

FLOOD MITIGATION UPDATE
February 4, 2022

It has been a while since the Board of Directors of Harris County WCID No. 110 (the “Water District”) has provided you an update on flood mitigation. The Water District has good news to report.

The Water District is working on a comprehensive drainage plan (“Drainage Plan”) which provides for cooperating with our commercial customers to clean out their drainage channels behind their commercial developments. While the commercial customer is responsible for the cost to maintain and clean out their drainage channels, the Water District is agreeable to assisting the commercial customers with their drainage channel cleaning, if requested by the commercial customer. Any cost incurred by the Water District to assist a commercial customer must be paid by the commercial customer and will be added to the commercial customer’s water bill. Cleaning out these drainage channels will facilitate drainage in the area around the commercial properties and surrounding areas. The Drainage Plan covers over forty (40) drainage channels. It will take a year to get the drainage channels cleaned, but thereafter there will annual inspections and cleanings that will ensure the drainage channels are maintained.

As many of you will recall, on July 16, 2020, the Board of Directors of the Water District hosted a virtual townhall meeting to discuss flood mitigation with United States Representative Dan Crenshaw, State Representative Valoree Swanson, Elie Alkhoury with the Texas Department of Transportation (TxDOT”) representatives of Harris County Precinct 4, and Matt Zeve Harris County Flood Control District. The discussion at the townhall meeting focused on partnering with Harris County Flood Control to undertake projects that would mitigate some of the flooding in the Water District. The Water District is pleased to announce that one of the projects discussed at the July 16, 2020, townhall meeting is coming to fruition. The Water District awarded a contract on January 12, 2022, to rehabilitate the detention pond behind the Fred Haas Toyota Dealership on the eastside of IH45. The Water District, Harris County MUD No. 249 and Harris County Flood Control are sharing in the cost of this project. It is expected that this project will be complete by the end of the first quarter of 2022.

The Water District, in cooperation with Harris County Flood Control, continues to work on defining a project on Enchanted Stream. While the Haas Project, the Enchanted Stream Project, and the Meadow Edge Project previously completed by Harris County Flood Control may not eliminate flooding along Cypress Creek or in the Water District, these projects will provide relief from storm water runoff.

It is the understanding of the Water District that TxDOT recently awarded the construction contract for the rehabilitation of the IH45 overpass at Cypress Creek. This Project has been planned for some time. The General Manager and Engineer for the Water District will routinely monitor the TxDOT construction for any conditions that adversely impact the Water District and notify TxDOT.

HARRIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 110
FLOOD MITIGATION UPDATE
AUGUST 12, 2021

Harris County Water Control and Improvement District No. 110 (HC110) is pleased to announce that progress continues with local flood mitigation initiatives. HC110 recognizes that the cost of flood mitigation requires cooperation among all affected entities and is working with local, state and federal representation and agencies to implement successful flood mitigation projects. HC110 is aware of the dissemination of information on flooding based on inaccurate conclusions and misrepresentation of facts and data. HC110 also recognizes that residents are concerned about flooding and want reliable, accurate and up to date information on the efforts being undertaken to address flooding. HC110 takes these concerns very seriously. To that end, HC110 will continue to provide accurate and current updates as work progresses on flood mitigation. Also, for your convenience, HC110 has included the past updates below.

August 12, 2021 Update

I-45 at Cypress Creek

Regarding the Texas Department of Transportation (“TxDOT”) project to rebuild/replace the southbound frontage road at I-45 at Cypress Creek, TxDOT provided the following update:

- Environmental Clearance is expected by August 13, 2021
- Drainage report will be submitted to HCFCD prior to August 31, 2021
- The Plans, Specifications, and Easements package will be complete by September 10, 2021
- The Temporary Construction Easement will be acquired through permit with HCFCD
- Weather permitting, clearance of aerial and underground utilities is expected to be complete by November 12, 2021
- Award of the contract for the project is expected to occur in December 2021

