



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSION À :**  
Parks Canada Agency Bid Receiving Unit  
National Contracting Services  
Parks Canada Agency  
Suite 1300, 635 – 8<sup>th</sup> Avenue SW  
Calgary, AB T2P 3M3

## REQUEST FOR PROPOSAL

## DEMANDE DE PROPOSITION

### Proposal to: Parks Canada Agency

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred or attached hereto, the goods, services and construction listed herein or on any attached sheets at the price(s) set out therefor.

### Proposition à : l'Agence Parcs Canada

Nous offrons par la présente de vendre à sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

### Comments – Commentaires:

Due to the nature of the bid solicitation, bids transmitted by email or facsimile to PCA will not be accepted.

This bid solicitation contains mandatory and point rated technical evaluation criteria. In its bid, Bidders must address clearly and in sufficient depth the evaluation criteria that are subject to technical evaluation.

### Issuing Office - Bureau de distribution :

Parks Canada Agency  
National Contracting Services  
Suite 1300, 635 – 8<sup>th</sup> Avenue SW  
Calgary, AB T2P 3M3

<b>Title - Sujet</b> Landscaping & Vegetation Restoration – Waterton Lakes National Park, AB		
<b>Solicitation No. - N° de l'invitation</b> 5P420-17-5044/A	<b>Date</b> May 29, 2017	
<b>GETS Reference No. - N° de référence SEAG</b> PW-17-00780770		
<b>Solicitation Closes - L'invitation prend fin</b>  <b>At - à :</b> 02 :00 PM <b>On - le :</b> June 20, 2017		<b>Time Zone - Fuseau horaire</b> Mountain Daylight Time (MDT)
<b>F.O.B. - F.A.B.</b> <b>Plant - Usine :</b> <input type="checkbox"/> <b>Destination :</b> <input checked="" type="checkbox"/> <b>Other - Autre :</b> <input type="checkbox"/>		
<b>Address Enquiries to - Adresser toutes questions à</b> Joanne Cuthbert		
<b>Telephone No. - N° de telephone</b> (403) 292-4558	<b>Fax No. -N° de télécopieur</b> (403) 292-4475	<b>Email Address - Courriel</b> <a href="mailto:joanne.cuthbert@pc.gc.ca">joanne.cuthbert@pc.gc.ca</a>
<b>Destination of Goods, Services, and Construction - Destination des biens, services, et construction</b> Waterton Lakes National Park, AB		

### TO BE COMPLETED BY THE BIDDER - À REMPLIR PAR LE SOUMISSIONNAIRE

<b>Vendor/ Firm Name - Raison sociale et adresse du fournisseur/ de l'entrepreneur</b>	
<b>Address - Adresse</b>	
<b>Telephone No. - N° de telephone</b>	<b>Fax No. - N° de télécopieur</b>
<b>Name of person authorized to sign on behalf of the Vendor/ Firm (type or print) - Nom de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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Contracting Authority - Autorité contractante  
Oksana Kuzyshyn

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Security Requirements**

There are no security requirements associated with this requirement.

### **1.2 Statement of Work**

The Work to be performed is detailed under Article 6.2 of the resulting contract clauses.

### **1.3 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.4 Optional Site Visit**

It is recommended that the Bidder or a representative of the Bidder visit the work site. Arrangements have been made for the site visit to be held at 1 Compound Road, Waterton, AB on June 06, 2017. The site visit will begin at 01:30 MDT, in Warden Office Boardroom.

Bidders are requested to communicate with the Contracting Authority no later than June 05, 2017 at 1:30 PM MDT to confirm attendance and provide the name(s) of the person(s) who will attend. Bidders may be requested to sign an attendance sheet. Bidders who do not attend or do not send a representative will not be given an alternative appointment but they will not be precluded from submitting a bid. Any clarifications or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation.

### **1.5 Trade Agreements**

The requirement is subject to the provisions of the Agreement on Internal Trade (AIT).

## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2017-04-27) Standard Instructions – Goods or Services – Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

All reference to the Minister of Public Works and Government Services Canada shall be deleted and replaced with the Minister of the Environment and Climate Change for the purposes of the Parks Canada Agency. All reference to the Department of Public Works and Government Services Canada shall be deleted and replaced with the Parks Canada Agency.

### 2.2 Submission of Bids

Bids must be submitted only to Parks Canada Agency (PCA) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by email or facsimile to PCA will not be accepted.

### 2.3 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c. C-17, the [Defence Services Pension Continuation Act](#), 1970, c. D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c. R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c. R-11, the [Members of Parliament Retiring Allowances Act](#), R.S. 1985, c. M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, c. C-8.

#### Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes** ( ) **No** ( )

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2012-2](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

#### Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** ( ) **No** ( )

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

## 2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

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## **2.5 Applicable Laws**

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Alberta.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3.1 Bid Preparation Instructions**

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid one hard copy

Section II: Financial Bid one hard copy

Section III: Certifications one hard copy

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

#### **Section I: Technical Bid**

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

#### **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

##### **3.1.1 Exchange Rate Fluctuation**

SACC Manual Clause [C3011T](#) (2013-11-06), Exchange Rate Fluctuation

#### **Section III: Certifications**

Bidders must submit the certifications required under Part 5.



## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 4.1.1 Technical Evaluation

All information required for technical evaluation must be included directly in the Bidder's technical bid. The evaluation team cannot consider information not provided directly in a Bidder's technical bid (e.g. links to additional website content, reference checks, etc.).

##### 4.1.1.1 Point Rated Technical Criteria

Bids which meet all the mandatory technical criteria will be evaluated against the point rated technical criteria below. For each Evaluation Criteria listed below, provide a list of projects which demonstrate stated years of experience, detailed summary of the project lead's role on the project, and a minimum of three (3) client references in total.

Each point rated technical evaluation criterion has a weight that reflects its importance in the proposal submission. The degree to which the proposal satisfies the requirement of each criterion will be assessed and a score will be assigned ranging from 0 to 10 as outlined under the Point Criteria, with 0 meaning the proposal completely fails to satisfy the requirements, and 10 meaning the proposal fully meets the outlined criterion. This score will then be multiplied by the weight indicated for that point rated evaluation criterion.

Item No.	Evaluation Criteria	Point Criteria	Weight	Maximum Weighted Points
1.1	Credentials of the project lead(s).	<p><b>0:</b> Project lead(s) does not have a background in vegetation restoration. The information provided is unsuitable or insufficient.</p> <p><b>4:</b> Project lead(s) has a background in vegetation restoration. Less than five (5) cumulative years of project management experience as project lead.</p> <p><b>6:</b> Project lead(s) has a background in vegetation restoration. Five (5) cumulative years or more of project management experience as project lead and interim/final report/plan author. Good experience in restoration project design, planning and execution.</p> <p><b>8:</b> Project lead(s) has a background in vegetation restoration. Five (5) cumulative years or more of project management. Very good experience in restoration project design, planning, and execution.</p>	2.5	25

		<p><b>10:</b> Project lead(s) has a background in vegetation restoration. Ten (10) cumulative years or more of project management. Excellent experience in restoration project design, planning, and execution in the local area.</p>		
1.2	Field crew lead(s) have previous experience with native seed collection projects.	<p><b>0:</b> No experience with native seed collection projects.</p> <p><b>4:</b> Experience with one (1) native seed collection project.</p> <p><b>6:</b> Experience with two (2) to five (5) native seed collection projects.</p> <p><b>8:</b> Experience with six (6) to ten (10) native seed collection projects.</p> <p><b>10:</b> Experience with more than ten (10) native seed collection projects.</p>	1.5	15
1.3	Field crew lead(s) have previous experience with native plant propagation projects.	<p><b>0:</b> No experience with native plant propagation projects.</p> <p><b>4:</b> Experience with one (1) native plant propagation project.</p> <p><b>6:</b> Experience with two (2) to five (5) native plant propagation projects.</p> <p><b>8:</b> Experience with six (6) to ten (10) native plant propagation projects.</p> <p><b>10:</b> Experience with more than ten (10) native plant propagation projects.</p>	1.5	15
1.4	Field crew lead(s) have previous experience with weed monitoring and control projects.	<p><b>0:</b> No experience with weed monitoring and control projects.</p> <p><b>4:</b> Experience with one (1) weed monitoring and control project.</p> <p><b>6:</b> Experience with two (2) to five (5) weed monitoring and control projects.</p> <p><b>8:</b> Experience with six (6) to ten (10) weed monitoring and control projects.</p> <p><b>10:</b> Experience with more than ten (10) weed monitoring and control projects.</p>	1.5	15

<b>1.5</b>	Field crew lead(s) have previous experience with native plug planting projects.	<p><b>0:</b> No experience with native plug planting projects.</p> <p><b>4:</b> Experience with one (1) native plug planting project.</p> <p><b>6:</b> Experience with two (2) to five (5) native plug planting projects.</p> <p><b>8:</b> Experience with six (6) to ten (10) native plug planting projects.</p> <p><b>10:</b> Experience with more than ten (10) native plug planting projects.</p>	1.5	<b>15</b>
<b>1.6</b>	Field crew lead(s) have previous experience in the relevant vegetation communities (i.e. Foothills Parkland, Foothills Fescue, Montane Natural Subregions).	<p><b>0:</b> No experience in the appropriate vegetation communities.</p> <p><b>4:</b> Experience with one (1) project in the appropriate vegetation communities.</p> <p><b>6:</b> Experience with two (2) to five (5) projects in the appropriate vegetation communities.</p> <p><b>8:</b> Experience with six (6) to ten (10) projects in the appropriate vegetation communities.</p> <p><b>10:</b> Experience with more than ten (10) projects in the appropriate vegetation communities.</p>	1.5	<b>15</b>

<b>Total Weighted Points Available</b>	<b>100</b>
<b>Minimum Weighted Points Required</b>	<b>60</b>

**Bids that do not obtain the required minimum of 60 points overall for the point rated technical criteria will be given no further evaluation.**

#### 4.1.2 Financial Evaluation

SACC Manual Clause [A0220T](#) (2014-06-26), Evaluation of Price – Bid

The financial bid at Annex B, Basis of Payment will be evaluated as follows:

##### For Required Services:

##### Lump Sum I

Unit of Measurement (A) x Estimated Quantity (B) = Total Estimated Price (C)  
Total Lump Sum Amount – Equals the Sum of Column C

##### Unit Price II

Estimated Quantity (A) x Unit Price (B) = Total Estimated Price (C)  
Total Estimated Price – Equals the Sum of Column C

**The Total Evaluated Bid Price:**  
Equals the Sum of Lump Sum I and Unit Price II.

**4.2 Basis of Selection - Highest Combined Rating of Technical Merit (60%) and Price (40%)**

4.2.1 To be declared responsive, a bid must:

- (a) comply with all the requirements of the bid solicitation;
- (b) meet all mandatory criteria; and
- (c) obtain the required minimum of 60 points overall for the technical evaluation which are subject to point rating. This rating is performed on a scale of 100 points.

4.2.2 Bids not meeting (a) or (b) or (c) will be declared non-responsive.

4.2.3 The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 60% for the technical merit and 40% for the price.

4.2.4 To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 60%.

4.2.5 To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 40%.

4.2.6 For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.

4.2.7 Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 60/40 ratio of technical merit and price, respectively. The total available points equals 135 and the lowest evaluated price is \$45,000 (45).

**Basis of Selection – Highest Combined Rating Technical Merit (60%) and Price (40%)**

	Bidder 1	Bidder 2	Bidder 3
<b>Overall Technical Score</b>	115 / 135	89 / 135	92 / 135
<b>Bid Evaluated Price</b>	\$55,000 (55)	\$50,000 (50)	\$45,000 (45)
<b>Technical Merit Score</b>	$115 / 135 \times 60 = 51.11$	$89 / 135 \times 60 = 39.56$	$92 / 135 \times 60 = 40.89$
<b>Pricing Score</b>	$45 / 55 \times 40 = 32.73$	$45 / 50 \times 40 = 36.00$	$45 / 45 \times 40 = 40.00$
<b>Combined Rating</b>	$51.11 + 32.73 = 83.84$	$39.56 + 36.00 = 75.56$	$40.89 + 40.00 = 80.89$
<b>Overall Rating</b>	1 <sup>st</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>

## **PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

### **5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

#### **5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the [Ineligibility and Suspension Policy \(http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html\)](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

### **5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

#### **5.2.1 Integrity Provisions – List of Names**

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietors, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

Bidders may use the attached Integrity Provisions – List of Names form under Annex "D".

#### **5.2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

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PW-17-00780770

**Title - Sujet**  
Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

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## **5.2.3 Additional Certifications Precedent to Contract Award**

### **5.2.3.1 Status and Availability of Resources**

SACC Manual Clause [A3005T](#) (2010-08-16), Status and Availability of Resources

### **5.2.3.2 Education and Experience**

SACC Manual Clause [A3010T](#) (2010-08-16), Education and Experience

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

6.1.1 There is no security requirement applicable to this Contract.

### 6.2 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

### 6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 6.3.1 General Conditions

[2010C](#) (2016-04-04), General Conditions – Services (Medium Complexity) apply to and form part of the Contract.

All reference to the Minister of Public Works and Government Services Canada shall be deleted and replaced with the Minister of the Environment and Climate Change for the purposes of the Parks Canada Agency. All reference to the Department of Public Works and Government Services Canada shall be deleted and replaced with the Parks Canada Agency.

### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The period of the Contract is from date of Contract to 30 November, 2018 inclusive.

### 6.5 Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Oksana Kuzyshyn  
Contracts, Procurement and Material Management Officer  
Parks Canada Agency  
Chief Financial Officer Directorate  
National Contracting Services  
635 – 8 Avenue S.W., Suite 1300  
Calgary, AB T2P 3M3

Telephone: (403) 292-4558  
Facsimile: (403) 292-4475  
E-mail address: [joanne.cuthbert@pc.gc.ca](mailto:joanne.cuthbert@pc.gc.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform

Solicitation No. - N° de l'invitation  
5P420-17-5044/A

Amd. No. - N° de la modif.  
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Contracting Authority - Autorité contractante  
Oksana Kuzyshyn

GETS Ref. No. - N° de réf. SEAG  
PW-17-00780770

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Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### 6.5.2 Project Authority

The Project Authority for the Contract is:

**\*\*\* To be determined at contract award \*\*\***

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 6.5.3 Contractor's Representative

The Contractor's Representative for the Contract is:

<b>Representative's Name:</b>		
<b>Title:</b>		
<b>Vendor/ Firm Name:</b>		
<b>Address:</b>		
<b>City:</b>	<b>Province/ Territory:</b>	<b>Postal Code:</b>
<b>Telephone:</b>		<b>Facsimile:</b>
<b>Email Address:</b>		
<b>Procurement Business Number or Goods and Services Tax Number:</b>		

#### Instruction on how to obtain a Procurement Business Number (PBN)

Canadian Bidders are requested to have a Procurement Business Number (PBN) before Contract award. Bidders may register for a PBN in the Supplier Registration Information service on line at the [Business Access Canada Website](https://buyandsell.gc.ca/for-businesses/selling-to-the-government-of-canada/register-as-a-supplier) (https://buyandsell.gc.ca/for-businesses/selling-to-the-government-of-canada/register-as-a-supplier). For non- Internet registration, Bidders may contact the Business Access Canada InfoLine at 1-800-811-1148 to obtain the telephone number of the nearest Supplier Registration Agent.

### 6.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act](#) (PSSA) pension, the Contractor has agreed that this information will be



reported on departmental websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2012-2](#) of the Treasury Board Secretariat of Canada.

## 6.7 Payment

### 6.7.1 Basis of Payment – Limitation of Expenditure

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work as determined in accordance with the Basis of Payment at Annex “B”, to a limitation of expenditure of \$ **\*\*\* to be inserted at contract award \*\*\***. Customs duties are included and Applicable Taxes are extra.

### 6.7.2 Limitation of Expenditure

**6.7.2.1** Canada's total liability to the Contractor under the Contract must not exceed \$ **\*\*\*to be inserted at contract award\*\*\***. Customs duties are included and Applicable Taxes are extra.

**6.7.2.2** No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:

- (a) when it is 75 percent committed, or
- (b) four (4) months before the contract expiry date, or
- (c) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

**6.7.2.3** If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

### 6.7.3 Progress Payments

**6.7.3.1** Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work, up to ninety (90) percent of the amount claimed and approved by Canada if:

- (a) an accurate and complete claim for payment using form [PWGSC-TPSGC 1111](#), Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) the amount claimed is in accordance with the basis of payment;
- (c) the total amount for all progress payments paid by Canada does not exceed one hundred percent of the total amount to be paid under the Contract;
- (d) all certificates appearing on form [PWGSC-TPSGC 1111](#) have been signed by the respective authorized representatives.

**6.7.3.2** The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all work required under the Contract if the Work has been accepted by Canada and a final claim for the payment is submitted.

**6.7.3.3** Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the rights to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

## **6.8 Invoicing Instructions – Progress Payment Claim – Supporting Documentation not Required**

**6.8.1** The Contractor must submit a claim for payment using form [PWGSC-TPSGC 1111](#), Claim for Progress Payment.

Each claim must show:

- (a) all information required on form [PWGSC-TPSGC 1111](#);
- (b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
- (c) the description and value of the milestone claimed as detailed in the Contract.

**6.8.2** Applicable Taxes, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no Applicable Taxes payable as it was claimed and payable under the previous claims for progress payments.

**6.8.3** The Contractor must prepare and certify one original and two (2) copies of the claim on form [PWGSC-TPSGC 1111](#), and forward it to the Project Authority identified under the section entitled "Authorities" of the Contract for appropriate certification after inspection and acceptance of the Work takes place.

