Henry Boot Construction

PART OF HENRY BOOT

Construction Environmental Management Plan (CEMP)

Highmoor Lane – Thirteen Housing Group

Date issued: 20/5/25
Document Date – May 2025

Review & Amendment Record

Date	Section	Revision	Amendments (describe where amendments are made)
7/5/25	9	A	Updated to reflect confirmation of TPO's.
7/5/25	7,8,10 Plus appendix A	B	Updated to reflect ecology report findings
8/5/25	6	C	Included updated site location plan
20/5/25	9+6	D	Updated site plan and TPO drawing.

Appendices

Appendix A – Environmental Risk Assessment
Appendix B – Dut of Care Compliance Matix
Appendix C – Consignment Note Schedule
Appendix D – Material Management Plan Requirement Flow Charts
Appendix E - Complaints Log
Appendix F – Disposal of Wastewater Flowchart
Appendix G – Emergency Spill Procedure

Contents

1. Overview

The requirement for a Construction Environmental Management Plan is based on the duty to ensure that aspects affected by the works are managed throughout the construction process to minimise the impacts of construction works.

Henry Boot Construction operates an Environmental Management System (EMS) accredited to ISO 14001 standards. This proactive approach to environmental management results in tangible benefits, such as reduced waste, energy conservation, and cost savings.

2. Legal Compliance

Acts (Primary Legislation)	Enforcement Agency	
	Environment Agency	Local Authority
Climate Change Act 2008	✓	
Environmental Protection Act 1990	✓	✓
Environment Act 1995	✓	
Clean Air Act 1993	✓	✓
Clean Neighbourhoods and Environment Act 2005	✓	
Control of Pollution Act 1974	✓	
Flood and Water Management Act 2010		✓
Water Act 2003	✓	
The Water Resources Act 1991	✓	
Highways Act 1980		✓
Town and Country Planning Act 1990	✓	✓
The Wildlife and Countryside Act 1981	✓	
Regulations (Secondary Legislation)		
Environmental Permitting (England & Wales) Regulations 2016	✓	
Town and Country Planning (Environmental Impact Assessment) Regulations 2011	✓	
Contaminated Land (England) Regulations 2006 – Amended 2012	✓	
Control of Asbestos Regulations 2012	✓	
The Waste (England and Wales) Regulations 2011	✓	✓
Controlled Waste (England and Wales) Regulations 2012	✓	✓
Hazardous Waste (England & Wales) Regulations 2005	✓	✓
The Groundwater Regulations 1998	✓	

3. Roles & Responsibilities

3.1. The anticipated roles and responsibilities of the key parties involved in the construction works are set out in the table below.

3.2. However, all members of the project management team are responsible for ensuring the requirements of the Construction Environmental Management Plan (CEMP) are followed.

Role	Name	Position	Tel No.
Environmental Nominee	Jon Watkins	Contracts Manager	07825097614
Considerate Constructors Champion	Jon Watkins	Contracts Manager	07825097614

3.3. Any changes in roles and responsibilities must be clearly communicated to those affected.

4. Record Keeping

4.1. The Environmental nominee will be responsible for undertaking the monitoring on works generating dust. This will be a daily inspection of activities. The Environmental Nominee will also be responsible for ensuring the subcontractors are adhering to their Method Statements and Risk Assessments regarding environmental management.

4.2. A record of inspections must be logged weekly within the Weekly SHE Inspections and any findings will be recorded and acted upon as appropriate.

4.3. An up-to-date copy of the Construction Environmental Management Plan must be maintained in the site office.

5. Training & Communication

5.1. Environmental training and communication shall be delivered and assessed throughout the project, to ensure the relevant aspects of the Construction Environmental Management Plan are communicated to the project team and front-line staff (including relevant subcontractors). This will include -

- Site Inductions
- Daily pre-start meetings
- Environmental Toolbox Talks
- SHEQ Updates and Bulletins
- Subcontractor pre-start checklist meetings

5.2. All site employees have a responsibility to be visually observant for disturbance to habitats and/or wildlife, in order to efficiently demonstrate this, all employees have CITB Site Environmental Awareness Training.

6. Site Details

Address

Highmoor Lane, Cleckheaton, BD19 6LW

Site Location Map

Biodiversity

7. Ecology Assessment

7.1. Local planning authorities (LPA) have a statutory duty to consider the conservation, protection and enhancement of biodiversity when determining a planning application. The presence of European Protected Species, UK Protected Species, internationally, nationally, or locally designated sites and priority habitats and species on or adjacent to a development site are material considerations within the planning process. The LPA must also consider the development in relation to its positive or negative impacts on environmental networks and priority landscape-scale areas for biodiversity.

7.2. In order for the potential impacts of a development to be understood it is necessary first to survey the proposed development site. The initial survey and any additional detailed surveys form the ecological assessment. The ecological assessment should be carried out at the very beginning of the process, prior to site design, so that the presence of sensitive species and habitats can be taken into account during the site design stage, allowing avoidance measures or the need for mitigation to be determined. If residual biodiversity loss will be inevitable, details of proposed biodiversity offsetting/compensation may be required.

	Yes	No
Has an ecological survey been carried out and is it representative of the area where work will be undertaken?	☒	☐
Is the site located next to/near to a sensitive environment? (E.g. Site of Special Scientific Interest (SSSI)/ Area of Outstanding Natural Beauty (AONB)/English Heritage/ National Trust)?	☐	☒

8. Habitats

Trees & Hedgerows

8.1. Under Part 8 of the Town and Country Planning Regulations), tree preservation orders (TPO's) can be made by the Local Authority to prohibit the cutting down, uprooting, or wilful damage or destruction of trees without the Local Authority's consent. It is illegal to cut down or alter any tree under a TPO. All trees in designated conservation areas are protected.

8.2. Under the Hedgerow Regulations, a hedgerow removal notice is required from the Local Authority if the hedgerow is older than 30 years and meets at least one of the criteria which focuses on length, location or importance of the hedgerow.

8.3. Any removal of a hedgerow of over 20 metres requires planning permission.

	Yes	No
Have any trees / hedgerows been identified as requiring removal?	☒	☐
Are any of these trees under a TPO or a hedgerow which is longer than 20m?	☒	☐
If yes, will permission be sought/ granted by the Local Authority for the removal of ancient hedgerows or trees with a Tree Protection Order.	☒	☐
Where protected trees are being retained, is there a tree protection plan in place?	☒	☐

Invasive Species

8.4. Invasive Plants and Animals are listed under Schedule 9 of the Wildlife and Countryside Act.

8.5. Invasive non-native plants are species which have been brought into the UK which can spread causing damage to the environment, the economy and human health. The site owner is not obliged to remove or treat invasive plant.

	Yes	No
Have any invasive species been identified within the Ecology report or prior to starting on site?	☐	☒
If yes, have the appropriate control measures been implemented to ensure that they are removed/protected (to prevent the spread) appropriately?	☐	☐

9. Plan of Tree Protection Zone(s)

Retained TPO's have been identified with the green circles as per the above drawing, which is being issued with the planning submission. We will erect tree protection fencing around the trees due to be retained to create the necessary exclusion zones to prevent unauthorised access and interference from construction traffic. The areas will all be sign posted with warning signs and all construction personnel will be made aware of these areas during the site induction process. See below example of one of our tree protection zones with signage on a recent project we have undertaken. Note: The TPO's marked in light red are scheduled to be removed but this is subject to final planning approval.

10. Wildlife

10.1. The Wildlife and Countryside Act is still the major legal instrument for wildlife protection in Britain. This legislation covers the protection of a wide range of protected species and habitats and provides the legislative framework for the designation of Sites of Special Scientific Interest (SSSIs).

10.2. Licences can, however, be issued to permit otherwise prohibited action under the above legislation providing specific criteria are met. For example, if a bat roost will be damaged or destroyed during development works a mitigation licence must be applied for prior to undertaking those works.

