



Sellafield Ltd

**Construction Method Statement, Transport
and Waste Plan**

RP/3509968/CSA/00016

Issue A

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Project title: CNC Operational Unit

Project number 35/09968

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1 Introduction

1.1 Requirement

The Civil Nuclear Constabulary (CNC) Operational Unit (OU) will be a deployment facility on the Sellafield site, that is suitable for responding to the UK's threat level for international and national terrorism.

The proposed CNC OU building will provide 24-hour accessible facilities for existing CNC staff who are currently located elsewhere on the Sellafield site. The facility will provide essential on-site support to the whole of the Sellafield site, with the ancillary buildings supporting the operations of the main CNC OU building.

1.2 Description

The proposed CNC Operational Unit will be located on the Sellafield site in an elevated position within the North Group area (please refer to drawing 1BE 3009117A).

The built form around the site is largely industrial buildings, infrastructure and offices. The land adjacent to the development site is in use as laydown areas, infrastructure and other new developments which restrict the useable footprint of the CNC OU site.

The proposed development site covers approx. 5,280m² and slopes down towards the northwest at around 5m in 300m. The layout of the development responds to the topography of the site, with the buildings being set into the rising slope. The site layout is illustrated on drawing: 1BE 3009119.

The proposal comprises of 4 key areas:

- Main CNC OU building – 58m x 29m
- Garage – 19.8m x 8.7m

- Kennels – 7.2m x 4m enclosures (6no.)
- Operational Car park areas

Site laydown area has been assigned immediately to the eastern boundary of the site.

The buildings will be constructed using traditional well understood construction techniques including raft foundations, concrete retaining walls, steel framed superstructure, masonry and modular cladding components. Due to the topography there will be elements of Bulk earthworks removal required commencing Q3 2021 subject to planning approval. Installation of the steel framework circa Q3 2022.

2 Personnel

2.1 Number of Personnel

It is envisaged that a significant proportion of the workforce will come from the 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 service diversion works, site clearance, bulk excavation and main slab construction, the numbers of construction personnel will involve around 20no. individuals. This will increase to an estimated 51no. blue collar workers at the peak. There will also be the associated support staff, supervision and management in the region of 30no. individuals based on site, remote working and within design partners' offices.

2.2 Location

The bulk of the physical works will be carried out on the Sellafield Site except for some off-site manufacture and works testing. The offsite manufacture will typically be electrical equipment, duct work and structural steelwork. These will typically be manufactured/sourced from the Northern region of the UK, traveling to Sellafield utilising the M6, A66 and A595.

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 further steps to encourage shared transport, enhancing security whilst minimising vehicle trips to the Sellafield Site.

Note: During Covid-19 Lockdown, these measures are suspended in line with government advice and will be periodically reviewed.

Sellafield Ltd have established several Park and Ride/Share locations in areas such as Greengarth, Seascale, Egremont, Rosehill Theatre, Cockermouth and Workington. Discussions led by the Site Management group will continue to additional offsite parking capacity to provide options for the workforce at Sellafield to use (contractors or SL).

Also, see Section 5.3 Cumulative Impact below.

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

4 Excavation and Groundwork Material

4.1 Characterisation

Details on the characterisation of the site can be found in the projects Phase 2 Contamination Assessment Report (RP/3509968/PROJ/00015/A).

Excavated material, Soil, spoil, concrete and tarmac, will need further characterisation by Facility Characterisation to determine the waste classification and where the waste will be sent. E.g. landfill or CLESA. The classifications we will encounter are come across on the CNC OU project are Out of scope (Exempt), Very low-level waste (VLLW), Hazardous and non-hazardous.

Any waste which cannot be used on site will be recycled or dispatched of via a designated licensed tip area within the site boundaries of offsite, via a registered carrier:

- Licenced landfill sites
- licenced recycling facility
- An exempt site

4.2 Excavation Volumes

Excavation of approximately 8,400m³ of spoil is required to enable the construction of the CNC Operational Unit. This volume results from bulk excavation to formation level and safe construction of retaining walls.

