V1 APARTMENTS	768
V2 APARMENTS	912
V3 APARTMENTS	792
CENTRAL FACILITY	748
LEVEL 1 WALKWAY ROOF	1,209
TOTAL AREA	4429m2

SOLAR PANELS AND RAIN WATER HARVESTING AREAS AND LOCATIONS

WONGA RESORT

WONGA BEACH, QLD

OVERALL PLAN _ ROOF LEVEL

Scale

Date 05/12/2025

TOWN PLANNING

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Proactive Consulting Engineers Pty Ltd

JOB NO. 5306

DRAWING NO. SKH-2

REV A

LEGEND

- FACILITIES BUILDING / GREEN ROOF
- V1-V3 VILLA APARTMENTS/ GREENROOF
- WATER BODIES LAKE / CREEK
- DB — WATER BODIES DETENTION BASIN
- LAGOON POOL
- COVERED WALKWAY
- DRIVEWAY / WALKWAY
- ROADS (EXISTING)
- TURF — LANDSCAPE_TURF (GRASS AREA)
- LANDSCAPE_P.U.G. (POD UNDERCROFT GARDENS)
- LANDSCAPE_G.B (GENERAL PLANTING AREA)
- LANDSCAPE_E.V (EXISTING VEGETATION)
- LANDSCAPE_ PROPOSED TREES & PALMS

2400

EXISTING SAND TRACK TO BEACH RETAINED. NO VEHICLE ACCESS.

PUMPED WASTE WATER RETICULATION MAIN ON UNDERSIDE OF LEVEL 1 WALKWAY AND ALSO SECOND PIPE FOR DISTRIBUTION MAIN FOR CLASS A EFFLUENT WASTE TO IRRIGATION SYSTEMS

PROPOSED SAND TRACK FOR PUBLIC ACCESS TO BEACH.

PROPOSED SAND TRACK ACCESS TO BEACH.

UNDERGROUND WASTE WATER DRAIN T O PUMP STATION

INGROUND SEALED WASTE WATER PUMP SATION

ACCOMMODATION POD WASTE WATER TREAMENT PLANT.

ROAD OVER LAKE

BULK WASTE WATER STROAGE TANKS. CLASS A WASTE 880KL TOTAL CAPACITY SPLIT OVER 3 TANK COMPARTMENTS

FIRE PUMP ROOM PUMPS MOUNTED 1M ABOVE GROUND LEVEL

LAKE

POOL PUMPS, FILTERS AND RAIN WATER PUMPS AND FILTRATION

HYDRANT SYSTEM WATER STORAGE TANK 50000L

FULL HEIGHT SCREEN AROUND WASTE WATER TREATMENT PLANT

DETENTION BASIN 2

RESTAURANT WASTE WATER TREAMENT PLANT

WASTE WATER BUFFER TANK FOR WASTE WATER FROM LOCAL TREATMENT PLANTS

POOL BALLAST TANK 120,000 L

CENTRAL BUILDING

3000 LITRE GREASE TRAP AT HIGH LEVEL IN PLANTROOM

DETENTION BASIN 1

PUMPED WASTE WATER RETICULATION MAIN ON UNDERSIDE OF LEVEL 1 WALKWAY AND ALSO SECOND PIPE FOR DISTRIBUTION MAIN FOR CLASS A EFFLUENT WASTE TO IRRIGATION SYSTEMS

OASIS DRIVE

EXISTING FOOTPATH

WASTE WATER FROM PUMP STATION TO BE PUMPED TO TREATMENT PLANT IN CENTRAL BUILDING VIA HIGH LEVEL RETICULATION MAIN.

LOADING / SERVICE

EXTEND EXISTING ROAD TO 6M FOR SHARED VEHICLE ACCESS ROAD

NEW ROAD

900mm WIDE PEDESTRAIN ZONE ON SHARED VEHICLE ACCESS ROAD

EXISTING FOOTPATH

FULL HEIGHT SCREEN AROUND WASTE WATER TREATMENT PLANT

CONFERENCE CENTRE, SPAR AND GYM WASTE WATER TREAMENT PLANT

WASTE WATER TREATMENT AND FILTRATION PLANT

EXISTING FOOTPATH

NOTE ALL PIPE ROUTES ARE DIAGRAMTIC ONLY

UNDERCROFT (LU)
GROSS BUILDING AREA (GBA) AND GROSS FLOOR AREA (GFA)

AREA NAME	LEVEL	ZONE NAME	GBA TOTAL (sqm)	QTY	GFA (sqm)
VILLA APARTMENTS	LU	WATER TANK	493	33	-
			493 m²		
CENTRAL-	LU	ENTRY LOBBY	593	1	-
FACILITY-	LU	LOGOON POOL TANK	55	1	-
BUILDING	LU	POOL PLANT	55	1	-
	LU	WASTE RECYCLING	48	1	-
			751 m²		
TOTAL			**1241 m²**		

UNDERCROFT (LU)
PARKING AND CIRCULATION

AREA NAME	LEVEL	ZONE NAME	GBA	QTY	GFA
CIRCULATION / ROAD	LU	COVERED VEHICLE CIRCULATION RING.	4734	-	-
CENTRAL CIRCULATION / ROAD	LU	COVERED ROUNDABOUTS AND ROADS	1783	-	
CENTRAL FACILITY BUILDING	LU	COVERED PARKING SPACES	1889	49 TOTAL	-
VILLA APARTMENT	LU	COVERED PARKING SPACES	6561	122 TOTAL	

PLAN _ UNDERCROFT

1:500 @ A1

HYDRAULIC SERVICES
WASTE WATER STORAGE AND DISTRIBUTION LAYOUT

WONGA RESORT

WONGA BEACH, QLD

OVERALL PLAN _ UNDERCROFT

Scale

Date 18/05/2026

TOWN PLANNING

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JOB NO. 5306

DRAWING NO. SKH-3

REV A

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EXISTING VEGETATION

INDICATE WATER WAY EXCLUSION AREA

EXISTING SAND TRACK TO BEACH RETAINED (NO VEHICLE ACCESS)

PROPOSED SAND TRACK FOR PUBLIC ACCESS TO BEACH

PLANTING BUFFER

EXTENT OF WORK

EXISTING DRAIN RETAINED

BELL'S REEF CLOSE

QASIS DRIVE

ROAD OVER LAKE

LAKE

1.5m FOOTPATH

1m FOOTPATH

CENTRAL BUILDING

DETENTION BASIN 1

DETENTION BASIN 2

POOL

ROAD

LOADING / SERVICE

CLASS A TREATED EFFLUENT DISTRIBUTION AREA VIA INGROUND DRIP IRRIGATION SYSTEM

INDICATED IRRIGATION AREA

900mm WIDE PEDESTRIAN ZONE ON SHARED VEHICLE ACCESS DRIVEWAY

LEGEND

- TURF — GRASS AREA
- P.U.G — POD UNDERCROFT GARDENS
- G.B. — GENERAL PLANTING AREA
- E.V. — EXISTING VEGETATION
- D.B. — DETENTION BASIN
- PA1 — PAVING TYPE 1 - STANDARD GREY CONCRETE FOOTPATH
- PROPOSED TREES & PALMS
- PROPOSED TREE GROUPING
- PROPOSED PLANTING BUFFER IN GENERAL PLANTING AREA
- EXTENT OF WORK

