# TECHNICAL GUIDE APPENDIX: DR2 HOUSING

### City of Houston Disaster Recovery Round 2 Design Guidebook



#### **Special Acknowledgement to:**

Horne Limited Liability Partnership City of Houston Housing and Community Development











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Fifth Ward Near Northside Old Spanish Trail / Griggs Acres Homes Independence Heights Sunnyside

Design Parameters

## Background

#### Hurricane IKE & Disaster Recovery Round 2 [DR2]

In September 2008, Hurricane Ike made landfall on the upper Texas coast, causing more than \$3 billion in damages to single family housing across the Houston metropolitan region. Many low-income homeowners impacted by the storm have not yet been able to repair or replace their homes due to limited financial resources. In response, the Texas General Land Office (GLO) granted \$152 million to the City of Houston's Housing and Community Development Department (HCDD) to administer Round 2 of the city's Disaster Recovery Program (DR2). Investment will provide relief to affected homeowners while creating areas of opportunity where neighborhood revitalization and recovery can occur.

HCDD, through an extensive analysis of Houston's social and physical conditions, identified six target neighborhoods as high opportunity areas. These Community Revitalization Areas (CRA) and CRA Outreach Areas will collectively receive up to 400 newly designed and constructed homes as part of the DR2 program.

(Disaster Recovery - Round 2 Market Analysis/Area Selection, Page 11)

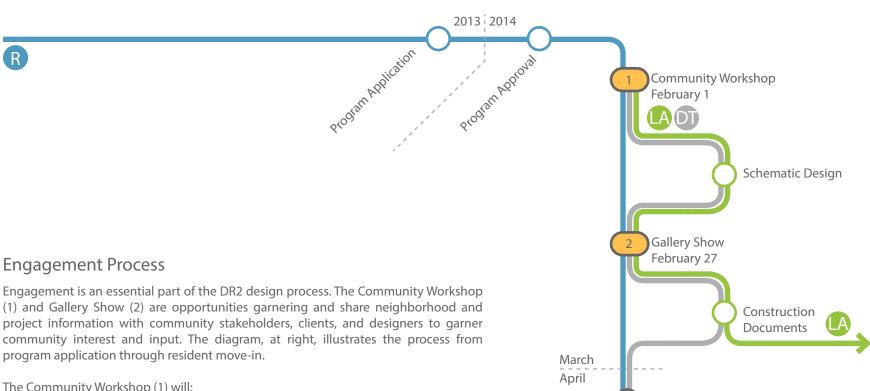


Hurricane Ike Storm Damage, Houston Texas

## Approach

#### **Problem Statement**

The design team, led by bcWORKSHOP and supported by Gulf Coast Community Design Studio, Unabridged Architecture, and the University of Houston Community Design Resource Center, is working to deliver single family DR2 infill home designs. These designs will be used in constructing homes across the six CRA & Outreach Areas. The team is committed to delivering high-quality cost-effective sustainable designs that respect the communities interests and character while offering individual homeowner choice. In order to achieve this, the design team has developed an engagement process involving neighborhood residents, community leaders, and local design architects.



The Community Workshop (1) will:

- Set contextual and programmatic design preferences for CRA & Outreach Areas, and
- Inform schematic home design, including floor plans and elevations.

The Gallery Show (2) will:

- Exhibit schematic designs developed directly from community input; and
- Ask CRA & Outreach Areas to select their preferred designs for further development and inclusion in the DR2 program.
- Residents / DR2 Applicants
- **Local Design Architects**
- Design Team
  - Resident / Local Design Architect Event

### City Context

#### **CRAs and Outreach Areas**

In order to maximize the impact and amount of community revitalization as a result of the Round 2 funding, the City of Houston Housing and Community Development Department (HCDD), the Houston Housing Authority (HHA), and stakeholder groups identified six areas of high investment opportunity. The six areas are divided into Community Revitailization Areas (CRAs), or primary investment areas, and CRA Outreach Areas, or secondary investment areas. Although common themes exist between communities, each area has its own unique history, social dynamics, and physical context. Areas include:

#### **Community Revitalization Areas (CRA)**

- Near Northside or Northside Village (N)
- Greater Fifth Ward (F)
- Old Spanish Trail/South Union (OS)

#### **CRA Outreach Areas**

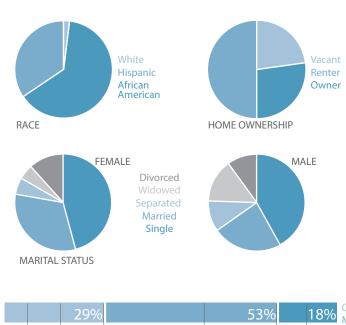
- Acres Homes (A)
- Independence Heights (I)
- Sunnyside (S)

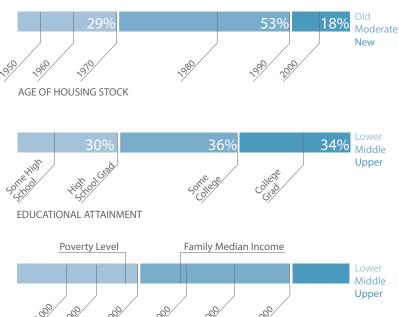


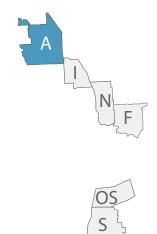
### **Acres Homes**

#### Neighborhood Overview

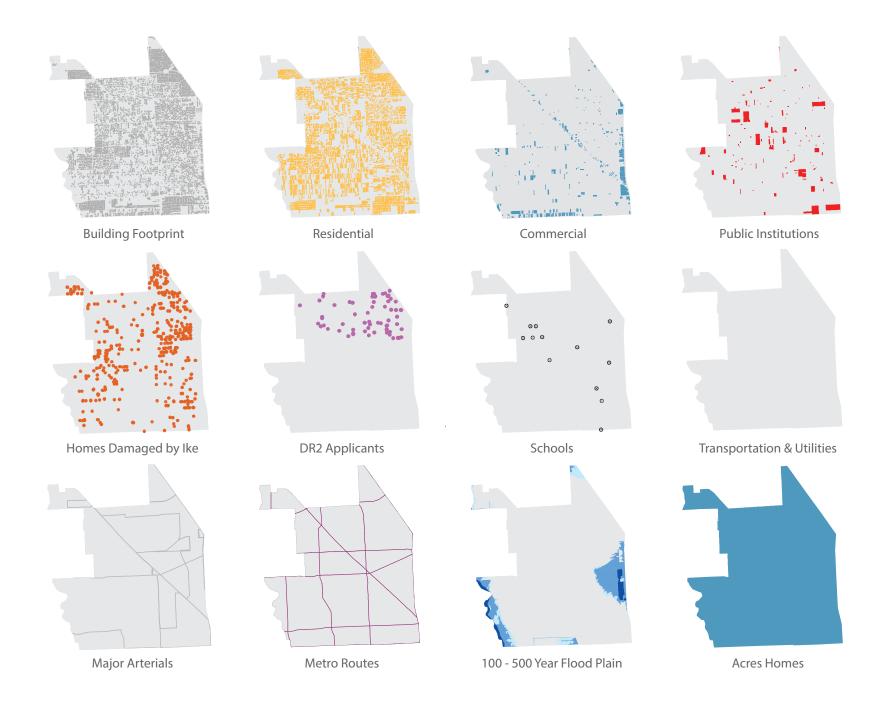
Acres Homes was once considered the South's largest unincorporated African American community. First platted by the Wright Land Company in 1917, undeveloped lots were sold by the acre, which is how the area derived its name. The rural homesites were inexpensive and afforded low taxes. They were sized to allow small gardens, farm animals, and had no building codes. Despite resident's efforts to develop infrastructure, the settlement was unable to maintain itself, due to poverty. In the early 1970's Acres Homes was annexed into the City of Houston, with city water and sewer services planned for the area. When annexed, Acres Homes was a 121/2-square-mile, heavily wooded, dispersed settlement without transportation or educational facilities. While 90% of residents were homeowners, much of the housing was in substandard condition at that time. By the 1980's, the community had become a sprawling working-class neighborhood of well-kept, brick and wood frame homes interspersed with abandoned cottages.

