

Construction Environmental Management Plan

South Tyneside College.



Record of Amendments

Date	Issue	Amended By	Comments/Details
17 th March 2025	DRAFT	Richard Lovell	

Prepared by:
Richard Lovell
Senior Project Manager
richardlovell@castlebs.co.uk

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1.0 Introduction

The Construction Environmental Management Plan (CEMP) has been produced to comply with our duties under the Construction Design and Management (CDM) Regulations 2015, South Tyneside Council Local Planning Authority and Building Contract.

As the principal contractor we will:

- The aim of the Construction Environmental Management Plan (CEMP) is to set out the responsibilities with regard to compliance with legislation and to implement any mitigation measures.
- This CEMP details management measures to minimize environmental impact from the construction phase of the development.
- Further, it provides a framework within which the measures will be implemented throughout the project.
- The CEMP provides project-specific management measures and is a dynamic document which should be reviewed if activities or conditions onsite change that may influence management measures.
- This document has been developed to avoid, minimize and mitigate any construction effects on the environment and surrounding community. It should be considered a living document with reviews being undertaken at set intervals and new information added as appropriate.

- For the purposes of this document, the working area is defined as any area where there will be a requirement for temporary or permanent works to facilitate the construction of the development. This includes areas required for access, temporary construction and temporary storage areas.
- Facilitate the co-ordination, co-operation, and communication between contractors to more effectively control site operations.

This CEMP shall outline strategies to mitigate / eliminate environmental impact which may be encountered during the construction phase of the project, such as:

- Vehicle Access.
- Waste Management.
- Working Hours.
- Noise and Vibration.
- Dust and Air Quality.
- Landscape and visual Impact.
- Communication with the Public.
- Potential Contamination of Land, Ecology and Ground Water.
-

2.0 Project Details

2.1 Location

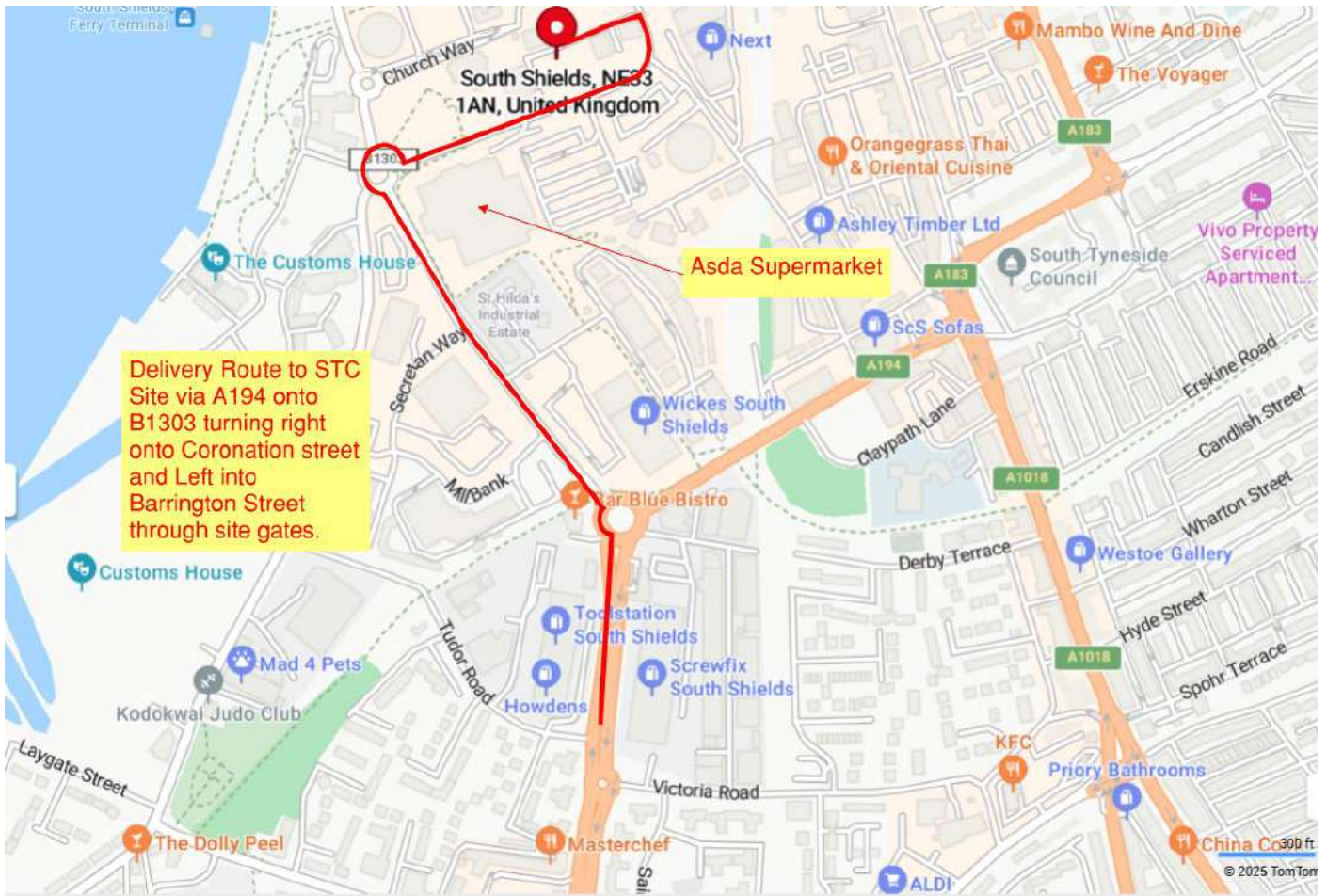
South Tyneside College
Between King Street and Coronation Street
South Shields
NE33 1AN.

The site is located within South Shields Town Centre and is surrounded by King Street to the Northern perimeter and Coronation Street on the Southern perimeter taking in East Street and Barrington Street respectfully.

Site deliveries and Visitors will Find the Site via Sat Nav by entering NE33 1AN. The site can be found from the A19 travelling North or South picking up the A194 East and following signs to South Shields Town Centre

Site Personnel will access the site car park Via Coronation Street South Shields.

There will be limited parking on site for contractors as shown on the Site logistics plan.



Externally the building will be constructed from traditional brickwork complimented with external cladding.

The roofs will be a mix of felted and single ply membrane with areas for Plant and Photo Voltaic installation.

The external works will include new drainage systems connected to existing and a new attenuation provision. There will be provision of a drop off area, car parking with disabled and EV charging provision, cycle storage, service yard, fencing and associated hard and soft landscaping.

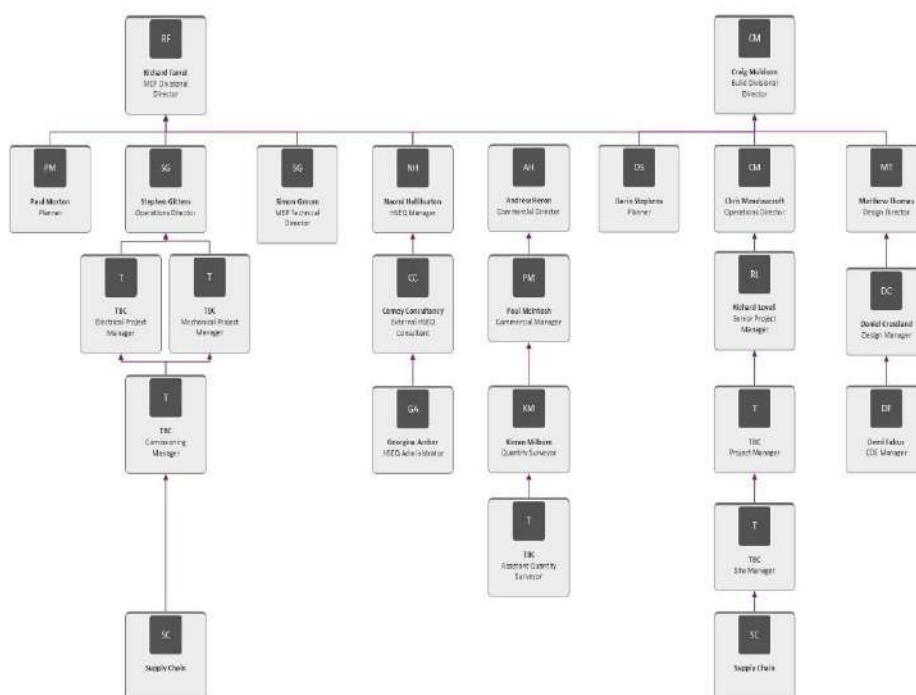
The Works will include,

- Take Possession of the Site footprint and install 2.4-meter timber hording to site perimeter.
- Complete service diversions to allow constriction works to commence
- Site strip and reduced level dig.
- Install oversite carpet to formation levels
- Construct foundations and substructures utilizing traditional wet poured and pre-cast concrete elements
- Construction of the steel frame and metal decking. Install precast lift shafts
- Install below ground drainage.
- Construct the external facade utilizing both traditional brickworks and cladding to the architect details
- Full internal MEP and Architectural fit out.
- External works soft and hard landscaping.
- Testing and commissioning of the building.
- De camp.

2.3 Roles and Responsibilities



SOUTH TYNESIDE COLLEGE DELIVERY TEAM



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2.4 Castle Management Responsibilities

Description	Person(s) Responsible	Email/ Mobile Number
Director	Craig Muldoon	Craigmuldoon@castlebs.co.uk
Senior Design Manager	Dan Crosland	Danielcrosland@castlebs.co.uk
Commercial Manager	Andrew Heron	Andrewheron@castlebs.co.uk
Operations Manager	Chris Meadowcroft	chrismeadowcroft@castlebs.co.uk
Senior Project Manager	Richard Lovell	richardlovell@castlebs.co.uk
Quantity Surveyor	Kieran Milburn	Kieran.Milburn@castlebs.co.uk
Temp. Works Co-Ordinator	TBC	TBC@castlebs.co.uk
Produce CPHSP	Naomi Halliburton	naomihalliburton@castlebs.co.uk
Review & Update CPHSP	Richard Lovell	richardlovell@castlebs.co.uk

Collate H&S File Information	Naomi Halliburton	naomihalliburton@castlebs.co.uk
First Aiders	Richard Lovell	richardlovell@castlebs.co.uk
Fire Warden	Richard Lovell	richardlovell@castlebs.co.uk
HSEQ Manager	Naomi Halliburton	naomihalliburton@castlebs.co.uk
Health & Safety Advisor	Carney Consultancy	martin@carneyconsultancy.co.uk

2.5 Key Shareholders Contacts Details

Client:	Tyne Coast College	
Address:	Tyne Coast College St Georges Ave South Shields Tyne and Wear NE34 6ET	
Tel:	01914273500	
Contacts:	TBC	
Email:	TBC	
Principal Designer:	Castle	
Address:	6 Merchant Court, Monkton Business Park South, Hebburn, Tyne & Wear, NE31 2EX	
Tel:	0191 519 4666	
Contacts:	TBC	
Email:	@castlebs.co.uk	
Principal Contractor:	Castle	
Address:	6 Merchant Court, Monkton Business Park South, Hebburn, Tyne & Wear, NE31 2EX	
Tel:	0191 519 4666	
Contacts:	Richard Lovell	
Email:	richardlovell@castlebs.co.uk	
Structural Engineer:	Portland Consulting Engineers Ltd.	
Address:	RWO	
Tel:	07508044145 0330 0566 900	
Contacts:	Ross Oakley, Andrew Gibson, Lisa Simpson	
Email:	Ross@rwo.group agibson@rwo.group lsimpson@rwo.group	

M&E Consultant:	Castle	
Address:	6 Merchant Court, Monkton Business Park South, Hebburn, Tyne & Wear, NE31 2EX	
Tel:	07738 887299 0191 519 4666	
Contacts:	Simon Groom	
Email	Simongroom@castle.co.uk	
Architect	GSS Architecture	
Address:	GSS Architecture	
Tel:	0330 0566 900 Juran Kerr Mob 07743973989	
Contacts:	Sion Rennison Rae, Juran Kerr, Gabriella Lynch, Ryan Rowley	
Email:	Sjrr@gssarchitecture.com jak@gssarchitecture.com	
Building Control	Blue Keep	
Address:	Blue Keep	
Tel:	07527 438 918 0191 236 4777	
Contacts:	Chris Noble	
Email:	Chris.noble@bluekeep.co.uk	
HSEQ Manager	Castle Building Services	
Address:	6 Merchant Court, Monkton Business Park South, Hebburn, Tyne & Wear, NE31 2EX	
Tel:	0191 519 4666	
Contacts:	Naomi Halliburton	
Email:	Naomihalliburton@castlebs.co.uk	
H&S Advisor:	Carney Consultancy Ltd	
Address:	7-8 Clifford's Fort, North Shields, NE30 1JE	
Tel:	0191 2963652	
Contacts:		
Email:		

2.6 Other Important Contacts:

Prior to the commencement of any construction works, Castle shall communicate with statutory service providers and the local authority to obtain accurate information / any related drawings or details they may have on record.

Whilst most of the above information is sourced during pre-construction phase, it is essential that site-based management are fully debriefed and have the necessary information at site level to manage site and set up effective controls.

Their contact details are as follows:

Local Authority

- South Tyneside Council
- Town Hall & Civic Offices
- Westoe Road
- South Shields
- NE33 2RL
- 0191 427 7000.

Water

- NWL
- Laura King
- 07966230144

Gas

- British Gas
- 0800 111 999

Electric

- Northern PowerGrid
- 0800 668 877
- Andrew Clarke
- 07568112249

Fire Station

- John Reid Road
- Fire Station
- NE34 8FS
- 0191 444 1827

Construction Start Date	09 th June 2024
Site Access	09 th June 2024
Set Up Site Compound	09 th June 2024
Decommission Site Compound	30 th May 2027
Completion Date	30 th June 2027
Construction Programmed @	107 weeks

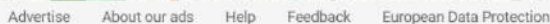
All documents can be accessed via the Project Folder on SharePoint. If you would like a copy of any of the above documents, please request these from the Project Manager.

2.9 Information for Contractors and Visitors

- All contractors and visitors to the site will be made aware of the Environmental policy and the controls applicable to their presence and activities on site including but not limited to:
 - Method statements
 - Risk Assessments
 - Site induction which includes Environment briefings
 - Toolbox talks.
- The Project Manager will be responsible for monitoring communications between all relevant parties to the project ensuring that all environmental matters to the project are discussed and managed and observation of the communications will be documented in the weekly site meetings and sent by e-mail. In addition, a copy of all correspondence will be held in this file.
- Relevant site layout and location plans / CDM drawing detailing the location and construction of the site compound, storage locations and car parking are to be displayed on an information board at the site entrance.

