

Dealing with Archaeological Risk at Construction Stage-

TII funded Minor & Safety Improvement Schemes

1. Introduction

This document provides an internal protocol for dealing with archaeological risk on minor and safety improvement schemes the construction of which is tendered and addresses the matter of how to deal with archaeological risk at construction stage on such schemes¹.

2. Background

Under PPP and D&B contracts there is an established mechanism for addressing any archaeological risk at Construction Stage that may remain following any Advance Works Archaeological Contracts. This involves transfer of risk to the Contractor and the process of dealing with archaeological discovery during construction is well laid out in the tender/contract process.

Under current forms of contract for minor schemes² there is no established detailed process for dealing with any residual archaeological risk at Construction Stage (other than its classification as a Delay and/or Compensation Event). This document addresses this.

3. Basic Principles on dealing with Archaeology on Minor & Safety Improvement Schemes

1. All designs should be assessed at the earliest possible stage by TII Archaeologists so as to determine the level of archaeological risk and appropriate mitigation strategies required, if any. This should be carried out as part of the business appraisal process³;
2. If risk is deemed to warrant it, in order to remove/reduce risk to Construction Contracts in terms of delay and cost, it should always be the intention to carry out Advance Works archaeological mitigation before construction contracts go to tender/commence on the ground;
3. In all instances Archaeological Requirements should be detailed in an Appendix to the construction tender documents (see sample Appendix B);
4. The risk of dealing with archaeology encountered at construction stage is to be met by the Contractor, through either a Scheduled Delay and/or Compensation Event⁴ who must engage a 'Contractor's Archaeologist' to carry out any required archaeological mitigation;
5. The 'Project Archaeologist' shall be the TII Archaeologist (see Definitions in Appendix B to this document);
6. In all instances, irrespective of level of Advance Works Archaeological Contract, an Appendix of Archaeological Requirements must be included in the construction tender/contract documents to detail what happens in the event of discovery of archaeology (see Appendix B).

¹ Where schemes are being constructed by Direct Labour, archaeological requirements still apply- consultation with TII Archaeologist shall be needed- see Appendix C

² **PW-CF3** - Public Works Contract for Civil Engineering Works designed by the Employer **PW-CF5** - Contract for Minor Building & Civil Engineering works designed by the Employer

³ Some schemes may require no Advance Works Archaeological investigation due to low potential for discovery- TII Archaeologist to advise.

⁴ As of Sept 2011 Archaeology is classed as a Delay event only on PW-CF3 contracts and as both a Delay & a Compensation Event on PW-CF5 contracts

4. Monitoring of earthworks by the Contractor's Archaeologist

Monitoring of earthworks shall only be a requirement of the Construction Contract in those cases where lands with archaeological potential within the Site have not been tested as part of any Advance Works Archaeological Contracts.

In the event that monitoring is required the following must be carried out-

1. Relevant Appendix of Archaeological Requirements to construction tender/contract documents must detail Areas to be Monitored by the Contractor's Archaeologist.
2. An item for provision of Monitoring by the Contractor's Archaeologist must be provided in the Pricing Document of the construction tender documents

APPENDIX A

Case Study Examples

Example 1

All landtake has been subject to Advance Works Test Excavations and all identified archaeological sites have been resolved ahead of construction

- Actions**
1. Details of advance works archaeological contracts should be given as tender information to construction contract Tenderers in Appendix of Archaeological Requirements;
 2. Letter from National Monument Service should be obtained (through TII Archaeologist) stating there is no requirement for archaeological monitoring of earthworks in areas already tested- this letter should be made available to construction contract Tenderers in Appendix of Archaeological Requirements;
 3. Notwithstanding all areas may have been tested, construction tender/contract documents to contain relevant Appendix of Archaeological Requirements detailing how process of dealing with any archaeological discoveries during construction will be dealt with (see Appendix B this document).
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Example 2-

All landtake has been subject to Advance Works Test Excavations but not all identified archaeological sites have been resolved ahead of construction

- Actions**
1. Details of advance works archaeological contracts should be given as tender information to construction contract Tenderers in Appendix of Archaeological Requirements;
 2. Letter from National Monument Service should be obtained (through TII Archaeologist) stating there is no requirement for archaeological monitoring of earthworks in areas already tested- this letter should be made available to construction contract Tenderers in Appendix of Archaeological Requirements;
 3. Construction tender/contract documents to contain relevant Appendix of Archaeological Requirements detailing how process of dealing with any remaining identified archaeological sites and any discoveries during construction will be dealt with (see Appendix B this document);
 4. Relevant Appendix of Archaeological Requirements to construction tender/contract documents should detail any Archaeological Exclusion Zones where excavation works may still be continuing and state relevant timescales for deferred access.
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Example 3-

Some landtake has (or has not) been subject to Advance Works Test Excavations but there remain some lands with archaeological potential within the Site.

