

Appropriate Assessment Screening Report

Adrigole Housing Project,
Co. Cork

July 2024

Prepared for:



Comhairle Contae Chorcaí
Cork County Council



O'DONNELL 
ENVIRONMENTAL

Summary

Project: Adrigole Housing Project, Adrigole, Co. Cork

Coordinates: 51.691809, -9.728078; V 80572 50193 (IG).

Company Profile: O'Donnell Environmental is an independent environmental consultancy established by Tom O'Donnell in 2019. O'Donnell Environmental is a Chartered Institute of Ecology and Environmental Management (CIEEM) 'Registered Practice' which demonstrates our commitment to high professional standards, accountability and the delivery of the best outcomes for biodiversity and our Clients.

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Executive Summary

Cork County Council propose a housing project at Adrigole in west Co. Cork, involving the redevelopment of a site consisting of an existing building (previously occupied as Adrigole Garda Station) and associated outbuildings. The proposal includes for the complete renovation of the internal layout of the former Garda Station to form two apartments, the demolition of existing concrete paths and patios, and all associated landscaping works.

This report presents the results of a screening assessment, in support of the Appropriate Assessment process. The purpose of the report is to identify whether significant effects on the conservation objectives of any Natura 2000 site are likely to occur.

It is objectively concluded that the proposed project, either individually or in combination with other plans or projects, is not likely to have significant effects on any Natura 2000 site.

1 Introduction

O'Donnell Environmental Ltd. was commissioned by Cork County Council to undertake an Appropriate Assessment (AA) in relation to a proposed housing project in Adrigole, Co. Cork. This Appropriate Assessment (AA) screening report represents the product of the Appropriate Assessment process.

Cork County Council propose to develop two apartments within an existing structure, formerly Adrigole Garda Station, located within the townland of Adrigole, Co. Cork. The proposal includes for the complete renovation of the internal layout within the existing building, the demolition and reconstruction of onsite services and removal of overgrown vegetation alongside all associated works.

The proposed site is fronted by the local road R572 to the south and is bordered primarily by private residential areas on the remaining sides. The wider area is represented largely by marginal agricultural land. A site location map is presented in **Figure 1.1**.

This Appropriate Assessment has been undertaken in accordance with the following guidance documents:

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – European Commission Methodical Guidance on the provisions of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (European Commission, 2021).
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DoEHLG, 2009).
- Environmental Assessments and Planning in Ireland (Office of Planning Regulator, 2021).

The following documents supplied by CroCon Engineers Ltd. (2024) inform the current assessment:

- Existing Site Layout.
- Proposed Demolitions.
- Proposed Site Layout.
- Proposed Drainage Layout.
- Proposed Watermain Layout.
- Proposed Construction and Environmental Management Plan (pCEMP).

A dedicated Bat Survey Report (O'Donnell Environmental, 2024) was undertaken alongside this Appropriate Assessment and the results were considered in this report.

1.1 APPROPRIATE ASSESSMENT PROCESS

The 'Appropriate Assessment' process that consists of up to four stages, carried out consecutively. This process is summarised as follows:

- Stage 1: A screening assessment is undertaken to identify whether in view of best scientific knowledge and in light of the conservation objectives of the Natura 2000 site(s) significant impacts on a Natura 2000 site(s) are likely to arise from the project or plan in question (individually or in combination with other plan or projects), in the absence of mitigation. If the likelihood of significant impacts cannot be ruled out, or if uncertainty exists, then the process moves on to Stage 2.

- Stage 2: Carried out when a screening assessment determines impacts on the Natura 2000 sites(s) are likely to arise from the project or plan, or where uncertainty exists, and considers potential mitigation measures to avoid or reduce adverse impacts.
- Stage 3: Carried out to assess alternative solutions when it is considered that mitigation measures will not be able to adequately avoid or minimise potential adverse impacts on a Natura 2000 site(s).
- Stage 4: Carried out to consider compensatory measures when no alternative solutions exist but the proposed activity or development is deemed to be of Imperative Reasons of Overriding Public Interest (IROPI).

1.2 LEGISLATIVE CONTEXT

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and of wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of Special Protected Areas (SPAs). These designations form part of Natura 2000, a network of key conservation sites throughout the European Community. Article 6(3) of the Habitats Directive requires member states to carry out an 'appropriate assessment' of the implications of plans and projects on the Natura 2000 network. The Habitats Directive has been transposed into Irish law and the relevant Regulations are the European Communities (Birds and Natural Habitats) Regulations 2011.

The EU Court of Justice has ruled in case C-721/21 that Article 6(3) of Directive 92/43 must be interpreted as meaning that: in order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the plan or project on that site, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site.

1.3 STATEMENT OF AUTHORITY

O'Donnell Environmental is an independent environmental consultancy established by Tom O'Donnell BSc (Hons) MSc CEnv MCIEEM in 2019. O'Donnell Environmental is a Chartered Institute of Ecology and Environmental Management (CIEEM) 'Registered Practice' which demonstrates our commitment to high professional standards, accountability and the delivery of the best outcomes for biodiversity and our Clients.

Tom O'Donnell BSc (Hons) MSc CEnv MCIEEM is a Chartered Environmentalist and a full member of the Chartered Institute of Ecology and Environmental Management. He was awarded a BSc in Environmental and Earth System Science [Applied Ecology] in 2007 and an MSc in Ecological Assessment in 2009, both from UCC. Tom has 15 years professional experience in the environmental industry, including working on projects such as windfarms, overhead power lines, roads, cycleways and residential developments.

Claire McCarthy BSc (Hons) MSc is a Qualifying member of the Chartered Institute of Ecology and Environmental Management. She was awarded a BSc in Biological, Earth and Environmental Sciences [Zoology] in 2018 and an MSc in Marine Biology in 2022, both from UCC. Claire has contributed to the

preparation of EIA and EclA reports for renewable energy developments and has experience in mammal walkover surveys, preliminary bat roost assessments and bat activity surveys.

Colm Breslin BSc (Hons) is a Qualifying member of the Chartered Institute of Ecology and Environmental Management. He was awarded a BSc in Biological, Earth and Environmental Sciences [Ecology and Environmental Biology] in 2023 from UCC. Colm has experience in habitat mapping, bat activity surveys and preliminary roost assessments for a variety of windfarm and residential developments. Colm is licenced by NPWS for roost disturbance (Ref: DER/BAT 2024-09) and to capture bats (C03/2024).

1.4 DESCRIPTION OF THE PROPOSAL

The proposed project involves the development of two apartments within an existing structure, previously occupied as Adrigole Garda Station, located within the townland of Adrigole, Co. Cork. The proposal includes for the complete renovation of the internal layout within the existing building, the demolition existing patios, paths and walls, landscaping and all associated works. The works will proceed for an approximate 12 month duration.

