## CROSSRAIL ARCHAEOLOGICAL ROUND-UP

## by Jay Carver, Crossrail Archaeologist and Andy Shelley, Principal Archaeologist, Ramboll UK Limited A report of the LURS meeting at All Souls Club House on Tuesday 12 January 2016

Andy Shelley is co-author (with Richard Brown) of the book "From Brunel to British Rail" (which is scheduled for publication in March 2016) summarising archaeological finds from buildings dating from 1830 to 2010 which have been discovered during the building of Crossrail. These sites are mainly on the Great Western Railway [GWR] lines out from Paddington but also include the London and North-Eastern Railway [LNER] lines around Stratford and sites in the North Woolwich area.

Andy concentrated his talk upon the Westbourne Park site and the findings there. In the 1830s the GWR was in discussion with the London and Birmingham Railway with the aim of sharing Euston station. Unfortunately, these discussions ended in disagreement and so the GWR Board instructed Isambard Kingdom Brunel to look at an alternative site in Paddington. This passenger station opened in 1838 on a site which is now covered by the Paddington Lock development. However, this site soon became insufficient in size for the services. Therefore, in the early 1850s, plans were developed to swop the Bishops Bridge goods yard and the passenger station sites. These changes caused the first locomotive depot (designed by Brunel and Daniel Gooch) to be moved to a site at Westbourne Park bordered by the Grand Union Canal and farmland.

The Westbourne Park engine shed was designed by Locke and Nesham (more famous for their designs for prisons) and opened in 1852. It featured 4 roads with broad gauge tracks and was 663ft long by 56ft 6in wide (hence larger than Lincoln Cathedral!). Its sheds were later termed the BG Shed (broad gauge) and the NG Sheds (narrow gauge).

In Crossrail terms, Westbourne Park is the top of the ramp leading down to the Royal Oak tunnel portal and so extensive excavations had to be undertaken. These have exposed some lengths of "Brunel Bridge Rail" along with a large expanse of very-well preserved brick-built inspection pits. This was excavated in 2014 and within it was found the wall which was built in circa.1861 when rails were altered to mixed gauge. The BG shed, which was demolished in 1907, contained a well preserved drainage chamber which lead to the Marcon sewer. (Marcon being the name of the company which produced concrete on the site). This sewer is still operational today to remove both rainwater and water from the adjacent Canal.

The Crossrail works also allowed archaeology survey of site of Alfred Villa. It is believed that this was the home of Daniel Gooch (or more likely to have been for his Deputy) and been built in 1850s. The site is now under the Westway and the Villa had been demolished following extensive damage during the Second World War. The remains were uncovered including some very well-preserved cellar walls.

The turntables at Westbourne Park were also uncovered, including the 1881 45ft diameter slewed version and a 40ft hand-operated version.

By the 1890s Westbourne Park had reached capacity and so depot provision was moved to Old Oak Common under the design of George Jackson Churchward from 1902 onwards.

The meeting thanked Andy in the usual way, as unfortunately he had to leave the meeting early. Jay Carver then took over the mic.

He is the Project Archaeologist overseeing all excavations by Crossrail. Construction is now complete on Crossrail and a series of books detailing the archaeological findings will be published in 2016. The oldest finding was a piece of Amber dating 55 million years. Jay began by describing how the geological foundations of London developed over 20,000 years.

The Royal Oak portal was watched carefully for evidence of the ice-age sands and gravels deposited by the fast-flowing Westbourne River of that time. Thousands of fossilised bones were found (mainly deer, buffalo and bison).

Some of the bones showed evidence of gnawing. But the earliest human implements date from much later. The oldest artefacts from this site are evidence of flint tool making (knapping) dating back 8,000 years giving proof that a tribe of Hunter-Gathers camped here.

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Moving across to East London at Plumstead Portal a number of Bronze Age artefacts were found including wooden stakes. These formed part of a large network (possible 5,000kms (3,000 miles) of trackways crossing the marshland which surrounded London.

The next age of finds were from Roman times and these were found at Liverpool Street. This site was just outside of the ancient City Walls and adjacent to a major Roman Road and the channel of the River Walbrook. Most of the archaeology is over 6 metres (18ft) under the modern street level so a number of trial test pits were dug first.

Archaeological surveys and excavations in this area, and Finsbury Circus, had been undertaken in the 1800s and early 1900s by Charles Roach Smith, Augustus Henry Lane-Fox Pitt Rivers and Sir Robert Eric Mortimer Wheeler. Their finds had included many Roman skulls, especially concentrated around the River Walbrook. There were many theories for why this concentration of bodies was found here, but no definitive answer has yet been concluded. Archaeologists were excited that the works for Crossrail would excavate many more skulls and allow further investigation of the reasons for this concentration.

This was certainly the case and many, many skulls were discovered (some to the surprise of the workers when they found skulls staring at them!). Another major finds was a pristine Roman pot which contained the ashes from a cremation. The excavations also uncovered the constructed Roman road with its gravel ramps and drainage ditches. From the findings it would appear that this area had not been lived in but used as a route out of London.

Jay and his colleagues have also theorised that the victims of executions may have been displayed alongside the road, as a warning to others, and were just buried where they fell into the ditches. However, the archaeologists also found a number of pits in which whole skeletons had been placed, but with the skull placed between the knees! This may have been due to a belief that this prevented haunting. Were these people criminals or sacrifices?

Some of the causes of death were beheading by sword! Large iron rings were also found in the pit which indicate that the person was restrained either before death (because they were criminals) or after (to prevent haunting). This is very unusual behaviour for Roman burials and has not been replicated in other London cemeteries dating from this time period. Other findings in the Liverpool Street area included horse skulls and riding equipment along with horse-shoes ("hipposandles").

Above the roman findings near to Liverpool Street is the site of the Bethlehem Burial Ground which was in use between 1569 and 1714. This was developed to alleviate the overcrowding the churchyards and over 30,000 were squeezed into this one acre site over the 150 years it was in use. Therefore, the Crossrail excavations uncovered a large number of skeletons (which were removed with dignity and these will be reburied) along with a number of gravestones and parts of coffins.

A main area of interest was what the 1665 plague pit would uncover and samples will be taken for microbiological analysis to discover which form of plague the 1665 actually was or whether it was even plague at all or, maybe, an form of influenza pandemic (similar to the "Spanish Flu" of 1918/1919).

Along with the Shelley & Brown book "From Brunel to British Rail", another volume in the series deals with the Thames Ironworks, where the first iron-clad war ships were built in the Hill's Shipyard; and another about the Tudor moated manor house at Stepney Green; and another volume entitled "The Changing Face of London": which looks at the historic buildings which have had to be demolished due to the building of the Crossrail route. All these books are due for publication during 2016 and Jay recommends keeping an eye on the media, especially the Crossrail website and Facebook page, for launch dates.

There will also be documentaries on Channel 4: two of which have already been shown which were about the Bethlem Churchyard and the Black Death Cemetery at Farringdon (but are available on "catch-up TV") and a programme about the Roman archaeology which is due for broadcast in May 2016 as part of the "Secret History" series. There will also be a major exhibition of the findings at the Museum of London opening in Spring 2017.

The meeting then thanked Mr. Carver in the usual manner.