



**Flint's Park, Ladies Mile,
Queenstown**
**TRANSPORT ASSESSMENT
REPORT**

DATE: 5/3/19



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4 EXECUTIVE SUMMARY

This report has been prepared by Candor³ on behalf of Glenpanel Ltd Partnership to assess the Transport Impact of the proposed housing Expression of Interest (EOI) submission at the Flint's Park, Ladies Mile Queenstown, Special Housing Area (SHA). The report demonstrates that in transport terms, the site complies with relevant standards, is deliverable, and will provide residents with good walk, cycle and bus connectivity to key services and facilities.

5 INTRODUCTION

5.1 Background

This Transport Assessment (TA) report assesses the transport related matters of the proposal for up to 207 dwelling units at Flint's Park, situated alongside the Ladies Mile section of State Highway 6 in Queenstown. The intention of the assessment is to support the Queenstown Lakes District Council (QLDC) SHA EOI submission.

5.2 Previous Masterplanning and Transport Studies

Queenstown Lakes District Council (QLDC) prepared an indicative masterplan for the wider Ladies Mile area which is shown in **Appendix A** with the proposed Flint's Park SHA overlaid. Flint's Park forms part of this wider masterplan. The proposed grid pattern masterplan layout enables an efficient use of land for housing, as well as providing for convenient walking, cycling and public transport connectivity. Planning consent via SHA was obtained for the Queenstown Country Club element of this masterplan and construction has commenced on this site with construction access utilising an existing farm track access directly from SH6.

In support of a Housing Infrastructure Fund (HIF) Business Case Bid, an Integrated Transport Assessment (ITA) was carried out on behalf of QLDC which assessed the impact of the proposed QLDC indicative masterplan and identified a package of transport measures to mitigate the impact of this scale of development. The Detailed Business Case was QLDC's formal request to obtain a \$19.2 million HIF loan (with repayments being made from development contributions) and \$6.5 million at 51% via the Local Road Funding Assistance Rate (FAR) as a separate \$6.5m HIF funded loan directly to the National Land Transport Fund (NLTF), not QLDC. A FAR (Funding Assistance Rate) of 51% was assumed due to the significant access improvements for the Lake Hayes Estate and Shotover Country communities and the safety improvements for all traffic through the Howards Drive intersection.

Therefore, the Business Case was prepared for a total investment of \$26.4 million to provide infrastructure to unlock developable land for 1,100 dwellings in the Ladies Mile development corridor, of which Flint's Park is part of. The transport works identified included:

- Access via a roundabout controlled intersection at SH6/Howards Drive (\$7.65m).
- One pair of bus stops and bus shelters on SH6 (location to be confirmed) (\$2.37m).
- SH6 pedestrian/cycleway underpass near bus stops (\$2.23m).
- Footpaths along SH6 to the underpass and bus stops.
- Access in later stage of development from Lower Shotover Road and SH6/McDowell Drive.
- Internal bus stops (developer to provide).
- Increased bus frequency and direct routes.
- Park and ride hub for 'Cromwell' traffic.
- SH6 bus priority.
- Reduce SH6 speed limit to 80km/h.

QLDC, Otago Regional Council (ORC) and NZTA have since agreed a programme (Programme 3) of funding for these improvements.

The detailed business case identified that developers will be responsible for the funding and construction of all the internal roading and 3 waters infrastructure with QLDC being

responsible for the construction of all external transport and 3 waters infrastructure. The HIF loan will assist with respect to funding.

As such, the wider transport impacts of the Flint's Park development have been assessed, and the wider off-site transport mitigation measures required have been identified and agreed upon. Therefore, this TA reviews the proposed internal walking/cycling/bus connectivity, the proposed internal road layout and construction traffic access prior to the opening of the SH6/Howards Drive roundabout.

5.3 Development proposal

The development proposal consists of 151 dwelling units as follows:

- 71 terrace Houses – typically 3 to 4 bedrooms with 2 onsite parking spaces. Some of the units will be served via private laneways/JOAL.
- 68 standalone houses - typically 3 to 4 bedrooms with 2 onsite parking spaces.
- 12 duplex – typically 3 bedrooms with 2 onsite parking spaces.

The existing Homestead end use is as yet undefined but potential uses include a gastro pub/restaurant or an art gallery/café. Onsite parking for these uses would need to be established, but it could be possible to provide circa 40 onsite parking spaces with these types of uses.

A Neighbourhood Park is proposed adjacent to the existing Homestead and a Linear Park is proposed on the eastern boundary of the site. This Linear Park retains the Oak Tree Driveway and links Ladies Mile with the Neighbourhood Park and the Historic Homestead.

Appendix B indicates the roads and private laneways/JOAL's proposed as part of the Flint's Park development.

In general accordance with the QLDC Ladies Mile masterplan (see **Section 5.2** above) a landscape setback with extensive tree planting from State Highway 6 (SH6) is proposed. Within this landscape setback a 3m wide shared footway/cycleway will be provided.

Appendix A shows how the proposed Flint's Park masterplan connects with the rest of the QLDC indicative masterplan in terms of overall site access, walking, cycling and bus connections to. For example, the Local Centre and connectivity of the rest QLDC masterplan with the proposed Neighbourhood and Linear Parks and the Homestead. As such, the proposed Flint's Park masterplan is in accordance with the rest of the QLDC masterplan and provides safe and convenient walk, cycle, bus and car connectivity to the Local Centre, as well as providing connectivity to the proposed Parks and Homestead.

