## **INTEROFFICE MEMO**

To: Janet Binns

Rob Zuber Phot D. Zh

From:Rob ZuberMMDate:4/17/2018Subject:Bowie 2, TR115 review

I looked at the TR-115 submittal, compared it to some existing pages and maps in the PAP, clarified items with Stover and Associates, and checked some hydrology calculations. Overall it looks good, but I suggest the following minor adequacy items. Let me know if you want to discuss any of these.

- 1. The extent of riprap for the East Diversion Ditch is somewhat inconsistent between the three submitted maps. On Map 21-3 the symbol for riprap extends well above the confluence with Ditch D-F1. On other maps it ends at D-F1. Please revise maps as appropriate and re-submit them to the Division.
- 2. On the page for Manning's equation calculations, the portion for the 30" half culvert should possibly be removed since the "smart ditch" was the chosen alternative. Also, the page number for this page may need to be revised: should it be "B-102" or "B-103"?