Upper Rio Grande Flood Control Project

Levee Improvement

June 22, 2009
Rio Grande Canalization Project

- Constructed 1938-1943
- Water delivery and flood control project
- 106 river miles from Percha Dam, NM to American Dam at El Paso, TX
- 130 miles of flood control levees
Levee Terminology

Riverside

Levee

Landside

Freeboard

Base Flood Elevation
(1% annual chance of occurrence) = 100yr event

Slope failure

Foundation

Structural Integrity

Overtopping

Through seepage

Underseepage (sand boils)
Current
Levee Status – Doña Ana/El Paso County

- Levee Height is deficient and Plating is required for levees in Doña Ana County
- Levee Height is deficient and Plating is required in El Paso County
- New Levee and Floodwall for Canutillo
Levee Status – Doña Ana County

Hatch Area Levees

- Hatch West Levee (Hatch Siphon to Bignell Arroyo)
  Levee Enhancement, Structure Improvements

  - Issue Contract Task Order 6/22/09
  - Produce Plans and Specs by 10/28/09
Levee Status – Doña Ana County

USIBWC will raise and add plating to:

Mesilla Levees (Shalem Bridge to Vado Bridge)
- Mesilla, West Levee (Shalem Bridge/Picacho. Flume to Mesilla Valley Bosque Park) ARRP Funds, design and Construction
  - Issue Contract Task Order 6/22/09
  - Produce Plans and Specs by 10/28/09

- Mesilla, East Levee, (Selden Canyon to Mesilla Dam) Levee Enhancement with non ARRA funds, In-house forces, ARRA funds for structure enhancement design
  - Complete 33% anticipated completion date 9/30/10

Mesilla, East and West Levees (Mesilla Dam to Vado Bridge)
- East Levee (Mesilla Dam to Vado Bridge)
- West Levee (Mesilla Dam to Vado Bridge)
  - Issue Contract Task Order 6/22/09
  - Produce Plans and Specs by 10/28/09
Levee Status – El Paso, Doña Ana Counties

Anthony/El Paso

- East Levee (Vado Bridge to Vinton Bridge)
- West Levee (Vado Bridge to Country Club Bridge)
- Anapra Levee
  - Issue Contract Task Order 6/22/09
  - Produce Plans and Specs by 10/28/09
Levee Status – Doña Ana/El Paso County

East Levee

- Canutillo, Vinton Bridge to Borderland Bridge
  - NEW LEVEE/FLOODWALL
  - ARRA Funds For Design
    - Out Year Funding

- Borderland Bridge to Electric Plant
  - Levee Enhancement with non ARRA funds, In-house forces, ARRA funds for structure enhancement design
    - Complete 33% anticipated completion date 9/30/10
LEVEE ENHANCEMENT
TYPICAL SECTION
EAST LEVEE
SELDEN CANYON TO VINTON BRIDGE
MAP 2 of 5
EAST LEVEE
SELDEN CANYON TO VINTON BRIDGE
MAP 3 of 5
EAST LEVEE
SELDEN CANYON TO VINTON BRIDGE
MAP 4 of 5
EAST LEVEE CANUTILLO AREA
EAST LEVEE
Borderland Bridge to Electric Plant
WEST LEVEE
HATCH SIPHON TO BIGNELL ARROYO

WEST LEVEE
HATCH SIPHON

LEVREE-13.60 MILES

HATCH SIPHON
BIGNELL ARROYO

END OF WEST LEVEE AT BIGNELL ARROYO
WEST LEVEE
PICACHO FLUME TO NEW MEXICO STATE PARK
WEST LEVEE
MESILLA DAM TO NEMEXAS DRAIN
MAP 1 OF 3
WEST LEVEE
MESILLA DAM TO NEMEXAS DRAIN
MAP 3 OF 3
LEVEE ENHANCEMENT EQUIPMENT
LEVEE ENHANCEMENT
EQUIPMENT ON LEVEE
Why Perform Levee Improvements?

- FEMA is updating flood insurance rate maps
- FEMA requires levees to contain the 100-year flood with 3 ft. freeboard
- USIBWC notified FEMA in 2006 that it could not certify all levees as meeting this requirement
FEMA Contact Information

James Orwat
800 North Loop 288
Denton, Texas 76209
940-898-5302 Voice
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WORK EXPECTATIONS

- Working Hours:
  - Monday – Friday 7:00 Am to 5:00 PM (Some Saturdays Possible) subject to change

- Noise: Construction Equipment

- Dirt and Dust:
  - USIBWC will manage dust

- Levee Traffic:
  - Construction Equipment/Pickups
INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

Contact Information

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