

CHUCK ENGELKEN
MEMBER
JOHN ZEMANEK
ALTERNATE

CITY OF LA PORTE DRAINAGE AND FLOODING COMMITTEE MEETING AGENDA

Notice is hereby given of a meeting of the Drainage and Flooding Committee of the City Council of the City of La Porte, to be held May 13, 2019, in the City Hall Council Chambers, 604 West Fairmont Parkway, La Porte, Texas, beginning at 5:00 pm to consider the following items of business.

- 1. Call to order
- 2. Authorizations
 - (a) Approve the minutes of the meeting held on April 8, 2019. [Lee Woodward, City Secretary]
- 3. Staff Reports
 - (a) Receive report from Harris County Flood Control District regarding current and future plans relating to flooding in the City of La Porte. [Lorenzo Wingate, P.E., City Engineer; Don Pennell, Public Works Director]
 - (b) Discussion regarding Texas Department of Emergency Management (TDEM) Hurricane Harvey DR-4332 Section 404 Hazard Mitigation Grant Program (HMGP) Funding. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]
 - (c) Presentation, discussion, and possible action regarding the status of current drainage projects. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]
 - (d) Presentation, discussion, and possible action regarding additional drainage concerns and providing staff with direction. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]
- 4. Set date for next Drainage and Flooding Committee Meeting
- 5. Committee Member Comments Hear announcements concerning matters appearing on the agenda; items of community interest; and/or inquiries of staff regarding specific factual information or existing policy from the Committee members and City staff, for which no formal action will be discussed or taken.

6. Adjournment

Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact the City Secretary's office (281-470-5019), two working days prior to the meeting for appropriate arrangements.

Councilmembers may attend in numbers constituting a quorum. This is a Drainage and Flooding Committee Meeting at which there will be no deliberation or formal action taken by City Council as a governmental body.

CERTIFICATE

I, Lee Woodward, C	City Secretary, do hereby certify that a copy	/ of the May 13, 2019, Dr	ainage and Flooding Committee
agenda was posted	I on the City Hall bulletin board, a place cor	nvenient and readily acces	sible to the general public at all
times, and to the Ci	ity's website, www.LaPorteTXgov, in complia	nce with Chapter 551, Tex	as Government Code.
DATE OF			
POSTING			
TIME OF		-	
POSTING			
TAKEN DOWN		•	
		•	
	Lee Woodward, City Secretary	-	

JAY MARTIN Chairman

DANNY EARP Vice-Chairman



CHUCK ENGELKEN
Member
JOHN ZEMANEK
Alternate Member

MINUTES OF DRAINAGE AND FLOODING COMMITTEE MEETING HELD APRIL 8, 2019

The Drainage and Flooding Committee of the City of La Porte met on **Monday**, **April 8**, **2019**, at the City Hall Council Chambers, 604 West Fairmont Parkway, La Porte, Texas, at **5:00 p.m**. to consider the following items of business:

Committee Members present: Danny Earp, Chuck Engelken, John Zemanek

Committee Members absent: Jay Martin

Council-appointed officers present: Corby Alexander, City Manager; Lee Woodward, City Secretary

- 1. Call to Order Vice Chairman Earp called the meeting to order at 5:00 p.m.
- 2. Consent Agenda (Approval of Consent Agenda items authorizes each to be implemented in accordance with staff recommendations provided. An item may be removed from the consent agenda and added to the Statutory Agenda for full discussion upon request by a member of the Committee present at this meeting.)
 - (a) Approve the minutes of the meeting held on February 25, 2019. [Lee Woodward, City Secretary]

Committee member Engelken moved to approve the minutes of the meeting held on February 25, 2019; the motion was unanimously adopted, 3-0.

Without objection, Billy Green was permitted to offer public comment, asking that drainage issues in the Lomax area be addressed.

3. Staff Reports

(a) Receive report from Harris County Flood Control District regarding current and future plans relating to flooding in the City of La Porte. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

City Engineer Lorenzo Wingate informed the Committee that Harris County Flood Control District (HCFCD) was not able to attend but had emailed him updates, including that they had analyzed their review of the Brookglen area and that they would meet with staff on April 16. Mr. Wingate said HCFCD had had HDR review the B112/Lomax area and that they would consider it internally before the next phase. Mr. Alexander asked Mr. Wingate to forward the email correspondence to the committee on Tuesday. Committee member Engelken said he was very disappointed that HCFCD had not attended yet again and noted he would reach out to the Harris County Commissioner to address these issues, citing destruction at Brookglen, current construction projects, and the loss of a related revenue stream. Mr. Alexander agreed to reach out to the Harris County Judge's office on the issues as well.

