

ENGINEERING • PLANNING • CONSTRUCTION MANAGEMENT

February 8, 2019

TDEC Division of Water Resources Water Pollution Control Unit William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243

RE:

Plans Review

US Highway 41A Pump Station and Sewer Line Extension- Phase 2 City of Decherd, Franklin County

543-02.02

TAN Dept. of Env. & Conservation

FEB 1 3 2019

Division of Water Resources

Dear Sirs:

Please find enclosed for your review and approval 5 sets of plans for the referenced sanitary sewer line extension project in the City Limits of Decherd, TN. This is considered Phase 2 of a project that you reviewed and approved in 2018 under Wastewater Project Number 17.0834. That project was for the sewer pump station and a portion of the gravity sewer lines up to Manhole 11 along US Hwy 41A. That project excluded the gravity sewer lines from Manhole 11 to Manhole 15. This Phase 2 project is to receive approval of 1,300 LF of 8" PVC SDR 26 gravity sewer line from MH 11 to Manhole 15.

Specifications are per the Decherd Water & Sewer Department's standard specifications. Also enclosed are hydraulic calculations and review fees in the amount of \$150.00.

The system owner is:

Decherd Water & Sewer Department Mr. Eric Bradford, Director P.O. Box 488 Decherd, TN 37324 ebradford@decherd.net

If you have any questions or need any additional information, please contact me at (931) 728-2638.

Sincerely,

St. John Engineering, LLC

Scot St. John, P.E.

WPN10-0000 WPN10-0088

Cc: Eric Bradford, Decherd Water & Sewer Department

Hydraulic Design Criteria

2/1/2019

Date:

Sheet1_ of1	Velocity	at Max	Flow	FPS	1.78	1.69	1.50	1.79
	Capacity	Flowing	Full	CFS	0.83	0.83	0.83	1.08
	Velocity	Flowing	Full	FPS	2.68	2.68	2.68	3.29
		Sewer	Fall	Ħ	1.60	1.60	09.0	2.42
		Sewer	Grade	%	0.40%	0.40%	0.40%	%69.0
	Invert	Elevations		Lower MH	945.07	946.77	948.47	949.17
				Upper MH	946.67	948.37	949.07	951.59
	Pipe	Diam		Z	8	8	8	∞
	Max	Sewage	Flow	CFS	0.2139	0.1604	0.1069	0.1069
	Avg	Sewage	Flow	CFS	0.0535	0.0401	0.0267	0.0267
	Addional	Flow		CFS	1923			
	Total Addion	Area	Served	Lots	4	3	2	2
	Area	Served		Lots	1	1	0	2
		ension		Length	400	400	150	350
				To MH	12	13	14	15
		US 41A Sewer Extension	543-02.02	From MH To MH Length	11	12	13	14
	Project:	US 41,		Street	Main Line to North			

Assumed 6 gpm/ commercial lot and peaking of 4

Notes:

