

# 4-8 Inman Road, Cromer – Warehouse Unit 10

## Transport Impact Assessment Report

PREPARED FOR DISCOVER & EVOLVE ENTERPRISES | 30/06/2025 | 300305892

We design with community in mind

# Revision

Revision	Date	Comment	Prepared By	Approved By
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A	30/06/2025	Final	Mustafa Farah / Abseen Anya	Herman Lai

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## Abseen Anya

For and on behalf of

**Stantec Australia Pty Ltd**

## Acknowledgment of Country

In the spirit of reconciliation, Stantec acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present, and extend that respect to all Aboriginal and Torres Strait Islander peoples.

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## **Limitations**

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# 1. Introduction

## 1.1 Background

It is understood that a development application is to be lodged with Northern Beaches Council (Council) for a proposed pickleball arena and wellness centre within Warehouse 10 of the Northern Beaches Business Park (NBBP) located at 100 South Creek Road, Cromer.

Stantec has been engaged by Discover & Evolve Enterprise to prepare a traffic impact assessment report for this application.

The proposal will include 12 pickleball courts within the existing warehouse unit, along with a 123 sqm auxiliary pro shop and milling area, and a 302 sqm wellness tenancy. There will be no other changes sought with the exception of inclusion of an additional six (6) at-grade spaces outside of the warehouse immediate frontage as part of the change of use application.

Discover & Evolve Enterprise, the applicant, has indicated that the site would typically accommodate up to 3 staff and 26 customers/visitors for the pickleball arena and an additional 5 patrons and up to 2 staff for the wellness centre at any one time. The maximum number of pickleball customers/visitors expected is to be no more than 58 persons, should the pickleball courts require to operate at full capacity occasionally, such as during the busier summer weekends / events.

## 1.2 Proposal

Based on information provided by the applicant and BDAI (the project architect), Stantec understands that the pickleball arena and wellness centre will have the following operating characteristics:

- **Hours of Operation:** 6:00am – 11:00pm Monday to Sunday for the Pickleball arena  
6:00am – 9:00pm Monday to Sunday for the wellness centre
- **Staff:** Up to 3 employees for the Pickleball arena;  
Up to 2 employees at the wellness centre
- **Person capacity:** Typically, 36 persons (including staff) at any one time
- **Parking allocation:** 50 car spaces (17 marked at-grade spaces adjacent to the warehouse and 33 spaces within the share pool in the basement car park), with access to additional 68 existing shared spaces within the basement on weekdays and 99 spaces on weekends (when 31 parking spaces allocated to childcare use are not required).

The pickleball arena is expected to operate daily from 6:00am to 11:00pm, with a varying number of attendees depending on the time of day. As per the information provided to Stantec, on weekdays (Monday to Friday), attendance is expected to average 12 people between 6:00am and 4:00pm, increasing to 16 people during the peak period from 4:00pm to 8:00pm, before reducing to approximately 8 people between 8:00pm and 11:00pm.

On weekends (Saturday and Sunday), the pickleball arena is expected to see an average of 8 people during the early morning hours (6:00am to 9:00am), then rising to 16 people from 9:00am to 4:00pm, followed by a drop back to people during 4:00pm to 11:00pm. It has also been assumed that up to 10 visitors will be present on site to watch pickleball matches during the weekdays after 4pm and during weekends, consistent with similar indoor sport centre and per advice provided by client. It is expected that up to three (3) staff members will oversee the centre operations.

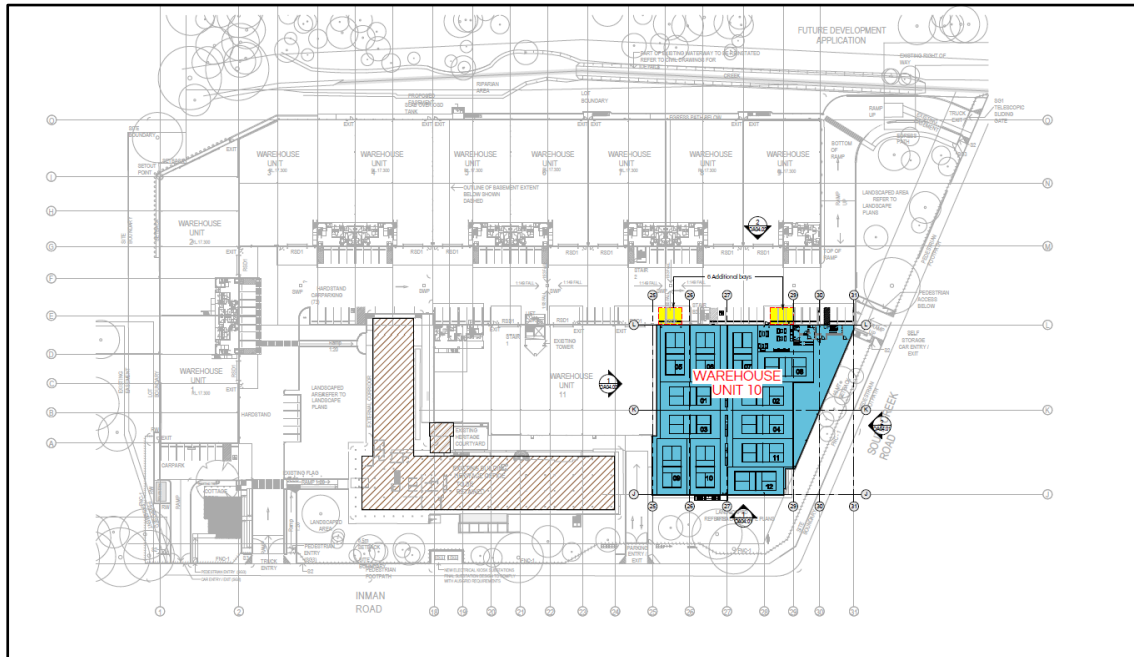
Stantec has been informed that the wellness centre is expected to operate every day from 6:00am to 9:00pm with a peak hourly attendance of 5 persons per hour, and between one (1) to two (2) staff members.

