Elevating Design: Edmond’s Northwest Complex Elevated Storage Tower

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PROJECT OVERVIEW

• 2013 Water Master Plan
• Existing Pump Station Site
• Elevated Storage Capacity x2
• First Composite Elevated Tower
Why Composite?

- Spheroidal
- Fluted Column
- Multi-Column
- Composite
Design Components - Int. Valves

- Altitude Valve for Level Control
- Bypass for Maintenance
- Ball Valve to Drain Tank
Design Components - Mixing System

- Passive System
- Low Maintenance
- Better Water Quality
- Impacts Operations
**Design Components - Overflow**

- Sized for Max Fill Rate
- Energy Dissipation
- Diverted to Detention Pond
DESIGN COMPONENTS - DOORS

- Security
- Access
- Tornado Resistant
Design Components - Balcony

- Wireless Service Antennas
- Source of Revenue
- Less Operational Interference
**Design Components - Actuators**

- Motor-Operated x15
- Controllable through SCADA
- Minimize Operator Trips
“…hazard estimates from induced earthquakes are not compatible with estimates of long-term seismic hazard caused by tectonic processes.”

USGS Report
Seismic Considerations
LANDSCAPING & SECURITY

Rendering provided by City of Edmond

Rendering of mature landscaping

Picture of installed landscaping
3D Renderings - Public Outreach

Before: Rendering of proposed Tower

After: Picture of completed Tower