

# **Manayunk Sewer Basin Construction Project**

# **Venice Island Recreation Center Reconstruction Project**

**January 2009**

# Agenda

- **Zoning Variances**
  1. **Setback and landscape Buffers**
  2. **Building Height**
  3. **Building Signage**
  4. **C-7 Zoning Restriction-No Recreational Use**
- **In-depth Look at the Exterior Design of the Performing Arts Center**
- **River Analysis**

# Zoning Setback & Buffer

- Why the Exception- is there an Alternative?
- Existing Riverbank Buffer- No Changes Planned





# New Plan Includes Landscape Buffer-No Variance



New Plan



Existing

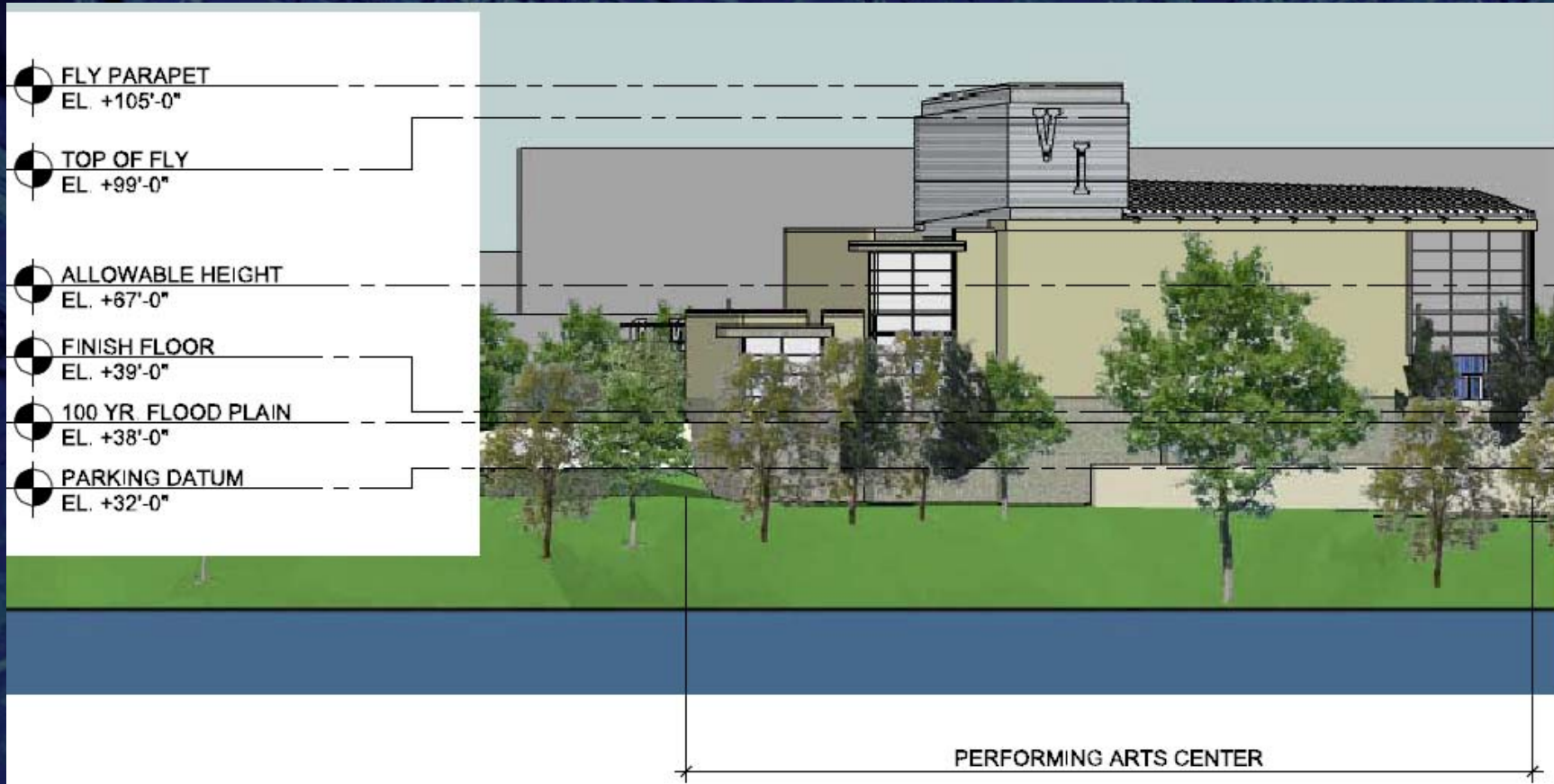


# No Changes to Riverbank-Existing Buffer



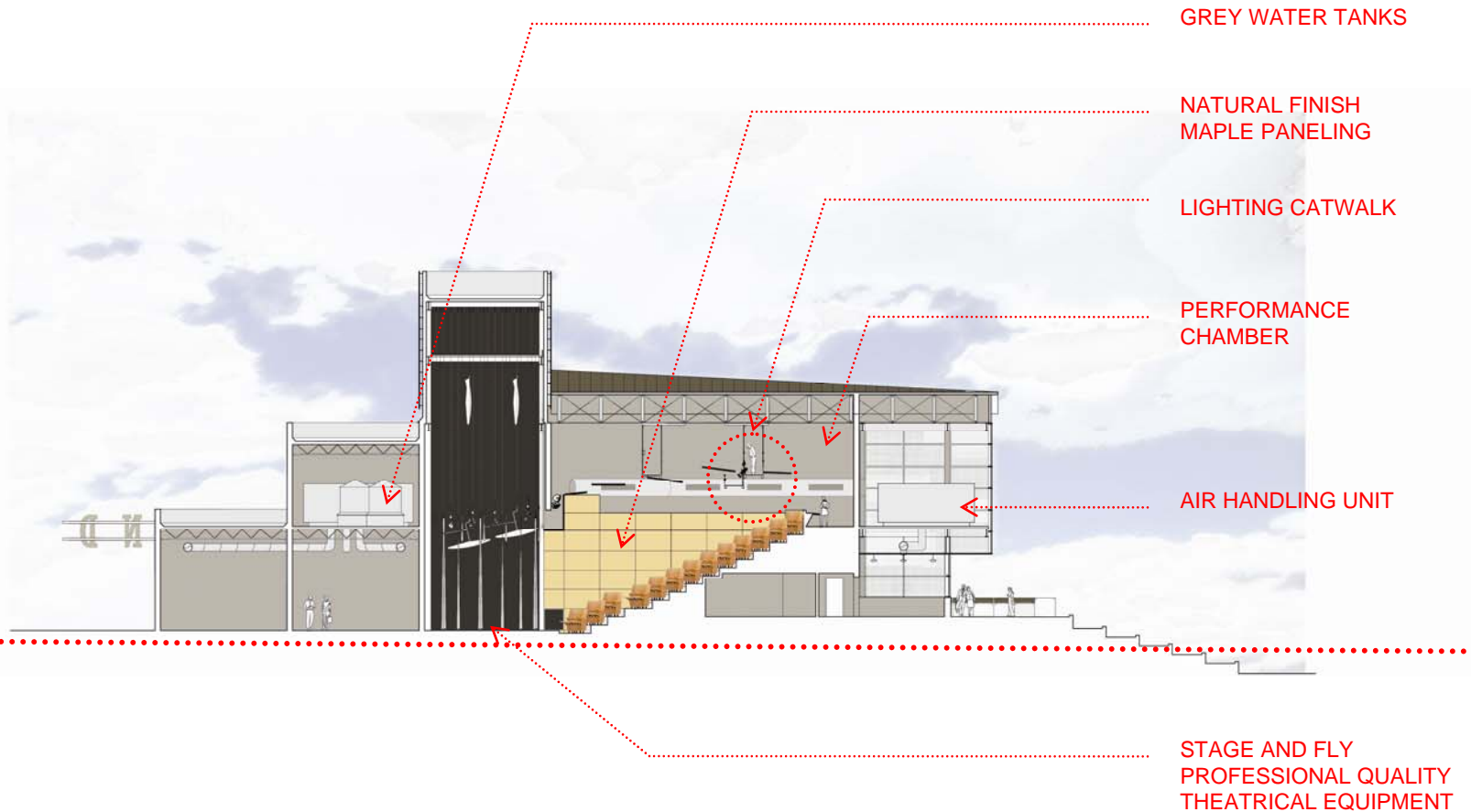
# Building Height

## Why so Tall ? What's inside?



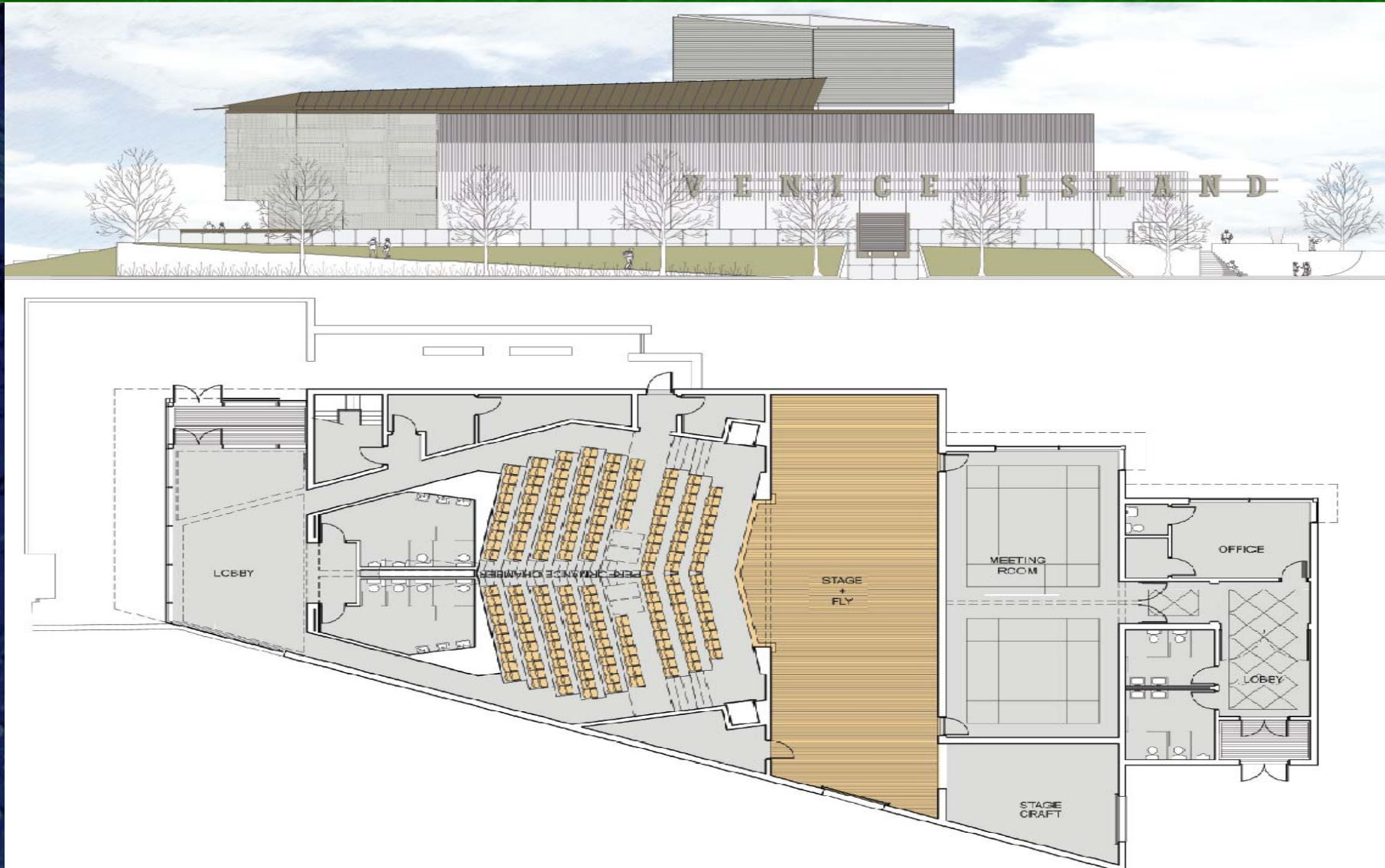