June 9, 2021 Update

Major Maintenance of Cypress Creek and its Tributaries Construction Advisory (update provided by HCFCD)

In June 2021, the Flood Control District will begin construction on the first set of project repair sites (Batch 1) of Bond Project CI-012, Major Maintenance of Cypress Creek and Tributaries. Overall, this project involves major maintenance along Cypress Creek and its tributaries to restore channel conveyance capacity across the watershed. Batch 1, located primarily between Spring-Cypress Road and Cypresswood Drive, inside the 77379 zip code area, includes removal of silt from the channel, placement of riprap (stones designed to protect from erosion), erosion repair, outfall pipe removal and replacement, manhole replacements, concrete channel lining replacements, excavation and off-site disposal, imported fill, and site restoration.

Multiple crews will be working on various channels simultaneously. The timeframe for when crews will be working at each site in Batch 1 has not been determined, but additional

communications will be sent to impacted areas prior to construction. To maintain a safe construction environment, area residents are urged and reminded to respect all warning signs, fencing, and barriers, and to avoid any trails, and areas, which may be temporarily impacted as work crews move around the area.

Bond Project CI-012 will be constructed in 6-8 phases, called batches, of multiple individual project sites throughout the Cypress Creek watershed in need of repair. This work will not widen or deepen the channels, but will return them to their designed capacity to convey stormwater. More information about this project, including details about planned batches and timelines can be found at hcfcd.org/CI-012. Residents with any comments or questions may contact the Flood Control District online through the project webpage, or by calling 346-286-4000.

March 17, 2021 Update

I-45 at Cypress Creek

The Texas Department of Transportation (TxDOT) is reporting that the sand and silt removal at IH45 and Cypress Creek will be part of the TxDOT project to rebuild/replace the southbound frontage road at I-45 and Cypress Creek. Work continues on relocation of utilities, easement acquisitions acquiring, and securing required environmental permits. Concurrence from the TxDOT environmental department has been requested to clear the entire right-of-way under IH45 from west to east of all the sand and silt. Design of this project is 50% complete and it is anticipated to be under construction in the fourth quarter of this year.

Haas Detention Pond

HC 110 and the Harris County Flood Control District (HCFCD) have partnered to excavate, enlarge, and improve the current detention pond located behind the Fred Haas dealerships, which will provide additional volume to facilitate drainage and mitigate flooding.

