

2026

**Ballinahown Greenway, Ballinahown,
Co. Westmeath
Construction Environmental
Management Plan (CEMP)**





Ballinahown Greenway, Ballinahown, Co. Westmeath
Construction Environmental Management Plan (CEMP)

Document Control Sheet

Client:	Westmeath County Council
Document No:	252243-ORS-XX-XX-RP-EN-13d-002

Revision	Status	Author:	Reviewed by:	Approved By:	Issue Date
P01	S1	KS	NK	LM	20/01/2026



Contents

1	Introduction	1
1.1	Objective of Construction Environmental Management Plan	1
1.2	Responsibility	2
2	Site Details	3
2.1	Site Location	3
2.2	Site Environmental Considerations	4
2.2.1	Topography	4
2.2.2	Hydrology	4
2.2.3	Undocumented Watercourses	5
2.2.4	Soils, Geology and Hydrogeology	5
2.2.5	Designated Areas	6
2.2.6	Flood Risk	7
2.2.7	Archaeology & Cultural Heritage	7
2.2.8	Geological Heritage	9
2.2.9	Historic Land Use	10
2.2.10	Noise Pollution	11
3	Development Description	13
3.1	Details of the Development	13
3.2	Phasing of the Development	14
3.2.1	Pre-Construction Phase	14
3.3	Pre-Construction Activities	15
3.3.1	Environmental Induction	15
3.3.2	Site Set-Up and Hoarding	16
3.4	Construction Sequence of New Structures	16
3.5	Site Working Hours	17
3.6	Design Changes	17
4	Environmental Management Plan	18
4.1	Background	18
4.2	Vibration & Noise	18
4.3	Dust and Air Quality	20
4.4	Surface Water and Groundwater Protection	23
4.5	Protection of Ecological Receptors	26
4.6	Protection of Archaeological Feature	27
5	Outline Traffic Management Plan	29
5.1	Background	29
5.2	Outline Traffic Management Plan	29
5.3	Construction Entrance and Construction Traffic Control	29
5.3.1	Access in	29
5.3.2	Site Access	30
5.4	Deliveries to Site / Site Access	31
5.5	Routing of Construction Traffic	31
5.6	Traffic Management Speed Limits	32
5.7	Road Cleaning	32
5.8	Road Condition	33
5.9	Enforcement of TMP	33
5.10	Working Hours	34



5.11	Emergency Procedures	34
5.12	Communication	34
6	Implementation	36
6.1	Role and Responsibilities	36
6.1.1	Construction Project Manager	36
6.1.2	Construction Project Manager Contact Details	36
6.1.3	Project Environmental Consultant	36
6.1.4	Resident Engineer	37
6.2	Awareness and Training	37
6.2.1	Environmental Induction	37
6.2.2	Toolbox Talks	38
6.3	Environmental Incidents and Complaints Procedure	38
7	Conclusion	39
Appendix A: Risk Assessment as per Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition		



1 Introduction

ORS have been appointed by Westmeath County Council (WCC) (the Applicant) to complete a Construction Environmental Management Plan (CEMP) for the Proposed Development located on a site adjacent to Ballinahown Sports Center, in the townland of Ballinahown, Co. Westmeath (herein referred to as 'the site'). The application site comprises an area of ca. 1.2 hectares.

The Proposed Development will consist of the following:

WCC proposes to develop a 1.3 km combined pedestrian and cycleway from Ballinahown Sports Park through lands predominantly in agricultural use, located to the west of the L-1406 local road in Ballinahown, Co. Westmeath.

Subject to land acquisition, the works will include:

- Construction of a 3 m-wide pedestrian and cycleway with a bound surface and associated grass verges
- Installation of a new 1.3 m-high stock-proof fence supplemented with native hedgerow planting
- Provision of 3 no. flat deck bridges to carry the pedestrian and cycleway across an existing drainage channel; and
- Other associated ancillary works.

The purpose of the project is to link Ballinahown village to the wider Greenway network by providing a dedicated pedestrian and cycle connection between Ballinahown and the planned Bord na Móna Greenway (Athlone–Clonmacnoise). In time, this Greenway will connect to the Dublin–Galway Cycleway, forming part of the EuroVelo 2 route from Galway to Moscow. Approximately €14 million has been invested to date in Westmeath's Greenways, and WCC continues to work with local communities to develop the linkages, facilities, and amenities required to maximise their value.

The project will also provide improved access to Greenway amenities for residents of Ballinahown and the wider community, who despite living adjacent to these significant recreational assets have had limited means to access them safely and conveniently.

1.1 Objective of Construction Environmental Management Plan

This Construction Environmental Management Plan (CEMP) is an outline document of the proposed approach to ensure that construction activities have the least impact on the surrounding environment. Below is an outline of the objectives:

- Ensure appropriate measures to prevent or mitigate nuisance emissions of noise and dust.
- Ensure that discharges to surface/groundwater sources are controlled.

- Ensure that any nearby ecological receptors (SPAs, SACs, NHAs) and archaeological sites are not adversely impacted by construction activities.
- Ensure that all activities on site are effectively managed to minimise the generation of waste and to maximise opportunities for reuse and recycling of waste materials.
- Ensure that all wastes generated onsite are removed from site by an appropriately permitted waste contractor and disposed of at an appropriately licensed/permitted facility in accordance with the Waste Management Act 1996 as amended.
- Minimise the impact on local traffic conditions resulting from construction activities.
- Outline how the measures proposed above shall be implemented.

This CEMP has been prepared for the planning phase of the development to outline the general considerations of the works, from initial enabling activities through to construction, with specific regard to the environmental and waste management requirements associated with delivering a combined pedestrian and cycleway.

A contractor is yet to be appointed to this project. This document will be revised upon appointment of an experienced and competent contractor, and the development will be constructed in accordance with the environmental management measures contained herein.

The CEMP, due to its structure and nature, will also require constant updating and revision throughout the construction period. Therefore, this is a working document and will be developed further prior to and during construction.

1.2 Responsibility

A contractor has not yet been appointed to carry out the proposed project. Once appointed it will be the responsibility of the contractor to maintain and update the construction stage CEMP throughout the work, and this updated document will be issued to Westmeath County Council.



2 Site Details

2.1 Site Location

The proposed works are beginning at Ballinahown Sports Park, (approximate ITM Coordinates: 609975, 733311) and will finish approximately 1.5km west at the edge of the Bord na Móna lands (approximate ITM Coordinates: 609039, -7.8642240). The site is bound to the east by Ballinahown village. The site is bounded to the north, south and west by extensive low-lying agricultural lands. The surrounding areas are also characterised by areas of raised bog, such as Clonydonnin Bog, located east of the village. Ballinahown lies on the N62 road national approximately 10km south of Athlone.

The proposed site extends ca. 1.5 km west of Ballinahown village. With the exception of the first 200 metres, which comprises an existing hard-stand walkway associated with the Ballinahown Sports Park and a small section of woodland along the sports park boundary, the remainder of the route consists of greenfield lands.

The entire expanse of the proposed site is greenfield and is to expand for approximately 1.5 west of Ballinahown village.

An approximate outline of the subject site and its environs is provided in **Figure 2.1** overleaf.

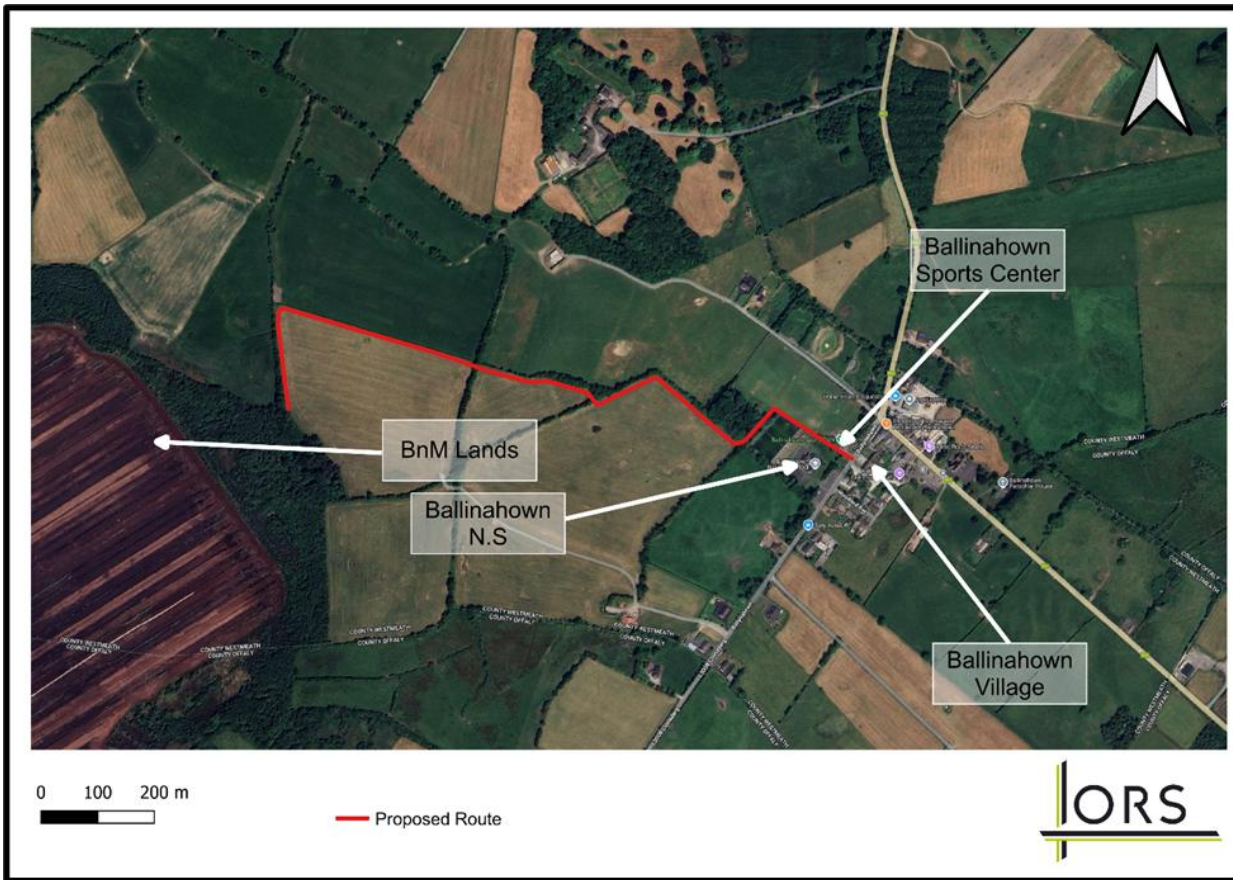


Figure 2.1 - Site location and environs.

