

Barton Springs Pool Structural Assessment of Dams

September 20, 2010



Assessment Team

- Datum Engineers, Inc.
 - Lead firm; coordination; analyses; final report
- Baer Engineering & Environmental Consulting, Inc.
 - Environmental engineering
- Holt Engineering and Austex Drilling & Sawing, Inc.
 - Testing Laboratory Services and Coring



Assessment Team (cont.)

- MWM Design Group
 - Preliminary hydraulic analysis
- Raymond Chan & Associates
 - Dam design consultation



Scope of Work

- Perform visual observation of both dams documented with photographs and crack mapping.
- Divers to perform underwater observations of both dams documented with underwater photographs and crack mapping.



Scope of Work (cont.)

- Coordinate testing laboratory for core drilling vertically through the dams to determine concrete and sub-grade foundation quality and strength.
 - Three cores will be taken completely through each dam, near the center and near each end.
 - Top of dam will first be ferro-scanned to avoid cutting reinforcing in the cantilevered slabs.



Scope of Work (cont.)

- Cores samples and sub-grade samples will be tested in the laboratory for strength and quality.
- Core holes will be refilled with concrete the same day.
- Baer Engineering will provide environmental reviews, coordination with regulatory agencies and water quality mitigation during this process.



Scope of Work (cont.)

- Provide written report with photos and sketches outlining the following:
 - Assessment of structural condition of both upper and lower dams to determine if dams are safe under Probable Maximum Flood (PMF) event.
 - Written description of any structural concerns and repair concepts if required.

Scope of Work (cont.)

- Determination of the feasibility of widening the pedestrian path on the pool side of the upper dam for safer Bobcat access which is required for pool cleaning, determine width and provide suggested construction technique.
- Feasibility of adding gates, size, quantity and location or increasing the size of existing gates of both dams and propose construction techniques.

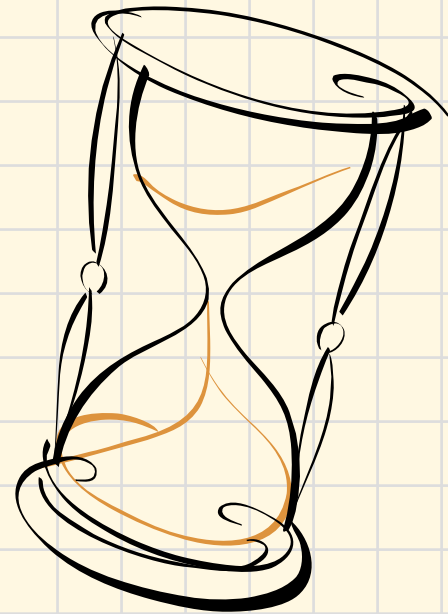
Scope of Work (cont.)

- Report on condition of connection of bypass culvert to upper and lower dams based on visual observations.
- Provide options for improving current safety system (PVC guards) at lower gates without blocking flow of water.



Timeline

- Visual inspections and crack mapping – underway
- Coring tentatively scheduled for November.
- Draft report - February 2011.
- Final report - March 2011.



BSP Assessment of Dams

- Questions?

