VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants
ACN 071 762 537 ABN 88 071 762 537

10 March 2022
Ref 20417

The Hills Shire Council
PO Box 7064
NORWEST 2153

Attn: Ms Cynthia Dugan
cdugan@thehills.nsw.gov.au

Dear Cynthia,

SSD-15882721
PROPOSED MIXED USE DEVELOPMENT
LOT 55 DP 1253217 – DORAN DRIVE PLAZA PRECINCT
VEHICULAR ACCESS, ON-SITE LOADING & WASTE COLLECTION MATTERS

I refer to your letter dated 14 September 2021 requesting additional information in respect to the abovementioned development proposal (SSD-15882721). The following advice is provided in respect of the matters raised under the '*Internal Traffic and circulation comments' – Item 3* and '*Asset Management, Traffic and Parks'* sections of your letter.

3. Internal Traffic and circulation comments

"3.1. The design of the Driveways, parking modules, circulation roadways and ramps (including obstruction, and curved roadways and ramps), and sight distance shall be designed in accordance with relevant AS/NZS 2890.1, AS2890.2 and AS/NZS 2890.6."

I can confirm that the proposed vehicular, parking and loading arrangements have been designed in accordance with the relevant requirements of the *AS2890* series in terms of parking space dimensions, loading bay dimensions, driveway and aisle widths, blind aisle situations, overhead clearances and visibility splays. Notwithstanding, it is noted that detailed construction plans will be required prior to the issue of the CC, and can be conditioned as part of the DA approval.

"3.2. The parking modules and aisle width shall comply with each respect user class as per Table 1.1 and Figure 2.2 of the AS/NZS 2890.1. The aisle width shall be provided on the basement plans and at least provide the typical parking modules."

Whilst the current basement plans include limited dimensions, we have thoroughly reviewed the layout and confirm that that the design complies with each respective user class (i.e. residential, retail, disabled etc), as per Table 1.1 and Figure 2.2 of *AS2890.1:2004.* As noted above, detailed construction plans of the vehicular access, parking and loading arrangements can be conditioned as part of the DA approval, to be provided *prior* to the issue of the CC.

"3.3. A cross section plan of driveways and ramps will need to be provided on plan; it must detail compliance gradient and changes of grade with the relevant AS/NZS 2890.1 and AS2890.2."

As requested, detailed cross section plans of the proposed basement access driveways and ramps have been provided and are attached. I can also confirm that the proposed ramp gradients and transition lengths comply with the relevant aspects of *AS2890.1:2004.* In particular it is noted that the ramp has been restricted with a maximum 1 in 5 (20%) grades, separated by 1 in 8 (12.5%) transitions, *or less*, in accordance with *AS2890.1* requirements.

Asset Management, Traffic and Parks

"A SIDRA model should be provided in De Clambe Drive at the entrance to the proposed apartment to demonstrate that the traffic turning right from De Clambe Drive into the proposed development will not cause any queue in De Clambe Drive."

Despite Council's comment that *a SIDRA model should be provided in De Clambe Drive at the entrance of the proposed apartment*, the submitted traffic report has already included the intersection analysis of the proposed site access driveway and De Clambe Drive.

Results of the SIDRA capacity analysis are attached, confirming that the 95th percentile "back of queue" during the AM peak arrival period is in the order of 1.7m (i.e. *less than* 1 car, assuming a spacing of 6m per car), increasing to 5.0m (i.e. approximately 1 car) during the PM peak arrival period.

Accordingly, based on the SIDRA capacity analysis, it is clear that the potential queuing generated from the traffic turning 'right-in' from De Clambe Drive into the proposed development will be *insignificant*, and will not result in any unacceptable traffic on road capacity, intersection performance or road safety issues.

"A median island shall be considered to restrict the right turn movements at the access of the proposed development if a queue is likely to occur in De Clambe Drive or in the car park of the proposed development due to the right turn movements."

As noted above, the potential "back of queue" during the AM and PM peak arrival periods are in the order of 1.7m and 5.0m, respectively (less at other times). As such, a median island along De Clambe Drive, in the vicinity of the entrance of the proposed development is considered unnecessary.

"Turning path diagrams shall be provided to demonstrate that a 12.5m Heavy Vehicle can turn left from Andalusian Way into the loading dock safely."

As requested, we have prepared *12.5m HRV swept turning paths* for vehicles accessing the loading dock.

The *swept turning path* diagrams were prepared using the *Autodesk Vehicle Tracking 2022* program in accordance with the requirements of *AS2890.2:2018*, and confirm that the HRV trucks will be able to enter and exit the site in a forward direction at all times as well as *turn left from Andalusian Way into the loading dock safely*.

Notwithstanding the above, all delivery drivers, contractors, etc., will be advised to approach and depart to the site via the most *direct route* to/from the arterial road network*;* i.e. via Showground Road – De Clambe Drive and Andalusian Way. Detailed *swept turning path* diagrams for the above nominated route have also been attached.

"If new services are required in Carrington Road, please contact Council's Infrastructure and Transport Planning section for proposed surface levels to assist with their placement."

As demonstrated by the *swept turning path* diagrams, no road upgrade works are required as a consequence of the development proposal, with the existing Carrington Road/Andalusian Way intersection capable of accommodating the 12.5m HRV trucks.

I trust the above information is sufficient. Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely

Donald Lee
Senior Engineer B.Eng (Civil)
Varga Traffic Planning Pty Ltd

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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6685, ABN 86 094 691 911

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Carspaces to be reinstated after 10 years following the completion of the affordable housing policy

Rev	Date	Approved by	Revision Notes
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission
03	05.11.21	JMC	For SDRP3
04	04.02.22	JMC	For Client Review
05	28.02.22	JMC	For Consultant Coordination
06	02.03.22	JMC	For Coordination
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08	08.03.22	JMC	For Client Review
09	09.03.22	JMC	For Client Review

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 06

Scale **1:200 @A1, 50%@A3**
Status **DA Submission**
Project No. **19068**
Dwg No. **DA-110-002**
Drawn by **AM, YT, JL, JE**
Rev **09**
North

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09	09.03.22	JMC	For Client Review

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 05

Scale: 1:200 @A1, 50%@A3
Status: **DA Submission**
Project No.: 19068
Dwg No.: DA-110-003
Drawn by: AM, VT, JL, JE
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09	09.03.22	JMC	For Client Review

Project Title
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Drawing Title
GA PLANS
Basement 04

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-004
Drawn by: AM, VT, JL, JE
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07	02.03.22	JMC	For Coordination
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09	08.03.22	JMC	For Client Review
10	09.03.22	JMC	For Client Review

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 03

Scale: **1:200 @A1, 50%@A3**
Status: **DA Submission**
Project No.: **19068**
Dwg No.: **DA-110-005**
Drawn by: **AM, VT, JL, JE**
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07	02.03.22	JMC	For Coordination
08	04.03.22	JMC	For Council Submission
09	08.03.22	JMC	For Client Review
10	09.03.22	JMC	For Client Review

