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Our Ref: 2025_GRI14

4 November 2025

Economic Development Queensland
GPO Box 2202
Brisbane Queensland 4001

Attention: Jennifer Davison, Principal Planner Development Assessment

Development Approval No: DEV2024/1571

Property Location: Nirimba Drive, Nirimba (Lot 8 on SP334576)

Application Description: Material Change of Use for Child Care Centre

Subject: Minor Change Application - Traffic Statement

Dear Jennifer,

We refer to the above approval for a Child Care Centre on the site at Nirimba Drive, Nirimba (Lot 8 on SP334576) as approved on 4 March 2025 under DEV2024/1571. Plans of the approved development are included for reference as **Attachment 1**.

This letter has been prepared to accompany an application for a minor change to the existing approval, with the key change being the conversion of a yoga room (under the approved development scheme) to an activity room. This has resulted in an increase in the number of places from 130 children to 142 children.

Q Traffic was engaged to review the amended development scheme (as shown in the plans included as **Attachment 2**) against the approved plans, as well as the relevant design standards and guidelines.

The following sections document the findings of our investigations addressing the following key traffic design elements and issues of the amended development scheme:

- Vehicle access arrangements;
- On-site car parking provision;
- Design of the car parking and vehicle circulation areas;
- Servicing and refuse collection arrangements; and
- The expected traffic impact of the proposed development, compared with that of the previously approved development.

Approved Development

The relevant plans showing the approved development are included for reference as **Attachment 1**, with an extract from the site plan provided as **Figure 1** below.

As shown in these plans, the approved development is a child care centre accommodating 130 children, with at-grade parking for 38 cars including 25 staff bays and 13 bays for drop-off and pick-up of children (including one (1) parking space for people with disabilities).

Vehicular access under the approved scheme was provided by way of an all-movements driveway located approximately midway along the southern site frontage, providing separation from both the intersection to the east, and the road bend to the west. The approved driveway was 6.2m wide, which is adequate to accommodate two-way passenger vehicle flow and access/egress by the largest vehicle expected to require access to the site, which is a refuse collection vehicle of approximately 10.2m length.

The following sections of this report describe the amendments to the approved traffic arrangements proposed under the amended development scheme which is the subject of this minor change application.



Figure 1: Extract from Approved Plan (Site Plan – Ground Floor)

Amended Proposal

The scheme which is the subject of this change application is shown in the plans included as **Attachment 2**, and the extract from the site plan provided as **Figure 2** over page.

The key change to the approved scheme is the conversion of a yoga room to an activity room, with the capacity of the child care centre increased from 130 children to 142 children in order to meet the specific requirements of the future operator. The forecast number of staff has also increased slightly from 20 to 23 staff, in response to the increased in the capacity of the centre.

The traffic elements of the amended development scheme are discussed in further detail in the following sections of this report.



Figure 2: Extract from Proposed (Amended) Plan (Site Plan – Ground Floor)

Vehicular Access Arrangements

As shown in the plans included as **Attachment 1** and **Attachment 2**, no changes are proposed to the vehicular site access arrangements under the amended development scheme, nor are any changes considered to be required.

Servicing and Refuse Collection Arrangements

No changes are proposed to the vehicle servicing arrangements under the amended development scheme, nor are any changes considered to be required.

Car Park Design

As shown in the plans included as **Attachment 1** and **Attachment 2**, no changes are proposed to the design of the car parking area under the amended development scheme, nor are any changes considered to be required.

Car Parking Provision

As outlined in the Traffic Reports prepared to support the existing approval, it is generally acknowledged that historic car parking rates for child care centres (including that recommended in the Plan of Development for Aura Western Locality (Precincts 6, 11, 12, and 14 (Parts))) are unnecessarily high.

To determine a suitable alternative level of parking provision for the proposed development, reference was made to a Planning and Environment Court matter in relation to a proposed childcare centre at 65-67 Lady Musgrave Road, Mountain Creek. One of the Joint Expert Reports of Traffic Engineers (JERs) prepared for this matter involved the collection and analysis of childcare centre parking demand data from five existing childcares in the Sunshine Coast region, ranging in capacity from 90 to 147 children.

A summary of the findings of the JER is provided as follows:

- the surveyed childcare centres were operating at about 93% of their approved capacity, on average, on the day of the survey (Tuesday);
- an 85th percentile parking demand (including both staff and visitor parking demands) of one space per 3.42 children in attendance was recorded on the day of the survey (Tuesday); and
- an 85th percentile parking demand (including both staff and visitor parking demands) of one space per 3.74 approved places, was recorded on the day of the survey (Tuesday).

The car parking rate under the existing approval represented a performance outcome (i.e. a reduced car parking rate compared with the recommendation in the Plan of Development for Aura Western Locality (Precincts 6, 11, 12, and 14 (Parts))), with 38 car parking spaces approved to support the centre catering for 130 children. This equates to an approved car parking rate of 1 space per 3.42 approved children. However this conservatively assumes 100% attendance at the centre, which is considered to be extremely unlikely.

The application of the lower car parking rate (which allows for reduced centre occupancy) to the development now proposed leads to the following recommended level of on-site car parking provision:

- 142 children x one space per 3.74 approved places = 38 parking spaces.

As shown in the plans included as Attachment 2, a total of 38 on-site car parking spaces are proposed under the amended development scheme, achieving the above car parking rate which was determined to be appropriate during a recent Planning and Environment Court matter.

Furthermore, reference has been made to the Proposed Sunshine Coast Planning Scheme (i.e. the Draft Planning Scheme), which appears to recognise that historic car parking rates for child care centre are excessive. This document recommends the following car parking rates for a childcare centre:

- 1 space / 3.6 children OR
- Where located in a centre zone or the Tourist Accommodation Zone – 1 space / 4 children

The application of the above car parking rates to the proposed development suggests that 36 – 40 car parking spaces would be appropriate to service the development.

The proposed overall level of on-site car parking (38 spaces) is therefore generally consistent with the recommended level of provision under the Proposed Sunshine Coast Planning Scheme (i.e. the Draft Planning Scheme), which appears to recognise that historic car parking requirements for child care centres are excessive.

Of the 30 car parking spaces proposed, 23 spaces are to be staff bays, leaving 15 car parking spaces available for drop-off and pick-up of children.

