

N81 Hollywood Cross Rural Traffic Calming RSIS

Part 8 Report

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TRANSPORTATION



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Executive Summary

DBFL Consulting Engineers (DBFL) have been commissioned by Wicklow County Council (WCC) to provide consulting engineering services for the design of bus stop and traffic calming facilities along the N81, adjacent to the village of Hollywood. The scheme received Gateway 1 Approval in accordance with Transport Infrastructure Ireland (TII) Publication *GE-STY-01037* on 21st November 2023.

This Part 8 Report has been prepared in line with TII publications *GE-STY-01037-Road Safety Improvement Scheme Approval Procedure* and *DN-GEO-03030 Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes and Local Improvement Schemes*.

The overall scheme aims to provide for north and southbound bus stops along the N81 at Hollywood in addition to a traffic calming scheme to reduce speeds and create a safer pedestrian environment on approach to Hollywood Cross.

Based on consultation with Transport Infrastructure Ireland (TII), it has been clarified that the full scheme will be submitted as a departure from standards to allow the traffic calming design elements (contained within *DN-GEO-03084 The Treatment of Transition Zones to Towns and Villages*) to be applied on an 80 km/h national road. An additional departure is also being sought regarding the sightlines from the minor road (R756) onto the major road (N81) under *DN-GEO-03060 – Geometric Design of Junctions*.

An AA and EIA screening assessment has been undertaken as part of this scheme design. In terms of the EIA screening, the assessment recommends that an EIA is not required. In terms of the AA screening (undertaken by Altemar), the report concluded that the proposed scheme development will not impact on the conservation objectives of qualifying interests of European sites and a Natura Impact Statement is not required.

As part of a previous options assessment for the scheme, a number of options for the location of the bus stops were considered and assessed with a multicriteria analysis. A preferred option emerged from this assessment which has now been progressed as part of this Part 8 application, to preliminary design.

The preferred option that emerged from the options assessment outlined that the bus stops will be located to the north and south of the staggered crossroads with an uncontrolled pedestrian crossing provided between the inbound and outbound bus stops at the existing pedestrian desire



line. Traffic calming through the crossroads will comprise of solid central islands, a narrowed road carriageway and the provision of gateway signs and red road surfacing on approach.

A Stage 1 Road Safety Audit has been carried out on the Preliminary Design. Problems identified in the audit have been addressed by the design team and agreed with WCC.



1 Introduction

1.1 Introduction

- 1.1.1 This Part 8 Report has been prepared in line with TII publications *GE-STY-01037-Road Safety Improvement Scheme Approval Procedure* and *DN-GEO-03030 Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes and Local Improvement Schemes*.
- 1.1.2 The report sets out the proposed design measures for the upgrade of the Hollywood Cross on the N81 and approval is now sought to proceed the bus stop and traffic calming scheme through Phase 4, Statutory Process.
- 1.1.3 Based on consultation with Transport Infrastructure Ireland (TII), it has been clarified that the full scheme will be submitted as a departure from standards to allow the traffic calming design elements (contained within *DN-GEO-03084 The Treatment of Transition Zones to Towns and Villages*) to be applied on an 80 km/h national road. An additional departure is also being sought regarding the sightlines from the minor road (R756) onto the major road (N81) under *DN-GEO-03060 – Geometric Design of Junctions*. Refer to Appendix E of this report for the Departures Forms for both of these departures.

1.2 Background

- 1.2.1 DBFL have been commissioned by Wicklow County Council (WCC) to provide consulting engineering services for the design and development of a traffic calming and bus stop scheme at Hollywood, Co. Wicklow. Wicklow County Council have previously engaged with the NTA who are in favour of bus stop facilities being provided at this location. The scheme received Gateway 1 Approval in accordance with Transport Infrastructure Ireland (TII) Publication GE-STY-01037 on 21st November 2023.
- 1.2.2 There is a current demand along the N81 within the Hollywood area for bus stops for the Bus Eireann route 132, which serves between Enniscorthy, Co Wexford and Dublin City Centre. At present, there are no official bus stops, however, some drivers do stop here to allow passengers to board and alight. These unofficial stops do not provide a safe interchange point for commuters as no facilities are provided to allow passengers to travel safely to and from these stops.



1.2.3 The N81 is currently a high-speed road environment with a posted speed limit of 100kph, reducing to 80kph on approach to the Hollywood staggered crossroads (June 2023). Video surveys undertaken as part of this scheme highlighted a number of safety concerns through the staggered crossroads.

1.3 Study Area

1.3.1 Hollywood Village is located to the western side of Co. Wicklow. The village is situated approximately 11km south of Blessington and 5km south of Ballymore Eustace. Baltinglass can be found approximately 20km to the south. Hollywood village forms the start of the Wicklow Gap which is one of only two roads to fully traverse the Wicklow Mountains in an east west alignment.

1.3.2 The N81 National Road runs to the immediate west of the village and separates the village centre from the local GAA club. The village centre is home to local shops, a service station, church, the local school, community centre, pubs and restaurants as well as residential properties.

1.3.3 The study area for this scheme centres around the intersection of the N81 and R756 within the vicinity of Hollywood, as illustrated in Figure 1-1 .

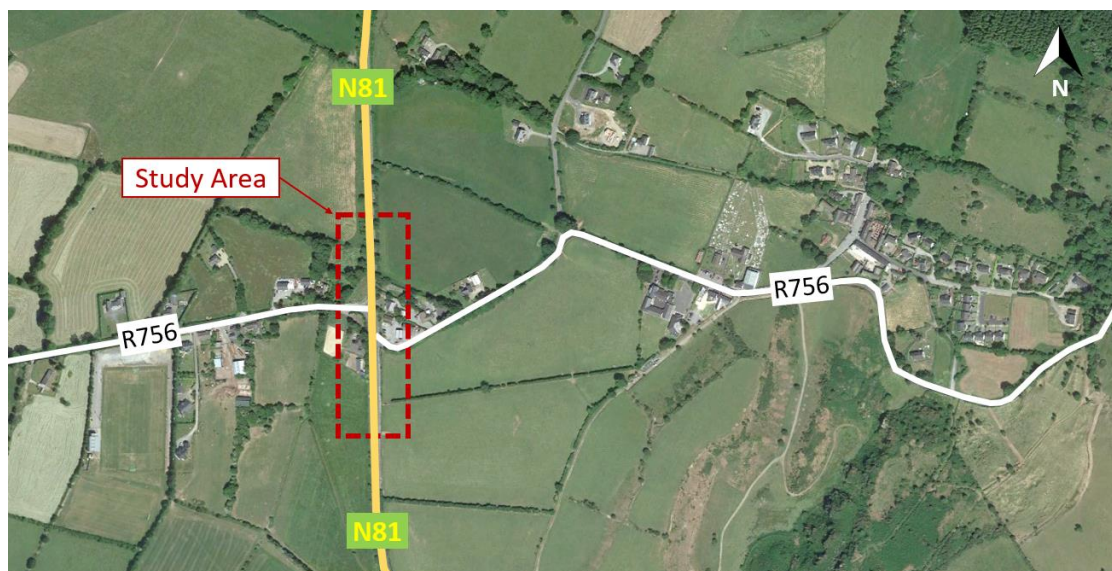


Figure 1-1 Study Area



1.4 Scheme Objectives

1.4.1 The objectives of this scheme are to provide formal bus stop facilities to serve the village of Hollywood, Co. Wicklow and to provide a traffic calming scheme at Hollywood Cross to reduce vehicle speeds and create a safer environment for vulnerable road users wishing to cross the N81.

1.5 Structure of the Report

1.5.1 The following outlines the structure of the remainder of this report:

- Section 2 outlines the various planning policies and design guidance relevant to the proposed bus stops and traffic calming scheme.
- Section 3 details the existing conditions in the vicinity of the proposed scheme, including existing road, traffic and pedestrian conditions at Hollywood Cross.
- Section 4 provides a summary of the EIA and AA Screening reports undertaken separately as part of this scheme.
- Section 5 provides an overview of the options selection process carried out for the proposed scheme.
- Section 6 details the preliminary design for the proposed scheme.
- Section 7 provides a summary of the Road Safety Audit while section 8 provides an overview of the project appraisal balance sheet.
- Section 9 summarises the stakeholder consultation undertaken during the development of the preliminary design.
- Section 10 provides an overall summary of the report.

2 Planning Policy & Design Guidance

2.1 Introduction

2.1.1 It is essential that a review of current policy and guidance us undertaken to inform the development of the proposed bus stop and traffic calming scheme at Hollywood, Co. Wicklow.

2.1.2 As such, the following policy document and design guidance have been reviewed:

- National Development Plan 2021-2030;
- National Sustainable Mobility Policy;
- Climate Action Plan 2023 (CAP23);
- Our Rural Future: Rural Development Policy 2021-2025;
- Eastern & Midlands Regional Assembly Regional Spatial & Economic Strategy 2019-2031;
- Greater Dublin Area Transport Strategy 2022-2042;
- West Wicklow / East Kildare Transport Study;
- Wicklow County Development Plan 2022-2028;

2.2 National Development Plan (2021-2030)

2.2.1 As part of Project Ireland 2040, the National Development Plan (NDP) sets out the Government's over-arching investment strategy and budget for the period 2021-2030. It is an ambitious plan that balances the significant demand for public investment across all sectors and regions of Ireland with a major focus on improving the delivery of infrastructure projects to ensure speed of delivery and value for money.

2.2.2 The NDP sets out a significant level of investment, almost €165 billion, which will underpin the National Planning Framework (NPF) and drive its implementation over the next 6 years. The scale of the transport related requirements under the revised NDP amount to c. €35 billion in total over the 2021-2030 period.





2.2.3 The NPF recognises the importance of significant investment in sustainable mobility (active travel and public transport) networks if the NPF population growth targets are to be achieved. Investing in high-quality sustainable mobility will improve citizens' quality of life, support our transition to a low carbon society and enhance our economic competitiveness.

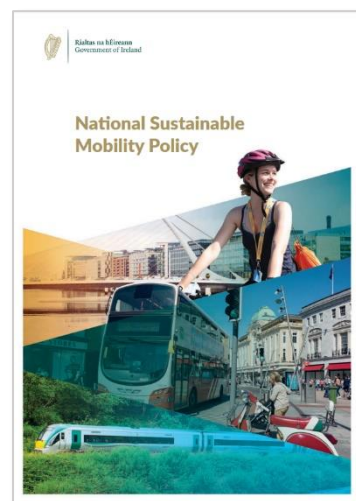
2.2.4 With regard to Ireland's greenhouse gas emissions, the transport sector has been determined as a key contributor to this and is responsible for 20% of overall emissions. The NDP sets out an entire National Strategic Objective that is dedicated to "Sustainable Mobility" and has a range of policies and measures to promote the achievement of sustainable mobility. In an Irish context, the NDP defines Sustainable Mobility as:

- Comfortable and affordable journeys to and from work, home, school, college, shops and leisure;
- Travelling by cleaner and greener transport; and
- A shift away from the private car to greater use of active travel (walk and cycling) and public transport.

2.3 National Sustainable Mobility Policy

2.3.1 The National Sustainable Mobility Policy was published in April 2022 by the Department of Transport and replaces Smarter Travel 2009. The overall aim of the Policy is to *"set out a strategic framework for 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade"*.

2.3.2 The Policy is a direct response to the fact that continued growth in demand for road transport is not sustainable due to the resulting adverse impacts of increasing congestion levels, localised air pollution, contribution to global warming and the additional negative impacts to health through promoting increasingly sedentary lifestyles.

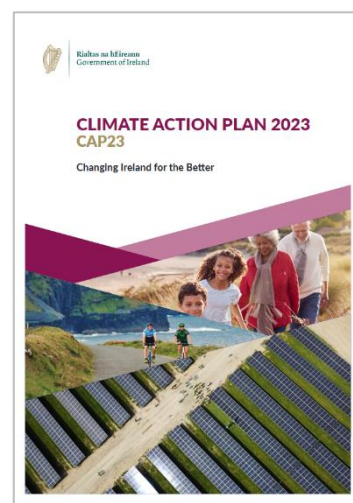




2.3.3 Goal 4 within the National Sustainable Mobility Policy is to “Expand availability of sustainable mobility in regional and rural areas”. The aim of this goal is to “expand the capacity and availability of sustainable mobility in a regional and rural context. This will be done through the delivery of improved active travel infrastructure, expansion of regional bus and rail services and local bus networks, and improved connectivity between different transport modes”.

2.4 Climate Action Plan 2023 (CAP23)

2.4.1 The Climate Action Plan 2023 sets out a major programme for change in response to the need to reduce Ireland’s greenhouse gas emissions. The plan implements carbon budgets and sectoral emissions ceilings while setting out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. The Climate Action Plan 2023 sets out how Ireland can accelerate the actions that are required to respond to the climate crisis, putting climate solutions at



the centre of Ireland’s social and economic development. The proposals outlined in the Plan are aimed at achieving a net zero carbon energy system within Ireland and it is envisaged that these proposals will also have associated positive economic and societal benefits, including cleaner air, warmer homes and a more sustainable economy in the longer term.

2.4.2 Ireland’s transport system plays a critical role in realising the ambitious targets of the Climate Action Plan. Consequently, to make growth less transport intensive a number of key policies are identified, including the expansion of walking, cycling and public transport to promote modal shift. The relevant high-level measures required to deliver the sectoral emissions targets for transport set out in the Climate Action Plan cover the following:

- Enhanced Governance and Accelerated Implementation;
- Communications Strategy;
- Enhanced Spatial Land Use Planning;
- Strategic Transport Planning;
- Demand Management Strategy;

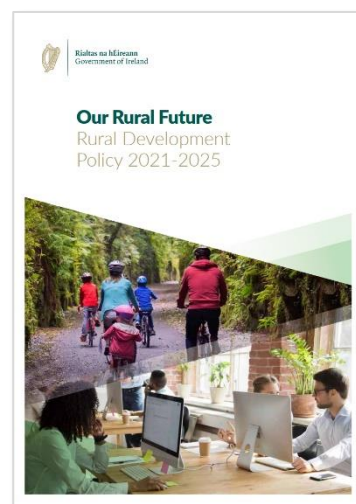
- Road Space Reallocation;
- Active Travel Infrastructure Programme;
- Major Public Transport Infrastructure Programme.

2.5 Our Rural Future: Rural Development Policy 2021-2025

2.5.1 Our Rural Future: Rural Development Policy 2021-2025 was first published by the Department of Rural and Community Development in March 2021. The policy sets out a framework for the development of rural Ireland up to the end of 2025.

2.5.2 As part of this policy, it is recognised that the provision of public transport services in rural Ireland will allow people to settle and live in rural areas while still having access to employment opportunities, education and social activities.

2.5.3 A number of key deliverables are identified under the policy including to *“provide improved rural public transport services and pilot new transport initiatives to enhance the quality of life for people in rural areas”*. In relation to bus services, there is a commitment from the Government to both protect and expand regional bus connectivity and the bus connectivity between towns and villages across rural Ireland.



2.6 Guidance on Bus Stop Locations in Rural Areas

2.6.1 The national Guidance on Bus Stop Locations in Rural Areas was published by the NTA in October 2016. The guidance puts an emphasis on passenger need and safety when selecting the location of bus stops along rural roads.

2.6.2 With regard to passenger need, it is preferred that:

- Bus stops are located proximate to junctions;
- Bus stops are located on the exit side of junctions;
- Bus stops should be located in pairs;
- Offset bus stops should be located within 100m of each other where possible.



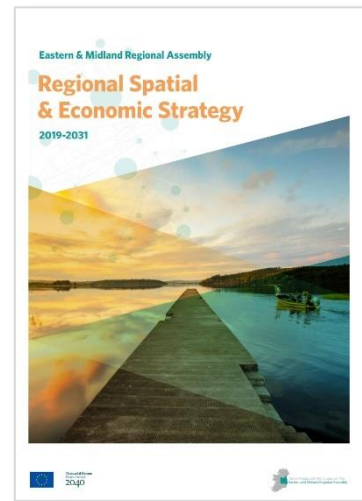
With regard to safety, bus stops should be located where:



- Passengers can reach and leave the bus stop safely;
- Passengers can wait safely at the bus stop;
- Passengers can safely cross the road in the vicinity of the bus stop.

2.7 Eastern & Midlands Regional Assembly Regional Spatial & Economic Strategy 2019-2031

2.7.1 The Eastern & Midlands Regional Assembly Regional Spatial & Economic Strategy 2019-2031 (RSES) provides a strategic framework for development of and investment in the Region over the coming decade. The strategy recognises that rural places provide a major contribution to both regional and national development in economic, social and environmental terms. The overall vision for the strategy is *“to create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all”*.



2.7.2 Increased transport connectivity is one of the development areas which will *assist in achieving this strategic vision. The primary objective for transport investment in the region is “to contribute to economic, social and cultural progress of the Region, and the protection and enhancement of the environment, in line with Government priorities in other sectors”*.

2.7.3 The strategy identifies a number of bus projects for the region which are of particular relevance to Hollywood, Co. Wicklow, including;

- A review of existing bus services between settlements;
- The provision of new interchange locations and new bus hub facilities;
- The improvement of bus waiting facilities.

2.8 Greater Dublin Area Transport Strategy 2022-2024

2.8.1 The Greater Dublin Area Transport Strategy 2022-2042 has arisen from a review of the original 2016 strategy.

2.8.2 The overall aim of the Transport Strategy is *“To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region’s climate change requirements, serves the needs of urban and rural communities, and supports the regional economy.”*



2.8.3 Four primary objectives have been identified as part of the Draft Greater Dublin Area Transport Strategy 2022-2042. These are:

- **An Enhanced Natural and Built Environment:** To create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, increasing walking, cycling and public transport use, and reducing car dependency.
- **Connected Communities and a Better Quality of Life:** To enhance the health and quality of life of our society by improving connectivity between people and places, delivering safe and integrated transport options, and increasing opportunities for walking and cycling.
- **A Strong Sustainable Economy:** To support sustainable economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to and facilitating the efficient movement of goods.
- **An Inclusive Transport System:** To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society.



2.9 West Wicklow / East Kildare Transport Study

2.9.1 As part of the Greater Dublin Area Transport Strategy 2022-2042, a transport study was carried out to assess the current transport environment in West Wicklow / East Kildare and to predict the potential future condition of the transport network in the area by 2042. A large proportion of the N81 secondary national road along with Hollywood Village were included in the study area.



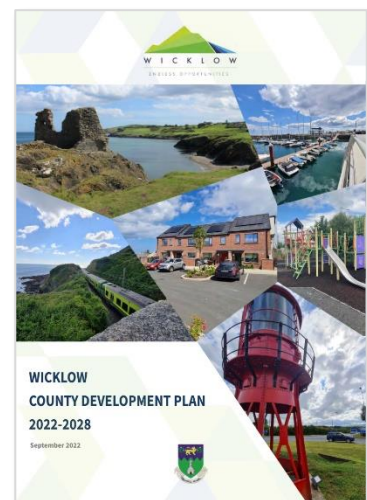
2.9.2 The study noted that the N81 is the least congested of Dublin's arterial roads and only operates over capacity as the road joins the M50 motorway. Although a small section of the road north of Blessington is operating at capacity, the overall lack of saturation along the length of the corridor provides an opportunity to increase bus services along the route.

2.9.3 The study examined the state of current bus services operating across the West Wicklow / East Kildare area including Bus Éireann route 132 which operates along the N81. Modelling included within the study report predicted that the bus service will be operating above capacity in 2042 before it reaches the Wicklow county border. Further investment in this service will be needed to cater for this increased demand and ensure that all those wishing to access the service can do so in a safe and convenient manner.

2.10 Wicklow County Development Plan 2022-2028

2.10.1 The Wicklow County Development Plan 2022-2028 came into effect in October 2022 and provides a framework for sustainable development across the county for the six year period up to 2028. Included in the plan are a number of policy objectives which directly relate to the provision of enhanced public transport access for rural communities. These include:

CPO 12.1 *“Through coordinated land-use and transport planning, to reduce the demand for vehicular travel and*





journey lengths by facilitating initiatives like carpooling and park and ride.”

CPO 12.20 *“To cooperate with the NTA and other relevant transport bodies in the delivery of a high quality, integrated and accessible transport system in County Wicklow.”*

CPO 12.21 *“To promote the development of transport interchanges and ‘nodes’ where a number of transport types can interchange with ease. In particular:*

- *To support the enhancement of public transport services and infrastructure in West Wicklow and in particular to support the improvement of bus services / bus priority on the N81, bus linkages to rail stations and the development of park-and-ride facilities at strategic locations.”*

CPO 12.27 *“To promote the delivery of improved and new bus services both in and out of the County but also within the County by:*

- *Facilitating the needs of existing or new bus providers with regard to bus stops and garaging facilities;*
- *To work with Bus Éireann and the NTA to improve services in south and west Wicklow.”*

CPO 12.29 *“In accordance with ‘Our Rural Future Rural Development Policy 2021-2025’ support and facilitate the delivery of improved rural public transport services and ensure that public transport services in rural areas are accessible to persons with disabilities.”*

CPO 12.37 *“Objectives for the N81:*

- *Tallaght to Hollywood Cross upgrade;*
- *Local alignment and width improvements at various locations as required;*
- *The Council will work to ensure the N81 receives much greater funding than received to date for improvements.”*

CPO 12.44 *“Objectives for Regional Roads:*

- *To maintain and improve the R756 (Wicklow Gap), having due regard to the designation of the Wicklow Mountains as a European site.”*



3 Existing Conditions

3.1 Speed

3.1.1 In order to determine the actual speed of vehicles travelling along the N81 in this section, speed surveys were carried out by Wicklow County Council from 26th September 2022 to 3rd October 2022 on both the northern and southern approach to the Hollywood crossroads. The location of these speed surveys in relation to the crossroads is highlighted in Figure 3-1.