The Project Authority will then forward the claim to the Payment Office for the remaining certification and payment action.

**6.8.4** The Contractor must not submit claims until all work identified in the claim is completed.

## **6.9 Direct Deposit**

In April 2012, the Government of Canada announced that direct deposit would be replacing cheques as the primary payment method for the federal payments issued by the Receiver General for Canada by April 2016. If the Bidder is not set up for direct deposit, a Direct Deposit Enrollment Form, Annex E will be required to be submitted to the Contracting Authority upon receipt of a Contract.

Additional information on this Government of Canada initiative is available at:

<http://www.directdeposit.gc.ca>.

## **6.10 Certifications and Additional Information**

### **6.10.1 Compliance**

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### **6.11 Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Alberta.

## 6.12 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions [2010C](#) (2016-04-04); General Conditions – Services (Medium Complexity)
- (c) Annex “A”, Statement of Work;
- (d) Annex “B”, Basis of Payment;
- (e) Annex “C”, Attestation and Proof of Compliance with Occupational Health and Safety (OHS);
- (f) the Contractor's bid dated **\*\*\* to be inserted at contract award \*\*\***.

## 6.13 SACC Manual Clauses

[A1009C](#) (2008-05-12), Work Site Access  
[A7017C](#) (2008-05-12), Replacement of Specific Individuals  
[A9039C](#) (2008-05-12), Salvage  
[A9068C](#) (2010-01-11), Government Site Regulations  
[B6802C](#) (2007-11-30), Government Property  
[G1005C](#) (2016-01-28), Insurance – No Specific Requirement

## 6.14 Inspection and Acceptance

The Project Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

## ANNEX "A"

### STATEMENT OF WORK

# 1. General Information

## 1.1. Goal

The primary goal of this project is to address the landscape restoration needs for Federal Infrastructure Investment Program (FII) Projects within Waterton Lakes National Park (WLNP), for which construction commenced in the fall of 2015.

## 1.2. Background

Parks Canada is currently undertaking the planning and construction of numerous FII Projects in Waterton Lakes National Park. The scope and size of these projects varies throughout the park, but they share a common need for on-going landscape restoration of the construction footprint associated with each project once the project has been completed. Since several FII projects involve similar types of work this restoration program has been developed to implement restoration activities across multiple projects in order to achieve efficiencies and improved outcomes for ecological integrity. This approach highlights benefits of the Federal Infrastructure Investment program for improving ecological integrity as opportunities to resolve pre-existing concerns (e.g., previously disturbed sites, weed infestations) can be incorporated into the restoration goals.

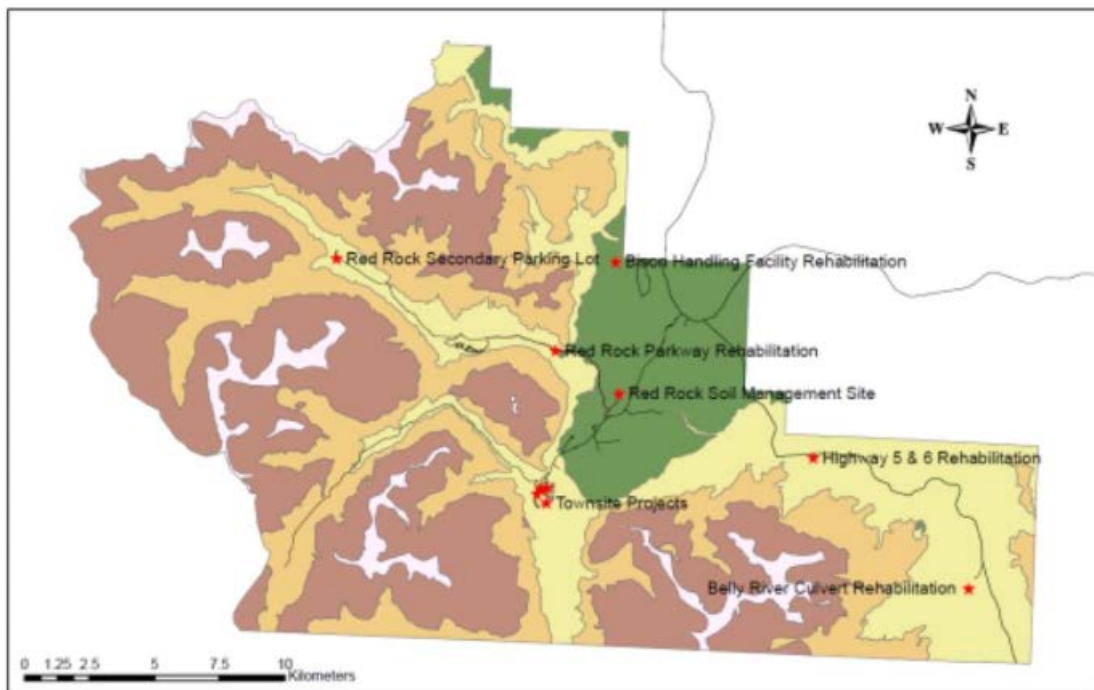


Figure 1 Map of Waterton Lakes National Park and key FII Project Sites

### 1.3. Summary of Work

The scope of work for the project generally includes the following:

- Native Seed Collection: Specified native seed to be collected within Waterton Lakes National Park and/or surrounding areas within the appropriate habitat.
- Native Plant Propagation: Specified native shrubs to be propagated through seed or cuttings collected within Waterton Lakes National Park and/or surrounding areas within the appropriate habitat.
- Weed Monitoring and Control: Monitoring completed construction footprints for weed growth and treating weeds via mechanical or chemical means (as approved by the Departmental Representative)
- Native Plug Planting (materials propagated under a separate contract): Installation of approximately 3000 plants that were propagated over 2016/2017 with plant materials collected from Waterton Lakes National Park and/or surrounding areas.

## 2. Codes and Regulations

### 2.1. Codes

2.1.1. The Contractor shall meet or exceed the requirements of:

- Contract Documents;
- Specified standards, applicable legislation, codes, and referenced documents;
- Other codes of Local, Provincial, or Federal application (in the case of conflict or discrepancy, the more stringent requirements shall apply); and
- All applicable environmental mitigations outlined in the Waterton Lakes General Projects Best Management Practice (BMP) which can be found in Appendix B.

### 2.2. National Parks Regulations

- 2.2.1. The Superintendent is responsible for the on-site administration of the Park and is located in the Park Administration building in the townsite of Waterton Lakes.
- 2.2.2. The Contractor shall ensure that all work is performed in accordance with the ordinances, laws, rules and regulations set out in the Canada National Parks Act and Regulations.
- 2.2.3. For the work in Waterton Lakes National Park, the Contractor and any sub-Contractors shall obtain a business license from the Parks Canada Administration Office in Waterton Lakes National Park prior to commencement of the contract. This can be obtained by contacting Bonnie Scott, Acting Municipal Officer at 1-403-859-5117.
- 2.2.4. All Contractor's vehicles are required to display a vehicle work pass from Parks Canada. These permits may be obtained free of charge with the purchase of a business license.

### 2.3. Contractor use of premises

- 2.3.1. For the purpose of this contract, Contractor will not be permitted to set up camp in Waterton Lakes National Park.
- 2.3.2. Parks Canada regulations prohibit anyone working with the Park from using campground facilities.

## 3. Project Submittals

### 3.1. Submittals

- 3.1.1. The Contractor shall complete and submit for Departmental Representative review, all required contract submittals as detailed below. Required submittals include, but are not limited to the following:
- Health and Safety Plan
  - Work Plan
  - Project Schedule
  - Environmental Protection Plan (including Erosion and Sediment Control Plan, Spill Response Plan, Fire Contingency Plan, etc.)
  - Certificates of Seed Analysis
- 3.1.2. Work affected by the submittals shall not proceed until the submittal is accepted by the PCA Representative.
- 3.1.3. Notify Departmental Representative in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- 3.1.4. Allow for submittal review periods of minimum 7 days in the schedule, or as required for each submittal.

### 3.2. Samples

- 3.2.1. Herbarium sample of collected seed for species verification to be submitted to Departmental Representative for verification purposes prior to collection of the species.
- 3.2.2. The Departmental Representative may require the Contractor to replace seed collected from an unapproved species or variety in cases where a herbarium sample was not accepted in advance of seed collection.

### 3.3. Photographic Documentation

- 3.3.1. Submit electronic copy of color digital photography in .jpg or .tif format, as directed by Departmental Representative.
- 3.3.2. Project identification: name and number of project and date of exposure indicated.
- 3.3.3. Frequency of photographic documentation:
- 3.3.3.1. Specimen photos for collections (for collected seed and/or propagules)

### 3.4. Certificates and Transcripts

- 3.4.1. Immediately after award of Contract, submit copies of provincial applicator's license for all applicators working on the project.

### 3.5. Health and Safety Plan

- 3.5.1. The Contractor shall prepare and comply with the site specific Health and Safety Plan. The preparation and details of the site specific Health and Safety Plan shall include conducting a site-specific hazard assessment based on review of Contract Documents, the BMP, the required work, and the project site. The site specific Health and Safety Plan shall address all concerns / requirements identified and include, at a minimum, the following information:
- Contractor's safety policy.
  - Identification of applicable compliance obligations.
  - General safety rules for project.
  - Job-specific safe work procedures.
  - List of key contractor personnel, including names, positions and telephone numbers.

- Inspection policy and procedures.
- Incident reporting and investigation policy and procedures.
- Occupational Health and Safety meetings.
- Occupational Health and Safety communications and record keeping procedures.
- List hazardous materials to be brought on-site as required by work.
- Identify personal protective equipment (PPE) to be used by workers.
- Identify personnel and alternates responsible for site safety and health.
- Identify personnel training requirements and training plan, including site orientation for new workers and personnel designated by the Departmental Representative as needing to visit the site.
- Identify employee training plans and procedures for wildlife encounters and prevention consistent with the requirements outlined in the BMP

- 3.5.2. Develop the plan in collaboration with all subcontractors. Ensure that work/activities of subcontractors are included in the hazard assessment and are reflected in the plan.
- 3.5.3. Revise and update Health and Safety Plan as required, and re-submit to the Departmental Representative. The review of Health and Safety Plan by PCA shall not relieve the Contractor of responsibility for errors or omissions in final Health and Safety Plan or of responsibility for meeting all requirements of the Work and Contract Documents.
- 3.5.4. The Contractor shall:
- 3.5.4.1. Be responsible for health and safety of persons on-site, safety of property on-site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of work.
  - 3.5.4.2. Comply with and enforce compliance by employees with safety requirements of Contract documents, applicable Federal, Provincial, Territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.
  - 3.5.4.3. The protection of persons off-site and the environment such that they may be affected by the conduct of the work.
  - 3.5.4.4. Conduct daily safety meetings and task specific meetings (toolbox) as required by special work. At a minimum meetings shall include refresher training for existing equipment and protocols, review ongoing safety issues and protocols, and examine new site conditions as encountered. Keep records of meetings.
- 3.5.5. Include with the Health and Safety plan, the name of the Health and Safety Coordinator. The Health and Safety Coordinator shall:
- 3.5.5.1. Be responsible for completing all health and safety training, site orientations, and ensuring that personnel that do not successfully complete the required training are not permitted to enter the site to perform work.
  - 3.5.5.2. Be responsible for implementing, daily enforcing, and monitoring the site-specific Health and Safety Plan.
  - 3.5.5.3. Be on-site during execution of critical elements of the work or as required by the Contractor.
  - 3.5.5.4. Have working knowledge of occupational safety and health regulations.
  - 3.5.5.5. Attend pre-site work and on-site progress meetings as required or as requested by the PCA Representative.

### 3.6. Work Plan

- 3.6.1. The Contractor shall prepare a plan for review by a Parks Canada representative prior to conducting the work. The work plan must include but not be limited to: Integrated Pest Management Plan, plan of execution for weed control methods, schedule, planned seed and propagule collection (locations, timing and methodology), plug planting plan (timing, methodology).

- 3.6.2. Should deficiencies in the Contractor's Work Plan be noted following acceptance of the submittal by the Departmental Representative but during the project work, the Departmental Representative reserves the right to provide additional comments to the Contractor and require resubmission of the Work Plan to ensure the correction of any deficiencies.
- 3.6.3. It is the responsibility of the Contractor to conduct sufficient site visits, visual inspections, etc. in order to accurately estimate the quantities involved in executing the scope of work. An optional site visit held during the solicitation period will be scheduled, which will include site visits to all work locations included in the scope of work.
- 3.6.4. Integrated Pest Management Plan
- 3.6.4.1. Prepare an Integrated Pest Management Plan in accordance with the Parks Canada Integrated Pest Management Directive 2.4.1 (Appendix C). One plan is to be prepared encompassing all of the work sites included in the work of the contract. Submit to Departmental Representative for approval application minimum of 7 days prior to start of start of herbicide application.
- 3.6.4.2. Include:
- Full name and PCP Registration number of herbicide products used including adjuvants.
  - Copies of provincial applicator's license and pesticide project application permit.

### 3.7. Project Schedule

- 3.7.1. Submit a Project Schedule that conforms to the project completion dates found in Section 6.1 Project Schedule / Milestones.
- 3.7.2. Ensure detailed Project Schedule includes as a minimum all relevant milestone activity types as follows:
- 3.7.2.1. Project Award
- 3.7.2.2. Receipt of necessary permits
- 3.7.2.3. Submittal Schedule:
- Environmental Protection Plan
  - Site Specific Health and Safety Plan, including MSDS
  - Work Plan
  - Weed Mapping and Control Forms
- 3.7.2.4. Mobilization
- 3.7.2.5. Work Activities by type / locations
- 3.7.2.6. Site Clean-up / De-mobilization
- 3.7.2.7. Project Substantial Completion and Project Completion dates.
- 3.7.3. Indicates date for submitting, review time, resubmission time, and last date for meeting schedule.
- 3.7.4. Include dates when reviewed submittals will be required from the Departmental Representative.
- 3.7.5. Prepare schedule in form of a horizontal Gant bar chart.
- 3.7.6. Provide a separate bar for each major work item of work or operation.
- 3.7.7. Split horizontally for projected and actual performance.
- 3.7.8. Provide horizontal time scale identifying first work day of each week.
- 3.7.9. Format for listings: the chronological order of start of each item of work.
- 3.7.10. Identification of listings by systems description.
- 3.7.11. Submit proposed schedules within 14 calendar days after award of Contract.



- 3.7.12. Submit schedules in electronic format via email to the Departmental Representative at time of submission following contract award). Provide schedules in PDF format and native file format if requested by the Departmental Representative.
- 3.7.13. If requested, submit two hard copies to be retained by the Departmental Representative.
- 3.7.14. The Departmental Representative will review the schedule and return any comments within ten days after receipt.
- 3.7.15. Resubmit finalized schedule within seven days after return of review copy.
- 3.7.16. Project Schedule Updates
- 3.7.16.1. Submit revised progress schedule with each application for payment.
- 3.7.16.2. Distribute copies of revised schedule to:
- Subcontractors
  - Other Concerned Parties.
- 3.7.16.3. Instruct recipients to report to Contractor within 10 days any problems anticipated by timetable shown in the schedule.
- 3.7.16.4. Update Project Schedule every two weeks reflecting activity changes and completions, as well as activities in progress. Provide updated project scheduled to Departmental Representative.
- 3.7.16.5. Indicate progress of each activity to date of submission schedule.
- 3.7.16.6. Show changes occurring since previous submission of schedule:
- Major changes in scope
  - Activities modified since previous submission.
  - Revised projections of progress and completion.
  - Other identifiable changes.
- 3.7.16.7. Provide a narrative report to define:
- Problem areas, anticipated delays, and impact on schedule.
  - Corrective action recommended and its effect.