(b) Receive a report regarding the status of the Texas GLO CDBG-DR 2015 Floods and Storms (DR-4223 and DR-4245) Allocation. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

Mr. Wingate said the project had been placed under contract, with scope communicated in order to move ahead.

(c) Discussion regarding Harris County's Method of Distribution (MOD) for the Community Development Block Grant-Disaster Recovery (CDGB-DR) Round 1 Funds for Hurricane Harvey. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

Mr. Wingate said the City has a grant administrator working on this item, noting that the City currently has an allocation of approximately \$325,000 for the initial phase of a proposed drainage improvement project and that the \$3.2 million is anticipated to be utilized for the continuation of planned subsequent phases. Although the timeline includes milestones to be completed by November 2018, the City has met these milestones, but is now awaiting Harris County review. Mr. Wingate shared has not received an updated timeline from Harris County yet for what was to be completed last November.

(d) Discussion regarding Texas Department of Emergency Management (TDEM) Hurricane Harvey DR-4332 Section 404 Hazard Mitigation Grant Program (HMGP) Funding. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

Mr. Wingate said the City had submitted three generator projects and five drainage projects and then TDEM was forwarding the generator items to FEMA. Mr. Alexander confirmed an additional project was not eligible and two additional projects did not fit the cost-benefit analysis.

(e) Presentation, discussion, and possible action regarding the status of current drainage projects. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

Mr. Wingate asked the committee's preference on funding allocations for projects versus waiting to hear about grant awards, following which reimbursement or use as a match might become possible. Without objection, the committee agreed to Mr. Alexander's suggestion that staff be allowed to clarify with TDEM and GrantWorks, Inc. as to whether upfront design and engineering costs will count as match. Vice Chairman Earp asked for a report on how the funds had been allocated for each project at this time.

(f) Presentation, discussion, and possible action regarding additional drainage concerns and providing staff with direction. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

Committee member Zemanek asked that someone check on the area Mr. Green had discussed in his public comment. Vice Chairman Earp inquired as to why Lomax water could not be drained into a dry pond at the airport and Mr. Wingate said he believed they were two separate watersheds and the current inlet didn't have capacity for additional runoff. Vice Chairman Earp asked if inline detention could be considered.

4. Set date for next Drainage and Flooding Committee Meeting. [Lorenzo Wingate, City Engineer and Don Pennell, Public Works Director]

The next meeting date was set for May 13 at 5:00 p.m.

5. Committee Comments

No comments were offered.

6. ADJOURN – The meeting was adjourned without objection at 5:39 p.m.

Lee Woodward,	City Secretary	

in the City of La Porte.	net current and ruture plans relating to hooding
SUMMARY & R Receive report regarding Harris County Flood Control Dist	ECOMMENDATION rict current and future plans relating to flooding
Exhibits:	Budgeted Item: C Yes C No
Report Resolution Ordinance	Amount Budgeted: Amount Requested:
Department: Public Works	Account Number:
Agenda Date Requested: May 13, 2019 Requested By: Lorenzo Wingate	Appropriation Source of Funds:

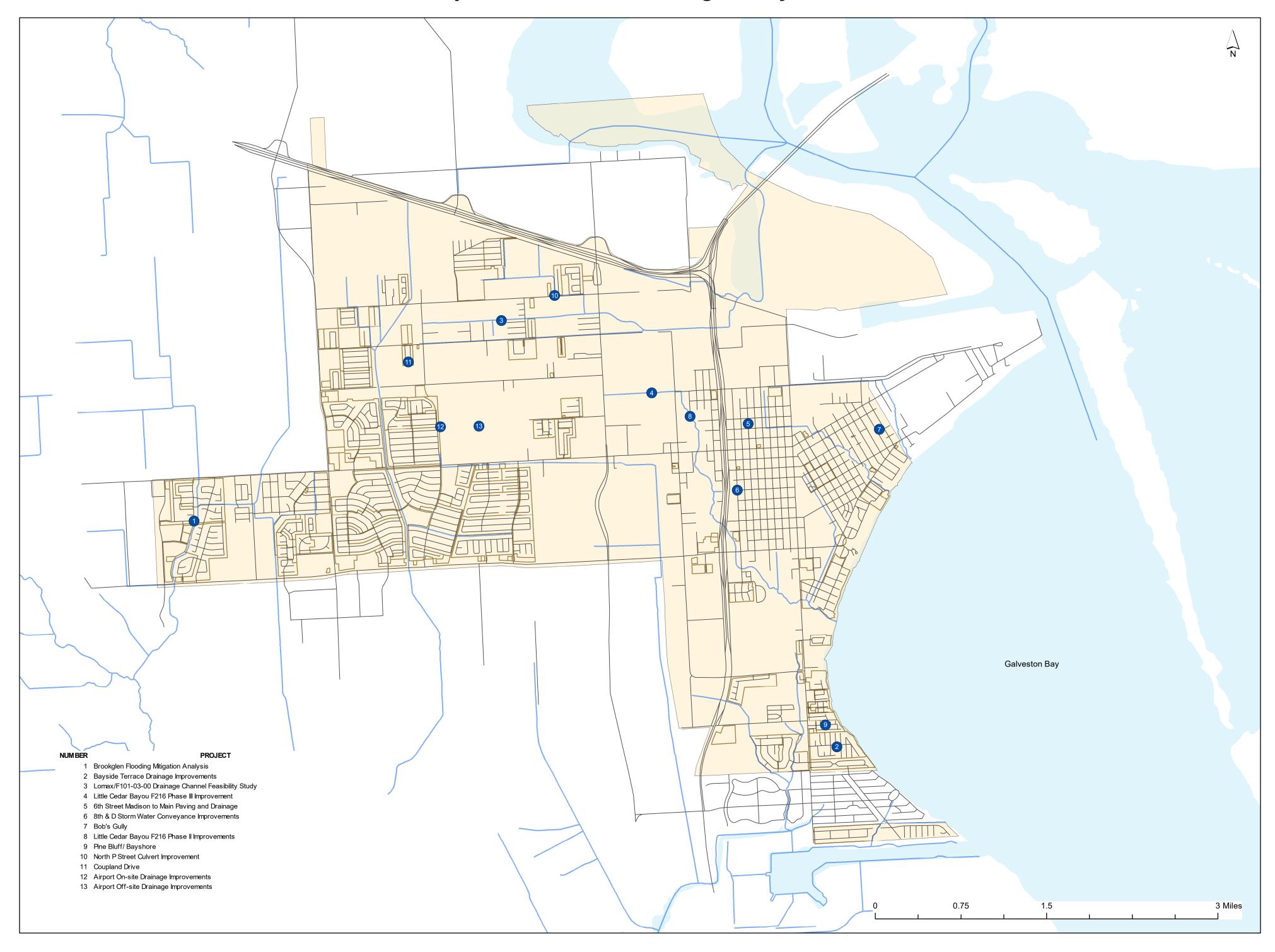
Agenda Date Requested: May 13, 2019	Appropriation
Requested By: Lorenzo Wingate	Source of Funds:
Department: Public Works	Account Number:
	Amount Budgeted:
	Amount Requested:
Exhibits: Proposed Project Budget(s)	Budgeted Item: C Yes C No
	/ & RECOMMENDATION
Texas Department of Emergency Management Hazard Mitigation Grant Program (HMGP) funding	(TDEM) Hurricane Harvey DR-4332 Section 404
generator projects and five (5) drainage improvement Program is 75% federal, 25% local. No portion of the begin prior to award. Proposed generator sites are Parks and Recreation Building. Proposed drainage Bayside Terrace; Brookglen; F101-06-00; Little responded to all TDEM requests for additional administratively complete. Applications are pending notices by July 2019. If selected, applications will be	(8) applications to TDEM for grant funding for three at projects. The cost share requirement for the HMGP to projects (preliminary design nor construction) can the 25 th Street Water Plant; Lift Station 40; and the improvement projects are: Battleground Estates; Cedar Bayou (F216-00-00) Phase III. Staff has information and all applications are considered g TDEM selection. TDEM is anticipating selection to forwarded to FEMA for review. The FEMA review City would then enter into an agreement with FEMA anticipated to begin as early as January 2020.
	TION REQUIRED
Consider the items presented and discussed and pr	ovide direction to staff.
Approved for Drainage Committee Agenda	
Corby D. Alexander, City Manager	 Date

