



SH20 - SH1 MANUKAU EXTENSION LINKING SH1 AND SH20

Beams go up over SH1

The project team completed one of the most eagerly anticipated and visually impressive tasks on the project in May, when ten bridge beams weighing more than 50 tonnes each were installed across the spans of the new SH1-SH20 flyover above the Southern Motorway.



The operation required careful planning and coordination, with safety as the highest priority.

The 30 metre beams were each loaded onto transporter vehicles at the project's precast yard in Takanini before being transported some 11 kilometres to the site. Two 300 tonne cranes lifted the beams into position as each one arrived. To add to the complexity the work was performed in atrociously wet weather conditions, yet managed to be completed during a single overnight motorway closure.

Each beam has been specifically manufactured to fit precisely into its own specific location within the bridge structure, so beams had to leave the precast yard and arrive on site in the exact same order that they were being installed.

In addition to this highly visible achievement, the project team have also completed a number of other milestones across the project. Just a short distance south of the new flyover the second stage of the SH20-SH1 underpass has been completed. Bridge beams have also been installed at the Puhinui Stream bridge.

Also at the western end of the project the temporary relocation of over 600 metres of SH20 has been completed allowing the team to construct the connection to the new motorway. This task was managed in a series of four traffic switches which were completed without having to close the motorway or affect travellers heading to and from the airport.

All across the site the team have also been realigning services such as power, water and gas as well as continuing with the project's extensive earthworks.



Pictured: Beam installation over SH1 and the view over the new motorway towards the West.

Busy winter work season ahead

The project team is busy this winter working to deliver the new motorway that will link State Highway 1 with the existing State Highway 20.

Wet winter weather means that earthworks have to be reduced as a result of saturated ground conditions. The team are now focusing on other activities such as bridge construction, services installation, retaining walls and construction of the actual road itself.

Progress at the triple level SH1-SH20 interchange continues as the team construct a series of on and off-ramps that are to combine with the new bridge flyover and underpass structure. This will form the new interchange which will connect the two motorways.

Also this winter season, the SH1 northbound lanes south of Redoubt Road will be shifted to the east. This will allow the team to construct the third and final stage of the underpass. Traffic lanes will remain in this position until the underpass structure is completed later this year.

Road metalling and surfacing along the main motorway alignment has already started in areas between Great South Road and Wiri Station Road. In the coming months road



Road construction along the motorway alignment has begun.

construction will also take place to the west of Lambie Drive and near the new Nesdale Interchange.

Work to progress extensive landscaping on the project is scheduled to continue this winter and some of a total of 240,000 native plants will be planted. In the middle of the project, a temporary traffic diversion has been constructed to allow work to start on the new Plunket Avenue Bridge. This bridge will carry local traffic over the new SH20 motorway and the Manukau Rail Link. Work is expected to be completed by early 2010.

The team is also carrying out one of the toughest challenges on the project in constructing the new SH20 over the North Island Main Trunk Railway (NIMTR) bridge.

Work such as installing bridge beams around a busy railway requires ongoing planning and careful coordination with ONTRACK to ensure that safety is maintained and that freight and passenger services are not disrupted.

The first beams on the bridge are expected to be installed by Spring.



240,000 native plants are being prepared for planting later this year.

For more information about the SH20 Manukau Extension, please call:

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