

CIP REPORT

Planning and Zoning: 4/6/2015 **Staff Contact:** Dan Franz, P.E.

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SUBJECT: To discuss and consider a recommendation to the City Council on the 5-year

Capital Improvement Plan for FY 2016 - 2020

ANNUAL CIP PROCESS:

Per the City Charter and the Code of Ordinances, the Planning and Zoning Commission shall annually submit a 5-year Capital Improvement Plan to the City Council and City Manager, at least 120 days before the beginning of the budget year. The plan must list projects in order of preference with a recommendation for the year of construction for each project.

FUNDING SOURCES:

There are different funding mechanisms for capital improvement projects; two of which are Certificates of Obligation (CO) and General Obligation (GO) bonds. A Certificate of Obligation (CO) is a bond secured by property tax in which does not require voter approval. Unlike a CO, a General Obligation (GO) bond is required to be approved by the voters, and the debt service typically placed on top of the tax rate. Historically, the City has used Certificates of Obligation (CO's) to fund roadway, drainage, sidewalk and park projects while the debt service is absorbed through the tax rate. Utility projects are typically funded by the Utility Fund, capital recovery fees (impact fees from new development) and CO's. Utility CO's are funded through utility revenue guaranteed by the tax rate.

In past years, the City issued CO's for the construction of roadways. While the current roadway projects are being funded in part by past CO issuances, staff recommends most future roadway CIP projects to be funded by GO bonds. The Utility Fund has multiple funding sources such as impact fees and CO's that can be used for utility purposes.

FISCAL YEAR 2015 STREET PROJECTS:

Below is a brief description of previous and currently funded street projects. These projects are funded by certificates of obligation (CO) associated with a development agreement, as well as General Obligation (GO) Bonds including the November 2014 General Obligation Bond vote.

Kelly Lane Phase 1A:

The construction of Kelly Lane Phase 1A was completed in February 2015. The construction of Kelly Lane Phase 1A (Murchison Ridge Trail to western-most intersection of Falcon Pointe Boulevard) widening Kelly Lane to a four lane urban section and incorporated turn lanes, new traffic signals and 24-inch water transmission main.



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Pfluger Farm Lane:

As a result of economic development agreements for Project Arista (Data Center Park) and the property owner (Terrell Timmermann), the City constructed Pfluger Farm Lane (Phase A), a north-south collector roadway, from the intersection of Town Center Drive within Stone Hill Town Center to the southern-most property line of the proposed 40-acre data center site, approximately 1450 linear feet of roadway. In addition, 250 linear feet of roadway was constructed on the south side of the property, intersecting with W. Pflugerville Parkway. By July 2016, the remainder of Pfluger Farm Lane (Phase B) will ultimately be constructed connecting Pflugerville Parkway to Town Center Drive.

Heatherwilde Boulevard Phase 1 & 2:

Right-of-way acquisition for N. Heatherwilde Boulevard Phase 1 and 2 is on-going. The design of Heatherwilde Phase 1 and 2, a four lane divided roadway, is 90% complete, with right-of-way acquisition as the remaining design approval element. Private utility relocations are currently being designed. This project will widen Heatherwilde Blvd to a four lane urban section with raised median, a 10' trail on the eastern portion of the roadway, new traffic signal at Kingston Lacy and street lighting. Construction funding is being allocated for this project from the 2014 General Obligation Bonds. Construction is expected to begin in FY 15.

East Pecan Street

This project will reconstruct East Pecan Street (from SH130 to Weiss Lane) as a three lane roadway section. This project will also reconstruct the existing two lane section from Weiss Lane to Cameron Road. Based on the City Master Transportation Plan, East Pecan Street from SH130 to Weiss will ultimately be a six lane urban roadway. This project will construct the initial three lanes of the ultimate section. 60% construction plans will be delivered to the City in March, construction is anticipated to initiate by end of the year. Funding for this project is allocated from the 2014 General Obligation Bonds.

Weiss Lane

This project, developed in collaboration with Travis County will reconstruct the existing two lanes of Weiss Lane from E. Pecan Street to Cele Road. This project will incorporate 4-ft shoulders, turn lanes at major intersections and a bridge replacement. City Council will approve consultant selection this April and design is anticipated to begin in May. Construction is anticipated to being in FY 16. Funding for this project is allocated from the 2014 General Obligation Bonds and includes participation from Travis County.

Rowe Lane

This project, developed in collaboration with Travis County will reconstruct the existing two lanes of Rowe Lane from SH 130 to Martin Lane. This safety project will incorporate 4-ft shoulders and drainage improvements. City Council will approve consultant selection this April and design is anticipated to begin in May. Construction is anticipated to being in FY 16. Funding for this project is allocated from the 2014 General Obligation Bonds and includes participation from Travis County.

Heatherwilde subdivision street reconstruction

This project is funded as part of the 2014 General Obligation Bond will reconstruct local streets within the Heatherwilde and Windermere subdivision areas. The reconstruction of local streets will include curb, pavement and sidewalks for the following streets: Cactus Blossom, Columbine, Ardisia, Simsbrook, Dashwood Creek, Blackthorn, Thackeray, Gravesend, Isle of Man, and Gower. City staff



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issued a request for qualifications in December 2014 and will make a recommendation to City Council for design selection this April.

Pflugerville Parkway

This project is funded as part of the 2014 General Obligation Bond will reconstruct the existing 2 lane roadway from Colorado Sand to Becker Farm Road. Based on the City Master Transportation Plan, E. Pflugerville Parkway from SH130 to Weiss will ultimately be a four lane urban roadway. This project will construct the initial two lanes of the ultimate section. Additionally, this project will improve the SH130/E. Pflugerville Parkway underpass to its ultimate roadway section and incorporate traffic signals. City staff issued a request for qualifications in December 2014 and will make a recommendation to City Council for design selection this April.

Pfennig Lane

This project is funded as part of the 2014 General Obligation Bond and will reconstruct the roadway to a three lane section from Rocky Creek Drive to the Justice Center. This project will incorporate a sidewalk on one side, incorporate curb and gutter and improved alignment for curve mitigation. City staff issued a request for qualifications in December 2014 and will make a recommendation to City Council for design selection this April.

POTENTIAL STREET PROJECTS FOR GENERAL BOND ELECTION:

The ability of the City to advance significant projects to construction is highly contingent on the development of a GO Bond program and a successful bond referendum. With the success of the 2014 General Obligation Bond, City Council has created a citizen's bond advisory committee responsible for developing a list of recommended GO bond projects for consideration by the City Council. Some projects that should be considered are identified in Table 1.

In order to support economic development within the SH 130 corridor as well as other parts of the City and providing the necessary connections to the commercial centers, a safe and efficient arterial roadway system in the high growth areas is essential. As development occurs in these areas, the public school system is required to expand with the construction of new schools to serve these areas, resulting in an increased impact on the existing rural two lane roadway network. In addition to single-family development, commercial development is expected to increase as accessibility to public infrastructure improves.

Potential projects to be considered for a GO Bond election are included in the table below:

Table 1 – Potential GO Bond Street Projects			
Project Name	Project Extent	Total Cost Estimate	
Royston Reconstruction	Construct a 3 lane urban, Central Commerce to Grand Avenue Parkway, closed drainage system	\$4.01 Million	
E. Pflugerville Parkway	Construct the remaining 2 lanes from Colorado Sand to Weiss to create the ultimate 4 lane roadway section	\$5.48 Million	
Old Austin Hutto Road	Construct a 3 lane section with ribbon curb, elimination of the low water crossing, and install street lights and sidewalks	\$2.20 Million	



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Weiss Lane	Construct an additional 2 lanes from Kelly Lane to E. Pecan Street completing 4 of the ultimate 6 lane roadway section	\$9.30 Million
Picadilly Drive	Construct a 4 lane urban roadway from Central Commerce to City limits	\$2.1 Million
Immanuel Road	Construct a 3 lane section urban roadway with a storm sewer system from Pecan St to Pigeon Forge Boulevard, no bridge replacement is required within this project scope	\$2.6 Million
	Subtotal	\$25.69 Million
	Administrative Costs (Bond issuance, etc)	\$0.51 Million
	Total	\$26.20 Million

OTHER POTENTIAL STREET PROJECTS:

The projects listed in Table 2 below are projects that have been identified as future City roadway projects as a result of economic development agreements with the City:

Table 2 – Other Street Projects			
Project Name	Project Extent	Total Cost Estimate	
Sun Light Near Way	Construct a 3 lane roadway from Pecan Street to Helios Way including turn lanes, sidewalk, and curb and gutter.	\$1.16 Million	
Pfluger Farm Lane	Construction of the middle portion of the roadway to complete the connection between Pflugerville Parkway and Town Center Drive (design completed)	\$4.00 Million	
Pfluger Farm Lane North	Extend a 3 lane roadway north of Town Center Drive to SH45.	\$3.08 Million	
Colorado Sand Drive*	Construction of the middle section and include water and wastewater services	\$2.85 Million	
Helios Way Extension	Construct a 4 lane roadway west of Sun Light Near Way, connecting to Pecan St. and includes water service and a traffic signal	\$3.10 Million	
	Total	\$14.19 Million	

^{*} Project to be funded by Project Sunshine

STREETS SUMMARY:

Staff recommends that the development of a bond program for the listed GO Bond roadway projects referenced in Table 1. Funding for projects listed in Table 2 can originate from CO's or GO's, grant funding, economic development agreements and other general fund sources. City staff have listed the roadway projects in Table 1 by priority, however the Commission may choose to rank such proposed roadway projects in order of preference.