LANDSCAPE CONCEPT MASTER PLAN
WONGA BEACH ECO RESORT DEVELOPMENT

Wonga Beach, QLD
May 2026

WASTE WATER GROUND LEVEL DISTRIBUTION AREA (GRADE A TREATED EFFLUENT)

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Proactive Consulting Engineers Pty Ltd

PROJECT NO; 5306
DRAWING NO: SKH-4 REV A

Attachment 2

Clive Steele Partners Pty Ltd

Response to Douglas Shire Council RFI No. 2 dated 14 November 2026

KELLY REASTON

kr

DEVELOPMENT & PROPERTY SERVICES

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CIVIL ENGINEERING DEVELOPMENT APPLICATION REPORT

RESPONSE TO DOUGLAS SHIRE COUNCIL RFI no. 2

Application no: CA 2025_5878/1

PROPOSED RESORT DEVELOPMENT

18 OASIS DRIVE, WONGA BEACH, QUEENSLAND



Date: 14th November 2026

Project No: 21342

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DOCUMENT CONTROL REGISTER

DISCIPLINE: Civil Engineering

Date	Issue	Comments/Revisions
17/11/2026	Draft	draft

Response prepared by :



Tim Hall B.E.Civil B.Arch.
MIEAust. CPEng. RPEQ15280
Principal Architect & Design Engineer
Clive Steele Partners Pty. Ltd.

This document contains commercial information which has been prepared for the attention of the Client on this project. It is confidential and no information contained in this document shall be released in part or whole to any third party without the approval of Clive Steele Partners Pty Ltd

RESPONSE TO DOUGLAS SHIRE COUNCIL R.F.I.

This engineering response report addresses Douglas Shire Council's Request for Further Information (RFI Items 9 to 15 and 18 to 21)

These items relate to traffic, parking, drainage & maintenance and construction matters.

Traffic

Access to the site does use Oasis Drive, as this is the primary address of this site. The property has always been accessed from the end of the partially formed cul-de-sac, as per the original Resort, and the Shire insisted on a single entry point to the site, which we have accommodated. The cul-de-sac services no other properties, so there is almost no traffic to have a conflict with.

The development will have a detrimental impact on the houses in Oasis Drive, which we have acknowledged in our traffic report. Oasis Drive, however, is of a size that is adequate for this volume of traffic, and we do not anticipate any resort traffic doing a u-turn in the cul-de-sac. The current roadway is an Access Street (FNQROC Development Manual), and this road currently complies with that requirement. It has a 6.5 m pavement width with a footpath to one side of the roadway.

We also point out that a residential subdivision on this site, with at least 32 new house lots, and possibly up to 40 lots, would result in a significant change to the traffic in Oasis Drive. A code assessed subdivision of this nature would result in significantly higher traffic volumes in Oasis Drive, an increase of at least 290-320 vpd. in the street. These volumes are still within the capacity of the street.

The road access does not, and never did, effect the existing footpath and bicycle link. The footpath remains untouched in it's current location, with more than adequate safe distance between the pathway and the access driveway.

9. *Turning Path Assessments:*
   Dimensions of the carparks and driveways as documented are larger than required under AS2890.1 , with all of the villas now complying with the standard. We acknowledge that there were two or three villas with narrow driveways in the previous submission. The columns in these villas have been moved, so these driveways now comply. We also note that these access driveways to the villas only serve two apartments, with a maximum of four cars. This is no more than a large house, and a lot less than an apartment block. The driveways are also very short, with adequate sight-lines, so the scale of these driveways is appropriate for the volume.

   We acknowledge that the geometry of some of the carparking is not conventional, but the aisle widths and extended driveways comply with the code. These are <u>not</u> carparks under large scale apartment buildings or a shopping centre, and have a small number of vehicle movements each day.

   We have provided a Turning path assessment for Villa 15. (See drg. TC03). This is the most challenging villa. This satisfies a B99 vehicle as outlined in the Australian Standards, based on a 6.3 m radius. This standard has a large turning circle, much larger than most vehicles.
   The other two unconventional parking arrangements in Villas 18 & 19 have similar issues, but turning distances comply with the standard. All other villas comply with AS2890.1

Amendments to the access driveways and carparks have been made to the following villas:

Villa	Amendment	Comment
1 - 5, 7	nil	Fully compliant with AS2890.1
6	nil	Column has a barrier. Vehicle circulation complies with AS2890.1
8,9,10, 11	Villas moved to the opposite side of the circulation driveway.	Driveways amended. Parking is fully compliant with AS2890.1
12, 13	Longer driveway to 12. Nil change otherwise.	Columns dividing driveway have barrier protection. 3 m clear either side.
14, 16, 17	nil	Fully compliant with AS2890.1
15, 18, 19	nil	Unconventional geometry, but turning circles compliant. See attached turning circle diagram.
20 - 25	nil	Fully compliant with AS2890.1
26, 27, 29	Columns moved.	Driveway width >= 3.0 m.
28, 32	nil	Fully compliant with AS2890.1
30, 31, 33	nil	Unconventional geometry, but turning circles compliant with AS2890.1
Staff Accom.	new facility	Fully compliant with AS2890.1

10. *Site Distance Assessment for the circulation roadway:*
The circulation route around the villas is not a race circuit. This is a low speed environment.

Sight-lines are typically of the order of at least 20 m. with most driveways having significantly more. The columns cannot obscure a full vehicle from any of the driveways. They may obscure part of a vehicle momentarily, but with the sight distances and low speeds we do not anticipate any issues arising from this. See the geometry on the attached drawing C04. We have not assessed every driveway, but have provided a significant sample of various situations.

Driveway speeds of 10 – 12 km/hr (< 3.33 m/s) provide stopping times of the order of 6 seconds, which is more than adequate under AS2890.1 (a 5 sec. gap is recommended with a 1.5 sec. reaction time).
Traffic speed control measures would be introduced if vehicles are found to exceed these speeds. The nature of the circulation road (under cover), along with the columns and multiple driveways, has a psychological affect on people, which results in drivers generally being more careful.
Traffic control measures would be utilised to limit speed if this proved to become an issue. Given the nature of the guests staying in a six star resort, we do not anticipate that this will become a problem
Turning circles are more than adequate around the columns. Driveways generally have been aligned to have a column directly opposite the centre of each driveway, allowing comfortable movement either side of the column. See drawing TC03.

11. Additional traffic management:

a. The design of the internal road network is designed to manage all vehicle movements, with clear and compliant signage to be installed throughout the resort. Detailed traffic management design has not been completed at this time. Give-way signage at this intersection at the bottom of the ramp will resolve any conflicts and prioritise circulation.