Specifically, the project will involve the following elements:

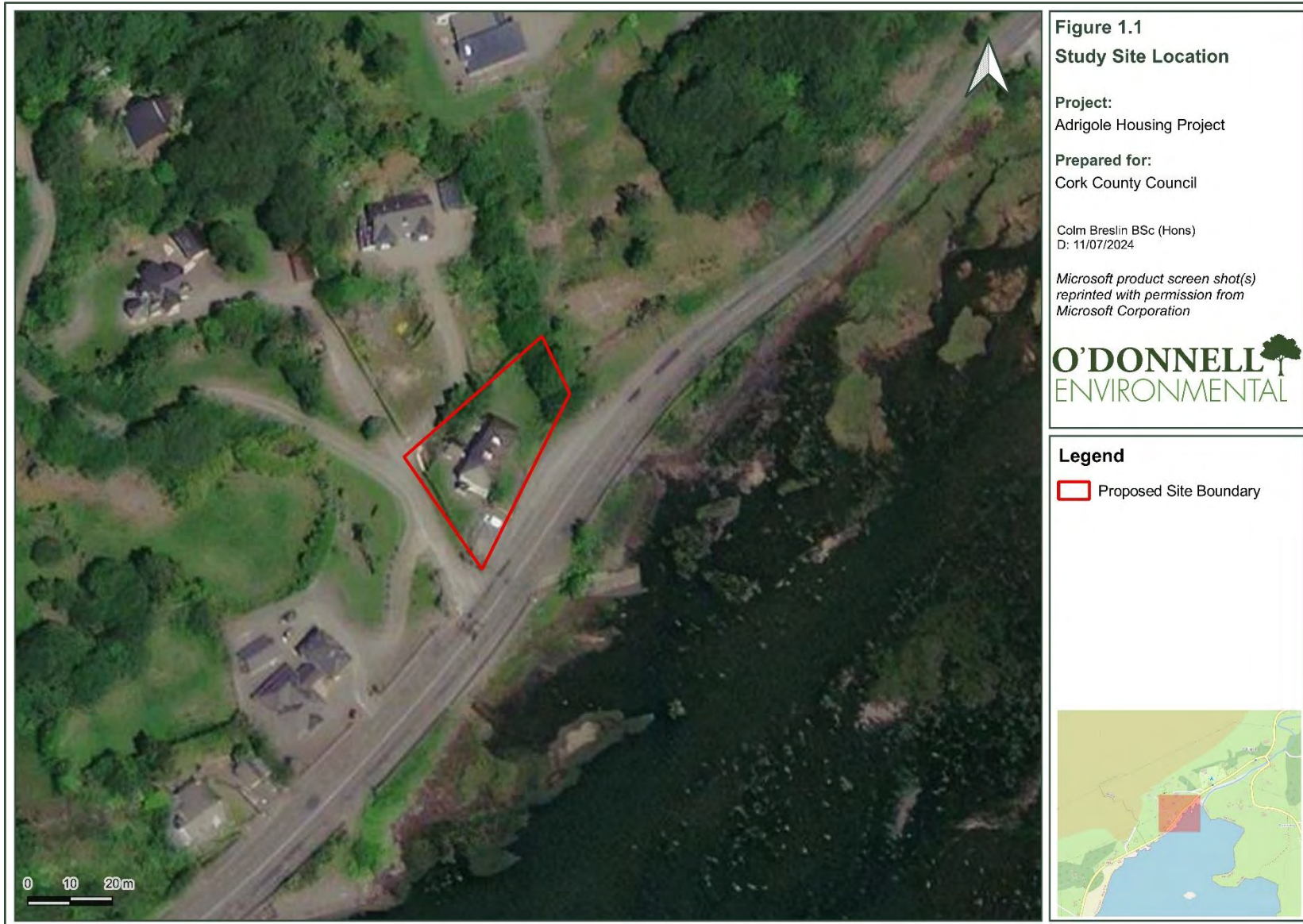
- Demolition of existing entry steps at two locations on the northern boundary of the site and the blockage of these existing entrances to the site.
- Demolition and removal of existing manholes, inspection chambers, gullies, and concrete paths surrounding building.
- Decommissioning and grubbing up of existing sewer line.
- Retention of a portion of existing boundaries.
- Decommissioning and removal of an existing oil tank and associated pipe work.
- Construction of new 215mm blockwork wall at the northeastern section of the site, alongside recapping of existing blockwork boundary walls.
- Construction of new concrete path and patio surrounding building.
- Installation of new Tricel Novo IRL10 wastewater treatment plant (P.E. 10), UV filter, 26m² Sandcell 1500 Sand Polishing Filter, and 52.2m² tertiary filtration area within northeastern area of grassland (or equivalent).
- Renovation of sliding sash windows including works to existing wall windows.
- Party wall and eaves fire-stopping works.
- Landscaping works include the cutback and removal of existing overgrown vegetation and grubbing up of roots.
- No 'off-site' works such as temporary storage, welfare services or other ancillary works are required to facilitate the development project.

Appendix A presents a photographic record on the current condition of the proposed site and **Appendix B** presents the proposed development design information.

1.4.1 Do Nothing Scenario

If the proposed development does not proceed, the 'do nothing' scenario is that the existing environment within the site boundary is likely to remain as described herein in the short term at least. The existing building is currently unoccupied and has been for a number of years. A number of missing slates allow water ingress in multiple sections of the attic. While currently in structurally sound condition, continued

water ingress and associated decay will begin to degrade the structure in the medium-term (7-15 years) (EPA, 2022). Without management, it is likely that the structure will eventually fall into dereliction.



2 Methodology

This Appropriate Assessment was informed by desk-based and site-based assessments.

2.1 DESK STUDY

A desk study was carried out to collate relevant available information including the following:

- National Parks and Wildlife Service (NPWS) (online).
- National Biodiversity Data Centre (NBDC) (online)¹.
- The Environmental Protection Agency (EPA) website.

2.2 SITE VISIT

This Appropriate Assessment is informed by Site visits carried out by Tom O'Donnell, Colm Breslin and Claire McCarthy on 21st March, 15th May and 18th June 2024. The entirety of the proposed site and former Garda Station were accessible and surveyed in detail. Any possible source-receptor pathways identified during the desk study were surveyed. Surface expressions of invasive alien plant species within and immediately adjacent to the development footprint were recorded where present. A separate Bat Survey Report (O'Donnell Environmental, 2024) was undertaken on the former Garda Station and the results are summarised below.

¹ Accessed 15th July 2024

3 Appropriate Assessment Screening

The proposed development site occurs within a residential area of the Adrigole townland. The site is fronted by the R572 to the south. Land uses in the wider area consist largely of marginal agricultural land. The proposed development is not connected with or necessary for the management of any Natura 2000 site.

3.1 DESCRIPTION OF THE NATURA 2000 SITES

The proposed development site is not located within a Natura 2000 site.

