



Charlotte County Utilities

White Paper Justification

WILLOW PHASE 3 WATER MAIN UPSIZING

Signatures

Dave Watson, Utilities Director

Bruce Bullert, Engineering Services Manager

Ken Stecher, Operations Manager

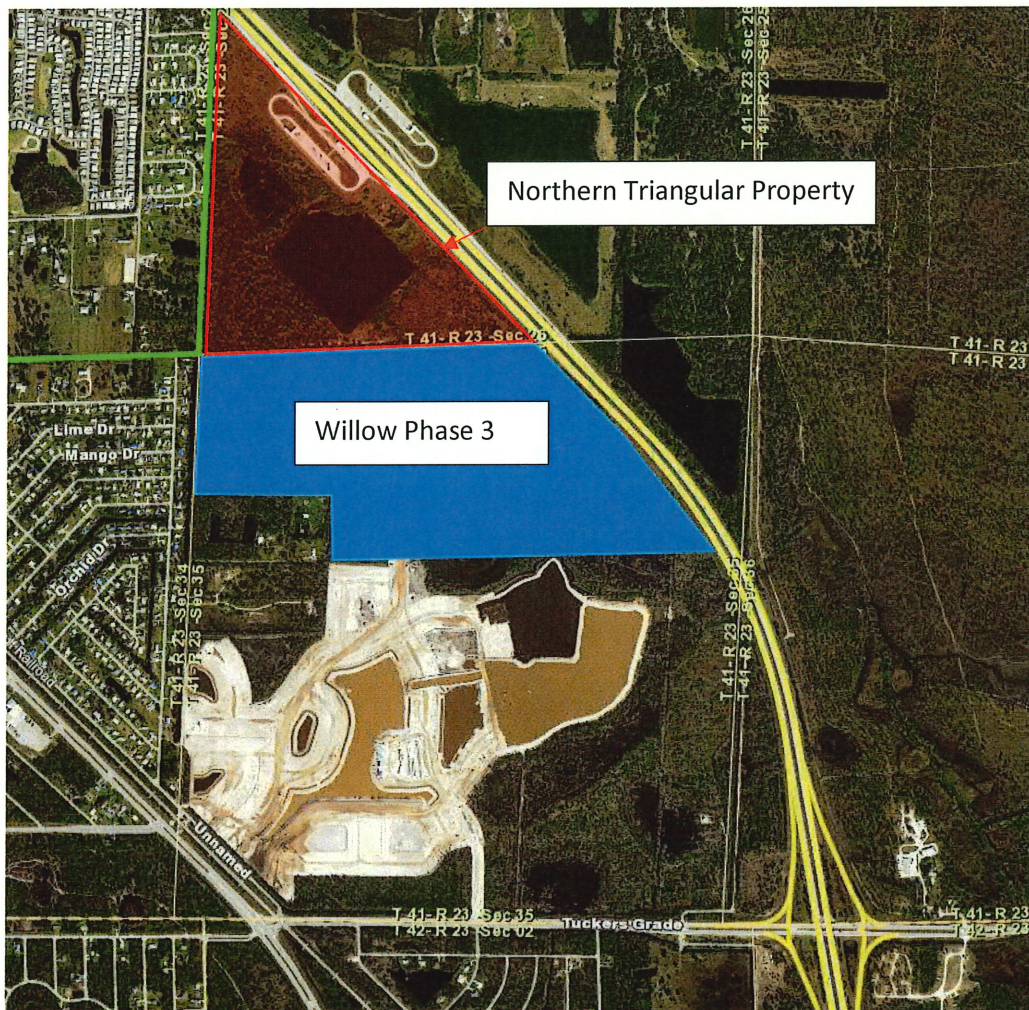
Denise Caruthers, Operations Supervisor

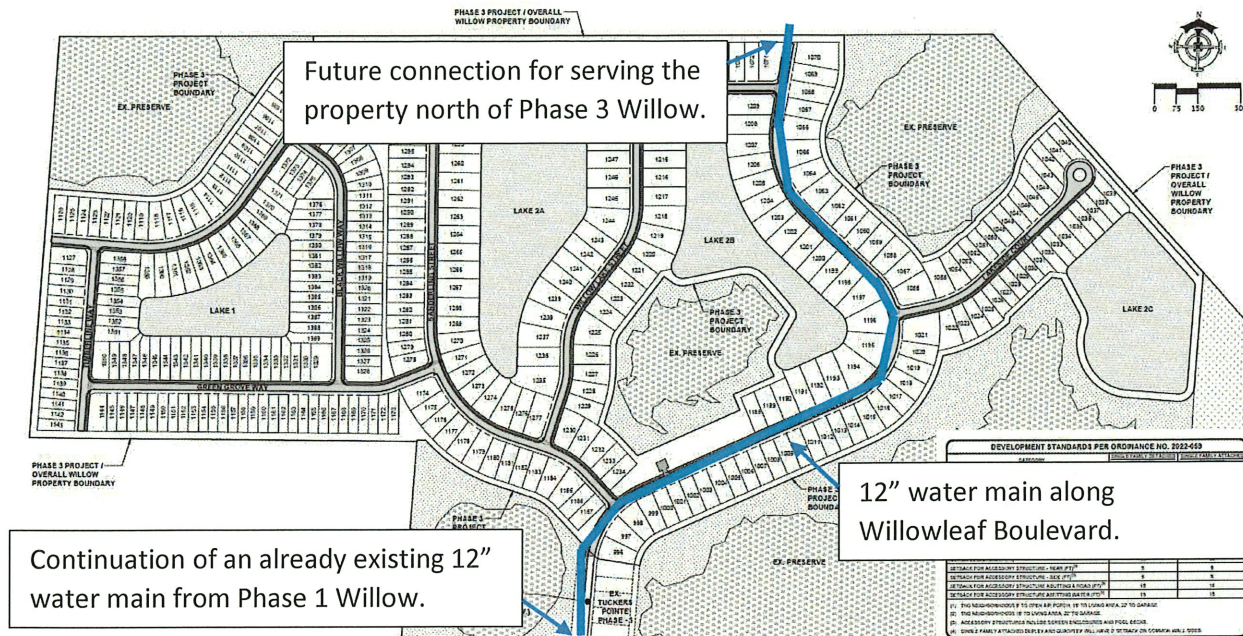
Prepared by:
Charlotte County Utilities
3100 Loveland Blvd.
Port Charlotte, FL 33980
Telephone: 941.764.4300
<https://www.charlottecountyfl.gov/departments/utilities/>

Statement: This project will provide sizing for existing and future development including the triangular property abutting Willow Phase 3 on the north (See map below). The proposed community is being completed in phases with this project being Phase 3 which consists of 394 single family units. Phase 1 is constructed, and phase 2 is currently under construction with a total of 635 single family units. Phase 4 will have 360 townhome units.

Objective: To determine the most reasonable, cost effective, and feasible option for providing utility service to this area.

Background: The original Willow project was submitted to have plans reviewed in November 2022. During the review process and at multiple meetings, there was discussion about potable water main sizing throughout the development and surrounding area. The triangular property is the northern limits of CCU's service area west side of I-75 and east of the City of Punta Gorda.





Based off the modeling results, a 12" water main will be needed to properly service the triangular property north of Phase 3 Willow to provide adequate domestic and fire protection service to the area.

Option #1: Allow the Willow development to install 8" water main which only meet the needs of their development.

This option does not adequately provide fire and domestic flows to the triangular piece north of Willow Phase 3. To meet this requirement, CCU would need to install additional infrastructure after the development is completed.

Option #1 Cost Estimate: CCU's Cost Now: \$0, Future CCU cost is approximately to be \$625,000.00.

Option #2: Follow the recommendations outlined in the potable water modeling results needed to serve the Willow development and the triangular property north of Willow Phase 3. Install a 12" watermain at this time to meet all future fire and domestic flows for the area.

Option #2 Cost Estimate: Cost to CCU: \$69,032.00 (see cost estimate below) to upsize potable water main from 8" to 12".

WILLOW LEAF BLVD/ AUTUM LEAF DRIVE UTILITIES COST SHARING										
REQUIRED UTILITY COST					UPSIZING/ADDITIONAL UTILITIES					VARIANCE (CCU COST)
DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	
8" PVC (DR 18) Water Main	2,493	LF	\$60.00	\$149,580.00	*12" PVC (DR 18) Water Main	2,493	LF	\$84.00	\$209,412.00	\$59,832.00
8" Gate Valve	4	EA	\$3,200.00	\$12,800.00	*12" Gate Valve	4	EA	\$5,500.00	\$22,000.00	\$9,200.00
									TOTAL CCU COST SHARE	\$69,032.00

Recommendation:

After evaluation of the two options, Option #2, at a CCU cost of \$69,032.00 is recommended.

It is in CCU's best interest to install the necessary infrastructure now and only pay the difference in pipe sizes. This option prevents CCU from duplicating the infrastructure at CCU's expense and paying additional cost of mobilization/demobilization, roadway crossings, driveway crossings, detours, corridor interferences and restoration again.