DRAINAGE PROJECTS

NO.	PROJECT	DESCRIPTION	Status	Potential Grant	Potential COLP	COLP	Estimated
1	Brookglen Flooding Mitigation Analysis	The 2009 City-wide Drainage Study identifies the Brookglen subdivision as an area with significant drainage/flooding problems, attributed to a mixture of inadequate sewerage and insufficient channel capacity within the B112-00-00 Channel. Compounded improvements recommended within the City-wide Drainage Study could reduce the flood risk within the Brookglen area. This analysis would expand upon the recommendations provided within 2009 study.	currently finalizing Technical Update. Staff submitted HMGP grant application for supplemental funding on October 17, 2018.	Funding \$4,000,021.50	\$1,000,005.38	\$275,000.00	Completion Date March 2022
2	Bayside Terrace Drainage Improvements	Approximately 800 linear feet of RCP pipe, ranging in size from 15" to 24", exists within the Bayside Terrance Subdivision, which has not been properly maintained due to access issues attributed to limited access to infrastructure, provided within a five foot utility easement. Portions of Hamilton Street and Fondren Street utilize this system to convey stormwater to its outfall point of Galveston Bay. The system fails to function properly causing flooding within the adjacent portion(s) of the subdivision. A proposed drainage study would discuss feasibility of rerouting this flows from the 800 feet of RCP, towards Bayside Dr. and utilizing the existing system within Bayside Dr. to convey the storm water within the existing system.	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$2,200,000.00	\$550,000.00	\$100,000.00	March 2022
3	Lomax/F101-03-00 Drainage Channel Improvements	Harris County Flood Control District's (HCFCD) F101-06-00 Channel system conveys storm water runoff from the Lomax area and ultimately outfalls into Lower San Jacinto Bay. The downstream section of the channel has been improved to ultimate capacity. Ar existing pipeline corridor, containing several pipelines located at depths ranging from approximately 2' to 18', cross the channel, limiting the depth of potential channe improvements. Moderate/heavy rain events, compounded with backwater conditions from this section of the channel, contributes to wide-spread flooding within the Lomax Area.	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020. HCFCD finalizing Technical Lindste	\$3,200,155.00	\$800,038.75	\$150,000.00	March 2022
4	Little Cedar Bayou F216 Phase III Improvements	Phase I and Phase II Improvements to Little Cedar Bayou, from Hwy 146 to Madison have either been completed or are currently awarded for construction. Phase I and Phase II improvements include, but are not limited to, excavating and disposing off- site soil as required for the new channel alignment, clearing and grubbing, demolition of existing structures, erosion control, and site restoration for approximately 5,533 LF of channel. Approximately 4,680 LF of channel remains unimproved upstream, with those improvements slated to be included within this project, to be considered Phase III. Survey data has been collected on this most upstream section. Routine maintenance of clearing overgrowth, trees, and obstructions; minor erosion control and slope stabilization; and desilting is planned to maintain existing conveyance capacity. Those maintenance operations are projected to begin late 4th quarter 2018 or early 1st quarter 2019 (calendar year). The following Phase III mitigation action is proposed, as recommended within the Hydraulic Analysis for Little Cedar Bayou Watershed HCFCD Unit F216-00-00: lowering the flow line of the Bayou 1 - 2 feet, from W. Madison to Sens Rd. Current channel side slopes would be modified to achieve 3:1 side slopes from W Madison St. to Sens Rd. Ar estimated 200,000 cubic yards are to be excavated from the channel. Over excavation is provided to yield sufficient storage volume in the pond after siltation and build-up in the pond bottom.	Staff submitted HMGP grant application for supplemental funding on December 20, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$2,500,000.00	\$625,000.00	\$825,000.00	March 2022
5	Battleground Estates Phase II	The P Street Improvements Project currently under construction was designed to provide significant lowering of the water surface elevation in the immediate upstream channel however, improvements become negligible the farther removed from the current improvements. The channel upstream of North P Street is too small to maintain flows of the 10-, 50-, or 100-year events within its banks. There are multiple sets of dual-barre culverts in the F101-00-00 channel that create a restriction approximately ¼-mile upstream of the current improvements. This restriction also impedes the flows from leaving the Battleground Estates Area, resulting in water out of banks as well. The combination of the current improvements and proposed improvements would allow for better drainage conveyance and lower water surface elevations.	Staff submitted HMGP grant application for supplemental funding on December 20, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$880,500.00	\$220,125.00	\$65,000.00	March 2022

