



Historical Resources Survey Report – Update

Project Name: North Houston Highway Improvement Project

Project Limits: From U.S. Highway (US) 59/Interstate Highway (IH) 69 at Spur 527 to IH 45 at Beltway 8 North

District(s): Houston

County(s): Harris

CSJ Number(s): 0912-00-146

Principal Investigators: Rick Mitchell and Emily Pettis, Mead & Hunt, Inc.

Report Completion Date: September 2019 (revised June 2020)

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated 12-16-2014, and executed by FHWA and TxDOT.

This historical resources survey report is produced for the purposes of meeting requirements under Section 106 of the National Historic Preservation Act, the Antiquities Code of Texas, and other cultural resource legislation related to environmental clearance as applicable.

Table of Contents

	Page
1. Introduction	5
A. Project Background.....	5
B. Historic Property Identification and Evaluation Methodologies.....	6
2. Public Involvement/Outreach	11
3. Supplemental Documentation and Evaluation	13
A. Supplemental Historic Contexts.....	13
(1) Transportation.....	13
(2) Municipal Utility Districts	34
(3) Chinese and Asian Settlement in East Downtown.....	41
(4) Sicilian Settlement in the Fifth Ward	44
B. Updated Historic Land Use.....	46
C. Historic District Evaluations	67
(1) Hidden Valley.....	68
(2) Germantown	87
(3) Third Ward	98
(4) Brooke Smith Addition	102
(5) Lindale Park.....	105
(6) Irvington Park	105
(7) North Park	105
(8) Pine Grove	106
(9) Independence Heights.....	106
D. Individual Resource Evaluations.....	119
E. Additional Responses to THC Comments.....	156
4. NRHP-Listed/NRHP-Eligible Properties	174
5. Project Effects to Historic Properties	187
A. Brooke Smith Historic District	187
B. Germantown Historic District	189
C. Hidden Valley Historic District.....	192
D. Houston Warehouse Historic District.....	195
E. Near Northside Historic District	218
F. Third Ward Historic District.....	229
G. Individual Properties	232
H. Cumulative Effects to Historic Properties.....	264
References Cited	265

Appendices

Appendix A: Resource Location Maps

Appendix B: Tabular Inventory of Surveyed Properties

Appendix C: Survey Forms

Appendix D: Previous Historic Resource Survey Reports

Appendix D-1: Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District. Prepared by CP&Y, Inc. for the Texas Department of Transportation, October 15, 2015.

Appendix D-2: Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District. Prepared by CP&Y, Inc. for the Texas Department of Transportation, December 9, 2016.

Appendix D-3: Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District: From US 59/I-69 at Spur 527 to I-45 at Beltway 8 North. Prepared by CP&Y, Inc. for the Texas Department of Transportation, October 19, 2017.

Appendix D-4: Historical Resources Survey Report, North Houston Highway Improvement Project: Birdsall Place Intensive Survey. Prepared by CP&Y, Inc. for the Texas Department of Transportation, September 14, 2018.

Appendix D-5: Historical Resources Survey Report, North Houston Highway Improvement Project: Kenilworth Grove Intensive Survey. Prepared by CP&Y, Inc. for the Texas Department of Transportation, September 14, 2018.

Appendix D-6: Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District: From US 59/IH 69 at Spur 527 to IH 45 at Beltway 8 North. Prepared by CP&Y, Inc. for the Texas Department of Transportation, September 28, 2018.

Appendix E: Public Involvement

Appendix F: Independence Heights Documentation and Evaluation Report

Appendix G: Texas Historical Commission Correspondence

Appendix H: Cumulative Effects to Historic Resources

1. Introduction

A. *Project Background*

The Texas Department of Transportation (TxDOT) is proposing improvements to create additional roadway capacity to manage congestion, enhance safety, and improve mobility and operational efficiency on Interstate Highway 45 (IH 45) from U.S. Highway 59 (US 59)/IH 69 to Beltway 8 North, including improvements along US 59/IH 69 between IH 45 and Spur 527 in Harris County, Texas. The proposed North Houston Highway Improvement Project (NHHIP) includes roadway improvements to:

- Add four managed express lanes on IH 45 from downtown Houston to Beltway 8 North;
- Reroute IH 45 to be parallel with IH 10 on the north side of downtown Houston and parallel to US 59/IH 69 on the east side of downtown Houston;
- Realign portions of IH 10 and US 59/IH 69 in the downtown area to eliminate the current roadway curvature;
- Transition the proposed roadway improvements to the interchange of US 59/IH 69 and Spur 527 south of downtown Houston;
- Reconstruct main lanes and frontage roads;
- Add bicycle/pedestrian features along frontage roads; and
- Add express lanes on IH 10 from IH 45 to US 59/IH 69.

To facilitate the design and analysis of alternatives, the project area was divided into three segments, from north to south:

- Segment 1: Beltway 8 North to IH 610;
- Segment 2: IH 610 to IH 10; and
- Segment 3: Downtown Loop System (IH 45, IH 10, and US 59/IH 69).

Multiple alternatives were generated for each study segment, from which three reasonable alternatives per segment were selected for detailed evaluations in the Draft Environmental Impact Statement (EIS). The reasonable alternatives were further evaluated to identify a

Preferred Recommended Alternative for each segment, which then received additional analysis and refinement.

B. Historic Property Identification and Evaluation Methodologies

TxDOT used a phased approach to identify, document, and evaluate historic properties in the project area, with four reconnaissance-level Report for Historical Studies Survey (Report) documents and two focused intensive-level survey reports prepared between 2015 and 2018. This February 2019 *Historical Resources Survey Report – Update* is intended to bring together the findings of the various reports and to address comments and questions raised by the Texas Historical Commission (THC) in responses to previous reports.

A series of maps showing the locations of the surveyed historic-age resources is presented in Appendix A of this report while a tabular inventory of surveyed resources is presented in Appendix B. Inventory forms with photographs of surveyed properties are found in Appendix C, and copies of the 2015-2018 Reports are included in Appendix D.

A methodological summary of the identification and evaluation efforts from the 2015-2018 Reports and the 2018 intensive-level survey reports is provided below.

Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District. Prepared by CP&Y, Inc. for the Texas Department of Transportation, October 15, 2015.

In the initial phase of investigation, TxDOT consultants CP&Y, Inc. (CP&Y) identified National Register of Historic Places (NRHP)-listed and previously determined eligible properties within the Survey Study Area (SSA), which was defined as 1,300 feet beyond the proposed right-of-way (ROW) for the three reasonable alternatives within each project segment. CP&Y historians then documented known historic properties and potentially historic properties in the Area of Potential Effects (APE) of each of the reasonable alternatives. The project's APE was defined as: the existing ROW where no new ROW acquisition is proposed; 150 feet from proposed new ROW and easements; and 300 feet from proposed ROW in locations of newly proposed elevated structures that would represent a vertical elevation increase of 5 feet or more from the existing elevation.

The historic resources survey during this project phase did not document all historic-age resources in the project's APE. Documentation was limited to the following classes of properties:

- Properties listed in the NRHP;
- Properties previously designated eligible for the NRHP;

- Properties that were “obviously” eligible for the NRHP based on the results of field surveys and consultation with TxDOT historians;
- Properties considered potentially eligible for the NRHP but requiring further research to make a definitive eligibility recommendation; and
- Properties considered likely not eligible for the NRHP but requiring further research to make a definitive eligibility recommendation.

The report also included a discussion of NRHP-listed and previously determined eligible historic districts that extended into the project’s APE. Documentation was limited to those portions of each historic district located in the project’s APE, with additional contextual photographs documenting potential effects of the project alternatives to each historic district.

This report is found in Appendix D-1.

Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District. Prepared by CP&Y, Inc. for the Texas Department of Transportation, December 9, 2016.

This survey phase had two primary emphases. First, CP&Y historians documented and evaluated four mid-twentieth-century residential subdivisions that extended into the APE of one or more of the reasonable alternative alignments to determine each subdivision’s potential for eligibility as an NRHP historic district. The surveyed subdivisions were: Glen Oaks, Airway Village, Wildrose Gardens, and Glenburnie. For each subdivision, historic-age properties (defined as resources built in 1973 or earlier) located within areas of proposed ROW acquisition were individually documented. Additional contextual photography and neighborhood-level developmental analysis was conducted to evaluate each subdivision for historic district potential.

Second, TxDOT consultants incorporated the findings of a July 2016 resurvey and re-evaluation of the NRHP eligibility of the Houston Warehouse Historic District and subsequent THC comments, dated August 26, 2016, regarding the historic district’s boundaries and status of individual properties within the district. The Houston Warehouse Historic District was initially identified in a series of historic resources survey reports and draft NRHP Nominations in the late 1980s and early 1990s. SWCA, Inc. historians resurveyed and re-evaluated the district as part of regulatory coordination for a Harris County Flood Control District project unrelated to the NHHIP activities. As delineated by the August 26, 2016, THC concurrence letter, the Houston Warehouse Historic District is discontiguous, consisting

of areas north and south of IH 10 just north of downtown Houston. Several contributing resources within the historic district were identified as located within the APE of one or more of the reasonable alternative alignments.

TxDOT submitted determinations of NRHP eligibility for properties surveyed in the 2015 and 2016 Reports to the THC, with the reports included as reference material. THC staff responded on February 1, 2017, concurring with most eligibility determinations but with several exceptions and comments for further review.

The 2016 Report is found in Appendix D-2.

Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District: From US 59/I-69 at Spur 527 to I-45 at Beltway 8 North. Prepared by CP&Y, Inc. for the Texas Department of Transportation, October 19, 2017.

This survey phase followed a methodology more typical of TxDOT reconnaissance-level surveys. All historic-age resources (defined as resources built in 1975 or earlier) located within the APE were documented and evaluated, excepting those properties already included in the 2015 and 2016 Reports. The survey was limited to historic-age resources in the APE of the preferred alternative, rather than the APEs of three reasonable alternative alignments.

The APE delineation was slightly modified from previous surveys. The project's APE was defined as: the existing ROW where no new ROW acquisition is proposed; 150 feet from proposed new ROW and easements; 150 feet from proposed ROW in locations of newly proposed elevated structures that would represent a vertical elevation increase of 5 feet or more from the existing elevation; and 300 feet from proposed ROW in locations of newly proposed elevated structures that would represent a vertical elevation increase of 10 feet or more from the existing elevation or in areas of a proposed multi-level or elevated component such as a flyover. In addition, the expanded 300-foot APE was only applied in areas considered to have a high probability of historic properties, as determined in consultation with TxDOT historians.

Approximately 940 historic-age properties were newly surveyed in this phase. Report findings indicated that the preferred project alternative would have no direct effect on newly surveyed historic properties, but would have the potential to affect historic properties documented in the 2015 and 2016 CP&Y surveys and in the July 2016 re-survey of the Houston Warehouse Historic District.

TxDOT submitted determinations of NRHP eligibility for properties surveyed in the 2017 Report to the THC, with the report included as reference material. THC staff responded on December 11, 2017, concurring with most eligibility determinations but with several exceptions and comments for further review. In addition, THC noted general methodological issues regarding evaluation of potential historic districts and NRHP eligibility justifications.

The 2017 Report is found in Appendix D-3.

Historical Resources Survey Report, North Houston Highway Improvement Project: Birdsall Place Intensive Survey. Prepared by CP&Y, Inc. for the Texas Department of Transportation, September 14, 2018.

In its review of TxDOT's October 2017 survey report, the THC raised concerns regarding the potential NRHP eligibility of the Birdsall Place subdivision with particular emphasis on a residential complex at the Hamilton Street/Isabella Street intersection and on the former Beth Jacob synagogue. TxDOT tasked CP&Y with conducting intensive-level research and documentation on Birdsall Place and its NRHP historic district potential, as well as potential NRHP eligibility for individual properties within the neighborhood. Based on the results of the intensive survey, TxDOT determined that no NRHP-eligible historic district was present in Birdsall Place and that the residential complex and former synagogue were not eligible for the NRHP. The intensive-level survey report was included as an appendix to the subsequent November 2018 Report for Historical Studies Survey.

The Birdsall Place intensive-level survey report is found in Appendix D-4.

Historical Resources Survey Report, North Houston Highway Improvement Project: Kenilworth Grove Intensive Survey. Prepared by CP&Y, Inc. for the Texas Department of Transportation, September 14, 2018.

In its review of TxDOT's October 2017 survey report, the THC raised concerns regarding the potential NRHP eligibility of the Kenilworth Grove subdivision with particular emphasis on a residence at 4120 Austin Street that was determined individually eligible for the NRHP in the October 2017 survey report. TxDOT tasked CP&Y with conducting intensive-level research and documentation on Kenilworth Grove and its NRHP historic district potential. Based on the results on the intensive survey, TxDOT determined that no NRHP-eligible historic district was present in Kenilworth Grove and that the NHHIP project would have no effect to the 4120 Austin Street property. The intensive-level survey report was included as an appendix to the subsequent November 2018 Report for Historical Studies Survey.

The Kenilworth Grove intensive-level survey report is found in Appendix D-5.

Report for Historical Studies Survey, CSJ 0912-00-146, North Houston Highway Improvement Project, Harris County, Houston District: From US 59/IH 69 at Spur 527 to IH 45 at Beltway 8 North. Prepared by CP&Y, Inc. for the Texas Department of Transportation, September 28, 2018.

This report followed a similar scope as the October 2017 version, with reconnaissance-level evaluation of all historic-age resources (defined as resources built in 1975 or earlier) within the APE of the preferred alternative alignment. The September 2018 survey report incorporated revisions based on comments received from the THC and TxDOT on the previous version. Two additional NRHP-eligible properties were identified in this phase of the project: the Rossonian Cleaners at 3921 Alameda Road (Resource 590) and a house at 4120 Austin Street (Resource 603). The September 2018 intensive-level survey reports of the Kenilworth Grove and Birdsall Place subdivisions were included as appendices to the main report. This report also included a section discussing the project's effects to historic properties in the APE, including indirect impacts from proximity, noise, and visual intrusion.

TxDOT submitted determinations of NRHP eligibility for surveyed properties and determinations of effect to historic properties to the THC, with the 2018 Report included as reference material. THC staff responded on November 2, 2018, concurring with most eligibility determinations but with numerous revisions, questions, and requests for further study.

The 2018 Report is found in Appendix D-6.

2. Public Involvement/Outreach

CP&Y conducted the initial public involvement and outreach measures for the NHHIP project. A draft of the Environmental Impact Statement for the project area was shared with Mayor Turner and other stakeholders for comment. Other activities included a public hearing, Cheek-Neal Building stakeholder meeting, and consulting parties meeting. The following is a summary of these public involvement and outreach measures and outcomes.

On April 19, 2017, a stakeholder meeting regarding the NRHP-listed Cheek-Neal Building (2017 Preston Street) took place to address stakeholder concerns. Meeting activities included a presentation on the building's history, exterior tour of the building, and discussion of the NHHIP activities and potential impacts. The meeting agenda and handout are presented in Appendix E.

On July 25, 2017, Mayor Turner provided a letter of comment on the Draft Environmental Impact Statement (DEIS) for NHHIP. A coalition of Houston neighborhood, civic, parks, transportation, quality of life, and historic preservation groups also provided comment on the DEIS. Mayor Turner's letter of support cites thoughtful planning and adhering to federal regulations. The coalition's comments express a range of concerns including general, environmental justice, displacement, mobility and access, economic impacts, parks, greenspace cap, Section 4(f), and historic resources. Comments were addressed by CP&Y in consultation with TxDOT. The review matrix and responses are included in Appendix E.

On December 13, 2017, an initial Section 106 stakeholder meeting was held. Representatives from the Houston Historic Preservation Office, THC, and CP&Y met with two property owners. A synopsis of the meeting is presented in Appendix E.

A public hearing was held in May 2018 whereby representatives of TxDOT and CP&Y presented NHHIP activities and invited comment. Written and verbal comments focused on the retention and/or loss of historic properties. Responses were recorded and are presented in Appendix E.

A consulting parties meeting and presentation was held on June 20, 2018, to address key issues and concerns. Attendees included representatives of the THC, Houston Archeology Society, Preservation Houston, the City of Houston, and property owners. Also in attendance were representatives of TxDOT and consultants representing HNTB, Cox McLain, AECOM, and CP&Y (for a full list, see the workshop notes in Appendix E). Discussion included issues related to flooding and storm drain problems (freeway height, design), impacts to fragile buildings (vibration, noise, access, congestion), connectivity and traffic, and archeological resources as areas of focus. Stakeholders were also concerned about pedestrian trails and historic bridges. Suggestions for mitigation measures included documentation (photos/survey), digital resources (images, 3D modeling), historic markers, interpretive exhibits, and preparation of NRHP Nominations or federal/state tax credits where appropriate. Meeting minutes, workshop notes, and the presentation are presented in Appendix E.

On April 25, 2019, TxDOT posted the March 2019 draft version of the Historic Resources Survey Report (HRSR) Update on the NHHIP project website for stakeholder and public review and comment. Following requests from stakeholders, the typical 30-day comment response period was extended to 60 days with comments due June 25, 2019. TxDOT also invited project stakeholders to a meeting held at TxDOT's Houston District office on May 30, 2019. Some stakeholders attended in person, while others joined by teleconference. At the meeting, TxDOT staff provided an update on cultural resources issues, including possible mitigation measures to be implemented by TxDOT. The meeting sign-in sheet and notes are presented in Appendix E.

Based on stakeholder and public comments, TxDOT conducted additional historic resources investigations to re-document and re-evaluate resources in areas of concern. TxDOT revised portions of the HRSR to reflect the additional investigations and findings.

TxDOT will complete mitigation activities to address stakeholder and public comments, including neighborhood-level historic resources studies that can be used to help inform planning and land use decisions, provide information on resources for tax credit or rehabilitation projects, and identify properties with potential for designation as local historic districts or protected landmarks.

3. Supplemental Documentation and Evaluation

A. Supplemental Historic Contexts

(1) Transportation

The history of transportation in the Houston area and Texas can be traced to early roads and pedestrian trails established by Spanish colonists and Native Americans. These early routes linked important areas within the region and often provided the general route for later wagon routes, stagecoach lines, railroads, and highways.¹ After Texas gained independence from Mexico in 1836, the Republic called for the development of new roads, including routes between county seats. Despite its support for new and better roads, the Republic of Texas was only able to fund surveys, leaving the responsibility for new construction and improvement of roads to citizens and local governments. Transportation development in Texas progressed slowly, but by the late 1830s several stagecoach lines connected the new town of Houston to other regions of the state, including Austin and Washington-on-the-Brazos.²

Transportation was an important factor in the establishment of Houston. In 1836 businessmen and brothers Augustus and John Allen planned the townsite at the confluence of Buffalo Bayou and White Oak Bayou with the vision of utilizing the waterways to create the “great interior emporium of Texas.” With its relatively straight and deep course, Buffalo Bayou proved to be the only dependably navigable waterway in Texas. Ships sailed from the port of Galveston and up Buffalo Bayou directly to the new city, where shipments of cotton and other agricultural products were loaded from wharves at Allen’s Landing located east of Main Street just south of Buffalo Bayou.³ The city’s original townsite and its early developments were oriented along the bayous. The original plat shows a grid-pattern street system with Main Street extending directly south from the fork of White Oak and Buffalo Bayous.⁴

¹ Heck Hardy Moore, Inc., *The Development of Highways in Texas: A Historic Context of the Bankhead Highway and Other Historic Named Highways* (Austin, Texas: Texas Historical Commission, 2015), 9, <http://www.thc.state.tx.us/public/upload/preserve/survey/highway/Statewide%20Historic%20Context.pdf>.

² National Register of Historic Places, Multiple Property Documentation Form, “Historic Road Infrastructure of Texas, 1866-1965,” E4; Hardy, *The Development of Highways in Texas: A Historic Context of the Bankhead Highway and Other Historic Named Highways*, 13.

³ Editorial Staff of Unibook, Inc., ed., *Houston, City of Destiny* (New York: Macmillan, 1980), 22–24; Marilyn M. Sibley, “Houston Ship Channel,” *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/rhh11>.

⁴ Editorial Staff of Unibook, Inc., *Houston, City of Destiny*, 23.

A. Railroads

During Houston's early period of development in the 1830s and 1840s, most of the surrounding region's agricultural products reached the city via primitive wagon roads and stage lines, which resulted in slow steady development. However, with the establishment of several railroads beginning in the 1850s the city quickly became a major transportation center. Opening in 1853, the Buffalo Bayou, Brazos and Colorado was the first railroad in Houston and in Texas. Other railroads such as the Houston and Texas Central Railway were constructed in the 1850s, and by 1861 Houston had five lines extending 50 to 100 miles out of the city.

New railroad construction effectively paused during the Civil War but revived shortly thereafter and continued in Houston through the late nineteenth and early twentieth centuries. By 1873 the city was connected to the national railroad network when the Houston and Texas Central Railroad connected to the Missouri, Kansas, and Texas Railway (MKT) in Denison.⁵ New railroads were constructed and existing lines merged or extended, creating an extensive railroad network in Texas by the mid-1880s. Houston became a hub for several major lines that were built or expanded after the Civil War, including the International and Great Northern Railroad (I&GN); the Galveston, Harrisburg and San Antonio Railway (GH&SA); and the Texas and New Orleans Railroad (T&NO) (see Figure 1).⁶ By the 1890s major interregional rail transportation systems such as the MKT and Southern Pacific had established services in Houston.⁷

⁵ David G. McComb, "Houston, TX," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/hdh03>; George C Werner, "Railroads," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/eqr01>.

⁶ E.A. Hensoldt, "The Railroad System of Texas" (Galveston News, September 1, 1883), Library of Congress Geography and Map Division, <https://www.loc.gov/resource/g4031p.ct000528/>; Werner, "Railroads."

⁷ National Register of Historic Places, San Jacinto Street Bridge over Buffalo Bayou, Houston, Harris County, Texas, 7, National Register # 07001098.

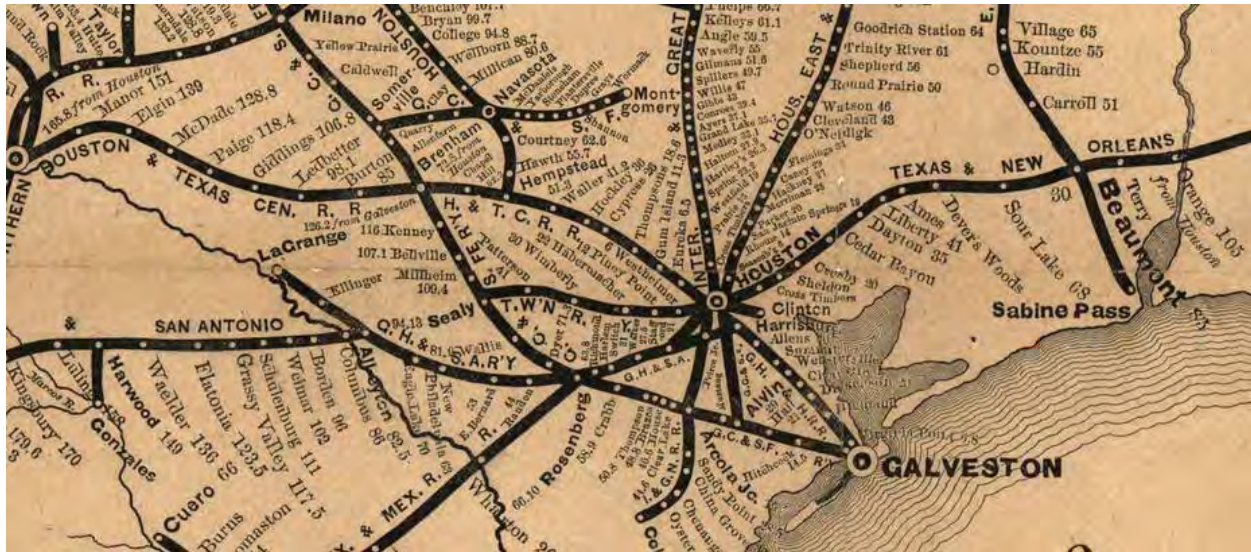


Figure 1. 1883 railroad map showing railroads extending in all directions from the center of Houston.⁸

As Houston's railroad transportation system developed, Buffalo Bayou continued to play an important role in the city's economic growth. Although the bayou was more dependable than the state's other waterways, it was still difficult to navigate and not accessible to oceangoing vessels. Efforts to dredge a deeper and wider channel began in the 1870s and continued through subsequent decades. By 1914, with the help of the federal government, the city opened the Houston Ship Channel, one of the largest deepwater ports in the country. While the cotton trade was a major impetus for early efforts to improve the channel, after the discovery of oil at Spindletop in 1901 petroleum quickly became the primary commodity driving industrial development along the waterway.⁹ In the early 1900s railroads continued to expand in Houston and spurred related construction including numerous sidings, railyards, and warehouses. Houston's position as a hub between major railroad and water transportation systems influenced rapid economic growth and commercial and industrial development in the late nineteenth and early twentieth centuries. *For more information on Houston's railroad-related commercial and industrial development, see pages 1-5 of Appendix B of the 2015 NHHIP HRSR, and pages 19-21 of the 2016 NHHIP HRSR located in Appendix D of this report.*

B. Electric Streetcar Lines

Houston's population grew significantly with the construction of railroads and expansion of its industrial economy in the late nineteenth century. While railroads were developed to move people and goods over long distances, electric streetcars emerged to transport people

⁸ Hensoldt, "The Railroad System of Texas."

⁹ Sibley, "Houston Ship Channel"; National Register of Historic Places, San Jacinto Street Bridge over Buffalo Bayou, Houston, Harris County, Texas, 7.

around the growing city.¹⁰ Houston's first streetcar service began in 1891, and by the following year the network consisted of 35 miles of track on 13 routes.¹¹ Streetcar services expanded rapidly around the turn of the century after the Houston Electric Company purchased the local rail services and their power operations.¹² The system reached its peak with 90 miles of track by 1927.¹³

Electric streetcars played an important role in the residential development of Houston as they allowed for efficient and affordable travel from the city core to its outskirts. As electric streetcars made the city's outer reaches more accessible, new additions and subdivisions emerged.¹⁴ Within the project area, portions of several early-twentieth-century neighborhoods, including sections of the NRHP-eligible Germantown Historic District and the NRHP-listed Near Northside Historic District, developed in part as a result of streetcar transportation. Woodland Park, within the Germantown Historic District, was specifically developed to increase ridership on the Houston Electric Company's line running along Houston Avenue.¹⁵ *For more information on residential development in Houston, see page 6 of Appendix B, in the 2015 NHHIP HRSR located in Appendix D of this report.*

Beginning in the mid-1920s bus services started to replace Houston's streetcar lines and operations completely ended by 1940. In addition to influencing the extent of Houston's suburbs, streetcar lines contributed to the patterns of later infrastructure development. For example, after the Galveston-Houston Interurban streetcar line ended its services in 1936, its ROW was transferred to the city of Houston and used as the route for the Gulf Freeway, which was completed in 1948.¹⁶

C. Roads, Highways, and Freeways

Even as railroads enabled relatively efficient long-distant transportation, and streetcar lines offered affordable urban and suburban mass transit services, roads continued to serve a vital role for local and routine travel. Despite their important function, roads and bridges across Texas and the nation, especially in rural areas, remained largely primitive up to the 1920s. During this period the more than 1.5 million miles of rural roads in the United States

¹⁰ Erik Slotboom, *Houston Freeways* (Cincinnati, Ohio: Oscar F. Slotboom, 2003), 3, <http://www.houstonfreeways.com/>.

¹¹ Slotboom, *Houston Freeways*, 15.

¹² William Dylan Powell, *Lost Houston* (London: Pavilion Books, 2016), 48.

¹³ Slotboom, *Houston Freeways*, 3.

¹⁴ Slotboom, *Houston Freeways*, 3.

¹⁵ City of Houston Planning & Development Department, Archaeological & Historical Commission, "Landmark Designation Report for the Hulsey-Davis House (1216 Wrightwood Street)," 2015, 2.

¹⁶ Powell, *Lost Houston*, 43.

were, with only a few exceptions, mostly unimproved, remaining unpaved with limited grading. Rain made unpaved rutted tracks impassable, while flooding and fire damaged bridges. Road conditions within urban areas, such as Houston, were generally better than in rural areas. Urban counties with higher tax revenues were able to provide funding and carry out improvements on their roads, and as a result some cities featured smooth paved roads by the early 1900s.¹⁷ Although conditions were improved in contrast to other parts of Texas, Houston's road network remained inadequate. As the city's economy and population boomed in the late nineteenth and early twentieth centuries, subdivisions extending from the original city core were laid out without comprehensive planning, which resulted in a disorganized transportation network that included narrow ROW, dead end streets, and offsets in many parts of the city.¹⁸

The Good Roads Movement emerged in the late nineteenth century in response to the poor general condition of the nation's road system.¹⁹ As the disparity between urban and rural roads grew, residents and civic leaders who recognized the economic impacts of bad roads were among the first to advocate for improvements. The Good Roads Movement gained momentum when organized bicyclists joined the cause.²⁰ A group of cyclists organized as the League of American Wheelman in 1880, the first of many organizations to promote road improvements as part of the Good Roads movement.²¹ Automobile enthusiasts joined the cause beginning in the 1890s and helped bolster public awareness of the need for adequate road networks. With the motto "lifting our people out of the mud," Good Roads advocates pressured the federal government to reevaluate its role in the development, financing, and maintenance of roads. They also lobbied for state and local involvement and financial resources in road building and maintenance activities.²²

As buses and automobiles became the preferred mode of transportation in Texas and around the nation the 1910s and 1920s, citizens and government officials increasingly

¹⁷ U.S. Department of Transportation, *America's Highways, 1776-1976: A History of the Federal-Aid Program* (Washington, D.C.: U.S. Department of Transportation, Federal Highway Administration, 1977), 43, <https://archive.org/details/americanhighways00unit>; National Register of Historic Places, Multiple Property Documentation Form, "Historic Road Infrastructure of Texas, 1866-1965," E-14.

¹⁸ Slotboom, *Houston Freeways*, 3; *The Major Street Plan for Houston and Vicinity* (Houston, Tex.: Report of the City Planning Commission, 1942), 2, Houston Metropolitan Research Center.

¹⁹ Paul Daniel Marriott, "The Preservation Office Guide to Historic Roads," June 2010, 36, <http://www.historicroads.org/documents/GUIDE.pdf>.

²⁰ Federal Highway Administration, U.S. Department of Transportation, *America's Highways, 1776-1976: A History of the Federal-Aid Program*, 42.

²¹ Melissa Keane and Simon Bruder, *Good Roads Everywhere: A History of Road Building in Arizona* (Phoenix, Ariz.: Arizona Department of Transportation, March 2004), 25.

²² National Register of Historic Places, Multiple Property Documentation Form, "Historic and Architectural Resources of the Lincoln Highway in Nebraska," Statewide, Nebraska, Section E, Page 2.

supported initiatives of the Good Roads Movement and took action to improve roads.²³ Booster groups in Texas and around the country raised funds and organized efforts to designate, construct, and maintain named transcontinental and regional highways. These early named highways often followed existing county roads or railroad lines in rural areas and city streets in urban areas.²⁴

Several major early named highways crossed Houston, including the Meridian Highway and the Old Spanish Trail. The Meridian Highway extended from Canada, through the United States, and into Mexico.²⁵ The route entered Houston from the northwest following the general alignments of present-day US 290 and Hempstead Road, then followed Washington Avenue before connecting to Preston Avenue just west of present-day IH 45. From that point it generally followed Preston Avenue through downtown and across the present-day alignment of US 59/IH 69 (through the project APE) before heading out of Houston and toward Galveston along Harrisburg Boulevard, Broadway Street, and Galveston Road.²⁶ The Old Spanish Trail extended from St. Augustine, Florida, to San Diego, California, and incorporated segments of some of the oldest trails in Texas. The highway was developed and promoted by the Old Spanish Trail Association in the late 1910s and early 1920s at a time when the federal government and states were increasing involvement in roadbuilding, which included implementing numbered highway systems. In Texas and through Houston, the Old Spanish Trail was designated as State Highway (SH) 3 and US 90.²⁷ Other early named highways that passed through downtown Houston included the Gulf-to-Colorado Highway and the Lone Star Highway.²⁸

²³ Slotboom, *Houston Freeways*, 4.

²⁴ National Register of Historic Places, Multiple Property Documentation Form, “Historic Road Infrastructure of Texas, 1866-1965,” Statewide, Texas, E4; Heck Hardy Moore, Inc., *The Development of Highways in Texas: A Historic Context of the Bankhead Highway and Other Historic Named Highways* (Austin, Texas: Texas Historical Commission, 2015), <http://www.thc.state.tx.us/public/upload/preserve/survey/highway/Statewide%20Historic%20Context.pdf>.

²⁵ David Moore, Martha Freeman, and Tara Dudley, *Meridian Highway, U.S. 81 Throughout, The Meridian Highway in Texas* (Austin, Tex.: prepared for Texas Historical Commission, May 27, 2016), 1, <http://www.thc.texas.gov/public/upload/preserve/survey/highway/Report%20Final.pdf>.

²⁶ Moore, Freeman, and Dudley, *Meridian Highway, U.S. 81 Throughout, The Meridian Highway in Texas*, 245, 247; Texas Historical Commission, “Explore the Meridian Highway,” *Texas Historical Commission*, accessed February 24, 2019, <http://www.thc.texas.gov/historic-highways/meridian-highway/explore-meridian-highway>.

²⁷ Moore, Freeman, and Dudley, *Meridian Highway, U.S. 81 Throughout, The Meridian Highway in Texas*, 244.

²⁸ Moore, Freeman, and Dudley, *Meridian Highway, U.S. 81 Throughout, The Meridian Highway in Texas*, 244.

Calls for improved roads increased within Houston as in cities around the country in the 1910s and 1920s. The pressing need for better roads coincided with the City Beautiful Movement and efforts by local governments to improve the aesthetic features of cities. As wealthier classes moved away from urban centers to newly developed suburbs, officials began to carry out efforts to make the city center a more desirable place to live and work, including developing master plans with the help of professional landscape architects and engineers.²⁹ In 1913 the City of Houston employed landscape architect and city planner Arthur C. Comey to develop its first master plan, *Houston: Tentative Plans for Its Development* (see Figure 2). The plan called for both aesthetic and practical improvements to existing streets, including improved lighting, tree-lined parkways and boulevards, and well-designed bridges, preferably constructed with concrete.³⁰ In addition to addressing aesthetics, Comey's plan featured recommendations for significant improvements to Houston's transportation infrastructure including a comprehensive highway plan that included two major types of highways: "radial" highways, which extended diagonally from the city center and out of the city limits, and "encircling" highways, which would form a "continuous circuit" connecting to the radial highways to relieve congestion within the city center.³¹

²⁹ National Register of Historic Places, San Jacinto Street Bridge over Buffalo Bayou, Houston, Harris County, Texas, 8–9.

³⁰ Arthur Coleman Comey, *Houston: Tentative Plans for Its Development* (Report to the Houston Parks Commission, 1913), 50, Digital Scholarship Archive, Fondren Library, Rice University, <https://scholarship.rice.edu/handle/1911/77141>.

³¹ Comey, *Houston: Tentative Plans for Its Development*, 44–50.

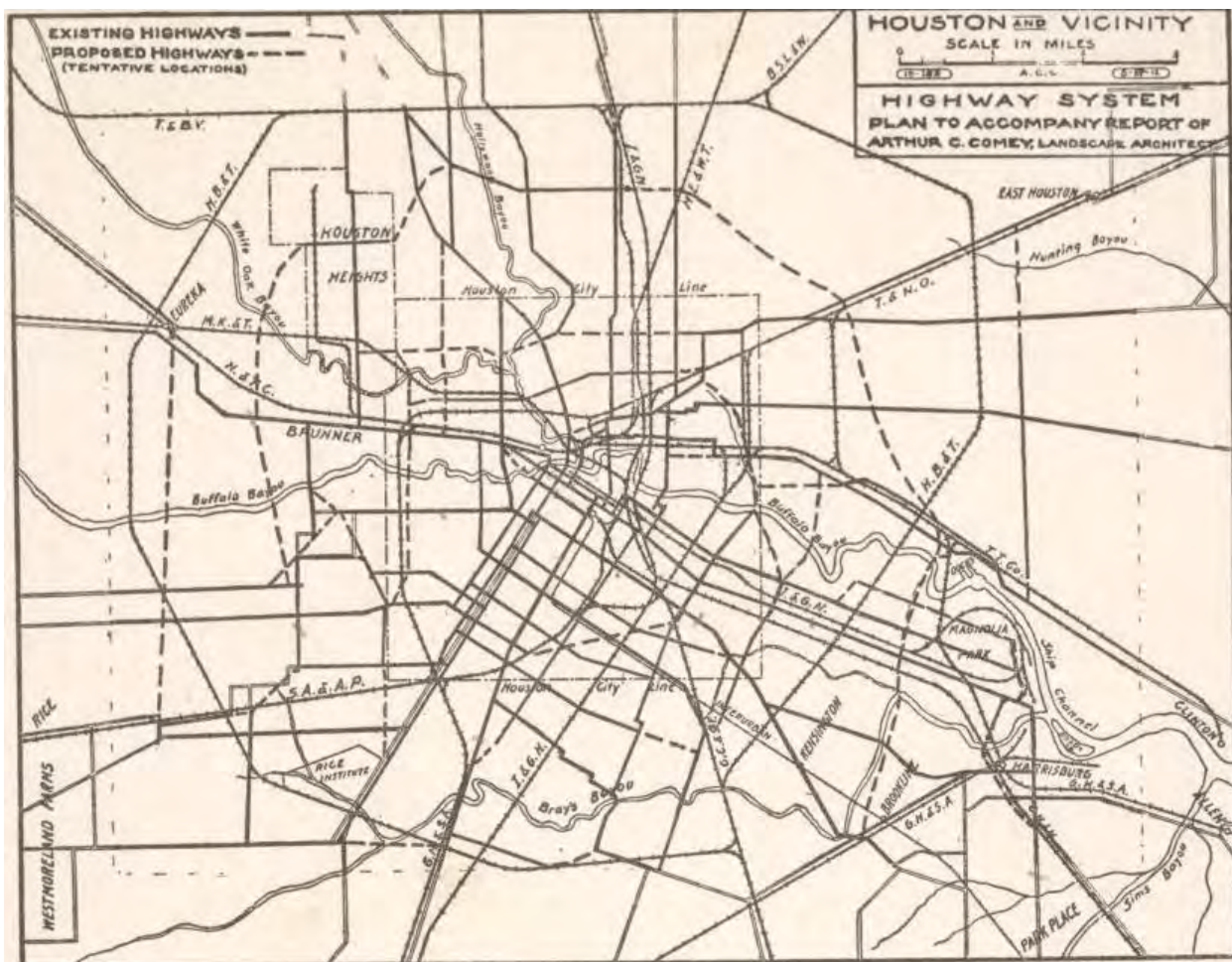


Figure 2. Proposed highway plan found in Houston's first proposed master plan in 1913. Existing highways appear as solid lines and proposed highways are shown as dotted lines. The system includes both "radial" and "encircling" highways. Railroads are also indicated on the map as hatched lines.³²

The 1913 master plan was never fully implemented, but many of its recommendations were reflected in downtown Houston's transportation features dating to the period, including the extant concrete arch San Jacinto Street Bridge over Buffalo Bayou constructed in 1914. Additionally, although the exact alignments differed, later highway planners would eventually adopt and implement a radial and circuit highway system in Houston. Furthermore, despite failed efforts to implement comprehensive transportation planning, Houston had nearly 196 miles of paved streets by 1915.³³

After passage of the Federal Aid Road Act of 1916, the state of Texas established the Texas Highway Department (THD) to plan a system of highways and grant funds to local

³² Comey, *Houston: Tentative Plans for Its Development*, 45.

³³ McComb, "Houston, TX."

governments for the construction and maintenance of highways.³⁴ Since its organization in 1917, the THD played an integral role in the development of Texas's road networks, including bridges. During its first year the THD published a map showing a proposed system of 22 numbered highways across the state. The THD envisioned an extensive network of roads, including highways that connected Houston to Austin, San Antonio, Dallas, and Beaumont. Many of the numbered highways followed designated or developing named highway routes.³⁵

By 1919 the state's road network had increased to include 38 highways across Texas. The THD's early activities included expanding the network of State Highways, extending existing roads, and construction of new ones. These roads often had high profiles, steep side ditches, narrow strips of pavement, and narrow or no shoulders. The THD also developed standardized bridge and culvert designs during this period, usually modeled on federal bulletins distributed by the Bureau of Public Roads (BPR).³⁶

In 1926 the Association of American State Highway Officials (AASHO), along with a joint board of federal and state highway officials, developed a national highway numbering system for interstate roads (U.S. Highways) to provide uniform routing and signage across the nation.³⁷ U.S. Highways usually followed the alignments of existing named highways or, in the case of Texas, designated State Highways. In Harris County, US 90 followed the Old Spanish Trail and US 75 followed the general path of the Meridian Highway from Houston to Galveston (see Figure 3).³⁸ Other early U.S. Highways designated through Harris County included US 75, which extended north from Houston to Dallas and provided the general route for portions of the later North Freeway and IH 45.

³⁴ Although THD was the formal name for the department during the subject period, some biennial reports refer to it as the State Highway Department of Texas.

³⁵ National Register of Historic Places, Multiple Property Documentation Form, "Historic Road Infrastructure of Texas, 1866-1965," Statewide, Texas, E4; Heck Hardy Moore, Inc., *The Development of Highways in Texas: A Historic Context of the Bankhead Highway and Other Historic Named Highways* (Austin, Texas: Texas Historical Commission, 2015), <http://www.thc.state.tx.us/public/upload/preserve/survey/highway/Statewide%20Historic%20Context.pdf>. See Figure 135, page 3, section 2 for edited version of the 1917 "Map Showing Proposed System of State Highway."

³⁶ National Register of Historic Places, Multiple Property Documentation Form, "Historic Road Infrastructure of Texas, 1866-1965," 29–30.

³⁷ Richard Weingroff, "From Names to Numbers: The Origins of the U.S. Numbered Highway System," *U.S. Department of Transportation, Federal Highway Administration*, November 18, 2015, <https://www.fhwa.dot.gov/infrastructure/numbers.cfm>.

³⁸ Moore, Freeman, and Dudley, *Meridian Highway, U.S. 81 Throughout, The Meridian Highway in Texas*, 110; Rand McNally & Company, "Auto Road Map of Texas" (Texas, 1927).



Figure 3. 1927 road map of Texas showing both highway names and U.S. Highway numbers.³⁹

While statewide efforts to standardize highways solidified in the 1920s, Houston city officials continued working to address the disorganized system of roads that had developed over decades without comprehensive planning. The need for better roads mounted as the city's population exploded in the 1920s and 1930s due to a booming oil-based economy. Confounding the population increase was a rapid nationwide trend toward private car ownership. The number of cars in Harris County increased from 1,031 in 1911 to 97,902 by 1930.⁴⁰ In 1929 Houston produced its second master plan document, *Report to the City Planning Commission*. It, like the 1913 plan, included proposals for improved transportation systems, including major and secondary highways.⁴¹ However, support for public planning was counteracted by Houston's long-standing conservative political climate that favored property rights and individualism, and opponents to city planning effectively blocked the street plan's adoption in 1929. Although the plan was never officially implemented, it formed the basis for Houston's first street plan approved several years later.⁴²

³⁹ Rand McNally & Company, "Auto Road Map of Texas."

⁴⁰ McComb, "Houston, TX."

⁴¹ Archie Henderson, "City Planning in Houston, 1920-1930," *The Houston Review* 9, no. 3 (1987): 133.

⁴² Henderson, "City Planning in Houston, 1920-1930," 134-36.

Although major road and highway planning initiatives in Houston floundered at the local level, federal funds available during the 1920s and through the New Deal programs of the 1930s enabled the THD to make limited but steady progress toward connecting roads and bridges across the state, including in Harris County. Like the rest of the nation, Texas's economy was devastated by the Great Depression of the 1930s. Financial hardship and unemployment in the state was exacerbated by Texas's rapidly growing population, which had reached 5.8 million in 1930, 40 percent of which resided in urban areas of the state such as Houston.⁴³ State and federal legislation was passed, providing funding and provisions that encouraged the maximum number of jobs in road and bridge construction. Federal legislation that provided funding for Texas road and bridge building projects in the 1930s included the National Industrial Recovery Act, the Hayden-Cartwright Act, and the Emergency Relief Appropriation Act. Road work included highway construction and improvement as well as the construction of grade-separation structures to eliminate hazardous road-railroad crossings by elevating either the railroad or roadway.⁴⁴ These emergency relief projects allowed road and bridge construction to continue in the 1930s and early 1940s, despite economic hardship. Overall, federal assistance for roadbuilding in Houston during the period amounted to millions of dollars.⁴⁵

At the onset of U.S. involvement in World War II, the Defense Highway Act of 1941 designated a national road system of defense or military highways and provided matching funds to states. These funds were divided among, and matched by, the states for survey and planning of the strategic network of highways in or through municipalities and urban areas.⁴⁶ This military network of highways was designated to expedite the transportation of goods, services, and raw materials between military installations, suppliers, major defense plants, and coastal shipping ports. As a major producer of wartime commodities such as petroleum, and as a hub for military facilities, Texas and Houston were critical to national defense.⁴⁷ Texas contained 6,375 miles of the 75,000 miles in the Strategic Military

⁴³ National Register of Historic Places, Multiple Property Documentation Form, "Historic Bridges of Texas, 1866-1945," Statewide, Texas, E-39.

⁴⁴ Barbara Stocklin, "Historic Bridges of Texas, 1866-1945," 1996, E-40-41.

⁴⁵ Evan Kalish, "Highway Development and Road Improvements - Houston TX," *Living New Deal*, November 4, 2014, <https://livingnewdeal.org/projects/highway-development-road-improvements-houston-tx/>.

⁴⁶ American Association of State Highway Officials, *The History and Accomplishment of Twenty-Five Years of Federal Aid for Highways: An Examination of Policies from State and National Viewpoints* (Washington, D.C.: American Association of State Highway Officials, 1944), 15.

⁴⁷ Texas Highway Department, *The Texas Highway System as Related to National Defense Transportation* (Austin, Tex.: Texas Highway Department, December 1940), 2-3.

Network nationwide.⁴⁸ The Strategic Military Network included several well-established routes that connected to Houston, including US 90 (Old Spanish Trail) and the portion of US 75 south of downtown to Galveston. US 75 north of downtown Houston, which followed the current route of IH 45 from north of present-day IH 610, was a secondary highway in the military network.⁴⁹

State transportation needs continued to mount during the war; thus, planning for a post-World War II (postwar) construction program became one of the THD's major wartime activities. A nationwide survey conducted by AASHO in 1943 found that 17,000 miles of roads in Texas needed to be rebuilt, widened, or relocated.⁵⁰ In an effort to anticipate postwar road and bridge construction needs, the THD completed a large number of surveys and plans during World War II for future projects that would be constructed after the war. As a result of the THD's superlative planning efforts, the state was prepared at the end of the war to resume its road and bridge building with the aid of federal funds.⁵¹

Transportation planning also ramped up at the local level in Houston during World War II. By 1940 automobiles had effectively replaced streetcars as the dominant mode of transportation, but despite numerous attempts at implementing road planning measures, Houston still lacked a comprehensive city plan by the beginning of World War II. City officials began to realize that roads offered important economic growth opportunities for the city. Improved highways offered an opportunity to connect to the nation's growing trucking industry, and would allow accessibility to further reaches of the hinterlands surrounding the city. Considering these potential economic gains, Houston's city planners began to formulate and seriously consider comprehensive road and highway planning in the early 1940s.⁵²

In 1942 the Houston City Planning Commission published *The Major Street Plan for Houston and Vicinity*, which contained a comprehensive plan for streets and thoroughfares. The report opened by proposing several key applications for its readers. The 1942 street plan

⁴⁸ Kirk Kite, "A History of the Texas State Department of Highways and Public Transportation 1917-1980" (PhD Dissertation, University of New Mexico, 1981), 120; Joseph E. King, *A Historical Overview of Texas Transportation, Emphasizing Roads and Bridges* (Austin, Tex.: Texas State Department of Highways and Public Transportation, n.d.), 65.

⁴⁹ Hardy, *The Development of Highways in Texas: A Historic Context of the Bankhead Highway and Other Historic Named Highways*, 154-57.

⁵⁰ American Association of State Highway Officials, *The History and Accomplishment of Twenty-Five Years of Federal Aid for Highways: An Examination of Policies from State and National Viewpoints*, n.p.

⁵¹ Mead & Hunt, Inc., *Historic Context for Texas Bridges, 1945-1965* (Prepared for the Texas Department of Transportation, n.d.), 11.

⁵² Kyle Shelton, *Power Moves: Transportation, Politics, and Development in Houston* (Austin, Tex.: University of Texas Press, 2017), 36.

would serve as: 1) a guide for new subdivisions to ensure they are well integrated within the comprehensive network, 2) a framework for bond issues to develop and prioritize phases of funding for construction, and, 3) a basis for building lines to allow for future road widening.⁵³ The plan included widened radial thoroughfares extending from the center of Houston to its outskirts and proposed inner and outer loops or bypass thoroughfares encircling the city, connecting to the radial roads. This radial and loop pattern was similar to the highway recommendations presented in Houston's first street plan proposal in 1913. These thoroughfares were based on existing roads, which the plan proposed to widen or extend for increased traffic volumes and improved connectivity. Existing thoroughfares incorporated in the radial thoroughfare plan included Hardy Street, Houston Avenue, and White Oak Drive north of downtown. South from downtown, the plan proposed to use the Galveston-Houston Interurban streetcar line ROW to extend a thoroughfare from Houston to Galveston (see Figures 4 and 5).⁵⁴

⁵³ *The Major Street Plan for Houston and Vicinity*, 3.

⁵⁴ *The Major Street Plan for Houston and Vicinity*, 4–8.

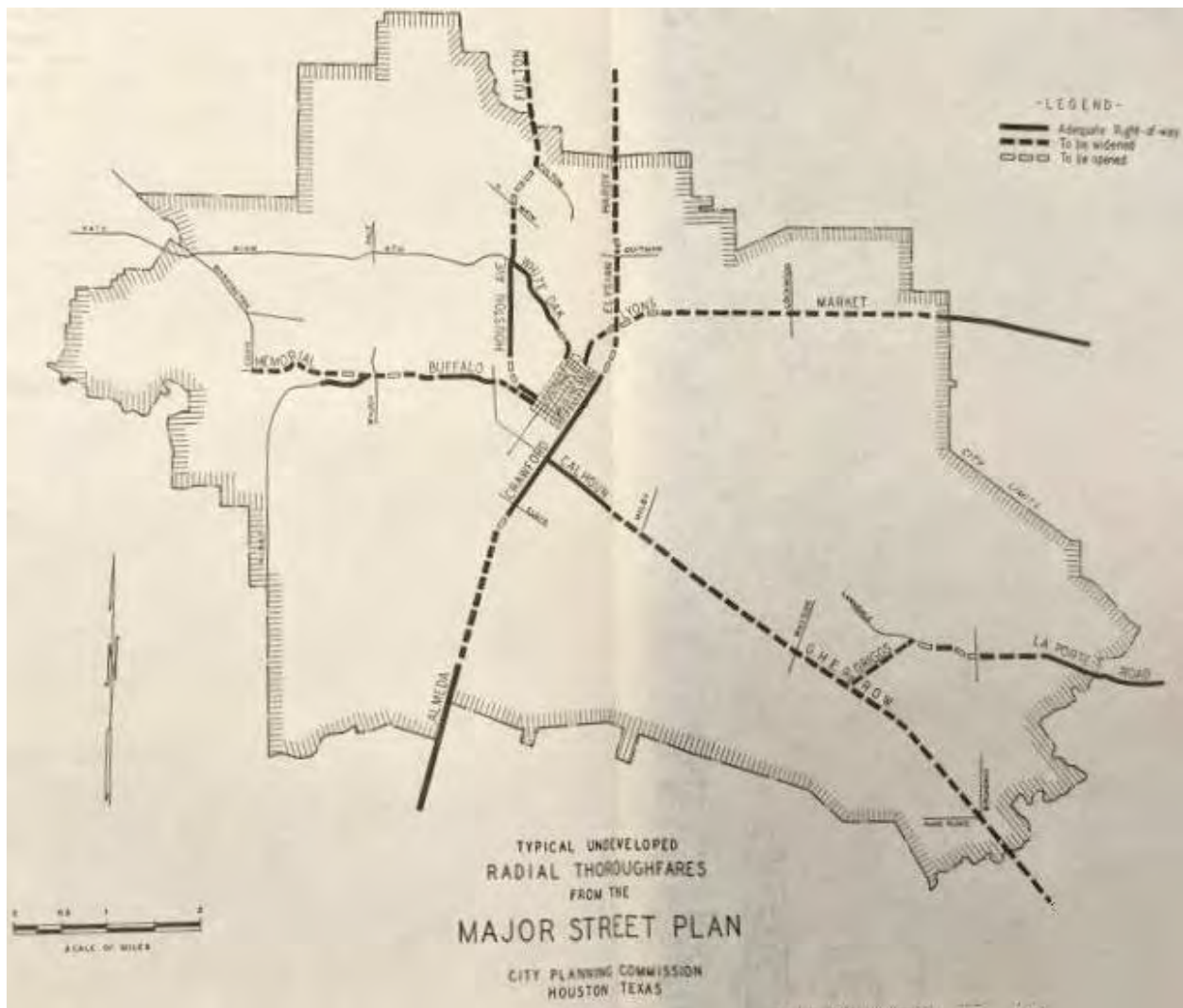
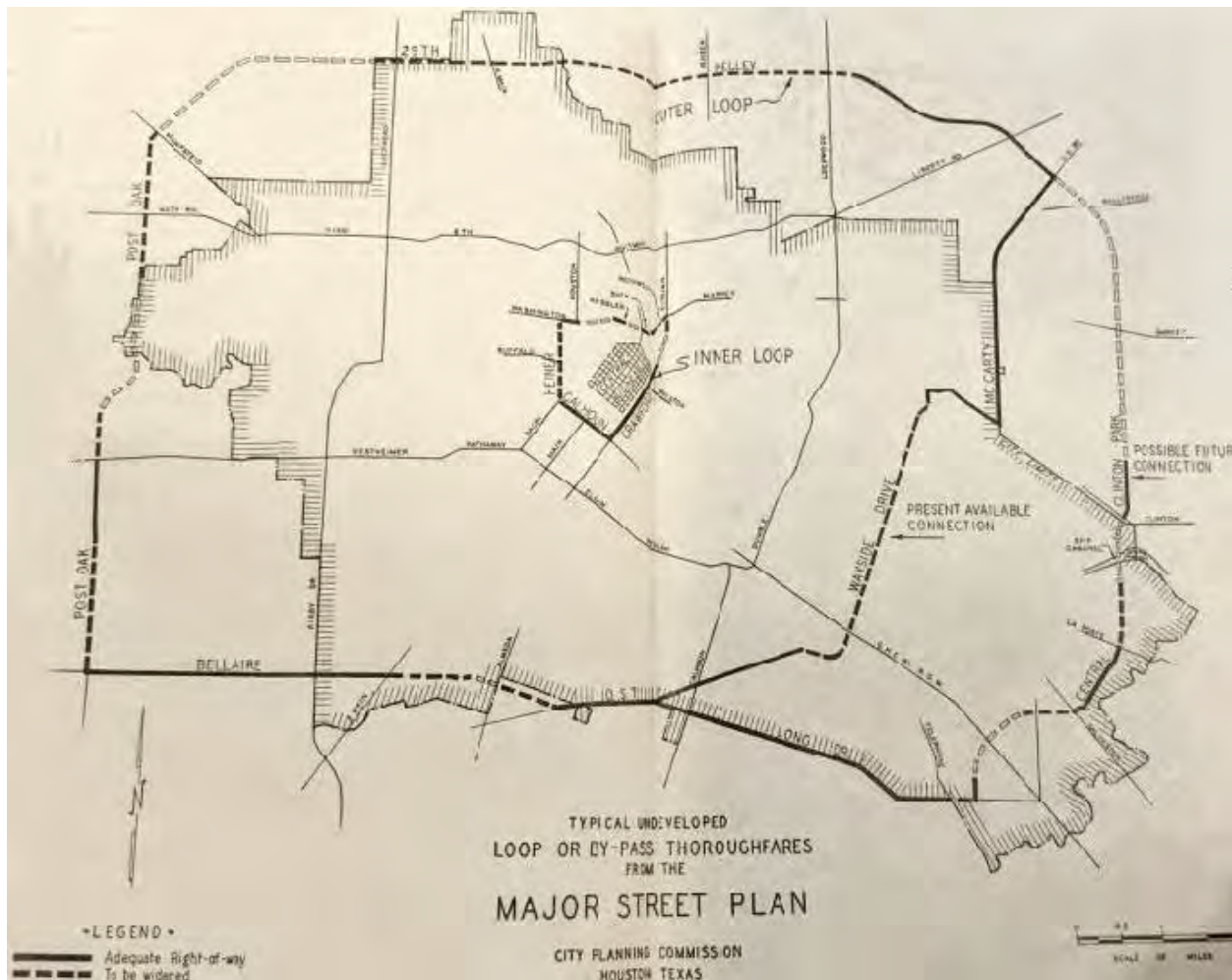


Figure 4. 1942 proposed system of radial thoroughfares extending from the city center to its outskirts and utilizing existing roads.⁵⁵

⁵⁵ *The Major Street Plan for Houston and Vicinity*, 5.



Although the plan proposed significant improvements, it did not include plans for limited-access freeways, which were an increasingly popular concept that had not yet been implemented in Texas by the 1940s. However, the plan did suggest that freeways would eventually become a necessity as traffic volumes would continue to increase. The plan suggested that freeways would be constructed in open areas with few inhabited structures and intersecting roads. Three potential freeway locations were presented in the plan. One extended south from downtown following the corridor of the former Galveston-Houston Interurban electric streetcar line, a second extended north along White Oak Bayou, and third extended west from downtown along Buffalo Bayou. Each of these proposed freeway segments would later carry limited-access highways.⁵⁷

⁵⁶ *The Major Street Plan for Houston and Vicinity*, 7.

⁵⁷ Slotboom, *Houston Freeways*, 6–7.

While federally-funded road building had slowed significantly during World War II, the state of Texas continued to embrace transportation improvement efforts and passed the necessary legislation to ensure that plans were in place and funding was available for projects to begin after the war ended.⁵⁸ Following the war, the state began to implement an expansive road-building program. Highway and bridge construction and improvement between 1945 and 1965 were made possible by the advent of significantly increased federal and state funding. In order to address nationwide road deficiencies, a postwar highway program was implemented through the enactment of the 1944 Federal-Aid Highway Act. The act expanded federal funding available for the nation's federal-aid road system, which included three types of roads: 1) federal-aid primary system, including U.S. Highways and State Highways, roads designated by the states as primary transportation routes; 2) secondary system, known as feeder roads, including farm-to-market roads, rural postal delivery routes, and public school bus routes; and 3) highways in urban areas. The act increased funds for primary roads and provided new funding for construction of urban highways and freeways and secondary roads.⁵⁹ In addition, it authorized designation of the National System of Interstate Highways that was intended to connect principal metropolitan areas, cities, and industrial centers, and to serve national defense and connect border points with routes of continental importance in Canada and Mexico. The act did not provide funding for construction of the Interstate Highway System, but only acknowledged the designation.⁶⁰

Although the act provided some funding for construction of primary and secondary roads and urban highways, it did not do enough to solve the nation's transportation problems. It did not anticipate postwar financial prosperity, which dramatically increased automobile ownership, highway usage, and commercial development. The unexpected increase in automobile usage created congestion in many urban areas and increased pressure on the overall transportation network.⁶¹ The wave of automobile culture resulting from postwar growth and prosperity was particularly evident in Houston. An explosion of jobs in petrochemical industries, the advent of air conditioning, increased manufacturing, and a major surge in suburban real estate investment and development combined to create massive growth in Houston during the early postwar period.⁶² Houston's growth was

⁵⁸ Mead & Hunt, Inc., *Historic Context for Texas Bridges, 1945-1965*, 14.

⁵⁹ State Highway Department of Texas, *Fifteenth Biennial Report, 1944-1946* (Austin, Tex.: State Highway Department of Texas, 1947), 3-4.

⁶⁰ A.E. Johnson, ed., *Published on the Occasion of the Golden Anniversary American Association of State Highway Officials: A Story of the Beginning, Purposes, Growth, Activities and Achievements of AASHO* (Washington D.C.: The American Association of State Highway Officials, 1965), 153.

⁶¹ Bruce E. Seely, *Building the American Highway System: Engineers as Policy Makers* (Philadelphia: Penn.: Temple University Press, 1987), 191.

⁶² Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 39-42.

represented not only in a major population increase, but in a major geographic expansion as well. The city began an aggressive annexation program in the 1940s and more than doubled in size from 73 square miles in 1940 to 160 square miles by 1950.⁶³

As Houston expanded rapidly, its residents embraced the automobile and demanded new highways to connect to the suburbs. City planners were motivated to meet the needs of their constituents, but also knew that population centers in the hinterlands without roads leading back to the city center had the potential to decentralize Houston's commercial districts. Planners and city officials worked to improve and design the city's roads to expand access for workers between the city's suburbs, industrial areas, and central commercial areas.⁶⁴ For Houston's local officials and residents, limited-access expressways, or freeways, would provide the primary means of efficient automobile transportation around the city. As high-capacity, efficient highways became a necessity after World War II, the THD began designing freeways as directed by the Federal-Aid Highway Act of 1944. Texas State Highway Engineer Dewitt C. Greer had begun planning freeways shortly after passage of the act, and in 1945 special freeway project offices were created in Houston, Dallas, Fort Worth, and San Antonio.⁶⁵ Freeways were designed to provide fast and safe mass transportation within and through metropolitan areas. The objective of the freeway was to separate through traffic from cross traffic, which included turning vehicles, parked cars, and pedestrians. These roads were able to handle three to four times the traffic volume of highways and city streets of the same width. Ingress and egress was available only at designated control points, and bridges or overpasses (grade-separation structures) were required at most intersections to eliminate at-grade crossings and improve safety and traffic flow.⁶⁶

As with most roadway construction in the state, the THD was ultimately responsible for design and construction of urban freeways. In Houston, city officials collaborated with the THD's Houston office and the Houston's Chamber of Commerce to develop early freeway plans. Houston officials and the THD identified places where freeways were needed most,

⁶³ McComb, "Houston, TX."

⁶⁴ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 46–47.

⁶⁵ Hilton Hagan, "An Informal History of the Texas Department of Transportation" (Texas Department of Transportation, Public Information Office, n.d.), 29, Reference Documents Collection, Texas State Library and Archives.

⁶⁶ "Golden Anniversary, Texas Highway Department, 1917-1967," *Texas Highways*, ; Department of Economic Development, "State's top community development projects honored," ; "Golden Anniversary, Texas Highway Department, 1917-1967," *Texas Highways*, 108; Dewitt C. Greer, "Freeways," *Texas Highways* (n.d.): 8-9; Laurence I. Hewes and Clarkson H. Oglesby, *Highway Engineering* (New York: John Wiley & Sons, Inc., 1954), 36.

then Houston's Chamber of Commerce worked to build public support for their construction.⁶⁷

Within cities, routes were typically constructed a few blocks from the main downtown area. Such routes were favored because property values and, hence, ROW costs were lower and they helped move traffic away from congested urban centers. In urban areas where congestion could not be avoided, elevated roads were constructed.⁶⁸ These design trends are reflected in the alignment of Houston's early freeways. Designated in October 1943, Houston's (and Texas's) first freeway, the Gulf Freeway, followed US 75 south of downtown to Galveston, and in 1945 the state highway commission approved freeway plans for US 75 along the western and southern borders of downtown. In 1946 the highway commission approved the extension of the US 75 freeway north from downtown to the city limits, which became known as the North Freeway. The same year, US 90, which generally ran east to west and crossed downtown Houston, was also approved as a new freeway route. By the end of the 1940s Houston's freeway system consisted of a five-spoke radial system (see Figure 6).⁶⁹

⁶⁷ Slotboom, *Houston Freeways*, 11.

⁶⁸ "Texas Urban Expressways Being Designed from Center Out," November 1945, 11–12.

⁶⁹ Slotboom, *Houston Freeways*, 11–12.

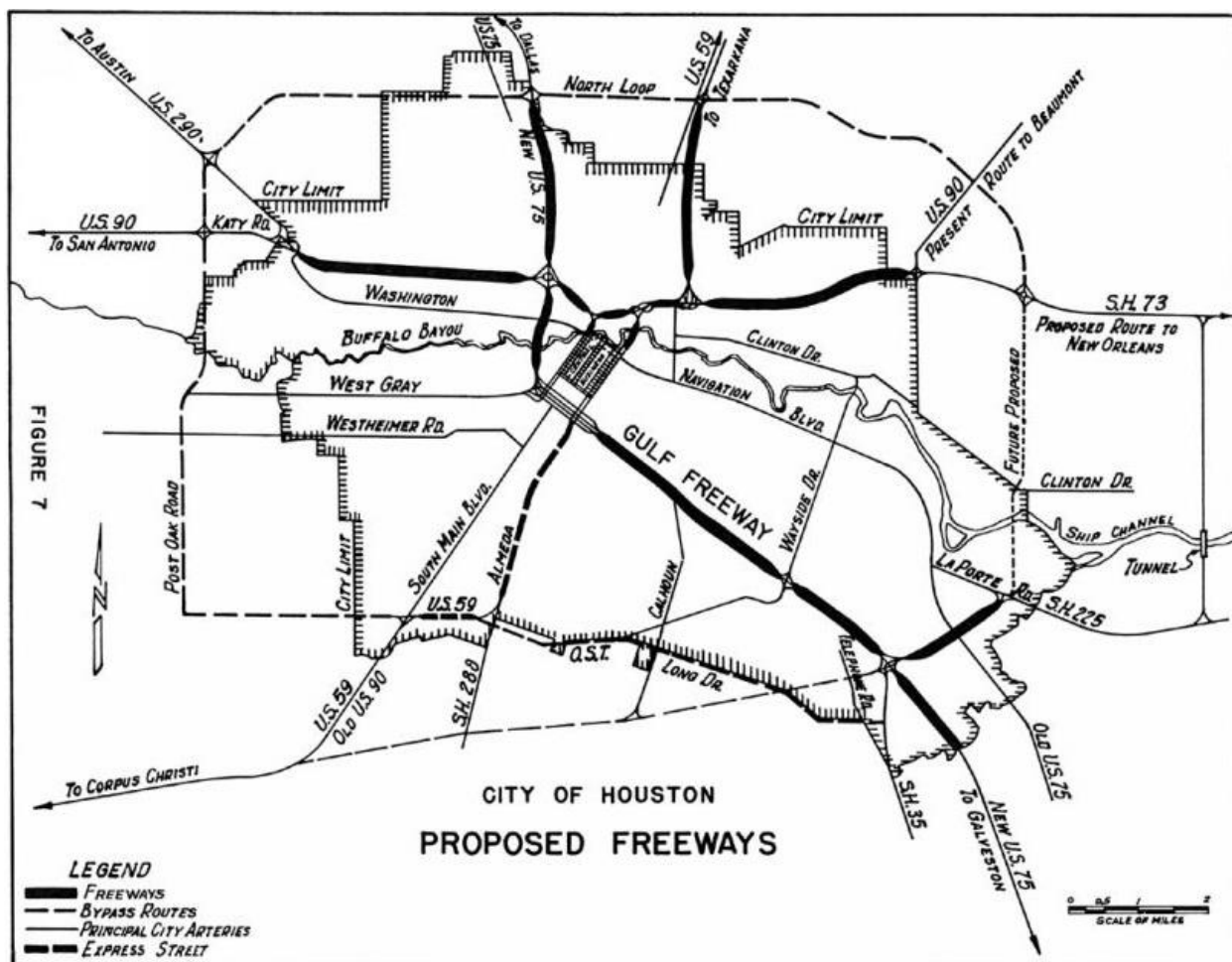


Figure 6. Map developed by the THD's Houston office showing the freeways planned by 1947.⁷⁰

By 1948 the Gulf Freeway had opened to traffic and plans for Houston's larger freeway system were beginning to take shape. City officials continued to develop comprehensive freeway plans in the early 1950s, which were continuously refined and adjusted. During this period freeway routes for US 59 (the Southwest Freeway), SH 288 (South Freeway), US 290 (Northwest Freeway), and Loop 610 were approved and incorporated into official plans. By 1955 the city's freeway plans began to show the system in its entirety (see Figure 7).⁷¹

⁷⁰ Slotboom, *Houston Freeways*, 12.

⁷¹ Slotboom, *Houston Freeways*, 13–14.

HOUSTON CHAMBER OF COMMERCE
HIGHWAY COMMITTEE
MASTER FREEWAY PLAN
FOR
HOUSTON & HARRIS COUNTY, TEXAS
MARCH, 1954

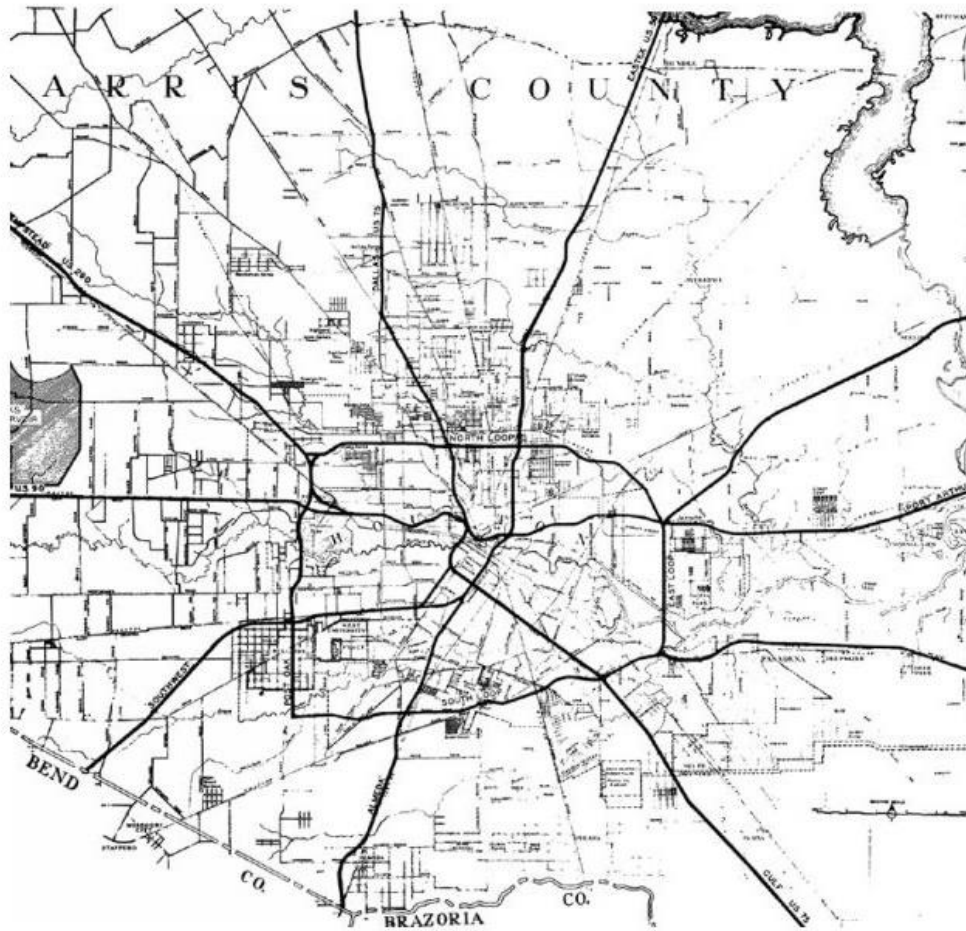


Figure 7. 1954 Houston freeway plan as shown on Houston Chamber of Commerce maps.⁷²

Although construction on Houston's downtown freeway system began in 1953, it took nearly 25 years to construct the system envisioned in the mid-1950s. Shortly after construction began, the federal government passed the Federal-Aid Highway Act of 1956, which made the first significant appropriations for construction of the Interstate Highway System and expanded it to 41,000 miles. The act provided allocations for 90 percent of construction costs, with states responsible for the remaining 10 percent.⁷³ In addition to increased funding for road construction and financial backing for the Interstate, the 1956 act brought uniformity to the nationwide road-building effort. The act included a provision requiring

⁷² Slotboom, *Houston Freeways*, 14.

