APPENDIX A AUP E27 Assessment

CHAPTER E27 TRANSPORT ASSESSMENT

E27 Standards assessment

Table A 1: Chapter E27 transport standards and assessment

E27 Standard	Assessment
E27.6.1. Trip generation	
(1) Where a proposal (except where excluded in Standard E27.6.1(2)) exceeds one of the following thresholds: (a) a new development in Table E27.6.1.1 (b) 100 v/hr (any hour) for activities not specified in Table E27.6.1.1 requiring a controlled or restricted discretionary land use activity consent in the applicable zone where there are no requirements for an assessment of transport or trip generation effects. This standard does not apply to development activities provided for as permitted in the applicable zone Resource consent for a restricted discretionary activity is required	**Applicable** (T1) more than 100 dwellings (T3) more than 100 visitor accommodation units (T8A) retail exceeding 1,667m^2 GFA
E27.6.2. Number of parking and loading spaces	
(1) The number of parking spaces must meet rates specified in Table E27.6.2.4	**Complies** No minimum nor maximum parking rates apply.
(6) Bicycle parking (a) the activities specified in Table E27.6.2.5 must provide the minimum number of bicycle parking spaces specified; (aa) for residential developments, the required secure long–stay bicycle parking must be located and designed in a manner that (is): i. not part of any required outdoor living space or landscaped area; ii. in a location accessible from either the road, vehicle access, pedestrian access or car parking area; iii. sheltered from the weather; iv. lockable and secure; (bb) To avoid doubt, the required secure long-stay bicycle parking may be located within a dwelling. (b) the following bicycle parking requirements apply to new buildings and developments.	**Complies** Each dwelling will have space within each lot for visitor bike parking. Each dwelling without a garage will have a secure space sheltered from the weather that can store bicycles. Bicycle parking for visitors are provided outside in clusters within proximity of the apartment buildings. All other activities requiring bicycle parking will have visitor bike parking distributed throughout each precinct, or in the case of the data centres, will have parking in its own lot, and secure bike parking for staff.
(7) End-of-trip facilities: (a) the activities specified in Table E27.6.2.6 must provide end-of-trip facilities as listed below; and (b) the following end-of-trip facilities requirements apply to new buildings and development	**Not applicable** The Proposal does not include offices, education facilities nor hospitals
(8) Number of loading spaces: (a) all activities must provide loading spaces as specified in Table E27.6.2.7 ***(T111) retail and industrial activities greater than 5,000 m^2 GFA up to 10,000 m^2 GFA*** ◆ 2 loading spaces ***(T113) All other activities where located in rural zones*** ◆ No minimum rate *(b)* In addition, where the only vehicle access for residential activities is from an arterial road as identified on the planning maps, a small loading space must be provided in accordance with Table E27.6.2.7A.	**Complies** All non-residential precincts (including Live/Work Precinct) will have on-site loading. Neighbourhood Precincts will not have dedicated on-site loading spaces given their proposed dwelling typologies. All loading and rubbish collection will be undertaken from the road or JOAL that the individual dwellings front on to, as is most practical.
E27.6.3.1. Size and location of parking spaces	

