

**Question 1**

At KM 678.4, it read that option #1 is to insert a 1350mm culvert into the existing 1500mm culvert, but if the hydrological calculations do not confirm that the flow is adequate to handle the 25 year flood, then the option for installing the 1800mm culvert will be chosen. Would it not be beneficial for the test to be done before hand so we know what option we would most likely be doing?

**Response 1**

There is the possibility that Option 2 could be done by a contractor at less cost in any event. Please bid as written.

**Question 2**

Under the pipe specs it calls for pipe coatings, is this real required?

**Response 2**

The steel pipe for liner for Option 1 is not required to have any coatings. Delete from Section 33 42 14 – item 3.4 Painting and Coating

The corrugated metal pipe culvert (CMP) for Option 2 will require zinc or aluminum coatings as per industry standards for CMP and the specifications including Section 32 05 36.

**Question 3**

At KM 687.4, if option 1 is chosen, there will be no control over the grades as we are just lining the old pipe with a new pipe, however in the specs it reads that the line and grade shall be within 50mm of design staked elevation and alignment, please clarify on this requirement.

**Response 3**

Correct the lines and grades would be fixed by the existing wood pipe in this case. The contractor is responsible to complete the concept design presented in the plans and specifications and will therefore also be setting the design staked elevation and alignments, as well as finalizing the engineering design and environmental (fish) protection measures for the entire project.

**Question 4**

At KM 687.4, do the welds of the pipe have to be fully certified?

**Response 4**

Quality control is required throughout the project. Manufactured pipe welds should meet industry standards for weld certification of non pressure pipe. Similarly field welds should include some level of quality control suitable for non pressure pipe.

**Question 5**

Is there no source for base or sub-base gravels from any government pit?

**Response 5**

Refer to Section 01 11 00 - Item 1.11 Owner Furnished Items. This allows the contractor to use gravels from PWGSC highway quarries, with a number of the closer ones being listed.

**Question 6**

Under section 01 74 11 it states no burning on site, but then in section 31 11 00 it says we can burn, can you clarify, or can we burn in the designated pit?

**Response 6**

Section 01 74 11 states no burning of waste materials which would be items brought to site by the contractor such as lumber.

Section 31 11 00 states chip or burn within the restrictions of BC Forest Practices Code. Given the limited volume of timber and possibility of fire restrictions, I would recommend planning on chipping. But that will depend on the weather, risks of fire and the necessity that any smoke not create a hazard to highway traffic.

**Question 7**

What are the timbers made of? Eg. Creosote? Are they an environmental hazard?

**Response 7**

We have no information on the timber used in the two culverts. But given that they are estimated to be over 50 years old, they may well contain creosote. Creosote is an environmental concern requiring proper disposal. We are not aware of any other environmental hazards per se, although work around fish bearing streams of course requires careful attention to the environment.

**End of Addendum No. 1**