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UTILITY PROJECTS:

The proposed 2016-2020 CIP for water and wastewater infrastructure is based off the amended Wastewater Master Plan and the Water Master Plan.

Recently, the City entered upon an agreement with Manville W.S.C. that released Manville's obligation to provide service to the old North Travis County MUD No. 5 (NTCMUD#5) and their ability to require impact fees within such NTCMUD#5 geographical boundary. The agreement also requires the City to purchase 685,000 gallons of water per day from Manville at a designated location, for the remainder of the term of the agreement for the District, expiring in September 2036. Also, in order for the City to serve the customers directly within the NTCMUD#5, the City is required to construct a few water utility projects.

Utility projects are typically funded by utility fund revenues, impact fees associated with new development, and bonds. The tables provided below list the water and wastewater utility project needs, purpose, preliminary cost estimates, and proposed dates of design and construction.

WATER: The water utility projects are listed in four categories.

- 1) System Strength and Reliability
- 2) Storage
- 3) Distribution
- 4) Miscellaneous System Improvements

Please refer to the table below for more information. This table lists staff's recommendation for water utility projects for the 5-year CIP and denotes a proposed timeframe for design and construction.

Table 3 – Water Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/ Construct
System Strength and Reliability			
Pfennig Pump Station and Ground Storage Improvements	Add two (2) pumps, increase ground storage and yard piping	\$3,800,000	2013/2015
Pflugerville Parkway Transmission Main	Construct second 16" Main to Pfennig Pump Station	\$878,000	2013/ 2015
Pfennig Lane Transmission Main	Replace 12" Main with 16" Main from Rocky Creek to Railroad	\$215,000	2013/ 2015
Pfennig Lane Transmission Main Connection	Construct a 16" Transmission Main Connection (Rocky Creek to FM685)	\$473,000	2013/2015
	Total	\$5,366,000	
Storage			
Elevated Storage Tank for 950 Pressure Plane	Construct an Elevated Storage to serve customers west of SH 130	\$6,750,000	2014/ 2016
	Total	\$6,750,000	
Distribution			



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Table 3 – Water Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/ Construct
NTCMUD#5 Phase 1	Construct water lines at various locations including Heatherwilde/Wilke Ridge 24" transmission main, New Meister 8" main connection, Pflugerville Parkway 16" transmission main	\$3,130,000	2014/2015
NTCMUD#5 Phase 2	Construct a 16" main on Black Locust, 16" main on Pflugerville Parkway from Wilke Lane to Regis, 12" main along Regis from Pflugerville Parkway to Dansworth	\$2,255,000	2014/2015
Weiss Transmission Main	Construct a Transmission Main from the Water Treatment Plant to the Sorento Development	\$1,712,000	2014/ 2015
SH 45 Interconnect	Bore 900 Linear Feet of 16" Water Line Under SH 45 to provide water service to properties north and east of SH 45 and SH 130	\$848,000	2019/2020
South Weiss Transmission Main	Construct a Transmission Main from the Water Treatment Plant to Wilbarger Creek	\$1,285,000	2015/2016
Total		\$9,230,000	
Miscellaneous System Improve			
Downtown Pressure Zone Re-delineation	Install Pressure Relief Valves (PRVs) and Check Valves for Pressure and Proper Flow	\$225,000	2015
2016 Water Treatment Plant Membrane Replacement	Install one new train at the Water Treatment Plant to increase capacity and provide maintenance to plant's operations	\$950,000	2016
Manville Connection to Water Treatment Plant	Construct a metered take point and 12" pipeline to connect the Manville pipeline at Weiss Lane and Pflugerville Parkway to the Water Treatment Plan	\$650,000	2015
City Well #6	Repair existing well for increase in capacity	\$1,250,000	2015/2016



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Table 3 – Water Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/ Construct
Water Master Plan, Impact Fee, CIP update	Perform Strategic Planning Efforts to Update the Impact Fees and CIP	\$260,000	2018
Pecan Street Parkway Drive Interconnect Bore a 12" interconnection under Pecan Street to interconnect with system acquired from Austin		\$318,000	2018
	Total	\$3,653,000	
	WATER TOTAL 5-YR CIP	\$24,999,000	

WASTEWATER

By completing the expansion of the Central WWTP to 6.9 million gallons per day (MGD) by fiscal year 2019, the construction of another regional wastewater treatment facility to serve the Wilbarger and the Cottonwood watershed basins can now be deferred well beyond the 5-year utility CIP to approximately the year 2034. The final design and construction of another regional wastewater treatment facility up to 25 MGD east of SH 130 and corresponding wastewater interceptor lines may be deferred until such time the City reaches 75% capacity at the Central WWTP. Please refer to the table below for the recommended wastewater utility projects and the proposed years of design and construction.

Table 4 – Wastewater Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/ Construct
Rowe Loop Wastewater Service Extension	Increase service and line capacity along Rowe Loop	*\$850,000	2013/ 2015
Central WWTP Expansion	Increase capacity at the WWTP to 6.9 MGD	*\$8,265,000	2017/ 2019
Sorento/ Carmel Lift Station and Force Main	Construct a Collection/Transmission Line per development agreement	\$5,130,000	2014/ 2015
Sorento Wastewater Interceptor	Install a 36" Collection and Transmission Line	\$4,190,000	2014/2015
Lakeside Wastewater Interceptor Phase 1	Install a 18" Collection and Transmission Line	\$888,000	2016
SH 45/ SH 130 Tunnel	Extend Service Area to the North of SH 45	\$804,000	2016
5-Year Impact Fee and CIP Update	Perform Strategic Planning Efforts to Update the Impact Fees and CIP	\$256,000	2018
New Sweden Package Treatment Plant	Install a 0.475 MGD package treatment plant	\$2,200,000	2017
Carmel Interceptor	Install 18" Collection and Transmission Main	\$2,080,000	2015/2016
West SH 130 Interceptor Phase 1	Install 36" and 42" gravity sewer mains. Funding	\$6,060,000	2015/2016



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	provided by project Sunshine		
West SH130 Interceptor Phase 2	Install a 36" gravity sewer main. Funding provided by project Sunshine	\$1,889,000	2015/2016
New Lift Station at WWTP	Construct a lift station necessary for SH130 Interceptor projects. Funding provided by Project Sunshine.	\$4,000,000	2015/2016
Decommission Pflugerville Parkway Lift station	Removal of existing lift station. Funding provided by Project Sunshine	\$180,000	2015/2016
Wastewater Master Plan Update	Perform Strategic Planning Efforts to update the Wastewater Master Plan	\$230,000	2018
	WASTEWATER TOTAL	\$37,022,000	

^{*}Design funded in fiscal year 2012.

RECLAIMED WATER (RE-USE)

In early 2015, the City completed its Re-Claimed Water Master Plan. This Master Plan illustrates the improvements and phasing necessary to provide reclaimed water for portions of the City. Examples of large users are cooling towers, large scale irrigation and manufacturing. The source of the reclaimed water is the City's wastewater treatment plant. Table 5 below illustrates the initial projects that would be implemented. These projects have been reprioritized as a result of the Project Sunshine development agreement.

Table 5 – RECLAIMED WATER Projects			
Project Name	Project Description	Total Cost Estimate	Design/ Construct
Reclaimed water pumping and storage "Phase 1"	Construct pumps and storage for system. Funding provided by Project Sunshine.	\$1,213,000	2016/ 2017
Reclaimed water transmission "Phase 1"	Construct a 20" re-use main from WWTP to Pecan St. Funding provided by Project Sunshine.	\$2,080,000	2016/ 2017
Reclaimed water transmission "Phase 3"	Construct a 16" re-use main from Pecan St to Pflugerville Parkway. Funding provided by Project Sunshine.	\$1,405,000	2016/ 2017
Reclaimed Water transmission "Phase 4" (partial)	Construct a 12" re-use main along Pflugerville Parkway. Funding provided by Project Sunshine.	\$72,000	2016/2017
	RECLAIMED TOTAL	\$4,770,000	



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UTILITY 5-YR CIP SUMMARY:

The proposed water and wastewater utility projects referenced in the proposed 5-YR CIP total approximately \$67 million dollars. It is important to note that the construction of the utility projects will require additional funding aside from Utility Fund Balance and impact fees. The City will need to issue CO bonds for the construction of these projects.

STAFF RECOMMENDATION:

Staff recommends a FY16 general roadway bond election based on a selection of the roadways listed in Table 1. The bond selection committee and planning and zoning may evaluate the roadway needs differently as illustrated in Tables 1 and 2. Staff also recommends concurrence with the water, wastewater and reclaimed water CIPs.

