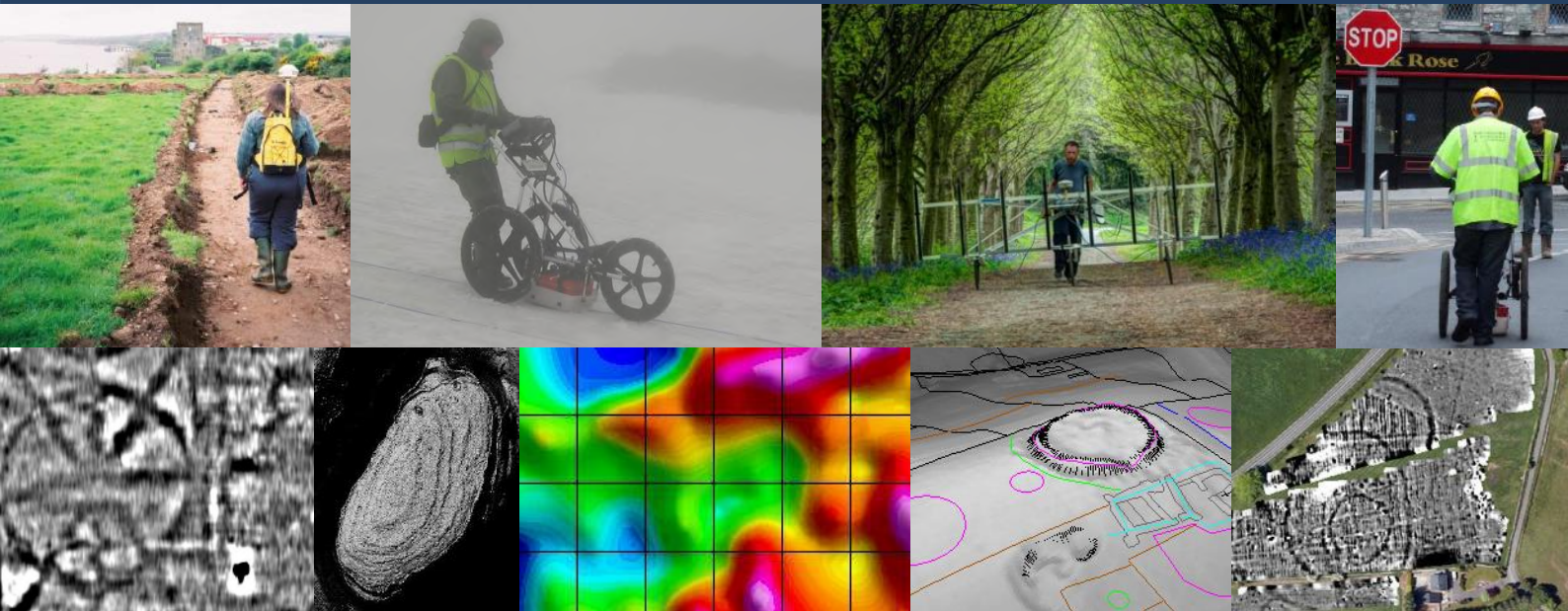




 **EARTH SOUND**  
geophysics



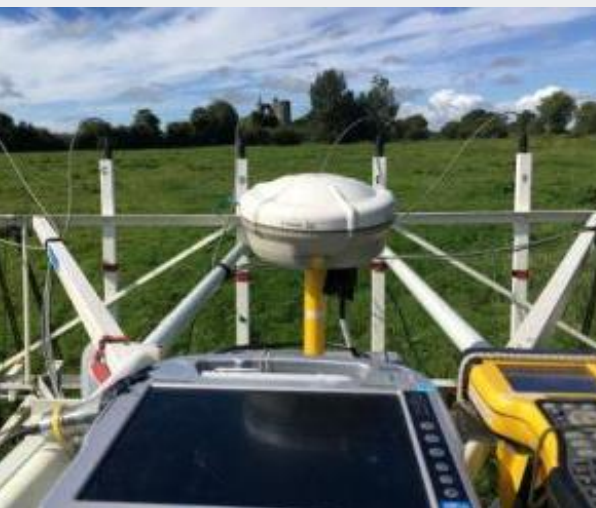
Company Profile

## About Earthsound

Earthsound Geophysics are a dedicated team specialising in non-invasive, non-destructive surveys to aid the detection, identification and analysis of archaeological sites. Trading since 2002, we have undertaken surveys in Ireland, the UK, Italy and Norway.



