Corsham Tunnels

Beneath a picturesque village in Wiltshire is one of the country’s best-kept secrets – the Corsham Tunnels.

Introduction

In the 1950s, as the threat of nuclear war loomed large, the Tunnels became an underground facility for the potential relocation of Government in time of crisis. This role was retained until 2004 when, the Cold War having ended, the site was declassified, though still remaining part of the Ministry of Defence estate. Much of what remains today reflects the Tunnels’ service as a nuclear bunker – ‘Burlington Bunker’, as it was code-named – but there is also ample evidence of their earlier roles.
The Quarry

The Tunnels started life as an underground quarry. So-called ‘Bath stone’ (Oolite limestone) had been quarried in the district since Roman times and was responsible for many fine buildings in the locality, including the Roman baths at the City of Bath itself. The arrival of the Great Western Railway and the building of Box Tunnel afforded easy access to the deep stone beds in the area, as well as providing a convenient mode of transport for the cut stone. Consequently, the underground quarry flourished in the period 1850-1910, the ‘golden age’ of quarrying at Corsham.
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Central Ammunition Depot

Between the First and Second World Wars, however, a new role was found for the old workings. War clouds were gathering, and the rapid development of air power fuelled fears that the enemy bomber would always get through. The War Office decided that measures need to be taken to protect ammunition stocks from attack by hostile aircraft, and in 1935 the go-ahead was given for the construction of three ammunition sub-depots – one here at Tunnel Quarry, and the others at neighbouring Monkton Farleigh and Eastlays Ridge. Collectively, they were known as the Central Ammunition Depot (CAD).

It had been estimated that CAD would take four years to complete but the first section – or ‘district’ – was ready by April 1938. Initially, the ammunition was lowered down a converted air-shaft by means of a steam winch but later, when all the ‘districts’ were completed, ammunition arriving by road or rail was unloaded at Surface Loading Platforms (SLP), one located at each sub-depot. Tunnel Quarry sub-depot had a standard gauge underground railway, complete with two platforms and locomotive shed, while the other sub-depots employed conveyor belts to connect with nearby railway sidings. Movement underground was by an ‘endless rope’ truck haulage system, similar to that used in coal mines. However, excessive noise and the danger posed by derailments led in 1940 to the system’s replacement by approximately 7.5 miles of conveyor belt at Tunnel Quarry and Eastlays Ridge.

When completed, Tunnel Quarry sub-depot consisted of ten ‘districts’, each with approximately five acres of floor space. Giant fans drew in fresh air and expelled the stale, producing a stable atmosphere of 65°F and 80% humidity.
Underground Facilities

In 1941 a barrack block was constructed underground at Tunnel Quarry. It could accommodate 300 personnel and was described by the RAOC Gazette as ‘magnificent’, with its bars and messing areas. There was a power station with two huge diesel generators capable of supplying power to a small town, and an underground lake for drinking water. Sewerage facilities and flood pumps were also provided. There was little need to go above ground, and during the Second World War many personnel remained underground for long periods to help keep the installation a secret.

In February 1942 it was decided to establish a new military communications centre for the South-west of England, and space was found in Tunnel Quarry in No1 ‘district’, which never had been fully commissioned for ammunition storage. Work was completed by July 1943, at a cost of $50,000.

Additionally, part of the Tunnels was set aside as a subterranean factory for the Bristol Aircraft Corporation, hidden away from the prying eyes and destructive capabilities of the Luftwaffe. It was this section of the Tunnels that, in 1943, was graced with the attractive murals painted by Olga Lehmann to brighten up the otherwise drab and gloomy working conditions.

After the War, Tunnel Quarry retained its CAD role until the early 1960s, when the Royal Army Ordnance Corps vacated the site and took the last remaining ammunition with them. The Royal Engineers, who had maintained the site, abandoned their underground workshop a few years later, in 1966.
In 1943 Olga Lehmann, a noted artist, was invited to paint murals in the subterranean factory of the Bristol Aircraft Corporation in the Corsham tunnels. Olga had been born in Chile in 1912; her mother was British and her father (a mine manager) was French; she had a sister, Monica. She grew up in Chile but during lengthy leave periods the family stayed at her paternal grandmother’s house in Dulwich, London, where Olga and her sister attended Dulwich High school. Her education continued in Chile where she attended the American college in Santiago until aged 17, when she applied successfully for a placement at the Slade School of Art in London. Here she won the coveted Slade Scholarship.
Initially training as a portrait painter, Olga was soon converted to mural and large-scale scene painting, and it was in this genre that she made her reputation. For example, she painted scenery for La Cenerentola in Covent Garden Theatre and painted murals in the Palace Hotel, Buxton (1934), as well as St. Helier House Hotel, Jersey. She designed and painted (with others) a decoration to cover Queen Victoria Street Railway Bridge to celebrate the Royal Silver Jubilee of King George V and Queen Mary (1935), held a ‘One Woman’ exhibition at the Little Gallery, New Burlington Street in 1937, and received Commissions for murals in hotels, private buildings, shops and nurseries, along with work for the film industry.

