



MEETING MINUTES

Reference No. 37936

PROJECT: MOFFAT CREEK TRUNK SANITARY SEWER - CLASS EA ADDENDUM
 CLIENT: City of Cambridge CLIENT REFERENCE NO.: P-2004-42
 RE: Technical Committee Meeting #3
 LOCATION: Cambridge City Hall DATE: May 15, 2008 TIME: 8:00 am
 Building - Bowman Room

Participants:

Samantha Lawson	GRCA	Giancarlo Radicioni	City of Cambridge
Albert Hovingh	Region of Waterloo	Jim Kirchin	City of Cambridge
Andrea Doherty	DFO	Alex Koch	City of Cambridge
John Lee	Region of Waterloo	April Souwand	City of Cambridge
Kevin Brousseau	Stantec Consulting	Phil Antoniow	City of Cambridge
Chris Bohme	Green Scheels Pidgeon	Chris Hunter	CRA
		Dwayne Hofstetter	CRA
		Dale Paynter	CRA
		Ron Schwark	CRA

Distribution:

<input checked="" type="checkbox"/> File	<input checked="" type="checkbox"/> Participants		Steven Perschbacher	Stantec Consulting
Mike Stone	MNR		Kevin Fergin	Stantec Consulting
Janet Babcock	City of Cambridge		Barb Slattery	MOE Hamilton
Gary Price	City of Cambridge		Ken Cornelisse	MNR - Guelph
Nancy Davy	GRCA			

<i>Item</i>	<i>Description</i>	<i>Action By</i>
1.0	<u>Introduction</u>	CRA
2.0	<u>Purpose of Meeting</u> <ul style="list-style-type: none"> • Provide a project status update; • To review current sewer alignment and trail design; and • Review of Next Steps in order to meet project timelines 	Info



<i>Item</i>	<i>Description</i>	<i>Action By</i>
3.0	<u>Project Status Update</u>	Info
3.1	<u>Site Survey and Data Collection</u> <ol style="list-style-type: none"> 1. 2 year floodline on north side of Moffat Creek has been added to drawings, based on 1996 Master Watershed Modelling. 2. 2 year floodline/Wetland on south side of Moffat Creek has been added to drawings based on 1996 Watershed Modeling PLUS survey pickup from GRCA delineation on Field Walk from April 30, 2008. 	Info
3.2	<u>Archeological Assessment</u> <ol style="list-style-type: none"> 1. Four area features of archeological interest were found, of which only one site is of significance. 2. Significant area to be fenced off to protect area during construction. 	Info
3.3	<u>Geotechnical Investigation</u> <ol style="list-style-type: none"> 1. Pump tests on BH3 and BH6 have been completed. 2. Obstruction/blockage on the East side of Dundas Street still creating ponding upstream of culvert. 3. Moffat Creek has been historically observed to be intermittently dry throughout the summer. 4. CRA will be preparing a Permit to Take Water application for the construction phase of the project. 	CRA
3.4	<u>Detailed Design</u> <ul style="list-style-type: none"> • Bridge crossing Moffat Creek to be installed as part of the initial construction efforts. • Access off Azores Crescent is to be paved down the embankment to a point at the turn around. • Works will require temporary removal of fencing and retaining wall (on adjacent properties) to allow access onto City lands. CRA is to prepare figures depicting the potential encroachment area for the City to address with the residents prior to construction. • Construction areas that will become maintenance areas, and are to be asphalted will have base asphalt placed prior to construction activities and surface asphalt placed after construction is completed. • CRA/City to consider specifying smaller trucks/construction equipment down Azores to limit impact and requirement to remove fencing. • Manhole 6A in the Dundas Street right-of way is to be a Provisional Item in this Contract. This manhole will be installed in 2010 with Dundas Street Sanitary upgrades under Region of Waterloo Contract. 	CRA



