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

November 5, 2019

Steve Long, P.E.

Reservoir Project Manager



FANNIN COUNTY COMMISSIONERS COURT UPDATE

AGENDA

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



BOIS d'ARC LAKE UPDATE

CMAR 1 – Dam and Intake Structure

- Dam activities
  - October was a productive month – 350,000 cubic yards
  - Next Major Activity - Close Bois d'Arc Creek Opening the "Notch"
  - Construction Photos

CMAR 1 – Construction Status

- Embankment x,xxx,xxx cubic yards 40% complete
- Service Spillway x,xxx cubic yards xx% complete
- Intake Tower xx,xxx cubic yards/40 feet high xx% complete
- Slurry Trench xxxx square feet/xx% complete3

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BOIS d'ARC LAKE UPDATE

Bois d'Arc Creek Rerouted – Notch Ready to Close

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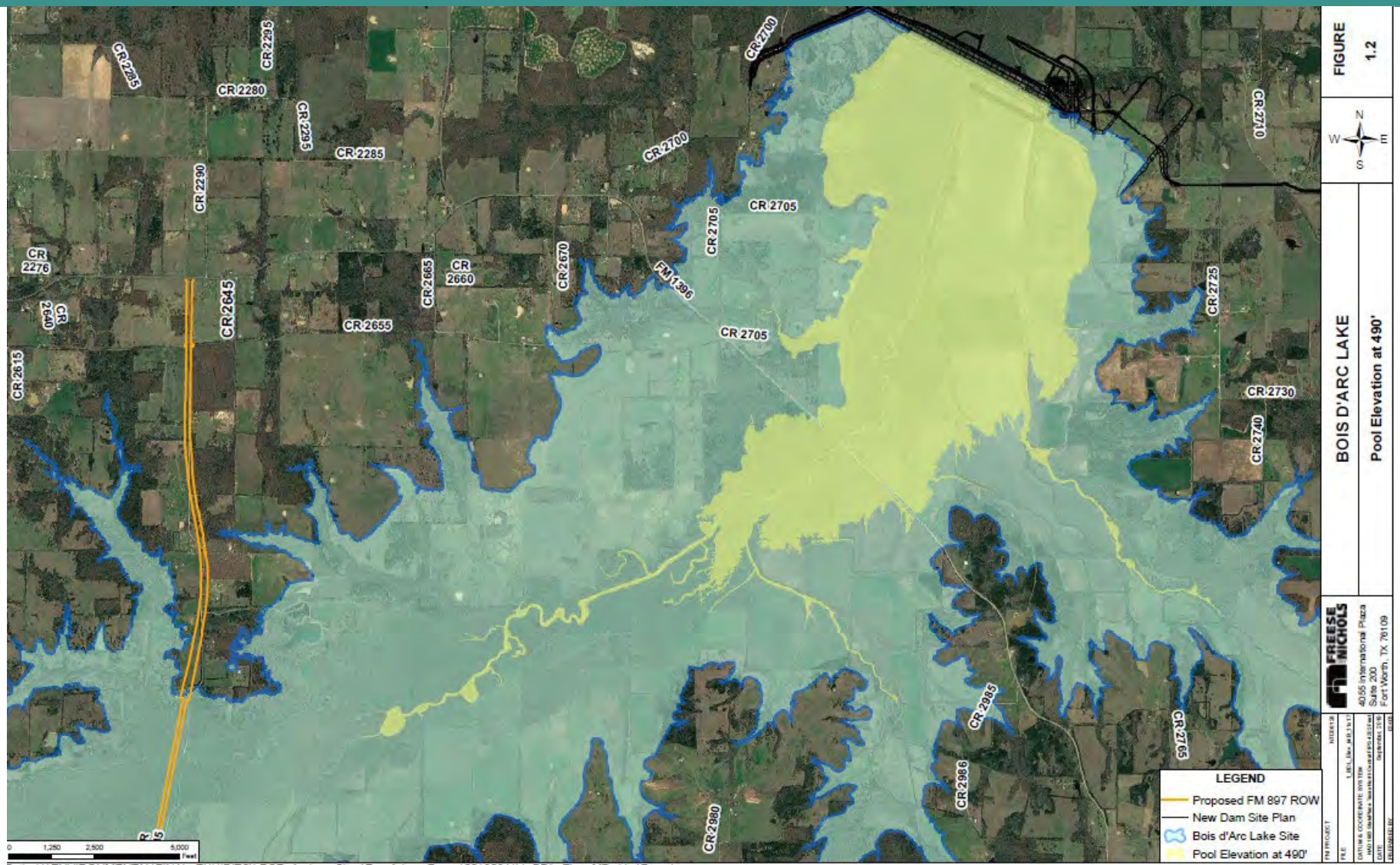
BOIS d'ARC LAKE UPDATE

