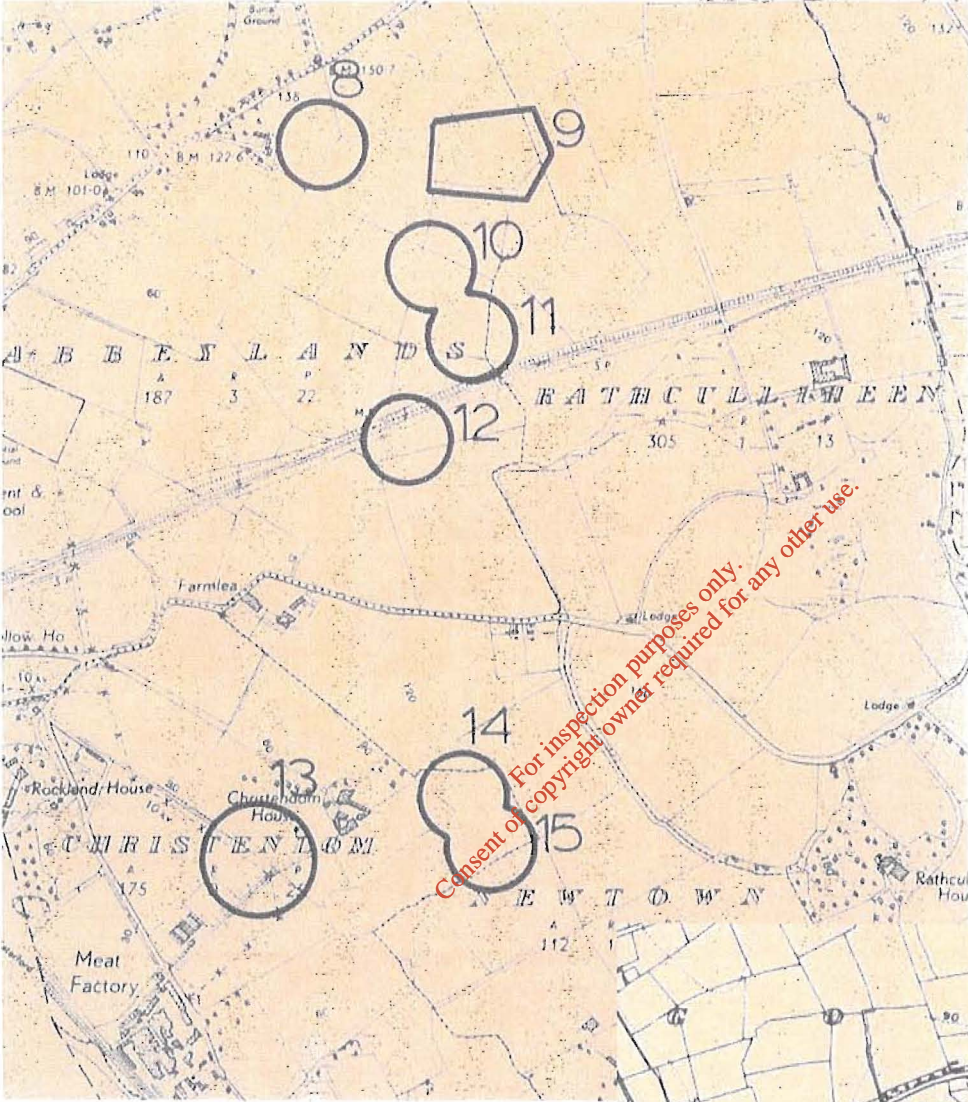
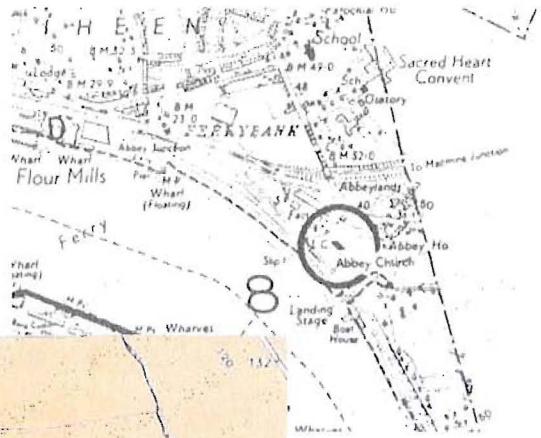