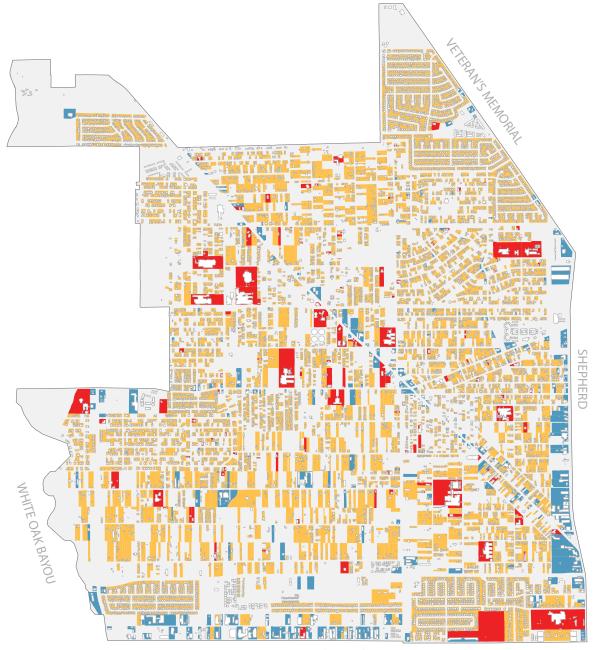












**PINEMOUNT** 



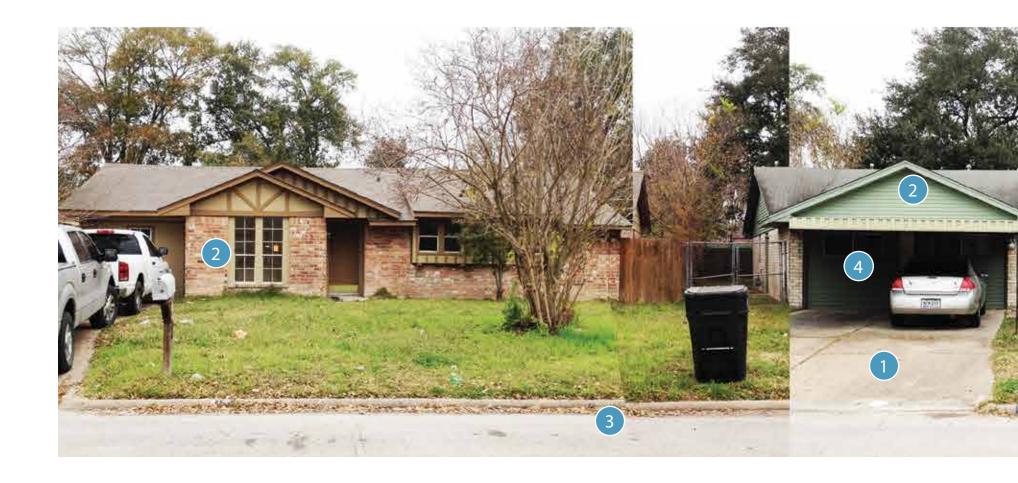
- 1 Driveway condition: side yard, paved and unpaved
- 2 Cladding: wood siding, various applications
- 3 Sidewalk condition: no curb, gutter, or sidewalks
- 4 Carport: occasionally seen, metal or wood coverings

- 5 Entrance sequence: bridge connections to street
- 6 Stormwater: open system, ditch in public right of way
- 7 Foundation: typically pier and beam
- 8 Vegetation: mature trees



Burg Street

Program: 2-3 bedroom 1-2 bath Home Size: 672 - 2,411 SF



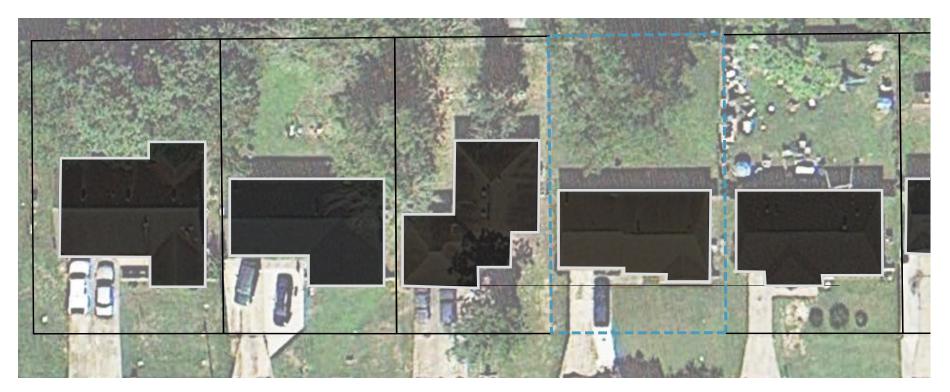
- 1 Driveway condition: side yard and front yard, paved
- 2 Cladding: brick and wood siding, various applications
- 3 Sidewalk condition: curb and gutter, no sidewalks
- 4 Garage: front, some garages enclosed for living space

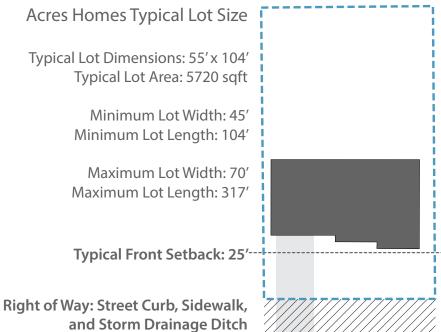
- 5 Entrance sequence: driveways used as pedestrian path
- 6 Stormwater: closed system
- 7 Foundation: slab on grade
- 8 Porch condition: semi-private, front stoops



Diplomat Way

Program: 2-3 bedroom 1-2 bath Home Size: 672 - 2,411 SF



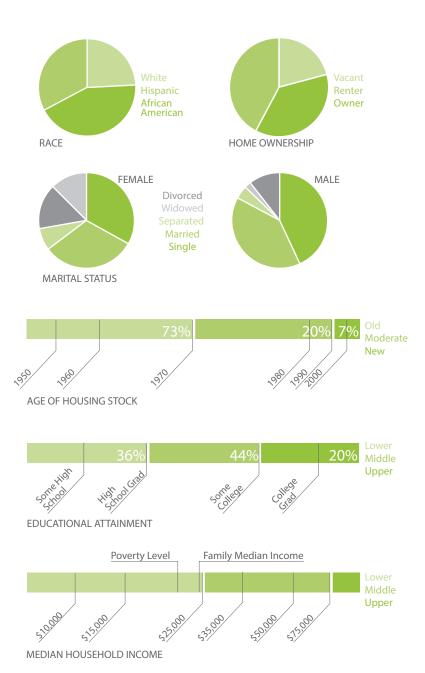


Notes.