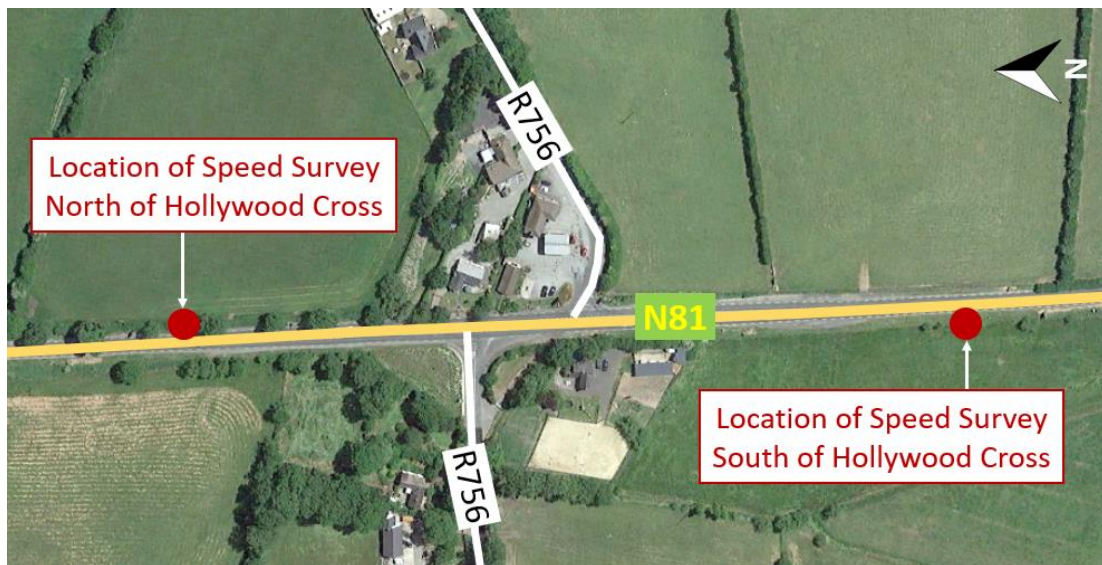


Figure 3-1 Location of Speed Surveys

3.1.2 In June 2023, the speed limit along the N81 was reduced from 100 km/h to 80km/h. To assess the impact of the speed limit change on actual vehicle speeds, revised speed surveys were conducted at the same locations from 10th – 17th January 2024. The results of this survey outlined that, on average, traffic speeds have reduced through here with the reduction of the speed limit. Figure 3-2 outlines the average speed for vehicles passing the southern detector with Figure 3-3 detailing the average speed for vehicles passing the northern detector. These graphs provide a comparison between the survey conducted in 2022 (speed limit at 100kph) and the survey conducted in 2024 (speed limit at 80kph).

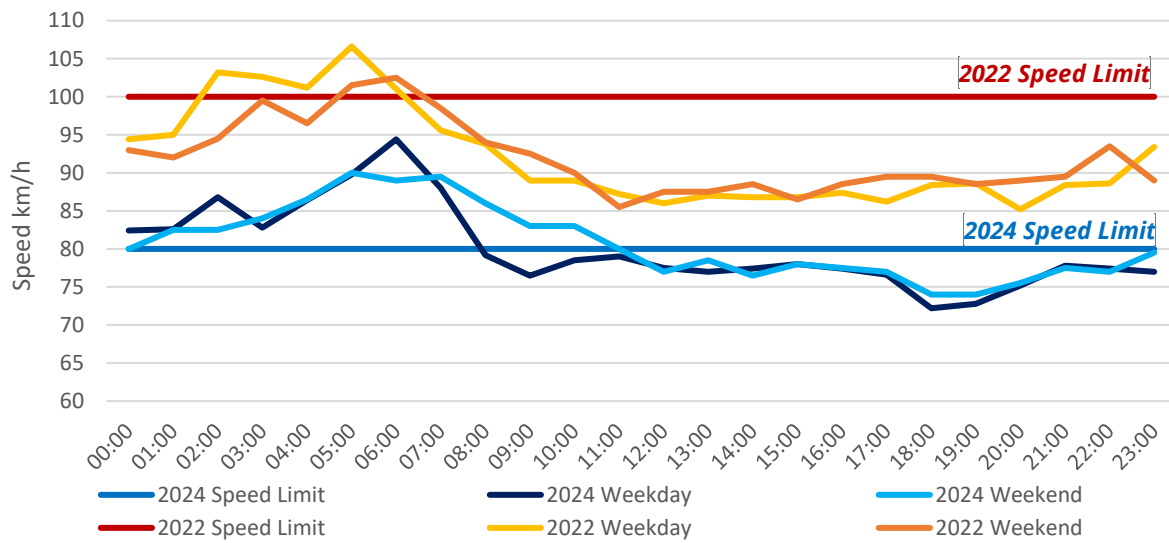


Figure 3-2 Average Speed on the Southern Approach to Hollywood Cross (N81)

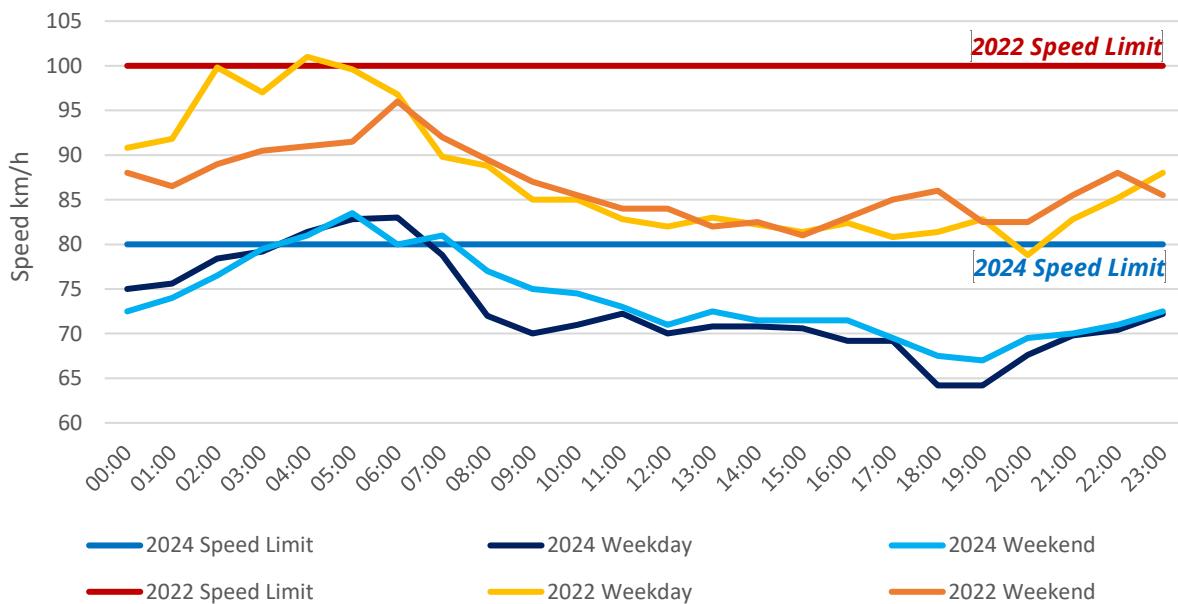


Figure 3-3 Average Speed on the Northern Approach to Hollywood Cross (N81)

3.1.3 These graphs highlight that there has been a considerable reduction in average speeds through this area with the reduction of the speed limit, in particular, during morning and afternoon times. The highest recorded speed in 2024 was 150 km/h compared to 196 km/h in 2022. On average, 16% of vehicles travelling southbound on the N81 broke the speed limit in 2024 which is comparable to the 15% that broke the speed limit in 2022.



- 3.1.4 Travelling northbound, 39% of vehicles broke the speed limit in 2024 compared to 22% in 2022. This suggests that due to the road carriageway being wide and straight through this section, it appears that vehicles find it more difficult to stay within the 80kph speed limit as compared with the 100kph speed limit.
- 3.1.5 The 85th percentile speed recorded on the northern approach to the crossroads stood at 81 km/h in 2024 and 101 km/h in 2022. On the southern side of the crossroads, the 85th percentile speed was recorded as 90 km/h in 2024 and 104 km/h in 2024.
- 3.1.6 Figure 3-4 breaks down the 85th percentile speed recorded in 2024 by location of the speed detector and direction of travel. Regardless of direction of travel, the 85th percentile speed recorded at the northern detector was lower than the 85th percentile speed recorded on at the southern detector.

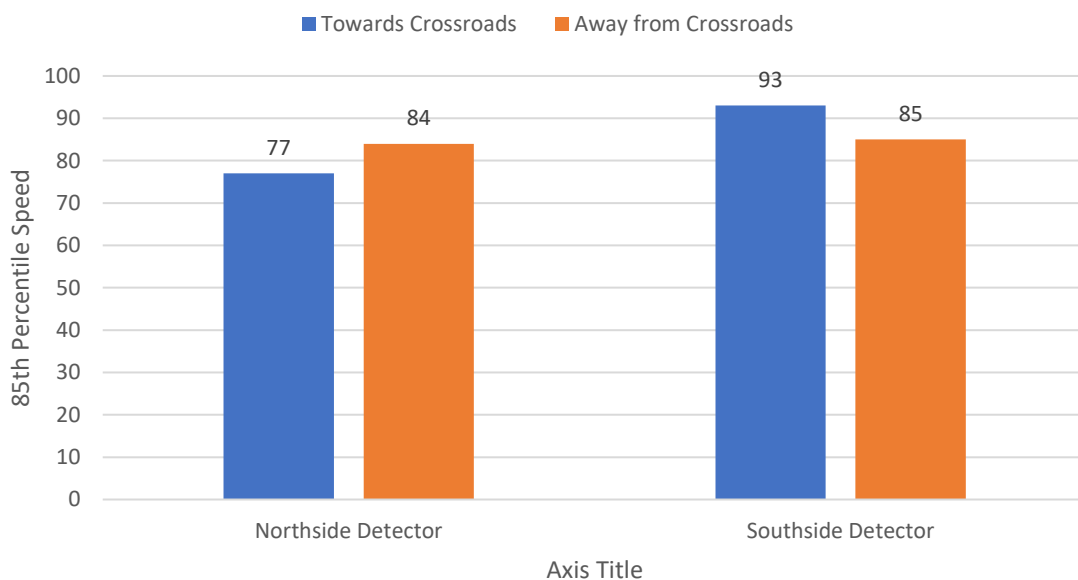


Figure 3-4 85th Percentile Speed by Direction of Travel, 2024

- 3.1.7 The higher speeds seen at the southern detector can be explained by the location of the 80km/h speed limit zone along the N81. The 80km/h speed limit zone begins approximately 3.4km north of the northern arm of the crossroads which allows sufficient time for vehicles to reduce their speeds on approach to the crossroads. To the south, however, the reduced speed limit zone begins 260m from the centre of the crossroads, which may not provide sufficient time for vehicles to reduce their speeds accordingly.



- 3.1.8 In 2022, motorbikes were proportionally detected as breaking the speed limit the most of any vehicle category on the northern approach to the crossroads with 18.3% travelling over 100 km/h. On the southern approach, cars were proportionally detected as breaking the speed limit the most with 24.1% travelling over 100 km/h.
- 3.1.9 In 2024, on northern approach, semi-trucks proportionally violated the speed limit the most with 17.2% travelling over 80 km/h. On the southern approach, motorbikes proportionally violated the speed limit the most with 43.6% detected travelling over 80 km/h.

3.2 Traffic Volumes

- 3.2.1 In order to determine the volume and direction of traffic travelling through the crossroads, a junction turning count survey was carried out by IDASO Ltd. from 5th October 2022 to 9th October 2022. From the survey, the weekday AM peak hour was identified as 08:00-09:00 while the PM peak hour was identified as occurring between 17:00-18:00. Figure 3-5 below presents the volume of traffic, in PCUs, travelling through the crossroads during these peak periods.
- 3.2.2 The AM peak hour shows that the highest traffic flow is along the N81 travelling northbound with a total of 308 PCUs. The side arms of the staggered junction (R756) show that although volumes are low on these arms, there is still a demand in peak times for vehicles travelling through the junction with a demand for vehicles heading from one side of the R756 to the other in both peak hours. This results in an 'S' like movement through the staggered junction.
- 3.2.3 The PM peak hour shows the southbound straight through movement having the higher traffic flow with 348 PCUs. There is a higher right turn movement from the N81 to the R756 in the PM peak with 71 PCUs undertaking this movement. Approximately 22% of right turning vehicles for this movement consist of LGV's and HGV's.

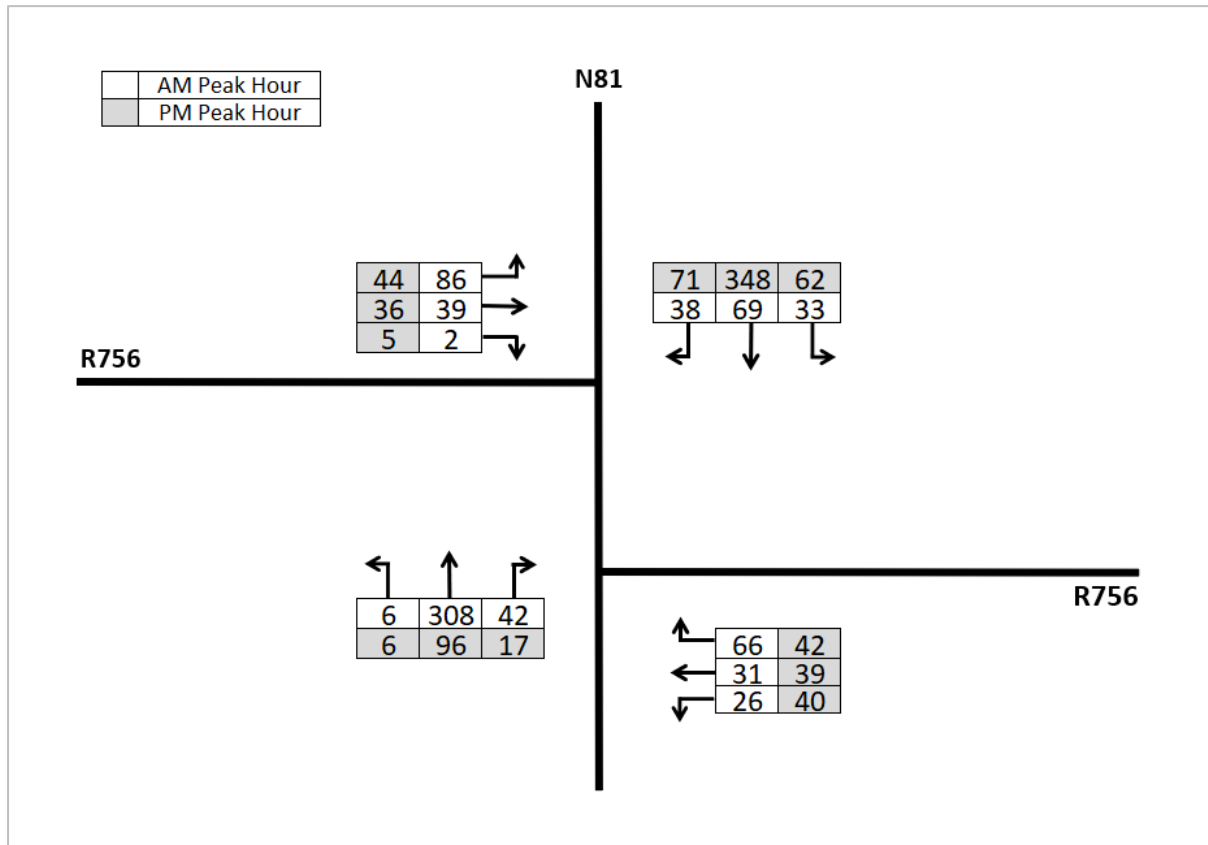


Figure 3-5 Traffic flows (PCUs) at Hollywood Cross, Thursday 6th October 2022

3.2.4 Using these traffic volumes, it was possible to calculate the AADT (Annual Average Daily Traffic) of the N81 on approach to the crossroads. Using the TII PAG Expansion Factors for Short Period Traffic Counts, the AADT on the N81 to the north of the crossroads was calculated at 7,069 vehicles. Of these 7,069 vehicles, approximately 5% are HGVs.

3.3 Horizontal & Vertical Alignment

3.3.1 In the vicinity of Hollywood Village, the N81 is a single carriageway road with a straight horizontal alignment. The corridor varies in width along the study area from 8.1m on the northern approach to the crossroads to 15m on the southern side of the crossroads where the hard shoulder is wide. The road is subject to a speed limit of 80 km/h. This speed limit came into effect in June 2023, reducing from 100 km/h through this staggered crossroads. On approach to the staggered crossroads, right turn flare lanes are in place on both approaches to the junction to allow for right turning vehicles to wait for an appropriate turning gap to the R756.

3.3.2 The existing vertical alignment is relatively flat through this section of the N81. There are no proposed changes to the vertical alignment of the N81 in the vicinity of Hollywood Cross as part of this scheme.

3.4 Junctions and Accesses

3.4.1 The proposed bus stops and traffic calming scheme centres around the junction between the N81 and the R756, which is a staggered uncontrolled crossroads located adjacent to Hollywood village in Co. Wicklow. The western arm (R756) of the crossroads is located approximately 50m north of the eastern arm (R756).

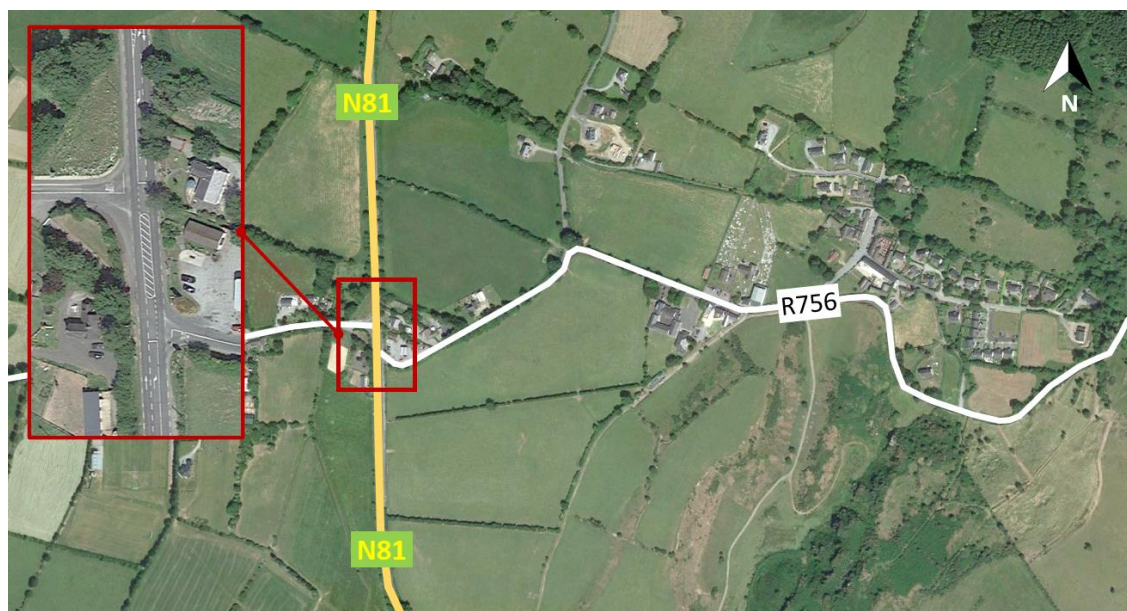


Figure 3-6 Current Layout of Hollywood Crossroads (Source: Google Earth)



3.4.2 There are 3 no. agricultural accesses and 1 no. residential access located throughout the scheme extents which will be maintained.

3.5 Facilities for Vulnerable Road Users

3.5.1 The proposed scheme is located along a rural section of the N81 and as such there are currently no dedicated facilities for pedestrians and cyclists along the N81 road carriageway. The side arms of the staggered junction (R756) are provided with footpaths on approach to the N81. The desire line for pedestrians to cross the N81 is located close to the centre of the staggered crossroads where the carriageway is approximately 13m wide.

3.5.2 Video surveys conducted by IDASO Ltd. from 5th October 2022 to 9th October 2022 showed a total of 238 no. pedestrian movements were recorded through the crossroads. Of these 238 no. movements, 7 no. were recorded as pedestrians crossing the N81 north of the crossroads while 49 no. were recorded as pedestrians crossing to the south. A lot of these movements are double movements for pedestrians who will inevitably be travelling on numerous arms of the crossroads junction to and from their destination. However, this does indicate that, while pedestrian volume may not be significantly high, there is a demand to cross through the crossroads at present.

3.6 Visibility and Sightlines

3.6.1 Visibility is restricted for drivers joining the N81 from the R756 on the northern arm of the staggered junction due to vegetation overgrowth.

3.6.2 Video surveys examining vehicle behaviour at the crossroads were carried out by IDASO Ltd. from 5th October 2022 to 9th October 2022. Over the 5-day survey period, 27 no. incidents were recorded where vehicles travelling on the western approach to the junction along the R756 encroached onto the N81 to get a better view of oncoming traffic, only to have to reverse to avoid this traffic.



Figure 3-7 Existing Sightline to the Right from R756 (W)



4 Environmental Constraints

4.1 Appropriate Assessment

4.1.1 Altemar Ltd. were commissioned to carry out a screening for Appropriate Assessment for this scheme. The full report is contained within Appendix B of this report with a summary of the report outlined below.

4.1.2 The AA screening report contains information required for Wicklow County Council to undertake a screening for Appropriate Assessment. It provides information on and assesses the potential for the proposed development to impact on the Natura 2000 network of European Sites

4.1.3 The AA Screening was undertaken with regard to a range of guidance documentation such as:

- *European Commission Methodological Guidance on the provision of Article 6 (3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC,2001);*
- *Part XAB of the Planning and Development Act 2000, as amended;*
- *Appropriate Assessment of Plans and Projects Ireland - Guidance for Planning Authorities; (Department of Environment, Heritage and Local Government, 2010);*
- *European Communities (Birds and Natural Habitats) Regulations 2011*

4.1.4 The report identifies that the proposed scheme is not located within a European site, with the closest European site being located 3.4km away at Poulaphouca Reservoir SPA. The Zone of Influence (ZOI) was extended beyond the best practice 2km from the site for non-linear projects due to the existing surface water drainage on the N81, which flows into the Hollywood upper stream (Liffey 50).

4.1.5 In line with the Habitats Directive, the area of assessment was expanded beyond the ZOI to include designated sites within 15km of the proposed scheme and designated sites beyond 15km of the proposed scheme with the potential for a hydrological connection. Table 4-1 summarises the European sites within 15km of the proposed scheme as well as the potential impact on these sites. The AA screening found that there were no direct pathways to Natura 2000 sites beyond 15km.