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

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BOIS D'ARC LAKE ELEV 490





BOIS d’ARC LAKE UPDATE

Dam Embankment 40 above natural ground

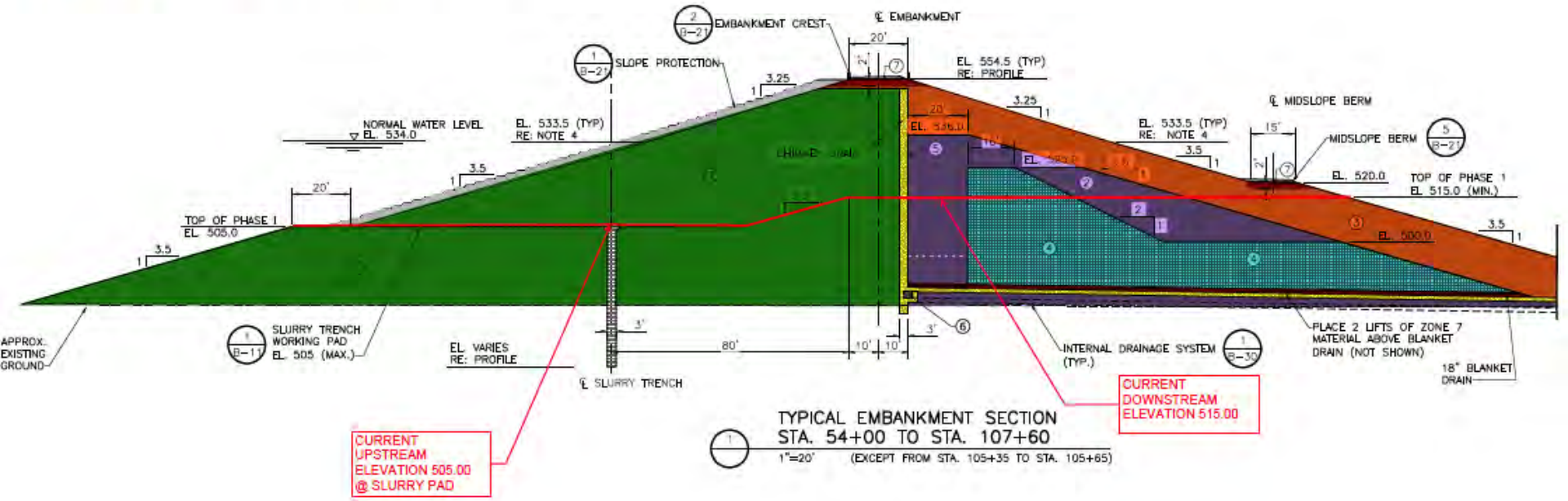
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DAM EMBANKMENT CROSSSECTION WEST OF BOIS D'ARC

- 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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BOIS d'ARC LAKE UPDATE

Service Spillway Chute

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SLURRY TRENCH LOOKING WEST



BOIS d'ARC LAKE UPDATE

CMAR 3 – Leonard Water Treatment Plant, RWPS & HSPS

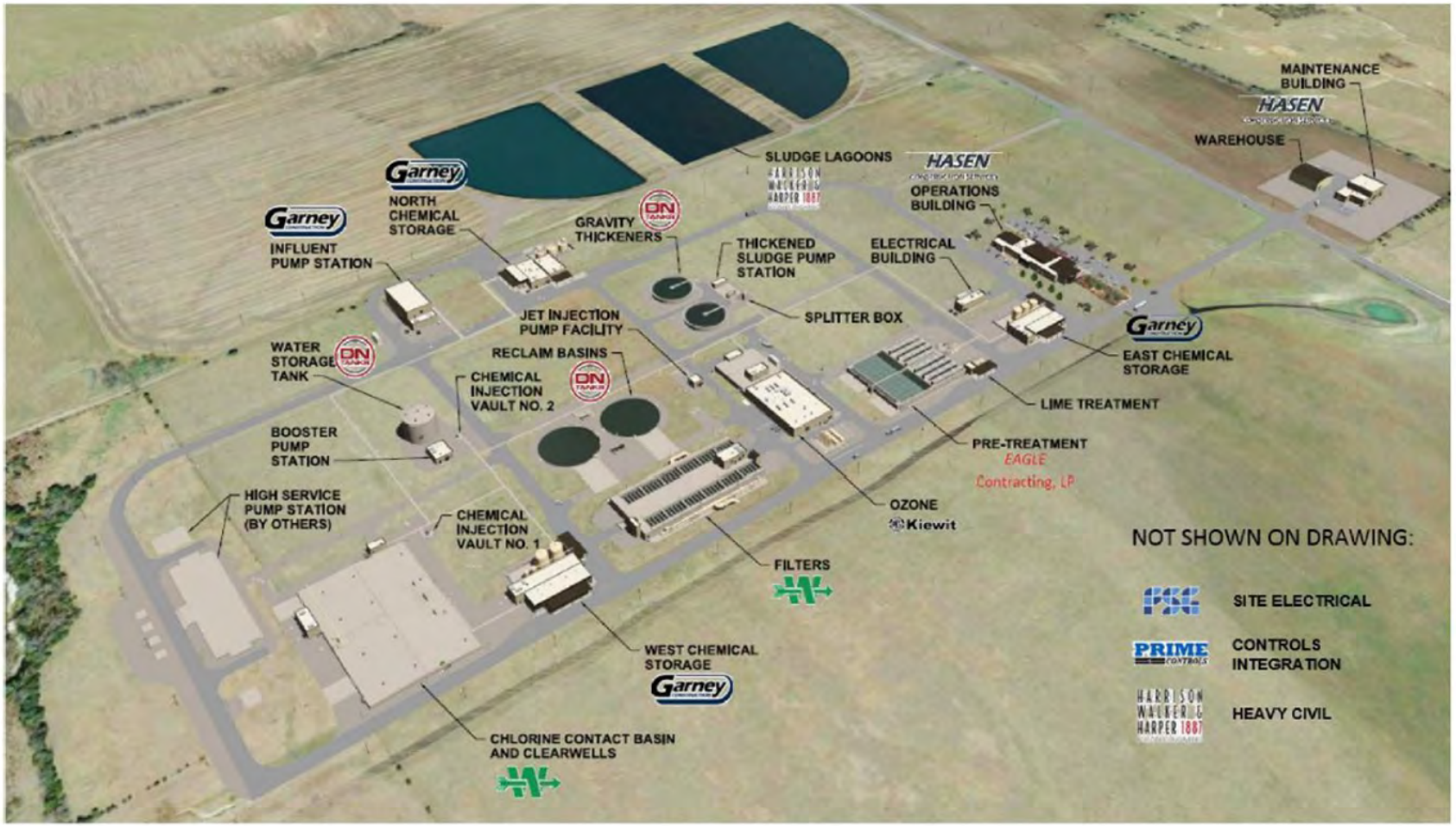
- Leonard Water Treatment Plant
  - Mobilization for all contractors is nearing completion
  - Mass earthwork is nearing completion and all but two facilities have been released to building sub-contractors
  - Rock anchors at clearwell are underway
- Raw Water Pump Station
  - Excavation is complete and foundation work is on-going
  - Rock anchor installation is complete
  - Work on alcove for sump pumps underway
  - Access road to the pump station site completed
- High Service Pump Station
  - Contracting and procurement stage

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LEONARD WATER TREATMENT PLANT PROGRESS PHOTOS

Leonard Water Treatment Plant





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





BOIS d'ARC LAKE UPDATE

CMAR 5 – Raw Water Pipeline and Treated Water Pipeline

- Raw Water
  - Tunneling and Right of Way preparation began April 1
- Treated Water
  - Procurement stage and ROW acquisition



TUNNEL INSTALLATION FOR 90-INCH RAW WATER PIPE



RWPL tunnel excavation



BOIS d'ARC LAKE UPDATE

CMAR 4 – FM 897 and County Roads

- FM 897
  - Tie-in to US 82 construction is underway
  - Continued work on bridge superstructure
  - Earthwork on north and south ends of bridge continued
- County Roads and Bridges
  - Sites 12 and 23 near completion and hand off to Fannin County
  - Significant progress on Sites 2 & 3

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FM 897 PROGRESS PHOTOS



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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

CR 2610 (Site 23)

Unnamed tributary of Bois d'Arc Creek



BOIS d'ARC LAKE CONSTRUCTION PHOTOS

CMAR 4 – Austin Bridge & Road (FM 897)

FM 897 column forms installed prior to pour



ABR - FM 897 PROGRESS PHOTOS

FM 897 earthwork on north end of bridge

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