

To Whom It May Concern

RE: Development Application MCUC 2915/2018, 20 Warner St, Pt Douglas. RFI 18007CL

The proposed hotel development at 20 Warner Street, Port Douglas incorporates 12 on-site carparking spaces at ground level. Access to the parking spaces has been assessed by undertaking a review of AS2890.1 requirements for off-street carparking and B99 swept path analysis for entry and egress movements to each parking space. AutoTurn 10.2 software on an AutoCad 2019 platform was used to perform the swept path analysis.

The ground floor carparking is shown on Wolveridge Architects drawing P-02.02 (14/01/19) and is summarised as follows:

- Spaces 1 to 9 - 9 x 90 degree angle parking spaces separated by a central aisle. The parking spaces are 2.4m wide with a 6.5m central aisle and includes provision for 1 x PWD parking space. These parking dimensions comply with AS2890.1 (Table 1.1) user class 1 & 1A for all day commuter & employee parking.
- Spaces 10 to 12 - 3 x 90 degree angle parking spaces located on one side of the existing shared driveway to an existing carpark at the rear of a Macrossan Street site. The parking spaces are 2.4m wide and the shared driveway is approximately 7.4m wide at this location. These parking dimensions comply with AS2890.1 (Table 1.1) user class 1 & 1A for all day commuter & employee parking.
- Parking spaces 3, 4, 5, 7, 8, 9 & 10 require a B99 design vehicle to reverse into the parking space. Parking spaces 1, 4, 5 & 11 will require three point turns for entry or egress as allowed for in AS2890.1 Table 1.1 for user class 1A parking.
- Parking spaces 1 to 9, 11 and 12 comply with AS2890.1 Figure 5.2 with columns and other obstructions clear of the required parking envelope. Parking space 10 has a column within the parking envelope although it can be demonstrated that the parking space can be accessed by a B99 design vehicle albeit within the 300mm vehicle clearances normally used for swept path design.
- B99 swept paths for entry and egress to each parking space is shown on Rodgers Consulting 180307-SK1 to SK12. Autoturn standard templates were modified for the minimum turning radius allowed for in AS2890.1 Fig B3 & B5.
- The Wolveridge architects hotel drawings show a clearance of 2.8m for the ground floor to FFL 3.10 to RL 5.90 (first floor soffit). This complies with AS2890.1 5.3 for a minimum headroom of 2.3m (PWD access) and 2.5m (AS2890.6) for the PWD parking space. Carparks 1 to 9 will generally have greater headroom due to the grades and falls required to match the existing shared driveway and this can be confirmed during final design.

Proposed carpark levels range from RL2.5 to RL 3.0. Carparks 10 to 12 range in level between 3.40 and 3.70 and meet the 2.2m minimum head requirement (no PWD access).

- The proposed carpark levels are compliant with AS2890.1 in terms of grade and crossfall including PWD access. This can be confirmed during final design.
- An MRV laundry service vehicle will attend the development kerbside. The laundry from the proposed hotel is intended to be transported to the kerbside in caged trolleys on castors and loaded in a medium ridged vehicle parked kerbside in front of the development. Pickup/ dropoff times will be early morning to avoid traffic congestion.

It is acknowledged that this development is located in a part of Port Douglas that may be affected by flooding in certain events. This is evidenced by the floor level of 3.10 (set by the local flood level) and existing kerb invert level of 1.87 in Warner Street. The stormwater design will include measures to ensure a non-worsening of the Warner Street drainage due to this development. Stormwater drainage detention will be incorporated with this development to ensure that the stormwater discharge from this development is not greater than from the existing undeveloped site. Because of the difference in height between the Hotel ground floor level and the Warner Street kerb, a stormwater detention tank can be built under the first floor. The tank can approximately 1.0m deep and can discharge to the Warner Street kerb with 100 dia max. pipes. Preliminary calculations in accordance with the recommendations of the Queensland Urban Drainage Manual (QUDM) are attached with the following average basin sizes:

Q2 3.26 m3

Q5 4.54 m3

Q10 5.33 m3

Q20 6.39 m3

Q100 8.03 m3

Adopting the Q100 storage volume for the worst case scenario will require a sub floor tank 4.0m long x 2.0m wide x 1.0m deep or 2.8m x 2.8m x 1.0m deep. The tank will require a sealed cover to the ground floor for maintenance access and will have an overflow outlet at the top of the tank to Warner Street. These calculations assume a fraction impervious of 0.9 for the entire site and is considered conservative due to the fact that numerous planter beds will be discharged to Warner Street directly bypassing the detention tank.

Final stormwater drainage detention details can be confirmed during final design.

Yours faithfully

RODGERS CONSULTING ENGINEERS



Heath P Rodgers

B E (Hons) MIE Aust RPEQ 7859



GILBOY HYDRAULIC SOLUTIONS

GJ & TL GILBOY PTY LTD / ACN: 85 105 215 432 / ABN: 105 215 432

Unit 4/131 Scott Street, Bungalow, Cairns

PO Box 857N, North Cairns. 4870

Phone: (07) 4051 5116 Fax: (07) 4051 5016 Mobile: 0439 664623

Email: greg@gilboy.com.au

4th February 2019

The Chief Executive Officer
Douglas Shire Council
PO Box 723,
Mossman. 4873

Attention: Building / Planning Department

Re:

MICRO HOTEL, 20 WARNER STREET – PORT DOUGLAS
DEVELOPMENT APPLICATION MCUC 2915/2018

We wish to advise that we have been commissioned by Wolveridge Architects to assist them with providing answers to the hydraulic services queries raised by Douglas Shire Council Request for Information in Development Application MCUC2915/2018 dated 22nd November 2018.

We have specifically been asked to provide commentary to Item 1 – Storm Tide Inundation and Item 2 – Other Engineering Infrastructure and the below forms the basis of our assessment or calculations relative to this matters and this proposed development.

1.0 Building Stormwater:

Whilst the detailed site information will ultimately come from a qualified RPEQ Engineer, the following information has been formulated to assist with the calculations of stormwater discharge from this site.

For the purposes of our calculations we have used a site rainfall catchment area of 664m² and a runoff coefficient of 1.0.

Roof sheeting will generally be colorbond steel screw fixed at pitches to suit building height limitations and manufacturers installation instructions.

Gutters are proposed to be eaves style, with material selection to be either colorbond steel to match the roof sheeting or stainless steel to suit the harsh marine beachfront location.

Downpipes will generally be painted PVC connecting to an in-ground gravity drainage system throughout the site.

Planters and open deck area drainage will be separated from roof drainage systems where possible to provide independent stormwater drainage systems facilitating quick removal of rainwater from site.

Planters will be fitted with in planter sock covered agricultural drainage to drain the bottom of the planters, with high level planter grates installed at high level to deal with large storm events or slow drainage through the planter soil system.

The anticipated volume of stormwater discharging from this property in a 1:20 year storm is 52 lit/sec with 66 lit/sec discharging from the site in a 1:100 year storm event.

Generally stormwater will be discharged from site using 4 x 150mm diameter stormwater pipes or 2 x 225mm diameter pipes discharging to front boundary grated surge pits, depending on the availability of pipe cover and connection point invert levels.

Grated pits will be installed where possible, both internal and external of the site to provide surge relief in the system in the event of high tide or large storm events. This will relieve the system of surcharge in large volume events and will prevent the back up of stormwaters internal of the property, minimising damage to building finishes and localised flooding within the building.

2.0 Other Engineering Infrastructure:

For the purposes of water usage and sewerage generation we have assumed the following parameters:

- Ground Floor Arrival Area including Café and Bar – No allowance for any tenancy space or retail facilities,
- First Floor consisting of 12 x 1 Bedroom Suites,
- Second Floor consisting of 12 x 1 Bedroom Suites,
- Third Floor consisting of 12 x 1 Bedroom Suites,
- Each Suite containing 1 x Basin, 1 x WC and 1 x Shower – No allowance for baths, laundries or sinks,
- Maximum occupancy of 72 persons plus 10 day staff.

2.1 Anticipated Water Demand:

Based on the above we have calculated the domestic water flow required to service this development of 2.2 litres/sec equating to 7,920 litres per hour. The calculated fire flow demand will be 10.0 litres/second to meet AS2419 hydrant codes.

This results in a 100mm diameter water main connection for the fire system and a 50mm diameter connection for the domestic water system. It is anticipated that a single dual supply 100mm diameter magflow water meter will be required to be provided to service this development.

The water meter will be located at the boundary and include for the appropriate backflow prevention requirements relative to the Australian Standards and local authority requirements.

An existing 100mm diameter council water main exists in the footpath in front of this property and is available for connection. At this stage preliminary testing of the water mains for flow and pressure analysis has not been undertaken, so it is assumed that the mains will deliver the requirements to meet the codes similar to the adjoining building services.

2.2 Anticipated Sewer Inflow:

Using the above site occupancy numbers, we have calculated that the proposed development will generate 246 Fixture Units across this site in accordance with AS3500.

This equates to a maximum dry weather flow rate into the existing sewer of approximately 4.66 litres/sec.

An existing 150mm diameter council sewer main exists in the roadway on Warner Street in front of this property. It is an end of line sewer that appears to service one upstream unit development before transgressing west and picking up the downstream adjoining properties.

Should you require further information or clarification on this matter, please do not hesitate to contact the undersigned on (07) 4051 5116.

Yours faithfully
GILBOY HYDRAULIC SOLUTIONS



.....
G.J. GILBOY

25/01/2019

Douglas Shire Council
PO Box 723
Mossman
Qld 4873

Dear Sir/Madam,

RESPONSE TO INFORMATION REQUEST (Council Ref. MCUC
2915/2018(DocID881197) dated 22 Nov.2018 FOR 20 WARNER STREET,
PORT DOUGLAS; LANDSCAPE.

Please find attached Revision B of Landscape Drawings that now include a Level1 Planter Box Drainage Sheet (LS_04) and a corrected plant species notation on Sheet LS_01. The summary below is in response to points 7a. and 8a. of the above information request.