<i>Item</i>	<i>Description</i>	<i>Action By</i>
	<ul style="list-style-type: none"> • Pedestrian and Maintenance Bridge details to show 2 yr, 25 yr and 100yr flood elevation on drawings. The plans submitted to the GRCA should also include the 2yr, 25 yr and 100 yr and/or Regional Storm as noted in the 1996 Master Plan document. • The trail/access alignment has approximately 1000 cu.m of fill within the project area, of which 500 to 800 cu.m of fill within 100yr floodline. This fill is the trail structure itself, which is to be placed on existing grade. There is potential to balance fill with bank removal and/or culvert installation through existing dyke near Franklin which would provide for an additional of floodplain storage of 800 cu.m. This would effectively provide for no loss of floodplain storage within the construction area. • All boardwalks to be 100 percent supported on helical piles (versus one edge founded on grade) for boardwalk areas to minimize impact and future erosion of granular material. • Construction access into the Greengate subdivision will be off Maple Bush Drive for works between MH59A to MH56A. Stantec to provide figure showing preferred construction access location. • Greengate servicing contract and Sanitary trunk sewer construction expected to be completed concurrently. Works limits will require specific delineation/separation to ensure no contractor issues on site. • Coordinating timing of enhancements i.e., Culvert/berm removal to increase floodplain during construction. • Rock Dam (east of Franklin) removal is not part of this Contract. • CRA to include allowance for removal of garbage/debris in creek (i.e. couch, shopping cart, and Rail Bridge (East of Dundas) etc.) • Trails (granular and boardwalks) continuing between maintenance access sections, plus environmental enhancements are to be included in contract as a provisional items. • CEAC will not conduct plant rescue due to the confrontations of residents reported. 	CRA
4.0	<p><u>Detailed Design Drawings Review:</u></p> <ul style="list-style-type: none"> • See Attached Presentation 	Info



Item	Description	Action By
5.0	<p><u>Preliminary Comments</u></p> <p>The following is a listing of preliminary comments received prior to and during the presentation.</p> <p><u>Grand River Conservation Authority:</u></p> <ol style="list-style-type: none"> 1. Overall efforts to be made to maintain the existing flood plain storage post construction. 2. Floodplain cut and fill volumes should be indicated on each of the restoration drawings. 3. The GRCA indicated a concern with the bridge collecting debris during high creek flow events. The City indicated that all trail bridges are maintained and monitored for these conditions. CRA will investigate raising profile elevation of bridge. <p><u>City:</u></p> <ol style="list-style-type: none"> 1. Suggestion to add hammerheads \ turnarounds at the end of the maintenance access for future maintenance. 2. Armour Stone retaining wall at Dundas to allow for gradient change and vehicle access to MH5A. 3. Site preparation Drawings to include structures that encroach City Property (chicken coop and bird aviary as examples)... CRA to prepare additional location figures for City Property Office, who in turn will ask residents to remove structures from City-owned lands. If structures not removed, they will be included in Contract Work (Provisional Item). 4. Turnaround at base of Azores access to be reviewed by CRA to suit specific City Vehicles. 5. Preliminary comments were provided to CRA on the trails and boardwalks drawings circulation by Community Services Department and that a follow-up meeting to discuss these is scheduled for May 20. 6. Developer is required to provide trails under the subdivision approval for the Greengate lands east/north of Dundas street. This needs to be resolved with the developer on cost recovery / extent of trail work to be included in this contract. <p><u>Stantec:</u></p> <ol style="list-style-type: none"> 1. Contract Liability Insurance - to include Stantec Consulting Ltd., both developers for the Greengate and Maple Crown Subdivisions. 2. MH 56A to be located on Wesley Blvd - complete with knockout for future connections. 3. Alignment of Pedestrian Boardwalk for trail east of Dundas, north of Moffat Creek to be modified to include extension of boardwalk (versus trail) to the north and the west outside of the Wetland Buffer. . Stantec to forward sketch on preferred alignment. 	<p>CRA</p> <p>CRA/City</p> <p>CITY</p>