Agenda Date Requested: May 13, 2019	Appropriation
Requested By: Lorenzo Wingate	Source of Funds:
Department: Public Works	Account Number:
Report Resolution C Ordinance	Amount Budgeted:
	Amount Requested:
Exhibits: Drainage Projects Update Drainage Projects Map	Budgeted Item: C Yes C No
SUMMARY	& RECOMMENDATION
Refer to attached Exhibit(s) for updates on various of	drainage projects throughout the City.
AC Consider the items presented and discussed and pre	TION REQUIRED ovide staff direction, as necessary.
Approved for Drainage Committee Agenda	
Corby D. Alexander, City Manager	 Date

The City of La Porte Drainage Projects 2019



DRAINAGE PROJECTS

NO.	PROJECT	DESCRIPTION	Status
Brookglen Flooding Mitigation Analysis		The 2009 City-wide Drainage Study identifies the Brookglen subdivision as an area with significant drainage/flooding problems, attributed to a mixture of inadequate sewerage and insufficient channel capacity within the B112-00-00 Channel. Compounded improvements recommended within the City-wide Drainage Study could reduce the flood risk within the Brookglen area. This analysis would expand upon the recommendations provided within 2009 study.	Staff working with HCFCD to develop regional solution. HCFCD currently working on Techincal Update. Staff submitted HMGP grant application for supplemental funding on October 17, 2018. Application pending TDEM review.
2	Bayside Terrace Drainage Improvements	Approximately 800 linear feet of RCP pipe, ranging in size from 15" to 24", exists within the Bayside Terrance Subdivision, which has not been properly maintained due to access issues attributed to limited access to infrastructure, provided within a five foot utility easement. Portions of Hamilton Street and Fondren Street utilize this system to convey stormwater to its outfall point of Galveston Bay. The system fails to function properly, causing flooding within the adjacent portion(s) of the subdivision. A proposed drainage study would discuss feasibility of rerouting this flows from the 800 feet of RCP, towards Bayside Dr. and utilizing the existing system within Bayside Dr. to convey the storm water within the existing system.	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM review.
3	Lomax/F101-03-00 Drainage Channel Improvements	Harris County Flood Control District's (HCFCD) F101-06-00 Channel system conveys storm water runoff from the Lomax area and ultimately outfalls into Lower San Jacinto Bay. The downstream section of the channel has been improved to ultimate capacity. An existing pipeline corridor, containing several pipelines located at depths ranging from approximately 2' to 18', cross the channel, limiting the depth of potential channel improvements. Moderate/heavy rain events, compounded with backwater conditions from this section of the channel, contributes to wide-spread flooding within the Lomax Area.	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM review. Staff coordinating with HCFCD.
4 Little Cedar Bayou F216 Phase III Improvements		Phase I and Phase II Improvements to Little Cedar Bayou, from Hwy 146 to Madison, have either been completed or are currently awarded for construction. Phase I and Phase II improvements include, but are not limited to, excavating and disposing off- site soil as required for the new channel alignment, clearing and grubbing, demolition of existing structures, erosion control, and site restoration for approximately 5,533 LF of channel. Approximately 4,680 LF of channel remains unimproved upstream, with those improvements slated to be included within this project, to be considered Phase III. Survey data has been collected on this most upstream section. Routine maintenance of clearing overgrowth, trees, and obstructions; minor erosion control and slope stabilization; and desilting is planned to maintain existing conveyance capacity. Those maintenance operations are projected to begin late 4th quarter 2018 or early 1st quarter 2019 (calendar year). The following Phase III mitigation action is proposed, as recommended within the Hydraulic Analysis for Little Cedar Bayou Watershed HCFCD Unit F216-00-00: lowering the flow line of the Bayou 1 - 2 feet, from W. Madison to Sens Rd. Current channel side slopes would be modified to achieve 3:1 side slopes from W Madison St. to Sens Rd. An estimated 200,000 cubic yards are to be excavated from the channel. Over excavation is provided to yield sufficient storage volume in the pond after siltation and build-up in the pond bottom.	Staff submitted HMGP grant application for supplemental funding on December 20, 2018. Application pending TDEM review. Staff coordinating with HCFCD.

NO.	PROJECT	DESCRIPTION	Status
5 6th Street Madison to Main Paving and Drainage		The segment of 6th St from W. Madison St to W. Main St is considered part of Old La Porte, which was generally noted in the City-Wide Drainage Study as not having sufficient storm sewer capacity due to undersized storm sewer, undersized storm inlets, or not enough storm inlets. RPS-Klotz provided an analysis of the existing storm sewer system and identified problem areas within the project limits. Additional analysis is required to determine most efficient improvement alternative.	CDBG allocations are intended to be utilized to supplment this project's funding. Application for 2015 allocation is currently pending GLO review. Application for Harvey allocation is pending Harris
6	8th & D Storm Water Conveyance Improvements	The area generally bounded by 8th Street to the west, Main Street to the north, 5th Street to the east, and D Street to the south experiences flooding during heavy rain events due to undersized culverts within the area. Increasing culvert sizes within the area will provide additional conveyance capacity within the existing open ditch system.	Proposed improvments to be completed in phases in-house,
7	Bob's Gully	Obtained drainage easement along East B Street ROW in Morgans Point from Boys and Girls Harbor. Coordinate with Harris County Flood Control & the Army Corp of Engineers to determine maintenance responsibilities.	Staff coordinating timing of channel analysis with HCFCD.
8	Little Cedar Bayou F216 Phase II Improvements	Improvements to Little Cedar Bayou, from Madison Street to 450 feet south of Spencer Highway. Work of the Contract includes, but is not limited to, excavating and disposing off-site approximately 25,984 CY of soil as required for the new channel alignment. Clearing and grubbing, demolition of existing structures, erosion control, and site restoration for approximately 7 acres and planting approximately 400 3-gallon trees. Construction contract awarded to Paskey.	Contractor has completed all preliminary site prepartion. Construction delayed due to weather. Construction expected to
9	Pine Bluff/ Bayshore	Pine Bluff Subdivision Improvements project includes the reconstruction of streets and storm facilities along Bay Shore Drive, Pine Bluff Street and the lettered streets (A thru F) within the Pine Bluff Subdivision. Construction contract awarded to Angel Bros.	
10	North P Street Culvert Improvement	Using the January 2009 City Wide Drainage Study prepared by Klotz Associates, Inc., Klotz Associates, Inc. provided a report in 2011 analyzing flooding in the Battleground Estates which indicated that flows within segments of the F101 Channel, north of N 'P' Street, rise to a level creating capacity limitations which produce frequent out of banks occurrences. The unimproved upstream channel flows into two forty-two inch (42") corrugated metal pipes (CMP), which feed into the improved two 8' x 10' reinforced concrete boxes downstream. LJA Engineering, Inc. provided Engineering Design Services for the recommended improvements of removing the two upstream forty-two inch (42") corrugated metal pipes and extending the dual 8' x 10' reinforced concrete boxes across N 'P' Street. Construction contract awarded to Paskey.	North P Culvert Extension project is 85% complete. Outstanding items include pouring concrete collar to tie in existing CMP with new CMP, removal of excavated material from site, and desilting new boxes.
The proposed storm sewer improvements include re-sloping Coupland Drive to drain towards inlets located throughout the subdivision. The inlets will drain into proposed storm sewer ranging in size from 24" to 30" RCP. This storm sewer will then flow underneath the existing roadside ditch along L Street to a combined outfall with the existing roadside ditch to Big Island Slough. The proposed storm sewer underneath the existing ditch on L Street will be 42" RCP and the combined outfall will need to be a 60" RCP. These improvements will result in no net fill within the Big Island Slough 100-year floodplain. The proposed storm sewer was sized for the 5 year storm event, per the City of La Porte drainage criteria.		HDR preparing 30% design. Construction to be incorporated into Lomax Lift Station Consolidation Project.	
12	Airport Off-site Drainage Improvements	Evaluation of the performance of airport drainage system at the west and north boundaries of the airport to address concerns that the airport drainage system may be overwhelmed, in extreme events, leading to stormwater flowing into neighborhoods adjacent to the airport.	Drainage report completed. Report identified on-site improvements

NO.	PROJECT	DESCRIPTION	Status
13	Airport On-site Drainage Improvements	On-site and offsite study determined there is no impact from airport drainage run off to the area north(Lomax) of the airport. The study determined there is impact to the Glen Meadows Subdivision. Onsite detention and increased capacity will be designed to mitigate the impact on Glen Meadows.	

DRAINAGE PROJECTS

NO	DDO IECT	DESCRIPTION	St atua	Potential Grant	Potential COLP	COLP	Estimated
NO.	PROJECT	DESCRIPTION	Status	Funding	Cost Share	Budgeted	Completion Date
1	Brookglen Flooding Mitigation Analysis	The 2009 City-wide Drainage Study identifies the Brookglen subdivision as an area with significant drainage/flooding problems, attributed to a mixture of inadequate sewerage and insufficient channel capacity within the B112-00-00 Channel. Compounded improvements recommended within the City-wide Drainage Study could reduce the flood risk within the Brookglen area. This analysis would expand upon the recommendations provided within 2009 study.	currently finalizing Technical Update. Staff submitted HMGP grant application for supplemental funding on October 17, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$4,000,021.50	\$1,000,005.38	\$275,000.00	March 2022
2	Bayside Terrace Drainage Improvements	Approximately 800 linear feet of RCP pipe, ranging in size from 15" to 24", exists within the Bayside Terrance Subdivision, which has not been properly maintained due to access issues attributed to limited access to infrastructure, provided within a five foot utility easement. Portions of Hamilton Street and Fondren Street utilize this system to convey stormwater to its outfall point of Galveston Bay. The system fails to function properly causing flooding within the adjacent portion(s) of the subdivision. A proposed drainage study would discuss feasibility of rerouting this flows from the 800 feet of RCP, towards Bayside Dr. and utilizing the existing system within Bayside Dr. to convey the storm wate within the existing system.	s y y y y Staff submitted HMGP grant application for supplemental funding on , November 26, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$2,200,000.00	\$550,000.00	\$100,000.00	March 2022
3	Lomax/F101-03-00 Drainage Channel Improvements	Harris County Flood Control District's (HCFCD) F101-06-00 Channel system conveys storm water runoff from the Lomax area and ultimately outfalls into Lower San Jacintz Bay. The downstream section of the channel has been improved to ultimate capacity. Are existing pipeline corridor, containing several pipelines located at depths ranging from approximately 2' to 18', cross the channel, limiting the depth of potential channel improvements. Moderate/heavy rain events, compounded with backwater conditions from this section of the channel, contributes to wide-spread flooding within the Lomax Area.	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020. HCFCD finalizing Toolphical Lindston.	\$3,200,155.00	\$800,038.75	\$150,000.00	March 2022
4	Little Cedar Bayou F216 Phase III Improvements	Phase I and Phase II Improvements to Little Cedar Bayou, from Hwy 146 to Madison have either been completed or are currently awarded for construction. Phase I and Phase II improvements include, but are not limited to, excavating and disposing off- site soil as required for the new channel alignment, clearing and grubbing, demolition of existing structures, erosion control, and site restoration for approximately 5,533 LF of channel. Approximately 4,680 LF of channel remains unimproved upstream, with those improvements slated to be included within this project, to be considered Phase III. Survey data has been collected on this most upstream section. Routine maintenance of clearing overgrowth, trees, and obstructions; minor erosion control and slope stabilization; and desilting is planned to maintain existing conveyance capacity. Those maintenance operations are projected to begin late 4th quarter 2018 or early 1st quarter 2019 (calenda year). The following Phase III mitigation action is proposed, as recommended within the Hydraulic Analysis for Little Cedar Bayou Watershed HCFCD Unit F216-00-00: lowering the flow line of the Bayou 1 - 2 feet, from W. Madison to Sens Rd. Current channel side slopes would be modified to achieve 3:1 side slopes from W Madison St. to Sens Rd. Ar estimated 200,000 cubic yards are to be excavated from the channel. Over excavation is provided to yield sufficient storage volume in the pond after siltation and build-up in the pond bottom.	Staff submitted HMGP grant application for supplemental funding on a December 20, 2018. Application pending TDEM selection. Awarded r projects are anticipated to begin as early as January 2020.	\$2,500,000.00	\$625,000.00	\$825,000.00	March 2022
5	6th Street Madison to Main Paving and Drainage	The segment of 6th St from W. Madison St to W. Main St is considered part of Old La Porte, which was generally noted in the City-Wide Drainage Study as not having sufficien storm sewer capacity due to undersized storm sewer, undersized storm inlets, or no enough storm inlets. RPS-Klotz provided an analysis of the existing storm sewer system and identified problem areas within the project limits. Additional analysis is required to determine most efficient improvement alternative.	t Executed contract with GLO effective March 9, 2019 through August t 5, 2021. Staff currently negotiating scope of work for design phase services with engineering consultant. Proposal expected by May 1,	\$325,775.30 & \$3,472,757.00	\$125,000.00	\$1,140,000.00	August 2021
6	8th & D Storm Water Conveyance Improvements	The area generally bounded by 8th Street to the west, Main Street to the north, 5th Street to the east, and D Street to the south experiences flooding during heavy rain events due to undersized culverts within the area. Increasing culvert sizes within the area will provide additional conveyance capacity within the existing open ditch system.	Proposed improvements to be completed in phases in-house,	N/A			March 2025
7	Bob's Gully	Obtained drainage easement along East B Street ROW in Morgans Point from Boys and Girls Harbor. Coordinate with Harris County Flood Control & the Army Corp of Engineers to determine maintenance responsibilities.		N/A		\$50,000.00	April 2020