Assuming an average duration of stay for parents/carers picking up and dropping off children of 6.8 minutes (as documented in Section 3.11.3 of the RTA Guide to Traffic Generating Developments), and a peak hour trip generation of 0.66 trips per child in the critical AM peak hour (as outlined in the Traffic Report which accompanied the development application), the estimated average number of vehicles on site dropping off and picking up children during the critical peak period is only 5 – 6 vehicles, calculated as follows:

- AM trip generation = 142 children x 0.66 trips per child = 94 vph
- Assume 50% arrivals and 50% departures = 47 vehicles on-site during the peak hour
- Average duration of stay = 6.8 minutes
- 6.8 mins / 60 mins x 47 vehicles = 5.33 vehicles (average demand) during critical peak periods

On the basis of the above, the 15 car parking spaces for drop-off and pick-up of children are expected to be more than adequate to cater for the visitor parking demand, which is expected to be in the order of only 5 - 6 vehicles on average during the critical AM peak hour.

In summary, the proposed level of car parking provision (i.e. 38 spaces to service a centre of 142 children) is considered to represent an appropriate and supportable performance outcome, based upon the following sources of data:

- Car parking surveys used to determine an appropriate level of car parking provision for child care centres during a recent Planning and Environment Court matter;
- The recommended level of provision under the Proposed Sunshine Coast Planning Scheme (i.e. the Draft Planning Scheme); and
- A first principles assessment (considering the documented average duration of stay for parents/carers picking up and dropping off children).

Traffic Impact of Development

As outlined in the Traffic Report which accompanied the application for the existing approval, the Department of Transport and Main Roads (TMR) has collected and published trip generation data at nine (9) existing child care centres. This data reveals the following average surveyed trip generation rates for child care centres:

- AM Peak Hour: 0.66 trips per child
- PM Peak Hour: 0.48 trips per child

Applying the above trip generation rates to the additional capacity proposed (12 children), suggests the following additional peak hour traffic volumes may be generated:

- AM Peak Hour: 8 additional vehicle trips (4 arrivals and 4 departures)
- PM Peak Hour: 6 additional vehicle trips (3 arrivals and 3 departures)

The above level of additional traffic generation is clearly very low, and once distributed onto the surrounding road network, is unlikely to have any notable additional impact upon the performance of the network from a capacity perspective.

Conclusion

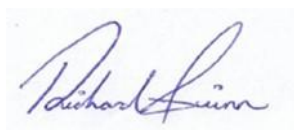
In my capacity as a Registered Professional Engineer of Queensland, I am satisfied that the proposed vehicular access, parking, servicing and refuse collection arrangements under the amended development scheme are generally in accordance with the approved development scheme and/or the relevant standards and guidelines, and/or represent suitable performance-based solutions which are acceptable from a traffic engineering perspective, considering the specific site conditions and the nature of the use.

Furthermore, I am satisfied that the impact of the proposed development upon the surrounding road network will be acceptable, and generally consistent with that of the previously approved development scheme.

On this basis, it is recommended that the minor change to the existing approval be approved from a traffic engineering perspective.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned.

Regards



Richard Quinn
BECivil, MIEAust, RPEQ (08565)
Director – Q Traffic

ATTACHMENT 1

Plans of Approved Development

Aura Early Learning Centre

Nirimba Drive, Nirimba



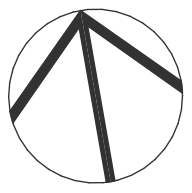
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Drawing No.	Sheet Name	Revision ID
00.01	Titlepage	O
01.02	Site Context Plan	G
03.01	Floor Plan - Ground	P
03.02	Floor Plan - First	P
04.01	Roof Plan	O
09.01	Elevations (Sheet 01)	O
09.02	Elevations (Sheet 02)	O
09.03	Elevations (Sheet 03)	O
09.04	Elevations (Sheet 04)	O
10.01	Sections	N
22.01	Renders (Sheet 1)	I
22.02	Renders (Sheet 2)	I
22.03	Renders (Sheet 3)	E

Site Information	
Local Authority	Sunshine Coast City Council
Site Area	3200m2

Development Information	
Landscaping	228.2m2 (7.1%)
Landscaping (Incl. Outdoor Play)	1232.8m2 (38.5%)
Site Cover	1069.7m2 (33.42%)
GFA	1000.2m2
Carparks Required	38
Carparks Provided	38
Bike Parks	4

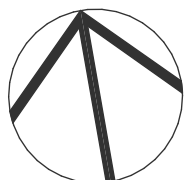
Activity Room Calculations						
Level	Room	Age Group	Area Required	Area Provided	Staff Ratio	No. of Staff
Ground Floor	Classroom 1 (0%)	0-24 mnths	39	39.18	1:4	3
	Classroom 2 (0%)	0-24 mnths	39	39.17	1:4	3
	Classroom 3 (0%)	2-3 yrs	65	65.57	1:5	4
	Classroom 4 (0%)	2-3 yrs	65	65.57	1:5	4
	Classroom 5 (0%)	3-5 yrs	72	72.00	1:11	2
	Classroom 6 (0%)	3-5 yrs	72	72.01	1:11	2
	Classroom 7 (0%)	3-5 yrs	72	71.98	1:11	2
			424	425.48 m²		20

Outdoor Play Calculations			
Zone	Age Group	Area Required	Occupancy
Outdoor Play (9%)	2+ yrs	910	130
		910	130



