Heritage Park Flood Control Facility

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Des Plaines River Flooding

- 1986 Flood
  - $35 Million Estimated Damages
  - 10,000 Homes Flooded
  - 263 Businesses Flooded

- 1987 Flood
  - $78 Million Estimated Damages
  - O'Hare Airport Closure
Levee 37

• Combination Levee / Floodwall
• Apx 8,500 Feet Long
• Swing Gate Closure Structure
• Protects Prospect Heights & Mt. Prospect
• Essentially Complete in 2010
• 600 Foot Long Gap in Place until Compensatory Storage is Provided
Levee 37 and Heritage Park
Heritage Park Master Plan
Heritage Park Partners

Heritage Park

Wheeling Park District
We're People Driven
An IPRA/TAPD Distinguished Agency

Village of Wheeling, Illinois
"A community of Choice"

Metropolitan Water Reclamation District of Greater Chicago
Stakeholders

- IDNR
- IEPA
- IDOT
- North Cook County Soil & Water Conservation District
- USFWS
- Wheeling Park District
- Village of Wheeling
- FAA
- Illinois Historic Preservation Agency
Site Constraints
Plan Summary

- 197 Acre Feet of Storage
- 6 Major Detention Basins
- One Major Pump Station
- Buffalo Creek Expansion and Restoration
- On Site Spoil Area
- Band Shell and Pavilion
- Baseball Complex w/ Concession Building
- Paths, Parking and Bridges
- Sitewide Landscaping
The Plan

- Band Shell
- Baseball Complex and Concession Building
- Spoil Pile
H&H Modeling

- Des Plaines River
  - 630 Square Miles
  - 10 Day Critical Duration
  - HEC-1 / HEC-2
  - Steady State

- Buffalo Creek
  - 27.2 Square Miles
  - 24 Hour Critical Duration
  - HECHMS / HECRAS
  - Unsteady State

- Multiple Storm Events
- Basin Volume / Spillway Elevation Optimization
Geotechnical Solutions

- Avoid Poor Soils to Maximum Extent
- Flatten Side Slopes in areas of weak soils
- Basin D
  - Bottom Elevation Above Groundwater Level
  - Underdrain System
- Basin F
  - Cement Bentonite Groundwater Cutoff Wall
  - Leave Central Portion (weak soils) at Grade
  - 8:1 Slopes in some areas
Recreational Features

• Baseball Complex w/ Concession Building
• Band Shell & Spoil Pile
• Pavilion
• Paths
• Parking, Roads and Bridges
• Lake Edge Restoration
• Buffalo Creek Restoration
• Park Landscaping
Baseball Field w/ Concession Bldg
Band Shell
Pavilion
Landscape Plan
Keys to Success

- Vested Interest
- Understanding of Stakeholder Goals & Constraints
- Early Leadership Involvement
- Frequent Communications
- Flexibility
Current Status

• Preparing Plans and Specifications
• Expected Advertisement: Fall 2011
• Construction Period: ~2 years
• Construction Estimate: $32 million
Questions?

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