### 3.8. Environmental Protection Plan

- 3.8.1. Submit an Environmental Protection Plan that clearly demonstrates confirmation and understanding of mitigation measures outlined in the WLNP General Projects Best Management Practices (Appendix B)
- 3.8.2. Ensure Environmental Protection Plan includes:
- 3.8.2.1. Name[s] of person[s] responsible for ensuring adherence to Environmental Protection Plan.
- 3.8.2.2. Name[s] and qualifications of person[s] responsible for manifesting hazardous waste to be removed from site.
- 3.8.2.3. Name[s] and qualifications of person[s] responsible for training site personnel.
- 3.8.2.4. Descriptions of environmental protection personnel training program.
- 3.8.2.5. **Erosion and sediment control plan** identifying type and location of erosion and sediment controls to be provided including monitoring and reporting requirements to assure that control measures are in compliance with erosion and sediment control plan, legislation and regulations. The minimum requirements of an erosion and sediment control plan include consideration of:
- Project design and spatial concept of environmental sensitivities (e.g. watercourses, wetlands, steep slopes etc.);
  - Erosion prevention procedures (e.g., project schedule, minimization of work area, site management, ground cover measures);

- Sediment control measures (e.g. sediment fences, check dams, sediment traps, etc.) including specifications and Typical Drawings of sediment control structures;
  - Detailed plans for in-stream works including site isolation measures and project timelines;
  - Water management plans including site control, equipment necessary and proposed dewatering locations;
  - Locations of erosion and sediment control measure application;
  - Monitoring of prevention and control measures and corrective actions (e.g., repairs).
  - Removal of non-biodegradable materials once site is stabilized.
- 3.8.2.6. Plans to include measures to minimize amount of material transported onto paved public roads by vehicles or runoff.
- 3.8.2.7. Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use.
- 3.8.2.8. Plan to include measures for marking limits of use areas and methods for protection of features to be preserved within authorized work areas.
- 3.8.2.9. **Spill Control Plan** to include procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance. The Spill Response Plan must at minimum, include the following information:
- List of products and materials that are considered or defined as hazardous or toxic to the environment. Such products include, but are not limited to, waterproofing agents, grout, cement, concrete finishing agents, hot poured rubber membrane materials, asphalt cement, sand blasting agents, paint, solvents and hydrocarbons.
  - required equipment on site and location of spill kits;
  - spill prevention procedures (i.e., containment and storage of materials, security, handling, use and disposal of empty containers, surplus product or waste generated in the application of these products in accordance with all applicable federal and provincial legislation);
  - fuelling procedures, fuel storage;
  - spill response (i.e., containment, clean-up, disposal of contaminated materials, etc.);
  - spill reporting procedure; and
  - up-to-date emergency response contact list including contact information for reporting spills.
- 3.8.2.10. **Spill Reporting Template** - Immediate spill reports are verbal notifications and must include all available information. Follow-up written spill reports must include the following:
- Prime Contractor Name
  - Name and Contact Number
  - Location and time the spill occurred
  - Type and quantity of the substance spilled
  - Cause of the spill
  - Size of area the spill spread to
  - Was the spill in water or on land
  - Does the spill have potential to enter a water body
  - Detail of immediate action taken to control the spill
  - Additional actions required or ongoing to control the spill
  - Any restoration required at the spill site
  - Names of PCA representatives that were present at the spill site

- 3.8.2.11. Non-Hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
- 3.8.2.12. Air pollution control plan detailing provisions to assure that dust, debris, materials, and trash, are contained on project site.
- 3.8.2.13. **Contaminant Prevention Plan** identifying potentially hazardous substances to be used on job site; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with Federal, Provincial, and Municipal laws and regulations for storage and handling of these materials.
- 3.8.2.14. **Fire Contingency Plan** is required for projects where risk of fire exists (e.g. for operations on dry grassland habitats) as requested by the Surveillance Officer in consultation with the Fire Management Officer. The fire contingency plan must at minimum contain the following information:
- required equipment on site;
  - fire prevention procedures;
  - initial response;
  - fire reporting procedure; and
  - up-to-date emergency response contact list.
- 3.8.2.15. Historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands.

## 4. Mobilization and Demobilization

### 4.1. Definitions

Mobilization and Demobilization consists of preparatory work and operations, including but not limited to:

- 4.1.1. Preparation and acceptance of submittals (Work Plan, Project Schedule, Health and Safety Plan, Environmental Protection Plan, and any other submittals required prior to starting work).
- 4.1.2. Work and costs incurred necessary for the movement of personnel, equipment, supplies and incidentals to/from the work site.
- 4.1.3. Work and cost incurred in the establishment and operation of offices and other facilities necessary to undertake the work.
- 4.1.4. Work and costs incurred in the completion of clean-up and project completion.
- 4.1.5. All other work and costs incurred in the successful completion of mobilization and demobilization.

## 5. Project Administration Requirements

### 5.1. Project Schedule

- 5.1.1. Seed and propagule collection to be completed in the 2017 growing season.
- 5.1.2. Results of seed testing for delivered seeds to be delivered to PCA by October 15, 2017. Propagation to be completed by fall of 2018.
- 5.1.3. See Appendix A for seed collection (Specification 32 93 13) and propagation (Specification 32 93 33) targets.

## 5.2. Project Milestones

No.	Deliverable	Method	Delivery Date (on or before)
01	Mobilization - Submission of Environmental Protection Plan, Health and Safety Plan, project schedule, and work plan as outlined in Section 3.	E-mail to the Parks Canada representative	Within 14 calendar days of contract award
02	Submission of Weed Mapping and Control forms	E-mail to the Parks Canada representative	Within 7 days of work completion as per specifications
03	Submission of Quality Control Reports for Herbicide usage	E-mail to the Parks Canada representative	Within 7 days of work completion as per specifications
04	Submission of OBW Herbicide Application Form	Email to Parks Canada representative	Within 7 days of work completion as per specifications
05	Submission of seed testing / Certificates of Analysis	E-mail to the Parks Canada representative	On or before October 15, 2017
06	Delivery of seed	Delivered to Waterton Lakes Compound	On or before October 31, 2017 <sup>1</sup>
07	Delivery of propagated materials	Delivered to Waterton Lakes Compound	On or before October 31, 2018
08	Demobilization – Project completion		On or before October 31, 2018

### Notes:

1. Departmental Representative may allow later delivery based on the status of the Germination tests.

## 5.3. Progress Meetings

- 5.3.1. The Departmental Representative will schedule and administer progress meetings at the site throughout the progress of the Works at minimum bi-weekly intervals or more frequently as required.
- 5.3.2. The Departmental Representative will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings. The Contractor will provide data required to the Departmental Representative and be prepared to discuss all items on the agenda.
- 5.3.3. Attendance Required: The contractor's manager, contractor's site supervisor, major subcontractors, as appropriate to agenda topics for each meeting.

## 5.4. Lines of Communication

- 5.4.1. All formal directions regarding project scope, budget, schedule, etc. must come from the Departmental Representative in writing.
- 5.4.2. The Contractor shall not respond to requests for project related information or questions from the media. All media related inquiries are to be directed to the Departmental Representative.

- 5.4.3. Departmental Representative must be notified in writing in the event of the replacement of the project lead. The resume of the proposed replacement must be forwarded for review and approval.

## 6. Health and Safety

### 6.1. Worker's Compensation Coverage

- 6.1.1. Comply fully with the Workers' Compensation Act, regulations and orders made pursuant thereto, and any amendments up to the completion of the work.
- 6.1.2. Maintain Workers' Compensation Board coverage during the term of the Contract, until and including the date that the Certificate of Final Completion is issued.

### 6.2. Compliance with Regulations

- 6.2.1. PCA shall deem the Contractor to be in default of its obligations under the Contract, if the Contractor refuses to comply with a requirement of the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- 6.2.2. It is the Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the work as required by the Workers' Compensation Act or Occupational Health and Safety Regulations.

### 6.3. Submittals

- 6.3.1. The Contractor's Health and Safety Plan shall be submitted to the Departmental Representative for review and acceptance in accordance with the procedures outlined in Section 3: Project Submittals. The Departmental Representative will review the plan (first submission and all subsequent re-submissions if required) within 14 days of submission. Upon review of the plan the Departmental representative will either:
- 6.3.1.1. Accept the plan
  - 6.3.1.2. Accept portions of the plan and provide comments outlining required changes or additional information in other sections. Following completion of edits by the Contractor, re-submit the plan for review.
  - 6.3.1.3. Reject the plan and provide comments outlining required changes or additional information needed. Following completion of edits by the Contractor, re-submit the plan for review.
- 6.3.2. Submit the following to the Departmental Representative in accordance with the procedures outlined in Section 3: Project Submittals.
- 6.3.2.1. Copies of reports or directions issued by Federal and Provincial health and safety inspectors.
  - 6.3.2.2. Copies of incident and accident reports.
  - 6.3.2.3. Complete set of Material Safety Data Sheets (MSDS), and all other documentation required by Workplace Hazardous Materials Information System (WHMIS)
  - 6.3.2.4. Emergency Procedures.
  - 6.3.2.5. Medical surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of work, and submit additional certifications for any new site personnel to the Departmental Representative.
- 6.3.3. The Contractor shall allow time in the schedule for the reviews, and subsequent edits / re-submission.
- 6.3.4. Work affected by the submittal (as determined by the Departmental Representative) shall not proceed until acceptance of the submittal by the Departmental Representative.

- 6.3.5. Submission of the Health and Safety Plan, and any revised version, to the Departmental Representative are for information and reference purposes only. It shall not:
  - 6.3.5.1. Be construed to imply approval by the Departmental Representative.
  - 6.3.5.2. Be interpreted as a warranty of being complete, accurate and legislatively compliant.
  - 6.3.5.3. Relieve the Contractor of his legal obligations for the provision of health and safety on the project.
- 6.3.6. Should deficiencies in the Contractor's Health and Safety Plan be noted following acceptance of the submittal by the Departmental Representative but during the project work, the Departmental Representative reserves the right to provide additional comments to the Contractor and require re-submission of the Health and Safety Plan to ensure the correction of any deficiencies.

## 6.4. Emergency Procedures

- 6.4.1. List standard operating procedures and measures to be taken in emergency situations. Include an evacuation plan and emergency contacts (i.e. names/telephone numbers) of:
  - 6.4.1.1. Designated personnel from own company.
  - 6.4.1.2. Regulatory agencies applicable to work and as per legislated regulations.
  - 6.4.1.3. Local emergency resources.
  - 6.4.1.4. Departmental Representative.
- 6.4.2. Include the following provisions in the emergency procedures:
  - 6.4.2.1. Notify workers and the first-aid attendant, of the nature and location of the emergency.
  - 6.4.2.2. Evacuate all workers safely.
  - 6.4.2.3. Check and confirm the safe evacuation of all workers.
  - 6.4.2.4. Notify the fire department or other emergency responders.
  - 6.4.2.5. Notify adjacent workplaces or residences which may be affected if the risk extends beyond the workplace.
  - 6.4.2.6. Notify Departmental Representative.
- 6.4.3. Provide written rescue/evacuation procedures as required for, but not limited to:
  - 6.4.3.1. Work in confined spaces or where there is a risk of entrapment.
  - 6.4.3.2. Work with hazardous substances.
  - 6.4.3.3. Work on, over, under and adjacent to water.
- 6.4.4. Revise and update emergency procedures as required, and re-submit to the Departmental Representative.

## 6.5. Hazardous Products

- 6.5.1. Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials, and regarding labeling and provision of Material Safety Data Sheets (MSDS) acceptable to the Departmental Representative and in accordance with the Canadian Labour Code.
- 6.5.2. Where use of hazardous and toxic products cannot be avoided:
  - 6.5.2.1. Advise Departmental Representative beforehand of the products(s) intended for use. Submit applicable MSDS and WHMIS documents as per Section 3: Project Submittals.

## 6.6. Fire Safety Requirements

- 6.6.1. Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.

## 6.7. Unforeseen Hazards

- 6.7.1. Should any unforeseen or peculiar safety-related factor, hazard or condition become evident during performance of the work, immediately stop work and advise the Departmental Representative verbally and in writing.
- 6.7.2. Should contaminated site conditions be encountered when completing the work, contact the Departmental Representative immediately.

## 6.8. Correction of Non-Compliance

- 6.8.1. Immediately address health and safety non-compliance issues identified by the Departmental Representative.
- 6.8.2. Provide Departmental Representative with written report of action taken to correct non-compliance with health and safety issues identified.
- 6.8.3. The Departmental Representative may stop or suspend the Work or part of the Work under the Contract if non-compliance of health and safety regulations is not corrected immediately or within posted time. The Contractor / Subcontractors will be responsible for any costs arising from such a "Stop work order".

## 6.9. Medical

- 6.9.1. Provide and maintain first aid facilities for all workers as required by the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- 6.9.2. Provide the appropriate first aid kit, based on the number of workers, in accordance with the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- 6.9.3. Establish an emergency response plan acceptable to Departmental Representative, for the removal of any injured person to medical facilities or a doctor's care in accordance with applicable legislative and regulatory requirements.
- 6.9.4. Provide proof of First Aid credentials to Departmental Representative prior to the start of the Work. Provide the appropriate number of first aid attendants on site in accordance with Workers' Compensation Act or the Occupational Health and Safety Regulations.
- 6.9.5. Emergency and First Aid Equipment:
  - 6.9.5.1. Locate and maintain emergency and first aid equipment in appropriate location on site including first aid kit to accommodate number of site personnel; portable emergency eye wash; fire protection equipment as required by legislation.
  - 6.9.5.2. Locate sufficient; blankets and towels; stretcher; and 1 hand held emergency siren in all confined access locations.
  - 6.9.5.3. Provide a minimum of 1 qualified first aid attendant as per Workers' Compensation Act or the Occupational Health and Safety Regulations on site at all times when Work activities are in progress; duties of first aid attendant may be shared with other light duty Work related activities.

## 6.10. Accidents and Accident Reports

- 6.10.1. Immediately report, verbally, followed by a written report within 24 hours, to Departmental Representative, all accidents of any sort arising out of or in connection with the performance of the Work, giving full details and statements of witnesses. If death or serious injuries or damages are caused, report the accident promptly to Departmental Representative by telephone in addition to any report required under federal and territorial laws and regulations.
- 6.10.2. If a claim is made by anyone against the Contractor or Sub-Contractor on account of any accident, promptly report the facts in writing to Departmental Representative, giving full details of the claim.

## 6.11. Posted Documents

6.11.1. Post legible versions of the following documents on-site:

- Health and Safety Plan
- Locations of the first-aid station, evacuation route and marshaling station, and the emergency transportation provisions
- Emergency procedures
- Notice as to where a copy of the Workers' Compensation Act and Regulations are available on the work site for review by employees and workers
- Workplace Hazardous Materials Information System (WHMIS) documents
- Material Safety Data Sheets (MSDS)
- Name of Health and Safety Representative, as applicable.

6.11.2. Post all documents in a common area, visible to all workers and in locations accessible to tenants when work of this Contract includes construction activities adjacent to occupied areas.

6.11.3. Postings should be protected from the weather.

## 7. Environmental Procedures

### 7.1. Environmental Protection Measures

7.1.1. Refer to the *Waterton Lakes National Park General Projects Best Management Practices* document in Appendix B for the required mitigation measures.

### 7.2. Environmental Protection Plan (EPP)

7.2.1. The Contractor is required to prepare an EPP. The EPP shall be prepared by a qualified professional, and shall include all sections outlined in Section 3.8 of Project Submittals.

## 8. Scope of Work

Contractor to complete the work as detailed in specification documents, Appendix A, attached.

Location Maps can be found in Appendix E



**Solicitation No. - N° de l'invitation**  
5P420-17-5044/A

**Amd. No. - N° de la modif.**  
00

**Contracting Authority - Autorité contractante**  
Oksana Kuzyshyn

**GETS Ref. No. - N° de réf. SEAG**  
PW-17-00780770

**Title - Sujet**  
Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

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## **APPENDIX "A"**

### **SPECIFICATIONS**

32 93 13	Native Seed Collection
32 93 33	Propagation
31 31 19.13	Chemical Vegetation Control
32 01 90	Landscape Maintenance
32 96 10	Plug Transplanting

## **1 GENERAL**

### **1.01 RELATED REQUIREMENTS**

- .1 Section 32 01 90 – Landscape Maintenance.

### **1.02 MEASUREMENT**

- .1 Native seed collection consists of all materials, labor and equipment required for collecting the target quantity of Pure Live Seed (PLS) including but not limited to: scouting appropriate seed locations for species and collection timing, equipment required for seed collection, subcontractor fees, obtaining all necessary permits and access permissions to carry out work, cleaning and processing seed, obtaining Certificates of Analysis (including results of germination and purity tests), replacement of rejected seed, purchasing of commercially available native seed [if approved by Departmental Representative], daily clean-up of work areas, traffic control as necessary, disposal of all excess and waste material off site and all other work necessary to complete the Work to the satisfaction of the Departmental Representative.

### **1.03 REFERENCES**

- .1 Parks Canada
  - .1 Waterton Lakes National Park, General Project Best Management Practices, Version 1.1, March 2016.
- .2 Government of Canada
  - .1 Seeds Act, R.S.C. 1985, c. S-8 (current to January 31, 2017).
  - .2 Seeds Regulations, C.R.C., c. 1400 (current to January 31, 2017).
- .3 Province of Alberta
  - .1 Weed Control Act, Weed Control Regulation, Alberta Regulation 19/2010 (with amendments up to and including Alberta Regulation 125/2016).

### **1.05 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 3: Project Submittals.
  - .1 Proposed collection locations (and species) within Waterton Lakes National Park.
  - .2 Proposed collection locations (and species) outside Waterton Lakes National Park.
  - .3 Herbarium specimens of collected species.
- .2 Obtain a Restricted Activity Permit (RAP) from the Departmental Representative prior to starting work and provide 48 hours' notice prior to the first day of the start of work. There is no fee for the Restricted Activity Permit.
- .3 Contractor is responsible for submitting Seed Collection details as specified in Section 3.03.1 at time of seed delivery.
- .4 Obtain Certificates of Seed Analysis for all collected seed and submit in accordance with Section 3: Project Submittals.
- .5 Seed Certificates:
  - .1 Submit to the Departmental Representative for approval in advance of delivering

- collected seed and/or purchasing seed. Seed certificate must be submitted for each specified seed species and/or approved substitution.
- .2 Seed certificates shall meet the following requirements and/or include the following information:
    - .1 Name and address of testing laboratory.
    - .2 Testing shall be conducted by a qualified seed testing laboratory as required by the Canada Seeds Regulations.
    - .3 Seed analysis must be conducted within 2 years of submittal of seed certificate. Indicate date of analysis on seed certificate.
    - .4 Species of seed, including common name, varietal, and scientific name, using the CANADENSYS nomenclature system.
    - .5 Indicate if the seed is a cultivar, ecovar or wild native.
    - .6 Geographic origin (seed source).
    - .7 Date of collection.
    - .8 Method of seed storage.
    - .9 Grade of seed (for commercial seed lots).
    - .10 Lot number (for commercial seed lots).
    - .11 Germination percentage.
    - .12 Purity analysis of seed mixture, including percentage of pure seed, variety, agronomic species, and weeds.
    - .13 Contact information for seed supplier.
  - .6 Where a specified species is not available for collection, or is unavailable for collection in the quantity required, submit explanation of level of effort to collect seed, existing conditions that are influencing lack of availability, and proposed species substitution in writing to Departmental Representative.
  - .7 Do not substitute species without written approval for substitution from the Departmental Representative.
  - .8 Where purchase of seed in lieu of collection has been approved by the Departmental Representative, submit Certificates of Analysis for proposed seed lot purchase and/or proposed species substitution(s) in writing to Departmental Representative for approval prior to purchasing or substituting seed.
  - .9 Do not purchase seed until written approval for each individual lot is obtained.