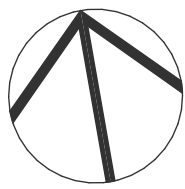
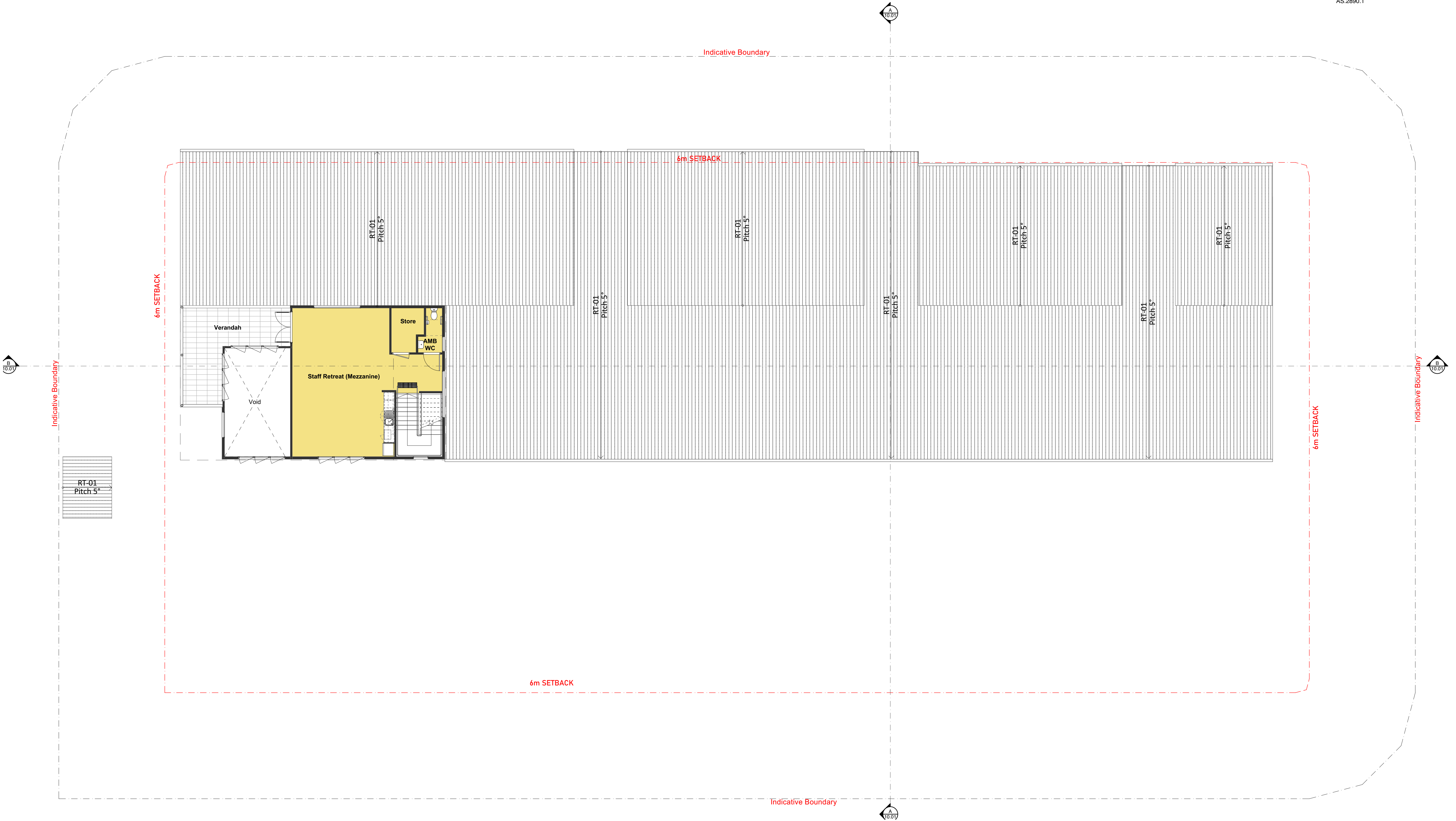
FLOOR PLAN LEGEND

- Steel Studs - 92mm typical
- BAL-1 Balustrade type
- CHS Circular Hollow Section
- FE Fire Extinguisher
- FW Floor Waste
- HR Handrail
- LBO Line of Building Over
- LRO Line of Roof Over
- LSO Line of Slab Over
- MRS-1 Metal Roof Sheetting
- TIL-1 Tiles
- RB Roof Beam
- TOW Top Of Wall
- USAB Universal Accessible Bathroom
- WH Window Hood
- WS WheelStop - (concrete) to comply with AS.2890.1



FLOOR PLAN LEGEND

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ATTACHMENT 2

Plans of Amended Development Scheme

Aura Early Learning Centre

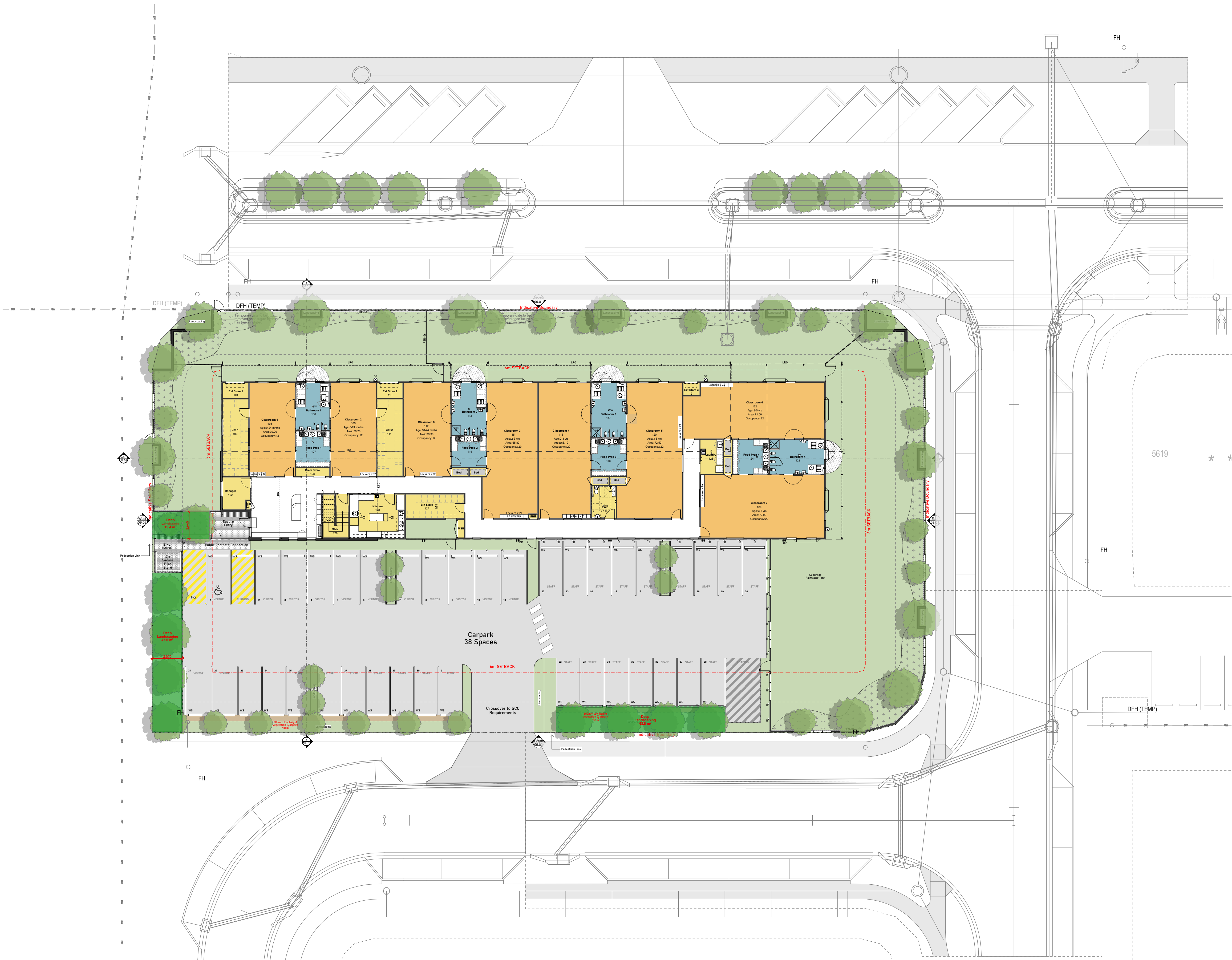
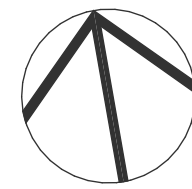
Lot 8 Nirimba Drive, Nirimba QLD



