Two Storey Modular Building

Construction Statement, Transport and Waste Plan

Project Title: Calder SEAP Building

Issue Date: September 2024

1. Introduction

This minor planning application is for a two-storey modular building which will be known as the Calder Hall Site Emergency Assembly Point (SEAP). The building will provide welfare facilities and some office space that is to service the needs of site-based personnel, including personnel working on demolition projects on the Calder Hall site. The building will be designated as a Site Emergency Assembly Point for both Site Emergency Exercises and in the event of a Site Emergency.

1.1. Requirement

There is an immediate requirement to provide adequate and local facilities, to meet Nuclear Site Licence Condition (NSLC) requirements, to provide appropriate site emergency shelter i.e. a Site Emergency Assembly Point (SEAP) and associated welfare, changeroom and office space for the workforce supporting Decommissioning and Demolition within the Calder site. Provision of identified SEAP shelter arrangements is a necessary requirement of NSLC 11 Emergency Arrangements and a failure to provide this would delay work on the Calder Site and significantly impact associated delivery plans across several areas of the business.

Historically, the original Administration building for Calder Hall was used as a SEAP. However, this building has recently been demolished to make way for future developments and hence a replacement SEAP facility is required. The other existing SEAPs in the Calder Hall area are unable to accommodate the full capacity needed and it has been confirmed by Sellafield Ltd's Emergency Planning Team that there are no existing facilities in the surrounding area that meet the needs of the additional SEAP requirement.

1.2. Description

The proposed SEAP will be located on the eastern side of the Sellafield site.

The proposed new Calder SEAP building will be a modular build over 2 storeys. The building will be approximately 6 m high, 36 m long and 16 m deep on the north elevation and 8 m deep on the south elevation; consisting of 28 modules in total, 14 for the first floor and 14 for the second.

The proposed development site covers approximately 2,000m² and allows the project to capitalise on the reuse of a civil concrete foundation previously used for a warehouse before it was demolished in the early 2000's. A survey and

design assessment has been undertaken, which confirms the existing foundation will be capable of taking the two-story modular buildings.

The selected location means that the main construction activities will eliminate the need for services diversions, significant bulk excavations for foundations, allow the installation of the modular units, and reduced excavation lengths to allow for connections into local services.

The Site Plan layout is illustrated on drawing: 0BE 3138662.

2. Personnel

2.1. Number of Personnel

Construction personnel will predominately be drawn from the existing work force across the Sellafield site apart from the modular build specialist sub-contractors. As such the quantity of vehicles on the local highway is not expected to change significantly.

The number of construction personnel is expected to range from 10 to 15 individuals throughout the project. There will also be associated support staff, supervision and management in the region of 7no. individuals based on site and remote working and within site partner's offices.

Once the facility becomes operational, there will be no additional personnel working on the Sellafield site as people will be relocated from other facilities.

2.2. Location

The majority of the physical construction works will be carried out by the modular supplier at their premises and hence the construction activities carried out at Sellafield will be limited and are not likely to take more than approximately 4 weeks, involving less than half a dozen personnel.

It is envisaged that the employment of off-site personnel associated primarily with design work will be required throughout the project. Where possible, the use of video conferencing, car sharing, or coach travel will be encouraged to limit individual journeys to site.

2.3. Travel to the Sellafield Site by Road

Transport demands will vary over the course of the project, although the construction phase is expected to dominate the number of personnel accessing and leaving the Sellafield Site. Following internal policy changes Sellafield Ltd has taken significant steps to encourage the use of shared transport and commuter buses etc in order to minimise the number of vehicle trips to the Sellafield Site.

Once the building becomes operational, there should be no change to the numbers of vehicles on the local road network as personnel will be relocating from other buildings on the site.

Also, see Section 6 Cumulative Impact Below.

Travel to the Sellafield site shall be in accordance with the Sellafield Ltd Travel Plan January 2022.

3. Excavation and Groundwork Material

3.1. Characterisation

Land characterisation will take place to determine the soil type and any contaminants to determine the most suitable place for re-use or disposal in accordance with Sellafield Ltd's procedures and the Environmental Protection Regulations.

