

# Peck Reservoir Replacement Project

Award of Design Contract



# Peck Reservoir Replacement Project

- The City has 3 existing reservoirs:
- Peck Reservoir: 7.5 Million Gallons
- Block 35 Reservoir: 2.0 Million Gallons
- Block 35 Elevated Tank: 0.3 Million Gallons
- Peck Reservoir constructed in 1957
- Peck Reservoir represents 77% of City's water storage capacity
- Replacement of Peck Reservoir recommended in 2010 Water System Master Plan due to age and condition



# Peck Reservoir Replacement Project

- The City operates 4 booster pump stations:
  - Peck Booster Pump Station
  - Block 35 Booster Pump Station
  - Larsson Street Booster Pump Station
  - 2nd Street Booster Pump Station
- Peck Booster Pump Station constructed in 1957
- The pump station equipment was replaced in 1998
- On average 85% of City's source water is imported and 15% from City wells on an annual basis
- City well water blended with MWD imported water at Peck Facility and Block 35 Facility to ensure water quality complies with current drinking water standards



# Peck Reservoir Replacement Project

- Peck Reservoir is a partially buried concrete structure that is located adjacent to Polliwog Park and MB Middle School.
- Peck Booster Pump Station – Pumps, motors, valves and piping are not located in an enclosed space and are subject to adverse impacts of the marine environment.



# Peck Reservoir Replacement Project

Peck Booster Pump Station – Small utility building is almost 60 years old and has inadequate space to access and perform duties associated with operations and maintenance of the water system.



# Peck Reservoir Replacement Project

- Design Scope of Work:
- Public Outreach and Utility Coordination
- Environmental Compliance and Drinking Water Permit Amendment
- Water Quality Compliance and Water Blending Operations
- Water System Operations Plan During Construction
- Geotechnical Engineering and Surveying Services
- Plans, Specifications and Estimates
- Reservoir and Pump House Replacement
- Pump Station Pump/Motor/Control Valve Replacements
- Emergency Generator/Automatic Transfer Switch Replacements
- Inlet and Bypass Automatic Control Valves



# Peck Reservoir Replacement Project

- Engineering design services Request for Proposal issued on December 30, 2015
- 5 proposals received on February 10, 2016
- Proposals reviewed by City Water Division and Engineering Division staff
- Proposal evaluation criteria:
  - Demonstrated understanding of City and scope of services
  - Firm's qualifications and experience with water system projects
  - Project management methods and quality control/assurance
  - Qualifications and experience of key personnel
  - Qualification and need for sub-consultants



# Peck Reservoir Replacement Project

- Top two Consultants interviewed on March 10, 2016
- **MWH Americas** selected for the following reasons:
- Excellent experience on similar projects
- Identified key project issues
- Comprehensive Scope of Work and methodology
- Appropriate level of staffing for the project
- Design team has significant applicable experience



# Peck Reservoir Replacement Project

- Project Scope of Work design costs: \$ 930,470
- Primary Optional Design Services: \$ 197,900
- Secondary Optional Design Services: \$ 230,270
- Recommended design contract cost: \$1,358,640  
CIP Design Budget: \$1,500,000
- Estimated Design Schedule: 15 months