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Drawing No.	Sheet Name	Revision ID				
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01.02	Site Context Plan	K				
03.01	Floor Plan - Ground	T				
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09.04	Elevations (Sheet 04)	P				
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22.03	Renders (Sheet 3)	G				

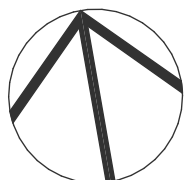
Activity Room Calculations						
Level	Room	Age Group	Area Required	Area Provided	Staff Ratio	No. of Staff
Ground Floor						
	Classroom 1	0-24 mnths	39.00	39.16	1:4	3
	Classroom 2	0-24 mnths	39.00	39.16	1:4	3
	Classroom 3	2-3 yrs	65.00	65.84	1:5	4
	Classroom 4	2-3 yrs	65.00	65.08	1:5	4
	Classroom 5	3-5 yrs	71.50	72.50	1:11	2
	Classroom 6	3-5 yrs	71.50	71.52	1:11	2
	Classroom 7	3-5 yrs	71.50	72.01	1:11	2
	Classroom 8	18-24 mnths	39.00	39.31	1:4	3
			461.50 m²	464.58 m²		23

Outdoor Play Calculations				
Zone	Age Group	Area Required	Area Provided	Occupancy
Outdoor Play 1				
	0-2 yrs	252.00	252.94	36
Outdoor Play 2				
	2+ yrs	280.00	281.16	40
Outdoor Play 3				
	2+ yrs	462.00	462.94	66
		994.00 m²	997.04 m²	142



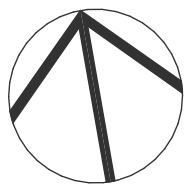
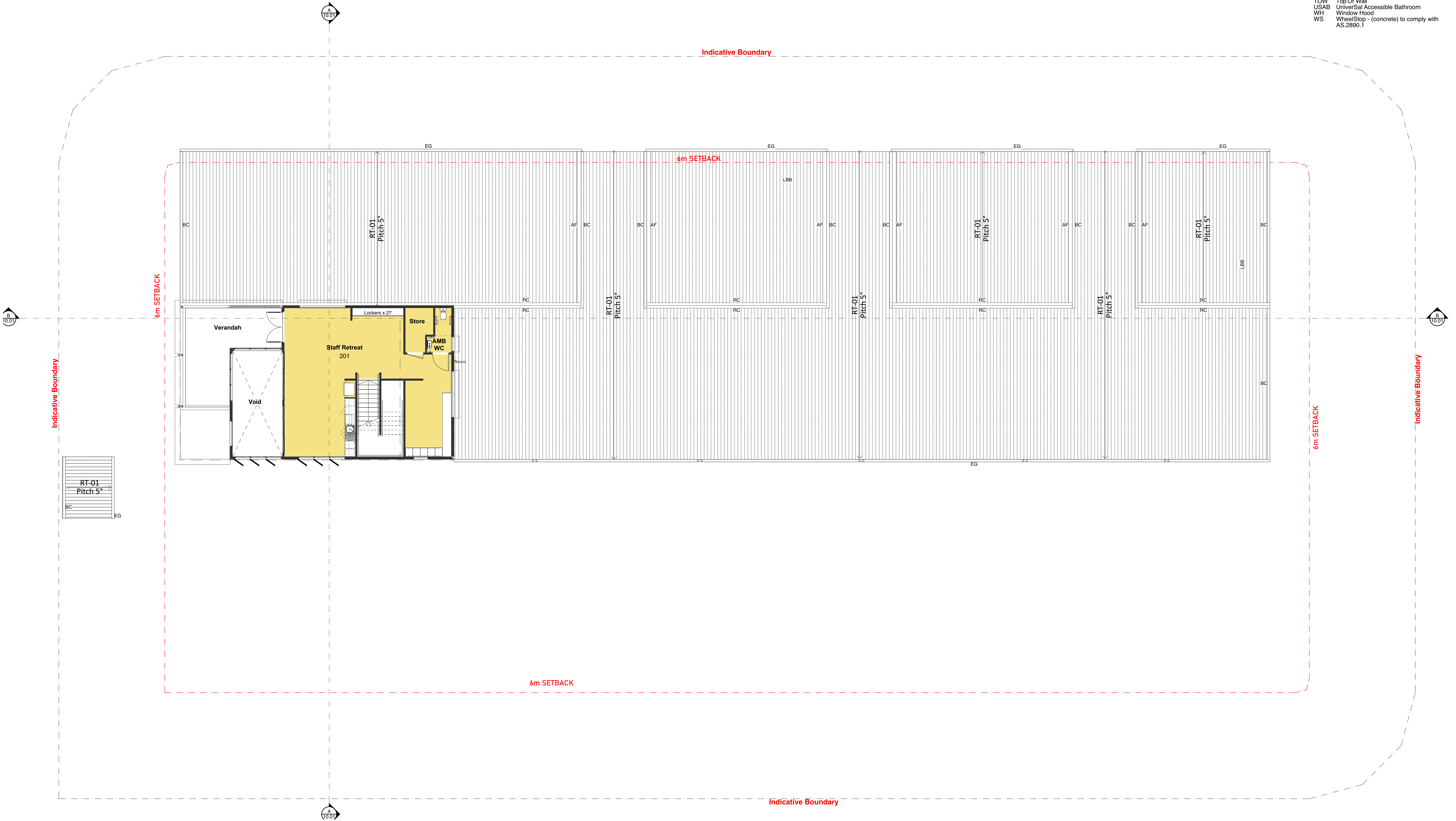
FLOOR PLAN LEGEND

