“Residential Permitting 101”

A general overview of the residential building permit process. This presentation will outline the basic steps involved in submitting plans for review, obtaining permits, and scheduling inspections for one and two family dwellings.

Presented By

CITY OF HOUSTON
PUBLIC WORKS AND ENGINEERING
PLANNING AND DEVELOPMENT SERVICES DIVISION

Topics Covered In This Presentation

- Project Planning
- Design Requirements
- Required Reviews by Project Type
- Plan Submittal
- Licensing & Registration
- Application Process
- Planning Requirements
- Taps & Meters
- Flood Plain Management
- Traffic
- Storm Water
- Required Inspections & When to Call
- Basic Code Requirements
- Other Services & Options
- Resources & Other Information
- Contact Us
- Website Highlights

Project Planning

Consider the following when planning the project. These items can save time and money.

- Make sure you can financially and legally build your proposed project
- Legal – Deed restrictions and property liens
- Survey and property lines (Ensure that your structure can be built in the proposed location)
- Utility availability (Assess if water, storm and sanitary capacity and utilities are available or if additional fees may be required)
- **Platting** (May be required if there is a change in use on the property)
- Verify Setback requirements
- Floodplain (Refer to Chapter 19 of the Code of Ordinances)

Design Requirements

Defining the Scope of Work

- New Construction – Ground up construction, Foundation Move-In
- Addition – Square footage added
- Remodel – Alteration of the existing building
- Repair – Replacement of materials; "like for like"

Applicable Codes

- 2006 International Residential Code **- Amendments**
- 2009 International Energy Conservation Code- **Amendments**
- 2011 National Electrical Code **– Amendments**
- Various Code of Ordinance Chapters

Plans Required

- 2 sets of plans are typically required for review. For detailed requirements please see "Plan Submittal".

Licensing & Registration

Who can purchase what permits and when?

- The building permit may be purchased by the owner, agent, contractor. General Contractors are not required to be licensed.

- Licensed contractors can purchase trade permits after the building permit has been sold. In some cases a homeowner may purchase those permits. For more information please contact us at 832-394-9494.

  - Electrical - Mechanical - Plumbing - Sprinklers - Sidewalk/Driveway

Electrical

- Master Electrician must be licensed by the **Texas Department of Licensing and Regulation** (TDLR) and be registered with the City of Houston.

Mechanical

- Air Conditioning Contractor must have a type A or B license from the **Texas Department of Licensing and Regulation** and be registered with the City of Houston. In some instances, a homeowner may obtain this permit.

Plumbing

- Master Plumber must be licensed by the **Texas State Board of Plumbing Examiners** and be registered with the City of Houston. In some instances, a homeowner may obtain this permit.

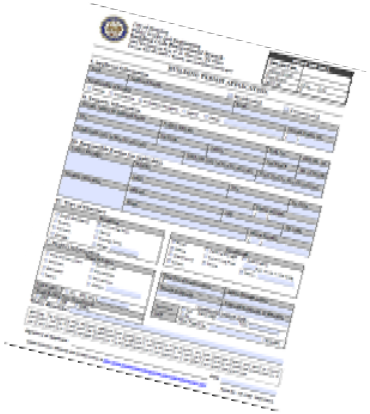
Application Process

- Deed Restriction Affidavit (Individual Owner or Corporate/Other Business Entity Owner)- Verify if the property has Deed Restrictions and whether this project would be in violation. For more information **click here** or contact the Harris County Clerk's office at 713-755-6405.

- Addresses are critical and must be verified at the Code Enforcement Office for new construction.

- Building Permit Application – completed, including valuation and notarized. Valuation is defined as the total cost of construction to the end user, excluding the land purchase costs and the overhead attributed to the land purchase. The value of donated goods and services is included.

- A Project Number will be assigned by the City of Houston Permit Office.



Required Reviews by Project Type

The following chart indicates the various department reviews required depending on the scope of work.

Project Type	Planning	Taps & Meters [2]	One Stop	Flood [3]	Traffic
New construction [1]	✓	✓		✓	
Addition	✓	✓	✓	✓	
Remodel		✓	✓	✓	
Garage/Carport (new)	✓	✓	✓	✓	
Repair			✓	✓	
Fence	✓		✓	✓	
Driveway/Sidewalk(new)	✓		✓	✓	✓
Driveway/Sidewalk (existing)			✓	✓	

1 Plans must be submitted for review 2 Taps & Meters applicable if plumbing is added 3 Flood applicable if project is in a flood plain

Please note: Permits are NOT required for:

- Painting
- Carpet
- Tile
- Wood Floors
- Cabinets*
- Interior trim and similar finish work
- Wood or metal fences less than 8 feet tall
- Uncovered detached decks under 30 inches

* Although a permit is not required for cabinets, replacement of plumbing or electrical fixtures require permits.