2.2 Site Environmental Considerations

2.2.1 Topography

A topographical desktop survey was conducted across the entire site. The site is at between ca. 43 m and 51 m AOD from the highest to the lowest point across the 1.5 km pedestrian track. This indicates a vertical difference of ca. 7 m over a horizontal distance of ca. 850 m, resulting in a slope of approximately 1.06%. According to the FAO Slope Gradient Classes (2006), this places the site within the “nearly level” category (Class 03).

2.2.2 Hydrology

Maps generated by the Environmental Protection Agency (EPA) and featuring data from the EU Water Framework Directive (WFD) were consulted to assess the extent and quality of waterbodies present in the vicinity of the proposed development. The nearest waterbody to the site is the River Worm (WFD designation: BALLYNAHOWN_26) located ca. 300m north of the proposed development. The Worm flows from the southeast to the west through Ballinahown village, where it adjoins the River Boor (WFD designation: Boor) and eventually discharges into the River Shannon ca. 2.5km west of the end of the greenway.

The WFD runs in 6-year cycles with the most recent data being generated between 2016-2021. The Directive takes rivers, lakes, estuaries, groundwater and coastal waters into consideration and each waterbody can be awarded one of five statuses: High, Good, Moderate, Poor, and Bad. Additionally, waterbodies can be assigned a risk level (“At Risk”, “Not at Risk”, “Review”) which represents the risk of the waterbody of failing its WFD objectives by 2027.

Based on data from EPA maps and in accordance with the Water Framework Directive (WFD), both the River Worm, the Boor River have a WFD status of “Moderate” and are classified as “At Risk,” indicating that their ecological and chemical conditions are not favourable.

The entirety of the proposed site is situated within the BOOR_020 Sub-Basin, within Hydrometric Area 26, the Upper Shannon Catchment, and the Shannon[Lower]_SC_010 sub-catchment. The 3rd Upper Shannon Catchment Report (HA 26), published in May 2024 and based on data up to 2021, provides a summary of water quality assessments for this catchment. According to the report, the most significant pressures on water quality in the catchment are hydromorphology, followed by peat and agricultural pressures. The issues driven by these pressures are altered morphological condition (habitat), nutrient pollution and organic pollution impacts.

EPA Maps were also consulted to determine whether any WFD River Network Routes in the vicinity are designated as Salmonid Waters under *S.I. No. 293/1988 - European Communities (Quality of Salmonid Waters) Regulations 1988*. None of the nearby riverine waterbodies are included in this designation, meaning that no adverse impacts on salmonid habitats are anticipated from the site.

2.2.3 Undocumented Watercourses

Three watercourses traverse the proposed pedestrian track, none of which are identified on EPA hydrological mapping. It is assumed these features function as improved drainage channels associated with the agricultural lands through which the route passes. The design proposes to traverse each channel using flat-deck bridge structures, with no instream works required. This approach avoids direct disturbance to the watercourses and ensures minimal impact during both the construction and operational phases.

2.2.4 Soils, Geology and Hydrogeology

GSI & Teagasc soil mapping indicates that the surface soils across the site are classified as “Grey Brown Podzolics, Brown Earths” to the east of the site, and “Basin Peats, Blanket Peats” to the west of the site. The “Grey Brown Podzolics, Brown Earths” soils are described as being derived from mainly calcareous parent materials, which are deep, well drained mineral (mainly acidic) (BminDW). The “Basin Peats, Blanket Peats” soils are described as being derived from cutaway or cutover peat. The Geological Survey of Ireland (GSI) bedrock database indicates that soils of the proposed site are underlain at depth by bedrock of the Ballysteen Formation, which consists predominantly dark muddy limestone, shale.

According to GSI groundwater maps, the site overlies a locally important aquifer (LI). This

aquifer is capable of supplying locally important supplies (e.g., smaller public water supplies, group schemes). The groundwater vulnerability index of the entirety of the site is described as moderate.

The EPA map viewer indicates that the site is underlain by the Inny groundwater body. This groundwater body comprises a large area stretching from south Cavan and the eastern boundary of the Shannon RBD to Lough Ree.

No karst features are present in close proximity to the proposed works, with the nearest feature being a superficial solution feature (IE_GSI_Karst_40K_11045) located ca. 4.6 km south of the site.

2.2.5 Designated Areas

An Appropriate Assessment Screening was completed by ORS in September 2025 which outlines the Natura 2000 sites in proximity to the site as well as those which are hydrologically connected to the site. **Table 3.1** overleaf outlines these sites as per the report.

Table 3.1: Natura 2000 Sites within Zol of Subject Site			
Site Name & Code	Distance & Direction from Site	Potential S-P-R Linkage?	Details
Middle Shannon Callows SPA 004096	2.5 km W	Yes	Screened Out Although a river flows approximately 250 m north of the most easterly extent of the proposed greenway and is hydrologically connected to the River Shannon Callows SAC and the Middle Shannon Callows SPA, no direct hydrological connectivity has been established between on-site drainage features and this watercourse.
River Shannon Callows SAC 000216	2.5 km W	Yes	Drainage channels traversing the site are not confirmed to discharge to the river and could instead attenuate and infiltrate locally to ground, with any interaction limited to the underlying Locally Important bedrock aquifer. Although the river 250m north is hydrologically connected to the European sites, it is not considered feasible that disturbances or contaminants arising from the proposed development would travel the required waterborne (ca. 4 km) or airborne (ca. 2 km) distances to give rise to significant effects. This Construction Environmental Management Plan (CEMP) has been prepared specifically for the proposed

		<p>development, which will ensure the works involved with the proposed development will not significantly impact the surrounding environment. The CEMP outlines measures which will mitigate dust emissions, ensure no uncontrolled surface or groundwater discharges occur via existing drainage channels, and ensure no ecological or hydrological receptors will be impacted by the proposed works.</p> <p>Strict adherence to the CEMP, as well as good housekeeping and adherence to best practice construction and environmental management measures will prevent significant effects upon the SPA or its QIs from arising.</p>
--	--	---

In summary, the main findings of the report are as follows:

- Two Natura 2000 sites have indirect potential pathways established between the proposed development site and the Natura 2000 site, warranting further consideration: Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216).
- Both sites lie downstream of the River Worm, which flows ca. 300 m north of the proposed development before discharging to the River Boor ca. 1.5 km further north. The River Boor then enters the River Shannon to the northwest. The Middle Shannon Callows SPA and the River Shannon Callows SAC lie within the downstream hydrological pathway.
- Although the river 250m north is hydrologically connected to the European sites, it is not considered feasible that disturbances or contaminants arising from the proposed development would travel the required waterborne (ca. 4 km) or airborne (ca. 2 km) distances to give rise to significant effects.
- Strict adherence to this CEMP prepared for the proposed development, as well as good housekeeping and adherence to best practice construction and environmental management measures will prevent significant effects upon any Natura 2000 sites and their QIs from arising.

2.2.6 Flood Risk

OPW Flood maps indicate 0.1%, 1% and 10% AEP flood extents are not predicted to occur within the boundary of the site. OPW Flood maps indicate no risk of fluvial or pluvial flooding within the boundary.

2.2.7 Archaeology & Cultural Heritage

The archaeological and cultural heritage assessment has determined that the proposed development site contains 1 no. recorded features of archaeological interest adjacent to the pathways boundaries.

Bullaun stone: WM035-009

ITM Coordinates: 609178 , 733499

“In grassland, just below ridge of low hillock on NE facing slope. Bullaun stones (WM035-007---; WM035-007001-) 440m and 460m respectively to NNW. Ballynahown Court 580m to NE. An irregular-shaped earthfast boulder (1.15m x 1.25m; H 0.45m) with two bowl-shaped hollows on its upper surface. The sides of the hollow have a reddish appearance. The SE hollow (top diam. 0.33m; base diam. 0.15m; D 0.09m) is 0.19m from the NW hollow (top diam. 0.38m; base diam. 0.15m; D 0.05m) which is not as well preserved. The remains of a third shallow depression (diam. 0.29m) can be seen on the N quadrant of the boulder surface. A double row of pitted dots can be seen running along the N face of the side of the boulder. The significance of this feature is uncertain. This boulder is now located in open grassland and was located 20m E of a tree-ring now levelled which is depicted on the revised 1910 ed. OS 25-inch map. This tree-ring is not depicted on the 1838 ed. OS 6-inch map and was probably a landscape feature associated with nearby Ballynahown Court.”

The other nearest recorded monument (WM035-007(001)), a Bullaun stone, is located ca. 420 m north of the site, while the closest protected structure (15403508 : house) lies ca. 40 m to the east of the Ballinahown Sports Centre.



Figure 2.2: Location of Bullaun Stone (WM035-009) adjacent to pathway

2.2.8 Geological Heritage

The Irish Geological Heritage (IGH) Programme identifies and selects a complete range of sites that represent Ireland’s geological heritage under sixteen themes ranging from karst features to hydrogeology. The IGH Programme is a partnership between the GSI and the National Parks and Wildlife Service (NPWS) and sites identified as important for conservation are conserved as Natural Heritage Areas (NHA).

Reference to the GSI online database confirms there are no geological heritage sites located within the site boundary. The closest heritage site is ‘Clonmacnoise Eske (OY008) located ca. 2 km from the proposed site and is described as a *‘the longest esker system in the country and is a superb example of relict subglacial conduit.’* There are no other designated sites within the 2km study area of the Proposed Development. **Figure 2.2** indicates the Geological Heritage Site within the wider region.