   An alternative to this is to introduce a round-a-bout to manage the traffic in this intersection. This option is illustrated in drg. TC10 Appendix A. This would be a very low structure (150 mm nom.) with a fully mountable raised section surround defining the round-a-bout. As stated previously, a detailed traffic management design has not been completed, but will be carried out during the detailed design phase of the project once a D.A. is approved.

   Deliveries are all to the loading bays at ground level under the central building.
   Most bus drop-offs will be at the first floor. Tour buses and other pick-ups may occur on the ground floor.
   Maintenance and service vehicles are generally small electric buggies circulating at first floor level and ground floor level in the Villa zone.
   External tradesman will circulate at ground floor and park under the particular building being worked on. Much of the scheduled maintenance / servicing of pumps and equipment will be accessed from the ground level, outside peak holiday times.

b. There is no requirement for a lay-off area. There is more than adequate room under the central building. The circulation zones under these buildings are all two lanes, so vehicles can stop and queue without interfering with any guests or normal resort operations.
   These 6.2 m wide driveways have room for stationary vehicles and still facilitate circulation.
   The scale of these circulation routes are very large.
   Areas under the Restaurant building and the Conference building, with dual lanes at 6.2 m. wide, would be allocated for staff, small bus parking and dedicated delivery bays. Casual visitors would be in the zone under the level 1 driveway, away from these other operational areas. Staff arrival / departure times are limited and predictable, and generally do not coincide with significant guest travel times.
   The Shire requested one access point. We have responded to that requirement.

c. The oval garden bed under the Central / Conference Building would not be treated as a round-a-bout. This would be clear from the signage and road marking. It provides a separate area for staff parking, deliveries, maintenance vehicles and mini-bus drop-off.
   It is not a general guest area, and it would be signposted as such.

d. Signage would make it clear the only round-a-bout under the building is the one under the circulation / reception building. The others will operate as secondary driveways that loop back to the main circulation route.
   The travel paths as documented are for a 14.5 m Rigid bus. Other vehicles will not be able to overtake or pass whilst the bus is traveling around the round-a-bout. We do not see this as an issue, as it is anticipated that there would be no more than 3-4 movements per day for these large buses.
   All other vehicles in this facility require significantly less room.

e. Support columns and lifts do not interfere with the main vehicle circulation route. This area between the two main buildings is a pedestrian space dedicated to bus drop-off / pick-up and non-resident visitor entry for the restaurant, conference centre, etc.

This zone provides adequate space and safe separation of vehicles and pedestrians, particularly with a bus drop-off or pick-up in this zone.
The two staircases and two lifts provide access straight to reception and the central facilities in the resort.
As noted above, there is only one round-a-bout on each level in the proposal. The two oval islands screen services and provide additional garden beds. Visitor parking would be largely excluded from both of these areas, as it is provided under the main circulation zone.

Parking

Employee accommodation has now been provided on the site in the southern portion of the land south of the drainage swale. The proposal is for up to 25 apartments accommodating approximately 30 people. This represents a significant proportion of the workforce on site. Many others would be Wonga Beach, and we anticipate that not all of them will drive to work.
Access to this southern portion of the land has been facilitated by covering over part of the drainage swale. This also adds room for 12 additional staff carparks.

12. *On-site Parking:*
We believe carparking has been provided in accordance with the planning scheme, and are summarised in the table below. We believe we have more carparks than required under the scheme eg. 1.5 x 66 apartments = 99 carparks. 124 provided.

Type		Ground	Level 1
a.	Check-in parking for resort guests	4	3
b.	Villa guests *	124	0
c.	Staff parking **	30	0
d.	Visitor parking (Day visitors)	22	0
e.	On site bus parking (shuttle and coach)	4	1
f.	Coach bus loading and unloading areas	1	1
g.	Service vehicle parking ***	2	0
h.	Delivery vehicles	2	0
	Total	**189**	**5**

* This is more than required for the Villas. It provides additional space for maintenance vehicles or Villa guests

** There would never be 74 staff on site at any one time, and not every staff member will drive to work on their own. We have also introduced on-site staff accommodation catering for up to 30 staff. We would also expect that this development would provide work for local residents, further reducing the number of vehicles on site.

*** Service vehicles will be parked under the relevant building, so they could be spread out under villas or under the main building. In-house maintenance and servicing would be carried out via golf buggy style vehicles travelling at first floor level, remaining quite separate from the road vehicles.
Many of the villas have more parking than required, offering guest parking and service vehicle parking under most of the villas, even in peak times.

13. *Traffic Sensitivity Analysis:*
As stated in our previous response, adopted rates are similar or higher to equivalent Resort Developments in the Douglas Shire, and are corroborated by a number of Queensland Government documents. We have also provided a range of figures based on average use and peak use. The report does cover the range of figures, which are realistic numbers for a resort of this nature. Queensland legislation does not prescribe a universal number of daily vehicle for every resort apartment. Some of these figures are based on first principles, and are determined by the location and the nature of the resort development, which is largely self contained.

Documents that were referred to in preparing the Traffic Report were as follows:

- Queensland TMR – Guide to Impact Assessment, Dec. 2018
- Douglas Shire council – Port Douglas Daintree Destination Plan 2021
provides typical occupancy rates

Recent or current developments in the Shire:

Fairmont Resort – Port Douglas	253 rooms + food& beverage + Conference Facility peak traffic = 76 vph
69-73 Murphy Street Port Douglas	16 apartment + 18 hotel rooms + food & drink outlet 134 movements per day peak movements = 15 vph

The Murhy Street development has adopted a much lower vehicle movements per day per apartment. The predicted daily peaks are lower for both of the other developments.

14. *Upper level road use:*
The use of the first floor circulation route for emergency parking is a last resort use of this area. Vehicles will be excluded from this area on a day to day basis. It is dedicated to pedestrians and golf buggy style vehicles. It would only be used in the event of a cyclone or significant flood for the few remaining guests and staff.

The ground floor circulation route, at the level adopted, will not go underwater without warning. It is at a level similar to the highest point on the site (other than beside the swale along the southern boundary), and is higher than the Shire's stated flood level. If the circulation road goes under water, many properties in Wonga beach will be flooded.

Floods or cyclone events of that scale do have early warning, and we would expect most if not all guests would evacuate prior to a cyclone event occurring.

15. *SARA Approval:*
The project has SARA approval, including the circulation road spanning over the artificial water feature in the middle of the site.

We do not anticipate any issues obtaining a permit to install culverts in the existing swale drain, as this is also a man-made structure, not a natural water course.

Design Plans:

The circulation road is a structure, and formed part of the approval by SARA.

The ground level height of the structure is determined by a number of factors.