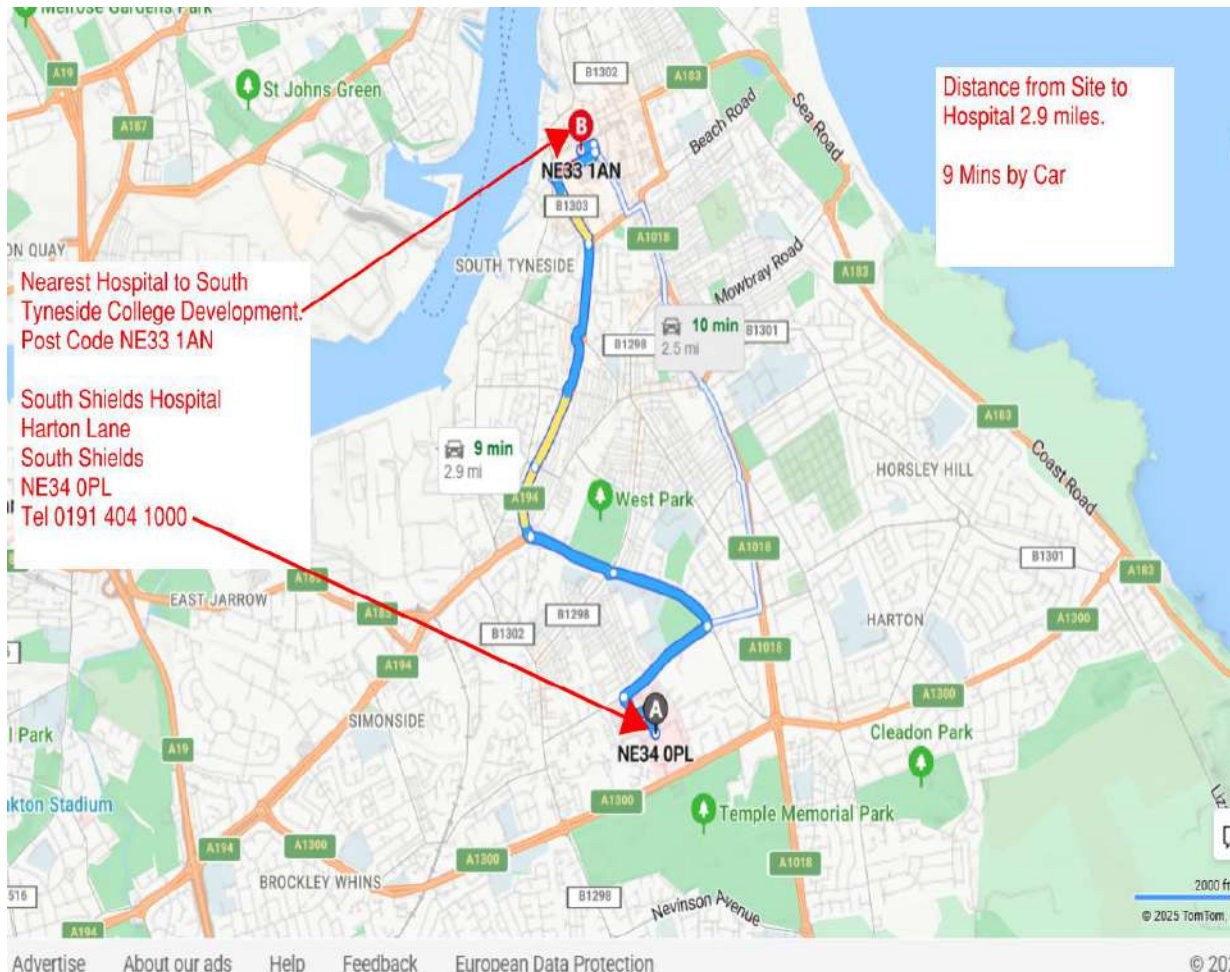
2.10 Location of Nearest Accident and Emergency Department

Hospital Name	South Shields Hospital
Hospital Address	Harton Lane South Shields NE34 0PL
Telephone Number	0191 404 1000
Distance from Site	2.2 Miles



Boldon Lane
South Shields
NE34 0NB

Tel 0191 430 2000



2.11 Working Hours.

The following are the set working hours for this site. Any hours that need to be worked outside of these times must be authorized by site management.

Monday – Friday	08.00 – 17.30
Saturday	09.00 – 13.00
Sunday	N/A
Bank Holidays	Not permitted.

3.0 Environmental Assessment

A Suite of environmental scoping assessments to identify potential environmental impacts of the project has been carried out. These assessments were undertaken in several ways including formal risk assessments process and comprehensive site assessments.

The assessments give consideration to each work activity which is to be undertaken and the potential for them to impact on the environment. The assessments provide details on the rating system used to determine the level of consequence and likelihood.

Environmental Statements were co-ordinated on behalf of South Tyneside College by WSP, Elliot Consultancy Ltd and ELG Heritage. The Environment Statement was submitted in support of the planning application to provide South Tyneside Planning Authority with independent, information about the proposals and the potential significance of likely environmental effects on the locality.

The assessments examined the following:

- Noise & Air Quality
- Archaeology & Cultural Heritage
- Landscape & Land Use
- Ecology
- Geology & Soils
- Materials
- Community Effects & Vehicular Travellers
- Drainage & Water Environment
- Waste
- Sustainability

Where applicable, elements of the Environmental Scoping Documents are utilised in the Construction Environmental Management Plan (CEMP) to produce a practical outline of the management of environmental risks of the project construction phase.

4.0 Environmental Management

4.1 Environmental Policy

Castle recognizes the importance of environmental management and is committed to operating its business responsibly.

Castle is committed to compliance with relevant environmental legislation and other requirements that the company subscribes to, which relate to the company's activities, products, and services.

Developing, implementing, and regularly reviewing the Environmental Policy and Procedures, ensuring that these are kept up to date with legislative and organizational changes and ensuring, wherever practicable, that industry best practice is followed.

Provide training, support and required resources to employees to ensure effective implementation of the environmental management system (EMS), as appropriate to their role.

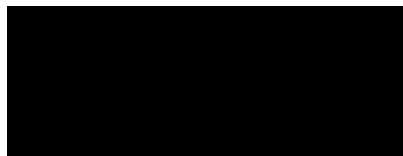
Continually improving the company's environmental performance by setting and regularly reviewing a framework of objectives and targets.

Environmental protection considers sustainable resource use and climate change mitigation.

We are deeply dedicated to safeguarding the environment and preventing pollution at Castle, adhering to stringent practices that minimize our ecological footprint and priorities sustainable operations in all facets of our business.

The Environmental Policy is communicated to all employees and made available to the public upon request.

Andrew Dawson
Managing Director



4.2 Details of environmental management systems

Castle operates a Health, Safety, and Environmental Management system (HSEQMS) which is accredited to ISO14001, ISO9001, and ISO45001 standards.

The HSEQMS covers the provision of design & construction services on Castle sites within the boundaries of the UK.

The purpose of the HSEQMS is to manage and control activities and processes that significantly impact on health, safety, and the environment, minimize the impact of these activities and achieve continual improvement of the HSEQMS and health, safety, and environmental performance.

For further information please request a copy of the CAS-HS-P00 HSEQ Policy & Management System and any supporting procedures.

4.3 Identification of regulations and requirements

Register of Environmental Legislation and Other Requirements- Hyperlinks To Legislation Text Online			Applicable to Castle
Waste	The Environmental Protection Act 1990 Part II The Environmental Protection Act 1990 (amendment Scotland) Regulations 2019	http://www.legislation.gov.uk/ukpga/1990/43/contents#pt2 https://www.legislation.gov.uk/ssi/2019/332/contents/made	YES
	Finance Act 2020 / The Landfill Tax (Miscellaneous Provisions) Regulations 2018	http://www.legislation.gov.uk/ukpga/2019/1/contents/enacted	YES
	The Waste (England and Wales) Regulations 2011 (Amendment) 2012 & 2014	http://www.legislation.gov.uk/ukdsi/2011/9780111506462/contents	YES
Waste Batteries	The Waste Batteries and Accumulators (Amendment) Regulations 2015	https://www.legislation.gov.uk/uksi/2015/1935/contents	YES
Electrical Waste	The Waste Electrical and Electronic Equipment (Amendment) (No. 2) Regulations 2018	https://www.legislation.gov.uk/uksi/2018/1214/contents/made	YES

Register of Environmental Legislation and Other Requirements- Hyperlinks To Legislation Text Online			Applicable to Castle
Packaging	The Producer Responsibility Obligations (England and Wales) Regulations 2007 <i>The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2012 – not in force currently</i>	http://www.legislation.gov.uk/uksi/2007/871/pdfs/uksi_20070871_en.pdf	NO
Hazardous Waste	Hazardous Waste Regulations 2005	http://www.legislation.gov.uk/uksi/2005/894/contents/made	YES
	Hazardous Waste Regulations 2009 Amendment	http://www.legislation.gov.uk/uksi/2009/507/contents/made	
	The Hazardous Waste (Miscellaneous Amendments) Regulations 2015	http://www.legislation.gov.uk/uksi/2015/1417/contents/made	
	The Hazardous Waste (England and Wales) (Amendment) Regulations 2016	http://www.legislation.gov.uk/uksi/2016/336/contents/made	
	The Fluorinated Greenhouse Gases Regulations 2015	http://www.legislation.gov.uk/uksi/2015/310/introduction/made	Yes
	The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011	http://www.legislation.gov.uk/uksi/2011/1543/contents/made	
Construction Waste	Site Waste Management Plan Regulations 2008	http://www.legislation.gov.uk/uksi/2008/314/contents/made	NO – Revoked December 2013
Trade effluent sent to foul sewer	The Water Industry Act 1991	http://www.legislation.gov.uk/ukpga/1991/56/contents	NO
	Water Act 2003	http://publications.environment-agency.gov.uk/PDF/GEHO0103BONG-E-E.pdf	NO
Pollution of Controlled Waters Effluent discharge to surface water drains	Environmental Permitting Regulations 2010	http://www.legislation.gov.uk/ukdsi/2010/9780111491423/contents	NO
	Environmental Permitting (Amendment) Regulations 2015		
	The Anti-Pollution Works Regulations 1999	http://www.legislation.gov.uk/uksi/1999/1006/contents/made	NO
	The Water Supply (Water Fittings) Regulations 1999	http://www.legislation.gov.uk/uksi/1999/1148/contents/made	NO
Polluter Pays Principle	The Environmental Damage (Prevention and Remediation) Regulations 2009	http://www.legislation.gov.uk/uksi/2009/153/contents/made	YES
Carbon	The Climate Change Act 2008	http://www.legislation.gov.uk/ukpga/2008/27/contents	YES
	The Climate Change Levy (General) Regulations 2001	http://www.legislation.gov.uk/uksi/2001/838/contents/made	YES
	Finance Act 2000	http://www.legislation.gov.uk/ukpga/2000/17	

Register of Environmental Legislation and Other Requirements- Hyperlinks To Legislation Text Online			Applicable to Castle
Prohibition of Dark Smoke	The Clean Air Act 1993	http://www.legislation.gov.uk/ukpga/1993/11/contents	NO
Statutory nuisance	The Environmental Protection Act 1990 Part III	http://www.legislation.gov.uk/ukpga/1990/43/contents	YES
Contaminated Land	The Contaminated Land Regulations 2006.	http://www.legislation.gov.uk/uksi/2006/1380/contents/made	NO
Chemical Storage	REACH UK DSEAR COSHH	www.hse.gov.uk/reach/ https://www.legislation.gov.uk/uksi/2021/904/contents/made http://www.hse.gov.uk/fireandexplosion/dsear.htm http://www.hse.gov.uk/coshh/	YES
Building Safety Act	The Building Safety Act 2022	https://www.legislation.gov.uk/ukpga/2022/30/contents/enacted	Yes
Fire Safety Act	The Fire Safety Act 2021	https://www.gov.uk/government/publications/fire-safety-act-2021	Yes
Environmental Pollution	The Environmental Civil Sanctions (England) Order 2010	http://www.legislation.gov.uk/ukdsi/2010/9780111492512/contents	NO
Register of Environmental Legislation and Other Requirements- Hyperlinks To Legislation Text Online (SCOTLAND SPECIFIC)			
Waste	The Environmental Protection (Duty of Care) (Scotland) Regulations 2014	http://www.legislation.gov.uk/ssi/2014/4/contents/made	YES
Waste	Waste (Scotland) Regulations 2012	https://www.legislation.gov.uk/sdsi/2012/9780111016657/contents	YES
Waste	The Special Waste Regulations 1996 / The Special Waste Amendment (Scotland) Amendment Regulations 2004	http://www.legislation.gov.uk/uksi/1996/972/contents/made http://www.legislation.gov.uk/ssi/2004/204/contents/made	YES
Pollution	The Pollution Prevention and Control (Scotland) Regulations 2012	http://www.legislation.gov.uk/ssi/2012/360/contents/made	YES
Pollution	The Controlled Waste (Fixed Penalty Notices) (Scotland) Order 2014	http://www.legislation.gov.uk/ssi/2014/320/contents/made	YES
Other Requirements			
Client/Business Development Requirement	ISO 14001 / ISO 9001 / ISO 45001		
Client Requirement	BREEAM		

Register of Environmental Legislation and Other Requirements- Hyperlinks To Legislation Text Online		Applicable to Castle
Building Regulations	The Building Regulations 2010 - http://www.legislation.gov.uk/uksi/2010/2214/introduction/made	
Data Protection Act 2018 (GDPR)	http://www.legislation.gov.uk/ukpga/2018/12/enacted	

4.4 Environmental awareness and **commitments**

As per CAS-E-P01 Environmental Procedures castle are committed to identifying and maintain awareness of environmental legislation and other requirements applicable to castle and to ensure the communication of and compliance with these requirements to appropriate personnel.

A summary of Environmental legislative requirements can be found in section 4.3. All permits, licenses and consents are listed on the register of environmental legislation.

As well as our HSEQ Manager our external consultants will review sources on a 6-monthly basis to identify any new or changes to existing legislation or other requirements.

Audits will be carried out to ensure compliance with changes in legislation, this will include but not be restricted to

- Regular Site Safety & Environmental Inspections
- Annual external UKAS accredited ISO 14001 Audits.

5.0 Environmental Impacts, Mitigation and Management.

5.1 Surface Water Run-Off / Mitigation Plan during Construction Phase

South Tyneside College has commissioned WSP to produce a Flood Risk Assessment & Drainage Strategy in support of a planning application for the relocation of South Tyneside College to South Shields Town Centre. The proposals include the construction of a new college main campus building, in the location of recently demolished buildings.

This assessment investigates flood risk in the area and outlines mitigation measures proposed to ensure the safe and sustainable development of the site in line with the requirements of the National Planning Policy Framework, the Planning Practice Guidance and the Environment Agency's (EA) Standing Advice.