(1) Every parking space must (a) comply with the minimum dimensions given in Table E27.6.3.1.1 and Figure E27.6.3.1.1; except accessible parking dimensions and accessible route requirements must be designed in accordance with the New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121- 2001); and (b) be located on the same site as the activity to which it relates unless one of the following criteria is met (i) the parking is located in an H7 Open Space Zone and the reserve, park or recreation area consists of more than one adjoining Certificate of Title. In that case, the parking must be located within the same reserve, park or recreation area as the activity to which it relates; or (ii) resource consent is granted to an alternative arrangement, such as shared parking, offsite parking, or non-accessory parking (c) [deleted] (d) be kept clear and available at all times the activity is in operation, except where stacked parking is permitted by Standard E27.6.3.3(3) below (e) be located outside any area designated for road widening; and (f) parking located in part of any yard on the site (where it is permitted in the zone) must not: (i) impede vehicular access and movement on the site; and (ii) infringe any open space and landscape requirements for the relevant zone; and (g) not to be sold or leased separately from the activity for which it provides parking as an accessory activity unless a resource consent is granted to an alternative arrangement such as shared parking or offsite parking.	**Complies**
E27.6.3.2. Size and location of loading spaces	
(1) Every loading space must: (a) comply with the minimum dimensions given in Table E27.6.3.2.1; and (b) be located on the same site as the activity to which it relates and be available at all times while the activity is in operation; (c) be located outside any area designated for road widening; and (d) comply with the following when any yard of a site is used to provide the loading space (where it is permitted within the zone): (i) ensure that the footpath or access to the rear of the site or access to an adjacent property is not blocked at any time; and (ii) (ii) the use of the loading space does not create a traffic hazard on the road at any time. ***(T137) Industrial activities*** ◆ 11 x 3.5m ***(T137) All other activities*** ◆ 8 x 3.5m ***(T137) All sites and developments designed to accommodate articulated vehicles*** ◆ 18 x 3.5m *(e)* have a maximum crossfall of 1:50 (2%) in all directions	**Complies**
E27.6.3.2(A) Number and Design of Accessible Parking	
(1) Accessible parking must be provided for all new buildings, extension to existing buildings and changes of activity from non-residential to residential land uses, in accordance with in E27.6.3.2(A)(2) to (5) below (2) For residential developments where car parking is provided on site, accessible parking spaces must be provided for developments of 10 or more dwellings (3) For all non-residential developments, accessible parking must be provided when car parking is provided on-site. (4) Accessible parking is not required to be provided where no car parking is provided on site, except for the following activities in the following zones, where accessible parking must be provided even when there is no car parking on-site. (5) Where accessible parking is required to be provided on-site in accordance with E27.6.3.2 (A) (1) to (4) above, the required number of accessible parking spaces must be calculated as set out in E27.6.3.2(A) (6) and (7). (6) For non-residential land uses, the required number of accessible parking spaces is to be determined using Steps 1 to 3 below:	**Complies** • Most of the housing typologies can accommodate parking in their own individual lot which complies with the accessible parking dimensions. • Based on both theoretical parking demand and overall car parking numbers, 12 accessible spaces are required for the Surf Lagoon Precinct, Accommodation Precinct and the Village. The proposed accessible parking spaces meet the requirement and are spread within the public car park areas in the Surf Lagoon Precinct, Accommodation Precinct and the Village Centre.