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 02

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-006
Drawn by: AM, YT, JL, JE
Rev: 10
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07	15.02.22	JMC	For Client Review
08	28.02.22	JMC	For Consultant Coordination
09	02.03.22	JMC	For Coordination
10	04.03.22	JMC	For Council Submission
11	08.03.22	JMC	For Client Review
12	09.03.22	JMC	For Client Review

Project Title
Doran Drive
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Drawing Title
GA PLANS
Basement 01

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-007
Drawn by: AM, VT, JL, JE
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11	16.11.21	JMC	For Client Review
12	04.02.22	JMC	For Client Review
13	09.02.22	JMC	For Client Review
14	15.02.22	JMC	For Client Review
15	18.02.22	JMC	For Consultant Coordination
16	23.02.22	JMC	For Consultant Coordination
17	01.03.22	JMC	For Landscape Coordination
18	02.03.22	JMC	For Coordination
19	04.03.22	JMC	For Council Submission

Project Title
Doran Drive
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Drawing Title
GA PLANS
Ground Level

Scale: **1:200 @A1, 50%@A3**
Project No.: **19068**
Drawn by: **AM, VT, JL, JE**
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Status: **DA Submission**
Dwg No.: **DA-110-008**
Rev: **19**

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1 Access/Egress Fire Control Room

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11	15.02.22	JMC	For Client Review
12	18.02.22	JMC	For Consultant Coordination
13	23.02.22	JMC	For Consultant Coordination
14	01.03.22	JMC	For Landscape Coordination
15	02.03.22	JMC	For Coordination
16	04.03.22	JMC	For Council Submission

Project Title
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Drawing Title
GA PLANS
Upper Ground Level

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-009
Drawn by: AM, VT, JL, JE
Rev: 16
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15	18.02.22	JMC	For Consultant Coordination
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17	01.03.22	JMC	For Landscape Coordination
18	02.03.22	JMC	For Coordination
19	04.03.22	JMC	For Council Submission

Project Title

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Drawing Title

GA PLANS

Level 01

Scale: **1:200 @A1, 50%@A3**

Status: **DA Submission**

Project No.: **19068**

Dwg No.: **DA-110-010**

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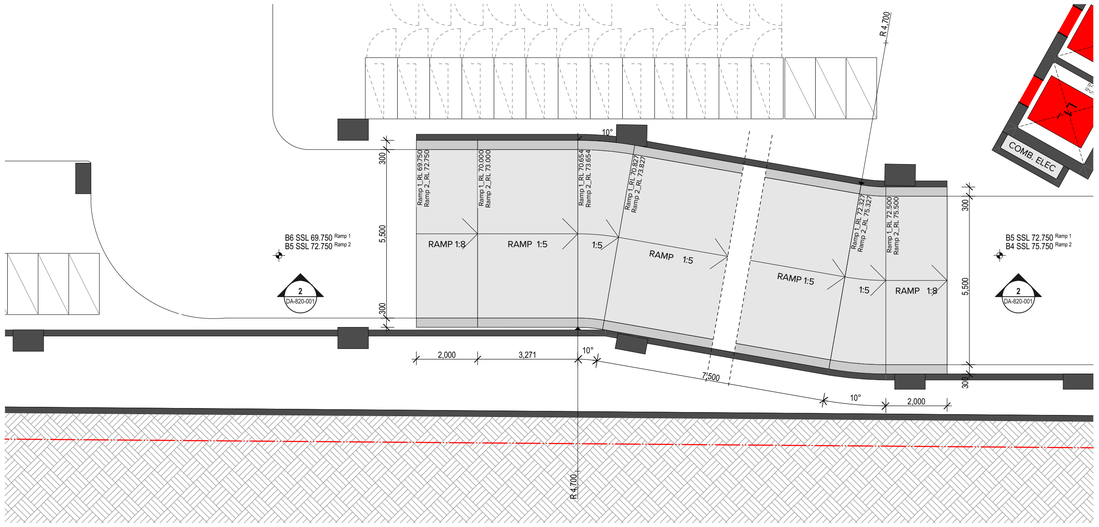

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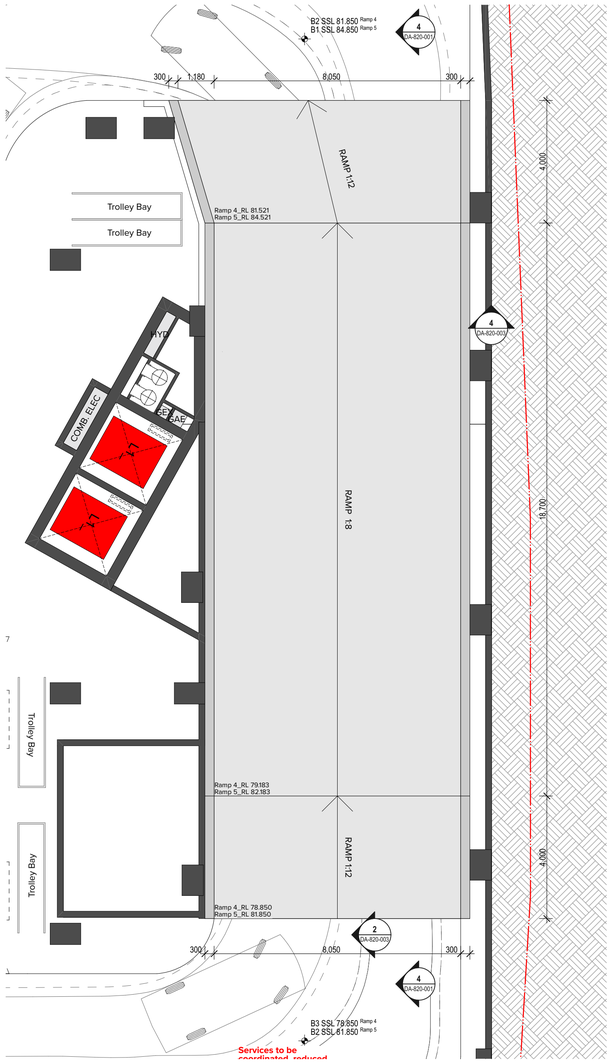

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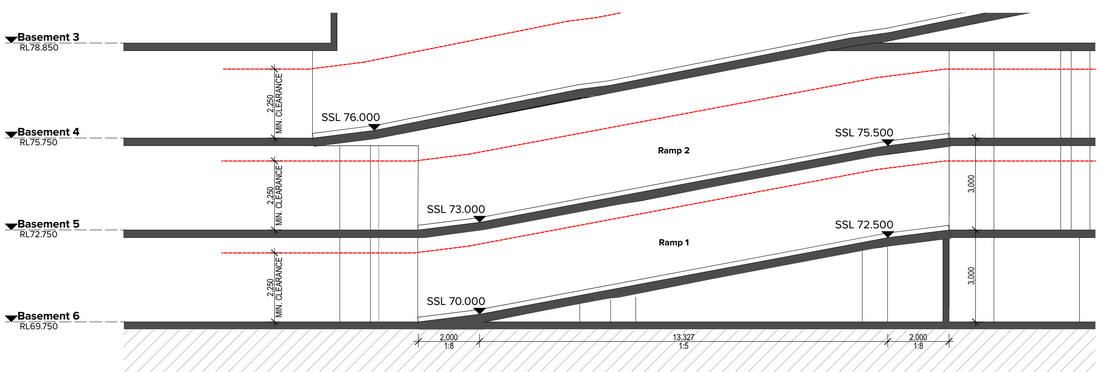