The detailed flood risk mapping provided by the EA indicates that the site lies within Flood Zone 1 with a low annual probability (less than 1 in 1,000) of flooding from rivers or the sea.

Surface water flood risk will be managed as part of the levels and drainage design and discharge from the college site including accommodation will be to discharge to a nearby Northumbrian Water public sewers as infiltration is not considered possible in the area based on desktop information available.

Water quality treatment will be provided by SuDS features including rain gardens, filter drains and permeable paving within the site car park prior to connecting to a flow control device via silt collection traps and subsequently discharges surface water directly to the public sewer system.

Surface water attenuation will be provided by SuDS including rain gardens, filter drains, below ground cellular storage and permeable paving sub-base. Surface flooding is expected to occur in some events but will be contained onsite, which has been analysed using Micro Drainage hydraulic modelling

Due to the low-risk nature of the development location, it is considered that neither the Sequential Test nor the Exception Test is required in support of the development. Overall, the proposed development is considered appropriate for the site and there will be no increase in flood risk to the site or surrounding area because of the development.

The report concludes that the proposed development site location is at a low risk of flooding from groundwater, sewer, tidal and reservoir sources and No resistance or resilience measures are required as the proposed Finished Flood Level (FFL) is above the nearest at least maximum Flood Zone 3 extent.

5.2 Surface Water Run-Off / Management Plan during Construction Phase

Prior to commencement of the South Tyneside College construction phase, Castle will develop and implement a robust surface water disposal plan and, as part of the reduced level dig and substructure works have in place planned measures to dewater the site through Silt Buster type units that will remove any silt from the surface water before discharge into the existing surface water disposal system through temporary drainage connections .

The temporary drainage system will be expanded as the structure is completed, roof gullies will be installed early, and temporary drainage will be installed to ensure surface water is discharged into the existing drainage system. Silt socks will be fitted to the temporary drainage at point of discharge and managed to ensure silt and sediment from the construction activities does not enter the drainage system in accordance with good practice to ensure compliance with environmental regulations.

Castle will install the new proposed external drainage as part of the early construction works allowing disposal of ground and rainwater into the permanent drainage system.

Fig 1. Typical Silt collection unit to be deployed for the early works and substructures.



Fig 2. Typical Silt Sock to be deployed to protect existing drainage during Construction Phase



In addition, there shall be an adherence to good environmental site practices. These are detailed below:

- Installation of systems such as silt traps designed to trap silty water including adequate maintenance and monitoring of these to ensure effectiveness, particularly after adverse weather conditions.
- Linear sump to be pumped out as required and water disposed of via filtration system.
- Temporary bunds, to prevent run-off from site. To be in place until kerb lines are installed, and drainage brought into service.
- Mark up a drawing showing the temporary drainage as well as the permanent drainage also detail.

- Foul sewage from construction site offices, etc. shall be properly collected, stored and removed from site for appropriate disposal until such time as a formal connection can be made via. Application of NWL public sewer.
- It is Castle's intention to construct all permanent roads / construct infrastructure as early as possible, thus mitigating the need for haul roads which will reduce the risk of plant/personnel collision accidents.
- The cleaning of vehicle wheels prior to leaving site shall be enforced by Castle Gateman through the use of a jet wash set inbound from new entrances from the existing and new roundabouts.
- Controlled and covered segregated waste skips / storage areas shall be enforced.
- Dust suppression (i.e. damping down) will be implemented throughout the earthworks and groundworks activities.
- Provision of environmental awareness training for Castle management and also site-based training shall be provided to the whole workforce involved in the project through the means of Tool Box Talks.
- Adoption of the EA Pollution Prevention Guidelines (Ref. 12.20), in particular:
- PPG1 'General Guide to the Prevention of Water Pollution' (Ref. 12.21).
- PPG5 'Works in, near or Liable to Affect Watercourses' (Ref. 12.22); and
- PPG6 'Working at Construction and Demolition Sites' (Ref. 12.23).
- Adherence to CIRIA guidance 'C532 – Control of Pollution from Construction Sites' 2001 (Ref. 12.24) for earthworks and construction activities.
- Program and phasing of works to be managed and monitored with forward planning of weather.
- A broad plan of construction works, highlighting the various stages and their context within the project, including a full schedule of materials and manpower resources and plant and equipment schedules.
- Detailed site layout arrangements (including requirements for temporary works), plans for storage, accommodation, vehicular movements, delivery and access.
- Details of plant used; and
- Details of operations that are likely to result in disturbance, with an indication of the expected duration of each phase with key dates.
- Part H of the Building Regulations¹⁵ establishes a hierarchy for surface water disposal, which encourages a SuDS approach. The hierarchy is that surface runoff must be discharged to one or more of the following in the following order of priority:
 - An adequate soakaway or some other adequate infiltration system; or, where not reasonably practicable,
 - A watercourse; or, where not reasonably practicable,
 - A sewer.

5.3 Vehicle Access.

Delivery and Removal of Materials to/from Site

All deliveries shall be met by a competent banksman when delivering to site and delivery times will be restricted between 8.00 and 17.00hrs

A delivery booking system is used on this project. This will ensure deliveries are coordinated and sequenced to prevent congesting the project and surrounding community.

Deliveries schedules must be submitted on a Thursday in preparation for the following week. Delivery applications will be reviewed by Castle.

To prevent congestion and to control the volume of materials being delivered to and from the project, deliveries may be rejected. If this occurs, a new timeslot will be issued.

Deliveries that arrive without being booked in will be rejected and turned away from the project.

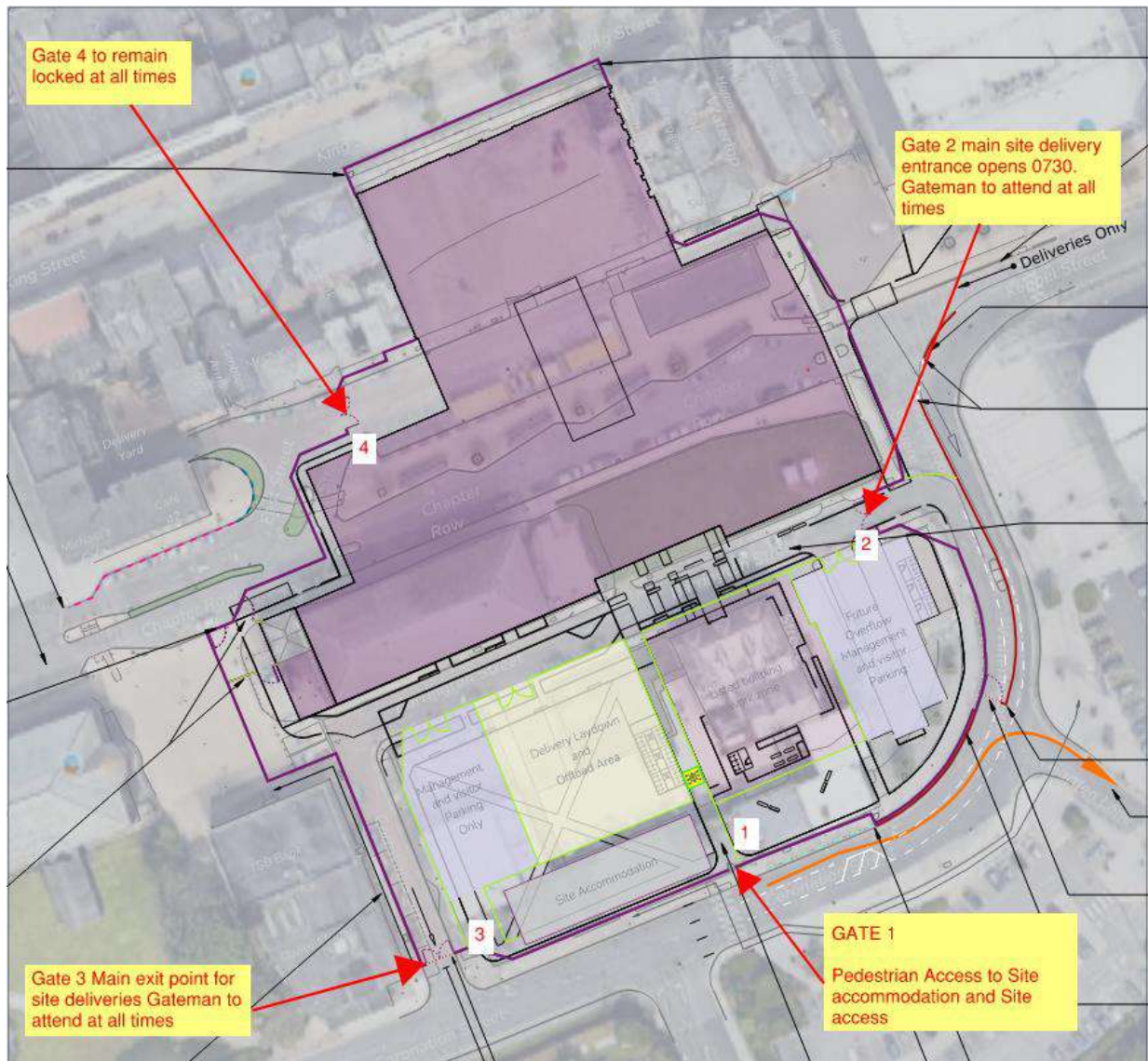
Deliveries and any potential local or project impact (e.g. large concrete pours etc.) will be discussed at the coordination meeting within a suitable timeframe before the delivery arrives at the site.

Any abnormal sized / complex loads that require additional support and planning will be reviewed and accepted by the Castle team within a suitable timeframe. Any anticipated project impact will be discussed at the coordination meeting.

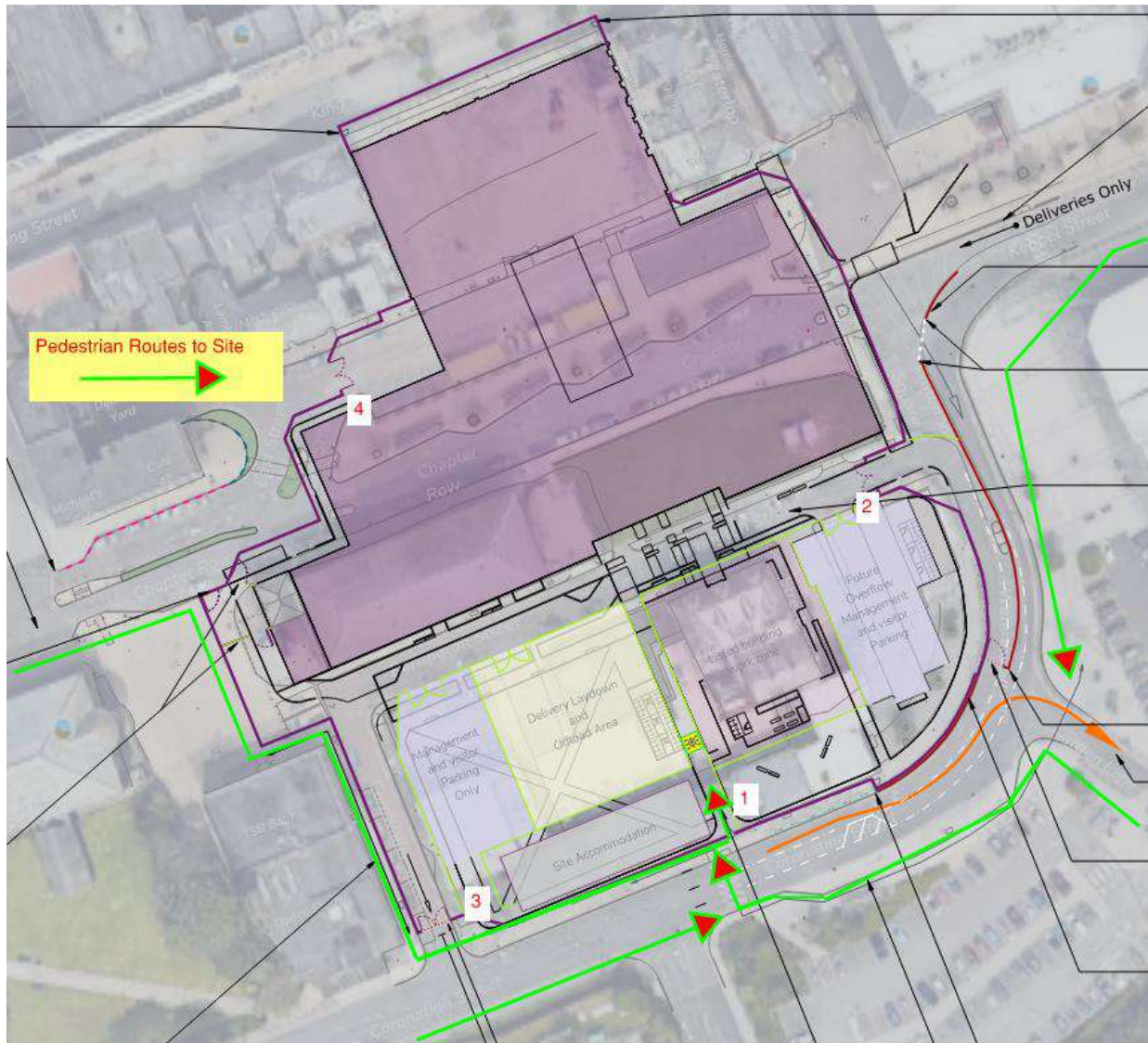
To reduce the impact of construction vehicles and congestion to the local community, deliveries will only be accepted at the following times:

- Gates 1, Will be opened at 0700 to allow site operatives to access car park and welfare.
- Gate 2 will open at 0730 to allow office staff access and deliveries.
- Gate 3 will open at 0730 and will be the main site exit point for deliveries.
- Gate 4 will always remain locked and only be used in emergencies of if a secondary delivery gate is required
- Gates 2 and 3 will have access control and a gateman will attend all times.

Gate Positions;



Pedestrian access on to Site



Roads / Routes to avoid.

- Contractors and deliveries will be by the routes shown within this document this information will be shared with our supply chain prior to start on site all will be notified not to approach the site through South Shields Town Center.

5.4 Waste Management.

The Construction Site Waste Management Plan (SWMP) will be completed and maintained on site by the Project/Site Manager. It should be made available to all personnel on site as appropriate. The SWMP data sheet template to be used can be found on the Castle document storage portal.

In addition, Highways England Design Manual for Roads and Bridges Volume 7 Part 2 HD35/04 'Conservation and Use of Secondary and Recycled Materials' specifies where materials can be reused within a road construction project.

Other industry guidance such as the CIRIA Waste Minimization in Construction will be utilized as required.

