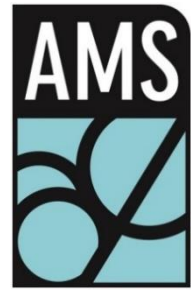


# Appendix C17.06c

## Archaeological Investigations (Testing) Programme Results

### TA3 Carnshannagh Stage (i)a Test Excavation and Stage (i)h Metal Detection Survey Report

# Archaeological Consultancy Services Contract: Stage (i): TEN-T Priority Route Improvement: TA3 Carnshannagh Updated Stage (i)a Test Excavation and Stage (i)h Metal Detection Survey Report



Prepared for Donegal County Council  
By Denis Shine and James McKee

Licence Nos.: 20E0502 and 20R0184

Updated July 2022

## TITLE PAGE

**AMS Job No.** J2077

**Project Name:** TEN-T Priority Route Improvement Project: Stage (i), Co. Donegal

**Licence Nos.** 20E0502 and 20R0184

**Townlands:** Carnshannagh

**Site Types:** Prehistoric Settlement

**ITM:** 628684, 904366

**Archaeological Consultant:** Archaeological Management Solutions Ltd,  
Fahy's Road, Kilrush, Co. Clare

**Excavation Director:** James McKee

**AMS Senior Archaeologist:** Denis Shine

**Report Authors:** Denis Shine and James McKee

**Report Status/Revision:** Final\_Rev.3.2

**Revision Date:** 08 July 2022

**Document Reviewers:** Fintan Walsh and Bryn Coldrick

**Approved By:** Ed Danaher

**File Name:** TEN-T TA3 Carnshannagh\_Stage(i)a&h\_Updated\_Final

## Contents

<b>1</b>	<b>Introduction .....</b>	<b>8</b>
1.1	Brief Description of the Approved Scheme .....	8
1.2	Planning Background .....	8
1.3	Statutory Approvals.....	9
1.4	Previous Assessments and Documented Archaeological Sites .....	9
1.5	Archaeological and Environmental Context.....	9
<b>2</b>	<b>Methods.....</b>	<b>11</b>
2.1	Aims and Scope of Stage (i) Test Excavations .....	11
2.2	Survey and Excavation Methods .....	11
2.3	Finds Retrieval and Sampling Methods.....	12
2.4	Specialist Contributions and/or Consultations.....	12
2.5	Radiocarbon dating .....	13
2.6	Conditions.....	13
2.7	Constraints on Methods.....	13
<b>3</b>	<b>Stage (i)a Test Excavation Results .....</b>	<b>14</b>
3.1	Carnshannagh Results .....	14
<b>4</b>	<b>Metal Detection Survey.....</b>	<b>19</b>
4.1	Aims and Scope of the Stage (i)h Metal Detection Survey Services.....	19
4.2	Survey Methodology .....	19
4.3	Survey Constraints.....	19
4.4	<b>Survey Results.....</b>	<b>19</b>
<b>5</b>	<b>Discussion.....</b>	<b>20</b>
<b>6</b>	<b>Significance of Findings .....</b>	<b>21</b>
6.1	Carnshannagh.....	22
<b>7</b>	<b>Impact Statement &amp; Recommendations .....</b>	<b>23</b>
<b>8</b>	<b>Bibliography .....</b>	<b>24</b>
8.1	References.....	24
8.2	Cartographic Sources .....	24
8.3	Online and Other Resources .....	24
	<b>Appendix 1: List of Contexts .....</b>	<b>25</b>
	<b>Appendix 2: List of Finds.....</b>	<b>32</b>
	<b>Appendix 3: List of Samples .....</b>	<b>34</b>
	<b>Appendix 4: Radiocarbon Dating.....</b>	<b>35</b>
	<b>Appendix 5: Excavation Bulletin.....</b>	<b>37</b>

**Appendix 6: Monument Report Form.....39****Figures****Plates****List of Tables**

Table 1: Names of townlands which contain Testing Areas.....	8
Table 2: Documented archaeological sites subject to Stage (i)a Standard Test Excavations .....	9
Table 3: Samples for priority radiocarbon dating on TEN-T Priority Route Improvement Project .....	13
Table 4: Trenches not completed.....	13
Table 5: Test trench detail.....	14
Table 6: Artefacts recovered as a result of test excavation .....	18
Table 7: Artefacts recovered from Metal Detection Surveys.....	19

**List of Figures**

Figure 1: Location of the Testing Areas on the TEN-T Priority Route Improvement Project
Figure 2: TA-3 Carnshannagh (Testing Area 3), Location showing impacted and surrounding Recorded Monuments
Figure 3: TA-3 Carnshannagh, Trenching layout overlaid on 1st edition 6-inch OS map
Figure 4: TA-3 Carnshannagh, Trenching layout overlaid on 25-inch OS map
Figure 5: TA-3 Carnshannagh, Trenching layout overlaid on modern aerial photography
Figure 6: TA-3 Carnshannagh, Trenching layout overlaid on geophysical and LiDAR survey
Figure 7: TA-3 Carnshannagh, Completed trench detail showing recorded features
Figure 8: TA-3 Carnshannagh, Completed trench detail, showing recorded features with geophysical survey
Figure 9: TA-3 Carnshannagh, Features recorded in Trench 59
Figure 10: TA-3 Carnshannagh, Features recorded in Trenches 60 and 66
Figure 11: TA-3 Carnshannagh, Trenches 59 and 60 Select section drawings of features

**List of Plates**

Cover Plate: Example of features at Carnshannagh (September 2020)
Plate 1: Example of trenching in the southern field (T37); facing northwest
Plate 2: Example of trenching in the southern field (T42); facing west
Plate 3: Example of trenching in the northern fields (T15); facing east
Plate 4: Post-medieval/modern field boundary/drain ([C.4]); facing northwest
Plate 5: Extension of T59, showing settlement features; facing east

Plate 6: Pit [C.9] and (C.10) in T60; facing northwest

Plate 7: Pit [C.17] and (C.18) in T60; facing north

Plate 8: Pit [C.11] in T59; facing northwest

Plate 9: Pit [C.15] in T59; facing northwest

Plate 10: Cluster of stakeholes and a posthole (C.38) around pit [C.11] in T59; facing northwest

Plate 11: Pit [C.19] and (C.20) in T66; facing south

Plate 12: Backfilling nearing completion at Carnshannagh; facing west

Plate 13: Re-seeding nearing completion at Carnshannagh; facing north

## Executive Summary

This updated report describes the results of Stage (i)a Standard Test Excavations and Stage (i)h Metal Detection Surveys in the townland of Carnshannagh as part of the Archaeological Consultancy Services Contract of the TEN-T Priority Route Improvement Project. This road scheme is covered by the Code of Practice agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (now the Minister for Housing, Local Government and Heritage) and Transport Infrastructure Ireland (TII) (TII 2017). TII nominated Orlaith Egan as Project Archaeologist with responsibility for the management of all archaeological aspects of the project.

The TEN-T Priority Route Improvement Project is part of the Trans-European Transport Network and comprises the construction of three sections of new road: Section 1: N15/N13 Ballybofey/Stranorlar Urban Region; Section 2: N56/N30 Letterkenny to Manorcunningham; and Section 3: N14 Manorcunningham to Lifford/Strabane/A5 link. Carnshannagh, in Section 3, is one of five Testing Areas (TAs) along the preferred route of the TEN-T project which require Stage (i)a Test Excavations and Stage (i)h Metal Detection Survey Services. The results of works at the other TAs will be reported in separate reports, with works in each location being undertaken under different licence numbers.

The total Stage (i)a testing linear metres excavated at Carnshannagh was 3,306m, representing a >12% sample of the greenfield area available for test excavations. During the Stage (i)a testing at Carnshannagh, a cluster of features, likely representing a small prehistoric settlement/camp, was uncovered. These features included a minimum of five postholes, seven stakeholes, eight pits (of indeterminate function) and a large burnt spread/deposit, based on initial assessment. Charred cereal (barley) from one of the pits produced a date of 1619–1454 cal. BC. A ditch and furrows were also recorded. Two isolated pits were also recorded, located southwest of the main cluster, directly adjacent the preferred route corridor, as set out at the time of testing. As a result of the test excavation process seven stone objects were recovered and subsequently identified to type where possible. In addition, a single metal artefact was recovered from metal detection of the topsoil during Stage (i)a archaeological testing. A further two metal objects were recovered as a result of the Stage (i)h Metal Detection Surveys at TA3 Carnshannagh. These two metal objects were assessed and identified where possible to find type.

The site at Carnshannagh may be adversely impacted upon by the scheme, pending the final design of the route within the preferred route corridor for the TEN-T road scheme. If the site cannot be avoided by the final design then the archaeology, as defined by the Stage (i)a testing, is recommended for pre-excavation preparatory work and preservation by record through full archaeological excavation.

## Acknowledgements

This report has been prepared by Archaeological Management Solutions (AMS) Ltd on behalf of Donegal County Council.

All archaeological excavations and surveys and other relevant archaeological works required were carried out under a licence issued by the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage (formerly the Department of Culture, Heritage and the Gaeltacht), in consultation with the National Museum of Ireland (NMI).

### **Client – Donegal County Council**

Senior Executive Engineer – Aine McHugh

Assistant Engineer – Peadar Kelly

### **TII Archaeologists**

Project Archaeologist – Orlaith Egan

Senior Archaeologist – Mary Deevy

### **National Monuments Service, Department of Housing, Local Government and Heritage**

Archaeologist – Mark Keegan

### **Fieldwork Staff**

James McKee, Ger Dowling, Ed Danaher, Denis Shine, Thomas Delaney, Adrian Dabrowski, Richard Hinchy and Daniel Keane

### **Report Production**

Report Writing – Denis Shine and James McKee

Report Editing – Fintan Walsh and Bryn Coldrick

Figure Production – Hugh Kavanagh

## Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data has been collated, the authors and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

© Archaeological Management Solutions Ltd 2022

## Abbreviations and Definitions

Abbreviation	Definition
<b>AMS</b>	Archaeological Management Solutions Ltd
<b>EIAR</b>	Environmental Impact Assessment Report
<b>GPS</b>	Global Positioning System
<b>ITM</b>	Irish Transverse Mercator
<b>NMI</b>	National Museum of Ireland
<b>NMS</b>	National Monuments Service
<b>OD</b>	Ordnance Datum
<b>OS</b>	Ordnance Survey
<b>RMP</b>	Record of Monuments and Places
<b>SMR</b>	Sites and Monuments Record
<b>TA</b>	Testing Area
<b>TII</b>	Transport Infrastructure Ireland

## Coordinate System

All coordinates are in Irish Transverse Mercator (ITM)

## 1 Introduction

This report describes the results of Stage (i)a Test Excavations and Stage (i)h Metal Detection Survey Services in the townland of Carnshannagh as part of the Archaeological Consultancy Services Contract of the TEN-T Priority Route Improvement Project (Figures 1–11).

This road scheme is covered by the Code of Practice agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (now the Minister for Housing, Local Government and Heritage) and Transport Infrastructure Ireland (TII) (TII 2017). TII nominated Orlaith Egan as Project Archaeologist with responsibility for the management of all archaeological aspects of the project.

### 1.1 Brief Description of the Approved Scheme

The TEN-T Priority Route Improvement Project is part of the Trans-European Transport Network and comprises the construction of three sections of new road: Section 1: N15/N13 Ballybofey/Stranorlar Urban Region; Section 2: N56/N30 Letterkenny to Manorcunningham and Section 3: N14 Manorcunningham to Lifford/Strabane/A5 link. Carnshannagh, in Section 3, is one of five TAs along the preferred route of the TEN-T project which require Stage (i)a Test Excavations and Stage (i)h Metal Detection Survey Services. The results of works at the other TAs will be reported in separate reports, with works in each location being undertaken under different licence numbers.

**Table 1: Names of townlands which contain Testing Areas**

Testing Area	Townland	Civil Parish	ITM	Licence Nos.
TA1	Drumboe Lower	Stranorlar	613410, 895454	20E0455 and 20R0167
TA2	Trimragh and Drumgreggan	Leck	621237, 911224	20E0501 and 20R0183
TA3	Carnshannagh	Drumcliffe	628587, 904423	20E0502 and 20R0184
TA4	Murlough	Drumcliffe	631615, 899290	20E0487 and 20R0182
TA5	Curraghalane	Drumcliffe	632263, 897206	20E0503 and 20R0185

### 1.2 Planning Background

Stage (i)a Test Excavations and Stage (i)h Metal Detection Survey Services in the townland of Carnshannagh were undertaken to provide further information as part of the design and environmental evaluation phase of the TEN-T Priority Route Improvement Project, Co. Donegal.

The investigations described herein are at one of five areas along the preferred route of the TEN-T project and include the areas as listed in Table 1 above.

### 1.3 Statutory Approvals

The test excavations detailed in this report were carried out under Licence No. 20E0502 (Test Excavations). The metal detection survey was undertaken under Licence No. 20R0184. Permits were issued by the Department of Culture, Heritage and the Gaeltacht (now Department of Housing, Local Government and Heritage) in consultation with the National Museum of Ireland (NMI).

### 1.4 Previous Assessments and Documented Archaeological Sites

There have been no previous intrusive archaeological investigations for the TEN-T project. An Environmental Impact Assessment Report (EIAR) is currently being prepared by Kate Robb of John Cronin and Associates but was not available at the time of writing. Geophysical and LIDAR assessments undertaken in 2020 are described in further detail below.