Birds

10.3. Birds are afforded various levels of protection and levels of conservation status on a species-by-species basis. The most significant general legislation for British birds lies within the Wildlife and Countryside Act. Under this legislation, it is an offence to, kill, injure or take any wild bird, take, damage or destroy the nest of any wild bird while that nest is in use or being built, take or destroy and egg of any wild bird.

	Yes	No
Are works likely to affect nesting birds' habitats expected to be undertaken during bird nesting season (Mar-Aug Inclusive)?	☐	☒
If yes, has an ecology watching brief been arranged where hedgerows and trees are to be removed (if authorised to do so)?	☐	☐

Bats

10.4. All bats and their roosts are fully protected under the Wildlife and Countryside Act. Section 9 of the Wildlife and Countryside Act states, it is an offence for anyone without a licence to kill, injure, disturb, catch, handle, possess or exchange a bat intentionally. It is also illegal for anyone without a licence to intentionally damage or obstruct access to any place that a bat uses for shelter or protection. Bat Roosts are protected throughout the year.

	Yes	No
Has an inspection for bats been undertaken within the Ecology Report?	☒	☐
Has this been undertaken within the last 12 months?	☒	☐
Is there a further requirement for Bat Activity (Nocturnal) Surveys to be undertaken due to the potential for bat roosts to be present within the site?	☒	☐

10.5. If additional Bat Activity (Nocturnal) surveys are required, there are one of two ways in which the proposed development can progress; -

A. Where a bat roost HAS been identified, it will be necessary to obtain a Natural England Licence prior to works starting.
B. Where a bat roost HAS NOT been identified during the Bat Activity (Nocturnal) Survey, works can commence with adherence to a Reasonable Avoidance Measures method statement which identify safe working practices and precautions necessary to avoid injury or death to any bats that may be present.

Other Protected Species

10.6. European Protected Species (such as bats, great crested newts, otters and dormice) receive full protection under The Conservation of Species and Habitats Regulations 2010. This makes it an absolute offence to deliberately capture, injure or kill any European Protected Species (EPS), to deliberately disturb them and to damage or destroy a breeding site or resting place.

10.7. In addition, the Wildlife and Countryside Act makes it an offence to intentionally or recklessly disturb an EPS while it is occupying a structure or place which it uses for shelter or protection, or to obstruct access to any structure or place the species uses for shelter or protection.

10.8. Have any of the below species identifies as an EPS been identified within the Ecological report;

	Yes	No
Badgers	☒	☐
Dormice	☐	☒
Otters	☐	☒
Water Voles	☐	☒
Great Crested Newts	☐	☒
Natterjack Toads	☐	☒
Adders	☐	☒
Fish (various)	☐	☒
White Clawed Crayfish	☐	☒

11. Procedure in the Event of an Unplanned Discovery (Biodiversity)

11.1. If a protected species, suspected protected species or an invasive plant is discovered after works have begun; Site Management should stop the work. Advice should then be sought from a competent Ecologist as to the next course of action.

11.2. Some guidance on what to do if a protected species or suspected protected species or an invasive plant is discovered includes –

- Stop works in the area and cordon off. Restrict access to the area until additional advice is obtained.
- Contact the Ecologist or Environmental Advisor for additional advice.
- Identify methodology for dealing with the issue.
- In the case of protected species and designated sites, the relevant bodies should also be informed after consultation with the Ecologist.
- Identify, discuss and agree measures required to ensure compliance with legislation, when works can be completed and what should be included within the Method Statement. Agreement and discussions should be recorded and kept on file.
- Monitor site compliance with these requirements.

12. Biodiversity Net Gain

12.1. Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected in such a way it is hoped that the current loss of biodiversity through development will be halted and ecological networks can be restored.

Proposed Enhancements

12.2. Whilst the project is still going through its design development and planning submission stage, proposed enhancements will include the likes of bird and bat boxes along with new trees, hedgerows, shrubs that will form part of an approved landscaping design.

Dust & Air Quality

13. Site Specific Dust Management Plan

13.1. To minimise dust emissions arising during the development. A copy of this 'site specific CEMP' shall be retained at the development site; and made available for inspection upon request by Kirklees Council.

13.2. The dust suppression measures shall be maintained and fully operational for the duration of the construction phase of the development.

The Dust & Air Quality Management Plan shall contain the records of inspections and visual assessments. Records shall be:

- kept on site and
- made available for examination upon request by Kirklees Council.

13.3. Where visible airborne emissions are brought to the attention of the contractor by:

- pro-active dust monitoring of the site or
- upon receipt of a dust complaint from a member of the public

13.4. Henry Boot Construction shall:

- identify the cause and extent of the dust emission
- detail the remedial corrective course of action
- inform Kirklees Council.
- record any complaints and corrective action taken in the Complaints Log (Appendix B)

14. Sensitive Receptor Identification

Human Receptors

14.1. A 'human receptor' refers to any location where a person or property may experience the adverse effects of airborne dust or dust soiling, or exposure to particulate matter over the course of the project.

14.2. In terms of annoyance effects, this will most commonly relate to dwellings but may also refer to other premises or property such as buildings, vehicles and amenity areas.

Based on the information contained within the 'Definition of Sensitive Receptors' table, this site poses a risk to human receptors considered to be;	High	☐
	Medium	☐
	Low	☒

Human Receptors within 350m of the Site

- Hartshead Moor Cricket Club is adjacent to the site.
- Some residential dwellings are also close by.

Ecological Receptors

14.3. An 'ecological receptor' refers to any sensitive habitat affected by dust soiling. This includes the direct impacts on vegetation or aquatic ecosystems of dust deposition, and the indirect impacts on fauna (e.g. on foraging habitats).

14.4. For locations with a statutory designation, e.g. Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs), consideration should be given as to whether the particular site is sensitive to dust, and this will depend on why it has been designated. Some non-statutory sites (i.e. local wildlife sites) and/or locations with very specific sensitivities may also be considered if appropriate.

Based on the information contained within the 'Definition of Sensitive Receptors' table, this site poses a risk to ecological receptors considered to be;	High	☐
	Medium	☐
	Low	☒

Ecological Receptors within 350m of the Site

- None

15. Definition of Sensitive Receptors

	High	Medium	Low
Human (Dust) Surrounding land where;	• Users can reasonably expect enjoyment of a high level of amenity • The appearance, aesthetics or value of their property would be diminished by soiling • The people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land. • I*ndicative examples include dwellings, museums and other culturally important collections, medium and long-term car parks and car showrooms*	• Users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home • The appearance, aesthetics or value of their property could be diminished by soiling • The people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land. • *Indicative examples include parks and places of work.*	• The enjoyment of amenity would not reasonably be expected • Property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling • There is transient exposure, where the people or property would reasonably be expected to be present • Only for limited periods of time as part of the normal pattern of use of the land. • *Indicative examples include playing fields, farmland, footpaths, short term car parks and roads.*
Human **(Particulate Matter)**	• Locations where members of the public are exposed over a time period relevant to the air quality objective for particulate matter for eight hours or more in a day • *Indicative examples include residential properties. Hospitals, schools and care homes should also be considered as having equal sensitivity to residential areas for this assessment.*	• Locations where people exposed are workers, and exposure is over a time period relevant to the air quality objective for particulate matter, a relevant location would be one where individuals may be exposed for eight hours or more in a day. • *Examples include office/shop workers, but will generally not include workers occupationally exposed to Particulate matter, as protection is covered by H&S at Work legislation.*	• Locations where human exposure is transient. • *Indicative examples include public footpaths, playing fields, parks and shopping streets.*
Ecological	• Locations with an international or national designation and the designated features may be affected by dust soiling • Locations where there is a community of a particular dust sensitive species such as vascular species included in the Red Data List for Great Britain. • *Indicative examples include a Special Area of Conservation*	• Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown • Locations with a national designation where the features may be affected by dust deposition. • *Indicative example is a Site of Special Scientific Interest (SSSI) with dust sensitive features.*	• Locations with a local designation where the features may be affected by dust deposition. • *Indicative example is a local Nature Reserve with dust sensitive features.*

16. Controls & Mitigating Action

16.1. Before work commences, an assessment shall be made to identify the risk of dust and emissions causing nuisance or environmental damage.

