

ANCILLARY COSTS OF INSTALLATION



The Knust estimate does NOT include **substantial** ancillary costs. Mr. Knust conceded that the costs could amount “in the tens of thousands”. Ted and Lynn have contacted specialists to obtain estimates that could include, but not be limited to:

1. The Conceptual Design Report, as well as the Davey’s Report, both discuss the need for **required preliminary studies** to include sediment assessment, bathymetric studies, topographic studies. Engineering plans will be required before permits can be requested. Lynn investigated some of these issues to indicate such preliminary work could run \$33,000—\$40,000.
2. Federal and state **permitting** can be complicated and it is advisable hire a specialist to handle the application process. Lynn has discovered that permitting costs could run \$5,000—\$6,000. This did not include the cost to hire a project manager.
3. **Legal services** for property adjustments (An official property line survey conducted by Deckard Land Survey in 2017 “...found that a significant portion of Pond 3 lies outside of the WFCA common area...” This issue will need to be officially resolved, especially if a stream channel is reformed in the existing area. An estimate of \$1800-\$2,000 may be low.
4. Relocating present **utility lines** buried around Ponds 3 and 4 will be necessary. The estimates for such were not available, at the time of this writing.
5. One unusual requirement is that a multi-year natural **wildlife study** must be conducted to determine how redesigning the waterway impacts wildlife. Lynn was able to get an estimate of \$7,000.
6. Given the complexity of the project and miscommunications that occurred in the past, it is advisable to hire a part-time experienced **project manager** for such a complex undertaking. Such costs are undetermined.
7. Even though some **landscaping costs** are included in the report estimates, Mr Knust admitted that additional landscaping would be needed to include the creation of a rain garden in what is now portions of pond #4. A few years ago, WFCA explored the idea of creating a rain garden just in the smaller northern section of Pond 3 and found that the cheaper plan would cost over \$35,000 (the other bid, from EcoLogic was well over \$88,000). Considering that the area in question is much larger and inflation has increased costs, estimates could run close to \$100,000. Additionally, the new landscaping will need more attention in the first few years to ensure that invasive unsightly vegetation does not take over. This, in turn, will requires additional maintenance funds.
8. **The ancillary costs to convert Ponds 3 and 4 to a stream channel could be approximately \$154,000, Added to the estimate of \$221,000 to create the actual stream bed and install minimal landscaping, the total to redesign Ponds #3 and #4 could instead be closer to \$375,000.** (This does not include the identified costs associated with alterations to pond #5 that are to be done simultaneously with P3 and P4.)

Assuming these details to be somewhat accurate this brings the total to complete the entire Scenario #2 to approximately \$575,000. The following chart provides the details.

**COMPARISON OF
OPTION B POND RENEWAL EXPENSES**

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STREAM CHANNEL EXPENSES WITH ESTIMATED ANCILLARY EXPENSES

OPTION B POND RENEWAL:			SCENARIO #2: STREAM CHANNEL		
POND	ACTION	ESTIMATED COST	POND	ACTION	ESTIMATED COST
Pond #3	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install sediment forebay in north end	\$121,000*	Pond #3, 4, & 5 as one project	Acquire, surveys, engineer report and necessary permits.	Ancillary costs estimate to be \$154,000
Pond #4	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$85,000		Convert 3 & 4 to streams by cutting thru weir between ponds 3 & 4. Redesign to create deep channel, reinforce banks for erosion control, landscape channel sides,	\$221,00
Pond #5	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$61,000		Dredge and install sediment forebay in pond #5	\$67,000*
Pond #6	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	68,000	Pond #6	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$68,000
Pond #7	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install water recirculating equipment	\$65,000	Pond #7	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install water recirculating equipment	\$65,000
Total \$400,000			Total \$575,000		

* included in the original estimate and has been removed for more accurate comparison purposes.