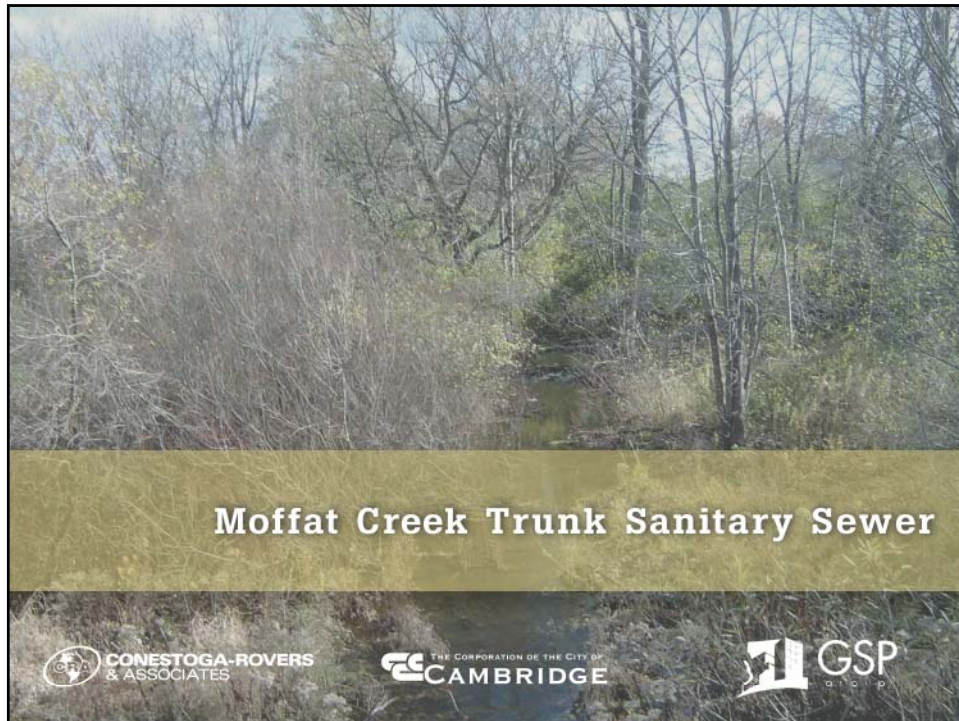


<i>Item</i>	<i>Description</i>	<i>Action By</i>
	4. Stantec to provide details/sketch of preferred construction access location (off Maple Bush). All comments are from the Technical Advisory Committee are to be submitted to CRA by May 23, 2008.	Stantec
6.0	<u>Other Business</u> 1. Full time construction inspection services will be provided during the construction phase of the project. 2. Environmental/Biologist Oversight during construction will be part of Consultant's Scope. This will be completed on a part time as needed basis. 3. CRA to prepare a revised and detailed listing of construction monitoring (pre, during and post construction) to the members of the TAC for review and comment. 4. CRA and City to Review Enhancements Package.	Info Info CRA CRA
7.0	<u>Next Steps in Design</u> 1. May 30, 2008 - Tender Ready Documents Submitted to the City of Cambridge. 2. June 5, 2008 - Submission of formal final submissions/applications to review agencies (MOE, MNR, and GRCA). 3. June 9, 2008 to July 14, 2008 - Tendering Period (3 weeks). 4. GRCA board meeting on June 14, 2008 and June 27 th , 2008. CRA is to complete submission to the GRCA by June 5, 2008 for final approval. 5. July 14th to award the tender by City Council. 6. August 1, 2008 Construction Start.	

Attachments: Sign- In Sheet, Presentation, Monitoring Program, Preliminary Enhancement Listing

Prepared By: Dwayne Hofstetter Date Issued: May 16, 2008
 Amended By: Chris Hunter Date Issued: June 3, 2008

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.