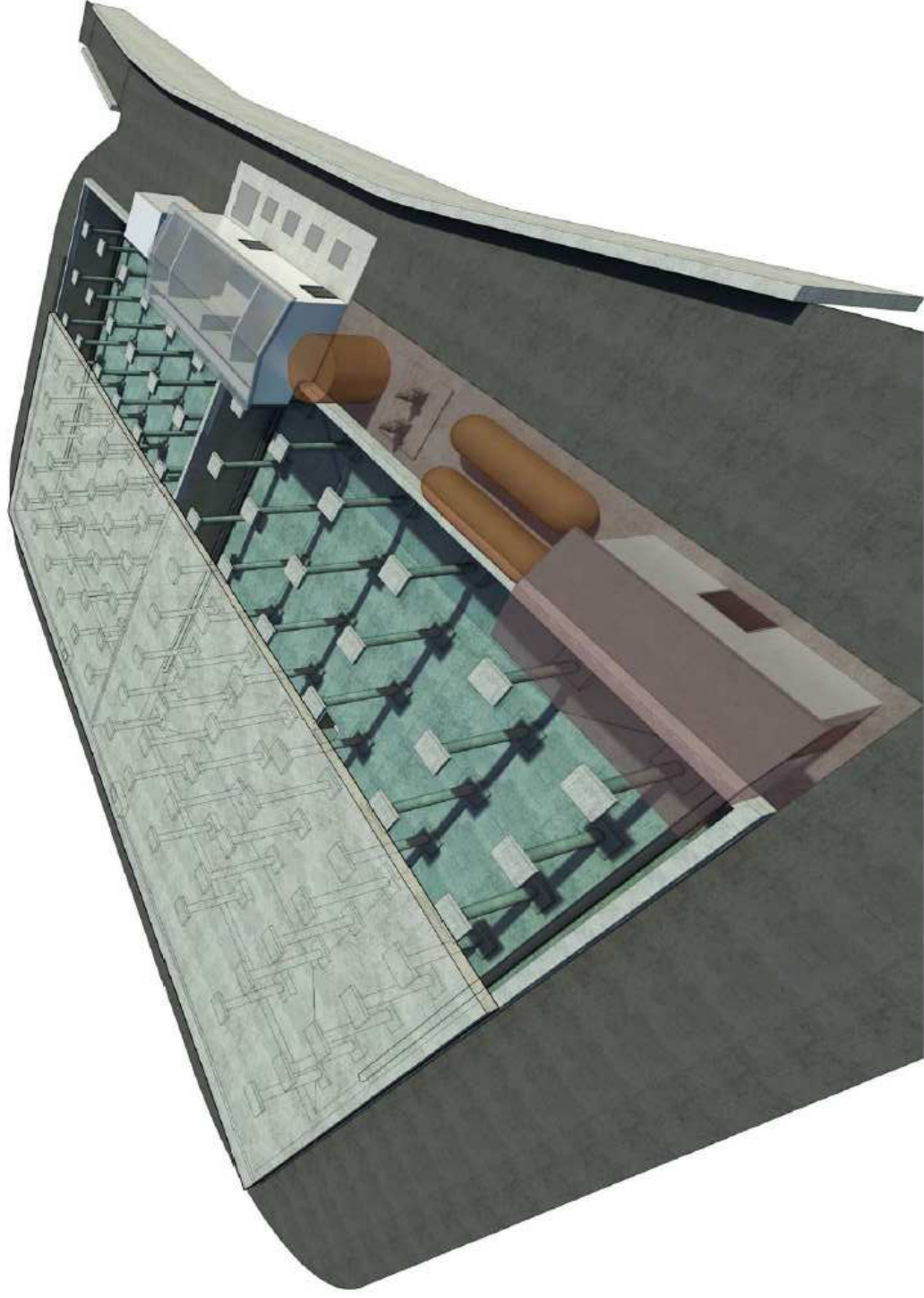


# Peck Reservoir Replacement Project

- Preliminary Project Design Concept
- Currently a single-cell 7.5 MG storage structure
- Preliminary recommendation is to construct a two-cell reservoir (2 – 4.0 MG cells)
- Two-cell reservoir structure has the following advantages:
  - Increased flexibility for operations and maintenance
  - Decrease water quality issues due to water age in the reservoir
  - Decrease water quality issues due to blending of imported and well water
- Potential to reduce footprint of reservoir in order to provide additional open space available to the community; to be included in Public Outreach discussion



