changes to Infrastructure Design Manual + Building Code to adopt recommendations of Redevelopment + Drainage Task Force
DETENTION

- Allow payment of a fee in lieu of detention
- Provide detention credit for green/low-impact developments
- Eliminate detention credit for existing impervious cover during redevelopment
- Allow sale of excess detention capacity
- Allow private sector involvement creating regional detention in parks/public land
require protection of sheet flow for all developments

accommodate natural drainage patterns

clearly define “engineered grading”

change threshold amount for engineered grading
ENCROACHMENTS

- Public roadside drainage education campaign
- Re-establish drainage in City right-of-way
CHAPTER 19

companion to Floodplain Ordinance to establish operational procedures
NEW PROCEDURE HIGHLIGHTS

| permits          | temporary repair permit  
|                  | small project expedited permit |
| design           | simplified mitigation plan  
|                  | flood opening calculations  
|                  | sheet flow analysis         |
| enforcement      | non-compliance certificate  
|                  | non-conversion agreement    
|                  | Section 1316 – denial of FEMA flood insurance  
|                  | mitigation facility recertification |
EXISTING PROCEDURE CLARIFICATION

substantial damage

- only applies in 100-year floodplain
- substantial damage determination request
- substantial damage appeal
- increased cost of compliance letter request

City Engineer

- preliminary damage assessment
- Community Rating System (CRS)
- Plan for Public Information (PPI)
- Floodplain Management Plan (FMP)
- FEMA community letter requests
COMMUNITY ENGAGEMENT

- 10 OPEN HOUSES
- 450+ ATTENDEES
- 450+ SURVEY RESPONSES
DESIGN STANDARDS

survey results
HOME ELEVATION

HOUSTON SHOULD INCREASE THE LOWEST FLOOR ELEVATION OF NEW HOMES OUTSIDE OF THE FLOODPLAIN

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>31%</td>
<td>145</td>
</tr>
<tr>
<td>Agree</td>
<td>32%</td>
<td>151</td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>15%</td>
<td>70</td>
</tr>
<tr>
<td>Disagree</td>
<td>12%</td>
<td>55</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>11%</td>
<td>50</td>
</tr>
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</table>
DEVELOPERS SHOULD FOLLOW THE SAME DETENTION RULES FOR NEW DEVELOPMENT AND REDEVELOPMENT
HOUSTON SHOULD REQUIRE NEW DEVELOPMENT TO NOT BLOCK EXISTING SHEET FLOW

- **STRONGLY AGREE**: 308 (64%)
- **AGREE**: 111 (23%)
- **NEITHER AGREE OR DISAGREE**: 32 (7%)
- **DISAGREE**: 22 (5%)
- **STRONGLY DISAGREE**: 2 (2%)
TOUGHER STORMWATER REGULATIONS ARE NEEDED TO REDUCE THE RISK OF FLOODING IN HOUSTON
Chapter 19 Guidelines – August 1st publication
Design Standards – August Council Action
Effective Date September 1st
**DESIGN STANDARDS**
WHAT: Draft Revisions Posted
60 Day Public Input Begins
WHERE: surveymonkey.com/r/HoustonDesignStandards

**CHAPTER 19**
WHAT: Ordinance Amended
WHO: City Council

**FEB**

**APR**

**MAY 29**

**JUN 11**

**JUN 28**

**DESIGN STANDARDS & CHAPTER 19**
WHAT: Super Neighborhood Meeting
WHERE: City Hall Annex, 900 Bagby St.

**DESIGN STANDARDS & CHAPTER 19**
WHAT: Transportation, Technology & Infrastructure Committee
WHERE: City Hall, 901 Bagby St.

**DESIGN STANDARDS & CHAPTER 19**
WHAT: Open House
WHERE: Houston Permitting Center, 1002 Washington Ave.
   Basement Training Room – B2
   TIME: 2 – 4 PM

**DESIGN STANDARDS & CHAPTER 19**
WHAT: Open House
WHERE: Evelyn Rubenstein Jewish Community Center of Houston
   5601 S. Braeswood Blvd, Houston, TX 77096
   TIME: 6 – 8 PM

**DESIGN STANDARDS**
WHAT: Final Report Issued
WHO: Redevelopment & Drainage Task Force

WHERE: pwe.director@houstontx.gov
**CHAPTER 19**
WHAT: Public Input Posted
WHERE: HoustonRecovers.org/Chapter19

**JUL 2**
**DESIGN STANDARDS**
WHAT: Open House
WHERE: VFW Post 8790
1560 Foley Street, Houston, TX 77055
TIME: 6 - 8 PM

**JUL 11**
**DESIGN STANDARDS**
WHAT: Open House
WHERE: Kingwood Community Center
4102 Rustic Woods Dr., Humble, TX 77345
TIME: 6 - 8 PM

**JUL 23**
**DESIGN STANDARDS**
WHAT: 60 Day Public Input Closes
WHERE: surveymonkey.com/r/HoustonDesignStandards

**AUG 1**
**DESIGN STANDARDS**
WHAT: Council Action to Amend Building Codes & Approve IDM Updates
WHERE: City Hall, 901 Bagby St.

**SEPT 1**
**CHAPTER 19**
WHAT: Final Guidelines Posted
WHERE: HoustonRecovers.org/Chapter19

**CHAPTER 19**
WHAT: Final Guidelines Posted + Go Into Effect
WHERE: HoustonRecovers.org/Chapter19

**JUN 29**
**CHAPTER 19**
WHAT: 30 Day Public Input Closes
WHERE: pwe.director@houstontx.gov
THANK YOU

houstonrecovers.org
Bit.ly/houdesignstandards.org