

# London Gateway: Marine Archaeology Dredging Licence Extension

## Archaeological Review

WA Ref: 72437  
DRAFT 19 July 2011

### Review

Wessex Archaeology (WA) has been commissioned by London Gateway Port Ltd. (LGPL) to provide archaeological services in respect of marine works in the course of developing London Gateway Port and its associated dredged channel. Dredging is being undertaken by the consortium LORDI.

As part of this work, WA has been asked to review a proposed extension to the dredging area, for which a dredging licence is being sought from the Port of London Authority (PLA).

With respect to the proposed extension, English Heritage (EH) has advised the PLA that EH requires clarification as to whether the extension is adequately addressed by *Maritime Archaeology Methods and Procedures* (MAM&P)<sup>1</sup>.

EH has also advised that if the extension is not adequately addressed by the archaeological survey, analysis and interpretation already conducted in support of London Gateway, then additional studies will need to be commissioned and agreed with EH prior to dredging.

Accordingly, WA has reviewed the proposed extension area in conjunction with existing data about the extent of prior survey, analysis and interpretation, and in the light of the provisions of MAM&P. WA has concluded that:

1. The area of the proposed extension has already been covered by previous survey, analysis and interpretation to a degree that is entirely consistent with the treatment of other equivalent areas of dredging for LG Port.
2. The provisions of MAM&P will be applied equally to the area of the proposed extension, offering equal mitigation to the areas already licensed for dredging. Specifically, the area of the proposed extension where there are most anomalies falls entirely within a dredging zone for which a watching brief is to take place. Elsewhere in the proposed extension area, the LG Archaeological Protocol will continue to apply.

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<sup>1</sup> Maritime Archaeology Methods and Procedures is available via Business Collaborator, numbered LG-WSA-ENV-CEP-C7013-RPT-ARC-3013.

## Background

The attached figure shows the spatial correlation between the proposed extension, the coverage of high resolution sidescan survey in 2002, the dredging zones, and sites and anomalies previously identified by WA (including sites previously subject to Clearance Mitigation Statements – CMS). The sites within and adjacent to the proposed extension are listed in Appendix I. The sites were allocated to Mitigation Groups in 2005, as follows:

- 1.1 Feature of no archaeological interest
- 1.2 Site clear
- 1.4 Site below dredge depth
- 0.1 Duplicates
  
- 2.n.1 Site of **certain** archaeological interest
- 2.n.2 Site of **probable** archaeological interest archaeological interest
- 2.n.3 Site of **possible** archaeological interest
- 2.n.4 Site of **uncertain** archaeological interest

Where n = 1 for sites upstream of Sea Reach 1, and 2 for sites seaward of Sea Reach 1.

The Dredging Licence Extension lies within the system of dredging zones already operated by LGPL / LORDI. Working seawards, the extension starts in Zone 37 and runs throughout the length of zones 38, 39 and 40. The extension goes beyond the current limits of the zones seaward of Zone 40.

Provision has already been made, by way of the Archaeological Protocol attached to MAM&P, for dredging in Zones 37 and 38 to be subject to an archaeological watching brief (see para. 1.11, *London Gateway: guidance on implementing the Archaeological Protocol*, May 2011). It is proposed that this provision will apply equally to the Dredging Licence Extension within Zones 37 and 38.

Detailed sidescan survey carried out in 2002 covered Zones 37, 38 and 39, and most of Zone 40. The Dredging Licence Area falls entirely within the coverage of the 2002 sidescan survey to the extent that it covers these zones (i.e. all but part of Zone 40), and has been subject to the same level of prior survey, analysis and interpretation.

No detailed sidescan survey has been carried out seaward of the 2002 survey, and in this respect the Dredging Extension Area in the seaward part of Zone 40 and beyond has been treated consistently with the approach accepted for the rest of the channel.

Looking at the Dredging Licence Extension in more detail, there are two sites classed as being of probable archaeological interest in 2005: 5046, adjacent to the proposed licence extension in Zone 38; and 6595, within the proposed licence extension in Zone 40.

Site 5046 was subject to pre-clearance archaeological investigations, which achieved a Level 2a record of the site, indicated that the wreck had been sunk post-WWII, and anticipated clearance by grabbing (WA Ref: 61209.5046.04, August 2008). The site was cleared by the PLA in 2010. In the course of clearance, a cannon was recovered, prompting archaeological recording of all the artefacts recovered by the Thames Discovery Programme (TDP) on behalf of PLA (TDP May 2010). TDP confirmed that the vessel remains dated to the late C19th at the earliest and that the cannon – probably dating to 1787-1822 – was not originally associated with site 5046, effectively being a stray artefact.

