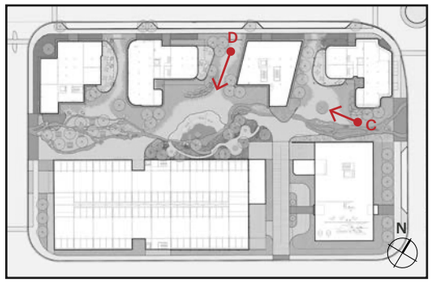
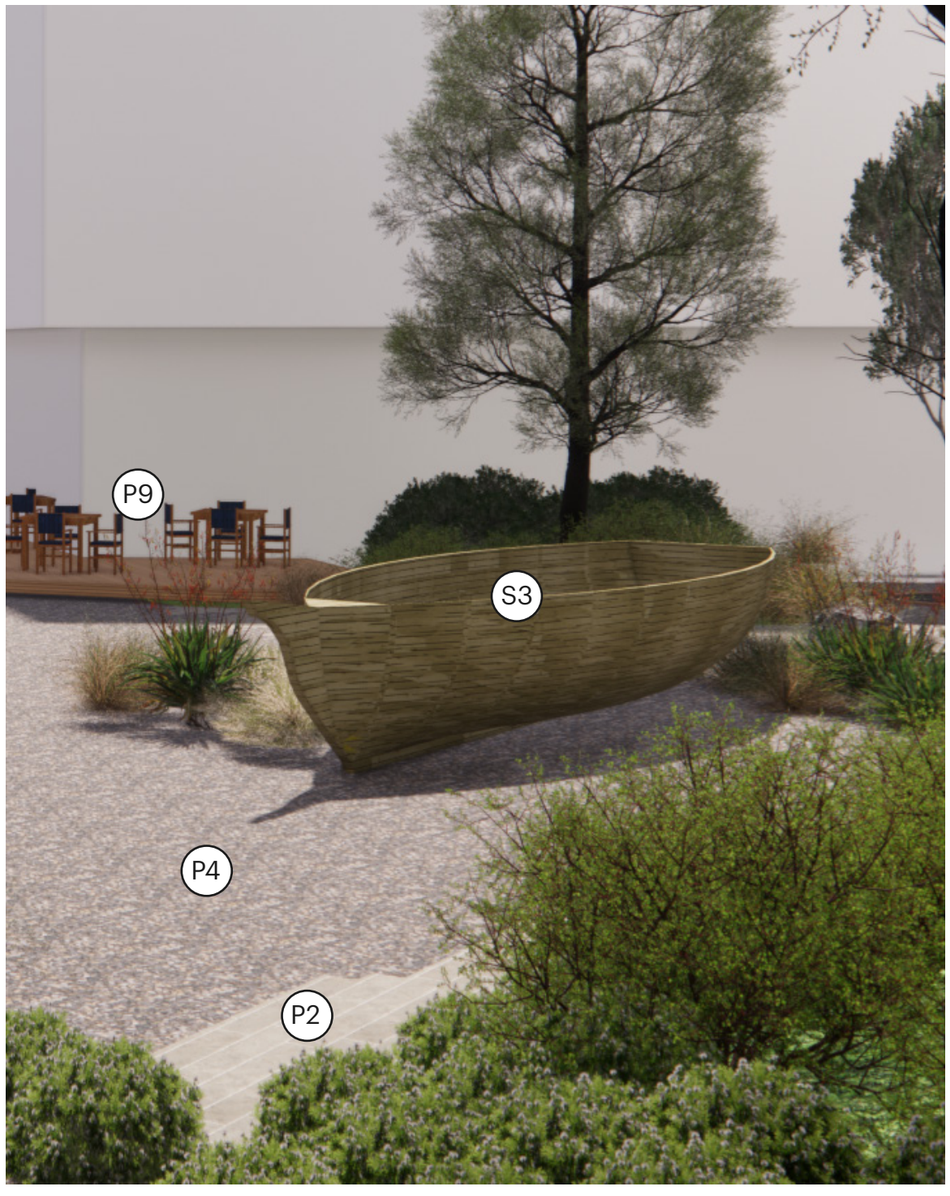


Key Plan

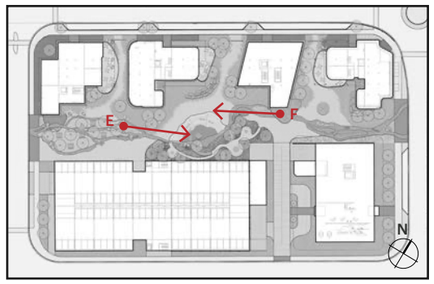
P2	Linear Feature Paving
P4	Permeable Resin Bonded Gravel
P8	Concrete ‘Floating’ Deck
S3	Large Sculpture - Interactive
S4	Large Sculpture - Centre Piece
S11	Stone Boulders - Tiered informal seating
S12	Vertical Vegetated Rain Chains



Tākaro – Interactive space
View C - Looking Northwest

Central Laneway
View D - Looking South

Te Ngākau – Heart centre
View E - Looking Northeast

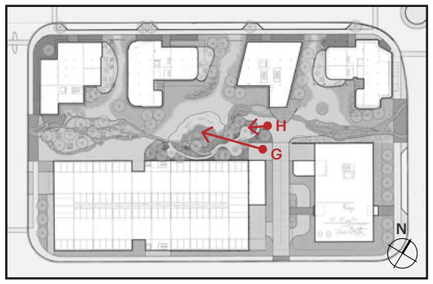


Key Plan

P1a	Natural Stone Schist Paving - Smooth
P1b	Natural Stone Schist Paving - Textured
P2	Linear Feature Paving
P4	Permeable Resin Bonded Gravel
P7	Tiered Concrete Steps
P9	Timber ‘Floating’ Deck

S3	Large Sculpture - Interactive
S4	Large Sculpture - Centre Piece
S7	Pergola
S9	Raised garden bed - edge
S10	Boardwalk
S11	Stone Boulders - Tiered informal seating
S12	Vertical Vegetated Rain Chains
S13	Tiered Water Feature

Te Ngākau – Heart centre
View F - Looking Southwest



Key Plan

P1a	Natural Stone Schist Paving - Smooth
P2	Linear Feature Paving
P4	Permeable Resin Bonded Gravel

S5	Reflection Pool
S7	Pergola
S8	Integrated Seating
S9	Raised garden bed - edge
S10	Boardwalk
S11	Stone Boulders - Tiered informal seating
S12	Vertical Vegetated Rain Chains

Rokoā – Healing Gardens
View G - Looking West

Rokoā – Healing Gardens
View H - Looking Southwest

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Integrated Transport Assessment

prepared for

Roa

Wanaka Health Precinct, Three Parks

November 2024

Integrated Transport Assessment

prepared for:

Roa

Wanaka Health Precinct, Three Parks

Novo Group Ltd
allie@novogroup.co.nz
PO Box 365, Christchurch 8140
P: (03) 365 5570
E: info@novogroup.co.nz
W: www.novogroup.co.nz

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Project Manager:	Rhys Chesterman, Director + Traffic Engineer/Planner
Prepared by:	Allie Mace-Cochrane, Transport Engineer
Reviewed by:	Rhys Chesterman, Director + Traffic Engineer/Planner

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List of Figures and Tables

Introduction

1. Roa has commissioned Novo Group to prepare an Integrated Transport Assessment (ITA) for the development of a five-storey integrated regional hospital, four/five multi-storey mixed-use health-related buildings, and an ancillary 305-space electric vehicle (EV) charger parking building within the Three Parks development.

2. This report provides an assessment of the transport aspects of the project. It also describes the transport environment in the vicinity of the site, the transport-related components of the proposal, and identifies compliance with the transport provisions in the District Plan. It has been prepared broadly in accordance with the Integrated Transportation Assessment Guidelines specified in New Zealand Transport Agency Research Report 422, November 2010.

3. It is proposed to develop the site at Sir Tim Wallis Drive to facilitate the activities listed below.

    - Integrated regional hospital (6,300m^2 GFA), involving theatres, inpatient, and post anaesthetic care beds.
    - Mixed-use building for allied health providers and ancillary uses, known as Building 1 (2,780m^2 over 4 levels),
    - Mixed-use building for medical specialists and ancillary uses, known as Building 2 (3,260m^2 over 5 levels),
    - Mixed-use building for integrated health and wellness, and ancillary food/beverage outlets, known as Building 3 (1,770m^2 over 4 levels), and
    - Mixed-use building for medical specialists and ancillary food/beverage outlets, known as Building 4 (2,960m^2 over 5 levels).

4. The activity will be supported by off-street parking accommodated within a split level EV charger and parking building, with three full above-ground floors, a quarter basement, and a quarter third floor. The building includes 305 parking spaces, including eight mobility spaces, 78 EV charger spaces, 150 cycle parking spaces, with an additional 18 provided at-grade outside of Buildings 1-4, 16 motorcycle parks, and an area for loading vehicles within the basement level. The EV charger parking building is accessed from Deering Street and Road 4 (which is an extension of McCormick Street), with some hospital staff and loading vehicles using the Deering Street access only. The general public will use the access from Road 4.

5. The EV chargers will be powered by solar energy, captured by the solar panels on the roof of the parking building.

6. The site location is illustrated in **Figure 1** and a copy of the proposed site layout is provided in **Appendix 1**.

Figure 1. Locality of the site.

Existing Transport Environment

Existing Road Network

Site Frontage Roads

7. The proposal has frontage onto four roads within the Three Parks development, noting that two of these roads are currently under construction. The key characteristics of these roads are summarised in **Table 1** below.

Table 1. Summary of the frontage road characteristics.

Key Feature	Sir Tim Wallis Drive	Deering Street	Road 4 (McCormick Street)	Road 6 (Grace Wright Drive)
Road Classification	**Not classified (assumed to be *Collector*)**	**Not classified (assumed to be *Local*)**	**Not classified (assumed to be *Local*)**	**Not classified (assumed to be *Local*)**
Cross-Section Description	• Two 3.0m wide through lanes • Two 1.2m wide cycle lanes • 2.5m wide indented parking bays on both sides	• 11.0m wide carriageway, allowing for two 3.0m wide through lanes and parking (2.5m wide) on both sides	(Not Constructed)	(Not Constructed)
Traffic Volumes	2,800 veh/d, including 6% HCV (Mobile Road, July 2023)	100 veh/d, including 6% HCV (Mobile Road, July 2023)	(N/A - Not Constructed)	(N/A - Not Constructed)
Speed Limit	40km/h	40km/h	40km/h	40km/h
Cycling Infrastructure	1.2m wide cycle lanes	Nil	Nil	Nil
Pedestrian Infrastructure	2.0m wide footpath on both sides	1.8m wide footpath on both sides (assumed to mimic the western segment of Deering Street)	Not constructed but assumed	Not constructed but assumed
Public Transport	None available	None available	None available	None available

Sir Tim Wallis Drive/State Highway 84 Intersection

8. The intersection of Sir Tim Wallis Drive and State Highway 84 (Wanaka-Luggate Highway) is a three-legged roundabout, as shown in **Figure 2**.

Figure 2. Sir Tim Wallis Drive/State Highway 84 roundabout.

9. This intersection was proposed as part of *Plan Change 4,* with traffic modelling undertaken by the Traffic Design Group Limited in 2010[1]. This predicted that the intersection would operate at a level of service D (LOS D) following the completion of the Three Parks development.

Sir Tim Wallis Drive/Ballantyne Road Intersection

10. The intersection of Sir Tim Wallis Drive and Ballantyne Road is a give-way controlled T-intersection, as shown in **Figure 3**. There are left and right turn lanes on Sir Tim Wallis Drive, a left turn slip lane on Ballantyne Road, and a wide shoulder on Ballantyne Road to allow through vehicles to undertake right turning vehicles. This intersection was proposed as part of *Plan Change 16*, which included an access assessment by MWH in 2009.