Details of the Flint's Park sustainable transport connections and the proposed internal road layouts/parking compliance with QLDC standards is provided in **Sections 9 and 10** of this report.

5.4 Construction Traffic Access

In advance of the New Zealand Transport Agency (NZTA) finalising the design and construction of the access point on SH6 at Howards Drive, it is proposed that construction access to the Flint's Park site be taken from the existing private access/driveway on SH6. Preliminary comments from NZTA have indicated that this is acceptable.

5.5 Intended use for the TA

This TA report is intended to support the EOI for a SHA application for the Flint's Park development and has been prepared with the guidance specified in the Integrated Transport Assessment Guidelines - Research Report 422 published by the NZTA. This TA report provides details on:

- A description of the site and its surrounding transport environment.
- Proposed sustainable transport connections.
- Compliance with relevant transport policies.
- Review of internal road layout and proposed parking provision.
- Conclusions.

6 SITE LOCATION AND EXISTING TRANSPORT CONNECTIONS

6.1 Background

The site location is shown in **Appendix C**. The site is located on the north side of Ladies Mile approximately half way between Queenstown and Arrowtown. The proposed development area is adjacent to two major residential developments: Lake Hayes Estate and Shotover Country (including a primary school which opened in 2015).

The site is adjacent to SH6 (Ladies Mile) which provides road connections to Queenstown CBD, Queenstown Airport/Frankton and wider South Island destinations. SH6 also provides an opportunity to link into key public transport routes between Arrowtown, Lake Hayes Estate/Shotover Country and the Frankton transit hub.

In 2017 the Flint's Park site was incorporated into the wider area QLDC Special Housing Area (SHA) Lead Policy. The Queenstown Country Club SHA on the opposite side of Ladies Mile has been consented and construction has commenced. A roundabout was constructed in 2016 at SH6/Stalker Road to serve Shotover Country to the south of Ladies Mile and a large commercial development is developing nearby, at Frankton Flats. It is understood that an EOI has been submitted for the Laurel Hills element of the Ladies Mile Masterplan. In 2017 public transport improvements within the Queenstown area included a bus route along SH6 with a regular, inexpensive bus service. The simplicity of the routes and timetables, combined with the new fare system, has resulted in bus patronage more than doubling. In 2018 the Wakatipu High School relocated to Remarkables Park. Employment in Queenstown has historically been focused in the CBD, though Frankton is increasingly becoming a significant employment centre.

6.2 Existing Site Accessibility and Connectivity

6.2.1 Walking and Cycling

Residents of Flint's Park will have easy walk access to the proposed Neighbourhood Park and Linear Park for recreational uses, and also will be within an easy 300m (4 minute walk time) of the Local Centre and Plaza as per proposed the QLDC Ladies Mile masterplan. It is understood that this will contain key local services for residents of Ladies Mile.

Via the proposed network of footways and cycle routes, residents will also have access to the adjacent Queenstown Trail and the open countryside for leisure and recreational uses.

The Flint's Park site is located circa 1km (12.5 minute walk /3 minute cycle ride) to Shotover Primary School. The QLDC Ladies Mile masterplan includes a pedestrian/cycle underpass located east of the SH6/Stalker Road roundabout adjacent to the Flint's Park site. The Laurel Hills concept design allows for a footpath connection on the east side of Stalker Road from the SH6 roundabout and the urban area of Shotover country. This proposal would provide a safe and direct walking/cycling link between the Flint's Park site and the school. There are existing pram crossing points across SH6 at the Stalker Road roundabout with the raised median function as a pedestrian refuge, which provides for a safe and direct crossing for pedestrians and cyclists to Stalker Road and onwards to Shotover Primary School.

The Flint's Park site is located

- Circa 4.5km from the Five Mile Shopping Centre – this contains key retail activities, a bank, pharmacy and other services.

- 6.5km from Queenstown Airport and Queenstown Hospital.
- 7.5km from the Remarkables Shopping Centre – this contains key retail activities, a medical centre, pharmacy and other services). Wakatipu High School is also located here, as well as various commercial developments in the Frankton area.
- 12.5km from Queenstown CBD.

Cycle access to these destinations is via Lower Shotover Road/Spence Road to the Queenstown Trail (Twin Rivers Ride) at Lower Shotover Bridge. From here a segregated route is provided via the Queenstown Trail Connector Trails and the Lake Wakatipu Ride to the Five Mile shopping Centre, Queenstown Airport, Queenstown Hospital, the Remarkables Shopping Centre, Wakatipu High School, Frankton commercial developments and Queenstown CBD.

6.2.2 Bus

Services

There are currently 2 bus services (routes 2 and 4) adjacent to the site on SH6 Ladies Mile. The bus services have a frequency of 30 minutes during the AM and PM peak periods (0600-0900 and 1500-1800 with an hourly service throughout the remainder of the day (0900-1500 and 1800-2200. Route 2 links Arrowtown, Queenstown CBD and Arthurs point with bus transfer to other services at the Frankton hub. Route 4 links Lake Hayes Estate with Jacks Point with bus transfer to other services at the Frankton hub. The two routes create two buses an hour in either direction adjacent to the Flint's Park site for most of the day. At peak times, there are an additional two services per hour.

