

The First Six Months of ESS Construction Proceed on Schedule

MAR 12, 2015

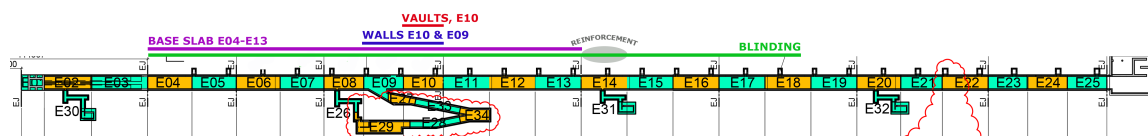
SCHEDULE. With the casting of the first 10-meter section of the accelerator tunnel walls in the last week of January, the European Spallation Source (ESS) began to go vertical.

BRUNNSHÖG — The appearance of the two 3.5-meter-high by 1-meter-thick additions to the Brunnsög landscape set ESS on pace toward the first accelerator component installations, scheduled for the second half of 2016. It has taken more than half a year of surveying, test piling, earth moving, road planing, ponding, shielding, shoring, blinding, moulding, pumping, insulating, polishing, curing, and head scratching to arrive at this point, but all has moved forward on schedule.

Accelerator Tunnel

Skanska and its sub-contractors will continue working at their steady pace casting the tunnel's base slab and erecting the walls and vaults section by section until the roughly 700 meters of main and auxiliary tunnels are complete. The total length of the main [Accelerator tunnel](#) will be 536.5 meters. As of the first week of March, 315 meters of excavation and blinding have been completed (sections E04 to E18); 214 meters of base slab has been cast (from sections E04 to E13); 39.2 meters of walls are set (at E10 and E09) and 19.6 meters of the vault has been cast (over section E10).

The first Accelerator installations will be the cryonic equipment, and by mid-2017 ESS expects to be assembling the Accelerator components within the enclosed tunnel.



Schematic of the ESS Accelerator tunnel concrete works, showing completed base slab, wall, vault, and excavation/blinding sections as of March 6, 2015. [Click to enlarge.](#)

Target and Building Works

March brings further excitement to the site as the Target area is undergoing excavation and Building Works have officially begun. Plumbing, electrical, concrete, and road works are ongoing, along with a flurry of operational planning and procurement, in anticipation of the first ESS buildings.

The primary electrical substation (**H05**) and the distribution substation (**H06**), serving the



Central Utility Building (**CUB**), will be the first major permanent buildings to go up on site. The large Gallery Building (**G02**) will follow close behind. The Gallery Building runs nearly the length of the Accelerator and includes the Cold Box and Test Facility areas.

The first Target installations are scheduled for late 2017.



Workers managing the concrete pour for casting a section of the vault, or roof, of the ESS Accelerator tunnel.

2nd Annual Project Review

April will bring the [2nd Annual ESS Project Review](#), an external assessment by a committee of over 30 experts with experience in nine technical and management areas. Held over four days, from April 21-24, the exercise will serve to measure how progress on the technical and managerial aspects of the project match up to the commendable pace of the civil construction. The two must be closely coordinated to avoid delays.

Webcams and other resources

[Two webcams](#) have been mounted on the roof of the site offices, providing live views of the Accelerator and Target work areas. The cameras provide static images every 10 minutes.

The ESS building layout plan is posted on the construction site [weekly updates page](#). Here, one can also find the construction layout drawings, weekly text and photo summaries of the site works, and high-resolution aerial photographs showing the dramatic evolution of the site from windswept farmland to the 65,000-square-meter buzzing hub of one of Europe's largest active infrastructure projects—and the future of [neutron science](#).

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