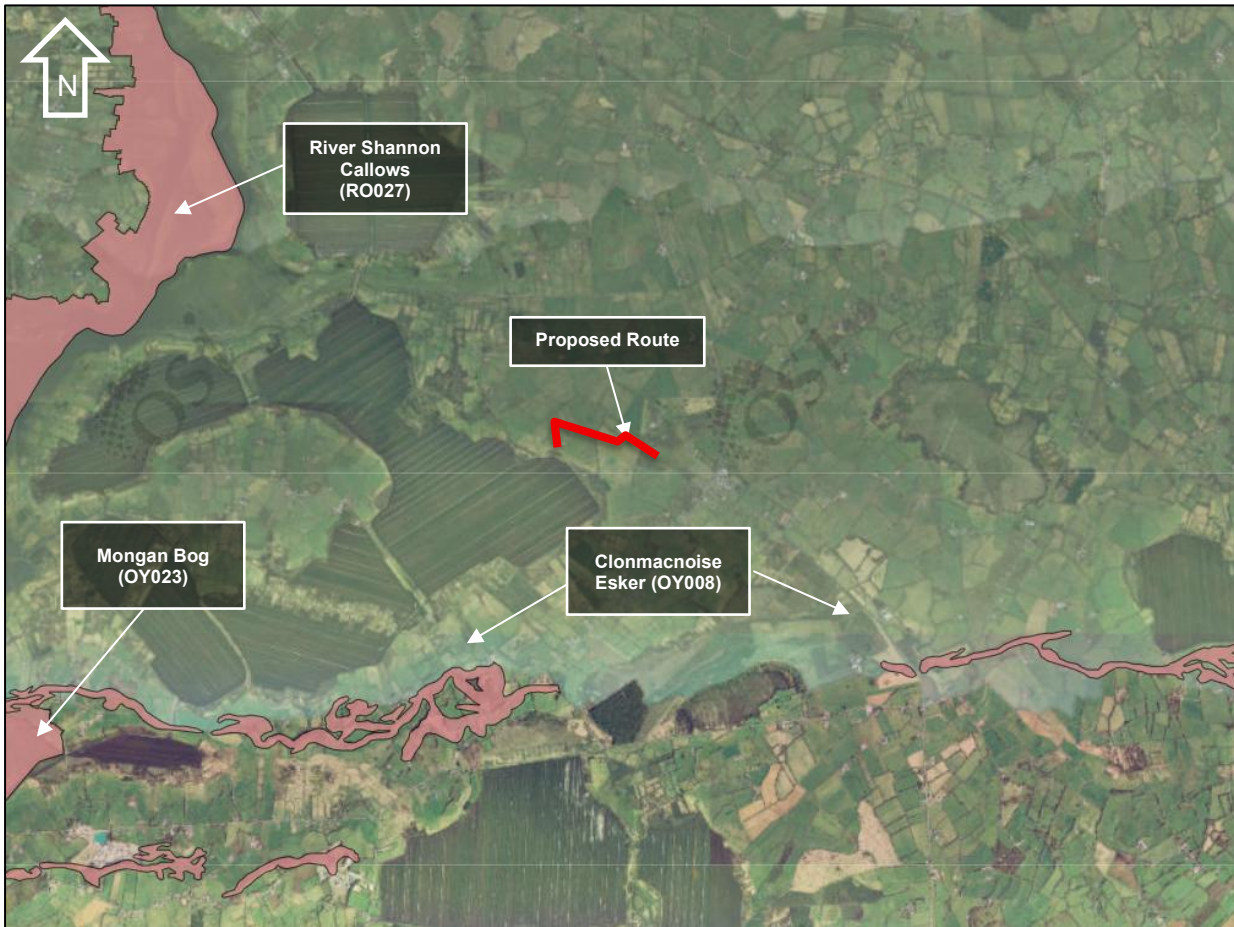


Figure 2.3: Geological Heritage Sites within the vicinity of the site (Source: GSI)

2.2.9 Historic Land Use

Based on a review of historical mapping, the site has changed very little since records began. It has consistently remained in agricultural use, with only minor alterations to surrounding roads and drainage features over time.

Table 2.2 summarises the findings.

Table 2.2 - Historical Land Use (<https://webapps.geohive.ie/>)

Date / Period	Source	Description
1837-1842	MapGenie 6 First Edition Black & White	Based on a review of available historical mapping, the site has remained largely unchanged and has been in continuous use as improved agricultural pasture for the full period over which mapping records exist
1837-1842	MapGenie 6 Inch First Edition Colour	
1830's - 1930's	MapGenie 6 Inch Last Edition Black & White (Reviewed)	

Date / Period	Source	Description
1863 - 1924	MapGenie 25 Inch	
1995	MapGenie Imagery 1995	
1996 - 2000	MapGenie Imagery (1996 - 2000)	
2001 - 2005	MapGenie Imagery (2001 - 2005)	
2006 - 2012	MapGenie Imagery (2006 - 2012)	
2013 - 2018	MapGenie Imagery (2013 - 2018)	

2.2.10 Noise Pollution

Under the Environmental Noise Directive (END) 2002/49/EC, members are required to develop strategic noise maps and noise management action plans for transport noise sources every 5 years. These strategic noise maps can be accessed via the EPA.ie website.

Noise modelling for the proposed development was considered using the EPA Noise Mapping platform. However, the nearest available noise model data is for the M6 Motorway ca. 5.7 km northeast of the proposed development.

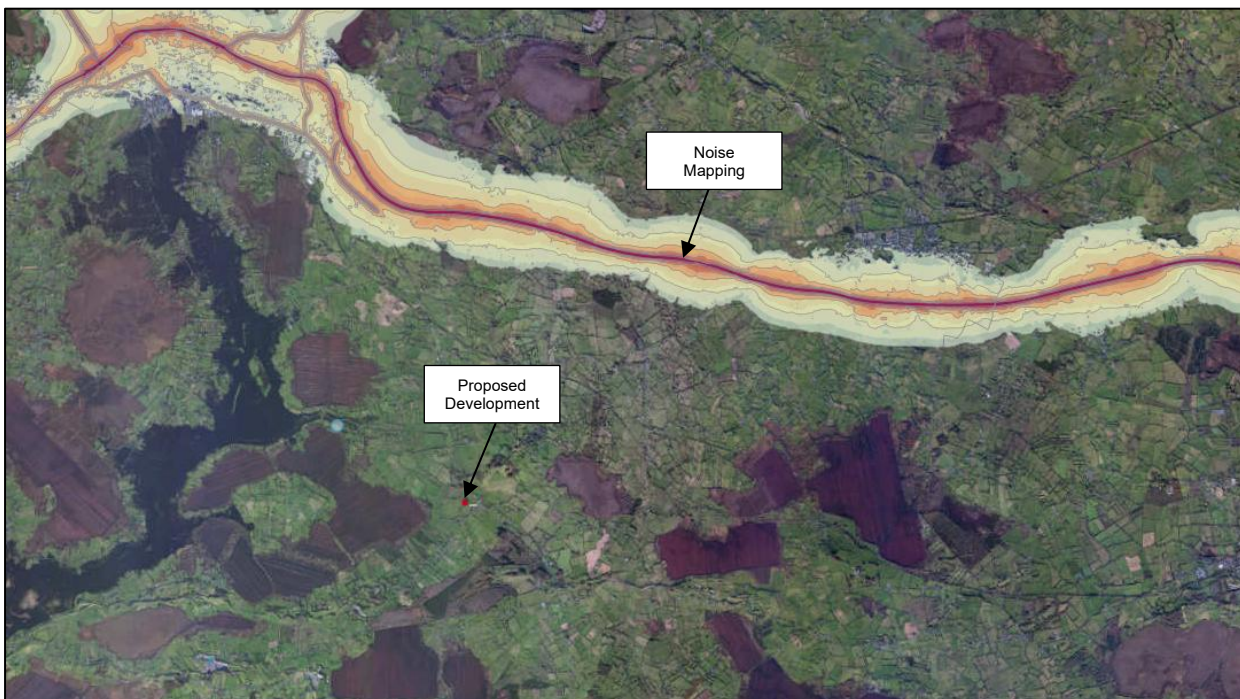


Figure 2.4: Nearest EPA Strategic Noise Mapping (Road – Daytime Noise) (Source: epa.ie Map Viewer)

Noise generation within the site boundary and immediately adjacent to the site during the construction phase is expected to increase temporarily due to the movement of construction



plant, delivery vehicles and operatives associated with the construction of the combined cycleway and pedestrian path. Works will include site preparation, earthworks, surfacing and the installation of and bridge structures.

It is not anticipated that construction-related noise will result in significant nuisance to nearby receptors. This assessment is based on the short-term and linear nature of the works, the absence of high-impact activities such as piling or blasting, and the existing baseline noise environment, which is influenced by local traffic movements and recreational use of the surrounding area. Construction activities will be temporary, progressive along the route, and managed in accordance with standard construction practices, thereby limiting the duration and intensity of noise at any one location.

Proposed mitigation steps outlined in **Section 5** will ensure that construction traffic is routed in such a way that minimizes disruption to nearby amenities and regular flow of traffic.

3 Development Description

Westmeath County Council proposes to develop a 1.3 km combined pedestrian and cycleway from Ballinahown Sports Park through lands predominantly in agricultural use, located to the west of the L-1406 local road in Ballinahown, Co. Westmeath

The purpose of the project is to link Ballinahown village to the wider Greenway network by providing a dedicated pedestrian and cycle connection between Ballinahown and the planned Bord na Móna Greenway (Athlone–Clonmacnoise). In time, this Greenway will connect to the Dublin–Galway Cycleway, forming part of the EuroVelo 2 route from Galway to Moscow

3.1 Details of the Development

This Construction Environmental Management Plan (CEMP) will outline the intended sequence of works. A construction programme of 12 months is expected. During the construction phase, deliveries and construction personnel will access the site on a daily basis. The arrivals and departures are expected to be spread out throughout the day; however, it is expected that they will be arranged in a manner to avoid traffic peak hours in the surrounding road network.