**LOCATION OF TEST PITS MONITORED  
ON ROUTE OF PIPELINE  
S. KILKENNY**

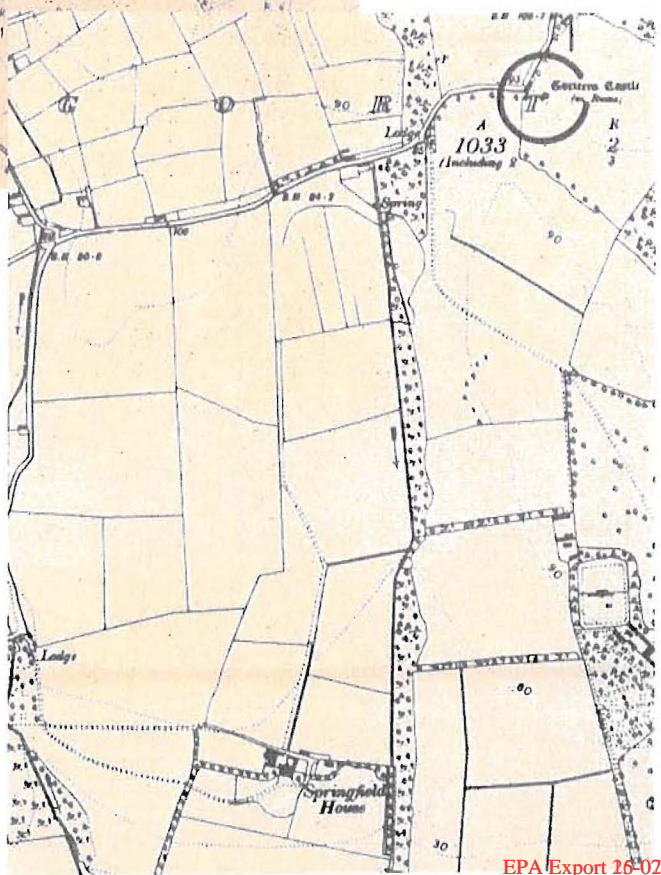
**FIG.2**

**FIG.  
3**

SMR  
Waterford  
sheet 9



SMR  
Kilkenny  
Sheet 46



SMR  
Kilkenny  
Sheet 47

# **Report on Archaeological Monitoring of Engineers Test Pits, Waterford Main Drainage, Phase 2. Licence No.01E0959**

## **Background to the Monitoring**

The testing was undertaken as an engineering project in connection with Waterford Main Drainage, phase 2.

Waterford Corporation has employed Consulting Engineers Pettit & Company to design the pipeline to take waste from the area of Waterford, (North of the River Suir) and through the townlands of Abbeylands, Christendom, Newtown, Rathculliheen Gorteeens Kilmurry and Drumdowney Lower, (Figure 1). The design includes two river crossings to carry waste from Waterford City to a wastewater treatment plant at Springfield, South Kilkenny. The proposed route of the pipeline and the location of the treatment plan are shown in Fig 1.

The route has been the subject of an archaeological impact study, undertaken by the writer in the summer of 2001. A copy of this report was submitted to the Duchas area archaeologist for Kilkenny, Mr. Mark Keegan.

The consulting engineers engaged the services of Geotech to undertake a programme of ground investigation, which included borehole trials, a limited number of slit trenches - chiefly to ascertain the location of services in selected areas- and test pits. The pits measured an average of 2m sq. The purpose of monitoring was to ensure that the pipeline would not intrude on any archaeological remains. This area of Kilkenny has a rich record of Fulachta Fiadha. At this early stage of planning of the route of the pipeline, the objective of monitoring the ground investigation is to avoid, if possible, any intrusion into archaeological deposits, whilst putting on record that the site is extant, and submitting the data to Duchas and the National Museum of Ireland.

In short, the exercise is one of mitigation, endeavouring to protect archaeological remains from disturbance.

## **Archaeological Background.**

A more detailed account of the background is provided in the impact statement mentioned above. The locations of known monuments, which are in the vicinity of the route of the pipeline, are given in Fig.3.

The townlands north of the river Suir through which the pipeline will pass are Abbeylands, Christendom, Newtown, Rathculliheen, Gorteens, Kilmurry and Drumdowney Lower.

Christendom townland contains 175 acres and was originally part of Abbeylands which bound it on the north and west. Newtown townland contains 12 acres is also a subdivision of Abbeylands. All three townlands are part of the old parish of Kilculliheen a name derived from Cill Cailchín, the church of Cailchín a celtic saint whose feast day is the 10th of February. No trace remains today of the celtic church, but it probably stood on the site known today as the Abbey church. The present day Abbey church (Plate 1), and graveyard are almost definitely situated on the site of the Augustinian nunnery of the Blessed Virgin Mary "de Bello Porta" which was founded in 1151 by Diarmuid Mac Murrough as a cell of the convent of St. Mary de Hoggis in Dublin

The name of Christendom is derived from Danish merchant who settled in Waterford, Fredrick Christian, born in 1630. He lived at Christendom, named it, and probably built the forerunner of the present house. Fredrick went on to become Comptroller of the Custom House of Waterford city. The original house is on the 1764 map, complete with outhouses and orchards. The present structure, which is empty and derelict, probably dates to the early 19<sup>th</sup> century.

The adjoining townland of Newtown is to the east of Christendom and was separated from it by a ditch. The map of 1764 indicates this ditch to have been the boundary between the enclosed land of Christendom, and the unenclosed rough pasture of Newtown. The area around Christendom has several recorded Fulachta Fiadha

In the townland of Drumdowney there are early ecclesiastic remains, with a ringfort further north

The pipeline will encroach on what were the lands of Gorteens Castle. Gorteens was described in the Down Survey as having two castles and four dwellings although the only remains on the ground today are of a fragmentary gatehouse, a 15<sup>th</sup> century tower house.

## Results of the Testing.

The test pits are described in order of location, from east to west. The engineers' titles of ST represents a slit trench, usually done to ascertain the location of services. The title TP indicates a test pit, normally dug to assess sub-surface depth and consistency of the soil and the level at which bedrock lies. The numbers allocated by the engineers have been adhered to for consistency between reports. The location of the test pits is shown in Fig. 2.

### ST10A (Plates 1 & 2)

This was dug on the public road. in the vicinity of the gates of the C of I church in Abbeylands. The trench was dug parallel to the centre of the road, with its long axis lying east-west.

The surface of tarmac was removed with the underlying layer of industrial fill, a combined depth of 0.15m. Under this was an earlier surface of tarmac, c. 0.10m deep. Beneath this was a layer, 0.15m deep, of brown gritty soil with frequent fragments of red brick and occasional pieces of yellow brick. A layer of orange clay, almost 0.10m thick underlay the soil layer. This had occasional fragments of charcoal. The clay in turn overlay a dense layer of stones. These stones were assorted, including shale, igneous and limestone and were angular. It is reasonable to infer that these must have been introduced, dumped or used to backfill the area. The layer reached a depth of 1.27m at the east side of the trench, and 1.40m at the west, following the natural incline. This overlay boulder clay.