A total of five documented archaeological sites were subject to Stage (i)a Standard Test Excavation Services and Stage (i)h Metal Detection Survey Services, as listed in Table 2 below.

**Table 2: Documented archaeological sites subject to Stage (i)a Standard Test Excavations**

TA No.	Townland	RMP No	ITM	Classification
TA1	Drumboe Lower	DG078-005	613410, 895454	Site of Church
TA2	Trimragh and Drumgreggan	DG53-028 and DG053-28001	621237, 911224	Site of Church and Graveyard
TA3	Carnshannagh	DG062-024	628587, 904423	Site of Enclosure
TA4	Murlough	DG070-048	631615, 899290	Site of Standing Stone
TA5	Curragehalane	DG070-082	632263, 897206	Souterrain

### 1.5 Archaeological and Environmental Context

The site is located within the townland of Carnshannagh, close to the nucleated farmsteads/settlements of Carnshannagh, as shown on the first-edition Ordnance Survey (OS) map (Figure 3). The site is currently used for tillage and pasture, and historically is recorded as pasture. The closest monument to the enclosure site, a ringfort (DG062-022), is located some 790m to the northeast.

The proposed test excavation area consists of a large, partly divided, field of pastureland (at the northern limit), as well as a large tillage field, at the southern limit – all bounded by hedgerows. The site is also bound by the N14 to its western extent. The area slopes from northeast to southwest. The preferred route of the proposed new road passes directly east of the possible enclosure DG062-024, which is located c. 70m east of the current N14 road.

The online Sites and Monuments Record (SMR), as maintained by the Archaeological Survey of Ireland (ASI), currently does not contain a record for the enclosure, which is also not indicated on OS mapping. On the first-edition six-inch OS map, the site is contained in a very large irregular field (with some areas of forestry), with the nucleated settlement of Carnshannagh at its eastern extent; this field has since been sub-divided into a series of square and rectangular pasture fields.

The 25-inch OS map indicates that the 'modern' field system had been established by this time, with c. 24 new fields created since the first-edition OS map (Figure 4). Otherwise, the immediate landscape around the site remains largely unchanged.

Geophysical surveys have identified numerous possible archaeological features, while two areas of archaeological potential were also identified through LiDAR survey (Figure 6); these are discussed separately below.

## 2 Methods

### 2.1 Aims and Scope of Stage (i) Test Excavations

The overall aim of Stage (i)a Test Excavations was to ascertain the location, nature, date, character, extent and significance of any archaeological features or deposits that may be present in the areas assigned for testing. In this way, the horizontal extent of all archaeological sites/features/deposits and the vertical extent of archaeological stratigraphy could be established and a preliminary report on the findings produced.

Stage (i)a Test Excavation Services were carried out across a minimum of 12% of the testable greenfield areas and also targeted anomalies recorded in the geophysical survey undertaken between May and October 2020 (Gimson 2020).

### 2.2 Survey and Excavation Methods

The Stage (i)a Test Excavations undertaken within the footprint of the Testing Area were carried out by a single team, utilising one mechanical excavator, working under the direction of James McKee and Denis Shine. Apart from the directors, the team consisted of a supervisor and two site assistants. Survey services were provided by Daniel Keane. The Senior Archaeologist on the project was Denis Shine.

The Stage (i)a Test Excavations took place at Carnshannagh on 23 to 30 September 2020 with (i)h Metal Detection Surveys completed across all TAs (except TA1) the week commencing 14 September 2020. The metal detection surveys were completed by Ed Danaher and Ger Dowling; with additional metal detection undertaken on the trench spoil by the testing team (see below).

The total area available for test excavations at Carnshannagh was approximately 4.71 greenfield hectares. A proposed (indicative) test trench layout was set out in the testing Method Statement submitted to the National Monuments Service (NMS) on 27 August 2020 (McKee 2020). In general, the test trenching layout followed a standard array consisting of a centreline trench in each field with offset trenches at right-angles, at regular intervals and to the limits of the footprint of the field or Testing Area. In some places, the layout was adapted to target features identified either through geophysics or during the course of testing and to ensure adequate testing of available lands. The location of each test trench was 'set-out' and re-surveyed after excavation, where required, using GPS equipment by the AMS surveyor (see below).

As part of the investigations, topsoil was removed from the test trenches by a 13-tonne 360° mechanical excavator equipped with a toothless grading bucket working under the direct and continuous supervision of an Excavation Director. Where archaeologically significant features were

identified, these were cleaned and tested by hand. Context numbers were used sequentially at each site, starting from number 1. A written and photographic record was prepared of identified features, and all trenches and features were surveyed using a Leica Viva GS20 with smart antenna GPS and related to Ordnance Datum (OD) and the Irish Transverse Mercator Grid (ITM).

The testing areas were assessed and recorded in accordance with the archaeological Method Statement, the contract with Donegal County Council and in a manner consistent with the Code of Practice agreed between TII and the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (TII 2017). A full list of features, finds and samples recovered are included in the appendices.

### 2.3 Finds Retrieval and Sampling Methods

Every effort was made to ensure the highest possible level of identification and retrieval of archaeological objects in the course of excavations. Archaeological objects of all periods were retained at each TA, with the exception of obvious 'scrap' or modern metal. A copper alloy coin and lead waste piece were recovered during Stage (i)h Metal Detection Surveys, which were added to by a copper alloy fitting during metal detection of spoil during Stage (i)a Test Excavations; these excavations also recovered seven flakes of worked quartz, including a core (see Appendix 2).

The treatment of artefacts complied with the policies of the NMI as set out in *Advice Notes for Excavators* (NMI 2010) and the Code of Conduct for the Treatment of Archaeological Objects ratified by the Institute of Archaeologists of Ireland (2006).

None of the finds recovered during the works required immediate conservation; however, provision was made for this during the works, as required and set out in the Method Statement.

Finds were housed temporarily on-site and following this at the AMS Strokestown Office. They are currently stored at the AMS Post-Ex Facility in Kilrush. The storage of artefacts has been undertaken in accordance with the *Advice Notes for Excavators* (NMI 2010).

### 2.4 Specialist Contributions and/or Consultations

There were no specialist contributions during the Stage(i)a works. As a result of the test excavation process a total of seven stone objects were recovered. The seven stone objects were examined by Dr Conor Brady to provide an identification where possible and to ascertain typology and geological composition (Table 6). The results of Conor's assessment have been incorporated into this report (Appendix 2). In addition, a further three metal objects were recovered as a result of the Metal Detection Surveys at TA3 Carnshannagh (Table 7). The three metal objects were assessed and identified where possible to find type by Orla Scully. The results of Orla's assessment have been incorporated into this report (Appendix 2).

## 2.5 Radiocarbon dating

As part of the Stage(i)a works, samples from select contexts at three of the five sites investigated on the TEN-T Priority Route Improvement Project were forwarded to the <sup>14</sup>CHRONO Centre, Queens University Belfast for priority radiocarbon dating. The nominated sites were Drumboe Lower, Carnshannagh and Curragehalane (Table 3).

**Table 3: Samples for priority radiocarbon dating on TEN-T Priority Route Improvement Project**

Site name	Site type	Sample No.	Context	Sample type
Drumboe Lower 1	Enclosure	6	C.17: fill of enclosure ditch C.11	Barley ( <i>Hordeum vulgare</i> )
Carnshannagh 1	Settlement, possible	1	C.12: fill of pit C.11	Barley ( <i>Hordeum vulgare</i> )
Curragehalane 1 & 2	Enclosure	3	C.6: upper fill of enclosure ditch C.27 (Curragehalane 1)	Barley ( <i>Hordeum vulgare</i> )
Curragehalane 1 & 2	Settlement, possible	2	C.12: fill of pit C.54 (Curragehalane 2)	Hazel ( <i>Corylus</i> )

## 2.6 Conditions

The weather conditions during the Stage (i) works were mild and dry, interspersed with occasionally heavy showers.

## 2.7 Constraints on Methods

There were no obvious constraints during Stage (i)a works. Trenches 38, 39, 40 and 42 were partly positioned under an overhead powerline (Figures 5–8), meaning a break in trenching to maintain an exclusion corridor. Trenches which could not be fully excavated are presented in Table 4 It ought to be noted, however, that additional trenches were excavated in the southern field where the required/ planned linear meterage of trenching was exceeded.

**Table 4: Trenches not completed**

Trench	Reason not completed
38	Trench had a break at its western limits due to an exclusion corridor for an overhead powerline.
39	Trench had a break at its western limits due to an exclusion corridor for an overhead powerline.
40	Trench had a break at its western limits due to an exclusion corridor for an overhead powerline.
42	Trench had a break at its western limits due to an exclusion corridor for an overhead powerline.
60	Trench had a break at its western limits due to a previously excavated geotechnical trial hole.

### 3 Stage (i)a Test Excavation Results

The total linear metres excavated was 3,306m (Plates 1–3), representing a greater than 12% sample of the greenfield area available for test excavations. During the Stage (i)a testing a number of archaeological features, likely representing a small prehistoric settlement, were identified.

#### 3.1 Carnshannagh Results

Site Name	<b>Carnshannagh 1</b>
ITM	628684, 904366
Townland	Carnshannagh
No. of Trenches	67
Total Meterage	3,306m

##### 3.1.1 Summary

Carnshannagh’s Testing Area (TA3) contains the ‘site of’ an enclosure DG062-024, which is located directly east of the N14, which bounds the TA at its western extent. The proposed testing was in two large fields, one arable and one pasture, which were surrounded by mature hedgerow. The northern of these fields was originally sub-divided into two and is still separated in places by a partial/intermittent field boundary. The closest monument to the enclosure site, a ringfort (DG062-022), is located some 790m to the east.

In total 67 test trenches were excavated, totalling 3,306 linear metres (Figures 6–8; Plates 1–3). The topsoil (C.1) ranged, on average, from 0.20m to 0.50m in depth, being deeper towards the base of slopes. The natural subsoil (C.2) is predominantly a mottled orangey-brown silty clay, interspersed with pockets of gravel.

**Table 5: Test trench detail**

Area	Trench	Length (m)	Width (m)	Archaeological Features	Non-Archaeological Features
N Field	1	90	1.8	N/A	N/A
N Field	2	24	1.8	N/A	N/A
N Field	3	24	1.8	N/A	N/A
N Field	4	24	1.8	N/A	N/A
N Field	5	24	1.8	N/A	N/A
N Field	6	24	1.8	N/A	N/A
N Field	7	29	1.8	N/A	N/A
N Field	8	29	1.8	N/A	N/A
N Field	9	29	1.8	N/A	N/A

Area	Trench	Length (m)	Width (m)	Archaeological Features	Non-Archaeological Features
N Field	10	24	1.8	N/A	N/A
N Field	11	24	1.8	N/A	N/A
N Field	12	24	1.8	N/A	N/A
N Field	13	60	1.8	N/A	N/A
N Field	14	35	1.8	N/A	N/A
N Field	15	165	1.8	N/A	N/A
N Field	16	29	1.8	N/A	N/A
N Field	17	24	1.8	N/A	N/A
N Field	18	23	1.8	N/A	N/A
N Field	19	22	1.8	N/A	N/A
N Field	20	22	1.8	N/A	N/A
N Field	21	9	1.8	N/A	N/A
N Field	22	36	1.8	N/A	N/A
N Field	23	46	1.8	N/A	N/A
N Field	24	22	1.8	N/A	N/A
N Field	25	14	1.8	N/A	N/A
N Field	26	14	1.8	N/A	N/A
N Field	27	14	1.8	N/A	N/A
N Field	28	22	1.8	N/A	N/A
N Field	29	19	1.8	N/A	N/A
N Field	30	19	1.8	N/A	N/A
N Field	31	22	1.8	N/A	N/A
N Field	32	22	1.8	N/A	N/A
N Field	33	22	1.8	N/A	N/A
N Field	34	22	1.8	N/A	N/A
N Field	35	22	1.8	N/A	N/A
N Field	36	22	1.8	N/A	N/A
S Field	37	150	1.8	N/A	N/A
S Field	38	96	1.8	N/A	YES
S Field	39	86	1.8	N/A	N/A
S Field	40	89	1.8	N/A	N/A
S Field	41	30	1.8	N/A	N/A
S Field	42	92	1.8	N/A	N/A
S Field	43	79	1.8	N/A	N/A

Area	Trench	Length (m)	Width (m)	Archaeological Features	Non-Archaeological Features
S Field	44	79	1.8	N/A	N/A
S Field	45	79	1.8	N/A	N/A
S Field	46	79	1.8	N/A	N/A
S Field	47	79	1.8	N/A	N/A
S Field	48	79	1.8	N/A	N/A
S Field	49	90	1.8	YES	N/A
S Field	50	39	1.8	N/A	N/A
S Field	51	44	1.8	N/A	N/A
S Field	52	79	1.8	N/A	N/A
S Field	53	26	1.8	N/A	N/A
S Field	54	79	1.8	N/A	N/A
S Field	55	79	1.8	N/A	N/A
S Field	56	79	1.8	N/A	N/A
S Field	57	79	1.8	N/A	N/A
S Field	58	79	1.8	N/A	N/A
S Field	59	141	1.8	YES	N/A
S Field	60	114	1.8	YES	N/A
S Field	61	79	1.8	N/A	N/A
N Field	62	9	1.8	N/A	N/A
S Field	63	43	1.8	N/A	N/A
S Field	64	44	1.8	N/A	N/A
S Field	65	27	1.8	N/A	N/A
S Field	66	36	1.8	YES	N/A
S Field	67	27	1.8	YES	N/A

### 3.1.2 Geophysical and LiDAR Survey

In 2020 several anomalies were identified at Carnshannagh in geophysical surveys carried out by Heather Gimson (Gimson 2020; licence 20R0078; Figure 6); these surveys were completed to investigate numerous archaeological areas and potential archaeological areas within and adjacent to the preferred routes of the TEN-T Project.

