

**LAND OFF DUTSON ROAD
LAUNCESTON
ST STEPHENS BY LAUNCESTON
CORNWALL**

Results of a Geophysical Survey



South West Archaeology Ltd. report no. 200210



www.swarch.net

Tel. 01769 573555
01872 223164

Land off Dutson Road, Launceston, St Stephens By Launceston, Cornwall

Results of a Geophysical Survey

By P. Webb
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Work undertaken by SWARCH for
A Private Client (the Client)

Summary

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH for land off Dutson Road, Launceston, Cornwall. The site is located off the A388 Dutson Road, on a south-west facing on the outskirts of the town of Launceston.

*The site is situated in a landscape with based upon medieval field patterns and settlement, though with prehistoric origins, and post-medieval industrial activity. It comprises four fields, of which three were subject to archaeological geophysical survey. Cartographic assessment suggests that the current field boundaries and usage have change little since the early 19th century. Development of the land would have limited impact on many of the designated assets in the surrounding landscape, though the impact on Launceston Castle and St Mary Magdalene's Church would be **negligible** to **negative/minor**.*

The geophysical survey identified a series of anomalies across the site including: linear bank and ditch features; and shallow possible ditch features which, given their alignment can be seen to match various elements of the existing field-systems, and indicates that they likely reflect earlier phases of the same field-systems. Further features appear to indicate different styles and episodes of agricultural activity; whilst some discrete features of unknown origin or date are also present within the site.

*The results of the site inspection and geophysical survey would suggest that the archaeological potential of the site is **low**.*



February 2020

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THE CLIENT (THE CLIENT)
THE LANDOWNER FOR ACCESS

PROJECT CREDITS

DIRECTOR: DR. SAMUEL WALLS, MCIFA
FIELDWORK: PETER WEBB
REPORT: PETER WEBB
EDITING: DR. SAMUEL WALLS, MCIFA
GRAPHICS: PETER WEBB

1.0 INTRODUCTION

LOCATION:	DUTSON ROAD, LAUNCESTON
PARISH:	LAUNCESTON/ST STEPHENS BY LAUNCESTON
COUNTY:	CORNWALL
NGR:	SX 233608 85367
PLANNING NO.	PRE-APPLICATION
SWARCH REF.	LDR20

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by a Private Client (the Client) to undertake a geophysical survey with heritage impact considerations on land off Dutson Road, Launceston and St Stephens by Launceston, Cornwall, as part of the pre-application requirements for a proposed residential development. This work was undertaken in accordance with best practice and ClfA guidelines.

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site is located approximately 500m east of the historic core of Launceston, and comprises four fields on a south-west facing slope between the settlement of Dutson and the modern expansion of Launceston. The site is in two sections, located on either side of a single track road off the A388 Dutson Road, and covers an area of c.8.4 hectares at an altitude of between 75m-128m AOD (Figure 1).

The soils of this area are the well-drained fine loamy soils of the Denbigh 2 Association where they border the well-drained fine loamy and fine silty soils of the Denbigh 1 Association (SSEW 1983). These overlie the mudstone and sandstone of the Crackington Formation and chert of the Teign Chert Formation (BGS 2019).

1.3 HISTORICAL & ARCHAEOLOGICAL BACKGROUND

Launceston lies in the north-division of the hundred of East, and deanery of Trigg-Major. It is an ancient market and borough town, located on the main-coach road from London to Land's-end (now the A30). The manor of Launceston was owned by the Earls of Cornwall, and following its seizure by William the Conqueror, was given to his half-brother Robert, Earl of Morteyne. The surviving 13th century castle was an important post during the civil war, being occupied at various points by both the Royalists and Parliamentarians. The town was made a free borough during the 13th century, and was incorporated in 1555.

Settlement at Dutson is first recorded in 1150, the name derived from a personal name and *tun* meaning 'farm' (MCO14336), the nearby farm at Goodmansleigh having similar early origins (MCO14568).

The Cornwall Historic Environment Record identifies the surrounding landscape as containing evidence of prehistoric and Romano-British activity: a Neolithic lithic scatter being recovered at Launceston (MCO52784); Iron Age settlement at Smallacombe Wood (MCO8483); and Romano-British findspot (MCO1824) at Launceston. However, it was during the medieval period that there is evidence for significant activity in the area: Launceston Castle being recorded in the Domesday Book of 1086 (MCO132; List1017575); St Stephen's monastery (List1013339), replaced by

Launceston Priory in 1127 (MCO6257; List 1004511); whilst settlement at Dutson (MCO14336), Goodmansleigh (MCO14568), and Truscott date to 1150; and at Newport (MCO22587) to 1250.

During the later medieval or post-medieval period the settlement at Goodmansleigh seems to have been divided into Higher (MCO14910) and Lower (MCO15515) Goodmansleigh; whilst there was also significant development of infrastructure, Dutson Road becoming a toll road with a toll-house at Dutson (MCO22585) and the addition of the North Cornwall Railway (MCO55730) and Launceston branch of the Great Western Railway (MCO55733). Industrial activity was also prevalent during this period: mining being carried out at the St Stephens manganese mine (MCO12226) and a number of quarries being worked across the landscape (MCO22601; MCO22603; MCO22604; MCO22605; and MCO22606). Much of this development of Launceston and its growth to subsume the nearby settlements of Newport and St Stephens can be seen in the multitude of listed buildings within the Conservation Area, many of which date to the post-medieval period.

The historic landscape in this area is characterised by the Cornwall Historic Landscape Characterisation (HLC) as *medieval farmland*, which forms part of the category of *Anciently Enclosed Land* and which may have prehistoric origins. Pockets of *post-medieval enclosed land* are included within this landscape, usually on the higher more exposed areas that were formerly medieval common land.

Archaeological investigations in the area have been limited, and largely centred around areas of existing settlement, with building recording having been carried out at: Park Hill House Farm (ECO3599), St Stephens; and the Eagle House Hotel (ECO2733), Kensey Tannery (ECO1056), and North Gate (ECO983), Launceston, alongside surveys at Launceston Castle (ECO916, ECO963, ECO1631, ECO1746, ECO2234, ECO3797, ECO3953), and Launceston Priory (ECO2846). Excavations have also been carried out at Duke Terrace (ECO2455), the Old Vicarage (ECO602), and Park Hill House (ECO3157), St Stephens; and the Dockey (ECO960), the Eagle House Hotel (ECO1714), Launceston Castle (ECO195, ECO380, ECO1231, ECO1252, ECO1632, ECO2153, ECO2632), Launceston Sheep Market (ECO953, ECO954), Madford Lane (ECO201), Southgate Street (ECO936), St Stephens Hill (ECO3597), Town Mills (ECO199) and Windmill Hill (ECO601), Launceston; identifying evidence of the medieval and post-medieval development of the settlements. Geophysical surveys have also been carried out at Cross Lanes, Lanstephen (ECO4702), Stourcombe (ECO4626) and Newton Farm (Bonvoisin & Webb 2017).

