comhairle chontae na mí
meath county council

Construction Environmental Management Plan

CEMP

Bettystown Library Development

Rev.	Date	Version Details	Author	Reviewed by	Approved by
0	19/05/20	Draft CEMP	Ger O'Donohoe	MPA Consulting Engineers	Robin Lee
1	25/05/20	CEMP	Ger O'Donohoe	NM Ecology	Robin Lee
2	02/06/20	CEMP MCC Logo	Ger O'Donohoe	Robin Lee	Robin Lee
3	02/06/20	pH testing added	Ger O'Donohoe	Robin Lee	Robin Lee

Contents

1. Introduction

1.1. General Introduction

This Construction Environmental Management Plan (CEMP) defines the project specific environmental measures that are to be put in place and procedures to be followed for the scope of construction works, both permanent and temporary, for Bettystown Library Development. The project application is accompanied by a Report for AA Screening which outlines the areas of natural conservation concern and potential impacts.

1.2. Objective/Purpose

The objective/purpose of this document is to communicate key environmental obligations that apply to all contractor organisations, their sub-contractors and employees while carrying out any form of construction activity on the project.

1.3. Scope

The CEMP defines the approach to environmental management at the site during the construction phase. Compliance with the CEMP, the procedures, work practices and controls will be mandatory and must be adhered to by all personnel and contractors employed on the construction phase of the project. This CEMP seeks to:

i. Provide a basis for achieving and implementing the construction related control measures,

ii. Comply with all relevant conditions attached to the Meath County Council Planning Permission,

iii. Promote best environmental on-site practices for the duration of the construction phase.

1.4. Live Document

The CEMP is considered a 'live' document and as such will be reviewed on a regular basis. Updates to the CEMP may be necessary due to any changes in environmental management practices and/or contractors. As explained in more detail in the later sections, the procedures agreed in this CEMP will be audited regularly throughout the construction phase to ensure compliance.

1.5. Project Description

The description of the development in accordance with the Notices of Proposed Development is for a Seafront Building and Civic Space at Seaview Terrace, Bettystown, County Meath in accordance with Part XI of the Planning and Development Act 2000 (as amended) and Part VIII of the Planning and Development Regulations 2001 (as amended). Figure 1 shows the Project location and Figure 2 shows a detailed view of the proposed development on recent aerial photography. Figure 3 is a plan of the proposed works. A detailed description of the proposed development follows.