## 1 Introduction

Figure 1 shows the overall approved layout for the Northern Beaches Business Park with Warehouse Unit 10 shown (subject site), whilst the proposed layout for the pickleball arena and wellness centre is shown in Figure 2.

The existing parking allocation within the basement car park as provided by the property management is attached at Appendix A. The indicative parking allocation to accommodate the proposed development is shown Figure 3, also based on information provided by the property management.

Figure 1: Northern Beaches Industrial Park – Proposed Warehouse 10



Source: Drawing Number DA01.01 Revision 1, prepared by BDAI, dated 16 June 2025

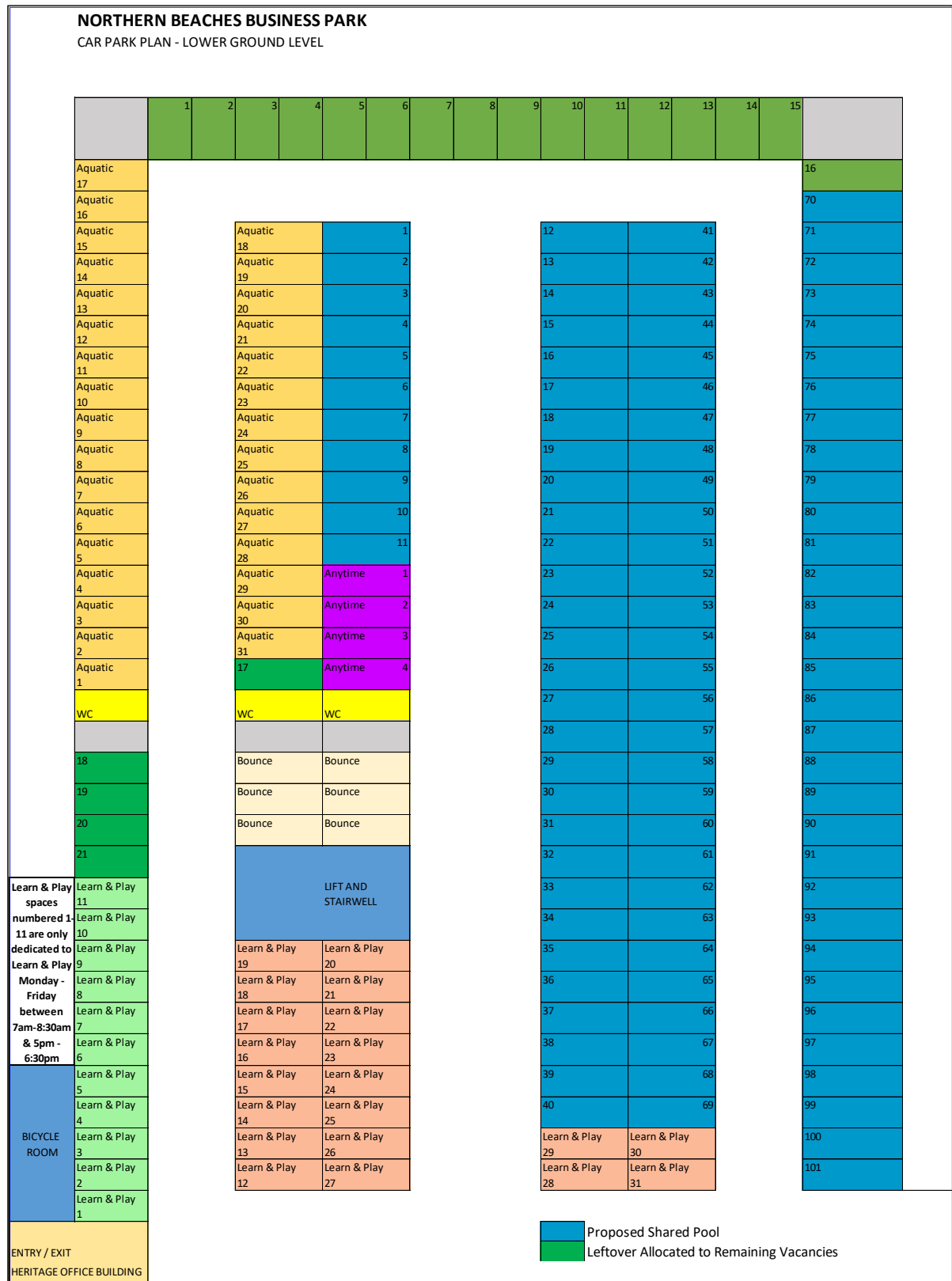
Figure 2: Warehouse 10 – Proposed Pickleball Arena & Wellness Centre Layout



Source: Drawing Number DA01.01 Revision 1, prepared by BDAI, dated 16 June 2025

# 1 Introduction

Figure 3: Indicative Basement Parking Allocation



Source: Information provided by Property Manager

## 1 Introduction

### 1.3 Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposal, including consideration of the following:

- existing traffic and parking conditions surrounding the site
- suitability of the proposed parking in terms of supply (quantum) and layout
- pedestrian and bicycle requirements
- service vehicle requirements
- suitability of the proposed access arrangements to the site
- the transport impact of the proposal on the surrounding road network.