⁷³ Johnson, *Published on the Occasion of the Golden Anniversary American Association of State Highway Officials: A Story of the Beginning, Purposes, Growth, Activities and Achievements of AASHO*, 181.

national organizations, such as AASHO and the BPR, to cooperate to develop design standards to accommodate traffic forecasts through 1975. The standards were meant to ensure national uniformity of design, provide full control of road access, and eliminate at-grade crossings.⁷⁴

Starting construction on the Interstate Highway System became a major focus of the THD after the passage of the 1956 act. The national plan included seven Interstate Highways in Texas: three running north-south from Oklahoma through Dallas-Fort Worth to Corpus Christi, Laredo, and Galveston; and four running east-west, one across the panhandle and three from Shreveport, Texarkana, and Orange westward to El Paso. There were also four urban loops within this mileage at Dallas, Fort Worth, San Antonio, and Houston.⁷⁵ Some of Houston's freeways under construction were designated as Interstate Highways. The Gulf Freeway and North Freeway became IH 45 South and IH 45 North while the East Freeway and Katy Freeway became IH 10 East and IH 10 West. Loop 610 was incorporated into the Interstate Highway System as IH 610.⁷⁶ These freeways enabled significant expansions of residential and commercial development surrounding Houston. Freeways extending in all directions from the city accommodated the suburban commuter lifestyle whereby workers lived well outside of the city and travelled in daily for work. The use of continuous frontage roads on Texas's freeways also improved access to businesses along the highway corridors and to local roads, which resulted in long stretches containing sprawling commercial development.

While the construction of Houston's freeway system drastically improved the overall mobility of the traveling public and connected Houston's city center to its outlying residential suburbs, it also transformed the city's landscape and required the demolition and displacement of entire neighborhoods. Fifth and Third Wards were particularly affected by the construction of IH 45 and IH 10. Both neighborhoods were home to vibrant black communities. Hundreds of Fifth Ward residents were displaced and numerous businesses and residences were demolished to make way for the construction of IH 10 East from IH 610 to downtown and the IH10/US 59 interchange. Similarly, the construction of IH 45 through the Third Ward, including a particularly controversial elevated segment along Pierce Street now known as Pierce Elevated, resulted in the removal of hundreds of residents.⁷⁷

⁷⁴ Richard Weingroff, "Federal-Aid Highway Act of 1956: Creating the Interstate System," *Public Roads* 60, no. 1 (Summer 1996), <https://www.fhwa.dot.gov/publications/publicroads/96summer/p96su10.cfm>.

⁷⁵ Kite, "A History of the Texas State Department of Highways and Public Transportation 1917-1980," 135-36.

⁷⁶ Slotboom, *Houston Freeways*, 20.

⁷⁷ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 61.

D. Conclusion

Houston's various types of transportation infrastructure—including the water transportation, railroads, streetcar lines, and early highways—played important roles in the city's development throughout its history. The construction of the Houston Ship Channel and establishment of an extensive railroad network in the late nineteenth and early twentieth centuries made Houston a key transportation hub and led to rapid industrial and commercial growth near the city's center. Also during this time, streetcar lines were established that enabled suburbanization on the edges of Houston. Roads and highways became increasingly important during the first half of the twentieth century, as automobiles replaced streetcars and trucks largely replaced trains as preferred modes of transportation. The development of roads, highways, and later freeways was largely the result of collaborative efforts between local officials, the THD, and private interests. While freeways enabled a massive suburban expansion surrounding Houston beginning in the postwar period, they also resulted in the demolition and bifurcation of neighborhoods and displacement of established communities. The influence of Houston's transportation history is reflected in the city's current infrastructure and many its extant historic-age resources, including some located within the NHHIP APE.

(2) Municipal Utility Districts

A. Overview of Municipal Utility Districts in Texas

Municipal Utility Districts (MUDs) are a type of special purpose district that function as independent, limited governments. The creation of MUDs in Texas dates to the early twentieth century. Following a series of floods and droughts, Texans began seeking new methods to publicly finance large-scale drainage, irrigation, and reclamation projects. In 1904 the Texas Legislature passed Article III, Section 52 of the Texas Constitution, which allowed for the creation of taxing districts to finance projects with the issuance of bonds. Local control in assessing infrastructure needs was limited with this initial amendment, and citizens began to call for new legislation to expand local flexibility. As a result, the Conservation Amendment was passed in 1917 under Article XVI, Section 52, which granted districts additional authority and authorized the creation of water conservation and reclamation districts. In subsequent decades the Texas legislature expanded the powers of water districts to accommodate the needs of local citizens. By the 1950s districts had the ability to provide a range of infrastructure needs in addition to water and drainage, including sewer services, road construction, and the establishment of park or recreational facilities.⁷⁸

⁷⁸ *House Committee on Special Purpose Districts*, Interim Report (A Report to the Texas House of Representatives 85th Texas Legislature, 2016), 14–15.

By the 1950s and 1960s the creation of MUDs became a common tool for developers to finance and construct utilities for new residential developments in Texas. MUDs were one of three basic methods for providing water, sewer, and drainage utilities to new developments. Other methods included extending existing city systems to the new area or installing privately owned and operated utility services. While each system has its advantages and disadvantages, MUDs were a popular tool because they allowed developers to finance infrastructure in inexpensive land areas far from the city at a low initial cost.⁷⁹

Districts were officially approved by a vote of residents and approval by the Texas legislature. Upon approval, residents elected a Board of Directors to oversee its operation. In their earliest stages, MUDs usually had Boards of Directors that consisted of the developer and initial property owners. Eventually, however, civic leaders or other residents of the community were often voted in to serve on the board. Shortly after its creation, a MUD would hold a bond election to provide sufficient finances to cover proposed utilities.⁸⁰ Eventually, the MUD repaid this debt through revenue from property taxes and user fees imposed on future residents. As debt is repaid, MUDs often funneled surplus tax revenue into other services.⁸¹ MUDs are typically outside a city's limits but were often later annexed by the adjacent city. If a city annexes a MUD before its bonds are paid off, the city assumes the balance of the debt.⁸²

In 1963 Texas enacted the Municipal Annexation Act, which assigned municipalities an "extra-territorial jurisdiction" (ETJ). ETJs were typically several miles from the city limits but varied based on population.⁸³ Cities held limited political control and were granted sole annexation rights over land within their ETJs. Beginning in the mid-1960s MUDs were often proposed within the ETJ of established cities or towns, meaning they had to meet the city's requirements for plans and specifications before approval.⁸⁴ This provided a benefit to cities

⁷⁹ Parkway Realty Research, *A Study of the Use of Municipal Utility Districts (or Water Districts) in the Development of Land in the Houston Area* (Houston, Tex.: Prepared for the Greater Houston Home Builders Association, 1974), 1, Texas and Local History Collection, Houston Metropolitan Research Center.

⁸⁰ Parkway Realty Research, *A Study of the Use of Municipal Utility Districts (or Water Districts) in the Development of Land in the Houston Area*, 5.

⁸¹ City of Austin, Texas, "Municipal Utility District (MUD) Basics," n.d., 1–2, <http://www.austintexas.gov/edims/document.cfm?id=227010>.

⁸² City of Austin, Texas, "Municipal Utility District (MUD) Basics," 1–2.

⁸³ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 45–46.

⁸⁴ Parkway Realty Research, *A Study of the Use of Municipal Utility Districts (or Water Districts) in the Development of Land in the Houston Area*, 5.

in that it allowed them to avoid taking major risks associated with new developments but assured that utilities constructed were compatible with their existing infrastructure.⁸⁵

B. Role of MUDs in Houston's Suburban Development

MUDs were utilized by developers all over Texas, but more MUDs were created in the Houston area than any other city in the state between 1949 and 1960. A total of 62 districts emerged surrounding the city during this period.⁸⁶ The widespread use of MUDs was one of several factors that influenced land development patterns in Houston and its surrounding area, including Harris County and portions of adjacent counties during the postwar period. A review of historic maps and aerials shows a sharp rise in residential development outside of Houston's city limits during the postwar period. These developments were isolated and discontinuous, often located along a major transportation corridor.⁸⁷ This type of development pattern has been characterized as "leap frog development."⁸⁸ MUDs, along with other interrelated factors, contributed to Houston's scattered and widespread development patterns during the postwar period.

Several geographic and institutional factors unique to Houston made MUDs favorable by developers in the Houston area. Geographic factors that influenced the predominance of MUDs in the Houston area included its relatively flat terrain and high water table. Since sewage systems typically use gravity to create flow, Houston's flat landscape required more lift stations to manage sewage processing over longer distances. Due to this added expense, MUDs were found economically competitive in Houston since they could be established within a smaller service area compared to connecting to distant regional utility systems. In addition, Houston's high water table allowed small MUDs to access well water relatively easily in multiple locations within the system. This significantly reduced costs by minimizing the need for storage facilities and reducing reliance on outside water suppliers. Eventually, overuse of well water in the Houston area caused the water table to drop significantly and resulted in land subsidence. As a result, MUDs established in the 1980s and after were sometimes unable to rely solely on well water.⁸⁹

⁸⁵ Ronald L. Welch, *Revival of Houston Area Municipal Utility Districts* (Institute for Regional Forecasting, November 2001), 2, Texas and Local History Collection, Houston Metropolitan Research Center.

⁸⁶ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 43.

⁸⁷ "Historical Imagery: Houston," *Google Earth Pro*, 1944, 1953, 1978, accessed January 25, 2019; U.S. Geological Survey, "Settegast, Texas," 1:31680 (Washington DC: U.S. Department of the Interior, Geological Survey, 1946).

⁸⁸ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 43.

⁸⁹ Richard B. Peiser, "The Economics of Municipal Utility Districts for Land Development," *Land Economics* 59, no. 1 (February 1983): 50.

In addition to geographic influences, several institutional or political factors influenced the predominance of MUDs in the Houston area. These included a relatively low number of incorporated suburbs in the surrounding area and a lack of zoning. Since there were relatively few incorporated municipalities surrounding Houston, development in the Houston area took place largely within unincorporated areas or within Houston's ETJ, and in both cases MUDs were often favored over connecting to Houston's public utility system due to lower costs and fewer bureaucratic hurdles.⁹⁰ Houston's lack of zoning also encouraged the use of MUDs by encouraging development further from the city center. Without zoning, land owners were free to use and sell land for any purpose, which created an incentive for landowners to hold property as its value increased over time. As a result, developers usually purchased land in areas far from the city, where there were fewer expectations for values higher than low-density residential development.⁹¹ MUDs enabled developers to establish utilities well outside of Houston's city limits and away from smaller municipalities that may have otherwise required connection to public services. Due to these factors, the number of districts created in the Houston area exploded from 1960 to 1980 (see Figures 8-10).



Figure 8. The location of MUDs near Houston in 1960.⁹²

⁹⁰ Peiser, "The Economics of Municipal Utility Districts for Land Development," 50–51.

⁹¹ Peiser, "The Economics of Municipal Utility Districts for Land Development," 52.

⁹² Conservation History Association of Texas, "Houston MUDs (Map)," *The Texas Landscape Project*, accessed February 12, 2019, http://texaslandscape.org/maps_houstonmuds/.

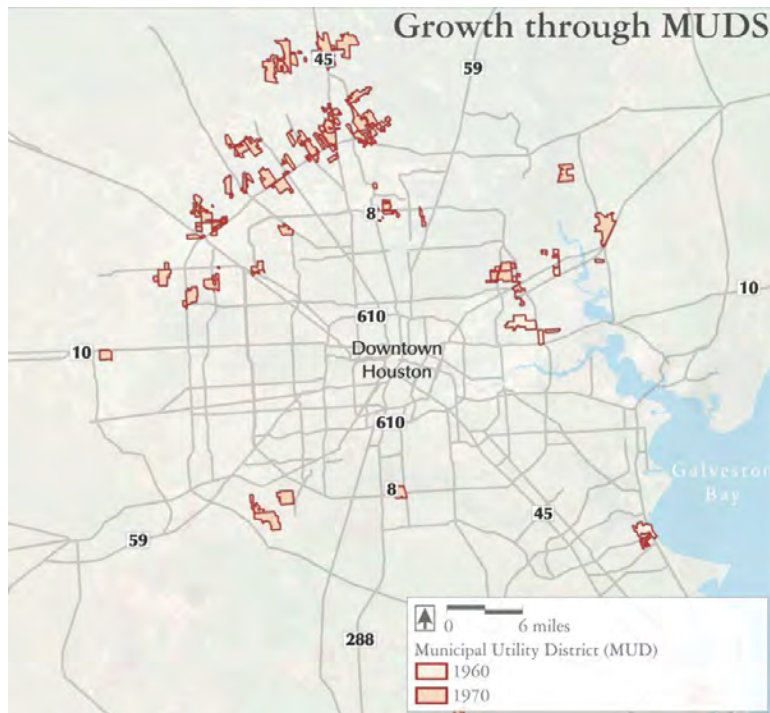


Figure 9. The location of MUDs near Houston in 1970, showing increase since 1960.⁹³

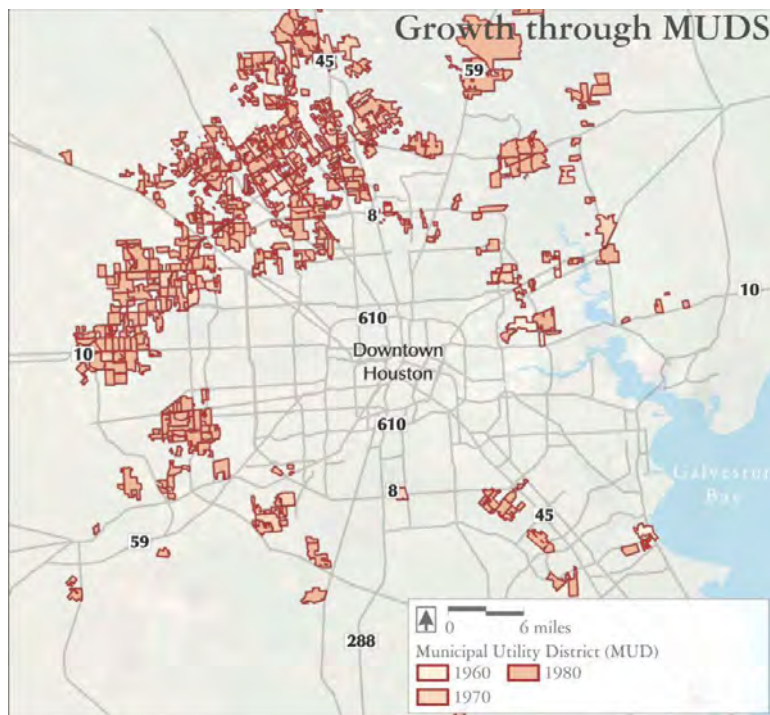


Figure 10. The location of MUDs near Houston in 1980, showing further increase.⁹⁴

⁹³ Conservation History Association of Texas, "Houston MUDs (Map)."

⁹⁴ Conservation History Association of Texas, "Houston MUDs (Map)."

MUDs enabled the widespread leapfrog development that occurred in the Houston area during the postwar period by making more land outside the city limits “developable.” GIS data from the City of Houston and online mapping from the Texas Commission on Environmental Quality provide the location of MUDs created in the Houston area from the 1950s to present. These maps compared with aerials and historic topographic maps from the period show a direct relationship between the location of new MUDs and residential growth in the area surrounding Houston (see Figures 11 and 12). Although MUDs influenced development patterns north and northwest of Houston, they appear to have had a minimal effect on residential development within the project APE. Residential development did occur along IH 45 south of current Beltway 8 during this period, but few were served by MUDs. Instead, utilities were more often provided to these areas by private companies, such as the Southern Water Corporation, which serviced the Hidden Valley subdivision west of IH 45.⁹⁵

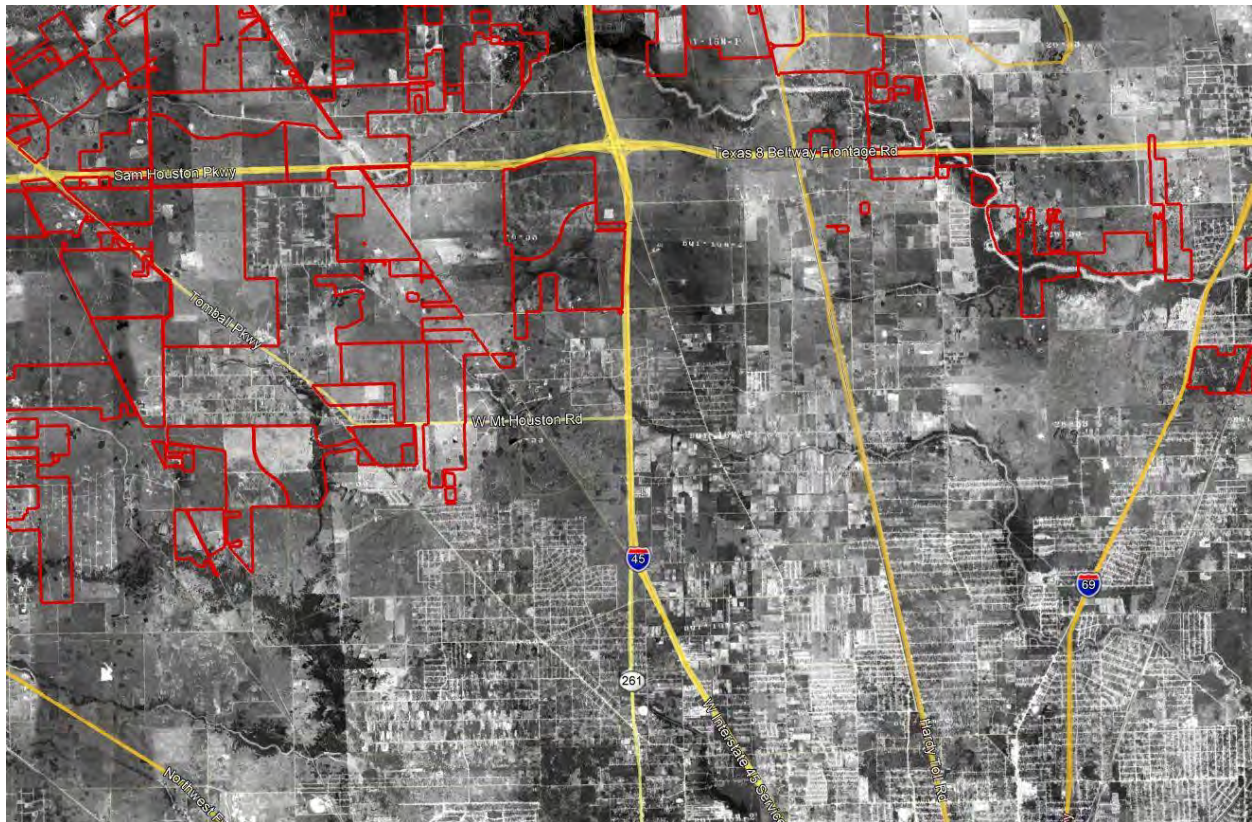


Figure 11. 1953 aerial photograph showing largely undeveloped land and future MUDs outlined in red.⁹⁶

⁹⁵ Texas Commission on Environmental Quality, “Water Districts Viewer,” *Water Districts Viewer*, accessed February 12, 2019, <https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=04bbf8b322b34d8abaea7b06996d3775>; “Historical Imagery: Houston,” *Google Earth Pro*, 1953, 1978, accessed January 25, 2019.

⁹⁶ “Historical Imagery: Houston,” *Google Earth Pro*, 1953, accessed January 25, 2019.

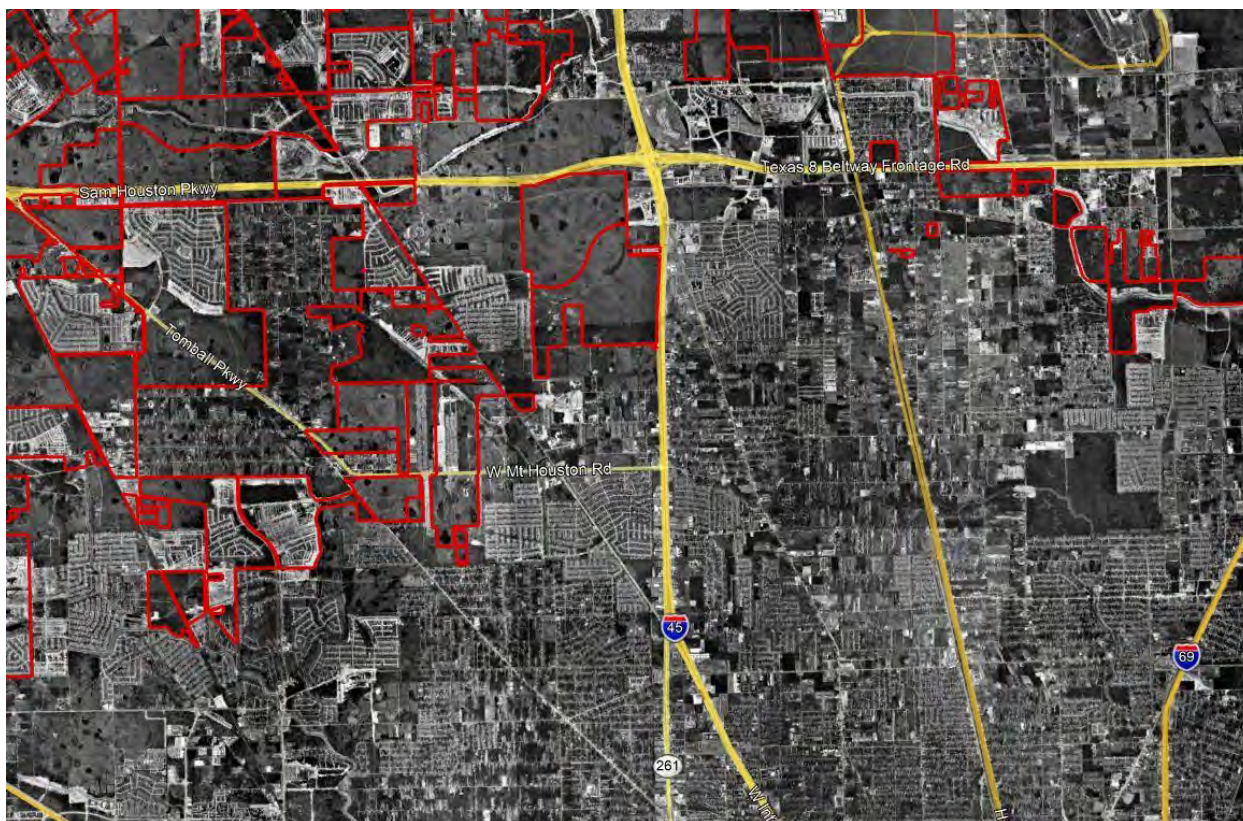


Figure 12. 1978 aerial photograph showing MUDs outlined in red. Note: some MUDs shown were created after 1978 and roads shown represent current alignments.⁹⁷

During the postwar period, Houston officials widely supported the use of MUDs as tools to encourage economic growth and ensure the extension of public services. As the number of unincorporated subdivisions exploded in the 1950s, Houston quickly began to annex the new developments. The city council approved annexation of large amounts of land between 1945 and 1958, including most of the areas that had been developed outside of the city limits after 1945. In 1949 the City enacted its largest annexation ordinance, adding approximately 84 square miles to the city limits and 139,114 new residents. In 1956 another annexation ordinance expanded the city limits by an additional 184.8 square miles. In total these two ordinances increased Houston's territory by four times in less than one decade.⁹⁸

Texas law required cities to absorb the debt of areas they annexed. Therefore, while MUDs helped to ensure outlying subdivisions were initially developed with basic utility services, eventually they added millions of dollars of debt to the city budget. Furthermore, since

⁹⁷ "Historical Imagery: Houston," *Google Earth Pro*, 1978, accessed February 12, 2019.

⁹⁸ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 44.

developers rarely integrated their subdivisions into larger comprehensive planning efforts, MUDs presented major metropolitan planning problems as they were annexed.⁹⁹

After the passage of the Municipal Annexation Act in 1963, the City of Houston was provided sole annexation rights and was able to impose some requirements over MUDs created within its ETJ, which was approximately five miles beyond its city limits.¹⁰⁰ As Houston's economy continued to boom in the late 1970s and early 1980s, most new residential developments emerged in Houston's ETJ and were served by MUDs.¹⁰¹ By the mid-1980s recession and overdevelopment led to a decline of MUDs in the Houston area. Several MUDs established in the late 1970s or early 1980s did not retain a sufficient tax base to pay its debts, and ultimately defaulted. However, as the economy recovered, taxable values of MUDs in the Houston area eventually increased and the creation of new districts accelerated again in the mid-1990s.¹⁰² By the end of 2000 there were over 420 MUDs within the ETJ of Houston and nearby cities and these entities continue to influence development in Houston.¹⁰³

(3) Chinese and Asian Settlement in East Downtown

The history of Chinese settlement in Texas dates to the 1870s, when the Texas Central Railroad Company brought nearly 300 Chinese workers from California to Central Texas to construct new track in the state. Smaller numbers of Chinese came to the state as railroad workers in the 1880s and 1890s. Many of these Chinese migrants dispersed to other areas of the state, becoming sharecroppers or farm laborers, and others settled in railroad towns or shipping points along the rail lines such as Toyah, San Angelo, San Antonio, and El Paso. By the early 1900s El Paso had the largest Chinese community in Texas.¹⁰⁴

In comparison to other large Texas cities, Houston had a relatively small Chinese population by the early 1900s. By 1930 the city had only 50 Chinese residents. Most Chinese in Houston during this period operated grocery stores or restaurants, which also contained their living quarters. Many of the Chinese who migrated to Houston in the 1920s and 1930s arrived from areas of the rural south where they had operated stores that served black patrons. As blacks left rural areas in large numbers during the Great Migration, many Chinese shop owners moved to larger cities in hopes of finding better jobs or establishing

⁹⁹ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 43.

¹⁰⁰ Shelton, *Power Moves: Transportation, Politics, and Development in Houston*, 45.

¹⁰¹ Welch, *Revival of Houston Area Municipal Utility Districts*, 3.

¹⁰² Welch, *Revival of Houston Area Municipal Utility Districts*, 5.

¹⁰³ Welch, *Revival of Houston Area Municipal Utility Districts*, 2.

¹⁰⁴ Marilyn Dell Brady, *Asian Texans* (College Station, Tex.: Texas A&M University Press, 2004), 11, 14–15.

new businesses. In Houston they often established new shops in black neighborhoods.¹⁰⁵ By 1935 there were one dozen Chinese businesses in the city, including six restaurants, one laundry, and five groceries.¹⁰⁶

Houston's Chinese population rose to over 300 by the mid-1940s but was dispersed among several parts of the city. At that time there was no recognizable Chinese settlement or "Chinatown." As Houston's Chinese population grew, members of its business community formed the On Leong Chinese Merchant's Association to facilitate growth and planning among Houston's Chinese businesses. In 1944 the association announced plans to construct a Chinese business and community center within the city after the end of World War II. In a newspaper article On Leong's chairman Jimmie Lim described the goal of the project to construct a "Chinese center along the lines of the Chinese district in New York, San Francisco and other cities." Most of Houston's Chinese businesses planned to relocate to the new center after its completion.¹⁰⁷

By 1950 the On Leong organization had purchased a large plot of land east of downtown at the southeast corner of Rusk and Chartres Streets. At the time this area contained a wide area of warehouses and industrial buildings interspersed with single-family residences and apartment buildings.¹⁰⁸ The new three-story Chinese business center was projected to cost \$150,000 and would feature a Chinese school, restaurant, grocery, and "place for teenagers to gather."¹⁰⁹

In 1950 Houston's Chinese population had reached 600, but the communist revolution in China and changes to U.S. policy easing restrictions on immigration from Asia resulted in major increases in the 1950s and 1960s.¹¹⁰ Interactive online maps produced by the Houston Asian American Archive (HAAA) at Rice University show the history of Asian settlement in Houston using data collected from Asian and Chinese-American city and telephone directories. Based on these maps, it appears that few, if any, Chinese-owned businesses listed addresses in the east downtown area prior to 1950. According to the HAAA maps, by 1958 directories listed one Chinese restaurant and several residents along

¹⁰⁵ Brady, *Asian Texans*, 20, 22.

¹⁰⁶ Edward C. M. Chen, "More Data on the History of Chinese in Houston," *Southwest Chinese Journal*, August 1980, 15–16.

¹⁰⁷ "Houston Chinese Plan Postwar Business Center," *Houston Chronicle*, October 24, 1944, Vertical Files, Houston Metropolitan Research Center.

¹⁰⁸ "Houston, Texas, 1924 (1951 Revised) Vol. 1" (New York: Sanborn Map Company, 1951), 34, 36, Digital Sanborn Maps, 1867-1970, ProQuest.

¹⁰⁹ Anne Haynes, "Chinatown With a Difference," *Houston Chronicle*, January 15, 1950, Vertical Files, Houston Metropolitan Research Center.

¹¹⁰ Chen, "More Data on the History of Chinese in Houston," 15.

Chartres Street between Rusk Street and Walker Street. Several more businesses emerged within this single block in the 1960s; however, Chinese businesses and residences remained scattered throughout the city.¹¹¹

The Chinese population in Houston continued to grow in the 1970s, and by 1980 there were an estimated 20,000 Chinese in Houston who worked in a wide array of occupations, including as small business owners operating restaurants or grocery stores or as professionals such as architects, lawyers, accountants, engineers, and doctors.¹¹² In addition to Chinese, other Asian groups began to settle in Houston in large numbers in the mid-1970s. Over 500,000 refugees emigrated to the United States from Vietnam, Cambodia, Laos, and Thailand after the end of the Vietnam War. These refugees settled in Houston in large numbers, and by the mid-1980s there were approximately 40,000 Vietnamese, 3,500 Cambodians, 1,100 Laotians, and 700 Thais living in the city.¹¹³ Vietnamese and other Asian entrepreneurs opened businesses within the east downtown area and it soon expanded into an Asian commercial district.¹¹⁴ Based on the HAAA online maps, a major expansion of Asian businesses appears to have occurred in the late 1970s within the five blocks between Chartres Street to the west and St. Emanuel Street to the east and extending from Rusk Street southwest to Polk Street.¹¹⁵

By the late 1970s the east downtown area had become known by many as Houston's Chinatown. Newspaper articles in the late 1970s described the area as two blocks bound by Chartres Street, St. Emanuel Street, Rusk Street, and McKinney Street.¹¹⁶ In 1978 Governor Dolph Briscoe cut ribbons to Houston's new Chinese Cultural Center at 1217 Walker Street, which would serve as an anchor to the growing community.¹¹⁷ This expansion of Asian business was in part due to investments by local businessmen and community leaders who felt Houston needed an established Chinatown or Asian center so established residents could display their culture to Americans with pride and newly arrived immigrants could more easily transition into American culture. This movement was led by Chinese-born

¹¹¹ "Map · Houston Asian American Archive (HAAA) Oral Histories," *Houston Asian American Archive (HAAA) Oral Histories*, accessed February 18, 2019, <https://haaa.rice.edu/mapping-project>.

¹¹² Dick Bryant, "First Chinatown in Texas," *Houston Chronicle*, October 14, 1979, Vertical Files, Houston Metropolitan Research Center; Tom Mulvaney, "Chinese in Houston: A Common Bond of Getting Ahead," *Houston Business Journal*, July 29, 1974.

¹¹³ Deborah Jensen, "Houston's Indo-Chinatown: The First Generation," *Cite 19* (Winter 1987): 14–16.

¹¹⁴ Jenalia Moreno, "Chinatown No Longer," *Houston Chronicle*, October 18, 2009, Vertical Files, Houston Metropolitan Research Center.

¹¹⁵ "Map · Houston Asian American Archive (HAAA) Oral Histories."

¹¹⁶ Bryant, "First Chinatown in Texas."

¹¹⁷ David Lee, "Houston's Chinatown Is Small, but Growing," *Houston Chronicle*, July 30, 1978, Vertical Files, Houston Metropolitan Research Center.

Houston businessman Lang Yee “Bo Bo” Woo, who invested several million dollars in revitalizing the area.¹¹⁸

As Houston’s Asian population continued to increase in the 1980s, other Asian commercial centers emerged that competed with Houston’s east downtown Chinatown. By the mid-1980s new areas also known as “Chinatown” developed in southwest Houston on Bellaire Boulevard and in Missouri City on South Main Street (US 90A) near Farm-to-Market Road (FM) 2234. These new commercial centers were established by development companies backed by investors.¹¹⁹ By the 1990s the Chinatown development on Bellaire Boulevard had flourished. As this area attracted more business, many of the established Chinese and Asian owned businesses in east downtown began to decline, forcing many to relocate.¹²⁰

By the early 2000s entrepreneurs and investors began to purchase the land in the east downtown area for development. The area was close to downtown, but land values were less than in other areas. By the early 2000s many of the Chinese- and Asian-owned businesses had left and the area began to transform into a district that catered to Houston’s young professionals. Businesses adopted the moniker “EaDo,” shortened from east downtown. New businesses were established including art galleries, bars, and concert venues along with a wide variety of restaurants.¹²¹ Reminders of the area’s period as Chinatown, which lasted from the 1950s to the 1990s, are still evident in faded signage and remnants of Asian-themed architectural details that remain on several buildings in the area.

(4) Sicilian Settlement in the Fifth Ward

Houston’s Fifth Ward, located north of downtown, was organized in 1866 as settlement expanded into areas north of Buffalo Bayou. The Fifth Ward’s boundaries were marked by Buffalo Bayou on the south and White Oak Bayou on the west. By 1870 the ward had a population of just over 1,100, split roughly evenly between black and white residents. Immigrants made up much of the ward’s white population, with Irish the largest group and smaller contingents of Italians and Germans.¹²² The Fifth Ward was composed of working-class communities, focused on the Southern Pacific’s railyards and resulting nearby

¹¹⁸ Bryant, “First Chinatown in Texas.”

¹¹⁹ Louis B. Parks, “Get Oriented to Houston’s Chinatowns,” *Houston Chronicle*, October 11, 1984, sec. 8, Vertical Files, Houston Metropolitan Research Center; Carl Hooper, “Area’s 3rd Chinatown Being Built,” *Houston Post*, October 12, 1984, Vertical Files, Houston Metropolitan Research Center.

¹²⁰ Moreno, “Chinatown No Longer.”

¹²¹ Moreno, “Chinatown No Longer.”

¹²² Diana J. Kleiner, “Fifth Ward, Houston,” *The Handbook of Texas Online*, February 13, 2017, www.tshaonline.org/handbook/online/articles/hpfhk; Lucinda Freeman, *Historic Houston: How to See It* (Bloomington, Ind.: iUniverse, 2010), 176.

industrial and warehouse activities.¹²³ In the early twentieth century the Fifth Ward became a predominately black area. Lyons Avenue developed as the ward's commercial artery, with a thriving black business community by the 1920s. Adding to the area's diverse ethnic mix, Creoles from Louisiana settled in the Fifth Ward during the 1920s to form the Frenchtown neighborhood. European immigrants continued to play an important role in Fifth Ward life through the period. A passage from the 2016 book *Houston Bound: Culture and Color in a Jim Crow City* highlights this interplay among cultures in Houston, including the Fifth Ward:

"Some Italian and Jewish Houstonians made homes on the outskirts of areas where black people made up the majority. People from Italy tended to live in each ward rather than develop one 'Little Italy'. Italian families could be found throughout Fifth Ward, for example. In 1920, seven Italian families lived on Gregg Street...in the heart of the growing black community in Fifth Ward. Arthur and Leanna Berry's family on Whitty Street paid rent to Italians on Sunday mornings and they purchased groceries on credit from Italian-owned stores, as did many of their neighbors."¹²⁴

Most Italians in Texas initially immigrated through Galveston or moved from Louisiana to southeast Texas. Many Italian immigrants formed rural settlements in Galveston County and in the Brazos Valley, but small urban communities developed in several Texas cities, including Houston.¹²⁵ Family connections, the Catholic Church, fraternal organizations, and Italian-language newspapers formed the cultural touchstones for most urban Italians in Texas.¹²⁶

Between 1890 and 1920 Houston's Italian residents represented a little less than one percent of the city's total population. In 1920 approximately 1,300 Italian-Americans were reported in census data for Houston. While small as a proportion of total population, Italians represented a larger proportion of small business owners in Houston, a characteristic also found in other Texas cities. Italians tended to open small businesses with low capital requirements. In 1906 Italians made up 13 percent of Houston's grocers, 11 percent of fruit and candy vendors, and 37 percent of the city's shoemakers and cobblers.¹²⁷

Limited research using Houston city directories, conducted to document the history of Michele Baglio's grocery at 920 Gregg Street in the Fifth Ward, bears out this settlement pattern. City directories from 1918 and 1920 show that the vast majority of residents on Gregg Street and nearby streets were black, with a scattering of Italian residents as well as

¹²³ Patricia Pando, "In The Nickel, Houston's Fifth Ward," *Houston History Magazine*, Summer 2011, 34.

¹²⁴ Tyina L. Steptoe, *Houston Bound: Culture and Color in a Jim Crow City* (Oakland, Cal.: University of California Press, 2016), 104.

¹²⁵ Valentine Belfiglio, *The Italian Experience In Texas* (Austin, Tex.: Eakin Press, 1983), 46, 49.

¹²⁶ Belfiglio, *The Italian Experience In Texas*, 60.

¹²⁷ Belfiglio, *The Italian Experience In Texas*, 52, 53.

Italian-owned businesses at many intersections. At the intersection of Gregg Street and Liberty Avenue were Martino Geraci's barbershop, Angelo Venezia's shoe shop, and J.J. Tamborello's grocery. Besides Baglio and Tamborello, other Italian grocers on Gregg Street included J.J. Ozio at 220 Gregg Street, Biagio Piazza at 1002 Gregg Street, and Vincenzo Orlando at 1816 Gregg Street.¹²⁸ The frequency of Italian small businesses in the Fifth Ward appears to have diminished by the mid-twentieth century as children and grandchildren of the Italian immigrants moved out of the area, and as black businesses in the Fifth Ward thrived, particularly along Lyons Avenue. Beginning in the 1960s the Fifth Ward business community as a whole quickly declined, as formerly segregated retailers downtown and in the outlying shopping centers opened their doors to black patrons.¹²⁹ Today, relatively few historic-age commercial buildings remain in the Fifth Ward. Parts of the Fifth Ward reflected an interesting ethnic dynamic in the late nineteenth and early twentieth centuries, with a preponderance of Italian storeowners serving a mostly black population. However, rather than concentrating in a defined "Little Italy" neighborhood, Italian settlement appears to have been scattered throughout Houston's wards.

B. Updated Historic Land Use

The following is a supplement to Historic Land Use sections provided in previous NHHIP Reports for Historical Studies Survey. At the request of the THC, this update includes historic maps and aerial images to aid in understanding the evolution of land uses in Houston and near the project APE. Land uses were influenced by various historical trends, patterns, and events. Two themes that had a significant impact on land use in Houston were transportation and MUDs. Additional information on these topics can be found above in Section 3.A.

Houston's founders sited the city strategically in 1836 along Buffalo Bayou to take advantage of the natural waterway for commerce. Its location provided a relatively convenient location for the exchange of agricultural goods between the inland coastal plains and the port city of Galveston. Harris County remained largely rural after the establishment of Houston into the late nineteenth century. A map of the county from 1847 shows the small settlement of Houston surrounded by large tracts of undeveloped land (see Figure 13). Transportation corridors extending to Houston at this time included only the bayous and several wagon roads or stagecoach lines.¹³⁰

¹²⁸ *Houston City Directory 1918* (R.L. Polk & Co., 1918), 1108, <http://digital.houstonlibrary.org/cdm/ref/collection/citydir/id/10860>.

¹²⁹ Pando, "In The Nickel, Houston's Fifth Ward," 36, 37.

¹³⁰ Unknown, "Map of Harris District" (Harris County, Texas: Texas General Land Office, 1847), GLO Historic County Maps, Portal to Texas History, <https://texashistory.unt.edu/ark:/67531/metapth88301/?q=harris%20county%20map%20>.

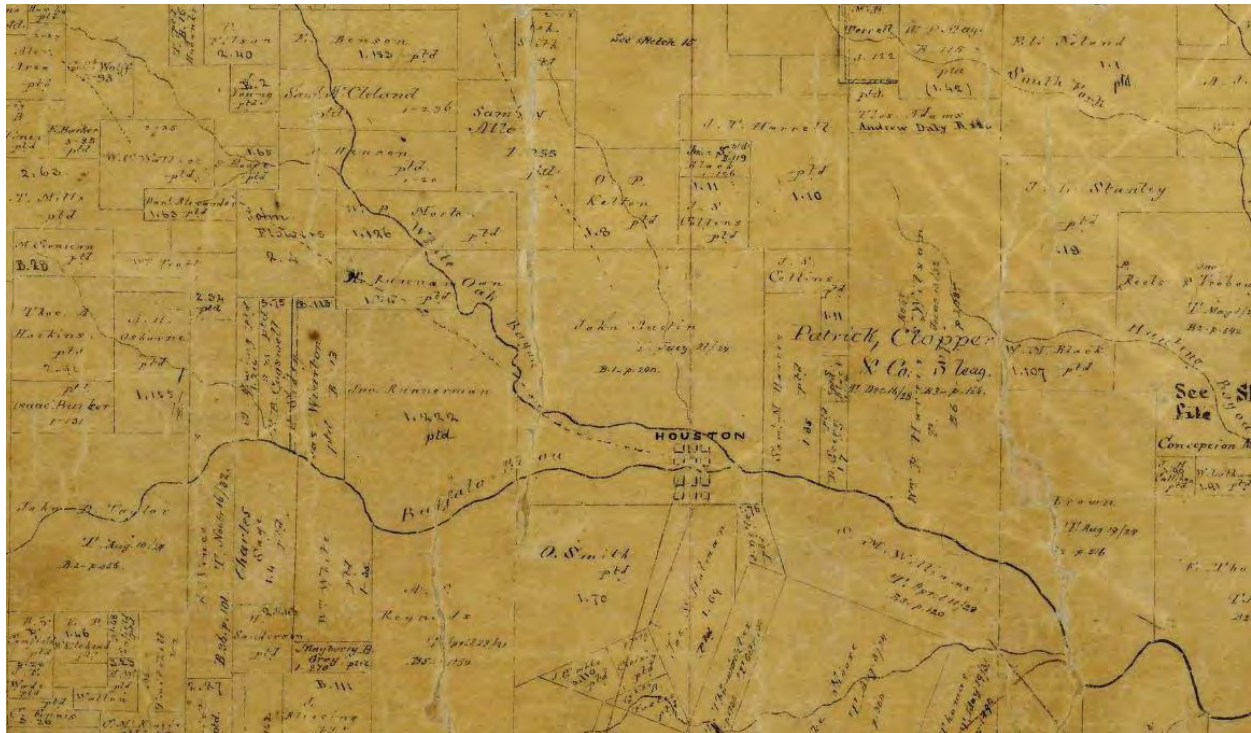


Figure 13. 1847 map of Harris County showing land surveys and settlements. Note that dashed lines extending from Houston indicate roads.¹³¹

Railroads connected to Houston by the 1850s and the city grew geographically as a result of increased commerce and population.¹³² Historic maps of the area from the 1860s and 1870s are limited; however, an 1861 map shows that several railroads connected to Houston and the city had grown north and south of Buffalo Bayou (see Figure 14). Tracts surrounding the city, including the John Austin Survey containing White Oak and Little White Oak Bayous, remained undeveloped during this period, and research indicated that much of the area was in use for agricultural purposes, much of it farmed by European immigrant families.¹³³

¹³¹ Unknown, "Map of Harris District."

¹³² For more information on railroads in Houston, see the Transportation historic context in Section 3.A of this report, and for more information on railroad-related industrial and commercial development see Appendix B of the NHHIP 2015 Report located in Appendix D of this report.

¹³³ Charles W. Pressler, "Map of Harris County" (Harris County, Texas: Texas General Land Office, 1861), GLO Historic County Maps, Portal to Texas History, <https://texashistory.unt.edu/ark:/67531/metapth88629/?q=map%20collection%20>.



Figure 14. 1861 map of Harris County showing Houston's modest growth and new railroad lines entering the city from the west and northeast.¹³⁴

Detailed imagery to indicate land use in Houston was produced beginning in the 1870s. Maps and bird's eye drawings of the city from 1873 to 1891 show Houston's growth and development in detail during this period (see Figures 15-17). By 1873 a high-density commercial business district had developed along Main Street just south of Buffalo Bayou's fork with White Oak Bayou. Approximately 10 blocks on either side of Main Street were occupied by buildings several stories high. Extending out from the business district on Main Street, land uses appear to diversify and include churches and schools along with residences. Land use north of Buffalo Bayou, in areas that would later be designated as part of the First and Fifth Wards, was also mixed and included some residential properties. However, a concentration of railroad-related industrial properties appears to have been developing along railroad lines that cut through the area.¹³⁵ An 1890 real estate map of Houston and 1891 bird's eye drawing show that the city of Houston had expanded but the land use patterns begun by the 1870s continued into the 1890s. By this time the high-density central commercial district that had developed along Main Street had expanded by several blocks south, east, and west. Blocks extending southeast into areas that would later

¹³⁴ Pressler, "Map of Harris County."

¹³⁵ Augustus Koch, "Bird's Eye View of the City of Houston, Texas" (Houston, Tex., 1873), Municipal Map Collection, Harris County Archives, <http://www.harriscountyarchives.com/Maps/imgZ.html?img=img19>.

become the Fourth Ward and Third Ward continued in mixed uses but appear primarily residential by 1891. North of Buffalo Bayou, land uses were largely industrial and related to railroad operations, agricultural processing, or city utilities.¹³⁶ The 1890 map of the city provides a better view of development in north Houston. Several railroads are shown crossing through the south First Ward and south Fifth Ward areas; industrial facilities included a cotton gin, flour mill, water works, soap works, iron works, foundry, electric power plant, and railroad depot. The map also shows a network of streetcar lines, including several extending north into newly developed areas. One line extended north into the First Ward up Houston Avenue and ended near Spring Street and another extended northeast into the Fifth Ward along Liberty Street. These lines influenced increased residential development in these areas as they allowed for efficient travel to and from the city business district.¹³⁷



Figure 15. 1873 bird's eye drawing of Houston facing south and showing a small central commercial district and mixed-use lots south of Buffalo Bayou and developing industrial areas north of Buffalo Bayou.

¹³⁶ A.L. Westyard, "Houston, Texas (Looking South)" (Houston, Tex., 1891), Municipal Map Collection, Harris County Archives, <http://www.harriscountyarchives.com/Maps/imgZ.html?img=img18>.

¹³⁷ "Pocket Map Showing the Railroads, Street Railways, Manufactories, Deep Water Connections, Blocks and Subdivisions" (WM. W. Thomas & Co., Real Estate Agents, 1890). For more on the impact of streetcar lines on suburban residential development, see Section 3.A of this report.



Figure 16. 1891 bird's eye drawing of Houston facing south and showing growth following previously established patterns, including an expanded central business district surrounded by mixed-use lots south of Buffalo Bayou, and increased industrial development north of Buffalo Bayou.

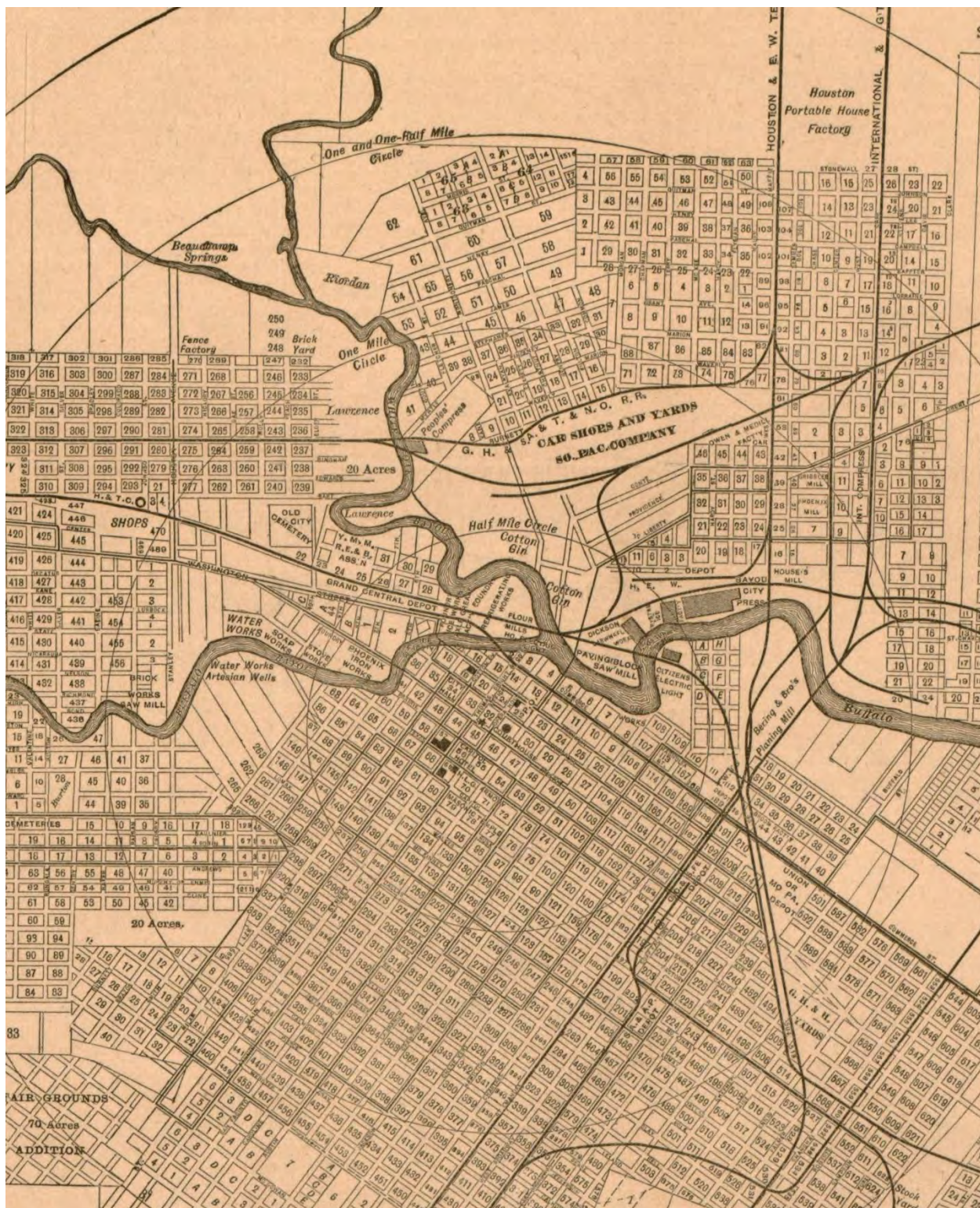


Figure 17. 1890 map of Houston showing expansion of the city, including new residential areas at the ends of streetcar lines (shown as thin lines in the middle of select streets) and increased industrial land uses north of Buffalo Bayou.

In the early twentieth century Houston's central business district immediately south of the Buffalo and White Oak Bayou confluence continued to expand with more blocks under high-density commercial use. The number of railroads leading into the city center also increased and related development including new warehouses, railyards, depots, and shops emerged north of Buffalo Bayou on both sides of White Oak Bayou. Maps of Houston from 1907 and 1913 created by title and abstract companies show a major geographic expansion of the city during the early twentieth century (see Figures 18 and 19). The expansion of Houston's resource-based economy due to the advent of railroads to the city, creation of the Houston Ship Channel, and nearby discovery of oil led to significant population increases. The proliferation of electric streetcar lines during this time allowed for increased residential development outside of the city center. Between the 1890s and the 1910s several new additions and subdivisions were platted north along the project corridor between present-day IH 10 and IH 610, including Woodland Heights, Glen Park, Irvington, and Brooke Smith. Based on the 1913 map, it appears that some areas between these additions and planned subdivisions remained under the ownership of individuals or families, who may have continued using the land for agriculture. Other land uses along the project corridor north of Houston included cemeteries (Hollywood Cemetery and Holy Cross Cemetery) and large parks along Little White Oak Bayou, such as Woodland Park.¹³⁸

¹³⁸ Stewart Abstract & Title Co., "Official Map of Houston and Vicinity" (Houston: State Printing Company, 1907), Municipal Map Collection, Harris County Archives, <http://www.harriscountyarchives.com/Research/Municipal-Map-Collection>; Houston Title Guaranty Co., "City of Houston Texas" ([Houston]: N.p., 1913), Municipal Map Collection, Harris County Archives, <http://www.harriscountyarchives.com/Research/Municipal-Map-Collection>.

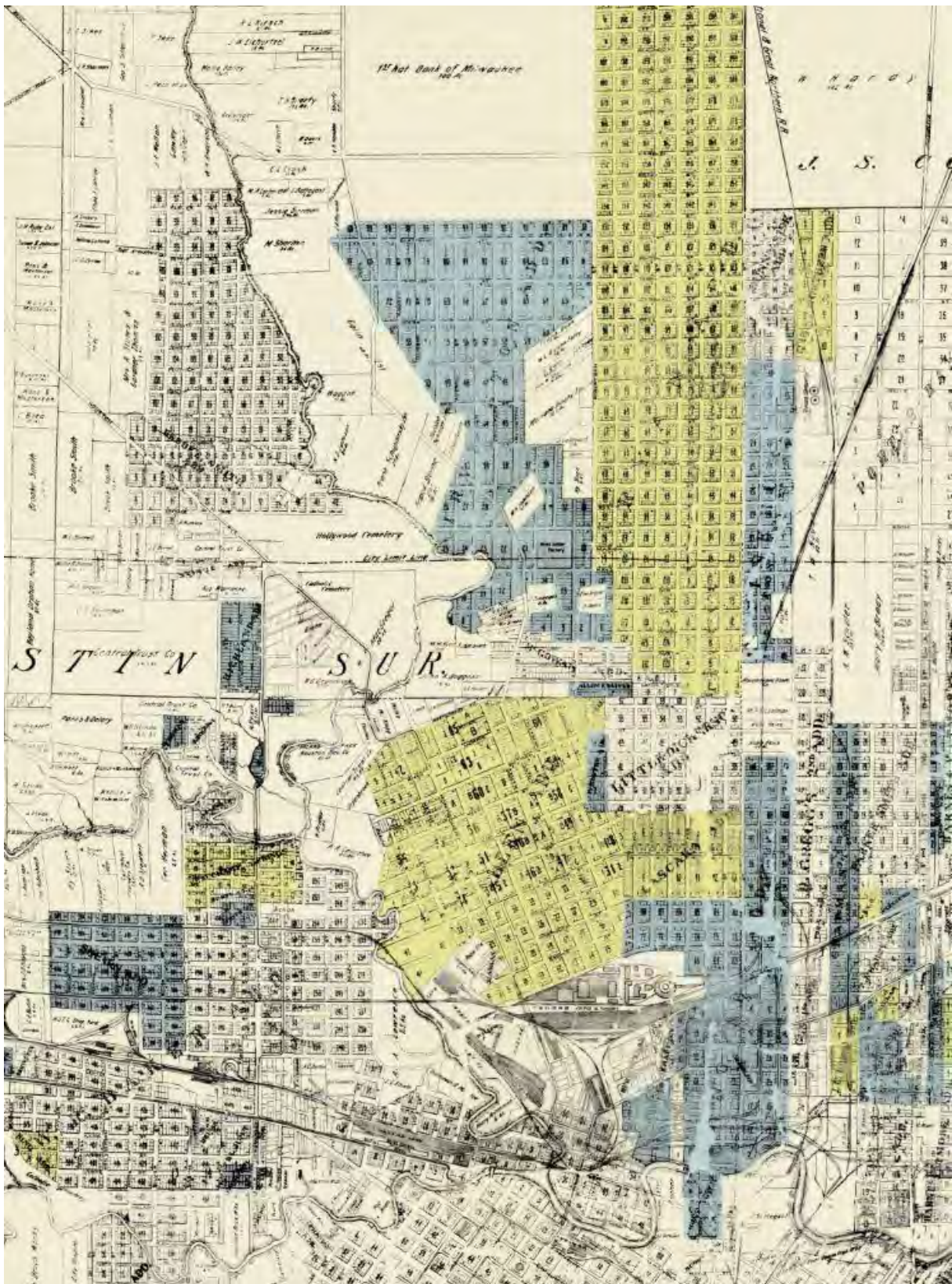


Figure 18. 1907 map showing increased residential development north of Buffalo Bayou.¹³⁹

¹³⁹ Stewart Abstract & Title Co., "Official Map of Houston and Vicinity."

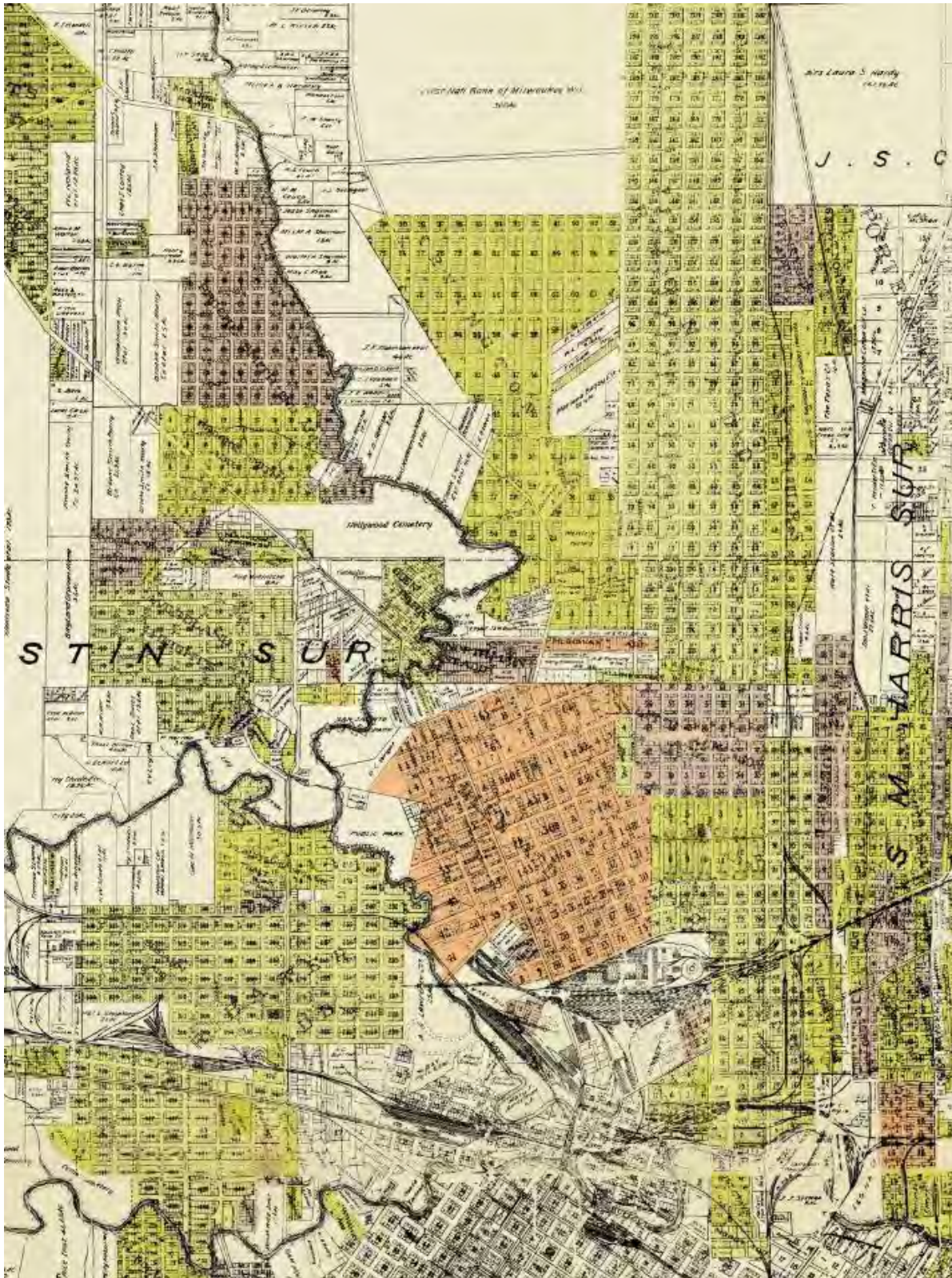


Figure 19. 1913 map showing a further increase in residential development north of Buffalo Bayou.¹⁴⁰

¹⁴⁰ Houston Title Guaranty Co., "City of Houston Texas."

Houston underwent a massive expansion between 1910 and 1930. A 1928 map created by Houston development company Fantham & Fantham shows the expansion of the city limits from 1838, just after its founding, up to 1928 (see Figure 20). The map shows that Houston expanded incrementally just after it was founded and its northern city limits reached just south of present-day Parkview Street by 1840. By 1903 the city had annexed additional land on all sides and reached the intersection of North Main and Houston Avenue. From 1903 to 1928 the city annexed portions of land west of Little White Oak Bayou and just north of present-day IH 610. Much of the land east of Little White Oak Bayou and north of IH 610 remained unincorporated at this time.¹⁴¹

¹⁴¹ Neil Geisenhoff, "Map of Houston, Texas" (Houston, Tex.: Fantham & Fantham, 1928), Municipal Map Collection, Harris County Archives, <http://www.harriscountyarchives.com/Maps/imgZ.html?img=MC012Map701Houston1928>.

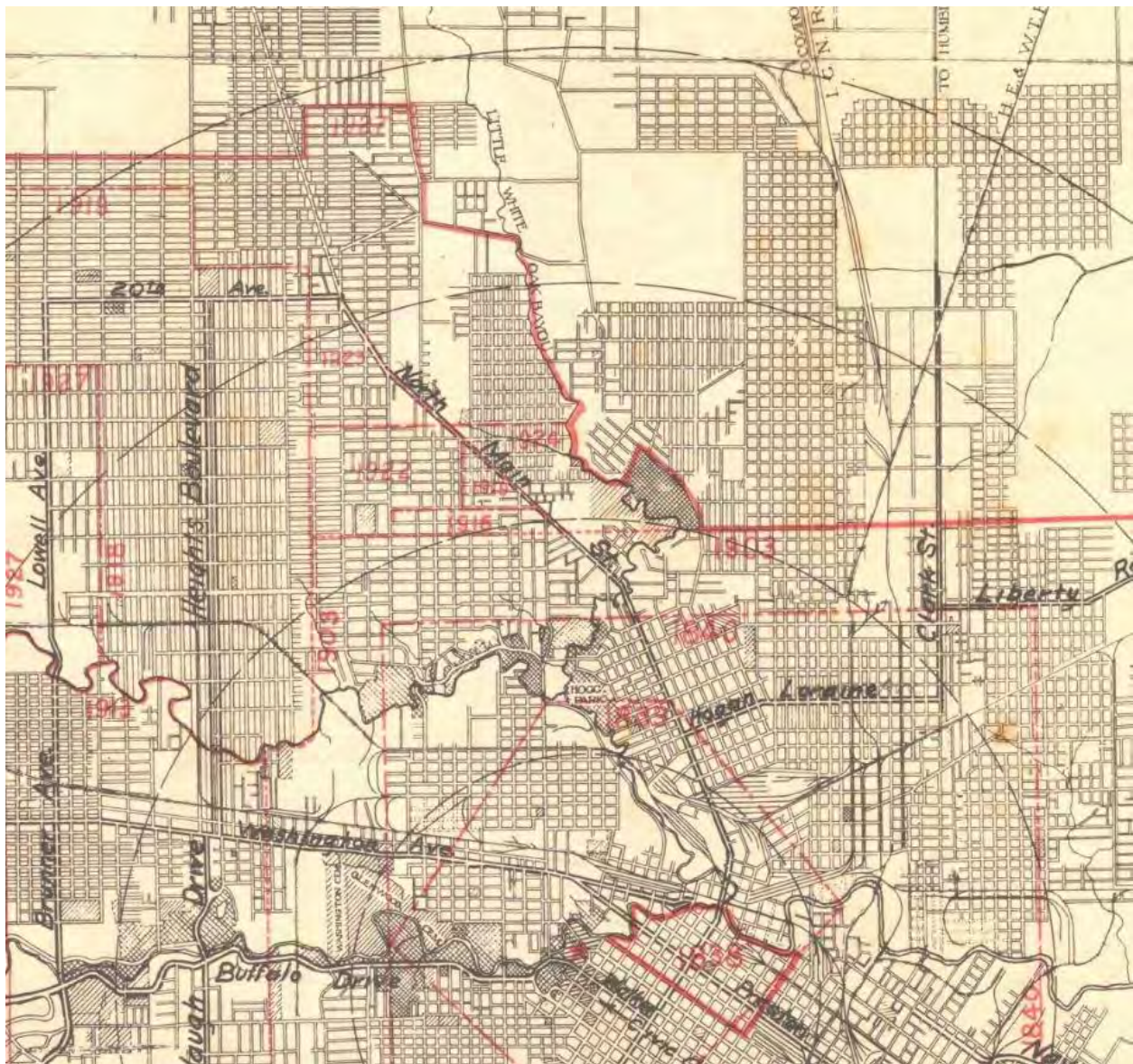


Figure 20. 1928 map indicating expansions of Houston's city limits by date.¹⁴²

A series of Houston land use maps provided by the Houston Metropolitan Research Center (HMRC) shows the full extent of Houston's expansion over time. These maps show that Houston expanded in all directions between 1910 and 1930. Land uses in the expanded areas north of the city core to present-day IH 610 were primarily residential and connected without large gaps between them. Industrial land uses had increased heavily along the Houston Ship Channel southwest of the city after 1910. These trends continued up to 1950, but as the maps indicate, by 1970 Houston underwent a massive expansion of residential development. As the maps show, areas north of Houston along the project corridor included

¹⁴² Geisenhoff, "Map of Houston, Texas."

intermittent developments with open areas of land between.¹⁴³ This “leap frog” development pattern was the result of several factors, including the use of MUDs and expansion of Houston’s radial and loop freeway system.¹⁴⁴ In addition, as the 1970 maps shows, industrial development continued to develop outside of the city, particularly along the ship channel to the southwest, and areas along major freeways and around freeway interchanges underwent commercial development. The following series of maps shows areas of Houston’s industrial, commercial, and residential land use in 1910, 1930, 1950, and 1970 (Figures 21-24).

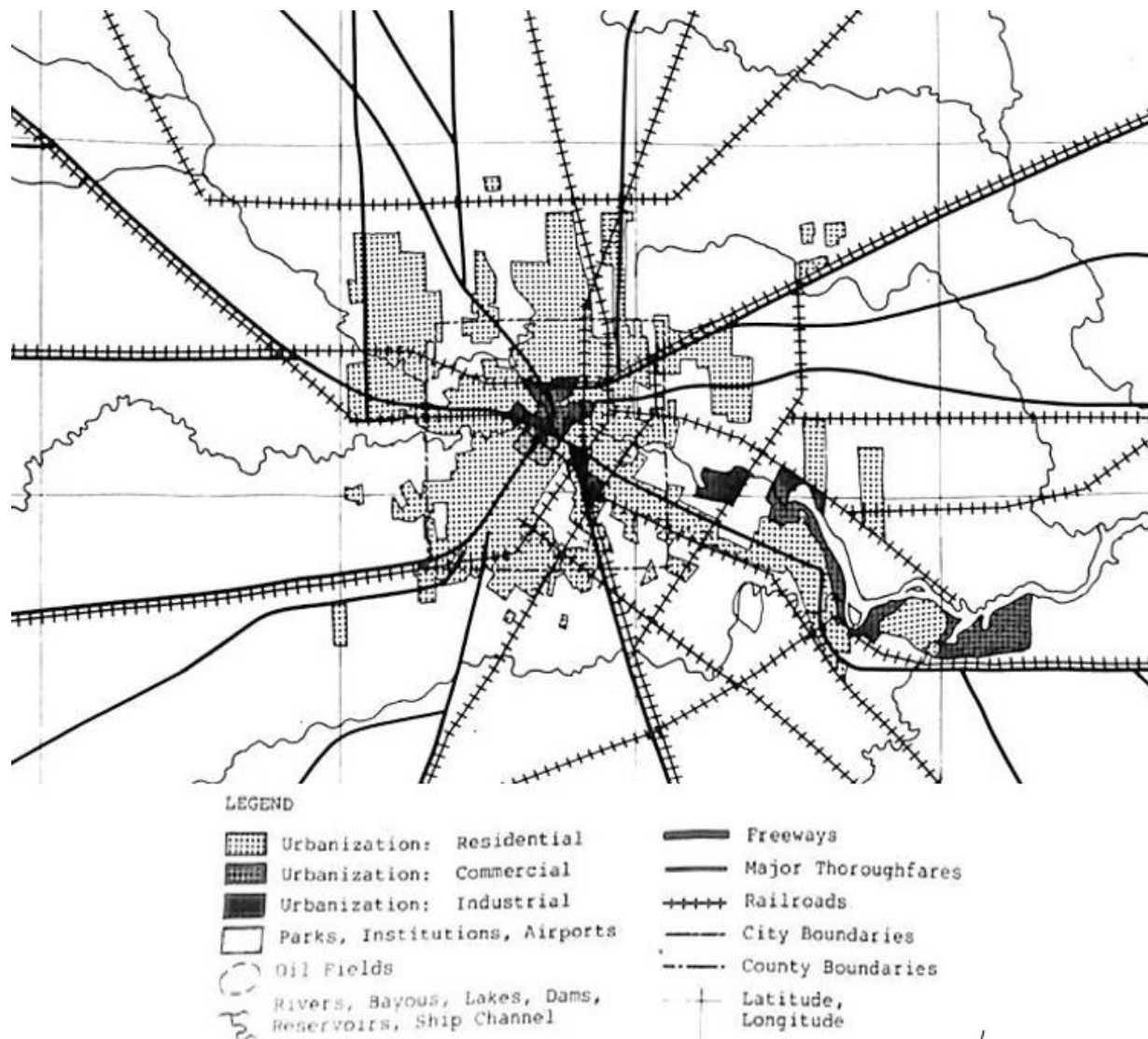


Figure 21. 1910 land use map of Houston showing residential, commercial, and industrial areas.¹⁴⁵

¹⁴³ Unknown, “Land Use Map Series by Decade (1900-1980)” (Houston, Tex., Unknown), Map Collection, Houston Metropolitan Research Center.

¹⁴⁴ For more information see historic contexts for MUDs and transportation in Section 3.A of this report

¹⁴⁵ Unknown, “Land Use Map Series by Decade (1900-1980).”

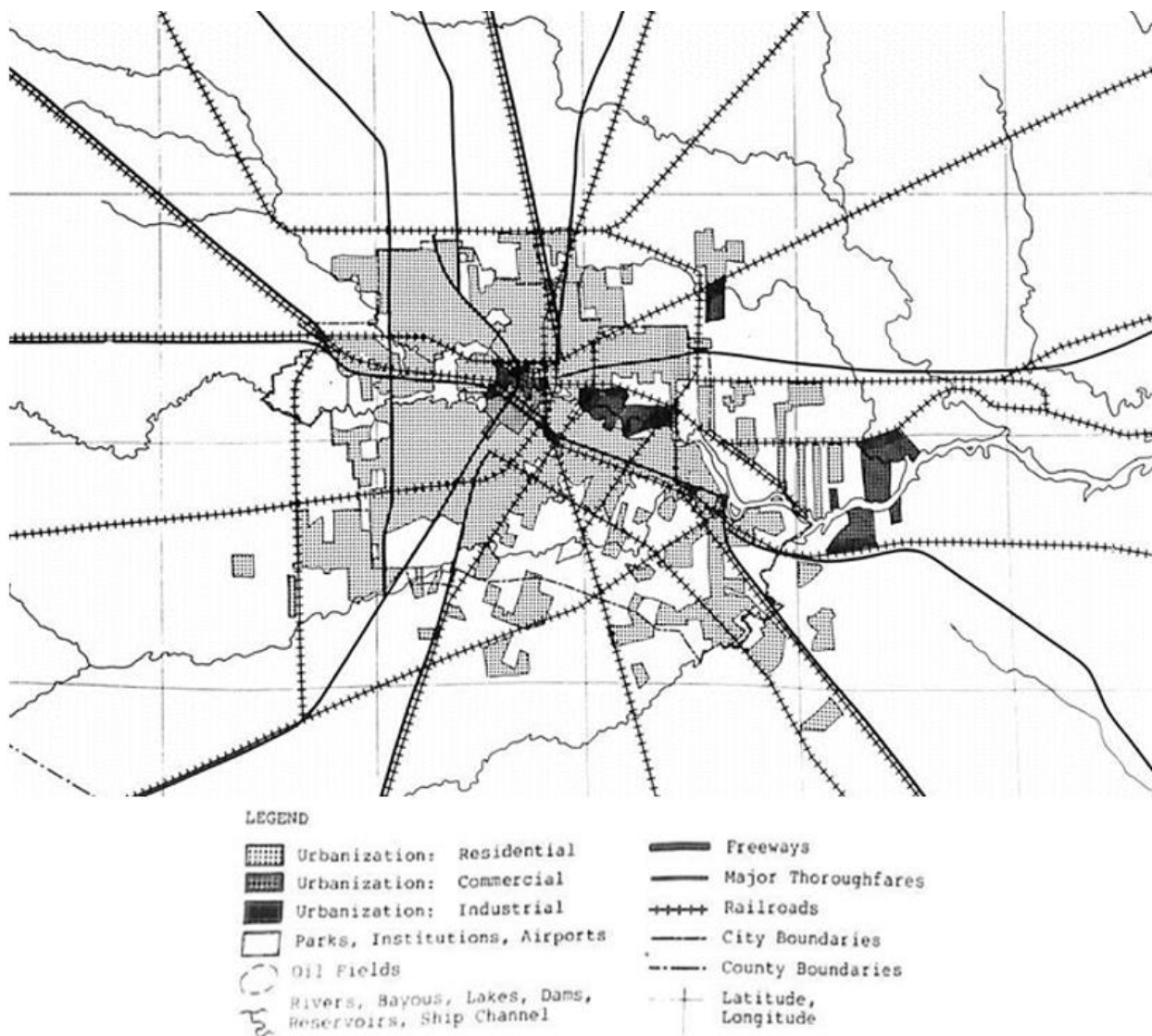


Figure 22. 1930 land use map of Houston showing residential, commercial, and industrial areas. Note primarily residential expansion north of the city center, and industrial expansion along the ship channel to the southwest.¹⁴⁶

¹⁴⁶ Unknown, "Land Use Map Series by Decade (1900-1980)."

