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County Council



Hodson Bay

Traffic and Transport Report

July 2026

PREPARED FOR

Roscommon County Council

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Traffic and Transport Report

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CONTENTS

1.	Introduction.....	2
1.1.	Background and Objectives	2
1.2.	Guidance and Legislation	2
2.	Site Location.....	5
3.	Proposed Development Description.....	6
3.1.	Proposed Project Overview	6
3.2.	Active Travel Infrastructure	6
3.3.	Traffic Management and Calming	6
4.	Existing Traffic Condition	7
4.1.	Weekend Traffic Counts	7
4.2.	Weekday Traffic Counts	7
4.3.	Traffic Speeds	7
4.4.	Level Crossing.....	8
4.5.	Existing Parking Facilities.....	9
4.6.	Parking Utilisation.....	10
4.7.	Accessibility of Existing Parking Areas.....	11
5.	Traffic Generation.....	11
5.1.	Construction Traffic	11
5.2.	Operational Traffic Generation	13
5.3.	Cumulative Traffic Generation.....	14
5.4.	Level Crossing Interface.....	15
6.	Parking Demand.....	15
6.1.	Hotel Parking Demand Assessment.....	15
6.2.	Waterfront Visitor Parking	16
6.3.	Overall Visitor Parking Requirement	16
7.	Traffic and Transport Proposals	17
7.1.	Parking Provision.....	17
7.2.	Walking and Cycling Infrastructure.....	18
7.3.	Public Transport	18
7.4.	Mobility and Management Plan	18
7.5.	Civils Design Package.....	18
7.6.	Road Safety Audit and Quality Audit	19
7.7.	Accessibility Audit.....	19
8.	Conclusion.....	19

1. Introduction

1.1. Background and Objectives

The project aims to enhance the Hodson Bay area into a flagship tourism facility. The project's key objectives include improving the visitor experience, developing a continuous promenade, extending the marina, reimagining the water play experience, and creating a sustainable access, parking, and transport strategy.

The project objectives are:

- To provide a world class multi-functional public space, which enhances the adjacent facilities. Fostering civic identity, social interaction and cultural expression.
- To provide a new water sports centre and café enhancing visitor experience.
- To support and comply with the binding requirements of the Climate Action Plan by prioritising resilience, adaptation, and greening.
- To upgrade the existing parking zones, designed for longevity and adaptability.
- To redesign the marina to promote expansion and easy access for boating vehicles.
- To support and enhance the local economy, strengthening the vitality of Hodson Bay.
- To provide safe routes for walking and cycling.
- To use the principles of universal design to provide an accessible space for all to enjoy.

The objectives have been developed through the project development process in consultation with key stakeholders in Roscommon County Council (RCC) to understand relevant issues and constraints. They are underpinned by the data analysis and insight gathered through the project development process to ensure objectives are realistic and evidence driven. They have also been framed to align with relevant national, regional and local policy.

The purpose of this report is to assess the existing and future transport impacts associated with the Proposed Development at Hodson Bay and to demonstrate that the Proposed Development can be accommodated safely and efficiently within the surrounding transport network.

1.2. Guidance and Legislation

1.2.1. Roscommon County Development Plan (2022–2028)

The Roscommon County Development Plan 2022-2028 (CDP) supports walking, cycling, tourism, recreation, and sustainable development. Relevant policies include:

- Recreation and Amenity Policy 05
 - Promote walkways, cycleways, and recreational routes, including links to Hodson Bay and Lough Ree.
- Tourism and Recreation Objective 07
 - Support sustainable tourism and recreation infrastructure at Hodson Bay, including marina expansion, waterfront public spaces, and greenway connections.
- Active Travel Policies
 - ITC 7.25: Promote safe walking and cycling infrastructure.
 - ITC 7.26: Develop a connected countywide walking and cycling network.
 - ITC 7.27–7.28: Apply national design standards and improve pedestrian/cyclist safety.
 - ITC 7.29–7.30: Deliver safer routes and retrofit active travel infrastructure.
- Hodson Bay / Barrymore Objectives
 - HB1: Support tourism, leisure, and amenity development.
 - HB2: Support expansion of tourism facilities while maintaining public access.
 - HB4: Facilitate low-intensity tourism, walking, and cycling routes near Natura 2000 sites.
 - HB8: Maintain greenbelt lands as environmental and visual buffers.
 - HB9: Protect greenbelt lands, biodiversity, landscape, and amenity value.
- All general objectives of Volume I of the CDP also apply.

The Proposed Development directly supports the objectives of the CDP by enhancing walking and cycling infrastructure, improving public access to the waterfront, facilitating sustainable tourism and recreation through the watersports facility and marina enhancements, protecting environmental assets through sensitive design and ecological mitigation measures, and maintaining the landscape and amenity value of Hodson Bay while improving connectivity between Athlone and Lough Ree.

1.2.2. Roscommon Outdoor Recreation Strategy (2023–2028)

Identifies Hodson Bay as a key recreation destination and supports improved walking and cycling access to the Shannon shoreline and wider outdoor recreation network.

The Proposed Development enhances Hodson Bay as a strategic outdoor recreation destination by improving access to the shoreline, upgrading recreational infrastructure, strengthening walking and cycling connections, and supporting sustainable tourism and water-based recreation.

1.2.3. Roscommon County Council Corporate Plan (2024–2029)

Relevant objectives include:

- Maintain and enhance public spaces and amenities.
- Protect the natural and built environment.
- Promote sustainable transport and optimise the existing road network.

The Proposed Development supports the Corporate Plan by delivering high-quality public realm improvements, protecting the natural environment through environmentally sensitive design, promoting sustainable transport through enhanced active travel infrastructure, and improving the efficiency and management of the local transport network.

1.2.4. Regional Spatial and Economic Strategy (RSES) 2019–2031

The RSES identifies Athlone as a Regional Centre and supports:

- Expansion of interconnected greenways (RPO 5.18)
- Development of greenways in accordance with best practice
- Collaborative greenway and blueway development with environmental protection
- Enhanced walking, cycling, and public transport
- Tourism linked to natural and cultural assets
- Biodiversity protection and green infrastructure

The Proposed Development contributes to the RSES by improving sustainable connectivity between Athlone and Hodson Bay, supporting greenway and blueway objectives, enhancing tourism linked to Lough Ree, strengthening green infrastructure, and encouraging walking and cycling as alternatives to private car travel.

1.2.5. National Planning Framework (2025)

The NPF is Ireland's long-term spatial planning strategy to 2040 and, together with the NDP, forms Project Ireland 2040. Relevant National Strategic Outcomes (NSOs) include:

- NSO 2: Enhanced Regional Accessibility
- NSO 5: Sustainable Mobility
- NSO 8: Carbon Neutral and Climate Resilient Society
- NSO 9: Sustainable Management of Environmental Resources

Relevant NPF Objectives include:

- NPO 34: Support sustainable tourism, greenways, blueways, and peatways.
- NPO 37: Prioritise walking and cycling accessibility.
- NPO 51: Support sustainable port and harbour infrastructure.
- NPO 63: Promote tourism, sport, heritage, arts, and culture.
- NPO 66: Ensure development occurs within environmental limits.
- NPO 83: Strengthen green and blue infrastructure networks.
- NPO 86: Seek no net loss of biodiversity.
- NPO 107: Align delivery of NPF and NDP objectives.