- Actions**
1. Details of advance works archaeological contracts should be given as tender information to construction contract Tenderers in Appendix of Archaeological Requirements;
 2. Letter from National Monument Service should be obtained (through TII Archaeologist) stating there is no requirement for archaeological monitoring of earthworks in areas already tested- this letter should be made available to construction contract Tenderers in Appendix of Archaeological Requirements;
 3. Construction tender documents to contain relevant Appendix of Archaeological Requirements detailing how process of dealing with archaeological discovery will be dealt with (see Appendix B this document);
 4. Areas to be Monitored by the Contractor's Archaeologist must be detailed in Appendix of Archaeological Requirements to construction tender/contract documents (see Appendix B this document).

APPENDIX B

Sample Appendix of Archaeological Requirements to Construction Tender/Contract Documents (PW-CF3 & PW-CF5)

Appendix 1/76

76.1 Definitions

- 76.1.a "**Contractor's Archaeological Consultant**" means the individual(s) appointed by the Contractor for the Contract of appropriate skill with regard to any fossils, coins, antiquities, monuments or other items of value or of archaeological or geological interest or human remains including investigations or discoveries on or adjacent to the Site and maintaining a watching brief and carrying out of any required archaeological excavations during the execution of the Works.
- 76.1.b "**Project Archaeologist**" means the individual appointed by TII in accordance with the Code of Practice between the Minister for Arts, Heritage, Gaeltacht and the Islands and the NRA with regard to any archaeological investigations or finds (fossils, coins, antiquities, monuments or other items of value or of archaeological interest or human remains including investigations or discoveries on the Site) and who shall oversee the archaeological operations carried out by the "Contractor's Archaeological Consultant".
- 76.1.c "**Employers Archaeological Consultant**" means the individual(s) appointed by the Employer to carry out archaeological works as part of the Advance Works Archaeological Contract(s).

76.2 Advance Works Archaeological Services Contracts

The Employer shall have organised the following archaeological works to have been carried out within the Area provided by the Employer for the Works in advance of the Starting Date:

- (i) x1 number Advance Archaeological Investigation and Resolution contract

[TO BE AMENDED AS APPROPRIATE]

76.3 Areas to be monitored by the Contractor's Archaeological Consultant

Areas where:-

- (i) No archaeological test excavations shall have been carried out, and hence where monitoring shall be undertaken by the Contractor's Archaeological Consultant in accordance with the Works Requirements shall be as identified in the Schedule of Specific Sites of Archaeological Interest in this Appendix 1/76 of the Specification and as shown on drawings numbered [Ref Number] to [Ref Number] inclusive and [Ref Number] inclusive.

The Contractor shall allow in the execution and completion of the Works for compliance with the requirements of this Appendix.

76.4 Areas where Advance Works Archaeological Contracts are ongoing and Archaeological Exclusion Zones apply

None [TO BE AMENDED AS APPROPRIATE to include drawings of Exclusion Zones and details of deferred access timescales]

76.5 Archaeological Works Requirements

- 76.5.1. A Project Archaeologist and a Contractor's Archaeological Consultant shall be appointed for the execution and completion of the Works, in accordance with all the following:
- (1) the Project Archaeologist shall perform the duties specified in the Code of Practice between the NRA and the Minister for Arts, Heritage, Gaeltacht and the Islands [now exercised by the Minister for Arts, Heritage and the Gaeltacht]
 - (2) the Contractor's Archaeological Consultant shall be retained by the Contractor for the duration of the relevant earthworks, topsoil stripping, grading and other soil disturbance where archaeological material may be uncovered during the execution and completion of the Works.
- 76.5.2 Certain archaeological sites have or may have been identified during the execution of advance archaeological investigation or resolution contracts and archaeological works in relation to these archaeological sites as relevant may have been organised by the Employer to take place in advance of or after the Contract Date.
- 76.5.3. Where archaeological excavation at sites has not been fully completed by the Employer in advance of the Contract Date or shall not be intended to have been fully recorded by the Employer in advance of the Contract Date, these areas shall be as included in Appendix 1/76 of the Specification (at section 76.4) and the Contractor shall comply with the exclusion timeframes as detailed in this Appendix in treating these areas as archaeological exclusion zones until the necessary Archaeological Works shall have been completed.
- 76.5.4 In the areas as listed in Appendix 1/76 of the Specification (at section 76.3) , where no archaeological test excavations shall have been carried out prior to the Contract Date, the Design, execution and completion of the Works shall allow for all topsoil strip, earthworks operations and excavations in those areas to be monitored by the Contractor's Archaeological Consultant.
- 76.5.5 The Contractor shall give the Employer's Representative, the Project Archaeologist and the Archaeological Consultant a minimum of 4 weeks prior written notice of topsoil stripping, earthworks, excavations and any other Works Items that may cause any fossils, coins, antiquities, monuments or other items of value or of archaeological interest or human remains to be discovered in any of the said areas as listed in Appendix 1/76 of the Specification (at section 76.3).
- 76.5.6 Notwithstanding any other provisions of the Contract, where wetland areas shall be encountered within either of the following areas:
- (1) the Area provided by the Employer for the Works, or
 - (2) the Area provided by the Contractor for the Works,
- execution and completion of the Works shall allow for archaeological mitigation within any wetland areas to be executed by the Contractor's Archaeological Consultant in accordance with the 'Guidelines for the Testing and Mitigation of the Wetland Archaeological Heritage for National Road Schemes', as contained within the TII Environmental Assessment and Construction Guidelines unless such areas shall have already been the subject of archaeological test excavation by the Employer.
- 76.5.7 Such mitigation as referred to in paragraph 76.5.6 of this Appendix may include test excavation, monitoring of Works Items and archaeological excavation. All mitigation shall be undertaken by the Contractor's Archaeological Consultant in accordance with licences issued to the Employer by the Minister for Arts, Heritage and the Gaeltacht and in consultation with the Project Archaeologist and shall be monitored by the Project Archaeologist
- 76.5.8 The Contractor shall give the Contractor's Archaeological Consultant, the Employer's Representative and the Project Archaeologist a minimum of 4 weeks prior written notice of intention to commence execution Works that may cause any fossils, coins, antiquities, monuments or other items of value or of archaeological interest or human remains to be discovered in any of the wetland areas as detailed in paragraph 76.5.6.
- 76.5.9. Notwithstanding any other provisions of the Contract, where any fossils, coins, antiquities, monuments or other items of value or of archaeological interest or human remains are found on the Site the Contractor shall immediately permit such items to be investigated by the Contractor's Archaeological Consultant in accordance with paragraphs 76.5.13 to 76.5.17 inclusive of this Appendix 1/76.

- 76.5.10 Notwithstanding any other provisions of the Contract, where any fossils, coins, antiquities, monuments or other items of value or of archaeological interest or human remains are found on or adjacent to the Site, this shall not constitute a Compensation Event under the Contract as referred to in the Conditions. **AMEND AS NECESSARY- see footnote**⁵
- 76.5.11 Notwithstanding any other provisions of the Contract, the Contractor shall in the execution of the Works for monitoring of the topsoil strip in accordance with paragraph 76.5.13 of Appendix 1/76 be required to meet any other requirements of the Contract.
- 76.5.12 The Contractor shall issue a programme of works and corresponding maps/drawings to the Employer's Representative, the Project Archaeologist and the Contractor's Archaeological Consultant thereby facilitating the Contractor's Archaeological Consultant to complete the archaeological mitigations works as set in this specification e.g., archaeological monitoring or further archaeological investigation. The Contractor shall ensure sufficient time is allocated in the programme of works to address any additional archaeological works detailed in this appendix.
- 76.5.13 A minimum four weeks written notice shall be given to the Employer's Representative, the Project Archaeologist and the Consultant Archaeologist to allow the Contractor's Archaeological Consultant to plan the inspection work. Early notice will assist in an earlier arrival on site by the Contractor's Archaeological Consultant to monitor earthworks. When there shall be breaks in earthworks operations during the execution of the Works, the Contractor shall notify the Contractor's Archaeological Consultant of the date for recommencement of execution of such affected earthworks Works
- 76.5.14 Where any fossils, coins, antiquities, monuments or other items of value or of archaeological interest or human remains are discovered on the Site during the execution of the Works, the Project Archaeologist and the Employer's Representative shall be immediately notified and all affected Works shall cease in the immediate area concerned, when instructed by the Employer's Representative, in order to permit the Contractor's Archaeological Consultant to investigate any such discovery.
- 76.5.15 Notwithstanding any other provisions of the Contract, the Contractor shall immediately fence off an adequate area centred on the archaeological remains (76.5.14) using Netlon fencing or similar approved by the Employer's Representative. The Contractor shall provide where feasible for two-way access across the landtake affected by any such discovery
- 76.5.16 Where it has been established by the Client's Project Archaeologist, in consultation with the Contractors Archaeological Consultant that archaeologically significant material is present, the Department of Arts, Heritage and the Gaeltacht and the National Museum of Ireland shall be notified by the Project Archaeologist. The Contractor will then be required to implement the requirements of the Department of Arts, Heritage and the Gaeltacht and the National Museum of Ireland which may involve the full archaeological excavation of any remains discovered. With regard to archaeological remains deemed to be a national monument as defined by the National Monuments Acts 1930 to 2004, the Minister for Arts, Heritage and the Gaeltacht will decide on the appropriate mitigation.
- 76.5.17 Notwithstanding any other provisions of the Contract, secure site offices and all necessary facilities in accordance with welfare legislation shall be provided by the Contractor on or near those sites where such archaeological excavation shall be required. The Contractor shall fence off the said excavations in a manner adequate to protect the site.
- 76.5.18 The Contractor shall consult and comply with any instructions given by the Project Archaeologist with regard to known archaeological remains adjacent to the Area provided by the Employer for the Works and ,where applicable, the Area provided by the Contractor for the Works. The execution and completion of the Works shall have no adverse effect on such archaeological remains.

⁵ **PW-CF3** - - Public Works Contract for Civil Engineering Works designed by the Employer (as of Sept 2011) - Archaeology classed as a Delay event only

PW-CF-5 - Contract for Minor Building & Civil Engineering works designed by the Employer - Archaeology classed as a Delay & Compensation Event

76.6 Protection of Archaeology shall include all of the following:

Notwithstanding any other provisions of the Contract, in respect of archaeological sites, monuments and other historic or heritage features affected by the execution and completion of the Works, the Contractor shall consult and comply with any requirements or directions of the following:

- (i) the Project Archaeologist as appointed under the Code of Practice between the National Roads Authority and the Minister for Art, Heritage, Gaeltacht and the Islands (2000) [now exercised by the Minister for Arts, Heritage and Gaeltacht]
- (ii) the National Monuments Section of the Department of Arts, Heritage and the Gaeltacht,
- (iii) if relevant (e.g. the discovery of human remains or archaeological artefacts), the National Museum of Ireland and
- (iv) if relevant (e.g. where a national monument is discovered in the course of the Works) the directions of the Minister for Arts, Heritage and the Gaeltacht.

76.7 Archaeological Objects and Human Remains

- 76.7.1 Unless otherwise specified in the Works requirements, if any fossils, coins, antiquities, monuments or other items of value or of archaeological or geological interest or human remains are discovered on the Site, the Contractor shall not disturb them, but shall take all necessary steps to preserve them, and shall promptly notify the Employer's Representative [and comply with any instructions given]. Any archaeological artefacts discovered in the course of works will be the property of the Employer, who will seek to have them accessioned to the National Museum of Ireland as soon as possible.

APPENDIX C

Sub-protocol for dealing with archaeology when construction is being carried out by direct labour (not tendered)

Same principles apply as for tendered works-

1. All designs should be assessed at the earliest possible stage by TII Archaeologists so as to determine the level of archaeological risk and appropriate mitigation strategies required, if any⁶.
2. If risk is deemed to warrant it, in order to remove/reduce risk to construction works in terms of delay and cost, Advance archaeological mitigation works should be undertaken before construction commences.

Principle 2 above is especially important when construction works are being carried out by direct labour as there is no contractual provision to allow for archaeological discovery during construction in these cases.

Where archaeological risk is left to construction stage or in the event of archaeological discovery during construction, the relevant local authority shall retain the services of an archaeological consultancy to carry out necessary archaeological mitigation.

⁶ Some schemes may require no Advance Works Archaeological investigation due to low potential for discovery- TII Archaeologist to advise