

## **Stormwater Activity Update**

Report of the Stormwater Asset Manager to the Activity and Monitoring Committee – 13 August 2009.

Please note – this report has been edited for information relating to Current Projects. The full report can be viewed at <http://www.franklin.govt.nz/YourCouncil/Meetingsandminutes/Meetingminutes/tabid/284/Default.aspx>

### **Discussion**

The purpose of this report is to provide information on the issues and activities pertaining to the Stormwater Activity over the last three months to the end of June 2009.

### **Maintenance of Public Stormwater Contract**

The Maintenance of Public Stormwater Systems contract for the urbanised areas is carried out by Transpacific Industrial Solutions Limited (TIS). They have continued to meet all contract requirements.

### **Hot Spots**

22 hot spots are checked monthly and additional inspections are carried out in the event of a heavy rainfall warning being issued by the metrological service. There have been no reported flooding incidents at any of the sites in the past three months.

### **Litter Traps**

The two bandalong litter traps (floating traps in the streams to trap floating debris) and four culvert inlet litter traps (grilles) are being cleared monthly. Over the last three month period 17.5 tonnes of litter has been removed and dumped by TIS.

### **Open Drains, Detention Ponds, Water Table Drains and Flood Gates**

Inspected on the three monthly required basis. A more proactive approach has been taken with regard to water table drains, the original contract required the contractor to inspect, remove litter and report on any issues. We are now having the contractor cut the vegetation and remove litter, the objective is that this will remove the need for adjacent property owners to spray and make them less likely to have litter dumped in them. Initial feedback from the contractor tends to suggest that the amount of litter has reduced.

### **Quality Devices**

All devices have been inspected and cleaned as required. Devices are performing their intended role by collecting debris, litter and silt. Recent subdivisions are seeking to make use of propriety devices. Works and

Services group in conjunction with Regulatory are evaluating these with respect to long term maintenance and accepted on a case by case basis.

### **Outfall**

All outfalls have been inspected. No serious issues have been reported.

### **Sediment Assessment**

Sediment assessment of pond and streams is underway. Transpacific is experimenting with a GPS/sonar device to provide a more comprehensive stream profile. Some difficulties have been encountered. These are being worked through and we believe that once the issues are resolved the results will provide a more accurate assessment of silt build up in streams and ponds.

### **Manhole Inspections**

The towns have been divided into areas containing between 50 and 100 manholes in each. Inspection of the areas is proceeding to programme.

Each manhole is located and graded for condition on a scale of one to five, one being excellent to five being very poor. The majority of the manholes fall into the one (excellent) or two (good) categories. Most others with minor faults are repaired to restore their rating to a two.

### **CCTV Inspections**

To augment the manhole inspection work for asset condition a sample selection of lines in each ID is being videoed. To date the CCTV work has confirmed the manhole inspection findings that most of the stormwater lines are in excellent or good condition. Most of the faults located via the CCTV survey are minor and urgent remedial works are not justified and faults will be dealt with as a programmed renewal works.

### **Reactive Works**

Reactive works are carried out as and when required. Our manhole and CCTV inspection work generates only a minor amount of this work. Most of the work comes from service requests from ratepayers.

## **Renewals and Minor Extensions**

### **Cordyline Road**

A line crossing Cordyline Road was found to have failed during the quarter. TIS carried out the renewal of the line. Work included the relaying of the line, redirecting the cesspit leads to the downstream manhole, reinstating the road and footpaths. A new vehicle crossing was installed to provide improved access into the Council reserve.

## **Major Capital Works Projects:**

### **Pukekohe Hill Stormwater Project:**

Design Consultant: OPUS

Project Manager: Lorenzo Canal of Urban Solutions

This project is for the detailed design and implementation of stormwater management on the upper slopes of Pukekohe hill to enable development to proceed as per the Pukekohe Hill Structure Plan.

Stage 2 - Contract - 07/27SW

Contractor: - Ross Reid Contractors Limited

This contract is for the construction of the attenuation and quality pond eastern gully, quality for bay pond Vernon's Reserve, pipe works and open drains to manage stormwater from the western side of Pukekohe hill.

Practical Completion Certificate issued 17 December 2008.

Minor remedial works required.