### 1.4 References

In preparing this report, reference has been made to the following:

- A desktop review of the site and its surrounds and any background records and photo imagery for the approved Northern Beaches Business Park Development Application
- Warringah Development Control Plan (DCP) 2011
- Warringah Local Environmental Plan (LEP) 2011
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2018
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- Northern Beaches Business Park, 100 South Creek Road, Cromer, TIA, prepared *by Stantec (then GTA Consultants), dated 27 October 2020*
- Proposed Childcare Centre Development, 4-10 Inman Road, Cromer – Traffic & Parking Assessment prepared by *Transport and Traffic Planning Associates, dated March 2024*
- other documents and data as referenced in this report.



# 2. Existing Conditions

## 2.1 Location

The subject site is Warehouse Unit 10 located within the existing Northern Beaches Business Park (NBBP) at 100 South Creek Road, Cromer. The site comprises 3,647 sqm (approx.) of warehouse area inclusive of a 250 sqm mezzanine level office area. The overall site has a land use classification of E4 General Industrial.

The surrounding properties predominantly include industrial developments to the northwest and south, Cromer Park sports fields to the immediate southwest, Northern Beaches Secondary College (Cromer Campus) to the west and residential uses to the east of the site.

The location of the Northern Beaches Business Park and its surrounding environs is shown in Figure 4, while the Local Environmental Plan (LEP) land use map is shown in Figure 5.

*Figure 4: Subject site and its environs*



Base image source: Nearmap, accessed 13 March 2025

## 2 Existing Conditions

Figure 5: Land use map (4-8 Inman Road, Cromer)



Base image source: Warringah LEP 2011, Northern Beaches ePlanning

(<https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Public/XC.Track/SearchProperty.aspx?id=475431#>)

## 2.2 Transport Network

### 2.2.1 Road Hierarchy

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Transport for NSW (TfNSW) is responsible for funding, prioritising and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules, most recently amended on 09 June 2023.

TfNSW defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility to high accessibility and low mobility. These road classes are:

- **Arterial Roads** – Controlled by TfNSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.
- **Sub-Arterial Roads** – Managed by either Council or TfNSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).
- **Collector Roads** – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.
- **Local Roads** – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

### 2.2.2 Surrounding Road Network

Along the frontages of the site, South Creek Road, Inman Road, Orlando Road and Campbell Avenue function as local roads. South Creek Road and Campbell Avenue become sub-arterial roads east and south, respectively, of where they intersect.

## 2 Existing Conditions

These roads have a posted speed limit of 50 kilometres per hour, with one traffic lane and kerbside parking in each direction. There is a combination of unrestricted and eight-hour time restricted kerbside parking near the site. Inman Road and Orlando Road have dedicated on-road bicycle shoulder lanes between the kerbside parking and the traffic lanes.

Further to the south and east of the site, Pittwater Road provides the main arterial road connection for the area. Pittwater Road is a 20-kilometre arterial road that generally aligns north-south linking Mona Vale to the north with Manly to the south. It is a two-way road configured with three traffic lanes in each direction, including peak direction kerbside bus lanes (southbound in the morning peak periods and northbound in the afternoon peak periods) with kerbside parking at other times. It has a posted speed limit of 60 kilometres per hour.

The key roads are shown in Figure 6 to Figure 11, taken for the approved Northern Beaches Business Park Development Application.

*Figure 6: Inman Road (looking north)*



*Figure 7: Inman Road (looking south)*



*Figure 8: South Creek Road (looking east)*



*Figure 9: South Creek Road (looking west)*





## 2 Existing Conditions

Figure 10: Pittwater Road (looking east)



Figure 11: Pittwater Road (looking west)



### 2.3 Car Parking

A desktop review of the publicly available car parking near the site indicates that eight-hour restricted parking is available on both sides of Inman Road, South Creek Road and Orlando Road, with unrestricted parking on Campbell Avenue (north of South Creek Road).

Historic observations collected from previous assessment and reports in relation to on-street car parking for the Northern Beaches Business Park suggest there is a low demand during the afternoon peak period. There were less than 30 vehicles parked in the afternoon along Inman Road (19 spaces both sides) and South Creek Road (nine spaces both sides), which have a kerbside supply of approximately 0 spaces and 105 spaces respectively on both sides. This suggests there are at least 125 spaces available historically.

A review of more recent Nearmap aerial imagery suggests that there may have been some increase in on-street demand since the opening of the business park, but is considered to be generally across the weekdays associated with the adjacent Park and School use. These uses are not in operation during the weekends or after school hours and with the long-term parking restriction currently in place along Inman Road, this likely indicates that on-street parking is not high or is manageable.

