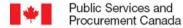




### CFB Comox FFTA Source Control Project

Mandatory Bidder's Meeting Wednesday, January 20, 2021 10:00am PDT

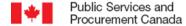




### Agenda

- Introductions
- Bidder's Meeting Overview
- Project Timing
- DND Remarks
- Security
- Site Overview, with Video Tour
- Evaluation Criteria
- Base & Optional Combined Price Form
- Other Mandatory Submissions

2





### Introductions

Department of National Defence:

Pam Cushing Marie Goulden

Public Services and Procurement Canada:

Janie Leung

Raman Birk

**Andrew Smith** 

**Dave Osguthorpe** 

Ruby Pennell

Stephanie James

Rob Thomas

3





### Introductions

### **Consultant Team:**

Korene Torney - SLR

Dave Kettlewell - SNC-Lavalin

Doug McMillan – SNC-Lavalin

Mark Edwards – SNC-Lavalin

Registered Bidder's MUST enter their firm name into the chat window during the meeting to verify attendance

4

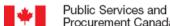




### **Bidder's Meeting Overview**

- This meeting is to familiarize the bidders with the site. Anything presented today does not take precedence over the tender documents. The bidders are to refer to the tender documents in their entirety.
- Questions from bidder's should be submitted in writing to Janie Leung-PSPC Contracting Authority and answers to be provided as addenda. No answers will be provided during this meeting.

5





### **Bidder's Meeting Overview**

### Virtual Meeting Rules and Instructions

- Attendees will be muted
- Attendees may be removed from the meeting after being warned in the event of inappropriate behavior
- There will be a video tour of the site during the Site Overview If there are requests for clarification regarding the videos – raise your hand or type a note into the chat
- Recording is NOT allowed







### **Bidder's Meeting Overview**

### <u>Virtual Meeting Rules and Instructions</u>

 Items discussed are not a complete list and the contractor is to refer to the tender documents for all requirements

7

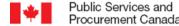




### **Project Timing Requirements**

- o Tender close is 14:00 PDT, February 10, 2021.
- Tender award: a couple weeks after tender close.
- O All work to be completed by:
  - Site Works to be completed by November 01, 2021
  - Completion of Work by February 28, 2022

8





### **DND Remarks**



9

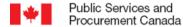




### **Security**

- There is a security requirement for this project as per the posted RFP documents.
- There will be NO EXCEPTIONS for security on this project.
- Any personnel that violate any of the security instructions or fail to adhere to direction from the base security personnel may have their access to CFB Comox revoked (at minimum).
- There is a strict NO-PHOTOGRAPHY rule at the base.
- Failure to obtain and maintain security clearances and base access IS NOT a reasonable or excusable cause for delays or non-performance of the Contract. Costs incurred by Canada due to non-performance as a result of security issues on the part of the Contractor may be sought as liquidated damages as per the General Conditions of the Contract.

10

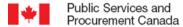




### **Site Overview**

SLR Presentation

11





### **CFB COMOX**FIRE FIGHTING TRAINING AREA

Source Control Project





### **PROJECT INTRODUCTION**

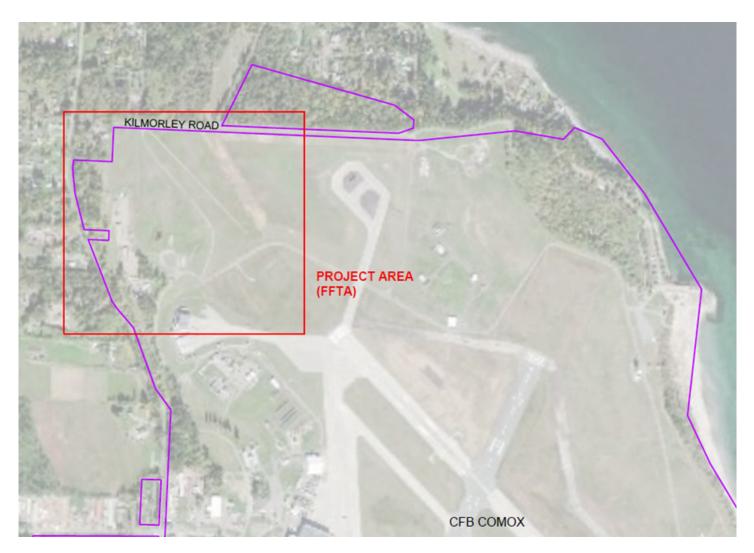


- Environmental Protection
- Site and Facility Preparation
- Excavation, Stockpiling
- Transport and Destruction
- Stabilization
- Backfilling (import and reused)
- FFTA construction and utilities
- Bioswale construction