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

Material Type	CLESA Waste (m3)	Non-CLESA Waste (m3)	Approx. vehicle moves on public highways (based on 12m3 wagons)
Tarmac	202	100	9
Spoil	8,092	301	26
Type 1	1050	0	0
Misc. (brick, clay pipe, metals)	200	100	9
General Waste	0	100	9

4.3 Waste Hierarchy

The most efficient methods of constructing the facility have been determined. These methods will contribute towards minimising potential wastes i.e. reduction in the use of raw materials and the reduction in transportation of goods. A Construction Environmental Management Plan has been developed and is included within this planning application (V2 Dated 23/02/2021). This document is consistent with Sellafield Ltd management arrangements to identify environmental management arrangements for the project.

5. Construction Material Deliveries

5.1 Materials

The CNC OU Project will typically be constructed from concrete, structural steel sections, masonry and proprietary external cladding systems. In addition, there will be mechanical and electrical (M&E) materials in the form of transformers, switch gear, piping, ducts and cable racking.

It is expected that material deliveries will access the site via the A595 and Sellafield Main Gate. Deliveries from outside the local area will utilise the M6, A66 and A595.

Deliveries will be managed via the Delivery Management System (DMS). The DMS is an online computer based commercial vehicle booking and management system. Commercial operators select a delivery slot (time and date) from the slots available and enter the details of their delivery. A control centre manages the system and can adjust the delivery slots available for traffic management purposes. Standard delivery slots available using the DMS system are from 09:00 until 15:00. The CNC OU project intends, where practicable, to make use of the DMS.

Where appropriate, warehousing at Lillyhall will be used to consolidate deliveries and thereby minimise the total overall number of vehicles arriving at the Sellafield Site. These activities will be coordinated via the DMS which will also be used to smooth the delivery profile to site. These arrangements will help to maintain a controlled flow of traffic and prevent bottle necks at the site gate. Additionally, where it is practicable to do so, bulk material import will be utilised in order to minimise packaging waste(s).

5.2 Use of On-Site Concrete Batching

The project plans to utilise existing onsite batching facilities which can deliver the quality and quantity of concrete required. The on-site batching facilities are managed centrally to ensure site demand is fulfilled and suitable quality standards are achieved. Off-site facilities will be utilised only as a back-up supply if the onsite batcher fails during a pour.

The anticipated volume of concrete to be used for the project is approximately 800m³ which would equate to 130 concrete vehicle movements on the A595 (i.e. 260 return trips in total).

To provide the raw materials to create 800m³ of concrete, based on a 20Te capacity lorry, this would require:

- 18 loads of cement

- 27 loads of sand
- 43 loads of aggregate

Utilising the on-site batching plant therefore leads to an overall saving of 42 road trips (84 return trips in total) on the A595.

5.3 Cumulative Impact

The cumulative impact of additional construction traffic on the A595 and other local highways which derive directly or indirectly from the CNC OU project should be negligible.

As outlined above, 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 51 construction personnel working on the project site which, once Covid-19 arrangements have ceased, it is envisaged will commute to the site by bus.

In relation to the supply of equipment, goods and raw materials, the building is not of a significant scale. The proposed materials will conform to standard loads. For example, the raw materials to supply the concrete batching plant on the site should equate to approximately 88 vehicles on the public highway over an extended period of 3 months to provide the 800 m³ of concrete required during construction. Similarly, the primary structural frame comprising will comprise of 300 tonnes of steel which will be delivered in 6 loads over a period of 2 weeks.

The small number of vehicle movements outlined above demonstrate the small scale of the project and its insignificant impact on the local highway.

6 Equipment

6.1 Vehicles/ Plant to the Sellafield Site

A mobile all-terrain crane will be driven to the construction site to enable construction in Q2 2022. The crane will remain for the duration of the construction of the super structure period whilst lifting is required externally.

Modularisation of key plant and equipment components will be utilised, but this will typically be small scale and capable of being accommodated by a standard articulated vehicle. The size of these is yet to be determined. Loads will typically utilise the M6, A66 and A595 to Sellafield.

During the main civil works there will also be the need for concrete pumps, these are common to the Sellafield Site and not expected to cause a significant increase in the volume to traffic traveling to site. General purpose plant i.e. excavators, dumper trucks etc., will be required throughout the bulk excavation phase and during the external works and hard landscaping phases of the project and will remain on site during those phases.

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

6.2 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.