### 2.4 Public Transport

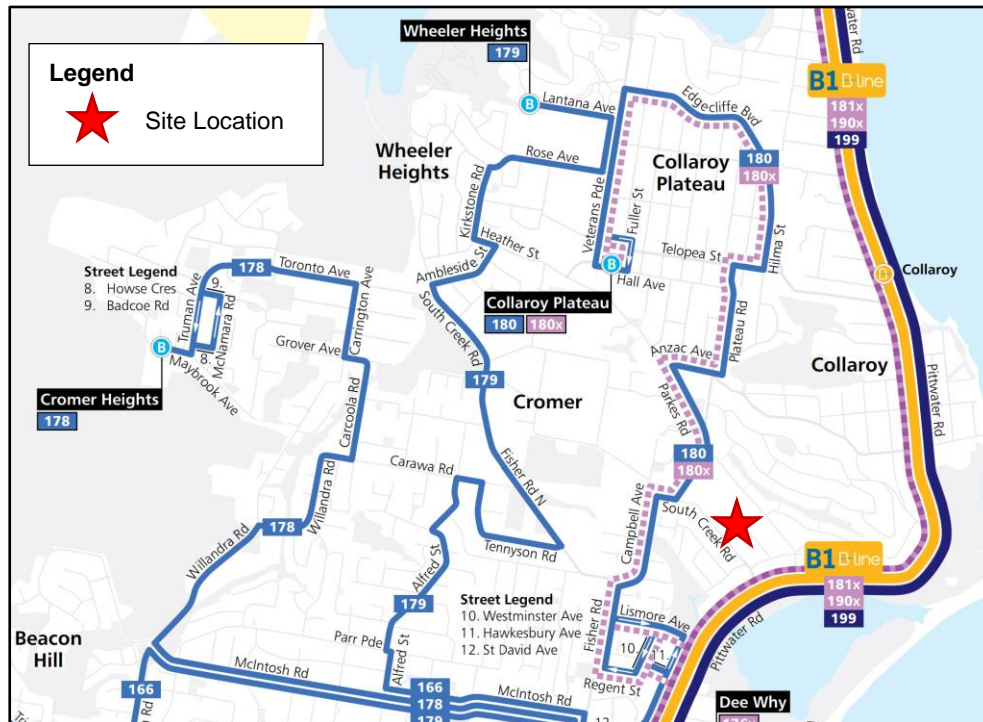
The public transport network is shown indicatively in Figure 12, overleaf.

The site is serviced by the 180 bus route, with several stops within a 400-metre radius of the site (along Parkes Road). The 180 bus route links Collaroy Plateau and Warringah Mall. It operates at 20-minute intervals in the AM peak, interpeak and the PM peak. It operates at 30-minute intervals in the evening off-peak.

In addition, the 179 bus route operates along Fischer Road North, an approximately 12-minute walk from the site, linking Wheeler Heights and Warringah Mall.

## 2 Existing Conditions

Figure 12: Surrounding public transport network



Base image source: Transport for NSW, accessed 6 June 2025

## 2.5 Walking and Cycling Infrastructure

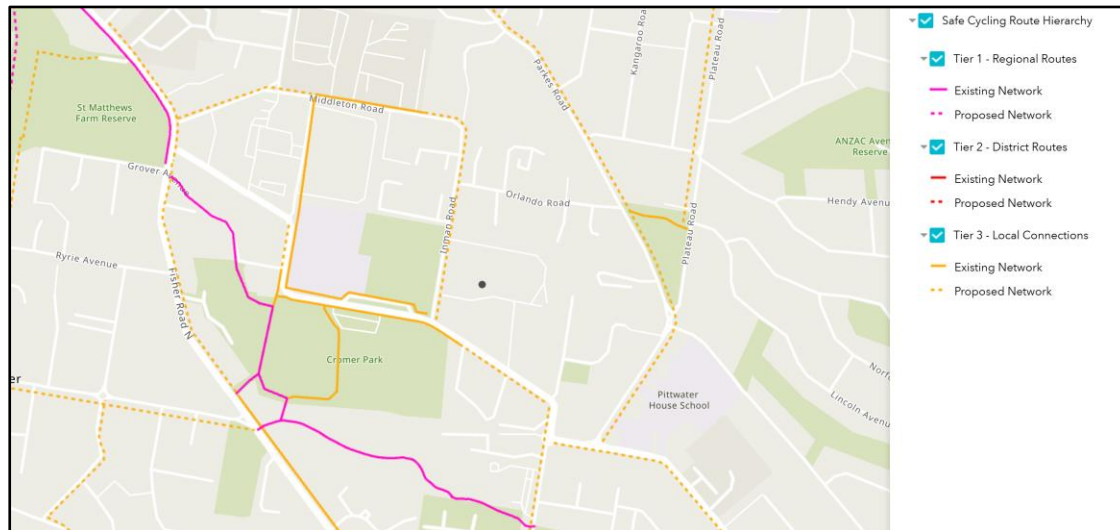
Footpaths are available on both sides of South Creek Road near the site and on the east side of Inman Road.

On-road cycle shoulder lanes are located on both sides of Inman Road and Orlando Road, with off-road shared paths provided adjacent to Cromer Park and Northern Beaches Secondary College (Cromer Campus).

The Northern Beaches Bike Plan 2020 proposes new and extended shared paths along Inman Road and South Creek Road towards Pittwater Road, illustrated in Figure 13, overleaf.

## 2 Existing Conditions

Figure 13: Surrounding cycling network



Base image source:

<https://northernbeaches.maps.arcgis.com/apps/webappviewer/index.html?id=abedc5db2afb4951a5596b64acc2641e>  
accessed 6 June 2025

# 3. Parking and Loading Appraisal

## 3.1 Car Parking Requirements

### 3.1.1 Industrial Park Provisions

The approved Northern Beaches Business Park plan proposed at least 279 car spaces across the estate, split between basement parking (203 spaces) and spaces adjacent to warehouses on the ground level hardstand area (76 spaces). The existing basement parking allocation plan as provided by the property manager is attached in Appendix A.