### ST8 (Plate 3)

The trench extended across the road, 16m east of the gates of Abbey House, the property at the east end of the church grounds. At the south side of the trench an organic rich garden soil was removed, exposing ESB cables at a depth of 0.62m. beneath the surface, 0.80m from the wall at the south. Outside the backfilled cable trench the soil was more stony and a light orange colour. There was a cast iron pipe, 0.84m down, at a distance of 3.10m from the wall. At the opposite side of the trench, 0.84 m below the surface of the road, was a gas pipe, the cut for which was backfilled with concrete. The layer contained some rubble, concrete with brick, including some pieces of cast concrete, which may have originally been a gate pillar. The layer became stonier towards the base, and was dug to a maximum of 0.90m.

### ST9 (Plate 4)

This is located at the corner of the road which leads south at the bottom of the hill to the east of Abbeylands church.

The tarmac and sub-road fill, a pinkish crushed stone, measured 0.27m in depth. Beneath this was undisturbed yellow silty boulder clay with angular stones. The maximum depth was 0.90m. At the southern end water seeped in, indicating the presence of a land drain.

### TP11 (Plates 5 & 6)

This trench was dug in the field immediately west of Christendom House. The surface cover was stubble. The topsoil measured 0.30m in depth and yielded a sherd of chinaware and a sherd of red earthen tile. The subsoil was a mid-brown sandy soil with fragments of coal cinders. The basal layer was beige/yellow boulder clay. The maximum depth was 1.20m. No features were exposed.

### TP12 (Plate 7)

This trench was dug in the field to the east of Christendom house. The field had not recently been cultivated, with a grass cover including dock and nettles. The terrain was bumpy and ridged indicating previous ploughing. The topsoil was 0.30m deep and overlay undisturbed pale brown boulder clay in an even horizon. The trench was dug to 0.60m.

### ST10 (Plate 8)

The objective in digging this slit trench was to locate water pipes associated with the meat factory at the river to the south. The endeavour was unsuccessful, but the trench but the length of the trench was extended in the search to c. 6m. east -west. The topsoil, with grass cover, was mid to dark brown silty soil, measuring 0.30m in depth. The underlying orange/buff-coloured clay had some black speckles, which was identified by the geologist present as degraded rock particles. The only feature exposed was a land drain at the western end of the trench. At the northern (uphill) face of the trench it was 0.40m below the surface, and at the southern face it was 0.50m. its base was at 0.70m at the northern side, and 0.9m at the southern side. The average width was 0.27m, The drain consisted of an earth-cut trench filled with broken, angular shale stones. It crossed the slit trench diagonally, NNW to SSE. The maximum depth of the slit trench was 1.2m, and the basal layer was consisted of gritty pinkish boulder clay, including rounded small boulders of sandstone.

### TP13 (Plate 9)

This trench was located on the slope to the river below the site of a walled garden and ruined lodge at Rathculliheen. The topsoil was 0.23m in depth. This overlay orange/red loose stony subsoil, which extended to 0.55m below the surface. Beneath this was boulder clay. At the west face of the trench only, a lens of soft clay was evident at a depth of 0.57m.

### TP14 (Plates 10 -16)

The trench was intended to be excavated in the centre of a small stand of trees, (plate 10). Lying against the base of eastern most of the trees was a large boulder. Due to the testing happening in winter, grass and undergrowth was at a minimum. Close examination of the stone revealed some markings at the south-facing end of the stone, (plates 14, 15 & 16). These were deemed by geological/engineering staff not to be slickensides -resultant abrasion from glacial action. The stone measures 1.44m x 0.80m x 0.73m.

The trench was relocated to the south of the "baseline" created by the triangle of trees, 4.7m due south of the boulder (plate 10). The trench measured 3.6m N/S, 1.45m E/W and was dug to a maximum of 1.1m deep.

The topsoil was 0.12m deep, under which was 0.17m of brown slightly sandy subsoil. The west-facing side of the trench (plate 11) had an undisturbed profile of light brown/yellow clay mottled with red, with occasional stones and a lens of sand near the base. The east-facing side of the trench showed disturbance of the upper levels. This was consistent with the uprooting of a tree. The disturbance appeared as a cut in the subsoil and the boulder clay to a maximum depth of 0.60m. The fill was stony loose clay with a slightly darker colour than the 'natural' deposits in the area, with occasional rootlets. The cut and fill was also apparent in the south-facing side of the trench. At the base of the cut, in the south-facing section, was a sherd of blue willow patterned ware, (plate 13). The likely explanation is that the piece is intrusive at this depth, having fallen in from the surface when the socket of the tree roots was open.

### TP15 (Plate 17)

This trench was located in the field in front of Springfield house, bordered at the south by the railway line, which runs alongside the river in this area. The field has some linear ridges, which may be soil creep resultant from intermittent flooding in the past. The topsoil was mid to dark brown soil, which lightened in colour towards the base at 0.25m below the surface. This overlay a sandy clay with small stones. There were no features or finds in the trench, which was 3.60m in length E-W and was dug to a maximum depth of 0.80m.

### ST15 (Plate 18)

This was excavated on the proposed route of the pipeline, at the margin of the road east of Gortens Castle. (A new road was built in the 1990's passing north of the castle, leading to the port at Belview). The trench had an unusually thick layer of road fill under the tarmac, up to 0.80m beneath the surface. Under this was sandy gravel rich clay. The bedrock showed at less than one metre below the road surface.

## Summary

Of the ten trenches monitored, only ST8A and TP14 yielded any indicators for archaeological potential. ST8A had an anomalous fill of angular stones which, because of its proximity to the site of an early church (underneath or in the vicinity of the present Abbeylands Church), should be flagged for attention during further monitoring in the event of the pipeline passing through this area. The possibility exists that an earlier enclosure associated with the early church was backfilled to level the area.

