BLOC

6 Stewart Avenue, Commercial Office

Supplementary Traffic Impact Report
DA 2018/01107

April 2019

Executive summary

In support of a development application (2018/01107) for a commercial tower office building at 6 Stewart Avenue, three scenarios were tested following debate at the Joint Regional Planning Panel held on 13 March, 2019.

These scenarios are:

- Impacts on traffic queueing in Beresford Lane should the site immediately to the south of Beresford Lane be developed
- Applicability of a single manoeuvre into the loading dock, including a reverse movement
- Justification for a reduction in car park supply for the commercial tower.

This report sets out to support each item, and in particular references Australian Standards, Newcastle City Council's DCP, and supporting information from other jurisdictions where high levels of public transport are provided.

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1. Introduction

This report provides supplementary information in support of a development application (2018/01107) for a commercial tower building to be located at 6 Stewart Avenue, Newcastle, and in particular in response to comments made at the Joint Regional Planning Panel held in Newcastle on 13 March 2019. This supplementary report should be read in conjunction with The Traffic Impact Assessment Report (GHD), dated September 2018.

1.1 Purpose of this report

The purpose of this report is to provide additional information in support of a development application for a commercial tower at 6 Stewart Avenue, Newcastle. The proposal subject of the development application is adjacent to an approved bus interchange and multi-storey carpark, that both make use of Beresford Lane as access from Stewart Avenue.

This supplementary report is in response to comments made at the Joint Regional Planning Panel held in Newcastle on 13 March 2019 and a subsequent meeting with Newcastle City Council staff on 26 March 2019.

The conditions debated at the hearing were C19, C20 and C21.

Section 2 of this report provides further justification to amend Condition C19, being driveway access and queueing issues around Beresford Lane.

Section 3 of this report provides further justification to amend Condition C20, covering loading and servicing of the commercial office.

Section 4 of this report provides further justification to amend Condition C21 to vary onsite car parking allocation rates.

1.2 Scope and limitations

This report has been prepared by GHD for BLOC and may only be used and relied on by BLOC for the purpose agreed between GHD and the BLOC as set out in Section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than BLOC arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

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GHD has not been involved in the preparation of the Development Application for the proposal and has had no contribution to, or review other than in preparation of traffic impact assessments. GHD shall not be liable to any person for any error in, omission from, or false or misleading statement in, any other part of the Development Applications and supporting documentation.

2. C19 - Basement Entry off Beresford Lane

As discussed in JRPP hearing, the question was raised about capacity of Beresford Lane, and in particular queue lengths should the properties on the southern side of Beresford Lane be developed. On the basis of these properties being amalgamated and subsequently developed, the hypothetical scenario modelled is detailed below in Section 2.1. Queue lengths are then considered in Section 2.2.

2.1 Traffic considerations development potential assessment – site to the south

Scenario: Realistic traffic projections for Beresford Lane, consider future potential traffic generation. The sites to the south of the Commercial Building could be amalgamated and would generate approx. 8,500 sqm GFA of commercial office as a maximum compliant scheme. To include for any future access of Beresford Lane for a potential future office building, please allow add in say 145 cars that would also use the Lane for access to a carpark in the hypothetical Commercial Building. Residential is not deemed achievable on this site.

The addition of parking for 145 cars on top of the current proposals doubles current generation rates with current peak hour traffic estimated along Beresford Lane at 75 v/h.

Assuming a peak rate of 0.8*0.57 v/h/carspace generates an additional 66 v/h ~ say 70 v/h, or round up to a total of 150 v/h in AM peak. This equates to **2-3 vehicles per minute, on average**.

Calculations

Beresford Lane Traffic Generation	Number	Rate
Kiss and Ride		
5 x spaces with a turnover of 6 minutes per space		
Spaces	5	no
Turnover	6	minutes
Rate	50	veh/h
Disabled parking		
2 x spaces with a turnover of 15 minutes per space		
Spaces	2	no
Turnover	30	minutes
Rate	4	veh/h
Residential tower basement parking		
Based on allocation of residential parking between basement and tower, entries only		
Trip Generation		
AM PEAK	37	veh/h
PM PEAK	96	veh/h
Number of spaces		
Multi-storey	500	no
Basement	37	no
Rate		
AM PEAK	3	veh/h

Beresford Lane Traffic Generation	Number	Rate
PM PEAK	7	veh/h
Commercial tower basement parking		
Based on allocation of commercial parking between basement and tower, entries only		
Trip Generation		
AM PEAK	90	veh/h
PM PEAK	25	veh/h
Number of spaces		
Multi-storey	158	no
Basement	40	no
Rate		
AM PEAK	18	veh/h
PM PEAK	5	veh/h
TOTAL ADOPTED VOLUMES (BASE SCENARIO)		
AM PEAK	75	veh/h
PM PEAK	66	veh/h

2.2 Queueing

Options to minimise traffic queuing (inclusive of a development at Hunter / Stewart)

Using an assumption that a driveway is opposite the commercial tower basement car park entry, therefore located approximately 40 m from Stewart Ave. The queueing storage is around 6-7 cars on average, or two minutes to arrive and queue.

Queueing is determined by two influences, being:

- Arrival rate (traffic generation, assume fixed but can be reduced by less parking)
- Service rate (garage entry capacity)

So if queueing is considered an issue, options include:

1. Maximising queue storage, e.g. driveways at western end.
   Then to minimise impacts of queue.
2. Increase service rate, i.e.:
   a. Rapid roller doors[1].
   b. Remote key fobs for roller door as opposed to swipe cards[1].
   c. Garage door open for AM peak hour or extended opening duration when activated in peak hour (this happens in GHD/NIB tower in Honeysuckle and makes entry similar to free flow).