NO.	PROJECT	DESCRIPTION	Status	Potential Grant	Potential COLP	COLP	Estimated
140.	PROJECT	DESCRIPTION		Funding	Cost Share	Budgeted	Completion Date
8	Little Cedar Bayou F216 Phase II Improvements	Improvements to Little Cedar Bayou, from Madison Street to 450 feet south of Spencer Highway. Work of the Contract includes, but is not limited to, excavating and disposing offsite approximately 25,984 CY of soil as required for the new channel alignment. Clearing and grubbing, demolition of existing structures, erosion control, and site restoration for approximately 7 acres and planting approximately 400 3-gallon trees. Construction contract awarded to Paskey.	Contractor has completed all preliminary site preparation. Construction expected to be completed by June 30, 2019.	\$1,337,422.22			June 2019
9	Pine Bluff/ Bayshore	Pine Bluff Subdivision Improvements project includes the reconstruction of streets and storm facilities along Bay Shore Drive, Pine Bluff Street and the lettered streets (A thru F) within the Pine Bluff Subdivision. Construction contract awarded to Angel Bros.		N/A			April 2019
10	North P Street Culvert Improvement	Using the January 2009 City Wide Drainage Study prepared by Klotz Associates, Inc., Klotz Associates, Inc., provided a report in 2011 analyzing flooding in the Battleground Estates which indicated that flows within segments of the F101 Channel, north of N 'P Street, rise to a level creating capacity limitations which produce frequent out of banks occurrences. The unimproved upstream channel flows into two forty-two inch (42" corrugated metal pipes (CMP), which feed into the improved two 8' x 10' reinforced concrete boxes downstream. LJA Engineering, Inc. provided Engineering Design Services for the recommended improvements of removing the two upstream forty-two inch (42" corrugated metal pipes and extending the dual 8' x 10' reinforced concrete boxes across N 'P' Street. Construction contract awarded to Paskey.	Substantial completion walk-through scheduled for April 26, 2019.	N/A			April 2019
11	Coupland Drive	The proposed storm sewer improvements include re-sloping Coupland Drive to drain towards inlets located throughout the subdivision. The inlets will drain into proposed storm sewer ranging in size from 24" to 30" RCP. This storm sewer will then flow underneath the existing roadside ditch along L Street to a combined outfall with the existing roadside ditch to Big Island Slough. The proposed storm sewer underneath the existing ditch on L Street will be 42" RCP and the combined outfall will need to be a 60" RCP. These improvements will result in no net fill within the Big Island Slough 100-year floodplain. The proposed storm sewer was sized for the 5 year storm event, per the City of La Porte drainage criteria.	HDR is awaiting comments from TWDB before beginning 60% design. Construction to be incorporated into Lomax Lift Station Consolidation Project.	N/A		\$1,110,000.00	July 2022
12	Airport Off-site Drainage Improvements	Evaluation of the performance of airport drainage system at the west and north boundaries of the airport to address concerns that the airport drainage system may be overwhelmed, in extreme events, leading to stormwater flowing into neighborhoods adjacent to the airport.	Drainage report completed. Report identified on-site improvements	N/A			December 2019
13	Airport On-site Drainage Improvements	On-site and offsite study determined there is no impact from airport drainage run off to the area north(Lomax) of the airport. The study determined there is impact to the Glen Meadows Subdivision. Onsite detention and increased capacity will be designed to mitigate the impact on Glen Meadows.	Drainage report completed Final design expect mid February	N/A			December 2019

Agenda Date Requested: May 13, 2019	Appropriation
Requested By: Lorenzo Wingate	Source of Funds:
Department: Public Works	Account Number:
Report Resolution Ordinance	Amount Budgeted:
Exhibits:	Amount Requested: Budgeted Item: C Yes C No
SUMMARY	& RECOMMENDATION
Opportunity to discuss any drainage concerns not cov	vered by previous items.
ACT Provide staff direction, as necessary.	TION REQUIRED
Approved for Drainage Committee Agenda	
Corby D. Alexander, City Manager	 Date