Olga Lehmann married Carl Huson, writer and broadcaster, in 1939, one month after the outbreak of the Second World War, and some of her most deeply compassionate interpretations stem from this period. She was commissioned to paint murals for the Air Raid Protection (ARP) HQ, factories and bill hoardings, and there were continuous illustrations for the Radio Times, periodicals and book jackets.

In 1943 came Olga’s Corsham commission. She was transported to the site by a War Office car, and spirited away to the underground tunnels. Materials had by this time become difficult to obtain. Oil paint was provided from the Factory, and all colours used in the murals were also those used in the production of aircraft. In all, there were about six canteens to be adorned with murals, and each canteen took about a week to a fortnight to finish. A fellow artist, Gilbert Wood, who was also employed by the film industry, assisted her and the whole project took about eight months to complete.
Olga told the chairman of the factory that she believed ‘the murals would only survive for 18 months to two years’. Only in Dec 1995 did she discover that the Corsham murals had not disintegrated but were still in remarkably good condition.

After the War, important commissions included work for films such as The Guns of Navarone, Nemo and the Floating City, The Man in the Iron Mask, Les Misérables and The First Modern Olympics. Emmy awards were collected for some of these motion pictures, now regarded as classics. Her work for the TV soap opera Dynasty was viewed by millions. In 1986 the BBC showed a documentary film of her work. Olga painted well into her retirement but with failing health; she passed away in October 2000 aged 88.
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Burlington Bunker

Even as the CAD role was winding down, an important new purpose for the Corsham Tunnels had emerged: ‘Burlington Bunker’. During the 1950s part of Tunnel Quarry, also known as ‘Site 3’, was prepared for the possible relocation of some 4,000 Central Government personnel – including the Prime Minister – in the event of nuclear war. Site 3 was fully equipped in all respects – from medical facilities to kitchens, canteens, offices, storerooms, living and sleeping accommodation, and an enhanced communications system – so that personnel could be supported there for a prolonged period, safe from the nuclear devastation above ground.

At the end of the Cold War, the Ministry of Defence took control of this underground city in 1991. The aim was to keep Site 3 at ‘minimum maintenance’ so that it could be brought back to full availability if necessary. However, the continuing decline of the strategic threat to the United Kingdom meant that even this level of maintenance had become unnecessary, and over the last decade the Site has been emptied of its fuel and food supplies. The large underground water reservoir has been drained. Since December 2004, Site 3 has been declassified – and the ‘best kept secret’ is out.
Corsham Underground – the Future

From Bath stone quarry to underground ammunition depot, subterranean aircraft factory and nuclear bunker, the Corsham Tunnels have had a varied and colourful past. What of the future?

The future of the Corsham Tunnels is part of a wider development plan called the Corsham Development Project (CDP), which aims to create a communication centre of excellence at Corsham for the MOD. The project is being developed via a Public Finance Initiative (PFI)*1 arrangement under a 25-year contract. Much of the new development will take place between 2007 and 2010.

As part of this project, it is envisaged that the contractor will make innovative use of the underground areas, which are now empty. Although the MOD will still retain ownership of the underground, some ideas for future use are storage of data/archive, wine and cold stores.

1 The Private Finance Initiative (PFI) is a partnership between Government and the private sector and is based on the Prime Minister’s principles for public sector reform to deliver high quality public services and clear value for money over the long term.
Requests for Visits to the Corsham Underground Area

The underground complex at Corsham has generated considerable interest locally, nationally and worldwide from many different and diverse groups of people including members of the public and the media. The underground is subject to very strict health, safety and fire regulations and has to comply with the equally stringent Mines Regulations.

Whilst the media and some members of the public have had the opportunity to visit the underground in the past, given the resource and H&S limitations it is not currently possible for members of the public to visit the underground complex.

All requests for visits by members of the public and the press, however, are considered on a case-by-case basis and are at the discretion of the Head of Establishment. Requests for visits in the first instance must be made in writing to: Nigel Spreadbury-Clews, HoE, Floorplate D3, Bldg 405, MOD Corsham, Westwells Road, Corsham, Wiltshire, SN13 9NR.
Requests for use / leasing of underground space

All requests should be forwarded to:
Sara Spurrier,
Defence Infrastructure Organisation,
Corsham Development Project,
Floorplate D3,
Building 405,
MOD Corsham,
Westwells Road,
CORSHAM,
Wiltshire SN13 9NR.