We can carry out a range of geophysical, geospatial and geochemical surveys, all designed to meet your project needs. We carry out surveys for individuals, public and private sector agencies, government departments and local volunteer groups. We have worked on a range of local, regional and national public, research and commercial sector projects.



Earthsound provides comprehensive, rapid and detailed field assessments, enabling cost-effective surveys to be undertaken of underlying archaeological remains in advance of project design, impact assessments or development. We can also provide a consultancy service enabling you to get the most out of your survey requirements.

All services and reports are carried out to the highest standards, adhere to the latest industry guidelines and our senior staff are Members of the Institute of Archaeologists of Ireland and the International Society for Archaeological Prospection.

## Geophysical Surveys

Geophysical surveys use a variety of instruments to identify and map buried archaeological features by measuring small changes in the magnetic and/or electrical properties of the soil which can indicate the possible presence of archaeology located beneath the ground.

We produce reports and images from the data we gather and give an archaeological interpretation of our results. Our reports can be supplied as hard copies or digitally for use by architects, planners, engineers, local authorities and researchers to progress and mitigate their designs and applications in a timely and cost-effective manner.



### Geophysical Services:

- Magnetometry
- Earth Resistance (ER)
- Electromagnetic Induction (EMI)
- Electrical Resistivity Tomography (ERT)



- Ground Penetrating Radar (GPR)
- Metal Detection
- Magnetic Susceptibility (MS)
- Induced Polarisation (IP)



All of our surveys adhere to industry standard guidelines and are carried out **under licence** from the National Monuments Service (ROI) or the Historic Environment Division (NI).

All of our staff hold primary degrees in archaeology. Our staff hold post-graduate qualifications in specialist archaeological disciplines including archaeological prospection as well as being members of the Institute of Archaeologists of Ireland and the International Society for Archaeological Prospection.

## Geospatial Services

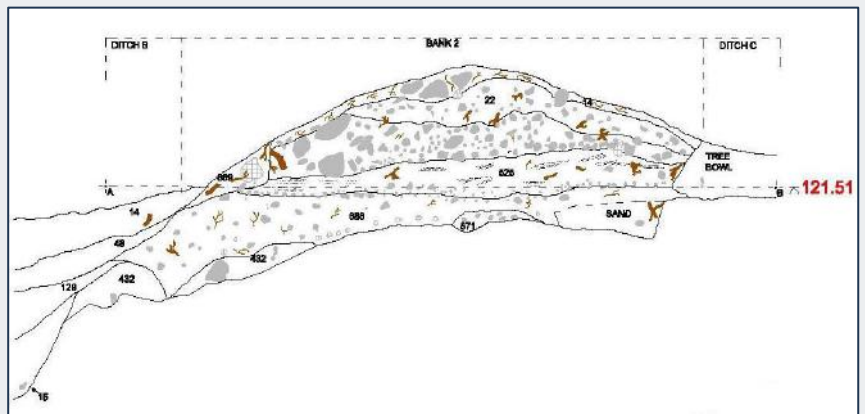
EarthSound offers a full range of land surveying services to clients for archaeological investigations and research. We have a range of GPS instruments available for a variety of purposes, including sub-metre and sub-cm precision options. We undertake photogrammetry surveys on structures and objects and process outsourced LiDAR data.

Our software suites can be used to integrate photogrammetry, excavation drawings, topographical and LiDAR results. These in turn can then be linked to geophysical or chemical survey results providing the ability to fully assess and interpret landscapes or sites.



### Geospatial Services:

- Photogrammetry
- Drawing and Digitisation
- Archaeological Topographical Surveys and Trench and Feature Layout
- LIDAR analysis



## Geochemical Services

Geochemical surveys analyse soil samples collected from archaeological sites for subtle physical and chemical variations. This helps determine the possible function of a feature from individual soil samples by identifying important diagnostic indicators which are not often appreciable to the naked eye. Geochemical analysis can be used as both a prospection tool and to further our understanding of excavated archaeological sites.

