NPS Form 10-900 United States Department of the Interior National Park Service National Register of Historic Places Registration Form

FEB - 1 2019 NAT. REGISTER OF HISTORIC PLAC.

3492

OMB No. 1024-0

1. Name of Property

Historic Name: 500 Jefferson Building Other name/site number: Five Hundred Jefferson Building, First Building Cullen Center Name of related multiple property listing: NA

2. Location

Street & number: 500 Jefferson Street City or town: Houston Not for publication:

State: Texas Vicinity:

County: Harris

State/Federal Agency Certification 3.

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this I nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property I meets I does not meet the National Register criteria.

I recommend that this property be considered significant at the following levels of significance: □ national □ statewide Ø local

Applicable National Register Criteria: □ В ØC DD

Signature of certifying official

State Historic Preservation Officer

ZQ

Texas Historical Commission State or Federal agency / bureau or Tribal Government

In my opinion, the property
meets
does not meet the National Register criteria.

Signature of commenting or other official

State or Federal agency / bureau or Tribal Government

4. National Park Service Certification

I hereby certify that the property is:

entered in the National Register

- determined eligible for the National Register
- determined not eligible for the National Register. removed from the National Register
- other, explain:

Signature of the Keeper

Date

5. Classification

Ownership of Property

X	Private	
	Public - Local	
	Public - State	
	Public - Federal	

Category of Property

X	building(s)
	district
	site
	structure
	object

Number of Resources within Property

Contributing	Noncontributing	
1	0	buildings
0	0	sites
0	0	structures
0	0	objects
1	0	total

Number of contributing resources previously listed in the National Register: NA

6. Function or Use

Historic Functions: COMMERCE/TRADE: Business/office building

Current Functions: COMMERCE/TRADE: Business/office building

7. Description

Architectural Classification: MID-CENTURY MODERN NONRESIDENTIAL: International Style; New Formalism; SKYSCRAPER

Principal Exterior Materials: CONCRETE, METAL, GLASS

Narrative Description (see continuation sheets 7-10)

8. Statement of Significance

Applicable National Register Criteria: C

Criteria Considerations: NA

Areas of Significance: Architecture

Period of Significance: 1963

Significant Dates: 1963

Significant Person (only if criterion b is marked): NA

Cultural Affiliation (only if criterion d is marked): NA

Architect/Builder: Welton Becket & Associates; W.S. Bellows Construction Corporation

Narrative Statement of Significance (see continuation sheets 11-22)

9. Major Bibliographic References

Bibliography (see continuation sheets 23-24)

Previous documentation on file (NPS):

- _ preliminary determination of individual listing (36 CFR 67) has been requested.
- _ previously listed in the National Register
- _ previously determined eligible by the National Register
- _ designated a National Historic Landmark
- _ recorded by Historic American Buildings Survey #
- _ recorded by Historic American Engineering Record #

Primary location of additional data:

- <u>x</u> State historic preservation office (*Texas Historical Commission*, Austin)
- _ Other state agency
- _ Federal agency
- _ Local government
- University
- x Other -- Specify Repository: Cullen Family Papers, Houston, Texas

Historic Resources Survey Number (if assigned): NA

10. Geographical Data

Acreage of Property: 1.4327 Acres

Coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: NA

1. Latitude: 29.752943° N Longitude: -95.373867° W

Verbal Boundary Description: Tract 1, Cullen Center

Boundary Justification: The boundary includes the legal parcel historically associated with the property.

11. Form Prepared By

Name/title: Amanda Barry, Hannah Curry-Shearouse with assistance from Anna Mod Organization: MacRostie Historic Advisors, LLC Street & number: 20 N. Sampson Street, Suite 102 City or Town: Houston State: Texas Zip Code: 77003-1824 Email: <u>abarry@mac-ha.com</u> Telephone: 713-470-0058 Date: July 2018

Additional Documentation

Maps (see continuation sheets 25-27)

Additional items (see continuation sheets 28-47)

Photographs (see continuation sheets 5-6, 48-63)

2018 Photographs

Name of Property:	500 Jefferson Building
City of Vicinity:	Houston
County:	Harris
State:	Texas
Name of Photographer:	Amanda Barry
Date of Photographs:	March 2018
Location of Original Digital Files:	MacRostie Historic Advisors
	20 N. Sampson Street, Suite 102
	Houston, TX 77003

Photo 1 (TX_HarrisCounty_500Jefferson_0001) North façade and east (side) elevation of office tower, skywalks to The Whitehall Hotel and 600 Jefferson Street, view southwest

Photo 2 (TX_HarrisCounty_500Jefferson_0002) North façade and west (side) elevation of office tower, view southeast

Photo 3 (TX_HarrisCounty_500Jefferson_0003) South (rear) elevation of office tower, view northwest

Photo 4 (TX_HarrisCounty_500Jefferson_0004) Connection between office tower and garage, view west

Photo 5 (TX_HarrisCounty_500Jefferson_0005) East (side) elevation of garage, view southwest

Photo 6 (TX_HarrisCounty_500Jefferson_photo_0006) South (rear) elevation of garage, view northwest

Photo 7 (TX_HarrisCounty_500Jefferson_0007) West (side) elevation of garage, spiral entry and exit ramps, view east

Photo 8 (TX_HarrisCounty_500Jefferson_0008) Mo-Sai panels on north façade, typical, view south

Photo 9 (TX_HarrisCounty_500Jefferson_0009) "Mo-Sai® by Rackle Company Houston, Texas" embossment on rear of garage Mo-Sai panels, detail

Photo 10 (TX_HarrisCounty_500Jefferson_0010) Ground floor lobby original travertine panels and terrazzo flooring, view east

Photo 11 (TX_HarrisCounty_500Jefferson_0011) Ground floor lobby, original travertine panels and terrazzo flooring, view west

Photo 12 (TX_HarrisCounty_500Jefferson_0012) Concourse (second floor), original travertine panels and terrazzo flooring, view east

Photo 13 (TX_HarrisCounty_500Jefferson_0013) Concourse (second floor), retail along south (rear) elevation and original terrazzo flooring, view east

Photo 14 (TX_HarrisCounty_500Jefferson_0014) Tenant floor (8), extant "loft" space and service core, view southeast

Photo 15 (TX_HarrisCounty_500Jefferson_0015) Tenant floor (14), sample tenant space with cubicles, view west

Photo 16 (TX_HarrisCounty_500Jefferson_0016) Tenant floor (12), sample tenant buildout, view east

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC

Narrative Description

The 500 Jefferson Building is a 21-story modern skyscraper with New Formalist and International Style influences with an integrated above ground 4-level parking garage located at 500 Jefferson Street in downtown Houston, Texas. The 500 Jefferson Building was the first building in a master plan for Cullen Center designed by Welton Becket & Associates. The 1963 office tower features a Classical, tripartite composition of base, shaft, and cornice, executed in a new, modernist vocabulary. The base of the building is two stories, with the ground floor recessed from the concourse level, and the concourse level recessed from the shaft of the building. The tower mass cantilevers and provides weather protection for the entrances. The base includes floor-to-ceiling, aluminum-framed window walls and Mo-Sai clad columns, or *pilotis*, that wrap the entirety of the building. The shaft, or central building section, is composed of precast, rectangular Mo-Sai panels with splayed glazing, providing architectural order and emphasizing the overall symmetry and verticality of the building. The building is capped with a cornice of solid Mo-Sai panels that screen the building's mechanical equipment. The building's facade has a Miesian composition, with grid-like divisions and broad expanses of glass at the ground and concourse levels. New Formalist characteristics include its symmetry, straight lines, and geometric shapes executed through the use of Mo-Sai panels, in addition to its individual window openings. The building's absence of ornamentation, use of modern materials (Mo-Sai), rectangular plan, repetition of cubic forms, columns at the base, and flat roof are hallmarks of the International Style. The integrated 4-level parking garage has two concrete spiral ramps painted white, one for entry and one for exit, at its west elevation. This provides a sharp contrast against the rectangular lines of the skyscraper. The garage itself has a square plan with exposed structural columns at the base and dark-gray Mo-Sai panels screening the upper parking decks. While the building experienced some interior changes over the years, it retains a high level of historic integrity.

Site

The property includes the 460,000 square foot office tower and the 92,000 square foot integrated above ground garage occupying a full city block of Tract 1, Cullen Center. The block is bounded by Jefferson Street to the north, Smith Street to the east, St. Joseph Parkway (formerly Calhoun Street) to the south, and Brazos Street to the east. The block is also directly adjacent to (east of) the section of Interstate 45, known locally as the "Pierce Elevated," which was completed in 1967 (Figure 3). The building is part of the Cullen Center, a cluster of office buildings and a hotel developed by the Cullen family in the 1960s and 1970s. Stephen Fox describes the overall plan of the center as a "series of slab-shaped buildings, rotated to minimize obstruction of view and interconnected with airconditioned pedestrian bridges, or "skywalks," at the concourse level (second floor) to The Whitehall Hotel (501 Jefferson Street, formerly the Hotel America and Crowne Plaza, 1963), also designed by Welton Becket & Associates, and the Cullen Center Bank & Trust Co. Building (600 Jefferson Street, 1971). Original features of the site include a rectangular reflection "pool" along the east (Smith Street) elevation and cubic planters located at the perimeter of the property. The pool was infilled with brick pavers at an unknown date, while other landscaping features remain in original locations (Figure 4).

