

FROM MESOLITHIC ENCAMPMENT TO MEDIEVAL ESTATE

THE ARCHAEOLOGY OF THE BAY GATEWAY

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Abbreviations

AMS	Accelerator Mass Spectrometry
aOD	Height above Ordnance Datum
GIS	Geographic Information System
HER	Historic Environment Record
IMS	Industrial Methylated Spirit
LOI	Loss on Ignition
MNE	Minimum Number of Elements
MNI	Minimum Number of Individuals
NISP	Number of Identified Specimens
NPP	Non-pollen Palynomorphs
OAE	Open-area Excavation
OS	Ordnance Survey
SMR	Strip, Map and Record
TLP	Total Land Pollen
WB	Watching Brief

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Summary

The Bay Gateway, a highway developed by Lancashire County Council and substantially funded by the Department for Transport, was constructed by Costain between 2014 and 2016 to provide a direct connection between the Port of Heysham, on the Lancashire coast (SD 3403 4601), and Junction 34 of the M6 motorway (SD 3495 4648), c 11 km to the north-east. Whilst groundworks at either end of the scheme involved substantial alterations to existing infrastructure within already heavily developed urban and suburban settings, the majority of the newly constructed elements of the route traversed a largely pastoral landscape, north of, and parallel with, the River Lune. The landscape of this part of the lower Lune Valley, between the marshes of the Lune Estuary to the south-west, and the sands of Morecambe Bay to the north-west, is dominated by drumlins, low, but generally steep elongated hills of boulder clay deposited by the retreating glaciers of the last Ice Age. The undulating countryside is predominantly agricultural in nature, with a patchwork of fields and isolated farmsteads. As well as providing the backdrop for the Bay Gateway, the rolling landscape appears to have been attractive to human settlers within this part of the Lune Valley for some 9000 years, from the Late Mesolithic period, through to the Middle Ages and beyond.

Excavations by Oxford Archaeology North along the route in 2014 marked the culmination of almost ten years of archaeological investigation, with each study contributing to an understanding of an area that had previously seen little comprehensive research. Preliminary works had comprised desk-based assessment and walkover surveys, devised to define the known archaeological resource of the route, while geophysical survey was undertaken to identify the presence of possible, hitherto unidentified, archaeological remains. The first intrusive survey comprised the evaluation excavation of a series of trial trenches by Rubicon Heritage in early 2013. This tested the results of previous studies and established the presence and potential significance of buried remains. When combined with development proposals, the evaluation permitted the compilation of a mitigation strategy for detailed archaeological investigation in advance of construction works. In its final form, the mitigation was focused on seven discrete areas, wherein remains relating to prehistoric, medieval, and post-medieval activity were identified.

Whilst occasional finds of prehistoric flintwork and burnt organic material were made at various locations, the earliest concentration of remains was found in the Beaumont area of Lancaster, occupying a gentle slope on the south-west face of a rise above the valley of the Howgill Brook (Strip, Map and Record (SMR) Area 3, the Slynedales Culvert). The earliest activity lay close to a small palaeochannel, and was associated with organic material that was radiocarbon dated to the mid-fifth millennium cal BC, towards the end of the Mesolithic period. Subsequently, groups of hunter-gatherers seem to have returned to the site at intervals, leaving distinct concentrations of flint- and chert-working debris, and occasional broken and burnt microliths amidst a wider scatter. This substantial assemblage of lithic material provided evidence that stone tools were made and personal toolkits repaired and refurbished at a site that, whilst never inhabited for long, was occasionally returned to.

Although subsequent occupation was unlikely to have been continuous, activity occurred on at least five occasions in the Neolithic period and Bronze Age. The most intensive of these events was represented by a group of pits and postholes, associated organic material producing a tight suite of radiocarbon dates in the mid-fourth millennium BC. The focus of that activity was seemingly a simple structure, few posts being identified, with, perhaps, a south-east-facing entrance. The building would have been no more than 6 m across. Immediately to the south were two pits, whilst just to the north were several shallow pits containing concentrations of burnt stone, charcoal, and hazelnut shells. Other cultural material was sparse, with four scattered sherds of early to middle Neolithic pottery, and a few tiny fragments of burnt bone in a small pit apparently within the putative building itself.