Vehicle access to the basement car park is via Inman Road. Access to the ground level hardstand area warehouses is also via Inman Road, with an egress driveway provided on South Creek Road. Pedestrian access from the street is via Inman Road, with no changes proposed under this proposal to the arrangement approved as part of the broader business park.

### 3.1.2 Warehouse Unit 10 Provisions

The current development proposes to provide a total of 50 exclusive parking spaces for the use, comprised of 17 parking spaces adjacent to Warehouse 10 (inclusive of six new spaces) and 33 parking spaces in the basement to be added to the existing shared pool of parking spaces (68 spaces).

The proposed pickleball arena and wellness tenancy will also have access to the 68 shared parking spaces in the basement for overflow demand on weekdays which increases to 99 spaces on weekends when the existing childcare use is not operating.

No changes are proposed to the basement car parking layout / arrangement as part of this Development Application (DA)

### 3.1.3 Statutory Car Parking Requirements

The car parking requirements for different development types are set out in the Warringah DCP 2011.

#### **Pickleball Arena**

A review of the Warringah DCP 2011 indicates that a statutory car parking requirement for 'pickleball (court)' use is not specifically defined.

However, for comparison purposes, the land use most closely related to the proposed pickleball arena is within the 'recreational and tourist facilities' categorisation, with the '*Tennis Court*' use.

A tennis court use requires *3 spaces per court*. Application of this rate to the 12 pickleball courts would therefore result in a requirement for 36 spaces.

It is noted however, that compared to a racket sport such as tennis, pickleball is most often played in "doubles" i.e. with two (2) players on each team, although two-player games are also possible. Further discussions on the possible parking requirements is discussed in Section 3.1.4.

#### **Wellness Centre**

The proposed wellness centre use most closely aligns with "Health consulting rooms" under the 'health and community services' categorisation.

The required car parking rate is *3 spaces per room used to see patients*, noting that "*This may be reduced if not all rooms will be in concurrent operation, or if convenient on-street parking is available, providing that the use of such parking does not adversely affect the amenity of the adjacent area*"

### 3 Parking and Loading Appraisal

The proposed wellness centre is expected to provide two (2) consultation rooms along with one (1) Intravenous Room. The water therapy and sauna services have been considered ancillary services. Application of the parking rate for "Health consulting rooms" results in a requirement for nine (9) car parking spaces.

#### Total Car Parking Requirement

Based on the above, the statutory car parking requirement is 45 spaces (if adopting tennis court rate), which is accommodated within the total proposed provision of 50 car parking spaces.

However, as noted earlier, pickleball games are often played in doubles matches. Further, it is anticipated that during the peak times, if all 12 courts were full or if specific courts were booked by groups, there is a potential that there will be overlap of players currently using the court players arriving for the next game.

As such, an empirical car parking assessment has been completed in the next section to ensure that sufficient parking is available during peak times with changeover periods for the subject land uses during both weekdays and weekends.

#### 3.1.4 Empirical Assessment of Car Parking Demand

##### Typical Parking Demand Estimate

The empirical assessment has been completed using the following input variables provided by the applicant and BDAI as well as the site leasing manager, and is based on their existing operating centres and data:

- Patrons per day: The number of patrons is expected to fluctuate depending on the day and time of day (as detailed in Table 1, below), with the typical number of customers being 36 people, inclusive of customers, staff and visitors, at any one time.
- Travel modes: Approximately 33% of patrons to the pickleball courts are expected to use alternative modes of transportation, primarily will be carpooling given the nature of the pickleball use, as well as cycling and buses to arrive and depart from the site.
- Staff on duty: typically, 2 to 3 staff at the pickleball courts and 1 to 2 staff at the wellness centre on duty at any given time.

The resultant anticipated demands during the surrounding road network and facility peak periods are provided in Table 1.

Table 1: Average parking demand estimate

Time	Category	Number of people	No. of arrivals by Car	Possible Overlaps	Parking Spaces (incl. changeover)
Weekday AM (road network peak)	Staff <sup>1</sup>	3	3	0	3
	Pickleball Customers	12	8	8	16
	Wellness Centre Customers	5	5	5	10
Subtotal		20	16	13	29
Weekday site peak (11am)	Staff <sup>1</sup>	3	3	0	3
	Pickleball Customers	12	8	8	16
	Wellness Centre Customers	5	5	5	10
Subtotal		20	16	13	29

<sup>1</sup> Includes employees of both pickleball arena and the wellness centre



### 3 Parking and Loading Appraisal

Time	Category	Number of people	No. of arrivals by Car	Possible Overlaps	Parking Spaces (incl. changeover)
Weekday PM (road network peak)	Staff <sup>1</sup>	3	3	0	3
	Pickleball Customers <sup>2</sup>	26	17	17	34
	Wellness Centre Customers	5	5	5	10
Subtotal		<b>34</b>	<b>25</b>	<b>22</b>	<b>47</b>
Weekend Midday (road network peak)	Staff <sup>1</sup>	5	5	0	5
	Pickleball Customers <sup>2</sup>	26	17	17	34
	Wellness Centre Customers	5	5	5	10
Subtotal		<b>36</b>	<b>27</b>	<b>22</b>	<b>49</b>
Weekend site peak (After 3pm)	Staff <sup>1</sup>	5	5	0	5
	Pickleball Customers <sup>2</sup>	18	12	12	24
	Wellness Centre Customers	5	5	5	10
Subtotal		<b>28</b>	<b>22</b>	<b>17</b>	<b>39</b>

<sup>1</sup> Includes employees of both pickleball arena and the wellness centre

<sup>2</sup> Includes visitors to the pickleball arena present to watch games

Table 1 indicates that the proposal would generate a maximum demand for 47 parking spaces during the weekday. This increases to 49 spaces on weekends. It is noted that staff parking demand as well as wellness centre customer demand does not factor in journey to work by other travel modes or compensate for within the carpooling reduction.