16.2. Where appropriate liaison with Kirklees Council will take place to agree monitoring and control measures where there is a risk that nuisance could occur.

Mitigation Measures - Dust

16.3. The following method will be used to manage dust within the construction phase (Select applicable);

Use dust monitoring devices to measure nuisance dust at boundary to site	☒
Dampening down haul routes with water	☒
Employ road sweeper as required to ensure Highways are regularly swept	☒
Install wheel washing equipment/ procedures at site exits where appropriate	☒
Ensure bulk materials and skip are covered when leaving site	☒
Use water suppression during cutting operations	☒
Cover stockpiles of bulk materials likely to cause dust	☒

Mitigiations Measures – Air Quality (Particulate Matter)

16.4. The Following method will be used to manage air quality within the construction phase (Select applicable);

Ensure vehicles are switched off when not required	☒
Use fuels designed to cause less pollution	☒
Connect to electricity supply rather than running from generators	☒

Mitigation Measures - General

16.5. The following mitigation methods will be applied across site within the Construction phase (Select applicable);

Implement a stakeholder communications plan before work commences on site.	☒
Display the contact details of person(s) accountable for issues on the site boundary	☒
Carry out regular site inspections to monitor compliance	☒
Increase the frequency of site inspections by the Environmental Nominee on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions	☒
Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.	☒
Avoid site runoff of water or mud.	☒
Ensure an adequate water supply on site for effective dust/particulate matter suppression, using non-potable water where possible and appropriate.	☒
Ensure equipment is readily available on site to clean and dry spillages and clean up spillages as soon as reasonably practicable after the event using wet suppression methods.	☒

Resources & Waste

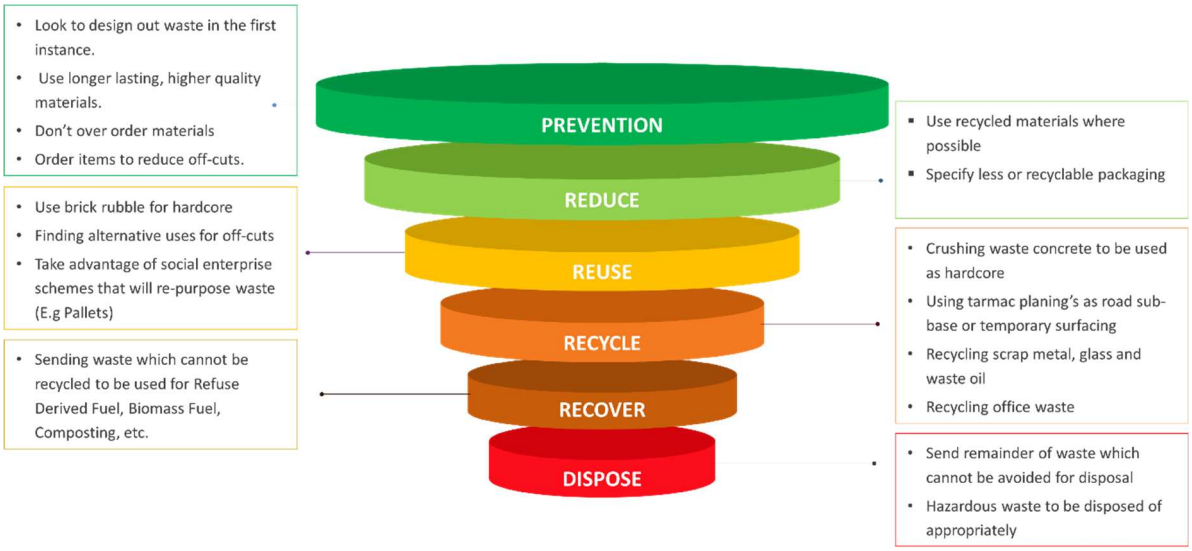
17. Waste Management

Waste Hierarchy

17.1. The Waste Hierarchy ranks waste management options according to what is best for the environment. It gives top priority to preventing waste in the first place.

17.2. When waste is created, the Waste Hierarchy gives priority to preparing waste for re-use, then recycling, then recovery, and last of all disposals (e.g., landfill).

17.3. Henry Boot Construction is committed to ensuring that the Waste Hierarchy is adhered to, to ensure the least amount of waste will be disposed of to landfill.



17.4. It is the responsibility of the Environmental Nominee to ensure that the disposal of waste from site is carried out in accordance with the current Waste Disposal and Duty of Care Regulations.

17.5. The Environmental Nominee are to ensure the selection of appropriate waste disposal methods in order to achieve the project specific waste targets for recycling and / or re-use.

17.6. Further guidance can be found in **Company Guidance 58 – Waste Management.**

Waste Figures

17.7. Henry Boot Construction shall measure and record the quantity of waste generated that is reused, recycled or recovered (e.g., by conversion to energy) both on-site and off-site as well as the quantities sent to landfill or for other disposal and it is essential that the waste data collected can provide this information.

18. Resource Efficiency

Material Procurement

18.1. The construction sector is the largest consumer of materials in the UK, and the largest producer of waste. More efficient use of materials will make a major contribution to reducing the environmental impacts of construction, including carbon emissions, landfill and the depletion of natural resources.

18.2. All materials procured for this project will be done so in line with our sustainable business charter. Through this charter we aim to achieve, through collaboration with our supply chain and other key stakeholders; -

- Achieve value for money on a whole life cost basis with the use of sustainable products
- Ensure all products are responsibly and ethically sourced, ensuring their effective management to mitigate environmental impact.
- Identify opportunities and implement actions to reduce carbon emissions and energy usage.
- Deliver sustainable solutions to all our clients that exceed their expectations.

Energy Usage

18.3. When calculating total energy consumption, Henry Boot Construction shall use verifiable data where reasonably practicable. Energy use data will be collected from meter data (from the supplier) which is the preferred method of data collection.

18.4. Scope 1 fuel, that is, for generators and in plant and machinery in use on, or at, a project and for company owned vehicles will generally be measured from suppliers' invoices or delivery tickets.

18.5. All energy usage will be logged on a monthly basis to keep track of our environmental impact on each project. This captures consumption of electricity, water, and gas.

18.6. The following considerations have been made to minimise our energy usage throughout the project

Consideration	Possible		If no, give reason why
	Yes	No	
Connections to the mains electricity grid	☒	☐	
Generator powered by HVO (Hydrated Vegetable Oil)	☒	☐	
Use of HUSHH Pod (Battery storage) with Generator	☒	☐	
Diesel powered generator	☒	☐	

Surface Water Management

19. Surface Water Controls

19.1. The following method(s) will be used to manage surface water within the Construction phase; - (Select applicable)

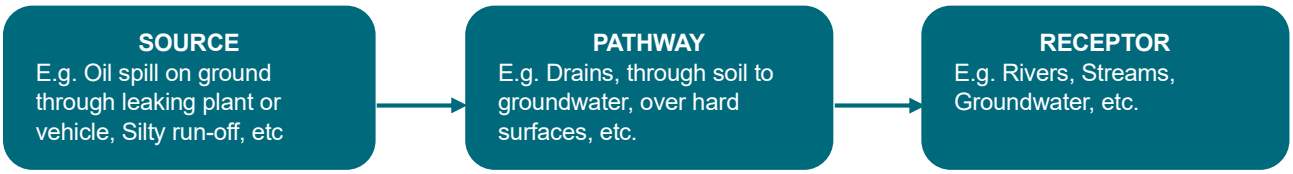
Build, use and remediate permanent surface water drainage system	☒
Install, use, and remove a temporary surface water drainage system	☒
Utilise existing system with pollution control measures	☒

19.2. Consent of the Regulator will be required if it is proposed that anything other than clean water, rainwater or silt-free groundwater is to be discharged to watercourse or to ground and sufficient time will be needed for this to be applied for and obtained.

