Galveston Causeway Bridge

David Frank
Bridge Administrator
Eighth Coast Guard District
(Coastal Area)
American Recovery & Reinvestment Act of 2009

Bridge Alteration
ARRA & BRIDGE ALTERATION

• $142 Million ARRA Appropriation-

“Alteration of Bridges, $142,000,000 for alteration or removal of obstructive bridges, as authorized by section 6 of the Truman-Hobbs Act (33 U.S.C. 516): Provided, That the Coast Guard shall award these funds to those bridges that are ready to proceed to construction: Provided further, That no later than 45 days after the date of enactment of this Act, the Secretary of Homeland Security shall submit to the Committees on Appropriations of the Senate and the House of Representatives a plan for the expenditure of these funds.”
ARRA & BRIDGE ALTERATION

• CG Flexibility, Selection Factors Used-
  ➢ Shovel Ready
  ➢ Previous Appropriation Levels

• 4 Projects

• Leveraging Additional $120.4M in Previously Appropriated Funds

• Total $262.4M Economic Stimulus
ARRA FUNDED BRIDGE PROJECTS

• Burlington: Upper Mississippi River, IA
  ➢ August 1991 OTA

• EJ &E: Illinois Waterway, IL
  ➢ February 1995 OTA

• Mobile: Mobile River, AL
  ➢ June 1999 OTA

• Galveston Causeway: Gulf Intracoastal Waterway, TX
  ➢ June 2001 OTA
CONSTRUCTION CONTRACTS

• Fixed Price
• Competitive Bid Process (Br. Owner)
• Selection Factors- Cost & Qualifications
• Mandatory Pre-bid Meeting
• Bids Opened Publicly
• Incentive/ Disincentives
• 2-Year Construction Duration
Galveston Causeway Bridge
GIWW Mile 357.2 Galveston Causeway
Old I-45 Bridge
EXISTING BRIDGE

- Crosses The GI WW, Mile 357.2
- Single-track
- Owned By Galveston County
- Operated By BNSF
  - 999-yr Lease
Two Existing Waterlines
Damage from Hurricane Ike
EXISTING BRIDGE NAVIGATION PROBLEMS

• 104’ Horiz.Clr. & Unlimited Vert. Clr. in Open Position

• Angle of Bridge Crossing w/ Respect to Approach Channels

• Prevailing Winds & Tidal Currents

• Serious Problems for Tows Getting Properly Aligned for Transiting Bridge

• Designed for a Single Barge Tow, 35’ Wide
EXISTING BRIDGE NAVIGATION PROBLEMS

• Tow Sizes Now Range up to Approx. 1,180’ Long X 108’ Wide

• Bridge Cited

The Most Difficult & Dangerous Bridge On The GI WW

• Since 1990 Sustained over 100 Allisions
  ➢ Signif. Damage to Bridge & Vessels
  ➢ Loss of life as Recently as January 2005-Judi Lynn Shrimp Boat Allision
Proposed Galveston Causeway Bridge
PROPOSED ALTERATION

• T-H Investigation Finds Bridge to be an Unreasonable Obstruction to Navigation

• June 2001 “Order To Alter”

• Alteration to Include Vertical Lift Bridge, which Provides-
  ➢ 300’ Horiz. Clr.
  ➢ 73’ Vert. Clr., Above Ordinary High Water in Open Position
PROPOSED ALTERATION

14" AMCO HIGH ISLAND PIPELINE

EXIST. DOLPHIN TO BE REMOVED
EXIST. CONC. TOWER FOUNDATIONS TO BE REMOVED
PROPOSED 7-PILE CLUSTER
ABANDONED OPERATORS HOUSE (TO BE REMOVED)

PROPOSED FENDER
PROPOSED DOLPHIN (TYP.)
PROPOSED VERTICAL LIFT BRIDGE

EXISTING BASCULE BRIDGE
EXISTING CONTROL HOUSE (TO BE REMOVED)
PROTECTION DOLPHIN (TO REMAIN)

EXIST. TRANSMISSION TOWER (TO REMAIN)

196.1" 196.1" 50'

NOTE 1
CURRENT STATUS

- July 24, 2009 Bid Solicitation ADV.
- Aug. 6, 2009 Pre-bid Meeting
- Bid Opening Sept. 02, 2009 → Extend
- Est. 2-Year Constr. Duration
PRE- BID MEETING

• Aug. 6 @ Galveston County Purchasing Agent’s Office

• Attended By Potential Contractors & Subs

• Included Site Visit

Office of Waterways Management
Bridge Program Division

August 14, 2009
Old FM 2031 Pontoon Bridge
Colorado Locks from new Bridge
Tule Lake Lift Bridge,
Corpus Christi, TX