7a. Please review the Landscape Sheet LS_04. It is proposed;

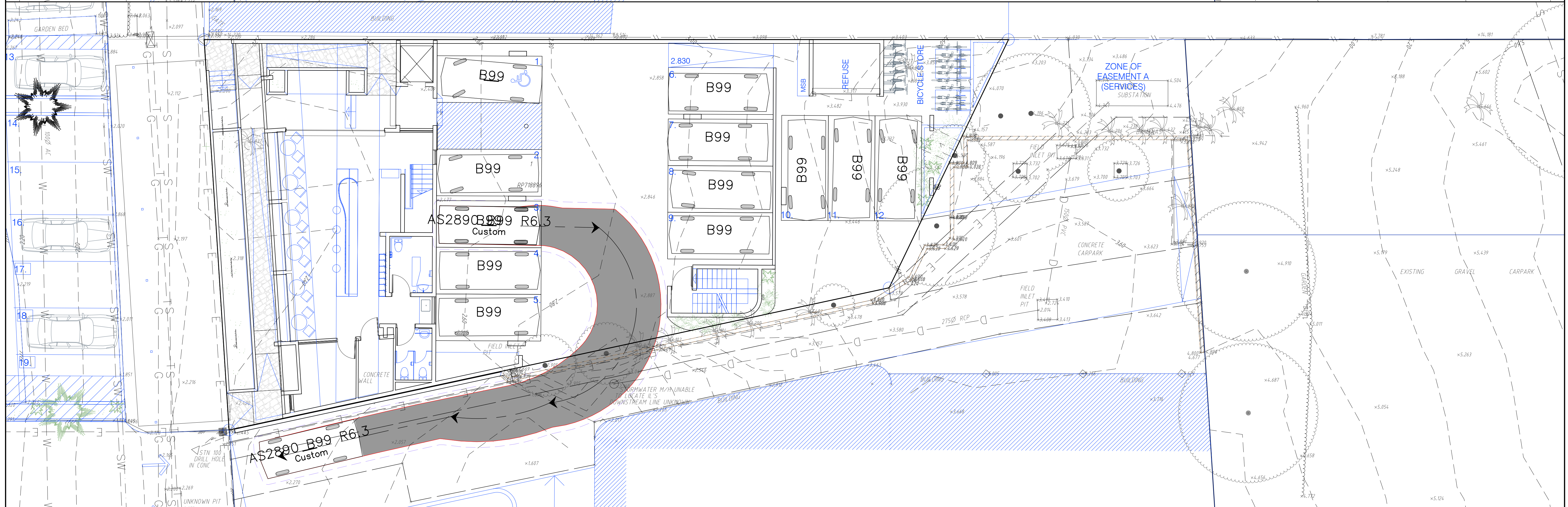
1. that each planter box contains a Primary Storm Water Pit, which is connected to a separate storm water system only connected to planter boxes and NOT to the roof run-off storm water system.
2. Each primary pit is connected directly through the Level 1 slab and attached to a garage wall, running vertically to the garage slab to be directed to approved discharge area. This will eliminate any encroachment of storm water pipes into headspace on the parking level.
3. In the long planter box on the north-western boundary a series of secondary storm water pits would be connected to the primary pit by running the pipes on top of the floor of the planter box.
4. The base of the planter box and sides of the planter box connected to internal walls shall have plastic 50mm Drainage Cell to allow the free movement of moisture to collection points.
5. Agricultural pipe beside the Drainage cell will be connected to 100mm PVC Storm Water pipe, directly below the pits to allow ease of inspection for debris and plant roots. This will also allow for ease of cleaning of the system.

8a. Please see the revised Landscape Sheet LS_01. The notation "CAR.P" has been corrected & now reads "GAR.P" for *Gardenia psidioides*.

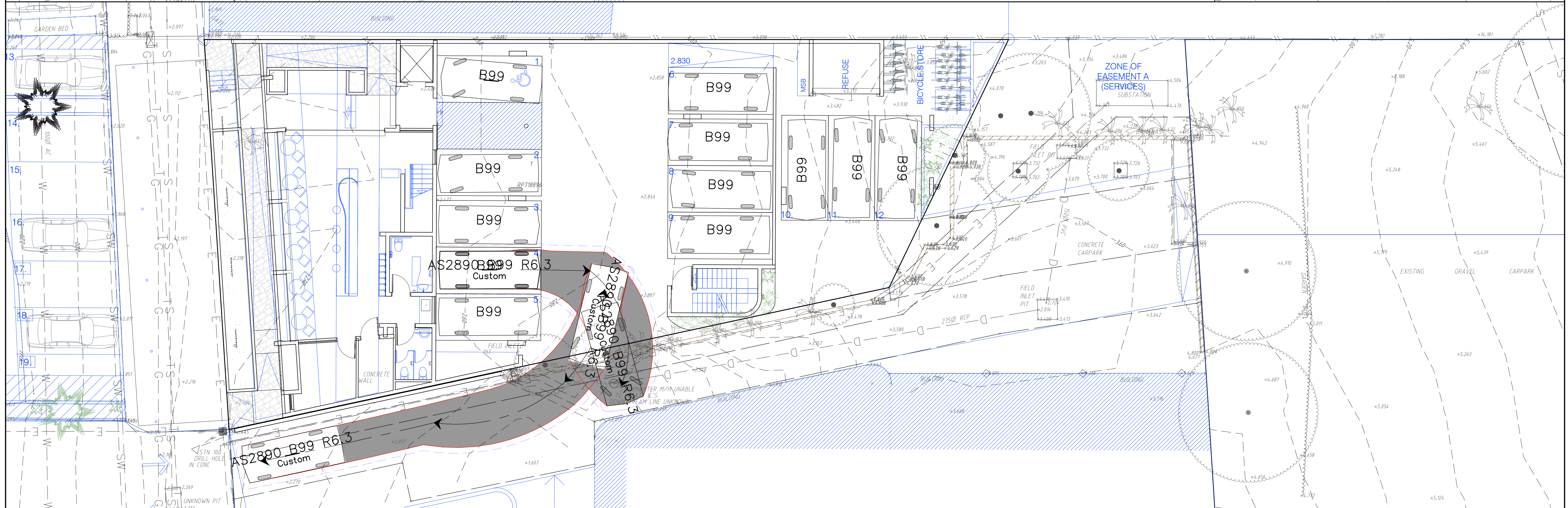
Please don't hesitate to contact me for any further information.