Thirteen Natura 2000 sites are located within 15km of the proposed site, of which eleven are Special Areas of Conservation (SAC) and two are Special Protection Areas (SPA) (see **Table 3.1**). It is important to note that this arbitrary distance of 15km is used for illustrative purposes only and all potential pathways for impact on designated sites have been included for both within and outside the 15km zone.

Caha Mountains SAC (0093) and Glanmore Bog SAC (1879) are the most proximal designated sites at 2.84km northeast and 5.65km northwest respectively. These sites are located upstream of the proposed development and thus possess no viable source-receptor pathway.

Kenmare River SAC (2158) and Glengarriff Harbour and Woodland SAC (0090) are located 7.45km north and 8.64km east of the proposed development. Both of these sites contain mobile species within the qualifying interests (Lesser Horseshoe Bat and Otter primarily, alongside Harbour Porpoise and Harbour Seal) which may utilise the environs surrounding the proposed development. Sheep's Head SAC (0102) is located 8.91km south of the proposed development and separated by considerable expanse of marine habitat in the form of Bantry Bay. The Beara Peninsula SPA (4155) and Sheep's Head to Toe Head SPA (4156) are located 9.59km west and 11.37km south of the proposed development at their nearest point and both listed for mobile bird species. Both SPAs are separated by considerable expanse of marine habitat.

The site is bordered on both sides by highly modified minor order streams (see **Appendix A2**) which possess culverts in places and discharge directly into Adrigole Harbour which borders the wider Bantry Bay (see **Appendix A5**). Sheep's Head SAC, Glengarriff Harbour and Woodland SAC, Beara Peninsula SPA and Sheep's Head to Toe Head SPA all border Bantry Bay and therefore possess varying degrees of hydrological connectivity to the proposed site. The qualifying interests and conservation objectives of the relevant Natura 2000 sites are summarised in **Table 3.2**.

No further sites are considered to be relevant to the current assessment due to the nature and scale of the proposed project and the lack of a viable source-receptor pathway between the proposed site and any other Natura 2000 sites.

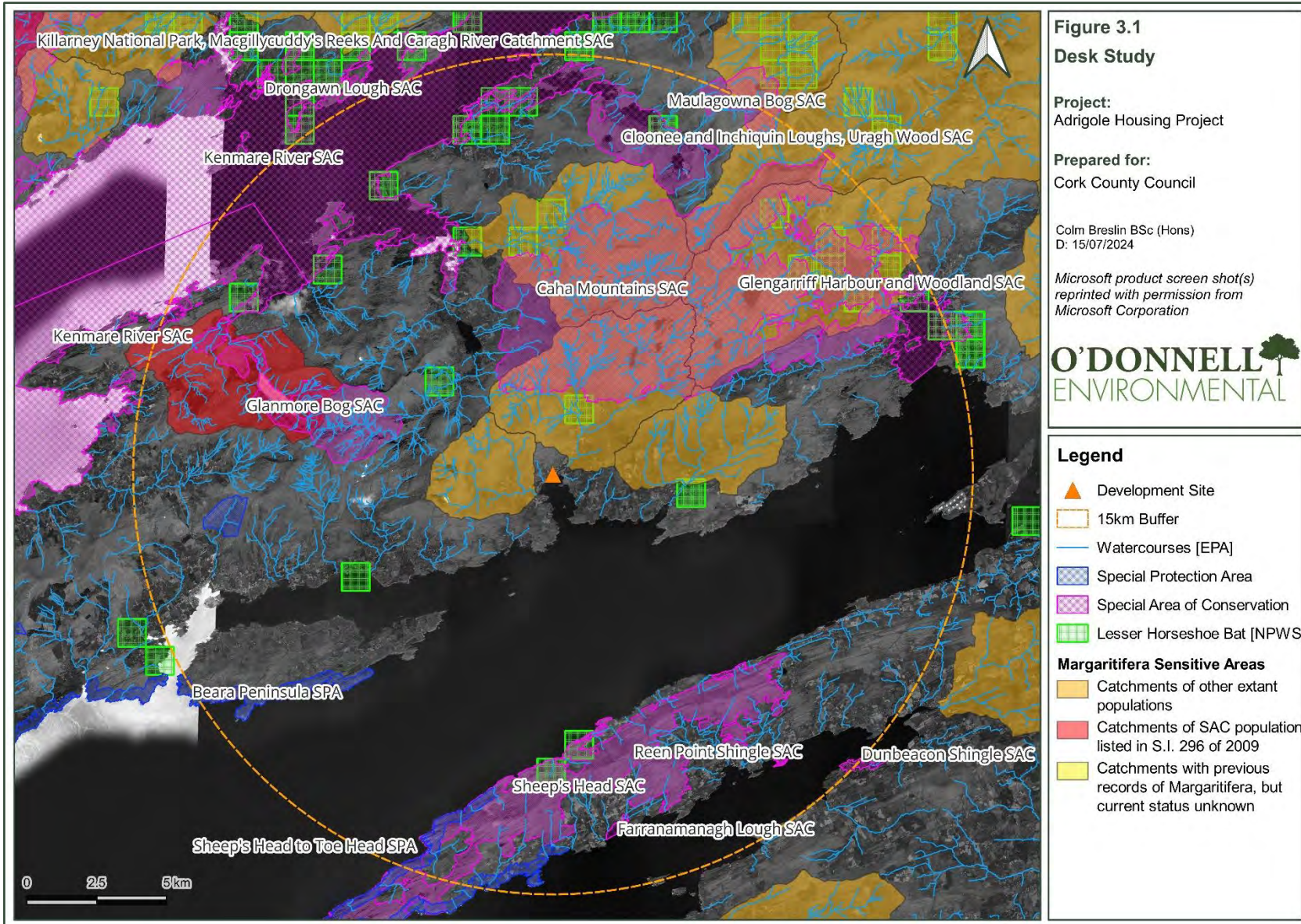
Table 3.1 - Natura 2000 sites within 15km of the proposed development site.

Site Name	Site Code	Distance (km)
Caha Mountains SAC	0093	2.84
Glanmore Bog SAC	1879	5.65
Kenmare River SAC	2158	7.45
Glengarriff Harbour and Woodland SAC	0090	8.64
Sheep's Head SAC	0102	8.91
Beara Peninsula SPA	4155	9.59
Cloonee and Inchiquin Loughs, Uragh Wood SAC	1342	10.86
Sheep's Head to Toe Head SPA	4156	11.37
Farranamanagh Lough SAC	2189	12.42
Reen Point Shingle SAC	2281	12.92
Maulagowna Bog SAC	1881	14.03
Cleanderry Wood SAC	1043	14.3
Dunbeacon Shingle SAC	2280	14.71

**Note: Sites highlighted in green are considered further within this document.*

Table 3.2 – Relevant Natura 2000 Site Details.

Site Name & Code	Qualifying Interests	Minimum Distance from Site (km)
Kenmare River SAC (2158)	<ul style="list-style-type: none"> • Large shallow inlets and bays [1160] • Reefs [1170] • Perennial vegetation of stony banks [1220] • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] • European dry heaths [4030] • <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] • Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130] • Submerged or partially submerged sea caves [8330] • Vertigo angustior (<i>Narrow-mouthed Whorl Snail</i>) [1014] • <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] • <i>Phocoena phocoena</i> (Harbour Porpoise) [1351] • <i>Lutra lutra</i> (Otter) [1355] • <i>Phoca vitulina</i> (Harbour Seal) [1365] 	7.45
Glengarriff Harbour and Woodland SAC (0090)	<ul style="list-style-type: none"> • Old sessile oak woods with Ilex and <i>Blechnum</i> in the British Isles [91A0] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] • <i>Geomalacus maculosus</i> (Kerry Slug) [1024] • <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] • <i>Lutra lutra</i> (Otter) [1355] • <i>Phoca vitulina</i> (Harbour Seal) [1365] 	8.64
Sheep's Head SAC (0102)	<ul style="list-style-type: none"> • Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] • European dry heaths [4030] • <i>Geomalacus maculosus</i> (Kerry Slug) [1024] 	8.91
Beara Peninsula SPA (4155)	<ul style="list-style-type: none"> • Fulmar (<i>Fulmarus glacialis</i>) [A009] • Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346] 	9.59
Sheep's Head to Toe Head SPA (4156)	<ul style="list-style-type: none"> • Peregrine (<i>Falco peregrinus</i>) [A103] • Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346] 	11.37



3.2 HYDROLOGICAL CONTEXT

The proposed site is located in the Dunmanus-Bantry-Kenmare Catchment, Area 21 and sub-catchment Clashaduff_SC_010. Two highly modified minor order streams not categorised by the EPA, which are culverted in places, border the east and western extents of the proposed development (see **Appendix A2**). As such, no data exists for these watercourses, of which both discharge via culvert directly into Adrigole Harbour (IE_SW_170_0500) which borders the wider Outer Bantry Bay (IE_SW_170_0000) (see **Appendix A5**). Both Adrigole harbour and Outer Bantry Bay currently possess 'High' water quality status and are classified as 'Not At Risk' under the Water Framework Directive (Transitional/Coastal Waterbody WFD Status 2016-2021). They are additionally classified as 'Unpolluted' (Transitional/Coastal Water Quality 2018-2020). No other watercourses or waterbodies are considered relevant for the current assessment considering separation distances involved and nature of the proposed works.

The EPA undertakes surveys of the water quality of groundwaters and based on this they categorise the water quality of the groundwater in the site location (IE_SW_G_019) as 'Good' and 'Not at Risk' (Ground Waterbody WFD Status 2016-2021).

The site is bordered to the west, north and east by three catchments (Reen, Adrigole, Trafask) containing extant records of Freshwater Pearl Mussel (*Margaritifera margaritifera*) (see **Figure 3.1**). All of these catchments are located upstream and no associated watercourses border the proposed development. The most proximal designated site listed for this species is Glanmore Bog SAC located 5.65km northwest of the proposed development.

3.3 ORNITHOLOGICAL CONTEXT

The proposed site is located approximately 9.59km east and 12.42km north of Beara Peninsula SPA and Sheep's Head to Toe Head SPA respectively. These SPAs are of conservation value for internationally important numbers of Fulmar and Chough, and Peregrine Falcon and Chough respectively. Beara Peninsula SPA hosts internationally important breeding population of Chough and nationally important breeding population of Fulmar (NPWS, 2015a), with Sheep's Head to Toe Head SPA also hosting an internationally breeding population of Chough and nationally important population of Peregrine Falcon (NPWS, 2015b). It is noted that Chough primarily forage within 300m of cliff tops used for breeding and that the habitats found along the Beara Peninsula favour Chough (marginal agricultural land with large tracts of semi-natural vegetation).

The proposed works are confined to a limited area encompassing the existing former Adrigole Garda Station alongside a small garden area which has since scrubbed over to some extent (see **Appendix A6**). These built surfaces and amenity grassland habitat are not favoured by any of the above species associated with Beara Peninsula SPA and Sheep's Head to Toe Head SPA. Additionally, the residential nature of the local area and active use of the local roads results in anthropogenic disturbances such that the site is highly unlikely to be of foraging or nesting importance to any of the above bird species.

3.4 OTHER MOBILE SPECIES CONTEXT

A total of four other mobile species, excluding birds, are associated with surrounding designated sites including Kenmare River SAC and Glengarriff Harbour and Woodland SAC. Both sites are listed for

Lesser Horseshoe Bat (*Rhinolophus hipposideros*), Otter (*Lutra lutra*) and Harbour Seal (*Phoca vitulina*). Kenmare River SAC is additionally listed for Harbour Porpoise (*Phocoena Phocoena*).

Collins (2023) defines the 'Core sustenance Zone' (CSZ) as the area surrounding a bat roost within which habitat availability and quality possess significant influence on the resiliency and conservation status of the roost. This metric is species-specific and can be utilised to indicate the area within which developments may impact the flight-paths and foraging habitat of bat roosts. The CSZ for Lesser Horseshoe Bat is estimated at approximately 2km radius. Kenmare River SAC and Glengarriff Harbour and Woodland SAC, of which both are listed for Lesser Horseshoe Bat, are located considerably outside the 2km CSZ radius. A bat survey report accompanying the development application also prepared by O'Donnell Environmental found no evidence of Lesser Horseshoe Bat using the structures or their immediate vicinity (O'Donnell Environmental, 2024).

The proposed development is bordered to the east and west by two heavily modified minor order streams which have been converted in places, and is bordered to the south by the shallow Adrigole Harbour transitional waterbody. Adrigole Harbour is largely tidal in nature, becoming fully exposed at low tides (see **Appendix A8**). The watercourses and marine waterbodies would be considered sub-optimal for the remaining mobile species of Otter, Harbour Seal and Harbour Porpoise which are associated with Kenmare River SAC and Glengarriff Harbour and Woodland SAC and were not recorded during any site visit.

3.5 IDENTIFICATION OF POTENTIAL IMPACTS ON NATURA 2000 SITES

Consideration is given here to identifying any aspects of the proposal which are likely to impact on the relevant Natura 2000 sites (identified above), and to identifying if uncertainty exists as to likelihood of occurrence.

The likelihood of effects is assessed considering a number of indicators including:

- Habitat loss.
- Habitat alteration.
- Habitat or species fragmentation.
- Disturbance and/or displacement of species.
- Water quality and resource.

3.5.1 Potential Construction Phase Impacts

The potential for direct and indirect impacts on any Natura 2000 site during the construction phase is discussed below.

3.5.1.1 Direct Impacts

The proposed works are not located within a Natura 2000 site, nor do they require any resources from the site. The proposed works area does not contain any of the habitats for which the named Natura 2000 sites have been designated. Direct impacts on the Natura 2000 sites can therefore be ruled out.

3.5.1.2 Indirect Impacts

Habitat loss or deterioration of the ecological status of designated sites can occur from the indirect effects of contaminated run-off or discharge into the aquatic environment, through siltation, nutrient

release and/or contamination. Indirect disturbances to relevant species may also be caused by anthropogenic disturbances such as noise, light or emissions of dust. Should habitat loss or deterioration of the ecological status of these sites occur, a negative impact on the qualifying interests of the designated sites discussed above may result. In this instance the relevant qualifying interests consists of coastal habitats and associated marine mammal species, bat and bird species.

The local drainage network discharges directly into Adrigole Harbour which borders Bantry Bay via heavily modified minor order streams bordering the east and west of the site (see **Appendix A2; A5**). This discharge point presents a remote hydrological connection to Glengarriff Harbour and Woodland SAC, Sheep' Head SAC, Beara Peninsula SPA, Kenmare River SAC and Sheep's Head to Toe Head SPA. All of the above designated sites are buffered by considerable distances of marine habitat possessing considerable assimilation capacity.

Given the nature and scale of the proposed works, the distances involved and the lack of a viable source-receptor pathways, the potential for impacts on the above designated sites could only occur as a result of ex-situ impacts on mobile species associated with surrounding SPAs (Chough, Fulmar, Peregrine Falcon) and SACs (Lesser Horseshoe Bat, Otter, Harbour Seal, Harbour Porpoise). These are discussed further below.

3.5.1.3 Surface Water

During the construction phase, indirect impacts on the qualifying interests of the Natura 2000 sites could occur if siltation, nutrient release and/or contamination of downstream receptors were to occur. Indirect impacts on the designated site requires connectivity between the proposed works and the designated site in question through watercourses or through surface run-off.

Standard surface water management procedures will be employed according to the Environmental Management Plan (CroCon, 2024) and CIRIA (2001) to prevent the discharge of soil-contaminated run-off during the construction phase. These measures include, but not limited to, minimising surface water runoff by minimising the area of paved surfaces, interception of runoff using settlement facilities and oil traps, hydrocarbon storage involving secondary containment procedures and associated bunds, spill-kits, storage of waste materials in skips or other suitable receptacles.

Considering the nature and scale of the proposed works, the separation distances involved, the nature of the receiving environment, the assimilation capacity of the receiving waterbodies and standard management procedures, there is no likelihood of significant indirect impacts on any of the above Natura 2000 sites, or any other Natura 2000 sites, arising from run-off during the construction phase.

3.5.1.4 Foul Water

During the construction phase of the proposed development, all foul water from construction facilities will be contained and disposed of in an appropriate manner offsite.

Given the processes outlined above, no significant negative impacts are likely to occur on the above Natura 2000 sites as a result of the foul water emissions from the proposed site during the construction phase.

3.5.1.5 Noise and Air Emissions

Localised increases in noise levels are likely to occur during the construction phase through the operation of machinery. The project will require excavations and earthworks which will be carried out in

accordance with the preliminary Construction and Environmental Management Plan (CroCon Engineer Ltd., 2024). Specifically, a noise limit of 70dB(A) LAeq./hr will be applied for any noise sensitive receptor. The existing site is located in a residential area subject to localised noise and air pollution as a result of road traffic along the local road which adjoins the proposed site (R572).

Given the nature and scale of the proposed works, the separation distances involved, the standard management procedures, it is considered that there is no likelihood of effects on the above Natura 2000 sites as a result of noise and air emissions during the construction phase.

3.5.1.6 Alien Invasive Plant Species

No high-impact invasive plant species (Kelly et al. 2013; O'Flynn et al. 2014) which are concerned to have the potential to spread as a result of the proposed works were recorded within the redline boundary of the proposed site or within close proximity to the proposed site, and thus there is no likelihood of significant indirect impacts arising from the spread of the identified alien invasive plant species on any Natura 2000 site. However, it should be noted that the alien plant species *Montbretia* (*Crocsmia x crocsmiiflora*) occurs within the site boundary (see **Appendix A3**) and is locally abundant in the locality and wider landscape but has not been formally risk-assessed in an Irish context.

3.5.1.7 Ex-situ Impacts on Birds

Disturbance and/or displacement may occur where populations of a mobile species listed as a qualifying interest of a Natura 2000 site suffer negative effects outside of the Natura 2000 site (ex-situ impacts). Such effects also include fatalities and loss of foraging opportunities.

No hazardous activities are proposed which have potential to give rise to bird fatalities. There is no likelihood that birds listed as qualifying interests of Beara Peninsula SPA or Sheep's Head to Toe Head SPA would be found within the proposed works area. The proposed works area consists of hardstanding and sealed roadway and footpath, grassland and adjoining hedgerows and trees. These habitats are not of significant importance for any relevant bird species given the local context of the surrounding highly modified residential environment.

Given that the proposed site is located in a in area of negligible value to relevant bird species, it is considered highly unlikely that the proposed development will result in any ex-situ impacts on such species and therefore no effects on the qualifying interests of Sheep's Head to Toe SPA (or any other Natura 2000 site) are likely to occur.

3.5.1.8 Ex-situ Impacts on Other Mobile Species

Disturbance and/or displacement may occur where populations of a mobile species listed as a qualifying interest of a Natura 2000 site suffer negative effects outside of the Natura 2000 site (ex-situ impacts). Such effects also include fatalities, loss of roosting sites and loss of foraging opportunities. The relevant sites include Glengarriff Harbour and Woodland SAC and Kenmare River SAC.

The former Adrigole Garda Station was confirmed to be used by a small number of non-breeding Brown Long-eared Bat within the western attic section (see **Appendix A4**), but no evidence of the Annex II species Lesser Horseshoe Bat was identified within the structure or the surrounding locality despite the structure being accessible for this species at the time of survey (via open windows) (O'Donnell Environmental, 2024). The proposed works will involve the temporary loss of this roosting location which will be restored following completion of works. Some clearance of overgrown vegetation is proposed within the northeastern section of the proposed development which will result in a minor loss of local foraging and commuting habitat, alongside reducing the screening effect of adjacent public

streetlighting. The most proximal SACs listed for Lesser Horseshoe Bat are Kenmare River SAC and Glengarriff Harbour and Woodland SAC at 7.45km north and 8.64km east of the proposed development. As discussed previously, these sites are located a considerable distance beyond the Core Sustenance Zone (CSZ) of Lesser Horseshoe Bat (Collins, 2023).