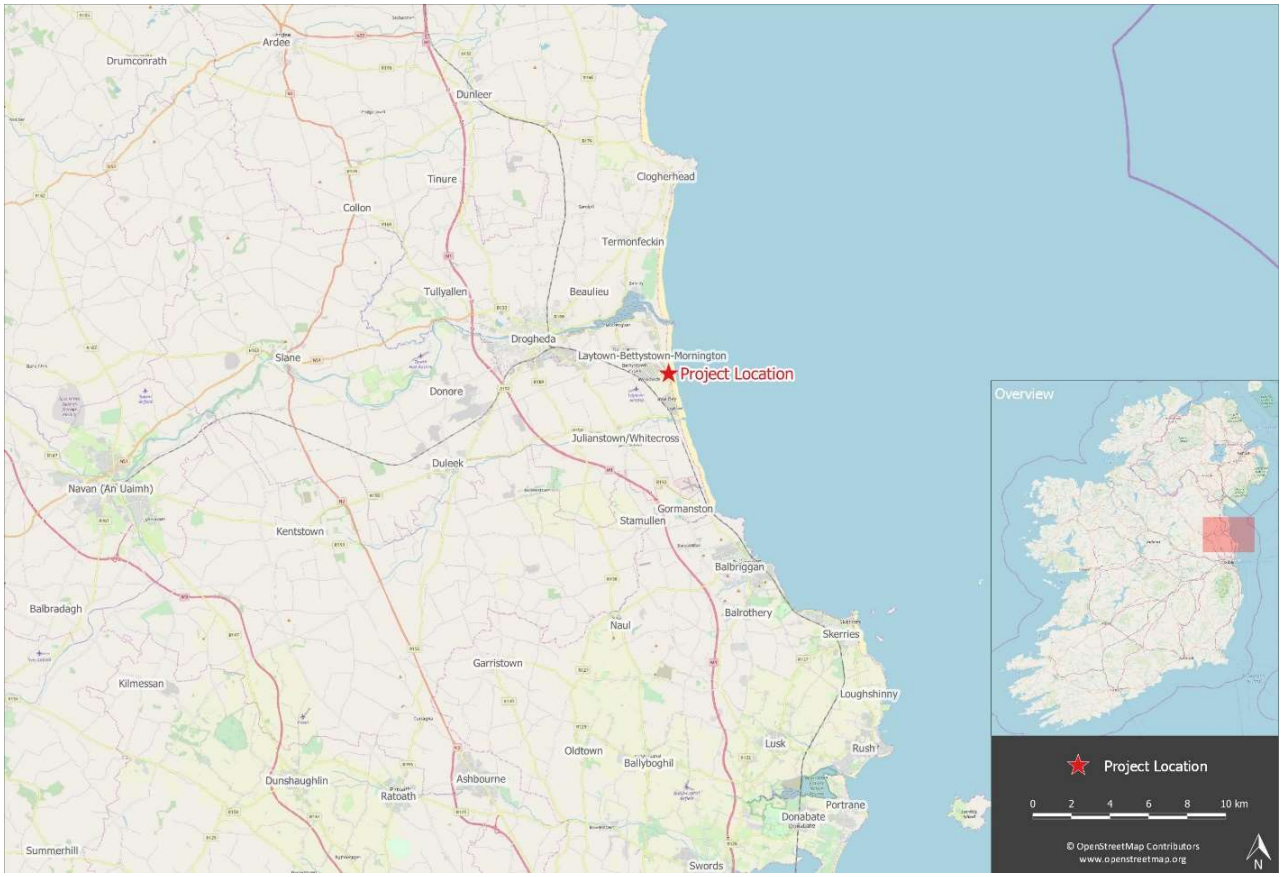

Figure 1. Location of the proposed development at Bettystown, Co. Meath.

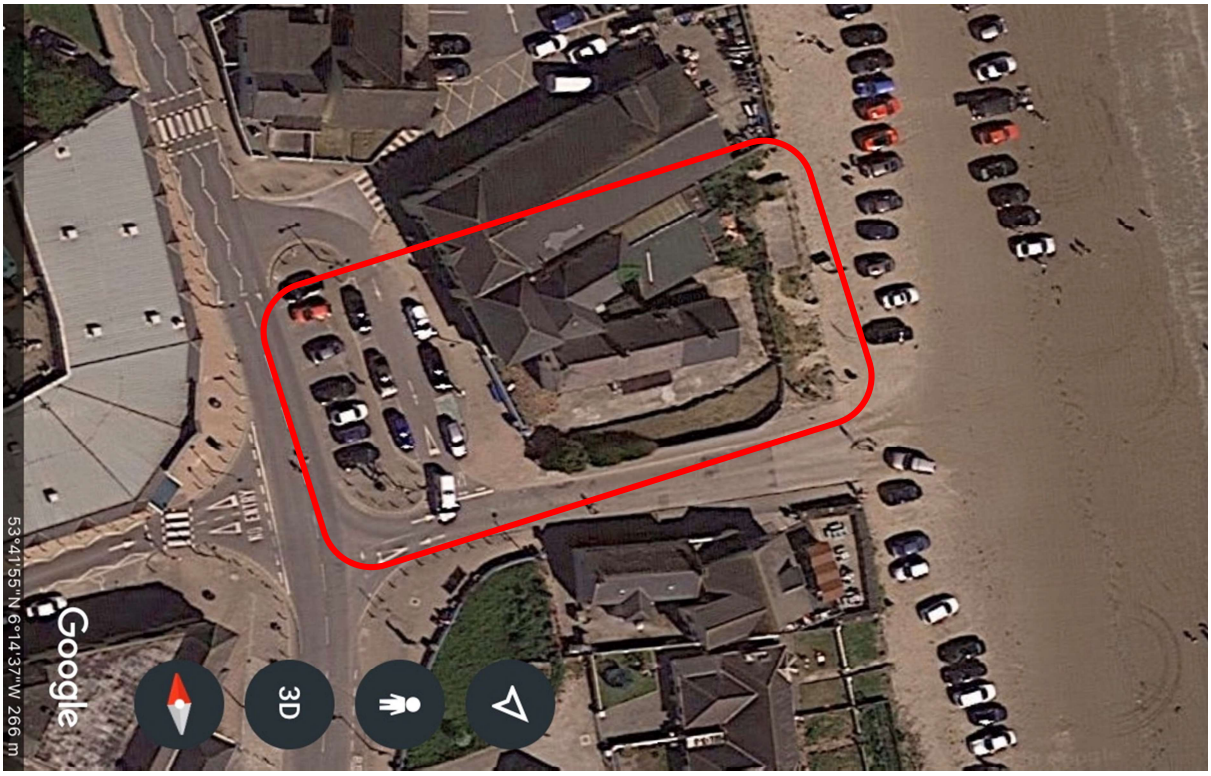

Figure 2. Site location of the proposed development at Bettystown on recent aerial photography.

