

# Engineering Report Incl. Stormwater Management

6 Alexandra Street,  
Rockhampton, QLD

Arcos Project: 2500616

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.:** D/11-2026

**Dated:** 20 March 2026

**Attention: Justn Architect**

C/- Justin Gioenco

By Email

18 November 2025

**Arcos Project: 2500616****Rev 0****AG-2500616-RPT-C-01****Engineering Report Incl. Stormwater Management****6 Alexandra Street,****Rockhampton, QLD****Document Control**

Version	Date	Details	Prepared	Checked	Approved
0	18/11/25	For Approval	HD	LS	LS

**Principal Civil Engineer****Lachlan Swann** B.Eng (Civ) (Hons), CPEng, RPEQ, NER, MIEAust

lachlanswann@arcosgroup.com.au

**For and On Behalf of Arcos Group**

E admin@arcosgroup.com.au

W arcosgroup.com.au

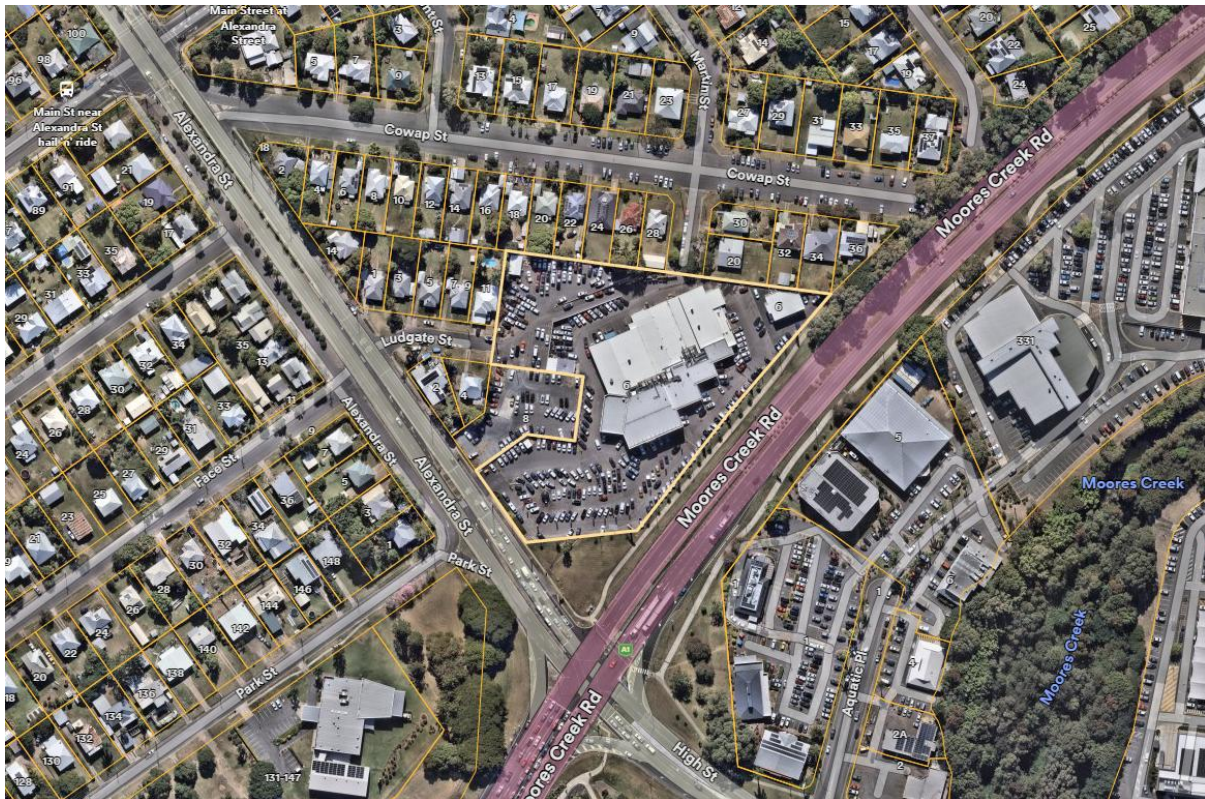
A 177C Brisbane Road, Mooloolaba, QLD, 4557

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## 1 Introduction

Arcos Unit Group Pty Ltd (Arcos) has been commissioned by Justn Architects to prepare this Engineering Report and approval drawings as part of an MCU development application with Rockhampton Regional Council (RRC). The subject site is described as Lot 1 on RP612250 and has an area of 16,227m<sup>2</sup>. A site locality plan is presented in **Figure 1**. The commercial development will be located at 6 Alexandra Street, Rockhampton, Queensland.



**FIGURE 1: SITE LOCALITY (NEARMAPS)**

The site is currently a car dealership, with an existing large central building and surrounding carpark, along with an asphalt access driveway.

This report addresses engineering considerations such as site works, servicing provisions, access, and a site-based stormwater management plan to assess the stormwater quality and quantity requirements.

## 2 Proposed Development

The proposed development consists of two proposed showroom extensions to the existing building, as shown in **Figure 2**. The existing driveway fronting Alexandra Street will continue to be used to service the site.



FIGURE 2: PERSPECTIVE 3D RENDER (JUSTN ARCHITECTS)

## 3 Access

### 3.1 Road & Driveway Type

A 12m wide development site access is existing at a crossover location on Alexandra Street and is to be used for the proposed upgrades.

TABLE 1 – ROAD & DRIVEWAY TYPE

Description	Standard
Frontage Road (existing)	Major Council Road (RRC Urban Central Area)
Access/Driveway (existing)	Access as per RRC, STD DRG CMDG-R-042.

### 3.2 Vehicle Movements

The vehicle turn paths have been checked to confirm a B99 vehicle can line up and track through the site and the proposed book in bays.

### 3.3 Waste Collection

Waste collection will follow the existing strategy, with the proposed works integrating into the current waste design.

## 4 Earthworks

The existing site is located above the adjacent road level and gently slopes towards the road. The internal site levels range between 12.8m AHD to 15.5m AHD, with an approximately 2.5m high retaining wall along the western boundary.

Building pad earthwork levels have been designed above the 1% AEP flood level with the majority of overland flow through the drainage easement on an adjacent lot.

All cutting and filling are to be carried out in accordance with AS3798:2007 Guidelines on Earthworks for Commercial and Residential Developments. Any site filling will be from site spoil (subject to Geotechnical Investigation), provided it meets the requirements of AS3798 and is placed with controlled compaction.

Impacts of proposed earthworks on overland flow conditions will not adversely affect adjacent or downstream properties. Proposed earthworks will not encroach on adjacent properties or affect the function of stormwater catchments external to the site.

All construction activities, including Erosion and Sediment Control (ESC) methods, would be managed under the control measures of a Construction Environmental Management Plan (CEMP) for the development site. The CEMP and ESC plans would be prepared for submission with the future application for Operational Works Approval.

## 5 Stormwater Management

### 5.1 General

The proposed building extension does not increase the site's impervious area and therefore does not alter existing stormwater generation, flow paths, or discharge conditions. The existing stormwater design remains compliant with the Rockhampton Regional Council Planning Scheme, Queensland Urban Drainage Manual (QUDM, 2017), and relevant standards. All minor (10% AEP) and major (1% AEP) storm events continue to be managed by the established onsite and downstream drainage network with no change required to system capacity or performance.

### 5.2 Drainage

All runoff continues to drain to the existing lawful point of discharge via the existing road drainage network, including the side entry pit and Ø1050 RCP. The southern stormwater easement conveys upstream flows. As the works do not alter levels, grades, or catchment areas, no drainage upgrades are required. Refer **Figure 3** below for existing stormwater network.

