

Colchester Archaeological Trust



**CAT Report 1798
issued November 2022**

**Archaeological monitoring on land at
Cut Throat Lane, Witham, Essex, CM8 2BY:
April-October 2022**



**CAT project ref.: 2021/10k
ECC code: WHCT21**

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Cut Throat Lane, Witham, Essex, CM8 2BY:
April-October 2022**

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Planning ref.: 19/02196/FUL

**CAT project ref.: 2021/10k
CAT Report 1798**

**ECC code: WHCT21
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report prepared by Bronagh Quinn

fieldwork by Ziya Eksen and Bronagh Quinn

**commissioned by Charlie Gordon
on behalf of Conrad Energy**

Prepared by:	Bronagh Quinn	Senior Site/Post-Excavation Assistant
Reviewed by:	Laura Pooley	Post-Excavation Manager
Reviewed and approved by:	Philip Crummy	Director of Archaeology
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Colchester Archaeological Trust

Roman Circus House,
Roman Circus Walk,
Colchester,
Essex CO2 7GZ

tel.: 01206 501785

email: bq@catuk.org

web: www.thecolchesterarchaeologist.co.uk

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1 Summary

Archaeological monitoring was carried out on land at Cut Throat Lane, Witham, Essex in advance of the construction of a standby gas-powered general facility. Located at the junction of the main railway line to London, monitoring revealed the remains of an intact railway turntable and associated features.

2 Introduction (Fig 1)

This is the report for archaeological monitoring carried out by Colchester Archaeological Trust (CAT) on land at Cut Throat Lane, Witham, Essex from 11th April to 19th October 2022. The work was commissioned by Charlie Gordon of Conrad Energy and took place during the construction of a standby gas-powered general facility.

Archaeological monitoring was requested by the Essex County Council Historic Environment Advisor (ECCHEA) Teresa O'Connor to ascertain whether any archaeological features were still present after the construction of the railway turntable.

In addition to the brief and WSI, all fieldwork and reporting was done in accordance with *Management of Research Projects in the Historic Environment (MoRPHE)* (Historic England 2016), and with *Standards for field archaeology in the East of England (EAA 14 and 24)*. This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological field excavation (ClfA 2014a)* and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2014b)*.

3 Archaeological background

The following archaeological background primarily includes extracts from the Brief and the Essex Historic Environment Record (EHER) held at Essex County Council, County Hall, Chelmsford, Essex (accessible to the public via <http://www.heritagegateway.org.uk>).

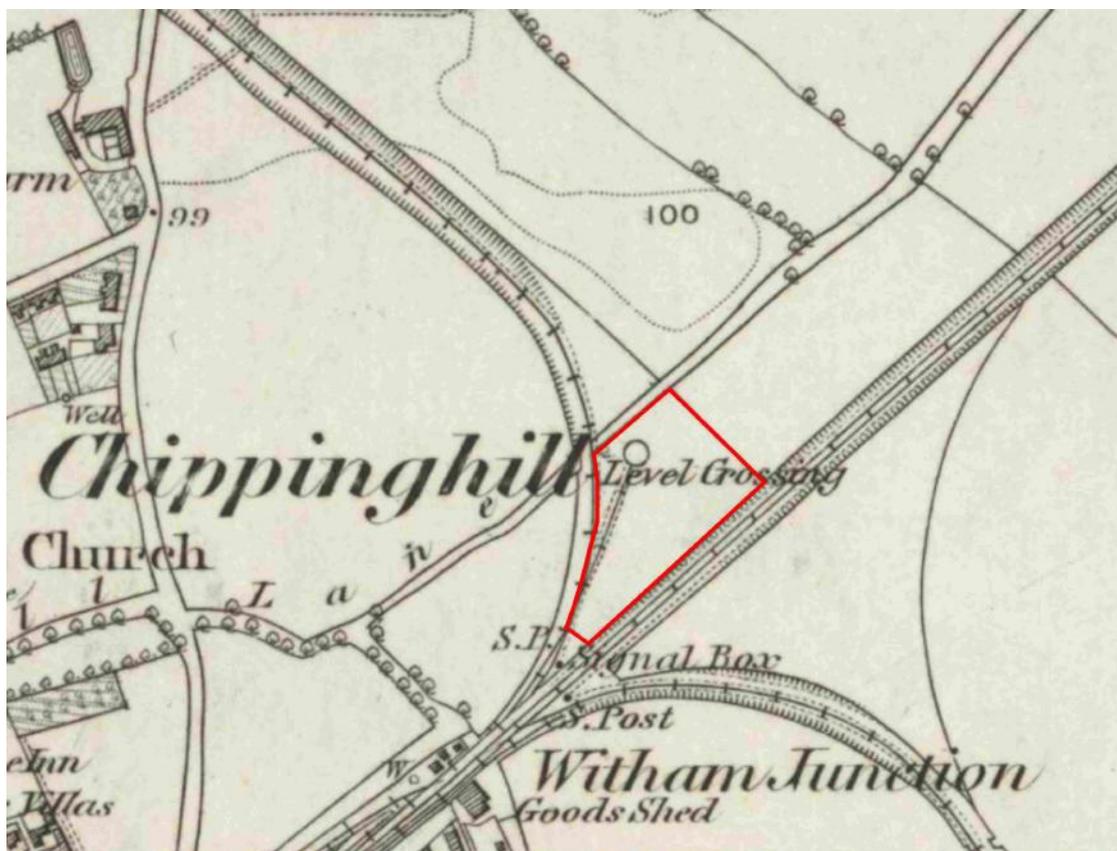
In the Palaeolithic period, the site of the later town of Witham was located on the shore of a large Hoxnian lake. Excavations at Ivy Chimneys recovered over 30 Palaeolithic hand-axes from a Roman votive deposit that could have had a local origin. Mesolithic and Early Neolithic flintwork has been recovered nearby from the Chipping Hill area along with evidence of Late Neolithic occupation and a Late Bronze Age buried soil (Medlycott 1999, 8; EHER 8171 and 14050).