1.4 METHODOLOGY

This work was undertaken in accordance with best practice and ClfA (2014) guidelines. The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (ClfA 2014).



FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

2.0 GEOPHYSICAL SURVEY

2.1 INTRODUCTION

An area of c.6ha was the subject of a magnetometry (gradiometer) survey. The purpose of this survey was to identify and record magnetic anomalies within the proposed site. While identified anomalies may relate to archaeological deposits and structures the dimensions of recorded anomalies may not correspond directly with any associated features. The following discussion attempts to clarify and characterise the identified anomalies. The survey was undertaken between the 4th and 6th of February 2020 by P. Webb; the survey data was processed by P. Webb.

Only Fields F1, F2 and F3 were surveyed, F4 was too steep to produce worthwhile results and was not surveyed.

2.2 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014).

The survey was carried out using a twin-sensor fluxgate gradiometer (Bartington Grad601). These machines are sensitive to depths of up to 1.50m. The survey parameters were: sample intervals of 0.25m, traverse intervals of 1m, a zigzag traverse pattern, traverse orientation was circumstantial, grid squares of 30x30m. The gradiometer was adjusted ('zeroed') every 0.5-1ha. The survey grid was tied into the Ordnance Survey National Grid. The data was downloaded onto *Grad601 Version 3.16* and processed using *TerraSurveyor Version 3.0.25.0*. The primary data plots and analytical tools used in this analysis were *Shade* and *Metadata*. The details of the data processing are as follows:

Processes: Clip +/- 3SD; DeStripe all traverses, median. DeStagger of particular grids.

Details: 5.3607ha surveyed; Max. 303.74nT, Min. -100.00nT; Standard Deviation 13.07nT, mean -0.39nT, median -0.06nT.

2.3 SITE INSPECTION

The site comprises four sub-rectangular fields (Fields F1-F4) forming an irregular parcel of agricultural land bordering the north-eastern edge of modern expansion of the historic town of Launceston; adjacent to the A388 Dutson Road, and split by a single track road. Much of the site slopes moderately steeply down from the north and north-east, becoming much steeper at the southern end through Field 4; the hillside overlooking the River Kensey and across to Launceston.

All of the fields were under pasture at the time of survey, the ground soft with recent rain and areas of waterlogging particularly around the access gates; the ground heavily trampled by grazing livestock.

Field 1 was situated to the north of the single track road which split the site, Fields 2-4 to the south; the A388 and modern housing development bounded the site to the west, Ridggrove Lane the southern edge and agricultural fields the eastern and northern edges. All of the fields were bounded by overgrown stone-faced earthen hedgebanks fronted by wire and wooden post fences, with the exception of the southern boundary of Field 4 which was bounded by a hedge and a partial wall, the line of the road having been cut into the hillside.

A small number of earthworks were identified across the site, largely reflecting the agricultural history of the fields. Across the eastern edge of Field 1, and particularly towards its north-eastern corner, a series of low linear earthwork banks and depressions were identified on an approximate north-west to south-east alignment. Their size and spacing suggests that they represent the remains of possible ridge-and-furrow type agriculture. The other earthworks of note were identified within Field 2, a linear bank and flanking depressions orientated north-east to south-west suggesting a removed bank and ditch field boundary. Within Field 4 levelled terraces were identified at the access points along the eastern boundary, whilst the entire length of the southern edge had been terraced to create a track.

A series of geotechnical investigation pits were also identified across the site, three within Fields 1 and 2, and one within Field 3.