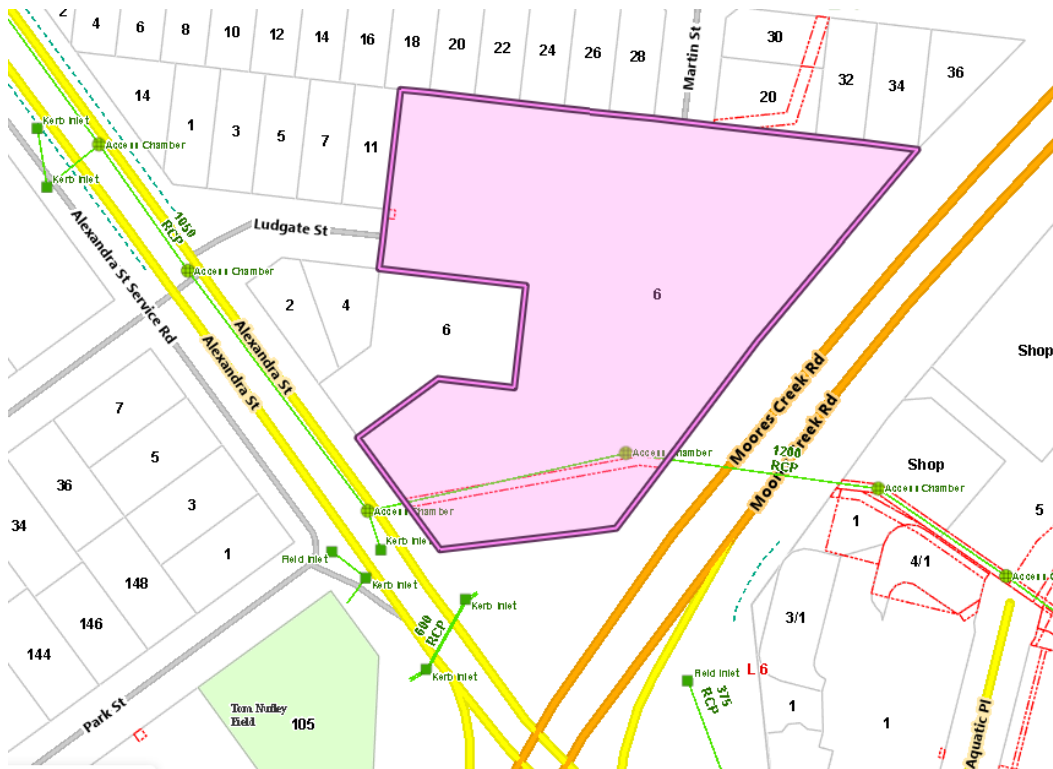


FIGURE 3: EXISTING STORMWATER NETWORK (RRC INTERACTIVE MAPPING)

### 5.3 Flooding

The site is outside the Fitzroy River catchment and is not flood-affected. The proposed extension will match the existing building's finished floor levels.

### 5.4 Lawful Point of Discharge

The lawful point of discharge remains the south corner of the site and complies with QUDM Section 3.9.1.

### 5.5 Stormwater Quality Management

The site's fraction impervious remains unchanged; therefore, no additional stormwater quality treatment is required. The existing strategy remains adequate.

### 5.6 Stormwater Quantity Management

With no increase in impervious area, the proposed works do not alter stormwater runoff volumes or rates. The existing quantity management strategy remains suitable.

## 6 Service Provisions

### 6.1 Water

Existing water connections remain unchanged and adequately service the proposed building works.

### 6.2 Sewer

Existing sewer connections remain unchanged and are sufficient for the proposed building upgrades.

### 6.3 Communications & Electrical

Details of electrical supply and communication infrastructure and services proposed for the development site are outside the scope of this report. However, we understand that supply to the upgrades can be managed with the already available infrastructure.

## 7 Conclusion

This Engineering Services Report has been prepared to provide a review and information on the Engineering requirements to support the application for a MCU application on the proposed development at 6 Alexandra Street, Rockhampton.

The following requirements have been reviewed as part of this report:

- Suitable access can be provided off Alexandra Street to access the development;
- The proposed levels are above the flood level requirements of the site;
- Stormwater quality and quantity requirements for drainage discharge are already met;
- Sewer is already adequately serviced; and
- Water connections will remain as existing.

In summary, this report shows that the development site can be adequately serviced and provision made as currently shown and in further detailed design for this development to be in accordance with Council's code requirements.

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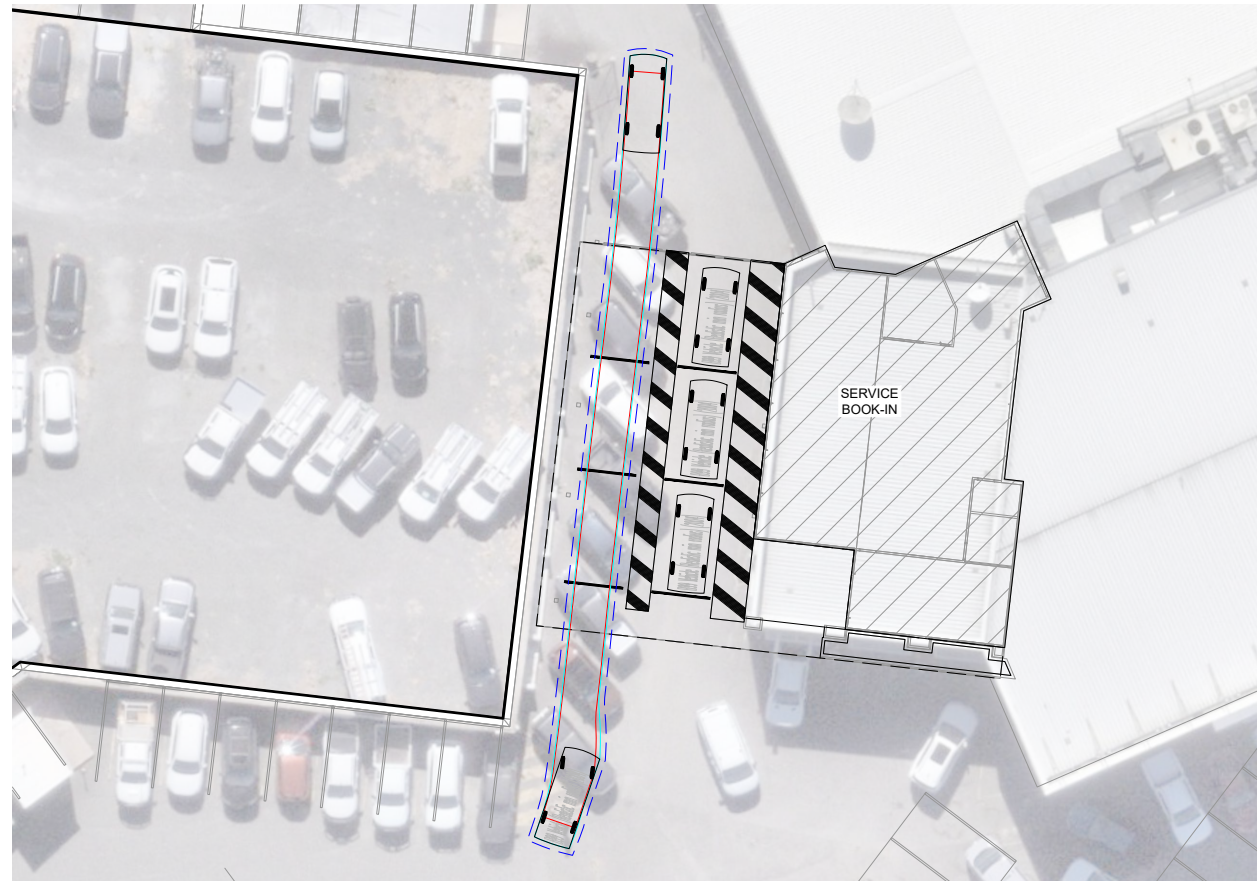
The required detailed design for the service infrastructure will be subject to the conditions (if any), attached to the Development Approval provided by Council and any nominated referral agencies.

The advice given in this document is based upon the assumed conditions and data outlined herein. The relevance and accuracy of advice given are directly affected by variations in the information supplied and open source information relied upon.