The proposed development lies just beyond the boundaries of the northeastern edge of Chipping Hill Camp. The camp earthwork is a bivallate (double-ditched) hillfort which was probably constructed in the Iron Age (EHER 8106-8). Iron Age occupation has been recorded on the periphery of the hillfort beyond the enclosure ditch and earthworks, and to the north-east a Middle Iron Age settlement has been excavated. The site's proximity to the hillfort could mean it lies on a possible route-way out of the hillfort. Three Late Iron Age inhumation burials and three Late Iron Age La Tène iron fire pokers were found at the camp in 1850 (EHER 8114).

During the Roman period the focus of occupation in Witham moved c 1 mile to the south-west at the Maltings Lane/Ivy Chimneys area, although some later Roman settlement evidence has been recovered from within the hillfort (EHER 8107, 8112-3, 8340 and 8444).

The Anglo-Saxon Chronicle records that in 912 AD King Edward the Elder 'went with some of his forces into Essex to Maldon and camped there while the burh was being made and constructed at Witham, and a good number of people who had been under the rule of Danish men submitted to him'. The location of the Witham burh is a matter of some debate, although Chipping Hill Camp, which was still a substantial earthwork at that date, is the most probable site (Medlycott 1999, 9). Rodwell (1993) has argued against Chipping Hill Camp because of the paucity of finds of a suitable date.

For a full background on the archaeology of the Chipping Hill area and Chipping Camp see the *Witham Historic Town Assessment Report* (Medlycott 1999) and *The Origins and Early Development of Witham* (Rodwell 1993).



Map 1 Extract of 1st edition six inch map of England and Wales, Essex sheet XXXV, published 1881, with site in red



Map 2 Extract of Ordnance Survey six inch map of England and Wales, published 1924, with site in red

The site is also located at Witham Junction on the edge of the main railway line from Colchester to London. Witham train station opened in 1843 with branch lines leading to both Braintree and Maldon opening in 1848 (Newman 2000). The main railway line and Braintree branch line are both still operating but the Maldon branch line closed in 1964. Early Ordnance Survey maps of Witham Junction show a turntable on the development site (Map 1). Turntables were typically constructed at important stations or junctions on railway lines in order to turn the locomotives around (Wilkins 1937), suggesting that the turntable was likely constructed sometime between 1843 and the establishment of Witham Junction in 1848 (Allen 1956; Audry 1990). A later Ordnance Survey map of 1924 shows two structures at the southern end of the site (Map 2). In 1951, a new 75 foot turntable was installed to accommodate the turning of the new large Britannia locomotives which had just come into operation on the line (Newman 2000).

