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Access Review Report for

103-109 Laycock Street, Cranebrook, NSW

Prepared by

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1. Introduction

Loka Consulting Engineers Pty Ltd has been engaged by Alvaro Architects to carry out an Access assessment for the proposed seniors housing development at 103-109 Laycock Street, Cranebrook, NSW.

The proposed development is bounded by

- 101 Laycock St, 15, 21, 23, 29, 31 Camelot Dr on the East,
- 111 Laycock St on the West,
- 22 Nepean St on the North, and
- Laycock St on the South.

An Access assessment report has been based on the following drawings prepared by Alvaro Architects.

No	Title	Drawing No.	Revision	Date
1	Site Plan	102	02	14.07.2021
2	Site Sections & driveway section	301	01	02.07.2021
3	Typical Floor Plans – Units 01 & 16	701	02	14.07.2021
4	Typical Sections and Elevations – Units 01 & 16	702	01	02.07.2021
5	Typical Floor Plans – Units 02-15	703	02	14.07.2021
6	Typical Sections and Elevations – Units 02-15	704	01	02.07.2021

2. Objectives

The report attempts to provide an accessibility review of the subject development to ascertain that the development is consistent with access requirements for a proposed residential housing development, compliant with the SEPP 2004 & the Disability Discrimination Act 1992.

3. Assessment Criteria

The assessment based on the following legislation, planning instruments and standards pertaining to access for seniors, subsequently the report will refer to the – "State of environmental planning policy (housing for seniors or people with a disability) 2004 (SEPP)" – a standard reference.

For those instances of "Deemed to Satisfy (DTS) non-compliance", a detailed analysis and commentary is provided, where items are nominated as 'Compliance Achievable" it is considered that the existing plans are capable of achieving compliance subject to implementation of the requirements in the construction phase of the development.

4. Proposed Development Summary

- The proposed development will facilitate the construction of a seniors housing development within a site area of approximately 7974m².
- The development consists of 16 units of 1-storey townhouses.
- The total number of car parking spaces is 32 which includes one single garage of 3.8m width for accessible parking for each unit, 1 carport for each unit and 3 visitor spaces.
- a pedestrian crossing is proposed in front of the development to connect the development to the existing footpath & bus stop on the opposite side of the street.
- The development proposed one vehicular entrance and two accessible pedestrian entrances from Laycock St with suitable gradients and cross falls.

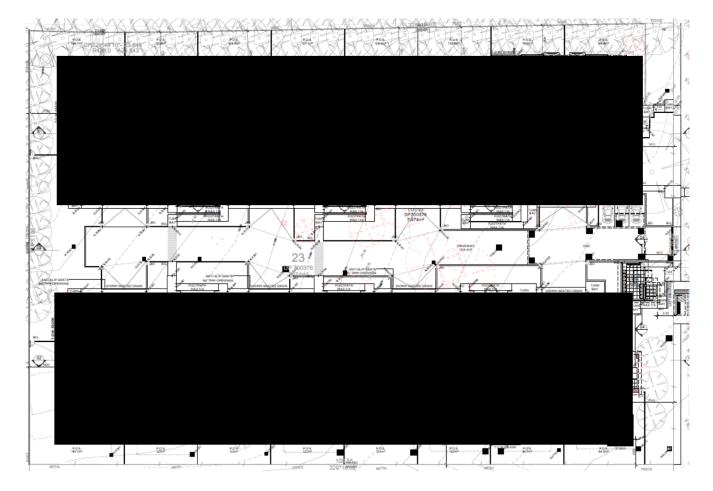


Figure 1: Site Ground Floor

4.1 Building Details

This report is for a proposed New Building, the development being a building with classification as detailed below:

- Class 7a car parking- garages
- Class 3 seniors housing

5. Development external adjoining

The proposed development has been designed to reflect the requirements of the SEPP. This development contains self-contained dwellings. Therefore, the requirements of SEPP Clause 26: Location and Access to Facilities and Clause 38: Accessibility are relevant.

5.1 Location and access to facilities – SEPP Clause 26

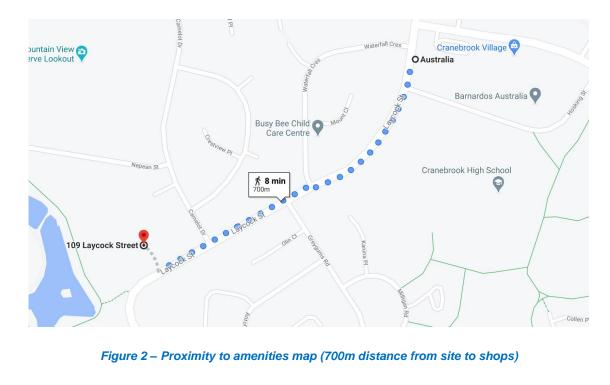
A SEPP development must offer access to services such as shops, banks, retail services, commercial services, recreational facilities, community facilities and doctors. These facilities are to be located within 400m of the site via an access-way that provides an accessible path of travel

For development within the Sydney Statistical Division, these services must be located at a distance no greater than 400m from the site or access to a public transport network. There are 2 bus stops located right in front of the subject site. One is to be constructed at the existing bus stop and boarding pad located directly opposite the development site on (the southern side of) Laycock Street, to service residents and their visitors waiting for buses to Penrith Station and shops. While The other is to be constructed at the existing bus stop and boarding pad located immediately fronting the development on (the northern side of) Laycock Street, to service residents and their visitors waiting for buses to Penrith Station and shops. While The other is to be constructed at the existing bus stop and boarding pad located immediately fronting the development on (the northern side of) Laycock Street, to service residents and their visitors waiting to catch buses to Jordan Springs Shopping Centre in the opposite direction. therefore, complies with this requirement (refer to traffic report issued by this office for details).

Refer to the proximity to amenities map from Google Maps shown below in Figure 2.

Refer to the location of Bus Stops from Google maps shown below in Figure 3.

Refer to the Bus Stop Timetable from Transport NSW shown below in Figure 4 and Figure 5.



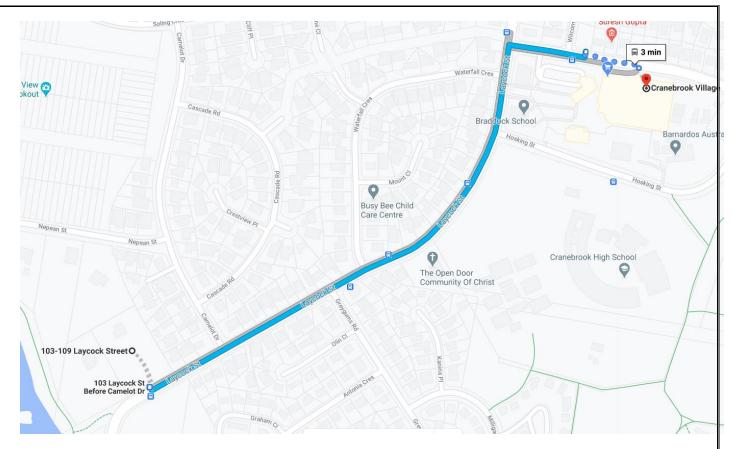


Figure 3 – Bus Stop Locations from site to shops



Valid from: 20 July 2020				ate: 14 S ation is co			NOTE: Information is correct on date of download.		
Monday to Friday	. ð.	8		5	8	6		8	6
Penrith Station							09:08		
Castlereagh Rd after Lugard St. Penrith							09.13		
Lakeview Dr After Oystercatcher PI, Cranebrook Borrowdale Way opp Cranebrook Village							09:16 09:20		
Shopping Centre, Cranebrook	00.15	00.41	07.10	07.41	00.11	00.42	09.20	10.20	11.20
Jordan Springs Shopping Centre, Jordan Springs	06:17	06:45	07:14	07:45	08:15	08:46	09:24	10:24	11:24
Bvd, Jordan Springs									
Greenwood Pkwy opp Nabilla St, Jordan Springs	06:24	06:52	07:21	07:52	08:22	08:53	09:31	10:31	11:33
Monday to Friday	. ð.	8		-	-	6	_	8	. 6
Penrith Station				15:08				17:18	
Castlereagh Rd after Lugard St. Penrith							16:56		
Lakeview Dr After Oystercatcher PI, Cranebrook							16:59		
Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook	12:20	13:20	14:20	15:22	16:04	16:34	17:03	17:30	17:55
Jordan Springs Shopping Centre, Jordan Springs	12.24	13.24	14.74	15.28	16:10	16:39	17:08	17:35	18:00
Bvd, Jordan Springs	12.24	13.24	14.24	15.20	10.10	10.55	17.00		10.00
Greenwood Pkwy opp Nabilla St, Jordan Springs	12:33	13:33	14:33	15:39	16:20	16:48	17:17	17:44	18:09
Monday to Friday	5.	8	6.	5	ė.				
Penrith Station				19:37					
Castlereagh Rd after Lugard St, Penrith	18:12	18:42	19:13	19:41	20:41				
Lakeview Dr After Oystercatcher Pl, Cranebrook	18:15	18:45	19:16	19:44	20:44				
Borrowdale Way opp Cranebrook Village	18:19	18:49	19:19	19:47	20:47				
Shopping Centre, Cranebrook									
Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs	18:24	18:54	19:24	19:52	20:52				
Greenwood Pkwy opp Nabilla St, Jordan Springs	18.32	19.02	19.31	19.58	20.58				
Saturday Penrith Station	08:42	09:42	10:42	11:42	12:42	13:42	14:42	15:42	16:42
Castlereagh Rd after Lugard St, Penrith							14:47		
Lakeview Dr After Oystercatcher Pl, Cranebrook							14:49		
Borrowdale Way opp Cranebrook Village	08:53	09:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53
Shopping Centre, Cranebrook									
Jordan Springs Shopping Centre, Jordan Springs	08:57	09:57	10:57	11:57	12:57	13:57	14:57	15:57	16:57
Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs	00.04	10.04	11.04	12:04	12.04	14.04	15:04	16.04	17.04
		10:04	11:04	12:04	15:04	14:04	15:04	10:04	17:04
	ь.								
Penrith Station	17:42								
Penrith Station Castlereagh Rd after Lugard St, Penrith	17:42 17:47								
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook	17:42 17:47 17:49								
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village	17:42 17:47								
Shopping Centre, Cranebrook	17:42 17:47 17:49 17:53								
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs	17:42 17:47 17:49 17:53								
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs	17:42 17:47 17:49 17:53								
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs	17:42 17:47 17:49 17:53				ė	6	ė	ė	6
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays	17:42 17:47 17:49 17:53 17:57 18:04						<u>د</u> 15:09		
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays Penrith Station Castlereagh Rd after Lugard St, Penrith	17:42 17:47 17:49 17:53 17:57 18:04 6 09:09 09:14	10:09 10:14	11:09 11:14	12:09 12:14	13:09 13:14	14:09 14:14	15:09 15:14	16:09 16:14	17:09 17:14
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook	17:42 17:47 17:49 17:53 17:57 18:04 09:09 09:14 09:16	10:09 10:14 10:16	11:09 11:14 11:16	12:09 12:14 12:16	13:09 13:14 13:16	14:09 14:14 14:16	15:09 15:14 15:16	16:09 16:14 16:16	17:09 17:14 17:16
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village	17:42 17:47 17:49 17:53 17:57 18:04 09:09 09:14 09:16	10:09 10:14 10:16	11:09 11:14 11:16	12:09 12:14 12:16	13:09 13:14 13:16	14:09 14:14 14:16	15:09 15:14	16:09 16:14 16:16	17:09 17:14 17:16
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook	17:42 17:47 17:49 17:53 17:57 18:04 09:09 09:14 09:16 09:20	10:09 10:14 10:16 10:20	11:09 11:14 11:16 11:20	12:09 12:14 12:16 12:20	13:09 13:14 13:16 13:20	14:09 14:14 14:16 14:20	15:09 15:14 15:16 15:20	16:09 16:14 16:16 16:20	17:09 17:14 17:16 17:19
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs	17:42 17:47 17:49 17:53 17:57 18:04 09:09 09:14 09:16 09:20	10:09 10:14 10:16 10:20	11:09 11:14 11:16 11:20	12:09 12:14 12:16 12:20	13:09 13:14 13:16 13:20	14:09 14:14 14:16 14:20	15:09 15:14 15:16	16:09 16:14 16:16 16:20	17:09 17:14 17:16 17:19
Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Greenwood Pkwy opp Nabilla St, Jordan Springs Sunday & Public Holidays Penrith Station Castlereagh Rd after Lugard St, Penrith Lakeview Dr After Oystercatcher Pl, Cranebrook Borrowdale Way opp Cranebrook Village Shopping Centre, Cranebrook	17:42 17:47 17:49 17:53 17:57 18:04 8 09:09 09:14 09:16 09:20 09:24	10:09 10:14 10:16 10:20 10:24	11:09 11:14 11:16 11:20 11:24	12:09 12:14 12:16 12:20 12:24	13:09 13:14 13:16 13:20 13:24	14:09 14:14 14:16 14:20 14:24	15:09 15:14 15:16 15:20 15:24	16:09 16:14 16:16 16:20 16:24	17:09 17:14 17:16 17:19 17:23

