



SH20 - SH1 Manukau Extension

Linking SH1 and SH20

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New motorway will bring progress to Manukau

The new SH20-1 Manukau Extension is set to make a significant difference to the Manukau community when it begins to open in August this year.

The new four lane motorway connects the Southern and Southwestern Motorways and will provide road users with a much better route across Manukau, bypassing 12 sets of traffic lights.

Manukau is an area of strong economic growth, with an increasing level of industry and development to the west, and residential development in the east. New educational and business developments are in progress with campuses for AUT University and the Manukau Institute of Technology being planned for the city centre. This growth has made improving transport connections an absolute priority for national and local government.

The new motorway will also improve life for road users across Auckland as it forms the vital southern section of the Western Ring Route, the NZTA's strategic alternative route between Manukau and Albany via SH20, SH16 and SH18.

With new interchanges at Cavendish Drive in the west, Lambie Drive in Central Manukau and the triple level interchange with SH1 the SH20 motorway really enhances the economic potential of Manukau.

The Cavendish Drive Interchange will connect the industrial areas around



NZ Transport Agency Regional Director Wayne McDonald with Manukau City Mayor Len Brown by Plunket Avenue Bridge. NZTA has worked closely with Manukau City Council during the construction of the SH20-1 Manukau Extension.

Wiri to the state highway network, as well as serving Auckland International Airport and its surrounding businesses.

Manukau business district will gain access to the new road at Lambie Drive Interchange. Finally, the connection with SH1 will connect the two motorways and open up access for a large number of people living in residential areas such as Flat Bush.

The project team is also carrying out work on the Manukau Rail Link and new Manukau Rail Station, enabling both the NZTA and KiwiRail to gain from using the same contractor to carry out adjacent projects within the transport corridor.

Project delivery by



SH20-1 Manukau Extension opening in three stages

The opening of the SH20-1 Manukau Extension will be in three stages, and will involve some significant changes for traffic around Manukau.

Stage 1 - Southbound lanes open (August)

The first part of the new motorway to open will be the southbound SH20 motorway lanes. Southbound traffic will be able to access the new lanes from the existing SH20, Cavendish Drive Interchange and Lambie Drive Interchange. At the SH20 to SH1 Interchange, motorists will be able to join either the north or southbound lanes of SH1 from SH20.

Motorists heading for Cavendish Drive from southbound SH20 should leave at the Puhinui Interchange before using the Puhinui-Cavendish connecting road to get to Cavendish Drive.

Stage 2 - Westbound lanes open (September)

After more construction work, the westbound lanes will open up allowing traffic to travel from SH1 and Lambie Drive

Interchanges onto the new motorway lanes. Westbound traffic will access the new motorway from SH1 north and south, the Redoubt Road on-ramp and at Lambie Drive.

Detours to minimise disruption

Motorists on Cavendish Drive and Roscommon Road will not be able to access the westbound motorway lanes using the Cavendish Interchange. Instead, westbound traffic on Roscommon Road will need to

follow a detour on Wiri Station Road to Lambie Drive to get onto the new SH20 motorway.

This will enable work to continue on diverting the Puhinui Stream and constructing the Cavendish-Puhinui connecting road and on-ramp. This detour route was chosen because it avoids smaller local roads that would quickly jam if used as a detour for SH20.

In addition to this work, KiwiRail will be carrying out work between September and November on the rail bridges at St George Street and Bridge Street. The work will require some more detours on local roads. Both the NZTA and KiwiRail have coordinated the work so that disruption is minimised.

During this stage, motorists travelling to the airport on SH20 can use George Bolt

Memorial Drive instead of Puhinui Road, as the connecting road will also link the westbound SH20 lanes with Puhinui Road and the airport.

Stage 3 - Connecting road and project completed (December)

Once the Cavendish-Puhinui connecting road is opened, the SH20-1 Manukau Extension will be fully open.



Final challenging task to complete motorway project

To complete the motorway project, the team will have to realign the Puhinui Stream and construct the Roscommon - Puhinui connecting road, and this will involve a series of challenging tasks.



Fish relocation is supervised by fresh water ecologists.

Once the new westbound lanes open in September, the team will start the work by detouring westbound SH20 Roscommon Road traffic via Wiri Station Road and Lambie Drive to get onto the new motorway.

Excavation work will then begin to carve out a new path for the stream to the west of the existing stream. At each end the team will install a steel sheet pile wall that will act as a dam, keeping the existing stream out of the new channel until it is ready.

The 150m new stream will be specially constructed to imitate a natural stream with rocks and bends, slowing the flow of the stream and providing shelter for fish.

Once the excavation is complete, the sheet piling will be removed allowing the new stream to fill with water while the old

stream drains. As the old stream drains, the team will rescue and relocate the fish under the supervision of fresh water ecologists. Previous stream work has seen the team typically removing over 300 eels, common bullies, kokopu and crustaceans each time.

Once the stream has been diverted, the team will begin the construction of the new connecting road linking the Cavendish and Puhinui Interchanges.

First the team will remove the soft ground beneath the old stream before placing over 20,000 cubic metres of material, starting with a layer of rock to provide a solid foundation.

When the correct height has been reached, the road pavement will be constructed, and the connecting road will be opened in December.



To complete the project the team have to realign the Puhinui Stream, demolish a stretch of the old SH20 route and construct the new Roscommon - Puhinui connecting road.

Stream diversion and connecting road facts

- Over 150 metres long stream diversion
- Over 300 metres of road to construct
- Over 8,000 cubic metres of material to be excavated
- Over 20,000 cubic metres of material to be placed

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