The site for the Cullen Center was residential prior to construction, characterized then as "midtown" due to its distance from downtown. Several homes were demolished to ready the city blocks for the new high-rises as Houston's downtown expanded and crept southward. Currently, the surrounding area is an urban commercial neighborhood with surface parking lots, skyscrapers, and multi-story parking garages. The building is

¹ Stephen Fox, *AIA Houston Architectural Guide Third Edition* (Houston: American Institute of Architects, Houston Chapter, 2012), 13.

approximately six blocks southwest of the Humble Building at 800 Bell Street (1963), also designed by Welton Becket & Associates.

Exterior

The 500 Jefferson Building is a steel-framed skyscraper with New Formalist and International Style influences with an integrated above ground garage that features precast exposed concrete cladding, also known as Mo-Sai, with quartz aggregate. The building's façade has a Miesian composition, with grid-like divisions and broad expanses of glass at the ground and concourse levels. The building's International features include the absence of ornamentation, use of modern materials, rectangular plan, repetition of cubic forms, columns, and flat roof. The building's symmetry, straight lines, and geometric shapes executed through the use of Mo-Sai panels, in addition to its individual window openings are indicative of New Formalism. The office tower's primary façade faces north onto Jefferson; its east (side) elevation faces onto Smith Street and the west (side) elevation faces onto Brazos Street. The office tower's south (rear) elevation faces onto St. Joseph Parkway and is connected at the concourse level (second floor) to the third level of the parking garage, creating a space between the office tower and the parking garage (Figure 4, Photos 1-9).

The office tower has a rectangular plan that measures approximately 230 feet by 85 feet with the longer span facing north onto Jefferson. The building rests on square Mo-Sai clad columns, or *pilotis*. The *pilotis* form eight regularly spaced 28 foot bays on the front and rear elevations and three bays on the side elevations in an "A-B-A" pattern, 23 feet by 28 feet by 23 feet in width (Figure 4). The original floor-to-ceiling aluminum framed ground floor and concourse level window walls are recessed behind the columns, allowing the tower mass to cantilever over and provide weather protection for the entrances. The ground floor is floor recessed from the concourse level, and the concourse level recessed from the shaft of the building, creating a "stepped" effect in the wall planes, until the third floor where the wall planes continue uninterrupted to the cornice. The mullions of the windows walls are spaced equidistantly on the ground floor and concourse level. The concourse level mullions are offset from the ground floor mullions at the midpoint of the glazing.

North (Jefferson Street) Façade

The office tower's primary (north) façade features windows walls at the ground floor and concourse level that continue uninterrupted, except for the entry doors at the ground floor. There is a skywalk at the fifth bay of the concourse level that connects to The Whitehall Hotel. Beneath the skywalk at the ground floor is an original revolving door. There is a second original revolving door in the sixth bay and an original double-door at the transition between the fifth and sixth bay (Figure 13, Photos 1-2).

East (Smith Street) Elevation

The east side elevation has an original windowless travertine-paneled wall on the ground floor and a continuation of the primary façade's window wall at the concourse level. Signage of individual letters spells out "500 Jefferson" appears to be original. There is a skywalk in the first bay of the concourse level that connects to the Cullen Center Bank & Trust Co. building (Figure 15, Photo 1).

West (Brazos Street) Elevation

The ground floor window wall wraps the northwest corner and terminates at travertine panels. The southwest corner is a recessed entrance in the rectangular plan used for unloading trucks. The concourse level continues the window wall of the primary façade (Figure 15, Photo 2).

South (St. Joseph Parkway) Elevation

The south (rear) elevation features window walls at the ground floor that continue uninterrupted. There are original double-doors at the transition between the third and fourth bay, and in the sixth bay. There are original revolving doors in the third and fourth bay. The rear elevation of the office tower is joined to the above ground parking garage via a skywalk at the concourse level, or third level of the garage, which spans from the third bay to the seventh bay (Figure 14, Photo 3).

Upper Floors

Tenant floors 3-20 feature individual, precast Mo-Sai concrete panels, with quartz aggregate and frames set back one foot from the wall face. Each panel measures 4 feet 7 ½ inches wide by 12 feet 11 ½ inches tall by 1 foot 4 inches thick. The glazing is splayed, tilting inward at the top and bottom with the widest point at the center projecting outward (Photo 8). The two-part glazed section has grey, plate glass in the upper half and opaque, Spandrelite glass at the bottom. The glass is attached to the frame with a neoprene gasket and a continuous aluminum bar surround embedded in the concrete. At the center "meeting rail," the gasket serves as a horizontal muntin, softening the rectangularity of the window openings (Figure 16).² Panel placement is mirror imaged on opposing elevations (north/south and east/west). The cornice is comprised of solid Mo-Sai panels that conceal the building's 21st mechanical floor. The office tower has a flat roof with a penthouse, which is not visible from the street.

Parking Garage

The office tower and the parking garage are joined at the ground level via a pedestrian walkway and a skywalk at the concourse level, or third level of the garage (Figure 14, Photos 3-7). The garage has two concrete spiral ramps painted white, one for entry and one for exit, as its west elevation. The garage has a square plan and exposed structural columns at the base and dark-gray Mo-Sai panels at the upper levels. The interior of each panel is embossed with "Mo-Sai® by Rackle Company Houston, Texas." The northeast corner of the garage at the ground floor has concrete block walls with louvers which houses mechanical/electrical equipment. In 2018, the building owner hired an engineer to conduct a forensic investigation into the construction of the garage. The garage's column caps were removed which confirmed that the garage was designed for additions to be made in the future.

Floor Plan and Interior

The office tower has two basement levels noted as "A" and "B" level subfloors; both are utilitarian with central service corridors and house mechanical systems, maintenance offices, and storage at the perimeter (Figure 5 & Figure 6). The "A" subfloor, the lower of the two, also houses men's and women's locker rooms/restrooms. The subfloors have very little architectural ornamentation. The "A" subfloor retains the original concrete floors, painted concrete block walls, and exposed ceiling. The concrete walls of the "B" subfloor were plastered over and "bumper guards" installed to protect the walls from rolling service carts. The concrete floor has been covered with a linoleum tile and exposed duct work, pipes, etc. concealed with a lay-in suspended ceiling.

The office tower's primary public spaces include the ground floor and concourse levels with a central core that includes escalators and elevators (Figures 7-8, Photos 10-13). There are two elevators with four cabs each. Low-rise elevators service the ground floor, concourse, and floors 3-12. High-rise elevators service floors 12-20. Only one low-rise elevator services the subfloors. The ground floor has an open, expansive lobby. The concourse has a large

² Architectural Record 11 (November 1960): 206.

lobby and retail/tenant space along the north (front) and south (rear) elevation. In addition to the aluminum-framed window walls and doors, both the ground floor and concourse retain their original terrazzo floors with brass screed lines that align with window mullions. Each level retains the majority of the original travertine panels; it is suspected that the original travertine remains behind later gypsum board wall alterations. The extruded aluminum veneer at the escalators and elevator lobbies shown in the original architectural drawings has been encapsulated with paneling, with the original likely extant behind. The acoustical tile ceiling at the ground floor was replaced with a lay-in suspended ceiling with recessed lights. The original translucent vinyl "lamilite" double-panel ceiling with luminous diffusers at the concourse was also replaced with a lay-in suspended ceiling with recessed lights.

The central service cores tenant floors 3-20 historically included duct shafts, smoke shafts, housing for electrical equipment, stairwells, "telephone closets," restrooms, elevator shafts, and an elevator lobby (Figures 9-11). The service cores have been altered to accommodate tenant needs, including the adaptations of core space for kitchens and conference rooms. Original architectural drawings show open space surrounding the service core labeled as an open concept "loft" space designed to offer maximum flexibility for tenant buildout (Figures 9-11, Photos 14-16). Tenants have made varying degrees of alteration to the "loft" spaces, with some opting to construct floor-to-ceiling walls to create corridors and perimeter offices, substantially segmenting the space. Others retained the open concept of the "loft" by opting for cubicles and de-constructible offices along the outer edges of the shorter spans of the tower maintaining exterior views along the perimeter of the building. The original architectural plans for tenant floors 3-20 call for terrazzo flooring in the elevator lobbies and "resilient" vinyl tile in the "loft" space. It is unclear whether the finishes were ever installed or if they are extant beneath later carpet installations. The original acoustical tile ceilings have been replaced lay-in suspended ceilings. Elevator lobbies and service cores, where unaltered, retain the original plaster. Along the perimeter of the tower, the Mo-Sai panels were left exposed. The 21st floor houses the building's mechanical equipment, which is masked by the tower's Mo-Sai cornice (Figure 12).

Summary

The 500 Jefferson Building retains a high degree of integrity of location, design, setting, materials, and workmanship. Constructed in what then was considered "midtown," the building was an early commercial development in a primarily residential area. The subsequent demolition of residential structures resulted in a more urban setting and location for the building, which it retains today. The exterior of the building, including the garage, remains essentially unaltered, with its New Formalist and International Style influences and design still discernable. The building's use of Mo-Sai panels as it's predominant exterior feature remains one of the building's defining characteristics, and is an excellent example of the period's design, materials, and craftsmanship. The interior public spaces retain many of their original finishes including travertine panels. The tenant floors have been altered, but this follows the initial design that tenant spaces should be designed for maximum flexibility. The building is recognizable as the first building in Cullen Center and for its New Formalist and International Style design.