The markings on the boulder at the original location of TP14 may or may not be archaeologically significant. No archaeological features or finds (other than the modern potsherd) were noted in the testing of TP14.

## Conclusions

The slit trenches and test trenches were small and well spaced out along the route. Only those in the vicinity of areas highlighted in the EIS done by the writer in the summer of 2001 were attended during the monitoring.

As such it cannot be inferred that archaeological remains do not survive along the entire route proposed for the pipeline.

In the case of the marked stone at TP14 it is a precaution to have it looked at further. The shape of the stone is not rectangular, or tapered in the shape often associated with Ogham stones, but nevertheless it would be advisable to have personnel from Duchas, with expertise in this area, to review the marks. It has been suggested that either Finbarr Moore or Paul Walshe of Duchas be consulted. The possibility exists that the markings could be the remains of an Ogham inscription, though it is far from certain.

As a general conclusion it is recommended that all further works associated with the excavation of the pipeline and the construction of wastewater treatment plant be monitored by a licensed archaeologist.

Orla Scully MA MIAI



## Conclusions

The slit trenches and test trenches were small and well spaced out along the route. Only those in the vicinity of areas highlighted in the EIS done by the writer in the summer of 2001 were attended during the monitoring.

As such it cannot be inferred that archaeological remains do not survive along the entire route proposed for the pipeline.

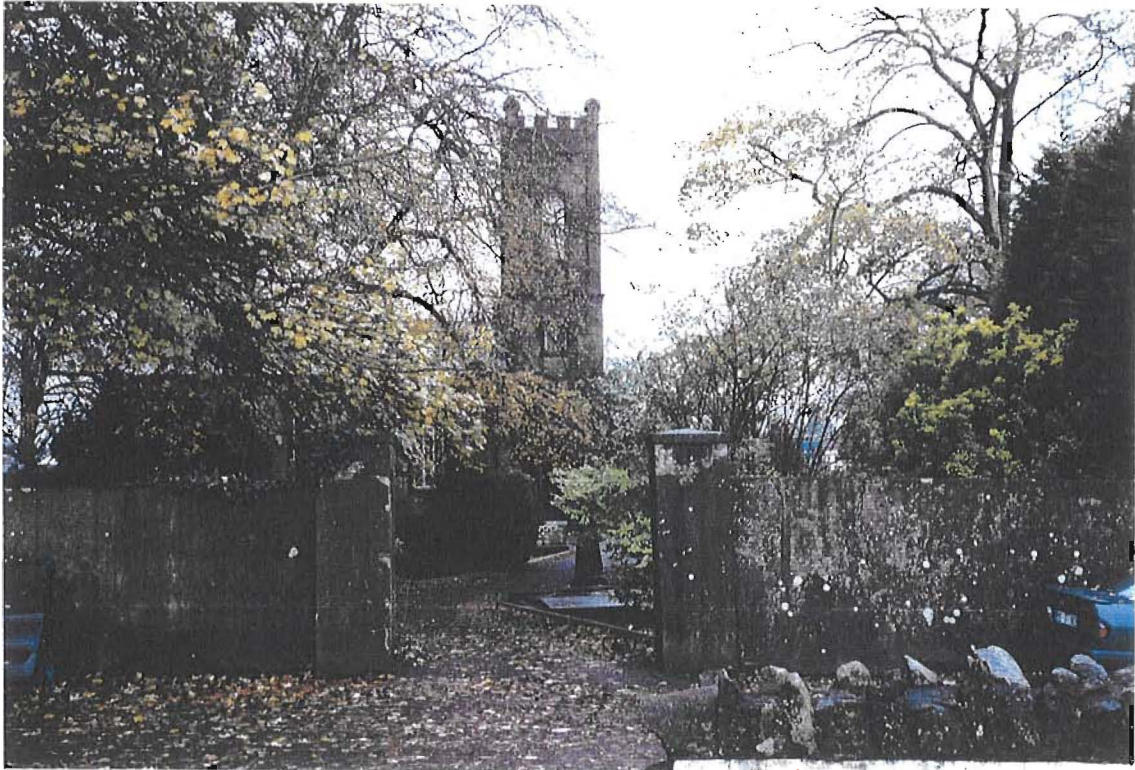
In the case of the marked stone at TP14, the opinion of an archaeologist in Duchas with expertise in this area, Mr Finbarr Moore, was sought. He concluded that the stone was not an Ogham stone. However, he did not rule out the possibility that the stone was from an earlier period. The marks appear to have been chiselled, and are not consistent with scrapes from a ploughshare. Chris Corlett of the licensing section of Duchas suggested the planning authority of Kilkenny, (in consultation with Maeve O Callaghan or Mark Keegan, the Duchas archaeologists with responsibility for planning in Co. Kilkenny), stipulate that the stone be retained. My recommendation would be that the stone should be displayed either on site, incorporated into the landscaping, or given to the care of Waterford Treasures, a designated repository for the National Museum.

As a general conclusion, it is recommended that all further works associated with the excavation of the pipeline and the construction of the wastewater treatment plant be monitored by a licensed archaeologist. This archaeologist should be fully appraised of the original location of the stone, and of the cautions attached to its potential function as a marker of some sort. The monitoring archaeologist should be provided, in advance, with the impact assessment and test pit monitoring report.