# Seating for 250

## Why Stacked Construction ?

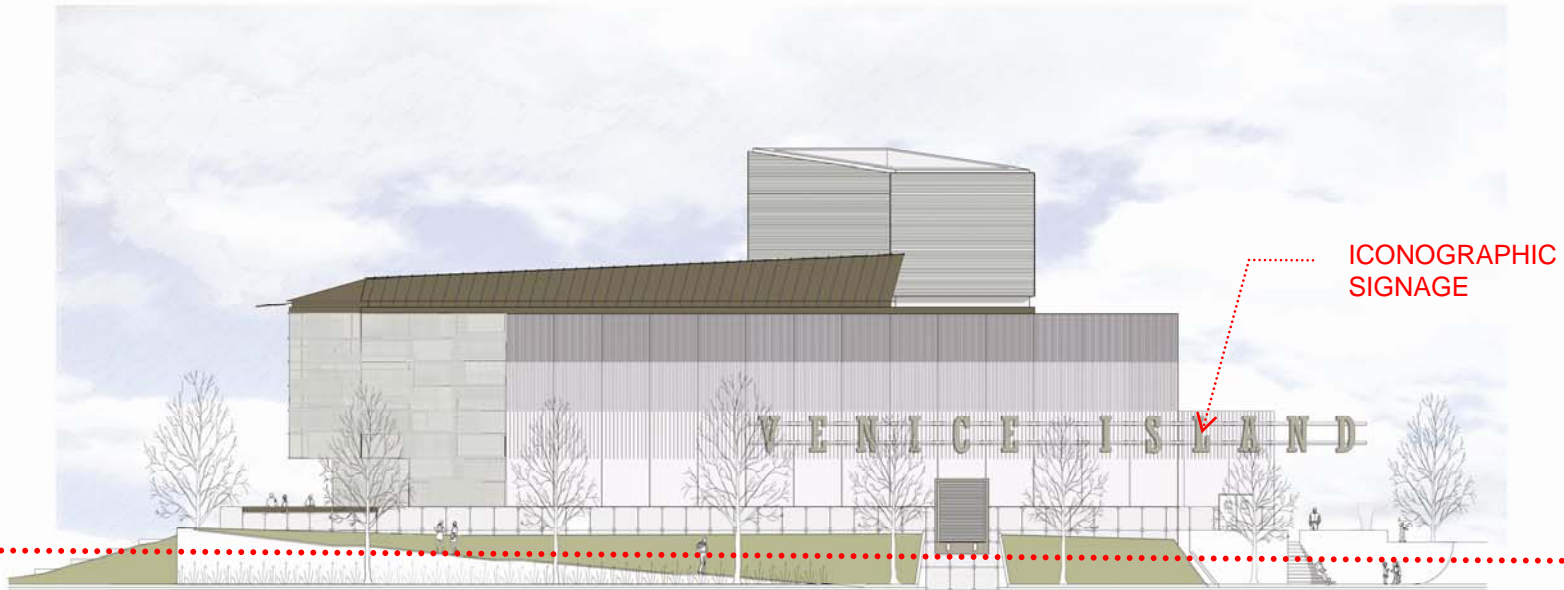




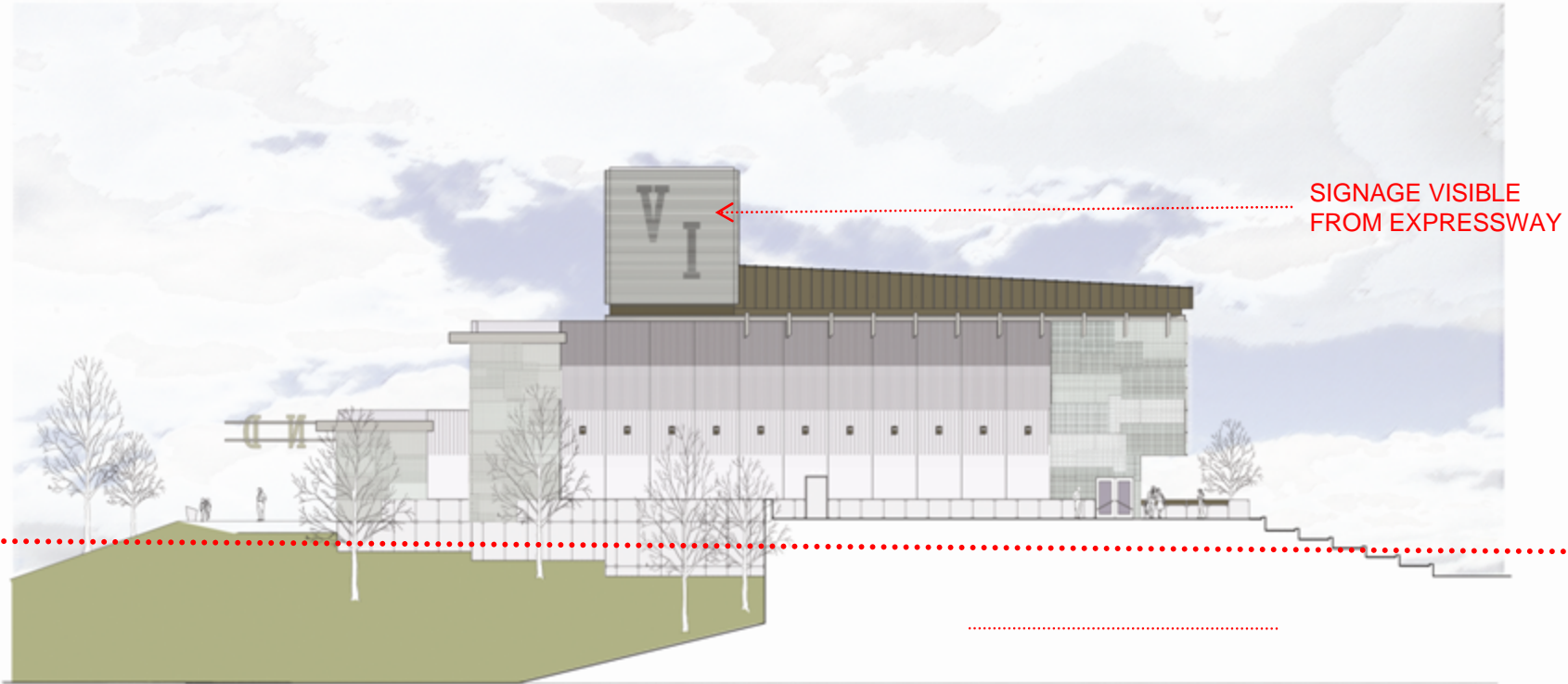
# Floor Plan Multi-purpose Use + Auditorium



