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File: 23-319

16 September 2024

Mr Alexander Bibbo
Bibbo Architects
Tenancy 4 / Ground Level
345 King William Street
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Dear Mr Bibbo

PROPOSED MIXED USE DEVELOPMENT – 162 GOUGER STREET, ADELAIDE – TRAFFIC AND PARKING ASSESSMENT

I refer to our previous discussions with respect to the proposed mixed use development on the above site.

As requested, we have undertaken the following review of the traffic and parking related aspects of the subject development.

EXISTING SITUATION**Locality**

The subject land is located within a *Capital City Zone*.

The subject site is located on the northern side of Gouger Street, Adelaide, and extends between Oakley Street to the west and Storr Street to the east.

The subject site is rectangular in shape with the frontage of 26.13 metres to Gouger Street and an overall depth of 54.8 metres to the north along both Oakley Street and Storr Street.

The subject site currently accommodates commercial developments on the south-eastern and southwestern corners of the subject site and at grade car parking areas associated with a commercial car park on the subject site.

Vehicular access to the existing development on the site is currently provided by:-

- a roller door on Storr Street servicing the existing building on the southeastern corner of the site,

- an access point located approximately mid-block along the Gouger Street frontage of the site associated with the on-site car parking areas, and
- an access point on the eastern side of Oakley Street which also provides access to the at-grade car parking area on the site.

Gouger Street adjacent to the subject site provides two traffic lanes in each direction separated by a centre line. An existing loading zone is located on the northern side of side of Gouger Street directly in front of the subject site.

Both Oakley Street and Storr Street extend from the intersections with Gouger Street to Grote Street to the north, with Oakley Street forming a four-way intersection with Selby Street, and Storr Street forming a T-intersection on the northern side of Gouger Street.

Oakley Street has a kerb to kerb width of approximately 9.0 metres with approximately 1.6m wide footpaths on both sides of this street. Minor narrowing of the carriageway is provided adjacent to existing plantation beds located intermittently on the eastern side of this roadway.

Storr Street adjacent to the subject has a kerb to kerb width of approximately 4.2 metres with approximately 1.0 metre wide footpaths on each side of this roadway.

On-street parking areas and loading zones are provided along both sides of Oakley Street.

Parking on the western side of Oakley Street includes: -

- 10 motorcycle parking bays on the western side of this roadway opposite the subject site,
- A parallel parking space to the immediate north of the motorcycle parking area which permits parking for a maximum of one hour between 8:00 am and 6:00 pm Monday to Friday and 8:00 am to 12:00 noon Saturday.
- Additional sections of parking spaces further to the north which generally permit one hour parking on weekdays and Saturday mornings, but which typically revert to permit parking outside of these periods, and
- Two loading zones at the northern end of this roadway which operate between 8.00 am and 6.00 pm Monday to Friday but revert to unrestricted parking outside of these periods.

Parking on the eastern side of Oakley Street includes:-

- Three sections of parallel parking spaces directly adjacent to the boundary of the site with a capacity to accommodate approximately 8 cars. Parking in these areas is restricted to one hour periods between 8:00 am and 6:00 pm Monday to Friday or 8:00 am and 6:00 pm Monday and 8:00 am to 12:00 noon Saturday with these three areas reverting to unrestricted parking outside of these periods, and
- similar parking restrictions on this side of Oakley Street to the north of the subject site.

Parking / loading on both sides of Storr Street is generally prohibited by No Stopping Anytime restrictions with the exception of:-

- A passenger loading only area on the western side of this roadway directly adjacent to the subject site, and

- Two additional passenger loading only areas on the eastern side of this roadway to the immediate south of the intersection with Grote Street.

From a review of the Location SA Map Viewer website, it is understood that the Annual Average Daily Traffic (AADT) volume on Gouger Street within the proximity of the subject site is of the order of 8900 vehicles per day (vpd).

Details of recorded road crashes in the near vicinity of the subject site have also been obtained from the Location SA Map Viewer website. It is identified from this website that there have been a total of three recorded crashes in the most recent 5 year reporting period (2019 to 2023 inclusive) including :-

- One rear end collision, and
- Two collisions involving sideswiping of parked vehicles.

Aerial imagery of the subject site and adjoining locality is provided in *Figure 1* below.



Figure 1: Subject site and surrounding locality

PROPOSED DEVELOPMENT

Built Form

The proposed development is identified on a series of plans prepared by your office (Bibbo Architects) namely Drawing Nos. TP001 to TP902 dated 4 September 2024.

The above plans indicated that the subject development will include:-

- Demolition of the existing buildings on the subject site and
- The construction of a 16 (Ground plus 15) level building accommodating: -
 - A ground floor area providing: -
 - three retail tenancies with a combined floor area of approximately 514m²,
 - a vehicular access point to be located on Oakley Street adjacent to the northern boundary of the subject site,
 - a 56-space bicycle storage area to the immediate south of the proposed carpark access point on Oakley Street, including 10 horizontal spaces and 46 vertical spaces,
 - an entry lobby to be accessed from Oakley Street,
 - service areas within the north-eastern corner of the site accommodating fire services,
 - a loading area to be accessed from Storr Street,
 - a waste storage area adjacent to the Storr Street boundary, and
 - pedestrian access into and out of the various building components from the three adjoining roadways,
 - two (2) levels of on-site car parking with a total of 68 spaces comprising:-
 - Car park 1 which will accommodate 32 cars on Level 1, and
 - Car park 2 which will accommodate a further 36 cars on Level 2,
 - A recreational and dining area above the car parking areas on Level 3 for use by residents,
 - 12 levels of residential apartments to be provided on Levels 4 to 15 totalling 107 apartments, and
 - A service area accommodating service plant including condenser units, hydraulic plant and condensing units on the rooftop.

The ground floor of the building will accommodate service components of the subject development including the waste storage area, fire pump and tank, battery storage and switch room together with an entrance lobby, stairwell and lift.

Vehicular Design Aspects

The on-site car parking areas and will be accessed directly to and from Oakley Street and waste collection will be provided via Storr Street.

Unlike the current vehicular access arrangements there will be no direct vehicular access associated with the proposed development to or from Gouger Street.

The design of the on-site car parking areas will satisfy the requirements of a User Class 1A facility (residential and employee parking) car parking facility, providing:

- Car parking spaces of 2.4m (minimum) in width,
- Car parking spaces of 5.4m in length, and
- Minimum aisle widths of 5.8m between rows of parking on each side of the aisle, or
- Minimum aisle widths of 6.2m between a row of parking on one side and of the aisle and structure on the other side of the car park aisle.

The section of driveway / ramp providing access into and out of the car park to and from Oakley Street will include:

- A flat area over the first 6m into the building,
- A maximum grade of 1 in 5, and
- Transitions at the top and bottom of the above section of ramp of 2m in length with a grade of 1 in 8.

There will be a level difference of at least 3.0m between consecutive levels within the car park which will permit a minimum vertical clearance of 2.2m throughout the car parking area, with a minimum vertical clearance of 2.5m to be provided above the accessible (disabled) car parking space and adjoining shared area.

The loading / waste collection area will be approximately 7m wide and 9.5m deep, with a floor to ceiling clearance of 3.8m.

As such, I consider that the design of the on-site parking areas would conform to recommended design criteria of the relevant off-street car parking standard (*AS/NZS 2890.1:2004 and AS/NZS 2890.6:2009*).

PARKING ASSESSMENT

Car Parking

Table 2 - General Off-Street Car Parking Requirements in Designated Areas within the *Transport Access and Parking Overlay* of the *Planning and Design Code* is relevant to a development such as that proposed within a *Capital City Zone*.

There is no minimum off-street car parking requirements within the subject *Capital City Zone*. As the subject site is located outside of the 'Primary Pedestrian Area', there is also no maximum off-street car parking restriction associated with the proposed residential component.

The proposed provision of any number of on-site car parking spaces, including the 68 spaces as proposed, is therefore appropriate as per the relevant *Planning and Design Code* provisions.

Bicycle Parking

Table 2 - Off-Street Bicycle Parking Requirements within the *Transport Access and Parking Overlay* of the *Planning and Design Code* identifies bicycle parking requirements relevant to the subject site of:-

- Shop: 1 space for every 300m² of gross leasable floor area plus 1 space for every 600m² of gross leasable floor area for customers, and
- Residential component of a multi-storey building: 1 for every dwelling for residents with a total floor area less than 150 m², 2 for every dwelling for residents with a total floor area greater than 150 m², plus 1 for every 10 dwellings for visitors.

The proposed development (noting that only 9 of the residential apartments will provide an area of more than 150m²) would need to provide a total of 130 on-site bicycle parking spaces in the form of:

- 2 bicycle spaces for use by staff within the retail land use components,
- 116 resident bicycle parking spaces, and
- 12 visitor bicycle parking spaces associated with the two land use components namely one such space associated with the retail component and 11 spaces associated with the residential component of the subject development

It is anticipated that above bicycle parking requirements would be met by:-

- use of the 56 bicycle parking spaces on the ground floor of the subject development,
- the potential to store bicycles within the dedicated storage areas within the two car parking levels noting that 20 storage spaces are proposed on each of these levels, and
- an opportunity to house bicycles within individual residential apartments.

TRAFFIC AND ACCESS ASSESSMENT

It is understood that the on-site car parking spaces will be allocated to for residents only.

The *Technical Direction TDT 2013/04a*' report produced by the Roads and Maritime Service of NSW identifies the following peak hour vehicle trip generation rates for a high density residential flat building:

0.15 am and 0.12 pm peak hour vehicle trips per car parking space in Sydney, or

0.35 am and 0.26 pm peak hour vehicle trips per car parking space regionally.

Conservatively applying the regional rate identified above, the proposed 68-space development would be forecast to generate approximately 24 am and 18 pm peak hour vehicle trips directly to and from the subject land.

Based upon typical proportions of entry and exit movements during the morning and afternoon peak periods associated with the residential dwellings this should equate to approximately:

- 6 entry and 18 exit movements in the am peak hour period, and
- 12 entry movements and 6 exit movements in the pm peak hour period.

The majority of the above forecast peak hour traffic movements are anticipated to occur indirectly via Gouger Street. While the above forecast traffic movements are not anticipated to result in capacity issues it should also be noted that the existing development on the subject site currently accommodates 23 car parking spaces and is therefore generating existing traffic movements on the adjoining road network.

Hence the actual increase in the volumes of traffic associated with the proposed development will be less than the above forecast. Accordingly, the traffic generation of the proposed should not result in any adverse traffic impacts on the surrounding road network.

Waste collection movements are anticipated to occur up to 10 times per week, i.e. an average of approximately twice per day, with collections typically occurring outside of peak hour commuter periods. These collections will occur within the building with access provided off Storr Street.

Servicing and Waste Collection

A Waste Management Plan has been prepared by Colby Phillips Advisory dated 12 September 2024. This assessment has identified, inter alia, that: -

- Waste will be stored within the bin storage area and service area on the eastern side of the building site to be accessed by a roller door on the Storr Street side of the building,
- Collection of waste associated with the residential component of the subject development will be undertaken by private waste contractor,
- General waste, organics and recycling collections will typically be undertaken by a rear lift rigid body truck with a length a potentially 10 m which based on modelling with Autotrack would be able to reverse into the building from Storr Street.

Figures A and B included as an appendix to this report identifies the ability of various design vehicles to be reversed into the proposed waste and service area on the eastern side of the subject development from Storr Street. This modelling indicates that a range of medium to large rigid body vehicles would be able to complete such movements without the need for drivers to make multiple turns.

The above waste management report indicates that up to 10 truck visits are expected per week indicating of the order of two collections on any one day between the hours of 7.00 am and 12.00 pm on scheduled collection days. Waste collections would potentially take between 10 and 12 minutes per collection.

Given these vehicles will be serviced on site there should be minimal disruption to traffic movements on Storr Street as a result of the anticipated waste collection process.

SUMMARY AND CONCLUSIONS

The proposed development will involve the construction of a mixed-use development on the northern side of Gouger Street, Adelaide, between the intersections of this roadway with Oakley Street to the west and Storr Street to the east.

The proposed development will accommodate, inter alia:-

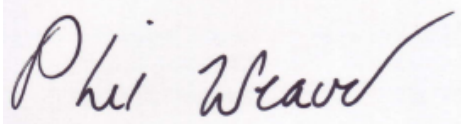
- Ground floor retail tenancies with a total area of 514m² on the southern side of the site fronting Gouger Street,

- Service and bin storage areas within the ground floor area of the building which will be accessed to and from Storr Street,
- Two levels of on-site car parking (68 spaces) with vehicular access to be provided to and from the site by a proposed access point on Oakley Street adjacent to the northern boundary of the subject site, and
- 11 levels of residential apartments (107 units) on levels 4 to 15.

In summary, it is considered that the proposed development will:

- Satisfy the off-street car parking requirements identified within *SA Planning Design Code* for a retail and residential development to be located within the *City Living Zone*,
- Provide an appropriate quantity of on-site bicycle parking spaces,
- Provide a design standard which is appropriate and meets the requirements of the relevant Australian Standards for off-street parking areas proposed within the building, and
- Not result in adverse traffic impacts on the adjacent road network, as the proposed development will:
 - Provide a design standard which meets the requirements of the relevant Australian / New Zealand Standards for off-street car parking areas.
 - Provide for waste collection and servicing to occur within the proposed dedicated waste and service area on the eastern side on the building and therefore avoid the need for such servicing to be undertaken on-street, and
 - Result in an anticipated 24 morning and 18 afternoon peak hour vehicle trips to be generated by the proposed development. While such a forecast peak hour traffic volume could be readily accommodated within the adjoining road network the actual increase in traffic generated by the proposed development will be negligible given that the existing development on the site currently generates traffic movements to and from both Gouger Street and Oakley Street. On this basis the subject development will therefore not result in adverse traffic movements on the adjoining road network.

Yours sincerely

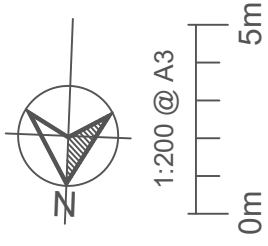


Phil Weaver
Phil Weaver and Associates Pty Ltd

Enc: Figures A and B

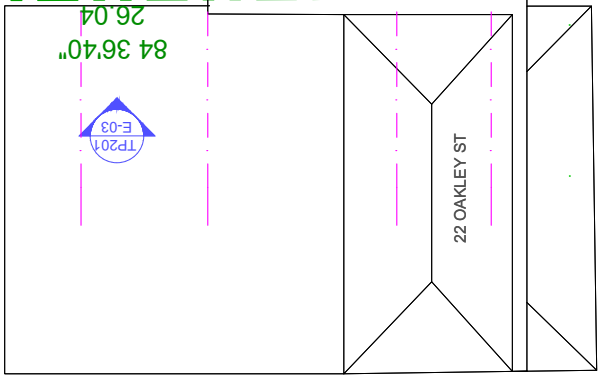
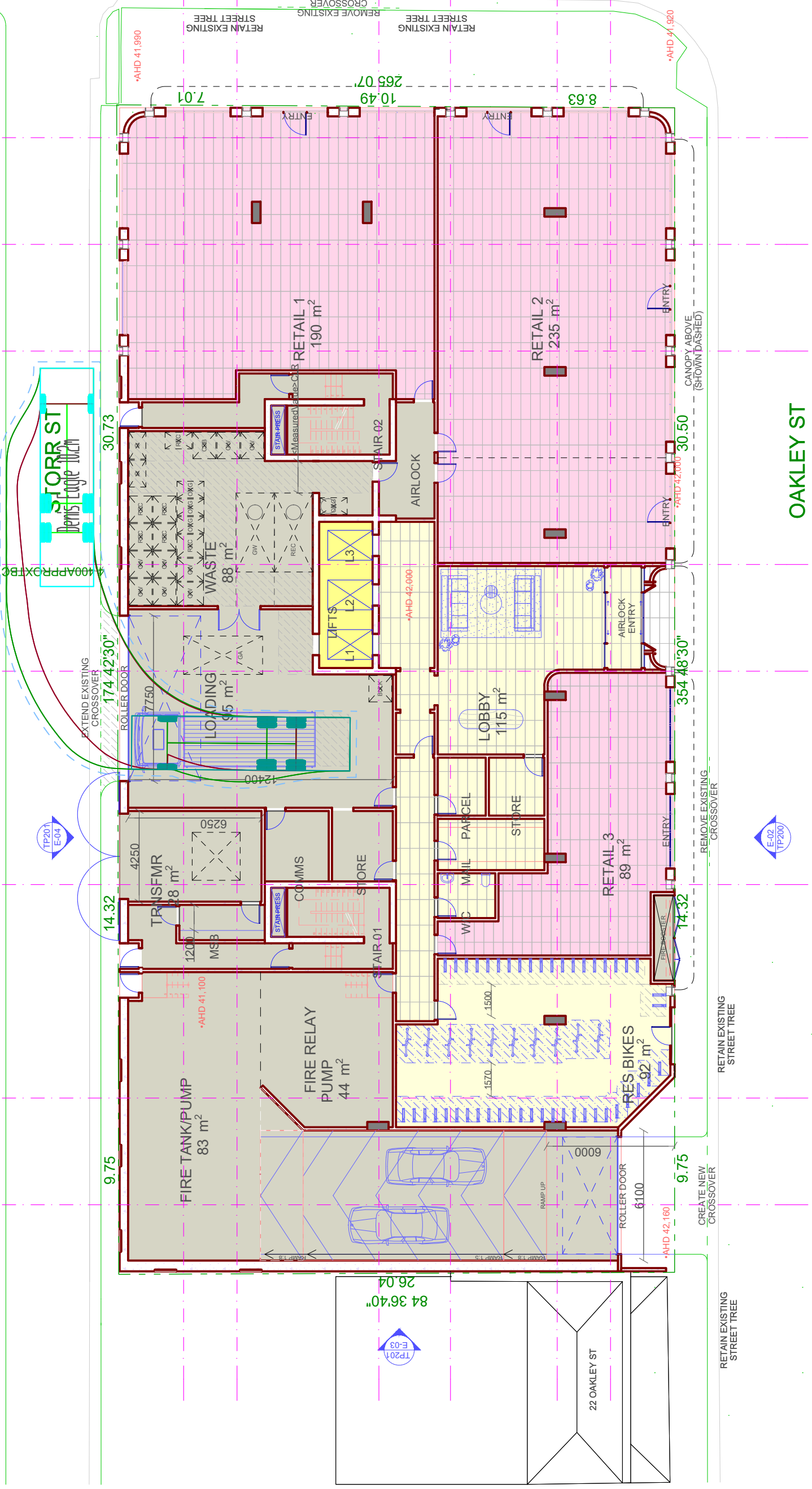
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GOUGER ST

OAKLEY ST