Although site 6595 has had some small sidescan anomalies associated with it, the CMS (WA Ref: 61209.6595.02, December 2007) concluded that it had originated as a typo in a list of wrecks identified at an early stage of the EIA process by Halcrow.

All of the other sites within or adjacent to the Dredging Exclusion Zone are sites of 'uncertain' interest, that is to say the origin of the anomalies is unclear. In 2005, these 'uncertains' were further grouped to indicate their likely origin, as follows:

- 2.n.4a Uncertain - ?bed feature
- 2.n.4b Uncertain - ?debris
- 2.n.4c Uncertain - ambiguous
- 2.n.4d Uncertain - ?archaeological feature

Where n = 1 for sites upstream of Sea Reach 1, and 2 for sites seaward of Sea Reach 1.

In the Dredging Licence Extension, most of these uncertain anomalies fall within Zone 38. Four uncertain sites are within the extension area, two of which are possible debris and two of which are possible archaeological features. There are four further sites (1x possible debris; 3x possible archaeological features) adjacent to the extension area. As noted previously, Zone 38 (with Zone 37) is already to be subject to an archaeological watching brief because of the number of anomalies in this area.

In Zone 39 there are no sites within the extension area, and just one site of possible debris (7569) and two possible archaeological features adjacent. The two possible archaeological features are an obstruction (5009) lifted in 1970 and a wreck (5007) located in 1978. Sites 7569 and 5007 lies outside the channel so will not be impacted by dredging.

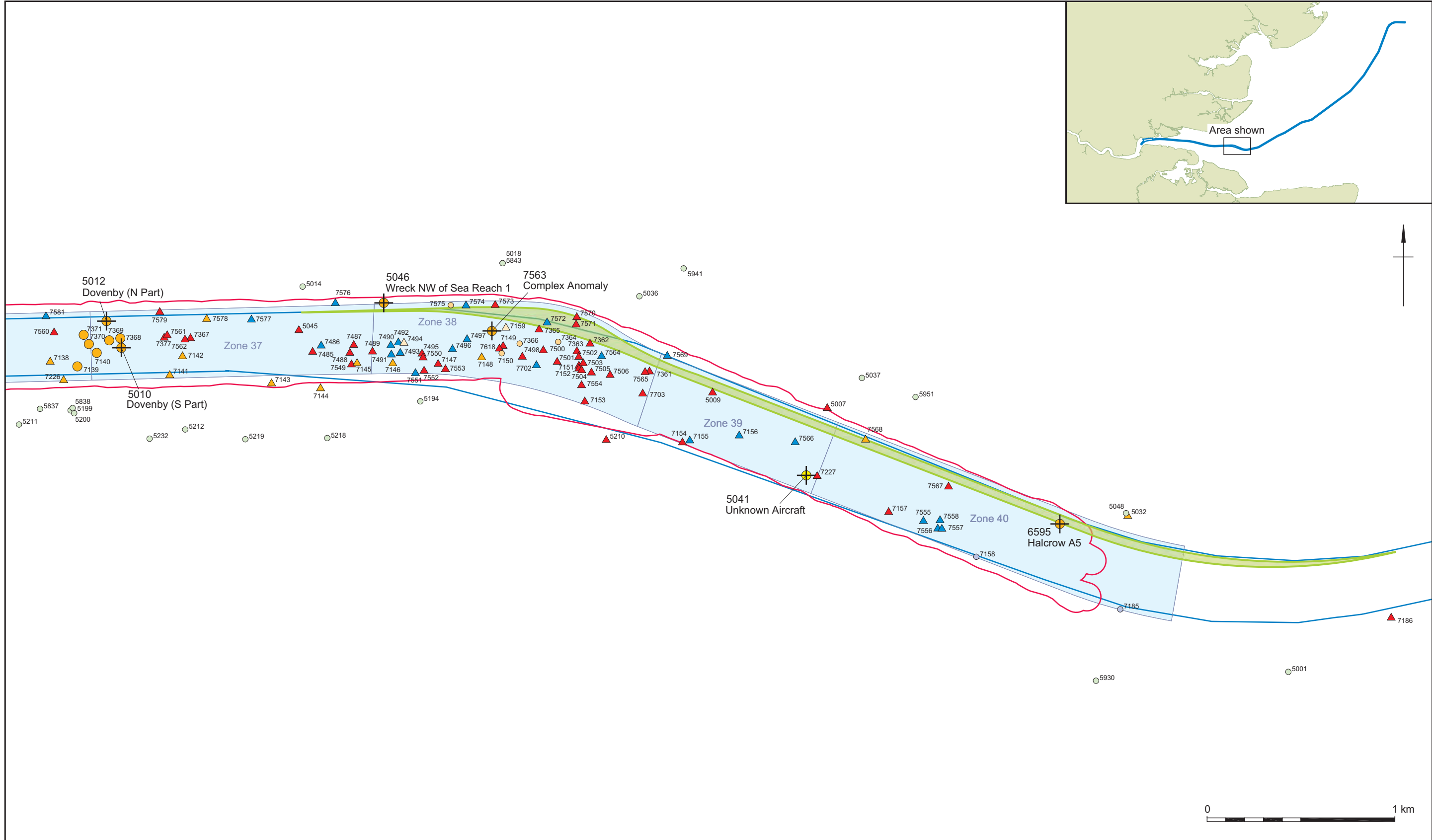
In Zone 40, there is an ambiguous anomaly (7568) lying within the extension area and a possible archaeological feature (7567) lying adjacent within the channel.

As noted above, the Archaeological Protocol applies to all dredging for London Gateway Port, and will apply equally to the Dredging Licence Extension. The Archaeological Protocol provides a mechanism that will enable an appropriate archaeological response to any archaeological material coming to light – either in association with these anomalies or additional to them – in the course of dredging.

Wessex Archaeology  
July 2011

## Appendix I: Dredging Licence Extension – List of Sites

Zone	Site ID		Mitigation Group	Description	Tiff file	References	Relation to Extension
Zone 37	nil						
Zone 38	5046	2.1.2	Site of probable archaeological interest; <b>Subject to CMS</b>	Wreck NW of Sea Reach 1	513	UKHO 13273; NMR UID 800490; PLA 729;	adjacent
	7574	2.2.4b	Site of uncertain archaeological interest - <b>?debris</b>	Bright linear reflector	511		immediately adjacent
	7573	2.1.4d	Site of uncertain interest - <b>?archaeological feature</b>	Disturbance in the pattern of sand waves causing a 50m sediment plume - other targets in the area	510		immediately adjacent
	7572	2.2.4b	Site of uncertain interest - <b>?debris</b>	Two small reflectors with shadow other debris in the vicinity	509		<b>within</b>
	7365	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Ephemeral rectangular impression on the seabed	285		immediately adjacent
	7572	2.2.4b	Site of uncertain interest - <b>?debris</b>	Two small reflectors with shadow other debris in the vicinity	509		<b>within</b>
	7570	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Linear anomaly with associated scattered targets 20m to the west	507		<b>within</b>
	7571	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Pair of anomalies	507		<b>within</b>
	7362	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Bright reflector with shadow and scour to the front	282		immediately adjacent
Zone 39	7569	2.2.4b	Site of uncertain interest - <b>?debris</b>	Group of anomalies in line with targets to the east and west	506		adjacent
	5009	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Obstruction located in 1967; removed 1970.		UKHO 12884; PLA 201/107;	immediately adjacent
	5007	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Wreck located in 1978	target88	UKHO 12879; NMR UID 831869; PLA 201/11;	adjacent
Zone 40	7568	2.2.4c	Site of uncertain interest - <b>ambiguous</b>	Area of disturbed seabed	505		<b>within</b>
	7567	2.2.4d	Site of uncertain interest - <b>?archaeological feature</b>	Ephemeral boat shaped impression in the bed	504		immediately adjacent
	6595	2.2.2	Site of probable archaeological interest; <b>Subject to CMS</b>	Anomaly with shadow	target 87	PLA 201/20	<b>within</b>



Channel	Anomalies: 1.1	2.1.1	2.1.4a	2.2.2	2.2.4a
Dredging zones	1.2	2.1.2	2.1.4b	2.2.3	2.2.4b
Dredging licence extension	1.3	2.1.3	2.1.4c		2.2.4c
2002 sidescan sonar coverage	1.4	2.1.4d			2.2.4d
Sites subject to CMS					

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Date:	23/06/11	Revision Number:	0
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