Plan Submittal

The Plan Review Department is responsible for ensuring that plans comply with all applicable building codes. All new construction projects, most renovations, repairs, or addition projects require plan approval before purchasing a permit. The following depicts the minimum plan submittal requirements for various scopes of work.

New Construction / Remodels / Additions/ Garages & Carports

- Two (2) complete sets of plans - All dimensions and materials clearly indicated
  - Survey by Texas Registered surveyor or a complete site plan with dimensions showing: Existing property lines, Easements, Building Setback Line and Proposed Building
  - Foundation plans: needed if a project includes a foundation. Dimensions shall include beams and steel bars with foundation conditions noted on plans.
  - Floor plans. For additions indicate footprint of existing building and show in detail new addition/affected area with location of partitions, windows and doors.
  - Elevation plans
  - Door and window schedule shown on plans
  - Wall section details
  - Roofing and framing plan indicating purlins, ceiling joist and rafters
  - Trusses (when applicable)
- Energy Code Form / Software (if applicable)
- Grading and Fill Worksheet
- Windstrapping information (indicated for 110 mph wind load)

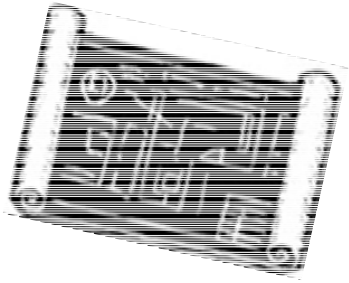
Repairs - Permits are required for repairs that involve only replacement of existing structural members and other building elements. A Repair Spec list must be submitted indicating the following:

- Replace siding/doors/windows / trim / stairs / porch / fireplace
- Replace roof covering / ceiling / wall covering / insulation
- Re-frame walls and /or ceiling

Planning Requirements

The Planning & Development Department reviews development site plans, (new construction and additions) for compliance with the City Code of Ordinances (Chapter 42), parking regulations (Chapter 26), tree and shrub regulations (Chapter 33); determine property use and setbacks (Chapter 42).

- Site plan
  - Drawn to scale
  - Show building setback lines
  - Show all existing and proposed structures
- Survey (one copy)
- Landscape analysis form
- Trees (1 required on lots < 5000 sq. ft. and 2 on lots > 5000 sq. ft.)
- Protected trees
- Recorded subdivision plat (one copy)



Taps and Meters

The Taps & Meters (Water/Waste Water) Department is responsible for managing wastewater flows through wastewater capacity reservations (WCR), managing water demands through water/storm drainage commitment letters, review process which provides information on water, wastewater and storm drainage requirements for new development or for existing development that will require additional water and/or wastewater capacity. (New construction and projects that only include plumbing.)

- Impact fee receipt (or exemption form)
- Waste Water Capacity Reservation Letter [1] (WCR)
- Point of connection
- For Impact Fee / WCR Credit
  - Demolition project number or
  - Previous water account or
  - HCAD tax statement

[1] Applicable for: a.) New development or for existing development that will require additional water and/or wastewater capacity, b.) If the main water line is $\leq$ 6" or $\geq$ 20" and c.) If the sewer line is < 8".

Flood Plain Management

The Flood Plain Section manages all development in the flood plain by reviewing plans, monitoring and inspecting construction activities as required by the Code of Ordinances. An archive of historic Flood Insurance Rate Map (FIRM) panels that are no longer "effective" as determined by FEMA are maintained by this office.

- Elevation Certificates (must be signed & sealed)
  - When plans are submitted
  - Prior to Framing Inspection
  - Prior to Final Inspection
- Mitigation Plan
- Site Topography Survey
- Finish floor elevations of all slabs
- Cut and fill areas (must be shaded)
- Appliances (mechanical, electrical & plumbing) must be 1 foot above BFE (Base Flood Elevation)
- Water resistant material (for areas below the BFE)
- Flood vents (for areas below the BFE)

