



Fire Station No. 11

Historic Structure Report

[Introduction](#)

[Executive Summary](#)

[Acknowledgments](#)

[Illustrations](#)

[Chronology of Development and Use](#)

[Evaluation of Significance](#)

[Historical Background and Context](#)

[Building Description](#)

[Condition Assessment](#)

[Preservation Treatment and Objectives](#)

[Work and Treatment Recommendations](#)

[Proposed Use](#)

[Requirements for Work: Laws, Codes and Standards](#)

[LEED Certification](#)

[Historic Preservation Tax Credits](#)

[Preliminary Budget](#)

[Glossary of Terms](#)

[Bibliography](#)

Appendices

[Appendix A: Property Deed Agreement](#)

[Appendix B: San Antonio, Texas Historic Fire Stations](#), The Department of Planning Historic Preservation and Design
Division

PATRICIA VELIZ • JENNIFER COVELL • KENT BRITTAIN • JOSE LOPEZ • STEPHANIE BRISTER •
AMY UNGER • LAUREN VASEK • ELISA VASQUEZ • RYAN WEEKLEY • PROFESSOR WILLIAM DUPONT



INTRODUCTION

The following Historic Structure Report for Fire Station No. 11 documents the building's integrity in its current and past settings. Fire Station No. 11 holds important significance and value due to its exemplification of the 1920's fire station type, its distinct Mission Revival architectural features, its relationship to significant individuals in the history of San Antonio, Texas, and its legacy of public service. In addition to these historical, architectural, and cultural values, the building holds important educational and financial value for the University of Texas at San Antonio.

With the help of the current owners, the Steves family, the nearby University of Texas at San Antonio can offer numerous resources and potential opportunities for the reuse of this significant building.

The purpose of this Historic Structure Report (HSR) is to:

- 1) Discover and document the building's history and condition.
- 2) Evaluate and define its significance.
- 3) Discuss its future value and rehabilitation.

To undertake such a report, an interest in careful documentation and the appropriate treatment of significant historic structures is needed. It is important to complete an HSR before any treatment is started. When done correctly, a HSR helps ensure that the history, significance, and condition of the property are thoroughly understood and taken into full consideration during treatment selection and determination of work recommendations. In addition, the HSR can be an important resource for future research.¹

This particular report is to be used as a basis for future work, education, and preservation of the integrity of Fire Station No. 11. In our efforts to present this information in a useful manner, we have prepared the full HSR as both a document and a website. It is our hope that this will aid other researchers and historic preservationists, as well as offer a site that demonstrates UTSA's efforts in historic preservation.

The goal of this report was to initiate an interest in preserving a historical building, to present potential compatible uses and to examine the feasibility of those uses. We hope this report will create a foundation of research that others may build upon and many may learn from. In addition, we hope our work will encourage people to become more actively involved in historic preservation efforts.

¹ Deborah Slaton, "The Preparation and Use of Historic Structure Reports," *Preservation Brief 43*.
<http://www.nps.gov/history/hps/tps/briefs/brief43.htm>

EXECUTIVE SUMMARY

This Historic Structure Report (HSR) for Fire Station No. 11 was prepared by the Spring 2008 Historic Preservation Graduate Seminar at the University of Texas at San Antonio. Fire Station No. 11 is located on the corner of South Frio and Durango Streets surrounded by the University of Texas at San Antonio Downtown Campus. Very little remains of the older, historic neighborhood.

A HSR was created to document the history of the site and building, evaluate the architectural materials and features, assess the existing condition of the building, and propose a treatment and compatible use. This report is to be used as a basis for future work, education, and preservation of the integrity of Fire Station No. 11.

Developmental History

Fire Station No. 11 was originally constructed in 1925 and is typical of 1920's fire stations. Due to advancements in fire fighting technology and the increased sizes of fire trucks, its continued use as a fire station is no longer feasible. Most recently, Fire Station No. 11 was used by the San Antonio Fire Department as storage. A stipulation in the original deed agreement between the Steves family and City of San Antonio required that the building continuously house a fire or hose company. Because this is no longer possible, the fire station was returned to the Steves family in early 2008. (See Historical Background and Evaluation of Significance.)

The preliminary assessment of the building revealed that the building is in generally good condition. The building has suffered some weathering and deterioration due to age and low levels of exterior maintenance. Some re-caulking and possibly masonry work has been done in the past. Some of this work was documented. Paint analysis may be done to determine original colors of the building, but no analysis has been conducted at this time. Initial inspection by a structural engineer indicates that the concrete foundation piers are sound. Concrete slab displacement and possible brick instability in water-damaged areas will require further investigation and monitoring. (See Building Condition Assessment.)

Treatment and Work Recommendations

The HSR contains historic preservation objectives, treatment and work recommendations and requirements for work necessary to meet applicable laws, codes, and standards. Through careful evaluation of the historical, cultural, and architectural values associated with the structure, we have determined that Fire Station No. 11 has the potential to be a highly successful rehabilitation project that benefits the larger community as well as UTSA. As stated by The Secretary of the Interior's Standards for the Treatment of Historic Properties:

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.¹

¹ National Park Service. "The Secretary of the Interior's Standards for the Treatment of Historic Properties." http://www.nps.gov/history/hps/tps/standguide/rehab/rehab_index.htm

The overall objective is to preserve and restore the features that convey its Mission Revival style, its fire station building typology and its relationship to the community as a historical record of a past neighborhood and important individuals in San Antonio's history. Through application of the laws, codes, and standards of San Antonio and the National Park Service criteria for rehabilitation, the preservation objectives for the fire station address the historical significance of the building through a developed methodology of determined levels of importance and integrity of the fire station's features.

Feasibility Analysis

In the feasibility analysis section, proposed uses, historic preservation tax credits, LEED Certification, and estimated costs are discussed in relation to Fire Station No. 11.

The ultimate goal for this project is rehabilitation of the building into a facility that could be used by UTSA and the larger community as a student work and cultural display space, coffee shop and bookstore. Additional uses could be determined based on further investigation during the design process. In regards to UTSA specifically, it was important to offer a use that would be beneficial to the university as an educational and demonstrational tool for students.

In detail, the HSR discusses the potential for using LEED certified techniques for the rehabilitation. This would involve using energy efficient materials and equipment, construction site awareness and possibly new systems of heating and cooling that would lower energy costs.

A preliminary budget attempts to denote all seen and unforeseen costs in the proposed rehabilitation project. In order to evaluate the feasibility of our proposed uses, the budget is helpful as a tool for determining the future of the project and funding requirements.

Conclusion

The main intent of this document is to recommend a treatment of rehabilitation. In taking the time and effort to produce this document, the goal is to record those significant features that should be evaluated and preserved in its rehabilitation process. The fire station contains many pleasing and historic features that represent the historical practices of the San Antonio Fire Department, Mission Revival architecture (as interpreted by the architects Adams and Adams), and Fire Station No. 11's stability as an icon of a past neighborhood and society.

The proposed uses will offer UTSA a source of new financial revenue, opportunities for displaying student talent and an educational tool for the Historic Preservation program. Fire Station No. 11 has maintained a presence in San Antonio for many years. By rehabilitating this durable and significant building it can be assured that the value of its presence will continue for many years to come.

ACKNOWLEDGEMENTS

This HSR was made possible by the following:

University of Texas at San Antonio Spring 2008 Graduate Seminar in Historic Preservation:

Stephanie Brister
Kent Brittain
Jennifer Covell
Jose Lopez
Amy Unger

Lauren Vasek
Elisa Vasquez
Patricia Veliz
Ryan Weekley
Professor William Dupont

It is important to note that this report was done not only as purposeful research on a building of great durability and stability, but also as a learning experience for graduate students in architecture studying historic preservation at UTSA.

The Steves family: The Steves family currently owns Fire Station No. 11. The family has provided assistance and interest in our efforts in documenting the fire station and proposing rehabilitation.

San Antonio Fire Department: Specifically Mark Heiland. and Jesse Fernandez who allowed us to tour the fire station on several occasions to obtain information, analysis, and photos.

For help with the structural analysis and budget we thank Lawrence Calvetti, WJC Engineers and Tommy Adams of John Rubiola Construction.

Hector Cardenas: Provided historical information, photos, video, and an interview regarding the lives of fire fighters at Fire Station No. 11 during the 1970's and 1980's.

Sue Ann Pemberton's Preservation Technology class: This class performed research and analysis of the existing building condition that assisted us in our documentation efforts and preparation of this report.

Jupiter Java and Jazz: This coffee shop offered a glance at the workings of a coffee shop in a rehabilitated historic building. This information was helpful as we developed our proposed uses.

George Skarmas: Preservation architect and guest lecturer. Skarmas discussed historic preservation in terms of assessment methods, documentation and how to present information on historic buildings.

Jonathan Vasek: With his expertise and assistance, we were able to create a website to upload and display our Historic Structure Report of Fire Station No. 11 to the public.

The Institute of Texan Cultures Library staff: Their assistance was invaluable in researching historical context and locating archival photographs housed in the ITC Library and Archives.

ILLUSTRATIONS

Unless otherwise noted, photos depict Fire Station No. 11 as it appeared in 2008.

Figure 1: 1896 Sanborn Map

Figure 2: 1904 Sanborn Map

Figure 3: 1912 Sanborn Map

Figure 4: 1923 Sanborn Map

Figure 5: 1951 Sanborn Map

Figure 6: 1968 Sanborn Map

Figure 7: MEP Modifications on the First Floor

Figure 8: MEP Modifications on the Second Floor

Figure 9: 1989 Roof Plan

Figure 10: 1989 Site Plan

Figure 11: First floor plan, Fire Station No. 11, drawing by Kent Brittain.

Figure 12: Second floor plan, Fire Station No. 11, drawing by Kent Brittain.

Figure 13: Alarm and communication equipment. Clockwise from top left: exterior horn, loudspeaker, bell, joker stand, photos by Elisa Vasquez.

Figure 14: Typical joker stands at use, exact dates and locations unknown, but assumed to be from the 1920s (top) and 1950s (below). Top photo shows trip alarm above the joker stand, photos archived by San Antonio Fire Department.

Figure 15: Fire Station No. 11 in 1944, photo archived by San Antonio Fire Department.

Figure 16: Front façade in 2008, photo by Jose Lopez.

Figure 17: Cornerstone, photo by Jose Lopez.

Figure 18: Kitchen area, photo by Jose Lopez.

- Figure 19: Four Mission Revival fire stations built in San Antonio in 1925 as part of a five-station construction program that included No. 11. Clockwise from top left: No. 7, No. 12, No. 17, No. 18; photos archived at The Institute of Texan Cultures, San Antonio Light Collection.
- Figure 20: Fire Station No. 11 in 1925. Note red tile roof, bi-fold doors and roof drainage system, photos archived at The Institute of Texan Cultures, San Antonio Light Collection.
- Figure 21: Ceiling fans in No. 11 (left) and No. 9. Fan in No. 9 is believed to date from 1925, photos by Amy Unger.
- Figure 22: Pressed tin ceiling in apparatus bay. Vehicle washing equipment and fire pole are visible, photo by Amy Unger.
- Figure 23: Cast iron sink in south apparatus bay. Top photo shows manufacturers mark on underside of sink bowl, photo by Amy Unger.
- Figure 24: Fire Station No. 11 in the 1950s. Note signage, lighting and window screens, photo archived by San Antonio Fire Department.
- Figure 25: Fire Station No. 11, based on equipment depicted, probably not long after opening in 1925. Note wooden benches at entry, photo archived by San Antonio Fire Department.
- Figure 26: The first fire station to occupy the corner of Matamoras and South Frio Streets was a wooden structure completed sometime between 1892 and 1896, photo archived by San Antonio Fire Department.
- Figure 27: Ed Steves & Sons Co. Sunset yard (left) and I. & G.N. yard (right) circa 1912, referenced from Sanborn Maps.
- Figure 28: Map of San Antonio's Red Light District circa 1912, referenced from David Bowser's *San Antonio's Old Red-Light District*.
- Figure 29: Jefferson High School, San Antonio, Texas, photo courtesy of Mason Contractors Association of America.
- Figure 30: Vintage postcard of Nixon Office Building, first skyscraper in Corpus Christi, Texas in the Beaux-Arts Style circa 1925, archived at Texas A&M University-Corpus Christi Mary and Jeff Bell Library, Kilgore Picture Postcard Collection.
- Figure 31: The San Antonio Municipal Auditorium in San Antonio, Texas circa 1926 shows a strong influence of Spanish/Moorish architecture, photo courtesy of the San Antonio Convention and Visitors Bureau.

Figure 32: San Antonio City Hall in San Antonio, Texas. The before, left, and after, right, photos of the remodeling conducted in 1927. Tower and turret tops removed, fourth story with red tile roof added and major entrances extensively remodeled, photos courtesy of the Historic American Building Survey.

Figure 33: The California State Building at the Panama Pacific International Exposition in San Francisco, California in 1915 in the Mission Revival Style, referenced from <http://www.exploratorium.edu>.

Figures 34: (Top) Brady City Hall in Brady, Texas circa 1920 combined city offices and the fire station. Note Spanish Colonial design features utilized at fenestration, entrance, parapet and towers, photo courtesy of Barker Texas History Center, University Texas at Austin.

Figure 35: (Bottom) Denton City Hall in Denton, Texas circa 1930 in the Spanish Colonial Style, photo by Willard Robinson and archived photo courtesy of Barker Texas History Center, University Texas at Austin.

Figure 36: Entrance to Mission San Jose in San Antonio, Texas circa 1983, photo courtesy of The Historic American Buildings Survey.

Figure 37: Side entrance to Sweetwater Municipal Building in Sweetwater, Texas circa 1926, photo by Willard Robinson.

Figure 38: San Angelo City Hall and Fire Station in San Angelo, Texas circa 1912, photo archived at Fort Concho Museum.

Figure 39: First floor plan, Fire Station No. 11, drawing by Kent Brittain.

Figure 40: Second floor plan, Fire Station No. 11, drawing by Kent Brittain.

Figure 41: North façade, photo by Elisa Vasquez.

Figure 42: South façade, photo by Elisa Vasquez.

Figure 43: East façade, photo by Elisa Vasquez.

Figure 44: West façade, photo by Elisa Vasquez.

Figure 45: Joker stand area, photos by Elisa Vasquez.

Figure 46: Kitchen/dining area, photos by Elisa Vasquez.

Figure 47: South apparatus bay area, photos by Elisa Vasquez.

Figure 48: Stairs area, photos by Elisa Vasquez.

Figure 49: Dormitory area, photos by Elisa Vasquez.

Figure 50: Second floor office areas, photos by Elisa Vasquez.

Figure 51: Second floor restrooms area, photos by Elisa Vasquez.

Figure 52: Second floor shower area, photos by Elisa Vasquez.

Figure 53: Second floor locker area, photos by Elisa Vasquez.

Figure 54: The Student Café's Proposed Needs, First Floor.

Figure 55: Faculty Offices' Proposed Needs, Second Floor.

Figure 56: Fire pole, photo by Patricia Veliz.

Figure 57: Kitchen cabinets, photo by Patricia Veliz.

Figure 58: Sidewalk outside Fire Station No. 11, photo by Patricia Veliz.

Figure 59: West façade, photo by Patricia Veliz.

Figure 60: Floor and wall base in apparatus bay, photo by Patricia Veliz.

Figure 61: Straight-on view of west façade, photo by Patricia Veliz.

Figure 62: Wall in south apparatus bay, photo by Patricia Veliz.

Figure 63: Door to joker station in south apparatus bay, photo by Patricia Veliz.

Figure 64: Hydraulic door closer, photo by Patricia Veliz.

Figure 65: Mirror in second floor restroom, photo by Patricia Veliz.

Figure 66: Doorways to second floor restroom and shower room, photo by Patricia Veliz.

Figure 67: Second floor restroom, photo by Patricia Veliz.

Figure 68: Second floor restroom sinks, photo by Patricia Veliz.

Figure 69: Stairwell railing, photo by Patricia Veliz.

Figure 70: Straight-on view of south façade , photo by Patricia Veliz.

Figure 71: Southwest exterior corner, photo by Patricia Veliz.

Figure 72: North façade, photo by Patricia Veliz.

Figure 73: Northeast exterior corner, photo by Patricia Veliz.

Figure 74: North façade, photo by Patricia Veliz.

Figure 75: Second floor restroom, photo by Patricia Veliz.

Figure 76: Northeast corner parapet, photo by Patricia Veliz.

Figure 77: East façade, photo by Patricia Veliz.

Figure 78: Perspective view from north of east façade, photo by Patricia Veliz.

Figure 79: View of kitchen wall from north apparatus bay, photo by Patricia Veliz.

Figure 80: Exposed structural brick at northeast corner, photo by Patricia Veliz.

Figure 81: Door and door hinge in kitchen, photo by Patricia Veliz.

Figure 82: View of kitchen wall from north apparatus bay, photo by Patricia Veliz.

Figure 83: Peeling paint chips on wall in south apparatus bay, photo by Patricia Veliz.

Figure 84: Door hinge in second floor dormitory, photo by Patricia Veliz.

Figure 85: Outer wall from south apparatus bay, photo by Patricia Veliz.

Figure 86: Joker station wall from north apparatus bay, photo by Patricia Veliz.

Figure 87: Preliminary Budget table, prepared by Patricia Veliz.

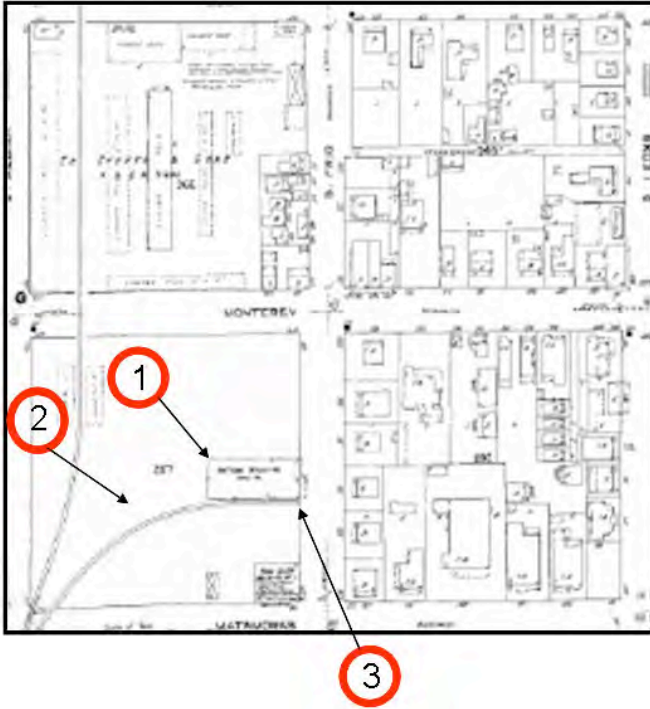


Figure 3: 1912 Sanborn Map

1912-This Sanborn Map shows the construction of the National Biscuit Co. north of the fire station (1). A new railroad trunk line extends to the new structure (2) and there are the first outlines of lumber stacks on the block. The fire station is now sited directly on the street, which seems to have been the result of a widening of the street (3).

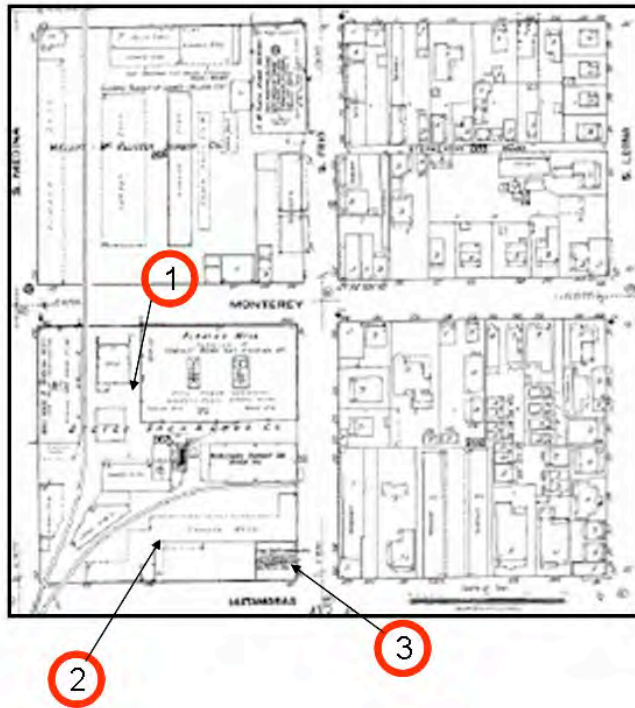


Figure 4: 1923 Sanborn Map

1923-This time frame shows intense development at Steves Sash & Door Co. (1) as well as the construction of the lumber shed which existed directly north and adjacent to Fire Station No. 11 (2). On this map there is no space between the fire station and the lumber shed (3). At this time it is assumed that the structure is still the one built in the 1890's.

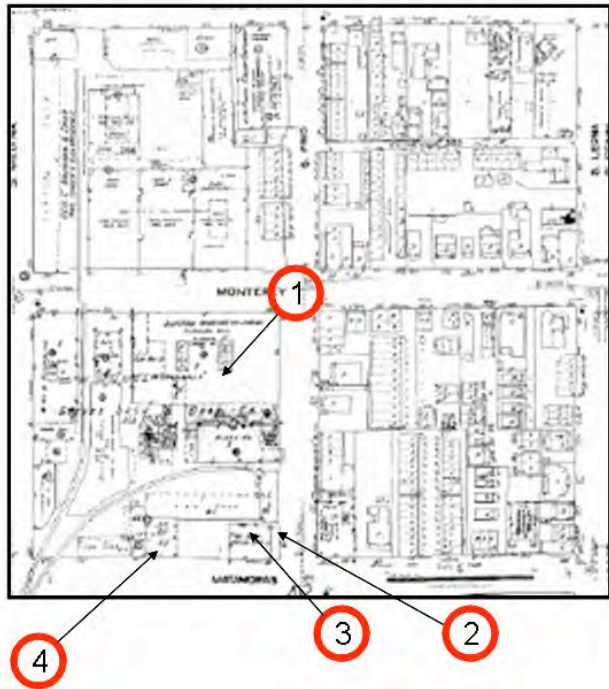


Figure 5: 1951 Sanborn Map

1951-There is continued development at Steves Sash & Door Co. (1) as well as construction of the brick 1925 fire station which is now set back from the edge of the street (2) and from the lumber shed (3). This map shows new building activity at the rear of the fire station lot (4).

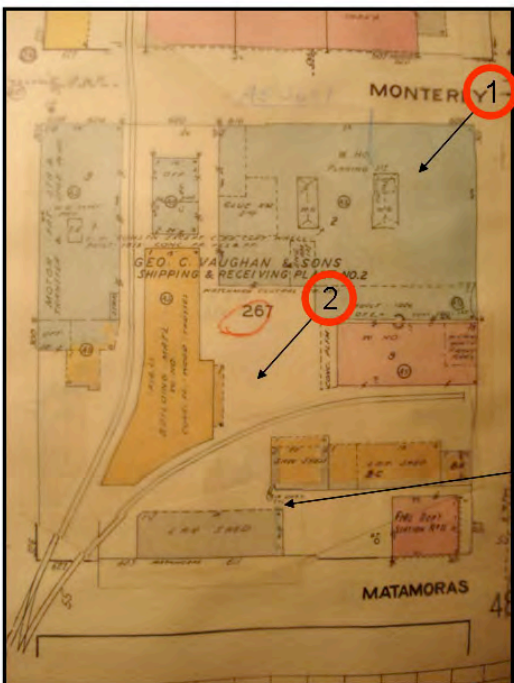


Figure 6: 1968 Sanborn Map

1968-Steves Sash and Door Co. has now changed to George C. Vaughan & Sons Shipping & Receiving Plant #2 (1). Some central structures have been removed from the George C. Vaughan & Sons site (2). The adjacent building to the north of the fire station remains with some changes (3).

Present Day- The adjacent building is no longer in existence and the older development on the block has been replaced by newer structures such as the City of San Antonio vehicle maintenance building and an office building occupied by UTSA. Matamoros Street lies directly south of the fire station, but has been privatized as a part of the City of San Antonio’s municipal court facility.

Building Changes and Modifications-Many of the existing doors in the building are outfitted with Norton Co. hydraulic door closers, which date from the 1930’s. A NIBCO gas line valve is present in the south apparatus bay and was installed at some point after the 1930’s. Heaters were installed at some point during construction and modifications were made to run the exhaust up through the second floor offices. On the underside of the sink in the north apparatus bay a manufacturer’s imprint, “Standard Sanitary Manufacturing Co., Louisville, KY Model ??430,” was found. The first two digits of the model number were unreadable, but research discovered that the sink must have been installed prior to 1948 when the name of the company was changed. The faucets on the first floor are marked with an Arrowhead symbol, which dates their installation as no later than the 1950’s.

1950’s Changes-The T-86 Round Honeywell thermostat on the first floor dates from the 1950’s, which indicates that there were modifications to the building at this time that included the installation of heating and cooling equipment.

1955 Inspection Report-This inspection report lists a leak in the flat roof at the northwest corner of the building.

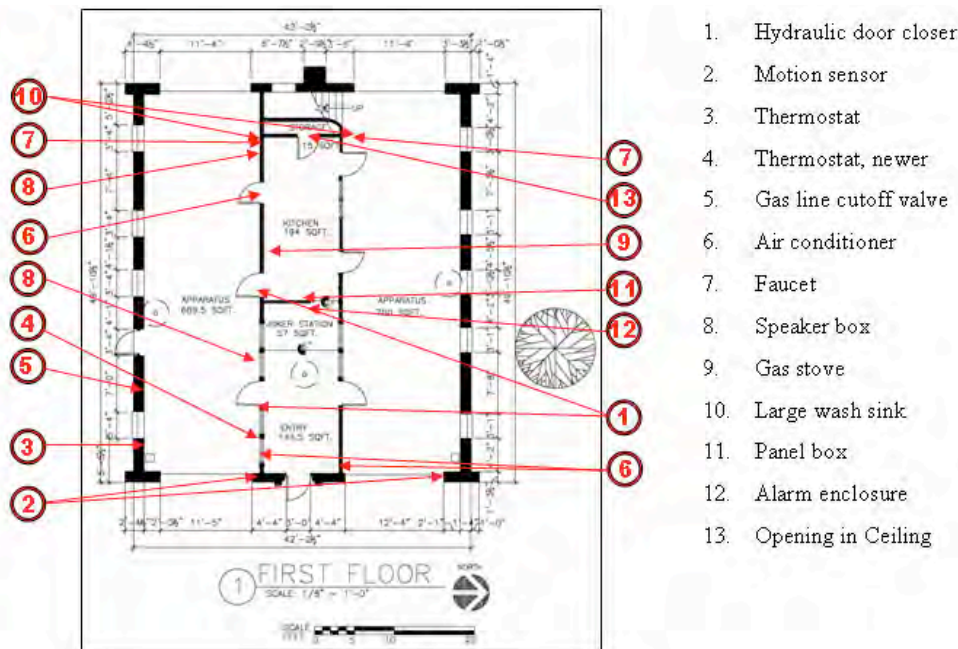


Figure 7: MEP Modifications on the First Floor

1969 Changes-Observed evidence in the form of impressions of past door hinges on the mirrored side of the jamb show that the existing door opening between the kitchen and the south apparatus bay is not the original configuration. In the central hall on the first floor, all past openings have been either painted and/or covered up with plywood. The second floor locker room shows evidence of similar hinges to those in the dormitory window screens, which seems to indicate that they are of the same time period. In addition, observed evidence points to the possibility of a missing window screen in the locker room. Modifications have been made at the top of the stairwell that seem to indicate a later enclosure as evidenced by a change of material and a newer door similar to those of the fire pole enclosures. The nature of the ceiling material changes midway up the second flight of stairs and a change in height and beveled ceiling form are further evidence. The fire pole enclosures are certainly a modification to the first build and were likely completed in the 1970's or 1980's in order to comply with newer life safety building codes.

