

Prairie du Pont/Fish Lake Authorized Level Project Cost Estimate

Preliminary Design Phase

Prepared for



Prepared by



August 12, 2016

1. Cost Estimate

Total Cost

Based primarily on previous bid line items from over a dozen local contractors, a preliminary construction cost estimate has been developed for Phase I of the Prairie du Pont / Fish Lake Authorized Level Design Project. For cost estimating purposes, a contingency of 20% was applied towards all line items. These estimates are preliminary, and represent a planning level estimate. The total construction cost at this time is \$24,111,070.

Development of Bid Packages

Amec Foster Wheeler has reviewed the USACE decision segments and recommends that one bid package for construction be developed. The quantity of seepage berm material is anticipated to be extremely large; therefore, we anticipate that contractor(s) will need to dredge the Mississippi river to cost-effectively obtain the volume of sand that will be required. With that assumption, the notion of only one single package for the berm work is appropriate so that there are not multiple contractors with multiple barges at any given time. The relief wells could, in theory, be bid as a separate package, but the relief wells are geographically intermixed with the seepage berms meaning there would be multiple contractors working in the similar areas. When multiple contractors work in the same areas there can be additional costs added to both contracts for coordination and routine items such as traffic control and haul routes can become logistically difficult; furthermore, it can be difficult to determine ownership of any restoration that needs performed to roads and other features, which is exacerbated by the fact that PdP/FL system only has a handful of roads to/from the entire levee system. Additionally, recent increases in construction costs throughout St. Louis metro area suggest that the contracting community is flush with construction work; therefore, contractors may be more selective in their bidding and less likely to bid smaller jobs, resulting in a smaller number of bidders per bid package. Likewise, the FPD Council's FEMA projects have demonstrated that the promise of a large construction job often brings out the most competitive bids from general contractors. Finally, the FPD Council has earned a positive reputation throughout the local contracting community, which also helps in obtaining good bids for construction work.

The single bid package has been named Bid Package 15, which is a continuation of the numbering from the FEMA Certification Design and other Authorized Level Construction packages along both the Wood River and MESD levee systems. The resultant bid package is as follows:

- ▶ Bid Package 15 is comprised of 23 USACE decision segments and spans from Levee Station 227+05 to 735+25. This package includes the abandonment of existing creosote impregnated wood stave relief wells, the construction of 16 new seepage berms and approximately 38 relief wells, all of which are tributary to existing pump stations.
 - Decision Segments:
 - Prairie du Pont – Station 227+05 to 250+15 – Seepage Berm
 - Prairie du Pont – Station 253+45 to 263+35 – Seepage Berm
 - Prairie du Pont – Station 276+55 to 279+85 – Relief Wells
 - Prairie du Pont – Station 283+15 to 289+75 – Relief Wells
 - Prairie du Pont – Station 289+75 to 299+65 – Seepage Berm
 - Prairie du Pont – Station 332+65 to 335+95 – Seepage Berm
 - Prairie du Pont – Station 345+85 to 349+15 – Seepage Berm
 - Prairie du Pont – Station 352+45 to 362+35 – Seepage Berm
 - Prairie du Pont – Station 365+65 to 368+95 – Relief Wells
 - Prairie du Pont – Station 385+45 to 405+25 – Seepage Berm
 - Prairie du Pont – Station 405+25 to 408+55 – Relief Wells
 - Prairie du Pont – Station 421+75 to 425+05 – Seepage Berm

- Prairie du Pont – Station 477+85 to 487+75 – Seepage Berm
- Prairie du Pont – Station 497+65 to 510+85 – Seepage Berm
- Fish Lake – Station 567+35 to 584+65 – Relief Wells
- Fish Lake – Station 584+65 to 590+05 – Seepage Berm
- Fish Lake – Station 604+10 to 609+85 – Seepage Berm
- Fish Lake – Station 616+45 to 619+75 – Relief Wells
- Fish Lake – Station 626+35 to 639+55 – Seepage Berm
- Fish Lake – Station 652+75 to 659+35 – Seepage Berm
- Fish Lake – Station 665+95 to 672+55 – Relief Wells
- Fish Lake – Station 705+55 to 725+35 – Seepage Berm
- Fish Lake – Station 731+95 to 735+25 – Seepage Berm

Appendix 1 – Preliminary Cost Estimate

**Southwestern Illinois Levee
Authorized Level Design
Prairie du Pont / Fish Lake - Bid Package 15**

<u>NO.</u>	<u>DESCRIPTION</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Total</u>
1	Dewatering	LS	\$ -	-	\$ -
2	Erosion & Sediment Control	LS	\$ 300,000.00	1	\$ 300,000
4	Mobilization	LS	\$ 585,300.00	1	\$ 585,300
5	Modify Piezometer - Raise to Grade	EA	\$ 4,210.00	2	\$ 8,420
7	Pvmt - Roads & Trails - Remove & Replace	SY	\$ 75.00	3,889	\$ 291,667
8	Relief Well - Existing - Abandon	EA	\$ 3,200.00	23	\$ 73,600
9	Relief Well - New - Type "D"	VF	\$ 750.00	3,800	\$ 2,850,000
10	Seeding, Mulching and Site Restoration	LS	\$ 300,000.00	1	\$ 300,000
11	Seepage Berm Material	CY	\$ 20.00	754,179	\$ 15,083,571
12	Utility Relocation	LS	\$ 600,000.00	1	\$ 600,000
12	Subtotal:				\$ 20,092,558
13	Contengency (20%):				\$ 4,018,512
14	Estimated Construction Cost:				\$ 24,111,070