#### Peak Demand Assessment

As a worst-case scenario, which could occur during one or two hours of the busier weekend(s) in a year, a peak demand profile has been assessed based on 100% operating capacity of the pickleball arena with min. 4 persons on a court at any one time.

The analysis also includes customer arrival overlaps and is presented below in Table 2.

Table 2: Peak parking demand estimate

Demand Scenario	Category	Number of people	No. of arrivals by Car	Possible Overlap	Parking Spaces (incl. changeover)
100% Operating Capacity	Staff	5	5	0	5
	Pickleball Customers	58	39	39	78
	Wellness Centre Customers	5	5	5	10
Subtotal		<b>58</b>	<b>49</b>	<b>44</b>	<b>93</b>

As shown above, the proposal could generate a maximum car parking demand of 93 spaces if the pickleball courts operate at full capacity along with visitors and change over.

This is considered to be a conservative estimate (excluding the occasional once off peak of peak events, etc.) given on the basis that overlap between both pickleball players and visitors within the hour have been considered, as this assumes it will be fully booked back-to-back.

#### 3.1.5 Adequacy of Car Parking Supply

The proposal will have a total of 50 parking spaces, inclusive of 17 adjacent to the warehouse and 33 shared spaces within the basement that are specifically provided to the tenants.

### 3 Parking and Loading Appraisal

On weekdays, the pickleball arena and wellness centre patrons will also have access to an additional 68 existing shared spaces within the basement car park for overflow demand (i.e. total of 118 parking spaces). The additional overflow basement parking available to the proposed development on weekends will increase to 99 spaces as the childcare use will not be operational, i.e. total of 149 spaces will be available should the need arise.

The additional basement car parking is currently only accessible by the existing childcare centre, swim school and the Bounce / Precision Golf tenants, as no other approved or prospective tenants have requested access to this shared / overflow parking.

Should there be additional demand for the shared/ overflow parking by other tenants, it is understood that the supply can be expanded if / as required noting Warehouse Unit 3,4 and 5 do not rely on any of basement parking for their operation.

With the average anticipated demand of 47 spaces on a weekday and 49 spaces on a weekend, the allocated 50 parking spaces is suitable to accommodate the expected demand.

Under the worst-case scenario presented above, in which the pickleball arena operates at a 100% capacity for consecutive peak hours during busy weekend(s) / events and there is demand overlap during changeover periods, the anticipated maximum demand of 93 spaces is comfortably accommodated within the available overflow shared parking within the basement.

It is also further noted that there are on-street parking available (mostly long-term) in the immediate road network, which also offers convenient option for any overflow parking to accommodate the extra demand during peak periods on the busiest weekend(s) of the year, if and when this occurs.

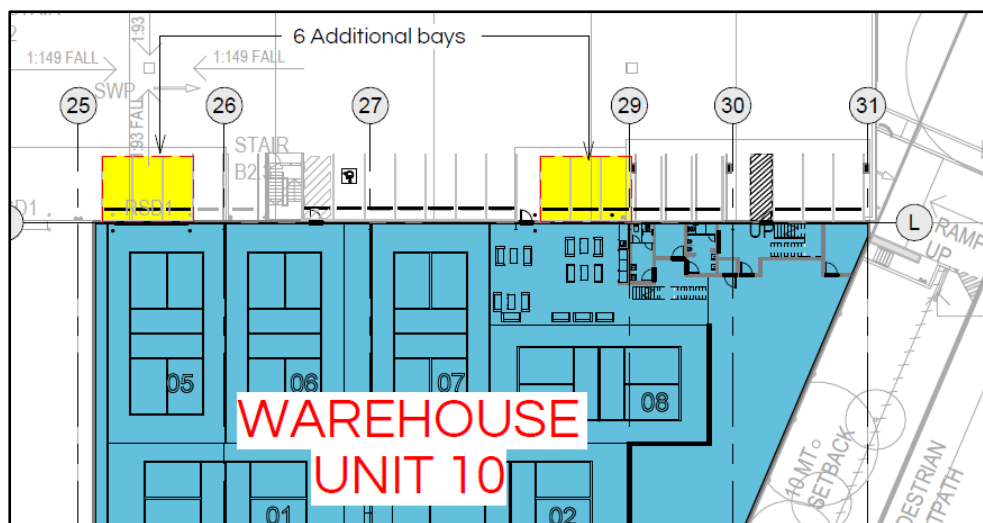
On the basis of the above, the parking provision is considered adequate and appropriate for the proposed development.

## 3.2 Car Park Layout Review

The proposal includes a total of 17 at-grade spaces located to the immediate frontage of Unit 10, inclusive of six (6) new spaces proposed in front of the roller shutter doors (RSDs) which are not required to be utilised (these were installed for the original industry warehouse use).