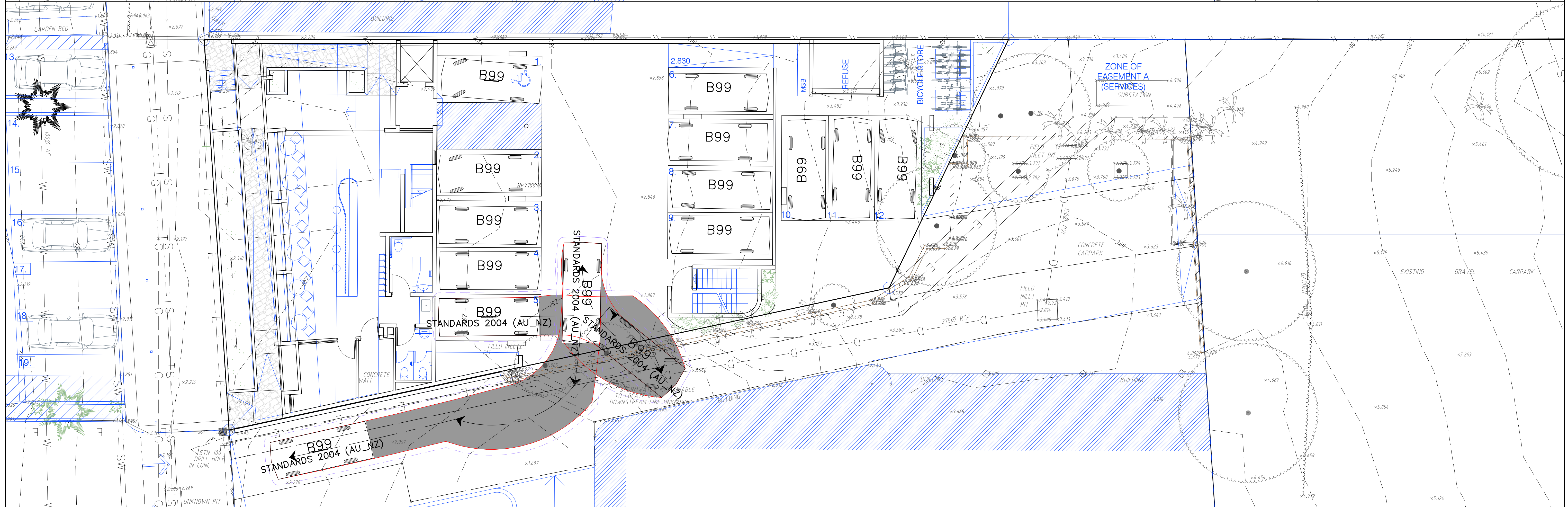
Kind Regards,

John Sullivan
HORTULUS LANDSCAPES

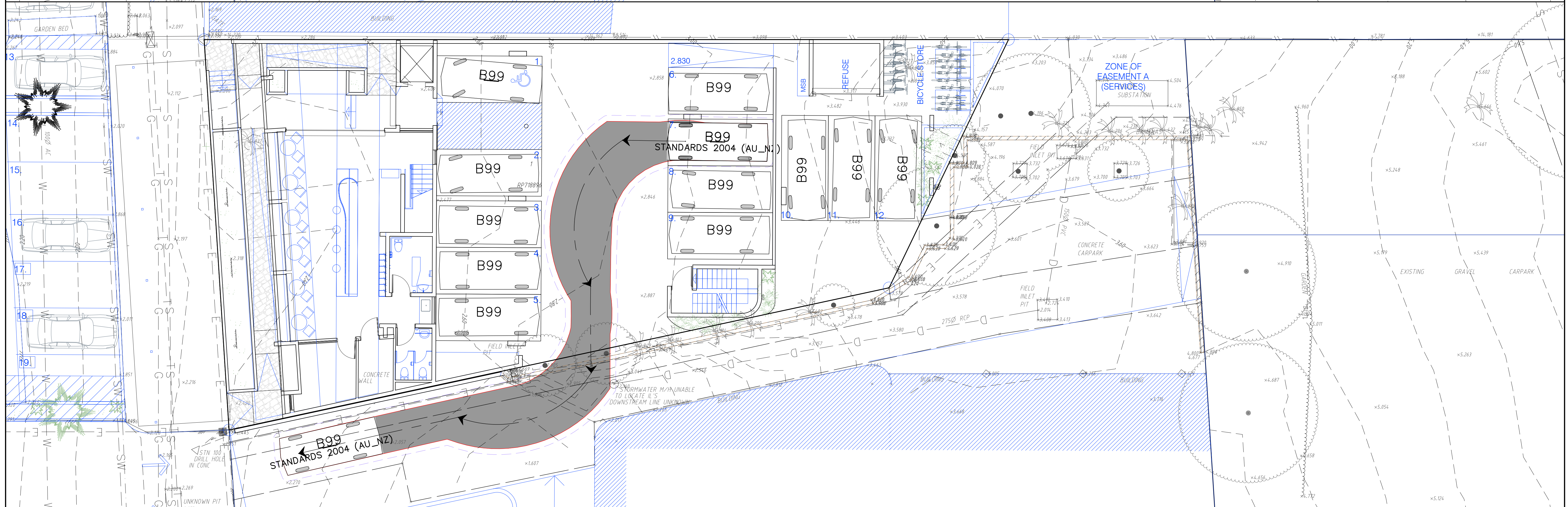


P2	B99 REVISED FOR AS2890 1 R6 3m RADIUS PRELIMINARY ISSUE	29/01/19 16/01/19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
----	--	----------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

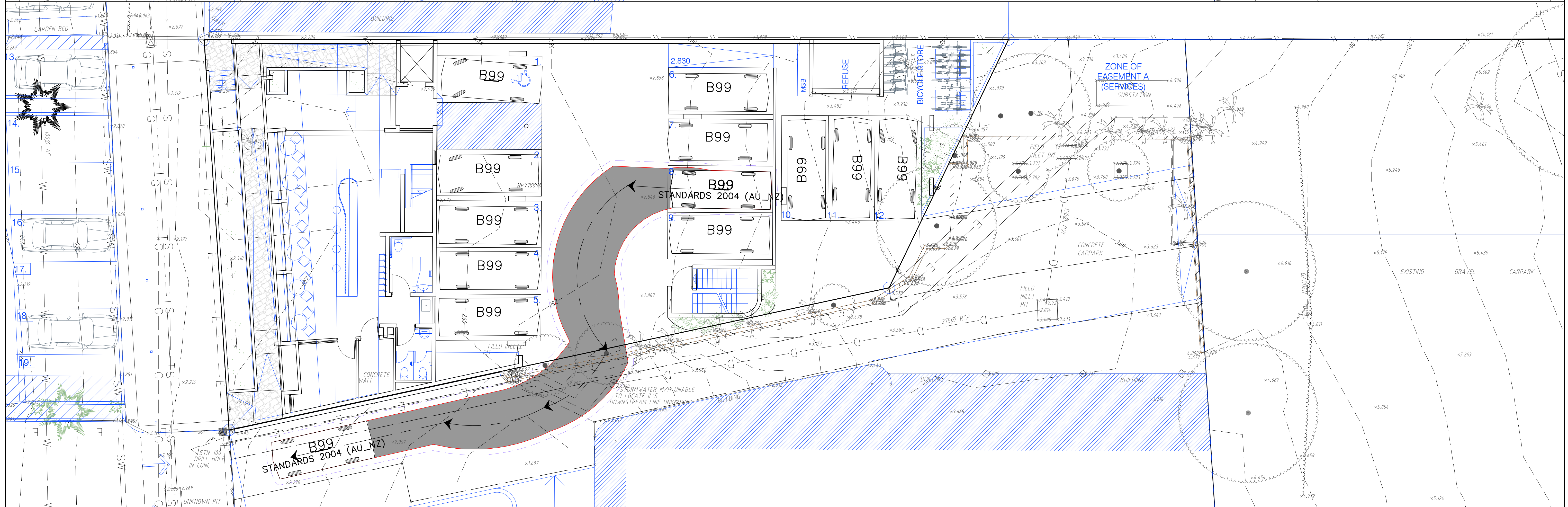
[illegible]



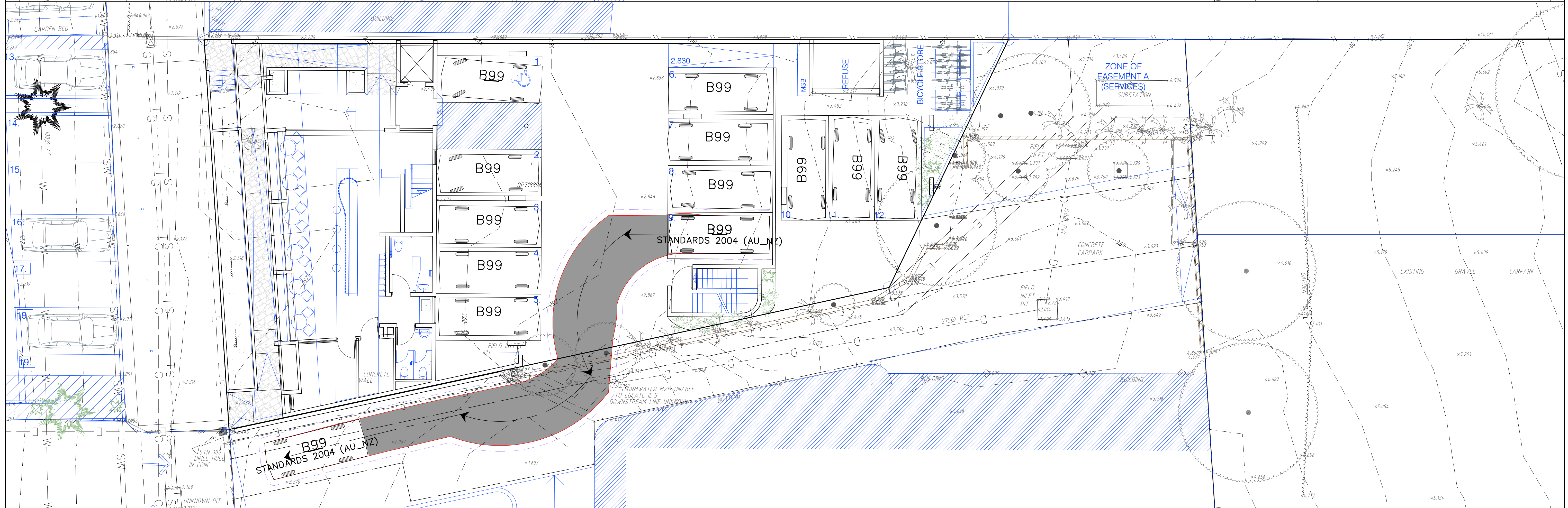
P2	B99 REVISED FOR AS2890 1 R6 3m RADIUS PRELIMINARY ISSUE	29/01/19 16/01/19					THE ENGINEERING NOTES ATTACHED TO THE CERTIFICATE FOR THIS JOB NUMBER ARE PART OF THE DRAWINGS, AND ARE TO BE ATTACHED TO EACH SET OF DRAWINGS TO BE WORKED FROM. THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED OR USED WITHOUT THE AUTHORITY OF RODGERS CONSULTING. DO NOT SCALE FROM THIS DRAWING. THE CONTRACTS ARE TO VERIFY ALL DIMENSIONS BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE DESIGNER ANY DISCREPANCIES PRIOR TO COMMENCING RELATED WORK.	CLIENT: SCALI NOMINEES PTY LTD PROJECT: WARNER STREET HOTEL 20 WARNER STREET PORT DOUGLAS 124 SPENCE STREET P.O. BOX 1769 CAIRNS 4870 PHONE: 07 4051 9466 FAX: 07 4051 9477 admin@rogersconsulting.com.au	TITLE: B99 DESIGN VEHICLE SWEEP PATHS CARPARK 5 ENTRY AND EXIT DRAFTED: EWK DESIGNED: EWK SCALE: 1:100 (A1) REVIEWED: A1 PLAN PROJECT NO: 180307 APPROVED: DWG NO: SK5 REV: P2
REV	DESCRIPTION	APP'D	DATE	REV	DESCRIPTION	APP'D	DATE		