20. Pollution Prevention Planning

20.1. A pollution prevention plan will be in place for the duration of the project. This will be developed by taking into consideration the elements as below; -

- Physical, chemical and biological properties of any material that maybe spilt.
- How materials are stored or transported and the condition of storage containers.
- Possible effects of accidents, flooding, vandalism and failure of containment.
- Location, including how close site is to local water courses, sensitive groundwater locations, public water abstraction points and environmentally sensitive areas.
- Surface water drains and foul sewers that flow off site (Including SUDS)
- Operations and layout of site, or factors to look out for in road traffic collisions.
- Risks posed to people and the environment and the extent of the possible damage.
- Local landscape and different weather conditions and the flood risk of site.



21. Permitting Requirements

21.1. Due to the risk of pollution, there are legal restrictions on carrying out activities and the siting of temporary structures adjacent watercourses. In addition, there are also similar restrictions applicable to floodplains due to the potential for interference with flood water storage.

21.2. You usually need an environmental permit from the Environment Agency if you discharge liquid or wastewater into surface water.

21.3. Liquid or wastewater includes poisonous, noxious, or polluting matter, waste matter, trade effluent, sewage effluent, contaminated surface water.

21.4. Surface water includes rivers, streams, estuaries, lakes, canals, and coastal waters.

22. Flood Risk Activity

22.1. The current guidance states that you may require a permit if you are working; -

- on or near a main river
- on or near a flood defence structure
- in a flood plain
- on or near a sea defence

22.2. You may need to apply for permission to do any of the following regulated flood risk activities:

- erecting any temporary or permanent structure in, over or under a main river, such as a culvert, outfall, weir, dam, pipe crossing, erosion protection, scaffolding or bridge
- altering, repairing or maintaining any temporary or permanent structure in, over or under a main river, where the work could affect the flow of water in the river or affect any drainage work
- building or altering any permanent or temporary structure designed to contain or divert flood waters from a main river
- dredging, raising or removing any material from a main river, including when you are intending to improve flow in the river or use the materials removed
- diverting or impounding the flow of water or changing the level of water in a main river
- quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- any activity within 8 metres of the bank of a main river, or 16 metres if it is a tidal main river
- any activity within 8 metres of any flood defence structure or culvert on a main river, or 16 metres on a tidal river
- any activity within 16 metres of a sea defence structure
- activities carried out on the floodplain of a main river, more than 8 metres from the riverbank, culvert or flood defence structure (or 16 metres if it is a tidal main river), if you do not have planning permission (You do not need permission to build agricultural haystacks, straw stacks or manure clamps in these places.)

Based on the guidance above this project **WILL** require a Flood Risk Activity Permit	☐
Based on the guidance above this project **WILL NOT** require a Flood Risk Activity Permit	☒

23. Temporary Dewatering from Excavations to Surface Water

23.1. The current guidance for permitting requirements for dewatering on a construction site is covered by a Regulatory Position Statement. The Regulatory Position Statement details that a permit is NOT required if; -

- You have a short term, temporary discharge of uncontaminated water which is wholly or mainly rainwater, from an excavation to surface water (such as pumping water out of excavations on a building site)

The discharge must:

- be clean water, for example clear rainwater or infiltrated groundwater which has collected in the bottom of temporary excavations
- not result in water containing fine or coarse suspended solids (silty water) entering surface water
- not last more than 3 consecutive months (the activity may stop and restart, but the clock does not restart) - if the activity is likely to go over 3 consecutive months, then you need to apply for a permit
- be made to surface water, such as a river, stream or the sea
- have a method statement that minimises the risk of pollution

24. Further Actions

Water Usage/Recycling

24.1. Clean potable water must be provided and a 'mains' supply is the preferred option. Should mains supply not be available, alternatives such as bottled water fountains or discrete deliveries by tanker will need to be arranged.

24.2. Subject to the size of the site accommodation, consideration could be given to rainwater harvesting for use, for example, in flushing site toilets and/or for damping down dust

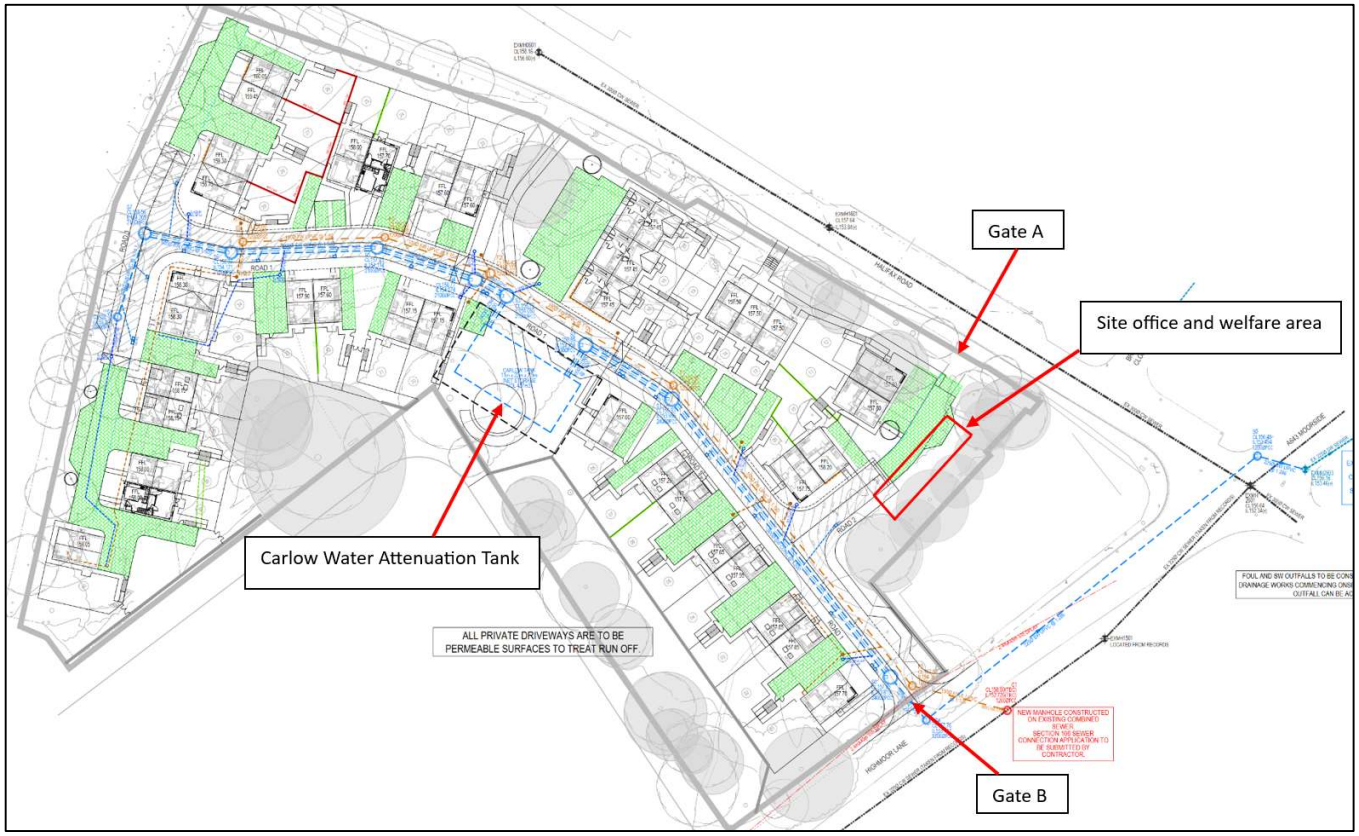
24.3. A connection made to the public sewer and duly consented by the statutory undertaker is the preferred option. Alternatively, arrangements will need to be made for removal by tanker to a licensed facility

Water Footprint Monitoring

24.4. Water usage will be monitored via water meters for fixed installations and through deliveries where we are unable to connect to the mains network. The amount of water used on site will be logged into our resource efficiency tool to monitor water consumption.

