Nueces County Historical Society – April 2019 Meeting

Our Corpus Christi Seawall - It’s Construction and It’s Restoration

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Seawall Reconstruction Project – Outline

- Function of Structure
- Historical Perspective
- Condition Evaluation
- Recommended Repair Option
- Construction
- Questions
Seawall Construction Project – Function of the Structure

- **Major Component of the City’s Flood Protection System**
  - Protects >$500M in Downtown Properties
  - Essential for Revitalization / New Development

- **Major Tourist Vehicle**
  - Facilities for Visitors and Conventioneers
  - Contributor to Visitor-related Sales Tax Receipts
  - Entertainment Platform for Locals and Visitors
Seawall Reconstruction Project – Historical Perspective

- **The City Dreams of a Seawall**
  - 1890: Caller Article
  - 1909: Nueces County Judge Walter Timon

- **1916 and 1919 Storms**
  - Timon’s Bayfront Plan
  - State: YES; Feds: NO
  - Breakwater Required – completed in 1926
Seawall Reconstruction Project – Historical Perspective

- **1928 – Another Push for a Seawall**
  Gutzon Borglum Commissioned to Develop a Design
  Voters turned down Bond

- **1938 – Seawall Bond Issues Pass!**
  $1,100,000 + $650,000 + Timon’s Bayfront Plan (State’s share of Property Taxes from Seven Counties in the Region)
Seawall Reconstruction Project – Historical Perspective

- **Designed in 1938**
  Myers, Noyes, and Forrest Consulting Engineers, Dallas
  40 sheet drawing package
  From Dallas City Directory, 1934-35

- **Stair-Step Design**
  City wanted vertical Steel Sheet Piling with Concrete Cap and 24-foot wide Parkway
  Edward Noyes negotiated a Bayfront “Second to None” utilizing Stair-Step design and 80-foot wide esplanade

- **Constructed 1939-1941**
  J. DePuy Contractor, San Antonio
  Bid $1,782,509.54
  Construction Innovations
Seawall Reconstruction Project – Historical Perspective

- **Condition Assessments / 2000 Bond Election**
  - General and periodic – 1980’s (multiple entities)
  - Specific and in-depth – 1999 (HDR|Shiner Moseley)

- **2000 Bond Election**
  - Proposition No. 4 - 1/8 cent sales tax for Seawall and Flood Protection system repair (4A Board Funds)

- **Reconstruction 2002-2007**
  - Detailed design and Construction Admin (HDR|Shiner Moseley)
  - Construction of improvements (Laughlin-Thyssen & CCC Group)
Seawall Reconstruction Project – Historical Perspective

- Dredge Fill from Water Street
  ~600 feet
Seawall Reconstruction Project – Historical Perspective

- **Before and After**

  The Princess Louise Hotel, ca. 1936

  The Princess Apartments, ca. 2016
Seawall Reconstruction Project – Historical Perspective

- Working “In the Dry”
Seawall Reconstruction Project – Historical Perspective

- Slipforming the Seawall
Seawall Reconstruction Project – Historical Perspective

- **Peoples Street Landmass**
Seawall Reconstruction Project – Historical Perspective

- Peoples Street Stem
Seawall Reconstruction Project – Historical Perspective

- Sheet Pile Installation
Seawall Reconstruction Project – Condition Evaluation

Seawall Cross-Section

- Concrete Apron/Sidewalk
- Possible Voids
- Shoreline Blvd.
- Concrete Steps
- Concrete Pile Cap
- Steel Sheet Piles
- Fill
- Timber Piles

Seawall Cross Section
NTS
Seawall Reconstruction Project – Condition Evaluation

- Wave Forces
Seawall Reconstruction Project – Recommended Repair Option

**Seawall Cross-Section**

- **Possible future concrete overlay and steps**
- **Shoreline Blvd.**
- **New concrete cap & sidewalk**
- **Voids to be filled with grout**
- **New steel sheet pile anchor wall**
- **Existing timber piles**
- **Crack repair**
- **Existing stepped concrete wall**
- **New concrete pile cap**
- **Hydrostatic relief**
- **Concrete infill**
- **New steel sheet pile wall**
- **Existing steel sheet pile wall**
Seawall Reconstruction Project – Construction

- Front Wall Repairs
Seawall Reconstruction Project – Construction

- Rear Wall Repairs
Seawall Reconstruction Project – Construction

- Sidewalk Replacement
Seawall Reconstruction Project – Completed Construction

- **Everything Shiny and New!**

  - New ADA Parking and Bus Stops
  - New Area Lighting
  - New Colored & Stamped Pedestrian Walk
  - New Benches
Seawall Reconstruction Project – Summary

- Overall project finished ahead of schedule (~ 2 months)
- Project finished within budget ($52,000,000)
- Coordinated and cooperative effort between City Staff, Contractors, Engineers, Downtown Businesses
- Lessons Learned:
  - Keeping Local Businesses Informed
  - Traffic Control
Seawall Reconstruction Project – Questions?