### **Project objective:**

- Remove/stabilize source zone PFAS contaminated soil
- rebuild the FFTA







## **CURRENT FFTA LAYOUT**





## FINAL PRODUCT - NEW FFTA





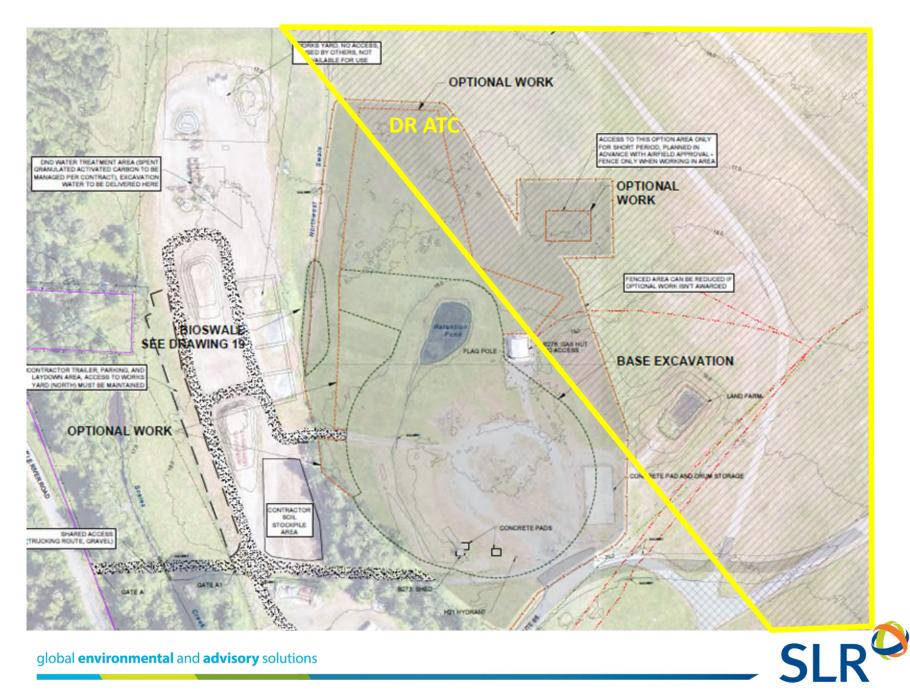
### vs OPTIONAL BASE

### OPTIONAL WORK BZ/E GAS HUT BASE EXCAVA CONCRETE PAD AND D 8273 SHED HIS HYDRANT



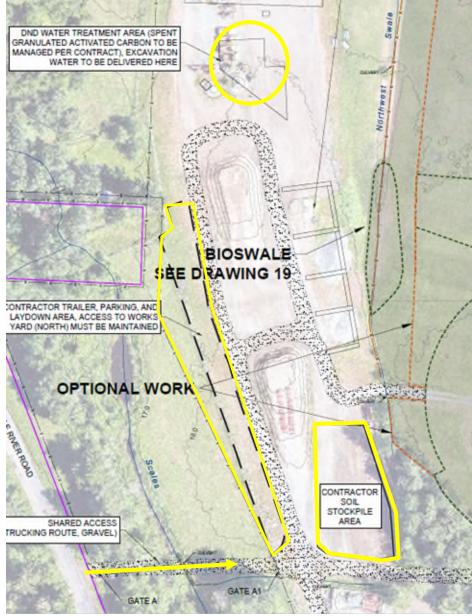
### **VIDEO HERE**







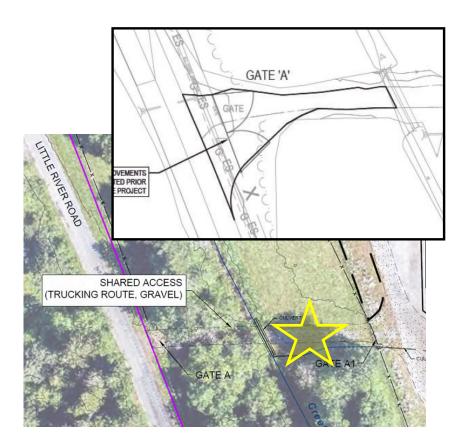
# CONTRACTOR LAYDOWN AREA





### **ACCESS**

Traffic Management Plan – Submittal







### **MAJOR SCOPE ITEMS**

- Excavation
- Transportation
- Destruction and Disposal
- Stabilization
- Backfill
- FFTA Design/Construction
- Bioswale Design/Construction
- Water Treatment



### **OTHER SCOPE ITEMS**

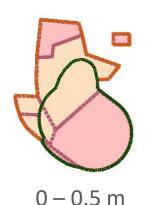
- Shed
- Concrete
- Drums and GAC bin
- Utility removal/replacement

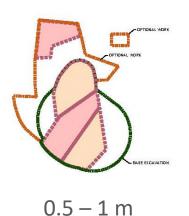


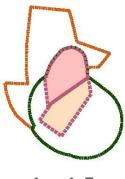


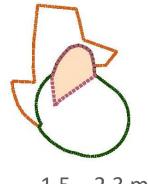


### **EXCAVATION (SLICES SIMPLIFIED)**









1 - 1.5 m 1.5 - 2.3 m

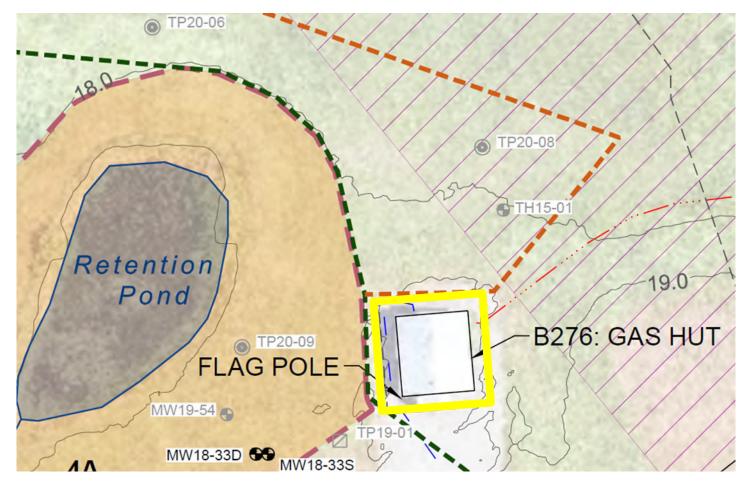
**Green** = New FFTA footprint (Virgin backfill)

Red = Soil for Destruction (PFOS > 0.54 mg/kg)

Orange = Soil for Stabilization and Reuse (PFOS > 0.14 mg/kg and ≤0.54 mg/kg)

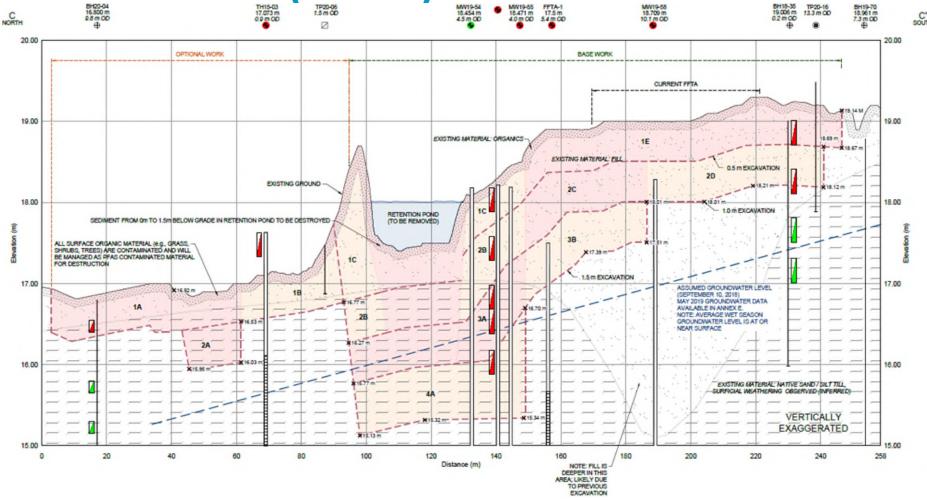


### **EXCAVATION NEAR GAS HUT**





### EXCAVATION (SLICES) Broods 16.800m 0.8m00 Process Trins-03 17.072 m 0.9m00 Process Trins-04 1.5m00 Process Trins-04 1





### **CONTAMINATION**

### Soil

- PFAS
- Petroleum Hydrocarbons
- Polycyclic Aromatic Hydrocarbons (PAHs)
- pH
- Metals

### Groundwater

- PFAS
- Volatile Organic Compounds (VOCs)
- Metals

			PFOS	Chemi	cal Groups Excluding PFOS
Excavation		Sample Depth	FSQG IL PFOS Exceedances	BC CSR IL. Standard Exceedances	CCME CLAL Guideline Exceedances
Area	Sample Location	(mbg)	µg/g		
Base	BH18-33 (MW18-33S/D)	0-0.3	0.24		Metals-
Base	BH18-35	0-0.3	0.34		*
Base	TH15-07	0-0.3	0.44		
Base	TH15-08	0.0.6	2.7		
Base	TP1	0.0.5	0.183	-	Hydrocarbons
Base	TP19-01	0.19-0.37	0.507	-	-
Base	TP19-02	0.11-0.29	4.32	-	
Base	TP19-03	0.2-0.4	1.34		
Base	TP19-04	0.17-0.34	1.68		
Base	TP2	0-0.5	1.81	Metals	Hydrocarbons, Metals
Base	TP4	0-0.3	0.165		
Base	TP5	0.0.6	0.591		
Base	TP9	0-0.3	1,06		
Base	TP9	0.3-0.6	0.422	-	Hydrocarbons, PAH, Metals
Optional	BH15-32 (MW18-32S/D)	0-0.3	1.8	-	
Optional	BH18-32 (MW18-32S/D)	0.4-0.7	0.58		
Optional	8H18-40	0-0.3	0.67		
Optional	8H18-40	0.3-0.6	0.056		Metals
Optional	TH15-01	0-0.4	0.45	-	-
Optional	TH15-03	0-0.3	0.22		
Optional	TH15-10	0.3-0.6	0.13	-	
	TP19-05	0.1-0.25	10.3	-	

n.a. - not analysed

mbg - metres below grade µg/g - micrograms per gram

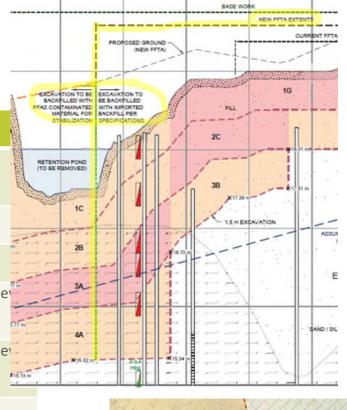
CCME - Canadian Council of Ministers of the Environment

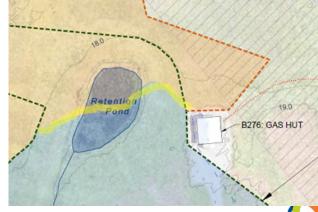
CSR - Contaminated Sites Regulations CL/IL - Commercial / Industrial Land Use FSQG - Federal Soil Quality Guideline



### **BACKFILL**

Deal-fill Material True	Description	Bower
Backfill Material Type	Description	Payment
(per MMCD)	(Brief)	
FFTA - Granular Base	<19mm	Included in New FFTA
		construction, no unit rate,
		see 32 11 23
FFTA - Crushed	<75mm	Unit rate; by weight,
Granular Sub-Base		see 32 11 16
MASS BACKFILL –	<100mm	Unit rate; by weight,
100 mm Pit Run Gravel		see 32 11 16
UTILITIIES - Granular	<25mm for	no unit rate, included in Ne
Pipe Bedding	utilities	FFTA construction,
		see 01 25 00
UTILITIES - Drain Rock	<25mm for	no unit rate, included in Ne
	utilities	FFTA construction,
		see 01 25 00
MASS BACKFILLING	Reused site	Payment per PFAS
OUTSIDE FFTA	soil	Stabilization costs, see 02 61
Stabilized PFAS		00.05
Contaminated Material		
FFTA OTHER AND	Per	Included in Site Restoration
BIOSWALE	Contractor's	and Bioswale, no unit rate,
Miscellaneous Backfill	Site	see 01 25 20
Materials to be	Restoration	
specified by	and	
Contractor's QP	Bioswale	
	Design	
	Design	





global  ${\bf environmental}$  and  ${\bf advisory}$  solutions

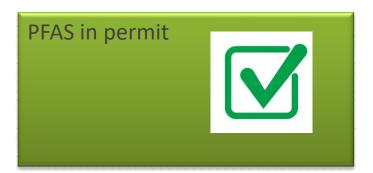
### **DISPOSAL – 3 CATEGORIES**

- 1. PFAS contaminated material after destruction
- 2. Concrete note specific requirements
- 3. Demo material (utilities, shed)