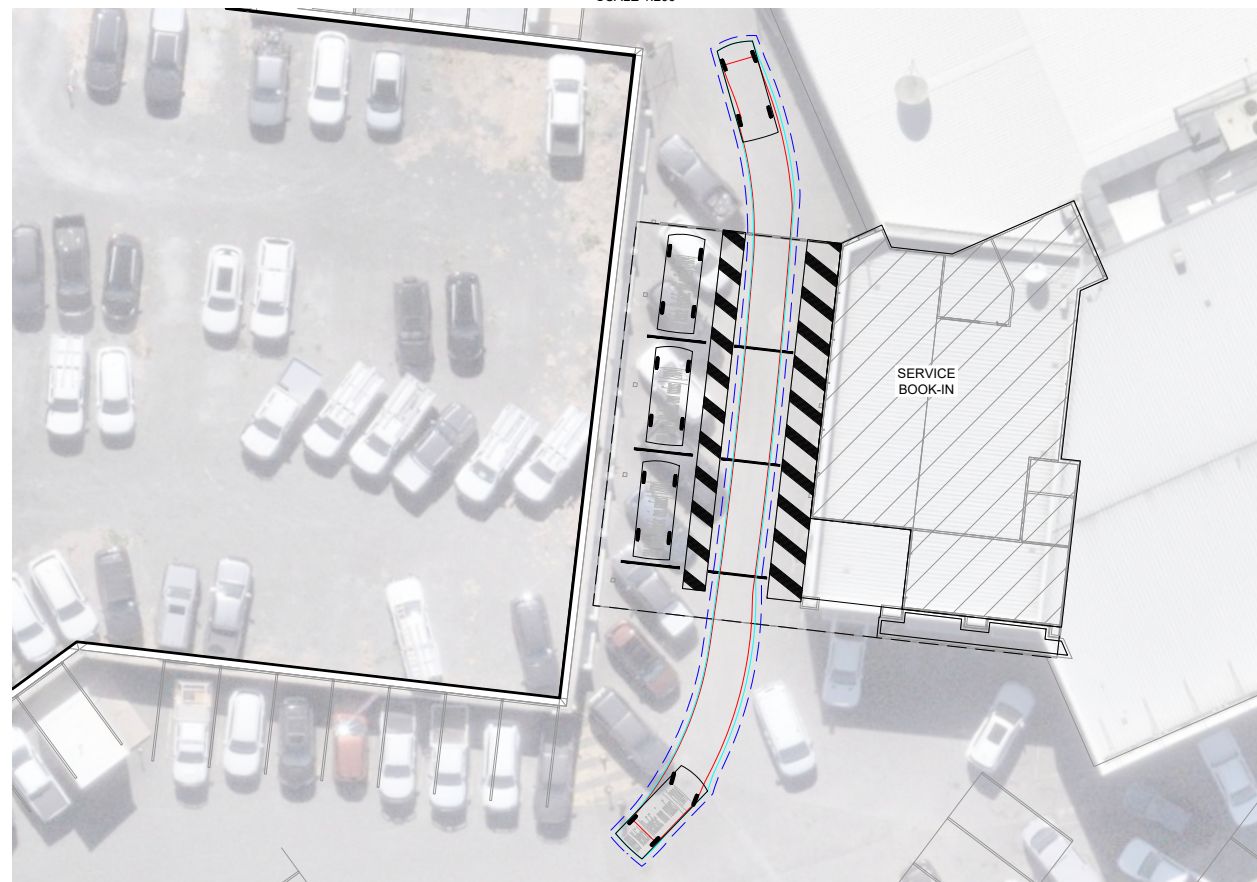
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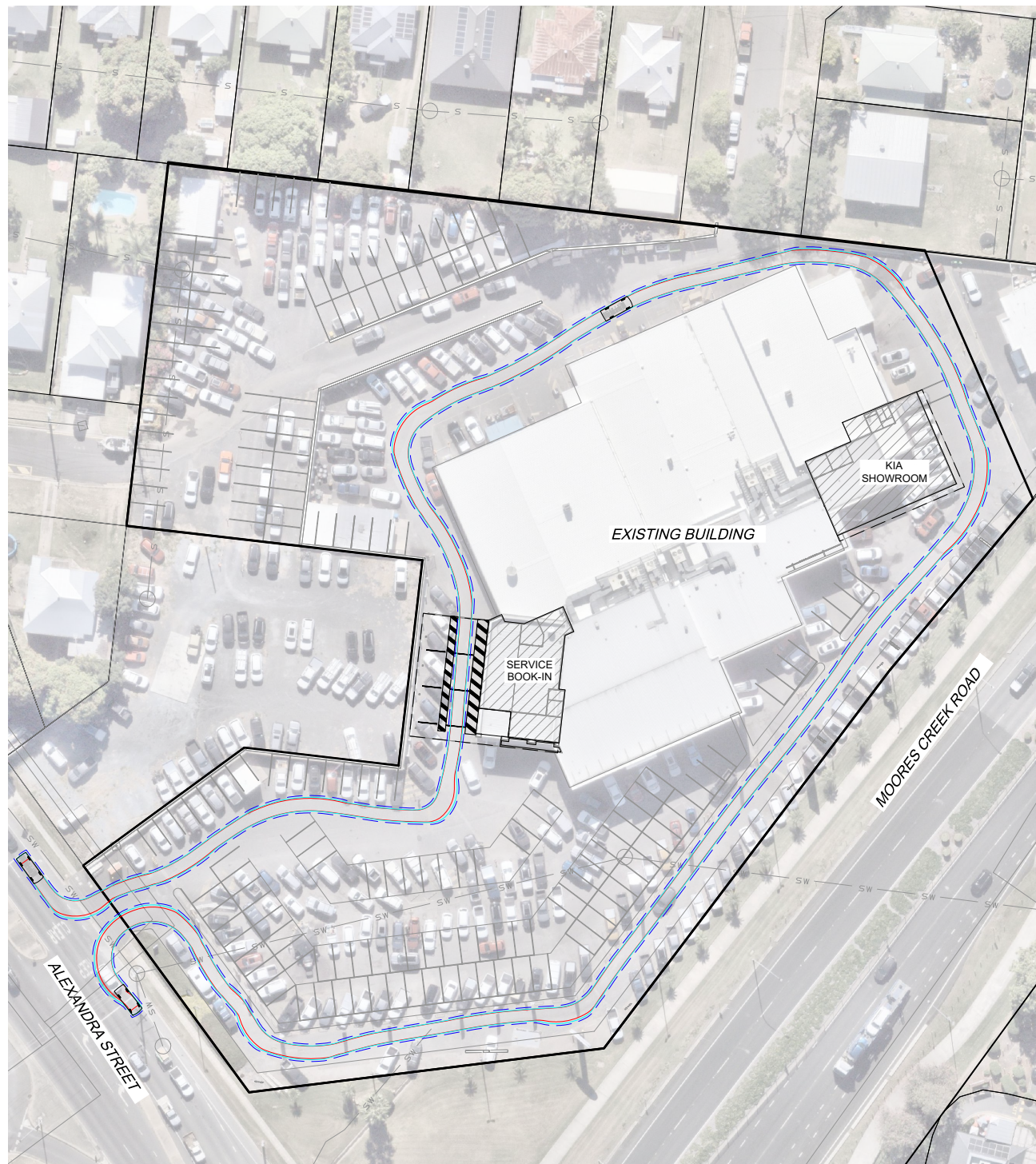
## Appendix A – Vehicle Turn Paths



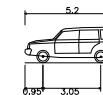
**B99 LHS BOOK IN BAY ACCESS**  
SCALE 1:200



**B99 RHS BOOK IN BAY ACCESS**  
SCALE 1:200



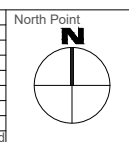
**B99 - SITE ACCESS**  
SCALE 1:500



B99 Vehicle (Realistic min radius) (2004)  
 Overall Length 5.200m  
 Overall Width 1.940m  
 Overall Body Height 1.875m  
 Min Body Ground Clearance 0.272m  
 Track Width 1.840m  
 Lock-to-lock time 4.00s  
 Curb to Curb Turning Radius 6.250m

Last saved by: JERRY@ARCOSGROUP.COM.AU | Last Saved: 2025-11-17  
 Project: 2500616 | Drawing: SKT-C-001 | Drawing Title: VEHICLE TRACKING PLAN

Rev	Description	Date	Approved
A	FOR APPROVAL	18.11.25	LS



Scale	Horiz. Datum LOCAL	Client
Vert. Datum AHD	Client	JUSTN ARCHITECTS
RL Datum	Client	

Consultant	Project
<b>ARCOS</b>	COMMERCIAL DEVELOPMENT MATERIAL CHANGE OF USE - CIVIL 6 ALEXANDRA STREET, ROCKHAMPTON, QLD