Figure 3. Sir Tim Wallis Drive/Ballantyne Road T-intersection.

[1]Traffic Generation and Distribution (TDG Traffic Assessment, September 2010)

Sir Tim Wallis Drive/Deering Street

11. The intersection of Sir Tim Wallis Drive and Deering Street is a give-way controlled crossroads intersection, as shown in **Figure 4**. Sir Tim Wallis Drive is the major road, with both segments of Deering Street as the minor road. There are pedestrian refuge islands provided at the intersection on both segments of Deering Street and pedestrians cutdowns on Sir Tim Wallis Drive.

Figure 4. Sir Tim Wallis Drive/Deering Street T-intersection.

Sir Tim Wallis Drive/Road 6

12. The intersection of Sir Tim Wallis Drive and Road 6 is a four-legged roundabout, with one circulating lane, as shown below in **Figure 5**. Splitter islands, with pedestrian facilities, are provided on all four legs.

Figure 5. Sir Tim Wallis Drive/Road 6 roundabout.

Crash History

13. The NZ Transport Agency Crash Analysis System (CAS) has been reviewed to identify crashes that have been reported within the Three Parks development, and the intersections of Sir Tim Wallis Drive/State Highway 84 and Sir Tim Wallis Drive/Ballantyne Road. This review has been undertaken for the most recent five-year period (2018-2023).

14. It is noted that in this five-year period, Sir Tim Wallis Drive was constructed, and construction was occurring at the State Highway 84/Sir Tim Wallis Drive intersection. In addition, COVID-19 travel restrictions will have affected traffic volumes and the area is not yet fully developed.

15. Two crashes have been recorded at the Sir Tim Wallis Drive/Ballantyne Road intersection. The non-injury crash resulted from a vehicle failing to give way to through traffic when turning right and the minor injury crash resulted from a vehicle failing to give way to a cyclist.

16. No other crashes have been reported within this five-year period.

Alternative Transport Modes

Cycling

17. The site is well located to cycle infrastructure, with cycle lanes along Sir Tim Wallis Drive extending into a shared-use path near the State Highway 84 intersection and the Ballantyne Road intersection. A shared-use path is provided on one side along State Highway 84 and Ballantyne Road, with both terminating near the intersection of State Highway 84, Ardmore Street, and Brownston Street, allowing cyclists from the site to access the town centre.

Pedestrians

18. At least one footpath is provided on each road throughout the development, with these connecting to the shared-use path infrastructure on Ballantyne Road and State Highway 84.

19. The posted speed limit through the wider Three Parks development area is 40km/h, which promotes a safer pedestrian environment through slower road speeds.

Existing Car Parking

20. There are indented parking bays provided along Sir Tim Wallis Drive, including the site frontage. On-street parking is also provided on both sides of Deering Street, and it is assumed that this provision will continue for Road 4 and 6.

Future Transport Network

Three Parks Structure Plan

21. The Three Parks development is a mixed-use development providing for commercial, retail, recreation, and residential. The overarching *Three Parks Structure Plan* (shown below in **Figure 6**) was approved as part of the original plan change to the (previous) Operative District Plan, which has since been superseded by the Proposed District Plan (noting that this is now operative for this site, and the remainder of Three Parks). Notwithstanding, this structure plan was developed with the expected traffic flows of the future Three Parks development in mind.

22. The fixed roads between Riverbank Road and Ballantyne Road will be constructed during future stages of the Three Parks development. Sir Tim Wallis Drive, the main road between Ballantyne Road and State Highway 84, has already been constructed and opened. Additional roads not identified within the structure plan will be constructed through future stages.

23. The wider Three Parks development is currently under construction, with the transport network evolving through each stage and Sir Tim Wallis Drive acting as the main spine road. The network itself has been designed based on the expected traffic flows at full development.

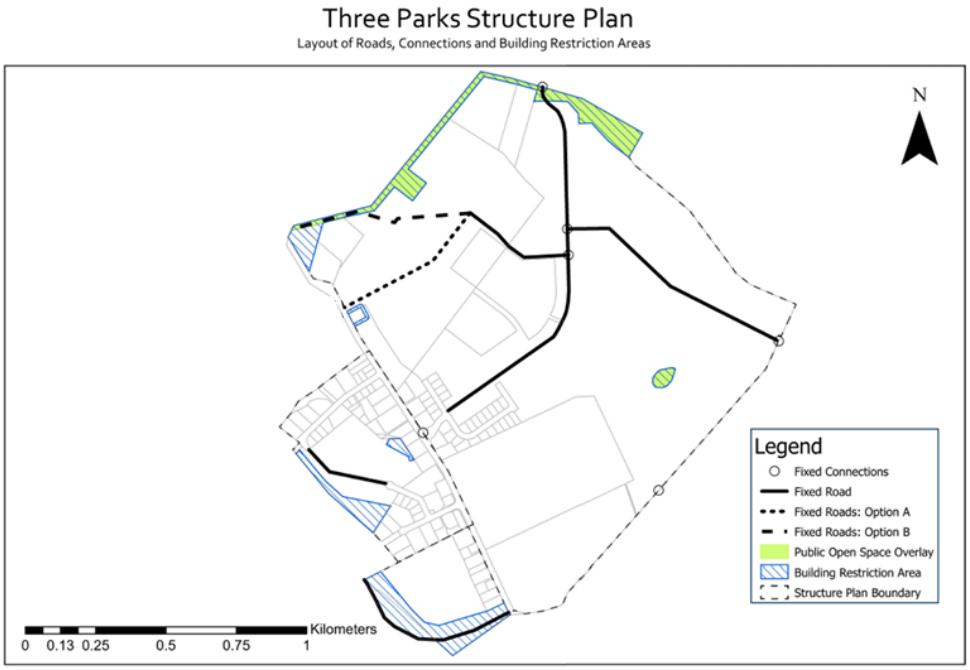


Figure 6. Three Parks Structure Plan.

Plan Change 16 (Operative from January 2011)

24. This plan change to the (previous) Operative District Plan rezoned the area of land, referred to as Three Parks, from rural paddocks, to enable the development of a highly urbanised area, with a range of land uses in accordance with the Wanaka Structure Plan (at the time), thereby meeting many of Wanaka's needs as a growing community. In addition, changes to Part 1 (introduction), Part 10 (Transport), Part 15 (Subdivision) and Part D (Definitions) of the Partially Operative District Plan were then proposed to enable the rezoning.

Plan Change 4 (Operative from July 2013)

25. This paved the way for the provision of low and medium density residential and business uses for the 46.8-hectare site between the Golf Course and the Three Parks Zone. The proposed zoning was intended to reflect the zoning outlined in the Wanaka Structure Plan that was adopted by the Council in 2007.

26. The Plan Change 4 documentation[2] included a Traffic Assessment prepared by Traffic Design Group. This assessment was predicated on the basis that the plan change area would

[2]See Council website: Plan changes to the Operative District Plan | Queenstown Lakes District Council (qldc.govt.nz)

accommodate 840 residential properties together with additional business and commercial areas[3]. Their assessment assumed a total of 6,720 daily movements (IN + OUT) and 750 movements during each of the peak hours. A further assumption was that 60-80% of the total traffic would use the State Highway and 20-40% would use Ballantyne Road. This suggested that the State Highway intersection would accommodate 450-600 vehicle movements in each peak hour, with Ballantyne Road accommodating 150-300 vehicle movements.

27. At that time, a priority intersection or a roundabout was considered appropriate to accommodate the traffic flows at Ballantyne Road, with the former being considered the most likely. A roundabout was seen as the most appropriate form of intersection at the State Highway, which has since been constructed.

Future State Public Transport

28. There is currently no public transport servicing the Wānaka area. However, the Otago Regional Council's (ORC) draft *Long Term Plan 2024-2034* proposes public transport investigations or trials in Wānaka.

29. The community shuttle trials which occurred in 2022 and 2023 included a route along Sir Tim Wallis Drive. Although both trials found that uptake was generally low, this may have been somewhat impacted by the extent of Three Parks that had been developed. Therefore, as this area grows (both as commercial and residential) it is expected that there will be a higher demand for public transport.

30. The staging of the Three Parks development has resulted in the areas bisected by Sir Tim Wallis Drive developing first. Therefore, in order to gain higher partronage numbers, the bus service should initially route and have stops along Sir Tim Wallis Drive. It is noted that this is dependent on when ORC implements a public transport service.

31. Following the completion of Three Parks, demand for public transport will be spread across a broader area. It is anticipated, however, that a higher demand will remain in and around Sir Tim Wallis Drive due to the consolidated employment area. Additionally, walking and cycling infrastructure could be implemented to encourage a larger catchment to use the service along this road.

32. The indented parking bays along Sir Tim Wallis Drive measure approximately 3.0m wide from the kerb face to the nib kerb face. Therefore, these are of suitable width to be retrofitted for out-of-lane bus stops.

33. It is assumed that the internal roundabouts within Three Parks have been designed to accommodate a bus, noting that they already accommodate heavy vehicles associated with the Three Parks Business zone and Business Mixed Use zone.

Consented Development

Subdivision

34. In May 2023, the Council approved a consent (RM230084) for 28 commercial lots and associated roading, laneways, infrastructure, and earthworks.

[3]See Page 1, Traffic Generation and Distribution (TDG Traffic Assessment, September 2010)

35. The project site is made up of 13 of these commercial lots (Lots 49 – 61), and the central laneway.

36. Road 4 and 6 form part of this approval, and all physical works are currently under construction.

Service Station (Electric Vehicle Charging Facility)

37. In January 2024, the Council approved a consent (RM230650) for an EV charging facility on Lot 981 (future Lots 57-59).

38. This provided for 78 EV parking spaces, including two mobility spaces, with separate ingress and egress access, and 6.0m of queue space. By nature of the number of car parking spaces proposed, this activity required assessment under the high traffic generator rule (Rule 24.9.11).

39. The initial traffic assessment noted that the site was restricted to the 78 charging ports provided; however, it did not provide an estimated traffic generation as a baseline. The TRICS database contains one survey of an EV charging station, which indicated a traffic generation of 5.75 trips per day per bay. This would result in an estimated traffic generation of 449 vehicles per day from this proposal.

Existing Site

Site Extents

40. The proposal utilises the entire block of land, including the private lane way, encompassed by Sir Tim Wallis Drive, Deering Street, Road 4 (McCormick Street extension), and Road 6 (Grace Wright Drive extension).

Baseline

41. A resource consent is required for all buildings within the *Business Mixed Use Zone* and the *Three Parks Business Zone*; however, assuming that all the matters of discretion are met, the planning framework does allow for the following permitted activities within these zones:

- residential visitor accommodation and homestays above ground floor level (*Business Mixed Use Zone*),
- activities that are not listed in the table (Section 16.4) and comply with the standards, including commercial, medical consulting, offices, retail and hospitality, (*Business Mixed Use Zone*),
- industrial and service activities (*Three Parks Business Zone*),
- trade suppliers (*Three Parks Business Zone*),
- showrooms (*Three Parks Business Zone*),
- office and retail activity ancillary to the principal use of the site and not greater than 30% of the GFA (*Three Parks Business Zone)*, and
- service stations (*Three Parks Business Zone*).

42. **Table 2** sets out hypothetical options of what could be constructed on future Lots 49-61 (provided the building is compliant with the standards), with their corresponding traffic generation rates. The total gross floor areas have been determined by the permitted 75% building coverage, with the exception being the service station. The permitted height enables commercial buildings three-storeys in height.

43. The gross floor area of the service station has been based on the size of the previously approved EV charging facility; however, it is noted that this could have a maximum site coverage of approximately 1,991m^2.