Construction and Demolition Waste

The principal types of material to be disposed of will be aggregates, blacktop, concrete, soils, stones, sand, woody plant material, some landfill materials (bound within soils) and vegetation.

In addition to excavated material quantities of other waste types will be generated during construction of the proposed development.

Quantities of general construction and demolition wastes are made up of waste such as wood, packaging, metals, plastics, bricks, blocks, canteen waste, hazardous waste (e.g. oils, paints and adhesives), site clearance and residual waste which are generated during the construction phase.

A review of these wastes including their respective European Waste

Catalogue (EWC) Codes are outlined below:

EWC Code	Waste Description
17 01 07	Concrete, bricks, tiles and ceramics
17 02 01/02/03	Wood, glass, plastic
17 03 01/02	Bituminous mixtures, coal tar and tarred products
17 04 07	Metal
17 05 03	Soil, stones, and dredging spoil.
17 08 02	Gypsum-based construction materials
17 09 04	Other construction and demolition waste
16 02 13/14	WEEE
13 07 01	Liquid Fuels
17 05 03	Soils and stones containing hazardous substances.
17 05 04	Soils and stones other than those mentioned in 17 05 03.

The Waste Hierarchy which should be implemented on site is as follows:

- Prevention/Reduction:
- Re-use: Products and materials could be used again, for the same or a different purpose.
- Recycling - Resources can often be recovered from waste.
- Disposal - Only if none of the above options offer an appropriate solution should waste be disposed of.

Site Waste Management Plan (SWMP)

A SWMP should identify the personnel and their roles and responsibilities. This includes maintaining records of waste transfers. The appointed site manager should also ensure compliance with any permits and record keeping.

Castle must ensure all controlled waste is managed in accordance with the following Duty of Care requirements:

- Ensure all waste is correctly assessed and categorised.
- Prevent the illegal deposit or handling of controlled waste by any other person.
- Prevent waste material from escaping our control.
- Only transfer controlled waste to an “authorised person” (Waste Collection Authority, the holder of an Environmental Permit, Registered Water Carrier, or Waste Disposal Authority).
- Ensure that non-hazardous waste is transferred under a Waste transfer Note which must be retained for two years.
- Hazardous waste is moved under a waste consignment note that provides a clear description of the waste material. The consignment note must be retained for three years.
- The waste is the responsibility of the company until it has been fully recovered or finally disposed of.

All suppliers on the approved supplier list will undergo an initial desktop duty of care audit and will be risk rated. Risk is determined based on spending with any one supplier and local knowledge or expertise. Group HSEQ will maintain an audit plan for suppliers and undertake audits on Castle Suppliers.

Waste Segregation

Wherever possible, different types of waste should be segregated for correct disposal. Each type shall be stored separately and securely to prevent pollution and cross-contamination and each waste container will be clearly labelled.

Waste limits include:

- Waste must not be stored for longer than 3 months
- No more than 50 cubic metres of non-liquid waste can be stored at any one time
- The total quantity of liquid waste must not exceed 1,000 litres at any one time.

Waste Electrical and Electronic Equipment (WEEE) includes battery powered items and will be recycled by an authorised recycling centre. Some WEEE can be considered hazardous, these shall be moved under hazardous waste such as fluorescent tubes and Lithium batteries.

The responsibility of updating the SWMP belongs to the Castle Senior Project Manager (Richard Lovell).

The following measures have been identified to minimise the quantity of waste produced during this project:

- - All arising's to be segregated and screened and reused on site
- - Re-usable materials will be identified on site
- - Recyclable materials will be removed from site for processing in licensed facilities,
 - these will be segregated into the following skips: metal, plasterboard, wood,
 - household, packaging, hardcore, general.
- - Recoverable materials will be removed from site for processing in licensed facilities
- - Implementation of the "reduce, re-use, recycle, recover" hierarchy

Re-use of Waste

Possibilities for re-use of clean non-hazardous excavation material as infill on the site or in landscaping works will be considered following appropriate testing to ensure material is suitable for its proposed end use.

In the event of excavation material which may not be re-used being found, the sub-contractor will endeavor to send material for recovery or recycling so far as it is reasonably practicable.

The sub-contractor will ensure that any off-site interim storage facilities for excavated material have the appropriate waste license or waste facility permits in place.

Type	Waste Minimisation decision taken	By whom	Intended results
Cut/Fill	Utilise cut material as fill	Earthworks/Groundwork Subcontractor	Minimise import of hardcore to be used
Re-use of imported aggregate for compound hard standing	Site compound hard standing will make use of existing site hard standing where possible	Earthworks/Groundwork Subcontractor	Return material to stone supplier
Construction waste removal	Area allocated to segregate waste material types	All Subcontractors on site	Send materials to be reprocessed at the transfer station
Concrete waste	Wagons wash out in wash out skip	Concrete Subcontractor	Utilise aggregate from concrete within permanent works
Waste Management	Waste material storage area on site	Howard Russell & All Subcontractors on site	Reuse of larger elements of waste material
Contact recycling companies	Materials sent to agency's or companies who recycle	Howard Russell & All Subcontractors on site	Minimise building products sent to land fill
Over ordering of construction materials	Reduce %age waste factor	All Subcontractors on site	Minimise new material products sent to land fill
Over ordering of construction materials	Materials delivered on a "just in time" basis	All Subcontractors on site	Minimise the quantity of new material product manufactured

Material Management

The amount of waste material on site will be reduced as far as reasonably practicable, through waste-minimisation, re-use and recycling. This shall be implemented by the following measures:

- Storage- material shelf life is not exceeded, damage and contamination is prevented including loss, theft and vandalism.
- Delivery- Damage during unloading, delivery to the correct location on site, acceptance of materials and components only in accordance with the order
- Handling- Materials and components are handled using correct methods, in minimal fashion
- Protection- Damage is avoided by provision of temporary protection where applicable.

Storage

We have segregated skips for metal, wood, plasterboard, general waste, and an enclosed welfare skip(s). Signage is displayed on all skips to make all aware and regular Tool Box Talks are carried out to reinforce the need to recycle correctly.

We also ensure that all materials are stored off the ground, either on pallets or recycled timbers laid flat as this will prevent materials from being damaged due to ground / rainwater, foot traffic or collisions.

Waste Auditing

The contractor will record the quantity in tonnes and types of waste and materials leaving the development site during the construction phase. The name, address and authorisation details of all facilities and locations to which and materials from the construction phase are

delivered will be recorded along with the quantity of waste in tonnes delivered to each facility. Records will show material which is recovered and disposed of.

5.4.1 Waste Types expected during Construction Phase

Excavated clay, fill material and stones.

This will be loaded directly to vehicles for use within the project or carted off site, as appropriate. Where short term temporary storage is unavoidable designated backfill, material will be stored separately from other soil types and or deleterious materials.

Concrete

Waste is to be sent back to the supplier for re-use. Where this is not possible, the concrete may be crushed and screened out and used within the project such as in the sub-base. The necessary permission for any crushing and screening activities required will be discussed within the environmental department of the local authority prior to any works being undertaken.

Metals

One of the primary sources of metal waste is rebar and this will be reduced by ordering made to measure rebar from the manufacturer and detailed scheduling of all Reinforced Concrete (RC) structural elements. Skips may be provided and, when full, shall be sent to a metals recycling facility.

Timber

This will be stored separately as it is readily contaminated by other wastes so any pallets will be returned to the supplier for re-use. Off cuts and trimmings will be used in formwork where at all possible. A container for waste wood will be covered by a waste contractor who will forward it to a wood recycling facility for chipping.

Treatment of timber with chemicals and the overuse of nails will be minimised and avoided as this will make it difficult to reuse/recycle the timber afterwards. The utilisation of reclaimed timber products will also be investigated.

Packaging and Plastic

Double handling will be avoided by segregating packaging wastes immediately after unwrapping. It is intended that where possible materials with recycled packaging will be purchased. Waste packaging will be segregated and stored in separate containers, preferably covered for collection and /or returned to the supplier.

Blocks, Bricks and Tiles

The most likely wastes produced will be off-cuts, trimmings and waste arising from breakages. Every effort will be made to use broken bricks and off cuts. Final quantities of these wastes generated will be stockpiled (possibly crushed and/or screened) and used at the site as subbase material for roads, hard standing etc.

Hazardous Wastes.

Within the site investigations there are small areas classed as Asbestos hot spots and a small amount of toxic material from the historical printing operations, These areas will be treated in line with the project remediation plan.

Other general hazardous wastes are not envisaged in our project although any hazardous waste found/generated will be identified, removed, and kept separate from other construction and demolition waste materials to avoid cross contamination. Specific method statements detailing the necessary mitigation measures required during excavation, handling transportation and disposal of hazardous wastes encountered on the site will be prepared as required.

Hazardous Liquids

Oils, paints, bitumen, adhesives, and chemicals will be kept in a separate contained storage area which will be locked when not in use. Packaging to be kept on for identification purposes and lids will be kept on containers to avoid spillage or waste by evaporation. These will be stored in COSHH Containers/stores or a containment tray with a capacity to contain 110% of the volume of the largest container.

Fuels and chemicals will be stored in double skinned containers or within a bund i.e. an impervious structure with the capacity to contain 110% of the volume of the largest tank stored within it. All containers will be carefully labelled.

Canteen Wastes

Welfare / Canteens have the potential to generate food waste and packaging waste. Designated receptacles will be provided at the canteen to allow for the segregation and storage of individual waste streams.

These will include receptacles for food waste (e.g. brown bin for waste foods, peelings etc.) dry recyclables (e.g. green bin for packaging, plastics, metals, wood, paper, cardboard, etc.) and residual bin (e.g. black bin for mixed food and packaging waste). Separate receptacles for the recyclable fractions may be provided such as plastics, metals, glass.

Other Wastes (Residual)

This waste is normally made up of residual non-recyclable waste such as soiled paper, cloth, cardboard, or plastics as well as canteen waste to include food as above and general waste found on the sites including plastic bottles, bags, cans etc. Given the heterogeneous nature of this material it is most important that residual waste is kept separate from the other waste streams to avoid contamination. This material will be stored in a dedicated container in the Waste Segregation Area.

Container size and collection frequency will be assessed with waste management contractors as works proceed. All residual wastes will be dispatched to a suitably licensed facility for disposal. Other construction and Project demolition waste material will be collected in receptacles with mixed construction and demolition waste materials for subsequent separation and disposal at a segregation facility.

Recycling

We shall introduce recycling waste bins within our site offices and welfare cabins, we have employed a cleaner who will ensure these waste bins are bagged and emptied into the correct segregated skips we have on site. Signage is displayed in all welfare areas to encourage all to recycle where possible.

Waste Management (Recycling/Disposal)

An important part of the site management process involves site cleaning, rubbish removal and recycling. We will produce a detailed Site Waste Management Plan which will include details of how we intend to reduce, re-use, recycle and manage site waste. This will be produced and implemented to comply with environmental legislation.

The adopted plan will involve the following provisions:

Buying and Storing Materials

- Order the number / amount of materials you need as accurately as possible
- Arrange for 'just in time' deliveries to reduce storage and material losses
- Consider the source of materials.
- Consider the packaging from materials delivered to the site -can this be reduced or recycled
- Ensure that deliveries are rejected if damaged or incomplete
- Make sure storage areas are safe, secure, and weatherproof (where required)
- Store liquids away from drains and in bunded areas to prevent pollution.

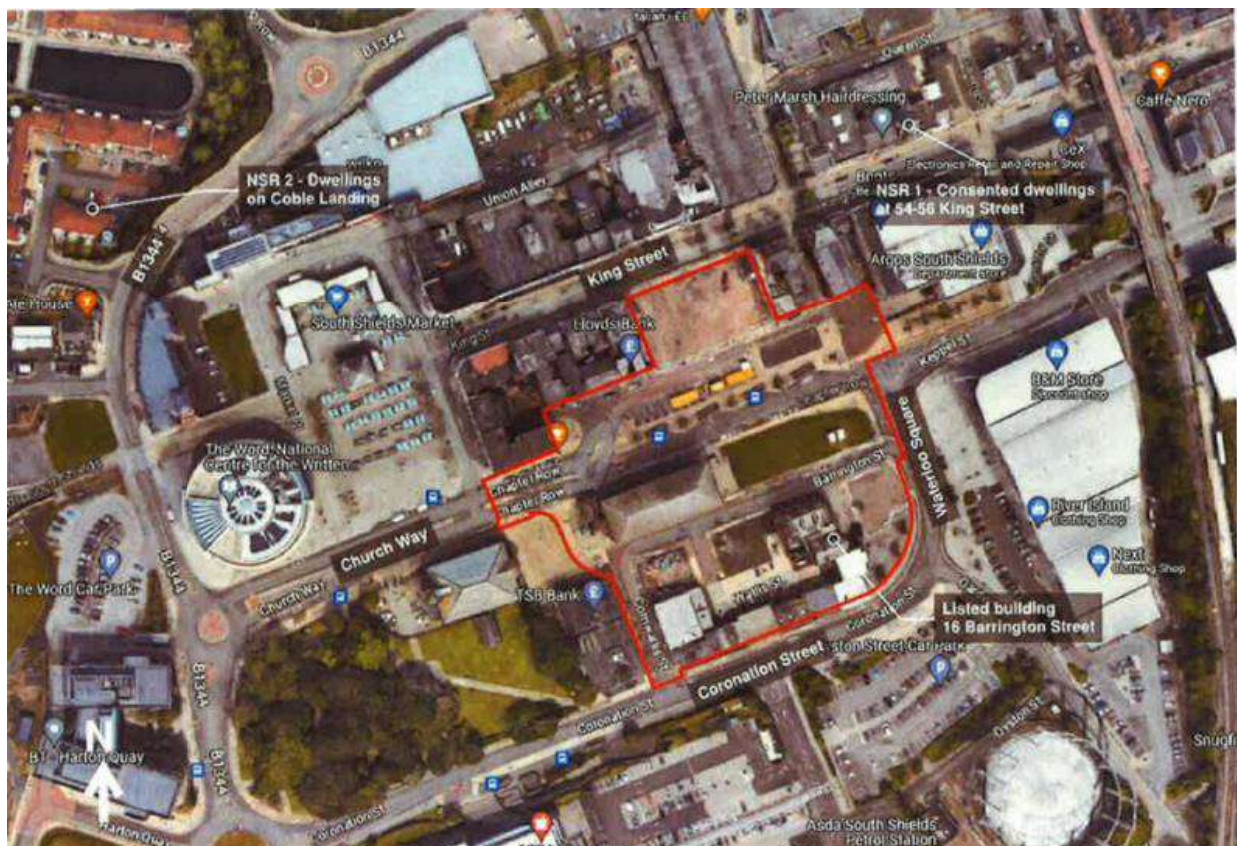
Other Site Activities

- Ensure options for the use of reclaimed and recycled construction materials, that meet the materials specification, are considered.
- Recycle suitable spoil, demolition materials, aggregate, and surplus construction material arising from the works on site to avoid the need to transport materials.
- Keep the site tidy to reduce material losses and waste.