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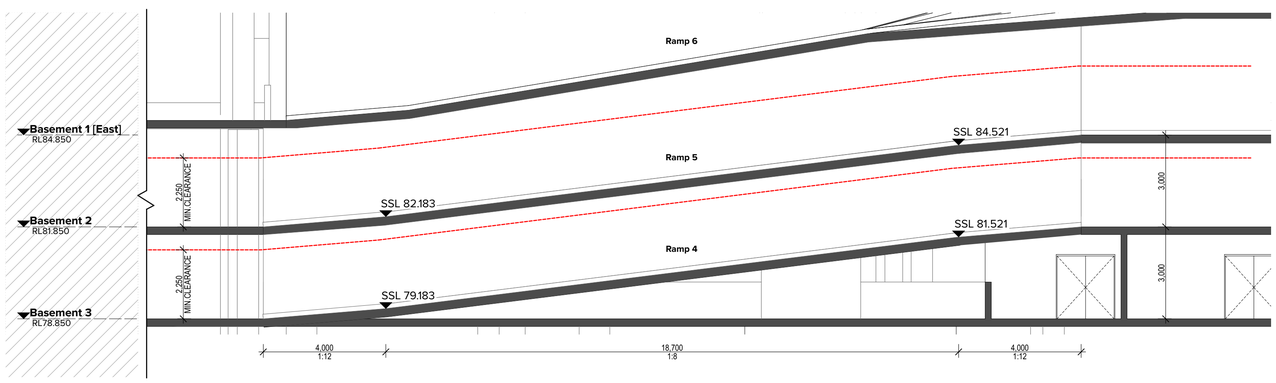

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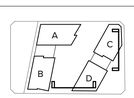

Rev	Date	Approved by	Revision Notes
01	08.10.21	JMC	For Client Review
02	04.03.22	JMC	For Council Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
Ramp Sections
Ramps 1&2,4&5

Scale	Project No.	Drawn by	North
1:100 @A1, 50%@A3	19068	JB	
Status	Dwg No.	Rev	
DA Submission	DA-820-001	02	

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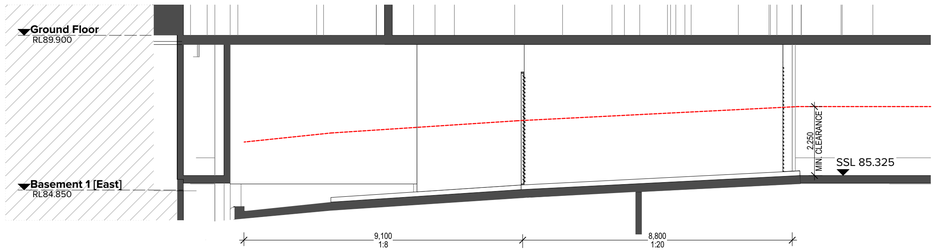

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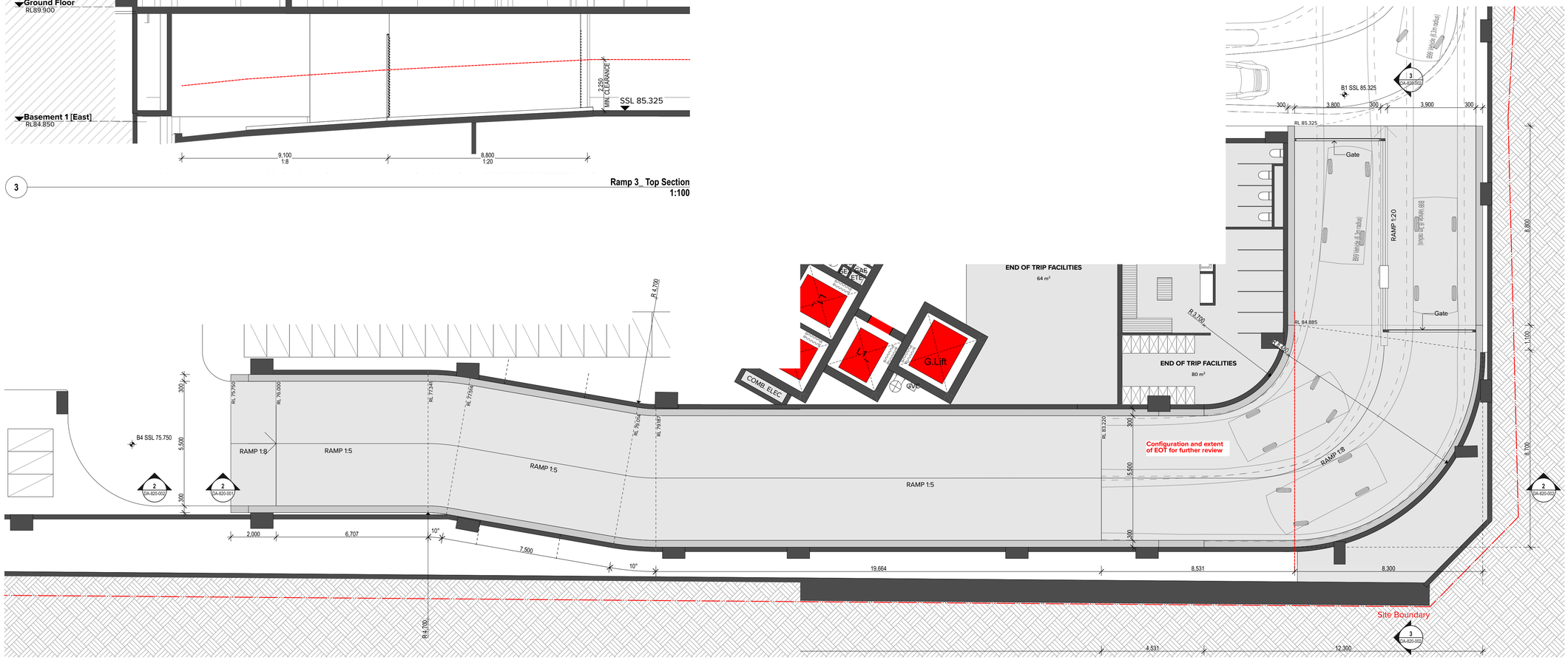