# Building Signage Manayunk Elevation



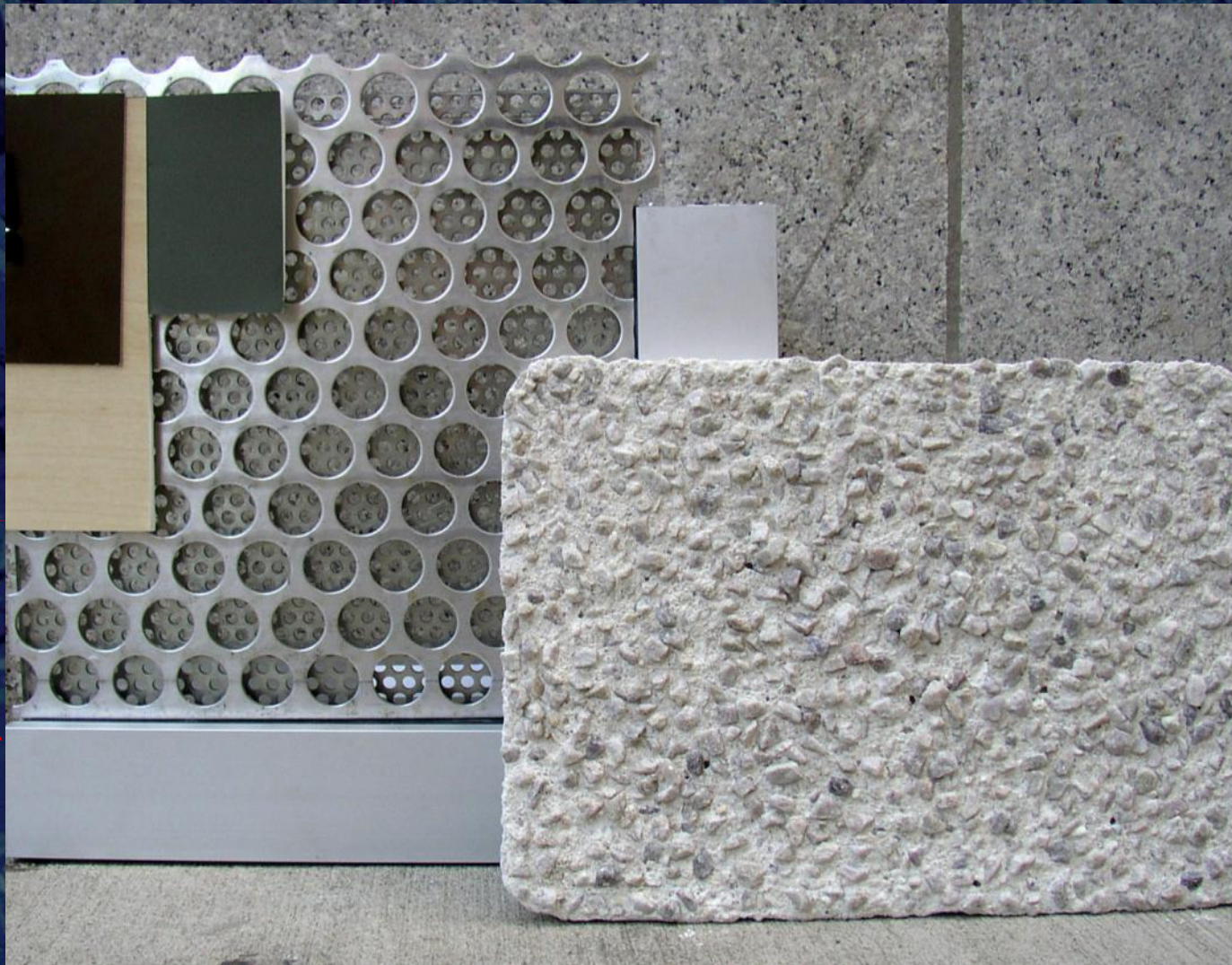
# Building Signage River Elevation



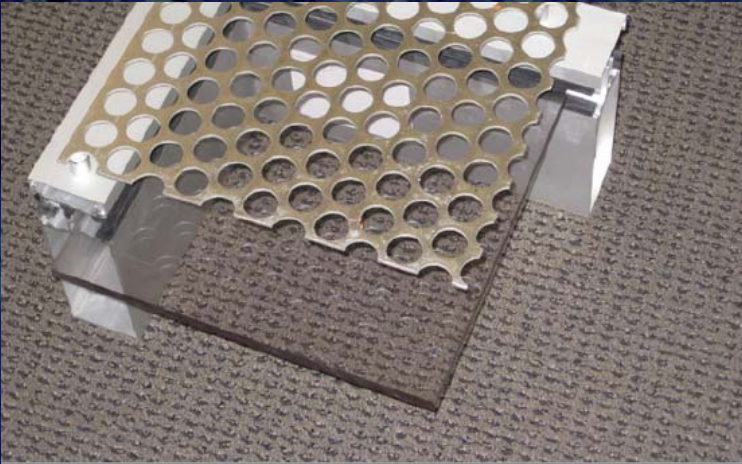


# In-depth look at the PAC's Exterior Design Material Palette

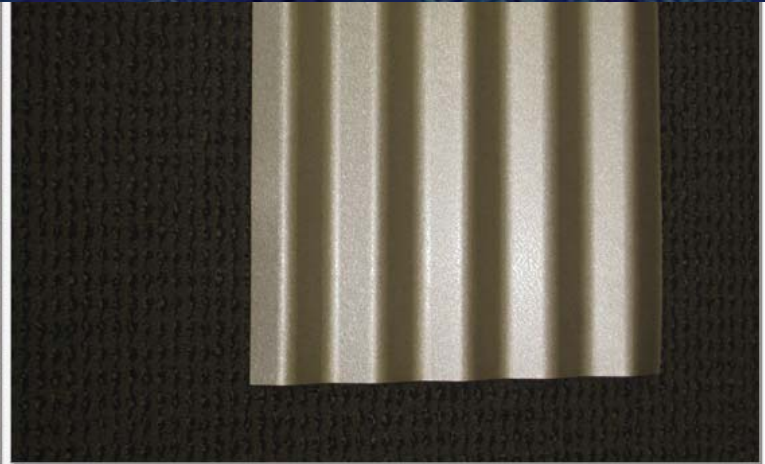
Department of Recreation's Rational



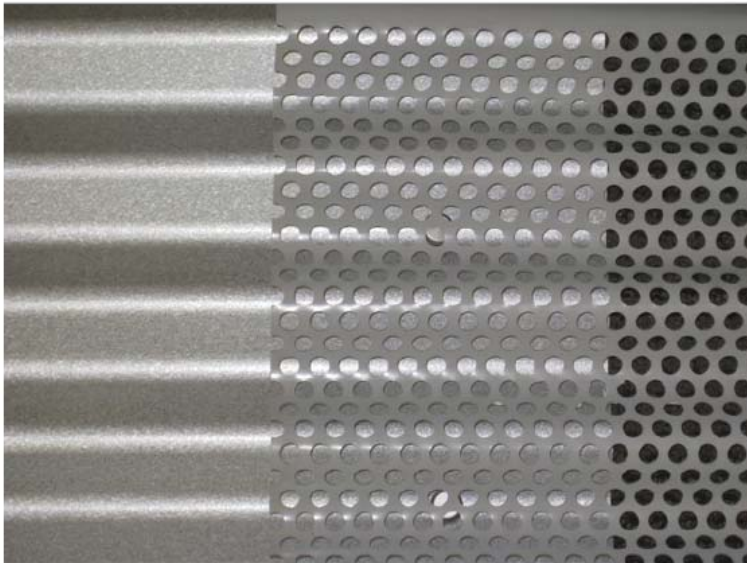
# PAC's Material Palette (continued)