The construction will operate within Westmeath County Council's recommended hours, which are from 08:00 to 18:00 from Monday to Friday and between 08:00 to 16:00 on Saturdays. No works shall be carried out on Sundays and public holidays or outside the aforementioned hours.

Construction traffic associated with the Proposed Development will include:

- Construction personnel accessing the site by private vehicles and vans.
- Delivery of materials by vans and HGVs.
- Earthworks machinery (excavators, rollers and dumper trucks) transported by HGVs.
- HGVs for the management of surplus excavated material.

Access to the development is proposed via the existing Ballinahown Sports Park entrance located on the L3008 local road ca. 150m south of an intersection with the N62 national road.

Haul routes for construction traffic are to be agreed upon with Westmeath County Council.

Section 5: Outline Traffic Management Plan provides further detail on the traffic management arrangements for this project.

A layout plan of the development is detailed in **Figure 3.1**.



Figure 3.1 Proposed Site Layout Plan (Source: WCC.)

3.2 Phasing of the Development

The project is expected to be divided into phases as follows:

Pre-Construction Phase - Site clearance, operations compound and preliminary works

- Confirm landowner agreements.
- Installation of the site boundary and site clearance.
- Establishment of a temporary site compound, including welfare facilities, storage areas, designated waste zones.
- Installation of temporary access points and internal haul routes for construction vehicles.
- Delivery and staging of key construction materials, equipment, and prefabricated components.
- Placement of environmental protection measures, including silt fencing, tree protection barriers, fencing around heritage feature and surface water controls.
- Implementation of temporary traffic and pedestrian management controls, including warning signage, adjacent to the sports park where the works interface with public roads and walkway.

Construction Phase – Site preparation, cycleway construction, drainage

- Establishment of site access points, compound areas and welfare facilities in agreed locations.
- Erection of temporary fencing, hoarding and signage to define the working area and control public access.
- Stripping and segregation of topsoil and subsoil, with temporary storage in designated areas for reuse.
- Site clearance limited to the defined footprint of works, with vegetation removal undertaken in a controlled manner.
- Installation of flat deck bridges to traverse 3 no. existing drainage channels along the cycleway alignment.
- Bridges to be installed sequentially to facilitate construction progression along the route.

- The drainage channel closest to the sports park to be traversed first, enabling continuation of cycleway construction through this section.
- The second drainage channel to be traversed next to allow further progression of works along the alignment.
- The third and final drainage channel to be traversed to facilitate completion of the remaining section of the cycleway.
- All bridge installations to be undertaken with no in-stream works, with structures spanning channels from bank to bank.
- Flat deck bridge units to be delivered to site on a just-in-time basis to minimise on-site storage and disturbance.
- Temporary works and plant access to be managed to avoid encroachment into drainage channels and to protect channel banks
- Formation of the cycleway formation, including excavation, trimming and compaction of sub-base layers.
- Importation, placement and compaction of granular fill and surfacing materials in accordance with the design specification.
- Construction of cycleway surfacing, kerbing, edging and ancillary features.
- Installation of French drains along a portion of the cycleway running adjacent to an existing drainage channel.
- Pollution prevention measures, including silt control, sediment traps and protection of nearby watercourses.
- Management of construction traffic and plant movements to minimise disturbance and prevent tracking of mud onto public roads.
- Storage and handling of fuels, oils and materials in accordance with spill prevention and response procedures.
- Ongoing inspection and maintenance of drainage and environmental control measures throughout the works.
- Reinstatement and stabilisation of disturbed areas following completion of construction activities.

Ancillary works

- Electrical services for lights.
- Site signage and wayfinding.
- Asphalt installation and pathway markings.

3.3 Pre-Construction Activities

The main contractor will conduct enabling works for establishing site setup, appropriate signing, hoarding, security fencing and welfare facilities.

3.3.1 Environmental Induction

The Environmental Induction will be integrated into the general site induction on a case-by-case basis for each member of staff employed on-site depending on their assigned roles and responsibilities on site. Where necessary, the Environmental Induction will as a minimum

include:

- An Outline of the CEMP structure and discussion of the key environmental risks and constraints.
- A discussion of the applicable Works Method Statement.
- The roles and responsibilities of staff, including contractors, in relation to environmental management.

3.3.2 Site Set-Up and Hoarding

Perimeter hoarding will be provided around the site to provide a barrier against unauthorised access from the public areas. Controlled access points to the site, in the form of gates or doors, will be kept locked at any time that these areas are not monitored (e.g. outside working hours).

The hoarding will be well-maintained and may be painted. Any hoardings may contain graphics portraying project information. The site hoarding may be branded using the appointed Contractors' logos, etc. Some marketing images or information boards may also be placed on the hoarding. Access to the site will be controlled and monitored outside of site working hours. All personnel working on site must have a valid Safe Pass card and the relevant CSCS cards.

A suitably secure site compound will be set up, wherever the restricted confines of the site allow and will facilitate the efficient delivery of materials and personnel to the site. This compound is to include material storage, a site office and meeting room, and staff welfare facilities. The site compound location will be specified by the main contractor once this is appointed. It is typically necessary to move the location of the compound as development progresses.

Generators or connections to electricity and water services will be set up to facilitate site works.

3.4 Construction Sequence of New Structures

The construction specifications for the proposed residential units are not yet finalised. This section of the CEMP will be updated once a main contractor is appointed and a definitive construction program is established, in advance of the commencement of the project.

A summary of operations for the construction phase is listed in **Table 3.1** below.

Table 3.1: Summary of Operations Expected

External envelope will or may require the following operations:	Internal work will or may require the following operations:
<ul style="list-style-type: none"> N/A (no works to building envelopes proposed) 	<ul style="list-style-type: none"> N/A (no internal works proposed)
Above ground external operations:	Below ground operations:
<ul style="list-style-type: none"> Site preparation works, including establishment of access routes, compounds and temporary fencing. Construction of the cycleway, including formation of sub-base and surfacing. Installation of flat deck bridges to traverse 3 no. existing drainage channels, undertaken sequentially to allow progression of cycleway works. Delivery and installation of bridge units on a just-in-time basis. Reinstatement of disturbed areas following completion of works 	<ul style="list-style-type: none"> Shallow excavations associated with cycleway construction (typically up to ca. 50 mm depth for formation and surfacing). Excavations for installation of French drains along sections of the cycleway adjacent to existing drainage channels. Excavations for drainage infrastructure (e.g. carrier drains and associated features). No in-stream works within drainage channels.

3.5 Site Working Hours

Construction operations on site will generally be subject to a planning permission and conditions. However, it may be necessary for some construction operations to be undertaken outside these times, for example, service diversions and connections, concrete finishing and fit-out works, etc.

Deliveries of materials to site will generally be between the hours of 08:00 – 18:00 Monday to Friday, and 08:00 to 16:00 on Saturdays, or as specified by Westmeath County Council. There may be occasions where it is necessary to make certain deliveries outside these times, for example, where large loads are limited to road usage outside peak times.

If materials need to be received or work carried out outside the specified times, Westmeath County Council must be notified at least 3 workdays in advance. Written confirmation from the Planning Department is required when requesting extensions to normal working hours.

3.6 Design Changes

This section shall be updated during the construction phase to reflect any changes in design or practice that have an impact on resource and waste management.

4 Environmental Management Plan

4.1 Background

A preliminary risk assessment was carried out for the proposed site location in accordance with the Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition, produced by the London Authorities Noise Action Forum, July 2016. This assessment took into account factors relating to the proximity of the site to sensitive receptors and rated the levels of nuisance and disruption anticipated with scheduled work practices.

Following the completion of this risk assessment, available in **Appendix A**, the proposed development was determined to be a **low-moderate risk** site. This section outlines suitable measures to minimise nuisance noise and dust emissions in order to minimise any impact of the proposed developments on surrounding receptors.

4.2 Vibration & Noise

The Contractor will aim to restrict noise levels to the following levels:

- Daytime (08:00 to 19:00 hrs) – 59dB.
- Evening (19:00 to 23:00 hrs) – 55dB.
- Night-time (23:00 to 08:00 hrs) – 45dB.

To minimise noise from construction operations, no heavy construction equipment/ machinery (to include pneumatic drills, construction vehicles, generators, etc.) shall be operated on or adjacent to the construction site before 08:00 or after 19:00, Monday to Friday, and before 08:00 or after 14:00 on Saturdays. No activities shall take place in site on Sundays or Bank Holidays. No activity, which would reasonably be expected to cause annoyance to residents in the vicinity, shall take place on site between the hours of 19:00 and 08:00am.

The Proposed Development will be obliged to comply with BS 5228 "*Noise Control on Construction and open sites Part 1*". The contractor shall implement the following measures to eliminate or reduce noise levels where possible, by standard:

- All site staff shall be briefed on noise mitigation measures and the application of best practicable means to be employed to control noise.
- All staff should be briefed on the complaints procedure, the mitigation requirement and their responsibilities to register and escalate complaints received.
- Good Quality site hoarding is to be erected to maximise the reduction in noise levels. It is recommended to incorporate a 2.4m timber hoarding to mitigate excessive noise pollution to neighbouring estates and sensitive receptors.
- Contact details of the contractor and site manager shall be displayed to the public, together with the permitted operating hours.

- Material and plant loading and unloading shall only take place during normal working hours.
- Ensure that each item of plant and equipment complies with the noise limits quoted in the relevant European Commission Directive 2000/14/EC.
- Fit all plant and equipment with appropriate mufflers or silencers of the type recommended by the manufacturer.
- Use all plant and equipment only for the tasks for which it has been designed.
- Locate movable plant away from noise sensitive receptors.
- Avoid the transfer of noise and vibration from demolition activities to adjoining occupied buildings through cutting any vibration transmission path or by structural separation of buildings.
- Ensure written confirmation is received from Westmeath County Council Planning Department when applying for extensions to normal working hours. No out of hours work to be undertaken unless permission to do so has been granted.
- In the event that excessive noise levels are deemed necessary, Westmeath County Council and local residents must be suitably notified in advance of said works.