Several more disparate features could be dated to the second half of the fourth millennium and to the first half of the third millennium BC; some of those contained concentrations of fire-cracked stone. Others still, including a ditch, as well as pits with a little pottery, indicated Early and Middle Bronze Age activity on the site (c 1958-1746 cal BC and c 1430-1290 cal BC, respectively).

Barely 600 m to the north-west, early Neolithic pits were identified on a south-facing slope just to the west of Beaumont Gate Farm on the A6 (SMR2), whilst possible Early Bronze Age activity was identified

at Torrisholme, at the western end of the scheme (SMR1). There, elements of a network of gullies could have been associated with a natural depression identified during trial trenching.

Typical of Lancashire, evidence for Iron Age activity was sparse. Nonetheless, the excavation to the west of Beaumont Gate Farm (SMR2) revealed ditches and gullies likely to have formed part of an enclosure or field system, which produced a Middle Iron Age radiocarbon determination. Two groups of badly preserved features to the north may represent activity of a similar period.

The most extensive remains on the scheme were identified in the valley of the Howgill Brook, which flows north/south between two drumlins in the area of Beaumont, just to the east of the A6. There, medieval occupation may have commenced as early as the mid-eleventh century. On the west side of the brook, evidence of three phases of building activity in timber was identified, as well as a nearby stone channel and, to the south, a grain-drying kiln. Collectively, these remains may represent the site of an early mill occupied in the twelfth to thirteenth century. Burnt grain suggests that one of these structures was destroyed by fire. Later medieval activity then switched to the east side of the brook, which had been partially diverted to form a canalised loop, creating a channel surrounding a D-shaped island. This was occupied by a stone, or stone-footed, building, associated with pottery, typically dating to the late fourteenth to fifteenth century. The building may have had glazed windows and a stone roof, and it had substantial hearths and a possible garderobe, it being surrounded by cobbled surfaces. Amongst the finds were pottery originating in Yorkshire, a copper-alloy candlestick, and pieces of dressed stone, as well as fragments of millstones. Preserved timber from the channel may have been elements of a waterwheel, whilst on the west side of the brook, was a second grain-drying kiln, a pond, and a lime kiln belonged to the late medieval period.

Documentary information places the site at the heart of the estate of Beaumont Grange, one of many holdings of Furness Abbey across northern England. The archaeological remains support documentary evidence suggesting that the grange was founded in the mid-twelfth century, some time prior to King John gifting the estate further land in 1200. Various farms in the vicinity claim to represent the site of the grange, but it is likely to have had several foci, each with a particular agricultural function. If so, the remains at Howgill Brook could have been farm buildings associated with the storage and processing of grain, and, at least at some point, accommodation.

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The archaeological works undertaken in 2014 for the Heysham to M6 Link project, now the Bay Gateway, were part of a large-scale civil-engineering project, substantially funded by the Department for Transport. The scheme was constructed by Costain, on behalf of Lancashire County Council. Costain also commissioned and undertook the day-to-day management of the archaeological works, whilst the County Council undertook wider management of the programme, commissioning Jacobs UK Ltd to design the programme of archaeological investigation, which was monitored by the former Lancashire County Archaeological Service.

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Assisted by John Zant, Becky Wegiel and Jeremy Bradley produced the phasing upon which the published stratigraphic narratives are based. Processing, assessment, and analysis of the finds and palaeoenvironmental remains were carried out by Sandra Bonsall, Jeremy Bradley, Denise Druce, Marta Gołębiewska, Chris Howard-Davis, Mairead Rutherford, Richard Macphail, and John Crowther. Mark Tidmarsh and Jamie Quartermaine processed the survey images in Agisoft. Adam Parsons and Marie Rowland illustrated the lithic and ceramic finds, whilst Marie Rowland illustrated and typeset the volume. Graham Taylor is thanked for permission to reproduce his image of replica Ebbsfleet Ware in Figure 92. The archaeological project was managed by Stephen Rowland, editing and quality assurance being provided by Rachel Newman.

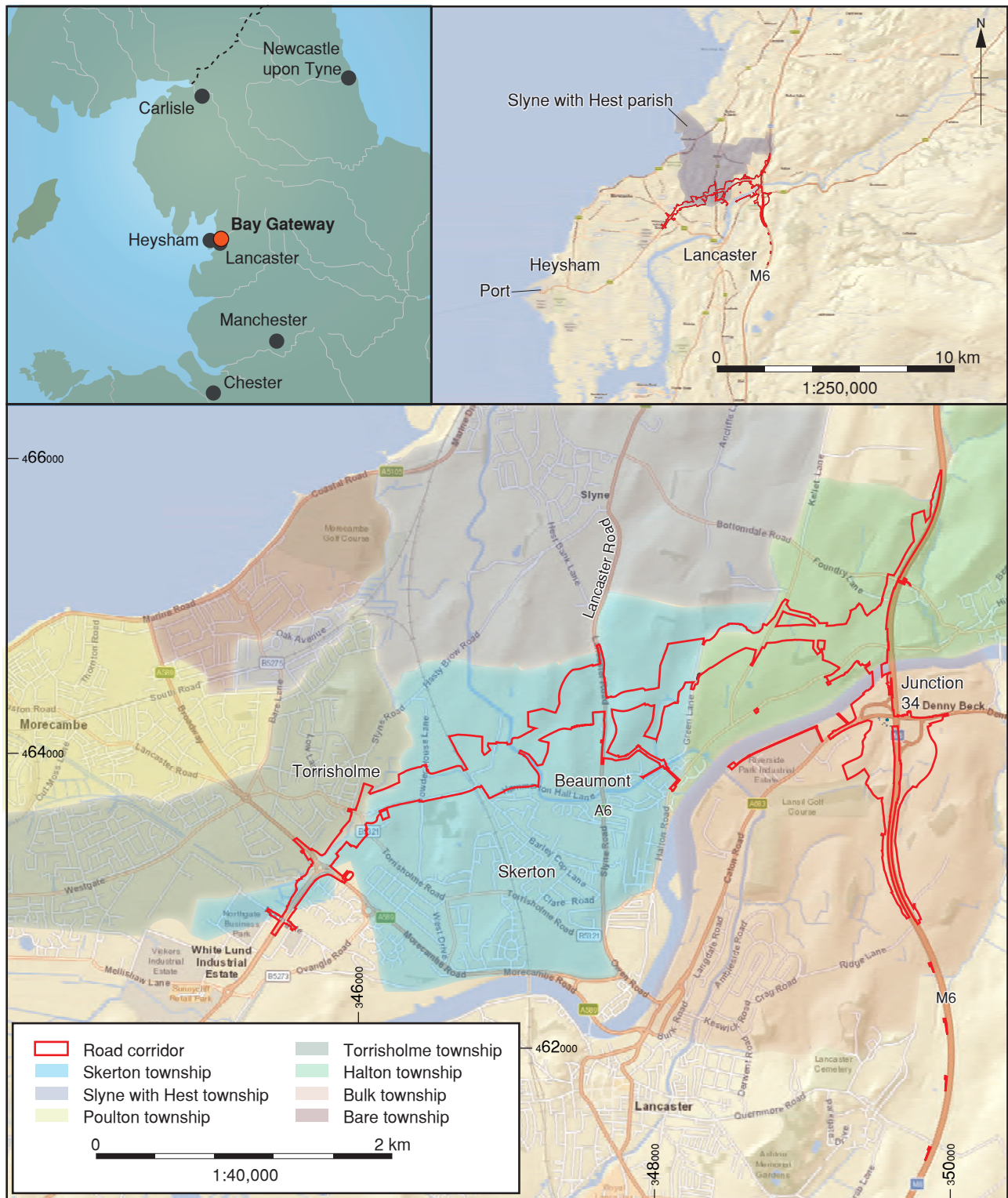


Figure 1: The location of the Bay Gateway