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Mr. Rich DeMarco
Co-Chair Kittery Parks Commission
200 Rogers Road
Kittery, ME 03904

November 28, 2018

Dear Mr. DeMarco,

FB Environmental Associates (FBE) is pleased to submit the attached proposal to conduct several tasks associated with the management of non-native, invasive plant species (invasives) present at Kittery's Fort Foster Park.

FBE is a ten-person environmental consulting firm with offices located in Portland, Maine and Portsmouth, New Hampshire. Since the company's start in 2001, we have focused much of our work on evaluating natural areas and helping communities reduce human impacts on waterbodies and wetlands. We have completed natural resource assessments and management plans throughout New England for both individual properties and entire towns. The vast majority of our work is completed for the public sector, including state agencies, the US EPA, and a number of municipalities including Kittery.

The project area for the activities proposed herein consists of the entire approximately 95-acre park (see attached map). In Summer 2018, FBE completed the first step to the management of invasives present at Fort Foster. This effort consisted of inventorying and mapping invasive plants on the property. All collected data have been uploaded into iMapInvasives online database, and a map depicting the type, location, and density of invasives at Fort Foster was submitted to the Kittery Parks Commission on October 24, 2018.

To continue the management and eradication of invasives present at Fort Foster, we propose to provide a field consultation with Vegetation Control Services to discuss options for invasive plant eradication methods and associated cost, review applicable laws and ordinances and acquire necessary permits, draft a management plan regarding the long-term management of non-native invasive plants on the property, and provide a presentation to the town council.

Kevin Ryan, Ph.D., FBE's Ecological Services division lead, and Amanda Gavin, M.S. Botanist, will conduct the majority of work associated with this project. If you have any questions, I can be reached on my cell phone at (207) 650-7597, or via email at info@fbenvironmental.com.

Sincerely,

Forrest Bell
Principal, FB Environmental Associates

PROJECT ESTIMATE (AND SCOPE OF SERVICES)

The project estimate and scope of services below is divided into five main tasks. Please note that we offer a “menu” approach which allows for selection of individual tasks.

Task 1. Project Management and Administration

In order to effectively manage this project, FBE will:

- Participate in phone calls and email communication with the client;
- Conduct project management duties (directing staff, scheduling);
- Complete project invoicing, memorandums, and other administrative duties.

Task 2. On-site coordination with a vegetation management company

FBE will coordinate a field visit with a company that specializes in the management of invasive vegetation and that has the necessary equipment (e.g., skid steers, chain saws, backpack sprayers) to implement a variety of control methods. (Best methods of control are determined during the on-site consultation.) Two reputable companies are Taylor’s Invasive Plant Control and Vegetation Control Services, both of which FBE has a good working relationship with.

Please note that the chosen vegetation management company will submit a separate proposal which will include a dollar amount (separate from this contract) to conduct on-the-ground removal of invasives.

Task 3. Ordinance Review and Permitting

FBE will prepare and submit the necessary DEP permit applications to conduct invasive species removal at Fort Foster. It is likely that the DEP will require a completed Permit by Rule (PBR) form as opposed to a Tier I application under the Natural Resources Protection Act. The former application is a streamlined process compared to the latter. FBE will also research applicable ordinances and acquire any necessary permits from the Town of Kittery.

As part of this task FBE will also contact Fred Seavey, Program Coordinator of the Maine Partners for Fish and Wildlife at the US Fish and Wildlife Service, regarding the management of the New England cottontail (*Sylvilagus transitionalis*) within the park. As the species uses dense vegetation thickets (sometimes composed of invasive species), the presence of the species might affect invasives management within certain areas of the park.

Task 4. Management Plan

FBE will use information collected from the invasive plant inventory and mapping that was completed in Summer 2018 and Tasks 2 and 3, as well as previous knowledge of the site, to develop a site-specific invasive species management plan for Fort Foster. The plan will include species-specific treatment recommendations to assist the Town of Kittery with long-term restoration strategies for the park. These recommendations will describe what management practices are acceptable based on previously identified

site constraints, the best timing for implementation, what permitting is necessary, which invasive species should be targeted, and how native species should be used to restore the site. The management plan will include a proposed schedule for restoration.

Task 5. Presentation to Town Council

FBE will prepare and deliver a PowerPoint presentation to the Town of Kittery explaining the key project features.

SCHEDULE OF WORK

Work can begin upon signing of this contract.