# Independence Heights

#### Neighborhood Overview

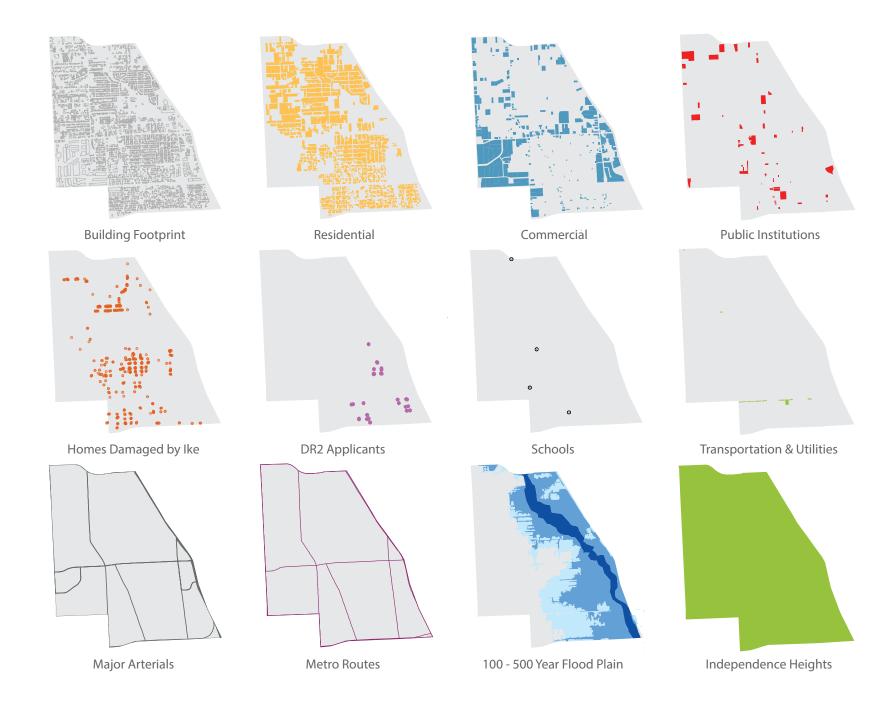
Developed by Wright Land Company, Independence Heights became the first African American municipality in Texas. The company began selling 25-foot lots in 1908 to middle-class black residents who moved from other areas of the city. It became an incorporated city in 1915. Houses were designed by the new residents and constructed by local African American builders. These homes had electric lights, water, shell streets, plank sidewalks, and were heated by natural gas. The population grew from around 400 in 1915 to more than 3,500 in 1929. The City of Houston formally annexed Independence Heights in December of 1929. Prior to annexation, the City of Independence Heights had a municipally owned water source, electric lights, several churches, and about 40 black-owned businesses. These included grocery stores, restaurants, a railroad terminal, a lumber company, and the Lincoln Theater, the only black theater in Houston at the time. A rail line used for public transportation ran a loop through Independence Heights. Despite annexation, investments that were supposed to bring improvements to the area, were never realized due to the Stock Market Crash of 1929 and the Great Depression.

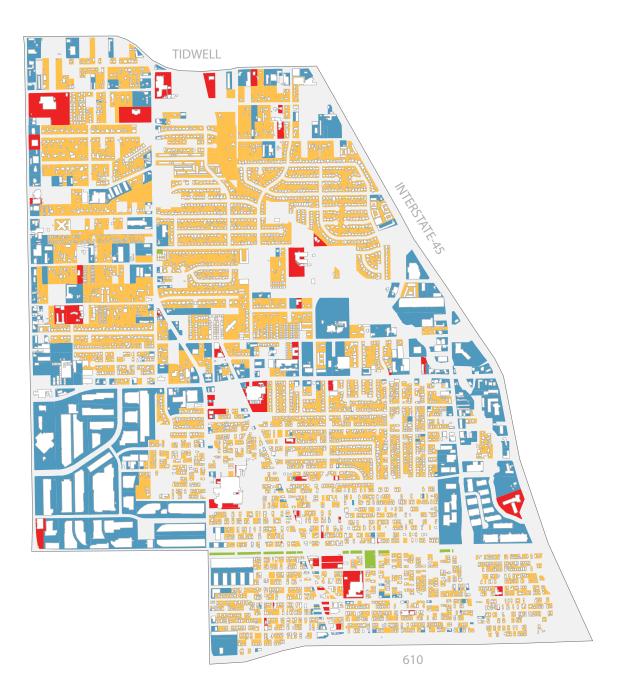


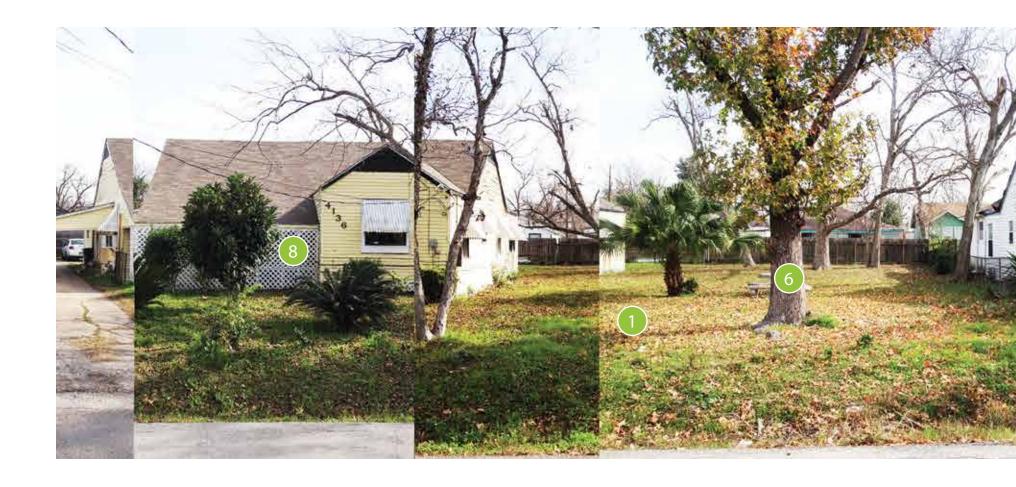












- 1 Vacant lot: scattered throughout neighborhood
- 2 Cladding: wood siding, pops of color
- 3 Privacy: metal fences enclose site
- 4 Carport: rear yard, metal or wood coverings

- 5 Entrance sequence: driveway connections to street
- 6 Vegetation: mature trees
- 7 Foundation: typically pier and beam
- 8 Porch condition: partially enclosed, front stoops



Dehli Street

Program: 2-3 bedroom 1-2 bath Home Size: 976 - 21,410 SF



- 1 Driveway condition: side yard, paved and unpaved
- 2 Cladding: wood and brick siding, various trim details
- 3 Sidewalk condition: no curb, gutter, or sidewalks
- 4 Garages and carports: rear yard, additional storage

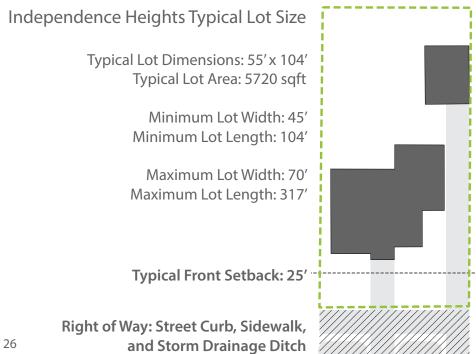
- 5 Entrance sequence: driveway and pathways
- 6 Stormwater: open system, ditch in public right of way
- 7 Porches: space for gathering, front stoops
- 8 Yard conditions: typically fenced, well maintained



Dehli Street

Program: 2-3 bedroom 1-2 bath Home Size: 976 - 21,410 SF



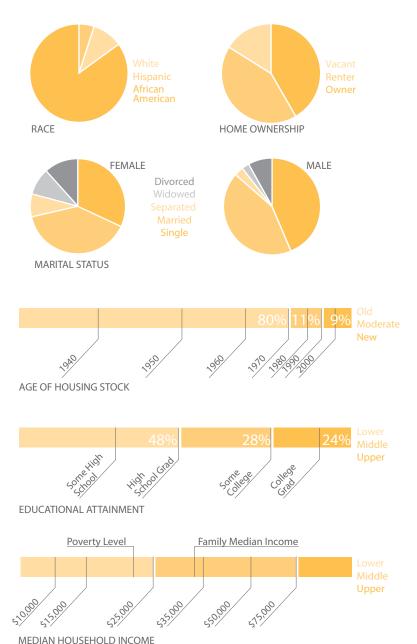


Notes.