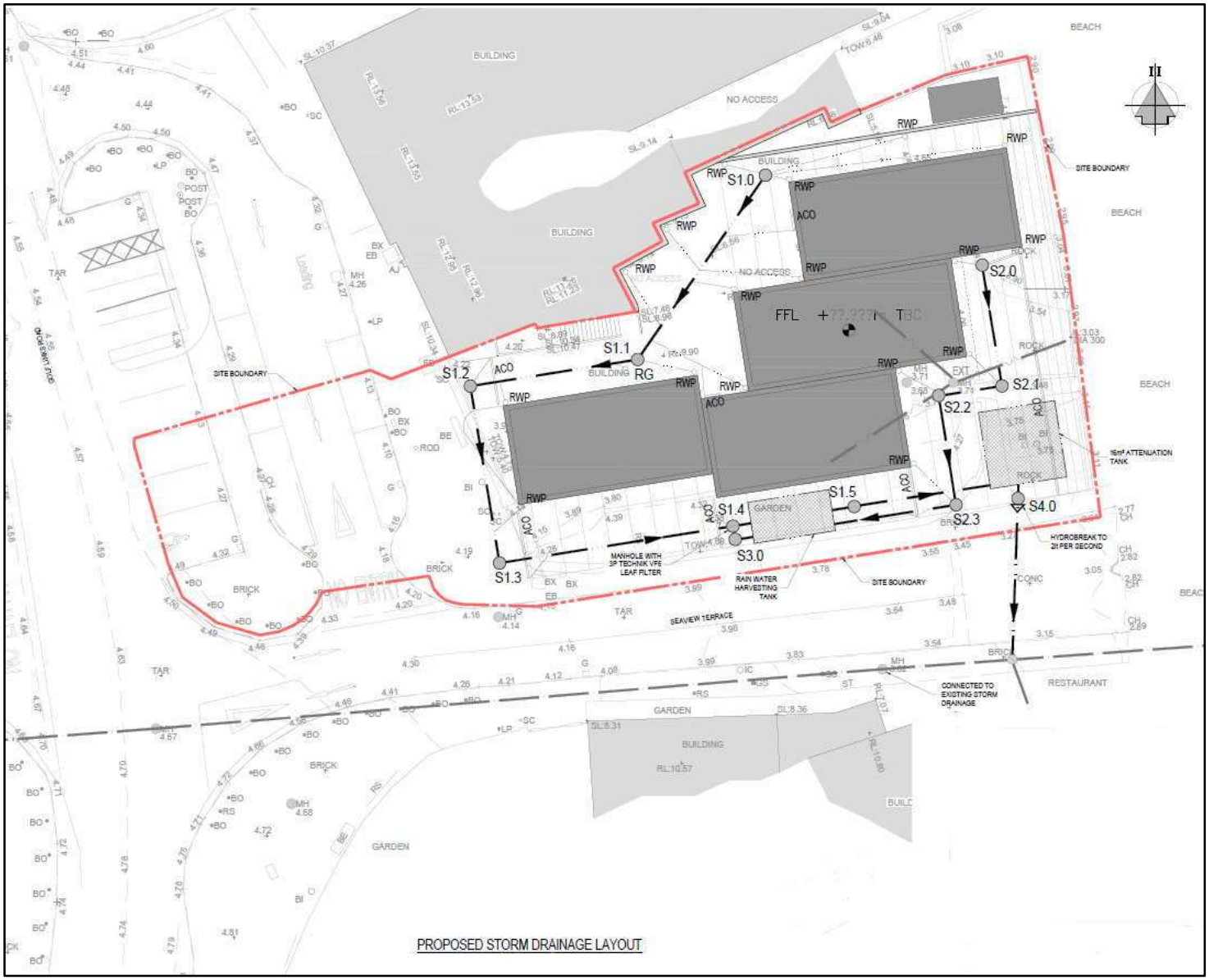

Figure 3. Site layout of the proposed development at Bettystown with indicative storm drainage layout.

The development will consist of the demolition of existing single storey buildings and the construction of a lifeguard station, public toilets and public library.

The new building will be three and four storeys in height with detached single storey structures containing ancillary accommodation.

The lifeguard station is composed of an open plan area for lifeguard activities, a single office and welfare facilities.

The public toilets are composed of separate male and female toilet facilities, an accessible WC, a general storage room and a fully accessible WC, shower and changing room housing a storage area for a beach wheelchair. Baby changing facilities will be incorporated.

The public library is composed of a community meeting room, staff areas, public library areas, meeting rooms, study and multipurpose rooms. Additional ancillary accommodation includes toilets, circulation spaces and plant rooms with the total gross internal area for the public library.

Public realm spaces are located principally to the south and east of the proposed building giving access from the town centre to the beach and providing views across the beach. Steps and a ramped access to the beach will allow for universal access.

A secure service and delivery area is located to the north of the proposed building adjacent to the neighbouring buildings to the north of the application site, with gated access from the west.

The development will also include associated site development works, drainage and hard landscaping works including the aforementioned the town centre to Bettystown Beach, parallel to Seaview Terrace.

It is noted that the eastern boundary of the proposed Project site is Bettystown Beach. The seashore c. 250m to the north is designated as part of the Boyne Coast and Estuary SAC, see Figures 4 & 5 below. The River Nanny Estuary and Shore SPA is located c. 1.24km to the south along the shore near Laytown and is unlikely to be affected. Potential direct and indirect impacts on these sites were considered in the 'Screening for Appropriate Assessment' report that accompanies this application, but it was concluded that the development will pose no risk of direct or indirect impacts on any Natura 2000 sites. It is important to note that the screening conclusion was reached without reference to any of the mitigation measures outlined in this CEMP, in accordance with Court of Justice of the European Union ruling on case C-323/17 'People Over Wind and Peter Sweetman v Coillte'.

