CONSTRUCTION INDUSTRY DAY MELVIN PRICE/WOOD RIVER SEEPAGE CUT-OFF WALL PROJECT

The U.S. Army Corps of Engineers, St. Louis District held a Construction Industry Day event on Tuesday, December 3rd, 2013 for all businesses interested in the Melvin Price/Wood River Seepage Cut-Off Wall Project.

Listed below are the Government & Contractor Attendees, and the General Session, Q & A:

Names	Title	Names	Title
Col. Hall	District Engineer	Mark Alvey	Geotechnical Branch Chief
Bill Levins	District Counsel	Jay Fowler	Construction Branch Chief
Mark Roenfeldt	Geotechnical Engineer, Section Chief	Thomas Mercer	Contracting Officer
Greg Kohler	Project Management, Project Manager	Tracey Kelsey	Project Management
Ryan Goetz	Geotechnical Engineer, Project Tech Lead	Barrietta Killiebrew	Contract Specialist
Heather Asunskis	Office of Counsel	Gregory Dyn	Cost Engineer
Twila Hopkins	Contract Specialist	Gerald Allen	Construction Engineer
David Paul	RMC Civil Engineer	Christine Leffeler	Construction Engineer
Janet Ulivi	Civil Engineer	Romanda Walker	Public Affairs
Josh VerDught	Civil Engineer	Chimeadu Ewoh	Civil Engineer

Government Attendees:

Contractor Attendees:

GANNETT FLEMING , INC TAYLOR BROTHER, INC MAGRUDER CONSTRUCTION CO KIEWIT INFRASTRUCTURE HEETER CONSTUCTION, INC JAFEC USA, INC ALBERICI CONSTRUCTORS, INC TREVIICOS GEOTECHNOLOGY, INC NICHOLSON CONSTRUCTION CO ADVANCED CONSTRUCTION TECHNIQUES INC TARLTON CORP GEO-SOLUTIONS INC BAUER FOUNDATION CORP GEOSYNTEC CONSULTANTS CONTI-BRASFOND JV LLC HAYWARD BAKER PAUL C RIZZO ASSOCIATES, INC. PANGEA, INC J. L. BROWN CONTRACTING SERVICES

Welcome/ Introduction:

Mr. Mark Alvey started at 8:00 a.m. and made sure all contractors had seats. He reminded all that there were donuts and coffee available. We first met in the classroom and then will split for the One-on-One Sessions into the classroom and the Discovery Theater.

COL Hall introduced himself and gave some opening remarks. This is a great turn out. It's an important project and let's put this into perspective. The future work will protect about 250,000 people and significant transportation corridors. We want to get this right and efficient. We have a lot of challenges to face in this area with the stratigraphy and conditions of river and pooled area. You will help us get designs right. We will take this into consideration. We want to get you involved early on and ensure we have designs and assumptions right in the beginning. Also, folks expect good things from the Corps and you will be part of this. We like to have a high level of quality. The One-on-One Sessions will be later on and I hope your time invested is good.

Mr. Alvey then introduced USACE team and all Corps employees introduced themselves.

Mr. Alvey welcomed all. We hope to be informative to all of you and us. We want to increase the value of the tax payer dollar. We will have a presentation from Mr. Mark Roenfeldt and Mr. Tom Mercer and then a Q&A session. Office of Counsel and Contracting are allowing us to have this dialogue but we have to stay within our limits to have a level playing field. We may not be able to answer all questions but we will be frank and honest. We want to get information from you and want to give information back. On the levee Mr. Ryan Goetz staked out the beginning of the cut-off wall 1100 feet downstream of the dam and you will see a spray painted orange stack on top of the levee. About 8,100 feet further upstream of that stake is another orange stack. These are approximate locations of the start and end of the cut-off wall. There will be drilling equipment on berms but please do not speak with the drillers. During the One-on-One Sessions, there are questions available that you can answer for us but maybe you only want to talk about a few of them because each of you get only half an hour during session. There will be session A in here and B will be in the Discovery Theater.