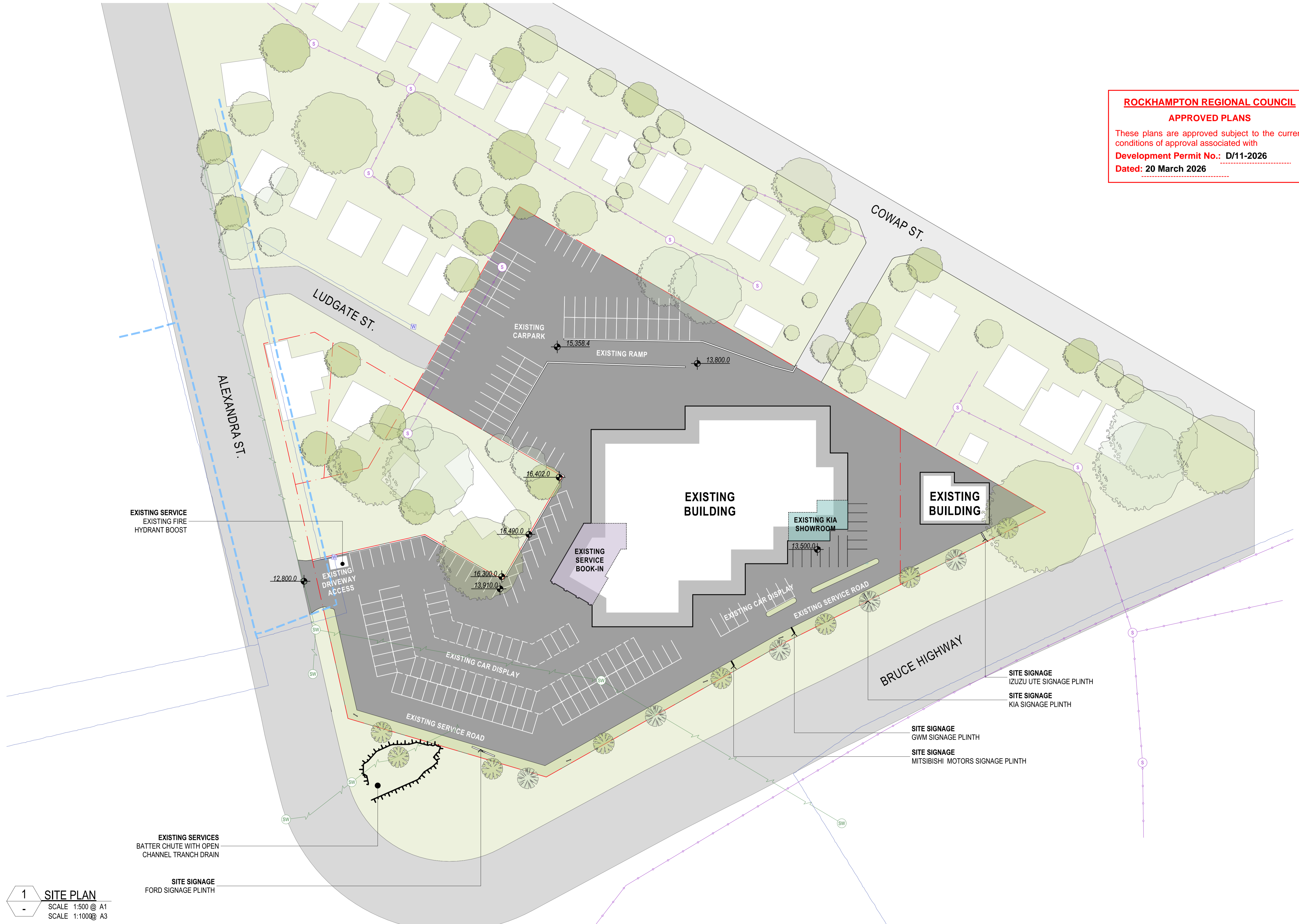
Drawn	HD	Design	HD	Check	LS
Approved	LACHLAN SWANN	Approved Date	18.11.25	Signed	

Project No.	2500616	Drawing No.	SKT-C-001	Rev No.	A
Status	FOR APPROVAL	Sheet Size	A1		

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## Appendix B – Building Design

**ROCKHAMPTON REGIONAL COUNCIL**  
**APPROVED PLANS**  
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**Dated: 20 March 2026**



**1 SITE PLAN**  
 SCALE 1:500 @ A1  
 SCALE 1:1000 @ A3

**JS TN. ARCHITECTS**

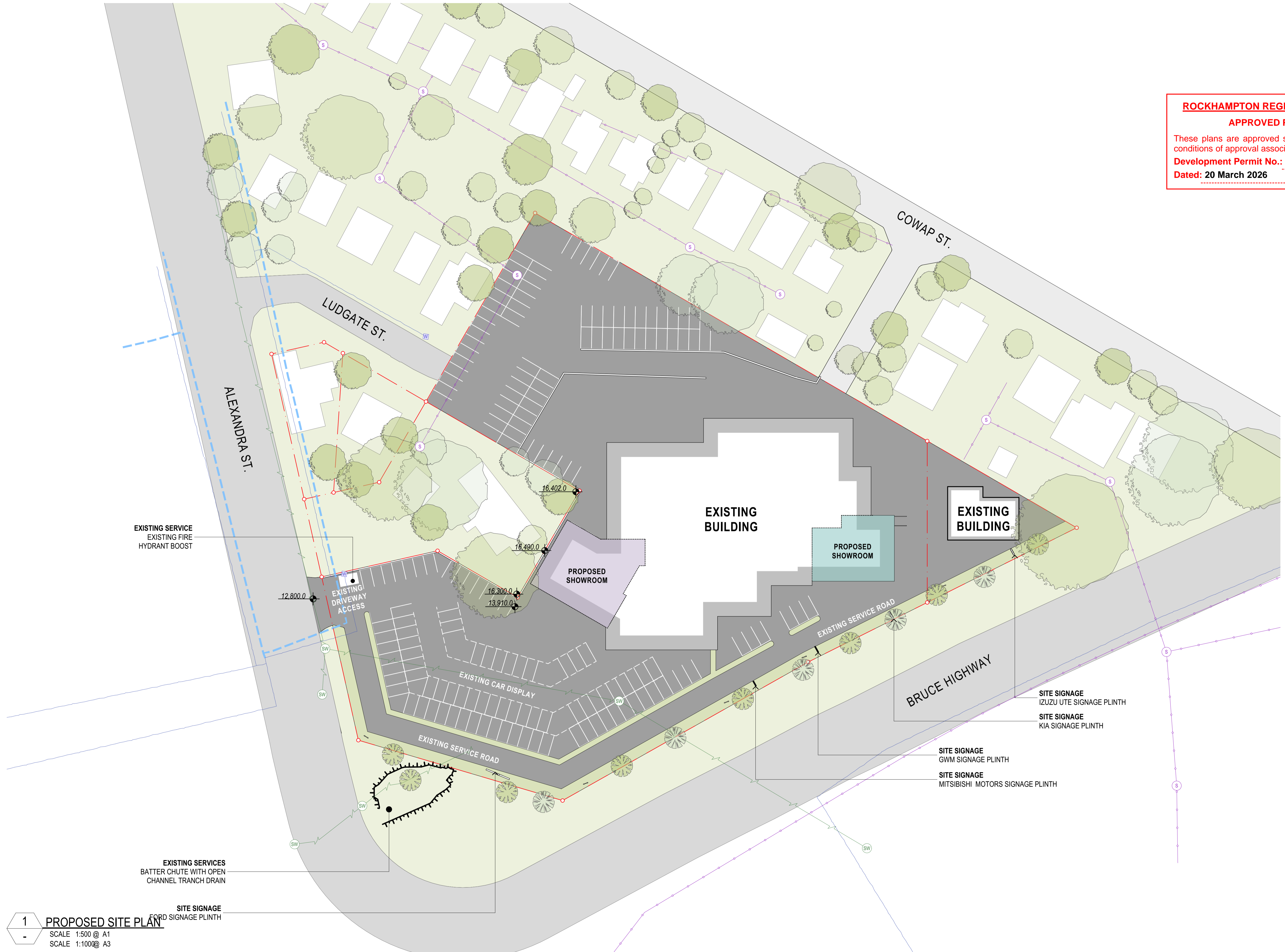
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01 FOR INFORMATION	17/10/2025	JLG JG JG
ISSUE PURPOSE	DATE	D. C. A.
<b>STATUS</b>		

**KIA SHOWROOM COMM**  
 Park Avenue , ROCKHAMPTON  
 CLIENT - TROPICAL AUTO GROUP  
 DRAWING TITLE  
**EXISTING SITE PLAN**  
 JOB No  
**MS02**  
 ISSUE  
**02**

