

# National Gallery of Art

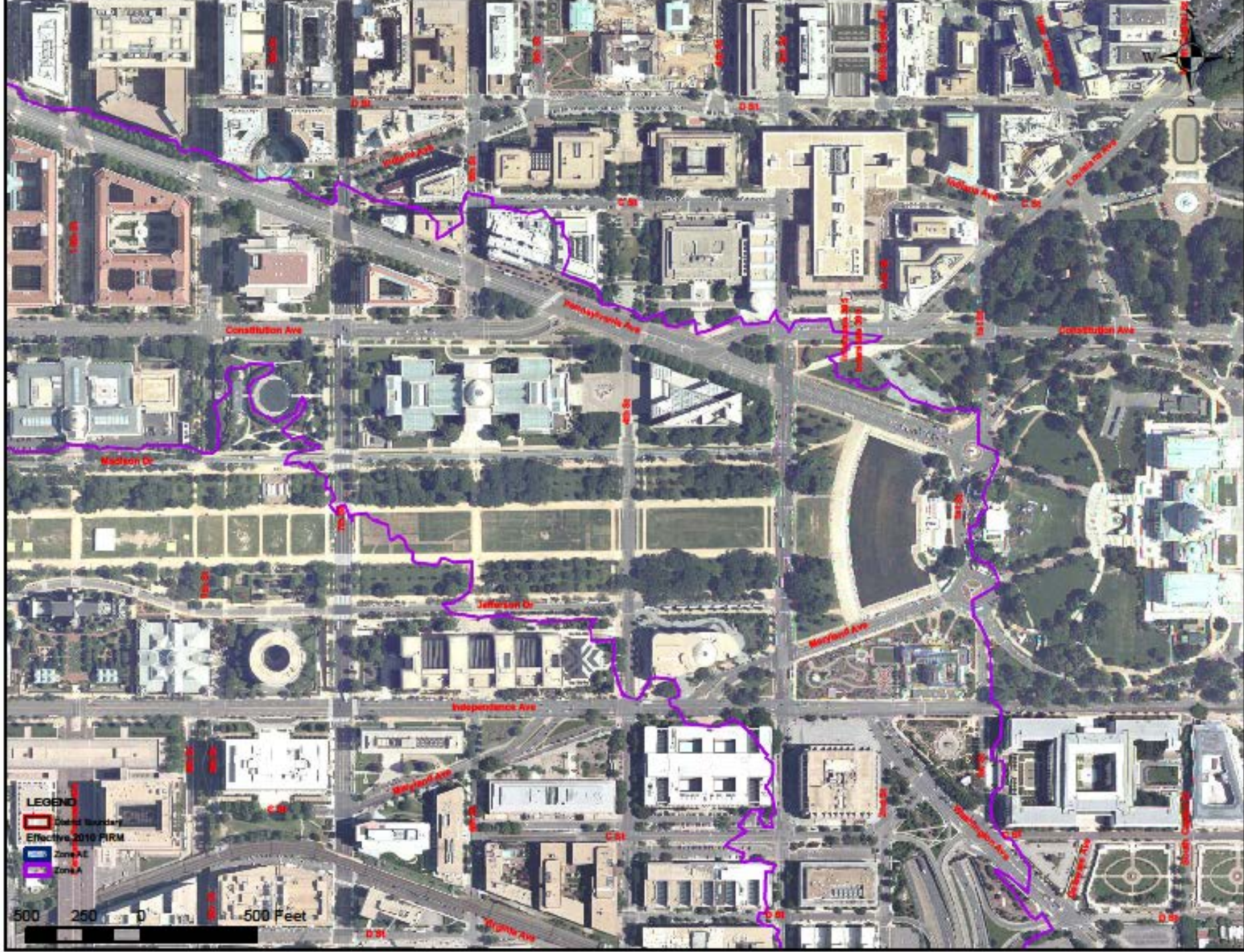
## Flood Prevention Projects Post June 2006 Flood