Outside of the Natura 2000 sites, it is noted that some of the habitats and species associated with the beach are of local ecological importance. This CEMP includes site-specific mitigation measures that will avoid any impacts on non-designated ecological features in the surrounding area.

The construction environmental management plan sets out the principles to be adhered to and outlines measures that will be implemented during the construction of the proposed development to ensure that potential environmental impacts and disturbance will be minimised or eliminated.

It will be the responsibility of the project proponent and contractor employed to update and add (where required) specific control measures relevant to the environmental management plan and procedures. The control measures will be amended by improvement with regards to environmental protection and will take cognisance of additional environmental commitments arising from planning conditions.

The Project Proponent will oversee the process through appointment of the contractor with input from the Project engineer and oversight from the planning and project team.

2. Construction Schedule

It is proposed that construction will commence once planning permission has been received (c. Summer/Autumn 2020). The proposed construction programme is approximately 18 months.

3. Project Roles & Responsibilities

Construction Management may be undertaken as a Team effort (Construction Management Team = CMT) and have a hierarchy of Director, Manager, Site Supervisors and Site personnel as required or may comprise a small operation such as a Contracting Firm with Site Foreman/Director and site personnel. Various roles and responsibilities are outlined below for completeness.

3.1. Construction Director

The Construction Director will have an overall responsibility for the organisation and execution of all related environmental activities as appropriate, in accordance with regulatory and project environmental requirements. Ultimately the Construction Director is answerable to the Project Proponent = Meath County Council.

The principal duties and responsibilities of this position will include:

- Overall responsibility for the development and implementation of the CEMP;

- Allocating resources to ensure the implementation of the CEMP;

- Participates in the management review of the CEMP for suitability, adequateness and effectiveness; and

- Sets the focus of environmental policy, objectives and targets for the Contractor.

3.2. Construction Manager

The Construction Manager (in this case can be the site foreman) is directly responsible to the Construction Director for the successful execution of the project. The principal duties and responsibilities of this position will include:

- To report to the Construction Director on the on-going performance of the CEMP;

- To discharge his/her responsibilities as outlined in the CEMP; and

- To support and augment the CMT and the Environmental Officer through the provision of adequate resources and facilities in the implementation of the CEMP.

3.3. Environmental Officer

The CMT Environmental Officer (in this case can also be the site foreman) will be responsible for, but not limited to, the following activities:

- Ensuring that the requirements of the CEMP are developed and environmental system elements (including procedures, method statements and work instructions) are implemented and adhered to with respect to environmental requirements;

- Reviewing the Environmental responsibilities of other managed Contractors in scoping their work and during Contract execution;

- To ensure that advice, guidance and instruction on all CEMP matters are provided to all their managers, employees, construction contractors and visitors on site;

- Report to the Construction Manager on the environmental performance of Line Management, Supervisory Staff, Employees and Contractors; and

- Advise site management (including, but not limited to, the site Construction/Commissioning Manager) on environmental matters.

3.4. Site Supervisors

CMT Site Supervisors are required to:

- Read, understand and implement the CEMP;

- Know the broad requirements of the relevant law in environmental matters and take whatever action is necessary to achieve compliance. Where necessary seek the advice of the CMT Environmental Officer;

- Ensure that environmental matters are taken into account when considering Contractors' construction methods and materials at all stages;

- Be aware of any potential environmental risks relating to the site, plant or materials to be used on the premises and bring these to the notice of the appropriate management;

- Ensure plant suggested is environmentally suited to the task in hand; - Co-ordinate environmental planning of CMT activities to comply with environmental authorities requirements and with minimum risk to the environment. Give Contractors precise instructions as to their responsibility to ensure correct working methods where risk of environmental damage exists;

- Where appropriate, ensure Contractors method statements include correct waste disposal methods;

- Be aware of any potential environmental risks relating to the Contractors and bring these to the notice of the appropriate management; and

- Ensure materials/waste register is completed.

3.6. Site Personnel

All Contractors, and other site personnel, on the project will adhere to the following principal duties and responsibilities:

- To co-operate fully with the CMT and the Environmental Officer in the implementation and development of the CEMP at the site;

- To conduct all their activities in a manner consistent with regulatory and best environmental practice;

- To participate fully in the environmental training programme and provide management with any necessary feedback to ensure effective environmental management at the site; and

- Adhere fully to the requirements of the site environmental rules.