**SK1002**

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EXISTING SERVICE  
 EXISTING FIRE  
 HYDRANT BOOST

EXISTING SERVICES  
 BATTER CHUTE WITH OPEN  
 CHANNEL TRANCH DRAIN

SITE SIGNAGE  
 FORD SIGNAGE PLINTH

PROPOSED SHOWROOM

PROPOSED SHOWROOM

EXISTING BUILDING

SITE SIGNAGE  
 ISUZU UTE SIGNAGE PLINTH

SITE SIGNAGE  
 KIA SIGNAGE PLINTH

SITE SIGNAGE  
 GWM SIGNAGE PLINTH

SITE SIGNAGE  
 MITSUBISHI MOTORS SIGNAGE PLINTH

**1** PROPOSED SITE PLAN  
 SCALE 1:500 @ A1  
 SCALE 1:1000 @ A3

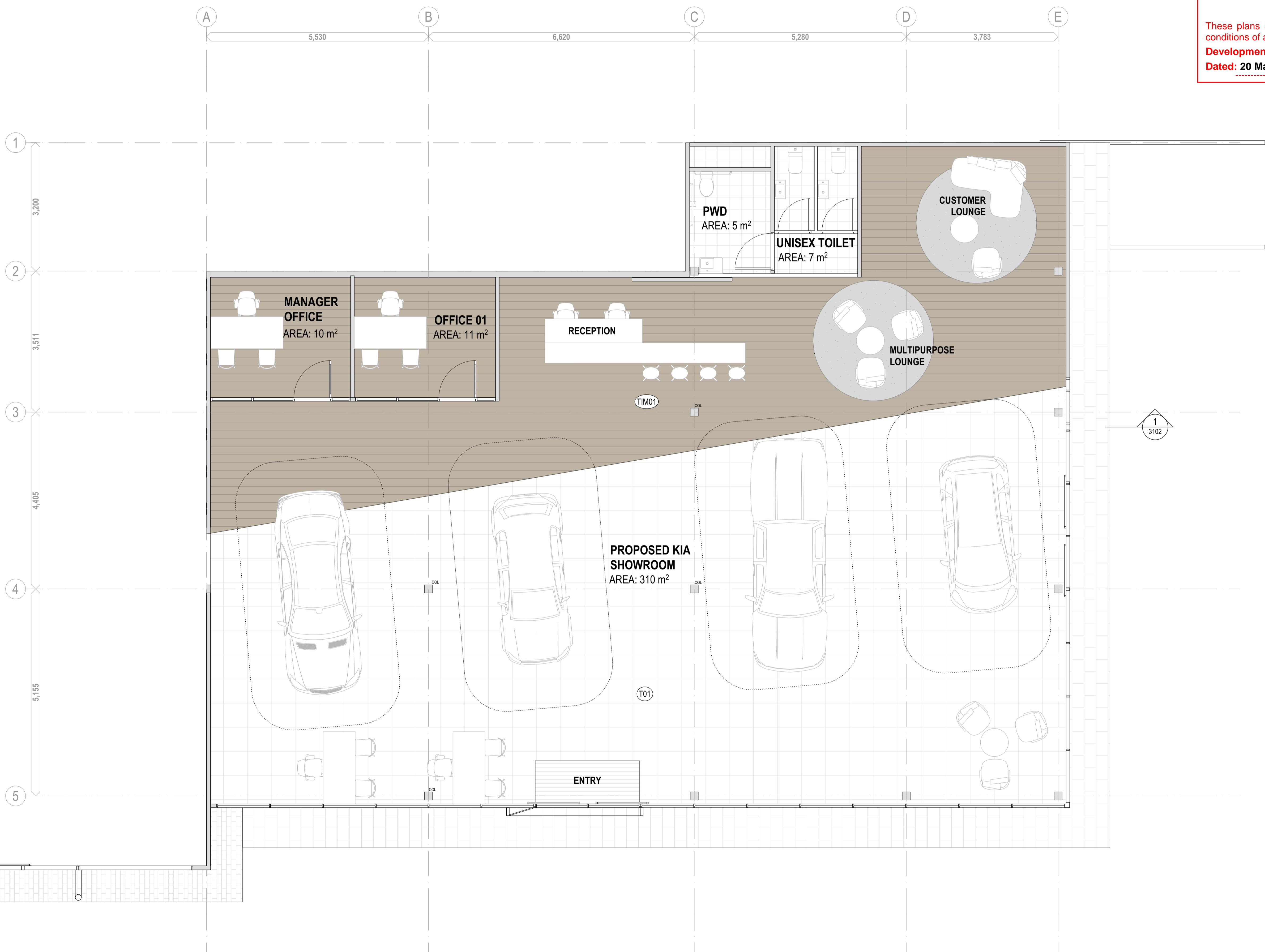
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**KIA SHOWROOM COMM**

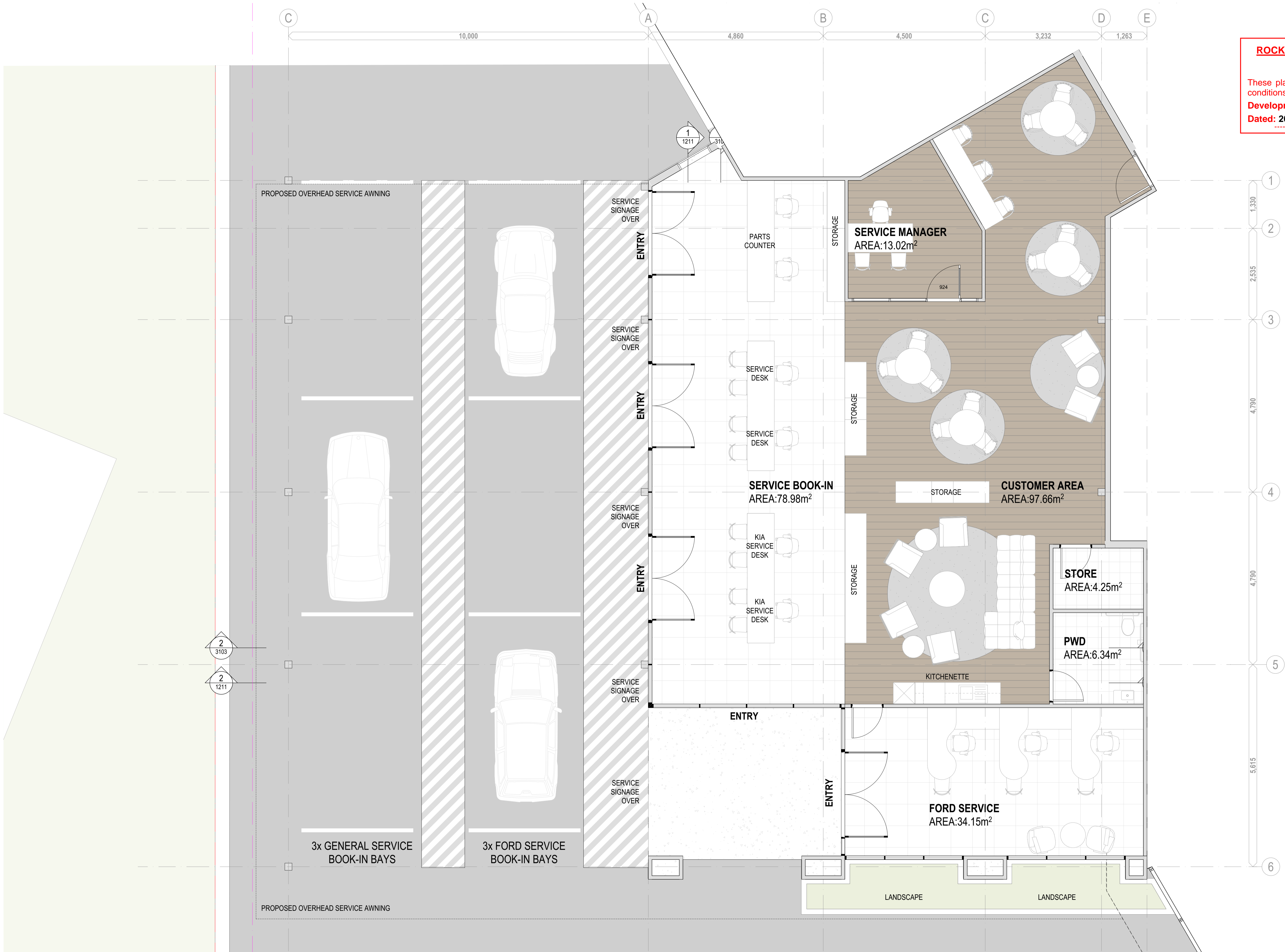
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CLIENT - TROPICAL AUTO GROUP

