north-south corridor South road superway

Launching Truss

The South Road Superway project features a 2.8km elevated roadway above the existing South Road in Wingfield and Regency Park. One of the largest pieces of machinery, used to lift segments weighing between 65 and 90 tonne each, is the launching truss.

Launching Truss

- A launching truss is an engineered frame that is designed to move longitudinally along the alignment of a bridge and provide the mechanism to lift bridge segments into position.
- These trusses are fabricated from structural steel and the rigidity of their design primarily depends on both the span of the bridge (distance between the piers) and the mass of the segment being lifted.
- The truss is designed with "feet" that are jacked onto specific locations of the structure and these feet, once engaged, take the weight of the truss and allow it to "walk" forward in a longitudinal plane.
- This ability to be self-propelling makes the selection of a launching truss ideal to use for the erection of long bridges, as it minimises the support equipment required on site, like cranes and scaffold.
- The launching truss being used on the Superway project is 140m long, and will be operating at anywhere between 7 metres and 20 metres above the existing South Road ground level.

For both the launching truss and the segment lifters, the elevated road is required to be constructed evenly from both sides of the pier. This is termed a balanced cantilever design, which places segments either side of the pier (balanced) to ensure they are not eccentrically overloaded.

For more information, including regular construction updates, p**1300 638 789** e **dpti:SouthRoadSuperway@sa.gov.au** or visit <u>www.infrastructure.sa.gov.au</u> and follow the links to the South Road Superway website.



Launching truss on South Road, Regency Park

All enquiries: 1300 638 789 Visit: www.infrastructure.sa.gov.au







Government of South Australia Department of Planning, Transport and Infrastructure