Progress Report
November 17, 2010
SW IL Levee System

By Jay Martin

Major Areas

- Program Management
- Field Activities
- Preliminary Design
- Schedule
- Budget
- Look ahead

Program Management

- Health and Safety
  - No reportable incidents project to date.
- Schedules prepared
- Weekly calls with the USACE to coordinate and share information
  - Three calls
  - Meeting today at 10:30

Program Management

- Subcontracts prepared/executed
  - Juneau Associates, surveying – prepared/negotiated
  - Sheppard, Morgan and Schwaab, surveying – prepared/executed
  - ABNA Engineering, surveying – prepared/executed

Field activities - Wood River
(developing data for both evaluation and design)

- Boring locations and access issues identified.
- Volkert continues working on utility clearance for exploration locations.
- Boring locations staked, drilling initiated on 10/18/10. Completed approximately 1,660 LF of SPT drilling, 1,425 LF of CPT and 80LF of sonic.
- Completed geophysical field survey of the levee system.
- Potential contaminated soils issues have been reviewed and field personnel informed and trained in the protocol for handling and containerizing waste materials.

Field activities - MESD
(developing data for both evaluation and design)

- Boring locations staked, drilling initiated on 10/11/10 and have completed approximately 2,048 LF of SPT drilling, 1,480 LF of CPT drilling.
- Completed the geophysical scan of the entire levee length.
- Identified and continuing to resolve site access issues which have limited the number of drill rigs that can be utilized. Drilling footage production per rig is higher than expected.
- Potential contaminated soils issues have been reviewed and field personnel informed and trained in the protocol for handling and containerizing waste materials.

Field activities - PdP/FL
(developing data for both evaluation and design)

- Boring locations staked, drilling initiated on 10/11/10. Completed approximately 60% of Phase I Certification Borings and 45% of Phase I seepage berm borings. Total footage – 1,100LF of SPT and 1,609 of CPT.
- Completed the geophysical scan along the PdP/FL corridor.
- Rights of access secured for all but 3 properties along the corridor, which inhibits subsurface exploration and cultural survey.

Preliminary Design and Evaluation Activities – Wood River

- Field Survey (AMEC) for H&H analysis is complete.
- Obtained Environmental records from COE and refined environmental constraints map.
- Developing sampling and environmental protocol for potentially impacted areas (including boring WRL-C-S1602, apparent hydrocarbon impacted).
- Validating COE under-seepage spreadsheet inputs. URS under contract and collecting field data from drilling for use in geotechnical analysis.

Preliminary Design and Evaluation Activities - MESD

- Cultural resources base mapping constraints have been established.
- Hazardous environmental review has identified approximately 40 sites within Wood River and MESD with the majority located in MESD
- H&H analysis backwater evaluation
- Reviewed new data collected from Corps of Engineers.
- Initiated relief well inventory through subcontractor.
- Began developing base maps.

Preliminary Design and Evaluation Activities – PdP/FL

- Water Resources: Hoelscher began analyses along flank levee.
- Civil Engineering: Began developing base maps.
- Environmental Engineering: Desk study completed. No potentially impacted areas identified.
- Cultural Resources: Desk study completed. With the SCI Phase I report, which surveyed 95% of corridor, we coordinated with Corps of Engineers regarding a path forward.
- Geotechnical Engineering: Validated 75% of USACE spreadsheets.
- Initiated relief well inventory through subcontractor.

Schedule

- Wood River – a detailed schedule with milestones has been developed. A revised schedule is being developed and will reflect the changed scope that considers what construction the COE has underway. We expect to meet the March 1 2011 goal for 30% design and cost estimate.
- MESD – Currently the critical path elements are drilling within the berm areas and development of a berm design for critical areas. Developed milestone turnover dates when the berm footprint and thickness are provided to the civil designers to move ahead. Have identified the following:
  - December 22 – complete berm design for the southwest corner of the MESD levee, along both the front levee and the flank levee
  - January 5 - complete berm design for the riverfront levee located several thousand feet north of the first levee
  - Complete berm design for the remaining areas located within MESD
- PdP/FL – A milestone schedule to meet the March 1, 2011 deadline has been developed.

Budget

- Second invoice prepared for submittal
- Budget status
  - Program Management $112,000 spent, 7.6% of budget
  - Preliminary Design $427,000 spent, 13.3% of budget
  - Preliminary Construction $530,000 spent, 9.3% of budget
  - Wood River – No issues have been identified that would cause an overrun.
  - MESD – Currently the overall project for MESD is expected to be complete within or under budget. However, the cost for treating potentially contaminated water or disposal of environmentally contaminated soils is unknown.
  - PdP/FL – budget has been reviewed and refined. To date, the effort (Professional and Field Services) is expected to be completed within budget. Desk studies and analyses have not uncovered issues that negatively affect the proposed budget.

Issues & Concerns

- Relief well testing – management of discharge
- Property access – proposed berm locations
- Coordination with the Corps – maximize efforts
- Unexpected material encountered in WR. Working to properly dispose of drums where hydrocarbons encountered.
- Locations of berms in Wood River along railroad; concern regarding how to deal with Wanda Road near railroad, and need to widen railroad berm and develop an operating agreement for O&M
- Some soft foundations soils encountered in PdP/FL
- One boring refused shallow in WR

Look Ahead – Wood River

- Must coordinate with COE on deficiencies already being addressed.
- Begin H&H analysis for flank levee freeboard, develop break-point between where MS River backwater controls WSE (final freeboard by mid-December for areas controlled by headwater flooding).
- Complete constraint maps for environmental, cultural and wetlands areas.
- Review COE completed relief wells and determine if any proposed berms can be eliminated/reduced (preliminary review indicates that some berms can be reduced).
- Address railroad access issues for northern portion of south flank levee.
- Begin cut-off wall data collection/analysis for elbow area.
- Substantially complete CPT and sonic drilling. Continue utility clearance for exploration locations.

Look Ahead - MESD

- Drilling must continue as quickly as possible – if the backlog of borings can increase we will look to bring on additional drill rigs. The following activities are planned:
  - Complete Phase I borings.
  - Review boring logs, assign laboratory data and compile data with geophysical work to plan Phase II borings.
  - Address environmental issues with contaminated water and soil (investigation derived waste) and identify disposal plan including receiving location for materials. Additionally, finalize plan for testing/pumping of relief wells prior to capacity testing.
  - Increase efforts to achieve all access agreements.
  - Complete review of cultural resources sites against planned conceptual designs.

Look Ahead – MESD (continued)

- Complete wetland and wildlife constraints maps based on existing, agency-approved delineations. Identify any areas that still require delineations for planned design improvements.
- Civil: Begin survey work and create base maps and survey strip maps; begin field survey to acquire missing data.
- Continue communications with key Corps personnel to acquire all available data – particularly that associated with Corps planned projects which could eliminate 100-yr design.
- Visit to MESD staff office to share information and answer questions (11/16).

Look Ahead – PdP/FL

- Collaborate with USACE to stay abreast of potential overlapping/conflicting solutions footprints.
- Water Resources: Hoelsher to provide interim H&H analysis results along flank levee.
- Civil Engineering: Complete base maps, begin incorporating multi-discipline information onto maps.
- Environmental Engineering: Desk study completed. No action planned.
- Cultural Resources: Provide SCI report to SHPO for approval. Develop work plan for surveying the remaining 5% of corridor.

Look Ahead – PdP/FL

- Geotechnical Engineering: Complete validation of USACE spreadsheets. Evaluate subsurface data as it returns to AMEC and develop embankment models to evaluate through-seepage. Begin fine-tuning seepage berm footprint.
- Complete the remaining Phase I subsurface exploration. Where required begin Phase II exploration.
- Volkert to obtain remaining rights of access.

QUESTIONS?