## **1.06 QUALITY ASSURANCE**

- .1 Seeds:
  - .1 Commercially supplied seed to be "Canada No. 1 Certified" seed, in accordance with Government of Canada "Seeds Act" and "Seeds Regulations", where applicable.
  - .2 Seed shall be sourced as locally to Waterton Lakes National Parks as possible within the appropriate seeding zone. Commercially supplied seed must be grown in Alberta, Saskatchewan, Manitoba, Montana or North Dakota.
  - .3 The seed shall not contain Prohibited Noxious or Noxious weed seeds.
  - .4 Seed containing other non-native species may be approved at the discretion of the Departmental Representative.
  - .5 Store all seeds in an appropriate manner to ensure seeds remain viable until delivered to Parks Canada, Waterton Lakes Field Unit.
  - .6 Acceptable seed must be mature/ripe without evidence of insects, diseases, environmental or other types of damage.
  - .7 PLS is measured as:
    - % Pure Live Seed = % Germination x % purity (100% - % Inert Material)

- .2 The Departmental Representative reserves the right to independently test the collected species for quality assurance purposes.

## **1.07 DELIVERY, STORAGE AND HANDLING**

- .1 All seed shall be stored in original containers or packaging until such time as accepted by Departmental Representative.
- .2 Seed labeling
  - .1 Seeds shall be packed and delivered in original containers in accordance with the Canada Seeds Act clearly showing:
    - .1 Name and address of supplier.
    - .2 Species of seed, including common name, varietal, and scientific name, using the CANADENSYS nomenclature system.
    - .3 Grade of seed.
    - .4 Lot number.
    - .5 Germination percentage.
    - .6 Purity analysis of seed mixture (percentage of pure seed, variety and weed content).
    - .7 Year of production.
    - .8 Net weight (mass).
  - .2 Retain package labels for inspection by Departmental Representative.
- .3 Storage and Handling Requirements:
  - .1 Place seed in a breathable container such as paper or cloth sacks. Do not use plastic to store seed.
  - .2 Label collections with species and collection location.
  - .3 Ensure seeds are dried properly in a well-ventilated location and are monitored for proper drying and insect activity.
  - .4 Store seed in a dry, weatherproof storage place.
  - .5 Protect seeds from damage by heat, moisture, invasive and noxious seed contamination, rodents, pesticides, and other sources of damage or contamination until time of delivery.
  - .6 Collections must be kept separate according to collection site. Collections should be made from a large, number of unrelated plants and collections should not be concentrated in one area where feasible. In some cases, it may be appropriate to collect a community of seeds in consultation with the Departmental Representative.

## 2 PRODUCTS

### 2.01 GRASS SEED

#### .1 Collection Targets

Scientific Name	Common Name	Target Quantity of Pure Live Seed (PLS)
<i>Pseudoroegneria spicata</i>	bluebunch wheatgrass	40 kg
<i>Agropyron trachycaulum</i>	awned wheatgrass	20 kg
<i>Bromus carinatus</i>	mountain brome	10 kg
<i>Bromus vulgaris</i>	Columbia brome	10 kg
<i>Calamagrostis canadensis</i>	marsh reed grass	20 kg
<i>Calamagrostis rubescens</i>	pine reed grass	20 kg
<i>Danthonia parryi</i>	Parry's oatgrass	10 kg
<i>Deschampsia caespitosa</i>	tufted hair grass	20 kg
<i>Elymus glaucus</i>	smooth wild rye	15 kg
<i>Festuca campestris</i>	Foothills rough fescue	40 kg
<i>Festuca idahoensis</i>	Idaho fescue	30 kg
<i>Festuca saximontana</i>	Rocky mountain fescue	40 kg
<i>Koeleria macrantha</i>	June grass	10 kg
<i>Poa juncifolia</i>	alkaline bluegrass	40 kg
<i>Poa palustris</i>	fowl bluegrass	5 kg
<i>Stipa columbiana (nelsonii)</i>	Columbia needlegrass	20 kg
<i>Carex pensylvanica</i>	sun-loving sedge	10 kg

.2 In some cases, it may be appropriate to collect a community of seeds in consultation with the Departmental Representative.

#### .3 Supply

- .1 Seed Collections must be completed within the appropriate seed zone for use within Waterton Lakes National Park. Collections from outside the appropriate seed zone ([http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/formain15749/\\$FILE/seed-zones-alberta.pdf](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/formain15749/$FILE/seed-zones-alberta.pdf)) requires consultation and approval by the Departmental Representative prior to the start of collection.
- .2 The Departmental Representative must be notified in writing as soon as possible if seasonal conditions will impact the ability to collect the specified target quantities.

### **3 EXECUTION**

#### **3.01 EQUIPMENT**

- .1 All equipment used in seed collection must be clean and free of vegetation to prevent the introduction and spread of invasive agronomic species and weed species.
- .2 Travel within Waterton Lakes National Park will be restricted to vehicles on public roads only and by foot when off road. The use of off-highway vehicles' is not permitted unless written approval is obtained from the Departmental Representative.
- .3 There is absolutely NO wheel or track type vehicle / equipment, quad, bob cat, or any other motorized equipment off the road or parking areas. If access with motorized equipment is required to collect seed, the contractor is responsible for notifying the Departmental Representative and obtaining written approval prior to proceeding. A Restricted Activity Permit is required for all off-road travel with equipment within Waterton Lakes National Park. Note that requesting access off roads or parking areas with motorized equipment does not guarantee access will be granted.

#### **3.02 EXAMINATION**

- .1 Verification of Species: Collect a herbarium specimen of each collected species for ease of verification and submit to the Departmental Representative.
- .2 Obtain Certificates of Seed Analysis for collected seed and submit to the Departmental Representative a minimum of two weeks prior to delivery for approval.

#### **3.03 COLLECTION**

- .1 Contractor is responsible for collecting the following site information for each collection:
  - .1 Lot number
  - .2 Species name (Scientific name)
  - .3 Collector's name
  - .4 Collection Date
  - .5 Collection Location (GPS)
  - .6 Prohibited Noxious or Noxious weeds in the vicinity of collection.
- .2 Ensure parent material remains intact following seed collection activities.

#### **3.04 DELIVERY**

- .1 Deliver dry, clean, processed seed to Waterton Lakes National Park in dry, weatherproof containers.
- .2 Protect seeds from damage by heat, moisture, invasive and noxious seed contamination, rodents, pesticides, and other sources of damage or contamination until time of delivery.

#### **3.04 CLEANING**

- .1 Progress Cleaning:
  - .1 Leave Work area clean at end of each day.
  - .2 Keep pavement and area adjacent to site clean and free from mud, dirt, and debris at all times.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment. Clean and reinstate areas affected by Work.

## **1 GENERAL**

### **1.01 RELATED REQUIREMENTS**

- .1 Section 32 01 90 – Landscape Maintenance.
- .2 Section 32 93 13 – Native Seed Collection

### **1.02 MEASUREMENT**

- .1 Propagation consists of all materials, labour and equipment required for propagation including but not limited to: scouting appropriate propagule locations for species and collection timing, equipment required for propagule collection, subcontractor fees, obtaining all necessary permits and access permissions to carry out work, cleaning and processing seed as necessary, replacement of rejected plugs, purchasing of native seed daily clean-up of work areas, traffic control as necessary, disposal of all excess and waste material off site and all other work necessary to complete the Work to the satisfaction of the Departmental Representative.

### **1.03 REFERENCES**

- .1 Reference Standards:
  - .1 Natural Resources Canada.
    - .1 Canada's Plant Hardiness Zones (2014).
  - .2 Canadian Nursery Landscape Association (CNLA)
    - .1 Canadian Standards for Nursery Stock - 8<sup>th</sup> Edition.

### **1.04 ADMINISTRATIVE REQUIREMENTS**

- .1 Scheduling: Obtain approval from Departmental Representative of schedule 7 days in advance of shipment of plant material.
- .2 Schedule to include:
  - .1 Quantity and type of plant material.
  - .2 Shipping dates.
  - .3 Arrival dates on site.

### **1.05 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 3: Project Submittals.
- .2 Submit in writing 7 days prior to commencing work:
  - .1 Proposed collection locations (and species) within Waterton Lakes National Park.
- .3 Obtain a Restricted Activity Permit (RAP) from the Departmental Representative prior to starting work and provide 48 hours' notice prior to the first day of the start of work. There is no fee for the Restricted Activity Permit.
- .4 Materials
  - .1 Arrange for inspection of live plant material by Departmental Representative prior to delivery. Inspection may be carried out at storage facility or onsite. The Departmental Representative reserves the right to reject any plant material that does not meet the specifications.

## **1.06 COLLECTION**

- .1 The contractor is responsible for researching and determining the best propagation method for the seed and/or cuttings collected as part of this contract. As Parks Canada has grown many of these species previously, some guidance on species biology can be provided by Parks Canada on request. An excellent resource for native plant propagation protocols is the Propagation Protocol Database developed by the Native Plant Network (see <http://www.nativeplantnetwork.org/network/search.aspx?SearchType=Continental>).
- .2 Where a specified species is not available for collection, or is unavailable for collection in the quantity required, submit explanation of level of effort to collect seed, existing conditions that are influencing lack of availability, and proposed species substitution in writing to Departmental Representative.
- .3 Do not substitute species without written approval for substitution from the Departmental Representative.

## **1.07 DELIVERY, STORAGE AND HANDLING**

- .1 Plugs must be in a healthy condition at the time of delivery and free of weeds, pests and pathogens.
- .2 Method of shipping will be the responsibility of the contractor. Plugs will be shipped in a manner that does not damage plant material and maintains quality of plant materials.
- .3 Delivery and Acceptance Requirements: deliver materials to site in original nursery packaging, labelled with grower's name and address.
  - .1 Protect plant material from frost, excessive heat, wind and sun during delivery.
- .4 Provide Departmental Representative the opportunity to inspect plant material upon delivery to site to determine if any plugs sustained damage or injury during shipping.
- .5 Target delivery dates below are estimates only, and should ultimately be determined by when a tight root plug in the growing container is achieved.

## **2 PRODUCTS**

### **2.01 PLANT MATERIAL**

- .1 Contractor will ensure a sufficient quantity will be available to ship after gradeouts or losses. Parks Canada, Waterton Lakes Field Unit has the first right of refusal on overruns exceeding the ordered quantity, if available.
- .2 Type of root preparation, sizing, grading and quality: comply with Canadian Standards for Nursery Stock.
  - .1 Source of plant material: grown in Zone 3a to 4a in accordance with Canada's Plant Hardiness Zones.
- .3 Plant material: free of disease, insects, defects or injuries and structurally sound with strong fibrous root system.
- .4 Plug Sizes
  - .1 Plant material must meet the following size requirements upon delivery to site.



Scientific Name	Common Name	Specifications	Target quantity
<i>Arctostaphylos uva-ursi</i>	Bearberry	Height: 7 cm Caliper: 7 mm Root System: firm plug in 800 ml / 4" containers.	1000
<i>Elaeagnus commutata</i>	wolf willow	Height: 30 cm Caliper: 5mm Root System: firm plug in 800 ml / 4" containers	100
<i>Juniperus horizontalis</i>	creeping juniper	Height: 7 cm Caliper: 5 mm Root System: firm plug in 800 ml / 4" containers.	100
<i>Juniperus communis</i>	common juniper	Height: 7 cm Caliper: 5 mm Root System: firm plug in 800 ml / 4" containers	100
<i>Prunus virginiana</i>	chokecherry	Height: 7 cm Caliper: 5 mm Root System: firm plug in 800 ml / 4" container	100
<i>Shepherdia canadensis</i>	buffalo berry	Height: 4.5 cm Caliper: 4 mm Root System: Firm plug in 800 ml / 4" container.	100
<i>Symphoricarpos occidentalis</i>	snowberry	Height: 12 to 36 inches. Caliper: N/A. Root System: firm plug in 800 ml / 4" container	200

### **3 EXECUTION**

#### **3.01 EXAMINATION**

- .1 Provide photographic documentation of collected specimens prior to the start of propagation for species verification to the Departmental Representative.

#### **3.02 CLEANING**

- .1 Progress Cleaning: leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

## 1 GENERAL

### 1.01 RELATED REQUIREMENTS

- .1 Appendix D – Submittal Forms.
- .2 Section 32 01 90 – Landscape Maintenance.

### 1.02 MEASUREMENT PROCEDURES

- .1 Measure chemical control of vegetation in number of hours spent per worker who is engaged in:
  - .1 The application of herbicides.
  - .2 The mapping of locations of herbicide application by Global Positioning System (GPS).
- .2 Chemical control of vegetation consists of the supply and application of chemical vegetation control products, including, but not limited to: sub-contracting fees, preparation and submission of required treatment reports, certifications, clean-up of spills, and proper disposal of containers and materials.
- .3 Repeated applications of herbicide on plants or areas that were previously treated under the work of the contract will be measured using the hourly rates of the contract, unless it is determined by the Departmental Representative that the initial application(s) of herbicide did not comply with the Project Specifications or industry best practices for herbicide application.

### 1.03 REFERENCES

- .1 Government of Canada
  - .1 Pest Control Products Act, S.C. 2002, c. 28 (current to January 17, 2017).
- .2 Health Canada (HC)/Pest Management Regulatory Agency (PMRA)
  - .1 National Standard for Pesticide Education, Training and Certification in Canada (1995) (with revisions up to and including 2005).
- .3 Province of Alberta
  - .1 Environmental Protection and Enhancement Act, Pesticide (Ministerial) Regulation, Alberta Regulation 43/1997 (with amendments up to and including Alberta Regulation 108/2016).
  - .2 Environmental Protection and Enhancement Act, Pesticide Sales, Handling, Use and Application Regulation, Alberta Regulation 24/1997 (with amendments up to and including Alberta Regulation 105/2016).
  - .3 Environmental Code of Practice for Pesticides (effective May 12, 2010).
  - .4 Weed Control Act, Statutes of Alberta, 2008, Chapter W-5.1 (Current as of October 1, 2011).
  - .5 Weed Control Act, Weed Control Regulation, Alberta Regulation 19/2010 (with amendments up to and including Alberta Regulation 125/2016).
- .4 Parks Canada Agency
  - .1 Management Directive 2.4.1, Integrated Pest Management, File C-6261-0 (December, 1998).

### 1.04 PERFORMANCE REQUIREMENTS

- .1 For weed control, within 30 days of treatment, kill target plants without damaging desirable vegetation to the following tolerances:
  - .1 High Priority Species: no plants are permitted to remain alive in the restoration areas.

- .2 Medium Priority Species: a maximum average of one (1) plant per square metre will be accepted, as defined by approved vegetation assessment procedures.
- .2 Refer to Section 32 01 90 – Landscape Maintenance for definition of High Priority Species and Medium Priority Species.
- .3 Refer to Section 32 01 90 – Landscape Maintenance for approved vegetation assessment procedures.
- .4 Any target plants which are not killed within 30 days of treatment shall be re-treated as directed by Departmental Representative.

### **1.05 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Make submittals in accordance with Section 3: Project Submittals..
- .2 Product Data:
  - .1 Submit manufacturer's installation instructions, including printed product literature, specifications and datasheet.
  - .2 Submit 2 copies of Workplace Hazardous Materials Information System (WHMIS) - Material Safety Data Sheets (MSDS).
    - .1 WHMIS acceptable to Human Resources Development Canada - Labour and Health Canada for herbicides and pesticides.
    - .2 Indicate VOC content.
    - .3 Provide copy of on-site stored products to local fire department.
- .3 Quality Control Reports: within 7 days of work completion, submit to Departmental Representative written report containing following information:
  - .1 Full name and PCP Registration number of herbicide products used including adjuvants.
  - .2 Copies of provincial applicator's license and pesticide project application permit if not submitted to Departmental Representative prior to the start of work.
  - .3 Copy of equipment log indicating spray calibration used during pesticide application.
- .4 For each application of herbicide, complete and submit a Weed Mapping and Control Form to the Departmental Representative within 7 days of work completion. Refer to Appendix D - Submittal Forms.
- .5 Where herbicide application is required within 30 m of an open body of water, complete and submit the OBW Herbicide Application Form to the Departmental Representative. Note that Section A of the form is to be completed in advance of herbicide application. Section B shall be completed and submitted within 7 days of completion of work. Refer to Appendix D - Submittal Forms.
- .6 Integrated Pest Management Plan: prepare and submit an Integrated Pest Management Plan as required by Section 3: Project Submittals.

### **1.06 SAFETY AND REGULATORY REQUIREMENTS**

- .1 Comply with label directions on the use of herbicide products.
- .2 Worker protection:
  - .1 Comply with label directions as to ambient temperature ranges for application.
  - .2 Ensure workers wear appropriate Personal Protective Equipment, including, but not limited to: full height rubber boots, chemical-resistant gloves, eye protection, long sleeved clothing, protective clothing, face shields, and chemical aprons when mixing, handling, or applying pesticides.
  - .3 Inspect Personal Protective Equipment before each use to ensure it is in good condition. Replace any damaged or faulty equipment before undertaking any pesticide mixing,

- handling, or application.
- .4 Ensure workers do not eat, drink or smoke while applying pesticides.
- .3 Comply with applicable personnel safety standards for handling and use of pesticides.
- .4 Regulatory Requirements:
  - .1 Provincial / Territorial Pesticide Certification Programs: comply with National Standard for Pesticide Education, Training and Certification and Provincial pesticide control regulations of locality in which operation is to be carried out.
  - .2 Obtain permits and licenses necessary to complete work.

