NORTH TEXAS MUNICIPAL WATER DISTRICT

Regional Service Through Unity… Meeting our Region's Needs Today and Tomorrow



BOIS d'ARC LAKE UPDATE

Fannin County Commissioners Court Briefing

January 7, 2019

Steve Long, P.E.

Reservoir Project Manager



FANNIN COUNTY COMMISSIONERS COURT UPDATE

AGENDA

- Construction Activities / Construction Pictures
  - Archer Western – Dam & Intake Structure
    - Bois d’Arc Creek Closure
  - Garney Construction – Leonard Water Treatment Plant
    - Raw Water Pump Station (at the dam site)
  - Austin Bridge and Road – FM 897 and County Roads & Bridges



FANNIN COUNTY COMMISSIONERS COURT BRIEFING

CMAR 1 – Dam and Intake Structure

- Dam activities
  - December was a productive month – 155,000 cubic yards of embankment
  - Next Major Activity - Close Bois d'Arc Creek Opening (the "Notch")
  - Construction Photos

CMAR 1 – Construction Status

- Embankment 2,623,500 cubic yards 50% complete
- Service Spillway 5,100 cubic yards 26% complete
- Intake Tower 7,600 cubic yards/60 feet high 72% complete
- Slurry Trench 367,000 square feet/67% complete
- Reservoir Clearing 3,920 acres/90% complete

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FANNIN COUNTY COMMISSIONERS COURT BRIEFING

Bois d’Arc Creek Rerouted – Notch Ready to Close

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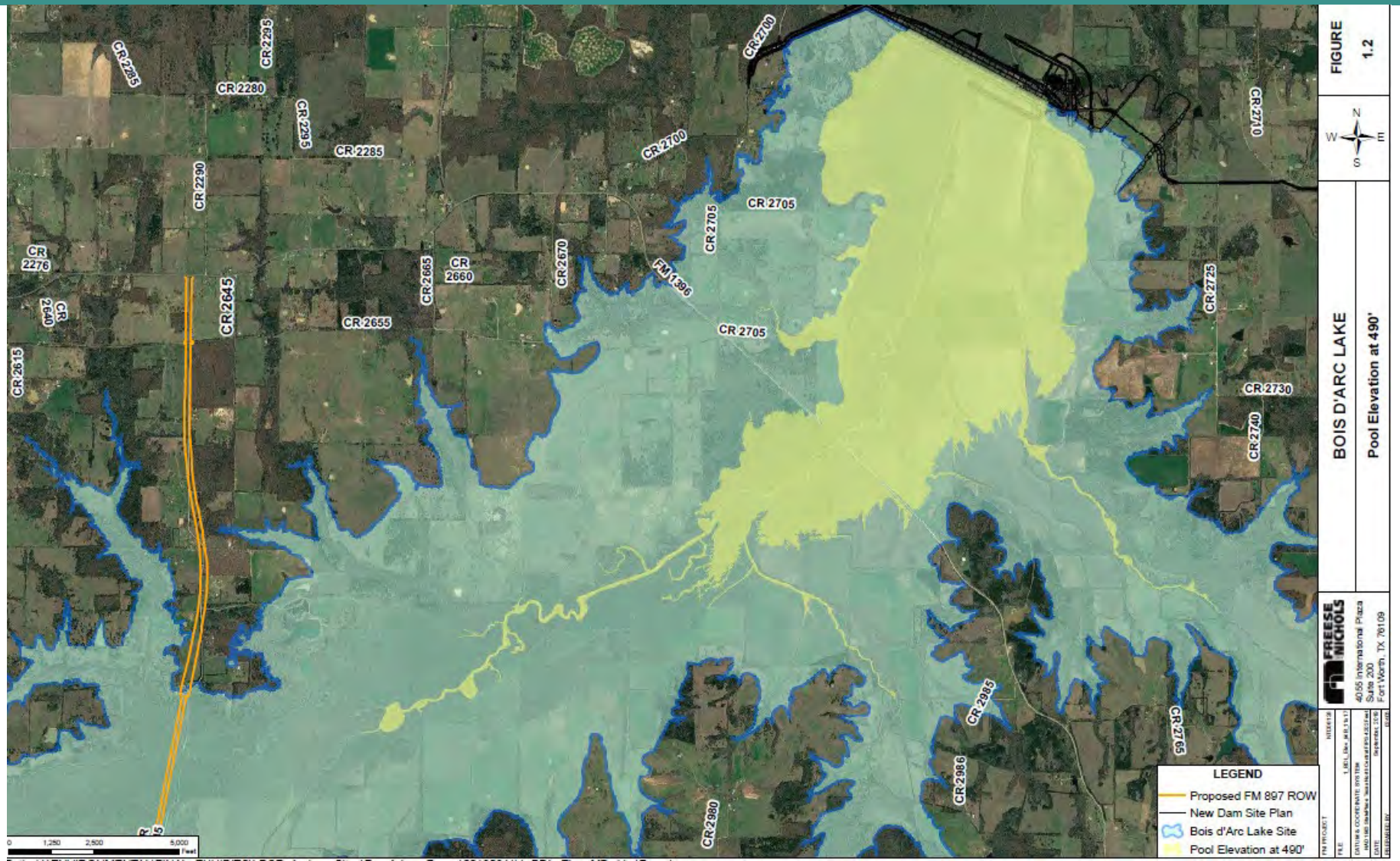
FANNIN COUNTY COMMISSIONERS COURT BRIEFING