### Near Northside

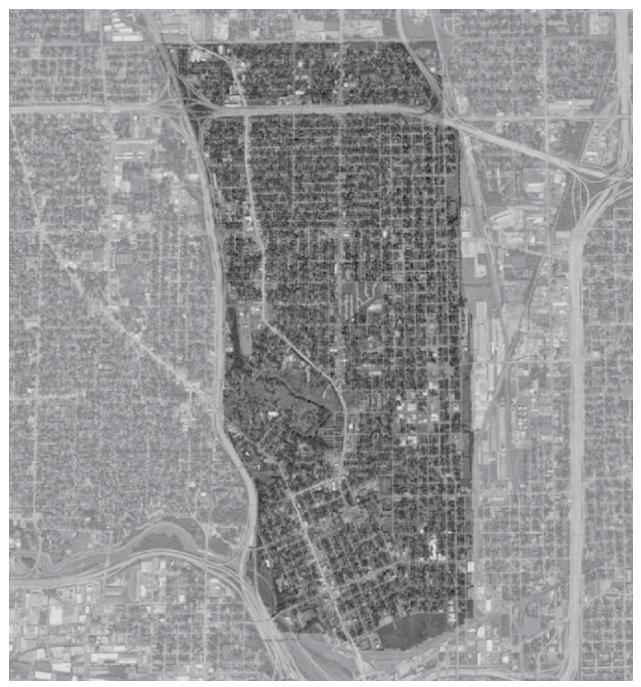
#### Neighborhood Overview

Near Northside, also known as Northside Village, was originally developed in the 1890's and was once part of the Fifth Ward. In the early 1900's, the area was predominantly occupied by people of European descent who worked at the nearby Southern Pacific Hardy Rail Yard. Houston was a rail town at the time, boasting more railroad traffic than any city south of St. Louis. The Northside expanded with the Ryon Addition in the 1910's, The Irvington Addition in the 1920's and Lindale Park in 1930's. After World War II, as railroad traffic declined, the population changed with increased HIspanic population. The original street grid still remains, with commercial structures facing the major thoroughfares and rows of one-story houses on more residential scaled streets.



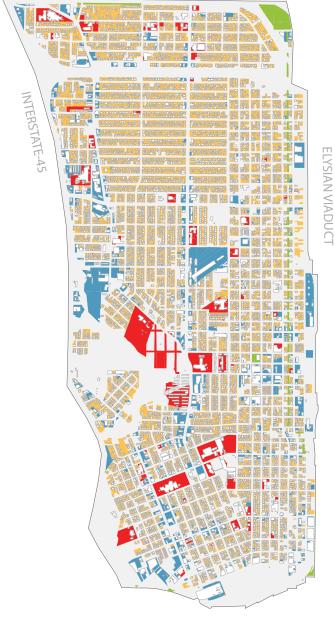








#### 610 + HARDY TOLL



WHITE OAK + BUFFALO BAYOU CONNECTION



- 1 Driveway: side yard, paved and unpaved
- 2 Cladding: wood siding, pops of color
- 3 Rafter detail: exposed tails, various detailing
- 4 Porch detail: exposed beams, various column details

- 5 Porch: open, gracious spaces, room for furniture
- 6 Garage and back houses: rear structure
- 7 Roof vent: gable vents
- 8 Stormwater: open system, ditch in public right of way



Century Road

Program: 2-5 bedroom 1-3 bath Home Size: 951 - 3,042 SF



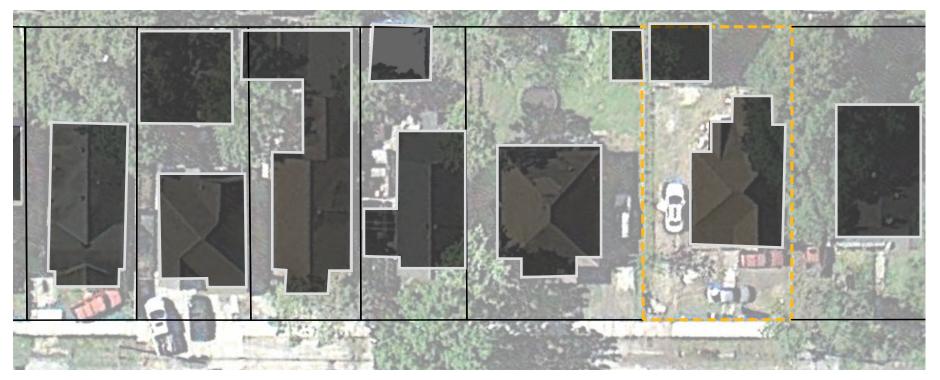
- 1 Rafter: kickers supporting fly rafter
- 2 Cladding: wood and brick veneer
- 3 Privacy: metal fences enclose site
- 4 Garage and carport: side and rear yard

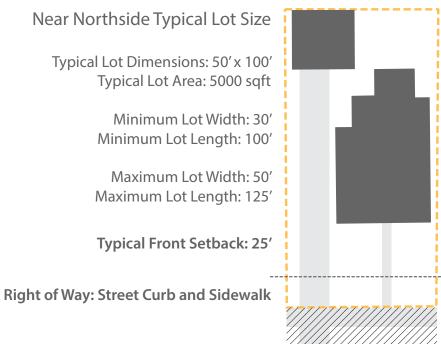
- 5 Front and side yard: narrow setbacks, dense lots
- 6 Vegetation: mature trees
- 7 Foundation: pier and beam
- 8 Porch: somewhat enclosed, dropped beams



**Century Road** 

Program: 2-5 bedroom 1-3 bath Home Size: 951 - 3,042 SF



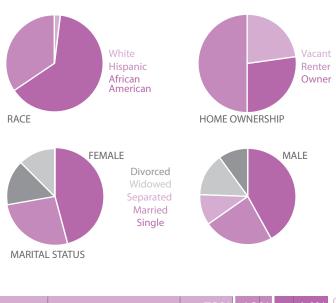


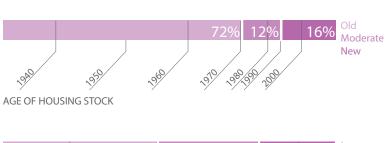
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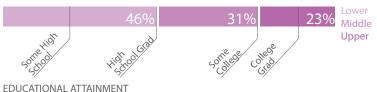
## Fifth Ward

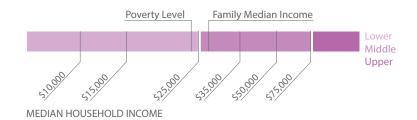
#### Neighborhood Overview

After the American Civil War, newly freed slaves began settling the area today known as Northside and Greater Fifth Ward. In 1866, the City of Houston christened the area the Fifth Ward or "The Nickel" as it came to be nicknamed. By 1870 the population was 50% African American and 50% white residents. By the mid-1880's, Fifth Ward became home to a nearly all African American working class community. In the 1930's, the neighborhood was described as "one of the proudest black neighborhoods" in the United States. Black-owned and operated businesses flourished within the community until the 1950's. In the 1970's and 1980's the Fifth Ward became notorious throughout Houston for the violence perpetrated in the community. Since the 1990's, however, Fifth Ward has undergone multiple revitalization efforts by community organizations.





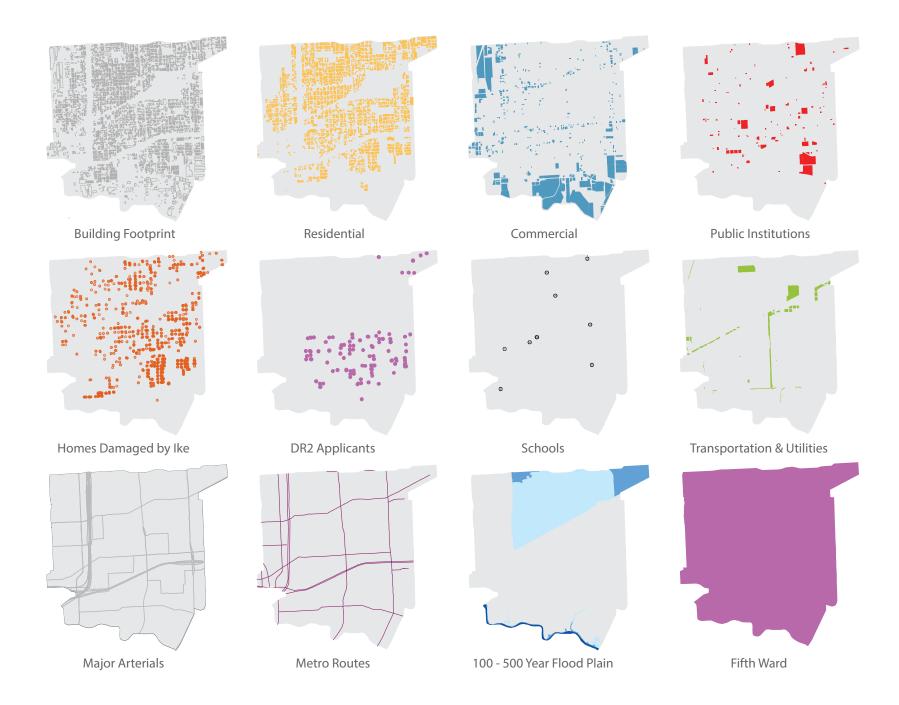


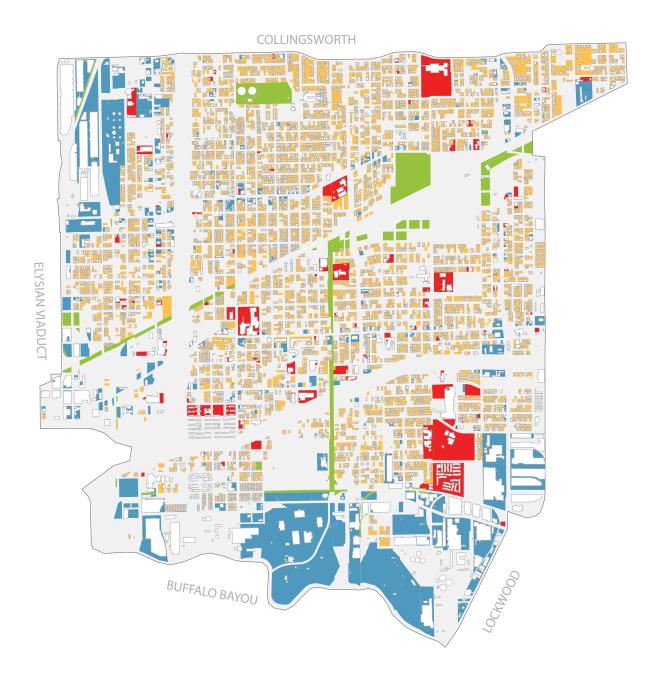














- 1 Driveway: side yard, paved
- 2 Cladding: wood siding, various applications
- 3 Cladding Application: chair rail datum, varying sizes
- 4 Roof: minimal overhang and sun protection

- 5 Entry Sequence: paved sidewalks to front doors
- 6 Sidewalk condition: curb, gutter, and sidewalks
- 7 Foundation: pier and beam
- 8 Garage: rear yard, detached



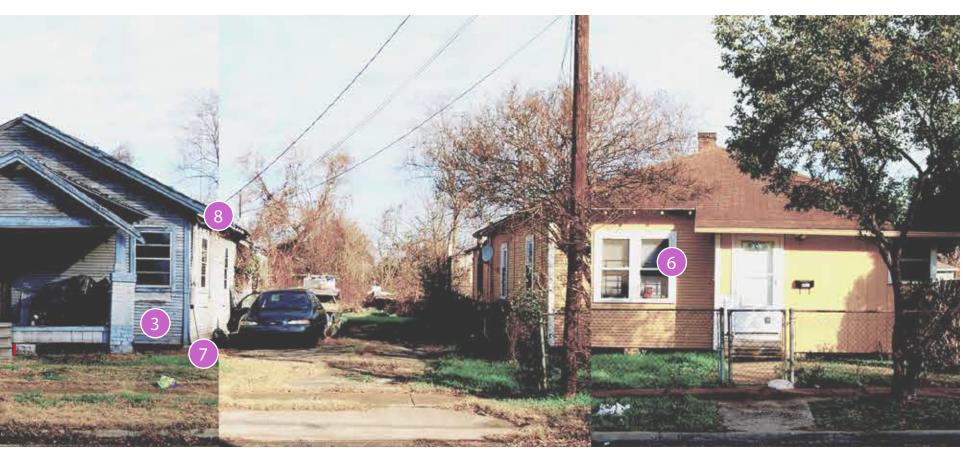
Providence Street

Program: 2-3 bedroom 1-2 bath Home Size: 768 - 1,704 SF



- 1 Driveway condition: front yard, unpaved, curbcuts
- 2 Gable vent: prevalent
- 3 Cladding: wood clapboard
- 4 Typology: repetition of home forms, shotgun style

- 5 Porch Details: brick, wood, and metal columns
- 6 Window Trim: painted trim board
- 7 Foundation: pier and beam
- 8 Roof: minimal overhang and sun protection



Providence Street

Program: 2-3 bedroom 1-2 bath Home Size: 768 - 1,704 SF



#### Fifth Ward Typical Lot Size

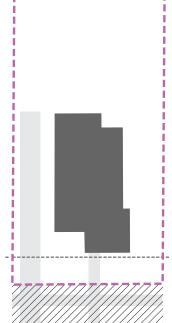
Typical Lot Dimensions: 50'x 100' Typical Lot Area: 5000 sqft

> Minimum Lot Width: 25' Minimum Lot Length: 40'

Maximum Lot Width: 50' Maximum Lot Length: 100'

Typical Front Setback: 15'



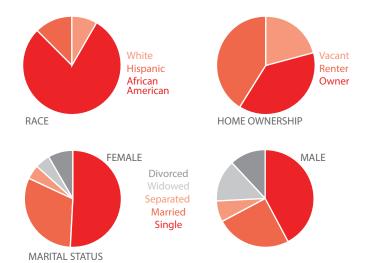


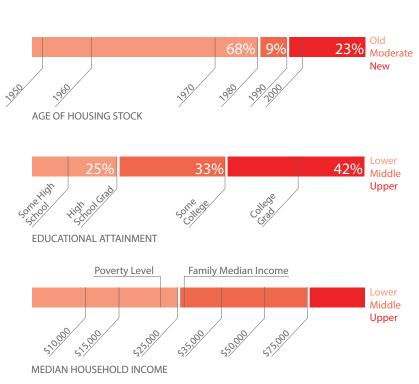
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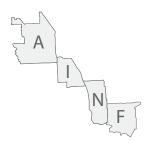
# OST/South Union

#### Neighborhood Overview

OST/South Union was rural and suburban when the area began development in the late 1940's. Heavily weeded lots measuring 50 feet by 100 feet were sold to young, African American WWII veterans and their families. Residents established their own municipal water district in the 1950's and many homeowners owned at least one car. Until annexation in 1957, the streets were dirt roads with open drainage ditches. This thriving community had its own modern grocery stores, meat markets, service stations, drive-In restaurant, churches, taxi cabs, ice cream parlors, barber shops, beauty shops, drug store, shoe shops, fire station, dry cleaners, and Sunnyside Elementary School. At one point, the nearby OST/South Union area had a private airstrip with two hangars, Baseball stadium, and horse racing tracks, all of which have since been demolished. After annexation South Union's urbanization and population began to increase rapidly and brought civic improvements to the neighborhood.

