- The minimum level at ground floor to keep above the Shire's published flood level + the stipulated freeboard, resulting in a floor level of RL 3.4 m. We have nominated a road circulation level 200 mm below this free-board height, but above the flood level, as we do not have any habitable buildings at ground floor level, but are trying to minimise the overall height.
- The requirement of a minimum of 4 m. clearance for emergency services vehicles for both ambulance and fire brigade. These vehicles will need to utilise the circulation road within the site to access individual villas.
- The first floor to be above the ultimate wave height in the event of a king tide and cyclone event combined with flooding in the creek. The electrical water supply pump equipment and septic system treatment plants are to be installed just under the first floor level, which is is just above this 1:500 yr. height.

These factors determine the minimum height at first floor level. This results in the overall building height as documented.

18. *Overall building height and maintenance access to the drain:*
The revised proposal includes a culvert drain to the drain along the southern boundary. This removes the need for maintenance access to this area along the southern side of the site. See the response to q.19 for further elaboration.

Drainage corridor and maintenance access

The original proposal did not touch the drain, and flood heights were stipulated by the Shire, so there was no need to comment or review flooding. This site is largely above the flood level, and our nominated floor levels were above this level. Further, the proposed development does not add any additional stormwater into the existing drain. It may actually redirect some water away from this drainage swale.
The Undercroft level has been set at 3.2 m. as this is slightly higher than the natural ground level generally over most of the site. Only the embankment along part of the drain on the southern edge of the site in slightly higher than 3.2 m

The Shire's demand for a five metre right-of-way beside a drainage swale over six metres wide running through private property, and dissecting the south eastern portion of the block is completely unreasonable.
We have proposed covering the swale on this property to the edge of the inundation overlay, eliminating the need for access by the Shire over much of the site.

19. *Drainage swale maintenance corridor:*
The drain will not be re-located, and a new maintenance corridor will not be provided, as it is no longer necessary with the revised proposal.

The revised proposal is to cover part of the swale with box culverts, removing the need for maintenance access to the drain along the south-western side of the site. These would extend from the western property boundary through to the Coastal Inundation overlay towards the

south-eastern side of the site.
There are other benefits to covering the swale:

- It removes the need for maintenance access along the southern boundary adjoining the neighbouring properties.
- The landscaping can be extended into this zone, providing room for additional screening trees between the resort buildings and the neighbouring properties to the south.
- This culvert provides vehicle and pedestrian access to the southern portion of the site, providing an area for additional parking and staff accommodation.

Maintenance access to the eastern part of the drainage swale can be made along the Esplanade without having to drive through the resort.

The box culverts would be protected with a grill at both ends. The grill at the inlet end can be accessed and cleaned from Marlin Drive.
The grill at the outlet should remain clean, and is there to prevent access by crocodiles and people.
The revised drain has been sized to match the existing volume of the swale. The box culverts are smaller than the existing swale, but carry water much more efficiently than a grass swale.

The very shallow swale above the box culverts carries any additional stormwater in a flooding event. The net effect is there is no change to the drainage capacity, but improves the landscape screening to the property. It also simplifies the maintenance of this drain.

20. No comment. Consult with the property Owner

Piling viability and impact

There are a number of piling methods, particularly on a sandy site. The exact footing design however will not be determined until a D.A. has been issued and a full geotechnical analysis of the site has been prepared. There are also alternate footing systems that would be explored once the geotechnical report has been completed, and their advice has been received.

21. *Piling Viability:*
Piling is viable, but it is not the only option that would be explored. A comprehensive geotechnical investigation would only be carried out after obtaining a Development Approval.

The two main piling methods are driven piles or vibratory piling. The second one generates a lot less noise. The method adopted would depend on the Construction program and the availability of piling equipment at the time of construction.
We would expect piling to take approximately 3 months, depending on the weather and access to materials. The timing and methodology would form part of the "Construction Management Plan", developed by the builder and lodged with the Shire at that time.

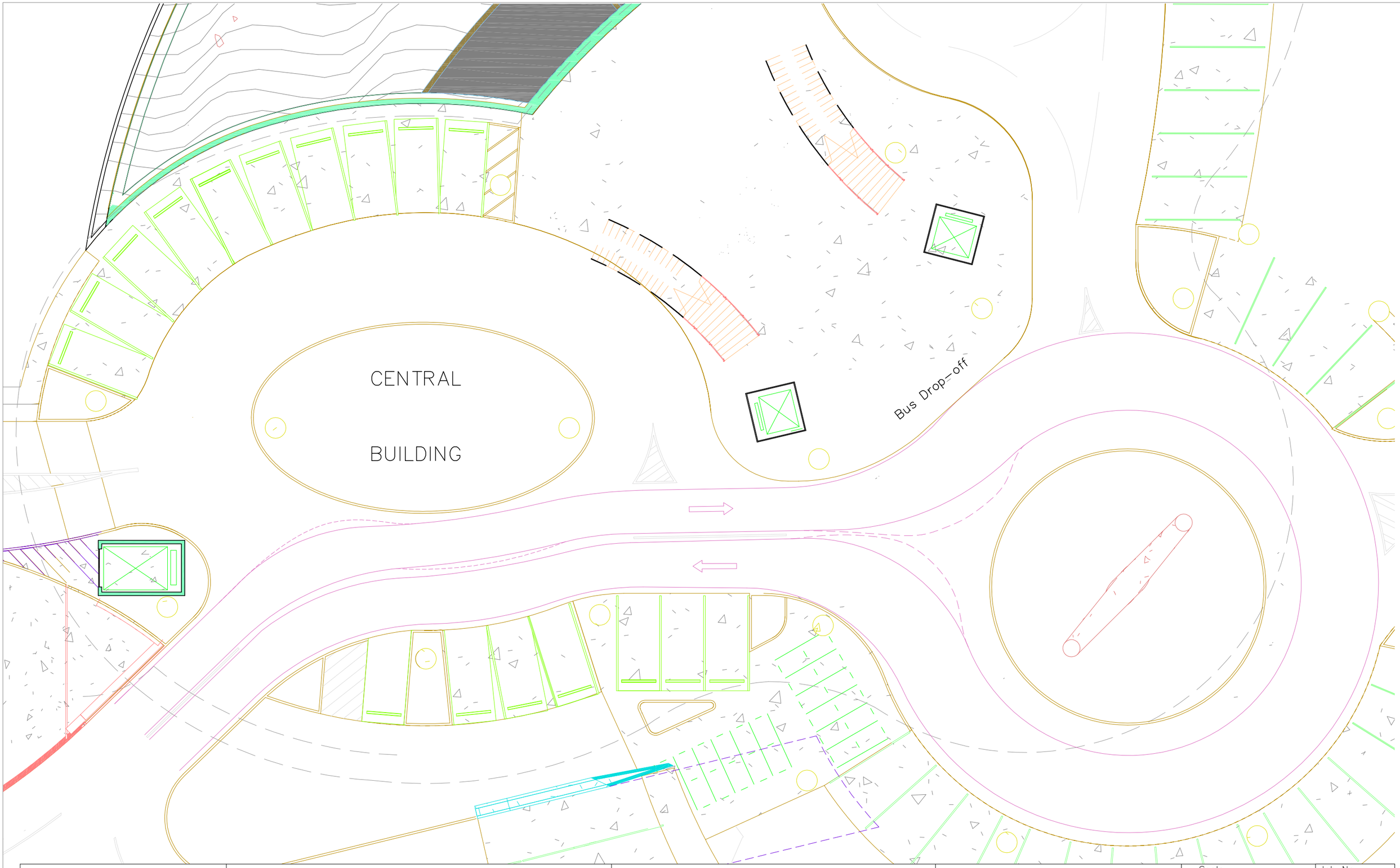
There are alternatives to piled footings.
Large pad footings would also be reviewed as an alternative to piling for the buildings generally. The portion through the dam may be the only piling required on the site.