### **1.07 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and maintain packaged materials with manufacturer's seals and labels intact.
- .2 Provide storage facility with non-porous floor capable of preventing leaching of spilled pesticides.
  - .1 Locate storage above 1 year flood plains.
- .3 Prevent damage, adulteration and soiling of material during delivery, handling and storage.
- .4 Store material in accordance with label directions, including those on maximum and minimum storage temperatures.
- .5 Store herbicide products in original containers as supplied by manufacturer and keep sealed until used.
- .6 Store herbicide products in well ventilated, controlled access location as reviewed by Departmental Representative.
- .7 Do not store herbicides near feeds and food stuffs, agricultural plants, seeds, fungicides, insecticides, fertilizers or other agricultural chemicals.
- .8 Identify storage area as pesticide storage facility for fire protection purposes.
- .9 Prominently post:
  - .1 List of medical and fire department telephone numbers.
  - .2 In a location outside of storage area, post list of products stored and keep list up-to-date.

### **1.08 WASTE MANAGEMENT AND DISPOSAL**

- .1 Triple rinse empty herbicide containers with diluent and add rinsate to spray mixture in tank.
- .2 Puncture on all sides and crush triple rinsed containers making them unsuitable for further use and dispose of material at appropriate recycling drop point.
- .3 Crush paper and cardboard containers and dispose of material at appropriate recycling facility.
- .4 Dispose of containers in accordance with provincial requirements.
- .5 Do not rinse or wash spray tanks and equipment on site.
- .6 Dispose of wash water from spray tanks and equipment outside of the park according to provincial requirements unless an alternative location is otherwise approved by Departmental Representative.
- .7 Dispose of unwanted or contaminated pesticides through appropriate environmental management facilities that will dispose of pesticide by methods as reviewed by Departmental Representative in accordance with Pest Control Products Act.

- .8 Dispose of water soluble packaging (usually PVA - poly vinyl acetate) in accordance with manufacturer's instructions in sprayer tank. All safety precautions for handling and use of PVA packaging must be adhered to.
  - .1 Adhere to safety precautions for handling and use of PVA packaging.
- .9 Place materials defined as hazardous or toxic waste in designated containers.
- .10 Ensure emptied containers are sealed and stored safely for disposal away from children and wildlife.

## **2 PRODUCTS**

### **2.01 MATERIALS**

- .1 Herbicides:
  - .1 Select appropriate herbicides to achieve specified control requirement.
  - .2 Herbicide products used must be currently registered for such in accordance with Pest Control Products Act.
- .2 Adjuvants: compatible with herbicide product used.
- .3 Herbicides:
  - .1 The following products are approved for use in Waterton Lakes National Park.

<b>Target Species</b>	<b>Herbicide</b>	<b>PCP Number</b>	<b>Treatment Type</b>	<b>Mix Rate</b>
Bull Thistle	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Canada Thistle	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Common Tansy	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Common Toadflax	Vantage Plus Max II		Wicking	25%
Curly Dock	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Dalmation Toadflax	Glyphosate (e.g. Vantage Plus Max II)	28840	Wicking	25%
Diffuse Knapweed	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Downy Brome	Glyphosate (e.g. Vantage Plus Max II)	28840	Spot Application/Wicking	0.75%/25%
Japanese Knotweed	Glyphosate (e.g. Vantage Plus Max II)	28840	Wicking	25%
Leafy Spurge	Chlorsulfuron / Aminocyclopyrachlor (e.g. Truvist)	30920	Spot Application	10g/20L
Orange Hawkweed	Chlorsulfuron / Aminocyclopyrachlor (e.g. Truvist)	30920	Spot Application	10g/20L
Oxeye Daisy	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Russian Knapweed	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Scentless Chamomile	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Spotted Knapweed	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%
Sulphur Cinquefoil	Aminopyralid (e.g. Milestone)	28517	Spot Application	0.05%

Target Species	Herbicide	PCP Number	Treatment Type	Mix Rate
Tall Hawkweed	Chlorsulfuron / Aminocyclopyrachlor (e.g. Truvist)	30920	Spot Application	10g/20L
White Sweet Clover	Chlorsulfuron / Aminocyclopyrachlor (e.g. Truvist)	30920	Spot Application	10g/20L
Yellow Sweet Clover	Chlorsulfuron / Aminocyclopyrachlor (e.g. Truvist)	30920	Spot Application	10g/20L

.2 Alternate products may be permitted if described and justified in the IPM submitted prior to project commencement and reviewed and approved by the Departmental Representative. The Departmental Representative reserves the right to reject proposed product recommendations if justification is deemed insufficient.

.4 Adjuvants:

.1 Choose adjuvants with lowest toxicity levels and residual effects.

## **2.02 EQUIPMENT**

.1 Backpack sprayer:

.1 With hose and handgun for spot treatment.

.2 Weed wiper applicator:

.1 Hand-held rope wick wiper.

## **3 EXECUTION**

### **3.01 NOTICE OF SPRAY OPERATION**

.1 Post areas to be treated with signs placed at 100 m intervals around perimeter.

.2 Indicate on signs that spray program is being implemented. Obtain approval for signs from Departmental Representative prior to placement.

.3 Put signs in place prior to beginning of spray operation and retain in place for 24 hours after spray operation is completed for each particular area.

### **3.02 ENVIRONMENTAL PROTECTION**

.1 No application of the herbicides specified in this Section is permitted in the Waterton Townsite, Salamander Hill or within 10 meters of a Bio-Control Release Sites. Locations are provided in the Appendix.

.2 Herbicide applications must not occur within 250 meters up stream of a potable water intake. Locations are provided in the Appendix.

.3 Spray application may continue only when wind velocities range between 2 and 10 km/h. Spray application at wind velocities of 10 – 16 km/h may be allowed with approval from the Departmental Representative if coordinating herbicide spray application with calm wind conditions proves unfeasible. The Departmental Representative may allow spot spraying in conditions exceeding the noted wind velocities if local conditions allow for application of herbicide without unacceptable drift to other plants or risk of wind gusts that may impact applicators.

.4 Do not spray when air turbulence will prevent uniform application.

- .5 Open Body of Water
  - .1 An Open Body of Water is a river, stream, lake, sloughs or ponds or public irrigation ditch. It does not include roadside ditches, man-made water hazards on a golf course with no out flow off the golf course.
  - .2 No herbicide application is permitted within 1 m of the normal high water level of an Open Body of Water.
  - .3 The following requirements apply to application of herbicides within 30 m of an Open Body of Water:
    - .1 An Open Body of Water Herbicide Application Form must be submitted to the Departmental Representative before proceeding with any herbicide application. Refer to Appendix D - Submittal Forms.
    - .2 No more than 10% of any 100 square meters within 1-5 m of the Open Body of Water shall be treated with herbicide within one calendar year.
    - .3 No more than 30% of any 100 square meters within 5-30 m of the Open Body of Water shall be treated with herbicide one calendar year.
    - .4 Only Prohibited Noxious or Noxious Plants as identified under the Alberta Weed Control Act shall be treated.
    - .5 Applications must be made using backpack sprayers, hand gun, or application methods that treat single plants.
    - .6 Glyphosate (e.g. Vantage Plus Max II) and Aminopyralid (e.g. Milestone) are the only acceptable herbicides to be applied within 30 m of an Open Body of Water.
- .6 In case of herbicide or pesticide spill, notify Departmental Representative verbally immediately and subsequently in writing. Follow spill reporting protocol outlined in Section 3: Project Submittals.
  - .1 Minor spill: use dry soil or other absorbent materials to remove excess liquid and sweep up powders or granular material.
  - .2 Spread contaminated soils or sweepings over large area of bare soil to facilitate degradation.
  - .3 Dispose of paper, cardboard or paper packaging contaminated during spill as dictated by the provincial Ministry of the Environment.
- .7 Do not allow drifting beyond target area.
  - .1 Use mechanical method to minimize herbicide drift.
- .8 Provide protective covering suitable to prevent contamination while spray is in progress adjacent to flowerbeds and desirable vegetation.
- .9 Mix concentrate and water at least 50 m away from any water supply.
- .10 Herbicides must not be sprayed on slumped or washed out areas or areas subject to soil erosion.

### **3.03 APPLICATION OF HERBICIDES**

- .1 Application's instructions: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheet.
- .2 Application equipment must be labeled with the trade name of the herbicide it contains and the mix rate of the solution.
- .3 Agitate the herbicide solution before application.
- .4 For backpack sprayers:
  - .1 Ensure sprayer is not over-pressurized.
  - .2 Minimize the distance between the sprayer nozzle and target plant to reduce over-spray.
  - .3 Do not spray to the point of runoff.

- .4 Do not fill back pack sprayer with more than 10 L of herbicide solution.
- .5 Never bend over while wearing back pack sprayer.
- .6 Always de-pressurize back pack sprayer after use.
  
- .5 For weed wipers:
  - .1 Use a funnel when filling the reservoir.
  - .2 Do not wick to the point of runoff.
  - .3 Always bring a form of secondary containment into the field.
  - .4 Always hold the wicker with both hands.
  - .5 A supervising applicator must be present during the entire application.
  
- .6 Start application at the farthest location from the access point or vehicle to avoid accidentally transferring herbicide to non-target plants by foot.
  
- .7 Treat areas as directed by Departmental Representative with appropriate herbicides as specified.
  
- .8 Calibrate equipment to achieve manufacturer's recommended application rates.
  
- .9 Confine herbicide application to areas as designated by Departmental Representative to achieve specified control requirements.
  
- .10 Space successive passes to provide uniform coverage of treated area.
  
- .11 Use flagmen or other aids as necessary to indicate successive passes.
  
- .12 Apply spray at full leaf stage of plant growth and thoroughly wet foliage in accordance with label directions.
  
- .13 Re-treat areas in accordance with label directions until specified control requirements are achieved.
  
- .14 Use appropriate buffer zones and berms to avoid surface contamination of wells, ponds and streams.

### **3.04 CLEANING**

- .1 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.



**1 GENERAL**

**1.01 RELATED REQUIREMENTS**

- .1 Section 31 31 19.13 – Chemical Vegetation Control.
- .2 Section 32 96 10 – Plug Transplanting

**1.02 MEASUREMENT**

- .1 Mechanical Vegetation Control shall include:
  - .1 The mapping of locations of weed infestations and weed control measures by Global Positioning System (GPS) as per the Weed Mapping and Control Form.
  - .3 Conducting monthly mechanical weed control activities.
  - .4 Mowing grass and weeds.
  - .5 Record showing the areas of work during the month will be submitted as supporting documentation to the progress claim.
- .2 Plug Maintenance shall include inspections of planted plug materials, maintenance of temporary fencing, watering plant materials and all other work required to meet the performance requirements.

**1.03 REFERENCES**

- .1 Reference Standards:
  - .1 Government of Alberta.
    - .1 Rangeland Health Assessment for Grassland, Forest and Tame Pasture, Alberta Sustainable Resource Development (Revised April 2009).
    - .2 Weed Control Act, Statutes of Alberta, 2008, Chapter W-5.1 (Current as of October 1, 2011).
    - .3 Weed Control Act, Weed Control Regulation, Alberta Regulation 19/2010 (with amendments up to and including Alberta Regulation 125/2016).
  - .2 Parks Canada Agency
    - .1 Management Directive 2.4.1, Integrated Pest Management, File C-6261-0 (December, 1998).

**1.04 DEFINITIONS**

- .1 Restoration Areas (See attached figures):

<b>Restoration Site</b>	<b>Estimated Area (ha)<sup>1</sup></b>
Belly River Culvert Replacement	0.1
Bison Handling Facility	0.6
Highway 5 & 6 Improvements	64.1
Red Rock Secondary Parking Lot	0.2
Red Rock Parkway	2.6
Red Rock Soil Management Site	1.5
Townsite Water/Sewer Improvements	0.8
Townsite Parking Areas	0.3
Townsite Building Sites (Housing, Washrooms)	0.1

<sup>1</sup> Contractor is responsible for verifying areas provided.

- .2 High Priority Species
  - .1 The following weed species are defined as “High Priority Species” in Waterton Lakes National Park for the purpose of this contract.

Species ID	Scientific Name	Common Name	AB Weed Control Act	Additional Listing
AEGCYL	<i>Aegilops cylindrica</i>	jointed goatgrass	Prohibited Noxious	
ALLPET	<i>Allaria petiolata</i>	garlic mustard	Prohibited Noxious	
BERVUL	<i>Berberis vulgaris</i>	common barberry	Prohibited Noxious	
BERINC	<i>Berteroa incana</i>	hoary alyssum	Prohibited Noxious	
BUTUMB	<i>Butomus umbellatus</i>	flowering rush	Prohibited Noxious	
CARACA	<i>Carduus acanthoides</i>	plumeless thistle	Prohibited Noxious	
CARNUT	<i>Carduus nutans</i>	nodding (musk) thistle	Prohibited Noxious	WLNP High Priority
CENDIF	<i>Centaurea diffusa</i>	diffuse knapweed	Prohibited Noxious	WLNP High Priority
CENJAC	<i>Centaurea jacea</i>	brown knapweed	Prohibited Noxious	
CENMAC	<i>Centaurea macrocephala</i>	bighead knapweed	Prohibited Noxious	
CENNIGA	<i>Centaurea nigra</i>	black knapweed	Prohibited Noxious	
CENNIGE	<i>Centaurea nigrescens</i>	Tyrol knapweed	Prohibited Noxious	
CENSOL	<i>Centaurea solstitialis</i>	yellow starthistle	Prohibited Noxious	
CENSTO	<i>Centaurea stoebe ssp. micranthos</i>	spotted knapweed	Prohibited Noxious	WLNP High Priority
CENVIR	<i>Centaurea virgata ssp. squarrosa</i>	squarrose knapweed	Prohibited Noxious	
CENMON	<i>Centaurea x moncktonii</i>	meadow knapweed	Prohibited Noxious	
CENPSA	<i>Centaurea x psammogena</i>	hybrid knapweed	Prohibited Noxious	
CHOJUN	<i>Chondrilla juncea</i>	rush skeletonweed	Prohibited Noxious	
CIRPAL	<i>Cirsium palustre</i>	marsh thistle	Prohibited Noxious	
CRUVUL	<i>Crupina vulgaris</i>	common crupina	Prohibited Noxious	
CYPESC	<i>Cyperus esculentus</i>	yellow nutsedge	Prohibited Noxious	
ELAUMB	<i>Elaeagnus umbellata</i>	autumn olive	Prohibited Noxious	
FALJAP	<i>Fallopia japonica</i>	Japanese knotweed	Prohibited Noxious	WLNP High Priority
FALSAC	<i>Fallopia sachalinensis</i>	giant knotweed	Prohibited Noxious	
FALBOH	<i>Fallopia x bohemica</i>	hybrid Japanese knotweed	Prohibited Noxious	
HALGLO	<i>Halogeton gloeratus</i>	Saltlover	Prohibited Noxious	
HERMAN	<i>Heracleum mantegazzianum</i>	giant hogweed	Prohibited Noxious	
HYPPER	<i>Hypericum perforatum</i>	common St. John's-wort	Prohibited Noxious	WLNP High Priority
IMPGLA	<i>Impatiens glandulifera</i>	Himalayan balsam	Prohibited Noxious	

Species ID	Scientific Name	Common Name	AB Weed Control Act	Additional Listing
IRIPSE	<i>Iris pseudacorus</i>	pale yellow iris	Prohibited Noxious	WLNP High Priority
ISATIN	<i>Isatis tinctoria</i>	dyer's woad	Prohibited Noxious	
JACVUL	<i>Jacobaea vulgaris</i>	tansy ragwort	Prohibited Noxious	
LYTSLA	<i>Lythrum slaicaria</i>	purple loosestrife	Prohibited Noxious	
MYRSPI	<i>Myriophyllum spicatum</i>	Eurasian water milfoil	Prohibited Noxious	
ODOVER	<i>Odontites vernus</i>	red bartsia	Prohibited Noxious	
PILAUUR	<i>Pilosella aurantiaca</i>	orange hawkweed	Prohibited Noxious	WLNP High Priority
PILCAE	<i>Pilosella caespitosa</i>	meadow hawkweed	Prohibited Noxious	
PILOFF	<i>Pilosella officinarum</i>	mouse-ear hawkweed	Prohibited Noxious	
POTREC	<i>Potentilla recta</i>	sulphur cinquefoil	Prohibited Noxious	WLNP High Priority
RHACAT	<i>Rhanmus cathartica</i>	common buckthorn	Prohibited Noxious	
RHAREP	<i>Rhaponticum repens</i>	Russian knapweed	Prohibited Noxious	WLNP High Priority
TAECAP	<i>Taeniatherum caput-medusae</i>	medusahead	Prohibited Noxious	
TAMRAM	<i>Tamarix ramosissima</i>	saltcedar	Prohibited Noxious	
TAMCHI	<i>Tamarix chinensis</i>	Chinese tamarisk	Prohibited Noxious	
TAMPAR	<i>Tamarix parviflora</i>	smallflower tamarisk	Prohibited Noxious	
TRITER	<i>Tribulus terrestris</i>	puncturevine	Prohibited Noxious	
ARCLA	<i>Arctium lappa</i>	great burdock	Noxious	
ARCMIN	<i>Arctium minus</i>	lesser /common burdock	Noxious	WLNP High Priority
ARMTOM	<i>Arctium tomentosum</i>	woolly burdock	Noxious	
BROJAP	<i>Bromus japonicus</i>	Japanese brome	Noxious	WLNP High Priority
BROTEC	<i>Bromus tectorum</i>	downy brome	Noxious	WLNP High Priority
CAMRAP	<i>Campanula rapunculoides</i>	creeping bellflower	Noxious	WLNP High Priority
CLETAN	<i>Clematis tangutica</i>	yellow clematis	Noxious	
CONARV	<i>Convolvulus arvensis</i>	field bindweed	Noxious	WLNP High Priority
CYNOFF	<i>Cynoglossum officinale</i>	hound's-tongue	Noxious	WLNP High Priority
ECHVUL	<i>Echium vulgare</i>	blueweed	Noxious	WLNP High Priority
EUPESU	<i>Euphorbia esula</i>	leafy spurge	Noxious	WLNP High Priority
GYPPAN	<i>Gypsophila paniculata</i>	common baby's-breath	Noxious	WLNP High Priority
HESMAT	<i>hesperis matronalis</i>	dame's rocket	Noxious	WLNP High Priority
HYONIG	<i>Hyoscyamus niger</i>	black henbane	Noxious	WLNP High Priority
KNAARV	<i>Knautia arvensis</i>	field scabious	Noxious	WLNP High Priority
LEPAPP	<i>Lepidium appelianum</i>	globe-podded hoary cress	Noxious	
LEPCHA	<i>Lepidium chalepense</i>	lens-podded hoary cress	Noxious	