Statement of Significance

The 500 Jefferson Building is a 21-story modern skyscraper with both New Formalist and International Style influences located at 500 Jefferson Street in downtown Houston, Texas. It was the first building built in the Cullen Center, Houston's first multi-building office center and the first of its kind in downtown. The building was designed by the Los Angeles-based, nationally acclaimed architecture firm Welton Becket & Associates. Houston-based W. S. Bellows Construction Corporation served as general contractor. The plans for the Cullen Center emerged as early as 1948 when Cullen family patriarch Hugh Roy Cullen (1881–1957) purchased the first five acres located in the Cullen Center. The building was completed in 1963 and has always functioned as an office building. The building is notable for its exterior materials and workmanship, featuring over 2,000 original precast exposed concrete panels, or Mo-Sai panels, with quartz aggregate. The 500 Jefferson Building is nominated to the National Register of Historic Places at the local level of significance under Criterion C in the area of Architecture as a remarkable modern skyscraper with both New Formalist and International Style influences that features Mo-Sai panels and is equipped with integrated parking. It also serves as an excellent example of the work of Welton Becket & Associates in Houston. The period of significance is 1963.

Houston's Pre-Modern Skyscrapers

Although there is no single, accepted definition of the term 'skyscraper,' the type can generally be described as a building of exceptional height with a steel-frame structure.³ High rise construction in Houston began in the last decade of the nineteenth century with the construction of the 1894-1895 Binz Building (demolished 1950-1951) at the intersection of Main Street and Texas Avenue.⁴ Not technically a skyscraper due to its interior cast iron and steel frame with load-bearing brick walls, the 6-story building marked the city's first attempts to build upward. The architect, Olle J. Lohren, ornamented the building with Italian Renaissance styled elements. The first completely steel-framed skyscraper in Houston was the 8-story First National Bank Building (Sanguinet & Staats, 1903-1905).⁵ As with the Binz Building, the architects utilized traditional Renaissance Revival ornamentation and organized the building into three parts, a base, a shaft, and a cornice.

Between 1908 and 1913, the City of Houston saw a boom in skyscraper construction with buildings ranging from seven to seventeen stories in height.⁶ These new buildings followed the same composition and ornamentation established by the Binz Building and First National Bank Buildings; traditional revival styles, such as the Renaissance or Gothic Revival styles, characterized the exteriors. The skyscrapers were either 'U' or L-shaped in plan to bring natural light and ventilation to the center of the building. Additionally, the buildings were flat-sided, rising directly from the sidewalk in the tripartite, base, shaft, and cornice formation. Only those elevations that faced streets were ornamented while the secondary or tertiary elevations were left undecorated.⁷ These new skyscrapers did vary from the earlier office use examples in their use and included hotels, apartments, retail space, and hospitals. The Rice Hotel (Mauran, Russell & Crowell, 1913) and an apartment building, the Beaconsfield (A. C. Pigg, 1911), exemplify Houston skyscrapers built at this time.

During the early years of Houston skyscrapers, most developers hired architects from out-of-town for both high-rise and low-level construction. Sanguinet & Staats of Fort Worth, Texas and Mauran, Russell & Garden of St. Louis, Missouri were the most prolific. D. H. Burnham & Co. of Chicago (1909, Scanlan Building, 405 Main Street), Jarvis

³ Francis D.K. Ching, A Visual Dictionary of Architecture (New York: John Wiley & Sons, 1995), 22.

⁴ Stephen Fox, "Scraping the Houston Sky 1894-1976," in *Ephemeral City: Cite Looks at Houston*, ed. Barrie Scardino,

William F. Stern, and Bruce C. Webb (Austin: University of Texas Press, 2003), 193.

⁵ Fox, "Scraping the Houston Sky," 193.

⁶ Fox, "Scraping the Houston Sky," 193.

⁷ Fox, "Scraping the Houston Sky," 197.

Hunt of Chicago (1911, Southern Pacific Building/ Bayou Lofts, 915 Franklin Avenue), and Warren & Wetmore of New York (1915, Texas Company Building, 720 San Jacinto Street) each designed a tall building in Houston as well.⁸ Sanguinet & Staats' C. F. Carter Building (1919) was the tallest building in Texas for a few months after its construction and the tallest building in Houston until 1926.⁹

From 1913-1917 tall building in Houston slowed as World War I (WWI) began and construction stopped altogether from 1917-1918 after the United States (U.S.) joined the war.¹⁰ When it began again in the early 1920s, Houston joined the rest of the U.S. and the world in the effort to identify a modern style to accompany the many advancements of the twentieth century.

Houston's Modern Skyscrapers

Houston participated in both waves of Modernism and produced Art Deco, Streamlined Moderne, and eventually Modern skyscraper design. The first building to attempt to break with traditional, architectural ornamentation was the 1929 Gulf Building (NRHP 1983) developed by Jesse Jones and designed by Alfred C. Finn. Built with Art Deco and Gothic Revival influences, the building retains the traditional tripartite arrangement of base, shaft, and cornice, but has very little ornament. Here, the Neo-Classical features seen on earlier skyscrapers have been streamlined into linear suggestions of the earlier detailed ornamentation.¹¹

Skyscraper construction in Houston slowed during the Great Depression of the early 1930s, but resumed by 1939 with the construction of Houston City Hall (NRHP 1990) designed by Joseph Finger. Ornamentation on this building is even more restrained and streamlined than the Gulf Building. Cornices are marked by simple banding or recessing the roofline back from the elevation. Simple, bas-relief friezes provide the most intricate decoration and sit atop each window column and over the main entrance. The building does retain the 3-fold formation; however, the base is articulated with two smaller towers placed in front of and on either side of the taller, central shaft with minimal cornice above.¹²

The 1940 St. Joseph's Infirmary Maternity and Children's Building was designed by I. E. Loveless and shows the continued streamlining of ornament typical of Art Moderne. This building is one of the last Houston Art Moderne skyscrapers to be built during the first wave of Modernism. It retains the 3-part formation and exemplifies the streamlined ornament of the new style with its horizontal banding and vertical emphasis on the central tower.¹³

Houston Skyscraper Development After WWII

The First City National Bank Building of 1949 was the skyscraper to be built following WWII. Although the first wave of Modernism ended before the war, the design of this building clearly shows lingering popularity of Art Deco/Art Moderne styles. This is due to its pre-war design. It was shelved, and then erected quickly once the war was over. Its ornamentation is more restrained than its pre-war predecessors and it clearly illustrates the turning point from the more streamlined, cut-back ornament of the first Modernist wave in Houston to the full expulsion of

⁸ Fox, "Scraping the Houston Sky," 197; Stephen Fox, *AIA Architectural Guide Third Edition* (Houston: American Institute of Architects, Houston Chapter, 2012), 64, 73, and 81.

⁹ Fox, "Scraping the Houston Sky," 196.

¹⁰ Fox, "Scraping the Houston Sky," 197.

¹¹ "Gulf Building: National Register of Historic Places Inventory – Nomination Form," Texas Historical Commission's Texas Historic Sites atlas, https://atlas.thc.state.tx.us/NR/pdfs/83004436/83004436.pdf (accessed July 3, 2018).

¹² "Houston City Hall: National Register of Historic Places Registration Form," Texas Historical Commission's Texas Historic Sites atlas, https://atlas.thc.state.tx.us/NR/pdfs/90001471/90001471.pdf (accessed July 3, 2018).

¹³ Anna Mod, Building Modern Houston (Charleston: Arcadia Publishing, 2011), 20.

ornament in the second wave.¹⁴ Almost all exterior ornament has been removed. The tripartite formation is still discernible, but has lost much of the emphasis seen in earlier buildings like City Hall and the Gulf Building.

Houston's first modern style skyscraper, the Melrose Building (NRHP 2014), was designed in the International Style and opened in 1952 as a 21-story office tower. The local Houston architectural firm Lloyd & Morgan designed the building which was the first skyscraper downtown to incorporate modern materials such as cast concrete and turquoise-colored concrete spandrel panels. The building marked a new design direction in its asymmetrical composition and use of cantilevered sunshades and grouped aluminum framed windows.¹⁵ Concurrent skyscraper development included a suburban example of early modern skyscraper design that incorporated perpendicular rectangular forms of different heights in the Prudential Building (demolished 2012).

The rest of the 1950s saw several forays into modern skyscraper design with a root in Classicism as seen in Kenneth Franzheim's South Texas National Bank from 1955 (extant; heavily altered) that fused the symmetrical tower-with-flanking-wings format with small, aluminum framed windows, and a smooth stucco skin devoid of ornament. A similar example of this Stripped Classicism is The Houston Club building (demolished 2015) that was clad in brick with minimal ornamentation. Another suburban example of an early curtain wall is the 1956 Central Square (extant; reclad 2014) by Houston architects Lars Bang and Lucian Hood.