[1] Not necessarily required as sufficient queueing capacity is available, but could be considered as additional mitigation measures.

2.2.1 Queue/Pass By in Beresford Lane

In the event of queueing in Beresford Lane, the question was raised about the ability for a vehicle to pass to continue west along Beresford Lane. As demonstrated below in Figure 1 to Figure 3, it is possible for the current design (Figure 1) that a vehicle can pass a car waiting to enter the basement car park, in the unlikely event of queued traffic. For comparison, a typical vehicle lane is 3m, with a typical parking space width of 2.5m for comparison purposes.

It is noted that as Beresford Lane is one way, it is unlikely any other cars queued further back would be able to pass should two cars be waiting to enter the car park as you would expect cars to travel in the middle of Beresford Lane. There is no upright kerb and gutter proposed on the southern side of Beresford Lane, however a trafficable v-drain is proposed 1.2m off the southern boundary line.

Figure 2 provides an alternate should the garage door be relocated some 5 m further back into the building footprint, but as discussed in the meeting with NCC on 23 March 2019, this has significant impacts on the building ground floor.

Figure 3 provides an alternate option where a minimum width of 4 m travel lane beyond the drainage channel in Beresford Lane, and demonstrates a significant impact on the building footprint.

Clearance from queued vehicle 3.5m

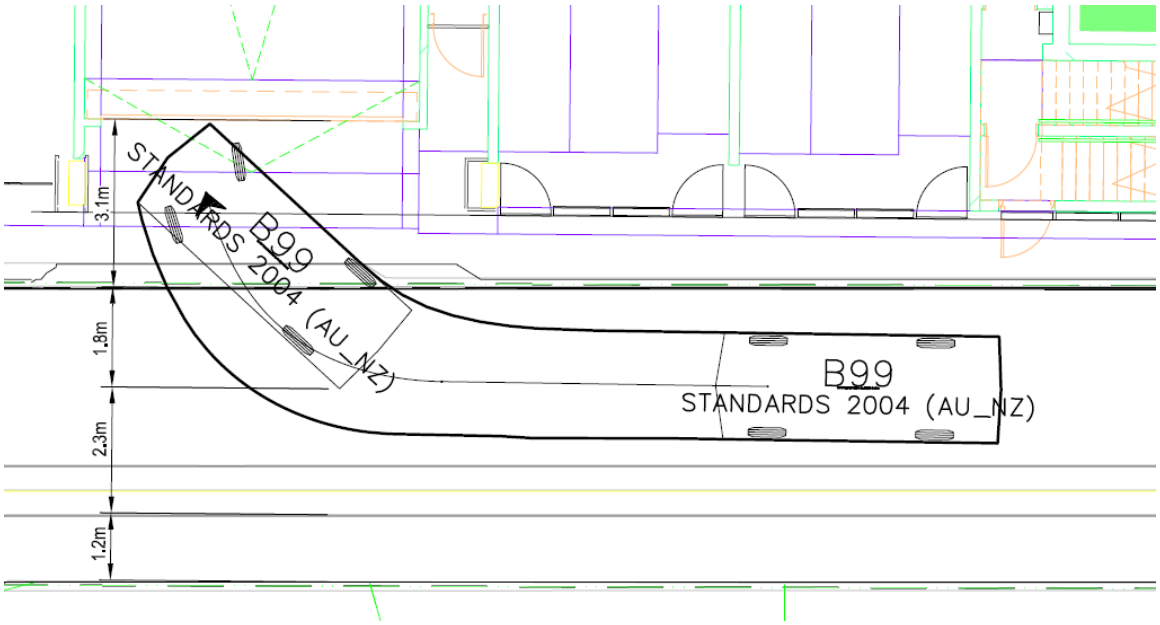


Figure 1 Current building design

Clearance to queued vehicle 4.9 m

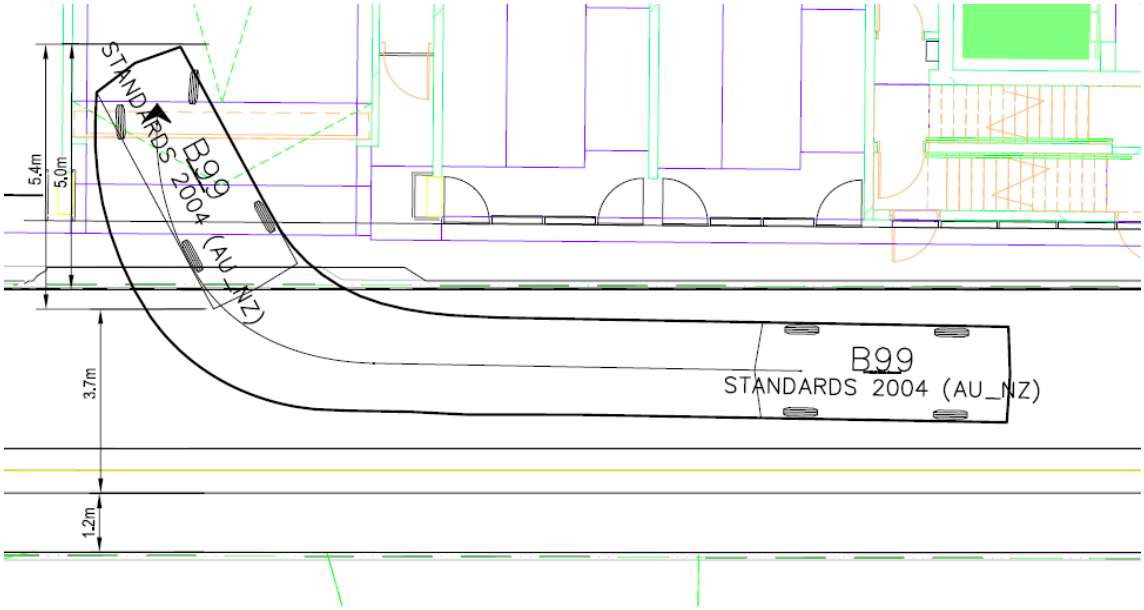


Figure 2 Option A – relocate roller door back 5 m from building kerb

Clearance to queued vehicle 5.2 m (from building line to the south)

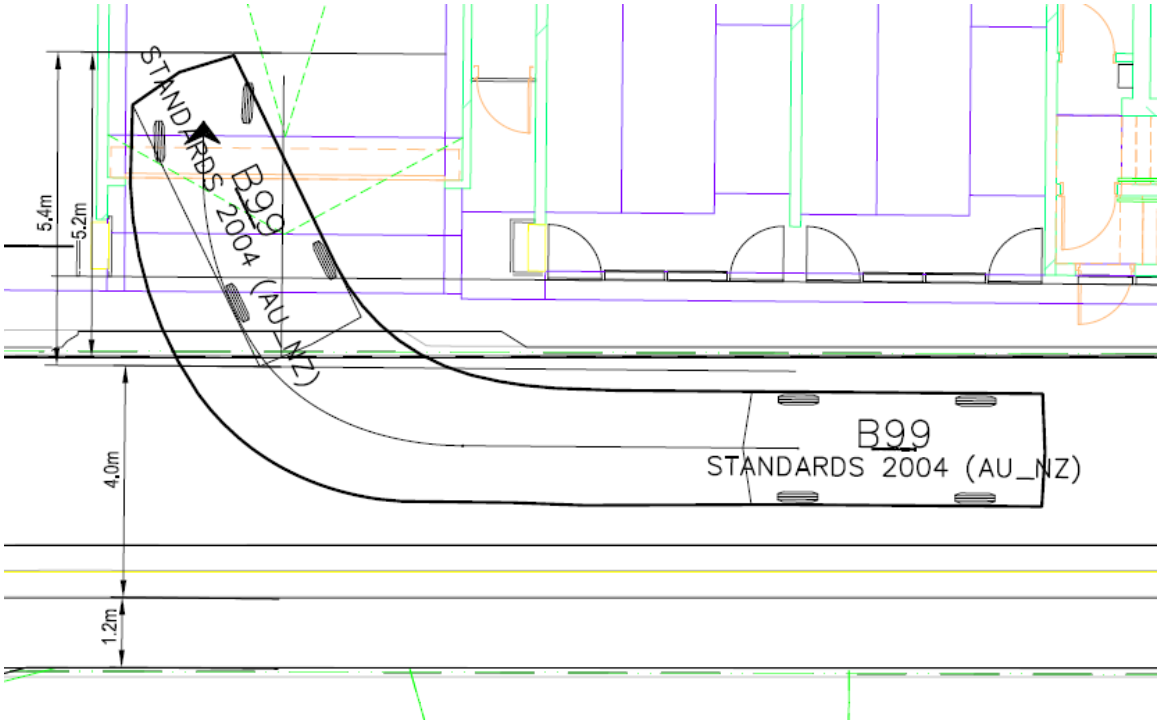


Figure 3 Min 4 m clearance

3. C20 - loading dock manoeuvers

Condition C20 specifically calls for a forward entry and exit movement, as listed below.