- 1 Driveway: ribbon driveway
- 2 Garage: detached, rear yard
- 3 Cladding: wood, aluminum vinyl, brick veneer
- 4 Vegetation: well kept yards, young trees

- 5 Porch treatment: open porches, various sizes
- 6 Gable vent
- 7 Foundation: slab on grade
- 8 Window treatment: awnings, shutters



Arvilla Lane

Program: 3 bedroom 1 bath Home Size: 1,244 - 1,684 SF



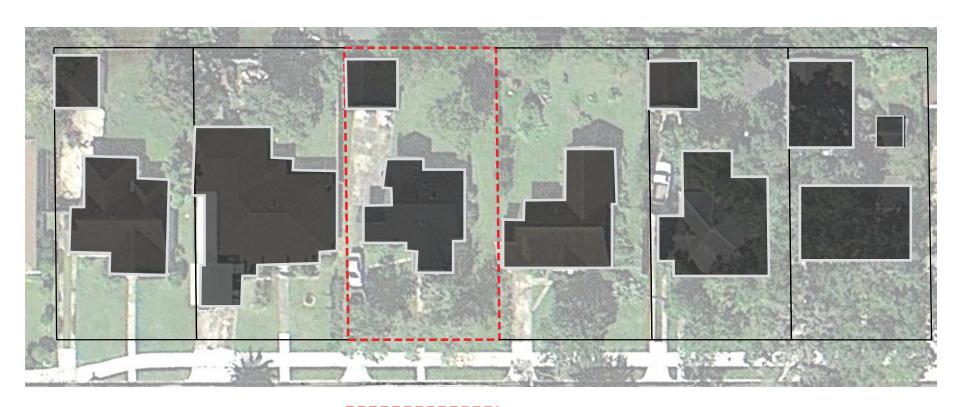
- 1 Window: various sizes, floor to ceiling
- 2 Pedestrian Path: walkways to front door
- 3 Cladding: wood, brick veneer
- 4 Entry: Double door entrance

- 5 Fence: rear yard
- 6 Grading: site work grades up to house
- 7 Foundation: slab on grade
- 8 Sidewalk: curb, gutter, and sidewalks



Arvilla Lane

Program: 3 bedroom 1 bath Home Size: 1,244 - 1,684 SF



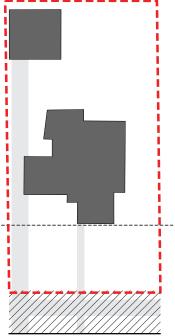
#### OST / South Union Typical Lot Size

Typical Lot Dimensions: 60' x 110' Typical Lot Area: 6600 sqft

> Minimum Lot Width: 55' Minimum Lot Length: 90'

Maximum Lot Width: 80' Maximum Lot Length: 150'

Typical Front Setback: 25'



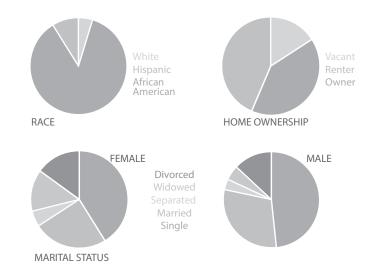
Right of Way: Street Curb and Sidewalk

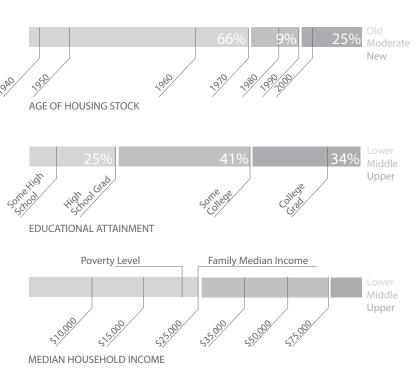
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# Sunnyside

#### Neighborhood Overview

Sunnyside can be described as "rurban," a word coined in 1918 which describes an area with a mix of urban and rural characteristics. When the earliest development took place circa 1912, the founder, H. H. Holmes, gave the land the name Sunny Side. In 1915, during the era of "Restricted Communities," this was the first addition south of the city to be developed and offered exclusively to African Americans. Platted land was sold to individuals and roads were scarce, often needing to be established by residents themselves. In 1949 Brookhaven subdivision became first part of Sunnyside to be annexed into the City of Houston. In 1956 the rest of Sunnyside was annexed. Before annexation, however, the community of Sunnyside had built churches, and hosted the first school for African American children to become part of Houston ISD. A civic club was organized to provide better drainage, lighting, and civic improvements, and created its own water district and volunteer fire department. As new houses began to appear in Sunnyside in 2007, the community still had small churches, horse stalls, original frame houses, open ditches, uncontrolled garbage fires, and many vacant lots characteristic of rural landscapes.

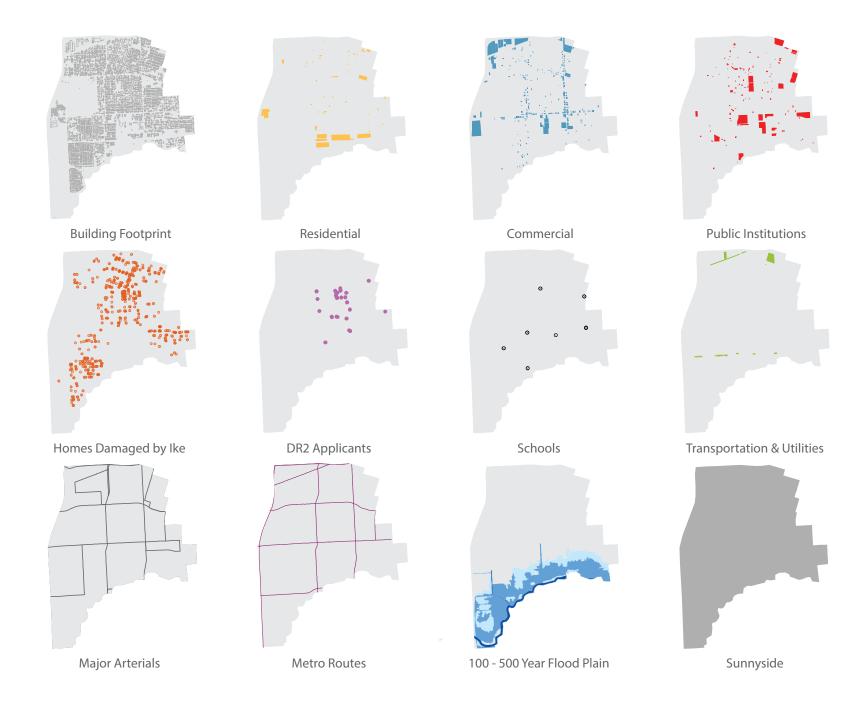


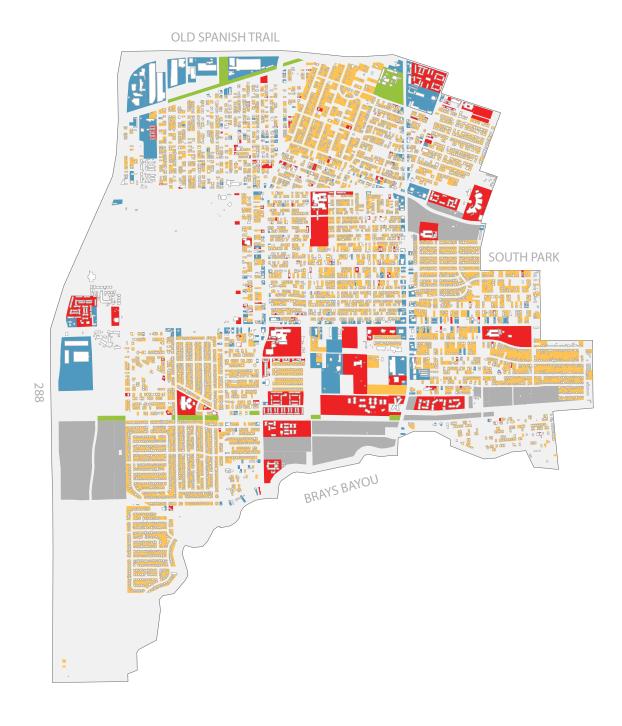














- Carport and Garage: front and side yards, metal cover
- 2 Ramp: accessibility path to the front door
- 3 Cladding: vertical wood board, horizontal siding
- 4 Exterior living: various sized porches & covered space

- 5 Roof: multiple gable forms
- 6 Stormwater: open system, ditch in public right of way
- 7 Foundation: slab on grade and pier and beam
- 8 Sidewalk: no curb and gutter



Davenport Street

Program: 2-3 bedroom 1-2 bath Home Size: 652 - 1,800 SF



- 1 Carport and Garage: side yards, metal cover
- 2 Fence: front and side yard
- 3 Cladding: vertical wood board, horizontal siding
- 4 Porch: recessed and protruding porches

- 5 Driveway: side drive, unpaved
- 6 Typology: repetition of home forms
- 7 Color: accents used throughout
- 8 Sidewalk: no curb and gutter



Davenport Street

Program: 2-3 bedroom 1-2 bath Home Size: 652 - 1,800 SF





Typical Lot Dimensions: 50' x 100' Typical Lot Area: 6600 sqft

> Minimum Lot Width: 40' Minimum Lot Length: 90'

Maximum Lot Width: 70' Maximum Lot Length: 170'

Typical Front Setback: 25'-

Right of Way: Street Curb and Sidewalk



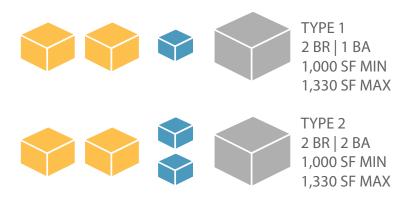
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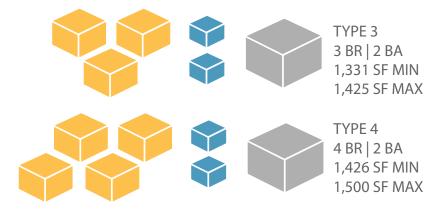
# **DESIGN**Parameters

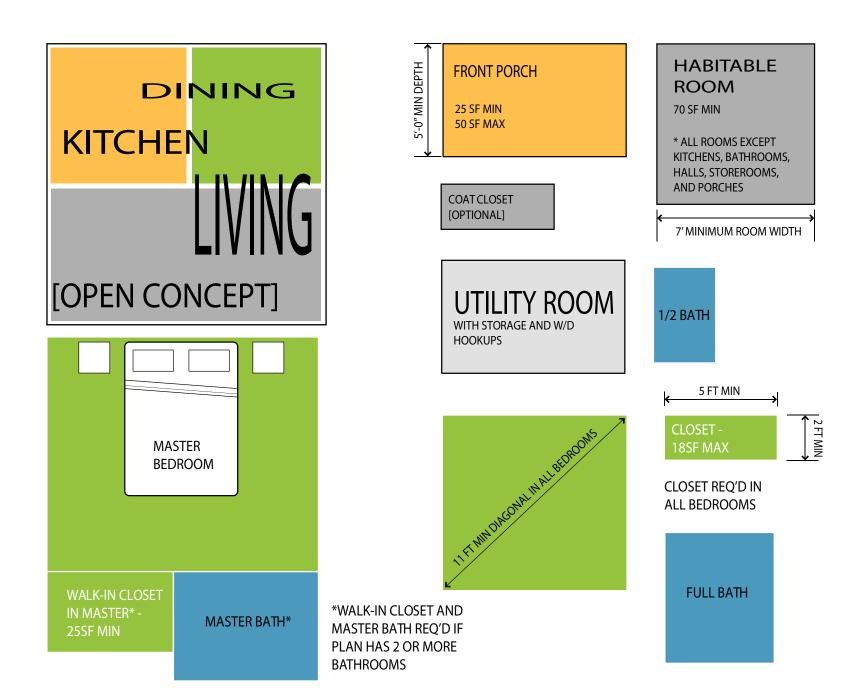
#### **Program Overview**

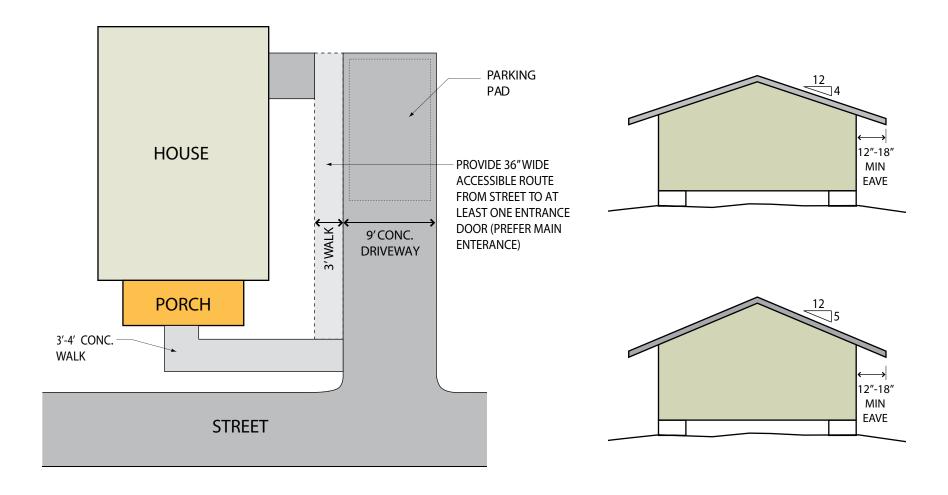
This section contains diagrams and potential room layouts based on the Program's Minimum Construction Standards and Design Guidelines as set by the State of Texas. These documents are also available online. Please see Resources, page 78.

Homes will be designed as a type 1(2BR, 1BA), a type 2(2BR, 2BA), a type 3(3BR, 2BA) or type 4(4BR, 2BA) with each having a corresponding square footage range. In all cases the homes will be a single story. Program elements are given on the opposite page and all homes must featue all required program elements.







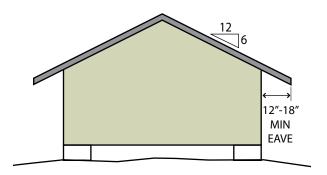


#### Site Design

Minimum Site Standards

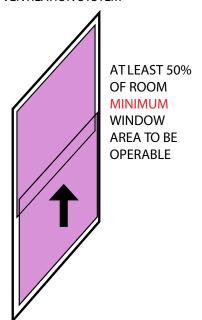
Sidewalks, driveways and parking pads shall be provided as required by Federal, State or local jurisdiction as follows:

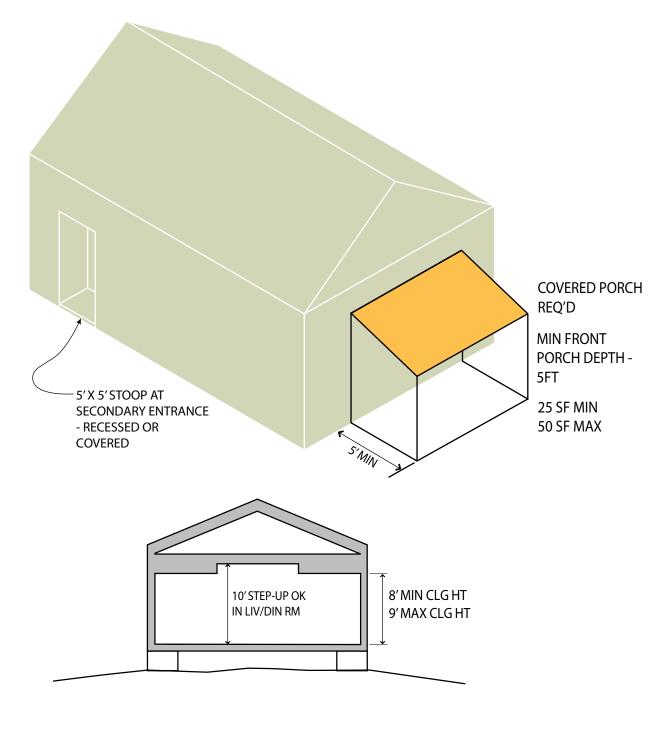
- 1. A handicap accessible route shall be provided from the street to one entrance door of the house.
- 2. Sidewalks: 3 ft.- 4 ft. wide concrete sidewalk with specified finish from street to front porch.
- 3. Driveways and Parking Pads If driveway or parking pad is required, 9 ft. wide concrete driveway with specified finish from street to parking pad.