Step 1 - For non-residential land uses in the following Business Zones: (i) Business – City Centre Zone; (ii) Business – Metropolitan Centre Zone; (iii) Business – Town Centre Zone; (iv) Business – Local Centre Zone; (v) Business – Mixed Use Zone; (vi) Business – Neighbourhood Centre Zone. Use Table E27.6.2.1 (maximum parking rates for the Business – City Centre), Table E27.6.2.2 (maximum parking rates for the Centre Fringe Office Control area) or Table E27.6.2.3 (maximum parking rates area 1) to determine theoretical demand where a maximum parking rate is stipulated that results in a lesser parking requirement to that based on the Parking Demand Guidelines in Appendix 23. For other non-residential land uses in the above Business zones and in all other Zones - use the Parking Demand Guidelines in Appendix 23 to determine the theoretical parking demand. Step 2 - Use Table 1 – Number of accessible parking spaces – Non- Residential, below to determine the required number of accessible car park spaces for non-residential land uses based on either the number of parking spaces that are existing or proposed to be provided or the theoretical parking demand for non-residential land uses calculated in step 1, whichever is the higher. Step 3 – Provided that the number of accessible car parks calculated using Table 1 shall not be less than presently exist on the site. (7) For dwellings in all zones (including dwellings in the residential component of mixed use developments) which provide car parking, the required number of accessible parking spaces provided must be in accordance with Table 2 below. (8) For retirement villages, supported residential care, visitor accommodation and boarding houses The same method for calculating the required number of onsite accessible parking spaces for non-residential uses in (6) applies. (9) Accessible car parks must be marked as accessible and connected by an accessible route to the building, unit(s) or facility they serve, except that: (a) for residential developments where an accessible car park is located within a garage, carport or parking pad that directly adjoins the dwelling it serves, the space may be, but is not required to be, marked as accessible; and (b) for accessible parking spaces in grouped or communal areas of residential developments that do not directly adjoin the dwellings they serve, such spaces must be marked as accessible, and may include additional signage indicating private allocation to specific dwellings. The marking for these residential parking spaces may be supplemented beyond standard accessible parking markings to clearly indicate their residential and private/allocated nature. For all non-residential developments, or non-residential components of mixed-use developments, standard accessible parking markings must be used. Note 1: Refer to NZS 4121:2001 – Design for Access and Mobility - Buildings and Associated Facilities for information on marking / signage of accessible car parks. Note 2: For accessible parking dimensions and accessible route requirements, see standard E27.6.3.1(1)(a). Note 3: Accessible parking spaces provided in communal parking areas must be marked, however for the avoidance of doubt can be allocated to individual units and do not need to be held in common. (10) The requirements of this standard E27.6.3.2(A) do not apply to activities within I208 Port Precinct. Note: Accessible parking requirements are further controlled by the Building Code. Plan users should refer to the Building Code to ensure compliance can be achieved at building consent stage. Granting of a resource consent does not imply that waivers of Building Code requirements will be granted.	
E27.6.3.3. Access and manoeuvring	
(1) Every parking space must have driveways and aisles for entry and exit of vehicles to and from the road and for vehicle manoeuvring within the site. Access and manoeuvring areas must accommodate the 85 percentile car tracking curves in Figure E27.6.3.3.1	**Complies**
(2) For every loading space accommodating heavy vehicles the access and manoeuvring areas associated with that loading space must comply with the tracking curves set out in the NZTA guidelines: RTS 18: NZ on-road tracking curves (2007)	**Complies**

(2A) For every small loading space required by Table E27.6.3.2.1.(T137A) the access and manoeuvring areas associated with that loading space must accommodate the 6.4m van tracking curves set out in Figure E27.6.3.3.3.	
(3) Where a dwelling provides more than one parking space, these may be stacked. Stacked parking means access is required through another parking space.	**Complies**
E27.6.3.4. Reverse manoeuvring	
(1) Sufficient space must be provided on the site so vehicles do not need to reverse off the site or onto or off the road from any site where any of the following apply: (a) Four or more parking spaces are served by a single access; (b) there is more than 30m between the parking space and the road boundary of the site; or (c) access would be from an arterial road or otherwise within a Vehicle Access Restriction covered in Standard E27.6.4.1. (2) Where E27.6.3.4(1)(a), (b) or (c) requires a heavy vehicle to turn around within a site in a residential zone, to avoid reversing off the site or onto or off the road, sufficient space must be provided on the site so an 8m heavy vehicle can turn around with a maximum reverse manoeuvring distance of 12m. (a) Heavy vehicle access and manoeuvring areas associated with access required by the above must comply with the tracking curves set out in the Land Transport New Zealand Road and traffic guidelines: RTS 18: New Zealand on-road tracking curves for heavy motor vehicles (2007).	**Complies**
E27.6.3.5. Vertical clearance	
(1) To ensure vehicles can pass safely under overhead structures to access any parking and loading spaces, the minimum clearance between the formed surface and the structure must be (a) 2.1m where access and/or parking for cars is provided for residential activities (b) 2.3m where access and/or parking for cars is provided for all other activities (c) 2.5m where access and/or accessible parking for people with disabilities is provided and/or required; (ca) 2.8m where loading is required for residential activities denoted with an asterisk (*) in Table E27.6.2.7A; (cb) 3.8m where heavy vehicle access in Standard E27.6.3(2) is provided; or (d) 3.8m where loading is required	**Complies** The height clearance in the apartment block parking areas are more than 2.1 m. All overhead structure above loading areas are at least 3.8 m high.
E27.6.3.6. Formation and gradient	
(1) Except for Standard E27.6.3.6(2) below, the whole area of parking and loading spaces, and manoeuvring areas and aisles must be formed, drained, provided with an all-weather surface to prevent dust and nuisance, and be marked out or delineated. This must be done before the activity to which those parking and loading spaces relate commences, and maintained for as long as that activity is continued.	**Complies**
(3) The gradient for the surface of any parking space must not exceed: (a) 1 in 25 in any direction for accessible spaces for people with disabilities; or (b) 1 in 20 (five per cent) in any direction for other spaces.	**Complies**
(4) The gradient for the manoeuvring area must not exceed 1 in 8	**Complies**
E27.6.3.7. Lighting	
(1) Lighting is required where there are 10 or more parking spaces which are likely to be used during the hours of darkness. The parking and manoeuvring areas and associated pedestrian routes must be adequately lit during use in a manner that complies with the rules in Section E24 Lighting. (2) Lighting is required, in residential zones to primary pedestrian access, vehicle access, parking and manoeuvring areas, where any of the following apply: (a) There are four to nine dwellings accessible from a primary pedestrian access which is not adjacent to a vehicle access; (b) There are 10 or more parking spaces; or (c) There are 10 or more dwellings. Lighting must be provided during the hours of darkness in a manner that complies with the rules in Section E24 Lighting.	**Can comply**

E27.6.4.1. Vehicle Access Restrictions	
(1) Vehicle Access Restrictions apply and new vehicle crossings must not be constructed to provide vehicle access across that part of a site boundary which is subject to: (a) a Vehicle Access Restriction – General Control as shown on the planning maps in the Business – City Centre Zone; or (b) a Key Retail Frontage Control as shown on the planning maps	**Not applicable** The Site is not subject to the specified Controls
(2) Standard E27.6.4.1(3) below applies in any of the following circumstances (a) a new vehicle crossing is proposed; (b) a new activity is established on a site; (c) there is a change of type of activity	**Applicable**
(3) Vehicle Access Restrictions apply and vehicle crossings must not be constructed or used to provide vehicle access across that part of a site boundary which (a) is located within 10m of any intersection as measured from the property boundary (b) is subject to the following types of Vehicle Access Restriction as identified on the planning maps in the zones listed in Table E27.6.4.1.1; (c) has frontage to an arterial road as identified on the planning maps; (d) is located closer than 30m from a railway level crossing limit line	**Does not comply** (a) In the North-East Neighbourhood Precinct – 2 private roads (assessed as vehicle crossings) create an intersection leg at the roundabout on the vested road. In the Surf Village Centre Precinct, the private road to the BOH Surf Lagoon and staff car park is within 10 m of the intersection across the road. In the North-West Neighbourhood Precinct, some vehicle crossings to the corner lots are be situated within 10 m of the intersection setback requirement. The JOAL to the Stage 5a vacant lot subdivision (assessed as vehicle crossings) create an intersecting leg onto the Postman Road roundabout. (c) A vehicle crossing for the surf park car park is proposed on Dairy Flat Highway, an arterial road. An existing vehicle crossing on Dairy Flat Highway is proposed to be used as a left-out exit-only by vehicles associated with the water treatment plant.
E27.6.4.2. Width and number of vehicle crossings	
(1) The maximum number of vehicle crossings permitted for any site and separation distance between crossings is specified in Table E27.6.4.2.1. ***(T146) All other sites*** ◆ One crossing per 25m of site frontage ◆ 2m separation from adjacent vehicle crossings, or combined with adjacent vehicle crossings and not exceeding 6m width ◆ Minimum of 6m separation between crossing serving the same site	**Does not comply** The main entry/exit vehicle crossing for the data centre is approximately 3 m apart – does not comply with minimum separation of 6.0 m for crossings serving the same site. All lots within the Neighbourhood Precincts will have a single vehicle crossing to each lot, 2 m apart. **Complies**
(2) The width of a vehicle crossing(s) must meet the minimum width and not exceed the maximum width as specified in Table E27.6.4.3.2. ***(T156) Rural zones*** ◆ Minimum width of crossing at site boundary of 3.0m ◆ Maximum width of crossing at site boundary of 6.0m. Provided that a maximum width of 9.0m is permitted where the crossing needs to accommodate the tracking path of large heavy vehicles	**Does not comply** The vehicle crossing on the Postman Road roundabout to the vacant subdivision lots is about 10 m wide. Vehicle crossings to the main surf park car park, the data centres will be no more than 9 m wide to accommodate the tracking path of heavy vehicles. **Complies**
(3) With the exception of vehicle crossings on unsealed roads, all vehicle crossings must be designed and constructed to maintain the level, colour, and materials of the footpath to clearly identify to vehicles that pedestrians have priority.	**Will comply**
(4) Vehicle crossings on unsealed roads: *(a) where the vehicle crossing is served by an access steeper than 1 in 8, the vehicle crossing must be sealed for 6m between the site boundary and the unsealed road.* *(b) vehicle crossings not covered by Standard E27.6.4.2(3)(a) above must be formed using materials similar to the existing road surface or better.*	**Not applicable**

(5) Where a vehicle crossing is altered or no longer required, the crossing, or redundant section of crossing, must be reinstated as berm and/or footpath and the kerbs replaced. The cost of such work will be borne by the owner of the site previously accessed by the vehicle crossing	**Complies**
E27.6.4.3. Width of vehicle access and queuing requirements	
(1) Every on-site parking and loading space must have vehicle access from a road, with the vehicle access complying with the following standards for width: *(a) passing bays are provided in accordance with Table E27.6.4.3.1;* ***(T147) Rural zones*** ◆ Where the length of access exceeds 100m and the width of access is less than 5.5m, passing bays are required at a maximum of 100m spacing ◆ Increase formed width of access to 5.5m over a 15m length (to allow two vehicles to safely pass each other) *(b) meeting the minimum formed access width specified in Table E27.6.4.3.2.* ***(T156) Rural zones*** ◆ No minimum specified *(c) meeting the minimum speed management measure spacing specified in Table E27.6.4.3.3*	**Complies**
(2) Access must be designed so that vehicles using or waiting to use fuel dispensers, ticket vending machines, remote ordering facilities and devices, entrance control mechanisms, or other drive-through facilities do not queue into the adjoining road reserve or obstruct entry to or exit from the site.	**Complies**
E27.6.4.4. Gradient of vehicle access	
(1) The gradient of the access must not be steeper than specified in Table E27.6.4.4.1: ***(T158) vehicle access used by heavy vehicles*** ◆ Maximum gradient of 1:8	**Complies**
(2) To avoid the underside of the car striking the ground, as illustrated in Figure E27.6.4.4.2, access with a change in gradient exceeding 1 in 8 (greater than 12.5 per cent change) at the summit or a 1 in 6.7 (15 per cent change) at a sag must include transition sections to achieve adequate ground clearance, refer to Figure E27.6.4.4.3. Typically, a transition section requires a minimum length of 2m.	**Complies**
(3) All vehicle access must be designed so that where the access adjoins the road there is sufficient space onsite for a platform so that vehicles can stop safely and check for pedestrians and other vehicles prior to exiting. This is illustrated in Figure E27.6.4.4.4. The platform must have a maximum gradient no steeper than 1 in 20 (5 per cent) and a minimum length of 4m for residential activities and 6m for all other activities	**Complies**
E27.6.5. Design and location of off-road pedestrian and cycling facilities	
(1) The design and location of the proposed facility to ensure good connections to existing facilities.	**Complies** The Proposal includes a connected series of off-road shared paths throughout the Site, connecting to the footpath and cycle path on the proposed spine road through the Surf Village Centre Precinct and the east-west Collector Road.
(2) The width of the path is designed to accommodate the anticipated number and type of users.	
(3) The surface of the path is designed to safely provide for the anticipated number and type of users.	
E27.6.6. Design and location of pedestrian access in residential zones	
(1) This standard applies to development of two or more dwellings in residential zones. (2) For the purposes of this standard and standard E38.8.1.2 (Access to rear sites), and the associated provisions and related assessment criteria, "physically separated" means separation of primary pedestrian access from vehicle access, parking and manoeuvring areas by way of: a) 150mm high, non-mountable vertical kerbs to primary pedestrian access; b) Minimum 1 m wide landscape buffer between primary pedestrian access and vehicle access, manoeuvring or parking areas; or c) wheel stops or similar barriers positioned to avoid vehicle access onto or over an adjacent primary pedestrian access. (3) Primary pedestrian access must be provided to each dwelling. The primary pedestrian access requirements specified in Table E27.6.6.1 apply for the full length of the pedestrian access: (4) Clear Width / Height Requirements for emergency responders	**Not applicable** The Site is not within a residential zone.

a. Where primary pedestrian access is adjacent to a vehicle access on the same site, no additional clear width/height requirement applies beyond the primary pedestrian access requirements in E27.6.6(3). b. Where primary pedestrian access is not adjacent to a vehicle access as described in (a), the following further requirements apply in addition to those in E27.6.6(3): i. Minimum clear width of 3m; ii. Minimum clear height of 2.1m; iii. The clear width may include the minimum formed primary pedestrian access width of 1.8m required in E27.6.6(3), but shall be free of permanent obstructions and spaces within which vehicles may park with the exception of: ◆ Soft/frangible landscape treatment with a maximum mature height of 600mm; ◆ Wall-mounted, fence-mounted or building-mounted lighting infrastructure. Note 1: Works within the legal road, such as connections to public footpaths, require prior approval from Auckland Transport as the road controlling authority. This approval is separate and additional to any land use or subdivision approval required. Note 2: E27.6.6(4) is intended to provide access for emergency responders. Emergency responder access requirements are further controlled by the Building Code. Plan users should refer to the Building Code to ensure compliance can be achieved at building consent stage. Granting of a resource consent does not imply that waivers of Building Code requirements will be granted. Fire and Emergency New Zealand publishes guidance in the context of Building Code requirements.	
E27.6.7. Provision for electric vehicle charging	
(1) Any new dwellings with undercover car parking (with the exception of new detached dwellings) must provide each undercover car park with the capability to install Electric Vehicle Supply Equipment with sufficient space for the necessary conduit, circuit and metering between the car park and an electrical distribution board on the same building storey, or ground level if the undercover car parking space is at ground level. (2) For developments requiring resource consent, compliance with this standard may be through one of the following: a. Resource consent drawings showing schematically the space identified for future Electric Vehicle Supply Equipment as required by (1); or b. An appropriate condition of resource consent (offered by the applicant and agreed by the Council) requiring that a detailed plan or plans be provided and certified by Council prior to the lodgement of any building consent application, showing the space identified for future Electric Vehicle Supply Equipment as required by (1). For developments not requiring resource consent, compliance with this standard must be demonstrated at building consent stage through building consent drawings showing the space identified for future Electric Vehicle Supply Equipment as required by (1).	**Complies** The parking spaces proposed in the apartment basement will have the capability to install Electric Vehicle Supply Equipment.

The Proposal infringes the following transport standards:

- **E27.6.1 Trip generation**
  - The Proposal includes more than 100 dwellings, more than 100 visitor accommodation and retail exceeding 1,667m^2 GFA.
- **E27.6.4.1 (3) Vehicle Access Restrictions**
  - A vehicle crossing is proposed on Dairy Flat Highway, an arterial road, for the surf park car park
  - An existing vehicle crossing on Dairy Flat Highway, is proposed to be used by vehicles exiting the water treatment plant, which is proposed to be a left-out only
  - Several private roads (vehicle crossings) create an intersecting leg onto roundabouts within the public road reserve, thereby are within 10 m of the intersection
  - Vehicle crossings in the Surf Village Centre Precinct and North-West Neighbourhood Precinct are within 10 m of a T-intersection
- **E27.6.4.2 Width and number of vehicle crossings**
  - The vehicle crossing to the Stage 5a vacant lot subdivision at the roundabout is 10 m wide, exceeding the permitted 9.0 m maximum width
  - The separate entry and exit vehicle crossings to the data centre is proposed to be about 3 m apart at the boundary where 6.0 m is the minimum separation distance.

The infringements above are assessed against the relevant assessment criteria in E27.8.2, summarised in the table below.

Table A 2: Chapter E27 Assessment criteria

E27.8.2.(3) – Activity/subdivision exceeds trip generation thresholds under E27.6.1	
Assessment Criteria	**Comment**
a) the effects on the function and the safe and efficient operation of the transport network as they relate to active modes (walking and cycling) and public transport infrastructure, particularly at peak traffic times; and b) the implementation of mitigation measures proposed to address adverse effects which may include measures such as travel planning, providing alternatives to private vehicle trips including accessibility to public transport, staging development, or contributing to improvements to the local transport network; or; c) the trip characteristics of the proposed activity on the site.	Refer to Section 5 of this ITA which includes an assessment of traffic effects on the key intersections of the Site and the proposed threshold for a secondary access point on Postman Road. Refer to Section 15 of this ITA which outlines proposed mitigation measures.
E27.8.2.(7) – Fewer than minimum loading spaces under E27.6.2.(8)	
(A) effects of the loading arrangements proposed for the site on the safe and efficient operation of adjacent transport network; (B) the specific business practice, operation or type of customer associated with the proposed activities; (C) the extent to which an accessible and adequate on-street loading space is available nearby or can be created while having regard to other demands for kerbside use of the road; (D) the extent to which loading can be provided informally on site or on another site in the immediate vicinity; or (E) the extent to which the reduction in loading spaces will contribute to the efficient use of land and the growth and intensification provided for in this Plan.	The Neighbourhood Precincts will not have dedicated on-site loading spaces given their proposed dwelling typologies. All loading and rubbish collection will be undertaken from the road or JOAL that the individual dwellings front on to, as is most practical.
E27.8.2.(8) – Infringes on design standards for parking/loading areas or access	
Assessment Criteria	**Comment**
a) effects on the safe and efficient operation of the adjacent transport network having regard to: *(i) the effect of the modification on visibility and safe sight distances;* *(ii) existing and future traffic conditions including speed, volume, type, current accident rate and the need for safe manoeuvring;* *(iii) existing pedestrian numbers, and estimated future pedestrian numbers having regard to the level of development provided for in this Plan; or* *(iv) existing community or public infrastructure located in the adjoining road, such as bus stops, bus lanes, footpaths and cycleways.* b) effects on pedestrian amenity or the amenity of the streetscape, having regard to: *(i) the effect of additional crossings or crossings which exceed the maximum width; or* *(ii) effects on pedestrian amenity and the continuity of activities and pedestrian movement at street level in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone and Business – Local Centre Zone.* c) the practicality and adequacy of parking, loading and access arrangements having regard to: *(i) site limitations, configuration of buildings and activities, user requirements and operational requirements;* *(ii) the ability of the access to accommodate the nature and volume of traffic and vehicle types expected to use the access. This may include considering whether a wider vehicle crossing is required to:* • *comply with the tracking curve applicable to the largest vehicle anticipated to use the site regularly;* • *accommodate the traffic volumes anticipated to use the crossing, especially where it is desirable to separate left and right turn exit lanes;* - *the desirability of separating truck movements accessing a site from customer vehicle movements;* - *the extent to which reduced manoeuvring and parking space dimensions can be accommodated because the parking will be used by regular users familiar with the layout, rather than by casual users;* *(iii) any use of mechanical parking installation such as car stackers or turntables does not result in queuing beyond the site boundary; or* *(iv) any stacked parking is allocated and managed in such a way that it does not compromise the operation and use of the parking area.*	Applicable infringement 1: The JOAL to the Stage 5a vacant lot subdivision will create an intersecting leg onto the Postman Road roundabout, measuring more than 9.0 m wide at the boundary. • While the activity within these lots will be subject to a separate Land Use Consent and not included as part of this Proposal, at this stage a wide vehicle crossing is proposed to cater for simultaneous semi-trailer entering at the same time as a medium rigid truck is stopped at the give-way line. Refer to vehicle tracking plan provided which shows the vehicle crossing width is not wider than it needs to be. • vehicles exiting the Site will be able to see towards the footpath and the road. Any fencing proposed will maintain visual permeability Applicable infringement 2: The separate entry and exit vehicle crossings to the data centre is proposed to be 3.1 m apart at the boundary where 6.0 m is the minimum separation distance. • The entry and exit vehicle crossings are separated by a central island of about 3 m wide at the site boundary. This central island is provided so it can allow for a future gate house. To provide a compliant 6.0 m separation will be too large for a gate house and will reduce the manoeuvring area in front of the loading docks; impacting the operation of the site. • The island between the entry/exit vehicle crossings provide a 2.5 m gap where footpath can stop between the vehicle crossings. This gap is sufficient for a cyclist to wait on (a bicycle being about 1.8 m long) without conflicting with the path of a vehicle. • vehicles exiting the Site will be able to see towards the footpath, cycle path and the road. The fencing proposed will maintain visual permeability.

E27.8.2.(11) – Construction/use of new vehicle crossing where vehicle access restriction applies	
Assessment Criteria	**Comment**
a) this applies where a Vehicle Access Restriction is identified in Standard E27.6.4.1(2) and Standard E27.6.4.1(3), other than a Vehicle Access Restriction Level Crossing or a Vehicle Access Restriction Motorway Interchange: *(i) effects of the location and design of the access on the safe and efficient operation of the adjacent transport network having regard to:* • *visibility and safe sight distances* • *existing and future traffic conditions including speed, volume, type, current accident rate, and the need for safe manoeuvring;* • *proximity to and operation of intersections;* • *existing pedestrian numbers, and estimated future pedestrian numbers having regard to the level of development provided for in this Plan* • *existing community or public infrastructure located in the adjoining road, such as bus stops, bus lanes and cycleways;* *(ii) the effects on the continuity of activities and pedestrian movement at street level in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone and Business – Local Centre Zone; or* *(iii) the practicability and adequacy of the access arrangements considering site limitations, arrangement of buildings and activities, user requirements and operational requirements, proximity to and operation of intersections, having regard to:* • *the extent to which the site can reasonably be served by different access arrangements including:* - *access from another road;* - *shared or amalgamated access with another site or sites* - *via a frontage road, such as a slip lane or service road; or* • *the extent to which the need for access can reasonably be avoided by entering into a shared parking and/or loading arrangement with another site or sites in the immediate vicinity* b) for any proposed access within a Vehicle Access Restriction Motorway Interchange Control: *(i) the intensity, scale and traffic generating nature of activities on the site are such that any adverse effects on the safe and efficient operation of the motorway interchange are avoided, remedied or mitigated; or* *(ii) the extent to which, when considered against other access opportunities for the site, comparable or better outcomes are achieved in terms of effects on the safe and efficient operation of the interchange* c) for any proposed access within a Vehicle Access Restriction Level Crossing Control: *(i) effects on the safe and efficient operation of the level crossing; or* (ii) *the practicability and adequacy of the access arrangements having regard to site limitations, arrangement of buildings and activities, user requirements and operational requirements.*	a) A new vehicle crossing is proposed on Dairy Flat Highway for the surf park car park. An existing vehicle crossing on Dairy Flat Highway, is proposed to be used by vehicles associated with the water treatment plant, which is proposed to be a left-out exit-only *(i) effects of the location and design of the access on the safe and efficient operation of the adjacent transport network having regard to:* For the new vehicle crossing for the surf park car park: ◆ visibility requirements can be met, refer to Section 7.1.1 and Appendix D of this ITA for assessment on visibility from the proposed car park vehicle crossing ◆ this access is proposed as a secondary access to the main car park, mainly used by servicing vehicles, as such will not have a lot of traffic. This is proposed to minimise service vehicles mixing with customer traffic in the main car park. For the existing vehicle crossing to be used by the WTP: ◆ this access is proposed as an exit-only only by trucks associated with the WTP and is proposed to only allow left-out only onto Dairy Flat Highway. The frequency of vehicles to the WTP is only expected to be once or twice a week, which is significantly less than the current residential land use. As such effects relating to the proposed use is expected to be no more than the current use. ◆ visibility requirements can be met, refer to Section 8.1 and Appendix E of this ITA for assessment on visibility from the existing vehicle crossing b) Not within Control specified. c) Not within Control specified.