C20 Loading/Servicing
The design of the development is to be modified to provide for all loading / servicing activity (including waste collection) associated with the development to be undertaken either within designated loading dock areas and/or kerbside in an approved and designated loading zone. The design is to ensure that all service vehicle movements are to be capable of forward entry and exit, ie, without the need to reverse into vehicular traffic flows. Required modifications are to be approved by Council before the issue of a Construction Certificate for the proposed development.

Condition C20 proposed amendment by JRPP

- **Condition 20 be amended to add the following sentence at the end of the condition:**
  This requirement may be waived if satisfactory alternative arrangements are made, to the satisfaction of Council's Regulatory, Planning an Assessment Unit, at the detailed DA stage. If this is pursued, details shall include realistic traffic projections of Beresford Lane (including potential future development of the site to the south), options to minimise traffic queuing and a Servicing Management Plan that considers the use of the loading areas, hours of use, truck size, alternative arrangements and any other measures to minimise traffic conflicts.

3.1 Loading dock use

The loading dock is anticipated to be used for prearranged purposes only, such as garbage collection services or major deliveries (special deliveries such as furniture).

Regular or every day delivery services not organised with prearranged access would include common consumables, couriers and catering. These deliveries typically arrive via vans or cars, and occasionally small to medium rigid vehicles and can utilise the loading zone provision in Cooper St (see sketch below), or alternatively the kiss and ride facility in Beresford Lane (to the west). This is a common approach to deliveries in the CBD and the precedent exists, such as at office buildings on Honeysuckle Drive.