4. Project Environmental Policy

The Project proponent recognises and seeks to minimise the impacts of its business on the environment. The appointed contractor will be is committed to:

- Carrying out the Project in full compliance with all applicable environmental regulations;

- Preventing pollution from activities through a system of operational controls that include written instructions and staff training appropriate to the environmental requirements of their work;

- Continually improving Project environmental performance by setting objectives and targets and implementing them through an environmental programme;

- Informing all project employees about Environmental Policy and explaining what they should do to protect the environment;

- Implementing this Policy through the successful operation of the CEMP.

5. Site Environmental Awareness

The following general site Environmental Rules will apply. These general rules will be communicated to all site personnel via the site induction training and they will be posted across the site at strategic locations, such as the site entrance, canteen and near the entrances to buildings.

GENERAL SITE ENVIRONMENTAL RULES

DO Report any signs of pollution or environmental damage to the manager no matter how small;

DO Report any spills, incidents or near misses that occur on site immediately to the site foreman;

DO Refuel only in designated areas with spill kits available;

DO NOT Dispose of anything into a drain or onto land. All waste must be sent to the designated site waste management areas;

DO NOT Throw litter, all waste must be sent to site waste management contractor;

DO NOT Drive plant or machinery outside the authorised working boundaries of the site.

IF IN DOUBT, ASK THE CMT SITE SUPERVISOR AND/OR ENVIRONMENTAL OFFICER FOR FURTHER INFORMATION.

The CMT will develop Environmental Procedures to control the potential impacts from the construction phase of the development. These procedures together with the site Environmental Policy are to be made available in the main offices and in the main EHS information points at the site.

The training of the site construction staff is the responsibility of the CMT. An environmental training programme will be organised for onsite personal to outline the CEMP and to detail the site environmental policy.

A brief outline of the CEMP will be incorporated into the site induction course. This can be as low key as a tool-box talk to personnel arriving on site.

6. Environmental Conditions, Potential Impacts & Controls

6.1. Planning Conditions

It is normal practice for the local authority (in this case Meath County Council) to include a number of specific environmental conditions as part of their planning consent for the development. The compliance with the environmental conditions and the proposed control measures will be included in the next version of the CEMP once these planning conditions are known.

6.2. Implementation of Controls

The CMT, the respective Construction Manager and all contractors shall be responsible for the implementation of control measures as identified in Section 6.3 below.

Contractors will comply with the requirements of the CMT to document and seek approval for Method Statements, Permits and other site-generated documentation as requested.

This CEMP will form part of tender and contract documentation for each works contract. Requirements and responsibilities will be reviewed with each Contractor at site kick-off meetings and at weekly progress meetings.

Any contractor submitting a tender for the project must inform the CMT of any legal proceedings with a regulatory authority, including the Irish EPA or environmental agencies of other jurisdictions.

Contractors shall ensure that any sub-contractors working under their remit are supplied with a copy of the CEMP, receive sufficient environmental training and are aware of their environmental obligations on the project.

Environmental requirements identified will be controlled as follows:

- Procedures and control measures as set out in this CEMP;

- Approved Method Statements and Risk Assessments from Contractors which shall address all potential environmental impacts for the specific task;

- Detailed contractor plans for specific environmental aspects;

- Emergency response plans;

- Specific induction training before commencing work.

In summary, it is expected that all contractors will follow good environmental practice throughout all activities.

6.3. Operational Controls

Dust Minimisation

It is not expected that the construction phase will generate significant amounts of dust. As a precaution the following Low Risk measures will be put in place:

- Machinery, fuel and chemical storage and dust generating activities should not be located close to boundaries and sensitive receptors if at all possible.
- Erect effective barriers around dusty activities or the site boundary if required.
- Use agreed wet cleaning methods or mechanical road sweepers on all roads during periods of dry weather.
- Clean road edges and pavements using agreed wet cleaning methods.

Best practice in demolition:

- Sheet and screen buildings with suitable material and where possible.
- Strip inside buildings before demolition begins.
- Materials should be removed from site as soon as possible.
- A Waste Management Plan will identify any material such as dust, sand, rubble, concrete that may be generated during demolition works and address its storage and appropriate removal from the site to avoid pathways identified as having connectivity with Bettystown Beach.

Control of Noise

It is not expected that the construction phase will generate significant noise levels. Environmental noise arising from activities on the construction site shall be controlled in accordance with the requirements of the Local

Authority and to Standard Guidance e.g. BS 5228:1997 – Noise and Vibration Control on Construction and Open Sites.

Ecology Considerations

The seashore c. 250m to the north is designated as part of the Boyne Coast and Estuary SAC, see Figures 4 & 5 below. The River Nanny Estuary and Shore SPA is located c. 1.24km to the south along the shore near Laytown and is unlikely to be affected. Potential direct and indirect impacts on these sites were considered in the 'Screening for Appropriate Assessment' report that accompanies this application, but it was concluded that the development will pose no risk of direct or indirect impacts on any Natura 2000 sites. It is important to note that the screening conclusion was reached without reference to any of the mitigation measures outlined in this CEMP, in accordance with Court of Justice of the European Union ruling on case C-323/17 'People Over Wind and Peter Sweetman v Coillte'.

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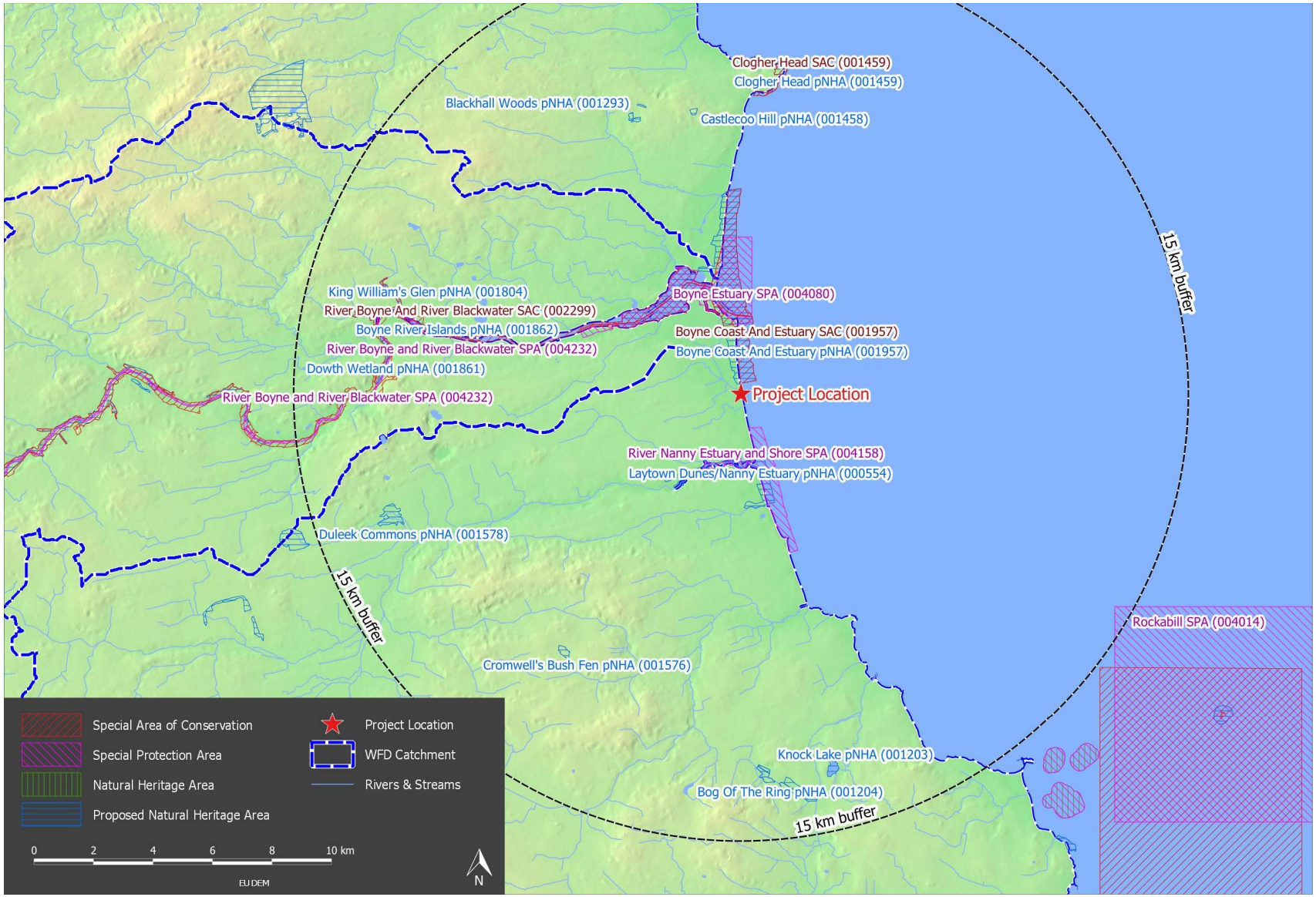

Figure 4. Showing the project site in relation to surrounding European Sites and possible supporting sites of conservation concern, NHAs and pNHAs.

