

CITY OF BAINBRIDGE ISLAND CITY COUNCIL AGENDA BILL



PROCESS INFORMATION

Subject: Strawberry Plant Park & Pritchard Park East Bluff Shoreline Restoration Project Construction Award	Date: August 25, 2010
Agenda Item: Consent Agenda	Bill No.: 0798
Proposed By: Acting Public Works Director Lance Newkirk	

BUDGET INFORMATION

Depart/Fund: PW – Parks/Open Space - #214 Pritchard Park East #211 Strawberry Plant & 2009 Carry Over		
Expenditure Req: \$848,544.34	Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Budget Amend. Req? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

REFERRALS/REVIEW

Study Session: August 18, 2010	Recommendation: Move to August 25, 2010 Business Meeting
City Manager <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Legal <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Finance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

DESCRIPTION/SUMMARY

Action Item:

Approve award to Boettcher & Sons, Inc. in the amount of \$848,544.34 for the Strawberry Plant Park & Pritchard Park East Bluff Shoreline Restoration project.

History:

This project consists of work at two sites: Strawberry Plant and Pritchard Park East Bluff. Work related to the project sites includes removal of a wood concrete and rock bulkhead, restoration of beach habitat, removal of paving, landscape planting and removal of soil and debris.

Bids were solicited through the local newspapers. The bid opening was held on August 3, 2010 and one bid was received. The apparent low bidder is Boettcher & Sons, Inc. in the amount of \$848,544.34. The engineer's estimate is \$976,000.00.

City staff reviewed the bid results and the contractor's qualifications and recommends that the City Council award this contract to Boettcher & Sons.

Continued on next page.

RECOMMENDED ACTION

Motion:

I move that the City Council approve the award to Boettcher & Sons in the amount of \$848,544.34 for the Strawberry Plant Park & Pritchard Park East Bluff Shoreline Restoration project and authorize the City Manager to execute the Agreement.

Schedule/Next Activities:

The Elliot Bay Trustee Council, which administers the Natural Resource Damage Assessment funds that are partially funding these restoration projects, will meet on August 17 to discuss the two shoreline restoration projects funding and required environmental covenants for these properties. The resolution and covenants will be provided to the Council upon transmittal from the Elliot Bay Trustee Council and should be available for the August 25 Council meeting. The Trustees are working to have the environmental covenants agreed to in principal by that time. At that meeting or the next meeting, the City Council will need to approve the City Manager to sign the restrictive covenants for both shoreline restoration projects once they are final.

Budget:

Strawberry Plant Park Funds Available

SRFB	\$252,395 (2008 Grant)
City	\$0
NRDA	\$315,443 (Elliot Bay Trustee Resolution 2009-1)
	\$567,838 Total (\$32,511 of which is for construction-related P.S & contingency)

Pritchard Park East Bluff Funds Available

SRFB	\$53,329 (remaining in 2006 grant after Phase I construction)
City	\$64,000 (remaining from 2008 carryover)
NRDA	\$220,000 (anticipated Elliot Bay Trustee Resolution as described previously)
	\$337,329 Total (\$24,083 of which is for construction-related P.S & contingency)

Elliott Bay Trustee Council Wyckoff/Eagle Harbor Restoration Resolution 2010-06

This resolution by the Elliott Bay Trustee Council (Trustee Council): 1) approves providing \$312,605.00 to the City of Bainbridge Island (City) as a match for a Salmon Recovery Funding Board (SRFB) construction grant for the Strawberry Plant Park Shoreline Restoration Project; 2) authorizes the disbursement of \$312,605.00 to the Suquamish Tribe to be transferred to the City for these purposes.

Adopted: August 17, 2010

References: Resolution 2008-01
Resolution 2009-01
Resolution 2009-10

Attachments: Strawberry Plant Project Construction Budget Information

The Trustee Council consists of the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce; the U.S. Department of the Interior, represented by the U.S. Fish and Wildlife Service; the Muckleshoot Indian Tribe; the Suquamish Tribe; and the Washington Departments of Ecology (as lead state Trustee) and Fish and Wildlife (as state co-Trustee). The Trustee Council is operating under the *Memorandum of Agreement for Elliott Bay, the Duwamish River and Eagle Harbor (effective date 1/19/06)*. In this Memorandum of Agreement, the Trustee Council agreed that proceeds from the settlement in *United States, the Suquamish Tribe and the Muckleshoot Indian Tribe v. Pacific Sound Resources et al., W.D. Wash. C94-697 (entered 8/29/94)* shall: 1.) be used for the restoration of natural resources injured as a result of releases of hazardous substances at the former PSRW facilities in Eagle Harbor and West Seattle; and 2.) be apportioned between restoration actions in and around Eagle Harbor and in the Elliott Bay/Duwamish Area as determined by the Trustee Council. The Trustee Council and the City of Bainbridge Island entered into a Memorandum of Agreement (*effective date 6/6/08*) that sets requirements for all projects built by the City using these settlement funds.