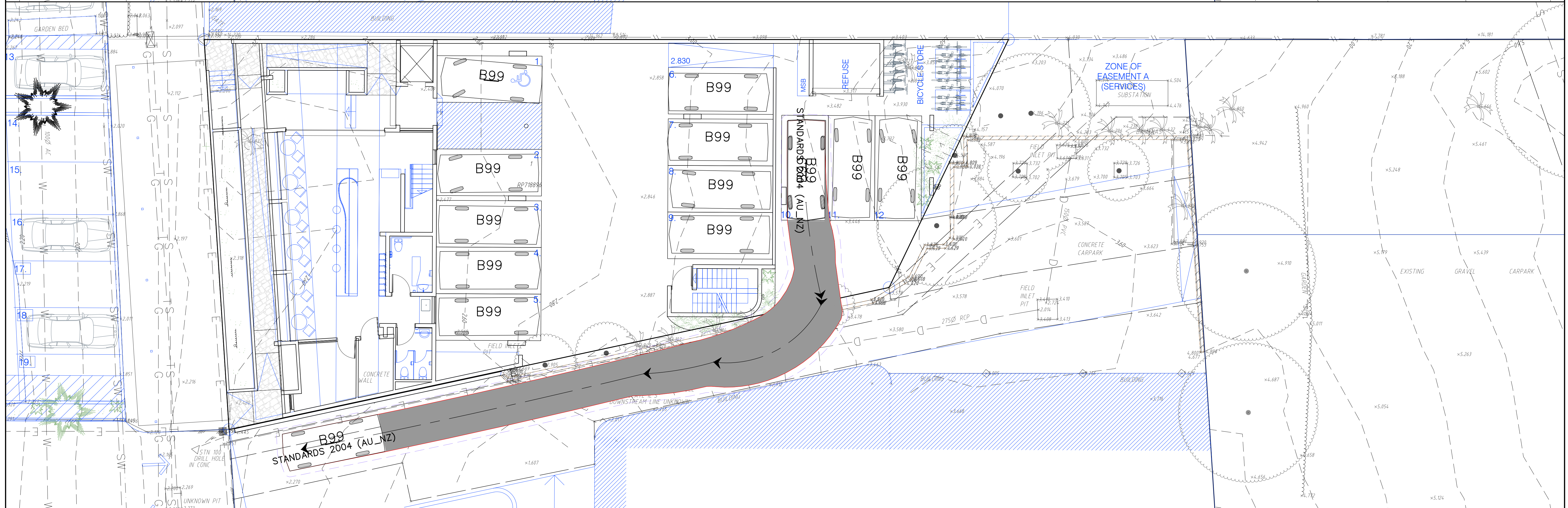


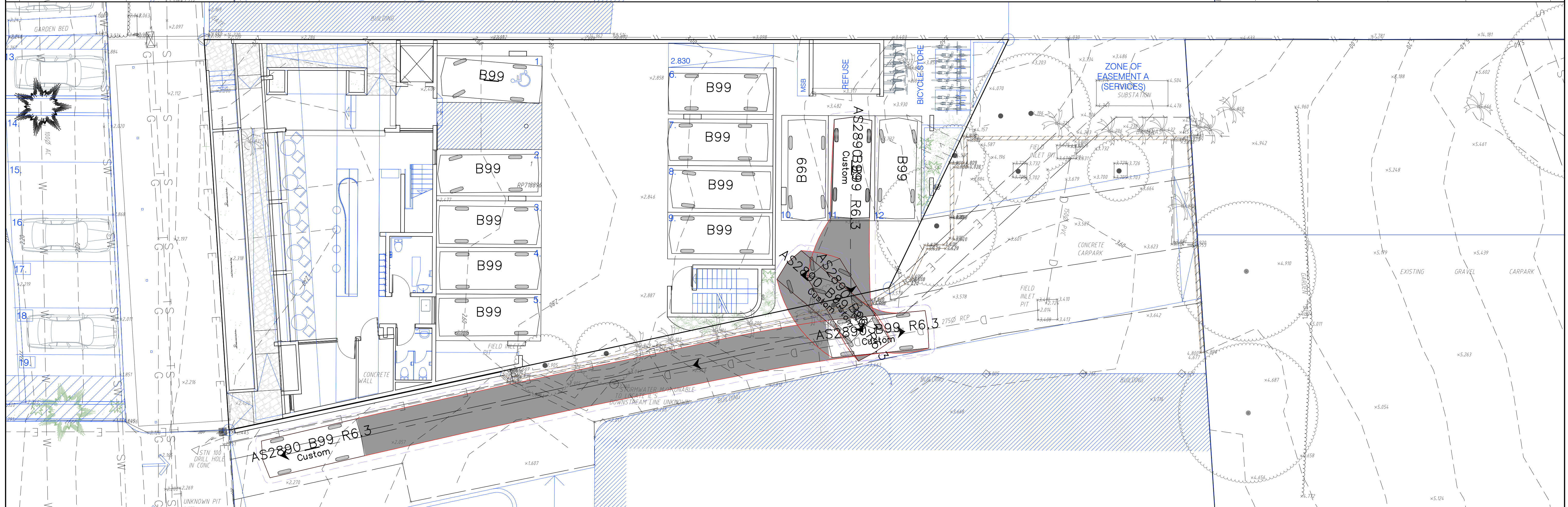
P2	B99 REVISED FOR AS2890 1 R6 3m RADIUS PRELIMINARY ISSUE	29/01/19 16/01/19						THE ENGINEERING NOTES ATTACHED TO THE CERTIFICATE FOR THIS JOB NUMBER ARE PART OF THE DRAWINGS, AND ARE TO BE ATTACHED TO EACH SET OF DRAWINGS TO BE WORKED FROM. THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED OR USED WITHOUT THE AUTHORITY OF RODGERS CONSULTING. DO NOT SCALE FROM THIS DRAWING. THE CONTRACTS ARE TO VERIFY ALL DIMENSIONS BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE DESIGNER ANY DISCREPANCIES PRIOR TO COMMENCING RELATED WORK.	CLIENT: SCALI NOMINEES PTY LTD PROJECT: WARNER STREET HOTEL 20 WARNER STREET PORT DOUGLAS	TITLE: RODGERS CONSULTING ENGINEERS 124 SPENCE STREET P.O. BOX 1769 CAIRNS 4870 PHONE: 07 4051 9466 FAX: 07 4051 9477 admin@rogersconsulting.com.au	TITLE: B99 DESIGN VEHICLE SWEPT PATHS CARPARK 7 ENTRY AND EXIT DRAFTED: EWK DESIGNED: EWK SCALE: 1:100 (A1) REVIEWED: A1 PLAN PROJECT NO: 180307 APPROVED: DWG NO: SK7 REV: P2
P1	REV DESCRIPTION	APP'D DATE	REV DESCRIPTION	APP'D DATE							



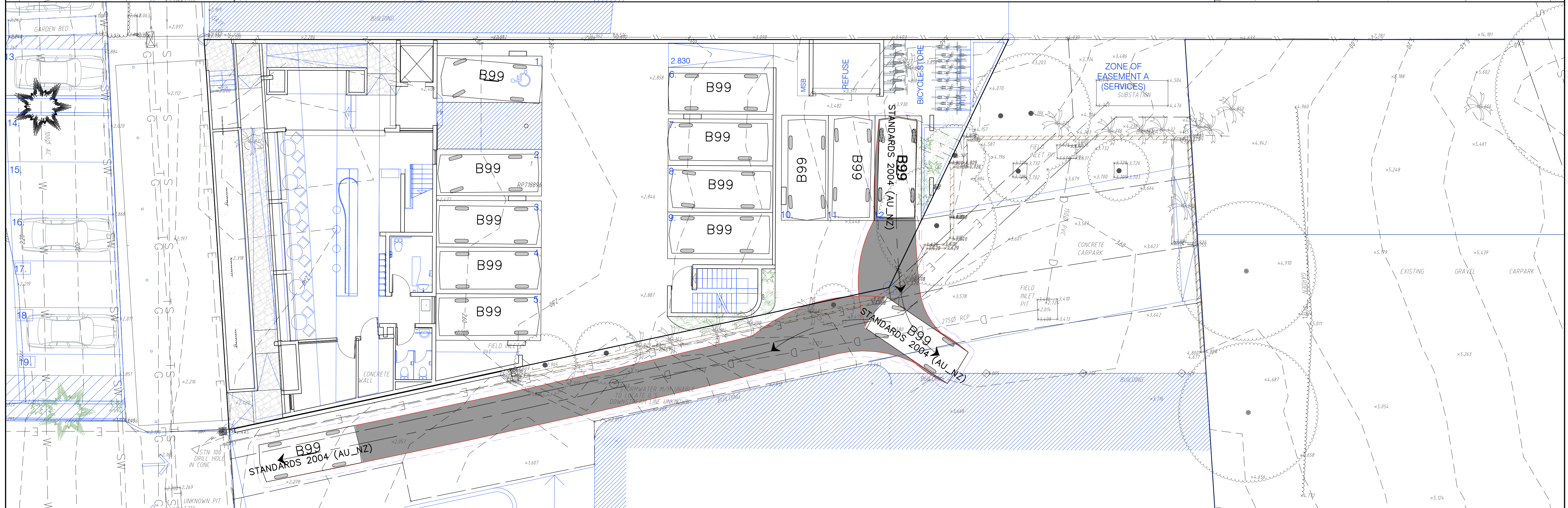
P2	B99 REVISED FOR AS2890 1 R6 3m RADIUS PRELIMINARY ISSUE	29/01/19 16/01/19					THE ENGINEERING NOTES ATTACHED TO THE CERTIFICATE FOR THIS JOB NUMBER ARE PART OF THE DRAWINGS, AND ARE TO BE ATTACHED TO EACH SET OF DRAWINGS TO BE WORKED FROM. THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED OR USED WITHOUT THE AUTHORITY OF RODGERS CONSULTING. DO NOT SCALE FROM THIS DRAWING. THE CONTRACTS ARE TO VERIFY ALL DIMENSIONS BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE DESIGNER ANY DISCREPANCIES PRIOR TO COMMENCING RELATED WORK.	CLIENT: SCALI NOMINEES PTY LTD PROJECT: WARNER STREET HOTEL 20 WARNER STREET PORT DOUGLAS	TITLE: RODGERS CONSULTING ENGINEERS 124 SPENCE STREET P.O. BOX 1769 CAIRNS 4870 PHONE: 07 4051 9466 FAX: 07 4051 9477 admin@rogersconsulting.com.au	TITLE: B99 DESIGN VEHICLE SWEEP PATHS CARPARK 8 ENTRY AND EXIT DRAFTED: EWK DESIGNED: EWK SCALE: 1:100 (A1) REVIEWED: A1 PLAN PROJECT NO: 180307 APPROVED: DWG NO: SK8 REV: P2
REV	DESCRIPTION	APP'D	DATE	REV	DESCRIPTION	APP'D	DATE			