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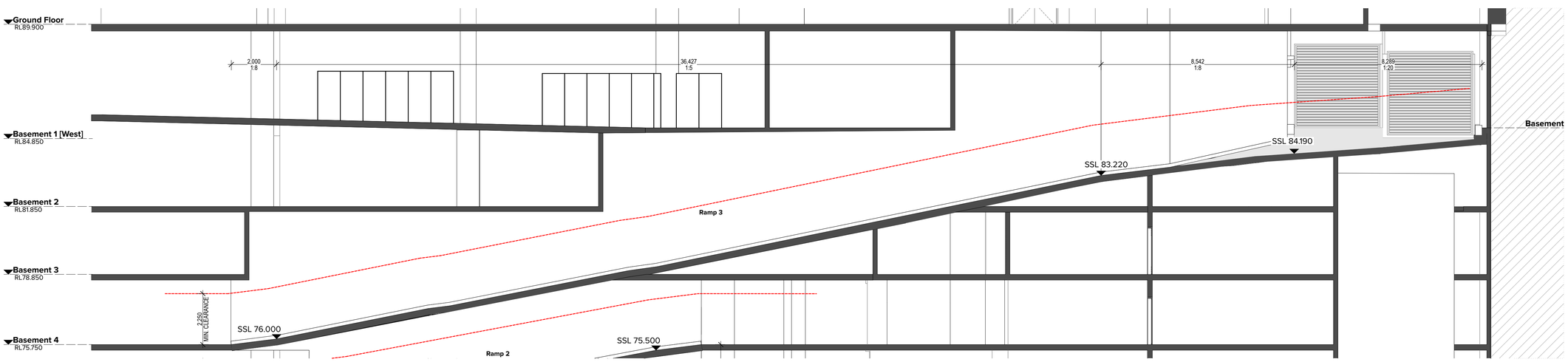

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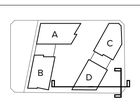

Rev	Date	Approved by	Revision Notes
01	08.10.21	JMC	For Client Review
02	04.03.22	JMC	For Council Submission

Project Title
Doran Drive
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Drawing Title
Ramp Sections
Ramp 3

Scale: 1:100 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-820-002
Drawn by: JB
Rev: 02
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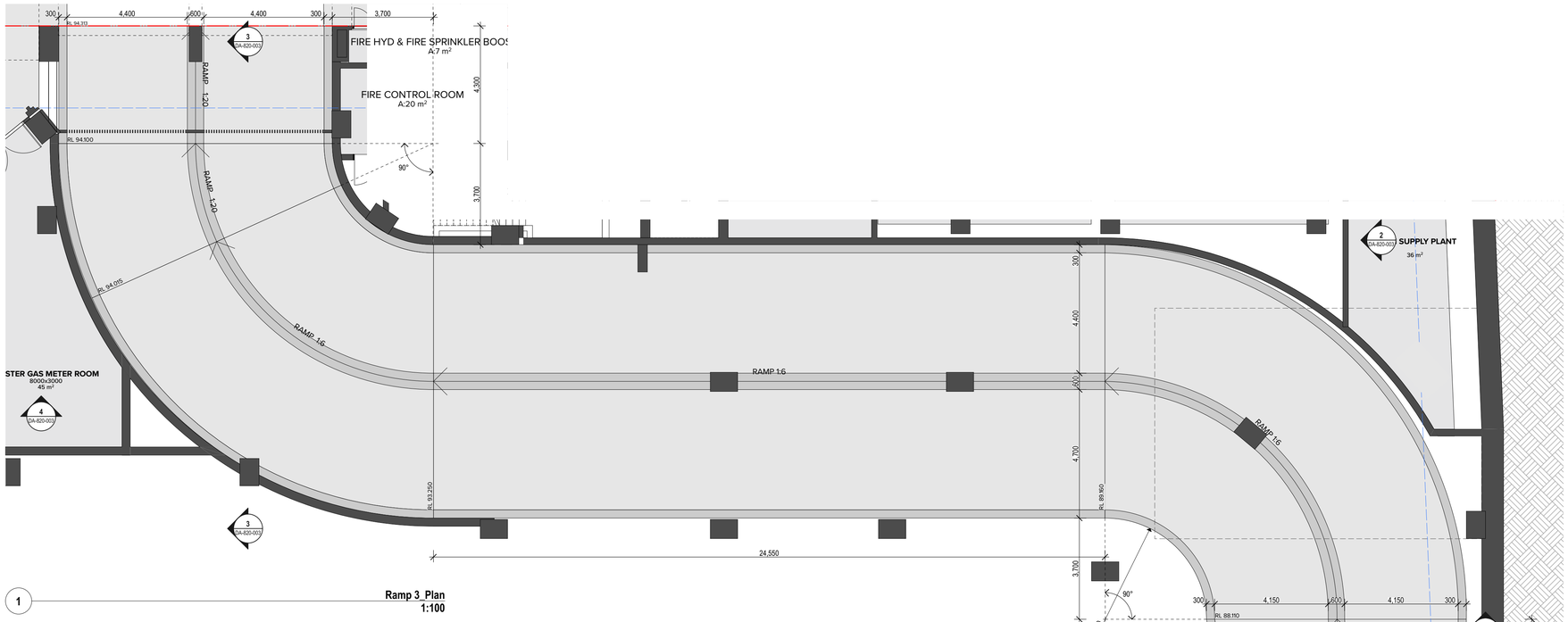

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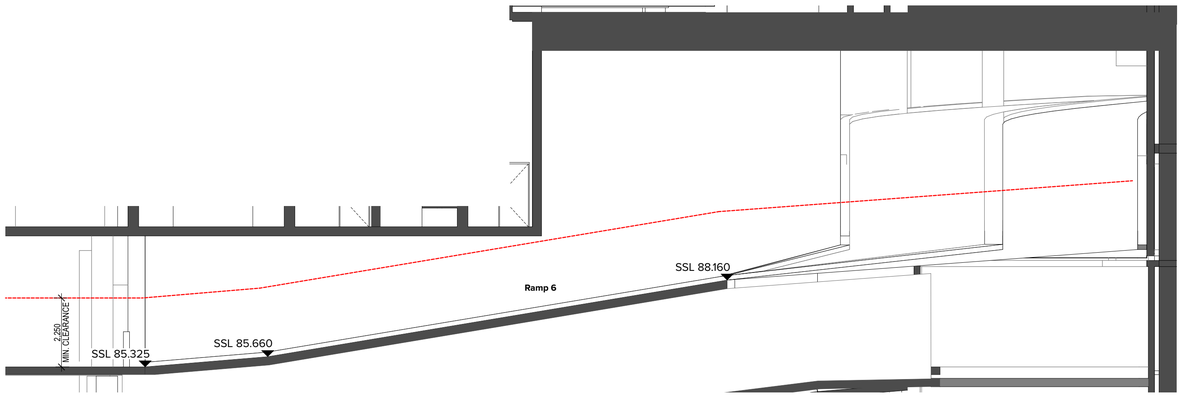

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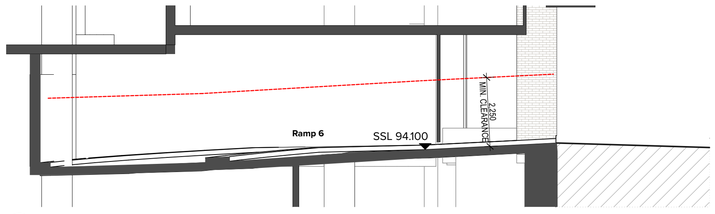