The Trustee Council considered the Strawberry Plant Park Shoreline Restoration Project as a possible restoration project intended to address injuries to natural resources from the former PSRW facility in Eagle Harbor in Resolution 2008-01, and identified this project in the Final Restoration Plan and Environmental Assessment for the Wyckoff/Eagle Harbor Site, Bainbridge Island, Washington (RP/EA) as one of the projects tentatively included for implementation under this plan. The City was awarded a SRFB grant for the construction of this project, and the Trustee Council agreed to provide the necessary SRFB match in Resolution 2009-01, subject to evaluation of such project under the National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA).

The Trustee Council approves providing \$312,605.00 to the City of Bainbridge Island as a match for a Salmon Recovery Funding Board (SRFB) construction grant for the Strawberry Plant Park Shoreline Restoration Project, and authorizes the disbursement of \$312,605.00 to the Suquamish Tribe to be transferred to the City for these purposes. Should any funds remain after construction of the Strawberry Plant Park Shoreline Restoration Project the Trustees will authorize the use of those funds by the City on a different task for this project or another project by resolution, or require the return of the excess funds.

Now, therefore, it is resolved that:

1. The Trustee Council approves providing \$312,605.00 to the City of Bainbridge Island as a match for a Salmon Recovery Funding Board (SRFB) construction grant for the Strawberry Plant Shoreline Restoration Project.

2. The Trustee Council authorizes the disbursement of \$312,605.00 to the Suquamish Tribe to be transferred to the City for these purposes.

By their signatures below, representatives of the Elliott Bay Trustee Council hereby certify that this Resolution, 2010-06, was adopted in compliance with decision-making procedures of the Trustee Council.

NOAA:

By:



John Kern



Date

U.S. Department of the Interior/U.S. Fish and Wildlife Service:

By:

Jeff Krausmann

Date

Washington State Department of Ecology (Lead State Trustee):

By:

Craig Thompson

Date

The Muckleshoot Indian Tribe:

By:

Glen St. Amant

Date

The Suquamish Tribe:

By:

Richard Brooks

Date

after construction of the Strawberry Plant Park Shoreline Restoration Project the Trustees will authorize the use of those funds by the City on a different task for this project or another project by resolution, or require the return of the excess funds.

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U.S. Department of the Interior/U.S. Fish and Wildlife Service:

By:  _____ Date 18 AUG 10
Jeff Krausmann

Washington State Department of Ecology (Lead State Trustee):

By: _____ Date _____
Craig Thompson

The Muckleshoot Indian Tribe:

By: _____ Date _____
Glen St. Amant

The Suquamish Tribe:

By: _____ Date _____
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U.S. Department of the Interior/U.S. Fish and Wildlife Service:

By: _____ Date _____
Jeff Krausmann

Washington State Department of Ecology (Lead State Trustee):

By: Randy Casman for Date 8/18/10
Craig Thompson

The Muckleshoot Indian Tribe:

By: _____ Date _____
Glen St. Amant

The Suquamish Tribe:

By: _____ Date _____
Richard Brooks

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By: _____ Date _____
Glen St. Amant 8-17-10

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By: _____ Date _____
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By: _____
Jeff Krausmann Date

Washington State Department of Ecology (Lead State Trustee):

By: _____
Craig Thompson Date

The Muckleshoot Indian Tribe:

By: _____
Glen St. Amant Date

The Suquamish Tribe:

By: 
Richard Brooks Date 8/18/10

Construction Cost Estimates for Shoreline Restoration Projects (including SRFB and NRDA funding estimate:

Strawberry Construction	
Funding	
SRFB	252,395
City	0
NRDA	315,443
Total	567,838

Pritchard - East Bluff/ Phase II	
Funding	
SRFB	53,329
City	64,000
NRDA	220,000
Total	337,329

Strawberry Construction	
Bid	535,000
Const. Adn	30,000
Total	565,000

East Bluff /Phase II construction	
Bid	313,250
Const. Adn	24,000
Total	337,250

Elliott Bay Trustee Council Wyckoff/Eagle Harbor Restoration Resolution 2010-07

This resolution by the Elliott Bay Trustee Council (Trustee Council): 1) approves providing \$219,921.00 to the City of Bainbridge Island (City) for the construction of the Pritchard Park East Bluff Shoreline Restoration Project; 2) authorizes the disbursement of \$219,921.00 to the Suquamish Tribe to be transferred to the City for these purposes.