Driving piles through saturated sand and sandy silts will result in minimal soil disturbance, and is unlikely to cause any significant vibration on the adjoining properties.

APPENDICES

Appendix A - Drawings

Drawings	**TC01**	**Bus turning path @ Ground Floor Level**
	TC02	**Bus turning path @ First Floor Level**
	TC03	**Turning path for Villa 15**
	TC10	**Resort Entry – Round-a-bout Option**
	C10	**Drainage Swale & Culvert Sections**
	C01	**Civil Engineering Site Plan & SW Drainage Plan**
	C02	**Civil Engineering – Earthworks Plan**
	C03	**Landscape Plan**
	C04	**Traffic Sight-lines Plan**
	D01	**Staff Accommodation Plans**



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Civil & Structural Engineers

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Building 6, 62/195 Wellington Rd
Clayton Vic. 3168 Australia

Project:
Wonga Resort
Wonga Beach QLD 4873

Title:
Bus Turning Circles
14.5 m Rigid Bus
Undercroft Level

Scale:
Date: Mar.'26
CAD File:
Drawn: th
Checked:

Job No: 21342
Drawing: TC01
Revision: A

CONFERENCE CENTRE

RECEPTION

INTERPRETIVE CENTRE

car & mini-bus parking

buggy parking

bollards

bus park

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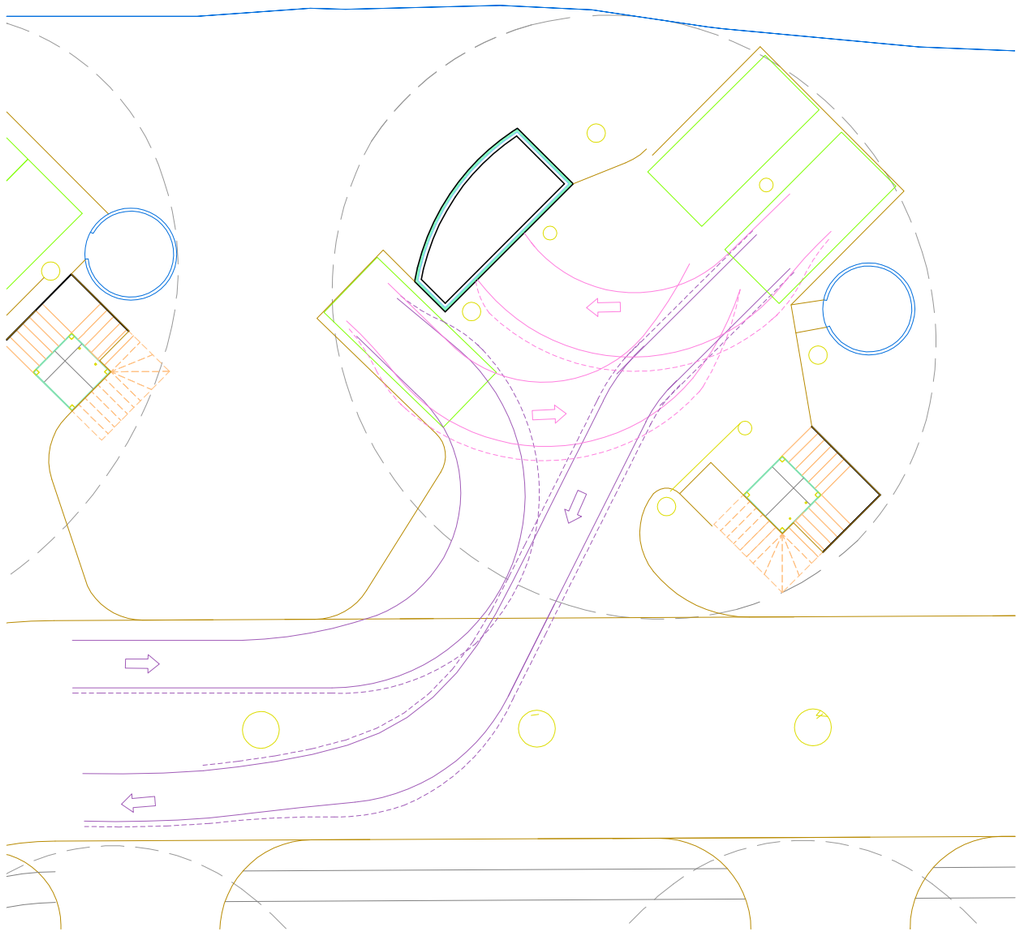
Building 6, 62/195 Wellington Rd
Clayton Vic. 3168 Australia