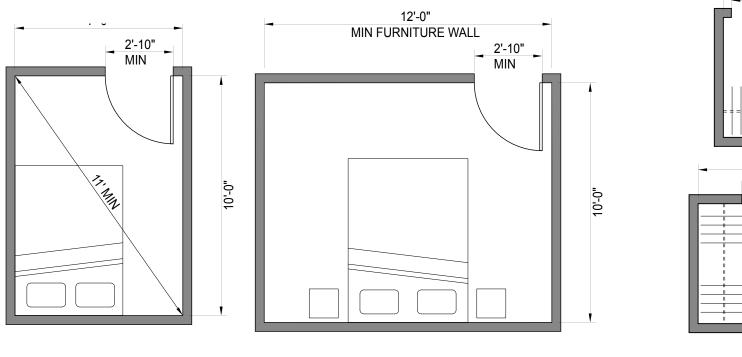




\*ALL HABITABLE ROOMS TO HAVE AT LEAST ONE OPPERABLE WINDOW OR SKYLIGHT \*\*NOT REQ'D IN BATHROOMS, KITCHENS, ETC. IF EQUIPED WITH VENTILATION SYSTEM







MASTER BEDROOM

# 6'-0" 25 SF MIN SIZE MIN SIZE

WALK-IN CLOSET

5'-0"

2'-4" MIN

#### Bedroom and Closet Requirement

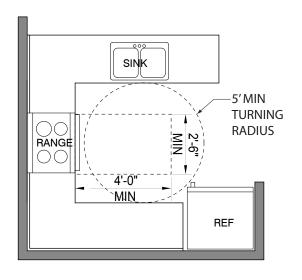
MIN BEDROOM SIZE

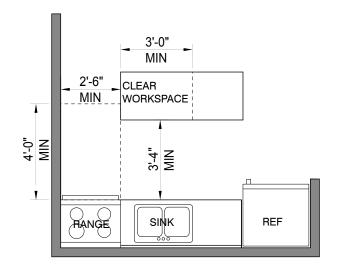
Minimum Design Standards

A master bedroom with a walk-in closet and master bathroom is required if the home has two or more bathrooms.

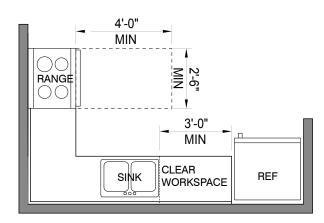
All bedrooms must include a min 5ft x 2ft closet (18sf max).

Coat closet is optional.





KITCHEN - U-SHAPED ACCESSIBLE KITCHEN - WITH ISLAND
ACCESSIBLE



#### Kitchen Design Requirements

All kitchens shall have adequate food storage facilities including at least three linear feet of counter area for food preparaation and adequate cabinet space.

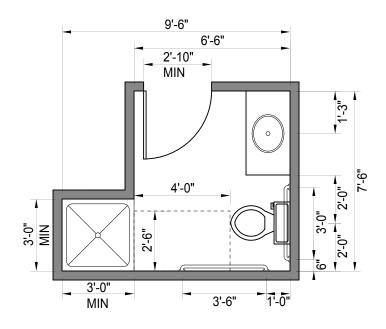
All kitchens shall have a working refrigerator/freezer, cook-top and oven. A dishwasher is not required, but space for one is encouraged to accommodate homeowner preferences.



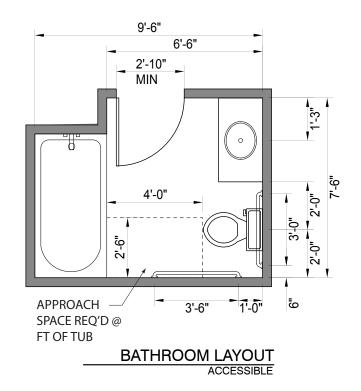
#### **Bathroom Design Requirements**

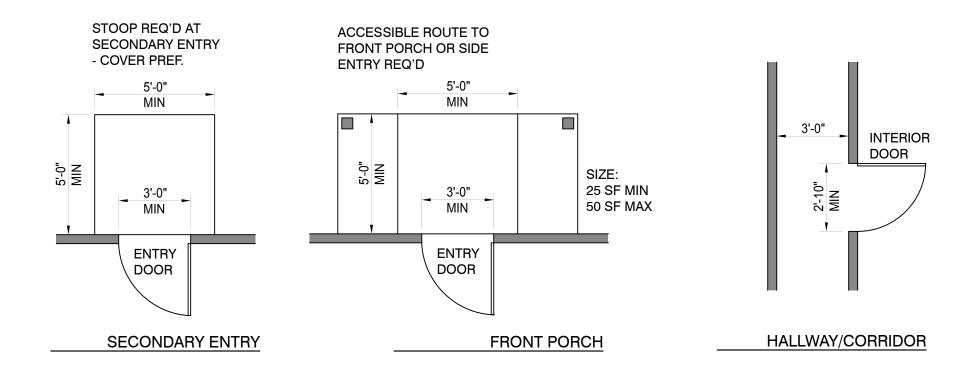
Shown above are possible layouts for bathrooms that meet the design guidelines. Although accessible bathrooms are only required when the customer requests them, designs should be easily adaptable and therefore should include at least one "accessible ready" bathroom. In this case the second bathroom need not be accessible or "accessible ready".

Where two bathrooms are included, only one must contain a bath tub. The other may contain a walk-in shower stall.



BATHROOM LAYOUT ACCESSIBLE





#### Other Design Elements

All homes must include an entry porch and a secondary entrance. The secondary entrance should be covered and located in the rear or on the side of the home.

Exterior entrance doors shall be 3'-0" wide, while interior doors shall be 2'-10" wide min. Closet doors shall be min 2'-4" wide where accessibility is not required.

Bay windows - optional in living and/or dining rooms - shall not be deeper than 1'-6".



#### **Simple Construction**

Homes shall be simply constructed of durable materials. An emphasis on quality detailing over design expression is preferred. While designs should be unique and contextually based, this exercise must be seen as an opportunity to provide well detailed, architect designed homes on a large scale to a typically underserved segment of the population.

### Resources

#### City of Houston

**Housing & Community Development Department** houstontx.gov/housing

#### **Project Standards and Guidelines**

**Disaster Recovery - Round 2 Market Analysis / Area Selection** houstontx.gov/housing/pdf/DR2\_Planning\_Study.pdf

**Disaster Recovery Program Ike and Dolly Round 2 Minimum Design Standards** houstontx.gov/housing/pdf/DR2\_Planning\_Study.pdf

#### **The Housing Design Standards**

 $glo. texas. gov/GLO/\_documents/disaster recovery/housing/subrecipients/design-standards-combined.pdf$ 

#### **The Housing Design Specifications**

 $glo. texas. gov/GLO/\_documents/disaster recovery/housing/subrecipients/housing-construction-specs. pdf$ 

#### The GLO Construction Manual

glo.texas.gov/GLO/\_documents/disaster-recovery/housingconstructionmanual.pdf

#### The Hurricane Ike Round 2 Guidelines

 $glo. texas. gov/GLO/\_documents/disaster recovery/housing/subrecipients/ike-round 2-housing-program-guidelines. pdf$ 

#### Houston Recovery Grant Administrator

**Horne LLP** 

www.horne-llp.com

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**MC2 Architects** 

mc2architects.com

**McIntyre and Robinowitz** 

mcintyrerobinowitz.com

MetaLab studio

metalabstudio.com

Lantz Full Circle/Enter Architecture lantzfullcircle.com

Logan and Johnson

loganandjohnson.com/

Taft Architects+MetaLAB

taftarchitects.com

