INSTRUCTIONS

FOR

SUBMITTING A PROPOSAL TO ONTARIO POWER GENERATION

ENVIRONMENTAL SERVICES FOR NORTHERN MAP TURTLE HABITAT EHNANSEMENT PROJECT

At the RANNEY SITE

March 2015

1. Refer to the Environmental Services for Northern Map Turtle Enhancement RFP for
    a. A description of the work
    b. Details on what information should be included in the proposal
    c. Pricing Table for you to provide a breakdown of price
    d. Evaluation Criteria

2. If you have any questions you can call either the **Project Manager**, Iskander Boulos at 416 592-8226; iskander.boulos@opg.com OR the **Environmental Advisor** for Ranney, Gillian MacLeod at 416-592-3481; Gillian.macleod@opg.com

3. Submit your proposal to **Iskander Boulos, Project Manager**. You can e-mail it to his email address noted in item 2 above OR courier it to:

Ontario Power Generation,

Attention Iskander Boulos,

700 University Avenue, Toronto,

Ontario M5G1X6

4. **DUE DATE FOR PROPOSALS IS 4:00 PM , Tuesday April 7, 2015**

5. OPG will review Proposals and make a decision by Thursday April 23, 2015

6. Sign Contract with successful bidder by the end of April / early May 2015

7. OPG contract placement with the successful bidder

8. Work should commence with a site kick-off meeting by mid May 2015

REQUEST FOR PROPOSAL

ENVIRONMENTAL SERVICES
FOR
RANNEY FALLS NORTHERN MAP TURTLE HABITAT ENHANCEMENT

March, 2015

1.0 Background

OPG is proposing to expand the capacity of the Ranney Falls Generating Station (GS) located on the Trent-Severn Waterway (TSW) in the Municipality of Trent Hills. There are two powerhouses on site. The main powerhouse has the G1 and G2 turbine units, each operating at approximately 5 MW during maximum flows. A secondary powerhouse, referred to as the "Pup", contains the 0.72 MW G3 unit that has reached its end-of-life.

The Ranney Falls GS site was formerly leased by the Federal Government to the Seymour Power Company. With the purchase of the Seymour Power Company on March 9, 1916, the Province of Ontario acquired the ownership rights to the site. Ranney Falls GS G1 and G2 units were commissioned in August 22, 1922 and September 2, 1922 respectively. Unit G3, which started operation in 1926, was acquired by the Hydro-Electric Power Commission of Ontario from the Quinte and Trent Valley Power Company in 1937. Ranney Falls GS was transferred to OPG on April 1, 1999, and is managed by OPG's Central Hydro Plant Group (CHPG) with remote operation from its North Bay Control Centre and is maintained by its Campbellford Service Centre.

The proposed Ranney Falls G3 expansion involves the following:

- Expansion of the existing forebay;
- Construction of a new G3 powerhouse, with a new intake structure and a 10 MW turbine unit, adjacent to the existing main powerhouse;
- Expansion of the existing tailrace channel;
- Construction of a new electrical substation to connect with one of the Hydro One Networks Inc. local distribution lines on site;
- Construction of a new spillway to by-pass station flow to the tailrace channel for emergency situations;
- Decommissioning of the "Pup" powerhouse;
- Rehabilitation of the stoplog structure and its operating deck (work platform) adjacent to the roadway/TSW bridge;
- Relocation of the existing boom; and
- Creation of enhanced habitat for Northern Map Turtle and Eastern Snapping Turtle and installation of fencing to prevent turtles accessing construction areas.

2.0 Scope Of Work

The turtle habitat enhancement work locates in Areas 1-6 which is OPG property and Areas 7-9 which is TSW property, as shown in below Figure 1.

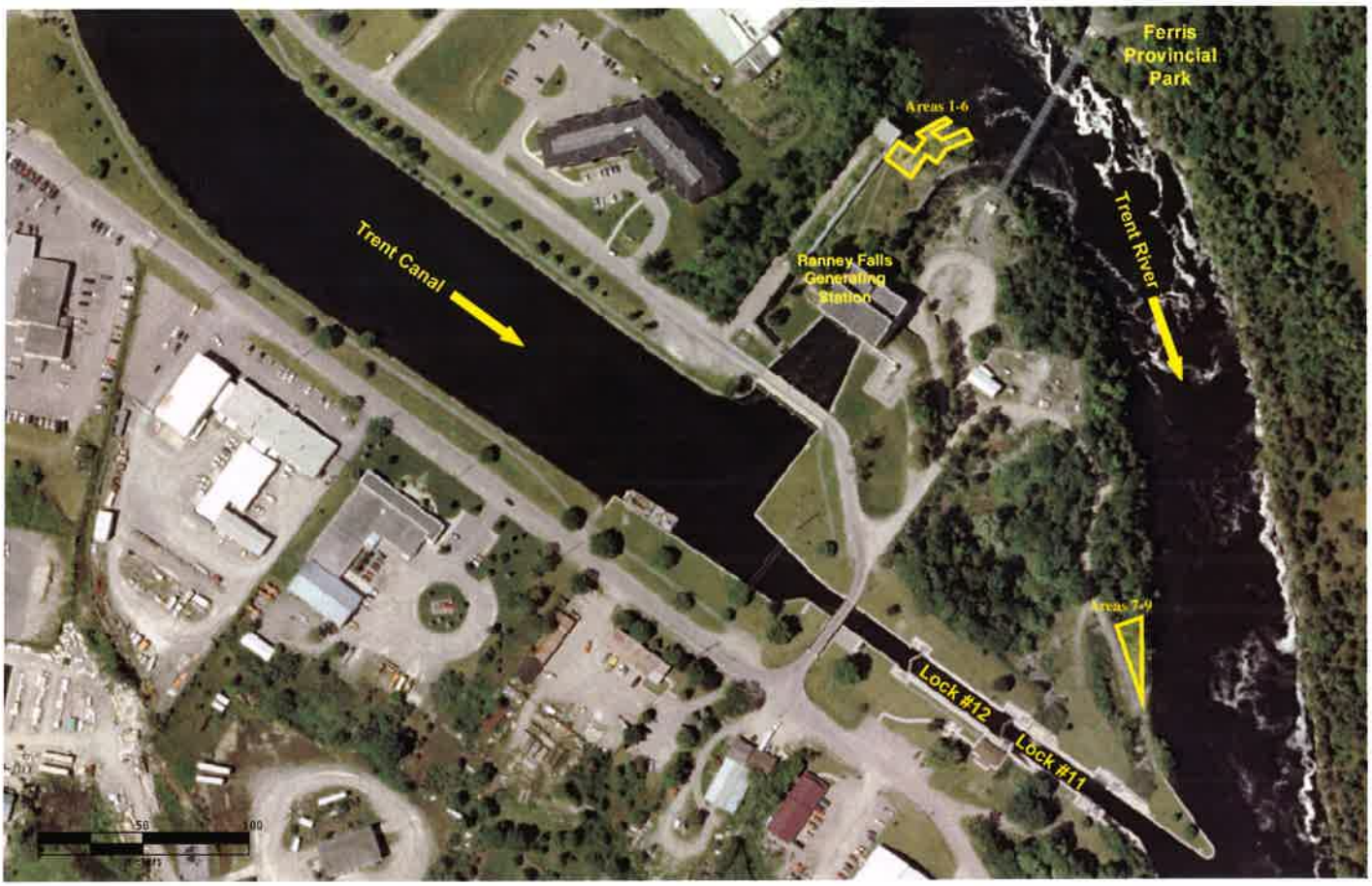


Figure 1: Overall site map for turtle habitat enhancement

2.1 Area 1-6 Work

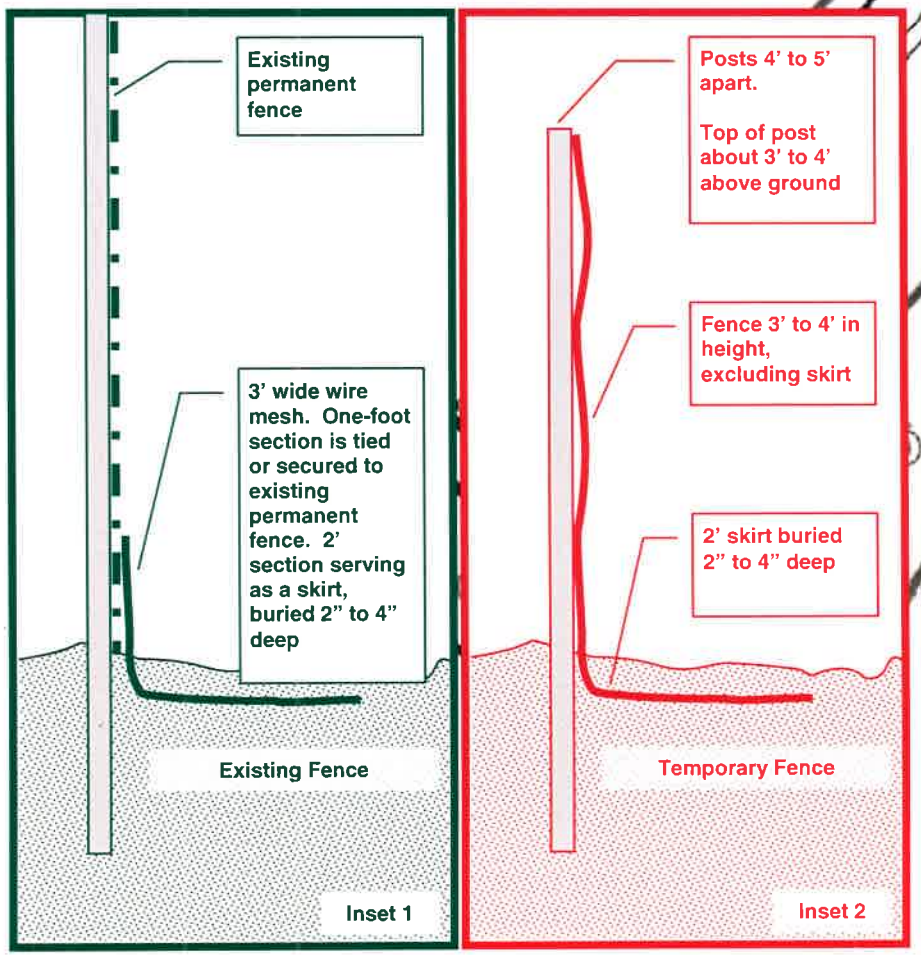
In Area 1-6 as in Figure 2, the proponent is required to supply and install the permanent turtle fence, inset 1, and temporary turtle fence, inset 2, as in Figure 3.

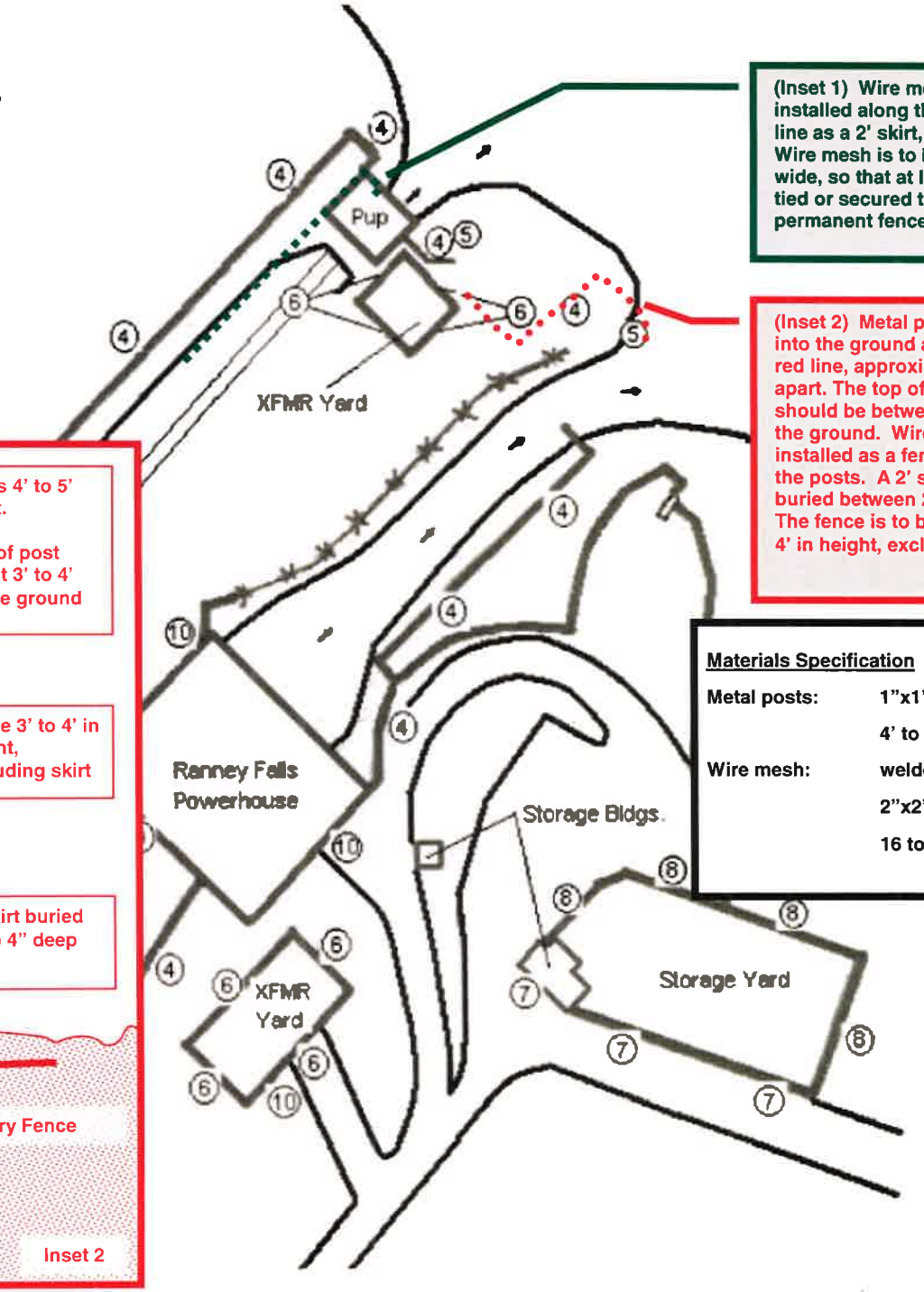
Permanent turtle fence, inset 1:
Supply and install, with all necessary materials, wire mesh along the dashed green line as a 2' skirt, 2" to 4" deep. Wire mesh is to be at least 3' wide, so that at least 1' can be tied or secured to the existing permanent fence.

Temporary turtle fence, inset 2:
Supply and install, with all necessary materials, wire mesh as temporary fence and tied to the metal posts. Metal posts are staked into the ground along the dotted red line, approximately 4' to 5' apart. The top of the posts should be between 3' to 4' from the ground. Wire mesh to be installed as a fence and tied to the posts. A 2' skirt should be buried between 2" to 4" deep. The fence is to be between 3' to 4' in height, excluding the skirt.

Figure 2: Area 1-6

Figure 3: Ranney Falls GS Temporary Turtle Fence Installation Plan





(Inset 1) Wire mesh to be installed along the dashed green line as a 2' skirt, 2" to 4" deep. Wire mesh is to be at least 3' wide, so that at least 1' can be tied or secured to the existing permanent fence.

(Inset 2) Metal posts are staked into the ground along the dotted red line, approximately 4' to 5' apart. The top of the posts should be between 3' to 4' from the ground. Wire mesh to be installed as a fence and tied to the posts. A 2' skirt should be buried between 2" to 4" deep. The fence is to be between 3' to 4' in height, excluding the skirt.

Materials Specification

Metal posts:	1"x1" size
	4' to 6' long
Wire mesh:	welded or woven
	2"x2" to 3"x3" mesh
	16 to 12.5 gauge

2.2 Area 7-9 Work

In Area 7-9, as in Figure 4, the proponent is required to:

1. Remove existing soil between 6" to 9" deep, unless encounter bedrock.
2. Install a geotextile layer to discourage root growth.
3. Fill excavated area with pea gravel about 6" deep to encourage drainage.
4. Cover area with a random mixture of pea gravel and sand to create the nesting substrate. The pea gravel-sand mix ratio is to randomly range from 30-70 to 50-50. Add about 0.5% of bentonite clay randomly to the mixture to create a range of moisture conditions.
5. Ensure nesting substrate is sloped at about 8% towards the river with mounds randomly created.
6. Ensure the perimeter around the nesting substrate is at about 45° for slope stability.

Detail of work is shown in Figure 5.

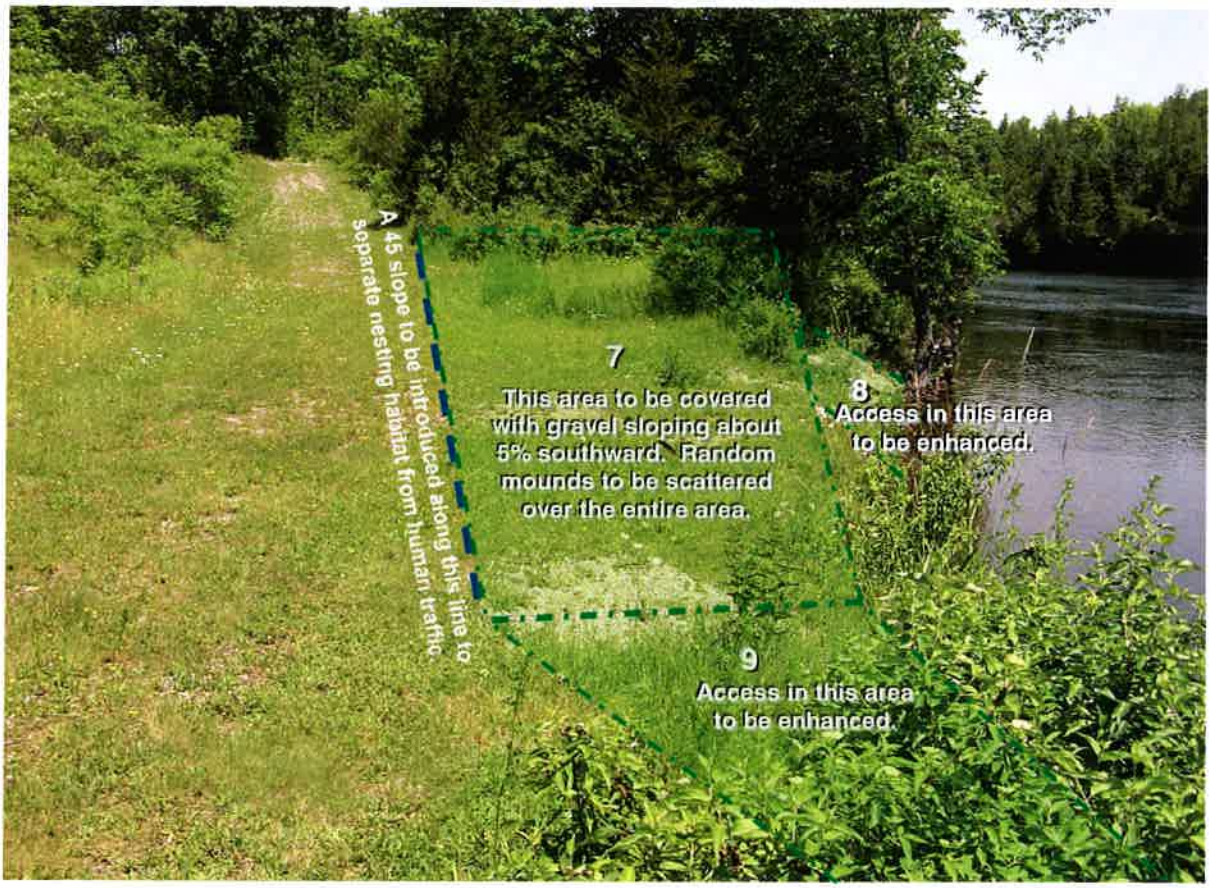


Figure 4: Area 7-9

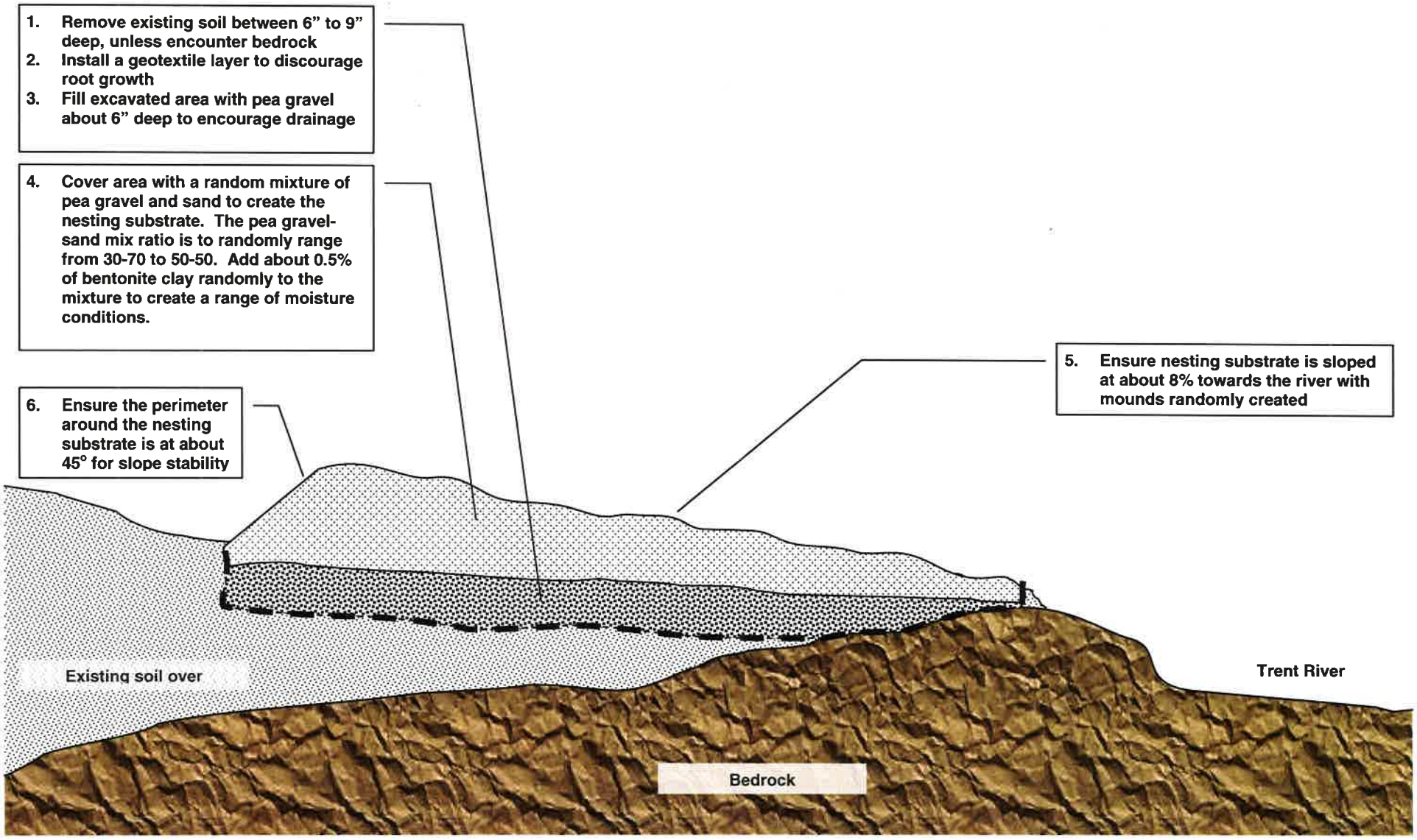


Figure 5: Work in Area 7-9

3.0 Proponent's Proposal

At a minimum, the proponent shall include the following information in their proposal to OPG:

1. WSIB and copy of paperwork
2. Copy of the company health and safety policy
3. Description of the work to be performed
4. Schedule of work to be performed
5. Information of experience for similar work
6. Name of the proponent site representative
7. Completed Pricing Table (see in Appendix A and proposals will be evaluated as specified and described in Appendix B)
8. The proponent must agree that they will assume the role of constructor and take the role of employer for all subs
9. The successful proponent must provide a Safe Work Plan for work undertaken
10. The proponent will indemnify OPG and its representatives from any of work done by themselves or the subs
11. Should there be any artifacts found during work, the proponent must stop work and notify project environmental officer to determine next step
12. Upon the completion of the proposal evaluation, the successful proponent shall participate in a pre-award meeting to confirm proposal details and address any minor gaps and questions

APPENDX A

Pricing Table

Item	Description	Quantity	Unit Price	Total Price
Permanent Fence Attachment (Inset #1)	Supply and install the permanent fence attachment			
Wire Mesh	Welded or woven 2" x 2" to 3" x 3" mesh; 16 to 12.5 gauge; 3 ft height x 115 ft length	115 ft	$ /ft	$
	Ties	As required		$
Temporary Fence (Inset #2)	Supply and install the temporary fence			
Metal Post	1" x 1" size; 4 ft to 6 ft height	35	$ /pc	$
Wire Mesh	Welded or woven 2" x 2" to 3" x 3" mesh; 16 to 12.5 gauge; 6 ft height x 115 ft length	115 ft	$ /ft	$
	Ties	As required		$
Area 4	Supply and install scatter mounds of nesting pea gravel substrate	5 m^3	$ /m^3	$
Area 7	Supply and install for Area 7, at TSW land adjacent to Locks #11 & #12			
Geotextile Material	26 m x 9 m	234 m^2	$ /m^2	$
Pea-Gravel Substrate	Pea gravel	25 m^3	$ /m^3	$
Pea-Gravel/Sand (50/50) Mix Top Layer with 0.5% Bentonite Spread as per Technical Spec.	Pea gravel Sand Bentonite	15 m^3 15 m^3 2 m^3	$ /m^3 $ /m^3 $ /m^3	$ $ $
Area 8 and 9	Supply and install grading to enhance turtle access from water	About 100 m^2	$ /m^2	$

APPENDIX B

BIDS EVALUATION CRITERIA

No.	Criteria	Maximum Points
1	Competitive Proposal Estimated Cost $ Estimated Man-Hours Unit Rates High / Medium / Low	35
2	Previous Experience in Similar Work Work on Small Hydro Electric Development	20
3	Understanding of Processes and Systems to Perform Work	25
4	Execution Plan Project Team Set-up Conforms to Project Schedule Cost / Schedule Control	5
5	Qualification / Availability of Staff Resumes of Key Positions Proposed Sub-Consultants / External Expert Assistance	10
6	References and Other Relevant / Constructive Proposals	5
	TOTAL	100