This allows us to detect industrial and metallurgical activity, cooking sites, refuse dumping, cess-pits and animal husbandry. Geochemical soil samples can be collected by Earthsound technicians or by archaeological site staff. Each sample needs to be collected using tried and tested methodologies - we can advise you on how to best achieve this and which technique(s) is/are appropriate to answer your project requirements.



### We can carry out the following laboratory analyses:

- Loss on Ignition analysis (organic content)
- Particle Size analysis
- Magnetic Susceptibility content
- Phosphate analysis
- pH analysis



## Community and Research Archaeology

EarthSound Archaeological Geophysics regularly carries out work with research partners, local communities, archaeological societies and heritage groups. Whether it's a Heritage Week event, an on-site demonstration or tuition in a creative open environment, or a talk to a local society, we offer a quality experience that meets the needs of your community audience and contributes to your research strategy. Most of the Community and Research Archaeology projects we work on are funded or part-funded by The Heritage Council, The Irish Walled Towns Network, The Royal Irish Academy or local county councils and academic institutes, etc.



### Our Community Archaeology services include:

- Geophysical and Geospatial surveys
- On-site training and tuition
- Field Schools and Demonstrations
- Continuous Professional Development
- Lectures and Outreach with societies, organisations and local schools
- Heritage Week events

### EarthSound's recent Community and Research Archaeology projects include:

- St. Anne's Park, Co. Dublin (2018)
- Fingal Geophysical Survey Project, Co. Dublin (2018)
- Kilfinane Motte, Adopt a Monument Scheme, Co. Limerick (2017)
- Doon Fort, Adopt a Monument Scheme, Co. Donegal (2017)
- Vinegar Hill Battlefield Research Project, Co. Wexford (2016-17)
- Castledermot Walled Town, Co. Kildare (2017)
- Castle Ward, Co. Down (2017)
- Knocknashee, Co. Sligo (2016)
- Stella's Tower, Co. Dublin (2016)
- Athy Walled Town, Co. Kildare (2013, 2014, 2015, 2016)
- St. Lomans Graveyard, Co. Westmeath (2016)
- Annacarty RIC Barracks, Co. Tipperary (2016)
- Disert Heritage Project, Co. Donegal (2016)
- Lea Castle, Co. Laois (2015, 2016)
- Duncannon Fort, Co. Wexford (2016)
- Tintern Abbey Walled Garden, Co. Wexford (2016)
- Kinsale Battlefield Project (2014, 2015)
- Wonderful Barns Garden Project (2015)
- Black Pig's Dyke Research Project (2014)
- Cashel Walled Towns, Co. Tipperary (2014)
- Rathnadrinna Research Project (2009, 2012, 2013, 2014)
- Great Connell Abbey Exploration Project (2012, 2013, 2014)
- The Hellfire Club Archaeological Project, Co. Dublin (2014)
- Castle Coole, Co. Fermanagh (2014)
- Rock of Cashel (2014)



## Contact Us

Thank you for contacting Earthsound Archaeological Geophysics. We would be happy to answer any queries you have or to give you a quotation on a potential survey. Please bear in mind, that the more information you can supply about the nature of the project and the site under investigation, the easier it will be to supply a quote and time schedule.



### Earthsound Geophysics

Prospect House

Drumagh, Claremorris

County Mayo

Ireland

F12XY90

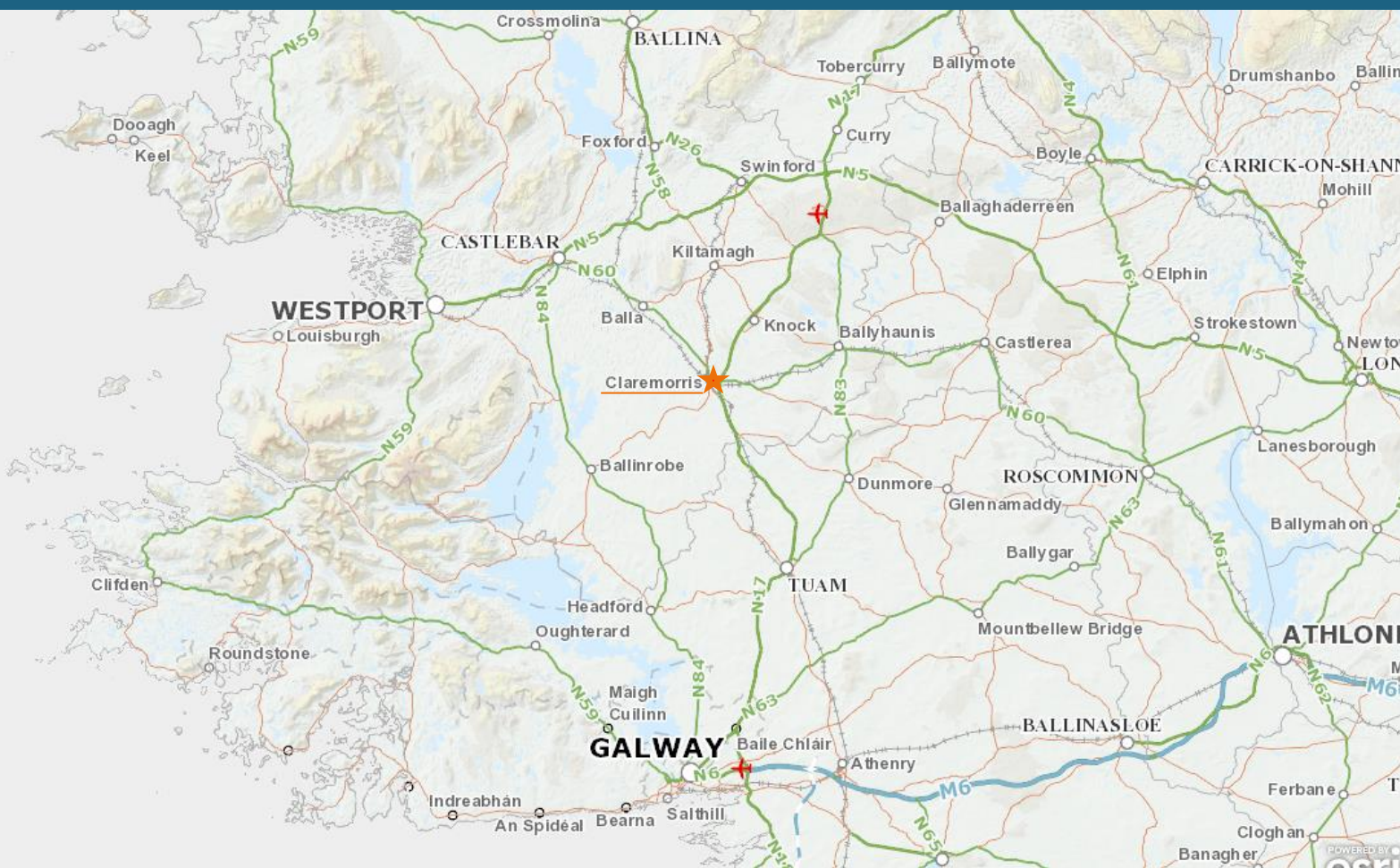
✉ General Inquiry: [survey@earthsound.net](mailto:survey@earthsound.net)

✉ Quotations: [survey@earthsound.net](mailto:survey@earthsound.net)

☎ +353 (0) 94 936 2228

📘 [www.facebook.com/Earthsound.Geophysics](https://www.facebook.com/Earthsound.Geophysics)

🐦 [@EAG\\_Earthsound](https://twitter.com/EAG_Earthsound)





## Previous Clients

### State Bodies:



Comhairle Contae an Chláir  
Clare County Council



AN ROINN DE LAIGUS CIRT AGUS COMHIONANNAS  
DEPARTMENT OF JUSTICE AND EQUALITY

An Chomhairle Oidhreachta  
The Heritage Council



Comhairle Chontae na Gaillimhe  
Galway County Council



Kildare County Council  
Comhairle Contae Chill Dara



Comhairle Cathrach & Contae Phort Láirge



SLIGO  
COUNTY COUNCIL  
COMHAIRLE CHONTAE SHLIGIGH



OPW  
Oifig na nOibreacha Poiblí  
The Office of Public Works



Comhairle Contae  
Ros Comáin  
Roscommon  
County Council

### Heritage Companies:



Comisiwn Brenhinol  
Henebion Cymru  
Royal Commission on the Ancient  
and Historical Monuments of Wales



### Engineering Firms:



### Academic Institutes:



University College Cork, Ireland  
Coláiste na hOllscoile Corcaigh



NTNU

Norwegian University of  
Science and Technology