Excavated material, soil, spoil, concrete and tarmac will need further characterisation by the Facility Characterisation Team to determine its classification and where it should be sent: e.g. to a licenced recycling facility, a landfill site off-site or Sellafield's on-site CLESA facility. The waste classifications that may be encountered are: Exempt, Very Low Level Waste (VLLW), Hazardous and/or Non-Hazardous. Any material which cannot be used on site will be recycled or disposed of appropriately.

Some material is likely to go to the recycling facility at the Beckermet industrial estate which should not exceed 30 wagon loads.

3.2. Excavation Volumes

Based on the site investigation works and engineering assessment the estimated excavated volumes will comprise of the following:

Material Type	Exempt Waste (m3) (Beckermet)	Approx/Vehicle Moves based on 12m3 wagons)
Mesh Reinforced Concrete	25	3
MOT Infill	73	7
Granular Soils	83	7
Hardstanding Tarmac	32	3
Road Tarmac	20	2
250mm Topsoil Turf	5	1
Total Wagon Moves	[redacted]	**23**

3.3. Waste Hierarchy

The most efficient methods of construction of the facility have been determined. These methods will contribute towards minimizing potential waste routes. For example, reducing the amount of raw materials required and the reduction in the transportation of goods.

i. Reduce

Through the selection of a modular build accommodation, the units will be manufactured off-site and will require delivering to site without the need of building foundations or substantial excavation for their installation.

ii. Re-Use

The selected location for the SEAP allows for the re-use of a previous foundation slab capable of withstanding the loads of the building and it is also within close proximity to infrastructure connections such as drainage, waste and power.

iii. Re-Cycle

A recycling facility will be used to process the clean material which cannot be re-used on site.

iv. Disposal

Any disposals off-site will be characterised and disposed of at suitable off-site licensed facilities.

4. Construction Materials and Deliveries

4.1. Materials

The SEAP Project will be constructed from prefabricated modular units. A total of 28 lorry journeys will be required to transport the 28 modular units to the Sellafield site via the A595 (from the north). These transportations will be planned to ensure that they do not occur at peak traffic times to ensure minimal impact on the local roads.

In addition to the prefabricated modular units, it is estimated that a total of 11 vehicle movements (22 round trips in total) will be required to provide the raw materials to make the concrete needed to backfill and make minor modifications to the slab to accommodate the SEAP modules. The raw materials will be delivered to the on-site concrete batching plant.

5. Equipment

5.1. Vehicles/Plant to the Sellafield Site

A mobile all-terrain crane will be driven to the construction site to enable lifting of the modular units into place in Q2 2025. The crane will remain for the duration of the construction of placing the modular units into position.

At this stage of the project it is not envisaged that abnormal load deliveries to site will be required.

5.2. Vehicles Dispatched from the Sellafield Site

All material leaving the Sellafield Site will be subject to the relevant clearance procedures under the supervision of the Local Clearance Co-ordinator and Waste Advisor.

The readings from the load cells on the wagons will be recorded on site by the contractor prior to removing the material from the site. This will be kept as a record to monitor the volume of material leaving the site.

6. Cumulative Impact

The cumulative impact of additional construction and personnel traffic on the A595 and other local highways which derive directly or indirectly from the SEAP Project is considered to be negligible.

As outlined within this document, it is envisaged that a significant proportion of the workforce will come from existing personnel currently employed on construction projects across the Sellafield Site. As such the quantity of vehicles on the local highway is not expected to change significantly. During the peak of construction there should be 10 construction personnel working on the project site which, it is envisaged, will commute to the site by bus.

In relation to the supply of equipment, goods and raw materials the deliveries will conform with standard loads. At this stage the road movements are estimated as follows:

Site Transport	Number of Wagons/Lorries	Estimated Distance (Miles)	~Weekly extra wagons on road for construction period
Deliveries of raw materials, and equipment	11	110 (210)	<2
Delivery of Modular units	28	252 (504)	<2
Dispatch of waste	23	N/A	N/A
Total	[redacted]		<2