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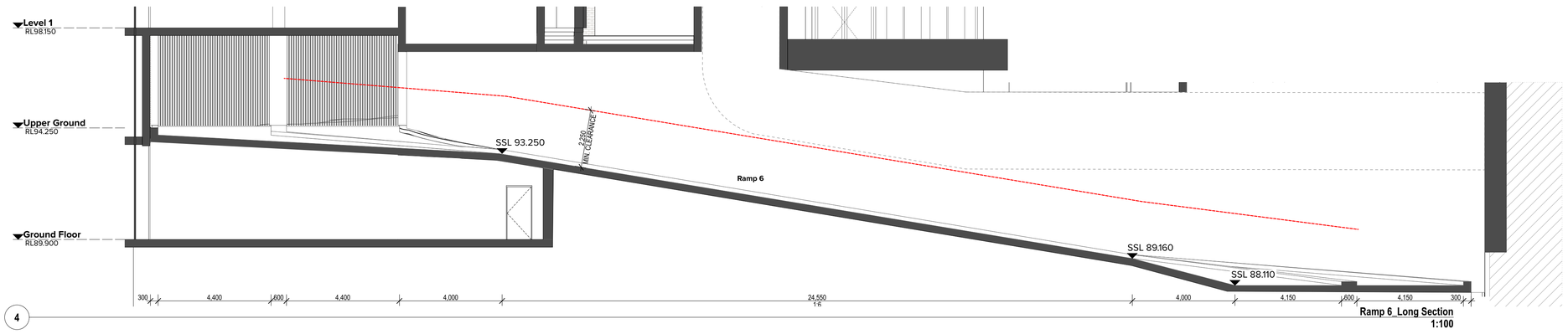

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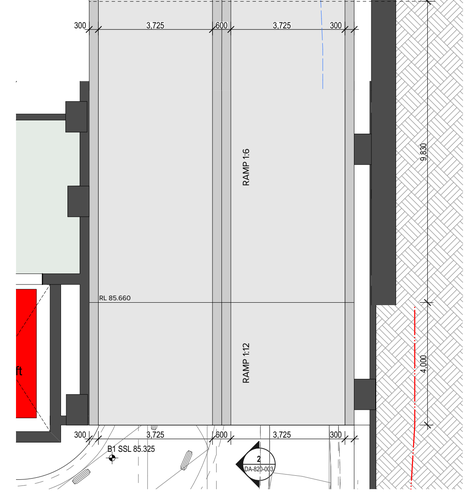

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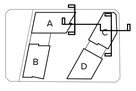

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02	04.03.22	JMC	For Council Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
Ramp Sections
Ramp 6

Scale **1:100 @A1, 50%@A3**
Status **DA Submission**
Project No. **19068**
Dwg No. **DA-820-003**
Drawn by **JB**
Rev **02**
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MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing (No Upgrades) AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	143	0.0	143	0.0	0.206	0.5	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
3	R2	104	0.0	104	0.0	0.206	2.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
Approach		247	0.0	247	0.0	0.206	1.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
East: De Clambe Dr (E)														
4	L2	159	0.0	159	0.0	0.155	3.9	LOS A	0.0	0.0	0.00	0.29	0.00	46.7
5	T1	135	0.0	135	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	34.1
Approach		294	0.0	294	0.0	0.155	2.1	NA	0.0	0.0	0.00	0.29	0.00	45.2
West: De Clambe Dr (W)														
11	T1	67	0.0	67	0.0	0.063	0.6	LOS A	0.2	1.7	0.28	0.21	0.28	33.8
12	R2	38	0.0	38	0.0	0.063	5.6	LOS A	0.2	1.7	0.28	0.21	0.28	21.6
Approach		105	0.0	105	0.0	0.063	2.4	NA	0.2	1.7	0.28	0.21	0.28	23.2
All Vehicles		646	0.0	646	0.0	0.206	1.8	NA	0.8	5.9	0.15	0.25	0.15	25.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing (No Upgrades) PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	226	0.0	226	0.0	0.360	0.5	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
3	R2	165	0.0	165	0.0	0.360	3.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
Approach		391	0.0	391	0.0	0.360	1.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
East: De Clambe Dr (E)														
4	L2	347	0.0	347	0.0	0.238	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	45.7
5	T1	100	0.0	100	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.41	0.00	30.2
Approach		447	0.0	447	0.0	0.238	3.0	NA	0.0	0.0	0.00	0.41	0.00	45.0
West: De Clambe Dr (W)														
11	T1	170	0.0	170	0.0	0.161	1.1	LOS A	0.7	5.0	0.36	0.21	0.36	33.0
12	R2	83	0.0	83	0.0	0.161	6.5	LOS A	0.7	5.0	0.36	0.21	0.36	21.5
Approach		253	0.0	253	0.0	0.161	2.8	NA	0.7	5.0	0.36	0.21	0.36	23.3
All Vehicles		1091	0.0	1091	0.0	0.360	2.6	NA	1.7	11.8	0.18	0.30	0.18	26.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	143	0.0	143	0.0	0.206	0.5	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
3	R2	104	0.0	104	0.0	0.206	2.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
Approach		247	0.0	247	0.0	0.206	1.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
East: De Clambe Dr (E)														
4	L2	159	0.0	159	0.0	0.155	3.9	LOS A	0.0	0.0	0.00	0.29	0.00	46.7
5	T1	135	0.0	135	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	34.1
Approach		294	0.0	294	0.0	0.155	2.1	NA	0.0	0.0	0.00	0.29	0.00	45.2
West: De Clambe Dr (W)														
11	T1	67	0.0	67	0.0	0.063	0.6	LOS A	0.2	1.7	0.28	0.21	0.28	33.8
12	R2	38	0.0	38	0.0	0.063	5.6	LOS A	0.2	1.7	0.28	0.21	0.28	21.6
Approach		105	0.0	105	0.0	0.063	2.4	NA	0.2	1.7	0.28	0.21	0.28	23.2
All Vehicles		646	0.0	646	0.0	0.206	1.8	NA	0.8	5.9	0.15	0.25	0.15	25.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
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Approach		391	0.0	391	0.0	0.360	1.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
East: De Clambe Dr (E)														
4	L2	347	0.0	347	0.0	0.238	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	45.7
5	T1	100	0.0	100	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.41	0.00	30.2
Approach		447	0.0	447	0.0	0.238	3.0	NA	0.0	0.0	0.00	0.41	0.00	45.0
West: De Clambe Dr (W)														
11	T1	170	0.0	170	0.0	0.161	1.1	LOS A	0.7	5.0	0.36	0.21	0.36	33.0
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Approach		253	0.0	253	0.0	0.161	2.8	NA	0.7	5.0	0.36	0.21	0.36	23.3
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Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
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3	R2	104	0.0	104	0.0	0.206	2.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
Approach		247	0.0	247	0.0	0.206	1.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
East: De Clambe Dr (E)														
4	L2	159	0.0	159	0.0	0.155	3.9	LOS A	0.0	0.0	0.00	0.29	0.00	46.7
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
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5	T1	100	0.0	100	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.41	0.00	30.2
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Approach		253	0.0	253	0.0	0.161	2.8	NA	0.7	5.0	0.36	0.21	0.36	23.3
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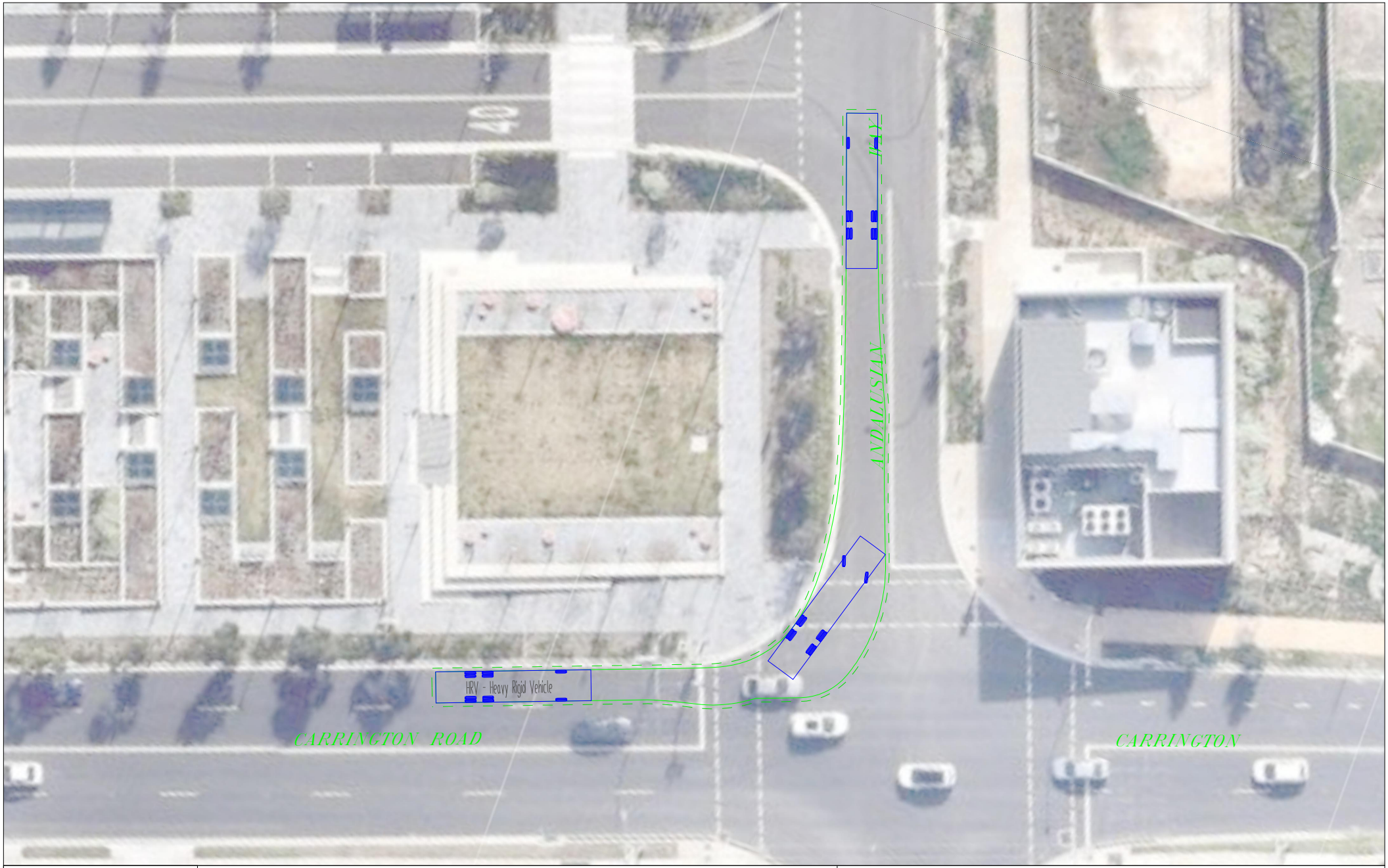
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



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Neutral Bay, NSW 2089

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PO Box 1868
Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
MIXED USE DEVELOPMENT

N

DRAWING TITLE
12.5M HRV TRUCK TURNING PATHS
Entering Andalusian Way from Carrington Road

ADDRESS
Doran Drive, Castle Hill

1:400 @ A4

PROJECT NO.
20417

DATE DRAWN
2021-10-20

REVIEWED
CHRIS PALMER

PREPARED
DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants

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www.vargatraffic.com.au
Sydney, Australia

PROJECT
MIXED USE DEVELOPMENT

N

DRAWING TITLE
12.5M HRV TRUCK TURNING PATHS
Entering Dedicated Loading Dock Area

ADDRESS
Doran Drive, Castle Hill

1:400 @ A4

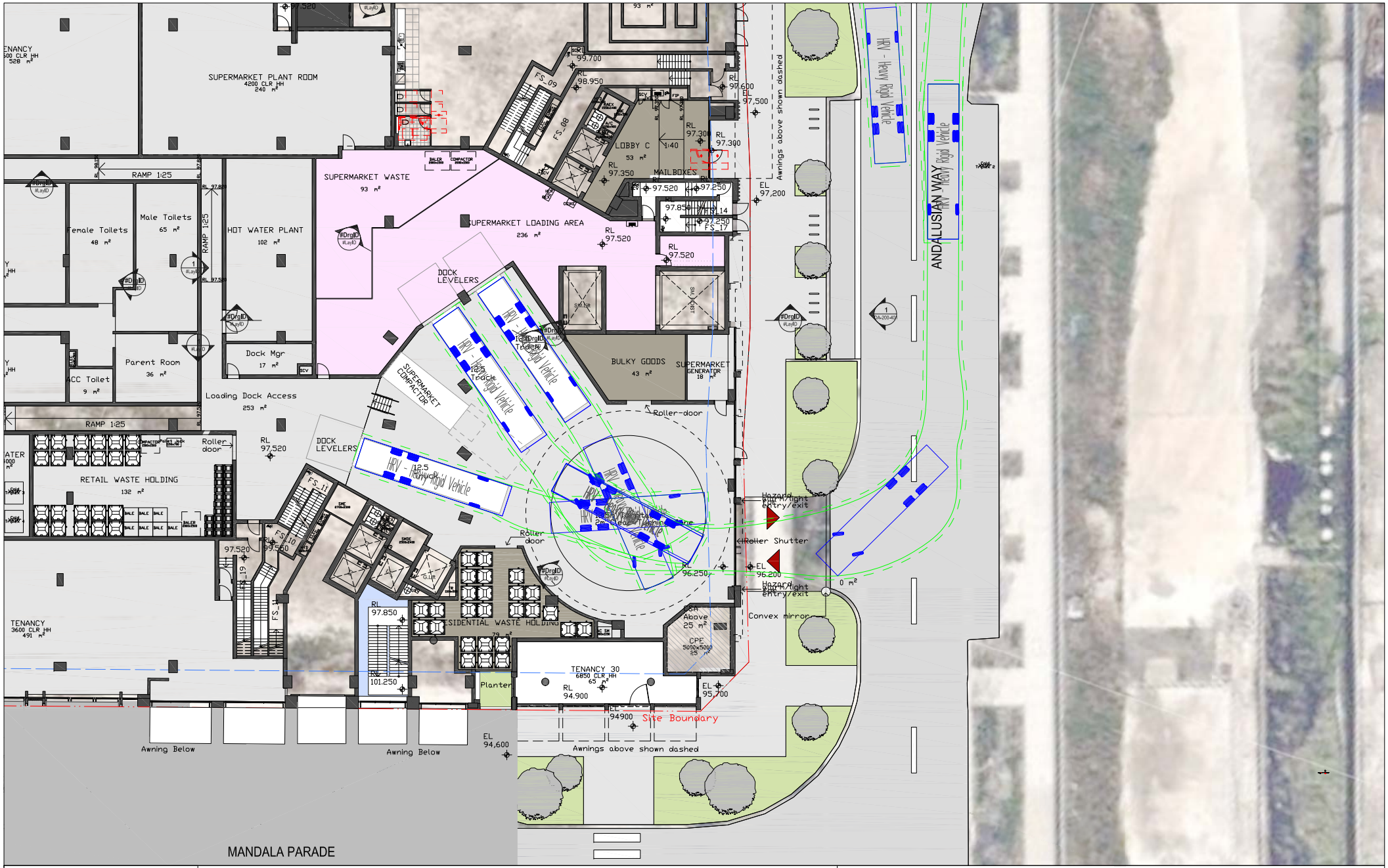
PROJECT NO.
20417

DATE DRAWN
2022-3-7

REVIEWED
CHRIS PALMER

PREPARED
DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



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PROJECT
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DRAWING TITLE
12.5M HRV TRUCK TURNING PATHS
Entering Dedicated Loading Dock Area

ADDRESS
Doran Drive, Castle Hill

1:400 @ A4

PROJECT NO.
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REVIEWED
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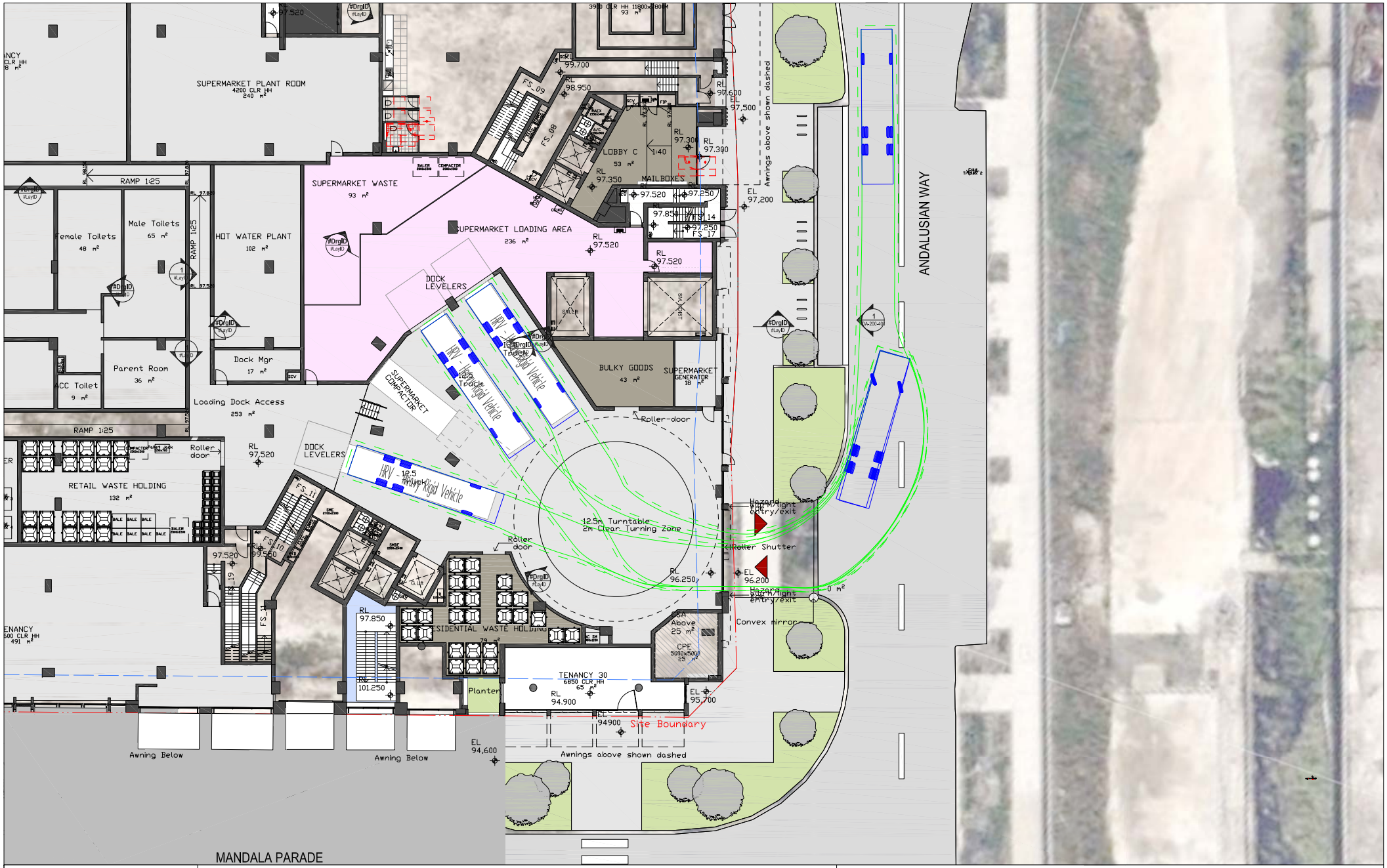

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PROJECT
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DRAWING TITLE
12.5M HRV TRUCK TURNING PATHS
Exiting Dedicated Loading Dock Area

