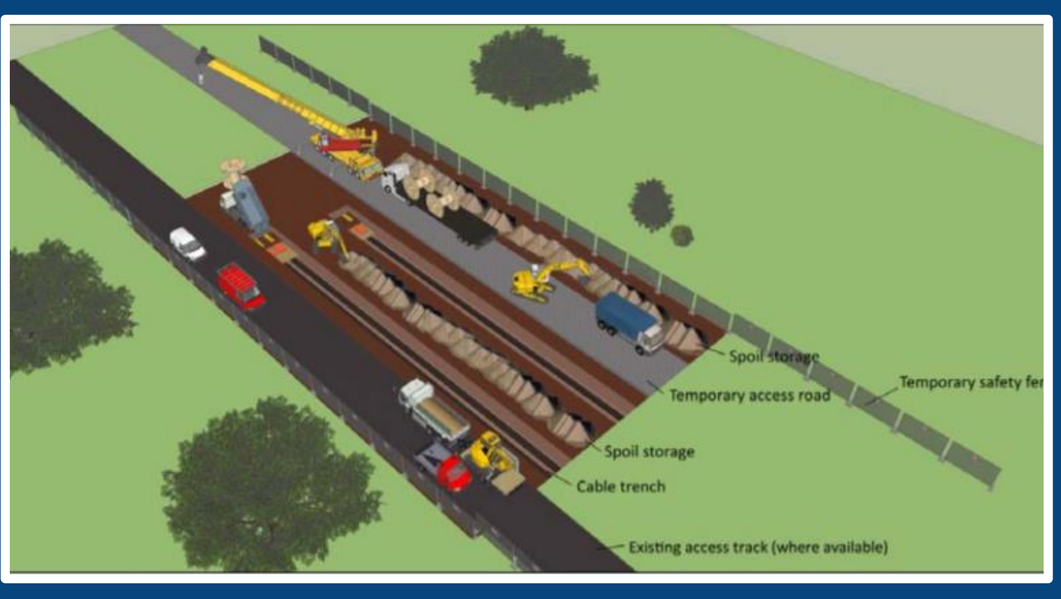
7 Cable installation

The Transmission System

Seagreen will have a three circuit 220kv HVAC (High Voltage Alternative Current) which means that there will be three sets of cables installed side by side along the entire route.

Onshore Export Cables

The majority of the cables will be directly installed into conventional open cut trenches or into ducts laid within the trenches. There will be a total of three cable trenches within the working corridor.



Example illustration of a typical working corridor for cable installation

Typical cable installation operation

A 30m wide working corridor will be required for installation of the cables. This will provide sufficient space beside the cable trenches for access, working space and for laydown of equipment, topsoil and spoil from trenching.

Topsoil and vegetation will be stripped from the working area and stored to one side. Topsoil will be stored separately from subsoil and away from watercourses or drains. Storage times for topsoil will be kept to a minimum to prevent deterioration in its quality. An excavator or trench digger will be used to dig the trench which will be back filled once cable duct installation is complete and the land will be restored.

At environmentally sensitive locations such as at the Buddon Burn it is proposed to use Horizontal Directional Drilling (HDD) rather than conventional open cut trenching. This is a guided trenchless method in which a pilot borehole is drilled along a pre-determined bore hole path. Subsequent hole enlargement then follows the path set by the bore hole with minimum disruption.

It is anticipated that the construction works at the proposed variation route will take approximately 160 days to complete. This includes for approximately 45 days to dig the trenches and install the ducting and 35 days for the proposed HDD operations.

Excavation, ducting, cable pulling and testing of Circuit 1 is expected to carried out during the 1st quarter of 2021. We anticipate that cable pulling and testing of Circuits 2 and 3 will be carried out in July 2021 followed by completion of reinstatement by the end of 2021.

Joint Bays and Pulling Pits

Joint bays are needed to join the lengths of cable together along the cable route. Cables are restricted in length to allow them to be safely delivered using the public road network.

Joint bays are simple underground concrete chambers which enclose and protect the cable joints. Each bay will be approximately 9.2m long by 2.4m wide by 2m deep. We anticipate up to three joint bays may be required along the length of the proposed variation route.

Pulling pits are temporary excavations required to provide a viewing point and locations to add lubrication during cable pulling operations. Once cable pulling is complete, the pits will be reinstated back to existing ground levels.
We anticipate up to three pulling pits may be required.

Site Access

We anticipate that construction access to the proposed variation route may be taken from the A930 (Barry Road) at the junction with the private access track to Balhungie Farm, or from the private track along the A930 opposite Lucknow.

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