Species ID	Scientific Name	Common Name	AB Weed Control Act	Additional Listing
LEPDRA	<i>Lepidium draba</i>	heart-podded hoary cress	Noxious	
LEPLAT	<i>Lepidium latifolium</i>	broad-leaved pepper-grass	Noxious	
LINDAL	<i>Linaria dalmatica</i>	Dalmatian toadflax	Noxious	WLNP High Priority
LINVUL	<i>Linaria vulgaris</i>	yellow (common) toadflax	Noxious	WLNP High Priority
RANACR	<i>Ranunculus acris</i>	tall buttercup	Noxious	WLNP High Priority
SILLAT	<i>Silene latifolia ssp. alba</i>	white cockle	Noxious	WLNP High Priority
SONARV	<i>Sonchus arvensis</i>	perennial sow thistle	Noxious	
TANVUL	<i>Tanacetum vulgare</i>	common tansy	Noxious	WLNP High Priority
TRIINO	<i>Tripleurospermum inodorum</i>	scentless chamomile	Noxious	WLNP High Priority
AGRCRI	<i>Agropyron cristatum</i>	crested wheatgrass	Unlisted	WLNP High Priority
ALYALY	<i>Alyssum alyssoides</i>	small alyssum	Unlisted	WLNP High Priority
ARTABS	<i>Artemisia absinthium</i>	absinthe wormwood	Unlisted	AISC Uncategorized WLNP High Priority
ASTCIC	<i>Astragalus cicer</i>	cicer milkvetch	Unlisted	AISC Uncategorized AWRAC Not Yet Assessed
BOTISC	<i>Bothriochloa ischaemum</i>	yellow bluestem	Unlisted	AWRAC Watch List
CARABO	<i>Caragana arborescens</i>	caragana	Unlisted	WLNP High Priority
CARCAR	<i>Carum carvi</i>	Wild caraway	Unlisted	WLNP High Priority AISC Uncategorized AWRAC Study List
CHEMAJ	<i>Chelidonium majus</i>	Celandine	Unlisted	AWRAC Watch List
CIRVUL	<i>Cirsium vulgare</i>	bull thistle	Unlisted	WLNP High Priority
CONMAC	<i>Conium maculatum</i>	poison hemlock	Unlisted	AISC Uncategorized
COTTIN	<i>Cota tinctoria</i>	yellow chamomile	Unlisted	WLNP High Priority
COTINT	<i>Cotoneaster integerrimus</i>	cotoneaster	Unlisted	AISC Uncategorized AWRAC Not Yet Assessed
CUSSSP	<i>Cuscuta spp.</i>	dodder	Unlisted	AISC Uncategorized
CYNLOU	<i>Cynanchum louiseae</i>	black swallow-wort	Unlisted	AISC Uncategorized
CYNROS	<i>Cynanchum rossicum</i>	European swallow-wort	Unlisted	AISC Uncategorized
DATSTR	<i>Datura stramonium</i>	jimsonweed	Unlisted	AISC Uncategorized
DAUCAR	<i>Daucus carota</i>	Queen Anne's lace	Unlisted	AISC Uncategorized
ECHSPH	<i>Echinops sphaerocephalus</i>	globe thistle	Unlisted	AWRAC Study List
ELAANG	<i>Elaeagnus angustifolia</i>	Russian olive	Unlisted	AISC Uncategorized AWRAC Study List
ELYREP	<i>Elymus repens</i>	quackgrass	Unlisted	WLNP High Priority
ERIVIL	<i>Eriochloa villosa</i>	woolly cupgrass	Unlisted	AWRAC Watch List
EROCIC	<i>Erodium cicutarium</i>	crane's (stork's) bill	Unlisted	WLNP High Priority, AISC Uncategorized
FRAALN	<i>Fragula alnus</i>	glossy buckthorn	Unlisted	AWRAC Watch List
GALAPA	<i>Galium aparine / Galium spurium</i>	cleavers	Unlisted	AISC Uncategorized
GLYMAX	<i>Glyceria maxima</i>	reed sweetgrass	Unlisted	AWRAC Study List
HIEFLA	<i>Hieracium flagellare</i>	whiplash hawkweed	Unlisted	AISC Uncategorized
HIEFLO	<i>Hieracium floribundum</i>	Kingdevil hawkweed	Unlisted	AISC Uncategorized

Species ID	Scientific Name	Common Name	AB Weed Control Act	Additional Listing
HIEGLO	<i>Hieracium gloeratum</i>	yellowdevil hawkweed	Unlisted	AISC Uncategorized
HIELAE	<i>Hieracium laevigatum</i>	smooth hawkweed	Unlisted	AISC Uncategorized
HIEMAC	<i>Hieracium maculatum</i>	spotted hawkweed	Unlisted	AISC Uncategorized
HIEMUR	<i>Hieracium murorum</i>	wall hawkweed	Unlisted	AISC Uncategorized
HIEPIL	<i>Hieracium piloselloides</i>	tall hawkweed	Unlisted	AISC Uncategorized
HIESAB	<i>Hieracium sabaudum</i>	European hawkweed	Unlisted	AISC Uncategorized
HIPRHA	<i>Hippophae rhamnoides</i>	sea buckthorn	Unlisted	AWRAC Not Yet Assessed
LOLPER	<i>Lolium persicum</i>	persian darnel	Unlisted	AISC Uncategorized
LOTCOR	<i>Lotus corniculatus</i>	bird's-foot trefoil	Unlisted	AWRAC Not Yet Assessed
MYOSTR	<i>Myosotis stricta</i>	Upright forget-me-not	Unlisted	WLNP High Priority
ONOVIC	<i>Onobrychis viciifolia</i>	sainfoin	Unlisted	AWRAC Not Yet Assessed
ONOACA	<i>Onopordum acanthium</i>	Scotch cottonthistle	Unlisted	AWRAC Watch List
PAPRHO	<i>Papaver rhoeas</i>	corn poppy	Unlisted	WLNP High Priority
PASSAT	<i>Pastinaca sativa</i>	wild parsnip	Unlisted	AISC Uncategorized
PEGHAR	<i>Peganum harmala</i>	African rue	Unlisted	AISC Uncategorized
PERWAL	<i>Persicaria wallichii</i>	Himalayan knotweed	Unlisted	AISC Uncategorized
PHAARU	<i>Phalaris arundinacea</i>	reed canarygrass	Unlisted	AWRAC Not Yet Assessed
PHRAUS	<i>Phragmites australis</i>	common reed	Unlisted	AWRAC Study List
PILPIL	<i>Pilosella piloselloides (praealtum)</i>	Tall hawkweed	Unlisted	WLNP High Priority
RAPRAP	<i>Raphanus raphanistrum</i>	wild radish	Unlisted	AWRAC Watch List
RUMCRI	<i>Rumex crispus</i>	curly dock	Unlisted	WLNP High Priority
SAPOFF	<i>Saponaria officinalis</i>	bouncing Bet	Unlisted	WLNP High Priority
SECVAR	<i>Securigera varia</i>	crown vetch	Unlisted	AWRAC Not Yet Assessed AWRAC Study List
SEDACR	<i>Sedum acre</i>	mossy stonecrop	Unlisted	WLNP High Priority
SILCHA	<i>Silene chalcedonica</i>	Maltese cross	Unlisted	WLNP High Priority
SILCUC	<i>Silene cucubalus</i>	bladder campion	Unlisted	AISC Uncategorized
SILNOC	<i>Silene noctiflora</i>	Night-flowering Catchfly	Unlisted	WLNP High Priority
SOLSES	<i>Soliva sessilis</i>	carpet burrweed	Unlisted	AWRAC Watch List
SONASP	<i>Sonchus asper</i>	prickly annual sowthistle	Unlisted	AWRAC Watch List
SONOLE	<i>Sonchus oleraceus</i>	annual sowthistle	Unlisted	AWRAC Watch List
SORAUC	<i>Sorbus aucuparia</i>	European mountain ash	Unlisted	AWRAC Watch List
SPHSAL	<i>Sphaerophysa salsula</i>	alkali swainsonpea	Unlisted	AISC Uncategorized
THEARV	<i>Thesium arvense</i>	Thesium arvense	Unlisted	WLNP High Priority AISC Uncategorized AWRAC Watch List,
THYPRA	<i>Thymus praecox</i>	creeping thyme	Unlisted	
VACHIS	<i>Vaccaria hispanica</i>	cow soapwort	Unlisted	AWRAC Study List
VERARV	<i>Veronica arvensis</i>	Corn Speedwell	Unlisted	WLNP High Priority
VIOARV	<i>Viola arvensis</i>	European field pansy	Unlisted	AISC Uncategorized

<b>Species ID</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>AB Weed Control Act</b>	<b>Additional Listing</b>
ZYGFAB	<i>Zygophyllum fabago</i>	Syrian bean-caper	Unlisted	AWRAC Watch List

**.3 Medium Priority Species**

- .1 The following weed species are defined as “Medium Priority Species” in Waterton Lakes National Park for the purposes of this contract.

<b>Species ID</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>AB Weed Control Act</b>
CIRARV	<i>Cirsium arvense</i>	Canada thistle	Noxious
LEUVUL	<i>Leucanthemum vulgare</i>	oxeye daisy	Noxious
VERTHA	<i>Verbascum thapsus</i>	common mullein	Noxious
BROINE	<i>Bromus inermis</i>	Smooth/Awnless Brome	Unlisted
MELALB	<i>Melilotus alba</i>	white sweetclover	Unlisted
MELOFF	<i>Melilotus officinalis</i>	yellow sweetclover	Unlisted
PHLPRA	<i>Phleum pratense</i>	common timothy	Unlisted
POACOM	<i>Poa compressa</i>	Canada bluegrass	Unlisted
POAPRA	<i>Poa pratensis</i>	Kentucky bluegrass	Unlisted

**1.05 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 3: Project Submittals.
- .2 Integrated Pest Management Plan as required by Section 3: Project Submittals.
- .3 For each weed infestation identified and each weed control measure applied, complete and submit a Weed Mapping and Control Form to the Departmental Representative within 7 days of work completion. Refer to Appendix D – Submittal Forms.
- .4 Progress Reports: Submit monthly written reports to Departmental Representative identifying areas of work completed.

**1.06 QUALITY ASSURANCE**

- .1 The Departmental Representative will assess vegetation using the following procedure:
  - .1 To be used for monitoring the presence of weed species.
  - .2 Vegetation will be assessed by square or round quadrats minimum 1 m<sup>2</sup> in area (1 x 1 m square or 1.12 m diameter circle).
  - .3 A minimum of 3 quadrats will be assessed for each landscape restoration area up to 1,000 m<sup>2</sup> in size. A minimum of 1 additional quadrat sample shall be added for each additional 1,000 m<sup>2</sup>. Additional quadrats may be required in sites with a high degree of variation in microsite conditions.
  - .4 Locate quadrats randomly throughout the landscape restoration area in a variety of slope, soil, moisture, aspect and shade conditions to ensure a sampling pattern that is representative of the variety of microsites within the landscape restoration area.
  - .5 Record the location of each quadrat sample using a Global Positioning System (GPS) device.
  - .6 Take photos of each quadrat sample that clearly show the percent coverage and different types of vegetation that are present in the sample.
  - .7 Within each quadrat, estimate or count the following indicator values:
    - .1 Count number of “High Priority Species” weeds.
    - .2 Count number of “Medium Priority Species” weeds.
  - .8 Add together the numeric observations for each sample area and divide by the total

- number of quadrats analyzed to determine the average value for each indicator in the landscape restoration area.
- .9 Each different plant community will be analyzed as a separate landscape restoration area.
- .10 Vegetation assessments will be carried out monthly, or more frequently as required during the growing season immediately following planting or seeding.
- .11 Vegetation assessments will be used as a method to determine general health of landscape restoration areas and will not be the sole factor in determining the need for or location of weed control activities.
- .2 Weed Control Inspections
  - .1 The Departmental Representative will provide the Contractor with weed survey data prior to the start of weed control activities. Monthly updates will be provided by the Departmental Representative.
  - .2 The contractor is responsible for completing a separate Weed Mapping and Control Form with a separate GPS file or layer for each weed species identified. Refer to Appendix D – Submittal Forms.

**1.07 PERFORMANCE REQUIREMENTS**

- .1 Weed Control
  - .1 No plants defined as “High Priority Species” are permitted to remain alive in the restoration areas.
  - .2 A maximum average of one (1) plant per square meter will be accepted for “Medium Priority Species”, as defined by approved vegetation assessment procedures.
  - .3 Where a modified vegetation community has been identified adjacent to, and extending at least 10 m from the weed control areas, the Departmental Representative may permit the occurrence of graminoid “Medium Priority Species” at a higher rate than one (1) plant per square meter. These areas will be confirmed with a site visit with the Contractor and Departmental Representative and approved in writing prior to completing treatment. Forb species listed as “Medium Priority Species” must meet the accepted one (1) plant per square meter requirements.
- .2 Shrub Plugs
  - .1 Minimum 70% survival rate of live plant material after 2 growing seasons.

**2 PRODUCTS**

**2.01 WATER**

- .1 Free of impurities that would inhibit plant growth.
- .2 Supplied by Departmental Representative at designated source.
- .3 Water for required irrigation will be supplied via standpipe at Waterton Lakes National Park Operations Compound. The Contractor is responsible for transporting water to locations where irrigation is required.

**2.02 FERTILIZER**

- .1 Fertilizer is not to be used.

**3 EXECUTION**

**3.01 MAINTENANCE OF PLANTS**

- .1 Perform following maintenance operations from time of planting to end of contract:
  - .1 Water to maintain soil moisture conditions for optimum establishment, growth and health of plant material without causing erosion.
    - .1 For evergreen plant material, water thoroughly in late fall prior to freeze-up to saturate soil around root system.
  - .2 Remove weeds monthly, or more frequently as required.
  - .3 If required to control insects, fungus and disease, use appropriate control methods in accordance with Integrated Pest Management Plan and Federal and Provincial regulations. Obtain product approval from Departmental Representative prior to application.
  - .4 Remove dead or broken branches from plant material.
  - .5 Remove and replace dead plants and plants not in healthy growing condition. Make replacements in same manner as specified for original plantings.

**3.02 MAINTENANCE OF LAWN AREAS**

- .1 Perform following maintenance operations from time of planting to end of contract:
  - .1 Control weeds by mechanical or chemical means utilizing acceptable integrated pest management practices.
    - .1 If chemical means are used, comply with Section 31 31 19.13 - Chemical Vegetation Control.

**3.03 MAINTENANCE OF NATIVE GRASSES AND FORBS**

- .1 Perform following maintenance operations from time of planting to end of contract:
  - .1 Review results of monthly vegetation assessment and weed control inspections with Departmental Representative. Coordinate any required corrective measures with approval of Departmental Representative.
  - .2 Determine appropriate weed control measures.
    - .1 If chemical means are used, comply with Section 31 31 19.13 - Chemical Vegetation Control.
    - .2 Mechanical Weed Control Methods
      - .1 The following mechanical control methods are recommended for weed species occurring in Waterton Lakes National Park. Alternative methods may be approved by Departmental Representative.

Species ID	Species Name	Mechanical Technique
CENDIF	diffuse knapweed	Hand Pulling
FALJAP	Japanese knotweed	Cut Seed Head/Burn in Brown Paper Bag
CARNUT	nodding (musk) thistle	Cut the root below the root crown
PILAUUR	orange hawkweed	Cut Seed Head/Burn in Brown Paper Bag
RHAREP	Russian knapweed	Hand Pulling
CENSTO	spotted knapweed	Hand Pulling
HYPPER	St. John's wort	Hand Pulling - Dig Out Roots
POTREC	sulphur cinquefoil	Cut Seed Head
IRIPSE	Yellowflag Iris	Cut above ground growth
ECHVUL	blue weed	Cut the root below the root crown
TANVUL	common tansy	Cut Seed Head/Burn in Brown Paper Bag
LINVUL	common toadflax	Cut Seed Head/Burn in Brown Paper Bag
LINDAL	Dalmatian toadflax	Cut Seed Head/Burn in Brown Paper Bag
HESMAT	dame's rocket	Hand Pulling
BROTEC	Downy Brome	Hand Pulling
CONARV	field bindweed	Hand Pulling



Species ID	Species Name	Mechanical Technique
KNAARV	Field Scabious	Cut the root below the root crown
BROJAP	Japanese brome	Hand Pulling
EUPESU	leafy spurge	Cut Seed Head/Burn in Brown Paper Bag
TRIINO	scentless chamomile	Cut Seed Head/Burn in Brown Paper Bag
SILLAT	white campion	Hand Pulling
ARTABS	absinthe wormwood	Hand Pulling
SAPOFF	bouncing Bet	Hand Pulling
PAPRHO	corn poppy	Hand Pulling - Dig Out Roots
EROCIC	crane's (stork's) bill	Hand Pulling
THYPRA	creeping thyme	Dig and remove all plant matter
SILCHA	Maltese cross	Hand Pulling
SEDACR	mossy stonecrop	Dig and remove all plant matter
SILNOC	Night-flowering Catchfly	Hand Pulling
PILPIL	Tall hawkweed	Cut seed head - Dig out Roots
CARCAR	Wild caraway	Hand Pulling

.3 Mowing

- .1 Mowing should only be used for the control of weeds, cover crops, and overly dominant species. General mowing for aesthetic purposes is not required in native grass areas.
- .2 Schedule mowing to remove tops of weed species before flower heads form.
- .3 Do not damage desirable species.
- .4 Remove clippings that will smother plants as directed by Departmental Representative.

**3.04 CLEANING**

- .1 Progress Cleaning: leave work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

## 1 GENERAL

### 1.01 RELATED REQUIREMENTS

- .1 Section 32 01 90 – Landscape Maintenance.

### 1.02 MEASUREMENT

- .1 Plugs used for transplanting will be provided by the Departmental Representative and will meet the specifications outlined in Section 2.01.
- .2 Plug transplanting includes, but is not limited to:
  - .1 on-site storage, care, transportation from the storage area to the planting sites, and planting of plugs;
  - .2 landscape maintenance; and
  - .3 supply and installation of temporary fencing, including, but not limited to: labor, fences, fence posts, hardware for attaching fence to posts, and maintenance and repair of fencing.

### 1.03 REFERENCES

- .1 Reference Standards:
  - .1 Natural Resources Canada.
    - .1 Canada's Plant Hardiness Zones (2014).
  - .2 Canadian Nursery Landscape Association (CNLA)
    - .1 Canadian Standards for Nursery Stock - 8<sup>th</sup> Edition.

### 1.04 ADMINISTRATIVE REQUIREMENTS

- .1 Scheduling: obtain approval from Departmental Representative of schedule 7 days in advance of shipment of plant material.
- .2 Schedule to include:
  - .1 Quantity and type of plant material.
  - .2 Shipping dates.
  - .3 Arrival dates on site.
  - .4 Planting dates.

### 1.05 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 3 of the Statement of Work.
- .2 Materials
  - .1 Arrange for inspection of live plant material by Departmental Representative prior to planting. Inspection may be carried out at storage facility or onsite. The Departmental Representative reserves the right to reject any plant material that does not meet the specifications.

### 1.06 DELIVERY, STORAGE AND HANDLING

- .1 Delivery and Acceptance Requirements: deliver materials to site in original nursery packaging, labelled with grower's name and address.
  - .1 Protect plant material from frost, excessive heat, wind and sun during delivery.

- .2 Immediately store and protect plant material which will not be installed within 1 hour.
- .3 Inspect plant material upon delivery to site. Do not plant plugs that have sustained damage or injury during shipping.
- .4 Keep plugs covered and protected from the effects of frost, freezing, mold, sun and wind until time of planting. Do not allow roots to dry out.

**2 PRODUCTS**

**2.01 PLANT MATERIAL**

- .1 Type of root preparation, sizing, grading and quality: comply with Canadian Standards for Nursery Stock.
  - .1 Source of plant material: grown in Zone 3a to 4a in accordance with Canada’s Plant Hardiness Zones.
  - .2 Plant material must be planted in zone specified as appropriate for its species.
  - .3 Plant material in location appropriate for its species.
- .2 Plant material: free of disease, insects, defects or injuries and structurally sound with strong fibrous root system.
- .3 Plug Sizes
  - .1 Plant material provided by the Departmental Representative will meet the following size requirements upon delivery to site.

Estimated No. of Plants	Size	Estimated Planting Density	Scientific Name	Common Name
1500	Height: 4 cm Caliper: 4 mm Root System: Firm plug in container.	3 plants / m <sup>2</sup>	<i>Arctostaphylos uva-ursi</i>	Bearberry
500	Height: 7 cm Caliper: 5 mm Root System: firm plug in 4" container	3 plants / m <sup>2</sup>	<i>Juniperus horizontalis</i>	creeping juniper
500	Height: 7 cm Caliper: 5 mm Root System: firm plug in 4" container	3 plants / m <sup>2</sup>	<i>Juniperus communis</i>	Common juniper
500	Height: 7 cm, Caliper: 9mm of main stem Root System: firm plug in container	3 plants / m <sup>2</sup>	<i>Mahonia repens</i>	Oregon grape

1: Exact locations and distributions will be provided after contract award.

**2.02 WATER**

- .1 Free of impurities that would inhibit plant growth.
- .2 Supplied by Departmental Representative at designated source.

- .3 Water for required irrigation will be supplied via standpipe at Waterton Lakes National Park Operations Compound. The Contractor is responsible for transporting water to locations where irrigation is required.

### **2.03 TEMPORARY FENCING**

- .1 Deer fencing: 2.3 m high bi-oriented black polypropylene mesh fence with minimum tensile strength of 8 kN/m (MD) and 10.0 kN/m (TD). Use wood posts.
  - .1 Reference product: C-Flex P as manufactured by TENAX Corporation, or approved equivalent.
- .2 Rabbit and rodent fencing: 0.9 m high 50 x 50 mm square welded wire mesh. Use metal t-stakes to secure.

## **3 EXECUTION**

### **3.01 EXAMINATION**

- .1 Verification of Conditions: verify conditions of substrate previously installed under other Sections or Contracts are acceptable for planting installation.
  - .1 Visually inspect substrate in presence of Departmental Representative.
  - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
  - .3 Proceed with installation only after unacceptable conditions have been remedied.

### **3.02 PRE-PLANTING PREPARATION**

- .1 Proceed only after receipt of written acceptability of plant material from Departmental Representative.
- .2 Plugs shall be planted only after seeding and hydro-mulching is complete.

### **3.03 PLANTING**

- .1 Plant plugs when species are in active growth only.
- .2 Remove plugs from trays by pushing up through bottom of liner. Do not pull plant from tray by vegetative material.
- .3 Fill planting bags just prior to planting. Do not pack bags tightly.
- .4 Do not tease root system apart.
- .5 Place plug vertically straight in planting hole, with roots pointing downward and not bent at bottom.
- .6 Do not twist plug into planting hole or compress plug to fit into a hole that is not large enough.
- .7 Plant plug level with top of native soil around plug.
- .8 Plugs shall be randomly spaced throughout the planting area to provide a non-uniform appearance.
- .9 Tamp soil around plug to ensure good root to soil contact.
- .10 Water immediately to reduce air pockets and further improve root to soil contact.

### **3.04 CLEANING**

- .1 Progress Cleaning: leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

**Solicitation No. - N° de l'invitation**  
5P420-17-5044/A

**Amd. No. - N° de la modif.**  
00

**Contracting Authority - Autorité contractante**  
Oksana Kuzyshyn

**GETS Ref. No. - N° de réf. SEAG**  
PW-17-00780770

**Title - Sujet**  
Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

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## **APPENDIX "B"**

### **WATERTON LAKES NATIONAL PARKS BEST MANAGEMENT PRACTICES**

Under separate attachment. File: 16028\_BMP\_AllProjects\_MASTER\_Apr19ver1.2\_eh

**Solicitation No. - N° de l'invitation**  
5P420-17-5044/A

**Amd. No. - N° de la modif.**  
00

**Contracting Authority - Autorité contractante**  
Oksana Kuzyshyn

**GETS Ref. No. - N° de réf. SEAG**  
PW-17-00780770

**Title - Sujet**  
Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

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**APPENDIX "C"**

**PARKS CANADA INTEGRATED PEST MANAGEMENT DIRECTIVE 2.4.1**

Under separate attachment. File: ipm\_directive-app

**Solicitation No. - N° de l'invitation**  
5P420-17-5044/A

**Amd. No. - N° de la modif.**  
00

**Contracting Authority - Autorité contractante**  
Oksana Kuzyshyn

**GETS Ref. No. - N° de réf. SEAG**  
PW-17-00780770

**Title - Sujet**  
Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

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## **APPENDIX "D"**

### **SUBMITTAL FORMS**

- D-1 Weed Mapping and Control Form Required Information
- D-2 OBW – Herbicide Application Form
- D-3 Waterton Lakes National Park Erosion and Sediment Control Inspection Form
- D-4 Integrated Pest Management Plan Submission Form



Name \_\_\_\_\_

Date \_\_\_\_\_

## Weed Mapping and Control Form Required Information

Worker Name: \_\_\_\_\_

Weed Species: \_\_\_\_\_

Date: \_\_\_\_\_

Start time: \_\_\_\_\_

End time: \_\_\_\_\_

Number of people: \_\_\_\_\_

GPS File Name: \_\_\_\_\_

Density (Plants/m<sup>2</sup>): \_\_\_\_\_

Stage of Growth (Select One):

“Seeds Dispersed” “Seeds on Plant” “Fall Regrowth” “Full Bloom” “Early Bloom”

“Bud” “Bolt” “Rosette” “Last year’s Growth”

Treatment Type (Select One):

Chemical	Cut_Seedhead	Pull	Weedwhip	Prune
Cut	Cut_Seedhead_Bag	Pull_Bag	Mow	Other_____
Cut_Bag	Map	Dig	Dig_Bag	

For Herbicide Treatments:

Supervising Applicator: \_\_\_\_\_

Date Signage Posted: \_\_\_\_\_ Date Signage Removed: \_\_\_\_\_

Herbicide Type: _____	Temperature: _____
Herbicide Amount (L): _____	Wind Speed: _____
Mix Rate: _____	Wind Direction: _____
Equipment Used: _____	Relative Humidity: _____
Treatment Type: _____	

Distance from Water (>30m, or if less than 30m fill out and attach an OBW - Herbicide Application Form): > 30m OR <= 30 m with attached form

Does the site need additional re-vegetation with desirable species? Yes / No

Additional Comments:

# **OBW - Herbicide Application Form**

## **Within 30 Meters of an Open Body of Water**

### **SECTION A – (TO BE COMPLETED BEFORE THE HERBICIDE APPLICATION)**

Alberta Pesticide Applicator Certificate Number \_\_\_\_\_

Reason for application \_\_\_\_\_

Description of Open Body of Water \_\_\_\_\_

Prohibited or Noxious species being treated

_____ Canada thistle	_____ Japanese Knotweed
_____ Common Tansy	_____ Spotted knapweed
_____ Common Toadflax	_____ Sulphur Cinquefoil
_____ Dalmatian Toadflax	_____ Other =

<b>Application Type</b>	<b>Equipment being used</b>
_____ Single Plant Application	_____ Backpack Sprayer
_____ Single Stem Application	_____ Wicker

Herbicide Solution being applied

\_\_\_\_\_ Milestone (mixed at 0.05%)

\_\_\_\_\_ Vantage Plus Max II (mixed at 0.75%)

\_\_\_\_\_ Vantage Plus Max II (mixed at 25%)

### **SECTION B – (TO BE COMPLETED AFTER THE HERBICIDE APPLICATION)**

How much herbicide solution was applied within the 30 horizontal meters of the Open Body of Water? \_\_\_\_\_ Litres

What is the percentage of vegetation that was treated with herbicide within Zone 3 (1-5 meters) of the Open Body of water? \_\_\_\_\_ %. (no more than 10%)

What is the percentage of vegetation that was treated with herbicide within Zone 4 (5-30 meters) of the Open Body of water? \_\_\_\_\_ %. (no more than 30%)

Signature of Applicator: \_\_\_\_\_

# Applications within 30 meters of an OBW

## Zones

Zone 1	Zone 2	Zone 3	Zone 4
Lake and Shore	0 – 1 meter	1 – 5 meters	5 – 30 meters

## Open Body of Water

Open Body of Water	Does Not Include
<ul style="list-style-type: none"> <li>• River</li> <li>• Stream</li> <li>• Lake</li> <li>• Public Irrigation Ditch</li> <li>• Sloughs</li> <li>• Ponds</li> </ul>	<ul style="list-style-type: none"> <li>• Roadside Ditches.</li> <li>• Man-made water hazards on a golf course with no out flow off the golf course.</li> </ul>

## Permitted Activities

Zone 1	Zone 2	Zone 3 & Zone 4														
No Application	No Application	<ul style="list-style-type: none"> <li>• Single plant application.</li> <li>• No more than 10% of vegetation within 100 square meters.</li> <li>• One application per year.</li> <li>• Only Vantage Plus Max II and Milestone can be applied within 30 meters of an OBW.</li> <li>• Only Aminopyralid and Glyphosate can be applied.</li> <li>• Only the following Prohibited or Noxious Plants can be treated with herbicide within 30 meters of an OBW:</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #c6e0b4;">Noxious</th> <th style="background-color: #c6e0b4;">Prohibited Noxious</th> </tr> </thead> <tbody> <tr> <td>Canada Thistle</td> <td>Diffuse Knapweed</td> </tr> <tr> <td>Common Tansy</td> <td>Japanese Knotweed</td> </tr> <tr> <td>Common Toadflax</td> <td>Spotted Knapweed</td> </tr> <tr> <td>Dalmation Toadflax</td> <td>Sulphur Cinquefoil</td> </tr> <tr> <td>Downy Brome</td> <td></td> </tr> <tr> <td>Oxeye Daisy</td> <td></td> </tr> </tbody> </table>	Noxious	Prohibited Noxious	Canada Thistle	Diffuse Knapweed	Common Tansy	Japanese Knotweed	Common Toadflax	Spotted Knapweed	Dalmation Toadflax	Sulphur Cinquefoil	Downy Brome		Oxeye Daisy	
Noxious	Prohibited Noxious															
Canada Thistle	Diffuse Knapweed															
Common Tansy	Japanese Knotweed															
Common Toadflax	Spotted Knapweed															
Dalmation Toadflax	Sulphur Cinquefoil															
Downy Brome																
Oxeye Daisy																

# Waterton Lakes National Park Erosion and Sediment Control Inspection Form



<b>Date of Inspection:</b>	
<b>Time of Inspection:</b>	
<b>Surveillance Officer:</b>	
<b>Project Number:</b>	
<b>Project / Location:</b>	
<b>Contractor:</b>	
<b>Consultant:</b>	

<b>Stage of Construction:</b>	
<b>Personnel on Site:</b>	
<b>Weather:</b>	

Inspection Checklist				
Questions	YES	NO	N/A	Notes
Are the approved and up-to-date ESC report and/or drawings available on-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is an inspection / maintenance log being maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are appropriate measures in place to control overland run-on and run-off? (clean run-on/run-off diverted around disturbed areas and dirty run-off contained)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are contractors staying within the approved construction limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all stockpiles adequately located and stabilized (i.e. located on flat areas, located with sufficient buffer from waterbodies and/or watercourses with containment and application of temporary cover if storage period is prolonged [ $>30$ days] or if the storage area is at high risk of wind/water erosion)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all disturbed areas requiring temporary or permanent stabilization been stabilized with appropriate erosion controls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Where possible, is sediment intercepted and controlled close to the source?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage/Dewatering of impounded water to a storm sewer: Does contractor have a valid drainage permit and are all permit conditions being adhered to?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all entry point to waterbodies and watercourses (including storm drainage systems, culverts, etc.) adequately protected (on-site and adjacent to site)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all perimeter controls properly installed and maintained to ensure sediment does not leave the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are soil and mud being kept off all adjacent roadways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are construction exits properly stabilized and maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In dry and/or windy conditions, is dust adequately controlled on stockpiles and exposed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In areas where construction is complete, are permanent stabilization measures adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all temporary controls that are no longer needed been removed within 30 days of the final site stabilization?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

*Form adapted from City of Calgary*

# Waterton Lakes National Park Erosion and Sediment Control Inspection Form



Action Items:											
Item No.	Type of Control	Condition of ESC Measure			Performance of ESC Measure			Maintenance Required?		Complete by:	Notes
		Poor	Fair	Good	Poor	Fair	Good	Yes	No		
		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter a date.	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter a date.	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter a date.	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter a date.	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter a date.	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter a date.	

Follow-Up:						
Item No.	Action Item Adequate and Complete?	Additional Recommended Corrective Measures	Complete by:	Notes	Inspector Sign-off (when deemed adequate and complete)	Date of Sign-off
			Click here to enter a date.			Click here to enter a date.
			Click here to enter a date.			Click here to enter a date.
			Click here to enter a date.			Click here to enter a date.
			Click here to enter a date.			Click here to enter a date.
			Click here to enter a date.			Click here to enter a date.
			Click here to enter a date.			Click here to enter a date.