*B. J. Scully*

*B.3.2002*

**Plate 1**  
**Abbeylands Church**

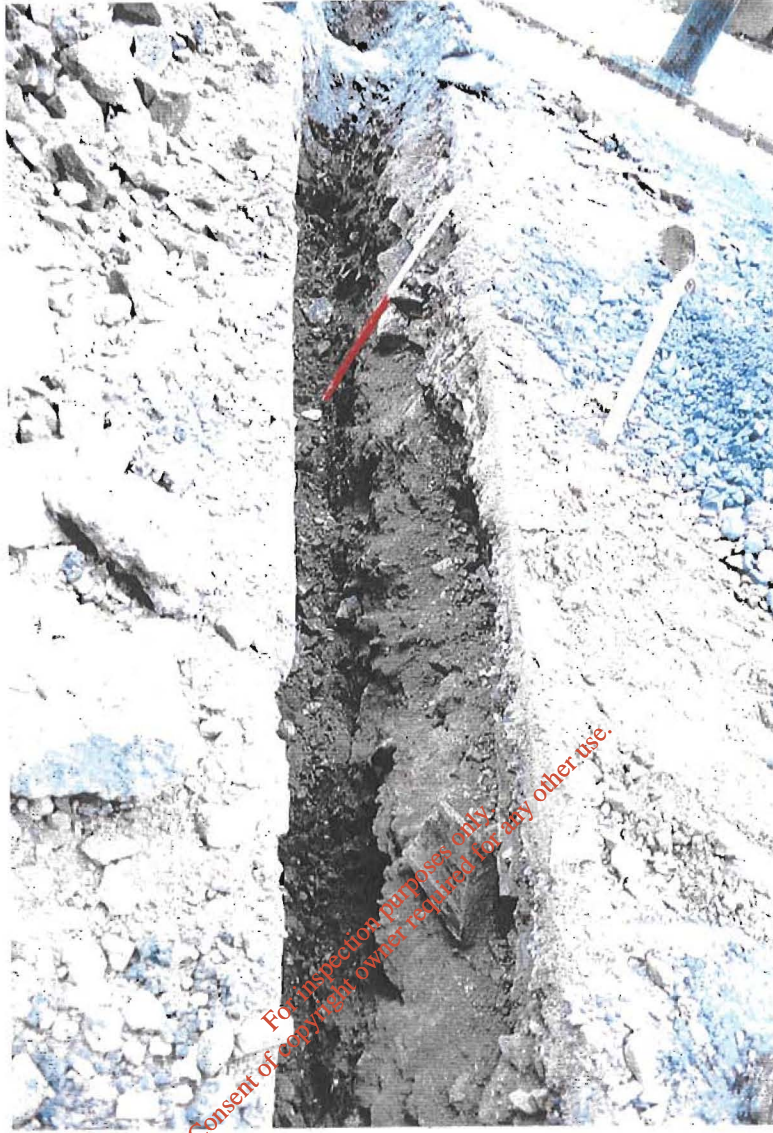


**Plate 2**  
**ST10A**



*For inspection purposes only.  
Consent of copyright owner required for any other use.*

**Plate 3  
ST8**

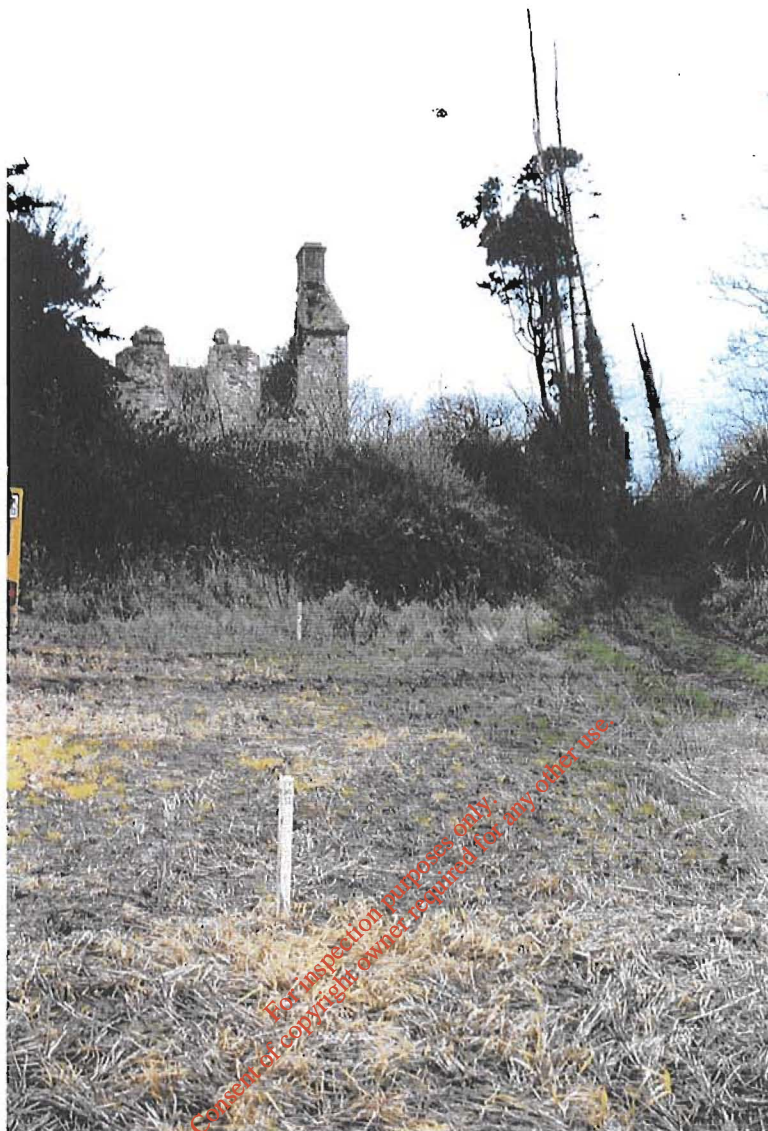


For inspection purposes only.  
Consent of copyright owner required for any other use.

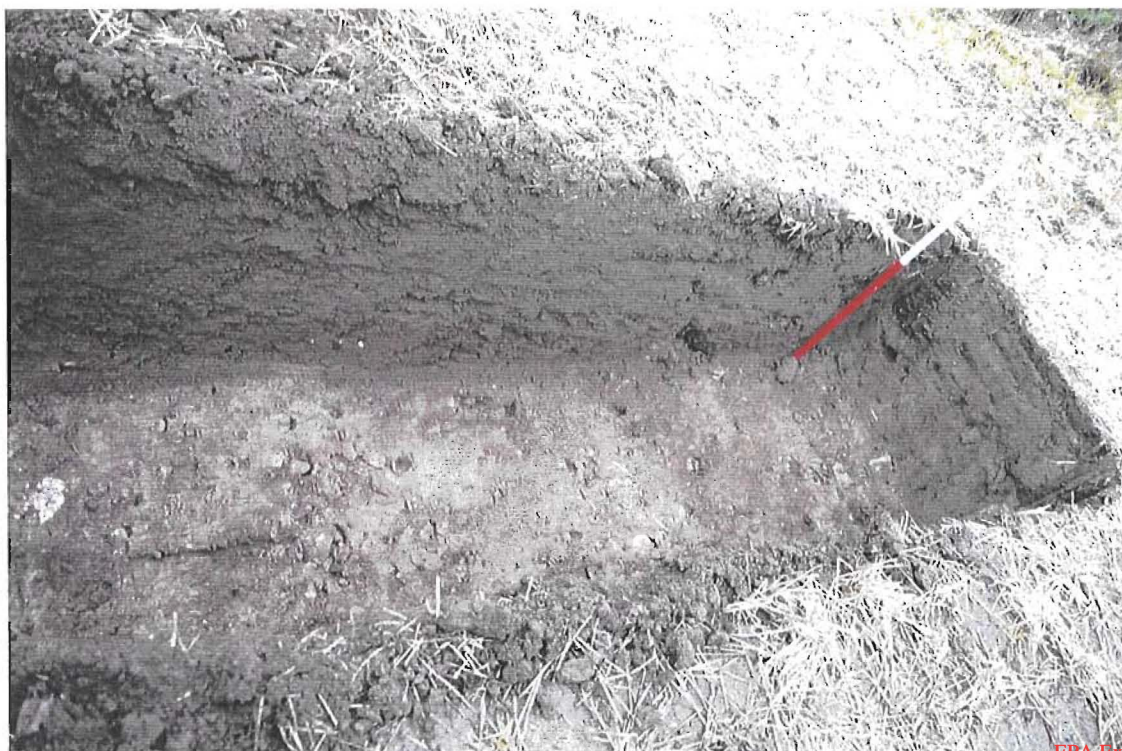
**Plate 4  
ST9**



**Plate 5**  
**TP11 (location)**



**Plate 6**  
**TP11**



**Plate 7  
Tp12**

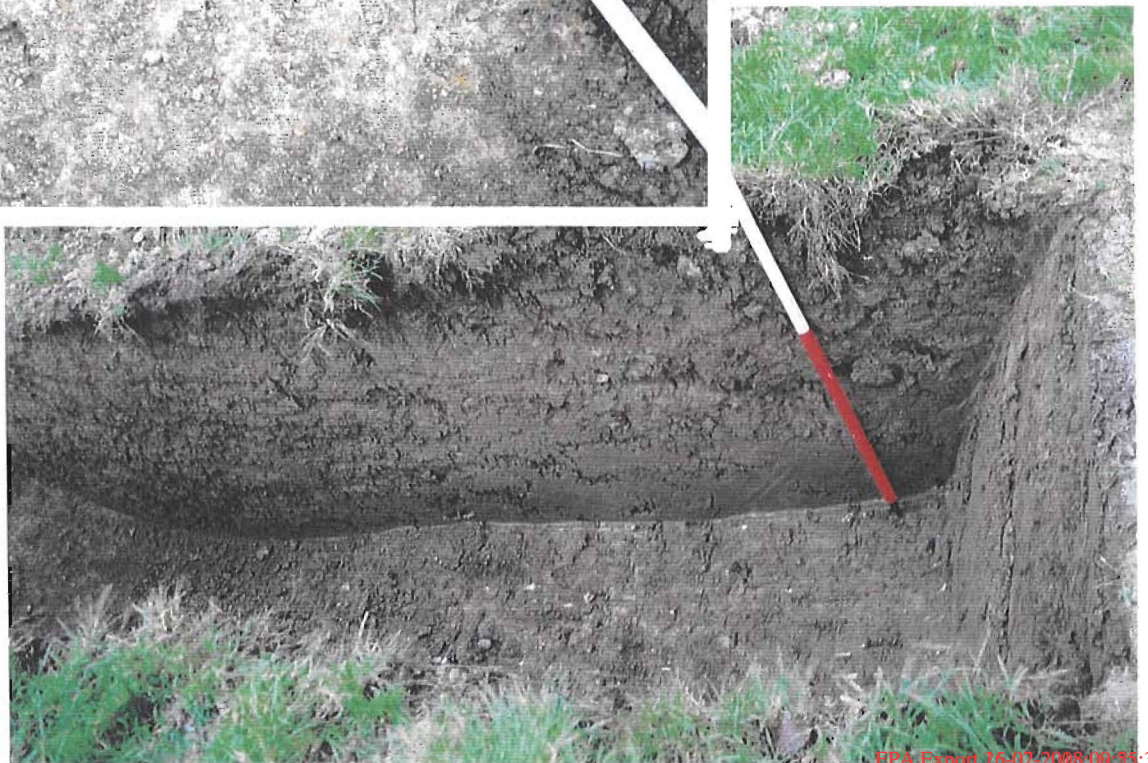


**Plate 8  
ST10**



For inspection purposes only.  
Consent of copyright owner required for any other use.

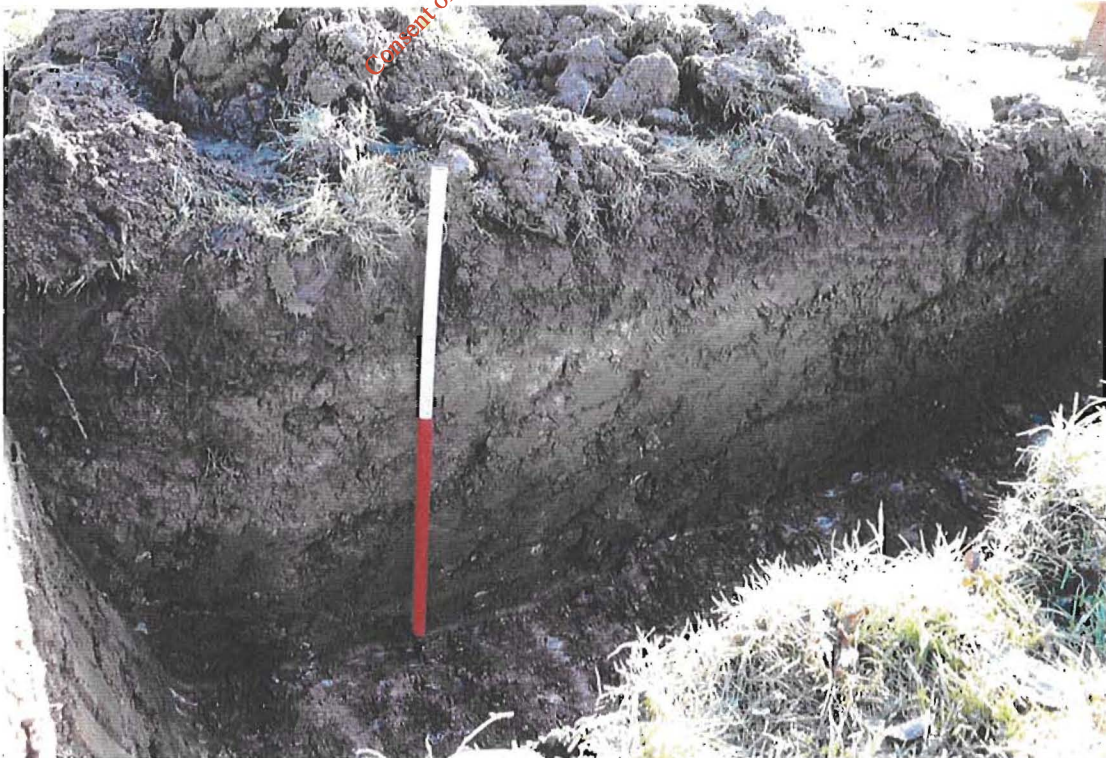
**Plate 9  
TP13**

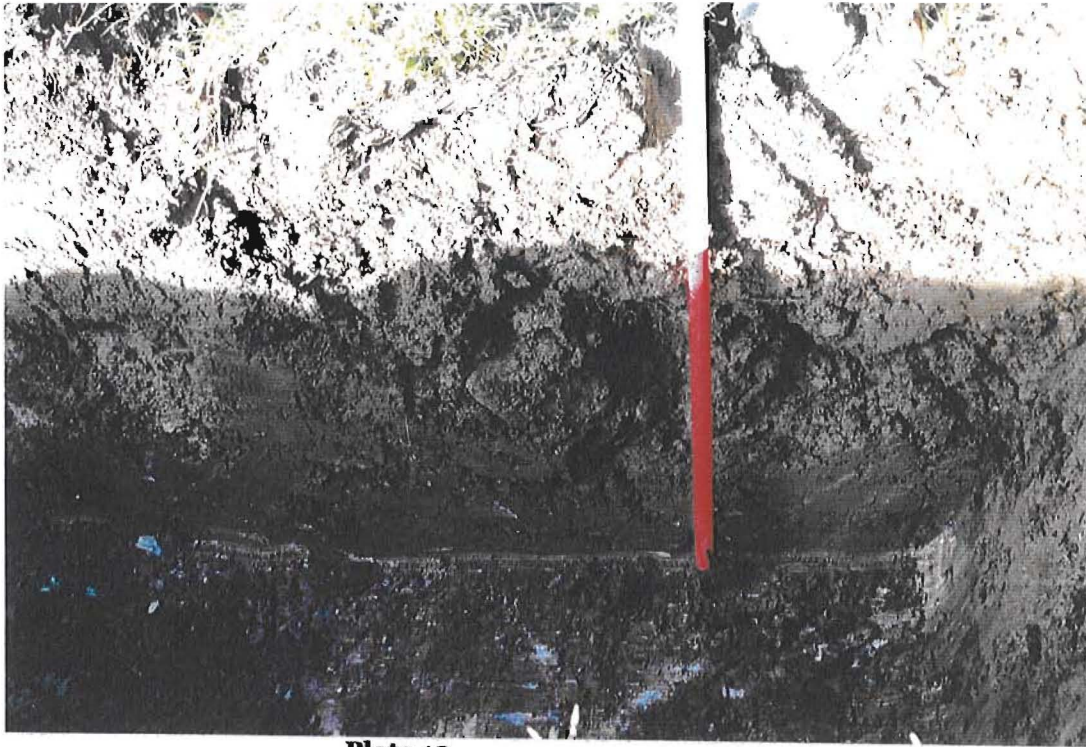




**Plate 10**  
**TP14 (center)**

**Plate 11**  
**TP14 (from west)**





**Plate 12**  
**TP14 (from east)**

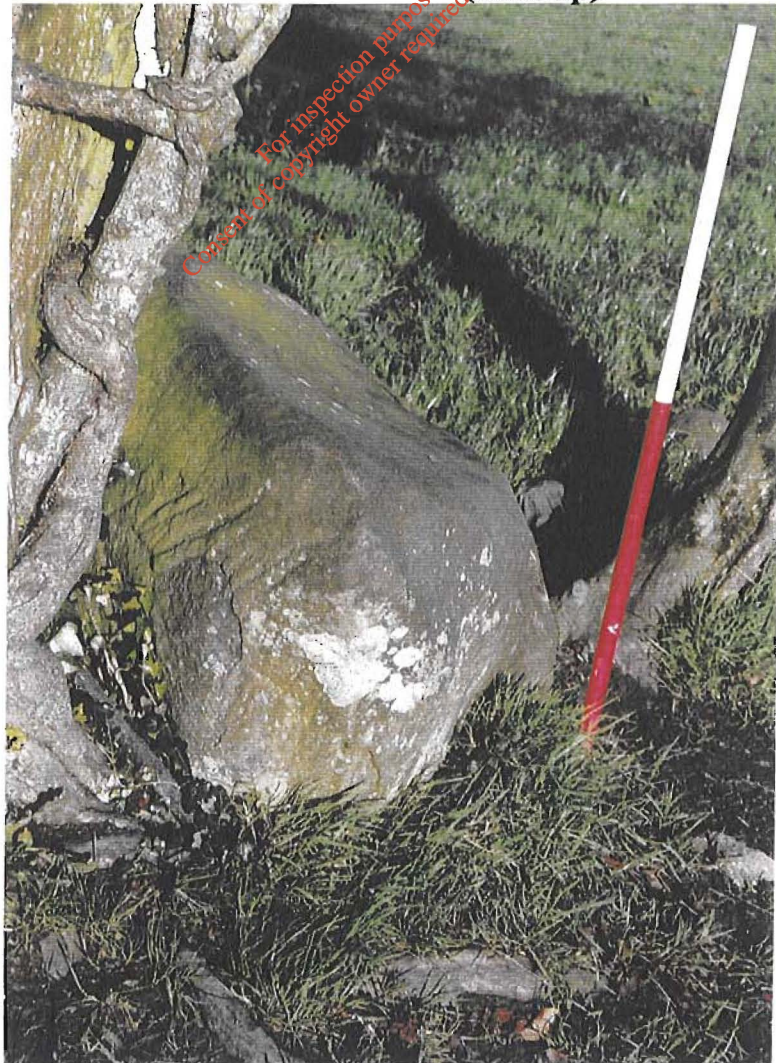
