An Bord Pleanála Oral Hearing

Irish Water Greater Dublin Drainage

Brief of Evidence

Archaeological, Architectural and Cultural Heritage

Faith Bailey

Qualifications and Role on the Proposed Project

- My name is Faith Bailey and I am a senior archaeologist and cultural heritage consultant employed by IAC Archaeology. I hold a Master of Arts (MA) in Cultural Landscape Management (archaeology and built heritage) and a Bachelor of Arts (BA) in single honours archaeology from the University of Wales, Lampeter. I am a licensed eligible archaeologist, a member of the Chartered Institute of Archaeologists, a member of the Institute of Archaeology of Ireland and have over 16 years' experience working in the commercial archaeological and cultural heritage sector.
- In my current role I have been responsible for the production and delivery of a large number of archaeological and built heritage desk top assessments, Environmental Impact Assessment Reports (EIAR), masterplans and management plans associated with all sectors of development in the Republic of Ireland and Northern Ireland. Previous projects have included the M11 Enniscorthy Bypass, the N7 Road Widening Scheme, the Claregalway Flood Relief Scheme, the Sallins Bypass, the Galway Outer Bypass Scheme and the Limerick Foynes Road Scheme. I have acted as an expert witness at eleven Oral Hearings to date.
- My role in the Proposed Project involved undertaking the archaeological, architectural and cultural heritage appraisal in respect of the Proposed Project. I have been working on the Proposed Project since 2012 with responsibility for the following:
 - co-ordinating our internal team and the production of information;
 - co-ordinating the marine archaeological investigation works, along with geophysical surveys and archaeological testing;
 - liaising with the environmental project managers (Jacobs) and the wider environmental and design team; and,
 - consulting with the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht, including the Underwater Archaeological Unit and Architectural Advisory Unit.
- The work that I have undertaken in relation to the Proposed Project includes:
 - archaeological, architectural and cultural heritage assessment of the initial proposed Wastewater Treatment Plant (WwTP) site (chapter 6, Alternative Sites Assessment and Route Selection Report (Phase 2): Emerging Preferred Sites and Routes);
 - Chapter 16 (Archaeological, architectural and cultural heritage) in Volume 3 Part A of the EIAR; and
 - co-ordination of the marine geophysical survey, archaeological dive surveys, intertidal surveys, archaeological geophysical survey and archaeological testing undertaken by ADCO Ltd, Earthsound Archaeological Geophysics, Target Archaeological Geophysics and IAC Ltd.

Likely Significant Impacts and Mitigation

The purpose of the cultural heritage appraisal detailed within the EIAR is to identify and assess the significance of, and impacts on, any known or previously unrecorded sites of archaeological, architectural and cultural heritage associated with the Proposed Project as detailed in Section 16.5 in Chapter 16 in Volume 3 Part A of the EIAR. During the assessment process, extensive consultations were held with the National Monuments Service, which resulted in a targeted programme of geophysical survey being carried out at sites of archaeological potential along with test trenching at the site of the WwTP. Marine

archaeological investigations were also requested, in the form of archaeological marine geophysical survey, intertidal survey and archaeological dive surveys.

- The assessment has revealed that there are a total of 50 sites or groups of archaeological heritage sites recorded within the study area of the Proposed Project. The study area is defined as an area measuring 500m from the edge of the proposed pipeline routes (including the proposed Abbotstown pumping station site) and 1km from the edge of the proposed WwTP site. The study area has been defined in order to fully capture the character of the archaeological, architectural and cultural heritage environment and ensure the appropriate assessment of impacts on same.
- 7 Of the 50 archaeological sites:
 - none are classed as National Monuments or further protected with a Preservation Order;
 - three very significant negative direct impacts are predicted upon recorded enclosure sites, AH 11, AH 31 and AH 39. Five significant negative direct impacts are predicted upon three enclosures: AH 41, AH 45 and AH 38, one ring ditch: AH 44 and one field system: AH 33. The location of these sites is shown in Figures 1-5 attached to this brief.
 - direct moderate negative impacts will occur in relation to two further sites; and
 - the remaining impacts are indirect or neutral, and in four cases no impact is predicted.
- A total of 28 structures were recorded within the study area of the Proposed Project which are listed within the Register of Protected Structures or within the National Inventory of Architectural Heritage. No significant negative impacts are predicted on these structures as none are located within the footprint of the proposed project or within its immediate vicinity.
- In addition to the above, multiple Areas of Archaeological Potential have been identified within the study area, along with a number of previously unrecorded buildings of architectural heritage merit, designed landscapes and townland boundary crossings. Potential impacts on these sites vary from direct to indirect or neutral. The significance of the impacts ranges from slight to very significant (negative).
- An extensive programme of archaeological test trenching will be carried out at each archaeological site identified prior to construction, as per the 'Framework and Principles for the Protection of the Archaeological Heritage', published by the Department of Arts, Heritage, Gaeltacht and the Islands (now the Department of Culture, Heritage and the Gaeltacht).
- Testing will also be carried out within the lands required for the overall Proposed Project by an archaeologist under licence to the Department of Culture, Heritage and the Gaeltacht. This work will provide information on the nature and extent of the remains within the Proposed Project study area, enabling the compilation of a programme of works to ensure the sites are fully preserved by record.
- The proposed outfall pipeline route (land-based section and marine section) will be constructed from the proposed WwTP to a discharge point approximately 1km north-east of Ireland's Eye. The marine environment possesses archaeological potential due to the presence of shipwrecks, which are protected under the National Monuments Act 1930 (as amended). The Shipwreck Inventory records 27 shipwrecks within the vicinity of Portmarnock Strand (Figure 6). No shipwrecks have been identified that will be directly impacted. However, the potential remains that archaeological deposits or features associated with shipwrecks remain buried at deeper levels beneath the current seabed. Dredging activity has the potential, directly and negatively, to impact these potential remains to a significant or profound degree. With regards to the marine archaeological resource, all dredging will be monitored by a specialist underwater archaeologist under

licence to the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht. Should any archaeological remains be identified, further mitigation, such as preservation by record, may be required.

- The Proposed Project will potentially directly impact AAP 2, 3, 5, 6, 8, 10, 12, 16, 17 and AAP 19. A programme of archaeological test trenching will be carried out within each area prior to construction. This includes a more detailed assessment of AAP 12. This will be carried out by an archaeologist under licence to the DCHG.
- The Proposed Project will potentially directly impact watercourses designated as AAP 7, AAP 8, AAP 9 and AAP 21. An underwater survey or wade survey will be carried out in these areas prior to construction. This will be carried out by an archaeologist under licence to the DCHG.
- This work will provide information on the nature and extent of the remains within the Proposed Project study area, enabling the compilation of a programme of works to ensure the sites are fully preserved by record.
- No mitigation is deemed to be necessary in association with designed landscapes during the construction or operation of the Proposed Project, as no significant direct or indirect impacts have been predicted.
- Similarly, no mitigation is deemed to be necessary in association with previously unrecorded built heritage sites during the construction of the Proposed, due to no significance direct or indirect impacts being predicted at either construction or operation stage.
- Due to predicted direct moderate negative impacts predicted on a number of linear townland boundaries, a written and photographic survey will be carried out at the following locations: TB 4, TB 5, TB 9, TB 11, TB 16 and TB 20. This work will be carried out by a suitably qualified archaeologist.
- A written and photographic TB survey, to include archaeological testing, will be carried out at the following locations: TB 3, TB 6, TB 10, TB 12, TB 13, TB 14, TB 18, TB 19, TB 21, TB 22, TB 23 and TB 24. This will be carried out by an archaeologist under licence to the DCHG.
- All mitigation measures are detailed in Section 16.6 in Chapter 16 in Volume 3 Part A of the EIAR. The mitigations measures will result in the preservation by record of any archaeological features that will be directly impacted upon by the proposed scheme. As such, the mitigation measures will fully ameliorate the predicted negative impacts. No residual impacts will occur upon the archaeological, architectural or cultural heritage resource following the implementation of mitigation measures.

Response to Issues Raised in Submissions/Observations

Four of 174 submissions raised points in relation to archaeological, architectural and cultural heritage.

21 Development Applications Units (DCHG)

Submission:

The submission from the DAU recommends that all archaeological mitigation measures be carried out as per the chapter 16 of the EIAR, which covers the assessment of the archaeological, architectural and cultural heritage resource.

Response:

The DAU submission is in agreement will all recommended mitigations measures details in Volume 3 Part A of 6; Chapter 16 – Archaeological, Architectural and Cultural heritage.

22 Derek Clifford

Submission:

Bullet Point 3 of Mr Clifford's submission states the following: 'The area has historical significance – in the 17th century the Lord Major of Dublin, Sir Humphrey Jervis, built a house on the property, Belcamp House, where Henry Grattan lived and Dean Swift open visited. Countess Markievicz rented the property in 1909, and it was also used as a centre for the Fianna Eireann. The building of the proposed plant will completely remove all reference to this historical location'.

Response:

Belcamp Park (incorrectly identified as Belcamp House in the submission) is designated as AH 20 within Volume 3 Part A of 6; Chapter 16 – Archaeological, Architectural and Cultural heritage (pg 47). The main house is no longer extant and the site of same is listed as a recorded monument, the classification of which is 'House - 16th/17th century' (RMP Ref.: DU015-061). The site of the house is located c. 670m south of the proposed WwTP (Figure 7). The construction of the scheme will not impact on the site of the house nor any of its historical associations and associated landscape, a large portion of which is now covered by modern residential development.

23 Portmarnock Beach Committee

Submission:

The submission states that 'There are 16 historical wrecks documented in the National Archives buried under the sands on Portmarnock beach. These should not be disturbed'.

Response:

All proposed marine works have been subject to underwater archaeological geophysical survey, archaeological dive inspections and an intertidal survey. Shipwreck sites are listed in Table 16.3 and detailed in Appendix A16.2 in Volume 3 Part B of the EIAR (see Figure 6). No recorded or previously unrecorded shipwrecks will be impacted upon by the Proposed Project. However, all works will be subject to archaeological monitoring as laid out within the suite of mitigation measures.

24 Fingal County Council

Submission:

The submission from Fingal County Council noted that the Conservation Officer and Community Archaeologist raised concerns about the location of Compound No.1 due to the proximity of a recorded church and graveyard, which is an archaeological monument and protected structure (AH 2/ BH 2). It is requested that the compound be relocated in agreement with Fingal County Council.

On page 64 (para 1) it is noted that FCC does not agree with the predicted 'neutral' impact at AH 2/ BH 2 (church and graveyard), due to the proximity of the proposed compound.

25 Response

The compound will be set back from the recorded church and graveyard by 50m in order to maintain an appropriate buffer during construction (Figure 8). These proposals will result in a slight negative (indirect) impact during construction and a neutral impact during operation.

There will be no direct, negative impacts upon the recorded church and graveyard site as a result of the proposed development. Indeed, the proposed tunnelling in this area is being carried out in order to preserve the recorded site in-situ and forms an example of mitigation by design.

Conclusions

- The submission relating to Belcamp Park is clearly dealt within the chapter 16 of the EIAR, which covers archaeological, architectural and cultural heritage. There will be no impact on this site as a result of the development going ahead.
- The submission relating to historic shipwrecks within the Portmarnock Beach area is also clearly dealt within Chapter 16 of the EIAR. No recorded shipwrecks will be impacted upon by the proposed development.
- The submission from the DAU of the Department of Culture, Heritage and the Gaeltacht notes that all mitigations measures laid out in chapter 16 of the EIAR should be undertaken as part of the proposed development.
- The submission from Fingal County Council notes concerns regarding proximity of the construction compound at Abbotstown to a church and graveyard, which are recorded monuments and protected structures. As such, adjustments will be made to the compound to ensure a 50m buffer area is maintained during construction. No direct impacts will occur on the recorded site as a result of the proposed development going ahead. No direct or indirect impacts will occur during the operation of the development.
- A full assessment of the archaeological, architectural and cultural heritage resource has been carried out as part of the proposed project. This includes an expanded study area of 500m surrounding the proposed pipelines and 1km around the proposed WwTP. Whilst no instruction as to the definition of a study area is given in the 'Framework and Principles for the Protection of the Archaeological Heritage', the NRA Guidelines (now Transport Infrastructure Ireland) Guidelines for the Assessment of Archaeological and Architectural Heritage Impacts of National Road Schemes, recommend a minimum study area of 200m from a proposed development for architectural heritage assessment. This clearly shows that a wide study area has been considered during the assessment.
- In addition to the above, a detailed programme of investigations of the terrestrial and marine archaeological environment has been carried out during the EIAR process, following consultation with the National Monuments Service of the DCHG. This has illustrated that there are no large-scale archaeological sites located within the proposed WwTP or shipwrecks within the footprint of the proposed marine outfall. Portions of a number of archaeological sites will be directly impacted upon by the proposed land-based pipelines. Several of these sites were newly identified during the assessment process, as they appeared as cropmarks within aerial photographic coverage of the landscape. However, archaeological testing, followed by the preservation by record of these features, means that negative impacts will be fully ameliorated.
- Mitigation by design has formed part of the proposed project, resulting in the tunnelling of the pipeline beneath a recorded church and graveyard at Abbotstown and beneath the archaeologically sensitive Portmarnock Strand and estuarine area.
- Potential impacts upon the built heritage resource, including known and previously unknown structures of architectural heritage merit, has shown that there will be no significant negative impacts upon same, which includes direct and indirect impacts. This is also the case with regards to designed landscapes identified within the study area and townland boundaries that will be crossed by the proposed project. A number of Areas of Archaeological Potential were identified during the assessment of the study area and these will be subject to archaeological testing where a direct impact is predicted, or underwater assessment or a wade survey, where a direct impact is predicted upon a watercourse. The implementation of all mitigation measures

will ensure that there are no residual negative impacts upon the archaeological, architectural or cultural heritage resource, as a result of the proposed project going ahead.



Figure 1- Location of AH 11

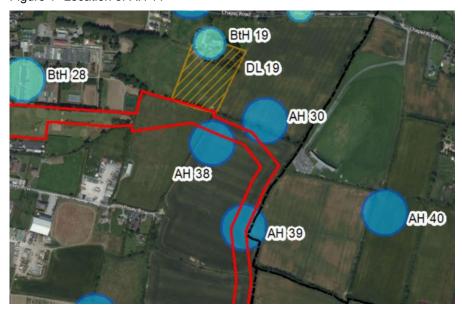


Figure 2 - Location of AH 39 and AH 38



Figure 3 – Location of AH 31 and AH 33



Figure 4 - Location of AH 41

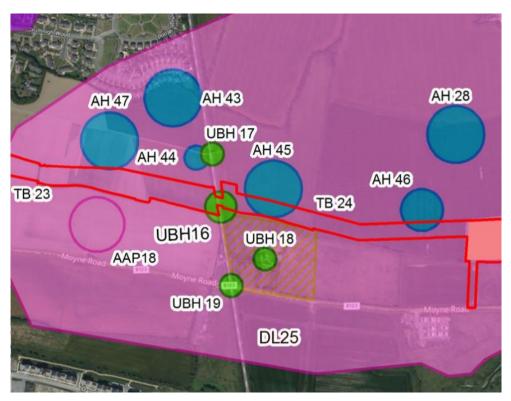


Figure 5 – Location of AH 44 and AH 45



Figure 6 – Position of recorded ship wrecks off the coast of Portmarnock showing position of out fall

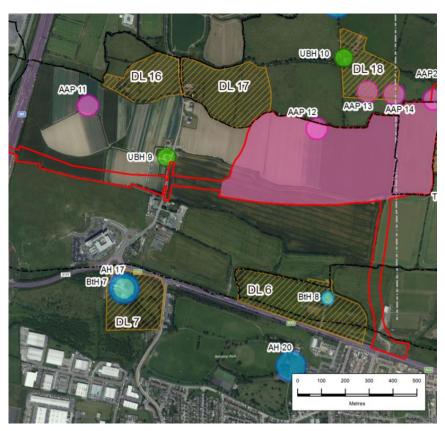


Figure 7 - Location of AH 20 and the proposed WWTW

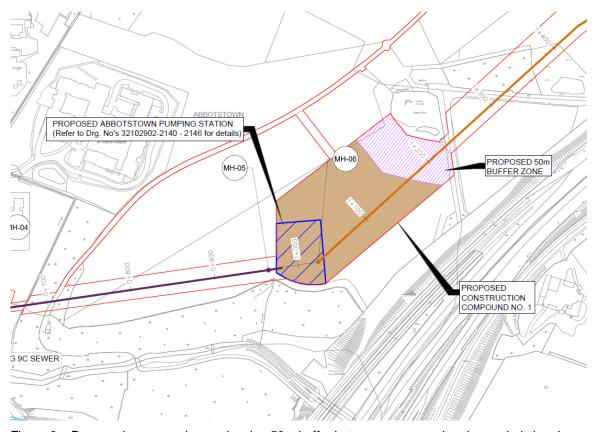


Figure 8 – Proposed compound area showing 50m buffer between compound and recorded church and graveyard at Abbotstown