Form adapted from City of Calgary

PARKS CANADA  
IPM PLAN SUBMISSION FORM

IPM PLAN SUBMISSION FORM FOR \_\_\_\_\_ (Year)

Park /Site \_\_\_\_\_

Province \_\_\_\_\_ Responsible Officer \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_

**REASON FOR PROPOSED PEST MANAGEMENT ACTIVITIES**

*(Check one box)*

- To control insect or disease infestations which threaten lands adjacent to areas owned or administered by Parks Canada
- To reduce or eliminate populations of non-native organisms which threaten ecological integrity
- To control infestations of pests that threaten the survival of species recognised as threatened or endangered
- To limit populations of organisms that are interfering with an ecological restoration project
- To reduce or eliminate populations of organisms which may cause human health concerns
- To control pest infestations which interfere with the function, use or aesthetics of areas owned, leased or administered by Parks Canada

**PEST CATEGORY**

*(Check one box. Use a separate form for each category)*

- Non- selective vegetation control (includes parking lots, paths, right of ways & weeds around buildings and structures)
- Selective weed control (weeds in the landscape, flowerbeds etc.)
- Turfs weed control (lawn, golf course and other turf areas)
- Turf insect control
- Turf disease control
- Landscape insect control (Ornamentals, shrubs, trees)
- Landscape disease control (Ornamentals, shrubs, trees)
- Insect control in or around buildings or stored materials
- Other - Specify type of pest (weed insect, disease, rodents etc.) and type of area (forested, aquatic etc.) \_\_\_\_\_  
\_\_\_\_\_

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IPM PLAN SUBMISSION FORM

**SECTION 1: PEST IDENTIFICATION**

Complete the following for each pest category selected above (*i.e.* Non-selective vegetation control, Selective weed control, Turf weed control, etc.). For non-selective weed control or weed complexes in landscaped areas and turf, list the major species only. (*For additional information, refer to page 2 of the Integrated Pest Management Protocol - Appendix 1*).

	Common Name	Scientific Name	Host plant, area or structure affected
<b>Pest 1</b>	_____	_____	_____
<b>Pest 2</b>	_____	_____	_____
<b>Pest 3</b>	_____	_____	_____
<b>Pest 4</b>	_____	_____	_____
<b>Pest 5</b>	_____	_____	_____

**SECTION 2: TREATMENT THRESHOLDS**

Assign a category to each facility, area, site or landscaped area being managed as follows:

**Class A-** Sites with high visibility and/or intensive management

**Class B-** Sites with moderate visibility and/or intensity of management

**Class C-** Sites with low visibility and/or intensity of management

Describe the treatment threshold that will be established for each pest. (*For additional information, refer to pages 2-4 of the Integrated Pest Management Protocol - Appendix I*).

Classification of Site and Justification ( <i>e.g.</i> Class A)	Description of Site(s), Facilities, or Area(s)	Pest or Group of Pests ( <i>e.g.</i> broadleaf weeds)	Treatment Threshold for Each

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IPM PLAN SUBMISSION FORM

**SECTION 3: MONITORING**

*(For additional information, refer to pages 4 & 5 of the Integrated Pest Management Protocol - Appendix I).*

Are pest population trends being monitored? Yes  No

Briefly describe how each pest is being monitored (e.g. visual observation, trap, capture etc.):

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**SECTION 4: PEST MANAGEMENT STRATEGIES**

*(For additional information, refer to pages 5-9 of the Integrated Pest Management Protocol - Appendix I).*

Describe preventive/suppressive measures that are being used or will be used to minimize the damage caused by each pest.

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Are non-chemical (*e.g.* biological, physical/mechanical) methods planned or being used to suppress pest populations?

Yes  No

If no, state why non-chemical methods are not being used:

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If yes, briefly describe the methods planned or being used and the facility/site category where they will be used (as appropriate):

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Are pesticide applications planned or being used to suppress pest populations? Yes  No

If yes, complete the following:

- i. **Product Trade Name** \_\_\_\_\_
- ii. **PCP Number** \_\_\_\_\_
- iii. **Active Ingredient(s)** \_\_\_\_\_
- iv. **Estimated size of the area that will be treated** \_\_\_\_\_
- v. **Method of Application**
  - Granular application
  - Liquid spray (blanket application)
  - Liquid spray (spot treatment)
  - Wick or roller application
  - Hack and squirt
  - Other \_\_\_\_\_
- vi. **Application Rate** \_\_\_\_\_
- vii. **Estimated date(s) of application** \_\_\_\_\_
- viii. **Estimated number of applications required** \_\_\_\_\_

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IPM PLAN SUBMISSION FORM

ix. **Are any of the following areas within 30 m of the site of proposed pesticide application?**

- Potable water supplies
- Standing surface water (*e.g.* lakes ponds etc.)
- Flowing surface water (*e.g.* river, streams, canals)
- Drainage ditch (wet or dry)
- Other wetlands
- Endangered species habitat
- Public use areas
- Children's play areas
- Sensitive natural areas

x. **If yes, describe the area, including the distance to the proposed treatment area and note any potential hazards:**

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**SECTION 5: FOLLOW-UP EVALUATION**

*(For additional information refer to page 9 of the Integrated Pest Management Protocol - Appendix I).*

Describe how and when the effectiveness of the treatment(s) will be evaluated (*e.g.* visual inspection one week after treatment, pest sampling, sticky trap counts etc.):

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Does the pest management plan outlined above differ from the previous year's program?  
Yes  No

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IPM PLAN SUBMISSION FORM

If yes, provide a brief description and evaluation of the previous year's program:

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**SECTION 6: SIGN-OFF**

Contact (individual responsible for ensuring plans are carried out):

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Name

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Signature

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Date

**Integrated Pest Management Plans  
must be completed and submitted to the Field Unit Superintendent  
by February 28 in the year of application.**

***RETAIN A COPY OF THIS PLAN FOR YOUR OWN RECORDS***

**APPENDIX "E"**

**LOCATION MAPS**

Under separate attachment. File: location-maps

- E1 Belly River Culvert Restoration Area
- E2 Bison Handling Facility Rehabilitation
- E3 Highway 5 & 6 Rehabilitation
- E4 Red Rock Parkway Rehabilitation
- E5 Red Rock Secondary Parking Lot
- E6 Red Rock Soil Management Site
- E7 Restricted Herbicide Use Areas
- E8 Townsite Infrastructure Improvements Water/Sewer, Parking, Facilities

**ANNEX "B"**

**BASIS OF PAYMENT**

**1. FIRM UNIT PRICES**

- 1.1. The Contractor will be paid firm unit prices for satisfactorily completing its obligations under the Contract as specified below.
- 1.2. All prices are in Canadian dollars, applicable taxes excluded, FOB destination, Canadian customs duties and excise taxes included.
- 1.3. Bidders must provide individual prices for each line item.
- 1.4. Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.
- 1.5. Payment of work shall be made as per the Prices shown in the Tables below.
- 1.6. For unit price items, progress payments shall be made based on the quantities of work in place and accepted by the PCA Representative. Provide to the PCA Representative for each progress claim, measurement data at each stage of construction to support progress claim quantities for each unit price item.

**2. REQUIRED SERVICES**

**2.1. Lump Sum Table**

2.1.1. Bidders are reminded that it is their responsibility to include in their bid all work as described in Annex "A". Pricing for work not accounted for in the Unit Price Table, including, but not limited to Mobilization, De-Mobilization, etc. is to be included in the Lump Sum Table.

ITEM NO.	DESCRIPTION of Labour, Plant or Material	UNIT OF MEASUREMENT (A)	ESTIMATED QUANTITY (B)	TOTAL ESTIMATED PRICE (C)
1	All work as described in Annex "A" (not including costs accounted for in the Unit Price Table)	Lump Sum	1	\$
I	<b>TOTAL LUMP SUM AMOUNT</b>			<b>\$</b>

**2.2. Unit Price Table**

**2.2.1. Native Seed Collection**

- 2.2.1.1. Payment for native seed collection will be made at unit price per kilogram of seed delivered.
- 2.2.1.2. Unit price for "native seed collection" is considered full compensation for all materials, labor and equipment required for collecting the target quantity of Pure Live Seed (PLS) including: scouting appropriate seed locations for species and collection timing, equipment required for seed collection, subcontractor fees, obtaining all necessary permits and access permissions to carry out work, cleaning and processing seed, obtaining Certificates of Analysis (including results of germination and purity tests), replacement of rejected seed, purchasing of commercially available native seed [if approved by Departmental Representative], daily clean-up of work areas, traffic control as necessary, disposal of all excess and waste material off site and all other work necessary to complete the Work to the satisfaction of the Departmental Representative.

### **2.2.2. Propagation**

- 2.2.2.1. Material propagation will be paid per plug, subtracting rejected plants.
- 2.2.2.2. Unit price for "propagation" is considered full compensation for all materials, labour and equipment required for propagation including: scouting appropriate propagule locations for species and collection timing, equipment required for propagule collection, subcontractor fees, obtaining all necessary permits and access permissions to carry out work, cleaning and processing seed as necessary, replacement of rejected plugs, purchasing of native seed daily clean-up of work areas, traffic control as necessary, disposal of all excess and waste material off site and all other work necessary to complete the Work to the satisfaction of the Departmental Representative.
- 2.2.2.3. In the event that the project is delayed and the contractor is required to hold the plugs for more than 30 days past the ship date ranges noted in Section 2.01.3.1 and the plugs have reached shippable quality, holding fees in the amount of 5 % per month will apply.

### **2.2.3. Chemical Vegetation Control**

- 2.2.3.1. Hourly rate for chemical control of vegetation shall include all costs for the supply and application of chemical vegetation control products, including, but not limited to: sub-contracting fees, certifications, clean-up of spills, and proper disposal of containers and materials.
- 2.2.3.2. Repeated applications of herbicide on plants or areas that were previously treated under the work of the contract will be measured and paid using the hourly rates of the contract, unless it is determined by the Departmental Representative that the initial application(s) of herbicide did not comply with the Project Specifications or industry best practices for herbicide application.

### **2.2.4. Plug Transplanting**

- Plug transplanting will be paid per plug, as verified by waybills for quantity of plant material delivered to site, subtracting rejected plants.
- 2.2.4.1. The cost of plug planting will include all costs associated with the on-site storage, care, transportation from the storage area to the planting sites, and planting of plugs.
  - 2.2.4.2. Cost of plug planting will include installation of temporary fencing and will include all costs for the supply and application of temporary fencing, including, but not limited to: labor, fences, fence posts, hardware for attaching fence to posts, and maintenance and repair of fencing.

### **2.2.5. Mechanical Vegetation Control**

- 2.2.5.1. Mechanical Vegetation Control will be measured in number of hours spent per worker who is engaged in:

- 2.2.5.1.1. The mapping of locations of weed infestations and weed control measures by Global Positioning System (GPS) as per the Weed Mapping and Control Form.
- 2.2.5.1.2. Completing required forms and reports.
- 2.2.5.1.3. Watering plant material.
- 2.2.5.1.4. Conducting mechanical weed control activities.
- 2.2.5.1.5. Mowing grass and weeds.

ITEM NO.	DESCRIPTION of Labour, Plant or Material	UNIT OF MEASUREMENT	ESTIMATED QUANTITY (A)	FIRM UNIT PRICE (B)	TOTAL ESTIMATED PRICE (C)
1	Native Seed Collection / Delivery: <i>Pseudoroegneria spicata</i> (bluebunch wheatgrass)	kilogram	40	\$	\$
2	Native Seed Collection / Delivery: <i>Agropyron trachycaulum</i> (awned wheatgrass)	kilogram	20	\$	\$
3	Native Seed Collection / Delivery: <i>Bromus carinatus</i> (mountain brome)	kilogram	10	\$	\$
4	Native Seed Collection / Delivery: <i>Bromus vulgaris</i> (Columbia brome)	kilogram	10	\$	\$
5	Native Seed Collection / Delivery: <i>Calamagrostis canadensis</i> (marsh reed grass)	kilogram	20	\$	\$
6	Native Seed Collection / Delivery: <i>Calamagrostis rubescens</i> (pine reed grass)	kilogram	20	\$	\$
7	Native Seed Collection / Delivery: <i>Danthonia parryi</i> (Parry's oatgrass)	kilogram	10	\$	\$
8	Native Seed Collection / Delivery: <i>Deschampsia caespitosa</i> (tufted hair grass)	kilogram	20	\$	\$
9	Native Seed Collection / Delivery: <i>Elymus glaucus</i> (smooth wild rye)	kilogram	15	\$	\$
10	Native Seed Collection / Delivery: <i>Festuca campestris</i> (Foothills rough fescue)	kilogram	40	\$	\$

11	Native Seed Collection / Delivery: <i>Festuca idahoensis</i> (Idaho fescue)	kilogram	30	\$	\$
12	Native Seed Collection / Delivery: <i>Festuca saximontana</i> (Rocky mountain fescue)	kilogram	40	\$	\$
13	Native Seed Collection / Delivery: <i>Koeleria macrantha</i> (June grass)	kilogram	10	\$	\$
14	Native Seed Collection / Delivery: <i>Poa juncifolia</i> (alkaline bluegrass)	kilogram	40	\$	\$
15	Native Seed Collection / Delivery: <i>Poa palustris</i> (fowl bluegrass)	kilogram	5	\$	\$
16	Native Seed Collection / Delivery: <i>Stipa columbiana (nelsonii)</i> (Columbia needlegrass)	kilogram	20	\$	\$
17	Native Seed Collection / Delivery: <i>Carex pensylvanica</i> (sun-loving sedge)	kilogram	10	\$	\$
20	Propagation: <i>Arctostaphylos uva-ursi</i> (Bearberry)	each	1000	\$	\$
21	Propagation: <i>Elaeagnus commutata</i> (wolf willow)	each	100	\$	\$
22	Propagation: <i>Juniperus horizontalis</i> (creeping juniper)	each	100	\$	\$
23	Propagation: <i>Juniperus communis</i> (common juniper)	each	100	\$	\$
25	Propagation: <i>Prunus virginiana</i> (chokecherry)	each	100	\$	\$
26	Propagation: <i>Shepherdia canadensis</i> (buffalo berry)	each	100	\$	\$
27	Propagation: <i>Symphoricarpos occidentalis</i> (snowberry)	each	200	\$	\$
	Mechanical Vegetation Control	Per hectare of area to be treated	HA	\$	\$
	Chemical Vegetation Control	Per hectare of area to be treated	HA	\$	\$
	Plug Transplanting – Installation Only	each	3000	\$	\$
<b>II</b>	<b>REQUIRED SERVICES TOTAL ESTIMATED PRICE (Equals the Sum of Column C)</b>				<b>\$</b>



**Solicitation No. - N° de l'invitation**  
5P420-17-5044/A

**Amd. No. - N° de la modif.**  
00

**Contracting Authority - Autorité contractante**  
Oksana Kuzyshyn

**GETS Ref. No. - N° de réf. SEAG**  
PW-17-00780770

**Title - Sujet**  
Landscaping & Vegetation Restoration, Waterton Lakes National Park, AB

<b>TOTAL EVALUATED BID PRICE</b> (Equals the Sum of Required Services I and II) \$
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**ANNEX "C"**

**ATTESTATION AND PROOF OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY (OHS)**

*The following form must be completed and signed prior to commencing work on Parks Canada Sites.*

**Submission of this completed form, satisfactory to Parks Canada, is a condition of gaining access to the work place.**

Parks Canada recognizes that federal OHS legislation places certain specific responsibilities upon Parks Canada as owner of the work place. In order to meet those responsibilities, Parks Canada is implementing a contractor safety regime that will ensure that roles and responsibilities assigned under Part II of the *Canada Labour Code* and the *Canada Occupational Health and Safety Regulations* are implemented and observed when involving contractor(s) to undertake works in Parks Canada work places.

<b>Parks Canada Responsible Authority/Project Lead</b>	<b>Address</b>	<b>Contact Information</b>
<b>Project Manager/Contracting Authority</b>		
<b>Prime Contractor</b>		
<b>Subcontractor(s)</b> (add additional fields as required)		

**Location of Work**

**General Description of Work to be Completed**

**Mark "Yes" where applicable.**

	A meeting has been held to discuss hazards and access to the work place and all known and foreseeable hazards have been identified to the contractor and/or subcontractor(s)
	The contractor and/or its subcontractor(s) will comply with all federal and provincial/territorial legislation and Parks Canada's policies and procedures, regarding occupational health and safety.
	The contractor and/or its subcontractor(s) will provide all prescribed safety materials, equipment, devices and clothing.
	The contractor and/or its subcontractor(s) will ensure that its employees are familiar with and use all prescribed safety materials, equipment, devices and clothing at all times.
	The contractor and/or its subcontractor(s) will ensure that its activities do not endanger the health and safety of Parks Canada employees.
	The contractor and/or its subcontractor(s) has inspected the site and has carried out a hazard assessment and has put in place a health and safety plan and informed its employees accordingly, prior to the commencement of the work.
	Where a contractor and/or its subcontractor(s) will be storing, handling or using hazardous substances in the work place, it will place warning signs at access points warning persons of the presence of the substances and any precautions to be taken to prevent or reduce any hazard of injury or death.
	The contractor and/or its subcontractor(s) will ensure that its employees are instructed in respect of any emergency procedures applicable to the site.

I, \_\_\_\_\_ (contractor), certify that I have read, understood and attest that my firm, employees and all sub-contractors will comply with the requirements set out in this document and the terms and conditions of the contract.

Name

Signature

Date

**ANNEX "D"**

**INTEGRITY PROVISIONS – LIST OF NAMES FORM**

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently on the Board of Directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

The Bidder hereby certifies that it is a (circle one that applies):

- A.** Corporate entity (including joint venture);  
List names of **Board of Directors**:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

- B.** Sole proprietorship (including joint venture);  
List name(s) of the owner(s):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

- C.** Partnership, Society or Firm.