The upper tower of the 1956 Bank of the Southwest designed by Kenneth Franzheim faces Houston's City Hall and mirrors its central-tower-with-flanking-wings composition only executed with an aluminum curtain wall, the city's first, instead of fossilized limestone. The lower pavilion base housed the banking lobby with a mural by the Mexican artist Rufino Tamayo since moved to the Dallas Museum of Art. The Medical Towers (NRHP 2016) building opened in 1956 approximately 3.4 miles to the southwest of the 500 Jefferson Building also in the Texas Medical Center. Medical Towers was designed by Skidmore Owings Merrill (SOM) with Houston architects Golemon & Rolfe Associates and is stylistically inspired by Lever House in New York with a broad multistory pavilion base with a recessed office tower above.¹⁶ Both Lever House and Medical Towers are early curtain wall construction with different colors of glass and spandrel panels.

SOM in collaboration with Wilson, Morris, Crain & Anderson designed the First City National Bank and boldly signaled the adoption of purely Modernist architectural vocabulary in the 1960s. Originally clad in white marble (reclad with white granite in the early 2000s), the buildings exoskeleton shaded a recessed curtain wall providing comfort for office workers. The practicality of the exoskeletal form was repeated on several Houston skyscrapers such as SOM's 1963 Tennessee Gas Building (Tenneco, now known as Kinder Morgan), the International Style skyscraper American General Building on Allen Parkway just west of downtown, and on low- and mid-rise buildings in suburban locations. Welton Becket & Associates with Golemon & Rolfe and George Pierce-Abel B. Pierce designed the 1963 Humble Building (now ExxonMobil; recently vacated), another International Style skyscraper with extended "fins" or sunshades shielding an aluminum framed glass curtain wall with aggregate spandrel panels below the glass.

The 500 Jefferson Building & the Evolution of Modern Skyscrapers

The 500 Jefferson Building reflects the evolution of skyscraper design in Houston. The Melrose Building (1952) is the city's first modern downtown skyscraper. The building retains a Classical three-part composition and introduces

¹⁴ Mod, *Building Modern Houston*, 20.

¹⁵ "Melrose Building: National Register of Historic Places Registration Form," Texas Historical Commission's Texas Historic Sites atlas, https://atlas.thc.state.tx.us/NR/pdfs/14000627/14000627.pdf (accessed July 3, 2018).

¹⁶ "Medical Towers: National Register of Historic Places Registration Form," Texas Historical Commission's Texas Historic Sites atlas, https://atlas.thc.state.tx.us/NR/pdfs/16000918/16000918.pdf (accessed July 3, 2018).

modern materials that define each segment: the storefront has an aluminum frame storefront defined by green marble clad; the shaft is an asymmetrical composition of ribbon windows, concrete "eyebrows," and buff colored brick; and, the cornice, although defined spatially, it a simple flat brick plane. Its location downtown allowed tenants and the developer to take advantage of surrounding surface parking and garages; there is no attached or associated parking garage. Four years later, parking was directly addressed with Medical Towers (1956), by SOM and Golemon & Rolfe, and was integral to the building design and composition as a pavilion with setback tower. The building occupies half of a commercial block in the Texas Medical Center and has perimeter commercial storefronts on three sides; the fourth elevation is dedicated to parking in and out ramps. Above the ground floor commercial space, the remaining three floors of the pavilion are dedicated to parking. The office tower portion is then set back and rises from the pavilion roof. Similar in composition and also inspired by Lever House in New York, the Houston First Savings and Loan association Building of 1962 (demolished early 2000s) relied on nearby surface parking with the lower pavilion dedicated to storefront retail with an expansive banking lobby above; the setback tower similarly rose above the roof of the pavilion.

In 1960, the First City National Bank building by SOM, was the first to adapt a purely abstract geometric composition with a ridged exoskeleton with an inset window wall system. There is an associated garage nearby, but it is not attached to the building. All of these buildings dedicated ground floor space for commercial concerns and the storefronts retained a typical storefront proportion and height. The 500 Jefferson Building along with the Tennessee Gas Building (1963), formerly known as Tenneco (now Kinder Morgan), the Humble Building (1963), and American General Building on Allen Parkway (1965), were the first to exhibit a monumental double height ground floor space that served the building and not commercial tenants. Additionally, the 500 Jefferson Building took advantage of its new location in the underdeveloped south side of downtown, to incorporate a four level parking garage. Similar residential towers of this era were constructed outside of downtown and ample land allowed for separate parking garages and surface lots.

Office Centers

Related to the construction of modern high-rises/skyscrapers was the construction of tall buildings in coordinated groups, or office centers, under the control of a single owner or developer. Office centers were common in both urban and suburban locations and were entirely self-contained, distinguished from their surrounding environment by their planning and architectural unity. Even in suburban locations, office centers exuded urbanity both in density and mixed use, the primary component of which was the high-rise office building. The model for the post-war office center was the twenty-two-acre Rockefeller Center (1939) in Manhattan, New York, which was distinguished at the time in its excellence of design and execution. Rockefeller Center was the ideal to which developers aspired when, during the post-war years, opportunities arose to develop large urban sites in other major U.S. cities. Rockefeller Center was also the building model promoted by federally funded urban renewal programs of the 1960s. Because Houston did not have a zoning ordinance, it was not eligible to participate in these renewal programs; nevertheless, its developers still adhered to the Rockefeller Center model. In fact, after the construction of the initial buildings for the Cullen Center had been completed in 1963, Ron Burroughs, *Houston Post* real estate editor, rhetorically asked, "What is going up next in the Cullen Center, Houston's \$100 million 'little Rockefeller Center?"¹⁷

Cullen Center was Houston's first foray into multi-block, downtown commercial development.¹⁸ The idea was followed by Allen Center (1972, 1974, 1980, 1983) at Dallas Street and Bagby Street on the western side of downtown; Houston Center (1974, 1978) at Fannin Street and McKinney Street downtown; and the suburban Greenway Plaza (1969, 1971-1973, 1978-1982) approximately six miles west of downtown. The design of Allen

¹⁷ Ben Koush, *Constructing Houston's Future: The Architecture of Arthur Evan Jones & Lloyd Morgan Jones* (Houston: Houston Mod, 2017), 34-35.

¹⁸ Fox, AIA Houston Architectural Guide, 13.

Center closed city streets to create is multi-building complex and incorporated retail within the development to shield tenants from the elements.¹⁹ Houston Center similarly made use of pedestrian skywalks. Houston Center's master plan by William L. Pereira Associates of Los Angeles envisioned "the city-within-the-city" for its original 75-acre site.²⁰

As the construction of office centers expanded, tenants became increasingly isolated from their urban and suburban surroundings. While Rockefeller Center's site plan was essentially an extension of the street grid, later projects, like the Cullen Center, avoided these direct connections. The Cullen Center's enclosed skywalks at the second level discouraged tenants from using the street to walk between buildings. Office centers became then inherently contradictory designs, fostering a sense of urbanity through its design and density while discouraging or outright preventing tenant interaction with their surrounding environment.²¹

Mo-Sai

The 500 Jefferson Building features over 2,000 precast exposed concrete panels, or Mo-Sai panels, with quartz aggregate, which is one of the building's predominant architectural features. The panels were manufactured by the Rackle Company of Houston, which utilized the then relatively new Mo-Sai process to pre-fabricate the panels offsite. Prior to installation, the durability and strength of the panels was put to a "hurricane test" using a 1,250-horsepower airplane engine to create wind gusts of up to 120 mph. In addition to the wind gusts, the panels were also tested for their water resistance using the same airplane engine, but with water sprayed into the blast of the propeller.²² The panels were then raised into position by a crane as a complete unit (Figure 1 & Figure 2).²³

Mo-Sai, which is used to refer to both the manufacturing process and the material itself, was known originally as the "Earley Process," the manufacturing process used to create precast exposed aggregate concrete cladding pioneered by John J. Earley and the Earley Studio. Earley is the "man truly responsible for developing exposed concrete as both a decorative architectural feature and a technically refined manufactured building material."²⁴ Earley obtained his first patent for the earliest vestiges of the Mo-Sai process in 1921, which was adjusted over the next several decades to improve manufacturing techniques and the building product. ²⁵ These precast elements were noted for their freedom of design in size, shape, texture, and color, their effective reduction of joints which, in turn, reduced leakage threats, their strong yet slender properties, the reusability of their forms, and their practical economy.²⁶ The earliest use of the term "Mo-Sai" was in December 1939 when the Earley Studio collaborated with Louis Falco of Dextrone Co. to use precast exposed aggregate concrete for the David Taylor Model Basin in Maryland. Falco filed for registration of the trademark "Mo-Sai," referring to the mosaic appearance of concrete made possible by the Earley Process.²⁷

During the post-war building boom, reinforced concrete quickly became the preferred construction technique used in the development of large-scale buildings because it satisfied the need for a material that could manufactured and

¹⁹ Fox, AIA Houston Architectural Guide, 11.

²⁰ Fox, AIA Houston Architectural Guide, 44.

²¹ Koush, Constructing Houston's Future, 35-36.

²² "Glass Panels Survive 'Hurricane'," Houston Post, November 29, 1960.

²³ "Opening: Cullen Center," March 1963, 38. H-Office Parks-Cullen Center, vertical file, Houston Metropolitan Research Center.

²⁴ Jenna Cellini, "The Development of Precast Exposed Aggregate Concrete Cladding: The Legacy of John J. Earley and the Implications of Preservation Philosophy" (master's thesis, University of Pennsylvania, 2008), 91.

²⁵ Cellini, "The Development of Precast," 56.

²⁶ Cellini, "The Development of Precast," 94.