COMPENSATION

The cost of FB Environmental's services is up to \$6,380.00. The cost shall not be exceeded without prior authorization from the Town of Kittery. The amount is based on time and materials (see below). If the scope of work changes materially, the amounts of compensation set forth herein shall be equitably adjusted in writing.

PROJECT TASKS

TASK 1: PROJECT MANAGEMENT AND ADMINISTRATION

Site visit preparation, administration, and overall project management.	\$ 875.00
Task 1 Total	\$ 875.00

TASK 2: FIELD CONSULTATION WITH A VEGETATION MANAGEMENT COMPANY

Site walk with chosen company.	\$ 635.00
Expenses Mileage (100 miles @ \$0.55/mile)	\$ 55.00
Task 2 Total	\$ 690.00

TASK 3: ORDINANCE REVIEW AND PERMITTING

Review ordinances and acquire necessary permits.	\$ 1,265.00
Task 3 Total	\$ 1,265.00

TASK 4: MANAGEMENT PLAN

Draft plan for long-term management of invasives at Fort Foster.	\$ 3,160.00
Task 4 Total	\$ 3,160.00

TASK 5: PRESENTATION TO TOWN COUNCIL

Production and delivery of a PowerPoint presentation to Town Council and/or general public.	\$ 1,265.00
Task 5 Total	\$ 1,265.00

GRAND TOTAL	\$ 6,380.00
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ASSUMPTIONS AND LIMITING CONDITIONS:

To further define our role in the project, our assumptions are as follows:

- This proposal does not include the cost for Vegetation Control Services to conduct on-the-ground invasive removal activities.
- All deliverables will be provided by FBE in electronic format including invasive species maps, and the Invasive Management Plan, unless otherwise requested.

INVOICES

FBE will submit invoices based on lump sum by task. FBE is a small business and functions best when invoices are submitted on a monthly basis. We ask that payments be made within 30 days from the date of invoice. Thank you and we look forward to assisting the Town of Kittery with this project.

ACCEPTANCE OF CONSULTING SERVICES

By signing below, FB Environmental Associates and the Town of Kittery accept the terms and conditions stated herein.



Forrest Bell ~ FB Environmental Associates

Date: November 28, 2018

Date:



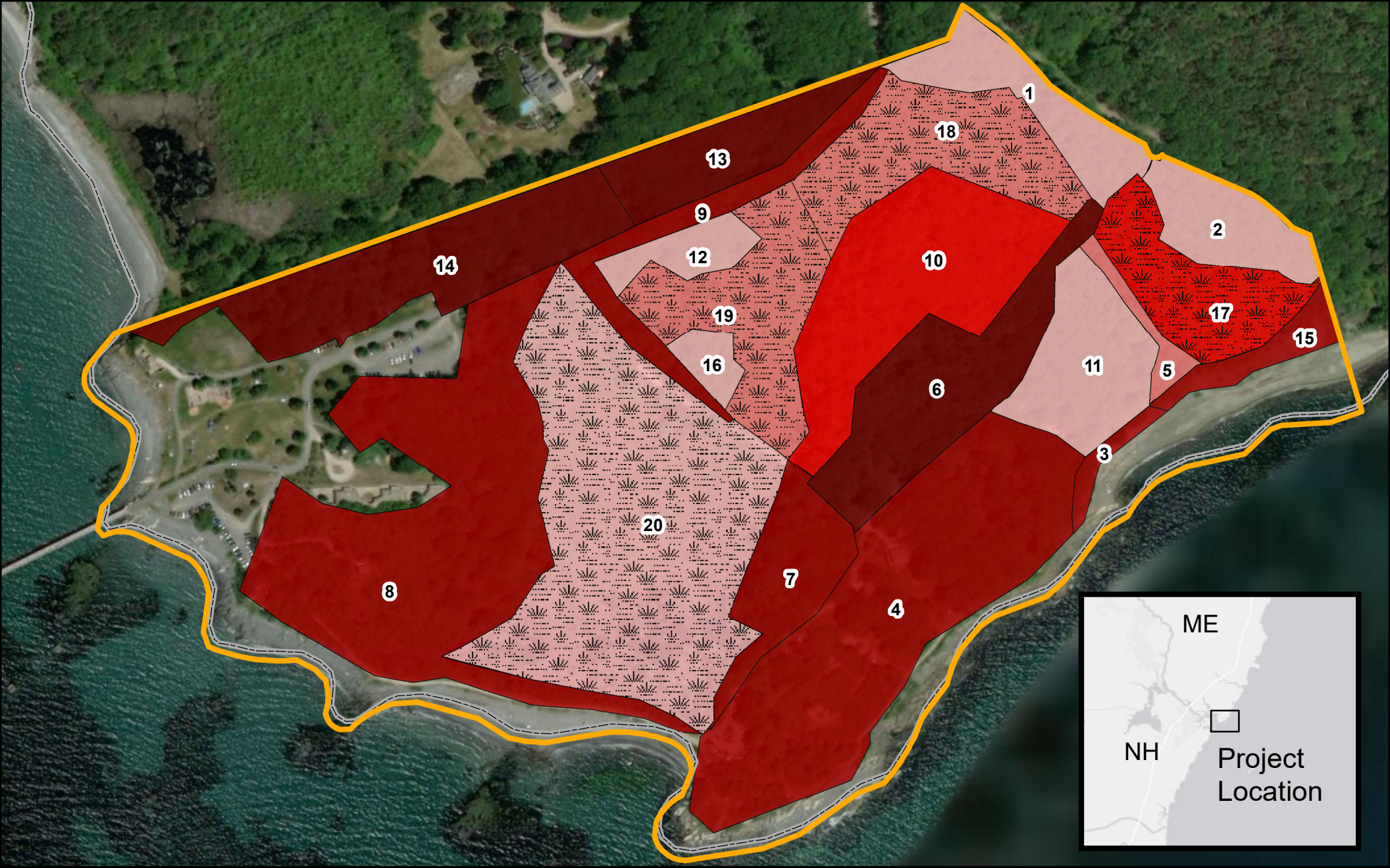
-  Town Boundary
-  Fort Foster Boundary
-  Road
-  Parcel