Bus stops

There are existing bus stops at Stalker Road (route 4) 900m from the site and Tucker Beach Road (routes 2 and 4) and Quail Rise (route 2) both of which are circa 2km from the site.

Fares and information

Bus fares are currently very low at \$2 per adult fare (for 5-15yrs, or under 20 with school ID the fare is \$1.50) with a GoCard anywhere within the Queenstown area and with a free transfer within 30 mins. SuperGold Card holders travel free with a GoCard 9am – 3pm and after 6:30pm (off-peak) – plus all day weekends and public holidays. All buses currently have free WiFi, bike racks (max 2 bikes per bus), and real time information is provided via the Choice app and the Orbus Link on the Council's website.

Summary

Residents will have easy walking access to key local facilities and recreational areas and within a reasonable bus and cycle distance, residents will also have access to key employment, shopping and education facilities in the neighbouring area.

7 PROPOSED SUSTAINABLE TRANSPORT CONNECTIONS

7.1 Pedestrians and cyclists

North/south and east/west pedestrian permeability through the site, to the rest of the Ladies Mile masterplan site and to wider destinations (eg Shotover/Lake Hayes Estate, Frankton/Queenstown Airport, Queenstown CBD and wider recreational routes) will be provided by the provision of the following facilities:

- On Roads 1 to 6, 1.8m wide footpaths will be constructed on both sides (noting on the Local Roads this is a greater width than QLDC CoP requirements). Footpaths have been set at 1.8m on all roads to provide consistency in provision throughout the site for pedestrians. Cyclists will ride on the road (in accordance with QLDC standards the low volumes of traffic and low design speeds will make this safe and attractive to cycle).
- On private lane ways/JOALS, cyclists will ride on lanes (very low volumes of traffic and low design speeds will make this safe and attractive to cycle).
- 3m off road shared use footway/cycleways provided at:
 - Southern end of site within the landscape setback area plus connections from Road 1.
 - East of the site within the Linear Park.
 - Through the Neighbourhood Park and connecting between Road 2 and Lane F.
 - The existing footpath at the SH6/Shotover Road/Lower Shotover Road roundabout will remain. This will be provided adjacent to SH6 and widening of the existing footpath (to allow for walking and cycling) within the adjacent berm area is proposed. By providing this link, a continuous walking and cycling route will be provided from the Flint's Park site (via Spence Road, Queenstown Trail and Connector Trails) to the Five Mile Shopping Centre (circa 4.5km/ 14 minute cycle travel time), Queenstown Airport (circa 6.5km/ 20 minute cycle travel time) to the Remarkables Shopping Centre/Frankton (circa 7.5km/ 23 minute cycle travel time) and Queenstown CBD (circa 12.5km/ 38 minute cycle travel time) from Flint's Park. Noting a 'beginner' average cycle time of 20km/h has been assumed.
- As described in the Travel Plan (see **Section 7.3** below), it is proposed that each property will be given a free electric bike (ebike). This will reduce the cycle journey times described above to circa 9 minutes to Five Mile Shopping Centre, 13 minutes to Queenstown Airport, 15 minutes to Remarkables Shopping Centre/Frankton and 25 minutes to Queenstown CBD (using an assumed average ebike speed of 30 km/h for a maximum electric motor of 300W permitted in New Zealand noting that maximum speed cut outs are typically 37km/h-40km/h). These journey times are not significantly greater than the free flow car journey time of circa 17 minutes to Queenstown CBD. Peak period congestion (as evidenced in the QLDC ITA) would bring the peak period ebike and car journey times much closer together. Furthermore, ebikes allow the rider to reach their end destination without the need for changing/shower facilities and are considerably easier/cheaper to park. Ebikes also have a wider appeal for potential users as it is not necessary to be a 'lycra clad' athlete to undertake these types of journeys.

7.2 Bus

At this stage it is not known what the bus route network will be through the whole Ladies Mile masterplan development. As such both of the proposed East West links (Roads 1 and 2) have been designed as Collector/Connector Roads which will safely accommodate buses (see **Section 9** below).

Bus stops could be provided on both or one of the Collector/Connector Roads (Roads 1 and 2) once the bus routes are confirmed by QLDC. Bus stops will be positioned to provide easy (<400m distance/5 min walk time in accordance with ARTA guidance) to the Flint's Park site. In accordance with paragraph 3.3.9 of the QLDC Code of Practice (CoP) these bus stops will be designed in accordance with ARTA (including pedestrian build outs/bus boarders) and will be tail to tail pairs with a pedestrian crossing facility and existing pedestrian routes connecting into these. Road markings in the form of a bus box and No Stopping At All Times (NSAAT) will be provided.