**GROUND FLOOR - KIA SHOWROOM**

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MS02  
ISSUE  
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**SK2001**

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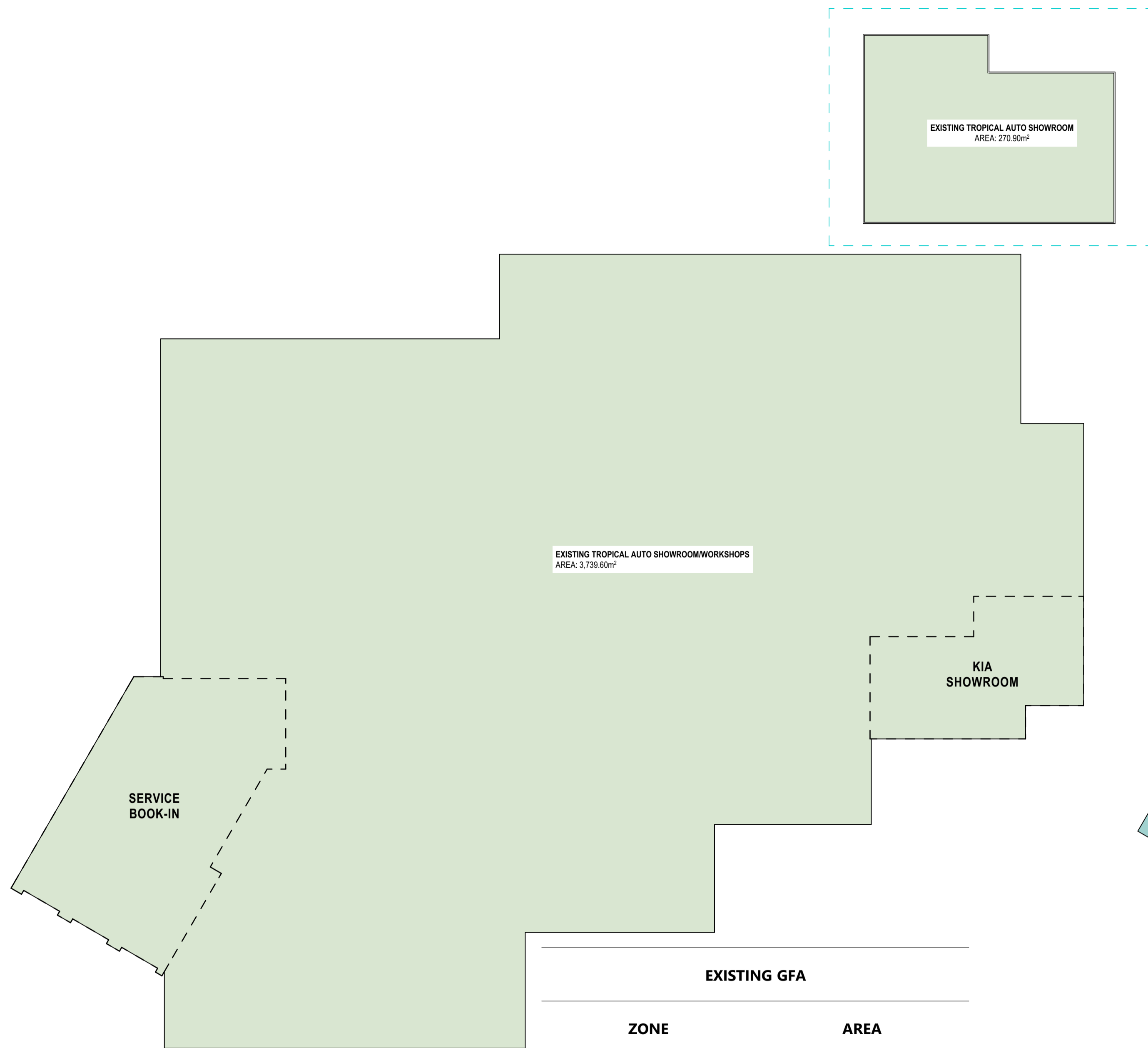


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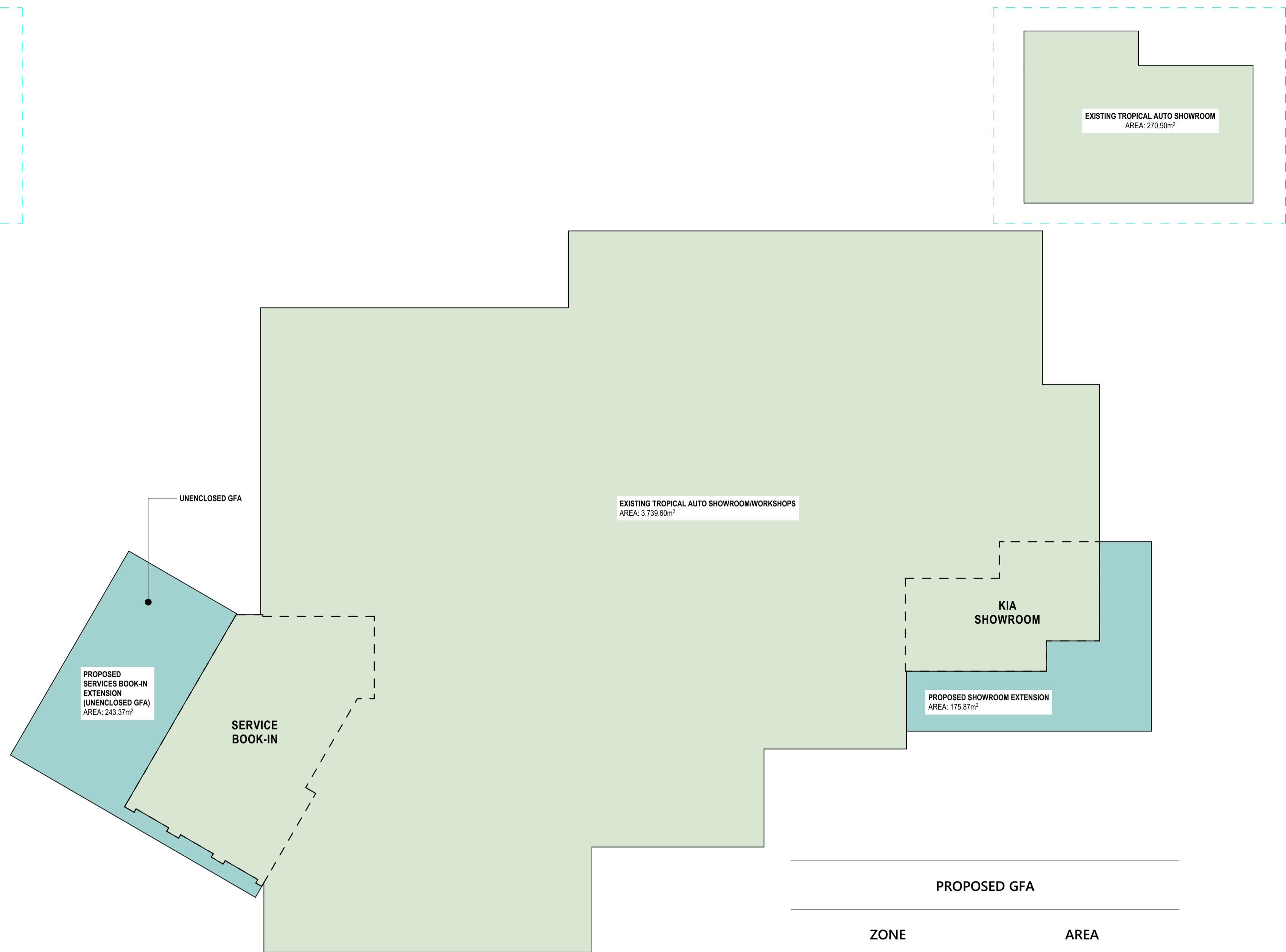
**KIA SHOWROOM COMM**  
 Park Avenue, ROCKHAMPTON  
 CLIENT - TROPICAL AUTO GROUP  
**GROUND FLOOR - SERVICE BOOK-IN**  
 JOB No MS02  
 ISSUE 02