Fort Foster
Kittery, Maine

0 500 1,000
Feet



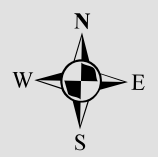
Data Sources: MEGIS, ESRI
Coordinage system: NAD 1983 UTM Zone 19N
Map created by FB Environmental, March 2018



Legend

Invasives Percent Cover			
0-5%		50-75%	
5-25%		75-100%	
25-50%		Wetland	
		Kittery Town Boundary	
		Fort Foster Boundary	

Fort Foster Invasive Species Map
Kittery, Maine



Data Sources: MEGIS, ESRI
 Coordination system: NAD 1983 UTM Zone 19N
 Map created by FB Environmental, August 2018

Polygon numbers refer to table entries on the following page.

Polygon Number*	Species 1**	Species 2	Species 3	Species 4
1	Glossy False Buckthorn	-	-	-
2	Glossy False Buckthorn	-	-	-
3	Morrow's honeysuckle	-	-	-
4	Morrow's honeysuckle	Asian bittersweet	Japanese barberry	Multiflora Rose
5	Glossy False Buckthorn	Japanese barberry	-	-
6	Glossy False Buckthorn	Japanese barberry	-	-
7	Morrow's honeysuckle	Japanese barberry	-	-
8	Morrow's honeysuckle	Glossy False Buckthorn	Asian bittersweet	Black Swallowwort
9	Morrow's honeysuckle	Glossy False Buckthorn	Japanese barberry	-
10	Glossy False Buckthorn	Japanese barberry	Morrow's honeysuckle	-
11	Glossy False Buckthorn	Japanese barberry	Morrow's honeysuckle	Multiflora Rose
12	Glossy False Buckthorn	-	-	-
16	Glossy False Buckthorn	-	-	-
13	Glossy False Buckthorn	Morrow's honeysuckle	Japanese barberry	-
14	Glossy False Buckthorn	Morrow's honeysuckle	Japanese barberry	Asian bittersweet
16	Glossy False Buckthorn	-	-	-
15	Morrow's honeysuckle	-	-	-
17	Glossy False Buckthorn	Common Reed	-	-
18	Glossy False Buckthorn	-	-	-

19	Glossy False Buckthorn	Purple Loosestrife	-	-
20	Common Reed	-	-	-

* Polygon number refers to polygons depicted on the August 2018 Fort Foster Invasive Species map.