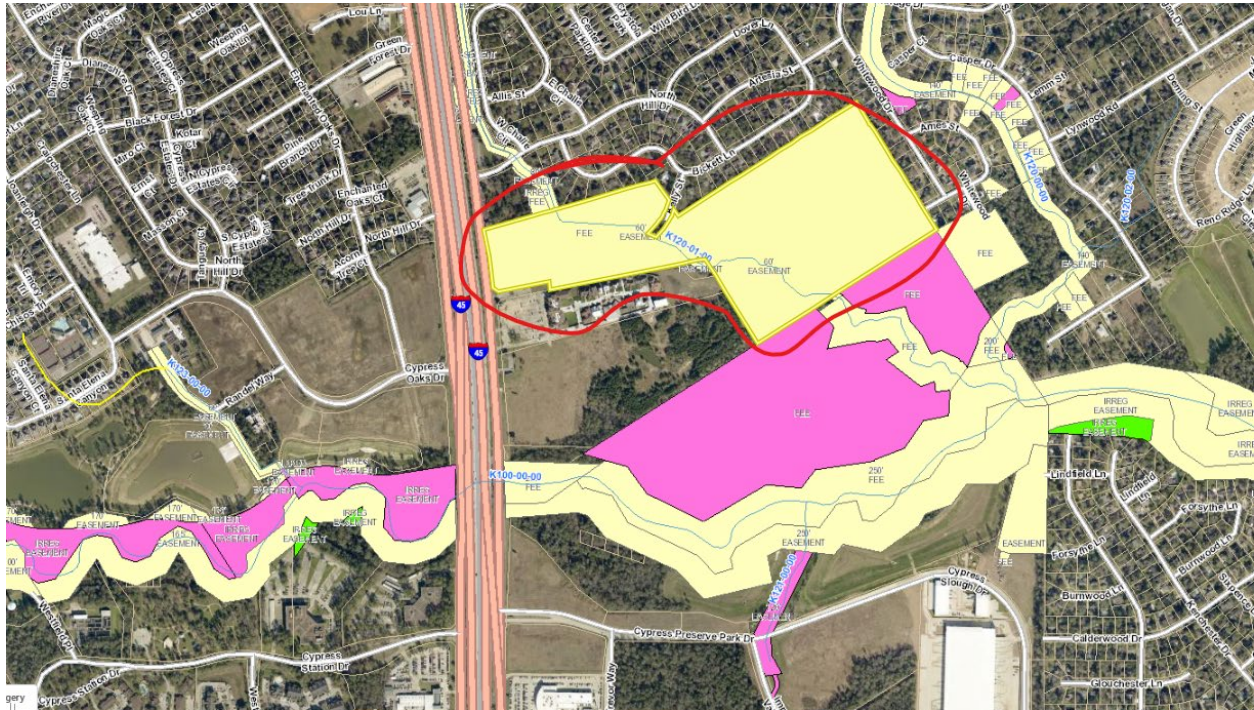
Seals Gully along Enchanted Stream

HC 110 and LEI are currently working with CenterPoint and AT&T to remove and relocate existing utilities along Seals Gully at Enchanted Stream, just south of Cypresswood. CenterPoint has provided to LEI a preliminary design plan to relocate the twelve (12) power poles as well as the installation of twelve (12) LED streetlights on each pole along Enchanted Stream. AT&T has provided plans for relocation of its communication lines. It is anticipated that this project will begin in the next thirty (30) days. After existing utilities have been relocated, detention pond(s) may be constructed in cooperation with the Harris County Flood Control District to divert some of the flood waters flowing into Seals Gully.

Land Acquisition

HCFCD has purchased a 56+ acre tract east of IH45 adjacent to the north bound frontage road south of Cypresswood. It is proposed that this tract will be used to construction detentions

ponds that will further mitigate flood in our area. The area circled (in red) in the illustration below is the 56+ acre tract.



January 8, 2021 Update

In late 2019, HC 110 Director Vanessa Sommer and District Engineer John Davis met with Harris County Flood Control District (HCFCD) Deputy Executive Director Matt Zeve to propose that HCFCD purchase available land on the East side of I-45 for the purpose of constructing a regional detention pond. As a result of this meeting, Director Sommer’s proposal was included as an Amendment to the Michael Baker Flood Study, and was adopted by the Harris County Commissioner’s Court. On December 27, 2020, HCFCD closed on the purchase of 54 acres for the purpose of constructing a new regional detention pond. This new detention pond will have a direct impact and will help mitigate flooding in HC WCID 110, HC WCID 99, Pine Forest MUD, Inverness Forest Improvement District, Timberlane MUD, and HC MUD 249.

December 4, 2021 Update

I-45 at Cypress Creek We are pleased to report that work continues on this project. A few unexpected items have been encountered that will require resolution before actual construction begins. TxDOT has advised that the project design to rebuild/replace the southbound frontage road at I-45 and Cypress Creek is 40% complete. The project is now likely to begin late 2021, rather than Summer of 2021 due to the following issues –

- Relocation of MCI cable and power lines
- Obtaining construction easements
- Obtaining an environmental permit due to potential work in Cypress Creek

We will continue to provide updates as they become available.