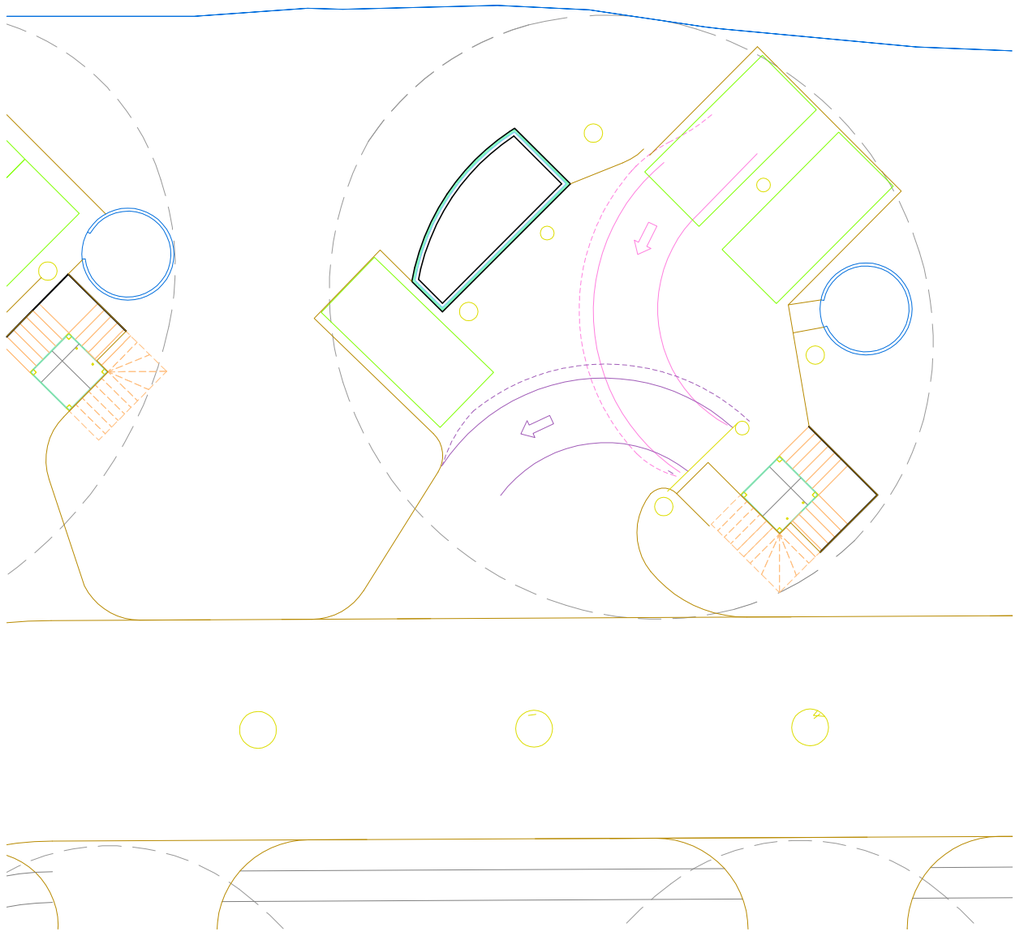
Project:
Wonga Resort
Wonga Beach QLD 4873

Title:
Bus Turning Circles
14.5 m Rigid Bus
Level 1 Reception

Scale: 1:200 @ A3
Date: Mar.'26
CAD File: Civil Eng._Level 1
Drawn: th
Checked:

Job No: 21342
Drawing: TC02
Revision: _





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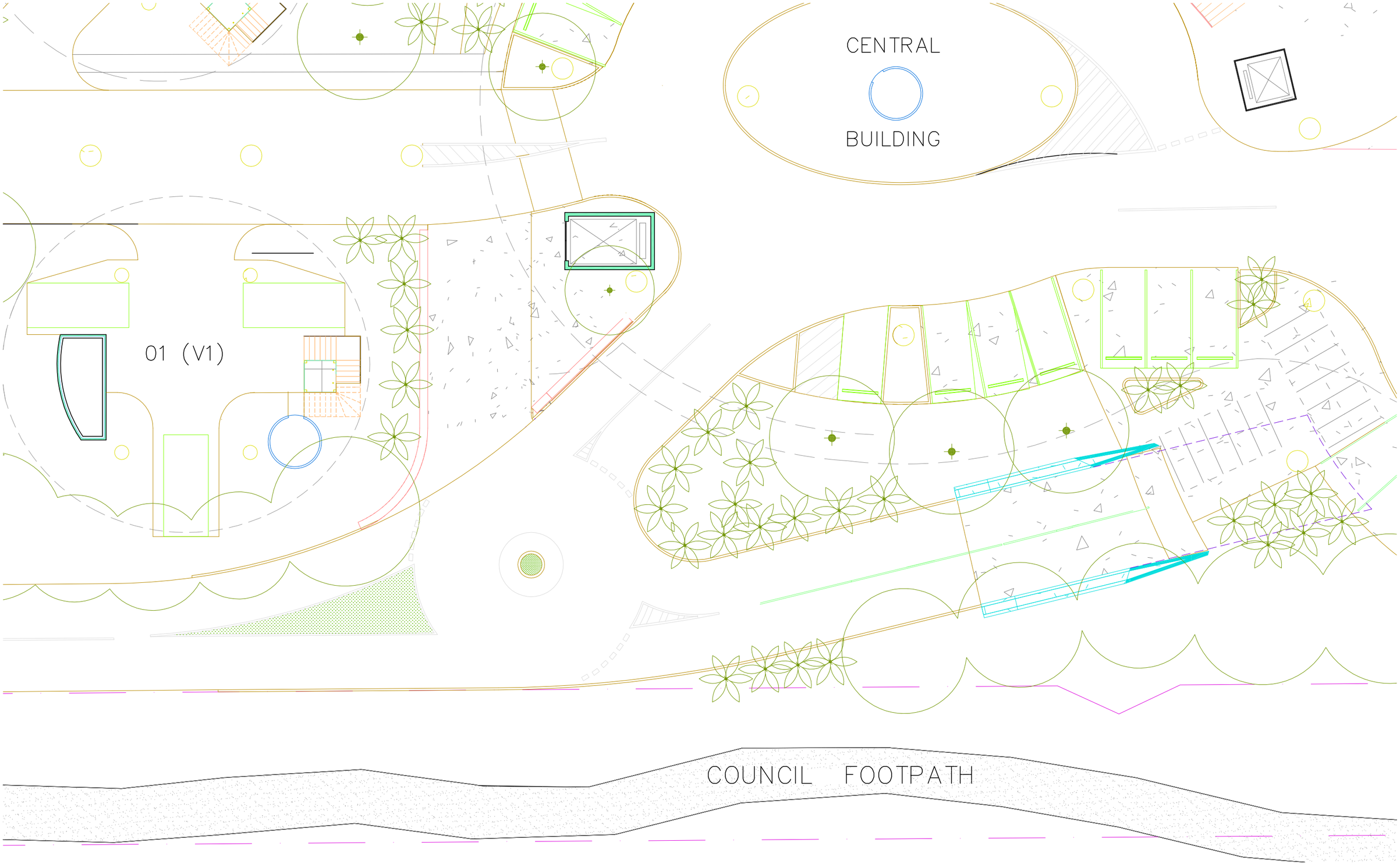
Building 6, 62/195 Wellington Rd
Clayton Vic. 3168 Australia

Project:
Wonga Resort
Wonga Beach QLD 4873

Title:
Car Turning Circles
Villa no. 15

Scale: 1:200 @ A3
Date: Mar.'26
CAD File:
Drawn: th
Checked:

Job No: 21342
Drawing: TC03
Revision: –



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Building 6, 62/195 Wellington Rd
Clayton Vic. 3168 Australia

Project:
Wonga Resort
Wonga Beach QLD 4873

Title:
Resort Entry
Round-a-bout Option
Undercroft Level

Scale:

Date: Nov.'26

CAD File:

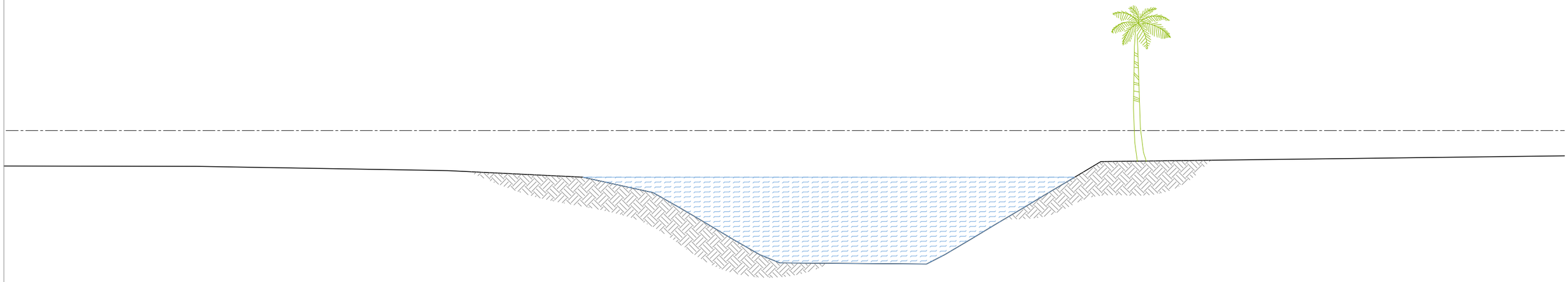
Drawn: th

Checked:

Job No: 21342

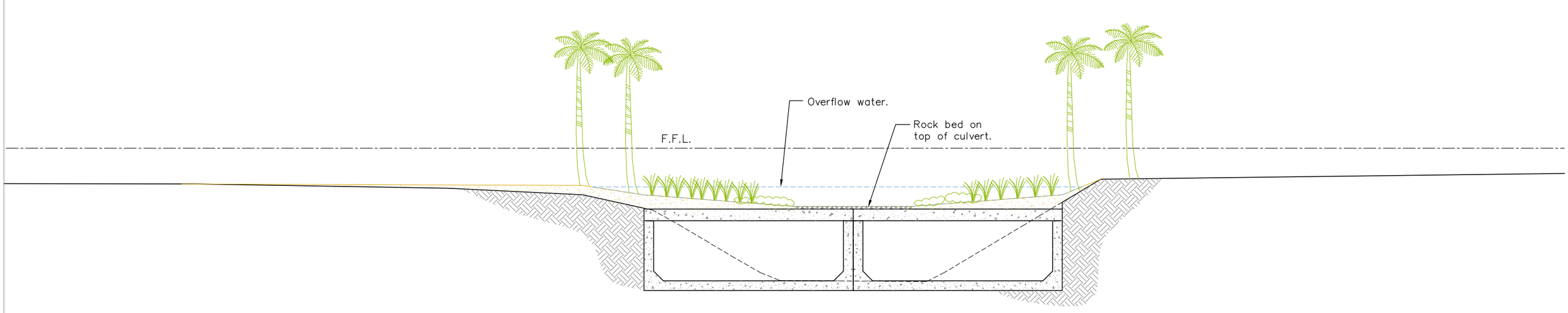
Drawing: TC10

Revision: –



EXISTING DRAIN SECTION

A = 4.38 sqm.



CULVERT DRAIN SECTION

Culverts – A = 3.3 sqm.
Overflow – A = 1.1 sqm.

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Building 6, 62/195 Wellington Rd
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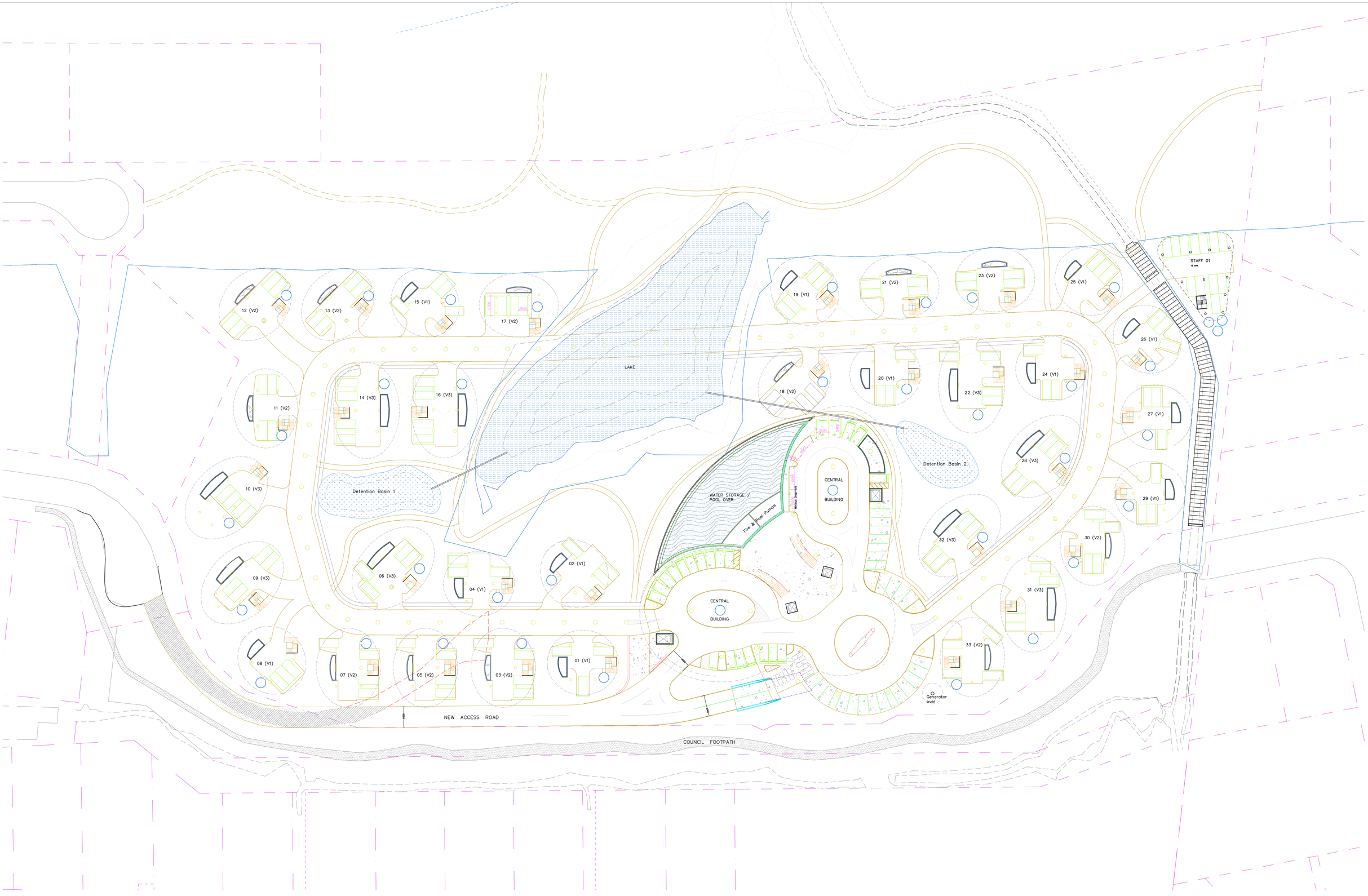
Project:
Wonga Resort
Wonga Beach QLD 4873

Title:
Stormwater Drain
Cross–sections

Scale:
Date: Nov.'26
CAD File:
Drawn: th
Checked:

Job No: 21342
Drawing: C10
Revision: –



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No:	Amendment:	Date:
D	Drain covered & staff accommodation added.	Nov.'26
	Northern circulation road and appartments moved	

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Project:
WONGA RESORT
WONGA BEACH, QUEENSLAND

Title:
VEHICLE CIRCULATION & PARKING
STRORMWATER MANAGEMENT

Scale:	1:500 @ A1
Date:	Apr.2026
CAD File:	21342 – Overall Plan_Undercroft
Drawn:	th
Checked:	

Job No: 21342
Drawing: C01
Revision: D



LEGEND:

- Cut for detention ponds. Max. depth 750 mm.
- Site cut. Ave. depth noted.
- Site fill. Ave. depth noted. site won or imported granular fill.