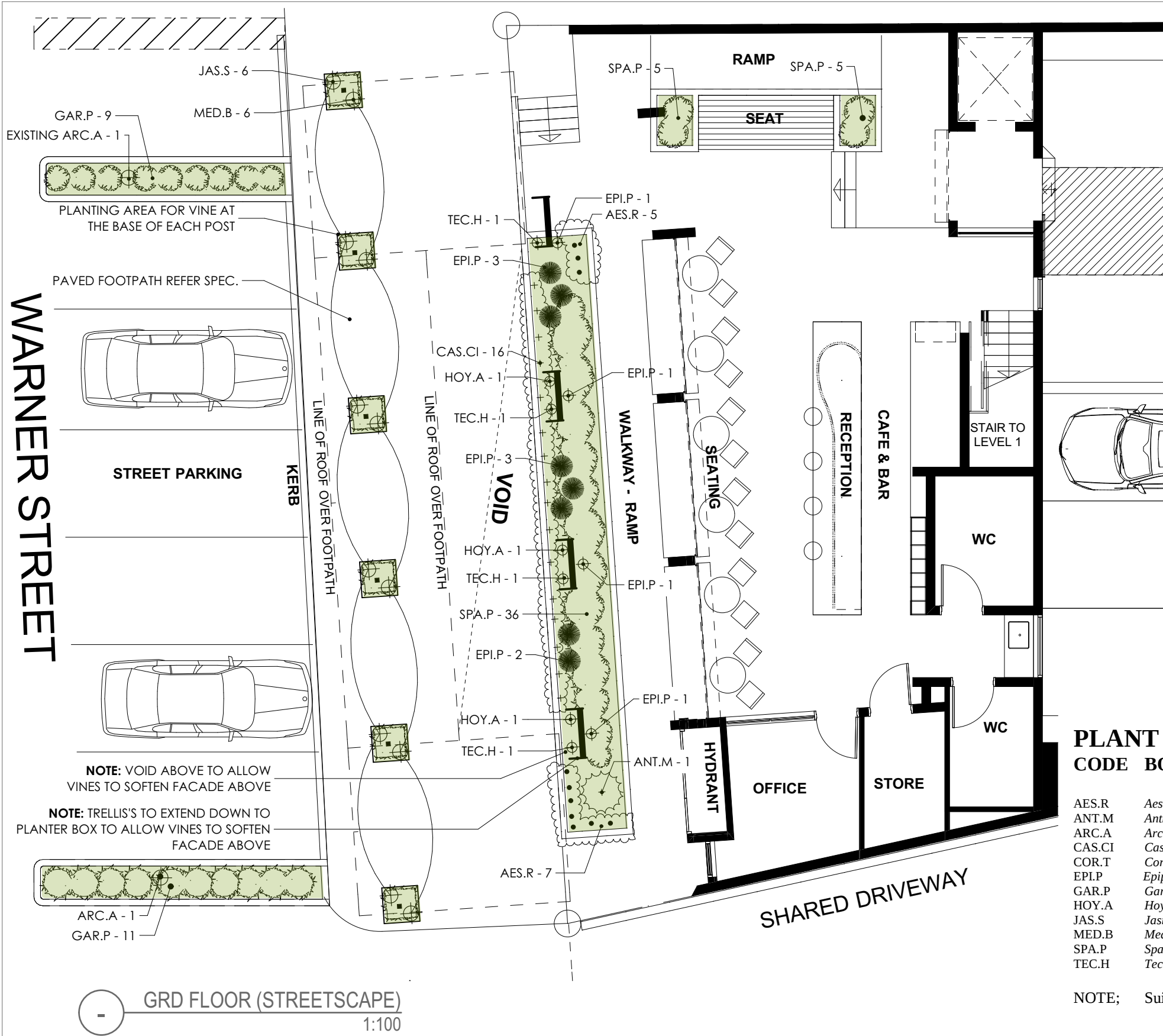
[illegible]

[illegible]



P2	B99 REVISED FOR AS2890 1 R6 3m RADIUS PRELIMINARY ISSUE	29/01/19 16/01/19					THE ENGINEERING NOTES ATTACHED TO THE CERTIFICATE FOR THIS JOB NUMBER ARE PART OF THE DRAWINGS, AND ARE TO BE ATTACHED TO EACH SET OF DRAWINGS TO BE WORKED FROM. THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED OR USED WITHOUT THE AUTHORITY OF RODGERS CONSULTING. DO NOT SCALE FROM THIS DRAWING. THE CONTRACTS ARE TO VERIFY ALL DIMENSIONS BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE DESIGNER ANY DISCREPANCIES PRIOR TO COMMENCING RELATED WORK.	CLIENT: SCALI NOMINEES PTY LTD PROJECT: WARNER STREET HOTEL 20 WARNER STREET PORT DOUGLAS 124 SPENCE STREET P.O. BOX 1769 CAIRNS 4870 PHONE: 07 4051 9466 FAX: 07 4051 9477 admin@rodgersconsulting.com.au	TITLE: B99 DESIGN VEHICLE SWEEP PATHS CARPARK 11 ENTRY AND EXIT DRAFTED: EWK DESIGNED: EWK SCALE: 1:100 (A1) REVIEWED: A1 PLAN PROJECT NO: 180307 APPROVED: DWG NO: SK11 REV: P2
REV	DESCRIPTION	APP'D	DATE	REV	DESCRIPTION	APP'D	DATE		

[illegible]



LANDSCAPE SPECIFICATION;

Footpath Paving: To be clay brick pavers to match existing footpath, with colour and laying pattern to be approved by Council in accordance with FNQROC, and Australian Standards.

Trellis: are proposed to be suitable 100mm square mesh, framed with 75mm square metal tubing before powder coating and mounting 100mm off and solid wall, to allow plants to climb throughout the mesh. All trellising to Architects detail and Engineering standards.

Irrigation: All planting areas to be irrigated with an automated system. All street plantings will use drip irrigation and be connected to the proposed buildings automated irrigation system. Planter boxes to be irrigated with spray heads. Irrigation to be installed in accordance with Council regulations and Australian Standards.

Natural ground soil: is to be cultivated to a depth of 300mm and amended with 50% aged compost, with 500g/m² of gypsum and suitable organic fertiliser at recommended rate.

Planter Boxes/drainage: to architect's detail. Internal areas are to be sealed with a suitable waterproof flexible membrane before covering with coreflute, & biddum geofabric to protect the surface. Drainage cell is to be applied to the base and any walls that adjoin any internal area. Apply biddum geofabric over drainage cell prior to filling area with approved soil mix. Drainage to be connected to a separate storm water system (NOT ROOF SYSTEM) and allow for an overflow pit (250mm) in each bed set 100mm below the top of the planter box wall.

Planter Box soil: is to be a suitable podium mix of 50% approved potting mix with 50% Quincan pebble (10mm), and pH adjusted. Allow for 30% compaction in boxes over the first 12 months by loading the soil height above required. Mulch with Quincan pebble (10mm) to 75mm deep.

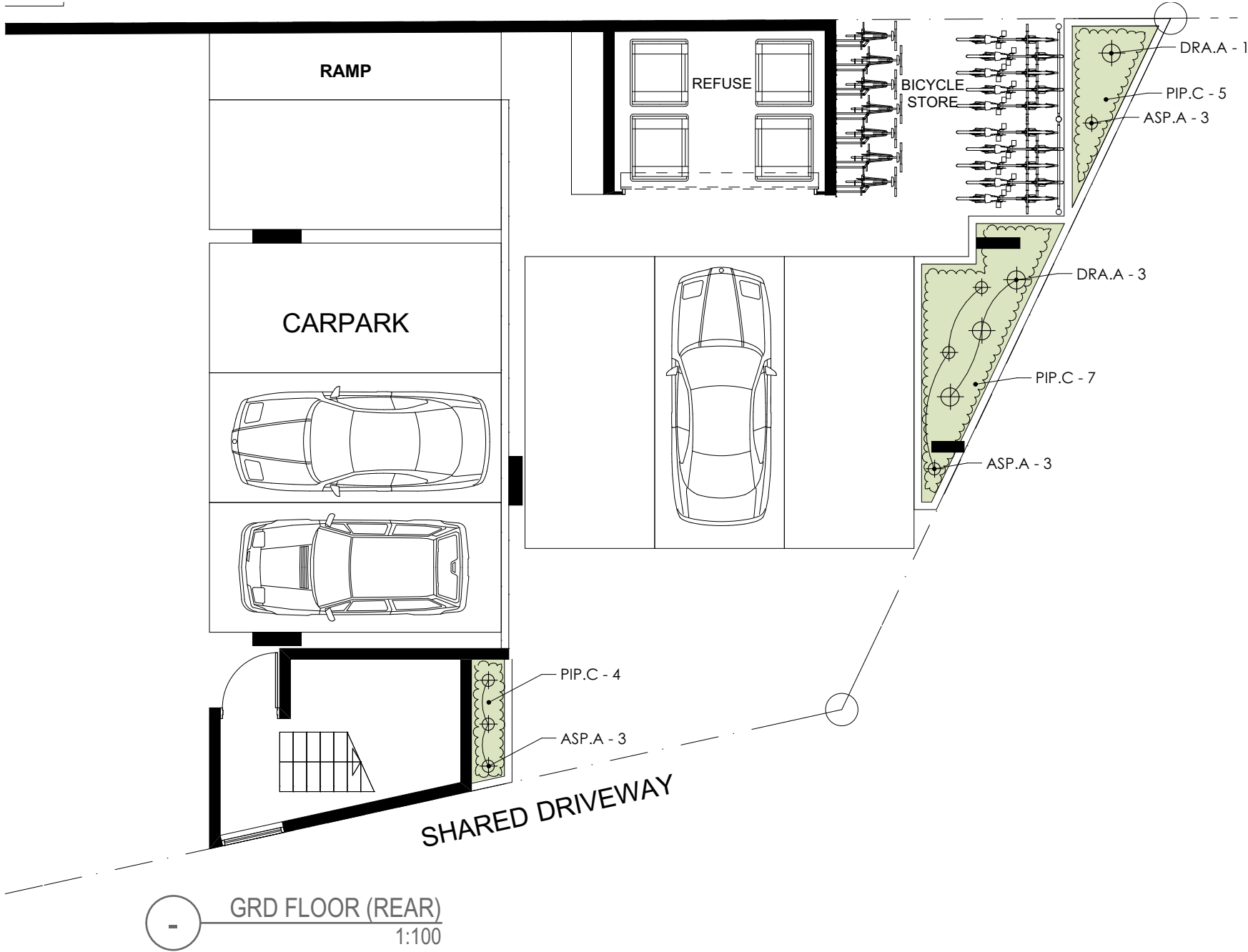
Plants: Have been chosen to enhance the natural character of the Port Douglas area. All plant material is to be of a high quality, in correct pot size or larger and approved by landscape designer prior to planting.