The Proposed Development aligns with the NPF by supporting sustainable tourism, prioritising walking and cycling, enhancing recreational access to Lough Ree, improving marina infrastructure, protecting biodiversity through appropriate mitigation measures, and contributing to climate resilience and sustainable regional development.

1.2.6. National Development Plan (2021–2030)

The NDP promotes balanced regional growth, climate action, sustainable transport, and quality of life improvements. It supports walking and cycling networks, active travel safety, and tourism connectivity.

The Proposed Development supports the NDP by investing in active travel infrastructure, improving sustainable access to tourism and recreation destinations, promoting healthier travel choices, and contributing to balanced regional growth.

1.2.7. National Investment Framework for Transport in Ireland (NIFTI) (2021)

NIFTI prioritises:

- Urban mobility
- Protection and renewal of infrastructure
- Regional and rural connectivity
- Decarbonisation

The Proposed Development aligns with NIFTI by prioritising sustainable mobility, improving regional accessibility, supporting transport decarbonisation through enhanced walking, cycling and EV charging infrastructure, and upgrading transport infrastructure serving Hodson Bay.

1.2.8. National Sustainable Mobility Policy (2021–2025)

The policy aims to increase daily active travel journeys by 50% by 2030. Relevant objectives include:

- Improving safety across all transport modes (Goal 1)
- Expanding sustainable mobility in regional and rural areas (Goal 4)
- Expanding the greenway network (Core Action 30)
- Encouraging modal shift and cycling facilities (Goal 5; Core Action 41)
- Improving multimodal connectivity through smart solutions (Goal 10)

The Proposed Development supports the National Sustainable Mobility Policy by providing safe and accessible walking and cycling facilities, improving links between tourism destinations and surrounding communities, enhancing multimodal connectivity through improved wayfinding, cycle parking and EV charging infrastructure, and encouraging modal shift from private car use.

1.2.9. Our Rural Future (2021–2025)

Supports sustainable tourism, outdoor recreation, accessible public transport, and investment in walking and cycling infrastructure. Relevant measures include:

- Measure 34: Sustainable tourism action plan
- Measure 36: Investment in greenways, blueways, and recreation infrastructure
- Measure 92: Accessible rural public transport
- Measure 102: High-quality walking and cycling infrastructure

The Proposed Development contributes to Our Rural Future by enhancing sustainable tourism infrastructure, improving access to outdoor recreation, investing in high-quality walking and cycling facilities, and supporting improved connectivity between Athlone, Hodson Bay and the wider Lough Ree area.

1.2.10. Climate Action Plan (2025)

The Proposed Development supports emissions reduction, active travel, sustainable tourism, and climate resilience. Relevant actions include:

- Action 231: Expand Active Travel and Greenway Networks
- Action 234: Increase modal shift to walking and cycling
- Action 260: Increase park-and-ride/share facilities

The Proposed Development supports the Climate Action Plan by encouraging active travel, reducing transport-related emissions through improved walking, cycling and EV charging facilities, incorporating climate resilience measures into the design, and promoting sustainable access to recreation and tourism destinations.

1.2.11. National Outdoor Recreation Strategy (2023–2027)

Promotes sustainable outdoor recreation and connected cycling networks integrated with public transport. Relevant Action 4.8 supports development of a coherent national cycling network.

The Proposed Development supports the National Outdoor Recreation Strategy by improving access to outdoor recreation opportunities, strengthening active travel links, enhancing facilities for water-based recreation, and contributing to a connected network of walking and cycling routes.

1.2.12. National Cycle Network (2021–2040)

The National Cycle Network aims to connect communities through safe cycling and walking routes. The proposed Hodson Bay–N61 link would connect the project area to this network, improving active travel, health, tourism, and regional connectivity.

2. Site Location

The Study Area for the assessment comprises Hodson Bay and its immediate environment, located on the western shore of Lough Ree, approximately 7 km northwest of Athlone. The area is accessed principally via the N61 and the L2020, which forms the primary vehicular access corridor serving the hotel, marina, waterfront recreational facilities, and associated tourism and leisure uses.

The Study Area is characterised by a rural lakeside setting with a strong focus on tourism, hospitality, and recreation. Key trip-generating land uses include the Hodson Bay Hotel, Athlone Golf Club, Baysports Waterpark, marina facilities, recreational amenities, lakeshore and water activities, and seasonal leisure attractions. The area also accommodates a degree of residential development and adjoining recreational lands, including golf course and open space uses.

The wider transport context is defined by the proximity of Athlone, which provides regional rail and bus services; however, no direct public transport services currently operate within the Study Area itself. As a result, access is predominantly car-based, supplemented by coach and organised group travel during peak tourism periods.

The L2020 Local Road corridor forms the principal internal access route through the study area, connecting the N61 to Hodson Bay Marina and waterfront facilities. This corridor also incorporates the Hodson Bay Level Crossing (XM038), which rail operations pass through Hodson Bay on the Dublin–Westport/Ballina railway line. The site location is illustrated in Figure 1.



Figure 1: Site Location

3. Proposed Development Description

3.1. Proposed Project Overview

The Proposed Development comprises a comprehensive package of public realm improvements, active travel infrastructure, transport enhancements, parking reconfiguration works within Hodson Bay and the construction of upgraded water sports and café buildings. The overall objective of the Proposed Development is to improve accessibility, enhance sustainable transport provision, and support the continued operation and growth of the area as a regional tourism and leisure destination.

Key elements of the traffic proposals include the reorganisation and net increase of car parking provision, the introduction of new pedestrian and cycling infrastructure along the L2020 Local Road corridor, enhancements to waterfront accessibility, and the provision of improved traffic management and safety measures.

The Proposed Development also includes the relocation of a proportion of existing lakefront car parking to improve the visual amenity and pedestrian priority of waterfront areas, alongside the introduction of new facilities to better manage visitor access and circulation.

3.2. Active Travel Infrastructure

The Proposed Development includes a significant enhancement of cycling infrastructure within Hodson Bay, with the objective of providing a continuous, safe, and high-quality active travel route between the N61 National Road and the waterfront area.

A key element of the Proposed Development is the provision of a 3m wide shared pedestrian and cycle facility along the L2020 corridor extending from the N61 junction to Hodson Bay Marina. This will be achieved through a combination of carriageway rationalisation and the widening and repurposing of existing footpaths.

Existing footpaths along the western side of the L2020 will be upgraded over a length of approximately 900m, while footways along the eastern side will be upgraded over approximately 415m, creating a continuous and coherent active travel corridor.

The Proposed Development also includes improved signage, lighting, and wayfinding to support safe and intuitive cycling movement, as well as the provision of dedicated bicycle parking facilities within the development. These measures are intended to support both recreational and functional cycling, improving access to the waterfront, hotel, and associated amenities.

3.3. Traffic Management and Calming

The Proposed Development incorporates a range of traffic management and calming measures designed to improve safety, reduce vehicle speeds, and enhance the integration of different transport modes within the L2020 corridor and waterfront environment.

Key measures include the introduction of vertical deflection features and raised pedestrian crossings at key desire lines, supporting safer pedestrian and cyclist movement across the road network. These measures are complemented by reductions in carriageway widths in selected locations to between 5.5m and 6m, facilitating the introduction of the shared pedestrian and cycle facility while also encouraging lower vehicle speeds.

The Proposed Development also includes upgraded road markings, regulatory and directional signage, and improved public lighting. Two new bus set-down areas are also proposed adjacent to the Water Sports Pavilion, which will assist in managing coach and group movements and reduce conflict between larger vehicles and general traffic.

4. Existing Traffic Condition

Traffic volumes in Hodson Bay are influenced by the tourism and hospitality functions of the area, with demand increasing during weekends, holiday periods and the summer season when visitor numbers are at their highest. In order to understand the parking demand in peak periods, traffic and parking surveys were undertaken in Hodson Bay by Irish Traffic Surveys Ltd over a seven-day period between Thursday 31st July 2025 and Wednesday 6th August 2025, which included the August Bank Holiday on Monday 4th August 2025.

The traffic survey was comprised of three Automatic Traffic Counts (ATCs) along the L2020 access corridor to record existing vehicle flows and speeds. The parking survey was comprised of a video survey at all parking locations within Hodson Bay, which was analysed to determine parking occupancy rates throughout the day.

The surveys indicated that existing traffic demand is moderate in nature and is generated predominantly by hotel guests, recreational visitors, leisure users and seasonal tourism activity. It should be noted that the traffic volumes recorded by ATCs also include trips associated with residential properties and Athlone Golf Club located between the survey locations and Hodson Bay. As a result, the recorded flows do not represent traffic travelling exclusively to and from Hodson Bay.

4.1. Weekend Traffic Counts

Traffic surveys undertaken during the weekend period recorded the following traffic volumes along the L2020.

Table 1: Weekend Traffic Volumes

Period	Inbound Vehicles	Outbound Vehicles
Daily Total Vehicles	1,374	1,408
AM Peak Hour (PCU)	103	87
PM Peak Hour (PCU)	191	176

The survey data indicates that traffic activity is highest during the PM peak hour, with a combined two-way flow of approximately 367 passenger car units (PCUs). The elevated afternoon and evening traffic volumes are consistent with visitor arrivals and departures associated with leisure activities, dining, hotel accommodation and waterfront recreation.

4.2. Weekday Traffic Counts

Traffic surveys undertaken during the weekday period recorded the following traffic volumes along the L2020.

Table 2: Weekday Traffic Volumes

Period	Inbound Vehicles	Outbound Vehicles
Daily Total Vehicles	1,200	1,178
AM Peak Hour (PCU)	118	98
PM Peak Hour (PCU)	186	136

Weekday traffic volumes are marginally lower than those observed during weekends, although the overall traffic profile remains similar. The PM peak period continues to represent the busiest operational period on the network, reflecting the influence of hotel guests, conference attendees, recreational visitors and tourism-related travel demand.

4.3. Traffic Speeds

The 85th percentile traffic speeds along the L2020 recorded at each ATC location is shown in Figure 2. The 85th percentile speed represents the speed at or below which 85% of vehicles travel under free-flow conditions and is commonly used to assess prevailing driver behaviour. This measure provides an indication of typical operating speeds along the route and helps identify locations where vehicle speeds may warrant further consideration in the context of road safety and design.

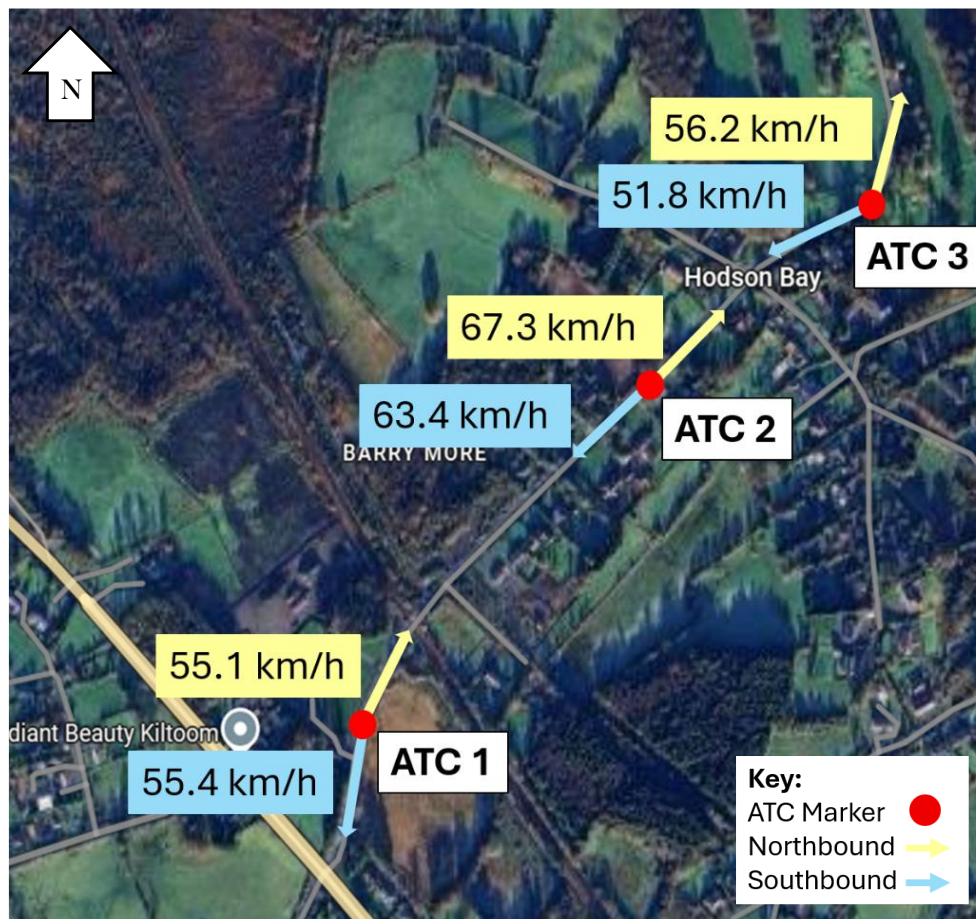


Figure 2: L2020 Traffic Counts 85% Traffic Speeds

All ATC locations recorded 85th percentile speeds above the posted 50 km/h speed limit, with the highest recorded value reaching 67.3 km/h. These results indicate that vehicle speeds along the L2020 are consistently higher than the posted speed limit, suggesting a high level of speeding along the route.

This finding is consistent with feedback received during stakeholder and community consultation, where local residents identified excessive vehicle speeds as a key concern and reported that speeding is a frequent issue along the L2020 access route.

4.4. Level Crossing

The Dublin–Westport/Ballina railway corridor passes through the Hodson Bay area and intersects the local road network at the Hodson Bay Level Crossing (XM038). While the railway line forms part of the national intercity rail network, there is no railway station within Hodson Bay, and no scheduled passenger services stop in the vicinity of the site. Consequently, the presence of the railway line does not provide a direct public transport option for visitors travelling to Hodson Bay.

Through engagement with Iarnród Éireann, it was found the level crossing is traversed by a total of 12 scheduled passenger train services each day, comprising six services in each direction. In addition to passenger operations, the railway line accommodates freight services, the frequency and timing of which vary depending on operational requirements. The line also facilitates unscheduled rail movements, including empty trainset transfers and on-track maintenance machines serving the Ballina branch, which typically operate between scheduled passenger services.

The operation of the level crossing results in periodic interruptions to vehicular, pedestrian and cyclist movements on the local road network. Iarnród Éireann informed that typical barrier closure durations are approximately four minutes for scheduled passenger services and approximately eight minutes for freight trains or on-track maintenance vehicles. Actual closure periods may vary depending on train speeds, signalling requirements and prevailing operational conditions at the time of passage.

Although these closures are relatively infrequent throughout the day, they can result in short-term delays for road users accessing and departing Hodson Bay. Given the reliance on the local road network for access to the hotel, marina,

waterfront amenities and recreational facilities, the operation of the level crossing forms an important consideration in the assessment of traffic conditions within the area.

In addition to the short-term delays experienced during barrier closures, consultation with local stakeholders identified that queues can form on the L2020 during periods of increased traffic demand. It was reported that these queues can extend from the Hodson Bay Level Crossing to the nearby N61 junction, particularly during peak visitor periods when traffic volumes are highest. The combination of level crossing closures and elevated traffic demand can therefore result in periodic congestion on the local road network, reducing junction performance and increasing delays for vehicles accessing and departing the Hodson Bay area. These operational constraints have been considered as part of the assessment of the existing transport network and its ability to accommodate future development-related traffic, which is described in detail in Section 5.4.

Notwithstanding the presence of the railway line, the absence of a station or stopping service within Hodson Bay means that rail infrastructure contributes little to the accessibility of the area from a public transport perspective. Accordingly, visitors and employees remain predominantly dependent on private vehicle travel, with the railway corridor acting primarily as a physical infrastructure constraint rather than a direct transport service for the area.

4.5. Existing Parking Facilities

Owing to its rural location and the limited availability of alternative transport options, most visitors travelling to Hodson Bay and the surrounding attractions rely on private vehicles as their principal mode of transport.

Over time, several parking facilities have been developed throughout the area to accommodate increasing visitor demand associated with the growth of tourism, recreation, hospitality and leisure activities. These parking areas serve a range of users, including patrons of the Hodson Bay Hotel, Baysports Waterpark visitors, people accessing the marina, and individuals accessing the shoreline and waters of Lough Ree.

The existing parking provision is distributed across several locations within Hodson Bay and currently comprises a total of 353 parking spaces, with no formal provision for bus or boat trailer parking. The parking supply is divided between the central activity area, incorporating the hotel, marina and promenade facilities, and the northern section of the site.

Table 3 and Figure 3 described the number and location of the existing parking provision in Hodson Bay.

Table 3: Existing Parking Numbers

Location	Parking Spaces
Central Hodson Bay (Car Park A, Car Park B and On-Street Parking)	244
North Hodson Bay (Car Park C)	109
Total Existing Parking Provision	353



Figure 3: Existing Parking Layout

4.6. Parking Utilisation

Parking occupancy surveys undertaken within Hodson Bay demonstrate that the existing parking facilities experience consistently high levels of utilisation, particularly within the central activity area encompassing the marina, promenade and hotel car parks. These areas represent the primary focus of visitor activity and therefore attract the greatest parking demand throughout the year.

Stakeholder consultation and survey results indicate that during periods of peak activity, particularly during weekends, holiday periods and major events, the existing parking facilities regularly operate at or near capacity. The central parking areas are typically the first to reach full occupancy, with demand subsequently extending to the northern car park. During these periods, the overall parking supply within Hodson Bay becomes constrained, resulting in varying levels of informal parking occurring within the vicinity of the site.

The observed parking conditions demonstrate that existing parking demand frequently exceeds the practical capacity of the available parking infrastructure during peak periods, highlighting the importance of maintaining and appropriately managing parking provision within the area.

Figure 4 shows the combined occupancy data for all parking in Hodson Bay during the survey on Sunday 3rd August 2025, indicating the parking was operating close to capacity.

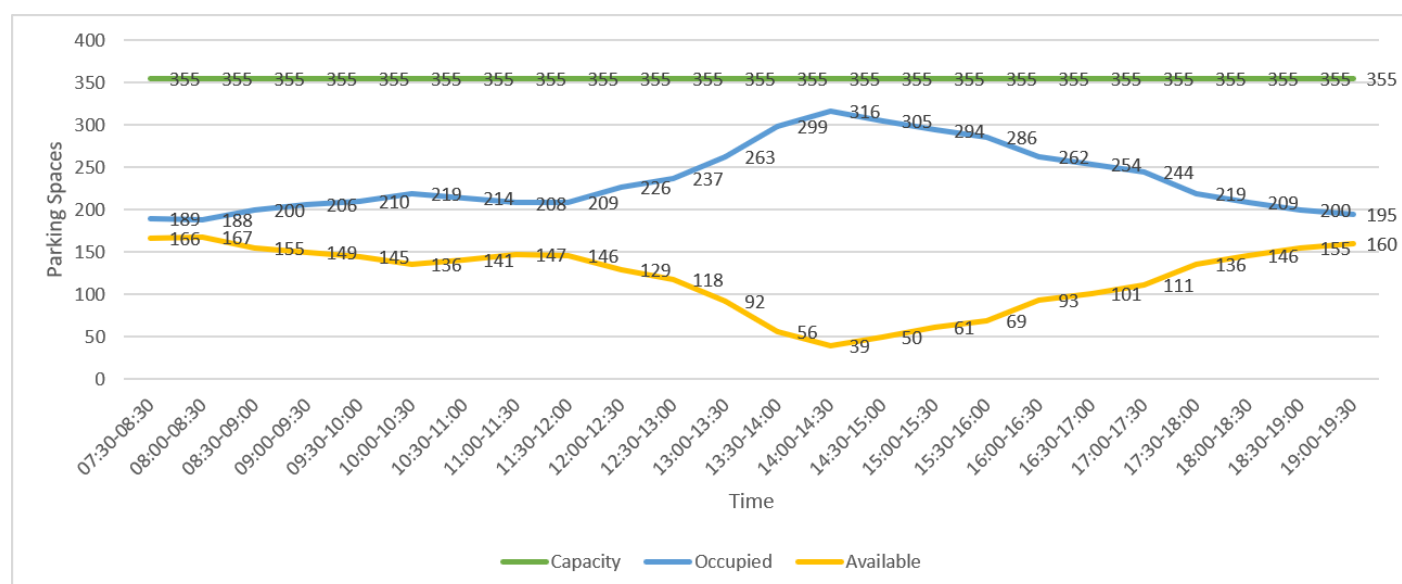


Figure 4: Hodson Bay Parking Utilisation - Sunday 3rd August 2025

4.7. Accessibility of Existing Parking Areas

The existing parking facilities are located at varying distances from the principal destination within Hodson Bay, namely the Hodson Bay Hotel and associated waterfront amenities. The proximity of parking spaces to the hotel entrance has a significant influence on parking choice, with visitors demonstrating a preference for the most conveniently located parking areas.

Measured walking distances from the hotel reception to the nearest available parking spaces within each parking area shown below.

Table 4: Parking Area Proximity

Parking Area	Distance from Hotel Reception
Marina Car Park – Nearest Bay	92 m
Hotel Car Park – Nearest Bay	94 m
Northern Car Park – Nearest Bay	343 m

These distances indicate that the northern car park functions as a more remote parking facility relative to the central parking areas, which are located within a short walking distance of the hotel entrance and principal visitor attractions.

5. Traffic Generation

5.1. Construction Traffic

The construction phase of the Proposed Development is anticipated to extend over a period of approximately 30 months and will be delivered in two primary stages: 1) Enabling Works and 2) Construction Works. This period will give rise to a temporary increase in traffic movements associated with construction workforce travel, the delivery of infrastructure components, and the movement of construction-related Heavy Goods Vehicles (HGVs).

These activities will be managed within the context of the existing Hodson Bay transport environment, which is characterised by a rural access network comprising the N61 National Road and the L2020 Local Road. This network already accommodates seasonal peaks in visitor-related traffic associated with the Hodson Bay Hotel, existing marina, and water sports activities. The construction phase impacts are therefore considered short-term and will be concentrated over defined periods of activity according to the project sequencing, with traffic levels reverting to baseline conditions upon completion of the works.

5.1.1. Construction Workforce Traffic

A peak construction workforce of approximately 25 personnel has been assumed for the purposes of the assessment. Given the rural context and limited availability of public transport, it is assumed that the majority of construction staff will travel to the site by private car.

Applying an average vehicle occupancy rate of 1.2 persons per vehicle results in the following:

- 25 construction staff ÷ 1.2 persons per vehicle = approximately 21 vehicles

This generates:

- 21 inbound vehicle trips during the morning peak construction period, and
- 21 outbound vehicle trips during the evening departure period

These movements will be distributed across typical construction start and finish times and are not expected to coincide directly with peak visitor activity periods at Hodson Bay, which are primarily concentrated during afternoon and evening leisure periods.

5.1.2. Construction HGV Movements

The frequency of HGV movements will fluctuate throughout the 30-month programme, determined by the intensity of material importation and waste removal required for each task item.

Enabling Works Stage:

During the initial stage, HGV activity will primarily involve the removal of demolition waste from the existing Baysports and toilet block structures, alongside the removal of material from site clearance and topsoil stripping. Inbound movements will include the delivery of granular stone to establish temporary construction compounds, site offices, and internal haul roads. As vegetation removal and site clearance are restricted to the period between September and February (outside of the bird breeding season), these movements may be concentrated within this window. This timing coincides with the autumn and winter months, when visitor numbers at Baysports typically decline and the facility subsequently closes to visitors, meaning these activities would occur primarily outside of the seasonal peak visitor period at Hodson Bay.

Construction Works Stage:

The peak period of HGV activity is anticipated during this stage, driven by the significant volume of materials to be imported to the site. This stage also requires high-frequency deliveries of ready-mix concrete for the Water Sports Pavilion foundations and site-wide kerbing.

A worst-case allowance of up to 15 HGV arrivals and 15 HGV departures per day has been assumed during peak construction activity periods. These movements will relate to the delivery of construction materials, plant, and equipment, as well as the removal of excavated material and general construction logistics.

Accordingly, HGV traffic generation is assessed as follows:

- 15 inbound HGV movements per day
- 15 outbound HGV movements per day

5.1.3. Total Construction Traffic Generation

The combined construction traffic generation results in a total of 72 two-way vehicle movements per day during the identified peak construction activity period. This total is comprised of the 42 daily workforce-related movements (staff cars/light vehicles) and the 30 daily HGV movements (material deliveries and waste removals) detailed in the preceding sections.

In accordance with the Construction Sequencing outlined in Chapter 4, this peak traffic generation is expected to be short-term and limited to the transition between the Enabling Works and the primary Construction Works stages. Specifically, this occurs when high-volume tasks overlap, such as the simultaneous importation of structural fill for regrading and the high-frequency concrete pours required for the Water Sports Pavilion foundations.

The scheduling of these 72 daily movements will be managed to ensure that they occur primarily outside of typical commuter peak hours on the N61 and the seasonal visitor peak periods at Hodson Bay. Furthermore, because construction is restricted from commencing during the bird breeding season (March 1st to August 31st), the most

intensive HGV activity related to site clearance and bulk filling will be concentrated in the autumn and winter months, further reducing the potential for conflict with peak summer tourism traffic.

Once the heavy civil engineering and structural phases are complete, traffic volumes will decrease significantly for the remainder of the 30-month programme, reverting to baseline conditions immediately upon the completion of site finishes and commissioning.

5.2. Operational Traffic Generation

5.2.1. Existing Visitor Traffic

The Hodson Bay waterfront and associated recreational facilities attract substantial numbers of visitors during the summer season. Visitor surveys carried out between June and November 2025 indicate that the existing waterfront amenities attract approximately 516 visitors per day during peak summer periods. This number does not include visitors associated with Hodson Bay Hotel or Athlone Golf Club.

Given the rural location of the site and the limited availability of direct public transport services, most visitors are expected to travel by private vehicle. A car mode share of 90% has been adopted based on existing visitor travel information from visitor surveys carried out between June and November 2025. An average vehicle occupancy of 2.8 persons per vehicle has been assumed for the Proposed Development, reflecting the predominance of family and group-based leisure trips associated with the Proposed Development. This assumption is considered appropriate for a destination-based family recreational facility and is consistent with the methodology set out in the TII Traffic and Transport Assessment Guidelines, whereby person trips are converted to vehicle trips using appropriate mode share and vehicle occupancy assumptions. The estimated daily traffic generation associated with waterfront visitors as follows:

- Daily Visitors: 516
- Car Mode Share: 90%
- Average Vehicle Occupancy: 2.8 persons per vehicle

Estimated Vehicle Arrivals:

- $(516 \times 0.90) \div 2.8 = 166$ vehicles per day

Allowing for both inbound and outbound movements, this equates to:

- 332 two-way vehicle trips per day

These movements form a significant component of the traffic demand observed within Hodson Bay during the summer season and contribute to the increased utilisation of the local road network and parking facilities.

5.2.2. Operational Visitor Traffic

Based on the Hodson Bay Tourism and Economic Study which projects activity levels across the combined recreational, hospitality and leisure offer, the Proposed Development is forecast to attract approximately 1,187 visitors per day during the summer season. This number does not include visitors associated with Hodson Bay Hotel or Athlone Golf Club.

Applying a rural car mode share assumption of 90% and an average vehicle occupancy of 2.8 persons per vehicle results in the following estimate of daily traffic generation:

- $1,187 \times 0.90 \div 2.8 = 382$ vehicles per day
- Equivalent to 764 two-way vehicle trips per day

5.2.3. Operational Traffic Generation Impact

The Proposed Development is therefore forecast to generate an additional:

- $764 - 332 = 432$ additional two-way vehicle trips per day

This equates to:

- 216 inbound vehicle trips per day, and
- 216 outbound vehicle trips per day

For the purposes of the peak hour assessment, it has been assumed that 10% of daily traffic occurs within the peak hour. This assumption is based on the average proportion of peak hour traffic (PCUs) relative to total daily traffic (PCUs)

observed in the existing weekend survey data, when traffic volumes are at their highest. The assumption is considered appropriate given the leisure-based nature of the Proposed Development, where visitor arrivals and departures are spread throughout the day rather than being concentrated within a typical commuter peak period.

Accordingly, peak hour traffic generation is estimated as:

- $216 \times 10\% = 22$ vehicles per peak hour in each direction
- Total: approximately 44 two-way peak hour movements

The number of visitors associated with Hodson Bay Hotel or Athlone Golf Club is not expected to change due to this project.

5.2.4. Operational Traffic Impact

The forecast development traffic has been assigned to the observed baseline traffic flows to assess future network performance. The resulting future year traffic flows are summarised below.

Table 5: Hodson Bay Traffic Flows - Weekday AM Peak

Movement	Existing	Development	Future
Inbound (PCU)	118	22	140
Outbound (PCU)	98	22	120

Table 6: Hodson Bay Traffic Flows - Weekday PM Peak

Movement	Existing	Development	Future
Inbound (PCU)	186	22	208
Outbound (PCU)	136	22	158

Table 7: Hodson Bay Traffic Flows - Weekend AM Peak

Movement	Existing	Development	Future
Inbound (PCU)	103	22	125
Outbound (PCU)	87	22	109

Table 8: Hodson Bay Traffic Flows - Weekend PM Peak

Movement	Existing	Development	Future
Inbound (PCU)	191	22	213
Outbound (PCU)	176	22	198

The assessment indicates that the Proposed Development results in an increase in peak hour traffic flows in the order of approximately 12% to 25%, depending on the period considered. This increase is occurring in the context of relatively low baseline traffic volumes and a leisure-oriented trip profile.

5.3. Cumulative Traffic Generation

The assessment of cumulative effects considers the interaction of the Proposed Development with other permitted or pending developments in the vicinity. A review of the Roscommon County Council planning register was undertaken for a study area extending from the N61 junction along the L2020 corridor into the Hodson Bay/Barrymore townlands.

Cumulative traffic impacts were assessed by combining the forecast development trips with the potential traffic generated by permitted developments identified in the planning search. These developments are categorised as "committed" as they have the potential to be under construction or operational simultaneously with the Proposed Development.

The planning search identified approximately 10 relevant applications in the Hodson Bay/Barrymore area. The majority of these are low-intensity residential developments. A review of the planning register identified a significant committed development at **Yew Point, Hodson Bay (Ref: 2360204)**, consisting of 36 timber eco-cabins which includes 12 family cabins and 24 two-person cabins, alongside various other permitted residential developments and individual dwellings in the immediate Barrymore and Hodson Bay area.

Allowing for the Yew Point scheme, the combined impact of other local permitted developments is limited; these are primarily small-scale residential in nature and do not fundamentally alter the traffic characteristics of the area.

5.4. Level Crossing Interface

The Hodson Bay Level Crossing (XM038) will continue to influence traffic flow characteristics on the local road network. While the Proposed Development will increase the number of vehicle movements using the L2020 in the operational phase, the relatively modest scale of peak hour generation (approximately 44 two-way movements) means that the Proposed Development is not expected to significantly alter the frequency or severity of delays associated with level crossing closures. Construction traffic is anticipated to operate outside of the peak hours so will not impact the frequency or severity of delays associated with level crossing closures.

The existing rail timetable and associated level crossing barrier operation are anticipated to remain the primary controlling factors in short-duration delay within the Study Area, as opposed to development-generated traffic impacts. The highest estimated inbound flow is 213 PCU.

Assuming a maximum barrier closure duration of approximately 8 minutes, queue lengths have been derived as follows:

- Inbound: $213 \text{ PCU} \times (8/60) = 213 \times 0.133 = \text{approximately } 28 \text{ PCU}$

The above results represent a worst-case scenario for queue accumulation at the level crossing under the stated barrier closure duration and peak flow conditions. To compare the existing is as follows:

- Inbound: $191 \text{ PCU} \times (8/60) = 191 \times 0.133 = \text{approximately } 25 \text{ PCU}$

Compared to the existing scenario, the Proposed Development results in a marginal increase in worst-case queue lengths at the level crossing under an 8-minute barrier closure period. Inbound queues increase from approximately 25 PCU to approximately 28 PCU, representing an increase of around three vehicles. Overall, the findings indicate a minor uplift in queue lengths, with operational conditions remaining broadly comparable between the existing and proposed scenarios.

The level crossing stop line is located 250m from the L2020 junction with the N61. Based on the predicted worst-case queue lengths, the assessment indicates that queues generated during barrier closures are not expected to extend back to the N61 junction under either the existing or proposed scenarios. Furthermore, the Proposed Development results in only a negligible increase in queue lengths compared to the existing situation and is therefore not expected to materially affect the operation of the N61 junction.

6. Parking Demand

6.1. Hotel Parking Demand Assessment

The parking requirement associated with the Hodson Bay Hotel has been assessed using operational information and visitor data supplied by hotel management. The assessment considers both overnight accommodation demand and peak daytime visitor demand generated by conferences, events, food and beverage facilities, and leisure activities.

6.1.1. Overnight Guest Parking Demand

The hotel currently contains 176 guest bedrooms. In accordance with the parking standards contained within the CDP, a parking provision of one space per bedroom is considered appropriate for overnight guests.

While average annual occupancy is approximately 80%, full occupancy is achieved on a regular basis and occurs for approximately 30% of the year. Consequently, the peak overnight parking requirement is assessed based on full occupancy.

Overnight Guest Parking Requirement:

- Hotel Bedrooms: 176
- Parking Standard: 1 space per bedroom
- Required Parking Spaces: 176

6.1.2. Daytime Visitor Parking Demand

In addition to overnight guests, the hotel attracts significant levels of daytime visitor activity generated by conferences, weddings, dining facilities, leisure amenities and spa services.

Visitor information supplied by hotel management indicates the following typical peak demand characteristics:

- Midweek conferences and business events: 150–300 attendees per day.
- Weekend weddings and social functions: approximately 100 attendees per day.
- Food and beverage outlets: 50–75 visitors per hour.
- Leisure centre and spa facilities: approximately 20 visitors per hour.

The hotel has identified a peak daytime scenario involving approximately 395 concurrent visitors associated with conferences, dining and leisure activities.

The daytime parking demand for the Hotel has been calculated using assumptions appropriate to the rural location of the site, namely:

- Car mode share: 90%, based on existing visitor travel information from visitor surveys carried out between June and November 2025
- Average vehicle occupancy: 1.8 persons per vehicle, reflecting typical occupancy rates for leisure and hotel-related trips reported in transport datasets and consistent with the mixed profile of hotel guests, staff and visitors.

Applying the assumed mode share and vehicle occupancy rates:

- Parking Demand = $(395 \times 0.90) \div 1.8$
- Parking Demand = 198 spaces

Accordingly, a peak daytime parking requirement of approximately 198 spaces is identified.

6.1.3. Total Hotel Parking Requirement

Combining the overnight guest requirement with the peak daytime visitor requirement results in an overall peak hotel parking demand as outlined in Table 9.

Table 9: Hotel Parking Demand Requirement

Demand Component	Parking Spaces
Overnight Guests	176
Daytime Visitors	198
Total Hotel Parking Requirement	374

The assessment indicates that the hotel alone can generate a peak parking demand of approximately 374 spaces during periods when overnight occupancy, conferences, events and leisure activities coincide.

6.2. Waterfront Visitor Parking

In addition to demand generated by the hotel, the wider Hodson Bay waterfront area attracts a significant number of recreational visitors accessing the marina, waterfront amenities and surrounding walking routes. As outlined in Section 5 (Trip Generation), the existing development is estimated to generate approximately 166 vehicle trips per day, increasing to approximately 382 vehicle trips per day including the Proposed Development.

To provide an indication of peak parking demand, it has been assumed that approximately 25% of the daily vehicle trips associated with the Proposed Development will be present on-site at the peak accumulation period. This represents a conservative planning assumption commonly adopted for leisure and hotel developments, recognising that vehicle arrivals and departures are distributed throughout the day and that not all daily trips equate to simultaneous parking demand. On this basis, the existing parking demand is estimated to be approximately 42 spaces, increasing to approximately 96 spaces following the Proposed Development, representing a net increase in demand of 54 parking spaces.

6.3. Overall Visitor Parking Requirement

The total peak parking requirement for the wider Hodson Bay area is estimated as shown in Table 10.

Table 10: Total Visitor Parking Requirements

User Group	Parking Spaces
Hodson Bay Hotel	374
Waterfront Park and Public Amenities	96
Total Visitor Parking Requirement	470

When compared with the existing parking supply of 353 spaces, the assessment identifies a shortfall of approximately 117 spaces during peak demand periods. This finding is consistent with observed parking survey results, which recorded high occupancy levels, regular capacity exceedance and the occurrence of informal parking throughout the study area during periods of maximum visitor activity.

7. Traffic and Transport Proposals

The Proposed Development comprises the expansion and enhancement of transport infrastructure serving the Hodson Bay area, including increased parking provision, improved walking and cycling facilities, enhanced public transport infrastructure, and road safety improvements.

7.1. Parking Provision

To accommodate the forecast parking demand associated with the Proposed Development, the design includes the reconfiguration and expansion of parking provision across the Hodson Bay area. The proposed parking provision comprises:

- Central Hodson Bay (Car Parks A & B): 268 spaces;
- North Hodson Bay (Car Park C): 236 spaces;
- Total Proposed Parking Provision: 504 spaces.

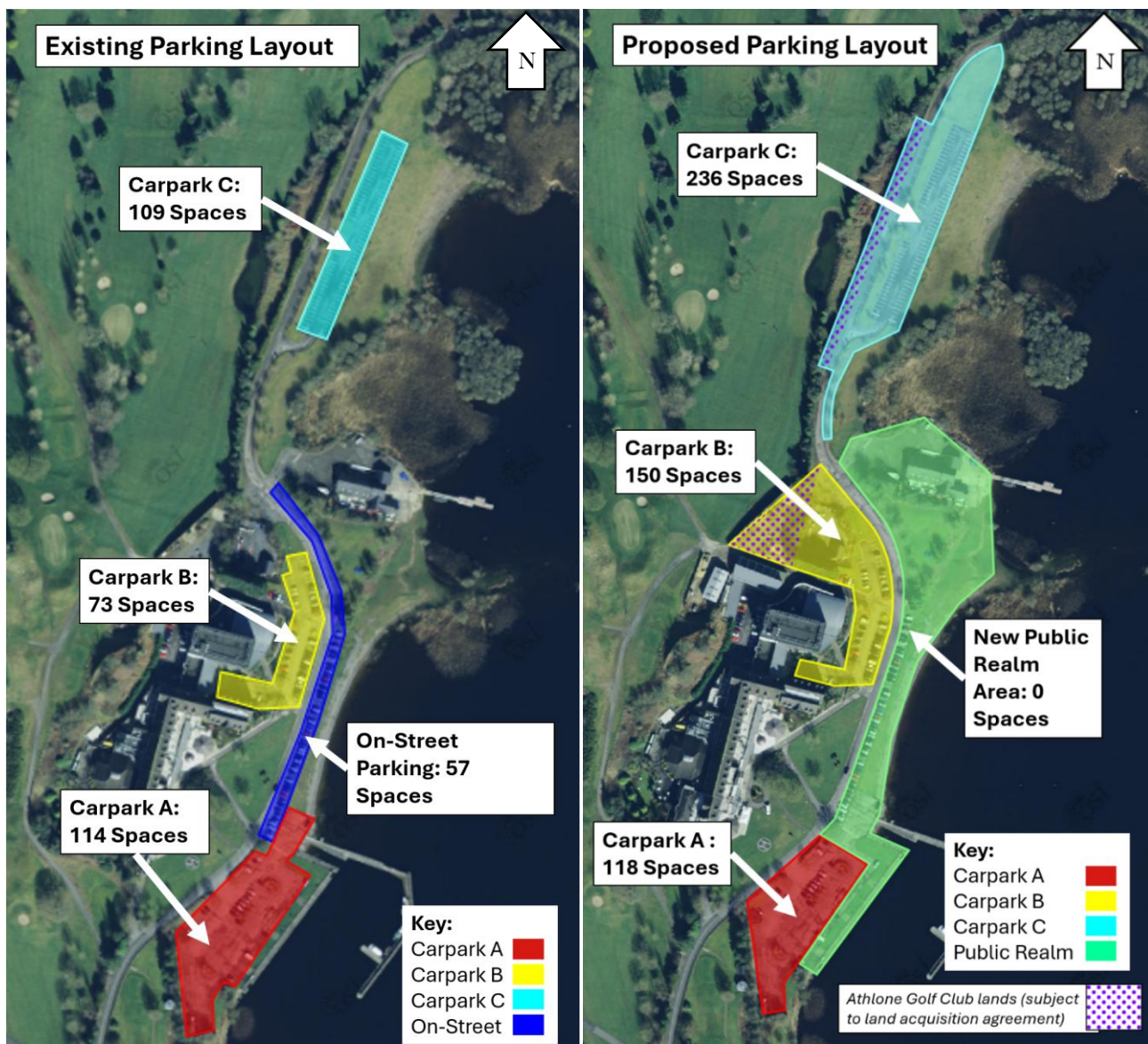


Figure 5: Existing vs Proposed Parking Layout

The proposals increase the overall parking provision by 151 spaces from 353 to 504 spaces. In addition to increasing capacity, the parking layout has been redesigned to improve the operation and appearance of the waterfront area by relocating existing on-street parking away from the immediate lakeshore, thereby enhancing the visual amenity, landscape setting and pedestrian environment. The layout also seeks to improve the distribution of parking demand across the site through enhanced wayfinding and signage, encouraging greater utilisation of the northern car park, particularly by visitors accessing the water sports facilities and café. This will improve the overall efficiency of the parking provision and reduce vehicle congestion within the central waterfront area.

The parking provision also includes:

- 30 electric vehicle (EV) charging spaces;
- 28 accessible parking spaces;
- Three dedicated bus parking bays within the northern car park;
- Three dedicated boat trailer parking bays within to the marina car park.

Although the parking assessment identified a requirement for 470 visitor parking spaces to serve the Proposed Development and existing Hodson Bay facilities, a total of 504 spaces is proposed. The additional provision has been informed by stakeholder consultation and recognises the seasonal nature of visitor demand, the rural context of Hodson Bay, and the site's continued reliance on private vehicle access. The provision of a limited surplus over the calculated requirement provides resilience during peak demand periods while supporting the long-term operation of the facility.

7.2. Walking and Cycling Infrastructure

The Proposed Development e delivers a comprehensive package of active travel improvements designed to encourage walking and cycling and improve connectivity throughout the Hodson Bay area. These include:

- A new 3.0 m wide shared pedestrian and cycle facility along the L2020 between the N61 junction and Hodson Bay Marina;
- A continuous lakeshore pathway with connecting links to improve public access to the waterfront;
- Bicycle parking and servicing facilities;
- Enhanced pedestrian connections between the car parks and key destinations.

7.3. Public Transport

To improve accessibility for organised transport services, the Proposed Development includes two new bus set-down areas adjacent to the proposed Water Sports Pavilion together with three dedicated bus parking bays within the northern car park. The internal road and parking layout has also been designed to improve manoeuvrability for buses, coaches and other large service vehicles, enabling safe access, circulation and turning within the site.

7.4. Mobility and Management Plan

A Mobility Management Plan has been prepared to support the operation of the Proposed Development and encourage sustainable travel by visitors, staff and service users. The plan includes measures relating to active travel wayfinding, cycle parking, parking management, coach management and visitor travel information and forms part of the overall sustainable transport strategy for Hodson Bay.

Full details regarding wayfinding, sustainable travel measures, parking management arrangements and operational proposals are provided in the Mobility Management Plan (July 2026) accompanying this submission.

7.5. Civils Design Package

The civil engineering design for the Proposed Development is presented in the Civils Design Package accompanying this submission. The civils drawing package comprises the following principal drawing groups:

- General Arrangement Drawings: 31022-DR-CIV-CE-00100 to 00111
- Kerbs, Road Markings, Traffic Signs and Surface Finishes: 31022-DR-CIV-CE-00201 to 00209
- Visibility Splays: 31022-DR-CIV-CE-00301 to 00305
- Vehicle Tracking Drawings: 31022-DR-CIV-CE-00401 to 00413
- Sections: 31022-DR-CIV-CE-00501 & 00502
- Standard Details: 31022-DR-CIV-CE-00601 & 00602
- Drainage Details: 31022-DR-CIV-CE-30001 & 30002
- Existing Utilities: 31022-DR-CIV-CE-00801 to 00806

For all architectural, building layout, floor plan, elevation, roof plan and associated building information, reference should be made to the Architects' layout drawings accompanying the application.

The above drawings collectively define the proposed access arrangements, active travel infrastructure, parking layout, road geometry, visibility requirements, vehicle manoeuvring, drainage strategy, and standard construction details forming the civil engineering design package for the Proposed Development.

7.6. DMURS Compliance Statement

A DMURS Compliance Statement has been prepared to demonstrate that the Proposed Development has been designed in accordance with the principles of the Design Manual for Urban Roads and Streets. The assessment confirms that the proposed carriageways, footways, crossings, parking layout and public realm have been designed to prioritise pedestrian movement, accessibility, safety and place-making within a low-speed waterfront environment.

Full details regarding the DMURS compliance review are provided in the **DMURS Compliance Statement (June 2026)** accompanying this submission.

7.7. Road Safety Audit and Quality Audit

A combined Stage 1 Road Safety Audit (RSA) and Quality Audit (incorporating Walking and Cycle Audits) has been undertaken by NRB Consulting Engineers to evaluate the proposed Waterfront Project. The audits were conducted in accordance with TII Standard GE-STY-01024 and the Design Manual for Urban Roads and Streets (DMURS) to ensure the safety and accessibility of the scheme for all road users.

The audit process identified several key areas for refinement, including the optimisation of road carriageway widths for bus swept paths, the standardisation of pedestrian crossing treatments, and the enhancement of wayfinding signage. Specific attention was also given to the continuity of the active travel shared surface and the placement of Electric Vehicle (EV) charging infrastructure to ensure footways remain unobstructed.

The Design Team has reviewed all items raised in the audit and provided formal responses within the Audit Feedback Form. Where appropriate, the design has been amended to incorporate the auditors' recommendations—such as widening raised crossing tables and improving bus circulation routes—to safeguard pedestrians, cyclists, and motorists alike.

For a comprehensive record of the identified items, recommendations, and the Design Team's responses, please refer to the **Stage 1 Road Safety Audit & Quality Audit (July 2026)** prepared by NRB Consulting Engineers.

7.8. Accessibility Audit

A Universal Access Statement has been prepared by O'Herlihy Access Consultancy to ensure that the Hodson Bay Waterfront Park is inclusive and accessible to all users, regardless of ability. The design methodology is rooted in Universal Design principles and strictly complies with Part M of the Second Schedule of the Building Regulations and the guidance within Technical Guidance Document M (TGD M) 2022.

The strategy ensures that all project elements—including the Water Sports Pavilion, café, marina, and public realm—are independently accessible. Key provisions include the allocation of a minimum of 5% accessible parking spaces, the implementation of 1,800mm turning areas in communal zones, and the provision of level landings at all building entrances. Notably, the Water Sports Pavilion will include a specialised 'Changing Places' toilet facility to support users with high support needs.

For a comprehensive breakdown of the accessibility features, including circulation routes, sanitary provision, and communication aids, please refer to the **Universal Access Statement (July 2026)** accompanying this submission, prepared by O'Herlihy Access Consultancy.

8. Conclusion

This Traffic and Transport Report has examined the existing transport conditions within the Hodson Bay area and assessed the anticipated differences of the proposed public realm, transport and waterfront development.

The existing transport network is characterised by relatively low traffic volumes, with pronounced seasonal peaks associated with tourism, recreation and hotel activity. Existing surveys also identify persistent parking capacity constraints during peak periods, together with excessive vehicle speeds along the L2020 and a reliance on private car

travel resulting from the limited availability of alternative transport options. The operational characteristics of the Hodson Bay Level Crossing have also been considered and, while periodic delays occur, these are primarily governed by rail operations rather than road traffic demand.

The Proposed Development is forecast to generate a modest increase in traffic movements, with approximately 44 two-way vehicle trips during the peak hour. When assessed against the existing traffic environment, this increase is not considered significant and can be accommodated by the surrounding road network without materially affecting the operation of the L2020, the N61 junction or the Hodson Bay Level Crossing. The predicted increase in queue lengths at the level crossing is limited to approximately three additional vehicles under a worst-case barrier closure scenario and is not expected to result in queues extending to the N61 junction.

The assessment further demonstrates that there is an existing shortfall in parking provision during periods of peak demand. The proposed increase in parking supply from 353 to 504 spaces addresses this deficiency while also improving the quality, distribution and management of parking throughout the site. The relocation of parking away from the immediate waterfront, together with enhanced wayfinding, dedicated coach, boat trailer, accessible and electric vehicle facilities, will significantly improve the efficiency, accessibility and overall visitor experience within Hodson Bay.

In addition to accommodating forecast demand, the development delivers substantial sustainable transport benefits through the provision of a continuous shared pedestrian and cycle facility, improved pedestrian connectivity, enhanced public transport infrastructure, traffic calming measures and road safety improvements. These measures are consistent with the principles of the Design Manual for Urban Roads and Streets (DMURS) and support national, regional and local transport policy objectives by promoting safer, more sustainable travel choices.

Overall, the Proposed Development represents a balanced and appropriate transport solution that responds to existing operational deficiencies while supporting the continued growth of Hodson Bay as a key tourism, recreation and leisure destination.

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