**SK2003**



EXISTING GFA	
ZONE	AREA
EXISTING TROPICAL AUTO SHOWROOM	270.90
EXISTING TROPICAL AUTO SHOWROOM/WORKSHOPS	3,739.60
	<b>4,010.50 m<sup>2</sup></b>

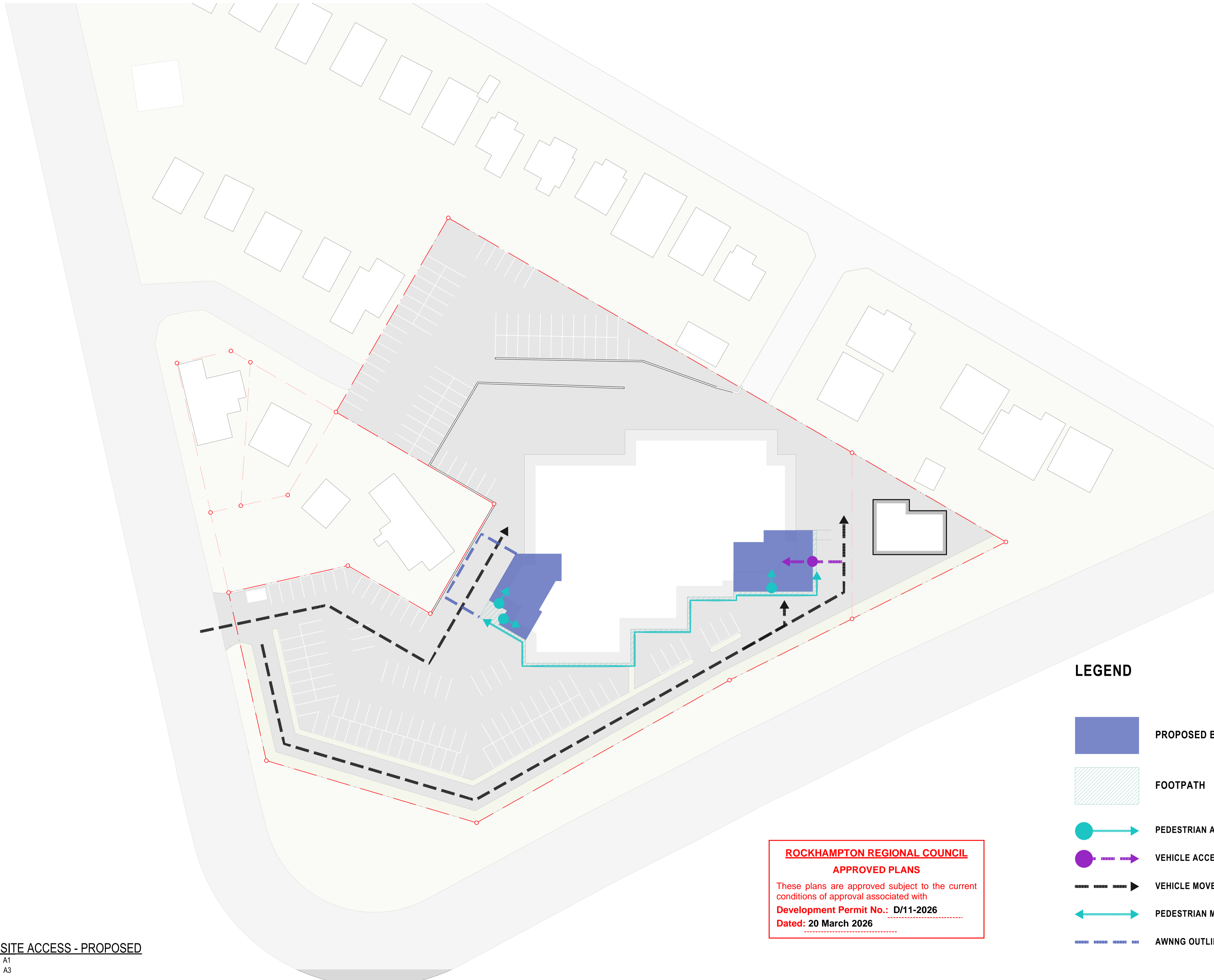
**1** DIAGRAM GFA - EXISTING  
SCALE 1:250 @ A1  
SCALE 1:500 @ A3



PROPOSED GFA	
ZONE	AREA
EXISTING TROPICAL AUTO SHOWROOM	270.90
EXISTING TROPICAL AUTO SHOWROOM/WORKSHOPS	3,739.60
PROPOSED SERVICES BOOK-IN EXTENSION (UNENCLOSED GFA)	243.37
PROPOSED SHOWROOM EXTENSION	175.87
	<b>4,429.74 m<sup>2</sup></b>

**2** DIAGRAM GFA - PROPOSED  
SCALE 1:250 @ A1  
SCALE 1:500 @ A3

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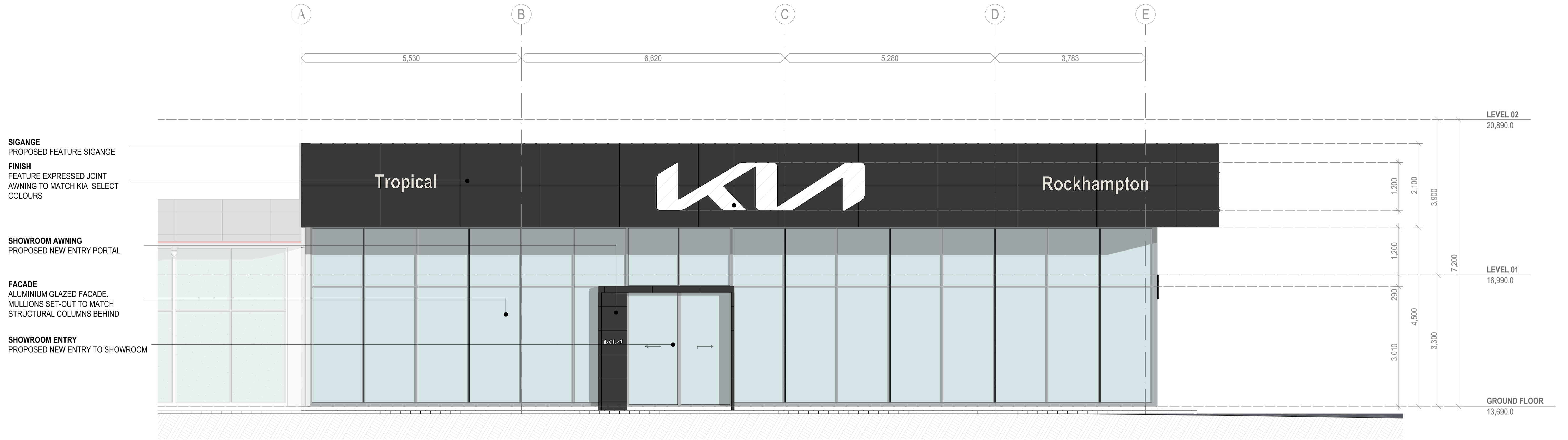


