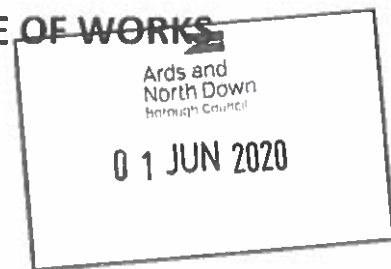


gahanandlong ltd
archaeological services

ARCHAEOLOGICAL PROGRAMME OF WORKS



Report	Archaeological programme of works
Project	Former Royal Hotel and Windsor Bar, Bangor
Planning Ref.	LA06/2017/1209/F
Grid Ref	Centred on 350,590 382,086
Date	22/05/2020



Distributed To:

Planning case officer
Gahan & Long Archaeologists
Client

Revision No.	Date	Revisions Made
1		
2		
3		

NOTES

1. PLEASE ENSURE THAT ALL SUPERSEDED METHOD STATEMENTS ARE FILED SEPARATELY OR ARCHIVED
2. PLEASE KEEP METHOD STATEMENTS SAFE AND AVAILABLE FOR INSPECTION AS REQUIRED
3. ENSURE THAT RISK ASSESSMENT IS SIGNED BY ALL SITE PERSONNEL PRIOR TO COMMENCING ANY SITE WORKS

Contents

1	Introduction	4
1.1	Background	4
1.2	Consultation	4
1.3	Development Site	4
2	Archaeological Baseline	6
2.1	Cultural heritage assets relevant to the proposed development	6
2.2	Archaeological potential of development site	10
3	Archaeological method Statement	10
3.1	Statutory Requirements	10
3.2	Methodology	10
3.3	Excavation Methodology	11
3.4	Post-Excavation	12
3.5	Resources	14
3.6	Health and Safety Input	14

Appendix 1

Figure 1:	location of proposed development site	15
Figure 2:	Site layout	16
Figure 3:	Sir Thomas Raven’s picture map of 1625 showing the approximate location of the proposed development	17
Figure 4:	2 nd edition OS map showing approximate location of proposed development site	18
Figure 5:	3 rd edition OS map showing approximate location of proposed development site.	19
Figure 6:	Known cultural heritage assets in the vicinity of the proposed development	20

Appendix 2

ARCHAEOLOGICAL EXCAVATION SITE SPECIFIC RISK ASSESSMENT	21
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1 Introduction

1.1 Background

It is proposed to construct a mixed-use development of 21no apartment units, comprising 12no apartments as part of the partial conversion and retention of the Royal Hotel and Windsor Bar building, partial demolition and 9no new build apartments within rear extension to Crosby Street, change of use of ground floor from hotel and public house to 4no new restaurant / café units, site access, car parking and all associated site works. The development will be located at the former Royal Hotel and Windsor Bar, 22-28 Quay Street, Bangor (figures 1 and 2).

This report forms the archaeological programme of works for the proposed development. It describes the archaeological baseline of the site and the surrounding area and assesses its archaeological potential.

The agreement of an approved archaeological programme of works is the first stage in discharging any archaeological condition within planning approval. This programme must be submitted to the appropriate Local Planning Authority (LPA) for approval. The LPA will consult with the relevant section within the Department for Communities: Historic Environment Division (DFC:HED) who will approve/ request amendments to the programme. Once approved, the programme must be implemented as agreed. Full discharge of the planning condition is only achieved once all elements of the programme have been implemented.

1.2 Consultation

Planning permission has been granted for the site, LA06/2017/1209/F, with the following archaeological condition:

'10. No site works of any nature or development shall take place until a programme of archaeological work has been implemented, in accordance with a written scheme and programme prepared by a qualified archaeologist, submitted by the applicant and approved by the Council. The programme should provide for the identification and evaluation of archaeological remains within the site, for mitigation of the impacts of development, through excavation recording or by preservation of remains and for the preparation of an archaeological report.'

1.3 Development Site

The proposed development consists of the former Royal Hotel and Windsor Bar, Quay Street, Bangor (figure 1). The red line boundary extends along Crosby Street. A review of the earliest available map of Bangor, Sir Thomas Raven's of 1625 (figure 4). This map shows the early development of the town and indicates that the area of Main Street, Bridge Street and Quay Street, existed as roads at that time. The map appears to show a number of properties located within the area of the proposed development.

A review of the early editions of the Ordnance Survey maps was also undertaken. While the 1st edition map was unavailable the 2nd and 3rd editions were inspected (figures 5 and 6). The 2nd edition map which dates to 1860, Quay Street is clearly labelled and a number of buildings are shown, as are formal gardens to the rear of the properties (figure 5).

Inspection of the Belfast and Province of Ulster Directory for 1852 describes the Royal Hotel and livery stables belonging to Henry McFall. It is described as ‘The principal hotel – “the Royal”, Mr. Henry McFall’s – is in a most agreeable position, facing the sea, commanding beautiful views of the Lough and of the County Antrim, on the other side.’

In addition, a review of the Griffith’s Valuation shows that Mr. McFall leased the property and land from Robert E. Ward for a total value of £38, of which £3 10/ was for the gardens and land which represent an area of 1 acre, 1 rood and 25 perches.

The valuation for the years 1872-1882 (VAL/12/B/23/7E-K) shows that at the time of the valuation the hotel and land was leased by Eliza Houston also from Robert E. Ward for the same value of £38. However, by 1879 William Parks has taken over the hotel and land. By 1894, it is likely that Mr. Parks has died as his representatives now lease the property. Mr. McNeil takes over the property later in 1894, but by 1897 William Donaldson is recorded as the proprietor. The property is now licenced and the value has increased to £75 primarily as a result of the yard being built over. The Belfast and Province of Ulster Directory for 1897 also lists W. Donaldson as the Royal Hotel’s proprietor. An inspection of the 3rd edition OS map shows the greater built up area but again the hotel is not recorded as such.



Plate 1. View of the façade of the former Royal Hotel and Windsor Bar.



Plate 2. Site of former Royal Hotel from corner with Crosby Street.



Plate 3. View of site of Royal Hotel looking down Crosby Street.

2 Archaeological Baseline

2.1 Cultural heritage assets relevant to the proposed development

A desk top survey was conducted to identify the location of known cultural heritage sites relevant to the proposed development site, within a 500m radius (figure 3). The following sources were inspected to form the archaeological baseline:

Data Source	Results
Sites and monuments Records (SMR)	2
Industrial Heritage Records (IHR)	7
Historic Buildings Records (HBR)	40
Historic Gardens Register	None identified within the study area
Defence Heritage Register	1
Battle sites	None identified within the study area
Excavations database	1
Pre-Ordnance Survey maps	Thomas Raven’s map of 1625
Early edition Ordnance Survey Maps	Second edition onwards

The desk top survey identified no known archaeological sites within the development area, however a number of cultural heritage assets were identified within a 500m radius. A desktop survey was conducted to identify the location of known archaeological and cultural heritage assets within the proposed application boundary (figure 3).

The proposed development is located within the Area of Archaeological Potential for Bangor which represents the historic core of the town, which is represented in the SMR as **DOW 2:39**. The historic town was built on hills overlooking Bangor Bay near the entrance to Belfast Lough on its S shore. A small settlement may have grown up around the medieval Augustinian abbey, **DOW 2:2**, but nothing is known of it. St. Malachy is reported to have built a new abbey church of stone in 1120.

At the Plantation the site was conveyed by Con O’Neill to Sir James Hamilton and in 1611 the visiting Commissioners reported that Bangor consisted of ‘80 new houses, all inhyabited with Scotysmen and Englishmen’. The town was incorporated in 1613 and a plan drawn by Thomas Raven in 1625 shows it to have consisted of two main streets at the head of Bangor Bay. The town was developed as a port and a customs house was built c. 1637 (**DOW 2:3**) and a small pier was added c.1760. Cotton manufacture was introduced in 1783. The expansion of Bangor followed the extension of the railway line from Holywood to the town in the second half of the 19th century.

The site, **DOW 2:3**, mentioned above, is identified as the Old Customs House, a probable 17th century tower house. It is described in the SMR as a de-scheduled listed building now used as an Exhibition Centre and houses the Tourist Board.

A full cartographic regression and document search of the development area was also undertaken the results of which are contained within section 1.3 above.

Looking beyond the area of development, a number of cultural heritage assets were identified within the study area. A total of 7 industrial heritage sites were identified which are listed in the table below.

Industrial heritage no	Description
2551	This coastguard station is not shown on the 1833 OS map. On the 1860 map it is shown at the quayside in the harbour. It is recorded as a 'Coastguard Station' on the 1903 edition and is shown but undesignated on the 1939 edition.
2553	This cotton manufactory is recorded as such on the 1833 OS map. A building is shown at the site but is undesignated on the 1860 edition. It is unclear whether the site is shown on the subsequent editions of 1903 and 1939.
2554	This site is identified as a cotton manufactory and is recorded as such on the 1833 and 1860 OS maps. It is not shown on the subsequent editions of 1903 and 1939.
2555	This is a corn mill site consisting of a corn mill, IHR 2555:1, a millrace, IHR 2555:2 and a mill pond, IHR 2555:3. The mill, IHR 2555:1, is identified as a 'Corn Mill' on both the 1833 and 1860 maps. It is uncertain whether it is shown on the 1903 map. By the 1939 map, the site has been taken over by the expansion of the gasworks. The millrace, IHR 2555:2, it is recorded as a 'Millrace' on the 1833 and 1860 maps. It is traceable though undesignated on the subsequent editions of 1903 and 1939. The mill pond, IHR 2555:3, is recorded as a 'Dam' on the 1833 map. On the 1860 edition it is recorded as a 'Millpond'. It is not recorded on the 1903 and 1939 editions though it is easily traceable as the ground had not been built over at that time.
2556	This site is identified as the gasworks. It is not shown on the 1833 OS map. It is recorded as 'Gasworks' on the 1860 edition. Here it is shown as being on the E side of the corn mill, IHR 2555. On the 1903 it has expanded to envelope the mill site IHR 2555. On the 1939 map the site is shown as 2 large gas holders.
2557	Bangor Harbour. The Ordnance Survey map shows the old central pier as the quay. The map of 1860 shows the coast guard station on the quayside. The new pier to the N and the coal depot to the S are shown on the 1903 edition. On the 1933 map the North Pier, South Pier and Central Pier are all recorded.
7538	This harbour is recorded as 'The Long Hole'. No further information is available regarding this site.

A review of the Historic Buildings database revealed a total of 40 listed buildings within the search area which are detailed in the table below.

Listed building number	Description	Grade
HB23/5/1	Northern Bank, 77 Main Street, Bangor	B1
HB23/5/2	Bangor Orange Hall, Hamilton Road. Built in 1872 in Gothic Revival Style	B2
HB23/5/3	Wesley Centenary Methodist Church, Hamilton Road	B2
HB23/5/8	Hamilton Road Presbyterian Church, Prospect Rd. Built in 1898-9 by William John Waterman Roome. Unusual polygonal plan form.	B2
HB23/5/10	Clock Tower, Quay Street. This is built in classical mould and was gifted by James McKee in 1915	B1
HB23/5/11	Petty Sessions court, Quay Street, built in the Italianate Style.	B2
HB23/5/12	Tower House, Quay Street. This is a fortified tower house previously used as a customs house. Built in 1637	B1

HB23/5/13 A-D	Nos. 2, 4, 6, 8 Victoria Road. This is a 3 storey terrace in a street formerly known as 'Fishers Hill' in the late 19 th century.	B2
HB23/5/16A-F	Nos. 102, 104, 106, 108, 110 and 112. This is a late 19 th century 2 storey Victorian terrace.	A-B1, B&C-B2,D-B1, E&F-B2
HB23/5/17A-D	114-120 Seacliff Road.	Record only
HB23/5/23	Harbour Masters Office, Bangor Harbour. This is a sturdy detailed and functional building of rubble stone work having cut stone dressings. The office is approached by steps from street level. Below is a boat house with a stone paved slipway. Built c.1840.	B2
HB23/5/25	Ulster Bank, 75 Main Street, Bangor. This is a 3 storey building of brick and stucco in the tradition of Edwardian freestyle of architecture. Built 1920.	B1
HB23/5/28	Bank of Ireland, 82A Main Street. Designed by Millar and Symes of Dublin in association with AGC Millar, architect to the Bank of Ireland. This is a 3 storey, 7 bay building of Portland stone to the ground floor and rustic brick with stone dressings to the upper floors, designed in an art deco style characterised by its overall step form composition, the crenellated pattern of its parapets, the zigzag line of its balcony railings and the chevron motif of its entrance tower peaks. Ground floor consists of a no. of shop fronts in which varying amounts of original features survive. These include stainless steel window frames, some bearing restrained art deco decorative details and polished granite bases. Above the clock face on the entrance bay the attic storey contains a 3 light rectangular window but this has been covered up by a modern name pond.	B1
HB23/7/6	1 st Presbyterian Church, Hamilton Road. This irregular church of rusticated stone with central glazed lantern with cantilevered balcony dates to 1899. The recent tower and front dates to 1966.	B+
HB23/7/7A	St. Comgalls Parish Church. Built in 1880-7 in a gothic revival style at a cost of £7500. Architect W H Lynn.	B+
HB23/7/7B	Dufferin Masonic Hall, 2A Hamilton Road	B2
HB23/7/8	Masonic Hall, Hamilton Road	B1
HB23/7/11 A-J	Nos. 47-56 Queens Parade. 3 storey terrace with classical detail. Built c.1880.	B2
HB23/7/12A&B	57&58 Queen's Parade.	B2
HB23/7/13A&B	59&60 Queen's Parade	B2
HB23/7/21A&B	61&62 Queen's Parade	B2

A single Defence Heritage Site **DHP 0.00** was identified. This is described as a nodal point. No further information is currently available on this site.

A single excavation **AE/04/32** was identified within the study area. This consisted of the archaeological monitoring of two trenches at the Bank of Ireland site, Main Street, Bangor. Nothing of archaeological significance was identified.

2.2 Archaeological potential of development site

The desk top survey has indicated that while no known cultural heritage assets are located within the red line boundary, the site lies within the Area of Archaeological Potential for Bangor, with the possibility that development at this location could at least extend back to the early 17th century. On the basis of this evidence the proposed development is located within an area of significant archaeological potential. However, an inspection of the development plans shows that the majority of this development will consist of the reuse and repurposing of the upstanding Royal Hotel and Windsor Bar. Therefore, any potential historical remains with could be located under these buildings will not be disturbed. In this area of the development it is recommended that no further archaeological mitigation be required. To the rear of the hotel property, though, there will be some demolition to allow for the construction of 9no apartments. Construction in this area could potentially disturb archaeological remains and negatively impact on them. As a consequence it is recommended that further archaeological works will be required within this area of the site.

3 Archaeological method Statement

3.1 Statutory Requirements

Archaeological excavation licence obtained from DfC:HED

3.2 Methodology

- Prior to archaeological works commencing the name and contact details (including mobile phone numbers) of the site director and project manager will be forwarded to the DfC:HED Inspector along with the start date for the project.
- Archaeological monitoring of ground reduction in the area to the rear of the hotel where demolition will occur, will be conducted. The buildings to be demolished will be removed to ground floor level. The ground surface will be removed, under strict archaeological supervision to formation level, naturally occurring subsoil or archaeological strata whichever is highest.
- The DfC:HED Inspector will be given regular verbal updates regarding progress of site works and notified immediately of all new discoveries, which may affect the current programme of works.
- Should human remains be identified work will cease immediately and both DfC:HED and the PSNI will be notified immediately. The PSNI contact number is 0845 600 8000. Upon the discovery of human remains, a separate mitigation strategy will be established in agreement with DfC:HED.
- Should archaeological deposits be identified then the area of archaeological activity will be cordoned off, and work in that area will be stopped until such time as an appropriate

mitigation strategy has been established. This mitigation strategy may include extending the area to reveal the full extent of the deposits uncovered.

- Should archaeological deposits be exposed their nature and extent will be assessed by the archaeologist present. This will entail the manual excavation of a small area of the material exposed.
- Should archaeological deposits be exposed the area surrounding the features will be extended until a 10m buffer zone, where no remains are located can be established. Should this not be possible due to the limits of the development, the extension will extend as far as possible.
- Based on the initial assessment DfC:HED will be contacted and an appropriate mitigation strategy established.
- The options, which this mitigation strategy could include, are preservation *in situ* or recording through full scale excavation.
- The optimum option would be to preserve the remains *in situ*. Depending on where, within the proposed development, the archaeological deposits were uncovered, it may prove possible to redesign or alter the layout, thereby removing any potential negative archaeological impact.
- Should it not prove possible to redesign the development, then archaeological resolution through full scale excavation will be required. This will be undertaken with sufficient staff to adequately resolve the archaeology and will be carried out in accordance with the guidelines for best archaeological practice as laid out by DfC:HED.

3.3 Excavation Methodology

Should archaeological remains be identified and the recommended course of action be full excavation of the identified features and deposits then the following methodology will be used.

- All identified features and deposits will be cleaned by hand, planned and recorded in accordance with standards and guidance issued by HED, ClfA and the Institute of Archaeologists of Ireland (IAI). All excavation of stratified deposits shall proceed in stratigraphic order from latest to earliest. In the first instance, all discrete cut features may be excavated by half section or quadrants to produce a vertical section, with plan and section drawn; any small, discrete features, such as stake-holes or post-holes less than 10cms in diameter, may be fully excavated. It is expected that all archaeology will be fully excavated if it cannot be preserved *in situ*.
- All structural features will be investigated, as appropriate to their component materials, to define the extent, nature, complexity and dimensions of their various elements and associated deposits. As with other linear features, any termini, junctions and intersections of features will be investigated to determine the stratigraphic/chronological relationships between those

disparate features. Particular care will be taken to ensure that areas of *in situ* burning are not disturbed prior to the consideration of scientific dating.

- All archaeological features and deposits will be issued with a unique number and would be recorded using standard context record sheets, which will include details of the nature, dimensions, appearance, relationships and location of each context. All archaeological features will be planned at the scale of 1:20 and sections drawn at the scale of 1:10.
- The excavation area will be precisely located within the development project through either GPS or total station and tied into the OS grid. A written, drawn, and photographic record of all archaeological deposits will be compiled, to include:
 - a pro-forma context record for each stratigraphic unit;
 - plans of each area exposed and or excavated showing the extent of the area, the extent of all stratigraphic units, and appropriate detail within stratigraphic units;
 - sections or profiles of excavated stratigraphic units; and
 - a photographic record of all stratigraphic units.
 - A running matrix will be kept on site and will be made available to HED for inspection during site visits.
- Drawings will be on plastic drafting film and further site plans will be created by digital survey. A full, high resolution (suitable for publication) digital photographic record of the work, with appropriate scales and identification, will be taken and maintained. All remains will be levelled with respect to Ordnance Survey data.
- Every artefact recovered will be issued with a unique finds number and its details, including category, material(s), recovery context and location, recorded in a finds register; it will be removed and packaged as appropriate to the material and condition and in accordance with ClfA standards and guidance and those of the Institute of Archaeologists of Ireland (IAI).
- If suitable deposits (such as organic or charcoal-rich soils) are encountered, suitable samples will be taken for environmental analysis, in keeping with IAI's Environmental Sampling: Guidelines for Archaeologists (2007).
- Should human remains be identified both DfC:HED and the PSNI will be notified immediately. The PSNI contact number is 0845 600 8000. Upon the discovery of human remains, a separate mitigation strategy will be established in agreement with DfC:HED.

3.4 Post-Excavation

Should an archaeological excavation take place then the following post-excavation methodology will be utilised.

Contexts

The context database will be consolidated, computerised (MS Word and/or Excel) and cross-referenced to ensure consistency and, with the drawn record, to identify or indicate collections and

complexes of features, and changes in stratigraphy and palaeoenvironmental features (e.g. old ground surfaces and river courses) on the site.

Finds

All artefacts recovered from both the assessment investigations will be processed and packaged as suitable for their constituent material(s) and conditions. If appropriate, they will be cleaned and marked with their site and unique codes.

All such finds are the property of the landowner(s) except where they satisfy certain criteria specified in the Treasure Act 1996 and the Treasure (Designation) Order 2002 and may be determined by a Coroner as treasure and, therefore, the property of the Crown. Where it is suspected that recovered items conform to those criteria, the Coroner will be informed.

Soil Samples

Soil samples retrieved from suitable features and deposits will be clearly marked, giving the location, context and date of the taking of the sample. The sample sizes may vary depending on the nature of the context; if it is a small deposit of soil/charcoal, the entire deposit may be collected, whereas samples up to 40 litres may be suitable/required for larger palaeoenvironmental features.

The samples will be double-bagged and labelled with a minimum of the site code, context number(s) and date of collection. They will be made available for determination of potential flora and fauna remains, radiocarbon analysis, etc. The samples will also be retained for post-excavation sieving as required by HED.

Drawings

An overall site plan will be produced, displaying the locations and identifying numbers for all deposits, features and artefacts.

Any field drawings (plans and sections) of all relevant features and deposits will be reproduced digitally and to appropriate professional standards, if necessary to publication quality.

Photographs

A register will be generated of all site photographs, detailing the photograph number, location, subject, date and direction.

Reporting Stage 1

At the conclusion of the archaeological excavation, a Technical Report, in the form of a Data Structure Report (DSR), will be prepared in accordance with current ClfA and IAI guidelines. The DSR will include:

- a) a full descriptive text detailing the features and deposits identified and an interpretation of their age and function, quality and value;
- b) descriptions of the artefacts, referring to the contexts from which they were recovered;
- c) plans and section drawings of significant features and deposits, cross-referenced with the text;

- d) illustrative annotated photographs of features, deposits, artefacts and samples, cross-referenced with the text; and
- e) an analysis of the results of the works, including an appropriate post-excavation appraisal, in the context of the wider archaeological landscape.
- f) outline of recommendations for an appropriate post-excavation schedule of works arising from the excavation.

Reporting Stage 2

When an appropriate post-excavation schedule of works (including any publication requirements) has been agreed with HED the agreed works shall be fully implemented and a Post Excavation Report to discharge the licencing and planning conditions shall be submitted. Where no archaeological deposits, or artefacts, have been encountered the DSR may suffice to fulfil the licensing and planning conditions.

3.5 Resources

Supervision and Labour

Archaeological Project Manager	Audrey Gahan
Archaeological work crew	1x licensed archaeologist

Plant, Equipment, Tools

Back acting excavator	Supplied by principal contractor
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3.6 Health and Safety Input

Identified Risks	Working with plant. Underground services
PPE	Safety boots / Hard Hat / Helmets / Hi-vis vests/ Glasses/ Gloves
Monitoring and Inspection	Archaeological monitoring in accordance with DFC:HED requirements. Weekly site inspections to be conducted as per Gahan and Long safety policy. Excavation inspections to be conducted by site director on daily/weekly basis as required by Gahan and Long safety policy.
Emergency Procedures	In the event of an emergency a supervisor from site should be contacted immediately, who dependent the situation will contact the emergency services, the relevant statutory authorities or administer first aid if necessary.
References	Project safety plan Project risk assessment Gahan and Long safety policy- weekly site inspections Gahan and Long safety policy- excavation inspections

Appendix 1

Figure 1: location of proposed development site

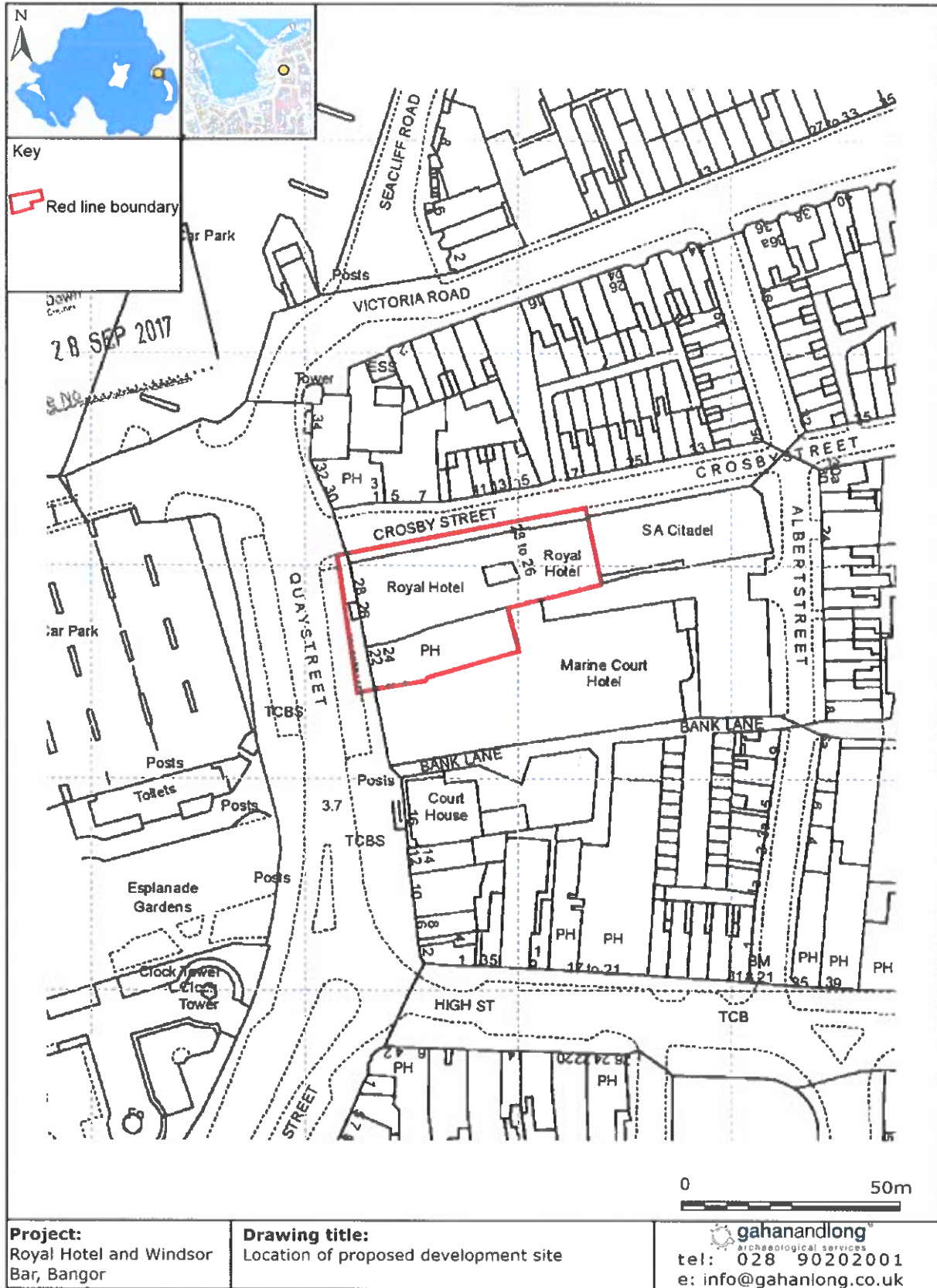


Figure 2: Site layout

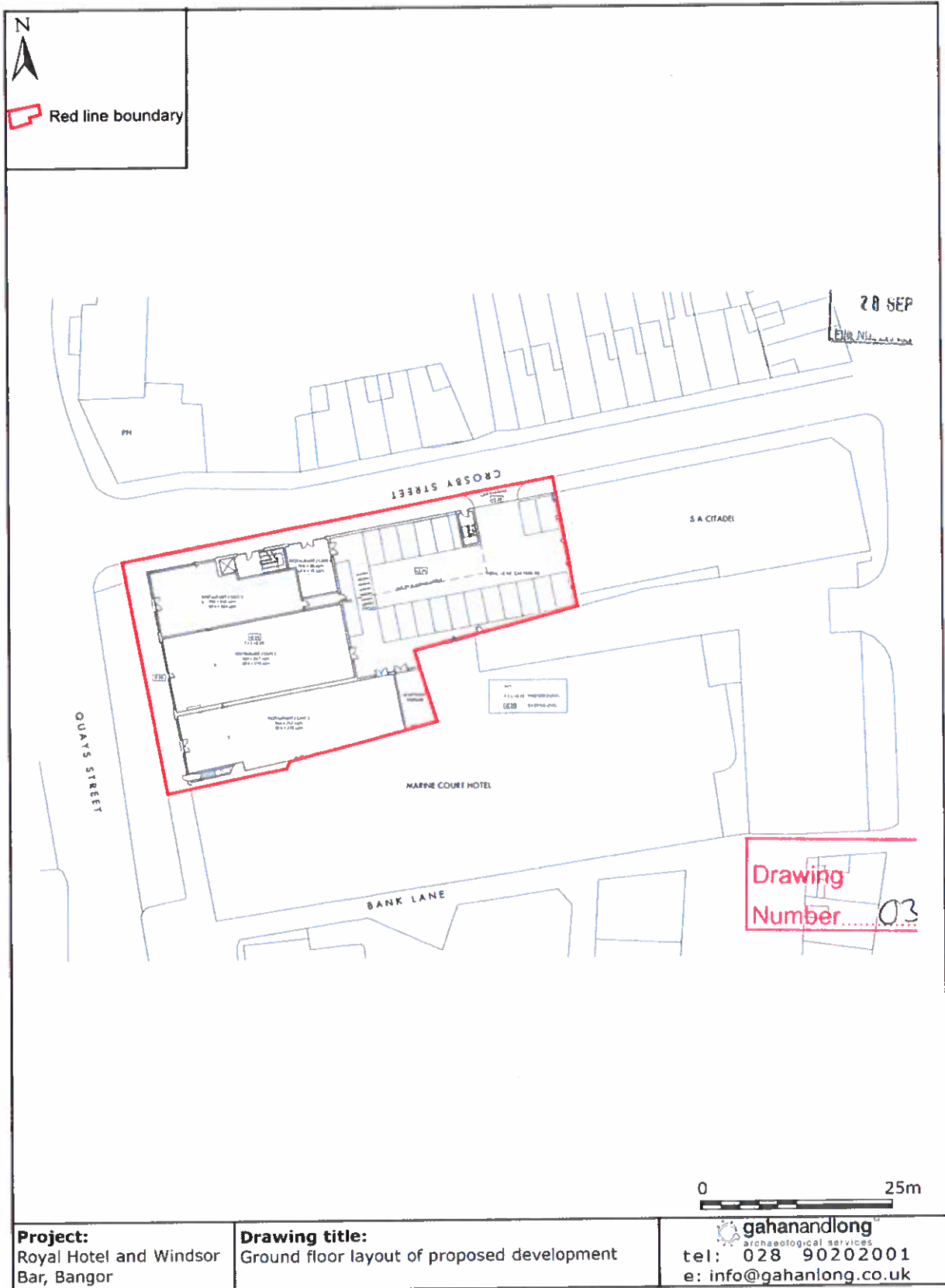


Figure 3: Sir Thomas Raven's picture map of 1625 showing the approximate location of the proposed development

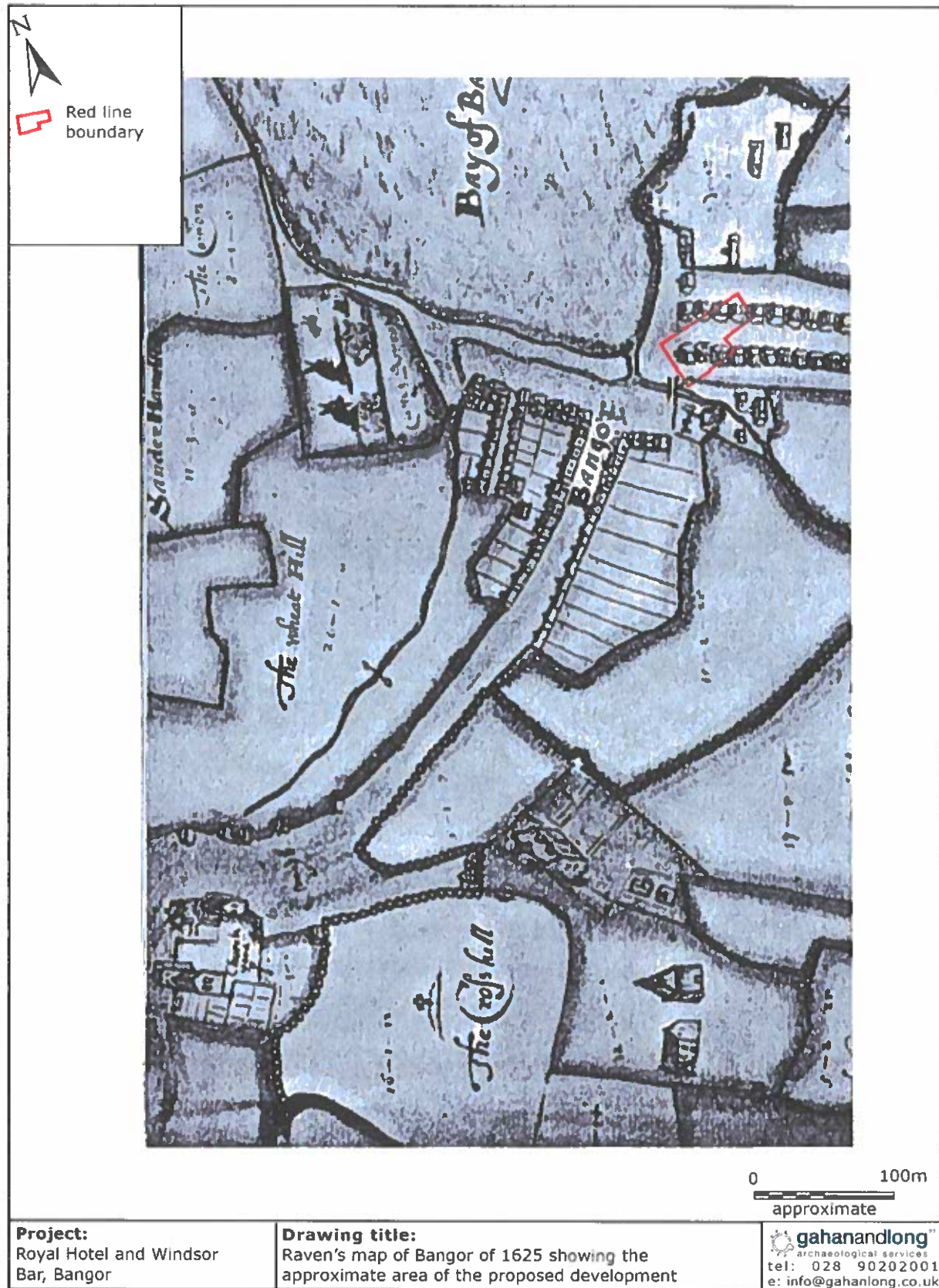


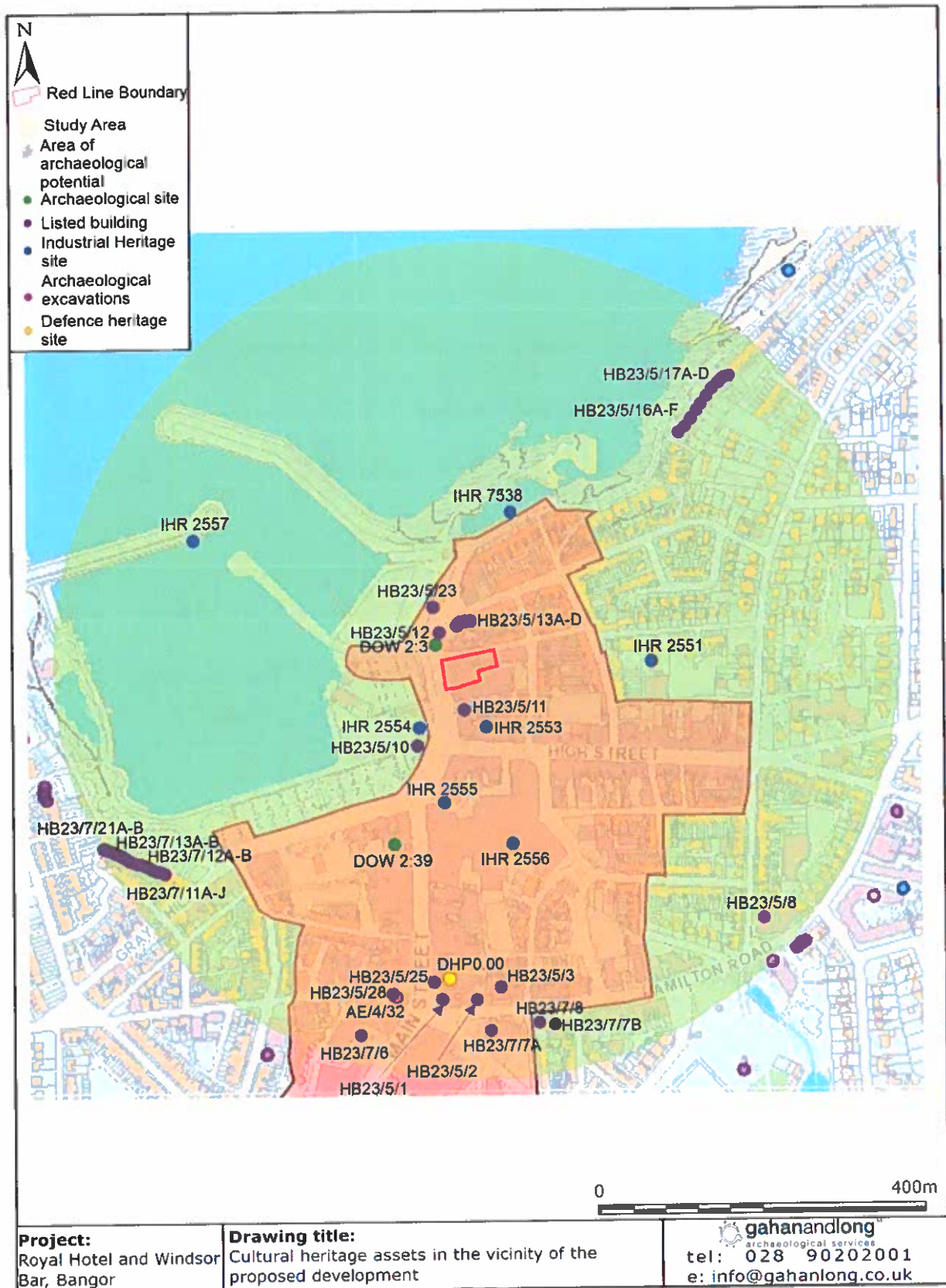
Figure 4: 2nd edition OS map showing approximate location of proposed development site.



Figure 5: 3rd edition OS map showing approximate location of proposed development site.



Figure 6: Known cultural heritage assets in the vicinity of the proposed development



Appendix 2

ARCHAEOLOGICAL EXCAVATION SITE SPECIFIC RISK ASSESSMENT

Site Address	Royal Hotel and Windsor Bar, Quay Street, Bangor
Completed by	Audrey Gahan
Date	19/05/2020

No.	Hazard	Risk rating			Control Measures
		H	M	L	
A: Access to the Site					
A1	Difficult terrain or topography			X	Examine the site access for presence of ditches, inclines, bogs, woodland, masonry, scaffolding, overhead cables etc . Secure safe access routes, use tracking, guard rails. If in doubt get an engineers or architects assessment
A2	Intertidal, riverine or lacustrine locations	N/A			Examine site access for deep mud or soft sand. Check local tide tables and effects of weather conditions on tides, floods, currents. Wear appropriate clothing and PPE. Establish a stable working platform if necessary
A3	Site use by others			X	Determine current and future use of site and access by others (developers, farmers) Liaise and ensure that they are aware of your presence and intended movements and operations
A4	Work Place Transport: Company vehicles			X	Conduct vehicle checks as per Transport Policy prior to use of Company vehicles. No use of mobile phones while driving.
B: Working environment					
B1	Adverse weather conditions			X	Ensure suitable site accommodation where necessary. Wear appropriate PPE- rain wear/gloves etc. If required take shelter until weather passes
B2	Slips/trips/falls: Muddy conditions Site obstacles			X	Provide suitable tracking and other appropriate equipment Maintain site tidiness to prevent build up of obstacles. Identify safe access routes through site to avoid excavated features. Cordon off deep features to prevent accidental access.

B3	Deep ditches or trenches			X	<p>Provide suitable shoring and ladders</p> <p>Cordon off deep features to prevent persons falling in.</p> <p>Weekly recorded inspections of all deep excavations</p> <p>Ensure spoil heaps are located adequate distance from edge of excavations.</p>
B4	Confined Spaces: Souterrains			X	Do not enter. Any violation of this rule will result in immediate dismissal.
B6	Electrical: Underground cables Overhead powerlines			X	<p>Ensure work area has been assessed/scanned for underground cables prior to commencing excavation.</p> <p>Do not dig in areas where cabling has been identified.</p> <p>Do not operate with plant beneath overhead powerlines</p>
B7	Working with Plant			X	<p>Ensure competency of plant operator- licence</p> <p>Maintain safe distance from plant- outside swing area</p> <p>Maintain visual contact with plant operator at all times</p> <p>Safe work position always up-slope of plant</p> <p>Wear hi-vis PPE at all times</p> <p>Be aware of other plant operating within or moving around site.</p>
B8	Lone working			X	Follow call in policy as detailed in Lone working RA
B9	Use of excavation tools			X	<p>Ensure tools are appropriate and suitable.</p> <p>Ensure all tools are cleaned and inspected at start and end of day.</p> <p>Report any defects to site director</p> <p>Do not use defective tools</p>

C: Medical concerns					
C1	Accidents			X	<p>Ensure appointed First aider present at all times</p> <p>Ensure First aid kit available</p> <p>Ensure egress maintained at all times</p> <p>Ensure mobile phone on site</p> <p>Report all accidents/injuries in accident book</p>
C2	Manual handling			X	<p>Ensure persons know how to lift correctly</p> <p>Provide alternative methods for lifting if possible</p>
C3	Biological: Leptospirosis			X	<p>Avoid washing hands in streams</p> <p>Avoid contact with animals</p> <p>Ensure suitable washing facilities available</p> <p>Maintain tetanus shots</p>
C4	Animal attack (including insects)			X	<p>Ensure as far as possible animals are prevented from entering the site.</p> <p>Consider insect repellent if appropriate</p> <p>Beware stinging insect habitats</p>
D1	Trespass, vandalism and theft			X	<p>Consider security fencing if possible</p> <p>Provide secure accommodation</p> <p>Consider signage and cordoning off area</p>
D2	Physical or verbal assault			X	<p>Investigate nature of population and individuals likely to be a problem</p> <p>Ensure all staff are aware</p>
E: PPE					
E2	Detail minimum requirements for PPE			X	<p>Minimum PPE to be worn:</p> <p>Hard Hat</p> <p>Hi-vis vest or jacket</p> <p>Safety boots</p> <p>Gloves</p>
E2	Assess excavation for additional risks which may be addressed by further issue of PPE eg- noise, eye protection, waterproofs			X	<p>Ensure additional PPE has been issued prior to work commencing</p>