Melvin Price/Wood River Seepage Cut-Off Wall Project Overview:

Mr. Roenfeldt began with the PowerPoint presentation. We are very glad you are here. How did we get here; we will give you a little history and the conditions. The PowerPoint was printed and available for all to get a copy. Mr. Roenfeldt started with a description of the project, site conditions, high water event examples, utilities, and subsurface conditions. Mr. Mercer will touch on the contracting information. Generally, the area is south of Alton, Illinois as shown on the vicinity map. The seepage area is part of the Wood River Levee and Drainage District protection area. Mel Price Locks and Dam is part of that. Mr. Roenfeldt showed a typical levee cross section showing a clay cap and a hydraulic sand core. The groundwater is not deep. Typical native foundation soil conditions include a clay blanket over sand alluvium, over glacial materials, which are highly variable. Native soils are underlain by sedimentary bedrock, which is typically limestone formation. Some of the exploratory work is on the riverside berm and some is on the levee crown. How did we get here? The original Locks and Dam 26 was in the Alton, IL vicinity, which put the Mel Price seepage study area in its tailwater. Mel Price Locks and Dam construction now puts the levee section and seepage area in its upper pool. Mr. Roenfeldt showed an aerial view of the locks and dam, the visitor center/museum, the adjacent highway, and the new Clark Bridge. Shown is the seepage area and ponding adjacent the upper pool. We have seen boils and seepage. Mr. Roenfeldt next showed a depiction relative to the locks and dam and some red dots where we have seen sand boils with moving material and seepage locations. The yellow dots are stationing along the levee. He next showed the proposed cut off wall alignment. On this slide, the graph at the bottom shows a line which is the existing grade of the proposed cut-off wall. It also shows a ramp where we transition from riverside to crown alignment. We considered other ways to deal with seepage like landside stability berms or relief wells. There are pros and cons and reasons why we are going this direction. Mr. Roenfeldt next showed typical cross sections and depicting some of cutoff walls. Another consideration is bottoming the cutoff wall into glacial till or into bedrock. The current concept is to go 5 feet into till or if there isn't sufficient till, then 2 feet into bedrock. There are also underground utilities, including parallel gas lines and communication lines. He showed two photos at one station and also showed photos of two stations during high water events. The second photo is from Cpl. Belchik Road. Another photo was shown of utilities in which red is overhead power, yellow is natural gas, orange is communication, and green is force main. As to subsurface conditions, we gathered information a variety of ways: pumping tests, subsurface explorations, and also from constructing the lock and dam. The subsurface strata show the levee section, alluvium, groundwater, glacial deposits, and bedrock. Mr. Roenfeldt next showed exploratory locations of borings. We used the traditional drilling rotary method, soil sampling, bedrock coring, piezometers, and have detailed logs of all field activity. The photo in the corner of the slide is the riverside berm with faint utility marks. There are glacial deposits and we know glaciers did come into area and terminated. We discovered that the materials are highly variable. We encountered materials that give evidence of being large which is what you could anticipate for glacial material deposits. Mr. Roenfeldt showed a slide of rotary drilling circulation losses. We had poor circulation and associated fluid losses. One example is total circulation loss at a depth of approximately about 80-90 feet depth. Drilling mud was continually added to maintain fluid in the hole. This location was drilled through the crown to a total depth on the order of 150 feet. The data shown on the right is from pumping tests. We are having most fluid loss from zones of