The contract documents shall specify that the Contractor undertaking the construction of the works will be obliged to take specific noise abatement measures when deemed necessary to comply with the recommendations of *BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction on open sites - Noise*. The following list of measures will be implemented, where necessary, to ensure compliance with the relevant construction noise criteria:

- No plant used on site will be permitted to cause an on-going public nuisance due to noise.
- The best means practicable, including proper maintenance of plant, will be employed to minimise the noise produced by on site operations.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working for the duration of the contract.
- Compressors will be attenuated models, fitted with properly lines and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers.
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use.
- Any plant, such as generators or pumps, which is required to operate before 07:00hrs or after 19:00hrs will be surrounded by an acoustic enclosure or portable screen.
- During the construction programme, supervision of the works will include ensuring compliance with the limits detailed below using methods outlined in BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Noise

Table 4.1: BS 5228 Categorisation Table.

Assessment category and threshold value period (L_{Aeq})	Threshold value, in decibels (dB)		
	Category A ^{A)}	Category B ^{B)}	Category C ^{C)}
Night-time (23.00–07.00)	45	50	55
Evenings and weekends ^{D)}	55	60	65
Daytime (07.00–19.00) and Saturdays (07.00–13.00)	65	70	75
<p><i>NOTE 1 A significant effect has been deemed to occur if the total L_{Aeq} noise level, including construction, exceeds the threshold level for the Category appropriate to the ambient noise level.</i></p> <p><i>NOTE 2 If the ambient noise level exceeds the threshold values given in the table (i.e. the ambient noise level is higher than the above values), then a significant effect is deemed to occur if the total L_{Aeq} noise level for the period increases by more than 3 dB due to construction activity.</i></p> <p><i>NOTE 3 Applied to residential receptors only.</i></p>			
A	Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB are less than these values).		
B	Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB are the same as category A values).		
C	Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB are higher than category B values).		
D	Category D: 19.00–23.00 weekdays, 13.00–23.00 Saturdays and 07.00–23.00 Sundays.		

- The hours of construction activity will be limited to avoid unsociable hours where possible. Construction operations shall generally be restricted to between 07:00hrs and 19:00hrs weekdays and between 08:00hrs and 16:00hrs on Saturdays. However, any necessary or emergency out of hours working will be agreed in advance with the local Planning Authority.

4.3 Dust and Air Quality

During the construction phase, all necessary steps will be taken to contain dust and other airborne particulate matter arising from the site, preventing nuisance to local persons. These measures include by default:

- Covering skips and material stockpiles.
- Regular damping and sweeping of roads and pavements.
- Using water sprays for dust suppression.
- Providing proper hard-stand access for vehicles to and from the site to prevent dirt and dust transfer onto public roads.

The extent of dust generation during construction activities is influenced by environmental factors such as precipitation, wind speed, and wind direction. Primary sources of dust at this location are anticipated to be soil stripping, foundation excavation, and the sawing of wood, steel, and concrete throughout the project duration. Additionally, vehicle movement across the site during dry periods can exacerbate dust dispersion. The release of fumes and other air emissions during the construction phase will also be subject to control measures, as detailed below:

- Contractors shall have good site management procedures throughout the construction works to avoid the creation of airborne dust. Contractors are obliged to guarantee that

sufficient preventative measures to limit dust generation are employed through suitable method statements, accounting for the risks and mitigation measures described in the CEMP.

- Throughout working hours, dust control procedures will be assessed as appropriate, subject to the prevailing meteorological conditions.
- The name and contact details of an appropriate person to contact concerning air quality and dust issues shall be exhibited on the site boundary, this notice board should also detail head/regional office contact details.
- It is advisable that community engagement commences before works begin on site describing the nature and duration of the works to local residents and businesses.
- Where complaints are received concerning dust, records will be maintained including likely causes and suitable action taken to alleviate any issues as a result of the construction. Management of any complaints will be done in conjunction with a suitable Complaints Procedure.
- During activities which pose a high probability of dust production and/or during periods of adverse weather conditions the rate of site inspections should be increased.
- Site inspections will be completed frequently to monitor compliance with dust control strategies set out in the CEMP and the results recorded of these inspections, including nil returns.
- The dust reduction strategies should be evaluated at regular intervals during the project to preserve the effectiveness of the techniques employed and to safeguard the minimisation of dust using best practice and procedures. In the event of dust spoiling/nuisance occurring beyond the boundary of the site, site activities will be assessed, and suitable measures utilized to negate the nuisance. Outlined dust mitigation measures to be employed are described below.
- Fully enclose or cover certain operations, where possible, when there is a high possibility for dust generation.
- Prevent site runoff of water or mud.
- Keep site barriers and fencing clean using watering procedures.
- Remove materials that have the capability to produce dust from site as soon as practicable, unless being reused on site.
- Opt for mains or battery powered equipment in preference to diesel- or petrol-powered generators where practicable.
- Use cutting or grinding equipment fitted with suitable dust suppression techniques such as water sprays or local extraction.
- Make certain an adequate water supply is available on the site for effective dust/particulate matter suppression/mitigation.
- Use enclosed chutes and conveyors and covered skips.
- Reduce drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever possible.
- Make certain equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

- Strictly no bonfires or burning of waste materials on site.
- A speed limit of 15km/hr will be applied as an effective control measure for dust for on-site vehicles utilising unpaved road surfaces.
- Entrance gates should be located at a minimum 10m from local sensitive receptors as much as is reasonably practical/possible.
- Watering of the site will be utilised during periods of prolonged dry weather to ensure unpaved surfaces, or areas associated with problematic dust are kept moist. Frequency of watering will be dependent on weather conditions, vehicle activity and soil type, dust suppression such as sprinklers, bowsers etc. should be available during the construction phase.
- A road sweeper will be applied as required to control mud and dust on the site access roads.
- All vehicles must switch off engines once stationary i.e. no idling vehicles on site.
- Vehicles entering and leaving sites must be covered to prevent dusty emissions from materials during transport.
- Document all inspections of haul roads and any follow-up action in a site logbook.
- Employ a wheel washing system with rumble grids to remove collected dust and mud prior to leaving the site where reasonable.
- Sand and other aggregates must be stored in bunded areas and are not allowed to dry out and become airborne, unless this is required, in which case ensure that appropriate additional control measures are in place.
- Bulk cement and other fine powder materials must be delivered in covered tankers and stored in silos with suitable control systems to negate escape from material and overfilling during delivery.
- Overburden material shall be shielded from exposure to wind by storing the material in sheltered regions of the site. Where possible storage piles should be positioned downwind of sensitive receptors.
- Adequate watering will take place to ensure the moisture content is high enough to suppress dust. The watering of stockpiles has been found to have an 80% control efficiency (UK ODPM 2002).
- Plan site layout so that machinery and dust causing activities including stockpiling are located away from receptors, as far as is possible.
- Erect solid screens or barriers around dusty activities or the site boundary which are at least as high as any stockpiles on site.
- Vehicles delivering or collecting material with capacity for dust emissions shall be covered with tarp, to limit the blow-off of dust.
- A wheel wash facility should be installed near the entrance of the construction site, where feasible. All trucks leaving the site must pass through the wheel wash. In addition, public roads outside the site shall be regularly inspected for cleanliness, as a minimum daily, and cleaned as necessary.
- The constant control of fugitive dust will maintain the prevention of significant emissions, instead of an inefficient attempt to manage them once they have been released. The main

elements with respect to control of dust will be:

- The design of a site policy on dust and the allocation of the site management responsibilities for dust management.
- The creation of a documented system for managing site practices regarding dust control.
- The development of a method by which the functionality of the dust control plan can be consistently monitored and assessed; and
- The requirement of effective procedures to handle any complaints.
- Material stockpiles will be strategically placed to reduce wind exposure. Materials will be ordered on an "as needed" basis to reduce excessive storage, as strategic placement minimizes wind erosion, and reduced storage means less material is exposed.
- The contractor will spray water on the surface of all roads in the vicinity of the site if required in order to minimise dust generation from the construction activities, as water binds dust particles on the road surface, preventing them from becoming airborne due to traffic.
- Appropriate dust suppression will be employed to prevent fugitive emissions affecting those occupying neighbouring properties or pathways, as a general measure ensuring that all effective techniques are used to protect nearby areas.
- Covers or dampening of soil stockpiles when high wind and dry weather are encountered, if required, to provide extra protection when conditions are most conducive to dust generation.
- Internal roads and footpath cleaning shall be undertaken during the ground works phase to minimise dust emissions, to remove accumulated dust, preventing it from being re-suspended by pedestrian or vehicular traffic.
- Wet cut concrete saws are only to be used on site. Tools with dust extraction filters are to be used when and where possible, as wet cutting binds dust at the source, and extraction filters capture airborne dust.
- During construction, all excavated materials will be visually assessed for contamination. Any contaminated material detected will be sent for analysis to a suitable environmental laboratory and subsequently quantified, segregated, and transported for disposal by a licensed contractor, to ensure proper handling and disposal of contaminated materials and prevent environmental pollution.

4.4 Surface Water and Groundwater Protection

The main pollutants with the potential to impact water receptors are silt, fuel/oil, concrete and chemicals. The steps outlined below aim to eliminate contamination of site surface water runoff. The below recommendations are advised with reference to the Inland Fisheries Board recommendations for protection of adjacent water courses during the construction phase:

- Keep sand and gravel stockpiles to a minimum size and well away from the drainage channels traversing the path route.
- Cover soil and debris stockpiles during high winds or wet weather to prevent erosion and

dust.

- Avoid earthworks and heavy plant movement during periods of extensive rainfall.
- Landscaping and reinstatement should be carried out as soon as possible to reduce exposed soils.
- Excavations should be backfilled as soon as possible to reduce infiltration and risk of groundwater contamination.
- Excavations must be covered during rainfall to prevent accumulation of sediment-laden water that would require dewatering.
- Store fuels, oils, paints, greases, and hydraulic fluids in banded, impermeable compounds located away from drains, gullies, and the southern drainage ditch. Bunds must hold 110% of the primary vessel capacity.
- Fuel bowsers must also be banded.
- Refuelling:
 - Not permitted within 50 m of the drainage channels or of any other surface drains.
 - To be carried out only by trained operatives using drip trays.
 - Plant and machinery must use drip trays when parked.
- Spill response:
 - Spill kits available at all refuelling/storage points and in each plant vehicle.
 - Staff trained in spill response.
 - Emergency spill procedures (containment, reporting, removal of contaminated soil to a licensed facility) must be in place.
- Concrete use:
 - On-site batching is prohibited.
 - Use pre-cast concrete where possible.
 - Any in-situ pours must be carried out in dry days and isolated from drains/watercourses until fully cured.
 - No direct discharges containing cement, residues, or chemicals to surface waters.
- Use temporary measures during rainfall events (sandbags, silt fencing) to control run-off to drainage channels.
- Use supplementary erosion controls (geotextiles, vegetated buffers) where appropriate.
- Appoint site staff responsible for environmental compliance.
- Carry out regular inspections of sediment controls, plant/machinery condition, and storage areas.
- Keep records of inspections, maintenance, and corrective actions.
- Main contractor must prepare and implement an emergency response plan for accidental sediment release or pollution incidents.
- Store fuels, oils, paints, greases, and hydraulic fluids in banded, impermeable compounds located away from drains, gullies, and the 3 no. drainage channels. Bunds must hold 110% of the primary vessel capacity.

- Fuel bowsers must also be banded.
- Install impermeable liners beneath soil and material storage areas to contain potential contaminants, particularly if contaminated soil is identified on site.
- Appoint site staff responsible for environmental compliance.
- Carry out regular inspections of plant/machinery condition, and storage areas.
- Keep records of inspections, maintenance, and corrective actions.
- Main contractor must prepare and implement an emergency response plan for accidental sediment release or pollution incidents.
- Excavations will be backfilled as soon as practicable to minimise the risk of contaminant infiltration into the subsurface and underlying aquifer.
- Landscaping works will be carried out promptly to reduce surface erosion and weathering.
- Baseline groundwater quality monitoring will be conducted prior to the commencement of works.
- Foundation and service designs will account for groundwater pressures and will include attenuation systems where appropriate, ensuring alignment with greenfield runoff rates (Q_{bar}).
- Pollution prevention measures will be enforced throughout all construction phases to prevent untreated runoff, spills, or other pollutants from entering groundwater or surface waters.
- Any soils exhibiting evidence of contamination (e.g., staining, odour, or debris) will be segregated, sampled, and tested for classification prior to reuse or disposal.
- Compounds, material storage areas, and fuel bowsers will not be within 50 meters of any surface water.
- All temporary drainage features will be subject to regular inspection and maintenance to ensure effective operation, with checks carried out especially after rainfall.
- The drainage strategy will be reviewed and adapted throughout the construction period to reflect evolving site conditions.
- A flood risk response plan will be prepared, setting out actions and procedures for extreme weather events, including safe evacuation routes for staff and protection of plant and materials.
- Emergency pumps, sandbags, and spill kits will be kept on-site to allow rapid response to storm events or accidental discharges.
- Weather forecasts will be reviewed regularly, and pre-emptive measures will be taken in advance of heavy rainfall.
- Manholes, gullies, and drains receiving surface water runoff from the site and access routes shall be protected using silt fencing material and sandbags. This measure will mitigate the risk of silt and chemical runoff entering the surface water network by establishing a physical barrier to prevent pollutants from migrating into the drainage system.
- Refuelling will not be permitted within 50m of rivers and 10m of surface drains, with the exception of pumps for dewatering purposes, if needed, which are to be stored on portable spill bunds, to minimize the risk of direct contamination of water bodies from refuelling

activities.

- Runoff from machine service and concrete/grout mixing areas must not enter stormwater drains and gullies leading off-site, to prevent the discharge of potentially polluting substances into the environment.
- Earthworks and the movement of plant on soil surfaces will be avoided during periods of extensive rainfall to limit silt-laden runoff and damage to soil structure, as saturated soils are more susceptible to erosion and compaction.
- Silt fences will be installed as needed, parallel to the site redline boundary and inside the site fencing to the east and south extents of the site, buried into the existing soil surface and standing 400-500mm above ground level. Additional erosion control measures, such as geotextiles or vegetative buffers, may also be implemented in conjunction with the silt fencing, to effectively trap sediment in runoff and prevent its release from the site.

4.5 Protection of Ecological Receptors

The potential impacts of the proposed development on the conservation objectives and qualifying interests of nearby Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and Proposed Natural Heritage Areas (pNHAs) have been assessed. Two Natura 2000 sites have indirect pathways established between the proposed development site and the Natura 2000 site, warranting further consideration: Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216).

Strict adherence to the CEMP, as well as good housekeeping and adherence to best practice construction and environmental management measures will prevent significant effects upon the SPA or its QIs from arising.

By following the standard mitigation measures outlined in this report, the proposed development should not significantly affect the conservation objectives of the aforementioned sites. The integrity of these sites should not be adversely impacted.

All works associated with the development should be confined to the proposed development site. No disturbances to any area of the SAC/SPA should occur during the construction or operation of the development.

Further mitigation measures are:

- Prior to the commencement of developments on site, the site engineer and the contractors should be made aware of the ecological sensitivity of the site and its surrounding habitats. They must be made familiar with the mitigation measures outlined in this CEMP and if possible, a statement signed by them acknowledging these mitigation measures should be presented to the Local Authority along with the Notice of Commencement.
- All guidelines within the document Inland Fisheries Ireland Requirements for the Protection of Fisheries Habitats during Construction and Development Works and River Sites (www.fisheriesireland.ie) and the updated guidelines entitled Guidelines on Protection of Fisheries During Construction Works in And Adjacent to Waters (2016).
- It is vital that there is no deterioration in water quality in the River Boor. This will protect both habitats and species that are sensitive to pollution within the Middle Shannon Callows

SPA (004096) and River Shannon Callows SAC (000216). Strict controls of erosion, sediment generation and other pollutants associated with the construction process should be implemented, including the provision of attenuation measures, silt traps or geotextile curtains to reduce and intercept sediment release into any local watercourses

- The removal of hedges and vegetation should be confined to those areas where it is deemed absolutely necessary to facilitate development of proposed structures.
- Where vegetation removal is required, it is recommended that existing scrub, hedgerow, and treeline habitats within the site are removed outside of the bird nesting season (1st March to 31st August).
- It is recommended that felled trees are left lying for several hours before further chopping or mulching to allow any bats within the tree to emerge and disperse from the immediate area.
- Felled branches or trunk pieces may be retained for use in the landscaping plan for the proposed site. Decaying wood provides suitable habitat for a variety of small insect species, and scattered branches and leaves can provide suitable nesting habitat for hedgehog and other small mammals.
- Only low intensity lighting should be used on the development. This will reduce the impact of any new lighting scheme on local bat populations. Lights should not be directed towards the riverbank, on known bat roosts or areas of mature vegetation.
- Bare soil should be seeded as soon as possible with grass seed. This will minimise erosion into local drains and watercourses.
- The removal of vegetation with herbicides should be avoided.
- Any landscaping should involve the planting of native Irish species that are indigenous to the site. Suitable species would include birch, oak, willow and alder. Only locally specific wildflower seed mixes should be used.
- Vehicles will be required to undergo inspection before using them on site to ensure no invasive species are present such as Japanese Knotweed.

An Appropriate Assessment Screening Report completed by ORS accompanies this planning application, the main findings are as follows:

On the basis of objective information provided in the AA Screening (**Doc. Ref.: 252243-ORS-XX-XX-RP-EN-13d-001**), a significant effect of the proposed development on any European sites, individually or in combination with other plans or projects, can be excluded. It is therefore the opinion of the author that Stage II (Natura Impact Statement) of the proposed development is not required.

4.6 Protection of Archaeological Feature

The archaeological and cultural heritage assessment has determined that the proposed development site contains a bullaun stone (Ref: WM035-009), which is recorded as an archaeological site of interest located adjacent to the pathway boundaries.

The project team intends to protect this feature throughout the construction process and operational phase of the cycle way and to ensure that its heritage value is preserved for the local community and future visitors.

- Temporary protective fencing will be installed around the bullaun stone prior to the commencement of any nearby works.
- This fencing will remain in place for the duration of construction activities.
- Appropriate fencing will also be incorporated into the final design of the pathway to prevent accidental damage or disturbance during its long-term operation.
- To promote awareness of the bullaun stone, interpretive signage will be installed at an appropriate location.
- The signage will describe the historical significance of the feature and will encourage respectful behaviour from members of the public.

These combined measures will ensure that the bullaun stone is fully safeguarded and appropriately acknowledged within the context of the new pedestrian and cycleway route.

5 Outline Traffic Management Plan

5.1 Background

This Outline Traffic Management Plan (OTMP) is designed to facilitate access to the site by plant, machinery, and work vehicles during collections/ deliveries; and to minimise traffic impacts of construction to residents and amenities in the vicinity of the site.

5.2 Outline Traffic Management Plan

The construction phase OTMP has been prepared in accordance with the following best practices publications and demonstrates compliance with the requirements of the Health and Safety Authority:

1. Chapter 8 of the Traffic Signs Manual and the Safety, Health & Welfare at Work (Construction) Regulations – Department of Transport.
2. Temporary Traffic Management Design Guidance – Department of transport, Tourism and Sport.

The main contractor will be required to implement monitoring measures to confirm the effectiveness of the mitigation measures outlined in the OTMP. The OTMP shall address the following issues:

- Site Access & Egress.
- Traffic Management Signage.
- Routing of Construction Traffic/ Road Closures.
- Timings of Material Deliveries to Site.
- Traffic Management Speed Limits.
- Road Cleaning.
- Road Condition.
- Road Closures.
- Enforcement of Construction Traffic Management Plan.
- Details of Working Hours and Days.
- Details of Emergency plan.
- Communication.
- Construction Methodologies.
- Particular Construction Impacts.