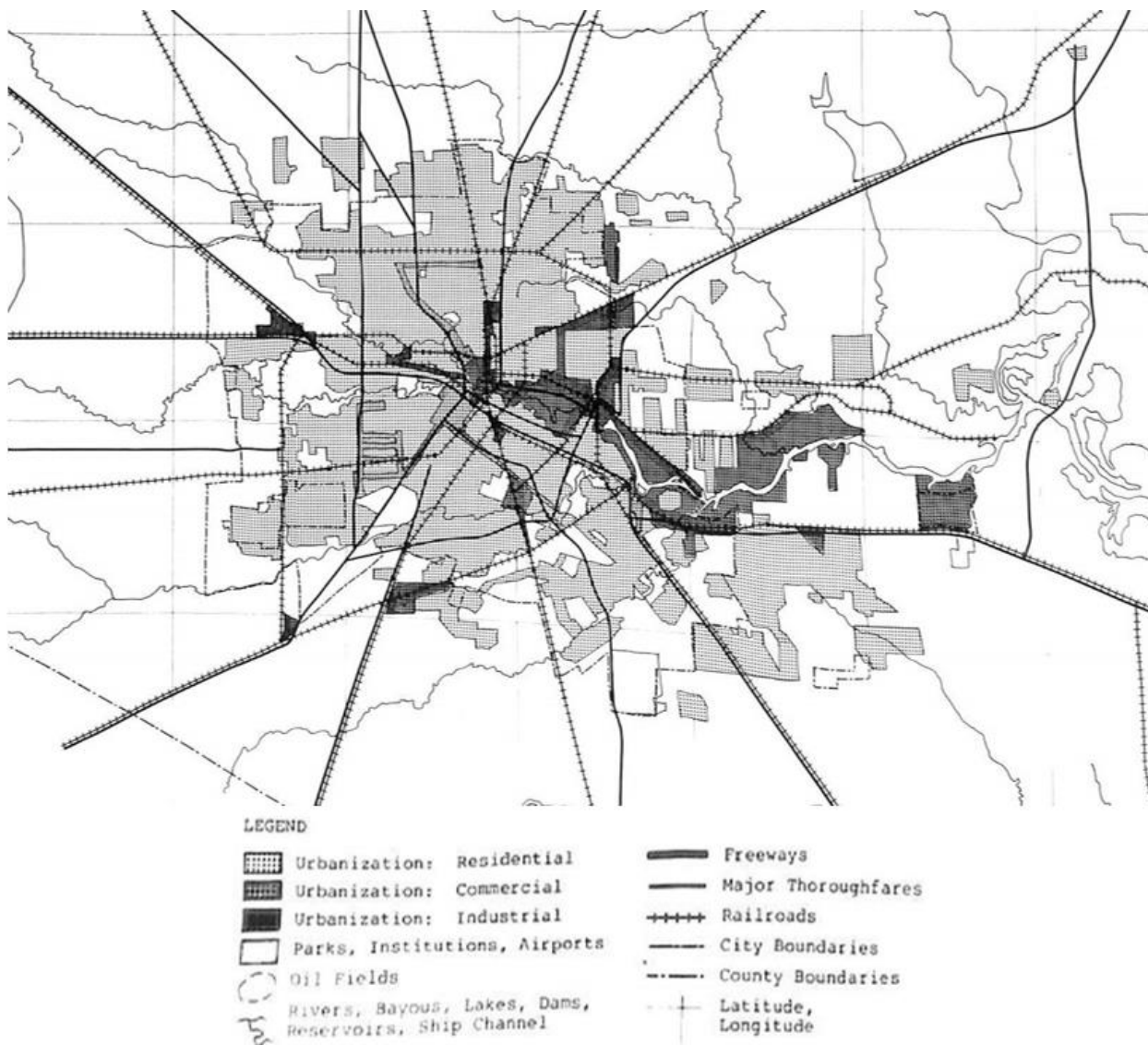


Figure 23. 1950 land use map of Houston showing residential, commercial, and industrial areas.¹⁴⁷ Note increased residential expansion north of the city center, and further industrial expansion along the ship channel to the southwest.¹⁴⁸

¹⁴⁷ Unknown, "Land Use Map Series by Decade (1900-1980)."

¹⁴⁸ Unknown, "Land Use Map Series by Decade (1900-1980)."

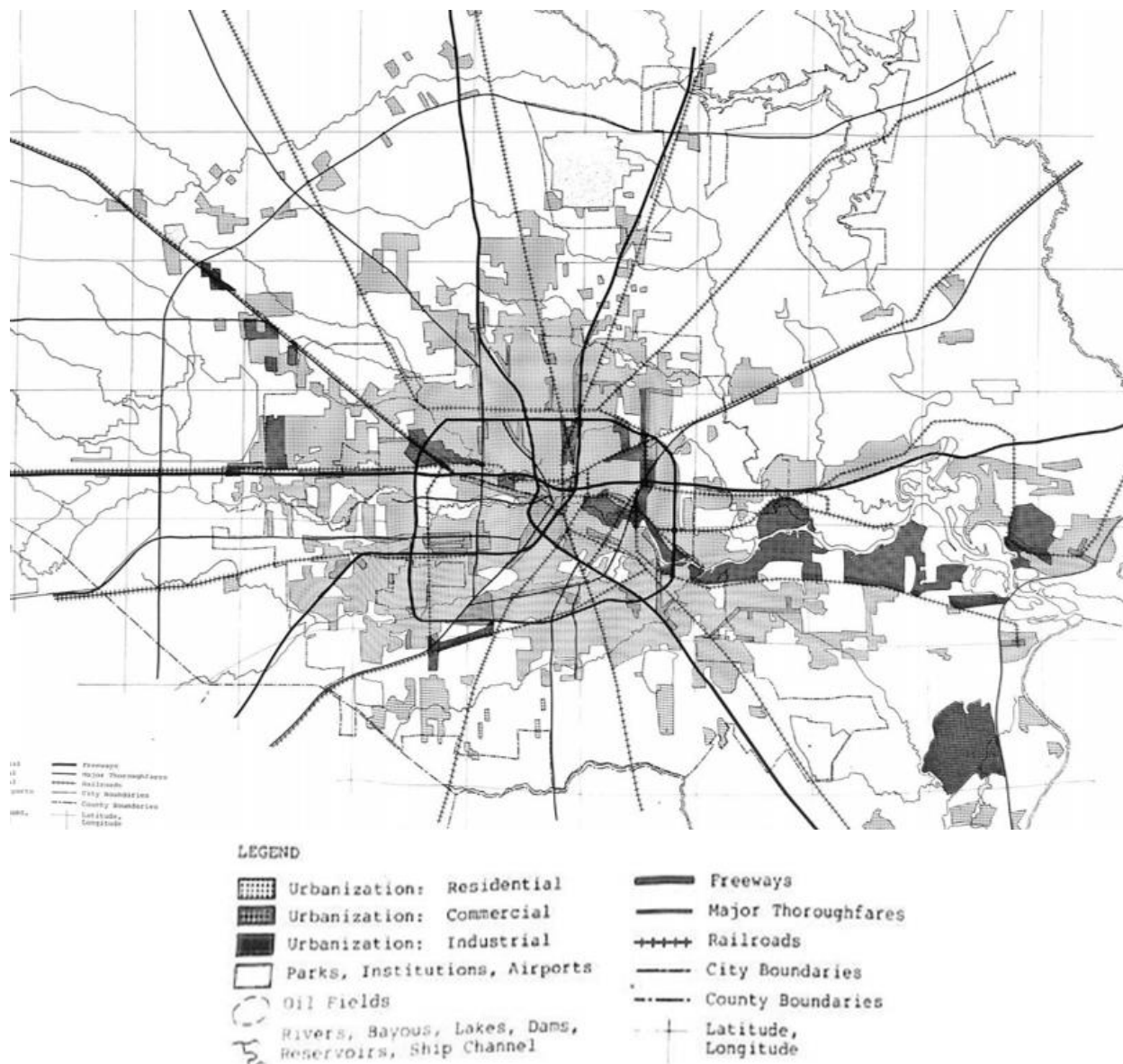


Figure 24. 1970 land use map of Houston showing residential, commercial, and industrial areas. Note scattered residential development, commercial development around major freeway interchanges, and further industrial expansion along the ship channel to the southwest.¹⁴⁹

The following series of aerial photographs from 1944 to 1978 shows the evolution of land uses within the NHHIP APE. These images are presented from north to south showing changes within each of three major areas: 1) north of IH 610 to Beltway 8, 2) land north of IH 10 around its interchanges with US 59 and IH 45, 3) IH 45 and US 59 around downtown Houston. Neither IH 45 nor IH 610 had been constructed by 1944, and historic aerials show that land north of current IH 610 were sparsely developed by this time (see Figure 25). Some residential development was present surrounding the area of the present-day IH 45/

¹⁴⁹ Unknown, "Land Use Map Series by Decade (1900-1980)."

IH 610 interchange; however, the density of development decreases moving north toward Beltway 8. Most of the lots shown along this corridor are large and contain few buildings. IH 45 and IH 610 were complete in this area by 1978, and historic aerials show that development increased significantly along both corridors (see Figure 26). A number of businesses developed immediately adjacent to IH 45 to serve travelers and residents of the numerous subdivisions that emerged in the area. Historic aerials show that much of the land within the APE south of IH 610 to the IH 10/ IH 45 interchange was in residential use by 1944 and included several parks along White Oak and Little White Oak Bayou. West along IH 10 to the interchange with US 59, land uses were industrial and mixed with residential developments within south Fifth Ward (see Figure 27). The completion of IH 45, IH 10, and US 59 freeways in the 1960s resulted in the removal of many buildings, including residences, but land uses in the immediate areas adjacent to the freeways appears to have remained largely unchanged (see Figure 28). Historic aerials of US 59 and IH 45 from 1944 and 1978 east and west of downtown Houston show that these areas underwent significant change after the completion of the freeways (see Figures 29 and 30). As in areas north of downtown, both freeway alignments required the removal and displacement of large numbers of residences within the immediate ROW. However, parcels several blocks from the new freeways transitioned from residential uses to vacant lots or lots in commercial use.

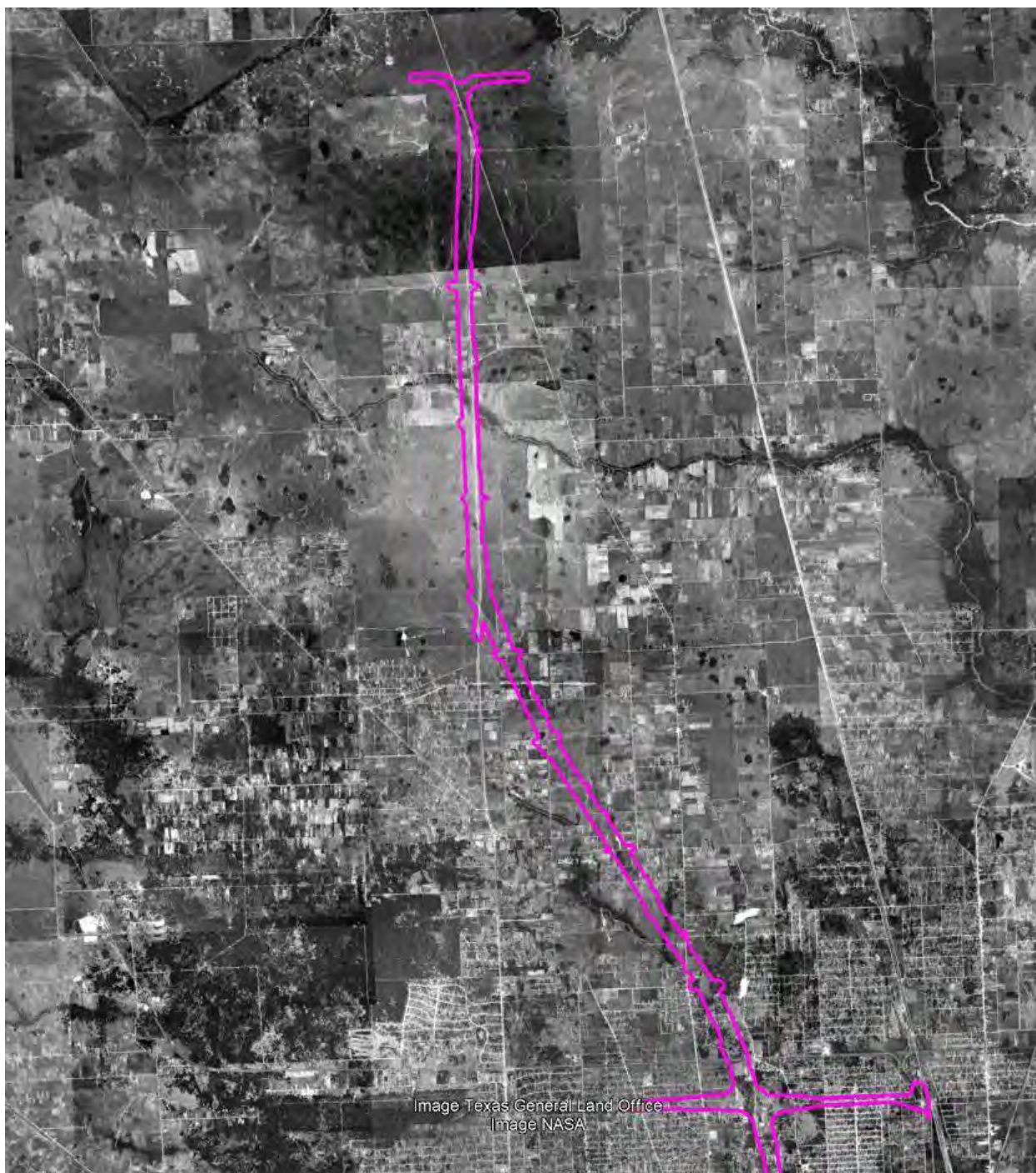


Figure 25. 1944 aerial image showing largely undeveloped land between current IH 610 and Beltway 8 and increasing development around the future IH 610/IH 45 interchange area. Note: The NHHIP APE is indicated in magenta.

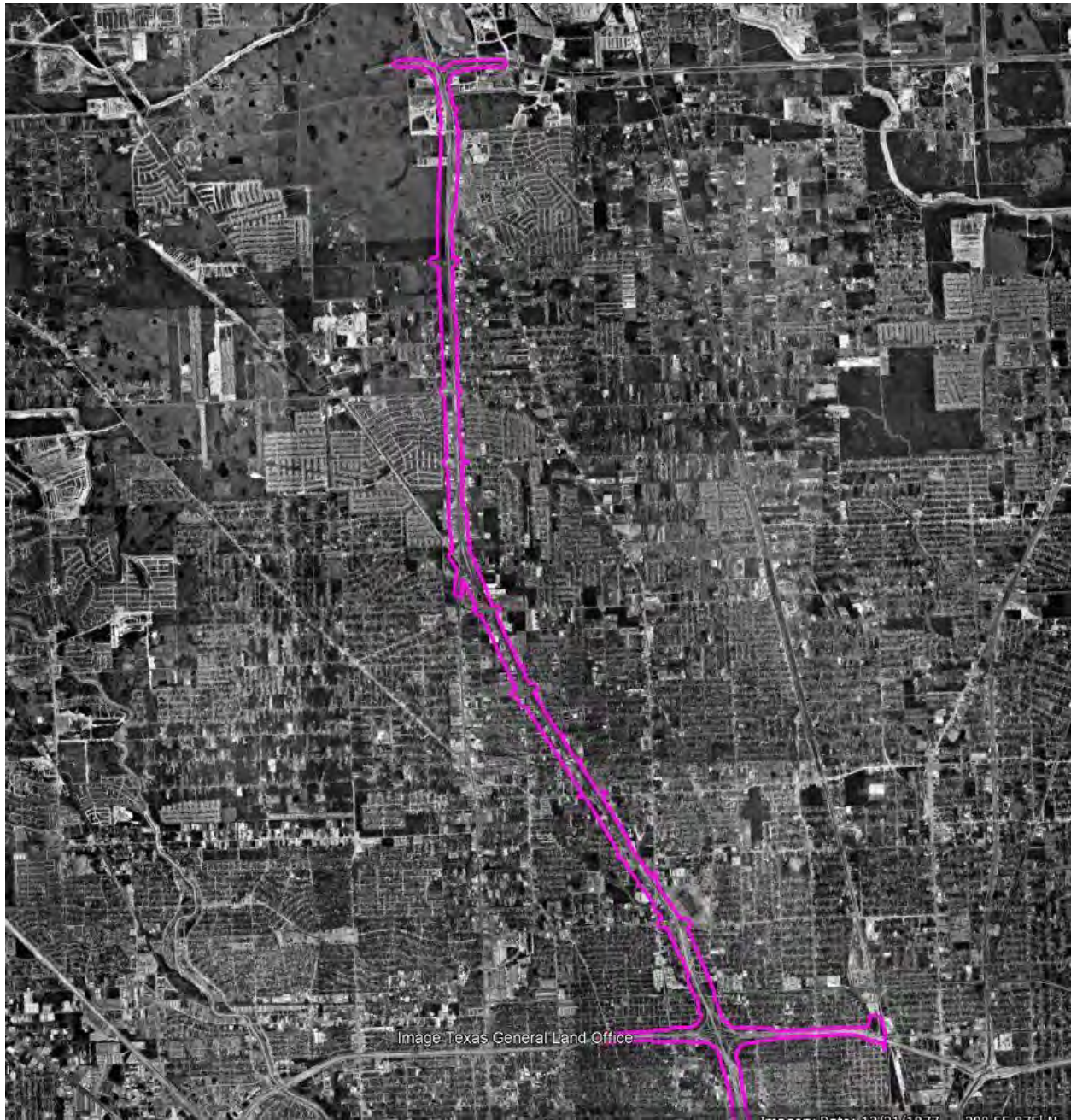


Figure 26. 1978 aerial image showing significantly increased development between current IH 610 and Beltway 8, including scattered subdivisions. Note: The NHHIP APE is indicated in magenta.



Figure 27. 1944 aerial image of current IH 10 around its interchanges with US 59 and IH 45 showing primarily residential development including several areas of open park land along White Oak and Little White Oak Bayous around the future IH 10/ IH 45 interchange and mixed, industrial and residential development west along IH 10 near its interchange with US 59.



Figure 28. 1978 aerial image showing the current project land north of IH 10 around its interchanges with US 59 and IH 45. Note: removal of buildings, including residences for the freeway ROWs, but land uses in the immediate areas adjacent to the freeways appears to have remained largely unchanged.



Figure 29. 1944 aerial image showing the current project APE in magenta showing IH 45 and US 59 around downtown Houston. Note high-density urban development within project APE area including residential and commercial land uses.



Figure 30. 1978 aerial image showing the current project APE in magenta showing IH 45 and US 59 around downtown Houston. Note removal of buildings within freeway ROWs and transition of lots within the downtown area from residential to vacant or commercial uses.

C. Historic District Evaluations

Mead & Hunt evaluated several areas for historic district potential, based on TxDOT and THC comments on the 2018 NHHIP historical survey report and earlier draft reports. On November 28, 2018, Mead & Hunt, TxDOT, and THC historians jointly conducted to examine these areas prior to more detailed survey and evaluation.

For areas with a high potential for NRHP eligibility as a historic district and for previously determined NRHP-eligible historic districts with potential for expanded boundaries, Mead & Hunt completed substantial field survey and research, with detailed NRHP eligibility evaluations as described in subsections 1-4 and 9, below.

For areas with a low potential for NRHP eligibility as a historic district based on the November 28, 2018 on-site survey and for previously determined NRHP-eligible historic districts without potential for expanded boundaries extending into the NHHIP APE, Mead & Hunt developed evaluation summaries as described in subsections 5-8, below.

(1) Hidden Valley

A. Overview and Methodology

The Hidden Valley subdivision was not evaluated as a potential historic district in the 2018 historical survey report (or earlier draft reports) prepared by CP&Y for the NHHIP. The THC comments dated November 2, 2018, requested further investigation of Hidden Valley as a potential NRHP-eligible historic district. In order to evaluate the subdivision, Mead & Hunt conducted reconnaissance-level survey, online archival research, and research at the Houston Public Library and the Houston Metropolitan Research Center. Sources consulted include newspaper articles, historic maps, and Hidden Valley plats to trace the subdivision's construction history and develop a mid-century Houston suburban expansion context.

Hidden Valley lies west of IH 45 approximately 9 miles north/northwest of Houston's downtown core. The triangular subdivision is generally bound by W. Mount Houston Road to the north, Veteran's Memorial Drive (formerly Stuebner Airline Road) to the west, and the IH 45 Service Road and IH 45 to the east.

B. Historic Overview

Like many American cities in the post-World War II (postwar) years, Houston was growing rapidly in the 1950s. The city initially grew to the south, with subdivision development concentrated there in the early 1950s. Growth to the north occurred by the mid-1950s. The *Houston Chronicle* newspaper regularly showcased available properties, especially new homes and housing developments, in a separate residential section of its Sunday edition (see Figure 31). Within this section, advertisements and articles were often large and eye-catching, listing amenities of new subdivisions and elements of individual residences within them to attract homebuyers. Between January 1 and October 1, 1956, Houston ranked fourth in the nation in building permits; only New York City, Los Angeles, and Chicago issued more.¹⁵⁰

¹⁵⁰ "Houston Ranks 4th In Building Total," *Houston Chronicle*, November 11, 1956, Houston Public Library.



Figure 31. 1956 advertisement for a residential subdivision in Houston.¹⁵¹

In 1953 the land that would become the Hidden Valley subdivision was undeveloped agricultural land north of Houston's city limits (see Figure 32). The 337-acre subdivision, located west of IH 45 (then U.S. Highway [US] 75) and between IH 610 and IH 10 within the project area, was developed between 1956 and 1979. Alignments of Houston's core freeway systems were finalized by 1954, and U.S. 75 served as the main north "spoke" connecting to Dallas. In the 1950s the segment of US 75 north of Houston was also known as North Freeway, Airline Freeway, and Dallas Freeway. Upgrade of this segment to Interstate Highway standards began in 1959, and its completion in 1963 encouraged a higher rate of both commercial and residential development within the north Houston area. The highway itself was touted as an attractive "amenity" for subdivisions, like Hidden Valley, along its length.¹⁵² The subdivision was annexed by Houston in 1969.¹⁵³

¹⁵¹ "Freeway Oaks," *Houston Post*, March 11, 1956, Houston Public Library.

¹⁵² Slotboom, *Houston Freeways*, 20, 218.

¹⁵³ Staff of the Houston Chronicle, *Houston Through the Years: 115 Years of Telling the Story of the Bayou City* (United States of America: Pediment Publishing, 2016).



Figure 32. 1953 aerial photograph showing undeveloped agricultural land north of Houston. The approximate Hidden Valley subdivision site is outlined in red. Image courtesy of Google Earth Pro.

C. Developers/Architect/Engineer

The Hidden Valley subdivision was developed by Raleigh A. Smith & Son, Inc. (Smith & Son) with assistance from a consulting engineer and others. Raleigh A. Smith Sr. began his career as a builder in 1946 after retiring from 30 years with the Southern Pacific Railroad. The building company Smith established grew steadily; he was joined by son Raleigh A. Smith Jr. in 1949 and by 1956 employed 14 people.¹⁵⁴ That same year (1956) the company opened a new office at 3710 Airline Road in Houston. By 1964 Smith & Son had built and developed in seven subdivisions on the north side of Houston: Greenfield, Glen Oaks, Glen Oaks Manor, Ben Brook, Ray, Goodman, and Hidden Valley, which was still ongoing at that point. Active in all aspects of the building process, Smith bought and developed land, had plans drafted, built homes with lumber from his own yard, and sold them through his own realty company. In 1964 he was a member of the Houston Home Builders Association, vice-president of Houston North Chamber of Commerce, and a director of Airline National Bank.¹⁵⁵ Research suggests that over time Smith & Son formed subsidiary companies, such

¹⁵⁴ "Hidden Valley Is A Family Addition," *Houston Chronicle*, November 25, 1956, Houston Public Library.

¹⁵⁵ "Who's Who In Home Building," *Houston Post*, February 16, 1964, Houston Metro Research Center - Vertical Files.

as the Southern Land Development Company, to carry out various functions related to residential development with increased efficiency.

Smith Jr. served in World War II before completing his degree in engineering at Rice University in 1947. Initially he worked as an engineer for Pittsburgh Plate Glass Co. and pursued building as a part-time occupation. However, in 1949 he devoted his energies full time to home building and joined his dad in the family business. A 1961 *Houston Post* article noted he “built homes in many of Houston’s leading subdivisions.” Smith Jr. was president of the Houston Home Builders Association (1961) and had been a director of the National Association of Home Builders and the Texas Association of Homebuilders.¹⁵⁶

Smith Sr.’s daughter, Virginia Smith Racmac, worked for the Southern Land Development Company. The 1962 and 1964 Hidden Valley plats (Section 5 and Hidden Valley West) list Virginia as co-owner of the subsidiary.¹⁵⁷

The Smith & Son team consisted of professionals of related disciplines, including architects and engineers. A 1956 *Houston Chronicle* article identified one key member as Robert S. Hill, who was noted for completing the “architectural planning for Hidden Valley.”¹⁵⁸ Research did not reveal further background information on Robert Hill. Newspaper advertisements for the subdivision stated that Hidden Valley’s house plans were copyrighted and could not be copied.¹⁵⁹

According to the Hidden Valley plats, Joseph B. Dannenbaum was the consulting engineer for the Hidden Valley subdivision. Dannenbaum was born in 1898 and educated at Houston public schools and Texas A&M. After serving in the cavalry in World War I, he began his engineering career with Humble Oil and Refining Company. Dannenbaum worked on several major projects in the area and served as Chief Engineer of the Houston Water Department. Beginning in 1945 he engaged as a consulting engineer specializing in water supply, waste disposal, roads, streets, drainage, water and sewer systems, and land planning for housing

¹⁵⁶ “HHBA President Began as Engineer,” *Houston Post*, June 2, 1961, Houston Metro Research Center - Vertical Files.

¹⁵⁷ Bureau of the Census, “Sixteenth Census of the United States, 1940, Population Schedule” (Department of Commerce, April 11, 1940), 16A, Ancestry.com, https://www.ancestry.com/interactive/2442/m-t0627-04053-00036?pid=157439645&backurl=https://search.ancestry.com/cgi-bin/sse.dll?indiv%3D1%26dbid%3D2442%26h%3D157439645%26tid%3D%26pid%3D%26usePUB%3Dtrue%26_phsrc%3DbLM60%26_phstart%3DsuccessSource&treeid=&personid=&hintid=&usePUB=true&_phsrc=bLM60&_phstart=successSource&usePUBJs=true.

¹⁵⁸ “Hidden Valley Is A Family Addition.”

¹⁵⁹ “Grand Opening Today - Hidden Valley,” *Houston Chronicle*, November 25, 1956, Houston Public Library.

developments. Dannenbaum served on numerous water-related boards and committees in the 1950s and 1960s, and was the chairman of the board of Dannenbaum Engineering Corp. when he passed away in 1975 at age 77.¹⁶⁰

Development of Hidden Valley

Sited west of the “Airline Freeway” (present-day IH 45), east of Stuebner Airline Road (present-day Veterans Memorial Drive), and accessed by North Shepherd Road, the Hidden Valley subdivision consists of 12 sections of varying acreage (see Figure 33). Plats for Sections 1-3 and Section 5 are available online from the Harris County website. The plat for Section 1 dates to 1956, and identifies R.A. Smith Sr. as the owner of the Southern Land Development Company, which developed Hidden Valley. By 1958 (Section 3 plat) Raleigh A. Smith Jr. was listed as secretary/treasurer, and in 1962 (Section 5 plat) Virginia Smith Racmac was listed as co-owner (see Table 1). The plats do not appear to have been completed sequentially as the Section 3 plat dates to 1958, and that of Section 2 dates to 1959.



Figure 33. Hidden Valley as shown in Wilson's Real Estate Index for Harris County.¹⁶¹

¹⁶⁰ “Engineer Dannenbaum, 77, Dies,” *Houston Post*, November 25, 1975, Houston Metro Research Center - Vertical Files.

¹⁶¹ “Hidden Valley Subdivision” (Houston, Texas: Wilson's Real Estate Index: Harris County, 1987), 25–1.

Table 1. Hidden Valley plat information, by section¹⁶²

Section	Plat Date	Built date	Consulting Engineer	Developer	Notes
1	May 1956	Nov. 1956	J.B. Dannenbaum	Raleigh A. (R.A.) Smith Sr. owner	33.53 acres, 8 blocks; no mention of water plant
3	1958		J.B. Dannenbaum	Southern Land Development Company; R.A. Smith Sr. & Jr. President and Sec.-Tres. respectively – owners of property	11.05 acres, 2 blocks
2	April 1959		J.B. Dannenbaum	Southern Land Development Company; same owners	39.2 acres, 7 blocks; section surrounding Goodman Elementary School
2	June 1959		J.B. Dannenbaum	Southern Land Development Company; same owners	3.56 acres, 1 block
5	February 1962		J.B. Dannenbaum	Southern Land Development Company; owners now RA Smith Sr. and Virginia Smith Racmac	18.59 acres, 6 blocks; also shows Section 4
HV West	1964		J.B. Dannenbaum	Southern Land Development Company; owners RA Smith Sr. and Virginia Smith Racmac	23.62 acres, 5 blocks
Block 1 Restricted Reserve A	2003		Clifton Seward, Surveyor	Enterprise Leasing Company	.51 acres, 1 block

A November 18, 1956, *Houston Chronicle* advertisement that ran one week prior to Hidden Valley's grand opening stated that, with Smith & Son as the developers, builders, and sole sales agent, the middle man was cut out and savings were passed on to the home buyer.¹⁶³ The following week the *Houston Chronicle* featured almost two full pages of articles and ads related to the Hidden Valley subdivision. Touting Hidden Valley homes as "the finest in the medium priced field," one ad stated that no city taxes and no water district taxes in the development meant lower monthly payments, and that property values were protected by complete restrictions (see Figure 34).¹⁶⁴ Another article listed the amenities of city living

¹⁶² Harris County Clerk's Office, Database, 2018, <https://www.cclerk.hctx.net/applications/websearch/RP.aspx>.

¹⁶³ "You Asked for It! Raleigh A. Smith & Son, Inc. Built It!," *Houston Chronicle*, November 11, 1956, Houston Public Library.

¹⁶⁴ "Grand Opening Today - Hidden Valley."

available at Hidden Valley, despite it being outside Houston's limits, including wide curvilinear streets, streetlights, curb, gutter, storm, sewage, garbage pick-up service, door-to-door mail delivery, and "other city conveniences." Residences were described as "unusual and serviceable designs, and despite the vastness of the project each home has been planned almost on an individual basis." The article also promoted Hidden Valley's proximity to the new Northline Shopping Center that was under construction across from the Airline Drive-In Theatre (4507 Airline Drive) as well as to downtown Houston, which was "only 18 minutes away."¹⁶⁵ The drive-in theatre and the shopping center were located approximately 3 miles southeast of Hidden Valley from W. Gulf Bank Road; the drive-in was west of the highway and the shopping center (present day Northline Commons) was to the east.

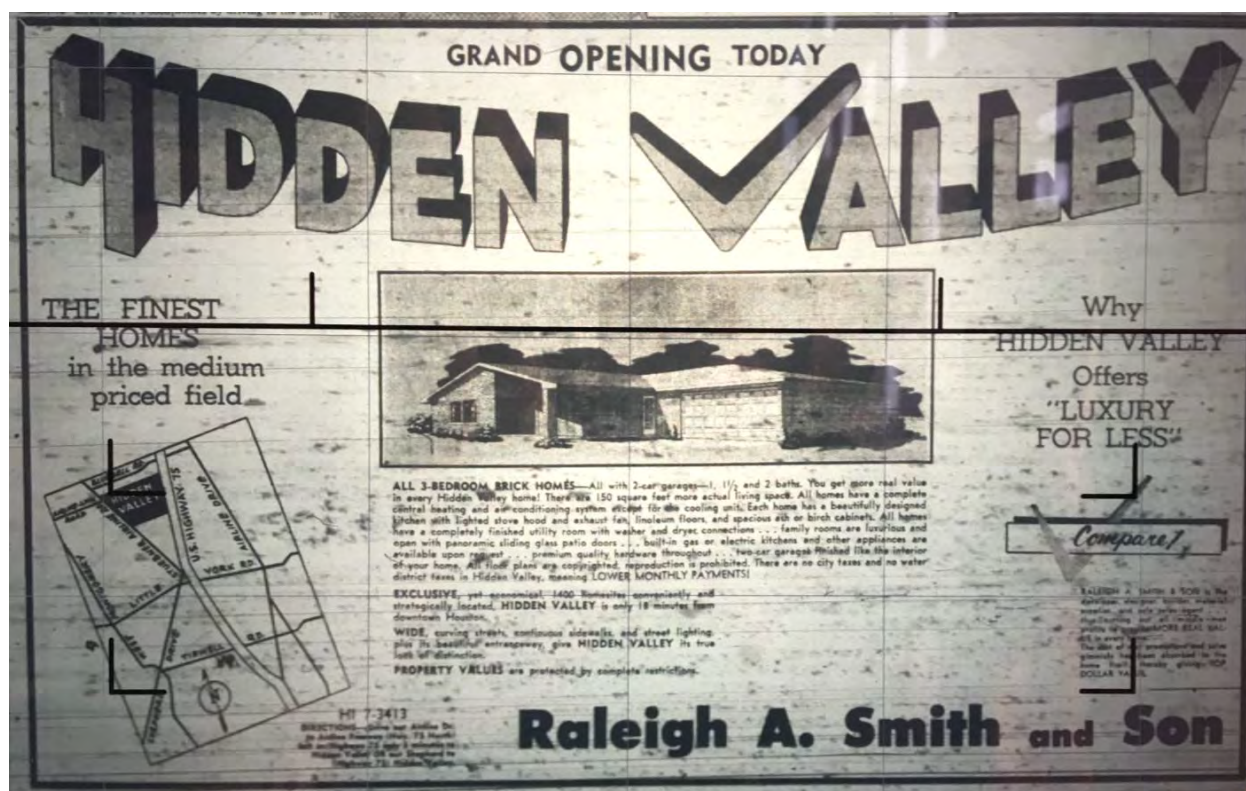


Figure 34. 1956 Houston Chronicle advertisement of Hidden Valley's grand opening.¹⁶⁶

The Smiths took pride in their minimalist ads, stressing this was another way they passed on savings to homebuyers. A 1958 *Houston Chronicle* ad (see Figure 35) touted the latest model homes' spacious rooms with desired architectural details, proximity to local attractions, and overall value.¹⁶⁷

¹⁶⁵ "New Suburban Housing Development Opens Today," *Houston Chronicle*, November 25, 1956, Houston Public Library.

¹⁶⁶ "Grand Opening Today - Hidden Valley."

¹⁶⁷ "Hidden Valley Ad," *Houston Chronicle*, August 17, 1958, sec. E, Houston Public Library.

Hidden Valley

One of Houston's unique communities, a carefully designed residential area dedicated to happy, comfortable living. Only a ten-minute drive from the new Champions Golf Course, and a straight shot to Lake Houston, Hidden Valley is the choice of many sportsmen and boating enthusiasts.

Payments on one of the beautiful homes are appreciably less than homes of the same price within the city, due to the absence of city taxes.

Be sure and visit

806 Saddle Rock
\$14,100

14x28' living room with beamed ceiling and wall-to-wall carpeting.
kitchen with NFW cabinets . . . brick floor
designed for outdoor living
brick-floored entry
3 bedrooms, 2 baths

Here's how you get there

(U.S. 75 N.) to just beyond
Drive out the Arline Freeway
where N. Shepherd comes

RALEIGH A. SMITH & SON
HI 7-3413 Nights MO 5-3054

Figure 35. 1958 Hidden Valley advertisement.¹⁶⁸

The Hidden Valley subdivision played a role in trend setting for mid-century Houston residential design. A 1959 *Houston Post* article reported a city-wide forum on modern housing held “in an effort to find a standard suitable for Houston homes.”¹⁶⁹ A Hidden Valley residence (9302 Sunnywood Drive) hosted the Houston Housing Forum, which was sponsored jointly by *Better Homes and Gardens* magazine and Housing Market Research, Inc. Conclusions of the forum were to result in the “ideal home for Houston” to be built by Raleigh Smith Jr. Two separate articles noted the “ideal home” would be built in Hidden Valley and eventually open to the public for viewing. The forum had the distinction of being the first of 20 like events held in cities across the nation during the next year. Houston’s forum focused on addressing local issues and current homebuilding trends, with attention to better home design, adaptability of homes to contemporary family life, use of new building materials and methods, and better coordination between modern architecture and modern furnishings.¹⁷⁰

The Houston Housing Forum results were announced in a 1961 *Houston Post* article in which Raleigh A. Smith Jr. was widely quoted as an expert in building and design. Incorporating input from the forum results, Smith & Son constructed at least one example of the ideal home in the Hidden Valley subdivision. The forum determined that the average prospective buyer wanted brick veneer cladding (full or partial), a Contemporary or Colonial

¹⁶⁸ “Hidden Valley Ad.”

¹⁶⁹ “Modern House Forum Planned For Two Days,” *Houston Post*, October 4, 1959, Houston Metro Research Center - Vertical Files.

¹⁷⁰ “Modern House Forum Planned For Two Days.”

Revival exterior, pastel interiors, two baths, three bedrooms, a living room, and a family room. Desired extras included full insulation, tiled baths, paved driveways, extra electrical outlets, air-conditioning, wood paneling, and sliding doors to a patio. Built-ins were popular, from the oven and range to bookshelves and chests of drawers, and even intercom systems. While fireplaces were desired, air-conditioning was more important to consumers.¹⁷¹ The article suggested that “ideal home” features were standard in Hidden Valley homes.

The opening of Hidden Valley’s Section 4 was noted in an April 20, 1964, *Houston Post* article. Smith Jr. stated that the new section represented more than \$2 million in homes on 100 lots. Home styles included Ranch forms with mid-century modern or Colonial and other revival stylistic features. Smith Jr. also said that new plans for Twin Falls Road established a “new profile in home building.” The model home, named “the South Pacific” and built in the Polynesian-inspired “Oriental Modern” style, offered “livable” details such as built-ins, natural light, and a sunken living room.¹⁷² The article noted that improvements to the North Freeway (IH 45) adjacent to Hidden Valley cut the drive time to downtown Houston to an easy 12 minutes, and highlighted the subdivision’s proximity to other amenities, such as the Northline Shopping Center, the Intercontinental Airport (now George Bush Intercontinental Airport), and golfing and recreational facilities.¹⁷³

W. Gulf Bank Road developed in the late 1960s as construction was completed in Hidden Valley Section 7 and in the southern portion of Hidden Valley West Section 4. Architectural styles continued to reflect Colonial Revival and mid-century modern influences. Section 8 developed in the 1970s and still featured some traditional forms but also incorporated new geometric shapes and Contemporary-style residences. Construction dates of residences are represented on the heat map in Figure 36.

¹⁷¹ Ann Minick Criswell, “Average Home Buyer Would Like Fireplace, Gets Air Conditioning,” *Houston Post*, June 5, 1961, Houston Metro Research Center - Vertical Files.

¹⁷² More research is needed to determine the address of this model home.

¹⁷³ “Hidden Valley Section Opens to Public Today,” *Houston Post*, April 20, 1964, Houston Metro Research Center - Vertical Files.



Figure 36. Hidden Valley neighborhood construction dates.

D. Infrastructure/Amenities

The water plant/related utilities

The water plant at 746 Rainy River Drive is noted on the original 1956 plat of Section 1. Due to the location of Hidden Valley outside the Houston city limits, it follows that this was a deliberate utility development to serve the new residential subdivision.¹⁷⁴ Three buildings located on the subject parcel have been altered over time. The Harris County assessor database does not show a construction date for buildings on this lot.

A 1963 *Houston Post* article notes that Smith Jr. owned two utility companies: the Green Field Utilities Corp. and Glen Oaks Utilities, Inc. (both R.A. Smith-built subdivisions), which served approximately 1,000 north Houston families.¹⁷⁵ Following this pattern, research suggests Smith specifically designed the water plant to serve the Hidden Valley subdivision. Research shows the plant was acquired by the Southern Water Corp. in 1990, a subsidiary of Smith & Son, and is currently owned/controlled by Stephen Racmac, who is believed to be related to Virginia Smith Racmac.¹⁷⁶

807 Rocky Mount Drive

The property at 807 Rocky Mount Drive consists of three lots in a triangular shape, with the water plant to the east, Rainy River Drive to the south, and Rocky Mount Drive to the north. The setting, location, size, and configuration of the property opened the possibility that it served the community as an events center or communal space. However, the Harris County assessor site identifies that the building on the property was constructed as a single-family residence in 1960. An in-ground pool and shed were added in 1970, and a large addition was completed c.1990.¹⁷⁷ There is no evidence to suggest that it served another capacity other than a single-family residence.

Hidden Valley School

Space for an elementary school was reserved within the Hidden Valley subdivision, as shown in the Section 2 plat (April 1959). The Aldine Independent School District (ISD) paid \$30,000 for the site and the Hidden Valley Elementary School at 9325 Deer Trail Drive was constructed in 1964 (see Figure 37). When it opened in September of that year, the school featured 30 classrooms and served 900 students. It was renamed Goodman Elementary school in 2000 for Ralph Goodman, a longtime Aldine ISD employee who served as principal

¹⁷⁴ Staff of the Houston Chronicle, *Houston Through the Years: 115 Years of Telling the Story of the Bayou City*, 316.

¹⁷⁵ "Sewage Plant Owner Is Charged," *Houston Post*, August 21, 1963, Houston Metro Research Center - Vertical Files.

¹⁷⁶ Harris County Parcel Viewer, <https://arcweb.hcad.org/parcelviewer/>

¹⁷⁷ Harris County Parcel Viewer, <https://arcweb.hcad.org/parcelviewer/>

of Inwood Elementary (now Smith Academy) and the district director of music and performing arts.¹⁷⁸ Newspaper research did not reveal advertisements highlighting the Hidden Valley elementary school among the subdivision amenities and features, as was commonly seen in residential ads appealing to families in this era.



Figure 37. Easternmost portion of Goodman Elementary School at right of image shown in relation to Hidden Valley neighborhood at left. Mead & Hunt photograph.

E. Hidden Valley Architectural Styles

The architectural styles represented in Hidden Valley reflect 25 years of evolution of homebuyer preferences, beginning in the mid-1950s and extending through the late 1970s. The earlier residences (Sections 1-3) are cohesive in massing, form, and materials. The residences are generally one-story, rectangular, L- or U-plan Ranch forms with mid-century modern, Colonial or Tudor Revival, or Asian stylistic influences. Common elements or features include: flat, low-pitch gable or hip roofs with moderate eaves, some with propped gables; use of decorative exposed beams; use of brick, often stacked, or used decoratively in screen walls, wing walls or integrated planters; and aluminum windows with horizontal divides, picture, or ribbon windows, some with diamond screens. Representative examples are presented in Figures 38-43.

¹⁷⁸ Mike Keeney, "Goodman Elementary Celebrates 50th Anniversary," *Inside Aldine, Discover News, Information and More about Aldine's ISD's Schools*, November 12, 2014, <http://insidealdine.com/2014/11/goodman-elementary-celebrates-50th-anniversary/>.



Figure 38. L-plan and U-plan Ranch forms at Beaver Bend Road and Sunnywood Drive. Mead & Hunt photograph.



Figure 39. Streetscape at Mosher Lane and Sunnywood Drive. Note prowd gable and exposed beams over the entrance on the home to the right. Mead & Hunt photograph.



Figure 40. Streetscape at Mosher Lane east of Bunny Run Drive. Note the brick wing wall that extends from the garage on the home to the right. Mead & Hunt photograph.



Figure 41. Corner of Helms Road and Valwood Court. Note the decorative beams and brick screen walls. Mead & Hunt photograph.



Figure 42. Residence on Sunnywood Drive near W. Mount Houston Road. Note the flat roof and decorative screen wall. Mead & Hunt photograph.



Figure 43. Tudor Revival-style influences seen at Sunnywood Drive and Lyngrove Drive. Note the cement street marker behind the curb. Mead & Hunt photograph.

Architectural forms represented in Sections 4-7 (constructed generally in the late 1960s) remain largely the same: one-story Ranch residences with mid-century modern, Colonial Revival, or other revival stylistic features. However, new elements are introduced, such as brick arches seen in window and door surrounds and other applied decorative details, or box bay windows. Also seen are gable-on-hip roofs or side-gable roofs with a projecting front hip or gable, and two-car garages (see Figures 44-46).



Figure 44. Streetscape at Helms Road and Still River Drive. Mead & Hunt photograph.



Figure 45. Streetscape at Glen Shadow Drive and Hidden Valley Drive. Mead & Hunt photograph.



Figure 46. Use of repetitive arches seen at Peach Spring Drive and Bunny Run Drive. Mead & Hunt photograph.

Section 8 was constructed primarily in the 1970s. Architectural forms, materials, and stylistic influences remain consistent with both Contemporary and Revival style residences represented. New elements introduced include truncated rooflines, eave openings framed by beams, slightly higher rooflines, and decorative pointed brick arch details (see Figures 47-49). Streets within Section 8 are also wider than those in the previous sections, and lots south of W. Bertram Street are deeper than others in the development.



Figure 47. Continued popularity of Colonial Revival-inspired Ranch house seen at Nelda Road and Marianne Street. Mead & Hunt photograph.



Figure 48. Use of decorative brick pointed arch detail on Nelda Road. Mead & Hunt photograph.



Figure 49. Contemporary residences along W. Bertrand Street. Note the truncated roofline and eave opening formed by beams. Mead & Hunt photograph.

F. Conclusion

The Hidden Valley subdivision has potential significance as an NRHP historic district. Under *Criterion A*, the subdivision has potential significance at the local level for its role in mid-century Houston suburban development. Specifically, Hidden Valley is associated with the 1959 Houston Housing Forum, which determined the “ideal home for Houston,” and at least one ideal home example was constructed in the subdivision, thereby playing a role in setting local mid-century architectural trends. As defined in the 2016 NHHIP historical survey report, Hidden Valley is a “Picturesque” type subdivision, whereby the developers were selling a lifestyle rather than just a house.¹⁷⁹ Hidden Valley displays an overall uniformity derived from government standards of the day coupled with Houstonians’ desire for a suburban utopia. While the neighborhood was constructed over a relatively long period of time (1956-1979), development within it retains a unified pattern. One developer/builder completed the work, which took place in phases and appears to have followed a master plan. Further, the neighborhood has distinct boundaries, intact streets with no significant

¹⁷⁹ Beth Reed and Tori Raines, *North Houston Highway Improvement Project, Harris County, Houston District* (Texas Department of Transportation, December 9, 2016), 527.

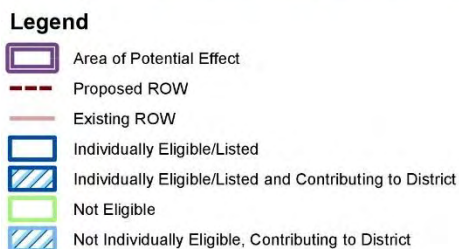
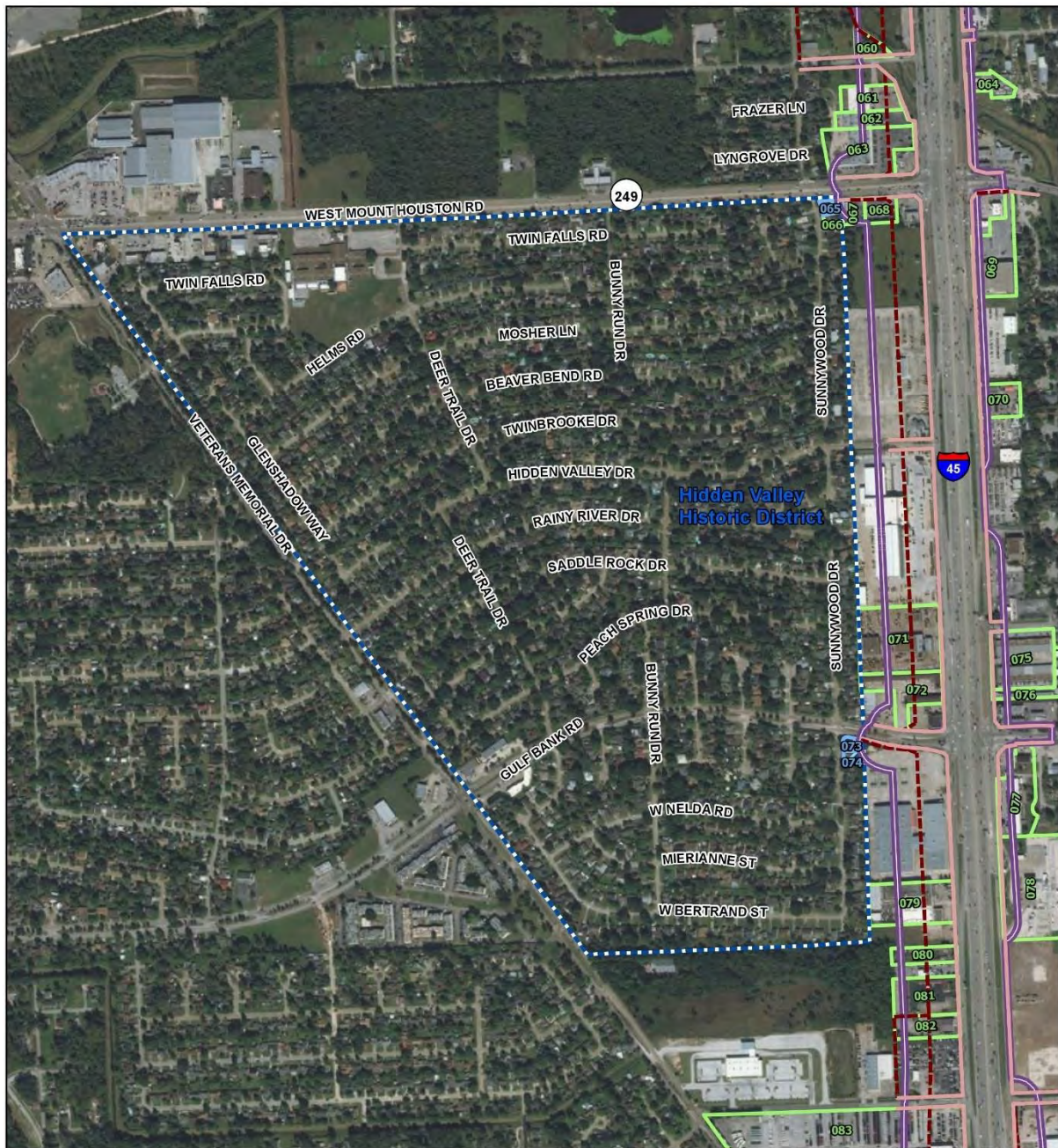
breaks, original lot sizes and shapes, and the majority of residences retain good integrity. Hidden Valley was planned with the family in mind, to provide a comfortable lifestyle with convenient access to a neighborhood school, and other commercial and recreational facilities available via US 75/IH 45.

Hidden Valley was the eighth subdivision built by prolific local builder Raleigh A. Smith Sr. One of his earlier subdivisions, Glen Oaks, was evaluated in the 2016 NHHIP historical survey report and determined not eligible. The Glen Oaks subdivision, platted in 1949 with construction beginning in 1950, was likely the first built after Raleigh Smith Jr. joined the family business. This development is located approximately 2 miles southeast of Hidden Valley (just east of IH 45) and consists of 221 single-family homes constructed within a six-year period. The Glen Oaks subdivision's streets are on a grid and the development was not designed with a school or other special features, such as a park, church, entrance features, or associated commercial development. Hidden Valley, by contrast, consists of approximately 1,400 single-family residences on curvilinear streets constructed in 12 sections over approximately 23 years. Hidden Valley was designed with its own water plant and a large lot was set aside for a school. The subdivision contained several other special features, including an attractive entrance off Hidden Valley Drive, back-door garbage pick-up, and front yard lighting at each property. Additionally, while recreational space or commercial development were not directly related to Hidden Valley, Smith & Son promoted the facilities that were nearby and easily accessible via US 75/IH 45.

The Hidden Valley subdivision retains good integrity on the whole. Alterations to some residences over time are seen mainly in window or door replacements, garage enclosures, or the addition of security bars. Less commonly seen are major additions, such as second-story bump-ups or the addition of dormer windows. Integrity of workmanship and materials may be slightly diminished due to alterations; however, the neighborhood generally retains integrity of location, design, and setting, and Hidden Valley still conveys the feeling and association of a mid-century subdivision.

Hidden Valley appears to possess historical significance and retain integrity. Definitive NRHP evaluation of Hidden Valley would require extensive additional work in order to complete comparative analysis, both with other neighborhoods in North Houston and with other Smith & Son properties. For purposes of this survey, Hidden Valley is considered eligible for listing as a historic district in the NRHP under *Criterion A* in the area of Community Planning and Development at the local level of significance. The Hidden Valley Historic District's boundaries conform to the 12 subdivision plats associated with the Hidden Valley neighborhood: Hidden Valley Sections 1-8, Hidden Valley West, and Hidden Valley West Sections 2-4 (see Figure 50 below). The historic district is generally bounded by SH 261 (Veterans Memorial Drive) to the west, SH 249 (West Mount Houston Road) to the

north, Sunnywood Drive to the east, and Bertrand Street to the south. Parcels that adjoin Sunnywood Drive and Bertrand Street are included within the district's boundaries.



Hidden Valley Historic District

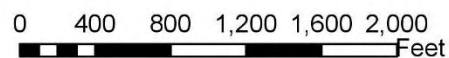


Figure 50. NRHP-eligible Hidden Valley Historic District.

(2) Germantown

A. Overview and Methodology

The 2015, 2016, and 2017 Reports for Historical Studies Survey, prepared by CP&Y, proposed an NRHP-eligible district with boundaries based on the City of Houston's (COH) locally designated Germantown Historic District. Designated in 2012, the COH Germantown Historic District is roughly bound by Houston Avenue to the west, Interstate Highway (IH) 45 to the north and east, and Woodland Park to the south. This district is almost entirely residential and includes Woodland Park, which was one of Houston's first parks, developed in 1903. Houses in the locally designated district were constructed between 1902 and 1932 and include popular early-twentieth-century forms and styles, including Craftsman, American Foursquare, Queen Anne, and Colonial Revival.¹⁸⁰ The district contains portions of

¹⁸⁰ City of Houston Planning & Development Department, "Germantown," *Historic Preservation Manual*, 2013, https://www.houstontx.gov/planning/HistoricPres/HistoricPreservationManual/historic_districts/germantown.html.

the following additions and subdivisions: Grota Homestead, Beltz, Osceola Addition, Highland Addition, Howard Terrace, Woodland Heights, and McDow (see Figure 51).¹⁸¹



Figure 51. Plats comprising the COH locally designated Germantown Historic District and Woodland Park, as shown in the Wilson's Real Estate Index.¹⁸²

¹⁸¹ McDoux Preservation, *City of Houston, Texas Germantown Historic District Design Guidelines*, July 15, 2013, 51–53; “Wilson's Real Estate Index: Harris County” (Houston, Tex.: Wilson's Real Estate Index, 1987), 46–47.

¹⁸² “Wilson's Real Estate Index: Harris County,” 46–4.

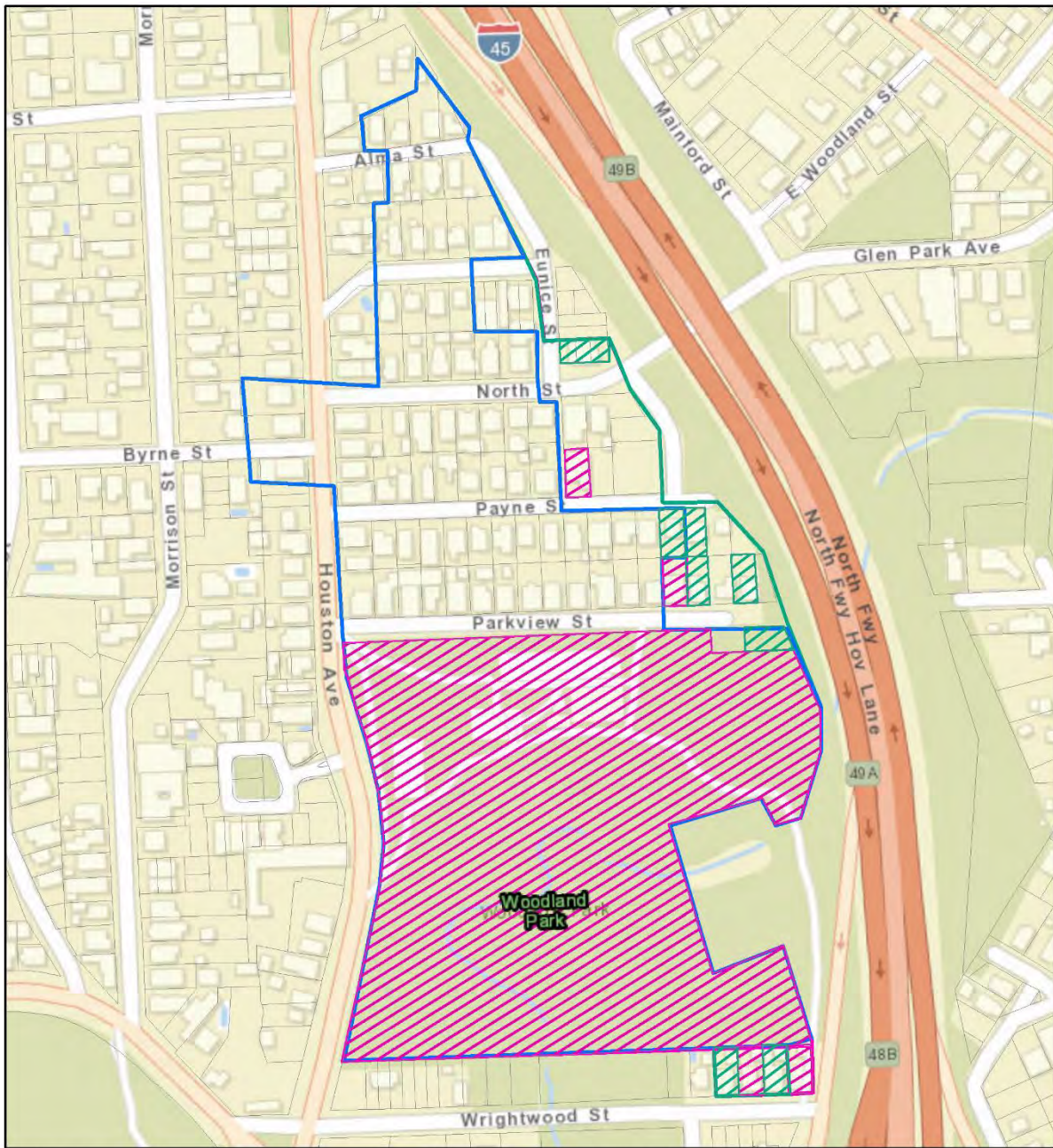
The NRHP-eligible Germantown Historic District initially proposed by CP&Y represented a smaller portion of the “Grota Home/Depenbrock-Allen/Osceola neighborhood” district determined eligible for listing in the NRHP by the Texas Historical Commission (THC) in 2005. Named for Germantown’s primary subdivisions and additions, this district was determined to possess significance under NRHP *Criterion A* in the area of Community Planning and Development and included early-twentieth-century commercial properties along Houston Avenue in addition to residences.¹⁸³

Upon reviewing the NRHP eligibility recommendations in CP&Y’s 2017 Report for Historical Studies Survey, the THC recommended a closer examination of the neighborhood and adjacent resources for potential expansion of the proposed NRHP-eligible Germantown Historic District boundaries beyond those delineated in the local designation. In response, CP&Y proposed expanding the district’s eastern boundary to include several properties near the southbound lane of IH 45, and its southern boundary to include Woodland Park and several residential properties on Wrightwood Street. CP&Y recommended the following properties as additional contributing resources: 3106 Eunice Street (Resource 534); 221 Parkview Street (Resource 539); 342 Parkview Street (Resource 542); 343 Parkview Street (Resource 541); 218 Payne Street (Resource 536); 302 Payne Street (Resource 537); 1214 Wrightwood Street (Resource 545); and 1218 Wrightwood Street (Resource 543).

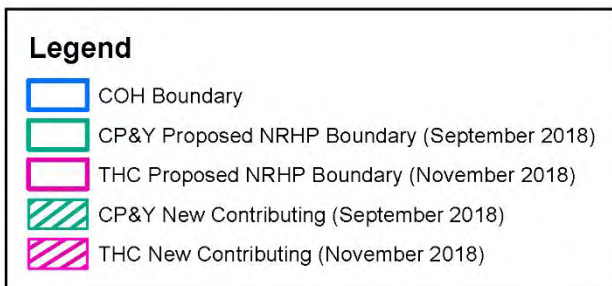
The THC’s most recent recommendations, as described in its November 2, 2018, response letter to the September 2018 Report for Historical Studies Report, concurred with the initial boundary expansion and recommended an additional expansion to include 1212 Wrightwood Street (Resource 546), which is located adjacent to the IH 45 ROW. The THC also recommended 1216 Wrightwood Street (Resource 544), 201 Payne Street (Resource 867), 215 Parkview Street (Resource 874), Woodland Park (Resource 967), and the Woodland Park Recreation Building (Resource 969), all of which were within the expanded boundary, as contributing resources.¹⁸⁴ The THC also requested a closer examination of Resource 511-526 located on Oleander, Farwood, and Woodland Streets east of IH 45 as potentially contributing to the Germantown Historic District. A summary of the proposed boundaries and resources to date is provided on the map in Figure 52.

¹⁸³ Anna Mod, *Windshield Survey: Grota Home, Depenbrock-Allen, Osceola Neighborhood, Houston, Texas*, 2005.

¹⁸⁴ The Hulsey-Davis House located at 1216 Wrightwood Street is an individually designated local landmark.



Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community



0 0.02 0.04 0.08 0.12 0.16 Miles

Figure 52. Germantown Historic District proposed boundaries to date.

In order to better understand the developmental history of Germantown and the surrounding area and consider the Wrightwood Street properties as potential additions to the Germantown Historic District, Mead & Hunt, Inc. (Mead & Hunt) conducted reconnaissance-level survey and research online and at the Houston Public Library and Houston Metropolitan Research Center (HMRC). Sources consulted include historic maps, newspapers, previous documentation for the locally designated Germantown Historic District, and the Houston Historic Landmark Application for the Hulsey-Davis House located at 1216 Wrightwood Street (Resource 544).

B. Historic Overview of Germantown and Surrounding Area

Prior to its development into a residential neighborhood in the early twentieth century, the land north of White Oak Bayou was inhabited largely by German immigrant families. Much of the area that contains the Germantown Historic District was owned by the Grota family, who purchased their property in 1859.¹⁸⁵ By the early twentieth century the construction of electric streetcar lines to the area fostered increased demand for suburban development. New streetcar lines enabled middle- and working-class residents of Houston to move away from the city center, which by that time had become crowded and polluted.

In an effort to increase ridership, the Houston Electric Company developed a 30-acre park east of Houston Avenue and north of White Oak Bayou. Originally named Highland Park, it included a restaurant, dance pavilion, and lake created by a dam constructed on Little White Oak Bayou. For a short period, Highland Park was renamed San Jacinto Park and then eventually renamed again to Woodland Park (its current name).¹⁸⁶

During the early 1900s several new subdivisions emerged in the area surrounding Woodland Park, including the Allen Addition to the southeast and the Irvington Addition to the northeast. A 1907 map of Houston and vicinity shows much of the Germantown area still undeveloped and under the ownership of various families or individuals. Surnames listed in the area included Grota, Arochineki, Wisnowski, Depenbrock, and Kohlhauff. A portion of the Highland Park Addition, between Payne Street and Highland Street (later renamed Parkview Street) was the first residential subdivision to develop in Germantown (see Figure 53).¹⁸⁷ Development continued in Germantown and the surrounding area during the 1910s; the Grotas and other land owners began selling plots and forming new subdivisions for development (see Figure 54).¹⁸⁸

¹⁸⁵ City of Houston Planning & Development Department, "Germantown."

¹⁸⁶ McDoux Preservation, *City of Houston, Texas Germantown Historic District Design Guidelines*, 3.

¹⁸⁷ Stewart Abstract & Title Co., "Official Map of Houston and Vicinity."

¹⁸⁸ McDoux Preservation, *City of Houston, Texas Germantown Historic District Design Guidelines*, 3; Houston Title Guaranty Co., "City of Houston Texas."

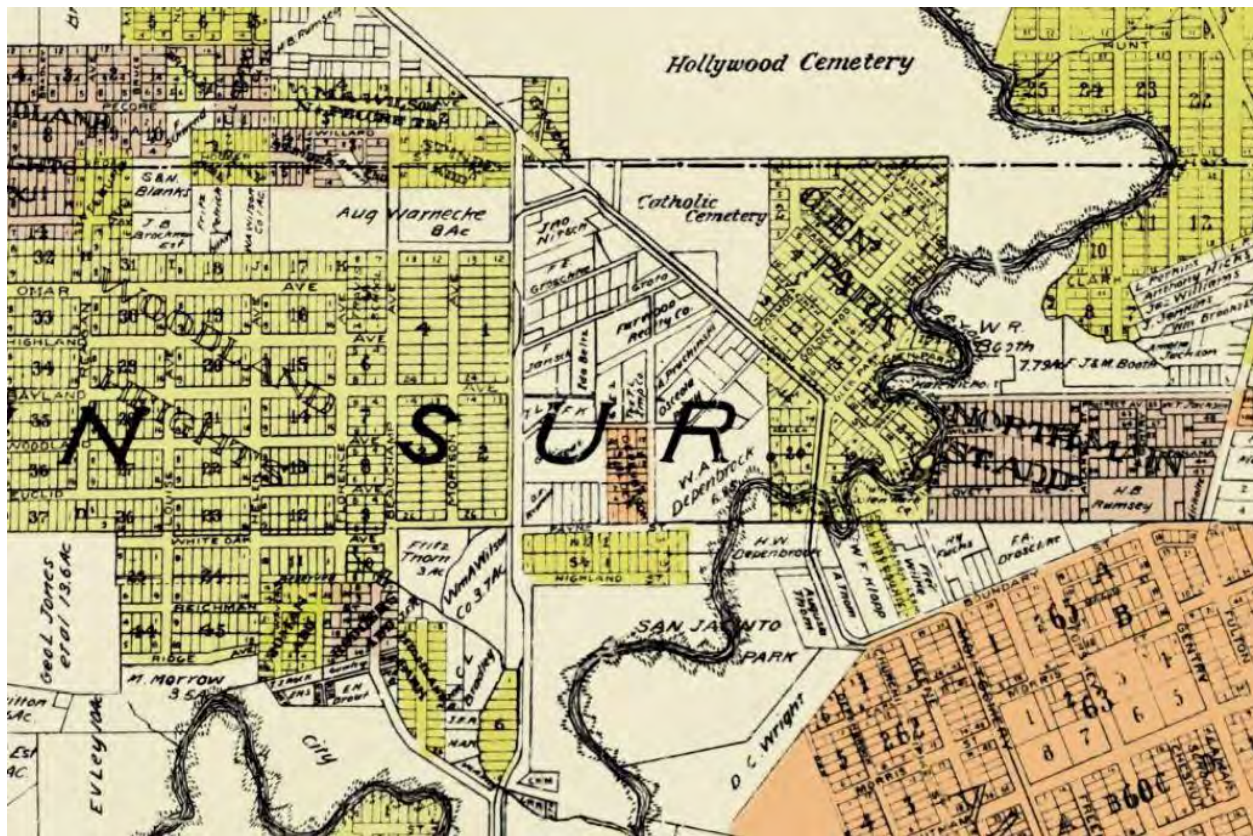


Figure 54. 1913 map showing increased development in Germantown and the surrounding area. Highland Park was also known as San Jacinto Park (as it appears in this map) for a brief period before it was again renamed Woodland Park.¹⁹⁰

The area south of Highland Park remained undeveloped until 1918, when Daniel C. Wright subdivided a small tract of land east of Houston Avenue and south of Woodland Park. A bridge was constructed on Wrightwood Avenue (later renamed Wrightwood Street) over Little White Oak Bayou, providing a connection from Houston Avenue to the northwest corner of the Allen Addition. Germantown and Wrightwood, along with Woodland Heights to the west, shared use of the recreational resource. Like houses along Parkview Street, lots along the north side of Wrightwood Street that backed up to Woodland Park were marketed for their proximity to the park (see Figures 55 and 56).¹⁹¹

¹⁹⁰ Houston Title Guaranty Co., "City of Houston Texas."

¹⁹¹ City of Houston Planning & Development Department, Archaeological & Historical Commission, "Landmark Designation Report for the Hulsey-Davis House (1216 Wrightwood Street)," 1-2.



Figure 55. 1920 advertisement in the Houston Post for the Wrightwood Subdivision noting “parks on all sides.” Other parks in the area included Hogg Park and Luna Park south of Wrightwood Street.¹⁹²



Figure 56. 1922 advertisement in the Houston Post for 341 Parkview Avenue noting the property's proximity to Woodland Park.¹⁹³

Residential construction continued on Wrightwood Street and in Germantown in the 1920s. Sanborn Fire Insurance Maps indicate that most of the lots contained residences by 1924.¹⁹⁴ Residents in the area continued to use Woodland Park as a recreational resource in subsequent decades. In 1948 the City of Houston commissioned the construction of a modern, two-story, brick and steel recreation building that featured a gymnasium, game gallery, club room, and kitchen.¹⁹⁵ The construction of IH 45 in the early 1960s bisected Woodland Park along with the Wrightwood Subdivision and much of the Germantown neighborhood. As a result, a number of residential properties were relocated or demolished and access across the freeway was significantly limited.

¹⁹² “Beautiful Wrightwood,” *The Houston Post*, May 9, 1920.

¹⁹³ “Newly Built Bungalow (Advertisement),” *The Houston Post*, October 22, 1922.

¹⁹⁴ “Houston, Texas, 1924 Vol. 2” (New York: Sanborn Map Company, 1924), 249, Online Map Collection, University of Texas, Perry-Casteneda Library.

¹⁹⁵ “Untitled (This Modern Recreation Building..),” *The Houston Chronicle*, September 12, 1948, Houston Metropolitan Research Center.

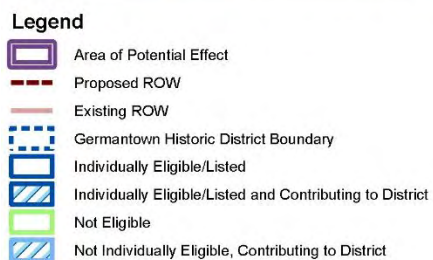
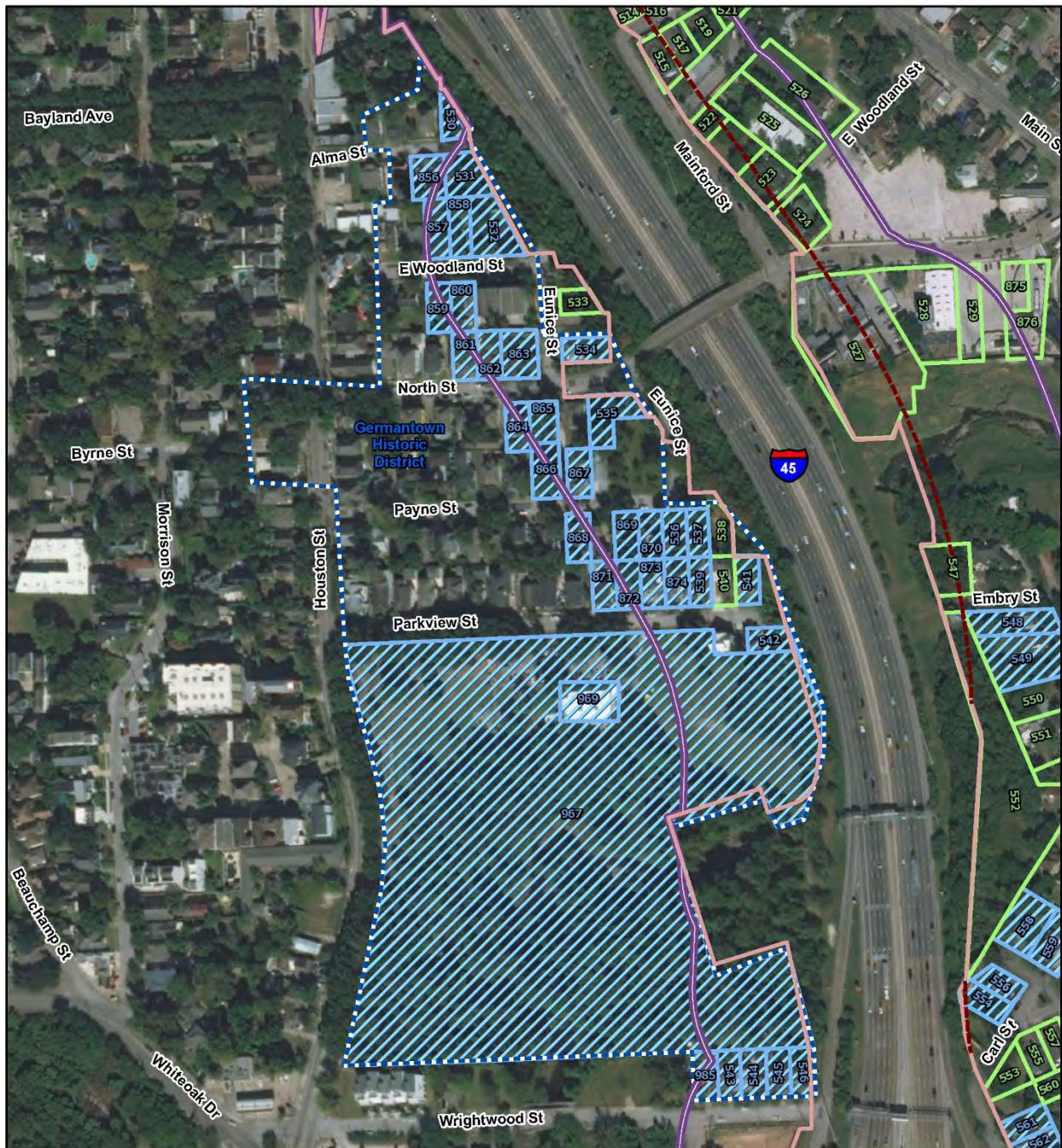
During reconnaissance-level field survey performed in December 2018, Mead & Hunt identified eight extant historic-age residences on Wrightwood Street west of IH 45. These included the four residences documented in previous NHHIP reports at 1212, 1214, 1216, and 1218 Wrightwood Street, as well as a residence at 1220 Wrightwood Street, and three just west of Little White Oak Bayou at 1403, 1405, and 1407 Wrightwood Street, which are located outside the project's Area of Potential Effect (APE) and were not documented in previous reports. The residences on the north side of Wrightwood Street include forms and styles similar to those of the locally designated Germantown Historic District, including one- to one-and-one-half-story Craftsman-style bungalows at 1212, 1214, 1218, and 1220 Wrightwood Street, and the Hulse-Davis House at 1216 Wrightwood Street, which was originally constructed as a single-story residence and later modified with the addition of a second story and exhibits Craftsman detailing such as wide eaves, exposed rafter tails, and brackets. Several of the houses were undergoing rehabilitation during the time of survey in December 2018. Overall, the five extant historic-age houses on the north side of Wrightwood Street have few alterations and retain a high degree of integrity of materials, design, and workmanship. Two of the three historic-age houses on the street's south side also retain a high level of integrity, but appear to predate the Wrightwood Subdivision. The house at 1403 Wrightwood Street, located just west of Little White Oak Bayou, has been remodeled with significant alterations to the roofline, the addition of dormers, and replacement windows.

C. Conclusion

The proposed Germantown Historic District north of Woodland Park represents a mix of portions of several subdivisions that were platted separately during the early twentieth century. While the majority of the district is comprised of the Grota Homestead Addition west of IH 45, it also includes portions of several other plats and subdivisions, such as the Highland Addition and Woodland Heights. Germantown's resources are unified by their age and architectural character as early-twentieth-century, middle- and working-class residences, and its cohesion as a district results from its identity by locals as the Germantown neighborhood.

Extant early-twentieth-century properties on Oleander, Farwood, and Woodland Streets east of IH 45 were historically associated with the development of the Germantown neighborhood. However, a site visit on November 28, 2018, revealed a loss of cohesion in this area due to vacant lots and non-historic infill development. Furthermore, these areas were physically separated from the rest of the neighborhood after the construction of IH 45 and have since developed a closer relationship to neighborhoods east of the freeway. During the site visit and informal consultation between TxDOT and THC historians, it was determined that IH 45 is the appropriate eastern boundary for the Germantown Historic District.

The Wrightwood Addition to the south of Woodland Park developed during Germantown's period of development and its houses exhibit the modest bungalow forms and Craftsman-style detailing that predominate the Germantown neighborhood. Furthermore, as a shared neighborhood recreational resource, Woodland Park is a unifying feature between the Germantown neighborhood and Wrightwood Street. Based on Mead & Hunt's investigations, TxDOT and the THC agreed that the boundaries of the NRHP-eligible Germantown Historic District should be expanded to include Woodland Park (Resource 967), the Woodland Park Recreation Building (Resource 969), and extant historic-age properties on the north side of Wrightwood Street (Resource 543-546). A boundary map of the NRHP-eligible Germantown Historic District is provided below (see Figure 57).



Germantown Historic District

0 75 150 300 450 600 Feet



Figure 57. Germantown Historic District boundary map.

(3) Third Ward

Large portions of Houston's Third Ward were determined to be eligible for NRHP listing during Section 106 consultation conducted for a series of Houston METRO projects between 2004 and 2007. Three districts—Third Ward North, Third Ward East, and Third Ward West—were determined eligible in 2004 as part of Houston METRO Southeast Corridor environmental studies. Collectively, the significance of these districts was described as:

These districts are located within the greater Third Ward of Houston, which is one of the city's oldest areas. The Third Ward was historically and is currently home to a large African-American community, and many of the city's black leaders emerged from this neighborhood. The three potential historic districts are eligible for the NRHP based on the architectural significance of the concentrations of intact historic buildings from the early twentieth century and historical associations with the area's growth and development and the local African-American community.¹⁹⁶

The Third Ward West Historic District, as delineated at a preliminary level in 2004, extends into the NHHIP APE. The Southeast Corridor Final Environmental Impact Statement provides more specific information regarding the potential district:

Third Ward West is the largest and most cohesive neighborhood in the overall Third Ward area...This area consists of numerous frame, vernacular, Bungalow, and Shotgun-type residences. Many of these houses are identical and are in rows that extend for blocks. Commercial buildings and churches of historic age are also found throughout the historic district. The historic buildings in this area date from the first half of the twentieth century. The approximate district boundaries are Adair and Scott Streets to the east, Alabama and Winbern Streets to the south, Webster Avenue and Gray Street to the north, and St. Emanuel and Hutchins Streets to the west.¹⁹⁷

In 2007 the Third Ward South Historic District was identified in historic resources surveys conducted as part of METRO's University Corridor environmental studies. The Third Ward South Historic District was determined to be eligible for NRHP listing, "under Criterion A for its historical association with the development of the Third Ward by the Jewish and African American communities and under [Criterion] C with its distinctive design characteristics that convey the residential trends of the time."¹⁹⁸ Resources in this area are typified by single-family, duplex, and fourplex dwellings, often displaying Tudor Revival or Craftsman stylistic influences. Many of the historic-age dwellings in the district have brick or stucco exterior, in contrast to the wood siding typically found on houses in the Third Ward West and Third Ward

¹⁹⁶ Federal Transit Administration, U.S. Department of Transportation, and Metropolitan Transit Authority of Harris County (METRO), *Southeast Corridor, Houston, Texas Final Environmental Impact Statement*, January 2007, 3–89, <https://www.ridemetro.org/Pages/ProjectDocumentArchives.aspx>.

¹⁹⁷ Federal Transit Administration, U.S. Department of Transportation, and Metropolitan Transit Authority of Harris County (METRO), *Southeast Corridor, Houston, Texas Final Environmental Impact Statement*, 3–90.

¹⁹⁸ Hicks & Company, *Volume I, Historic Resources Survey Report, University Corridor Project* (Prepared for Metropolitan Transit Authority of Harris County, Texas, May 10, 2007), 22.

East Historic Districts. The boundary of the Third Ward South Historic District was delineated as “bounded by South Hutchins on the west, Blodgett on the south, Texas Southern University and the [Union Pacific Railroad] tracks to the east, and Alabama on the north.”¹⁹⁹ Using this 2007 boundary, the western edge of the Third Ward South Historic District is just outside the NHHIP APE.

In a November 2, 2018, Section 106 consultation letter to TxDOT, the THC questioned if the Third Ward West and Third Ward South Historic Districts had been taken into account in previous NHHIP historic resources surveys, and asked TxDOT to determine if one or both historic districts extend into the NHHIP APE, given the approximated boundary delineations of the 2004 and 2007 surveys and the redevelopment that has taken place in portions of the Third Ward in recent years. Mead & Hunt historians conducted an on-site examination of the area on January 23, 2019, to delineate appropriate historic district boundaries in the vicinity of the NHHIP APE.

The January 2019 field survey confirmed the continued presence of an NRHP-eligible historic district in Third Ward South, south of Alabama Street. Based on field survey, the Third Ward South Historic District extends west to the SH 288/US 59/IH 69 ROW, rather than terminating at Hutchins Street as delineated in 2007. This westward extension of the historic district applies from Alabama Street on the north to Blodgett Street on the south. There is a high percentage of contributing resources between the highway ROW and Hutchins Street, and typical resource type, construction date, form, exterior materials, and styles in this area match those identified in the 2007 historic resources survey. The area west of Hutchins Street also possesses similar historical associations as the remainder of the Third Ward South Historic District. Replacement doors and windows are the most common alteration to the residences, with non-historic exterior materials present in isolated examples. Garages are usually detached; some have been altered for use as storage or as an accessory residence or have been replaced with a non-historic-age building. In general, the Third Ward South Historic District possesses good integrity between SH 288/US 59/IH 69 ROW and Emancipation Avenue. A greater proportion of infill redevelopment and vacant land is present east of Emancipation Avenue, but the historic district can still be delineated to connect the areas west of Emancipation Avenue with the remainder of the Third Ward South Historic District.

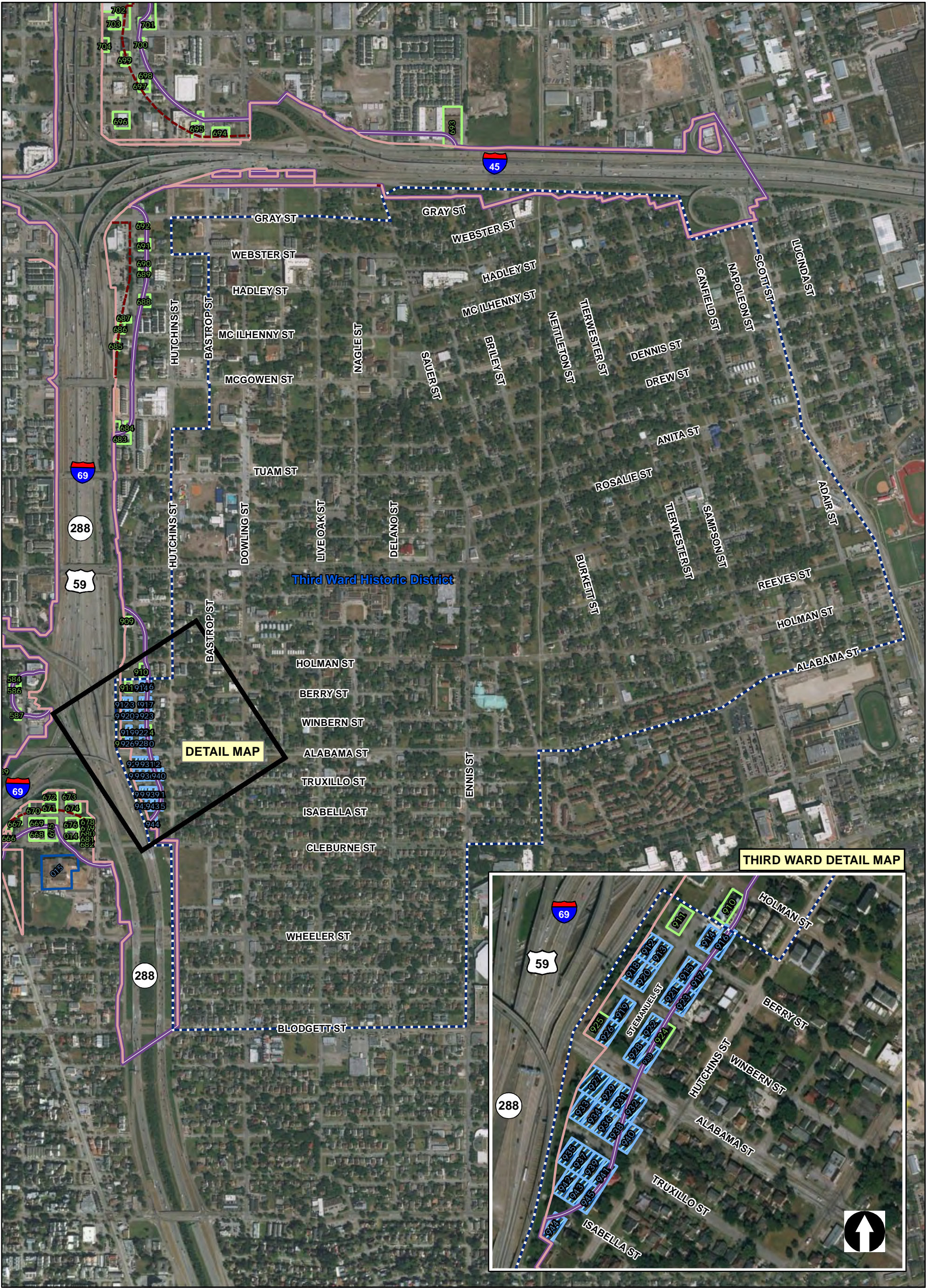
The January 2019 field survey also examined areas in and near the NHHIP APE included in the NRHP-eligible Third Ward West Historic District, as delineated in 2004 and 2007. Mead & Hunt historians examined a two-block-wide corridor from SH 288/US 59/IH 69 on the west to Hutchins Street on the east, with a more cursory analysis of parcels just east of Hutchins Street. Within those boundaries, the area from Alabama Street north to Berry

¹⁹⁹ Hicks & Company, *Volume I, Historic Resources Survey Report, University Corridor Project*, 21.

Street (including properties on the north side of Berry Street) contains a high proportion of intact historic-age buildings, with resources that generally reflect similar 1920s-1930s construction dates and styles as those found in the Third Ward South Historic District. In contrast, the area from Holman Street north has been subject to considerable incompatible infill development, typically multi-story condominiums, since the late 2000s. Numerous vacant lots are also present from Holman Street north, perhaps due to clearing in preparation for land sale and redevelopment. While scattered historic-age resources remain extant, the substantial amount of infill development and the removal of historic-age buildings result in a loss of visual cohesion and an overall loss of integrity.

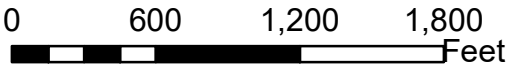
Within the NHHIP APE, the Third Ward West Historic District retains sufficient integrity to remain eligible for NRHP listing in the area from Alabama Street to one-half block north of Berry Street. No NRHP-eligible historic district is present in the NHHIP APE from one-half block north of Berry Street to Gray Street, due to recent incompatible infill development and removal of historic-age buildings.

The portions of the Third Ward South and Third Ward West Historic Districts share common architectural characteristics and historical associations, without a clear visual delineation between the two districts. For purposes of this project, they are referenced in common as the Third Ward Historic District. Inventory forms in Appendix C and the inventory table in Appendix B for resources in the Third Ward area have been revised to reflect their evaluation as components of an NRHP-eligible historic district. A boundary map of the NRHP-eligible Third Ward Historic District is provided below (see Figure 58).



- Legend**
- Area of Potential Effect
 - Third Ward Historic District
 - Proposed ROW
 - Existing ROW
 - Individually Eligible/ Listed
 - Individually Eligible/ Listed and Contributing to District
 - Not Eligible
 - Not Individually Eligible, Contributing to District

Third Ward Historic District



(4) Brooke Smith Addition

The Brooke Smith neighborhood is located on the west side of IH 45, north and east of North Main Street. It is a predominately residential neighborhood with commercial land uses along the IH 45 frontage road and North Main Street. It is located north and east of other early-twentieth-century streetcar-oriented developments such as Houston Heights, Woodland Heights, and Germantown. The Brooke Smith First Addition was platted in 1905 by Brooke Smith, a prominent merchant and banker of Brownwood, Texas. The Brooke Smith First Addition contained 35 blocks with 421 residential lots. A second addition was platted nearly simultaneously, with 115 blocks and 892 residential lots. Smith established a local realty company to market, sell, and finance the purchase of lots in the two additions.²⁰⁰ Taken together, the two additions were bound by Louise Avenue on the north, Little White Oak Bayou on the east, Cottage Street on the south, and Moss and Norwood (now Northwood) Streets on the west.²⁰¹

Brooke Smith gradually developed in its first few years. The Houston Electric Railway soon extended a line along North Main Street, then north along Enid Street through the heart of the Brooke Smith additions. A 1908 advertisement touted the presence of numerous houses, two churches, and a school in the suburb. Brooke Smith sold his remaining interest in the subdivisions to local developers David Smith and Charles Lindsay in 1914. Smith took the lead in improving and marketing the additions, with considerable construction of homes during the mid and late 1910s.²⁰² The Woodland Court Addition, which takes in properties on present-day Dell Court, was platted just southeast of the Brooke Smith additions and is considered contemporaneous with the period of early Brooke Smith development.²⁰³ The Brooke Smith additions and adjoining areas were largely built out by the mid-twentieth century. The construction of IH 45 in the 1960s resulted in the removal of 269 residences on the eastern side of Brooke Smith.

The Brooke Smith additions and adjoining Woodland Court Addition are characterized by a mix of early-twentieth-century residential types, including L-plans, modified-L-plans, bungalows, and gable-roof and pyramidal-roof cottages. Some houses exhibit Craftsman, Colonial Revival, or Folk Victorian stylistic features, while others reflect more simple vernacular adaptations. Some infill development is present in the Brooke Smith area, with two-story, non-historic-age houses and three-story condominiums. However, the amount of

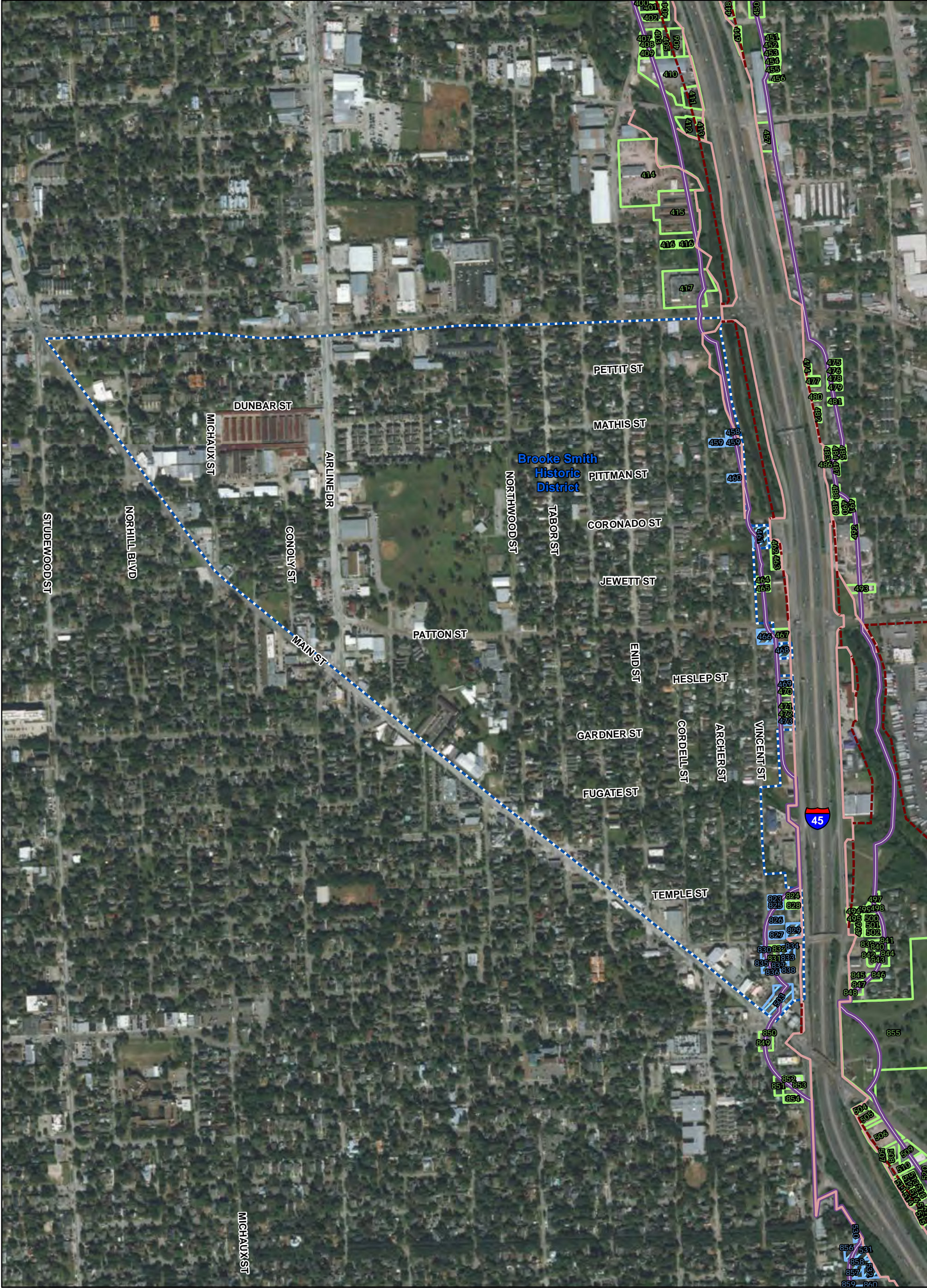
²⁰⁰ City of Houston Planning & Development Department, *Whitaker-Graliano-Brown House*, Protected Landmark Designation Report (Houston, Tex.: City of Houston Planning & Development Department, September 2013), 12–13.

²⁰¹ “Brooke Smith Additions One and Two, File No. 452-A,” Subdivision Plat, (September 8, 1905), Harris County Archives.

²⁰² City of Houston Planning & Development Department, *Whitaker-Graliano-Brown House*, 13–15.

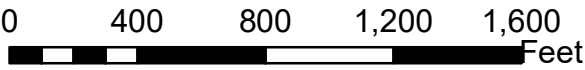
²⁰³ City of Houston Planning & Development Department, *Whitaker-Graliano-Brown House*, 16.

infill development does not overwhelm the overall historic setting and feeling of the neighborhood. TxDOT and THC historians examined the Brooke Smith area in a January 23, 2019, site visit. The on-site review and informal consultation between TxDOT and the THC determined that all or large portions of Brooke Smith likely comprise an NRHP-eligible historic district. Definitive evaluation and boundary delineation would require considerable intensive-level survey. Therefore, for purposes of this project, the Brooke Smith Historic District is considered to be bound by Cavalcade Street to the north, Northwood Street to the west, the IH 45 southbound frontage road to the east, and North Main Street to the south and southwest. The district's eastern boundary is along White Oak Bayou from Cavalcade Street to near Coronado Street, then follows an irregular line southward between the IH 45 southbound frontage road and Vincent Street. The eastern boundary was delineated to exclude concentrations of non-historic-age resources and vacant parcels adjoining IH 45. Several noncontributing resources fronting IH 45 are still included within the historic district boundaries. A boundary map of the NRHP-eligible Brooke Smith Historic District is provided below (see Figure 59).



- Legend**
- Area of Potential Effect
 - Proposed ROW
 - Existing ROW
 - Brooke Smith Historic District
 - Individually Eligible/Listed
 - Individually Eligible/Listed and Contributing to District
 - Not Eligible
 - Not Individually Eligible, Contributing to District

Brooke Smith Historic District



(5) Lindale Park

The Federal Transit Administration (FTA) determined the Lindale Park neighborhood to be eligible for listing in the NRHP as a historic district under NRHP *Criterion A* in the area of Community Planning and Development. The NRHP-eligible historic district was initially identified in the August 6, 2004, *Reconnaissance Standing Structures Survey, North Corridor, Houston, Texas* report, prepared as a technical report in conjunction with environmental studies of Houston METRO's North Corridor (commonly known as the Red Line). The reconnaissance-level survey did not delineate the full boundaries of the NRHP-eligible district but suggested it could extend to IH 45 on the west. The April 2008 *Supplemental Final Environmental Impact Statement, North Corridor Fixed Guideway in Houston, Harris County, Texas* recommended NRHP-eligible Lindale Park Historic District boundaries to extend from approximately Cavalcade Street on the south to Maury Street on the east to the Houston Belt & Terminal Railroad on the north and to Fulton Street on the west. The November 28, 2018, on-site review and informal consultation between TxDOT and THC determined that Fulton Street is the appropriate western boundary for the NRHP-eligible district. The Lindale Park Historic District does not extend into the IH 45/NHHIP APE.

(6) Irvington Park

The FTA determined the Irvington Park neighborhood to be eligible for listing in the NRHP as a historic district under NRHP *Criterion A* in the area of Community Planning and Development. The NRHP-eligible historic district was initially identified in the August 6, 2004, *Reconnaissance Standing Structures Survey, North Corridor, Houston, Texas* report, prepared as a technical report in conjunction with environmental studies of Houston METRO's North Corridor (commonly known as the Red Line). The reconnaissance-level survey did not delineate the full boundaries of the NRHP-eligible district but suggested it could extend to IH 45 on the west. The April 2008 *Supplemental Final Environmental Impact Statement, North Corridor Fixed Guideway in Houston, Harris County, Texas* recommended NRHP-eligible Irvington Park Historic District boundaries to extend to approximately Collingsworth Street on the south to Maury Street on the east to Cavalcade Street on the north and to IH 45 on the west. However, the November 28, 2018, on-site review revealed extensive non-historic-age infill development and alterations to many historic-age resources in Irvington Park between Fulton Street and IH 45. The on-site review and informal consultation between TxDOT and THC determined that Fulton Street is a more appropriate western boundary for the NRHP-eligible district. The Irvington Park Historic District does not extend into the IH 45/NHHIP APE.

(7) North Park

North Park is a small residential subdivision located along Witcher Lane and Anabel Lane, west of IH 45 just north of Tidwell Road. The subdivision is predominately composed of modest, one-story, wood-frame residences constructed in the 1950s. The November 28, 2018, on-site review revealed alterations to many of the historic-age resources in the

subdivision. North Park is a small subdivision with little relation to nearby residential and commercial development. The on-site review and informal consultation between TxDOT and THC determined that North Park is not eligible for listing in the NRHP as a historic district.

(8) Pine Grove

Pine Grove is a small residential subdivision located along Neyland Street, Oddo Street, and the north side of Westfield Street, between IH 45 and Fulton Street. Historic-age resources in the neighborhood are on Witcher Lane and Anabel Lane, west of IH 45 just north of Tidwell Road. The subdivision is predominately composed of modest, one-story, wood-frame residences constructed in the late 1940s and early 1950s. The November 28, 2018, on-site review revealed major alterations to many of the historic-age resources in the subdivision. Alterations include replacement of exterior materials, changes to fenestration, and additions to the original building footprint. Some non-historic-age infill development is also present. The on-site review and informal consultation between TxDOT and THC determined that Pine Grove is not eligible for listing in the NRHP as a historic district.

(9) Independence Heights

As part of historic resources investigations associated with the proposed NHHIP, TxDOT conducted documentation and NRHP evaluation of the Independence Heights neighborhood (see Figure 60). The investigations were conducted in response to stakeholder comments regarding previous evaluations contained in earlier HRSRs. The stakeholder comments identified a need for re-evaluation of areas in and close to the proposed NHHIP ROW for inclusion in a historic district and/or individual NRHP eligibility. Appendix F contains the full report concerning the documentation and re-evaluation of historic-age resources in the NHHIP APE in the Independence Heights neighborhood, as well as survey maps, streetscape photography, and updated survey forms.

A. Previous Independence Heights Historical Designations

There are several previously designated historic properties in the Independence Heights neighborhood; however, none of the properties are located in the NHHIP APE.

- Independence Heights Residential Historic District, listed in 1997. The historic district nomination was prepared using historic context and evaluation guidance from the *Historic and Architectural Resources of Independence Heights* Multiple Property Documentation Form (Independence Heights MPDF), prepared in 1997.
- Seven individual properties listed in 1997, also using the Independence Heights MPDF as background for context and evaluation. Some of the individually listed properties are no longer extant.

- The Carroll House at 309 East 32nd Street was designated as a City of Houston Local Protected Landmark on February 8, 2012.²⁰⁴
- The Starkweather Historic District was designated by the City of Houston on February 26, 2014. The district includes parcels facing East 31½ Street between Yale Avenue and Cortlandt Street.²⁰⁵

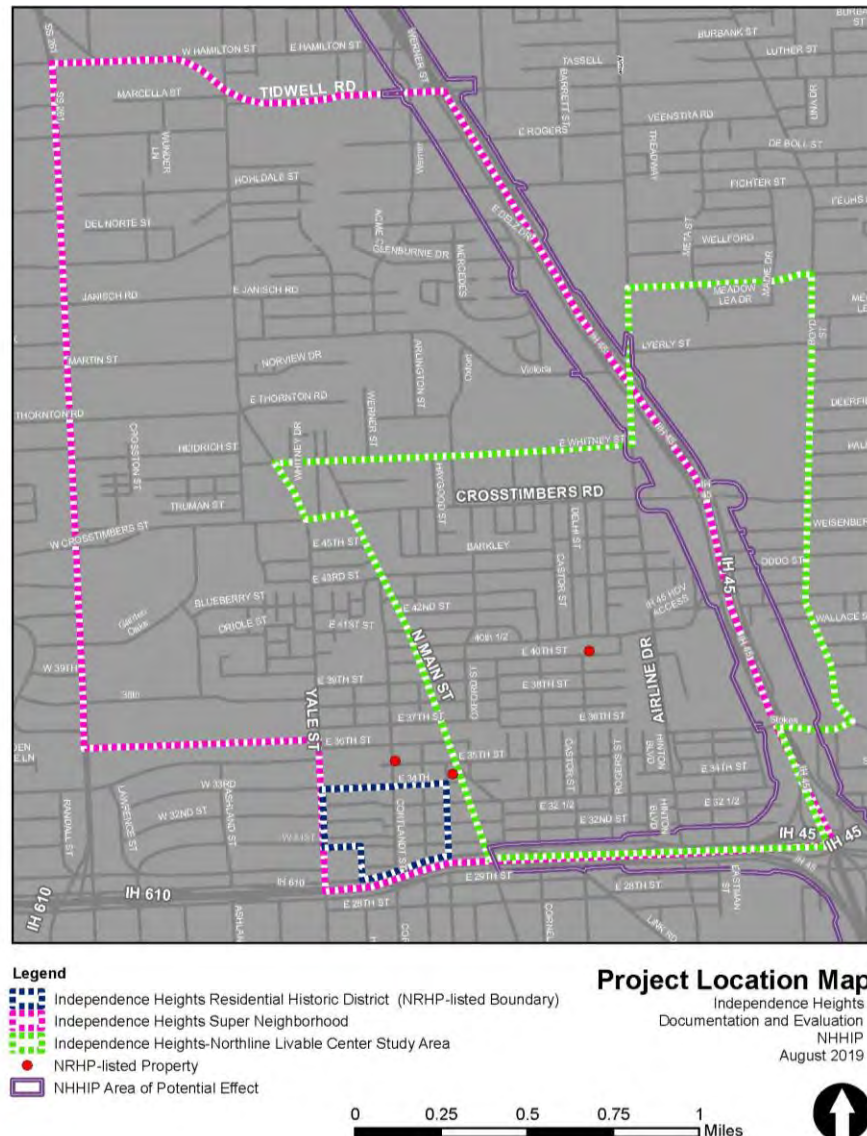


Figure 60. Project location map showing NHHIP and relation to Independence Heights.

²⁰⁴ City of Houston Planning & Development Department, "Protected Landmark Designation Report, Carroll House," December 2, 2011.

²⁰⁵ City of Houston Planning & Development Department, "Starkweather," *Historic Preservation Manual*, accessed June 18, 2019, https://www.houstontx.gov/planning/HistoricPres/HistoricPreservationManual/historic_districts/starkweather.html.

B. Methodologies

In June 2019 qualified historians resurveyed historic-age properties in the Independence Heights area located in the NHHIP APE as previously established in consultation between TxDOT and THC, using TxDOT's reconnaissance-level documentation standards. In a more expansive study area, historians completed streetscape-level photography and identified historic-age resources that retain integrity and appear to have some potential for significance. The historians photographed representative built resources in this area, with examples of historic-age and non-historic-age resources. The field survey activities also included noting overall development patterns and building conditions in these larger study areas to help delineate boundaries of any potential historic district, beyond the existing NRHP-listed Independence Heights Residential Historic District.

Resources were evaluated for NRHP eligibility and for NRHP historic district potential through application of the NRHP Criteria for Evaluation (36 CFR 60.4), using National Park Service guidance as provided in the NRHP Bulletin *How to Apply the National Register Criteria for Evaluation*. The property type descriptions, registration requirements, and evaluation methods provided in the 1997 Independence Heights MPDF were used to provide more focused guidance for evaluating surveyed resources in the NHHIP APE and for assessing historic district potential.

C. Historical Narrative

The Independence Heights neighborhood is located about 4 miles north-northwest of downtown Houston. Prior to 1910, the area was used as agricultural land on the east side of White Oak Bayou. In 1910 Alfred A. (A.A.) Wright, a banker who moved to Houston in 1908 from the upper Midwest, began purchasing land north of Houston for subdivision and development. A.A. Wright and his son Raymond established the Wright Land Company in 1910 for platting subdivisions, selling lots to African Americans, and financing the lot purchases.²⁰⁶

Wright platted five subdivisions in the area later incorporated as the City of Independence Heights: Independence Heights and Independence Heights Annex in 1910, Independence Heights School Addition in 1911, East Independence Heights in 1912, and Independence Heights Park Addition in 1914.

The Wrights marketed their Independence Heights developments in a manner that allowed for African Americans to attain land ownership in the midst of Jim Crow restrictions and widespread discrimination. The 1997 MPDF notes that "the Wright Land Company offered

²⁰⁶ "Alfred Alexander Wright (1865-1936)," *Findagrave.Com*, August 10, 2010, www.findagrave.com/memorial/56900460/alfred-alexander-wright; National Register of Historic Places, Multiple Property Documentation Form, "Historic and Architectural Resources of Independence Heights, Houston, Texas," E-4.

[African Americans] a reasonable process and financed almost all of the sales at a time when it was almost impossible for blacks to obtain conventional loans. The interest was lower than going commercial rates and they dealt fairly with people.”²⁰⁷ A 1913 title company map shows the nascent Independence Heights community developing in and near the Wright subdivisions (see Figure 61).

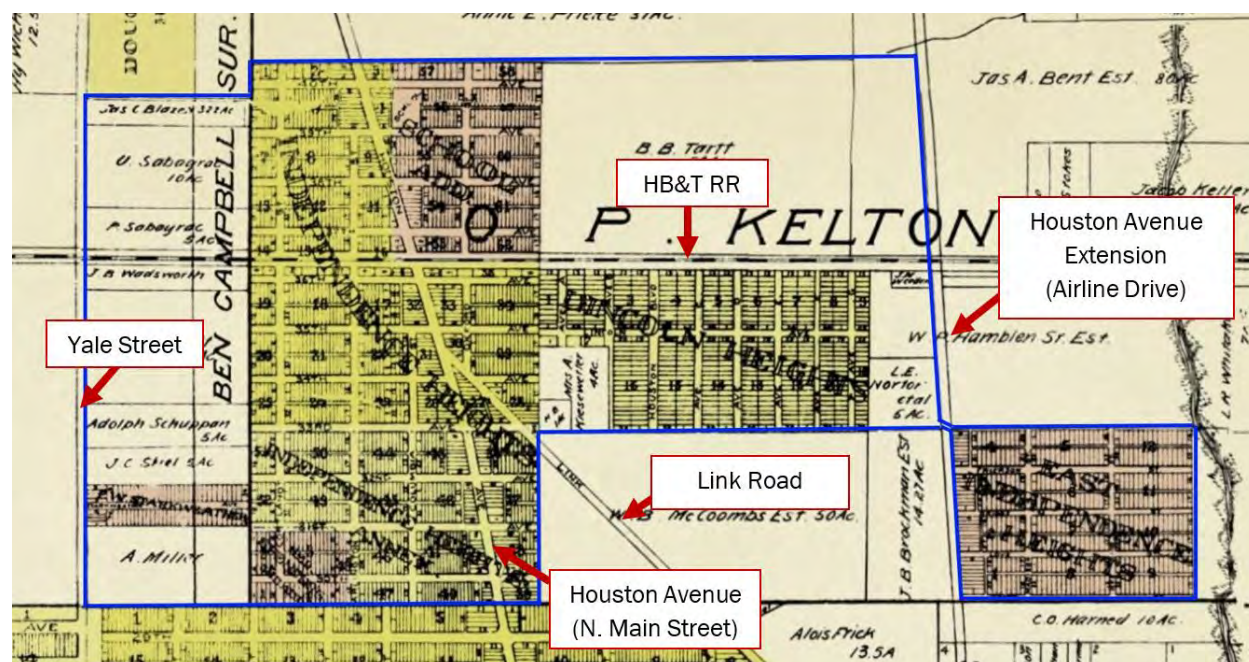


Figure 61. Portion of 1913 Guaranty Title Company map of Houston, showing the Independence Heights subdivisions and nearby parcels in their early stages of development.

Other subdivisions including Lincoln Heights, the McComb Addition, Air Line Heights, and Bella Vista were laid out between 1912 and 1926, filling the gaps surrounding the Wright developments. A map showing the location of these subdivisions in relation to the City of Independence Heights boundary is shown in Figure 62. The chance for owning land and building a house in a suburban environment was attractive to African American residents living in the Fourth and Fifth Wards and other areas close to downtown.

Within just a few years of its initial development, Independence Heights had become a thriving community, with several churches, businesses, a school, civic and fraternal organizations, and about 600 residents by 1915. Residents of Independence Heights voted for incorporation in January 1915, making it the first incorporated city in Texas with all black

²⁰⁷ National Register of Historic Places, Multiple Property Documentation Form, “Historic and Architectural Resources of Independence Heights, Houston, Texas,” E-6; Kimberley McCullough, “Independence Heights, Texas,” *Touchstone: Walter Prescott Webb Historical Society* 22 (2003): 55.

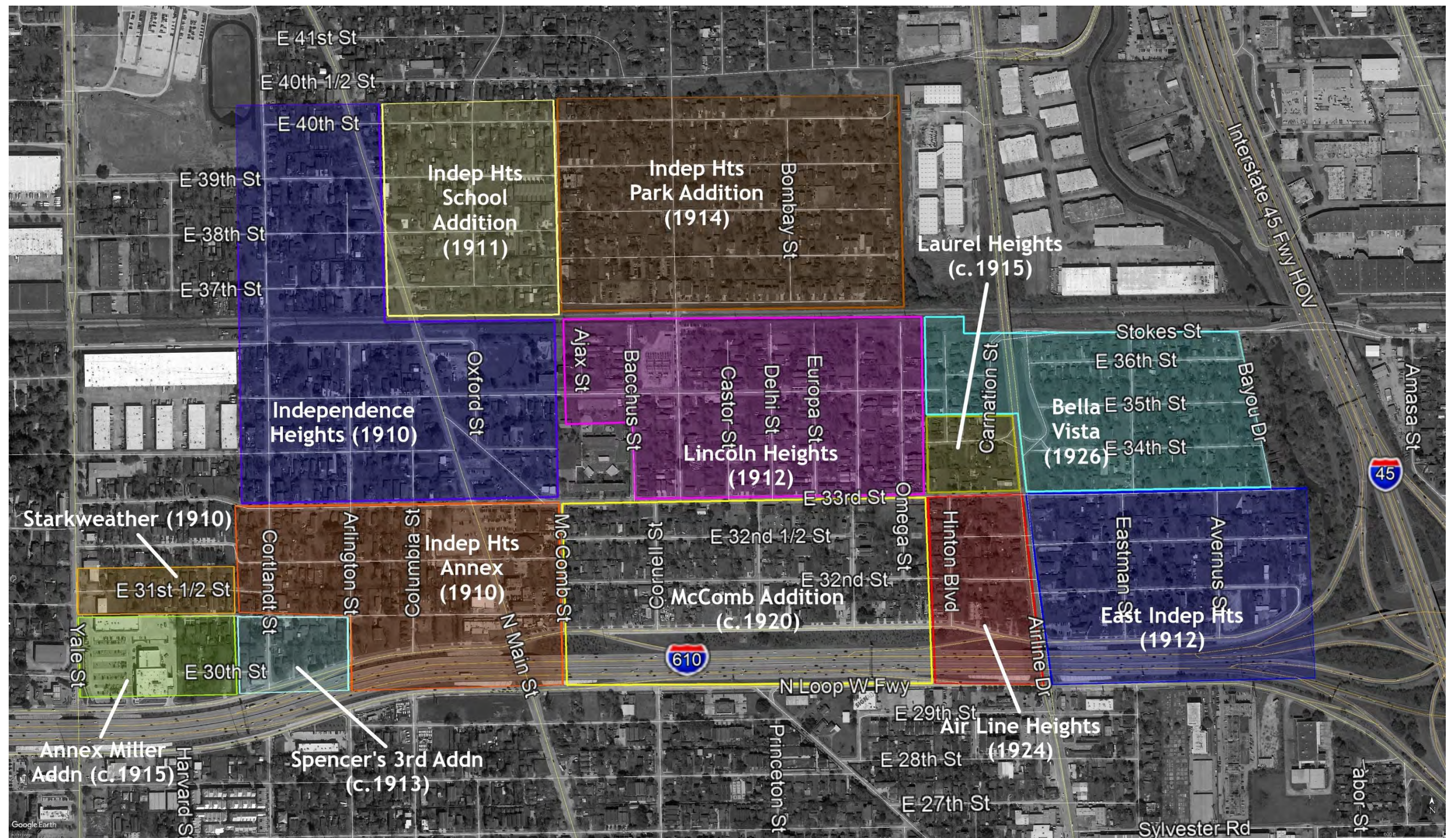


Figure 62. Location and plat date of early-twentieth-century subdivisions in and near the NHHIP APE in the Independence Heights neighborhood.

officials.²⁰⁸ The new City of Independence Heights took in a conglomeration of several additions and a few remaining unsubdivided rural tracts. The area later subdivided as the McComb Addition and Air Line Heights were not included within the new city's boundaries.

The City of Independence Heights continued to grow after incorporation. In 1920 the federal census counted 720 residents, reflecting additional residential construction in the city. Gradually, remaining tracts were subdivided into residential lots. One example is the Starkweather Addition in the southwest portion of the City of Independence Heights. The Starkweather Addition was initially subdivided in 1910 but was further developed by the Edgar Phelps Real Estate Company in the mid-1920s. Phelps sold lots on 31½ Street between Yale Street and Cortlandt Street and initially marketed the lots to African Americans who wanted to live in the City of Independence Heights (see Figures 61 and 62 for location of Starkweather Addition).²⁰⁹

In November 1928 the city's residents voted for annexation by Houston, as a way to improve infrastructure including better streets, water supply, transit access, and mail delivery. The McComb Addition, which had been platted after Independence Heights' incorporation, was already a part of the city of Houston. The formal annexation took place on December 29, 1929. Independence Heights was one of many suburbs annexed by Houston in the 1920s.

Infill development continued in Independence Heights after the 1929 annexation, with numerous businesses and churches established in the 1930s and 1940s. Development patterns similar to the previous decades continued, with most commercial and community-related uses along present-day North Main Street and Columbia Street and nearby cross-streets. During the 1930s, Airline Drive was designated as US 75, the primary route north and northwest from Houston. This designation attracted scattered commercial development (no longer extant) but may have inhibited residential development of the East Independence Heights addition, which was separated from the remainder of the Independence Heights neighborhood by Airline Drive.

An aerial photograph taken in 1943-1944 provides a detailed view of the overall layout of Independence Heights at the time (see Figure 63).

²⁰⁸ "Independence Heights Will Be Incorporated," *Houston Post*, January 17, 1915; National Register of Historic Places, Multiple Property Documentation Form, "Historic and Architectural Resources of Independence Heights, Houston, Texas," E-6.

²⁰⁹ City of Houston Planning & Development Department, "Starkweather."



Figure 63. 1943-1944 aerial photograph showing Independence Heights and vicinity. Most development is focused west of Airline Drive south of the HB&T railroad line. Former incorporated limits of the City of Independence Heights are outlined in blue; McComb Addition outlined in yellow and Air Line Heights outlined in red.

The 1946 USGS Houston Heights quadrangle map also shows overall growth trends, as well as the relationship of the East Independence Heights addition to adjacent areas (see Figure 64). The 1946 map depicts much of the former City of Independence Heights and the adjacent McComb Addition as urbanized south of the HB&T Railroad. The portion of the Independence Heights neighborhood between Airline Drive and White Oak Bayou, representing the former East Independence Heights subdivision, is still shown as having unimproved streets with 47 buildings scattered between 33rd Street to the north and a drainage ditch near 29th Street to the south. Through the mid-twentieth century, the Independence Heights neighborhood continued as a predominately African American community with a range of businesses, several churches, and elementary and secondary schools serving the area's residents. Nearly all of these early and mid-twentieth-century buildings have been removed and in some cases have been replaced with new buildings, compromising the neighborhood's overall integrity of association, setting, and feeling.

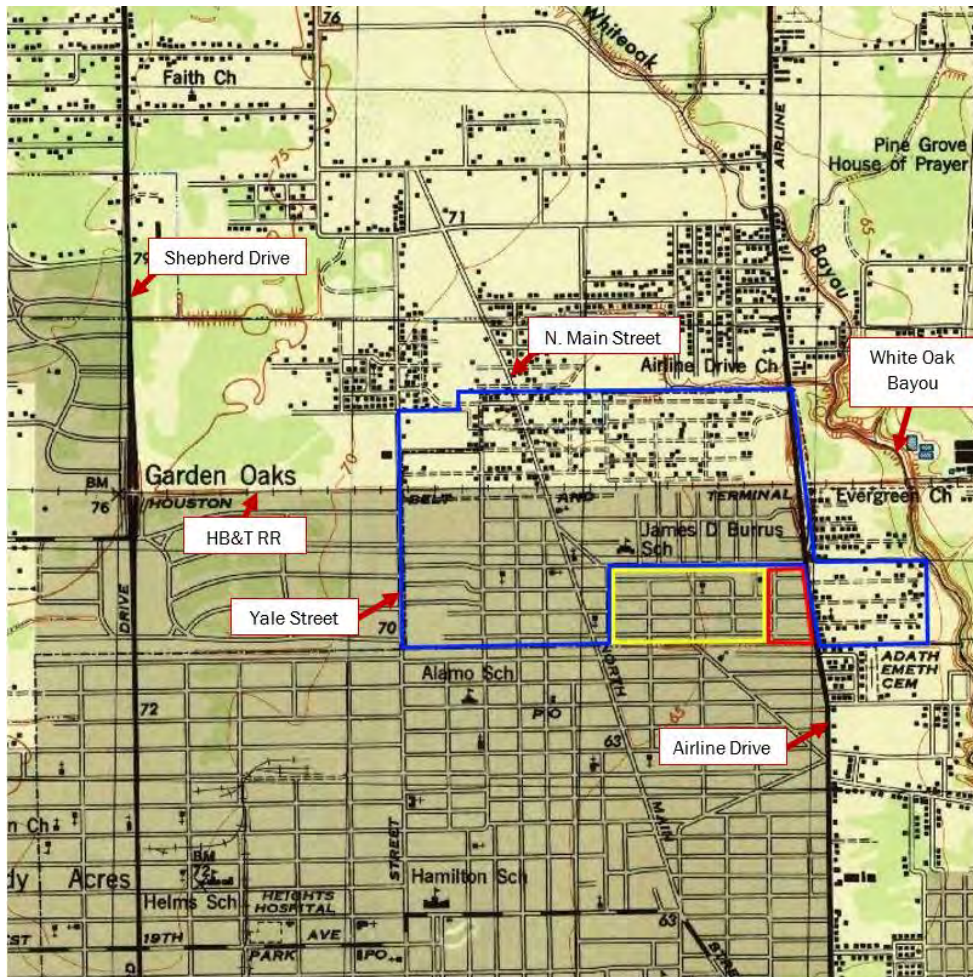


Figure 64. 1946 USGS Houston Heights quadrangle, showing continuing suburban growth in and near the Independence Heights neighborhood. Former incorporated limits of the City of Independence Heights outlined in blue; McComb Addition outlined in yellow.

In the 1950s and 1960s, suburban growth continued northward, with new subdivisions to Crosstimbers Road and beyond. Freeway construction in the early 1960s had major impacts on Independence Heights as well as many other inner-ring neighborhoods. Houston thoroughfare plans had called for a “North Loop” as early as 1942. The 1942 plan called for the North Loop to be a widened street or parkway along existing 25th Street. Following World War II, thoroughfare plans were revised to reflect the trend of constructing wide limited-access freeways to carry traffic through metropolitan areas. A 1947 Texas Highway Department planning map and subsequent maps show the North Loop in essentially the same configuration as today’s IH 610 in the Independence Heights area.²¹⁰ Figure 71 depicts the profound impacts from this freeway construction. IH 45 was placed along White Oak Bayou, while the IH 610 alignment followed a path through residential development

²¹⁰ Rick Mitchell and Emily Pettis, *Historical Resources Survey Report Update, North Houston Highway Improvement Project* (prepared for the Texas Department of Transportation, March 2019), 23–32.

between Independence Heights to the north and Sunset Heights to the south. The construction of the highway resulted in acquisition of about 67 acres from Independence Heights Annex, McComb Addition, Air Line Heights, and East Independence Heights, with removal of dozens of residences in the community (see Figure 65). The new freeways also placed both a physical and symbolic barrier around two sides of the Independence Heights community.



Figure 65. The 1956 Zingery plat locator map shows the proposed location of IH 610 (east-west at bottom of image) and IH 45 (north-south at right of image) in Independence Heights.

Two recent trends have had major implications for Independence Heights and its current appearance. Urban redevelopment pressures began to encroach into the area in recent years. New infill construction is now scattered throughout the neighborhood, often two-story or three-story condominiums. Redevelopment increases pressure for removal of historic-age houses even if no new construction is imminent, to facilitate land sales and future construction. Severe flooding during Hurricane Harvey in 2017 also affected the community, with many houses damaged and requiring repair after the disaster, particularly in areas closer to the bayou. In some cases, owners replace historic-age buildings with new residences or drastically rehabilitate the older buildings to allow for continued use. In other cases, owners have removed damaged houses and lots remain vacant awaiting future development. The neighborhood partners with low-income housing specialists, receiving grant funding in an effort to retain longtime residents through replacement or reconstruction of houses. Many of these efforts result in more compatible infill than the larger

condominiums, with one-story houses that better reflect the neighborhood's historic building forms. Nonetheless, the changes from both speculative redevelopment and replacement or rehabilitation of flood-damaged houses continue to rapidly alter the appearance of Independence Heights.

D. Findings

i. Study Area Observations

The study area is characterized by a mix of built resources dating from the 1910s to the present. Most historic-age buildings appear to date from the 1920s to the 1960s, with a substantial amount of non-historic-age infill also present. Residential buildings are the predominant building type. Field observations confirm information gathered from historic maps and aerials regarding slightly later and more scattered construction in East Independence Heights than in adjacent additions. Some non-historic-age commercial buildings are located along North Loop (IH 610 frontage road), with a mix of historic-age and non-historic-age commercial buildings scattered along Airline Drive and North Main Street. The newly constructed Mount Olive Missionary Baptist Church (MBC) is within the project's APE at the northeast corner of Airline Drive and North Loop.

ii. Historic District Potential

A primary objective of the current historic resource investigations is to determine the potential for an NRHP-eligible historic district within, or extending into, the NHHIP APE. For purposes of the NRHP, "a district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."²¹¹

The historical significance of Independence Heights as a whole is not in question. Instead, the primary issue in determining historic district potential in the NHHIP APE is centered on the ability of these areas to reflect and convey that historical significance, which is dependent on possessing a direct association to the neighborhood's history as well as retaining the overall historic setting and feeling of the neighborhood. In turn, the overall integrity of setting and feeling is derived from retaining the essential physical qualities related to the design, materials, and workmanship of the buildings and structures within the potential district.

Based on an analysis of historic maps and aerial images, East Independence Heights developed more slowly and in a more scattered pattern than other areas of Independence Heights. While historic-age buildings are scattered throughout the addition, few extant

²¹¹ National Park Service, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin, 1990, 5, www.nps.gov/Nr/publications/bulletins/nrb15/.

buildings date from the community's time as a separate municipality. A similar pattern holds for 1930s and 1940s-era buildings, as less development occurred east of Airline Drive until after World War II.

The NRHP-listed Independence Heights Residential Historic District lies outside the NHHIP APE. Based on field survey as well as a comparison with historic maps and aerials, the areas in and near the NHHIP APE do not retain sufficient integrity to justify an expansion of the Independence Heights Residential Historic District boundaries or delineation of a separate historic district. There are no individual NRHP-listed or NRHP-eligible properties in the APE.

- Substantial non-historic-age infill development is scattered through the APE and the adjacent study area. Numerous examples of new one-story residences to some extent mimic the historic residential forms of Independence Heights. These houses often feature front gable rooflines, front porches, pier-and-beam foundation, and similar form and massing as historic residences of the area. While admirable for their compatibility, they nonetheless represent non-historic infill. Many examples of two- and three-story condominiums are highly incompatible in terms of materials, form, massing, and overall character.
- Many remaining historic-age resources display substantial exterior alterations, often with four or more architectural elements removed or altered. Some alterations appear to date from the 1960s through 1980s. These older alterations include application of cement-asbestos or vinyl siding, installation of aluminum-frame windows or non-historic doors, and porch enclosure. Many houses display newer alterations, perhaps from repairs and rehabilitations following Hurricane Harvey or other recent flood events. The new alterations often include application of fiber-cement siding, installation of aluminum or vinyl windows, non-historic doors, publicly visible additions, and full porch replacement with non-historic features.
- In some cases, historic-age resources appear to have been removed, resulting in numerous vacant lots. Vacant lots are scattered through the area, with particular frequency in areas east of Avernus Street. The presence of vacant lots in place of historic-age resources reduces the number of potentially contributing buildings and detracts from the historic setting and character of the area.

Even when applying the integrity guidance provided in the Independence Heights MPDF and using a relatively expansive potential period of significance extending into the 1960s, field observations indicate that less than 50 percent of the extant resources in the NHHIP APE and adjacent study area would contribute to a district (see Figure 66). The demolition of historic buildings, alterations to remaining buildings, and infill development have resulted in considerable change to the overall character of the community.



Figure 66. Map showing status of individual property parcels in NHHIP APE.

The NHHIP APE and adjacent study area possess historical significance through shared associations with Independence Heights as a separate city built, organized, and governed by African Americans, and as a distinct and vibrant African-American community through the mid- and late twentieth century. However, these areas no longer retain sufficient integrity to convey this significance. Therefore, no NRHP-eligible historic district appears to be within, or extend into, the NHHIP APE.

iii. NRHP Eligibility for Individual Properties

Another objective of the current historic resource investigation is to determine if individual properties in the NHHIP APE are individually eligible for listing in the NRHP. As previously noted, a property must possess significance under one or more of the NRHP Criteria for Evaluation and must retain historic integrity.

The Independence Heights MPDF states that primary historical significance under NRHP *Criteria A and B* derives from a direct association with Independence Heights during its period of incorporation between 1915 and 1929, through construction of a building during that period, and/or associations with an individual or family living in Independence Heights during that period. Other evaluative factors are relative rarity of property type and “reflection of the range and scope of human activity in an incorporated municipality of the early twentieth century.” Properties with buildings constructed after 1929 lack direct association with the unique significance of the City of Independence Heights as the state’s first city to be incorporated and fully governed by African Americans, many of whom themselves constructed their own houses and business establishments. Instead, post-1929 development in Independence Heights is associated with the neighborhood serving as one of several vibrant African American communities in the City of Houston and surrounding Harris County. Significance in the area of ethnic heritage for post-1929 properties must therefore be tied to the larger story of African American heritage and culture in Houston.

Significance of individual post-1929 properties in the Independence Heights neighborhood under NRHP *Criterion C* follows a similar reasoning. Properties dating from between 1915 and 1929 may have certain design or construction characteristics reflective of a certain building form or style favored in the City of Independence Heights or reflective of the techniques of a specific craftsman or builder who lived in or worked in the City of Independence Heights. Post-1929 properties lack this association. To be considered significant under NRHP *Criterion C*, an individual property must “embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value.”

Based on the June 2019 field survey, general research on the Independence Heights neighborhood, and property-specific research, there are no properties in the NHHIP APE that are individually eligible for listing in the NRHP. Some buildings in the NHHIP APE would be

considered contributing resources to a historic district; that is, they may lack individual distinction but contribute to overall historic character. However, to be individually eligible for NRHP listing, a property must demonstrate its significance on its own merits and must possess historic integrity.

In addition to demonstrating significance, a property must possess historic integrity to be eligible for the NRHP. The Independence Heights MPDF recognized the challenges in evaluating integrity of African American historic properties. Registration requirements developed under the Independence Heights MPDF note that “domestic buildings in Independence Heights often have changes and alterations that reflect income levels and cultural preferences. These should not be considered as a reason for denial of listing if other factors are present and support registration.” In addition, “domestic buildings may be eligible for listing if no more than three architectural elements are removed or altered. Typical changes to consider in this evaluation include window or door replacements with inappropriate materials, extensive porch alterations or enclosures, or application of synthetic siding outside the period of significance.”²¹² However, even given these criteria, many buildings in the NHHIP APE exhibit alterations that compromise integrity of design, materials, workmanship, feeling, and, in some cases, association.

In some cases, buildings have been moved to their current location after the period of significance, resulting in a loss of integrity of location. Some buildings now in the NHHIP APE or in other nearby areas of the Independence Heights neighborhood were likely moved to their current location due to the construction of IH 610 and IH 45 in the late 1950s and early 1960s, while others appear to have been moved later in the 1960s or 1970s.

Based on the lack of individual significance and/or loss of historic integrity, there are no properties in the NHHIP APE in the Independence Heights neighborhood that are individually eligible for listing in the NRHP. Survey forms with information on specific properties are in Appendix C of this report.

D. Individual Resource Evaluations

Resource 007: Sam Houston Park (1000-1100 Bagby Street) and component resources

Sam Houston Park is designated by the City of Houston as a Protected Landmark and contains four Recorded Texas Historic Landmark (RTHL) buildings, one of which (the Kellum-Noble House) is also listed in the NRHP. The Kellum-Noble House was identified and documented as Resource 007 in the 2015 Report for Historical Studies Survey (HRSR). However, Sam Houston Park as a whole was not evaluated, nor were other built or

²¹² National Register of Historic Places, Multiple Property Documentation Form, “Historic and Architectural Resources of Independence Heights, Houston, Texas,” F-16.

landscape resources within the park. In November 2018 the THC requested evaluation of the park and its component resources. Therefore, Sam Houston Park was designated as Resource 007, Kellum-Noble House was redesignated as 007A, other resources were designated as 007 B-D.

TxDOT and THC historians examined Sam Houston Park and its component resources during a site visit on January 24, 2019. On-site review and informal consultation between TxDOT and the THC determined that the NRHP-listed and RTHL-designated Kellum-Noble House (Resource 007A) and the park's other RTHL buildings, the Nichols-Rice-Cherry House (Resource 007B), San Felipe Cottage (Resource 007C), and the Pillot House (Resource 007D), warrant individual NRHP evaluation (see Figure 67). However, the park's other historic-age resources were determined not individually eligible for listing in the NRHP and warrant evaluation only as component resources of Sam Houston Park. Provided below is an evaluation of the overall park (Resource 007) followed by individual evaluations for Resources 007A-D.

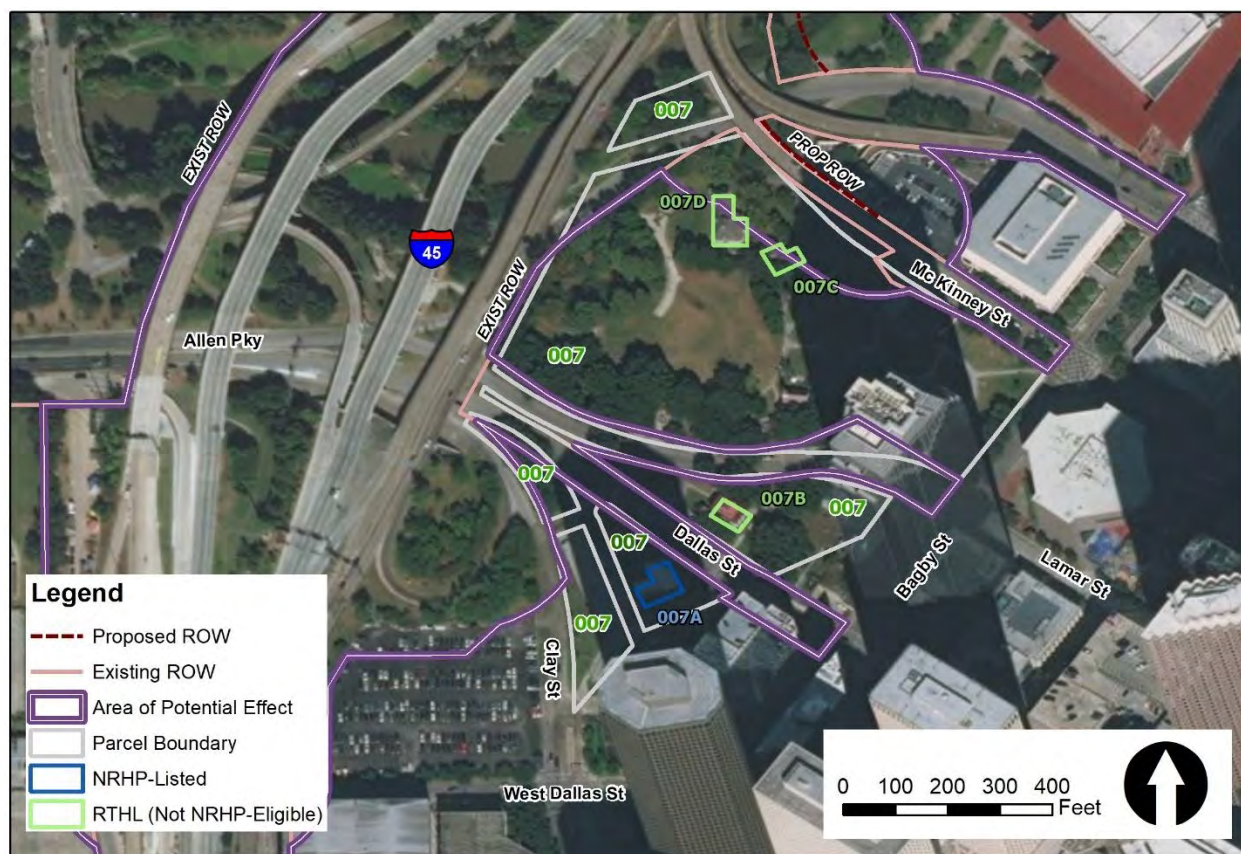


Figure 67. Aerial image of Sam Houston Park indicating locations of Resources 007A-D and NRHP boundary of Resource 007A, the Kellum-Noble House.

Founded in 1899, Sam Houston Park is the oldest municipal park in the City of Houston. The present-day park encompasses nearly 21 acres on Buffalo Bayou east of IH 45 and west

of Bagby Street. Most of the park is nestled between the Clay Street and McKinney Street IH 45 exit ramps with portions of the property divided by Lamar Street and Dallas Street. In 1899 the City of Houston purchased the Kellum-Noble House (Resource 985A) and adjoining acreage to designate as the first city park. City Engineer John W. Maxey developed a Victorian Gardenesque landscape that included geometric plantings, curvilinear drives and walking paths, a centrally-located bandstand, several small ponds, a water mill, and ornate wooden bridges. In the early 1900s several commemorative features were added to the park, which were later removed or relocated. Two commemorative features from this period that remain on park grounds include the 1908 Spirit of the Confederacy bronze statue designed by Louis Amateis and a 1908 stone marker commemorating Alexander Hodge placed by the Daughters of the American Revolution. Both features were later relocated within the park. The Spirit of the Confederacy statue originally stood on a natural stone base near Walker Street but was later moved to a location at the west end of the park near an artificial pond and placed on a new granite block base. The Alexander Hodge memorial marker originally stood at the center of the park but was later relocated south of Lamar Street.²¹³

Several changes to the park's original layout occurred in the mid-twentieth century. In 1924 the city hired the Kansas City-based firm Hare & Hare to develop city planning documents including, zoning, transportation, and beautification plans. Hare & Hare's plans were never fully realized, but some of their proposals for Sam Houston Park were later implemented. Changes included simplifying the park's curvilinear drives to better accommodate automobile traffic. The park's roads were again realigned and widened to connect Lamar Street and Dallas Street to Allen Parkway by the early 1950s.²¹⁴ Freeway expansion in the mid-1950s through the early 1960s resulted in additional changes to the character of the park and its surroundings. The northbound IH 45 frontage road encroached on the park's west side and introduced massive concrete road structures to the park's bayou setting.²¹⁵

In 1954, the City of Houston's announcement to demolish the Kellum-Noble House sparked a movement that resulted in the establishment of the Harris County Heritage and

²¹³ "Protected Landmark Designation Report for Sam Houston Park," 2007, 1–5; "Sam Houston Park: Landscape Information," *The Cultural Landscape Foundation Org.*, 2018, <https://tclf.org/landscapes/sam-houston-park>.

²¹⁴ "Protected Landmark Designation Report for Sam Houston Park," 8–10; U.S. Geological Survey, "Settegast, Texas," 1:31680 (Washington DC: U.S. Department of the Interior, Geological Survey, 1922); U.S. Geological Survey, "Settegast, Texas," 1:31680 (Washington DC: U.S. Department of the Interior, Geological Survey, 1946); "Historical Imagery: Houston," *Google Earth Pro*, 1944 and 1953, accessed January 25, 2019.

²¹⁵ "Protected Landmark Designation Report for Sam Houston Park," 2007, 8–10; "Historical Imagery: Houston," *Google Earth Pro*, 1944, 1953, 1978, accessed January 25, 2019; "Historic Aerial Viewer: Houston," *Historic Aerials by NETROnline*, 1953, 1957, 1962, 1964, 1966, 1973, <https://www.historicaerials.com/viewer>.

Conservation Society (now the Heritage Society). By 1956 the City Council designated Sam Houston Park an “outdoor historic buildings museum” to be maintained by the Heritage Society. The society acquired its first resource, the Nichols-Rice-Cherry House (Resource 007B), in 1959 and continued to add to the collection in subsequent years. In 1968 the Heritage Society constructed an artificial city block along Bagby Street called “Long Row” that included faux nineteenth-century storefronts for interpretive purposes. The society later converted the building for use as a meeting area and gift shop.²¹⁶

A review of historic aerial imagery shows that the layout of Sam Houston Park was reconfigured several times since 1960. Between 1964 and 1966, an entrance on Dallas Street led to a semi-circular walking path at the center of the park that surrounded a centrally-located bandstand. The circular path connected to radial walkways that led to the park’s historic buildings. As new buildings were added in subsequent years, new walkways were connected to the center path. In addition, a small lake was constructed at the park’s west side between 1966 and 1973. In the 1980s the park was expanded to include a lot on its east side that previously held the Houston Fire Alarm Building and a parking lot. The Heritage Society museum adjoining “Long Row” appears to have been constructed during this period. The new area included walking paths that led to entrances on McKinney Street and Lamar Street. The latest major reconfiguration occurred in 2013 and included the addition of a second semi-circular walking path at the park’s east section, additional paths connected to newly acquired buildings, and the relocation of the bandstand.²¹⁷

Presently the park contains four buildings designated as Recorded Texas Historic Landmarks (RTHLs), including: the Kellum-Noble House (Resource 007A, also NRHP-listed); Nichols-Rice-Cherry House (Resource 007B); San Felipe Cottage (Resource 007C); and Pillot House (Resource 007D). In addition to these RTHLs, the park contains other historic-age buildings including:

- Old Place – A wood-frame cabin, built c.1823 on the banks of Clear Creek. It was moved to Sam Houston Park in 1973.
- Fourth Ward Cottage – A c.1850 cottage originally located on Robin Street in Houston’s Fourth Ward neighborhood. It was moved to Sam Houston Park in 2002.
- St. John Church – An 1891 Gothic Revival church built in the Spring Branch farming community and relocated to Sam Houston Park in 1968.

²¹⁶ “Protected Landmark Designation Report for Sam Houston Park,” 10–11.

²¹⁷ “Historical Imagery: Houston,” *Google Earth Pro*, 1978, 1989, 1995, 2012, 2013, 2017, accessed January 25, 2019; “Historic Aerial Viewer: Houston,” *Historic Aerials by NETROnline*, 1953, 1957, 1962, 1964, 1966, 1973, 1981, 1995, <https://www.historicaerials.com/viewer>.

- Staiti House – The 1905 home of oilman Henry Staiti and originally located on Westmoreland Street. It was moved to Sam Houston Park in 1986.
- The Yates House – The c.1870 home of African-American minister Rev. Jack “Henry” Yates originally located in Freedman’s Town (Fourth Ward). It was moved to Sam Houston Park in 1994.
- Baker Family Playhouse – An 1893 Greek Revival playhouse moved to Sam Houston Park in 2010.
- Bandstand – Constructed in the mid-1960s to replicate the original 1900 bandstand. Relocated within the park in 2013.
- Heritage Society Tea Room – Constructed in 1968 as “Long Row”, an interpretive structure designed to resemble a nineteenth century city block. Later modified and converted to a meeting area and gift shop. The building is connected by an overhang to a c.1985 museum gallery building to the northeast.

Evaluation

Sam Houston Park was evaluated as both a historic site, which the NRHP defines as “the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural or archaeological value regardless of the value of any existing structure” and a historic district, which is defined as a “significant concentration, linkage or continuity of sites, buildings, structures, or object united historically or aesthetically by plan or physical development.”²¹⁸

As Houston’s first city park, Sam Houston Park is associated with the city’s earliest efforts to establish recreational areas for its residents. However, few of the park’s original landscape features (described above) remain from this period and the park has undergone numerous changes to setting due to urban development. Due to its loss of character, numerous reconfigurations, and non-historic additions, the park has lost integrity of setting, feeling, design, workmanship, and materials, and therefore no longer conveys its association with early-twentieth-century recreational values or community planning. The park is also associated with Houston’s first major historic preservation movement and the establishment of the Heritage Society in the mid-1950s. Although it is associated with this movement, its

²¹⁸ Timothy Keller and Genevieve Keller, *How to Evaluate and Nominate Designed Historic Landscapes*, National Register Bulletin 18 (National Park Service, U.S. Department of the Interior, n.d.), 10.

numerous additions and the relocation of resources within the park in recent years diminish its integrity of setting, feeling, and association related to this period. Therefore, due to lack of integrity the park is not eligible under *Criterion A*.

Research did not reveal a direct association between the park and persons significant in local, regional, or state history and as such, the park does not have significance and is not eligible under *Criterion B*.

Sam Houston Park was also evaluated using guidance on the evaluation of designed historic landscapes, as outlined in the NRHP Bulletin *How to Evaluate and Nominate Historic Designed Landscapes*.²¹⁹ The park was established in 1899 and originally included an elaborate Victorian Gardenesque landscape. However, the park's curvilinear drives and walking paths were later altered or removed. These changes were part of city planning efforts developed by Hare & Hare in 1924; however, a review of historic maps and aerial imagery from 1922 to the present indicates that few if any of Hare & Hare's plans are reflected in the current landscape. Urban development in the mid-twentieth century, including highway development and road widening, resulted in the loss of characteristic features from its early design. Due to these changes and the addition and relocation of numerous buildings, structures, and objects and several changes in the park's overall landscape design since 1975, Sam Houston Park does not reflect a historic designed landscape and thus is not eligible for the NRHP under *Criterion C*.

In addition to the buildings listed above the park has acquired commemorative sculptures and artworks of throughout its history. With the exception of the Kellum-Noble House, none of the historic-age buildings, structures, or objects within the park are recommended individually eligible for the NRHP. According the City of Houston's Protected Historic Landmark designation report for Sam Houston Park, all historic structures and buildings on the property, with the exception of the Kellum-Noble House (007A), have been relocated from their original sites or moved within the park during its history. Although the Nichols-Rice-Cherry House (007B), San Felipe Cottage (007C), and Pillot House (007D) are designated as RTHLs and other historic-age resources may possess significance, none meet the requirements of *Criteria Consideration B: Moved Properties*, which states that moved properties must retain an "orientation, setting, and general environment that are comparable to those of the historic location and that are compatible with the property's significance." Together, these properties represent an "artificially created grouping" and have not achieved significance since the time of their assemblage. Therefore, these

²¹⁹ Keller and Keller, *How to Evaluate and Nominate Designed Historic Landscapes*.

resources do not represent an eligible historic district under the requirements of *Criteria Consideration B*.²²⁰

A. Resource 007A: Kellum-Noble House

Constructed in 1847, the two-story brick Kellum-Noble House reflects modest Greek Revival details including square columns, a full-height porch, and a simple pedimented door surround. Nathaniel Kellum had the house constructed with bricks from his nearby kiln, and sold the property to Abram Noble in 1851. The house remained in the Noble family until it was purchased by the city in 1899 as part of the first city park. The threat of demolition following a fire in 1954 led to the formation of the Harris County Historical Society, which restored the building and opened it as a historic house museum.²²¹ A second restoration was completed in 2014.²²²

The Kellum-Noble House became an RTHL in 1967 and a Houston Historic Preservation Landmark in 1989. The house was listed on the National Register of Historic Places (NRHP) for its significance under *Criterion A* in the area of Education and *Criterion C* in the area of Architecture in 1975.²²³ The building retains integrity of location, design, materials, workmanship, feeling, and association; integrity of setting is slightly diminished by adjacent twentieth and twenty-first-century highway and high-rise development. However, these changes to the setting do not diminish the property's ability to convey its significance. The NRHP listing does not include the adjacent reconstructed Kellum-Noble Cottage or land beyond the footprint of the house. No changes to the boundaries of the NRHP listing are recommended.

B. Resource 007B: Nichols-Rice-Cherry House

The Nichols-Rice-Cherry House was built in 1850 in the 300 block of San Jacinto Street on the courthouse square in Houston. The house is an excellent example of the Greek Revival style with full-facade porch. Ebenezer Nichols, business partner to William Marsh Rice, was the first owner, and Rice later purchased the house. Rice acquired his fortune through real estate, lumber, cotton, the railroad, and other investments and later founded Rice Institute

²²⁰ National Park Service, *How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: Department of the Interior, 1997), 29–31.

²²¹ “Historic Marker Application: Kellum Noble House,” *The Portal to Texas History*, 2019, 3, <https://texashistory.unt.edu/ark:/67531/metapth477774/m1/?q=kellum>.

²²² Roka, “Kellum-Noble House,” *Solid Rock Constructors: Home/Projects*, May 27, 2014, <https://www.solidrockconstructors.com/aliquam-bibendum-justo-semper/dior-garment-styles-boutique/>.

²²³ National Register of Historic Places, Kellum-Noble House, Houston, Harris County, Texas, National Register #75001989; “Historic Marker Application: Kellum Noble House”; City of Houston Planning & Development Department, Archaeological & Historical Commission and City of Houston Planning & Development Department, Archaeological & Historical Commission, “Landmark Designation Report for the Kellum-Noble House,” 1998.

(now Rice University).²²⁴ Due to various developments downtown, the building was moved several times: in 1873 it was moved to the corner of San Jacinto Street and Franklin Avenue (about two blocks distance) and it was later moved to 608 Fargo Street. The last resident was artist Emma Richardson Cherry, who had a studio in the house. Cherry is credited as Houston's first modern artist and founded the Houston Public Art School where she taught for over 60 years.²²⁵ By the 1930s additions had been constructed on the side and rear elevations and a gable roof had been constructed over the original roof, as evidenced by Historic American Building Survey drawings recorded in 1934. In 1959 the Nichols-Rice-Cherry House became the first historic building to be moved to Sam Houston Park. The house was restored, additions removed, and the roofline returned to its original configuration.²²⁶

The Nichols-Rice-Cherry House (Marker No. 10630) was designated as an RTHL in 1967. The house is not listed as a locally designated Historic Preservation Landmark on the Houston Planning and Development page of the city website, although Sam Houston Park is noted as a protected landmark. This building was evaluated through application of *Criteria Consideration B* for evaluation of moved properties.

Research did not reveal a direct association with events, patterns, or trends important to local, state, or national history. Accordingly, this house does not have significance under *Criterion A*. While this house has an association with merchant and philanthropist William Marsh Rice who founded Rice University and made contributions to the commercial development of downtown Houston, other properties where he conducted business may better reflect his professional achievements. Likewise, the house has an association with artist Emma Richardson Cherry, who made important contributions to Houston's cultural development. It appears that this is the last surviving property associated with the part of her life for which Cherry is significant. As well, the Nichols-Rice-Cherry House is an excellent example of a Greek Revival residence. However, applying *Criteria Consideration B*, a moved property "must still have an orientation, setting, and general environment that are

²²⁴ Forest Muir, "Rice, William Marsh," *Texas State Historical Association*, February 24, 2019, <https://tshaonline.org/handbook/online/articles/fri03>.

²²⁵ Kelly Montana, "Emma Richardson Cherry: Houston's First Modern Artist at the Houston Public Library," *Texas State Historical Association*, April 27, 2013, <https://glasstire.com/2013/04/27/emma-richardson-cherry-houstons-first-modern-artist-at-the-houston-public-library/>.

²²⁶ "1850 Nichols-Rice-Cherry House," *The Heritage Society at Sam Houston Park: Historic Buildings*, 2018, <https://www.heritatesociety.org/nichols-rice-cherry-house/>; Virginia McAlester and Lee McAlester, *A Field Guide to American Houses* (New York: Knopf, 2003), 179; "HABS TEX,101-HOUT, 1-Nichols-Rice-Cherry House, Sam Houston Park (Moved from San Jacinto Street), Houston, Harris County, TX," *Library of Congress*, 1934, <https://www.loc.gov/resource/hhh.tx0389.sheet/?sp=1>; Marvin Eickenreht, "Photographs, Written Historical and Descriptive Data, District No. 33" (Historic American Building Survey, 1936), *Library of Congress*, <https://cdn.loc.gov/master/pnp/habshaer/tx/tx0300/tx0389/data/tx0389data.pdf>.

comparable to those of the historic location and that are compatible with the property's significance.”²²⁷ The Nichols-Rice-Cherry House has a different orientation to the street, and the move from a city streetscape to a park environment is not comparable, thus the property does not meet the requirements for inclusion in the NRHP under *Criteria Consideration B*. Therefore, the Nichols-Rice-Cherry House is not eligible for the NRHP under *Criteria A, B, or C* through application of *Criteria Consideration B*.

C. Resource 007C: San Felipe Cottage

Named for the old San Felipe Stage Route that passed its original location (313 San Felipe Road, now West Dallas Road), the 1868 San Felipe Cottage is an excellent local example of mid-nineteenth-century German vernacular architecture. The modest frame building has muted vernacular Greek Revival stylistic influences seen in the wide frieze and square columns. The building's original location was an area initially settled by German immigrants, and later immigrants from Switzerland, Ireland, and England. As Houston's commercial core grew in the early-to-mid-twentieth century, former downtown residential neighborhoods were redeveloped into commercial properties.²²⁸ Threatened by demolition, the house was moved to Sam Houston Park and restored by the Heritage Society in 1962.²²⁹

The San Felipe Cottage (Marker No. 10766) was designated as an RTHL in 1967. The San Felipe Cottage is not listed as a locally designated Historic Preservation Landmark on the Houston Planning and Development page of the city website, although Sam Houston Park is noted as a protected landmark. This building was evaluated through application of *Criteria Consideration B* for evaluation of moved properties.

Research did not reveal an association with any persons who made important contributions to local, state, or national history. Although the building may once have had an association with the establishment and growth of its original ethnic neighborhood, any association was lost when it was moved to Sam Houston Park. The property is an excellent example of a German immigrant cottage; however, it was moved from its original city streetscape to Sam Houston Park and it no longer has an “orientation, setting, and general environment” comparable to those of its historic location. Therefore, the San Felipe Cottage House is not eligible for the NRHP under *Criteria A, B, or C* through application of *Criteria Consideration B*.

²²⁷ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 30.

²²⁸ “Historic Aerial Viewer: Houston,” *Historic Aerials* by NETROnline, topos from 1922 and 1942, <https://www.historicaerials.com/viewer>; and a review of historic aerials from Google Earth Pro: 1944, 1953, 1978.

²²⁹ “1868 San Felipe Cottage,” *The Heritage Society at Sam Houston Park: Historic Buildings*, 2018, <https://www.heritagesociety.org/san-felipe-cottage/>; “Historic Marker Application: San Felipe Cottage,” *The Portal to Texas History*, 2019, [https://texashistory.unt.edu/ark:/67531/metaph477585/?q=san felipe](https://texashistory.unt.edu/ark:/67531/metaph477585/?q=san%20felipe).

D. Resource 007D: Pillot House

The Pillot House was built in 1868 at 1803 McKinney Street and was occupied for almost a century by the Pillot family. When constructed, the house was the first in Houston to boast an attached kitchen, running water, gas lighting, and closets. Fine architectural detailing reflects the Queen Anne style, as seen in the spindlework, brackets, and pendants, and the tall windows and wraparound porch show adaptation to Houston's climate. Eugene Pillot operated the family lumber business and developed properties in Houston, such as the 1858 Pillot Building (1006 Congress Avenue) and Pillot's Opera House. Eugene and wife Zeolide raised six children in the house. Son, Camille Pillot, became a partner in Houston grocery chain Henke & Pillot in 1885. As Houston's commercial core grew in the early-to-mid-twentieth century, downtown residential areas were redeveloped. The house was donated to the Heritage Society and moved to Sam Houston Park in 1965.²³⁰

The Pillot House (Marker No. 10745) was designated as an RTHL in 1967. The house is not listed as a locally designated Historic Preservation Landmark on the Houston Planning and Development page of the city website, although Sam Houston Park is noted as a protected landmark. This building was evaluated through application of *Criteria Consideration B* for evaluation of moved properties.

Research did not reveal a direct association between the Pillot House and events, patterns, or trends important to local, state, or national history. Accordingly, this house does not have significance under *Criterion A*. While this house has an association with Eugene Pillot, who made contributions to the commercial development of downtown Houston, and an association with prominent businessman Camille Pillot, other properties where they conducted business may better reflect their professional achievements. Due to lack of strong and clear association, this property does not have significance under *Criterion B*, applying *Criteria Consideration B*. Furthermore, any association was lost when it was moved to Sam Houston Park. The Pillot House is an excellent example of a Queen Anne house. However, it was moved from its original city streetscape and no longer has an "orientation, setting, and general environment" comparable to those of its historic location. As such, the Pillot House is not eligible for the NRHP under *Criteria A, B, or C* through application of *Criteria Consideration B*.

Resource 958: Former Koppel and Wascher Property (2000 Nance Street)

The property at 2000 Nance Street contains two buildings: a larger two-story brick warehouse (Resource 958A) on the northern portion of the property and a much smaller two-story warehouse (Resource 958B) on the southern portion of the property (see Figure 68). The southern building (958B) was not evaluated in the 2018 Historical Resources

²³⁰ "1868 Pillot House," *The Heritage Society at Sam Houston Park: Historic Buildings*, 2018, <https://www.heritatesociety.org/pillot-house/>; "Historic Aerial Viewer: Houston," *Historic Aerials by NETROnline*, topos from 1922 and 1942, and aerials from 1957 <https://www.historicaerials.com/viewer>.

Survey Report (HRSR) or earlier draft reports prepared by CP&Y for the NHHIP. The northern building (958A) was identified in a 2016 Re-Survey of the Warehouse Historic District. The 2016 resurvey excluded the 2000 Nance Street property from the boundaries of the proposed Warehouse Historic District but noted that the Texas SHPO recommended it as individually eligible for NRHP listing.²³¹ However, the 2018 HRSR states that Resource 958A is not individually eligible.²³² Mead & Hunt's research centered on survey and evaluation of both buildings on the property.



Figure 68. Aerial view showing Resources 958A and 958B.

According to the Harris County Appraisal District online parcel viewer, both warehouses on the property were constructed in 1907.²³³ However, the 1907 Sanborn fire insurance map indicates a different one-story building, used as a lumber planing mill for Henry House Wholesale and Retail Lumber, on the north portion of the property. The southern portion of

²³¹ Harris County Parcel Viewer online, <https://arcweb.hcad.org/parcelviewer/>.

²³² "Houston, Texas, 1907" (New York: Sanborn Map Company, n.d.), Sheet 9, Online Map Collection, University of Texas, Perry-Castaneda Library.

²³³ Harris County Parcel Viewer online, <https://arcweb.hcad.org/parcelviewer/>.

the property was an open-air lumber pile at the time.²³⁴ The 1912 Houston city directory notes the entire block as vacant.²³⁵ The current buildings are first noted in city directories in 1917, which lists 2002-2020 Nance Street as warehouses for the B. Deutser Furniture Company.²³⁶

Previous historic resources surveys stated that Resource 958A was historically occupied by the Deutser Furniture Company and Resource 958B by the Koppel & Wascher mattress factory.²³⁷ However, further review of Houston city directories shows that these companies occupied the entire property during different time periods. The Deutser Furniture Company was established in Beaumont, Texas, in 1884 as a wholesale and retail furniture store. In the 1910s the company expanded into Houston, at first limiting business to wholesale trade. The company's primary Houston location was initially at 1104 Rusk Avenue with the warehouses on Nance Street. By 1919 a "spacious store building" at 808 Prairie Avenue was acquired and remodeled, with the firm retailing furniture and floor coverings.²³⁸ At that time, the company had warehouses at 2002-2020 and 2103-2105 Nance Street.²³⁹

Deutser Furniture remained at the Nance Street location until 1922. The following year, Deutser closed its Houston operations, with a successor company operating from a downtown location. The 1924 Sanborn fire insurance map and the 1923-1924 Houston city directory show that the northern warehouse building at 2000-2018 Nance Street was occupied by National Warehouse & Distributing Company, a wholesale furniture distribution company owned by Addison Koppel and C.L. Wascher, while the southern building was occupied by Koppel & Wascher's mattress factory.²⁴⁰ By 1926 it appears Koppel bought out Wascher and the occupant of 2000-2018 Nance Street had changed to Ad Koppel Co.

²³⁴ "Houston, Texas, 1907," Sheet 9.

²³⁵ *Directory for the City of Houston, 1912* (Houston: Morrison & Fourmy Directory Co., 1912), 73, <http://digital.houstonlibrary.org/cdm/landingpage/collection/citydir>.

²³⁶ *Houston City Directory 1917, Houston Street and Avenue Guide* (Houston: Morrison & Fourmy Directory Co., 1917), 1131, <http://digital.houstonlibrary.org/cdm/landingpage/collection/citydir>.

²³⁷ Reed and Raines, *North Houston Highway Improvement Project, Harris County, Houston District*, Appendix E, 4-5.

²³⁸ *The Grand Rapids Furniture Record*, vol. 38 (Grand Rapids, Mich.: Periodical Publishing Co., 1919), 318.

²³⁹ "Houston City Directory for 1920-21," *Houston Area Digital Archives*, 1920, 1530, <http://digital.houstonlibrary.org/cdm/ref/collection/citydir/id/12564>.

²⁴⁰ "Houston City Directory for 1923-24," *Houston Area Digital Archives*, 1923, 186, 947, <http://digital.houstonlibrary.org/cdm/ref/collection/citydir/id/15159>; "Houston, Texas, 1924 (1951 Revised) Vol. 3" (New York: Sanborn Map Company, 1951), Sheet 305, Digital Sanborn Maps, 1867-1970, ProQuest.

“wholesale distributors of furniture.”²⁴¹ While occupancy of the buildings changed over time, they remained in use as warehouses. The 1951 Sanborn map shows both buildings in the same configuration as 1924, with Houston Bonded Warehouse No. 1 occupying the larger northern building and Houston Fibre and Waste Mills in the southern building.²⁴² Between January 1988 and 2006 Action Electric Sales, Inc. owned the property. In May 2006, Estate Land Co. of Houston, purchased 2000-2018 Nance Street.²⁴³

A draft NRHP nomination of the Deutser Furniture Company Warehouse (Resource 958A) was completed in 1992 but was not submitted to the National Park Service due to property owner objections. In 2016, the Texas SHPO stated the Deutser Warehouse “appeared to retain sufficient historic integrity to remain eligible individually” under *Criterion C*.²⁴⁴

Both warehouse buildings possess a general association with commercial and warehouse development in central Houston. However, research did not indicate that this property (as Deutser Furniture or as Koppel & Wascher) was significant within this theme, nor is it associated with other important local, state, or national events, or manufacturing or commercial trends. Research did not reveal an association with people who made important contributions to local, state, or national commercial or manufacturing development. Due to this lack of association, Resources 958A and 958B are not historically significant and are not eligible for the NRHP under *Criteria A or B*.

The architecture of both buildings reflects common forms, materials, and building practices, typical of early-twentieth-century warehouses. Neither building has notable architectural features or stylistic influences, and neither is the work of a master. In addition, alterations to both buildings over the years, including the infill or boarding of most fenestration and replacement of select windows and doors, has resulted in diminished integrity of design, materials, and workmanship. Due to their lack of significance and diminished integrity, Resources 958A and 958B are not eligible for NRHP listing under *Criterion C*.

Resource 976: Adath Emeth Cemetery (1540 Sylvester Road)

Adath Emeth Cemetery, located south of IH 610 at 1540 Sylvester Road, was established in 1919 for the Orthodox Jewish congregation Adath Emeth. The cemetery is located on a 2.6-acre rectangular lot and is accessed from either Sylvester Road or the IH 610 frontage road. It features concrete-paved walkways between a grid of square and rectangular family plots

²⁴¹ “Houston City Directory for 1926,” *Houston Area Digital Archives*, 1926, 1097, <http://digital.houstonlibrary.org/cdm/ref/collection/citydir/id/136>.

²⁴² “Houston, Texas, 1924 (1951 Revised) Vol. 3,” Sheet 305.

²⁴³ Harris County Parcel Viewer online, <https://arcweb.hcad.org/parcelviewer/>.

²⁴⁴ Reed and Raines, *North Houston Highway Improvement Project, Harris County, Houston District*, Appendix E, 4-5.

bordered by concrete curbing and covered with crushed granite. The headstones are modest, and the grounds feature few trees; there is a small historic-age, side-gable shed building located near the center of the property.

Jewish settlement in Houston dates back to the city's early years of development. By 1850 the city had at least 17 Jewish residents, and by 1860 that number had risen to 108. Most were German immigrants who worked as merchants or real estate developers. The city's Jewish residents gathered together for worship as early as 1837 but did not begin to organize formal institutions until the 1850s. Houston's first Jewish congregation, Beth Israel, formed in 1854 and among its first major actions was the establishment of a cemetery on Dallas Street south of Buffalo Bayou. Beth Israel initially observed traditional Orthodox Judaism but began to shift toward Reform Judaism after the Civil War.

By the late nineteenth century, increasing numbers of Jewish immigrants from Eastern Europe began to form new Orthodox congregations in Houston. Hundreds of Russian and Eastern European Jews immigrated to Houston between 1907 and 1914.²⁴⁵ Many made their way to Houston as a result of the "Galveston Movement" when the Jewish Immigrants' Information Bureau attempted to redirect Jewish immigration from New York to Galveston to discourage additional Jewish settlement on the eastern seaboard and prevent an anticipated wave of antisemitism.²⁴⁶

The majority of Jewish immigrants who settled in Houston during the early twentieth century practiced Orthodox Judaism and needed synagogues within walking distance from their homes. In 1910 Jewish settlers in Houston's Sixth Ward formed the congregation Adath Emeth. Initially the small congregation worshipped in a rented house, but within the first decade the growing congregation began to purchase permanent facilities of their own including a cemetery lot on Sylvester Street and a house for worship at the corner of Houston Avenue and Washington Avenue. By the mid-1920s the congregation had constructed a large two-story red brick synagogue with classical detailing at its Houston Avenue property and had submitted a detailed plat for the Adath Emeth Cemetery, located about five miles north of the synagogue.²⁴⁷

The new cemetery featured a central driveway and a mostly symmetrical, grid-pattern plan with walkways between square family plots. The plat was approved by the City of Houston in

²⁴⁵ "Encyclopedia of Southern Jewish Communities - Houston, Texas," *Goldring/Woldenberg Institute of Southern Jewish Life*, n.d., <http://www.isjl.org/texas-houston-encyclopedia.html>.

²⁴⁶ Jane Manaster, "Galveston Movement," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/umg01>.

²⁴⁷ "Encyclopedia of Southern Jewish Communities - Houston, Texas"; Lynna Kay Shuffield, "Historic Texas Cemetery Application, Adath Emeth Cemetery, HR-C102, Houston, Texas," 2009, Texas Historical Commission.

1927, but the first burial at the location was April 14, 1919, which indicates that some burials occurred before the cemetery plan was implemented.²⁴⁸

For a period in the 1930s and 1940s, and again in the 1960s, Jews in Houston began to relocate and concentrate in areas south of downtown. Since Orthodox Judaism required walking to service on the Sabbath, many Orthodox synagogues, including Adath Emeth, moved with their congregations. Adath Emeth sold its Houston Avenue synagogue and constructed a modern facility on Cleburne Street in the Third Ward in 1948, then relocated again to North Braeswood Boulevard in 1960. Despite these moves, the Adath Emeth Cemetery remained the congregation's primary burial place.²⁴⁹

The number of those practicing Orthodox Judaism had declined in Houston by the mid-1960s. As a result, the city's three Orthodox congregations, Adath Emeth, Adath Israel, and Beth Jacob merged to form the United Orthodox Synagogues (UOS). The three congregations maintained distinct identities, but shared responsibility for maintenance and use of facilities.²⁵⁰ The UOS is the current owner of the Adath Emeth Cemetery.²⁵¹

Adath Emeth Cemetery does not have an association with an adjacent NRHP-eligible building or structure, is not part of an NRHP-eligible district, and does not appear to have the potential to yield information beyond what is documented in other sources under *Criterion D*. Therefore, the cemetery must meet *Criteria Consideration D* requirements for evaluation of cemeteries to be considered for listing under *Criteria A, B, or C*. Furthermore, as a Jewish cemetery historically and currently owned and maintained by a religious entity, the site must also meet the requirements of *Criteria Consideration A* for evaluation of religious properties.²⁵²

Adath Emeth Cemetery was first purchased in 1919 and developed by the mid-1920s. As a cemetery in active use since this time, Adath Emeth Cemetery reflects a close association with the traditional religious practices of the Orthodox Jewish faith in Houston, and therefore may possess significance under *Criterion A* in the area of Religion. However, this significance is likely also embodied in the extant historic-age synagogues used by the Adath Emeth congregation. While the cemetery is associated with the history of Jewish settlement in Houston, it is not the oldest extant cemetery associated with this theme; the Beth Israel

²⁴⁸ Shuffield, "Historic Texas Cemetery Application, Adath Emeth Cemetery, HR-C102, Houston, Texas."

²⁴⁹ "Encyclopedia of Southern Jewish Communities - Houston, Texas."

²⁵⁰ "Encyclopedia of Southern Jewish Communities - Houston, Texas."

²⁵¹ Shuffield, "Historic Texas Cemetery Application, Adath Emeth Cemetery, HR-C102, Houston, Texas."

²⁵² National Park Service, *How to Apply the National Register Criteria for Evaluation*, 26–27, 34–35; Elisabeth Walton Potter and Beth M. Boland, *Guidelines for Evaluating and Registering Cemeteries and Burial Places*, National Register Bulletin 41 (National Park Service, U.S. Department of the Interior, 1992), 15.

Cemetery located at 1207 West Dallas Street and the Beth Yeshurun Cemetery located at 3502 Allen Parkway, for example, predate the Adath Emeth Cemetery by several decades. Furthermore, its associations with themes in religious history do not appear to warrant “secular scholarly recognition.” Therefore, Adath Emeth Cemetery’s significance in under *Criterion A* in the area of Religion does not rise to the levels necessary to meet requirements of *Criteria Consideration A* or *Criteria Consideration D*.²⁵³

According to the HTC application documentation, Adath Emeth cemetery contains the graves of several influential church leaders. However, research did not indicate that any of these leaders rise to the level of “transcendent importance.” Therefore, Adath Emeth Cemetery is not significant under *Criterion B* through application of *Criteria Consideration D*.

The cemetery appears to embody traditional design principles and requirements for Orthodox Jewish burial places. Several traditional design features were identified during field survey, including: modest grave markers, headstones facing east toward Jerusalem, and fencing walls or curbing between some individual graves.²⁵⁴ While distinctive in comparison to non-Jewish cemeteries, a review of Google aerial and street view imagery indicates that these design elements are common among Houston’s other historic-age Jewish cemeteries. Therefore, Adath Emeth Cemetery does not have significance under *Criterion C*.

Due to lack of significance under *Criterion D*, or *Criteria A, B, or C* through application of *Criteria Considerations A and D*, Adath Emeth Cemetery is not eligible for listing in the NRHP.

Resource 977: Eichwurzel Cemetery (5711 Enid Street)

The Eichwurzel Cemetery (Resource 977), located south of IH 610 along Little White Oak Bayou, was established in the early twentieth century as a family cemetery on the homestead of Swedish immigrant John William Eichwurzel. The cemetery is located at 5711 Enid Street east of Little White Oak Bayou and is bordered on the north and south by residential parcels. The lot is approximately 0.25 acres and open to Enid Street and does not feature a fence, gated entry, or driveway access. Only fourteen concrete or marble gravestones remain extant and many are partially sunken or deteriorated.

John William Eichwurzel immigrated to Houston in 1871 and in 1879 purchased a 15-acre tract of land in north Houston between present-day Fulton Street to Little White Oak

²⁵³ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 26, 35.

²⁵⁴ Unknown, “Guide to Jewish Cemetery” (Congregation B’nai Tikvah Beth Israel, n.d.), <https://www.cbtbi.org/wp-content/uploads/2016/10/Guide-to-Jewish-Cemetery.pdf>.

Bayou.²⁵⁵ By the mid-nineteenth century, many European immigrants, primarily German and French, settled north and west of Houston and established dairy and truck farms. The success of these farmers continued to draw other European immigrants to the area through the end of the nineteenth century.²⁵⁶ Swedes began to emigrate to Texas in the late 1840s and by 1900 4,344 Swedes resided in the state.²⁵⁷ Although Swedes established settlements in several parts of Texas, research did not indicate a significant concentration of Swedes associated with Houston's Little White Oak Bayou area. Eichwurzel produced much of his income as a truck farmer and carpenter and his homestead included a small house on the bayou. Eventually, he and his family moved to a larger home at 5709 Fulton Street.²⁵⁸

In 1880 Eichwurzel organized a small Methodist congregation that met in a school building near the corner of present-day Fulton Road and Link Road. By 1887, under his leadership, the congregation constructed a new wood-frame church building near Little White Oak Bayou and named it White Oak Church. The church was a member of the East Texas Conference and on the Harris County Mission Methodist circuit. The original church building burned down in 1935. The congregation eventually went on to build the City of Houston landmark Reid Memorial United Methodist Church, and is one of the oldest surviving Methodist congregations in Houston.²⁵⁹

Historic maps indicate that much of the Eichwurzel property remained undeveloped until the 1940s.²⁶⁰ The cemetery remains the only undeveloped section of the original Eichwurzel homestead. It is also known as Little White Oak Bayou Cemetery, Sharman Cemetery, Sylvester Road Cemetery, and White Oak Bayou Cemetery. Graves included those of John William Eichwurzel (1842-1943), and other members of the extended Eichwurzel family;

²⁵⁵ City of Houston Planning & Development Department, Archaeological & Historical Commission, "Landmark Designation Report for the Reid Memorial United Methodist Church," 2008, 1-2.

²⁵⁶ Margaret Henson, "Harris County," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/hch07>.

²⁵⁷ Art Leatherwood, "Swedes," *Handbook of Texas Online*, August 31, 2010, <https://tshaonline.org/handbook/online/articles/pts01>.

²⁵⁸ City of Houston Planning & Development Department, Archaeological & Historical Commission, "Landmark Designation Report for the Reid Memorial United Methodist Church," 1-2.

²⁵⁹ City of Houston Planning & Development Department, Archaeological & Historical Commission, "Landmark Designation Report for the Reid Memorial United Methodist Church," 1-2.

²⁶⁰ "Ashburn's Map of Houston Texas" (J.Foster Ashburn, 1936), Map Collection, Houston Metro Research Center; Leslie E. Ogilvie, "Map of the City of Houston" (Wald Transfer Storage Company, c 1940), Municipal Map Collection, Harris County Archives.

burials range in dates from 1907 to 1960.²⁶¹ The cemetery likely contained other graves, but some were washed away during a storm in 1915.²⁶²

Eichwurzel Cemetery does not have an association with an adjacent NRHP-eligible building or structure, is not part of an NRHP-eligible district, and does not appear to have the potential to yield information beyond what is documented in other sources under *Criterion D*. Therefore, the cemetery must meet *Criteria Consideration D* requirements for evaluation of cemeteries to be considered for listing under *Criteria A, B, or C*.²⁶³

Although the Eichwurzel Cemetery was established on the homestead of an early Swedish immigrant, it does not appear to have a direct association with the broader history of Swedish settlement in Harris County. Furthermore, while Eichwurzel was instrumental in establishing a lasting Methodist congregation, the cemetery itself does not appear to have a close association with the church other than containing the grave of its founder. As such the Eichwurzel Cemetery does not have significance under *Criterion A*.

Research did not reveal a number of graves of “persons of transcendent importance” at the Eichwurzel Cemetery. Furthermore, while John William Eichwurzel was a significant figure in the history of the local Methodist community, his significance does not rise to the level of “outstanding importance” required for consideration of a single grave under *Criteria Consideration C*.²⁶⁴ For these reasons, the Eichwurzel Cemetery is not significant under *Criterion B* through application of *Criteria Consideration C* and *Criteria Consideration D*.

Furthermore, research did not indicate that the Eichwurzel Cemetery was designed by a master, nor does it possess high artistic values or distinctive characteristics of a type, period, or method of construction. For these reasons, it does not have significance under *Criterion C*.

Due to lack of significance under *Criterion D*, or *Criteria A, B, or C* through application of *Criteria Considerations C* and *D*, the Eichwurzel Cemetery is not eligible for listing in the NRHP.

²⁶¹ “Eichwurzel Cemetery,” *Find-A-Grave*, n.d., <https://www.findagrave.com/cemetery/2301808/eichwurzel-cemetery>.

²⁶² Lynna Kay Shuffield, “Historic Texas Cemetery Application, Eichwurzel Cemetery, HR-C077, Houston, Texas,” 2009, Texas Historical Commission; “Eichwurzel Cemetery.”

²⁶³ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 34–35; Potter and Boland, *Guidelines for Evaluating and Registering Cemeteries and Burial Places*, 15–18.

²⁶⁴ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 32–33.

Resource 978: Holy Cross Cemetery (3502 North Main Street)

Holy Cross Cemetery is located at 3502 North Main Street within a roughly triangular lot between IH 45 and Cosmos Street south of the Hollywood Cemetery. The cemetery features a grid-patterned network of one-lane asphalt roads. Grave markers vary in size, shape, and detail and are generally comprised of concrete, marble, or granite. Four small family or individual mausoleums that appear to date to the early twentieth century are located near the south corner. A larger 1970 cruciform-plan mausoleum is situated the center of the property and features replacement windows and textured concrete block or brick cladding.

The second of two Catholic cemeteries founded by the Diocese of Galveston-Houston in the City of Houston, Holy Cross Cemetery (Resource 978) was established on July 23, 1904 under Father Thomas Hennessey of the Church of Annunciation, Houston's oldest extant Catholic church.²⁶⁵ Houston's first Catholic cemetery was St. Vincent de Paul Cemetery founded in 1853 and located on Navigation Boulevard. The one-acre St. Vincent de Paul Cemetery began to fill up shortly after its founding largely due to a wave of yellow fever in the late 1860s. As the cemetery became overcrowded, Houston's Catholics purchased plots and reserved sections in other Houston cemeteries.²⁶⁶ In 1874, for example, Catholics reserved a 12-acre section of the Glenwood Cemetery on Washington Avenue.²⁶⁷

Upon its founding in 1904, Holy Cross Cemetery was open to Catholics of all races and ethnicities. Individuals buried at Holy Cross reflect Houston's ethnic diversity and include Germans, Irish, Italians, Czechs, Poles, Hispanics, Lebanese, African-Americans, and others.²⁶⁸ The cemetery features several designated sections including a "Mixed Marriage" section, an "Unbaptized" section for babies and the unborn, and a "Strangers Rest" section for "indigent" individuals. A major flu epidemic between 1914 and 1918 resulted in the "Strangers Rest" section of the cemetery reaching near capacity; according to the 2010 Historic Texas Cemetery (HTC) application, this section holds over 4,000 burials.²⁶⁹

²⁶⁵ Lynna Kay Shuffield, "Historic Texas Cemetery Application, Holy Cross Cemetery, HR-C218, Houston, Texas," 2010, Texas Historical Commission; Sister Mary Brendan O'Donnell, "Church of Annunciation, Houston," *Handbook of Texas Online*, June 12, 2010, <https://tshaonline.org/handbook/online/articles/ivc01>; Steven P. Ryan, "Catholic Diocese of Galveston-Houston," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/icg01>.

²⁶⁶ George E. Wolf, "Holy Cross Cemetery," *Cemeteries & History of Harris Co., Texas*, 2009, <https://sites.google.com/site/cemeteriesofharriscotexas/holy-cross-cemetery>.

²⁶⁷ Suzanne Turner and Joanne Seale Wilson, *Houston's Silent Garden: Glenwood Cemetery, 1871-2009* (Texas A&M University Press, 2010).

²⁶⁸ Wolf, "Holy Cross Cemetery."

²⁶⁹ Wolf, "Holy Cross Cemetery"; Shuffield, "Historic Texas Cemetery Application, Holy Cross Cemetery, HR-C218, Houston, Texas."

Holy Cross Cemetery contains the historic-age graves of several noteworthy clergymen and citizens, including: the cemetery's founder Father Thomas Hennessy (1836-1913); Patroness of the Church of Annunciation Blanche Foley (1881-1963); renowned Texas architect Joseph Maurice Sullivan (1884-1961); and major-league baseball players Jerimiah Dennis (Jerry Denny) Eldridge (1859-1927) and Cornelius Cecil "Con" Lucid (1874-1931). In addition, the cemetery contains the grave of Father Bartholomew Augustine de San Damiano D' Asti, O.S.F. (1827-1866), who moved to Houston in 1861 and served as pastor of the St. Vincent de Paul Church and established some of the first social services in Houston to help those financially affected by the Civil War.²⁷⁰ D'Asti was initially buried near the St. Vincent de Paul Church, then moved to the St. Vincent de Paul Cemetery in 1978. In 1915 his remains were relocated to an unmarked grave at Holy Cross Cemetery, and sometime after 1970, they were moved to the Holy Cross mausoleum.²⁷¹

Holy Cross Cemetery does not have an association with an adjacent NRHP-eligible building or structure, is not part of an NRHP-eligible district, and does not appear to have the potential to yield information beyond what is documented in other sources under *Criterion D*. Therefore, the cemetery must meet *Criteria Consideration D* requirements for evaluation of cemeteries to be considered for listing under *Criteria A, B, or C*. Furthermore, as a Catholic cemetery, historically and currently owned and maintained by the Diocese of Galveston-Houston, the site must also meet *Criteria Consideration A* requirements for evaluation of religious properties.²⁷²

Holy Cross Cemetery was established in 1904 as the second Catholic cemetery maintained by the Diocese of Galveston-Houston in the City of Houston.²⁷³ As a cemetery in active use since 1904, Holy Cross Cemetery reflects a close association with the traditional religious practices of the Catholic faith in Houston, and therefore may possess significance under *Criterion A* in the area of Religion. However, this significance is likely also embodied in other historic-age Catholic properties in Houston, and Holy Cross Cemetery is not the oldest extant Catholic cemetery in the area.²⁷⁴ Furthermore, its associations with themes in religious history do not appear to warrant "secular scholarly recognition." Therefore, Holy Cross Cemetery's significance under *Criterion A* in the area of Religion does not rise to the levels

²⁷⁰ Wolf, "Holy Cross Cemetery."

²⁷¹ Mary H. Ogilvie, "D'Asti, Bartholomew [Red. Augustine]," *Handbook of Texas Online*, June 12, 2010, <https://tshaonline.org/handbook/online/articles/fdaar>.

²⁷² National Park Service, *How to Apply the National Register Criteria for Evaluation*, 26–27, 34–35; Potter and Boland, *Guidelines for Evaluating and Registering Cemeteries and Burial Places*, 15.

²⁷³ "Catholic Cemeteries," *The Archdiocese of Galveston-Houston*, n.d., <https://www.archgh.org/offices-ministries/administration/catholic-cemeteries/>.

²⁷⁴ O'Donnell, "Church of Annunciation, Houston"; "St. Vincent de Paul Cemetery," *Historic Houston*, May 30, 2013, <http://historichouston1836.com/st-vincent-de-paul-cemetery/>.

necessary to meet requirements of *Criteria Consideration A* for evaluation of religious properties or *Criteria Consideration D* for evaluation of cemeteries.²⁷⁵

The cemetery contains the burials of several influential church leaders and citizens who had significant impacts on the local community and Catholic institutions. These include Father Bartholomew Augustine de San Damiano D'Asti who established some of the first social services in Houston to help those financially affected by the Civil War, and architect Joseph Maurice Sullivan who designed a number of schools, churches, convents, and hospitals for the Diocese of Galveston-Houston from the 1920s through the 1950s.²⁷⁶ While these figures may have been significant locally in the areas of social history and architecture, the cemetery itself does not convey the significance of their social contributions and architectural work. Several buildings designed by Joseph Maurice Sullivan are still extant and may be considered better representations of his significance in the field of architecture. Research did not reveal other extant properties associated with Father Bartholomew Augustine de San Damiano D'Asti. However, his remains have been relocated several times and are now held within a mausoleum that was constructed in 1970, long after his death and period of significance. Other noteworthy figures listed in the HTC application were either not "persons of transcendent importance" or their contributions were primarily significant in the area of Religion but did not rise to the level of "secular scholarly recognition."²⁷⁷ Therefore, Holy Cross Cemetery is not significant under *Criterion B* through application of *Criteria Consideration A* and *Criteria Consideration D*.

Holy Cross Cemetery contains several large and ornate grave markers mausoleums dating from the early-twentieth century, however none appear to exhibit characteristics that are distinctive in comparison to other large cemeteries of the period within the Houston area. Furthermore, research did not indicate that the cemetery was designed by a master, nor does it possess high artistic values or distinctive characteristics of a type, period, or method of construction. Therefore, Holy Cross Cemetery is not significant under *Criterion C*.

Due to lack of significance under *Criterion D*, or *Criteria A*, *B*, or *C* through application of *Criteria Considerations A* and *D*, Holy Cross Cemetery is not eligible for listing in the NRHP.

Resource 979: Former Missouri-Kansas-Texas (MKT) Bridge Over White Oak Bayou

This c.1955 railroad bridge is a deck plate girder bridge located north of the Hogan-Crockett Street Bridge over White Oak Bayou and the White Oak Bayou Greenway Trail. Between the

²⁷⁵ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 26, 35.

²⁷⁶ Wolf, "Holy Cross Cemetery"; Stephen Fox, "Maurice Joseph Sullivan," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/fsu16>; Ogilvie, "D'Asti, Bartholomew [Red. Augustine]."

²⁷⁷ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 27.

time of its construction and 1989, the bridge carried the Missouri-Kansas-Texas (MKT; Katy) Railroad.

Originally named the Union Pacific Railway Company, Southern Branch, the railroad line was the first to enter Texas from the north just after the Civil War. Before its establishment through the state, none of Texas' railroads connected to those in other states. By 1870 the railway was renamed MKT or as it was popularly known, the "Katy." The railway marketed itself as the "Gateway to Texas" and eventually expanded into major Texas cities, including Dallas, Fort Worth, Waco, San Antonio, Houston, and Galveston.²⁷⁸ By 1882, MKT trackage in Texas had reached 638 miles and by 1890 that number had increased to 849 miles. The MKT was completed to Houston and across White Oak Bayou by 1893.²⁷⁹ By 1895 the MKT's operation produced over \$1 million in passenger earnings, and \$3 million in freight earnings.²⁸⁰

The MKT continued to expand in Texas in the early twentieth century and by 1904 it operated over 1,100 miles of track in the state and in 1914 it leased several lines to gain operation over 1,600 miles. In 1915 the company went into receivership and by 1923 it reorganized under Missouri-Kansas-Texas Railroad Company of Texas. The new company continued to use the abbreviations "MKT" and "Katy."

The MKT connected markets across a vast area and allowed regular shipments of wheat and oil between Oklahoma and Texas' major cities, including Houston. The MKT reached its peak in revenues during World War II but began to decline starting in the 1950s. After several failed merger and reconstruction attempts in the 1960s and 1970s, the MKT was eventually acquired by Union Pacific in 1988 and some track was subsequently abandoned.²⁸¹

Research did not reveal the exact construction date for the former MKT bridge over White Oak Bayou, however, a 1951 Sanborn map shows the MKT carried in this location by a wooden bridge, which indicates that the deck plate girder was constructed after 1951.²⁸²

²⁷⁸ Donovan L. Hofsommer, "Missouri-Kansas-Texas Railroad," *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/eqm08>.

²⁷⁹ "Houston, Texas, 1890" (New York: Sanborn Map Company, 1890), Key, Digital Sanborn Maps, 1867-1970, ProQuest; "Houston, Texas, 1896" (New York: Sanborn Map Company, 1896), Key, Online Map Collection, University of Texas, Perry-Castaneda Library; Douglas L. Weiskopf, *Rails Around Houston* (Charleston, S.C.: Arcadia Publishing, n.d.), 56.

²⁸⁰ Hofsommer, "Missouri-Kansas-Texas Railroad."

²⁸¹ Hofsommer, "Missouri-Kansas-Texas Railroad."

²⁸² "Houston, Texas, 1924 (1951 Revised) Vol. 2" (New York: Sanborn Map Company, 1951), 238, Digital Sanborn Maps, 1867-1970, ProQuest.

The MKT rail line has significance under *Criterion A* for its association with early transportation development in Houston with a period of significance from 1893, when it first served Houston, to c.1950, when the MKT began to decline. However, the MKT Bridge (Resource 979) was constructed after the period of significance, and thus does not have an association with early transportation development. Due to the lack of association, the MKT bridge does not have significance under *Criterion A*.

To be eligible under *Criterion B*, the bridge must be associated with a person who made a significant contribution to the development of local, state, or national history. Research did not reveal a direct association with an important individual in local, regional, or state history and as such, the bridge does not have significance under *Criterion B*.

The former MKT bridge features two parallel riveted steel plate girder main spans over White Oak Bayou between seven steel and timber stringer approach spans on the east end and nine on the west end. The bridge is supported by a timber substructure; the main spans sit on metal bents with concrete caps and the approach spans sit on timber bents and abutments. Plate girder bridges were a popular choice for railroads crossing water features because they allowed maximum vertical clearance between the deck and the waterway.²⁸³ In 2009, the MKT railroad grade was repurposed to carry a multi-use trail. The substructure of the bridge was kept intact and the deck including original rails and ties were replaced with a concrete deck with a paved surface for pedestrian and bicycle traffic.²⁸⁴ The MKT bridge was constructed after 1950 and therefore does not represent a significant early example of its type; furthermore, the bridge is an example of a common bridge type, constructed with common materials and methods, and does not exhibit exceptional engineering. It does not exhibit decorative detailing or other aesthetic treatment. As such, it does not have significance under *Criterion C*.

Due to lack of significance for reasons explained above this bridge is not eligible for the NRHP under *Criteria A, B, or C*.

Resource 980: Former Galveston, Harrisburg, and San Antonio (GH&SA) Railroad Over White Oak Bayou

This 1961 railroad bridge is a steel plate girder bridge and is located south of the Hogan-Crockett Street Bridge west of downtown Houston, Texas. The bridge carries the former

²⁸³ Parsons Brinckerhoff and Engineering and Industrial Heritage, *A Context for Common Historic Bridge Types* (prepared for The National Cooperative Highway Research Program, Transportation Research Council, and National Research Council, October 2005), 3–111, [http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25\(15\)_FR.pdf](http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25(15)_FR.pdf).

²⁸⁴ “Heights Bike Trail - White Oak Bayou Bridge,” *Bridgehunter.Com*, May 12, 2014, <http://bridgehunter.com/tx/harris/bh60953>.

Galveston, Harrisburg, and San Antonio Railroad (GH&SA) railroad over IH 45, IH 10, US 90, White Oak Bayou, and “Heights Bike Trail” (formerly Union Pacific Railroad).

The first railroad operating in Texas, and the second railroad west of the Mississippi River, the GH&SA was founded in 1850 as the Buffalo Bayou, Brazos, and Colorado Railway Company. After the Civil War, the company reorganized and under new ownership, its name changed in 1870. The GH&SA began service to Houston in 1877 (over another railroad’s tracks) and built its own line in 1880. An 1885 Sanborn map shows the line carried over the White Oak Bayou by a wooden trestle bridge. Other railroads utilized this line throughout its history, including the Missouri-Kansas-Texas Railroad (MKT), the Southern Pacific Railroad (SP), the Texas & New Orleans Railroad (T&NO) and the Union Pacific Railroad (UP).²⁸⁵ By 1904 a major expansion occurred at the railyards east of the White Oak Bayou. In 1905 the GH&SA, which had been controlled by SP-related interests since the 1880s, acquired five additional SP subsidiary companies with a total of 391 miles of track, and expansion continued into the mid-1910s with completion of new lines southeast of Houston. In 1927 the T&NO, another SP-controlled railroad, leased the GH&SA and acquired it in 1934. In 1961 the T&NO fully merged into the SP and the line appears to be in current use.²⁸⁶

The GH&SA rail line has significance under NRHP *Criterion A* for its association with transportation development. Specifically, this rail line is associated with the development of the GH&SA in Houston, with a period of significance of 1885, when it first served Houston, to 1934, when the line was acquired by the T&NO. However, the GH&SA Bridge (Resource 980) was constructed nearly three decades after the period of significance and thus does not have an association. Due to the lack of association, the GH&SA bridge does not have significance under *Criterion A*.

To be eligible under *Criterion B*, the bridge must be associated with a person who made a significant contribution to the development of local, state, or national history. Research did not reveal a direct association with an important individual in local, regional, or state history and as such, the bridge does not have significance under *Criterion B*.

The current bridge was constructed in 1961. The 19-span steel plate girder bridge is composed of nine steel plate girder spans of varying lengths and ten prestressed concrete beam approach spans, all supported by a concrete substructure of concrete pilings and concrete abutments. Each of the substructure’s 18 bents consists of triple cylindrical piers

²⁸⁵ “Houston, Texas, 1885” (New York: Sanborn Map Company, 1885), Digital Sanborn Maps, 1867-1970, ProQuest; “UP - I45/I10/US90 Viaduct,” *Bridgehunter.Com*, May 12, 2014, <http://bridgehunter.com/tx/harris/bh57899>.

²⁸⁶ George C Werner, “Galveston, Harrisburg and San Antonio Railway,” *Handbook of Texas Online*, June 15, 2010, <https://tshaonline.org/handbook/online/articles/eqg06>.

with concrete caps, and the bents just east and west of White Oak Bayou have concrete web walls. The bridge has a total structure length of 1030.9 feet and its main spans are 100 feet long. The prestressed concrete beam spans display end blocks typical of prestressed beam bridges of the period; however, this bridge was constructed five years after the initial use of prestressed concrete beams for Texas bridges and does not represent an early or notable example of the type.²⁸⁷ Likewise, steel plate girders had been in use since the nineteenth century. The GH&SA bridge is a common bridge type constructed with common materials and methods and does not exhibit exceptional engineering. It does not display decorative detailing or other aesthetic treatment. As such, it does not have significance under *Criterion C*.

Due to lack of significance for reasons explained above this bridge is not eligible for the NRHP under *Criteria A, B, or C*.

Resource 981: Former Crawford Elementary School (1510 Jensen Drive)

The former Crawford Elementary School was constructed in 1964 at 1510 Jensen Street, in Houston's Fifth Ward. The school was constructed in a predominately African-American neighborhood during the era of school desegregation in Texas. Research centered on investigating the school's role in local desegregation, as well as gathering additional information about the building's architect. Integration of Texas schools occurred at different rates and levels of resistance. In the 1940s, the state spent approximately one-third less on the education of black students compared to white students, and black teachers' salaries were roughly a quarter less than their white counterparts. The early 1950s saw improved funding of school buildings and facilities, as well as teachers' salaries. The 1954 U.S. Supreme Court *Brown vs. Board of Education* decision which outlawed segregated education ushered in a period of transition. In some Texas communities, such as San Antonio, school integration occurred swiftly and smoothly; however, in Houston the process was very slow.²⁸⁸ Houston Independent School District (HISD) officials resisted the process until a federal judge ordered the implementation of a stair-stepped plan for integration in the fall of 1960. HISD integration proceeded slowly through the 1960s, resulting in boycotts and court cases initiated by the African-American and Hispanic communities. Criticism centered on the sluggish pace of integration and continued *de facto* racial segregation at nearly all HISD schools into the 1970s. The HISD remained under court-ordered integration until 1984.²⁸⁹ HISD did authorize three bond issues totaling \$130 million between 1959

²⁸⁷ Mead & Hunt, Inc., *Historic Context for Texas Bridges, 1945-1965*, 55.

²⁸⁸ The San Antonio school district was one of the first in the nation to desegregate its schools following the Supreme Court decision in 1954.

²⁸⁹ Anna Victoria Wilson, "Education For African Americans," *Handbook of Texas Online*, 2010, <https://tshaonline.org/handbook/online/articles/kde02>; Salatheia Bryant, "Integration Did Not Come to HISD

and 1965 for construction of new schools and repair of existing facilities. While the influx of funding helped improve school conditions throughout the district, some residents argued that the bond issues also perpetuated segregation by building new schools in minority areas while adhering to a policy of neighborhood-based attendance zones.²⁹⁰ As late as the early 1970s, every HISD school was composed of 80 percent or greater of either white or minority students, while more than 10 percent of HISD schools had all-black or all-minority student population.²⁹¹

The first Crawford Elementary School was built on the northern portion of this parcel in 1917. It was named for Joseph H. Crawford, a former Houston schoolteacher who became a science professor at Prairie View State and Industrial College (now Prairie View A&M University). By the mid-1950s a classroom building (Resource 981B) was constructed and an additional classroom building (Resource 981E) was added to the campus by the early 1960s. In 1963 the architectural firm Rustay, Martin, Vale and Associates planned a new three-story classroom, library and administration building (Resource 981A) to replace the temporary buildings at the south end of the school grounds. The new building featured brick veneer and aluminum-frame windows on the exterior, and concrete block walls with terrazzo or asphalt tile floors on the interior. The building was completed in spring of 1964 at a cost of approximately \$300,500.²⁹² A cafeteria building (Resource 981D) was constructed by the mid-1960s. The 1917 school building was demolished that same year, thus creating the recreational field north of the present-day school complex. Two pavilions were constructed north and east of the 1964 building in the mid-1990s. This school complex served the HISD as an elementary school until 2011 and now houses the district's Secondary Disciplinary Alternative Education Program (DAEP).²⁹³

This historically African-American school was built during the era of desegregation in Houston; however, beyond serving the community as an "all-black" school for a number of years, research did not reveal that it played a specific role in the desegregation process. Further, the former Crawford Elementary School is not known to have played a role in local,

until 1984.," *Houston Chronicle*, May 16, 2004, <https://www.chron.com/news/houston-texas/article/Integration-did-not-come-to-HISD-until-1984-1512348.php>.

²⁹⁰ *Broussard v. Houston Independent School District*, 395 F.2d 817 (United States Court of Appeals Fifth Circuit 1968).

²⁹¹ Alabama Council on Human Relations, *It's Not Over In the South: School Desegregation in 43 Southern Cities 18 Years After Brown* (Washington D.C.: Southern Education Foundation, 1972), x, 16.

²⁹² "New Building For Crawford Is Approved," *The Houston Chronicle*, February 6, 1963, 2, 6, Houston Metro Research Center - Vertical Files.

²⁹³ "General Information: Elementary Schools (A-J)," *Houston Independent School District*, n.d., <https://www.houstonisd.org/Page/32480>; "Historic Aerial Viewer: Houston."

state, or national educational trends. As such, Resource 981 does not have significance under *Criterion A*.

This school is named for an African American educator, Joseph H. Crawford. However, Crawford himself was not associated with the extant buildings on the site. Research did not reveal associations with other persons of local, state, or national significance. Due to lack of association, Resource 981 does not possess significance under *Criterion B*.

The former Crawford Elementary School complex is an excellent intact example of mid-century elementary school design. Constructed over a period of approximately 10 years, the complex consists of four Modern Movement buildings complementary in design. The three-story classroom building is particularly noteworthy, featuring ribbon window bands to maximize natural light, extension of concrete floor system elements at each story and roofline to form flat-roof overhangs, and decorative perforated concrete block screening. Architects for many of the buildings are not known, except Resource 981A, which was designed by the firm Rustay, Martin & Vale. Architect Wylie W. Vale was known for his mid-century modern residential design in Houston, and he also designed many commercial and public buildings, including more than 100 schools. In the 1960s, Vale, George Rustay, and Foy Martin formed Rustay, Martin, and Vale, which was one of the largest architectural firms in Texas at the time. In 1969 the firm was recognized for their excellent school design and at least one of those noted, the Sylvester B. Boone Elementary School in the Alief Independent School District, is still extant.²⁹⁴ However, historic aerials imagery shows that Boone Elementary School underwent major alterations between 1989 and 1995, including a large addition on the building's south elevation. In contrast, the Crawford School (Resource 981A) has undergone few, if any, notable exterior alterations. The school possesses significance as an excellent example of Modern movement school architecture. The historic-age buildings continue in use as a school and they retain all aspects of integrity. The historic-age buildings at the former Crawford Elementary School complex (Resources 981 A, B, D, E) are therefore recommended eligible under *Criterion C* in the area of Architecture. NRHP-eligible boundaries are limited to the footprints of the four historic-age buildings and the breezeways that connect them (see Figure 69). Several non-historic-age sheds located on the parcel's eastern boundary (Resource 981F) as well as two non-historic-age pavilions on the west side of the campus (Resources 981C and 981G) do not contribute to the school's significance and are therefore excluded from the NRHP-eligible boundaries.

²⁹⁴ "Exhibit of Outstanding Schools," *The Texas Architect*, April 1969, 18–19, <https://magazine.texasarchitects.org/wp-content/uploads/2018/06/Apr-1969.pdf>; "Wylie Vale," *Houston Chronicle*, January 27, 2013, <https://www.legacy.com/obituaries/houstonchronicle/obituary.aspx?n=wylie-vale&pid=162631926>.



Figure 69. Aerial view showing resources 981A-G and NRHP-eligible boundaries.

Resource 982: Pleasant Grove Missionary Baptist Church (2801 Conti Street)

Established 1872, the Pleasant Grove Missionary Baptist (PGMB) Church is one of the oldest predominantly black churches in Houston. Founded by Reverend Steward, the church soon acquired property at Opelousas and Clark Street. The church grew under the stewardship of 15 pastors between 1872 and 1945. In 1945 Reverend Aaron McCardell, Sr. became pastor of the PGMB Church, and served for 21 years.²⁹⁵ In the late 1940s McCardell instigated the “prayer-bowl” ministry and in the 1950s McCardell began an aggressive expansion campaign that included construction of the large classroom addition and expansion of community programs. The congregation continued to grow; when Charles L. (C.L.) Jackson became pastor in 1966 he led the campaign to build his dream chapel: the circular Contemporary chapel. Completed in 1978, the chapel accommodates 5,000 parishioners. An even larger audience was reached in the 1970s as services began to be regularly televised. Other ministries started under Pastor C.L.’s tenure, as the PGMB Church started numerous ministries to serve the larger community and underserved populations. By 1996 Sheldon Jackson, Pastor C.L.’s son, was an assistant pastor at PGMB. At the time the congregation had swelled to 16,000 members and continued to offer numerous

²⁹⁵ C.L. Jackson, Pastor and Sheldon Jackson, Pastor, “The History of Pleasant Grove Missionary Baptist Church,” *Pleasant Grove Missionary Baptist Church*, n.d., <http://pleasantgroveway.wixsite.com/pleasantgroveway/about>.

programs. Of particular note was the A.A. McCardell Academy, which consisted of remedial classes and half-day GED for dropouts, suspended or expelled students, and juvenile offenders, offered in association with Houston Independent School District.²⁹⁶ This program was extended to include troubled adults.²⁹⁷ After preaching at Pleasant Grove for over 47 years, C.L. Jackson died in 2016 and was succeeded by his son Sheldon, who is the current pastor at PGMB Church.

In 1947 a new church building was completed at the Conti Street location. In the 1950s a large addition housing 45 classrooms was constructed to the rear (north) of the original building mass. In 1978 the circular 5,000 seat Contemporary sanctuary building was built to the west of the 1947 building, across a street that once ran between the two buildings. PGMB acquired the street in the early 1990s, vacated it, and built a tinted glass gymnasium wing to join the two buildings (see Figure 70). The Contemporary sanctuary, designed by California architect Frederick Booker, originally had a butterfly roof with exposed wood beams. The roof was destroyed in a 1994 fire and replaced with a lighter flat roof with a central geodesic dome, which has central skylights and a spire.²⁹⁸

²⁹⁶ Sheila Dewan, "Pleasant Grove Church," *Cite* 34, no. Spring (1996): 27, http://offcite.org/wp-content/uploads/sites/3/2010/03/FifthWard_Theis_Cite34.pdf; Jeffrey L. Boney and Sheldon Jackson, Pastor, "Pleasant Grove Missionary Baptist Church Pastor Dr. C.L. Jackson Passes Away at Age 80.," *Houston Forward Times*, December 21, 2016, <http://forwardtimes.com/pleasant-grove-missionary-baptist-church-pastor-dr-c-l-jackson-passes-away-age-80/>.

²⁹⁷ Jackson, Pastor and Jackson, Pastor, "The History of Pleasant Grove Missionary Baptist Church."

²⁹⁸ Dewan, "Pleasant Grove Church," 27.



Figure 70. Aerial view of resource 982 showing various additions over time.

The PGMB Church property is evaluated under *Criteria Consideration A*, which states a religious property must derive its significance from architectural or artistic distinction or historical importance, rather than its religious doctrine. Numerous church programs initiated in the 1960s and 1970s were important to the local community and underserved groups. Programs started at PGMB Church, notably the A.A. McCardell Academy, were widely imitated. The McCardell Academy program reflects the growing outreach and services to at-risk students that developed in Houston in the 1960s and 1970s, and thus influenced local and regional social trends. The PGMB Church property is significant under *Criterion A* through application of *Criteria Consideration A* in the area of Social History for its contributions to social philanthropy to the Fifth Ward and other central Houston communities. The PGMB Church property is not associated with other historic themes, artistic distinction, or cultural values. Current research does not suggest the property has significance for association with a person important in religious history or other significant persons in local, regional, or state history. As such, the church does not have significance under *Criterion B*.

The 1947 church and the large c.1955 addition are not significant for their architectural design or construction. The building is of common materials and construction methods and does not possess high artistic value or reflect the work of a master. The large Contemporary sanctuary, though dramatic in design, was constructed in 1978 and has suffered from major non-historic-age alterations. The distinctive original roof was replaced following a 1994 fire

and a large gymnasium addition was constructed in the mid-1990s to join the two sanctuaries, which had been freestanding buildings. The large addition detracts from the overall integrity of the complex. While reflecting the evolution of the site, the church is not architecturally cohesive, does not possess artistic distinction, and does not represent any particular style, and therefore lacks significance under *Criterion C*.

While the PGMB Church has significance under *Criterion A* through application of *Criteria Consideration A* for its contributions to social philanthropy, numerous recent alterations to the church, as noted above, have resulted in loss of integrity of design, materials, workmanship, setting, and feeling, and the church no longer conveys its significance. Therefore, the PGMB Church (Resource 982) is not eligible for the NRHP under *Criteria A, B, or C*.

Resource 983: City Hall Annex (900 Bagby Street)

Planning for a new building to house several city departments began in the late 1960s and construction on the City Hall Annex (Annex) began in 1970. Completed in late 1972, city employees began to move into the Annex in January 1973. The new building is sited northwest of the City Hall (901 Bagby Street) and connected to it via a tunnel under Bagby Street.²⁹⁹ Four floors are visible above sidewalk level, one floor is exposed at the rear (north) elevation, and two additional lower levels provide underground parking and tunnel access. The building was touted as “built with the public in mind” through one-stop centralization of services for convenience. Newspaper articles highlighted its modern amenities, including ample underground parking and a rooftop helicopter pad. The building was held up as a symbol of the shining modern city that Houston had become.³⁰⁰

The Annex was designed by the prominent Houston architectural firm Caudill Rowlett Scott Design Associates Inc. In 1946 William Caudill and John Rowlett, both architecture professors at Texas A&M, founded Caudill and Rowlett in Austin, Texas. In 1948 Wallie Scott joined the firm, which became Caudill Rowlett Scott. Initially focused on residential architecture, Caudill Rowlett Scott became renowned for its expertise in school design by the 1950s. In 1957 the company adopted an abbreviated name, CRS, and became one of the first architecture firms to incorporate.³⁰¹ CRS was the largest architectural firm in Houston when it moved there the following year. In the 1960s CRS became an integrated design firm, known for its team approach which included planners, architects and engineers. The

²⁹⁹ “New City Hall Annex To Be Opened in 68,” *City Hall Mark*, January 20, 1967, Houston Metro Research Center - Vertical Files.

³⁰⁰ “Formally Dedicated - Margaret Westerman Annex,” *Houston Chronicle*, March 23, 1973, sec. 7, 17, Houston Metro Research Center - Vertical Files.

³⁰¹ “CRSS INC. History,” *Funding Universe*, accessed January 28, 2019, <http://www.fundinguniverse.com/company-histories/crss-inc-history/>.

firm received several state and national-level design awards and by 1969 had established a reputation as an authority on school design.³⁰² The firm branched out into higher education and medical facilities, as well as international projects (Saudi Arabia). In 1971 the firm went public assuming the new name CRS Design Associates. In the 1970s the company continued to expand and acquired smaller companies. In 1983 the company, then known as the CRS Group, Inc. became CRSS with another acquisition. At the time it was the largest architecture/engineering/construction corporation in the United States.³⁰³

CRS designed the Annex in the Brutalist style, which developed from the Modern Movement in architecture. *A Field Guide of Contemporary Architecture* points out that by mid-century, Modernist design of public buildings employed bold massing, new materials, and meaning was conveyed by the very lack of ornamentation.³⁰⁴ The Brutalist style spawned from the modernist architectural movement and stresses exposing a building's structural elements and materials, and is recognizable for its monolithic form, repetitive modular elements, and use of raw materials, most commonly concrete.

Houston's first Brutalist buildings were constructed in the early 1960s. According to architectural historian Stephen Fox, many of Houston's early Brutalist buildings retained a level of conservatism common in earlier Miesian-inspired modernist designs. These buildings exhibited an "urban-scale proportion" and were characterized by large-scale frames, repetitive framed bays, and contoured exterior spaces. By the late 1960s, Brutalism had become "the power style" of Houston architecture and began to replace earlier modernist approaches, such as organic and eclectic formalism. Houston's Brutalist buildings in the late 1960s and early 1970s were typically large in scale with "thrusting profiles" and usually exhibited exposed concrete construction.³⁰⁵

Although completed in 1972, research indicates that the Annex building was designed as early as 1967.³⁰⁶ As such, the Annex building recalls the character-defining features of buildings designed during Houston's earlier phase of Brutalism. These features include: an urban-scale massing that fits within a city block and complements the nearby 1939 City Hall building; exposed frame construction creating repeated bays; repetitive modular elements

³⁰² Stephen Fox, "William Wayne Caudill," *Handbook of Texas Online*, June 12, 2010, <https://tshaonline.org/handbook/online/articles/fcabf>.

³⁰³ "CRS History," *Texas A&M University: College of Architecture*, n.d., <http://crs.arch.tamu.edu/about-us/history/>.

³⁰⁴ Carole Rifkin, *A Field Guide to Contemporary Architecture* (New York, New York: Penguin Books Ltd., 1998), 104, <https://archive.org/details/fieldguidetocont00rifk/page/n7>.

³⁰⁵ Stephen Fox, "New Brutalism: The Houston Interpretation," *Cite* 40 (Winter 1998): 19–23.

³⁰⁶ "New City Hall Annex To Be Opened in 68." A sketch in the 1967 article shows the building's design as constructed five years later in 1972.

such as angular deeply-inset window frames; and contoured exterior spaces within the building's courtyard areas.

The Annex reflects a move in the 1960s and 1970s by the City of Houston to centralize city services for convenience and economy. Designed with the latest technology to accommodate the fast-paced auto-centric society, the Annex represented Houston's growth and progress. Since its completion, the building has continually served to house several departments. As such, the City Hall Annex has significance at the local level under *Criterion A* in the area of Politics/Government for its association with Houston's civic development.

The building was formally dedicated on March 20, 1973, as the Margaret Westerman Annex. Mrs. Westerman served as a city secretary for 30 years and was known for her extreme dedication and zeal.³⁰⁷ Although the building is named for Westerman, research did not reveal that she made an important contribution to local, state, or national civic or governmental function or trends. Further, the building was dedicated to Mrs. Westerman's memory, and other buildings where she worked during her long career have a stronger association to her career as a public servant. Due to lack of association, the building does not have significance under *Criterion B*.

Designed by architectural firm Caudill Rowlett Scott during the height of Brutalist architecture in Houston, the City Hall Annex reflects the exposed structural elements, massing, materials, and repetitive forms that are characteristic of Brutalist architecture in Houston in the 1960s and early 1970s. In addition, the Annex abstractly expresses the ideals associated with government buildings that are traditionally communicated through classical architecture: permanence, authority, and democracy. As such, the City Hall Annex has significance under *Criterion C* in the area of Architecture as an excellent example of a Brutalist government building. Furthermore, the building exhibits few alterations and retains integrity of location, design, setting, materials, workmanship, feeling, and association.

For the reasons explained above, the City Hall Annex is recommended eligible for the NRHP under *Criterion A* in the area of Politics/Government for its association with Houston's civic development, and *Criterion C* in the area of Architecture as an excellent example of a Brutalist government building in Houston.

Resource 984: Cullen Plaza (1700 block Brazos Street)

Originally named "Cullen Plaza," the 2-acre park situated between Jefferson Street and Pease Street at the 1700 block of Brazos Street was constructed in 1963 as part of the

³⁰⁷ "Formally Dedicated - Margaret Westerman Annex," 17.

Cullen Center, Houston's first planned, multiple-building office complex.³⁰⁸ Based on Harris County Tax Appraisal District maps, portions of the park appear to be within TxDOT ROW. Only a 0.3-acre portion at the east side of the park along Brazos Street is currently under the ownership of the Cullen Center, Inc. Plans for the Cullen Center were announced in 1959 and included two office towers, a hotel, parking garages, and a plaza. Los Angeles-based architecture firm, Welton Becket & Associates produced the center's master plan and designed its first building at 500 Jefferson Street, which opened on March 1, 1963. Several months later, the Cullen Center announced the opening of the Hotel America, which included an adjacent open-air plaza extending from the hotel's northwest entry to the IH 45 frontage road.³⁰⁹ Marketing materials and newspaper articles announcing the Hotel America's opening emphasized the plaza as an important amenity for guests and visitors. One newspaper article for the hotel opening was headlined "Overlooking Cullen Plaza" and noted that the park contained 20,000 square feet of open landscaped areas, an 80-foot illuminated fountain, and an 18-hole putting green. The article promised to offer use of the space for art exhibits and musical performances.³¹⁰

Cullen Center marketing materials continued to emphasize the plaza amenity in the 1970s. A 1973 promotional brochure touted the area as a "garden terrace" and a "cultural showplace." A range of activities took place at Cullen Plaza. In one brochure photo, guests are seated at the park enjoying a concert of the Houston Symphony Orchestra, and in another, golfers compete on the plaza's 18-hole putting green in the Tenth Annual Cullen Green Gold Tournament.³¹¹

Cullen Plaza was designed as a component within a larger complex. Its purpose was to complement the aesthetics and functions of adjacent buildings such as the Hotel America and the 500 Jefferson Building. Therefore, following National Register guidance on evaluating designed historic landscapes, evaluations of significance for Cullen Plaza should address "both the architecture and the designed historic landscape and their interrelationship."³¹²

As Houston's first planned multi-building office park, the Cullen Center complex possesses significance under *Criterion A* in the area of Community Planning and Development. Furthermore, portions of the complex such as 500 Jefferson Building possess significance

³⁰⁸ National Register of Historic Places, Jefferson Building, Houston, Harris County, Texas 500, 11, Draft Nomination provided by the Texas Historical Commission.

³⁰⁹ National Park Service, *How to Apply the National Register Criteria for Evaluation*, 17–18.

³¹⁰ "Overlooking Cullen Plaza," *Unknown*, July 1963, Vertical Files, Houston Metro Research Center.

³¹¹ *Unknown*, "Lifestyle on the Green," *Cullen Center World*, October 1973, Vertical Files, Houston Metro Research Center.

³¹² Keller and Keller, *How to Evaluate and Nominate Designed Historic Landscapes*, 2.

under *Criterion C* for their architecture. A draft NRHP nomination for the 500 Jefferson Building has been approved by the State Board of Review and is currently awaiting approval by the National Park Service.³¹³ Additional field survey and research would be needed to determine the NRHP eligibility of the Cullen Center as a district under *Criterion C*. Research did not reveal a direct association with significant persons in local, regional, or state history and as such, the park does not have significance under *Criterion B*.

While the Cullen Plaza was an integral component in the overall Cullen Center plan and therefore possesses significance in its relationship to the complex, non-historic-age alterations have diminished its integrity and ability to convey significance. Historic photos, drawings, and aerial images show that the layout of the plaza and its relationship to the rest of the Cullen Center were altered in the late 1970s or 1980s. When the Cullen Center first opened, Brazos Street did not extend from Jefferson Street to Pease Street, and the park extended from IH 45 directly up to the hotel's northwest elevation (see Figures 71 and 72). In the original design, the curved gravel walkways led directly from the fountain to a point that would now be in the center of Brazos Street. From that point, several sets of steps led guests up to the hotel's northwest entrance. Historic aerial images indicate that the 1700 block of Brazos Street was constructed sometime between 1978 and 1989, obliterating a large portion of the park and altering its original design.³¹⁴

³¹³ National Register of Historic Places, Jefferson Building, Houston, Harris County, Texas 500.

³¹⁴ "Historical Imagery: Houston," *Google Earth Pro*, 1978 and 1989, accessed January 25, 2019.



Figure 71. c.1965 aerial image of the Cullen Plaza showing its connection to the Hotel America.³¹⁵ Cullen Center boundaries are outlined with a white dotted line.

³¹⁵ Cullen Center, Inc., "Untitled Promotional Brochure" (Cullen Center, Inc., c 1965), Vertical Files, Houston Metropolitan Research Center.



Figure 72. 1989 aerial image of Cullen Plaza showing newly constructed Brazos Street through east portion of the plaza.

The park was designed to be adjacent to the Hotel America in order for guests to have uninhibited access for recreation and planned events. Although the building is still used as hotel (now the Whitehall Hotel), the construction of a city street between the building and the remaining park disrupts this relationship such that the park's connection to the hotel and the rest of the Cullen Center is no longer clearly evident and its integrity of feeling, association, setting, and design. Regardless of the potential significance of the Cullen Center complex as a district, the alterations substantial to the park result in a loss of integrity and it can no longer convey significance as a contributing feature in the Cullen Center complex. Therefore, it is not eligible for listing in the NRHP.

E. Additional Responses to THC Comments

In a November 2, 2018, Section 106 consultation letter to TxDOT, THC staff requested numerous revisions and clarifications to TxDOT's determinations of NRHP eligibility, determinations of effect, and general report findings. Mead & Hunt was tasked with completion of further research and field survey to answer these questions and prepare an update to the September 27, 2018, Report for Historical Studies Survey. Items requiring the most intensive analysis have been included in Sections 3.C and 3.D of this report. In addition to these more in-depth contexts and evaluations, Mead & Hunt prepared brief responses to numerous other questions and requests posed by the THC in the November 2, 2018, letter. These responses are presented below, in numerical Resource order.

Resource 004: Houston Water Works (27 Artesian Street)

As well as its NRHP-listed status, the 1879/1926 Houston Water Works was designated as a State Antiquities Landmark in 1981, but the designation was not included in the table of previously designated properties. Section 4 of this report reflects the additional designation.

Resource 056: Iglesia Cristiana La Senda Antigua (9600 North Freeway)

The THC requested a photograph showing the building's primary facade facing North Freeway, including the decorative stained glass on the primary facade.

Mead & Hunt historians took several additional photographs of the building, including the primary facade and stained glass. The inventory form for the building has been updated with the new photographs, additional description, and revised NRHP eligibility justification statement. The recommendation that Resource 056 (9600 North Freeway) is not eligible for listing in the NRHP remains unchanged.

Resource 099: Rittenhouse Baptist Church (513 West Rittenhouse Road)

The THC noted that historic aerial photographs shows the church building constructed between 1966 and 1973, but the Resource 099 inventory form dates the building to 1950. Further review of historic aerial photographs and research using Houston city directories provided a better understanding of the property's evolution. Aerial photographs in 1953 show a small rectangular building on the property, south of the current main church building. By 1957, this building had been replaced or substantially expanded with an addition to form a long rectangular-plan building with cross-gable roof. The building footprint shown in the 1957 aerial photograph is identical to that of an existing building on the church property that was not identified in the Resource 099 inventory form. The 513 West Rittenhouse Road address was first listed in in the 1958 Houston city directory and was shown as Rittenhouse Baptist Church. It is presumed that the cross-gable building served as the congregation's first sanctuary. The decagonal building previously identified as Resource 099 was constructed between 1966 and 1973 as a new sanctuary for the church. Both buildings remain owned and occupied by the Rittenhouse Baptist Church. A second congregation, Iglesia Sendero de la Cruz, now meets at this address as well.

The inventory form for Resource 099 has been updated with the revised construction date of 1957/c.1970. The recommendation that Resource 099 (513 West Rittenhouse Road) is not eligible for listing in the NRHP remains unchanged.

Resource 251: Property (4505 Airline Drive)

The THC commented that Resource 251 was not included in the tabular inventory. The resource is not of historic age but was surveyed in earlier historic resources survey efforts. A line for Resource 251 has been added to the inventory table in Appendix B.

Resource 256: Commercial Building (1319 Crosstimbers Drive)

The 2018 Report for Historical Resources Survey did not include this commercial property in the tabular inventory or inventory forms but did include it on project maps. The property was subsequently surveyed by Mead & Hunt historians on January 22, 2019. Resource 256 (1319 Crosstimbers Drive) is not eligible for listing in the NRHP under Criteria A, B, or C. Inventory forms and inventory table have been updated to reflect the survey findings.

Resource 457: Fraternal Order of Police Lodge (3130 North Freeway)

The THC questioned if the building, based on its exterior and structural materials, could have any distinctive or decorative features associated with the local of the Operative Plasterers' and Cement Masons' International Association (OPCMIA), a former owner of the building. The building features exposed-aggregate concrete exterior wall panels, wavy concrete parapet, and concrete-frame construction. Review of Houston city directories indicates that, from the time of its construction in 1965-1966, the building was owned and occupied by "Cement Masons Local 681," which is a local of the OPCMIA. The Cement Masons Local 681 owned the property until 1999, when it was sold to the local chapter of the Fraternal Order of Police.

The use of concrete as a primary construction material is understandable, given the original ownership of the building. While visually interesting, the use of exposed-aggregate concrete wall panels was widespread by the mid-1960s with mass production of the material by several companies.³¹⁶ The expressed concrete framing and decorative parapet are interesting but are indicative of common design trends for commercial and warehouse buildings of the period. Research in local repositories did not reveal additional information to indicate the use of innovative or distinctive techniques or materials. The recommendation that Resource 457 (3130 North Freeway) is not eligible for listing in the NRHP remains unchanged.

³¹⁶ Jenna Cellini, "The Development of Precast Exposed Aggregate Concrete Cladding: The Legacy of John J. Earley and the Implications for Preservation Philosophy" (Thesis, University of Pennsylvania, 2008), 97–104.

Resource 523: House (3224 Mainford Street)

The 2018 Report for Historical Resources Survey did not include an inventory form for this 1959 residence. The property was subsequently surveyed by Mead & Hunt historians on January 22, 2019. The recommendation that Resource 523 (3224 Mainford Street) is not eligible for listing in the NRHP remains unchanged. An inventory form for this property has been added to Appendix C.

Resource 538: House (306 Payne Street)

The THC noted that this property was not included in the tabular inventory or inventory forms in the 2018 Report for Historical Resources Survey. Field investigations revealed that no buildings or structures are extant on this parcel. It is likely that a building was present at the outset of NHHIP field surveys but was subsequently removed. The inventory table in Appendix B has been updated to reflect the current status of the property.

Resource 539: House (221 Parkview Street)

The inventory form and inventory table had contradicting information regarding the NRHP eligibility status of the residence at this property. Mead & Hunt historians examined the house and confirmed the residence at 221 Parkview Street is not individually eligible for the NRHP but is a contributing resource to the NRHP-eligible Germantown Historic District.

Resource 565: House (1518 Weber Street)

The THC asked for additional information regarding response to a previous THC request dated December 12, 2017, and a follow-up January 2018 site visit to this property by TxDOT staff and consultants and THC staff.

The December 12, 2017, THC comment was: "We need more information and better photos of Resource 565 (1518 Weber). Our research indicates it may date to the middle-19th century and that its primary facade may face north toward the bayou. It likely predates much of the rest of that neighborhood and may be individually eligible for NRHP designation as a rare surviving property from that era of Houston's history and that period of building."

Historic resources consultants CP&Y, Inc. provided the following response to this request: "Research showed house faced the street rather than bayou originally and has undergone extensive modifications and is therefore recommended not eligible, as originally stated. Site visit with THC [in January 2018] confirmed that this resource is not individually NRHP eligible."³¹⁷

³¹⁷ CP&Y, Inc., "Memorandum: Responses to SHPO Comments Re. NHHIP 100% Survey Historic Resources Report," n.d.

Resource 566: Warehouse (2200 Houston Avenue)

The Resource 566 polygon on the survey maps did not include a brick warehouse on the surveyed property. The maps in Appendix A have been revised to incorporate this comment.

Resource 571 and Resource 572: Houses (1204 and 1200 Shearn Street)

The THC requested additional information on these properties as requested in an December 12, 2017, letter regarding possible inclusion as potential contributing resources to an expanded High First Ward Historic District.

Historic resources consultants CP&Y, Inc. provided the following response to this request: “The team conducted a tour of this area with THC staff, to showcase the vast amount of infill in the area and the discontinuity of the existing district. Resources 571 and 572 have had their dates updated on forms. However, the High First Ward district does not extend to the project APE. The City of Houston district is currently gerrymandered in a moderate to severe degree in order to maintain a semblance of continuity in the existing district; this type of gerrymandering is considered inappropriate in determining an NRHP district but would be required to extend the district north to the project area.”³¹⁸ The local High First Ward Historic District is located more than 1,000 feet away from the NHHIP APE at its closest proximity.

Resource 580: Former Tennison Hotel (110 Bagby Street)

The THC noted that this building was likely architecturally significant but was no longer eligible for NRHP listing due to alterations and additions resulting in integrity loss. The inventory table and inventory form have been modified to reflect that recommendation.

Resource 581: Downtown Houston Post Office, Processing and Distribution Center (401 Franklin Street)

The THC requested revisions to reflect the 2018 listing of the building in the NRHP and to use the same historic name for the property as used on the NRHP nomination. Section 4 this report, the Appendix B inventory table, and Appendix C inventory form have been updated to incorporate this comment.

Resource 590: Rossonian Cleaners (3921 Almeda Road)

The THC asked for additional information regarding the Rossonian Hotel, which was the original location of the Rossonian Cleaners. The hotel, actually constructed as luxury apartments with service businesses on the ground floor, was located at the northeast corner

³¹⁸ CP&Y, Inc., “Memorandum: Responses to SHPO Comments Re. NHHIP 100% Survey Historic Resources Report.”

of McKinney Street and Fannin Street in downtown Houston.³¹⁹ It was demolished in 1974 for the construction of 2 Houston Center, which remains at that location to the present.³²⁰

Resource 688: House (2102 Hadley Street)

Resource 689 and 690: Houses (2200 block of St. Emanuel Street)

Resource 691: Berean Seventh-Day Adventist Church (2115 St. Emanuel Street)

The THC noted that these buildings, as well as a house at the rear of Resource 690, are located in or near the 2007 NRHP-eligible Third Ward Historic District and should be evaluated as contributing or noncontributing resources to the historic district. As discussed earlier in this report, Mead & Hunt conducted field investigations in the Third Ward to clarify and update historic district boundaries. Due to substantial infill and removal of historic-age resources, there is no longer potential for an NRHP-eligible historic district at these locations. The recommendation that these properties are not individually eligible for listing in the NRHP remains unchanged.

The THC also noted that the 1960 construction date for Resource 691 was incorrect in the 2018 Report for Historical Studies Survey, as the building is shown on a 1950 Sanborn map of the area. The construction date has been revised to c.1950 in the Appendix B inventory table and Appendix C inventory form.

Resources 725 and 726: 2105 McKinney Street and 2120 Walker Street Reevaluation

The THC noted that the Sanborn fire insurance map used to evaluate Resources 725 and 726 showed the incorrect block of McKinney Street and questioned how the resources' association with Chinatown could be properly evaluated without a context on the subject. In addition, the THC questioned whether the building had any actual associations with the Westheimer family, a prominent family in the history of Houston. In order to address these concerns, Mead & Hunt developed a Houston Chinatown context and investigated Sanborn fire insurance maps, historic aerial imagery, and Houston-area city directory listings for 2105 McKinney Street at the Houston Metropolitan Research Center (HMRC) and Texas State Library and Archives (TSLAC).

Resources 725 and 726 are two separate buildings but were evaluated and inventoried in previous reports as one building. The Harris County Appraisal District (HCAD) website lists Resource 725 as 2105 McKinney Street and Resource 726 as 2120 Walker Street. Currently these buildings share the same owner (HBS Warehouse Associates), but research did not reveal whether the wall that separated them has been opened or removed (see

³¹⁹ Texas Publishing Company, *Directory for the City of Houston 1911-1912* (Houston, Tex.: Texas Publishing Co., 1911), 593.

³²⁰ "The Rossonian," *Houston Time Portal*, 2009, houstontimeportal.net/rossonian.html.

Figure 73). However, research indicated that the buildings may have shared uses during its history. Therefore, they were evaluated together as one property.



Figure 73. Current Google Earth aerial image of Resources 725 and 726 showing two separate buildings.

City directories investigated dated from 1920 to 1980. Listings for 2105 McKinney Avenue (later renamed McKinney Street) between 1920 and 1935 primarily included individuals. Sanborn maps shows that addresses comprising the current footprints of Resources 725 (2105 and 2109 McKinney Avenue) and 726 (2104, 2108, and 2110 Walker Street) were occupied by residences by 1924 (see Figure 74).³²¹ There were no city directory listings for 2105 McKinney Avenue between 1935 and 1939, indicating that it was likely vacant during this period.

³²¹ "Houston, Texas, 1924 Vol. 1" (New York: Sanborn Map Company, 1924), 36, Digital Sanborn Maps, 1867-1970, ProQuest.

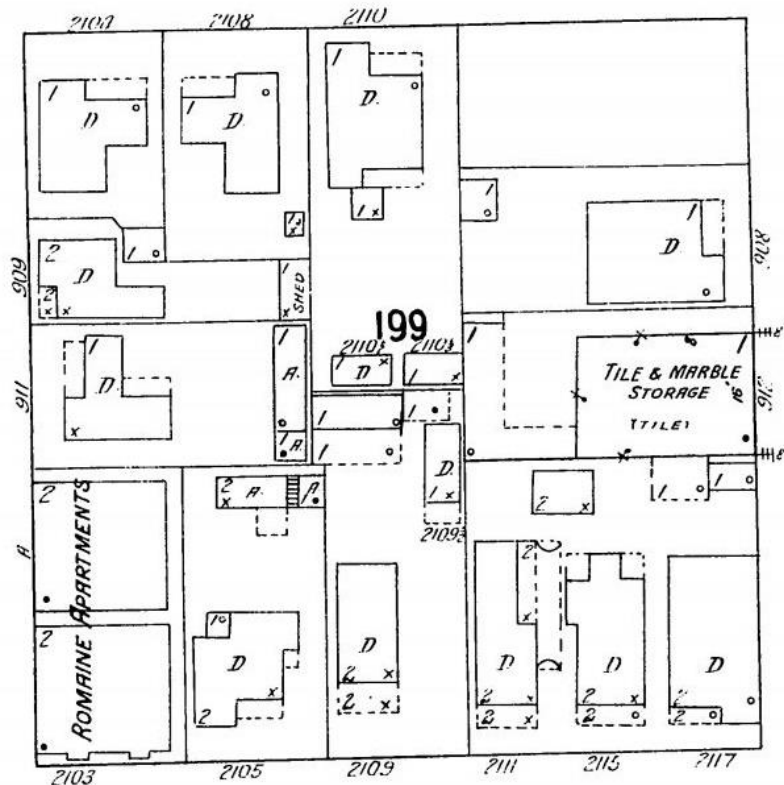


Figure 74. 1924 Sanborn map showing 2100 block of McKinney Street. Addresses that comprise Resources 725 (2105 and 2109) and 726 (2104, 2108, and 2110) were occupied by residences.

Historic aerial photographs show both Resources 725 and 726 were constructed by 1944 and city directory listings for 2105 McKinney Avenue show that property was occupied by several industrial companies beginning in 1940.³²² This transition reflects a wider trend during this period as warehouses and factories replaced residences along railroad lines in the area. City directory listings for 2105 McKinney Avenue between 1940 and 1958 included the Kluesener-Fogel Company, Warren Electric Company, Garlock Company, and the G&H Auto Air Conditioning Company. The 1951 Sanborn map labels Resource 725 as the Damon Wells Warehouse and indicates that it and Resource 726 along Walker Street to the north were used by an electric supply company. The northeast elevation of Resource 726, which features several garage bay openings, faced a railroad siding along Walker Street that connected to the Houston Belt and Terminal Railway (see Figure 75).³²³ From 1959 into the 1970s 2105 McKinney Street was used by the Allen-Bradley Company, a control component manufacturer, and by 1980 the building was occupied by HBS Warehouse Associates, its current owner.

³²² "Historical Imagery: Houston," *Google Earth Pro*, 1944, accessed January 25, 2019.

³²³ "Houston, Texas, 1924 (1951 Revised) Vol. 1," 36.

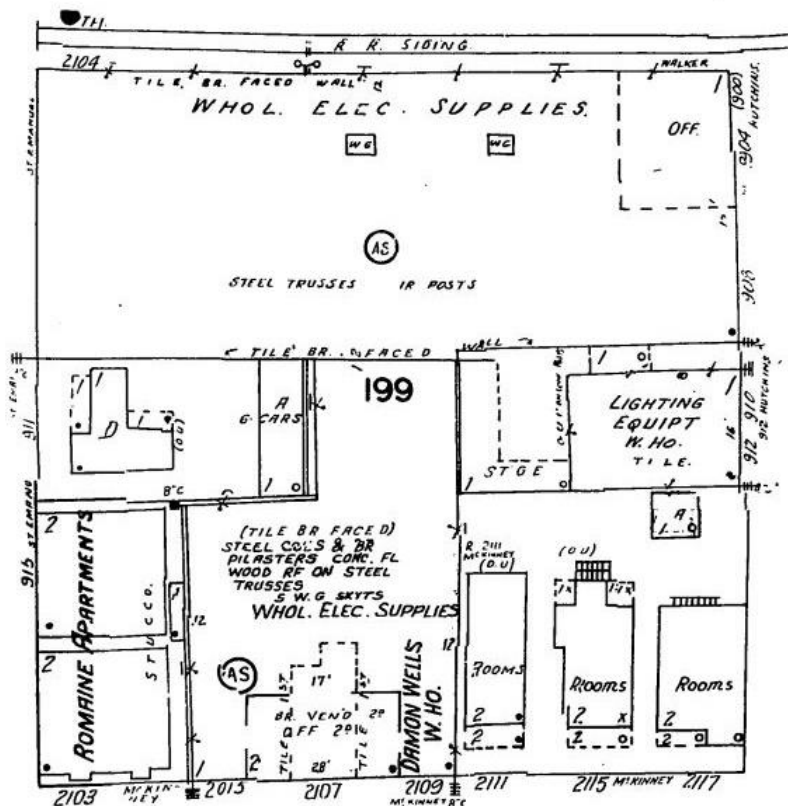


Figure 75. 1951 Sanborn map of 2100 block of McKinney Street showing both Resources 725 and 726 used for “Whol. Elec. Supplies.” Note several residences remain on the block but most of it has transitioned to industrial uses. The railroad siding shown along Walker Street did not appear on the earlier 1924 Sanborn.³²⁴

Research and field survey indicate that Resources 725 and 726 were constructed c.1940 and used for industrial purposes up to 1975. Research did not reveal a direct association between the buildings and Houston’s commercial Chinatown during this period. Although directories list a warehouse company as the occupant of 2105 McKinney Street by 1980, the building’s extant applied Asian-themed architectural elements, such as pagoda-style awnings, indicate that it was occupied by an Asian business and likely associated with Chinatown in the 1980s or 1990s. Research did not indicate any association between the resources and the Westheimer family as noted in previous HRSR reports.

Although Resources 725 and 726 were constructed during a period of railroad-related industrial development in Houston, they alone do not individually convey the significance of this historic trend and there is no indication that a potential railroad-related historic district is present in the area. Additionally, research indicated that the buildings’ connection to Chinatown occurred after 1975 and this association does not rise to the level of exceptional significance required under *Criteria Consideration G: Properties that have Achieved*

³²⁴ “Houston, Texas, 1924 (1951 Revised) Vol. 1,” 36.

Significance within the Last Fifty Years. Furthermore, research did not reveal a direct association with persons significant to local, state, or national history. For these reasons, Resources 725 and 726 are not eligible under *Criteria A* or *B*.

The architecture of Resources 725 and 726 reflects common forms, materials, and building practices typical of Houston's historic-age warehouses. Although the front (southwest) facade of Resource 725 displays some modest Art Deco detailing along the roofline, the building as a whole lacks other distinctive architectural features and is not a notable example of an Art Deco warehouse, nor is it the work of a master. In addition, recent alterations to both buildings, including infilled windows and the addition of pagoda-style awnings, replacement doors, and pilasters along the front (southwest) facade of Resource 725, has resulted in diminished integrity of design, materials, workmanship, and feeling. Due to lack of significance and diminished integrity, Resources 725 and 726 are not eligible for NRHP listing under *Criterion C*.

Resource 801: Michele Baglio Grocery (920 Gregg Street)

This resource was evaluated as a residence in previous Reports for Historical Studies Survey. The THC noted that the building originally functioned as a grocery operated by Michele Baglio, a Sicilian immigrant. The THC recommended evaluation of the property for possible Criterion A significance.

Mead & Hunt conducted general research into early Italian settlement in Houston and more specifically the Fifth Ward, along with property-specific research to appropriately evaluate the building at 920 Gregg Street. This report includes a brief context for Italian settlement in Houston's Fifth Ward is located in Section 3.A.(4) of this report and was used as general background for evaluation of this property.

Michele Baglio is first identified in Houston city directories in 1917, operating a grocery at 902 Bayou Street in the Fifth Ward, about five blocks northwest of present-day 920 Gregg Street. The 1918 city directory shows Baglio had moved his grocery's location to 920 Gregg Street. Prior to 1918, there were no entries for the 900 block of Gregg Street; it appears likely that the Baglio Grocery at 920 Gregg Street was constructed in 1917 or 1918 and represented the first building at that location. The Baglio family, including Michele's wife Giovanna "Annie" Oliveri and four children, also lived at the same address, presumably on the second story of the building. The 1920 city directory indicated most of the residents of Gregg Street and adjacent streets as "colored" with a few Italian-owned businesses and residents with Italian surnames, thus reflecting the ethnically mixed settlement pattern typical of the Fifth Ward in the late 1800s and early 1900s. Michele Baglio operated his grocery at 920 Gregg Street until 1939. Michele and Annie Baglio moved to another residence by 1940.

The grocery store changed hands several times over the next decade, listed as the Tony Raia Grocery in 1940 and the Wan Food Market (operated by Joseph Wan) in 1941. The property was vacant in the mid-1940s and was occupied by the LM Food Market by 1948. In the 1950s the building's function changed from a retail grocery to a beauty shop/barber shop, a function it retained until at least 1970. Retha's Beauty Shop occupied the building from 1957 to 1970, and it also served as a residence during that period. From the mid-1970s to the present it has served solely as a residence, with occasionally periods of vacancy.

The building retains its overall form, massing, roofline, and primary exterior material, and remains recognizable as a commercial building. The porch, while reconstructed with non-historic material, retains the same wraparound configuration as that shown on the 1924 Sanborn map for the area. However, the building does exhibit notable alterations. These alterations include a one-story shed-roof addition on the building's south side; boarding and partial infill of entries and windows; possible changes to location of some doors and windows; installation of various types of replacement wood siding in some locations on the front and side facades.

The Baglio Grocery reflected the general trend of small corner groceries operated by Italians in ethnically mixed or predominately African-American neighborhoods. However, it was not significant within that trend, which was replicated dozens of times elsewhere in the Fifth Ward and throughout Houston. Research indicates that Italians were scattered throughout the city rather than clustered in a single "Little Italy" neighborhood. The building also appears to lack significant associations with the black business community that thrived in the much of the Fifth Ward in the mid-twentieth century. Based on the lack of historical significance coupled with the integrity issues noted above, Resource 801, the Baglio Grocery at 920 Gregg Street, is not individually eligible for listing in the NRHP under Criteria A, B, or C. This property is not located in an NRHP-listed or NRHP-eligible historic district.

Resource 820: Warehouse (1116 Naylor Street)

During research conducted for this report, Mead & Hunt historians noted multiple non-historic-age additions to the METRO Warehouse, which is a contributing resource to the Houston Warehouse Historic District. Based on review of historic aerial images, the rear portion of the building was constructed between 1978 and 1989. The second story in the middle of the front portion of the building also appears to date from that period. The research also identified removal of historic-age buildings once located on the property. Much of the current paved parking area is depicted on the 1924 Sanborn fire insurance map as occupied by a narrow rectangular building labeled as "junk" with an adjacent open-air junkyard (see Figure 76). The rectangular building is evident on the 1951 Sanborn map and on aerial images into the 1960s.

In March 2019, the THC requested the addition of Sanborn maps and historic aerial imagery to show the evolution of this property over time. Included below are Sanborn maps from 1924 and 1951 (Figures 76 and 77) and historic aerial imagery from Google Earth dating from 1953, 1978, and 1989 (Figures 78 through 80).

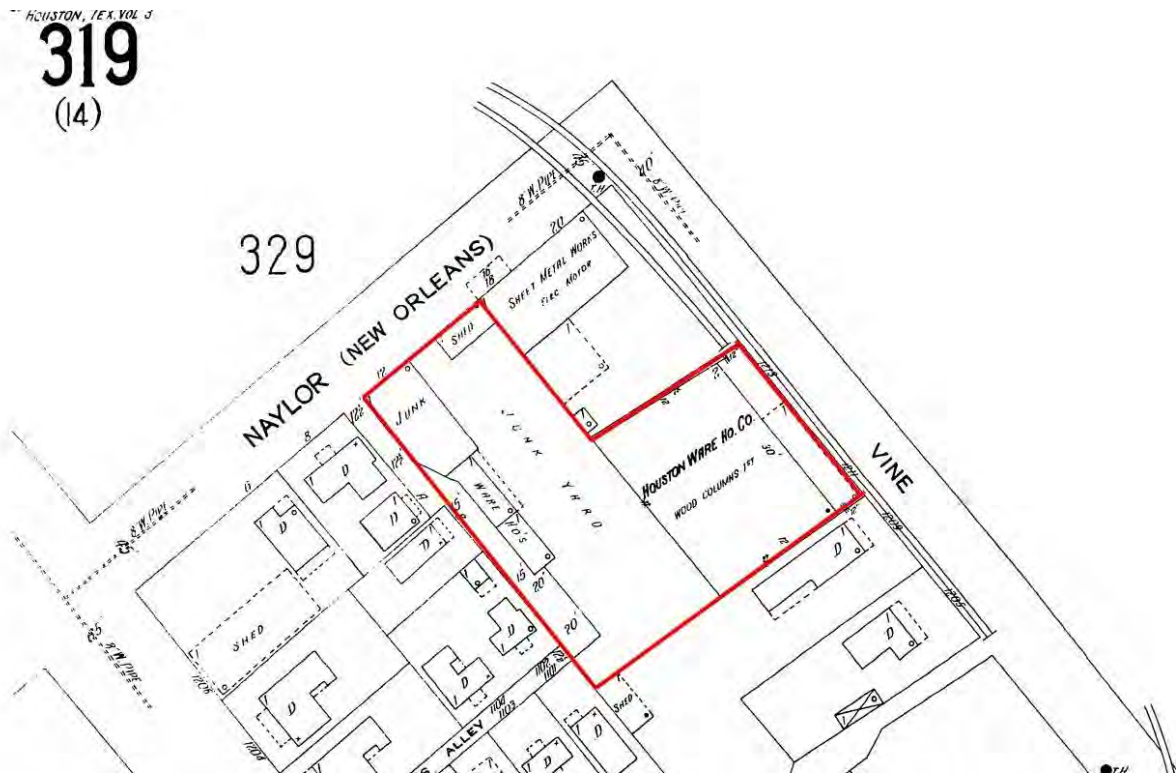


Figure 76. 1924 Sanborn map with the current Resource 820 parcel outlined in red. Note the shape of the primary building facing Vine Street and smaller buildings extending south from Naylor Street.

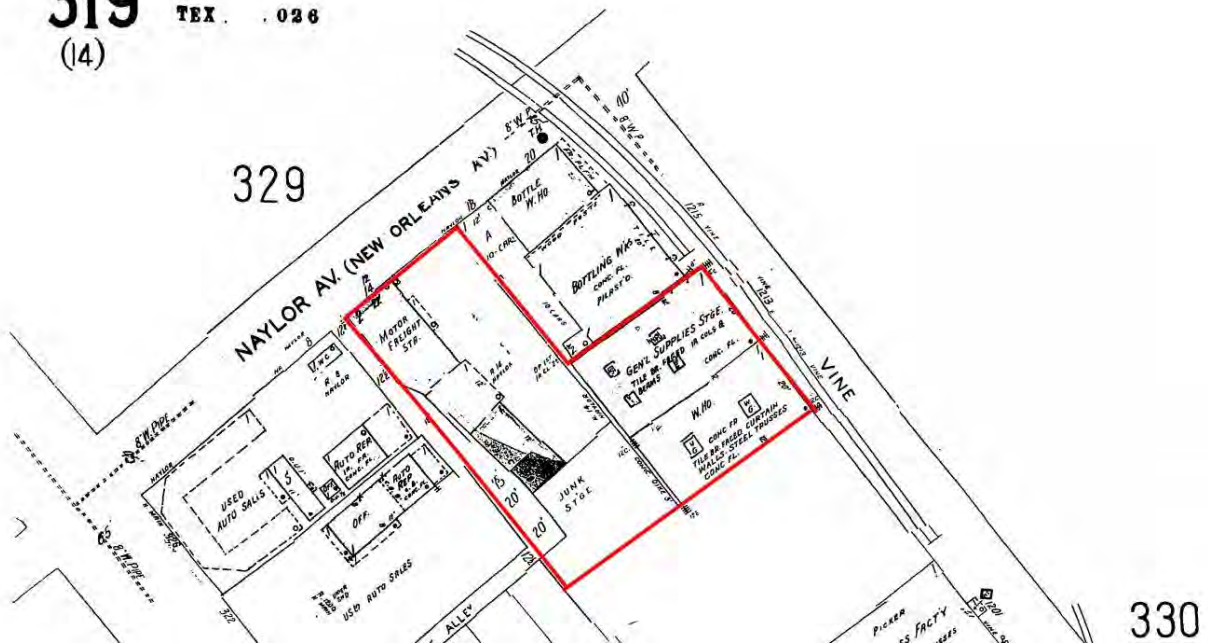


Figure 77. 1951 Sanborn map with the current Resource 820 parcel outlined in red. The primary building has been subdivided into two businesses with interior divisor walls. Smaller buildings remain extant along the west edge of the current Resource 820 parcel.



Figure 78. 1953 aerial image with the current Resource 820 parcel outlined in red. Building placement matches 1951 Sanborn map.



Figure 79. 1978 aerial image with the current Resource 820 parcel outlined in red. Buildings along the west side of the current Resource 820 parcel are no longer present.



Figure 80. 1989 aerial image with the current Resource 820 parcel outlined in red. The large rear addition to the primary building first appears in this aerial image.

Resource 822: Vacant Lot (421 North Main Street)

The THC commented that survey maps show this address as containing a historic-age resource; however, the building formerly on this parcel was demolished several years ago. Survey maps in Appendix A have been revised. For continuity and clarity, parcels that were originally included in the survey as “vacant/new construction” have been retained on the maps. To simplify the graphic presentation on the survey maps, previously surveyed vacant parcels and parcels with new construction are shown as not eligible rather than as a separate category.

Resource 855 and 855.1: Hollywood Cemetery (3506 North Main Street)

The THC reiterated a request for additional evaluation of the cemetery and noted a previous THC request on this item dated December 12, 2017. The THC’s concerns centered on the need for fuller evaluation of the cemetery under NRHP Criteria Consideration D, since it is designated as a Historic Texas Cemetery, which generally connotes significant historical associations.

Historic resources consultants CP&Y, Inc. provided the following response to this request: “Confirmed via site visit with THC staff that this is not an NRHP-eligible cemetery.”³²⁵ TxDOT staff and consultants and THC staff briefly examined the cemetery as part of a November 28, 2018, site visit. Based on the absence of direct effects and limited potential for indirect effects to historic properties in this area, it was agreed that no further evaluation of Resource 855 and 855.1 was required.

Resource 867: House (201 Payne Street)

The THC noted that this property was shown on survey maps but not included in the tabular inventory or inventory forms. The THC recommended the property as contributing to the NRHP-eligible Germantown Historic District. Mead & Hunt historians surveyed the property on January 22, 2019, and confirmed that the c.1905 house on the property is contributing to the Germantown Historic District. The Appendix B inventory table has been updated and an inventory form for Resource 867 is included in Appendix C.

Resource 874: House (215 Parkview Street)

The THC noted that this property, located within the Germantown Historic District, was evaluated as not individually eligible for the NRHP but was not evaluated as a resource in the historic district. The THC recommended the property as contributing to the NRHP-eligible Germantown Historic District. Mead & Hunt historians surveyed the property on January 22, 2019, and confirmed that the 1920 house on the property is contributing to the

³²⁵ CP&Y, Inc., “Memorandum: Responses to SHPO Comments Re. NHHIP 100% Survey Historic Resources Report.”

Germantown Historic District. The Appendix B inventory table has been updated and a revised inventory form for Resource 874 is included in Appendix C.

Resource 908: Butler Brothers Union Terminal Warehouse (1002-1008 Washington Street)

This property was designated as a City of Houston protected landmark in 2012 and was recently rehabilitated for use as the City's development permitting center. THC recommended that Resource 908 is eligible for listing under Criterion C for its architecture.

Mead & Hunt historians re-surveyed the building on January 22, 2019, and toured the exterior of the property with TxDOT and THC historians on January 23, 2019. Further field survey and research into the building, including examination of the City of Houston's 2012 Protected Landmark Designation Report, supports the finding that Resource 908 at 1002-1008 Washington Avenue is eligible for NRHP listing under Criterion C in the area of Architecture.

Resource 957.1: Warehouse (2103 Lyons Avenue)

The THC requested that Resource 957.1 be distinguished from Resource 957 on survey maps. Closer examination indicated that the Resource 957.1 designation was mistakenly applied to a separate photographic view of the same building on the property. Resource 957.1 has been removed from the Appendix B inventory table and Appendix C inventory forms.

Resource 967: Woodland Park (bounded by IH 45, Houston Avenue, Parkview Street, Wrightwood Street)

Woodland Park was first established as Highland Park by the Houston Electric Company in 1903. The company developed the park as part of its effort to increase ridership on its electric streetcar line, which at that time extended along Houston Avenue to the park. The park developed at a time of rapid suburbanization at the outskirts of Houston. During this period, the park included a restaurant, dance pavilion, and lake created by a dam constructed on Little White Oak Bayou. The City of Houston was actively seeking ways to develop and improve parks throughout the city and in 1911 it purchased the park and renamed it Woodland Park.³²⁶ The property and its amenities were important recreational resources that contributed to the historic character of the Germantown and Woodland Heights neighborhoods. Homes along Parkview Street to the north and Wrightwood Street to the south were marketed for their proximity to the park. In its November 2, 2018, response to the September 2018 NHHIP Report for Historical Studies, the THC requested Woodland Park (Resource 967) be considered as a contributing resource to the NRHP-eligible Germantown Historic District. Research and field survey confirmed that although many of its

³²⁶ City of Houston Planning & Development Department, Archaeological & Historical Commission, "Landmark Designation Report for the Hulsey-Davis House (1216 Wrightwood Street)," 2015, 2.

early-twentieth-century features have been removed, the park retains its recreational function and physical connection to the Germantown neighborhood. Therefore, it is recommended contributing to the Germantown Historic District.

Resource 969: Woodland Park Recreation Building (212 Parkview Street)

In 1948 the City of Houston commissioned the construction of a modern, two-story, brick and steel, recreation building that featured a gymnasium, game gallery, club room, and kitchen. The building was designed by local architect R. W. Leibsle and constructed by contractors the Albert Meyerson Company.³²⁷ The building exhibited modernist stylistic influences including a low side-gable roof with wide overhanging eaves and industrial fixed-frame windows. In its November 2, 2018, response to the September 2018 NHHIP Report for Historical Studies, the THC requested that the Woodland Park Recreation Building (Resource 969) be considered as a contributing resource to the NRHP-eligible Germantown Historic District. Field survey and research indicated that, although the building was constructed later than the early-twentieth-century residences that predominate the Germantown neighborhood, it is a historic-age feature that enhanced the park's important community recreational function in the mid-twentieth century. As an important historic-age feature contained within Woodland Park (Resource 967), the Woodland Park Recreation Building (Resource 969) is recommended as contributing to the Germantown Historic District.

Resource 974: Kelly Village (3118 Green Street)

The 2018 Report for Historical Studies Survey recommended this property as not eligible for NRHP listing. The THC agreed that the property is not eligible, but due to integrity loss rather than lack of significance. Appendix B inventory table and Appendix C inventory forms have been updated to incorporate this comment.

Resource 985: House (1220 Wrightwood Street)

This c.1920 house was not identified in previous surveys. Mead & Hunt surveyed the property in December 2018 and evaluated it as a resource within the NRHP-eligible Germantown Historic District. It retains its original form, roofline, and massing, and contributes to the overall character of Germantown. Resource 985 at 1220 Wrightwood Street is therefore recommended as a contributing resource to the Germantown Historic District. The Appendix B inventory table has been updated and an inventory form has been prepared and included in Appendix C.

³²⁷ "Untitled (This Modern Recreation Building..)." A bronze plaque near the entrance provides the name of the architect and contractor.

General Comment: Disposition of Pierce Elevated

The Pierce Elevated is a grade-separated structure that carries IH 45 on the east and south sides of downtown Houston. As part of the NHHIP, IH 45 would be realigned to parallel existing IH 10 around the north and west sides of downtown Houston, and TxDOT would transfer or sell the IH 45 ROW along the Pierce Elevated. The City of Houston and other public entities would have right of first refusal in acquisition of the Pierce Elevated ROW. If no public entities wish to acquire the ROW, TxDOT would offer the ROW for sale in accordance with its standard practices for excess real property.

Two competing proposals for the Pierce Elevated ROW have been advanced by local interest groups. The first would remove the elevated structure and replace it with recreational open space at ground level. The second would leave the elevated structure in place and create a “skypark” with recreational open space on the former bridge deck. TxDOT visualization shows the ground-level open space but explicitly states that either option is conceptual only and would require development and funding by parties other than TxDOT. TxDOT takes no stance on either of the open-space options or other potential land uses, besides providing the City of Houston or other public entities with the first opportunity to acquire the ROW.

General Comment: Additional areas for potential survey

In preparation of this report, three locations within the NHHIP APE were identified as unsurveyed in previous historic resources surveys for the project. The potential for additional survey of these areas will be determined in consultation between TxDOT and the THC. A brief summary of each area for potential survey is provided below:

- **Area 1: Love’s Truck Stop, 210 Patton Street.** A non-historic-age truck stop and paved parking area is proposed for ROW acquisition for use as a stormwater detention pond. The truck stop was not identified as additional ROW in previous surveys, and historic-age resources within 150 feet of the proposed ROW were not documented. TxDOT and Mead & Hunt historians reviewed Google Street View and Google Earth images of the area surrounding the truck stop. Parcels north of Patton Street are used as overflow truck stop parking. Parcels northeast of the truck stop are generally non-historic-age commercial and warehouse buildings. The Silverdale neighborhood is east and southeast of the truck stop, generally typified by modest mid-twentieth-century houses and non-historic-age houses, usually of wood-frame construction and one story in height. A few c.1920s bungalows with limited Craftsman influences are scattered throughout the neighborhood. Many of the historic-age residences display some exterior alterations. Little White Oak Bayou borders the west and southwest edges of the truck stop property.

Review of Harris County Appraisal District records and historic maps indicate the area west of White Oak Bayou, located between the Brooke Smith Addition to the west and the Irvington Park area to the east, remained relatively undeveloped into the early

twentieth century. The Silverdale neighborhood was likely platted in the early to mid-1920s, but residential development may have been slow to occur. Based on the area's developmental history and current built environment, there is little potential for presence of an NRHP-eligible historic district in the area. The proposed detention pond would have minimal potential for adverse effect to nearby properties.

- Area 2: Block bounded by St. Emanuel Street on the west, Franklin Street on the north, Hutchins Street on the east, and Congress Street on the south. The proposed IH 45/IH 69 ROW near this location juts out about 150 feet to the southeast. No ROW would be acquired from this block but most of the block is within 150 feet of the proposed IH 45/IH 69 ROW. Three historic-age built resources on the block were previously surveyed and evaluated in a December 2017 Report for Historical Studies, prepared for TxDOT by AmaTerra Environmental, Inc. for replacement of a railroad crossing and reconstruction of the Navigation Boulevard underpass.³²⁸ These resources were determined not eligible for listing in the NRHP per Section 106 coordination between TxDOT and the THC. The THC also concurred that no NRHP-eligible historic district was present in the area. The built resources in the AmaTerra report are:
 - 2104 Franklin Street (Map ID N-14 in the 2017 AmaTerra report)
 - 2121 Congress Street (Map ID N-15)
 - 215 St. Emanuel Street (Map ID N-17)
- Area 3: Area east and northeast of existing APE, northeast of the IH 45/IH 69 interchange. This area was surveyed using an APE of 150 feet beyond the proposed ROW. Schematic design files indicate two elevated direct-connector ramps at this location—southbound IH 45/IH 69 to southbound IH 45 and northbound IH 45 to northbound IH 45/IH 69—that would be constructed on new ROW. It is unclear if the APE should have been expanded to 300 feet beyond the proposed ROW at this location based on project activities or if further consultation among TxDOT staff and consultants resulted in the application of a 150-foot APE. The additional APE would be marked by a curved line from near the Leeland Street/Hutchins Street intersection southeast to near the Emancipation Avenue/Jefferson Street intersection. This area is characterized by a mix of mid-to-late-twentieth-century warehouses and commercial buildings, recent condominium or apartment buildings, and vacant parcels. In February 2019, TxDOT and THC historians discussed the appropriate APE for this area and agreed that the 150-foot APE used in the reconnaissance survey was appropriate given the area's industrial use and the existing presence of elevated flyovers in the vicinity.

³²⁸ AmaTerra Environmental, Inc., *Report for Historical Studies Survey, CSJ 0912-72-388 - Gulf Coast Rail District: Intersection of Commerce Street and Navigation Boulevard, Harris County, Houston District* (Prepared for Texas Department of Transportation Environmental Affairs Division, December 2017).

4. NRHP-Listed/NRHP-Eligible Properties

A summary of NRHP-listed and NRHP-eligible properties (including historic districts) within the NHHIP APE is presented below. The summary includes the name, NRHP status, NRHP significance, and photograph(s) of each resource. For historic districts, a list of individual resources within the NHHIP APE and their contributing/noncontributing status to the district is also provided.



Near Northside Historic District

NRHP Status: Listed 2010 (Criteria A, C)

Significance: Listed in the NRHP under Criterion A in the area of Community Planning and Development and under Criterion C in the area of Architecture. District represents a typical late 19th and early 20th century working class neighborhood that developed in response to nearby industrial centers. It includes an intact collection of working-class homes dating to district's period of significance (c.1890-1940) with very little postwar infill.

District Resources within Project APE:

(C = Contributing, NC = Noncontributing)

Resource 001: 2101 South St. C (Robert E. Lee Elementary School; also indiv. eligible)

Resource 002: 2015 Thomas St. C (Galveston, Harrisburg, and San Antonio Railroad Hospital; also indiv. eligible)

Resource 548: 2515 Ideal St. C (house)/NC (outbldg)

Resource 549: 2513 Ideal St. C (house)

Resource 550: 2509 Ideal St. NC (house)

Resource 551: 2503 Ideal St. C (house)/NC (outbldg)

Resource 554: 109 Carl St. C (house)/NC (garage)

Resource 555: 110 Carl St. NC (house)

Resource 556: 111 Carl St. C (house)/NC (garage)

Resource 557: 112 Carl St. NC (house)

Resource 558: 2508 Thomas St. C (house)

Resource 559: 2500 Thomas St. C (house)/NC (garage)

Resource 560: 2415 Thomas St. NC (house)

Resource 561: 2406 South St. C (house)

Resource 562: 2404 South St. C (house)/NC (garage)

Resource 877: 2516 Ideal St. C (house)/NC (garage)

Resource 878: 2514 Ideal St. C (house)/NC (garage)

Resource 879: 2512 Ideal St. C (house)/NC (garage)

Resource 880: 2510 Ideal St. C (house)/NC (garage)

Resource 881: 2516 Fletcher St. C (house)/NC (garage)

Resource 883: 206 Carl St. C (house & outbuilding)

Resource 887: 2315 Thomas St. C (house)

Resource 888: 2307 Thomas St. C (house)

Resource 890: 2220 South St. C (house)/NC (garage)

Resource 891: 2218 South St. C (house & outbuilding)

Resource 968: 2311 Thomas St. C (house)/NC (garage)



Germantown Historic District

NRHP Status: Eligible (Criteria A, C)

Significance: This district is generally composed of intact early 20th century residences with numerous examples of the Queen Anne, Colonial Revival, American Foursquare, Craftsman, and Folk Victorian styles, as well as vernacular dwellings. The district also includes Woodland Park, the 1949 Woodland Park Recreation Building, and a few early 20th century commercial properties along Houston Avenue. Large portions of the district were initially determined NRHP-eligible in 2005 under Criterion A in the area of Community Planning and Development. Subsequent fieldwork delineated expanded district boundaries and identified significance under Criterion C in the area of Architecture.

District Resources within Project APE:

(C = Contributing, NC = Noncontributing)

- Resource 530: 121 Alma St. C (house)
- Resource 531: 118 Alma St. C (house)
- Resource 532: 211 East Woodland St. C (house)
- Resource 534: 3106 Eunice St. C (house)
- Resource 535: 206 North St. C (house)
- Resource 536: 218 Payne St. C (house)
- Resource 537: 302 Payne St. C (house)
- Resource 538: 306 Payne St. NC (vacant site)
- Resource 539: 221 Parkview St. C (house)
- Resource 541: 343 Parkview St. C (house)
- Resource 542: 342 Parkview St. C (house)
- Resource 543: 1218 Wrightwood St. C (house)
- Resource 544: 1216 Wrightwood St. C (house)
- Resource 545: 1214 Wrightwood St. C (house)
- Resource 546: 1212 Wrightwood St. C (house)
- Resource 856: 114 Alma St. C (house)
- Resource 857: 209 East Woodland St. C (house)
- Resource 858: 209½ East Woodland St. C (house)
- Resource 859: 218 East Woodland St. C (house)
- Resource 860: 220 East Woodland St. C (house)
- Resource 861: 121 North St. C (house)
- Resource 862: 125 North St. C (house)
- Resource 863: 3107 Eunice St. C (duplex)
- Resource 864: 128 North St. C (house)
- Resource 865: 138 North St. C (house)
- Resource 866: 129 Payne St. C (house)
- Resource 867: 201 Payne St. C (house)
- Resource 868: 202 Payne St. C (house)
- Resource 869: 210 Payne St. C (house)
- Resource 870: 214 Payne St. C (house)
- Resource 871: 205 Parkview St. C (house)
- Resource 872: 209 Parkview St. C (house)
- Resource 873: 213 Parkview St. C (house)
- Resource 874: 215 Parkview St. C (house)
- Resource 967: Bounded by Parkview St. to N, IH 45 to E, parcels facing Wrightwood St. to S, Houston Ave. to W. C (Woodland Park)
- Resource 969: 212 Parkview St. C (Woodland Park Recreation Building)
- Resource 985: 1220 Wrightwood St. C (house)



Houston Warehouse Historic District

NRHP Status: Eligible (Criteria A, C)

Significance: The district was determined eligible in 2016 under Criterion A in the area of Commerce/Industry and under Criterion C in the area of Architecture. The district includes an intact collection of railroad-oriented warehouses from the early 20th century and automotive-related warehouses dating from the 1920s to the 1960s. Existing IH 10 bisects the district, resulting in a discontinuous district with sections north and south of IH 10.

District Resources within Project APE

(C = Contributing, NC = Noncontributing)

Resource 024: 1201 Naylor St. C (Readers Distributors Warehouse; also indiv. eligible)

Resource 025: 1125 Providence St. C (San Jacinto Warehouse; also indiv. eligible)

Resource 028: 1120 Naylor St. C (Bottling Works/Walter's Downtown)

Resource 029: 1133 Providence St. C (Carlisle Plastics, north building)

Resource 030: 1133 Providence St. C (Carlisle Plastics, south building)

Resource 820: 1116 Naylor St. C (METRO Transit building)



Third Ward Historic District

NRHP Status: Eligible (Criteria A, C)

Significance: The district is eligible under Criterion A in the areas of Community Planning and Development and Ethnic Heritage for historical associations with the development of the Third Ward by African-American and Jewish communities. The district is also eligible under Criterion C based on the architectural significance of the concentrations of intact early 20th century buildings. In the NHHIP APE, most historic-age buildings are single-family, duplex, and fourplex residences, many exhibiting Tudor Revival and Craftsman stylistic features.

District Resources within Project APE:

(C = Contributing, NC = Noncontributing)

Resource 911: 2015 Berry St. NC (church)

Resource 912: 2014 Berry St. C (house)

Resource 913: 2020 Berry St. C (house)

Resource 914: 2103 Berry St. C (house)

Resource 915: 2102 Berry St. C (house)

Resource 916: 2107 Berry St. C (house)

Resource 917: 2108 Berry St. C (house)

Resource 918: 2011 Winbern St. C (house)

Resource 919: 2022 Winbern St. C (house)

Resource 920: 2019 Winbern St. C (house)

Resource 921: 2101 Winbern St. C (house)

Resource 922: 2102 Winbern St. C (house)

Resource 923: 2105 Winbern St. C (house)

Resource 924: 2106 Winbern St. NC (house)

Resource 925: 2015 Alabama St. NC (house)

Resource 926: 2019 Alabama St. C (house)

Resource 927: 2024 Alabama St. C (house)

Resource 928: 2103 Alabama St. C (house)

Resource 929: 2102 Alabama St. C (house)

Resource 930: 2105 Alabama St. C (house)

Resource 931: 2108 Alabama St. C (house)

Resource 932: 2110 Alabama St. C (house)

Resource 933: 2023 Truxillo St. C (house)

Resource 934: 2101 Truxillo St. C (house)

Resource 935: 2102 Truxillo St. C (house)

Resource 936: 2105 Truxillo St. C (house)

Resource 937: 2106 Truxillo St. C (house)

Resource 938: 2109 Truxillo St. C (house)

Resource 939: 2112 Truxillo St. C (house)

Resource 940: 2113 Truxillo St. C (house)

Resource 941: 2114 Truxillo St. C (house)

Resource 942: 2105 Isabella St. C (house)

Resource 943: 2107 Isabella St. C (house)

Resource 944: 2110 Isabella St. C (house)

Resource 945: 2115 Isabella St. C (house)



Hidden Valley Historic District

NRHP Status: Eligible (Criterion A)

Significance: For purposes of the NHHIP, Hidden Valley is considered NRHP-eligible under Criterion A in the area of Community Planning and Development at the local level of significance, for its role in mid-20th-century Houston suburban development.

District Resources within Project APE:

(C = Contributing, NC = Noncontributing)

Resource 065: 9334 Sunnywood Dr. C (house)

Resource 066: 9330 Sunnywood Dr. NC (house)

Resource 073: 8922 Sunnywood Dr. C (house)

Resource 074: 8918 Sunnywood Dr. C (house)



Brooke Smith Historic District

NRHP Status: Eligible (Criteria A, C)

Significance: For purposes of the NHHIP, Brooke Smith is considered NRHP-eligible under Criterion A in the area of Community Planning and Development and Criterion C in the area of Architecture at the local level of significance. The Brooke Smith Addition and associated subdivisions reflect early-20th-century streetcar-influenced suburban development of north Houston with examples of vernacular L-plan, modified-L-plan, and pyramidal-roof houses as well as Craftsman bungalows.

District Resources within Project APE

(C = Contributing, NC = Noncontributing)

Resource 458: 1110 Archer St. C (house)

Resource 459: 1108 Archer St. C (house)

Resource 460: 609 Pittman St. C (house)

Resource 461: 521 Coronado St. C (house)

Resource 466: 509 Patton St. C (house)

Resource 468: 2461 North Freeway C (house)

Resource 469: 2623 North Freeway C (retail)

Resource 470: 2619 North Freeway NC (retail)

Resource 471: 2611 North Freeway NC (commercial)

Resource 472: 2607 North Freeway NC (house)

Resource 473: 2603 North Freeway C (house)

Resource 503: 3600 North Main St. C (retail)

Resource 823: 212 Vincent St. C (house)

Resource 824: 2423 North Freeway NC (house)

Resource 825: 208 Vincent St. C (house)

Resource 826: 204 Vincent St. C (house) / NC (carport)

Resource 827: 200 Vincent St. C (house) / NC (carport)

Resource 828: 2419 North Freeway NC (garage)

Resource 829: 500 Cottage St. C (house)

Resource 830: 605 Cottage St. C (house)

Resource 831: 601 Cottage St. NC (house)

Resource 832: 509 Cottage St. NC (house)

Resource 833: 507 Cottage St. C (house)




Resource 834: 505 Cottage St. C (house)

Resource 835: 512 Dell Ct. C (house)

Resource 836: 510 Dell Ct. C (house)

Resource 837: 508 Dell Ct. C (house)

Resource 838: 506 Dell Ct. C (house)

	<p>Resource: 001</p> <p>Property Name: Robert E. Lee Elementary School</p> <p>Address: 2101 South Street</p> <p>Type: EDUCATION/School</p> <p>Construction Date: 1920</p> <p>NRHP Status: Eligible (Criterion A)</p> <p>Significance: Eligible under Criterion A in the area of Education as a good example of an early twentieth century neighborhood elementary school and the work of significant Houston architect Alfred C. Finn.</p>
	<p>Resource: 002</p> <p>Property Name: Galveston, Harrisburg, and San Antonio Railroad (GH&SA) Hospital</p> <p>Address: 2015 Thomas Street</p> <p>Type: HEALTHCARE/Hospital</p> <p>Construction Date: 1910</p> <p>NRHP Status: Eligible (Criteria A, C)</p> <p>Significance: Eligible under Criterion A in the area of Medicine and Criterion C in the area of Architecture as a large-scale, Italian Renaissance building, easily recognizable to its early-twentieth-century period of significance. Contributing resource to Near Northside Historic District.</p>
	<p>Resource: 004A</p> <p>Property Name: Houston Water Works</p> <p>Address: 27 Artesian Street</p> <p>Type: INFRASTRUCTURE/Water pump station</p> <p>Construction Date: 1926</p> <p>NRHP Status: Listed 1976 (Criterion A)</p> <p>Significance: 1926 pump station associated with early development of Houston's municipal water service. The station was also designated a State Antiquities Landmark in 1981.</p>

	<p>Resource: 004B Property Name: Houston Water Works Address: 27 Artesian Street Type: INFRASTRUCTURE/Water pump station Construction Date: 1926 NRHP Status: Listed 1976 (Criterion A) Significance: 1926 pump station associated with early development of Houston's municipal water service. Resource 004B not originally included in 1976 NRHP nomination but located on the NRHP-listed parcel and now considered a contributing resource to the property.</p>
	<p>Resource: 007A Property Name: Kellum-Noble House Address: In Sam Houston Park, 212 Dallas Street Type: DOMESTIC/Single Family Construction Date: 1847 NRHP Status: Listed 1975 (Criteria A, C) Significance: Listed under Criterion A in the area of Education and Criterion C in the area of Architecture as fine example of Greek Revival style.</p>
	<p>Resource: 015 Property Name: Former Albert Sidney Johnson Jr. High School Address: 1906 Cleburne Street Type: EDUCATION/School Construction Date: 1925 NRHP Status: Eligible (Criterion C) Significance: Eligible under Criterion C in the area of Architecture as good example of an early twentieth century school building constructed in the Beaux Arts style designed by a prominent Texas architecture firm.</p>



Resource: 016

Property Name: Cheek-Neal Coffee Company

Address: 2017 Preston Avenue

Type: COMMERCIAL/Manufacturing Facility

Construction Date: 1917

NRHP Status: Listed 2016 (Criterion A)

Significance: Listed under Criterion A in the area of Industry in early twentieth century Houston, Texas. Designated as City of Houston Protected Historic Landmark. The resource is a significant example of a major manufacturing outpost established in Houston due to the many available transportation opportunities.



Resource: 017

Property Name: Myers-Spalti Manufacturing Plant

Address: 2115 Runnels Street

Type: INDUSTRY/Manufacturing

Construction Date: 1900-1928

NRHP Status: Listed 2003 (Criteria A, C)

Significance: Listed under Criterion A in the area of Industry and Criterion C in the area of Architecture as an example of the three types of construction used in industrial building in Houston from the turn of the century through the early twentieth century.



Resource: 019

Property Name: Houston Fire Station No. 5



Address: 910 Hardy Street

Type: MUNICIPAL/Firehouse

Construction Date: 1932

NRHP Status: Eligible (Criterion A)

Significance: Eligible under Criterion A in the area of Politics/Government as an example of an early municipal fire station within the warehouse area of Houston, north of Buffalo Bayou. Representative of the mixed-commercial and residential area.

	<p>Resource: 024</p> <p>Property Name: Readers Distributors Warehouse</p> <p>Address: 1201 Naylor Street</p> <p>Type: COMMERCIAL/Office and Warehouse</p> <p>Construction Date: 1954</p> <p>NRHP Status: Eligible (Criterion C)</p> <p>Significance: Eligible under Criterion C in the area of Architecture as a good and rare example of mid-twentieth century Moderne design in a commercial building. Contributing resource to the Houston Warehouse Historic District.</p>
	<p>Resource: 025</p> <p>Property Name: San Jacinto Warehouse</p> <p>Address: 1125 Providence Street</p> <p>Type: COMMERCIAL/Warehouse</p> <p>Construction Date: 1929</p> <p>NRHP Status: Eligible (Criterion C)</p> <p>Significance: Eligible under Criterion C in the area of Architecture as good and uncommon example of an early twentieth century warehouse building designed to accommodate both rail and truck transport by its users. Contributing resource to the Houston Warehouse Historic District.</p>
	<p>Resource: 179</p> <p>Property Name: Former Phillips 66 Gas Station</p> <p>Address: 5610 North Freeway</p> <p>Type: COMMERCIAL/Auto</p> <p>Construction Date: 1965</p> <p>NRHP Status: Eligible (Criterion C)</p> <p>Significance: Eligible under Criterion C in the area of Architecture as fine example of the International style and the Phillips 66 gas station designs between 1950 and 1970.</p>

	<p>Resource: 581 Property Name: Downtown Houston Post Office Address: 401 Franklin Street Type: GOVERNMENT/Post Office Construction Date: 1962 NRHP Status: Listed 2018 (Criteria A, C) Significance: Listed under Criterion A in the area of Politics/Government and Criterion C in the area of Architecture as fine example of New Formalism in the Modern Movement.</p>
	<p>Resource: 590 Property Name: Rossonian Cleaners Address: 3921 Almeda Road Type: COMMERCIAL/Trade Construction Date: 1928 NRHP Status: Eligible (Criteria A, C) Significance: Eligible under Criterion A in the area of Commerce in twentieth-century Houston and Criterion C in the area of Architecture as an example of retail and storefront architecture for its period of significance.</p>
	<p>Resource: 603 Property Name: Residence Address: 4120 Austin Street Type: DOMESTIC/Single Family Construction Date: 1920 NRHP Status: Eligible (Criterion C) Significance: Eligible under Criterion C in the area of Architecture as a unique and intact example of Queen Anne-style architecture in Houston.</p>
	<p>Resource: 738 Property Name: Gribble Stamp Building Address: 121 St. Emanuel Street Type: INDUSTRIAL/Commercial Construction Date: 1948 NRHP Status: Eligible (Criterion C) Significance: Eligible under Criterion C in the area of Architecture as fine example of a commercial building in the International style.</p>



Resource: 908

Property Name: Butler Brothers Union Terminal Warehouse

Address: 1002-1008 Washington Avenue

Type: INDUSTRIAL/Commercial

Construction Date: 1900

NRHP Status: Eligible (Criterion C)

Significance: Eligible under Criterion C in the area of Architecture as fine example of the industrial architecture in Houston during the turn of the century. Exhibits character defining features of the historical structures associated with Houston's industrial and transportation history.



Resource: 956

Property Name: Residence

Address: 3417 Baer Street

Type: DOMESTIC/Single Family

Construction Date: c.1900

NRHP Status: Eligible (Criterion C)

Significance: Eligible under Criterion C in the area of Architecture as an example of Folk Victorian style in Houston.



Resource: 966

Property Name: Houston Belt and Terminal Railroad (HB&T RR) Bascule Bridge over Buffalo Bayou

Address: No Address

Type: TRANSPORTATION/Railroad Bridge

Construction Date: 1912

NRHP Status: Eligible (Criterion C)

Significance: Eligible under Criterion C in the area of Engineering as an example of Houston's transportation architecture. It is one of the few examples of this bridge type still extant.

	<p>Resource: 975 Property Name: Judge Hernandez Tunnel Address: Main Street, under former GH&SA RR Type: TRANSPORTATION/Highway Construction Date: c.1910 NRHP Status: Eligible (Criterion C) Significance: Eligible under Criterion C in the area of Engineering for its significance as a complex series of roads and railroads near the Historic Warehouse District.</p>
	<p>Resource: 981 Property Name: Former Crawford Elementary School Address: 1510 Jensen Drive Type: EDUCATION/School Construction Date: 1960/1964 NRHP Status: Eligible (Criterion C – Architecture) Significance: Excellent example of mid-20th-century modernist school design. Resource 981A designed by noted local architectural firm Rustay, Martin and Vale. Resources 981 A, B, D, E are contributing; Resources 981 C, F, G are noncontributing.</p>
	<p>Resource: 983 Property Name: City Hall Annex Address: 900 Bagby Street Type: GOVERNMENT/Offices Construction Date: 1972 NRHP Status: Eligible (Criterion C) Significance: Eligible under Criterion C in the area of Architecture as an excellent example of a Brutalist public building in Houston.</p>
	<p>Resource: No Resource Property Name: Navigation Boulevard Underpass Address: Navigation Boulevard at Commerce Street Type: TRANSPORTATION/Highway Construction Date: 1936 NRHP Status: Eligible (Criterion C) Significance: Eligible under Criterion C in the area of Engineering as an example of the complex transportation and railroad-related infrastructure in Houston.</p>

5. Project Effects to Historic Properties

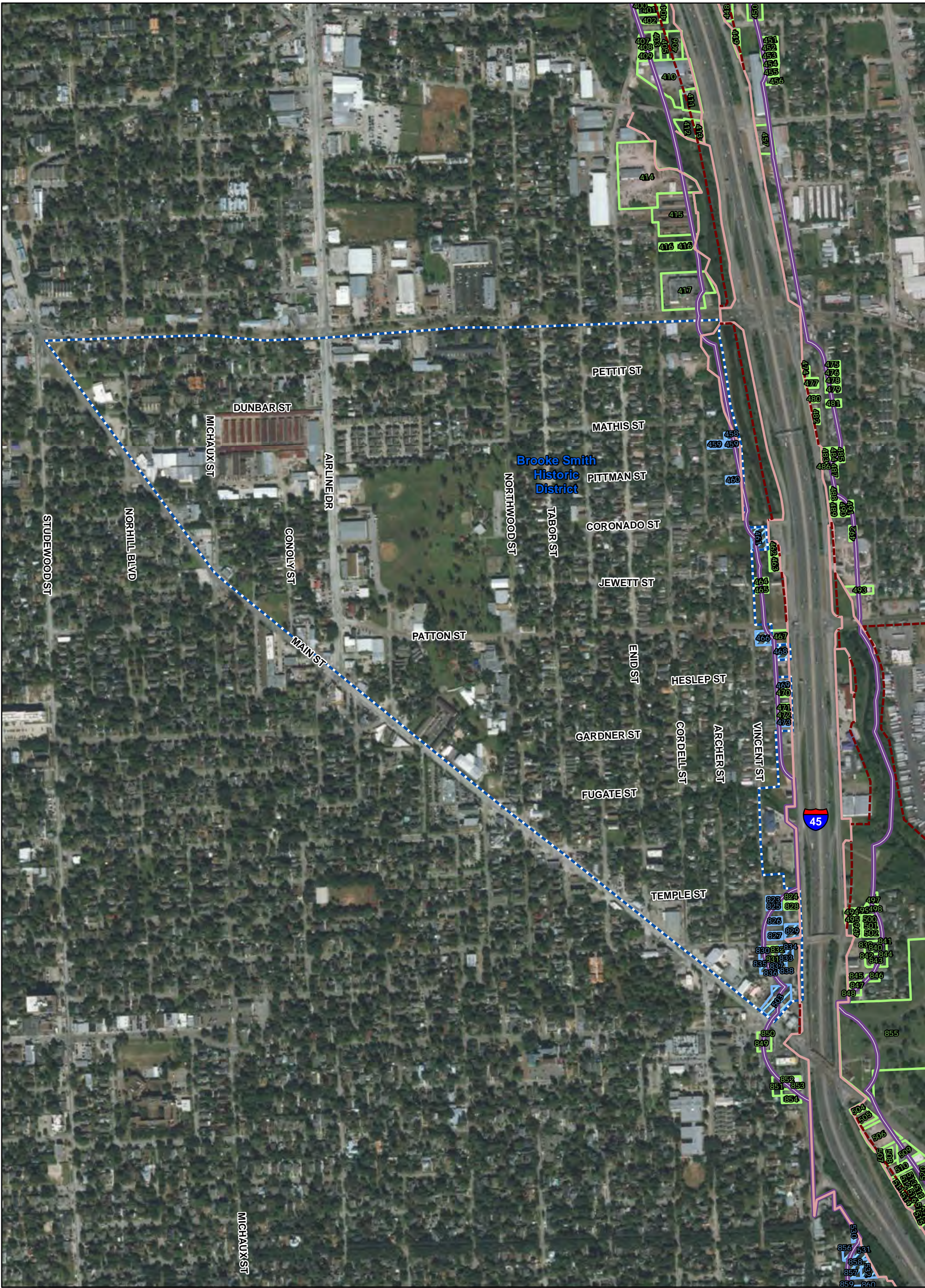
A. *Brooke Smith Historic District*

The Brooke Smith Historic District is located on the west side of IH 45, from Cavalcade Street on the north to North Main Street on the south (see Figure 81). The historic district has an irregular eastern boundary to exclude concentrations of non-historic resources and vacant lots along IH 45. The historic district's eastern boundary remains within one block of the IH 45 southbound frontage road for the full length of the district. The distance between the existing IH 45 ROW and the Brooke Smith Historic District's eastern boundary varies from between 0 and 230 feet depending on specific location.

Currently, IH 45 in this location has four travel lanes in each direction with dedicated entry/exit lanes, a reversible HOV lane along the centerline, and three-lane frontage roads in each direction. With the NHHIP, proposed IH 45 would have five travel lanes in each direction, two MaX lanes in each direction in the center of the roadway, and three-lane frontage roads in each direction. The main lanes and MaX lanes would be depressed and capped with concrete from North Main Street to Cottage Street. The main lanes and MaX lanes would be depressed and uncapped between Cottage Street and Gardner Street and at grade from Gardner Street to Cavalcade Street. Frontage roads would remain at grade. Grade separations would be located at the IH 45 intersections with Cavalcade Street, Holman Street, and North Main Street (as part of the larger concrete cap over IH 45). Grade separations are already present at these locations. The NHHIP would result in minimal ROW acquisition from a few parcels on the west side of IH 45 at this location. There would be no ROW acquisition from parcels within the Brooke Smith Historic District. Distances between contributing resources in the historic district and the closest IH 45 pavement edge would remain the same as current distances.

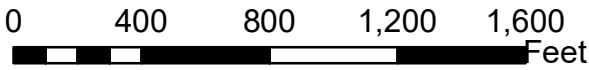
Noise studies performed for the NHHIP in 2018 found that, with NHHIP construction, projected 2040 noise levels for residences and commercial buildings along IH 45 would vary in comparison to current levels, ranging between a 2 dBA decrease to a 3 dBA increase. Noise barriers are not proposed in this area as they are not cost-effective between Cavalcade Street and Patton Street, and would not provide adequate noise reduction for areas south of Patton Street. In addition, existing and projected noise levels in areas closer to North Main Street do not meet the level required for abatement or mitigation.

NHHIP activities would not result in ROW acquisition or other direct effects to the historic district or its contributing resources. There would be no appreciable visual or proximity impacts and NHHIP noise impacts would be minimal given the existing noise conditions along IH 45. The NHHIP would have **no adverse effect** on the Brooke Smith Historic District as a whole and would have **no adverse effect** to contributing resources within the historic district.



- Legend**
- Area of Potential Effect
 - Proposed ROW
 - Existing ROW
 - Brooke Smith Historic District
 - Individually Eligible/Listed
 - Individually Eligible/Listed and Contributing to District
 - Not Eligible
 - Not Individually Eligible, Contributing to District

Brooke Smith Historic District



B. *Germantown Historic District*

The Germantown Historic District is located on the west side of IH 45, from near Alma Street to Wrightwood Street (see Figure 82). The existing IH 45 ROW at this location is 315 feet wide. In each direction of travel, existing IH 45 has four travel lanes, a dedicated exit lane, and shoulder. A barrier-separated reversible HOV lane is located in the center of the facility between the northbound and southbound lanes. Between Alma Street and Parkview Street, IH 45 is slightly below prevailing grade of the adjoining district properties. From Parkview Street to Wrightwood Street, IH 45 is at grade, rising gradually south of Wrightwood Street as IH 45 southbound lanes approach the interchange with IH 10.

With the proposed NHHIP, IH 45 would have five travel lanes in each direction of travel between Alma Street and North Street and six travel lanes in each direction between North Street and Wrightwood Street. IH 45 would also have 10-foot-wide inside and outside shoulders. An elevated structure would carry MaX lanes, with two lanes in each direction of travel as well as 10-foot outside and 4-foot inside shoulders. The express-lane structure would be located in the middle of the IH 45 facility, supported on a series of single-column bents between northbound and southbound main travel lanes. The use of an elevated structure allows for a narrower ROW section in this portion of IH 45, which is constrained by the Germantown Historic District to the west and Near Northside Historic District to the east, as well as the confluence of bayous. The height of the elevated structure would begin to sharply drop from south to north, starting at Parkview Street. The MaX lanes would meet the height of the IH 45 main travel lanes at about Woodland Street. The IH 45 main lanes and MaX lanes would continue to drop into a depressed configuration, lowering below prevailing grade near the northern edge of the Germantown Historic District.

In addition to the through traffic lanes, there would be a one-lane southbound entrance ramp between Houston Avenue and North Street and a one-lane southbound exit ramp between Little White Oak Bayou and Wrightwood Street. In response to stakeholder requests, the existing concrete box culvert that carries IH 45 over White Oak Bayou would be replaced with paired bridge structures to allow for pedestrian access along Little White Oak Bayou and improved connectivity between the Germantown and Near Northside neighborhoods.

The proposed NHHIP improvements would add between 0 and 120 feet of additional width to the IH 45 ROW in this area depending on the specific location. However, all new ROW acquisition would take place on the east side of IH 45. There would be no acquisition of ROW from the Germantown Historic District. The NHHIP would have no direct effect to the Germantown Historic District or to its component resources.

The existing IH 45 ROW directly adjoins the Germantown Historic District. IH 45 ROW distance to contributing resources in the historic district will remain the same, but in most cases the IH 45 roadway will move closer to contributing resources. As examples,

information regarding proximity of the proposed roadway to four of the historic district's closest contributing resources is provided below:

- 121 Alma Street – house (Resource 530): Currently 11 feet from IH 45 ROW, 83 feet from the closest pavement edge, 133 feet from the closest main lane. Proposed 11 feet from IH 45 ROW, 59 feet from the closest pavement edge, 97 feet from the closest main lane.
- 3106 Eunice Street – house (Resource 534): Currently 30 feet from IH 45 ROW, 111 feet from the closest pavement edge/main lane. Proposed 30 feet from IH 45 ROW, 72 feet from the closest pavement edge/main lane.
- 342 Parkview Street – house (Resource 542): Currently 54 feet from IH 45 ROW, 115 feet from the closest pavement edge/main lane. Proposed 54 feet from IH 45 ROW, 96 feet from the closest pavement edge/main lane.
- 1212 Wrightwood Street – house (Resource 546): Currently 17 feet from IH 45 ROW, 42 feet from the closest pavement edge, 125 feet from the closest main lane. Proposed 17 feet from IH 45 ROW, 41 feet from the closest pavement edge, 68 feet from the closest main lane.

The vertical profile of IH 45 would increase from its current elevation, particularly closer to the southern portion of Germantown. Below is a summary of changes in vertical profile:

- Proposed IH 45 near Alma Street: roughly same grade as existing IH 45.
- Proposed IH 45 near North Street: main lanes about 18 feet higher than existing elevation, MaX lanes about 24 feet higher than existing elevation.
- Proposed IH 45 near Parkview Street: main lanes about 13-16 feet higher than existing elevation, MaX lanes about 48 feet higher than existing elevation.
- Proposed IH 45 near Wrightwood Street: main lanes about 13-16 feet higher than existing elevation, MaX lanes about 50 feet higher than existing elevation.

Noise studies performed for the NHHIP in 2018 modeled impacts to ten “receivers” in the Germantown Historic District: eight residences, the Woodland Park athletic field, and the Woodland Park trail. Existing average noise levels at the Germantown noise receivers range between 70 and 76 dBA. The proposed NHHIP project is projected to increase noise (up to 2 dBA) at two receivers and decrease noise (up to -6 dBA) at eight receivers. It should be noted that traffic noise currently exceeds NAC for residences and recreational facilities and would continue to exceed this level under the proposed NHHIP. Therefore, construction of a 16-foot-high noise barrier along the IH 45 ROW boundary is proposed for the full length of the

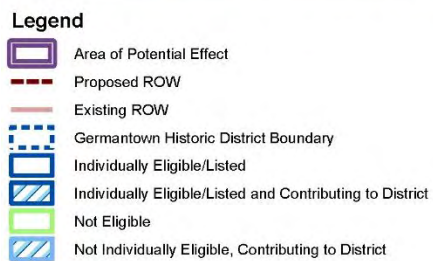
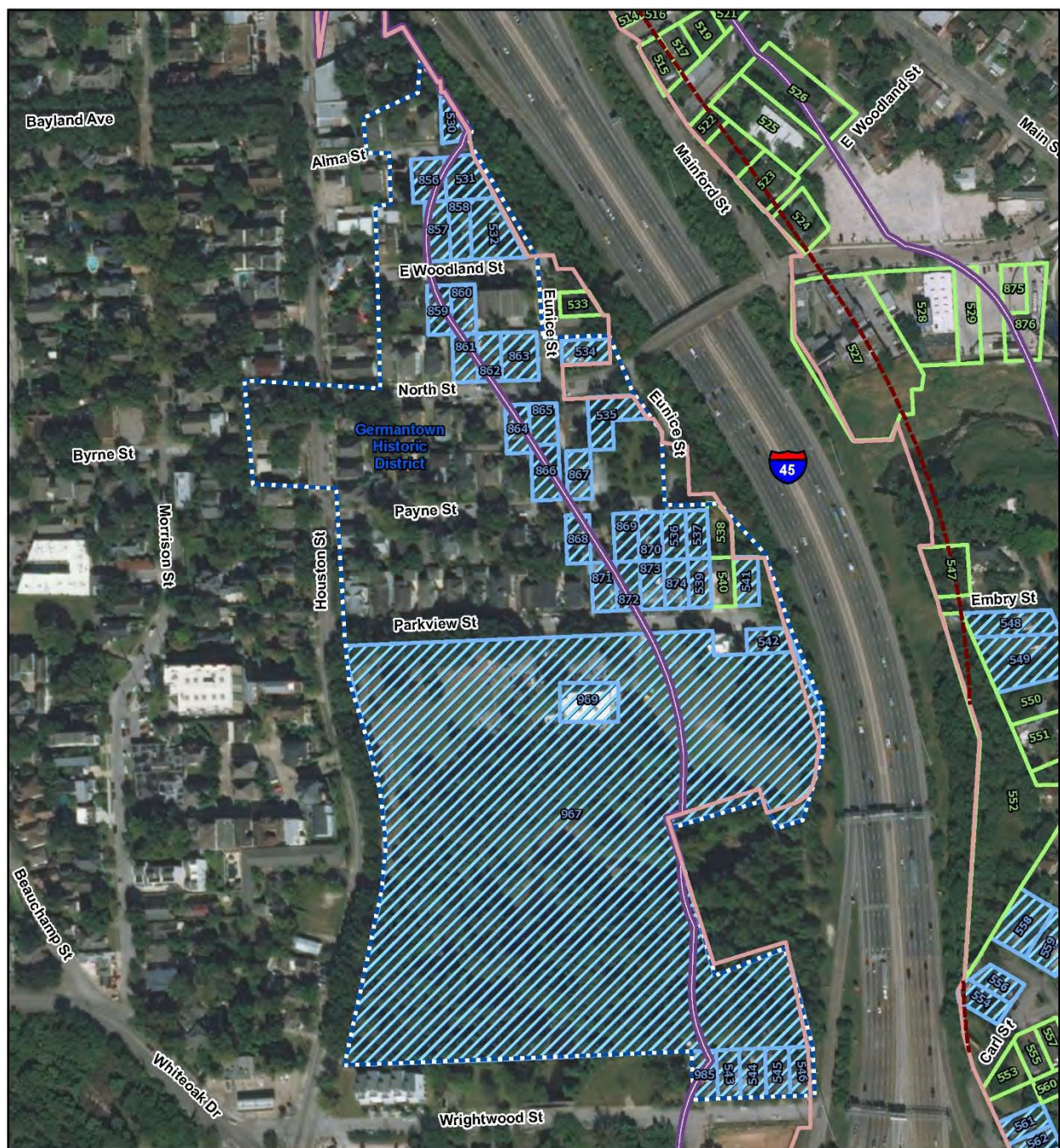
Germantown Historic District. The proposed noise barrier would reduce noise by an additional 5 dBA or more, including a reduction of 7 dBA for at least one residential noise receiver in Germantown. While the wall height is known, specific design and color of the proposed noise barriers is not known at this time; however, these features will be designed in coordination with nearby property owners and other stakeholders.

Other aspects of the NHHIP could indirectly result in reasonably foreseeable effects to the district. The existing North Street bridge over IH 45 would be removed without a replacement bridge at that location. The bridge's removal could be expected to change traffic patterns, by reducing traffic passing on North Street through the Germantown Historic District and instead shifting it to crossings at North Main Street north of Germantown and White Oak Drive/Quitman Street south of Germantown. Similarly, traffic on the southbound IH 45 exit ramp/frontage road would be blocked from turning on Wrightwood Street, which could be expected to reduce cut-through traffic through the south portion of the Germantown Historic District.

The proposed NHHIP would not have a direct effect on the Germantown Historic District, as recent schematic modifications have avoided any ROW acquisition from the historic district. The IH 45 pavement edge would move somewhat closer to properties in the historic district. There would be a significant reduction in noise impacts compared to existing IH 45 traffic noise, particularly with proposed installation of a noise barrier along the IH 45 ROW. For visual impacts, the overall IH 45 grade would be higher than existing IH 45, particularly along central and southern portions of the Germantown Historic District. The most significant visual intrusion would be the elevated MaX lanes. However, the elevated portion of the MaX lanes would be located in the center of the proposed IH 45 ROW, 60 or more feet inside of the at-grade pavement edge. The proposed noise barrier itself would be a visual change along the eastern boundary of the Germantown Historic District. The historic district is already bounded by existing IH 45, with resulting noise and visual presence.

In a November 2, 2018, letter, the THC raised questions regarding placement of lighting standards and direction of lighting (see correspondence in Appendix G). Current highway lighting near the historic district includes standard high-mast lighting. Specific lighting locations and dimensions were not determined in the development of conceptual schematic layouts. The NHHIP design-build contract specifies that the contractor shall design and construct lighting fixtures and placement to minimize dispersion of light beyond the ROW, using current industry standard techniques and systems.

In summary, the NHHIP would have no ROW acquisition from the historic district, would not directly impact any contributing resources, and noise and visual impacts would not be substantial considering the existing conditions. The proposed project would not appreciably change the district's historic character, nor its ability to convey its historical and architectural significance. Therefore, the project would have **no adverse effect** on the Germantown Historic District as a whole.



Germantown Historic District

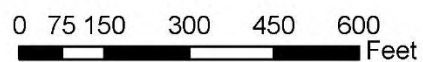


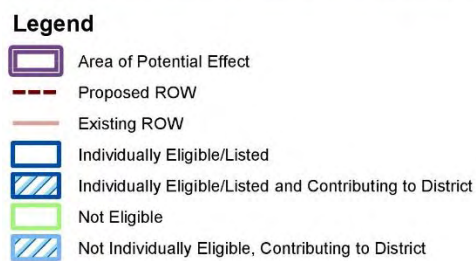
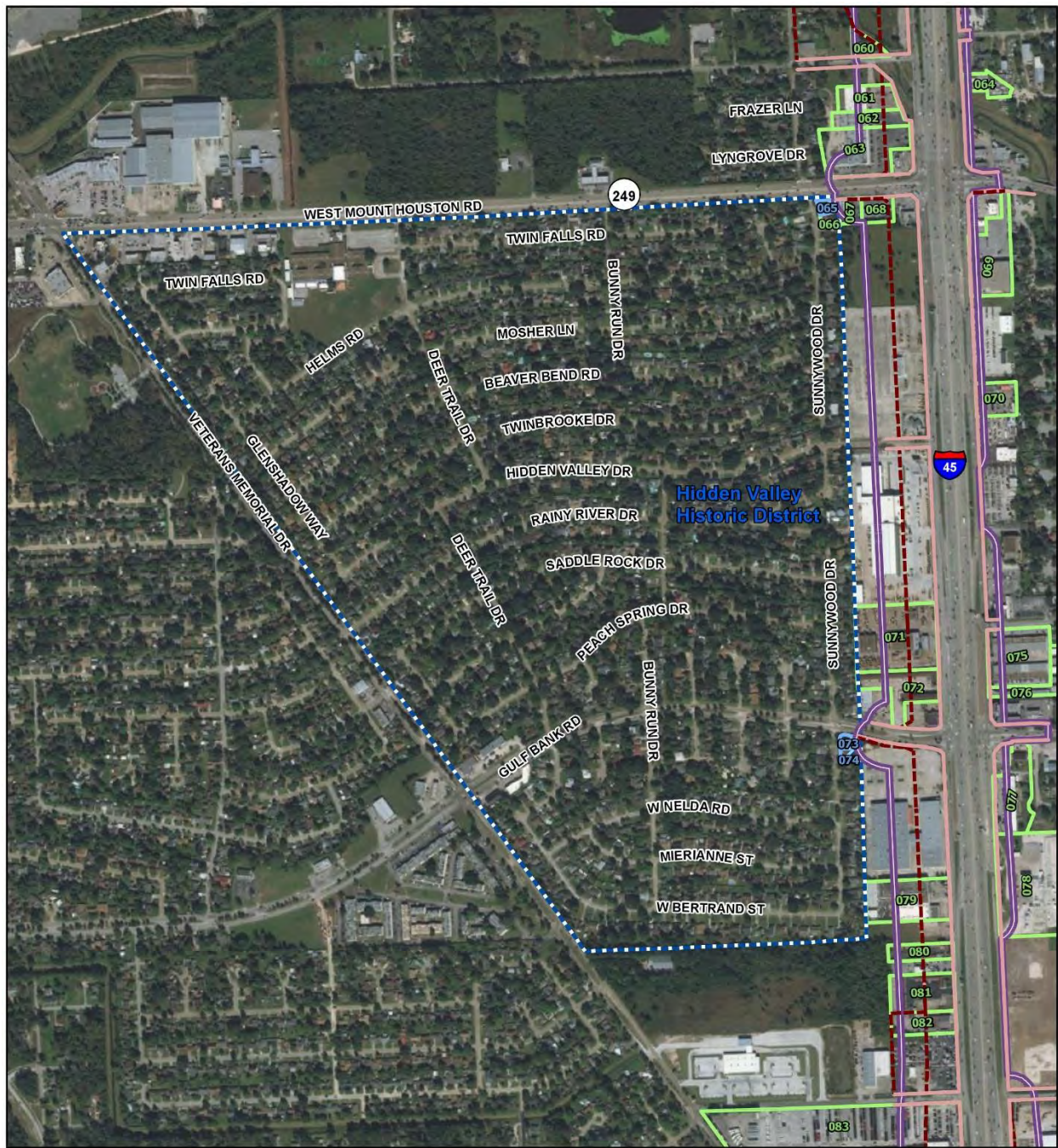
Figure 82. Germantown Historic District.

C. Hidden Valley Historic District

The Hidden Valley Historic District is located west of IH 45, roughly between West Mount Houston Road on the north to approximately 0.25 mile south of Gulf Bank Road on the south (see Figure 83). The eastern boundary of the historic district is the east property line of parcels fronting Sunnywood Drive. The commercial parcels directly adjoining IH 45 are not included within the historic district's boundaries. The district is significant under NRHP *Criterion A*.

At its closest proximity, the existing IH 45 ROW is 470 feet east of Hidden Valley Historic District at the north end of the district, and 505 feet east at the south end of the district. The proposed IH 45 ROW would move approximately 170 feet closer to the contributing resources in the historic district compared to the existing ROW. No ROW would be acquired from the Hidden Valley Historic District.

Grade separations would be located at the IH 45 intersection with Gulf Bank Road and with Mount Houston Road. Grade separations are already present at these locations. The elevation of the IH 45 main lanes would be raised by less than 5 feet but would have negligible visual impact. The NHHIP would have **no adverse effect** on the Hidden Valley Historic District as a whole and would have **no adverse effect** to contributing resources within the historic district.



Hidden Valley Historic District

0 400 800 1,200 1,600 2,000 Feet



Figure 83. Hidden Valley Historic District boundary.

D. Houston Warehouse Historic District

The Houston Warehouse Historic District, as resurveyed and delineated in a 2016 SWCA survey, is comprised of about 40.7 acres on either side of IH 10, just north of downtown Houston (see Figure 84). The IH 10 ROW is not included, making the historic district discontinuous. The Houston Warehouse Historic District was determined eligible for listing in the NRHP under Criteria A and C. The north portion of the district is roughly bounded by one-half block west of Vine Street to the west, the Union Pacific Railroad to the north, Walker Street to the east, and Providence Street and IH 10 to the south. The south portion is roughly bounded by one-half block west of San Jacinto Street to the west, Rothwell Street and Nance Street to the north, McKee Street to the east, and the Union Pacific Railroad to the south.

In this location, existing IH 10 has four travel lanes in each direction, with entry/exit ramps. Moving from west to east, IH 10 is elevated as it passes over White Oak Bayou and North Main Street, then gradually drops to a depressed profile to pass under McKee Street, Hardy Street, and Elysian Street. Providence Street functions as a westbound IH 10 frontage road and Rothwell Street serves as an eastbound IH 10 frontage road.

In the 2016 resurvey of the historic district, only buildings were evaluated for their status as contributing or noncontributing resources. The 2018 Report for Historic Studies Survey for the NHHIP expanded this evaluation to include discussion of ancillary classes of resources such as parking lots, lighting, sidewalks, and vegetation. These resource types were determined to not contribute to the district's significance. The contributing features of properties in the historic district are generally limited to the buildings themselves, with the exception of paved loading dock areas adjacent to the warehouse buildings.

The NHHIP would substantially realign IH 10 several hundred feet north of its current location. In addition, IH 45 would be realigned along the new IH 10 alignment. Proposed IH 45/IH 10 would vary in width between 350 and 750 feet (see Figure 85). At Vine Street, IH 45/IH 10 would consist of five parallel elevated structures with a total of 20 travel lanes. The structures would vary in height and be partially cantilevered to reduce ROW width. IH 45/IH 10 would return to the current IH 10 alignment near McKee Street. At McKee Street, IH 10 main lanes and IH 10 MaX lanes would be in a depressed section. IH 45 main lanes would be carried on two elevated structures. Columns for the IH 45 elevated structures would be founded in the depressed section rather than at-grade, so the IH 45 lanes would be only about 15 to 20 feet above ground level. Rothwell Street and Providence Street would continue to serve as frontage roads at ground level.

The realignment of IH 45/IH 10 would result in acquisition of 5.1 acres of ROW from properties in the Houston Warehouse Historic District, representing about 12.5 percent of the historic district's total area. The NHHIP would result in removal of at least two of the

district's contributing resources and would acquire ROW from three additional parcels containing contributing resources.

Indirect effects related to proximity, noise, and visual impacts would be sharply reduced in the south portion of the historic district, as the existing IH 10 freeway would be removed and relocated. However, indirect effects would markedly increase in the north part of the district through the IH 45/IH 10 realignment, with increase noise and elevated structures up to 65 feet in height.

In a November 2, 2018, the THC raised several questions regarding design considerations relating to the Houston Warehouse Historic District (see correspondence in Appendix G). While not directly related to the determination of effect, responses to these questions are provided, as follows:

Q: Can the multiple elevated structures for IH 45/IH 10 be cantilevered over one another to reduce the overall road width?

A: As noted in the THC comments, the ROW width in this area has already been reduced through design modifications in an effort to reduce effects to the Houston Warehouse Historic District. The current schematic design cantilevers the IH 45 southbound lanes over the IH 10 eastbound lanes to reduce ROW width by about 20 feet. Additional cantilevering and stacking is not feasible in this section, as it would not provide 16 feet of vertical clearance for portions of the freeway. Additional cantilevering would also result in reduced connectivity, as IH 45/IH 10 transitions to multi-level interchanges both to the east and to the west.

Q: What measures are in place by TxDOT or others to address street connectivity across the to-be-abandoned ROW and compatibility of future development on this land?

A: San Jacinto Street will be extended northward to provide connectivity across the former IH 10 ROW. Additional connectivity issues will be under the purview of the City of Houston. In terms of future development, the University of Houston-Downtown and the City of Houston will be given first opportunities to acquire the land. If these public entities decline their option, it will be offered to adjacent property owners, and then to the public following TxDOT's standard procedures for disposal of excess ROW.

In summary, the NHHIP would result in substantial direct effects to contributing resources within the historic district through ROW acquisition and, in some cases, demolition. Indirect proximity, noise, and visual effects would lessen in southern portions of the historic district but would increase by a commensurate level in northern portions of the district. The project would therefore have an **adverse effect** on the Houston Warehouse Historic District as a

whole. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G). More detailed information regarding impacts to individual contributing resources in the historic district is provided below.



Warehouse Historic District

Legend

- Area of Potential Effect
- Warehouse Historic District
- Proposed ROW
- Existing ROW
- Eligible/Listed, Contributing to District
- Not Eligible,
- Not Eligible, Contributing to District

0 300 600 Feet



Figure 84. Houston Warehouse Historic District boundary.

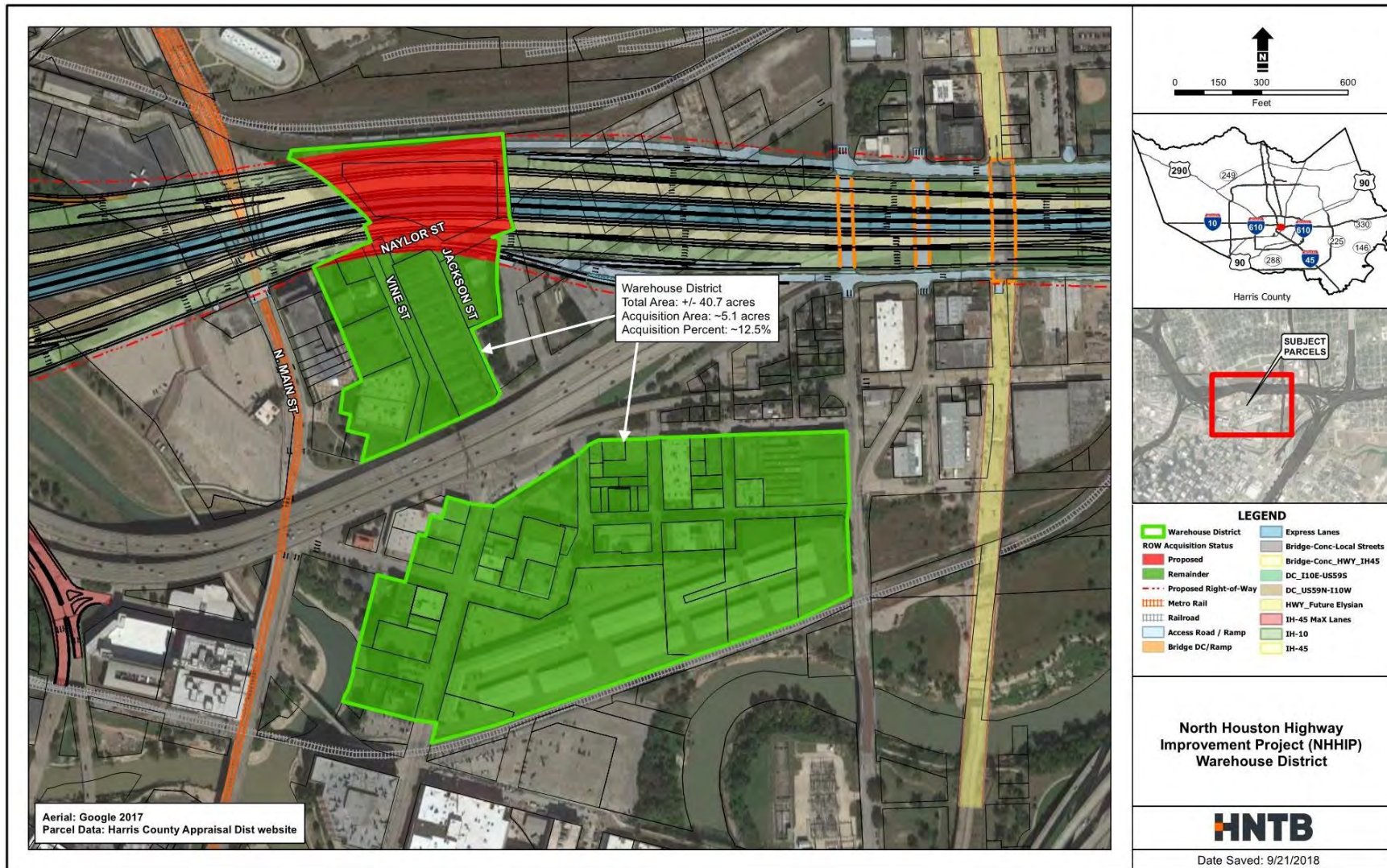


Figure 85. Preliminary schematic showing proposed ROW acquisition from the Houston Warehouse Historic District. District boundaries are shown in green and proposed ROW acquisition is in red.

(1) Individual Properties Within the Houston Warehouse Historic District

Resource 024: Readers Distributors Warehouse (1201 Naylor Street)

The Readers Distributors Warehouse is a contributing resource to the Houston Warehouse Historic District and has been determined individually eligible for the NRHP under *Criterion C* (see Figures 86 and 87). Proposed IH 45/IH 10 main lanes pass directly over the existing Readers Distributors Warehouse (see Figure 88). With the NHHIP, the entire Resource 024 would be acquired for additional ROW and the warehouse building would be demolished. The NHHIP would result in an **adverse effect** to Resource 024, the Readers Distributors Warehouse at 1201 Naylor Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).



Figure 86. View facing north, showing central section of warehouse building.



Figure 87. View facing northwest, showing loading docks on southeast corner of warehouse.

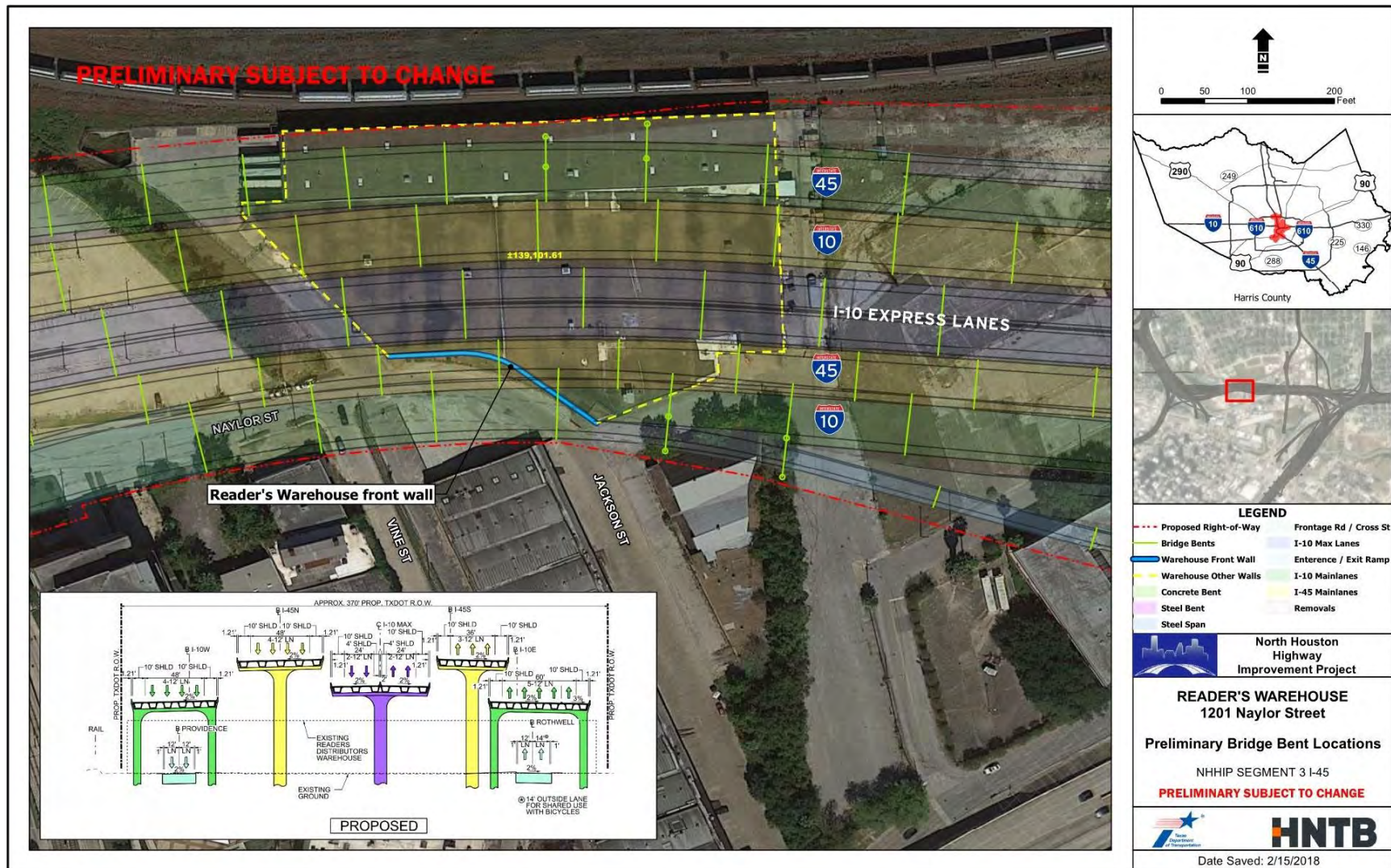


Figure 88. Preliminary schematic showing relationship of proposed IH 45/IH 10 to Resource 024 (Readers Warehouse). The entire property would be acquired as ROW and the building demolished. This figure also indicates the proposed location of bents for elevated IH 45/IH 10 structures.

Resource 025: San Jacinto Warehouse (1125 Providence Street)

The San Jacinto Warehouse is a contributing resource to the Houston Warehouse Historic District, located on the south side of the proposed IH 45/IH 10 ROW (see Figures 89 through 91). The project would take 88.23 square feet of land from the Resource 025 parcel, which is about 0.01 percent of the parcel's total area. ROW acquisition would be limited to a small portion of the current paved parking area adjacent to the raised loading dock that extends along the building's east elevation (see Figure 92). In a November 2, 2018, letter, the THC conditionally agreed that the ROW acquisition would have no direct adverse effect to the property but raised numerous questions regarding possible indirect adverse effects (see correspondence in Appendix G). These questions are addressed below.

Q: Please provide information on the distance between this building and the proposed elevated freeway lanes and the spacing of the support piers.

A: The building is closest to the proposed IH 45/IH 10 facility at its northeast corner. At that location, the building face is 7 feet from the edge of the elevated structure and 17 feet from the closest travel lane, a dedicated exit lane from eastbound IH 10 to the eastbound frontage road. The height of the elevated structure at this location is approximately 40 feet. A support pier will be located about 8 feet northeast of the building. At ground level, the eastbound frontage road would be located about 18 feet from the building, between support piers for the IH 10 eastbound structure.

Q: Will the construction of these elevated lanes cause any vibratory impacts to this historic building?

A: Similar to the steps taken at the Cheek-Neal Coffee Company Building (Resource 016), reinforced drill shafts will be used for supports rather than pilings to reduce vibration and noise impacts. According to the April 5, 2018, technical memorandum prepared by HNTB for the Cheek-Neal building, common construction equipment can generate significant vibratory impacts, as measured in peak particle velocity, at distances of 15 feet or less. Design prescriptive requirements will be added to the Design-Build Agreement to address potential for vibratory impacts.

Q: What effects will the proposed construction have on the setting of this historic property? Removal of the existing IH 10 elevated freeway will...have a positive effect on the setting but how will the new elevated freeway...compare especially in terms of height and proximity?

A: Several bays on the building's south end were demolished in the late 1960s as part of the initial IH 10 construction through this area. The building nonetheless continues to convey its significance, as evidenced by its inclusion as a contributing resource to the Houston Warehouse Historic District. The edge of the existing IH 10 elevated freeway structure is 30

feet from the building at its closest point and the existing IH 10 elevated structure is approximately 16 to 18 feet above ground level. The height and proximity of the proposed IH 45/IH 10 structures would have greater height and closer proximity to the building.

Several buildings, including Resource 024, within the Houston Warehouse Historic District are located immediately adjacent to the existing IH 10 ROW and within 25 to 50 feet of the existing elevated IH 10 structure. These buildings have been determined to retain sufficient integrity to convey their significance as contributing resources to the historic district. While the proposed elevated IH 10 structure will be closer to Resource 025 and taller in height, the result from the proximity and visual intrusions is similar to that applied to buildings in close proximity to existing IH 10.

TxDOT proposes to incorporate several design prescriptive requirements to the Design-Build Agreement for implementation during final design to avoid potential adverse direct and vibratory effects:

- Avoid any direct work to the building, canopy, and raised loading dock.
- Complete a desktop analysis of the predicted movements to determine the magnitude and risk.
- Conduct a vibration study, including soil investigation.
- Avoid heavy loads near the structure and the proposed retaining wall during construction.
- Install instrumentation to monitor the effects of vibration during construction.

Given implementation of these conditions, the NHHIP would have **no adverse effect** to Resource 025, the San Jacinto Warehouse at 1125 Providence Street. The minor acquisition of ROW from the parcel would result in a finding of a de minimis Section 4(f) use of land.



Figure 89. View facing southeast. Proposed eastbound IH 10 elevated structure would be located in the paved area in foreground of image. Resource 025 parcel boundary is located just north of the yellow bollards.



Figure 90. View facing southwest. Proposed IH 45/IH 10 ROW boundary would be located at the orange barrier at its closest point to the building. Edge of the eastbound IH 10 elevated structure would be located at the “SLOW” barrier.



Figure 91. View facing southwest, showing existing elevated IH 10 in close proximity to Resource 025.

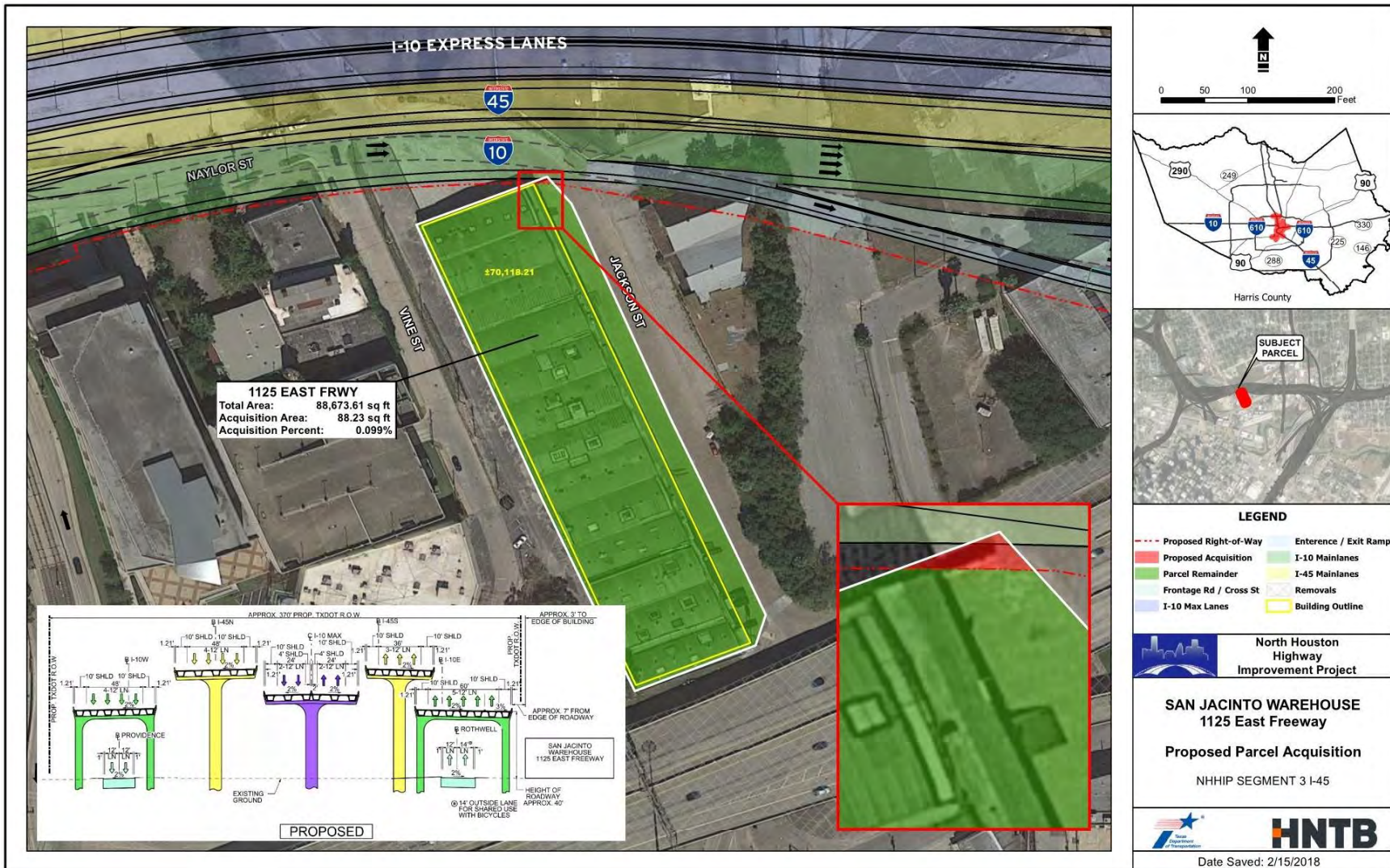


Figure 92. Preliminary schematic showing proposed ROW acquisition from Resource 025 (San Jacinto Warehouse). Property boundaries are shown in green and proposed ROW acquisition is in red.

Resource 028: Bottling Works (1120 Naylor Street)

The former Bottling Works is a contributing resource to the Houston Warehouse Historic District and is located on the south side of the proposed IH 45/IH 10 ROW (see Figures 93 through 95). While the building on the property is addressed as 1120 Naylor Street, its front facade faces east to Vine Street. The project would take 0.07 acre of land from the Resource 028 parcel, which is 27.62 percent of the parcel's total area (see Figure 96). Much of the unpaved parking area north of the building would be taken by the new ROW acquisition. There would be no taking or other direct effects to the building. In a November 2, 2018, letter, the THC agreed that the ROW acquisition would have no direct adverse effect to the property but raised numerous questions regarding possible indirect adverse effects (see correspondence in Appendix G). These questions are addressed below.

Q: Please provide information on the distance between this building and the proposed elevated freeway lanes and the spacing of the support piers.

A: The building is closest to the proposed IH 45/IH 10 facility at its northeast corner. At that location, the building face would be about 2 feet from the TxDOT ROW, 6 feet from the edge of the elevated structure, and 16 feet from the closest travel lane, a dedicated exit lane from eastbound IH 10 to the eastbound frontage road. The height of the elevated structure at this location would be approximately 41 feet. Preliminary plans show a support pier would be located about 8 feet northeast of the building. The location of support piers is subject to change. TxDOT will consult with the THC as design plans are finalized. At ground level, the eastbound frontage road would be located about 25 feet from the building, between support piers for the IH 10 eastbound structure.

Q: Will the construction of these elevated lanes cause any vibratory impacts to this historic building?

A: Similar to the steps taken at the Cheek-Neal Coffee Company Building (Resource 016), reinforced drill shafts will be used for supports rather than pilings to reduce vibration and noise impacts. According to the April 5, 2018, technical memorandum prepared by HNTB for the Cheek-Neal building, common construction equipment can generate significant vibratory impacts, as measured in peak particle velocity, at distances of 15 feet or less. Design prescriptive requirements will be added to the Design-Build Agreement to address potential for vibratory impacts.

Q: What effects will the proposed construction have on the setting of this historic property? A comment on the view to/from only the front facade is not an adequate evaluation of the potential effects to the setting.

A: The proposed IH 45/IH 10 alignment with elevated structures will certainly pose proximity and visual effects to this property. However, several buildings within the Houston Warehouse Historic District are located immediately adjacent to the existing IH 10 ROW and within 25 to 50 feet of the existing elevated IH 10 structure. These buildings have been determined to retain sufficient integrity to convey their significance as contributing resources to the historic district. While the proposed elevated IH 10 structure will be closer to Resource 025 and taller in height, the result from the proximity and visual intrusions is similar to that applied to buildings in close proximity to existing IH 10.

TxDOT proposes to incorporate several design prescriptive requirements to the Design-Build Agreement for implementation during final design, to avoid potential adverse direct and vibratory effects:

- Avoid any direct work to the building.
- Complete a desktop analysis of the predicted movements to determine the magnitude and risk.
- Conduct a vibration study including soil investigation.
- Avoid heavy loads near the structure during construction.
- Install instrumentation to monitor the effects of vibration during construction.

Given implementation of these conditions, the NHHIP would have **no adverse effect** to Resource 028, Walter's Downtown/former Bottling Works at 1120 Naylor Street. The minor acquisition of ROW from the parcel would result in a finding of a de minimis Section 4(f) use of land.



Figure 93. View facing southwest, showing building at Resource 028.



Figure 94. View facing west-southwest. Proposed IH 45/IH 10 ROW would extend to building face. Proposed eastbound IH 10 elevated structure would be located above the existing paved parking area.



Figure 95. View facing northwest, showing current view from Resource 028 building entrance.

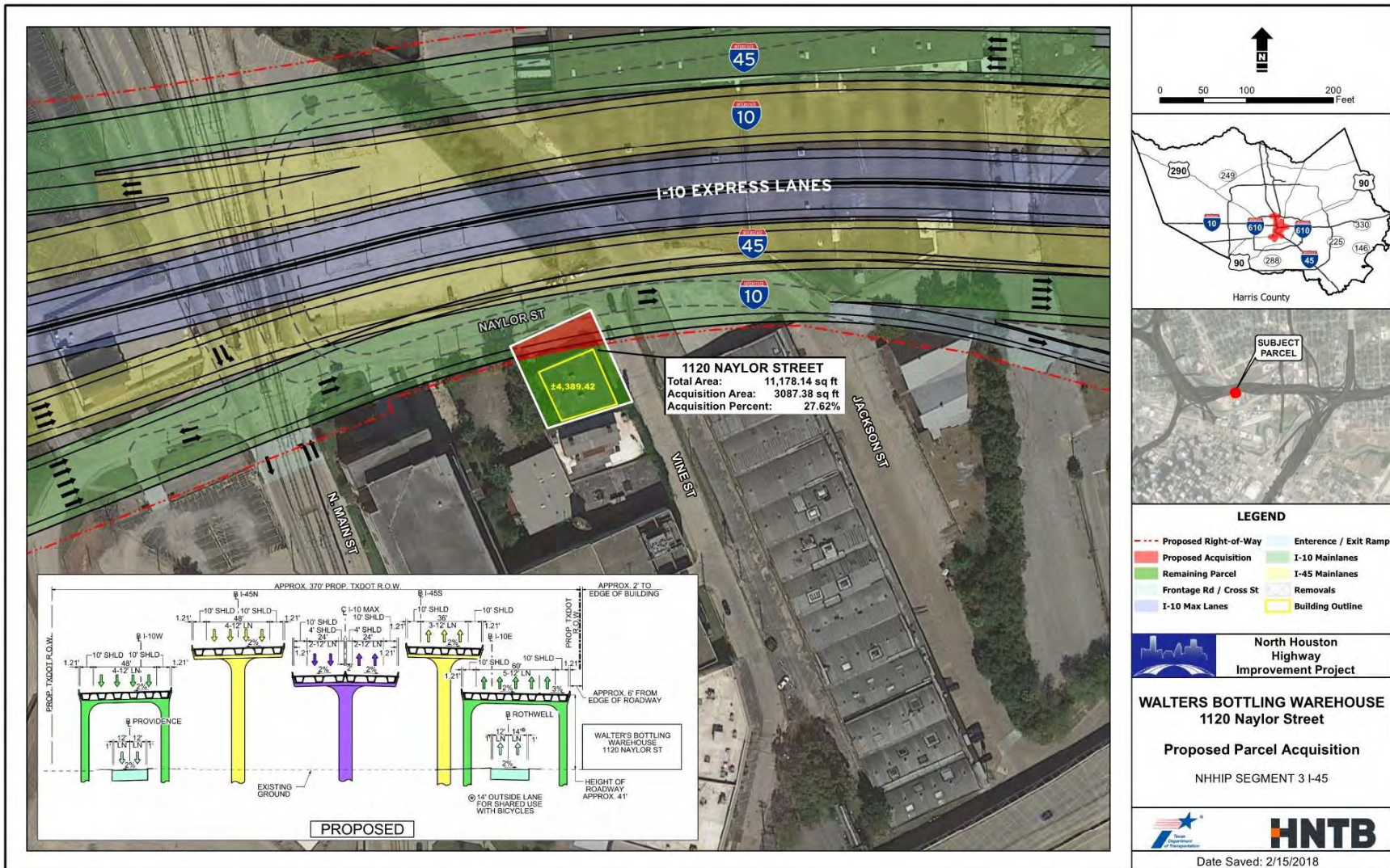


Figure 96. Preliminary schematic showing proposed ROW acquisition from Resource 028. Property boundaries are shown in green and proposed ROW acquisition is in red.

Resource 029: Carlisle Plastics, north building (1133 Providence Street)

Resource 030: Carlisle Plastics, south building (1133 Providence Street)

These resources are two adjacent buildings on a single property on the south side of the proposed IH 45/IH 10 ROW (see Figures 97 through 100). Resource 029 is a metal-clad warehouse and Resource 030 is a brick-clad warehouse. Both buildings are contributing resources to the Houston Warehouse Historic District. The two buildings are now jointly addressed as 1133 Providence Street; however, they were addressed jointly as 1110 Naylor Street in the 2016 resurvey of the Houston Warehouse Historic District. In the 2016 Report for Historical Studies Survey for NHHIP, Resource 029 was addressed as 1110 Naylor Street and Resource 030 was addressed as 1119 Naylor Street.

The project would take 0.16 acre of land from the Resource 029/030 parcel, or about 15.91 percent of the parcel's total area (see Figure 101). The ROW acquisition would require demolition of the north building (Resource 029). Current plans call for retaining the south building (Resource 030) in place. The existing IH 10 ROW is located 578 feet south of Resource 030. With the NHHIP, the Resource 030 building would be located 105 feet from the closest IH 45/IH 10 ROW, 109 feet from the closest edge of the elevated freeway structure, and 111 feet from the closest pavement edge, an exit ramp from eastbound IH 10 to the eastbound frontage road. The height of the elevated structure at this location is approximately 42 feet. In a November 2, 2018, letter, the THC raised questions and comments regarding possible adverse effects (see correspondence in Appendix G). These questions are addressed below.

Q: Because this building [Resource ID 030] and ID 029 appear to actually overlap. Please submit demolition plans for the adjacent metal building when available and detailed photographs of the exterior and interior of both buildings.

A: TxDOT will include a design prescriptive requirement in the design-build contract to obtain a demolition plan prior to any work on Resource 029. TxDOT will provide the demolition plan to the THC for review and consultation. TxDOT will also include design prescriptives to avoid damage to Resource 030 in the demolition process. TxDOT will provide exterior and interior photos of both buildings prior to any demolition work. Interior photos will be provided following ROW acquisition.

Q: What effects will the proposed construction have on the setting of this historic property? A comment on the view to/from only the front facade is not an adequate evaluation of the potential effects to the setting.

A: The proposed IH 45/IH 10 alignment with elevated structures has the potential to pose some proximity and visual effects to this property. However, several buildings within the Houston Warehouse Historic District are located immediately adjacent to the existing IH 10

ROW and within 25 to 50 feet of the existing elevated IH 10 structure. These buildings have been determined to retain sufficient integrity to convey their significance as contributing resources to the historic district. While the proposed elevated IH 10 structure will be taller in height than existing IH 10 structures, the result from the noise and visual intrusions is similar to that applied to buildings in close proximity to existing IH 10.

On the condition that TxDOT provide an acceptable demolition plan and photographs as noted above, the NHHIP would have **no adverse effect** to Resource 030, the Carlisle Plastics south building at 1133 Providence Street. The NHHIP would have an **adverse effect** to Resource 029, the Carlisle Plastics north building. A Section 4(f) Evaluation will be prepared for this property.



Figure 97. View facing southeast, showing Carlisle Plastics north warehouse (Resource 029), Eastbound IH 10 ramp structure would be located at left of frame. Proposed IH 45/IH 10 ROW would clip northeast corner of Resource 029.



Figure 98. View facing southeast, showing Carlisle Plastics south warehouse (Resource 030).



Figure 99. View facing southeast, showing interface between Resource 029 and Resource 030 buildings.



Figure 100. View facing north from northwest corner of Resource 030. Proposed IH 45/IH 10 ROW would be located along orange barriers and far edge of Resource 029, in background of frame.

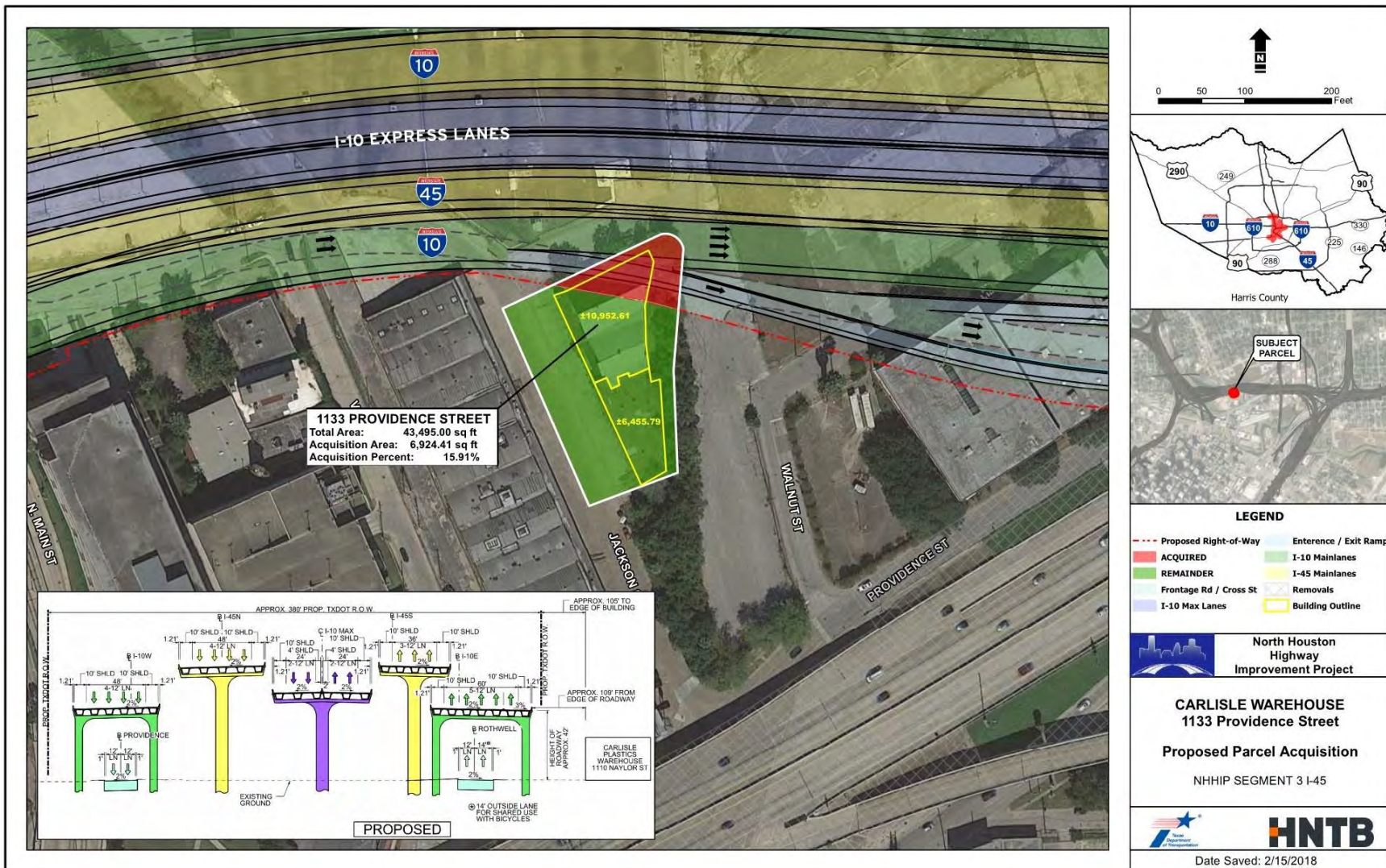


Figure 101. Preliminary schematic showing proposed ROW acquisition from Resource 029/030. Property boundaries are shown in green and proposed ROW acquisition is in red.

Resource 820: METRO Transit Building (1116 Naylor Street)

Resource 820 is a one-story warehouse owned by the Metropolitan Transit Authority of Harris County (METRO). The building is a contributing resource to the Houston Warehouse Historic District. It is located just south of Resource 028, south of the proposed IH 45/IH 10 ROW (see Figures 102 through 105). Resource 820 is comprised of three adjoining building masses, with a paved parking area extending north to Naylor Street from the rear building extension, to form an L-shaped parcel. The distinct building masses are evident on historic and recent aerial images of the property. The historic-age front facade faces east to Vine Street; however, thick vegetation covers the entire facade and the property appears to be accessed through the driveway to Naylor Street.

Proposed ROW acquisition for the NHHIP would take a small strip of land from the parcel, at the northeast edge of the paved parking area along Naylor Street. There would be no taking of, or other direct effects to, the METRO warehouse building. The building is closest to the proposed IH 45/IH 10 facility at its northeast corner. At that location, the building face is about 82 feet from the TxDOT ROW, 86 feet from the edge of the elevated structure, and 96 feet from the closest travel lane, a dedicated exit lane from eastbound IH 10 to the eastbound frontage road. The height of the elevated structure at this location is approximately 41 feet.

It should be noted that, based on review of historic aerial images, the rear portion of the building was constructed between 1973 and 1989. The second story in the middle of the front portion of the building also appears to date from that period. Much of the current paved parking area is depicted on the 1924 Sanborn map as occupied by a narrow rectangular building labeled as “junk” with an adjacent open-air junkyard. The rectangular building is evident on aerial images until at least 1966.

In a November 2, 2018, letter, the THC agreed that the ROW acquisition would have no direct adverse effect to the property but raised numerous questions regarding possible indirect adverse effects (see correspondence in Appendix G). These questions are addressed below.

Q: Will the construction of these elevated lanes cause any vibratory impacts to this historic building?

A: Similar to the steps taken at the Cheek-Neal Coffee Company Building (Resource 016), reinforced drill shafts will be used for supports rather than pilings to reduce vibration and noise impacts. According to the April 5, 2018, technical memorandum prepared by HNTB for the Cheek-Neal building, engineers studied the vibrations induced by types of equipment likely to be used for NHHIP construction activities in terms of velocity and frequency to determine vibratory impacts to the Cheek-Neal building. It should be noted that the METRO

warehouse building would be located at least 82 feet from NHHIP-related construction vibration, more than three times the distance than that of the Cheek-Neal building. Based on figures provided in the April 5, 2018, memorandum, vibration generated by construction equipment likely to be used during NHHIP activities would not be significant; that is, it would not meet the threshold for structural damage to historic buildings from continuous or transient vibration sources based on distance from the building face. The engineers also studied the potential for traffic vibration, particularly low-frequency sound levels produced by trucks. Based on the distance between the IH 45/10 facility and the METRO warehouse building, traffic-induced vibration would be under the annoyance threshold as well as the structural damage threshold. It should be noted that the historic-age portions of the METRO warehouse building are partially shielded from indirect noise and visual effects by the presence of adjacent Resource 028, the Walter's Downtown (former Bottling Works) building.

TxDOT proposes to incorporate several design prescriptive requirements to the Design-Build Agreement for implementation during final design, to avoid potential adverse direct and vibratory effects to Resource 028. These requirements would likewise avoid potential adverse effects to Resource 820:

- Avoid any direct work to the building.
- Complete a desktop analysis of the predicted movements to determine the magnitude and risk.
- Conduct a vibration study including soil investigation.
- Avoid heavy loads near the structure during construction.
- Install instrumentation to monitor the effects of vibration during construction.

Q: What effects will the proposed construction have on the setting of this historic property? A comment on the view to/from only the front facade is not an adequate evaluation of the potential effects to the setting.

A: The proposed IH 45/IH 10 alignment with elevated structures has the potential to pose some proximity and visual effects to this property. However, several buildings within the Houston Warehouse Historic District are located immediately adjacent to the existing IH 10 ROW and within 25 to 50 feet of the existing elevated IH 10 structure. These buildings have been determined to retain sufficient integrity to convey their significance as contributing resources to the historic district, at closer proximity to existing IH 10. While the proposed

elevated IH 10 structure will be taller in height than existing IH 10 structures, the result from the noise and visual intrusions is similar to that applied to buildings in close proximity to existing IH 10.

The NHHIP would have **no adverse effect** to Resource 820, the METRO warehouse building at 1116 Naylor Street. The minor acquisition of ROW from the parcel would result in a finding of a de minimis Section 4(f) use of land.



Figure 102. View facing northwest, showing front façade of Resource 820 along Vine St.



Figure 103. View facing south-southeast, showing non-historic-age rear addition to Resource ID 820.



Figure 104. View facing south-southeast. Proposed IH 45/IH 10 ROW would take a small portion of the paved parking area inside the fenceline. Second-story addition is visible in this image at left of frame.



Figure 105. View facing east, showing area of proposed IH 45/IH 10 ROW acquisition along Naylor Street. Resource 820 at right of frame, Resource 028 at center of frame.

E. Near Northside Historic District

The Near Northside Historic District is located on the east side of IH 45, just east and northeast of the multi-level IH 45/IH 10 interchange (see Figure 106). The interchange is in the vicinity of the confluence of White Oak Bayou and Little White Oak Bayou, which adds to the complexity of the interchange. The Near Northside Historic District is listed in the NRHP under Criteria A and C.

The existing IH 45 ROW at this location is 315 feet wide. In each direction of travel, existing IH 45 has four travel lanes, a dedicated exit lane, and shoulder. A barrier-separated reversible High Occupancy Vehicle (HOV) lane is located in the center of the facility between northbound and southbound lanes. Near the north edge of the historic district, IH 45 is slightly below prevailing grade of the adjoining district properties. From Quitman Street south, northbound IH 45 (the closest portion of the freeway to the historic district) remains roughly level as it crosses over White Oak Bayou, while the elevation of southbound IH 45 rises to cross over Quitman Street and approach the interchange with IH 10.

The proposed NHHIP improvements would add between 0 and 28 feet to the IH 45 ROW in this area depending on specific location (see Figure 107). IH 45 would have six travel lanes in each direction of travel, to accommodate IH 45 through traffic and traffic exiting to IH 10. IH 45 would also have 10-foot-wide inside and outside shoulders. An elevated structure would carry managed express (MaX) lanes, with two lanes in each direction of travel as well 10-foot outside and 4-foot inside shoulders. The express-lane structure would be located in the middle of the IH 45 facility, supported on a series of single-column bents between northbound and southbound main travel lanes. The MaX lanes would therefore be situated about 35 feet above the inside shoulders and inside main travel lanes of IH 45. The use of an elevated structure allows for a narrower ROW section in this area. The vertical elevation of the MaX-lane structure would begin to drop in the vicinity of Embry Street near the north edge of the historic district and would meet the proposed IH 45 main lane grade near North Street. An elevated direct connector ramp from eastbound IH 10 to northbound IH 45 would be oriented in a north-south alignment in the vicinity of the historic district. The ramp would span over Quitman Street and would then decrease in elevation to merge into IH 45 travel lanes just north of Carl Street.

The Near Northside Historic District is about 70.5 acres in size (see Figure 107). Existing IH 45 ROW makes up about 2.09 acres of the historic district. The proposed NHHIP work would require acquisition of about 0.02 acre of additional ROW from a property parcel at 109 Carl Street (Resource 554), or about 0.03 percent of the total historic district area. A noncontributing garage at 109 Carl Street would be removed for the project. A portion of the noncontributing garage already extends into the existing IH 45 ROW. The contributing house on the same parcel would remain in place. Analysis of potential effects to 109 Carl Street is presented in a separate discussion later in this section.

Existing IH 45 ROW directly adjoins the Near Northside Historic District. The building edge of the historic district's closest contributing resource, 109 Carl Street (Resource 554), is located 24 feet from the IH 45 ROW and 57 feet from the IH 45 pavement edge. With the proposed project, the building edge of 109 Carl Street would be located 17 feet from the proposed IH 45 ROW and 29 feet from the proposed IH 45 pavement edge. Farther south, the closest contributing resource near Quitman Street is 2220 South Street (Resource 890), which is located 77 feet from existing IH 45 ROW and 300 feet from the IH 45 pavement edge. With the proposed project, the building edge of 2220 South Street would remain 77 feet from proposed IH 45 ROW and would be 270 feet from the IH 45 pavement edge.

At the closest proximity of IH 45 to the historic district (in the vicinity of 2400 block of South Street, 100 block of Carl Street, and 2500 block of Ideal Street), the vertical profile of the proposed IH 45 northbound main lanes would be about 12-15 feet above existing IH 45 grade and the vertical profile of the proposed IH 45 southbound lanes would be about 16-19 feet above existing grade. The elevated structure for MaX lanes would be about 50 feet above existing grade.

Noise studies performed for the NHHIP in 2018 indicate that residences at 109 Carl Street and on South Street south of Carl Street currently experience an average noise level of 74 decibels (dBA). The proposed NHHIP project is projected to result in a decrease in noise for properties in the historic district, projected to be 71 dBA for 109 Carl Street, and 72 dBA for the South Street residences. It should be noted that traffic noise currently exceeds Noise Abatement Criteria (NAC) for residences and would continue to exceed this level under the proposed NHHIP. Construction of a noise barrier in this location would not achieve the minimum feasible noise reduction of 5 dBA; therefore, noise barriers would not be constructed in the Near Northside Historic District. Existing vegetation would continue to partially shield the eastern edge of the historic district from IH 45 visual and noise impacts.

The proposed NHHIP would have negligible direct effect to the Near Northside Historic District, with extremely minimal ROW acquisition from the district and displacements limited to removal of a noncontributing garage that already extends into the existing IH 45 ROW. The IH 45 pavement edge would move somewhat closer to properties in the northeast and east-central parts of the historic district, while moving farther away from properties in the southeast part of the district. There would be a reduction in noise impacts compared to existing IH 45 traffic noise. For visual impacts, the overall IH 45 grade would be somewhat higher than existing IH 45. The most significant visual intrusion would be the MaX lanes. However, the elevated portion of the MaX lanes would be located in the center of the proposed IH 45 ROW, 60 or more feet inside of the at-grade pavement edge. The historic district is already bounded by existing IH 45 in proximity to the IH 45/IH 10 interchange, with resulting noise and visual presence. Elevated structures are already present in the vicinity

of the historic district, although the existing elevated structures are on southbound IH 45, at a greater distance from the historic district than those proposed as part of the NHHIP.

In a November 2, 2018, the THC raised several questions regarding design considerations relating to the Near Northside Historic District (see correspondence in Appendix G). While not directly related to the determination of effect, responses to these questions are provided, as follows:

Q: Can the right-of-way take be avoided altogether?

A: The right-of-way width in this area has already been reduced through design modifications in an effort to avoid or minimize direct effects to the Near Northside Historic District and the NRHP-eligible Germantown Historic District, located on the west side of IH 45. The elevated MaX-lane structure was one result of the efforts to avoid or minimize taking of land from the two historic districts. Avoidance of taking of land from the Near Northside Historic District would result in a taking of land from 1212 Wrightwood Street, a contributing resource to the Germantown Historic District.

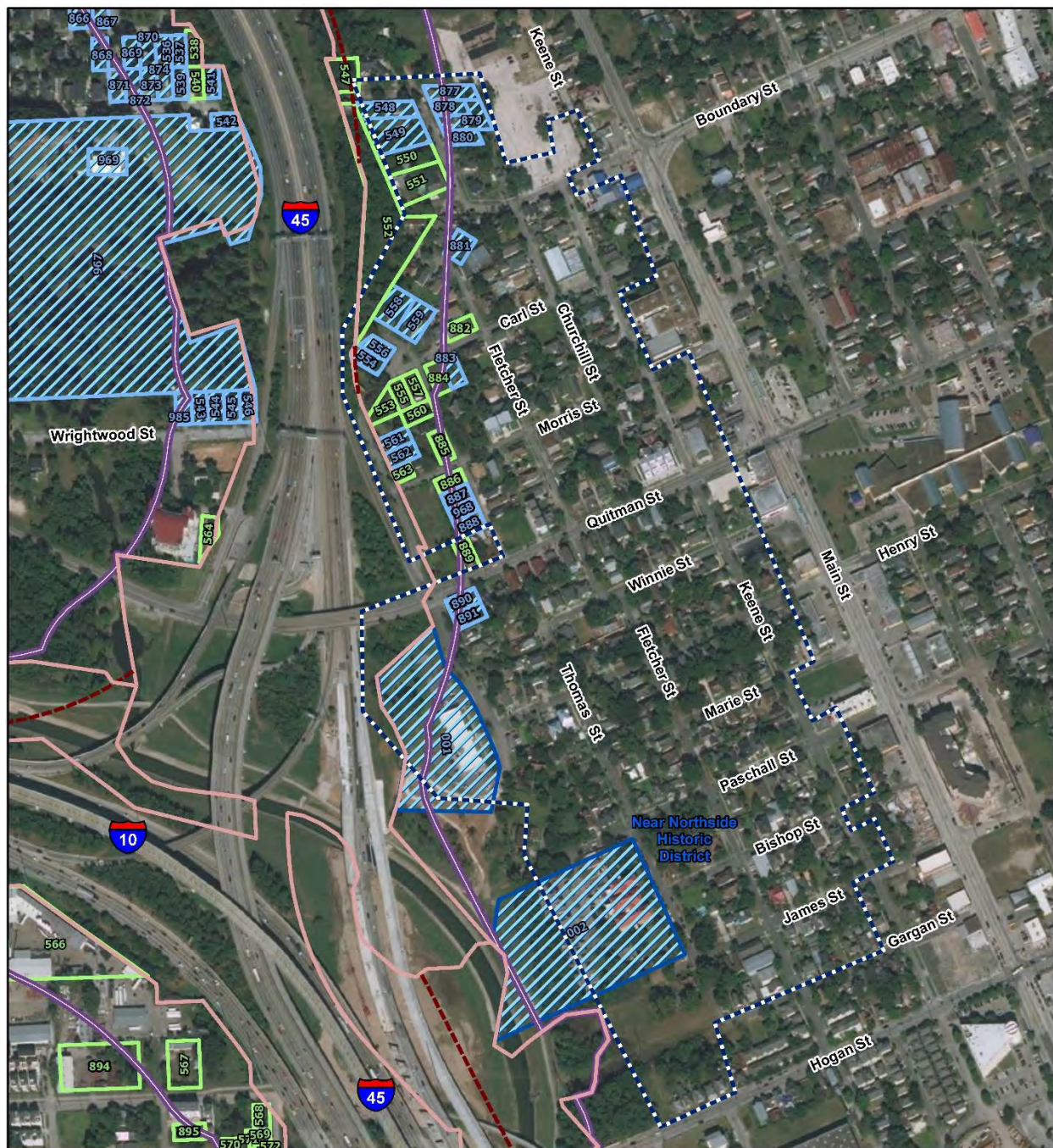
Q: Will there be any additional lighting? Where? How tall? Can lighting be directed or located to avoid or minimize any potential effects to the Near Northside Historic District?

A: Current highway lighting near the historic district includes standard high-mast lighting. Specific lighting locations and dimensions were not determined in the development of conceptual schematic layouts. The NHHIP design-build contract specifies that the contractor shall design and construct lighting fixtures and placement to minimize dispersion of light beyond the ROW, using current industry standard techniques and systems.

Q: Are there any noise mitigation walls or other ancillary construction activities that are proposed?

A: There are no noise mitigation walls proposed for the Near Northside Historic District. Retaining walls would be constructed along portions of the IH 45 northbound frontage road and IH 45 northbound main lanes.

In summary, the NHHIP would have minimal ROW acquisition from the historic district, would not directly impact any contributing resources, and noise and visual impacts would not be substantial considering the existing conditions. The proposed project would not appreciably change the district's historic character, nor its ability to convey its historical and architectural significance. Therefore, the project would have **no adverse effect** on the Near Northside Historic District as a whole. Additionally, the project has been determined to have a *de minimis* impact on the Near Northside Historic District under Section 4(f).



Near Northside Historic District

Legend

- Area of Potential Effect
- NRHP_District
- Proposed ROW
- Existing ROW
- Eligible/Listed, Contributing to District
- Not Eligible
- Not Eligible, Contributing to District

0 300 600 900
Feet



Figure 106. Near Northside Historic District boundary.

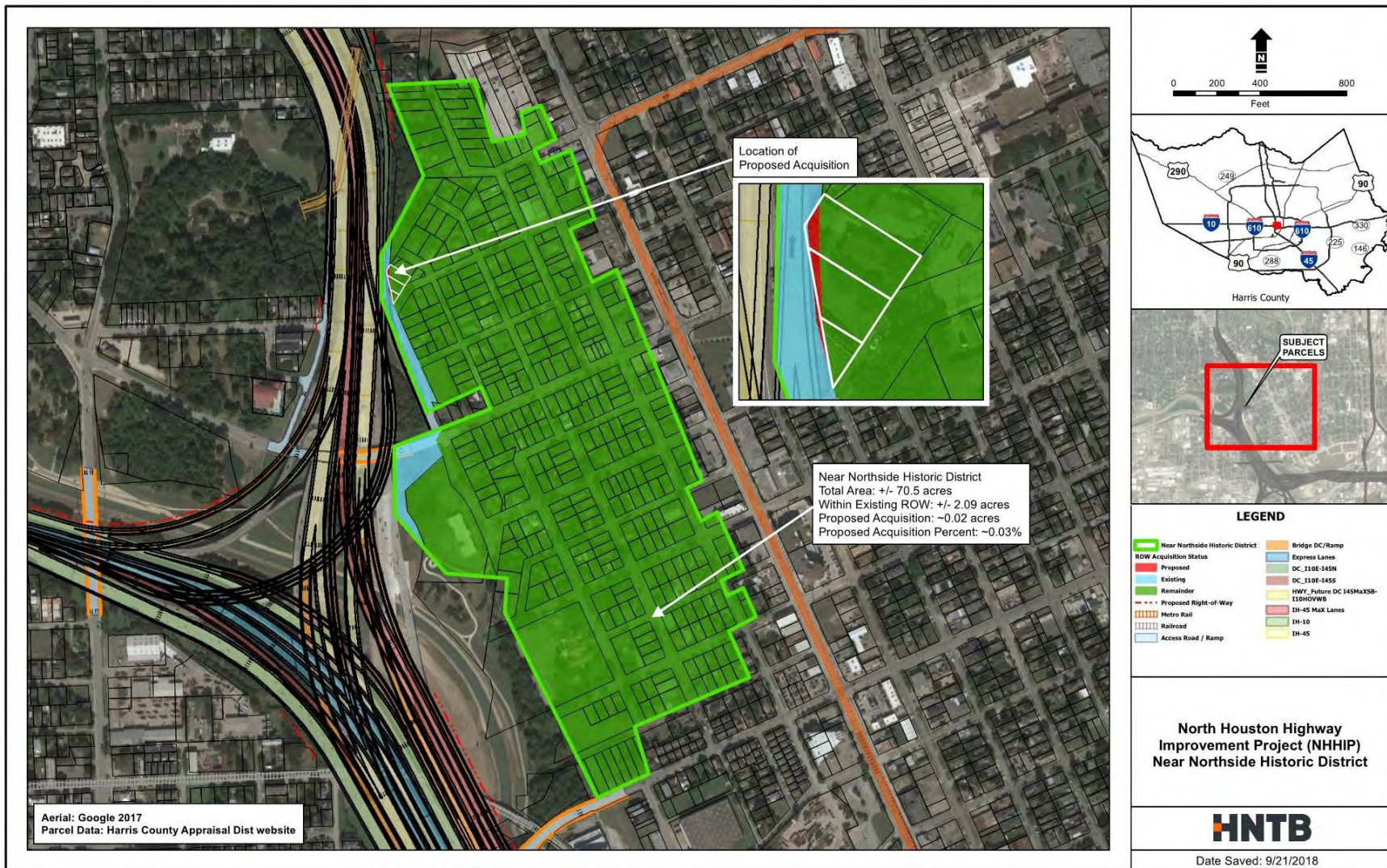


Figure 107. Preliminary schematic showing proposed ROW acquisition from the Near Northside Historic District.

(1) Individual Properties Within the Near Northside Historic District

Resource 001: former Robert E. Lee Elementary School (2101 South Street)

The former Robert E. Lee Elementary School, now the BakerRipley Lionel Castillo Community Center, is individually eligible for the NRHP as well as a contributing resource to the Near Northside Historic District. The property is located on the east side of IH 45 and IH 10, east of the multi-level IH 45/IH 10 interchange (see Figure 108). The property adjoins the existing IH 45/IH 10 ROW. However, the former school on the property is separated from the existing and proposed IH 45/IH 10 roadway by a surface parking lot and a grassy area sloping down to White Oak Bayou. The former school is located approximately 148 feet west of the ROW boundary. There would not be any additional ROW acquisition from the property for NHHIP activities.

The former school is currently located 245 feet from the closest IH 45 pavement edge, the IH 45 northbound lanes. With the proposed project, the former school would be located about 330 feet from the closest IH 45 pavement edge, an elevated structure adjacent to White Oak Bayou that would carry the IH 45 northbound frontage road adjacent to White Oak Bayou and an elevated ramp connecting eastbound IH 10 with northbound IH 45. The proposed increase in the elevation of IH 45 at the closest proximity to Resource 001 is about 50 feet. Elevated structures associated with the IH 45/IH 10 interchange are already present in this vicinity, between 600 and 800 feet east of the former school.

Noise studies performed for the NHHIP in 2018 indicate that the former school currently experiences an average noise level of 68 dBA. The proposed NHHIP project is projected to result in a 3 dBA decrease in noise, to 65 dBA in 2040.

There would be no ROW acquisition from the Resource 001 parcel and no direct effect to the property. The IH 45 pavement edge would move about 85 feet farther away from the former school building. The NHHIP is projected to improve traffic noise conditions and new elevated freeway structures would have little additional visual impact, given the existing proximity to the multi-level IH 45/IH 10 interchange. For these reasons, the project would have **no adverse effect** to Resource 001, the former Robert E. Lee Elementary School at 2101 South Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).



Figure 108. Proposed NHHIP ROW in relation to Resource 001.

Resource 002: former Galveston, Harrisburg and San Antonio (GH&SA) Railroad Hospital (2015 Thomas Street)

The former GH&SA Railroad Hospital, now the Harris Health System's Thomas Street Health Center, is individually eligible for the NRHP under Criteria A and C, as well as a contributing resource to the Near Northside Historic District. The property is located on the east side of IH 45 and IH 10, east of the multi-level IH 45/IH 10 interchange (see Figure 109). The property adjoins the existing IH 45/IH 10 ROW. However, the former hospital building on the property is separated from the existing and proposed IH 45/IH 10 roadway by a surface parking lot, a line of trees and vegetation, the White Oak Bayou Greenway Trail, and White Oak Bayou. The former hospital building is located about 112 feet west of the ROW boundary. There would not be any additional ROW acquisition from the property for NHHIP activities.

The former hospital building is currently located 692 feet from the closest IH 45 pavement edge, an elevated structure that carries IH 45 northbound lanes. With the proposed project, the former hospital building would be located about 608 feet from the closest IH 45 pavement edge, an elevated structure adjacent to White Oak Bayou that would carry the IH 45 northbound frontage road. At this location, the proposed project would include elevated structures for the IH 45 and IH 10 MaX lanes, direct connector ramps to downtown, and the IH 45 northbound frontage road. The proposed increase in the elevation of IH 45 at the

closest proximity to Resource 002 is about 60 feet. However, elevated structures for IH 45 northbound main lanes and IH 10 HOV lanes are already present in this vicinity.

Noise studies performed for the NHHIP in 2018 indicate that the former hospital building currently experiences an average noise level of 64 dBA, which is below the threshold for noise abatement. The proposed NHHIP project is projected to result in a 2 dBA decrease in noise, to 62 dBA in 2040.

There would be no ROW acquisition from the Resource 002 parcel and no direct effect to the property. At its closest proximity, IH 45 would still be located over 600 feet from the former hospital building with an improvement in traffic noise conditions and minimal increase in visual changes due to elevated freeway structures. For these reasons, the project would have **no adverse effect** to Resource 002, the former GH&SA Railroad Hospital building at 2015 Thomas Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).

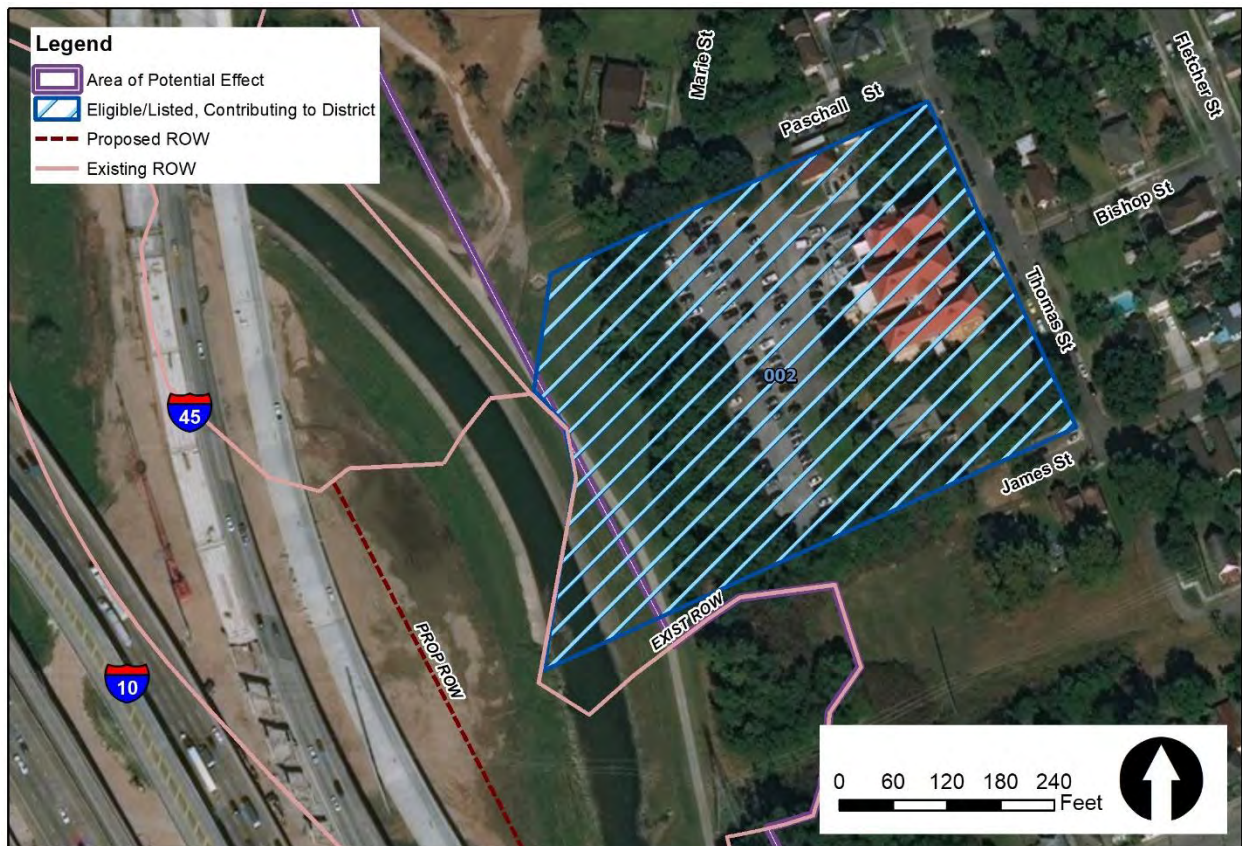


Figure 109. Proposed NHHIP ROW in relation to Resource 002.

