



Review and appraisal of Environmental Impact Assessment Report Chapters for proposed amendments to previously permitted large-scale residential development at Temple Hill and Temple Road, Monkstown, Blackrock, Co. Dublin.

P28-050 EIAR Review - LAND, SOILS, GEOLOGY and HYDROGEOLOGY		
Heading	Summary of Evaluation	Conclusions / Recommendations
Competency	This chapter has been completed by Liana Rocha (Beng MSc) and Marcelo Allende (BSc BEng) of AWN.	The assessment been prepared by competent experts with an appropriate level and scope of experience.
Receiving Environment	The Proposed Development site is located at Temple Hill, Temple Road, Monkstown, Blackrock, Co. Dublin and covers an area of approximately 4.56 hectares. The Proposed Development is bounded to the north by the N31 national road, while to the west and southeast the site is bounded by existing residential properties. Rockfield Park playing pitches are located to the south of the Proposed Development. A description of the existing land use and site history has been provided. The site is currently a greenfield area, partially vegetated in places, with a convent building occupying a portion of the site. There are no EPA licenced facilities within the site boundary or adjacent to the Proposed Development, with the closest licenced site approximately 2.5km south of site. Two preliminary site investigations have been carried out at the site by Ground Investigations Ireland Limited, in December 2018 and November 2020. A summary of these investigations is provided. The surveys indicated a consistent sequence of strata encountered across the site, including topsoil, made ground, cohesive deposits, granular deposits and bedrock (2.10 mBGL to 8.0 mBGL). The locatiouns of the site investigation exploratory points are presented in figure 7.7 and the site investigation reports are included in Appendix L of the Engineering Services Report. The GSI/Teagasc (2025) mapping indicates the presence of three soil types across the site, identified as made ground, mineral poorly drained (mainly basic) – BminPD and deep well drained mineral (mainly basic) - BminDW. According to GSI (2025), the quaternary sediments in the area of the subject site indicate that the principal subsoil type comprises Limestone till Carboniferous (TL); i.e. Till derived from limestones), which is a low-permeability cohesive deposit, as shown in Figure 7.8. This is consistent with the findings of the site investigations. The Geological Survey of Ireland (GSI, 2025) identifies the bedrock underlying the proposed site and its surrounding area as comprising of the Type 2p microcline porphyritic (New Code: IDNLGRP; Stratigraphic Code: NT2p), part of the Caledonian System, which consists mainly of granite with microcline phenocrysts. According to the Geological Survey of Ireland (GSI, 2025) the proposed site development does not lie within or is in close proximity to any Geological Heritage Sites. The nearest site is Backrock Breccia (Site Code: DLR003) located c. 630m north of the site. According to the GSI mineral database, 8 mineral sites are identified within a 5 km radius of the proposed site, with the closest 2.2km southwest of the site. No karst landforms have been identified within the site boundary or in the vicinity of the Proposed Development. Based on the GSI spatial map viewer, the landslide susceptibility classification within the site boundary is 'Low' (GSI, 2025). Due to the local topography and the underlying strata, there is a negligible risk of a landslide event occurring at the site. The Proposed Development is within the 'Kilcullen' groundwater body (GWB) (European Code: IE_EA_G_003) and is classified as 'Poorly productive bedrock'. According to GSI (2025), the bedrock aquifer underlying the site is classified as a Poor Aquifer (PI), i.e. Bedrock which is Generally Unproductive except for Local Zones. The potential for vertical or horizontal migration within this type of aquifer is poor as fractures will be disconnected. As such the aquifer is not a significant pathway for off-site migration. According to GSI regional mapping, the majority of the subject site has a 'High' groundwater vulnerability rating, corresponding to a general overburden depth potential of 3-5 m, while a western portion of the site is classified as 'Moderate', corresponding to an overburden depth potential of 5-10 m, as shown in Figure 7.12. Historical site investigations (GII, 2019; GII, 2020) recorded depths to bedrock ranging from 2.1 mBGL to 8.0 mBGL, which is consistent with the classification of aquifer vulnerability ranging from 'High' to 'Moderate' across the area. There is no. 1 registered well within a 3km radius of the Development site. This well is located c. 2.0km southwest of the proposed development site, within Foxrock Townland, Co. Dublin. In terms of groundwater quality, presently, the Kilcullen GWB has a WFD status of "Good" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "At Risk" of not achieving good status. There are no identified Groundwater-dependent terrestrial ecosystems in the vicinity of the Proposed Development. Based on the TII methodology (2009), the importance of the hydrogeological features at this site is rated as 'Low', based on the assessment that the attribute has a low-quality significance or value on a local scale, given that the bedrock aquifer underlying the site is classified as a Poor Bedrock Aquifer. Additionally, there are no recorded Public Supply Source Protection Area or Group Scheme Preliminary Source Protection Areas in the vicinity of the Proposed Development site. Based on the NRA/TII methodology, the criteria for rating the importance of geological features, the importance of the soil feature at this site is rated as 'Low' Importance based on the assessment that the attribute has a low quality, significance or value on a local scale. AWN have developed a conceptual site model (CSM) in order to identify any likely Source-Pathway-Receptor linkages relating to the site and the Proposed Development. A Hydrogeological cross section has been prepared to support the conceptual understanding of the conditions within the study area in relation to its interaction with the identified surface water bodies and is presented in .	Satisfactory. An adequate description and characterisation of the baseline land, soils, geology and hydrogeology environment has been provided.
Impact Assessment	The characteristics of the proposed development have been described and the potential impacts associated with the proposed development have been identified. Demolition To facilitate the development, demolition works were required under the parent permission. Demolition works are limited to surface-level activities which do not involve any excavation works. As a result, the impact on the land, soils and hydrogeology is minimal. Construction The potential impacts on Land, Soils and Geology have been outlined. The excavation of topsoil and subsoil will be required to facilitate construction of foundations, basements, installation of underground services and for levelling of the site. Local removal and reinstatement (including infilling) of soil within the development area will increase the aquifer vulnerability during construction prior to paving and installation of stormwater drainage and services. Capping of significant areas of the site by hardstand/building following construction and installation of drainage will minimize the potential for contamination of the aquifer beneath the site. In the absence of mitigation measures the potential impacts during the construction phase on land, soils and geology are negative, significant and short-term. There is potential for run-off water to become contaminated with pollutants released during construction activity. If not mitigated, contaminated water can pose a temporary risk to the underlying 'Poor Aquifer' i.e. Kilcullen groundwater body (GWB) associated with suspended solids, excavations/soil stripping, cement/concrete, hydrocarbons and chemicals. There are no potential impacts from wastewater on the hydrogeological environment as this will be discharged of appropriately. In the absence of mitigation measures, the potential impacts during the construction phase on groundwater quality are negative, slight and short term. Surface water runoff during the construction phase may contain increased silt levels or become polluted from construction activities. Runoff containing large amounts of silt can cause damage to surface water systems and receiving watercourses. Silt water can arise from dewatering excavations, exposed ground, stockpiles and access roads. There are no groundwater abstractions proposed, therefore no potential impacts on the existing groundwater regime. There are no proposed permanent diversions of any waterbodies as part of the Proposed Development. In the absence of mitigation measures the potential impacts during the construction phase on groundwater quantity and flow are negative, slight and short term. There is a potential of accidental discharges during the construction phase. However, these are temporary short-lived events that will not impact on the status of the Kilcullen groundwater body (GWB) in the long term. As such the Proposed Development will not cause any significant deterioration or change in groundwater quality status or prevent attainment, or potential to achieve the WFD objectives. In the absence of mitigation measures the potential impacts during the construction phase on the Water Framework Directive (WFD) status due to changes to the hydrogeological environment are negative, slight and short term. A reduction in soil quality via unmitigated pollutants entering the soil has the potential to lead to negative impacts on human health and populations. Given the historical and current use of the land—primarily greenfield—it is unlikely that hazardous waste or soil contamination is present within the site or surrounding areas. In the absence of mitigation measures the potential impacts during the construction phase on land, soils and geology are negative, significant and short term.	The chapter does not assess the potential impact to bedrock from the proposed piled foundations. The CEMP states "piling / coring through rock may be required to allow excavation of the basements in the strata above the rock in accordance with the proposed design."
	Operational There will be no requirement for excavation of made ground, subsoil and rock during the operational phase. The majority of the site will be capped by hardstand/building during construction and installation of drainage will minimize the potential for contamination of the aquifer beneath the site during the operational phase. Therefore, on this basis in the absence of mitigation measures the potential impacts during the operational phase on land, soils and geology due to the potential for contamination of soils are neutral, imperceptible and long term. Surface water runoff from roads, car parking, and hardstanding areas, can potentially contain minor levels of contaminants such as hydrocarbons from trafficked areas. The surface water runoff during the operational phase will more likely impact stormwater drainage, rather than directly impact the Kilcullen groundwater body (GWB) underlying the site, due to the hardstand and drainage infrastructure proposed. The surface water drainage strategy includes the Proposed Development to be served by a SuDS that is to be integrated with the developments landscaping features and is typically to comprise a combination of multiple measures. Any surface water flows from the Proposed Development will be directed to underground attenuation system of the Proposed Development which discharge to the to the existing public sewer. In the absence of mitigation measures (or design measures) the potential impacts during the operational phase on groundwater quality are negative, significant and short term. The proposed incorporation of hardstand area and the use of SuDS design measures will have a minor effect on local recharge to ground and has the potential to result in increased run-off from the site if not adequately mitigated. However, the impact on the overall groundwater regime will be insignificant considering the site area is underlying by a "Poor" Aquifer (PI), which is relatively unproductive and will have no significant impact groundwater levels. The design of the Proposed Development and drainage infrastructure proposed will ensure that the run-off rate is restricted to greenfield run-off and includes the implementation of SuDS and an underground attenuation system. The design includes for a 100-year plus climate change allowance and discharge surface water to the downstream network at an appropriately determined rate. There are no groundwater abstractions proposed, therefore no potential impacts on the quantity of groundwater. In the absence of mitigation measures (or design measures) the potential impacts during the operational phase on groundwater flow and quantity are negative, slight, and short-term. There is no sensitive economic, or historical geology at the site. During the operational phase of the Proposed Development there is no potential for impact on human health and populations due to changes in land, soil, and geology. Therefore, on this basis in the absence of mitigation measures the potential impacts during the operational phase on human health and populations due to the potential for contamination of soils are neutral, imperceptible and long term.	



Figure 7.7 – Historical Site Investigation points

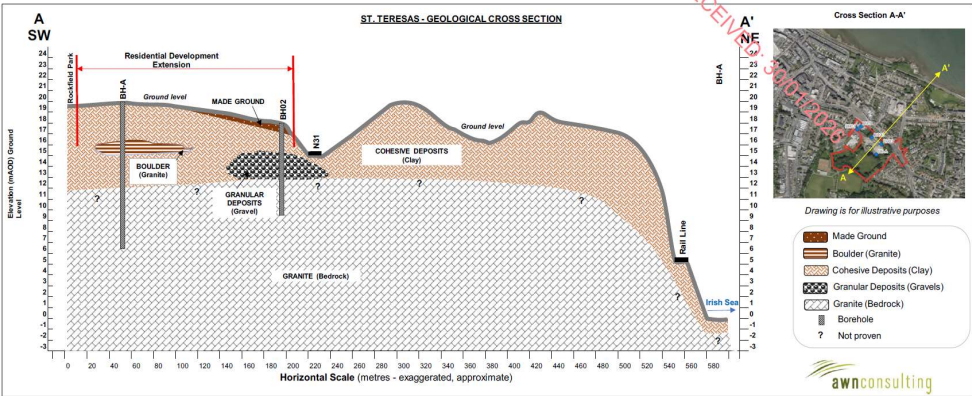


Figure 7.14 - Hydrogeological cross section A-A'

Mitigation	During the demolition works all waste materials will be dealt with in accordance with regional and national legislation. Time and resources will be dedicated to ensuring efficient waste management practices and waste arisings will be taken to suitably registered / permitted / licenced waste facilities for processing and segregation, reuse, recycling, recovery, and / or disposal, as appropriate. In order to reduce impacts on the land, soils, geological and hydrogeological environment, a number of mitigation measures will be adopted as part of the construction works on site. The measures will address the main activities of potential impact which include: • Control of soil excavation and export from site. The effects of soil stripping and stockpiling will be mitigated through the implementation of an appropriate earthworks handling protocol during construction. Dust suppression measures (e.g. damping down during dry periods), vehicle wheel washes, road sweeping, and general housekeeping will ensure that the surrounding environment are free of nuisance dust and dirt on roads. • Sources of fill and aggregates for the Proposed Development. All imported fill and aggregate that may be required for the Proposed Development will be sourced from reputable suppliers. All suppliers will be vetted for: Aggregate compliance certificates/declarations of conformity for the classes of material specified for the Proposed Development; Environmental Management status; and regulatory and Legal Compliance status of the Company. • Fuel and chemical handling, transport and storage measures, including, where feasible all ready-mixed concrete will be brought to site by truck. No wash-down or wash-out of ready-mix concrete vehicles during the construction works will be carried out at the site within any riparian or buffer zone. The construction contractor will be required to implement emergency response procedures, and these will be in line with industry guidance. Relevant personnel working on the site will be suitably trained in the implementation of the procedures. Designation of bunded refuelling areas on the site, provision of spill kit facilities across the site and measures for mobile bowsters. During the operational phase, mitigation measures have been specified including aemergency response and operating procedures. The design has taken account of the potential impacts of the development on groundwater quality; measures have been incorporated in the design to mitigate these potential impacts. To mitigate potential contamination from surface water runoff, which may originate from roads and hardstanding areas, a sustainable drainage system (SuDS) will be implemented. This system is designed to minimize the risk of contaminants, such as hydrocarbons, entering the stormwater drainage network and subsequently impacting the Kicullen groundwater body GWB underlying the site. The surface water drainage strategy integrates various measures, including attenuation tanks, intensive and extensive green roofs, permeable paving and dry swales/infiltration trench. These features will effectively manage surface water flows, directing them to attenuation tanks to maximize their storage potential. Flow control devices will be installed at the outlet pipes of each attenuation storage tanks to ensure that surface water runoff is stored efficiently before entering the receiving environment. The proposed incorporation of hardstand areas and SuDS design measures may slightly reduce local groundwater recharge and increase runoff if not properly managed, potentially causing flooding and affecting downstream environments. However, the overall impact on the groundwater regime is expected to be insignificant due to the site's small area relative to the total aquifer, and construction will avoid areas with localized flooding to mitigate flood risks. To mitigate these risks, the design of the development and its drainage infrastructure will ensure that runoff rates are restricted to those of greenfield conditions. The development will incorporate SuDS and an underground attenuation system, with a design that up to and including the 100-year plus climate change allowance and discharge surface water to the downstream network at an appropriately determined rate. Surface water management and mitigation measure are discussed in further detail in Chapter 8 (Hydrology). Furthermore, there are no proposed groundwater abstractions, eliminating potential impacts on the quantity of groundwater resources.	The proposed mitigation measures outlined are considered satisfactory. A number of the Chapter 7 mitigation measures have not been included in outline CEMP. It is recommended that this is addressed through appropriate Planning Conditions.
Residual impacts	Demolition During demolition, the predicted effect on the land, soils, geological and hydrogeological environment will be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the geological and hydrogeological related attributes, the magnitude of impact is considered negligible. Construction During construction, the residual effect on the soils and bedrock during the construction phase is considered to be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the geological related attributes, the magnitude of impact is considered negligible. The residual effect on groundwater quality during the construction phase is considered to be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the hydrogeological related attributes, the magnitude of impact is considered negligible. The residual effect on groundwater flow and quantity during the construction phase is considered to be neutral, imperceptible and short-term. Following the TII criteria (refer to Appendix 7.1) for rating the magnitude and significance of impacts on the hydrogeological related attributes, the magnitude of impact is considered negligible. The residual effect on the soils and bedrock during the construction phase is considered to be neutral, imperceptible and short-term. Operational The residual effect on the soils and geology during the operational phase is considered to be neutral, imperceptible and long-term. Following the TII criteria for rating the magnitude and significance of impacts on the geological related attributes, the magnitude of impact is considered negligible. The residual effect on groundwater quality during the operational phase is considered to be neutral, imperceptible and long-term. Following the TII criteria for rating the magnitude and significance of impacts on the hydrogeological related attributes, the magnitude of impact is considered negligible. The residual effect on groundwater flow and quantity during the operational phase is considered to be neutral, imperceptible and long-term. Following the TII criteria for rating the magnitude and significance of impacts on the hydrogeological related attributes, the magnitude of impact is considered negligible. The residual effect on human health and populations during the operational phase is considered to be neutral, imperceptible and long term.	Satisfactory.
Cumulative	The cumulative impact of the proposed development with relevant other planned or permitted developments have been considered. There are existing residential and commercial developments close by, along with the multiple permissions remaining in place in the area. Multiple developments in the area could potentially be developed concurrently or overlap during the demolition, construction and operational phases. There will be no effects on land, soils, geology and hydrogeology as each development will adhere to their own CEMP and mitigation plan. There is no pathway and connectivity to land, soils and geology to each development. During demolition, The implementation of mitigation measures outlined in Section 7.8.1 will ensure the residual effect on the land, soils, geology and hydrogeology environment during the demolition phase is likely to be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the geological and hydrogeological related attributes, the magnitude of impact is considered negligible. During construction, the implementation of mitigation and monitoring measures detailed in this EIA Report as well as the compliance of the above permitted and planned developments with their respective planning conditions, will ensure there will be minimal cumulative potential for change to the soil and water environment during the construction phase of the Proposed Development. The cumulative impact of the Proposed Development in combination with other planned or permitted developments on the land, soils, geological and hydrogeological environment environment can therefore be considered to be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the geological and hydrogeological related attributes, the magnitude of impact is considered negligible. During the operational phase, the implementation of design and mitigation measures detailed in Section 7.8.3 as well as the compliance of the Proposed Development and permitted development with their respective planning conditions, will ensure there will be minimal cumulative potential effects on the land, soils, geological and hydrogeological environment during the operational phase of the Proposed Development. The residual cumulative impact of the Proposed Development in combination with other planned or permitted developments can therefore be considered to be neutral, imperceptible and long-term. Following the TII criteria (Appendix 7.1) for rating the magnitude and significance of impacts on the geological and hydrogeological attributes, the magnitude of impact is considered negligible.	Satisfactory.
Satisfactory?	No	
Compliance with Planning Policy and Environmental Legislation	No	
Deficiencies Identified	The potential impact from the proposed piled foundations has not been assessed.	
Suggested Request for Further Information	The chapter does not assess the potential impact to bedrock from the proposed piled foundations. The CEMP states "piling / coring through rock may be required to allow excavation of the basements in the strata above the rock in accordance with the proposed design." The potential impact to land, soils, geology and hydrogeology from the proposed piled foundations should be assessed and associated mitigation measures should be specified, if required.	
Recommended Planning Conditions	Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit an updated, detailed Construction Environmental Management Plan (CEMP) for the written agreement of the planning authority. The CEMP shall incorporate as a minimum details for the following: collection and management of construction waste, surface water run-off from the site, management of noise emissions and all environmental management measures to be implemented during construction. A dedicated process for recording all complaints and mitigation measures implemented shall be defined in the CEMP. A record of daily checks that the construction works are being undertaken in accordance with the CEMP shall be kept at the construction site office for inspection by the planning authority. The agreed CEMP shall be implemented in full in the carrying out of the development. REASON: In the interest of landscape and environmental protection, residential amenities, and public health and safety. All materials to be removed from the development site shall be tested in accordance with the relevant environmental standard to determine the appropriate offsite reuse or disposal options. This includes analyses to enable the classification of the material as hazardous or non-hazardous. The results of such testing shall be provided to the Local Authority. REASON: In the interest of good material/waste management. All groundwater which is subject to dewatering, and which is proposed to be discharged to the receiving environment shall be tested prior to discharge to ensure it does not contain concentrations of polluting material that results in it exceeding relevant environmental quality standards. The results of such testing shall be provided to the Local Authority. It is noted that in such instances the Applicant is separately required to apply for a discharge licence from the Local Authority and no discharge shall occur without same. REASON: In order to protect water quality.	

P26-050 EIAR Review - HYDROLOGY		
Heading	Summary of Evaluation	Conclusions / Recommendations
Competency	This chapter has been completed by Liana Rocha (Beng MSc) and Marcelo Allende (BSc BEng) of AWN.	The assessment been prepared by competent experts with an appropriate level and scope of experience.
Receiving Environment	A site description has been provided. The Proposed Development site is located at Temple Hill, Temple Road, Monkstown, Blackrock, Co. Dublin and covers an area of approximately 4.56 hectares. The Proposed Development is bounded to the north by the N31 national road, while to the west and southeast the site is bounded by existing residential properties. The Rockfield Park playing pitches are located to the south of the Proposed Development. The site is currently a partially vegetated greenfield, with a convent building occupying a portion of the site. The hydrological environment has been characterised. The Proposed Development site lies within the Liffey and Dublin Bay (Catchment 9), and the Dodder_SC_010 (WFD Sub-catchment 09-16). According to the most recent EPA online mapping, the nearest surface water body is the Carysfort-Maretime Stream (European Code: IE_EA_09B130400, also known as Brewery Stream), which flows along the northwestern boundary of the Proposed Development towards the Dublin Bay Coastal Water Body (European Code: IE_EA_090_0000), located c. 300m north of the Proposed Development, which hosts SAC, SPA and NHA habitats. The Carysfort Maretime Stream rises to the southwest of Sandyford Village. It flows in a north easterly direction through the Sandyford Business District and Stillorgan before discharging into Dublin Bay at Blackrock. The nearest Natura 2000 Sites is the South Dublin Bay and River Tolka Estuary SAC (NPWS code Site Code 004024) which is located c. 300m to the north of the Proposed Development within the Dublin Bay Coastal Water Body. Dublin Bay hosts a number of bathing areas protected by the bathing water directive 2006/7. The nearest swimming location is Seapoint, located c. 700m east in the Dublin Bay Coastal Water Body. A review of the EPA bathing status data for the last four years, shows that current EPA (2025) Bathing Water Quality report has classified nearby Seapoint as 'Excellent' for the last four years 2021-2024. Regarding surface water quality, the Carysfort-Maretime Stream is part of the Brewery Stream_010 WFD River Waterbody. According to EPA (2025), this waterbody has a WFD status (2019-2024) of 'Poor' and a WFD risk score at 'Review'. This 'Poor' status assigned to the Carysfort-Maretime Stream is due to its poor ecological status or potential and moderate phosphorous conditions. However, it should be noted that this status was estimated using modelling techniques (i.e., without water quality data, as there are no EPA water quality stations on this waterbody) and therefore, its confidence is 'medium' according to the EPA. The Dublin Bay Coastal Water Body has a WFD status (2019-2024) of 'Good' and a WFD risk score of 'Not at risk' of not achieving good status, which means there have been no breaches of the EPA's threshold values for nutrient enrichment, accelerated plant growth, or disturbance of the level of dissolved oxygen normally present. A review of Environmental Sensitivity Mapping online maps that includes the Register of Protected Areas (RPA) under the Water Framework Directive (WFD) has shown that there are no Recreational Waters, Bathing Waterbodies, or Surface Water Drinking RPA, within the Proposed Development or located near the Carysfort-Maretime Stream. The nearest Recreational Waters, Bathing Waterbodies, or Surface Water Drinking RPA to the proposed development is Seapoint (Bathing Waters ID: IEEABWC090_0000_0100) located c. 700m east in the Dublin Bay Coastal Water Body. Based on the EPA, Seapoint is classified as achieving Excellent Water Quality in 2024 based on the assessment of bacteriological results for the period 2021 to 2024. A review of the Environmental Protection Agency (EPA) online mapping, which includes the Register of Protected Areas (RPA) established under the Water Framework Directive (WFD), indicates that there are no Nutrient Sensitive Area within the proposed development. There are no existing water or wastewater utilities located within the boundary of the Proposed Development site or in its immediate surrounding area. A Flood Risk Assessment was undertaken by JBA Consulting for the Proposed Development to assess the potential flood risk associated with the Carysfort-Maretime Stream. There is 1 no. recorded past flood events along Temple Road, adjacent to the site's north-eastern boundary. The proposals comprise amendments to the permitted SHD (ABP-303804-19), all of which are located within Flood Zone C. The proposed alterations do not extend into Flood Zone A/B, do not alter the mapped Flood Zone A/B extents, and are not predicted to be impacted by extreme flood events. Based on the assessment, design approach, and proposed mitigation measures, the development is considered consistent with the core principles of the Planning Guidelines and the relevant objectives of the DLR Development Plan 2022–2028. The European sites and pNHA in closest proximity to the Proposed Development are as follows: • South Dublin Bay and River Tolka Estuary SAC (Site Code 004024) c. 300m north. • South Dublin Bay pNHA (Site Code 000210) c. 300m north The nearest Natura 2000 Site is South Dublin Bay and River Tolka Estuary SAC located c. 300m north of the proposed development. The development site has an 'indirect' hydrological connection with this SAC, as the public stormwater sewer discharges into the Carysfort-Maretime Stream that flows along the northwestern boundary of the Proposed Development.	Satisfactory. An adequate description and characterisation of the receiving hydrological environment has been provided.
Impact Assessment	An analysis of the potential impacts of the Proposed Development on the hydrological environment during demolition, construction and operation has been outlined. Demolition The likelihood of significant effects on the hydrology during the demolition phase was minimal due to the demolition works of the permitted development being limited to surface-level activities and do not involve any excavation works. The absence of excavation works also means that there will be no disturbance to the natural soil structure, thus preventing potential soil erosion or compaction and increased run-off rates. Overall, the surface-level of remaining demolition works will have a negligible impact on the hydrological environment, preserving their integrity and minimizing any potential environmental consequences. In the absence of mitigation, the effect on hydrology is likely to be neutral, imperceptible and short-term. Construction Regarding potential impacts on surface water quality, there is potential for run-off water to become contaminated with pollutants released during construction activity. If not mitigated, contaminated water can pose a temporary risk to the Carysfort-Maretime Stream, which discharges to the Dublin Bay Coastal Water Body and the underlying 'Poor Aquifer' i.e. Kilcullen groundwater body (GWB). During construction of the development, the potential of contamination is associated with sources including: • Suspended solids (muddy water with increased turbidity (measure of the degree to which the water loses its transparency due to the presence of suspended particulates)) – arising from excavation and ground disturbance; • Excavations/ top and sub soil stripping- Increase sediment run off (erosion during rainfall periods), Pollutant mobilisation (heavy metal runoff), Loss of vegetation; • Cement/concrete (increase turbidity and pH) – arising from construction materials; • Hydrocarbons and other construction chemicals (ecotoxic) – accidental spillages from construction plant or onsite storage; • Wastewater (nutrient and microbial rich) – arising from accidental discharge from on-site toilets and washrooms. Construction phase sewerage may initially need to be contained in a tank and taken off site by tanker for disposal at a licensed waste management facility, before connection to the sewer line can be made. There are no potential impacts from wastewater on the hydrological environment as this will be discharged of appropriately. In the absence of mitigation measures, the potential impacts during the construction phase on surface water quality are negative, slight and short term. Regarding surface water flow and quality, surface water runoff during the construction phase may contain increased silt levels or become polluted from construction activities. Runoff containing large amounts of silt can cause damage to surface water systems and receiving watercourses. Silt water can arise from dewatering excavations, exposed ground, stockpiles and access roads. The potential impact of this is a possible increase in surface water run-off along with sediment loading, which could potentially impact local drainage if not adequately mitigated. There are no surface water abstractions proposed, therefore no potential impacts on the existing surface water regime. There are no proposed permanent diversions of any waterbodies as part of the Proposed Development. In the absence of mitigation measures the potential impacts during the construction phase on surface water quantity and flow are negative, slight and short term. As noted above, there is a potential of accidental discharges during the construction phase. In the absence of mitigation measures the potential impacts during the construction phase on the Water Framework Directive (WFD) status due to changes in the hydrological environment are negative, slight and short term. Operational There is an indirect hydrological connection, to the Carysfort-Maretime Stream and Dublin Bay Coastal Water Body during the construction and operational phase. Surface water runoff from roads, car parking, and hardstanding areas, can potentially contain minor levels of contaminants such as hydrocarbons from trafficked areas. The surface water runoff during the operational phase will more likely impact stormwater drainage, rather than directly impact the water bodies i.e. Carysfort-Maretime Stream, Dublin Bay Coastal Water Body and the Kilcullen groundwater body (GWB) underlying the site, due to the hardstand and drainage infrastructure proposed. In the absence of mitigation measures (or design measures) the potential impacts during the operational phase on surface water and groundwater quality are negative, significant and short term. An increase in surface water runoff can have an adverse effect on the hydrological regime of downstream environments via flooding and inundation to downstream properties. The proposed landscaping and overall development does not increase flood risk to areas downstream. Overall, the proposed development complies with national planning guidelines and the objectives of the Dún Laoghaire–Rathdown Development Plan 2022–2028. In the absence of mitigation measures (or design measures) the potential impacts during the operational phase on surface water flow and quantity are negative, slight, and short-term. All foul water generated on the Proposed Development will be directed to gravity flow systems into the existing public wastewater sewers. The wastewater would be conveyed to Ringsend Wastewater Treatment Plant (WWTP) (D0024) for full treatment. Following treatment, the final effluent will be discharged into South Dublin Bay coastal waterbody. According to its 2023 Annual Environmental Report (AER), Ringsend WWTP currently has adequate operational capacity to accommodate the additional flows generated by the proposed development. Therefore, no potential impacts are anticipated on Carysfort-Maretime Stream, Dublin Bay Coastal Water Body and the Kilcullen groundwater body (GWB) underlying the site. The potential impacts on Natura 2000 sites located downstream of the Proposed Development site are further explained in Chapter 6 (Biodiversity). On the basis of the design and characteristics of the Proposed Development, in the absence of mitigation measures (or design measures) the potential impacts during the operational phase on the foul water network, Carysfort-Maretime Stream, Dublin Bay Coastal Water Body and the Kilcullen groundwater body (GWB) from the proposed foul water drainage are negative, significant and short-term	Satisfactory. The assessment of potential impacts on hydrology is considered adequate.
Mitigation	Demolition Overall, no mitigation measures are required during the remaining demolition phase in relation to hydrology due to the surface level nature of the works. The surface-level demolition works will have a negligible impact on hydrology, preserving their integrity and minimizing any potential environmental consequences. Construction The CEMP sets out the proposed procedures and operations to be utilised on the proposed construction site to protect water quality. In order to manage the potential impact associated with sediment and sediment runoff the following mitigation measures will be implemented during the construction phase: • During earthworks and excavation works care will be taken to ensure that exposed soil surfaces are stable to minimise erosion. All exposed soil surfaces will be within the excavation site which limits the potential for any offsite impacts. • Silt reduction measures on site will include a combination of silt traps and hydrobrakes measures. • Any hard surface site roads will be swept to remove mud and aggregate materials from their surface while any unsurfaced roads shall be restricted to essential site traffic only. • Aggregate materials such as sands and gravels will be stored in clearly marked receptacles within a secure compound area to prevent contamination. • Movement of material will be minimised to reduce the degradation of soil structure and generation of dust. • Excavations will remain open for as little time as possible before the placement of fill. This will help to minimise the potential for water ingress into excavations. • Weather conditions will be considered when planning construction activities to minimise the risk of run-off from the site. Where feasible all ready-mixed concrete will be brought to site by truck. A suitable risk assessment for wet concreting will be completed prior to works being carried out which will include measures to prevent discharge of alkaline wastewaters or contaminated storm water to the underlying subsoil and aquifer. Wash-outs will only be allowed to take place in designated areas with an impervious surface where all wash water is contained and removed from site by road tanker. The construction contractor will be required to implement emergency response procedures, and these will be in line with industry guidance. Relevant personnel working on the site will be suitably trained in the implementation of the procedures. In order to prevent any spillages to ground of fuels and other construction chemicals and prevent any resulting to surface water (and groundwater) systems: • Designation of bunded refuelling areas on the site; • Provision of spill kit facilities across the site; • Locks, spill kits and drip trays where mobile fuel bowers are used. All excavated materials will be visually assessed by suitably qualified persons for signs of possible contamination. Should it be determined that any of the soil excavated is contaminated, this will be segregated and appropriately disposed of by a suitably permitted/licensed waste disposal contractor. Refuelling of construction vehicles and the addition of hydraulic oils or lubricants to vehicles will take place in designated bunded refuelling areas. The construction contractor will be required to implement emergency response procedures, and these will be in line with industry guidance. All personnel working on the site will be suitably trained in the implementation of the procedures. Foul water from the offices and welfare facilities on the site will discharge into the existing foul sewer on site, however, it may initially need be collected by a licensed waste sewerage	The proposed mitigation measures outlined are generally considered satisfactory. However, a number of the Chapter 8 mitigation measures have not been included in outline CEMP. It is recommended that this is addressed through an appropriate Planning Condition.
	Surface water discharge from the site will be managed and controlled for the duration of the construction works until the surface water drainage system of the Proposed Development is complete. The construction contractor will be required to manage suspended solids during the construction phase and will be permitted to discharge treated construction water to the established stormwater network. The construction activities will require surface water management to prevent pollution and degradation of habitats from a chemical spill or run off containing excessive suspended solids that complies with guidelines and best practices such as “Control of Water Pollution from Construction Sites and Guidance for Consultants and Contractors” (CIRIA 532, 2001).	
Residual Impacts	Demolition Overall, the surface-level demolition works will have a negligible impact on the hydrological environment, preserving their integrity and minimizing any potential environmental consequences. The implementation of mitigation measures outlined in Section 8.8.1 will ensure the residual effect on the hydrological environment during the demolition phase is likely to be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the hydrological related attributes, the magnitude of impact is considered negligible. Construction The implementation of the mitigation measures detailed in Section 8.8.1, will ensure that the potential impacts on surface water quality during the construction phase are adequately mitigated. There will be no change to overall flow and quality within the hydrological regime as a result of construction. The residual effect on surface water quality during the construction phase is considered to be neutral, imperceptible and short-term. The implementation of the mitigation measures detailed in Section 8.8.1, will ensure that the potential impacts on surface water flow and quantity during the construction phase are adequately mitigated. There will be no change to overall flow and quality within the hydrological regime as a result of construction. The residual effect on surface water flow and quantity during the construction phase is considered to be neutral, imperceptible and short-term. Operational The implementation of the mitigation measures detailed in Section 8.8.2, will ensure that the potential impacts on surface water quality once the Proposed Development is constructed and operational are adequately mitigated. The residual effect on surface water quality during the operational phase is considered to be neutral, imperceptible and short-term. The implementation of the mitigation measures detailed in Section 8.8.2, will ensure that the potential impacts on surface water flow and quantity once the Proposed Development is constructed and operational are adequately mitigated. The residual effect on surface water flow and quantity during the operational phase is considered to be neutral, imperceptible and short-term.	Satisfactory.

Cumulative	The cumulative impact of the proposed development with relevant other planned or permitted developments have been considered. Existing developments that are already built and in operation contribute to the characterisation of the baseline environment. As such any further environmental impacts that the proposed development may have in addition to these already constructed and operational developments has been assessed in the preceding sections of this chapter. Permitted developments have been listed. Neither the development proposed, nor any other developments will give rise to any significant impacts on water receptors and there are no predicted cumulative impacts in relation to water receptors in terms of water quality and flow, as a result of the proposed development in combination with existing / proposed plans or projects. Demolition The implementation of mitigation measures outlined in Section 8.8.1 will ensure the residual effect on the hydrological environment during the demolition phase is likely to be short-term, imperceptible and neutral. Following the TII criteria for rating the magnitude and significance of impacts on the hydrological related attributes, the magnitude of impact is considered negligible. Construction In relation to the potential cumulative impact on the water environment during the construction phases, the construction works which would have potential cumulative impacts are sediment compaction and contamination of receiving waters (surface water drainage) from accidental spillage and leakage from oil storage on site, construction traffic, alkaline runoff from cementing work. The implementation of mitigation and monitoring measures detailed here as well as the compliance of the above permitted and planned developments with their respective planning conditions, will ensure there will be minimal cumulative potential for change to the water environment during the construction phase of the Proposed Development. The cumulative impact of the Proposed Development in combination with other planned or permitted developments on the hydrological environment can therefore be considered to be neutral, imperceptible and short-term. Following the TII criteria for rating the magnitude and significance of impacts on the hydrological related attributes, the magnitude of impact is considered negligible. Operational In relation to the potential cumulative impact on the water environment during the operational phases, the operational activities which would have potential cumulative impacts are from increased hard standing areas will reduce local recharge to ground and increase surface water run-off potential if not limited to the green field run-off rate and each development will require approval from Uisce Éireann (UE) confirming available capacity in the water and wastewater infrastructure. During operation, all developments are required to manage surface water discharges in accordance with legislative requirements including the European Communities Environmental Objectives (Surface Water) Regulations (S.I. 272 of 2009 and S.I. 77 of 2019). As such, there will be no significant cumulative impact to water quality. The residual cumulative impact of the Proposed Development in combination with other planned or permitted developments can therefore be considered to be neutral, imperceptible and long-term. Following the TII criteria for rating the magnitude and significance of impacts on the hydrological related attributes, the magnitude of impact is considered negligible	Satisfactory.
Satisfactory?	Yes	
Compliance with Planning Policy and Environmental Legislation	Yes	
Deficiencies Identified	None	
Recommended Planning Conditions	As per Ch 7 Conditions.	

2.1 APPENDIX TO CHAPTER 2 - Construction and Environmental Management Plan

7.1 APPENDIX TO CHAPTER 7 –NRA/TII Criteria for Rating the Magnitude and Significance of Soils, Geological and Hydrogeological Impacts at EIA Stage National Roads Authority

8.1 APPENDIX TO CHAPTER 8 – NRA/TII Criteria for Rating the Magnitude and Significance of Hydrological Impacts at EIA Stage National Roads Authority

ENGINEERING SERVICES REPORT Appendix L site investigation reports

Flood Risk Assessment (QIK-JBAI-XX-XX-RP-HO-0001-A3-C02_Temple Rd FRA)