Notch Closed - Bois d'Arc Creek Routed through Intake Structure



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BOIS D'ARC LAKE ELEV 490





FANNIN COUNTY COMMISSIONERS COURT BRIEFING

Dam Embankment 40 above natural ground update this photo

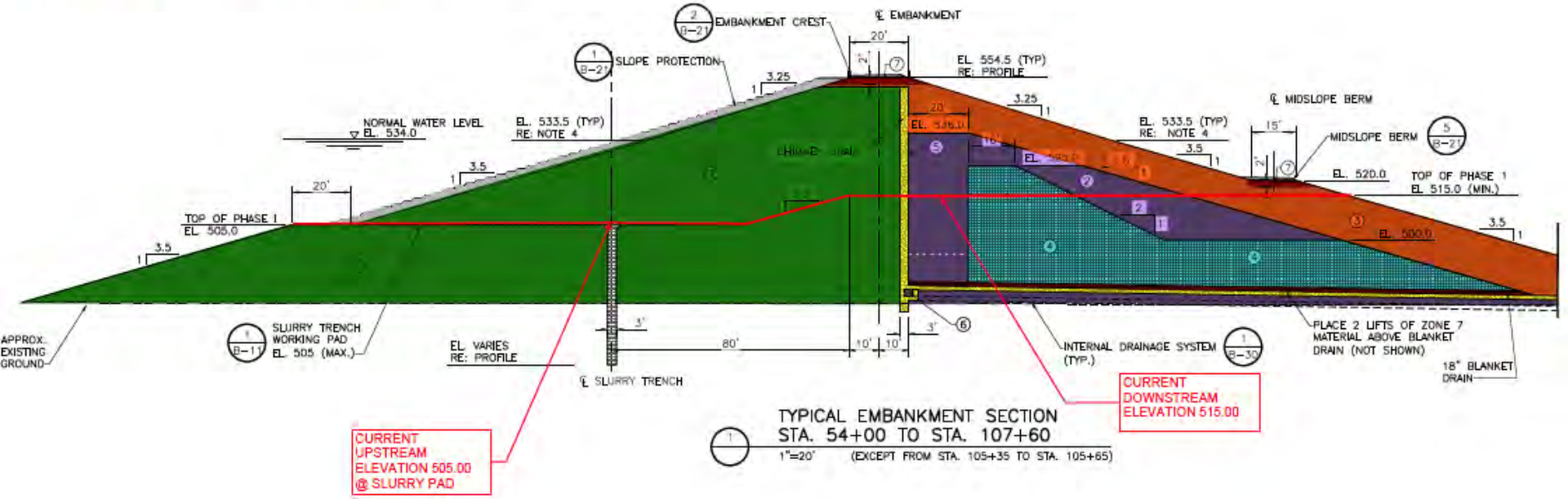
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DAM EMBANKMENT CROSSSECTION WEST OF BOIS D'ARC UPDATE