- Steel Studs - 92mm typical
- BAL-1 Balustrade type
- B Bollard
- CHS Circular Hollow Section
- DP Downpipe
- EG Eaves Gutter
- FE Fire Extinguisher
- FW Floor Waste
- HR Handrail
- KE Kitchen Exhaust
- LBO Line of Building Over
- LRO Line of Roof Over
- LSO Line of Slab Over
- RB Roof Beam
- RT-01 Roof Type 1 - Metal Roof Sheet
- RW Retaining Wall
- TOW Top Of Wall
- USAB Universal Accessible Bathroom
- WH Window Hood
- WS WheelStop - (concrete) to comply with AS.2890.1



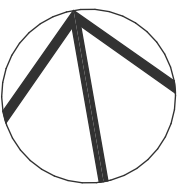
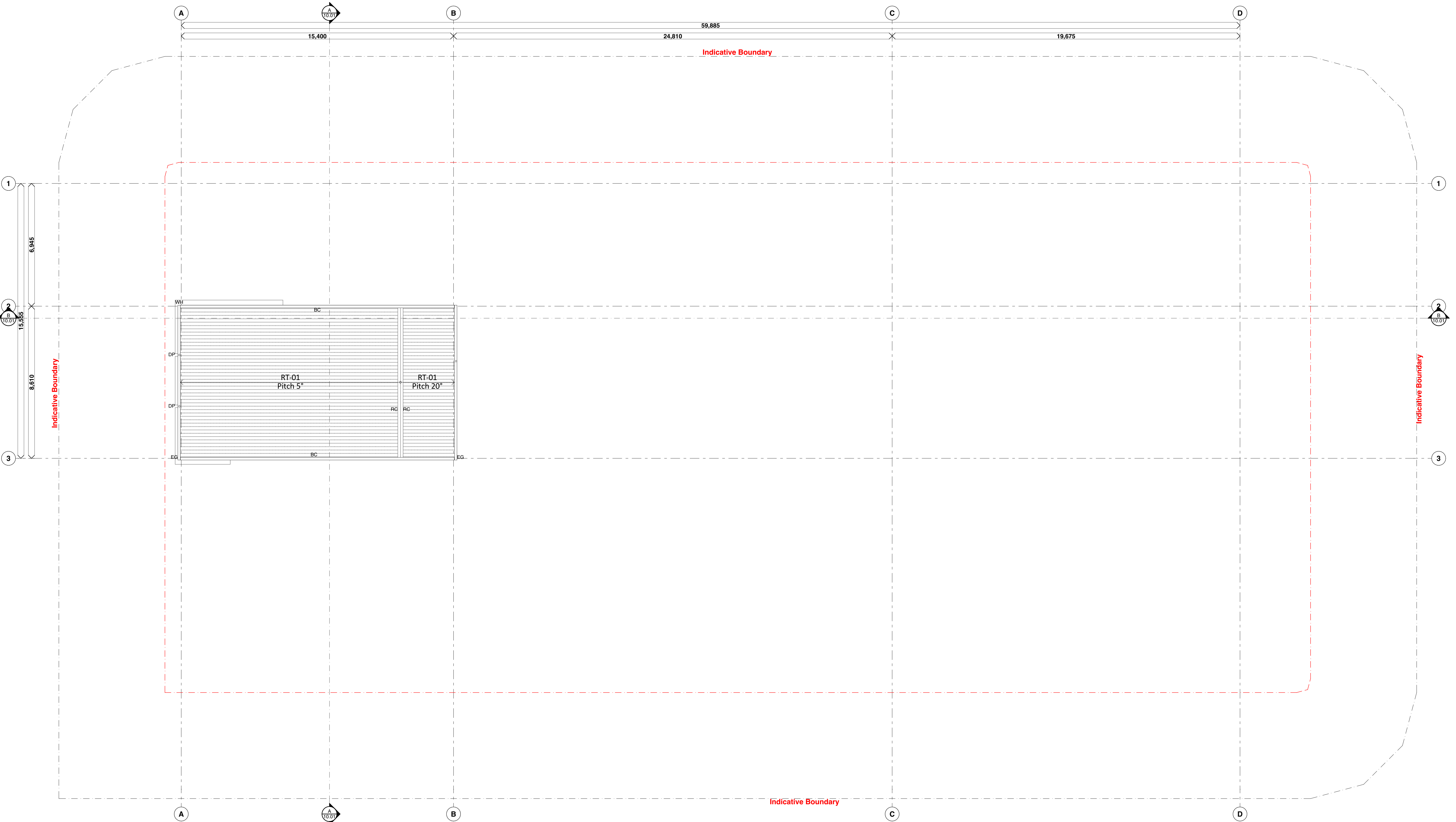
FLOOR PLAN LEGEND