### **Upper Manukau Road Project:**

Design Consultant: Stage 1 - OPUS

Project Manager: Lorenzo Canal of Urban Solutions.

This project is for the detailed design and implementation of stormwater management from the Kitchener Road pond and Nelson Street culvert to the twin 2.5m culverts at Manukau Road

Stage 1: Contract 07/38SW

Contractor: - ICB Construction Limited

This contract is for the construction of approximately 100m of open channel works including bank erosion protection to contain the 20% Annual Exceedance Probability (AEP) flows within channel and 1% AEP flows within a designed and designated flow path.

Practical Completion Certificate to be issued 22 May 2009.

Contract has a 52 week defects period.

Stage 2 and 3: SW 080 and SW 081

Balance of the open channel works and Nelson Street reticulation upgrade to be designed together. Physical works may be divided into two separate contracts.

Design Consultant: - To be advised.

Contractor: Tonkin and Taylor

Consents: To be applied for. – September 2009 - expected – November 2009.

Tender: - December 2009.

Construction: - To commence late January 2010

Completion; - June 2012

### **Pukekohe North Catchment Projects:**

This project is for the detailed design and implementation of stormwater management generally associated with the main upper eastern and western arms of the Whangapouri Stream together with the Whangapouri stream from Cape Hill Road to Paerata State Highway 22 triple culverts, including minor tributaries. This being the main stormwater management system detailed in the Pukekohe North Catchment Management Plan consisting of channel works, culvert upgrades, and attenuation and quality ponds. These works are programmed for design and implementation over a eight year time span.

Project Manager: - To Be Determined – Tender – August 2009

Design Consultant/s: - To Be Advised

Stages: To Be Advised

To be determined in conjunction with appointed Project Manager and on resolution of Pukekohe North Catchment Management Plan (PNCMP) appeals to the Environment Court. (Refer to details planning section below)

### **Lions Lake Waiuku – Contract 06/50SW**

Consultant: Connell Wagner Limited

Initial Contractor: D and F Contracting Limited

Completed by: KOTR Limited and Dempsey and Wood Limited

The contract was for the desilting of the lions pond including the removal of island, replacement of the retaining walls, provision of siphon outlets in the

weir structure, and an upgraded fish passage. Also installation of a grass pollution trap on the inlet at Victoria Street.

Practical Completion Certificate Issued 23<sup>rd</sup> January 2009

**King Street Waiuku Stormwater Improvements – Contract 08-33SW**

Design Consultant: OPUS

Contractor: Transpacific Industrial Solutions

Contract Amount: \$249,655.60

Physical Works Commenced April 2009 – For the renewal and extension of stormwater services.

Practical Completion Certificate issued 12 June 2009.

Contract has a six month defect period.

**East Street Stormwater Improvements - Contract 07/41SW**

Stage I: Complete

Stage II: East Street to the Railway

Design Consultant: OPUS

Not yet tendered. Final design and contract documentation is in progress

Physical Works to be undertaken toward the end of 2009

**River Lane Waiuku – Contract 08/11SW**

Consultant: Connell Wagner Limited

Contractor: Dempsey and Wood Limited

Stage I

Being the upgrading of the reticulated public stormwater services in River Lane in preparation for the Waiuku Town Centre upgrade.

Completed. Practical Completion Certificate issued 12 December 2008

Defects period four months.

Stage II

Being the desilting of the open watercourse, stabilising of river banks, and provision of additional weir at the King Street end.

There have been difficulties in obtaining consents for stage II from the Auckland Regional Council (ARC) that has delayed the start. Consent has

now been obtained but consents to work through the winter months, was declined.

Construction: - To commence October 2009

Completion: - March 2010

**Planning Works:**

**Pukekohe North Catchment Management Plan (PNCMP) – Contract SW 99/75**

Consultants: GHD Hydrology, Opus Engineering.

The PNCMP has been publicly notified and hearings held 2-3 May 2007. Decision to grant received from the ARC; however five objections received by ARC which resulted in Environment Court assisted mediation commenced 26 September 2007. Agreement has now been reached on consent orders for four objections. One objection is still to be resolved. The most promising solution being a consent order is being drafted that may remove the need for an Environment Court hearing.