coarser material (cobbles, etc.). He showed a graphic depiction of rough drilling. We have detailed drilling logs. There is highly varied drill advance in zones of coarser glacial materials. We have a lot of data logging from our efforts. The blue dots are bedrock. We are doing a lot of coring to corroborate depth and quality of rock, especially where glacial material is encountered. We had one boring where we thought we were on bedrock, but then continued on through an isolated rock. Mr. Roenfeldt showed a slide on glacial till and bedrock, with stick logs depicting soils and rock in various locations. The summary points include that the glacial till varies in thickness from about 1 to10 feet. The thickness of the till is not consistent. The till depths varies from 115 to 155 feet, with greater depths for boring locations through the levee crown. The bedrock depths are about 130 to 140 feet riverside but at the levee section are 150 to 160 feet. We had significant size range of glacial material, with till being hard fine-grained material. Other evidence comes from construction impact information related to construction of Mel Price Locks and Dam. The Corps did an over-water pile driving test program in 1970s. There was damage to piling. Cobble and boulder size material were found. He also showed photos from actual pile driving during construction. There will be no piling in this cutoff wall job, but we are just highlighting the subsurface conditions and especially the effects of glacial materials on construction. We now have a summary of concepts we currently are using for analysis and design basis. The Government is using the assumptions listed on slide which include items such as panel construction width of 20 to 50 feet; panel thickness of 2 feet minimum; backfill material of cement bentonite; slurry weight of 72 pound range; working platform at existing grade; 40 feet wide riverside berm as being sufficient working area; cutoff terminating 5 feet into glacial till or 2 feet into bedrock (there may be cost savings if you go shallower); strength properties including 15 psi prior to excavating secondary panels and 28 day strength of 50 to 100 psi. Site conditions, subsurface conditions and project concepts are the aspects we want to get out to you. Our goal is to be able to develop P&S for an effective and quality project.

Mr. Mercer then highlighted some contracting items that are still in the planning phase. We are looking at an unrestricted FFP IDIQ and will most likely be done in phases. The Source Selection process will be Best Value - Lowest Price, Technically Acceptable. We will publish stringent qualification criteria and go/no-go. Contractors should provide their best proposal during the first submittal; incase the Government elect to make an award without discussions. Per the Federal Acquisition Regulation (FAR), the most we can say about the estimated value of the contract is - it is greater than \$10 million. We will also state the nature of this work. Legally binding Joint Ventures and Teaming Arrangements are encouraged. Without a legally binding arrangement, the prime cannot receive credit for the Sub-contractors experience and technical expertise. The main point - if you lack the technical expertise and want credit for your Subs abilities; you have to have a legally binding agreement between the prime and sub. This is very important because the Government does not have a contracting relationship with Subcontractors. This is specialty type construction contract. The prime is required to perform at least 25% of the cost of the contract, minus cost of materials, with its own employees. This is important because we check and evaluate for compliance. The bonding requirements will depend on how the contract is structured in (Task Orders or Phases). The bond will be up to the total value of the Task Order or contract capacity. A question was asked if we are considering MATOC. Mr. Mercer answered, no.

Glenn Chatman spoke about the subcontracting requirements. Performance is not just equipment but also materials. Requirements include that you must make sure you identify your subcontracting plan whether you use small business, women-owned, vet-owned, etc., keep in mind that the contract award is not made until the subcontracting plan is approved. We will look at it closely. If you are a small business, it is not required.

Mr. Alvey continued and said that the Q&A Session would begin. During this time, if you want to see a presentation slide we can do that but remind you that we are limited on time and we have strict fences to work within. The Q&A Sessions will be located on web page. The One-on-One Sessions are strictly confidential, to the extent permitted by law.

General Session, Q&A Session:

Industry Day 3 December 2013 Questions and Answer Session

Q: Clarify the subcontractor/prime relationship.

A: Mr. Tom Mercer answered that the prime contractor must do at least 25% of total cost of the contract, not including the costs of materials, with its own employees.

Q: Can you discuss the rationale for the 20-50 foot wide panel?

A: Yes, we did a design a mile downstream where we had a deep cutoff wall and we could not do a continuous wall and had to look at achieving some factor of safety for integrity of the levee and have done other analyses that have limited the panel widths.

Q: Was it a stability issue?

A: Yes

Q: Is there any information of berm movement because of patching?

A: We don't have a record of levee slides in that area and maybe seeing drying of fat clays on the levee surface.

Q: There is no instrumentation there?

A: No, but we will have during construction of the wall.

Q: One assumption was no guidewall. Would you please clarify?

A: We looked at the requirement to have no guidewalls and we don't think they are required but they will be allowed.

Q: What is the rationale of no guidewalls?

A: Cost

Q: What is the rationale of the alignment?