24.5. Water standpipes must be approved for use by the water company and meet their standards, including double check valve to protect water quality and a water meter to manage network supply. These should be obtained through the purchasing department with a request for a licence accompanying the requisition.

25. Plan of Surface Water Management System(s)



We will manage surface water during the construction phase through our methodology of delivering the scheme i.e. we will install the drainage system (including the Carlow water attenuation tank) on the scheme as one of the first activities, to ensure that the surface water system is up and running for the houses to connect straight into once the roofs, gutters and downpipes are installed. This way, the rainwater runoff from all the dwellings isn't discharging onto the surface and is instead directed straight into the new surface water system.

There will be two access routes to the site, Gates A and B, that will serve for construction deliveries etc. After the drainage has been installed including the road gully's, we will base coat tarmac lay the new roads, which will form the site traffic access routes - this will ensure that the site stays clean and does not get churned up by site vehicles and plant and this will also prevent any mud leaving the site. The new gully's will be fitted with "gully silt socks", which will prevent silt from entering the permanent system during the construction phase. These silt socks will be inspected at regular intervals each week and they will be cleaned and replaced as and when required.

For further notes on surface water management, refer to the environmental risk assessment in appendix A, which also includes mitigation measures.

Appendix A – Environmental Risk Assessment

Environmental Aspect	Environmental Risk	Applicable Risk Yes / No	Probability	Consequence	Controls / Mitigating Action	Residual Risk
Environmental Management / Best Practice All Construction	Environmental Awareness 	Yes	3	3	All production related employees attend an environmental awareness course. Environmental best practice toolbox talks, and appropriate Environment Agency PPG's (Pollution Prevention Guidelines) are available for reference on the company network. An Environmental Manual, written by the Construction Confederation specifically for construction site staff is available on the company network (HBC Data), titled 'Environmental Manual'. This manual gives up-to-date environmental legislation compliance guidance. The document is divided into a number of chapters, each of which addresses different environmental topics listing the relevant legal legislation / obligations.	1
Environmental Management / Best Practice All Construction	Company and Industry Image CONTRACTOR AND SUPPLIER PARTNER CONSIDERATE CONSTRUCTORS SCHEME	Yes	3	3	The project has been registered with the Considerate Constructors Scheme, although the site will abide by the principles of the schemes. Henry Boot Construction Limited are a Considerate Constructors Partner and are committed to complying with the schemes Code of Considerate Practice. Refer to the CCS Company Compliance Guidance checklist for guidance. The workforce shall be suitably disciplined and be considerate to others, this will be discussed during site inductions and subcontractor checklist meetings. A complaints log shall be established to record details of any complaints made by members of the public.	1
Noise & Lighting All Construction	The generation of noise is a statutory nuisance which can cause inconvenience, damage, health implications to wildlife.	Yes	3	4	Noise is to be kept to a minimum wherever possible. Consultation with the local stakeholders must be carried out and noisy activities planned in advance. Where identified noise readings shall be taken during noisy activities as required by the visiting safety manager. Work will be carried out within the normal working hours. The normal working hours are: - Monday to Thursday – 8.00 am to 4.30pm Friday - 8.00am to 3.30pm Saturday – 8.00am to 1.00pm Sunday & Public Holidays – No working	2

Biodiversity: Habitat Protection All Construction	The following species are protected by law: • Bats • Badgers • Adders • Great Crested Newts • Nesting Birds • Others – see the ecology sections of the Construction Environmental Manual for further guidance.	Yes	3	4	Where any of these have been identified either via an existing ecology or biodiversity report or were identified on site, special measures must be put in place before construction work can start or continue. The site Biodiversity Champion is the 'Site Environmental Nominee'. Species identified by Ecology Report. • Badger survey is required and will be undertaken. • Bat activity survey is recommended and will be undertaken in accordance with the ecological report. Note: Ecology clerk of works will be appointed to undertake a watching brief to look for hedgehogs, reptiles and amphibians. **Associated documents:** Company Guidance: CG/19 Environmental Impact Management CG/04 Environmental Management in Procurement Environmental Toolbox Talks: NC1 Nature Conservation – Adders NC2 Nature Conservation – Badgers NC3 Nature Conservation – Bats NC4 Nature Conservation – Great Crested Newts NC5 Nature Conservation – Nesting Birds EA PPG6 Working at Construction and Demolition Sites Construction Environmental Manual Section 7	2
Biodiversity: Invasive Plants All Construction	Invasive plants are those which can rapidly spread and take over areas to the detriment of other existing plant and animal species and the environment. Those invasive plants most commonly found in the UK are: • Japanese Knotweed • Himalayan Balsam • Common Ragwort • Giant Hogweed	No	2	3	**None identified within ecological survey.** Where any of these have been identified either via an existing ecology or biodiversity report or where identified on site, special measures must be put in place before construction work can start or continue. **Associated documents:** Work Instructions: WI/05 Japanese Knotweed Environmental Toolbox Talks: NC6 Nature Conservation – Giant hogweed NC7 Nature Conservation – Himalayan Balsam NC8 Nature Conservation – Japanese Knotweed EA PPG6 Working at Construction and Demolition Sites Construction Environmental Manual Section 7	1

Biodiversity: Protection of Trees All Construction	Protection of Trees	Yes	3	3	Any trees identified that require protection must be protected prior to commencing any work on site to BS 5837. Trees requiring protection must have a suitable bunding in place (e.g. stone) to prevent 'silty' water seeping into the root system of the trees. It is imperative that these trees are protected, and the situation continually monitored by HBC site management. Further site-specific controls; - • Tree protection zone fencing and signage will be erected and in place prior to commencement of works. **Associated documents:** EA PPG6 Working at Construction and Demolition Sites Construction Environmental Manual Section 7	**2**

Pollution (Water / Ground) All Construction	Pollution of watercourses from silty / contaminated water Silty water run-off into drainage systems is an illegal discharge which could cause pollution of rivers. Silt pollution is a major cause in environmental incidents. It can damage and kill aquatic life by smothering and suffocating and can cause flooding by blocking culverts and channels. Pollution of watercourses from silty / contaminated water Silty water run-off into drainage systems is an illegal discharge which could cause pollution of rivers. Silt pollution is a major cause in environmental incidents. It can damage and kill aquatic life by smothering and suffocating and can cause flooding by blocking culverts and channels.	Yes	3	3	Any water encountered within excavations shall be pumped onto a grassed area, therefore allowing the water to disperse within the confines of the site settling any silt. The effectiveness of this method shall be closely monitored to ensure silty run-off does not reach any watercourses and surface water drainage. Where the above or not feasible or the effectiveness of the above measures is not sufficient, consideration shall be given to alternative measures such as pumping into settlement tanks for subsequent disposal. An alternative is to discharge to a foul sewer, although this requires consent from the sewerage 'undertaker'. Any liquid, with or without suspended particles, which is wholly or partially produced during any trade or industrial activity carried out at "trade premises" will be classed as trade effluent. The only effluents which are not classed as Trade Effluent are clean, uncontaminated surface water (i.e. clean rainwater which has not been contaminated when running over the site). The consent from the Statutory Sewerage Undertaker is in the form of a Trade Effluent Consent or Trade Effluent Agreement. Any water encountered within excavations shall be pumped onto a grassed area, therefore allowing the water to disperse within the confines of the site settling any silt. The effectiveness of this method shall be closely monitored to ensure silty run-off does not reach any watercourses and surface water drainage. Where the above or not feasible or the effectiveness of the above measures is not sufficient, consideration shall be given to alternative measures such as pumping into settlement tanks for subsequent disposal. An alternative is to discharge to a foul sewer, although this requires consent from the sewerage 'undertaker'. Any liquid, with or without suspended particles, which is wholly or partially produced during any trade or industrial activity carried out at "trade premises" will be classed as trade effluent. The only effluents which are not classed as Trade Effluent are clean, uncontaminated surface water (i.e. clean rainwater which has not been contaminated when running over the site). The consent from the Statutory Sewerage Undertaker is in the form of a Trade Effluent Consent or Trade Effluent Agreement. Further site-specific controls: • Refer to section 25 on Surface Water Management	**2**
Pollution (Water/Ground) All Construction	Plant Refuelling and Servicing	Yes	3	3	Drip trays shall be placed under all items of stationary plant. All items of plant shall be refuelled in a designated area within the site compound, i.e. at the furthest point away from existing watercourses. Re-fuelling of plant must only be carried out by competent persons. Plant must be regularly maintained / serviced in accordance with the manufacturers' guidelines to avoid the generation of excessive pollution. Records of servicing shall be maintained on the weekly SHE checklist. Items of plant must be turned off when not in use and isolated / immobilised.	**2**

Pollution (Water/Ground) Run-off	Pollution of watercourses from silty / contaminated water Silty water run-off into drainage systems is an illegal discharge which could cause pollution of rivers. Silt pollution is a major cause in environmental incidents. It can damage and kill aquatic life by smothering and suffocating and can cause flooding by blocking culverts and channels.	Yes	3	3	Henry Boot Site Management will continually monitor run off and prevent any contamination of local watercourses and surface water drainage. Ensure any stockpiles are either battered or sheeted to minimise the potential for silt. The requirement to install a filter membrane 'geotextile fence' around stockpile(s) of excavated materials to trap silt in run-off shall be monitored. Where possible, excavated materials shall be removed from site on a daily basis to reduce the likelihood of runoff. Ensure all drains are suitably protected (e.g. proprietary product, with terram, straw or block). Consider the use of silt fences, silt traps / grips (stone filled trenches) where the risk is run-off is high. Road sweepers will be used as required to clean the surrounding access road when needed. The site must be kept free of contaminants to prevent contamination of any surface water run-off.	**2**
Pollution (Water/Ground) Dewatering	Pollution of watercourses from silty / contaminated water Silty water run-off into drainage systems is an illegal discharge which could cause pollution of rivers. Silt pollution is a major cause in environmental incidents. It can damage and kill aquatic life by smothering and suffocating and can cause flooding by blocking culverts and channels.	Yes	3	3	Any water encountered within excavations shall be pumped onto a grassed area, therefore allowing the water to disperse within the confines of the site settling any silt. The effectiveness of this method shall be closely monitored to ensure silty run-off does not reach any watercourses and surface water drainage. Where the above or not feasible or the effectiveness of the above measures is not sufficient, consideration shall be given to alternative measures such as pumping into settlement tanks for subsequent disposal. An alternative is to discharge to a foul sewer, although this requires consent from the sewerage 'undertaker'. Any liquid, with or without suspended particles, which is wholly or partially produced during any trade or industrial activity carried out at "trade premises" will be classed as trade effluent. The only effluents which are not classed as Trade Effluent are clean, uncontaminated surface water (i.e. clean rainwater which has not been contaminated when running over the site). The consent from the Statutory Sewerage Undertaker is in the form of a Trade Effluent Consent or Trade Effluent Agreement.	**2**
Pollution (Water/Ground) Wash-out	Risk to groundwater from washing-out trucks, pumps etc (contamination of watercourses) Run-off from mixer washouts. During concrete pour and washout activities on site the resulting water will contain fines / silt and also be highly alkaline. If this gets into drainage, surface water or watercourses this can have considerable environmental impacts.	Yes	3	3	Careful consideration needs to be given to the washing out of concrete trucks. Ideally this needs to be done back at the batching plant or into a mixed waste skip. Washing-out of concrete wagons / mixers shall be carried out in a designated area within the site, which is not a hard-standing area and this area should be sited 10 metres away from any watercourse or surface water drain to minimise the risk of run-off entering a watercourse. The risk to groundwater must be assessed when deciding the washout decision. The site must be kept free of contaminants to prevent contamination of surface water run-off into nearby watercourses and surface water drainage. Washing out of mixers and tubs used for mixing small quantities of concrete required for benching shall be carried out into a mixed waste skip. Washings must not be allowed to flow onto any hardstanding areas or into any drain or watercourse. Mixer areas must be controlled and be at least 10m away from and any watercourse.	**2**

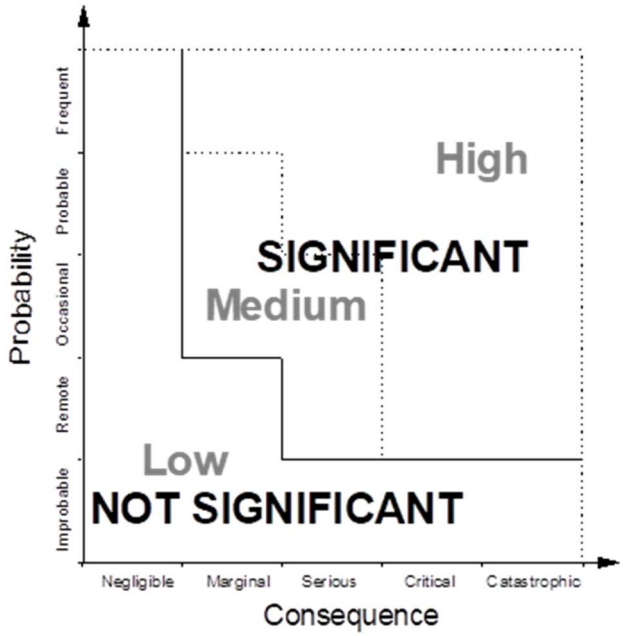
Air Quality & Dust Demolition Excavations Masonry Work Surfacing All Construction	The generation of dust is a statutory nuisance which can cause inconvenience, damage, health implications to surrounding properties, local residents, businesses & wildlife.	Yes	4	3	Dust suppression techniques and close monitoring of high-risk activities will be implemented to minimise the threat that airborne contaminants bring. For activities carried out during the winter period, the generation of dust has a low probability, however wet cutting must be carried out to minimise the level of dust. The site will be dampened down in dry weather using a bowser or sprayer to minimise dust pollution, where necessary skips will also be covered. Beware, this could create a problem with silt if too much water is used, additional protection measures will be needed to mitigate against silt entering drains / watercourses. Suitable RPE must be issued to those affected, see specific RA/MS. **Associated documents:** Environmental Toolbox Talk N2 Nuisance – Dust and air quality EA PPG6 Working at Construction and Demolition Sites Construction Environmental Manual Section 6	**2**
Waste Disposal Earthworks / Remediation	Compliance with CL:AIRE assessment model and application of a Materials Management Plan.	Yes	3	3	This will negate the requirement to apply for a Waste Management Licence or Waste Management Licence Exemption. The MMP will detail all movements for the activities described above, including verification upon completion and will be signed off / authorised by the 'Qualified Person'.	**2**
Waste Disposal Plasterboard / Gypsum Waste	The land filling of gypsum-based waste is now subject to a greater level of control, all gypsum-based waste that is sent to landfill must be buried in a separately constructed area in the landfill site for high sulphate waste.	Yes	3	3	Where plasterboard disposal is required, this must be separated from all other waste streams. For small quantities, plan with the skip provider.	**2**
Waste Disposal Waste Timber	Opportunity to use a Social Enterprise (Community Wood Recycling or similar) to remove waste timber for reuse or recycling.	Yes	2	2	Appointment of Social Enterprise to remove waste timber for reuse/recycling.	**1**
Waste Disposal WEEE Waste	Incorrect disposal of electronic wastes	Yes	2	3	Arrangements must be made for the collection of any waste electronic equipment recognised under the Waste Electrical & Electronic Equipment (WEEE) Regulations where necessary. This type of waste is generally any piece of equipment, which has a battery or plug, for example, computers, desktop fans, heaters etc.	**1**
Waste Disposal Duty of Care	Duty of Care: Waste Transfer Notes Disposal of waste in a legal manner	Yes	2	3	Waste transfer notes must be in place prior to any waste leaving site, these must give a description of the waste as well as listing the European Waste Code (EWC). Management of waste disposal will be in accordance with Work Instruction 58: Waste Disposal. A copy of the waste transfer documentation, carrier's licenses and details of the final disposal point (waste management license) will be obtained and kept on file for all controlled waste leaving site. Removal of all waste will be carried out by a licensed waste carrier.	**2**

