

Archaeological Testing at Cleanrath Wind Farm, Co. Cork

Archaeological Excavation Licence No. 18E0646

Licensee: Annette Quinn

Client: Inchee Energy Supply Ltd.,
Lissarda Business Park
Lissarda,
Co. Cork

Planning Ref: ABP PL. 04. 246742

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1 REPORT DETAILS

Excavation Licence No.	18E0646
Licensee:	Annette Quinn
Planning Ref:	ABP PL 04. 246742
Townland:	Various
County:	Cork
ITM Coordinates (Centre point)	ITM E520194, N569225
Planning Status:	Condition No. 16

2 INTRODUCTION

2.1 Scope of work

This report was prepared by Miriam Carroll and Annette Quinn of Tobar Archaeological Services. It presents the results of pre-development archaeological testing of a permitted wind farm at Cloontycarthy, Cleanrath Nth, Cleanrath Sth, Derreennacarton, Derrineanig, Turnaspidogy, Milmorane, Coomlibane, Rathgaskig, Derragh, Augeris, Gorteennakilla, Carrignadoura, Gurteenowen, Lyrenageeha and Lackabaun townlands, Co. Cork. Archaeological testing (Licence number 18E0646) was undertaken on the site in compliance with Condition No. 16 of the An Bord Pleanála grant of planning permission and a recommendation of the archaeology and cultural heritage chapter of the EIAR undertaken for the development. The permitted development comprises a 9 turbine wind farm and associated infrastructure.

This document has been updated for the purposes of inclusion in a Remedial Environmental Impact Assessment Report for Cleanrath Wind Farm as part of a substitute consent application to An Bord Pleanála. The updates to the document relate only to the turbine numbering where it reverts to the original numbering system used when the project was originally proposed for planning permission.

2.2 Permitted development

Planning permission for a 9 turbine wind farm at Cloontycarthy, Cleanrath Nth, Cleanrath Sth, Derreennacarton, Derrineanig, Turnaspidogy, Milmorane, Coomlibane, Rathgaskig, Derragh, Augeris, Gorteennakilla, Carrignadoura, Gurteenowen, Lyrenageeha and Lackabaun townlands, Co. Cork has been granted by An Bord Pleanála (ABP Pl. 04. 246742).

2.3 Planning requirements

Condition No. 16 of the grant of planning permission deals with archaeology and states the following:

'The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site or along the grid connection route. In this regard the developer shall:

- (a) Notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
- (b) Employ a suitably qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:-

- (i) The nature and location of archaeological material on the site and
- (ii) The impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to an Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site or along the grid connection route.'

2.4 Previous Work Carried Out on the Site

Tobar Archaeological Services carried out the Archaeology and Cultural Heritage chapter of the EIAR for the project which included both desktop research and a site walk-over survey. Tobar also carried out pre-development archaeological testing of one turbine base, hardstand and associated access track in 2011 under licence 11E0335 on foot of a request for Further Information from the Planning Authority (Pl. Ref. 11/05245). No archaeological finds or features were uncovered during the testing.

2.5 Site Description and Receiving Environment

The permitted development area is located in County Cork approximately 2.5km north-west of Inchigeelagh. It is situated on relatively high ground varying in height from 200-304m above OD and incorporates a portion of Derrineanig Hill. The northern portion of the site is under forestry and semi-mature forestry is located along the eastern portion of the site. The site measures approximately 2.6km north-south by 2.8km east-west.

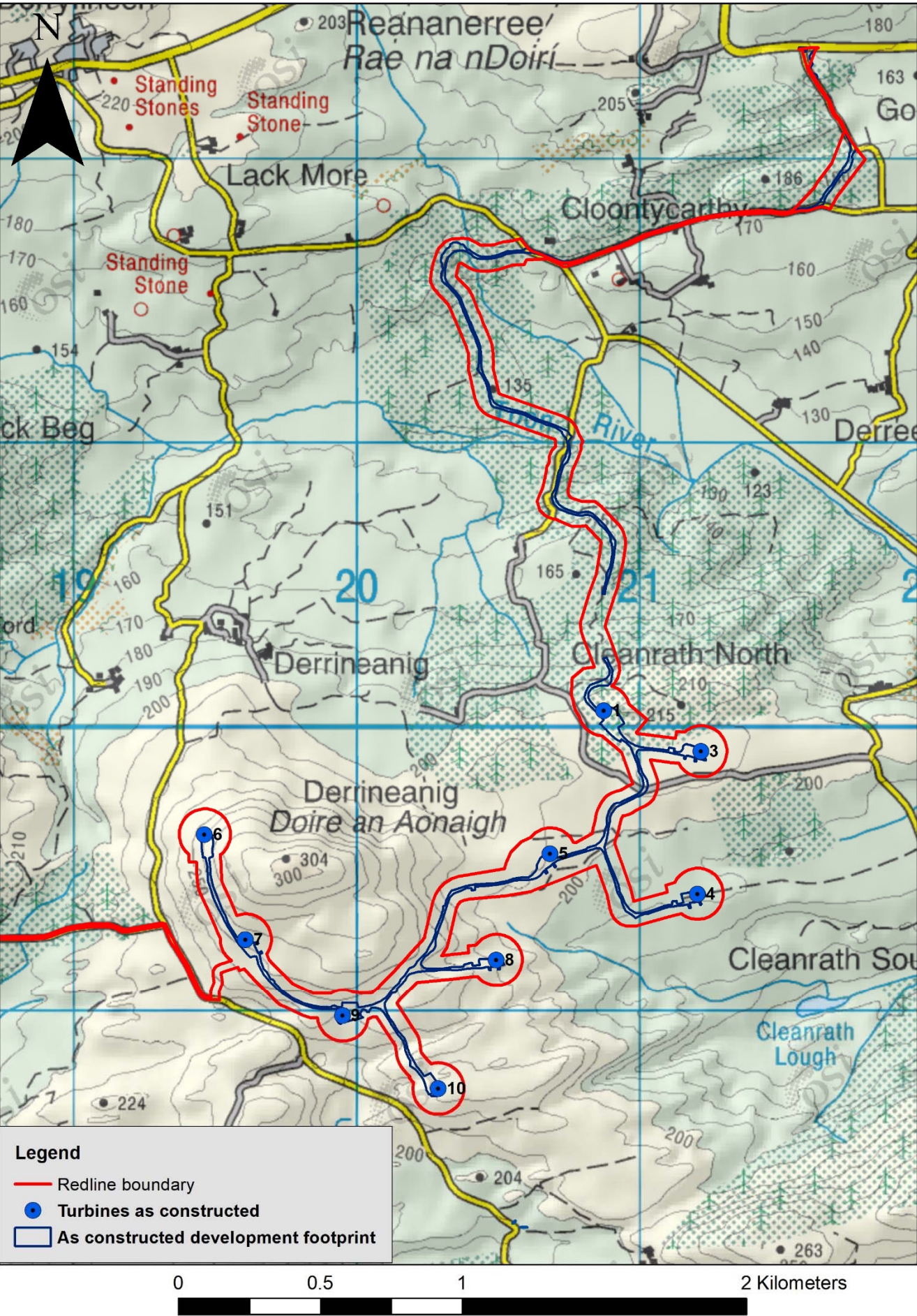


Figure 1: Site location map and wind farm layout.

3 METHODOLOGY

The methodology for archaeological testing of the site was agreed with the National Monuments Service of the DCHG in advance of the site work and granting of the excavation licence. The aim of the testing was to determine if archaeological features were present within the permitted development site in areas where ground disturbance will occur during the construction phase of the works. Testing was only carried out in unforested areas of the site, in accordance with the recommendation of the EIAR. The testing was undertaken over 2 days with 2 archaeologists and 1 mechanical excavator. The excavator utilised a 1.8m wide grading bucket and all trenches were excavated to the level of natural subsoil. A photographic and descriptive record was made of all trenches.

3.1 Limitations

Limitations regarding access to various locations within the permitted site and the excavation of trenches as a result of the topography were encountered. The terrain over much of the west, south-west and central portions of the site comprises ridges of bedrock and intervening ravines in which deep, waterlogged peat was located. The bedrock ridges and associated ravines hindered machine access to some turbine locations and consequently the excavation of test trenches. Weather conditions were poor with rain at times.

3.2 Statutory context

3.2.1 Current Legislation (Archaeological)

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

4 EXISTING ARCHAEOLOGICAL ENVIRONMENT

Four recorded monuments (CO069-094 – Enclosure, CO069-095001 and 002 – hut sites, CO069-096 – field boundary) are located in close proximity to the westernmost turbine, T6 and were detected during field survey carried out by Tobar Archaeological Services as part of the Archaeology and Cultural Heritage chapter of the EIAR in 2010 and 2011. Given the proximity of these features to the development area T6 was subsequently tested, however, no archaeological finds or features were uncovered.

The monuments are not described on the Historic Environment Viewer (www.webgis.archaeology.ie/historicenvironment).

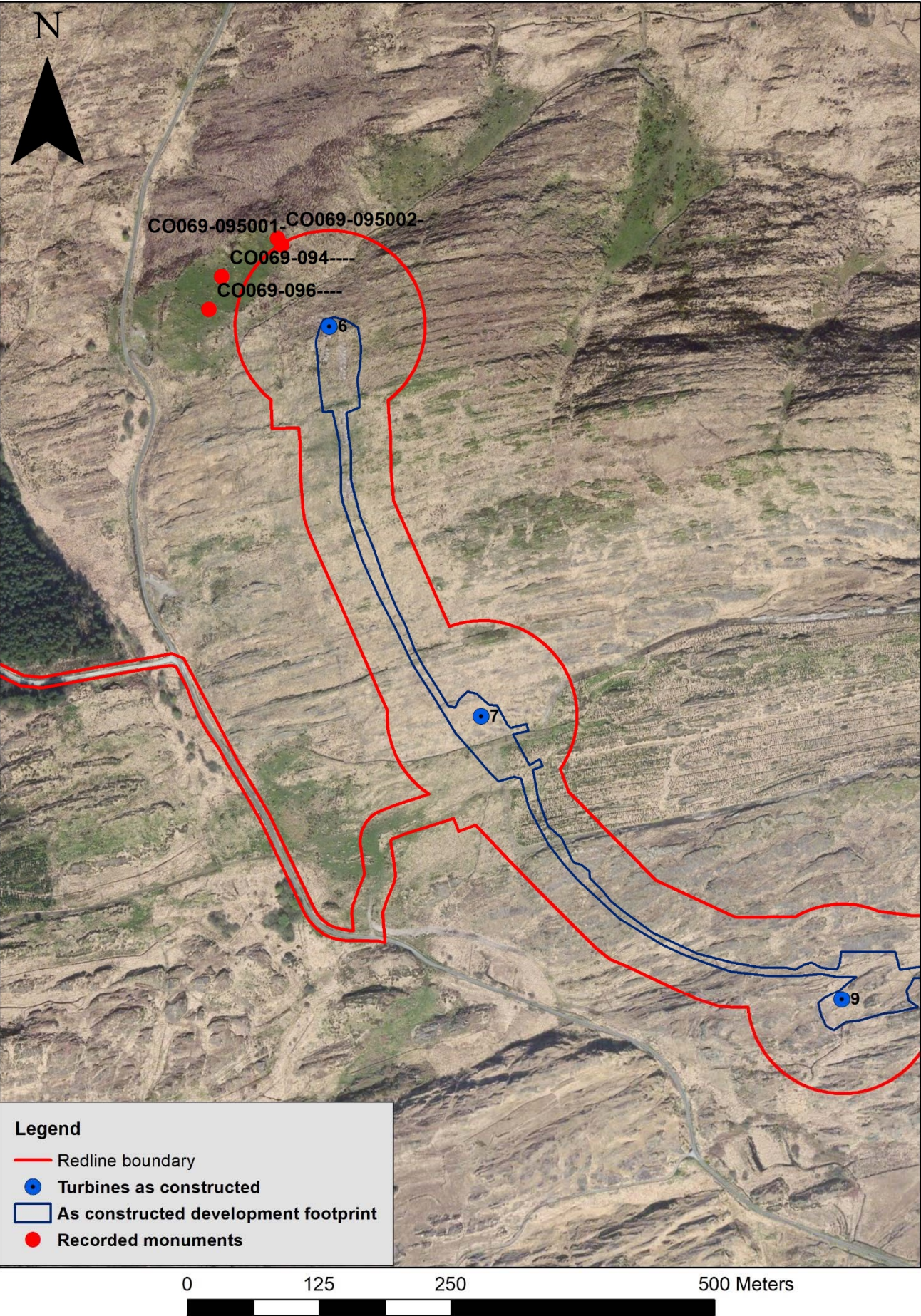


Figure 2: Permitted development site in relation to nearest recorded monuments to NW of T6 (previously tested).

5 RESULTS OF ARCHAEOLOGICAL TESTING

5.1 Results of testing

A total of 12 test trenches were excavated within the permitted development area in areas where ground disturbance will occur during the construction phase of the works. Natural subsoil was exposed at the base of each trench.

In general the stratigraphy encountered within the test trenches was similar throughout the site comprising grass-covered peat/peaty soil overlying a grey stoney natural or bedrock. No archaeological finds, features, structures or deposits were exposed in any of the test trenches excavated.

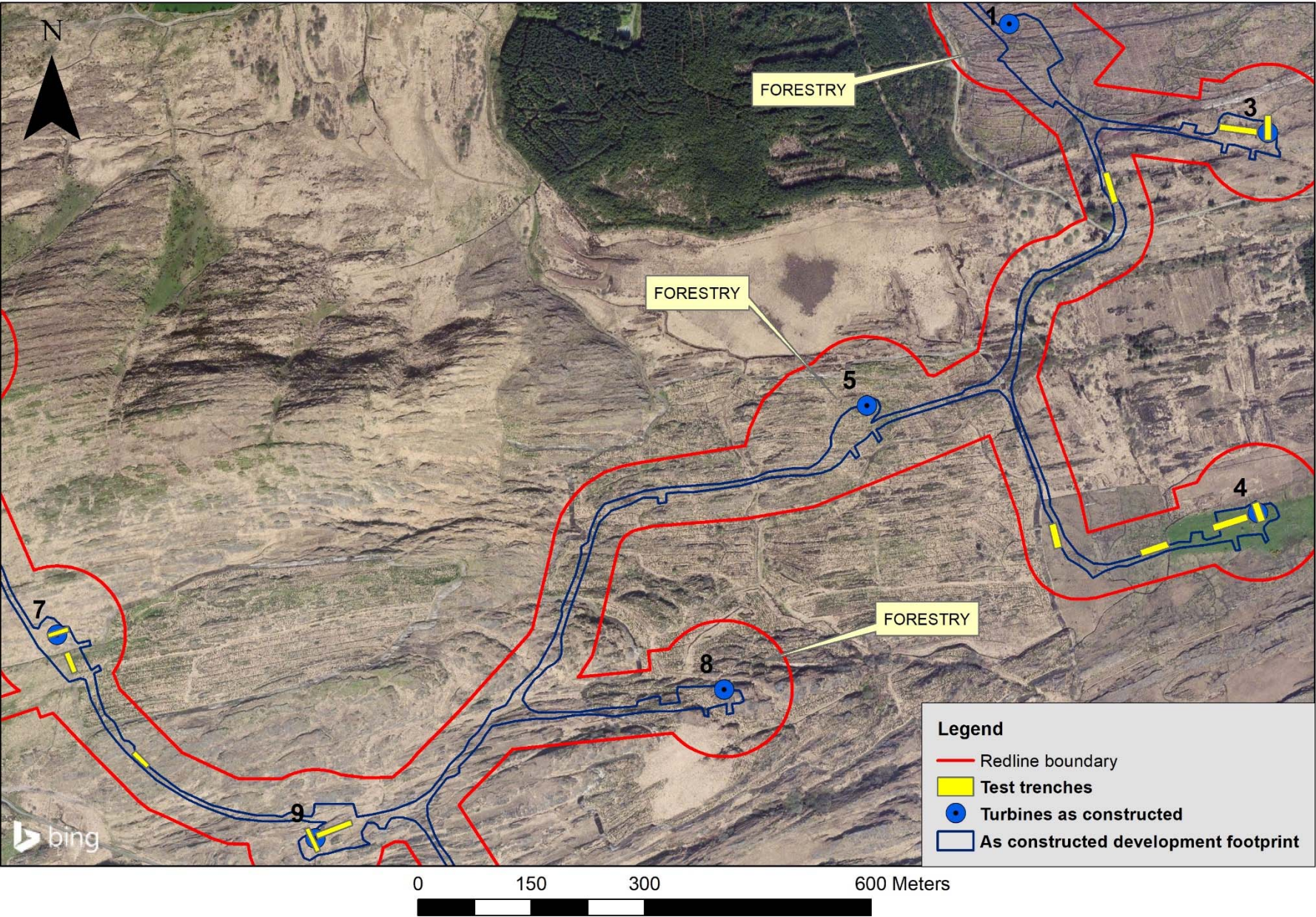


Figure 3: Test trench layout.

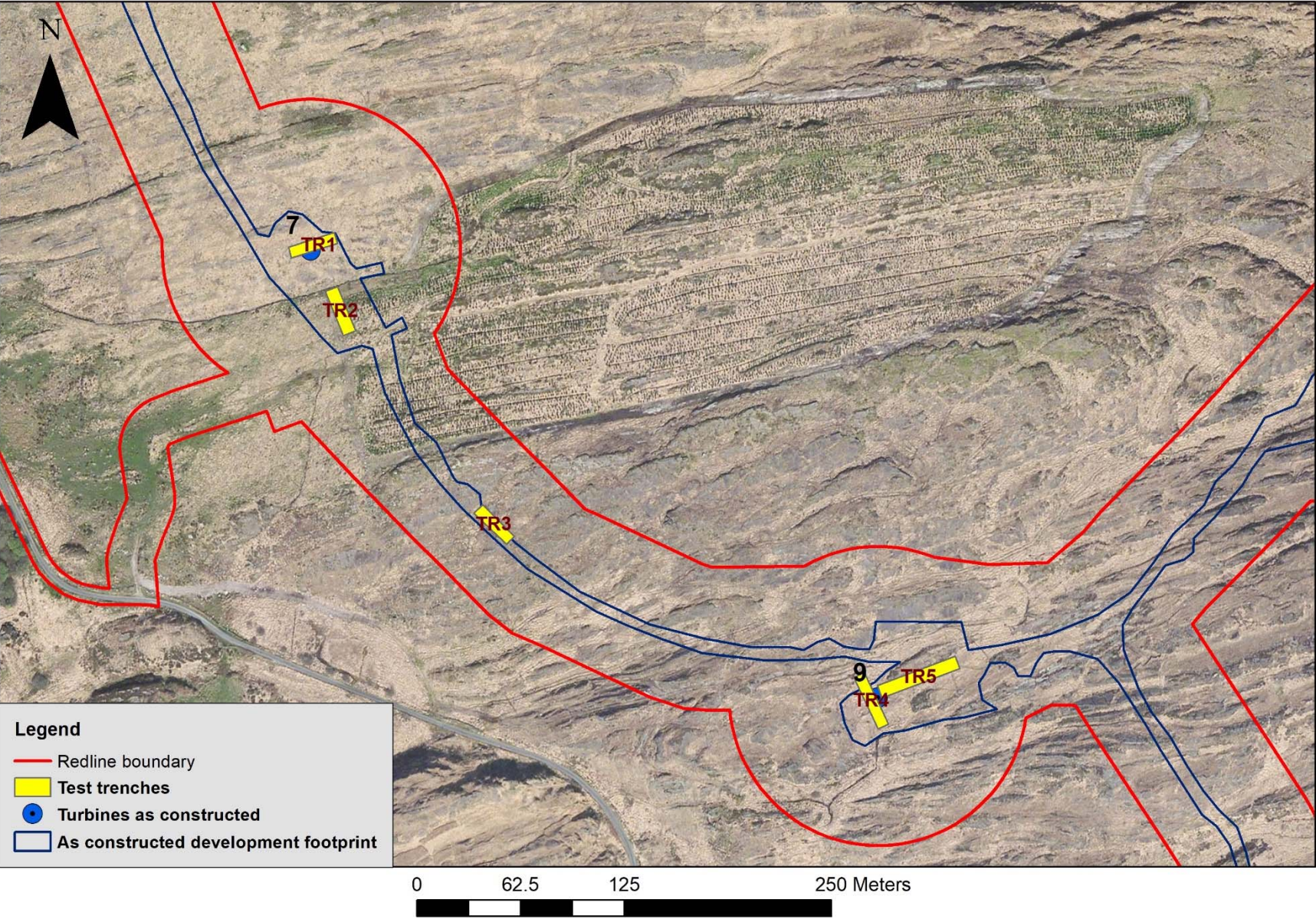


Figure 4: Trenches 1-5.

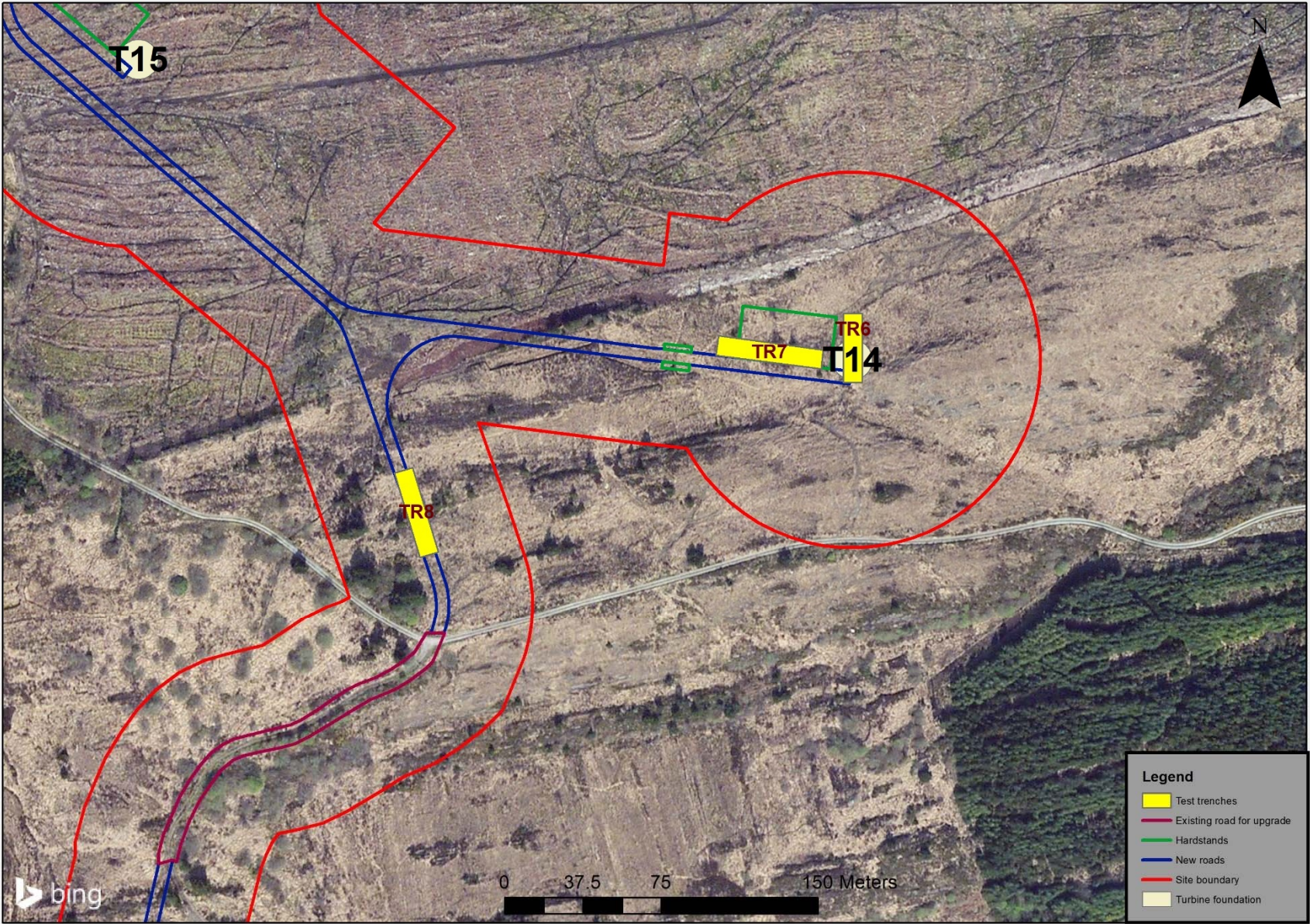


Figure 5: Trenches 6-8.

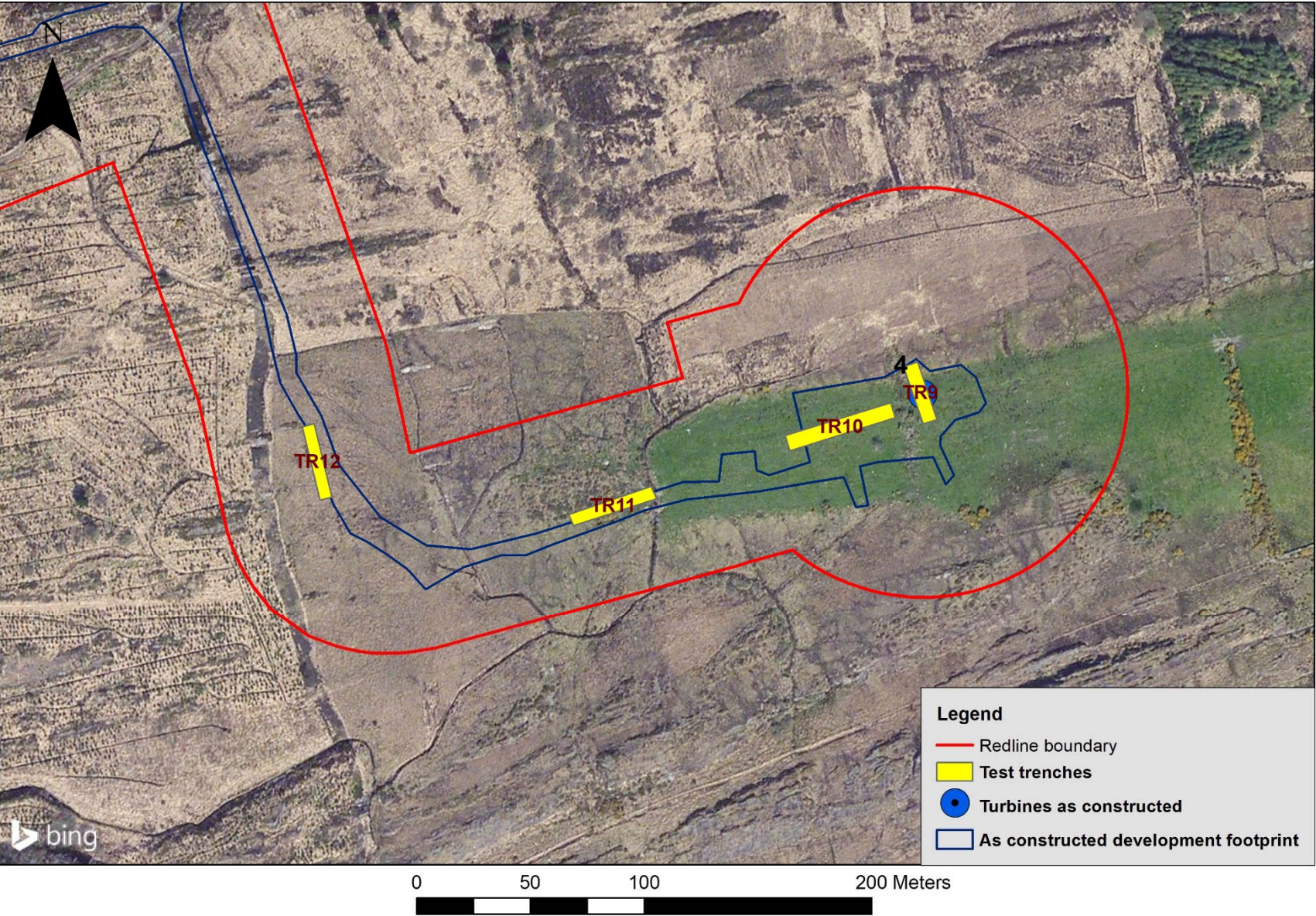


Figure 6: Trenches 9-12.

5.1.1 Trench 1

Trench 1 was excavated across T7 turbine base in a roughly E/W direction. It measured 29m in length, 1.8m in width and 0.4m in depth. The stratigraphy consisted of 0.4m (max.) of grass-covered peaty soil which overlay bedrock and a beige-brown stoney natural. Bedrock rose to the surface at the west end of the trench and frequent loose stones and boulders were encountered throughout the trench. No archaeological finds, features or deposits were uncovered.



Plate 1: Trench 1, looking west.

5.1.2 Trench 2

Trench 2 was excavated along the hardstand for T7 in a NW-SE direction. It measured c. 30m in length, 1.8m in width and 0.3m in depth. The stratigraphy consisted of 0.3m of grass-covered peat overlying a grey-brown stoney natural with frequent loose rocks and boulders. No archaeological features or deposits were uncovered.



Plate 2: Trench 2, looking SE.

5.1.3 Trench 3

Trench 3 was excavated on the proposed road between T7 and T9 in open mountainous terrain. Frequent rock outcrops were located in this area and the trench was excavated between these ridges. It measured c. 25m in length (NW/SE), 1.8m in width and 0.4m in depth. In general the stratigraphy consisted of 0.3m-0.4m of grass-covered peat overlying bedrock and a beige stoney natural. No archaeological finds or features were uncovered.



Plate 3: Trench 3, looking SE.

5.1.4 Trench 4

Trench 4 was excavated on the turbine base for T9 in an area of relatively level grass-covered peat. It was orientated roughly N/S and measured 20m in length, 1.8m in width and 0.4m-0.6m in depth. Excavation began at the south end of the trench where waterlogged peat in excess of 1.5m in thickness was encountered. Water ingress and peat depth rendered this end of the trench unsafe to excavate. Further to the north the peat was shallower and measured 0.5m-0.6m thick before rising up further to the north where it measured 0.4m-0.6m thick. It overlay a beige-pink stoney natural and no archaeological finds, features or deposits were uncovered. Water ingress occurred throughout the length of the trench.



Plate 4: Waterlogged deep peat at south end of Trench 4.



Plate 5: Trench 4, looking south.

5.1.5 Trench 5

Trench 5 was excavated along the hardstand for T9 to the east of trench 4. It measured 42m in length (NE/SW), 1.8m in width and 0.3m in depth. The stratigraphy consisted of 0.2m-0.3m of grass-covered waterlogged peat overlying bedrock and a stoney grey natural. No archaeological finds or features were uncovered.



Plate 6: Trench 5, looking NE.

5.1.6 Trench 6

Trench 6 was excavated at turbine base T3 at the north-east side of the permitted development site. It was orientated roughly north-south adjacent to a bedrock ridge/outcrop. It measured 29m in length, 1.8m in width and 0.3m in depth. The stratigraphy generally consisted of shallow peaty soil (0.25m) overlying both rock and a beige stoney natural. No archaeological finds or features were uncovered.



Plate 7: Trench 6, looking south.

5.1.7 Trench 7

Trench 7 was excavated on the hardstand for T3, west of trench 6. This area comprised grass-covered peat with occasional coniferous trees. Excavation began at the west end of the trench where peat measuring 1.8m in depth was encountered and overlay a stoney grey-beige natural. Excavation continued in an easterly direction for c. 15m before excavation was stopped due to collapse of the trench sides. Excavation recommenced further to the east where the peat was shallower. Here it measured 0.8m in thickness and overlay both rock and a beige-grey natural. The peat continued to become shallower as trenching progressed to the east where it measured 0.3m-0.4m in thickness. No archaeological finds or features were uncovered. The trench measured c. 40m in length, 1.5m in width and 0.3m-1.8m in depth.



Plate 8: Area of hardstand for T3 prior to excavation of test trench 7, looking west.



Plate 9: Western end of Trench 7, looking east.



Plate 10: Eastern end of Trench 7, looking west.

5.1.8 Trench 8

Trench 8 was located on the proposed road to T3 and was excavated in two halves due to the presence of an intervening boundary. It was orientated roughly north-south and measured 32m in length, 1.5m in width and 0.4m-1m in depth. The stratigraphy in the southern half of the trench was shallow consisting of c. 0.4m of grass-covered peat overlying a stoney beige clay. Further to the north the peat became deeper with frequent tree roots. No archaeological finds, features or deposits were uncovered.



Plate 11: Southern end of Trench 8, looking north.



Plate 12: Northern half of Trench 8, looking north.

5.1.9 Trench 9

Trench 9 was located at the turbine base for T4 and was situated in rough pasture. It was orientated roughly north-south and measured 25m in length, 1.5m in width and 0.2m-0.8m in depth. The stratigraphy generally consisted of peaty soil overlying a stoney beige natural. At the south end of the trench soil cover was shallow and measured only 0.2m in thickness. Further to the north the peat measured 0.8m in thickness and contained frequent tree roots. No archaeological finds or features were uncovered.



Plate 13: Trench 9, looking north.

5.1.10 Trench 10

Trench 10 was excavated along the hardstand for T4 and was orientated in an ENE-WSW direction. It measured 47m in length, 1.5m in width and 0.2m-0.4m in depth. The stratigraphy generally consisted of peaty sod-covered soil overlying a stoney beige natural. No archaeological finds or features were uncovered.



Plate 14: Eastern end of trench 10, looking west.



Plate 15: Trench 10, looking east.

5.1.11 Trench 11

Trench 11 was excavated on the proposed road to T4, west of the hardstand. The stratigraphy was very shallow here comprising 0.15m of sod and topsoil overlying a beige-orange natural which was stoney in

places. It measured 33m in length ENE/WSW, 1.5m in width and 0.2m in depth. No archaeological finds or features were uncovered.



Plate 16: Trench 11, looking west.

5.1.12 Trench 12

Trench 12 was excavated on the proposed road to T4 in grass-covered peat. The peat was c. 1m deep at the north end of the trench adjacent to a bedrock ridge and became shallower towards the south where it measured 0.4m-0.5m thick. It overlay a beige stoney natural and no archaeological finds or features were uncovered. The trench measured 28m in length (N/S), 1.5m in width and 0.4m-1m in depth.



Plate 17: Trench 12, looking south.

6 CONCLUSION

Pre-development archaeological testing of a permitted 9 turbine wind farm was carried out under licence 18E0646. A total of twelve trenches were excavated where topography and ground conditions allowed. All trenches were excavated to the underlying natural subsoil or bedrock and no archaeological finds, features or deposits were uncovered. Archaeological monitoring of the construction stage of the development will be undertaken in compliance with Condition No. 16 of the ABP grant of planning permission (ABP PL. 04.246742). A report on the monitoring will be compiled on completion of the work and submitted to the relevant authorities.

7 BIBLIOGRAPHY

Code of Practice between the Department of the Environment, Heritage and Local Government and the Irish Concrete Federation, 2009.

Department of Arts, Heritage, Gaeltacht and the Islands, 1999, Framework and Principles for the Protection of the Archaeological Heritage, 1999.

Other Sources

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www.webgis.archaeology.ie/historicenvironment.ie