Figure 4 – Bus Stop Timetable (From Site to Shops)

783 Jordan Springs to Penrith



		_	_		_	_	_	_	_
Monday to Friday	6.	<u>6</u>	6.	6.	<u>6</u> .	6.	6.	é.	6.
Greenwood Pkwy after Nabilla St, Jordan Spring									09:33
Jordan Springs Shopping Centre, Jordan Spring Bvd, Jordan Springs	05:31	06:00	06:30	06:58	07:27	07:58	08:28	08:59	09:37
Cranebrook Village Shopping Centre, Borrowda	e 05:35	06:04	06:35	07:05	07:35	08:06	08:36	09:07	09:44
Way, Cranebrook	05.20	00.00	06.40	07.10	07.40	00.11	00.44	00.12	00.40
Lakeview Dr Before Wedgebill Pl, Cranebrook		06:08					08:41		09:49
Castlereagh Rd opp Lugard St, Penrith Penrith Station		06:12						09:17	09:53
		06:18	00.52		07.52	00.25	06.55	09.24	09.59
Monday to Friday	. 6.	<u>.</u>	. 6.	. 6.		6.		<u>.</u>	
Greenwood Pkwy after Nabilla St, Jordan Spring								16:51	
Jordan Springs Shopping Centre, Jordan Springs	10:37	11:39	12:39	13:39	14:39	15:49	16:30	16:55	17:23
Bvd, Jordan Springs	40.44	44.45	42.45	42.45	4.4.45	45.50	46.24	47.00	47.20
Cranebrook Village Shopping Centre, Borrowda	e 10:44	11:45	12:45	13:45	14:45	15:53	16:34	17:00	17:28
Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook	10.40	11:49	12.40	12.40	14.40	15.57	16.20	17.04	17.22
Castlereagh Rd opp Lugard St, Penrith		11:53	12:53	13:53	14:53	16:01	16:42	17:04	
Penrith Station		11:59							
						10.07	10.40	17.17	17.44
Monday to Friday	6	6	6	8	6				
Greenwood Pkwy after Nabilla St, Jordan Spring				19:04					
Jordan Springs Shopping Centre, Jordan Spring: Bvd, Jordan Springs		18:15	18:38	19:08	19:38				
Cranebrook Village Shopping Centre, Borrowda	e 17:55	18:20	18:42	19:12	19:42				
Way, Cranebrook									
Lakeview Dr Before Wedgebill Pl, Cranebrook		18:24							
Castlereagh Rd opp Lugard St, Penrith		18:29							
Penrith Station	18:11	18:36	18:55	19:25	19:54				
					(
Saturday	. 8	. ô.	. 6.	. ð.	6	. 6.	. ð.	<u>.</u>	<u>8</u> .
Greenwood Pkwy after Nabilla St, Jordan Spring	s 08:08	09:06	10:06	11:06	12:06	13:06	14:06	15:06	16:06
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Spring	s 08:08	09:06	10:06	11:06		13:06	14:06	15:06	
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Spring Bvd, Jordan Springs	s 08:08 08:11	09:06 09:10	10:06 10:10	11:06 11:10	12:06 12:10	13:06 13:10	14:06 14:10	15:06 15:10	16:06 16:10
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Spring Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda	s 08:08 08:11	09:06 09:10	10:06	11:06	12:06	13:06	14:06	15:06	16:06
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Spring Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook	s 08:08 08:11 e 08:17	09:06 09:10 09:17	10:06 10:10 10:17	11:06 11:10 11:17	12:06 12:10 12:17	13:06 13:10 13:17	14:06 14:10 14:17	15:06 15:10 15:17	16:06 16:10 16:17
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook	s 08:08 08:11 e 08:17 08:21	09:06 09:10 09:17 09:21	10:06 10:10 10:17 10:21	11:06 11:10 11:17 11:21	12:06 12:10 12:17 12:21	13:06 13:10 13:17 13:21	14:06 14:10 14:17 14:21	15:06 15:10 15:17 15:21	16:06 16:10 16:17 16:21
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Spring Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook Castlereagh Rd opp Lugard St, Penrith	s 08:08 08:11 e 08:17 08:21 08:25	09:06 09:10 09:17 09:21 09:25	10:06 10:10 10:17 10:21 10:25	11:06 11:10 11:17 11:21 11:25	12:06 12:10 12:17 12:21 12:25	13:06 13:10 13:17 13:21 13:25	14:06 14:10 14:17 14:21 14:25	15:06 15:10 15:17 15:21 15:25	16:06 16:10 16:17 16:21 16:25
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook Castlereagh Rd opp Lugard St, Penrith Penrith Station	s 08:08 08:11 e 08:17 08:21 08:25 08:32	09:06 09:10 09:17 09:21	10:06 10:10 10:17 10:21 10:25	11:06 11:10 11:17 11:21 11:25	12:06 12:10 12:17 12:21 12:25	13:06 13:10 13:17 13:21 13:25	14:06 14:10 14:17 14:21 14:25	15:06 15:10 15:17 15:21 15:25	16:06 16:10 16:17 16:21 16:25
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook Castlereagh Rd opp Lugard St, Penrith Penrith Station Saturday	s 08:08 08:11 e 08:17 08:21 08:25 08:32	09:06 09:10 09:17 09:21 09:25	10:06 10:10 10:17 10:21 10:25	11:06 11:10 11:17 11:21 11:25	12:06 12:10 12:17 12:21 12:25	13:06 13:10 13:17 13:21 13:25	14:06 14:10 14:17 14:21 14:25	15:06 15:10 15:17 15:21 15:25	16:06 16:10 16:17 16:21 16:25
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook Castlereagh Rd opp Lugard St, Penrith Penrith Station Saturday Greenwood Pkwy after Nabilla St, Jordan Spring	s 08:08 08:11 e 08:17 08:21 08:25 08:32 08:32	09:06 09:10 09:17 09:21 09:25	10:06 10:10 10:17 10:21 10:25	11:06 11:10 11:17 11:21 11:25	12:06 12:10 12:17 12:21 12:25	13:06 13:10 13:17 13:21 13:25	14:06 14:10 14:17 14:21 14:25	15:06 15:10 15:17 15:21 15:25	16:06 16:10 16:17 16:21 16:25
Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Springs Bvd, Jordan Springs Cranebrook Village Shopping Centre, Borrowda Way, Cranebrook Lakeview Dr Before Wedgebill Pl, Cranebrook Castlereagh Rd opp Lugard St, Penrith Penrith Station Saturday Greenwood Pkwy after Nabilla St, Jordan Spring Jordan Springs Shopping Centre, Jordan Spring	s 08:08 08:11 e 08:17 08:21 08:25 08:32 08:32	09:06 09:10 09:17 09:21 09:25	10:06 10:10 10:17 10:21 10:25	11:06 11:10 11:17 11:21 11:25	12:06 12:10 12:17 12:21 12:25	13:06 13:10 13:17 13:21 13:25	14:06 14:10 14:17 14:21 14:25	15:06 15:10 15:17 15:21 15:25	16:06 16:10 16:17 16:21 16:25
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Figure 5– Bus Stop Timetable (From Shops to Site)

5.2 Accessibility – SEPP Clause 38

A SEPP development should have obvious and safe pedestrian links from the site that provide access to public transport services or local facilities. A development should provide attractive, yet safe, environments for pedestrian and motorists with convenient access and parking for residents and visitors.

The proposed development meets the intent of safe pedestrian link by direct accessible path to public pedestrian footpath on Laycock St via proposed pedestrian crossing.

The proposed development meets the intent of convenient access and parking for residents and visitors by providing car parking spaces for residents and visitor with an accessible path of travel to all units.

6. Standards concerning accessibility and usability Requirements

"SEPP SCHEDULE 3 – Standards concerning accessibility and usability for self-contained dwellings"

The dwellings within the proposed development have been considered against SEPP-Housing for seniors and People with Disabilities (SEPP); Part 1: Self-contained dwellings - standards concerning access and usability (Clauses 1 - 21) is applicable in this instance.

There are 16 dwellings arrangement, each is provided with a garage with 3.8m width for disabled parking. Extra 4 visitor car parking spaces are provided in this site.

6.1 Wheelchair access – SEPP Schedule 3 Clause 2 (1, 2)

According to SEPP (Housing for seniors or People with a Disability) 2004, Part 1 Cl. 2(1): If the whole of the site has a gradient of less than 1:10, 100% of the dwellings must have wheelchair access by a continuous accessible path of travel (within the meaning of AS 1428.1) to an adjoining public road.

The whole development is provided with continuous path of travel from the 2 main entrances on Laycock St, comprising mostly of max 1:14 footpaths and a 1:10 steep ramp leading up to the entrance of each dwelling.

6.2 Development Internal Road access – SEPP Schedule 3 Clause 2 (3)

All the dwellings that meet the requirements of sub-clause (1) must have wheelchair access by a continuous accessible path of travel (*within the meaning of AS 1428*) to an adjoining public road.

The site provides an accessible path of travel between the internal pathway and the units via walk ways.

6.3 Common areas – SEPP Schedule 3 Clause 2 (4)

Access must be provided so that a person using a wheelchair can use common areas and common facilities associated with the development. The following common areas are provided within the development:

• Bin store at the Laycock street entry

6.4 Seniors Living Requirements

The following assessment summarises the compliance status of the design documentation and requirements referenced to SEPP standard

ltem	Architecture drawings	Compliance	Comments/ Recommendation
Security	Pathway lighting is to be designed and located to avoid glare for pedestrians and adjacent dwellings. Lighting to be minimum 20 lux at ground level.	Compliance is achievable Details to be verified at CC stage.	Please ensure the dwellings lighting to be minimum 20 lux.
Letterboxes in Estate developments	Letter boxes to be on hard standing area connected to accessible pathway (within the meaning of AS 1428.1). Must be lockable. Must be located together in one or more central locations adjacent to the street entry or, in the case of self- contained dwellings. Give consideration to locating letterboxes within common reach ranges of 700-1200mm above the adjacent ground surface, per AS1428.2 (1992).	Complies Details to be verified at CC stage.	Please ensure the letterbox on hard standing area connected to accessible pathway with a lock for the privacy/ security purposes and within common reach ranges of 700 -1200mm above ground surface
Private Car Accommodation	Car parking space or garage as per AS2890.6. 5% of total number must be designed to enable width to be increased to 3800mm. Any garage must have a power-operated door, or there must be a power point and an area for motor or control rods to enable a	Complies Details to be verified at CC stage.	All the units are provided with single garages of 6.1m × 3.8m Please ensure the garage door to be power-operated.

	power-operated door to be installed later.		
Accessible Entry	Every entry (whether a front entry or not) to a dwelling, not being an entry for employees, must comply with clauses 4.3.1 and 4.3.2 of AS 4299.	Complies Details to be verified at CC stage.	Accessible entry is provided to all the units with entry doors having porch and landing on all continuous path of travel
General Interior	Internal doors to comply with AS 1428.1 (<i>min opening</i> <i>width 850mm</i>). Internal corridors min. unobstructed width of 1000 mm. Circulation space at approaches to internal doorways must comply with	Compliance is achievable Details to be verified at CC stage.	details Please ensure all the internal doors clear width opening is 850mm complying with AS1428. Corridors are 1045mm All the door circulation spaces are complying
Living & Dining room	AS 1428.1. Provision for circulation space of min. 2250 mm dia. as per AS 4299 clause 4.7.1. Telephone adjacent to general power outlet GPO.	Compliance is achievable	Please ensure telephone adjacent to the GPO and the illumination level min. 300 lux

	Potential illumination level min. 300 lux.	Details to be verified at CC stage.	DODALH TURN CONTRACTOR DO CONT
Kitchen	 Minimum width 2.7 m (1550 mm clear between benches) as per AS 4299 clause 4.5.2. Provision for circulation at doors to comply with AS 1428.1. Provision for benches planned to include at least one work surface of 800 mm length that comply with clause 4.5.5 (a). "D" pull cupboard handles are located towards the top of below-bench cupboards & towards the bottom of overhead cupboards. Oven as per AS 4299 clause 4.5.7. Tap set capstan or lever handles or lever mixer as per AS4299 clause 4.5.6 and located within 300 mm of front of sink. Cooktops to include isolating switch side controls with raised cross bars as per AS 4299. GPOs to comply with AS 1428.1. At least one double GPO within 300 mm of front of work surface. 	Compliance is achievable Details to be verified at CC stage.	 Please ensure: Oven and Tap set capstan or lever handles or lever mixer as per AS4299. The Cooktops to include isolating switch side controls with raised cross bars as per AS 4299. The "D" pull cupboard handles are located towards the top of below-bench cupboards & towards the bottom of overhead cupboards. The GPOs comply with AS 1248.1 and to be easily accessible. At least one double GPO within 300 mm of front of work surface. Refer to Section A.1 with figure 1 for more details

	GPO for refrigerator to be easily accessible when the refrigerator is in its operating position.		
Bedroom	At least one bedroom of area sufficient to accommodate queen size bed, wardrobe, and circulation space requirements of AS 1428.1. Provision for circulation space of min. 1200mm wide at the foot of the bed and 1000mm wide beside the bed. 2 double GPO on the wall where the head of the bed; and one at least opposite to this wall. Telephone outlet adjacent to general power outlet GPO or the next to the side closet. Potential illumination level min. 300 lux	Compliance is achievable Details to be verified at CC stage.	Please ensure 2 double GPO on the wall where the head of the bed; and one at least opposite to this wall, telephone outlet adjacent to GPO; and the illumination level min. 300 lux. All the units have at least 1 bedroom accessible
Bathroom	Must comply AS 1428.1 for circulation space for sanitary facilities Circulation spaces overlapping must follow 1428.1 sub-clause 15.6 and figure 50. A slip-resistant floor surface, Soap holder and taps to comply with 1428.1 sub- clauses 15.5.7, 15.5.8 and figure 48. A washbasin with plumbing that would allow, either immediately or in the future, clearances that comply with AS 1428.1 Opening shower screens must maintains required circulation space of 1600mmX2350mm.	Complies Details to be verified at CC stage.	 Please ensure: The washbasin, the soap holder and taps comply with AS 1428.1. The shower screen can easily be removed to facilitate future accessibility. The shower of flexible hose of min. length 1500mm; folding seat, grabrails and shower head supports grabrails specified as AS1428.1. The fixture and fittings specified as per SEPP standards. Shower recess - no hob. Minimum size 1160x1100mm. Double GPO beside mirror as per SEPP. A wall cabinet that is sufficiently illuminated to be able to read the labels of items stored in it.

	As per 1428.1 sub-clause (1)		
	(c) does not prevent the installation of a shower screen that can easily be removed to facilitate future accessibility		
	Shower recess - no hob. Minimum size 1160x1100mm to comply with AS 1428.1. Sub-clause 15.5.2 and Figures 47 and 48.		
	Shower head shall have flexible hose of minimum length of 1500mm and comply with 1428.1 sub- clause 15.5.6		
	Folding seat to comply with 1428.1 sub-clause 15.5.9		
	Grabrails and showerhead supports grabrails must specified as per 1428.1 clause 17.		
	Fixture and fittings to follow 1428.1 sub-clause 15.4.		
	Double GPO beside mirror as per SEPP		
	A wall cabinet that is sufficiently illuminated to be able to read the labels of items stored in it.		
	Dwelling must have at least one toilet on the ground (or main) floor		
Toilet	Slip resistant floor surface. (Vitreous tiles or similar).	Complies	Please ensure
	Water taps shall comply with AS 1428.1 Location of WC pan at correct distance from fixed walls as per AS 1428.1	Details to be verified at CC stage.	 Water taps comply with AS 1428.1. Floor has slip-resistant surface; The toilet sanitary facilities comply with AS4299 The graphical zone follow AS 1428.1
	Provision for grab rail zone as per AS 1428.1.		 The grabrail zone follow AS 1428.1. Location of WC pan at correct distance from fixed walls.
	The toilet seat, backrest, flushing control, toilet paper dispenser and grabrails shall comply with AS 4299		 The WC grabrails are safely fixed as per AS1429.1.

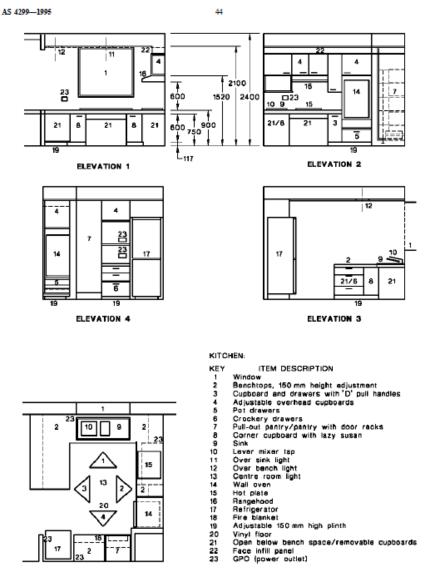
	The circulation space to be revised as per 1428.1 sub- clause 15.2.8.1 and figure 43		
	Provision of visitable toilet or accessible toilet – "being a toilet with a space of minimum 1250mm x 900mm in front of the WC pan". Balconies and external paved areas must have slip-		
	resistant surfaces.		
Surface finishes	Balconies and external paved areas must have slip- resistant surfaces.	Compliance is achievable	Please ensure that balconies and external paved area are Slip resistant floor surface.
		Details to be verified at CC stage.	
Door hardware	Door handles and hardware for all doors (including entry doors and other external doors) must be provided in	Compliance is achievable Details to be	Please ensure the Door handles and hardware (including entry doors and other external doors) must be provided in accordance with AS 4299.
	accordance with AS 4299.	verified at CC stage.	
Ancillary items	Switches and power points must be provided in accordance with AS 4299.	Compliance is achievable	Please ensure the Switches and power points GPO must be provided in accordance with AS 4299.
		Details to be verified at CC	
Access to kitchen, main bedroom, bathroom and toilet	In a multi-storey building containing separate self- contained dwellings on different storeys, lift access must be provided to dwellings above the ground	stage. NA	The development is a one storey unit.
	level of the building by way of a lift complying with clause E3.6 of the Building Code of Australia		
Lifts in multi- storey buildings	Circulation at doors to comply with AS 1428.1	NA	
Laundry	A circulation space at door approaches that complies with AS 1428.1	Compliance is achievable	Please ensure that the provision for installing appliances; slip-resistant floor surface with clear waste water outlet must
	Clear space in front of appliances of at least 1300mm.		