Waste Disposal Hazardous Waste	Hazardous Waste Disposal - It is important to ensure that any waste generated is classified correctly (e.g. Inert, Non-Hazardous, or Hazardous) and disposed of legally. Hazardous waste has its own unique issues depending on the hazards it poses-	Yes	3	4	A consignment note must be produced by the person / company (registered carrier) collecting the waste, this must show the unique consignment note code. The unique code is only valid for one consignment. Under no circumstances must any hazardous waste be allowed to leave site without the consignment note being produced, it is not acceptable for the registered carrier to forward on the consignment note after removal from site. A further copy of the consignment note is required after removal from site to show that the waste has been received at the final disposal point (i.e. with Part E completed). ***Hazardous Waste Consignment Note Code: HENRYB/**	**2**
Waste Disposal All Construction  	It is important to ensure that any waste generated is classified correctly (e.g. Inert, Non-Hazardous, or Hazardous) and disposed of legally. Application of the Waste Management Hierarchy must be applied to all decisions taken. Where requested by the client or where the project is subject to a BREEAM assessment, CG/15: SWMP must be completed.	Yes	3	3	Henry Boot Construction Ltd implement an overall minimum waste recycling target of **99% (diversion from landfill).** Inductions to all subcontractors and operatives shall include communication of the waste management requirements. At all stages during the construction period every opportunity will be taken to minimise waste and maximise resource efficiency, materials shall be reused on site wherever possible. As well as the guidance described in this plan, further guidance is available from DEFRA, BRE, Envirowise and WRAP. Where the opportunity exists, and at the relevant stage of the project, waste shall be segregated into separate skips (i.e. Pre-Treated) to maximize the recycling process and in support of the company's objective to reduce and recycle waste. Mixed waste shall be removed from site by the waste management contractor to their transfer station for subsequent sorting and recovery for reuse and recycling. Waste shall be segregated into the waste streams listed below where possible (subject to space restrictions on site) to maximize the recycling process: • Masonry Waste • Timber • Excavation Arisings • Mixed Metals • Demolition Wood Waste Appropriate signage for the above will be provided. Site personnel / operatives shall be made aware of these arrangements as part of the site induction. In the event of discovery of a hypodermic syringe or needle, Henry Boot Construction Limited site management must be notified as instructed during the site safety induction. The needles shall be placed into a clinical waste box (contaminated sharps) and removed by the Local Authority. Materials shall be stored in a way as to prevent physical damage; all materials will be stored in the designated area(s). The designated area(s) must be kept in a clean and tidy condition. Protective packaging (where applicable) should be left on as long as possible. Any surplus materials must be returned to storage for re-use. General housekeeping standards shall be monitored by site management and audited / inspected by the visiting safety manager. **Associated Documents:**	**2**

					CG/58 Waste Disposal CG/19 Environmental Impact Management CG/04 Environmental Management in Procurement CG/15 Site Waste Management Plans Environmental Toolbox Talks: W1 Waste – Control of Road Sweeper Arisings W2 Waste – Segregation of Waste W3 Waste – Storage of Waste W4 Waste – Waste Hierarchy GP3 Good Practice – Material Handling & Housekeeping EA PPG6 Working at Construction and Demolition Sites Construction Environmental Manual Section 4	

Extract from Company Guidance 42- Risk Assessment

PROBABILITY		Score
Description	Guidance	
Frequent	Likely to occur frequently, on a regular basis or as part of a routine activity i.e. daily, weekly or monthly. An event that is likely occur on an unpredictable basis > 10 times per year.	5
Probable	Occasional planned activities e.g. crane rigging, major excavation, beam placing etc. Unexpected events with a statistical probability of happening more than once in the project duration.	4
Occasional	Singular planned activities. Unexpected events with a statistical probability of happening some time in < five times the project duration.	3
Remote	Unexpected events with a statistical probability of happening some time in > five times the project duration.	2
Improbable	Unexpected events which, whilst possible, have not been known to occur.	1
CONSEQUENCE		**Score**
Level	Guidance	
Catastrophic	Critical to the business and/or the environment. Action must be initiated immediately and control implemented: e.g. Legal non-compliance, severe damage to the eco-system.	5
Critical	Major importance to the business and/or the environment. Contract requirement. Plans must be initiated to reduce or eliminate within an agreed timescale: e.g. Imminent changes to legislation, severe concern from relevant interested party.	4
Serious	Important to the business and/or environment. Likely to contravene policy, codes of practice and good practice. Likely to be of major importance if normal working practice.	3
Marginal	No immediate effect on the business and/or the environment: minimal impact risk to the environment under normal working practices.	2
Negligible	Low or no significant importance to the business and/or the environment: minimal impact on the environment under emergency conditions.	1



Appendix B – Duty of Care Compliance Matrix

Waste Description / Type	List of Waste Code	Service Provider	Carriers Registration Number	Expiry Date	Waste Transfer Note (Y/N)	Disposal Site	Type of Site	Licence Number

Appendix C – Consignment Note Schedule

There is a legal duty placed on us to ensure that all hazardous waste is disposed of correctly. From the 1st April 2016 premises no longer need to register as hazardous waste producers. This change affects the entire hazardous waste control system. The Consignment Note Code which accompanies every single movement of hazardous waste is now created by us as producer of that waste. A unique code must be used for each Consignment Note. The first six letter must be used (HENRYB) followed by a six-number reference. This must contain the last three numbers of the Contract Number followed by unique consecutive numbering (e.g. 16801 for the first consignment note, then 02 etc. for each subsequent consignment note).

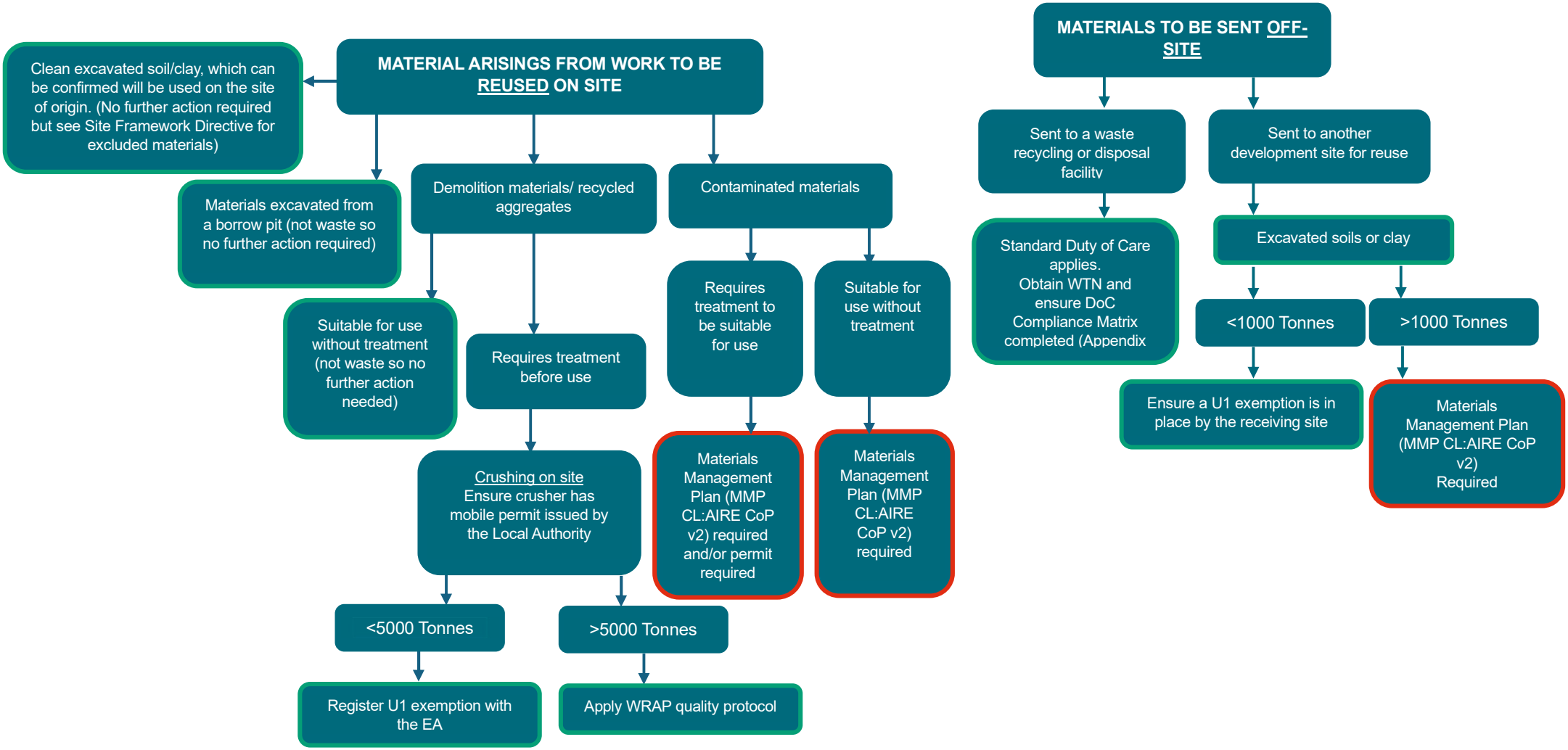
A record of each hazardous waste consignment must be maintained on the schedule below.

Further guidance on completing a consignment note, including assigning a consignment note code, is detailed in CG/58: Waste Management; Section 11.

As such, a schedule needs to be maintained for every unique code given.

Consignment Note Code	Waste Carrier	Date
HENRYB/		
HENRYB/		
HENRYB/		

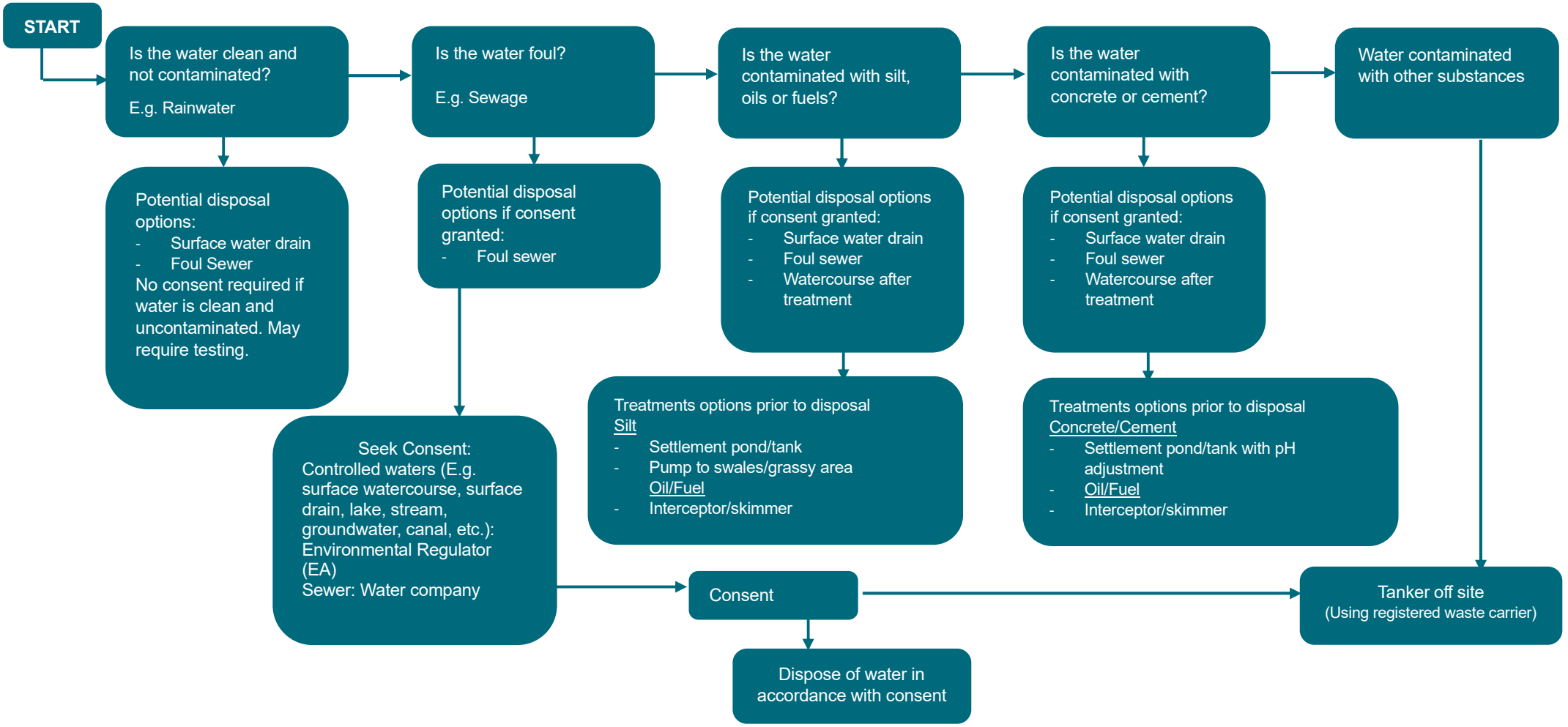
Appendix D - Material Management Plan Requirement Flowcharts



Appendix E - Complaints Log

Date of Complaint	Complaint From	Responsibility of	Description of complaint	Action Taken	Date Action Undertaken	Signature

Appendix F – Disposal of Wastewater Flow Chart



Appendix G – Emergency Spill Procedure

The following emergency procedure will apply in the event of spillage of fuel, oil or any other contaminant:

a) Identify the source of pollution and stop it, if safe to do so
b) Prior to the use of any equipment to absorb spillages of petrol, diesel, chemicals etc, the following Personal Protective Equipment must be worn:

    - Eye Protection - Resistant Goggles (Standard - EN 166-B-4,4)
    - Respiratory Protection - Respirator / Dustmask (Standard FFP 3)
    - Hand Protection - Rubber / Nitrile / PVC Gauntlets (Standard EN 388 & EN 374)

c) Spilt liquid is to be surrounded with absorbent pads or granules (contained in the spillage kit) and progressively soaked up from the edge of the spillage to absorb the liquid. Where spillage occurs on permeable ground, the affected area must be dug out and placed in a suitable container and disposed of as hazardous waste.
d) When the liquid has been fully absorbed, the pads / granules shall be placed in a suitable container and disposed of as hazardous waste in accordance with WI/58.
e) If the spillage occurred near to an existing road gully, surround the gully with a boom / absorbent pads to prevent the contaminant entering the surface water drainage system.
f) Where the spillage occurred on a road surface it will be cleaned by a road sweeper.

If the above measures do not contain the spillage and a watercourse is polluted, then the Environment Agency (EA) must be notified immediately on the following number:

0800 80 70 60 - Environment Agency Incident Desk

Major Spillage Procedure

Where the above spillage procedure does not or cannot contain the spillage and there is imminent danger of the pollutant entering a watercourse, our emergency spillage contractor must be contacted immediately on:

https://www.csg.co.uk/industrial-commercial-waste/emergency-spill-response/emergency-hotline

0800 011 6600 - CSG 24hr Emergency Hotline