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No:	Amendment:	Date:
A	Issued for information	June '26
B	paths amended. Staff area added	Nov. '26

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Clayton Vic. 3168 Australia
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Project:
WONGA RESORT
WONGA BEACH, QUEENSLAND

Title:
SITE EARTHWORKS
CUT & FILL

Scale: 1: 500 @ A1
Date: Jun.2026
CAD File: 21342 – Overall Plan_Undercroft
Drawn: th
Checked:

Job No: 21342
Drawing: C02
Revision: B



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No:	Amendment:	Date:

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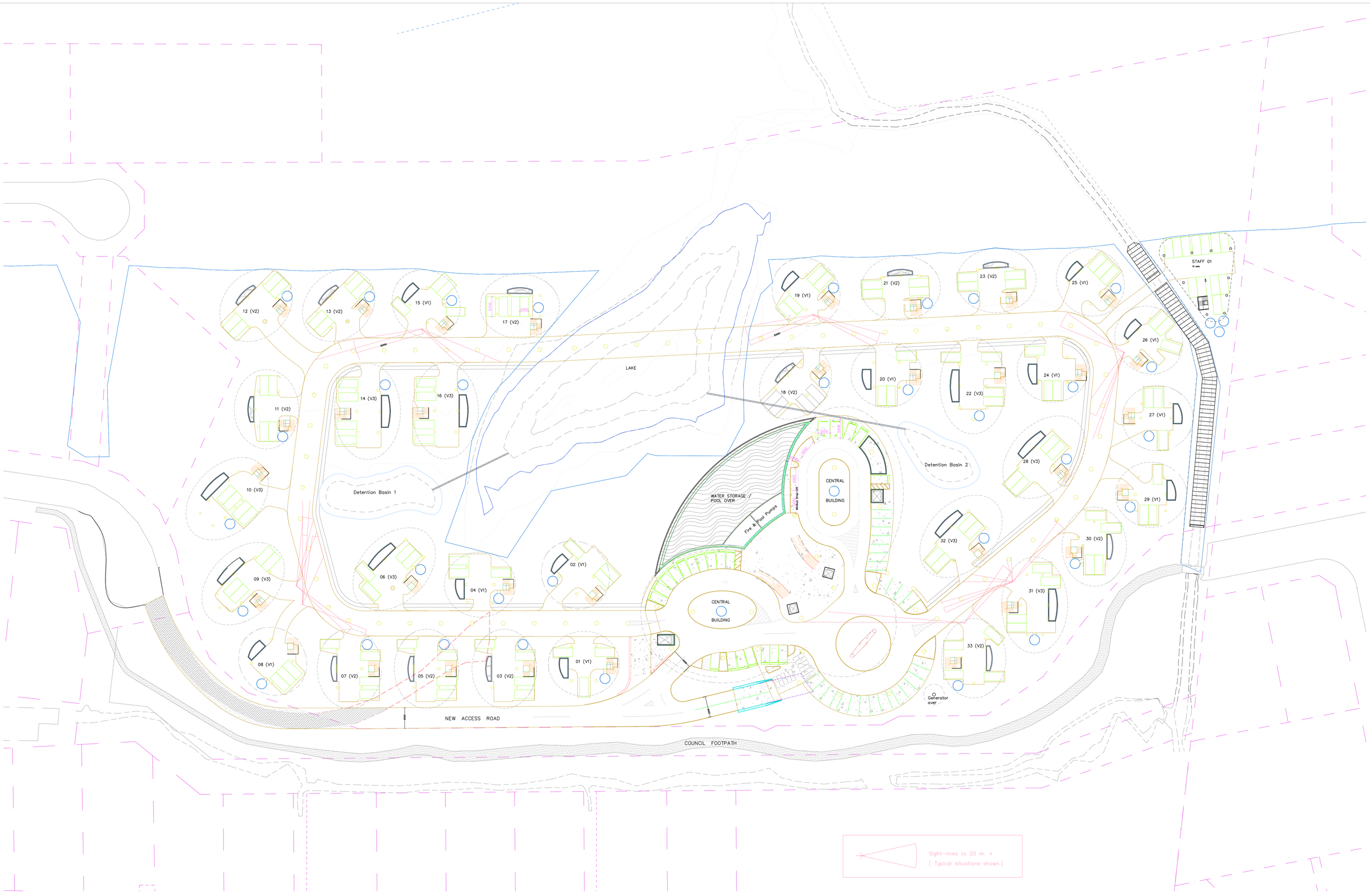
Telephone: (613) 9545 0223
Email: csp@clivesteele.com.au

Project:
WONGA RESORT
WONGA BEACH, QUEENSLAND

Title:
VEHICLE CIRCULATION & PARKING
LANDSCAPING

Scale:	1:500 @ A1
Date:	Nov. 2026
CAD File:	21342 – Overall Plan_Undercroft
Drawn:	th
Checked:	

Job No: 21342
Drawing: C03
Revision: –



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No:	Amendment:	Date:

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Project:
WONGA RESORT
WONGA BEACH, QUEENSLAND

Title:
VEHICLE CIRCULATION & PARKING
SIGHT-LINES

Scale:	1:500 @ A1
Date:	Apr.2026
CAD File:	21342 – Overall Plan_Undercroft
Drawn:	th
Checked:	

Job No: 21342
Drawing: C04
Revision: –



Staff Accommodation – Level 1



Staff Accommodation – Level 3



GF Level Carpark



Staff Accommodation – Level 2

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No:	Amendment:	Date:

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Telephone: (613) 9545 0223
Email: csp@clivesteele.com.au

Project:
WONGA RESORT
WONGA BEACH, QUEENSLAND

Title:
STAFF ACCOMODATION
FLOOR PLANS

Scale: 1:200 @ A1
Date: Nov. 2026
CAD File: 21342 – Overall Plan_Undercroft
Drawn: th
Checked:

Job No: 21342
Drawing: D01
Revision: –