



Carrickmines-Shanganagh River Flood Relief Scheme

An Coimisiún Pleanála Submission Response Note

Case # ABP-321937-25

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Contract

This report relates to the Carrickmines-Shanganagh Rivers Flood Relief Scheme commissioned by Dún Laoghaire-Rathdown County Council (DLRCC), on behalf of the Office of Public Works (OPW).

Purpose

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1.1 Introduction

The period for submissions relating to the Carrickmines-Shanganagh River Flood Relief Scheme (FRS) ended on the 15th April 2025. An Coimisiún Pleanála (ACP), formerly known as An Bord Pleanála issued a letter to the applicant, Dún Laoghaire-Rathdown County Council (DLRCC) dated 24th July 2025 requesting comments on the submissions by the 13th August 2025.

A second letter dated 31st July 2025 granted an extension to DLRCC for providing submission responses to the 24th September 2025. There were 14 submissions received by ACP in total. Seven of these were from statutory bodies, namely:

- Development Applications Unit (DAU)
- Health Service Executive (HSE)
- Iarnród Éireann
- Inland Fisheries Ireland (IFI)
- National Transport Authority (NTA)
- Transport Infrastructure Ireland (TII)
- Uisce Éireann

Seven responses were received from members of the public or representatives of residential development. These are:

- Emma and Stephen Usher
- Gleb Reys
- Jake Jackson
- Kilgobbin Apt Ltd.
- Rory Rogers
- Roslyn Nicholson
- Sandyford Park Developments One Limited

A summary of the content and any required response is detailed hereunder for each.

1.2 DAU

The DAU in their response make several recommendations with regard to Ecology and Cultural Heritage and query the level of surveying carried out with regard to the distribution of certain species of fauna.

1.2.1 Nature Conservation

Under the heading of “*Nature Conservation*”, the DAU notes the assessments carried out for the proposed development and welcomes the consideration of ecology in the design, such as the placement of the proposed flood wall at Brookdene avoiding damage to an existing riparian strip. The DAU goes on to query the level of surveying carried out for certain species of fauna, including bat species, otter, and breeding birds. Finally, they make three recommendations as outlined in the table below, and request that these be requested by ACP as part of Further Information. Our responses to these recommendations are included in the same table:

Observation Statement	Applicant Response
Clarification of whether any of the trees to be removed to facilitate the proposed flood relief works have any potential to harbour bat roosts and a protocol for surveying any trees with such potential before they are removed and, if necessary, applying to the NPWS for a derogation licence to interfere with any identified bat roosts. Reason: To avoid any injury to bat species subject to a system of strict protection under the Habitats Directive (92/43/EEC).	We would like to note that consultation with the NPWS was carried out as outlined in Environmental Impact Assessment Report (EIAR) Section 5.6, at which all ecology surveys being carried out for the development were discussed. Bat roost potential surveys were carried out as part of the EIAR, as outlined in Section 8.2.8 and 8.2.12. We would accept a condition, if consider

Observation Statement	Applicant Response
	appropriate by ACP, requiring follow up bat roost potential checks to be carried out at relevant locations prior to construction beginning.
An Otter Conservation Plan for the proposed flood relief scheme incorporating provision for undertaking new otter surveys of the sections of the Carrickmines and Shanganagh river system to be affected by the planned flood defence works and at least 200m upstream and downstream of these works, and maintaining as far as possible free passage of otters along these water courses during the construction and operational phases of this scheme, including if feasible a high level pipe or culvert ledge to maintain safe passage of otters along the Bride's Glen River under the N11 during flood events. Reason: To conserve otters, as species subject to a system of strict protection under the Habitats Directive.	Checks for otters or field signs of otter were carried out throughout the EIAR, as outlined in Section 8.2.8 and 8.2.11. Mitigation measures for the protection of otters are included in Section 8.8.7, including pre-works checks, and general avoidance measures in Section 8.8.12. It is also noted in Section 8.9.1 that the inclusion of the new N11 overflow culvert will act as a corridor for otters, resulting in a long-term positive effect. Monitoring for otters is also included in Section 8.10, to be carried out once per year for two years following construction.
Riparian Bird Conservation Plan for the proposed flood relief scheme to provide for the survey of the stretches of the Carrickmines and Shanganagh Rivers for which flood defence works are planned for breeding birds particularly of the riparian species, kingfisher, dipper and grey wagtail, the avoidance of the destruction of the nests of such bird species in the course of these works, and alternate temporary nest sites for any birds which have to be excluded from nest sites during the works and the installation of nest boxes or ledges suitable for to be used by these bird species during the operational phase of the scheme. Reason: to conserve riparian bird species of particular conservation value and protected under the Wildlife Acts, 1976 to 2023	Breeding and wintering birds, including riparian species, have been assessed in the EIAR, as outlined in Chapter 8, particularly Sections 8.6 and 8.7.3. Mitigation measures for the protection of birds are included, such as pre-works nesting checks and general avoidance measures. Other mitigation measures for the protection of trees and riparian areas will also contribute to the protection of riparian birds.

We submit that the information contained in the EIAR is complete with regards to the above, and that any clarifications if required could be provided as part of a condition.

1.2.2 Archaeology

The DAU's Archaeology submission notes the archaeological and architectural assessment carried out for the proposed development and makes 7 No. recommendations with regards to mitigation measures and other post-planning items, and request that these be attached as conditions to any grant of permission.

DLRCC acknowledges the 7 No. recommendations within DAU's submission and the inclusion of these recommendations as conditions of a granted permission is a decision for ACP if it deems it appropriate.

1.3 HSE

The HSE noted the findings of the EIAR and recommended that the mitigation measures stated both in the EIAR and Preliminary Construction Environmental Management Plan (CEMP) be implemented in full. DLRCC acknowledges the recommendations within National Environmental Health Service (NEHS) submission and the inclusion of these recommendations as conditions of a granted permission is a decision for ACP if it deems it appropriate. The recommendations include:

- That all the mitigation identified in the EIAR is implemented in full. If there are any exceedances of any the guidance levels outlined in the EIAR mitigation measures, then these measures should be reviewed and additional measures implemented. This recommendation is made in the interest of protection of public health.

- The construction phase will be subject to a Construction and Environmental Management Plan (CEMP), which is detailed in the application. The CEMP identified the mitigation that the NEHS recommends should be implemented in full to protect Public and Environmental Health during the construction phase.

1.4 Iarnród Éireann

Iarnród Éireann have submitted several observations, most of which can be addressed at detailed design stage. For observation number 4 they have made a request. Clarification is required on how the proposed design will influence water flow and potential for scouring at the underbridge or flood water contacting the soffit of the bridge at Bayview Grove/Lawns.

Comparisons between peak water levels and flows for the pre and post scheme at the upstream face of the bridge for the 1% AEP event (Standard of Protection) show the scheme has imperceptible impact at this location. Peak water level increases by 0.09m while flow increases by 1.77m³/s. The peak velocity which can indicate potential increased risk of scour only increases by 0.06m/s when the scheme is in place. The peak water level in 1% AEP event is 0.50m below the bridge soffit.

In summary there is imperceptible change in the flows when the scheme is in place with no increase in scour to the bridge identified.

1.5 IFI

DLRCC acknowledges IFI's recommendation which includes pre consultation to be carried out with IFI for any instream works, approval of all instream method statements and prior notification of commencement of the agreed works. The inclusion of this recommendation as a condition of a granted permission is a decision for ACP if it deems it appropriate.

1.6 NTA

The submission provided by the NTA acknowledges the consideration given by the project team to their submission at Scoping Stage and the critical need to maintain access for sustainable transport modes through the discrete works areas during the construction phases. Chapter 11 of the EIAR sets out the general intention. The NTA have recommended *"that the proposed Construction Traffic Management Plan would benefit from the input of the NTA in addition to the list of proposed stakeholders, in order to minimise disruption to sustainable transport modes during the construction of the flood relief works"*.

DLRCC acknowledges the recommendation to consult and agree the Construction Traffic Management Plan with NTA in advance of the construction works. The inclusion of this recommendation as condition of a granted permission is a decision for ACP if it deems it appropriate.

1.7 TII

1.7.1 Summary of Submission

The submission provided by TII *welcomes and is supportive of proposals aimed at achieving Project Ireland 2040 National Strategic Outcomes (NSO)"* and also mentions that *"by observing provisions of official development policy and in having regard to national road network maintenance and safety should also proceed where they are complementary to the requirements of official policy concerning maintaining the strategic capacity and safety of the national road network in accordance with NSO 2 Enhanced Regional Accessibility"*.

The submission notes concerns relating to:

- The safe and efficient operation of the national road network during and after the proposed works.
- The options assessment, considered alternatives and constructability of the proposed solution.

- That consultation and appropriate protocol agreement is required with the MMarC Network Contractor in relation to any proposed works.
- Compliance with TII publications, and particularly TII Publication DN-STR-03001-Technical Acceptance of Road Structures on Motorways and Other National Roads.
- Construction Traffic Management Plan to be prepared as part of the CEMP and to specifically include TII amongst its primary stakeholders.

1.7.2 Applicant Response

There is a clear interface between the existing TII infrastructure, the Carrickmines and Shanganagh Rivers at the:

- N11 Dual Carriageway – new overflow culvert and
- Glenamuck Road North – flood defence walls and containment at M50 Junction 15 which is maintained by TII.

TII states that any decision on this application should be contingent on their recommendations being resolved prior to planning. The applicant has met with TII to discuss their concerns raised within their observation and to explain any further detail they may have relating to the scheme. Meetings were held on the 1st July 2025 and 13th August 2025.

DLRCC intention is to continue engaging with TII on all stages of the scheme to ensure the delivery of this critical infrastructure to realise the objectives of both the OPW and TII.

1.7.2.1 Operation of the National Road Network

Whilst TII's submission does not explicitly acknowledge the long-term operational benefits and safety improvements provided by the FRS, the positive impacts of the scheme have been welcomed by TII during recent engagements.

As indicated within Chapter 2 of the EIAR, the N11 dual carriageway is subject to flooding in the existing baseline scenario for the 1% AEP event from both the Shanganagh and Carrickmines Rivers. This is primarily attributed to capacity issues with existing culverts beneath the N11 dual carriageway.

TII have identified in their own publications that flooding is a key threat to the national road network resulting in reduced performance for users with the impacts likely to be exacerbated by the effects of climate change. The implementation of this flood relief measure mitigates this flood risk and allows for adaptability in the future to address flood risks associated with climate change at the N11 dual carriageway.

Likewise, Glenamuck Road roundabout floods under existing conditions and this will be alleviated as part of the scheme. Although the FRS is being led by DLRCC in partnership with OPW, the measures at Glenamuck Road and the N11 dual carriageway align with TII's own strategies by alleviating the existing flood risk to these road networks. The scheme as proposed mitigates the operational impact on the road network arising from flooding for the 1% Annual Exceedance Probability (AEP) event from the adjoining rivers.

1.7.2.2 Options & Constructability Assessment

OPW and TII have separate procedures and guidance for identifying options and alternatives for a preferred scheme which becomes the proposed development in the context of a planning submission. The alternatives and options, including the assessment of reasonable alternative design or technology, for the FRS have been considered in accordance with OPW's guidance as this is specifically written for projects of this nature. It is similar to equivalent TII guidance. The Options Development Report produced by the consultants on behalf of the applicant is available under the Engineering heading on the project website at:

<https://www.csfrs.ie/project-info/documents/>

The alternatives for this FRS are explained in Chapter 2 of the EIAR and within the Options Report. In addition, the applicant provided a presentation to TII on the 13th August 2025 to explain the need for intervention at each location, flood risk management (FRM) approaches, options development and the expected approach to construction for the areas of proposed development which interact with their infrastructure. The presentation is available in Appendix 2.

Alternatives

The alternatives and options for the FRS have been developed in accordance with the OPW's guidance and are presented in Chapter 2 of the submitted EIAR.

At the N11 dual carriageway, the options assessment, including in combination hydraulic testing, identified the most beneficial measure for alleviating the existing flood risk to be:

- an additional culvert beneath the N11 dual carriageway and
- a new flood defence wall to contain flows upstream of the roadway.

Other alternatives considered include:

- i. Addition of storage upstream. A theoretical volume of 100,000m³ was identified to provide the necessary hydraulic benefits. This was deemed to be unviable due to the urban environs and steep topography of the catchment. A potential volume of only 12,350m³ could be identified.
- ii. Flood defence walls to envelope the backwater effect thus eliminating the spillage. This solution would involve wall heights of between 5.5m and 6m high above existing ground level which was determined to be unsuitable on the grounds of social and community impact.
- iii. Replacement of the Existing N11 Culvert with larger capacity culvert. This was not the preferred option due to significant construction challenges. The expansion of the culvert would impact existing services within the N11 dual carriageway and maintaining live flows in the river during works would not be practicable.
- iv. Diversion of flows to into the Shanganagh River. This was determined not to be feasible as no reasonable culvert route could be identified through the adjacent properties.
- v. Permanent Pumping Station to over pump high river flows. This was not the preferred option due the risks associated with the reliance on mechanical equipment and the sustainability of such an option.

Having followed OPW guidance and sound engineering judgement in its assessment of options, it is the opinion of the applicant, that the proposed solution at the N11 is the most suitable approach to alleviating flood risks for the present day and future scenarios at dual carriageway and surrounding properties.

A similar level of assessment has also been undertaken at Glenamuck Road North to establish the required defence options, which is available in Chapter 2 of the EIAR.

TII's Preferred Method

TII's preferred method is horizontal directional drilling (HDD). It is explained in the EIAR that reasonable alternative design or technology was considered for implementing the additional culvert beneath the N11 dual carriageway. HDD was considered by the applicant during planning and design, but it was determined to be not viable for the installation of the proposed N11 overflow culvert. This method was therefore not presented in the EIAR.

This HDD construction method is more commonly used for the installation of flexible pipes and for pipe diameters smaller than required at the N11. These applications do not require the same accuracy and control of invert levels required by rigid structures.

Alternative Technology

TII, in its submission, questions the reasons for open cut techniques to install the N11 overflow culvert.

As explained in Chapter 2 of the EIAR and in the presentation given by the applicant to TII (13th August 2025), the applicant has considered open cut and trenchless techniques (e.g. pipe jacking, TBM) to install the proposed overflow pipe. Both trenchless techniques have been carefully considered and the reason for not progressing them is based on that assessment. It is stated in the EIAR that:

"the proposed overflow culvert will be constructed with an open cutting and subsequent backfilling and reinstatement of the road. A construction methodology which uses an open cutting rather than a trenchless method is required due to constraints on constructability using a trenchless method. Trenchless construction using a tunnel boring machine (TBM) is not feasible due to the risk of damage to utilities in the area and constraints on pipe gradient, which would limit pipe capacity".

As well as the constructability and site constraints noted, the risk of structural or settlement damage to the existing road would remain.

Although the reason for selecting open cut techniques as the preferred installation method for N11 overflow culvert is explained in the EIAR, we note that attempts to alter the design to facilitate installation of the overflow pipe by trenchless techniques have been explored. Risks including structural and utility damages associated with trenchless installation techniques could be reduced or removed by deepening the proposed vertical alignment of the installation. However, trenchless techniques would require deepening and flattening the gradient of the proposed overflow pipe to a depth that would bring the overflow pipe below the existing riverbed levels. In effect, the overflow would operate as an inverted siphon beneath the N11 dual carriageway. Hydraulic testing showed that this design would not provide the necessary benefits to alleviating flood risks at the N11 dual carriageway.

At the meeting on 13th August, TII requested further details in relation to the methodology of open cut construction at the N11 dual carriageway beyond that described in the presentation and EIAR. A detailed constructability assessment with traffic management plans within fixed hours is provided in Appendix 3. A copy of this constructability assessment statement has been provided to TII as a follow up to recent consultations.

The applicant is satisfied that open cut methodology is the most appropriate approach for the installation of the N11 overflow culvert as it enables the overflow culvert's operational capacity to be optimised, providing a longer-term benefit relative to the short duration of traffic management required for the installation.

1.7.2.3 Traffic Impact Assessment

To demonstrate a safe and efficient operation of the national road network during construction stage, a traffic count survey and traffic assessment at the N11 Crossing and Glenamuck Road North were conducted as follows:

Part A) Traffic Count Survey in 2025

According to the current policies (i.e. Planning and Development Act 2000, as amended Section 28 Guidelines: Spatial Planning and National Roads Guidelines for Planning Authorities (Department of Environment, Community and Local Government [DoECLG], 2012), Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019-2031, etc.), it requests to maintain and protect the safety, capacity and efficiency of Ireland's existing national road network for users. As the proposed scheme works at two sites (including "Glenamuck Road North" and "N11 Crossing") will interact with the national road network carriageways, a traffic count surveys was undertaken at two junctions at "Glenamuck Road North" Site and one junction at "N11 Crossing" Site as shown in Figure 1.1 in order to determine current traffic behaviour in the vicinity of the subject sites and facilitate the assessment of traffic impact due to the proposed scheme works at the aforementioned sites.

- Junction 1: Glenamuck Road North Roundabout (for Glenamuck Road North Site);
- Junction 2: Glenamuck Road North / Castle View Junction (for Glenamuck Road North Site); and
- Junction 3: N11 / Cherrywood Road / Bray Road Junction (for N11 Crossing Site).

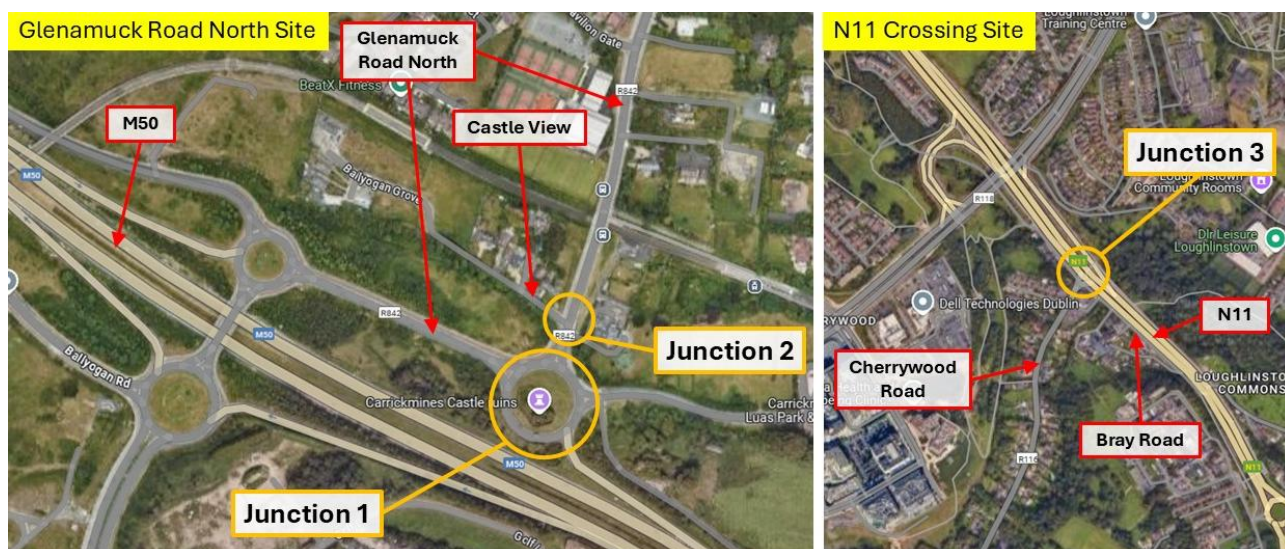


Figure 1.1: Locations of Traffic Count Survey

A classified traffic count was undertaken on Tuesday, 27th May 2025. The count was carried out over the 24-hour period and included both the morning and evening peak periods. The data was chosen while schools were open to ensure the maximum volume of traffic was included. The count was designed to identify the critical peak hour periods of traffic flow in the vicinity of the subject sites. Data was collected in 15-minute intervals and the following count classifications were employed:

- Pedal Cycles (P/C);
- Motorcycles (M/C);
- Taxis;
- Cars;
- Light Good Vehicles (LGV);
- Oversize Goods Vehicles 1 (OGV1);
- Oversize Goods Vehicles 2 (OGV2); and
- Public Service Vehicles (PSV).

The link traffic flows in morning and evening peak hours in the vicinity of the Glenamuck Road North Site and N11 Crossing Site were identified as shown in Table 1.1. A full transcription of the turning movement survey is included in Appendix 1 herein.

Table 1.1: Link Traffic Flows in the Morning and Evening Peak Hours in 2025

Site	Link Road	AM Peak		PM Peak	
		Period	Flows (Veh)	Period	Flows (Veh)
Glenamuck Road North	Glenamuck Road North – West Arm (Eastbound)	08:00-09:00	1,010	17:00-18:00	1,156
	Glenamuck Road North – North Arm (Northbound)	08:00-09:00	593	17:00-18:00	737
	Glenamuck Road North – North Arm (Southbound)	08:00-09:00	606	15:00-16:00	626
	Castle View (Westbound)	09:00-10:00	4	21:00-22:00	6
	Castle View (Eastbound)	08:00-09:00	6	16:00-17:00	7
N11 Crossing	Bray Road (Northwest bound)	08:00-09:00	91	17:00-18:00	34
	Bray Road (Southeast bound)	09:00-10:00	2	17:00-18:00	6
	N11 Mainline (Northwest bound)	08:00-09:00	1,869	13:00-14:00	1,220
	N11 Mainline (Southeast bound)*	11:00-12:00	1,272	17:00-18:00	2,391
	N11 Slip Road (Southeast bound)	08:00-09:00	569	17:00-18:00	934

Note: * including the link flows from N11 Slip Road (Southeast bound).

Part B) Traffic Assessment on Glenamuck Road North Site**Glenamuck Road North**

In order to provide a robust analysis, a tolerance of 5% (to account for daily fluctuations) has been added to the recorded traffic flows. Figure 1.2 presents the 24-hour link traffic flows, with additional 5% tolerance to account for daily fluctuations, at the Glenamuck Road North – West Arm (Eastbound traffic lane). Figure 1.2 demonstrates that the link traffic flows at the at Glenamuck Road North – West Arm (Eastbound traffic lane) on Glenamuck Road North Roundabout in the morning and evening peak hours are 1,061 vehicles at 08:00-09:00 and 1,214 vehicles at 17:00-18:00 respectively.

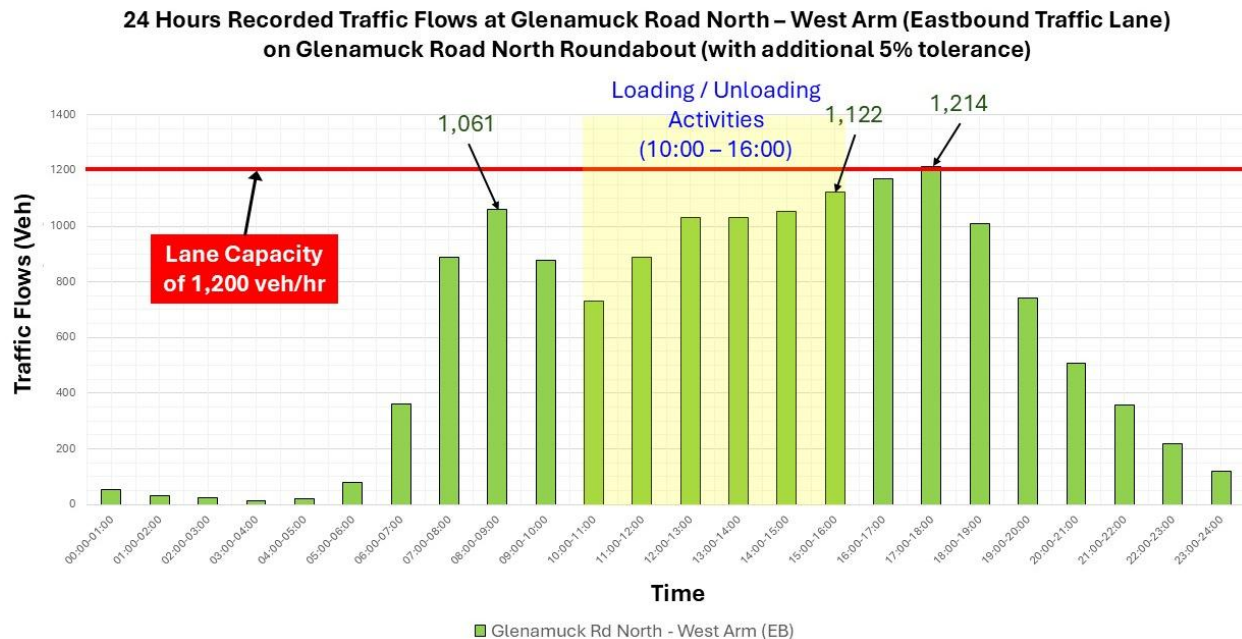


Figure 1.2: 24 Hours Recorded Traffic Flows at Glenamuck Road North – West Arm (Eastbound Traffic Lane) on Glenamuck Road North Roundabout (with additional 5% tolerance)

Currently, Glenamuck Road North - West Arm (Eastbound traffic lane) on Glenamuck Road North Roundabout contains two traffic lanes. To facilitate the construction of new flood walls adjacent to Glenamuck Road North, some loading / unloading activities may be required at Glenamuck Road North – West Arm (Eastbound traffic lane) on Glenamuck Road North Roundabout during the off-peak hour (i.e. 10:00-16:00). Thus, the nearside lane of this road will be temporarily closed during the off-peak hour (i.e. 10:00-16:00) to facilitate the loading / unloading activities.

To estimate the lane capacity for one traffic lane with minimum lane width of 3.0 metres, two guidance documents, including “Transport Research & Information Note – A Study of Lane Capacity in the Greater Dublin Area” and “Volume 15 – Economic Assessment of Road Schemes in Scotland (Section 1 – The NSA Manual) of Design Manual for Roads and Bridges”, were used. According to the aforementioned guidance documents, the lane capacity for one traffic lane with minimum lane width of 3.0 metres are listed as follows:

- Section 5.11 of “Transport Research & Information Note – A Study of Lane Capacity in the Greater Dublin Area”: The lane capacity for one traffic lane is equal to 1,600 vehicles per hour; and
- Table 5/3/1 of “Volume 15 – Economic Assessment of Road Schemes in Scotland (Section 1 – The NSA Manual) of Design Manual for Roads and Bridges”: To provide a “worst-case” scenario, it was assumed that the speed limit on N11 is 48kph during construction. Thus, the lane capacity for one traffic lane is equal to 1,200 vehicles per hour.

To provide a robust and conservative analysis, the lower figure of 1,200 vehicles per hour was adopted for assessment.

Figure 1.2 illustrates that the highest link traffic flows at Glenamuck Road North – West Arm (Eastbound traffic lane) between 10:00 and 16:00 is 1,122 vehicles at 15:00-16:00, which is less than the aforementioned lane capacity of 1,200 vehicles per hour. Additionally, the proposed loading / unloading activities at Glenamuck Road North will only carry out in a short duration. In view of above reasons, it is anticipated that the proposed loading / unloading activities at Glenamuck Road North during the off-peak hour (i.e. 10:00-16:00) will not cause a significant traffic impact to public.

Castle View

To facilitate the replacement of existing walls adjacent to Castle View, the junction of Castle View / Glenamuck Road North, a temporary traffic signals or a STOP/GO traffic management system (with 3-arm control) will be provided at Castle View and Glenamuck Road North to maintain two-way traffic flow on Castle View for the duration of the works.

In order to provide a robust analysis, a tolerance of 5% (to account for daily fluctuations) has been added to the recorded traffic flows. Based on the recorded traffic flows, with additional 5% tolerance to account for daily fluctuations, the two-way traffic flow at Castle View in the morning and evening peak hours are 9 vehicles at 08:00-09:00 and 12 vehicles at 16:00-17:00 respectively. Additionally, the highest two-way traffic flows at Castle View between 10:00 and 16:00 is 10 vehicles at 13:00-14:00. As the two-way traffic flows at Castle View is very small, it is anticipated that the traffic movements along the Glenamuck Road North (Northbound and Southbound) can be maintained most of the time under the proposed traffic management system. In view of above reason, it is anticipated that the proposed traffic management system will not cause a significant traffic impact to public.

Part C) Traffic Assessment on N11 Crossing Site

N11 Dual Carriageway

In order to provide a robust analysis, a tolerance of 5% (to account for daily fluctuations) has been added to the recorded traffic flows. Figure 1.3 presents the 24-hour link traffic flows, with additional 5% tolerance to account for daily fluctuations, at the N11 mainline (Northwest bound) and N11 mainline (Southeast bound). Figure 1.3 demonstrates that the link traffic flows at the N11 mainline (Northwest bound) and N11 mainline (Southeast bound) in the morning peak hour are 1,962 vehicles at 08:00-09:00 and 1,336 vehicles at 11:00-12:00 respectively while the link traffic flows at the N11 mainline (Northwest bound) and N11 mainline (Southeast bound) in the evening peak hour are 1,281 vehicles at 13:00-14:00 and 2,511 vehicles at 17:00-18:00 respectively. For the period between 10:00 and 16:00, the highest link traffic flows at the N11 mainline (Northwest bound) and N11 mainline (Southeast bound) are 1,510 vehicles at 10:00-11:00 and 2,029 vehicles at 15:00-16:00 respectively.

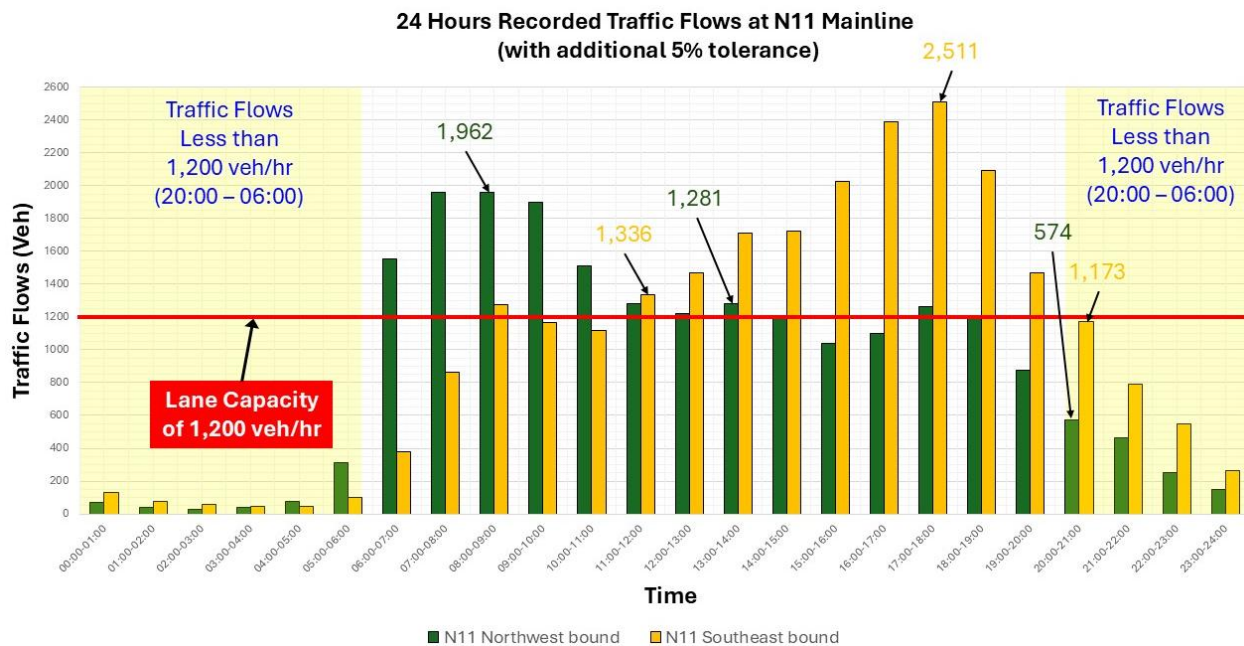


Figure 1.3: 24 Hours Recorded Traffic Flows at N11 Mainline (with additional 5% tolerance)

As mentioned above, the lane capacity of 1,200 vehicles per hour was adopted for one traffic lane with minimum lane width of 3.0 metres for assessment.

To facilitate the works, a lane closure at N11 is required and at least one live traffic lane shall be provided in each direction of N11. With only provision of one traffic lane in each direction of N11 during construction, it is anticipated that both link traffic flows at the N11 mainline (Northwest bound) and N11 mainline (Southeast bound) in daytime will exceed the aforementioned lane capacity of 1,200 vehicles per hour. Thus, reduction of any traffic lane at N11 in daytime will cause significant traffic impact to public.

To minimise the traffic impact to public during construction, it is advised that the appointed Contractor will undertake the works during nighttime hours. Figure 1.3 indicates that the highest link traffic flows at the N11 mainline (Northwest bound) and N11 mainline (Southeast bound) between 20:00 and 06:00 are 574 vehicles at 20:00-21:00 and 1,173 vehicles at 20:00-21:00 respectively, which are less than the aforementioned lane capacity of 1,200 vehicles per hour. Thus, the proposed works at N11 between 20:00 and 06:00 will not cause a significant traffic impact to public. After discussion with TII, it is agreed that the proposed works at N11 will be carried out between 22:00 and 06:00 in order to further minimize the traffic impact to public. It should be also noted that the presence of the additional traffic lane and part of a bus lane southbound at the crossing location, where the traffic from the Wyatville Flyover merges with the N11, can be utilised to carry out lane shift in order to maintain the existing traffic movement on N11 for the duration of works.

Bray Road

To facilitate the pipe laying works at Bray Road, it is necessary to fully close Bray Road at nighttime hours and traffic for the affected southeast bound at Bray Road will be diverted. It should be noted that a small section of Bray Road is a one-way road with one traffic lane and the remaining section of Bray Road is a bi-directional two-lane single carriageway. Thus, Bray Road southeast bound is a cul-de-sac. Also, this road provides access to a few commercial businesses and properties only.

In order to provide a robust analysis, a tolerance of 5% (to account for daily fluctuations) has been added to the recorded traffic flows. Based on the recorded traffic flows, with additional 5% tolerance to account for daily fluctuations, the highest link traffic flows at the Bray Road (Northwest bound) between 20:00 and 06:00 is 8 vehicles at 20:00-21:00 and no traffic flow at the Bray Road (Southeast bound) was recorded between 20:00 and 06:00. As the link traffic flows at the Bray Road (Northwest bound) and Bray Road (Southeast bound) between 20:00 and 06:00 are very small, so it is anticipated that the proposed pipe laying works at Bray Road with the aforementioned traffic diversion between 20:00 and 06:00 will not cause a significant traffic impact to public.

Based on the recorded traffic flows, with additional 5% tolerance to account for daily fluctuations, the two-way traffic flows at Bray Road in the morning and evening peak hours are 96 vehicles at 08:00-09:00 and 42 vehicles at 17:00-18:00 respectively. Additionally, the highest two-way traffic flows at Bray Road between 10:00 and 16:00 is 39 vehicles at 10:00-11:00. As the two-way traffic flows at the Bray Road is small, so the proposed minor works at Bray Road with implementation of temporary traffic signals or a STOP/GO traffic management system (with at least 2-arm control) to maintain two-way traffic flow on Bray Road and without reduction of any traffic lane at N11 will not cause significant traffic impact to public.

Part D) Summary

In view of above traffic analysis, the proposed works at Glenamuck Road North Site and N11 Crossing Site will not cause a significant traffic impact to public during construction phase and the proposed mitigation measures (i.e. nighttime works at N11) can ensure efficient operation of the national road network during construction. Additionally, the signage and coning for the proposed Temporary Traffic Management measures will be designed in accordance with 'Traffic Signs Manual (2019) (Chapter 8 – Temporary Traffic Measures and Signs for Roadworks)', 'Temporary Traffic Management Design Guidance' and 'Temporary Traffic Management Operations Guidance' in order to ensure the safety of road users.

Moreover, the relevant documents (i.e. traffic and works management, specific mitigation measures, traffic management plan, etc.) related to the Glenamuck Road North Site and N11 Crossing Site will be circulated to the TII / MMarC for comments prior to commencement of works.

1.7.2.4 Protocol Agreement with the MMarC

The applicant will engage with MMarC on the proposed flood alleviation measures at Glenamuck Road North. It is our opinion that planning should not be contingent on the formalised operation and maintenance arrangements being put in place.

ACP may at their discretion implement a condition as part of the granted planning to include an operation and maintenance agreement between the relevant stakeholders for the works which interact with TII infrastructure.

1.7.2.5 TII Publication Compliance

The applicant will adhere to the standard DN-STR-03001 "*Technical Acceptance of Road Structures on Motorways and Other National Roads*" in as far as reasonably practicable as the documentation is not written for flood relief schemes. We expect to arrange the RA/ Designers kick off meeting as described in Table 2/1 of DN-STR-03001 with TII Structures Section in October and November 2025. This consultation is expected to define the scope of the documents required by TII, however TII's Structures Section have mentioned that a Structures Options Report (SOR) and Preliminary Design Report (PDR) are likely to be requested. We will provide the requested reports to TII as part of their procedural process.

1.7.2.6 Construction Traffic Management Plan

The applicant has provided traffic management plans within the constructability assessment for the construction of the overflow works relating to N11 dual carriageway to support the viability of the installation method for TII. Notwithstanding this, we consider the provision of a Traffic Management Plan to be premature at this stage.

The provision of a Traffic Management Plan in advance of the works is a requirement that ACP can condition on the grant of permission if it deems it appropriate.

1.8 Uisce Éireann

DLRCC acknowledges the recommendations within UÉ's submission and the inclusion of these recommendations as conditions of a granted permission is a decision for ACP if it deems it appropriate. The recommendations include:

- The applicant to lodge a diversion enquiry with Uisce Éireann clearly illustrating all proposed interactions with UÉ assets, depth profiles, designs & layouts of culverts, defence walls, new culverts/ overflow pipes, localised screen upgrades and localised works and any other information necessary to complete a feasibility assessment, prior to works commencing.
- The applicant to enter into a works agreement, as deemed necessary by UÉ, prior to works commencing.

1.9 Emma and Stephen Usher

1.9.1 Summary of Emma and Stephen Usher's Submission

The submission provided by Emma & Stephen Usher acknowledges a general satisfaction of the proposed scheme which will help reduce the flood risk to their homes however contends that some details in the positioning of the flood defence wall have been overlooked by the project team. The observation notes concerns relating to the ongoing maintenance (grass cutting) of the area adjoining the wall, potential for illegal dumping and loss of amenity for children and animals. The submission asserts that:

- Brookdene has been selected to serve as a flood plain for the 1% AEP event in lieu of an entire area on the left bank of Commons Road, upstream of Shanganagh Bridge, and that the proposed new flood defence walls at this location are intended to protect the only property on this bank. The submission notes that this property does not have planning permission for the development.
- The construction of these flood defence walls upstream of Shanganagh Bridge creates a tunnel of water during a flood event which has an adverse effect on Shanganagh bridge even with reinforcement measures, thus causing a flood onto the road and into Brookdene.

1.9.2 Applicant Response

The placement of the proposed wall at Brookdene is the result of extensive consultation between the project team and various stakeholders, including the National Parks and Wildlife Service (NPWS). The proposed wall location has been chosen to protect the riparian zone along the riverbank in this area, and to preserve as much as possible existing trees in the green area at Brookdene.

Access for maintenance of the green areas within the riparian tree corridor will be maintained. Demountable flood barriers will be included as part of the detailed design. It is our opinion that anti-social or illegal behaviour such as dumping of rubbish is not a planning matter and should be dealt with by the relevant authorities if it were to occur.

The existing flooding during the 1% AEP event which occurs within the Brookdene estate is linked to out of bank flows upstream of Shanganagh Bridge. These flood waters overtop the existing defences upstream of Shanganagh bridge and overflow Shanganagh Road into the Brookdene Estate.

For clarity the proposed works to increase wall heights upstream of Shanganagh Bridge are in the interest of protecting the residents of Brookdene and Commons Road. It is not intended to create a flood plain adjoining the Brookdene estate as suggested. The proposed measure is intended to defend against the out of bank flows which will now downstream given the need to adopt new defences upstream.

Planning or enforcement matters relating to other developments should not be a consideration in determining this application.

1.10 Gleb Reys

The submission by Gleb Reys focuses on the Cherrywood Road area, as described in EIAR as Defence 4.A. The points raised in the observation and the applicant's responses to these are outlined in the table below:

Observation Statement	Applicant Response
The proposed flood wall will effectively subdivide the property, making land on the opposite bank of the stream inaccessible or neglected. Visual amenity will be significantly reduced, as the wall will block views of the river and the mature, wildlife-rich woodland owned by the property owner on the opposite bank.	The main focus of the Landscape and Visual Impact Assessment (LVIA) in the EIAR is to identify if any significant effects could arise from the proposed development. The negative effect on setting resulting from the new wall is assessed as slight negative in the EIAR Section 14.3.5, which is not significant.
The height of the proposed wall (potentially up to 1.8m or more) raises concerns over property value depreciation. Has the local authority provided any estimates of potential capital value loss?	The local authority does not agree with the landowner's assertion that the installation of this flood defence wall will potentially impact property value. The landowner's property is subject to flooding in the baseline scenario for the 1% AEP event. As part of the proposed FRS, it is intended to construct a new flood defence wall to protect the landowner and their property. As such the property will benefit from the proposed development.
The height of up to 1.8m raises security concerns as well because it will make the other bank less visible. It's not a public land but strangers are known to walk into that area from the viaduct which doesn't have any fences on the slopes of that riverbank. Such a high wall will restrict visibility of any such trespasser.	ACP may include if considered appropriate a condition as part of the granted permission which enables the authority to agree the finishes to the flood defence wall with the landowner. This would enable glass panelled flood defence walls to be adopted into the detailed design to address the landowner's security concerns.
In light of potential depreciation, has the local authority prepared a compensation fund for affected landowners?	No compensation for potential depreciation will be provided to landowners benefitting from the proposed flood defence scheme.
What assessment has been made of the hydraulic or environmental impact on the opposite bank, including risk of soil erosion, destabilization of mature trees, and property damage? Will the council compensate for any such future damage	Reach-specific assessment of the potential impacts of proposed defences informed by both field walkover and hydraulic modelling, the results of which are contained in the EIAR. Table 10.6 within the document, referring to River section BGS1, highlights the assessment showed no impact from the defences. A minor percentage increase in velocity was reported at one cross-section only for the 1% AEP event. Associated erosion risk is considered adequately constrained by the existing topography and physical nature of the watercourse at this location. Field observations describe the channel as stable and composed of boulder/cobble with a mobile gravel bed. This channel material is not easily erodible.
What ecological assessments have been conducted regarding potential loss of wildlife habitats and vegetation on the unprotected riverbank?	EIAR Chapter 8 Biodiversity evaluates the existing baseline ecology, including the potential operational impacts on the unprotected stream / riverbanks within the footprint of the FRS. Riparian ecology is dynamic in nature given that it is strongly linked to the erosion and deposition activities of watercourses; therefore, the riparian floral (distribution) and faunal species will be adaptable to potential structural alterations and periodic changes to water levels that may occur along the unprotected bankside during the operational phase of the FRS.
The 112 page report covered habitat and plants/shrubs/trees found in the area, however there seems to be no mention of the wildlife considerations? The 1-acre woodland part of our property (the hillside on the other bank of the river) is home to a variety of wildlife.	Faunal species were considered on a scheme-wide basis, with aquatic / semi-aquatic species such as European Eel, Salmonids, Lamprey species, Kingfisher and Otter considered to be present throughout most scheme sections, bar the headwaters. Additionally, any wooded sections were considered to be capable of supporting Red Squirrel, Pine Marten and Badger. All these species were

Observation Statement	Applicant Response
	considered when assessing the ecological impacts adjacent to the property. Both floral and faunal species data (including protected and invasive species) for this woodland were obtained through desktop data and field surveys across a multi-year period.
It also appears that the existing bridge is vital for animals crossing the river – foxes cross multiple times per day and during season there are otters and deer (photo/video evidence available if you're interested).	All mammals listed, as well as other mammal species within the locality, are all capable of traversing the riverbanks / riparian zone within this section of the Scheme. It also is not essential that mammal species cross the watercourse in this section, as the riparian zones both upstream and downstream also provide suitable means of navigating across the watercourse.
Any proposed works should ensure that these ecological values are preserved and that any adverse impacts are minimized.	The mitigation measures contained within the EIAR's Biodiversity Chapter 8 ensure the safeguarding of valued ecological features, nullifying or minimising any potential adverse impacts that may arise as a result of the construction and operational phases of the proposed FRS.
Has wall height been determined based on current riverbed depth? if so, could lowering or deepening the riverbed (via a one-time, ecologically sensitive clearing) allow for reduced wall heights, thus preserving views and property value?	The design height for the proposed flood defence walls is based on the modelled peak water level plus a freeboard of 300mm. This is the required Standard of Protection as described in Chapter 2 of the EIAR. Within the hydraulic modelling the current riverbed values have been used to develop the scheme. Lowering of the channel bed was not considered within the project. Hydraulically Brides Glen River is already a steep relatively incised channel, any lowering of the bed would result in increased slope, resulting in higher velocities and increased flood risk further downstream and therefore not considered a viable solution hydraulically.
I would like to see implications of reducing the proposed wall height to 1.0m max, with the timeline attached (some parts of report mention that FRS is about future proofing the flood protection).	The proposed defence heights have been set using the following: the 1% AEP peak flood levels (Standard of Protection event), freeboard assessment. Where appropriate and the increases required are not significant, the defence levels have been set to protect against climate change. Review of the flood levels in the various cross sections provided as part of the planning application (drawing number: 20108-JBB-00-XX-DR-Z-02926) shows that a reduction of the wall heights to 1m would result in overtopping and flooding in the 1% AEP event at present day. Therefore, to ensure the Standard of Protection is met for the scheme lower wall heights of 1m should not be considered.
In other areas, culverts are being upgraded. While widening the culvert under the viaduct may not be feasible, has deepening it been explored? The viaduct structure appears robust enough to accommodate this.	Hydraulically, deepening the culvert will have no impact on flood levels upstream. This would only be effective if the channel bed of the entirety of the reach is lowered which, as discussed above, is not a viable measure for this scheme as it would not provide the required Standard of Protection during a flood event. Therefore, it was not a viable measure for the scheme.
The proposed debris screen will be placed on private land with no public access. Why can't it be installed further downstream or between properties where access and visual impact might be better balanced?	A debris screen is required upstream of the culvert due to the potential risk and impacts of the inlet becoming blocked during a flood event. During the options assessment as described in Chapter 2 of the EIAR, it was identified that a screen at the inlet of the

Observation Statement	Applicant Response
	viaduct culvert was not viable due to the confined location and limited access for maintenance machinery. Therefore, the upstream location was selected as it allows the best access for maintenance along the reach.
What is the structural support plan for the debris screen? Who will be responsible for ongoing maintenance, debris removal, and potential odour issues if blockages occur?	DLRCC are responsible for the maintenance of debris screens and flood scheme structures.
Has the council considered the aesthetic impact of the wall and bridge/flyover? Will concrete walls be textured or clad in stone to match the existing viaduct and culvert? Otherwise, the wall risks appearing as an industrial structure that further reduces visual amenity and property value. Are detailed designs available for the proposed new bridge? This structure should be sensitively designed to avoid a utilitarian appearance. Are detailed designs available for the flood barrier system? Who is going to be responsible for putting the flood barrier up and on what conditions? It might not be necessary to have such a system if the bridge is built as a flyover – will mean the wall is permanently in place with constant flood protection and no risks of someone not putting the flood barrier up. No information has been provided about the location of the construction compound or which property entrances will be used during the works. If the site is selected for compound or access use, what compensation will be offered for disruption, potential delays, or reinstatement of damaged features? What is the process for determining compound placement and access routes? How much space will be required, and what protections are in place for residents' property rights?	These points are noted. The landowner is seeking details relating to the final construction design. ACP may include at their discretion a condition as part of the granted permission if considered appropriate, which facilitates agreement of the final detailed design of the flood defence wall and accommodation works with the landowner prior to construction works.

1.11 Jake Jackson

The submission by Jake Jackson focuses on Defence 3.A as described in the EIAR, or the area of Castlevue and Carrickmines Castle. The submission focuses on a number of concerns as outlined below.

1.11.1 Impact on the Preservation Order for the Land

The submission states, in reference to the National Monuments Act and a preservation order for Carrickmines Castle, that *“the demolition of the granite wall, would directly undermine the preservation efforts mandated by this legislation and impact the historical aesthetics of the area”*. We draw ACP's attention to the EIAR Chapter 13 Cultural Heritage, which fully examined the Carrickmines Castle in the context of the proposed development. The proposed flood wall has been designed with the cultural and archaeological context of the surrounding area in mind, and no significant effects on same are likely, as outlined in the EIAR Chapter 13.

The submission goes on to reference a DAU report dated 10th of May 2021, in relation to a separate planning application ACP Ref. 310625-21, which is not related to the proposed FRS. The DAU have made their own submission on this FRS which is described in Section 1.2.2 above. Their submission includes various recommendations which are noted and agreed with in Section 1.2 above and does not mention Carrickmines Castle or any potential issues with the scheme in relation to compliance with Cultural Heritage policies and objectives.

Finally, the submission claims that the proposed works in this area will be in direct conflict with “*dlroco development plan 11.3.2.2 policy objective HER2: Carrickmines castle archaeological conservation plan*” Note that Policy Objective HER2 is actually Section 11.3.1.2. We disagree that the proposed works in the area would conflict with either CDP Policy Objective HER2 (11.3.1.2) or HER4 (11.3.2.2). The Cultural Heritage Chapter of the EIAR was prepared with reference to the policies of the CDP.

1.11.2 Aesthetic Impact

The submission states that the proposed works will have a negative effect on the aesthetics of the area, due to the demolition of an existing granite wall and use of “*more modern or less sympathetic materials*”, and also refer to the effect of removal of trees.

Potential landscape and visual impacts have been assessed in Chapter 14 of the EIAR. No significant effect at this area has been identified. Limited removal of trees is needed to facilitate construction access and the construction of the proposed development; however, this will not result in a significant negative effect as only a small number of the overall large number of trees in the area must be removed. In terms of the wall, the proposed flood wall will be faced with the same or similar stones as the existing wall and as such will have a similar appearance, reducing any visual or landscape effects arising from the development.

1.11.3 Environmental Impact on the River and Surrounding Ecology

The submission states that the development would “*likely cause significant disruption to the local environment, particularly with regard to the nearby river and surrounding natural habitats*”. We would disagree with this point and refer to the assessment carried out in the EIAR, particularly the results of Chapter 8 Biodiversity and Chapter 10 Water. No likely significant residual effects were identified in the area in these chapters.

1.11.4 Heritage and Community Concerns

The submission states that the proposed development, particularly the demolition of the existing granite wall, would have a negative effect on the historical character of the area and could lead to a loss of community identity, and that it is essential that any proposals take the preservation of heritage and character into account.

The heritage and historical context of the existing wall were taken into account in the design and the EIAR of the proposed development. The proposed flood wall was designed with input from a Conservation Engineer. The proposed flood wall will be finished in the existing or similar stones, to result in a similar appearance to the existing stone wall, will be in keeping with the historical character of the area.

1.11.5 Visual Impact Assessment

The submission makes several further points on potential visual impacts as outlined below:

Observation Statement	Applicant Response
Loss of Historical Aesthetic: The granite wall is a key visual feature that contributes to the historical and cultural aesthetic of the Carrickmines area. Its rough-hewn stone and traditional design are consistent with the historical character of the region, particularly the nearby Carrickmines Castle. The wall serves as a visual cue of the historical significance of the area, maintaining the area’s authentic and traditional look.	We note that the historical aesthetic of the existing stone wall will not be lost as the proposed flood wall will be finished with the existing or similar stones to retain its current appearance.
Impact on Visual Cohesion: The demolition of the granite wall would create a noticeable gap in the streetscape. Without the wall, the transition between properties and the surrounding environment would be jarring and would detract from the visual harmony currently present. The open, more modern appearance	No gap in the wall will be created as a replacement wall will be constructed in its place. Following its construction, the appearance of the new flood wall will be similar to the existing stone wall, as outlined in the EIAR Chapter 13 and 14.

Observation Statement	Applicant Response
that could replace the traditional stone wall would contrast sharply with the older structures in the area, diminishing the overall aesthetic appeal of the neighbourhood.	
Impact on Local Vantage Points: From the Carrickmines Green and nearby viewpoints, the wall currently provides a sense of enclosure and aesthetic continuity. Its demolition would expose more of the development behind it, which is likely to be less visually compatible with the existing structures and the surrounding natural environment. This disruption in the visual experience would negatively affect the enjoyment of residents and visitors	As outlined in Chapter 14 of the EIAR, the proposed flood wall will be very similar in appearance to the existing, with a slight to imperceptible effect on visual amenity during operation.
Effect on Historical Context: The wall plays a role in contextualizing the area's history and character. Its demolition risks erasing part of the historical landscape and could lead to a fragmented and less cohesive representation of the area's heritage. This could be detrimental to the identity of Carrickmines and its surrounding communities, especially those who take pride in its historical context	As stated in the three responses above, the proposed flood wall has been designed with this area's history and character in mind. The proposed flood wall, to be finished in the same or similar stone as the existing wall, will be in keeping with the historical character and landscape. Potential effects in this regard were assessed in the EIAR and were assessed as not significant.
Overall Landscape Disruption: Demolition of the wall would disturb the natural and built environment. The introduction of modern materials could conflict with the more naturalistic appearance of the surrounding landscape, including the stone and greenery that currently define the aesthetic of Carrickmines. The area would lose part of its charm and distinctive character, especially in a region that values both its heritage and natural beauty	The proposed flood wall will be in keeping with the existing natural and built environment, as it will have a stone finish which reflects the current aesthetic of the area and the existing stone wall.

1.12 Kilgobbin Apt Ltd

DLRCC acknowledges the recommendations within Kilgobbin Apt. Ltd.'s submission and the inclusion of these recommendations as conditions of a granted permission is a decision for ACP if it deems it appropriate. The recommendations include:

- The local authority or their contractor to agree the extent of the proposed Construction Compound C such that it does not prevent Kilgobbin Apt. Ltd.'s development from taking place, particularly in relation to the construction of the apartment block, open space and connection onto Kilgobbin Road.
- The contractor undertaking the works as part of the Flood Relief Scheme to consult and agree such works prior to commencement with Kilgobbin Apt. Ltd.

1.13 Rory Rogers

The submission from Rory Rogers relates to his property Waterfall Cottage, the adjacent property Rose Cottage, and the N11 overflow culvert. The points raised and responses to these are outlined in the table below:

Observation Statement	Applicant Response
Rory Rogers does not object to the proposed flood defence scheme per se. He welcomes the flood defence measures in principle although he has serious reservations about the adverse impacts of the proposals during construction and the permanent impact upon built heritage at his property. He also considers that alternative solutions to the scheme design affecting his property were not identified and assessed in the EIAR.	Chapter 2 of Volume 2 of the EIAR sets out the alternative measures considered within the scheme and at Waterfall Cottage. Further detailed queries raised are discussed in the responses below.
Mr. Rogers is particularly concerned about the serious adverse impacts during the construction works phase. Having regard to the nature and extent of the heavy engineering works along the river within his property in such close proximity to his home, he is extremely concerned about the serious impact during the construction works phase and the duration of the construction phase affecting our clients' home	We note Mr Rogers's concerns in this regard. Potential impacts during construction were a key part of the EIAR, with detailed mitigation measures devised for the construction phase which will be put in place by the appointed contractor. These mitigation measures are also outlined in the Preliminary CEMP.
In the longer term his main objection is to the permanent negative effect of the defence wall upon the setting of Waterfall Cottage, which is a protected structure.	As noted in the EIAR Section 13.6, the residual effect on Waterfall Cottage with respect to Cultural Heritage will be slight positive. With regard to landscape and visual impact, the EIAR Section 14.3.5 notes that the residual visual effect will be imperceptible, while Section 14.3.2 notes that the residual landscape effect will be permanent, slight, negative. These residual effects must be fully considered in context with the long-term flood protection benefits to Waterfall Cottage.
Both aspects are not adequately addressed, or addressed at all, on the drawings or in the EIAR and the documentation accompanying this application for Approval to An Bord Pleanála.	The construction and operational phase effects on Waterfall Cottage and its inhabitants are fully assessed in the EIAR.
Given the proximity of the works to his home, a protected structure, and the likely adverse impacts upon his property, Mr. Rogers requests the Board to exercise its discretion to have an oral hearing in this case. A hearing would enable Mr. Rogers and his advisers to set out his concerns directly to the local authority in the presence of the Board's Inspector.	We respect Mr. Roger's position to request ACP to exercise its discretion to have an oral hearing. It is our view that an oral hearing is not required as we concur with the requested conditions as set out in Mr Rogers submission. The concerns raised by Mr Rogers primarily relate to the impacts of construction works in the environs of his home, however the scheme, including flood defence walls, provide a significant long-term benefit to alleviate the risk of flooding for the 1% AEP event with the present-day scenario. We do not believe this long-term benefit should be overlooked in deciding on the scheme. Notwithstanding this, it may alleviate some of Mr Roger's concerns if a condition is included with the granted planning which imposes obligations on DLRCC's appointed contractor to engage with the landowner on works programme, the Preliminary CEMP, noise and vibration monitoring, construction stage method statements and the construction stage traffic management plan.
Blocks from this wall falling into the river would potentially obstruct the flow of water in the river	We agree with the observation that blocks falling into the river may potentially obstruct the flow of water within the river channel. We understand this wall forms the curtilage of the landowner's property and the responsibility to address these defects lies with them.

Observation Statement	Applicant Response
I carefully reviewed the above drawings for the Lower Bride's Glen and N11 Overflow flood defence scheme. As a general comment, the details of the existing dwelling at Waterfall Cottage on the drawings are very faint and these details vanish altogether when printed	We are satisfied that the digital and printed drawings and documents submitted in the application and on public display are clearly legible.
The scope of the proposed works is not adequately or clearly explained on the drawings and in the EIAR. Inadequate information is provided regarding the existing conditions at Waterfall Cottage, for example, I query the accuracy of the elevation of Waterfall Cottage at CH60 on the wall elevation/long section on DRWG. No. DR-Z-02931 Rev C01.	The intention of providing some of Waterfall Cottage as part of the background elevation is to provide the reader with an indication of the scale of the surveyed elevation closest the proposed flood defence wall.
There is conflicting information between the site layout and the sections. The drawings do not include enough sections through our client's property and the details on the sections on DRWG. No. DR-Z-02932 Rev C01 are not sufficiently detailed to assist the Board and other stakeholders in understanding the full impact of the proposed works	We are satisfied that level of detail at this location is sufficient.
Consider the information on Sections 1-1 and 2-2 in conjunction with the proposed site layout (DRWG. No. DR-Z-02930 Rev C01). Section 1-1 is located roughly at CH 40 near the southeast corner of the garden at Waterfall Cottage. Figures 2-5 above show, and a site visit will confirm, that there is an existing stone wall along the west side of the river through both Sections 1-1 and 2-2.	Correct an existing stone wall is present at both Sections 1-1 and 2-2. This retaining wall is included within the ground profile for both sections Drawing No. 20108-JBB-00-XX-DR-Z-02930, Rev C01.
2.7 Section 1-1 in Figure 9 shows that the proposed works entail the removal of the existing granite wall to the west bank of the river (shaded red) and the construction of a reinforced concrete retaining wall. 2.8 I question the accuracy of the ground levels on the east side of the river shown in Section 1-1. The ground levels on the east side of the river are generally lower than on the west side at this location, yet the levels are shown higher in this section (see Figure 4).	We do not agree that the picture provided in Figure 4 of the observation accurately represents the location of Section 1-1 shown on Drawing No. 20108-JBB-00-XX-DR-Z-02930, Rev C01. A topographical survey has been undertaken to verify the existing ground levels and features. We consider the picture provided in Figure 4 to be located downstream of Section 1-1. The ground levels on the right bank (East side) of the river are predominantly more elevated than the left bank (West side).
2.9 Figure 10 is an extract from the proposed site layout in the vicinity of Waterfall Cottage. I have highlighted in red the drawing note pertaining to the works along this portion of the flood defence, which is immediately at the rear of the house close to Section 1-1 (Figure 9). The drawing note suggests that the existing wall to be removed "if required," which is not consistent with the details shown on Section 1-1 where the existing wall is explicitly to be removed (shaded red on Section 1-1)	Noted. The note "if required" should be disregarded. This application and information contained within relates to the removal of this section of existing wall. If during detailed design and ground conditions are deemed suitable adjoining the property, the designers may consider methods to preserve the wall in situ as part of the new flood defence walls.
2.11 Section 2-2 indicates that a reinforced concrete retaining wall will be built to a height of 16.32m OD with a railing over and shows that the ground between the edge of the river and the flood defence wall will be retained. This may indeed be the proposal, and it aligns with the proposed site layout, which also shows a strip of land between the river and the proposed flood defence. However, the existing granite wall is not shown in the section or in plan, and the removal of the existing wall is not referenced on Section 2-2	The existing granite wall has been included within the ground profile developed for this area. The drawings do not indicate the existing wall at this location, Section 2-2, will be removed. The intention is to construct a new flood defence wall adjoining to the existing wall to preserve the existing structure and its character is as far as it is practical.

Observation Statement	Applicant Response
2.12 The proposed site layout only shows the new wall in this location, and it does not indicate that the existing wall lining the river is to be removed (depicted by red hatching in the legend on the site layout drawing), yet the existing stone wall lining the river at this location is omitted from Section 2-2. Thus, the works shown on the proposed site layout and on the section are silent about the status of the existing wall. Where the information provided is so limited, and yet it is inconsistent as regards such fundamental details, the Board will appreciate our client's lack of confidence in relation to the delivery of this project and the implications at our client's properties.	As above.
2.13 Figure 12 is a section through the proposed overflow culvert between Rose Cottage and the N11 bridge. The existing culvert is faced with cut stone, which considerably enhances the visual aesthetic of the bridge. A few questions occur in relation to these works. 2.14 What consideration, if any, was given to enlarging the existing culvert? Our client raised this directly with the DLR Senior Executive Engineer during a site visit. Chapter 2 of the EIAR examines "Alternatives" and does not show whether the enlargement of the N11 culvert was considered nor does it set out an objective basis for rejecting this option. From Mr. Rogers's perspective, the enlargement of the existing culvert may significantly reduce the impact of the scheme works upon his property, [Redacted].	A replacement upgrade of the current N11 culvert was considered as part of the scheme development as outlined in Table 2.1 of the EIAR. Tests were carried out as to whether a larger culvert would provide the necessary conveyance to reduce impacts upstream. It was found that an enlarged culvert would not reduce water levels upstream sufficiently to resolve flooding, and could not be upgraded in the future due to constraints from existing infrastructure, and were therefore not climate adaptable. This is outlined in Section 2.1.3 of the EIAR.
2.15 Another obvious alternative would be to construct the proposed N11 culvert to the east of the existing N11 culvert, which would also avoid the permanent negative impact on Rose Cottage. This alternative is not identified or considered in Chapter 2 of the EIAR.	No significant negative effects on Rose Cottage are identified in the EIAR. Hydraulically a culvert on the eastern side of the existing culvert would operate the same as the proposed. The proposed western location was selected as there is sufficient space on this side of the channel to allow works to be carried out and provide safe access to the culvert in the future. Placing the culvert to the east would also require significant channel widening to accommodate the inlet as well as construction issues with crossing utilities and road levels.
2.16 Section 5-5 does not indicate that the proposed culvert will be finished in stone, and it is inferred from the drawing that the structure will be made of and finished in concrete. If this is the case, our client considers the proposed works do not have adequate regard to the character of the existing culvert and to the location of the site within the curtilage of a protected structure.	ACP at their discretion may include a condition as part of the granted permission if considered appropriate which includes the use of stone finishes at this location.
2.17 The construction of the inlet to the overflow culvert will involve significant excavation work and soil removal as shown on Section 5-5. The flood defence wall measures approx. 129m long extending from the inlet at Rose Cottage to a point past Cherrywood Cottage, virtually all of it within our client's ownership. Sections through the reinforced concrete retaining wall show that the total height of this new flood defence ranges from 2.83m (Section 1-1, i.e. 16.83m OD – 14.00mOD) up to 3.32m (Sections 2-2/3-3 and 4-4) so it is a substantial structure, the construction of which will entail heavy duty engineering works in proximity [Redacted] The consideration of alternatives does not include the retention of the existing stone wall and raising the wall height above the 1% AEP flood level. If	We note that the referenced flood defence heights are based on the distance between the top of the wall and bottom of the river channel. As noted above, this application and information contained within relates to the removal the wall adjoining waterfall cottage with the retention of all existing granite stone. The existing granite stone will be retained for reuse within the proposed flood defence wall. If during detailed design and ground conditions are deemed suitable adjoining the property, the designers may consider construction methods to preserve the wall in situ as part of the new flood defence walls. We do not agree that any alternative solution to retain the existing wall in situ will be less impactful than

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feasible, this would reduce the construction works at our client's home	those works proposed. A robust flood defence wall is still required in combination with the masonry structure.
2.18 No details or information on the construction works at our client's property are set out on the drawings or in the EIAR or in any other documents lodged. The sections do not reveal the proximity of the works to the east elevation of Waterfall Cottage. The SE corner of the dwelling is less than 2m from the river so the Board will appreciate our client's legitimate concerns regarding the potential impact of the works upon his family home	We acknowledge the landowner's concerns in relation to the proximity of these essential flood relief works to their home. Potential impacts during construction including at Waterfall Cottage are assessed in the EIAR, and mitigation measures for the construction stage are included in the EIAR and Preliminary CEMP.
2.19 Other information not adequately addressed in the papers includes the following; - No details of the flood gates provided. - No details of the railing are provided - Details of the finish to the inlet to the overflow culvert under the N11. - Insufficient construction details are provided such as details of site access/egress, phasing, no information regarding works compound to implement works within our client's property or measures to safeguard the existing protected structure. 2.20 The above is not an exhaustive list, but these are significant omissions pertaining to both the short-term construction impacts and the permanent impacts of the proposed flood defence works at Waterfall Cottage.	We have provided adequate details relating to the railings, stone finishes to walls and flood gates at this stage. Considering the information sought by the landowner of Waterfall Cottage, we would request ACP consider a condition to be included as part of granted permission which requires the agreement on these finishes with the landowner prior to construction. Drawing 20108-JBB-00-XX-DR-Z-02931 highlights that all details are subject to final landowner agreement. Potential impacts on the protected structure have been considered in the EIAR Chapter 13. Details on construction were included in Chapter 3 of the EIAR, which was used in the preparation of the EIAR chapters.
2.21 Our client reiterates that these works are to be carried out within the curtilage of a protected structure. The flood gate and railings are close to the house and are important matters of architectural detail, which ought to be addressed at the earliest stage in this approval process. The elevation drawings show a 900mm high railing on the flood defence wall from CH40 to CH96 reducing slightly in height in the section terminating at the inlet. Our client favours retaining and increasing the existing wall on the west side of the river.	As per Item No.19
2.22 An Bord Pleanála cannot properly assess the impact of these works upon our client's residential properties based on the information lodged and where details on the proposed site layout conflict with the section drawings in this regard. To assist in understanding the proposed works, detailed existing and proposed sections are required	We contend sufficient information has been provided to enable ACP to make a decision on the works within the curtilage of Waterfall Cottage.
2.23 Rory Rogers is disappointed with the information provided in relation to the substantial works envisaged within the curtilage of Waterfall Cottage, a protected structure. As a minimum, the applicant should be required to provide detailed accurate drawings and information to	It is our view that the drawings submitted with the application are sufficiently detailed and accurate to fully assess potential impacts of the proposed works at Waterfall Cottage, as has been done in the EIAR.

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explain the extent of the proposed works at Flood Defence Measure 4B and 4C in the Lower Bride's Glen and N11 Crossing respectively	Drawings 20108-JBB-00-XX-DR-Z-02930 to 02932 show the proposed development at Waterfall Cottage.
3.6 It is proposed to demolish 91 cubic metres of stone walls at Lower Bride's Glen, all of it within our client's boundary. This volume is significant in the context of the entire flood relief scheme, which involves the demolition of 596 cubic metres of stone walls.	The extent of demolition required at Waterfall Cottage is not itself significant. Approx. 95 linear metres of wall will be removed to allow for the construction of the proposed flood defence wall. The table extract here is taken from Section 6 of the EIAR, which assesses potential impacts during construction with regard to dust soiling and air quality. The residual effect (i.e., including site-specific mitigation) is negligible, as noted in Section 6.1.6.
3.7 A total of 567 sq. metres of earthworks will be excavated at Lower Bride's Glen and the N11 crossing. The proposed works area at Lower Bride's Glen comprises 0.11ha. which is a significant proportion of our client's total lands shaded green on Figure 2 above.	The figures quoted formed part of the assessment of potential effects on air quality due to dust soiling. The assessment concluded that any impacts arising from this will not be significant.
3.9 EIAR Table 6.7 records that there are approx. five sensitive receivers within 20m of the site in the Lower Bride's Glen (Defence 4B). Sensitivity to Dust Soiling Effects on People and Property is classified as "High" for sensitive receivers within 50m of the site.	The referenced table is noting sensitivity to dust soiling effects. Following the implementation of site-specific mitigation measures as outlined in Section 6.1.6, the residual effect of dust soiling on such receptors is negligible, as outlined in Table 6.10 in the EIAR.
3.10 The plot occupied by Waterfall Cottage is on both sides of the river. Waterfall Cottage and its private garden are located on the west bank of the river and will be adjacent to the planned flood defences. Our client's home is therefore particularly sensitive to the construction works impact and to dust soiling effects during demolition, excavation, and construction	Noted. As noted previously, Waterfall Cottage is fully assessed in the EIAR. Potential impacts during construction works with regard to dust soiling are assessed in Chapter 6 of the EIAR.
3.11 Section 6.1.5 outlines the construction mitigation and sets out various measures under a number of headings; communications, site management, preparing and maintaining the site et al. However, this general approach to mitigation is insufficient and lacking in detail to explain how DLR will address the challenge of implementing the construction works at our client's property given the position of the house next to the river	A full suite of mitigation measures have been developed in the EIAR as a result of the impact assessment that has been carried out. These mitigation measures have been included in the preliminary CEMP, which will be developed into the Construction stage CEMP by the appointed contractor and kept as a live document throughout the construction phase. No significant residual effects have been identified in the EIAR.
3.12 It is proposed to construct 129m of reinforced concrete retaining wall from a point within the curtilage of Cherrywood Cottage through the entirety of Waterfall Cottage to the inlet at the N11 Overflow Culvert next to Rose Cottage, so [Redacted] will be exposed to the construction activities at Flood Defences 4B and 4C. In terms of noise and vibration, Waterfall Cottage will be subject to adverse impacts during the works. The extracts from Table 6.17 below indicate the predicted worst-case 1-hour construction noise levels at three distances from the works	Noted that the levels in Table 6.17 are worst-case 1-hour construction noise levels. Chapter 6 goes on to fully assess potential for noise impacts including mitigation measures and residual effects, which are judged to be not significant.

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3.13 EIAR Section 7.4 identifies Waterfall Cottage as a “principal potential receptor” and refers to the proposed flood defence measures in the vicinity of our client’s home as follows: Lower Brides Glen - Measure 4.B The proposed flood defence wall will be installed in close proximity to Waterfall Cottage which will require access to and the use of the private garden and driveway Once operational. The property will no longer be within the 1%AEP flood extent. Operational activities in the area will be passive flood protection, with periodic inspection and maintenance as required N11 Culvert - Measure 4.C A headwall will be installed at both the upstream and downstream ends of the pipeline. The upstream structure is located within the private lands of Waterfall Cottage. Although the upstream headwall will involve lands being acquired from a private landowner, these lands are currently unused with heavy overgrowth Operational activities in the area will be passive flood protection. with periodic inspection and maintenance as required. 3.14 Measure 4B recognises that the flood defence wall will be constructed close to our client’s home and states that access and the use of the private garden and driveway at Waterfall Cottage will be required. Presumably access is needed for an excavator, dump truck, and a concrete mixer as per the extract from EIAR Table 6.17 above, but details of the nature of the access and/or the duration of such access are not provided.	Access will be required at Waterfall Cottage to allow for the construction of the proposed development as outlined in Chapter 3 of the EIAR. Access requirements will be temporary, with the effect during construction expected to be slight negative and not significant, as outlined in Chapter 7 and Chapter 14 of the EIAR. The preliminary CEMP outlines the expected construction operations as part of the proposed development.
3.22 The extract below is also from EIAR Section 13.4.5 and describes the built heritage impacts on Waterfall Cottage. Built Heritage Impacts Waterfall Cottage (RPS Ref: 1770) is a thatched structure. located on the left bank of Loughlinstown River South. the property and its linear garden along the riverbank enjoys open access to the river. A low rubble stone granite-built retaining wall (CHI 1) is built into the riverbanks and there is stepped access into the river at the upstream end of the property and directly in front of the cottage (these are described in detail in the UAIA report Appendix 13.5). Waterfall House is an important surviving example of traditional thatched roof workmanship. having a functional and aesthetic relationship to Loughlinstown River South. Access to the river will be retained in the area directly in front of the cottage location. a flood gate inserted here. A photomontage the upstream view of the cottage, is provided in the LVIA Chapter 13. The images are extracted as follows in Figure 13.36 (existing view) and Figure 13.37. The construction of a c. 1m-1.5m high flood wall at Waterfall Cottage have a permanent negative visual effect and effect on the setting of the structure. However, preventing the future flooding of the structure will have a positive effect on the physical fabric of the structure.	Noted.
3.23 The assessment admits that the construction of a 1m-1.5m high flood wall (presumably height above ground level) on the west bank of the river at Waterfall Cottage will have “a permanent negative visual effect and effect (sic) on the setting of the structure.”	The paragraph immediately following the quoted one (EIAR Section 13.4.5, subsection “Built Heritage Impacts”) notes that the negative effect on setting resulting from the new wall will be slight negative, which is not significant: <i>“Waterfall Cottage (RPS 1770) and CH11 is of Medium significance (Protected Structure) the addition of a new boundary wall will have a Low magnitude of effect,</i>

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	<i>resulting in a Slight negative effect on the setting of the property."</i> (EIAR Section 13.4.5, Built Heritage Impacts)
3.24 Notwithstanding this permanent negative impact, it is considered that the prevention of future flooding will have a positive effect on the fabric of the structure. The above extract refers to the existing view in Figure 13.36 and the photomontage showing the proposed flood defence walls in Figure 13.37. These figures tend to conceal, rather than reveal, the permanent negative impact upon Waterfall Cottage for the following main reasons	We disagree with the statement that Figures 13.36 and 13.37 of the EIAR conceal an effect on Waterfall Cottage. Figures 13.36 and 13.37 form part of the LVIA Chapter 14 of the EIAR (and are reproduced in Chapter 13 Cultural Heritage for discussion purposes). The images were produced to show a photomontage view of the proposed development from the public footpath. This is in line with the methodology followed in the EIAR LVIA Chapter 14. The rationale for using the images for the photomontage is further explained in the following three rows.
3.25 First, Waterfall Cottage is barely visible in Figure 13.36 because the photograph is taken at a considerable distance and Waterfall Cottage is largely obscured by intervening vegetation and Rose Cottage in the foreground	We note that Figures 13.36 and 13.37 are reproduced from the LVIA Chapter 14 of the EIAR. The reproductions are included in Chapter 13 for discussion purposes only. The full-size versions are shown in Section 14.1 (View 4 Baseline View and View 4 As Proposed) of EIAR Volume 3 Appendices, and it is these figures which should be referred to for this discussion as they are the technically correct photomontages. The EIAR Chapter 14 LVIA's main focus is to identify if any significant impacts could arise from the proposed development and visual impacts are assessed from public locations for this purpose, such as the view from the public footpath in EIAR Volume 3 Section 14.1 View 4. The negative effect resulting from the new wall is assessed as slight negative in EIAR Section 14.3.5, which is not significant.
3.26 Second, Figure 13.37 shows the proposed inlet and the flood defence wall around Rose Cottage, and does not really show Waterfall Cottage. In fact, this chapter does not include a good picture of Waterfall Cottage, which is astonishing given its heritage significance.	It is noted that Waterfall Cottage is visible in Figures 13.36 and 13.37. Several additional images of Waterfall Cottage are included in EIAR Volume 3 (Appendices), Section 13.4, and full-size versions of the photomontage are shown in Volume 3 Section 14.1, as described in the row above. The photographs and text descriptions contained in the EIAR, in addition to site visits carried out by the authors of Chapter 13, were sufficient to assess potential impacts on Waterfall Cottage.
3.27 Third, the flood defence at Waterfall Cottage is not shown clearly enough on Figure 13.37 or on any other document in this application to reach an informed conclusion regarding the likely permanent impact upon the setting of this protected structure.	The proposed flood defence is shown in the plan view, section view, and elevation view (Drawings 20108-JBB-00-XX-DR-Z-02930 to 02932), and photomontage view (EIAR Volume 3 Section 14.1) in the application documents. These provide sufficient detail to assess the likely effect of the proposed defences once built. As stated in 14.1.1, the photomontages are verified as per Guidelines for Landscape and Visual Impact Assessment (GLVIA), as published by the Landscape Institute (UK) and the Institute of Environmental Management and Assessment (3rd Edition, 2013). This means that they accurately depict the proposed development exactly as shown in the engineering drawings. As noted above, the location of the photomontage was chosen to show the likely visual effect of the proposed defence as viewed from the public footpath.

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3.28 The conclusion in relation to cultural heritage appears based upon the flood protection, but there is no evidence of any real consideration of the impact of these works upon the built heritage at Waterfall Cottage. Nonetheless, the assessment at EIAR Section 13.4.5 concludes that the construction of a 1m-1.5m high by 129m long flood wall on the bank of the river at Waterfall Cottage will have a permanent negative visual effect on the setting of the protected structure.	The assessment takes into account all potential effects, during construction and operation including flood protection. As noted in Table 13.6 of the EIAR, the significance of effect on Waterfall Cottage pre-mitigation will be slight negative. Following the implementation of mitigation measures as outlined in Section 13.5, the residual effect will be slight positive. The assessment concludes that the proposed development will not have a significant effect on the Protected Structure.
It is proposed to permanently remove the pedestrian footbridge over the river providing access at Rose Cottage, which is a permanent negative impact on this structure. Figure 13.37 shows that the proposed flood walls will effectively "seal off" Rose Cottage thereby permanently eliminating any future development potential. The Board will note that DLR approved our client's application for a Derelict Refurbishment grant in November 2023.	The proposed scheme does not include the permanent removal of the pedestrian footbridge to Rose Cottage. The proposed flood defence walls will provide the same standard of protection to Rose Cottage as other properties included as part of the scheme. A flood gate is proposed to provide access via the existing pedestrian bridge. As noted on section 4-4 of Drawing 20108-JBB-00-XX-DR-Z-02932, the existing wooden bridge is to be retained.
3.31 The extract below identifies the cut stone bridge as an undesignated cultural heritage feature and concludes that the proposed N11 culvert will not impact on the historic bridge structure. However, the mitigation measures do not specify similar stone material and a high-quality finish to the new N11 culvert, which is disappointing.: "The UAIA records and describes the N11 culvert, which is built onto an earlier single arch barrel-vaulted cut stone bridge on the upstream site. The bridge, labelled as Loughlinstown Bridge on historic mapping is an undesignated cultural heritage structure (UAIA Ref U189, Appendix 13.5). The proposed N11 overflow culvert works will not impact on the existing historic bridge structure"	As noted by the Cultural Heritage assessment, no impacts to the historic bridge structure are expected to occur. A condition may be included as part of the granted permission if considered appropriate by ACP, which requires a similar stone material and high-quality finish to the new N11 culvert. A condition to appoint a Project Engineer who will consult on detailed design matters is expected as it has been recommended by the DAU, which will tie in with this point.
3.32 The mitigation measures at EIAR Section 13.5 do not include details of the methodology for implementing the flood defence measures within our client's lands. Specifically, there is no explanation or construction method statement to explain how the existing wall along the river at Waterfall Cottage will be removed to facilitate the construction of the proposed reinforced concrete flood defence.	The provision of a construction method statement would be premature at this stage given a contractor has not yet been appointed. The scheme drawings (Drawings 20108-JBB-00-XX-DR-Z-02930 to 02932), and photomontage view (EIAR Volume 3 Section 14.1) and the description of the development included in the EIAR Chapter 3 were sufficient to facilitate the preparation of the EIAR and carry out a full assessment of potential significant effects on the environment. No likely significant effects on any aspect of the environment as a result of the proposals at Waterfall Cottage or the N11 were identified.
3.33 These works include the removal of the existing granite stone wall, the storage of the granite for re-use, the excavation of foundations and the construction of a substantial reinforced concrete flood defence wall along the west side of the river. The construction of the flood defence wall therefore will entail heavy engineering works over an extended period within the curtilage of the Rogers's family home. The impact will be significant and negative yet this is not adequately captured in the EIAR.	No significant negative effects were identified in the EIAR, either during construction or operation, at Waterfall Cottage or the N11 overflow culvert.
3.35 Our client disputes this claim regarding "mitigation by design" at our client's property because the EIAR does not elaborate any measures to mitigate the real negative impacts upon Waterfall Cottage and our client's properties during the construction phase for the reasons set out herein.	Mitigation by design through using materials in keeping with the surrounding setting is one type of mitigation used. Specific construction-phase mitigation measures are also included in all chapters of the EIAR and in the preliminary CEMP, which will be developed as the construction stage CEMP by the appointed contractor. With mitigation measures in place, no significant effects

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	are likely to occur as a result of the development at Waterfall Cottage or the N11 culvert.
3.36 Without prejudice to our client's concerns regarding the proposed works and the serious negative construction impacts associated with these works, if the scheme is approved as is or as modified by the Board, Mr. Rogers requests the Board to attach a condition that the flood defence wall at Lower Bride's Glen is faced with granite to both sides in the interest of cultural heritage and to mitigate the permanent negative impact upon the setting of a protected structure	Noted and agreed.
3.37 EIAR Chapter 14 contains the landscape and visual impact assessment. The landscape impacts are summarised in Table 14.4 below and described at EIAR Section 14.3.3. In keeping with the general approach in the EIA, the assessment summarises the impact of the FRS project as a whole and it misses the serious localised impact upon individual properties, such as Waterfall Cottage.	The EIAR LVIA's main focus is to identify if any significant impacts could arise from the proposed development and Visual impacts are assessed from public locations for this purpose, such as the view in Figure 13.36 from the public footpath. The negative effect on setting resulting from the new wall is assessed as slight negative, which is not significant.
3.38 The extract from Table 14.5 below shows the predicted impacts of the Lower Bride's Glen Defence Measures at receptors LBG1 (Waterfall Cottage) and LBG3 (Cherrywood Cottage). The sensitivity of our client's properties is classified as "low" for the landscape assessment yet both receptors, i.e., LBG1 and LBG3 have a "high" sensitivity in respect of the visual Impact assessment.	Low refers to the landscape sensitivity as described in the landscape character assessment. High refers to the sensitivity of the residential visual receptor. These are distinct environmental factors with different sensitivity ratings.
3.39 EIAR Figure 14.16 above purports to show the visual impact of the flood defence works upon Waterfall Cottage (this figure is a replica of Figure 13.37 referenced at paras. 3.24 and 3.30. Figure 14.16 merely shows the permanent negative impact at Rose Cottage. By virtue of the distance to Waterfall Cottage, the angle at which the original photograph was taken and the intervening vegetation, Figure 14.16 is of virtually no assistance in terms of assessing the visual impact of the proposed works at Waterfall Cottage.	It should be noted that the visual impact on Waterfall Cottage is as described in EIAR Section 14.3.5, subheading LBG 1. The visual impact is assessed following the methodology outlined in Section 14.1, which combines the sensitivity of the receptor with the magnitude of the effect, as determined by the LVIA competent expert. The LVIA methodology allows for photomontages which can act as an aid to the assessment, but they are not a requirement nor the main source of determining visual effects on receptors. Figure 14.16 is a photomontage view of the proposed development as viewed from the public footpath. It is used as a visual aid to assist in the assessment of visual impacts. The EIAR LVIA's main focus is to identify if any significant impacts could arise from the proposed development and Visual impacts are assessed from public locations for this purpose, such as the view in Figure 13.36 from the public footpath. The negative effect on setting resulting from the new wall is assessed as slight negative, which is not significant.
3.40 Having regard to the extent of the proposed flood defence works within the curtilage of a protected structure and the proximity of these works to the house and rear garden, it is difficult to fathom why the application documents do not include an image showing the likely impact upon Waterfall Cottage. Ideally, the application should include imagery to enable a robust assessment of the works within the curtilage of the protected structure	The EIAR LVIA's main focus is to identify if any significant impacts could arise from the proposed development and Visual impacts are assessed from public locations for this purpose, such as the view in Figure 13.36 from the public footpath. The negative effect on setting resulting from the new wall is assessed as slight negative, which is not significant.

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	It is not a requirement of the LVIA or the Cultural Heritage assessment to prepare or present photomontage views for every visual receptor.
Notwithstanding our client's objections, and without prejudice to his concerns regarding DLR's proposals, if the Board approves the Flood Relief Scheme, we invite the Board to attach conditions along the following lines or amended conditions as the Board sees fit. • DLR shall engage a suitably qualified and experienced Conservation Architect to advise in relation to works within the curtilage of 'Waterfall Cottage,' which is a protected structure. • The proposed flood defence wall in Measures 4.B and 4.C shall be faced in granite stone on both sides. • The proposed culvert and N11 Crossing shall be faced in granite stone.	Noted and agreed. We consider aspects of the request within this observation to be considered within the current application. The current project team includes a conservation engineer who will continue to provide the relevant engineering expertise. Drawing 20108-JBB-00-XX-DR-Z-02931 allows for all finishes to walls and railings to be subject to final landowner agreement. DLRCC acknowledges the landowner's submission and a condition may be included as part of the granted permission if considered appropriate by ACP, for: • A suitably qualified and experienced Conservation Engineer to advise in relation to works within the curtilage of 'Waterfall Cottage'. • The proposed flood defence walls to be finished in granite stone on both sides. All details to be subject to final landowner agreement. • The proposed culvert and N11 Crossing shall be faced in granite stone.

1.14 Roslyn Nicholson

1.14.1 Summary of Submission

The submission provided by Roslyn Nicholson expresses the following views:

1. The proposed FRS will not give adequate protection to all residents in Bayview South, Bayview Glen and Bayview Crescent.
2. That increases in flood volume, levels, or velocity could occur on the Shanganagh River at Bayview due to proposed flood defences further upstream, and that these could lead to increases in flood risk for residents at Bayview.
3. That disturbance of the riverbank or removal of trees and roots may lead to erosion or subsidence, and that heavy rainfall, tidal influences, and climate change are all additional factors on flooding in this area.
4. Concerns around insurance issues, and that the proposed FRS should protect all residents at risk of flooding, particularly older residents or those with long-term care needs.
5. Potential cumulative effects with other developments in the area, particularly with the Dublin Array Windfarm, ACP Ref. 321992.
6. Concerns around safety, access, and landscaping of the pedestrian walkway between Bayview Lawns and Bayview Crescent.
7. Concerns around pest control.
8. Biodiversity concerns including protection of certain species and control of invasive species.
9. Suggestions to include additional walls along the road kerb at Bayview Crescent/Glen, or further to the north.

1.14.2 Applicant Response

1. The modelling carried out for the EIAR shows that these residences do not flood in the baseline scenario. As outlined in Section 3.3 of the EIAR, the proposed FRS has been designed to provide a Standard of Protection up to and including the 1% AEP flood event. Comparing the surveyed threshold levels of the properties closest to the river at Bayview Glen with the modelled peak flood levels with the

scheme in place shows the lowest house level to be 1.89m higher than the predicted peak flood level for the 1% AEP event. As a result, no formal defence is required along this reach as the existing ground and house elevations provide sufficient protection from flooding.

2. Any increases to flood level, volume and velocity as a result of the scheme being in place have been reviewed and the proposed defences adjusted to compensate for any changes. The peak modelled flood levels and velocities at this location are sufficiently lower than the minimum house level in Bayview Glen (greater than 1.50m freeboard, refer to response to comment 1) that the properties mentioned are not at risk from increased flooding from the Shanganagh River with the scheme in place and no formal defence is required along the stretch.
3. No significant increased erosion or subsidence risk has been identified in the EIAR. The location of the proposed defences, mostly set back from the riverbank, means that direct disturbance of the riverbank is not required in most areas. The closest point to the riverbank is at the railway culvert; detailed construction method statements which address stability and consultation with Iarnród Éireann will be required prior to construction starting in this area.

Limited tree removal is required in this area, which is not likely to result in significant removal of roots or disturbance of ground conditions.

Contributions of the surrounding stormwater network that discharge into the river have been incorporated into the hydraulic model to ensure flow contributions and impacts from all aspects have been considered during scheme development. No increased risk of surcharging stormwater systems was identified in the Bayview/Brookdene area as a result of the scheme and the discharge from the network has been considered within the final design. Tidal impacts were also assessed within the hydraulic model to establish whether a combined tidal-fluvial event would result in increased impact. Review of the modelling results when 1% AEP fluvial event is paired with a high tide boundary showed no significant increases in water level upstream of the DART line bridge. The overall slope of the channel at this location is such that any backwater effect from the tide is limited to the lower portion of the watercourse away from the properties mentioned. Climate change has also been considered with proposed flood levels for the Medium Range and High-End Future Scenarios (MRFS and HEFS) reviewed and flood defences added or raised as part of the scheme climate adaptation plan.

4. Insurance issues will need to be discussed between insurance providers and homeowners. The proposed FRS has been designed to provide flood protection to all residences in the scheme area, up to and including the 1% AEP flood event.
5. The FRS team and the Dublin Array Windfarm team have engaged in consultation prior to the submission of the planning application, and consultation will continue following the planning periods for both projects. The Dublin Array Windfarm was considered in the assessment of potential cumulative effects in the EIAR submitted with the FRS. It is concluded in the EIAR that no significant cumulative effects are likely to occur between the Dublin Array Windfarm and the proposed FRS.

If both projects go to construction at the same time, it is expected that the contractors for both will engage and coordinate to ensure that any impacts to residents of Bayview will be minimised, in line with the mitigation measures outlined in the EIAR. The likely cumulative effect of both projects going to construction at the same time was considered in Cumulative Effects section of each EIAR chapter, and in Chapter 16.

6. As assessed in the EIAR, a partial loss of amenity space at this location will not result in significant negative effects. A tree survey and arboricultural assessment were carried out as part of the EIAR and assessed that the loss of several trees at this location will not be significant.

While construction at this location will result in temporary negative effects in terms of public access, as per the EIAR this will not be significant, and no Public Right-of-Way is shown in this area according to the DL RCC County Development Plan 2022-2028.

Potential loss of public open space has been considered in the EIAR and has been assessed as not significant.

Access along the route between Bayview Lawns and Bayview Crescent will be maintained once the FRS is operational. The FRS includes a proposed landscape plan for this area to maintain it as an attractive access route (EIAR Figure 14.24). Note that this route is not designated as a Public Right-of-Way by DLRCC. Maintenance of this route will be the responsibility of DLRCC.

7. The appointed contractor will put in place measures to control pests during the construction phase, as outlined in the Preliminary CEMP Section 6.9.
8. The EIAR Chapter 8 included a full assessment of potential effects on biodiversity. No significant negative effects on biodiversity are likely to occur.

Potential for negative effects regarding invasive species such as Giant Hogweed was assessed in Chapter 8 of the EIAR. The residual effect, following mitigation measures including the Invasive Species Management Plan (Appendix 8.5 of the EIAR) will be imperceptible. The Invasive Species Management Plan includes specific mitigation measures for Giant Hogweed and will be put in place by the appointed contractor.

9. The properties referenced in the submission are at a level which is above the peak modelled flood levels for the 1% AEP flood event. The properties are sufficiently high such that no defences are required in this location to protect against flooding from the Shanganagh River. Combined fluvial - tidal impacts have also been considered and were found to have minimal impact on flood levels in this area due to the slope of the watercourse. Therefore, a formal defence in this location is not required as part of the scheme to provide protection.

1.15 Sandyford Park Developments One Limited

1.15.1 Summary of Submission

The submission provided by Sandyford Developments One Ltd. expresses the following views:

- The proposed FRS does not fully address the flooding risks within development along the north, northwest and west parts of the development comprising houses 84 to 92, Clon Brugh, The Wood and The Hill apartment blocks.
- The overland flow channel linking the Carysfort-Maretimo Stream and the Kilgobbin Stream has not been constructed in substantial compliance with the granted planning for the Clon Brugh development.
- It is understood why Measure 1F as set out in the document was not taken forward.
- A wall structure/culvert and garden has been constructed over and on the bank of the Carysfort-Maretimo Stream at the north point of the Clon Brugh development houses by a landowner which places 84-92 Clon Brugh at a greater flooding risk in the absence of defences already ruled out (Measure 1F).
- Amendments to the designed scheme including works to the Carysfort Maretimo Stream would address flooding issues for the entire Clon Brugh development.
- A bridge will be required to maintain a pedestrian 'right of way' that links the Clon Brugh the Dun Gaoithe Heights developments.
- The positioning of the site compound as proposed would appear to result in the loss of parking spaces and requests that a condition be inserted into the planning conditions to place an obligation on DLRCC and their Contractor to liaise with the management company in advance of the works.

1.15.2 Applicant Response

As presented by DLRCC and their Consultants at the public consultation day, cross flows from the Carysfort-Maretimo Stream spill onto areas of low-lying ground along an existing flow pathway connecting the Carysfort-Maretimo and Kilgobbin stream putting existing residential properties within the Clon Brugh estate at risk of flooding. The inclusion of these flood alleviation works at Clon Brugh aims to improve the existing situation for properties within the Clon Brugh Estate by redirecting some overspill flow from the Carysfort

Maretimo Stream into the existing swale lining to the Kilgobbin Stream. The submission notes that the reasoning for not developing Measure 1F is understood. As stated in Table 2.1 of the EIAR Measure 1F has not been brought forward as it would lead to increases in flow and levels in the Carysfort Maretimo River, which is already at flood risk.

The concerns raised within the submission are noted, however redesigning a scheme to accommodate development undertaken by others without statutory consent is not a reasonable consideration for this project not to proceed. This matter should be resolved by the regulatory authorities. The proposal put forward within the submission will not alleviate the risk of flooding from the Carysfort Maretimo Stream to the Clon Brugh Estate as suggested.

The proposed measure for the Clon Brugh estate aims to improve the existing situation until the FRS for the Carysfort Maretimo Stream can be developed. Spilled flows are to be collected as far as reasonably possible and redirected into the Kilgobbin Stream via the existing swale. The gaps within the existing walls facilitate this and realignment of the footpath facilitate this. The proposed design level of the footpath between the two walls meets the required design level at this location, thus eliminating the risk associated with flood gates. The footpath forms part of the flood defence.

A fully detailed FRS and environmental assessments will be required for the Carysfort Maretimo Stream to alleviate the flood risk to other properties, including 84 to 92 Clon Brugh, The Wood and The Hill apartment blocks.

No registered right of way exists between the Dun Gaoithe and Clon Brugh estates, however it is acknowledged by the local authority that existing access must be maintained. The design will be slightly amended to incorporate access at this location. No works are proposed to the existing pedestrian bridge.

ACP at their discretion may include as part of the granted permission a condition for agreement on the finalised site compound arrangement between the DLRCC's appointed Contractor and the management company for the Clon Brugh development.

Appendix 1: Traffic Survey

Appendix 2: Presentation to TII (Dated 13th August 2025)

Appendix 3: Constructability Assessment

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