European Site	Code	Distance	Direct Hydrological / Biodiversity Connection	Potential Impact
Special Areas of Conservation				
Wicklow Mountains SAC	IE002122	7.2 km	No	No significant effects likely
Red Bog, Kildare SAC	IE000397	12 km	No	No significant effects likely
Slaney River Valey SAC	IE000781	13.5 km	No	No significant effects likely
Special Protection Areas				
Poulaphouca Reservoir SPA	IE004063	3.4 km	No	No significant effects likely
Wicklow Mountains SPA	IE004040	6.9 km	No	No significant effects likely

Table 4-1 Summary of European Sites within 15km

- 4.1.6 The report summarises that the potential impacts associated with the proposed development do not have the potential to affect the receiving environment and, consequently, do not have the potential to affect the conservation objectives supporting the qualifying interest / special conservation interests of any European sites. Therefore, the proposed development is not likely to have significant effects on any European sites.
- 4.1.7 As the proposed development itself will not have any effects on the Qualifying Interests / Special Conservation Interests or conservation objectives of any European sites, there is no potential for any other plan or project to act in combination with it to result in likely significant effects on any European sites.
- 4.1.8 The report concludes that following an examination, analysis and evaluation of the relevant information, including in particular, the nature of the project and its potential relationship with European sites and their conservation objectives, as well as considering other plans and projects, and applying the precautionary principle, it is considered that there is no potential for likely significant effects on any European sites and that the application for consent for the proposed development does not require an Appropriate Assessment or the preparation of a Natura Impact Statement (NIS).



4.2 EIA Requirements

- 4.2.1 Screening is the process of assessing the requirement of a project to be subject to be subject to an Environmental Impact Assessment (EIA), based on the project type, scale and on the significance or environmental sensitivity of receiving environment.
- 4.2.2 The overriding consideration in determining whether a road scheme should be subject to an EIA is the likelihood of significant environmental effects. Significant effects may arise by virtue of the type of road scheme, the scale or extent of the road scheme and the location of the road scheme in relation to sensitive environments.
- 4.2.3 In interpreting which projects are likely to have significant environmental effects, the EIA Directive (Directive 2014/52/EU), lists those projects for which an EIA is mandatory (Annex I) and those projects for which an EIA may be required (Annex II).
- 4.2.4 The legal requirements for an EIA of a road development are identified in the Roads Act (1993) as amended by the Planning and Development Act (2000-2017) and regulations made under the Roads Acts & Planning Acts.
- 4.2.5 Table 4-2 provides an overview of the legislative requirements that determine whether a roads upgrade scheme will require an EIA, as summarised in the TII Publication *RE-ENV-07008 Environmental Planning of National Roads and Greenway Projects*.

Mandatory		Assessment	EIA Required
The construction of a motorway		The proposed scheme is not a motorway	No
The construction of a busway		The proposed scheme is not a busway	No
The construction of a service area		The proposed scheme is not a service area	No
Any prescribed type of proposed road development consisting of the construction of a proposed	The construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area or 500 metres or more in length in an urban area	The proposed scheme is subject to realignment, however, contains only 2 lanes	No



public road or the improvement of an existing public road	The construction of a new bridge or tunnel which would be 100 metres or more in length	The proposed scheme does not include for the construction of a bridge or tunnel	No
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Table 4-2 Summary of Legislative Requirements for EIA Screening (Source: Fig 4.2 and Fig 4.3 TII RE-ENV-07008)

4.2.6 With reference to Table 4-2, the proposed scheme at Hollywood Cross, Co. Wicklow, is sub threshold in all cases and therefore does not require a mandatory EIA with reference to the Roads Act and also Schedules 5 & 7 of the Planning & Development Regulations (2001-2017).

4.3 Archaeological Constraints

4.3.1 A review of the National Inventory of Architectural Heritage (NIAH) and National Monuments Service’s (NMS) websites was conducted by DBFL in order to ascertain the location of any recorded monuments or items of architectural heritage within proximity of the proposed scheme. The location of these archaeological and architectural items in relations to the proposed scheme is presented in Figure 4-1.

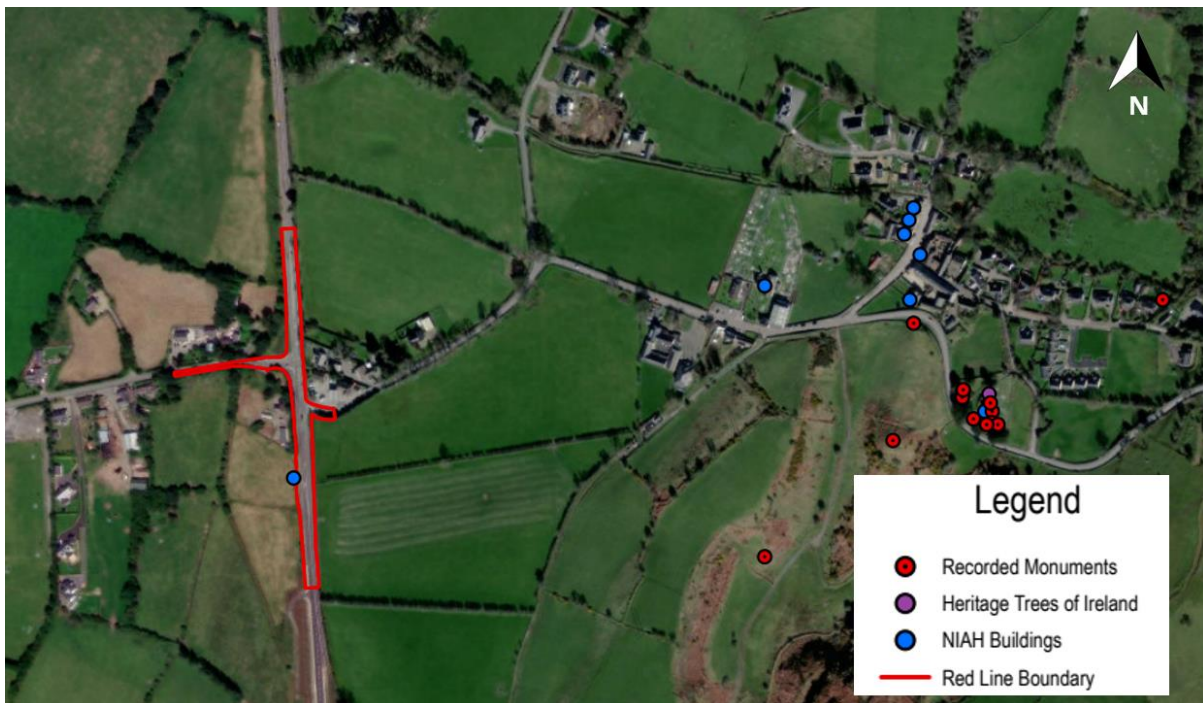


Figure 4-1 Location of Archaeological and Architectural Heritage Items within the Vicinity of the Proposed Scheme



4.3.2 A summary of the recorded items of architectural heritage within the vicinity of the proposed scheme is presented in Table 4-3 while Table 4-4 lists the recorded monuments.

Reg No.	Use	Description
Within the Scheme Boundary		
16400910	Milestone / milepost	Triangular granite milestone of c.1760 inscribed "Dublin 23" to one face and "Bglass [Baltinglass] 12" on the other, both in informal lowercase lettering. Under both of these inscriptions are the more formally inscribed uppercase letters "CW", the latter possibly added at a later date. The milestone is one of at least four which still survive on the stretch of the N81 road between Hollywood Cross Roads and Baltinglass.
Within Hollywood Village (425m east of proposed scheme)		
16400903	Church / chapel	St. Kevin's Catholic Church - This early 19th-century Catholic church is a good example of the typically plain forms employed prior to Emancipation (although the building does actually date from 1830); as such it contributes much to the semi-rural "streetscape" of Hollywood.
16400904	Public House	Semi-detached three-bay two-storey former house, built c.1840, extended to the north by five bays in the later 20th-century and now in use as a public house. Though much extended in the late 1900s and somewhat marred by the multitude of pub signs, this building retains a somewhat 'traditional' character and remains of benefit to the Hollywood streetscape
16400905	Public House	Semi-detached three-bay two-storey double-pile house, built c.1835, now in use as a house and public house. Despite the unsuitable replacement window frames this building has largely maintained its mid (to late) 19th-century appearance and remains an asset to the streetscape.
16400906	House	Semi-detached four-bay single-storey house with former blacksmith's forge, built c.1830, now in use solely as a house. This early to mid 19th-century house, with its distinctive horseshoe shaped former blacksmith's forge doorway outline remains of benefit to the Hollywood streetscape.
16400907	House	Detached three-bay two-storey house, built c.1830. Despite the replacement uPVC window frames, this building has retained its early 19th-century setting and as such adds interest to the semi-rural Hollywood streetscape.
16400908	Church / chapel	St. Kevin's Church - 17th-century churches are a rare commodity, largely intact 17th-century churches even scarcer. Despite the small porch and lean-to additions this particular example has maintained much of its original form and as such is possibly one of the most noteworthy churches in the whole county.
16400909	House	Terraced four-bay single-storey house, built c.1830. Despite replacement window frames and doors, this vernacular building has retained its early 19th-century form and remains an asset to Hollywood's semi-rural streetscape.

Table 4-3 Architectural Heritage Items within the Vicinity of the Proposed Scheme



ID	Class	Description
WI009-017----	Historic Town	A documentary reference to Hollywood in 1256-66 states that its burgesses had the customs of Breteuil. The only surviving remnant is the motte.
WI009-031---	Ritual Site	Situated on the W side of a narrow N-S valley. A naturally split boulder with a concave broken face, traditionally associated with St. Kevin.
WI009-017001	Castle	Situated on the N summit of a steep-sided N-S ridge in a narrow rocky valley S of the Anglo-Norman town of Hollywood. The motte consists of a steep-sided mound which incorporates the spine of the ridge and has a flat top. The surrounding fosse and external bank are well defined at the W and S and can be traced at the E. To the N a flat-bottomed fosse divides the motte from the level bailey; and there is a centrally located causeway. Large sections of collapsed masonry occur on the side of the motte and at the base of the fosse at the SW. The bailey consists of a largely natural platform defined by a steep scarp and with traces of earthworks along the E side.
WI009-017002	Church	Situated on a low steep-sided knoll. The present church, possibly of 17th-century date, may occupy the location of the medieval church which was first mentioned in 1219-28 when it belonged to the convent of Timolin. Within the graveyard there is a 16th- or 17th-century graveslab (now reerected as a headstone). This is a tapering granite slab with an equal-armed Maltese cross on a narrow stem defined by a shallow groove. A small granite disc-headed cross dated 166..? also stood in the graveyard and there is a granite mortar or piscina with four lugs in the church. This site was part of the medieval borough of Hollywood.
WI009-017003	Graveyard	An oval-shaped graveyard with St. Kevin's C of I church near its centre at the summit of a knoll. The graveyard is on a much lower level than the church on the S, W and N. Bounded by a public road at E side.
WI009-017004	Graveslab	Within the graveyard, an earthfast, gently tapering granite stone with an equal-armed Maltese cross on a narrow stem defined by a shallow groove.
WI009-017005	Cross	A small lichen-covered granite disc-headed cross dated 166+ stands in NW quadrant of graveyard.
WI009-017007	Cross	In a graveyard, just SSW of a church An earthfast, slightly tapering, granite stone carries an incised Latin cross with expanded terminals.
WI009-017008	Graveslab	Discovered in a graveyard, lying some 10m S of a church. The granite slab measures 75cm long and 12cm thick. The slab is 40cm wide at the top and 53cm wide at the base where it has broken. This tapering form implies that this represents the lower end of a larger slab, whereby the main cross was located on the missing part of the slab. The incised splayed cross is equal armed. From the lower transom of the cross an incised shaft or stem extends down the face of the slab, and originally would probably have linked this cross with the main cross at the top of the slab.
WI009-017009	Graveslab	Discovered in a graveyard, lying some 10m S of the E-end of a church. This complete granite slab measures 1.06m long, 0.44m wide at the



ID	Class	Description
		top, 0.33m wide at the base and is 0.10m thick. The incised cross is splayed and measures 0.28m high and 0.255m across. From the lower transom a shaft extends down the slab for a distance of 0.23m, and stops without any formal terminal, or in a terminal cross as might be expected.
WI009-017010	Cross	In S quadrant of graveyard, lying S of St. Kevin's C of I Church. Maltese cross carved in relief on E face of granite slab with traces of an incised circle beneath cross which suggests that this may have been an encircled maltese cross on the east face of a low upright granite boulder
WI009-037---	Bullaun stone	On relatively level ground in the back garden of a private residence c. 5m S of a stream. An earthfast boulder containing a single water-filled basin on the W side. Locally called the wart stone and still in use.

Table 4-4 Recorded Monuments in Hollywood

- 4.3.3 It is noted that 1 no. architectural monument is located within the extents of the proposed scheme. As detailed in Table 4-3, the monument is a historic milestone dating back to 1750. It is proposed to preserve and maintain the milestone as part of this scheme. The full details of this preservation and maintenance will be explored at detailed design stage.
- 4.3.4 There are no additional recorded monuments or sites within 250m of the scheme boundary. However, 7 no. buildings in Hollywood Village are recorded in the National Inventory of Architectural Heritage with an additional 12 no. sites across the village identified in the Sites and Monuments Record.



5 Options Development

5.1 Summary of Option Development

- 5.1.1 A detailed options assessment was undertaken for the location of the northbound and southbound bus stops relative to the staggered crossroads. A multi-criteria analysis was undertaken for two options, locating both bus stops south of the junction or staggering the bus stops at the junction. These options were developed in consultation with Wicklow County Council and Transport Infrastructure Ireland.
- 5.1.2 The preferred option, identified through multi-criteria analysis, was the option of staggering the bus stops at the crossroads. Full details on this proposal can be found in Chapter 6 of this report, Preliminary Design. The preferred option received Gateway 1 approval from TII on 21st November 2023.



6 Proposed Design

6.1 Introduction

6.1.1 The following section provides detail on the preliminary design of the proposed scheme. The scheme will provide for a northbound and southbound bus stop staggered at Hollywood Cross with accompanying traffic calming and an uncontrolled pedestrian crossing. The image in Figure 6-1 outlines the proposed preliminary design layout for the scheme. The full drawing layout is shown in Appendix A of this report.

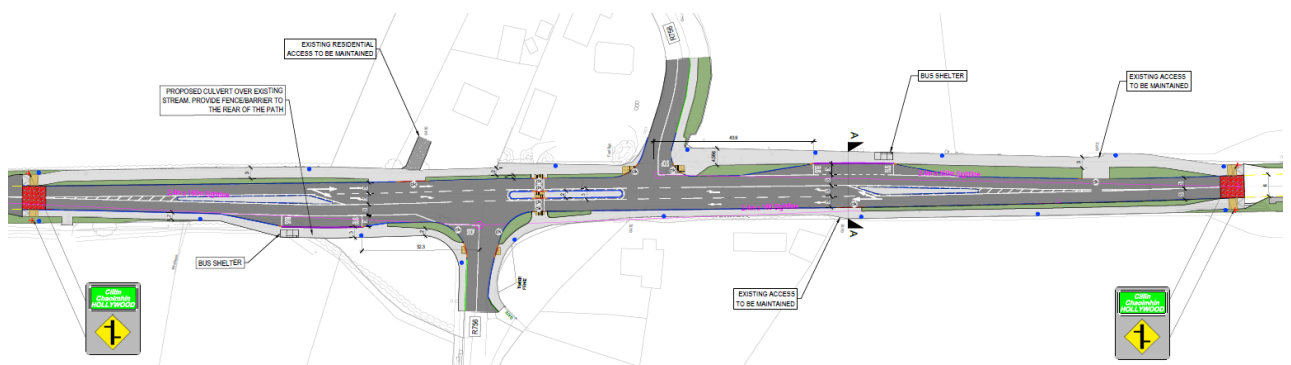


Figure 6-1 Proposed Overall Scheme Layout

6.2 Land Acquisition

6.2.1 The majority of the scheme can be accommodated within the existing road carriageway, and in WCC owned lands. There is a requirement to locate the northbound bus stop within an existing section of grassland that is currently used as a remembrance garden. This is in WCC ownership and will require a small section of this area to accommodate the bus stop and bus shelter. The bus stop on this side will also require a small section of land take where the proposed footpath travelling behind the bus stop will encroach into private lands. WCC have had initial engagement with this landowner to outline the proposals.

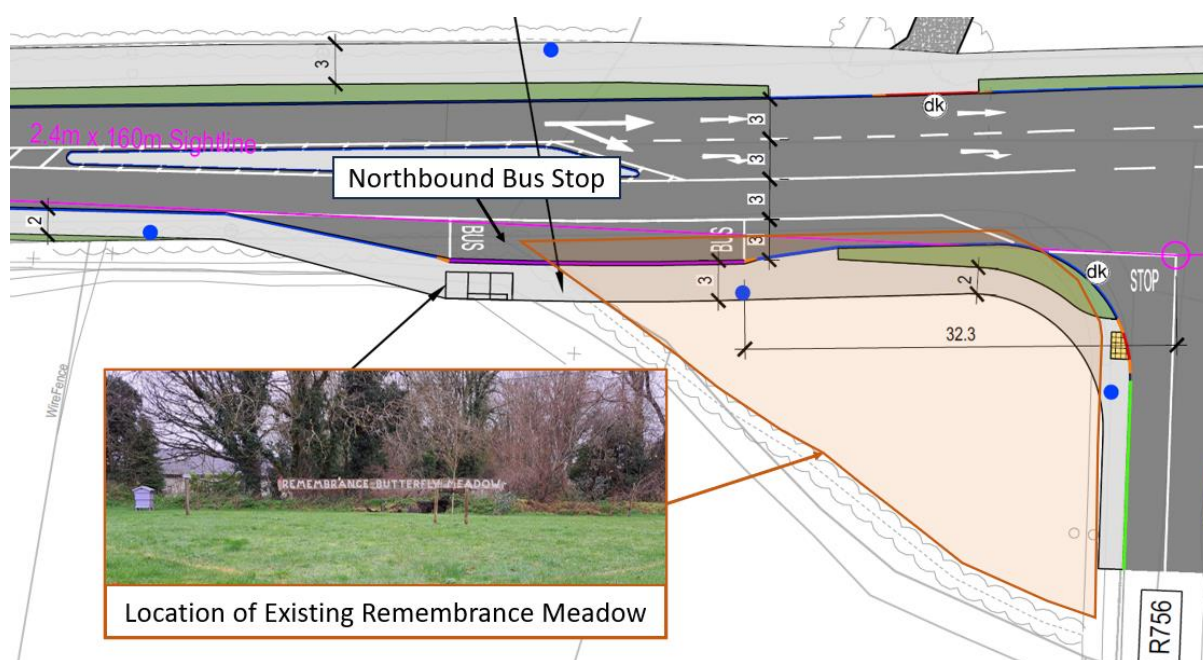


Figure 6-2 Location of Existing Remembrance Garden in relation to the Northbound Bus Stop

6.3 Horizontal & Vertical Alignment

6.3.1 The horizontal and vertical alignment of the road will remain unchanged as per the existing road layout. Shared pedestrian and cyclist paths are proposed on both sides of the carriageway from gateway to gateway. In combination with the proposed solid central islands, these facilities will reduce the width of the traffic lanes to 3.0m.

6.3.2 There are no proposed changes to the vertical alignment of the N81 in the vicinity of Hollywood Cross as part of this scheme.

6.4 Cross Section and Crossfall

6.4.1 As discussed in sections 6.1.4, 6.1.5 and 6.1.6, shared pedestrian and cyclists paths of minimum width 2.0m will be provided on both sides of the N81, from gateway to gateway. This removes the existing hard shoulder through the crossroads. The existing north and southbound traffic lanes will be reduced to 3.0m. An example of this cross section is shown in Figure 6-3.

6.4.2 The crossfall of the existing carriageway will not be altered.

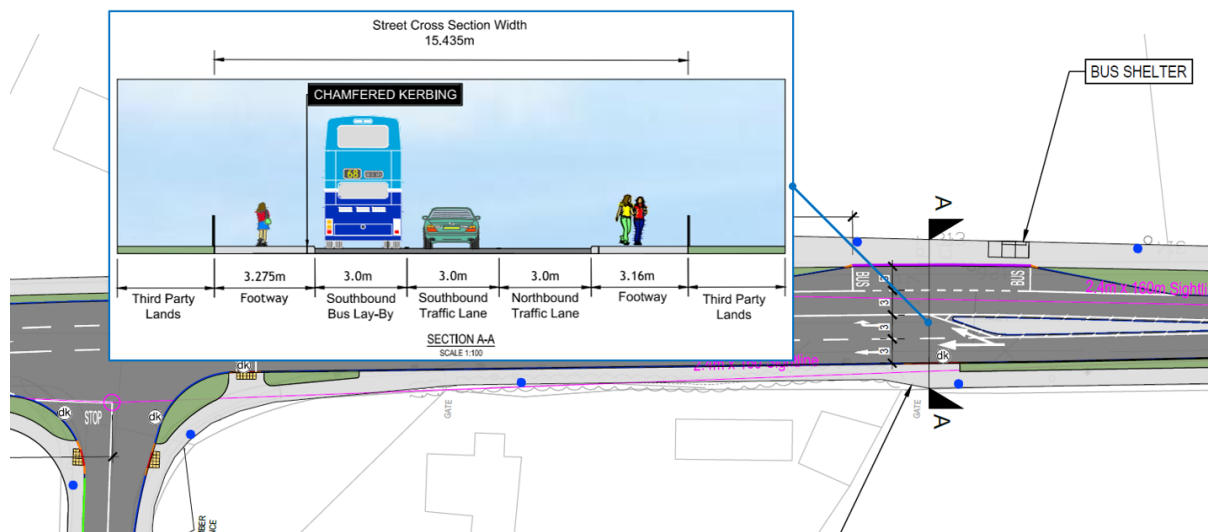


Figure 6-3 Cross Section at the Southbound Bus Stop

6.5 Gateway Feature

- 6.5.1 A gateway feature is proposed at both ends of the proposed scheme along the N81 in order to alert drivers that they are approaching a traffic calmed environment. The northern gateway will be located approximately 120m north of the western arm of the junction (R756) while the southern gateway will be located approximately 175m south of the eastern arm of the junction (R756).
- 6.5.2 Both gateways have been designed in line with Gateway Type A as specified in TII CC-SCD-0510. Each gateway will feature alternative red road surfacing and 2 no. gateway signs. Each sign will feature the placename in both Irish and English as well as warning sign W007RL indicating a staggered junction ahead.

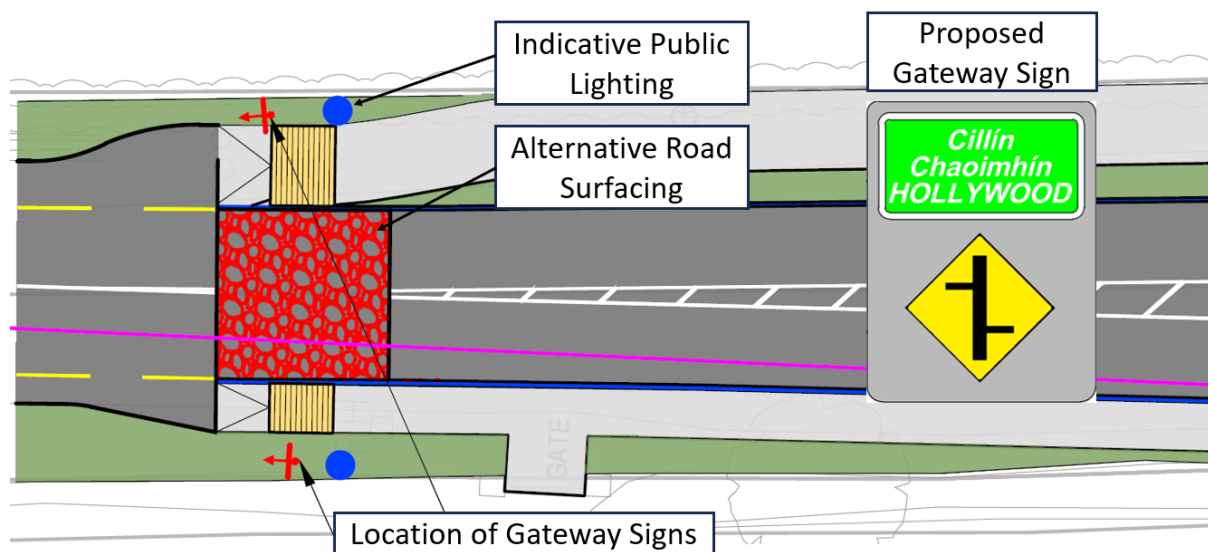


Figure 6-4 Gateway Feature along the N81 (N)

6.6 Facilities for Vulnerable Road Users

- 6.6.1 Shared pedestrian and cyclist paths of minimum width 2.0m are proposed extending from gateway to gateway on both sides of the N81 corridor. These paths will connect to the existing footpaths in place along the R756 side arms of the staggered junction.
- 6.6.2 To allow pedestrians to safely navigate the N81, a 2.4m wide uncontrolled pedestrian crossing will be provided between the eastern and western arms of the junction. A 3.0m wide solid central island will be provided at the midpoint of the crossing, allowing pedestrians to stop and make a two-stage crossing movement, if necessary. The location of the crossing aligns with the existing desire line to cross the N81 to access the service station. Tactile paving will be provided at this uncontrolled crossing on both the footpaths and central island. Additional tactile paving will be provided on the footpaths on approach to the minor arms of the crossroads (R756) as well as at the scheme extents, where the path joins the carriageway.

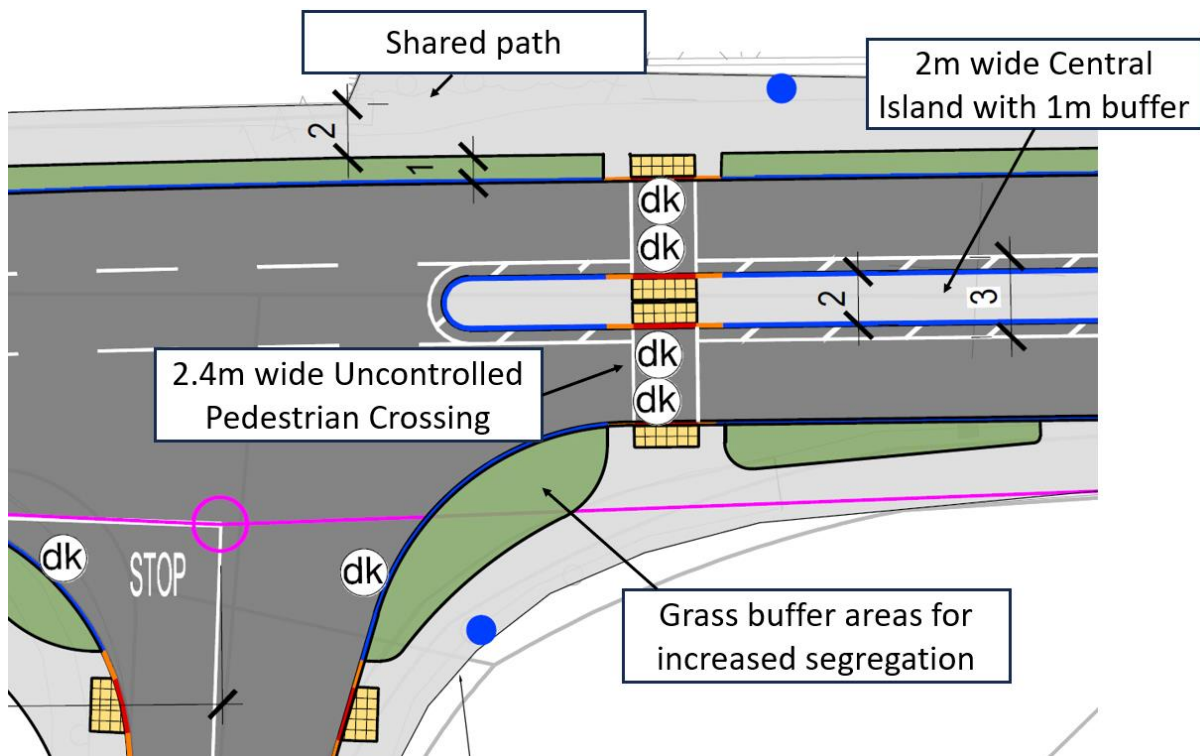


Figure 6-5 Uncontrolled Pedestrian Crossing on the N81

6.7 Additional Traffic Calming Features

6.7.1 In order to maximise the level of traffic calming in the vicinity of the proposed bus stop facilities, the existing hatched islands in the vicinity of the staggered crossroads will be replaced with solid islands and a reduced carriageway width (6.0m) to encourage drivers to reduce their speed. These central islands will be accompanied by an appropriate planting strip, where feasible, between the footpath facilities and the edge of the road carriageway to emphasise the transition zone and the change in the characteristics of the road.

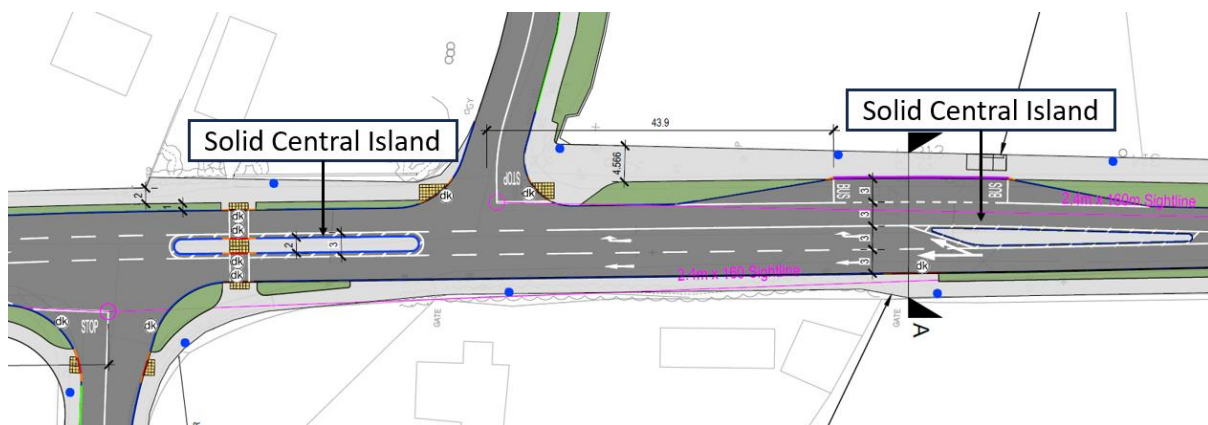


Figure 6-6 Solid Central Islands on Approach and Through the Staggered Crossroads



6.8 Bus Stop Facilities

6.8.1 Bus stops complete with bus shelters will be provided on both sides of the N81 carriageway to cater for both north and southbound bus services. These bus stops will be staggered at the crossroads, as recommended in the *Guidance on Bus Stop Locations in Rural Areas*, with the northbound bus stop located approximately 30m north of the western arm (R756) and the southbound bus stop located approximately 45m south of the eastern arm of the junction (R756).

6.8.2 Each bus stop will feature a bus shelter, bus stop signage, bus stop kerbing and appropriate public lighting.

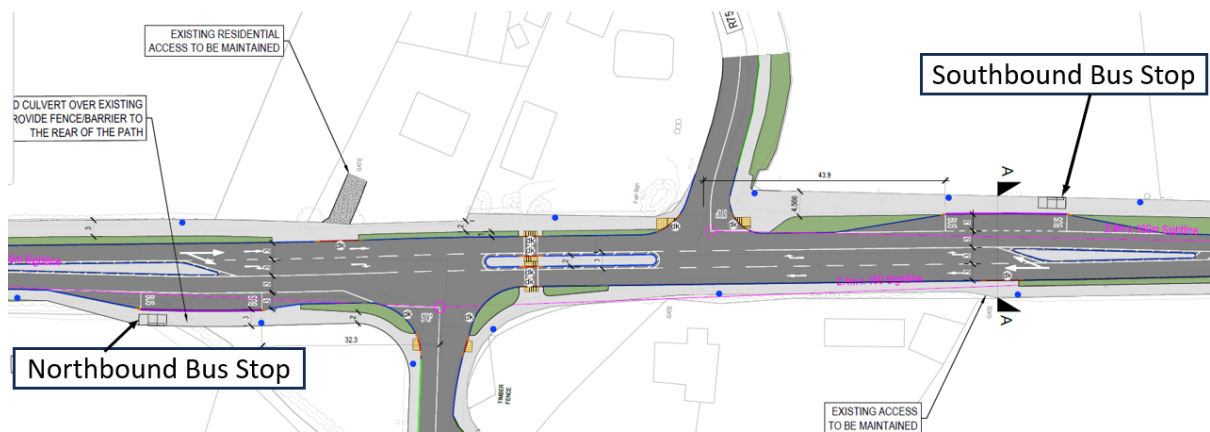


Figure 6-7 Location of Bus Stops at Hollywood Cross

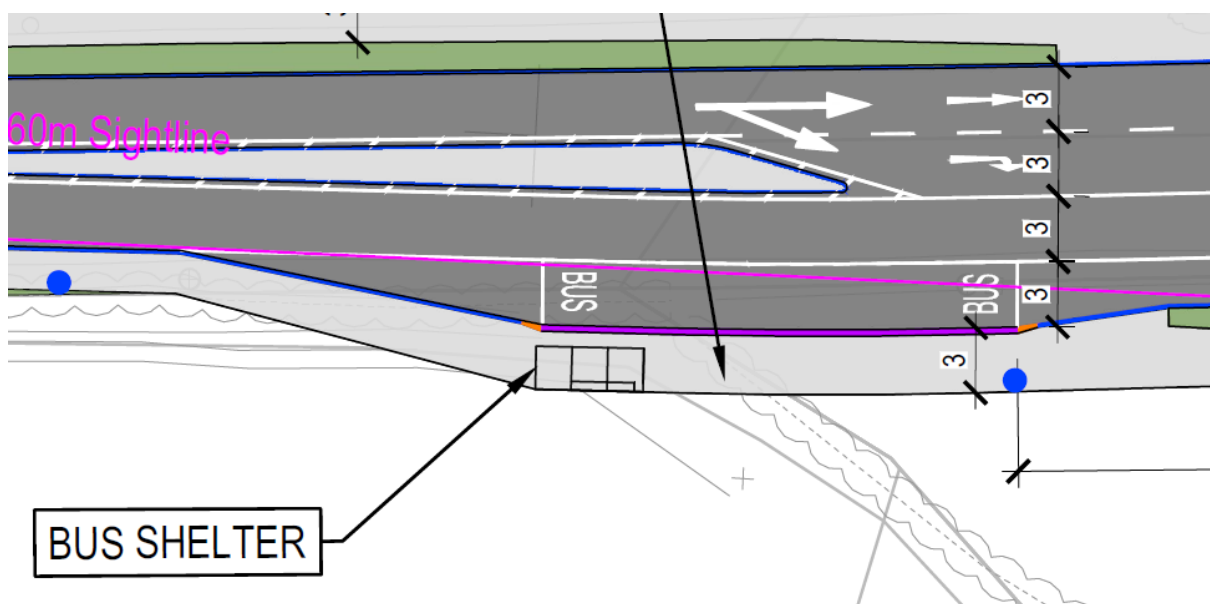


Figure 6-8 Layout of Northbound Bus Stop



6.9 Sightlines

- 6.9.1 To improve the sightline for vehicles turning onto the N81 from the western arm of the staggered crossroads, the R756, overgrown vegetation will be cut back and removed as part of this scheme.
- 6.9.2 A departure is being sought from the sightline standards under *DN-GEO-03060 Geometric Design of Junctions* to allow for the required 160m sightline for vehicles turning onto the N81 from the R756 to be measured to the edge of the far side of the carriageway rather than the nearside edge.
- 6.9.3 The departure allows for the bus stops to be brought closer to the staggered crossroads and pedestrian desire line, resulting in the northbound and southbound bus stops being located approximately 120m apart. This departure is justified based on the introduction of solid central islands through the staggered crossroads which restrict the ability for vehicles to perform overtaking manoeuvres.
- 6.9.4 A copy of the application form for this departure can be found in Appendix E.

6.10 Traffic Signs and Road Markings

- 6.10.1 All traffic signs and road markings have been designed in accordance with the Traffic Signs Manual. There is no provision for new directional signs for the extents of the proposed scheme. All existing directional signage will be retained in place or moved as appropriate.
- 6.10.2 A total of 4 no. gateway type signs will be installed as part of the scheme, 2 no. at the scheme boundary to the north and south of Hollywood Cross. Each sign will feature the placename in both Irish and English as well as warning sign W007RL indicating a staggered junction ahead.

6.11 Public Lighting

- 6.11.1 New public lighting is proposed along the length of this scheme, in particular, at the gateway features both sides of the scheme extents in order to further alert drivers that they are coming into a traffic calmed area.
- 6.11.2 Lighting along the length of the proposed scheme will be designed and implemented to efficiently mitigate against interference with flora and fauna and will also be designed to mitigate against glare to residential properties along this section of road.



6.11.3 An indicative public lighting layout has been shown on the drawing, however, this is subject to change once a full lighting plan is developed at detailed design stage.

6.12 Surface Water Drainage

6.12.1 The surface water along the N81, south of the crossroads, currently runs into gullies and manholes and connects to either soakpit within the verge or to swale/open ditch. On the northern side of the crossroads, the surface water currently drains over the edge of the road carriageway and connects to a swale/open ditch.

6.12.2 It is proposed, as part of this scheme, to provide new footpaths over the scheme extents of the N81 on both sides of the road carriageway. This will increase the hardstanding and will require additional gullies to be located along this length of road which will connect into the swale/open drains and open ditch.

6.12.3 The scheme will also require the existing gullies in place, on the southern side of the crossroads, to be relocated, which will require a gully lead.

6.12.4 Detailed drainage proposals will be investigated further at detailed design stage.

6.13 Mitigation at Open Stream along N81

6.13.1 It is proposed, as part of this scheme, to extend new footpath over an existing open drainage ditch. This will require a pipe/culvert to be implemented to allow the surface water to continue to flow and drain into this ditch. This will be developed in further detail at detailed design stage. A safety barrier/fence will be provided at the back of path to ensure safety of VRUs.

6.14 Departures from Standard

6.14.1 During consultation with TII, a decision was made to seek a departure from the sightline standards under *DN-GEO-03060 Geometric Design of Junctions* to allow for the required 150m sightline to be measured to the edge of the far side of the carriageway rather than the nearside edge. This departure is justified based on the introduction of solid central islands through the staggered crossroads which restrict the ability for vehicles to perform overtaking manoeuvres. The departure allows for the bus stops to be brought closer to the staggered crossroads and pedestrian desire line, resulting in the northbound and southbound bus stops being located approximately 120m apart.



- 6.14.2 A departure from standards is also being sought to cover the full extents of the proposed scheme and will allow for the use of the traffic calming standards set out in DN-GEO-03084 to be used as design guidance on the N81 in an 80km/h speed limit zone. This departure is being sought based on discussions with TII, who recognise the difficulty with retrofitting traffic calming and pedestrian facilities onto legacy national roads. The departure is justified to support the recent reduction of the speed limit along this section of the N81 to 80km/h. Although the lowering of the speed limit has reduced vehicle speeds somewhat, there is a need to lower these speeds further with physical civil engineering interventions, in turn increasing pedestrian comfort and safety at the junction.
- 6.14.3 A copy of the Departure from Standards forms submitted to TII on this scheme can be found in Appendix E.



7 Road Safety Audit

- 7.1.1 A Stage 1 Road Safety Audit was carried out in March 2024 by PMCE Consultants. The final, signed report is provided in Appendix C of this report.
- 7.1.2 All problems identified in the audit have been addressed by the design team and agreed with WCC.
- 7.1.3 The final audit report has been uploaded to the RSAAS.



8 Project Appraisal Balance Sheet

8.1.1 A project appraisal balance sheet has been prepared for this scheme in accordance with the guidance set out in DN-GEO-03030. The PABS is provided in Appendix D. The overall description of the scheme is slightly positive.



9 Stakeholder Consultation

9.1 Introduction

9.1.1 Consultations with key stakeholders has been undertaken as part of this scheme design. The results of this consultation as well as feedback are provided below.

9.2 Consultation Feedback

Feasibility and Options Consultation with TII

9.2.1 DBFL and WCC undertook a number of engagements with TII over the course of the feasibility and option development stage of this scheme. A number of online meetings were held, in which the feasibility and option development for the scheme was discussed and the proposed design was formalised. Overall, TII are in support of the scheme.

Preliminary Design Consultation with TII

9.2.2 An online consultation meeting was held between DBFL, WCC and TII on the 11.03.24 in order to discuss the Preliminary Design development for the scheme. TII provided feedback on the proposed design being put forward for Part 8 Planning.



10 Summary of Report

- 10.1.1 DBFL Consulting Engineers (DBFL) have been commissioned by Wicklow County Council (WCC) to provide consulting engineering services for the design and development of the N81 Bus Stops Scheme at Hollywood, Co. Wicklow. The scheme received Gateway 1 Approval in accordance with Transport Infrastructure Ireland (TII) Publication *GE-STY-01037* on 21st November 2023.
- 10.1.2 A number of policy documents on a national, regional and local level have been reviewed in order to inform the overall scheme design and to ensure that the scheme is being developed to best policy and guidance.
- 10.1.3 The objectives of this scheme are to provide formal bus stop facilities to serve the village of Hollywood, Co. Wicklow and to provide a traffic calming scheme at Hollywood Cross to reduce vehicle speeds and create a safer environment for pedestrians wishing to cross the N81.
- 10.1.4 Based on consultation with Transport Infrastructure Ireland (TII), it has been clarified that the full scheme will be submitted as a departure from standards to allow the traffic calming design elements (contained within *DN-GEO-03084 The Treatment of Transition Zones to Towns and Villages*) to be applied on an 80 km/h national road. An additional departure is also being sought regarding the sightlines from the minor road (R756) onto the major road (N81) under *DN-GEO-03060 – Geometric Design of Junctions*.
- 10.1.5 A detailed options assessment involving multicriteria analysis was undertaken for this scheme with a preferred option emerging as a result. The preferred design option has been developed further as part of this Part 8 process, to preliminary design.
- 10.1.6 The bus stops will be located to the north and south of the staggered crossroads with an uncontrolled pedestrian crossing provided between the inbound and outbound bus stops at the existing pedestrian desire line. Traffic calming through the crossroads will comprise of solid central islands, a narrowed carriageway and the provision of gateway signs and red road surfacing on approach.

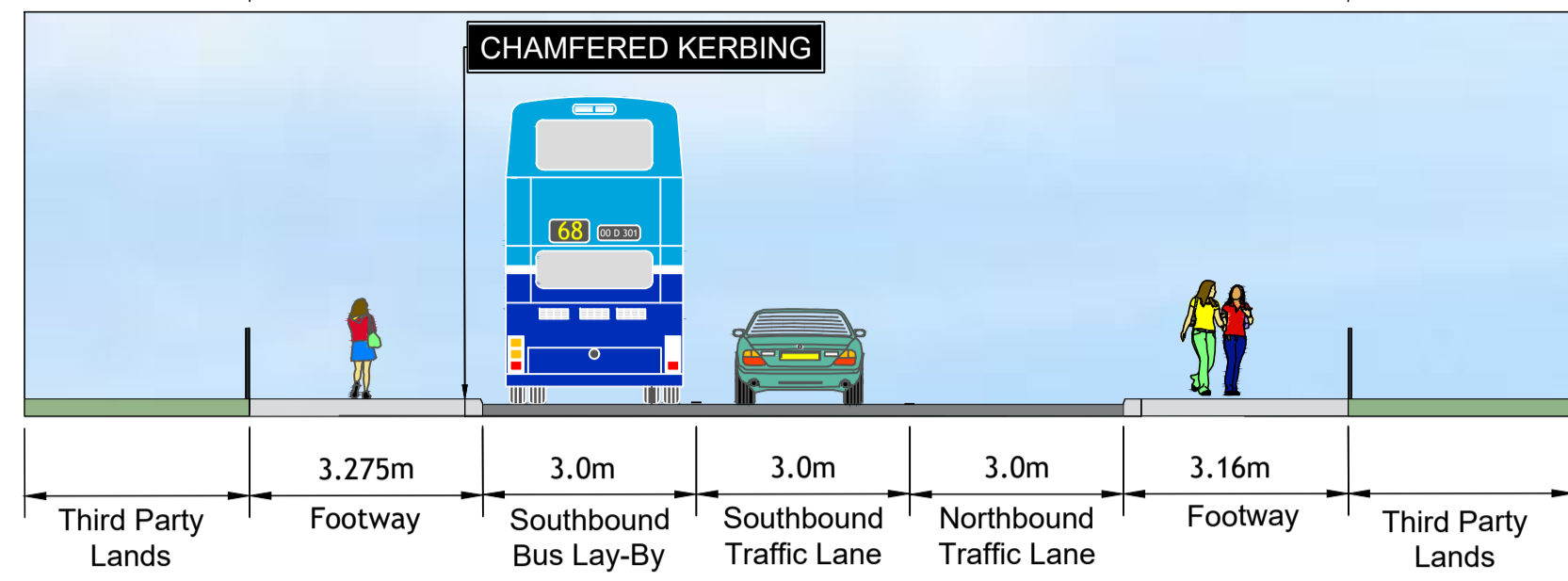


- 10.1.7 The majority of the scheme can be accommodated within the existing road carriageway or in adjacent WCC owned lands. However, the northbound bus stop will require a small section of land take where the proposed footpath travelling behind the bus stop will encroach into private lands. WCC have had initial engagement with this landowner to outline the proposals.
- 10.1.8 Lighting along the length of the proposed scheme will be designed and implemented to efficiently mitigate against interference with flora and fauna and will also be designed to mitigate against glare to residential properties along this section of road.
- 10.1.9 It is proposed, as part of this scheme, to extend new footpath over an existing open drainage ditch. This will require a pipe/culvert to be implemented to allow the surface water to continue to flow and drain into this ditch. This will be developed in further detail at detailed design stage.
- 10.1.10 An AA and EIA Screening assessment has been undertaken as part of this scheme design. Results of the screening concluded that an Natura Impact Statement is not required and the scheme does not require an EIA.
- 10.1.11 A Stage 1 Road Safety Audit has been carried out on the Preliminary Design. Problems identified in the audit have been addressed by the design team and agreed with WCC.



