



Arborfield Garrison (Demolition of Rowcroft Barracks), Berkshire

OVERVIEW: Lawson Group were awarded the contract to undertake the demolition, asbestos removal, and remedial work at Arborfield Garrison. The work was set to take place over 4 years, working on various buildings, structures and SANGS - all with different challenges and requirements. This case study will centre on one of those areas: Demolition of Rowcroft Barracks

Phase 2: The demolition of Rowcroft Barracks School Site

CHALLENGE: Lawson Group were awarded the contract to undertake the demolition and remediation work required at Arborfield Garrison's former Rowcroft Barracks. The vast area of land was required to be cleared as part of a regeneration project of the area where a school, local shops and thousands of homes were due to replace the former barracks which was in the sought-after location in Berkshire.

Lawson Demolition (part of Lawson Group) would need to work closely with the client throughout the whole project as there were many procedures that would need to be met prior to the demolition work commencing. This would include working closely with the CDM - Coordinator who was given the method statements and construction phase health and safety plans for approval.



When writing the methodology, the BS 6187:2000 would need to be followed as a guideline to ensure that all codes of practice on various aspects of demolition would be met.

This complex project was faced with ecological issues which controlled the programme and methodology of the order of demolition. These issues would require an ecologist to work closely with Lawson Group to ensure that the bats and birds had moved out of the buildings before demolition could take place. The ecologist would use methodologies which included the erection of a bat barn and placing bat boxes in the trees to ensure that the endangered species were free from the building and ensured that birds weren't nesting in the trees which were required to be cut down.

The remediation work would be undertaken to ensure areas of ground were clear. This work would need to take place whilst the buildings were being demolished and will be described in a separate case study.

SOLUTION: Following the Asbestos removal as outlined in a separate, phase one case study, the demolition phase two could take place.

Structures to be demolished were: Buildings 41, 61, 62, 65, 59, 60 and Astro turf. As well as 1, 2, 4, 5D, 7, 7A, 8, 8a, 59, 70, 72, 73 and hard standings. This case study concentrates on a selection of the major buildings.

Buildings 8a

These buildings were based to the north of the site and were demolished using a smaller machine which took to the porta-cabin after they were soft stripped.



Building 61

Once the ecologist granted permission for the works to start within other buildings, Lawson Environmental were able to commence work on buildings which required licensed asbestos removal that was recognised as a result of a Refurbishment and Demolition Asbestos Survey.

Once the strip out was completed by Lawson Demolition and asbestos removal work was finished within the buildings, Lawson Group were able to utilise their company owned plant and experienced demolition plant operatives to commence demolition on site. Arborfield Garrison was a large site which enabled multiple machines to operate during the same period of the programme.

Buildings 41,61,62,65,70 and 59 were all affected by the ecological issues. Once the ecologist gave permission for demolition, Lawson Demolition commenced work to the south of the site firstly demolishing building 61. This work was completed using a CAT

excavator which took a period of 5 days to demolish the building. The demolition arisings were crushed and cleared from the area so that the demolition of buildings 62 and 41 could start.

Building 62 was one of the larger buildings on site which was to be demolished. It required one of Lawson Demolition's larger machines, the CAT 944, which demolished the building in its entirety in 3 days. An experienced demolition operative undertook the task of demolishing the building which required a methodology of demolition using a fixed grab attachment to demolish the brick building.



A CAT 323 worked through the demolition arisings to process the materials ensuring that Lawson Group's recycling targets were met. Building 62 was predominantly made out of brick and concrete which was able to be crushed on site with some of the material being recycled as a subbase for the roads.

Building 59 was a prefabricated building which required a different methodology including the use of a CAT 336 to demolish the building. This building was predominantly made of wood and other soft materials; therefore, a selector grab attachment was required to undertake the work. A benefit of using this attachment was that the materials were able to be processed simultaneously as the demolition was taking place. This methodology was also used on building 41.

Building 10 Swimming Pool and Sports Hall.



The scope of works for the swimming pool and sports hall required extensive licensed asbestos removal to the boiler rooms, treatment and basement plant rooms, ceiling throughout the swimming pool, squash and sports hall.

All treatment plant and pumps were fully decommissioned, and all tanks were pumped and emptied. A full scaffold platform was erected over the swimming pool to form a working area and allow

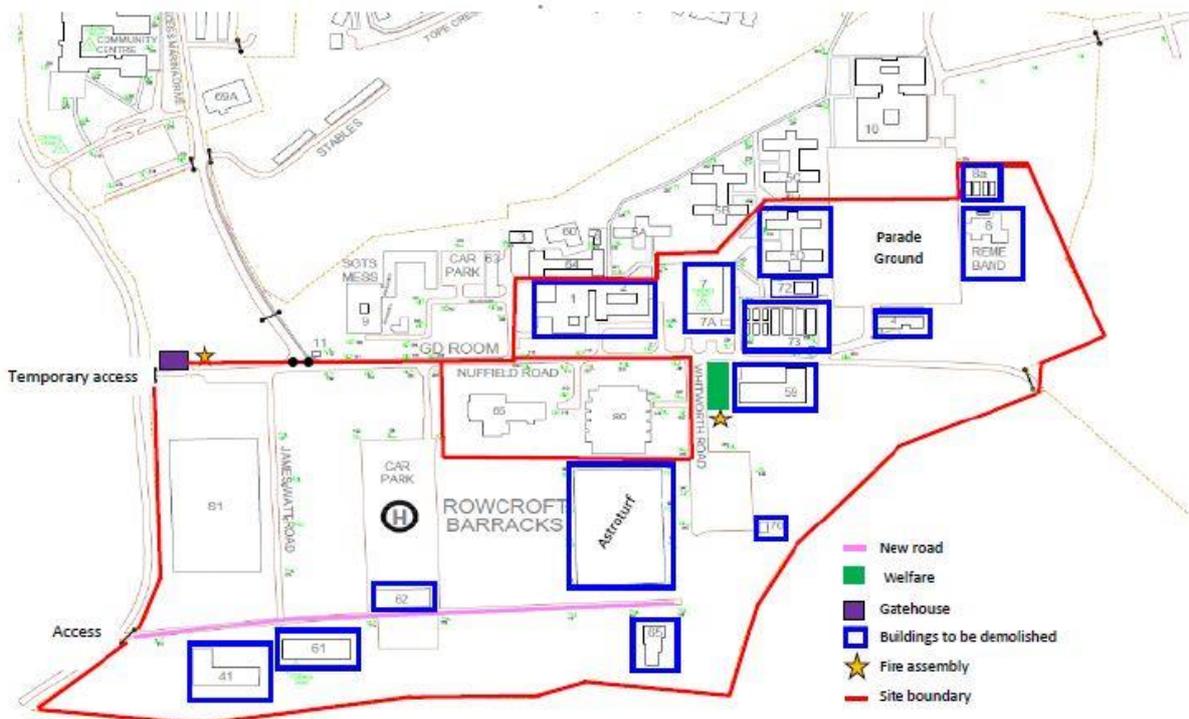
for a full asbestos removal enclosure to safely remove all ceiling panels. Once all hazardous material had been removed mechanical demolition to the super structures was completed.



Building 41 - A sheer attachment on the CAT 336 was used for sorting the demolition arisings from the demolished building, as shown below.



RESULT: Once all the buildings marked on the diagram below were successfully removed, the site was handed over to the client for the next stage of development.



To find out more on how Lawson Group can help with your next demolition or asbestos removal project, call Lawson Group on 01793 782000, email estimating@lawsongroup.co.uk or visit www.lawsongroup.co.uk