A: Again, cost.

Q: When will your ground investigations be available?

A: They will be available before the solicitation but we are still doing drilling now. We will discuss having additional data on the website with our Office of Counsel.

Q: Is there any room for supplementary larger scale investigations due to the cobbles and boulders; maybe a shaft to go down to bedrock; bedrock penetration involves a process that may not be required otherwise and tied to fluid loss? You need to know if you will be losing slurry.

A: We will take this into consideration.

Q: This will be a firm fixed price contract?

A: Yes

Q: Will you issue a geotechnical baseline document?

A: Yes, that is the plan.

- Q: Will the test panel data be available?
- A: We are constructing a slurry trench but we are not construction managers.

Q: There will be potential phases and several contracts?

A: We are looking at all different ways and there are variables like funding. We would be interested in your comments on this.

Q: Maybe use the ECI process.

A: We looked at it and this is kind of like that but not a formal ECI process.

Q: As to the guidewall, are you looking at an enhanced work table how much of a work table?

A: This is yet to be decided. We realize you need a relatively flat area to work from and we will consider comments.

Q: Are there loading restrictions on levee?

A: Where work is at the crown, a portion of the levee will be excavated about 6 feet so the loading will be equivalent to a crane.

Q: What is the responsibility for the levee stability? Where does it lie because you could have tons of equipment?

A: We are performing an analysis at each boring location and doing slope stability analysis to take into consideration and could bring this into the One-on-One Session.

Q: What is the rationale of 5 feet into glacial till and 2 feet into bedrock?

A: As to the 2 feet into bedrock, it is a relatively dense limestone that we would socket into. As to the glacial till, we think maybe 2 to 5 feet, but we have not finalized anything

Q: How descriptive will you be on technique or will there be latitude?

A: This is unknown.

Q: What was the material of the boulder in your example?

A: Limestone material has been encountered above the bedrock, but other materials may also have been encountered. We will do the best we can to define material in the boring logs.

Q: Is there psi information on boulders?

A: No, not at this location.

Q: For guidewalls, for this depth, we would use a guidewall for safety and quality, and would you consider this?

A: You can bring this discussion into your comments.

- Q: Will there be a designated disposal area?
- A: We will find one.

Q: As to lay down areas on the flood side and upcoming floods and moving equipment, will there be an area on the protected side?

A: We will be looking at staging areas; one area is the esplanade and we are still looking.

Q: The wall is the lion's share; what other work is included like utilities?

A: Mr. Josh Verdught noted that at a similar work area there was grading work and ditch filling but he is not sure if this type of work is included. The bulk is slurry wall.

Q: As to guidewalls, we feel strongly about using them.

A: OK

- Q: As to the bentonite polymers, these are considered contaminants in some locations.
- A: We have nothing on this topic
- Q: As to discharge points, where do you see this occurring?
- A: Waste would be put in an approved area for waste disposal or taken to a landfill.
- Q: Does the government have a disposal area that would handle the liquid waste?
- A: We are putting it along levee toe in our other design.

Q: We see other places that use a guidewall, work platforms, collection trenches, and going to settlement areas or other ways. We would like to see how the work room and everything goes together, to make this a level playing field.

A: Thank you.

Q: Any thoughts on handling the slurry loss, like case the hole and get through the deposit?

A: We have thought about it but have no comment on it at this time.

Q: Do you envision pretreatment works and open matrix soils to reduce slurry loss?

A: We have not considered that and please put down as a comment.

Q: This will be one IDIQ or multiples?

A: This may be one IDIQ with multiple phases or Task Orders. Exact contract type is not known yet.

Q: Does the Government have a project labor agreement (PLA)?

A: No, a PLA will not be required for this project.

Q: Is this in-house design?

A: Yes.

Q: What is driving IDIQ strategy; is it funding?

A: Yes, partially.

Q: What is the funding profile?

A: Mr. Greg Kohler answered that the funding is uncertain and we don't know funding streams. Mr. Tom Mercer asked for value of the contract, what value level makes it worth your while; this is something we would like to know. Q: This also depends on procurement strategy.