Adopted: August 17, 2010

References: Resolution 2010-04
Letter from the Trustee Council to the City (dated February 11, 2010)

Attachments: Pritchard Park East Bluff Shoreline Restoration Project, Construction Budget Information

The Trustee Council consists of the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce; the U.S. Department of the Interior, represented by the U.S. Fish and Wildlife Service; the Muckleshoot Indian Tribe; the Suquamish Tribe; and the Washington Departments of Ecology (as lead state Trustee) and Fish and Wildlife (as state co-Trustee). The Trustee Council is operating under the *Memorandum of Agreement for Elliott Bay, the Duwamish River and Eagle Harbor (effective date 1/19/06)*. In this MOA, the Trustee Council agreed that proceeds from the settlement in *United States, the Suquamish Tribe and the Muckleshoot Indian Tribe v. Pacific Sound Resources et al., W.D. Wash. C94-697 (entered 8/29/94)* shall: 1.) be used for the restoration of natural resources injured as a result of releases of hazardous substances at the former Wyckoff and Pacific Sound Resources facilities in Eagle Harbor and West Seattle; and 2.) be apportioned between restoration actions in and around Eagle Harbor and in the Elliott Bay/Duwamish Area as determined by the Trustee Council.

The Trustee Council evaluated the types of natural resource injuries and losses of service that are likely to have resulted from releases of hazardous substances into Eagle Harbor and considered how best to restore those injured natural resources. The Trustee Council developed the *Restoration Plan and Environmental Assessment for Wyckoff/Eagle Harbor, Bainbridge Island, Washington* which presented the types of restoration projects that would address injuries resulting from releases of hazardous substances from the Wyckoff Facility into Eagle Harbor. It identified the Pritchard Park East Bluff Shoreline Restoration Project as one potential restoration project under this plan and indicated that there would be a supplemental environmental assessment for this project that would present a specific analysis of potential impacts from the project, should the Trustee Council decide to fund this project.

Resolution 2010-04 adopted the *Supplemental Environmental Assessment for the Pritchard Park East Bluff Shoreline Restoration Project*. The Trustee Council approved the 30% design document for Pritchard Park East Bluff Shoreline Restoration Project on February 11, 2010. The *Final Supplemental Environmental Assessment for the Pritchard Park East Bluff Shoreline Restoration Project* identifies it as a preferred project for inclusion in the restoration effort for restoring injuries to natural resources and services injured by releases from the Wyckoff Facility in Eagle Harbor.

The Trustee Council approves providing \$219,921.00 to the City for the construction of the Pritchard Park East Bluff Shoreline Restoration Project, and authorizes the disbursement of \$219,921.00 to the Suquamish Tribe to be transferred to the City for these purposes. Should any funds remain after construction of the Pritchard Park East Bluff Shoreline Restoration Project the Trustees will authorize the use of those funds by the City on a different task for this project or another project by resolution, or require the return of the excess funds.

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By: _____ Date _____
John Kern

U.S. Department of the Interior/U.S. Fish and Wildlife Service:

By: _____ Date _____
Jeff Krausmann 18 AUG 10
Jeff Krausmann

Washington State Department of Ecology (Lead State Trustee):

By: _____ Date _____
Craig Thompson

The Muckleshoot Indian Tribe:

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U.S. Department of the Interior/U.S. Fish and Wildlife Service:

By: _____
Jeff Krausmann Date

Washington State Department of Ecology (Lead State Trustee):

By: Craig Thompson for Date 8/18/10
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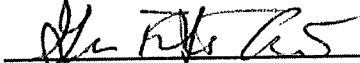
U.S. Department of the Interior/U.S. Fish and Wildlife Service:

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By: _____
Jeff Krausmann Date

Washington State Department of Ecology (Lead State Trustee):

By: _____
Craig Thompson Date

The Muckleshoot Indian Tribe:

By: _____
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The Suquamish Tribe:

By: 
Richard Brooks Date 8/18/10

Construction Cost Estimates for Shoreline Restoration Projects (including SRFB and NRDA funding estimate:

Strawberry Construction

Funding

SRFB	252,395
City	0
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Total	567,838

Pritchard - East Bluff/ Phase II

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Strawberry Construction

Bid	535,000
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Total	565,000

East Bluff/Phase II construction

Bid	313,250
Const. Adn	24,000
Total	337,250

MEMORANDUM

To: Libby Hudson, City of Bainbridge Island
Chris Wierzbicki, City of Bainbridge Island
Date: August 20, 2010

From: John Laplante, PE
Project: 080510-04.01

Cc: John Small, ASLA, Anchor QEA

Re: Review of Soil and Groundwater Chemistry Data
Strawberry Plant Site – 240 NW Weaver Road
Bainbridge Island, Washington

This memorandum summarizes Anchor QEA's review of existing soil and groundwater chemistry data, and provides a summary of the lab results as compared to relevant Washington State Department of Ecology (Ecology) standards for the Strawberry Plant site (240 NW Weaver Road Property) located in Bainbridge Island, Washington.

SUMMARY OF ENVIRONMENTAL STUDIES

Several environmental studies have been performed at the Strawberry Plant site. Anchor QEA has reviewed the following reports from these studies:

- Subsurface Investigation at the Strawberry Plant site by Robinson & Noble and Saltbush Environmental Services, dated June 7, 2004 (Saltbush Report)
- Groundwater Sampling and Analysis Report at the Strawberry Plant site by Hart Crowser, dated August 2, 2004 (Hart Crowser Report)
- Sampling Activities Report at the Strawberry Plant site by Aspect Consulting, dated September 18, 2008 (Aspect Report)

The 2004 Saltbush work included advancing push probes at several locations, and submitting unfiltered, turbid (high total suspended solids) water samples collected directly from these push probes for laboratory analysis. The Saltbush Report stated that lead, chromium, cadmium, arsenic, and mercury were detected in one or more groundwater samples collected from the site at concentrations exceeding State of Washington Model Toxics Control Act (MTCA) Method A cleanup standards for groundwater. Based on these data, the Saltbush

Report stated that there was a potential for groundwater contamination at the Strawberry Plant site.

The Saltbush Report provided no analysis of the potential high bias in metal concentrations that result from analysis of unfiltered, turbid water samples. The Saltbush Report indicated that samples tested as groundwater were collected directly from the cased boreholes. However, based on data presented in the Saltbush Report, and considering the natural background concentration range of metals present in native Puget Sound soils, the “elevated” metals concentrations reported by Saltbush can be attributed entirely to the presence of suspended soils that were entrained in these water samples within the boreholes—these sample values are thus not representative of local groundwater conditions. Representative groundwater samples for metals can only be obtained through properly developed monitoring wells, which Saltbush did not install at the site. As described in technical publications such as U.S. Geological Survey (USGS) Report 96-4233 (*Guidelines and Standard Procedures for Studies of Groundwater Quality* 1997), soil material must be removed from the exploration well prior to groundwater sampling (a process called “development”) so that high bias and associated errors are not introduced into the test results. Because of the presence of naturally occurring metals in native Puget Sound soils, this high bias is particularly problematic for metals and requires installation and proper development of monitoring wells to obtain representative groundwater samples.

Subsequent to publication of the Saltbush Report, (later in 2004) Hart Crowser performed follow-on work at the site to obtain representative groundwater samples for chemical analysis. The Hart Crowser work included installation of three monitoring wells, development of the wells using standard protocols, and collection of representative groundwater samples from the developed wells in accordance with USGS and Ecology protocols. Significantly, none of the groundwater samples collected by Hart Crowser exceeded MTCA Method A groundwater cleanup standards.

In preparation for the future Strawberry Plant work, the City of Bainbridge Island contracted with Anchor QEA and Aspect Consulting (Aspect) to collect additional groundwater samples in 2008 from a representative site monitoring well (EP-4-W), which was established in the area of planned excavation. Again, the groundwater sample collected by Aspect did not

exceed MTCA Method A groundwater cleanup standards, verifying the 2004 Hart Crowser results (Table 1).

The 2008 Aspect work also included collection of soil samples from three target locations at the site. Soil test results from the Aspect investigation were compared to MTCA Method A unrestricted use soil cleanup standards (the most stringent soil criteria promulgated under MTCA for protection of human health and the environment). All of the soil samples contained chemical concentrations below MTCA Method A unrestricted use soil cleanup standards (Table 2). Significantly, the metals reported as “elevated” in the Saltbush Report (i.e., lead, chromium, cadmium, arsenic, and mercury) were within the natural background concentration range (95 percent probability level) of metals present in native Puget Sound soils.

While there have been no measured groundwater impacts in the project area, there is the potential that residual oil may be present in soils upgradient of the site related to the adjacent former Tosco bulk storage facility. This site has had active remediation and is currently undergoing long-term monitoring by Ecology. Based on groundwater test results at the project site, there is no reason to believe that contamination associated with the Tosco facility has impacted or will impact groundwater in the project area.

CONCLUSION

Upon review of the results of the recent work by Aspect, the prior work by Hart Crowser, and the recognition that the initial work by Saltbush would likely have resulted in erroneous conclusions about groundwater, there is no evidence that indicates the Strawberry Plant project site (i.e., the area of proposed habitat restoration) has impacted soils or groundwater, and no indication that the soils tested would be expected to pose a risk to environmental media or receptors.

**Table 1
Groundwater Results**

Task SampleID Sample Date	MTCA Method A Cleanup Levels for Groundwater	Strawberry Plant EP-4-W 8/25/08
Metals (µg/L)		
Arsenic	5	4.1
Barium	--	20.8
Cadmium	5	1 U
Chromium	50	2.08
Lead	15	1 U
Mercury	2	0.2 U
Selenium	--	1.04
Silver	--	1 U
Volatile Organic Compounds (µg/L)		
1,1,1,2-Tetrachloroethane	--	1 U
1,1,1-Trichloroethane	200	1 U
1,1,2,2-Tetrachloroethane	--	1 U
1,1,2-Trichloroethane	--	1 U
1,1-Dichloroethane	--	1 U
1,1-Dichloroethene	--	1 U
1,1-Dichloropropene	--	1 U
1,2,3-Trichlorobenzene	--	1 U
1,2,3-Trichloropropane	--	1 U
1,2,4-Trichlorobenzene	--	1 U
1,2,4-Trimethylbenzene	--	1 U
1,2-Dibromo-3-chloropropane	--	1 U
1,2-Dibromoethane (EDB)	0.01	1 U
1,2-Dichlorobenzene	--	1 U
1,2-Dichloroethane (EDC)	5	1 U
1,2-Dichloropropane	--	1 U
1,3,5-Trimethylbenzene	--	1 U
1,3-Dichlorobenzene	--	1 U
1,3-Dichloropropane	--	1 U
1,4-Dichlorobenzene	--	1 U
2,2-Dichloropropane	--	1 U
2-Butanone (MEK)	--	10 U
2-Chlorotoluene	--	1 U
2-Hexanone	--	10 U
4-Chlorotoluene	--	1 U
4-Methyl-2-pentanone	--	10 U
Acetone	--	10 U
Benzene	5	1 U
Bromobenzene	--	1 U
Bromodichloromethane	--	1 U
Bromoform	--	1 U
Bromomethane	--	1 U
Carbon Tetrachloride	--	1 U
Chlorobenzene	--	1 U
Chloroethane	--	1 U
Chloroform	--	1 U
Chloromethane	--	1 U
cis-1,2-Dichloroethene	--	1 U
cis-1,3-Dichloropropene	--	1 U
Dibromochloromethane	--	1 U

Table 1
Groundwater Results

Task SampleID Sample Date	MTCA Method A Cleanup Levels for Groundwater	Strawberry Plant EP-4-W 8/25/08
Dibromomethane	--	1 U
Ethylbenzene	700	1 U
Hexachlorobutadiene	--	1 U
Isopropylbenzene	--	1 U
m,p-Xylene	1000	2 U
Methyl t-butyl ether (MTBE)	20	1 U
Methylene chloride	5	5 U
Naphthalene	--	1 U
n-Propylbenzene	--	1 U
o-Xylene	1000	1 U
p-Isopropyltoluene	--	1 U
sec-Butylbenzene	--	1 U
Styrene	--	1 U
tert-Butylbenzene	--	1 U
Tetrachloroethene	5	1 U
Toluene	1000	1 U
trans-1,2-Dichloroethene	--	1 U
trans-1,3-Dichloropropene	--	1 U
Trichloroethene	5	1 U
Trichlorofluoromethane	--	1 U
Vinyl chloride	0.2	0.2 U
Semivolatile Organic Compounds (µg/L)		
1,2,4-Trichlorobenzene	--	1 U
1,2-Dichlorobenzene	--	1 U
1,3-Dichlorobenzene	--	1 U
1,4-Dichlorobenzene	--	1 U
2,4,5-Trichlorophenol	--	10 U
2,4,6-Trichlorophenol	--	10 U
2,4-Dichlorophenol	--	10 U
2,4-Dimethylphenol	--	10 U
2,4-Dinitrophenol	--	30 U
2,4-Dinitrotoluene	--	1 U
2,6-Dinitrotoluene	--	1 U
2-Chloronaphthalene	--	1 U
2-Chlorophenol	--	10 U
2-Methylnaphthalene	160	1 U
2-Methylphenol	--	10 U
2-Nitroaniline	--	1 U
2-Nitrophenol	--	10 U
3-Nitroaniline	--	3 U
4,6-Dinitro-2-methylphenol	--	30 U
4-Bromophenyl phenyl ether	--	1 U
4-Chloro-3-methylphenol	--	10 U
4-Chloroaniline	--	3 U
4-Chlorophenyl phenyl ether	--	1 U
4-Methylphenol	--	10 U
4-Nitroaniline	--	10 U
4-Nitrophenol	--	10 U
Acenaphthene	--	1 U
Acenaphthylene	--	1 U

Table 1
Groundwater Results


Task SampleID Sample Date	MTCA Method A Cleanup Levels for Groundwater	Strawberry Plant EP-4-W 8/25/08
Anthracene	--	1 U
Benz[a]anthracene	--	1 U
Benzo(a)pyrene	--	1 U
Benzo(b)fluoranthene	--	1 U
Benzo(ghi)perylene	--	1 U
Benzo(k)fluoranthene	--	1 U
Benzoic acid	--	100 U
Benzyl alcohol	--	1 U
Benzyl butyl phthalate	--	1 U
Bis(2-chloroethoxy)methane	--	1 U
Bis(2-chloroethyl) ether	--	1 U
Bis(2-chloroisopropyl) ether	--	1 U
Bis(2-ethylhexyl) phthalate	--	10 U
Carbazole	--	1 U
Chrysene	--	1 U
Dibenzo(a,h)anthracene	--	1 U
Dibenzofuran	--	1 U
Diethyl phthalate	--	1 U
Dimethyl phthalate	--	1 U
Di-n-butyl phthalate	--	1 U
Di-n-octyl phthalate	--	1 U
Fluoranthene	--	1 U
Fluorene	--	1 U
Hexachlorobenzene	--	1 U
Hexachlorobutadiene	--	1 U
Hexachlorocyclopentadiene	--	3 U
Hexachloroethane	--	1 U
Indeno(1,2,3-cd)pyrene	--	1 U
Isophorone	--	1 U
Naphthalene	160	1 U
Nitrobenzene	--	1 U
N-Nitroso-di-n-propylamine	--	1 U
N-Nitrosodiphenylamine	--	1 U
Pentachlorophenol	--	10 U
Phenanthrene	--	1 U
Phenol	--	10 U
Pyrene	--	1 U

Notes:

Bold = Detected result

U = Compound analyzed, but not detected above detection limit

 Detected concentration is greater than MTCA Method A Cleanup Level

 Non-detected value exceeds screening level

Draft, Unvalidated

**Table 2
Soil Results**

Task SampleID Sample Date	Sediment Quality Standard	Cleanup Screening Level	MTCA Method A ^a	Strawberry Plant EP-2/3-7 8/25/08	Strawberry Plant EP-4/5-8 8/25/08	Strawberry Plant EP-6/7-7 8/25/08
Metals (mg/kg)						
Arsenic	57	93	20	4.28	4.47	8.43
Barium	--	--	--	20.7	15.2	72.6
Cadmium	5.1	6.7	2	1 U	1 U	1 U
Chromium	260	270	19 ^b	16.9	8.99	13.4
Lead	450	530	250	14.7	7.76	39.8
Mercury	0.41	0.59	2	0.2 U	0.2 U	0.26
Selenium	--	--	--	1 U	1 U	1 U
Silver	6.1	6.1	--	1 U	1 U	1 U
Volatile Organic Compounds (mg/kg)						
1,1,1,2-Tetrachloroethane	--	--	--	0.05 U	0.05 U	0.05 U
1,1,1-Trichloroethane	--	--	2	0.05 U	0.05 U	0.05 U
1,1,2,2-Tetrachloroethane	--	--	--	0.05 U	0.05 U	0.05 U
1,1,2-Trichloroethane	--	--	--	0.05 U	0.05 U	0.05 U
1,1-Dichloroethane	--	--	--	0.05 U	0.05 U	0.05 U
1,1-Dichloroethene	--	--	--	0.05 U	0.05 U	0.05 U
1,1-Dichloropropene	--	--	--	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene	--	--	--	0.1 U	0.1 U	0.1 U
1,2,3-Trichloropropane	--	--	--	0.05 U	0.05 U	0.05 U
1,2,4-Trichlorobenzene	--	--	--	0.1 U	0.1 U	0.1 U
1,2,4-Trimethylbenzene	--	--	--	0.05 U	0.05 U	0.05 U
1,2-Dibromo-3-chloropropane	--	--	--	0.05 U	0.05 U	0.05 U
1,2-Dibromoethane (EDB)	--	--	0.005	0.05 U	0.05 U	0.05 U
1,2-Dichlorobenzene	--	--	--	0.05 U	0.05 U	0.05 U
1,2-Dichloroethane (EDC)	--	--	--	0.05 U	0.05 U	0.05 U
1,2-Dichloropropane	--	--	--	0.05 U	0.05 U	0.05 U
1,3,5-Trimethylbenzene	--	--	--	0.05 U	0.05 U	0.05 U
1,3-Dichlorobenzene	--	--	--	0.05 U	0.05 U	0.05 U
1,3-Dichloropropane	--	--	--	0.05 U	0.05 U	0.05 U
1,4-Dichlorobenzene	--	--	--	0.05 U	0.05 U	0.05 U
2,2-Dichloropropane	--	--	--	0.05 U	0.05 U	0.05 U
2-Butanone (MEK)	--	--	--	0.5 U	0.5 U	0.5 U
2-Chlorotoluene	--	--	--	0.05 U	0.05 U	0.05 U
2-Hexanone	--	--	--	0.5 U	0.5 U	0.5 U
4-Chlorotoluene	--	--	--	0.05 U	0.05 U	0.05 U
4-Methyl-2-pentanone	--	--	--	0.5 U	0.5 U	0.5 U
Acetone	--	--	--	0.5 U	0.5 U	0.5 U
Benzene	--	--	0.03	0.03 U	0.03 U	0.03 U
Bromobenzene	--	--	--	0.05 U	0.05 U	0.05 U
Bromodichloromethane	--	--	--	0.05 U	0.05 U	0.05 U
Bromoform	--	--	--	0.05 U	0.05 U	0.05 U
Bromomethane	--	--	--	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	--	--	--	0.05 U	0.05 U	0.05 U
Chlorobenzene	--	--	--	0.05 U	0.05 U	0.05 U
Chloroethane	--	--	--	0.5 U	0.5 U	0.5 U
Chloroform	--	--	--	0.05 U	0.05 U	0.05 U
Chloromethane	--	--	--	0.05 U	0.05 U	0.05 U
cis-1,2-Dichloroethene	--	--	--	0.05 U	0.05 U	0.05 U
cis-1,3-Dichloropropene	--	--	--	0.05 U	0.05 U	0.05 U
Dibromochloromethane	--	--	--	0.05 U	0.05 U	0.05 U
Dibromomethane	--	--	--	0.05 U	0.05 U	0.05 U
Dichlorodifluoromethane	--	--	--	0.5 U	0.5 U	0.5 U
Ethylbenzene	--	--	6	0.05 U	0.05 U	0.05 U
Hexachlorobutadiene	--	--	--	0.1 U	0.1 U	0.1 U
Isopropylbenzene	--	--	--	0.05 U	0.05 U	0.05 U
m,p-Xylene	--	--	9	0.1 U	0.1 U	0.1 U
Methyl t-butyl ether (MTBE)	--	--	0.1	0.05 U	0.05 U	0.05 U