²⁷ Cellini, "The Development of Precast," 77-78.

erected quickly and cheaply.²⁸ Precast concrete also afforded architects, designers, and developers economy of design while still retaining an aesthetic appeal. The material was iconic of the 1960s and 1970s, which by then had an entire building industry dedicated to precast concrete, and by the 1980s, was the dominant architectural design. Buildings constructed between 1960 and 1980 tended to value the "buff" tone of concrete typical of Earley's early work. However, these later buildings lacked the experimentation and exploration of the aesthetic possibilities of concrete envisioned by Earley. The material didn't highlight the interplay of light, color, and texture, and was overshadowed by other architectural elements. While Mo-Sai was still used to achieve a textured surface, the precast concrete became less "mosaic-like" as generic, uniformly colored high-rises incorporated the material into a separate architectural vocabulary.²⁹

Hugh Roy Cullen (1881-1957)

Hugh Roy Cullen was born on July 3, 1881 in Denton County, Texas. His grandfather, Ezekiel Cullen, fought in the Texas Revolution before becoming a public servant as a judge and state senator, where he authored and shepherded the bill that established Texas' educational system. Hugh Roy's mother, Louis Beck Cullen, relocated with her children to San Antonio, where Hugh Roy completed the fifth grade before he began his business career at age twelve sacking candy.³⁰

Cullen moved to Schulenberg, Texas in 1897 when he was seventeen, where he went into the cotton industry as a buyer. Cullen worked in Texas and Oklahoma, and he met his wife Lillie Cranz during his work in Oklahoma. Hugh Roy and Lillie married in 1903, and they had five children, Roy Gustav, Lillie, Agnes, Margaret, and Wilhelmina.³¹

The Cullen family relocated to Houston in 1911, where Hugh Roy continued to work in cotton while also expanding his business to include real estate investments. Cullen started making investments into oil leases in 1918, with the first several investments being non-producing sites.³² In 1921, one of Cullen's properties in south Texas resulted an enormous oil field discovery. Cullen's business tenacity enabled him to use his profits to invest in other fields, often buying other oil leases in proven fields and then drilling deeper to find new pockets of oil in the sands.³³ In 1932, Cullen formed Quintana Petroleum, and his company almost immediately discovered several other oil-producing fields; the Tom O'Conner field he found in the 1930s reportedly still produced oil as late as 2014. Almost overnight, Cullen became one of the wealthiest men in oil.³⁴

In 1936, the oldest Cullen child, Roy Gustav, died in an oil field accident at age 31. In their grief, Hugh Roy and Louise renewed their focus on philanthropy and politics.³⁵ The Cullens donated to several philanthropic causes over the next several decades, including the YMCA, Boy Scouts of America, the Houston Symphony, the Museum of Fine Arts Houston, Houston-area hospitals, and the Harris County Houston Ship Channel Navigation District. The

²⁸ Cellini, "The Development of Precast," 97.

²⁹ Cellini, "The Development of Precast," 91-93 and 102-103.

³⁰ Reinhardt Krause, "Hugh Roy Cullen Gushed to the Top of Texas Oil," *Investor's Business Daily* (April 2011), https://www.investors.com/news/management/leaders-and-success/hugh-roy-cullen-gushed-to-the-top-of-texas-oil/ (accessed March 9, 2018).

³¹ "Hugh Roy Cullen," Regents, University of Houston System, http://www.uhsystem.edu/board-of-regents/former-regents/regents/hrcullen/index.php (accessed March 9, 2018).

³² Charles E. Gilbert, Jr., "Hugh Roy Cullen: South's Foremost Philanthropist," in *The Cullens: Two Great Texans* (Houston: University of Houston, 1949), 41.

³³ Gilbert Jr., "Hugh Roy Cullen" in *The Cullens*, 41.

³⁴ "The Founders: Hugh Roy Cullen," Cullen Foundation, http://cullenfdn.org/the-founders/ (accessed March 9, 2018). ³⁵ "The Founders."

Cullen's \$250,000 gift to the Ship Channel in 1940 made it possible for the Port Authority to widen and deepen the channel at the time.³⁶ However, his best known charitable legacy is to the University of Houston.

The University of Houston started as a junior college attached to the Houston public school system in 1927. By 1934, the school officially adopted its University of Houston name, and they soon thereafter received two contiguous tracts of land as a donation for starting their own campus. However, the land donation was contingent on building construction starting before January 1, 1938. The Cullens donated the money for the University to construct its first building, the Roy Gustav Cullen Building, named for their departed son. The Cullens and their descendants have donated more than \$70 million to the University of Houston over the decades.³⁷

The Cullens endowed the Cullen Foundation in 1947. The new foundation was endowed with the proceeds from multiple oil leases spread out over more than 18,000 acres. The properties combined contained approximately 80 million barrels of oil, and they were estimated to be worth \$160 million.³⁸ Since its founding, the Cullen Foundation has provided over \$487 million in grants to various organizations.³⁹

Cullen Center & the 500 Jefferson Building

The 500 Jefferson Building was the first building envisioned and built in the Cullen Center, Houston's first multibuilding office center. The Los Angeles architecture firm Welton Becket & Associates designed the building and Houston-based W. S. Bellows Construction Corporation served as general contractor.⁴⁰ The plans for the Cullen Center emerged as early as 1948 when Cullen family patriarch Hugh Roy purchased the first five acres of what would become Cullen Center.⁴¹ The site was previously residential, characterized as "midtown," and several homes were demolished to ready the city blocks for the new high-rise office center. Most of the residential buildings previously located on the site date to the late nineteenth and early twentieth centuries; the demolished buildings included the L.A. Hamburger House, Hansen Grocery, Carleton House, Delmonico Spaghetti House, and the A.T. Branch House. Though many of the houses retained their original occupants, the buildings were described as "gaunt and shabby," according to a 1960 article in the *Houston Press*.⁴²

Over the next twelve years, Hugh Roy and his descendants purchased an additional seven acres for the planned twelve-acre Cullen Center.⁴³ Even after Hugh Roy's death in 1957, the Cullen family moved forward with plans and construction for the Cullen Center. The official plans were announced publicly in 1959 for the project which included two office towers, a luxury hotel, a plaza, and parking garages. Welton Becket & Associates provided a master plan for Cullen Center in addition to the building plans for the 500 Jefferson Building (Figure 17).⁴⁴ The plan for the center was spearheaded by Gerald E. Veltmann, a partner at Price, Guinn, Veltmann, and Skelton, the law firm that represented the Cullen family's interests. Other family members involved in the project were sons-in-law Douglas B. Marshall, Corbin J. Robertson, and Isaac Arnold and grandson Harry H. Cullen.⁴⁵

³⁶ Gilbert, Jr. "Hugh Roy Cullen" in *The Cullens*, 53.

³⁷ Jo Anne Davis-Jones, "Legacy of the Pride," *The University of Houston Magazine* (Spring 2010).

http://www.uh.edu/magazine/10s/features/legacy-of-pride/ (accessed March 9, 2018).

³⁸ Gilbert, Jr., "Hugh Roy Cullen," in *The Cullens*, 60.

³⁹ "Since Inception, 1947-2016," Cullen Foundation, http://cullenfdn.org/grant-history/since-inception/ (accessed March 21, 2018).

⁴⁰ "Formal Opening of 500 Jefferson Bldg Is Scheduled Today," *Houston Post*, March 1, 1963.

⁴¹ "500 Jefferson Building Supplement," Houston Post, March 1, 1963.

⁴² "Cullen Center Replacing Many Old Landmarks."

⁴³ "Cullen Center Replacing Many Old Landmarks," *Houston Press*, April 8, 1960.

⁴⁴ "H.R. Cullen Got First Land for Center in '48," *Houston Post*, March 1, 1963.

⁴⁵ "11 New Buildings to Boost Skyline," Houston Chronicle, December 6, 1959.

Construction of the \$15 million 500 Jefferson Building was closely covered in local newspapers. The *Houston Press* published photos of the building under construction, including one of the building's two-ton panels being installed.⁴⁶ Additional coverage in both the *Houston Post* and *Houston Chronicle* touted the Cullen Center's total \$100 million investment in downtown construction. Though the project did experience construction labor strike that lasted several weeks in November 1961, the building was completed in March 1963.⁴⁷

The 500 Jefferson Building held its grand opening on March 1, 1963 with celebrations and a special section in the *Houston Post* covering the occasion. The *Post*'s special section contained advertisements from many of the project suppliers, including HVAC, landscaping, and mechanical systems.⁴⁸ The grand opening ceremonies were attended by Houston Mayor Lewis Cutrer, Pan American Petroleum Corp Vice President John C. Johnston, and Vice President William G. Callahan from the Hotel America who planned to open in the Cullen Center in the near future. Several members of the Cullen family, in addition to the men directly involved with the project, were also in attendance.⁴⁹

Marketing materials for the Cullen Center highlighted the site's "midtown" location and its easy access to the city's major highways as a focal point for drawing tenants and investors.⁵⁰ The Center's convenient location to Houston's highway system continued to be the focal point of their marketing materials for at least a decade, bolstered by the construction of the "Pierce Elevated."⁵¹ Later promotional materials for Dresser Tower (1973), also located in the Cullen Center, touted occupants' ability to walk between their cars, offices, and other buildings in the Cullen Center without ever stepping out of the conditioned space.⁵² Early plans for the 500 Jefferson Building also included helipads on the roof for the parking garage to accommodate the needs of their higher end clients.⁵³

Tenants in the 500 Jefferson Building at its opening included Pan American Petroleum Corp, who leased four floors, and Quintana Petroleum, who leased three floors. Other tenants for the building included attorney Melvin E. Cowart, tax consulting firm Hall Walker & Clark, Neuhaus Investment Company, engineering firm Tennant Company, multiple insurance companies, the International Nickel Company, IT consultants Bonner & Moore, as well as restaurants, a barber, and a salon.⁵⁴ Twenty-five tenants had already moved in prior to the grand opening.⁵⁵ Later tenants included Highland Insurance Company, Amoco Corporation, the Metropolitan Transit Authority, Continental Airlines, and KBR.

