Final Notice and Public Explanation of a Proposed Activity in a Floodplain

To: All interested Agencies, Groups and Individuals

This is to give notice that the **City of Pasadena** has conducted an evaluation as required by Executive Order 11988, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management. The activity is funded under the HUD CDBG Disaster Recovery Program under **#22-085-001-D221 / B-18-DP-48-0002, Pasadena - MIT - Little Vince Bayou 22-085-001-D221.**

Project Location:
All work will occur in the City of Pasadena, Harris County, Texas at the following locations, including mid-point coordinates for each segment:

Flood and Drainage Facilities

- Detention Basin "Lilac Basin": Property located on the southeast side of Lilac St. and Little Vince Bayou (29.66987, -95.15836)
- Pansy St Culvert. - Little Vince Bayou just north of the intersection of Oak St.and Pansy St. (29.67246, -95.16304)
- Outfall Improvement at Armand Bayou Headwaters - From point on Morning Glory Dr. 277 feet south of Sycamore Ave southeast to East Houston Parkway

There is a commercial warehouse at 2815 Lilac, which is fenced in. Then there at the 2402 Sycamore address there is an open grassy area with a channel crossing diagonally on the property. Half of the Sycamore address location also has a single residence, fairly new build on site. The last Parcel on Morning Glory is only a grassy area.

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**
Flood and Drainage Facilities
Subrecipient shall perform channel and bayou improvements including the construction of a new Storm Water Detention basin and improve existing culverts:

Lilac Detention Basin:

- Excavation & Off-Site Disposal - 15,170 CY
- Hydromulch - 2 AC
- Landscape Shrubs - 143 EA
- Landscape Tree - 4 EA
- Demolish existing building which was constructed in 1980

Pansy St/ Culvert:

- 36 inch RCP - 1 EA
- 36 inch backflow preventer - 1 EA
- 30 inch RCP - 1 EA
- Road Repair - 260 SF

Outfall Improvement at Armand Bayou Headwaters:

- Install approximately 112 feet of 42" RCP culvert and 340 feet of open cut storm drain. This outfall to be metered out to optimize the reduction of peak discharge from the Lilac Detention Basin.

Acquisition:
The project will require acquisition to ensure adequate ROW is available. Grantee shall acquire easements as needed to accommodate construction and carry out all acquisition of needed easements and/or rights-of-way in compliance with the Uniform Relocation Assistance and Real Property.

FLOODPLAIN
How Federal Flood Risk Management Standard (FFRMS) was determined:
The FFRMS is determined by utilizing a tiered approach:

- *Climate-Informed Science Approach (CISA) - **Preferred Method***
- *0.2-Percent-Annual Chance Floodplain Approach (0.2PFA)*
- *Freeboard Value Approach (FVA)*

Climate-Informed Science Approach (CISA)

- *Federal CISA data must be equal to or greater than base flood elevation (BFE) to be used.*

According to the Federal Flood Standard Support Tool (FFSST), there is no CISA data available for the project area. As such, this approach could not provide a determination as to whether the project was in the FFRMS floodplain. The next tiered approach, 0.2PFA (500-year floodplain method), was therefore considered.

FEMA 0.2PFA (500-year floodplain)

- *FEMA maps must show a 500-year floodplain in order to be used*
- *Critical Actions require both the 0.2PFA and the Freeboard Value Approach (FVA) be used to determine which elevation is higher, the 0.2PFA or FVA.*

According to FEMA floodplain map #48201C0920M (Effective Date 1/6/17), the majority of the project area is in FEMA Zone X (area of minimal flood hazard). Because Zone X is not considered a FFRMS floodplain, no further action is required for the portions of the project which occur within this zone.

However, a portion of the project will also occur within a 100-year floodplain (Zone A). Since the 100-Year Floodplain is considered a FFRMS floodplain, it was concluded that the project is in the FFRMS floodplain and the 8-step process is required. Further, since the 500-year floodplain was identified on the map, this method could be used to determine whether the project is located in an FFRMS floodplain.