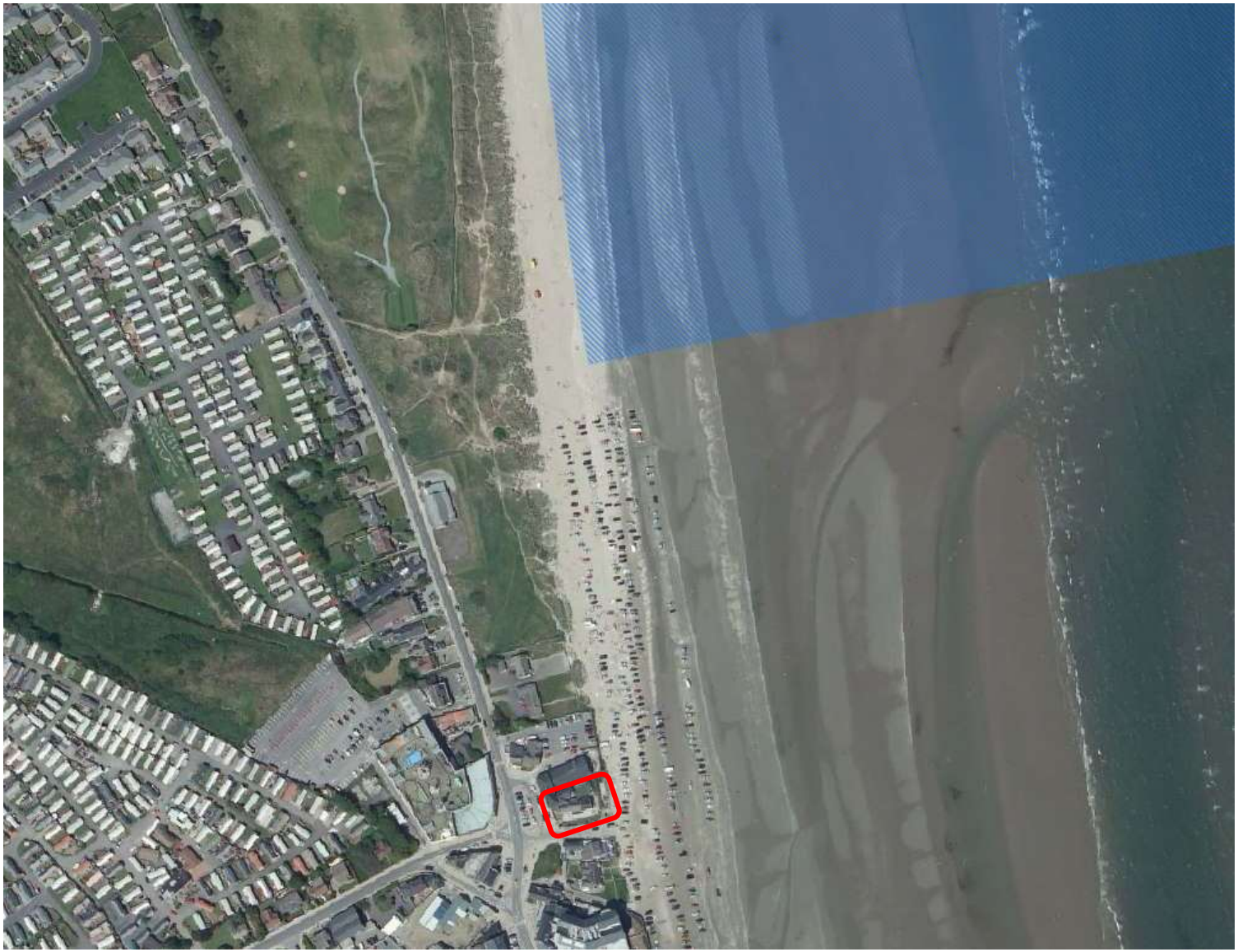

Figure 5. Detailed location of the development site in relation to the Boyne Coast and Estuary SAC.

Construction Management Measures

General

An initial site environmental induction and ongoing training will be provided to communicate the main provisions of this environmental plan to all site personnel.

Two-way communication will be encouraged to promote a culture of environmental protection.

The following outlines the information which must be communicated to site staff:

- Environmental procedures of the CEMP.
- Environmental buffers and exclusion zones.
- Housekeeping of materials and waste storage areas.
- Environmental emergency response plan.

Prior to any works, all personnel involved will receive an on-site induction relating to operations adjacent to the Bettystown Beach and the environmentally sensitive nature of the receiving environment of the adjacent marine environment and re-emphasise the precautions that are required as well as the construction management measures to be implemented.

The project proponent will ensure that the engineer setting out the works is fully aware of the ecological constraints and construction management requirements.

Environmental Emergency Response Plan

In the event of an environmental emergency, all personnel will react quickly and adhere to this procedure (to be finalised by contractor). The following outlines the information on the types of emergency which must be communicated to site staff:

- Release of hazardous substance – fuel or oil spill.
- Concrete spill or release of concrete.
- Flood event – extreme rainfall or rising tide level event.
- Environmental buffers and exclusion zones breach.
- Housekeeping of materials and waste storage areas breach.
- Stop work orders due to environmental issue or concern (e.g. threat to ecological feature).

Concrete Control Procedure

Concrete will be used for wall foundations, wall forming structures and grouting of precast concrete. Wet concrete and cement are very alkaline and corrosive and can cause serious pollution to water. The following measures will be implemented to prevent concrete entering water bodies:

- Batch loads of concrete will be delivered, on an as needed basis, to a pre-prepared hardstand area.
- Small batch concrete loads will be delivered to specific construction locations by mini dumper or other enclose contained system of transfer.
- A designated trained operator experienced in working with concrete will be employed during concrete pouring.
- Disposal of raw or uncured waste concrete will be controlled to ensure that Bettystown Beach will not be impacted.
- Best practice in bulk-liquid concrete management addressing pouring and handling, secure shuttering / form-work, adequate curing times will be implemented.
- Wash water from cleaning ready mix concrete lorries and mixers may be contaminated with cement and is therefore highly alkaline, therefore, washing will not be permitted on site.

