CH. 19 GUIDELINES

Companion to Floodplain Ordinance to Establish Operational Procedures
Temporary Repair Permit For Substantially Damaged Structures
• Repair immediately
• Allow Up to 2 Years to Bring Into Compliance
• Provides options to impacted property owners
• Per recent FEMA guidance

Expedited Review | Zero Fee Permit For Small Scope Projects
• Remodel or repair
• No sitework, additions or conversion to living space
• Residential less than $10k
• Commercial less than 10% floor area
Mitigation Plan

- Prepared by Texas Professional Engineer
- Compares existing and proposed elevations on a development site
- FILL = material is added to area of site below the 500-year flood elevation either from on site or off site
- CUT = material is removed from area of site below the 500-year flood elevation
- ZERO NET FILL = fill does not exceed cut
ZERO NET FILL
Cut Equals or Exceeds Fill
GUIDELINES HIGHLIGHTS
New Design Procedures

Simplified Mitigation Plan
Procedure for simplified cut and fill calculations for qualifying sites

Flood Opening Calculations
• Accept ICC-ESR in lieu of Engineer’s certifications for Engineered Flood openings
• Provide standard flood opening calculation template
GUIDELINES HIGHLIGHTS
New Design Procedures

Options for Fill in 500 year floodplain

• Comply with zero net fill provision OR
• Complete Optional Sheet Flow Analysis
  o Engineering Analysis for exception to zero net fill in 500-year floodplain
## GUIDELINES HIGHLIGHTS

### Sheet Flow Analysis

<table>
<thead>
<tr>
<th></th>
<th>Condition 1</th>
<th>Condition 2</th>
<th>Condition 3</th>
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</thead>
<tbody>
<tr>
<td><strong>Sheet Flow Analysis</strong></td>
<td>No Existing Offsite Sheet Flow</td>
<td>Existing Offsite Sheet Flow Identified</td>
<td>Existing Offsite Sheet Flow Identified</td>
</tr>
<tr>
<td><strong>Result</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Fill Requirement</strong></td>
<td>Net Fill Permitted</td>
<td>Net fill permitted in Footprint of existing building to be replaced</td>
<td>Net Fill Permitted</td>
</tr>
<tr>
<td><strong>Design Notes</strong></td>
<td>Grading per building code</td>
<td>No other grading changes permitted</td>
<td>Design ditch or pipe to divert offsite sheet flow to appropriate outfall per IDM</td>
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GUIDELINES HIGHLIGHTS

Sheet Flow Conditions

- **CONDITION 1: NO OFFSITE SHEETFLOW**
- **CONDITION 2: OFFSITE SHEETFLOW MAINTAINED**
- **CONDITION 3: OFFSITE SHEETFLOW DIVERTED**
GUIDELINES HIGHLIGHTS

Enforcement

Non-Compliance Certificate
• Filed in deed records for non-compliant properties including unresolved substantial damage or temporary repair permit

Compliance Certificate
• Filed in deed records reversing non-compliance certificate

Non-Conversion Agreement
• Filed in deed records Prohibiting the conversion of areas below minimum flood protection elevation to living space and requiring that floodplain standards be maintained (no certificate of occupancy for residential)

Section 1316
• City Engineer can recommend that FEMA deny NFIP flood insurance to violators of provisions of Chapter 19

Recertification of Mitigation Facilities
• Property owners are required to submit annual recertification packages for their Mitigation Facility.
Revisions to guidelines include clarifications outside of ordinance changes
**HOW IS SUBSTANTIAL DAMAGE DETERMINED?**

Cost to repair damage \(\geq 50\%\) of market value of building (not including land)

<table>
<thead>
<tr>
<th>Only Applies in the 100-year floodplain</th>
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<tbody>
<tr>
<td>City determines proactively using FEMA or FMO data</td>
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<tr>
<td>City determines reactively based on permitting activity and property owner request</td>
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*Not an ordinance change, but procedures are expanded from previous guidelines.*
GUIDELINES HIGHLIGHTS
Substantial Damage – Only Applies in 100-year

Substantial Damage Procedures

Substantial Damage Determination Request
• Form for property owner requests

Substantial Damage Determination Appeal
• Form and procedure for Appeals

Increased Cost of Compliance Letter Request
• Form for property owner requests
**GUIDELINES HIGHLIGHTS**

**Documenting City Engineer’s Duties**

<table>
<thead>
<tr>
<th><strong>Preliminary Damage Assessment</strong></th>
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<tr>
<td>• Assist OEM and DON in assessing flood damage after a flood event</td>
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<tr>
<th><strong>Community Rating System (CRS)</strong></th>
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<tr>
<td>• Manage program and make annual submittals</td>
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<tr>
<th><strong>Plan for Public Information (PPI)</strong></th>
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<tr>
<td>• Implement plan, make annual updates and develop new plan every 5 years</td>
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<tr>
<th><strong>Floodplain Management Plan (FMP)</strong></th>
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<td>• Implement plan, make annual updates and develop new plan every 5 years</td>
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<tr>
<th><strong>AW-501 Updates / Community Letter Requests</strong></th>
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<tbody>
<tr>
<td>• Notify FEMA of mitigated properties to change Repetitive Loss or Preferred Risk Policy status for insurance purposes</td>
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</table>
Public comment period ends June 30th
DESIGN STANDARDS
WHAT: Final Report Issued
WHERE: survey monkey.com/r/HoustonDesignStandards
WHO: Redevelopment & Drainage Task Force

CHAPTER 19
WHAT: Ordinance Amended
WHERE: City Council

MAY 29

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

JUN 11

DESIGN STANDARDS
WHAT: Draft Guidelines Posted
WHERE: pwe.director@houstone.org
30 Day Public Input Begins

JUN 12

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

**JUN 29**

**Chapter 19**

**WHAT:** Public Input Posted  
**WHERE:** HoustonRecovers.org/Chapter19

**WHAT:** 30 Day Public Input Closes  
**WHERE:** pwe.director@houstontx.gov

**JUL 16**

**Design Standards**

**WHAT:** Open House  
**WHERE:** TBD

**JUL 30**

**Chapter 19**

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

**SEPT 1**

**Design Standards**

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

**Chapter 19**

**WHAT:** Final Guidelines Posted  
**WHERE:** HoustonRecovers.org/Chapter19

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

www.houstonrecovers.org