Water Treatment Plant 4

Bullick Hollow Road Ductbank Construction Village of Volente Council Meeting January 18, 2011

Water Treatment

Plant 4







WTP 4 Overview







City of Austin, TX Water Treatment Plant #4

Image # 101108 6011 Date 11.08.10

727.520.8181 www.aerophoto.com

Electrical Power Supply to the Raw Water Pump Station (RWPS)

Dual feed electrical service and communications lines required for operation of the RWPS facility Four (4) alternatives studied to provide service from WTP4 site to RWPS site.

- Ductbank (underground electrical conduit) running down Bullick Hollow Road ROW
- Electrical and communications lines in tunnel
- Overhead electrical lines over Comanche Canyon Preserve and through RWPS site
- Overhead electrical lines over Comanche Canyon Preserve and ductbank in Bullick Hollow Road ROW.





Electrical Power Supply to the Raw Water Pump Station (RWPS)

Constraints

- Prohibited from installing overhead electrical lines over Comanche Canyon Preserve.
- Prohibited from installing new overhead electrical lines on or adjacent to RWPS site due to deed restrictions.
- Ductbank requires pull boxes spaced at approximately 400 foot intervals
- Bullick Hollow Road ROW is a BCP
 Infrastructure Corridor.





Electrical Ductbanks

What is a ductbank?

- An underground electrical and communications conduit run.
- Pull boxes required at approximately 400 foot intervals to provide access for installation and maintenance of the conduit.
- A pull box looks like a manhole from the surface.





Bullick Hollow Road

Travis County Right-of-Way **BCP** Infrastructure Corridor Surrounded by preserve lands Steep road slopes in some areas Congested with existing utilities Adjacent to Critical Environmental **Features and Buffer Zones** >ROW exhibits several "pinch points"





Construction Methodology

Daytime Construction

- Construction time 7 a.m. to 5 p.m.
- Daytime lane closures resulting in high traffic impact
- Approximate 6-8 month construction period
- Heavy construction traffic in daytime hours
- Construction duration could extend into beginning of peak season

Nighttime Construction

- Construction time 8 p.m. to 6 a.m.
- Nighttime full road closure from RR 620 to Oasis Bluff
- Alternate routes provided
- Approximate 4-6 month construction period
- Full use of Bullick Hollow Road in daytime and weekends
- Increased safety for daytime commuters/traffic

BCP Infrastructure Void Mitigation Protocols - Delays for void mitigation investigation could impact construction period duration.





Bullick Hollow Road

Previous Bullick Hollow Road Improvements

- Widening of east and west bound lanes near RWPS site
- Addition of acceleration lane east bound from RWPS site.
- Addition of turning lanes to WTP4 and RWPS.
- Stormwater conveyance, collection, and treatment improvements





Community Outreach

Community outreach effort consists notification and updates to:

- Travis County Precinct 3 Commissioner Karen Huber
- Travis County TNR
- Village of Volente Council Members
- Volente Neighborhood Association
- Volente Fire Department ESD 14
- Lake Travis Fire Rescue ESD 6
- Austin Fire Department (2 stations near plant site)
- Travis County Sheriff's Office West Command
- US Post Office
- Comanche Trail Community Association
- Leander ISD bus route managers
- TxDOT
- Surrounding businesses and property owners





Next Steps

Identify potential improvements to Bullick Hollow Road

- Revegetate roadside with wild flowers
- Expand acceleration lane to top of hill
- Improve/add shoulders to Bullick Hollow Road
- Increase lane width

 Complete design process
 Permitting through City of Austin, Travis County, and BCP





Bullick Hollow Road Ductbank

Questions and Comments?