### PFAS DESTRUCTION

- Existing Facility
- Facility Regulator permit, license, approval, etc.
- Destruction is <u>stipulated</u> AND Destruction is defined as meeting DET



PFAS not in permit QP-PFAS to confirm

- Temperature (1100°C).
- concentration reduction, and
- Process control requirements



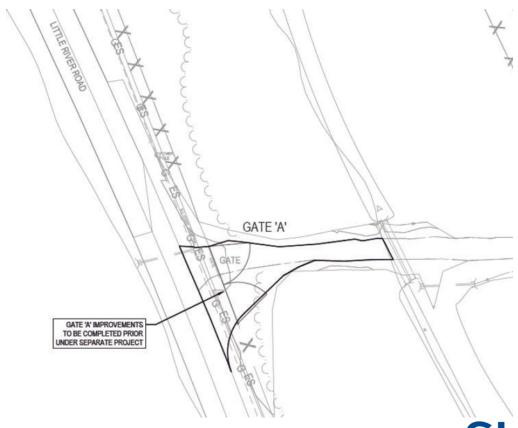
### **PFAS STABILIZATION**

- Objective: reduce PFAS mobility in the environment and by binding contaminants in place reduce groundwater and surface water concentrations.
- The Work includes stabilization to meet PFAS Stabilization Efficacy Target (SET) by mixing site soil with approved Amendment(s).
  - Fluorosorb 200 [a Cetco Product] at a 1% minimum dosage rate by weight,
  - RemBind Plus [A Ziltek Product] at a 4% minimum dosage rate by weight, or
  - Equivalent via Amendment Equivalency Proposal and Documentation;
- Be compacted to density of not less than 90% modified maximum proctor dry density test in accordance with ASTM D1557;



### **TRANSPORTATION**

- Contaminated Material Transportation Plan Submittal
- Interim Storage Facility(ies) permitted, environmental protection



### **WATER TREATMENT**

- Contractor responsibilities
  - Dewatering scope and equipment
  - Storage of water
  - Removal of sediment (turbidity)
  - Transport to PSPC treatment plant
- PSPC

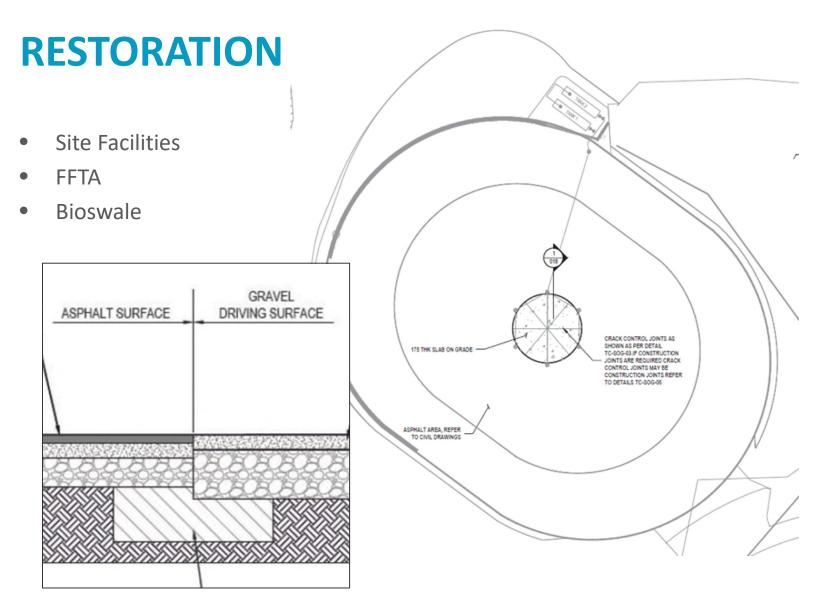
 Contaminant treatment and discharge



GRANULATED ACTIVATED CARBON TO BE MANAGED PER CONTRACT), EXCAVATION

VATER TO BE DELIVERED HERE

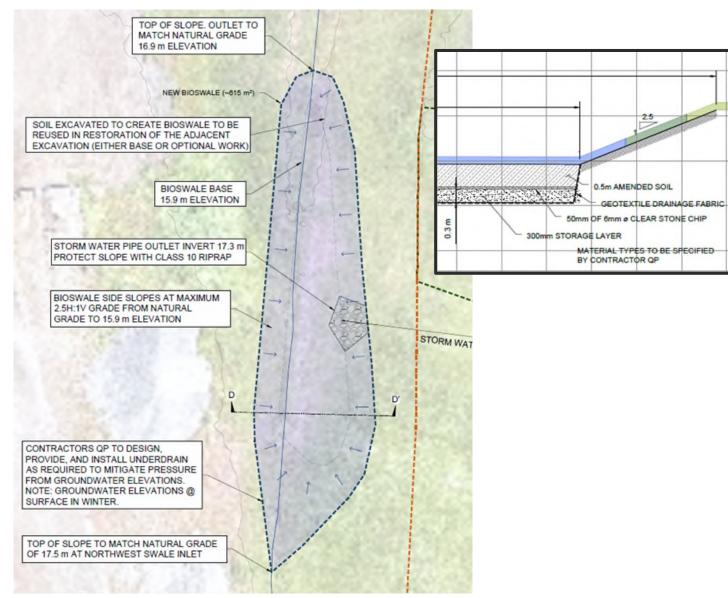








## **BIOSWALE CONCEPT**





### **Surveys**

- Pre and Post Construction Condition Survey
- Progress Surveying
- Marine Surveys (as required)
- Final Excavation Limits
- As-built survey
- Conditions Survey



### **CONTRACTOR SUBMITTALS – PRE-MOB**

Section	Contractor's Submission	Submitted When
01 11 55	<ul> <li>Construction Work Plan includes:</li> <li>Shed Demolition Plan (02 41 13)</li> <li>Contaminated Water Management (Turbidity Reduction) Plan (02 61 00.01)</li> <li>Contaminated Soil and Water Management Plan (02 61 00.02)</li> <li>Excavation and Backfilling Plan (02 61 00.02)</li> <li>Contaminated Material Transportation Plan (02 61 00.03)</li> <li>PFAS Contaminated Material Destruction Plan (02 61 00.04)</li> <li>PFAS Contaminated Material Stabilization Plan. (02 61 00.05)</li> <li>Concrete Disposal (02 61 00.06)</li> </ul>	10 days after award, with Master Plan
01 25 20	<ul> <li>Design and Construction Plans includes:</li> <li>Site Restoration and Bioswale Design</li> <li>New FFTA Design</li> </ul>	20 days after award



### **CONTRACTOR SUBMITTALS – DURING WORK**

Section	Contractor's Submission	Submitted When
01 11 55	Daily Work Records	Daily, end of shift
01 31 19	Progress Information / Meetings Minutes (e.g., cash flow, schedule)	5 days prior to submission
01 32 16	Interruption of Service, After Hrs Work, Work in DR ATC	At least 5 days prior
01 45 00	Review, Inspection and Testing Results	Within 5 days of receipt
02 61 00.02	Backfill	5 days before delivery
02 61 00.03	Transport Manifests	Within 5 days of receipt

Section	Contractor's Submission	Submitted When
02 61 00.04	Certificate of Destruction	Within 30 days of treatment at PFAS Destruction Facility and prior to payment, and prior to Final Completion
02 61 00.05	Certificate of Stabilization	Within 30 days of completing PFAS Stabilization and prior to payment, and prior to Final Completion
02 61 00.06	Certificate of Disposal	Within 30 days of disposal at Disposal Facility and prior to payment, and prior to Final Completion



### **CONTRACTOR SUBMITTALS – COMPLETION**

Section	Contractor's Submission	Submitted When
01 25 20	As-Built Documents , Post-Construction Condition Survey,	Within 10 days of
		completing site work
01 25 20	Close-out Documents	Within 20 days of Final
		Completion of site
		restoration
01 31 19	Final Site Inspection	Within 2 days of the final
01 78 30		site inspection
01 78 30	Record Documents	No later than 10 days
		after completion of the
		work
01 78 30	Certificate of Completion	No later than 10 days
		after completion of the
		work