Variation Pukekohe North Catchment Management Plan (VPNCMP)

Required to incorporate Pukekohe North (Beatty Road) structure plan (plan change 21) and proposed Paerata business land structure plan (plan change No: To Be Determined).

Until the PNCMP is actually granted Franklin District Council (FDC) can not progress this variation.

Consultant: - GHD engaged and preliminary work commenced

Timetable: - To Be Determined

**Waiuku Integrated Catchment Management Plan (WICMP) – Contract SW 06/37**

Consultant: Fraser Thomas Partners Limited

Investigation works commenced incorporating proposed business land structure plan (plan change 23). Contract expanded to incorporate the District Growth Strategy (DGS) into plan. Initial Draft plan has been produced and submitted to the ARC. Further works required to satisfy both HRC and FDC.

Earliest possible Consent June 2010 following public notification.

**Tuakau Catchment Management Plan (TCMP) – Contract SW 0/61**

Consultant Hydraulic Modeling Services.

Completed and publicly notified, agreement reached on Discharge Consent Conditions and now Network Discharge Consent granted by Environment Waikato (EW) on the 3 December 2008.

Variation Tuakau Catchment Management Plan (VTCMP) – Contract 07/30 SW

Consultant: Harrison and Grierson

Stage I – Business Land – Plan Change 22

Completed.

Stage II – All DGS Areas

Initial Draft received.

**Pokeno Catchment Management Plan (PCMP)**

Consultant Hydraulic Modeling Services.

Completed and publicly notified, agreement reached on Discharge Consent Conditions and Network Discharge Consent granted by EW on 3 December 2008.

Variation Pokeno Catchment Management Plan (VPCMP)

This is being prepared by the consultants as a support document for the proposed Pokeno Consortium Structure Plan. FDC involvement is to assist with information and ensure it can be utilised as an expanded Catchment Management Plan for the Pokeno Township in the future independently of proposed structure plan.

Consultant: Harrison and Grierson. – Commissioned and paid for by Pokeno Consortium

Completed and accepted by Environment Waikato.

## **Bombay Integrated Catchment Management Plan (BICMP)**

An initial study of the existing drainage patterns private farm drains on the northern slopes of the hill has been carried out. This catchment also drains to the Pahurehure Inlet and FDC are involved in a joint ARC, Manukau City Council (MCC), Papakura District Council (PDC), FDC project developing a Manukau Harbour Model that looks at the dispersal of contaminants

Consultant: NIWA (Harbour Model) Funded by ARC.

Project now advancing as Hingia Integrated Catchment Management Plan as a joint project with Papakura District Council (PDC).

Joint Project Manager - Lorenzo Canal of Urban Solutions

Consultant: Stream Ecology – Golders Limited – field work completed and draft report produced.

Hydrology Modelling – DHI Limited – Initial date being sourced to produce model.

Balance – To Be Determined.

Timetable: - Lodge Consent ARC December 2009

## **Future Catchment Management Planning:**

### **Awhitu Peninsular Integrated Catchment Management Plan (APICMP)**

This plan is required to manage the growth of the many small coastal settlements on the peninsular it is expected that issues effecting them all will be similar and will be able to be treated as a series of sub-catchments to achieve the same required outcomes.

### **Clarks and Waiiau Beach Integrated Catchment Management Plan (C and WBICMP)**

A CMP has already been produced for Clarks and Waiiau Beach and is currently the subject of section 92 requests from the ARC. It has been decided that to utilise the funding assistance available from the ARC to upgrade this plan to a full ICMP.

### **Glenbrook Beach Integrated Catchment Management Plan (GBICMP)**

A CMP has already been produced for Glenbrook Beach and is currently the subject of section 92 requests from the ARC. It has been decided that to utilise the funding assistance available from the ARC this plan will be upgraded to an ICMP.

### **Whakatiwai, Waharau Integrated Catchment Management Plan**

This plan may be undertaken in a similar manner to that proposed for the Awhitu Peninsular and will incorporate Kaiua which is in the Environment Waikato Region as the Firth of Thames is a common receiving environment.

A joint coastal management plan is currently being prepared by ARC, EW and FDC and will provide inputs to this document.