PLANT LIST; Streetscape Planting

CODE	BOTANICAL NAME	COMMON NAME	NO.	POT SIZE	TYPE	H&W.
AES.R	<i>Aeschynanthus radicans</i>	Lipstick Plant	12	140mm	C	0.3x2
ANT.M	<i>Antherium magnificum</i>		1	200mm	S	1x1
ARC.A	<i>Archontophoenix alexandrae</i>	Alexander palm	1	45ltr	P	10x4
CAS.CI	<i>Casuarina glauca</i> "Cousin it"		16	200mm	GC	0.3x 2
COR.T	<i>Cordyline terminalis</i>	Cordyline	9	200mm	S	2x1
EPI.P	<i>Epipremnum pinnatum</i>	Native Monstera	5	200mm	C	10x1
GAR.P	<i>Gardenia psidioides</i>	Glennie River Gardenia	20	140mm	GC	0.5x2
HOY.A	<i>Hoya australis</i>	Native Hoya Vine	3	200mm	C	8x2
JAS.S	<i>Jasminum simplicifolium subsp. australiense</i>	Native Jasmin	6	140mm	S	3x3
MED.B	<i>Medinilla balls-headleyi</i>	Daintree Medinilla	6	200mm	C	6x3
SPA.P	<i>Spathophyllum "Pablo"</i>	Peace lily	46	140mm	S	0.6x0.6
TEC.H	<i>Tecomanthe hillii</i>	Fraser Island Creeper	4	200mm	C	8x4

NOTE; Suitable substitutions may be made depending on the availability of the species and pot size.

KEY; C = Climber F = Fern GC = Ground Cover
G = Ginger P = Palm S = Shrub
Se= Sedge T = Tree

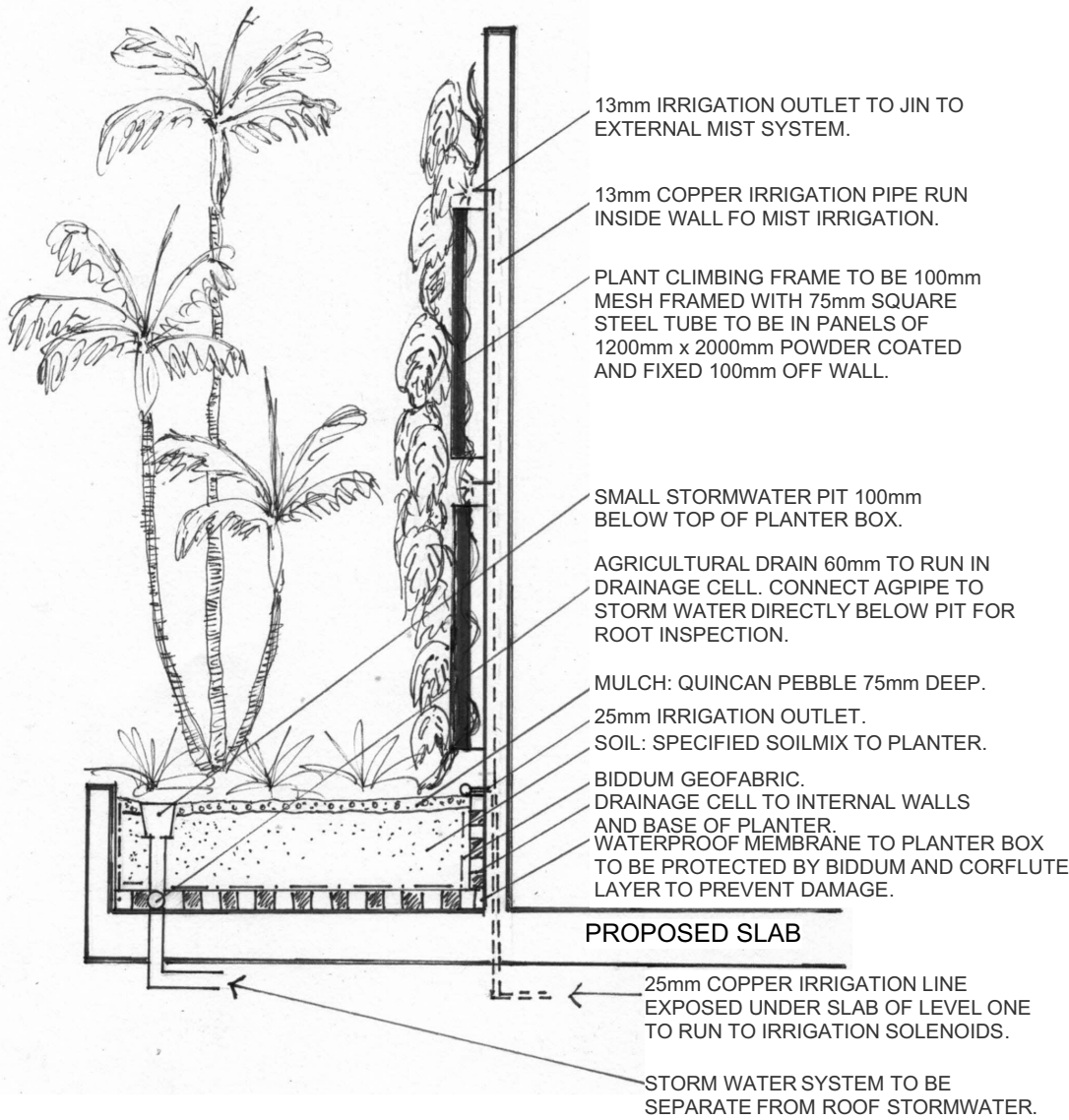


PLANT LIST; Carpark Planters

CODE	BOTANICAL NAME	COMMON NAME	NO.	POT SIZE	TYPE	H&W.
ASP.A	<i>Asplenium australasicum</i>	Birds Nest Fern	7	200mm	F	1x1
DRA.A	<i>Draceana angustifolia</i>	Native Draceana	4	300mm	S	6x4
PIP.C	<i>Piper caninum</i>	Native Pepper	16	140mm	C	6x4

NOTE; Suitable substitutions may be made depending on the availability of the species and pot size.

KEY; C = Climber
G = Ginger
Se= Sedge
F = Fern
P = Palm
T = Tree
GC = Ground Cover
S = Shrub



TYPICAL PLANTER BOX SECTION

NTS

LANDSCAPE PLAN



HORTULUS
LANDSCAPE DESIGN & MANAGEMENT
HORTULUS AUSTRALIA PTY LTD
ABN NO 84 105 194 821

Consultant: John Sullivan
B.App.Sc.Hort, M.A.I.H

Job No: SN-D18_A

Client: Scali Nominees P/L

Drawn by: DV

Checked by: JAS

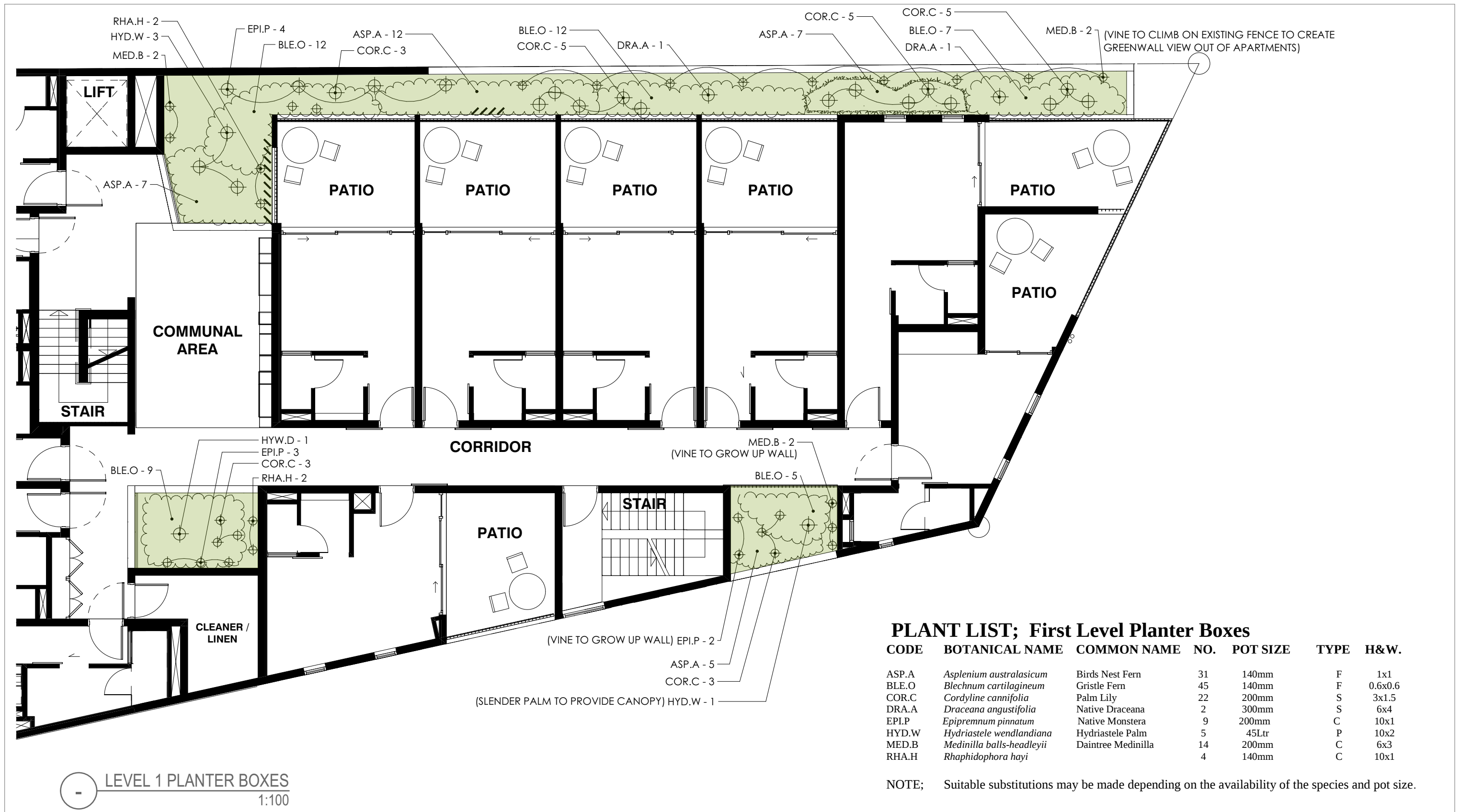
Project: PROPOSED LANDSCAPING
20 Warner Street
Port Douglas, QLD 4877