The Hotel America also opened in 1963 and included the landscaped, open-air Cullen Plaza on the same block.⁵⁶ The hotel and plaza were substantially altered in 2005 when the hotel was resurfaced and the plaza reconfigured. Phased additions to Cullen Center include the Cullen Center Bank & Trust Co. Building (1971) at 600 Jefferson and Dresser Tower (1973) at 601 Jefferson. These two buildings, both designed by Neuhaus & Taylor, did not follow the Becket master plan, fulfilling what Stephen Fox describes as Houston's "penchant for individualism."⁵⁷

⁴⁷ "Work can continue now," *Houston Press*, November 25, 1961, photo caption.

⁴⁸ "500 Jefferson Building Supplement."

⁵⁰ "Cullen Center" promotional booklet, 2. H-Office Parks-Cullen Center, vertical file, Houston Metropolitan Research Center.

⁴⁶ "Two-ton panels lifted in place," *Houston Press*, December 11, 1961, photo caption.

⁴⁹ "Formal Opening of 500 Jefferson Bldg Is Scheduled Today."

⁵¹ "Cullen Center: prime location," promotional booklet, 7-9. H-Office Parks-Cullen Center, vertical file, Houston Metropolitan Research Center.

⁵² "Dresser Tower in Cullen Center" promotional booklet, 2. H-Office Parks-Cullen Center, vertical file, Houston Metropolitan Research Center.

⁵³ "Cullen Center" promotional booklet, 5.

⁵⁴ "Cullen Center's 500 Jefferson Building," Houston Post. March 1, 1963.

⁵⁵ "500 Jefferson Building Formal Opening is Held," *Houston Post*, March 2, 1963.

⁵⁶ "500 Jefferson Building Formal Opening is Held."

⁵⁷ Fox, *AIA Houston Architectural Guide*, 13.

The tallest tower and last constructed building in Cullen Center, 1600 Smith, was completed in 1983. That same year, Cullen Center Inc. also spent \$215 million renovating the 500 Jefferson Building, which included a substantial interior remodel.⁵⁸

The Cullen family continued to own and operate the Cullen Center buildings for several decades. In 1986, Canadian company Trizec Properties offered to buy 50% of the Cullen Center investments, a deal which was valued at over \$200 million.⁵⁹ The deal ultimately fell through, and Cullen Center, Inc. actively worked to buy back former investments from outside companies. In 1993, Cullen Center, Inc. announced that they acquired the 50% ownership share from the co-owners for 1600 Smith. Cullen Center, Inc. always maintained sole ownership of the 500 Jefferson Building.⁶⁰ In 1999, Cullen Center, Inc. began selling the properties in the office center. The hotel was sold to Houston Hotel Associates in April, and 600 Jefferson to Trizechahn Office Properties, Inc. that August. Trizechahn also acquired the 500 Jefferson Building in April 2000. Dresser Tower and 1600 Smith were sold much later in 2012 to New York City-based investors.⁶¹

Welton Becket (1902-1969)

Welton Becket was born in Seattle on August 8, 1902 and graduated from Queen Anne High School in 1922. No doubt influenced by both his father and brother who were builders, Becket studied architecture at the University of Washington where he graduated with his Bachelor of Architecture in 1927. After graduation, he lived and traveled for a time in Europe studying for four months at the Ecole des Beaux-Arts and travelling for two months with his classmate, Paul Thiry. Upon returning from Europe, he moved to California where he worked for several years before crossing paths with former University of Washington classmate, Walter Wurdeman, in 1930. The two formed and partnership and returned to Seattle, where they immediately began receiving commissions. The firm grew quickly and by 1932 moved into the Edmond Meany Hotel Building.⁶²

Becket's designs in Seattle were an eclectic array of styles, including the Art Deco garage for the Edmond Meany Hotel (1931), a Cap Cod style house (1930) for Fred Harley in the Laurelhurst neighborhood, Cove Mid-City Market (1931), and American Wholesale Grocery (1933). In 1933, Beckett and Wurdeman moved back to Los Angeles and formed a partnership with Charles Plummer, establishing the firm of Plummer, Wurdeman, & Becket (1933-1938).⁶³ The firm gained notoriety with their award-winning design of the Pan Pacific Auditorium (1935). Their notoriety parlayed entry into Hollywood film circles, and the firm received residential commissions from movie stars like James Cagney, Ceasar Romero, and Robert Montgomery.⁶⁴

After Plummer's death in 1939, the firm incorporated as Wurdeman & Becket (1938-1949).⁶⁵ The firm prospered and expanded during WWII, completing miscellaneous public housing and defense projects. Their work during the war positioned the firm for success during the post-war building boom. Among their best known post-war buildings are the Bullock's Department Store (1946) in Pasadena, the Prudential Insurance Building (1947) in Los Angeles, and the General Petroleum Building (1949), also in Los Angeles. Upon completion, the General Petroleum Building in southern California.⁶⁶ The firm pioneered the concept of "total design;" a

⁵⁸ Bischoff, "Cullen Center spruces up to lease in tough market."

⁵⁹ "Cullen Center gives Calgary firm option," Houston Post, April 17, 1986.

⁶⁰ Pat Rosen, "Cullen Center acquires 50% stake in tower," *Houston Post*, November 11, 1993.

⁶¹ Harris County Appraisal District, Ownership History.

⁶² Michael Houser, "Welton D. Becket," Washington State's Department of Archaeology & Historic Preservation, https://dahp.wa.gov/bio-for-welton-d-becket (accessed March 1, 2018).

⁶³ Bruce Emerton, *Built by Becket* (Los Angeles: The Modern Committee of the Los Angeles Conservancy, 2003), 4.

⁶⁴ Houser, "Welton D. Becket."

⁶⁵ Emerton, *Built by Becket*, 4.

⁶⁶ Christopher Reynolds, "L.A.'s invisible builder: Long overlooked, Welton Becket is getting his due," Los Angeles Times

constant, consistent architectural product that included master planning, engineering, interiors, furniture, fixtures, landscaping, signage, and even, when designing restaurants, menus, silverware, matchbooks, and napkins for their clients. Wurdeman died unexpectedly in 1949, after which Becket bought out his partner's heirs and renamed the firm to Welton Becket & Associates (1949-1988).⁶⁷

Under Becket's leadership, the firm grew to one of the largest architectural firms in the United States with over 500 employees at multiple branch offices. According to a survey by *Architectural Forum*, Welton Becket & Associates was the largest architecture firm in the United States in 1961.⁶⁸ He developed methods for architectural firms to manage the scale and complexity of commercial/institutional projects typical of the last third of the twentieth century, reorganizing the traditional architecture office on a new corporate footing.⁶⁹ With headquarters in Los Angeles, the firm also had offices in San Francisco, New York, Chicago, and Houston, which was under the direction of C.R. Sikes, Jr.⁷⁰ Houston, like Los Angeles, was experiencing a period of tremendous growth and transformation in the decades following World War II, and Becket was eager to take advantage of those opportunities.

Some of Welton Becket & Associates' most notable mid-century designs in Los Angeles include:

- Beverly Hilton Hotel (1955)
- Capitol Records Building (1955)
- Century City Complex (1959)
- Santa Monica Civic Auditorium (1959)
- Cinerama Dome (1963)
- Los Angeles Music Center (1964)

Notable designs in the U.S. include:

• The Contemporary Resort, Disney World (1971)

Notable designs in Houston include:

- 500 Jefferson Building (1963)
- Humble Building (1963)
- First State Bank (1966, Clear Lake)
- Shell Information Center (1972)
- Fluor Houston Operations Center (1984)

At the time of its construction, the Humble Building at 800 Bell Street, now vacated since the company centralized operation and personnel at their new north Houston campus, was the tallest building west of the Mississippi River (Figure 22). It was also Becket's first opportunity to implement his "total design" concept. The 44-story, 600-foot-tall International Style skyscraper was designed by Louis Naidorf, who also designed the iconic Capitol Records Building in Los Angeles. Naidorf sought to give the tower a sense of regional identity by emphasizing sun control, utilizing tiers of horizontal aluminum sunshades. The building was designed with a companion 1,300 car garage at 1602 Milam Street. The garage housed the air-conditioning equipment for the skyscraper, which left the top two

⁽March 2003), http://articles.latimes.com/2003/mar/06/news/wk-cover6 (accessed March 1, 2018).

⁶⁷ Emerton, *Built by Becket*, 4.

⁶⁸ "100 Largest Architectural Firms in the U.S.," Architectural Forum, (May 1962): 14-16.

⁶⁹ Emerton, *Built by Becket*, 8-9.