Covered Window Glazing



Corrugated Panel

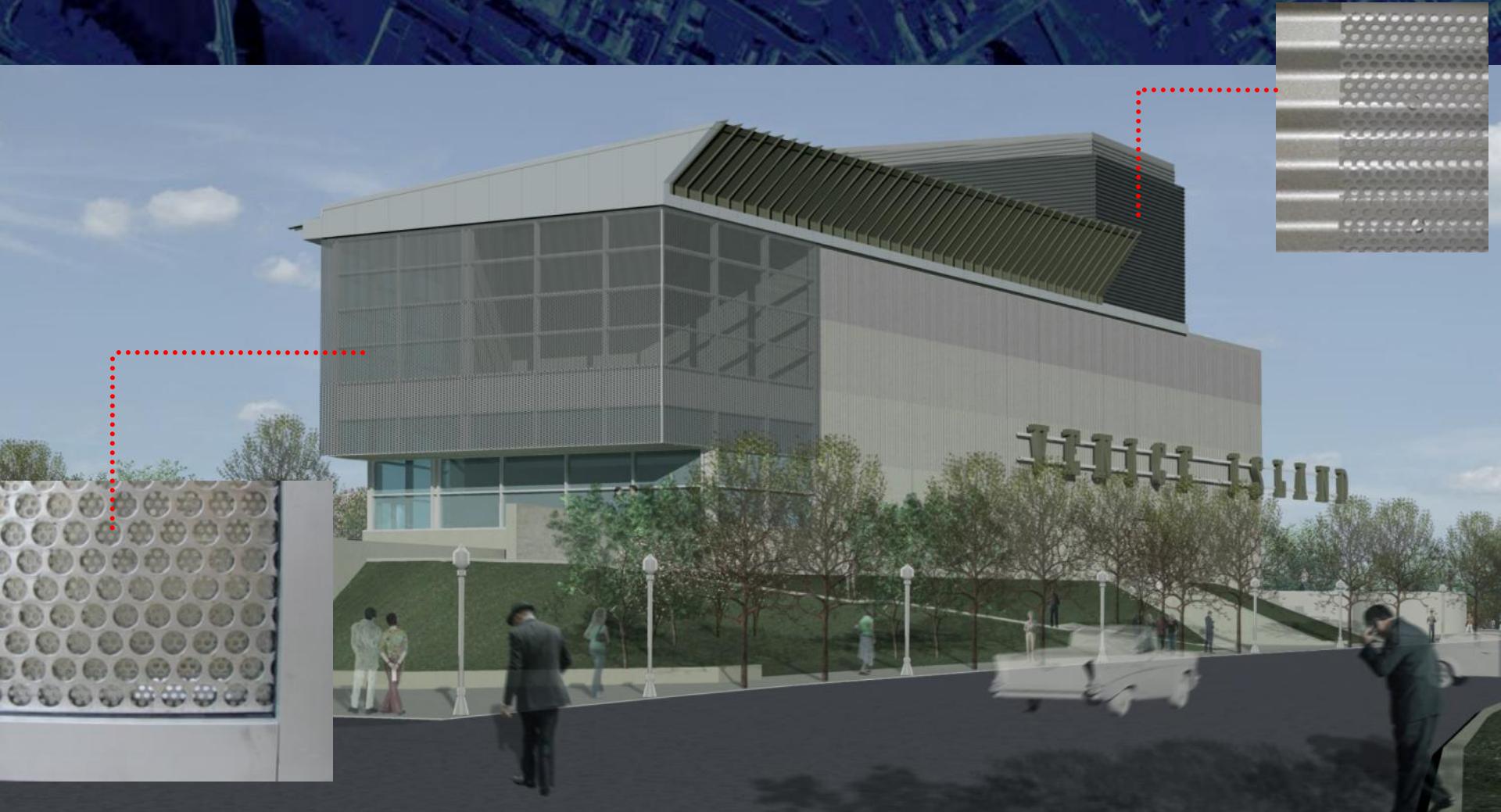


Layered Panel



Window Glazing

# Performing Arts Center View from Parking Lot w/Materials



# View from River Side

- Precast Wall Panel



- Use of Shadowing

- Use of Exterior lighting





# River Analysis Hydraulic Report

- Prepared by Jerry Snyder, Professional Engineer w/ 30+ years experience
- Industry Standards & Protocol followed
  - Same process used by US ACOE for FEMA
  - Utilized HEC-RAS (update of HEC II) Computer Model
  - Cross Sections taken from Flood Insurance Study (FIS) developed by FEMA.
  - Additional cross sections were added to provide more detail to the project area.
  - Model was calibrated to the 100-year water surface elevations established in 1996 FIS.

# What was Evaluated?

- **Future Conditions were modeled by modifying cross-sections to represent proposed conditions**
  - **Performing Arts Center & Head House**
- **Key concepts:**
  - **Volume of river channel along site**
  - **The amount of “fill” between existing grade and the regulatory flood (100-year flood flow)**
  - **The volume of buildings above flood line has no impact. The fill is offset by other areas that are the same grade.**

# Hydrologic/Hydraulic Analysis

## What's it all mean?

- No impact to flooding of the Schuylkill River during 100-year flood flow with proposed improvements. This is a result of:
  - Minimal fill when compared to
    - ✓ volume of river channel along site
    - ✓ volume of the river channel along its entire length

An aerial photograph of a city grid, likely Philadelphia, with a river winding through it. The image is overlaid with a dark blue gradient and a solid green horizontal bar at the top. The text is in yellow and white.

# **Hydraulic Report**

## **Reviewed by the following Agencies**

- **City of Philadelphia Planning Commission**
- **Delaware River Basin Commission**
- **Army Corps of Engineers (part of Joint Application)**
- **PADEP (Part of Joint Application)**