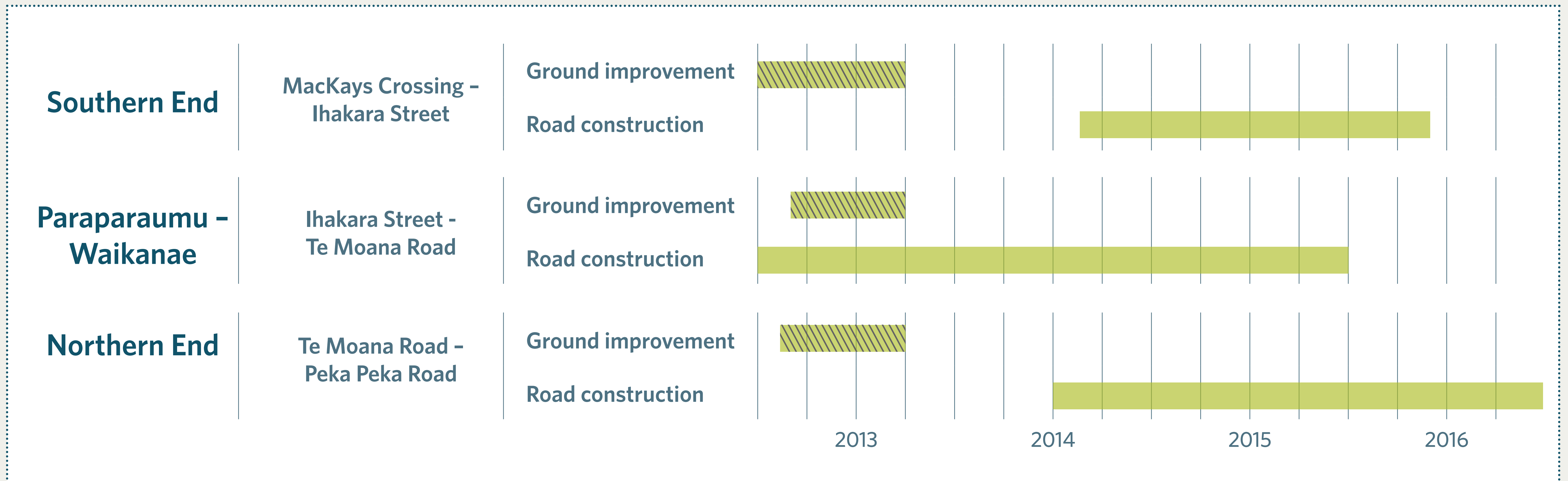


1 MacKays to Peka Peka Expressway

Construction and temporary works

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Construction will be undertaken at different times around three sectors.



Approach

There are four main components to the construction phase.

Ground improvement

Where extensive soft peat is encountered, an embankment of fill material will be placed directly on the ground. In other areas, pockets of peat will be excavated out and replaced with fill material to improve the ground.



Earthworks & drainage

Once the ground has been improved, the bulk earthworks will be undertaken to form the route of the new expressway. At this stage, drainage routes will be formed.



Bridges

While the earthworks are proceeding, bridge construction will commence. There are 13 bridges across streams and local roads along the length of the expressway.



Pavements & surfacing

Upon completion of the earthworks and bridge construction, aggregates will be brought in to form the new road pavement. Once formed, the final process will be to lay the road surface.



Environmental management

There are potential environmental effects from construction to be mitigated including:

- Noise mitigation - by building during normal working hours and selecting machines with low-noise generation. Noise levels will be constantly monitored to ensure construction noise remains within acceptable standards.
- Dust mitigation - by dampening down surfaces and applying straw to exposed sand faces.
- Vibration - by using rubber-tyred machines and non-vibrating rollers.
- Siltation - by using catchment ponds and silt traps to catch runoff before it enters waterways and limiting the extent of open construction areas.
- Traffic - construction traffic will be mostly confined to the expressway corridor and highway, to minimise the use of local roads.

A Construction Management Plan will be prepared as part of the application for consent for the expressway, which will describe how these effects will be avoided or mitigated.

Trials are being undertaken before construction starts, so that construction techniques can be refined. Local contractors will be used in, and to advise, the construction process.

During construction, a stakeholder team will be dedicated to liaising with neighbours of the expressway and the community. They will anticipate issues and deal with them before they arise. An 0800 number will provide contact with the team for any issues that may arise.



Managing dust by water dampening.