**Speices are listed in order of prevalence.

Fort Foster Invasive Map Table

Species 5	Percent Class Cover	Disitrbution	Maturity	Woody Plant Info
-	Less than 5	Scattered plants or clumps	Vegetative	Mature and Seedling
-	Less than 5	Scattered plants or clumps	Vegetative	Mature and Seedling
-	50 to 75	Dense plants or clumps	Fruit	Mature
Glossy False Buckthorn	50 to 75	Dense plants or clumps	Fruit	Mature
-	Five to 25	Scattered plants or clumps	Seeds	Mature
-	75 to 100	Dense plants or clumps	Seeds	Mature
-	50 to 75	Dense plants or clumps	Fruit	Mature
Japanese barberry	50 to 75	Dense plants or clumps	Vegetative, Flowers, Fruits	Mature
-	50 to 75	Dense plants or clumps	Vegetative, Flowers, Fruits	Mature
-	25 to 50	Dense plants or clumps	Vegetative, Flowers, Fruits	Mature and Seedling
-	Less than 5	Scattered plants or clumps	Seeds	Mature and Seedling
-	Less than 5	Scattered plants or clumps	Seeds	Mature and Seedling
-	Less than 5	Scattered plants or clumps	Seeds	Mature and Seedling
-	75 to 100	Dense plants or clumps	Vegetative, Flowers, Fruits	Mature and Seedling
-	75 to 100	Dense plants or clumps	Vegetative, Flowers, Fruits	Mature and Seedling
-	Less than 5	Scattered plants or clumps	Seeds	Mature and Seedling
-	50 to 75	Dense plants or clumps	Seeds	Mature
-	25 to 50	Dense plants or clumps	Vegetative, Flowers, Fruits	Mature and Seedling
-	Five to 25	Scattered plants or clumps	Vegetative, Flowers, Fruits	Mature and Seedling

-	Five to 25	Scattered plants or clumps	Vegetative, Flowers, Fruits	Mature and Seedling
-	Less than 5	Dense plants or clumps	Vegetative	N/A

Notes
All stems cut 1x from Oct 2017 to May 2018 by G. Mitchel.
All stems cut 1x from Oct 2017 to May 2018 by G. Mitchel.
Linear plot along the edge of cobble beach.
Dense patches throughout plot.
Predominantly buckthorn and occasional barberry.
Highest density along old road.
Highest density along old road.
Highest density along road and ridge in center of polygon; <10 percent along wetland border.
Highest density along edges.
Buckthorn concentrated along wetland edge.
Buckthorn concentrated along wetland edge.
Buckthorn dense along road and fence line.
Very thick vegetation, nearly 100% invasive.
Buckthorn concentrated along wetland edge.
Clumps of honeysuckle on cobble beach.
Thick wetland, difficult to access during ice-free season. Common reed near beach-should be removed
Dense wetland.

Dense wetland; mostly Glossy false buckthorn; patch of purple loosestrife borders polygon 12.

Located on beach side of wetland.

Common Name	Scientific Name			
Asian bittersweet	<i>Celastrus orbiculatus</i>			
Black Swallowwort	<i>Cynanchum louiseae</i>			
Common Reed	<i>Phragmites australis</i>			
Glossy False Buckthorn	<i>Frangula alnus</i>			
Japanese barberry	<i>Berberis thunbergii</i>			
Morrow's honeysuckle	<i>Lonicera morrowii</i>			
Multiflora Rose	<i>Rosa multiflora</i>			
Purple Loosestrife	<i>Lythrum salicaria</i>			

Glossy False Buckthorn					
Glossy False Buckthorn					
Morrow's honeysuckle					
Morrow's honeysuckle				Row Labels	
Glossy False Buckthorn				Asian bittersweet	
Glossy False Buckthorn				Black Swallowwort	
Morrow's honeysuckle				Common Reed	
Morrow's honeysuckle				Glossy False Buckthorn	
Morrow's honeysuckle				Japanese barberry	
Glossy False Buckthorn				Morrow's honeysuckle	
Glossy False Buckthorn				Multiflora Rose	

Glossy False Buckthor n				Purple Loosestrife	
Glossy False Buckthor n				(blank)	
Glossy False Buckthor n				Grand Total	
Glossy False Buckthor n					
Glossy False Buckthor n					
Morrow's honeysuc kle					
Glossy False Buckthor n					
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Glossy False Buckthor n					
Common Reed					
Asian bitterswe et					
Japanese barberry					
Japanese barberry					

Japanese barberry					
Glossy False Buckthorn					
Glossy False Buckthorn					
Japanese barberry					
Japanese barberry					
Morrow's honeysuckle					
Morrow's honeysuckle					
Common Reed					
Purple Loosestrife					
Japanese barberry					
Asian bittersweet					
Japanese barberry					

Morrow's honeysuckle					
Morrow's honeysuckle					
Japanese barberry					
Japanese barberry					
Multiflora Rose					
Black Swallow wort					
Multiflora Rose					
Asian bittersweet					
Glossy False Buckthorn					

Japanese barberry					