A: We would like to know what threshold is considering mobilization and we are trying to get it to a level where more people would be interested in bidding the contract.

Q: Is bonding for whole project or each Phase/Task Order?

A: Each Phase/Task Order, but it all depends.

Q: What is the expected length total in time?

A: It depends on funding and how much wall is done at each time. We want the funding flow to be continuous.

Q: Will the contract documents have constant funding but if funding stops will there be something in contract?

A: Yes, but we want to keep continuity in your work, so we will have a standby cost line item.

Q: What is the contract time?

A: It could be one year but it could be longer.

Q: With step funding and with multiple year contracts you could install and you have some idea of the duration?

A: We don't know and it really is dependent on funding. The solicitation will say what the duration is.

Q: When will you issue the solicitation?

A: It is anticipated to have a contract packet July 15, 2014, which is the earliest date.

Q: As to this capability statement is there a deadline for questions or comments?

A: We were hoping to have them today but you could submit later and maybe we will try to accommodate but would like to have done today. Ms. Barietta Killiebrew or Ms. Twila Hopkins would take capability statements.

Q: Will you walk us through what we are assuming?

A: This is 100% federally-funded. We will advertise July 15 at the earliest if funding is received and that depends on Congress.

Q: Do you have funding for 2014?

A: Not yet; we have funding to continue design but things are uncertain beyond that. The goal is to award in 2014 but it depends.

Q: Have funds been requested?

A: Yes. Mr. Tom Mercer added that we will have a pre-proposal conference on this type of project. It will probably be a 6-week proposal period to give you time to review, will have the pre-proposal conference, and then time after that.

Q: Are there any unique things about the construction seasons, like maybe regulatory agreements or anything to inhibit construction?

A: There may be floods.

Q: Whose risk is the flood?

A: Mr. Jay Fowler said that contract time is extended and the contract will say that and also there will be a standby time clause.

Q: Is there consideration to staging areas on the riverside and cofferdams and cleaning?

A: This is considered case by case.

Q: Are there work hour restrictions?

A: Not that we are aware of and if there are they would be in the solicitation.

Q: The procurement period is probably short; several of the contractors in attendance agreed.

A: We may possibly consider 60 days and we will possibly adjust. Please note this to us in your comments.

Q: What level of design are we responsible for?

A: Please note this in your comments.

Q: Where is the levee excavated 6 feet as noted earlier in the presentation?

A: It will be in the vicinity of the locks and dam. It was noted that we welcome your feedback and you can send additional comments electronically and we will treat them like it's a One-on-One Session, but it has to be within reason and may be limited to 15 days.

Q: In regard to a flood event and demobilization, the verbiage says the Government will compensate for a period of time for moving equipment. Is this a possibility?

A: Yes, that is part of it. We look at weather delays and standby time.

Q: Will the Government consider having a period of time (10-15 days) to submit electronically a list of comments?

A: Yes, send to Ms. Barrietta Killiebrew, but only for the next 15 days.

Q: Is there a way to have additional questions and openly answered?

A: No.

Q: Will the Government answer the questions submitted?

A: No, but we will consider them. The Questions and Answers will be on the website and they are for everyone to see. Again, this is the beginning of our design and some decisions may be made quite a while later so some answers will be noted as "will be taken into consideration". Mr. Bill Levins concurred that all additional comments and questions should be confidential. Mr. Glenn Chatman said that there is also the pre-proposal conference where you can bring questions.

Q: The Government should have another industry day when the design is more mature and this would level the playing field.

A: The next opportunity will be the pre-proposal conference and we may not be able to have something else in addition.

Q: In regard to the funding issue, it would be nice to know before solicitation comes out.

A: OK.

Q: Will there be an opportunity to visit other sites that the Government has?

A: Yes, we have others including Clearwater, Wolf Creek, a couple in Jacksonville, and Mound City, IL.

- Q: Will the slides be available?
- A: Yes, they are on the website.

Mr. Mark Alvey gave concluding words to end the Q&A Session.

The Q&A Session concluded at 9:45 a.m.