



T2D TORRENS TO DARLINGTON

Southern Laydown Area

A 'laydown area' is where we'll temporarily store equipment and supplies for use in construction. The main laydown areas where we'll launch the tunnel boring machines (TBMs) will be located at one end of the tunnels. Extra infrastructure is needed at the main laydown areas to support TBM operations and tunnel construction.

- 1 **Substation**
Power substations are needed to supply power to the TBMs during their operation, and to support tunnel operations like lights, fans and pumps.
- 2 **Spoil sheds and bins**
Spoil will be emptied into large bins inside a spoil handling shed, then loaded into covered trucks and transported offsite.
- 3 **Worker facilities**
- 4 **Belt conveyor**
Excavated spoil will be removed from the tunnel and taken to the surface via a belt conveyor to be managed.
- 5 **Workshop**
- 6 **TBM assembly area**
TBMs are assembled in a trench deep enough to launch them at the required gradient.
- 7 **Multi-service vehicle (MSV)**
About 27m long, MSVs can be driven from both ends and are used to transport materials needed to work in the tunnels.

- 8 **Acoustic shed**
Built above the tunnel entry to keep noise and dust to a minimum.
- 9 **Gantry cranes**
Cranes on legs move along tracks to lower TBM parts including cutterheads for assembly. During excavation, they lower precast tunnel lining segments to the TBMs.
- 10 **Cooling facilities**
Cooling facilities will lower the temperature of air circulating in the tunnels where required.
- 11 **Grout plants**
Grout and other substances produced onsite will seal the gaps between concrete segments lining the tunnels and surrounding ground. This will stabilise the soil and help prevent groundwater seeping into the tunnels.
- 12 **Water treatment plant**
Wastewater and run-off from the construction area will be treated onsite to achieve the required water quality before disposal.