3.2 Loading dock traffic generation

3.2.1 Precedent loading zone supply

Anecdotal evidence for the frequency of and type of deliveries or servicing for a professional services office on Honeysuckle Drive (at GHD) estimate up to 50 car or van deliveries per week, made up of:

- Catering
- Secure paper shredding
- Vending machines
- Couriers (incl Mail Plus for Aust Post, Toll Priority, TNT, Startrack, Fastway, FedEx) for equipment, stationary, office supplies
- Banking courier

It is noted that:

- Garbage collection is undertaken via bins wheeled to the road.
- No deliveries or garbage collection occur within the premises.

- No regular deliveries occur via a large vehicle, and would be considered an extraordinary delivery with arrangement to suit.

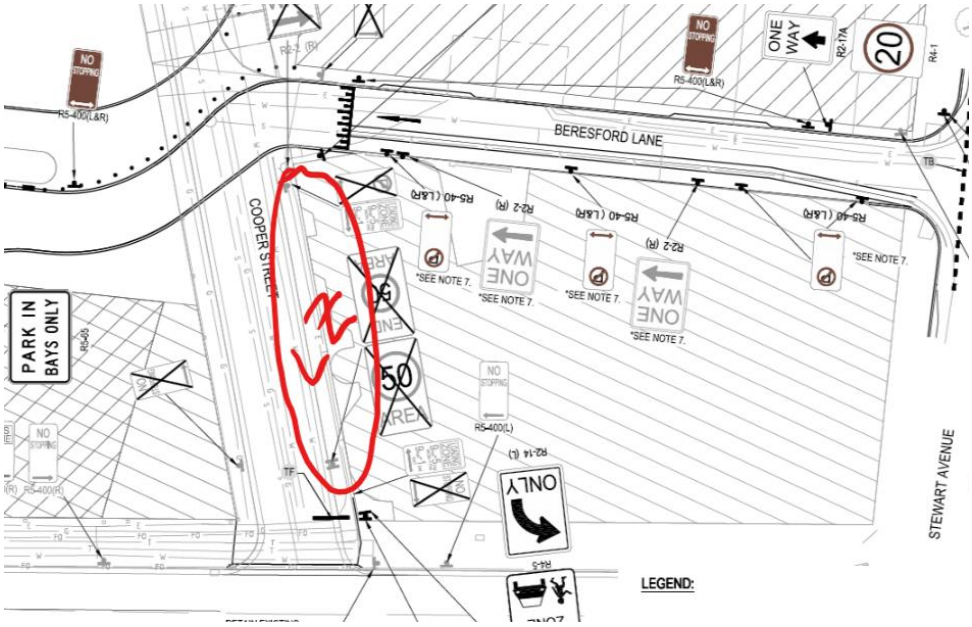


Figure 4 Cooper St Loading zone

All deliveries occur using either timed on street parking or an on street timed loading zone approximately 22 m in length. This loading zone services the nib/GHD towers, Sparke Helmore and Government offices at 26 Honeysuckle Drive, and also the new office tower at 18 Honeysuckle Drive. It is estimated that the total commercial floor area served by this loading zone is over 30,000 m^2.

The Loading Zone in Cooper Street (Figure 4) is approximately 28 m compared to 22 m in Honeysuckle Drive, and serves far less commercial floor space.

It is therefore considered this loading zone is sufficient supply relative to nearby commercial areas.

3.2.2 Advice from Property NSW

Reference is made to email correspondence from the tenant representative (2/4/19, can be provided to Council if requested) commenting on the expected usage of the dock. The table of usage and frequency is shown below in Table 3-1.

Table 3-1 Loading dock access frequency

Delivery Type	Frequency	1. Loading Dock (Beresford Lane) 2. Loading Zones (Cooper St)
Commercial Waste (Private Contractor MRV managed by Landlord)	Twice weekly	1. Loading Dock (Beresford Lane) by prior arrangement only, outside of peak.
Mobile Shredding (Private Contractor MRV)	Fortnightly	1. Loading Dock (Beresford Lane) by prior arrangement only, outside of peak.
Furniture/Printer/Bulk Delivery (MRV)	Ad hoc (Monthly)	1. Loading Dock (Beresford Lane) (MRV) by prior arrangement only, outside of peak.
Couriers, Office Supplies (paper, stationery etc.)	Daily	2. Loading Zones (Cooper St)
Catering, Florist, Dry cleaning, Milk, Fruit Deliveries etc.	Daily	2. Loading Zones (Cooper St)
Service Vehicles	As required	2. Loading Zones (Cooper St) or a dedicated Basement carpark for Service Vehicles.

The frequency of use of the loading dock in the commercial tower will average less than 1 vehicle per day.

All regular and unscheduled deliveries make use of the Cooper St Loading Zone or on street parking in the kiss and ride area. The regular use of the loading dock will be via managed garbage collection (twice per week and outside of peak hours), mobile shredding, and adhoc prearranged major delivery (for example, office furniture during a fit-out). These activities would occur outside of office or peak traffic generation hours, and for garbage collection it is expected to be early in the morning (before 7:00 am).

3.3 Loading dock access manoeuvre

The proposed loading dock manoeuver is for a truck to arrive and open the door via a remote key fob (regular garbage collection), or in the event of a special delivery via prearranged and escorted access with the building manager. In this type of event, the door will be open before truck arrival, with no significant delays to traffic movements.

The manoeuver is for a truck to pull up adjacent to the loading dock and reverse into the loading dock. As the loading dock door will open quickly, there no significant dwell time waiting for the dock to become available. At this time a warning light adjacent to the door will flash, and the manoeuvre will be supervised by a person trained in traffic control utilising a stop/go bat. The manoeuvre is expected to take no more than 1 minute to execute.