The ecology report submitted as part of the planning application states that the topsoil within the site has been removed previously, which may have impacted on any archaeological remains present.

4 Aims

Archaeological monitoring was undertaken to ascertain the location and survival of the railway turntable as well as to observe whether any older archaeological material still remains after construction of the railway lines and associated structures.

5 Results (Figs 2-4)

All groundworks were machine excavated under the supervision of a CAT archaeologist. Initial monitoring works were undertaken to establish the location and survival of the railway turntable known to be located on the site. Service trenches were subsequently monitored in areas undisturbed by the railway turntable.

The railway turntable (Fig 2)

Excavation was undertaken to ascertain the location of the railway turntable in order for piling to be carried out on site without the risk of hitting solid structures (Fig 2). The railway turntable in its entirety was not exposed as it would not be affected by the piling taking place. Railway turntables were typically constructed by excavating a large pit in which a concrete base and walls are constructed. A central pivot supported a metal bridge on which the trackway for the trains sat. Inside the pit would be an external platform on which wheels would sit to help in the rotation of the train. Larger turntables could also have brick-lined inspection pits for repairs to be undertaken (All information kindly supplied by Neal Benjamin, pers comm).

All that survived of the Witham turntable (F1) was the central pivot atop a concrete base, a brick-lined walkway or inspection pit, and some concrete stairs up to the surface. No external walls for the pit were located, although a secondary curved brick platform was found underneath the concrete platform to the south of the central pivot, which has an unknown purpose but could be part of the earlier turntable which was replaced in 1951.

The pit dug to construct the turntable was approximately 25m in diameter and over 1.6m deep with no signs of a complete base or external wall found during the monitoring work. In the centre of the pit was a large circular concrete block (1.98m diameter, 0.62m tall) (Photograph 1) out of which 8 steel bars protruded. This was identified as the central pivot of the turntable and was recorded at 1.6m below current ground level. It sat loose on a large concrete slab which continued along parallel brick walls coming off of the pivot which presumably acted as a base for the turntable. The two parallel brick walls (Photograph 2) were discovered on the north-eastern edge of the central pivot. They were 8.7m long, 0.28m wide (two brick courses) and five courses deep. The walls were 1.05m apart and appear to form a safe walkway or inspection pit for the underside of trains. At the north-eastern limit of these walls was a large, thick concrete slab measuring 2m in width (Photograph 3). The internal edge of this slab has an obvious curve to it, suggesting it acted as a full external ring around the perimeter of the pit, likely for wheels supporting the bridge of the turntable. From this slab was a large concrete staircase (Photograph 3) leading up to ground level. A width of 1.5m was exposed with a brick wall along one edge, which would presumably be mirrored on the other side, leading into the inspection pit.

Most of the pit backfill consisted of a very soft, light/medium greyish-brown silty loam topsoil with finds including plastic bottles, modern china fragments, iron objects (likely associated with the railway track) and concrete blocks. Backfill from within the walkway contained further modern material including glass bottles, beer cans, plastic bottles and styrofoam cups among other debris. None of these finds were retained. Ecology reports from before the start of the groundworks suggested that the topsoil across site had previously been removed, and it seems likely that the topsoil was removed and backfilled into the turntable pit, likely as a method of levelling the ground.

Around the central pivot in the base of the pit was a layer of bitumen (L2, c.0.10m thick) which contained frequent coal/clinker and glass, and a layer of yellowish orange ballast material (L3, c0.1m thick), both likely associated with the construction of the turntable. L3 appeared to seal a further curved brick structure found south of the pivot. As it was sealed by L3 which appears to be the base of F1 it is likely that this curved brick structure could be part of the earlier turntable shown on OS maps. This structure was only visible for a short time during its removal (Photograph 4) so its full extent is unknown.



Photograph 1 Central pivot of the turntable, looking north-west



Photograph 2 Looking down into turntable pit, showing staircase, external concrete ring, brick walls and central pivot, looking south-west



Photograph 3 Staircase, external concrete ring and brick walls, looking north-east



Photograph 4 General shot showing southern curved brick structure, looking north-north-east.