A design review has been completed and is considered that the additional parking spaces adjacent to Warehouse 10 is compliant and designed in accordance with the with Australian Standards (AS290.1:2004) with min. 2400mm wide and 5400mm long space.

Figure 14: Proposed addition spaces adjacent to Warehouse Unit 10



Source: Drawing Number DA01.01 Revision 1, prepared by BDAI, dated 16 June 2025

### 3 Parking and Loading Appraisal

## 3.3 Bicycle Parking Requirements

Warringah DCP does not provide specific bicycle parking rates for a pickleball arena or wellness centre. However, it indicates bicycle parking rates are for recreational facilities which are considered generally suitable for both the proposed uses.

The DCP bicycle parking requirement for a recreational facility is summarised in Table 3, which indicates a total of 19 bicycle parking spaces would be required for the proposal.

*Table 3: Warringah DCP 2011 bicycle parking spaces*

Use	Size	Bicycle parking rate	Bicycle parking requirement
Recreational Facility	Max.5 staff (at any one time)	1 per 4 employees + 1 per 1,500 spectators	1 bicycle parking space
	3,647m <sup>2</sup> GFA <sup>2</sup>	1 per 200m <sup>2</sup> GFA + 1 per 250 spectator spaces	18 bicycle parking spaces

The business park has some 40 on-site bicycle parking spaces that can accommodate the demand expected to be generated by the proposal, noting that the proposal's peak periods of demand occur outside of traditional commercial, warehouse and industrial peaks.

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<sup>2</sup> Estimated GFA of existing Warehouse Unit 10

# 4. Transport Appraisal

## 4.1 Traffic Generation

### 4.1.1 Approved Development

The approved business park was assessed to generate 168 and 181 vehicle trips in the weekday AM and PM peak hours respectively (Stantec, then GTA Consultants 2020). Warehouse 10 would have accounted for up to 18 to 19 of these vehicle trips in the weekday AM and PM peak hours. The proposed business park was determined to generate less traffic than the historic use on the site. Specifically, the approved business park was determined to generate approximately 130 vehicles less during the peak hours, or at least 40 per cent less traffic compared to the historic use.

### 4.1.2 Pickle Ball Arena & Wellness Centre

The *Guide to Transport Impact Assessment Technical Guidance for Transport Practitioners* (TS 00085, Version 1.1) released by Transport for NSW (TfNSW) in 2024 does not provide specific traffic generation rates for pickle ball court. However, under the “recreational and tourist facilities” categorisation, the closest applicable land use is ‘Tennis Courts’ and the corresponding traffic generation rates are considered suitable as follows:

- Evening peak hour vehicle trips = 4 per court
- Daily vehicle trips = 45 per court.

Application of the above rates result in anticipated traffic generation of 48 evening peak hour trips and 540 daily trips.

It is noted that for recreational sports, the evening peak hour is typically outside the road network weekday PM peak hour. The Stantec team has also been provided with expected patronage across various time periods based on information available to the applicant. As such, an empirical assessment has been completed expanding on the parking demand estimates completed in Table 1.

The 2024 TfNSW Guide does not provide traffic generation rates for a wellness centre use. Accordingly, an empirical assessment has been completed for this land use as well.

The total traffic generation estimates are detailed below in Table 4. The assessment assumes that visitor parking turns over once each hour and that staff are only expected to generate vehicle trips during the weekday and weekend mornings or evenings before or after the proposed operating hours.

Table 4: Traffic Generation Estimates

Time	Directional flow	Vehicle trips per hour		
		Pickleball Arena	Wellness Centre	Total
Weekday AM (road network peak)	Inbound	8	5	13
	Outbound	8	5	13
<b>Subtotal</b>		<b>16</b>	<b>10</b>	<b>26</b>
Weekday site peak (11am)	Inbound	8	5	13
	Outbound	8	5	13
<b>Subtotal</b>		<b>16</b>	<b>10</b>	<b>26</b>
Weekday PM (road network peak)	Inbound	17	5	22
	Outbound	17	5	22
<b>Subtotal</b>		<b>34</b>	<b>10</b>	<b>44</b>

## 4 Transport Appraisal

Time	Directional flow	Vehicle trips per hour		
		Pickleball Arena	Wellness Centre	Total
Weekend Midday (road network peak)	Inbound	17	5	22
	Outbound	17	5	22
<b>Subtotal</b>		<b>34</b>	<b>10</b>	<b>44</b>
Weekend site peak (After 3pm)	Inbound	12	5	17
	Outbound	12	5	17
<b>Subtotal</b>		<b>24</b>	<b>10</b>	<b>34</b>

On the basis of the above, the proposal could generate up to 26 vehicle trips per hour (two-way) during the weekday road network AM peak and up to 44 vehicle trips per hour (two-way) during the weekday road network PM peak.

On weekends when most other business park land uses (e.g. commercial and childcare) are not operating, the proposal is expected to generate up to 44 vehicle trips per hour (two-way) during the typical weekend midday road network peak.

## 4.2 Traffic Impacts

The anticipated traffic generation in the weekday AM peak is only slightly higher than in the estimated traffic generation in Section 4.1.1 above for the approved use, while in the weekday PM peak hour and weekend peak hour, the traffic is estimated generation is approximately doubled.