**Table 2
Soil Results**

Task SampleID Sample Date	Sediment Quality Standard	Cleanup Screening Level	MTCA Method A ^a	Strawberry Plant EP-2/3-7 8/25/08	Strawberry Plant EP-4/5-8 8/25/08	Strawberry Plant EP-6/7-7 8/25/08
Methylene chloride	--	--	0.02	0.5 U	0.5 U	0.5 U
Naphthalene	--	--	--	0.05 U	0.05 U	0.05 U
n-Propylbenzene	--	--	--	0.05 U	0.05 U	0.05 U
o-Xylene	--	--	9	0.05 U	0.05 U	0.05 U
p-Isopropyltoluene	--	--	--	0.05 U	0.05 U	0.05 U
sec-Butylbenzene	--	--	--	0.05 U	0.05 U	0.05 U
Styrene	--	--	--	0.05 U	0.05 U	0.05 U
tert-Butylbenzene	--	--	--	0.05 U	0.05 U	0.05 U
Tetrachloroethene	--	--	0.05	0.025 U	0.025 U	0.025 U
Toluene	--	--	7	0.05 U	0.05 U	0.05 U
trans-1,2-Dichloroethene	--	--	--	0.05 U	0.05 U	0.05 U
trans-1,3-Dichloropropene	--	--	--	0.05 U	0.05 U	0.05 U
Trichloroethene	--	--	0.03	0.03 U	0.03 U	0.03 U
Trichlorofluoromethane	--	--	--	0.5 U	0.5 U	0.5 U
Vinyl chloride	--	--	--	0.05 U	0.05 U	0.05 U
Semivolatile Organic Compounds (mg/kg)						
1,2,4-Trichlorobenzene	--	--	--	0.03 U	0.03 U	0.03 U
1,2-Dichlorobenzene	--	--	--	0.03 U	0.03 U	0.03 U
1,3-Dichlorobenzene	--	--	--	0.03 U	0.03 U	0.03 U
1,4-Dichlorobenzene	--	--	--	0.03 U	0.03 U	0.03 U
2,4,5-Trichlorophenol	--	--	--	0.3 U	0.3 U	0.3 U
2,4,6-Trichlorophenol	--	--	--	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	--	--	--	0.3 U	0.3 U	0.3 U
2,4-Dimethylphenol	--	--	--	0.3 U	0.3 U	0.3 U
2,4-Dinitrophenol	--	--	--	0.9 U	0.9 U	0.9 U
2,4-Dinitrotoluene	--	--	--	0.03 U	0.03 U	0.03 U
2,6-Dinitrotoluene	--	--	--	0.03 U	0.03 U	0.03 U
2-Chloronaphthalene	--	--	--	0.03 U	0.03 U	0.03 U
2-Chlorophenol	--	--	--	0.3 U	0.3 U	0.3 U
2-Methylnaphthalene	--	--	5	0.03 U	0.03 U	0.03 U
2-Methylphenol	--	--	--	0.3 U	0.3 U	0.3 U
2-Nitroaniline	--	--	--	0.03 U	0.03 U	0.03 U
2-Nitrophenol	--	--	--	0.3 U	0.3 U	0.3 U
3-Nitroaniline	--	--	--	0.9 U	0.9 U	0.9 U
4,6-Dinitro-2-methylphenol	--	--	--	0.9 U	0.9 U	0.9 U
4-Bromophenyl phenyl ether	--	--	--	0.03 U	0.03 U	0.03 U
4-Chloro-3-methylphenol	--	--	--	0.3 U	0.3 U	0.3 U
4-Chloroaniline	--	--	--	3 U	3 U	3 U
4-Chlorophenyl phenyl ether	--	--	--	0.03 U	0.03 U	0.03 U
4-Methylphenol	--	--	--	0.3 U	0.3 U	0.3 U
4-Nitroaniline	--	--	--	0.9 U	0.9 U	0.9 U
4-Nitrophenol	--	--	--	0.3 U	0.3 U	0.3 U
Acenaphthene	--	--	--	0.03 U	0.03 U	0.03 U
Acenaphthylene	--	--	--	0.03 U	0.03 U	0.03 U
Anthracene	--	--	--	0.03 U	0.03 U	0.03 U
Benz[a]anthracene	--	--	--	0.03 U	0.03 U	0.033
Benzo(a)pyrene	--	--	0.1	0.03 U	0.03 U	0.038
Benzo(b)fluoranthene	--	--	--	0.03 U	0.03 U	0.053
Benzo(ghi)perylene	--	--	--	0.03 U	0.03 U	0.039
Benzo(k)fluoranthene	--	--	--	0.03 U	0.03 U	0.03 U
Benzoic acid	--	--	--	3 U	3 U	3 U
Benzyl alcohol	--	--	--	0.03 U	0.03 U	0.03 U
Benzyl butyl phthalate	--	--	--	0.03 U	0.03 U	0.03 U
Bis(2-chloroethoxy)methane	--	--	--	0.03 U	0.03 U	0.03 U
Bis(2-chloroethyl) ether	--	--	--	0.03 U	0.03 U	0.03 U
Bis(2-chloroisopropyl) ether	--	--	--	0.03 U	0.03 U	0.03 U
Bis(2-ethylhexyl) phthalate	--	--	--	0.3 U	0.3 U	0.3 U

