

INVITATION OF EXPRESSIONS OF INTEREST FOR DETAILED DESIGN OF A 100KW LOW-HEAD HYDRO SCHEME

Hexham Community Partnership is inviting expressions of interest from suitably qualified and experienced organisations to tender for the detailed design (including all relevant environmental work), planning and licensing for a 100kW low head hydro-electric scheme at Hexham Bridge, Hexham, Northumberland.

Any organisation wishing to be included on the tender list must formally express an interest by answering the questions set out on the final page of this document and emailing this form for the attention of Norman Rogers to normanrogers@btinternet.com. The information must be received by email no later than 12 noon on Friday 27 January 2012.

Timescales

1. To express an interest to participate in the tender please email your responses to the questions below to Norman Rogers at normanrogers@btinternet.com by no later than 12 noon on Friday 27 January 2012.
2. Hexham Community Partnership will send out Information Packs and requests for tender in the week beginning Monday 30 January 2012.
3. Hexham Community Partnership will ask for completed tender proposals to be submitted by 5pm on Friday 24 February 2012.
4. We anticipate the contract to carry out the work will be let by the end of March 2012.

Information Pack

This will include:

1. Site plan
2. Details of the bridge/weir including the width of the arches and the weir crest levels
3. Outline drawings of 3 potential scheme layouts
4. Flow recordings from the gauging station at Bywell (January 1983 to November 2010).
5. Level recordings from the gauging station just above the weir at Hexham (November 2003 to January 2011).
6. Results of a Utilities search.
7. Information on flood levels
8. The preliminary feasibility report
9. A constraints summary, including:
 - limitations on work affecting the listed bridge
 - restrictions resulting from a proposed new fish pass
 - land ownership issues

Scope of Work

NOTES:

(1) The scope shown below is not intended to be exhaustive. It is an outline only to enable organisations to determine whether or not they wish to express an interest.

(2) Organisations do not need to be able to discharge all the work directly themselves.

(3) We are aware that different models of working exist in the hydro sector with regard to aspects such as equity ownership. We wish to hear from all organisations suitably qualified and experienced to carry out the work.

TECHNICAL REVIEW OF THREE POTENTIAL SCHEME LAYOUTS

1. Technical review of three potential scheme layouts to ascertain the best option to carry forward to detailed design.
2. Technical review of potential turbines to select the best option to carry forward to detailed design.
3. In order to make credible conclusions, annual energy capture and budget capital cost for each scheme will need to be determined.
4. The criteria for selecting the best option will be financial viability, maximisation of energy capture, ease of maintenance, ability to resist flood water levels and environmental acceptability (ecological impact, visual impact, noise etc).
5. The review must include the assembly of detailed information on variation in headwater level, tailwater level and flow in order to establish accurate predictions for turbine performance and energy capture.
6. The results of the technical review will be presented to the steering group to facilitate a discussion on the best option to carry forward to detailed design.

DETAILED DESIGN OF SELECTED OPTION

1. Liaison with Planning Authority, bridge owners (County Council) and Environment Agency regarding their requirements, particularly in regard to works adjacent to the bridge, fish pass requirements and fish screening requirements.
2. Liaison with turbine manufacturer regarding coordination of mechanical plant, electrical plant and civil engineering works.
3. Conducting all relevant environmental work
4. Hydraulic design of conduits and channels.
5. Incorporation of a suitable fish pass.
6. Structural design of open channel structures, pipelines, screens, sluice gates and supports, concrete walls, turbine foundations, walkways and ancillary steelwork.
7. Production of specifications, civil and structural engineering drawings and reinforced concrete schedules suitable for construction.

PLANNING AND LICENSING

1. Commissioning and coordination of any required ecological studies and environmental statements.
2. Application for formal grid connection offer.
3. Development of general arrangement drawings, layout plans, outline method statements and pollution prevention measures suitable for Planning and EA applications.
4. Liaison with Planning Authority and EA as required.
5. Submission of Planning application.
6. Submission of EA application for abstraction.

CONTRACT PREPARATION

1. Compilation of a tender document to an agreed form of contract.
2. Compilation of residual hazard identification information in accordance with the CDM Regulations.
3. Compilation of operation and maintenance guidance notes in accordance with CDM Regulations.

CONSTRUCTION, DESIGN AND MANAGEMENT REGULATIONS

1. The appointed contractor will be required to carry out the role of CDM Coordinator.

PLEASE ANSWER THE FOLLOWING QUESTIONS TO EXPRESS AN INTEREST IN TENDERING FOR THE DETAILED DESIGN OF THIS LOW HEAD HYDRO SCHEME:

1. Organisation

Name:.....

2. Registered Office:

a. Address (including post code):

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b. Telephone

number:.....

c. Website

url:.....

3. Point of Contact

a. Name:.....
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b. Title:.....
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c. Telephone
number(s):.....

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Please include out of hours telephone number if possible

d. Email address:

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4. Any items you wish to draw to our attention at this stage:

Please email your responses to the above questions below to Norman Rogers at normanrogers@btinternet.com by no later than 12 noon on Friday 27 January 2012.