Area of Disturbance: Pansey St. Culvert - 0.014 acres

In order to ensure that all appropriate FEMA floodplain data was considered and the most stringent data source was used for the comparable flood data, all available effective, preliminary and pending FIRMS were reviewed:

- Effective FIRM Panels - 11
- Preliminary Maps - 0
- Pending Maps - 0

Upon completion of this review, it was discovered that an updated National Flood Insurance Program map with an effective date of January 9, 2017 was available. However, since the map was revised to show the LOMR, the map did not change the FFRMS determination.

Since the FEMA maps did not show the Floodplain Base Elevation, the FEMA Floodplain Elevation was determined to be 36 feet per the FEMA Floodplain Base Elevation tool. In order to determine the FFRMS elevation, the Freeboard Value Approach (FVA) was utilized.

Freeboard Value Approach (FVA):
FVA defines the FFRMS floodplain as the elevation and flood hazard area that results from:

1. *Adding two (2) feet to the base flood elevation (BFE)* ***for non-critical actions*** *or*
2. *Adding three (3) feet to the BFE* ***for critical actions.***

Because the project is not a critical action, the FFRMS floodplain elevation is as follows:

- Base Floodplain elevation (36 feet) + 2 feet = **38 feet**

WOTUS (Waters of the United States)
Since no wetlands were identified in the project area and no wetlands will be disturbed as a result of this project, the 8-step process is not required to satisfy Executive Order 11990 and Part 55, Wetlands Protection. However, it should be noted that, since the project will disturb Waters of the United States (WOTUS), it must comply with the Clean Water Act which falls under the United States Army Corp of Engineers (USACE) jurisdiction. Therefore, in order to comply, the project must be constructed under Nationwide Permit (NWP) 3, NWP 43 with Pre-Construction Notification (PCN) and NWP 13 as described in the Water and Wetland Delineation Report. A Preconstruction notification was submitted to the USACE on November 8, 2024.

Natural Values of the Floodplain:
The natural resources of the floodplain include water, biological, and societal resources. The proposed project will have minimal impacts to the floodplains because there will be minimal ground disturbance.

The **City of Pasadena** has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values:

1. Do work only outside the floodplains. Completing the project without disturbing any floodplains is not possible. (Not Viable)
2. Obtain a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR). - It was determined that neither a LOMA nor a LOMR was likely nor practical for the project area. (Not Viable)
3. Other infrastructure considered. - After considering other potential projects in the City, it was determined that of the eligible projects, this project was of the highest priority. (Not Viable)
4. No Action or Alternative Actions that Serve the Same Purpose. - The current storm drainage system is inadequate for the area and must be addressed to prevent public health hazards. (Not Viable)

Mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values:

1. Preserving Property: Project designs should, to the best extent possible, incorporate measures to reduce the risk of damage to the new infrastructure via another flood.
2. Preserving Natural Values and Minimizing Impacts: After construction is completed, the disturbed area will need to be immediately re-vegetated with native grasses. Only native plants are to be used in the floodplain and on the site.
3. Deposition and excavation of materials will need to be performed in such a manner that erosion and sedimentation will be controlled.
4. Precautions will need to be taken in the handling of fuels or other hazardous materials to prevent discharge or spillage resulting in lower groundwater quality.
5. Erosion control measures such as hay bales or silt screen barriers will need to be implemented and maintained during construction as required.
6. The project engineer will need to incorporate best management practices into the specifications and plans.

Date of any final or conditional LOMR's or LOMA's from FEMA: None requested.

The **City of Pasadena** will ensure applicable state and local floodplain protection procedures are followed. The **City of Pasadena** has reevaluated the alternatives to building in the floodplain and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 6 of Executive Order 11988 are available for public inspection, review and copying upon request at the times and location delineated in the last paragraph of this notice for receipt of comments.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information and request for public comment about floodplains can facilitate and enhance Federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplain**s**, it must inform those who may be put at greater or continued risk.

Written comments must be received by the **City of Pasadena** at the following address on or before **March 4th, 2025,** a minimum 7 calendar day comment period will begin the day after the publication and end on the 8th day after the publication: **City of Pasadena City Hall, 1149 Ellsworth Drive, 5th Floor, Pasadena, TX 77506 and (713) 475-7296, Attention: Zafar Iqbal, PE, Senior Assistant Director of Public Works.** A full description of the project may also be reviewed from 9:00 am to 5:00 pm from the previously mentioned address**.** Comments may also be submitted via email at todd@texasenvironmentals.com.

Date: February 24, 2025