3.4 Loading dock access queueing

There is approximately 16 m of storage between the loading dock and the kerb line at Stewart Ave – or approximately two to three car lengths.

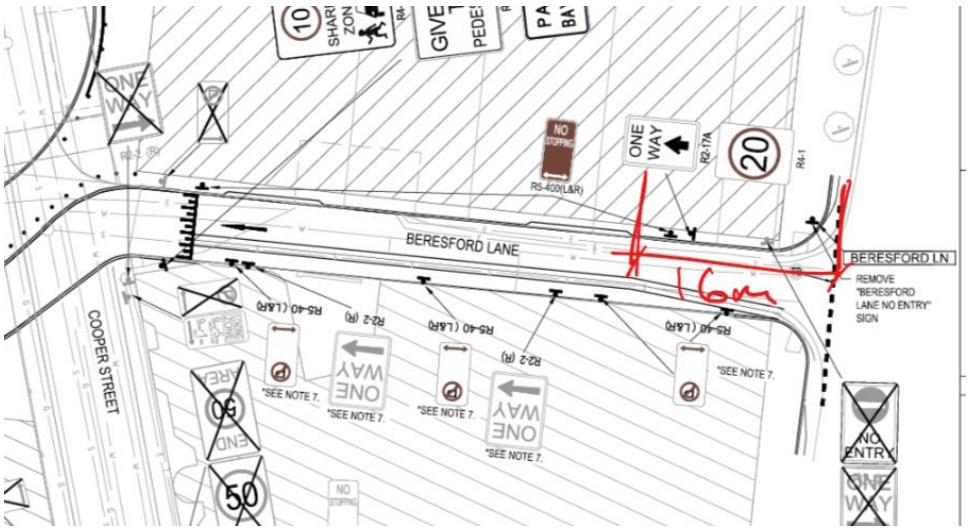


Figure 5 Loading dock access queueing

As noted in a previous Traffic Impact Assessment, the expected base peak hour traffic along Beresford Lane is around 75 v/h, or 1.25 v/minute. On this basis, it can therefore be concluded that there is sufficient capacity for queueing outside of peak hours, and even in the peak hour. It is noted that it is not proposed for regular deliveries to occur during the peak hour, reducing the likelihood of a queue exceeding the available storage length along Beresford Lane.

If you were to undertake a risk assessment in terms of assessing the loading dock proposed location, it could be considered this functionality would be a low risk, based on a low probability and low consequence proposal.

For example:

- A low likelihood - most loading zone use is in Cooper St with only specific vehicles using the building loading dock, and would most likely occur outside of peak hour times. The base traffic on Beresford Lane is relatively low at 75 v/h in AM peak, and far less in off peak scenarios.
- A low consequence as it is a low speed environment subject to a 20 km/h limit and with geometry that requires a low speed with a 90 degree left turn into Beresford Lane, and low traffic volumes at 75v/h in the AM peak (on the assumption of a clash during peak hours).

As noted in Section 2, for the hypothetical development scenario, the total hypothetical traffic peak traffic generation of Beresford Lane (including a developed site to the south) is estimated at 150 v/h, it is unlikely to change the low likelihood of an incident.

Therefore it can be considered a low risk manoeuvre based on a low probability and low consequence.

3.5 Australian Standards Compliance

Comments have been received by NCC Development Engineer in the meeting of 26 March, 2019 that the relevant Australian Standard, *AS2890.2, Parking Facilities – Part 2: Off-street commercial vehicle facilities* requires a forward entry and exit. Reference is made to the following provisions of AS2890.2-2018, which clearly limits reversing manoeuvres to one only, subject to permission by the relevant authority.

Definitions

Cl 1.4.13 Minor Road

A cul-de-sac or a road carrying predominantly local traffic.

Cl 1.4.16 Occasional service

Service by a nominated design vehicle less than once per day.

1.4.17 Regular service

Service by nominated design vehicle at least once per day.

It is considered in terms of definitions under AS2890.2-2018, that Beresford Lane is defined as a "Minor Road" as per Clause 1.4.13. As demonstrated above in Section 3.2, usage of the dock is considered irregular or "occasional service" averaging less than 1 vehicle per day (reference Table 3-1).

Reference is then made to Clause 3.2.2, regarding occasional servicing requirements, where the standard states:

Cl 3.2.2 Occasional service

Requirements for providing occasional service shall be as follows:

(a) The vehicle shall be able to stand wholly within the site.

(b) Reverse manoeuvres at the property boundary, if permitted by the relevant authority, shall be limited to one only, either on entering or departing, and be subject to determination of both safety and obstruction to other on-street traffic.

NOTE The AV vehicle class is the largest vehicle to be considered for reverse manoeuvres.

(c) The swept path plus clearances shall be accommodated within the access driveway or circulation roadway.

NOTE The full width of the access driveway may be used for both entering and leaving the site.

Commentary on Cl 3.2.2 Occasional service requirements is included below in Table 3-2:

Table 3-2 Access requirements Cl 3.2.2 AS2890.2

Requirement	Comment
(a) The vehicle shall be able to stand wholly within the site.	Compliant
(b) Reverse manoeuvres at the property boundary, if permitted by the relevant authority, be limited to one only, either on entering or departing, and shall be subject to determination of both safety and obstruction to other on-street traffic.	Compliant with regards to safety and obstruction to traffic – see Section 3.4. Outstanding requirement is NCC's permission as "relevant authority"
(c) The swept path plus clearances shall be accommodated within the access driveway or circulation roadway.	Compliant

It is concluded that the proposition is consistent with, and satisfies the requirements of *AS2890.2-2018, Parking Facilities – Part 2: Off-street commercial vehicle facilities*, subject to *"permitted by the relevant authority".* As such it is recommended that Council support the loading dock access provisions proposed for this development.

3.6 Loading dock management plan

Should there be any further concerns regarding usage of the loading dock and potential hazards at this location, additional mitigation measures can be implemented including provisions of a loading dock management plan or Servicing Management Plan that could include:

- Low frequency of deliveries.
- Small deliveries (vans) will use Cooper St Loading Zone. Florist, Catering, Couriers and enter via the Building Entry on Cooper St.
- Restricted vehicle size in the Loading Dock is MRV.
- Waste is a commercial contractor that is controlled outside of peak periods.
- Other deliveries are by prior arrangement.
- Building Manager ensures the door is open on arrival, prior to reversing manoeuvre.
- Flashing warning light when loading dock in use.
- Convex mirrors for trucks exiting the Loading Dock.
- Minor traffic control by building manager.
- Loading zone in Cooper St at 23 m (capacity of say up to 2 x HRV or up to 3 x MRV's) can be used for holding until such time the Loading Dock is open so trucks are not waiting to be served in Beresford Lane.

4. C21 - Commercial parking rates

As discussed in the JRPP hearing, the rate of parking supplied was debated, specifically requesting further justification for a variation to the DCP rates using other localities as precedent examples. The proposal seeks a dispensation from the DCP published figure of 1 space for 60m^2 of GFA on the basis of excellent provision of public transport. The proposed parking rate is 1 space per 100m^2 with precedents nominated from other local government areas in NSW.

4.1 NCC DCP

4.1.1 Parking provision

Reference is made to Council's DCP, and technical manual Section 7.03, Traffic, Parking and Access.

With regards to Section 7.03.02 and S7.03.03 of the DCP (see Figure 6), the high provision of available public transport support adoption of a parking supply rate of 1 space per 100m^2 for a commercial tower at this location.

7.03.02 Parking provision

A. Parking rates

Objectives

1. Ensure an appropriate level and mix of parking provision, having regard to the likely demand and the impacts of over/undersupply of parking.

3. Establish an appropriate parking standard for the City Centre that recognises its locational advantages in relation to public transport access.

Controls

Controls applying to all development to which this section applies

1. Car parking is generally provided in accordance with the rates set out in Table 1 – Parking Rates, except for car parking for non-residential development in the Newcastle City Centre, which is provided at the rate of one space per 60m^2 gross floor area. Council reserves the right to vary the rates, subject to merit assessment of the proposal.

2. Parking provision for major traffic generating development in Newcastle is assessed on merit, with particular reference to:

   (a) likely peak usage times

   (b) the extent to which development will attract additional patronage, as opposed to drawing on existing visitations

   (c) the likely use of public transport.

Figure 6 NCC DCP Parking provision

With respect to the controls that govern this part of the manual, reference is made to the following:

2(a) – peak usage times are business days only. The tenant is the NSW Government, with regular office hours as the defined usage time, and regular AM/PM peak periods.

2(b) – Patronage attraction. As a regular office building with the NSW Government as a tenant, car parking demand for visitors is expected to be very low. The current location of NSW Government offices at Honeysuckle and King St (RMS) has no provision for visitor parking, with a significant use of either public or active transport being employed.

2(c) – the use of public transport is expected to be very high. The site is serviced by three modes of public transport being bus, light rail and heavy rail.

4.1.2 Travel demand

Section 7.03.03 of the NCC DCP (Figure 7) specifically targets travel demand management and in Section A, identifies the objectives of increased modal share of public transport, and alternatives to vehicle ownership, use and parking. The proposal seeks a dispensation from the DCP published figure of 1 space for 60m^2 of GFA on the basis of excellent provision of public transport.

7.03.03 Travel demand management

A. Public transport

Objectives

1. Facilitate increased modal share to public transport.
2. Encourage consideration of alternatives to private vehicle ownership, use and parking.

Figure 7 Travel and demand management

The development site is part of an overall development including the Newcastle Bus Interchange, being complimentary to the Newcastle Transport Interchange incorporating both heavy rail and light rail modes. The Bus Interchange has been designed to have direct pedestrian connections to both heavy and light rail travel modes, meaning this development site has more public transport service modes than any other location in NSW, outside of Sydney. Therefore commuters travelling to the office building will have direct and immediate access from all three modes of public transport.

Additionally facilities are proposed for active transport modes (including secure bike storage and end of trip facilities such as showers).

4.1.3 Controls

Specific controls from the DCP are noted below in Figure 8:

Controls

The following controls apply to major development, as identified

1. For major development, resulting in more than 50 dwellings, recreation facilities, hospitals, community centres, entertainment venues, aged persons' accommodation or other development deemed appropriate by Council, a bus stop and shelter are provided, except where the pedestrian entrance to the proposed development is located within 400m of an existing bus stop with shelter. Alternatively, Council may accept a monetary contribution in lieu of provision of a bus stop with shelter, through a voluntary planning agreement.
2. For major developments, defined above, the applicant will liaise with public transport service providers and Transport NSW regarding the adequacy of current services and potential improvements.
3. The bus shelters are directly connected to the entry to the development by a conveniently accessible footpath.
4. Signage is installed directing patrons to public transport stops facilities, with timetable information displayed in a prominent location.

Figure 8 Controls

In comment regarding these controls it is noted that the following are to be included in a green travel plan (as proposed in Council's draft conditions of consent):

1. Direct bus stop proximity (and heavy rail and light rail)
2. TfNSW is the major stakeholder in the site development
3. Bus shelters adjacent (as per #1)
4. Wayfinding scheme to be incorporated into NBI

4.1.4 End of trip facilities

End of Trip Facilities (Figure 9) are provided within the commercial tower, including bike lockers and showers. There are further bike racks provided in the bus interchange and bike facilities in the Newcastle Transport Interchange. This is considered consistent with the requirements of the DCP as listed below.

C. End of trip facilities

Objectives

1. Encourage trips by walking and cycling through adequate provision of end of trip facilities.

Controls

The following controls apply only to development with an estimated cost of more than $250,000, involving employment of staff.

1. For new development that has an estimated cost of more than $250,000, "end of trip" facilities for employees are provided at the following rates:
   (a) one personal secure locker for each bicycle parking space
   (b) one shower cubicle, with ancillary change rooms, per 12 bicycle spaces (or part thereof over four spaces) with a minimum of one shower and change facility.
2. Facilities are secure, with controlled access, and located in well-lit areas, as close as practicable to bicycle parking. Facilities may be unisex.

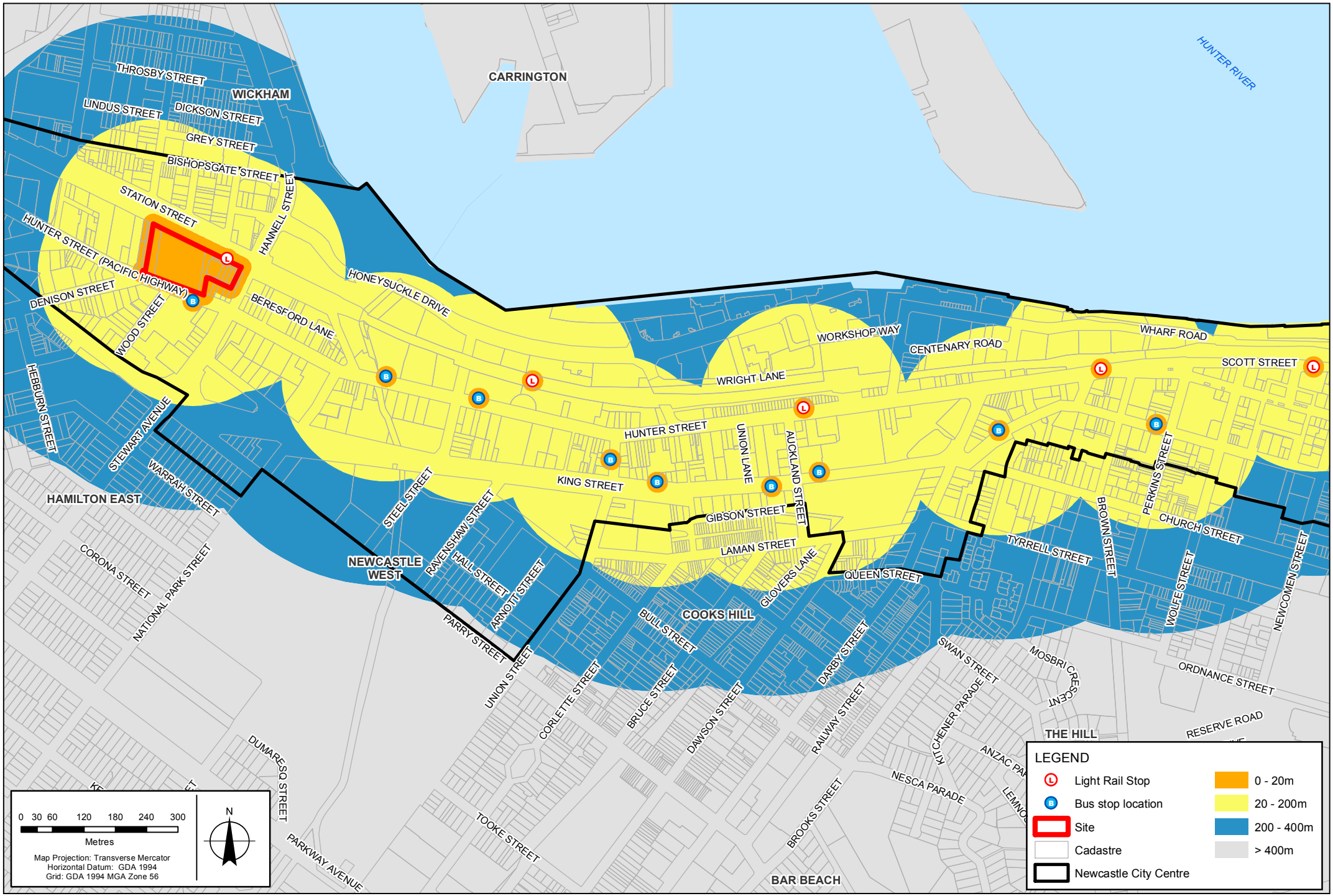
Note: Provision of facilities to store belongings, shower and change may encourage people to walk and cycle more. These facilities will also benefit employees who choose to exercise during meal breaks.

Figure 9 End of trip facilities

4.2 Relative public transport provision

As noted overleaf in Figure 10, the provision of public transport at this site is considered to be above the base level of public transport within the Newcastle CBD. The heat map in Figure 10 provides relative proximity to public transport within the Newcastle CBD area, and highlights that three modes (Bus, Light Rail and Heavy Rail) are available. Typically a catchment area of a bus stop for example, is considered to be around 400 m or about a 5 minute walk. Reference is made to this in Figure 10, and particular comparison against all areas of the CBD zone where a 1:60 parking rate applies.

It is clear that not all parts of the zone as mapped by Council are equal in the provision of public transport, and this development site has more public transport services available than anywhere else in the City of Newcastle.


HUNTER RIVER
CARRINGTON
WICKHAM
THROSBY STREET
LINDUS STREET
DICKSON STREET
GREY STREET
BISHOPSGATE STREET
STATION STREET
HANNELL STREET
HUNTER STREET (PACIFIC HIGHWAY)
DENISON STREET
WOOD STREET
BERESFORD LANE
HONEYSUCKLE DRIVE
WORKSHOP WAY
CENTENARY ROAD
WHARF ROAD
SCOTT STREET
WRIGHT LANE
HUNTER STREET
UNION LANE
AUCKLAND STREET
KING STREET
GIBSON STREET
LAMAN STREET
QUEEN STREET
HEBBURN STREET
STEWART AVENUE
WARRAH STREET
HAMILTON EAST
STEEL STREET
RAVENSHAW STREET
HALL STREET
ARNOTT STREET
NEWCASTLE WEST
PARRY STREET
UNION STREET
GLOVERS LANE
COOKS HILL
BULL STREET
CORLETTE STREET
BRUCE STREET
DAWSON STREET
DARBY STREET
RAILWAY STREET
SWAN STREET
TYRRELL STREET
BROWN STREET
PERKINS STREET
CHURCH STREET
WOLFE STREET
NEWCOMEN STREET
MOSBRI CRESCENT
ORDNANCE STREET
RESERVE ROAD
THE HILL
KITCHENER PARADE
ANZAC PA
NESCA PARADE
BROOKS STREET
BAR BEACH
TOOKE STREET
PARKWAY AVENUE
DUMARESQ STREET
CORONA STREET
NATIONAL PARK STREET
0 30 60 120 180 240 300
Metres
N
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56
LEGEND
Light Rail Stop
Bus stop location
Site
Cadastre
Newcastle City Centre
0 - 20m
20 - 200m
200 - 400m
> 400m

4.3 Precedents in other jurisdictions

Further to the assessment that a reduced rate should be provided, precedent rates are identified below where public transport availability is high.

4.4 Willoughby Council DCP (Chatswood)

The Willoughby Council DCP provides for greatly reduced parking rates for office/business developments where public transport is available (reference to Railway Precincts). For this jurisdiction, parking rates would be either 1:110 or 1:200. See below in Table 4-1 for the Willoughby DCP parking requirements.

Table 4-1 Willoughby Council DCP Parking Rates

Office/Business	Rate
Office / Business Premises (Outside Railway Precincts and MPTCs)	1/60 m^2
Office / Business premises within Railway Precincts (besides those mentioned below) and Major Public Transport Corridors as defined in Clause C.4.1-E	1/110 m^2
Office/Business premises in Chatswood (Zone B3 under WLEP 2012) where access is only available from Pacific Highway, Albert Avenue, Victoria Avenue, Help or Railway Streets	1/200 m^2

4.4.1 Waverly Council DCP – Bondi Junction

The Waverly Council DCP provides for greatly reduced parking rates around Bondi Junction where public transport has high availability. For office/business developments in this area, parking rates would be between 0 and 1 space per 100 m^2 of GFA. See below in Table 4-2 for the Waverly DCP parking requirements.

Table 4-2 Waverly Council DCP Parking Rates per 100m^2

Land Use	Bondi Junction		Zone A		Zone B		Zone C	
	Min	Max	Min	Max	Min	Max	Min	Max
Business/ Office	0	0.66	0	1	0	1	0	1

4.4.1 City of Ryde DCP - Macquarie Park Corridor

The City of Ryde DCP has specific car parking generation rates at a maximum rate of 1:60. The Ryde DCP acknowledges different objectives in the Macquarie Park Corridor varying from a base rate of 1 space for 100 m^2. The objectives of the Macquarie Park Corridor provision includes “achieve a safe and convenient pedestrian environment that encourages *public transport* use and social interaction”.

Table 4-3 City of Ryde DCP – Macquarie Park Corridor parking rate

Land Use	Parking Rate – Macquarie Park Corridor
Industrial/Commercial	1 space per 100 m^2

4.5 Conclusion

It is concluded, as demonstrated above that there is likely to be significant usage of public transport in accessing the development site. There is also significant precedent within other jurisdictions where public transport has high availability, as will be the case for this site at Newcastle west.

As such the proposal to vary the applicable DCP parking rate for the commercial development is considered consistent with the provisions of the DCP. Departure from the DCP parking rate provisions is entirely consistent with good planning principles in reducing car driven travel demand where public transport is provided. This is further supported in this location with excellent levels of public transport availability.

Typical parking rates where public transport is available with a high level of service start from as little as 0 spaces per 100 m^2 with others around 1 per 100 m^2. The NCC rate of 1 per 60 m^2 is at the upper end of this range, or where no significant public transport is available. It is noted the NCC DCP predates the provision of the transport interchange with three modes of available public transport.

It is therefore considered a rate of 1 per 60 m^2 is an oversupply for this locality, and 1 per 100 m^2 is more than appropriate for this site with excellent public transport available, and a city going through generational change.

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	G Wood	M Petrusma		S Page		05/04/2019

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