Preliminary results revealed c. 61 geophysical anomalies including possible pits, ditches/boundary ditches, stone features and a zone of compact earth or stone, which may be archaeological in nature. Of note, a large possible enclosure ditch (60m east to west) and bank, containing anomalies, was identified in the northern field. The 'anomalies' were interpreted as a possible enclosure, with internal

features, close to the marked location of RMP DG062-024; however, these features were subsequently resolved as geological. Surveys in the southern field were considered less likely to have identified archaeological features with any anomalies again subsequently resolved as geological variations.

An archaeological LiDAR survey was also commissioned for the TEN-T Project by Donegal County Council to analyse low- and high-resolution data to assist with the archaeological assessment of the TEN-T study area as part of the Design and Environmental Assessment Phase. The archaeological LiDAR data was captured and provided by BlueSky and subsequently assessed by Dr Richard Clutterbuck of Archaeological Management Solutions (Clutterbuck 2020). LiDAR results at Carnshannagh identified two possible sites (L334-1 and L334-2) as follows:

- [L334-1]: a 'possible enclosure (Route Selection S3-AP01); irregular oval area of slightly raised ground c. 17m E–W, 30m N–S, c. 0.2m high; sited in a tillage field on ground sloping NE–SW'.
- [L334-2]: 'Enclosure (SMR: DG062-024---); nothing depicted on historic OSI maps; a very low relief circular enclosure with central mound located c.55m NE of SMR point on ground sloping to the SW; enclosure 34m in diameter, with a bank 3.4m wide and 0.08m high; no ditch; central circular mound c.1m diameter and 0.2m high. Possibly a barrow.

No evidence of these features was found during testing; however, a crown of high bedrock was recorded at the same location as L334-1, which may explain this feature.

### **3.1.3 RMP Site DG062-024**

Testing at Carnshannagh was conducted in close proximity to site of the possible enclosure DG062-024, which is located at the northwestern limits of the southern field of the TA.

### **3.1.4 Archaeological Features**

A total of 49 archaeological contexts were recorded from Carnshannagh, which are presented in full in Appendix 1. This cluster of features, likely representing a small prehistoric settlement, included a minimum of five postholes, seven stakeholes, eight pits (of indeterminate function) and a large burnt spread/deposit, based on initial assessment (Figures 8–11; Plates 5–11). The archaeological features can be summarised as follows:

- A series of postholes including [C.29] a confirmed post-hole filled by C.32, with four more features (C.30, C.31, C.38 and C.39) which morphologically appear to be post-holes but were not sectioned.
- Two confirmed stakeholes [C.21] and [C.23] (filled by C.22 and C.24 respectively) as well as five more features (C.33, C.34, C.35, C.36 and C.37) which appear to be stakeholes morphologically but were not sectioned. These stakeholes are clearly clustered around a single pit [C.11].
- A series of pits, including [C.8], [C.9], [C.11], [C.13], [C.15], [C.17], [C.19] and a probable pit, C.28, which was not sectioned. Two further pits, [C.43] and [C.45], were also recorded in Trench 66, with a further two isolated pits [C.46] and [C.48] located some 80m southwest of

the main cluster of archaeological features. Some of these pits, such as [C.15], contain a number of fills, some oxidised at high temperature, indicating industrial activity at the site.

- A single ditch, C.5, was visible in Trenches 59 and 60 and is thought to post-date the main settlement activity, although no direct relationship could be confirmed. A later furrow ([C.25]), was confirmed as cutting deposit C.27.
- A heterogenous deposit, C.27, with evidence of burning, occurred over much of Trench 59. This feature covered at least one of the structural features, namely posthole [C.29], and is likely to post-date the structure that this post, and its associated features, may represent; the feature could represent a burning event at the site.

Collectively, the recorded features suggest a small prehistoric settlement at the site, possibly dating to the Neolithic or Bronze Age. Indeed, charred cereal grain (barley) from the fill (C.12) of pit C.11 sent for priority radiocarbon dating returned a Bronze Age date of 1619–1454 cal. BC (Appendix 4). Seven pieces of worked quartz were also recovered from the site, but only one from a secure context (C.27). This may indicate stonework at the site in prehistory. Further investigations, as well as dating evidence, is required to better understand the nature and significance of activity at the site.

A Monument Report Form relating to the prehistoric settlement is included as Appendix 6 in the present report.

**Table 6: Artefacts recovered as a result of test excavation**

Testing Area	Brief Identified Object Description	Specialist
TA 3 (Carnshannagh)	Seven stone objects (Six quartz flakes, one quartz core)	Conor Brady
TA 3 (Carnshannagh)	One metal object (A copper alloy fitting)	Orla Scully

### 3.1.5 Non-Archaeological Features

A single feature, resolved as post medieval/modern, was identified during Stage (i)a testing, consisting of a field drain/ditch ([C.3] filled with C.4). A full list of recorded context numbers is presented in Appendix 1 (see also Plate 4). The testing area also recorded evidence of deep plough and drainage; the latter being more notable in the western limits of the southern field.

## 4 Metal Detection Survey

### 4.1 Aims and Scope of the Stage (i)h Metal Detection Survey Services

Metal detection surveys were completed across four TAs in the week starting Monday 14 September by Ed Danaher and Ger Dowling; Stage(i)h surveys were completed previously at Drumboe, during a programme of site works, from Monday 31 August to Friday 4 September.

### 4.2 Survey Methodology

The metal detection survey employed a metal detector with a penetration depth of 0.5m and was designed to recover from the topsoil all items of metalwork of possible historical or archaeological significance. All finds were recorded using a Leica Viva GS20 with smart antenna GPS and related to Ordnance Datum (OD) and Irish Transverse Mercator Grid (ITM).

### 4.3 Survey Constraints

There were no constraints on the metal detection survey at Carnshannagh.

### 4.4 Survey Results

Artefacts recovered from the Metal Detection Surveys are listed below in Table 7. None of the finds recovered during the works required immediate conservation and they were housed temporarily on-site and following this at the AMS Strokestown Office. They are currently stored at the permanent and secure AMS Head Office Post-Ex Facility in Kilrush. The storage of artefacts has been undertaken in accordance with the *Advice Notes for Excavators* (NMI 2010).

**Table 7: Artefacts recovered from Metal Detection Surveys**

Testing Area	Description	Licence Number
TA 1 (Drumboe)	Seven objects (three unidentified iron, one iron staple, one iron horseshoe, one tip or sock of plough share and one copper alloy buckle)	20R0167
TA 2 (Trimragh)	One copper alloy halfpenny coin	20R0183
TA 3 (Carnshannagh)	One coin and a single lead waste piece (note: a copper alloy fitting was recovered from spoil during testing)	20R0184
TA 4 (Murlough)	None	20R0182
TA 5 (Curraghane)	One copper alloy sixpence coin and one copper alloy mount	20R0185

Spoil was also metal-detected during archaeological testing at each TA. A single copper alloy fitting was recovered from spoil during testing at Carnshannagh.

## 5 Discussion

As stated, the site comprises a small probable prehistoric settlement, including a minimum of five postholes, seven stakeholes, eight pits (of indeterminate function) and a large burnt spread/deposit, based on initial assessment. The burnt deposit covers some of the structural features and could represent burning of a wooden structure on site. Charred cereal (barley) from one of the pits produced a date of 1619–1454 cal. BC (UBA- 44852) and indicates arable farming in the surrounding landscape at this time. Potential evidence for quartz flaking was also documented at the site. A ditch and furrow(s) were also recorded.

No evidence of the features identified by geophysical or LiDAR surveys were recorded during testing, although several were explained by variations in the geology. Likewise, no features were identified which relate to the site of the possible enclosure DG062-024; this is currently marked at the northwestern limits of the southern field of the TA, but now appears to be located elsewhere and erroneously identified as the enclosure site; of note a crop mark, depicting a likely enclosure, is located in the field immediately southwest of the TA, on the other side of the N14 road (see Figure 5).

## 6 Significance of Findings

The following significance criteria have been taken from Appendix 2 of the *Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes 2005* (NRA 2005). They are not presented in any ranking order but can be used to evaluate the significance of an archaeological site, monument or complex. They should not, however, be regarded as definitive; rather they are an indicator which contributes to a wider judgment based on the individual circumstances of each feature.

### Existing Status

The level of protection associated with a monument or complex is an important consideration.

### Condition/Preservation

The survival of a monument's archaeological potential both above and below ground is an important consideration and should be assessed in relation to its present condition and surviving features. Well-preserved sites should be highlighted; this assessment can only be based on a field inspection.

### Documentation/Historical Significance

The significance of a monument may be enhanced by the existence of records of previous investigations or contemporary documentation supported by written evidence or historical maps. Sites with a definite historical association or an example of a notable event or person should be highlighted.

### Group Value

The value of a single monument may be greatly enhanced by its association with related contemporary monuments or with monuments from different periods indicating an extended time presence in any specific area. In some cases, it may be preferable to protect the complete group, including associated and adjacent land, rather than to protect isolated monuments within that group.

### Rarity

The rarity of some monument types can be a central factor affecting response strategies for development, whatever the condition of the individual feature.

### Visibility in the Landscape

It is important to recognise sites that have a limited distribution. Monuments that are highly visible in the landscape have a heightened physical presence. The inter-visibility between monuments may also be explored in this category.

### Fragility/Vulnerability

It is important to assess the level of threat to archaeological monuments from erosion, natural degradation, agricultural activity, land clearance, neglect, careless treatment or development.

The nature of the archaeological evidence cannot always be specified precisely but it may still be possible to document reasons to justify the significance of the feature. This category relates to the probability of monuments producing material of archaeological significance as a result of future investigative work.

### Amenity Value

Regard should be taken of the existing and potential amenity value of a monument.

## 6.1 Carnshannagh

**Existing Status:** Contains RMP site DG062-024 (site of enclosure) which is protected under the National Monuments Acts 1930 to 2014.

**Condition/Preservation:** This site has no upstanding remains. What has survived at this site are the subsurface remains of a small prehistoric settlement.

**Documentation/Historical Significance:** No documentation or historical significance.

**Group Value:** A single known enclosure (ringfort DG062-022), unrelated to the newly discovered archaeological site, is located 790m from the site.

**Rarity:** It is relatively common to find similar sites in the landscape.

**Visibility in the Landscape:** Not visible.

**Fragility/Vulnerability:** This site may be removed pending the final road scheme design.

**Amenity Value:** N/A

**Conclusion:** A small settlement/camp, likely to be of (early?) prehistoric date. The significance of this site is provisionally rated as **low** and it is considered of **local** significance only.

## 7 Impact Statement & Recommendations

During Stage (i)a Standard Test Excavations at Carnshannagh, a small prehistoric settlement/camp was identified. This site is inside the preferred route corridor and may be directly impacted by the proposed development, pending its final design. Archaeological testing within the preferred route corridor revealed no further evidence for archaeological features, although two isolated pits are located just outside it, meaning the cluster of features appears to be well defined.

The site at Carnshannagh is recommended for full excavation and 'preservation by record' if the final chosen route cannot avoid the archaeology and preserve the site *'in situ'*.

## 8 Bibliography

### 8.1 References

- Clutterbuck, R. 2020. Report for the TEN-T Priority Route Improvement Project, Donegal, LiDAR Archaeological Assessment No 1: Lower Resolution LiDAR data. Unpublished LiDAR survey report prepared by Archaeological Management Solutions Ltd for Donegal County Council.
- Grimson, H. 2020. Geophysical Survey Report. TEN-T Priority Route Improvement Project (Drumboe lower, Ballynaglack, Ballyrairie, Trimragh, Carnshannagh, Murlough & Curraghalane Td's), Co. Donegal (20R0078). Unpublished geophysical survey report prepared for Donegal County Council.
- McKee, J. 2020. Method Statement accompanying an application to carry out Stage (i)a, Test Excavation and Metal Detection at Carnshannagh Townland in order to provide further information for the TEN-T Priority Route Improvement Project as part of the Design and Environmental Assessment Phase (27 August 2020). Unpublished document by Archaeological Management Solutions Ltd.
- TII 2017. Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Transport Infrastructure Ireland (June 2017).

### 8.2 Cartographic Sources

First-edition six-inch OS map 1836

First-edition 25-inch OS map 1900–05

### 8.3 Online and Other Resources

- IAI. 2006. Code of Conduct for Treatment of Archaeological Objects. Dublin: Institute of Archaeologists of Ireland. [Online]. [Accessed: 18 January 2019]. Available from: <http://www.iai.ie/wp-content/uploads/2016/03/IAI-Code-of-Conduct-for-the-Treatment-of-Archaeological-Objects.pdf>.
- National Monuments Service database and mapping service. 2020. [Online]. [Accessed: 14 October 2020]. Available from: [www.archaeology.ie](http://www.archaeology.ie).
- National Museum of Ireland. 2010. Advice Notes for Excavators. [Online]. [Accessed 14 October 2020]. Available from <https://www.museum.ie/getmedia/4f2db21c-9095-48de-a2ce-6e52f2e52b90/Advice-Notes-for-Excavators-2010.pdf>.
- National Roads Authority. 2005. Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes. [Online]. [Accessed 14 October 2020]. Available from: <https://www.tii.ie/technical-services/environment/planning/Guidelines-for-the-Assessment-of-Archaeological-Heritage-Impact-of-National-Road-Schemes.pdf>
- TII. 2005. *Guidelines for the testing of and mitigation of the wetland archaeological heritage for national road schemes* [Online, Accessed: 14 October 2020]. Available from: <https://www.tiipublications.ie/library/PE-ARC-02008-01.pdf>

## Appendix 1: List of Contexts

Context	Area	Trench	Description	Dimensions (m)
C.1	E Field	All	Number used to record topsoil.	N/A
C.2	E Field	All	Number used to record subsoil.	N/A
C.3	S Field	38	Post medieval/modern ditch cut containing C.4. Linear feature orientated N–S, with a sharp break of slope at the top, sloping sides and a gradual break of slope at the base, which is flat. Appears to correspond to anomaly 502 recorded on geophysics.	1.1m x 0.4m x not sectioned
C.4	S Field	38	Ditch fill (in [C.3]) consisting of a light greyish brown moderately compact silty clay. Orientated broadly N-S. Resolved as a post-medieval/modern field boundary/drainage feature when sectioned. Appears to correspond to anomaly 502 recorded on geophysics.	1.1m x 0.4m x not sectioned
C.5	S Field	60	Ditch cut containing C.6. Linear feature, with a sharp break of slope at the top, straight sides and a gradual break of slope at the base, which is U-shaped. Not recorded on geophysics.	2.0m x 0.7m x not sectioned
C.6	S Field	60	Ditch fill (in [C.5]) consisting of a light brown moderately compact clayey silt, containing occasional stone. Appears to represent a deliberate backfilling of [C.5]. Not recorded on geophysics.	2.0m x 0.7m x not sectioned
C.7	S Field	60	Pit cut containing C.8. Sub-circular feature, with a gradual break of slope at the top, concave sides and a gradual break of slope at the base, which is concave. Not recorded on geophysics. The feature is related to [C.9], [C.11], [C.13], [C.15], [C.17] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.28m x 0.90m x 0.21m
C.8	S Field	60	Pit fill (in [C.7]) consisting of a light brown moderately compact clayey silt, containing occasional stone (including quartz: Appendix 2). Not recorded on geophysics.	1.28m x 0.90m x 0.21m
C.9	S Field	60	Pit cut containing C.10. Sub-circular feature, with a sharp break of slope at the top, concave sides and a gradual break of slope at the base, which is uneven. Not recorded on geophysics. The feature is related to [C.7], [C.11], [C.13], [C.15], [C.17] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.88m x 1.29m x 0.30m

Context	Area	Trench	Description	Dimensions (m)
<b>C.10</b>	S Field	60	Pit fill (in [C.9]) consisting of a light brown moderately compact clayey silt, containing occasional stone. Not recorded on geophysics.	1.88m x 1.29m x 0.30m
<b>C.11</b>	S Field	59	Pit cut containing C.12. Sub-circular feature, with a sharp break of slope at the top, concave sides and an imperceptible break of slope at the base, which is flat. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.13], [C.15], [C.17] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.18m x 0.79m x 0.26
<b>C.12</b>	S Field	59	Pit fill (in [C.11]) consisting of a light brown moderately compact clayey silt, containing occasional stone, charcoal and burnt clay. Not recorded on geophysics.	1.18m x 0.79m x 0.26
<b>C.13</b>	S Field	59	Pit cut containing C.14. Sub-circular feature, which was not sectioned. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.15], [C.17] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.40m x 0.84m x not sectioned
<b>C.14</b>	S Field	59	Pit fill (in [C.13]) consisting of a light brown moderately compact silty clay, containing occasional charcoal and burnt clay. Not recorded on geophysics.	1.40m x 0.84m x not sectioned
<b>C.15</b>	S Field	59	Pit cut containing C.16, C.40 and C.41. Oval feature, with a gradual break of slope at the top, concave sides and an imperceptible break of slope at the base, which is flat. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.13], [C.17] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.35m x 1.00m x 0.15m
<b>C.16</b>	S Field	59	Pit fill (in [C.15]) consisting of a light grey moderately compact silty clay, containing occasional charcoal. Pit [C.15] also contains C.40 and C.41. Not recorded on geophysics.	1.35m x 1.00m x 0.15m
<b>C.17</b>	S Field	60	Pit cut containing C.18. Sub-circular feature, with a gradual break of slope at the top, concave sides and a gradual break of slope at the base, which is rounded. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.13], [C.15] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	0.74m x 0.49m x 0.10m

Context	Area	Trench	Description	Dimensions (m)
<b>C.18</b>	S Field	60	Pit fill (in [C.17]) consisting of a light brown moderately compact clayey silt, containing occasional charcoal and pebbles. Not recorded on geophysics.	0.74m x 0.49m x 0.10m
<b>C.19</b>	S Field	60	Pit cut containing C.20. Irregular feature, with a gradual break of slope at the top, sloping sides and a gradual break of slope at the base, which is uneven. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.13], [C.15] and [C.17], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	2.78m x 1.90m x 0.10m
<b>C.20</b>	S Field	60	Pit fill (in [C.19]) consisting of a mid brown moderately compact clayey silt, containing occasional small stone. Not recorded on geophysics.	2.78m x 1.90m x 0.10m
<b>C.21</b>	S Field	59	'Cut' of stakehole containing C.22. Circular feature, with a sharp break of slope at the top, straight sides and a U-shaped base. Not recorded on geophysics. The feature is related to [C.23] and five more features (C.33, C.34, C.35, C.36 and C.37) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.06m x 0.06m x 0.15m
<b>C.22</b>	S Field	59	Stakehole 'fill' (in [C.21]) consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics.	0.06m x 0.06m x 0.15m
<b>C.23</b>	S Field	59	'Cut' of stakehole containing C.24. Circular feature, with a sharp break of slope at the top, straight sides and a U-shaped base. Not recorded on geophysics. The feature is related to [C.21] and five more features (C.33, C.34, C.35, C.36 and C.37) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.08m x 0.08m x 0.15m
<b>C.24</b>	S Field	59	Stakehole 'fill' (in [C.23]) consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics.	0.08m x 0.08m x 0.15m
<b>C.25</b>	S Field	59	Furrow cut containing C.26. Linear feature orientated NW-SE, with a sharp break of slope at the top, concave sides and a gradual break of slope at the base, which is flat. Not recorded on geophysics.	5.20m x 0.38m x 0.08m
<b>C.26</b>	S Field	59	Furrow fill (in [C.25]) consisting of a grey firm silty clay. Not recorded on geophysics.	5.20m x 0.38m x 0.08m

Context	Area	Trench	Description	Dimensions (m)
<b>C.27</b>	S Field	59	Irregular spread, surrounded by pits, posts and stakeholes, consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal and stone. Not recorded on geophysics. Containing worked quartz ( <b>20E0502:27:1-7</b> ) and possibly related to settlement/quartz working area.	3.20m x 4.80m x 0.10m
<b>C.28</b>	S Field	59	Pit fill (not sectioned) consisting of a light brown/grey moderately compact silty clay, containing occasional charcoal clay. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.13], [C.15] and [C.17], a series of pit cuts in Trenches 59 and 60.	0.80m x 0.78m x not sectioned
<b>C.29</b>	S Field	59	Posthole cut containing C.32. Circular feature, with a gradual break of slope at the top, straight sides and a gradual break of slope at the base, which is rounded. Not recorded on geophysics. The feature is related with four more features (C.30, C.31, C.38 and C.39) which appear to be post-holes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.23m x 0.28m x 0.14m
<b>C.30</b>	S Field	59	Posthole fill consisting of a mid brown moderately compact clayey silt, containing occasional small stone. Not recorded on geophysics. The feature is related with post-hole [C.29] and three more features (C.31, C.38 and C.39) which appear to be post-holes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.25m x 0.23m x not sectioned
<b>C.31</b>	S Field	59	Posthole fill consisting of a mid brown moderately compact clayey silt, containing occasional small stone. Not recorded on geophysics. The feature is related with post-hole [C.29] and three more features (C.30, C.38 and C.39) which appear to be post-holes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.25m x 0.24m x not sectioned
<b>C.32</b>	S Field	59	Posthole fill (in [C.29]) consisting of a mid brown moderately compact clayey silt, containing occasional small stone. Not recorded on geophysics.	0.23m x 0.28m x 0.14m
<b>C.33</b>	S Field	59	Stakehole 'fill' consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics. The feature is related to [C.21] and [C.23] and four more features (C.34, C.35, C.36 and C.37) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.06m x 0.06m x not sectioned

Context	Area	Trench	Description	Dimensions (m)
<b>C.34</b>	S Field	59	Stakehole 'fill' consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics. The feature is related to [C.21] and [C.23] and four more features (C.33, C.35, C.36 and C.37) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.07m x 0.07m x not sectioned
<b>C.35</b>	S Field	59	Stakehole 'fill' consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics. The feature is related to [C.21] and [C.23] and four more features (C.33, C.34, C.36 and C.37) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.08m x 0.08m x not sectioned
<b>C.36</b>	S Field	59	Stakehole 'fill' consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics. The feature is related to [C.21] and [C.23] and four more features (C.33, C.34, C.35 and C.37) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.05m x 0.05m x not sectioned
<b>C.37</b>	S Field	59	Stakehole 'fill' consisting of a mid brown/grey moderately compact silty clay, containing occasional charcoal. Not recorded on geophysics. The feature is related to [C.21] and [C.23] and four more features (C.33, C.34, C.35 and C.36) which appear to be stakeholes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.09m x 0.09m x not sectioned
<b>C.38</b>	S Field	23	Posthole fill consisting of a mid brown moderately compact clayey silt, containing occasional small stone. Not recorded on geophysics. The feature is related with post-hole [C.29] and three more features (C.30, C.31 and C.39) which appear to be post-holes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.40m x 0.32m x not sectioned
<b>C.39</b>	S Field	21	Posthole fill consisting of a mid brown moderately compact clayey silt, containing occasional charcoal. Not recorded on geophysics. The feature is related with post-hole [C.29] and three more features (C.30, C.31 and C.38) which appear to be post-holes morphologically but were not sectioned, and hence only recorded as fills in Trench 59.	0.15m x 0.15m x not sectioned
<b>C.40</b>	S Field	59	Pit fill (in [C.15]) consisting of a grey/black loose silty clay, rich in charcoal. Pit [C.15] also contains C.16 and C.41. Not recorded on geophysics.	Length and width undetermined, 0.03m deep

Context	Area	Trench	Description	Dimensions (m)
<b>C.41</b>	S Field	59	Pit fill (in [C.15]) consisting of a red compact clay, containing occasional charcoal. Pit [C.15] also contains C.16 and C.40. Not recorded on geophysics.	Length and width undetermined, 0.02m deep
<b>C.42</b>	S Field	66	Pit fill (in [C.43]) consisting of a dark brown moderately compact sandy clay. Not recorded on geophysics.	1.15m x 1.30m x 0.20
<b>C.43</b>	S Field	66	Pit cut containing C.42. Sub-circular feature, with a sharp break of slope at the top, concave sides and an imperceptible break of slope at the base, which is rounded. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.13], [C.15] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.15m x 1.30m x 0.20
<b>C.44</b>	S Field	66	Pit fill (in [C.45]) consisting of a dark brown moderately compact sandy clay, containing occasional small stone. Not recorded on geophysics.	1.39m x 1.06m x 0.13
<b>C.45</b>	S Field	66	Pit cut containing C.44. Sub-circular feature, with a gradual break of slope at the top, concave sides and an imperceptible break of slope at the base, which is rounded. Not recorded on geophysics. The feature is related to [C.7], [C.9], [C.11], [C.13], [C.15] and [C.19], a series of pit cuts in Trenches 59 and 60, as well as probable pit, C.28, which was not sectioned, and two further pits [C.43] and [C.45] in Trench 66.	1.39m x 1.06m x 0.13
<b>C.46</b>	S Field	49	Pit cut containing C.47. Sub-circular feature, with a gradual break of slope at the top, straight sides and a gradual break of slope at the base, which is uneven. Not recorded on geophysics. The feature is related to [C.48], two isolated pits in Trench 49, which are located just outside the road-take.	1.46m x 1.43m x 0.24
<b>C.47</b>	S Field	66	Pit fill (in [C.46]) consisting of a mid brown moderately compact clayey silt, containing occasional stone and charcoal. Not recorded on geophysics.	1.46m x 1.43m x 0.24
<b>C.48</b>	S Field	48	Pit cut containing C.49. Oblong feature, with a gradual break of slope at the top, straight sides and a gradual break of slope at the base, which is uneven. Not recorded on geophysics. The feature is related to [C.46], two isolated pits in Trench 49, which are located just outside the road-take.	1.53m x 0.68m x 0.14m

Context	Area	Trench	Description	Dimensions (m)
<b>C.49</b>	S Field	49	Pit fill (in [C.48]) consisting of a mid brown/grey moderately compact clayey silt, containing occasional small stone. Not recorded on geophysics.	1.53m x 0.68m x 0.14m

## Appendix 2: List of Finds

Find number	Field	Trench	Context	Full Name	Description	Dimensions in cm
20E0502:1:1	N/A	N/A	C.1	Lead spillage	Small nugget of lead, one face almost flat, opposite side is concave and multifaceted; object has a cream patina from exposure.	(L)3.28 x (W)1.79 x (T)0.81
20E0502:1:2	N/A	N/A	C.1	Copper alloy coin	Copper alloy coin, very worn with green patina in places; slightly bent; no detail discernible but its diameter is indicative of a pre-decimal halfpenny, either English or Irish.	(D)2.51 x (T)0.11
20E0502:27:1	South	N/A	C.27	Quartz core	Quartz multi-platform core. A complete quartz multi-platform core in fresh condition. Systematic breaks/flake scars on all sides. <b>Weight</b> 286.7g.	(L)5.90 x (W)5.80 x (T)5.20
20E0502:27:2	South	N/A	C.27	Quartz flake	An incomplete quartz flake in fresh condition. Large well-formed flake, lozenge-shaped section with the distal end missing. Three longitudinal flake scars. <b>Weight</b> 32.7g.	(L)6.30 x (W)3.50 x (T)1.30
20E0502:27:3	South	N/A	C.27	Quartz flake	An incomplete quartz flake in fresh condition. The distal end is missing and the edges are damaged. There are two longitudinal flake scars. <b>Weight</b> 11.3g.	(L)3.70 x (W)2.20 x (T)1.30
20E0502:27:4	South	N/A	C.27	Quartz flake	A complete quartz flake in fresh condition. There are two longitudinal flake scars. <b>Weight</b> 7.3g.	(L)3.60 x (W)2.40 x (T)0.80
20E0502:27:5	South	N/A	C.27	Quartz flake	Quartz flake/spall. A complete quartz flake fragment/spall in fresh condition. <b>Weight</b> 5.3g.	(L)4.20 x (W)1.00 x (T)0.70
20E0502:27:6	South	N/A	C.27	Quartz flake	A complete quartz flake in fresh condition. There is one longitudinal flake scar. <b>Weight</b> 5.4g.	(L)3.00 x (W)2.10 x (T)0.60
20E0502:27:7	South	N/A	C.27	Possible worked quartz	An incomplete quartz flake in abraded condition. All edges are damaged. <b>Weight</b> 6.0g.	(L)2.70 x (W)2.30 x (T)0.70

Find number	Field	Trench	Context	Full Name	Description	Dimensions in cm
<b>20E0502:27:8</b>	South	N/A	C.27	Copper alloy fitting	Copper alloy fitting (possible). Open circular object, upper surface is convex, rear is flat with three prongs extending, two of which are broken off, third is tapered to a blunt point, possible stove or lantern fitting.	(D)5.03 x (T)0.35

*Note: Finds 20E0502:1:1–2 were recovered from Stage(i)h Metal Detection Survey (20R0184).*

### Appendix 3: List of Samples

Sample	Context	Feature	Sample type	Vol./ Weight	Process	Flot weight/ weight (g)	Retent
1	C.12	Fill of pit C.11	Soil	10L	Flotation	92.52/776.35	
2	C.18	Fill of pit C.17	Soil	10L	Retained	N/A	
3	C.40	Fill of pit C.15	Soil	7.5L	Retained	N/A	
4	C.47	Fill of pit C.46	Soil	5L	Retained	N/A	

## Appendix 4: Radiocarbon Dating

Radiocarbon dating was conducted by the <sup>14</sup>CHRONO Centre, Queens University Belfast

Lab. Code	Sample No.	Sample Weight	Material	Context	Years BP	pMC <sup>1</sup>	68.3% calibration	95.4% calibration	Calibration dataset
UBA-44852	1	0.03g	Barley ( <i>Hordeum vulgare</i> )	C.12: fill of pit C.11	3274±34	66.52±0.28	1609–1503 cal. BC	1619–1454 cal. BC	Incal20.14c Reimer <i>et al.</i> 2020

---

<sup>1</sup> The 'percent Modern Carbon' (pMC) value is obtained by multiplying by 100 the 'Fraction Modern Carbon' (F14C) figure supplied by the <sup>14</sup>CHRONO Centre.

Cristina Ocejo  
Archaeological Management  
Solutions (AMS)  
Fahy's Road  
Drimna  
Kilrush, Co Clare V15 C780  
Ireland



<sup>14</sup>CHRONO  
Centre  
Queens  
University  
Belfast  
42 Fitzwilliam  
Street  
Belfast BT9  
6AX  
Northern  
Ireland

## Radiocarbon Date Certificate

Laboratory Identification: UBA-44852  
Date of Measurement: 2021-06-04  
Site: Carnshannagh  
Sample ID: Ten-T\_20E0502\_S1\_C12  
Material Dated: charred seed or nutshell  
Pretreatment: AAA  
mg Graphite: 1.014  
Submitted by: Louise Nugent AMS

Conventional <sup>14</sup> C Age:	3274±34 BP
Fraction corrected	using AMS $\delta^{13}\text{C}$

### RADIOCARBON CALIBRATION PROGRAM\* CALIB REV8.2

Copyright 1986-2020 M Stuiver and PJ Reimer

\*To be used in conjunction with:

Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.

UBA-44852 44852 Radiocarbon Age BP 3274 +/- 34 Calibration data set: intcal20.14c	% area enclosed	cal AD age ranges	# Reimer et al. 2020 relative area under probability distribution
68.3 (1 sigma)	cal BC	1609- 1577 1560- 1555 1545- 1503	0.327 0.040 0.633
95.4 (2 sigma)	cal BC	1619- 1495 1479- 1454	0.931 0.069
Median Probability: -1539			

#### References for calibration datasets:

Reimer P, Austin WEN, Bard E, Bayliss A, Blackwell PG, Bronk Ramsey C, Butzin M  
Edwards RL, Friedrich M, Grootes PM, Guilderson TP, Hajdas I, Heaton TJ, Hogg A  
Kromer B, Manning SW, Muscheler R, Palmer JG, Pearson C, van der Plicht J, Reim  
Richards DA, Scott EM, Southon JR, Turney CSM, Wacker L, Adolphi F, BÄntgen U,  
Fahrni S, Fogtmann-Schulz A, Friedrich R, KÄhler P, Kudsk S, Miyake F, Olsen J  
Sakamoto M, Sookdeo A, Talamo S. 2020.  
The IntCal20 Northern Hemisphere radiocarbon age calibration curve (0-55 cal kB  
Radiocarbon 62. doi: 10.1017/RDC.2020.41.

## Appendix 5: Excavation Bulletin

Bulletin Field	Bulletin Detail
Excavation Completion Date	30 September 2020
Year	2020
County	Donegal
Author	James McKee
Author's Address	c/o Archaeological Management Solutions Ltd, Fahy's Road, Kilrush, Co. Clare
Site Number	To be assigned by excavations.ie
Site Name	Carnshannagh 1
Site Type	Prehistoric Settlement
ITM Coordinates	628684, 904366
Site and Monuments Record No.	DG062-024
Excavation Licence No.	20E0502 (and 20R0184)
Description	<p>James McKee of Archaeological Management Solutions Ltd undertook Stage (i)a Standard Test Excavations and Stage (i)h Metal Detection Surveys in the townland of Carnshannagh as part of the Archaeological Consultancy Services Contract of the TEN-T Priority Route Improvement Project in Donegal.</p> <p>The TEN-T Priority Route Improvement Project is part of the Trans-European Transport Network and comprises the construction of three sections of new road: Section 1: N15/N13 Ballybofey/Stranorlar Urban Region; Section 2: N56/N30 Letterkenny to Manorcunningham; and Section 3: N14 Manorcunningham to Lifford/Strabane/A5 link. Carnshannagh, in Section 3, is one of five Testing Areas (TAs) along the preferred route of the TEN-T project which require Stage (i)a Test Excavations and Stage (i)h Metal Detection Survey Services.</p> <p>The total Stage (i)a testing linear metres excavated at Trimragh was 3,306m, representing a &gt;12% sample of the greenfield area available for test excavations. These excavations targeted anomalies identified through previous geophysical and LiDAR surveys at the site; these surveys were themselves undertaken to assess RMP site DG062-024, one of five known monuments which could be impacted by the scheme.</p> <p>During archaeological testing at Carnshannagh a cluster of features, likely representing a small prehistoric settlement/camp, was uncovered. These features included a minimum of five postholes, seven stakeholes, eight pits (of indeterminate function) and a large burnt spread/deposit, based on initial assessment. Charred cereal (barley) from one of the pits produced a date of 1619–1454 cal. BC. A ditch and furrows were also recorded. Two further isolated pits were also recorded, located southwest of the main cluster, directly adjacent the preferred route corridor, as set out at the time of testing.</p> <p>Collectively the features indicate a small prehistoric settlement at the site, possibly dating to the Bronze Age or Neolithic. Seven pieces of worked quartz were recovered from the site, but only one from a secure context, indicating possible stone-work at the site. Stage (i)h Metal Detection surveys also recovered two artefacts, a coin and</p>

a lead waste piece, with a further single copper alloy fitting recovered from metal detection of the topsoil during archaeological testing.

The site at Carnshannagh may be adversely impacted upon by the scheme, pending the final design of the route within the preferred route corridor for the TEN-T road scheme. If the site cannot be avoided by the final design then the archaeology, as defined by archaeological testing, was recommended for full excavation and preservation by record.

## Appendix 6: Monument Report Form

### Carnshannagh 1: Prehistoric settlement



An Roinn Tithíochta,  
Rialtais Áitiúil agus Oidhreacht  
Department of Housing,  
Local Government and Heritage

## NATIONAL MONUMENTS SERVICE

### Monument Report Form

The following report form has been designed to assist persons who may wish to supply information on newly discovered monuments. The current operational policy of the National Monuments Service is primarily to record monuments dating from the pre-AD 1700 period. Please check the records of the Archaeological Survey of Ireland on the National Monuments Service website [www.archaeology.ie](http://www.archaeology.ie) before sending in a report to ensure that the monument has not already been recorded. This Monument Report Form will form part of the Sites and Monuments Record.

**County:** Donegal

**Townland(s):** Carnshannagh

**Classification** (e.g., ringfort, standing stone, cairn, mound): Prehistoric settlement

**Irish Transverse Mercator co-ordinates:** E: 

6	2	8	6	8	0
---	---	---	---	---	---

 N: 

9	0	4	3	7	1
---	---	---	---	---	---

**Irish Grid co-ordinates:** E: 

2	2	8	7	3	4
---	---	---	---	---	---

 N: 

4	0	4	3	8	0
---	---	---	---	---	---

**Date of inspection of monument (dd/mm/yyyy):** 30/ 09/ 2020

The Archaeological Survey of Ireland uses mapping provided by OSI: this utilises the Irish Transverse Mercator (ITM) co-ordinate system. This replaces the former Irish Grid referenced mapping. If possible, please supply ITM co-ordinates. These should be determined using a Global Positioning System (GPS) unit that is enabled for the ITM co-ordinate system. A twelve-figure reference should be determined at the centre of the monument (six for easting and six for northing). Alternatively, users may derive the ITM co-ordinates from the mapping component of the National Monuments Service website ([www.archaeology.ie](http://www.archaeology.ie)).

**Source of co-ordinates (please fill one):** GPS  Website

**Name of person compiling report (Block Capitals):** JAMES MCKEE

**Address:** C/o Archaeological Management Solutions Ltd,

Fahy's Road, Kilrush,

Co. Clare V15 C780

**Phone no.:** 0044 7922 382955

**Email address:** jamesmckee1645@gmail.com

**Are you content to be identified by name on the Historic Environment Viewer as the person who reported the monument**

Yes  No

**Setting of monument** (i.e., situation and land use in and around monument, etc.):

The monument is located in the southeast corner of large, flat field of pasture.

**Condition of monument:** (i.e., whether obscured by trees, scrub, bushes, etc.)

The monument displays no visible surface trace and was initially identified through test investigations.

**Local information:** (i.e., local name, field name, past history, etc.)

No local Information

**References (where relevant):** (i.e. publications, web address, etc.)

Shine, D. and McKee, J. 2021. Archaeological Consultancy Service Contract: Stage (i): TEN-T Priority Route Improvement: TA3 Carnshannagh Updated Stage (i)a Test Excavation and Stage (i)h Metal Detection Survey Report. Unpublished report prepared for Donegal County Council.

**Other notes:** *For example, if the monument has been found as the result of a licensed archaeological investigation then the **licence number** should be given and if the monument has been completely excavated (i.e. there is **NO** surviving archaeology above or below ground surface) this should be noted here. If the monument has been discovered as the result of geophysical investigations then this should be stated. If there is a planning application associated with it, the planning reference number should be given.*

The monument displays no visible surface trace and was initially identified through Stage (i)a Standard Test Excavations (licence 20E0502) carried out by Archaeological Management Solutions in September 2020 as part of the TEN-T Priority Route Improvement Project. A Stage (i)h Metal Detection Survey (licence 20R0184) was also undertaken at this time.

**Summary description of monument:** (additional details may be supplied on a separate page(s))

The monument comprises the remains of a possible prehistoric settlement defined by a total of 49 discrete features, comprising five postholes, seven stakeholes, eight pits and a large burnt spread/deposit. Some of the pits contain a number of fills that display evidence of oxidisation, suggestive of industrial activity. Charred cereal grain (barley) from the fill (C.11) of pit C.12 sent for radiocarbon dating returned a Bronze Age date of 1619–1454 cal. BC. A few pieces of possibly worked quartz were also recovered from the site,

**Report accompanied by a sketch plan and/or section, elevation drawings?** Yes

(see present report)

**Report accompanied by a photograph(s):**Yes **X**

(see present report)

Where possible the date the photo was taken should be written on the back if not already imprinted on it.

**Report accompanied by a copy of OS map** Yes **X**      **and/or aerial photo:** Yes 

(see present report)

*It is important that the report be accompanied by either a map or aerial photograph (web-derived aerial photos are acceptable) with the location and extent of the 'monument' clearly marked on it. The aerial photo or map must be at a scale where field boundaries are clearly visible to enable it be referenced to Ordnance Survey Ireland mapping.*

**Checked against National Monuments Service website,**  
[www.archaeology.ie](http://www.archaeology.ie):Yes **X****Signed:****Date:** 14 October 2021

Scheme Location

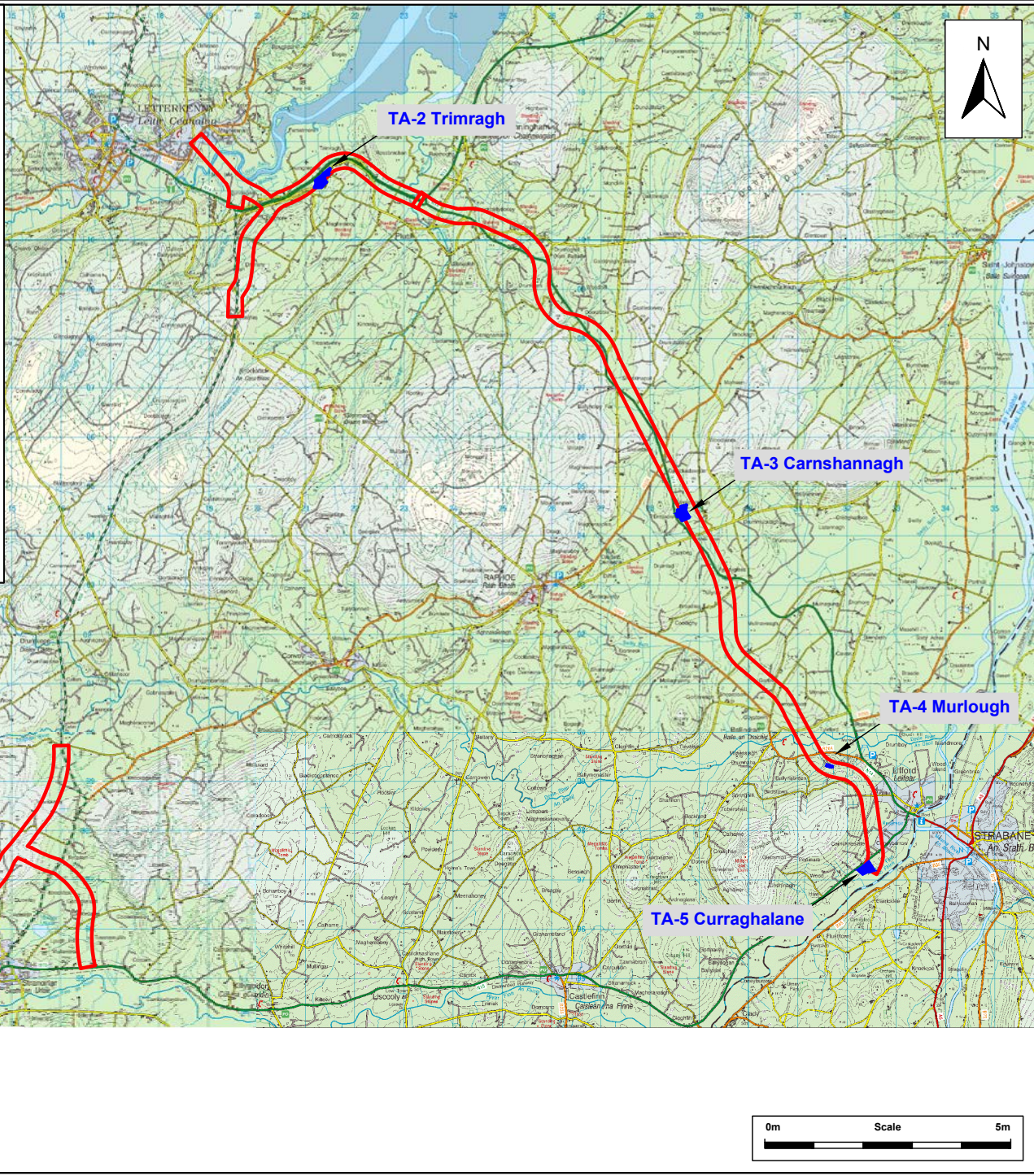
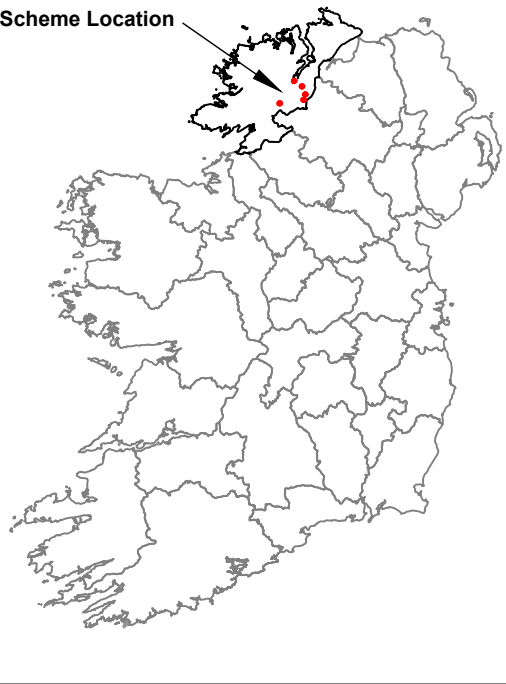




Figure No. 1

TEN-T Priority Route Improvement Project, Donegal

Location of the Testing Areas on the TEN-T Priority Route Improvement Project

Legend

-  Scheme Corridor
-  Stage (i) Testing Area

Scale 1:125000@A4

Date 14 12 20

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSi\_NMA\_273.

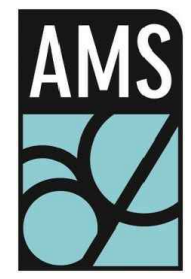
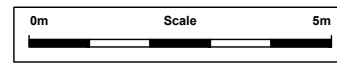








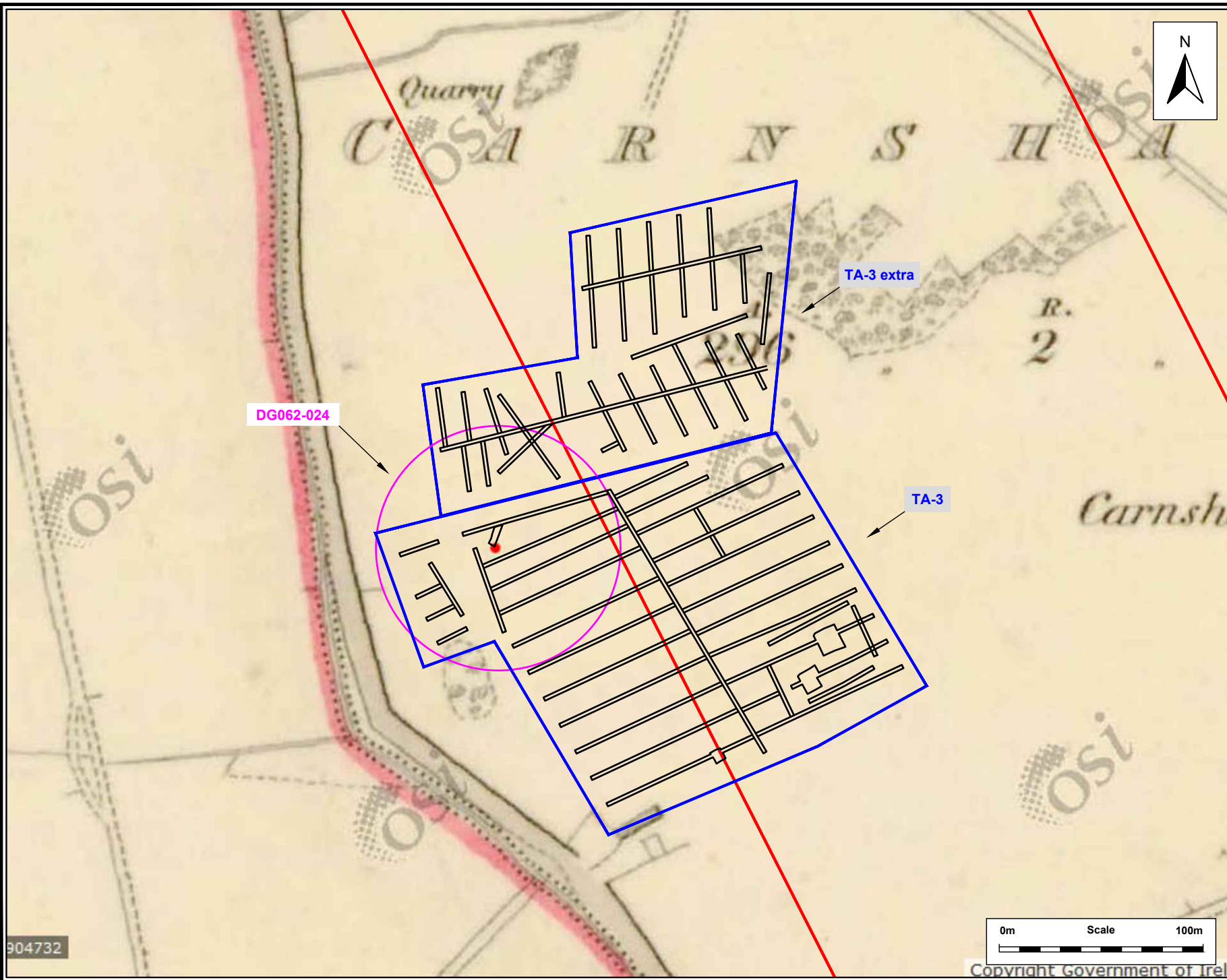
Figure No. 3

TEN-T Priority Route Improvement Project, Donegal

TA-3 Carnshannagh  
Trenching layout overlaid  
on 1st edition 6-inch OS map

Legend

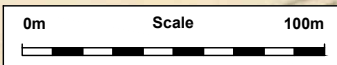
-  Scheme Corridor
-  Stage (i) Testing Area
-  Recorded Monument and Zone of Notification
-  Stage (i)a test trenches (excavated)



Scale  
1:2500@A4

Date  
14 12 20

© National Roads Authority (NRA) 2020.  
Transport Infrastructure Ireland (TII) is an  
operational name of the National Roads  
Authority. © Ordnance Survey Ireland  
2020/OSi\_NMA\_273.



904732





Copyright Government of Ireland

Figure No. 4

TEN-T Priority Route Improvement Project, Donegal

TA-3 Carnshannagh Trenching layout overlaid on 25-inch OS map

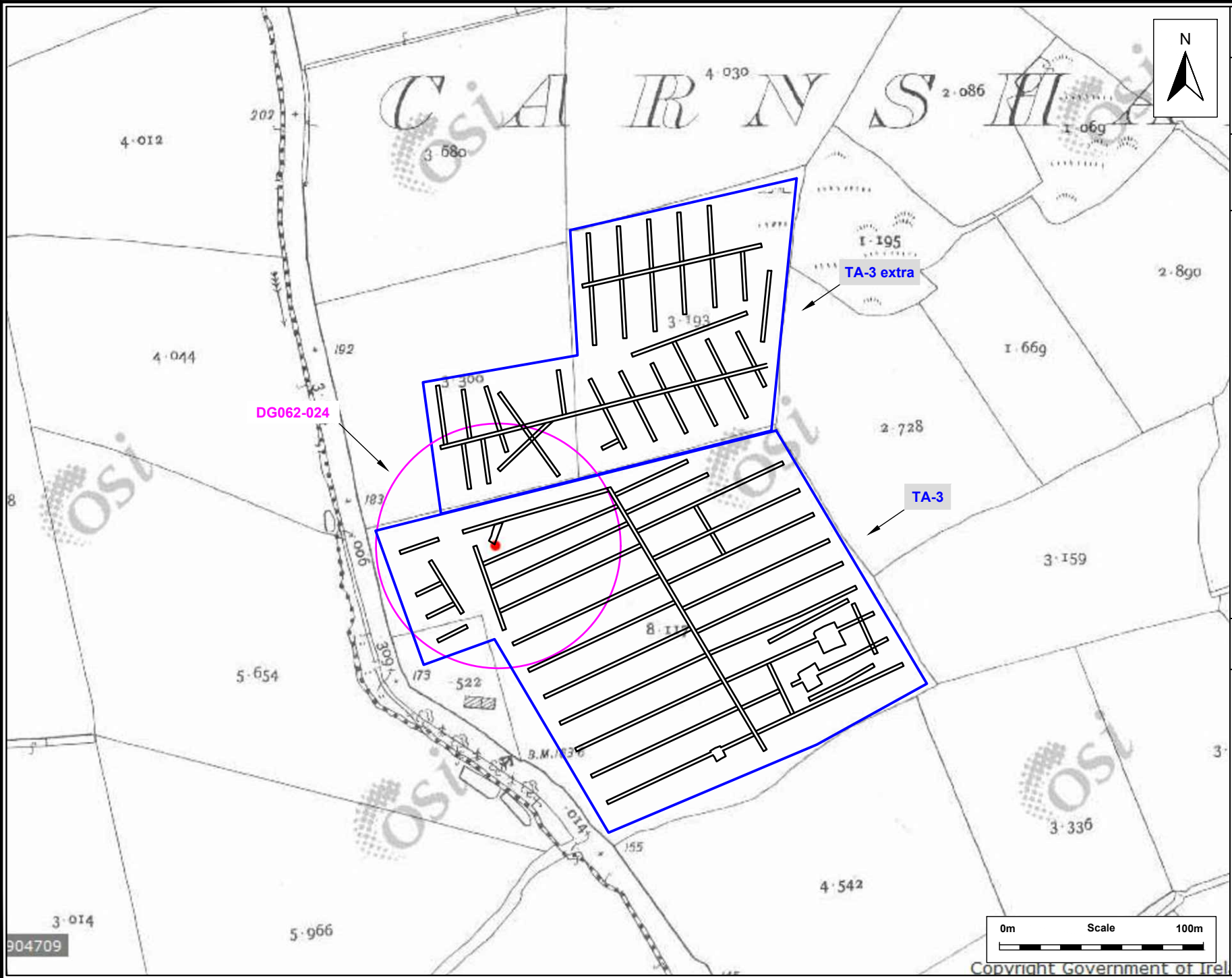
Legend

-  Scheme Corridor
-  Stage (i) Testing Area
-  Recorded Monument and Zone of Notification
-  Stage (i)a test trenches (excavated)

Scale 1:2500@A4

Date 14 12 20

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSi\_NMA\_273.



904709

Copyright Government of Ireland



**Figure No. 5**

TEN-T Priority Route Improvement Project, Donegal

**TA-3 Carnshannagh**  
Trenching layout overlaid on modern aerial photography

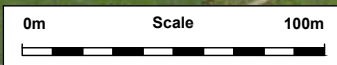
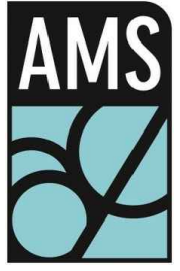
**Legend**

- Scheme Corridor
- Stage (i) Testing Area
- Recorded Monument and Zone of Notification
- Stage (i)a test trenches (excavated)

Scale  
1:2500@A4

Date  
14 12 20

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSi\_NMA\_273.













904741

Figure No. 6

TEN-T Priority Route Improvement Project, Donegal

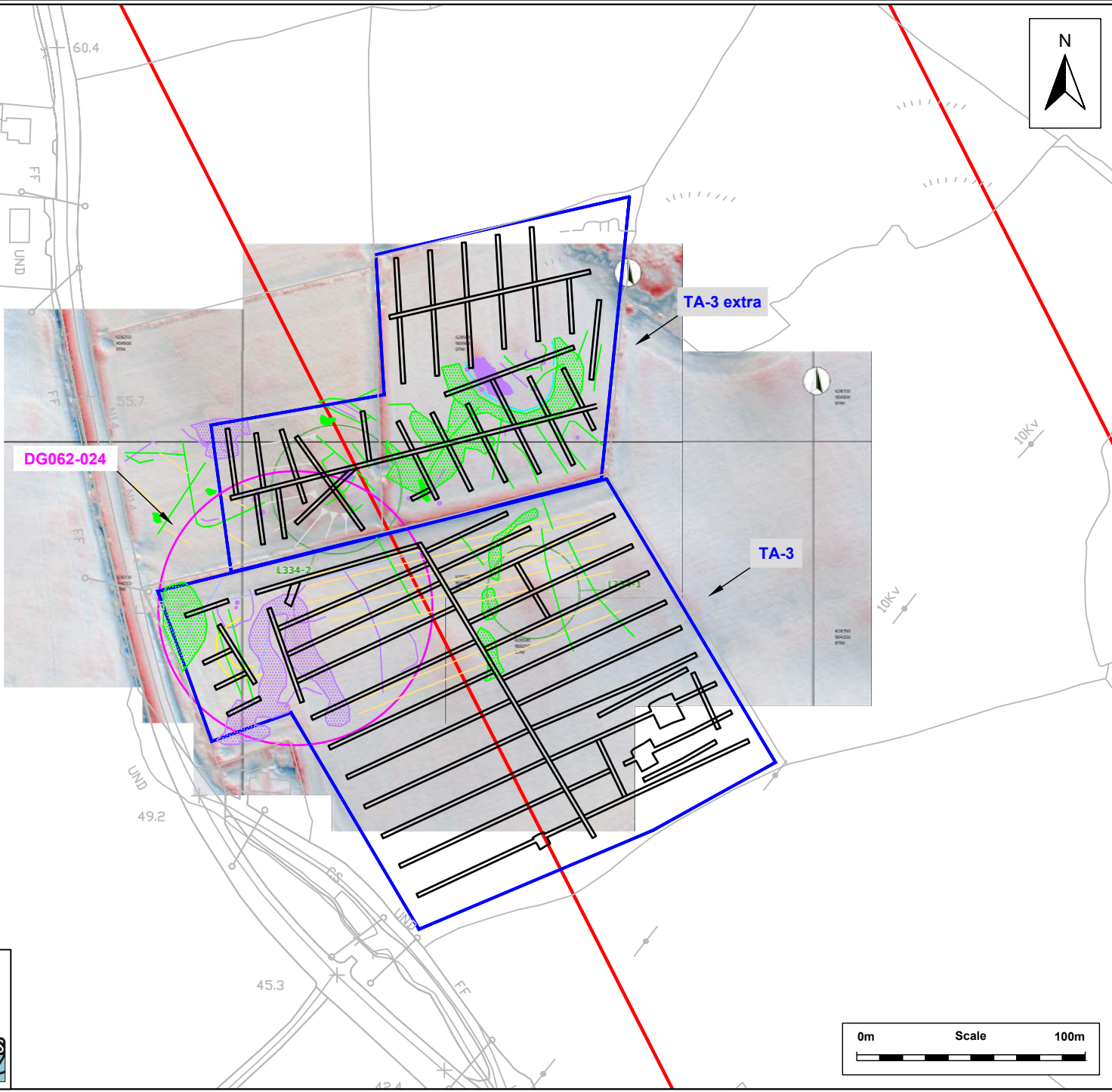
TA-3 Carnshannagh  
Trenching layout overlaid on geophysical and LiDAR survey



Legend

-  Scheme Corridor
-  Stage (i) Testing Area
-  Recorded Monument and Zone of Notification
-  Stage (i)a test trenches
-  Res. Possible Archaeology
-  Res. High Resistance Anomaly
-  Res. Low Resistance Anomaly
-  Res. Cultivation Furrows
-  Mag. Possible Archaeology
-  Mag. Trend

Scale 1:2500@A4	Date 14 12 20
--------------------	------------------

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSi\_NMA\_273.



 LiDAR Sites  
 High Res. Tile Index

Detrended model of 0.5m-resolution DTM generated from LiDAR, 75% transparent, over a multi-direction hillshade model (d.16, h. 35) generated in RVT 2.2.1.











Figure No. 7

TEN-T Priority Route Improvement Project, Donegal

TA-3 Carnshannagh  
Completed trench detail  
showing recorded features

Legend

-  Scheme Corridor
-  Stage (i) Testing Area
-  Recorded Monument and Zone of Notification
-  Stage (i)a test trenches
-  Archaeological Feature
-  Other Feature
-  OH Powerline Corridor

Scale 1:1500@A4	Date 14 12 20
--------------------	------------------

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSI\_NMA\_273.

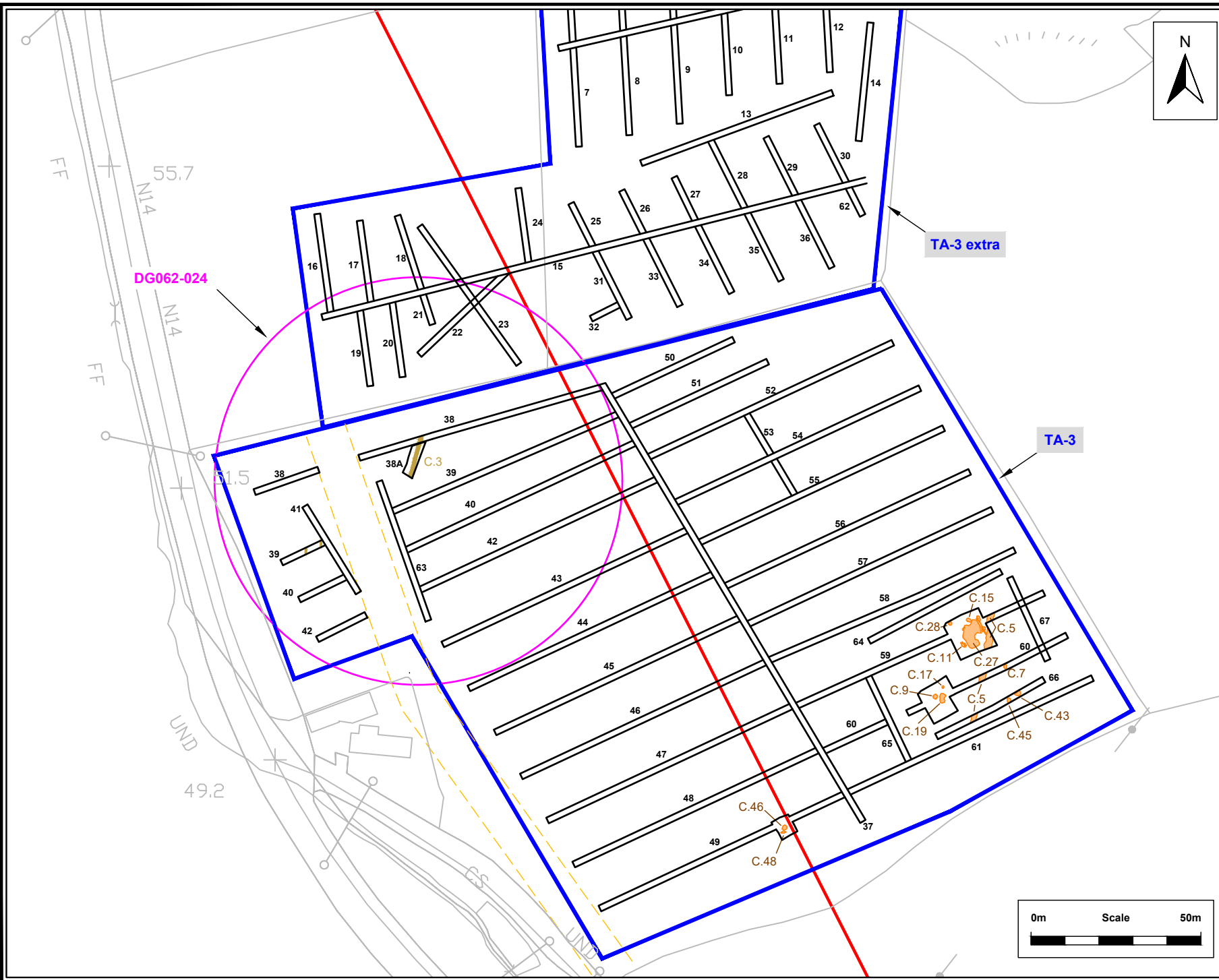
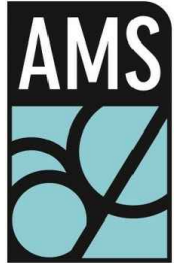


Figure No. 8

TEN-T Priority Route Improvement Project, Donegal

TA-3 Carnshannagh  
Completed trench detail,  
showing recorded features  
with geophysical survey

Legend

- Scheme Corridor
- Stage (i) Testing Area
- Recorded Monument and Zone of Notification
- Stage (i)a test trenches
- Archaeological Feature
- Other Feature
- OH Powerline Corridor
- Res. Possible Archaeology
- Res. High Resistance Anomaly
- Res. Low Resistance Anomaly
- Res. Cultivation Furrows
- Mag. Possible Archaeology
- Mag. Trend

Scale 1:1500@A4	Date 14 12 20
--------------------	------------------

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSI\_NMA\_273.

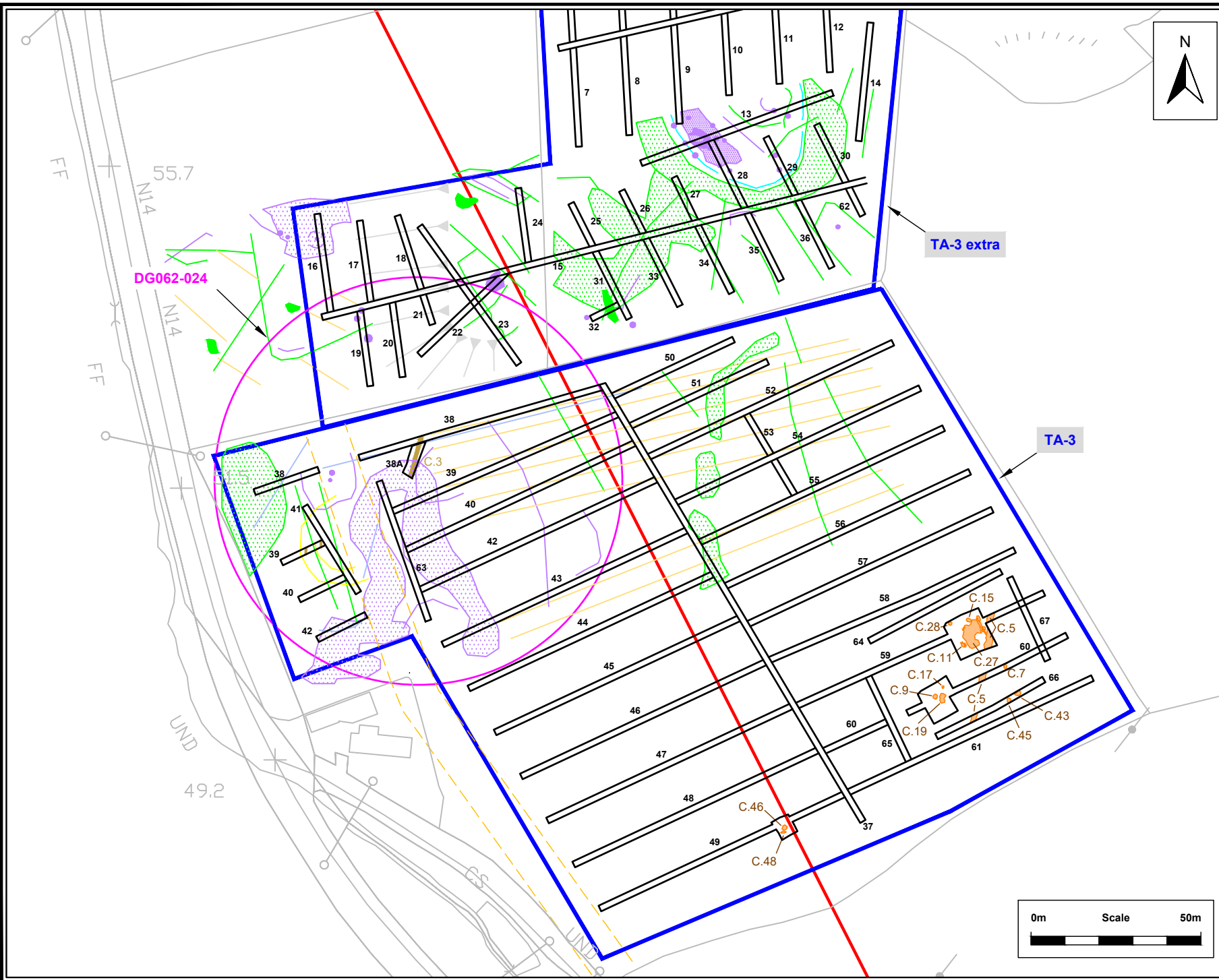
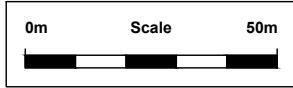
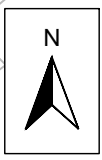








Figure No. 9

TEN-T Priority Route Improvement Project, Donegal

TA-3 Carnshannagh Features recorded in Trench 59

Legend

-  Stage (i)a test trenches
-  Archaeological Feature
-  ITM Grid Point
-  Section Point
-  Section Line
-  OD Level

Scale 1:100@A4

Date 14 12 20

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSi\_NMA\_273.

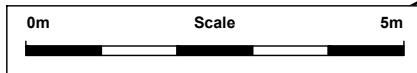
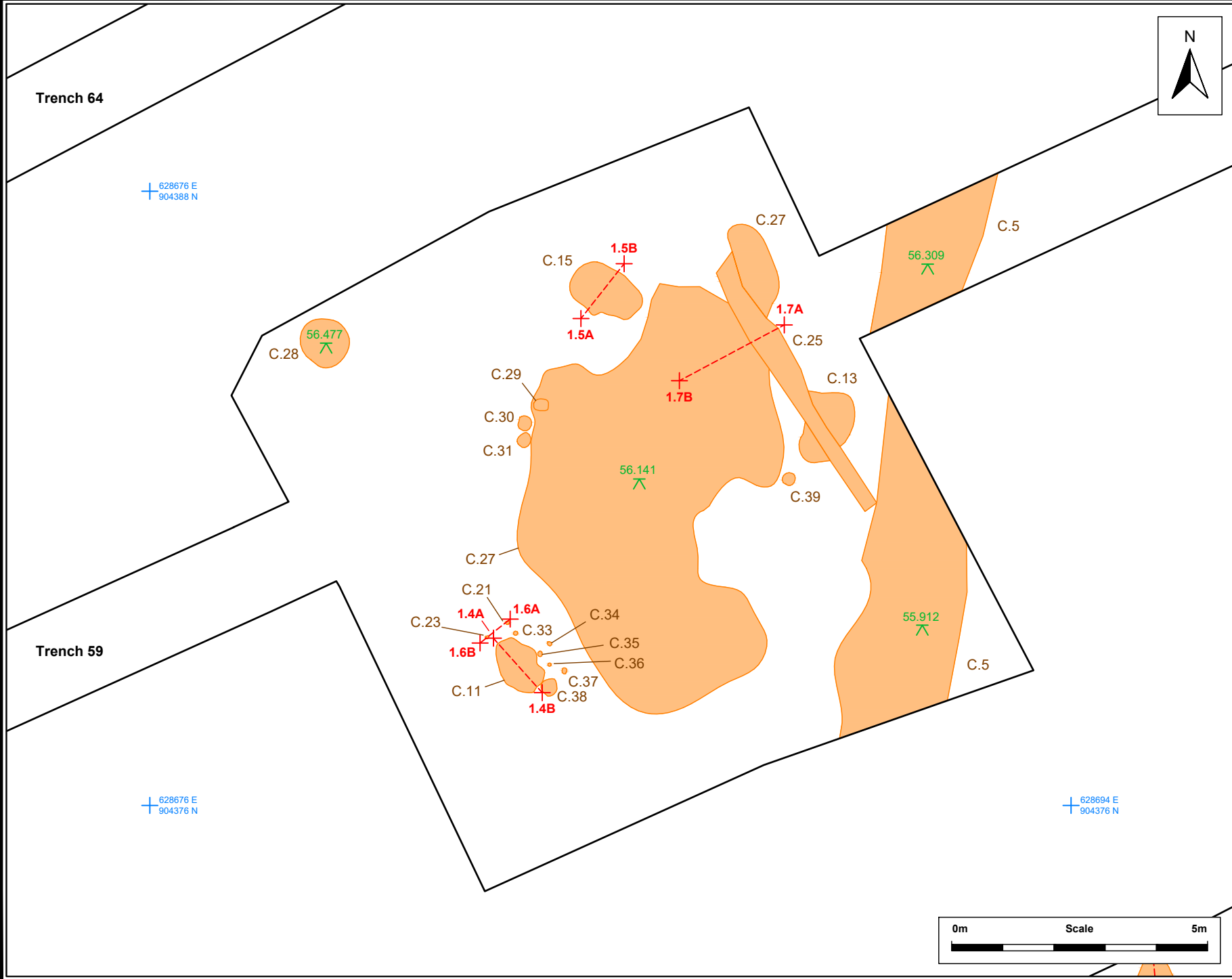


Figure No. 10

TEN-T Priority Route Improvement Project, Donegal

TA-3 Carnshannagh  
Features recorded in  
Trenches 60 and 66

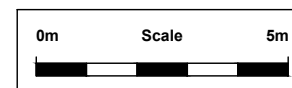
Legend

- Stage (i)a test trenches
- Archaeological Feature
- ITM Grid Point
- Section Point
- Section Line
- OD Level

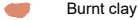






Scale  
1:150@A4

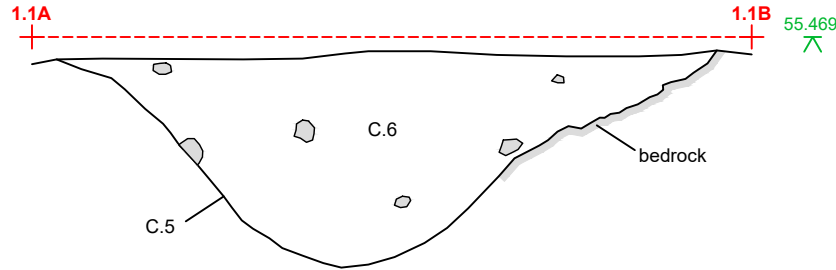
Date  
14 12 20

© National Roads Authority (NRA) 2020.  
Transport Infrastructure Ireland (TII) is an  
operational name of the National Roads  
Authority. © Ordnance Survey Ireland  
2020/OSi\_NMA\_273.

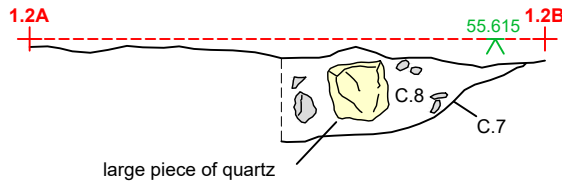
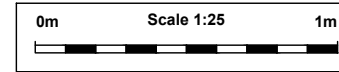


Legend

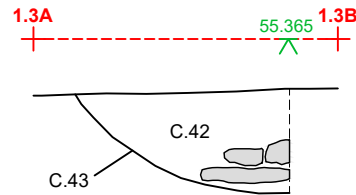
-  Burnt clay
-  Stones
-  Quartz
-  Charcoal
-  Section Point
-  Section Line
-  OD Level



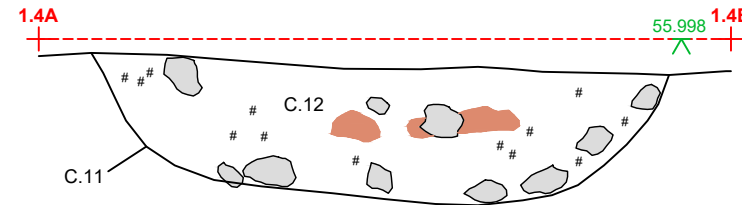
(i) Trench 60. South-facing section of C.5 and C.6



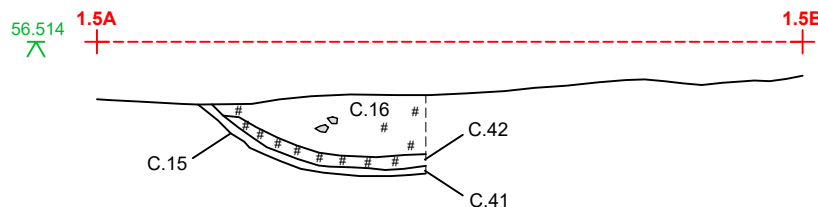
(ii) Trench 60. West-facing section of C.7 and C.8



(iii) Trench 66. East-facing section of C.42 and C.43



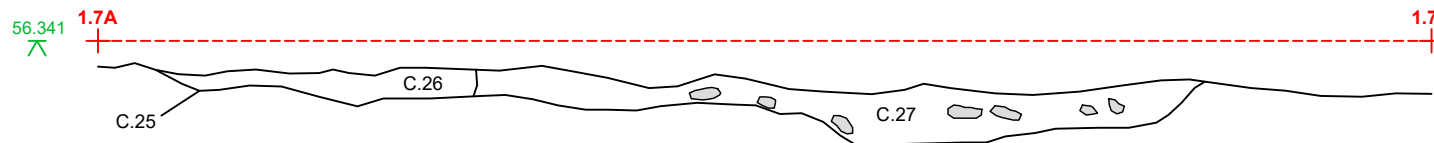
(iv) Trench 59. Southwest-facing section of C.11 and C.12



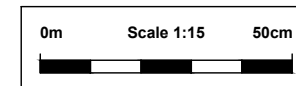
(v) Trench 59. East-facing section of C.15, C.16, C.40 and C.41



(vi) Trench 59. NE-SW profile of C.21 and C.23



(vii) Trench 59. North-facing section of C.25, C.26 and C.27



Scale  
1:25 & 1:15 @A4

Date  
14 12 20

© National Roads Authority (NRA) 2020. Transport Infrastructure Ireland (TII) is an operational name of the National Roads Authority. © Ordnance Survey Ireland 2020/OSi\_NMA\_273.



## PLATES



Plate 1: Example of trenching in the southern field (T37); facing northwest



Plate 2: Example of trenching in the southern field (T42); facing west



Plate 3: Example of trenching in the northern fields (T15); facing east



Plate 4: Post-medieval/modern field boundary/drain ([C.4]); facing northwest



Plate 5: Extension on T59, showing settlement features; facing east



Plate 6: Pit [C.9] and (C.10) in T60; facing northwest



Plate 7: Pit [C.17] and (C.18) in T60; facing north



Plate 8: Pit [C.11] in T59; facing northwest



Plate 9: Pit [C.15] in T59; facing northwest



Plate 10: Cluster of stakeholes and a posthole (C.38) around pit [C.11] in T59; facing northwest



Plate 11: Pit [C.19] and (C.20) in T66; facing south



Plate 12: Backfilling nearing completion at Carnshannagh; facing west



Plate 13: Re-seeding nearing completion at Carnshannagh; facing north