7.3 Travel Plan

Although a Travel Plan has not been specifically prepared for the site, there are a number of Travel Plan initiatives that will be implemented including:

- All dwellings will be given an electric bike (ebike) to encourage commuting, shopping, education, health and leisure cycle trips to key destinations including Shotover/ Lake Hayes Estate, Five Mile Shopping Centre, Queenstown Airport, Remarkables Shopping Centre/Frankton, Queenstown CBD and wider recreational routes. This will help to reduce the dependency on car use.
- Electric charge points will be provided in each garage for the charging of the electric bike.
- Sales staff will provide buyers with cycle maps indicating safe and direct routes for cycling to key destinations.
- Sales staff will provide buyers with details of bus routes, timetables and the Choice app when the bus service becomes operational.
- A GoCard will be given to each dwelling to promote use of the bus once the bus service through the site becomes operational.

8 COMPLIANCE WITH RELEVANT TRANSPORT POLICIES

In 2018 QLDC, Otago Regional Council and NZTA signed a Memorandum of Understanding to formalise a collaborative approach to addressing transport challenges within Queenstown.

Key national, regional and local transport policies and strategies that the Flint's Park proposal complies with includes:

Government Policy Statement (GPS) 2018 - focused on four key priorities; safety, access, environment, and value for money. The four categories have been developed to reduce Deaths and Serious Injuries (DSI's), deliver the best infrastructure for the right cost, provide increased access for people and reduce adverse effects on the climate.

To reduce deaths and serious injuries, governing bodies will need to have a greater focus on safety improvements on high risk state highways, such as SH6 in Queenstown, as well as local roads.

The second priority of the GPS is access, with increased investment in footpaths and cycleways to encourage uptake of active travel modes. The Flint's Park development focuses on facilities for active travel modes. The strategic vision looks at an increased focus in urban centres and development in thriving regions, such as Queenstown. There is a direction to support national freight and tourism connections, as well as integrating transport and land use planning, which increases access to employment, education and recreation.

The policy statement also seeks to protect the environment in relation to land transport, with mode shift to help aid in lowering emissions to facilitate the wider commitments of the Government such as achieving the Paris Agreement 2030 GHG emissions target. It notes the importance of creating liveable cities through enhanced public spaces and improved accessibility. The Flint's Park development achieves this through provision for bus and active travel modes. The final priority is around investing in value for money projects which consider the full range of costs and benefits over the whole life of the investment.

Otago Southland Regional Land Transport Plans (OSRLTP) 2015- 2021 (and proposed variations Dec 2017 - out for consultation at the time this report was produced). The Otago Southland RLTP was produced jointly between Otago and Southland Regional Transport Committees to help acknowledge shared challenges and opportunities within the regions.

The long-term goal is a transport system in Otago and Southland that provides adequately for mobility, economic activity and productivity while minimising road trauma. For urban areas, including Queenstown, the OSRLTP seeks to reduce reliance on the private motor vehicle, especially for shorter trips. It supports integrated transport planning and providing transport for future requirements in addition to the present.

The plan encourages future development and subdivisions, such as Ladies Mile, to be effectively served by public transport and active modes, reducing the demand on the road network. Public transport should run on a regular basis and connect nodes to a centre with essential services. It should also be accessible with adequate bus stops, shelters and footpaths for people to access the services.

Provision for active modes must be incorporated into new designs and major improvements. This can be by reallocating road space, delivering separated paths and priority for

pedestrians and people on bikes. The SH6 Ladies Mile Corridor improvements are included in the OSRLTP where top priority projects proposed for 2018-2021 include:

- New roundabout at the intersection of SH6 and Howards Drive.
- One pair of bus stops on SH6, location to be confirmed.
- SH6 pedestrian/cycleway underpass near bus stops.
- Footpaths along SH6 to the underpass and bus stops.

Queenstown District Lakes Operative District Plan (OPD) (June 2018 updates). The Operative District Plan recognises the need for a sustainable, safe transport system that provides maximum choice between modes. The unique nature of transport demands and constraints in Queenstown mean that land use and access need to be controlled efficiently.

Objectives 6 and 7 within the District Plan refer to recognising and meeting the needs of people who travel by active modes and public transport. Detailed specific considerations include:

Section 7.5.5.2 iii) identifies a minimum set back from a road boundary of 4.5m.

Section 10:

- 10.1.1 ii) Efficient Use of buildings and Infrastructure makes reference to “*efficient and safe routes for movement of people*”.
- 10.1.13 Objective 1 refers to “*providing a choice of transport mode*” and providing a “*convenient link between employment and living environments*”. Objective 5 refers to making Queenstown town centre accessible to people including promote and investigate opportunities for public transport linkages.

Section 14, Objective 1 classifies SH6 Ladies Mile as an Arterial Road, being a “*dominant element of the network connecting the major settlements in the District with the District*” and that it “*will be managed to minimise its local access function*”. The proposed SH6/ Howards Drive roundabout access is an existing intersection and as such this minimises its local access function. Furthermore, the proposed construction traffic access does not result in an additional access onto the existing SH6 thus minimising its local access function.

The Flint’s Park development is shaped and informed by the OPD and contributes to the OPD stated objectives.

QLDC Housing Infrastructure Fund (HIF) Business Case and Integrated Transport Assessment (ITA). The HIF bid recognised that car dependent development is not sustainable into the future as there is very limited opportunity to increase highway capacity in an affordable way. All recently undertaken or planned Queenstown Transport Studies include improvements to public transport and active travel, to improve the attractiveness and reduce the use of private vehicles.