David Samec, P.E., CFM  
Chief of Facilities



**WEST**

**EAST**

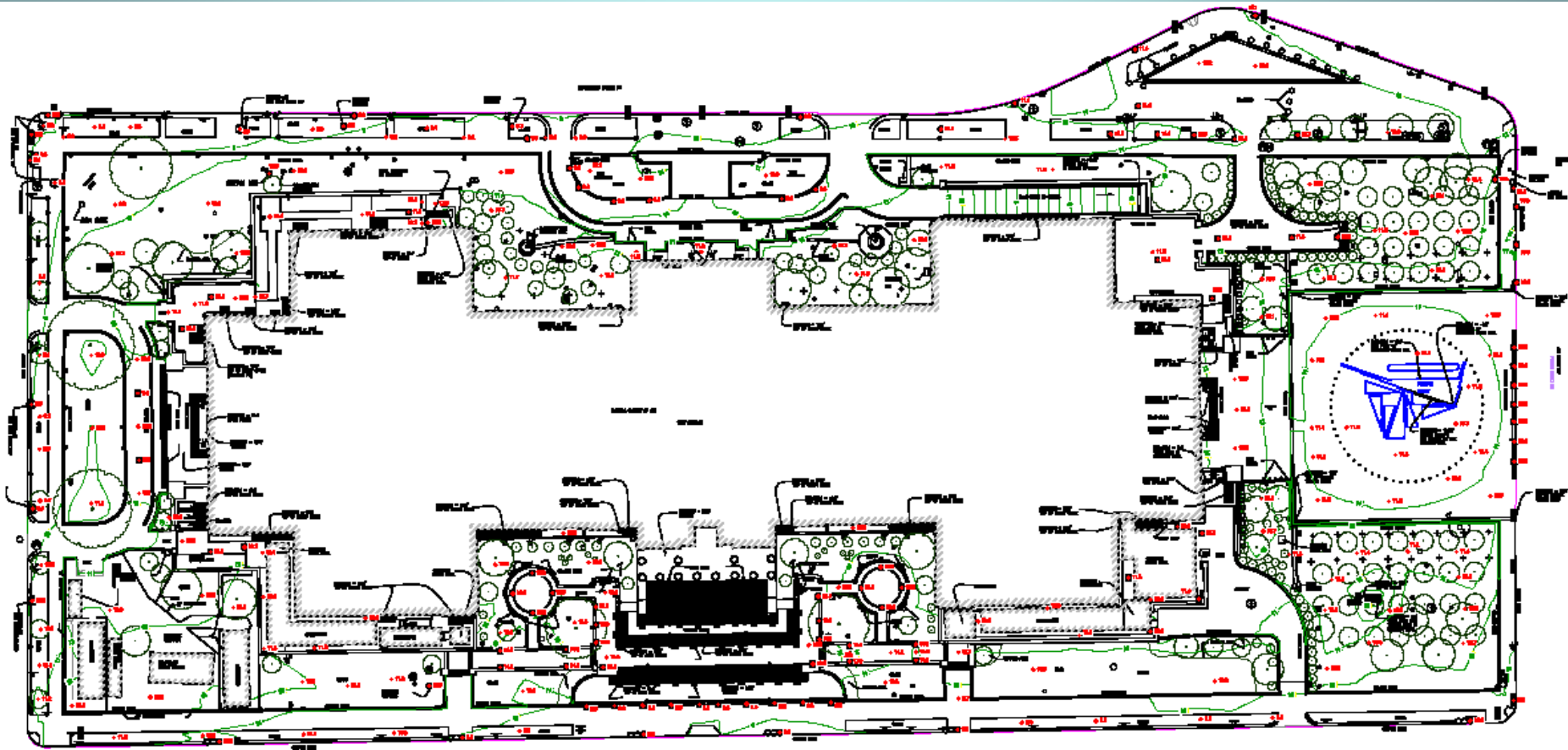


**LEGEND**  
District boundary  
Effective 2010 FIRM

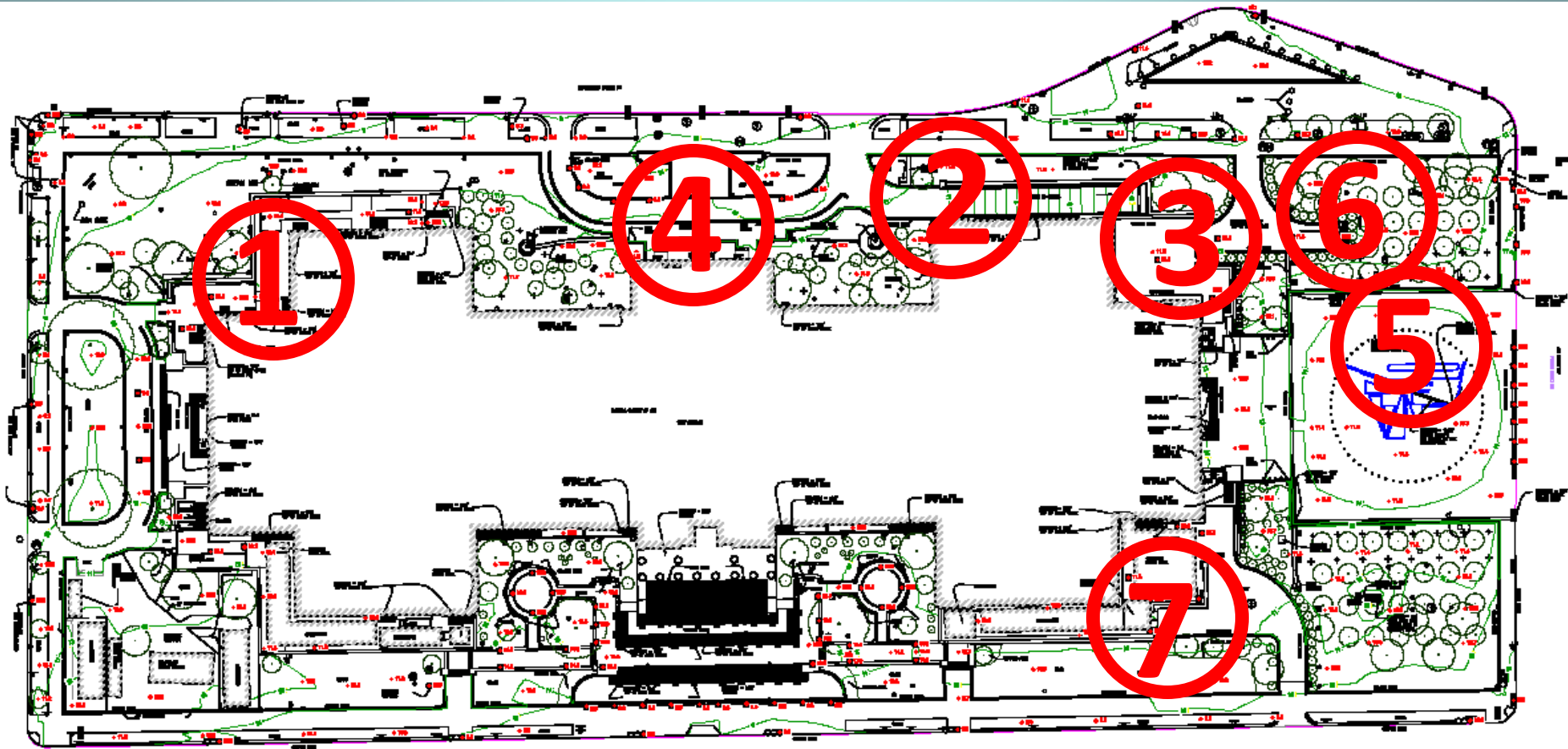
Zone AE  
Zone A

500 250 0 500 Feet

# Step 1: Survey Elevations



# Step 2: Assess Areas of Highest Risk



# Step 3: What to Use?



**Water-filled cofferdams**

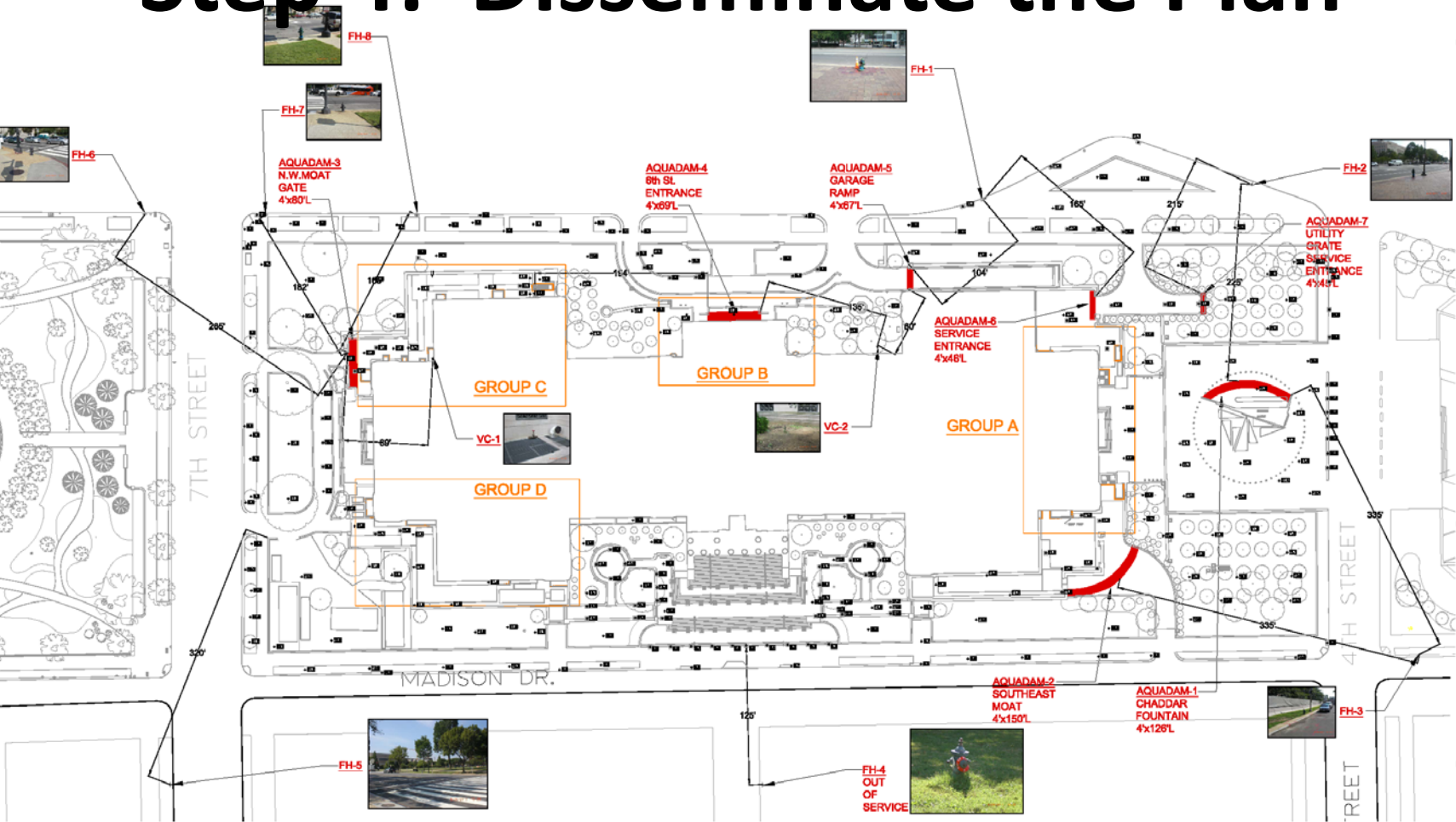


**Water-absorbing gel bags**

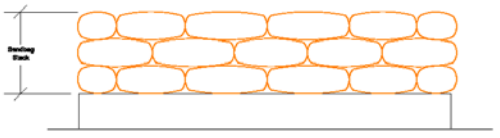
# Step 4: Disseminate the Plan



Office of Architecture and Engineering



\*DIMENSIONS SHOWN ARE CALCULATED LENGTH OF FIREHOSE NEEDED NOT ACTUAL DISTANCES.



Sandbag Stack

### Legend



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| REVISIONS |      |             |
|-----------|------|-------------|
| NO.       | DATE | DESCRIPTION |
|           |      |             |
|           |      |             |
|           |      |             |
|           |      |             |

PROJECT: AquaDam and Sandbag Location Plan

PROJECT NO: \_\_\_\_\_

DATE: 7 Jan 2009

DRAWN BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

SENIOR ARCHITECT: \_\_\_\_\_

Scale 1:30

AquaDam and Sandbag Placement Drawings - West Building

SB01

# Step 5: Caches and Pre-Positioning



# Step 5: Caches and Pre-Positioning





# Step 6: Deployment of Aqua Dam



# Completed Aqua Dam at 7<sup>th</sup> Street Moat Entrance



# Aqua Dam Increased Facility Entrance Flood Elevations as Required for Event



# Lessons Learned

- **Aqua Dams and Gel Bags do work**
- **Planning and Rehearsal are necessary**
  - **Do not wait for an event to happen**
- **There may be other alternatives since 2006 that are feasible, easier, and less expensive to use**



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**WEST**

**EAST**