Moffat Creek Trunk Sanitary Sewer

Agenda

1. Purpose of Meeting
2. Project Status Update
3. Review of Detailed Design
4. Next Steps
5. Other Business

Purpose of Meeting

1. Update on Works Completed;
2. Review of Drawings and Details;
3. Tender Documents;
4. Review of Next Steps

Update on Works Completed

Site Survey and Data Collection

1. Survey Complete
2. DFO Delineated 2-Year Channel Flow
3. GRCA delineated wetland boundary

Archaeological Assessment

- Submitted to Ministry of Culture

Update on Works Completed

Geotechnical Investigation

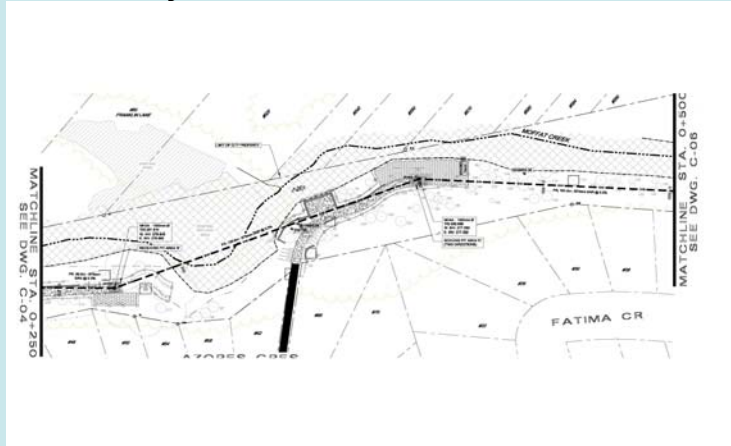
1. Pumping Tests Completed
2. Geotechnical Data Report (GDR) and Geotechnical Baseline Report (GBR) to be included in the tender documents