Appendix A : Preliminary Design Drawing

Street Cross Section Width
15.435m



SECTION A-A
SCALE 1:100

ON ORIGINAL

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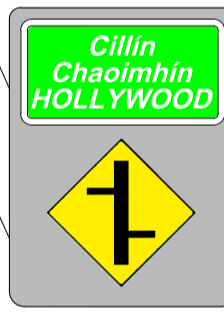
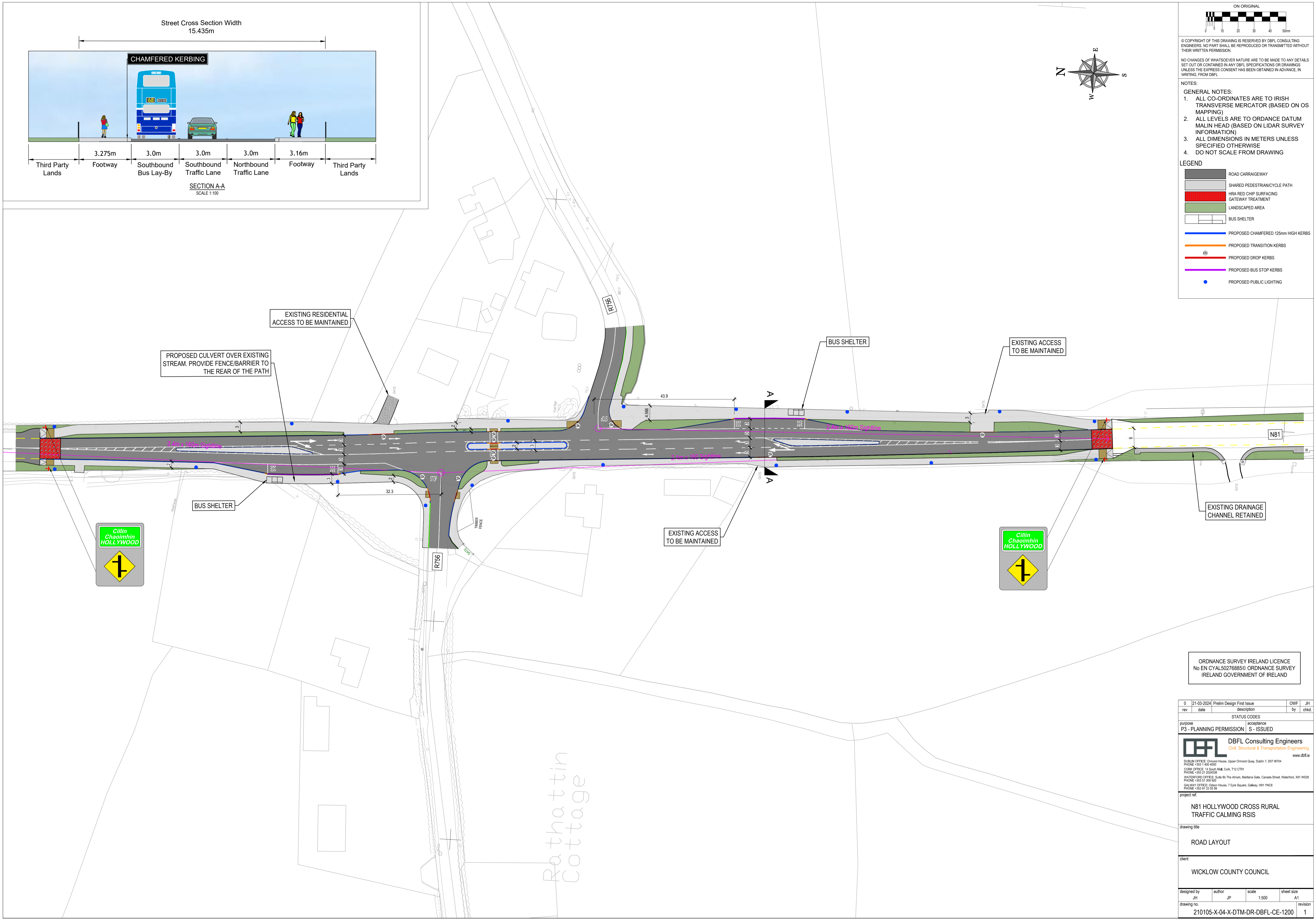
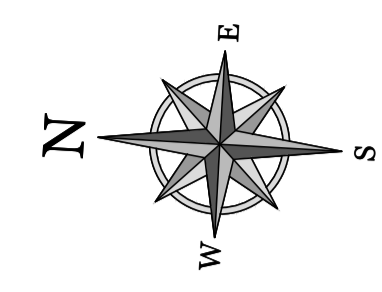
NOTES:

GENERAL NOTES:

1. ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR (BASED ON OS MAPPING)
2. ALL LEVELS ARE TO ORDANCE DATUM MALIN HEAD (BASED ON LIDAR SURVEY INFORMATION)
3. ALL DIMENSIONS IN METERS UNLESS SPECIFIED OTHERWISE
4. DO NOT SCALE FROM DRAWING

LEGEND

- ROAD CARRIAGEWAY
- SHARED PEDESTRIAN/CYCLE PATH
- HRA RED CHIP SURFACING GATEWAY TREATMENT
- LANDSCAPED AREA
- BUS SHELTER
- PROPOSED CHAMFERED 125mm HIGH KERBS
- PROPOSED TRANSITION KERBS
- PROPOSED DROP KERBS
- PROPOSED BUS STOP KERBS
- PROPOSED PUBLIC LIGHTING



ORDNANCE SURVEY IRELAND LICENCE
No EN CYALS0276885 © ORDNANCE SURVEY
IRELAND GOVERNMENT OF IRELAND

0	21-03-2024	Prelim Design First Issue	OWF	JH
rev	date	description	by	chkd.

STATUS CODES

purpose acceptance

P3 - PLANNING PERMISSION S - ISSUED

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project ref.

N81 HOLLYWOOD CROSS RURAL TRAFFIC CALMING RSIS

drawing title

ROAD LAYOUT

client

WICKLOW COUNTY COUNCIL

designed by	author	scale	sheet size
JH	JP	1:500	A1
drawing no.	revision		
210105-X-04-X-DTM-DR-DBFL-CE-1200	1		



Appendix B : AA Screening Report

Appropriate Assessment Screening for a proposed N81 Hollywood
Cross Rural Traffic Calming RSIS at Hollywood, Co Wicklow.



4th March 2024

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.
On behalf of: DBFL Consulting Engineers.

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Document Control Sheet			
Project	Appropriate Assessment Screening for a proposed Bus stop at N81 at Hollywood, Co Wicklow.		
Report	Appropriate Assessment Screening		
Date	4 th March 2024		
Version	Author	Reviewed	Date
Final	Bryan Deegan	Emma Peters	4 th March 2024

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1. Introduction

An Appropriate Assessment is an assessment of the potential effects of a proposed project or plan, on its own, or in combination with other plans or projects, on one or more European sites (Special Areas of Conservation (SAC) or Special Protection Areas (SPA)).

The following Appropriate Assessment Screening has been prepared by Altemar Ltd. at the request DBFL Consulting Engineers (DBFL) on behalf of Wicklow County Council (WCC). DBFL Consulting Engineers (DBFL) have provided consulting engineering services for the design of bus stop and traffic calming facilities along the N81, adjacent to the village of Hollywood.

The AA Screening stage examines the likely significant effects of the proposed development, either on its own, or in combination with other plans and projects, upon a European site and considers whether, on the basis of objective scientific evidence, it can be concluded, in view of best scientific knowledge and the conservation objectives of the relevant European sites, that there are not likely to be significant effects on any European site.

1.1 Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include residential, infrastructural, renewable, oil & gas, private industry, local authorities, EC projects and State/semi-State Departments.

1.2 Statement of Authority

Bryan Deegan (MCIEEM) prepared this AA Screening. Bryan is the managing director of Altemar. Bryan is an environmental scientist, aquatic and marine biologist with 28 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture).

This report was also prepared by ecologist, Emma Peters. Emma holds a B.Sc in Environmental Science and is skilled in bat detection through static detector surveys, dusk emergence, and down re-entry surveys and is a member of Bat Conservation Ireland. She is skilled in habitat identification, native and non-native species identification and ecological conservation, having experience in mitigation measures in ecological assessment.

2. Background to the Appropriate Assessment

The Habitats Directive 92/43/EEC (together with the Birds Directive (2009/1477/EC)) forms the cornerstone of Europe's nature conservation policy. The Directive protects over 1000 animals and plant species and over 200 "habitat types" which are of European importance. In the Habitats Directive, Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of conservation sites (NATURA, 2000). These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive), Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the [NATURA 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the component national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

As outlined in “Managing European sites, The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC” (European Commission, 21 November 2018) *“The purpose of the appropriate assessment is to assess the implications of the plan or project in respect of the site’s conservation objectives, either individually or in combination with other plans or projects. The conclusions should enable the competent authorities to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus of the appropriate assessment is therefore specifically on the species and/or the habitats for which the European site is designated.”*

As outlined in the EC guidance document on Article 6(4) (January 2007)¹:

“Appropriate assessments of the implications of the plan or project for the site concerned must precede its approval and take into account the cumulative effects which result from the combination of that plan or project with other plans or projects in view of the site’s conservation objectives. This implies that all aspects of the plan or project which can, either individually or in combination with other plans or projects, affect those objectives must be identified in the light of the best scientific knowledge in the field.

Assessment procedures of plans or projects likely to affect European sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity. Regardless of whether the provisions of Article 6(3) are delivered following existing environmental impact assessment procedures or other specific methods, it must be ensured that:

- *Article 6(3) assessment results allow full traceability of the decisions eventually made, including the selection of alternatives and any imperative reasons of overriding public interest.*
- *The assessment should include all elements contributing to the site’s integrity and to the overall coherence of the network as defined in the site’s conservation objectives and Standard Data Form, and be based on best available scientific knowledge in the field. The information required should be updated and could include the following issues:*
 - *Structure and function, and the respective role of the site’s ecological assets;*
 - *Area, representativity and conservation status of the priority and nonpriority habitats in the site;*
 - *Population size, degree of isolation, ecotype, genetic pool, age class structure, and conservation status of species under Annex II of the Habitats Directive or Annex I of the Birds Directive present in the site;*
 - *Role of the site within the biographical region and in the coherence of the European network; and,*
 - *Any other ecological assets and functions identified in the site.*
- *It should include a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts and other impacts likely to arise as a result of the combined action of the plan or project under assessment and other plans or projects.*
- *The assessment under Article 6(3) applies the best available techniques and methods, to estimate the extent of the effects of the plan or project on the biological integrity of the site(s) likely to be damaged.*
- *The assessment provides for the incorporation of the most effective mitigation measures into the plan or project concerned, in order to avoid, reduce or even cancel the negative impacts on the site.*

¹ European Commission. (2007). Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission;

- *The characterisation of the biological integrity and the impact assessment should be based on the best possible indicators specific to the European assets which must also be useful to monitor the plan or project implementation.”*

3. Stages of the Appropriate Assessment

This Appropriate Assessment screening report was undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001), Part XAB of the Planning and Development Act 2000, as amended, in addition to the December 2009 publication from the Department of Environment, Heritage and Local Government; 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities' and the European Communities (Birds and Natural Habitats) Regulations 2011. This AA screening report was prepared by Altamar Ltd. to provide the competent authority (Board) with information necessary to meet their obligation of carrying out AA screening, to determine whether AA is required. In order to comply with the above Guidelines and legislation, the Appropriate Assessment process must be structured as follows:

1) Screening stage:

- Description of plan or project
- Identification of relevant European sites, and compilation of information on their qualifying interests and conservation objectives
- Identification and description of individual in combination effects likely to result from the proposed project;
- Assessment of the likely significance of the effects identified above. Exclusion of sites where it can be objectively concluded that there will be no likely significant effects; and,

Conclusions

2) Appropriate Assessment (Natura Impact Statement):

- Description of the European sites that will be considered further;
- Identification and description of potential adverse impacts on the conservation objectives of these sites likely to occur from the project or plan; and,
- Mitigation Measures that will be implemented to avoid, reduce or remedy any such potential adverse impacts
- Assessment as to whether, following the implementation of the proposed mitigation measures, it can be concluded, beyond all reasonable scientific doubt, that there will be no adverse impact on the integrity of the relevant European Site in light of its conservation objectives"
- Conclusions.

If it can be demonstrated during the AA screening phase (Stage 1), that the proposed project will not have a significant effect, whether alone or in combination with other plans or projects, on the conservation objectives of a Natura 2000 site, then no further AA (Stage 2) will be required. It is important to note that there is a requirement to apply a precautionary approach to AA screening. Therefore, where effects are possible, certain or unknown at the screening stage, AA will be required.

In addition, it should be noted that Article 6(3) of the Habitats Directive must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an AA of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.

4. Stage 1 Screening Assessment

4.1 Description of the Proposed Project

DBFL Consulting Engineers (DBFL) have been commissioned by Wicklow County Council (WCC) to provide consulting engineering services for the design of bus stop and traffic calming facilities along the N81, adjacent to the village of Hollywood.

The overall scheme aims to provide for north and southbound bus stops along the N81 at Hollywood in addition to a traffic calming scheme to reduce speeds on approach to Hollywood Cross.

The bus stops will be located to the north and south of the staggered crossroads with an uncontrolled pedestrian crossing provided between the inbound and outbound bus stops at the existing pedestrian desire line. Traffic calming through the crossroads will comprise of solid central islands, a narrowed road carriageway and the provision of gateway signs and red road surfacing on approach.

As part of a previous options assessment for the scheme, a number of options for the location of the bus stops were considered and assessed with a multicriteria analysis. A preferred option emerged from this assessment which has now been progressed as part of this Part 8 application, to preliminary design.

The proposed site outline, location, plan, and development layout are demonstrated in Figures 1-3.

4.2 Drainage

A Preliminary Design Report has been prepared by DBFL Consulting Engineers to accompany this planning application. This report outlines the surface water drainage strategy for the proposed development site:

'Surface Water Drainage for the N81

5.5.1 The surface water along the N81, south of the crossroads, currently runs into gullies and manholes and connects to either soakpit within the verge or to swale/open ditch. On the northern side of the crossroads, the surface water currently drains over the edge of the road carriageway and connects to a swale/open ditch.

5.5.2 It is proposed, as part of this scheme, to provide new footpaths the length of the N81 on both sides of the road carriageway. This will increase the hardstanding and will require additional gullies to be located along this length of road which will connect into the swale/open drains and open ditch.

5.5.3 The scheme will also require the existing gullies in place, on the southern side of the crossroads, to be relocated, which will require a gully lead.

5.5.4 Detailed drainage proposals will be investigated further at detailed design stage.'

The existing drainage strategy is demonstrated in Figure 4.



0 0.5 1 1.5 km

Project: Bus Stop on N81.
 Location: Hollywood, Co.Kildare.
 Date: 23rd January, 2024.
 Drawn By: Emma Peters (Altamar).

ALTEMAR
 Marine & Environmental Consultancy

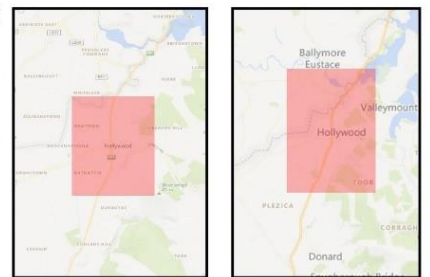
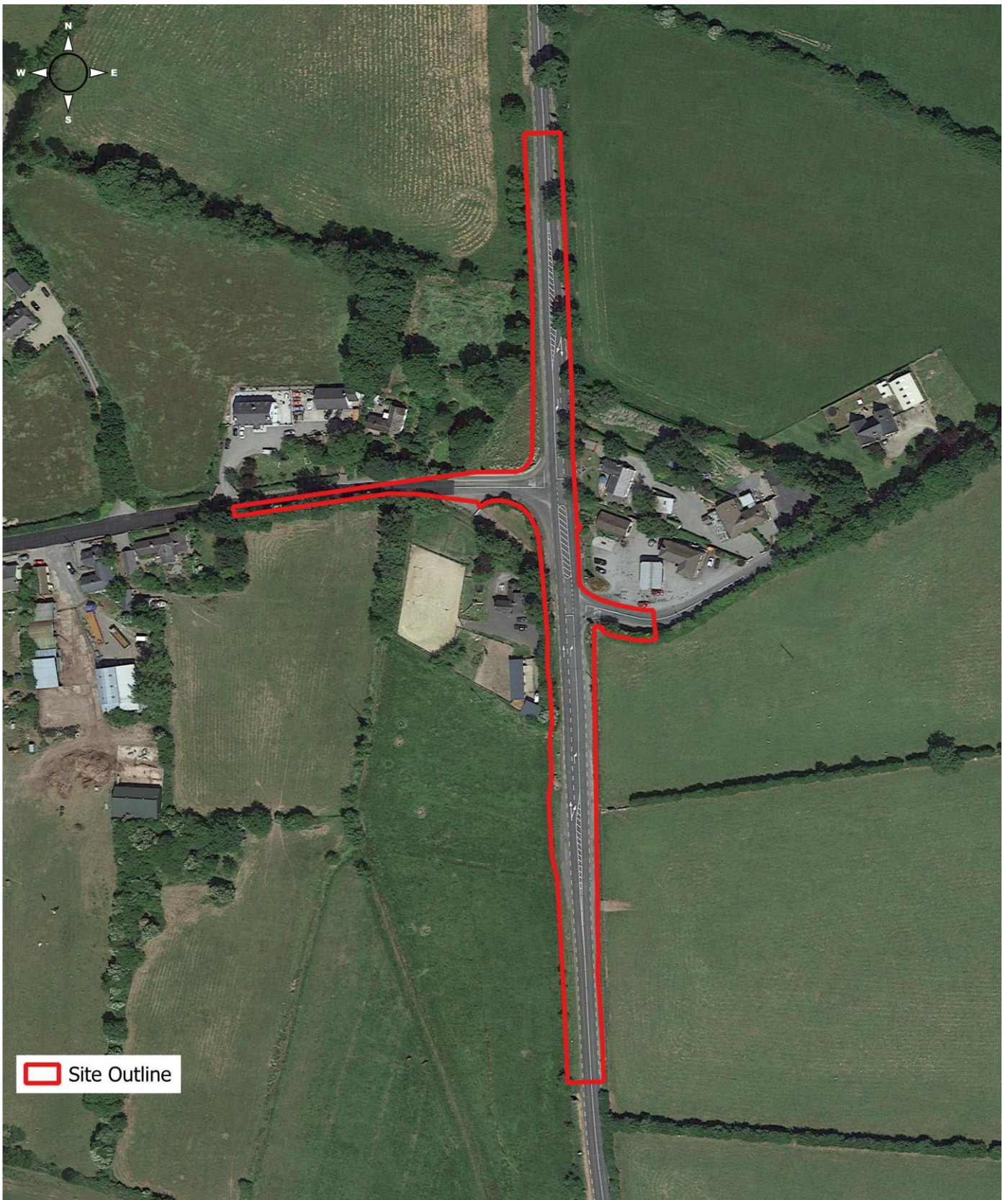


Figure 1. Site outline and location on satellite imagery (ESRI)



Site Outline

0 50 100 150 200 250 m

Project: Bus Stop on N81.
Location: Hollywood, Co.Kildare.
Date: 23rd January, 2024.
Drawn By: Emma Peters (Altamar).

ALTEMAR
Marine & Environmental Consultancy

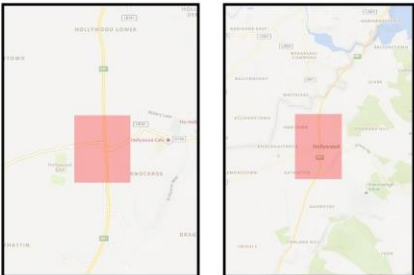


Figure 2. Outline of proposed site.

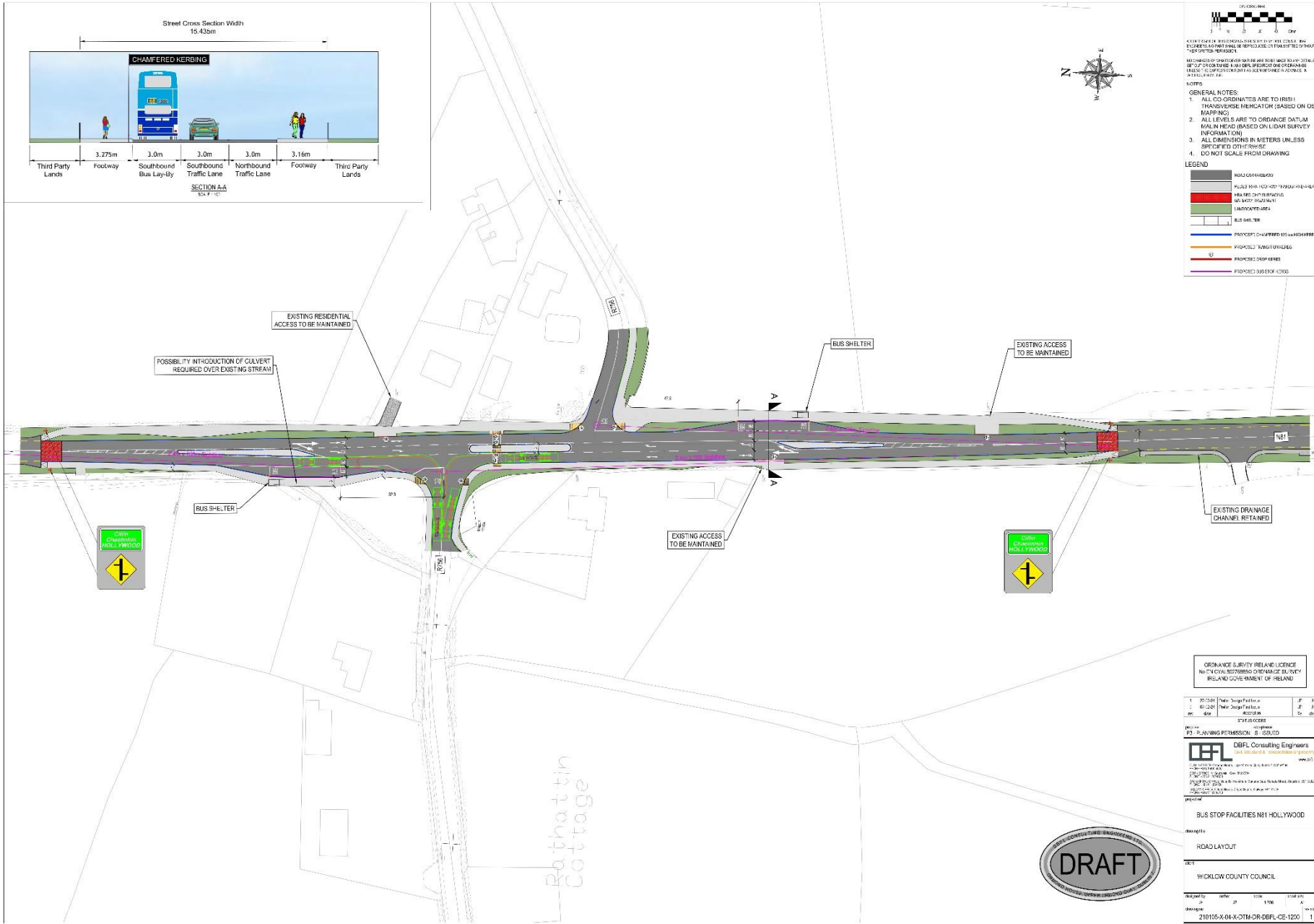


Figure 3. Draft preliminary layout.

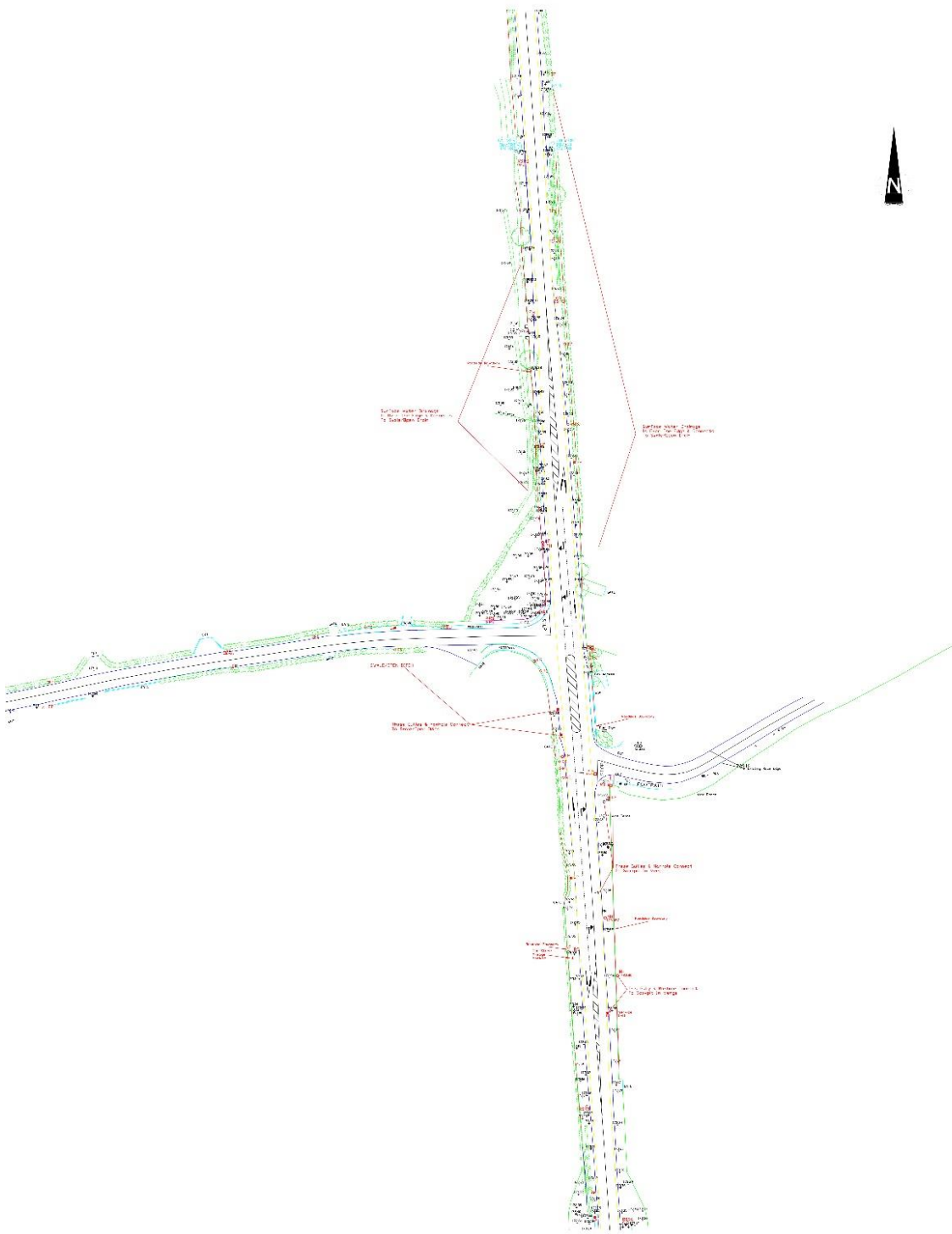


Figure 4. Existing drainage layout.

4.3 Identification of Relevant Natura 2000 Sites

The following identifies the relevant European sites, and compiles information on their qualifying interests and conservation objectives in addition to outlining the potential for significant effects on each site. The proposed development site is not located within a European site. As outlined in Office of the Planning Regulator (2021) *“The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km).”*

A key factor in the consideration as to whether or not a particular European site is likely to be affected by the proposed works is its distance from the location of the works. It is generally, but not necessarily, the case that the greater the distance from the plan or project the smaller the likelihood of impacts. In this case, the nearest European site to the proposed development is 3.4 km away (Poulaphouca Reservoir SPA). Best practice guidance suggests that an initial zone of influence be set at a radius of 2km for non-linear projects (IEA, 1995). The potential zone of influence (ZOI) was set at a radius of 2km from the proposed Project and was extended beyond 2km where there was a potential for the ZOI to be influenced by drainage connections, natural biodiversity corridors e.g. rivers or woodland. After consultation with DBFL Consulting Engineers, it was outlined that surface water will outfall to the existing surface water drainage network on N81, flowing north along this road before turning east and discharging to the Hollywood upper Stream (Liffey 050). Hollywood upper Stream (Liffey 050) flows in a northwest direction. In this case, the potential ZOI extends beyond the site, with the potential for downstream impacts to extend beyond the proposed development area via the surface water.

In the interest of carrying out a thorough assessment in line with both the Habitats Directive, and the precautionary principle, the area of assessment was expanded beyond the ZOI to include designated sites within 15km of the proposed development site, and sites beyond 15km with the potential for a hydrological connection. This was done in the interest of ensuring that any pathways, however indirect or remote, were considered. The Natura 2000 sites within 15km are seen in Figures 5 & 6. Watercourses, SACs and SPAs proximate to the proposed development are demonstrated in Figures 7-9. The potential hydrological pathways based on EPA Water Framework Directive nomenclature are seen in Figure 10. All Natura 2000 sites within 15km are listed in Table 1. The conservation objectives, qualifying interests, and the potential impact of the development on each European site and qualifying interest, are outlined in Table 2. There is no direct pathway to Natura 2000 sites beyond 15km.

Table 1. Proximity to designated sites of conservation importance.

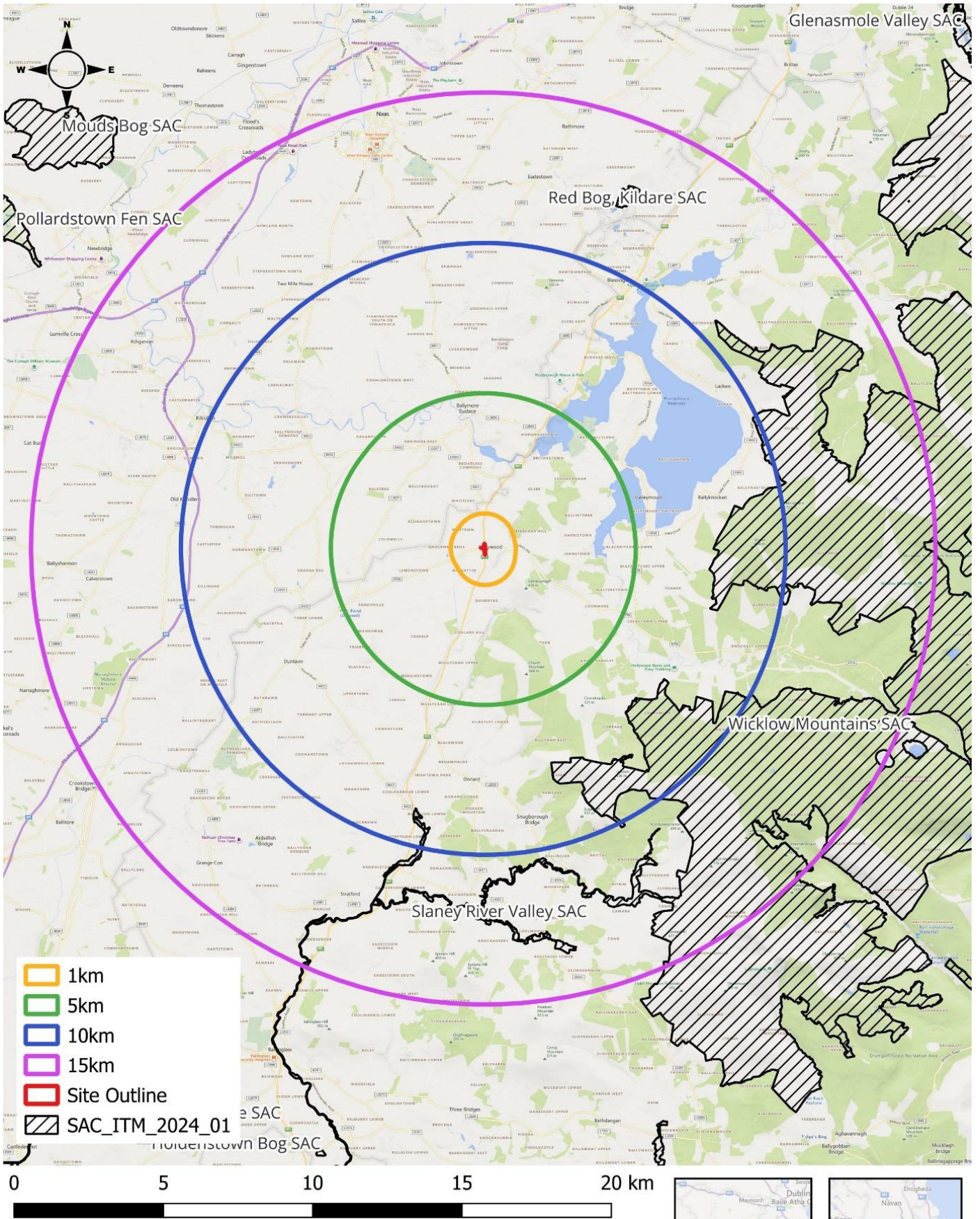
European Site	Code	Distance	Direct Hydrological / Biodiversity Connection
<i>Special Areas of Conservation</i>			
Wicklow Mountains SAC	IE002122	7.2 km	No
Red Bog, Kildare SAC	IE000397	12 km	No
Slaney River Valey SAC	IE000781	13.5 km	No
<i>Special Protection Areas</i>			
Poulaphouca Reservoir SPA	IE004063	3.4 km	No
Wicklow Mountains SPA	IE004040	6.9 km	No

Table 2. Initial screening of NATURA 2000 sites within 15km and NATURA 2000 sites beyond 15km with potential of hydrological connection to the proposed development

NATURA Code	Name	Screened IN/OUT	Details/Reason
Special Areas of Conservation			
IE002122	Wicklow Mountains SAC	Out	<p>Conservation Objectives:</p> <p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.</p> <p>Qualifying Interests</p> <p>1355 Otter <i>Lutra lutra</i> 3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) 3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletalia uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with (ULFDWHWUDOL[4030 European dry heaths 4060 Alpine and Boreal heaths 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i> 6230 Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) 7130 Blanket bogs (* if active bog) 8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) 8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p><i>* indicates a priority habitat under the Habitats Directive</i></p> <p><i>Please note that this SAC overlaps with Wicklow Mountains SPA (004040). The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate.</i></p> <p>Potential Impact</p> <p>The proposed development is located 7.2 km from the Wicklow Mountains SAC (Figure 8). There is no direct pathway from the proposed development site to this SAC.</p> <p>There is no direct or indirect pathway from the proposed development to this SAC. In the absence of mitigation measures, the construction and operation of the proposed development will not impact on the conservation objectives of this SAC.</p> <p>No significant effects are likely</p>
IE000397	Red Bog, Kildare SAC	Out	<p>Conservation Objectives:</p>

			<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.</p> <p>Qualifying Interests</p> <p>7140 Transition mires and quaking bogs</p> <p>Potential Impact</p> <p>The proposed development site is located 12 km from the Red Bog, Kildare SAC (Figure 8). There is no direct or indirect pathway from the proposed development site to this SAC. In the absence of mitigation measures, the construction and operation of the proposed development will not impact on the conservation objectives of this SAC.</p> <p>No significant effects are likely</p>
IE000781	Slaney River Valey SAC	Out	<p>Conservation Objectives:</p> <p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.</p> <p>Qualifying Interests</p> <p>Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Alosa fallax fallax</i> (Twaite Shad) [1103] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365]</p> <p>Potential Impact</p> <p>The proposed development is located 13.5 km from the Wicklow Mountains SAC (Figure 8). There is no direct pathway from the proposed development site to this SAC.</p> <p>There is no direct or indirect pathway from the proposed development to this SAC. In the absence of mitigation measures, the construction and operation of the proposed development will not impact on the conservation objectives of this SAC.</p> <p>No significant effects are likely</p>

Special Protection Areas			
IE004063	Poulaphouca Reservoir SPA	Out	<p>Conservation Objectives: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>Features of Interest A043 Greylag Goose (<i>Anser anser</i>) A183 Lesser black-backed Gull (<i>Larus fuscus</i>)</p> <p>Potential Impact The proposed development is located 3.4 km from Poulaphouca Reservoir SPA (Figure 9).</p> <p>There is no direct or indirect hydrological connection from the proposed development site to this SPA via surface water drainage. Surface water runoff will discharge via the existing public surface water network to the Hollywood Stream (Liffey 050) which ultimately discharges to the River Liffey. As demonstrated in Figure 10, the subject site is hydrologically connected to a watercourse that connects to the River Liffey at a point located downstream of this SPA. As a result, there is no potential for surface water runoff from the subject site to enter this SPA via the Hollywood Stream.</p> <p>Further, given the minimum distance to this SPA (3.4 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen in the absence of mitigation.</p> <p>In the absence of mitigation, the construction and operation of the proposed development will not impact on the conservation objectives of this SPA.</p> <p>No significant effects are likely</p>
IE004040	Wicklow Mountains SPA	Out	<p>Conservation Objectives To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>Features of Interest A098 Merlin (<i>Falco colombarius</i>) A103 Peregrine (<i>Falco peregrinus</i>)</p> <p>Potential Impact The proposed development site is located 6.9 km from the Wicklow Mountains SPA (Figure 9).</p> <p>There is no direct or indirect pathway from the proposed development to this SPA. In the absence of mitigation, the construction and operation of the proposed development will not impact on the conservation objectives of this SPA. Given the minimum distance to this SPA (6.9 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen in the absence of mitigation.</p> <p>There is no direct or indirect pathway from the proposed development to this SPA. The construction and operation of the proposed development will not impact on the conservation objectives of this SPA. No significant effects are likely</p>



Project: Proposed Bus Stop on N81.
 Location: Hollywood, Co. Kildare.
 Date: 23rd January, 2024.
 Drawn By: Emma Peters (Altamar).

ALTEMAR
 Marine & Environmental Consultancy

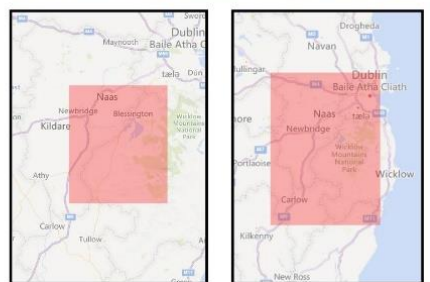


Figure 5. Special Areas of Conservation (SAC) located within 15km of the proposed development.

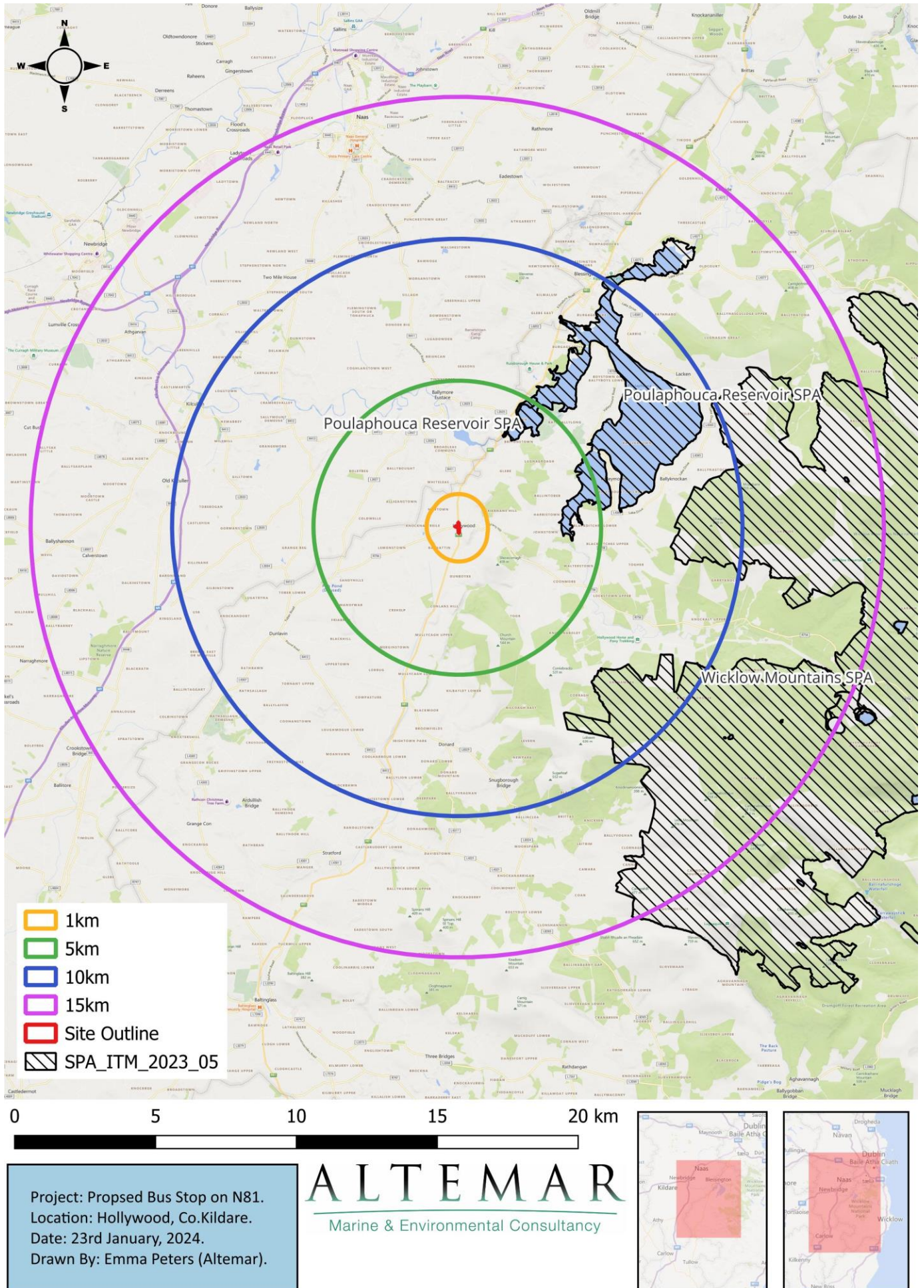


Figure 6. Special Protection Areas (SPA) within 15km of the proposed development.

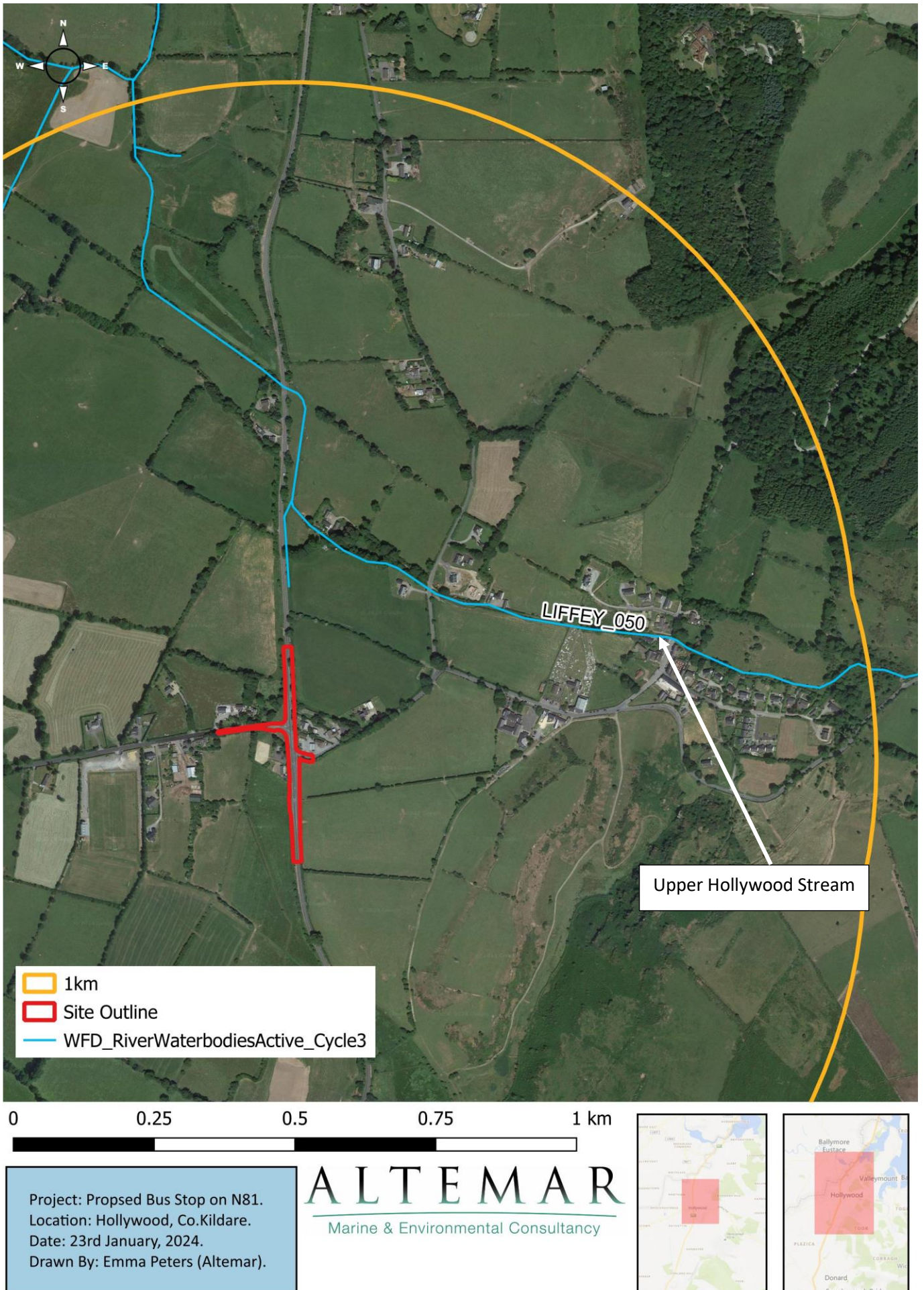


Figure 7. Watercourses proximate to the proposed development site

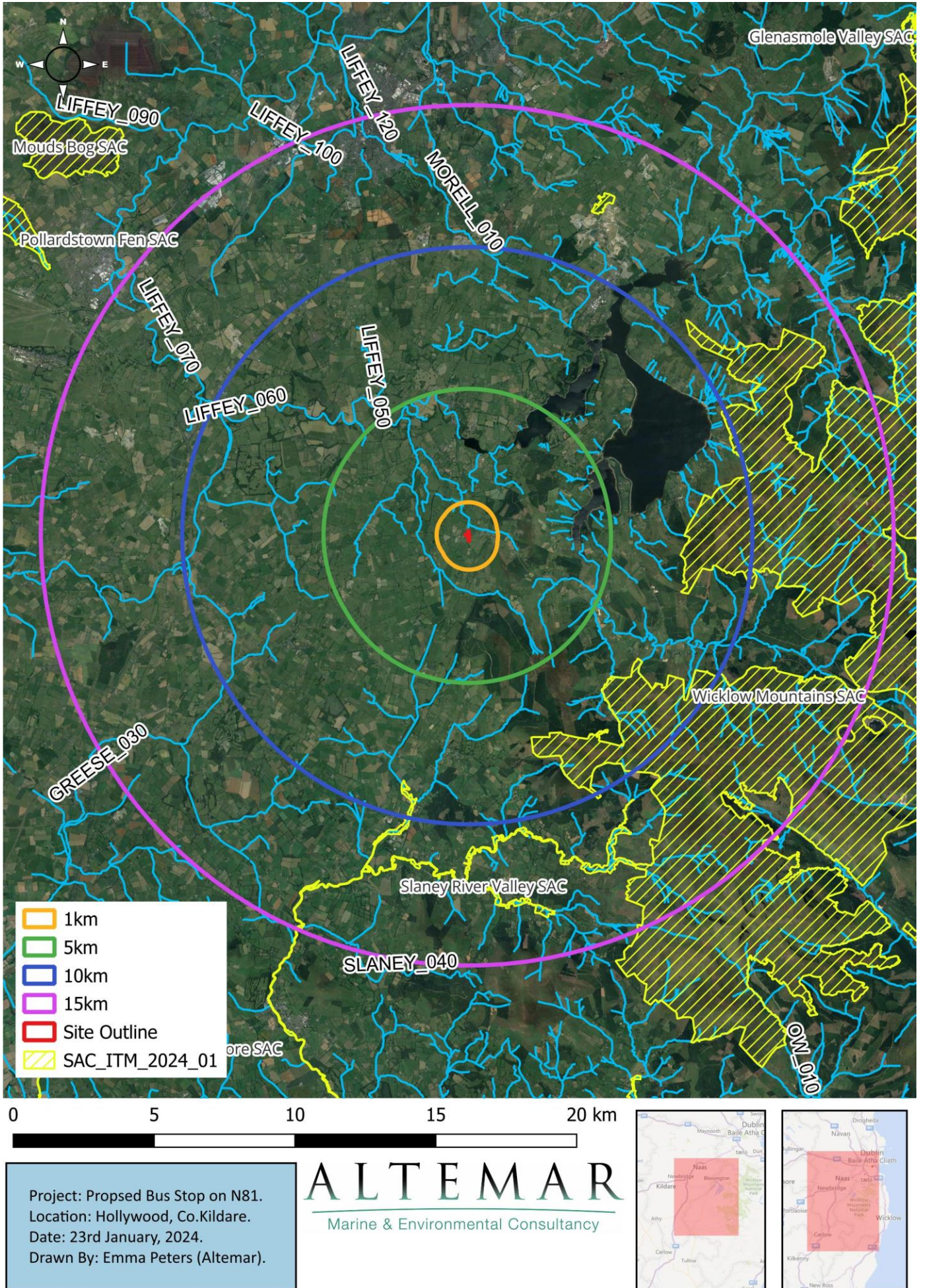


Figure 8. Watercourses and SACs within and beyond 15km of the proposed development site

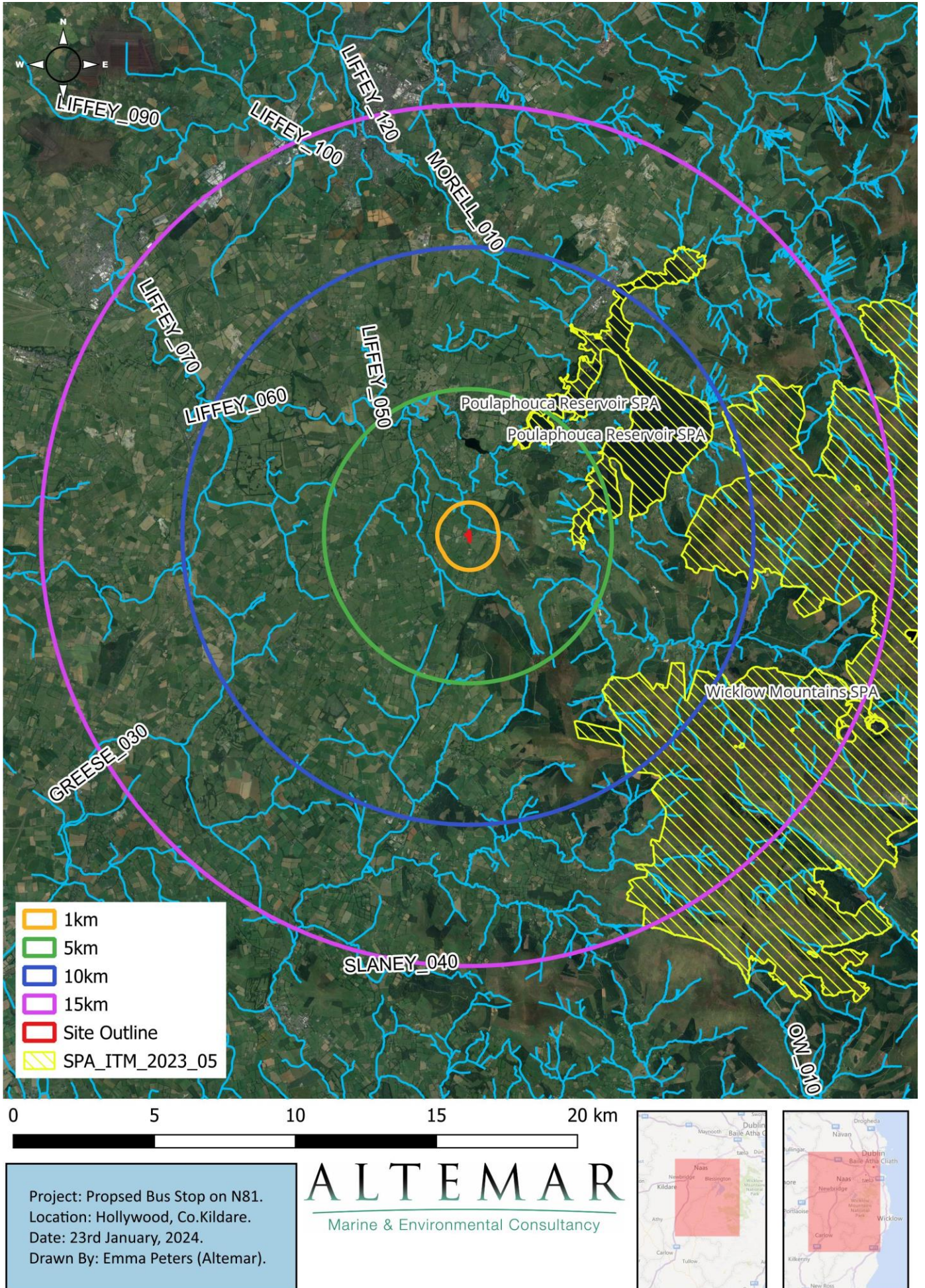


Figure 9. Watercourses and SPAs within and beyond 15km of the proposed development site

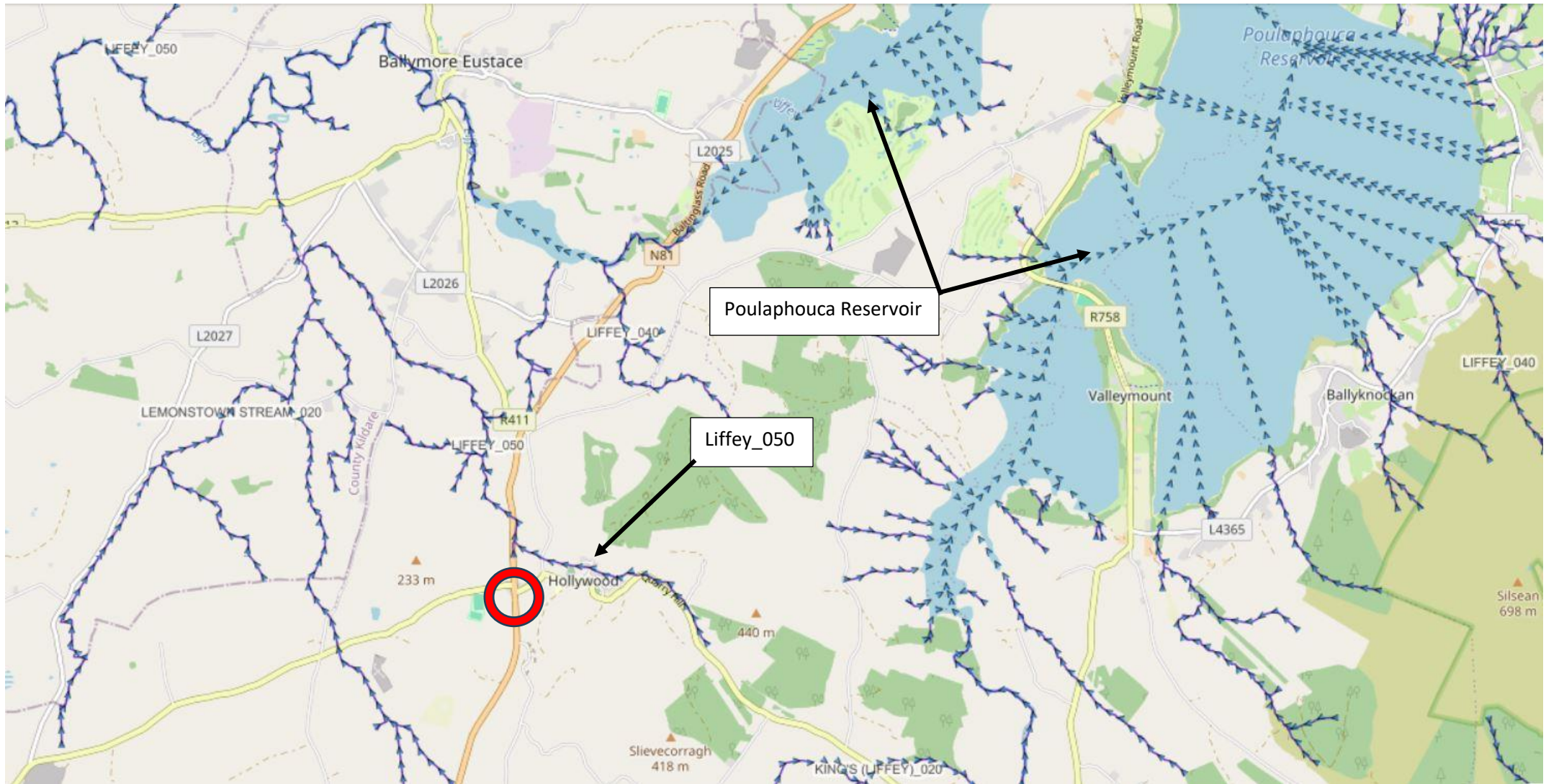


Figure 10. Sub-catchments and river flow direction of watercourses proximate to the proposed development site (red ring) (EPA WFD maps).

4.4 In-Combination Effects

There are several proposed developments located in the area immediately surrounding the subject site that have been assessed for potential in-combination effects through the examination of planning documentation. The following is a list of planning applications as in the vicinity of the proposed development on the Department of Housing, Local Government and Heritage's 'National Planning Application Map' portal:

Table 3. In combination effects evaluated (developments surrounding the subject site)

Planning Ref.	Address	Proposal
23888	Hollywood Upper , Hollywood , Co. Wicklow	E0 Extend an existing domestic garage with a floor area of 51.3 sq.m. Floor area of proposed extension is 55 sq.m. giving a total floor area of 106.3sq.m. and all associated site works
201207	Knockroe Town Land , Hollywood , W91 NWK5	Change of use of a small portion of existing agricultural land adjacent to the Hollywood Community Centre, to recreational use (as an outdoor play space) solely in conjunction with the use/s of the above Centre and for all associated site works
211342	Rathattin , Hollywood , Co. Wicklow	2 no. storey & a half type dwellings with 2 no. detached domestic garages, 2 no. individual domestic wastewater treatment systems to current EPA guidelines, to relocate the entrance to the existing homeplace developing in-lieu a replacement shared recessed entrance & access driveway and for all associated siteworks
221179	Rathattin , Hollywood , Co. Wicklow	2 no. storey & a half type dwellings with 2 no. detached domestic garages, 2 no. individual domestic wastewater treatment systems to current EPA guidelines, with shared entrance and driveway to be combined with the existing farmyard entrance and for all associated site works
22244	Hollywood Demesne , Hollywood , Co. Wicklow	Change of house design from that granted under PPRR 21/872 (TO ADDRESS THE RE-ORIENTATION IMPOSED BY CONDITION 8 OF ppr 21/872)
211150	Hollywood Lower , Hollywood , Co Wicklow	Two storey dwelling, with single storey annex, serviced with a small on site wastewater treatment system to current EPA guidelines, recessed entrance and all associated site works
211336	Hollywood Demesne , Hollywood , Co. Wicklow	To build a split-level dwelling, with two rooms at loft level, to install a domestic wastewater treatment system to current EPA guidelines, domestic garage with solar PV array to south roof face, recessed entrance and all associated site works

An evaluation of the projects in the vicinity of the proposed development through an assessment of planning documentation and observations during fieldwork indicated that there are no significant projects proposed or currently under construction that could potentially cause in combination effects on Natura 2000 sites.

Given this, it is considered that in combination effects with other existing and proposed developments in proximity to the application area would be unlikely, neutral, not significant and localised. It is concluded that no significant effects on Natura 2000 sites will be seen due to the proposed development alone or combination with other projects. There is no direct pathway from the proposed development site to Natura 2000 sites.

No projects in the vicinity of the proposed development would have a significant in combination effect on Natura 2000 sites.

5. Conclusions

An initial screening of the proposed works, using the precautionary principle (without the use of any standard construction phase controls or mitigation measures) and the Source/Pathway/Receptor links between the proposed works and European sites with the potential to result in significant effects on the conservation objectives and Qualifying Interests of the European sites was carried out in Tables 2 and 3. Based on best scientific knowledge and objective information and assessment, the possibility of significant effects caused by the proposed project was excluded for the following European sites within 15km in addition to sites beyond 15km with a direct/indirect pathway:

Special Areas of Conservation

- IE000397 Red Bog, Kildare SAC
- IE002122 Wicklow Mountains SAC
- IE001209 Glenasmole Valley SAC

Special Protection Areas

- IE004040 Wicklow Mountains SPA
- IE004063 Poulaphouca Reservoir SPA

The project is limited in scale and extent and the potential zone of influence is restricted to the immediate vicinity of the proposed development. The Poulaphouca Reservoir SPA is 3.4 km from the proposed development and there is no direct or indirect hydrological connection to this SPA from the subject site. In the absence of mitigation measures, there is the potential for contaminated surface water runoff to enter the Lower Hollywood Stream (Liffey 050) and impact downstream water quality of environments outside of European site boundaries. As demonstrated in Figure 10, the subject site is proximate to a watercourse that connects to the River Liffey at a point located downstream of this SPA. As a result, there is no potential for surface water runoff from the subject site to enter this SPA via the Hollywood Stream. It is unlikely that the proposed development will have negative effects that will impact on the conservation objectives of the Qualifying Interests of this SPA via contaminated surface water runoff during the construction and operational phases of development in the absence of mitigation.

Having taken into consideration foul and surface water drainage from the proposed development, the distance between the proposed development to designated conservation sites, lack of direct hydrological pathway or biodiversity corridor link to conservation sites, and the dilution effect within the Hollywood Stream and River Liffey watercourse network, it is concluded that the proposed development would not give rise to any significant effects to designated sites. The construction and operation of the proposed development will not impact on the conservation objectives of qualifying interests of European sites.

This report presents a Stage 1 Appropriate Assessment Screening for the Proposed Development, outlining the information required for the competent authority to screen for appropriate assessment and to determine whether or not the Proposed Development, either alone or in combination with other plans and projects, in view of best scientific knowledge, is likely to have a significant effect on any European or European site.

Based on the content of this report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site. **A Natura Impact Statement is not required for the proposed development.**

6. Data used for AA Screening

NPWS site synopses and Conservation objectives of sites within 15km were assessed. The most recent SAC and SPA boundary shapefiles were downloaded and overlaid on Bing Road maps and satellite imagery.

7. References

1. Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities March 2010.
2. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009;
http://www.npws.ie/publications/archive/NPWS_2009_AA_Guidance.pdf
3. Managing NATURA 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, European Commission 2000;
http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/provision_of_art6_en.pdf
4. Assessment of Plans and Projects Significantly Affecting NATURA 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC;
http://ec.europa.eu/environment/nature/Natura2000management/docs/art6/Natura_2000_assess_en.pdf
5. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission;
http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance_art6_4_en.pdf
6. Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging;
http://ec.europa.eu/environment/nature/Natura2000/management/docs/guidance_doc.pdf
7. The Status of EU Protected Habitats and Species in Ireland.
http://www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pdf
8. NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
9. NPWS (2019) Conservation Objectives: Red Bog, Kildare SAC 000397. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
10. NPWS (2011) Conservation Objectives: Slaney River Valley SAC 000781. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
11. NPWS (2022) Conservation objectives for Wicklow Mountains SPA [004040]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
12. NPWS (2022) Conservation objectives for Poulaphouca Reservoir SPA [004063]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.



Appendix C : Stage 1 RSA Report

DBFL Consulting Engineers

N81 Hollywood Cross Traffic
Calming RSIS

Stage 1 Road Safety Audit

DBFL Consulting Engineers

N81 Hollywood Cross Traffic Calming RSIS

Stage 1 Road Safety Audit

Document Ref: P24039-PMCE-XX-XX-RP-SA-3_0001

Rev	Prepared By	Reviewed By	Approved By	Issue Date	Reason for Revision
3.0	MAH	PJM	PJM	21 st March 2024	Final
2.0	MAH	PJM	PJM	11 th March 2024	Updated Draft Report
1.0	MAH	PJM	PJM	8 th March 2024	Draft Report

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1 Introduction

1.1 General

This report results from a Stage 1 Road Safety Audit on the proposed N81 Hollywood Cross Traffic Calming RSIS carried out at the request of Ms. Jane Hennaghan of DBFL Consulting Engineers.

The members of the Road Safety Audit Team are independent of the design team, and include: -

Mr. Peter Monahan
(BE, MSc, CEng, FIEI, RSACert)
Road Safety Audit Team Leader

Mr. Mazen Al Hosni
(BE(Hons), MSc, RSACert, MIEI)
Road Safety Audit Team Member

The Road Safety Audit took place during March 2024 and comprised an examination of the documents provided by the designers (see Appendix B). In addition to examining the documents supplied the Road Safety Audit Team visited the site of the proposed measures on the 1st March 2024. Weather conditions during the site visit were icy and the road surface was icy. Traffic volumes during the site visit were moderate, pedestrian and cyclist volumes were low and traffic speeds were considered to be generally within the posted speed limit for southbound traffic and above the posted speed limit for northbound traffic.

Where problems are relevant to specific locations these are shown on drawing extracts within the main body of the report and their locations are shown in Appendix C. Where problems are general to the proposals sample drawing extracts are within the main body of the report, where considered necessary.

This Stage 1 Road Safety Audit has been carried out in accordance with the requirements of GE-STY-01024 - Road Safety Audit (December 2017), contained on the Transport Infrastructure Ireland (TII) Publications website.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. It has not been examined or verified for compliance with any other standards or criteria. The problems identified in this report are considered to require action in order to improve the safety of the scheme and minimise collision occurrence.

If any of the recommendations within this road safety audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observations are intended to be for information only. Written responses to Observations are not required.

2 Project Description

It is proposed to provide two bus stops along the N81 at Hollywood, Co. Wicklow.

Hollywood Village is located to the western side of Co. Wicklow. The village is situated approximately 11km south of Blessington and 5km south of Ballymore Eustace. Baltinglass can be found approximately 20km to the south. Hollywood village forms the start of the Wicklow Gap which is one of only two roads to fully traverse the Wicklow Mountains in an east west alignment.



FIGURE 2.1: LOCATION PLAN (SOURCE: WWW.OPENSTREETMAP.ORG)

The N81 National Road runs to the immediate west of the village and separates the village centre from the local GAA club. The village centre is home to local shops, a service station, church, the local school, community centre, pubs and restaurants as well as residential properties. The N81 cross-section in the vicinity of the proposed scheme is a single carriageway with a posted speed limit of 80kph. However, the speed posted speed limit increases to 100kph immediately south of the scheme. At present, the N81 in this location, does not provide for any facilities for pedestrians crossing from one side of the village to the other.

A safety review was undertaken with results outlining the requirement for traffic calming through the village. Traffic calming measures, including the installation of solid traffic calming islands and the inclusion of footpaths and crossings, are proposed in order to improve safety through the village. In addition, it is proposed to formalise the existing bus stops by providing bus stop facilities to the north and south of the staggered crossroads.

3 Items Arising from the Audit

3.1 High Approach Speeds

Location: General Problem

Summary: High approach speeds may increase the risk to NMUs on the footpaths/at the bus stops or using the crossings and to vehicle occupants.

The retention of the proposed speed limit of 80kph through the traffic calmed section is noted. During the site visit it was also noted that the 100 kph speed limit commences immediately south of the section of road being amended. Northbound vehicle speeds were observed as being relatively high entering the section of road proposed to be amended, and the proposed gateway(s) may be insufficient to encourage sufficient speed moderation.

Should vehicle speeds through this section remain high these could create risks to NMUs on the footpaths/at the bus stops or using the crossings and for vehicle occupants should the vehicle strike a kerb or items of roadside furniture.

It is noted that chamfered kerbs are proposed to the new islands and the footpaths, which is assumed to mean a 45° kerb face. This could reduce the consequences for an errant vehicle striking a kerb, however this could also reduce the protection afforded to NMUs on the footpaths.

Recommendation

Additional measures encouraging slower speeds through this section of road should be provided on the approaches (in particular for northbound traffic) to, & entry to, this section of the N81. These could include more prominent gateway treatments and speed detection/display units.

3.2 Narrow Traffic Lanes

Location: General Problem

Summary: Narrow traffic lanes may present a risk to pedestrians waiting in the central refuge/footway.

It is proposed to provide narrow traffic lanes (3m wide) on the N81 through the amended road layout. It is accepted that these would contribute to encouraging slower speeds through the amended road layout. However, there may be a risk that overhanging portions of vehicles (e.g. mirrors on buses) may extend or protrude into the splitter islands, which may present a risk to pedestrians waiting in the central refuge while undertaking a crossing.

Recommendation

Ensure during the during development that a sufficient offset (e.g. hatched area) is provided between the traffic lanes and the pedestrian refuge areas/footways.

3.3 Provisions for Cyclists

Location: General Problem

Summary: Narrow traffic lanes may present a risk to cyclists travelling along the N81.

It is proposed to provide narrow traffic lanes (3m wide) on the N81 through the amended road layout. The arrangements indicated at the Gateways do not appear to include for cyclists to bypass the Gateway and join the carriageway in a safe manner, and could result in cyclists travelling within the footpath through the traffic-calmed area, with a risk of collisions with pedestrians on the footways.

In addition the narrow traffic lanes would require cyclists to travel within the traffic lane, sharing it with vehicular traffic including a high proportion of HGVs, increasing the risk of vehicular/cyclist collisions.

Recommendation

The proposed road layout should be amended to incorporate measures to allow cyclists to safely traverse the traffic-calmed area and rejoin the N81 downstream safely.

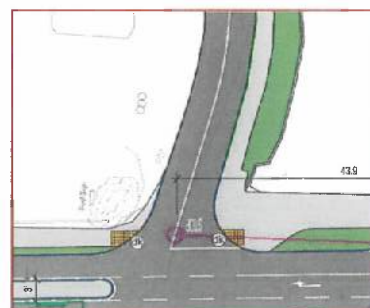
If it is intended that the paths through the traffic calmed area are to be shared paths, then the paths should be sufficiently wide enough to safely accommodate both pedestrians & cyclists, and during the design development measures should be included to ensure that pedestrians & cyclists are aware that they are on a shared path (e.g. appropriate markings, signage and Ladder & Tramline tactile paving).

3.4 Side Road Centreline Road Marking

Location: R756 (East)/N81 Junction

Summary: Centreline road marking on the R756 (East) at its junction with the N81, meets the mainline at an angle.

The centreline road marking on the R756 (East) are shown meeting the N81 at an angle less than 90°, which may result in right-turning vehicles from the N81 cutting across the opposing traffic lane on the side road, leading to low-speed head-on collisions.



Recommendation

The centreline road marking should meet the N81 at an angle of 90°.

3.5 Swept Path

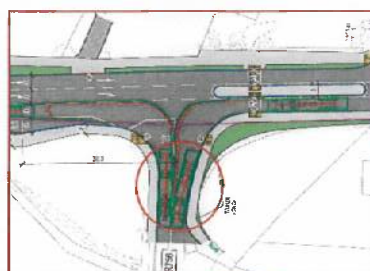
Location: R756 junctions with the N81

Summary: Large vehicles exiting the R756 onto the N81 may encroach into the opposing traffic lanes.

The swept path for left-turning HGVs from the R756 (West) indicates vehicles overhanging into the opposing right-turn lane. In addition, it is unclear if there will be sufficient space for vehicles to enter/exit the R756 (East).

Should insufficient width be available to safely complete turning manoeuvres, this could result in large vehicles encroaching onto the opposing traffic lane when turning into the N81, resulting in head-on or side-on collisions with vehicles on the N81.

Similarly, the swept path for left-turning HGVs onto the R756 (West) shows left-turning vehicles overhanging into the opposing traffic lane on the side road resulting in an increased risk of head-on collisions.



Recommendation

Ensure the proposed road layout safely accommodates the swept path of vehicles turning into or out of the R756 junctions.

3.6 Visibility for Exiting Side Road Drivers

Location: R756 (west) junction with the N81.

Summary: Visibility impeded by the existing boundary vegetation.

During the site visit it was noted that visibility to the right for drivers of vehicles exiting the R756 (West) is somewhat impeded by the existing boundary vegetation.



It is unclear from the drawings provided it is intended to cut back the boundary vegetation. Insufficient visibility may lead to unsafe exiting manoeuvres and possible side-on collisions.

Recommendation

During the design development ensure that an appropriate visibility splay is provided for all vehicles exiting from the side roads onto the N81.

3.7 Utility Poles Within the Clear Zone,

Location: N81 verge

Summary: Overhead utility poles in close proximity to mainline carriageway.

During the site visit the Audit Team noted a number of overhead electricity poles, which also have lighting luminaires on them within the Scheme, positioned relatively close to the edge of the carriageway.



Poles located close to the carriageway constitute a potential hazard to occupants of an errant vehicle if struck resulting in the potential for increased injury severity for vehicle occupants.

Recommendation

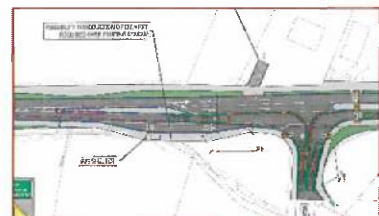
During the design development these poles should be repositioned outside of the clear zone.

3.8 Height Hazard

Location: Northbound bus stop at the N81.

Summary: Potential fall from height hazard.

It is proposed to culvert an existing stream west of the northbound bus stop. It is unclear from the drawing provided if it is intended to provide a fence/height barrier at the back to the rear the footway in the vicinity of the stream. Should no protection be provided there is a risk of falls from height for pedestrians.



Recommendation

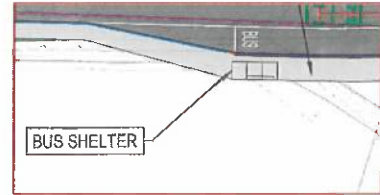
During the design development ensure pedestrians are protected from vertical height hazards at this location.

3.9 Road Hazard

Location: N81

Summary: *Bus shelters may constitute hazards to occupants of an errant vehicle.*

Bus shelters are proposed at both bus stops, and it is unclear if these would be passively safe. If they are not passively safe, they may constitute hazards to occupants of an errant vehicle with increased injury severity for vehicle occupants should they be struck.



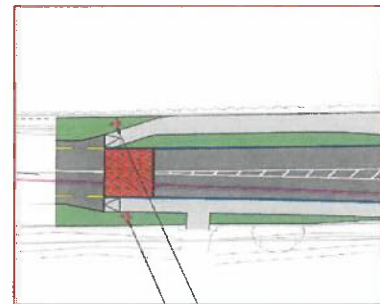
Recommendation

A risk assessment should be undertaken ensuring that the proposed bus shelters will not constitute hazard to the occupants of an errant vehicle. Where they may constitute hazards to occupants of an errant vehicle they should be relocated or replaced with passively safe bus shelter.

4 Observations

4.1 The footways are shown ending at dropped kerbs at the proposed Gateways, however no tactile paving has been indicated.

Where dropped kerbs are provided tactile paving should be provided to warn visually impaired from proceeding into the carriageway.



5 Audit Team Statement

We certify that we have examined the drawings referred to in this report. The examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme.

The problems identified have been noted in this report together with associated safety improvement suggestions, which we would recommend should be studied for implementation.

No one on the Road Safety Audit Team has been involved with the design of the scheme.

ROAD SAFETY AUDIT TEAM LEADER

Peter Monahan

Signed:



Dated:

21st March 2024

ROAD SAFETY AUDIT TEAM MEMBER

Mazen Al Hosni

Signed:



Dated:

21st March 2024

6 Road Safety Audit Feedback Form

Road Safety Audit Feedback Form

Scheme: N81 Hollywood Cross Traffic Calming RSIS

Route No.: N81 Hollywood

Audit Stage: 1 Date Audit Completed: 5th March 2024

To be Completed by Designer				To be Completed by Audit Team Leader
Paragraph No. in Safety Audit Report	Problem Accepted (Yes/No)	Recommended Measure(s) Accepted (Yes/No)	Describe Alternative Measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted	Alternative Measures or Reasons Accepted by Auditors (Yes/No)
3.1	Yes	No	The gateway type has been designed in accordance with TII standard SCD-05101. Speeds will be monitored through this area on completion of the scheme and it is noted that the measures proposed will be subject to further review at Stage 3 RSA.	Yes
3.2	Yes	Yes		
3.3	Yes	Yes	The predicted volumes of pedestrians and cyclists is deemed to be low in this area considering the location. We will provide shared path for pedestrians and cyclists, however, due to width constraints, there may be reduced widths in some places to 2m. To increase segregation, we will be providing a grassed buffer along the route where feasible.	
3.4	Yes	Yes		
3.5	Yes	Yes		
3.6	Yes	Yes	Existing vegetation will be cut back to increase visibility here.	
3.7	Yes	Yes		
3.8	Yes	Yes		

Road Safety Audit Feedback Form

Scheme: N81 Hollywood Cross Traffic Calming RSIS

Route No.: N81 Hollywood

Audit Stage: 1 Date Audit Completed: 5th March 2024

To be Completed by Designer				To be Completed by Audit Team Leader
Paragraph No. in Safety Audit Report	Problem Accepted (Yes/No)	Recommended Measure(s) Accepted (Yes/No)	Describe Alternative Measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted	Alternative Measures or Reasons Accepted by Auditors (Yes/No)
3.9	Yes	Yes	The bus stops are being implemented as part of an overall traffic calming scheme which will reduce actual speeds through this area.	

Signed: *Jane Humphreys* Designer Date 21st March 2024

Signed: *Peter J. Monahan* Audit Team Leader Date 21st March 2024

Signed: *Brendan Doyle* Employer Date 22nd March 2024

Appendix A – Approval of Audit Team

Jane Hennaghan
Ormond House
Ormond Quay Upper
Dublin 7

Date: 28/02/2024

Our Ref: 48854485/48464/Stage 1

re: N81 N81 Hollywood Traffic Calming Scheme
APPROVAL OF ROAD SAFETY AUDIT TEAM, Stage 1

Dear Jane Hennaghan,

The following members of the proposed road safety audit team are approved to carry out the Stage 1 road safety audit of N81 N81 Hollywood Traffic Calming Scheme.

1. Peter Monahan - PMCE Ltd. - Leader
2. Mazen Al Hosni - PMCE Ltd. - Member

A copy of all audit reports, design team response and exception reports must be uploaded through RSAAS. Successful upload of these reports and completion of the audit approval process is necessary for any further audit approval on this scheme.

Yours sincerely,

Lucy Curtis

Regional Road Safety Engineer
roadsafetyaudits@tifi.ie

Appendix B - Documents Submitted to the Road Safety Audit Team

DOCUMENT/DRAWING TITLE	DOCUMENT/DRAWING NO.	REVISION
Road Layout	210105-X-04-X-DTM-DR-DBFL-CE-1200	1
Feasibility and Options Report	210105-X-X-X-XXX-RP-DBFL-CE-0001	4

Appendix C – Problem Locations

General Problems 3.1,
3.2, 3.3 and 3.7

Problem 3.8

Problem 3.5

Problem 3.4

Problem 3.9

Problem 3.6





Appendix D : Project Appraisal Balance Sheet

PAG Unit 14 Project Appraisal Balance Sheet - Summary Table for Minor Projects (€0.5m to €5m) as defined by DN-GEO-03030

Scheme Name:		Description:		Problems Identified:		Budget Cost €m							
N81 Hollywood Cross Rural Traffic Calming RSIS		Provision of 2 no. bus stops, traffic calming, footpaths and an uncontrolled pedestrian crossing on the N81 at Hollywood Cross		RSIS Type D site. Feasibility and Options Report identified informal bus set down, excessive vehicle speeds, poor visibility and a pedestrian crossing demand.		€0.7m							
Current Typical Carriageway Width:		Route No:		Speed Limit:	Proposed Carriageway Standard:								
7.9m		N81		80km/h	2 x 3.0m through lanes and 3.0m turning lane								
Appraisal Criteria	Appraisal Sub-Criteria	Objectives (Guidance available in PAG Unit 3.0)	Qualitative Statement:	Sub-criteria Performance Description	Sub-criteria Score	Appraisal Criteria Score							
Environment	Air Quality	N/A	No change to traffic volumes	Not significant or Neutral	4	Neutral							
	Noise and vibration	N/A	No change to traffic volumes	Not significant or Neutral	4								
	Landscape & visual quality	N/A	Small area of existing community garden to be utilised and replaced with roadside planting, new landscaping and seating to be provided	Minor or slightly positive	5								
	Biodiversity	N/A	Existing route, minor pavement widening into existing verge and community garden	Minor or slightly negative	3								
	Cultural, Archaeological, Architectural Heritage	N/A	Desktop study carried out, milestone circa 1750, in close proximity to the scheme, will be protected during works	Not significant or Neutral	4								
	Land Use	N/A	A small area of council owned land will be used to facilitate the northbound bus stop along with an small area of privately owned land, which has been accounted for in the project cost	Not significant or Neutral	4								
	Water resources	N/A	Local stream will be culverted for new footpath, AA screening concluded no impacts from proposed scheme	Not significant or Neutral	4								
Safety	Collision reduction	Reduce collision rate	Traffic calming scheme will reduce vehicle speeds. Sightlines improved from side arms. Formal facilities for pedestrians to cross.	<table border="1"> <tr> <td>Current Rate:</td> <td colspan="2">See F&O Report, RSA data unavailable</td> </tr> <tr> <td>Proposed Rate (see PAG 6.11):</td> <td>2 Lane Single carriageway > 60kph</td> <td>0.080 PIA/mvkm</td> </tr> </table>	Current Rate:	See F&O Report, RSA data unavailable		Proposed Rate (see PAG 6.11):	2 Lane Single carriageway > 60kph	0.080 PIA/mvkm	Moderately positive	6	Moderately Positive
	Current Rate:	See F&O Report, RSA data unavailable											
Proposed Rate (see PAG 6.11):	2 Lane Single carriageway > 60kph	0.080 PIA/mvkm											
Security	Cater for vulnerable road users	Footpath and uncontrolled crossing will provide for pedestrians through the junction		Moderately positive	6								
Economy	Transport Efficiency and Effectiveness	N/A	N/A	<table border="1"> <tr> <td>Current AADT:</td> <td></td> </tr> <tr> <td>Forecast 2030 HG AADT:</td> <td></td> </tr> </table>	Current AADT:		Forecast 2030 HG AADT:		Not significant or Neutral	4	Neutral		
	Current AADT:												
	Forecast 2030 HG AADT:												
Wider economic impact	N/A	N/A		Not significant or Neutral	4								
Transport Reliability and Quality	N/A	Improving bus stop facilities along the N81		Minor or slightly positive	5								
Accessibility and Social Inclusion	Vulnerable groups	N/A	Improving accessibility for VRUs along the N81 between Hollywood Village and residents west of the N81.	Minor or slightly positive	5	Slightly Positive							
	Deprived geographic areas	N/A	N/A	Not significant or Neutral	4								
Integration	Transport integration	Provide a connection to the local public transport network	Provide formalised facilities for bus to stops at Hollywood Cross	Moderately positive	6	Slightly Positive							
	Land-use integration	N/A	N/A	Not significant or Neutral	4								
	Geographical integration	N/A	N/A	Not significant or Neutral	4								
	Integration with other government policies	Climate Action Plan 2023	Provides infrastructure to increase public transport access	Minor or slightly positive	5								
Physical Activity	Physical Activity	Improve walking facilities to Hollywood Village from the R756 and N81	Minimum 2.0m footpaths provided along with uncontrolled pedestrian crossings and reduced road carriageway width	Minor or slightly positive	5	Slightly Positive							
Overall Description of Scheme:						Slightly Positive							

Multi Criteria Analysis Scale

Major or highly positive	7	Highly Positive
Moderately positive	6	Moderately Positive
Minor or slightly positive	5	Slightly Positive
Not significant or Neutral	4	Neutral
Minor or slightly negative	3	Slightly Negative
Moderately negative	2	Moderately Negative
Major or highly negative	1	Highly Negative

Scaling collision Benefits

Current collision rate:	0.151	
Proposed collision rate:	0.081	
Proposed difference in rate / Current collision Rate	0.5	
Reduce current rate by half	=	Major or highly positive
Reduce current rate by less than half	=	Moderately positive
Limited change to current rate	=	Not significant or Neutral
Increase current rate by less than half	=	Moderately negative
Increase current rate by half	=	Major or highly negative



Appendix E : Departure From Standard

Application for a Departure from the TII Publications as part of the Tender Design Process for Design and Build and PPP Schemes

Application for a Departure from TII Publications (Standards)
Includes all documents classified as Standards on www.tiipublications.ie including the Requirements for Measuring and Pricing (RMP)

General Information for Application No. _____:

Route Number:	Scheme:	Contract Type:
N81	N81 Hollywood Cross Rural Traffic Calming RSIS	
Design Speed:	Traffic Flow and Composition (if applicable):	
80 km/h	Approx. _____8,000 AADT__ (Design Year)	

Carriageway Type / Road Cross Section:

Single Carriageway , Type 2. Existing cross section includes single traffic lane in both directions, hard shoulder on approach to staggered cross roads. No existing footpaths along the N81 in this section.

Applicant Information:

Applicant Name:	Contact Person and Contact Details:
Wicklow County Council	Name: John Bowes – Senior Engineer Email: jbowes@wicklowcoco.ie
Applicants Departure Reference No:	

Departure Information:

Departure Location and Chainage (as relevant):

N81 Hollywood Cross Staggered Junction

Publication Stream:

Publication:

Publication Paragraph:

Section 6 , Paragraph 14

Departure Type:

Full Departure

Standard Required:

DN-GEO-03084 – The Treatment of Transition Zones to Towns and Villages

Standard Provided:

DN – GEO – 01037 & DN-GEO-03030

Justification:

This scheme incorporates traffic calming design elements from DN-GEO-03084 and applies these to an 80kph design road. The aim of this scheme is to reduce traffic speeds through the N81 Hollywood Cross Roads and incorporate bus stops through this area. The physical traffic calming elements will be incorporated into the scheme to reduce traffic speeds appropriately through this section.

Other Departures or Relaxations at same location:

Departure required for sightlines from minor road arm.

Additional Information:

Comments:

Supporting Documentation:

Preliminary Design Report

Status:

Final

Application for a Departure from the TII Publications as part of the Tender Design Process for Design and Build and PPP Schemes

Application for a Departure from TII Publications (Standards)
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General Information for Application No. _____:

Route Number:	Scheme:	Contract Type:
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Applicant Information:

Applicant Name:	Contact Person and Contact Details:
Wicklow County Council	Name: John Bowes – Senior Engineer Email: jbowes@wicklowcoco.ie
Applicants Departure Reference No:	

Departure Information:

Departure Location and Chainage (as relevant):

N81 Hollywood Cross Staggered Junction

Publication Stream:

Publication:

Publication Paragraph:

Chapter 6, Paragraph 9

Departure Type:

Full Departure

Standard Required:

DN-GEO-03060 – Geometric Design of Junctions
Requirement to have the sightline to nearside edge of carriageway

Standard Provided:

The sightline to the north (from the R756 northern arm) has been provided to the edge of the far side traffic lane in order to accommodate the bus stop lay by closer to the staggered junction.

Justification:

The departure is justified based on the provision of solid central islands through the staggered cross roads which will restrict overtaking through this area.

Other Departures or Relaxations at same location:

Departure required for overall scheme proposals.

Additional Information:

Comments:

Supporting Documentation:

Preliminary Design Report

Status:

Final



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