

Project Status Update - May 16, 2017



Work Done To-Date

- Flow Forecasting
- Hydraulic Model
- Preliminary Pump Station Sizing
- Conducted two of three public open houses
- Developed preliminary forcemain tie-in methodology
- Reviewed and recommended alignment for forcemain from PS to WWTP

Feedback from Open House

- Open House #1
 - General concern about the review process used previously
 - Desire not to “see” the facility
 - Compliance with zoning by-law questioned
 - Focus on the capacity of the system, size of pumps etc
 - Lighting, noise, vibration and smell
 - Groundwater contamination

Feedback from Open House

- Open House #2
 - Generally supportive of design approach, but looking for more detail
 - Focus on impacts to quality of life (water supply, noise, odour, vibration and lighting)
 - Seeking guarantees for odour, noise, vibration and impact on water supply
 - Lack of trust in previous processes specifically if the project budget increases

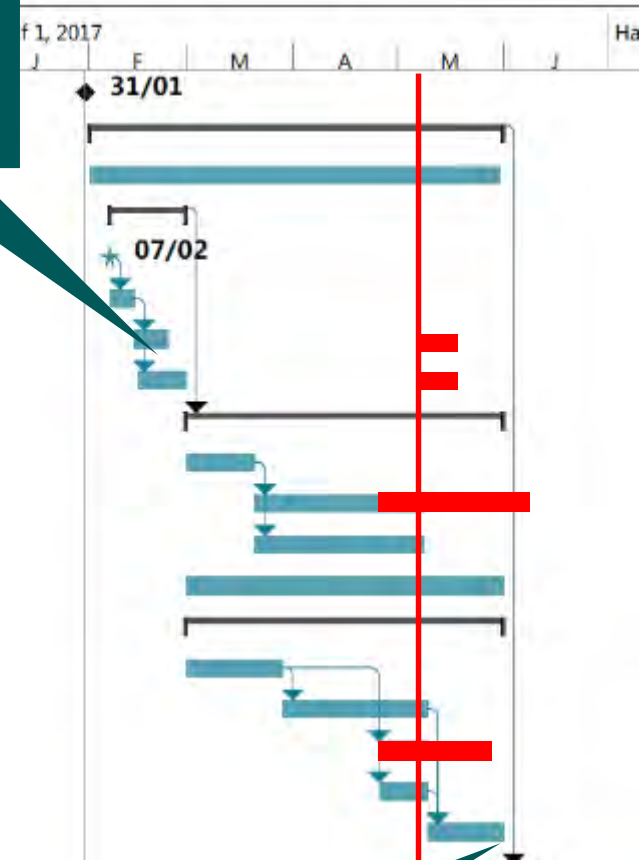
Initial Building Concept



Program Schedule

ID	Task Name
1	Notice of Award to Owner's Engineer
2	Pre-Implementation Phase
3	PD-1 Project Delivery Pre-Implementation Phase
4	100 Site Investigations and Data Collection
5	101 Kick-off Meeting and Site Visit
6	102 Review Background Documentation
7	103 Geotechnical Investigations
8	104 Topographic Survey
9	200 Option Evaluation, Agency Coordination, and Public Engagement
10	201 Evaluate Options
11	202 Permitting and Approvals
12	203 Utility Coordination
13	204 Public Engagement Materials
14	300 Indicative Design
15	301 Develop Design Criteria
16	302 TM Indicative Design
17	303 Cost Estimating
18	304 Project Schedule
19	305 Indicative Design Report

Geo & survey deferred



Draft report end of month

Next Steps – Pump Station

- G e o t e c h n i c a l I n v e s t i g a t i o n
- A c o u s t i c M o n i t o r i n g
- A l i g n m e n t S u r v e y
- I n d i c a t i v e D e s i g n
- C a p i t a l C o s t U p d a t e
- E n v i r o n m e n t a l p e r m i t s i n i t i a t i o n


Questions

Forcemain – Tie-in to Pump Station

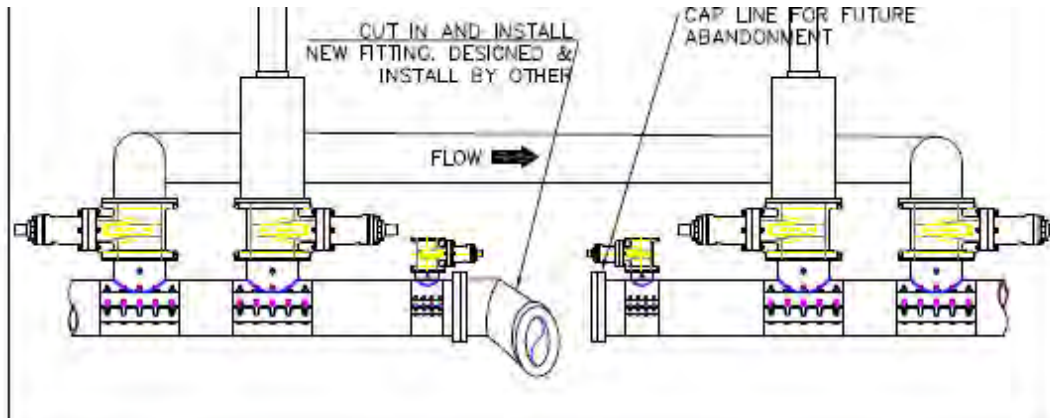
- Major risk factors
 - Tide cycles limit working period
 - Land based equipment only
 - Retention of excavation
 - Sewage spills
 - Unforeseen material conditions
 - Difficult working environment



DB Contract Development

- Reviewed Contract Options
 - Recommending CCDC 14 with Supplemental General Conditions
- Completed Risk Workshop
 - Foremain condition evaluation Condition
 - Groundwater impacts Monitoring/KPI 
 - Sewage spill Spill kits
 - Long term expansion requirement Design
 - Material durability requirements Design

Forcemain – Tie-in to Pump Station



Open House #1

What is a Pump Station?



All pump stations have a similar purpose – to convey fluids from one place to another. The size and layout of each pump station is dependent on many factors. However, sanitary pump stations typically consist of the following main components:

Mechanical Room

This room would house potable water service, hot water tanks, and other mechanical equipment.



Dry Well

Connected to the wet well through suction pipes, pumps are housed in this room where noise and vibration mitigation measures are implemented.



Electrical Room

The electrical panel and control components are installed here.



Wet Well

A water-tight and fully-enclosed concrete basin used for balancing in and out flows from the pumps.

(In this photo, the wet well is underground.)



Odour Control

Air drawn from the wet well will pass through odour control technology to eliminate odours prior to release to the environment.



Genset Room

The backup power generator, fuel storage, secondary containment and noise control would be housed in this room.



- Objectives:
 - Listen to public
 - Provide discussion topic
 - Solicit input

Open House #2

- Objectives
 - Present a concept of the building
 - Further listening to community concerns

Initial Building Concept