QLDC - Queenstown Integrated Transport Programme Business Case (QITPBC) (2017) and Overarching Transport Programme Business Case (2017). Includes Objective 1: To improve network performance for private vehicles, public transport and cycling and Objective 2: Improved liveability and visitor experience. The QITPBC identified the Ladies Mile Corridor Improvements as a key project and a good strategic fit with the overall network improvements planned by the PBC.

Park and ride public transport services are also recommended in the QITPBC. This included the provision of parking facilities at appropriate locations (such as Frankton, Ladies Mile, Jacks Point, Arrowtown/Arrow Junction) to enable greater use of public transport. The PBC identified the importance of public transport at Ladies Mile in the overall integrated network programme and funding from the NLTF at the 51% FAR rate would be expected for the bus stops and underpass.

QLDC - Public Transport Demand Capacity Analysis. It is understood that this analysis has been carried out to understand the demand for public transport across Queenstown and the capacity of proposed solutions.

QLDC Frankton to Queenstown Single Stage Business Case (SSBC). Proposes increasing capacity on SH6A with priority for public transport and intersection improvements.

Wakatipu Active Travel Network Detailed Business Case (DBC). Sets out strategic active mode links to be integrated with other planned transport improvements and studies. The proposed active travel mode Flint's Park proposals support this DBC.

QLDC Parks and Open Space Strategy 2017. This document indicates that open space should be distributed to create a contiguous network where possible that establishes recreational trail networks, cycling and walking linkages. Connections or linkages can also make moving around neighbourhoods easy, and can provide an alternative and sustainable mode of transport. When new developments are planned they should connect with existing trails and reserves where possible. All residents within urban/built up areas should live within reasonable walking distance to a Local Park. Pathways to the reserves should be easy for parents with young children, people with limited mobility and the elderly. For a reserve to be 'accessible' it should generally be within 600m (an easy 5 to 10 minute walk) of a property it serves and easily and safely accessible by foot. The Flint's Park development complies with these requirements.

9 INTERNAL ROAD LAYOUT AND COMPLIANCE WITH STANDARDS

9.1 Proposed road layout (see Appendix B for layout and Appendix D for typical street designs)

Vested Roads

Road 1 – Collector/Connector Road - east/west route 15m road reserve with the following cross section from north to south:

- 0.4m berm from property boundary to back of footway.
- 1.8m footway.
- 2.4m indented parking.
- 7m road.
- 2.4m indented parking.
- 1m berm to landscape buffer.
- Total = 15m.

Road 1 width is future proofed to accommodate bus movements should this in the future be the bus route. On street parking is provided on both sides of the street. Cyclists have the option to ride on the road or, in likely the case of less confident or recreational cyclists, on the parallel segregated footway/cycleway to the south of Road 1.

Road 2 - Collector/Connector Road - east/west route, 18m road reserve with the following cross section:

- 1.3m berm from property boundary to back of footway.
- 1.8m footway.
- 2.4m indented parking.
- 7m road.
- 2.4m indented parking.
- 1.8m footway.
- 1.3m berm from property boundary to back of footway.
- Total = 18m.

Road 2 width is future proofed to accommodate bus movements should this in the future be the bus route. On street parking is provided on the south side of the street and partly on the north side (none proposed parallel to the Neighbourhood Park). Cyclists will ride on the road.

Roads 3, 4 and 5 – Local Roads - north/south routes, 18m road reserve with the following cross section:

- 1.8m berm from property boundary to back of footway.
- 1.8m footway.
- 2.4m indented parking.
- 6m road.
- 2.4m indented parking.
- 1.8m footway.
- 1.8m berm from property boundary to back of footway.
- Total = 18m.

Cyclists will ride on the road.

Road 6 – Local Road - north /south route, 14m road reserve with the following cross section from west to east:

- 1.8m berm from property boundary to back of footway.
- 1.8m footway.
- 2.4m indented parking.
- 6m road.
- 2m berm to Linear Park.
- Total = 14m

No Stopping At All Times (NSAAT) road markings will be provided on the east side adjacent to the Linear Park. Cyclists will ride on the road or on the Linear Park shared route which runs parallel to the Park.

Private Laneways/JOAL's

Typical lane widths will be 8m.

9.2 QLDC Masterplan proposed 3rd Collector/Connector East/West Road

The QLDC indicative masterplan identified a 3rd east/west collector/connector road in between the proposed Roads 1 and 2. This is not proposed within the Flint's Park proposal for a number of reasons including:

- The Flint's Park proposal via Roads 1 and 2 provides a direct and convenient pedestrian, cycle, bus and car connection to the proposed Local Centre without the need for an additional 3rd Collector/Connector Road.
- Provision of a 3rd collector/connector road as shown on the QLDC indicative masterplan would not comply with the QLDC CoP (paragraph 3.3.7 Intersection and alignment) 150m minimum intersection spacing.
- The final form of the Local Centre is as yet unknown and hence it is difficult to confirm whether this 3rd east/west road would be required. However, from an urban design, public realm and pedestrian/cycle connectivity viewpoint, having the 3rd east/west route aligned through the centre of the Local Centre Plaza would create additional conflicts and barriers for pedestrian permeability around the Local Centre.
- Provision of the 3rd east/west road produces very short block lengths (circa 80m) resulting in an inefficient layout that would unnecessarily reduce the potential for much needed housing.