October 6, 2020 Update

I-45 at Cypress Creek TxDOT has advised that its project to rebuild/replace the southbound frontage road at I-45 and Cypress Creek is on schedule for Summer of 2021. TxDOT provided the following status –

- Survey work is complete
- Preliminary Level B subsurface utility engineering is complete, with a final report expected October 19, 2020
- Two of the three Geotech borings are complete. The third bore location will be drilled after verification of a potential utility conflict
- A draft hydraulic analysis drainage report is expected by the end of October
- A preliminary bridge layout is expected by the end of October or early November
- Preliminary horizontal alignment for the southbound frontage road is expected by the end of October
- The hydraulic analysis, preliminary bridge layout, and horizontal alignment are subject to change pending the findings of the utility subsurface utility engineering investigation

Haas Detention Pond - HC 110 and HCFCD have partnered to excavate, enlarge, and improve the current detention pond located behind the Fred Haas dealerships, which will provide additional volume to facilitate drainage and mitigate flooding. SK Law is finalizing the Agreement with HCFCD and construction is expected to begin in early 2021.

Enchanted Stream - HC 110 and LEI are currently working with CenterPoint and AT&T to relocate existing utilities along Enchanted Stream, just south of Cypresswood. CenterPoint has provided to LEI a preliminary design plan to relocate the power lines along Seals Gully, at an estimated cost of \$62,570, along with the installation of LED streetlights on each relocated pole at an estimated cost of \$1544. AT&T is working on its design plan. After design plans are approved, relocation may begin in early 2021. After existing utilities have been relocated, detention pond(s) may be constructed to divert some of the flood waters flowing into Senger Gully. It is anticipated that, after the utilities have been relocated, HC 110 may partner with HCFCD on the detention pond projects.

I-45 at Cypress Creek - On July 16, the District hosted a Virtual Town Hall meeting with Congressman Crenshaw, HCFCD, and TxDOT. On July 29, John Davis, Maria Parker, and Deidra Daniels met with TxDOT and HCFCD. **On July 30, TxDOT began the process of clearing vegetation and trash debris from the underpass.** A large amount of vegetation and debris has been removed. Below are BEFORE and AFTER pictures showing the completed clearing. TxDOT has also advised that, when the I-45 southbound feeder is rebuilt (summer 2021), the design will take into consideration the dam/blocking effect that is currently occurring at the underpass. HC 110 has learned that the dam/blocking issue is caused (at least in part) by the erosion of Cypress Creek West of I-45. The erosion has significantly widened Cypress Creek. The I-45 southbound feeder rebuild, upon completion, is anticipated to further mitigate flooding in this area and along Cypress Creek.

BEFORE



AFTER



July 8, 2020 Update

IN COOPERATION WITH FEDERAL, STATE AND LOCAL ENTITIES, ACTIONS CONTINUE TO BE TAKEN TO MITIGATE FLOODING IN THE CYPRESS CREEK WATERSHED AND HC WCID 110. FLOOD MITIGATION CONTINUES TO BE A TOP PRIORITY FOR HARRIS COUNTY WCID 110. Your HC 110 Directors, Langford Engineers (“LEI”), and Harris County Flood Control District (“HCFCD”) are diligently working to reduce flooding within HC 110 and the Cypress Creek Watershed. HC 110 continues with its two-prong approach: (1) steps that can be taken **now** to immediately reduce the risk of flooding; and (2) steps to facilitate long-term projects for additional flood abatement infrastructure. Your Directors have committed funds and have authorized HC 110 to partner with HCFCD, the United States Corp of Engineers (“USACE”), and the Texas Department of Transportation (“TxDOT”) on various projects.

Haas Detention Pond - HC 110 and HCFCD have partnered to excavate, enlarge, and improve the current detention pond located behind the Fred Haas dealerships, which will provide additional volume to facilitate drainage and mitigate flooding. LEI is finalizing the construction plans and will submit to HCFCD for approval once an agreement is produced, with construction scheduled to begin Fall 2020.