# Peck Reservoir Replacement Project



IF THIS SHEET DOES NOT  
MEASURE 11" X 17" IN DIMENSIONS  
IT IS NOT TO SCALE

0 1/2" 1

PECK AVENUE RESERVOIR

DATE: FEBRUARY 201

CONTRACT NO.: 100B-15

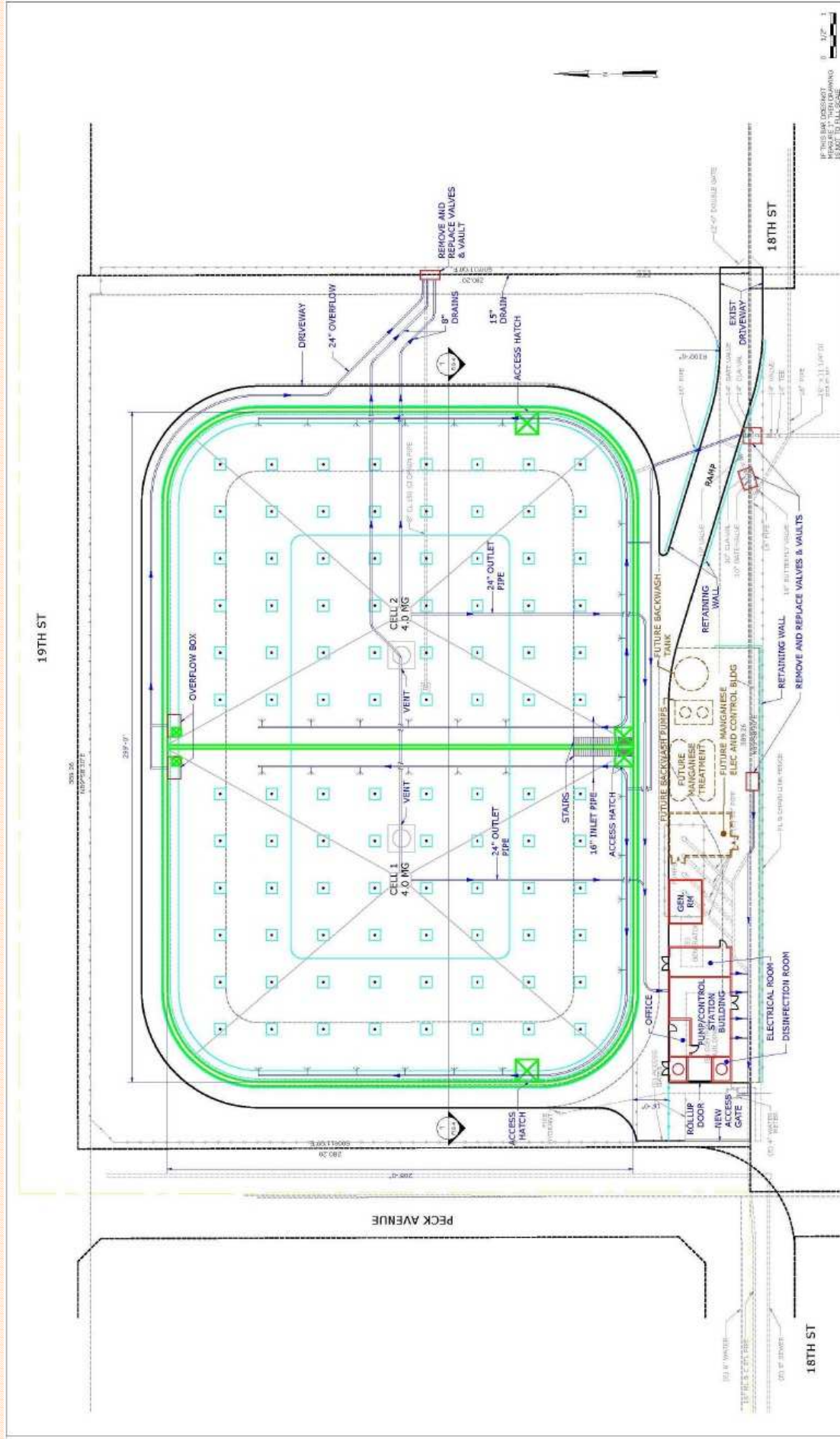
FIGURE NUMBER:

3D RENDERING



FIGURE 1

# Peck Reservoir Replacement Project



OPTION 1 - FLOOR PLAN  
2.00' = 1'-0"

PECK AVENUE RESERVOIR

DATE: FEBRUARY 201

CONTRACT NO: 1008-115

OPTION 1 - SITE PLAN

FIGURE NAME: FIGURE 2



300 N. LUGA AVE  
PASADENA, CA

**Thank You!**