**LEGEND**

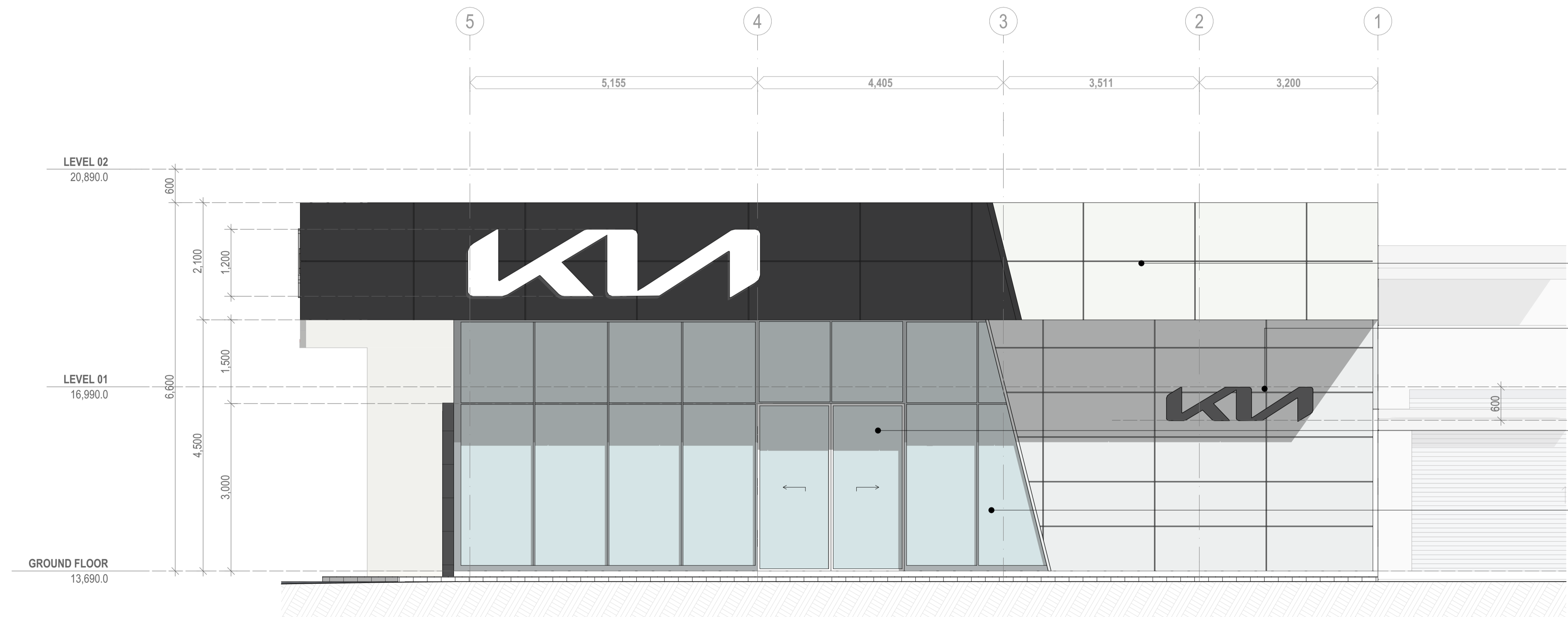
- PROPOSED BUILDINGS
- FOOTPATH
- PEDESTRIAN ACCESS
- VEHICLE ACCESS TO SHOWROOM
- VEHICLE MOVEMENT
- PEDESTRIAN MOVEMENT
- AWNING OUTLINE

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**1** DIAGRAM SITE ACCESS - PROPOSED  
 SCALE 1:500 @ A1  
 SCALE 1:1000 @ A3



**1 KIA FRONT ELEVATION 01**  
 SCALE 1:50 @ A1  
 SCALE 1:100 @ A3



**2 KIA SIDE ELEVATION 02**  
 SCALE 1:50 @ A1  
 SCALE 1:100 @ A3

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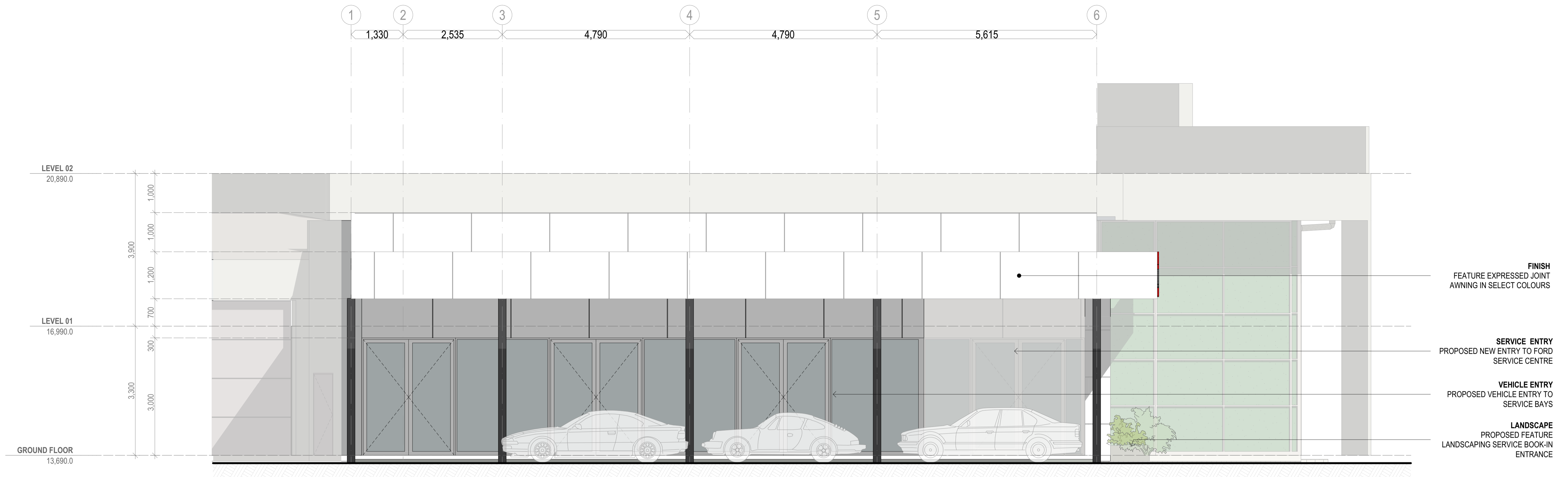
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ISSUE PURPOSE	DATE	D.	C.	A.	STATUS
03 FOR DESIGN APPROVAL	18/12/2025	J.G.	J.G.	J.G.	
02 AWNING UPDATES	10/30/2025	J.G.	J.G.	J.G.	
01 FOR INFORMATION	17/10/2025	J.G.	J.G.	J.G.	

**KIA SHOWROOM COMM**  
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**ELEVATIONS - KIA SHOWROOM**

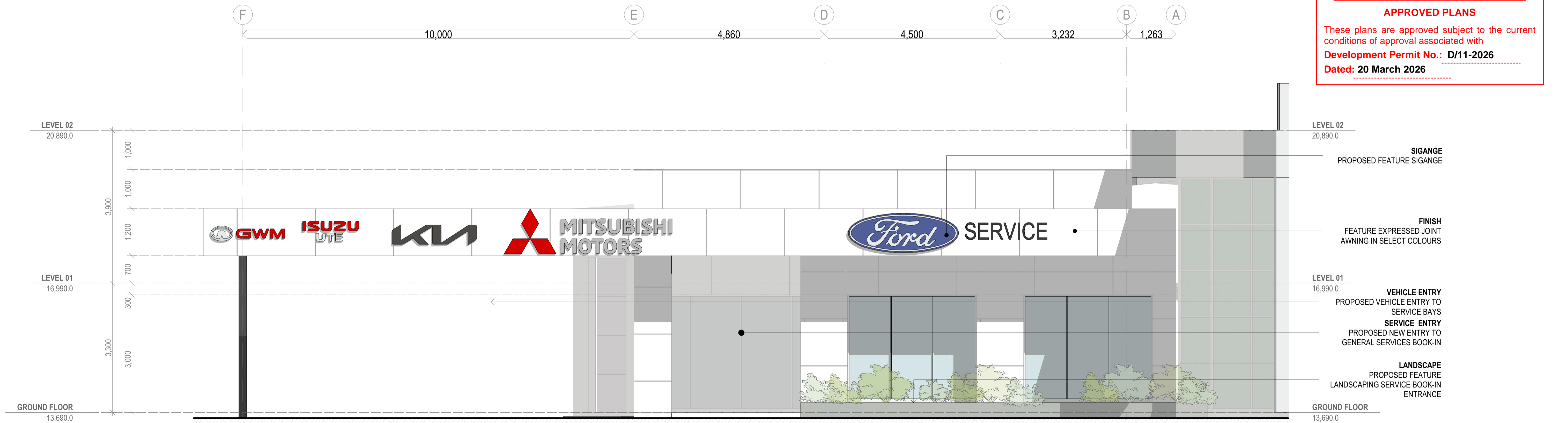
JOB No  
**MS02**  
 ISSUE  
**03**

**SK3001**



**1 SERVICES SIDE ELEVATION 01**  
 SCALE 1:50 @ A1  
 SCALE 1:100 @ A3

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**2 SERVICES FRONT ELEVATION 02**  
 SCALE 1:50 @ A1  
 SCALE 1:100 @ A3

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 ISSUE 02

**SK3002**