STAFF REPORT

TO: Environment & Planning Committee

FROM: Dave Shaw, Compliance Officer

REFERENCE: C653

SUBJECT: **INTERIM REPORT - RUBY BAY BY-PASS PROJECT - REPORT EP…….. -** Report prepared for meeting of 19 November 2009

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1. INTRODUCTION

In 2000 a suite of resource consents for the Ruby Bay By-Pass project were granted. These consents authorised activities such as major land disturbance, diversion of water courses, stormwater discharges and coastal reclamations.

Work started on the new 10.6km upgrade of State Highway 60 from Trafalgar Road to Harley Road in November 2008 and represents the districts biggest roading infrastructure project for a number of years.

Proposed earthworks to construct the by-pass included the excavation of many tonnes of material which were principally made up of “Moutere Gravels”. The clay content of such soils can provide a real challenge to operators undertaking earthworks, as fine clay particles associated with these subsoils are easily suspended and find their way into highly sensitive receiving environments such as streams and estuaries.

Research from monitoring of other similar projects in the North Island has shown many of the older techniques and practices designed to manage sediment discharges were proving ineffective or limited in controlling these finer clays. The unwanted effects on the clarity of the receiving water can often be seen for months after a poorly managed project has been completed. Significant deposits of sediment on stream beds or estuaries have been shown to have considerable adverse effects on aquatic ecosystems and this is particularly evident in the Auckland region.

2. COMPLIANCE MONITORING

When notification of works commencing was given by the consent holder it was quickly acknowledged that given the size of the project and interest likely to be generated from the public, Council’s monitoring programme needed to be both coordinated and comprehensive. Hence, a decision to use a role similar to that of a “project manager” was employed where all council’s compliance requirements and concerns from the public could be channelled through one person.

Also, as environmental management practices associated with such bulk earthworks had progressed considerably in the years from when this particular suite of consents was granted and to ensure best environmental outcomes at this site, it was decided that by using the conditions of consent requiring staged approval of environmental management plans, modern controls could be applied, particularly with regards to sediment and erosion.

With any new concept come challenges and this project has been no exception. Initially, proposed earthworks plans to mitigate effects from erosion and the discharge of sediment were restricted to the use of more traditional methods, such as silt fences and filter socks. However, in light of several years of research on this topic carried out by council staff and consultants from other major centres of New Zealand, it was decided from the outset that upgrades to the proposed earthworks plans were going to be required. Furthermore, conditions of consent required the use of sediment detention ponds which were not proposed in the initial plans, partly due to the restricted amount of space available within the contractors work area for the placement of such ponds.

At this stage, as expectations from the various parties (TDC Compliance, NZTA and contractor) were some distance apart an early on-site conference meeting was held with the consent holders, agents and contractors to establish clear expectations and identify roles and responsibilities. Clear lines of communication were also formed.

Thereafter, a continuing weekly programme of compliance monitoring commenced in November 2008. As each major stage of work was approved and commenced the district began to see some of the latest engineering designed sediment detention ponds and automated flocculation shed systems along with more traditional measures such as silt fences and straw bales. The use of straw mulching on un-stabilised exposed areas of land for interim erosion control has also seen some good environmental effects.

It is felt that through the use of a single point of contact good relationships have been maintained between the project team representing the New Zealand Transport Agency and Council. Where any concerns have arisen, these have been worked through to achieve desired outcomes. This has also translated through to continued open dialogue between parties on such things as improving design features or simplified procedures.

2.1 Bringing Best Practice To The District

The opportunity to use the project as a working platform to observe best practice in action for bulk earthworks has not been overlooked. As a result a number of educational visits were coordinated, which has included several groups of college students currently studying environmental science. The opportunity for students to gain "hands on" experience of a project of this magnitude has been invaluable. Feedback from the teacher in charge indicates the visits have been very well received and it is understood some of the environmental management systems have since become a focus of their curriculum.

Additionally, other field visits have also been arranged to enable other key council staff to share in the latest developments of the project.

Following on from this, the increasing level of interest from the industry coupled with the opportunity provided by this project Council is now "leading the way" by hosting three sediment and erosion control workshops (the first being held on 2/3 November 2009) for local contractors. It is also hoped that in the near future this will be followed by developing a set of informative guidelines for best practice on this topic.

2.2 Concerns from the Public

Inevitably, major works of this nature generate cause for concern from members of the public. In this case having a dedicated officer as a point of reference, to inform and advise the public has proved very useful and generally concerns have been brought to a successful conclusion promptly.

Where further enquiries have been needed to reach an outcome, the role has provided an excellent link between key stakeholders, the public and other council departments.

Generally speaking, to date, concerns raised have been relatively minor in nature, tending to be more about topics such as finished landscaping and public access rather than environmental issues.

2.3 Completion of the Project

The majority of the earthworks are almost complete and many areas are now sealed with straw mulch or stabilised with vegetation, although some sensitive work still remains around the coastal fringes. The final work area plan has been approved for earthworks to remove the old Mariri causeway and to form new sympathetically designed "estuary islands". It is understood that final designs are still being worked through following consultation with the Department of Conservation.

Works on the major culverts, pedestrian underpass and the associated stream diversions are also in the process of being completed. Several kilometres of the highway from Old Coach Road towards Tasman is also close to completion, with a base course applied in preparation for sealing.

A continued programme of compliance monitoring is proposed which will include the supervision of the decommissioning of some of the sediment controls. Although, the frequency of monitoring may be reduced as the project nears completion. It is hoped to report in due course on the remainder of the project.

3. RECOMMENDATIONS

It is recommended that the committee receive this report.