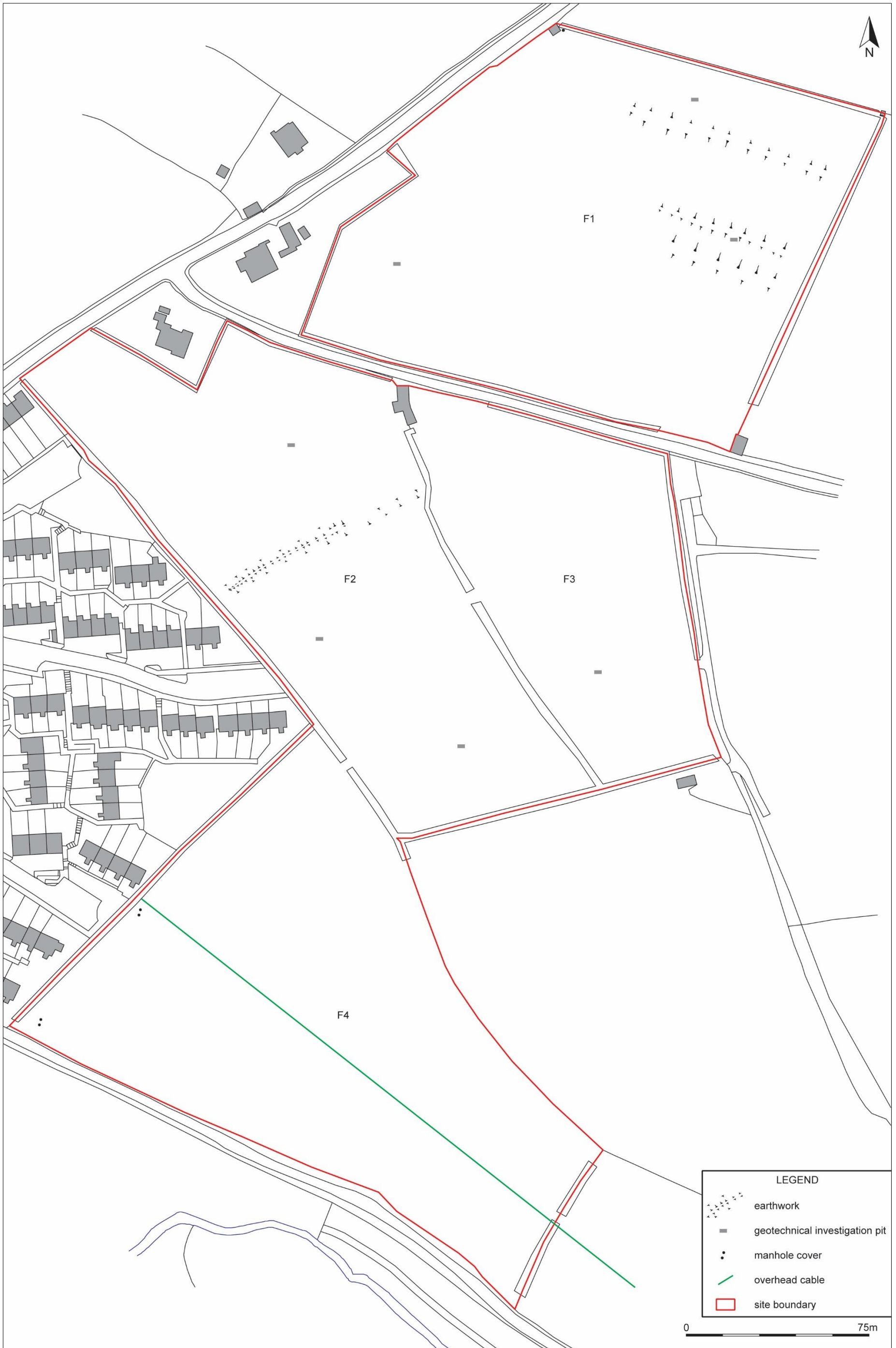


FIGURE 2: SITE PLAN SHOWING FIELD LAYOUT AND APPROXIMATE POSITIONS OF FEATURES NOTED DURING SITE INSPECTION.

2.4 RESULTS

Table 1 with the accompanying Figures 2 and 3 show the analyses and interpretation of the geophysical survey data. Additional graphic images of the survey data and numbered grid locations can be found in Appendix 1.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Strong mixed positive and negative, probable	Linear	Field boundary	Results are indicative of modern disturbance and may indicate a modern service pipe, but is in the position of a 20 th century boundary and likely reflect the demolition and removal of this, the strength of the results suggesting a high quantity of either stone or metal within the debris. Boundary depicted on 20 th century historic mapping. Responses of c.-100.22nT to +101.22nT.
2	Moderate positive and negative, probable	Linear	Field boundary	Indicative of bank material with flanking infilled cut features indicative of ditches. Together these indicate a traditional Cornish field boundary. Boundary depicted on 1840 tithe map, though curving nature and alignment with older elements of the existing field system suggests likely association. Responses of between c.-22.49nT and +32.52nT.
3	Weak to moderate positive and negative, probable	Linear	Field boundary	Indicative of bank material with flanking infilled cut features indicative of ditches. Together these indicate a traditional Cornish field boundary. Boundary not depicted on historic mapping, but curving nature and broad alignment corresponds with older elements of the existing field-system suggests likely association. Associated with anomaly group 5. Responses of between -23.89nT and +36.86nT.
4	Weak to moderate positive and negative, possible	Linear	Field boundary	Indicative of bank material with flanking infilled cut features indicative of ditches. Together these indicate a traditional Cornish field boundary. Intermittent and weak responses suggest only shallow survival, masking by local geology, or disturbance by modern use as access route between gates. Boundary not depicted on historic mapping but curving nature and broad alignment corresponds with older elements of the existing field-system suggests likely association. Associated with anomaly group 4. Responses of between -7.52nT and +17.95nT.
5	Weak to moderate positive and negative, probable	Linear	Field boundary	Indicative of bank material with associated infilled cut feature indicative of a ditch. Boundary not depicted on historic mapping, though broadly aligned with elements of the existing field system suggests possible association. Responses of between -9.18nT and +24.60nT.
6	Weak to moderate positive, probable	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Whilst boundaries are not present on historic mapping, they appear to create parcels of land suggesting use as boundaries. Features align with older elements of the existing field-system, suggesting earlier origins. Responses of between +1.55nT and +16.23nT.
7	Weak positive, possible	Curvilinear	Possible ditch	Indicative of infilled cut features such as a ditch. Weak responses suggest only shallow survival or masking by local geology. Possible similarity of alignment with older elements of the existing field-system, though may be earlier still. Responses of between +2.85nT and 16.32nT.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
8	Weak to moderate positive, probable	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping, though alignment with elements of the existing field-system suggests likely association. Possible remnants of strip-field divisions or deeper surviving elements of agricultural practices. Responses of between +4.85nT and +31.00nT.
9	Weak positive and negative, possible	Linear	Agricultural activity	Indicative of banked material with flanking infilled cut features. Broad alignment corresponds with elements of the existing field-system, whilst repetition and spacing suggests agricultural origin such as ridge & furrow type agriculture. Visible as low and shallow earthworks. Responses of between -10.46nT and +6.35nT.
10	Weak positive and negative, probable	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and negative responses suggest shallow ploughing. Responses of between -12.42nT and +7.23nT.
11	Moderate positive and negative, possible	Ovoid	Possible pit / tree-throw	Indicative of discrete infilled cut features such as pits/tree-throws with surrounding spoil/up-cast from removal. Responses of between -18.55nT and +35.28nT.
12	Weak to moderate positive, possible	Ovoid	Possible pit / tree-throw	Indicative of infilled cut features such as pits/tree-throws. Weak responses suggest only shallow survival or masking by local geology. Responses of between +5.05nT and +24.48nT.
13	Strong positive and negative, probable	Ovoid	Possible pit	Indicative of infilled cut features such as pits/tree-throws. Strength of response suggests possible modern pit and/or burial/loss of metallic objects. Responses of between -102.28nT and +100.73nT.
14	Strong positive and negative, probable	Sub-rectangular	Demolished structure	Indicative of metallic debris and modern disturbance. Historic mapping shows a structure in this location during the 20 th century. Likely demolition material associated with this structure. Responses of between -91.63nT and +102.32nT.
15	Moderate to strong mixed positive and negative, probable	Linear	Modern service	Indicative of modern disturbance and likely associated with modern service trenching. Responses of between -100.32nT and +23.65nT.
	Strong bipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of a metallic object. Responses of between -97.10nT and +96.18nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -102.24nT and +97.07nT.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

2.5 DISCUSSION

The survey identified 14 groups of anomalies. These were predominantly linear anomalies likely associated with historic boundaries and agricultural activity. The general geological variation across the site was between +/-3nT. The identified anomaly groups include: historic field boundaries; ditch features; pits/tree-throws; agricultural activity; and modern services. Additional visual sources supporting the discussion and comments can be seen in Appendix 2.

Anomaly Group 1 consists of strong mixed negative (-3.42nT to -100.22nT) and positive (+8.04nT to +101.22nT) responses forming a linear anomaly orientated approximately north-west to south-east across Field 1. An intermittent positive (+3.44nT to +11.66nT) anomaly indicative of an infilled cut ditch appears to run along its southern edge. Historic Ordnance Survey mapping dating to the start of the 20th century depicts a field boundary in this location associated with the construction of Millways, and it is likely that the anomaly represents the remains of this removed boundary. It should be noted that responses such as this usually indicate the presence of a modern metallic service, and it is possible that such a feature was added when the boundary was removed.

Anomaly Group 2 consists of weak to moderate negative (-5.00nT to -22.49nT) linear responses indicative of bank material with associated weak to moderate positive (+5.05nT to +32.52nT) linear responses indicative of infilled cut ditches. Together these indicate the presence of a traditional Cornish field boundary of a central bank with a pair of flanking ditches. They are orientated approximately north-east to south-west across Field 2 and correspond with a boundary depicted on the 1840 tithe map and later Ordnance Survey mapping, though the slightly curving nature may suggest origins associated with the medieval field layout.

Anomaly Group 3 consists of weak to moderate negative (-5.63nT to -23.89nT) linear responses indicative of bank material with associated weak to moderate positive (+4.19nT to +36.86nT) linear response indicative of infilled cut ditches. Together these indicate the presence of a traditional Cornish field boundary of a central bank with a pair of flanking ditches. They are orientated approximately north-east to south-west across Field 3 and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly group 4.

Anomaly Group 4 consists of weak to moderate negative (-4.99nT to -17.52nT) linear responses indicative of bank material with associated weak to moderate positive (+4.02nT to +17.95nT) linear responses indicative of infilled cut ditches. Together these indicate the presence of a traditional Cornish field boundary of a central bank with a pair of flanking ditches. The weak and intermittent responses suggest only shallow survival, masking by local geology, or disturbance by modern use as an access route between gates (wheel ruts were visible on the ground particularly at the north-eastern end). They are orientated approximately north-east to south-west across Field 2 and whilst they do not appear on the historic mapping, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly group 3.

Anomaly Group 5 consists of weak negative (-3.13nT to -9.18nT) linear responses indicative of bank material with associated weak to moderate positive (+4.76nT to +24.60nT) linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. One is orientated approximately north-north-east across the north-west corner of Field 2; the second approximately west-north-west to east-south-east across the southern end of Field 3. Neither is depicted on historic mapping, though their alignment matches elements of the existing field-system and they may represent an earlier phase.

Anomaly Group 6 consists of a series of weak to moderate positive (+1.55nT to +18.80nT) linear responses indicative of infilled cut ditches. The weak and intermittent or partial nature of many of these responses is likely a result of either only shallow survival or masking by local geology. They are orientated broadly either north-west to south-east and north-east to south-west across Field 1. These anomalies do not appear on the historic mapping and whilst their alignment matches elements of the existing field-system, they are off-set to the boundaries associated with the fields in which they sit, suggesting that they form an earlier phase.

Anomaly Group 7 consists of weak to moderate positive (+2.85nT to +16.32nT) positive curvilinear responses indicative of infilled cut ditches. The weak and intermittent nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north to south across the south-west corner of Field 1, curving towards the south-west as they enter the north-east corner of Field 2 creating a single linear feature. This feature does not appear on the historic maps, and whilst its alignment has broad similarities with older elements of the existing field-system, it may pre-date it.

Anomaly Group 8 consists of weak to moderate positive (+4.11nT to +31.00nT) positive linear response indicative of infilled cut ditches. Where these responses are weak, this suggests only shallow survival or masking by local geology. They are orientated broadly north-east to south-west or east to west across Fields 2 and 3. These features do not appear on historic mapping, though their alignment with elements of the existing field-system and with anomaly groups 2, 3 and 4 suggests that they are associated, and may reflect elements of agricultural land use.

Anomaly Group 9 consists of weak negative (-4.07nT to -10.46nT) negative linear responses indicative of bank material with associated weak positive (+4.69nT to +6.35nT) positive linear response indicative of infilled cut features. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-east to south-west across Field 1 and were visible as low and shallow earthwork features. Their alignment corresponds with the existing field-system, and their repetition and spacing indicates that they are agricultural features likely representing traces of ridge & furrow.

Anomaly Group 10 consists of weak negative (-4.43nT to -12.42nT) and positive (+4.05nT to +8.83nT) responses with a general west-north-west to east-south-east trend within Field 1; north-west to south-east trend within Field 2; and north to south trend within Field 3. They are narrowly and consistently spaced and are likely to represent the most recent episodes of ploughing across each of the fields.

Anomaly Group 11 consists of moderate positive (+5.25nT to +23.50nT) positive discrete ovoid responses indicative of cut and filled discrete features such as pits or tree throws, with surrounding associated moderate negative (-2.50nT to -20.53nT) responses indicating banked material. Located in the northern half of Field 1, the potential size of these pits suggests that they may have association with possible quarrying activity, the up-cast spoil banked around the edges.

Anomaly Group 12 consists of weak to moderate positive (+5.05nT to +24.48nT) discrete ovoid responses indicative of cut and filled discrete features such as pits or tree-throws spread across Fields 2 and 3. The weak nature of some of the responses suggests only shallow survival or masking by local geology.

Anomaly Group 13 comprises strong positive (+6.68nT to +100.73) with associated strong negative (-10.21nT to -102.28nT) discrete ovoid anomalies indicative of cut and infilled discrete features such as pits spread across Field 2. The strength of the mixed responses indicates that they may have been pits excavated for the burial (or loss) of large metallic objects such as agricultural equipment.

Anomaly group 14 comprises a sub-rectangular area of strong positive (+15.11nT to +102.32nT) and strong negative (-7.62nT to -91.63nT) responses indicative of metalwork and other modern disturbance. Historic mapping indicates that a structure was present at this location of the western boundary of Field 3 during the 20th century and it is likely that this represents the remains of this demolished structure.

Anomaly Group 15 consists of a strong negative (-4.26nT to -100.32) and moderate positive

(+4.55nT to +23.65nT) linear response indicative of disturbed ground within a modern service trench. It is orientated approximately north-west to south-east across Field 1 running from a metallic structure with associated manhole covers in the north-west corner of the field.

Modern disturbance, Di-Polar anomalies and magnetic disturbance are also located across the site, particularly around the site boundaries. This is likely due to modern or metallic debris and metallic components along the boundaries of the field.



FIGURE 3: SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING.

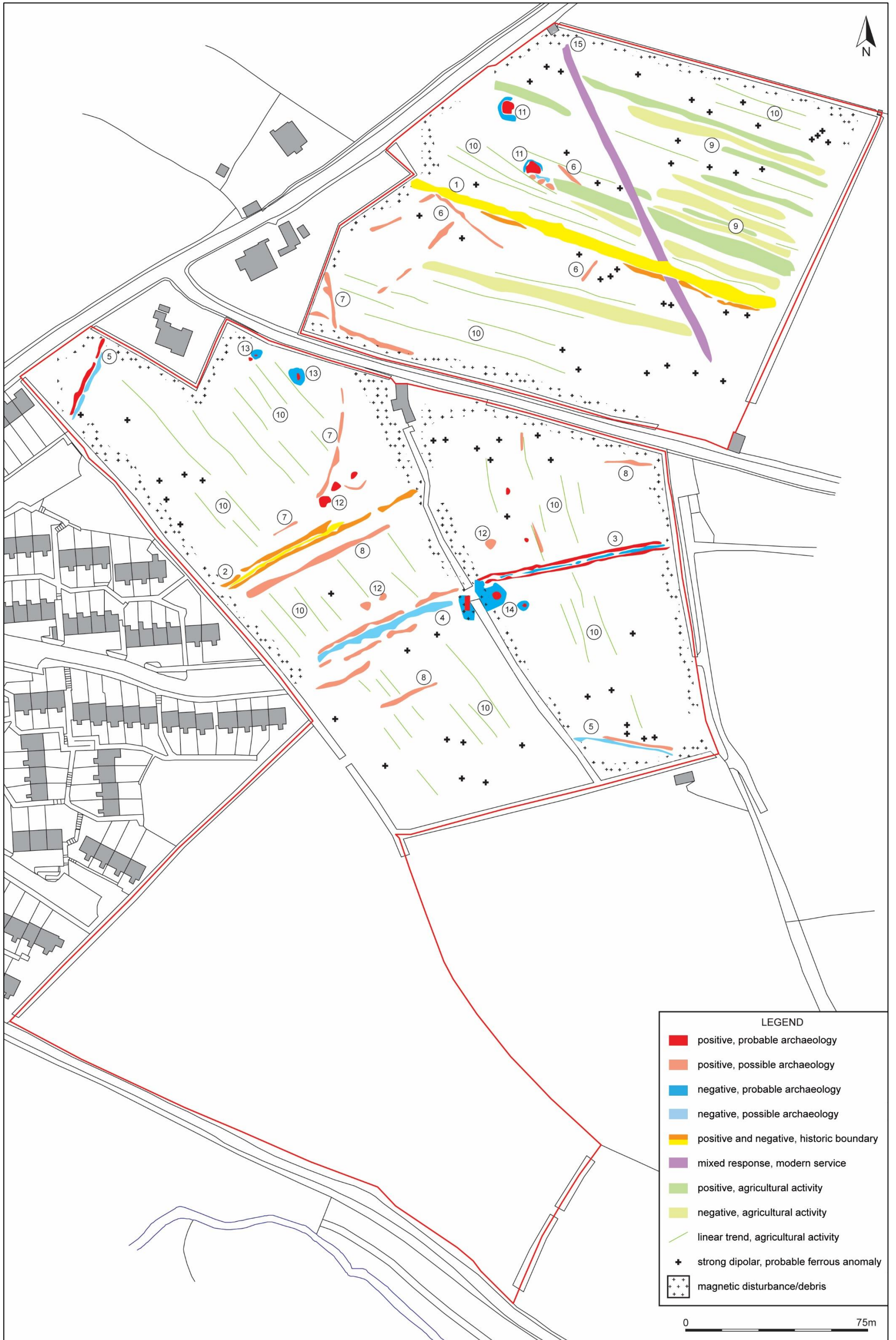


FIGURE 4: INTERPRETATION OF GRADIOMETER SURVEY DATA.

3.0 IMPACT CONSIDERATIONS

3.1 INTRODUCTION

Brief consideration of the likely effect of the proposed development on designated heritage assets has been undertaken. The principal guidance on this topic is contained within two EH publications: *The Setting of Heritage Assets* (2011, revised 2015) and *Seeing History in the View* (2011). While interlinked and complementary, it is useful to consider the following sites in terms of their *setting* i.e. their immediate landscape context and the environment within which they are seen and experienced, and their *views* i.e. designed or fortuitous vistas experienced by the visitor when at the heritage asset itself, or of the asset in its landscape context when viewed from a third location. In addition, it must be stated that impact assessments are not predicated on proximity or aesthetic appreciation alone and are a balanced judgement as to the relative contribution of setting to the significance of the heritage asset concerned. As the relevant guidance (NPPG) makes clear ‘... in general terms, substantial harm is a high test, so it may not arise in many cases’.

Note that this is a brief consideration of the potential impact rather than detailed assessment, and is focused upon high value designated assets within the immediate vicinity of the site.

3.2 DESIGNATED ASSETS

There are a substantial number of designated assets within 1km of the site (six Grade I, 14 Grade II*, and 152 Grade II Listed buildings, largely within the Launceston Conservation Area; and one Scheduled Ancient Monument, see Figure 2). Whilst multiple of the Grade II assets within the Conservation Area would be visible from the site, their immediate setting within the town rather than the wider landscape would have been the main considerations in their development. The impact on such assets is therefore likely to be limited, particularly as modern development already reaches the boundary of the proposal site. Several of the higher value assets, such as the grander houses, would have been designed and situated with reference to their principal views which look away from Launceston. In the majority of these instances, they do not look directly towards the proposal site; and where the site is visible from these assets, it is on the periphery of these views and alongside modern development. The designated assets to the east of the proposal site are largely screened by the natural topography, whilst the assets on the opposite side of the hill, i.e. Ridgewater Mill being a functional building with a focus along the base of the river valley.

The designated assets most directly affected, Launceston Castle and St Mary Magdalene’s Church, were both designed and built with wider landscape views in mind; the impact of any development on these assets is therefore much greater. The immediate setting of these assets, the town of Launceston, would not be affected, the main impact being on their wider setting. The proposal site is visible from both assets, and any development would see a loss of agricultural fields which would have been the dominant aspect of much of the surrounding landscape when the assets were constructed. The impact of this, however, would be tempered by development appearing alongside existing modern urban development of which it would appear part, the impact being largely cumulative rather than as a stand-out feature. In terms of the impact on views towards the assets, those from the north-east across the site would be tempered by the existing tree screening and partly concealed by the slope on which the development would sit; whilst in those from the south-west the development would appear part of the already existing mix of modern and historic housing. On that basis the effect of the proposed development would be limited, overall a **negligible to negative/minor** impact.

3.3 SUMMARY

Restricted intervisibility and the character and location of most of the heritage assets in this area mean the impact of the proposed development would be very limited; and the development would largely appear as part of the wider modern development of Launceston.

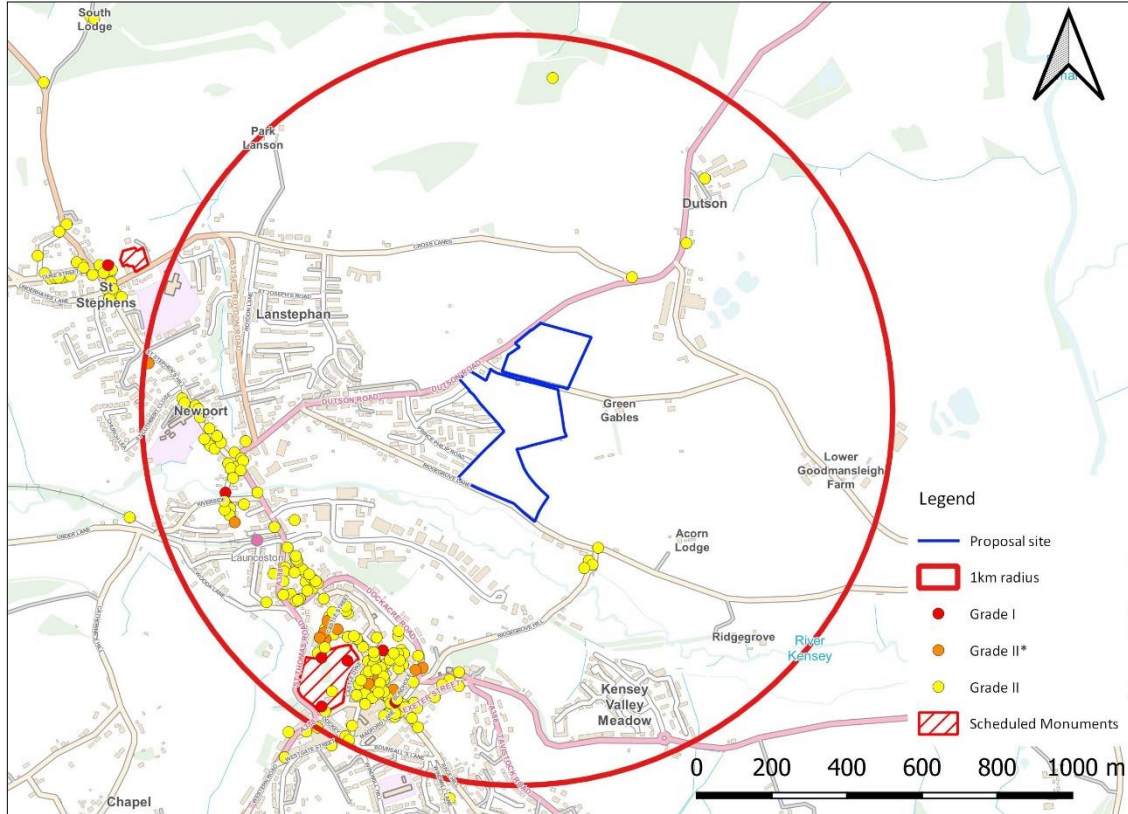


FIGURE 5: DESIGNATED HERITAGE ASSETS WITHIN CLOSE PROXIMITY TO THE PROPOSAL SITE (INDICATED).



FIGURE 6: VIEW ACROSS THE DEVELOPMENT SITE TOWARDS LAUNCESTON CASTLE; VIEWED FROM THE NORTH-NORTH-EAST.

4.0 CONCLUSION

The site comprises four fields located off the A388 Dutson Road, on a south-west facing hillside on the edge of Launceston; and, of which three were subject to archaeological geophysical survey. Cartographic assessment suggests that the current field boundaries and usage have change little since the early 19th century.

Development of the land would have a limited impact on any of the nearest designated assets in the surrounding landscape, though the impact on Launceston Castle and St Mary Magdalene's Church would be *negligible* to *negative/minor* depending upon the nature of the final design and landscaping, which should be carefully considered to be of suitable local materials and colour palette.

The geophysical survey identified a series of anomalies across the site including: linear bank and ditch features; and shallow possible ditch features which, given their alignment can be seen to match various elements of the existing field-systems, and indicates that they likely reflect earlier phases of the same field-systems. Further features appear to indicate different styles and episodes of agricultural activity; whilst some discrete features of unknown origin or date are also present within the site, many of these are also likely to reflect agricultural activity are be modern in origin.

The results of the site inspection and geophysical survey would suggest that the archaeological potential of the site is *low* .

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APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY



GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING.



GREYSCALE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.



RED GREYSCALE BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.

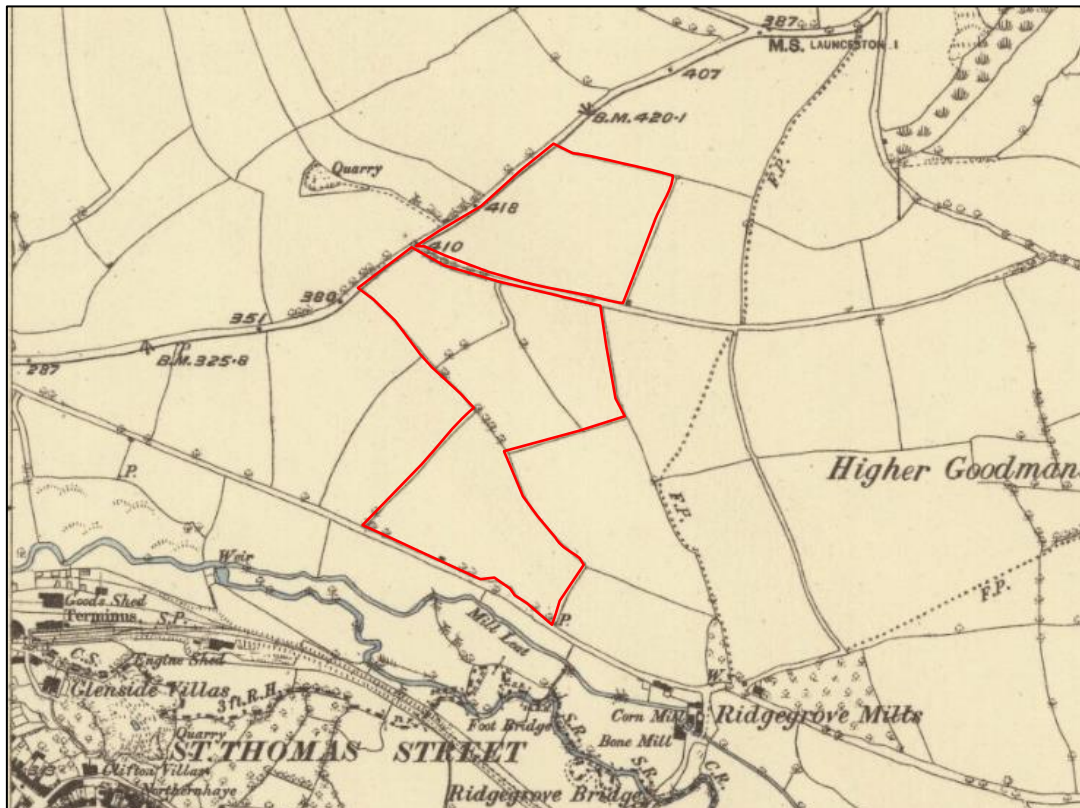


RED-BLUE-GREEN SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.

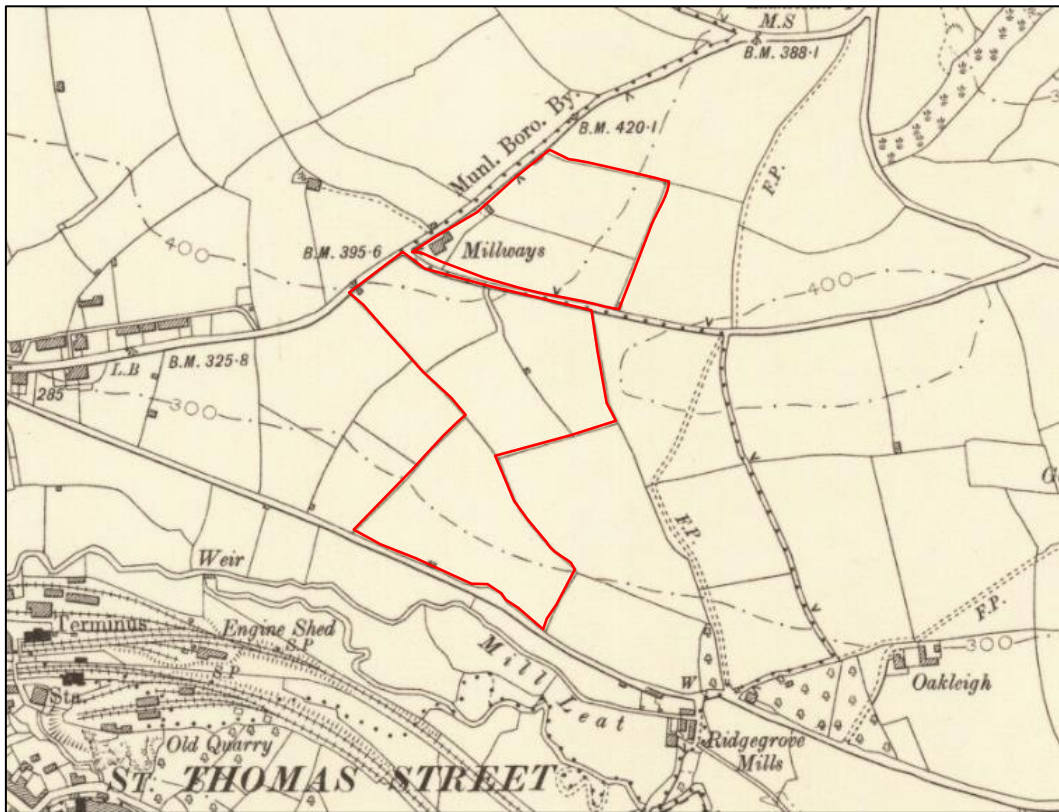
APPENDIX 2: SUPPORTING CARTOGRAPHIC EVIDENCE



EXTRACT FROM THE 1840 ST STEPHENS BY LAUNCESTON TITHE MAP; THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED.



EXTRACT FROM THE 1883 1ST EDITION ORDNANCE SURVEY MAP, CORNWALL SHEET XVII.NW; THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED.



EXTRACT FROM THE 1907 2ND EDITION ORDNANCE SURVEY MAP, CORNWALL SHEET XVII.NW; THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED.

APPENDIX 3: SUPPORTING PHOTOGRAPHIC EVIDENCE



1. WEST-NORTH-WEST ELEVATION OF STRUCTURE IN SOUTH-EAST CORNER OF F1; VIEWED FROM THE WEST-NORTH-WEST (1M SCALE).



2. VIEW ACROSS F1; VIEWED FROM THE SOUTH-EAST (NO SCALE).



3. DETAIL OF THE STONE FACED HEDGEBANK FORMING THE SOUTHERN BOUNDARY TO F1; VIEWED FROM THE NORTH-NORTH-EAST (1M SCALE).



4. VIEW ACROSS F1; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).



5. VIEW ALONG THE WESTERN BOUNDARY OF F1 TO LAUNCESTON, NOTE THE PROMINENCE OF LAUNCESTON CASTLE; VIEWED FROM THE NORTH-EAST (NO SCALE).



6. SOUTH-EAST ELEVATION OF THE STRUCTURE ALONG THE WESTERN BOUNDARY OF F1, WITH METAL STIES BEHIND; VIEWED FROM THE SOUTH-EAST (1M SCALE).



7. VIEW ACROSS F1; VIEWED FROM THE NORTH (NO SCALE).



8. VIEW ALONG WESTERN ROADSIDE BOUNDARY TO F1 TOWARDS DUTSON TOLL HOUSE; VIEWED FROM THE SOUTH-WEST (NO SCALE).



9. SOUTH-EAST ELEVATION OF THE CRUDE STRUCTURE IN THE NORTH-WEST CORNER OF F1; VIEWED FROM THE SOUTH-SOUTH-EAST (1M SCALE).



10. VIEW ACROSS F1 TO LAUNCESTON FROM THE NORTH-WEST CORNER, NOTE THE PROMINENCE OF LAUNCESTON CASTLE; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).



11. DETAIL OF THE MODERN SERVICE MANHOLE COVER IN THE NORTH-WEST CORNER OF F1; VIEWED FROM THE SOUTH-WEST (NO SCALE).



12. DETAIL OF THE POSITIONING OF CATTLE FEEDERS AT INTERVALS ALONG THE NORTHER HEDGEBANK BOUNDARY OF F1; VIEWED FROM THE SOUTH-WEST (1M SCALE).



13. VIEW ACROSS F1 TO LAUNCESTON FROM THE NORTH-WEST CORNER, NOTE THE FAINTLY VISIBLE EARTHWORKS ACROSS THE SITE; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).



14. DETAIL OF EASTERN HEDGEBANK BOUNDARY OF F1; VIEWED FROM THE SOUTH-SOUTH-WEST (1M SCALE).



15. DETAIL OF ONE OF THE BACKFILLED GEOTECHNICAL INVESTIGATION PITS WITHIN F1; VIEWED FROM THE SOUTH (1M SCALE).



16. VIEW ALONG THE EASTERN HEDGEBANK BOUNDARY OF F2; VIEWED FROM THE SOUTH-EAST (NO SCALE).



17. VIEW ACROSS THE F2 TOWARDS LAUNCESTON FROM THE SOUTH-EAST CORNER, NOTE THE PROMINENCE OF LAUNCESTON CASTLE AND CHURCH OF ST MARY MAGDALENE; VIEWED FROM THE EAST-NORTH-EAST.



18. DETAIL OF ONE OF THE BACKFILLED GEOTECHNICAL INVESTIGATION PITS WITHIN F2; VIEWED FROM THE SOUTH (1M SCALE).



19. VIEW ALONG THE SLIGHT EARTHWORK OF A REMOVED HISTORIC BOUNDARY WITHIN F2; VIEWED FROM THE SOUTH-WEST (1M SCALE).



20. VIEW ACROSS F2 FROM THE NORTH-WEST CORNER; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).



21. SOUTH-EAST ELEVATION OF THE CRUDE METAL STRUCTURE IN THE NORTH-WEST CORNER OF F2; VIEWED FROM THE SOUTH-EAST (1M SCALE).



22. VIEW ACROSS THE NORTHERN END OF F2 TO LAUNCESTON, NOTE THE PROMINENCE OF LAUNCESTON CASTLE; VIEWED FROM THE NORTH (NO SCALE).



23. DETAIL OF THE CRUDE METAL STRUCTURE IN THE NORTH-EAST CORNER OF F2; VIEWED FROM THE SOUTH (1M SCALE).



24. DETAIL OF THE EASTERN HEDGEBANK BOUNDARY OF F2; VIEWED FROM THE NORTH-NORTH-WEST (1M SCALE).



25. VIEW ALONG THE NORTHERN HEDGEBANK BOUNDARY OF F3, FROM THE NORTH-EAST CORNER; VIEWED FROM THE SOUTH-EAST (NO SCALE).



26. VIEW ACROSS F3 TOWARDS LAUNCESTON FROM THE NORTH-EAST CORNER, NOTE THE PROMINENCE OF LAUNCESTON CASTLE; VIEWED FROM THE NORTH-EAST (NO SCALE).



27. DETAIL OF THE MAKE-SHIFT ANIMAL WATERING TROUGH ALONG THE EASTERN BOUNDARY OF F3; VIEWED FROM THE WEST-SOUTH-WEST (1M SCALE).



28. VIEW ACROSS F3 FROM THE SOUTH-EAST CORNER; VIEWED FROM THE SOUTH-EAST (NO SCALE).



29. VIEW FROM THE SOUTH-EAST CORNER OF F2 TO LAUNCESTON, NOTE THE PROMINENCE OF LAUNCESTON CASTLE AND CHURCH OF ST MARY MAGDALENE; VIEWED FROM THE EAST (NO SCALE).



30. DETAIL OF THE BACKFILLED GEOTECHNICAL INVESTIGATION PIT WITHIN F3; VIEWED FROM THE NORTH-WEST (1M SCALE).



31. DETAIL OF METAL STRUCTURE IN THE NORTH-WEST CORNER OF F3; VIEWED FROM THE SOUTH-EAST (1M SCALE).



32. DETAIL OF THE DUMPED MODERN MATERIAL AT THE NORTH-WEST CORNER OF F3; VIEWED FROM THE SOUTH-WEST (NO SCALE).



33. VIEW ACROSS F3 FROM THE NORTH-WEST CORNER; VIEWED FROM THE NORTH-WEST (NO SCALE).



34. DETAIL OF THE STONE FACED HEDGEBANK NORTHERN BOUNDARY OF F4; VIEWED FROM THE SOUTH-WEST (1M SCALE).



35. DETAIL OF THE MAKE-SHIFT LIVESTOCK WATERING TROUGH IN THE NORTHERN HEDGEBANK BOUNDARY OF F4; VIEWED FROM THE SOUTH-EAST (1M SCALE).



36. VIEW ACROSS F4 FROM THE NORTH-EAST CORNER SHOWING THE STEEPNESS OF THE SLOPE; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).



37. VIEW ACROSS F4 TO LAUNCESTON FROM THE NORTH-EAST CORNER, NOTE THE PROMINENCE OF LAUNCESTON CASTLE AND CHURCH OF ST MARY MAGDALENE; VIEWED FROM THE NORTH-EAST (NO SCALE).



38. DETAIL OF THE STONE FACED HEDGEBANK EASTERN BOUNDARY OF F4; VIEWED FROM THE NORTH (1M SCALE).



39. DETAIL OF THE SLIGHT TERRACING TO THE GATEWAYS AT THE EASTERN BOUNDARY OF F4; VIEWED FROM THE SOUTH-WEST (NO SCALE).



40. DETAIL OF THE MODERN MANHOLE COVERS AT THE SOUTH-WEST CORNER OF F4; VIEWED FROM THE EAST (1M SCALE).



41. VIEW ALONG THE TERRACED TRACK AT THE SOUTHERN BOUNDARY OF F4; VIEWED FROM THE NORTH-WEST (NO SCALE).



42. VIEW ACROSS F4 TO LAUNCESTON FROM THE NORTH-WEST CORNER, NOTE THE PROMINENCE OF LAUNCESTON CASTLE AND CHURCH OF ST MARY MAGDALENE; VIEWED FROM THE NORTH-EAST (NO SCALE).



THE OLD DAIRY
HACCHE LANE BUSINESS PARK
PATHFIELDS BUSINESS PARK
SOUTH MOLTON
DEVON
EX36 3LH

TEL: 01769 573555
01872 223164
EMAIL: MAIL@SWARCH.NET