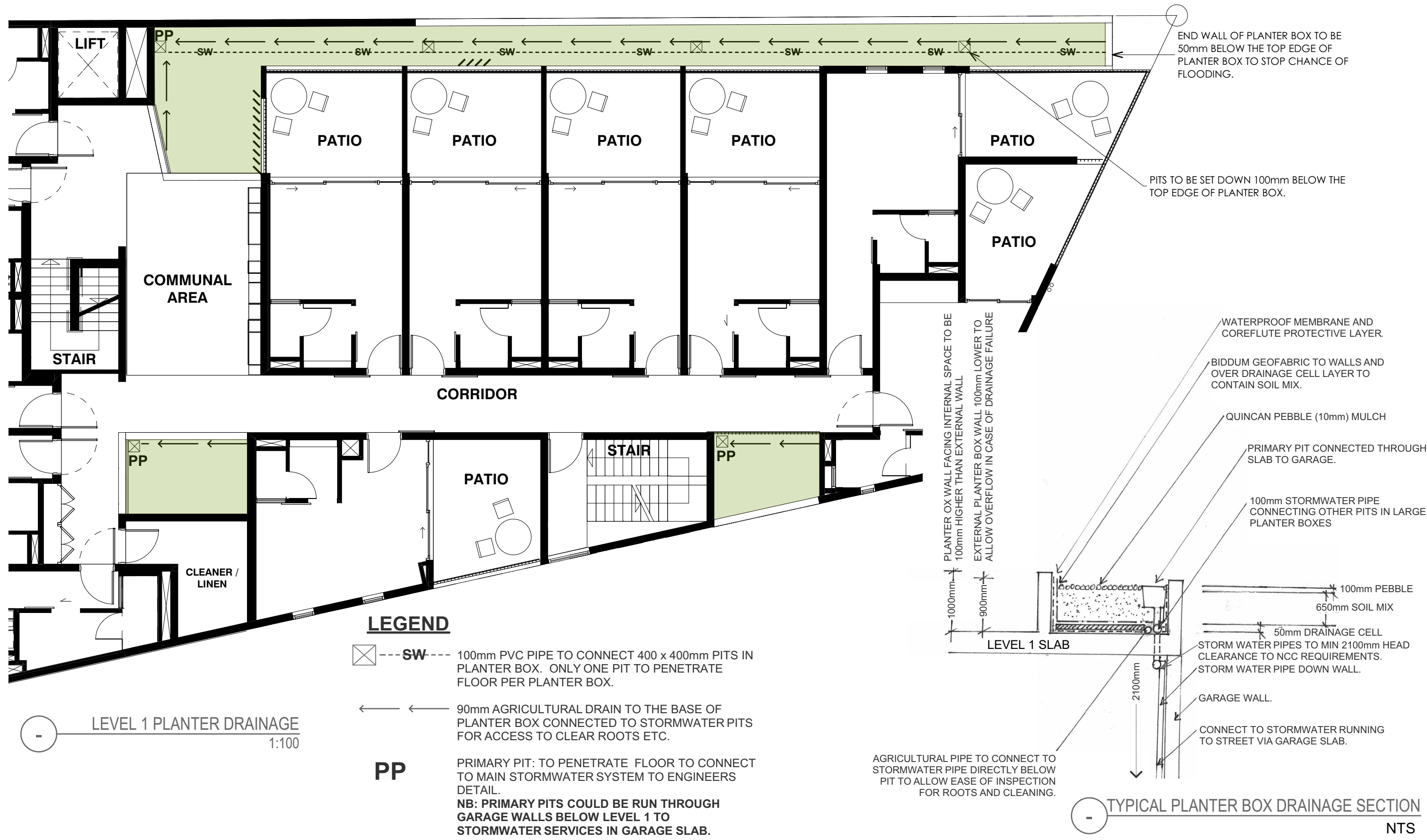
Scale:
1:100
A3 sheet

Date:
25-01-19

Dwg no:
LS_02

Issue:
B





LANDSCAPE PLAN



HORTULUS
LANDSCAPE DESIGN & MANAGEMENT
HORTULUS AUSTRALIA PTY LTD
ABN NO 84 105 194 821

Consultant: John Sullivan B.App.Sc.Hort, M.A.I.H		Job No: SN-D18_A			
Client: Scali Nominees P/L		Drawn by: DV	Checked by: JAS		
Project: PROPOSED LANDSCAPING 20 Warner Street Port Douglas, QLD 4877	Scale: 1:100 A3 sheet	Date: 25-01-19	Dwg no: LS_04	Issue: B	

14 February 2019

Our ref: P71866

Your ref: MCUC 2915/2018

Mr Michael Kridemann
A/General Manager Operations
Douglas Shire Council
PO Box 723
Mossman Qld 4873

via email: enquiries@douglas.qld.gov.au

Attention: Ms Jenny Elphinstone

Dear Jenny,

**Re: Development Application MCU for Short-term Accommodation (Hotel)
20 Warner Street, Port Douglas**

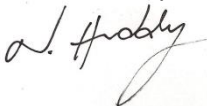
Further to Council's information request of 22 November 2018, I am pleased to provide the attached Information Response for the above application at 20 Warner Street, Port Douglas.

In support of the development proposal, we request that Council have regard to the following points:

- The development represents a new and vibrant alternative to the existing hotel experiences in Port Douglas and will attract an alternate visitor to the tourist town. The design of the hotel represents a new global approach in the development of "micro hotels", that offer well-designed compact rooms to respond to the needs of social-media savvy travellers. These travellers typically carry less (a bag and laptop) and are wanting well-designed spaces, but do not need a lot of it. With tropical design elements and edgy green spaces, the proposal offers something fresh and exciting to Port Douglas.
- The proposal provides an economically-viable solution to the existing vacant lot. As an infill site, it is highly constrained, and the viability of the project is enhanced by the innovative delivery of hotel rooms.

This information response addresses the matters raised, however if you require any further information please do call me. We are seeking a positive outcome for this site and look forward to continue to work with the Council in gaining a development approval. To this end, I look forward to meeting with you on 7 March 2019 to further discuss the development application.

Yours sincerely



Nikki Huddy
Director
Planz Town Planning
Att:

1. Information Response with Appendices 1-5

Information Response

14 February 2019

Information Requested	Response
1. Storm Tide Inundation a. Please provide qualified writer advice regarding the proposed ground floor, finished floor level of 3.2m AHD is suitable to meet the 1% storm tide inundation with a suitable freeboard and the car parking facilities have a suitable 5% storm tide inundation plus a suitable freeboard. These levels must have regard to sea level rise of 0.8m AHD for the year 2100. The advice should include a statement from an appropriately qualified professional commenting on how the levels have been identified and what circumstances are present. It is recommended that a convolution of storm tide and flood inundations should be considered. c. Please clarify the finished floor levels of the car parking area and the electrical and communications board area. d. Where the proposed finished floor levels are less than the 1% and 5%, plus suitable freeboards, as nominated above, then provide detail of how storm tide inundation are prevented from entering the site. e. Where the proposed finished floor levels are less than the 1% and 5%, plus suitable freeboards, as nominated above, then provide detail of how risk is mitigated and the land owner's responsibility for any such risk.	It is acknowledged that this development is located in a part of Port Douglas that may be affected by flooding in certain events. The recently approved 'Quicksilver' development at 19 Warner Street, located directly across from the subject site, has an approved FFL of RL 3.1m and carpark level of approx. RL 2.2m (ground level). It is considered reasonable for the proposed development to achieve the same design level. Accordingly, the proposed development has been re-designed with a floor level of RL 3.1m for the hotel reception area (refer amended plans at Appendix 1). This is consistent with nearby development, and helps to achieve better integration with the footpath and create an attractive pedestrian-friendly environment. It should be acknowledged that anything above this level will result in impenetrable and undesirable development within the pedestrian environment. The car parking area will have a floor level range in in height from RL2.5m to RL3.0m. The communications and electrical boards will be installed on concrete hobs to avoid any possible inundation. It is considered that the proposed development can mitigated the impact of inundation to within acceptable levels. The applicant accepts a condition of approval to acknowledge in writing that the building FFL of RL3.1m may not achieve full Q100 flood immunity and

Information Requested	Response
	devise an action plan, prior to the issue of a Development Permit for Building Work, to manage and prevent flood water from entering the building in an extreme weather event.
2. Other Engineering Infrastructure a. Please provide an engineering statement and complimentary documentation explaining the capacity of existing stormwater, sewer and water infrastructure capacity to meet the expected post development demand. Given the low lying nature of the environment, stormwater discharge should consider the impact of tail waters in high tide events. Secondly, the statement should needs to identify any required external upgrades to the external infrastructure. b. Please clarify that the garden wells, established on the first floor level, have sufficient capacity to receive heavy rainfall and have suitable drainage to mitigate risks in these events.	The development site is located in a dense, infill urban setting. On-site detention and other such initiatives will be catered for in a future civil design to the satisfaction of the Council. The consultant engineer's advice in regards to the development states: <i>"the stormwater design will include measures to ensure a non-worsening of the Warner Street drainage due to this development. Stormwater drainage detention will be incorporated with this development to ensure that the stormwater discharge from this development is not greater than from the existing undeveloped site."</i> Refer to advice contained in Appendix 2. The consultant hydraulic engineer has advised that the existing 100mm diameter Council water main and 150mm diameter Council sewer main which exist in the footpath fronting the property and are available for connection, which is adequate for the needs of the development. Refer to advice contained in Appendix 3. The planters and open deck area drainage will be separated from the roof drainage systems where possible, in order to provide independent stormwater drainage systems. This design will allow for the efficient removal of rainwater from the site. Refer to advice contained in Appendix 3 and 4.
3. On site Vehicle Parking and Traffic Movements a. Please advise of the ability to redesign of the development to achieve a parking design for a B99 vehicle.	a. The consultant traffic engineer has undertaken swept path analysis for a B99 vehicle and concluded that the majority of carparks can accommodate this size vehicle, in accordance with relevant Australian Standards. Refer to Appendix 2.