Please note, these recommendations are based on evaluated needs and do not reflect a fiscally constrained Capital Improvement Plan; rather they fulfill the requirement that the Commission provide a project list in order of preference with a recommendation for year of construction.

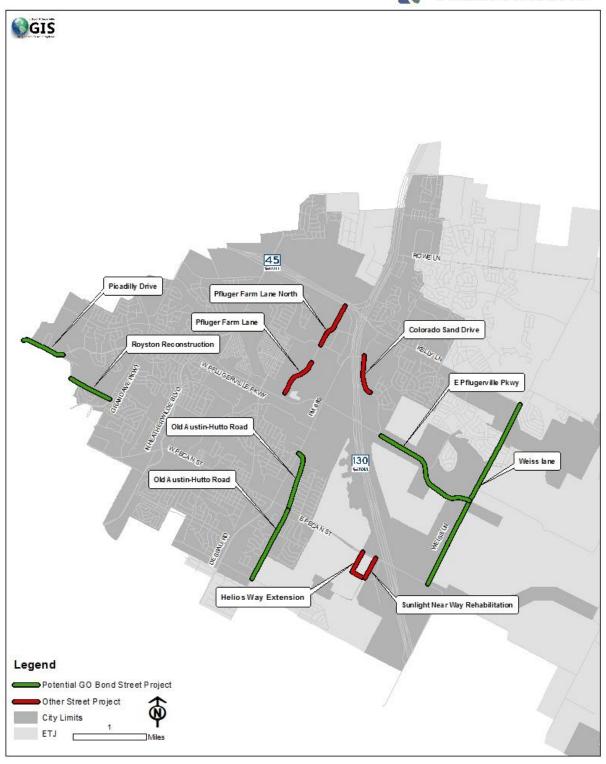
ATTACHMENTS:

- Project Locator Map For Roadway Projects
- (Additional graphics will be provided in the presentation)



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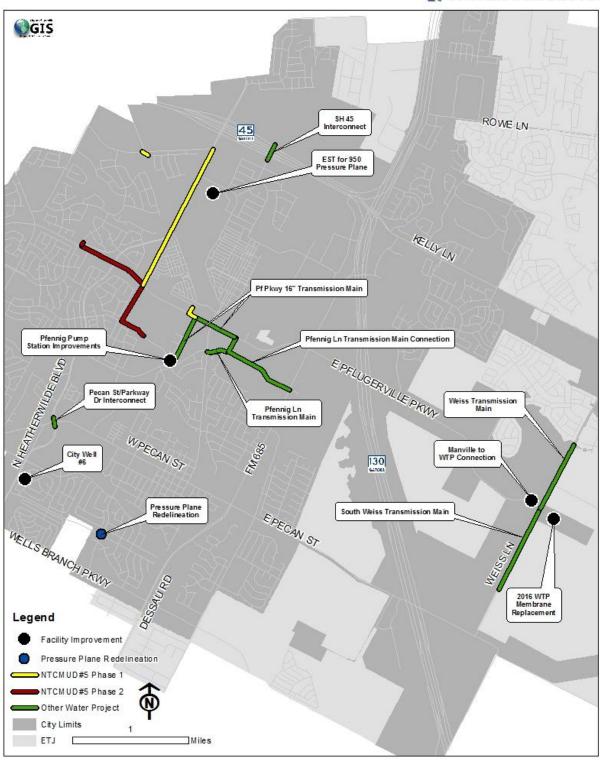






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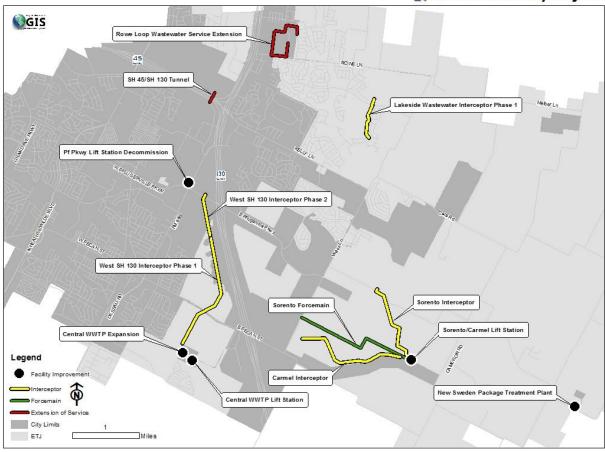
WATER PROJECTS





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Wastewater Utility Projects





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RECLAIMED WATER PROJECTS