⁷⁰ Houser, "Welton D. Becket."

stories of the building free for the Petroleum Club and an observation deck. The observation deck closed in 1971 when One Shell Plaza (Skidmore, Owings & Merrill) became the tallest building in Downtown Houston.⁷¹

Throughout his career, Becket never developed a singular, personal style, at times making his vision and work difficult to recognize. He generally declined to discuss his architectural theory in interviews, but he maintained a belief that "a building should reflect the client, not the architect." This statement is evident in Becket and, after his death, his firm's diverse body of work. The Beverly Hilton Hotel (1955), for example, is a large hotel geared to car travelers. Compositionally, it is a low pavilion and tower, with the low pavilion closest to the street. The tower has three wings radiating from the central circulation core. Each of the building's three obtuse angled elevations have floor to ceiling windows shaded by cantilevered eyebrows; the end walls of each of the three wings are solid masonry. The Capitol Records Building (1956) highlights Beckett's agility to utilize current architectural technology and style while giving a direct reference to the client's business, in this case the music business. The circular building is evocative of a stack of 45 records, historically known as singles. The 45s could be assembled in a "stack" and dropped one by one onto the turntable. The Santa Monica Civic Auditorium (1959) has a low, full width entry and a multi-story auditorium space behind clad with a decorative *brise-soleil*. The low entry has a flat roof divided into five equal bays by large, tapered light poles that rise above the height of the auditorium. The light poles serve to announce the building as a public venue and the low entry pavilion gives attendees the formal procession and pre-function sense of arrival prior to entry into the auditorium.

Becket continued creating remarkable designs through the 1960s. The Cinerama Dome (1963) is a concrete example of Buckminster Fuller's patented geodesic dome construction. Cinerama was a large curved screen developed to lure movie patrons away from their televisions. The building, designed specifically to this cinema technology, includes the domed theater and lower adjacent pavilions for tickets and concessions. The tradition of client-driven design continued after Becket's death, evident in the firm's design of The Contemporary Resort (Disney World, 1971). The design literally integrated the Disney monorail with the train passing through the center of the A-frame plan building. The interior is a large open public space, much like a train station, with the hotel rooms and amenities pushed to the perimeter flared tower blocks. The hotel rooms were all prefabricated off site and stacked on the site forming the flanking flared towers. Becket maintained that good design originated from functionalism and understanding/serving client needs within the established budget. For much of his career, this meant working within a modern style, somewhere on the continuum of Streamline Moderne, Late Moderne, or the International Style for corporate projects. The 500 Jefferson Building fits within Becket's body of work by being a functional, client-driven design, yet architecturally distinguished through its New Formalist and International Style influences.

Becket's philosophy of design was not without its critics, and it also brought him a great deal of success. Becket and his firms received numerous awards at the local, national, and international level for the design and execution of their projects. Becket was elected as a fellow of the American Institute of Architects in 1952, one of the youngest architects to receive the honor at that time.⁷²

Becket died in Los Angeles in January 1969. A week prior to his death, he passed the role of president of Welton Becket & Associates to his nephew, MacDonald Becket, who aggressively expanded the firm. Under M. Becket's leadership, the firm's architecture became increasingly corporate in character. In 1987, the firm merged with Ellerbe, a Minnesota-based firm, to form Ellerbe Becket. Ellerbe Becket was absorbed by AECOM in 2009.⁷³

⁷¹ Fox, *AIA Houston Architectural Guide*, 14.

 ⁷² Ann Harrison, "Finding aid for the Welton Becket architectural drawings and photographs, 1913-2009, bulk 1930-1969,"
 Online Archive of California, https://oac.cdlib.org/findaid/ark:/13030/c8639v5d/entire_text/ (accessed July 3, 2018).
 ⁷³ Harrison, "Finding aid."

W. S. Bellows Construction Corporation

W. S. Bellows Construction Corporation was founded by Warren Sylvanus Bellows in 1914 and is still familyowned and operated. Originally operating in Canada, the company relocated to Kansas City, Kansas and moved again to Oklahoma City, Oklahoma in 1920. The company made its home in Houston in 1936 after winning the contract to build the San Jacinto Monument in nearby La Porte. In addition to the 500 Jefferson Building, the company was also contracted to build the Humble Building, another building designed by Welton Becket & Associates. Additional Bellows-built buildings that can be found in the Houston skyline include Wortham Theater Center (1987) and One Shell Plaza (1971). Bellows has worked on many projects in the Texas Medical Center, completing over 300 renovation and building projects for clients including Baylor, St. Luke's Medical Center, Memorial Hermann Hospital, and Texas Children's Hospital. Following Warren S. Bellows, the company was led by his sons Warren, Jr. and George, then by his grandson, Tom Bellows, who died unexpectedly in 2007. His widow, Laura Bellows, now serves as President and Chairman of the Board.⁷⁴

Summary

The 500 Jefferson Building, designed by the prolific firm of Welton Becket & Associates and built by W. S. Bellows Construction Corporation, is an excellent example of an early 1960s New Formalist and International Style skyscraper with an integrated above ground parking garage. It was the first building constructed in Cullen Center, Houston' first multi-building office center, conceived by Hugh Roy Cullen. The building is also notable for its use of over 2,000 Mo-Sai panels as a predominant architectural feature. Completed in 1963, the building retains a high degree of integrity of location, setting, design, materials, workmanship, association, and feeling corresponding to the period of significance. The 500 Jefferson Building is nominated to the National Register of Historic Places (NRHP) under Criterion C in the area of Architecture at the local level of significance. The period of significance is 1963.

⁷⁴ "History: W.S. Bellows Construction Corporation," W.S. Bellows Construction Corporation, http://www.wsbellows.com/about/history (accessed July 3, 2018).

Bibliography

Architectural Record 11 (November 1960): 206.

- Cellini, Jenna. "The Development of Precast Exposed Aggregate Concrete Cladding: The Legacy of John J. Earley and the Implications of Preservation Philosophy." Master's Thesis, University of Pennsylvania, 2008. In Scholarly Commons, https://repository.upenn.edu/cgi/viewcontent.cgi?article=1099&context=hp_theses.
- Ching, Francis D.K. A Visual Dictionary of Architecture. New York: John Wiley & Sons, 1995.
- Crabbe, Rita. "Cullen, Hugh Roy." Handbook of Texas Online, Texas State Historical Association. http://www.tshaonline.org/handbook/online/articles/fcu06 (accessed March 9, 2018).

Cullen Foundation. http://cullenfdn.org/ (accessed March 9, 2018).

- Davis-Jones, Jo Anne. "Legacy of the Pride." *The University of Houston Magazine* (Spring 2010). http://www.uh.edu/magazine/10s/features/legacy-of-pride/ (accessed March 9, 2018).
- Emerton, Bruce. *Built By Becket*. Los Angeles: The Modern Committee of the Los Angeles Conservancy, 2003.
- Fox, Stephen. "Scraping the Houston Sky 1894-1976." In *Ephemeral City: Cite Looks at Houston*, edited by Barrie Scardino, William F. Stern, and Bruce C. Webb, 193-211. Austin: University of Texas Press, 2003.
- Fox, Stephen. AIA Houston Architectural Guide Third Edition. Houston: American Institute of Architects, Houston Chapter, 2012.
- Graf, Joseph C., rev. by Alan Stewart. "Cullen Foundation." Handbook of Texas Online, Texas State Historical Association. http://www.tshaonline.org/handbook/online/articles/vrc02 (accessed March 09, 2018).
- "Gulf Building: National Register of Historic Places Inventory Nomination Form." Texas Historical Commission's Texas Historic Sites atlas. https://atlas.thc.state.tx.us/NR/pdfs/83004436/83004436.pdf (accessed July 3, 2018).
- Harris County Appraisal District. http://hcad.org/ (accessed March 9, 2018).
- Harrison, Ann. "Finding aid for the Welton Becket architectural drawings and photographs, 1913-2009, bulk 1930-1969." Online Archive of California. https://oac.cdlib.org/findaid/ark:/13030/c8639v5d/entire_text/ (accessed July 3, 2018).
- "History: W.S. Bellows Construction Corporation." W.S. Bellows Construction Corporation. http://www.wsbellows.com/about/history (accessed July 3, 2018).
- Houser, Michael. "Welton D. Becket." Washington State's Department of Archaeology & Historic Preservation. https://dahp.wa.gov/bio-for-welton-d-becket (accessed March 1, 2018).

Houston Chronicle

"Houston City Hall: National Register of Historic Places Registration Form," Texas Historical Commission's Texas Historic Sites atlas, https://atlas.thc.state.tx.us/NR/pdfs/90001471/90001471.pdf (accessed July 3, 2018).

Houston Metropolitan Research Center vertical files

- A Cullen (Hugh Roy) Center
- H Office parks Cullen Center

Houston Post

Houston Press

- "Hugh Roy Cullen." Regents, University of Houston System. http://www.uhsystem.edu/board-ofregents/former-regents/hrcullen/index.php (accessed March 9, 2018).
- Kilman, Ed and Charles E. Gilbert. *The Cullens: Two Great Texans*. Houston: University of Houston, 1949.
- Koush, Ben. Constructing Houston's Future: The Architecture of Arthur Evan Jones & Lloyd Morgan Jones. Houston: Houston Mod, 2017.
- Krause, Reinhardt. "Hugh Roy Cullen Gushed to the Top of Texas Oil." *Investor's Business Daily* (April 2011). https://www.investors.com/news/management/leaders-and-success/hugh-roy-cullen-gushed-to-the-top-of-texas-oil/ (accessed March 9, 2018).

Los Angeles Times

- "Medical Towers: National Register of Historic Places Registration Form." Texas Historical Commission's Texas Historic Sites atlas. https://atlas.thc.state.tx.us/NR/pdfs/16000918/16000918.pdf (accessed July 3, 2018).
- "Melrose Building: National Register of Historic Places Registration Form." Texas Historical Commission's Texas Historic Sites atlas. https://atlas.thc.state.tx.us/NR/pdfs/14000627/14000627.pdf (accessed July 3, 2018).

Miss Classified

- Mod, Anna. Building Modern Houston. Charleston: Arcadia Publishing, 2011.
- Perry-Castañeda Library Map Collection, University of Texas at Austin. http://legacy.lib.utexas.edu/maps/sanborn/h.html (accessed June 28, 2018).
- "Texas Medical Center Legacy Makers The Cullen Family." *Houston Lifestyles & Homes*. http://houstonlifestyles.com/texas-medical-center-legacy-makers-the-cullen-family/ (accessed March 9, 2018).

Map 1 Harris County, Texas



Map 2 Houston, Harris County, Texas



Map 3

Google Earth Map Accessed July 18th, 2018.



Map 4

Bing Map Accessed July 18th, 2018



Map 5 Bing Map Accessed July 18th, 2018



Figure 1

"1962 Press Photo Construction on the 500 Jefferson Building" Courtesy of Houston Chronicle via Historic Images (Ebay)



Figure 2

"1962 Press Photo Work at the 500 Jefferson Building in the Cullen Center" Courtesy of Houston Chronicle via Historic Images (Ebay)



Figure 3

Construction of I-45 with 500 Jefferson beyond and to the left Image RGD0006-0949r courtesy of Houston Metropolitan Research Center



Figure 4

Original architectural drawings (March 1961), Site Plan



Figure 5

Original architectural drawings (March 1961), "A" Level Basement Floor Plan



Figure 6

Original architectural drawings (March 1961), "B" Level Basement Floor Plan



Figure 7

Original architectural drawings (March 1961), Ground Floor Plan



Figure 8

Original architectural drawings (March 1961), Concourse Floor Plan



Figure 9

Original architectural drawings (March 1961), 3rd Floor Plan and 4th to 11th Floor Plan


Figure 10

Original architectural drawings (March 1961), 12th Floor Plan and 13th Floor Plan



Figure 11

Original architectural drawings (March 1961), 15th to 20th Floor Plan



Figure 12

Original architectural drawings (March 1961), 21st Mechanical Floor, 21st Floor Mezzanine Plan, and Roof and Penthouse Plans



Figure 13

Original architectural drawings (March 1961), Jefferson Street Elevation



Figure 14

Original architectural drawings (March 1961), South Elevation & Drive



Figure 15

Original architectural drawings (March 1961), East Elevation and West Elevation



Figure 16

Original architectural drawings (March 1961), Curtain Wall Elevation & Details



Figure 17

Early proposed design for Cullen Center "Cullen Center" courtesy of Houston Metropolitan Research Center vertical files



Figure 18

"Cullen Center today"

VF A-Cullen (Hugh Roy) Center p001 courtesy of Houston Metropolitan Research Center vertical files



Approximately 900,000 square feet of new leases were signed in the downtown market in 1993. Some 31 percent of that was in Cullen Center which comprises eight percent of the leasable space downtown. Since January, Cullen Center has generated an additional 17,347 square feet in new leases and renewed another 24,356 square feet.

Among the Center's major new or expanding leases in the last year are Texas Independent Exploration for 11,566 square feet and Edisto Resources for 8,923 square feet, both in 1600 Smith; and ARA Services for 20,589 square feet and Exxon Corporation for 10,034 square feet in M. W. Kellogg Tower.

Major renewals included the City of Houston for 97,594 square feet in 500 Jefferson and the University of Houston for 23,806 square feet in 1600 Smith.

Rooms Renovations Completed

The Whitehall Hotel's ballroom and other meeting rooms have recently been renovated to provide improved facilities for downtown meeting planners.

"The carpeting and wall treatments have been refurbished and we have upgraded the life safety features of these rooms," says Dallas Hardcastle, architect, Cullen Center (continued on p. 6)

Figure 19

"500 Jefferson Building Formal Opening Is Held," *Houston Post* Courtesy of Houston Metropolitan Research Center vertical files



Figure 20 Humble Building Courtesy of Pinterest



Photo 1 (TX_HarrisCounty_500Jefferson_0001)

North façade and east (side) elevation of office tower, skywalks to The Whitehall Hotel and 600 Jefferson Street, view southwest



Photo 2 (TX_HarrisCounty_500Jefferson_0002) North façade and west (side) elevation of office tower, view southeast





Photo 3 (TX_HarrisCounty_500Jefferson_0003) South (rear) elevation of office tower, view northwest

Photo 4 (TX_HarrisCounty_500Jefferson_0004) Connection between office tower and garage, view west



Photo 5 (TX_HarrisCounty_500Jefferson_0005) East (side) elevation of garage, view southwest



Photo 6 (TX_HarrisCounty_500Jefferson_0006) South (rear) elevation of garage, view northwest



Photo 7 (TX_HarrisCounty_500Jefferson_0007) West (side) elevation of garage, spiral entry and exit ramps, view east



Photo 8 (TX_HarrisCounty_500Jefferson_0008) Mo-Sai panels on north façade, typical, view south



Photo 9 (TX_HarrisCounty_500Jefferson_0009)

"Mo-Sai® by Rackle Company Houston, Texas" embossment on rear of garage Mo-Sai panels, detail



Photo 10 (TX_HarrisCounty_500Jefferson_0010) Ground floor lobby, original travertine panels and terrazzo flooring, view east



Photo 11 (TX_HarrisCounty_500Jefferson_0011) Ground floor lobby, original travertine panels and terrazzo flooring, view west



Photo 12 (TX_HarrisCounty_500Jefferson_0012)

Concourse (second floor), original travertine panels and terrazzo flooring, view east



Photo 13 (TX_HarrisCounty_500Jefferson_0013)

Concourse (second floor), retail along south (rear) elevation and original terrazzo flooring, view east



Photo 14 (TX_HarrisCounty_500Jefferson_0014) Tenant floor (8), extant "loft" space and service core, view southeast



Photo 15 (TX_HarrisCounty_500Jefferson_0015) Tenant floor (14), sample tenant space with cubicles, view west



Photo 16 (TX_HarrisCounty_500Jefferson_0016) Tenant floor (12), sample tenant buildout, view east



































UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

Requested Action:	Nomination				
Property Name:	500 Jefferson Building				
Multiple Name:				· · · · · · · · · · · · · · · · · · ·	
State & County:	TEXAS, Harris	· · · · · · · · · · · · · · · · · · ·			
Date Recei 2/1/201		Date of 16th Day: Date of 16th Day: Date 2/27/2019	ate of 45th Day: 3/18/2019	Date of Weekly List:	
Reference number: SG100003492			······································		
Nominator:	SHPO				
Reason For Review:					
X_Accept	Return Reje	ect3/6/20	0 19 Date		
Abstract/Summary Comments:	500 Jefferson Street is locally sign A twenty-one story, steel-framed s Welton Beckett & Associates, the Modern design, blending Internation of several high-rise buildings cons the early commercial development the post-war era. 500 Jefferson and value of modernist high-rise tower economic development and trade.	kyscraper designed 1963 building is an e onal and New Forma tructed as part of the of the "midtown" are nd the surrounding C	by the respected a excellent local exa- list style architection cullen Center, the ca of Houston as f cullen Center wou	architectural firm of mple of Mid-Century ural forms. The first le building reflected the city expanded in Id underline the	
Recommendation/ Criteria	Accept NR Criterion C				
Reviewer Paul Lu	usignan	Discipline	Historian		
Telephone (202)35	54-2229	Date	3/6/2019		
DOCUMENTATION	: see attached comments : No	see attached SLF	R : No		

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

TEXAS HISTORICAL COMMISSION

real places telling real stories

HECEIVE NATIONAL PARK SERVICE

- TO: Paul Lusignan National Register of Historic Places Mail Stop 7228 1849 C St, NW Washington, D.C. 20240
- From: Mark Wolfe, SHPO Texas Historical Commission
- RE: 500 Jefferson Building, Houston, Harris County, Texas
- DATE: February 4, 2019

The following materials are submitted:

	Original National Register of Historic Places form on disk.			
X	The enclosed disk contains the true and correct copy of the National Register of Historic Places nomination of the 500 Jefferson Building, Houston, Harris County, Texas			
	Resubmitted nomination.			
Х	Original NRHP signature page signed by the Texas SHPO.			
	Multiple Property Documentation form on disk.			
	Resubmitted form.			
	Original MPDF signature page signed by the Texas SHPO.			
х	CD with TIFF photograph files, KMZ files, and nomination PDF			
	Correspondence.			

COMMENTS:

- ____ SHPO requests substantive review (cover letter from SHPO attached)
- ____ The enclosed owner objections (do__) (do not__) constitute a majority of property owners
- Other: