

STRATEGIC INFRASTRUCTURE DEVELOPMENT
APPLICATION TO AN BORD PLEANÁLA
(REG NO. PL04.PA0045)

ORAL HEARING

RESOURCE RECOVERY CENTRE,
RINGASKIDDY, COUNTY CORK

WITNESS STATEMENT OF AVRIL PURCELL

ARCHAEOLOGY ARCHITECTURE & CULTURAL HERITAGE

1. Qualifications and Experience

My name is Avril Purcell. I received a BA (Hons) in archaeology and history and an MA (Hons) in Archaeology in 1994 from University College Cork. I am a full member of the Institute of Archaeologists of Ireland (MIAI). I have published a number of archaeological papers in peer-reviewed archaeological journals and books. I have given evidence as an expert witness in a number of oral hearings and given evidence as an expert witness at a court hearing relating to the assessment of the cultural heritage significance of lands in east County Galway.

I have been working full-time in archaeology since 1994 and as a licence holding archaeologist since 1997. I have managed and coordinated a number of major excavation projects in that time and I have compiled the archaeological, architectural and cultural heritage assessments for projects including pipelines, roads, waste-water treatment plants, recreational and industrial facilities, wind and alternative energy projects. These include a 40 km gas pipeline from Baunlusk, Co Kilkenny to Great Island Co Wexford; Ballinacorra West to Aghada Gas pipeline in east Co Cork; Whitegate Independent Power Plant, Co Cork; a bio-diesel plant in Kildorrery, Co Cork; windfarms at Carrigmount, Co Cork; Binnion Hill, Co Donegal; Kilbraney and Clonlard, Co Wexford; and Cork's lower harbour.

2. Role in the Project

My role in the project involved undertaking the archaeological, architectural and cultural heritage assessment of the proposed development site. I also carried out a licensed intertidal and metal detector survey at Gobby Beach as part of an Underwater Archaeological Impact Assessment of the proposed coastal protection works.

The work that I have undertaken on the scheme includes:

- A desktop assessment of the archaeology, architecture and cultural heritage of the proposed development site and a 2km study area;
- A review of the previous applications and EIS undertaken on the site;
- A review of relevant legislation and guidelines;
- Site inspections to assess the physical environment and identify any previously unrecorded features of cultural heritage importance;
- Consultations with other members of the team including Arup and Brady Shipman Martin;
- Consultation with Cork County Archaeologist, Cork Conservation Officer, National Monuments Service Archaeologist for Co Cork and the Underwater Archaeology Unit of the National Monuments Service;
- A wading and metal detector survey of the foreshore of Gobby Beach in May 2015 as part of an Underwater Archaeological Impact Assessment of the coastal protection works;
- An evaluation of the impacts of the proposed development on the archaeological, architectural and cultural heritage of the proposed development site and study area;
- Proposed mitigation measures to be undertaken to reduce potential impacts on the archaeological, architectural and cultural heritage resource.

2.1 Conclusion of Archaeological, Architectural and Cultural Heritage Appraisals

The conclusions of Chapter 14 of the EIS may be summarised as follows:

- There are no Recorded Monuments listed in the Record of Monuments and Places within the proposed development site.
- There are no Protected Structures listed in the Record of Protected Structures in the County Development Plan within the proposed development site.
- The nearest Recorded Monument is Ringaskiddy Martello tower (CO087-053) located 70m to the south of the development site. This is also the nearest Protected Structure (RPS 00575). The tower is also included in the National Inventory of Architectural Heritage as a site of regional importance (Reg. No. 20987047).
- No evidence for a path running northeast from the Martello tower to Gobby Beach and shown on the 1st, 2nd and 3rd editions of the Ordnance Survey 6-inch maps (of 1841, 1902 and 1934) is apparent.
- There are no cultural heritage sites within the proposed development site.
- Construction work for the proposed development will involve ground disturbance in the eastern part of the site (identified as Area 2 in the Assessment) and the western fields (identified as Area 1 in the Assessment).
- A programme of pre-construction archaeological geophysics followed by archaeological test trenching will be carried out on these areas and will include the area of the path shown on the 1st, 2nd and 3rd editions of the Ordnance Survey maps.
- A report outlining the results of the investigations will be submitted to the National Monuments Service and the Local Authority proposing suitable mitigation.
- The amenity walkway to the Martello tower will be constructed on a no-dig basis thus requiring no ground reduction.
- Archaeological monitoring of all coastal protection works proposed on Gobby Beach will be undertaken by a suitably qualified, licence-eligible, underwater archaeologist.
- The upper portion of the main process building and the stack will be visible from Ringaskiddy Martello tower looking to the northeast.
- The inter-visibility between Ringaskiddy Martello tower, Haulbowline Martello tower, Westmoreland Fort Mitchell on Spike Island and the defences at the mouth of the harbour Camden Fort Meagher and Carlisle Fort Davis will not be impacted by the proposed development.

3. Submissions and Responses

In preparing this witness statement, I have considered each of the observations submitted to An Bord Pleanála by various parties in relation to the archaeological, architectural and cultural heritage impact appraisal of the Ringaskiddy Resource Recovery Centre. The responses to prescribed bodies are first addressed and where similar issues are raised in other submissions these are grouped together to minimise repetition.

3.1 Observations have been made by the Department of Arts Heritage and the Gaeltacht in relation to suitable mitigation measures.

Submission

Terrestrial Archaeology

The Department notes that the proposed development is large in scale and is close to and may impact upon the Recorded Monument CO087-053 Ringaskiddy Martello Tower. The department concurs with the mitigation strategies outlined in chapter 14 of the cultural heritage impact assessment. The Department recommends the following conditions be attached to a grant of planning permission:

- The applicant is required to engage the services of a suitably qualified archaeologist to inspect the proposed development site, summarise the historic and archaeological background to the site and review cartographic sources and aerial photographs.
- This is to be followed by geophysical survey followed by archaeological testing of the development site under licence and in consultation with the licensing section of the National Monuments Service.
- A report outlining the results of the work is to be submitted to the local authority and the Department outlining if archaeological features will be impacted by the proposed development.
- If archaeological features will be impacted further mitigation measures will be required including redesign for in situ preservation, excavation and monitoring, as considered appropriate by the Department.
- The walkway to the Martello tower and associated viewing platform is to be constructed on a geotextile membrane on a raised surface level to avoid impacts in the vicinity of the Martello tower.

Response

The mitigation required by the Department will be undertaken as outlined in Section 14.6.1 of Chapter 14 of the EIS. Geophysical Survey followed by archaeological testing will be undertaken in consultation with the licensing section of the National Monuments Service following which a detailed report outlining the results will be submitted. If archaeological features are revealed, Indaver will be advised by the Department and the Local Authority

regarding suitable mitigation. The walkway and associated viewing platform will be constructed on a no-dig basis as outlined in Section 14.6.1 of Chapter 14 of the EIS.

Submission

Underwater Archaeology

The Underwater Archaeology Unit notes that an Underwater Archaeological Impact Assessment was carried out for the coastal protection works and agrees with the mitigation measures put forward. Planning conditions are recommended by the Underwater Archaeology Unit to include:

- The engagement of a suitably qualified, licence-eligible, underwater archaeologist to monitor all works to the foreshore including the placement of the coastal protection material, the placement of the shingle to form the access route across the foreshore and the removal of the shingle once coastal protection works are completed.
- Any material to be removed from the foreshore to facilitate the coastal protection works is to be inspected, metal detected and its removal archaeologically monitored.
- The geophysical survey is to extend to the area immediate to the foreshore to determine if the pathway and associated ordnance stones survive in any form.
- Archaeological testing is to be undertaken in the area of the path and ordnance stones to determine if any evidence for same exists.

Response

There will be no material removed from the foreshore during the construction of the coastal protection works. The shingle path to be constructed for the works will form the base of the coastal protection material or sacrificial material and will not be removed. A licensed metal detector survey of the foreshore has already been undertaken and reported on in the Underwater Archaeological Impact Assessment.

The mitigation required by the Department will be undertaken as outlined in section 14.6.1 of Chapter 14 of the EIS. A suitably qualified, licence-eligible, underwater archaeologist will be engaged to carry out monitoring of all works associated with the coastal protection works as outlined by the Underwater Archaeology Unit. The geophysical survey will include the area immediate to the foreshore and archaeological testing will be undertaken in the area of the path and ordnance stones to determine if any evidence for same exists.

3.2 Observations have been made by the County Archaeologist, Cork County Council in the internal technical report submitted.

The observations include a recommendation for clarification through pre-development archaeological testing of the possible sub-surface remains of a path across the proposed development site from Ringaskiddy Martello tower northeast to Gobby Beach. It is also observed that the context of a cannon ball find was not stated. Monitoring the Ringaskiddy Martello tower to ensure it is not damaged by vibration during the proposed development is

recommended. The indirect visual impact on the 50 recorded archaeological sites within the 2km study area is noted, however, it is stated that “*given the industrial landscape in which the development is proposed and the nature and distance of the vast majority of these sites from the proposed development that this is unlikely to be an issue*”. The visual impact on Ringaskiddy Martello tower is noted as a concern and this is dealt with below in conjunction with several other submissions on the subject of visual impact on the historic military monuments in the lower harbour. Finally, the County Archaeologist notes in her technical report that she is satisfied in general with regard to the direct impact on archaeology.

Response

Current evidence strongly suggests that the path from the Martello tower northeast to Gobby Beach as shown on the 1st, 2nd and 3rd editions of the OS 6-inch maps (of 1841, 1902 and 1934) does not survive on the site. There is no above ground evidence for the path and the area in question, which now slopes steeply, appears to have been used as a cut area for reclamation works in Ringaskiddy in the second half of the 20th century. A drawing has been prepared showing a section along the line of the path from the Martello tower northeast to Gobby Beach. The profile of the land along the path as shown by the contours on the 1934 OS 6-inch map is presented as well as the existing profile of this ground. The discrepancy between the two shows the amount of ground removed from this area since 1934. As outlined in Section 14.6.1 Chapter 14 of the EIS pre-construction geophysical survey and archaeological testing are proposed for the area of the path. Given the weight of evidence that the path does not survive it is suggested that the pre-development archaeological investigations as outlined in the mitigation above would be sufficient to address this point.

The cannon ball referred to in the report was found during a licenced metal detector and intertidal survey of the foreshore at Gobby Beach (15D0046 and 15R0050) requested by the Underwater Archaeology Unit following consultations with them (included in Section 14.1.3 of Appendix 14.1). The cannon ball (of approximately 62mm diameter) was found in the intertidal zone in an area of sea-weed covered stones and cobbles. It was an isolated find with no associated features or other finds. Following appropriate conservation by an accredited conservator it has now been deposited with the Cork Museum. Its precise location was recorded as ITM coordinates and this area will not be impacted by the coastal protection works.

Monitoring of the Ringaskiddy Martello tower will be carried out as recommended in the technical report by the County Archaeologist.

3.3 Observations have been made by the Conservation Officer, Cork County Council in the internal technical report submitted.

Submission

The report by the Conservation Officer outlines that the proposed development will not physically impact the Martello tower but is concerned about the inter-visibility between the tower and Spike Island. This is dealt with below in conjunction with several other

submissions on the subject of visual impact on the historic, military monuments in the lower harbour. The Conservation Officer notes in her technical report that she is satisfied that the proposed development will not physically impact on the Martello tower.

3.4 Observations have been made by the County Archaeologist, Cork County Council; the Conservation Officer, Cork County Council; An Taisce; and others in relation to the significance of the historic military monuments in the lower harbour and the significance of the inter-visibility between them.

Submission

The submissions outline the direct effects on the setting of the Martello Tower and its relationship with other historic monuments and features in the harbour including Spike Island which is being developed as a major tourist attraction. The inspector's conclusions on PA0010 are outlined which note the commanding position of the Martello tower arising from its central position within the harbour and panoramic views over same and how the scale of the proposed development would change and challenge the topographic setting of the tower and sever the visual relationship with Fort Westmoreland on Spike Island rendering it redundant.

Submissions outline a failure to take into account the significance of the three historic military installations Westmoreland Fort Mitchell on Spike Island, Camden Fort Meagher and Carlisle Fort Davis and their visual connection with the Martello tower. Submissions also outline that the main process building and stack would be within the heritage triangle of Camden Fort Meagher, Westmoreland Fort Mitchell and the Ringaskiddy Martello and that any interference in this visual connectivity would fundamentally detract from their character and setting.

Response

Sections 14.3.5 and 14.5.1.4 of Chapter 14 of the EIS and Section 14.3.5.1.1 of Appendix 14.3 outline the historical background to the development of the elaborate military defences in the lower harbour (Camden Fort Meagher and Carlisle Fort Davis at the mouth of the harbour, Westmoreland Fort Mitchell on Spike Island, Covefort at Carrignafoy on the Great Island and the two Martello towers one on Haulbowline Island and the other adjoining the development site at Ringaskiddy). The historical and physical development of these defences is outlined and their relationship with each other and with other contemporary military buildings within the harbour and beyond is recognised and discussed. The level of legal protection afforded them either as Recorded Monuments and or Protected Structures is clearly stated. There is no effort to deny or downplay the significance of the lower harbours military history.

Section 11.6.1 of Chapter 11 (Landscape & Visual) of the EIS and Section 14.6.2 of Chapter 14 of the EIS outline how the orientation, massing and colouring of the main process building

have been designed and positioned on the site to reduce the visual impact on Ringskiddy Martello tower. The main process building will be coloured varying shades of natural green to blend with the darker shades of the ridge background and lighter sky shades at the higher level.

Notwithstanding these mitigations, the residual impact of the proposed development on the views to and from the Martello tower and the broader architectural heritage of the lower harbour are clearly acknowledged in Section 11.5.4.9 Chapter 11 and sections 14.5.1.4 and 14.7 of Chapter 14 of the EIS. The height and scale of the development will diminish the tower's position of prominence on the peninsula and obscure the view to and from the tower over the northern part of Spike Island and Marloag Point on the Great Island. The visual landscape of the tower will be permanently altered. This is seen in the context of the changes and alterations to the landscape in the 200 years since the tower was built; extensive reclamation, industrialisation and urbanisation of the town of Cobh, in particular, have combined to permanently alter the rural setting of the early 19th century landscape in which the tower was built.

In addressing the visual relationship or inter-visibility of Ringaskiddy Martello tower and the contemporary military structures in the lower harbour I refer to Paul Kerrigan's 1995 publication on the 'Castles and Fortifications in Ireland 1485-1945' as outlined in section 5.1.1 of Appendix 14.3 of the EIS "*The Ringaskiddy tower provided for some defence of the high ground on the western side of the harbour, with a field-of-fire over the harbour to the east and to the north west, the area west of Haulbowline Island*". He notes that "*the tower on the highest point of Haulbowline was a strong point for the island, with a clear field-of-fire over parts of the harbour not visible from or within range of Fort Westmoreland on Spike Island*". The visual relationship or inter-visibility between the Ringaskiddy Martello and Westmoreland Fort Mitchell on Spike Island will not be severed; the full extent of the fort will remain visible from the Martello tower. The inter-visibility of the Ringaskiddy and Haulbowline Martello towers will not be impacted. Furthermore, as outlined in Section 11.5.4.9 of Chapter 11 and section 14.7.1 of Chapter 14 of the EIS, there will be no obstruction of views to Westmoreland Fort Mitchell on Spike Island, Camden Fort Meagher and Carlisle Fort Davis at the mouth of the harbour.

4. Conditions Recommended by Cork County Council

Cork County Council has recommended the attachment of a condition which is contained in its Report received by the Board on 13 April 2016. The applicant is in agreement with the approach taken by the Council in relation to the condition recommended, which for ease of reference, is set out below:

23. The mitigation measures as proposed in Chapter 14 of the EIS with regards to Archaeology shall be implemented in full to the satisfaction of the Planning Authority. Further the Martello Tower shall be monitored during the construction period to ensure that vibration associated with proposed works will not cause damage to the structure. Full details shall be submitted to and agreed with the Planning Authority prior to the commencement of development.

This condition shall be implemented in full by Indaver.

Cork County Council has suggested Further Information /Clarification in its Report received by the Board on 13 April 2016.

County Archaeologist

1. Clarification should be sought in the form of pre-development archaeological testing to establish the presence or absence of the historic path between Gobby Beach and the Martello Tower.

The applicant is proposing to carry out licensed geophysical survey and licensed archaeological testing prior to construction commencing. Given the weight of evidence that the path does not survive it is suggested that the pre-development archaeological investigations proposed would be sufficient to address this point.

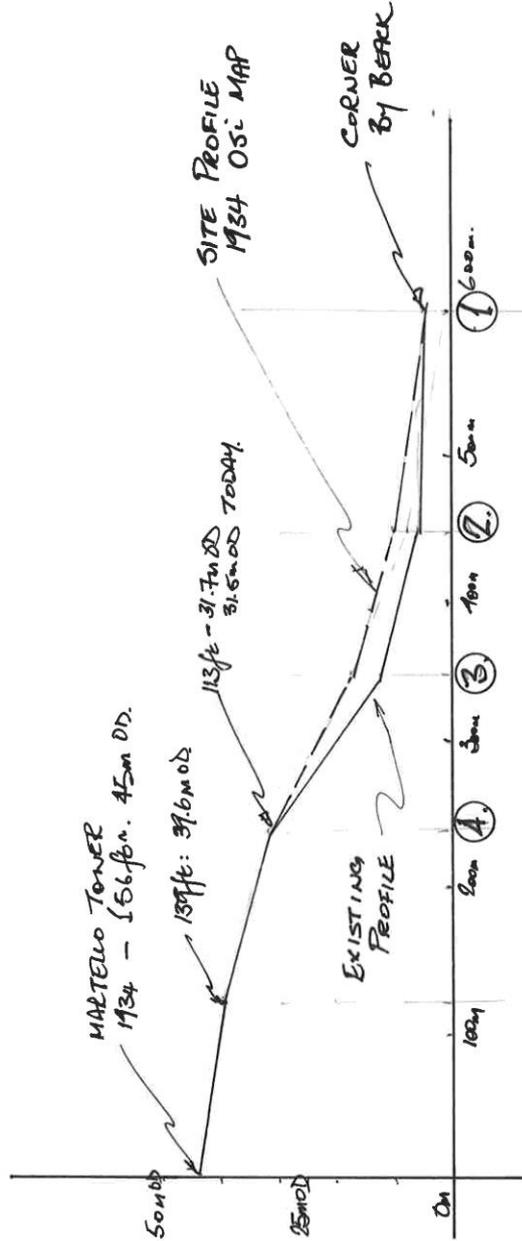
5. Conclusion

In summary, the archaeological, architectural and cultural heritage assessment of the site examined all of the available resources to outline the cultural development of the site within the broader landscape. The site was visited on a number of occasions and no new previously unrecorded sites of cultural heritage significance were revealed. It is acknowledged, however, that where ground reduction is proposed it is always possible that previously undetected archaeological remains may be uncovered. Appropriate mitigation including a licensed geophysical survey followed by licensed archaeological testing of the area to be impacted by the proposed development (i.e. Areas 1 and 2) will be undertaken prior to construction commencing. A report outlining the results of the investigations will be submitted to the National Monuments Service and Local Authority and if archaeological features or deposits are revealed suitable mitigation will be carried out in agreement with these bodies.

An Underwater Archaeological Impact Assessment of the coastal protection works was submitted and archaeological monitoring by a suitably qualified, licence-eligible, underwater archaeologist of all works associated with the coastal protection works will be undertaken.

The upper portion of the main process building and the stack will be visible from Ringaskiddy Martello tower looking to the northeast thus obscuring the view over the northern part of Spike Island and further northeast over the southeastern tip of the Great Island at Marloag Point. The orientation, massing and colouring of the main process building and stack have been designed and positioned on the site to reduce the visual impact on Ringaskiddy Martello tower. The inter-visibility between the Ringaskiddy Martello tower and other military structures in the lower harbour including the Martello tower on Haulbowline, Westmoreland Fort Mitchell on Spike Island and the defences at the mouth of the harbour Camden Fort Meagher and Carlisle Fort Davis will not be affected by the proposed development.

ELEVATION ALONG MAETELLO TOWER PATH



HORIZONTAL = 1:400
VERTICAL = 1:500