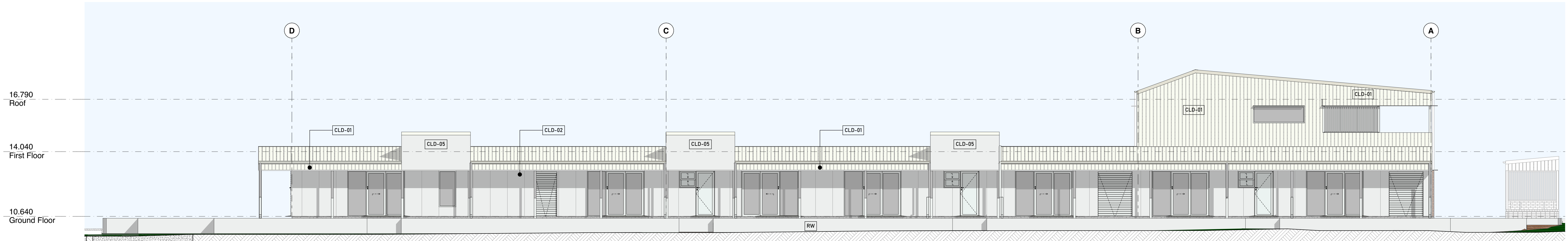
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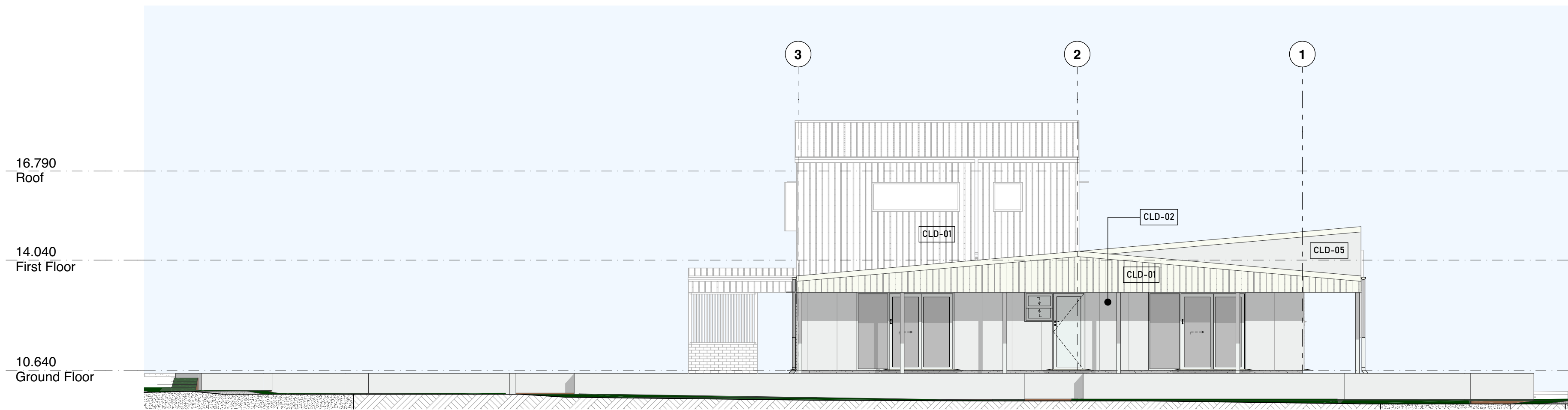
ROOF LEGEND

- AF Apron Flashing
BC Barge Capping
DP Downpipe
EG Eaves Gutter
LBB Line of Building Below
OH Overhang
RC Ridge Capping
RT-01 Roof Type 1 - Metal Roof S





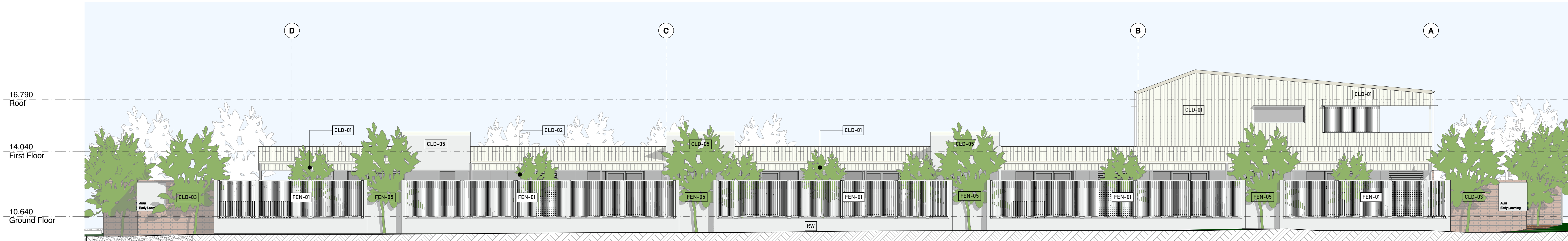
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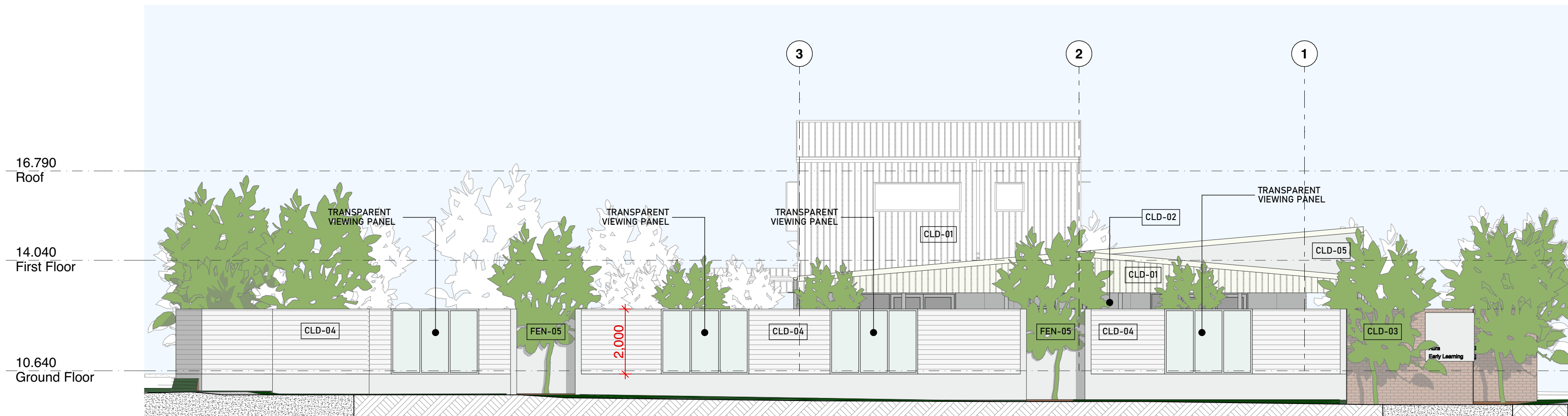
2 East Elevation
Scale 1:100



CLD-01 METAL CLADDING (LIGHT FINISH) CLD-02 900MM FIBRE CEMENT PANNELS (WHITE FINISH) CLD-03 STANDARD BRICK (NATURAL FINISH) CLD-04 WEATHERBOARD (WHITE FINISH) PF-01 WHITE RT-01 METAL ROOF SHEETING (LIGHT FINISH) FEN-01 2m H BATTEN FENCE WITH GAPS (VARIOUS SECTIONS OF PF-01, PF-02 & PF-03) FEN-02 2m H ALUMINIUM FLAT BAR FENCE (LIGHT FINISH)



