

Capital Improvement Program Projects

City Council approved the fiscal year 2022 Capital Improvement Program projects as part of the City's annual budget adoption on September 20, 2021. The fiscal year 2022 capital improvement projects have been designed to meet today's infrastructure needs as well as those of the future. This quarterly report contains updates for the timeframe of October 2021 to December 2021. While the Capital Improvement Plan included in the fiscal year 2022 budget includes Vehicle, Equipment, and Technology Fund appropriations, this report focusses on traditional capital projects appropriated in the Capital Improvement Fund, Capital Bond Fund, Capital Grant Fund, and METRO Fund. Information pertaining to the Vehicle, Equipment, and Technology Fund is not included in this report. We have included project numbers to aid in cross-referencing to the fiscal year 2022 budget; however, projects initiated prior to fiscal year 2021 do not have project numbers.

Bonds for Better Bellaire 2016 Program

Water and Wastewater Group A Phase 2

Services are underway with the following companies:

Service	Companies Performing Work
Design Engineering and Construction Administration	ARKK Engineers
Third Party Review and Construction Management	KIT Professionals
Construction Contractor	A-Status

This project is substantially complete. Presently, City staff and the City Attorney are working with the contractor and their bonding company to develop and agreement to finalize the projects and complete the remaining work items. We hope to request City Council approval of this agreement at the February 21, 2022, Council Meeting with discussion occurring in a closed executive session.

WA2206 - Water and Wastewater Group A Phase 3

Services are underway with the following companies:

Service	Companies Performing Work
Design Engineering and Construction Administration	ARKK Engineers
Third Party Review and Construction Management	KIT Professionals
Construction Contractor	Not yet awarded by Council

Due to exceptional bid prices received from the first two phases of the water and wastewater projects in 2018, the number of linear feet of waterline improvements for this project doubled. The scope of this project includes replacing approximately 34,000 linear feet of existing water distribution lines and a limited number of fire hydrants and valves, plus all labor, equipment, materials, and incidentals. Trenchless construction techniques will be used to minimize the intrusiveness of the project and an urban forester will be retained to consult during the design and construction. ARKK Engineers has completed the 100% design and is incorporating final comments from city staff. The neighborhood meeting was held on October 30, 2019, and a second meeting was held on December 11, 2019, at the Civic Center. Due to the number of street blocks included with this project, the work will be divided into two (2) construction packages. Incorporation of the remaining uncompleted blocks from the Group A Phase 2 project into this project is currently underway. We believe this will keep the number

of construction sites manageable and the work on a reasonable schedule for completion. The design contract includes waterline improvements on the following blocks:

- 5300-5400 blocks of Bellaire Boulevard
- 6500-6700 blocks of South Rice Avenue
- 4700-5000 blocks of Evergreen Street
- 7200-7400 blocks of South Rice Avenue
- First Street, Elm Street to Bissonnet Street
- 7500-7800 blocks of South Rice Avenue
- 800 block of Holton Street
- 5100-5300 blocks of Valerie Street
- 4600 block of Maple Street
- 4600 block of Locust Street
- 4700-5000 blocks of Maple Street
- ~~5100 block of Pocahontas Street~~
- 4600 block of Mimosa Street
- 5200 block of Patrick Henry Street
- ~~4700-5000 blocks of Braeburn Drive~~
- 8300 block of Baldwin Avenue
- ~~100 block of Allendale Street~~
- 100 block of Phanturn Lane
- ~~100 block of Berkshire Street~~
- ~~4700-5000 blocks of Pine Street~~
- ~~100 block of Cherrywood Street~~
- ~~900 block of Lennette Court~~
- ~~100 block of Datonia Street~~
- ~~4700-4800 blocks of Bellview Drive~~
- ~~100 block of Ferndale Street~~
- ~~4700-4800 blocks of Welford Drive~~
- ~~1000 block of Pauline Avenue~~
- ~~8100-8200 blocks of Englewood Street~~
- 100 block of Pembroke Court
- 4700-4800 blocks of Holt Street
- ~~7500-7700 blocks of Second Street~~
- ~~4700 block of Cedar Street~~
- 5700-5800 blocks of West Loop South
- Linden Alleyway

The Group A Phase 3 project has been bid and is reflective of the modified street list above. The streets with the strike through designation will be addressed in a future phase. The project budget is \$3.5 million. The low bidder is at \$3.9 million. Staff is researching to determine the best course of action moving forward. Staff is currently exploring three (3) options: 1) a recommendation to formally reject the bid and wait until the pricing associated with PVC pipe normalizes, 2) Remove several streets from the project to get it within budget, 3) include additional funding with the project and award it as is. Staff hopes to have this recommendation ready for Council consideration at a March 2022 City Council meeting.

Streets and Drainage Group C Phase 2

Services are underway with the following companies:

Service	Companies Performing Work
Design Engineering and Construction Administration	Costello
Third Party Review and Construction Management	ARKK Engineers
Environmental Clearance Documentation Preparation & Submission	Not applicable
Construction Contractor	A-Status

This project includes the reconstruction of portions of North 5th and Spruce Streets as well as portions of Maple Street and Bolivar. The work is substantially complete. Presently, City staff and the City Attorney are working with the contractor and their bonding company to develop and agreement to finalize the projects and complete the remaining work items. We hope to request City Council approval of this agreement at the February 21, 2022, Council Meeting with discussion occurring in a closed executive session.

ST2203 - Streets and Drainage Group C Phase 3

Services are underway with the following companies:

Service	Companies Performing Work
Design Engineering and Construction Administration	Kelly R. Kaluza & Associates
Third Party Review and Construction Management	ARKK Engineers
Environmental Clearance Documentation Preparation & Submission	Weston Solutions
Construction Contractor	Not yet awarded by Council

The design for this project is 100% complete. Since this project received grant funding through the Community Development Block Grant 2015 program (CDBG-DR 2015) and Community Development Block Grant 2017 Program (CDBG-DR2017), environmental clearance for this project is required. Weston Solutions has been engaged to prepare and submit the necessary environmental clearance documentation. Coordination with GLO and Harris County has been ongoing. This project will be split and bid as two projects due to the two grants being designated for specific streets. The Cynthia Street (CDBG-DR 2015) project was opened on August 11, 2021, and contract approval by City Council occurred on September 27, 2021, with a pre-construction meeting held on October 26, 2021. The remaining four streets (CDBG-DR 2017) received environmental clearance and have been bid. The project scope includes street replacement, storm sewer upgrade and repairs to existing sidewalk. All drainage for this project is designed to a 100-year storm event. The following blocks are included in the project:

CDBG-DR 2015

- 4300 block of Cynthia Street

CDBG-DR2017

- 4500 block of Larch Lane
- 4600 block of Cedar Street
- 500 block of Chelsea Street
- 4600 block of Mimosa Drive

On December 8, 2021, six (6) bids were received for the project. TB Concrete Construction, Inc. was the apparent low bidder. Their references have been verified and a letter of recommendation provided by the

Engineer of Record, Kelly R. Kaluza & Associates. Staff will request City Council action on this project at the February 21, 2022, City Council meeting.

TR2204 - Traffic Signalization and Mobility Improvements

This project is awaiting final funding approval with the FHWA.

Service	Companies Performing Work
Design Engineering and Construction Administration	TBD
Third Party Review and Construction Management	TBD
Environmental Clearance Documentation Preparation & Submission	TBD
Construction Contractor	TBD

Bellaire was awarded this HGAC sponsored grant in 2018. The purpose of the grant funding is to upgrade the technology of the 14 traffic signals within the Bellaire City Limits. We are hopeful that the FHWA approval which was delayed in 2021 will hopefully be received in 2022 so that we can begin the design of the improvements.

WA2202 - Fire Hydrant Rehabilitation and Replacement & WA2203 - Water Distribution System Valve Improvements

Service	Companies Performing Work
Design Engineering and Construction Administration	TBD
Third Party Review and Construction Management	TBD
Environmental Clearance Documentation Preparation & Submission	TBD
Construction Contractor	TBD

The intent of this project is to upgrade through replacement poor or non-performing hydrants and valves throughout the community. Presently staff is researching a few ways of procuring these services. One of these options could be procured through a cooperative purchasing agreement and entails working with a specialist contractor to test and identify issues throughout the entire hydrant and valve system. We hope to decide in the coming months for consideration by Council.

WA2204 - Update to 2015 Infrastructure Study

Service	Companies Performing Work
Design Engineering and Construction Administration	TBD
Third Party Review and Construction Management	TBD
Environmental Clearance Documentation Preparation & Submission	TBD
Construction Contractor	TBD

The intent of this project is to update a study conducted by ARKK Engineers in 2015. The 2015 Study recommended replacement of aging cast iron waterlines throughout the community as well as the replacement of the remaining older and failing wastewater infrastructure. The purpose of the update is to re-assess the system to determine what the next rounds of water and wastewater line replacement and upgrade should be. A key component of this will be to look at past practices relative to construction technique to determine if techniques like pipe bursting or CIPP are a good fit here in Bellaire.

WA2205 - Priority Water Line Improvements

Service	Companies Performing Work
Design Engineering and Construction Administration	TBD
Third Party Review and Construction Management	TBD
Environmental Clearance Documentation Preparation & Submission	TBD
Construction Contractor	TBD

This project identified 4 water lines not included in the BBB16 program listed earlier in the document. Staff has an extensive history of repairs to these lines and recommends their replacement prior to the next large waterline project to minimize the risk of a large blow out.

WW2202 - Wastewater Collection System Improvements

Service	Companies Performing Work
Design Engineering and Construction Administration	TBD
Third Party Review and Construction Management	TBD
Environmental Clearance Documentation Preparation & Submission	TBD
Construction Contractor	TBD

This project is for the rehabilitation of a variety of items associated with the wastewater collection and wastewater treatment systems. IT is likely that the program will include manhole rehabilitation as well as a handful of items at the Wastewater Treatment plant like the bar screen filters and the roof of the bar screen facility.

Cash Funded Projects

PA 2201 - Park Amenities Management Program - Bellaire Family Aquatics Center

City Council allocated \$150,000 in the fiscal year 2022 budget for improvements to the Bellaire Family Aquatic Center. The project will include developing a storage area, additional decking, a large shade umbrella, and the expansion of green space for patrons to enjoy. The project is being managed internally by staff. The estimated cost of the project is \$120,600. Staff's goal is to complete the project before the pool opens to the public in May 2022.

PA 2102 - Mulberry Park Public Restrooms

City Council allocated \$150,000 in the fiscal year 2022 budget to install public restrooms in Mulberry Park. The project will include two single toilet restrooms, landscaping, an accessible walkway, plumbing, and electrical. The project will be managed internally by staff. The estimated cost of the project is \$148,700. Staff's goal is to have the restroom completed and operable in June 2022.

Renwick Well Improvement Project

H2OMC, LLC is providing project management for this project. The existing pumps and motors are past their useful life expectancy and have been rebuilt or repaired multiple times over the years. More energy efficient models are available. H2OMC, LLC finalized the bid specifications. The City held a bid opening on December 9, 2020. On January 4, 2021, City Council awarded a contract to Tidal Construction Inc. The contractor has completed approximately 80% of the installation. Project completion was anticipated for winter 2021. However, due to supplier issues relative to the pumps, the project will likely not be complete until the spring 2022.

City-Wide Supervisory Control and Data Acquisition (SCADA) Systems Upgrade Project Phase 2 and 3

Once all phases of SCADA are complete, Public Works staff will be able to operate all water and wastewater facilities remotely from the wastewater treatment plant through the SCADA software system. Without a SCADA system, staff would have to make manual changes at the various water and wastewater locations city-wide. SCADA Phase 1 set up communications from the wastewater treatment plant to all water plant wells; SCADA Phase 2 set up communications from the wastewater treatment plant to the lift stations; and SCADA Phase 3 will bring the wastewater treatment plant on the SCADA system.

The Phase 3 SCADA specifications were finalized, and the bid package developed. The project was bid in February 2020. However, only one (1) qualified bid was received with a higher-than-expected cost. Staff is working towards rebidding this project.

Public Works staff is working with the IT department to develop non-disclosure agreements for potential partners to evaluate the next steps in the completion of this project. One of the key aspects is system security. The TCEQ is working to finalize a functional requirements statement relative to system security that will provide guidance on their new requirements. This project will likely exceed those standards.

WA2102 - Central Well Pumps

The project will replace all three (3) booster pumps and motors which are past their life expectancy. H2OMC, LLC finalized the bid package. The City held a bid opening on December 9, 2020. This project was approved by City Council on January 4, 2021, and a contract was awarded to Tidal Construction Inc. The contractor has completed approximately 40% of the installation. Project completion was anticipated in winter 2021. However, due to supplier issues relative to the pumps, the project will likely not be complete until the spring of 2022.

North-South Drainage Study - Master Drainage Conceptual Plan (MDCP) & DR2202 - MDCP Regional Participation

The fiscal year 2020 budget included appropriations of \$702,000 for the completion of a MDCP (referred to at the time as a North-South Drainage Study). The MDCP is regional drainage study for the City and surrounding areas which is being conducted with partners Harris County Flood Control District (HCFCD) and the Texas Department of Transportation (TxDOT). The total cost of the MDCP is \$702,000, and upon completion HCFCD will reimburse the City for \$351,000 of the cost (50%), and TxDOT will reimburse the City for \$129,250 of the cost (18%), resulting in a net cost to the City of \$221,750 (32%) for its contribution.

The consultant team consists of ARKK Engineers, LLC, Costello, Inc., and Freese & Nichols, Inc. The professional services contract with the consultant team was awarded at the November 18, 2019, City Council meeting. The first draft of the MDCP was completed and copies sent to Bellaire, HCFCD, TxDOT, and the City of Houston for review in early August 2021. Findings of the reports were presented to the Flood Hazard Mitigation Task Force on September 28, 2021, and to City Council on October 4, 2021.

The engineering components of the MDCP were completed in 2021 and the work is presently being presented to and evaluated by TxDOT, the City of Houston, and HCFCD. The next steps are to incorporate comments from these entities into the final document and begin the project development phases. This effort entails breaking down the drainage system improvements into manageable sizes and identifying funding for design and construction. It is anticipated that the TxDOT, the City of Houston, and HCFCD evaluation processes will be complete in March of this year. We are hopeful that funding programmed for the Cypress Ditch in the Harris County bond program will be incorporated as a major source of funding for the first phase of construction which will likely entail an expansion of the Cypress Ditch. Improvements to the Cypress Ditch will have a significant and positive impact on the performance of the drainage systems within the community.

The fiscal year 2022 budget included appropriations of \$16,000,000 for DR2202 – MDCP Regional Drainage Project, to be funded by bonds (\$6,000,000), grants (\$2,500,000), and interlocal participation from regional partners (\$7,500,000). This is intended to allow the City to participate in any Phase 1 regional drainage/flood mitigation projects that may develop from the MDCP findings or to participate in any City of Houston, HCFCD, and/or TxDOT drainage/flood mitigation projects. The \$6,000,000 of City bond funding would come from issuing of the remaining \$6,000,000 of authorized but unissued Bonds for Better Bellaire 2016 bond authority; however, this bond issuance is unlikely to happen during fiscal year 2022.

City of Bellaire Grant Application Update

The City receives grant funds from federal and state agency programs for capital improvements. The Development Services and Public Works Departments manage, monitors, and are working to establish a grants management processes by working with City departments to ensure the City is utilizing available funding and meeting compliance and reporting requirements.

Active Awards: The City currently has three awards administered through two different federal agencies.

- **Federal Agency:** Housing and Urban Development (HUD)
- **Programs:** Community Development Block Grants- Disaster Recovery (CDBG-DR) (2015 & 2017)
- **Description:** CDBG-DR grants provide funds for a broad range of recovery activities following major disasters including infrastructure projects to help rebuild damaged areas. These funds are distributed through the Texas General Land Office (GLO) as a part of the State’s “Action Plan.” The City aligned existing street and drainage projects identified in the Capital Improvement Plan (CIP) with this funding source after disaster declarations associated with the 2015 Memorial Day Flood and 2017 Hurricane Harvey.
- **Projects:** Street and drainage improvements for: 4500 block of Cynthia Street, 500 block of Chelsea Street, 4500 block of Mimosa Street, 4600 block of Cedar Street, 4500 block of Larch Lane
- **Next Steps:** Construction of new street infrastructure which is partially under way. Cinthia Street was awarded by Council in FY21 and the construction is ongoing. The remaining streets will be awarded by Council in Q2 2022.

- **Federal Agency:** Federal Emergency Management Agency (FEMA)
- **Program:** Hazard Mitigation Grant Program (HMGP) (Texas Hurricane Harvey)
- **Description:** HMGP grants provide funding to help communities implement hazard mitigation measures following a Presidential Major Disaster Declaration. These funds are distributed through the Texas Department of Emergency Management (TDEM). The City identified improvement projects that aligned with the HMGP requirements.
- **Projects:** Mitigation projects
 - Feld Park Emergency Diesel Generator
 - ~~Flap Gates Floodproofing Phase 1 Study~~ *Withdrew as of May 2021*
- **Next Steps:** Staff will continue with the required reporting activity for the remaining generator project

Table 1: City of Bellaire Capital Projects that have been awarded Grant Funding.

Table 1: City of Bellaire Grant Awards

#	Project	Grant (\$)	Local (\$)	Total (\$)	Grant Program	Agency Federal \ State \ Local
1	4500 Cynthia Street	\$252,033	\$378,250	\$630,283	CDBG-DR (2015)	HUD\GLO
2	500 Chelsea Street, 4500 Mimosa Street, 4600 Cedar Street, 4500 Larch Lane	\$4,095,702	\$632,848	\$4,728,550	CDBG-DR (2017)	HUD\GLO\Harris County
3	Feld Park Emergency Diesel Generator	\$180,218	\$60,073	\$240,290	Hurricane Harvey	FEMA\TDEM
Total		\$4,527,953	\$1,071,171	\$5,599,123		

Pending Applications: The City currently has one pending application.

- **Federal Agency:** Federal Highway Administration (FHWA)
- **Program:** Congestion Mitigation and Air Quality Improvement (CMAQ) Program
- **Description:** CMAQ provides funds for surface transportation improvements designed to improve air quality and mitigate congestion. The City’s Traffic Management System project was approved for funding as part of the H-GAC 2021-2024 Transportation Improvement Program (TIP) for funding in 2022.
- **Projects:** Traffic Management System
- **Next Steps:**
 - Response anticipated from FHWA
 - Upon approval, TxDOT will initiate a contract with the City
 - Project delayed until fiscal year 2023 per TxDOT due to backlog associated with COVID

- **Federal Agency:** Federal Emergency Management Agency
- **Program:** Flood Mitigation Assistance (FMA)
- **Description:** The FMA Program is a competitive grant program that provides funding for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. The City coordinated with residents interested in elevating their homes and applied to the Texas Water Development Board (TWDB) in December 2021. Grant award requires a 25% local match, which respective residents are responsible for.
- **Projects:** 12 different homes across the city.
- **Next Steps:** The City did not receive a grant award for this program

Table 2: City of Bellaire Pending Grant Applications (June 2021) identifies City projects that are currently being considered for grant funding.

Table 2: City of Bellaire Pending Grant Applications (February 2022)

#	Project	Grant (\$)	Local (\$)	Total (\$)	Grant Program	Agency Federal \ State \ Local
1	Traffic Management System	\$693,394	\$173,349	\$866,743	CMAQ	FEMA\TXDOT\HGAC
2	Wastewater Treatment Facility (Denied See Below)	\$64,674,232	\$646,743	\$65,320,975	CDBG-MIT	HUD\GLO
3	Home Elevations (Denied)	\$808,863	\$269,621*	\$1,078,484	FMA	FEMA\TWDB
Total		\$66,176,489	\$1,089,713	\$67,266,202		

**Residents required to provide 25% local match if awarded.*

Grant Opportunities:

- **Federal Agency:** Housing and Urban Development (HUD)
- **Program:** Houston-Galveston Area Council (H-GAC) Method of Distribution (MOD) Community Development Block Grants- Mitigation (CDBG-MIT)
- **Description:** H-GAC is developing a MOD to allocate approximately \$209 million of CDBG-MIT funds from HUD to counties and cities in the H-GAC region. These funds can be used for a variety of eligible project types to mitigate against risks posed by flooding, hurricanes, and other natural disasters. A preliminary summary by jurisdiction estimated the City’s allocation to be approximately \$1.1 million. The method of distribution and allocation may change depending on coordination with the GLO.
- **Projects:** To be determined
- **Next Steps:**
 - GLO to provide guidance to H-GAC
 - Upon finalization of method of distribution and allocation, the City will identify potential projects and apply for allocated funds

- **Federal Agency:** U.S. Department of Treasury
- **Program:** American Rescue Plan Act (ARPA) – Coronavirus State and Local Fiscal Recovery Funds
- **Description:** President Biden signed into law the American Rescue Plan Act of 2021 on March 11, 2021, approving program funding for communities in need of short and long-term economic recovery. Eligible projects include investments in water, sewer, broadband, COVID-19 emergency response, essential employee pay, or projects associated lost revenue during the pandemic. The City is estimated to receive approximately \$4.7 million.
- **Projects:** To be determined
- **Next Steps:**
 - April 2022: Reporting to the United States Treasury begins
 - December 31, 2024: Deadline to obligate (encumber) funds
 - December 31, 2026: Deadline to expend funds

In summary, there is quite a bit of activity on the “grants front” to align the needs of the community with available funding to deliver improvements to Bellaire residents and businesses.