

Provisional outline programme – subject to confirmation

Friday 17th June:

- p.m. pre-conference field excursion – Ffos-y-fran opencast coal mine (Miller Argent Ltd).

This excursion will provide a rare opportunity to visit this large pit, which is extracting coal from an area which in the later 18th and 19th centuries provided coal and ironstone for both Dowlais and Pen-y-darren ironworks. The excursion will demonstrate the modern extraction procedures, the raw geological materials and, depending on current exposures, examples of 18th-19th century underground workings. At the time of writing, the upstanding buildings of the Pen y Waun ironstone mine are emerging from beneath deep later overburden as it is removed, but it is not known, of course, what will be visible in June 2016.

- return to accommodation, evening meal not included

- 19:30: introductory talk and reception – Cyfarthfa Castle.

Now a museum presenting Merthyr's history, the castle was constructed in 1824 by William Crawshay II (the grandson of Richard Crawshay, who ran Cyfarthfa after Richard's death in 1810), as his main residence (replacing Cyfarthfa House, adjacent to the Lower works and the head of the Glamorganshire Canal).

Saturday 18th June:

- to be held in the Richard Hill Room, Table Table Restaurant, Pentrebach House, Pentrebach, Merthyr Tydfil, CF48 8BD.

This mansion was constructed by Anthony Hill (son of Richard Hill I) in 1850. Richard Hill I, a manager for Anthony Bacon, had leased the Plymouth furnace from Anthony Bacon's estate in the 1780s and gained full control in 1803. In the early years Plymouth mainly supplied pig to other works (particularly Cyfarthfa), but expansion in the early 19th century gave the works their own bar iron mills. After Richard I's death in 1806, the works were run by his sons and after 1844 by Anthony alone. Anthony died in 1862 and the works were purchased by Messrs. Fothergill, Hankey and Bateman, eventually closing c. 1880.

- 9.30 to 12.30: lecture session 1

- 12.30-14.00: buffet lunch (included)

- 14.00-14.30 – The **HMS 2016 AGM**

- 14.30-17.30: lecture session 2

- 19.30: Delegates may make their own arrangement for their evening meal, but for those eating at Pentrebach House, efforts will be made to seat delegates together as far as is possible.

Sunday 19th June:

Excursion through the sites of the Taff Valley in Merthyr. Excursion on foot, but transfer between many of the sites may be made by car. Packed lunch to be provided. Total walking distance approximately 7km. Sites to be visited include:

- the Merthyr (Pen-y-darren) Tramroad tunnel

A Bill for a tramroad from Merthyr to Cardiff was defeated in Parliament in 1799 by opposition from the Glamorganshire Canal proprietors but the upper section of the proposed line (to Abercynon) was built anyway. The engineer was George Overton and construction began in 1800 under the supervision of Richard Hill of the Plymouth Ironworks. It was completed in 1802. At Plymouth Ironworks the line ran through a tunnel only 8ft high beneath the charging area of the blast furnaces

- the Ynysfach Ironworks,

A satellite of the Cyfarthfa works which undertook smelting and refining to supplement the iron supply to the Cyfarthfa puddling forges. The construction of the new college building in 2011 provided the unique opportunity for the excavation of the refinery and southern engine house by GGAT. The façade of the blast furnaces will be accessible. The Ynysfach Ironworks northern engine house (originally constructed 1801/4, but subsequently modified, probably in the 1830s when the 3rd and 4th furnaces were added) provided the blast to the unusual pair of blast furnaces (built 1801/4) and their associated refineries is open as a visitor centre.

- Chapel Row,

Crawshay cottages of the 1820s, attached to Crawshay's chapel of ease. No 4 was the birthplace of Joseph Parry, composer (1841-1903) and is now a museum. Outside, various iron artefacts are positioned around a 'restored' section of the Glamorganshire canal.

- Cyfarthfa Ironworks

The southern part of the site includes the furnace bank with six of seven nineteenth century blast furnaces surviving, some remains of a 19th century blowing house and the bases of the late 19th century hot blast stoves from the steelworks period. The northern part of the site includes Pont-y-cafnau – a multipurpose cast iron bridge dating from 1793 designed by Watkin George (claimed to be the world's oldest surviving railway bridge). It carried a low-level leat (from the Taf Fechan) below the Gyrnos tramroad (from the limestone quarries to the works) and also supported a high-level leat above which fed the great 'Aeolus' 50-foot diameter waterwheel at Cyfarthfa (another of Watkin George's designs, implemented when a third blast furnace was added in 1793-6). Adjacent to Pont-y-cafnau is the 'finger tip' an elongate slag dump, which runs alongside the Tai Mawr leat – the original leat constructed by Charles Wood in 1766/7 to supply power to the first blast furnace here from the Taf Fawr. Finally, at the very north of the site is the impressive limestone Cefn-coed-y-cymmer viaduct built to carry the Brecon and Merthyr Railway over the Taf Fawr.

Excursion to finish by c. 16.00