**Plate 13**  
**TP14 (from south)**





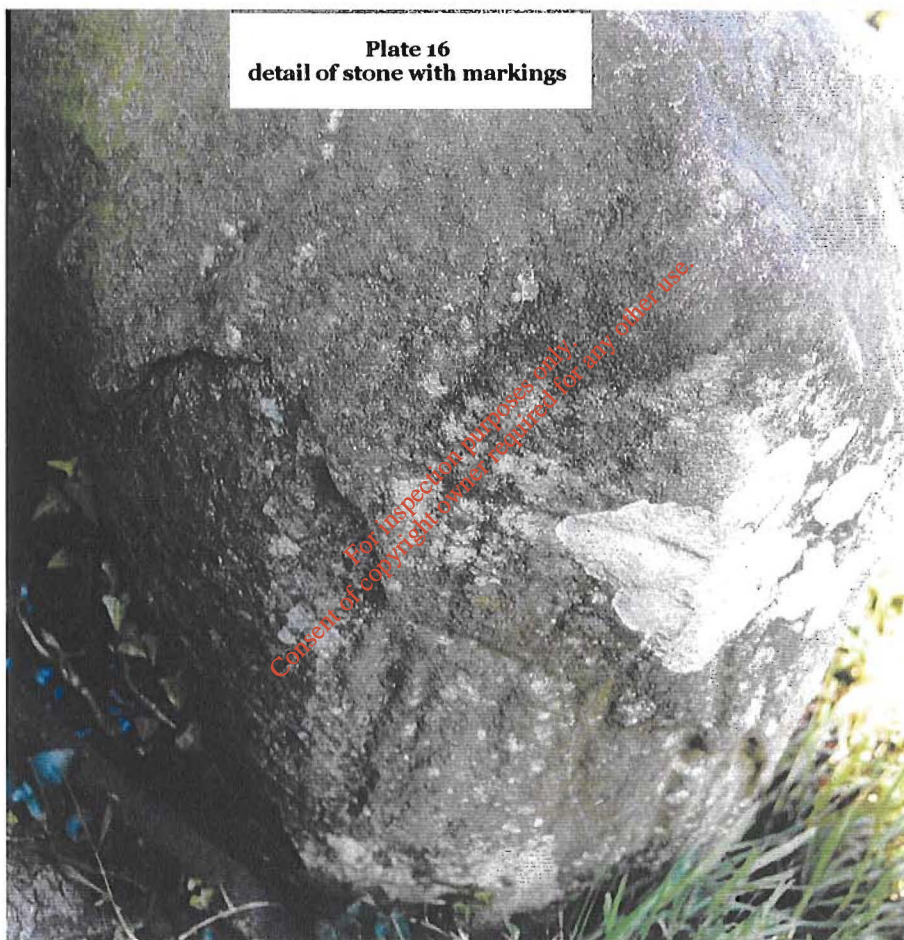
Plate   
Stone with markings north of TP14

Plate   
Stone with markings north of TP14  
(close up)





**Plate 16**  
**detail of stone with markings**



**Plate 17**  
**TP15**



**Plate 18**  
**ST15**