Storage for linen	Provision for the installation of an automatic washing machine and clothes dryer. An accessible path of travel to any clothesline provided in relation to the dwelling. Slip-resistant floor surface A self-contained dwelling must be provided with a linen	Details to be verified at CC stage.	be provided. In addition to an accessible path of travel to clothes line		
	storage in accordance with clause 4.11.5 of AS 4299 It should be at least 600mm wide that have adjustable shelving	Details to be verified at CC stage.	AS 4299 of adjustable shelves of min. 600mm wide.		
Garbage	A garbage storage area must be provided in an accessible location.	Complies Details to be verified at CC stage.	Bin store room is located at the entry from Laycock street		

Appendix A – References

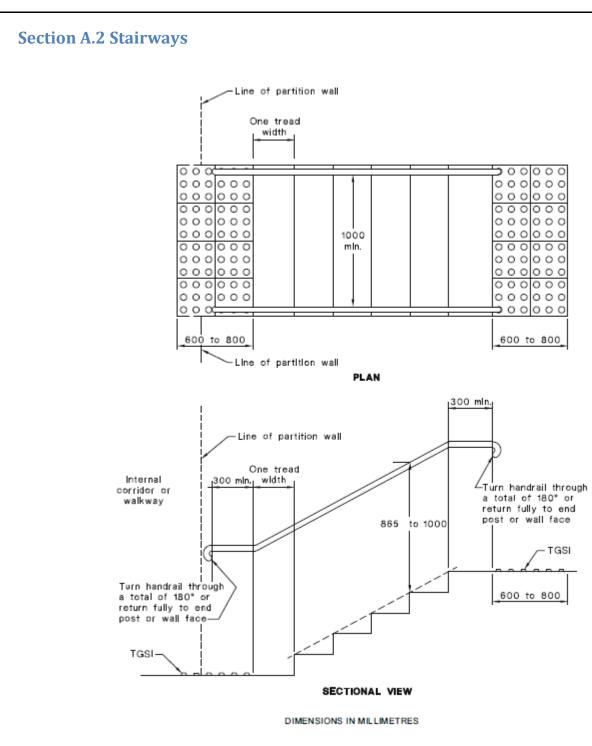
The below figures are taken from AS1428.1 and AS 4299 for references, for broader knowledge, more clarification and to support the "comments/recommendations" part of the table in Section 6.4 of the report.

Section A.1 Kitchen



DIMENSIONS IN MILLIMETRES

Figure 1: Example of kitchen layout - after adaptation





Appendix B – Statement of Expertise

CONSULTANCY PROFILE AND STATEMENT OF EXPERTISE

Loka Consulting Engineers offers a wide range of professional services to provide advice and auditing services for clients in developing new or modifying existing buildings, facilities and services to be accessible to people with disabilities to comply with legislation and regulations. These legislations and regulations include Disability Discrimination Act (DDA), Building Code of Australia (BCA), Australian Standards AS 1428.1, as 1428.4.1, as 2890.6, AS 1735.12 and various local government development plans.

Apart from providing access report, Loka Consulting Engineers also provides below stated services:

- Traffic report, traffic control plan, waste management plan, **Dilapidation report**
- Stormwater design
- BASIX and NatHERS
- Soil & Water Management and Erosion & Sediment Control Plan, and many more

The access reports prepared by the Loka Consulting Engineers consider issues concerning people with all types of disability including: physical; vision; hearing, intellectual and other cognitive impairments that may affect access for people with the Disability Discrimination Act.

As a Senior Civil Engineer and the Director, Nermein Loka has 18 years of experience in Civil Engineering field and considerable expertise in a wide range of access related projects.

Her qualifications and affiliations are:

- Associate Member of the Association of Consultants in Access Australia
- Member of Institute of Engineers Australia
- Member of the St. Merkorious Charity, which • predominantly focuses on feeding the homeless around Sydney.





Association of Consultants in Access Australia, Inc.

Certificate of Membership Associate Member





Nermein LOKA

Membership Numbe 550





irs farsh Ma Secretary Mr Terry Osborn



<u>APPENDIX C</u>

Architectural Plans

LOKA CONSULTING ENGINEERS PTY LTD

GENERAL NOTES:

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PRINCIPAL CERTIFYING AUTHORITY AND NCC 2019 A1.

ALL DEMOLITION WORK TO BE CARRIED OUT IN ACCORDANCE WITH AS 2601-2001.

SILT SEDIMENT CONTROL MEASURES TO BE IN PLACE PRIOR EXCAVATION OR

PEDESTRIAN ACCESS, INCLUDING DISABLED AND PRAM ACCESS DURING ROAD WORK TO BE MAINTAINED AS PER AS 17423. 'PART 3 - TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS'.

BUILDER SHALL MAKE GOOD ALL DISTURBED AREAS ADJACENT TO THE WORKS ON COUNCILS ROAD, FOOTPATH ARE TO BE RESTORED TO THE SATISFACTION OF THE PRINCIPAL CERTIFYING AUTHORITY.

ALL CONCRETE FOOTINGS, FLOOR SLABS AND TIMBER ROOF FRAMING TO STRUCTURAL ENGINEERS DETAILS.

THE REFLECTIVITY INDEX OF GLASS USED IN THE EXTERNAL FACADE OF THE BUILDING IS NOT TO EXCEED 20%.

ONGOING WASTE FROM THE PROPOSED DEVELOPMENT IS TO BE ADDED TO THE EXISTING WASTE COLLECTION SYSTEM CURRENTLY IN USE BY THE EXISTING DEVELOPMENT ON SITE.

SAFETY GLASS SHALL BE USED IN EVERY GLASS DOOR OR PANEL ENCLOSING OR PARTLY ENCLOSING A SHOWER OR BATH

ALL BATHROOM AND WC WINDOWS SHALL BE FITTED AND MAINTAINED WITH OBSCURE GLASS

NCC COMPLIANCE

SECTION 1 GOVERNING REQUIREMENTS

PART A6 BUILDING CLASSIFICATION A6.1 CLASS 1 BUILDINGS:

- ONE OR MORE BUILDINGS WHICH IN ASSOCIATION CONSTITUTE-(1) CLASS 1A IS ONE OR MORE BUILDINGS, WHICH TOGETHER FORM A SINGLE DWELLING INCLUDING THE FOLLOWING:
 - (A) A DETACHED HOUSE (B) ONE OF A GROUP OF TWO OR MORE ATTACHED DWELLINGS. EACH BEING A BUILDING. SEPARATED BY A FIRE-RESISTING WALL. INCLUDING A ROW HOUSE. TERRACE HOUSE. TOWN HOUSE OR VILLA UNIT.

SECTION 2 PERFORMANCE PROVISIONS

PART 2.1 STRUCTURE - SEE ENGINEERS PLANS

SECTION 3 ACCEPTABLE CONSTRUCTION

PART 3.7 FIRE SAFETY

- PART 3.7.1 FIRE PROPERTIES FOR MATERIALS AND CONSTRUCTION THE FOLLOWING MATERIALS, THOUGH COMBUSTIBLE OR CONTAINING COMBUSTIBLE FIBRES, MAY BE USED WHEREVER A NON-COMBUSTIBLE MATERIAL IS REQUIRED:

- (A) PLASTERBOARD.
- (B) PERFORATED GYPSUM LATH WITH A NORMAL PAPER FINISH.

(C) FIBROUS-PLASTER SHEET.

(D) FIBRE-REINFORCED CEMENT SHEETING.

- (E) PRE-FINISHED METAL SHEETING HAVING A COMBUSTIBLE SURFACE FINISH NOT EXCEEDING 1 MM THICKNESS AND WHERE THE SPREAD-OF-FLAME INDEX OF THE PRODUCT IS NOT GREATER THAN 0.
- (F) BONDED LAMINATED MATERIALS WHERE--(I) EACH LAMINA, INCLUDING ANY CORE, IS NON-COMBUSTIBLE; AND (II) EACH ADHESIVE LAYER DOES NOT EXCEED 1MM IN THICKNESS AND THE TOTAL THICKNESS OF THE ADHESIVE LAYERS DOES NOT EXCEED 2MM: AND
- (III) THE SPREAD-OF-FLAME INDEX AND THE SMOKE-DEVELOPED INDEX OF THE BONDED LAMINATED MATERIAL AS A WHOLE DO NOT EXCEED 0 AND 3 RESPECTIVELY.

- PART 3.7.1.2 FIRE HAZARD PROPERTIES THE FIRE HAZARD PROPERTIES OF MATERIALS USED IN A CLASS 1 BUILDING
- MUST COMPLY WITH THE FOLLOWING: (A) SARKING-TYPE MATERIALS USED IN THE ROOF MUST HAVE A
- FLAMMABILITY INDEX NOT GREATER THAN 5.

