Status Report #5 from the Technical Oversight Panel to the CALWMC

November 17, 2015

Summary statement

The consultant team that TOP is overseeing is currently completing Task #2 and starting Task #3.:

Task #3 Deliverables: At the conclusion of this task, consultants will present the CRD with the following:
• **Technical Memo #3**, detailing the 30 year financial (costs and revenues) model for each option set, including capital costs, life cycle costs, municipal allocations and revenue opportunities from reuse systems (and how these align with either municipal or regional services). Alternative revenue possibilities such as development oriented financial mechanisms, and market factors such as discount rates will also be included.

• Presentation Materials from Meeting with CRD/Core Area Municipalities

TOP reviewed the intent of the consultant's content and wording of TM#3 November 17, 2015

Task #2 Deliverables: At the conclusion of this task, consultants will present the CRD with the following:
• **Technical Memo #2**, detailing the finalized option sets that will form the basis for the costing and financial analysis, to be completed in Task 3. This will include general site and system characterizations, operational strategies descriptions of treatment processes including influent/effluent water quality and quantity, residuals treatment/management, flow scenarios and growth phasing, performance targets, and approvals requirements.

Presentation Materials from the CALWMC/CRD Meeting

TOP reviewed the consultant's second draft of TM#2 November 17, 2015

Phase 2 activities for TM#1-4 have been coordinated and the detailed critical path schedule is now complete and available to the CALWMC

Teleconference meeting November 3, 2015 was open to the public with a short closed portion and meetings November 10, and 17 in this period have been open to the public

The USA work visa for the Florida advisor is resolved and he will attend the November 23/24 meetings.

Action for this period

1. Updated Detailed Critical Path Project Schedule

The critical path schedule is available to the CALWMC for information. The detailed critical path indicates the critical path between all deliverables, reviews, meetings and approvals required for this planning phase two.

CRD staff report on proposed FT scheduler pending

2. Organization chart

A final organization chart will be issued to the team for November 24, 2015. This chart will keep all team members on track with reporting, communication and delivery requirements. This chart indicates roles, reporting and contractual relationships between: CALWMC members, CRD staff, Eastside and Westside Group member, TOP members, all consultant key individuals, and others.

TOP advises the CALWMC to direct CRD staff to develop an updated Organization chart for Q1 2016

3. Technical Memo #2

TOP met with the consultants to review the final draft of TM#2 November 17, 2015. This three hour meeting was open to the public. The consultants have prepared five options consisting of: one plant/16km of new pipe; two plant/36 km of new pipe; four plant/ 66km of new pipe; seven plant/ 86km of new pipe. The latest draft of TM#2 included the consultant response to, and incorporation of, many TOP items.

The latest draft of TM#2 did not resolve the following items which are to be incorporated into TM#3 once resolved by the consultants at the November 24, 2015 meeting with TOP:

Potential and costs for distributed solid waste treatment on distributed plant options

Cost clarification 1b) deletion of effluent lines from/back to Clover point with tertiary at RB

Cost clarification option 3 deletion of effluent lines from/back to MacCauley with tertiary at EFN

Cost clarification for any options to a solid waste pipeline from tertiary plant at Colwood

Cost clarification of Storm water credit value in water reuse calculation

Clarification of recommended project delivery options to allow innovative technology providers to compete

Pricing of gasification and anaerobic digestion (no other technologies will be priced)

TOP advises the CALWMC that it supports site options 1a), 1b), and 2. TOP advises the CALWMC that site options 3 and 4 are possible but not optimal, as they are complex and expensive with marginal advantages over other options.

TOP advises the CALWMC that options 1a), 1b), 2 increase the flow through Clover Point and will likely necessitate significant upgrade of capacity there.

TOP advises the CALWMC that option 4 would be best advanced with a separate study to determine the optimal distributed solid and liquid waste reuse options that could be negotiated for the region.

TOP advises the CALWMC to study the effects of improved I&I on WWTP cost savings through reduction of the projected capacity increase for 2020-2045.

TOP advises the CALWMC to accept final TM#2

4. Technical Memo #3

The consultants are working to develop draft TM#3. The draft will be reviewed at the November 24 TOP meeting and submitted to the CALWMC with TOP recommendations December.

5. Final Deliverable, Technical Memo #4 Table of Contents

The consultants and CRD will work together to determine the Final Technical Memo #4 content to support the eventual funding and rezoning requirements of the project. The draft outline of the content will be provided to the CALWMC for comment.

Outstanding - To get ahead of the content requirements for the final report, TOP recommends that CRD provide any metrics, cost base timelines or other formatting information that will be required by funding agencies or zoning authorities that can reasonably be incorporated into TM#4 (under the original terms of reference) to ensure that the format of the information in TM#4 is the most useful format for the CRD

6. Private Sector Vendor Canvas

Eight more vendors are interested in presenting. Meetings have been arranged for November 23, 2015. These will be closed meetings as there are vendor concerns about proprietary information. CRD and TOP will attend. A summary will be provided by TOP to the consultants as they are unable to attend the meetings. A summary will be included in TOP Report #6 to the CALWMC.

TOP advises the CALWMC to determine the project delivery options that will accommodate innovation in technology as part of the implementation team terms of reference.