

On Tue, Jan 15, 2019 at 7:18 AM Amy Macrellis <amacrellis@stone-env.com> wrote:

Good morning Jessica!

Here's my brief understanding of the scope items for alterations to a sub-set of the conceptual designs included in the final Stormwater Master Plan (SWMP) for Richmond following the team call on January 9, 2019, along with a cost estimate for completing the alterations.

On the January 9 call, we learned that VTrans is supportive of the concept design proposed at WR-19 (in the I-89 right-of-way and draining west onto the School campus), but will not be able to proceed with design and construction of those improvements within the next five years. VTrans's timeline is not consistent with the Town's or the School District's desire to move forward with projects in the Town right-of-way adjacent to the School campus (WR-12), or on the Richmond Elementary/Camel's Hump Middle School campus immediately down-slope from the improvements proposed at WR-19 and receiving runoff from I-89 (WR-22 and WR-14). During development of Richmond's SWMP, the concept designs at WR-19, WR-22, and WR-14 were advanced as a holistic, watershed-based approach to alleviating severe erosion issues that exist at WR-14. Thus, sizing calculations and certain design details for the concept designs at WR-22 and WR-14 assumed that these designs would be implemented at the same time as those in the VTrans right-of-way (WR-19).

In preparation for advancing with final design applications for the improvements conceptualized at WR-22 and WR-14, the consultants will update sizing calculations, design details, and implementation cost estimates to account for the VTrans implementation timeline, and to ensure safe passage for the un-managed flows that will reach WR-22 and WR-14 from the VTrans right-of-way and the vicinity of the proposed WR-19 improvements until those improvements are implemented by VTrans. Results of the concept design updates will be summarized in a concise technical memo. Two meetings are anticipated: a kick-off and coordination meeting with the Town, CCRPC, and School District officials, and a design update review meeting with the same stakeholder group. Vermont DEC staff (Watershed Management Division, Rivers Program, etc.) may also participate in the coordination meetings or provide review comments.

Our cost estimate presented in the following table, for completing the scope of work outlined above, assumes that Senior Professional Amy Macrellis will provide project oversight, and Senior Water Resources Engineer Gabe Bolin, PE will lead concept design and cost updates, supported by Staff Engineer Branden Martin, EI.

Task/Phase	Project Team				Expenses	Total Cost
	Name	Hours	Rate/Hr	Cost		
1 Concept Design Updates	Amy Macrellis	6	136.7	\$820	\$0	\$2,813
	Gabe Bolin	8	136.7	\$1,094		
	Branden Martin	11	81.77	\$899		
2 Meetings and Coordination	Amy Macrellis	8	136.7	\$1,094	\$70	\$1,710
	Gabe Bolin	4	136.7	\$547		
	Branden Martin	0	81.77	\$0		
TOTAL COST						<b>\$4,523</b>

Thank you for the opportunity to support the Town of Richmond's application for UPWP funding – we stand ready to answer any questions you may have about our estimate.

Best regards,

Amy

**Amy Macrellis**

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