9.3 Road layout compliance with QLDC standards

The QLDC Land Development Code of Practice (CoP) provides details of the standards for land development and subdivision infrastructure. For Flint's Park the QLDC land use category of Live and Play and area type of Urban (i.e. population of 50/ha (circa 18.5 houses per ha) has been assumed. In terms of compliance with the CoP paragraphs this is summarised below:

- 3.2.5 Network Connectivity - in accordance with the CoP, all properties are within 300m of a connector/collector road.
- 3.2.8 Vesting – Roads 1 to 6 will be vested.
- C3.3.1 Rear Access Lanes – all proposed Lanes A to H comply with CoP carriageway types (a) and (b).

- 3.3.1.3 On street parking – each proposed indented parking bay is proposed to be 2.4m as opposed to the 2.5m in the CoP requirements. It is considered that this non-compliance will have a negligible impact and is considered an acceptable width.
- Table 3.2 Figure E20 Lanes, serving <20 dwellings as a rear service access – all Lanes A to H comply with CoP requirements. Cyclists ride on the road - low traffic volumes and low target operating speed (20km/h).
- Table 3.2 Figure E22 – Local Roads, serving 1 to 200 dwellings as the primary access to housing. Cyclists ride on the road - low traffic volumes and low target operating speed (30km/h). Roads 3, 4 and 5 comply with CoP standards whilst the Road 6 road reserve is slightly narrower at 14m compared to 15m since it only requires a footway on one side of the road.
- Table 3.2 Figure E23 – Connector/Collector Road – Road 1 is slightly narrower in road reserve width than the CoP standards. This is considered acceptable because:
 - It is not certain whether this road will actually be a bus route.
 - Even if this is a bus route, the proposed movement lane width of 7m is sufficiently wide to accommodate two buses to pass each other especially since parking is accommodated in the indented on street parking. Even if this is a bus route, the frequency of buses is unlikely to exceed a 15 minute frequency and, as such, the number of buses passing on this road will be very low (unlikely to exceed eight per hour i.e. one bus every 7.5 minutes).
 - Cyclists are provided with a parallel segregated footpath/cycleway and therefore more likely to use this than ride on the road.
- Table 3.2 Figure E23 – Connector/Collector Road – Road 2 is slightly narrower in road reserve width than the standards. This is considered acceptable because:
 - It is not certain whether this road will actually be a bus route.
 - Even if this is a bus route, the proposed movement lane width of 7m is sufficiently wide to accommodate two buses to pass each other especially since parking is accommodated in the indented on street parking. Even if this is a bus route, the frequency of buses is unlikely to exceed a 15 minute frequency and, as such, the number of buses passing on this road will be very low (unlikely to exceed 8 per hour ie 1 bus every 7.5 minutes).
 - On street indented parking is not proposed adjacent to the Neighbourhood Park.

3.3.7 Intersection and alignment design – in accordance with CoP requirements, all kerb radii are 4m to 6m. The distance between the intersection of Roads 1 and 2 (the two Collector/Connector roads) is circa 195m which exceeds the 150m minimum specified in the CoP.

3.3.8 No exit roads - as shown in **Appendix A** there is only one cul de sac and that is Lane H, for which a turning head can be provided if required. Roads 1 and 2 provide connections to the rest of the QLDC masterplan site and, as such, would not ultimately be no exit roads – if required the need for any temporary road turning areas would be discussed with QLDC.

3.3.11 Footpaths - all footpaths comply with CoP requirement for a 0.9m wide berm at the kerbline (except at indented parking bays).

3.3.11.1 Footpaths – all footpaths exceed the CoP minimum width of 1.5m and tactile pavers will be provided in accordance with the CoP. Pedestrian and cycle accessways are shown

on the masterplan at the cul de sac on Lane H, and also elsewhere to improve connectivity to the Neighbourhood Park, Linear Park and the SH6 Ladies Mile landscape area.

Vehicle Crossings - QLDC Operative District Plan (June 2018 update) Section 14.2.4.2 Access – at this stage detailed design has not been carried out on an individual unit basis but the access design standards are noted and will be complied with.

10 PARKING PROPOSALS AND COMPLIANCE WITH STANDARDS

10.1 Onsite Parking

QLDC Operative District Plan (June 2018 update) section 14.2.4.1 (i) Table 1 indicates the following minimum onsite parking spaces for residents and visitors:

- 2 per residential unit.
- 1 per residential flat.

As detailed in **Section 5.3** above, the development complies with these parking standards.

10.2 On street parking

The masterplan indicates circa 125 indented on street parking spaces will be available for the 151 residential units. This is marginally less than the requirement of one on street parking space per residential dwelling required by C3.3.6 of the QLDC CoP. It is considered that this parking requirement is excessive taking into account:

- National, regional and local transport policy prioritising modal shift away from car use to active modes and bus.
- Given the excellent walk, cycle and bus connectivity available to Flint's Park residents it would be inappropriate to provide excessive parking standards in this location.

Therefore, it is considered that the amount of on street parking provided is appropriate for this development.

10.3 Parking dimensions

QLDC Operative District Plan (June 2018 update) section 14.2.4.1 (x) indicates the following residential onsite parking dimensions:

- Single space = 3.1m width, 5.5m depth.
- Double space = 5.6m width, 5.6m depth.