**Table 2
Soil Results**

Task SampleID Sample Date	Sediment Quality Standard	Cleanup Screening Level	MTCA Method A ^a	Strawberry Plant EP-2/3-7 8/25/08	Strawberry Plant EP-4/5-8 8/25/08	Strawberry Plant EP-6/7-7 8/25/08
Carbazole	--	--	--	0.03 U	0.03 U	0.03 U
Chrysene	--	--	--	0.03 U	0.03 U	0.039
Dibenzo(a,h)anthracene	--	--	--	0.03 U	0.03 U	0.03 U
Dibenzofuran	--	--	--	0.03 U	0.03 U	0.03 U
Diethyl phthalate	--	--	--	0.03 U	0.03 U	0.03 U
Dimethyl phthalate	--	--	--	0.03 U	0.03 U	0.03 U
Di-n-butyl phthalate	--	--	--	0.03 U	0.03 U	0.03 U
Di-n-octyl phthalate	--	--	--	0.03 U	0.03 U	0.03 U
Fluoranthene	--	--	--	0.03 U	0.03 U	0.067
Fluorene	--	--	--	0.03 U	0.03 U	0.03 U
Hexachlorobenzene	--	--	--	0.03 U	0.03 U	0.03 U
Hexachlorobutadiene	--	--	--	0.03 U	0.03 U	0.03 U
Hexachlorocyclopentadiene	--	--	--	0.09 U	0.09 U	0.09 U
Hexachloroethane	--	--	--	0.03 U	0.03 U	0.03 U
Indeno(1,2,3-cd)pyrene	--	--	--	0.03 U	0.03 U	0.03
Isophorone	--	--	--	0.03 U	0.03 U	0.03 U
Naphthalene	--	--	5	0.03 U	0.03 U	0.03 U
Nitrobenzene	--	--	--	0.03 U	0.03 U	0.03 U
N-Nitroso-di-n-propylamine	--	--	--	0.03 U	0.03 U	0.03 U
N-Nitrosodiphenylamine	--	--	--	0.03 U	0.03 U	0.03 U
Pentachlorophenol	--	--	--	0.3 U	0.3 U	0.3 U
Phenanthrene	--	--	--	0.03 U	0.03 U	0.03 U
Phenol	--	--	--	0.3 U	0.3 U	0.3 U
Pyrene	--	--	--	0.03 U	0.03 U	0.064
Carcinogenic PAH TEC	--	--	0.1	0.02265 U	0.02265 U	0.05299

Notes:

Bold = Detected result

U = Compound analyzed, but not detected above detection limit

a MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses

b Value is for Chromium IV cleanup level

Total PAHs were calculated using 1/2 of the reporting limit for non-detected results

 Detected concentration is greater than MTCA Method A Cleanup Level

 Non-detected value exceeds screening level

Draft, Unvalidated