### **UNIT PRICE TABLE**

		BAS	SE WORK (A)			
Item	Class of Labour, Plant or Material	Specification Section	Unit of Measure	Estimated Quantity (EQ)	Price per Unit (PU) applicable taxes extra	Extended amoun (EQ x PU) applicable taxes extra
1	Standby Time	01 11 55	Hours	40		
2	Pre-Mobilization Submittals	01 25 20	Lump Sum	1		
3	Mobilizatio <i>n</i>	01 25 20	Lump Sum	1		
4	Site Preparation	01 25 20	Lump Sum	1		
5	Demobilization	01 25 20	Lump Sum	1		
6	Site Facilities – Provision	01 52 00	Lump Sum	1		
7	Site Facilities - Operation	01 52 00	Days	60		
8	Weigh Scale	01 52 00	Lump Sum	1		
9	Closeout Submittals	01 78 30	Lump Sum	1		
10	Shed Demolition and Disposal	02 41 13	Lump Sum	1		
11	Contaminated Water Management (Turbidity Reduction) – Provision	02 61 00.01	Lump Sum	1		
12	Contaminated Water Management (Turbidity Reduction) - Operation	02 61 00.01	Lump Sum	1		
13	Excavation	02 61 00.02	Cubic Meters	15,600		
14	Backfill Material - Crushed Granular Sub-Base	32 11 16	Tonnes	10,600		



tem	Class of Labour, Plant or	Specification	Unit of	Estimated	Price per	Extended amount
	Material	Section	Measure	Quantity (EQ)	Unit (PU) applicable taxes extra	(EQ x PU) applicable taxes extra
15	Backfill Material - 100 mm Pit Run Gravel	32 11 16	Tonnes	17,800		
16	PFAS Contaminated Soil for Destruction	02 61 00.04	Tonnes	12,500		
17	PFAS Contaminated Soil for Stabilization	02 61 00.05	Tonnes	15,500		
18	PFAS Stabilization Amendment	02 61 00.05	Lump Sum	1		
19	Concrete Disposal	02 61 00.06	Lump Sum	1		
20	Site Restoration and Bioswale	01 25 20	Lump Sum	1		
21	New FFTA Design and Construction	01 25 20	Lump Sum	1		



	OPTIONAL WORK (B)						
Item	Class of Labour, Plant or Material	Specification Division - Section	Unit of Measure	Estimated Quantity (EQ)	Price per Unit (PU) applicable taxes extra	Extended amount (EQ x PU) applicable taxes extra	
1	Standby Time	01 11 55	Hours	10			
2	Site Preparation	01 25 20	Lump Sum	1			
3	Site Facilities - Operation	01 52 00	Days	25			
4	Weigh Scale	01 52 00	Lump Sum	1			
5	Contaminated Water Management (Turbidity Reduction) - Operation	02 61 00.01	Lump Sum	1			
6	Excavation	02 61 00.02	Cubic Meters	5,600			
7	PFAS Contaminated Soil for Destruction	02 61 00.04	Tonnes	6,500			



	OPTIONAL WORK (B)						
Item	Class of Labour, Plant or Material	Specification Division - Section	Unit of Measure	Estimated Quantity (EQ)	Price per Unit (PU) applicable taxes extra	Extended amount (EQ x PU) applicable taxes extra	
8	PFAS Contaminated Soil for Stabilization	02 61 00.05	Tonnes	3,500			
9	PFAS Stabilization Amendment	02 61 00.05	Lump Sum	1			
10	Site Restoration	01 25 20	Lump Sum	1			
	OPTIONAL WORK (B) - TOTAL EXTENDED AMOUNT Excluding applicable taxe(s))						

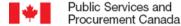
TOTAL EVALUATED BID PRICE					
A Total Extended Amount – Base Work					
B Total Extended Amount – Optional Work					
TOTAL BID AMOUNT: Base Work (A) + Optional Work (B) Excluding applicable tax(es)					



### **Evaluation Criteria**

- Three main components
  - Mandatory Criteria
  - Point Rated Criteria
  - Price Evaluation
- Bid Format
- Generic Evaluation Criteria
- Basis of Selection Examples

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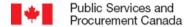




### **Base/Optional Combined Price Form**

- Complete BOTH UPTs
  - Base and Optional
- Base + Optional = Total Bid Amount
- Total Bid Amount is used for the price evaluation
- Optional Award will based on Budget, Schedule, and/or Base Operations

13





### **Other Mandatory Submissions**

- Price Proposal/Bid and Acceptance Form
- Integrity Provisions
- Bid Security

14





### **Questions**

Questions from bidder's should be submitted in writing to Janie Leung– PWGSC Contracting Authority and answers to be provided as addenda.

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