5.3 Construction Entrance and Construction Traffic Control

5.3.1 Access in

The site's eastern boundary is flanked by the L3008 local road which intersects with the N62

national road ca. 150m north of the Ballinahown Sports Park entrance.

Vehicular access to the Proposed Development is via an existing access to Ballinahown Sports Park.

The proposed site access roads, the L3008 from the south, and the N62 from the north, are single lane carriageway of approximately 4-5m wide and 6-7m wide, respectively.



Figure 5.1 – Access to the site – shared with the Ballinahown Sports Park on the L3008 (Source: Google© Maps)

5.3.2 Site Access

When vehicles are due to depart from the site the banksman will ensure the roadway is safe to proceed and will communicate with the driver in the cab. The proposed construction exit from the site will be the same as that used for entrance to the site, as planned, see **Figure 6.1**.

The main contractor is required to ensure the provision of adequate guarding and lighting appropriate to the circumstances. Traffic signs should be placed in advance of the works area on both sides to ensure adequate warning to the general public and maintained, when necessary, they should be operated as reasonably required for the safe guidance or direction of the public with regard to the needs of people with disabilities. The main contractor will comply with Regulation 97 of the Safety, Health, and Welfare at Work (Construction) Regulations 2013.

Access to the construction site will only be to authorised persons. During afterhours, security will be employed by the main contractors to ensure no unauthorised access.

5.4 Deliveries to Site / Site Access

The site entrance will be gated and manned at all times with access only permitted for site vehicles and plant movements when necessary.

Deliveries of materials to site will be planned and programmed to ensure that the materials are only delivered when required by adopting a 'just in time', lean construction management approach. There will be periods where multiple vehicle deliveries will be required, e.g., site fill material under roads, houses and landscape areas, pre-cast concrete and large concrete pours. These will be planned well in advance, and no queuing of vehicles will be allowed on the public road at the entrance to the site. Supply chain to be directed as not to travel in convoys greater than three at any time.

All off-loading of material will take place within the site, remote from the public road and access via the agreed access construction point only. Bulk deliveries to take place outside of peak traffic hours within a six-day week as to minimise impact on the existing road network.

Access control: The site entrance will be controlled by a banksman at all times. The contractor will carry out a visitor induction briefing for all visitors or other persons who need access to the construction area. All visitors to the site will be required to have current 'Safe Pass' cards.

Material delivery: Material deliveries to the site will be coordinated as to avoid peak traffic hours associated with the neighbouring estates which could be expected around regular commuting times in the morning and evening.

Sign management: Signs are to comply with statutory requirements on public roads. Other construction sites may be carrying out construction activity at the same time as the subject site. It is therefore imperative that directions to each site are distinctly identifiable.

5.5 Routing of Construction Traffic

Haul routes for construction traffic will be agreed upon with Westmeath County Council.

A suggested construction traffic route will be accessing and egressing the site using the Local Road (L3008) and joining the N62 national road ca. 150m north of the entrance of the site. All construction traffic will utilise the M6 motorway joining the N62 national road via Junction 6 of the motorway, as shown in **Figure 5.2**.

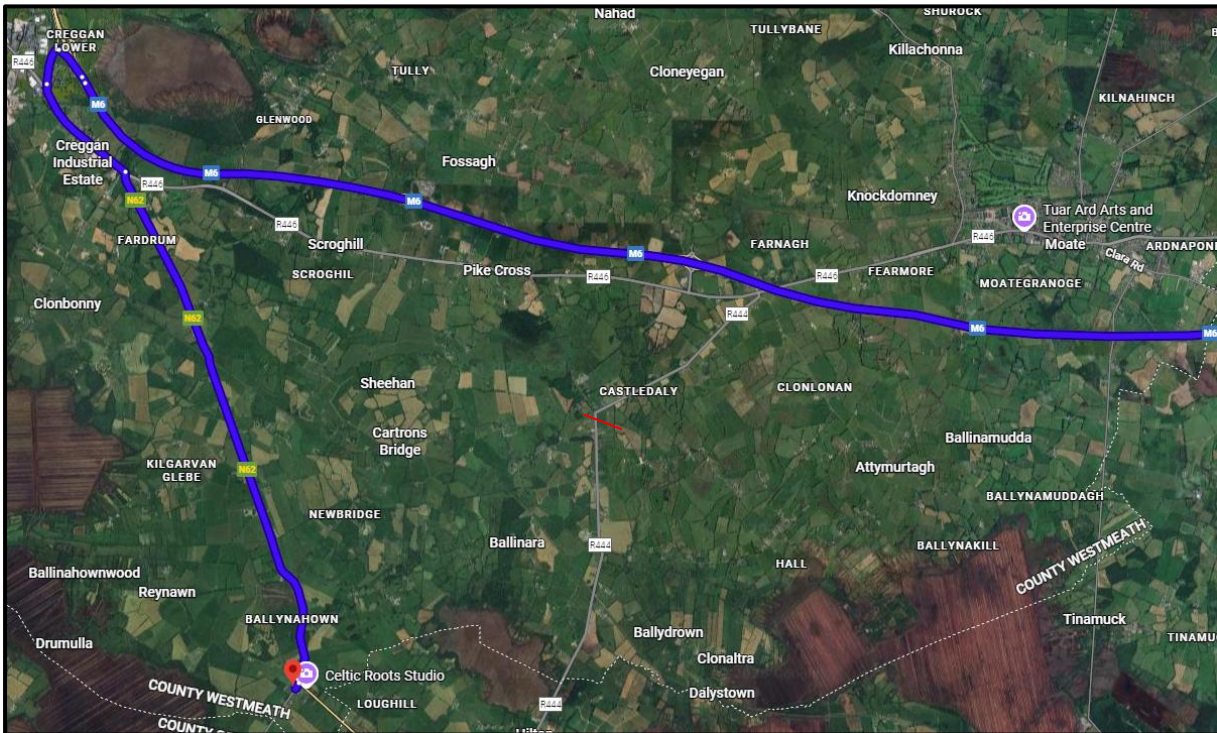


Figure 5.2 – Proposed construction traffic routes to the site (Source: Map Data 2015 ©Google).

Construction traffic will be instructed to utilise the M6 motorway, exiting at Junction 8 to join national road N62 on approach to site, and the same route on departure from the site, to avoid/minimise the encountering of narrow road widths, poor visibility, and unsuitable bearing capacities. Traffic will be instructed to take due care on the local road L3008 on approaching the entrance to the Sports Park.

5.6 Traffic Management Speed Limits

Adherence to posted/ legal speed limits will be emphasised to all contractors and sub-contractors during induction training.

Drivers of construction vehicles/ HGVs will be advised that vehicular movements in locations, such as local community areas, shall be restricted to 50 km/h. Special speed limits of 30 km/h shall be implemented for construction traffic in sensitive areas such as residential. Such recommended speed limits will only apply to construction traffic and shall not apply to general traffic.

5.7 Road Cleaning

Road sweeping operations to remove any project related dirt and material deposited on the road network by construction/ delivery vehicles will be utilised as required. It is recommended that road sweepers used have a vacuum function that can remove fine silt and dust from nearby surfaces effectively and prevent them from entering nearby waterbodies and drainage

systems. All material collected will be disposed of to a licensed waste facility.

The following additional measures will be taken to ensure that the site, public roads and surroundings are kept clean and tidy:

- Wheel washing will be established for all site traffic entering and leaving the proposed site to prevent carry of soil or solids off-site.
- A regular program of site tidying will be established to ensure a safe and orderly site.
- Food waste will be strictly controlled on all parts of the site.
- Mud spillages on roads and footpaths outside the site will be cleaned regularly and will not be allowed to accumulate.

5.8 Road Condition

The higher volume of heavy vehicle traffic movements and the nature of the payload may create problems to the local road network in terms of:

- Fugitive losses from wheels, trailers, or tailgates.
- Localised areas of subgrade and wearing surface failure.

The main contractors shall ensure that:

- Loads of materials leaving each site will be evaluated and covered if considered necessary to minimise potential dust impacts during transportation.
- The transportation contractor shall take all reasonable measures while transporting waste or any other materials likely to cause fugitive losses from a vehicle during transportation to and from site, including but not limited to.
- Covering of all waste or material with suitably secured tarpaulin/ covers to prevent loss.
- Utilisation of enclosed units to prevent loss.
- Roads forming part of the haul routes will be monitored visually throughout the construction period and a truck mounted vacuum mechanical sweeper will be assigned to roads along the haul route as required.

5.9 Enforcement of TMP

The traffic management plan will be enforced by both the Construction Project Manager and the Resident Engineer.

All project staff and material suppliers will be informed of the measures proposed by the TMP during site induction and will be required to adhere to the final TMP. As outlined above, the contractor shall agree and implement monitoring measures to confirm the effectiveness of the TMP.

5.10 Working Hours

Deliveries of materials to site will generally follow the construction hours, which shall be restricted to between the hours of 07.00hrs and 19.00hrs Monday to Friday and between 08.00hrs and 16.00hrs on Saturdays. No construction works to be carried out on Sundays and Public Holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority. Deviation from those hours should be applied for no less than 3 working days in advance.

5.11 Emergency Procedures

The main contractor shall ensure that unobstructed access is provided to all emergency vehicles along all routes and site accesses. The contractor shall provide to the local authorities and emergency services, contact details of the contractor's personnel responsible for construction traffic management. In the case of an emergency the following procedure shall be followed:

- Emergency Services will be contacted immediately by dialling 112.
- Exact details of the emergency/ incident will be given by the caller to the emergency line operator to allow them to assess the situation and respond in an adequate manner.
- The emergency will then be reported to the Site Team Supervisors and the Safety Officer.
- All construction traffic shall be notified of the incident (where such occurs off site).
- Where required, appointed site first aiders will attend the emergency immediately.
- The Safety Officer will ensure that the emergency services are on their way.