At this stage detailed design has not been carried out on an individual unit basis, but the onsite parking design standards are noted and will be complied with.

11 CONCLUSIONS

- The proposal complies with relevant QLDC District Plan and Land Development Code of Practice policy and design standards.
- The development generally complies with the QLDC indicative Ladies Mile masterplan.
- This TA does not specifically consider the transport impacts beyond the site and has adopted the findings and recommendations from the QLDC ITA.
- In advance of NZTA delivering the SH6/Howards Drive, a construction traffic access can be provided off SH6 to access the site initially.
- The site provides excellent sustainable transport links for residents with an easy walk and cycle distance to onsite local centre and Parks facilities and easy cycle and bus journey times to nearby employment, education, shopping and other key services.
- The development supports and complies with national, regional and local stated sustainable transport strategy/objectives.
- As such, it is concluded that the development is generally in accordance with the ODP, that with the proposed transport measures then any potential transport effects are minimised to a point which is acceptable and as such there are no transport reasons that would preclude the development of the Flint's Park site as proposed.

12 APPENDICIES

- A. QLDC indicative masterplan for the wider Ladies Mile
- B. Flint's Park masterplan
- C. Site Location
- D. Typical Street Designs

'Engineering for life' isn't just a line. It's a philosophy.

We believe the most commercially successful projects are the ones that are built for people. At Candor³ we make better use of resources to deliver quality outcomes and to address the immediate needs of clients and the community, without constraining future opportunities.

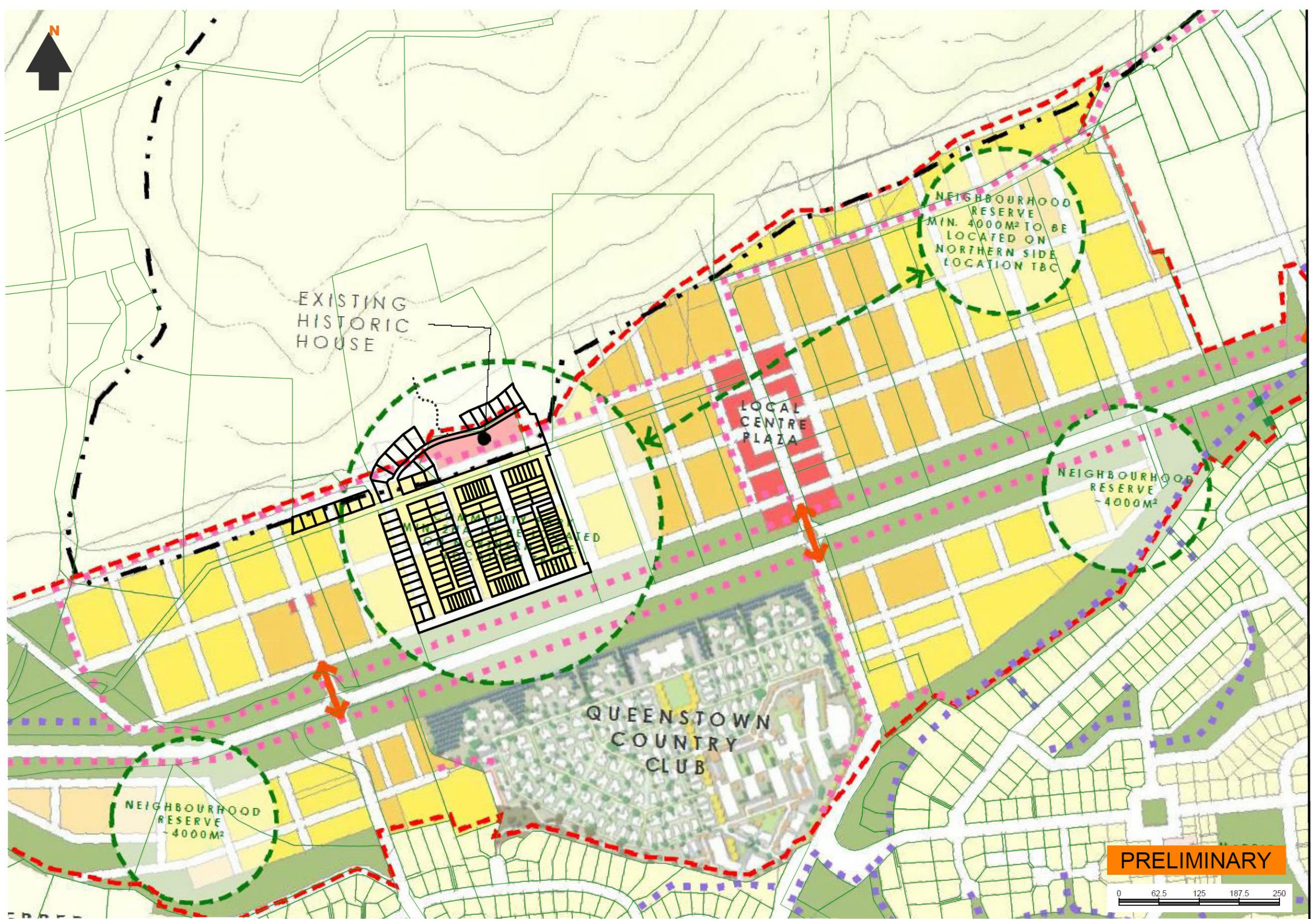
This holistic, people-focussed approach isn't just about feeling good - it also makes business sense. Outcomes that enhance the lives of people attract attention, accolades, and support in the market place.