Although the proposed pickleball arena and wellness centre is anticipated to generate more traffic during the weekday PM and weekend road network peaks than traditional commercial, warehouse and industrial uses, most of the traffic is anticipated to be from nearby residential areas thus using the local road network to access the facility more directly.

The post-development traffic modelling completed for the Northern Beaches Business Park in the 2020 Stantec (then GTA) report suggested that the Pittwater Road / South Creek Road signalised intersection would operate at LoS B in the weekday peak hours. As noted earlier, the proposed site will only generate no more than of 44 vehicle movements during peak hour periods (less than 1 movements per minute). This is fairly low in traffic engineering terms. For perspective, for a signal operating at a cycle length of 120 seconds, approximately 1 to 2 additional vehicles will pass through intersection per signal cycle, which is unlikely to significantly impact intersections operations.

Further, a review of nearby TfNSW permanent counter data for Pittwater Road suggests that average daily two-way traffic volumes in 2024 and 2025 are around 10 to 15 per cent lower on a weekend compared to a weekday. Therefore, the intersection would operate better on a weekend, with the additional vehicle trips generated by the proposal expected to have minor impact to its operation.

The post development traffic modelling also suggested that the South Creek Road / Inman Road priority-controlled intersection, which will carry most of the development traffic, would operate at LoS A in the weekday peak hours, with plenty of capacity to accommodate the increased demand.

Overall, the anticipated traffic volumes associated with the proposed pickleball court arena and wellness centre are not expected to materially change the impacts previously assessed in relation to the approved Northern Beaches Business Park, nor to compromise the safety or function of the surrounding road network during either the weekday or weekend, road network or facility peaks.

# 5. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- Based on a first-principles assessment, the proposed development comprising a pickleball court arena and wellness centre is expected to generate a demand for up to 47 and 49 parking spaces during the weekday PM and weekend peak periods respectively.
- It is anticipated that traffic generated by the facility will primarily use the local road network, which provides more direct and free flowing access, rather than Pittwater Road given that the catchment of such recreational centres is typically more local.
- There is adequate capacity in the surrounding road network to accommodate for the traffic generated by the proposal.
- The proposed allocation of 50 parking spaces for the Warehouse Unit 10 with 17 at-grade spaces and 33 shared spaces within the basement and potentially an additional 68 to 99 spaces within the basement car park (i.e. total 118 to 149 spaces) on weekdays and weekends, respectively, can be expected to accommodate the anticipated demand, including any increased demand due to overlaps during changeover periods.
- The proposal requires 19 bicycle parking spaces. There are 40 bicycle spaces provided across the business park to accommodate the demand associated with the proposal, noting the different peaks for the various uses within the business park.
- The proposal will have low demand for deliveries and waste collection; therefore, the existing / available provision would be suitable for the proposal.

On this basis, the proposed development of a pickleball court arena and wellness centre can be supported from a traffic and transport perspective.



## Appendix A. Existing Basement Parking Allocation

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**NORTHERN BEACHES BUSINESS PARK**

**CAR PARK PLAN - LOWER GROUND LEVEL**

		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Aquatic 17																	21	
Aquatic 16																	22	
Aquatic 15				Aquatic 18				1				12				41	23	
Aquatic 14				Aquatic 19				2				13				42	24	
Aquatic 13				Aquatic 20				3				14				43	25	
Aquatic 12				Aquatic 21				4				15				44	26	
Aquatic 11				Aquatic 22				5				16				45	27	
Aquatic 10				Aquatic 23				6				17				46	28	
Aquatic 9				Aquatic 24				7				18				47	29	
Aquatic 8				Aquatic 25				8				19				48	30	
Aquatic 7				Aquatic 26				9				20				49	31	
Aquatic 6				Aquatic 27				10				21				50	32	
Aquatic 5				Aquatic 28				11				22				51	33	
Aquatic 4				Aquatic 29	Anytime			1				23				52	34	
Aquatic 3				Aquatic 30	Anytime			2				24				53	35	
Aquatic 2				Aquatic 31	Anytime			3				25				54	36	
Aquatic 1				5	Anytime			4				26				55	37	
WC				WC	WC							27				56	38	
												28				57	39	
1				Bounce	Bounce							29				58	40	
2				Bounce	Bounce							30				59	41	
3				Bounce	Bounce							31				60	42	
4				LIFT AND STAIRWELL								32				61	43	
Learn & Play spaces numbered 1-11 are only dedicated to Learn & Play Monday - Friday between 7am-8:30am & 5pm - 6:30pm	Learn & Play 11	Learn & Play 10							33				62	44				
	Learn & Play 9		Learn & Play 19						Learn & Play 20				34				63	45
	Learn & Play 8		Learn & Play 18						Learn & Play 21				35				64	46
			Learn & Play 7	Learn & Play 22				36				65	47					
			Learn & Play 6	Learn & Play 23				37				66	48					
BICYCLE ROOM	Learn & Play 5		Learn & Play 15	Learn & Play 24				38				67	49					
	Learn & Play 4		Learn & Play 14	Learn & Play 25				39				68	50					
	Learn & Play 3		Learn & Play 13	Learn & Play 26				40				54	51					
	Learn & Play 2		Learn & Play 12	Learn & Play 27				Learn & Play 29	Learn & Play 30				52					
	Learn & Play 1							Learn & Play 28	Learn & Play 31				53					
ENTRY / EXIT HERITAGE OFFICE BUILDING																		

 Current Shared Pool Parking  
 Available / Unallocated



