| From: | Green, Frank |
| :--- | :--- |
| To: | Daly, Keith; |
| Subject: | FW: Contract 8078 - Current Water Level on Columbia River |
| Date: | Monday, February 07, 2011 8:45:06 AM |
| Attachments: | RIVERLEVEL,Weekof1-30-11.jpg |

Consider this RFI 5

Since the water level is lower, there will be one (or two) bubble rings not in the water. We still need the setup to include all of the bubble rings shown in the plans.

From: Vernon Uy [mailto:vernonu@americanconstco.com]
Sent: Sunday, February 06, 2011 7:49 PM
To: Green, Frank; Degenhart, Mark
Subject: fw: Contract 8078 - Current Water Level on Columbia River

```
The content of this email was found to
contain potentially hostile or malicious content.
For your protection, eSafe's Content Security Server has
modified this email and removed the dangerous content.
***************************************************************************
\USGS.14144700.01.00065.20110130.20110206.0.gif.png Msg #723 - Multiple extensions are
prohibited (USGS.14144700.01.00065.20110130.20110206.0.gif.png) - File Blocked.
Hi Frank, Mark.
```

Resending that chart again... renamed to "RIVER LEVEL, Week of 1-30-11.jpg"

Vernon Uy
American Construction Company, Inc.
(425) 870-3217

From: "Vernon Uy" [vernonu@americanconstco.com](mailto:vernonu@americanconstco.com)
Sent: Sunday, February 06, 2011 7:22 PM
To: "Mark Degenhart - WSDOT" [degenhartm@columbiarivercrossing.org](mailto:degenhartm@columbiarivercrossing.org), "Frank Green - WSDOT"
[greenf@columbiarivercrossing.org](mailto:greenf@columbiarivercrossing.org)
Subject: Contract 8078 - Current Water Level on Columbia River
Hi Frank, Mark.
I noticed on Friday (2/4) that the water level on the river is only between $6.5^{\prime}$ and $5^{\prime}$. This translates to EL $+11.8^{\prime}$ and EL +10.3' (NAVD88 datum). This is quite a bit lower than the "high river level" of EL +21.2' (as shown on Plan Sheet ND1).

Attached is a chart that shows water level on the river last week. You need to add 5.28 ' to each value to convert to NAVD88 datum.

Conclusion: There will not be enough water depth (assuming mudline elevations of EL -21 ' and -25 ' are correct) to use all 7 bubble rings (unconfined system). Looks like only a total of 5 or 6 bubble rings will be needed.

Furthermore, fewer bubble rings mean fewer compressors are required to supply the system. Three (3) 1600-cfm compressors will be enough to provide air for up to 6 bubble rings ( $1600 \mathrm{cfm} \times 3=4,800 \mathrm{cfm}$ or 800 cfm minimum per bubble ring).

Call me if you have questions. Thanks.

Vernon Uy
American Construction Company, Inc.
(425) 870-3217

USGS 14144780 COLUHBIA RIVER AT UANCOUVER, HA