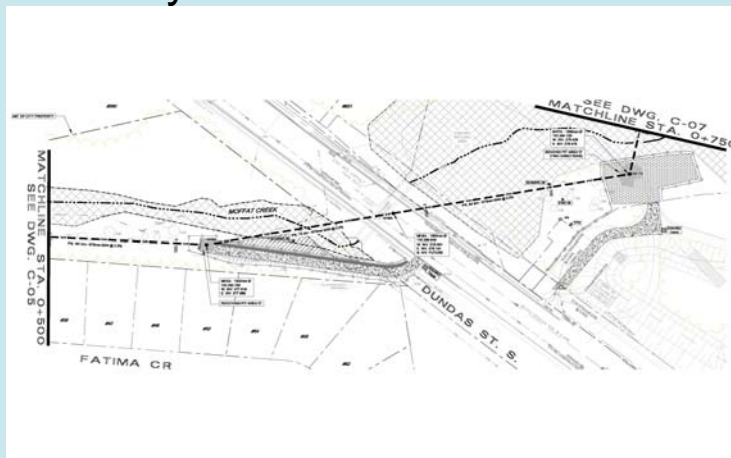
Geotechnical Investigation



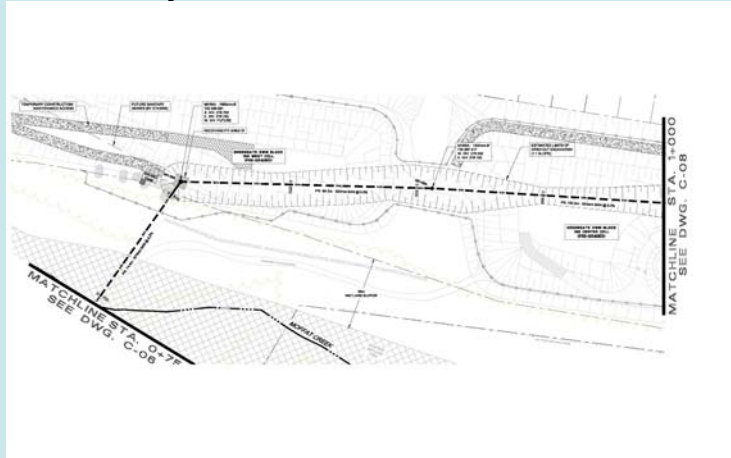
Sanitary Sewer - 0+250 to 0+500



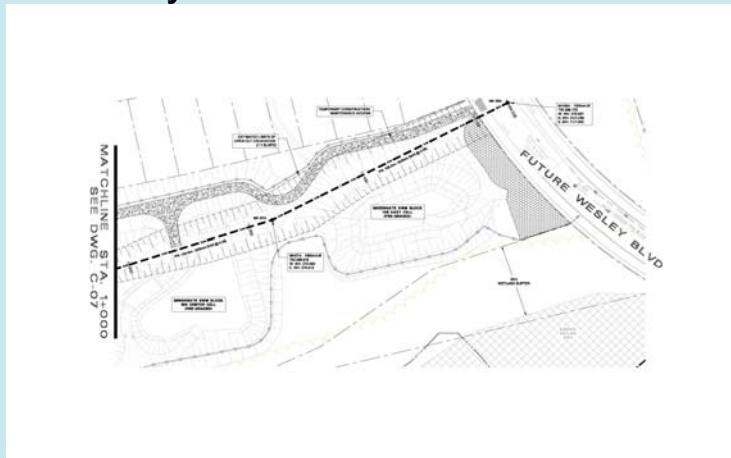
Sanitary Sewer - 0+500 to 0+750



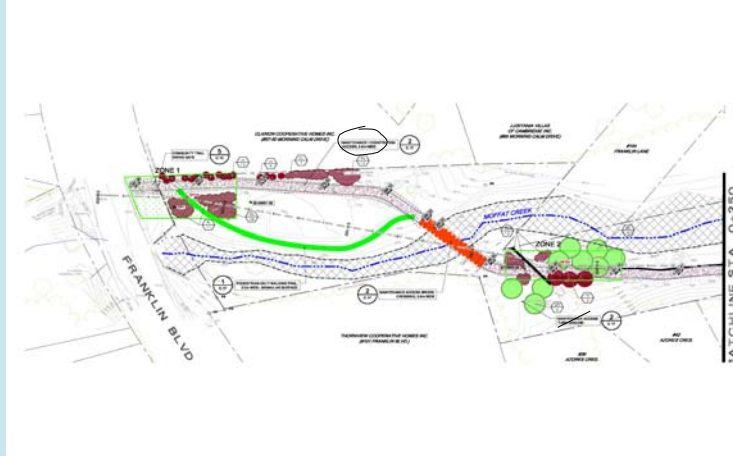
Sanitary Sewer - 0+750 to 1+000



Sanitary Sewer - 1+000 to 1+250



Pedestrian Trail - 0+000 to 0+250



Pedestrian Trail - 0+250 to 0+500



Pedestrian Trail - 0+500 to 0+750



Pedestrian Trail - 0+750 to 1+000



Pedestrian Trail - 1+000 to 1+250



Next Steps

1. May 23, 2008 - Comments from Technical Steering Committee
2. May 30, 2008 - Tender Ready Documents Submitted to the City of Cambridge
3. June 5, 2008 - Submission of formal final submissions/applications to review agencies
4. June 9, 2008 - 2 Week Tendering Period

DISCUSSION QUESTIONS



OTHER BUSINESS



SUMMARY OF CONSTRUCTION ENHANCEMENTS
Moffat Creek Trunk Sanitary Sewer

Works Included in Current Contract

<i>Community Trail Boardwalks</i>	\$	150,000.00
<i>Community Trails</i>	\$	50,000.00
<i>Trees and Plantings</i>	\$	25,000.00
<i>Improve Floodplain Storage</i>	\$	5,000.00
Installation of Culvert(s) through above Earthen Dyke		
Subtotal:	\$	230,000.00