Fuel and Oil Management Plan

The appointed contractor will implement a fuel management plan which will incorporate the following elements:

- Chemicals used will be stored in sealed containers.
- Chemicals shall be applied in such a way as to avoid any spillage or leakage.
- All refuelling, oiling and greasing will take place above drip trays or on an impermeable surface which provides protection to underground strata and watercourses and away from drains and watercourses as far as reasonably practicable. Vehicles will not be left unattended during refuelling.
- Storage areas, machinery depots and site offices will be located within the site boundary on hardstanding.
- Spill kits will be made available and all staff will be properly trained on correct use.

- All fuels, lubricants and hydraulic fluids required to be stored on site will be kept in secure bunded areas at a minimum of 10m from Bettystown Beach. The bunded area will accommodate 110% of the total capacity of the containers within it.

- Containers will be properly secured to prevent unauthorised access and misuse. An effective spillage procedure will be put in place with all staff properly briefed. Any waste oils or hydraulic fluids will be collected, stored in appropriate containers and disposed of offsite in an appropriate manner.

- All plant shall be well maintained with any fuel or oil drips attended to on an ongoing basis.

- Any minor spillage during this process will be cleaned up immediately.

- Should any incident occur, the situation will be dealt with and coordinated by the nearest supervisor who will be responsible for any further instructions by the Local Authority.

Protection of Water Resources

(A) Surface water

- Site boundary markings to safeguard features of interest/value, e.g. drainage connectivity with Bettystown Beach will be established.

- Excavations: Water will be prevented from entering local excavations by way of cut-off drains. Personnel and/or plant will not disturb water in a local excavation. The means of dewatering excavations in the event there is ingress will include settlement tanks or a silt buster stream if required to ensure that any de-waterings do not increase background suspended solids levels in the environment.

- Contact with cementitious water or uncured concrete could cause elevated pH (pH > 10). Site environmental management will include provision for on-site checking of the pH of any water being pumped out from excavations into surface water drains to ensure pH is < 9.

- Spoil heaps: Small (<100m^3) topsoil/subsoil heaps will be located, protected and stabilised in a temporary compound in a way that will avoid the risk of contamination of drainage systems and local water bodies.

- Site roads will be kept free from dust and mud deposits.

(B) Deliveries

- Special care will be taken during deliveries, especially when fuels and hazardous materials are being handled.
- All liquid deliveries will be supervised by a responsible person to ensure that (1) storage tank levels are checked before delivery to prevent overfilling and (2) the product is delivered to the correct tank.
- Contingency plans will be agreed and suitable materials available to deal with any incident.
- All employees will be briefed on the actions required in the event of a spillage.
- Spillages will be recorded and advised to the project manager who will inform local authorities if they deem it significant.

(C) Refuelling

- Mobile plant will be refuelled in the construction compound, on an impermeable surface away from any drains or watercourses. A spill kit will be available at this location.
- Hoses and valves will be checked regularly for signs of wear and turned off and securely locked when not in use.
- Generators, diesel pumps and similar equipment will be placed on drip trays to collect minor spillages. These will be checked regularly, and any accumulated oil removed for disposal.

(D) Storage

- Leaking or empty oil drums will be removed from the site immediately and disposed of via a licensed waste disposal contractor.
- The contents of any tank will be clearly marked on the tank, and a notice displayed requiring that valves and hoses be locked when not in use.
- Any tanks or drums will be stored in a secure container or compound, which is to be kept locked when not in use.

Management of Excavation and Spoil

For the management of excavation and spoil, the contractor will:

- Implement a surface water management plan (including the installation of drainage infrastructure) prior to excavation and include areas dedicated to spoil storage with the drainage infrastructure.

- Ensure stockpiles and adjacent features of drainage infrastructure will be monitored and maintained appropriately.

- A Waste Management Plan will identify any material such as dust, sand, rubble, concrete that may be generated during demolition works and address its storage and appropriate removal from the site to avoid pathways identified as having connectivity with Bettystown Beach.

The final CEMP will be held on site by the site director/foreman for inspection as required by the Local Authority or a representative thereof.

7. Emergency Planning & Response

7.1. Emergency Contact Details

• Ambulance	112 / 999
• Fire Brigade	112 / 999
• Garda Station	112/999
• HSA	01-6147000
• ESB	1850-372999 (if cable is struck)
• Bord Gais	1850-205050 (if gas main/service is struck)
• Eircom	1901
• Meath Co. Co.	1890 445 335

The Construction Environmental Management Plan will be read and signed by the Contractor /Site Foreman.

CEMP STATEMENT REGISTER:

I have been briefed and understand this management plan:

PRINT NAME:	SIGNATURE:	DATE: