

USSD Levees Workshop Program

Memphis, Tennessee — November 2-4, 2010

Tuesday, November 2

7:00 a.m. - 5:00 p.m. **Registration**

7:00 a.m. - 8:00 a.m. **Continental Breakfast in Exhibit Hall**

8:00 a.m. to 8:45 a.m. **Opening Session**

Moderator — **Dean B. Durkee**, Workshop Chairman, and Gannett Fleming, Inc., Phoenix, AZ

Keynote Address — A Historical Perspective

Major General Don Riley (retired), Former Deputy Chief of Engineers, Corps of Engineers, Washington, DC

8:45 a.m.- 12:15 p.m. **Seepage Issues**

Moderators — **John D. Rice**, Utah State University, Logan, UT; and **George L. Sills**, George Sills, Geotechnical Engineering Consultant, LLC, Vicksburg, MS

The History of Levee Seepage Design Criteria

Noah D. Vroman, Corps of Engineers, Vicksburg, MS

Herbert Hoover Dike: Low Gradients Lead to Seepage Distress

Jacob Davis, Corps of Engineers, Jacksonville, FL

Finite Element Seepage Analysis: Considerations and Limitations

John D. Rice, Utah State University, Logan, UT

10:00 a.m. - 10:30 a.m. **Break in Exhibit Hall**

Seepage Berms: An Overview of Design Considerations

Thomas Wolff, Michigan State University, East Lansing, MI

Proper Design and Construction of Slurry Walls for Levees

George L. Sills, George Sills, Geotechnical Engineering Consultant, LLC, Vicksburg, MS

Relief Wells: History of Use in Memphis District

Cory Williams, Corps of Engineers, Memphis, TN

12:15 p.m. - 1:15 p.m. **Buffet Lunch in Exhibit Hall**

1:00 p.m. - 5:00 p.m. **Penetrations Through Levees**

Moderators — **Mark Stanley**, Kleinfelder, Inc., Sacramento, CA; and **Daniel L. Johnson**, Tetra Tech Inc., Golden, CO

Proposed Guidelines for Use of HDD Under Corps Flood Protection Projects

Patrick J. Conroy, Corps of Engineers, St. Louis, MO

Field Investigations

Jim Nickerson, GEI Consultants, Inc., Boston, MA

Archaeological Approach to Identifying Penetrations

Kim Tremaine, Argus Technologies, West Sacramento, CA

3:00 p.m. - 3:30 p.m. **Break in Exhibit Hall**

Analyses of Issues Identified

Kevin DiRocco, GEI Consultants, Inc., Boston, MA

Filter Diaphragm Design for Penetrations

Danny McCook, Consultant, Fort Worth, TX

5:30 p.m. - 7:30 p.m. **Reception in Exhibit Hall
Sponsored by Geo-Con, Monroeville, PA**

Wednesday, November 3

7:00 a.m. - 5:00 p.m. **Registration**

7:00 a.m. - 8:00 a.m. **Continental Breakfast**

8:00 a.m.- 12:00 noon **Closure Structures**

Moderator — **Stephen L. McCaskie**, Hanson Professional Services, Inc., St. Louis, MO

Introduction

John J. Jaeger, Corps of Engineers, Huntington, WV

Design Criteria

Cameron Chasten, Corps of Engineers, Philadelphia, PA

HSDRRS Design Guidelines

Chris Dunn and **Denis Hoerner**, Corps of Engineers, New Orleans, LA

Floodgate Design

Charles LaBorde, Corps of Engineers, New Orleans, LA

9:45 a.m. - 10:15 a.m. **Break in Exhibit Hall**

Stop Log Design

Phil Sauser, Corps of Engineers, St. Paul, MN

Fracture Critical Members (FCM)

Philip Fish, Fish and Associates, Middleton, WI

Rehabilitation, Lessons Learned

John J. Jaeger, Corps of Engineers, Huntington, WV

New Orleans West Closure Complex

Dave Lovett and **Ira Dorsett**, Corps of Engineers, New Orleans, LA

12:00 p.m. - 1:00 p.m. **Lunch in Exhibit Hall**

1:00 p.m. - 4:30 p.m. **Hydraulic Height**

Moderator — **John S. Wolfhope**, Freese and Nichols, Inc.,
Austin, TX

*Hydraulic Design Criteria — Where are We Now and What is
the Future Direction?*

Jerry W. Webb, Corps of Engineers, Washington, DC

3:00 p.m. - 3:30 p.m. **Break in Exhibit Hall**

*Analysis of Levee Resiliency — When is Overtopping
Protection Needed?*

Steven A. Hughes, Corps of Engineers, Vicksburg, MS

Armoring for Overtopping Projection

Christopher I. Thornton, Colorado State University, Fort
Collins, CO

4:30 p.m. - 5:00 p.m. **Closing Session**

National Levee Safety Program Update

Donald L. Basham, Stantec Inc., Crestwood, KY

Thursday, November 4

8:00 a.m. - 3:00 p.m. **Field Tour — Delta Relief
Well Project**

The Delta Relief Well Project consists of installation of 96 relief wells and 6 piezometers at the toe of the Mainline Mississippi River Levee in Coahoma County, Mississippi. The relief wells with associated drainage features are being constructed to protect the levee from sand boils resulting from high hydraulic pressures. The wells are 8 inches and 10 inches in diameter and are constructed of stainless steel wrapped-wire screen. The Yazoo Levee Board maintains the levee and requested this project after observing heavy seepage and sand boils during high water in 2002 and 2005. The project site is located near Friars Point, Mississippi. The contract is Federally funded through Mississippi River Levees Project and was awarded for approximately \$3.1 million.

(Updated October 14, 2010)