Additional Works Identified in 1999 EA Report

<i>Removal of Rock Dam</i>	\$	5,000.00
near new bridge crossing near Franklin		
<i>Improved Hydraulics</i>	\$	25,000.00
removal of Earthen Dyke near Franklin		
<i>Creek Improvements Low Flow Channelization</i>	\$	100,000.00
allowance		
<i>Removal of Existing Footbridge and other blockage</i>	\$	20,000.00
North of Dundas placement of new substrate		
Subtotal:	\$	150,000.00

SUMMARY OF MONITORING REQUIREMENTS
Moffat Creek Trunk Sanitary Sewer

Monitoring Pre-Construction

Archaeological Survey	Completed
Development of Baseline Health Conditions of Creek	Completed
Pumping Testing and Geotechnical Investigation	Completed
Ground Water Quality Sampling (develop baseline)	To Be Done

Construction Administration and Inspection

QA/QC of Contractor Activities	Full Time on Site Presence During Construction
Erosion and Sedimentation Controls Inspection	Daily and at Each Rainfall <12 mm

Monitoring During Construction

Surface Water Monitoring

Flow Monitoring	Monthly Mar-Dec
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Water Quality Analysis Grab Sample (TSS, DO, P, E.Coli)	Monthly Mar-Dec
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Ground Water Monitoring

Monitoring of Ground Water Levels at Existing Piezometers	Weekly during Dewatering
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Monitoring of Creek and Wetland Impacts	Low Flow Periods
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installation of creek and wetland piezometers at each sending and receiving pit location

Ground Water Quality Sampling	During Construction
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versus baseline

Fisheries Habitat

Benthic Sampling and Analysis	Monthly Mar-Dec
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upstream and downstream of construction

Observation of Habitat During Construction	Weekly
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Fish Rescue if required

Monitoring Post Construction

Surface Water Monitoring

Flow Monitoring	Monthly Mar-Dec
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2 Year Duration

Water Quality Analysis Grab Sample (TSS, DO, P, E.Coli)	Monthly Mar-Dec
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2 Year Duration

Ground Water Monitoring

Monitoring of Ground Water Levels at Existing Piezometers	Twice per Season
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2 to 5 Year Duration

Low Flow Periods
Weekly during Dewatering
TBD

Ground Water Quality Sampling	
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versus baseline

2 to 5 Year Duration

Fisheries Habitat

Benthic Sampling and Analysis	Monthly Mar-Dec
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upstream and downstream of construction

2 Year Duration

**MOFFAT CREEK TRUNK SANITARY SEWER PROJECT
CITY OF CAMBRIDGE
TECHNICAL STEERING COMMITTEE MEETING #3**

**THURSDAY, MAY 15TH, 2008
BOWMAN ROOM - CAMBRIDGE CITY HALL**

SIGN-IN

[Handwritten signatures on lined paper]

Nancy Davy	Grand River Conservation Authority
Samantha Lawson	Grand River Conservation Authority
Barb Slattery	Ministry of the Environment (Hamilton)
Mike Stone	Ministry of Natural Resources (Guelph)
Ken Cornelisse	Ministry of Natural Resources (Guelph)
Albert Hovingh	Region of Waterloo EEAC
Andrea Doherty	Department of Fisheries and Oceans
John Lee	Region of Waterloo Engineering
Gary Price	City of Cambridge
Janet Babcock	City of Cambridge - Planning
Giancarlo Radicioni	City of Cambridge - Planning
Phil Antoniow	City of Cambridge - Engineering Services
Alex Koch	City of Cambridge - Community Services
April Souwand	City of Cambridge CEAC
Kevin Brousseau	Stantec Consulting
Steven Perschbacher	Stantec Consulting
Chris Bohme	GSP - Green Scheels Pidgeon
Chris Hunter	CRA - Conestoga-Rovers and Associates
Dale Paynter	CRA - Conestoga-Rovers and Associates
Dwayne Hofstetter	CRA - Conestoga-Rovers and Associates
RON SCHWARZ	
Jim Kirwin - City	