Enchanted Stream - HC 110 and LEI are currently working with CenterPoint and AT&T to relocate existing utilities along Enchanted Stream, just south of Cypresswood. CenterPoint and

AT&T have agreed to these relocations and are working with LEI on finalizing designs and determining preliminary cost estimates to relocate existing power poles and communication lines. Relocation is expected to begin in Fall 2020. After existing utilities have been relocated, detention pond(s) can be constructed to divert some of the flood waters flowing into Senger Gully. It is anticipated that, after the utilities have been relocated, HC 110 will partner with HCFCD on the detention pond projects.

I-45 at Cypress Creek - In cooperation with HCFCD and TxDOT, drainage issues at I-45 and Cypress Creek are being addressed. TxDOT has scheduled improvements of the southbound frontage road bridge for Summer 2021. This project, upon completion, is anticipated to further mitigate flooding in this area and along Cypress Creek.

USACE - In July 2019, four (4) Letters of Intent were provided to USACE by which HC 110 requested that the USACE conduct an investigation to determine an effective flood reduction project which could be completed within the boundaries of HC 110, and pledged up to \$200,000 to match funds provided by USACE. In October 2019, John Davis with LEI and representatives of USACE met onsite at the District to determine the scope of a study of the Cypress Creek Watershed and the District. At this time, HC 110 is still awaiting a response from the USACE.

Other Projects - Several other flood mitigation projects are currently under construction or have been recently completed which will reduce flooding within the boundaries of HC 110. Although HC 110 was not involved in the projects, your Directors want to provide accurate information regarding the current projects. **Seals Gully** - HCFCD approved a channelization project to address slope erosion and various slope failures for Seals Gully. The work on the south side of Cypresswood Drive that proceeded downstream approximately 1900 feet, has been completed. Both east and west sides of the Gully have been repaired. Work south of Louetta Rd. and north of Cypresswood Dr. continues. **Senger Gully** – HCFCD approved a Sediment Removal from Concrete Lined Channels project, east of I-45, between Magic Oaks Dr. and E. North Hill Dr. Per HCFCD website, this project is still on-going. **Hardy Toll Road at Cypress Creek** - Harris County Toll Road Authority completed channelization work on both sides of Cypress Creek underneath the Hardy Toll Road. The project included hard edge treatment on lower sections of the stream banks, new storm drain outfalls, and removal of sediment on both sides of Cypress Creek. The improvements have lowered the low-level flows about two (2) feet. **Cypress Creek** - HCFCD issued a maintenance contract for erosion and channelization repairs of the Cypress Creek main channel from the west side of Hardy Toll Road upstream approximately 4,000 feet. This project includes hard edge treatment on lower sections of stream banks, replacement of storm drain outfalls, correcting flowline issues, and removal of sedimentation on both side of Cypress Creek. Construction began in September 2019 and is anticipated to be complete end of 2020.

ACTIONS CONTINUE TO BE TAKEN TO MITIGATE FLOODING IN THE CYPRESS CREEK WATERSHED AND HC WCID 110. Your HC 110 Directors, Langford Engineers, and Harris County Flood Control District (“HCFCD”) are diligently working to reduce flooding within HC 110 and the Cypress Creek Watershed. HC 110 continues with its two-prong approach: (1) steps that can be taken **now** to immediately reduce the risk of flooding; and (2) steps to facilitate long-term projects for additional flood abatement infrastructure. Your Directors have committed

funds and have authorized HC 110 to partner with HCFCD, the United States Corp of Engineers (“USACE”), and the Texas Department of Transportation (“TxDOT”) on various projects.

Detention Pond - HC 110 and HCFCD have partnered to excavate, enlarge, and improve the current detention pond located behind the Fred Haas dealerships, which will provide additional volume to facilitate drainage and mitigate flooding. Langford Engineer is finalizing the plans and will submit to HCFCD for approval, with construction to begin Fall 2020.

Enchanted Stream - HC 110 is currently working with CenterPoint to relocate the utilities along Enchanted Stream just south of Cypresswood. CenterPoint has agreed to the relocation is working on finalizing a design to relocate power poles. Relocation is expected to begin in Fall 2020. After the lines are relocated, a detention pond can be constructed to divert some of the flood waters flowing into Senger Gully. It is anticipated that, after the utilities have been relocated, HC 110 will partner with HCFCD on the detention pond project

I-45 at Cypress Creek - In cooperation with HCFCD and TxDOT, drainage issues at I-45 and Cypress Creek are being addressed. TxDOT has scheduled the demolition and rebuild of the southbound frontage road bridge in June 2021. this project, upon completion, is anticipated to further mitigation flooding in this area.

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Other Projects - Several other flood mitigation projects are currently under construction or have been recently completed which will reduce flooding within the boundaries of HC 110. Although HC 110 was not involved in the projects, your Directors want to provide accurate information regarding the current projects. **Seals Gulley** - HCFCD approved a channelization project for Seals Gulley and work has begun. The project begins on the south side of Cypresswood Drive and proceeds downstream approximately 1900 feet, and includes reconstruction of the side slopes and replacement of most of the backslope drains. Both east and west sides of the Gulley will be repaired. **Hardy Toll Road at Cypress Creek** - Harris County Toll Road Authority completed channelization work on both sides of Cypress Creek underneath the Hardy Toll Road. The project included hard edge treatment on lower sections of the stream banks, new storm drain outfalls, and removal of sediment on both sides of Cypress Creek. The improvements have lowered the low-level flows about two (2) feet. **Cypress Creek** - HCFCD issued a maintenance contract for erosion and channelization repairs of the Cypress Creek main channel from the west side of Hardy Toll Road upstream approximately 4,000 feet. This project includes hard edge treatment on lower sections of stream banks, replacement of storm drain outfalls, correcting flowline issues, and removal of sedimentation on both side of Cypress Creek. Construction began in September 2019 and is anticipated to be complete end of 2020.

February 2020 Update

GOOD NEWS! Your HC 110 Directors and Langford Engineers are diligently working to reduce flooding within HC 110. HC 110 has adopted a two-prong approach: (1) steps that can be taken **now** to immediately reduce the risk of flooding; and (2) steps to facilitate long-term projects for additional flood abatement infrastructure. Your Directors have committed funds and have authorized HC 110 to partner with the Harris County Flood Control District (“HCFCD”), the United States Corp of Engineers (“USACE”), and the Texas Department of Transportation (“TxDOT”) on various projects.

Haas Detention Pond - HC 110 and HCFCD are partnering to excavate, enlarge, and improve the current detention pond located behind the Fred Haas dealerships, which will provide additional volume to facilitate drainage and mitigate flooding. Construction is expected to begin later this year. **Enchanted Stream** - HC 110 is currently working with CenterPoint to relocate the utilities along Enchanted Stream just south of Cypresswood. It is anticipated that, after the utilities have been relocated, HC 110 will partner with HCFCD on a project which will improve drainage.

I-45 at Cypress Creek - Upon invitation from your HC 110 Directors, HCFCD Executive Deputy Director Matt Zeve attended HC 110 meetings on July 31 and August 28, 2019, to provide information, answer questions, and generally respond to residents’ flooding concerns. Since that time, additional information, drone footage, and photos have been provided by Langford Engineering to HCFCD. ***Progress is being made.*** At a public meeting held December 17, 2019, TxDOT and HCFCD confirmed that the I-45 southbound frontage road bridge at Cypress Creek is scheduled for replacement in June 2021. This is excellent news! However, your HC 110 Directors and District Consultants have not stopped. Communications and meetings with HCFCD continue, most recently on Monday, February 2. HCFCD personnel have also met with Langford Engineering at the I-45 / Cypress Creek bridge for visual inspections. HCFCD and TxDOT are continuing to study the I-45/Cypress Creek bridge area and we hope to have more news to report in the near future.

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