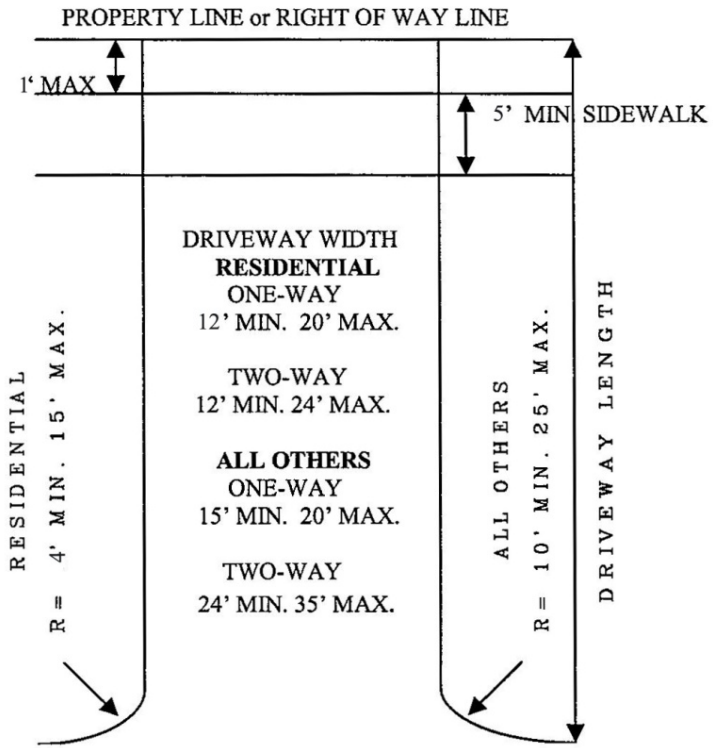
Note: No permit shall be issued for development in the floodway except as stipulated in the City of Houston Ordinance Chap. 19-43 sec (b) & (c).

Traffic

The Traffic Department reviews plans for driveways, sidewalks, and culvert parking lots, issues permits for private street paving work, and addresses right-of-way issues.

Driveways, Sidewalks & Culverts

- Plans or drawings drawn to scale are required and must show:
  - Existing and proposed driveways
  - Location of driveway to nearest neighbor common property line
  - Widths of:
    - Sidewalks - Ditches - Culverts
  - Existing trees, storm inlets and location of edge of pavement
  - Center line of ditch & radii or taper of the driveway
- Requires $2000 bonded contractor



Note: Minimum culvert size is 24" RCP (reinforced concrete pipe) X width of driveway

Storm Water

The Storm Water review ensures that site drainage complies with all mandated policies directing runoff to the city right-of-way and may not overflow to an adjacent property.

Minimum Requirements For Residential Drainage

- Detailed site drainage plan
- Single family residences on lots 15,000 sq. ft. or more require a Letter of Storm Availability attached to plans.
- Some sites require Detention/Storage plans by a Professional Engineer per the Letter of Storm Availability.

Required Inspections & When To Call

Once the appropriate permit is purchased work may begin. Approved "Red Stamped" plans and permits must be on the job site for inspections. Be sure to call for an inspection after the permit has been purchased and the work completed.

Electrical Inspections

- Ditch cover - Call when underground conduit is put in
- Rough in – Call when walls and ceiling wired
- TCI - Call when temporary power is needed to check wiring
- Meter Loop Services / Final - Call after all work is completed

Plumbing Inspections

- Ground, Sewer, Water Service, Storm Drainage, Lawn Sprinklers - Call before pipes are covered
- Rough in – Call before sheetrock is installed
- Gas / Final – Call when work is complete

Required Inspections & When To Call continued…

Mechanical Inspections

- Duct Seal - Call before insulation and sheetrock is installed
- Cover - Call before insulation and sheetrock is installed
- Grille Seal - Call before insulation and sheetrock is installed
- Final – Call after work is complete

Structural Inspections

- Pier / Foundation – Call before placement of concrete
- Windstorm – Call prior to exterior sheathing installation to verify fasteners / straps
- Frame – Call after MEP rough-ins and prior to installing insulation and sheetrock.
  Note: Truss plans should be approved at this time.
- Lath / Brick Tie – Call after frame inspection has been approved
- Insulation – Call after frame inspection has been approved
- Building Final – Call after the entire project has been completed to verify that all life safety and grading items have been installed and are working properly

Basic Code Requirements

Some of the basic code requirements that are reviewed upon submittal are as follows.

- Location on property – 3' typical unless rated construction
- Minimum 1 door 3'0 wide and 6'8 tall
- Egress windows required out of bedrooms
- Stairs – Tread max. 7 ¾ inch rise and 10" min. depth; Headroom 6' 8" min. typical
- Smoke Detectors – Required in each bedroom and hallways near bedrooms; interconnection required
- Sidewalks required on Major Thoroughfares, Inside 610 Loop, and lots over 125' street frontage
- Handrails – between 34 -38"
- Guardrails – 36" in height minimum and 4" openings max
- Lighting and ventilation are required
- Sanitation facilities are required
- Windows/Insulation/Equipment efficiencies must meet Energy Code Requirements

For more information please see the **Single Family Residential Checklist – 2006 IRC** or call 832-394-8820.