Service trenches and a soakaway (Figs 3-4)

An L-shaped service trench (28.8m long and 0.8m wide), was monitored to see if there were any earlier archaeological remains which had not been disturbed by the construction of the railway turntable. The trench cut through a modern dump material (L4, 0.2-0.6m thick) and a small amount of patchy subsoil (L5, 0.4m thick) which sealed natural geology (L6, identified at 0.2-0.6m bcgl).

Pit F2 (1.5m wide and 1.2m deep) was filled with modern debris including concrete blocks (not retained). Due to its positioning it is likely that this pit is associated with the railway turntable.

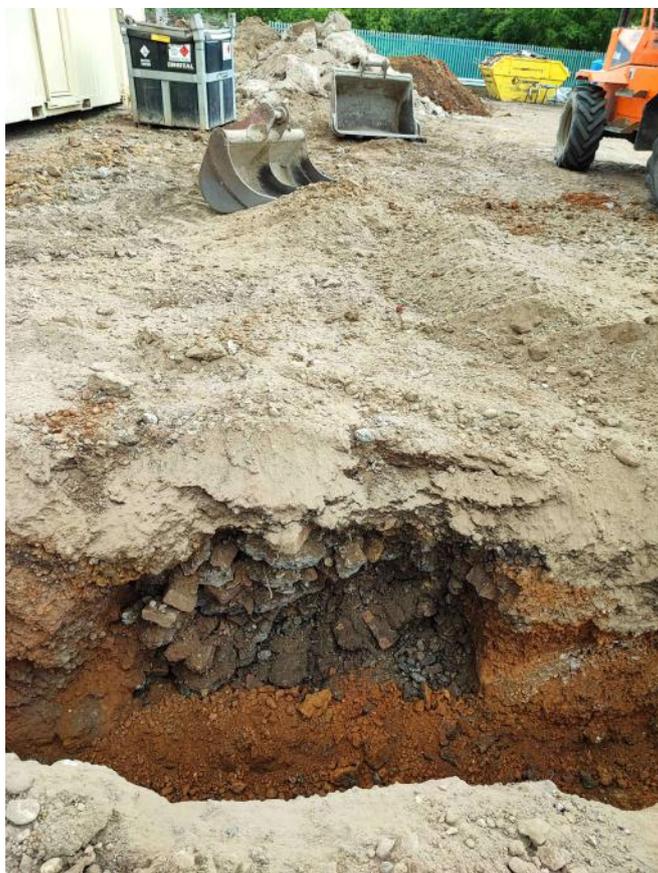
The soakaway measured 3.8m wide, c 19m long and c 5m deep. This area was only partially monitored as it was ascertained that the site had previously been stripped, with only c 0.2m of modern dump material (L4) sealing natural with no intervening archaeological remains surviving.



Photograph 5 Representative section in service trench, looking north-east



Photograph 6 Service trench, looking south-east



Photograph 7 F2 section, looking south-east



Photograph 8 Working shot of the soakway, looking north-west

6 Finds

There were no archaeological finds.

7 Conclusion

Monitoring of groundworks on land at Cut Throat Lane, Witham located the remains of the 1951, 75-foot Witham Junction turntable with central pivot, brick examination chamber, outer concrete ring and concrete staircase surviving. After recording, the remains were removed from the ground in order to facilitate piling for the construction of the standby gas-powered general facility. Remains of the turntable not affected by the piling were left in-situ. Further monitoring of the area beyond the turntable produced no archaeological remains, possibly due to the aforementioned stripping of the site in the past.

8 Acknowledgements

CAT thanks Charlie Gordon and Conrad Energy for commissioning and funding the work. The project was managed by C Lister, fieldwork was carried out by B Quinn and Z Eksen. Figures are by E Holloway. The project was monitored for ECCPS by Teresa O'Connor. CAT also thanks Neal Benjamin for his help in researching train turntables.