ADDRESS
Doran Drive, Castle Hill

1:400 @ A4

PROJECT NO.
20417

DATE DRAWN
2022-3-7

REVIEWED
CHRIS PALMER

PREPARED
DONALD LEE

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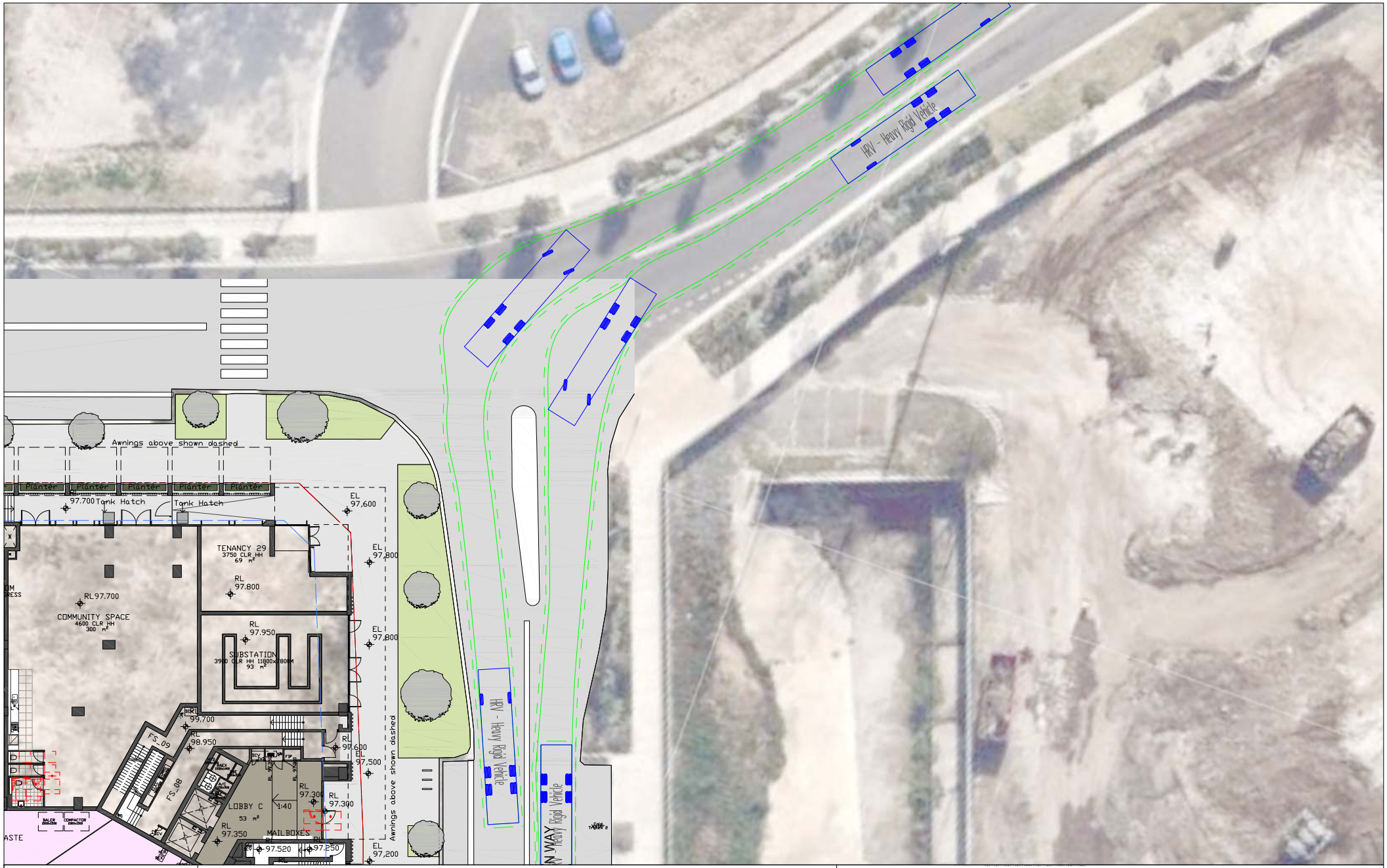

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PROJECT
MIXED USE DEVELOPMENT

N

DRAWING TITLE
12.5M HRV TRUCK TURNING PATHS
Entering / Exiting Andalusian Way from De Clambe Drive

1:400 @ A4

ADDRESS
Doran Drive, Castle Hill

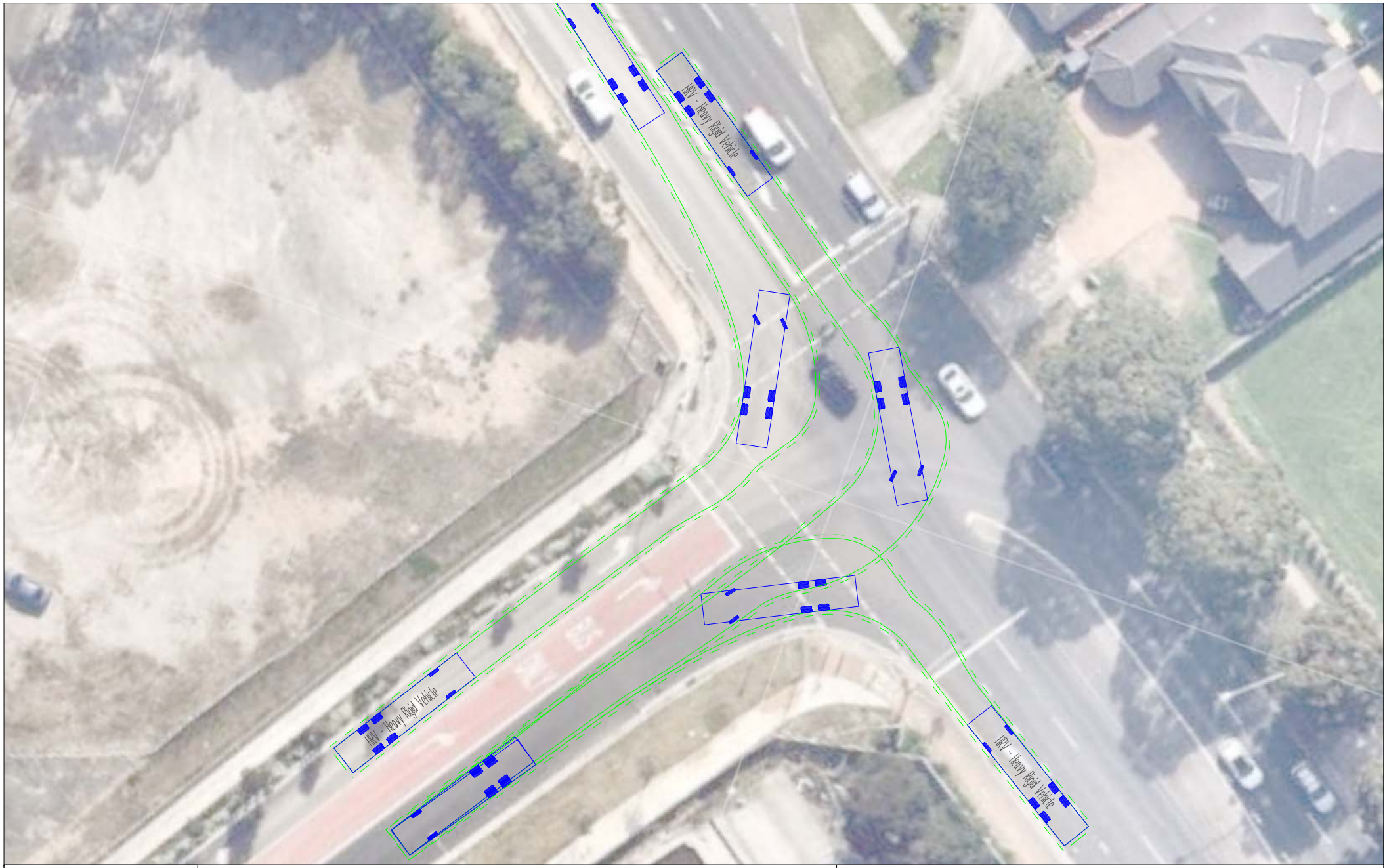
PROJECT NO.
20417

DATE DRAWN
2022-3-7

REVIEWED
CHRIS PALMER

PREPARED
DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



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Sydney, Australia

PROJECT
MIXED USE DEVELOPMENT

N

DRAWING TITLE
12.5M HRV TRUCK TURNING PATHS
Entering / Exiting De Clambe Drive from Showground Road

1:400 @ A4

ADDRESS
Doran Drive, Castle Hill

PROJECT NO.
20417

DATE DRAWN
2022-3-7

REVIEWED
CHRIS PALMER

PREPARED
DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants