South Howard Flood Relief Project
Frequently Asked Questions

Revised November 20, 2024

What is the South Howard Flood Relief Project? Why is it necessary?
The South Howard Flood Relief Project involves designing and building a major stormwater conveyance system to improve drainage and reduce flooding along South Howard Avenue and adjacent neighborhoods, including Parkland Estates and Palma Ceia Pines. The project originated in 2015 after a rain event flooded several homes in Parkland Estates. An initial evaluation concluded that the existing stormwater system is undersized, and a new conveyance system is needed to divert heavy rainfall. In addition to reducing flooding, the project includes upgraded water, wastewater and stormwater infrastructure; undergrounding of TECO power lines on South Howard; and repaving roadways near the project area before construction begins.

What is a design-build project? Has any engineering been done on the route?
This project is a progressive design-build project, where one team is hired to do the engineering design work and the construction work under one contract. (Typical projects are partially designed, then put out to bid for construction under separate contracts.) The design-build model is a much more collaborative process between the owner, engineering consultant, and contractor that is ideal for complex projects because they work together as a team from the beginning of the design through to construction. This helps avoid adversarial relationships between engineer and contractor that are common when under separate contracts. Any changes or issues throughout the project are addressed as a team, which minimizes delays and cost overruns.

Preliminary route analysis was done during the planning phase of this project, but more specific and technical details will be engineered once the design-build team is under contract and can begin their design work. The City selected the Kimmins Contracting Corp. team as the most qualified. The City and Kimmins are currently negotiating the scope and fee of the design phase, which should go before City Council in late spring or early summer. Kimmins has selected AtkinsRéalis to do the engineering design work, which will include looking at route options off South Howard. Once the design is complete, Kimmins will submit to the City a Guaranteed Maximum Price to build the project.

Why wasn't the project competitively bid? Has there been transparency in the bidding process?
The City is striving to be fully transparent on all aspects of the project, including the competitive procurement for a Design-Build Team. The City advertised the Request for Qualifications (RFQ) on Oct. 1, 2023, and received three RFQ submissions on Nov. 2, 2023. These submissions were reviewed by City staff, and the most qualified team, led by Kimmins, was selected as the Design-Build (DB) Team for this project because they have successfully completed similar, large-

scale stormwater projects for the City and have a history of being very attentive to the concerns of the affected stakeholders.

The RFQ process is a competitive procurement process that follows state law. There is no competitive bidding in a Request for Qualifications process. The goal is not to select a low bidder, but rather to select the most qualified team to work collaboratively for this specialized work.

When will the project begin? What's the timeline?
The City has done some preliminary analysis, design and public outreach. The preliminary engineering, watershed modeling update, and alternatives analysis work will begin upon City Council approval and execution of the Kimmins agreement. Kimmins expects the preliminary engineering and design phases to last about 15 months, and construction will take about 3 years. Early works, such as utility relocation, water line upgrades, and milling and resurfacing of peripheral roads could begin early while design is ongoing.

What is the route? How was it selected? Has the route analysis been shared? Could the route change?
The preliminary planning report for this project, conducted by JMT, analyzed potential stormwater routes from Parkland Estates to the Bay. This report, available online, also looked at stormwater vaults and a pump station in Fountain Park. The report concluded that a stormwater conveyance system was needed. The South Howard portion of the route was selected when the City identified that two large box culverts had already been installed under the Selmon Expressway and under Bayshore Boulevard. The existence of that infrastructure makes the South Howard portion of the route ideal, as it eliminates the need for two costly and impactful installations and establishes a spine for future flood relief project in the surrounding neighborhoods along the route.

Residents have expressed concerns for how the route will connect South Howard to Parkland Estates, so the City has included analysis of the alternative route segments off Howard (Bristol, Morrison and Swann) as an initial task in the Kimmins Scope of Services. This work will be performed early in the design phase. The analysis will be shared with stakeholders once complete and will be formally presented in the initial community meeting during the design phase. The route starts on Bayshore Boulevard at South Howard Avenue and goes north. At some point, the route must turn west off South Howard and into Parkland Estates. Kimmins will work with AtkinsRéalis during the design phase to evaluate three alternative route segments from South Howard (Morrison, Bristol and Swann)

How will you determine which alternative route segment is best? How will they be scored?
Kimmins will work with its design engineer, AtkinsRéalis, to evaluate and score all route segments during the design phase. The project team has not yet developed scoring criteria, but resident feedback received to date will help shape the scoring criteria. The criteria will be as objective as possible, based on technical engineering criteria and other considerations. Trees, cost and traffic will be part of the scoring process.

Are the two existing culverts too old? Is there new technology that could be better suited for this area?

The existing segments under Bayshore and the Expressway are concrete box culverts, which the industry continues to use today. Box culverts were historically cast-in-place concrete structures. While this approach is still in use today, most projects are built with pre-cast segments, much like concrete pipe, which makes for a more efficient installation, requiring less time for construction. The pre-cast segment approach is planned for this project. The City of Tampa has active stormwater box culverts that are 100+ years old and kept in good condition with basic maintenance and rehabilitation effort. The DB Team will evaluate the existing culverts and determine if any rehabilitation will be required once construction begins.

Are you widening Bristol? Is there a plan to get rid of the median on Bristol? Will the culvert go where the median is currently located on Bristol?

The City has no plans to remove the median or widen Bristol. Should the box culvert be installed down Bristol and the median disturbed, the contractor will restore Bristol's median and the two traffic lanes. If the Bristol median is disturbed, the DB Team will work with Bristol residents on a plan to re-landscape the median including tree replacement. (Due to further evaluation of the anticipated depth of the box culvert in this area, replacement of trees in the Bristol median would be included in the plan.)

Will the project affect trees along the route, either in medians or in the right of way?

Trees along the pipeline route could be impacted to some degree. That could mean trimming the tree canopy to allow access for large equipment, root pruning to clear a path for new infrastructure, or removing some trees. The project team will know more about which trees may be affected and how the area could be restored at the 30 percent design stage. Protecting trees is a high priority. The project team's arborist will oversee any tree trimming or root pruning that needs to be done. In areas where trees are removed, replanting of trees will occur wherever opportunities for tree replacement are identified.

Has a tree assessment been conducted?

A formal tree assessment will be conducted during the design phase. Kimmins will have an arborist do a full review of trees along each proposed route segment alternative. They will look at all tree classifications, tree health and potential construction impacts to trees on each alternative segment to be studied. That report will be made available to the public.

How will the project be built?

The project will primarily be built by open cut, which means heavy machinery will dig trenches, lower infrastructure into the trench, backfill and compact the trench, then cover it with road base before re-paving. Because box culverts are so large (10 feet wide by 5 feet tall), Kimmins will first relocate existing utilities, like water lines and wastewater lines, to open a corridor in which the box culvert will be placed. Some utility relocation work will be done by horizontal direction drill, a trenchless construction technique that minimizes surface disruption.

Will Bayshore be closed at South Howard?
The two northwest bound lanes of Bayshore will be closed for 8-10 weeks. During that time, the two southeast bound lanes will be converted to one lane of traffic in either direction.

Will the box culvert installation require a full road closure for 5-7 weeks?
The City has developed a preliminary phasing plan that breaks up construction into sections. Kimmins will be required to open one section or segment before starting work on another. During box culvert installation, the contractor estimates that work will take 5-7 weeks per 500-800 linear feet, barring unforeseen conditions. The phasing plan is preliminary and subject to updates and improvements. At any given time only one portion of the route will be closed.

How long will you be working in front of my house/business?
It's difficult to give an exact duration as the project is not yet designed. However, the contractor estimates that an individual driveway could be inaccessible for 5-7 weeks, unless there is inclement weather or some other unforeseen circumstance. The contractor will provide alternate means of accessing homes and businesses, including temporary driveways, temporary off-site parking with golf cart shuttle, temporary walkways, etc.

Will you be able to keep one lane open?
Kimmins will try to keep one lane open during utility relocation work, but during box culvert installation, that will not be feasible due to the size of the structures and the space required side to side and in front and back of the active construction zone.

Will residents be displaced during construction? Will the contractor put residents in hotels?
No one will be displaced during construction, and the project team does not anticipate any long-term interruptions to residential utilities. The contractor's excavation and installation are about a 500-800-foot-long process. When the contractor blocks a driveway, resident access will be maintained in one of two ways: 1) by installing a temporary road to get a resident to their driveway or 2) by having the resident park in temporary parking, identified by the contractor, that is staffed 24/7 by a security company with a golf cart to take residents to and from their homes.

The contractor will put residents in hotels in the extraordinary circumstance of night work. If night work is required, the contractor will offer hotel accommodation to those homes that are immediately adjacent to the work zone.

Will homes and businesses be damaged by vibration?
The City has recently completed several projects of this magnitude and in close proximity to nearby structures without damage to adjacent buildings and homes. This is accomplished by careful vibration monitoring techniques using sensors at key locations along the route and adjusting construction techniques as necessary to keep the vibration levels to acceptable levels. This project will employ the same vibration monitoring program in a concerted effort to achieve the same damage-free results.

Additionally, the contractor will document existing conditions by videotaping and photographing all structures, walkways, driveways, etc. to remain along the project limits to ensure the "after" condition matches the "before."

Will you be adding dedicated bicycle lanes to South Howard?
No, there is not enough room to add dedicated bike lanes along Howard Avenue. The City understands that the community would like to improve pedestrian and bicycle safety along South Howard and will take those concerns into consideration. The South Howard Streetscape will focus on wider sidewalks, removing utility poles, on-street parking and traffic calming measures. As part of early works, we will work to connect the different parks with walkways. We can also explore lane markings or green colored pavement to improve awareness of bicycles in the area.

When will you have public meetings?
Robust public engagement will begin once the Kimmins team is under contract and can dedicate resources to listening to the community and understanding and addressing the input received. Kimmins community outreach subconsultant is Valerin Group. Valerin will be scheduling one-on-one meetings, small group briefings and community meetings to ensure residents and businesses are engaged in the project from the beginning. The City's initial community outreach over the past few months has been aimed at introducing the project and project team to community members and gathering early information for the Kimmins team. All input received will be provided to the Kimmins team.

Large-scale projects like the one in Seminole Heights were very disruptive to residents and businesses. How do we know this project won't be the same?
The City has learned from the experience on Southeast Seminole Heights project and has taken measures with this project to avoid those issues. The City has developed a design criteria package that specifies measures the contractor must take, including a communications plan, phasing plans, restoring as construction moves and more. The South Howard project won't be without impact, but the City has taken measures to improve transparency and minimize impacts.

How much will the project cost? How much money is available for neighborhood mitigation?
The total project budget is estimated based on preliminary engineering and design; the project budget has not yet been allocated as the City is still negotiating the scope and fee for the design phase. The selected alternative route segment, market conditions and cost of materials, labor and other factors will affect the total construction cost. The current budget is $64.5 million, which includes $39 million from stormwater assessments, $11 million from the Tampa Hillsborough Expressway Authority to address its stormwater needs, $4.5 million in water department upgrades and $10 million in FDEP grant funds from Resilient Florida.

How long will the new stormwater conveyance system last?
Current design standards can produce precast reinforced concrete box culverts with 75-to-100-year lifespans. The City of Tampa has active stormwater box culverts that are 100+ years old and kept in good condition with basic maintenance.

Have you looked at other options for handling the stormwater, like stormwater ponds or cleaning out the existing system?

The City modeled the existing stormwater system within the watershed, and it was determined to be significantly undersized for typical Florida storm events, lacking the capacity for heavy rainfall even when clear of debris. It has been determined that the system primarily relies on a large diameter culvert system with a 48" pipe being the smallest pipe near the southern boundary of the flooding area. The system needs approximately 5 times the capacity of that 48" pipe, equivalent to a 5'x10' box culvert, to prevent flooding.

Stormwater system improvements to alleviate flooding are generally limited to establishing new, larger stormwater pipes/culvert outfalls, creating new stormwater ponds sized to temporarily store storm runoff until the existing system has time to drain the runoff or installing a pump station and force main pipe to collect and pump the runoff to the bay outfall.

Culverts are the most reliable and resilient option since they operate on their own and annual maintenance is minimal.

Ponds work well too but require a large land area to provide sufficient capacity. For this project, we have estimated that an approximate 25-acre pond is necessary to prevent structural flooding. Pump stations are a last resort for stormwater because of the operational complexities, critical reliance on power to adequately perform and cost.

Pump stations are considered the least resilient option to rely upon for flood prevention. And they, too, require installation of a large pipe from the flood location to the bay outfall.

Is the project schedule realistic? Is the phasing plan schedule realistic?
A preliminary schedule and phasing plan have been developed based on duration timeframes from other recently completed projects with similar scope and scale. As the project design develops, the DB Team will continue to review the project phasing and look for ways to improve construction sequencing to minimize access issues and reduce the overall construction duration. The phasing of the project will not be changed unless the DB Team is able to document that changes will provide such improvements. This is a key requirement identified in the Design Criteria Package. Also, please note that existing conditions and utilities may impact the preliminary schedule.

Where can I find more information?
More information is available at https://www.tampa.gov/project/sw40007. You can also email the project team at SouthHowardFloodRelief@gmail.com or call (813) 486-0361.