Resource 554: 109 Carl Street

This property contains two built resources: a 1910 house that is a contributing resource to the Near Northside Historic District, and a garage that is a noncontributing resource to the historic district (see Figures 110 and 111). The noncontributing garage is located at the northwest edge of the parcel and touches the existing ROW. The contributing house is located 24 feet from the existing ROW boundary and about 57 feet from the nearest IH 45 pavement edge.

At this location, a strip of additional ROW would be acquired to accommodate the IH 45 main travel lanes and the IH 45 northbound frontage road. The proposed project would acquire 437.22 square feet (about 0.01 acre) of additional ROW from this parcel (see Figure 112). The additional ROW represents 8.17 percent of the total parcel size. Following ROW acquisition, the contributing house would be located 17 feet from the ROW boundary and 29 feet from the closest pavement edge, the IH 45 northbound frontage road. The proposed increase in the elevation of IH 45 at the closest proximity to Resource 554 is about 17 feet.

Noise studies performed for the NHHIP in 2018 indicate that residences at 109 Carl Street and on South Street south of Carl Street currently experience average noise level of 74 decibels (dBA). The proposed NHHIP project is projected to result in a decrease in noise for properties in the historic district, projected to be 71 dBA for 109 Carl Street.

Effects from the proposed project would consist of taking of a noncontributing secondary building and a small percentage of the overall property. Along the IH 45 ROW boundary, a retaining wall would be constructed for the IH 45 northbound frontage road in place of sloped fill, as a measure to reduce the need for additional ROW and reduce direct effects to the property. Other noise, visual, and proximity impacts resulting from the proposed project would be relatively limited given current conditions along existing IH 45. The proposed project would have **no adverse effect** to Resource 554, the house at 109 Carl Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G). Additionally, the project has been determined to have a *de minimis* impact on Resource 554, the house at 109 Carl Street under Section 4(f).



Figure 110. View facing east, showing noncontributing garage at Resource 554.



Figure 111. View facing east, showing relationship of Resource 554 to existing IH 45.



Figure 112. Preliminary schematic showing proposed ROW acquisition at Resource 554 (109 Carl Street).

F. Third Ward Historic District

As delineated earlier in this report, the Third Ward Historic District extends into the NHHIP APE between one-half block north of Berry Street on the north and Blodgett Street on the south (see Figure 113). The district was determined eligible for the NRHP under *Criteria A* and *C*. The Third Ward Historic District is just east of the existing multi-level interchange of SH 288 and IH 69/US 59. At Cleburne Street, existing SH 288 ROW is about 600 to 650 feet wide, with four travel lanes in each direction, shoulders, and a direct-connection flyover from northbound SH 288 to southbound IH 69/US 59. The elevated flyover is the closest freeway element to the historic district. SH 288 is on earthen fill, about 15 feet above prevailing grade of adjacent historic district resources. Moving north, the SH 288-to-IH 69 flyover continues to elevate to form the highest level in the interchange. At Berry Street, the SH 288/IH 69/US 59 ROW is between 600 and 700 feet wide with a complex web of multi-level travel lanes and ramps. In general, 16 travel lanes, ramps, and collector/distributor flyovers are between SH 288 and Jackson Street and Chenevert Street on the west side of the freeway.

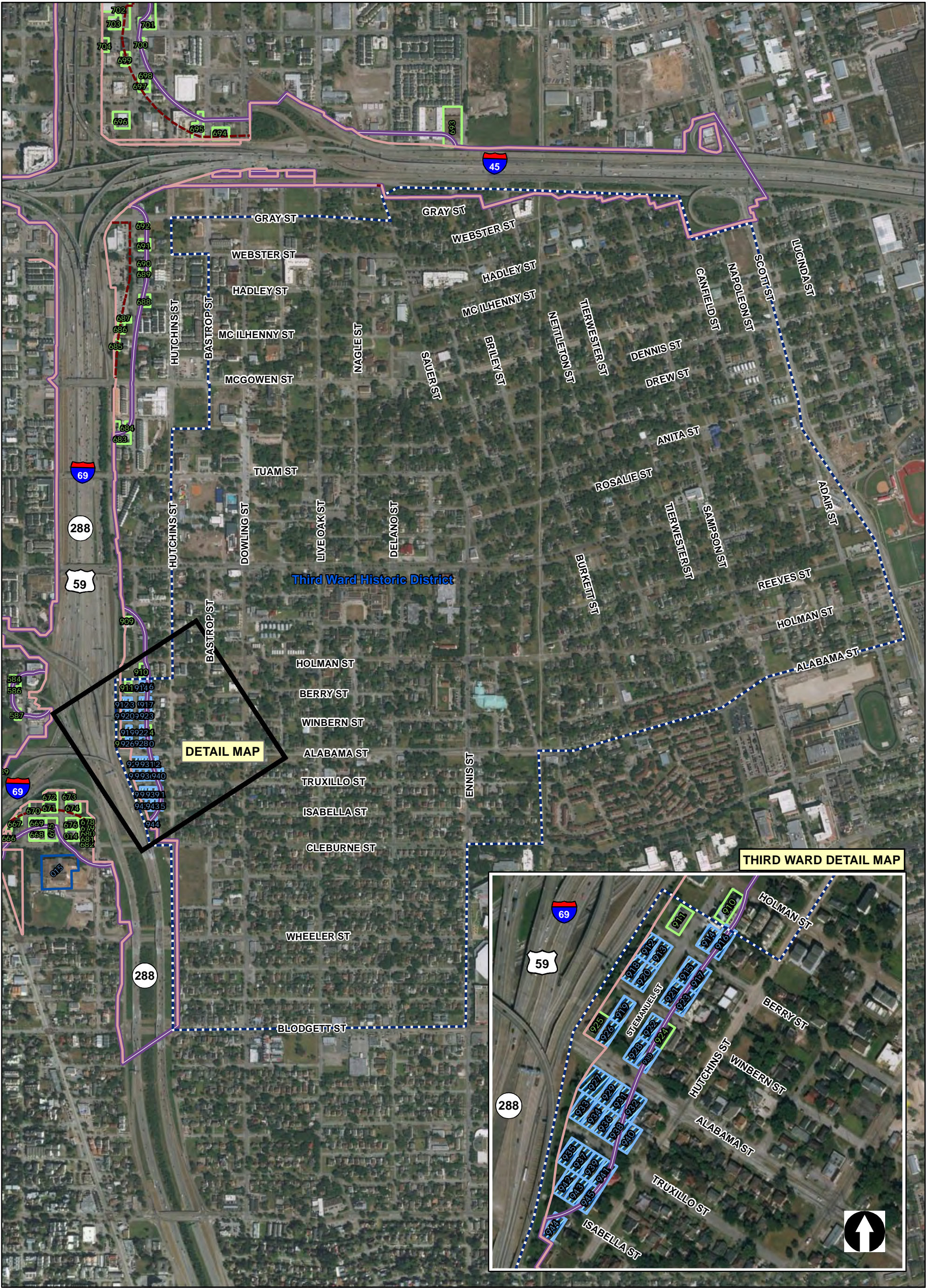
Currently, the Third Ward Historic District directly adjoins the SH 288 ROW. The NHHIP would not result in ROW acquisition from the Third Ward Historic District and there would be no direct effects to resources within the district's boundaries. Several contributing resources are located within 10 feet of the existing SH 288 ROW and within 30 to 50 feet of the closest pavement edge. Within the NHHIP, the SH 288 pavement edge would move closer to these resources, with an at-grade two-lane SH 288 northbound frontage road immediately inside the SH 288 ROW boundary. Elevated flyovers would be constructed in a new configuration but would remain at the same distance or farther away from the Third Ward Historic District.

Noise studies performed for the NHHIP in 2018 modeled impacts to six representative "receivers" in the Third Ward Historic District: four residences and a church interior. Existing average noise levels at the residential exteriors range between 66 and 70 dBA, while the church interior had a noise level of 51 dBA. The proposed NHHIP project is projected to increase noise between 1 and 5 dBA at the receivers. Therefore, construction of a series of 16-foot-high noise barriers along the SH 288 ROW boundary is proposed for the Third Ward Historic District from north of Berry Street to Cleburne Street and from Barbee Street to Blodgett Street. The proposed noise barrier would reduce noise by an additional 5 dBA or more, including a reduction of 7 dBA for multiple residential noise receivers in the Third Ward.

The proposed NHHIP would not have a direct effect on the Third Ward Historic District, as there would be no ROW acquisition from the historic district. The SH 288 pavement edge would move somewhat closer to properties in the historic district; however, these resources are already located close to busy freeway traffic and the new construction closer to the

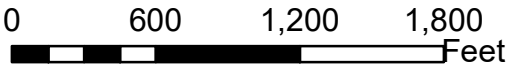
historic district's resources will be at an-grade frontage road rather than main lanes or ramps. Noise impacts to resources in the historic district would be mitigated through proposed construction of a noise barrier, with project noise levels after barrier construction at or below current levels. The proposed noise barrier itself would be a visual change along the western boundary of the Third Ward Historic District. While the wall height is known, specific design and color of the proposed noise barriers is not known at this time; however, these features will be designed in coordination with nearby property owners and other stakeholders. Elevation of SH 288 main lanes and flyovers will remain near current height. The historic district is already adjoined by existing SH 288 in proximity to the multi-level SH 288/IH 69 interchange, with resulting noise and visual presence. Elevated structures are already present in the vicinity of the historic district.

In summary, the NHHIP would have no ROW acquisition from the historic district, would not directly impact any contributing resources, and noise and visual impacts would not be substantial considering the existing conditions and proposed noise mitigation. The proposed project would not appreciably change the district's historic character, nor its ability to convey its historical and architectural significance. Therefore, the project would have **no adverse effect** on the Third Ward Historic District as a whole.



- Legend**
- Area of Potential Effect
 - Third Ward Historic District
 - Proposed ROW
 - Existing ROW
 - Individually Eligible/ Listed
 - Individually Eligible/ Listed and Contributing to District
 - Not Eligible
 - Not Individually Eligible, Contributing to District

Third Ward Historic District



G. Individual Properties

Resources 004A and 004B: Houston Water Works (27 Artesian Street)

The former Houston Water Works is listed in the NRHP under *Criterion A*. Resource 004A is a circular masonry reservoir that may be a remnant of the 1879 Houston Water Works, while the adjacent Resource 004B is a 1926 water pump station. They are located just north of IH 45 in downtown Houston. Both resources are immediately adjacent to existing IH 45 ROW (see Figure 114). At this location, IH 45 is carried on the Pierce Elevated, a series of paired elevated structures. Each structure at this location carries four travel lanes and a dedicated exit ramp. With the proposed NHHIP, there would be no additional ROW acquisition from this property or adjacent properties. IH 45 would have the same number of travel lanes and would be carried on elevated structures of similar height as current conditions.

On November 2, 2018, the THC concurred that the NHHIP would have **no adverse effect** to Resource 004A and 004B, the former Houston Water Works at 27 Artesian Street, provided addition of design prescriptive requirements to the Design-Build Agreement to avoid potential adverse vibratory effects from demolition and construction activities (see correspondence in Appendix G).



Figure 114. Proposed NHHIP ROW in relation to Resource 004.

Resource 007A: Kellum-Noble House (in Sam Houston Park, 1000 Bagby Street)

The Kellum-Noble House is located in Sam Houston Park on the northwest edge of downtown Houston (see Figure 115). It is listed in the NRHP under *Criteria A* and *C*, with listed boundaries limited to the building footprint. The Kellum-Noble House is located about 115 feet from the closest existing IH 45 ROW, 225 feet from the closest IH 45 pavement edge (a ramp) and 415 feet from the closest IH 45 main lanes. However, the house is situated in close proximity to two local streets that pass under IH 45 and potentially subject to NHHIP-related work: Dallas Street is located 25 feet northeast of the building, and a ramp from Allen Parkway to Clay Street is located 120 feet southwest of the building.

With the proposed NHHIP, there would be no additional ROW acquisition from this property or adjacent properties. Distances from the Kellum-Noble House to the proposed IH 45 ramp and main lanes would increase. The distance from the Kellum-Noble House to Dallas Street would remain unchanged, while the Allen Parkway-to-Clay Street ramp would be reconstructed at a distance 135 feet from the house. The Kellum-Noble House would be about 260 feet from the nearest IH 45 ramp and about 650 feet from the nearest IH 45 main lanes.

TxDOT staff and consultants and THC staff toured the area on January 23, 2019, to confirm NRHP boundaries and potential for project effects. Based on this site visit and the information noted above, the NHHIP would have **no adverse effect** to Resource 007A, the Kellum-Noble House in Sam Houston Park at 1000 Bagby Street.

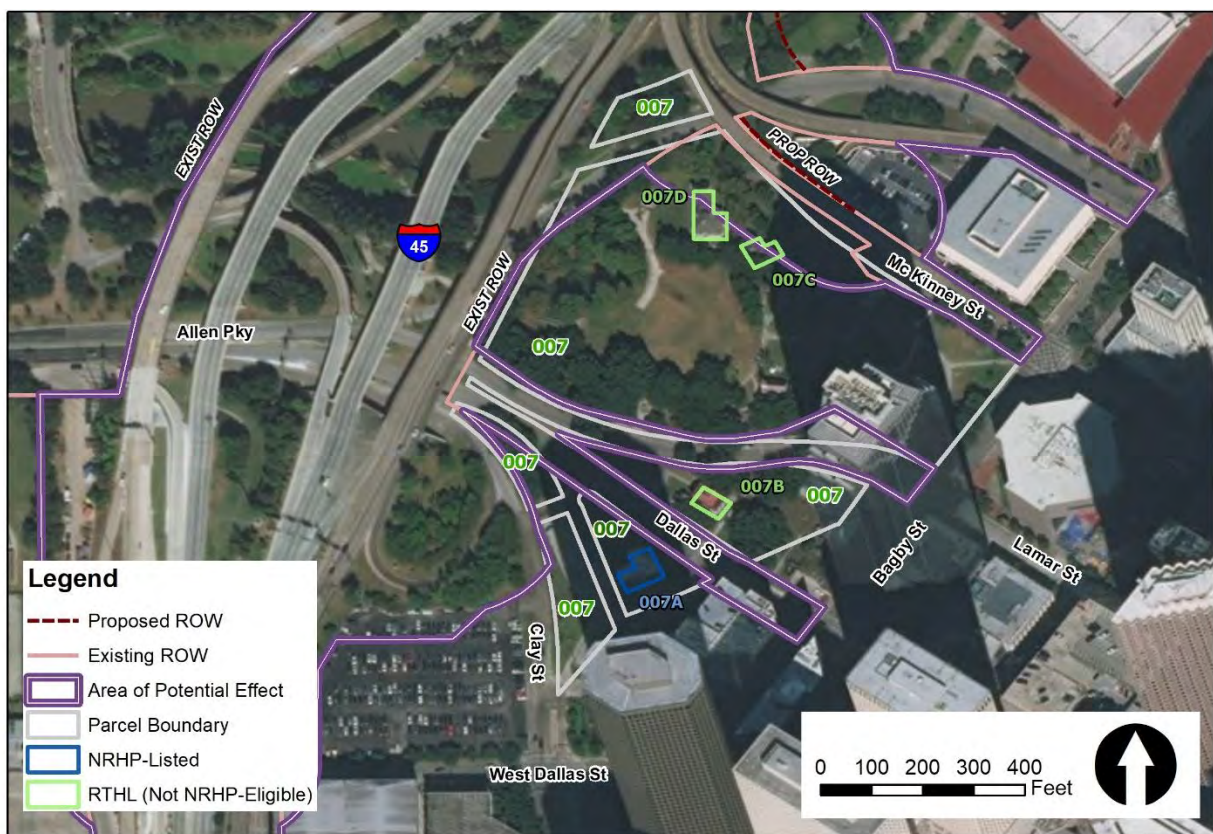


Figure 115. Proposed NHHIP ROW in relation to Resource 007A.

Resource 015: former Albert Sidney Johnston Jr. High School (1906 Cleburne Street)

This school building, now the home of the Houston ISD Young Women’s Preparatory Academy, is eligible for the NRHP under *Criterion C*. It is located southwest of the SH 288/IH 69 interchange (see Figure 116). The school is about 470 feet south of the nearest existing IH 69 ROW and 540 feet from the nearest IH 69 pavement edge, and about 315 feet north of both the nearest SH 288 ROW and pavement edge.

With the NHHIP, SH 288 and IH 69 would remain in a similar configuration and location. The most impactful change would be associated with the reconstruction of the SH 288/IH 69 interchange, with construction of a direct-connector ramp from northbound IH 69 to southbound SH 288 on new ROW. At the closest point, the new ROW and pavement edge for the ramp would both be located 355 feet from the school, with no significant visual impact to the school property.

Given the distance to the roadway, the school was not modeled as a noise receiver in the 2018 NHHIP noise study. Several residences on SH 288 ROW were modeled in the study. Projected 2040 noise levels varied from current levels, ranging from a 2 dBA decrease to a 6 dBA increase. Residences close to the SH 288 ROW are already above noise abatement criteria for residences. Noise barriers with a height of 16 feet are proposed at several

locations along the SH 288 ROW, including portions of the new IH 69-SH 288 direct-connector ramp. Based on the distance to the proposed ROW and proposed construction of noise barriers, the school should not have significant effects from traffic noise, particularly since it is eligible for the NRHP for its architecture rather than historical associations which could be compromised by greater noise levels. On November 2, 2018, the THC concurred that the NHHIP would have **no adverse effect** to Resource 015, the former Albert Sidney Johnston Jr. High School at 1906 Cleburne Street (see correspondence in Appendix G).



Figure 116. Proposed NHHIP ROW in relation to Resource 015.

Resource 016: Cheek-Neal Coffee Company Building (2017 Preston Avenue)

The Cheek-Neal Coffee Company Building (Cheek-Neal), listed in the NRHP under *Criterion A*, is located on the east side of IH 69 (see Figure 117). It is also designated as a City of Houston Protected Historic Landmark. The main portion of the building is five stories in height, with a one-story extension on the building's northeast side (see Figures 103 and 104). The Cheek-Neal property is made up of four lots and an additional tract that comprises the south-central and southeast portions of Block 168, bounded by Chartres Street on the west, Congress Street on the north, St. Emanuel Street on the east, and Preston Street on the south. The building takes up most of the parcel, with paved parking area on the west portion of the property. The remainder of the city block is also used as paved parking area. The Cheek-Neal building is located 160 feet east of the existing IH 69

ROW, 170 feet east of Chartres Street which functions as a de facto frontage road, and 210 feet east of the IH 69 main lanes, which are carried on an elevated structure.



Figure 117. Proposed NHHIP ROW in relation to Resource 016.

The NHHIP would place IH 45/IH 69 in a depressed configuration in this location, with 10 southbound travel lanes and 11 northbound travel lanes. To accommodate the additional freeway width, a 150-foot-wide strip of additional ROW would be acquired on the east side of existing IH 69. The additional ROW acquisition includes about 27.5 percent of the Cheek-Neal property parcel. Proposed IH 45/IH 69 would move much closer to the Cheek-Neal building face, to a point about 16 feet from the one-story building extension.

Visually, the Cheek-Neal building would benefit from the NHHIP work through removal of the elevated freeway structures and replacement with a depressed facility. Existing traffic noise on the building exterior is 71 dBA, which is projected to decrease to 70 dBA after completion of the proposed NHHIP. Based on the window type and placement, interior noise is assumed to be 20 dBA lower than exterior levels, or 50 dBA after NHHIP work. This interior noise level is 2 dBA below the minimum level for noise abatement and mitigation.

The potential indirect effect to Cheek-Neal is from soil movement and vibratory impacts associated with construction of the depressed freeway facility. TxDOT engineering

consultants HNTB, Inc. conducted an impact avoidance analysis, dated April 5, 2018, to study structural and vibratory impacts to the Cheek-Neal building.

First, structural layouts were adjusted to maximize the distance between the building face and the proposed drilled-shaft retaining wall on the east side of the depressed IH 45/IH 69 facility. The face of the retaining wall would be 25 feet from the building face and the drilled shafts would be 16 feet from the assumed building foundation. It should be noted that the structural foundation of the Cheek-Neal main building and extension are not definitively known and may require additional investigation prior to construction. If the Cheek-Neal building uses a deep foundation, there would be negligible effects from soil movement during or after construction. If a shallow foundation system is in place, additional stiffening of the retaining wall may be needed to minimize lateral movements.

For vibratory impacts, engineers studied the vibrations induced by types of equipment likely to be used for NHHIP construction activities in terms of velocity and frequency, as well as distance to the Cheek-Neal building. Vibration generated by construction equipment likely to be used during IH 45/IH 69 reconstruction would not be significant; that is, it would not meet the threshold for structural damage to historic buildings from continuous or transient vibration sources at 25 feet from the building face. The engineers also studied the potential for traffic vibration, particularly low-frequency sound levels produced by trucks. Based on the distance between the IH 45/IH 69 facility and the Cheek-Neal building, traffic-induced vibration would be under the annoyance threshold as well as the structural damage threshold. See Figures 120 and 121.

Based on the HNTB study, TxDOT proposes to incorporate several design prescriptive requirements to the Design-Build Agreement for implementation during final design, to avoid potential adverse soil movement and vibratory effects:

- Complete a desktop analysis of the predicted movements to determine the magnitude and risk.
- Conduct a vibration study including soil investigation and a feasibility analysis of improving the soil adjacent to the building or adding ground barrier.
- Provide increased stiffness to the drilled shaft retaining wall to minimize lateral deflections. This can be achieved by increasing the diameter of the drilled shaft wall system, reducing drilled shaft spacing, using high strength concrete, or adding structural steel elements into the drilled shafts.

- Avoid heavy loads near the structure and the proposed retaining wall during construction.
- Modify the cantilever drilled shaft retaining wall system to increase its stiffness and reduce the potential for lateral deflections, using one of the systems below or a combination of them:
 - Install a tie-back or prop system to eliminate the possibility of mobilizing an active soil mass with the cantilever construction.
 - Use a secant pile wall system in which additional unreinforced drilled shafts are added in between the original reinforced drilled shafts.
- Install instrumentation to monitor the effects of vibration during construction and in service.

Due to the acquisition of ROW from the property parcel, removal of most parking areas, and potential for indirect impacts, the NHHIP would have an **adverse effect** to Resource 016, the Cheek-Neal Coffee Company Building at 2017 Preston Street. An Individual Section 4(f) Evaluation will be prepared for this property.



Figure 118. View facing south.



Figure 119. View facing southwest. Area of proposed IH 45/IH 69 ROW is at center and right of frame. Left orange cone at location of proposed ROW boundary and right orange cone at location of proposed retaining wall.

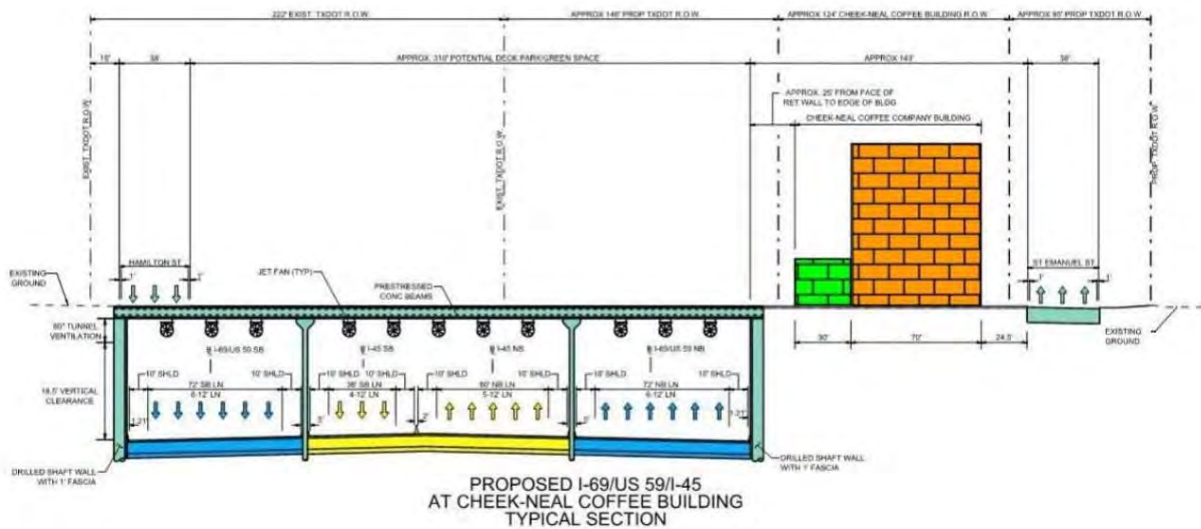


Figure 120. Typical section of IH 45/IH 69 at Resource 016, showing depressed freeway profile and retaining wall.

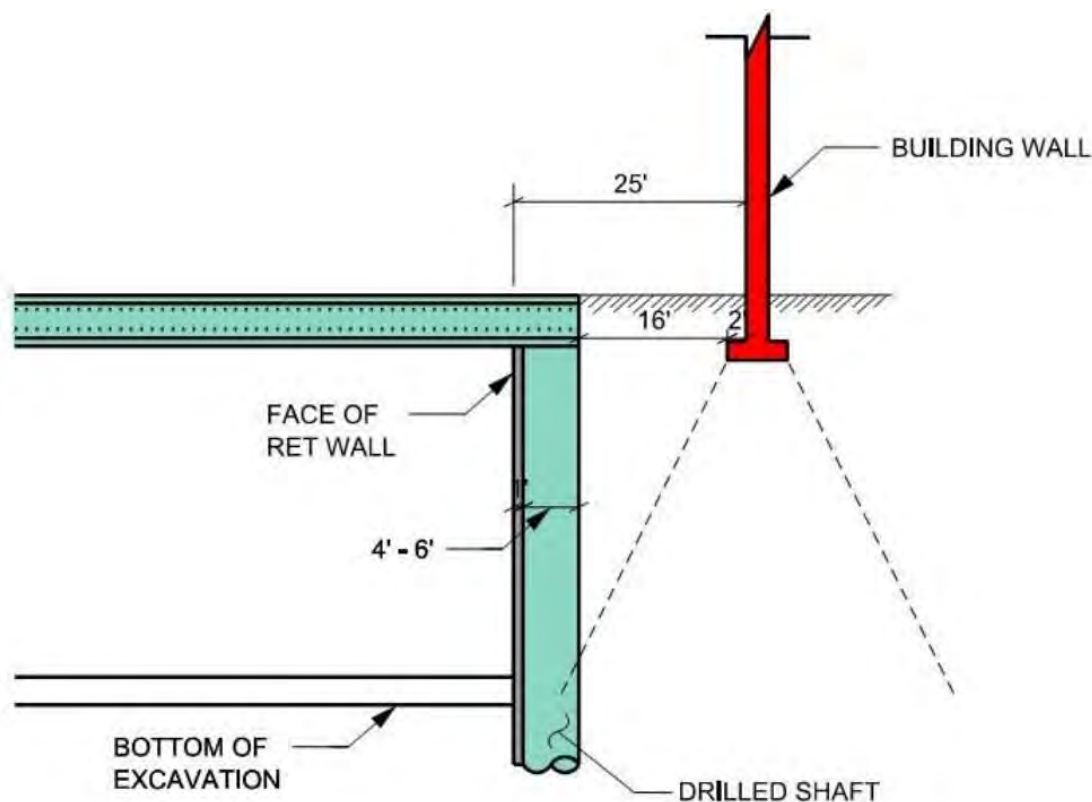


Figure 121. Diagram showing relationship of proposed retaining wall construction to Resource 016.

Resource 017: Myers-Spalti Manufacturing Plant (2115 Runnels Street)

Resource 017, the former Myers-Spalti Manufacturing Plant (Myers-Spalti), is located east of IH 69 on the south bank of Buffalo Bayou (see Figures 122 and 123). The building has been converted to condominiums and was listed in the NRHP in 2003 under *Criteria A* and *C*. Resource 017 is 659 feet east of the IH 69 ROW, with the Houston Housing Authority's Clayton Homes between the freeway and the property.

Under the proposed NHHIP, IH 45/IH 69 would shift to an alignment several hundred feet eastward from current IH 69. There would be no ROW acquisition from the NRHP-listed property. However, the proposed ROW would be 76 feet from the parcel boundary and 97 feet from the Myers-Spalti building. At this location, proposed IH 45/IH 69 main lanes would be near ground-level grade. Just north, several flyover ramps begin to rise in elevation to cross Buffalo Bayou and enter the complex IH 45/IH 69/IH 10 interchange to the northwest of Myers-Spalti. Noise studies conducted in 2018 for the NHHIP indicate that existing interior noise level of 44 dBA would increase to 52 dBA following NHHIP construction. While noise levels would rise, this level is well below thresholds for significant noise impact and no noise mitigation is proposed. In addition, Myers-Spalti is a former manufacturing facility with loud activities during its period of significance; a low noise level is not necessary for the building to convey its significance. Runnels Street, which is now an east-west through

street, would terminate at the freeway ROW. In its current use as condominiums, the change in street access would not have detrimental effects to the building's future use or viability.

On November 2, 2018, the THC concurred that the NHHIP would have **no adverse effect** to Resource 017, the former Myers-Spalti Manufacturing Plant at 2115 Runnels Street (see correspondence in Appendix G).



Figure 122. Proposed NHHIP ROW in relation to Resource 017.



Figure 123. View facing north, showing relationship of Resource 017 east of railroad tracks (right of frame) to proposed NHHIP ROW west of railroad tracks (far left of frame).

Resource 019: Fire Station No. 5 (910 Hardy Street)

This resource was determined individually eligible for the NRHP under Criterion A. At this location, existing IH 10 is comprised of four travel lanes in each direction and one-way local streets functioning as frontage roads (see Figure 124). The IH 10 main lanes are depressed and frontage roads are at-grade. The building is located approximately 152 feet south of the existing IH 10 ROW, 163 feet south of Rothwell Street, and 272 feet south of the nearest IH 10 pavement edge. With the NHHIP, proposed IH 45/IH 10 would be reconstructed along the same alignment but with a modified vertical profile. IH 10 main lanes and MaX lanes would be depressed, while IH 45 main lanes would be carried on elevated structures. The elevated structures would be founded in the depressed section and cantilevered over the IH 10 lanes; the vertical elevation of the proposed IH 45 main lanes would be about 30 feet above existing grade. There would be now ROW acquisition from this property. The distances from the building to proposed ROW and frontage road would remain the same as existing. The building would be located about 202 feet south of the closest IH 45/IH 10 pavement edge (the depressed IH 10 main lanes) and 280 feet south of the proposed IH 45 main-lane elevated structure. There would be no direct effect to Resource 019, and proximity and noise impacts would be negligible considering the building's relationship to the existing IH 10. The building will be able to convey its significance as an early municipal fire station in the warehouse district, regardless of the increase in vertical elevation of portions of the IH 45/IH 10 facility. The NHHIP would have **no effect** to Resource 019, Fire

Station No. 5 at 910 Hardy Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).



Figure 124. Proposed NHHIP ROW in relation to Resource 019.

Resource 179: Phillips 66 Gas Station (5610 North Freeway)

This 1965 gas station, on the east side of IH 45, was determined eligible for the NRHP under Criterion C. It is made up of a rectangular-plan building and prominent triangular-shaped canopy that projects towards IH 45 (see Figure 125). Existing IH 45 at this location is comprised of four travel lanes and outside shoulders in each direction, a reversible HOV lane, and two-lane one-way frontage roads in each direction. All lanes are at-grade. At its closest point (the tip of the canopy), the resource is currently 7 feet from IH 45 ROW, 67 feet to the northbound frontage road, and 80 feet to the nearest IH 45 main lane. With the NHHIP, proposed IH 45 would be widened to four travel lanes, two managed lanes, and three-lane one-way frontage roads in each direction. All lanes would be at-grade. To accommodate the additional lanes, additional ROW would be acquired on the west side of existing IH 45 and the facility would be shifted to the west. There would be no ROW acquisition from this property. The slight realignment would move the at-grade frontage road somewhat closer at 34 feet from the tip of the building canopy, but main travel lanes would be farther away at 130 feet from the tip of the building canopy. Based on design schematics and related studies, the NHHIP would result in **no adverse effect** to Resource

179, the Phillips 66 gas station at 5610 North Freeway. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G) on the condition that no ROW is taken from the property and the frontage roads remain at-grade.



Figure 125. Proposed NHHIP ROW in relation to Resource 179.

Resource 581: Downtown Houston Post Office, Processing and Distribution Center (401 Franklin Street)

This property was listed in the NRHP in 2018 under Criteria A and C. The property is located on the east side of IH 45, between Franklin Street on the south and railroad ROW on the north. The post office building occupies the north-central portion of the property, surrounded by large surface parking lots to the south and east and smaller paved surface parking areas to the north and west of the building. Existing IH 45 at this location is carried on the Pierce Elevated structure about 27 feet above ground level. There are four travel lanes in each direction.

With the NHHIP, IH 45 would be relocated north and east of downtown Houston and the Pierce Elevated would be replaced with a “Downtown Connector” that provides access from IH 45 and IH 10 to the west side of downtown. The Downtown Connector would be constructed with three to four travel lanes in each direction, generally within existing IH 45 ROW. However, a narrow strip of ROW would be acquired from Resource 581 for a ramp

between the northbound Downtown Connector and eastbound IH 10 (see Figure 126). The NHHIP would acquire about 904 square feet (0.021 acre) of land from the property, representing about 0.13 percent of the total parcel area. The ROW to be taken is a small portion of the paved parking area adjacent to existing IH 45 and northwest of the former post office building. The proposed project would have no direct effect to the NRHP-listed building. Indirect effects would be negligible, as there is already considerable noise and visual intrusion from existing IH 45. The existing Pierce Elevated was constructed in the mid-1960s, in the same period as the former post office building. The NHHIP would therefore have **no adverse effect** to Resource 581, the former Downtown Houston Post Office, Processing and Distribution Center at 401 Franklin Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G). A de minimis Section 4(f) finding will be prepared for the ROW acquisition of land from this property.

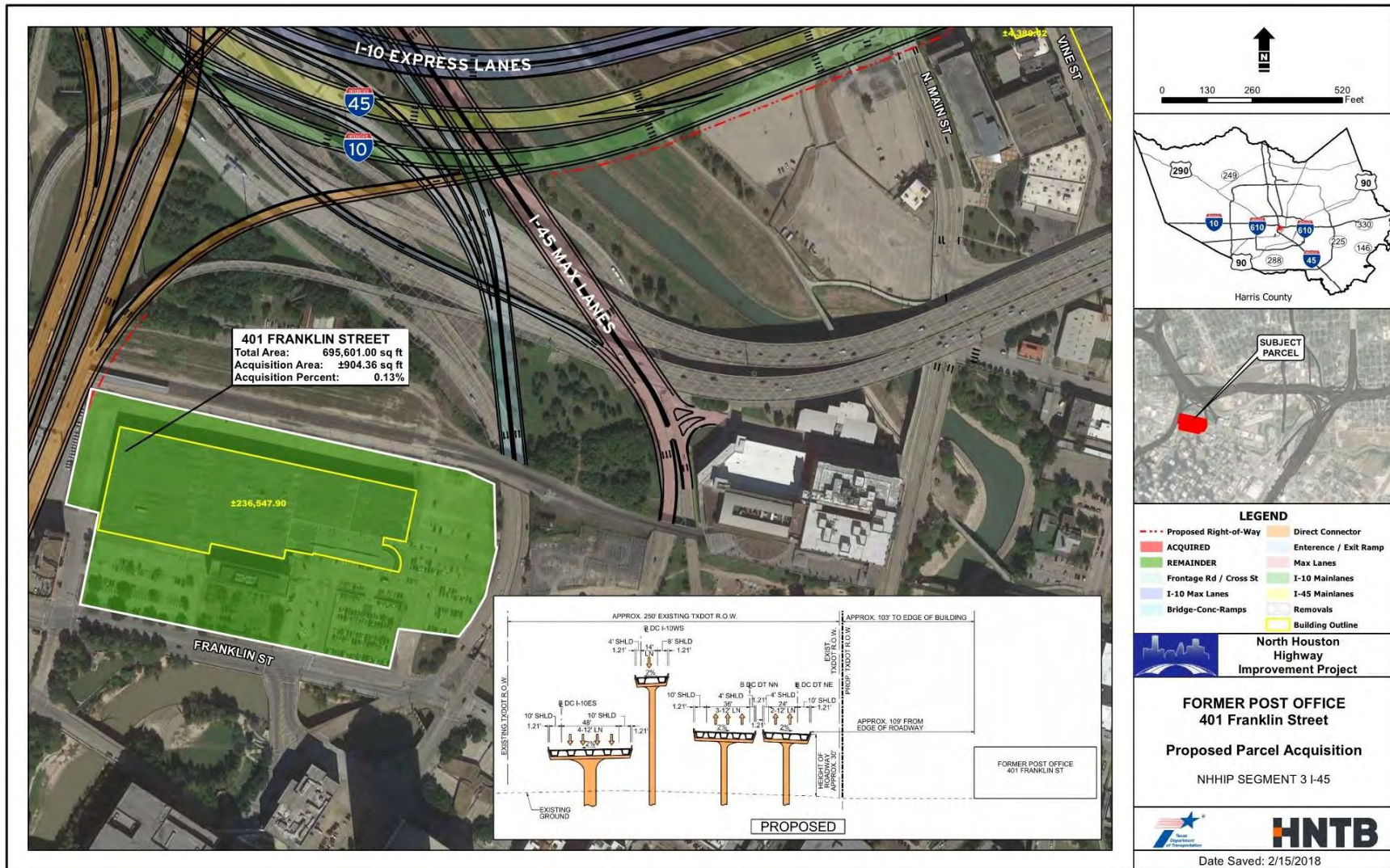


Figure 126. Preliminary schematic showing proposed ROW acquisition from Resource 581. Property boundaries are shown in green and proposed ROW acquisition is in red.

Resource 590: Rossonian Cleaners (3921 Alameda Road)

The Rossonian Cleaners building was determined eligible for the NRHP under Criteria A and C (see Figures 127 through 129). It is located adjacent to the IH 69 ROW, just north of the freeway facility and west of the IH 69/SH 288 interchange. In this location, existing IH 69 has three travel lanes in each direction, with a one-lane ramp adjacent to the Resource 590 property. The ramp connects northbound SH 288 with southbound IH 69. The existing ramp is elevated on fill immediately south of the property. The NHHIP would include addition of travel lanes to IH 69 to four travel lanes in each direction and reconstruction of the IH 69/SH 288 interchange. Just south of Resource 590, the closest freeway lanes would be a two-lane southbound IH 69 frontage road along the ROW boundary and a reconstructed ramp from northbound SH 288 to southbound IH 69. The NHHIP would acquire 0.079 acre of land from the Resource 590 property, or about 28.7 percent of the total parcel area (see Figure 130). The ROW boundary would extend into the existing Rossonian Cleaners building and would require demolition of the c.1945 addition that makes up the southern half of the building, and would likely require acquisition and removal of the entire building.

In a November 2, 2018, the THC raised the following question regarding design considerations relating to Rossonian Cleaners (see correspondence in Appendix G):

Q: Could portions of proposed frontage road at this location be cantilevered over the freeway main lanes to reduce the required roadway width?

A: Horizontal geometric constraints preclude further reduction of roadway width or a cantilvered vertical profile. TxDOT has undertaken design modifications to minimize effects to properties in this area, reducing the frontage road design to two lanes. Traffic exiting from southbound IH 69/SH 288 would merge into Hamilton Street/southbound frontage road just north of Resource 590, making further reductions or horizontal shifts imprudent. The curvature of the northbound SH 288 to southbound IH 69 ramp has already been tightened in this location to reduce ROW taking, with design speeds reduced to 45 miles per hour given the sharper curvature.

The NHHIP would have an **adverse effect** on Resource 590, the Rossonian Cleaners at 3921 Alameda Road. An Individual Section 4(f) Evaluation will be prepared in relation to the use of this property.



Figure 127. View facing west-northwest, showing Resource ID 590 with existing IH 69 at far right of frame.



Figure 128. View facing northwest, showing relation of Resource ID 590 (left) to existing IH 69 (right).



Figure 129. View facing north, showing roofline of Resource ID 590.

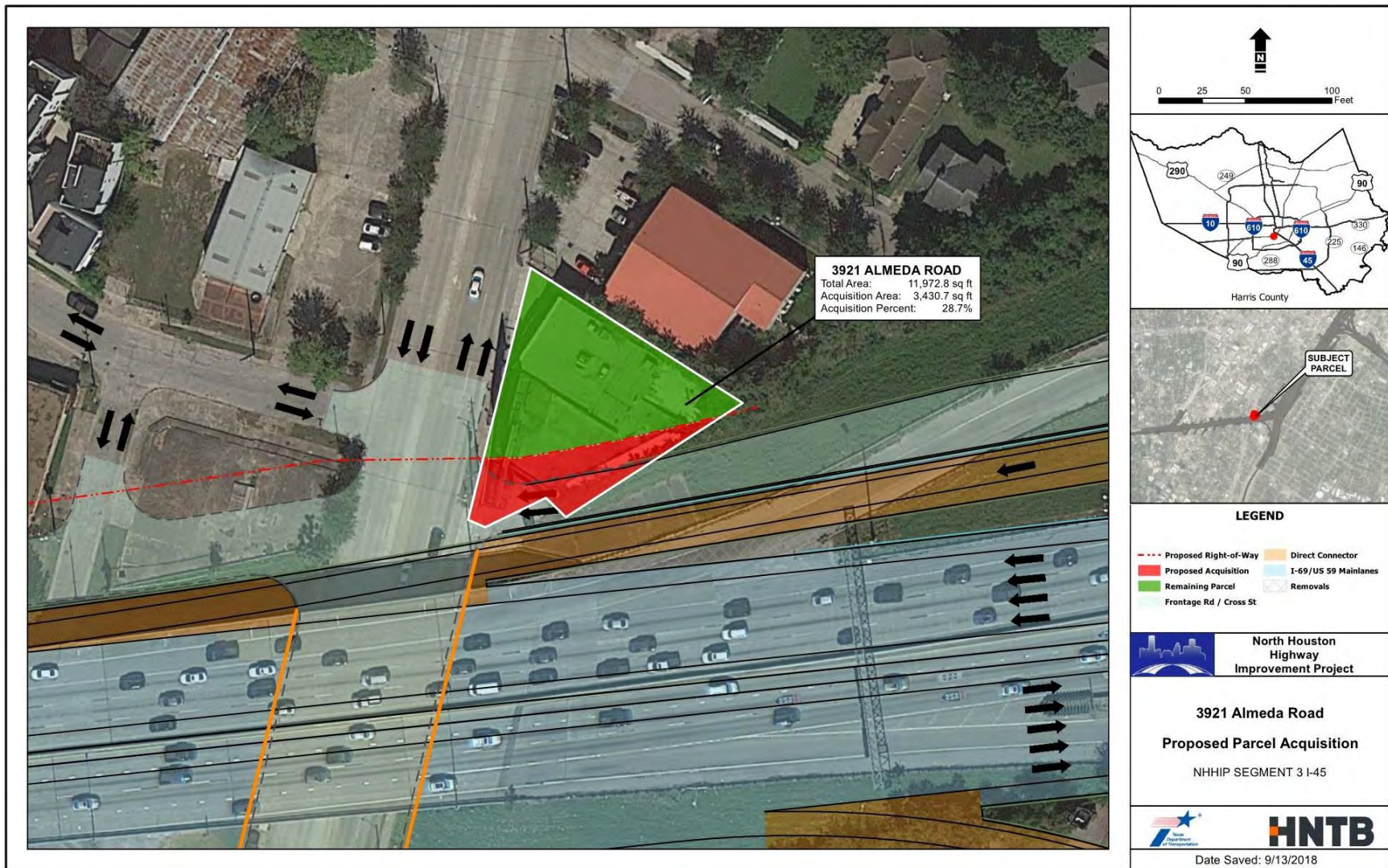


Figure 130. Preliminary schematic showing proposed ROW acquisition from Resource 590. Property boundaries are shown in green and proposed ROW acquisition is in red.

Resource 603: House (4120 Austin Street)

This house, located north of existing IH 69, was determined eligible for the NRHP under Criterion C. At this location, existing IH 69 has three travel lanes and a dedicated entry/exit lane in each direction (see Figure 131). The freeway is slightly elevated, about 18 feet above grade. The edge of the Resource 603 parcel is approximately 176 feet from the existing IH 69 ROW. The house is located approximately 199 feet from the existing ROW and 209 feet from the closest IH 69 pavement edge. The NHHIP would reconstruct this portion of IH 69 to accommodate five northbound and six southbound travel lanes in a depressed profile with retaining walls, as well as two-lane frontage roads at grade. The ROW would move somewhat closer to Resource 603. The parcel boundary would be approximately 103 feet to the proposed IH 69 ROW, while the house would be approximately 130 feet from the proposed ROW, 145 from the closest frontage road, and 170 feet from the closest main lane pavement edge.

There would be no ROW acquisition from this property. Proximity impacts are moderated by substantially reduced noise and visual intrusions as compared to existing conditions. The existing IH 69 elevated structure would be removed from view. Noise studies conducted in 2018 for the NHHIP modeled noise impacts for two representative receivers located between Resource 603 and proposed IH 69. Both receivers would have reduced noise levels, from 74-75 decibels to 70-72 decibels. The NHHIP would have **no adverse effect** on Resource 603, the house at 4120 Austin Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).



Figure 131. Proposed NHHIP ROW in relation to Resource 603.

Resource 738: Gribble Stamp Company Building (121 St. Emanuel Street)

The Gribble Stamp Company building is located along St. Emanuel Street adjacent to the Navigation Boulevard Underpass (see Figure 132). It is eligible for listing in the NRHP under Criterion C. The building is located east of existing IH 69, approximately 331 feet east of the IH 69 ROW and 371 feet from the closest freeway pavement edge. At this location, existing IH 69 is elevated, with four travel lanes and shoulders in each direction. The NHHIP would place IH 45/IH 69 in a depressed configuration in this location, with 10 southbound travel lanes and 11 northbound travel lanes. To accommodate the additional freeway width, a 150-foot-wide strip of additional ROW would be acquired on the east side of existing IH 69. The Gribble Stamp Company building would be 120 feet from the proposed IH 45/IH 69 ROW, 143 feet from the frontage road, and 180 feet from the edge of the freeway retaining wall. There would be no ROW acquisition from this property. Proximity impacts are moderated by reduced noise and visual intrusions as compared to existing conditions. Visually, the Gribble Stamp Company building would benefit from the NHHIP work through removal of the elevated freeway structures and replacement with a depressed facility. NHHIP-related noise studies did not model representative noise receivers in the immediate vicinity of this property; however, traffic noise would be expected to substantially decrease with main lanes in the depressed section.

The NHHIP would have **no adverse effect** on Resource 738, the Gribble Stamp Company building at 121 St. Emanuel Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G) on the condition that the property retains access to St. Emanuel Street as depicted on current project design schematics.

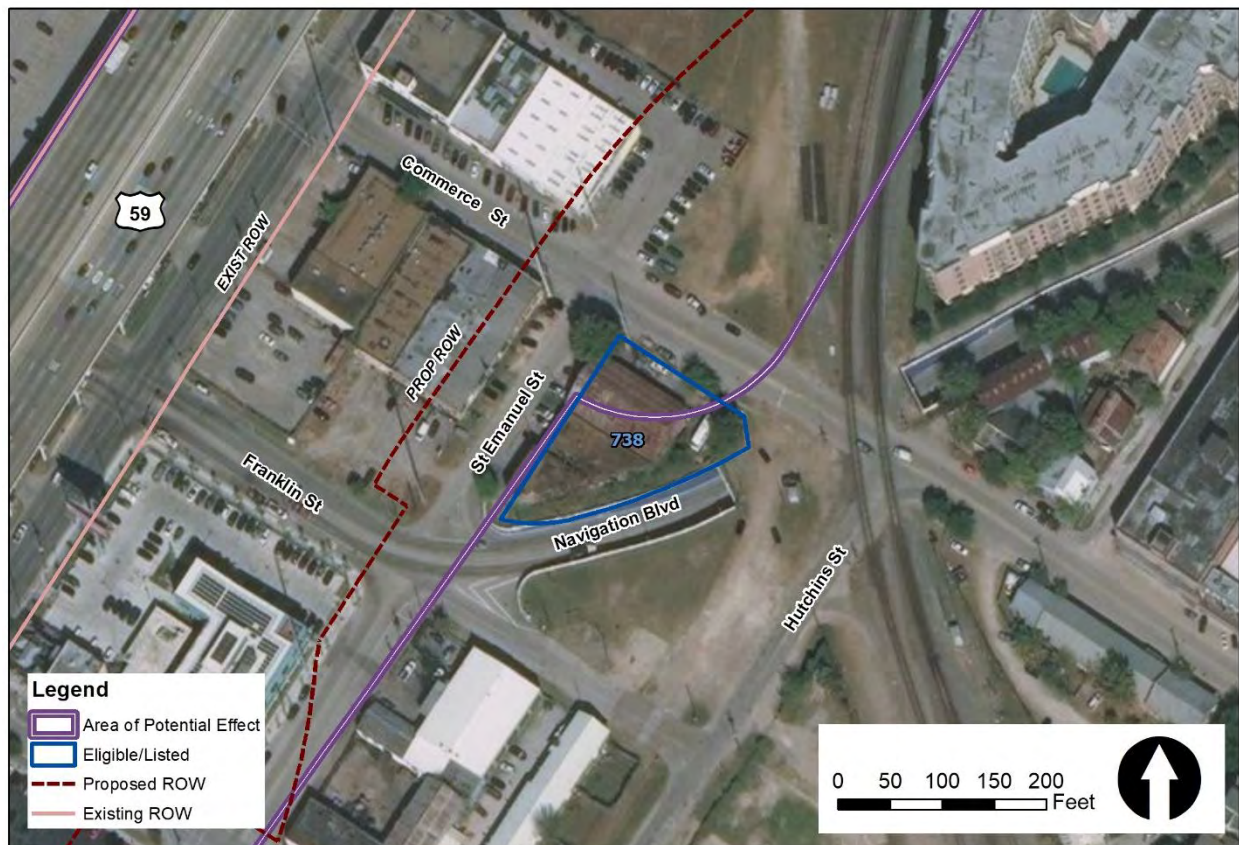


Figure 132. Proposed NHHIP ROW in relation to Resource 738.

Resource 908: Butler Brothers Union Terminal Warehouse (1002-1008 Washington Avenue)

The former Butler Brothers Union Terminal Warehouse, now the City of Houston Permitting Center, is located east of existing IH 45, between Washington Avenue on the south and railroad ROW on the north (see Figure 133). The building is recommended as eligible for the NRHP under Criterion C. At this location, IH 45 is currently carried on the Pierce Elevated structure about 27 feet above ground level. There are four travel lanes in each direction. In addition, an elevated ramp just west of the Pierce Elevated carries the connector between downtown and eastbound and westbound IH 10 HOV lanes. The freeway structure nearest to Resource 908 is the IH 10 HOV ramp, located 295 feet from the closest building face. The NHHIP does not include work to the IH 10 HOV structure. The warehouse building is located 355 feet from the existing IH 45-associated ROW and 376 feet from the nearest edge of the Pierce Elevated structure. The only portion of the Resource 908 property within the NHHIP APE is a small portion of paved parking east of the building.

With the NHHIP, IH 45 would be relocated north and east of downtown Houston and the Pierce Elevated would be replaced with a "Downtown Connector" that provides access from IH 45 and IH 10 to the west side of downtown. The Downtown Connector would be constructed with three to four travel lanes in each direction, generally within IH 45 ROW. The NHHIP would not result in ROW acquisition from the Resource 908 property or adjacent properties. The Downtown Connector would remain in the same location as existing IH 45. Indirect effect would be negligible based on distance to the proposed NHHIP improvements, the presence of existing elevated freeway structures, and the continued presence of the IH 10 HOV ramp between the proposed Downtown Connector and Resource 908. The NHHIP would therefore have **no adverse effect** on Resource 908, the former Butler Brothers Union Terminal Warehouse at 1002-1008 Washington Avenue.



Figure 133. Proposed NHHIP ROW in relation to Resource 908.

Resource 956: House (3417 Baer Street)

This house, located south of IH 10 east of downtown Houston, was determined eligible for the NRHP under Criterion C. IH 10 at this location has four travel lanes, shoulders, and one-way frontage roads in each direction, all at-grade. The Resource 956 property is 247 feet south of existing IH 10 ROW at its closest proximity, while the house itself is 254 feet from the IH 10 ROW (see Figure 134). With the NHHIP, IH 10 would be widened, with five main travel lanes in each direction and two MaX lanes on westbound IH 10, as well as three-lane

one-way frontage roads in each direction. To accommodate the additional lanes, a narrow strip of ROW would be acquired on the south side of IH 10. There would be no ROW acquisition from this property. Proximity impacts would be negligible, with the IH 10 ROW moving approximately 28 feet closer to Resource 956. Visually, IH 10 main lanes and MaX lanes would remain within five feet of existing elevation and frontage roads would remain at-grade. Noise studies conducted in 2018 for the NHHIP modeled noise impacts for three representative receivers located between Resource 956 and proposed IH 10 ROW. Noise levels at the receivers would remain the same or decrease by up to 2 dBA. Since existing noise levels are above noise abatement thresholds, a series of 16-foot-high noise barrier walls are proposed to be constructed along this portion of IH 10. Based on these factors, the NHHIP would have **no adverse effect** on Resource 956, the house at 3417 Baer Street. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).



Figure 134. Proposed NHHIP ROW in relation to Resource 956.

Resource 966: Strauss Bascule Bridge (former Houston Belt and Terminal Railroad over Buffalo Bayou)

The bascule bridge that carried the former Houston Belt and Terminal Railroad over Buffalo Bayou, commonly known as the Strauss Bascule Bridge, is located directly under the existing IH 69 ROW as the freeway passes over Buffalo Bayou (see Figure 135). Under the NHHIP,

existing IH 69 structures would be removed and the proposed IH 45/IH 69 facility would be located several hundred feet east, away from the Strauss Bascule Bridge. The bridge is no longer in use and has been planned for incorporation into a multi-use trail along Buffalo Bayou. The bridge rehabilitation and trail construction would be funded through a separate Transportation Alternatives Set Aside (TASA) project and would not be a part of the NHHIP.

In September 2018, TxDOT determined the NHHIP would have no adverse effect to the bridge and forwarded this determination of effect to THC. In a November 2, 2018 response letter, THC commented: “Because this bridge is directly underneath the existing and proposed freeway, THC cannot concur with the effect finding without further information regarding the demolition of the existing freeway overhead, the construction of the new roadway, construction of any potential detention ponds, and construction notes for the protection of the bridge during the project.”

The bridge would be located immediately west of two ramps connecting IH 69 HOV lanes with local streets in downtown Houston. The primary concentration of elevated structures and ramps between IH 45/IH 69 east of downtown and IH 45/IH 10 north of downtown would be located several hundred feet east of the bridge at Buffalo Bayou and about 200 feet north of the bridge as they curve just north of the bayou. No direct effects to the bridge are called for in the NHHIP design. The potential detention ponds on the south side of Buffalo Bayou would not have a direct effect on the bridge or its substructure. The current design is expected to open up visibility of the bridge. TxDOT will develop design prescriptive requirements in the Design-Build Agreement for implementation in the final design and construction of the NHHIP to protect the existing bridge from damage during construction. Provided implementation of these conditions, the NHHIP would have **no adverse effect** on Resource ID 966, the Strauss Bascule Bridge over Buffalo Bayou.



Figure 135. Proposed NHHIP ROW in relation to Resource 966.

Resource 975: Judge Hernandez Tunnel (North Main Street under former GH&SA Railroad)

The Judge Hernandez Tunnel carries North Main Street under the former GH&SA (now Union Pacific) Railroad (see Figures 136 through 138). The METRO Red Line runs north-south just east of North Main Street in this area. The Judge Hernandez Tunnel has northern and southern approaches with railings and concrete retaining walls, and a separated pedestrian walkway to the west of the vehicular lanes. The tunnel's north approach has been largely reconstructed with a new concrete headwall and incompatible railings. The south approach retains its original railings and headwall. The property's NRHP-eligible boundaries consist of the grade-separation structure itself, the west retaining wall of the south approach, and the historic railings on the south side of the tunnel.

With the NHHIP, proposed IH 45/IH 10 would pass in an east-west alignment, with the proposed IH 45/IH 10 ROW extending north to include part of the tunnel's south approach. At North Main Street, the proposed IH 45/IH 10 ROW would be about 460 feet wide, with IH 45 main lanes, IH 10 main lanes, and IH 10 MaX lanes carried on a series of parallel elevated structures. The proposed westbound IH 10 lanes would pass over the tunnel's south approach. All IH 45/IH 10 structures would be elevated in this location to span over North Main Street and the METRO Red Line, which is currently elevated over the former GH&SA/Union Pacific Railroad line.

North Main Street and the associated Judge Hernandez Tunnel are already dedicated for transportation purposes and the proposed IH 45/IH 10 design with clear spans across North Main Street would not be considered an acquisition of additional ROW from the tunnel, provided no piers or other appurtenances are physically located in the NRHP-eligible boundaries of the tunnel. While proximity, noise, and visual impacts will be substantial, it should be noted that these types of indirect effects often have little impact to historic setting or feeling of an urban grade separation such as the Judge Hernandez Tunnel. In addition, there is already substantial transportation-related activity in the area, with a passenger rail line on an elevated structure, an at-grade freight rail line, and North Main Street all in the immediate vicinity. The Judge Hernandez Tunnel would continue to carry North Main Street vehicular traffic. For these reasons, the NHHIP would have **no adverse effect** to Resource ID 975, the Judge Hernandez Tunnel carrying North Main Street under the former GH&SA Railroad. THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G), on the condition that the construction of the proposed freeway does not directly affect the concrete railings along the western retaining wall and sidewalk of the south approach. Measures requiring protection of the railings are specified in the Design-Build Agreement for implementation in the final design and construction.

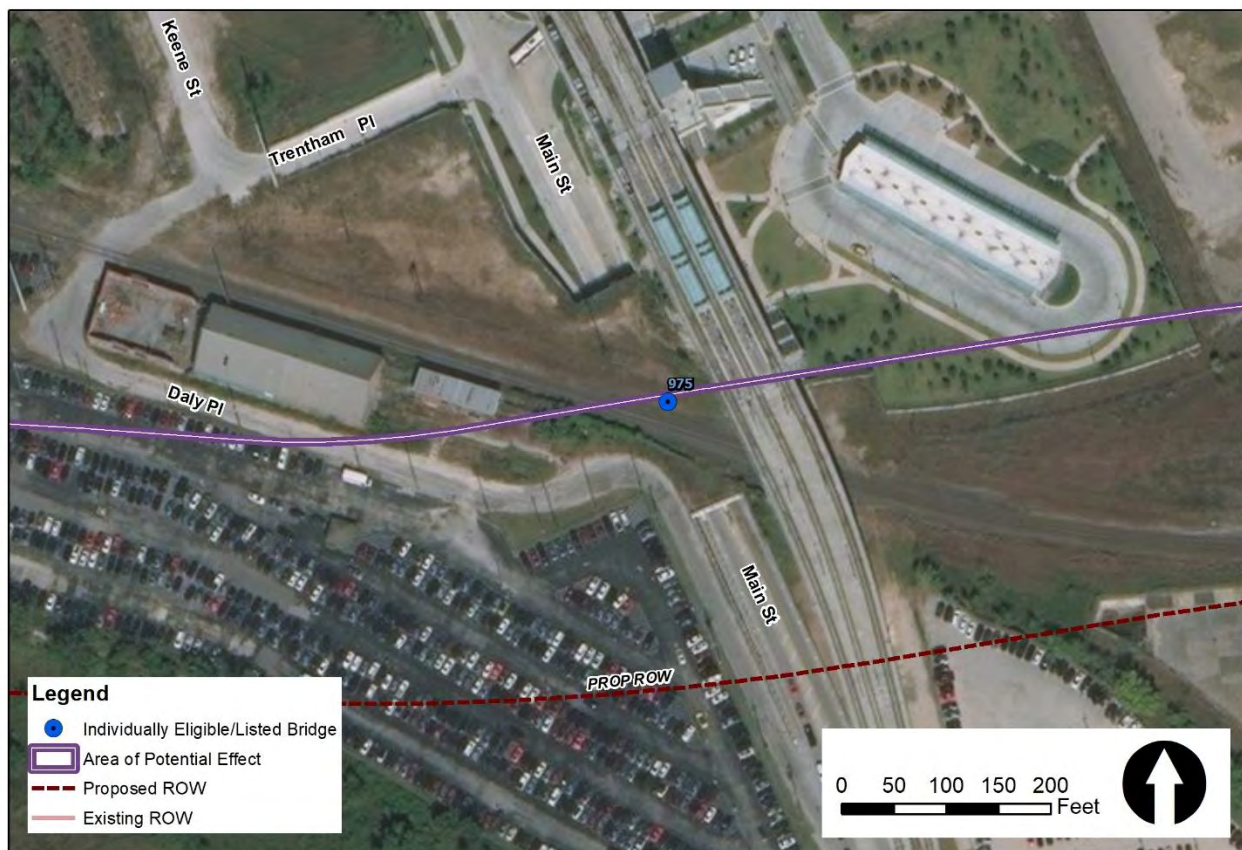


Figure 136. Proposed NHHIP ROW in relation to Resource 975.



Figure 137. View facing north towards Judge Hernandez Tunnel. Note existing elevated METRO Red Line structure immediately east of tunnel.



Figure 138. View facing northeast, showing historic-age features of Judge Hernandez Tunnel. The north approach and east side of the south approach were replaced, presumably as part of METRO Red Line construction.

Resource 981: former Crawford Elementary School (1510 Jensen Drive)

The Crawford Elementary School is recommended as eligible for the NRHP under Criterion C in the area of Architecture. NRHP-eligible boundaries are limited to the footprints of the four historic-age buildings and the breezeways that connect them (Resources 981 A, B, D, E. See Figure 139). Several non-historic-age sheds located on the parcel's eastern boundary (Resource 981F) as well as two non-historic-age pavilions on the west side of the campus (Resources 981C and 981G) do not contribute to the school's significance and are therefore excluded from the NRHP-eligible boundaries.

At this location, existing IH 69 is comprised of six southbound travel lanes, four northbound travel lanes, and a reversible HOV lane in the center of the freeway. The main lanes are elevated between 18 and 20 feet above adjoining grade. The IH 69 southbound frontage road is two lanes, widening to five lanes at the Lyons Avenue intersection. The northbound frontage road has two lanes north of Lyons Avenue. Schwartz Street acts as a north-south local access road on the west side of IH 69, as the frontage roads elevate to span over the Union Pacific Railroad northeast of Resource 981 and therefore do not provide direct access to adjoining properties.

The Resource 981 property is located at the northern edge of proposed NHHIP-related work on IH 69. With the NHHIP, the frontage roads and Schwartz Street would remain in the same configuration as existing conditions. IH 69 would be reconstructed to the Union Pacific Railroad, with the same number of travel lanes and similar elevation. The only operational change would be that the two lanes dedicated for traffic exiting from southbound IH 69 to IH 10 would be carried on a separate elevated ramp that would split from IH 69 just east of the Resource 981 property, rather than on a single elevated structure with other IH 69 lanes as currently configured.

Currently, the closest edge of the NRHP-eligible boundaries of Resource 981 is 48 feet from the IH 69 ROW (at Schwartz Street), 110 feet from the southbound frontage road, and 200 feet from the main lane pavement. With proposed NHHIP improvements, the distances to the IH 69 ROW and southbound frontage road would remain the same and the distance to the main lane pavement would be 187 feet. Noise and visual effects from the proposed NHHIP would be negligible, as an elevated freeway structure is already in place and the property's significance is not dependent on low noise levels or unimpeded views. Noise studies conducted in 2018 for the NHHIP modeled future noise impacts to the school. The school currently has an average noise level of 69 dBA, which is projected to decrease to 64 dBA in 2040 following NHHIP construction. Based on the information presented above, the NHHIP would have **no adverse effect** to Resource 981, the former Crawford Elementary School at 1510 Jensen Drive.



Figure 139. Proposed NHHIP ROW in relation to Resource 981. Note NRHP-eligible boundaries within property.

Resource 983: City Hall Annex (900 Bagby Street)

Houston's City Hall Annex is located on the west side of Bagby Street, between McKinney Street to the south and Walker Street to the north. The City Hall Annex is recommended as eligible for the NRHP under Criteria A and C. The NRHP-eligible boundaries of the property consist of the building itself; the below-grade plaza area and retaining wall on the east, north, and south sides of the building; and the associated parking structure on the west side of the building. Currently, a two-lane ramp southwest of the property carries traffic from southbound IH 45 to one-way eastbound McKinney Street, and a two-lane ramp northwest of the property carries traffic from one-way westbound Walker Street to northbound IH 45. The ROW and ramp pavement edge are located immediately adjacent to the Resource 983 property.

With the proposed NHHIP, ramps would be reconstructed in their same configuration. A two-lane ramp would extend from southbound Downtown Connector (replacing IH 45) to McKinney Street in an essentially identical location as the existing ramp. A one-lane ramp would connect Walker Street to northbound Downtown Connector. The Walker-to-Downtown Connector ramp would be located between 10 and 25 feet farther north than the existing ramp, away from Resource 983. There would be no ROW taking from the property, and the ramp changes would have no appreciable noise or visual effects to the NRHP-eligible

property. For these reasons, the NHHIP would have **no adverse effect** to Resource 983, the City Hall Annex at 900 Bagby Street.

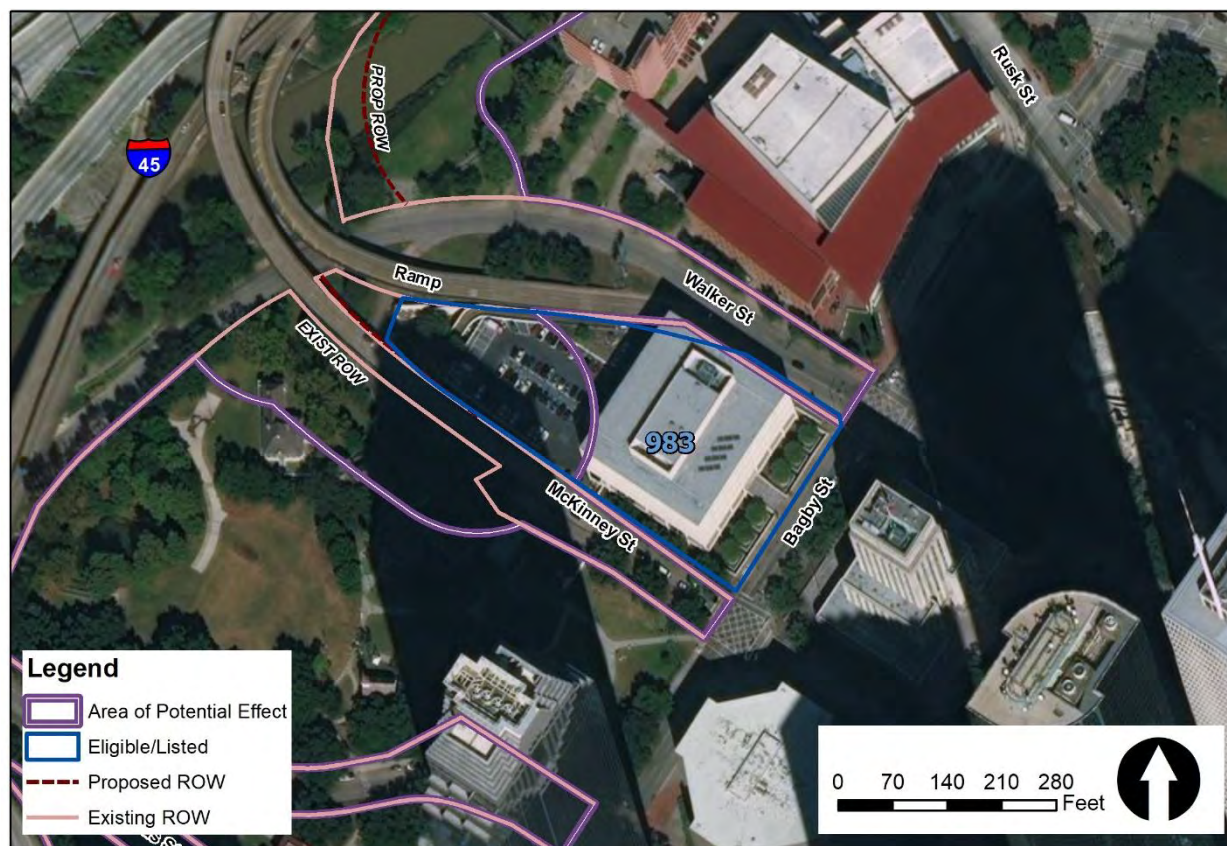


Figure 140. Proposed NHHIP ROW in relation to Resource 983.

No Resource ID: Navigation Boulevard Underpass

The Navigation Boulevard Underpass, constructed in 1936, carries Navigation Boulevard under Union Pacific Railroad's West Belt Subdivision line. The underpass is eligible for the NRHP under Criterion C. The edge of the Navigation Boulevard Underpass west retaining wall is located about 320 feet east of the existing IH 69 ROW, while the underpass itself is about 500 feet from the existing ROW. Existing IH 69 is elevated in this area, with four travel lanes and shoulders in each direction. The NHHIP would place IH 45/IH 69 in a depressed configuration, with ten southbound travel lanes and 11 northbound travel lanes. To accommodate the additional freeway width, a 150-foot-wide strip of additional ROW would be acquired on the east side of existing IH 69, with slightly wider ROW just south of Franklin Street. At closest proximity, the Navigation Underpass west approach retaining wall would be 75 feet from the proposed IH 45/IH 69 ROW, 100 feet from the frontage road, and 135 feet from the edge of the freeway retaining wall. There would be no ROW acquisition or other direct effects to this property. Proximity impacts are moderated by reduced noise and visual intrusions as compared to existing conditions, although these types of indirect effects often have little impact to historic setting or feeling of an urban grade separation such as

the Navigation Boulevard Underpass. Vehicular traffic would continue to use this facility as a connection between the East Downtown and East End neighborhoods. The NHHIP would have **no adverse effect** on the Navigation Boulevard Underpass. The THC concurred with this determination of effect on November 2, 2018 (see correspondence in Appendix G).



Figure 141. Proposed NHHIP ROW in relation to Navigation Boulevard Underpass.

H. Cumulative Effects to Historic Properties

Cumulative effects to historic resources were evaluated by TxDOT consultants. This section provides a summary of the evaluation and the conclusion regarding cumulative effects. The complete analysis is presented in Appendix H of this report.

While most of the properties in the APE will not be adversely affected, some properties will experience an adverse effect. TxDOT has considered measures to avoid and minimize impacts from the NHHIP project on historic properties. Several historic commitments, referred to as “prescriptives,” regarding treatment and consideration for historic properties have been developed. The prescriptives, combined with other mitigation measures, will minimize and mitigate for adverse effects caused by this project. In the past, the most significant direct impact to historic resources in the APE occurred with ROW acquisition in the 1950s before the NHPA (enacted 1966) and NEPA (enacted 1970) provided an established regulatory framework to evaluate impacts to historic and community resources. More recent TxDOT undertakings have taken adverse effects to historic properties into account and have mitigated for those adverse effects.

Current and future TxDOT undertakings will provide additional mitigation (like neighborhood-level historic resources surveys) that could potentially mitigate some of the past effects to historic resources. Incentive programs, such as the Federal and State Historic Preservation Tax Credits, and general trends toward rehabilitation encourage the reuse of historic buildings and the protection of historic character. This trend is already evident in the APE with projects like POST HTX, a historic tax credit rehabilitation of the Downtown Houston Post Office, or Hardy Yards, a residential development designed to respectfully reflect the aesthetic of the adjacent NRHP-eligible Warehouse Historic District. The NHHIP project is not expected to significantly alter the parallel trends of development and historic preservation/rehabilitation occurring in downtown Houston.

In conclusion, the cumulative effects evaluation considered historic resources in the APE, discussed relevant trends, and identified direct and potential indirect impacts for the resources. Past, present, and reasonably foreseeable future actions that could affect historic properties were identified by applying research and additional information about historic trends and resources. Mitigation of direct adverse impacts from the proposed project substantially reduces the project’s incremental contribution to adverse cumulative impacts on historic resources. The proposed project does not deviate from established urban development trends that result in both beneficial and adverse impacts to historic resources from large infrastructure projects; these trends are not likely to be substantially changed by this project.

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