1 North Elevation (Fencing)
Scale 1:100



2 East Elevation (Fencing)
Scale 1:100



CLD-01
METAL CLADDING
(LIGHT FINISH)

CLD-02
900MM FIBRE CEMENT PANNELS
(WHITE FINISH)

CLD-03
STANDARD BRICK
(NATURAL FINISH)

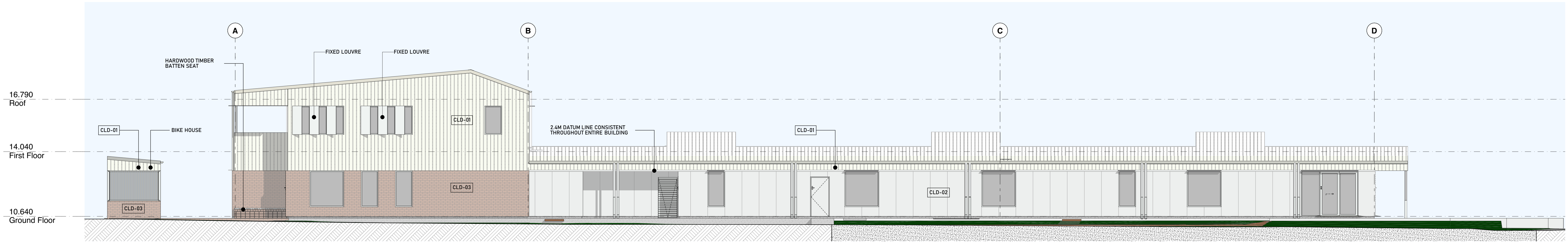
CLD-04
WEATHERBOARD
(WHITE FINISH)

PF-01
WHITE

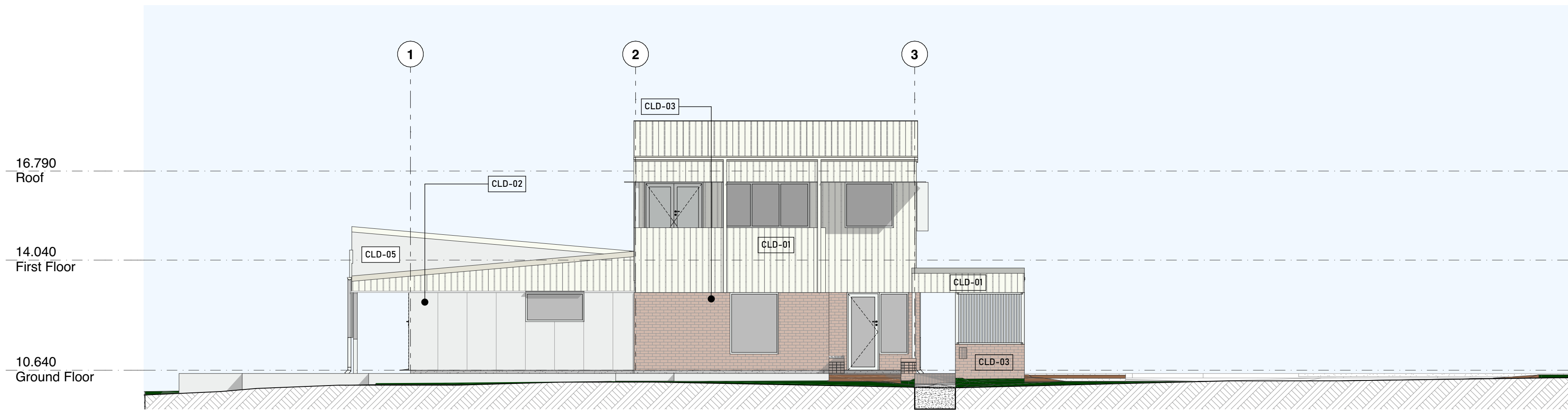
RT-01
METAL ROOF SHEETING
(LIGHT FINISH)

FEN-01
2m H BATTEN FENCE WITH GAPS
(VARIOUS SECTIONS OF PF-01, PF-02
& PF-03)

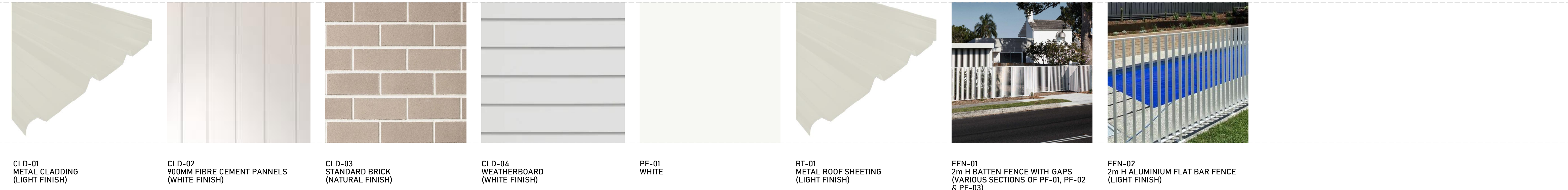
FEN-02
2m H ALUMINIUM FLAT BAR FENCE
(LIGHT FINISH)