- Zone 1 Material (Fat Clay, Impervious Core)
- Zone 2 Material (Leaner Clay, Cohesive Random)
- Zone 3 Material (Sandy Clay, Low Plasticity Random)
- Zone 4 Material (Mixed Clay, Random Fill)
- Zone 5 Material (Sand, Sand Filter)
- Zone 6 Material (Gravel, Gravel Drain)
- Zone 7 Material (Sandy Clay, Cohesionless Random)

BP02 DAM CONSTRUCTION
STA. 56+00 TO 78+00 EMBANKMENT
OCTOBER 2019 UPDATE - PHASE 1
FILL COMPLETE



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SLURRY TRENCH LOOKING WEST



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BOIS D'ARC LAKE DAM PROGRESS PHOTOS

Service Spillway Chute



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CMAR 3 – Leonard Water Treatment Plant & HSPS

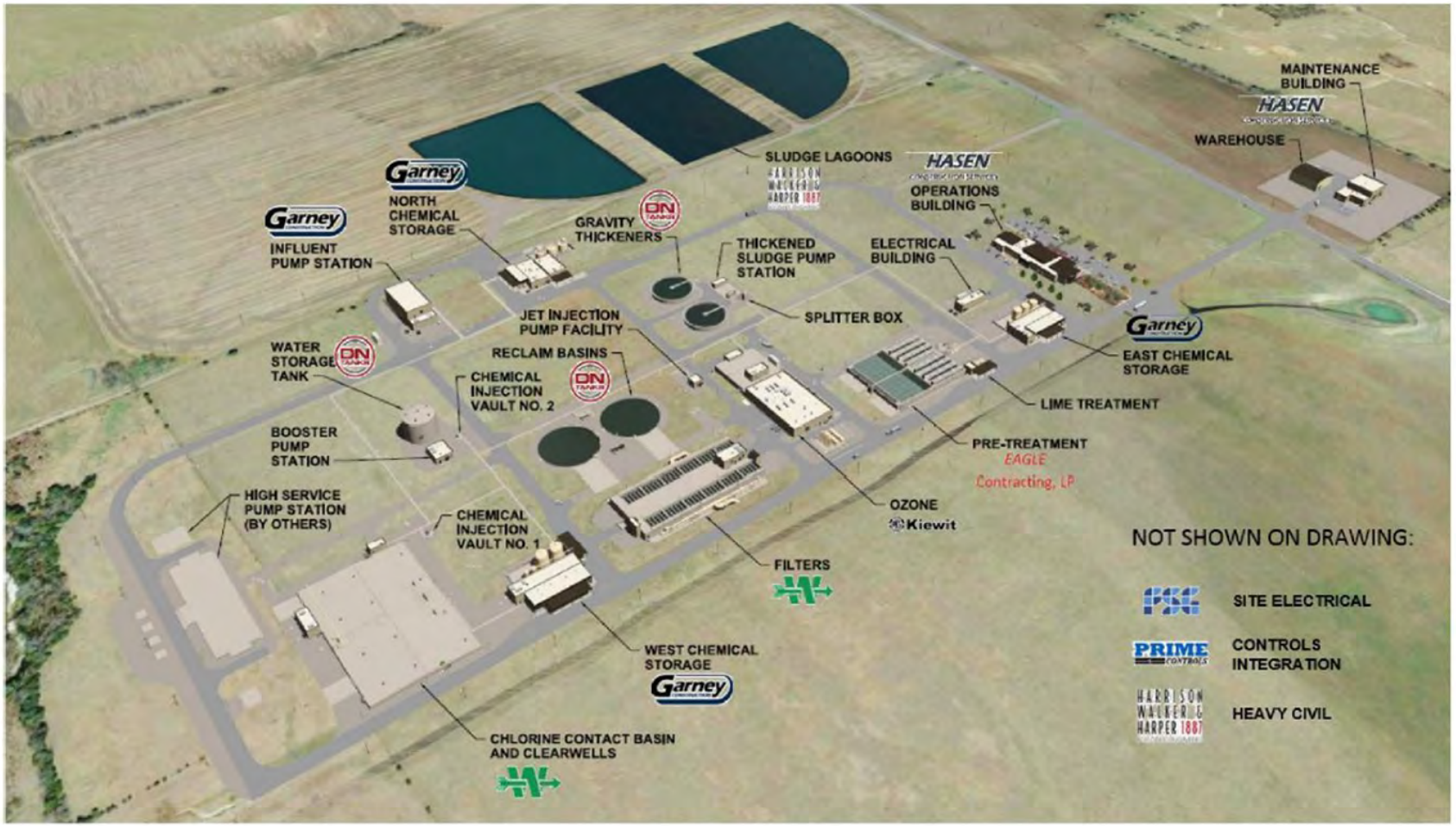
- Leonard Water Treatment Plant
  - Work is underway at all structures
  - Water supply tank is nearing completion
  - Filter Building underslab piping complete/constructing filter boxes
  - Clearwell slab and chlorine contact walls are well underway
- High Service Pump Station
  - Excavation is complete
  - Discharge pipe installation underway
  - Rock anchors for floor slab underway
- Raw Water Pump Station (located at the dam site)
  - Suction piping is complete (exterior)
  - Discharge piping is complete (beneath the floor slab)
  - 11,225 cubic yards – 64% complete

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LEONARD WATER TREATMENT PLANT

Leonard Water Treatment Plant





LEONARD WATER TREATMENT PLANT

CMAR 3 – Leonard WTP Maintenance Area



LEONARD WATER TREATMENT PLANT

Leonard WTP Looking Northeast from HSPS/Clearwell



HSPS – Foreground left
Clearwell – Foreground right
Filters – Middle Right



LEONARD WATER TREATMENT PLANT PROGRESS PHOTOS

Filter building gallery slab & filter box slabs



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Water Storage Tank Setting Precast Panels



Water Storage Tank Wrapping Prestressing Wire





LEONARD WATER TREATMENT PLANT PROGRESS PHOTOS

Water Storage Tank Complete





BOIS D'ARC LAKE RAW WATER PUMP STATION PROGRESS PHOTO

Raw Water Pump Station



FANNIN COUNTY COMMISSIONERS COURT BRIEFING

CMAR 4 – FM 897 and County Roads

- FM 897
  - Drilled Shafts – 100%
  - Columns – 80%
  - Bent Caps – 70%
  - Beams – 66%
  - Deck – 38%
  - Roadway – 60%
- County Roads and Bridges
  - Sites 23 and 27 (CR 2610 and CR 2625) hand off to Fannin County
  - Significant progress on Sites 2 & 3
  - Site 1 Beam set pictures

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FM 897 PROGRESS PHOTOS





FANNIN COUNTY ROAD AND BRIDGE IMPROVEMENTS

CR 2610 (Site 23)

Unnamed tributary of Bois d'Arc Creek



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FANNIN COUNTY ROAD AND BRIDGE IMPROVEMENTS

CR 2610 (Site 23) Unnamed tributary of Bois d'Arc Creek





FANNIN COUNTY ROAD AND BRIDGE IMPROVEMENTS

Site 27 (CR 2625) Love Lake Farms



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FANNIN COUNTY ROAD AND BRIDGE IMPROVEMENTS

Site 27 Love Lake Farms

Driveway Bridge over Thomas Branch





FANNIN COUNTY ROAD AND BRIDGE IMPROVEMENTS

Site 1, CR 2980 Ward Creek Setting Beams



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