(B) FLEXIBLE DUCTWORK USED FOR THE TRANSFER OF PRODUCTS INITIATING FROM A HEAT SOURCE THAT CONTAINS A FLAME MUST COMPLY WITH THE FIRE HAZARD PROPERTIES SET OUT IN AS 4254.1

- PART 3.7.2.2 EXTERNAL WALLS OF CLASS 1 BUILDINGS AN EXTERNAL WALL OF A CLASS 1 BUILDING, AND ANY OPENINGS IN THAT
- WALL, MUST COMPLY WITH 3.7.2.4 IF THE WALL IS LESS THAN-(A) 900MM FROM AN ALLOTMENT BOUNDARY OTHER THAN THE BOUNDARY ADJOINING A ROAD ALIGNMENT OR OTHER PUBLIC SPACE: (B) 1.8M FROM ANOTHER BUILDING ON THE SAME ALL OTMENT OTHER THAN A CLASS 10 BUILDING ASSOCIATED WITH THE CLASS 1 BUILDING OR A DETACHED PART OF THE SAME CLASS 1 BUILDING.
- PART 3.7.2.4 CONSTRUCTION OF EXTERNAL WALLS (A) EXTERNAL WALLS (INCLUDING GABLES) REQUIRED TO BE FIRE
- RESISTING MUST-(I) COMMENCE AT THE FOOTINGS OR GROUND FLAB. EXCEPT WHERE THE EXTERNAL WALL COMMENCES ABOVE A SEPARATING
- WALL; AND (II) EXTEND TO-(A) THE UNDERSIDE OF A NON-COMBUSTIBLE ROOF
- COVERING, EXCEPT THAT A WALL MAY TERMINATE NOT MORE THAN 200 MM FROM THE UNDERSIDE OF A NON-COMBUSTIBLE ROOF COVERING, WHERE THE AREA BETWEEN THE EXTERNAL WALL AND UNDERSIDE OF THE ROOF COVERING IS SEALED WITH A NON-COMBUSTIBLE FASCIA, GUTTER OR FLASHING; OR (B) THE UNDERSIDE OF A NON-COMBUSTIBLE EAVES LINING; AND
- (III) BE CONSTRUCTED IN ACCORDANCE WITH (B).
- (B) A WALL REQUIRED BY (A) MUST-(I) HAVE AN FRL OF NOT LESS THAN 60/60/60 WHEN TESTED FROM THE OUTSIDE; OR
- (II) BE OF MASONRY-VENEER CONSTRUCTION IN WHICH THE EXTERNAL MASONRY VENEER IS NOT LESS THAN 90 MM THICK; OR (III) BE OF MASONRY CONSTRUCTION NOT LESS THAN 90 MM THICK. (C) OPENINGS IN EXTERNAL WALLS REQUIRED TO BE FIRE-RESISTING
- MUST BE PROTECTED BY-(I) NON-OPENABLE FIRE WINDOWS OR OTHER CONSTRUCTION WITH
- AN FRL OF NOT LESS THAN -/60/-; OR

(II) SELF-CLOSING SOLID CORE DOORS NOT LESS THAN 35MM THICK. (D) THE REQUIREMENTS OF (C) DO NOT APPLY TO A WINDOW IN A NON-HABITABLE ROOM THAT IS LOCATED ADJACENT TO AND NOT LESS THAN 600 MM FROM THE BOUNDARY OF AN ADJOINING ALLOTMENT OR 1200 MM FROM ANOTHER BUILDING ON THE SAME ALLOTMENT PROVIDED

- (I) IN A BATHROOM, LAUNDRY OR TOILET, THE OPENING HAS AN AREA OF NOT MORE THAN 1.2 M2; OR
- (II) IN A ROOM OTHER THAN ONE REFERRED TO IN (I), THE OPENING HAS AN AREA OF NOT MORE THAN 0.54 M2 AND--
- (A) THE WINDOW IS STEEL-FRAMED, THERE ARE NO OPENING SASHES AND IT IS GLAZED IN WIRED GLASS; OR (B) THE OPENING IS ENCLOSED WITH TRANSLUCENT HOLLOW GLASS BLOCKS.

- PART 3.7.3.2 SEPARATING WALLS

- (A) A SEPARATING WALL BETWEEN CLASS 1 BUILDINGS, OR A WALL THAT SEPARATES A CLASS 1 BUILDING FROM A CLASS 10A BUILDING WHICH IS NOT ASSOCIATED WITH THE CLASS 1 BUILDING MUST --
 - (I) HAVE EITHER--
- (A) AN FRL OF NOT LESS THAN 60/60/60; OR
- (B) BE OF MASONRY CONSTRUCTION NOT LESS THAN 90 MM THICK; AND (II) COMMENCE AT THE FOOTINGS OR GROUND SLAB, EXCEPT FOR
- HORIZONTAL PROJECTIONS TO WHICH 3.7.3.5 APPLIES: AND (III) EXTEND-
- (A) IF THE BUILDING HAS A NON-COMBUSTIBLE ROOF COVERING, TO THE UNDERSIDE OF THE ROOF COVERING; OR (B) IF THE BUILDING HAS A COMBUSTIBLE ROOF COVERING, TO NOT LESS THAN 450 MM ABOVE THE ROOF COVERING; AND
- (IV) COMPLY WITH (B) TO (E) AND 3.7.3.3 AS APPLICABLE. (B) A SEPARATING WALL OF LIGHTWEIGHT CONSTRUCTION MUST BE TESTED IN ACCORDANCE WITH SPECIFICATION C1.8 OF THE NCC VOL 1. (C) A SEPARATING WALL COMPLYING WITH (A)(III)(A)--
- (I) MUST NOT BE CROSSED BY TIMBER OR OTHER COMBUSTIBLE BUILDING ELEMENTS EXCEPT FOR ROOF BATTENS WITH DIMENSIONS OF 75 X 50 MM OR LESS, OR ROOF SARKING: AND (II) MUST HAVE ANY GAP BETWEEN THE TOP OF THE WALL AND THE UNDERSIDE OF THE ROOF COVERING PACKED WITH MINERAL FIBRE OR OTHER SUITABLE FIRE-RESISTING MATERIAL

(D) WHERE A BUILDING HAS A MASONRY VENEER EXTERNAL WALL, ANY GAP BETWEEN THE SEPARATING WALL AND THE EXTERNAL MASONRY VENEER MUST BE--(I) NOT MORE THAN 50 MM; AND

(II) PACKED WITH A MINERAL FIBRE OR OTHER SUITABLE FIRE-RESISTANT MATERIAL WITH THE PACKING ARRANGED TO MAINTAIN ANY WEATHERPROOFING REQUIREMENTS OF PART 3.3.4.

- PART 3.7.5.3 SMOKE ALARM LOCATION IN A CLASS 1A BUILDING, SMOKE ALARMS MUST BE LOCATED IN-(A) ANY STOREY CONTAINING BEDROOMS, EVERY CORRIDOR OR (A) ANY STORET CONTAINING BEDROOMS, EVERT CORRIDOR OR HALLWAY ASSOCIATED WITH A BEDROOM, OR IF THERE IS NO CORRIDOR OR HALLWAY, IN AN AREA BETWEEN THE BEDROOMS AND THE REMAINDER OF THE BUILDING: AND
- (B) EACH OTHER STOREY NOT CONTAINING BEDROOMS. PART 38 HEALTH AND AMENITY

- PART 3.8.1 WET AREAS AND EXTERNAL WATERPROOFING WET AREAS WITHIN THE PROPOSED BUILDING TO COMPLY WITH THE REQUIREMENTS OF PART 3.8.1.2 WET AREAS AND AS 3740.

- PART 3.8.1.3 EXTERNAL ABOVE GROUND MEMBRANES WATERPROOFING MEMBRANES FOR EXTERNAL ABOVE GROUND USE MUST COMPLY WITH AS 4654.1 AND AS 4654.2.
- PART 3.8.5 VENTILATION
- PERFORMANCE REQUIREMENT P2.4.5 IS SATISFIED FOR A MECHANICAL VENTILATION SYSTEM IF IT INSTALLED IN ACCORDANCE WITH AS 1668.2.
- PART 3.8.6 SOUND INSULATION COMPLIANCE WITH THIS ACCEPTABLE CONSTRUCTION PRACTICE SATISFIES PERFORMANCE REQUIREMENT P2.4.6 FOR SOUND INSULATION

-PART 3.8.7 CONDENSATION MANAGEMENT

- PLIABLE BUILDING MEMBRANE (A) WHERE A PLIABLE BUILDING MEMBRANE IS INSTALLED IN AN
- EXTERNAL WALL, IT MUST--
- (I) COMPLY WITH AS/NZS 4200.1; AND (II) BE INSTALLED IN ACCORDANCE WITH AS 4200.2; AND
- (III) BE A VAPOUR PERMEABLE MEMBRANE FOR CLIMATE ZONES 6, 7 AND 8; AND (IV) BE LOCATED ON THE EXTERIOR SIDE OF THE PRIMARY
- INSULATION LAYER OF WALL ASSEMBLIES THAT FORM THE EXTERNAL ENVELOPE OF A BUILDING.

PART 3.9 SAFE MOVEMENT AND ACCESS THE TREADS AND RISERS OF THE PROPOSED STAIRS ARE TO COMPLY WITH PART 3.9.1.2 (GENERAL REQUIREMENTS)

STANDARDS AUSTRALIA COMPLIANCE:

THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH BUT NOT LIMITED TO THE FOLLOWING AUSTRALIAN STANDARDS-

AS/NZS 2293.1:2008	EMERGENCY EVACUATION LIGHTING IN BUILDINGS
AS 3700:2018	MASONRY STRUCTURES
AS 1670.1:2018	FIRE DETECTION, WARNING, CONTROL AND
	INTERCOM SYSTEMSSYSTEM DESIGN,
	INSTALLATION AND COMMISSIONING
AS 1668:2012	THE USE OF MECHANICAL VENTILATION AND AIR
	CONDITIONING IN BUILDINGS
AS 1428:2010	GENERAL REQUIREMENTS FOR ACCESS - NEW
	BUILDING WORK
AS 2293.1:2018	EMERGENCY ESCAPE LIGHTING AND EXIT SIGNS FOR
	BUILDINGS
AS 3500.3:2018	PLUMBING AND DRAINAGE - STORMWATER
AS/NZS 1664.1:1997	ALUMINIUM STRUCTURES
AS/NZS 1905.1:2015 & 190	5.2:2015 COMPONENTS FOR THE PROTECTION OF
-	OPENINGS IN FIRE RESISTANT WALLS
AS 2050:2018	INSTALLATION OF ROOF TILES
AS 2047:2014	WINDOWS - SELECTION AND INSTALLATION
AS/NZS 2327:2017	COMPOSITE STRUCTURES
AS 2870:2011	RESIDENTIAL SLABS AND FOOTINGS
AS 1684.2:2010	RESIDENTIAL TIMBER-FRAMED CONSTRUCTION
AS/NZS 3013:2005	ELECTRICAL INSTALLATIONS
AS 1668.1:2015 & 1668.4:20	12 THE USE OF MECHANICAL VENTILATION
	AND AIR CONDITIONING IN BUILDINGS
AS 2444:2001	PORTABLE FIRE EXTINGUISHERS AND FIRE
	BLANKETS-SELECTION AND LOCATION
AS 3786:2014	SMOKE ALARMS
AS 3786:2014 AS 1288:2006	GLASS - SELECTION AND INSTALLATION
AS 2107:2016	ACOUSTICS- RECOMMENDED DESIGN SOUND LEVELS
	& REVERBERATION TIMES FOR BUILDING INTERIORS
AS 3660.3:2014	
AS 3740:2010	WATERPROOFING OF WET AREAS IN RESIDENTIAL
	BUILDING
AS 1926.1:2012 & 1926.2:20	07 SAFETY BARRIERS FOR SWIMMING POOLS

ADDITIONAL NOTES - PROVIDE SIGNAL MASTER TV ANTENNA - PROVIDE FIXED OUTDOOR CLOTHES DRYER

- ALL WALL FIXTURES TO BE INSTALLED ARE TO BE RATED AAA - ANY NEW HOT WATER SYSTEM IS TO ACHIEVE A MINIMUM 4 STARS - ALL EXTERNAL TILES ARE TO BE SLIP RESISTANT.