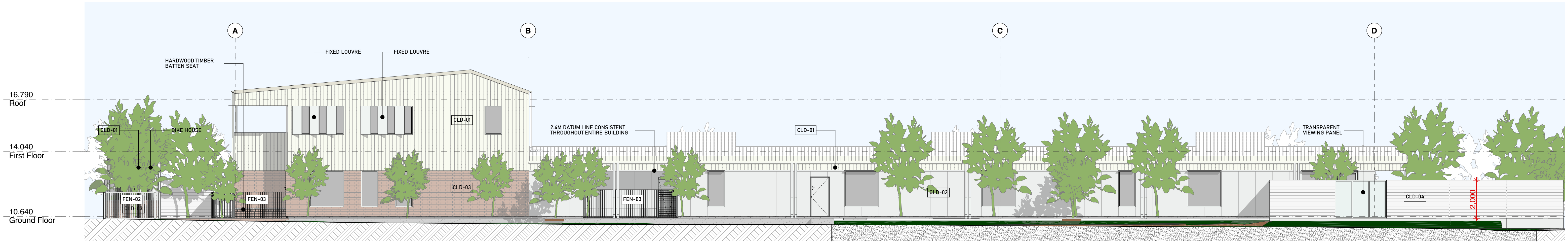


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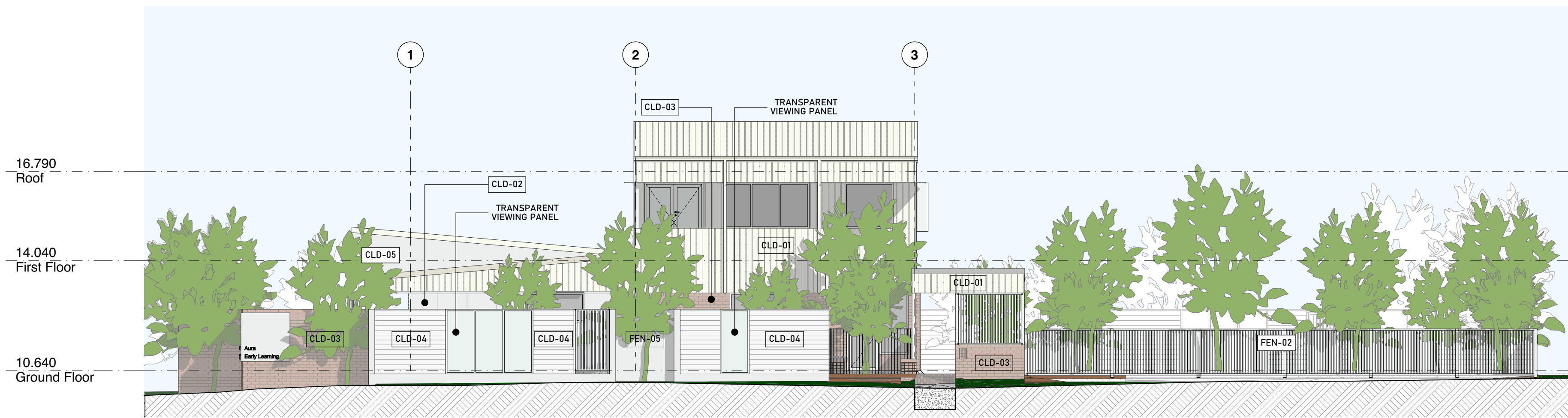


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Scale 1:100

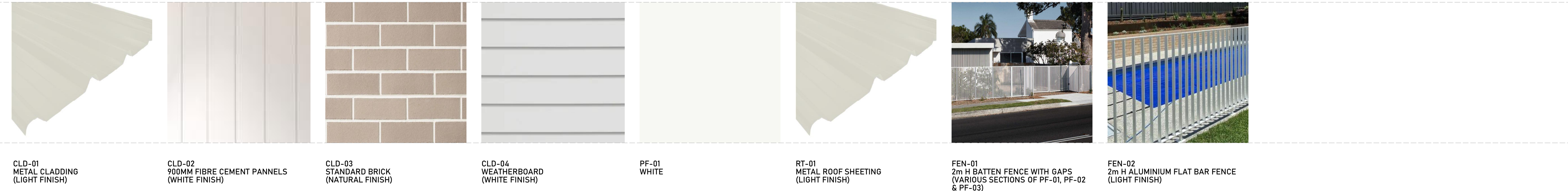


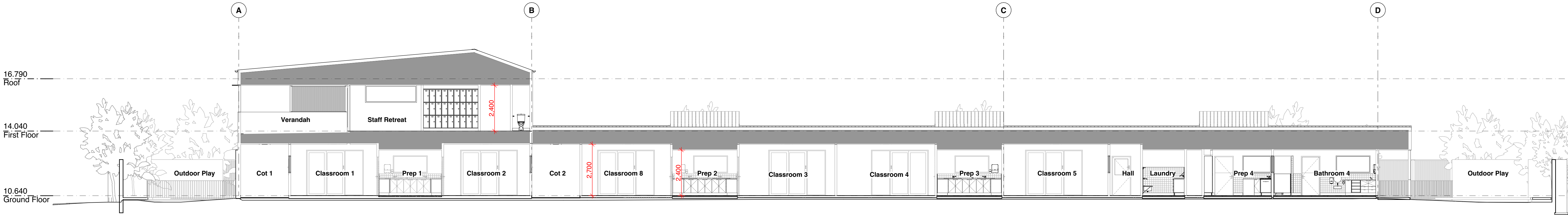


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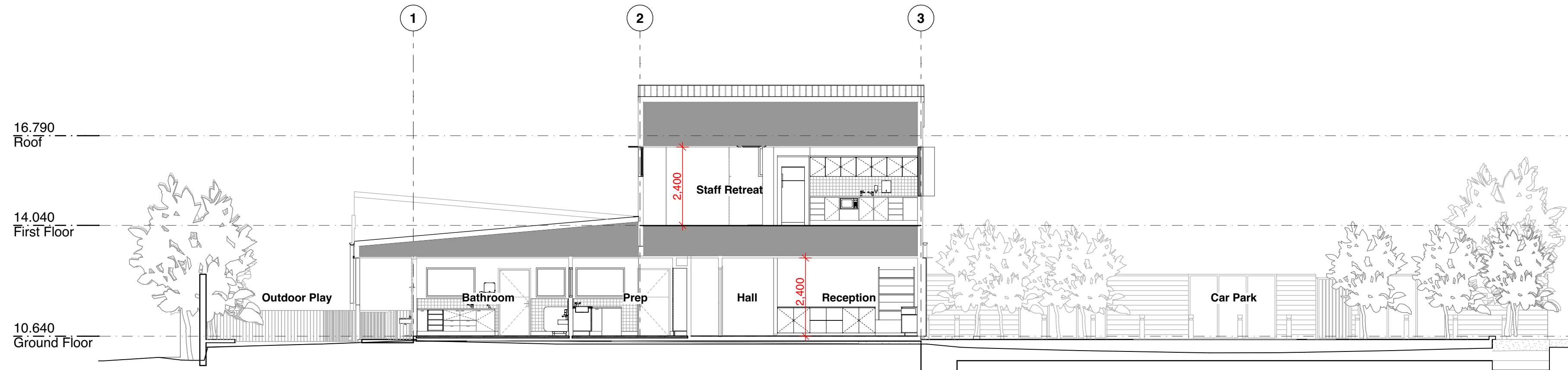


2 West Elevation (Fencing)
Scale 1:100





1 A Section A
Scale 1:100



2 B Section B
Scale 1:100