Surface water within the bounds of the site currently discharges to the nearby stream at the eastern bounds of the site, which discharges into Adrigole Harbour that borders the wider Bantry Bay. Adrigole Harbour is shallow and tidally influenced, becoming completely exposed at low tide (see **Appendix A8**). As such, this area is largely unsuitable for Harbour Porpoise associated with Kenmare River SAC located on the opposite side of Beara Peninsula. The minor order stream is highly modified in nature and culverted in places. As such, Otter are considered highly unlikely to occur within this area. Harbour Seal may utilise Adrigole Harbour although none were recorded during site visits.

No hazardous activities are proposed which have potential to give rise to fatalities of the above species. While the proposed works will involve the temporary loss of a bat roosting site, the Annex II listed species Lesser Horseshoe Bat has not been recorded onsite. Potential ex-situ impacts on marine mammal species as a result of contaminated surface water runoff has been avoided through standard surface water control measures outlined in CIRIA (2001) and the pCEMP (CroCon Engineers Ltd., 2024).

Given the nature of the proposed works, separation distances involved, general negligible value for marine mammal species in the wider area, and lack of Lesser Horseshoe Bat evidence within the site (O'Donnell Environmental, 2024), it is considered highly unlikely that the proposed development will result in any ex-situ impacts on such mobile species and therefore no effects on the qualifying interests of the above sites are likely to occur.

3.5.2 Potential Operational Phase Impacts

The operational phase impacts of the proposed project otherwise do not differ significantly from the impacts already occurring at the site (the do-nothing scenario) in terms of habitat loss and disturbance. Following completion of works, the former Adrigole Garda Station will be reinstated as a permanent two-unit residence. The potential for operational-phase impacts as a result of foulwater during the operational phase of the proposed development will be entirely avoided with the installation of a new wastewater treatment unit and filtering areas (see **Section 1.4** above). No additional potential impacts arise as a result of the operational phase of the proposed development specifically.

3.6 LIKELY IMPACTS OF THE PROJECT ON THE NATURA 2000 SITES

As outlined in above, it is deemed that the proposed development does not have the potential to impact the qualifying interests of Kenmare River SAC, Glengarriff Harbour and Woodland SAC, Sheep's Head SAC, Beara Peninsula SPA, Sheep's Head to Toe Head SPA, or any other Natura 2000 site via hydrological connectivity, ex-situ impacts or other pathways. All works will be carried out applying standard environmental controls throughout the construction phase and in accordance with the preliminary Construction and Environmental Management Plan (CroCon Engineers Ltd., 2024). The likely impacts are discussed below.

3.6.1 Size, Scale & Land-take

There will be no direct impacts on any Natura 2000 site.

3.6.2 Distance from or Key Features of the Natura 2000 Sites

As detailed in **Table 3.1-3.2** and shown in **Figure 3.1**.

3.6.3 Resource Requirements (water abstraction *etc.*)

There will be no resource requirements (including water abstraction) from Natura 2000 sites as a result of the proposed works.

3.6.4 Excavation Requirements

Not applicable.

3.6.5 Emission (disposal to land, water or air)

No significant impacts on any Natura 2000 site are likely to occur as a result of emissions from the proposed development in the construction or operational phases.

3.6.6 Transportation Requirements

Transport requirements during construction and operation will use existing road networks and will not occur within the boundaries of any Natura 2000 sites.

3.6.7 Duration of Operations

For the purposes of environmental assessment, the duration of operations of the residential redevelopment is assumed to be permanent.

3.6.8 Cumulative Effects

A review of the National Planning Database (NPD) was undertaken to identify relevant planning applications proximal to the study area. An appropriate site search area was defined as consisting of 250m from the proposed reinforcement route. A search of planning applications within this area within the last 5 years was undertaken on 4th April 2024 by O'Donnell Environmental. **Table 3.3** below provides the results of this search. The locations of applications are shown in **Figure 3.2**.

All applications comprise minor residential works. No planning applications which are relevant to the assessment of in-combination effects were found.

Table 3.3 – Summary of relevant planning applications within the relevant search area.

Application Number	Development Description	Decision	Decision Date
23418	Construction of single storey extension to existing house, relocation of existing septic tank and all associated site works	Conditional Permission	2024-03-28
22423	A change of use of ground floor public house, to residential use, incorporating existing residential area in first floor and second floor (formally Hotel accommodation) to become 1 no. dwelling house, with minor alterations to elevations. Also on northern elevation, permission to demolish existing store room and the construction of a hipped roof to replace flat roof and the construction of a waste water treatment system with associated site works	Conditional Permission	2023-01-30
21596	Permission for retention of installation of wastewater treatment plant and permission for (A) completion of wastewater treatment system with ancillary siteworks, (B) conversion of attic to dwelling with alterations to elevations and (C) construction of domestic garage, all on enlarged site with modified boundaries to those originally permitted under planning reference 02/2529	Conditional Permission	2021-10-15
20604	1. Sunroom extension on southern elevation of existing dwelling house. 2. Detached domestic garage 3. Site Entrance	Conditional Permission	2020-12-16

Note: 'Development Description' field was truncated by the Planning Authority when providing data to the NPD.



3.7 AA SCREENING CONCLUSION

This Appropriate Assessment screening exercise has been carried out based on the best available scientific information and data, ecological site walkovers, bat surveys and project details provided by CroCon Engineers Ltd. on behalf of Cork County Council. It is considered that bespoke avoidance or mitigation measures are not required to eliminate the likelihood of significant negative impacts occurring on any Natura 2000 site as a result of the proposal.

It is concluded that the proposed project is not likely to cause significant negative effects on Kenmare River SAC, Glengarriff Harbour and Woodland SAC, Sheep's Head SAC, Beara Peninsula SPA, Sheep's Head to Toe Head SPA, or any other Natura 2000 site via hydrological connectivity, ex-situ impacts on relevant species or other pathways, individually or in combination with other plans or projects. It is considered that there is no reasonable scientific doubt in relation to this conclusion.

4 References

Council of the European Communities (1992) Council Directive of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). OJL 206/35, 1992.

Construction Industry Research and Information Association CIRIA (2001). Control of water pollution from construction sites. Guidance for consultants and contractors (C532D).

Department of the Environment, Heritage and Local Government (DoEHLG) (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

European Commission (2001). Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Luxembourg: Office for Official Publications of the European Communities.

Kelly, J., O'Flynn, C., and Maguire, C. (2013) Risk analysis and prioritisation for invasive and nonnative species in Ireland and Northern Ireland. A report prepared for the Northern Ireland Environment Agency and National Parks and Wildlife Service as part of Invasive Species Ireland.

NPWS (2013) Site Synopsis: Glengarriff Harbour and Woodland SAC 000090. Version 13. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2015a) Site Synopsis: Beara Peninsula SPA 004155. Version 15. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2015b) Site Synopsis: Sheep's Head to Toe SPA 004156. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2024) Site Synopsis: Kenmare River SAC 002158. Version 24. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

O'Flynn, C., Kelly, J. and Lysaght, L. (2014). Ireland's invasive and non-native species – trends in introductions. National Biodiversity Data Centre Series No. 2. Ireland.

Appendix A

Photographic Record



A1. View of the existing building at the proposed site, previously occupied as Adrigole Garda Station, photographed from the R572.



A2. View of the heavily modified stream bordering the east of the proposed site.



A3. Alien plant species Montbretia stand within the existing garden to the east of the former Garda Station.



A4. View of single male Brown Long-eared Bat within the attic of the former Garda Station (NPWS Licence Ref: DER/BAT 2024-09; 008/2024)



A5. View of the outfall associated with the eastern stream discharging directly into Adrigole Harbour.



A6. View of the existing grassland area located at the eastern extent of the proposed site.



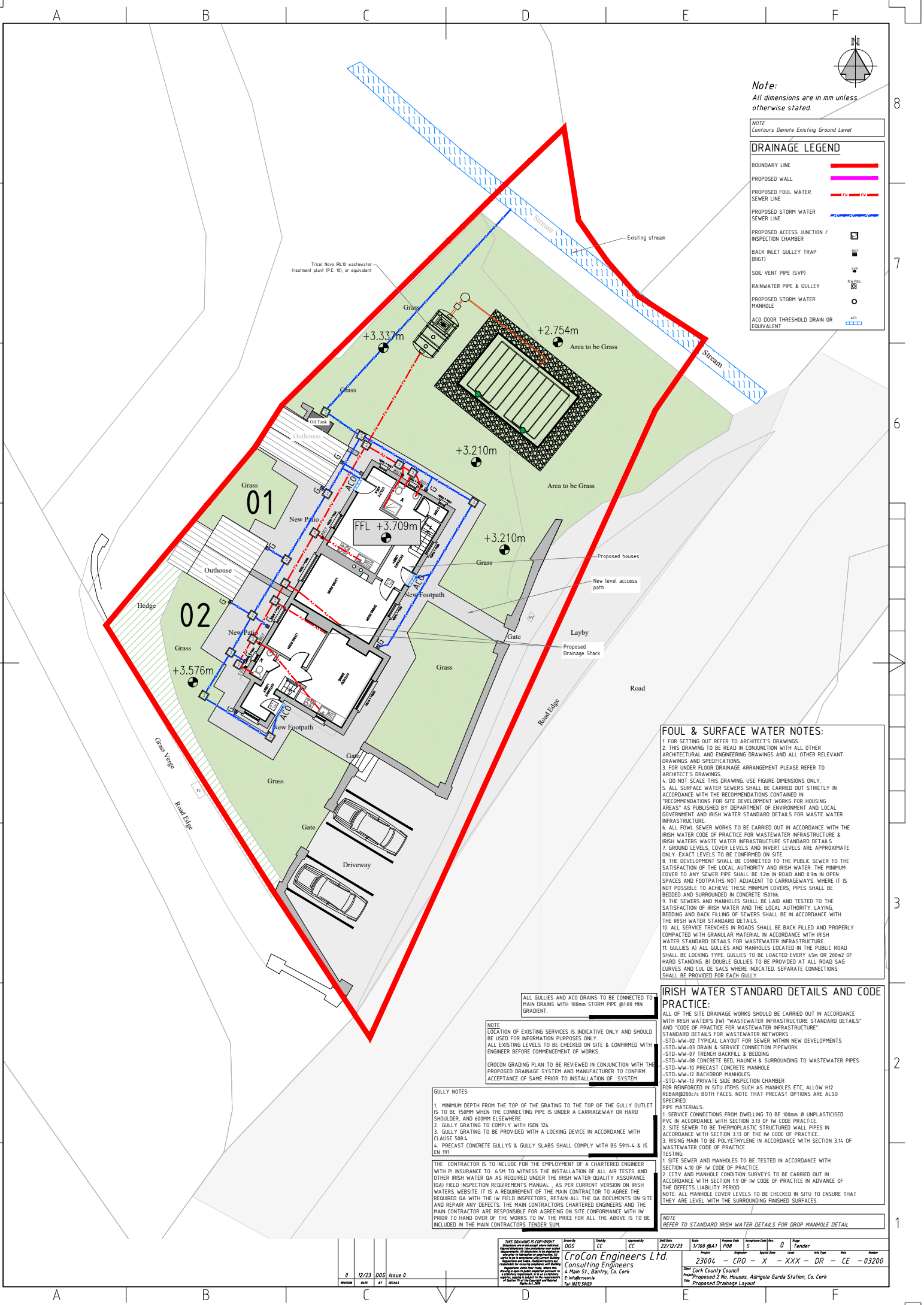
A7. View of the night-time context of the site showing artificial streetlighting.



A8. View of Adrigole Harbour at low tide showing complete exposure of mudflats.

Appendix B

Project Design Information



Note:
All dimensions are in mm unless otherwise stated.

NOTE
Contours Denote Existing Ground Level

DRAINAGE LEGEND

BOUNDARY LINE	
PROPOSED WALL	
PROPOSED FOUL WATER SEWER LINE	
PROPOSED STORM WATER SEWER LINE	
PROPOSED ACCESS JUNCTION / INSPECTION CHAMBER	
BACK INLET GULLY TRAP (BIGT)	
SOIL VENT PIPE (SVP)	
RAINWATER PIPE & GULLY	
PROPOSED STORM WATER MANHOLE	
ACO DOOR THRESHOLD DRAIN OR EQUIVALENT	

FOUL & SURFACE WATER NOTES:

1. FOR SETTING OUT REFER TO ARCHITECT'S DRAWINGS.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER ARCHITECTURAL AND ENGINEERING DRAWINGS AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
3. FOR UNDER FLOOR DRAINAGE ARRANGEMENT PLEASE REFER TO ARCHITECT'S DRAWINGS.
4. DO NOT SCALE THIS DRAWING. USE FIGURE DIMENSIONS ONLY.
5. ALL SURFACE WATER SEWERS SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN "RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS" AS PUBLISHED BY DEPARTMENT OF ENVIRONMENT AND LOCAL GOVERNMENT AND IRISH WATER STANDARD DETAILS FOR WASTE WATER INFRASTRUCTURE.
6. ALL FOUL SEWER WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE & IRISH WATERS WASTE WATER INFRASTRUCTURE STANDARD DETAILS.
7. GROUND LEVELS, COVER LEVELS AND INVERT LEVELS ARE APPROXIMATE ONLY. EXACT LEVELS TO BE CONFIRMED ON SITE.
8. THE DEVELOPMENT SHALL BE CONNECTED TO THE PUBLIC SEWER TO THE SATISFACTION OF THE LOCAL AUTHORITY AND IRISH WATER. THE MINIMUM COVER TO ANY SEWER PIPE SHALL BE 12m IN ROAD AND 0.9m IN OPEN SPACES AND FOOTPATHS NOT ADJACENT TO CARRIAGEWAYS, WHERE IT IS NOT POSSIBLE TO ACHIEVE THESE MINIMUM COVERS, PIPES SHALL BE BEDDED AND SURROUNDED IN CONCRETE 150mm.
9. THE SEWERS AND MANHOLES SHALL BE Laid AND TESTED TO THE SATISFACTION OF IRISH WATER AND THE LOCAL AUTHORITY. LAYING, BEDDING AND BACK FILLING OF SEWERS SHALL BE IN ACCORDANCE WITH THE IRISH WATER STANDARD DETAILS.
10. ALL SERVICE TRENCHES IN ROADS SHALL BE BACK FILLED AND PROPERLY COMPACTED WITH GRANULAR MATERIAL IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS FOR WASTEWATER INFRASTRUCTURE.
11. GULLIES A) ALL GULLIES AND MANHOLES LOCATED IN THE PUBLIC ROAD SHALL BE LOCKING TYPE. GULLIES TO BE LOCATED EVERY 45m OR 200m² OF HARD STANDING. B) DOUBLE GULLIES TO BE PROVIDED AT ALL ROAD SAG CURVES AND CUL-DE-SACS WHERE INDICATED. SEPARATE CONNECTIONS SHALL BE PROVIDED FOR EACH GULLY.

IRISH WATER STANDARD DETAILS AND CODE PRACTICE:

- ALL OF THE SITE DRAINAGE WORKS SHOULD BE CARRIED OUT IN ACCORDANCE WITH IRISH WATERS (IW) "WASTEWATER INFRASTRUCTURE STANDARD DETAILS" AND "CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE".
- STANDARD DETAILS FOR WASTEWATER NETWORKS:
- STD-WW-02 TYPICAL LAYOUT FOR SEWER WITH NEW DEVELOPMENTS
 - STD-WW-03 DRAIN & SERVICE CONNECTION PIPEWORK
 - STD-WW-07 TRENCH BACKFILL & BEDDING
 - STD-WW-08 CONCRETE BED, HAUNCH & SURROUNDING TO WASTEWATER PIPES
 - STD-WW-10 PRECAST CONCRETE MANHOLE
 - STD-WW-10 BACKDROP MANHOLES
 - STD-WW-13 PRIVATE SIDE INSPECTION CHAMBER
- FOR REINFORCED IN SITU ITEMS SUCH AS MANHOLES ETC, ALLOW HZ REBAR@200/c/c BOTH FACES. NOTE THAT PRECAST OPTIONS ARE ALSO SPECIFIED.
- PIPE MATERIALS:
1. SERVICE CONNECTIONS FROM DWELLING TO BE 100mm Ø UNPLASTICISED PVC IN ACCORDANCE WITH SECTION 3.13 OF IW CODE OF PRACTICE.
 2. SITE SEWER TO BE THERMOPLASTIC STRUCTURED WALL PIPES IN ACCORDANCE WITH SECTION 3.13 OF THE IW CODE OF PRACTICE.
 3. RISING MAIN TO BE POLYETHYLENE IN ACCORDANCE WITH SECTION 3.14 OF WASTEWATER CODE OF PRACTICE.
- TESTING:
1. SITE SEWER AND MANHOLES TO BE TESTED IN ACCORDANCE WITH SECTION 4.10 OF IW CODE OF PRACTICE.
 2. CCTV AND MANHOLE CONDITION SURVEYS TO BE CARRIED OUT IN ACCORDANCE WITH SECTION 19 OF IW CODE OF PRACTICE IN ADVANCE OF THE DEFECTS LIABILITY PERIOD.
- NOTE: ALL MANHOLE COVER LEVELS TO BE CHECKED IN SITU TO ENSURE THAT THEY ARE LEVEL WITH THE SURROUNDING FINISHED SURFACES.
- NOTE**
REFER TO STANDARD IRISH WATER DETAILS FOR DROP MANHOLE DETAIL

ALL GULLIES AND ACO DRAINS TO BE CONNECTED TO MAIN DRAINS WITH 100mm STORM PIPE @180 MN GRADIENT.

NOTE
LOCATION OF EXISTING SERVICES IS INDICATIVE ONLY AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
ALL EXISTING LEVELS TO BE CHECKED ON SITE & CONFIRMED WITH ENGINEER BEFORE COMMENCEMENT OF WORKS.

CRD/CN GRADING PLAN TO BE REVIEWED IN CONJUNCTION WITH THE PROPOSED DRAINAGE SYSTEM AND MANUFACTURER TO CONFIRM ACCEPTANCE OF SAME PRIOR TO INSTALLATION OF SYSTEM

GULLY NOTES:

1. MINIMUM DEPTH FROM THE TOP OF THE GRATING TO THE TOP OF THE GULLY OUTLET IS TO BE 750MM WHEN THE CONNECTING PIPE IS UNDER A CARRIAGEWAY OR HARD SHOULDER, AND 600MM ELSEWHERE.
2. GULLY GRATING TO COMPLY WITH IS 124.
3. GULLY GRATING TO BE PROVIDED WITH A LOCKING DEVICE IN ACCORDANCE WITH CLAUSE 508.4.
4. PRECAST CONCRETE GULLIES & GULLY SLABS SHALL COMPLY WITH BS 5911-4 & IS EN 191.

THE CONTRACTOR IS TO INCLUDE FOR THE EMPLOYMENT OF A CHARTERED ENGINEER WITH PI INSURANCE TO 6.5M TO WITNESS THE INSTALLATION OF ALL AIR TESTS AND OTHER IRISH WATER QA AS REQUIRED UNDER THE IRISH WATER QUALITY ASSURANCE (QA) FIELD INSPECTION REQUIREMENTS MANUAL. AS PER CURRENT VERSION ON IRISH WATERS WEBSITE. IT IS A REQUIREMENT OF THE MAIN CONTRACTOR TO AGREE THE REQUIRED QA WITH THE IW FIELD INSPECTORS. RETAIN ALL THE QA DOCUMENTS ON SITE AND REPAIR ANY DEFECTS. THE MAIN CONTRACTORS CHARTERED ENGINEERS AND THE MAIN CONTRACTOR ARE RESPONSIBLE FOR AGREEING ON SITE CONFORMANCE WITH IW PRIOR TO HAND OVER OF THE WORKS TO IW. THE PRICE FOR ALL THE ABOVE IS TO BE INCLUDED IN THE MAIN CONTRACTORS TENDER SUM.

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Project No: 23004 - CR - X - XXX - DR - CE - 03200

Client: Cork County Council
Proposed No. Houses, Adrigole Garda Station, Co. Cork
Proposed Drainage Layout

0	12/23	DOS	Issue 0
revision	date	by	details

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