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We cut through the complexity and distill each project down to its fundamentals for lasting, cost-effective solutions that truly add to people's quality of life.

**At Candor³, we build for people
- that's engineering for life.**







0 10 20 50m
SCALE = 1:1000 AT A1

Masterplan A
Reference PA18274 - IS04
25 February 2018





Regional Context

The site is located on the north side of Ladies Mile approximately half way between Queenstown and Arrowtown.

Queenstown Airport is located 5km from the site, while the various commercial developments in the Frankton area provide convenient local shopping and services.

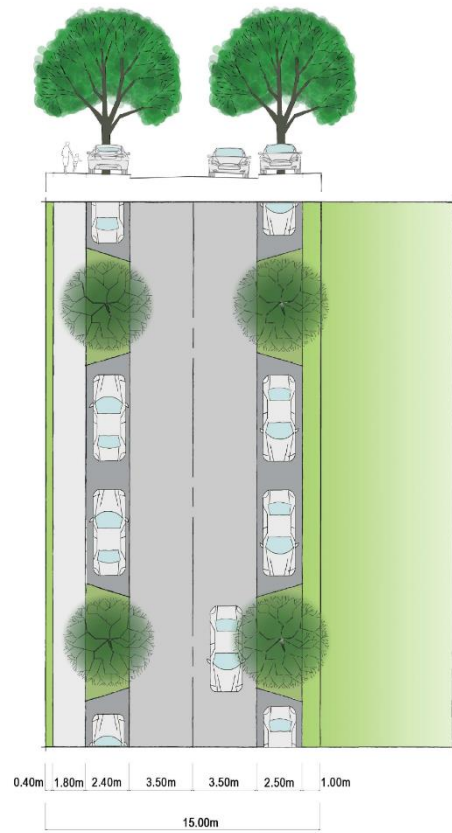
The site is located on Ladies Mile (SH6), which provides an opportunity to link into key public transport routes between Arrowtown, Lake Hayes Estate/Shotover Country and the Frankton transit hub and Queenstown central.



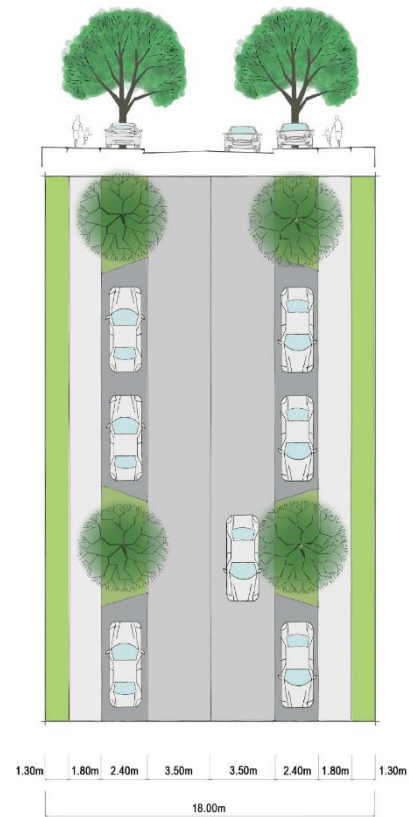
Site Location -Flint Park SHA

0 2.0km

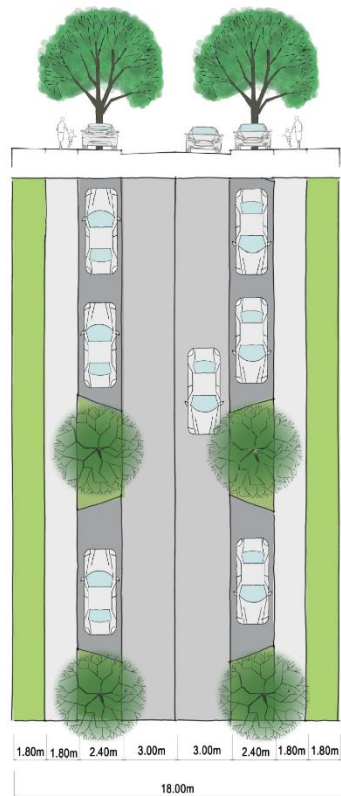
Typical Street Designs



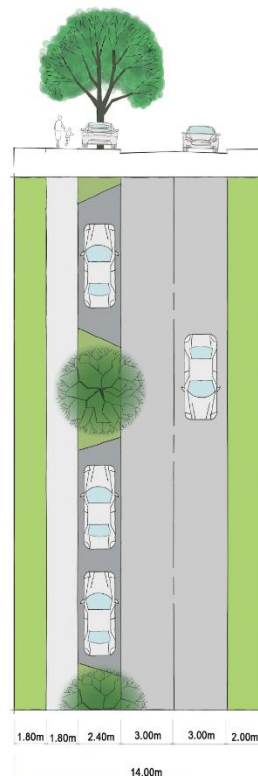
Road 1



Road 2



Roads 3, 4, 5



Road 6



Roads 3, 4, 5



Road 6