5.12 Communication

The main contractor shall ensure that close communication with Westmeath County Council and emergency services is maintained throughout the construction phase. Such communications shall include:

- Submissions of proposed traffic management measures/ closures for comment and approval.
- Ongoing reporting relating to the condition of the road network and updates to construction programming.
- Information relating to local and community events that could conflict with proposed traffic management measures and construction traffic aimed towards implementing alternative measures to avoid such conflicts.
- The contractor shall also ensure that the local community is informed of any proposed traffic management measures in advance of their implementation. Such information shall be disseminated by posting advertisements in local newspapers and delivering leaflets to houses in the affected areas. Such information shall contain contact information for members of the public to obtain additional information and to provide additional knowledge

such as local events, sports fixtures, etc., which may conflict with proposed traffic management measures.

- Effective communication is particularly important during the pre-construction phase with regards to the soil removal procedure as outlined in Section 3.2.1 above. A continuous flow of construction traffic is expected during this phase, and it is therefore pertinent that local authorities and nearby residents are suitably informed of the potential disruptions posed by this procedure.

6 Implementation

6.1 Role and Responsibilities

Due to the scale and nature of this development, the appointment of a full-time environmental manager is required for the duration of the project. The Construction Project Manager will be responsible for the day-to-day implementation of the measures outlined in the Project CEMP. The Construction Project Manager will be supported by an Environmental Consultant who will be involved in the project on an ad-hoc basis should unforeseen or significant environmental incidents arise.

6.1.1 Construction Project Manager

The Construction Project Manager will have the overall responsibility of ensuring the measures outlined in the OCEMP are adhered to for the duration of the construction phase. The primary responsibilities of the Construction Project Manager are as follows:

- Promotion of awareness of environmental issues associated with each project phase.
- Ensure adherence with all environmental and traffic management standards listed in the Project CEMP.
- Facilitate environmental audits and site visits.
- Monitor the impact of construction traffic on local traffic conditions.
- Awareness and implementation of relevant legislation, codes of practice, guidance notes as stated in the OCEMP.
- Conduct regular site inspections to facilitate the timely identification of environmental risks or incidents.
- Ensure all construction activities are carried out with minimal risk to the environment.
- Report environmental incidents in a timely manner to the project Environmental Consultant and the relevant authorities.

6.1.2 Construction Project Manager Contact Details

Contact details of the Project Manager are pending until a Contractor has been appointed.

- Name: Pending.
- Telephone: Pending.
- Email: Pending.

6.1.3 Project Environmental Consultant

As mentioned above the Construction Project Manager will assume the role of Project Environmental Consultant. Should any issues or impacts arise throughout the project then a suitable Environmental Contractor will be contacted. The primary responsibilities of the Project

Environmental Consultant are as follows:

- Quality assurance of the Project CEMP.
- Update of the Project CEMP as required paying particular attention to site-specific environmental hazards or changes in legislation.
- Ensuring compliance of Project CEMP with the conditions of the Planning Permission.
- Provide expertise to the Construction Project Manager on environmental concerns.
- Conduct the various specialist environmental monitoring tasks outlined within the Project CEMP (noise, dust, surface water monitoring etc.).
- Prompt response to environmental issues if they arise.

6.1.4 Resident Engineer

Typically, the Resident Engineer's primary role involves assurance that the construction work of a project is carried out according to the quality, time and cost requirements of the contract. A significant degree of cross-over can usually be anticipated between the roles of a Resident Engineer, a Construction Project Manager and an Environmental Consultant. With respect to the Project CEMP, the Resident Engineer is expected to play a crucial role in the Traffic Management Plan (TMP) along with the following responsibilities:

- Performing or coordinating site inductions.
- Monitoring the performance of subcontractors.
- Monitoring the performance of the traffic management plan.
- Managing and supervising less experienced site engineers and operatives.
- Ensuring that work activities have been carried out in accordance with the plans, specifications, and industry standards.
- Ensuring that tests and inspections are performed.
- Liaising with construction management to remove any hazards associated with work activities.
- Ensuring that delivered materials meet specifications and established quality standards.
- Initiating and maintaining records, back-charge procedures, progress reports etc.

6.2 Awareness and Training

6.2.1 Environmental Induction

The key environmental topics outlined in the Project CEMP will be summarised and integrated into the general site induction. Site-specific concerns and best work practices will be outlined to all contractors and sub-contractors due to carry out work at the site. As a minimum this will include:

- The roles and responsibilities of the Construction Project Manager the Environmental Consultant and the Resident Engineer along with the responsibilities of contractors/sub-

contractors themselves.

- Incident and complaints procedure.
- Outline of the CEMP structure.
- Site-specific environmental concerns.
- Best work practices.

6.2.2 Toolbox Talks

Daily toolbox talks will be conducted by the Construction Project Manager as standard practice. It is the duty of the Construction Project Manager to liaise with the Project Environmental Consultant and Resident Engineer to assess site operations for environmental concerns particularly as the project advances and new activities commence. Appropriate mitigation measures will be devised and communicated to the relevant personnel prior to the commencement of any such activities.

6.3 Environmental Incidents and Complaints Procedure

The Construction Project Manager will maintain a register of environmental incidents which will document the nature, scale and severity of any environmental incident or complaint which arises due to site activities. In the event of an environmental incident the following steps must be followed:

- The Project Environmental Consultant is notified immediately.
- The Project Environmental Consultant will liaise with the competent authority if necessary.
- The details of the incident will be recorded on an Environmental Incident Form which will record the following details:
 - Cause of the incident.
 - Extent of the incident.
 - Immediate actions.
 - Remedial measures.
 - Recommendations made to avoid reoccurrence.
- If the incident has impacted on an ecologically sensitive receptor (SPA, SAC, NHA) an ecological specialist will be consulted.
- The Project Environmental Consultant and Construction Project Manager will fully cooperate with any investigations conducted by the competent authority.

7 Conclusion

This Construction Environmental Management Plan (CEMP) will form part of the construction contract and is designed to reduce possible impacts which may occur during the construction of the Proposed Development.

The Proposed Development shall be constructed and developed to minimise the generation of construction and demolition waste. During the construction phase, construction waste shall be stored and segregated in dedicated waste storage areas which shall optimise the potential for off-site reuse and recycling. All construction waste materials shall be exported off-site by an appropriately permitted waste contractor. Measures and policies for proper waste management during this project are outlined in the Resource Waste Management Plan which accompanies this project (**Doc Ref.: 252243-ORS-XX-XX-RP-EN-13d-003**).

Extensive measures shall be taken to prevent uncontrolled emissions to drains and gullies leading off the site. Noise mitigation measures will be utilised as required. Several measures have been outlined to ensure adequate dust suppression throughout the project. Noise and dust monitoring shall be carried out at various stages throughout the project to ensure compliance with the relevant standards.

Suitably qualified personnel including a Construction Project Manager, Project Environmental Consultant and Resident Engineer will be appointed to implement the procedures and protocols relevant to their profession as outlined in this CEMP.

The Client shall be responsible for ensuring that The Contractor manages the construction activities in accordance with this Construction Project Management Plan and shall ensure that any conditions of planning are incorporated into the final Construction Project Management Plan prepared by the appointed works contractor.

Appendix A: Risk Assessment as per Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition

Risk Assessment A – Locality/Site Information

	Low	Medium	High
Expected duration of work			
Less than 6 months			
6 months to 12 months		X	
Over 12 months			
Proximity of nearest sensitive receptors			
Greater than 50 metres from site			
Between 25m and 50m		X	
Less than 25 metres			
Hospital or school within 100 metres			
Day time ambient noise levels			
High ambient noise levels (>65dB(A))			
Medium ambient noise levels (55- 65dB(A))		X	
Low ambient noise levels (<55dB(A))			
Working Hours			
8am – 7pm Mon-Fri; 9am-2pm Sat	X		
Some extended evening or weekend work			
Some night-time working, including likelihood of concrete power floating at night			
SUBTOTAL A	1	3	0

Risk Assessment B – Works Information

	Low	Medium	High
Location of works			
Majority within existing building			
Majority External			X
External Demolition			
Limited to two weeks			
Between 2 weeks and 3 months			
Over three months			
Ground Works			
Basement level planned			
Non-percussive methods only	X		
Percussive methods for less than 3 months			
Percussive methods for more than 3 months			
Piling			
Limited to one week			
Bored Piling Only			
Impact or vibratory piling			
Vibration generating activities			
Limited to less than 1 week	X		
Between 1 week and 1 month			
Greater than 1 month			
SUBTOTAL B	2	0	1

Total Risk Assessment

	Low	Medium	High
Risk Assessment A	1	3	0
Risk Assessment B	2	0	1
Total	3	3	1

The site is assessed as **LOW - MODERATE** overall.



A World-Class Multidisciplinary Building Consultancy

10 SERVICES, 1 TEAM

Have a project in mind? View our brochure to learn more about how our multidisciplinary team can support you.

The image shows a laptop and a tablet. The laptop screen displays a grid of 10 service icons with labels: Environmental, Project Management, Infrastructure, Health & Safety, Assigned Certifier, Fire Safety, Energy Management, Civil & Structural, Building Surveying, and Mechanical & Electrical. The tablet displays the 'Core Values' section with five items: People-First, Quality, Flexibility, Relationships, and Ambition. A green button with a mouse cursor icon and the text 'CLICK HERE' is positioned below the laptop, with a dotted line pointing to the 'OUR SERVICES' header on the laptop screen.

OUR SERVICES

- Environmental
- Project Management
- Infrastructure
- Health & Safety
- Assigned Certifier
- Fire Safety
- Energy Management
- Civil & Structural
- Building Surveying
- Mechanical & Electrical

Core Values.

- People-First.**
Empowering you to thrive
- Quality.**
Always
- Flexibility.**
It's what we're built on
- Relationships.**
Matter
- Ambition.**
It's our mindset

CLICK HERE

Best Workplaces
Great Place to Work
IRELAND 2025