Information Requested	Response
b. Please nominate the frequency and type of service vehicles attending the property for all servicing including rubbish collection and laundry services etc. The anticipated loading and unloading areas are to be identified on the site. Access onto and egress from the site from suitably sized service vehicles is to be demonstrated and swept path turn diagrams are to include the whole of the adjacent road width for traffic moving to and from the property in both directions. Consideration should be given to the on-street parking areas having B99 vehicle is parked thereon. c. Please provided a report and statement by a suitably qualified Engineer substantiating the compliance of the onsite car parking design with AS 2890 and that the number of car parking spaces is sufficient for the proposed. The report should have regard to the Planning Scheme Code 9.4.1 Access, Parking and servicing Code with particular attention paid to the purpose requiring the parking to be provided onsite. The statement is to identify all occasions where the code benchmarks are not achieved and provide grounds on which consideration of approval should occur as per the <i>Planning Act 2016</i>.	b. No large commercial vehicles are anticipated to enter the site. The proposed development can be serviced from the street, as with the majority of all other Macrossan Street and Warner Street properties. Laundry services and refuse collection will occur outside peak traffic hours to avoid congestion, as per surrounding hotel properties. It is not feasible for the proposed development to accommodate the loading and unloading of large refuse trucks and other commercial vehicles, given the size and shape of the site. It is noted that previous development approval on the site did not accommodate on-site refuse collection. The site is an infill site, and the proposed development will provide a desirable outcome for the streetscape than the existing vacant lot. c. The proposed development provides for a total of 12 on-site parking spaces. The consultant traffic engineer has provided advice regarding the carparking, and compliance with relevant standards (refer Appendix 2). The Performance Outcome 1 of the Access, Parking and Servicing Code states: <i>"Sufficient on-site car parking is provided to cater for the amount and type of vehicle traffic expected to be generated by the use or uses of the site, having particular regard to:</i> <i>(a) The desired character of the area;</i> <i>(b) The nature of the particular use and its specific characteristics and scale;</i> <i>(c) The number of employees and the likely number of visitors to the site;</i> <i>(d) The level of local accessibility;</i> <i>(e) The nature and frequency of any public transport serving the area;</i> <i>(f)".</i>

Information Requested	Response
	The proposed development achieves PO1 in that: • The site is easily accessible from the tourist hub of Macrossan Street and is serviced by shuttle buses to and from the Cairns Airport, and around Port Douglas. A number of guests to the hotel will arrive via shuttle bus. • An additional 7 on-street parking spaces can be provided in the street immediately adjacent to the site and a number of on-street parking spaces are available within the near vicinity of the site, including the Council's carpark located between Grant and Wharf Streets. • The site is a highly-constrained, infill site and the proposed development, including the number of carspaces able to be provided on-site is a sensible and economically-viable solution to the site. Having regard to the above comments, it is considered that the proposed number of spaces is sufficient to cater for the amount of traffic expected to be generated by the use, and the proposed development complies with the Performance Outcome.
4. Protection for Adjacent Footpath a. Please advise of the alternative use of a clear awning cover over the "void" as currently proposed. Alternatively, please advise on the ability to contain the void to the land area.	The proposal plans have been amended to show the awning void removed. A full awning is now proposed. Refer to amended drawings at Appendix 1.
5. Communal Areas and Reception / Café and Bar Access a. Please clarify the after-hours access and egress, in particular the auto sliding door between the lift area and the car park. b. Please provide a statement from the Architect clarifying that the development, including the ground floor bar and café area, achieve all required access requirements under the Premises Standards and the Building Code for disability access without the necessity for any dispensations. The dimensions and accessibility of communal areas should exclude through pedestrian corridor traffic areas.	a. Access to and from the carpark is intended to be provided at a 24 hour basis via automated sliding door adjacent to the lift. It is proposed that the hotel café, reception and bar area can be closed overnight with roller shutter doors or similar. The lift only permits access to each upper floor via an electronic key provided to guests by the hotel service provider. Access down to ground level via the lift or fire stair escapes will not require electronic key. Fire exits shall meet NCC and relevant AS standards. It is intended that a finalised access protocol will be confirmed with the hotel service provider(s).

Information Requested	Response
c. Please provide examples of similar establishments, in similar locations/environments where internal communal open space has been successfully provided.	b. The consultant Architect has advised: Access to common portions of the development such as the ground floor hotel café, reception and bar area and room walkways is intended to meet the National Construction Code and AS Standard pertaining to the Disability Discrimination Act – typical to a building use such as that of the subject application and to the degree that is expected from an architect. Further assessment of access shall be to be confirmed with relevant consultants and hotel service provider(s) as required. c. The consultant Architect has provided examples of internal communal open space areas within the amended drawings, shown on new drawing sheet P-06.02. Refer to Appendix 1.
6. Number of storeys and street elevation a. Please provide further detail to substantiate the proposed development in respect to the Port Douglas/Craigie Local Plan Code. b. Please provide advice to the ability to reduce the form, bulk, mass and scale of the development, particularly the upper level at the streetscape.	The Architect has provided an additional perspective drawing which demonstrates the development is consistent with the surrounding built form and will complement the streetscape. Refer to drawing sheet P-05.02 at Appendix 1. The purpose of the Port Douglas/Craigie local plan code is to <i>facilitate development outcomes consistent with community values, the local tropical built-form and protection of the natural environment within the Port Douglas/Craigie local plan area, while providing a platform for investment and prosperity</i>. The development, whilst exceeding the preferred outcome of 3 storeys, achieves the purpose in that: • The built form provides a tropical façade and will meet the community expectations for good-quality tropical design; and • The proposal achieves a good planning outcome to a highly constrained infill site, whilst providing an economically-viable solution; • The proposal will provide a desirable presence in the Warner Street environment, as opposed to the current use of the site as a derelict informal “carpark”.

Information Requested	Response
	Furthermore, the development the overall outcomes of the codes, specifically the proposal will: • attract international and domestic tourists to the town with an alternate and fresh hotel experience; • assist in consolidating the town centre by providing a high-quality infill development to an existing vacant and derelict site; • set a new benchmark for tropical urbanism, and contribute to the modernisation of Port Douglas; • deliver a tropical and high-quality public interface and activate the street frontage. The proposed building will be 13.5m in height at the Warner Street frontage, increasing to 14.1m to the rear of the site. The slight increase in height will not be visible from public vantage points. The Architect has been able to cleverly achieve the desired building heights whilst ensuring the capacity of the constrained site provides an economically-viable solution.
7. Sections a. Please provide sections and drainage details for the landscaped voids and areas of vertical landscaping that commence at the first floor level detailing the depth of deep planting to the soil boxes and the indicative drainage scheme. Indicate all areas of the ground floor where headspace is reduce by the impact of the planter areas above. b. Please provide sections of the unit entry area, in particular the corridor elevation of the units. c. Please provide detail of how the unit's security door will enable through breezes and maintain privacy.	The consultant landscape architect has provided further information on the details of the planter boxes, including sections and drainage details. Refer to Appendix 4 for further detail. The updated architectural drawings include the relevant details in relation to items b and c. Please refer to Appendix 1 attached.

Information Requested	Response
8. Landscape Plan a. Please clarify what the proposed plants are in the street island planting areas detailed as “CAR.P” on the Hortulus Plan, Page 1 of 1.	The consultant landscape architect has provided further information on the details of the planter boxes, including sections and drainage details. Refer to Appendix 4 for further detail.
9. Café / Bar Seating a. Please clarify that a maximum of twelve (12) seats are provided to this area. Please clarify whether there is any intention at this stage to provide outdoor dining (on the street footpath). Please provide an internal fitout design of the café/bar facility.	The proposed reception / café and bar area is indicative only and was proposed as a way of activating the streetscape and providing a waiting / meeting area for guests. It also provides some flexibility for the future hotel operator. It is envisaged that the area will function primarily as a typical hotel lobby, providing limited café service. Footpath dining is not proposed at this stage. If in future this aspect of the development extends to outdoor dining, then relevant Council approval will be sought at that time. It is not necessary or appropriate for detailed internal fitout design to be provided at this stage in the development application process.
10. Electricity Padmount a. Please advise whether Ergon energy requires a padmount facility to be provided for the development and if so, where this will be provided on the land.	Advice from Ergon Energy indicates that the existing electricity infrastructure available to the site is sufficient to meet the electrical demands of the development. Refer Appendix 5 .

14 February 2019

APPENDIX 1: AMENDED ARCHITECTURAL DRAWINGS

APPENDIX 2: TRAFFIC ENGINEERING ADVICE

APPENDIX 3: HYDRAULIC ENGINEERING ADVICE

APPENDIX 4: LANDSCAPE ADVICE

APPENDIX 5: EMAIL ADVICE FROM ERGON ENERGY