Other Services & Options

- **One-Stop Program** simplifies the permit process. In most cases, other than new buildings, your building and improvement plans can be reviewed and a building permit issued within just a few hours when the following criteria are met:
  - Applicable Plan Review Requirements
  - Completed Residential Building Permit Application and project number
  - Review can be done in 30 minutes

  Note: Plans for New Construction must be submitted.

- **Multi-Discipline Inspection Program (MDI)** is a voluntary program for new one- or two-family residential home builders/remodelers administered by Structural Inspections. The objective is to reduce the number of inspections by scheduling inspections as seven (7) specific construction phases are completed. Call the Structural Inspection Section at (832) 394-8840 for more information.

- **New Residence Master Home Program**
  - Designed for builders who build 10 or more units of the same repeat home over a 12 month period.
  - Applicant is required to submit 3 complete sets of plans and energy code forms for the master plan when the process is started. An additional set of plans may be submitted for approval stamps.
  - For subsequent identical units built, plan reviews are performed in an expedited manner and permit fees are known in advance.
  - Repeat homes require submittal of only two (2) copies of the site plan and two (2) landscape forms to the New Residence Office. One set of plans will be stamped for the field.
  - The Residence Master Plan Project Number must be entered in the Remarks Section of the Residential Building Permit Application.

Resources & Other Information

- **Building Permit Fees**
- Water & Sewer Rates
- City of Houston Comprehensive Drainage Plan
- Top 10 Things You Should Know About Permitting
- Frequently Missed Inspection Items
- Open Records Section of the Code Enforcement branch provides permit records and residential plans beginning in 1988 to the present.
  - A Public Information Request Form, e-mail or faxed request must be submitted.
  - Lost Plans may be requested with an original letter of consent from the Architect and/or Engineer(s) on the plans, before the plans will be released.
- Lost Permits (Job Cards) may be duplicated and purchased from the Permits Office for a fee of $100.42.
- Tax Increment Redevelopment Zone (TIRZ)

  TIRZs are special districts created by City Council to attract new investments to an area. TIRZs help finance the cost of redeveloping or encouraging infill development in an area that would otherwise not attract sufficient market development in a timely manner. Taxes attributable to new improvements (tax increment) are set-aside in a fund to finance public improvements in the zone.
- Historic Designation
  - As a designated City of Houston historic building, your property will be exempt from compliance with Energy Code requirements in the Building Code.
  - You are eligible for a 50% discount on building permit fees if the Houston Archeological and Historical Commission (HAHC) issued a Certificate Of Appropriateness (COA) for the approved work.
  - **Historical Preservation Ordinance** regulates exterior alteration, new construction, relocation or demolition of any historic structure, object or site.

Contact Us…

Please Call Us:

General Information
- 832-394-9494

Residential Plan Review
- 832-394-8820

Planning
- 832-394-9091

Taps and Meters
- 832-394-8888

Inspections
- 713-222-9922

Open Records
- 832-394-8800

Or Visit Us Online:

Code Enforcement
- www.houstonpermittingcenter.org/code-enforcement.html

Permits/Inspections/Plan Review
- www.houstonpermits.com

Planning & Development
- www.houstonplanning.com

Houston Fire Department
- www.houstonfire.com

General Information
- www.houstontx.gov/311

Flood Maps
- www.tsarp.org

Public Works & Engineering Main Webpage
- www.publicworks.houstontx.gov

City of Houston Main Webpage
- www.houstontx.gov

Or Email Us at rmcacd@houstontx.gov

Website Highlights

Welcome to the City of Houston's Online Permits Website

I-Permits - Customer / Contractor Portal

First Time User
Login
For questions, please contact us at rmcacd@houstontx.gov

Building Permit - Fee Estimator

Fee Calculator
For questions about the PERMIT FEE CALCULATOR please contact us at luis.villasana@houstontx.gov

Schedule Inspections

Schedule Inspections and Inspections History
To receive inspection results by e-mail or cell phone Click Here.
For questions about SCHEDULING INSPECTIONS please Click Here

Check Permit Status

Plan Review
Plan Review Status (Real Time Pages)
Permits Sold
Search for Sold Permits (sold permits for the last 3 years)
The online sold permit search only supports Windows with Internet Explorer (IE Version 8 or older).

Other Information

Code Enforcement Main Page

Purchase Permits (certain restrictions apply)

Estimate Building Permit Fees

Schedule Inspections

Check the Status of Plans

Visit the Code Enforcement Main Webpage