NGL

CODE BIR

CL

DP

FC FW HWS



LOCATION MAP Document Set ID: 9691729 Version: 1, Version Date: 10/08/2021

							REV	DATE	DESCRIPTION		BY
UNIT NO.	GROUND FLOOR (m ²)	ROOF AREA (m ²)	GARAGE (m ²)	P.O.S. (m ²)	NO. BEDS	PARKING SPACES	00 01	18.12.20 02.07.21	DA ISSUE ISSUE TO CONSULTANTS FOR F		EF
1	129.2	210.2	23.3	96.6	3	2	01	14.07.21	ISSUE TO CONSULTANTS FOR F		EF
2	127.1	197.5	23.3	100.1	3	2					
3	127.1	197.5	23.3	132.5	3	2					
4	127.1	197.5	23.3	129.8	3	2					
5	127.1	197.5	23.3	127.1	3	2					
6	127.1	197.5	23.3	124.4	3	2					
7	127.1	197.5	23.3	121.9	3	2					
8	127.1	197.5	23.3	199.7	3	2					
9	127.1	197.5	23.3	197.1	3	2					
10	127.1	197.5	23.3	122	3	2	DES	SIGN FAC	۶T		
11	127.1	197.5	23.3	122	3	2		E AREA	515		7974m²
12	127.1	197.5	23.3	122	3	2	NO	. OF DWEL	LINGS		16
13	127.1	197.5	23.3	122	3	2		NTROL		SEPP HSPD 2004	
14	127.1	197.5	23.3	122	3	2	CO	NIROL		PROPOSED	REQUIRED
15	127.1	197.5	23.3	91.7	3	2	FSF	२		0.26:1	0.50:1
16	129.2	210.2	23.3	85.8	3	2	LAI	NDSCAPED	AREA	43%	30%
						-	DEI	EP SOIL ZO	DNE	38%	15%
								LAR ACCE		MIN 70%	70%
TOTALS	2037.8	3185.4	372.8	2016.7	48	32		VATE OPE		MIN 85m ²	15m²
								-	RKING SPACES	32	23
								SITOR SPACE		4	0
$\langle \ \rangle Ah$	EA SCHEDULE	OF UNITS					CO	MMUNAL (OPEN SPACE	0m²	0m²
()		-						X. BUILDIN		7.084m	8m
\smile							TO	TAL ROOF	AREA	3185.4m²	

DRAWING SCHEDULE

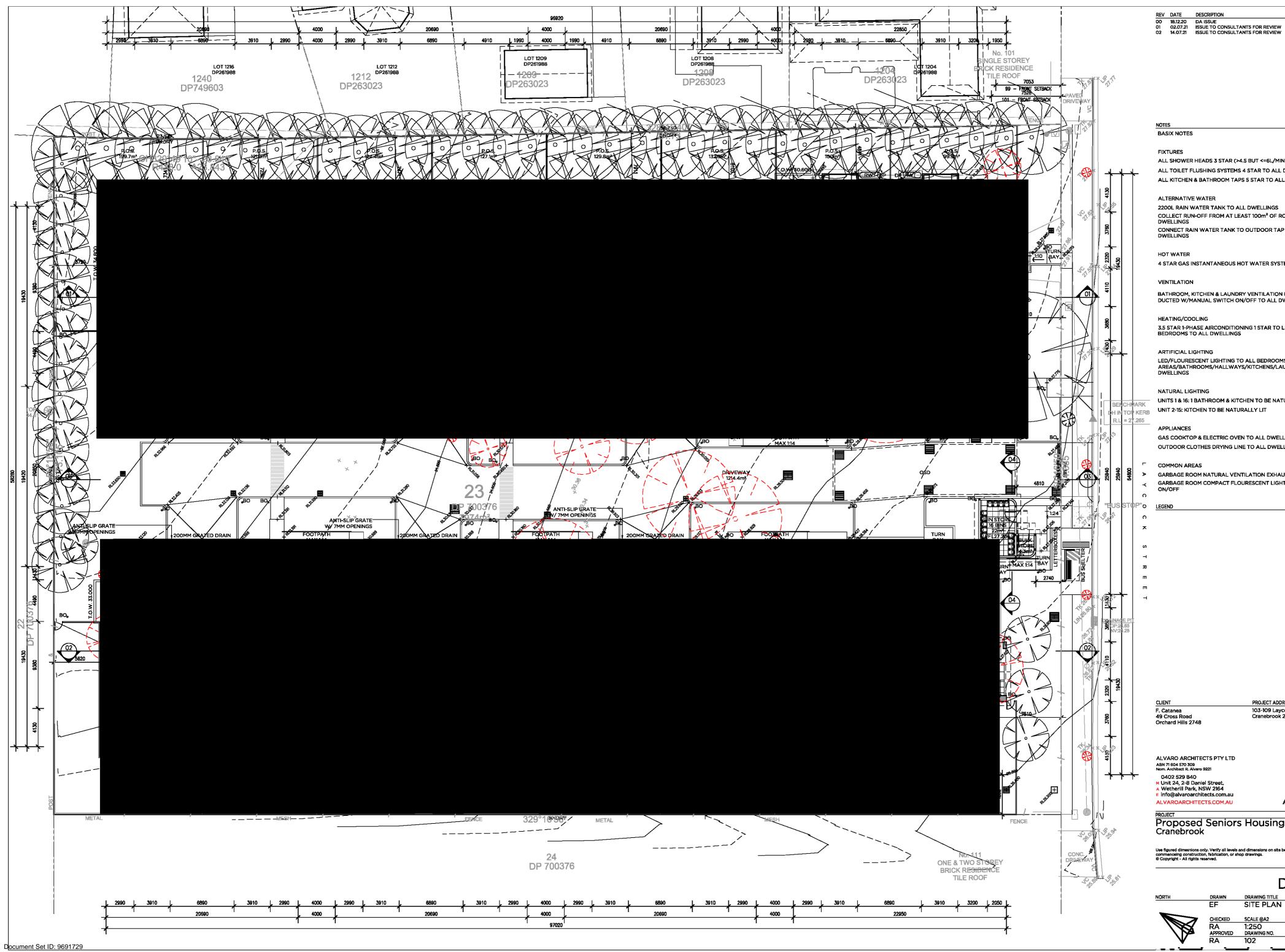
SHEET NO. 000	TITLE COVER SHEET	SCALE NTS	REV 02
100	SITE ANALYSIS & DEMOLITION PLAN	1:250	00
101	CONTEXT MAP	NTS	00
102	SITE PLAN	1:250	02
103	SITE PLAN - ROOF	1:250	01
301	SITE SECTIONS & DRIVEWAY SECTION	1:250	01
302	SITE ELEVATIONS	1:250	01
303	SITE INTERNAL ELEVATIONS	1:250	01
304	SITE INTERNAL ELEVATIONS	1:250	01
401	AREA SCHEDULE	1:250	01
402	DEMOLITION PLAN	1:250	00
403	CUT & FILL DIAGRAM	1:250	01
501	WINDOW SCHEDULE - UNITS 01-10	NTS	00
502	WINDOW SCHEDULE - UNITS 11-16	NTS	00
503	HEIGHT LIMIT DIAGRAM	NTS	01
601	SHADOW DIAGRAM - 22 JUNE 9AM	1:250	01
602	SHADOW DIAGRAM - 22 JUNE 12PM	1:250	01
603	SHADOW DIAGRAM - 22 JUNE 3PM	1:250	01
604	SOLAR ACCESS DIAGRAM	1:1000	01
701	TYP. FLOOR PLANS - UNITS 01 & 16	1:100	02
702	TYP. SECTIONS & ELEVATIONS - UNITS 01 & 16	1:100	01
703	TYP. FLOOR PLANS - UNITS 02-15	1:100	02
704	TYP. SECTIONS & ELEVATIONS - UNITS 02-15	1:100	01
705	BIN STORE DETAILS	1:100	01
706	BIN STORE DETAILS	1:100	00
707	SITE ELEVATION & BUS SHELTER DETAIL	1:250 & 1:50	00
SUB101	STRATA SUBDIVISION PLAN	1:250	00

CLIENT		PROJECT ADDRES	SS
F. Catanea 49 Cross Road Orchard Hills 27	748	103-109 Laycod Cranebrook 27	
ALVARO ARCH ABN 71 604 570 309 Nom. Architect R. Al			
0402 529 84 M Unit 24, 2-8 E A Wetherill Par E info@alvaroa	aniel Street,		
ALVAROARCH	ITECTS.COM.AU	F	LVAR
PROJECT			
Propose	ed Seniors	Housing	
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Use figured dimesnic commenceing const © Copyright - All rig	ok ons only. Verify all levels a ruction, fabrication, or shi hts reserved. DRAWN EF	and dimensions on site before p drawings.	A ISSU

Proposed Seniors Housing & Housing for People with a Disability 103-109 Laycock Street, Cranebrook NSW 2749 - LOT 23 DP700376

DESCRIPTION	CODE
BUILT IN ROBE	0
BOLLARD W/MIN. 20 LUX	OSD
FLOOR LIGHTING PROVISION	Ρ
CUPBOARD	PB
CLOTHES LINE	RWT
DOWNPIPE	TOW
FRIDGE	WIR
FIBRE CEMENT	
FLOOR WASTE	
HOT WATER SYSTEM	
LINEN CUPBOARD	
NATURAL GROUND LINE	

DESCRIPTION OVEN ON-SITE DETENTION PANTRY PLASTERBOARD RAINWATER TANK TOP OF WALL WALK IN ROBE



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BY EF EF EF

ALL SHOWER HEADS 3 STAR (>4.5 BUT <=6L/MIN) TO ALL DWELLINGS

- ALL TOILET FLUSHING SYSTEMS 4 STAR TO ALL DWELLINGS
- ALL KITCHEN & BATHROOM TAPS 5 STAR TO ALL DWELLINGS

ALTERNATIVE WATER

2200L RAIN WATER TANK TO ALL DWELLINGS

COLLECT RUN-OFF FROM AT LEAST 100m² OF ROOF AREA TO ALL DWELLINGS CONNECT RAIN WATER TANK TO OUTDOOR TAP & LAUNDRY TO ALL

4 STAR GAS INSTANTANEOUS HOT WATER SYSTEM TO ALL DWELLINGS

BATHROOM, KITCHEN & LAUNDRY VENTILATION INDIVIDUAL FAN DUCTED W/MANUAL SWITCH ON/OFF TO ALL DWELLINGS

3.5 STAR 1-PHASE AIRCONDITIONING 1 STAR TO LIVING AREAS & BEDROOMS TO ALL DWELLINGS

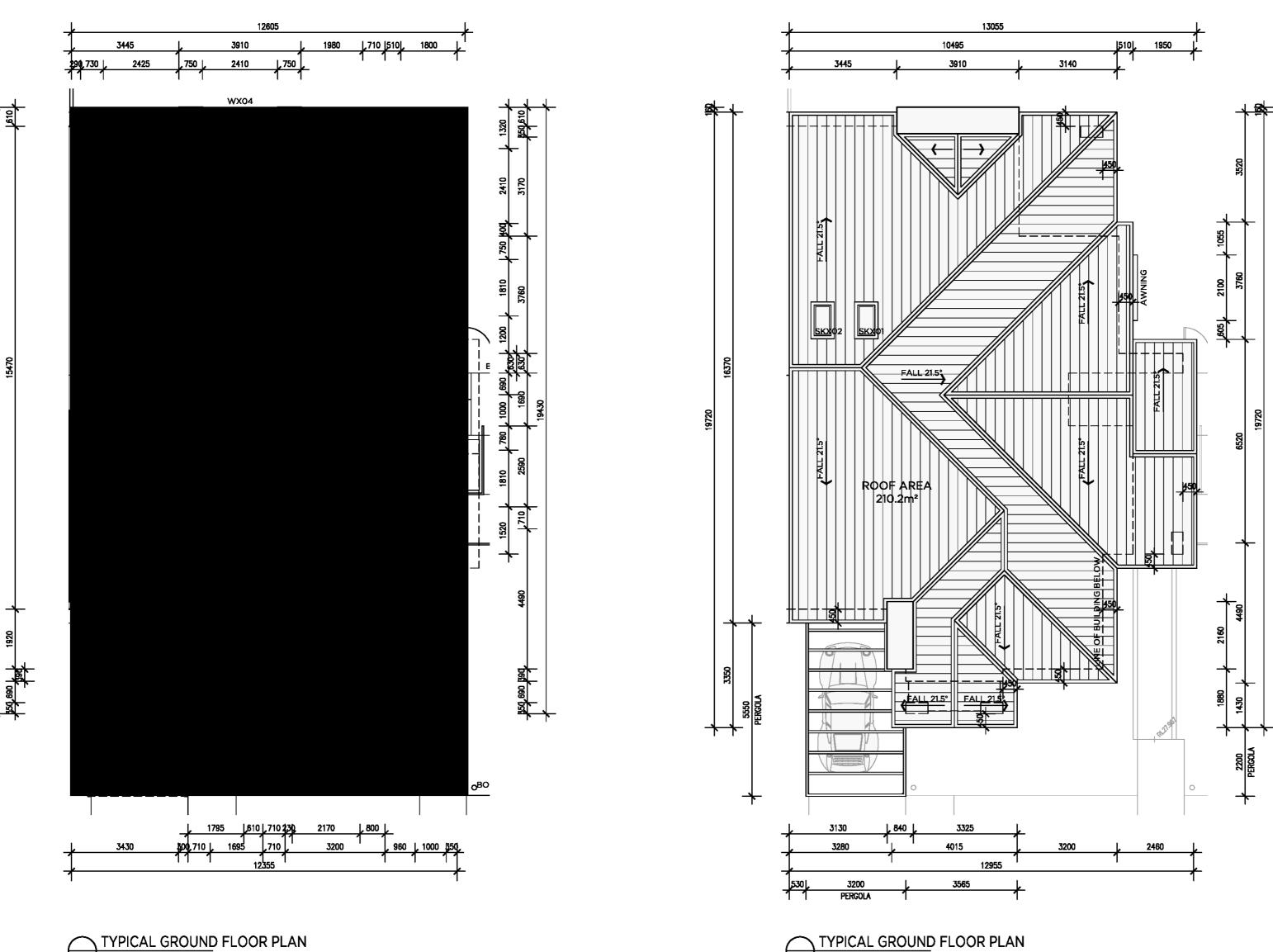
LED/FLOURESCENT LIGHTING TO ALL BEDROOMS/LIVING AREAS/BATHROOMS/HALLWAYS/KITCHENS/LAUNDRIES TO ALL

UNITS 1 & 16: 1 BATHROOM & KITCHEN TO BE NATURALLY LIT

GAS COOKTOP & ELECTRIC OVEN TO ALL DWELLINGS OUTDOOR CLOTHES DRYING LINE TO ALL DWELLINGS

GARBAGE ROOM NATURAL VENTILATION EXHAUST ONLY GARBAGE ROOM COMPACT FLOURESCENT LIGHTING WITH MANUAL

LEGEND					
CLIENT			PROJECT A		
F. Catan 49 Cros			103-109 L Cranebro	aycock Sti ok 2749	reet
Orchard	Hills 2748				
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	erill Park, NS alvaroarchit	SW 2164 ects.com.au			
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NORTH		DRAWN	DRÁWING TITL		ISSUE
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UNITS 01 & 16

Document Set ID: 9691729 Version: 1, Version Date: 10/08/2021

UNITS 01 & 16

9430

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 18,12,20
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 01
 02,07,21
 ISSUE TO CONSULTANTS FOR REVIEW

 02
 14,07,21
 ISSUE TO CONSULTANTS FOR REVIEW

BY EF EF EF

NOTES BASIX NOTES

FIXTURES

ALL SHOWER HEADS 3 STAR (>4.5 BUT <=6L/MIN) TO ALL DWELLINGS ALL TOILET FLUSHING SYSTEMS 4 STAR TO ALL DWELLINGS

ALL KITCHEN & BATHROOM TAPS 5 STAR TO ALL DWELLINGS

ALTERNATIVE WATER

2200L RAIN WATER TANK TO ALL DWELLINGS COLLECT RUN-OFF FROM AT LEAST 100m² OF ROOF AREA TO ALL DWELLINGS CONNECT RAIN WATER TANK TO OUTDOOR TAP & LAUNDRY TO ALL DWELLINGS

HOT WATER

4 STAR GAS INSTANTANEOUS HOT WATER SYSTEM TO ALL DWELLINGS

VENTILATION

BATHROOM, KITCHEN & LAUNDRY VENTILATION INDIVIDUAL FAN DUCTED W/MANUAL SWITCH ON/OFF TO ALL DWELLINGS

HEATING/COOLING

3.5 STAR 1-PHASE AIRCONDITIONING 1 STAR TO LIVING AREAS & BEDROOMS TO ALL DWELLINGS

ARTIFICIAL LIGHTING

LED/FLOURESCENT LIGHTING TO ALL BEDROOMS/LIVING AREAS/BATHROOMS/HALLWAYS/KITCHENS/LAUNDRIES TO ALL DWELLINGS

NATURAL LIGHTING

UNITS 1 & 16: 1 BATHROOM & KITCHEN TO BE NATURALLY LIT UNIT 2-15: KITCHEN TO BE NATURALLY LIT

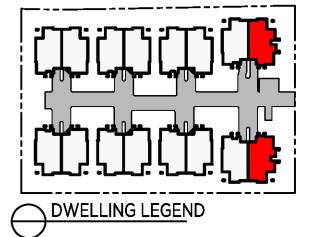
APPLIANCES

GAS COOKTOP & ELECTRIC OVEN TO ALL DWELLINGS OUTDOOR CLOTHES DRYING LINE TO ALL DWELLINGS

COMMON AREAS

GARBAGE ROOM NATURAL VENTILATION EXHAUST ONLY GARBAGE ROOM COMPACT FLOURESCENT LIGHTING WITH MANUAL ON/OFF

LEGEND



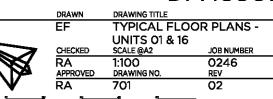
CLIENT	PROJECT ADDRESS
F. Catanea 49 Cross Road Orchard Hills 2748	103-109 Laycock Street Cranebrook 2749
ALVARO ARCHITECTS PTY LTD ABN 71 604 570 309 Nom. Architect R. Alvaro 9221	
0402 529 840 M Unit 24, 2-8 Daniel Street, A Wetherill Park, NSW 2164 E info@alvaroarchitects.com.au ALVAROARCHITECTS.COM.AU	

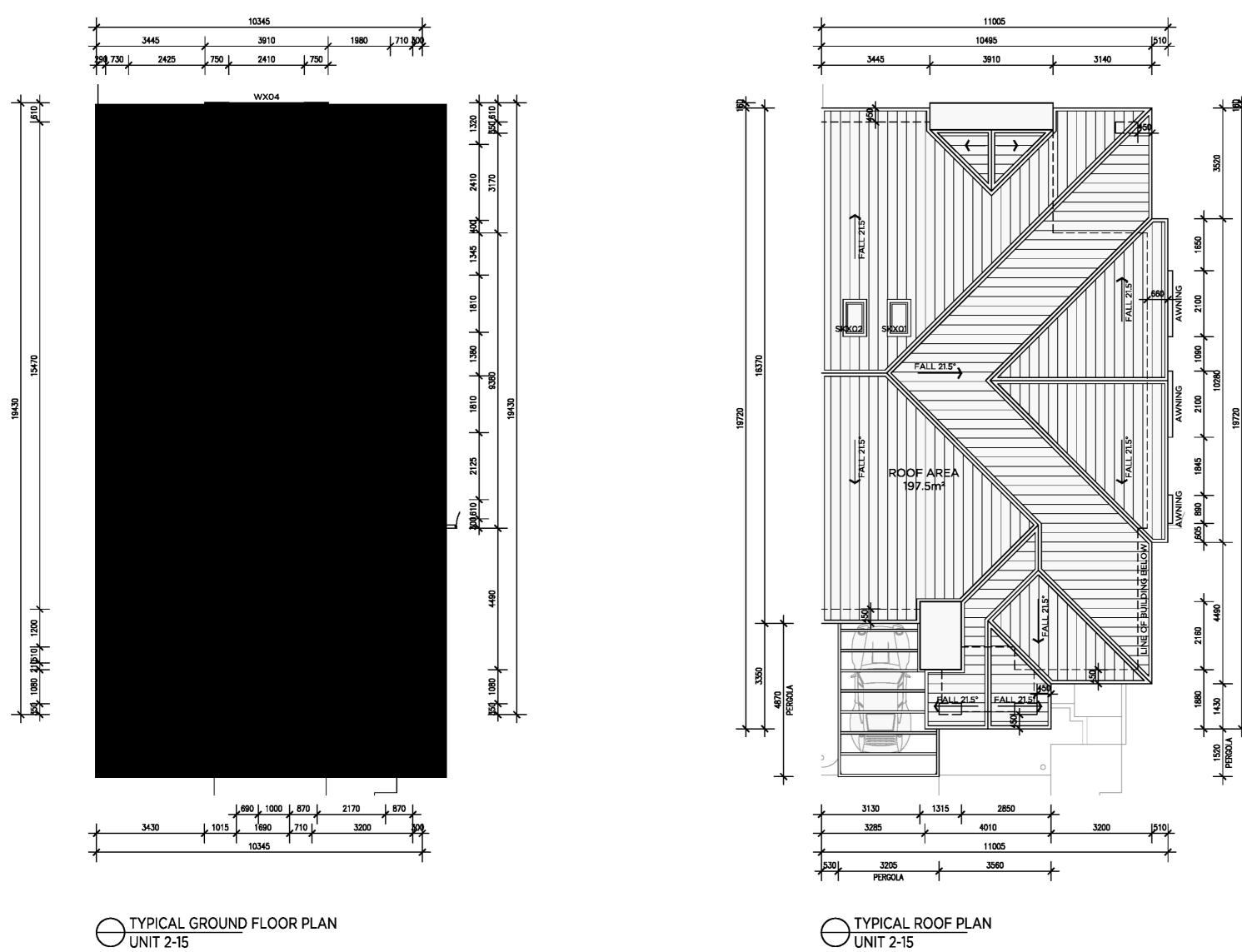
PROJECT Proposed Seniors Housing Cranebrook

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DA ISSUE







Document Set ID: 9691729 Version: 1, Version Date: 10/08/2021
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 DATE
 DESCRIPTION

 00
 18,12,20
 DA ISSUE

 01
 02,07,21
 ISSUE TO CONSULTANTS FOR REVIEW

 02
 14,07,21
 ISSUE TO CONSULTANTS FOR REVIEW

BY EF EF EF

NOTES BASIX NOTES

FIXTURES

ALL SHOWER HEADS 3 STAR (>4.5 BUT <=6L/MIN) TO ALL DWELLINGS ALL TOILET FLUSHING SYSTEMS 4 STAR TO ALL DWELLINGS

ALL KITCHEN & BATHROOM TAPS 5 STAR TO ALL DWELLINGS

ALTERNATIVE WATER

2200L RAIN WATER TANK TO ALL DWELLINGS COLLECT RUN-OFF FROM AT LEAST 100m² OF ROOF AREA TO ALL DWELLINGS CONNECT RAIN WATER TANK TO OUTDOOR TAP & LAUNDRY TO ALL DWELLINGS

HOT WATER

4 STAR GAS INSTANTANEOUS HOT WATER SYSTEM TO ALL DWELLINGS

VENTILATION

BATHROOM, KITCHEN & LAUNDRY VENTILATION INDIVIDUAL FAN DUCTED W/MANUAL SWITCH ON/OFF TO ALL DWELLINGS

HEATING/COOLING

3.5 STAR 1-PHASE AIRCONDITIONING 1 STAR TO LIVING AREAS & BEDROOMS TO ALL DWELLINGS

ARTIFICIAL LIGHTING

LED/FLOURESCENT LIGHTING TO ALL BEDROOMS/LIVING AREAS/BATHROOMS/HALLWAYS/KITCHENS/LAUNDRIES TO ALL DWELLINGS

NATURAL LIGHTING

UNITS 1 & 16: 1 BATHROOM & KITCHEN TO BE NATURALLY LIT UNIT 2-15: KITCHEN TO BE NATURALLY LIT

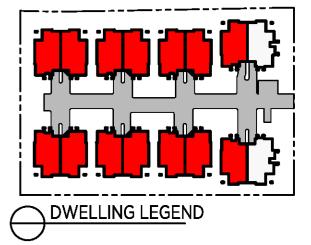
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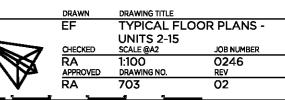
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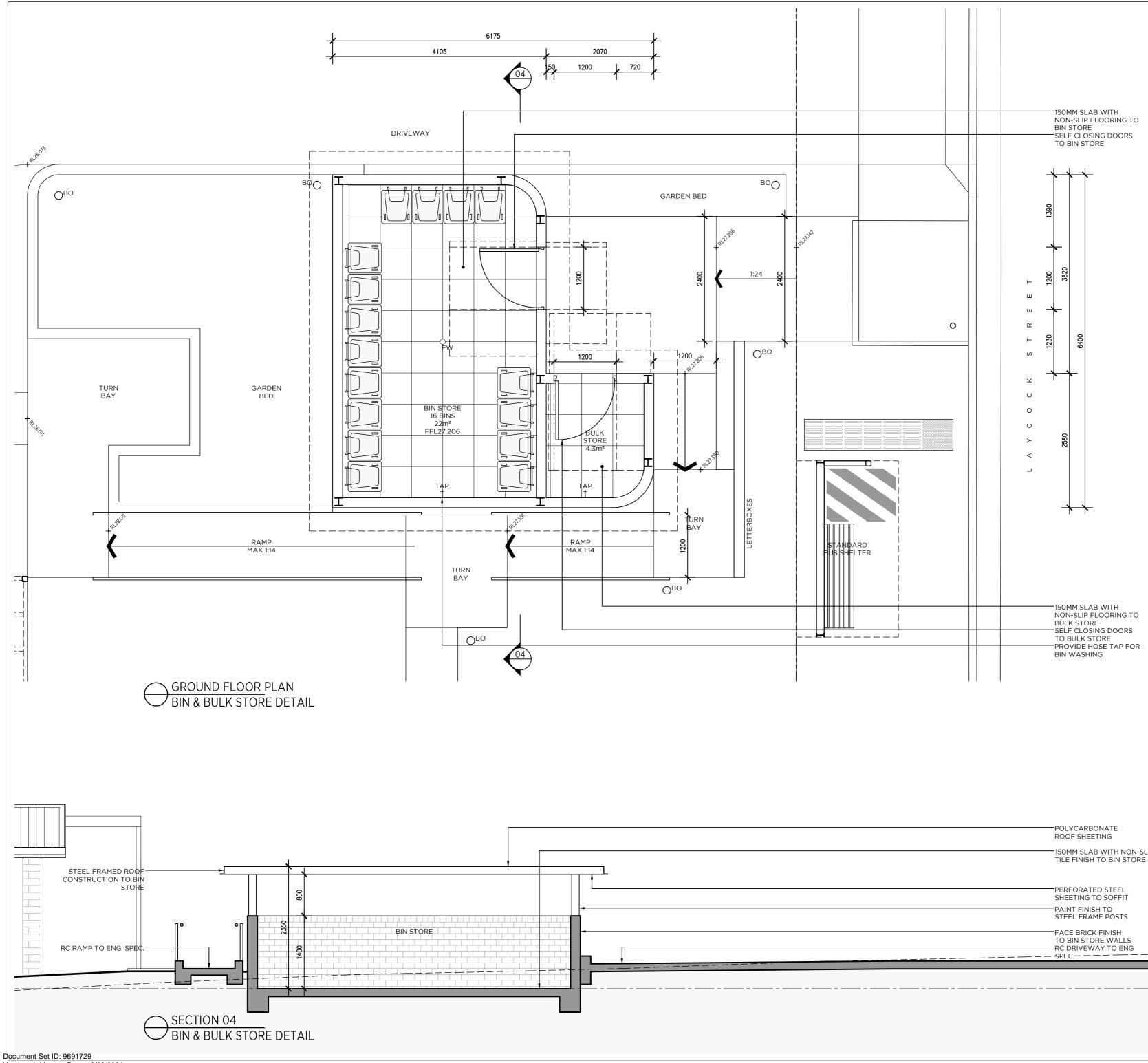
LEGEND



CLIENT F. Catanea 49 Cross Road Orchard Hills 2748	PROJECT ADDRESS 103-109 Laycock Street Cranebrook 2749
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A Wetherill Park, NSW 2164	
e info@alvaroarchitects.com.au ALVAROARCHITECTS.COM.AU	ALVARO
PROJECT Proposed Seniors	
Cranebrook	sticusing
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Version: 1, Version Date: 10/08/2021

		03-109 Laycock Street Tranebrook 2749
POLYCARBONATE ROOF SHEETING		
150MM SLAB WITH NON-SLIP TILE FINISH TO BIN STORE	ALVARO ARCHITECTS PTY LTD ABN 71 604 570 309 Nom. Architect R. Alvaro 9221	
	0402 529 840 M Unit 24, 2-8 Daniel Street, ∧ Wetherill Park, NSW 2164 E info@alvaroarchitects.com.au	
PERFORATED STEEL SHEETING TO SOFFIT	ALVAROARCHITECTS.COM.AU	ALVARC
PAINT FINISH TO STEEL FRAME POSTS	PROJECT Proposed Seniors Ho Cranebrook	ousing
FACE BRICK FINISH TO BIN STORE WALLS RC DRIVEWAY TO ENG	Use figured dimesnions only. Verify all levels and dime commenceing construction, fabrication, or shop drawi	
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REV	DATE	DESCRIPTION
00 01	02.07.21 14.07.21	ISSUE TO CONSULTANTS FOR REVIEW ISSUE TO CONSULTANTS FOR REVIEW

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CLIENT

PROJECT ADDRESS



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