Table 2. Corresponding traffic generation for hypothetical options on future Lots 49-61.

Future Lots	Activity	Estimated Total Gross Floor Area Across Lots (m^2)	Daily Trip Rate (veh/d/100m^2) / Peak Hour Trip Rate of Activity (veh/h/100m^2)	Daily Traffic Generation (veh/d) / Peak Hour Generation of Activity (veh/h)
49-54	Separate three-storey offices	12,611	16.2 / 2.6 (TRICS database)	2,043 / 328
55, 59-61	Industrial buildings	8,845	6.9 / 0.7 (TRICS database)	610 / 62
56-58	Service station	716	718.0 / 100.9 (Waka Kotahi Research Report 453)	5,141 / 722
Total				**7,794 / 1,112**

44. It is noted the above traffic generation estimates do not necessarily represent new network trips, as trips to the service station are usually an addition to a trip for another purpose.

Proposed Development

45. The comprehensively designed project is explained in detail in paragraph 3, and includes:

- an integrated regional hospital,
- four front health-related buildings with ancillary retail and hospitality, and
- an EV charger car parking building with spaces for 305 vehicles.

Trip Generation

Generation

46. Quantifying the overall traffic generation is difficult to predict given that tenants and uses have not been finalised. As such, a varity of activities have been considered to provide a robust assessment. The traffic generation of the proposed activity has been based on data for comparable-sized developments in the TRICS database (noting that it provides more relevant categories and units), and where similar-sized development data was not available, the *ITE Trip Generation Guid*e (hospital only). The only exception to this is the ancillary food and

beverage activity, where multiple outlets will have varying floor sizes on the site, and subsequently the 'café' category and smaller associated floor sizes has been used as a catch-all in the TRICS database. The TRICS data is provided in **Appendix 2** and the trip rates are summarised in **Table 3**.

Table 3. Summary of trip rates.

Activity	Daily Trip Rate per 100m^2 (veh/d/100m^2)	Peak Hour Trip Rate of Activity per 100m^2 (veh/h)
Integrated Hospital (ITE)	17.760	1.570
Allied Health/Health Consultancy (TRICS)	9.887	1.237
Food and Beverage (TRICS)	113.161	13.855
Commercial/Retail (TRICS)	141.046	11.545
Offices/Lab (TRICS)	12.485	1.144

47. The estimated traffic generation for each activity using the trip rates above is shown in **Table 4**.

Table 4. Resulting daily and peak hour trip generation for each activity.

Activity	Total Gross Floor Area (m^2)	Estimated Average Daily Traffic (veh/d)	Estimated Peak Hour Trip Generation (veh/h)[4]
Integrated Hospital	6,300	1,119	99
Allied Health/Health Consultancy	2,960	293	37
Food and Beverage	1,075	1,217	149
Commercial/Retail	1,265	1,784	146
Offices/Lab	5,470	683	63
Totals		**5,096**	**494**

48. Whilst the estimated traffic generation appears high, it is generally commensurate with the traffic generation from permitted activities within these two zones[5] that could have been constructed on future Lots 49 to 61. Considering the hypothetical permitted baseline provided

[4] Peak hour generation of the activity rather than during the adjacent network peak hour.
[5]The part of the site fronting Sir Tim Wallis Drive is zoned *Business Mixed Use*; and the remainder is zoned *Three Parks Business*.

in **Table 2**, this proposal is estimated to generate considerabley less daily and peak hour traffic, by approximately 2,698 vehicles per day and 618 vehicle movements per hour.

49. Furthermore, due to the massing of the site with multiple activities, many individuals are expected to utilise trip chaining (i.e., utilising various land use activities as part of one trip). For example, considering their ancillary nature, the food and beverage outlets are likely to service morning tea, lunch, and/or afternoon tea demand from employees of other businesses on the site, as well as nearby sites within walking distance. This will reduce the calculated traffic generation estimates for this proposal, as well as potentially reducing the traffic generation associated with existing or future activities on other sites, whereby employees might otherwise have to travel further afield by car for these services.

50. Considering the operation of the varying activities proposed on the site, it is unlikely that each activity will have the same corresponding peak hour. For example, the morning and afternoon commuter peak hour is likely to be weighted towards traffic from conventional offices and commercial retail which have staff travel patterns that coincide with those network peaks. Conversely, hospitals often operate with shift work hours that sit outside of conventional commuter peak hours, and food and beverage outlets can have mid-morning, midday, mid-afternoon and evening peaks. Accordingly, a lower commuter peak hour generation could be justified.

Parking Demand

Car Parking Demand and Supply

51. The District Plan was updated to remove minimum parking requirements following the release of the *National Policy Statement on Urban Development 2020 (NPS-UD 2020)*. Prior to that, and as part of the proposed District Plan process, the Transport Chapter was reviewed, and the parking requirements that were adopted were considered to be a suitable proxy for acceptability by the Council. **Table 5** shows the parking rates from the previous revision of the Proposed District Plan and the corresponding parking requirements for each activity. For ease, it has been assumed that the public floor area of the food and beverage outlets is equal to the gross floor area; however, in practice, this will not be the case and a lower parking requirement would be expected.

Table 5. Parking requirements for each activity (Previous QLDC District Plan).

Activity	Parking Rate	Parking Requirement (spaces)
Integrated Hospital (71 beds assumed)	1 space/5 beds (visitor) 2 spaces/5 beds (staff)	43
Allied Health/Health Consultancy (50 staff assumed)	2 spaces/professional staff (visitor) 1 space/professional staff and 1 space/2 other FTE (staff)	123
Food and Beverage (1,075m² GFA assumed)	1 space/25m^2 PFA (visitor) 1 space/100m^2 PFA (staff)	54
Commercial Retail (1,265m² GFA assumed)	1 space/25m^2 GFA (visitor) 1 space/300m^2 GFA (visitor)	115
Offices/Lab (5,470m² GFA assumed)	1 spaces/50m^2	109
Total		**444**

52. As noted in the previous section, it is anticipated that many people will utilise trip chaining, which will result in a lower parking demand. Further to this, varying frequencies of parking turnover would be expected for all activities, which would act to improve the implied shortfall.

53. It is noted that whilst *NPS-UD 2020* has removed the requirement to provide on-site parking, this proposal does include the provision of 305 parking spaces, including 78 EV spaces, and 16 motorcycle parking spaces. The intention of providing this on-site parking is a market-led approach to providing a suitable supply to cater for the anticipated demand. The provision of these spaces will reduce the demand for on-street parking on the surrounding road network.

54. The 305 parking spaces are provided within the EV charger parking building. **Table 6** summarises the car parking provisions on each level, noting that the parking spaces on the basement level will be reserved for use by hospital staff.

Table 6. Summary of car parking provisions on each floor.

Floor	Parking Spaces	Accessible Parking Spaces	Motorcycle Parking Spaces
Basement	24	4	8
Ground	54 (28 EV)	4 (2 EV)	8
First	96 (48 EV)	0	0
Second	96	0	0
Third	27	0	0
Total	**297**	**8**	**16**

55. The accessible parking spaces are proposed to be 2.5m wide and 5.0m long, with an additional 1.3m of width between parking spaces to enable a wheelchair user to exit the vehicle.

56. The general parking spaces are proposed to be 2.6m wide and 5.0m long, with 9.2m wide aisles. Therefore, these are suitable to accommodate all user classes specified in Table 29.11 of the District Plan.

57. Roa participated in a pre-application meeting with the ORC, the minutes of which were provided on 16 May 2024. During this meeting, the ORC raised the following point: “providing 305 parking spaces does further encourage the car-dependent Wānaka population.”

58. There is currently no public transport provider in the Wānaka area and outside of the shared-use paths on State Highway 84 and Ballantyne Road, no dedicated cycle infrastructure. In addition, the 2020-2023 Household Travel Survey indicates that the average commuter cycle trip is 4.0km. As the site is located approximately 2.0km from the nearest residential area (noting this will reduce following the development of the Three Parks residential area) and compounded by the urban sprawl of Wānaka, some residents may perceive that the distance between the site and their house is not viable for cycling.

59. Whilst it is acknowledged that providing on-site parking spaces facilitates travel by car, the absence of alternate mode infrastructure means that removing this parking will not facilitate the desired mode shift, and will instead increase the demand for on-street parking. This can lead to a number of adverse effects on the function of the surrounding road network, as well as impacting driver behaviour (e.g., risky manoeuvres to access parking spaces, etc.).

60. The split-level design of the parking building means that when options for alternative modes of transport increases, the building can be repurposed for other uses (e.g. offices) to facilitate and encourage mode shift.

61. It is noted that there will always be a need for some car parking provisions because hospital patients and patients of the health consultancies will generally be in a vulnerable state, where walking large distances or using future public transport is not possible.

Loading

Integrated Hospital

62. Loading is provided on the basement level for the hospital. This space accommodates a large rigid truck, which is required for unloading/loading MRI equipment. Further to this, the basement height and headroom clearance on the ramp has been specifically designed to accommodate this vehicle. The basement loading will also include supplies for the kitchen, and access to the plant and back of house which is at basement level of the hospital.

63. Other delivery vehicles, such as courier vans, that do not have access to the basement level of the building, will use the pick-up/drop-off area at ground floor to the rear of the hospital for loading/unloading. Dwell times of these vehicles are typically low, although it is anticipated that on-site management will be required to ensure appropriate enforcement and high turn-over.

Allied Health Buildings

64. The four health/commercial buildings fronting Sir Tim Wallis Drive do not have direct access to the loading in the basement; however, loading for larger vehicles (e.g., small rigid vehicles) could still occur in the basement level. There is a lift located at this level which provides direct access to the pedestrianised lane way, and subsequently the four buildings along the Sir Tim Wallis Drive frontage. Loading for these buildings could also occur on the street frontage, noting that the application site includes four road frontages - although this would need resolution with Council and would ultimately be dependent on the tenants (currently unknown) and the final uses.

Cycle Parking

65. The ground floor of the parking building has three separate areas for cycle parking, with two of these specifically for staff associated with the hospital and four commercial buildings, and the other area intended to service the general public. In total, 114 and 36 cycle parking spaces are provided for staff and the general public, respectively. Additionally, 18 cycle parks will be provided at-grade outside of the four buildings fronting Sir Tim Wallis Drive.

66. Access to the staff cycle parking will be controlled by a locked door, which either requires a pin or a swipe card to unlock.

67. In addition to the cycle parking, 67 lockers and seven unisex showers are proposed to be included within the hospital staff cycle parking area. It is anticipated that the additional requirements for end of trip facilities will be provided within the commercial buildings on the Sir Tim Wallis Drive frontage.

Public Transport

68. It is anticipated that the proposal will generate a high-level of employment. Therefore, once a public transport provider and network is established, Roa would welcome the construction of bus stop infrastructure outside their site.

69. Given the Three Parks area has been earmarked for development since the Queenstown Lakes District Council released the Wānaka Structure Plan in 2004, and there have been two plan change hearings (PC4 and PC16), future public transport should have already been considered. Therefore, whilst this proposal may be seen as a major change in land use, its generation is commensurate with permitted activities in the area and subsequently, this should

not be seen as the only generator for public transport need (i.e., this proposal should not be the source of all developer funding for a future PT route through Three Parks).

Site Layout

Parking Building Layout

General Layout

70. The split-level parking building is considered to be ancillary to all activities on the site, and includes a quarter of a basement level and third level. Access (ingress + egress) to the basement level will be via a vehicle crossing on Deering Street and access to the remainder of the building will be via a vehicle crossing on Road 4.

71. The entry and exit of the parking building will be controlled by an electronic barrier arm (or similar), which will most likely be controlled with number-plate recognition to increase efficiency at the access. For the main building, which will generally be fully accessible to the general public, vehicles will enter and circulate in a clockwise direction and exit in an anticlockwise direction.

72. All aisles are 9.2m wide on each level, allowing for generous two-way vehicle movements throughout the building. This then narrows to 8.2m at the ramps, which is still sufficient for two-way vehicle movements. Vehicle tracking is provided in **Appendix 3.**

73. The basement level, which will generally be restricted to selected hospital staff and for deliveries, requires no circulation with a straight inbound/outbound aisle and a turning area at the rear.

74. EV charging ports are provided on the ground and first floor for parks located in the middle of the building. Each charging station can service two vehicles and will be powered by solar energy captured by the solar panels on the roof of the building.

Queue Length

75. The queue length for the public access is approximately 25.0m (equivalent to four car lengths) from the barrier arm to the footpath. The hospital staff and loading access has a queue length of approximately 7.0m (equivalent of one car length).

Pedestrian Circulation

76. Pedestrian stairs and lifts are provided at the midpoint of the building on the eastern and western side. These connect to the exterior footpath on the ground floor, which leads to the commercial buildings and the hospital. A dedicated pedestrian space is also provided at the access, creating separation from motor vehicles. This path then leads to the hospital entrance via a priority path across the pick-up and drop-off area.

Hospital

Pick-up and Drop-off Area

77. Three pick-up and drop-off spaces are provided for the hospital, which share the same vehicle crossing as the main car parking building entrance on Road 4. Vehicle tracking for this is provided in **Appendix 3.**

Emergency Vehicle Access

78. Two emergency vehicle (ambulance) bays are provided behind the parking building on the hospital side. Ambulance access will be via the same vehicle crossing on Road 4, with access to the rear area controlled by raised bollards, which will automatically recede to ground level for an inbound/outbound ambulance.

79. The ambulances will not be based at the hospital, meaning only inbound movements will be emergency response trips.

Allied Health Buildings

80. Access to the four allied health buildings will be via the footpath on Sir Tim Wallis Drive or via the newly formed pedestrian lane way between these buildings and the car parking building.

Cycle and Pedestrian Access

81. The existing laneway through the site will be transformed into a pedestrian/cycle space, with vehicle access blocked by suitable infrastructure (except for emergency vehicles unrelated to the hospital). This will provide safe pedestrian connections between the parking building and commercial buildings, and safe cycle connections to the cycle parks in the parking building.

District Plan Compliance

82. The site is bisected by two zones along the western boundary of the laneway. The four front buildings are located within the *Business Mixed Use* zone, and the hospital building and parking building are located within *Three Parks Business* zone, with these zones included in the Proposed District Plan.

Chapter 29. Transport

29.4 Rules – Activities		
Table 29.1 Transport related activities outside a road		
29.4.7 Off-site parking areas in the General Industrial Zone, Coneburn Industrial Zone, Business Mixed Use Zone and Local Shopping Centre Zone, excluding off-site parking used exclusively for the parking of coaches and buses.	**RD**	Parking for the four allied health buildings along the Sir Tim Wallis Drive frontage is located within the proposed parking building, which although are part of the same comprehensive development, are technically located on separate lots/sites.
29.4.11 High Traffic Generating Activities Any new land-use or subdivision activity, including changes in use that exceeds the traffic generation standards or thresholds set out in Table 29.5, excluding in the Airport Zone.	**RD**	Mixed-use activity provides more than 50 carparking spaces. Also generates more than 400 veh/d and 50 veh/h.

Overall Application Status

83. It is understood that the overall application status is *Non-complying,* as a hospital is proposed in the *Three Parks Business* zone. For the purposes of this assessment, all non-compliances associated with the transport chapter of the Proposed District Plan have been assessed, alongside the relevant matters of discretion. The full assessment of transport compliance is provided in **Appendix 4**.

Assessment of Transport Effects

Accessible Parking Numbers and Location

84. Where multiple activities are occurring on one site, the District Plan states that the number of accessible parking spaces is based on the activity generating the highest requirement. Allied Health and the health consultancy (classed as *Health Care Facilities* in the District Plan), based on the assumption of 35 professional staff members and 15 other full-time equivalents, generate the highest requirement of two visitor parks and three staff parks.

85. Whilst eight parks are provided in the parking building, four of these are located on the basement level, which is only accessible by hospital staff. This leaves a shortfall of one staff accessible park. It has been recommended that these spaces are relocated onto the ground floor level, and it is understood that this will occur in due course. Therefore, compliance with accessibility parking numbers will be achieved.

86. The District Plan requires direct access to be provided between the car parks and the building(s). The accessible parking spaces on the ground floor level (noting the four spaces on the basement level will be relocated to this level) are located as close as practicable to the hospital entrance, with a priority pedestrian path provided from the parking building to the hospital, and to the footpath which provides access to the pedestrianised space and the other buildings.

87. Further to this, it is anticipated that any mobility-impaired users visiting the health care facilities (or any of the four buildings along the frontage of Sir Tim Wallis Drive) will utilise the on-street parking on Sir Tim Wallis Drive to minimise travel distance.

88. For the reasons discussed above, the mobility impaired are fully catered for, and any resulting effects are considered to be **less than minor**.

Pick-up/Drop-off Provisions

89. The District Plan requires one pick-up/drop-off space to be provided per 10 professional staff. At this stage, it is unknown how many professional staff will be employed by the hospital; however, it is assumed this will exceed 30, resulting in a non-compliance with the number of pick-up/drop-off spaces provided in this proposal.

90. The three spaces proposed will be monitored and managed by on-site staff to ensure an efficient (and safe) turn-over. In the event that there is a high demand for these spaces, hospital staff could tailor discharge times to spread this demand over a period of time. Furthermore, as the parking building is located close to the hospital entrance, it is anticipated that many people will favour locating a car park and then escorting the patient (passenger) to hospital.

91. No drop-off/pick-up facilities are proposed for the allied health Buildings 1-4. It is anticipated that anyone driving to an appointment will park their car in the parking building and anyone being dropped off/picked up would have this occur at the parking spaces on Sir Tim Wallis Drive or adjoining roads, as these are the closest locations to the building entrances.

92. For these reasons, the number of pick-up/drop-off spaces is considered to be adequate and fit-for-purpose. Accordingly, the effects on the transport environment are considered to be **acceptable** and **less than minor.**

Queuing Space

93. The District Plan requires a queue space provision of 30.0m (equivalent to five car lengths) for access to the above-ground levels and 12.0m (equivalent to two car lengths) for access to the basement level of the parking building. The proposal provides approximately 25.0m (equivalent to four car lengths) and 7.0m (equivalent to one car length), respectively.

94. At both access locations, the width of the vehicle crossing allows for two-way traffic flow, meaning that opposing traffic will not conflict.

95. An electronic barrier arm with number plate recognition will be considered to ensure an efficient flow of traffic in and out of the building. A queue exceeding four car lengths will result in spillover onto Road 4; however, due to the proposed barrier system, it is expected that this queue will diminish quickly. It is also noted that due to the *local road* classification of Road 4, traffic volumes will be low (noting that only one vehicle crossing is proposed along the entire block frontage).

96. For basement level access, it is proposed that a barrier arm/door be installed, which requires a swipe card to enter. There is sufficient space for one vehicle to queue in front of the door without encroaching on the footpath. This car parking only serves 28 spaces, and the barrier arm/gate would retract quickly and efficiently to allow the vehicle to enter quickly and efficiently, with minimal risk of a second vehicle having to queue on the road frontage.

97. For the reasons discussed above, the queue space is considered to be safe, efficient, and fit-for-purpose. As such, the effects are considered to be **less than minor**.

Loading Areas

98. The District Plan requires off-street loading to be provided on every site within the *Business Mixed Use Zone*.

99. Loading for the four buildings fronting Sir Tim Wallis Drive can occur within the basement level of the parking building, as frequent delivery drivers will have access to this level (e.g., milk deliveries to the food and beverage outlets). A lift provides direct access to the pedestrianised lane way, which then leads to the four buildings.

100. Due to the distance between the parking building and the four buildings, it is likely that smaller delivery vehicles (i.e., vans) will use the road frontage (noting that the site includes four frontages and this would need resolution by Council). It is assumed that these would largely cater for the office based activities, as these do not typically receive large goods on a regular basis. These types of deliveries generally occur at a time when there are people in the building and are quick in nature, meaning dwell time on the road shoulder will be low.

101. A loading area is provided in the basement level of the parking building for the hospital. This has been designed to meet the needs of the large rigid vehicle required for delivering MRI equipment and general hospital supplies.

102. For the reasons discussed above, the loading arrangements are considered to be **acceptable** and **less than minor**.

Access Width

103. The road design standards in the Council's *Land Development and Subdivision Code of Practice* suggest that the maximum width for an access carriageway for a mixed-use site should be 5.7m wide. The access to the basement has a proposed carriageway width of approximately 8.9m, and the access to the above-ground levels, ambulance bay, and pick-up/drop-off area has an access width of approximately 7.0m.

104. The access to the basement level needs to be greater than 5.7m wide to allow tracking for a heavy vehicle to enter/exit. The additional width is not expected to induce higher vehicle speeds of vehicles turning into or out of the site, as they will need to swipe in to open the electronic barrier. Furthermore, approximately 7.0m of berm width is provided between the parking building and the footpath, so vehicles exiting the site will have sufficient visibility to pedestrians on the footpath.

105. The main car park and hospital access has been designed to allow two-way vehicle flow into and out of the parking building, ambulance bay, and pick-up/drop-off area. As such, the additional width is required to ensure that an ambulance can pass vehicles entering/exiting at the same time. Higher vehicle speeds will not be induced by the wider access, as vehicles entering/exiting the parking building will need to wait momentarily at the electronic barrier arm, and vehicles using the pick-up/drop-off area will need to wait at the priority pedestrian crossing and then turn into the one-way pick-up/drop off, before turning out of the area again. At the detailed design stage, raised pedestrian platforms could also be considered to provide visual and/or physical cues to reduce vehicle speeds in the location.

106. The designed access width traversing through the site is deemed practical, functional, and suitable for the intended usage. Adherence to the stated rule in this specific instance would not yield additional benefits or enhance functionality. Therefore, a deviation from the standard width requirements is considered acceptable for the efficient operation of the site's traffic flow. Accordingly, the effects on the traffic environment are considered to be **less than mino**r.

Sight Distance from Vehicle Crossing

107. The District Plan has no requirement for sight distance in a 40km/h zone.

108. The Austroads *Guide to Road Design Part 4A: Unsignalised and Signalised Intersections* indicates that the desirable minimum approach sight distance on a sealed, flat road for a driver with a reaction time of 2.0 seconds is 40.0m. Similarly, AS/NZS2890.1 suggests a minimum sight distance of 35.0m.

109. Due to the proximity of the Deering Street vehicle crossing to the Deering Street/Road 4 (approximately 30.0m), it is assumed that this sight distance is not achieved in this direction.

110. The layout of the property on the southwestern corner of the Deering Street/McCormick Street intersection, means that a vehicle travelling along McCormick Street should have adequate sight distance to the Deering Street vehicle crossing, noting that this is based on the assumption that the fence shown in aerial images is permeable.

111. Notwithstanding the above, due to the priority control at the Deering Street/McCormick Street intersection, a vehicle turning onto Deering Street will be travelling slower than 40km/h and will therefore be able to react in time to avoid any conflicting movements at the vehicle crossing. The same applies for vehicles travelling along Road 4 and turning into Deering Street.

High Traffic Generating Activity

112. The proposal is a high traffic generating activity because it proposes more than 50 parking spaces, and the mixed-use of the site generates more than 400 vehicles per day and 50 vehicles during the commuter peak hour. The District Plan identifies a number of assessment matters for this. These are addressed in turn.

a. Integration with the existing transport network

113. The parking building has been located so that it seamlessly integrates with the existing transport network. No vehicle access to the building is proposed from Sir Tim Wallis Drive in order to prevent disruptions in traffic flow along the main spine road through the Three Parks development. Furthermore, on-site car parking will be available for all activities within a dedicated parking building, which will assist in reducing demand for kerbside parking and unnecessary circulation around the surrounding road network to find a car park.

114. The proposal includes the provision of EV charging facilities along the middle parking aisle of each floor, providing for 78 EVs to be charged while parked in the building. The provision of these charging facilities is intended to encourage a shift from traditional vehicles to electric vehicles.

115. The design of the electronic vehicle access systems means that vehicles will be able to enter the parking building quickly, minimising disruption to the traffic flow on Deering Street and Road 4.

b. Measures to reduce traffic generation

116. The parking building provides 305 car parking spaces, so it is restricted to this number of vehicles.

117. The *National Policy Statement on Urban Development 2020* (NPS-UD 2020) removed the need for on-site car parking to be provided. In areas where there are suitable provisions for alternate modes of transport, this generally leads to mode shift away from private vehicles. However, where there are no suitable provisions, private vehicles will continue to be used and instead congest the on-street parking supply. In this case, there is no public transport existing or proposed to provide this alternative mode of transport. As such, until this is established, the provision of on-site car parking will encourage people to park their vehicles within the parking building rather than congesting the on-street parking supply. One of the reasons for the mode shift to public and active transport is to reduce the effects on climate change.

118. Whilst 305 vehicles will be able to park on-site, 78 of these parking spaces are provided with EV chargers. This may indirectly reduce the overall traffic generation, as these car parks will specifically cater for EVs; therefore, excluding conventional vehicles (petrol/diesel powered) from accessing the 78 spaces.

119. The number of cycle parks provided for staff exceeds the number required by the District Plan, which is intended to encourage more employees to adopt active transport modes.

120. The site is located on the frontage of the main through road (Sir Tim Wallis Drive) for the Three Parks development. As public transport evolves in Wanaka, Sir Tim Wallis Drive would logically

be the most suitable road for public transport stop provisions. These are likely to be included within the indented car parking bays by the Council.

121. The parking building has been designed in a way which allows repurposing of other uses in the future (i.e., offices). Therefore, if provisions for alternative modes of transport improve, the building use could be changed to encourage mode shift and reduce private vehicle traffic generation.

122. The comprehensiveness of the development, along with the overall scale and the various activities proposed, suggest that trip chaining (or trip-linking) will inevitably occur. This suggests that single purpose trips could be minimised.

123. In addition, this proposal is estimated to generate less daily and peak hour traffic than the permitted baseline provided in **Table 2**.

c. Measures to facilitate mode shift

124. The number of cycle parks provided exceeds the requirements of the District Plan. In addition to this, seven unisex showers and 67 lockers will be provided for the staff cycle parks, noting that the shortfall of showers and lockers in the office staff parking spaces will be accommodated in the commercial buildings. The provision of more cycle parking and end-of-trip facilities will assist in making walking and cycling valid modal choices.

125. The removal of motor vehicles from the laneway that runs through the middle of the site will prioritise pedestrians, and will naturally encourage more people to utilise the space and walk between buildings.

d. Functional/operational needs of the activity to locate in that environment

126. The location of this proposal is optimal for meeting the needs of the office, commercial, food/beverage, medical, and hospital activities occurring on the site.

127. It is assumed that the cross-section of Road 4 will align with McCormick Street, which is compatible with the underlying *Business Mixed Use and Three Parks Business* zoning, and will allow vehicles to enter/exit the site with relative ease.

e. Positive effects on the efficient use or amenity of the site or overall subdivision

128. The proposed parking building will have positive effects on the project and wider area by reducing the demand for on-street parking. Furthermore, as EVs become more common, the parking building is providing self-sufficient (i.e., powered by solar energy captured by the solar panels on the roof) infrastructure that serves the needs of the community.

129. In addition to motor vehicle parking, the project provides 164 cycle parking spaces, which will encourage people to consider an alternative mode when travelling to work and may lead to reduced congestion on the road network. With the location of the site on an active transport route, with adequate end-of-trip facilities, pedestrian transport is encouraged.

130. Redeveloping the private laneway into a pedestrian space removes the disjoint in the site between buildings and creates a common area where people can come together.

f. Positive effects on the urban design quality of the land use or subdivision activity

131. The project has been developed in a comprehensive way, which provides multiple provisions to encourage active transport, including a pedestrianised laneway, cyle parking, and end-of-trip facilities. The pedestrianised laneway will suitabley landscaped, creating a high amenity environment.

g. Recommendations from an Integrated Transport Assessment

132. There are no recommendations arising from this Integrated Transport Assessment. Any changes have already been incorporated into the design.

Conclusion

133. The proposal has been reviewed against the Transport Rules of the Proposed District Plan and the identified non-compliances are in regard to:

- 29.4.11 – High Traffic Generating Activities,
- 29.5.4(b) and (h) – Mobility Parking Spaces,
- 29.5.5(a) – Drop Off/Pick Up Areas,
- 29.5.8 - Queuing,
- 29.5.9(a) – Loading Spaces, and
- 29.5.13 – Access and Road Design.

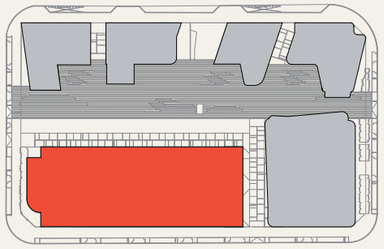
134. It is estimated that this proposal will generate 5,096 vehicle movements per day and 494 vehicle movements in the peak hour. This is considerably less than the 7,794 vehicle movements per day and 1,112 vehicle movements per hour estimated for the permitted baseline.

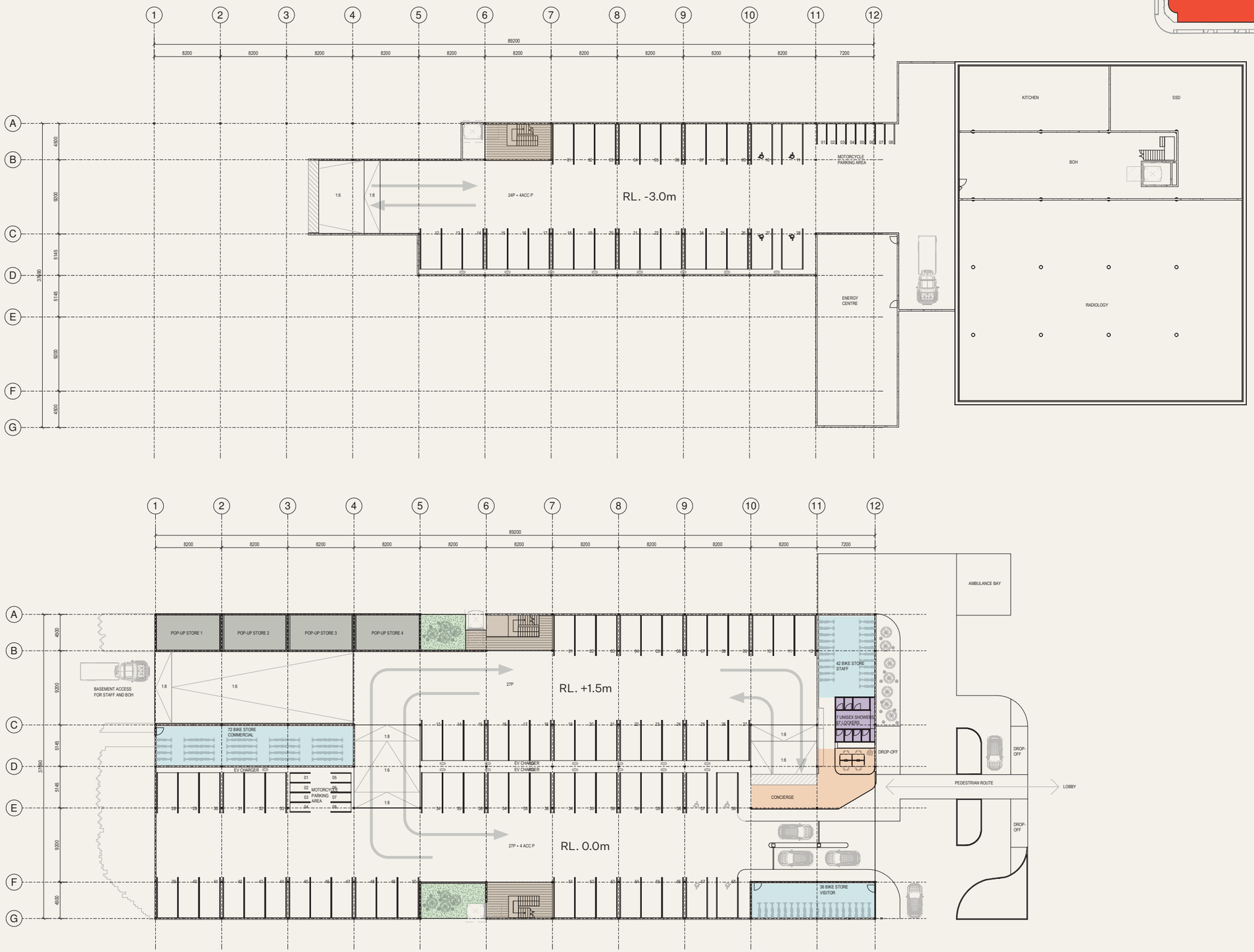
135. The above sections detail the effects resulting from these non-compliances; however, overall, it is considered that these do not create any adverse effects on the transport network and are considered to be **acceptable** and **less than minor.**

Appendix 1. Proposed Site Layout

EV Charger Car Park Plans

Scale 1:500@ A3



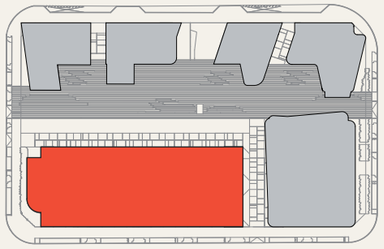


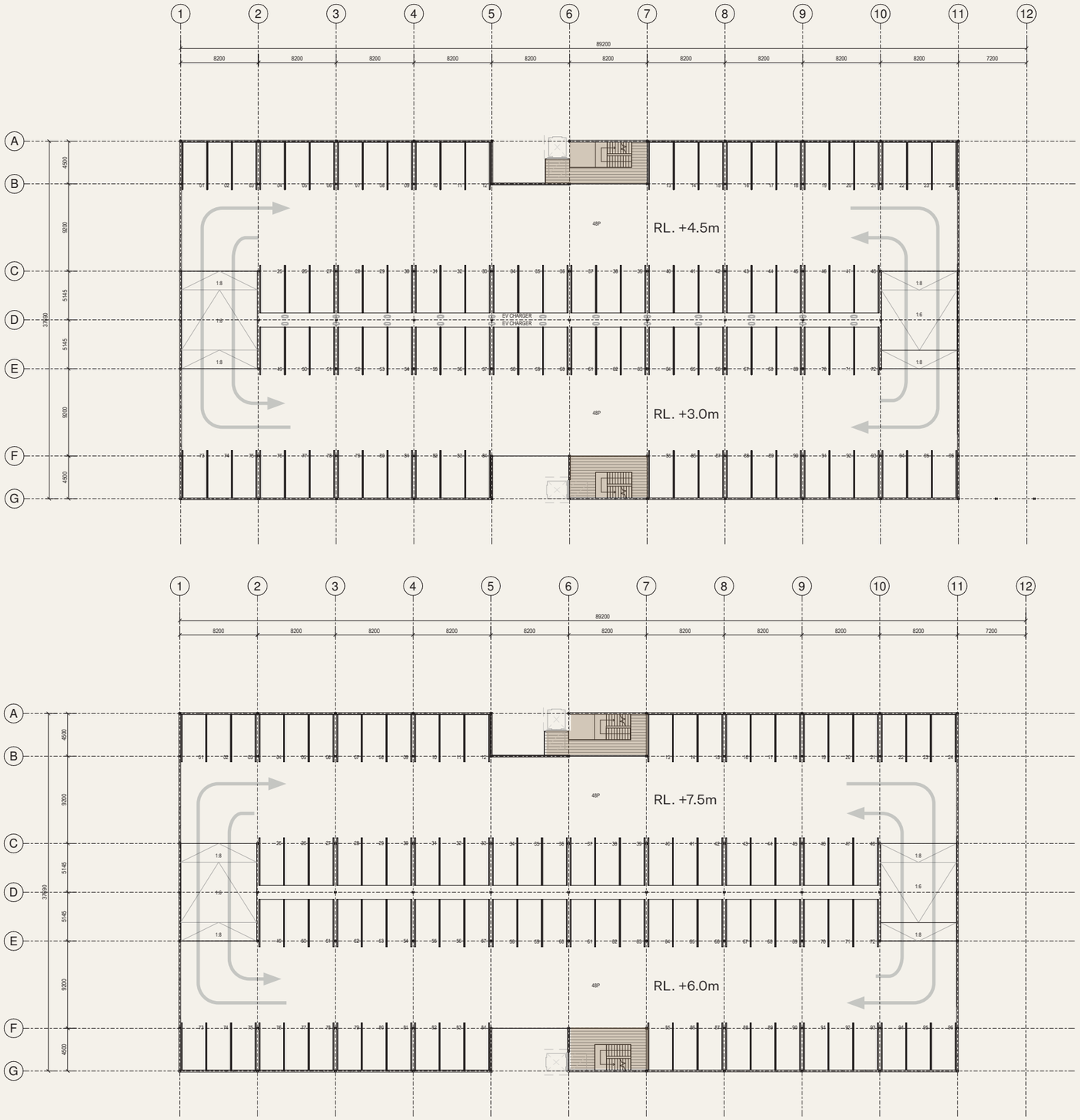
BASEMENT

GROUND FLOOR

EV Charger Car Park Plans

Scale 1:500@ A3



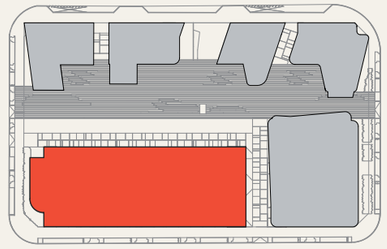


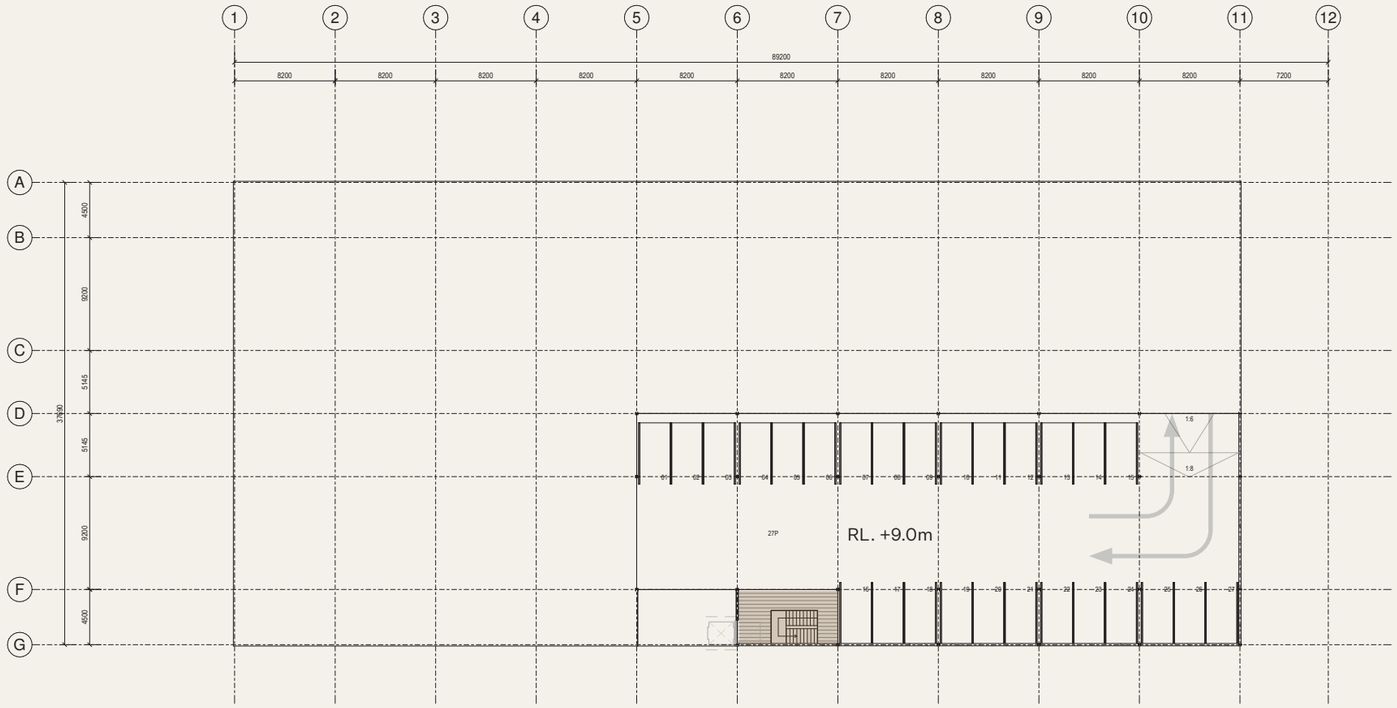
LEVEL 01

LEVEL 02

EV Charger Car Park Plans

Scale 1:500@ A3





LEVEL 03

	Carpark	Acc. Carpark	EV Charger Car Park	Motorbike	Bike (Staff)	Bike (Visitor)	Bike (Commercial)
Basement	24	4		8			
Ground Floor	54 (28EV)	4 (2EV)	30	8	42	36	72
First Floor	96 (48EV)		48				
Second Floor	96						
Third Floor	27						
Total:	**297**	**8**	**78**	**16**	**42**	**36**	**72**

Appendix 2. TRICS Data

Calculation Reference: AUDIT-191301-240415-0447

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : K - CAFE
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	WS	WEST SUSSEX	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
08	NORTH WEST		
	GM	GREATER MANCHESTER	1 days
09	NORTH		
	NB	NORTHUMBERLAND	1 days
11	SCOTLAND		
	GC	GLASGOW CITY	1 days
14	LEINSTER		
	WC	WICKLOW	1 days
	WX	WEXFORD	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	60 to 320 (units: sqm)
Range Selected by User:	60 to 320 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 20/04/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	2 days
Thursday	1 days
Friday	1 days
Saturday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	5
Neighbourhood Centre (PPS6 Local Centre)	4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Built-Up Zone	3
Village	1
High Street	3
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	8 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

E(b)	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
125,001 to 250,000	2 days
500,001 or More	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	7 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	9 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 DL-06-K-01 CAFÉ DUBLIN
CRUMLIN ROAD
DUBLIN
DRIMNAGH
Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total Gross floor area: 74 sqm
Survey date: FRIDAY *25/11/22* *Survey Type: MANUAL*

2 GC-06-K-01 CAFÉ GLASGOW CITY
GREAT WESTERN ROAD
GLASGOW
WEST END
Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 105 sqm
Survey date: MONDAY *17/04/23* *Survey Type: MANUAL*

3 GM-06-K-01 CAFÉ GREATER MANCHESTER
DEANSGATE
MANCHESTER

Town Centre
Built-Up Zone
Total Gross floor area: 200 sqm
Survey date: TUESDAY *19/04/22* *Survey Type: MANUAL*

4 LN-06-K-01 CAFÉ & TEA ROOM LINCOLNSHIRE
RED LION SQUARE
STAMFORD

Town Centre
Built-Up Zone
Total Gross floor area: 190 sqm
Survey date: TUESDAY *12/10/21* *Survey Type: MANUAL*

5 NB-06-K-01 STARBUCKS NORTHUMBERLAND
A69
REDBURN

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 210 sqm
Survey date: SATURDAY *16/10/21* *Survey Type: MANUAL*

6 NF-06-K-01 CAFÉ NORFOLK
SAINT GILES STREET
NORWICH

Town Centre
Built-Up Zone
Total Gross floor area: 82 sqm
Survey date: TUESDAY *20/09/22* *Survey Type: MANUAL*

7 WC-06-K-01 CAFÉ WICKLOW
FITZWILLIAM SQUARE
WICKLOW

Town Centre
High Street
Total Gross floor area: 320 sqm
Survey date: WEDNESDAY *16/11/22* *Survey Type: MANUAL*

8 WS-06-K-01 CAFÉ WEST SUSSEX
GORING ROAD
WORTHING
GORING-BY-SEA
Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 87 sqm
Survey date: WEDNESDAY *11/05/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	WX-06-K-01 MALLIN STREET WEXFORD	CAFÉ	WEXFORD

Town Centre
No Sub Category
Total Gross floor area: 60 sqm
Survey date: THURSDAY *20/04/23* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/K - CAFE
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	142	0.704	2	142	0.000	2	142	0.704
07:00 - 08:00	4	177	1.410	4	177	0.846	4	177	2.256
08:00 - 09:00	8	159	2.287	8	159	1.498	8	159	3.785
09:00 - 10:00	9	148	4.970	9	148	3.991	9	148	8.961
10:00 - 11:00	9	148	7.304	9	148	6.551	9	148	13.855
11:00 - 12:00	9	148	5.798	9	148	5.949	9	148	11.747
12:00 - 13:00	9	148	6.175	9	148	5.873	9	148	12.048
13:00 - 14:00	9	148	6.401	9	148	6.401	9	148	12.802
14:00 - 15:00	9	148	5.497	9	148	6.325	9	148	11.822
15:00 - 16:00	9	148	3.840	9	148	4.367	9	148	8.207
16:00 - 17:00	7	163	2.980	7	163	3.506	7	163	6.486
17:00 - 18:00	4	198	2.785	4	198	3.418	4	198	6.203
18:00 - 19:00	1	210	3.333	1	210	4.762	1	210	8.095
19:00 - 20:00	1	210	2.857	1	210	2.857	1	210	5.714
20:00 - 21:00	1	210	0.000	1	210	0.476	1	210	0.476
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			56.341			56.820			113.161

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	60 - 320 (units: sqm)
Survey date date range:	01/01/16 - 20/04/23
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	1
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-191301-240415-0401

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : E - CLINICS
TOTAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days
14	LEINSTER		
	KK	KILKENNY	1 days
16	ULSTER (REPUBLIC OF IRELAND)		
	CV	CAVAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	310 to 1720 (units: sqm)
Range Selected by User:	300 to 3000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 25/10/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	3
Built-Up Zone	1
Out of Town	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	4 days - Selected

Secondary Filtering selection:

Use Class:

E(e)	5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,000 or Less	1 days
5,001 to 25,000	1 days
50,001 to 75,000	1 days
500,001 or More	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	2 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	5 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CV-05-E-01 PHYSIOTHERAPY CLINIC CAVAN
LORETO ROAD
CAVAN
CARRICKANE
Edge of Town
Out of Town
Total Gross floor area: 400 sqm
Survey date: TUESDAY 25/10/22 *Survey Type: MANUAL*

2 KK-05-E-01 PHYSICAL THERAPY CLINIC KILKENNY
CLONMEL ROAD
CALLAN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1720 sqm
Survey date: FRIDAY 27/10/17 *Survey Type: MANUAL*

3 MS-05-E-01 COSMETIC SURGERY CLINIC MERSEYSIDE
RODNEY STREET
LIVERPOOL

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 615 sqm
Survey date: WEDNESDAY 28/11/18 *Survey Type: MANUAL*

4 TW-05-E-02 COSMETIC SURGERY CLINIC TYNE & WEAR
BAYSWATER ROAD
NEWCASTLE UPON TYNE
JESMOND
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 350 sqm
Survey date: FRIDAY 19/10/18 *Survey Type: MANUAL*

5 WK-05-E-01 CHIROPRACTIC CLINIC WARWICKSHIRE
ALCESTER ROAD
STRATFORD-UPON-AVON

Edge of Town
Residential Zone
Total Gross floor area: 310 sqm
Survey date: FRIDAY 29/06/18 *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 05 - HEALTH/E - CLINICS
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1060	0.094	2	1060	0.094	2	1060	0.188
08:00 - 09:00	5	679	0.383	5	679	0.029	5	679	0.412
09:00 - 10:00	5	679	0.648	5	679	0.295	5	679	0.943
10:00 - 11:00	5	679	0.560	5	679	0.589	5	679	1.149
11:00 - 12:00	5	679	0.530	5	679	0.707	5	679	1.237
12:00 - 13:00	5	679	0.383	5	679	0.324	5	679	0.707
13:00 - 14:00	5	679	0.471	5	679	0.353	5	679	0.824
14:00 - 15:00	5	679	0.471	5	679	0.589	5	679	1.060
15:00 - 16:00	5	679	0.471	5	679	0.501	5	679	0.972
16:00 - 17:00	5	679	0.206	5	679	0.383	5	679	0.589
17:00 - 18:00	5	679	0.236	5	679	0.295	5	679	0.531
18:00 - 19:00	5	679	0.265	5	679	0.353	5	679	0.618
19:00 - 20:00	4	761	0.131	4	761	0.230	4	761	0.361
20:00 - 21:00	2	508	0.000	2	508	0.296	2	508	0.296
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.849			5.038			9.887

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	310 - 1720 (units: sqm)
Survey date date range:	01/01/16 - 25/10/22
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
03	SOUTH WEST		
	GS	GLOUCESTERSHIRE	1 days
06	WEST MIDLANDS		
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	FU	WESTMORLAND & FURNESS	1 days
	TW	TYNE & WEAR	1 days
10	WALES		
	CF	CARDIFF	2 days
11	SCOTLAND		
	AD	ABERDEEN CITY	1 days
	FI	FIFE	1 days
13	MUNSTER		
	TI	TIPPERARY	1 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	3 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	3100 to 7925 (units: sqm)
Range Selected by User:	3000 to 8000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 06/06/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	2 days
Wednesday	4 days
Thursday	4 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	1
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	9
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	6
Commercial Zone	1
Development Zone	2
Residential Zone	2
Built-Up Zone	1
Village	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	9 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	14 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 500m Range:
All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	6 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	5 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	9 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	14 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	14 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 AD-02-B-02 BUSINESS PARK ABERDEEN CITY
CRAIGSHAW DRIVE
ABERDEEN
EAST TULLOS IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 7925 sqm
Survey date: THURSDAY *21/11/19* *Survey Type: MANUAL*

2 AN-02-B-02 BUSINESS PARK ANTRIM
MONTGOMERY ROAD
BELFAST
CASTLEREAGH
Edge of Town
Industrial Zone
Total Gross floor area: 3100 sqm
Survey date: WEDNESDAY *12/10/16* *Survey Type: MANUAL*

3 AN-02-B-04 BUSINESS PARK ANTRIM
CASTLEREAGH ROAD
BELFAST
CASTLEREAGH
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 4400 sqm
Survey date: THURSDAY *19/10/17* *Survey Type: MANUAL*

4 AN-02-B-05 BUSINESS PARK ANTRIM
ALBERT STREET
BELFAST

Town Centre
Built-Up Zone
Total Gross floor area: 4750 sqm
Survey date: THURSDAY *19/10/17* *Survey Type: MANUAL*

5 CF-02-B-04 BUSINESS PARK CARDIFF
RHYMNEY RIVER BRIDGE RD
CARDIFF

Edge of Town
Development Zone
Total Gross floor area: 5300 sqm
Survey date: FRIDAY *05/05/17* *Survey Type: MANUAL*

6 CF-02-B-05 BUSINESS PARK CARDIFF
LAMBOURNE CRESCENT
CARDIFF
LLANISHEN
Suburban Area (PPS6 Out of Centre)
Development Zone
Total Gross floor area: 6250 sqm
Survey date: WEDNESDAY *05/10/16* *Survey Type: MANUAL*

7 EX-02-B-02 BUSINESS PARK ESSEX
WYNCOLLS ROAD
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 4083 sqm
Survey date: FRIDAY *18/05/18* *Survey Type: MANUAL*

8 FI-02-B-01 BUSINESS PARK FIFE
ENTERPRISE WAY
DUNFERMLINE
PITREAVIE
Edge of Town
Commercial Zone
Total Gross floor area: 7000 sqm
Survey date: MONDAY *21/03/16* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	FU-02-B-01 OXENHOLME ROAD KENDAL	BUSINESS PARK		WESTMORLAND & FURNESS
	Edge of Town Residential Zone Total Gross floor area:		5500 sqm	
	Survey date: FRIDAY		*13/05/22*	*Survey Type: MANUAL*
10	GS-02-B-01 BARNETT WAY GLOUCESTER BARNWOOD	BUSINESS PARK		GLOUCESTERSHIRE
	Edge of Town Industrial Zone Total Gross floor area:		3485 sqm	
	Survey date: WEDNESDAY		*03/05/23*	*Survey Type: MANUAL*
11	NY-02-B-02 OAKNEY WOOD ROAD SELBY	BUSINESS PARK		NORTH YORKSHIRE
	Edge of Town Industrial Zone Total Gross floor area:		3150 sqm	
	Survey date: TUESDAY		*06/06/23*	*Survey Type: MANUAL*
12	TI-02-B-01 R498 THURLES	BUSINESS PARK		TIPPERARY
	Edge of Town No Sub Category Total Gross floor area:		4180 sqm	
	Survey date: WEDNESDAY		*12/10/22*	*Survey Type: MANUAL*
13	TW-02-B-06 JOICEY ROAD GATESHEAD	BUSINESS PARK		TYNE & WEAR
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:		3712 sqm	
	Survey date: THURSDAY		*18/10/18*	*Survey Type: MANUAL*
14	WO-02-B-02 BIRMINGHAM ROAD NEAR BROMSGROVE LICKEY END	BUSINESS PARK		WORCESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area:		4187 sqm	
	Survey date: TUESDAY		*26/06/18*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	14	4787	0.178	14	4787	0.027	14	4787	0.205
07:30 - 08:00	14	4787	0.448	14	4787	0.084	14	4787	0.532
08:00 - 08:30	14	4787	0.588	14	4787	0.100	14	4787	0.688
08:30 - 09:00	14	4787	0.846	14	4787	0.094	14	4787	0.940
09:00 - 09:30	14	4787	0.579	14	4787	0.158	14	4787	0.737
09:30 - 10:00	14	4787	0.364	14	4787	0.152	14	4787	0.516
10:00 - 10:30	14	4787	0.221	14	4787	0.178	14	4787	0.399
10:30 - 11:00	14	4787	0.170	14	4787	0.169	14	4787	0.339
11:00 - 11:30	14	4787	0.169	14	4787	0.185	14	4787	0.354
11:30 - 12:00	14	4787	0.188	14	4787	0.234	14	4787	0.422
12:00 - 12:30	14	4787	0.230	14	4787	0.275	14	4787	0.505
12:30 - 13:00	14	4787	0.270	14	4787	0.306	14	4787	0.576
13:00 - 13:30	14	4787	0.285	14	4787	0.267	14	4787	0.552
13:30 - 14:00	14	4787	0.222	14	4787	0.201	14	4787	0.423
14:00 - 14:30	14	4787	0.188	14	4787	0.206	14	4787	0.394
14:30 - 15:00	14	4787	0.173	14	4787	0.218	14	4787	0.391
15:00 - 15:30	14	4787	0.127	14	4787	0.188	14	4787	0.315
15:30 - 16:00	14	4787	0.163	14	4787	0.258	14	4787	0.421
16:00 - 16:30	14	4787	0.146	14	4787	0.477	14	4787	0.623
16:30 - 17:00	14	4787	0.172	14	4787	0.524	14	4787	0.696
17:00 - 17:30	14	4787	0.188	14	4787	0.956	14	4787	1.144
17:30 - 18:00	14	4787	0.104	14	4787	0.534	14	4787	0.638
18:00 - 18:30	14	4787	0.093	14	4787	0.306	14	4787	0.399
18:30 - 19:00	14	4787	0.073	14	4787	0.203	14	4787	0.276
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.185			6.300			12.485

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	3100 - 7925 (units: sqm)
Survey date date range:	01/01/16 - 06/06/23
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-191301-240415-0409

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : I - SHOPPING CENTRE - LOCAL SHOPS
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
03	SOUTH WEST		
	GS	GLOUCESTERSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	CU	CUMBERLAND	1 days
	TW	TYNE & WEAR	1 days
13	MUNSTER		
	CR	CORK	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	580 to 2910 (units: sqm)
Range Selected by User:	500 to 3000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 03/05/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Friday	6 days
Sunday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6
Retail Zone	1
High Street	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	8 days - Selected

Secondary Filtering selection:

Use Class:

n/a	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	1 days
20,001 to 25,000	5 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days
500,001 or More	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	9 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	9 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 CR-01-I-01 LOCAL SHOPS CORK
BISHOPSTOWN ROAD
CORK
WILTON
Neighbourhood Centre (PPS6 Local Centre)
Retail Zone
Total Gross floor area: 1575 sqm
Survey date: FRIDAY *23/03/18* *Survey Type: MANUAL*

2 CU-01-I-01 LOCAL SHOPS CUMBERLAND
CENTRAL AVENUE
CARLISLE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1325 sqm
Survey date: FRIDAY *15/10/21* *Survey Type: MANUAL*

3 DL-01-I-08 SHOPPING CENTRE DUBLIN
BLACKTHORN DRIVE
DUBLIN
SANDYFORD
Edge of Town
Residential Zone
Total Gross floor area: 2910 sqm
Survey date: FRIDAY *25/11/22* *Survey Type: MANUAL*

4 DR-01-I-01 LOCAL SHOPS DONCASTER
EVERINGHAM ROAD
DONCASTER
CANTLEY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1645 sqm
Survey date: FRIDAY *17/09/21* *Survey Type: MANUAL*

5 GS-01-I-02 LOCAL SHOPS GLOUCESTERSHIRE
HUCCLECOTE ROAD
GLOUCESTER
HUCCLECOTE
Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total Gross floor area: 840 sqm
Survey date: WEDNESDAY *03/05/23* *Survey Type: MANUAL*

6 HF-01-I-02 LOCAL SHOPS HERTFORDSHIRE
BROADWATER CRESCENT
STEVENAGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1115 sqm
Survey date: FRIDAY *28/06/19* *Survey Type: MANUAL*

7 MS-01-I-02 LOCAL SHOPS MERSEYSIDE
PAGE MOSS LANE
LIVERPOOL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1230 sqm
Survey date: SUNDAY *25/04/21* *Survey Type: MANUAL*

8 TW-01-I-03 LOCAL SHOPS TYNE & WEAR
VICTORIA ROAD
WASHINGTON
CONCORD
Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 2700 sqm
Survey date: FRIDAY *24/05/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	WM-01-I-04	LOCAL SHOPS	WEST MIDLANDS
	SUTHERLAND AVENUE		
	COVENTRY		
	UPPER EASTERN GREEN		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	580 sqm	
	Survey date: TUESDAY	*18/10/22*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	4	1615	0.743	4	1615	0.604	4	1615	1.347
07:00 - 08:00	9	1547	1.997	9	1547	1.853	9	1547	3.850
08:00 - 09:00	9	1547	3.951	9	1547	3.096	9	1547	7.047
09:00 - 10:00	9	1547	4.777	9	1547	3.966	9	1547	8.743
10:00 - 11:00	9	1547	5.043	9	1547	4.583	9	1547	9.626
11:00 - 12:00	9	1547	4.957	9	1547	5.424	9	1547	10.381
12:00 - 13:00	9	1547	5.661	9	1547	5.517	9	1547	11.178
13:00 - 14:00	9	1547	5.496	9	1547	5.690	9	1547	11.186
14:00 - 15:00	9	1547	5.503	9	1547	5.596	9	1547	11.099
15:00 - 16:00	9	1547	5.359	9	1547	5.453	9	1547	10.812
16:00 - 17:00	9	1547	5.726	9	1547	5.797	9	1547	11.523
17:00 - 18:00	9	1547	5.568	9	1547	5.977	9	1547	11.545
18:00 - 19:00	9	1547	5.158	9	1547	5.216	9	1547	10.374
19:00 - 20:00	9	1547	4.181	9	1547	4.655	9	1547	8.836
20:00 - 21:00	9	1547	2.974	9	1547	3.060	9	1547	6.034
21:00 - 22:00	9	1547	2.069	9	1547	2.292	9	1547	4.361
22:00 - 23:00	5	1432	0.922	5	1432	1.047	5	1432	1.969
23:00 - 24:00	2	2070	0.531	2	2070	0.604	2	2070	1.135
Total Rates:			70.616			70.430			141.046

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

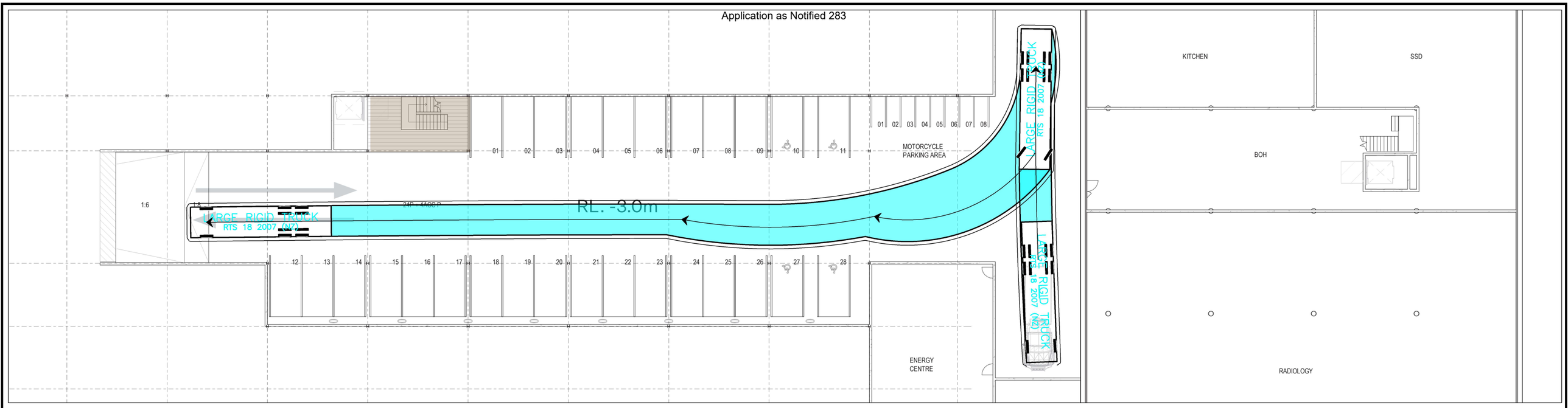
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

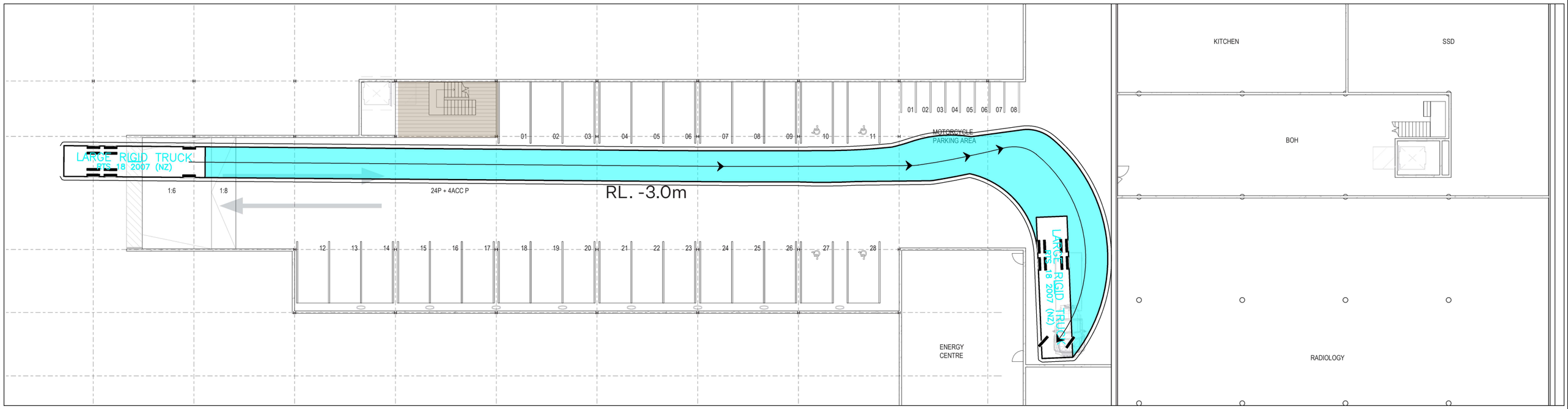
Trip rate parameter range selected:	580 - 2910 (units: sqm)
Survey date date range:	01/01/16 - 03/05/23
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	1
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 3. Vehicle Tracking



EXITING LOADING AREA



ENTERING LOADING AREA

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Christchurch 8014

WANAKA FIRST DISTRICT, THREE PARKS ROA

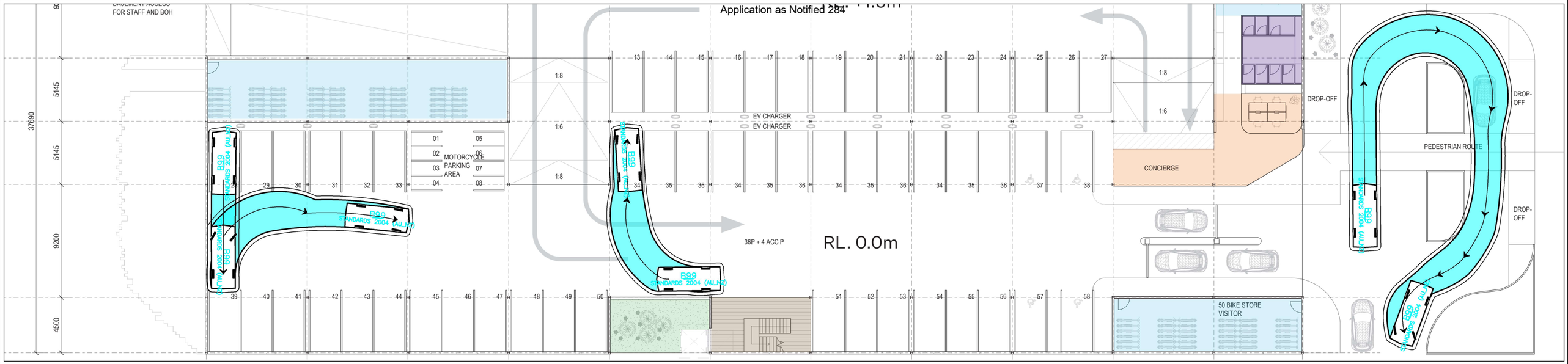
LARGE RIGID VEHICLE TRACKING - BASEMENT LEVEL LOADING AREA

FOR INFORMATION

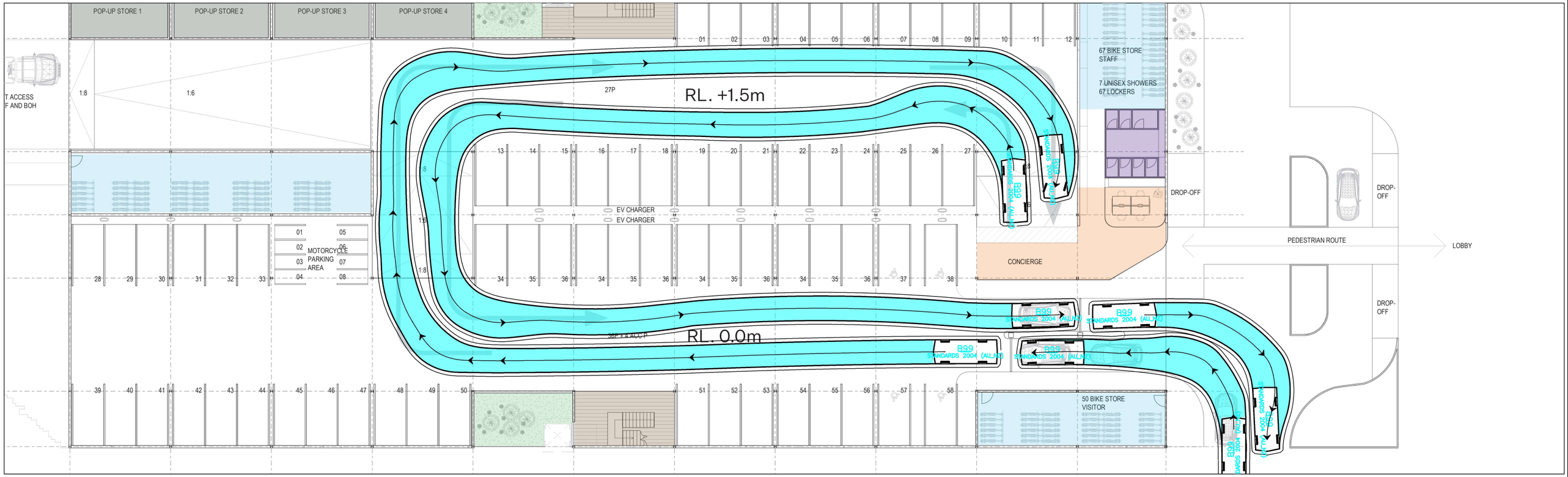
Drawing: 1323003_WANAKA FIRST DISTRICT_T_D_DWDW100X_A

Sheet
1323-003 DWD1001-A

Scale @A3 1:500
Date 23/04/2024
By A MACE–COCHRANE
Project #1323003



ENTERING/EXITING CONSTRAINED CARPARKS AND PICK UP/DROP OFF CIRCULATION



CIRCULATION OF GROUND FLOOR + INGRESS/EGRESS OF PARKING BUILDING

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Christchurch 8014

WANAKA FIRST DISTRICT, THREE PARKS ROA

99TH PERCENTILE VEHICLE TRACKING - GROUND FLOOR LEVEL AND PICK UP/DROP OFF

FOR INFORMATION

Drawing: 1323003_WANAKA FIRST DISTRICT_T_D_DWDW100X_A

Sheet
1323-003 DWD1002-A

Scale @A3 1:500
Date 23/04/2024
By A MACE-COCHRANE
Project #1323003