9 References

Note: all CAT reports, except for DBAs, are available online in PDF format at <http://cat.essex.ac.uk>

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10 Abbreviations and glossary

Bronze Age	period from c 2500 – 700 BC
CAT	Colchester Archaeological Trust
CIfA	Chartered Institute for Archaeologists
context	a single unit of excavation, which is often referred to numerically, and can be any feature, layer or find.
ECC	Essex County Council
ECCHEA	Essex County Council Historic Environment Advisor
ECCPS	Essex County Council Place Services
EHHER	Essex Historic Environment Record
feature (F)	an identifiable thing like a pit, a wall, a drain: can contain 'contexts'
Iron Age	period from 700 BC to Roman invasion of AD 43
Iron Age (Late)	Late Iron Age (LIA), period from c 100 – 50 BC to Roman invasion of AD 43
layer (L)	distinct or distinguishable deposit (layer) of material
medieval	period from AD 1066 to c 1500
modern	period from c AD 1800 to the present
natural	geological deposit undisturbed by human activity
Neolithic	period from c 4000 – 2500 BC
NGR	National Grid Reference
OASIS	O nline A cces S to the Index of Archaeological Investigation S , http://oasis.ac.uk/pages/wiki/Main
post-medieval	from c AD 1500 to c 1800
Roman	the period from AD 43 to c AD 410
section	(abbreviation sx or Sx) vertical slice through feature/s or layer/s
ws	written scheme of investigation

11 Contents of archive

Finds: n/a

Digital record

CAT Report 1798

ECC brief and CAT WSI

Digital photographs and photographic log

Graphics files

Site data

Survey data

12 Archive deposition

The archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ, but will be permanently deposited with the Archaeological Data Service.

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Distribution list:

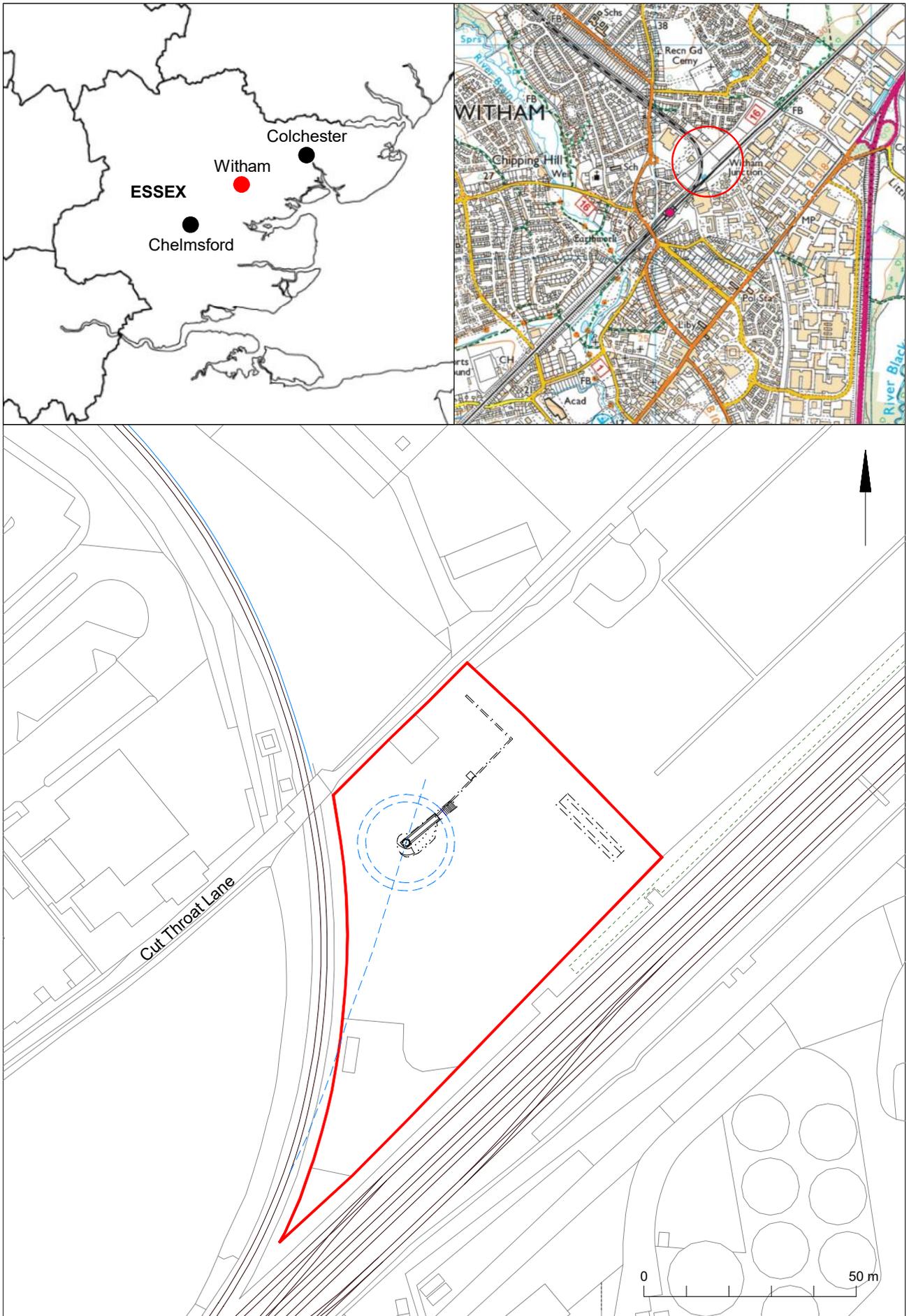
Conrad Energy

ECC Place Services Historic Environment Advisor

Essex Historic Environment Record, Essex County Council

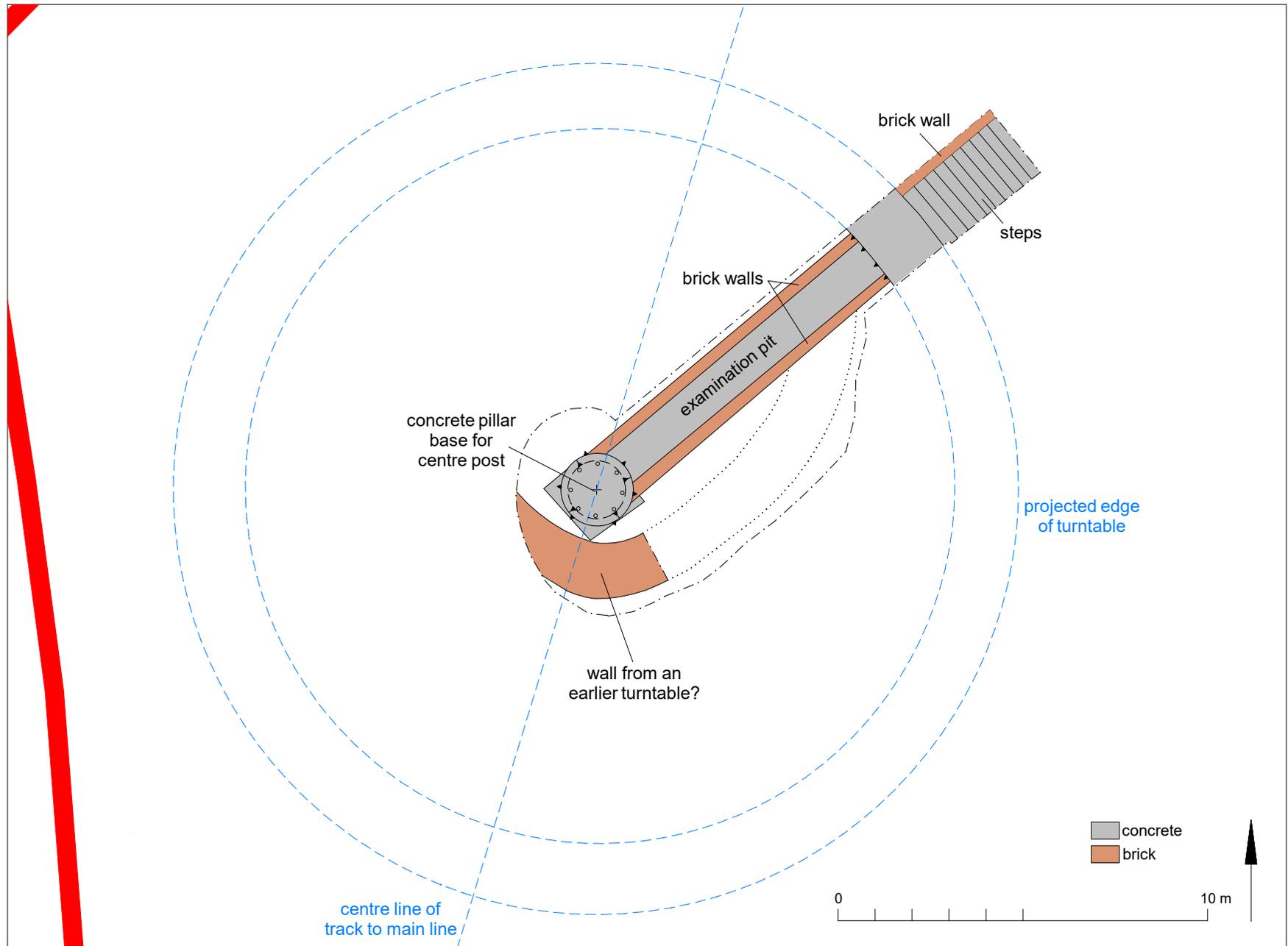
Appendix 1 Context list

Context	Finds no.	Context type	Description	Date
L1	-	Backfill	Loose, light-mid grey-brown silty loam with plastic bottles, scrap metal, modern bricks and pottery	Modern
L2	-	?Bitumen layer	Dark blue-grey ?bitumen material	Modern
L3	-	?Building material	Yellow-orange gravel material	Modern
L4	-	Dump material	Dry, friable dark brown silty sand with occasional small stones	Modern
L5	-	Subsoil	Dry, friable mid brown silty sand with occasional small stones	Undated
L6	-	Natural	Dry, mid yellow-orange sands and gravels	Post-glacial
F1	-	Railway turntable	Railway turntable with surviving central pivot, examination pit, outer concrete ring and concrete staircase	Modern
F2	-	Pit	Loose, dark brown-grey silty sand with large amounts of concrete bricks	Modern



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Fig 1 Site location.



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Fig 2 Results showing railway turntable F1.

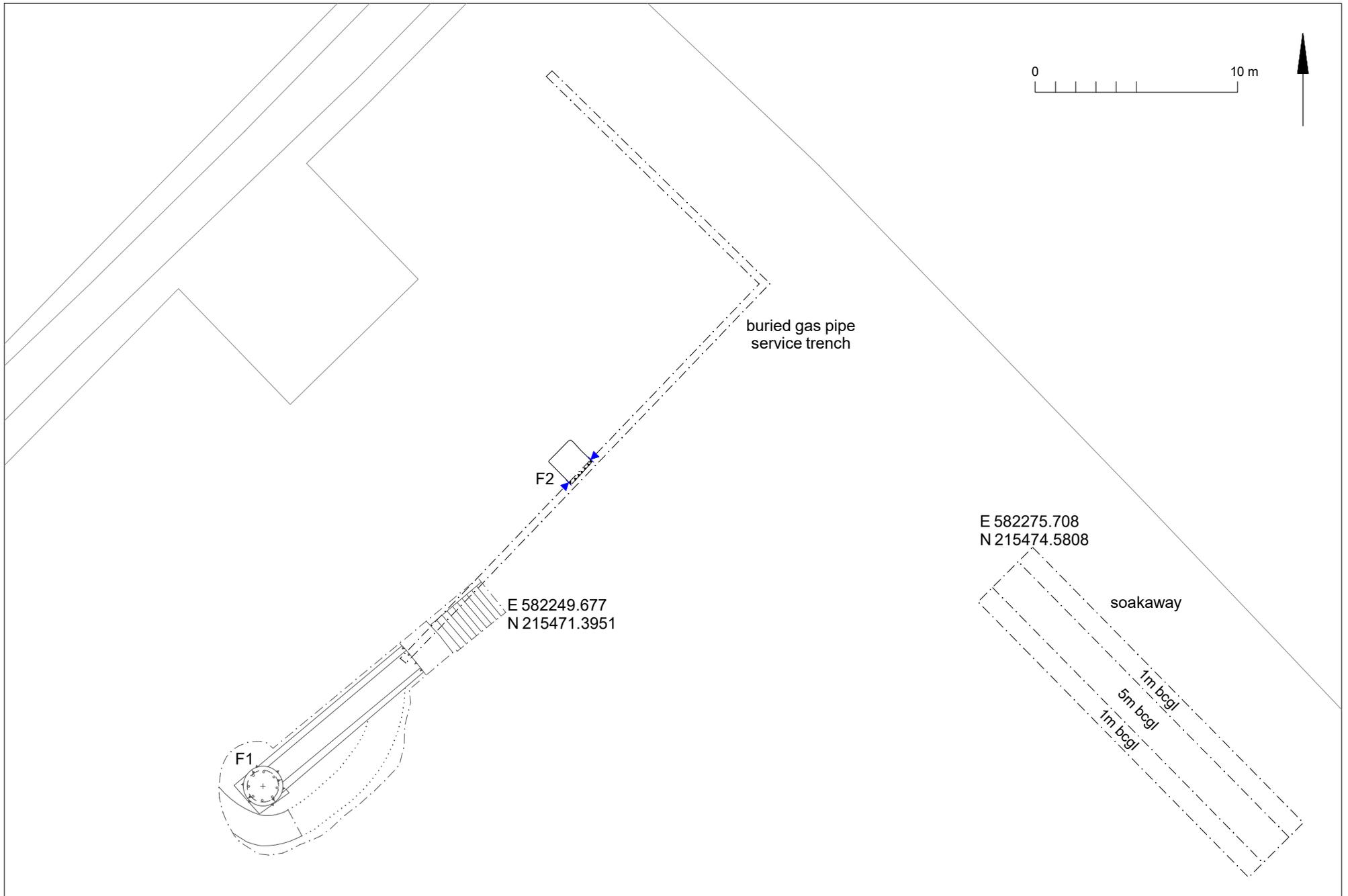


Fig 3 Turntable, service trench and soakaway

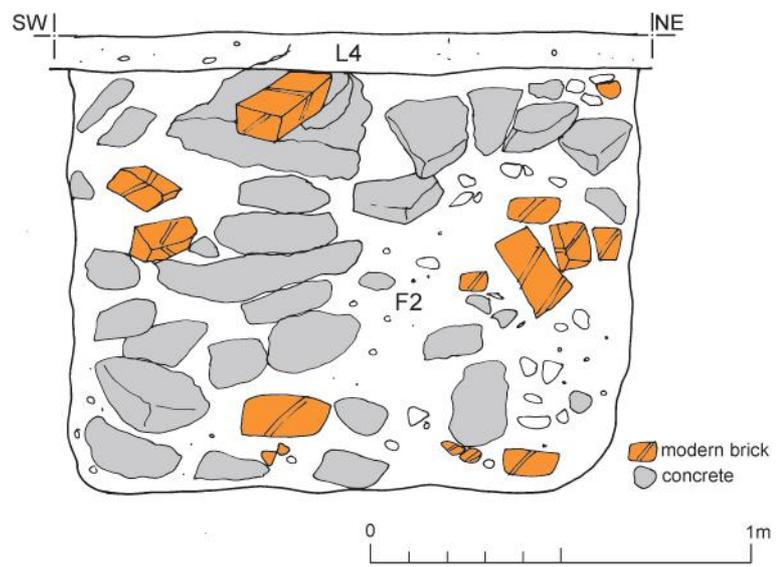


Fig 4 Section.

Summary for colchest3-433403

OASIS ID (UID)	colchest3-433403
Project Name	Archaeological monitoring and excavation on land at Cut Throat Lane, Witham, Essex, CM8 2BY
Sitename	land at Cut Throat Lane, Witham, Essex
Activity type	WATCHING BRIEF
Project Identifier(s)	2021/10k
Planning Id	19/02196/FUL
Reason For Investigation	Planning requirement
Organisation Responsible for work	Colchester Archaeological Trust
Project Dates	11-Apr-2022 - 19-Oct-2022
Location	land at Cut Throat Lane, Witham, Essex NGR : TL 82249 15456 LL : 51.8080297904842, 0.642181183222401 12 Fig : 582249,215456
Administrative Areas	Country : England County : Essex District : Braintree Parish : Witham
Project Methodology	All work was undertaken in accordance with the Archaeological Brief and Written Scheme of Investigation.
Project Results	Archaeological monitoring was carried out on land at Cut Throat Lane, Witham, Essex in advance of the construction of a standby gas-powered general facility. Located at the junction of the main railway line to London, monitoring revealed the remains of an intact railway turntable and associated features.
Keywords	Railway Turntable - 20TH CENTURY - FISH Thesaurus of Monument Types
Funder	
HER	Essex HER - unRev - STANDARD
Person Responsible for work	B, Quinn
HER Identifiers	HER Event No - WHCT21
Archives	Digital Archive - to be deposited with Archaeology Data Service Archive;