5.5 Noise and Vibration.

Noise and vibration statutory nuisances are controlled under the Environmental Protection Act 1990. As such, a desktop assessment of the likely effects of noise and vibration on the surrounding area was carried out by WSP and a Noise impact assessment report was produced and submitted as part of the STC planning application.

Fig; shows closest noise sensitive receptors.



The Closest Noise Sensitive Receptors to the main Campus were identified as 54-56 King Street South Shields.

The main source of noise pollution within the area is from the traffic routes around the perimeter of the site which hosts HGVs amongst other vehicles.

Noise and vibration sensitive receptors will be located along the perimeter of our site boundary lines.

There are no medical buildings or care homes located within 300m of the development area.

The potential noise disturbance from the site would be resulting from vehicle movements and steel erection works.

Before works on site commence, all contractors will make available for inspection a method statement (in accordance with the principle described in BS 5228: 2009: Part 2: Code of practice for noise and vibration control on construction and open site) stating precisely the type of plant to be used and the proposed noise control methods.

The contractors will also be required to comply with other relevant provision of the Control of Pollution Act 1974. The contractor should also comply with the recommendations set out in BS 5228:1997 AMD 1 Code of practice for noise control on construction and demolition sites.

Muffling should be in accordance with the recommendations set out in BS 5228:1997, Code of practice for noise control on construction and demolition sites:

- Compressors will be fitted with properly lined and sealed acoustic covers, which shall be kept, closed whenever in use.
- Pneumatic percussive tools which can be, will be fitted with mufflers or silencers of the type recommended by the manufacturers.
- Machines in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum.
- Care will be taken when loading or unloading vehicles or dismantling scaffolding or moving materials etc. to reduce impact noise.

We shall follow best practice measures to reduce the noise effect on the local community including the following:

1. Materials will be handled with care e.g. material such as scaffolding and steelwork will be placed rather than dropped.
2. Drop heights of materials from lorries and other plant will not be accepted.

3. With regards to the piling of foundations, to ensure where possible, that noise and vibration effects during these works are minimised.
4. Fixed and semi-fixed ancillary plant such as generators, compressors, and pumps liable to create noise and/or vibration whilst in operation will, as far as reasonably practicable, be located away from sensitive receptors.
5. All plant used on site, paying particular attention to the integrity of silencers and acoustic enclosures will be maintained in good and efficient working order and operated such that noise emissions are minimised as far as reasonably practicable.
6. As far as reasonably practicable, any plant, equipment or items fitted with noise control equipment found to be defective should not be operated until repaired.
7. Where reasonably practicable, fixed items of construction plant should be electrically powered in preference to diesel or petrol driven.
8. Vehicles and mechanical plant, where reasonably practicable, will be fitted with effective exhaust silencers and will be maintained in good working order and operated in a manner such that noise emissions are controlled and limited as far as reasonably practicable.
9. Machines in intermittent use should be shut down or throttled down to a minimum during periods between works.

Risk Assessments and Method Statements (RAMS) from contractors will be scrutinised and authorised before work commences to ensure the requirements above are understood, factored into working methods and adhered to.

Noise Monitoring and Management:

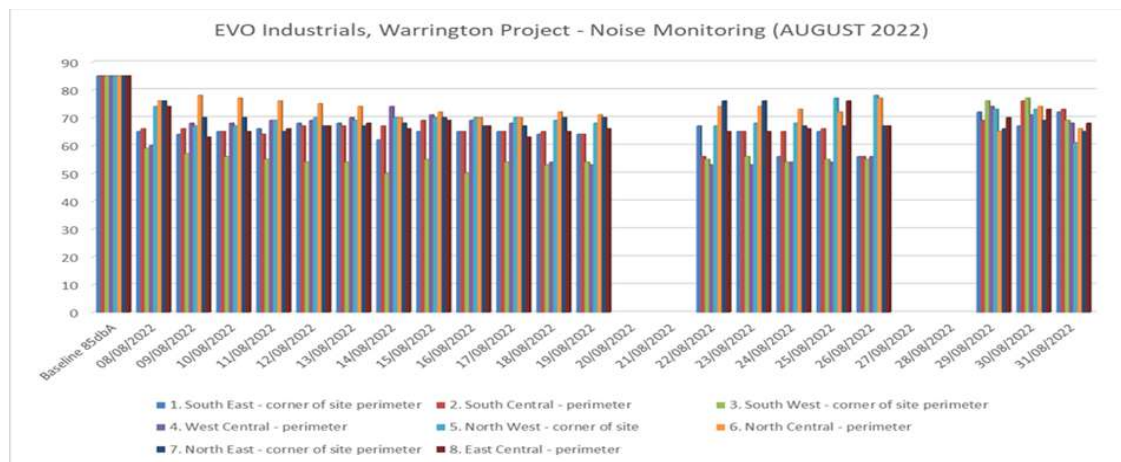
Castle Site Management will carry out noise monitoring each day to ensure neighbours are not subjected to excessive noise levels i.e. the upper exposure limit 85dbA on site and we're aiming to not exceed 55dbA at the boundary of our neighbouring residents' boundaries.

PLEASE NOTE: there is a live road and car parks serving our neighboring businesses. The cars using the car park and road generate noise greater than 55dbA.

We shall monitor and manage noise on site by carrying noise meter readings during planned works each day, we will look to install approx. 8Nr. Sensors to specific points around the perimeter of our site to take these readings.

By using digital noise monitoring devices, we can take average decibel readings at each location every day during our noisiest works of the day. These accurate decibel readings are then logged in the below table (see extract below) where we can both compare these decibel readings against the upper exposure limit of 85dbA on site and 55dbA off site and create a month for displaying on our hoarding etc. for full transparency to our neighbouring residents, businesses, and member of the public.

Castle's Noise Monitoring and Record Keeping Example



Vibration Monitoring and Management:

We shall implement vibration monitoring during our reduced level dig and substructure works to eliminate any/all vibration concerns and queries from our neighboring businesses. We shall employ a professional contractor to monitor the vibration levels generated from our works and compare with the below British Standards Guidelines.

British Standard Guidelines

Type of Structure	Guideline values for vibration velocity in mm/sec			
	Vibration at foundation at a Frequency of			Vibration at highest floor
	1Hz- 10 Hz	10Hz- 50Hz	50Hz- 100Hz	all frequencies
Building used for commercial purposes, office blocks, industrial units, factories, buildings of similar design	20	25 to 40	40 to 50	40
Houses, Flats, Dwellings of similar design with full occupancy	5	5 to 15	10 to 20	15
Structures that because of their sensitivity to vibration cannot be classified under the above categories and are of great intrinsic value: Listed Buildings and buildings under preservation orders	3	3 to 8	8 to 10	8

We shall carry out vibration monitoring during substructure activities as these works generate the most vibration. The monitoring will be compared against BS5228-2:2009+A1:2014: Code of practice for noise and vibration control on construction and open sites and a table shall be created for open reporting to all.

The vibration monitoring equipment will be programmed to carry out vibration monitoring between the hours of 08:00 and 18:00 Monday to Friday.

The limits set in the monitoring are 12mm/s Amber & 15mm/s Red, whilst earthworks and ground works are being carried out. The vibration monitoring report shall show all levels which exceeded the pre-set level programmed into the vibration unit together with a trend of the vibration levels generated throughout the day (see below photos and report/graph)

Vibration Monitoring Equipment

The monitor is a completely self-powered, remote, GSM based shock monitoring system for sensitive properties and structures. It will capture any shocks/vibrations that exceed the pre-defined levels that have been configured via the secure web bureau. An alarm will then be generated via SMS and email to our Project Manager thus enabling immediate, corrective action to be undertaken.

Visual example of Vibration Monitoring Equipment

Equipment Location



Company:	Howard Russell Construction Ltd
Date:	21/09/22
Site:	Lingley Mere, Omega Boulevard, Warrington, WA5
Dates Covered:	14/09/22
Unit ID Number:	35
Alarm Trigger Level:	12 mm/s Amber & 15 mm/s Red



Approximate Noise Level (dB(A))	Example
0	Limit of hearing
30	Rural area at night
40	Library
50	Quiet office
60	Normal conversation at 1 m
70	In car noise without radio
80	Household vacuum cleaner at 1 m
100	Pneumatic drill at 1 m
120	Threshold of pain

Castle's Vibration Monitoring and Record Keeping Example

[illegible]

The application of standard dust control measure included in the British Research Establishment guidance (Building Research Establishment, 2003) are normal working practice on all well managed construction sites in the UK. Standard measures will be applied to the construction areas within the Site as agreed with the local authority air quality / pollution control officer or Environmental Health Officer.

1. Staff will be trained in the control of dust and will ensure the site is monitored for levels of surface dust. Should dust build up this will be damped down with hosepipes.
2. Record all dust and air quality complaints, identifying cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
3. Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the logbook.

4. The access road into and out of the site will be monitored for excessive dust build up. Should surface dust build up the road will be swept.
5. The name and contact details of person(s) accountable for air quality and dust issues will be displayed on the site boundary. This may be the environment manager/engineer or the site manager.
6. Strictly not allow any bonfires and burning of waste materials.

5.6 Air Quality / Dust and Debris Management

Castle and our Sub-Contractors will agree a safe system of work surrounding dust and debris management being transferred from vehicles leaving site and review daily at site level to ensure the construction works do not impact the surrounding highways by:

- Site will implement a jet wash / sunken wheel wash facility at the vehicle access gates to ensure no debris from our site is transferred onto the adjacent highways. All vehicles entering and leaving the site will have their wheel cleaned with the jet wash/wheel wash facility to eliminate the risk of debris transferring onto the adjacent road.
- Should wheel washing be required, dedicated areas on site, with the correct water and waste management procedure will be in place, to avoid any contamination of clean water courses and drains. We shall also install gully filters into road gullies adjacent to our vehicle entranceway and these gully filters will be removed and cleaned of any debris within our site.
- We have set up an order with a local road sweeping business to provide road sweeps on an ad-hoc basis to the highway should it be required, around the full boundary, with offsite tipping at a licensed facility.
- All waste removal wagons, 20T wagons or skip wagons will be contracted to have an integral sheeting system, which prior to leaving site will cover the carrying part of the wagon to mitigate risk of waste leaving the wagon onto the highway.
- Daily inspections of the highway and site perimeter will be carried out by one of the site team at regular intervals to ensure appropriate action is taken effectively if any debris has left our site.

Dust Monitoring and Management:

Castle Site Management shall undertake dust monitoring and management for both on and off site.

On site

Castle Management shall record the daily weather forecast and review expected forthcoming weather forecasts to assist with forward planning of works. We shall compile MetOffice records for each day and create a weather log to show when we have had dry spells and therefore need to dampen down the site (see below weather log table example).

During dry spells we shall employ/arrange for an operative to operate a tractor/plant which pulls around a 2000ltr water bowser (see below photo example). The water bowser has a spray which spreads sufficient water to dampen down the site and this remains in operation until the ground is dust free/sodden.

We also employ a Gateman Banksman who operates our site purchased mobile jet wash and water bowser, this allows us to ensure all plant, delivery/collection vehicles wheels are all thoroughly cleaned prior to leaving site.

Stockpiled materials: during the course of the project, we may need to stockpile arisings and to prevent dusts from occurring and travelling off site we shall firstly seal the stockpile of arisings by compacting the arisings together to provide a compacted smooth surface rather than uncompacted loose surface which winds can lift dusts from. If/when required we shall also introduce covers for the heaps to further mitigate the risk of dusts travelling off site. We will also dampen down these stockpiles during dry spells for added measures.



It is our intention to construct a wheel wash point in bound of site for all vehicles to drive through as they leave site, after driving through wheel wash area the vehicles will be inspected before being allowed to leave site..

Off site

Castle Management have placed an order with a road sweeper contractor, and we shall make the necessary arrangements for the road sweeper to attend site and operate for as long as we need in the event that debris is transferred onto the roads adjacent to site.



Air Quality

We have checked the Air Quality Assessment and other supporting documentation for the proposed development.

An assessment has been undertaken in accordance with the IAQM Guidance for the construction phase for dust for the impact from development generated traffic on the local road network.

It has been identified that there is potential for dust soiling due to fugitive emissions from the site. Mitigation measures for dust control have been identified and therefore satisfied that with these measures implemented, dust soiling will not be significant during this phase. **The results for the assessment for the development generated traffic conclude that the levels will not be significant.**

5.7 Communication with the Public.

Internal Communication

Meeting	Attendees	Frequency
Sub-Contractor Pre-Start Meetings	Subcontract Supervisor & Castle Site Team	Prior to commencement on site
Sub-Contractor Progress Meeting	Sub-Contractor Supervisor & Castle Site Team	Weekly
Client Progress Meeting	Castle Project Team	Monthly
Daily Briefing	All Sub-Contractor Supervisors & Castle Site Team	Daily (Morning)
Site Safety Induction	All Personnel	Prior to entering site
Toolbox Talks	All Sub-Contractors & Castle Site Team	Weekly
Safety Ambassador Meeting	Castle Ambassadors & Sub-Contractors	Quarterly

External Communications

In partnership with South Tyneside College and South Tyneside Council a Web page is under construction to inform the projects' Neighbour's and business users of progress on site. This will be regularly updated.

All complaints or information requests will be made aware to the Project Manager and will be logged promptly. Careful monitoring of complaints received, including recording details of the location of the affected party, time of the disturbance and nature. This is to assist with managing the works to reduce the likelihood of further complaints.

Due to the location of the site within a large commercial area, adjacent shops and eating houses, it is recognised that effective communication with people who may be affected by the project is maintained to show good neighbourhood relations during this project.

The maintenance of good relations, effective communication, and implementation of strategies to reduce disruption will form an important aspect of the successful management of this project.

The following action will be implemented:

- Site information will include contact name for project manager and contact number will be displayed in front of site entrance.

- Effective communication and notices will be in place for advanced works that may cause disruption.

Community Impact

Community Consultation Statement has been completed for our development – Conclusion.

A consultation has been undertaken in relation to the proposed development of land at the brown field site situated at NE33 1AN South Shields, by South Tyneside Council, for the new South Tyneside College Campus to inform the local community of the proposals and invite feedback.

A website is being launched and advertised through a press release. The website will continue to provide information on progress and allow people to make comments via an online comment form. Leaflets were distributed to residents and businesses to inform them of the development progress and direct them toward the project website.

Our Client and Castle remains committed to listening to, and working with, the local community throughout the planning and construction process.

- Monthly Notices will be given to the local businesses to inform them of the works.
- Any works that are to be undertaken that will affect any local business i.e. road closures for service connections will be prior agreed and liaised to ensure as little disruption as possible.
- Regular contact will also be made with the local emergency services and crime prevention team to discuss any operations which may affect our neighbours and residents.

5.8 Potential Ecological Impacts and Recommendations

Initial ecological assessments of the Site were undertaken on buildings present on the Site between 2020 and 2022. These assessments included external bat roost assessments and, where necessary, dusk emergence surveys to support a prior approval application for demolition of some of the buildings. Prior approval was granted by South Tyneside Council to demolish the former Jobcentre and other buildings within Area A and the library within Area B. Demolition works had already begun in Area A at the time of the assessment.

A desk study was undertaken to review existing ecological baseline information available in the public domain and to obtain information held by relevant third parties. Records of legally protected and/or notable species and non-statutory designated sites were obtained from the Northumberland Wildlife Trust and the Environmental Records Information Centre (ERIC) North East. Freely downloadable datasets (available from Natural England) were consulted for information regarding the presence of internationally and nationally designated sites within 5 km of the Site. No designated sites were identified within, or directly adjacent to, the Site. Five internationally or nationally important designated sites within the search area, the closest being the Northumbria Coast Special Protection Area (SPA) and Ramsar site. In addition, the desk study included a review of reports provided by the Client, detailing the ecological assessments previously undertaken by South Tyneside Council to inform the prior approval applications referred to above.

Due to the nature of the Proposed Development, with Area B providing new accommodation in the local area, indirect impacts from recreational pressure on statutory designated sites within 6km of the Site have been considered in line with the South Tyneside Council Interim Supplementary Planning Document (SPD) 23 (South Tyneside Council, 2018). It is understood that the proposed new student accommodation is intended to replace existing accommodation, and there will be no net increase in students residing in the local area. As such, no significant impacts in relation to increased recreational pressure on the nearby Northumbria Coast SPA/Ramsar or Durham Coast SAC are predicted.

The field survey encompassed the extent of the Proposed Development and a 30m buffer (the 'Survey Area'). Overall, eight habitat types were identified during the UK Habitat Classification (UKHab) survey completed, none of which meet the requirements necessary to be classified as a Habitat of Principal Importance (HPI).

Some habitats present within the Survey Area were assessed as being suitable to support protected and/or notable species including roosting bats and nesting birds, as well as invasive non-native species (INNS). Further survey requirements in relation to these species include a minimum of one dusk emergence/dawn re-entry survey on the former registry office building present in Area A, and pre-commencement walkover surveys for INNS and nesting birds.

A separate Biodiversity Net Gain (BNG) assessment is being undertaken to help inform the landscape design for the Site compliance with local policy. This landscape design produced for the Proposed Development includes the provision of native tree and shrub

planting to provide accessible foraging and nesting areas for birds and other protected and/or notable species.

In the following sections the potential impacts of the proposed development are considered with reference to the legal protection afforded to some species, habitats, and sites, and with reference to national planning guidance and local planning policy.

Statutory Designated Sites

No construction phase impacts are anticipated for any statutory designated site because of the proposed development. No part of the Site or the habitats which are adjacent to it are subject to any statutory designation and therefore direct impacts can be ruled out.

During the operational phase of the development, no direct or indirect impacts upon statutory designated sites are anticipated due to the nature of the development (Educational Facility) and the stand-off distances between the Site and any statutory protected sites. A neutral effect upon statutory sites is therefore anticipated.

Nutrient neutrality

Non-statutory designated sites

During the operational phase, the stand-off distance and separation created by the existing commercial establishments is considered to be sufficient to be able to rule out any potential direct or indirect impacts upon this site.

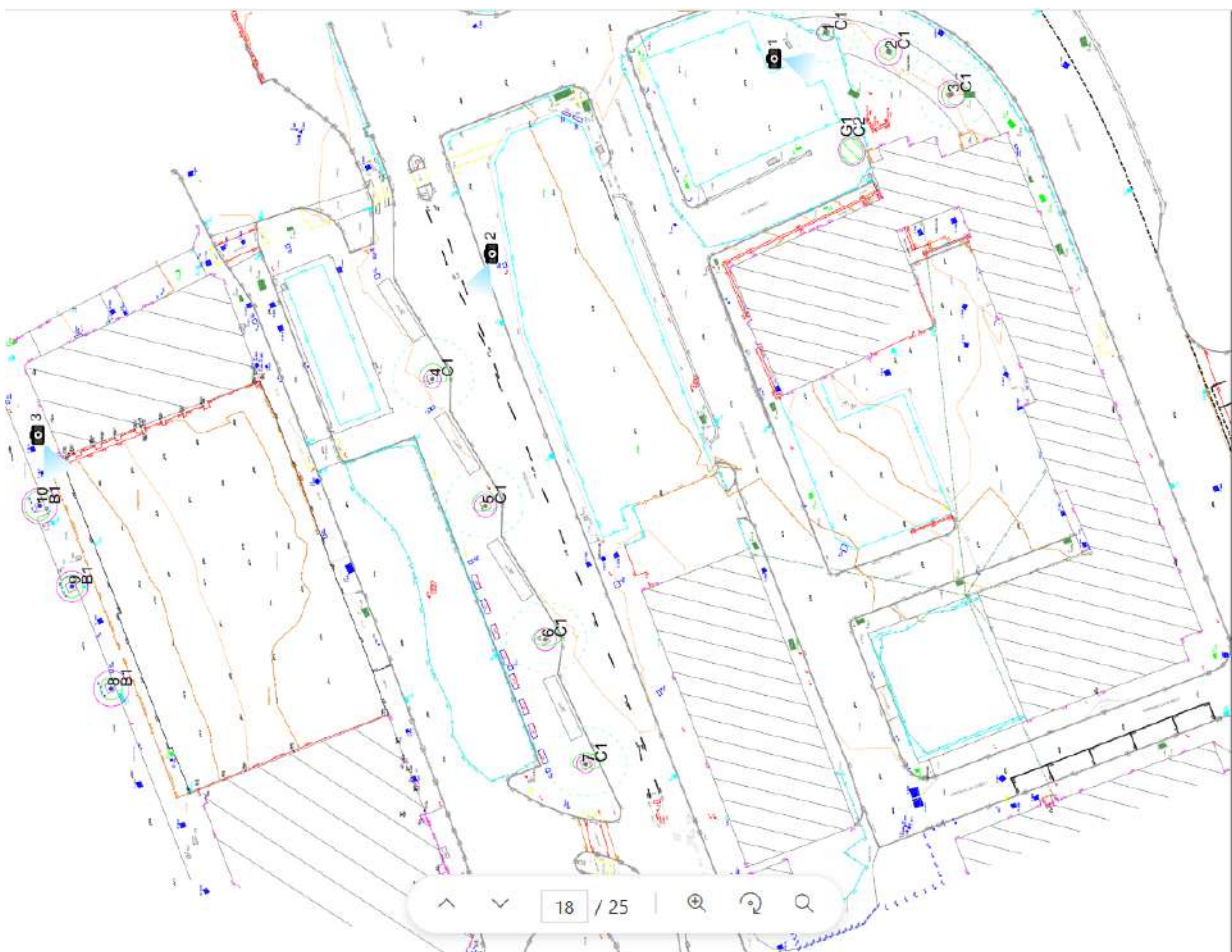
No residual impacts upon non-statutory protected sites are therefore anticipated. A neutral effect upon non-statutory sites is therefore anticipated.

5.9 Habitat And Trees.

- During the construction phase direct impacts, including habitat loss and modification, are not anticipated due to the nature of the site which is a brown field reclaimed site post demolition.

5.10 Trees and Woodland / Invasive and Injurious Plant Species.

- This landscape design produced for the Proposed Development includes the provision of native tree and shrub planting to provide accessible foraging and nesting areas for birds and other protected and/or notable species.
- 7 No C classification trees and 1 No raised planter containing mixed shrubs have been identified as being removed to accommodate the development. These will be removed prior to the nesting season as part of the pre construction works.



5.11 Bare ground and hard-standing

- The Site comprises of a mix of post demolition zones paved areas and redundant carriage way with a grassed area between Barrington Street and Easy Street of bare unvegetated ground and areas of recently created hard standing are present within the Site.

5.12 Bats

- Dendra Consulting Ltd was commissioned by South Tyneside Council to undertake a bat and nesting bird survey of 79-99 King Street in 2020. This assessment concluded that 79-87 and 97-99 King Street had low bat roosting suitability while 89-95 King Street had negligible bat roosting suitability. A single nocturnal activity survey was recommended for those properties identified as low suitability and no emerging bats were identified following this survey.
- Buildings along Chapter Row, Coronation Street, Barrington Street and Cornwallis Street were subject to external bat inspection using binoculars in August 2022 by Countryside Officers from South Tyneside Council. This assessment concluded that the Site had limited connectivity and low foraging opportunities for bats and that all buildings surveyed had negligible suitability to support roosting bats. No further bat surveys were recommended.
- The one building being retained and all trees within the Site were assessed for their suitability to support bat roosts. A ground-level visual inspection was completed to search for PRFs which may provide potential roosting opportunities for bats. The building and trees were categorised in line with good practice guidance, from the Bat Conservation Trust (BCT).
- The Site is unlikely likely to be heavily frequented after dark by commuting and foraging bat species due to the lack of suitable connective habitat, overall limited natural habitat on Site and high levels of artificial lighting. As a result, no further surveys or recommendations in relation to bat commuting and foraging activity are recommended.

5.14 Breeding Birds

- Under the WCA, all wild birds are protected from killing and injury, and their nests and eggs protected from taking, damage and destruction whilst in use. Additional protection is extended to species listed under Schedule 1 of the Act, meaning it is also an offence to disturb these species at or near the nest, or whilst they have dependent young.
- Given the extent and the nature of the habitats on the Site, no breeding or wintering bird surveys are considered necessary. However, to avoid direct impacts to common

nesting bird species, a pre- commencement check for nesting birds will be undertaken prior to construction or demolition works taking place within the nesting bird period (March — August inclusive).

5.17 Lighting

In determining the lighting arrangement on site, consideration will be given to residents and other sensitive receptors that may experience a nuisance by light.

Where appropriate, measures will be implemented to reduce obtrusive light.

Where possible a daylight only construction schedule will be adopted to minimise adverse lighting. It is unavoidable that construction work may require work during the hours of darkness in consideration of shorter daylight availability during winter months.

Where appropriate the following measures will be considered for Implementation:

- Dim or switch off lights where it is safe to do so
- Use specifically designed equipment
- Position lights sensibly

It is not anticipated that any construction works will be carried out at night.

It is recommended that the new access road is not lit to minimise impacts upon commuting and foraging bats.

We intend to employ a temporary electrics contractor who will be responsible for the supply and installation of lighting and power in line with our lighting strategy on our site (see below extract of our Internal lighting strategy). It is our intention to provide external lighting on our cabins and perimeter fencing which will provide a downward glare so to light segregated footpaths between our welfare and the pedestrian gate. As the lights will be facing downwards, no lighting will disrupt neighbouring businesses or residents.

Where possible we will not light up the building after working hours as we have found lighting up the building attract thieves. However, we will have emergency lights on within the building's staircases and possible a cabin light as we have a duty to provide safety lighting in the event intruders do break in.

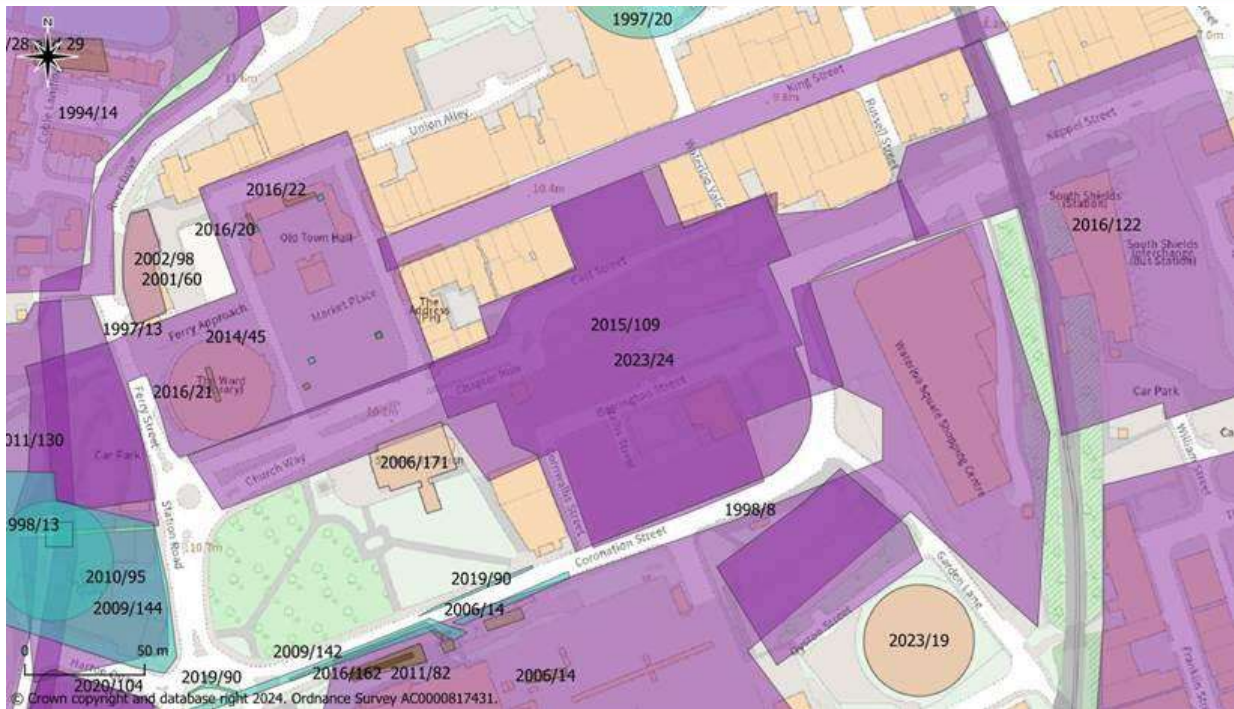
During working hours, we will have lighting within the building although this will not be installed until the façades cladding and roof liner sheets have been installed thus eliminating the risk of lighting glare disrupting neighbouring properties. Due to the early dark nights and us having to commence cladding and roofing works in November and December we will need

to provide some lighting up the external system staircase (ground floor to roof) and need a light at the top of the staircase to ensure safe access/egress to and from the roof level. We will ensure that this lighting will not face and will not disrupt neighbouring properties.

During the steel frame erection works, we may need to introduce mobile construction floodlighting to provide widespread lighting across the footprint of the site which will highlight the ground conditions to all working on site and therefore eliminate/mitigate slip, trips and falls hazards. I can confirm that these lights will be set up to shine away from the neighbouring houses and businesses and NOT towards them thus eliminating the risk of disrupting our neighbouring properties.

5.18 Archeology

- Archaeological monitoring is required to comply with condition 15 of planning consent ST/0534/23/FUL, in accordance with paragraph 218 of the National Planning Policy Framework.
- The site is located in the historic centre of South Shields to the south of King Street, and east of the market place and St Hilda's Church. There is some evidence for prehistoric activity in the area prior to the establishment of Arbeia Roman fort (HER 914) to the northeast in c AD 160. The route of the Wrekendyke Roman Road (HER 277), which connected Arbeia Roman fort to the Roman road from Chester-le-Street to the Tyne, probably ran through the site. The site of the church of St Hilda (HER 8078) may have been the focus of the Anglian nunnery of St Hilda, built in 674AD. South Shields grew around the Mill Dam inlet during the medieval period (HER 945) and the area around the site was largely agricultural. In the 18th century it was developed as a new planned urban centre around the market place (HER 4593), supported by the industry along the bank of the Tyne. Development of the town continued in the 19th and 20th centuries, and earlier archaeological remains are likely to have been truncated by this activity. The town was also bombed during WWII. In the 1960s Coronation Street was realigned northwards, cutting through the churchyard of St Hilda's and former streets and buildings.



- The site has been subject to an Archaeology Assessment carried out by BWB Consulting in 2023 (event 5438 report 2023/24). This concluded that there is low potential for prehistoric and Roman period archaeological remains, moderate potential for early medieval and medieval period archaeological remains, and low potential for post-medieval archaeological remains. The assessment demonstrates convincingly that burials associated with St Hilda's Church are very unlikely to have extended beyond the existing eastern boundary of the churchyard, however there is some potential for earlier burials associated with the nunnery, or other significant archaeological remains, to be identified during groundworks. No previous investigative archaeological work has taken place on the site.
- An intrusive ground investigation was carried out by Allied Exploration & Geotechnics Ltd (AEG) in 2023 (AEG, South Tyneside College – Main Campus Ground Investigation, Ref. 4466, dated 30 January 2024). This comprised boreholes, machine excavated trial pits, foundation inspection pits and hand excavated inspection pits.
- The appointed contractor should review the Phase 1 Preliminary Geo-environmental Appraisal and the AEG ground investigation report before site work begins, in order to establish where areas of known made ground and known basements occur. A drawing of these should be provided to the Tyne and Wear Archaeology Officer before groundworks begin.
- These areas may be excluded from the archaeological monitoring programme. Only areas which have been identified as having remaining archaeological potential should be monitored during groundworks. Areas which are identified during the monitoring

as being comprised of made ground may be excluded from future monitoring of groundworks to the same or a shallower depth.

Aims

- The overall aim of the project is to record and advance understanding of the significance of the archaeology to be lost as a result of the development of the site. The project should investigate the extent, character and chronology of the archaeological features present on the site, in order to understand and interpret them with reference to comparable sites.
- The project should be carried out with reference to the relevant research agendas of the revised North-East Regional Research Framework for the Historic Environment (NERRF) (2023). Other relevant research frameworks can be found at the Research Frameworks Network. The Early Medieval research agenda of the published NERRF includes key research priorities EM8: How was the coast exploited in the early medieval period? and EM9: How did Christianity arrive and develop in early medieval north-east England?, which may be addressed by this project.

Monitoring by Tyne and Wear Archaeology Service

- The fieldwork will be monitored by the Tyne and Wear Archaeology Officer. The Archaeological Contractor must give as much written notice as possible of the start of fieldwork, and keep the Tyne and Wear Archaeology Officer informed of progress, so that a site visit can be arranged if required.

Health and Safety

- The appointed contractor must produce a risk assessment, or RAMS (Risk Assessment and Method Statement) if required by a main contractor, in line with legislative requirements and industry best practice. Health and Safety will always take priority over archaeological requirements. If any elements of the fieldwork cannot be completed due to health and safety issues, this should be clearly stated in the report.

Methodology

- The archaeological fieldwork must be undertaken by professional archaeologists with proven experience of undertaking similar projects, and with appropriate skills and experience to undertake work to the highest professional standards.
- Removal of topsoil or overburden by machine to the level of archaeological deposits or natural subsoil must be carried out using a toothless ditching bucket, except when ground conditions make a toothed bucket necessary. Machine work must be supervised by an archaeologist. Exposed archaeological deposits and structures must be cleaned by hand.
- All ground disturbing work in areas which have been identified as having remaining archaeological potential, including site preparation, foundation trenching and service trenching, must be monitored by an archaeologist to observe and record the presence or absence of any archaeological remains. If archaeological remains are identified the

construction must stop to allow the excavation and recording of the archaeological remains. All archaeological features within the construction area should be fully excavated.

Sampling

- All fills and deposits should be assessed for their potential for environmental sampling and scientific dating, and samples taken accordingly. Archaeological deposits may have the potential for the preservation of a wide range of environmental evidence, as discussed in the [Historic England guidance](#), and specialist advice should be sought prior to and during all projects. Consideration should be given to the nature of the site and the potential for preservation by factors such as waterlogging. Scientific dating is particularly important for sites with little or no artefactual evidence.

Recording

- The written record of archaeological features, stratigraphy, finds and samples should be undertaken using *pro forma* indices and record sheets, according to industry standards. Drawings (plans, sections and elevations) should be produced at standard scales as appropriate (1:10, 1:20, 1:50, 1:100 etc.). References to cardinal directions should use the [standard 16 point system](#) with no further subdivision. All site survey and the site location should be tied in to the British National Grid, and heights recorded relative to ordnance datum.
- Digital photographs should be taken using a high-resolution DSLR camera with sensors exceeding 10 Mega Pixels, producing either TIFF files or RAW files which must be converted to TIFF before archive deposition. The photographs should be recorded in an index recording the image number, subject, any scales used, direction facing, date the picture was taken and who took it.
- All photographs should be in focus, with an appropriate use of depth of field; they should be adequately exposed in good natural light, or where necessary well-lit by artificial means (not by camera-triggered electronic flash). The use of a tripod is recommended, particularly for the interior of buildings.

Finds

- Bulk finds (pottery, animal bone etc.) should be collected by context. Small finds (metal objects, worked pottery sherds, worked bone etc.) should be recorded and located individually. Finds should be packed and stored to ensure minimal deterioration before their removal from site, according to the guidance in *First Aid for Finds* (D Watkinson and V Neal, third edition 2001, RESCUE/UKIC). A new edition of *First Aid for Finds* is expected in [summer 2022](#).
- For sites where large assemblages are anticipated, a selection strategy should be developed prior to fieldwork starting. The Chartered Institute for Archaeologists has produced a [Toolkit](#) to assist in the production of a strategy.

Human Remains

Human remains must be treated with dignity and respect by all parties on site including non-archaeological contractors, and in accordance with [Historic England advice](#).

- Excavation areas should be shielded from public view where necessary. Where human remains are known to be present, an osteoarchaeologist should be involved in the project from the outset.
- The excavation of articulated human burials requires a licence from the [Ministry of Justice](#). Where articulated human burials are found unexpectedly, a licence must be obtained before proceeding with excavation. If articulated human burials are known to be present a licence should be obtained in advance of fieldwork.
- In Christian burial grounds under Church of England jurisdiction a faculty is required rather than a licence, and reburial is generally carried out following any scientific investigation.
- The guidance issued by the Advisory Panel on the Archaeology of Burials in England (APABE) regarding [best practice](#) should be followed.

Treasure

- Any finds which might fall under the [Treasure Act 1996](#) must be reported to the Coroner in whose district they were found within 14 days of discovery and to the [regional Finds Liaison Officer](#).

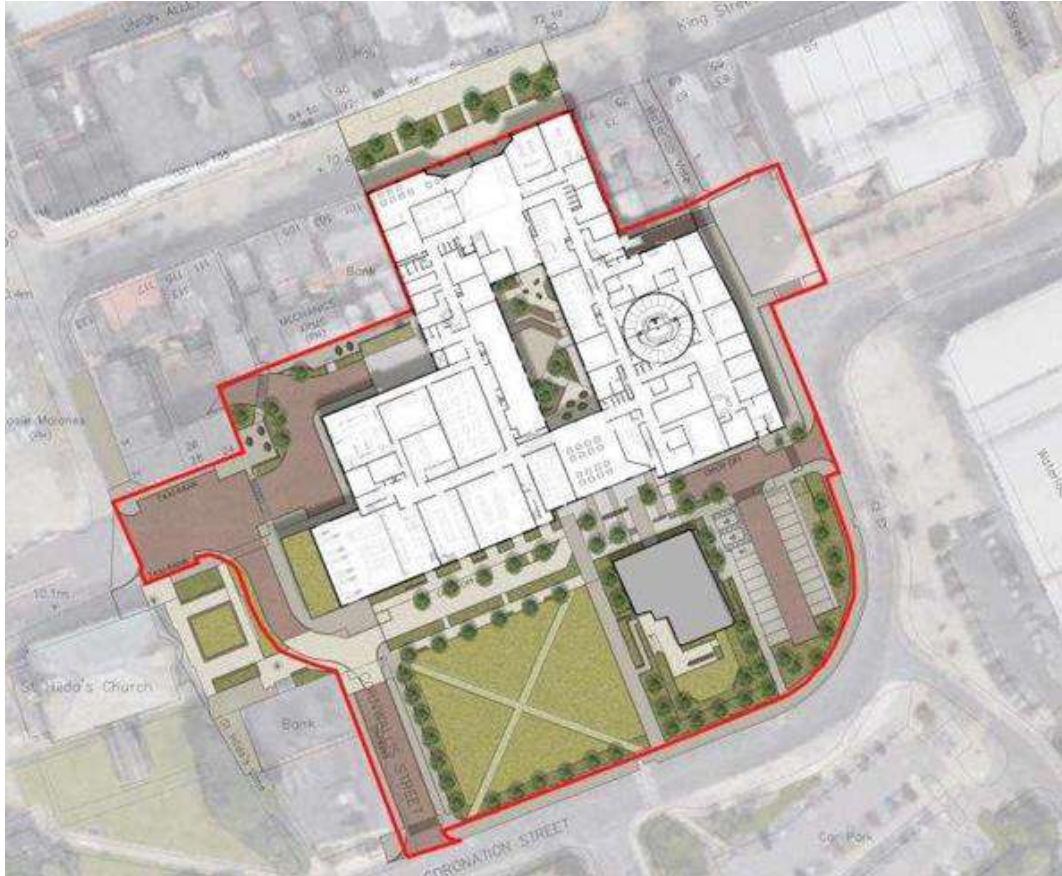
Post-fieldwork assessment, analysis and reporting

- Post-fieldwork assessment, analysis and reporting must be carried out to the relevant standards and guidance produced by the [Chartered Institute for Archaeologists](#), and with reference to the wide range of specialist guidance produced by [Historic England](#). All site records must be ordered, checked for internal consistency, quantified and indexed. All classes of artefacts and ecofacts must be assessed by suitably qualified and experienced specialists and consideration given to the potential for further analysis.
- The report must contain the following sections as a minimum:
- Non-technical summary
- Introduction
- Aims and objectives
- Methodology
- Results
- Conclusions
- Archive location
- Appendices, including a copy of this specification
- Illustrations

- References and bibliography
- The report must be submitted digitally as a pdf to the Tyne and Wear HER and submitted to OASIS for archiving by the ADS.
- **Publication**
 - Significant archaeological sites will require publication in a regional or national journal (such as [Archaeologia Aeliana](#), the [Durham Archaeological Journal](#), the [Arbeia Journal](#), or [Industrial Archaeology Review](#)) as appropriate. Other forms of public engagement and dissemination such as site open days, popular publications and interpretation panels may also be required for some sites.
- **Archive**
 - Following assessment and reporting, the physical archive including all site records and retained artefacts and ecofacts must be prepared in accordance with the [ClfA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives](#), and with the requirements of the receiving body. For Tyne and Wear these are:
 - Great North Museum: Hancock for Hadrian's Wall and the medieval town of Newcastle (contact Keeper of Archaeology andrew.parkin@newcastle.ac.uk).
 - Tyne and Wear Archives and Museums for the rest of Tyne and Wear (Gateshead, outer Newcastle, North Tyneside, South Tyneside and Sunderland) (contact Alex Croom at Arbeia Roman Fort 0191 277 1410).
 - The Great North Museum: Hancock charges a fee for archive deposition as described in the [Archaeological Archive Deposition Policy](#).
 - The physical archive should be deposited with a pdf copy of the report.
 - The digital archive including all photographs, CAD files etc. must be archived with the [Archaeology Data Service \(ADS\)](#). The likely cost of archiving with the ADS and their requirements for archived material should be established before tendering for the project. Proof of archiving with the ADS will be required by the Tyne and Wear HER. The Chartered Institute for Archaeologists has produced a [Toolkit](#) to help support those managing digital data.
 - The project must be registered with [OASIS](#) in order to signpost the project nationally, and the reference number included in the report.

5.19 Heritage

Proposed Development



Summary & Public Benefit

- The proposed works seek to achieve a new purpose built education facility in the centre of South Shields. The proposals will not only create a state of the art college campus but in turn will look to regenerate south Shields Town centre by a substantial number of students and teachers visiting and associated spend within the town centre.
- The public benefits of introducing new and wider audiences to the town centre to enjoy and appreciate the neighbouring heritage assets should not be underestimated. The transformative effects of such a large-scale building on the setting of the existing heritage assets will not go unnoticed. The design has however been developed to reduce the general scale and massing by stepping back floors adjacent to those assets of particular importance and the use of extensive glazing.

- gap site and reinforcing the built form of Kings Street and Barrington Street. Furthermore, there are benefits in bringing into use 16 Barrington Street in a more productive manner and introducing quality public realm within the immediate settings of the adjacent listed buildings.
- The proposed works will therefore bring substantial educational and wider regeneration benefits to the town centre of South Shields. Through redevelopment of the larger vacant site, the building will have a transformational effect on the surrounding built environment. Reinstating built fabric and urban grain, generating the wider town centre both in an environmental, social and economic sense through increased footfall and spend. The existing listed building will be restored and new areas of public realm created.
- Whilst the proposals are not considered to result in overall harm to the collective heritage assets affected by the development. Any resulting harm to individual assets such as the Locally Listed public houses, would be

Where the proposed development would lead to less than substantial harm to the significance of a designated heritage asset, there needs to be clear and convincing justification for the harm and this has been weighed against the public benefits of the proposed

considered less than substantial for the purposes of the NPPF. This harm would be outweighed by the significant public benefits that the scheme would bring.

- The proposal therefore brings with it significant social, environmental and economic benefits which are considered to outweigh any harm identified above. These include but are not limited to:
- The works will result in a range of impacts including neutral, negligible, minor and moderate beneficial and minor adverse to heritage assets. The overall resulting impacts of the proposal will be one of a transformative nature to the Town Centre, reintroducing built development in the current
- High quality replacement building which will considerably improve the character and appearance of the streetscene on Kings Street.
- Introduction of an active street frontage to Kings Street.

- Provision of good quality teaching accommodation within centre of town.

Conclusions

- Increased natural surveillance from improved footfall within the town centre in both day and night.
- Support for the growth of the college through provision of good quality teaching accommodation.
- This development will help kickstart the regeneration of this area, which is important to help stimulate further investment in the area.

This HIA conforms with the relevant legislative and policy requirements and has considered the effect of the proposed development on the heritage significance of surrounding heritage assets that have the potential to be affected and considered the impact of such on their special interest.

The proposals involve the creation of a new college campus on a largely cleared site within the historic town centre of South Shields. The resulting building is one of a significant bulk and scale. Through sensitive design and appropriate quality of finish and materials it is considered that the site can suitably accommodate the level of development proposed.

- The works to the listed building 16 Barrington Street are considered to preserve the character, appearance and significance of the grade II listed building. Whilst modest changes are proposed to non original fabric this is balanced with positive changes including the removal of the existing external fire escape and opportunities for improved use, public access to and reinterpretation of historic spaces within the building.
- The proposals bring significant economic investment in respect of environmental, social and economic benefits which will contribute to the wider regeneration of South Shields Town Centre.

5.20 Potential Contamination of Land.

An intrusive ground investigation has been undertaken to inform the scheme design.

The design and execution of the works shall account for the ground conditions encountered.

Variable strata are recorded within the glaciofluvial deposits, with the Soil type ranging between granular and cohesive materials. This should be accounted for in the design of any piles scheduled to end bear within this stratum.

Evidence of gross residual contamination of soils or groundwater has not been encountered during the ground investigation.

A potential for encountering unrecorded contamination during Construction remains. The risk Shall be managed in a remediation Strategy or design Statement will be required to Specify the measures required to treat unrecorded Contamination encountered during Construction.

An intrusive ground investigation has been undertaken to formulate a ground model with in-Situ and laboratory tests to determine engineering properties.

Made Ground has been encountered at all borehole locations, both Cohesive and Granular. Strength data for the natural deposits has been established by the investigation and a piled foundation Solution is proposed.

All ground investigation information Should be passed onto the design team and Contractor. Derived design parameters and factors of Safety to be adopted for temporary and permanent works. The design and execution of the works Shall take into account the ground Condition's expected.

Glacial Till and Glaciofluvial Deposits were recorded in all positions as well as Cohesive Made Ground in Certain locations.

Shallow foundations and/or floor Slabs bearing at Shallow depth within the Glacial Till Should Consider the proximity and type of any existing or proposed trees, and foundation's Should be locally deepened where required to mitigate the effect of potential Soil Shrinkage/Swelling.

Although not encountered on a Significant Scale during the investigation works, if localized perched Shallow groundwater is encountered, it will need to be managed for excavations during the works. Excavation depths Should be limited where possible and shored/pumped as required.

Groundwater pumped from excavations Should be analyzed to identify the most appropriate disposal route.

Groundwater Should be anticipated for pile boring within natural Soils.

Assuming a brownfield location and potentially mobile groundwater, the investigation results indicate a Design Sulphate Class of **DS-2** and an ACEC Class of **AC-2**.

A GPR Survey will be undertaken to trace all buried Service locations and the Scheme designed accordingly including any diversion works. Follow-on trial trenching may also be instructed by the Principal Contractor where required to verify the positions of Critical Services.

All the redundant Structures on Site have been demolished to facilitate the Construction of the new development. However, the Grade two listed Structure will be retained as well as the Structures either Side of the Northern Site boundary.

The risks to off-Site Structures, including the existing road infrastructure will be Considered in the design and the Contractors temporary works during Construction.

Monitoring for the presence of undetected UXO during all intrusive works (including piling and excavations) Shall be undertaken.

Method Statements and risk assessments will be required for intrusive work's to Specify the measures required to mitigate the risk from encountering undetected UXO.

A Clean Cover Soil System will be required to mitigate the risk to future Site users from exposure to asbestos Containing Made Ground. A minimum thickness of 0.6m is recommended at this Stage.

The requirements for and detailed design of a Clean Cover Soil System, including it's thickness, will require agreement from the Local Authority. A remediation Strategy will be required to detail the requirements for the Clean Cover Soil System and its verification.

An Asbestos Management Plan in accordance with CAR 2012 Should be prepared to mitigate risks to Construction workers from exposure to asbestos in Made Ground. watching asbestos brief during earthworks is recommended

Prior to approval, a scheme that includes the following components to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing, by the local planning authority:

A site investigation scheme, based on the submitted desk top study (Ref: NT15280, March 2021) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

An options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

This must be conducted in accordance with DEFRA and the Environment Agencies "Land Contamination Risk Management" guidance (2020). Any changes to these components require the express written consent of the local planning authority. The scheme shall be implemented as approved.

Ground Conditions:

An intrusive ground investigation has been undertaken to inform the scheme design.

The design and execution of the works shall account for the ground conditions encountered.

Variable strata are recorded within the glaciofluvial deposits, with the Soil type ranging between granular and cohesive materials. This should be accounted for in the design of any Foundations that bear onto this stratum.

Groundwater & Stability:

The majority of the boreholes which were recorded in the Ground Investigation Report were dry and stable during the exploratory period, although a minor groundwater ingress was recorded within the made ground, attributable to trapped / perched groundwater and not reflective of a shallow continuous groundwater surface (water table).

Taking the above into account, significant shallow water ingress is unlikely to be experienced during future construction related excavations. However, depending upon the finished formation levels, and for any deeper excavations i.e. drainage, it would be prudent to allow for the introduction of suitable groundwater control measures, to take care of any localised ingresses of groundwater which may occur during the construction period, especially during the wetter periods of the year.

Depending upon finished development levels, suitable / adequate structural support (temporary and permanent) may be needed as part of any preparatory earthworks and / or subsequent construction works, to ensure both the short and long-term stability of the slope and serviceability of the proposed buildings. The proposed works shall consider any possible surface and groundwater flow / ingress which may occur within the slope, especially during wetter periods of the year.

Controlled Waters

Considering no significant groundwater ingress was recorded during the intrusive works and the overall environmental setting of the site, levels of contaminants in the samples screened are not considered to represent a significant risk to Controlled Waters or adjacent sites, and as such no further treatment, removal, protection measures and / or DQRA is considered necessary in this regard.

Classification of Waste

The made ground materials encountered beneath this site which may have to be discarded as a waste to landfill, have been assessed using Technical Guidance WM3 'Guidance on the classification and assessment of Waste', in conjunction with the on-line waste classification software tool HazWasteOnlineTM. Each sample has been assessed separately to determine whether all the made ground can be considered as a single waste stream or whether the

If natural deposits generated from the creation of service runs (i.e., drainage, etc.) cannot be accommodated on site and require off-site disposal, then it is likely that these types of materials would meet the Inert Waste Criteria for disposal at a Landfill accepting Inert Waste, however prior to disposal of these materials confirmatory WAC testing will be required.

It should be noted that this Waste Classification Report is only applicable to those made ground materials which have been sampled and screened as part of the assessment.

If materials, other than those covered by this report, are to be discarded from site as a waste to landfill or there is a significant increase in the volume of materials to be discarded, then these additional materials will also need to be assessed using Technical Guidance WM3: Guidance on the classification and assessment of Waste.

Where possible, removal of materials from site as a 'waste' should be kept to a minimum and ideally excavated materials should all be reused on site. However, if excavated materials have to be discarded to accommodate finished ground levels etc., it should be noted that additional analysis and screening may be required once each specific waste stream has been

identified and the volume of material to be disposed of has been calculated, since the amount of screening required, including any pre-disposal WAC screening, will be dependent upon the final volume of material to be disposed of.

General Comments

We have sampled and tested for asbestos and this is discussed in the report. There is always the possibility, along with other contamination, that undiscovered asbestos exists between sample locations and the possibility of unknown asbestos exists on all sites, particularly brownfield sites where previous buildings have been demolished, where there were previous features that were infilled (old hollows, pits etc) or where significant quantities of materials such as demolition and brick rubble exist, as such, any contamination found during construction phase works will be dealt with by a professional asbestos contractor.

It is not uncommon for historical asbestos wastes to be deliberately buried on derelict sites or imported old demolition rubble which could contain asbestos to be imported for use as hardstanding / hardcore. Unless otherwise stated we have not assessed any below ground features such as service ducts, culverts, partly demolished or dilapidated structures, spoil heaps, fly tipped materials, etc.

For future site works, adequate lateral trench support will be required for excavations, to prevent trench wall collapse or over excavations, as well as to create a safe working environment, and any excavations on this site should remain open for as short a period as possible, since some of these materials may be susceptible to deterioration, if left open to the natural elements for any significant period.

It is also recommended for any new developments, adequate surface drainage should be designed and installed by a competent contractor, to prevent surface water 'ponding' or collection, during and post construction, particularly where the existing surface drainage system is disrupted or damaged.

In addition, for deeper excavations, drainage, service runs or the like that may pass close to or beneath any proposed new foundations, these should be undertaken with care and completed prior to the preparation of any new foundations, so as not to allow any loose or granular material to move or 'flow', thus causing settlement to occur to any new foundations based at a higher level.

An "observational technique" can be applied to the design and construction of this site, and where ground conditions seem to vary from that indicated from the conceptual ground model derived from works to date, then advice from a suitably qualified Engineer should be sought.

5.21 Reducing impact on residential amenities and neighbouring businesses.

Our Site Management Team shall ensure that Risk Assessments and Method Statements (RAMS) will be reviewed and authorised prior to works commencing on site to ensure the requirements of noise and vibration statutory nuisance are controlled and managed under the Environmental Protection Act 1990 and all those working on site understand this and factor this requirement into working methods.

We shall assess all plant intended to be used on our site prior to their arrival and ensure the hours of operation of specific plant items will be limited if found to be excessive of noise and vibration (e.g. a two hours on / two hours off approach).

Where necessary and feasible, we shall ensure all heavy plant are fitted with noise reducers/bafflers to reduce noise levels at the adjacent noise sensitive receptors/dwellings.

Where reasonably practicable, low vibration working methods will be employed.

Plant will be carefully selected to eliminate / mitigate the potential for vibration and as far as possible, vibration will be controlled at the source and the spread of vibration will be limited.

Where reasonably practicable, we shall assess all tasks/operations, plant, and the methodology work likely to cause significant levels of vibration at sensitive receptors will be replaced by other less intrusive plant and / or methods of working.

Any equipment that generates significant noise and/or vibration will be selected in terms of its noise and vibration output characteristics. Preferences will be given to equipment that generates vibration outside the 10-40Hz frequency range.

No amplified sound shall be generated at any time within the site or at any time whilst carrying out any phase of works for the development. This constraint shall not apply in the event of emergencies / emergency fire drills. This constraint will also not apply to any amplified noise generated by construction plant as a reversing alarm although our request to all plant hire companies is for them to provide plant which create white noise whilst reversing instead of amplified noise speakers which generate a 'squark' noise which doesn't travel as far as the usual loud 'beep' noise.

With our forward planning, we have started looking at heavy plant and equipment needed throughout the project, and it is our intention to use electrical items of plant instead of diesel plant where possible particularly in sensitive locations.

We will liaise with all plant operators and ensure that the plant will be started up sequentially rather than simultaneously.

All loading/unloading activities will be located on site and far away from residential properties and the offices.

Drop heights of materials will not be permitted, all movement of materials will finish with controlled lowering methods and not drops.

Our understanding is that our Welfare and Offices can be supplied off existing supplies along with Water (North of site) and data and Foul drainage to the South side of site. We don't envisage the need for a generator thus eliminating the need for noisy plant on site.

Effective exhaust silencing and plant muffling equipment will be fitted and maintained in good working order.

All equipment utilised on site will be well maintained and where possible will be used in the mode of operation that minimise noise.

It is Castle Company Policy for any/all plant and equipment **MUST** be shut down when not in use. Mobile construction plant will be located, as far as is reasonably practicable, away from adjacent occupied dwellings and offices.

All materials will be handled by appropriate lifting equipment and in a manner that minimises noise.

We have been assigned space to accommodate on-site parking for visitors and some staff and contractors involved in the project which will ensure that any/all construction associated vehicles will not wait or queue on the public highway with engines idling.

Reversing alarms will incorporate both flashing warning lights and where possible white noise reversing sounders. Alternative comparable systems may be used on specific plant to minimise noise and nuisance from reversing alarms.

Where feasible, we also intend to only use low emission non-road mobile machinery on our site.

5.22 Details of activity on site outside the stated construction hours

We can confirm that the only work being carried out, outside of normal working hours is the power floating operations of the Ground and Upper Floor RC slabs. Communications with neighbouring businesses has confirmed that out of hours working i.e. noise and lighting required for floating operations will not affect local businesses.

We will secure the site gates using chains and padlocks to both the vehicle and pedestrian gates, perimeter fencing and hoarding shall be erected upon commencement on site and CCTV will be installed with call out security will be implemented.

In the event of an out-of-hours break-in, CCTV will notify an external security contractor who will immediately attend the site and inspect and if need be, notify the police and report/record appropriately.

6.0 Monitoring and Auditing

CEMP Review

The CEMP is a live document and the project team on site will ensure that controls outlined in the CEMP are properly implemented and regularly monitored to ensure their effectiveness.

Changes to the controls will be instigated if they do not achieve their objectives.

The CEMP will be revised once new changes have been implemented to address the environmental controls set out. The aim is to ensure control set out remains consistent with environmental regulatory requirements and meet conditions of planning approval.

Environmental monitoring

Scheduled monitoring of environmental performance will be conducted during the development. This will enable the overall effectiveness of established environmental measures and compliance procedures to be assessed and allow areas of underperformance to be identified so corrective actions can be taken to strengthen environmental safeguards or improve outcomes.

Safety Inspections

Regular inspections will be carried out on all construction activities and work areas to check compliance with this CEMP and regulatory conditions. The results of these inspections shall be recorded as part of the health and safety auditing procedure.

Event Based Inspections

Event based checks shall be conducted by the Project Manager (David Hills) following any significant event such as rainfall of sufficient quantity to generate run off, high winds, the receipt of an environmental complaint, issue of a non-compliance report or any exceedance in monitoring results. Event based checks will be recorded on a separate inspection form detailing the reasons, observations, findings, and outcomes of the inspection which should then be recorded, and actions closed out.

Performance and Progress meetings

A regular progress meeting will be held with the stakeholders and the subcontractors to discuss the construction updates and check that controls are effective.