The joker stand slab shows physical evidence of changes. A modified ramp slab entering into the kitchen is crudely dated 1969. The kitchen also has a dropped ceiling that is different from the rest of the first floor. The drop ceiling conceals the existing original tin ceiling and creates a space that was possibly used as a plenum. Paint analysis of the concealed tin ceiling in the kitchen might aid in identifying exactly when the change took place.

Inspection of the equipment in the upstairs bathroom shows that the Kohler toilets were installed at some point between 1970 and 1985. The Delta faucets were installed no earlier than 1953, but likely date from the 1960's.

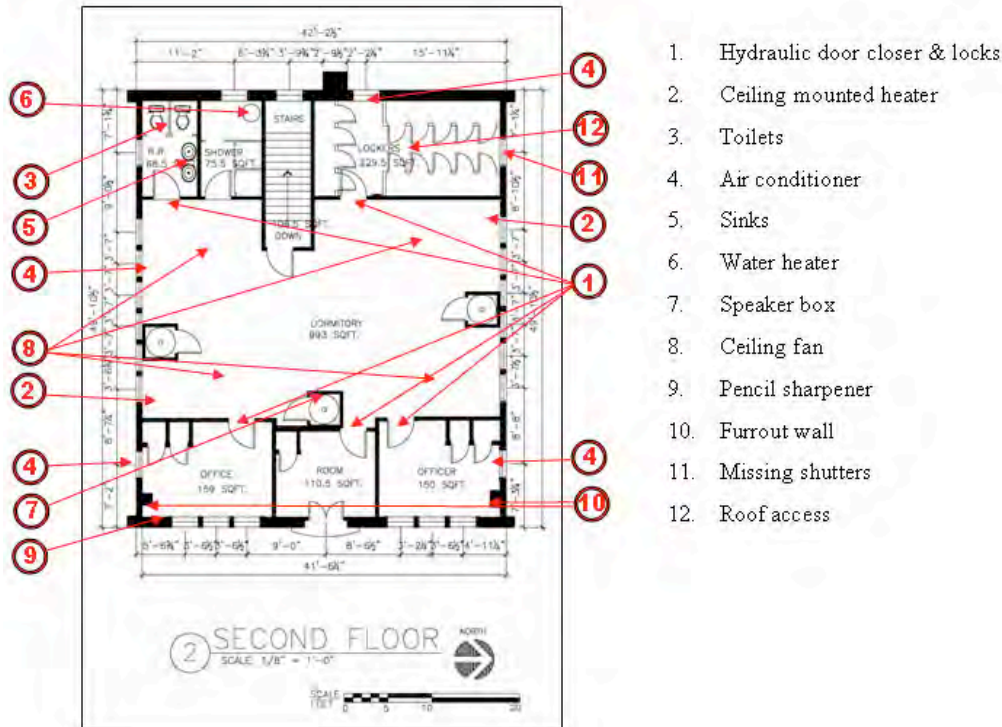
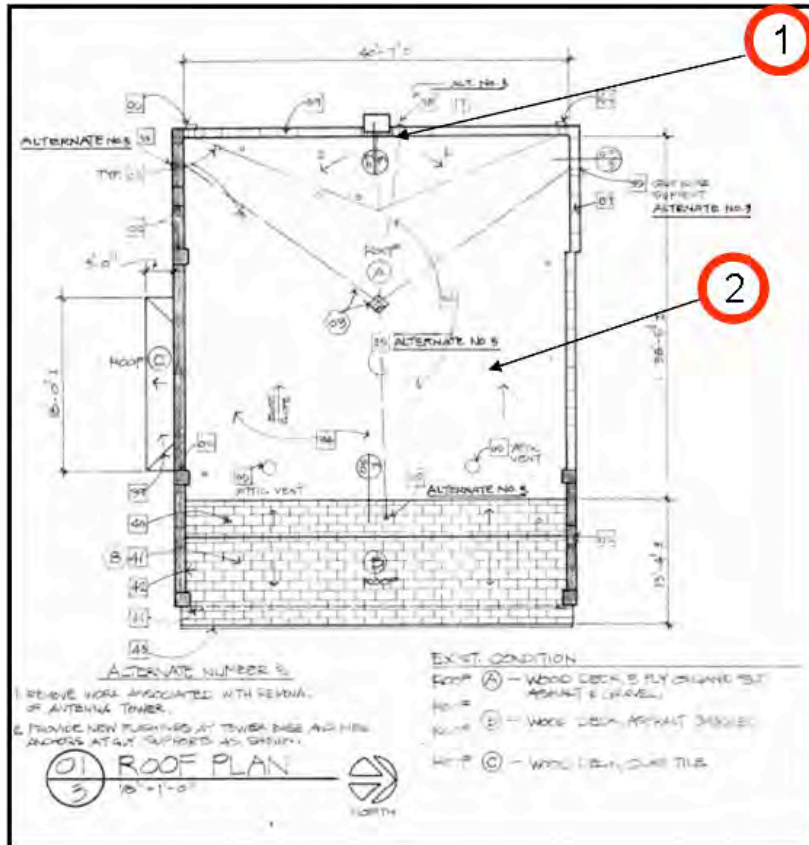


Figure 8: MEP Modifications on the Second Floor

1980's Changes-The hardware on the existing apparatus bay doors is marked by the Overhead Door Company, which was founded in 1981. These doors are outfitted with Omron motion sensors and a Powermaster door opener installed by John Green Corp. that likely date from the 1980's. Other modifications that were likely made in the 1980's include the A.O. Smith water heater on the second floor, Kwikset door locks on all of the upstairs doors, JW Davis speaker box from Dallas, and the Square D Co. fuse box on the first floor. The Vulcan gas stove found in the kitchen was first manufactured in 1983 and was installed somewhere near this time. Changes were made to the heating and cooling equipment during this time as evidenced by the MPLS thermostat and Friedrich A/C window unit that was installed between 1985 and 1987.



1989 Roof Plan

- (1) Removal of antenna tower, guys, supports, concrete base, etc.
- (2) Removal of existing composition roofing and deteriorated roofing components, replacement with new material

Figure 9: 1989 Roof Plan

1988 Recorded Existing Conditions-

- Roof A: Pent roof, Spanish clay tile roof
- Roof B: Front sloping roof, asphalt shingles
- Roof C: Flat roof, 4-ply Organic Felt, asphalt and gravel

In 1988 on Roof A, clay tiles that were broken or missing were replaced. A difference in color between the original and the replacement tiles confirms this change.

Roof B refers to the front sloping roof on the east façade that, in photographs from the 1930's, had Spanish clay tiles like Roof A on the south façade. Sometime between 1930 and

1988 asphalt shingles replaced the clay tiles on Roof B. In 1988 the existing asphalt shingles and underlayment were completely removed down to the wood decking. The wood deck was inspected for deterioration and repaired as necessary. A new asphalt shingle roofing system was installed which is the current shingle roof we see today.

Roof C refers to the main flat roof that covers the majority of the building. In 1988 the entire asphalt and gravel 3-ply built up roof was completely removed down to the existing wood deck. The deck was inspected for deterioration and repaired as necessary. A new cricket was installed on the west side, which is the lower portion of the roof. New 4-ply asphalt built-up roofing was installed which is believed to remain today. Access to the roof has not yet been possible so this remains an assumption.

Drawings indicate that new measures to preserve the building by directing water away from the building were recommended or undertaken, but evidence of these changes is not visible today. The drawings also suggest that new downspout boots were installed to achieve these ends. New flashing was installed to prevent future leaks. A new wooden cap and flashing was installed for the chimney, which was no longer in use. Deteriorated and loose mortar was also chipped and raked out at all joints of the cast stone parapet and clay tile copings. These joints were resealed to prevent water from penetrating.

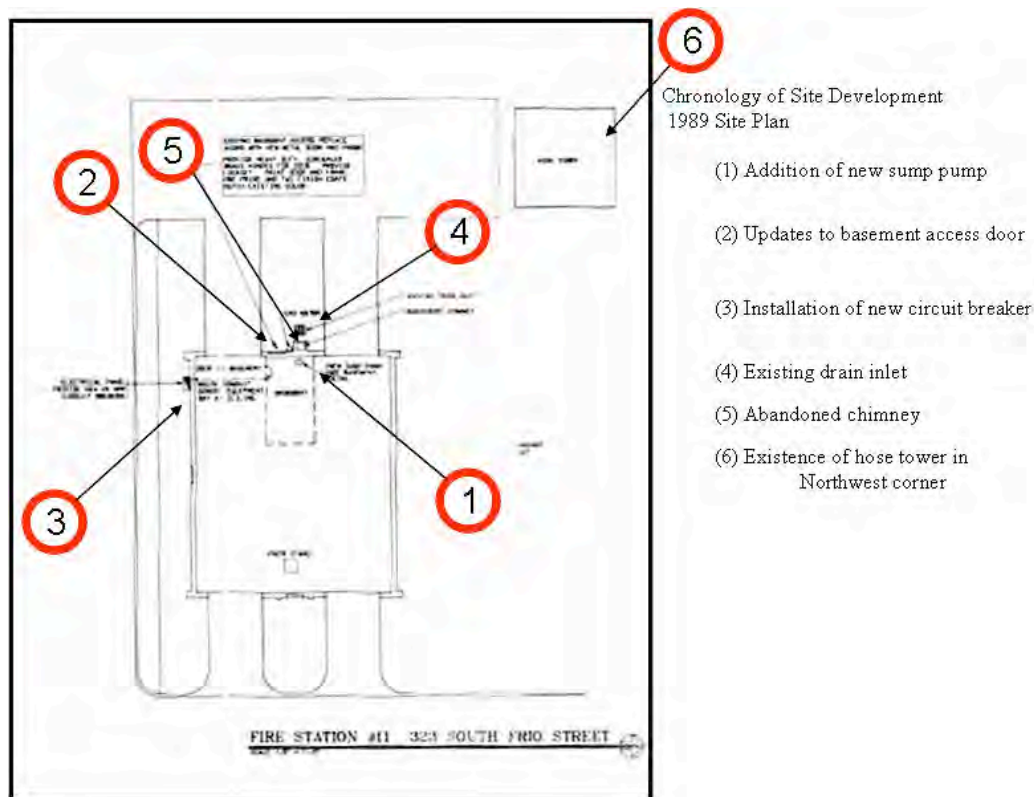


Figure 10: 1989 Site Plan

1989 Building Modifications-In 1989 the wooden door and hardware to the basement was replaced with a metal door and frame. The electrical panel on the north façade and new wiring

were also added. The hose tower was still present at the site in 1989 but there is no photographic evidence of the tower or indications of when it was constructed. A firefighter who previously worked at the station recalled that it was of metal frame construction and located behind the fire station in an area off the northwest corner.¹ The hose tower was generally used for hanging hoses to dry after use and for cleaning purposes. The tower may have been removed due to changes in practice and drying technology that rendered it obsolete. The 1989 modifications also included the addition of a new sump pump at the rear of the building. Roof plans from 1989 indicate that several changes were made at this time to remove an antenna tower and their guys, supports and concrete bases.

1990's Changes-Updates were made to the structure throughout the 1990's and several mechanical modifications were made. The Hoffman Engineering Co. alarm enclosures and the Anchor Scientific alarm wiring were installed during this time frame. The Whirlpool A/C window unit model 3ACQ294XAO dates from November 1993.

Notes

¹ From an interview with former San Antonio firefighter Hector Cardenas, 2/18/2008.

EVALUATION OF SIGNIFICANCE

“The process of evaluation occurs throughout the study of the historic structure as information is gathered, compared, and reviewed. Historical data and physical evidence are reviewed to help evaluate the historical, architectural, engineering, and cultural significance of the property, its construction and use, and occupants or other persons associated with its history and development. This evaluation includes determination of the period(s) of primary significance. An overview of the building's history and an assessment of its significance are included in the report.”¹

The first fire station located on the site was built in the 1890s during a time when San Antonio's Cattlemen's Square and lumberyards were established along the recently introduced national railroad system. The station played an important role in protecting the lives, homes, and business located in the surrounding neighborhood—including the brothels and saloons of San Antonio's nearby Red Light District. This structure also marked the period in which the San Antonio Fire Department transitioned from voluntary brigades to paid fire station companies. The current structure was completed in 1925 as part of an expansion resulting in the construction of five new fire station buildings.

The site's historical significance is also tied to several people that influenced San Antonio society. The Steves family, pioneers in the lumber industry in San Antonio, agreed to allow the land to be used by the city to build and maintain a Hose or Engine House to aid in combating fires in the area. Other influential persons related to this building are Adams & Adams, architects of San Antonio's Jefferson High School which is now listed on the National Register of Historic Places. Adams & Adams specialized in commercial architecture, but were also sought after to build residences for the elite of San Antonio.

Adams & Adams are also pivotal to the architectural significance of the structure. The structure's design embodies the Mission Revival style typical of regional municipal architecture of the time, particularly in the Southwest. The plan of the building is especially significant because it merges Adams & Adams's classical approach to design with the paramount functional concerns of the program. The bilateral symmetry and utilitarian plan embodied the key elements of the function of a 1925 fire station.

Many people might not identify Fire Station No. 11 at South Frio and Durango Streets by name, but they certainly recognize the structure. It is an important part of the physical and cultural landscape of San Antonio—a building in a sea of asphalt and concrete, a testament to a bygone era with a legacy of service to the community.

As a surviving piece of San Antonio's rich heritage, it is important to perpetuate its historical, architectural, and cultural significance as well as realize its potential financial and educational value to the nearby University of Texas at San Antonio.

Evaluation of Features

The historical, architectural and cultural value of Fire Station No. 11 and its site can be summarized under four distinct categories of significance:

- 1.) The role of the building and its site as a historical record of the San Antonio Fire Department and its fire fighting practices;
- 2.) The architectural design of the building as it exemplifies a local fire station type and 1920's regional municipal architecture in San Antonio and South Texas;
- 3.) The role of the building and its site as a historical record of a neighborhood that has been lost to demolition; and
- 4.) The role of the building as an active and positive presence in the neighborhood that serves the public good.

The building's value not only lies in its history and present state of good integrity, but also in its possibilities for contemporary use. Because Fire Station No. 11 can no longer house a fire station, reuse and new programming of the durable facility is desirable and potentially possible with help from the neighboring University of Texas at San Antonio.

Features of the building that contribute to building's significance can be evaluated as follows:

Features Related to Historical Significance

The corner of South Frio and Matamoros (now Durango Street) has been the site of a fire station since the late 1890s. Constructed in 1925, Fire Station No. 11 is significant as a historical record of fire fighting in San Antonio. For over 80 years, the men and women stationed at No. 11 served the needs of local citizens and businesses by fighting fires and providing emergency services in the surrounding neighborhoods. During this time, fire fighting equipment and practices changed and Fire Station No. 11 was physically adapted to challenges posed by those changes. Many features of the building date to the 1925 construction, but alterations have slowly been made throughout the years. The current condition is a mix of old and new features that represent changes in fire fighting practice over time in San Antonio. Thus, the building displays multiple layers of history.

Features of the building that relate to the historical significance of its use as a fire station can be grouped under two broad categories—plan and equipment. The plan of the building derives directly from its use as a fire station. The requirements of the activities that occurred within the building determined the plan of the structure. Therefore the plan has historical significance as it directly relates to the building's historical function as a fire station. For example, the need to respond quickly to emergency situations required that the bay areas be quickly accessible from all other areas of the building. The significance of the plan can be broken down as follows:

Floor plan: first floor

Two symmetrical apparatus bays flank a central core space. (Figure 11) Each bay was assigned a four-man company and its associated vehicle/equipment—usually a fire engine and a ladder truck. Bays were used to house and maintain fire station vehicles and equipment. Large doors at either end of bays allowed vehicles to enter and leave station quickly and efficiently.

The central core space includes the entry/joker stand area and kitchen/dining area. The joker stand area is separated from equipment bays by walls with operable double-hung windows that allowed for ventilation and visual inspection of equipment bays from the joker stand area. Efficient access to the apparatus bays was provided through two doors in the joker stand area. Fire poles provided fast access from the second floor.

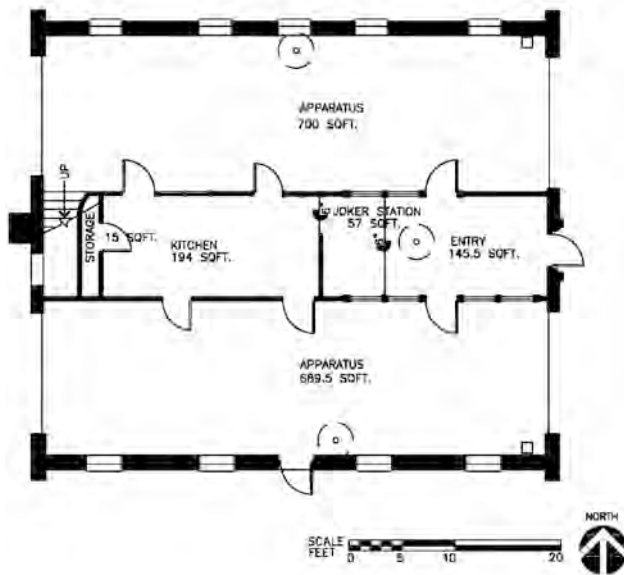


Figure 11: First floor plan, Fire Station No. 11.

The kitchen/dining area is currently separated from equipment areas by solid walls. Anecdotal evidence suggests that the area was previously separated from the equipment bays by screen panels that allowed for ventilation prior to the installation of air conditioning units. Two doors in the kitchen area provided efficient access to apparatus bays. This area was used for communal preparation of meals and dining.

Floor plan: second floor

The second floor contains large open dormitory space used by on-duty firefighters for sleeping and relaxing and three offices for ranking officers. (Figure 12)

The second floor plan reflects the hierarchy of fire station personnel, with separate spaces for ranking officers and communal living quarters for others. Three fire poles provide efficient access to equipment bays and central joker stand area. The presence of locker rooms, bathrooms and showers reflects the around-the-clock function of the fire station that required firefighters to stay overnight at the station.

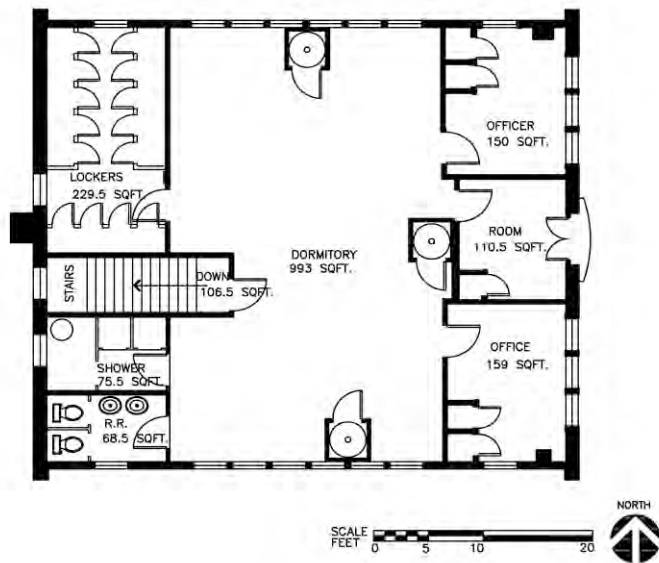


Figure 12: Second floor plan, Fire Station No. 11

Equipment: alarms



Figure 13: Alarm systems and joker stand area, Fire Station No. 11.



Figure 14: Joker stands at other San Antonio area fire stations.

The function of fire station required a variety of alarm systems and a communication hub, the joker stand. (Figures 13 & 14) Alarms were received in this area. Alarm bells activated from the joker stand alerted firefighters to a call. Loudspeakers, also activated from the joker stand, were located on the second floor and in each bay. A horn located on the exterior of the building at the rear bay doors warned passersby that vehicles would be leaving the building. The 1925 trip alarm has been removed, but may be part of the Fire Department museum collection.² Closer inspection of alarm bells and loudspeakers are needed to accurately date this equipment, but is likely that the bells date to the first build and the loudspeakers were later additions. These alarm features show the changes over time, in technology and in the workings of the fire station.

Equipment: maintenance & operational equipment

The building houses a variety of equipment required to maintain and operate the fire station including hose systems, sinks, and floor drains in each equipment bay that reflect the historical use of the bay areas as a location for washing fire fighting vehicles. A hose tower, now removed, was located outside the building on the northwestern portion of the site. The tower was used to hang wet fire hoses so they would dry properly. The tower was a purely functional metal-frame structure. Door operation equipment is visible in the apparatus bays. The type of door operation equipment used reflected the need to leave the building quickly when a call was received and yet keep the building secure. Cast iron corner guards located at ground level at the edges of the bay doors ensured that the building would not be damaged when the large and often unwieldy fire fighting vehicles left and entered the building.

Equipment: signage



Figure 15: Signage over the front entrance identifies this public building as Fire Station No. 11.



Figure 16: A temporary sign installed when the fire station was deactivated covered the upper door area for several years until removed in 2008. Current signage located on the bay doors indicates the historical use of the building as an active fire station.



Figure 17: A cornerstone located at the northeast corner of the building lists city officials at the time of construction as well as the names of the architects, Adams & Adams, and the builder, A. Vogel.

Equipment: daily living

A number of features reflect the building's historical function as living quarters for on-duty firefighters and provide a connection with the personal realities of fire fighting. Kitchen appliances and cabinetry reflect the need for on-duty firefighters to eat their meals at the fire station. Current appliances appear to date from the 1980s. An example of an earlier stove used at San Antonio fire stations is located at Fire Station No. 9.



Figure 18: Current cabinetry does not appear to be part of the first build, but further investigation is needed.

Visual inspection of the south wall between the kitchen and bay indicates that it has been reconfigured some time after the 1925 construction. (See Chronology of Development and Use for more information.) This wall may have been reconfigured to allow for installation of the cabinetry and counters and to make space for a larger stove. A small pantry area off the kitchen likely provided food storage space. This also may explain the break from the symmetrical placement of doors in this area. No historical photos of the interior of the building have been located at this time. The features and historical configuration of the space might be chronologically dated through paint analysis. Further investigation beyond the scope of this report would be necessary.

On the second floor ventilated locker doors were installed; an assumed necessity for firefighters doing strenuous work in damp conditions. Over the years, firefighters customized several lockers with simple storage shelves.

Features Related to Architectural Significance

Equally important is the building's architectural value. Fire Station No. 11 is architecturally significant as the embodiment of the distinguishing characteristics of the 1920s era fire station type in San Antonio, Texas. Adams & Adams, a well-known regional architectural firm, designed the station. The firm was responsible for a number of local institutional and governmental buildings including the Spanish Revival style Jefferson High School, now listed on the National Register of Historic Places. (See Historical Background for more information.) The

work of Adams & Adams was very much of its time and region—the firm designed in the Eclectic style popular after World War I in San Antonio and throughout the United States.



Figure 19: Fire Station No. 11 was constructed as part of a five-station building program; all five included the salient features of the Mission Revival/Spanish Colonial Revival style that was a popular choice for regional municipal buildings in 1920s Texas.

Fire Station No. 11 has been adapted over time, but in relatively minor ways. No major additions, demolitions or spatial alterations appear to have been made. Several features that are assumed to be part of the 1925 construction remain intact, such as the pressed tin ceiling. Historical photographs provide evidence of earlier details and features that have been removed or altered over time.

1920s Mission Revival Regional Architecture

Fire Station No. 11 displays a large number of features that identify the building as a Mission Revival and connect the building generally with other regional municipal architecture constructed during the 1920s in San Antonio and South Texas. More specifically, its features connect the building with four other San Antonio fire stations built in 1925—No. 7, No. 12, No. 17 and No. 18. (Figure 19) The current integrity of the building as an example of a 1920s Mission Revival style fire station is high. Nevertheless, some notable changes were made over time to accommodate changes in fire fighting practices and address safety concerns brought about by the changing character of the neighborhood. These changes have diminished the building's integrity as it relates to the significance stated above. These changes include the replacement of the 1925 wooden bi-fold bay doors by automated aluminum overhead garage doors and the replacement of 1925 wood and glass entry doors by metal security doors.



Figure 20: Fire Station No. 11 in 1925. Note red tile roof, bi-fold doors and roof drainage system. (ITC/San Antonio Light Collection)

The replacement of the 1925 red tile roof material with asphalt shingles, likely due to maintenance and budget reasons, also diminishes the historical integrity of the exterior as do changes in exterior lighting. The window screens that are currently installed on some windows do not appear in the 1925 historical photo but are evident in a 1944 photo. (Figure 15) Further investigation would be needed to determine if the metal windows installed on the north façade are part of the 1925 construction or were installed in a later renovation.

Existing features that contribute to the historical integrity of the building and classify it as a 1920s era Mission Revival fire station include the shaped parapets on the north and south façades; cast stone stringcourse; cast stone baroque detailing and contrasting stone quoining surrounding the front entry door; second floor balcony area with iron railing and double leaf doors; cast stone baroque brackets atop buttresses; dark beige exterior brick; cast stone vents (design reminiscent of mission church ornament); contrasting shaped cast stone trim around second floor windows on east and south façades; contrasting shaped stone lintels over windows; contrasting shaped stone lintels and decorative keystones above bay doors.

The interior features of the building are highly utilitarian. Generally, they do not relate to the Mission Revival style but rather convey historical construction practices and features common during the 1920s. The interior has had more modifications than the exterior. Changes over time made in response to the changing needs of firefighters illuminate the fire fighting history but have eroded the architectural integrity of the interior. Alterations appear to have been done in a cost conscious and utilitarian manner with limited concern for the preservation of earlier historic fabric. Changes in fire fighting technology and equipment required upgrades to electrical and plumbing systems. Changes in workplace safety policies required the enclosure of the fire pole area on the second floor. Further investigation is needed to date changes that have been made to the joker stand and kitchen areas on the first floor and the bathroom and shower areas on the second floor. At this time, no historical photos or architectural drawings have been located that provides evidence of the interior features as they existed in 1925. Paint analysis will be needed to date features such as interior trim and exploratory investigations would date second story flooring material.



Figure 21: The ceiling fan in the joker stand area appears to be consistent with a ceiling fan identified as part of the 1925 construction of Fire Station No. 9, one of the four sister stations to No. 11.³

Utilitarian features that contribute to the integrity of the building as an example of 1920s architecture include the large double-hung windows with transoms and associated operation hardware. Significant interior materials and features surviving from 1925 include tin ceilings, cast iron sinks, and possibly at least one ceiling fan. (Figures 21 - 23)



Figure 22: A pressed tin ceiling exists in the first floor apparatus bays, entry/joker stand and kitchen areas. This ceiling appears to be part of the first build because all subsequent alterations were modest, utilitarian improvements.



Figure 23: Cast iron sinks marked “Standard Sanitary Mfg. Co.” located in both apparatus bays are assumed to date from the first build, as well. (See Chronology of Development and Use for further information.)

Historical photos indicate that the front façade windows were part of the 1925 construction. (Figure 20) Windows of the same configuration located in other façades are also assumed to be part of the first build. Further investigation may reveal a connection between the doors, windows, and wood decorative trim and the Steves Sash and Door Company. Significant features of the windows include the wood trim and sill style; wood muntin configuration (upper sash divided into nine lights, lower into three vertical lights); and wooden mullions. Current window hardware may be of various vintages.

An earlier wood and glass entry door is visible in historical photos. (Figures 15 & 20) Design of this door is consistent with transom above and was likely part of the first build. Historical photos from 1925 through the 1950s show bi-fold wooden apparatus bay doors with double windows consisting of 4 lights each. (Figures 15, 20, 24) The size and configuration of the interior window and door trim, baseboards, and dado rails appear to be consistent with features common during the 1920s, but this has not been confirmed.

The red tile roofing material has been replaced at the west (front) façade, but the roof configuration appears to have remained as it was in 1925. (Figure 15) Significant features of the roof include the exposed rafters on front façade overhang (soffit) and the roof drainage system.



Figure 24: Fire Station No. 11 in the 1950s. Note signage, lighting and window screens. (SAFD)



Figure 25: Fire Station No. 11. Based on equipment depicted, probably not long after opening in 1925. Note wooden benches at entry. (SAFD)

The historical photos appear to confirm that the current roof drainage system was part of the first build. (Figures 15, 20, 24)

Exterior lighting installed in 1925 has been removed. Historical photos from 1925, 1944 and the 1950s show black lantern fixtures located on either side of the entrance door. Contemporary fixtures installed in the decorative keystone over the bay doors now provide exterior lighting. The penetrations made when the 1925 fixtures were installed are still visible in

the front façade. Disconnected electrical service equipment is visible on the rear façade. Further investigation is needed to determine the provenance of this equipment.

Features Related to Cultural Significance

Fire Station No. 11 exists today as a remnant of a lost neighborhood with a colorful past. In 1892, an agreement between prominent lumbermen Albert and Ernest Steves and the city of San Antonio called for an active fire station to be located at the corner of South Frio and Matamoros Streets on the southeastern edge of the Steves Lumber Yard (later the Steves Sash and Door Company). The lumberyard represented the western border of what would become San Antonio's most notorious Red Light District. In 1925, Fire Station No. 11 replaced the first wooden fire station and continued to serve the neighborhood and bear witness to its growth and decline. In the 1960s and 70s, highway construction and urban renewal efforts destroyed the historical buildings that once surrounded Fire Station No. 11. The physical features of the building can only hint at the historical neighborhood context. The relatively plain quality of the north façade indicates that neighboring structures previously obscured it from view and the siting of the structure suggests the fact that Matamoros (now Durango) was once a public street. Photographic evidence shows benches outside the fire station entrance—creating a spatial connection with the neighborhood and an indication that the corner was once a pleasant place to sit outside. (Figure 25) Beyond these few features, the role of Fire Station No. 11 and its site in the development and social history of the neighborhood must be conveyed through interpretation.

Conclusion:

Fire Station No. 11 and its site are significant as:

- a historical record of the San Antonio Fire Department and its fire fighting practices;
- an example of the fire station type, 1920's regional architecture in San Antonio and the work of architects Adams & Adams;
- a historical record of a neighborhood that has been lost to demolition; and
- an active and positive presence in the neighborhood that serves the needs of the larger community.

The features discussed contribute to the significance associated with Fire Station No. 11. A number of these features contribute to its value as an example of a 1925 fire station. Beneath its stylistic surface, the building is essentially a utilitarian structure with a layout that is highly specific to its programmatic use. Restoring, rehabilitating, or preserving these features would offer an educational opportunity to experience and understand the functionality of historical fire stations.

Restoring, rehabilitating, or preserving the Mission Revival and 1920s architectural features of the building would offer the opportunity to physically experience and understand the work of its architects, Adams & Adams, and more generally, 1920s regional architecture in San Antonio. In addition, restoring, rehabilitating or preserving the architectural form and features of

the building would provide the opportunity to experience and understand the character of a historical neighborhood lost to demolition.

Fire Station No. 11 is a structure of great durability. Built on a site where a fire station has stood for over 100 years, the building has weathered momentous change—major advancements in fire fighting technology and practices, shifting architectural tastes, and the profound effects of urban development. Over time, Fire Station No. 11 has adapted to such change with minimal loss of integrity. As a result, Fire Station No. 11 has the potential to offer a wide variety of educational and cultural experiences for UTSA students and the citizens of San Antonio.

As importantly, compatible reuse of the building would restore the site's active role in daily life of the surrounding neighborhood and preserve Fire Station No. 11's legacy of service to the citizens of San Antonio.

Notes

¹ Deborah Slaton, “The Preparation and Use of Historic Structure Reports.” *Preservation Brief 43*.
<http://www.nps.gov/history/hps/tps/briefs/brief43.htm>

² From an interview with former San Antonio firefighter Hector Cardenas, 2/18/2008.

³ Ibid.

HISTORICAL BACKGROUND AND CONTEXT

On May 23, 1892, brothers Albert and Ernest Steves entered into an agreement with the City of San Antonio that ensured a fire station would occupy the corner of South Frio and Matamoras Streets for as long as the city chose to maintain an active presence at the site. As a result, for more than one hundred years an active fire station protected the businesses and citizens of the surrounding neighborhood. At first, a wooden structure housed firefighters, steam-powered engines and the horses that pulled them. But when the city modernized in the early 1900s, automobile engines replaced horsepower and a new building was constructed to serve the area's firefighting needs.

On the corner of South Frio and Matamoras, brick replaced wood, and a new, modern fire station was constructed in 1925. The Mission Revival style fire station designed by architects Adams & Adams reflected the prevailing taste in regional municipal architecture of the time. The second Fire Station No. 11 has stood for 81 years, bearing witness to the changing cultural landscape that surrounded it. The rough and tumble district east of the International and Great Northern Railway with its lumber yards, warehouses, saloons and brothels disappeared, replaced by a landscape of unremarkable commercial buildings and the Downtown Campus of the University of Texas at San Antonio. Although the neighborhood has changed dramatically and the building is no longer an active fire station, Fire Station No. 11 remains an important and visible record of the rich history of the City of San Antonio and its people.

San Antonio's Fire Department Early Chronological History

1854

Ben Milam No. 1 established
First organized volunteer fire company in San Antonio
Bucket brigade

1866

First Reorganization
Ben Milam No. 1 and Alamo Fire Association No. 2 reorganize after Civil War

1865 to 1888

Fire Companies No. 3 and 4 established during Reconstruction Era
First African-American volunteer fire companies in San Antonio

1866

Second Reorganization
Lead by William A. Menger and Alamo Fire Association No. 2
First fire bell acquired

1868

First Steam Engine acquired, purchased by William A. Menger

1869

Turner Hook and Ladder Co. established
Formed from members of the San Antonio Turn Verein, a German athletic club
All members under the age of 25
2-wheeled ladder truck

1877

Third Reorganization
Response to arrival of railroad, construction of large buildings and installation of new water system

1881

Horse-drawn equipment introduced
First steam engines

1883 to 1891

Additional volunteer companies established
1883: Second Ward Hose Company (San Pedro and Main)
1885: Sunset Hose Company No. 1 (Grand Ave. near Avenue D)
1885: Mission Hose Company No. 4 (604 South Alamo)

1891

Volunteers disbanded
San Antonio Fire Department established on February 26, 1891

1905 to 1931

Department expands to 13 stations
Introduction of automotive equipment

San Antonio's first volunteer fire company, Ben Milam No. 1, was organized on June 6, 1854 as a simple bucket brigade. By 1856, the company had acquired a hand-drawn, two-wheeled ladder truck that could carry several ladders and a large number of leather buckets. Lacking a permanent fire house, the new equipment was stored in a one-story adobe shed that was once a part of the old Spanish Presidio located on Military Plaza. On February 8, 1858, the company claimed 82 members and was chartered by the State of Texas as "The Fire Company of the City of San Antonio." Ben Milam No. 1 continued to operate under the name Fire Company No. 1 until 1891 when the volunteer departments were disbanded and a professional fire department was established in San Antonio.¹

A number of major fires occurred in San Antonio in the late 1800s that stretched the capabilities of the volunteer forces to their maximum. During the "Alamo Fire" in 1874, flames engulfed the Honore Grenet Store & Warehouse adjacent to the Alamo on Alamo Plaza. Winds blew sparks across the plaza, igniting the Maverick homestead as well. Despite the limited resources of the volunteer firefighters, both structures were saved. In the 1890s, the Hugo Schmeltzer Co. was set ablaze when a candle used by two employees to light their way in a dark cellar came into contact with a leaking alcohol barrel, resulting in a terrific explosion that killed

two employees and severely wounded a third. One of the more sensational fires of the time took place at a brothel in the city's red light district. A history of the San Antonio Fire Department describes the fire as such:

Probably the most talked about fire in old San Antonio was a spectacular night "illumination" in the early 1890s. It was in the tierra incognita, along the purling waters of the silvery San Pedro. It was a home of ladies of pleasure and several well-known citizens escaped the flames with barely any of their clothing. For several months not a man in San Antonio would buy a suit of clothes, fearful that he may be greeted with "Hello, were you in the fire too?" In the first decade of the 1900s this was still a classic and frequently the owner of a new suit would be greeted with "Hello! Where was the fire?"²

By the 1890's, urban growth spurred by the arrival of the railroad in 1877 had outstripped the volunteer force's ability to adequately protect San Antonio's buildings and residents. In 1891, Mayor Bryan Callaghan called for the establishment of a paid, professional fire department. Alderman A.J. Lockwood summed up the argument for a paid force when he argued that modern times demanded a modern approach to firefighting—one that took full advantage of new technologies and relied on professional firefighters to protect San Antonio's growing population. On February 26, 1891, the City Council of San Antonio approved the ordinance establishing a paid department. L.P. Peck was appointed chief of the new department, its six fire houses and 45 paid firefighters.³

The end of the volunteer period of the San Antonio fire department marked a critical point in the history of firefighting in San Antonio. The transition was not necessarily a smooth one. San Antonio's leading Anglo and German businessmen—men who had little interest in joining the paid rank and file—had dominated the volunteer fire companies. For these men, membership in the volunteer companies was a highly visible symbol of civic and ethnic pride—a position they appeared less than eager to relinquish, especially to groups seen at the time as inferior. Except for a brief time during the Civil War and Reconstruction periods when two African American companies were established, minorities had essentially been excluded from the firefighting ranks in San Antonio.⁴

The old volunteer groups had been organized largely along ethnic lines with the majority of firefighters claiming German or Dutch heritage. The new professional firefighters were a diverse mix of ethnic Mexicans, Irish, Germans and Dutch. By professionalizing the fire department and opening up its ranks to minorities, Mayor Callaghan and the City Council provided an important means by which minority men could raise their socio-economic status—an opportunity many Mexican-Americans took. In short time, Mexican-Americans filled many of the new paid posts and a few had risen to ranking officer positions with non-Hispanic firefighters serving under them. By 1925, Payroll records indicate that half of the firefighters employed at Fire Station No. 11 on the city's largely Hispanic West side were Hispanic, including the senior chief, F. T. Leal. Although Hispanics represented a large portion of San Antonio's fire department after 1891, it would be 83 years before the city appointed its first Hispanic Fire Chief, Isidoro Martinez, in 1974. It would be another five years before San Antonio hired its first female firefighter.⁵

The glamour of the original voluntary firefighter brigades was perhaps lost after 1891, but the hard work of fighting fires in San Antonio remained. The city continued to expand rapidly. The International & Great Northern railroad (I. & G.N.) was established on the West side in 1881 and by 1900 five additional railroad lines were completed. In 1920, San Antonio was the largest city in Texas with a population over 160,000. With no natural impediments to restrict growth, San Antonio's urban development quickly sprawled outward into the surrounding ranch lands, stretching the fire department's capabilities. Between 1905 and 1939, the department would expand from the original six stations to eighteen.⁶

It was during this time of rapid expansion and modernization that the automotive fire engine fully replaced the horse-drawn steam engine. The last remaining fire horses were released from duty in April of 1927. The switch to gas power engines likely encouraged the construction of new fire stations designed to house and service the new modern equipment. Several new stations were constructed in the early 1900s, including five built in 1925—No. 7, No. 11, No. 12, No. 17, and No. 18. The first three replaced earlier stations located at the same site. No. 7 replaced the 1901 fire station built to replace the unique Mission Hose Company No. 4 building; an earlier fire station of unknown design was replaced by the Mission Revival style No. 12 at 1102 South Flores; and the new No. 11 replaced a wooden fire station constructed between 1892 and 1896 at the corner of South Frio and Matamoras Streets.⁷

The first fire station built at South Frio and Matamoras Streets was constructed to fulfill the agreement reached between the City of San Antonio and the Steves brothers, Albert and Ernest. In May of 1892, Albert and Ernest Steves agreed to convey a portion of their land at South Frio and Matamoras Street to the city for the purpose of constructing an engine or hose house. The land adjoined the Steves family lumber business near the I. & G. N. railway. The agreement called for the city to "erect and maintain on the property herein conveyed an engine or hose house fully equipped with necessary apparatus for fire protection." By all accounts it was a win-win situation. The benefits of having a fire station in close proximity to a highly flammable business enterprise seemed obvious and the city was undoubtedly happy to gain access to prime real estate at the bargain basement price of ten dollars. Nevertheless, the agreement did carry restrictions. A deadline of the end of August 1892 was given for the completion of construction and a reversion clause included. If the city failed to build or maintain an engine or hose house on the property, the agreement would be nullified and the land returned to the Steves family. The exact completion date of the first fire station is not known, but by 1896 a structure appears on local Sanborn maps of the area surrounding the Steves's I. & G.N. lumberyard.⁸



Figure 26: The first fire station to occupy the corner of Matamoras and South Frio Streets was a wooden structure completed sometime between 1892 and 1896.

The lumberyard located along South Frio Street near I. & G.N railroad was part of a business founded by Albert and Ernest's father, Edward Steves. Born in Germany in 1829, Edward immigrated to Texas in 1848 with his father and siblings. In 1866, he and his wife Johanna moved to San Antonio and he began selling local lumber from his property at Blum and Bonham Streets. Johanna and Edward Steves had three sons, Edward Jr., Albert, and Ernest. In 1866, Edward bought out the stock of lumber held by E. V. Hartz and opened Edwards Steves Lumber Yard, at the site of the old San Antonio Opera House on Alamo Plaza. When the Galveston, Harrisburg and San Antonio Railway (also known as the Sunset Lines and later as the Southern Pacific Railroad) arrived in 1877, Steves moved the lumberyard to Lamar Street near the new railroad. The Steves lumber business enjoyed great success and Edward soon brought his three sons into the business, changing the name to Ed Steves and Sons in 1879. In 1881, the yard was moved near the I. & G.N. railway line. Edward retired in 1882, selling the business to his three sons. In 1883, they opened a branch yard on East Commerce Street adjacent to the Sunset Lines.⁹

Albert and Ernest became sole proprietors of the business in 1884 when Edward Jr. chose to leave the company. Albert opened a millwork factory at the Sunset lumberyard in 1904. The millwork operation was highly successful and became an independent venture in 1912—the Steves Sash & Door Company. It is interesting to note that a fire station, Engine Company No. 3, was located at the northeast corner of the Sunset lumberyard in the same manner as at the I. G. & N. lumberyard. Bexar County deed records do not indicate that the same type of arrangement was made between the city and the Steves, but the similarity of the two sites is striking.

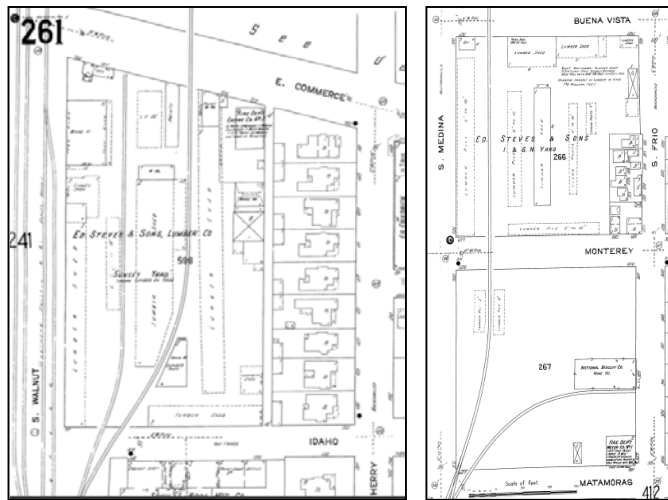


Figure 27: Ed Steves & Sons Co. Sunset yard (left) and I. & G. N. yard (right) circa 1912. Fire Station No. 3 is located in the northeast corner of the Sunset yard. Fire Station No. 1 (later renamed No. 11) appears in the southeast corner of the Steves property that included the I. & G. N yard.

Nonetheless, the proximity of the Engine Company No. 3 to the Sunset Yard did not appear to insulate the Steves businesses from loss by fire. A devastating fire destroyed the millwork building on the night of February 15, 1913. A new concrete building was erected and began operations on October 5, 1913. At some point, probably around 1922, the millwork operations were consolidated at the I. G. & N. lumberyard, where it continued to operate as the Steves Sash and Door Company until the late 1960s.¹⁰

The Steves’s I. G. & N. lumberyard was located at the edge of a bustling commercial area that sprang up near the rail lines in the 1880s. The activities that occurred there were varied. Most relied on the transportation provided by the railroad—cattle shipping, warehousing, lumber. Others catered to the transient nature of the neighborhood—saloons, boarding houses and brothels dominated the five blocks along Matamoras Street between South Frio Street and Santa Rosa Street and much of the nearby blocks along Concho and Santa Rosa Streets.

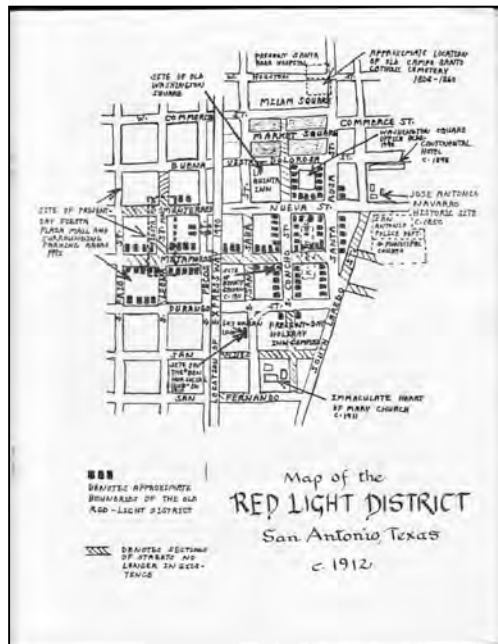


Figure 28: Map of San Antonio’s Red Light District circa 1912. (From David Bowser’s *San Antonio’s Old Red-Light District*)

Around 1890, Mayor Bryan Callaghan, legalized prostitution in a limited area east of the I. & G. N. railway and the Steves's lumberyard. The fire station adjacent to the lumberyard provided firefighting services for all the businesses and homes in the immediate area, regardless of moral status. The fire station served more than just the nearby red light district. West of the railroad tracks were working class neighborhoods, home to a large portion of San Antonio's Hispanic population.¹¹

But prostitution was clearly a way of life for many of the fire station's closest neighbors. A 1912 "Blue Book" guide to the area listed over 106 prostitution establishments. Some women were employed by madams in large "parlor houses" that offered other entertainments as well as sex for a fee. Others conducted business in "cribs," one or two-room rental shacks where the prostitutes lived and worked.¹²

In the 1920s and 30s Prohibition and changes in Federal tax laws discouraged red light businesses and activity in the district steadily declined. In 1941, under pressure from Fort Sam Houston Commander General Dwight D. Eisenhower, Mayor C.K. Quin officially closed the red light district and prostitution was made illegal in San Antonio. The neighborhood, already in decline, slipped further into disrepair and neglect.¹³

The neighborhood's sordid past and general disrepair made it a prime candidate for demolition as part of the urban renewal programs of the 1950s and 60s. Interstate I-35 sliced through the area, symbolically cutting off the I. & G. N. railway and San Antonio's western neighborhoods from the larger downtown area and the majority of the older commercial buildings and residences were raised. Few structures remain from the neighborhood's heyday between 1890 and 1920. Many have been replaced by non-descript commercial and governmental structures. The Steves Sash and Door Company moved its operations elsewhere and part of the Downtown Campus of the University of Texas at San Antonio now occupies the I. & G. N. lumberyard site. The adjacent Fire Station No. 11 is one of the rare structures that persist as a reminder of the neighborhood's early history.

The existing Fire Station No. 11 was constructed in 1925 on the site of the earlier wooden fire station built to fulfill the agreement between Albert and Ernest Steves and the City of San Antonio. Adams & Adams, a leading commercial architecture firm working in San Antonio during the first half of the twentieth century, designed the station. Carleton W. Adams was the son of Jay E. Adams, a prominent real estate developer in San Antonio. The elder Adams was instrumental in the development of the northern suburban areas of San Antonio during the 1890s and early 1900s. After graduating high school in San Antonio, Carleton studied architecture at Columbia University. In 1909, he returned to San Antonio and founded Adams & Adams with his uncle Carl C. Adams. Carleton was the principal of the firm for most of its existence.¹⁴ Although Adams & Adams was primarily a commercial architecture firm, they were also sought after to design residences for San Antonio's elite residents. The firm designed several homes now included in the Monte Vista Historical District. Due to Carleton's political savvy and personal connections, the firm was able to obtain several important commercial commissions in San Antonio and South Texas.¹⁵

Adams & Adams Commissions (partial list)

1912

Santa Gertrudis Ranch House (King Ranch House)
Kingsville, Texas
Mediterranean style

1919

San Antonio Drug Co.
(now Homewood Suites Riverwalk Hotel)
San Antonio, Texas
Beaux-Arts Style

1925

Great American Life Insurance Building
San Antonio, Texas
Beaux-Arts Style

Sames-Moore Building
(now Rialto Hotel)
Laredo, Texas
Beaux-Arts Style

West Texas Utilities Building
San Angelo, Texas
Beaux-Arts Style
Plaza Hotel
Corpus Christi, Texas
Beaux-Arts Style

Nixon Office Building
(first skyscraper in Corpus Christi)
Corpus Christi, Texas
Beaux-Arts Style

1930-1932

Jefferson High School
San Antonio, Texas
Spanish Colonial Revival

1931

Cenotaph to the Heroes of the Alamo
Sculpture
San Antonio, Texas



Figure 29: Jefferson High School.



Figure 30: Nixon Office Building.

1936

Texas Centennial Exposition
Hall of State Building
(collaboration with several other firms)
Dallas, Texas
Moderne

1950

Student Union Building
Texas A&M
College Station, Texas
Modern

1962

Texas State Archives
Austin, Texas
Modern

Adams & Adams worked in the Beaux-Arts tradition popular in the United States during the 1920s. Taken as a whole, the firm's buildings constitute an eclectic mix of styles, but many Adams & Adams buildings reflected a regional preference for the Spanish Colonial Revival or Mission Revival. Jefferson High School in San Antonio is perhaps their best-known building. The school is considered an exemplary example of Spanish Colonial Revival architecture and is listed on the National Register of Historic Places. Adams & Adams's design for Fire Station No. 11 exhibited several of archetypal features of Spanish Colonial Revival and Mission Revival architecture including a high level of symmetry, a strong central axis, shaped parapets, ornate detailing that emphasized the entrance and fenestration, and red terracotta roofing. Constructed as part of a \$100,000 five-station building program completed in 1925, Fire Station No. 11 shared these qualities with other regional municipal buildings constructed throughout Texas during the 1920s.

During the early twentieth century, rising urban populations in Texas demanded increased public services. Changes to the state constitution enacted in 1912 established municipal home rule, granting Texas cities with populations over 5,000 broader powers, including the right to annex lands adjacent to the city limits and to tax property at a higher rate than previously allowed. Across the state, new city halls and fire stations were built, responding to the public needs of growing populations and symbolizing the increased wealth and strength of municipal governments in Texas. San Antonio adopted a home rule charter in 1914 and throughout the 1920s several new municipal buildings were constructed, including the City of San Antonio Municipal Auditorium (1926) and eleven new fire stations.

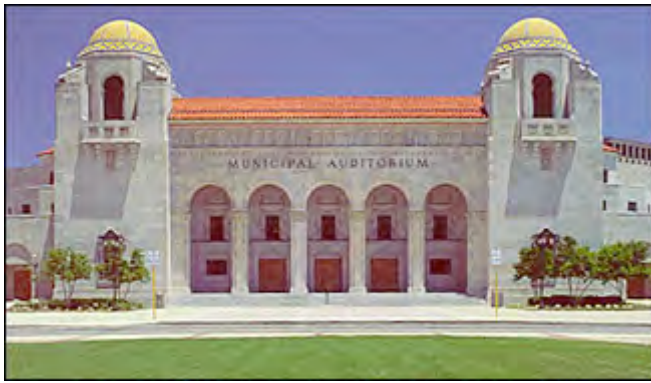


Figure 31: The San Antonio Municipal Auditorium, in San Antonio, Texas (1926) showed the strong influence of Spanish/Moorish architecture. (San Antonio Convention and Visitors Bureau.)

In 1927, City Hall underwent extensive renovations, led by the architectural firm of Adams & Adams.¹⁶



Figure 32: San Antonio City Hall, San Antonio, Texas. The before, left, and after, right, photos of the remodeling conducted in 1927. Tower and turret tops removed, fourth story with red tile roof added and major entrances extensively remodeled. (Historic American Building Survey)

Like many of the municipal buildings constructed in Texas during the 1910s and 20s, these buildings referenced the colonial history of the region through the use of details taken from historic Spanish architecture. The popularity of Spanish inflected architecture in South Texas and San Antonio reflected a growing interest in regionalism following World War I.¹⁷ The Panama-Pacific International Exposition in San Francisco and Panama California Exposition in San Diego, both held in the summer of 1915, promoted Spanish Colonial Revival and Mission Revival architecture throughout the United States, but these styles became especially fashionable in states with Spanish Colonial pasts, such as Florida, New Mexico and Texas.



Figure 33: The Mission Revival California State Building at the Panama Pacific International Exposition in San Francisco, California 1915. (<http://www.exploratorium.edu>).



Figures 34 & 35: (Top) Brady City Hall (ca. 1920) in Brady, Texas combined city offices and the fire station. (Willard Robinson) (Bottom) Denton City Hall (ca. 1930), Denton, Texas. Note Spanish Colonial design features utilized at fenestration, entrance, parapet and towers. (Barker Texas History Center, University Texas at Austin)

Regional municipal architecture in Texas drew freely from various sources, including the missions of California and Texas as well as Spanish Baroque architecture. Flat, typically brick surfaces contrasted with ornate cast stone decorative elements concentrated around doorways and windows in the churrigueresque manner seen at the Mission San José y San Miguel de Aguayo in San Antonio.



Figure 36: Entrance, Mission San Jose, San Antonio, Texas (1768). (Historic American Buildings Survey – 1983 photo)



Figure 37: Side entrance, Sweetwater Municipal Building (1926), Sweetwater, Texas. (Willard Robinson)

Wrought iron railings were common as were red tile roofs. Shaped parapets—an element inspired by California’s Spanish Missions—were popular features of smaller buildings including those that housed both city offices and a fire station.¹⁸



Figure 38: San Angelo City Hall and Fire Station (1912). (Fort Concho Museum)

San Antonio's Fire Station No. 11 exhibited all of these features, making it an excellent example of the 1920s era regional municipal architecture in South Texas.

Fire Station No. 11 embodies the history of South Texas on a number of scales—the region, the city, the neighborhood and the site. The station is a fine example of 1920s regional municipal architecture and the work of regional architects Adams & Adams. Fire Station No. 11 and the firefighters who worked there played an important role in the history of the city of San Antonio and its storied fire department. It is a remnant of a once bawdy neighborhood now dramatically transformed. And finally the site itself, a site where an active fire station proudly operated for over 100 years, exists as a reminder of the lumberyard that anchored the area for over 60 years and the civic generosity of the Steves family. Together these qualities mark Fire Station No. 11 as a historically exceptional feature of San Antonio's physical and cultural landscape.

Notes

¹ Hector J. Cardenas, *San Antonio Fire Department History, 1891-2000* (Paducah, Kentucky: Turner Pub. Co., 2000), 23.

² Cardenas, 33.

³ Cardenas, 34.

⁴ Shirley Lerner. "San Antonio Fire Department History 1848-1900," 1986. Posted on the City of San Antonio Fire Department website. http://www.sanantonio.gov/safd/History/History_1848_1900.asp (accessed March 19, 2008) Lerner's article states that only two Hispanic surnames were listed within volunteer ranks of the fire companies. An 1888 report by Chief Gustav Duerler quoted in Cardenas indicates that those ranks totaled 185 men.

⁵ Cardenas, 35-6. Lerner states that G. Luna was a Lieutenant at Hose Company No. 9 in 1907 and D. N. Diaz was Captain of Engine Co. No. 11 in 1917. City of San Antonio Fire Department payroll ledger dated January 31, 1925.

⁶ *Handbook of Texas Online*, s.v. "San Antonio," <http://www.tshaonline.org/handbook/online/articles/SS/hds2.html> (accessed March 19, 2008). Cardenas, 37.

⁷ Cardenas, 38. "\$100,000 in Fine New Firehouses Help Make Life Safe in San Antonio." *San Antonio Light*, June 7, 1925. Gloria Lamoureux, "San Antonio, Texas Historic Fire Stations." Prepared for the Department of Planning, Historic Preservation and Design Division. June 2003, 7-8.

⁸ Bexar County 1837-1963 Historical Deed Records. Book 113: 26, 6/30/1892. <http://www.countyclerk.bexar.landata.com/>. Sanborn Map Company online database. Digital Sanborn Maps of San Antonio, 1896: sheet 5.

⁹ Frederick C. Chabot, *With the Makers of San Antonio* (San Antonio, Texas, A G, 1937), 400-2. Cecilia Steinfeldt, *San Antonio Was: Seen Through a Magic Lantern, Views from the Slide Collection of Albert Steves, Sr.* (San Antonio, Texas: San Antonio Museum Association, 1978), 88-9.

¹⁰ Chabot, 402. Digital Sanborn Maps of San Antonio, 1904: sheet 129; 1911-1924: sheet 261.

¹¹ David Bowser, *San Antonio's Old Red-Light District: A History 1890-1941*. (San Antonio, Texas: self-published, 1992), 2.

¹² Bowser, 2-6.

¹³ *Ibid.*, 11.

¹⁴ *Handbook of Texas Online*, s.v. "Carleton Adams," <http://www.tshaonline.org/handbook/online/articles/AA/fad25.html> (accessed March 19, 2008); Christopher Long, "Adams and Adams," *Texas Architect*, November-December 1989, 42.

¹⁵ Long, 42. Monte Vista Historical Association Home Database. "Architects: Adams & Adams" <http://www.montevista-sa.org/district/viewArchitect.php?architectId=2462>

¹⁶ *Handbook of Texas Online*, s.v. "Home Rule Charters" <http://www.tshaonline.org/handbook/online/articles/HH/mvhek.html> (accessed March 21, 2008); Chris Carson and William B. McDonald, eds., *A Guide to San Antonio Architecture*, (San Antonio Chapter, American Institute of Architects, 1986).

¹⁷ Willard B. Robinson, *The People's Architecture: Texas Courthouses, Jails and Municipal Buildings* (Austin, Texas: Texas State Historical Association, 1983), 251, 253.

¹⁸ *Ibid.*, 253, 256.

BUILDING DESCRIPTION

Summary

Fire Station No. 11 is a rectilinear, two-story brick Mission Revival building. The two-garage-door fire station is ringed by a concrete sidewalk and rear parking lot. The main entrance of the fire station is located on the east façade and a side door is located on the south façade. Entrance to the basement is located on the west façade. The building plan is divided into three bays on the first floor. The north and south bays are nearly identical and previously housed fire fighting vehicles. The central bay includes a joker stand, kitchen, and stairs. Windows and doors connect the central bay to the apparatus bays. The central bay provides access to the second floor via a staircase at its western end.

The sleeping quarters are located on the second floor. This area includes the restrooms, showers, and lockers. The dormitory is the largest room in the fire station and forms the central bay of the second floor. This room has three enclosed fire pole stations. Offices with storage areas are also located on the second floor.

Exterior

The construction materials for the exterior of the building include: brick, clay tile, cast stone, cement, glass, wood trim, wood frame windows, metal framed windows, and an iron balcony. The cast stone ornamentation is consistent with the Mission Revival style and consists of an ornate pilaster with organic and urn-shaped relief. The stone roundels along the north and south façades, along with the rounded parapets are also consistent with the Mission Revival style. The carved doorway and balcony and the scroll decoration on the buttresses also contribute to the uniform decorative language of the building.

The roof is divided into three parts. The largest portion of the roof is flat. Available drawings indicate a wooden deck substrate with 3-ply organic felt covered with asphalt and gravel. The second section of the roof is visible from the street level at the front façade. This section is composed of a wood deck substrate with asphalt shingles. The third section is the pent roof at the south façade, composed of a wooden deck with red clay tile roofing.

Interior

The interior construction materials include: plaster, wood, wood frame windows, concrete, and tin ceiling panels. Both floors have high ceilings. An abundant amount of natural light was intended to enter through the numerous windows of the building. The first floor plan includes the joker stand, two apparatus bays, kitchen, and dining area. The second floor plan includes the dormitory, locker room, shower room, toilet room, offices and closets.

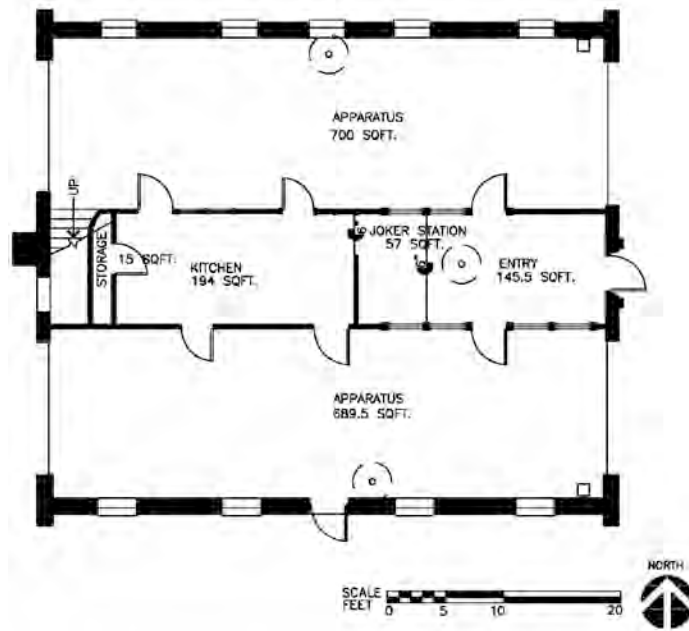


Figure 39: First Floor Plan

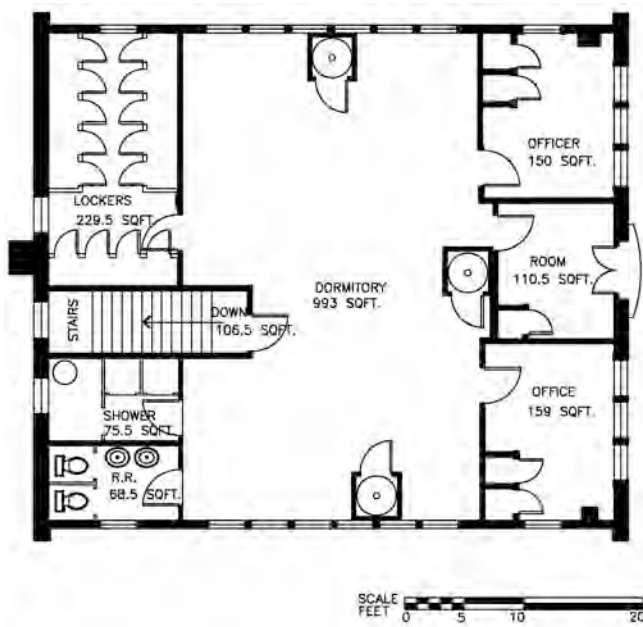


Figure 40: Second Floor Plan

Exterior Elevations

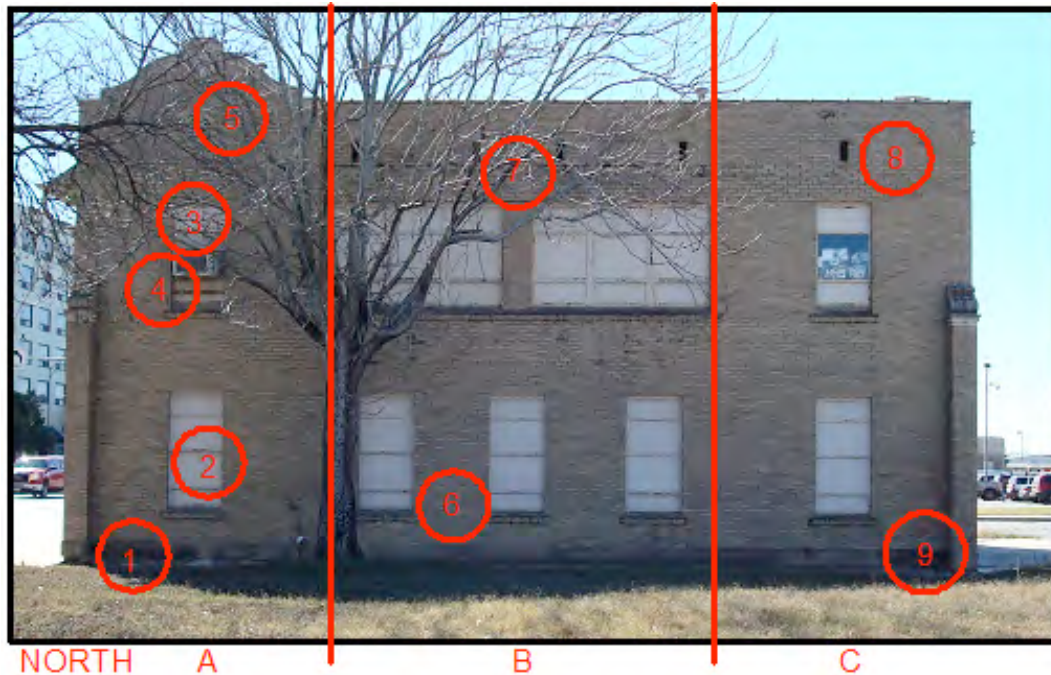


Figure 41: North Façade

North Elevation (Figure 41)

- The north façade is slightly asymmetrical and divided into three sections: a decorative section similar to the south façade (A), a central section (B), and a simple side section (C).

Summary

- The entire façade consists of dark beige brick.
- The north façade materials are brick, wood, glass, metal and concrete.
- All window glass is painted with a beige colored paint, with the exception of one pane.
- The beige metal window frame is peeling and deteriorating.
- This façade differs from the south façade in that it has no pent roof.
- One decorative cast stone vent. Others are rectilinear metal vents recessed within the brick façade.
- An obstructive tree is altering the appearance of the façade and the adjacent landscape.

- There are 13 single-hung metal-framed windows.
- Only the eastern section of the façade has a rounded parapet.

Side Section (A) Notes

1. Brick buttresses with decorative cast stone scrolls are found at both corners of the north façade. Organic growth is present on bricks adjacent to both buttresses. The sidewalk has settled significantly at the northeast corner.
2. The windows on the first level are all awning metal frame windows with four lights.
3. The second level windows are all awning metal frame windows with three lights.
4. This window has an air-conditioning unit that has altered the appearance of the window with wooden planks as reinforcements.
5. This section is the only one with a rounded decorative parapet. This is the section with a cast stone vent.

Central Section (B) Notes

6. The windows on the northern façade have a concrete wash over the window sills.
7. There is a tree adjacent to the north façade that abuts the concrete sidewalk.

Side Section (C) Notes

8. The vents in both the central and side sections (C) are small, rectilinear, metal vents.
9. The buttresses have a concrete base. The underlying red brick footing is exposed. The sidewalk has settled at the northwest corner, although not as much as at the northeast corner.



Figure 42: South Facade

South Elevation (Figure 42)

- The South façade is symmetrical and divided into three sections, a central entry section (B) and two side sections (A & C).

Summary

- The entire façade consists of dark beige brick.
- The south façade materials are brick, stone, wood, glass and red roofing tile.
- All window glass is painted with a light grey paint.
- The first floor door and window trim is painted mint green.
- The wood window trim is cracked and the paint is peeling off.
- Electrical boxes are located on the western section of the façade.
- Electrical wiring runs underneath the second floor windows from the back of the building toward the front.

- Three A/C units are located in second story windows.
- There are 8 windows on the second floor and 4 windows plus a door on the first floor.

Side Section (A & C) Notes

1. Mission Revival style stone parapet
2. Circular cast stone vent with ornamental stone screen.
3. Single-hung wood window framed by round-edged stone detailing. Stone window sill.
4. The central piece of the Mission Revival style parapet wall is made of stone and has decorative carving at its center.
5. First floor windows are of equal size and shape. They consist of a stone lintel that wraps around the top corners of each window. There is a decorative keystone that protrudes up from the lintel into the brick façade. The trim is painted a mint green color.
6. A brick buttress with a decorative stone scroll at the top flanks the east and west ends.

Central Section (B) Notes

7. A roof extends over the 6 windows in the central area. It is wood frame construction with a red tile roofing material.
8. Circular vents made of stone and screened
9. Six double-hung windows that are divided by square wooden columns that protrude from the rest of the façade. The bases of the columns are stone supports that coincide with the sill running along the bottom of the windows.
10. The entry door is centered within the façade. It has the same lintel as the windows on the first floor and a decorative transom. There are decorative woodcarvings on the front of the door. The trim is painted a mint green color.

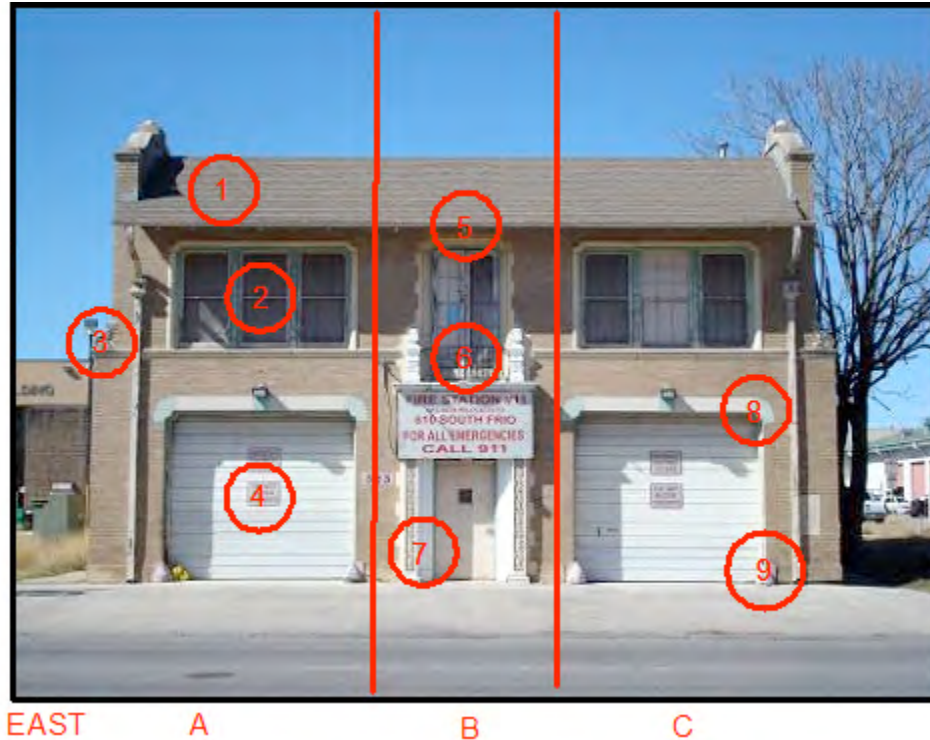


Figure 43: East Façade (front street elevation)

East Elevation (Figure 43)

- The east façade is divided into three sections, a central entry section (B) and two side sections with apparatus bay doors on the first floor and windows on the second floor. (A & C)

Summary

- The façade consists of dark beige brick with cast stone detailing around fenestrations.
- The façade is divided horizontally by a cast stone stringcourse.
- On the second floor, there are three windows above each apparatus bay door and a small, centrally located balcony.
- The first floor has large metal roll-up doors on the left and right side providing access to apparatus bays.
- Centrally located on the first floor is a metal entry door to the joker room.
- On each side there are metal down spouts from roof.
- On the right side is a cornerstone.

Left Side Section (A)

- The roofing material is composition shingles with metal gutters at fascia.
- There are three 12-light, single-hung windows with wooden screens attached. The windows are separated by wooden decorative columns painted mint green.
- Cast stone corbelling is located above the stringcourse on each side of the elevation.
- The metal apparatus doors are painted white with warning signs attached.

Central Section (B) Notes

- The soffit is tongue and groove board painted a cream color.
- The small balcony has cast stone detailing at the railing corners and an iron railing. The double, 10-light wooden doors have multiple layers of peeling paint.
- Cast stone detailing around main entry. Painted metal door with small fenestration and transom above.

Right Side Section (C) Notes

8. Decorative stone trim elements around apparatus doors painted mint green and cream.
9. Cast iron corner guards located at corner of each apparatus door openings.



WEST

Figure 44: West Façade

West Elevation (Figure 44)

- The west façade is the rear of the fire station and is unique from the other façades.

Summary

- The entire façade consists of dark beige brick.
- The west façade materials are brick, wood, glass and metal.
- All window glass is painted with a beige color, except for the staircase window, which is missing window lights.
- The trim surrounding the garage doors is painted mint green.
- The wood window trim is deteriorating and the paint is peeling.
- The protruding chimney is unique to this façade.

- Façade serves as the location for utilities, which include the gas meter, basement chase, pipes (gas and water), and storm drains.
- There is one A/C unit located in the second story locker room window.
- There are 3 windows on the second floor, 2 garage doors on the first floor and a small basement door.

Overall

1. At the north corner, the concrete base has broken off and exposed the underlying red brick.
2. The painted cast iron corner guards have started to peel and rust. They are starting to detach from the exterior wall. The wooden door frame is painted a beige and mint green color.
3. Concrete cracks are visible at the garage door exits and corner guards.
4. Painted, galvanized-metal downspouts are located on the sides of the façade and have peeled to expose the sheet metal. The sheet metal boots have peeled and rusted. A black stain is located on the upper left hand side of the building.
5. This 9-light wooden frame window has an air-conditioning unit.
6. The staircase window is composed of 9 lights and 2 lower lights are missing. The missing window lights are replaced with wooden boards.
7. The second level brick window sill has some mold and discoloration.
8. The exterior gas meter and exterior pipes are rusted.
9. The wooden frames for the garage doors are starting to peel. This exposed wood is deteriorating and chipping.



Figure 45: Joker Room Area

Interior Floor Plans

Joker Room (Figure 45)

Layout

- North and south walls are similar with 3 single-hung windows that open to apparatus bays. Door open to apparatus bays from the joker room. The main entry from South Frio Street is located on the east wall. On the west wall there is the joker stand with wooden floor cabinets, chalkboard, fire bell and speaker system. Located in the middle of the room is a fire pole that vertically connects joker room with the dormitory above.

Walls

- Walls are plastered on structural clay tile blocks and painted white.

Ceiling

- The decorative tin ceiling, a popular element from the 1890's through the 1920s, is painted white. Tin ceilings are durable, lightweight and fire resistant. Rust stains are apparent.

Floor

- Floors are stained concrete with an applied rectangular etched pattern. There is a 6-inch step up from entry to the joker stand.

Windows/Doors

- There are 6 steel, single-hung, 6-light, windows and 2 solid wooden doors with transoms on north and south walls. There is a steel framed metal door at entry from South Frio Street. The trim around doors and windows are wood and painted white. The glazing has been painted and covered by plywood.

Electrical

- Two fluorescent lights and a fan are in the joker room. A/C window unit and furnace located on east walls. Electrical wiring conduit is mounted on surface of walls.



Figure 46: Kitchen/Dining Area

Kitchen/Dining

Layout

- The kitchen and dining areas are centrally located in the fire station. The north wall has two doors leading to apparatus bays with an exposed wooden framework and plywood inserts. A chalkboard hangs on the exposed framework. The south wall consists of wooden cabinetry with wooden countertops. There is a sink, gas stove, hung cabinets and shelving, and an A/C unit. The casement opening from the joker room is located on the east wall as is the electrical panel and intercom speaker. The west wall has entry to a pantry that has 4 wooden shelves on each side.

Walls

- Walls are plastered on structural clay tile blocks and painted white.

Ceiling

- The gypsum board ceiling is dropped down for the mechanical storage and the access panel allows visibility to the tin ceiling above, which appears to have rust stains in various locations.

Floor

- Floors are stained concrete with an applied rectangular etched pattern.

Windows/doors

- Three wooden doors with transoms on north and south walls in dining area. The wood trim around doors is painted white.

Plumbing

- Kitchen has one sink.

Electrical

- Two fluorescent lights are located in the kitchen/dining area. Electrical wiring and plumbing are exposed.

North/South Apparatus Bays

Layout

- The north and south apparatus bays were used to house the fire trucks. All of the interior windows are painted over with a light grey paint. There are many layers of paint on the walls. The exterior facing walls are covered in plaster. The north and south bays are similar with only a few differences, such as the closet present in the north bay.

Walls

- Walls are plastered on structural clay tile blocks and painted white.

Ceiling

- The entire bay has a tin pressed ceiling that is corroding in some places.

Floors

- The floor is made of concrete with two drains, one towards the front of the building and one towards the back.

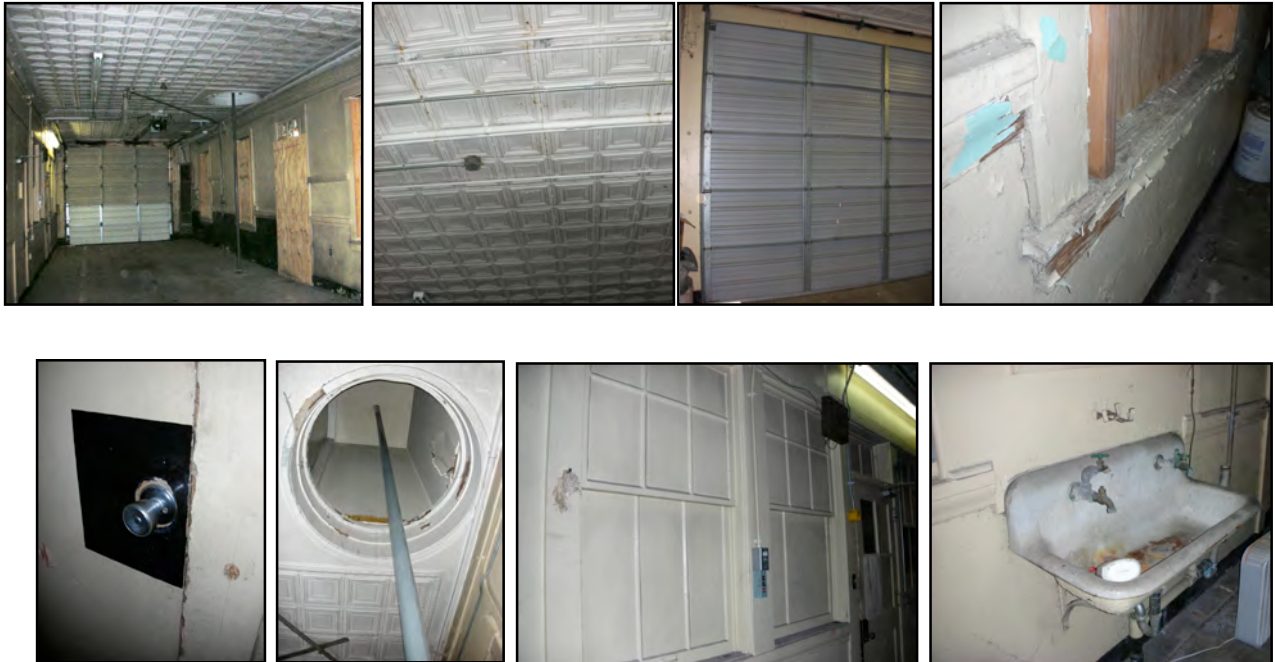


Figure 47: South Apparatus Bay Area; Similar Conditions in North Apparatus Bay

Windows/doors

- Large metal garage doors, two on the east wall, two on the west wall, all essentially identical. There are switches attached to the wall that control the door. There are many layers of paint on the sills and trim, including mint green and light grey paint. The paint is peeling and the wood is splitting. At the door leading to the central dining room, there is a metal doorknob that does not match the other doorknob on the other interior door (Figure 47). The door leading outside is covered with a piece of plywood. Windows on the interior of the bay look into the joker room. They are painted over with light grey paint. The doorknob of the door leading to the joker room is old and fragile. An A/C unit is located near the east bay door.

Plumbing

- An old heavy-duty sink with four faucets and a shelf above. Further down the wall from the sink, there is another similar shelf with a mirror.

Electrical

- Fluorescent lights are found throughout the apparatus bay.

Fixtures

- The metal fire pole is approximately 4" in diameter and approximately 20' long. It is secured to the bay floor and to the second floor ceiling.
- There is a large pipe running along the ceiling leading to the center of the room where a flexible hose is attached to the end. Used for filling the fire trucks with water (Figure 47).



Figure 48: Stair

Stairs

Layout

- A quarter turn stair, with intervening landing, connects the first and second floors,. Stairs are accompanied by round metal railings. Treads and risers are of wood construction, but have an applied texture on top surface with metal nosing and blue paint.

Walls

- Walls are plastered on structural clay tile blocks and painted gray.

Ceiling

- Ceiling is plaster and painted gray.

Windows/doors

- There is a single-hung window at landing on west wall that has been boarded up. The wood trim around the window is painted light blue.

Electrical

- One drop down lighting fixture. Electrical conduit exposed on wall surface.



Figure 49: Dormitory

Dormitory

Layout

- The second floor dormitory is the largest room in the fire station. The fire poles are located here. The fire poles are now enclosed by typical wood stud framing with a gypsum wallboard finish. Doors in the enclosures provide access to the fire poles. There are two banks of windows in the dormitory area. The fire pole enclosures cover some of the windows. The typical wall is composed of plaster. The windows on the south side of the building are 12-light, wood-frame, double-hung windows. The banks of windows on the north side are composed of metal-frame, single-hung windows with 3 lights and have interior wooden shutters.

Walls

- Walls are plastered on structural clay tile blocks and painted white.

Ceiling

- The ceiling is plaster, painted white.

Floor

- The wooden floor is covered with mottled green vinyl tiles with a black vinyl base.

Windows/doors

- All the wooden door and window trim is painted a light blue color. There are seven doorways that enter into the dormitory. Each fire pole enclosure has a door.

Electrical

- Fluorescent lights and ceiling fans are located on the ceiling.

Mechanical/HVAC

- Two ceiling mounted furnaces are located in the corners of the rooms. Three window mounted A/C units are also located in the dormitory.

Fixtures

- The fire station poles are metal and concealed by the enclosures built around them.



Figure 50: Offices; Similar Conditions in all Offices

Offices

Layout

- The office construction is similar to the rest of the building. The outer offices are symmetrical in their layout, with a closet, windows, and A/C units. The central office has a single closet and a balcony. All the windows and the balcony are boarded up with plywood. Utility chases are located in both outer offices.

Walls

- Walls are plastered on structural clay tile blocks and painted white.

Ceiling

- The ceiling is similar to the wall finish.

Floor

- The wooden floor is covered with mottled green vinyl tile flooring with a black vinyl base. The left side office floor is scratched and missing sections of tile.

Windows/doors

- All the wooden door and window trim is painted a light blue color. There are 6 windows units and 2 windows units with air conditioners. The closet doors are vented.

Electrical

- The lighting fixtures have incandescent bulbs and are wall and ceiling mounted. Wall-mounted light fixtures are located in left hand side office.

Mechanical/HVAC

- There are two window mounted A/C units.

Fixtures

- The wooden planks that encase the A/C units are deteriorated. Cracks appear in the walls of both corner offices.



Figure 51: Restrooms

Restrooms

Layout

- The restroom consists of two toilets along the west wall separated by seven foot infill walls. Two iron sinks are affixed to the north wall with a mirror and lighting above. The south wall consists of a single-hung window. The entry door is located on the east wall.

Walls

- Walls are plastered on structural clay tile blocks and painted white.

Ceiling

- Ceiling is plaster and painted gray.

Floor

- Floors are stained concrete with an applied rectangular etched pattern.

Windows/doors

- One solid-core wooden entry door. The door and window trim is wood and painted light blue. Window glazing is painted.

Electrical

- Fluorescent lights and wall sconce lighting fixtures are found in the restroom area. Electrical conduit, plumbing and access panel exposed.



Figure 52: Shower Room

Shower Room

Layout

- Shower room consists of two shower stalls located on the north wall and separated by seven-foot infill walls. Small storage room with gas water heater and shelving on west wall.

Walls

- Walls are plastered on wooden lath and painted white. The stall walls are concrete and painted light blue.

Ceiling

- Walls are plastered on wooden lath and painted white.

Floor

- Floors are stained concrete with an applied rectangular etched pattern.

Windows/doors

- One solid-core wooden entry door on east wall. One single-hung window on west wall. The door and window trim is wood and painted white.

Plumbing

- Plumbing exposed.

Electrical

- Two fluorescent lights located in shower room. Electrical conduit exposed on wall surface.



Figure 53: Locker Room

Locker Room

Layout

- Locker room consists of 14 small closets, each with wooden shelves and a closet rod. The east wall consists of 5 closets. The south wall consists of 4 closets. The west wall consists of 5 closets and a single-hung window. The north wall has one single-hung window.

Walls

- Walls are plastered on structural clay tile blocks and painted light blue.

Ceiling

- The ceiling is wood painted white with crown molding, also painted white.

Floor

- Floors are stained concrete with an applied rectangular etched pattern.

Windows/doors

- Closets have vented wooden doors painted white. The door and window trim is wood and painted light blue. The window has been covered with protective materials.

Electrical

- One incandescent lighting fixture. Electrical conduit mounted on wall surfaces.

Conclusion of Building Description

The overall physical description of Fire Station No. 11 illustrates a rich history and architecture that has survived throughout the 20th century. This building demonstrates a high level of craftsmanship used to create a regional building that is closely tied to the architecture and culture of San Antonio.

Throughout the physical description for both the interior and exterior, observations were similar and minor problems were noticed that reflect the resonant life of the building. The overall appearance and construction of the building has persisted through renovations undertaken by the owners of the building to adapt the building to contemporary needs.

CONDITION ASSESSMENT

Condition Assessment Overview

A general assessment of Fire Station No. 11 was undertaken to evaluate and identify any visible damage that may impact the rehabilitation of the building. This assessment allowed for the identification of any observable deterioration of the brick façade and interior structure.

The general assessment is divided into sections of the exterior and interior. The interior was divided into the separate rooms that make up Fire Station No. 11. All investigation was surface observation from the ground without aid of ladders or lifts. Material testing such as paint and mortar analysis was outside scope of work. None of the various non-destructive evaluation methods, such as infrared photography or sonar were utilized. Tools used in the investigation were limited to binoculars, tape measures, screwdriver (slot head), flashlights, and digital cameras.

Exterior, General

The exterior brick façade was in good condition. Most of mortar appears to be intact from 1925. The mortar could be a Portland Cement mix. A mortar analysis should be undertaken to confirm. The cement base course at grade level is relatively thin and brittle. Minimal pressure will break or crack this material. The present damage was likely caused by differential movement opening fractures in the cement. Water got in and behind the materials through the cracks. Either the water froze and spalled off the cement or else salt borne in the water crystallized upon drying and produced a similar spalling effect. The cementitious base that runs along the bottom of the building was applied wet during its construction and is starting to deteriorate and break away from the façade, exposing the underlying red brick. Perhaps the red bricks were less expensive because they were used at locations intended to be hidden or covered. Minor discoloration and organic growth is seen in some areas around the building, this is more apparent on the north façade (see below for more details).

Interior, General

Most of the interior damage is caused by the everyday activities of the firemen/women. Puncture holes, scratched floors, and scarred walls are some of the more prominent damage seen throughout the building. Most of the infrastructure is no longer functioning or serviceable for contemporary use.

North Exterior Elevation

Overall

- The brick across the entire façade is in overall good condition. Some organic growth exists at the buttresses and the area where the adjacent tree abuts the building façade. Pollen and prolonged moisture due to the tree's location are the likely cause for the higher incidence of organic growth in this area. At the buttresses of the façade, the

cementitious base is cracking off and exposing the foundation and underlying red bricks. This breakage from the dark beige bricks may have occurred because the cement base course was relatively thin and brittle when applied. The foundation brick itself is starting to suffer from moisture damage demonstrated through the discoloration of the mortar and brick fractures. Preliminary inspection by a structural engineer indicates that the concrete foundation piers are sound and only the concrete slab has been displaced. Slab displacement is most probably the result of a softening of the soil beneath the slab due to water intrusion. Organic growth has affected the intersecting corner of the buttress and the façade wall. This occurs because the north wall remains damp longer due to less exposure to sunlight.

Windows

- The windows are in overall good condition, except for areas of the metal trim and mullions where exposed natural metal has started to rust. Exposed and unprotected ferrous metals will oxidize. The windows on this façade are unique because they are safety glass awning windows. The safety glass windows date from the early 1900s and were usually installed on façades very near to property lines. Although no adjacent buildings exist at this time, structures were located directly north of the fire station in the past. The first floor metal windows have 4 lights, while the second floor windows have 3 lights. The window sills have a cement wash that is starting to crack, due to moisture penetration.

South Exterior Elevation

Overall

- The brick across the entire façade is in good condition with minor cracking. At the corners of the building near the base of the building, the cement base is cracking off and the foundation brick can be seen. (See above note at Exterior, General) Mold has formed where the buttress meets the wall. This growth occurs because this area does not dry quickly after rain. Inside corners hold dirt more readily and as a result, organic material can grow in these areas.

Windows

- Overall, the windows seem to be in good condition, with the exception of the wood trim. The paint coatings have not been maintained in recent years. The trim has been affected by prolonged southern exposure to the sun and is cracked. There appears to be many layers of paint on the exterior windows in beige and mint green colors. The cracks have accelerated the paint deterioration, as they allow bulk moisture to reach the wood behind the paint.

Door

- The door suffers from the same issues as the wood windows— it is cracking and peeling. Many layers of paint are present. Perhaps the substrate was inadequately prepared prior to application of new coating.

Overhang

- The wood on the underside of the overhang is cracking, but in good condition. The wood on the second level windows has been affected by deterioration due to loss of protective paint coatings. The wood on these windows is cracking and the paint is peeling. The paint coating protects the wood from moisture and excessive drying. Paint coatings on southern façades may need more careful substrate preparation and more frequent maintenance. Once the wood is exposed, ultraviolet degradation can damage the cellular structure of the wood and cause splits or checks.

East Exterior Elevation

Overall

- The brick façade is in overall good condition. There seems to be very little mortar problems, with the exception of a few areas:
 - On the lower left hand side of the façade there is evidence of abrasive scarring of the brick by something very large and heavy.
 - Mortar and brick discolored due to overflowing downspouts
 - The cast stone is in overall good condition beyond normal weathering. Cement base is chipping, as on other façades. The concrete sidewalk settlement displacement has left the cement base on the northeast corner exposed.
 - Minor displacement of the bricks over the windows due to settlement.

Doors

- Metal roll up doors have small dents and scratches. Balcony doors appear to be working properly, although paint is peeling on frames and sash. Window panes have been painted. Screen doors are missing screens and paint is peeling.

Gutters

- Gutter downspouts have vegetation growing at connection points due to down spouts not draining properly. Excess debris likely caused the connection points to clog and allowed for the vegetation to thrive.

Roof/ Overhangs

- On the tongue and groove soffits, paint is peeling and there is evidence of water damage.

Further investigation needed

- Hardware on windows and doors
- Functionality of doors and windows
- Shingles are over 20 years old and are frayed, especially over the ridge

West Exterior Elevation

Overall

- The brick façade appears to be in generally good condition. Some brick displacement over the north garage door is the area of greatest concern. There seems to be a bulge in this area, indicative of moisture penetration. This imperfection appears minor, but should be monitored. The cement base course is starting to crack and has left the corners exposed. Fire ants have taken up residence at places where cement has spalled. There are some minor scratches on the protruding chimney, probably caused by the fire trucks or other heavy equipment. Some mortar replacement can be seen on the upper southwest corner. This mortar discoloration is high above the ground and needs further investigation.

Windows

- The windows seem to be in good condition, except for some damage to the wooden trim. Trim coatings are starting to peel. Moisture penetration has caused the paint to peel and damaged the wood. The window with the A/C unit has the most damage. The wooden planks that hold the unit in place have started to deteriorate and damage the window frame itself. The 9-light wooden staircase window has 2 lights missing, which have been replaced with wooden boards. All the windows are painted over with a beige paint, which is starting to peel due to moisture penetration.

Door

- The metal garage doors are in good condition, except for the painted wooden trim that has started to peel. This peeling has exposed underlying paint and natural wood. The wood has severe moisture penetration and has started to rot. If this trim is to be kept, further investigation is needed to determine whether it is fungal or insect rot. The basement door is in very good condition. Some minor scratches have stained the beige metal door.

Corner Guards

- The cast iron corner guards are starting to rust and the paint is starting to peel. The corner guards have started to separate from the wall. Alternatively, impact with a heavy object, likely a fire truck, may have displaced these cast iron elements. Either way, water is entering freely behind the corner guards and the potential is great for further damage.

South Apparatus Bay, Interior

Overall

- The south apparatus bay is in worse condition than the north apparatus bay. There appear to be many layers of paint on the walls that is peeling due to water damage and breakdown of the coatings. The walls themselves are in good condition with no noticeable cracks or shifting. The concrete floor is in good condition.

Window Sills and Framing

- The windows have many layers of paint on them. The glass is painted over but seems to be in good condition. The sills of the windows on the wall towards the exterior are cracked and have experienced paint failure. This is due to water damage. The windows may not be sealed properly. Water is intruding from outside due to problems described above and has caused the paint to peel off the sills.

Wood Trim

- The wood trim that runs along the walls of the room is in fair condition, but in some areas the paint is peeling, probably due to chemical breakdown of coatings. The wood itself is starting to rot, caused by overexposure of the untreated wood to moisture.

Doors

- The doors are in used condition. The bases of the doors show water damage. The door towards the west side of the bay is heavily damaged and the wood is rotting. This has been caused by condensation from the nearby A/C unit pooling at the bottom of the door over a long period of time. This in turn has promoted fungal growth in the wood.

Ceiling

- The tin ceiling is corroding in many places, especially where it has been cut to allow for electrical lines. The ceiling is sagging in some places. Both problems can be attributed to water damage.

North Apparatus Bay, Interior

Overall

- The north apparatus bay is in generally good condition. The paint on the walls seems to have been applied more recently than that in the south bay and there are fewer layers. The paint is peeling less in this bay than in the south bay. This is because the north apparatus bay had been used for storage and was probably not opened to the natural elements as much as the south apparatus bay.

Window Sills and Framing

- The sills on the interior wall of the building are in good condition. The sills of the exterior windows, are concrete and in good condition. There is less paint on the windows and the glass in the windows is in good condition.

Wood Trim

- The trim that runs around the entire room is in good condition, but in some areas the paint is peeling, probably due to chemical breakdown of coatings.

Doors

- The doors are in generally good condition, as is the paint on them. The bases of the doors are in used condition.

Ceiling

- The tin ceiling is corroding in many places, especially where it has been cut to allow for electrical lines. Exposed tin will slowly oxidize (rust) in presence of high relative humidity. The ceiling is sagging in some places. Both of these attributes are due to water damage that may have occurred when the roof above leaked.

Joker Room

Overall

- Wear and tear is apparent due to high use.

Walls

- Plaster on walls appears to be in fair condition. No apparent cracks.

Floors

- Concrete floor is in good condition.

Ceiling

- Tin ceiling is corroded due to oxidation (see above). Some discoloration is likely due to smoke and grease from the adjacent kitchen.

Cabinetry

- Joker stand missing cabinet door.

Electrical

- Electrical wires exposed due to mechanical installations made through the years. Electrical to heater and other electrical systems need to be evaluated against present day standards. Current light fixtures work, but need to be further investigated for safety issues.

Trim

- Window trim paint is peeling. Trim around apparatus bay doors has some water damage that has penetrated beneath the painted surfaces.

Windows

- Windows have been covered with plywood and have been painted. Functionality of windows unknown; assumed painted shut.

Doors

- Doors are functioning properly; paint peeling.

Kitchen

Overall

- Wear and tear is apparent due to high use.

Walls

- Plaster on walls appears to be in fair condition. No apparent cracks. Pantry plaster has been patched. An access panel to wall exists.

Floors

- Concrete floor is in good condition.

Ceiling

- The gypsum board drop down ceiling metal is corroded due to moisture that has rusted the metal fasteners.

Trim

- Window and door trim paint is peeling.

Doors

- See note for south apparatus bay doors.

Cabinets

- Cabinets in fair condition. Paint peeling. Hardware is not functioning properly. Cabinet doors are missing. Stove needs to be further investigated to determine if it is still functional and to determine its proper use. A/C unit is missing cover and filter.

Electrical

- Electrical wires exposed due to mechanical installations made through the years.

Plumbing

- Plumbing exposed. Plumbing fixtures missing. Needs further analysis.

Stairs

Overall

- Wear and tear due to high use. Stairs appear to be in good structural condition. Paint is peeling at treads and trim. The plaster is cracking at landing. Cracks run from ceiling to window. Water infiltration from the window is probably the cause of this damage.

Walls

- Plaster on walls appears to be delaminating in areas due to punctures and impacts caused by high usage and possible water infiltration through the window.

Windows

- Paint is peeling around the windows due to moisture penetration that has weakened paint adhesion. The moisture appears to be entering through missing window lights that are boarded up.

Dormitory

Overall

- The dormitory is in overall good condition. Some minor damage has occurred through the usage of this room as the sleeping quarters for the firemen/women.

Walls

- The walls are good condition, except for a crack in the northwest corner. This crack runs from the floor to the ceiling. Initial inspection by a structural engineer was unable to determine the exact cause of the crack, but it does not appear to be structural. (Note: Few exterior cracks of any significance can be identified in connection with this interior crack.) The paint coatings over the windows have failed and are peeling, probably due to moisture infiltration. There are punctures in the plastered walls, probably caused by impacts. In the fire pole enclosures, there are gypsum board punctures, probably due to usage.

Window Sills and Framing

- The wooden windows on the south wall are in average condition. The wooden trim coatings are starting to peel due to moisture penetration and many of the painted coatings on the glass are starting to severely peel. The windows with A/C units have started to rot, due to air and moisture penetration that has seeped through the wooden planks holding the unit in place. Condensation from the window A/C units drips onto the exterior side of the windows. The metal windows on the north wall are starting to experience the same damage due to moisture penetration, which has caused the metal frame to peel and rust. The wooden shutters are in very good condition, with only dust damage. Some of the awning windows do not close completely and allow moisture to penetrate into the room.

Floors

- The vinyl tile floor is in overall good condition. Some minor broken tiles are found near the restroom and shower rooms. These broken or missing tiles have exposed the wooden floor. In the central part of the room there are minor scratches and stains, which have been caused by wear and tear through the years.

Wood Trim

- The wooden trim pieces that surround all the doors are in overall good condition. There are some areas that have started to peel, exposing the many layers of paint that have been applied through the years.

Doors

- The doors are in good condition, except for some small areas where the paint has started to peel, revealing the underlying grey paint.

Ceiling

- The plaster ceiling is in overall good condition. There has been some patching done to the ceiling, evidenced through discoloration and excess plaster material. The patched area is located near the central staircase doorway.

Electrical

- Some ceiling fan blades are missing and some fluorescent lights fixtures do not work properly. The electrical conduit that runs along the wooden trim is starting to rust.

Restrooms

Overall

- Wear and tear due to high use.

Walls

- Plaster in fair condition, paint is peeling in areas

Floor

- Concrete floor in fair condition; some chipping.

Ceiling

- The ceiling is in fair condition; some paint peeling.

Trim

- Wood trim throughout is in fair condition; scratches and paint peeling. Door trim water damaged at base.

Windows

- Paint is peeling around the windows due to moisture penetrating window.

Door

- Door is operable and in fair condition.

Plumbing

- Toilets in poor condition; stained with rust or minerals in water; bowls cracked. Access to plumbing in wall. Sinks slightly stained. Plumbing in poor condition.

Shower Room

Overall

- Wear and tear due to high use and age.

Walls

- Plaster in fair condition, paint peeling in areas. Concrete walls are in fair condition.

Floors

- The floors have water stains due to standing water.

Trim

- Wood trim throughout is in fair condition; scratches and paint peeling.

Windows

- Paint is peeling around the windows due to moisture penetrating window. Air infiltration at window due to lack of barriers. Chipping paint, damaged wood around trim

Doors

- Doors are all operable and in fair condition.

Plumbing

- Plumbing fixtures need further evaluation Shower units are in fair condition; water damage to wall; outdated plumbing fixtures. Water heater and plumbing are exposed so further evaluation will not be difficult.

Locker Room

Overall

- Wear and tear due to high use and age. Water infiltration from roof damage located in northwest corner locker. Exposed structural clay tile and expanded metal lath due to water damage.

Walls

- Plaster in fair condition, paint peeling in areas

Floor

- The floor is in good condition.

Trim

- Wood trim throughout is in fair condition; scratches and paint peeling.

Windows

- Paint is peeling around the windows due to moisture penetrating window. Air infiltration at window is due to lack of barriers. The sash is missing; glass is painted.

Doors

- Doors are operable and in fair condition. Hardware needs to be further evaluated. Paint chipping and stickers applied.

Mechanical

- A/C window unit installation has caused damage to window trim.

Offices (South, Central, North)

Overall

- The overall condition of the three offices is good. The boarded windows of the eastern façade have allowed the rooms to maintain their overall condition. Evidence of insect infestations (insect frass) was found in all offices.

Wall

- The walls are in generally good condition. There is minor paint peeling. Cracks appear at the southeast corner of the north office and at the exterior corners of the central

office. Initial inspection by a structural engineer was unable to determine the exact cause of the cracks, but they do not appear to be structural. Minor displacement of the exterior bricks is visible on the exterior of the north office, which may be a contributing factor to the interior crack. There is no exterior crack that corresponds to the interior crack in the central office. There are some holes in the wall base, which may have been made to accommodate electrical wiring or by animal infestation. In the north office, frass was found near the north wall that needs further analysis. There are salt deposits developing beneath the metal window sill on the north wall. The salt deposits were caused from deterioration of the clay tile or mortar due to moisture infiltration and the general dampness of the north wall due to a lack of sun exposure.

Window Sills and Framing

- The only exposed windows in the north and south offices are those with A/C units. These windows are in dire condition. The paint coatings on the wooden trim of both the metal and wooden windows are starting to peel and reveal the underlying paint layers. The windows themselves are starting to suffer from the A/C units that are held in place with wooden planks that are starting to rot due to moisture infiltration. Further investigation is recommended to determine the extent of the damage caused by the A/C units.

Floors

- The vinyl tile floor is in overall good condition in the north and central offices. Some minor broken tiles are found near the utility chase in the north office. The worst damage to the vinyl tiles is located in the south office. These tiles are broken in some areas and heavily scratched, probably due to harsh usage. Broken tiles have left the wooden floor exposed. In the central office, some discoloration of the tiles was caused by moisture infiltration through the balcony doors.

Wood Trim

- The wood door and closet trim is in overall good condition.

Doors

- The doors are in good condition, except for minor areas where the paint has started to peel and reveal the underlying grey paint.

Ceiling

- The plaster ceiling is in overall good condition.

Conclusion

The general condition assessment demonstrates that the condition of the building appears to be stable and safe for rehabilitation. Initial investigation by a structural engineer has verified the structural stability and integrity of the building. Two areas of concern need further investigation and monitoring:

- 1) Slab settlement at northeast corner
- 2) Damage to brick wall at northwest corner due to roof leaks.

The exterior assessment indicates that the building was well constructed and has survived the test of time with few problems. The brick exterior has minor damage, consisting of a few scratches and minor organic growth. The cement base has sustained the most damage and has broken off or cracked in places, exposing the underlying red brick. The cement sills on the north façade have started to spall.

The interior walls are well preserved. There are some problems with the wooden trim and some damage from moisture penetration. The floors have damage consistent with daily usage. The ceilings are deflected in some areas, but are in overall stable condition.

PRESERVATION TREATMENT AND OBJECTIVES

At the corner of South Frio and Durango Streets, Fire Station No. 11 stands today as “Old Fire Station No.11.” The building is no longer suitable to house the present-day equipment and fire trucks used by the San Antonio Fire Department. A new Fire Station No. 11, two blocks away, has taken over the functions of the old fire station. After evaluation of the historical, cultural, and architectural values associated with the building, it has been determined that Fire Station No. 11 has the potential to be an excellent adaptive reuse (rehabilitation) project that will benefit both the community and the nearby University of Texas at San Antonio. As defined by The Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995:

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.¹

The definitive treatment, in reference to rehabilitation criteria, will be to preserve and rehabilitate the building's historical, cultural, and architectural features while making those changes that are necessary to meet the program requirements of the newly proposed use of Fire Station No. 11. The preservation objectives for rehabilitation of the fire station will address the historical significance through a developed methodology of determined levels of importance and integrity. The overall objective is to preserve and restore the features that portray its Mission Revival style, its fire station building type, and its relationship to the community as a surviving historic building from an old neighborhood now largely demolished.

Evaluation of Fire Station No. 11

An evaluation of the background and history of Fire Station No. 11 will help determine the actions and procedures appropriate for the proposed rehabilitation project. We will look at its uses, current context, existing integrity, and a summary of the features significant to its cultural, historical, and architectural value in respect to levels of importance.

Use (past, current, future)

The use of Fire Station No. 11 has changed from fire station to storage. The fire station no longer houses a fire company. The apparatus bays where the fire trucks were once located are inadequate for present day equipment. The last known fire truck to be housed in the Fire Station No. 11 bays was the smaller 1977 Seagrave Fire Truck. Ambulances were also used out of the station.

The neighborhood of Fire Station No. 11 has changed significantly. The surroundings now include the University of Texas at San Antonio Downtown Campus, the Radisson Hotel, and the Municipal Court of San Antonio. The present day surroundings offer the fire station a potential new use, specifically, a facility that could be used by UTSA and the community as a student work and cultural display space, coffee shop and bookstore. Additional uses could be determined based on further investigation during the design process. Uses particularly important

to UTSA include uses of the fire station that would be beneficial to the College of Architecture as an educational and demonstrational tool.

Context (Historic and Legal)

Currently, the ownership of Fire Station No. 11 is in the process of transferring back to the Steves family. On May 23rd, 1892, the land was donated to the City of San Antonio, with the stated agreement that an “Engine or Hose House” be maintained and built on the site.² Because Fire Station No. 11 is no longer used to house a fire engine or hose company, litigation was undertaken to return the land to the Steves family. The terms under which the land might be used by UTSA have not been thoroughly discussed or examined. Part of the purpose of this report is to examine the feasibility of new uses and provide supporting material for discussion.

Integrity of Existing Condition

The integrity of the fire station would be best described as “in good condition.” Although there are still some unknowns, the overall assessment of the features relative to 1920’s architecture, fire station typology, and the Mission Revival style is that they are largely intact. Historical research and historical photographs have offered a clear sense of the exterior lighting, benches and signage that once existed and show the alterations and retained features over time. No major additions, demolitions or spatial alterations appear to have been made. The Durango and South Frio Street façades, facing main thoroughfares, depict better stylistic details than the other two façades.

Historical Significance and Value

The following is a brief assessment of our earlier findings for its historical significance: (Please see Evaluation of Significance for the full contents)

The historical, architectural and cultural value of Fire Station No. 11 and its site can be summarized under four distinct categories of significance;

Category 1: the role of the building and its site as a historical record of the San Antonio Fire Department and its fire fighting practices;

Category 2: the architectural design of the building as it exemplifies a local fire station type and 1920’s regional municipal architecture in San Antonio and South Texas;

Category 3: the role of the building and its site as a historical record of a neighborhood that has been lost to demolition; and

Category 4: the building’s value to UTSA due to its relevant location and potential use by the university.

Category 1 Significance and Related Architectural Features:

The building layout is typical of a 1925 fire station. (See Figure 39: first floor plan and Figure 40: second floor plan.) The features common to early fire stations and that are still in existence at Fire Station No. 11 can be evaluated as follows:

Levels Defined- Level A and Level B: Features are ranked according to their relative importance in preserving the integrity of the building during the rehabilitation process. Level A represents features that significantly contribute to the integrity of the building. Level B features are of less importance but still contribute to the overall integrity of the building. Level A features are those that preserve the integrity of the 1925 fire station characteristics. Level A features should be handled with great care. Rehabilitation efforts should present the original features as they appeared in the 1925 build but at the same time be sensitive to all features that may contribute to the fire station's significance over time. The relative importance of features should be considered based on their contribution to the 1925 fire station type, the Mission Revival style and the history of firefighters' lives. Other considerations include how to best accommodate the proposed future uses of the building while maintaining the integrity of the fire station.

Level A Features:

- Two apparatus bays (maintaining the integrity of one bay and its original way of use may be determined as sufficient to convey the spatial qualities of the original fire station)
- Joker stand and the central core on first floor housing kitchen/dining area (may be rehabilitated for new café), joker station, entry and staircase.
- Fire poles
- East and south facades, original bi-fold doors of 1925 construction (now missing)
- Main entrance with numerous Mission Revival features and detailing
- Historic signage typical to fire stations at entries, warning signs, and display of station number
- Cornerstone with date built (1925) and by Adams & Adams Architects
- Cast-iron corner guards
- Elements of the Mission Revival style such as decorative trim, keystones, and drainage

Level B Features:

- Open dormitory living space on second floor
- Firefighter lockers-second floor
- Exterior sash windows, with screens
- Quarters for ranking officers
- Bathrooms and showers conveying the around-the-clock function of the fire station
- Alarm systems and loudspeakers
- 1925 sinks, floor drains, maintenance equipment, etc.
- Existing bay aluminum garage doors may be kept on the less significant West façade.
- Kitchen cabinetry and kitchen appliances

Fire Station No. 11 represents over 100 years of Fire Department presence on the corner of South Frio and Durango Streets. Although an earlier fire station was constructed shortly after 1892, the present-day building illustrates the life span of the Fire Department in this particular area of San Antonio. The building displays alterations made over time due to technology and

equipment changes. The station housed many types of fire equipment and hose trucks including Ahrens Fox Steamers, ambulances, and the 1977 Seagrave Pumper Truck, which was the last working fire truck in service at Fire Station No. 11. A successful rehabilitation will maintain and preserve the aspects of the fire station building type, such as the bays, interior layout and fire station features, as well as be sensitive to the requirements of the new use.

Category 2 1920's Significance and Related Mission Revival Style Architectural Features:

Adams & Adams, a well-known regional architectural firm, designed the station. The firm was responsible for a number of local institutional and governmental buildings including the Spanish Revival style Jefferson High School, now listed on the National Register of Historic Places. Fire Station No. 11 was constructed as part of a five station building program in 1925, along with Nos. 7, 12, 17, and 18. Features associated with both 1920's and Mission Revival style regional architecture are very evident, but some important changes have been made over time to accommodate changes in fire fighting practices and address safety concerns. Therefore, some features may need to be restored to best reflect the Mission Revival style and 1920's character of the building. The primary focus will be on the east and south facades, which contain most of the building's features associated with the Mission Revival style. These two façades are the street-facing façades in public view. As built in 1925, the west and north façades contain fewer Mission Revival style elements.

Noted changes to be reversed: Lighting, bi-fold doors on apparatus bays to garage doors, screens, windows painted, red tile roof replaced with shingles.

Summary of features significant to Mission Revival style to be preserved and restored:

1. Shaped parapets on the north and south façades
2. Cast stone stringcourse;
3. Cast stone baroque detailing and contrasting stone quoining surrounding front entry door;
4. Second floor balcony area with iron railing and double leaf doors;
5. Cast stone baroque brackets atop buttresses;
6. Exterior brick; cast stone vents (design reminiscent of mission church ornament);
7. Contrasting shaped cast stone trim around second floor windows on east and south façades;
8. Contrasting shaped stone lintels over windows;
9. Contrasting shaped stone lintels and decorative keystones above bay doors.

Summary of additional items significant to 1920's architecture:

Pressed tin ceiling
Ceiling fans
Cast-iron sinks
Certain hardware, electrical, and plumbing
Wood trim
Windows
Roof drainage system

Category 3 Significance to the context as a historical record of neighborhood and relationship to identifiable persons in history:

(Please see Evaluation of Significance for full text):

Fire Station No. 11 exists today as a remnant of a lost neighborhood with a colorful past. In 1892, an agreement between prominent lumbermen Albert and Ernest Steves and the city of San Antonio called for an active fire station to be located at the corner of South Frio and Matamoros Streets on the southeastern edge of the Steves Lumber Yard (later the Steves Sash and Door Company). The lumberyard represented the western border of what would become San Antonio's most notorious Red Light District. In 1925, Fire Station No. 11 replaced the first wooden fire station and continued to serve the neighborhood and bear witness to its growth and decline. In the 1960s and 70s, highway construction and urban renewal efforts destroyed the historical buildings that once surrounded Fire Station No. 11. The physical features of the building can only hint at the historical neighborhood context. The relatively plain quality of the north façade indicates that neighboring structures previously obscured it from view and the sitting of the structure suggests the fact that Matamoros (now Durango) has always been a streetscape. Photographic evidence demonstrates the historical presence of benches outside the fire station entrance—creating a spatial connection with the neighborhood and an indication that the corner was once a pleasant place to sit outside. Beyond these features, the role of Fire Station No. 11 and its site in the development and social history of the neighborhood must be conveyed through interpretation.

Albert Steves and the architects Adams & Adams, are notable figures associated with Fire Station No. 11. They both have a broad attachment to the history of San Antonio.

Fire Station No. 11 Preservation Objectives—According to the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, rehabilitation allows for a variety of alterations and even additions to accommodate modern use of the structure. This addresses the alterations that may be made due to ADA regulations and code requirements. The changes should be reversible. For example, the alterations, additions, or other modifications be designed and constructed in such a way that they can be removed or reversed in the future without the loss of existing historic materials, features or characters.³

One objective in the rehabilitation treatment of Fire Station No. 11 will be to assess those features that are important to the original style, period of significance (1925) and the building type.

This process will include:

- establishing a proposed program for future use and determining the intended spaces for those uses;
- preservation and restoration of the building's existing and known features in regards to levels of significance and integrity of existing building;
- rehabilitation of the building's plumbing, mechanical, and electrical system to comply with modern building and life safety codes;

- compliance with ADA requirements;
- establishing a schedule of rehabilitation treatment that will coincide with funding and overall treatment success.

Proposed Program for Use:

Coffee shop, small eatery

Bookstore

Offices

Student display of art/architecture

Student display of musical talent (live and recorded performances)

Seating for café/coffee area

Storage

Possible ADA accessibility to second floor

The program will undergo review to determine areas of inhabitation within the existing building. The existing spaces must accommodate the new uses without need for major alterations that would damage historic significance. The significance defined herein must be respected to maintain the historical essence of Fire Station No. 11.

Preservation and restoration of the building's existing and known features-The assessment of the overall condition of the building is good. Deterioration of the building is low, and the building does not have a visible need for many major repairs or replacements at this time. Further investigation of appliances, structure, and electrical will need to be done to determine the complete condition of the existing building.

Those features that show historical significance with relevance to the 1920's, the San Antonio fire department, cultural values of the historical neighborhood and significant persons, and that are representative of the Mission Revival style, shall remain intact or be restored. Some may be determined as less significant, once a final examination of all materials and features is completed. In regards to the Mission Revival style, the stated elements of the red tile roof, the baroque detailing around the entry, the stone lintels over windows and bay doors, the original front entry door, and the sash windows are examples of features that will need to be restored. Most of the elements that portray the style shall be preserved or restored.

Treatment and rehabilitation of the exterior façades should follow preservation guidelines. Restoring the building in a manner that is sensitive to its historic features will preserve its identity as a Mission Revival style and 1920's fire station. New signage should remain minimal and keep in character with the 1920's fire station. New signage or alterations to the exterior façades would compromise the historical value and character of the building. Restoring features such as exterior lighting types, original paint colors, and hardware, doors, etc. should be considered.

Rehabilitation of the building's electrical system-In order to comply with modern building and life safety codes, a professional inspection and assessment must be done to determine the existing condition of the electrical system. If possible, some wiring may remain intact to show the age of the building and character of the original interior.

ADA Requirements-Improvements and additions to the building must be done to provide handicapped accessibility to the first floor and possibly the second floor. A plan of potential alternatives must be established if altering the building would threaten or destroy its historical significance.

Establishing a schedule of rehabilitation treatment that will coincide with funding and overall treatment success-A schedule and hierarchy of treatment/rehabilitation may need to be established to accommodate the type of funding and time period given to the project in order to assure the correct and timely treatment of the historic Fire Station No.11.

Conclusion-Fire Station No. 11 enjoys a prime location near the UTSA downtown campus and the downtown cultural community of San Antonio. With this characteristic, the potential for rehabilitation and successful reuse of this fire station is high. There are many preservation and rehabilitation objectives that will coincide with its future completion. Through evaluating its integrity and its overall historical significance to San Antonio, Fire Station No. 11 has great future potential as an asset to the community of downtown San Antonio. With continued care and consideration for its many historical values and its representation of historic San Antonio and the Fire Department, Fire Station No. 11 will be significant and beneficial for another hundred years.

Notes

¹ National Park Service, “The Secretary of the Interior’s Standards for Rehabilitation,” <http://www.nps.gov/history/hps/tps/tax/rhb/stand.htm>.

² Bexar County 1837-1963 Historical Deed Records. Book 113: 26, 6/30/1892.

³ National Park Service, *George Dixon House Historic Structure Report, Cape Lookout National Seashore Portsmouth*. 2004. http://www.nps.gov/history/history/online_books/calocalo_pgdh_hsr.pdf

WORK AND TREATMENT RECOMMENDATIONS

Introduction

The work and treatment section is meant to provide solutions to the condition assessment that addressed concerns to Fire Station No. 11. This section highlights the treatments necessary to repair the damaged areas, along with helping to extend the life of the fire station through its proper maintenance. All investigations were surface observations.

Work and Treatment: General Exterior Recommendations

Overall Brick Work and Treatment Recommendations

- Initial inspection by a structural engineer indicates that it is highly unlikely that the brick veneer is connected to the structural clay tile with metal ties. The deformities in the brick veneer are most likely the result of water penetrating between the structural clay tile and the brick veneer. Further investigation into the cause of the deformities as well as continued monitoring of the situation is needed.
- Step cracks along mortar joints do not require structural repairs. To repair step cracking remove mortar and re-point with a mortar that matches existing.
- To treat the bricks that are punctured by metal brackets creating spalling, it is recommended to remove metal brackets and repair brick, and if necessary remove damaged brick and replace with brick that matches existing.
- Where mortar has been replaced with caulk, remove caulk and re-point with mortar that matches existing.
- Brick and mortar should be cleaned with the appropriate cleaner. The importance of testing cleaning methods and materials cannot be over emphasized. Applying the wrong cleaning agents to historic masonry can have disastrous results. Washing with low-pressure or medium-pressure water is one of the most commonly used methods for removing dirt or other pollutant soiling from historic masonry buildings. Starting with a very low pressure (100 psi or below), or even a garden hose, and progressing as needed to slightly higher pressure—generally no higher than 300-400 psi—is always the recommended way to begin. Scrubbing with natural bristle or synthetic bristle brushes—never metal which can abrade the surface and leave metal particles that can stain the masonry—can help in cleaning areas of the masonry that are especially dirty. If this does not work, then a mild biocide will likely be necessary to eliminate organic growth.¹
- After cleaning, exterior cracks may become apparent. If cracks exist, then it will be necessary to address this issue in order to prevent further moisture damage.
- Cleaning after re-pointing may be likely.

Wood Windows

- No windows were tested for operational soundness due to the excessive layers of paint. Windows should be tested for operational soundness prior to any repairs or work.
- All new wood members are to be preservative-treated and any existing members are to be preservative treated with linseed oil before oil-based primers are applied to all wood surfaces.
- In the case of the sash, if damage alters the wood's structural integrity, remove glazing putty and glazing pieces. Carefully disassemble existing damaged member and replace with new wood member to match existing historic. Reinstall original glazing and glazing putty to match historic. Paint glazing putty immediately after it dries to seal properly.
- Where existing wood screens are missing, reinstall new wood screens to match existing historic in material, finish and dimension.
- Remove all existing window A/C units.

Cementitious Base

- All loose material must be removed. A cold chisel can be used to open the crack and add a bonding adhesive that will allow for hydraulic or quick setting cement to infill the crack. This should allow for the cementitious base to be patched and prevent further moisture damage.

Roof

- Further investigation is needed to determine the integrity of the roof. The intent is to remove and replace the asphalt shingles on the east elevation with red clay tiles. This will help in rehabilitating the fire station to match its original architectural intent of the Mission Revival style. An analysis of the flat roof assembly, along with any repairs addressing the leakage on the northwest corner, needs to be further investigated.
- Parapet: tile coping repair and re-pointing critical at joints.

Work and Treatment: North Façade

Brick

- See Overall Brick Work and Treatment Recommendations.
- Initial inspection by a structural engineer indicates that the building is structurally sound. Measures must be taken to inhibit water penetration beneath the concrete slab to avoid further displacement of the slab.
- Preliminary inspection by a structural engineer was unable to determine the exact cause of the interior cracks, but they do not appear to be structural. Continued monitoring is needed.

Cement Wash at Window Sills

- For small spalled and cracked areas, it is necessary to scrape, chip or grind away the weak areas and refill with a repairing mortar that matches properties of adjacent existing. This should be preceded by mortar analysis to develop appropriate mix.

Metal Windows

- Further corrosion of the metal windows can be curtailed through the installation of weep holes at the base of the window, along with scraping and repainting the metal frame. The overall security glass is in good condition and the removal of the paint can be done through manually or mechanically stripping off the paint layers.

Work and Treatment: South Façade

Brick

- See Overall Brick Work and Treatment Recommendations.

Windows

- A special condition exists on one window of the south façade on the first level nearest the east façade. For this window a complete replacement of the sill and installation of new sill to match existing historical material is needed. Replace the entire lower stile of the upper sash and repair lower section of frame.

Exterior Door

- Door should be treated according to the specifications of the window treatments.

Pent Roof

- Some tiles need to be replaced. Remove all roof tiles and re-attach with new corrosion resistant fasteners such as heavy copper or aluminum alloy nails or hooks. It is highly recommended that all tiles be numbered and diagramed to show the original location of each tile and to aid any patterns and color variations. Replace historic damaged or missing tiles with new matching tiles, including non-original matching tiles that have aged differently in color. Re-point all clay tiles as needed, especially at ridges, hips and corners. Chemically remove dirt and stains from tiles (clay tie cleaning). Take extra caution when replacing single broken clay tiles since they are very fragile and easily broken.
- All rotting wood must be removed and replaced to match existing. The wood needs to be sanded and repainted to match the first paint. Paint coatings on the southern façade may need more careful substrate preparation and more frequent maintenance to prevent more damage to the wood. Once the wood is exposed, ultraviolet radiation can damage the cellular structure of the wood and cause splits or cracks.

Work and Treatment: East Façade

Brick

- See Overall Brick Work and Treatment Recommendations.
- A special condition exists on lower left side of elevation. It is recommended to carefully cut out the worst affected areas (approximately 15 bricks) and replace them with sound new bricks matching the original in dimension, color, texture and physical characteristics such as modulus of rupture and thermal expansion coefficient. New mortar should match properties of existing mortar.

Cast Stone

- Further evaluate the cast stone that has become displaced. (second level, right side of elevation, left side of window)

Corner Guards

- Hand-scrape to remove the existing paint and light rust on the cast iron corner guards can be accomplished by the utilization of a wire brush. Apply alkyd rust-inhibitive primers contain pigments of iron oxide, zinc oxide and zinc phosphate. Two coats of primer are recommended, followed by an alkyd enamel finish coat.

Gutters

- Clean out gutter to maximize drainage. Repair or replace any damaged gutter pieces to ensure proper drainage.

Doors

- It is recommended the roll up doors on the east elevation and its hardware be removed and replaced with replica doors per original design.
- Front door to be removed and replaced with door that matches the first build. All wood that is rotted or decaying needs to be removed and replaced to match.
- Wooden frames around the doors must be repaired and painted where damage is apparent.
- If it is not possible to determine the first paint on the doors, they should be painted to match the first paint on the windows.

Windows

- Where existing wood screens are missing, reinstall new wood screens to match existing historical fabric in material, finish and dimension.

Roof

- See General Roof Recommendations.

Soffits

- Remove paint, repair or replace water damaged tongue and groove soffit. The repair of gutter will keep the tongue and groove boards from further damage.

Cast Iron Decorative Railing

- It is recommended to hand scrape or use a wire brush to remove the existing paint and rust on cast iron. Proper coating of paint such as alkyd paint is recommended to replace existing paint.

Work and Treatment: West Façade

Bricks

- See Overall Brick Work and Treatment Recommendations.
- The bulge or brick displacements over the north garage door should be monitored and the exact cause of the damage determined. The moisture damage that may have contributed to this bulge needs to be addressed at parapet and roof.

Garage Doors

- Garage doors need to be cleaned and further analyzed for damage. These west façade doors may remain in the rehabilitation project and need to be tested for operational soundness.
- The wooden frame needs to be replaced because the wood is rotted through.

Corner Guards

- Hand-scrape to remove the existing paint and light rust on the cast iron corner guards can be accomplished by the utilization of a wire brush. Apply alkyd rust-inhibitive primers contain pigments of iron oxide, zinc oxide and zinc phosphate. Two coats of primer are recommended, followed by an alkyd enamel finish coat.
- The detached corner guards need to be re-attached to the west façade.

Work and Treatment: General Interior Recommendations

Paint

- Remove peeling paint and re-paint as needed. Wood should be treated before applying new paint so as to prevent future deteriorating of the paint. Walls should be plastered smooth where there are discontinuities before repainting.
- The damaged paint can be removed “with a putty knife, hand or mechanically sanded, primed, and repainted.”²

Interior Wood Window Sills, Sashes and Framing

- Window frames and sills are to be sanded and treated in order to receive a new coating of paint to be determined by paint analysis.
- Another option is the replacement of the deteriorated sills. If they have no structural integrity, they should be removed and replaced with new wood sills to match existing historical fabric.
- In the case of the sash, see general exterior recommendations: wood windows.
- Paint should be removed from the glass panes in the windows, and glass should be cleaned and replaced in windows. Any broken panes should be replaced to match existing. Windows must be re-sealed and all preventative measures against future water leakage/damage must be taken.

Interior Doors

- All wood that is rotted or decaying needs to be removed and replaced to match historical fabric.
- Wooden frames around the doors must be replaced and painted to match the first paint as determined by paint analysis. Doors should be painted to match the first paint.

Walls

- Walls should be re-plastered where there are inconsistencies or where damaged before repainting. The removal of peeling paint and then re-painting is recommended.

Wood Trim

- Water damaged wood should be repaired or replaced matching existing trim. Paint should be removed from trim and wooden trim treated and repainted.

Floors

- General cleaning and repair will need to be conducted prior to improvements. Floors should be prepared for the future use, such as tile or staining.

MEP

- Further investigation by licensed professionals
- All the A/C units need to be removed and the structural stability of the windows needs to be analyzed. Any damaged caused by the water infiltration and insertion of the unit must be addressed.
- It is recommended that the building be tested for hazardous materials, specifically asbestos and lead paint.

Work and Treatment: South Apparatus Bay

Wooden Dado Rail

- Save the existing wood by sanding and treating it in order to prepare it for the new paint to be applied.

Pressed Metal Ceiling

- Further investigation of the original finish of the ceiling is necessary, as it is currently painted. Apply protective coatings of paint where needed.
- Treat the corroded areas with a rust converter and re-paint. The flaking paint should be removed before the rust converter and new paint layer are applied.

Floors

- Drains in the middle of the room need to be repaired or covered to prepare for the future use of the building and ADA requirements. The coverings for the drains may be transparent to allow for viewing of the existing drains.
- Any cracks in the concrete should be repaired as follows: the surface should be prepared by cleaning any loose material from the crack with a wire brush or drill with wire wheel attachment. To keep the repair material from pushing out of the crack, a cold chisel and a hand maul should be used to open the crack into a backward-angled cut that is wider at the base. Next, by using a paintbrush, a thick layer of bonding adhesive should be applied to the area. The material used to fill a concrete crack depends on the size of the crack. A vinyl-reinforced patching compound could be used for small cracks, and a sand-mix concrete with a concrete fortifier could be used for the larger ones.

Work and Treatment: North Apparatus Bay

Paint

- See General Paint Recommendations.

Window Sills, Sashes and Framing

- See General window recommendations.

Wooden Dado Rail

- Sand and treat the existing wood in order to prepare it for the new paint to be applied.

Floors

- See general floor recommendations.
- Further inspection of the foundation in the northeast corner of the building needs to be completed in order to identify the reason for the cracking of the concrete floor. If there is settling of the foundation, a repair approach could be to infill under the foundation and then to repair the concrete in the bay.

- Any cracks in the concrete should be repaired as follows: the surface should be prepared by cleaning any loose material from the crack with a wire brush or drill with wire wheel attachment. To keep the repair material from pushing out of the crack, a cold chisel and a hand maul should be used to open the crack into a backward-angled cut that is wider at the base. Next, by using a paintbrush, a thick layer of bonding adhesive should be applied to the area. The material used to fill a concrete crack depends on the size of the crack. A vinyl-reinforced patching compound could be used for small cracks, and a sand-mix concrete with a concrete fortifier could be used for the larger ones.
- An investigation on the current damage and history of the vinyl floor tiles will help in repairing the flooring material. The broken or damaged vinyl tiles need to be replaced with tiles that match the existing tiles. Determination of the authenticity and date of the tiles will help in determining whether these tiles can be replaced with the same tiles or similar, to closely match the current tiles. Remove the damaged tiles, clean the underlying wooden floor, and re-apply new tiles.
- A pest exterminator must assess the infestation and apply appropriate treatment.

Work and Treatment: Joker Room

- See General Interior Recommendations.

Ceiling

- Clean and retain painted finish. Remove peeling paint and re-coat at these areas.

Cabinetry

- Replace cabinet door matching characteristics of originals.

Work and Treatment: Kitchen

- See General Interior Recommendations.

Ceiling

- Remove drop down ceiling to expose pressed tin ceiling.

Cabinets

- Depending on use of existing kitchen, cabinets may be removed based on future use of space.

Work and Treatment: Stairs

- See General interior recommendations.
- Steps need to be evaluated per code.

Work and Treatment: Dormitory

- See General Interior Recommendations.

Walls

- In order to determine the degree of damage of the crack, analysis needs to be done to determine how long this crack has existed and if moisture has penetrated. Treat fine crack by pointing. A wider crack, which has some evidence of moisture penetration, needs further analysis to determine if the structural integrity of the building has been compromised.³
- An indentation, or hole, on the east wall is another problem in this room. This type of damage requires further investigation that quantifies the severity of the indentation. This particular indentation is small and can be treated by troweling a base layer of plaster just below the surface layer. When this dries, then another layer of plaster is applied to match existing.⁴
- Holes on the fire pole closet can be addressed by patching the damaged areas with new drywall construction. Cutting away the damaged piece and replacing it with a drywall piece larger than the damaged piece is the first step in patching up the damaged area. After that step is established, then secure the furring pieces, which are meant to hold the new drywall in place. Then apply tape and a joint compound to hold the new drywall piece in place and finish by matching existing wall finish.⁵

Ceiling

- Patchwork has already been done to the central portion of the ceiling. However, the craftsmanship of the application has left a protrusion of excess plaster. Investigation into the reason for this treatment will help in reapplying the plaster that was probably applied because of moisture penetration. If the moisture problem has been properly addressed, then the treatment recommendation will involve either reapplying plaster to match existing or sanding the existing patchwork it to help create a smooth finish.

Work and Treatment: Restroom and Shower Room

- See General Interior Recommendations.

Trim

- Recommendation: Water damaged wood should be repaired or replaced to match existing trim. Paint should be removed from trim and wooden trim treated and repainted.

Plumbing

- Plumbing should be further evaluated. Although it is apparent that the plumbing fixtures (toilets and sinks) are not in good condition due to high use and rusting. Reuse of sinks may be desired for LEED Certification, but toilets will likely need to be replaced. Water heater will have to be further evaluated for proper functioning.

Work and Treatment: Locker Room

- See General Interior Recommendations.

Walls

- Where water has infiltrated from roof damage in northwest corner locker, it is recommended to repair roof first. Exposed structural clay tile wall and expanded metal lath due to water damage should be repaired, re-plastered and re-painted.

Ceiling

- Recommendation: The removal of peeling paint and re-painting is recommended for the suspended ceiling.

Work and Treatment: North Office Room

- See General Interior Recommendations.

Walls

- Remove salt deposits, repair plaster, and paint.

Window

- Remove boards and make windows operational.

Work and Treatment: Central Office Room

- See General Interior Recommendations.

Walls

- The major problem in this room is the crack that runs from the floor to the ceiling at the southeast corner. Continued monitoring of the situation is needed. Further investigation may determine the exact cause of the crack.

Balcony

- Needs to be addressed and further analyzed as to its damage and recommendations needed to preserve the balcony doors.

Work and Treatment: South Office Room

- See General Interior Recommendations.
- The boarded up windows on the east façade need to be analyzed for damage and addressed to prevent further damage.

Electrical

- The electrical wiring around the wooden base and the ceiling need to be further analyzed as to its authenticity and the feasibility of future use. Any damaged wires need to be removed and replaced.

Summary

The recommendations and treatments required to address the condition assessment of Fire Station No. 11 has demonstrated that this building requires an acceptable amount of repair and maintenance that does not prohibit proceeding with the rehabilitation process. Addressing repair issues and properly maintaining the fire station will not only help make this building safe, but will help extend its useful life.

Notes

¹ John Ashurst and Nicola Ashurst, *Practical Building Conservation: Brick, Terracotta and Earth* (New York: Halsted Press, 1988), 33-35.

² Kay D. Weeks, David W. Look, "10: Exterior Paint Problems on Historic Woodwork" *Preservation Brief 10*, (20 March 2008) <http://www.cr.nps.gov/hps/TPS/briefs/brief10.htm>.

³ John Ashurst and Nicola Ashurst, *Practical Building Conservation: Brick, Terracotta and Earth*, 50.

⁴ Mary Lee MacDonald, "21: Repairing Historic Flat Plaster Walls and Ceilings," *Preservation Brief 21*, (20 March 2008) <http://www.cr.nps.gov/hps/TPS/briefs/brief21.htm>, 8.

⁵ Julian Cassell, Peter Parham, and Theresa Coleman, *DIY* (New York: DK, 2006), 125.

PROPOSED USE AND NEEDS OF NEW USER

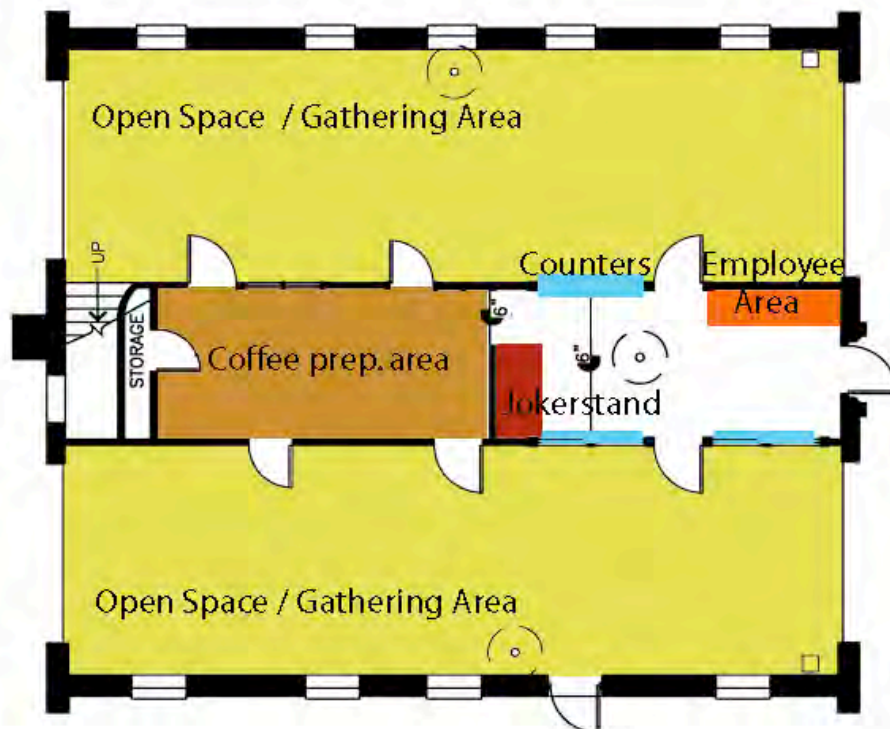
Fire Station No. 11, as the Historic Structure Report and Feasibility Analysis show, has the potential to become an exemplary case of a rehabilitated structure given a new use; continuing with the original intent of the Steves family dating back to 1883 to allow for the site to be home to an active force in the community.

The 4,400 sq. ft. facility can easily be converted into a variety of uses such as rare book sales, cultural exhibits, performance space for student musicians and gallery space for art and architecture students' work. The rehabilitated facility could house the new Center for Preservation Design and Research currently being developed at UTSA by the San Antonio Conservation Society Endowed Professor.

Further studies could reveal other needs and uses. However, this study concentrates on two main functions: a multi-use student's café on the first floor and faculty offices on the second floor. The proposed use and needs are presented below, followed by overall general requirements.

The Student Café's Proposed Needs (Figure 54)

- Open Space and Gathering Area
- Ground Floor Accessible Restrooms
- Café Preparation Area
- Designated Delivery Area
- Counter Area
- Storage Area



The open space/gathering areas utilize the north and south apparatus bays of the building. The bays' east and west doors can remain open during the hours of operation, creating a flexible open space environment. Part of the outdoor space within the site compound will be furnished with tables and chairs, creating year-round outdoor seating areas. Occupancy restrictions will determine the amount of furnishings needed for both the inside and outside areas. Special attention should be given to the density of the seating areas in order to allow for easy reconfiguration if space is needed for presentations or similar activities. Wireless hot spots are already part of the University System and can be added.

Two ground floor accessible restrooms are needed.

The central core of the building can house the service area of the student café. The existing kitchen space can house the refrigerator/freezer, sink, microwave, and preparation table as needed allowing for all or part of the existing cabinetry to remain.

The joker stand can be utilized for storing everyday non-perishable supplies such as napkins, cups, lids, paper bags, coffee stirs, etc. The top counter space could house the cash register. This area can continue to house a speaker system to call out clients' orders.

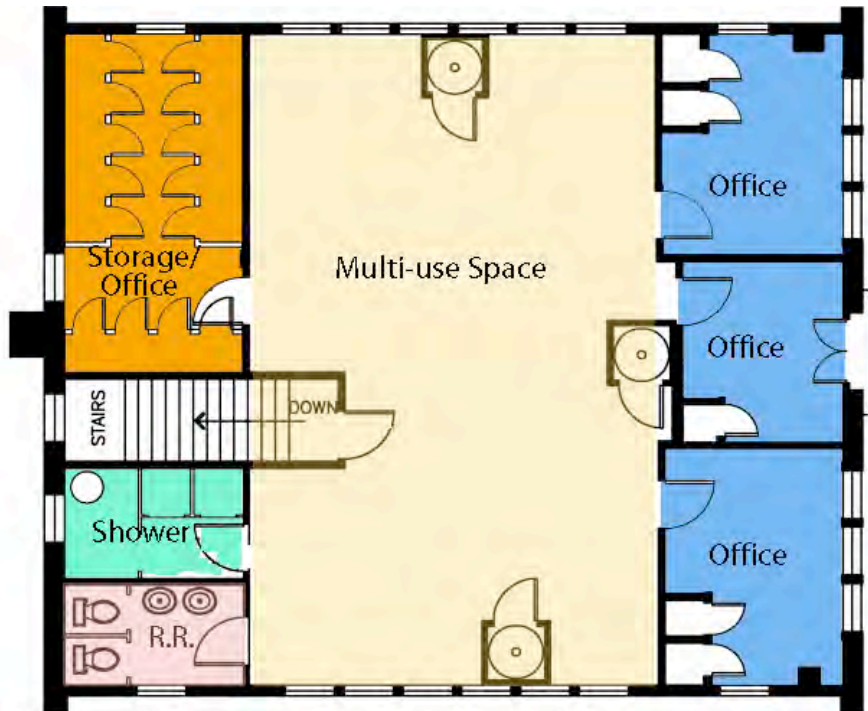
The boards used to cover part of the walls of the central core will need to be removed to allow for continuity of open space within the indoor area. This will create the opportunity for a counter space along the open areas facing the bays.

This counter space, in turn, creates an opportunity for additional storage space for over stock of non-perishables under it, thus eliminating the need of a storage room. The doors on both sides of the central core are to remain operable. The main entrance to the central core will house employee related needs such as coat rack, time clocks, etc.

Future designs will include a delivery area drop-off.

Faculty Offices' Proposed Needs (Figure 55)

- Office Spaces
- Multi-use Space
- Remodeled Rest Rooms
- Storage Space



Former Fire Department offices can house faculty offices; one per room. Closet spaces should remain and be given new usage such as storage, filing, etc.

The former dormitory space on the second floor can become a multi-use space. This space should allow for small faculty meetings, student presentations, and/or desks for staff if needed.

Rest rooms should be updated. Toilets, sinks, hardware and accessories should be replaced as needed. If further studies confirm the acceptability of only one unisex rest room, necessary remodeling should take place; leaving a functional shower fully remodeled to accommodate faculty and staff who use alternate means of transportation. Bicycle racks also add points towards LEED certification.

If locker room remains intact, it can be utilized for storage, but if need be, it could become a small office. Any cabinetry removed should be considered for reuse before being discarded.

Over All General Requirements

Piping utilities not included in the new electrical/mechanical design scheme should be removed and holes patched and covered to match new design color and texture scheme.

Whenever possible, information technology implementation should take advantage of wireless system of communication to avoid further alterations harmful to the structure.

Air conditioning and heating equipment should be selected for minimal impact on building structure such as mini split systems and portable heating equipment. Equipment should be chosen to match the interior design scheme.

Further studies are needed to determine the need and placement of an elevator.

Interior design approach should comply with ADA, Fire Code and other applicable local/state codes as per new building usage.

The interior design scheme should incorporate all the original artifacts left inside the building, such as fire poles, speakers, joker stand, sinks, etc. All wood work should be given the appearance needed to conform to the new interior design scheme.

All doors and windows should be operable not only to preserve the original design intent, but as an opportunity for natural ventilation.

The project should conform to the Secretary of the Interior's Standards for Rehabilitation to preserve the original design intent of the architect.

Rehabilitating this facility to serve a new use for UTSA will preserve the original intent of the Steves family. Allowing this structure to be used for educational, demonstrational and mixed uses, supported by the University of Texas as San Antonio but open to the general public, strengthens the site and the building’s active role in the community.

Case study:	Total
• Jupiter Java and Jazz cafe	585 sq ft
• Unisex rest room and small water closet	81 sq ft
• Back room with preparation table, industrial freezer and refrigerator, industrial sink, microwave and shelving for storage	90 sq ft
• Front counter: counter space, register area, storage, coffee machines	50 sq ft
• Sitting/Lounge/Egress/Accessibility area	364 sq ft

LAWS, PERMITS, CODES, AND STANDARDS FOR REHABILITATION

During renovations to Fire Station No. 11 it will be necessary for all work to comply with the building and fire safety codes in place for the City of San Antonio. In addition, applications for permits must also comply with city standards. Due to the fact that the property is designated as a historic landmark for the City of San Antonio, it will also be necessary that any work done be compliant with City of San Antonio preservation codes. An outline of LEED certification requirements is also examined in a separate section.

International Building Code and International Existing Building Code

All construction and renovation must comply with the International Building Code or aspects of the International Existing Building Code as detailed specifically below.

- The International Building Code 2006 will be used for any construction, alteration, replacement, repair, equipment update, use and occupancy, maintenance, removal and demolition of a structure. (IBC101.2)
- A Change of Use is requested and will be classified B for Business (office use) and A-2 for Assembly to include restaurant (i.e.: coffee shop) and bookstore (IBC302)
- Construction Documents required for every permit prior to construction and to be sealed by a registered design professional. (IBC106)
- Required inspections include preliminary, foundation, floors, frame, fire resistance, energy efficiency and other specialized inspections. (IBC109)
- Certificate of Occupancy includes permit number, address of building, name and address of owner, description of applicable area of use and for what use, occupant load, code used to determine occupancy, name of building official and any special conditions. (IBC110)
- Use International Existing Building Code 2006 if building was not previously occupied or used for its intended purpose and if repairs on an existing building's elements, materials, means of egress and accessibility are recommended. (IEBC101.4.1) (IEBC502)
- Existing pent roof is considered a "window awning supported by an exterior wall" and a permit is required for use groups B and A-2. (IEBC105.2)
- Stairways in existing buildings do not have to comply with new stairway requirements unless it does not meet accessibility or means of egress requirements for its intended use. (IEBC305.3B)
- For Historic buildings a report shall list ongoing repairs, alterations, update structural or change in occupancy as investigated and evaluated. The report shall be filed with code

official by a registered design professional. Report shall identify required safety features for compliance and look to reframing from damaging historic features. (IEBC1101.2)

All new mechanical, electrical, plumbing, and HVAC installation must comply with the International Building Code.

- International Electric Code 2005 calls out for any installation, alteration, repair, replacement of electrical wiring and equipment, fixtures, appliances and fittings as recommended. (IBC101.4.1)
- International Fuel and Gas Code 2006 calls out for installation of gas piping from point of delivery, gas appliances and related accessories for heating and kitchen requirement updates. (IBC101.4.2)
- International Mechanical Code 2006 calls out for application of installation, alteration, repair and replacement of mechanical systems including equipment, appliances, fixtures, fittings and devices for ventilating, heating, cooling, refrigeration systems and energy-related systems. (IBC101.4.3)
- International Plumbing Code 2006 calls out for application of installation, alteration, repair and replacement of plumbing systems including appliances, fixtures, fittings and connections to water and sewage. (IBC101.4.4)
- International Plumbing Code 2006 includes plumbing systems for erection, installation, alteration, repair, relocation, replacement, in addition to, use and maintenance of sanitary. Detailed in the International Fuel Gas Code are fuel gas distribution piping and equipment, fuel gas fired water heaters and water heating or ventilating systems. (IPC101.2)
- New plumbing shall be of regulated of materials, standards and acceptable materials for approved installation, and all open for inspection. (IPC303)
- Rodent proofing on pipe openings and meter boxes are recommended. (IPC304)
- Protection of plumbing system components by way of deterring from corrosion, breakage, stress and strain. The sleeves are filled or caulked between the pipes. Pipes through foundations have a relieving arch for support. Piping underground must be constructed a minimum of 6" below frost line and water proof openings. This includes joints at roof and around venting pipes. (IPC305)
- International Fire Code 2006 calls out for application of matters affecting or relating to structures, processes and premises from the hazards of fire and explosion in spaces, structures and equipment including conditions hazardous to life, property or public

welfare from construction, extension or repair of fire suppression and alarm systems. (IBC101.4.6)

- International Fire Code 2006 regulates the premises from the hazard of fire and explosions that arise from storage, handling or use of structures, materials or devices. This includes conditions hazardous to life, property or public welfare in the occupancy of structures or premises. It describes deterrence from fire hazards in the structure from occupancy or operation and matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems. (IFC101)
- Fire protection if included in designated historic buildings shall be provided in accordance with an approved fire protection plan. (IFC102.5)
- Fire-resistance rated construction includes walls, fire stops, shaft enclosures, partitions, smoke barriers, floors, fire-resistant coatings and sprayed fire-resistant materials and signage. (IFC700)
- Fire protective systems include safeguards such as automatic fire detection systems, fire alarm systems, fire extinguishers and fire-extinguishing systems. (IFC900)
- The means of egress includes the arrangement of a continuous and unobstructed way of egress travel from any accessible point and must meet code requirements for modes of access out of a building. (IFC1000)
- Comply with IFC 1400 for fire safety during construction and demolition.

Permit Process

All necessary permit applications will have to comply with the guidelines set forth by the City of San Antonio Development Services which are outlined on their website at www.sanantonio.gov/dsd/permitprocess.asp.

All work that requires a permit is subject to inspection by the official responsible for compliance. Further detail of this process is found at www.sanantonio.gov/dsd/PP5.asp.

A Certificate of Occupancy is required for all uses, including nonconforming uses as required by the UDC, with the exception of single family dwellings, registered family homes, and group day-care homes. The Director of Development Services maintains a record of all Certificates of Occupancy. For details see www.sanantonio.gov/dsd/PP6.asp.

Preservation Codes for City of San Antonio

Landmark Status

Fire Station No. 11 is designated as an historic landmark with the City of San Antonio with the further status as Historic Exceptional.

City Preservation Codes

The specific codes that apply to the adaptive reuse of Fire Station No. 11 are found in the January 1, 2006 Unified Development Code in Article VI for Historic Preservation and Urban Design. The section that specifically applies to the adaptation of Fire Station No. 11 is 35-610 for Alteration, Restoration, and Rehabilitation. Additionally, maintenance and repairs over time are addressed in section 35-611. City tax exemptions and credits for preservation projects are addressed in section 35-618.

35-610 Alteration, Restoration, and Rehabilitation

In considering whether to recommend approval or disapproval of an application for a certificate to alter, restore, rehabilitate, or add to a building, object, site or structure designated an historic landmark or located in a historic district, the historic and design review commission shall be guided by the National Park Service Guidelines in addition to any specific design guidelines included in this subdivision.

(a) Every reasonable effort shall be made to adapt the property in a manner that requires minimal alteration of the building, structure, object, or site and its environment.

For Fire Station No. 11 this will entail choosing a use that will allow the structure to maintain key features that define the structure's use as a fire station and are representative of the building's style.

(b) The distinguishing original qualities or character of a building, structure, object, or site and its environment, shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features shall be avoided when possible.

All attempts shall be made to maintain stylistic features that define the character of the building and maintenance of historic materials such as the tin ceilings or cast stone detailing shall be undertaken when possible.

(c) All buildings, structures, objects, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance are prohibited.

During the design phase, no attempts will be made to make speculative changes to the fire station that have no basis in factual research.

(e) Changes that may have taken place in the course of time are evidence of the history and development of a building, structure, object, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

Fire Station No. 11 was in use for a long period of time, which led to many changes made throughout the years. Some of these changes, such as installation of new equipment or technologies that were not present at the time of first construction have acquired significance in the context of a working fire house occupied for many decades.

(f) Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, object, or site shall be kept where possible.

Fire Station No. 11 has many stylistic features such as the cast stone elements and tin ceilings that should be maintained as examples of the craftsmanship of the time.

(g) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

This section in particular applies to the reuse of Fire Station No. 11 due to the nature of the deterioration of parts of the building and its materials. When at all possible, the design for reuse should attempt to repair and maintain vintage materials. If this is not a viable option, it will be necessary to acquire new materials that match the original as closely as possible. This applies to the repair of deteriorated ceiling tiles, exterior bricks, clay roofing tiles, and remaining historic windows and doors.

(h) The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic buildings materials shall not be undertaken.

There are many exterior surfaces at Fire Station No. 11 that will need cleaning of some kind to remove organic growth. Cleaning may also be necessary on interior walls, ceilings, and floors. In these cases the gentlest means of cleaning available should be used in order to maintain historic materials.

(i) Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any project.

Consideration should be given to this provision in the case of a need for excavations on the site.

(j) Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical,

architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.

Any new design elements that will be added on the property should be considerate of the significance of the historic structure and be aware of the effect they will have on the structure's context.

(k) Wherever possible, new additions or alterations to buildings, structures, objects, or sites shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the building, structure, object, or site would be unimpaired.

This is particularly important for the reuse of Fire Station No. 11 in the case of addition of new structures and alterations to the existing building. If additions are made to the site it is important that they consider carefully how they attach to the existing structure and make every effort to be reversible.

35-611 Ordinary Repair and Maintenance

Those activities that constitute ordinary repair and maintenance include but are not restricted to:

- (a) Repair using the same material and design as the original;
- (b) Repainting, using the same color;
- (c) Re-roofing, using the same type and color of material; and
- (d) Repair of sidewalks and driveways using the same type and color of materials.

A clear photograph of the building, object, or structure to be repaired, a brief description of the intended work, and samples of replacement materials or paint for comparison with the existing building, object, or structure must be furnished with the application.

This section of the code applies to plans for future maintenance and repair procedures that should be followed upon completion of the project. The last sentence pertains to the need for documentation of work done in order to better inform future work.

35-618 Tax Exemption Qualifications

- (a) Assessed Valuation

In accordance with the provisions of this article, a building, site, or structure which meets the definition of an historically significant site in need of tax relief to encourage preservation and which is substantially rehabilitated and/or restored as certified by the historic and design review commission and approved by the city tax assessor-collector, shall have an assessed value for ad valorem taxation as follows:

- (1) A residential property shall have the assessed value for ad valorem taxation for a period of ten (10) tax years equal to the assessed value prior to preservation.

(2) A commercial property shall have no assessed value for ad valorem taxation for a period of five (5) tax years after verification. Thereafter, the exempt property shall be reappraised at current market value and assessed at a fifty (50) percent rate for an additional consecutive five-year period.

In order to receive tax credits from the City of San Antonio it would be necessary for the Steves family to apply as a commercial property. The comparable rehabilitated fire station located at 1102 S. Flores is currently appraised at \$327,730. The current (2008) tax levy is \$8,124.57 per year. The tax exemption over 10 years for this comparable property would be worth \$60,934.28 in 2008 dollars.¹

Secretary of the Interior's Standards for Rehabilitation

In the event that the rehabilitation of Fire Station No. 11 pursues federal tax credits, it will be necessary to comply with and be reviewed under the Secretary of the Interior's Standards for Rehabilitation. The City Preservation Codes are very similar to the Secretary of the Interior's Standards for Rehabilitation so the recommendations will be very similar.

These standards outline the accepted treatments of rehabilitation and include specific guidelines that will pertain to the adaptive reuse of Fire Station No. 11. Beyond the general preservation philosophies addressed in the 10 Standards, further guidelines for the treatment of specific materials can be found in the Secretary of the Interior's Guidelines for Rehabilitation.² The following information is from the National Park Service's Illustrated Guidelines for Rehabilitating Historic Buildings.³

The Standards (Department of Interior regulations, 36 CFR 67) pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and the interior, related landscape features and the building's site and environment as well as attached, adjacent, or related new construction. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

ADA Standards

The existing Fire House No. 11 on South Frio and Durango Streets was constructed in 1925. The fire house is the second constructed on this site for the San Antonio Fire Department. The fire house is not occupied at the moment and will be rehabilitated to serve the University of Texas at San Antonio as a cafe with offices above. The main level of the building is to be used as a coffee shop and reading area. The second level is more private, containing offices for professors and staff.

1.3 Application

1.3.1 Minimum requirements. The standards contained in this document shall be considered the minimum requirements for complying with the intent of *Article 9102, Texas Civil Statutes*. They are common to all spaces and elements of buildings and facilities constructed on or after April 1, 1994, and shall have both interior and exterior application. It is not the intent of these standards to prohibit or discourage the development and use of sites with extreme conditions. However, excavation or other site modifications, even contrary to natural terrain, may be necessary to comply with the intent of the law.⁴

1.3.2 Equal Access. The application of these standards is to further the concept of equal treatment for people with disabilities to the maximum extent possible and reasonable.

4.2 Space Allowances and Reach Ranges

4.2.1 Wheelchair Passage Width: The minimum clear width for single wheelchair passage shall be 32" at a point and 36" continuously. Refer to Figure 56.



Figure 56: Fire pole can remain because it is a character defining feature, if there is a clearance of 32" for wheelchair to pass.

4.2.2 Width for Wheelchair Passing: The minimum width for two wheelchairs to pass is 60".

4.2.3 Wheelchair Turning Space: The minimum space required for a standard wheelchair to make a 180-degree turn is a clear space of 60" diameter or a T-shaped space.

4.2.5 Forward Reach: If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48". The minimum low forward reach is 15". If the high forward reach is over an obstruction, reach and clearances shall be as shown. Refer to Figure 57.

4.2.6 Side Reach: If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54" and the low side reach shall be no less than 9" above the floor. If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig 6(c).

4.3 Accessible Route

4.3.1 General: All walks, halls, corridors, aisles, skywalks, tunnels, general circulation routes, and other spaces that are part of an accessible route shall comply with 4.3. Refer to Figure 58.



Figure 57: If cabinets are to be used by the public they shall be lowered to recommended height. Lower cabinets would require knee space for acceptable forward reach.



Figure 58: Sidewalk must be reconstructed to allow free access without any changes in levels due to land shifts.

4.3.2 Location: At least one accessible route within the boundary of site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public unless that route would violate 4.3.2 Refer to Figure 59.

4.3.3 Width: The minimum clear width of an accessible route shall be 36" except at doors. If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in figure 7(a) and 7(b).

4.3.4 Passing Space: If an accessible route has less than 60" clear width, then passing spaces at least 60" by 60" shall be located at a reasonable intervals not to exceed 200 ft. A T-intersection of two corridors or walks is an acceptable passing place.

4.3.7 Slope: An accessible route with a running slope greater than 1:20 is a ramp and shall comply with 4.8. Nowhere shall the cross slope of an accessible route exceed 1:50.

4.3.10 Egress: Accessible routes serving any accessible space or element shall also serve as a means of egress for emergencies or connect to an accessible area of rescue assistance.



Figure 59: If main entrance is to be on west façade, it should have accessible parking in proximity to main entrance. UTSA nearby parking can serve as accessible parking for shop.

4.5 Ground & Floor Surfaces

4.5.1 General: Ground and floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, slip resistant, and shall comply with 4.5. Soft or loose materials such as sand, gravel, bark, mulch or wood chips are not suitable.

4.5.2 Changes in Level: Changes in level up to ¼" may be vertical and without edge treatment. Changes in level between ¼" and ½" shall be beveled with a slope greater than ½" shall be accomplished by means of a ramp that complies with 4.7 or 4.8. Refer to Figure 60.

4.5.4 Gratings: If gratings are located in walking surfaces or along accessible routes, then they shall have spaces no greater than ½" wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

4.6 Parking & Passenger Loading Zone

4.6.1 Minimum Number: Parking spaces required to be accessible by 4.1 shall comply with 4.6.2 through 4.6.5. Passenger loading zones required to be accessible by 4.1 shall comply with 4.6.5 and 4.6.6. Refer to Figure 61. Access aisles must be a minimum of 60" wide except for "van accessible" parking spaces (van accessible spaces require 96" wide access aisles).

Total Parking In Lot	Required Minimum of Accessible Spaces	Total Parking in Lot	Required Minimum of Accessible Spaces
1 to 25	1	201 to 300	7
26 to 50	2	301 to 400	8
51 to 75	3	401 to 500	9
76 to 100	4	501 to 1000	2 percent of total
101 to 150	5	1001 and over	20 plus 1 for each 100 over 1000
151 to 200	6		



Figure 60: Floor shall be verified on site for any changes in level, for example from kitchen area towards left/right bay. The change in level shall be softened with a ramp.



Figure 61: If parking is to be provided, the total number of parking spaces for this building will be approximately 1-25, which means at least one accessible parking space will be required. However, parking is not necessary since there is parking readily available at the UTSA Monterrey Building.

4.6.2 Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility.

4.6.3 Parking Spaces: Accessible parking spaces shall be at least 96" wide. Parking access aisles shall be part of an accessible route to the building or facility entrance and shall comply with 4.3. Two accessible parking spaces may share a common access aisle. Parked vehicle overhangs shall not reduce the clear width of an accessible route. Parking spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions.

4.7 Curb Ramps

4.7.1 Location: Curb ramps complying with 4.7 shall be provided wherever an accessible route crosses a curb.

4.7.2 Slope: Slopes of curb ramps shall comply with 4.8.2. The slope shall be measured from height divided by length of ramp. Transitions from ramps to walks, gutters, or

streets shall be flush and free of abrupt changes. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1:20.

4.7.3 Width: The minimum width of a curb ramp shall be 36", exclusive of flared sides.

4.8 Ramps

4.8.1 General: Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with 4.8.

4.8.2 Slope and Rise: The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30".

4.8.3 Clear Width: The minimum clear width of a ramp 30' or less in length shall be 36". Ramps more than 30' in length shall have a minimum clear width of 44".

4.8.4 Landings: Ramps shall have level landings at bottom and top of each ramp and each ramp run.

4.8.5 Handrails: If a ramp run has a rise greater than 6" or a horizontal projection greater than 72", then it shall have handrails on both sides.

4.8.6 Cross Slope and Surfaces: The cross slope of ramp surfaces shall be no greater than 1:50. Ramp surfaces shall comply with 4.5.

4.13 Doors

4.13.1 General: Doors required to be accessible by 4.1 shall comply with requirements of 4.13.

4.13.5 Clear Width: Doorways shall have a minimum clear opening of 32" with the door open 90 degrees, measured between the face of the door and the opposite stop. Openings more than 24" in depth shall comply with 4.2.1 and 4.3.3. Refer to Figure 62.



Figure 62: All doors on first level shall be verified at 3'-0" for accessibility. If door does not have clear width of 3'-0" then it shall be replaced or made non-public.

4.13.8 Thresholds at Doorways: Thresholds at doorways shall not exceed 3/4" in height for exterior sliding doors or 1/2" for other types of doors. Raised thresholds and floor level changes at accessible doorways shall be beveled with a slope no greater than 1:2.

4.13.9 Door Hardware: Handles, pulls, latches, locks, and other operating devices on accessible doors shall have a slope that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Refer to Figure 63.



Figure 63: Doors on first level shall have new hardware that does not require twisting of the wrist if it is to be used as a major passageway. It is recommended that a panic device be used for easy exit.

4.13.10 Door Closers: If a door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3" from the latch, measured to the leading edge of the door. Refer to Figure 64.



Figure 64: Doors on first level shall have working door closers

4.14 Entrances

4.14.2 Service Entrances: A service entrance shall not be the sole accessible entrance unless it is the only entrance to a building or facility. Access must be provided to all levels whenever possible.

4.18 Urinals

4.18.2 Height: Urinals shall be stall-type, or wall hung with a tapered elongated rim mounted at a maximum of 17" above the finished floor (AFF).

4.18.3 Clear Floor Space: A clear floor space 30" by 48" shall be provided in front of urinals to allow forward approach. This clear space shall adjoin or overlap an accessible route and shall comply with 4.2.4.

4.19 Lavatories & Mirrors

4.19.2 Height and Clearances: Lavatories shall be mounted with the rim or counter surface no higher than 34" above the finished floor. Provide a clearance of at least 29" above the finished floor to the bottom of the apron.

4.19.3 Clear Floor Space: A clear floor space 30" by 48" complying with 4.2.4 shall be provided in front of a lavatory to allow forward approach.

4.19.6 Mirrors: Mirrors shall be on accessible routes at locations consistent with that of other mirrors in the same room, and shall be mounted with the bottom edge of the reflecting surface no higher than 40" above the finished floor. Refer to Figure 65.

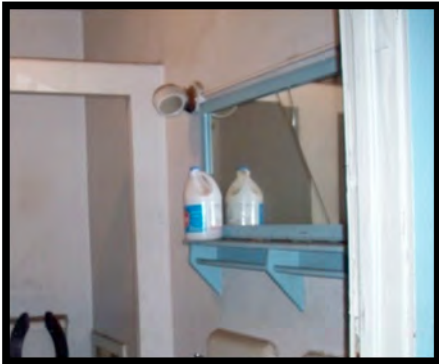


Figure 65: If mirrors are to remain they shall be no higher than 40" above finished floor (AFF), they shall be replaced or relocated as needed.

4.22 Toilet Rooms

4.22.2 Doors: All doors to accessible toilet rooms shall comply with 4.13. Doors shall not swing into the clear floor space required for any fixture. Refer to Figure 66.



Figure 66: If toilet rooms on second level are to be used, the doorways need to be 3'-0" wide, if not the doors shall be replaced or new accessible toilet room shall be constructed on first level.

4.22.3 Clear Floor Space: The accessible fixtures and controls required in 4.22.4, 4.22.5, 4.22.6, and 4.22.7.

4.22.4 Water Closets: If toilet stalls are provided, then at least one shall be a standard toilet stall complying with 4.17, where 6 or more stalls are provided, in addition to the stall 36" wide with an outward swinging. Water closets in such stalls shall comply with 4.16. If water closets are not in stalls, then at least one shall comply with 4.16.

4.32.7 Controls and Dispensers: If controls, dispensers, receptacles, or other equipment are provided, then at least one of each shall be on an accessible route and shall comply with 4.27. Refer to Figure 67.



Figure 67: New soap and paper towel dispensers shall be provided no higher than 42" AFF.

4.24 Sinks

4.24.2 Height: Sinks shall be mounted with the counter or rim no higher than 34" above the finished floor. Refer to Figure 68.



Figure 68: If sinks are to remain and made operable, they shall have a height of 34" AFF to rim. If sink is to be operable with hot water, then exposed pipes shall be covered with insulation and faucets shall be replaced with push-type.

4.24.3 Knee Clearance: Knee clearance that is at least 27" high, 30" wide, and 19" deep shall be provided underneath sinks.

4.24.4 Depth: Each sink shall be a maximum of 6-1/2" deep.

4.24.5 Clear Floor Space: A clear floor space at least 30" by 48" complying with 4.2.4 shall be provided in front of a sink to allow forward approach. The clear floor space shall be on an accessible route and shall extend a maximum of 19" underneath the sink.

4.24.6 Exposed Pipes and Surfaces: Hot water and drainpipes exposed under sinks shall be insulated or otherwise configured so as to protect against contact. There shall be no sharp or abrasive surfaces under sinks.

4.24.7 Faucets: Faucets shall comply with 4.27.4. Lever-operated, push-type, touch-type, or electronically controlled mechanisms are acceptable designs.

4.26 Handrails & Grab bars

4.26.2 Size and Spacing of Grab Bars and Handrails: The nominal diameter or width of the gripping surfaces of a handrail or grab bar shall be 1-1/4" to 1-1/2" or the shape shall provide an equivalent gripping surface. If handrails or grab bars are mounted adjacent to a wall, the space between the wall and the grab bar shall be 1-1/2". Handrails may be located in a recess if the recess is a maximum of 3" deep and extends at least 18" above the top of the rail. Refer to Figure 69.



Figure 69: Handrails at stairs shall be verified with 4.26.2 and shall have proper gripping surface. If current handrails do not meet requirements they shall be replaced with new.

4.26.4 Eliminating Hazards: A handrail or grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8".

4.27 Controls & Operating Mechanisms

4.27.2 Clear Floor Space: Clear floor space complying with 4.2.4 that allows a forward or a parallel approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles, and other operating equipment.

4.27.3 Height: The highest operable part of controls, dispensers, receptacles, and other operable equipment shall be placed within at least one of the reach ranges specified in 4.2.5 and 4.2.6. Electrical and communications system receptacles on walls shall be mounted no less than 15" above the floor.

4.27.4 Operation: Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lb/f.

Notes

¹ The City of San Antonio, “Historic Preservation & Urban Design- UDC Article VI, January 1, 2006,” San Antonio Preservation Office, <http://www.sanantonio.gov/historic/code.asp>.

² National Park Service, “The Secretary of the Interior’s Standards for Rehabilitation,” <http://www.nps.gov/history/hps/tps/tax/rhb/stand.htm>.

³ The National Park Service. “The Secretary of the Interior’s Standards for Rehabilitation: Introduction to the Standards.” <http://www.nps.gov/history/hps/tps/tax/rhb/stand.htm>

⁴ Information on the ADA standards is from the Texas Department of Licensing and Regulation’s Texas Accessibility Standards (TAS) website at <http://www.license.state.tx.us/ab/tas/abtas1.htm>

LEED CERTIFICATION

LEED was first published in 1999, and has helped professionals improve the quality of their buildings and the impact they create on the environment. Green design is an advantage because it reduces operating costs, increases occupant productivity, and is good for public health and environment.

The LEED program has a rating system that works with the accumulation of points. The more points received the higher the certification. The amount of points gained by each project is certified as follows:

26-32 Points	Certified
33-38 Points	Silver
39-51 Points	Gold
52-69 Points	Platinum

A project obtaining LEED certification has its advantages. It can be recognized throughout the community as addressing environmental issues. It can qualify for local government and state initiatives and can also receive marketing exposure through the Greenbuild conference, case studies, and media announcements. Achieving a LEED certification process can serve as an educational experience—what is learned about building green can be used repeatedly in the future.

Preliminary analysis indicates that Fire Station No. 11 could be LEED certified. Fire House No. 11 is an existing building that is located on the corner of South Frio and Durango Streets. The building is not currently occupied and will be rehabilitated to highlight its historical significance as well as serve a different use, that of a coffee shop. The following can be applied to Fire House No. 11 for LEED certification:

Sustainable Sites:

- SS Prerequisite 1: Construction Activity Pollution Prevention Required
 - *Requirements- Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project.*
- SS Credit 4.1: Alternative Transportation: Public Transportation Access 1 Point
 - *Requirements-Locate project within 1/2 mile of an existing, or planned and funded, commuter rail, light rail or subway station. Refer to Figure 70.*
- SS Credit 4.2: Alternative Transportation: Bicycle Storage & Changing Rooms 1 Point
 - *Requirements-For commercial or institutional buildings, provide secure bicycle racks and/or storage (within 200 yards of a building entrance) for 5% or more of all building users. Refer to Figure 71.*



Figure 70: South Frio Street. Building has an existing bus stop that can be used to the advantage of the proposed coffee shop in the certification process.



Figure 71: Add bicycle racks near the front entrance to allow for alternative transportation.

- SS Credit 4.4: Alternative Transportation: Parking Capacity 1 Point
 - *Requirements- Provide no new parking. Preferred parking refers to the parking spots that are closest to the main entrance of the project (exclusive of designated handicapped spaces) or parking passes provided at a discounted price. Refer to Figure 72.*
- SS Credit 5.1: Site Development: Protect or Restore Habitat 1 Point
 - *Requirements- On previously developed or graded sites, restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.*
- SS Credit 5.2: Site Development: Maximize Open Space 1 Point
 - *Requirements-For areas with no local zoning requirements (e.g., some university campuses, military bases), provide vegetated open space area adjacent to the building that is equal to the building footprint.*



Figure 72: Use parking adjacent to serve the building. Handicapped parking spaces can also be from the UTSA Monterrey Building.

- SS Credit 7.1: Heat Island Effect: Non-Roof 1 Point
 - *Requirements-Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): shade (within 5 years of occupancy), paving materials with a Solar Reflectance Index (SRI) of at least 29, and open grid pavement system. Refer to Figure 73.*
- SS Credit 7.2: Heat Island Effect: Roof 1 Point
 - *Requirements-Use roofing materials having a Solar Reflectance Index (SRI) equal to or greater than the values in the table below for a minimum of 75% of the roof surface.*
- SS Credit 8: Light Pollution Reduction 1 Point
 - *Requirements-All non-emergency interior lighting shall be automatically controlled to turn off during non-business hours. Provide manual override capability for after hours use.*



Figure 73: Sidewalks that will be reconstructed can use paving materials with a SRI of 29.

Water Efficiency:

- WE Credit 1.1: Water Efficient Landscaping: Reduce by 50%
 - *Requirements-Reduce potable water consumption for irrigation by 50% from a calculated mid-summer baseline case.*
- WE Credit 1.2: Water Efficient Landscaping: No Potable Water Use or No Irrigation 1 Point
 - *Requirements-Use only captured rainwater, recycled wastewater, recycled greywater, or water treated and conveyed by a public agency specifically for non-potable uses for irrigation. Refer to Figure 74.*
- WE Credit 2: Innovative Wastewater Technologies 1 Point
 - *Requirements-Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures (water closets, urinals) or non-potable water (captured rainwater, recycled greywater, and on-site or municipally treated wastewater).*



Figure 74: Storm water could be collected for irrigation of plants.

- WE Credit 3.1: Water Use Reduction: 20 % Reduction 1 Point
 - *Requirements-Use high-efficiency fixtures, dry fixtures such as composting toilet systems and non-water using urinals, and occupant sensors to reduce the potable water demand. Refer to Figure 75.*
- WE Credit 3.2: Water Use Reduction: 30% Reduction 1 Point in addition to WE Credit 3.1
 - *Requirements-Consider reuse of stormwater and greywater for non-potable applications such as toilet and urinal flushing, mechanical systems and custodial uses*

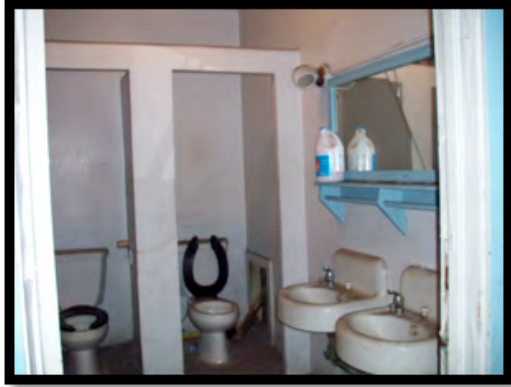


Figure 75: Install water efficient plumbing fixtures and automatic water control systems.

Energy & Atmosphere

- EA Prerequisite 1: Fundamental Commissioning of the Building Energy Systems-Required
 - *Requirements-Owners are encouraged to seek out qualified individuals to lead the commissioning process. Qualified individuals are identified as those who possess a high level of experience in the following areas: Energy systems design, installation and operation, Commissioning planning and process management, Hands-on field experience with energy systems performance, interaction, start-up, balancing, testing, troubleshooting, operation, and maintenance procedures.*

EA Prerequisite 2: Minimum Energy Performance-Required

- *Requirements-Design the building envelope, HVAC, lighting, and other systems to maximize energy performance. Refer to Figure 76.*
- EA Prerequisite 3: Fundamental Refrigerant Management-Required
 - *Requirements-Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phase-out conversion prior to project completion.*
- EA Credit 2: Onsite Renewable Energy 1-3 Points
 - *Requirements-Use on-site renewable energy systems to offset building energy cost. Assess the project for non-polluting and renewable energy potential including solar, wind, geothermal, low impact hydro, biomass and bio-gas strategies. Refer to Figure 77.*

<i>% Renewable Energy</i>	<i>Points</i>
2.5%	1
7.5%	2
12.5%	3

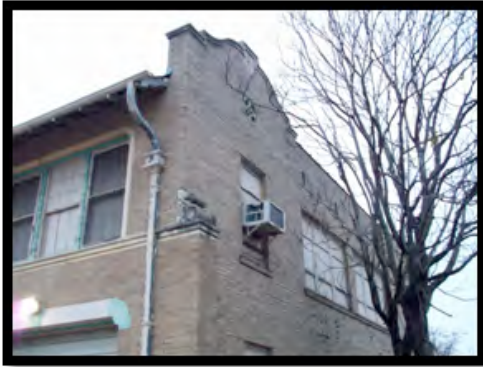


Figure 76: Identify mechanical equipment such as A/C units that are not working efficiently and replace them with more efficient units.

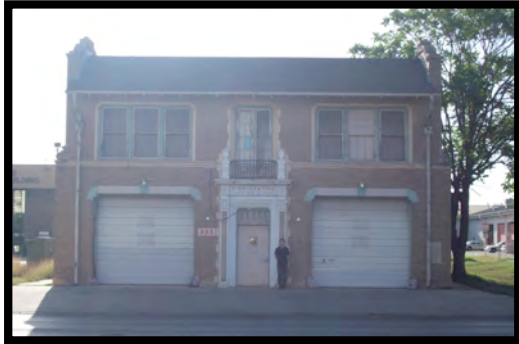


Figure 77: There is potential for renewable energy use such as installing solar panels on roof to reduce energy costs.

- EA Credit 4: Enhanced Refrigerant Management 1 Point
 - *Requirements-Do not use refrigerants.*
- EA Credit 6: Green Power 1 Point
 - *Requirements-Determine the energy needs of the building and investigate opportunities to engage in a green power contract. Green power is derived from solar, wind, geothermal, biomass or low-impact hydro sources.*

Materials & Resources

- MR Prerequisite 1: Storage & Collection of Recyclables-Required
 - *Requirements-Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.*
- MR Credit 1.1: Building Reuse: Maintain 75% of Existing Walls, Floors & Roof 1 Point
 - *Maintain at least 75% (based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). Refer to Figure 78.*



Figure 78: The existing roof decking, walls and windows will remain on the building and be reused.

- MR Credit 1.2: Building Reuse: Maintain 95% of Existing Walls, Floors & Roof 1 Point in addition to MR Credit 1.1
 - *Requirements -Maintain an additional 20% (95% total, based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material).*
- MR Credit 1.3: Building Reuse: Maintain 50% of Interior Non-Structural Elements 1 Point
 - *Requirements -Use existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the completed building (including additions). Refer to Figure 79.*
- MR Credit 2.1: Construction Waste Management: Divert 50% From Disposal 1 Point
 - *Requirements -Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris.*
- MR Credit 3.1: Materials Reuse: 5% 1 Point
 - *Requirements -Use salvaged, refurbished or reused materials such that the sum of these materials constitutes at least 5%, based on cost, of the total value of materials on the project*



Figure 79: At least 50% of interior walls, doors floor and tin ceiling will remain intact for the proposed use of the coffee shop.

- MR Credit 3.2: Materials Reuse: 10% 1 Point in addition to MR Credit 3.1
 - *Requirements-Use salvaged, refurbished or reused materials for an additional 5% beyond MR Credit 3.1 (10% total, based on cost).*
- MR Credit 4.1: Recycled Content: 10% (post-consumer + 1/2 pre-consumer) 1 Point
 - *Requirements-Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project.*
- MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally 1 Point
 - *Requirements-Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% (based on cost) of the total materials value. Refer to Figure 80.*
- MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally 1 Point in addition to MR Credit 5.1
 - *Requirements-Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for an additional 10% beyond MR Credit 5.1 (total of 20%, based on cost) of the total materials value.*



Figure 80: Brick that will be replaced can be hauled in from within 500 miles to conserve fuel costs.

- MR Credit 7: Certified Wood 1 Point
 - *Requirements -Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes. Refer to Figure 81.*

Indoor Environmental Quality

- EQ Prerequisite 1: Minimum IAQ Performance-Required
 - *Requirements -Design ventilation systems to meet or exceed the minimum outdoor air ventilation rates as described in the ASHRAE standard. Refer to Figure 82.*
- EQ Prerequisite 2: Environmental Tobacco Smoke (ETS) Control-Required
 - *Requirements -Prohibit smoking in the building, or locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows.*



Figure 81: If doors or any wooden trim is to be replaced with certified wood in accordance with the Forest Stewardship Council's Principles.



Figure 82: Increase natural ventilation by opening the garage doors during business hours or opening windows to allow for controlled airflow paths.

- EQ Credit 3.1: Construction IAQ Management Plan: During Construction 1 Point
 - *Requirements -Adopt an IAQ management plan to protect the HVAC system during construction, control pollutant sources and interrupt contamination pathways.*
- EQ Credit 4.1: Low-Emitting Materials: Adhesives & Sealants 1 Point
 - *Requirements -All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following:*

<i>Architectural Applications</i>	<i>VOC Limit [g/L less water]</i>	
<i>Indoor Carpet Adhesives</i>	<i>50</i>	<i>PVC Welding</i> 510
<i>Carpet Pad Adhesives</i>	<i>50</i>	<i>CPVC Welding</i> 490
<i>Wood Flooring Adhesives</i>	<i>100</i>	<i>ABS Welding</i> 325
<i>Rubber Floor Adhesives</i>	<i>60</i>	<i>Plastic Cement Welding</i> 250
<i>Subfloor Adhesives</i>	<i>50</i>	<i>Adhesive Primer for Plastic</i> 550
<i>Ceramic Tile Adhesives</i>	<i>65</i>	<i>Contact Adhesive</i> 80
<i>VCT & Asphalt Adhesives</i>	<i>50</i>	<i>Special Purpose Contact Adhesive</i> 250
<i>Drywall & Panel Adhesives</i>	<i>50</i>	<i>Structural Wood Member Adhesive</i> 140
<i>Cove Base Adhesives</i>	<i>50</i>	<i>Applied Rubber Lining Operations</i> 850
<i>Multipurpose Constr. Adhesives</i>	<i>70</i>	<i>Top & Trim Adhesive</i> 250



Figure 83: Paints and coatings applied to interior walls of Fire House No. 11 shall have VOC emissions not exceeding the VOC and chemical component limits of Green Seal Standards Requirements.

- EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings 1 Point
 - *Requirements -Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993. Flats: 50 g/L, Non-Flats:150 g/L*
- EQ Credit 4.4: Low-Emitting Materials: Composite Wood & Agrifiber Products 1 Point
 - *Requirements -Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins.*
- EQ Credit 6.1: Controllability of Systems: Lighting 1 Point
 - *Requirements -Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. Refer to Figure 84.*



Figure 84: Implement system and occupant control of ambient and task lighting to suit individual preferences on new light fixtures.

- EQ Credit 8.1: Daylight & Views: Daylight 75% of Spaces 1 Point
 - *Requirements -Achieve a minimum glazing factor of 2% in a minimum of 75% of all regularly occupied areas. The glazing factor is calculated as follows: Refer to Figure 85.*

$$\text{Glazing} = \frac{\text{Window Area [SF]} / \text{Floor Area} \times \text{Window Geometry Factor} \times \text{Actual Tvis} / \text{Minimum Tvis} \times \text{Window Height Factor}}$$

- EQ Credit 8.2: Daylight & Views: Views for 90% of Spaces 1 Point
 - *Requirements -Achieve direct line of sight to the outdoor environment via vision glazing between 2'6" and 7'6" above finished floor for building occupants in 90% of all regularly occupied areas. Refer to Figure 86.*



Figure 85: Provide high performance glazing or remove paint and plywood from existing windows to maximize interior day lighting.



Figure 86: Remove paint on windows to allow a line of sight to the outdoor environment

Innovation and Design Process

- ID Credit 1–1.4: Innovation in Design 1–4 Points
 - *Requirements -Substantially exceed a LEED for New Construction performance credit such as energy performance or water efficiency.*

- ID Credit 2: LEED Accredited Professional 1 Point
 - *Requirements-At least one principal participant of the project team shall be a LEED Accredited Professional (AP).*

HISTORIC PRESERVATION TAX CREDITS

Introduction

Tax credits or incentives in historic preservation are designed to promote and encourage the conservation of historic structures. In 1976, the National Park Service (NPS) and the Internal Revenue Service (IRS) united in the preservation effort by creating these incentives for organizations and individuals to utilize. The different incentives, whether they are tax credits or loans, are meant to further historic preservation at both a national and state level.

The incentives applicable to Fire Station No. 11, will help in advancing the project through the development and construction phase by providing funds necessary for its rehabilitation.

Local Tax Exemptions

According to 35-618 of the Preservation Codes of San Antonio Tax Exemption Qualifications:

- A commercial property shall have no assessed value for ad valorem taxation for a period of five years after verification. Thereafter, the exempt property shall be reappraised at current market value and assessed at a 50% rate for an additional five-year period.

Comparable Property information

The rehabilitated Fire Station No. 12 at 1102 S. Flores is appraised at \$327,730. The current (2008) tax levy is \$8,124.57 per year. So, the tax exemption over 10 years for this comparable property would be worth \$60, 934.28 in 2008 dollars (i.e. unadjusted for future inflation).

Federal Applicable Tax Incentives

The current federal tax incentive for Fire Station No. 11, established by the Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47 [formerly Section 48(g)]) include:

- 20% tax credit for the *certified rehabilitation* of *certified historic structures*.

What Is a Tax Credit?

A tax credit lowers the amount of tax owed. In general, a dollar of tax credit reduces the amount of income tax owed by one dollar.¹

- The 20% rehabilitation tax credit equals 20% of the amount spent in a *certified rehabilitation* of a *certified historic structure*.

The 20% rehabilitation tax credit applies to any project that the Secretary of the Interior designates a *certified rehabilitation of a certified historic structure*. The 20% credit is available for properties rehabilitated for commercial, industrial, agricultural, or rental residential purposes, but it is not available for properties used exclusively as the owner's private residence.

Processing Fees

The NPS charges a fee for reviewing applications, except where the total rehabilitation cost is under \$20,000. Fees are charged according to a two-tiered system: a preliminary fee and a final fee. The \$250 preliminary fee covers NPS review of proposed work. The final fee covers NPS review of completed projects. The final fee depends on the rehabilitation costs, according to the fee schedule below. The preliminary fee is deducted from the final fee. Payment should not be sent until requested by NPS. The NPS will not issue a certification decision until payment has been received.

Fee	Size of Rehabilitation
\$500	\$20,000 to \$99,000
\$800	\$100,000 to \$499,999
\$1,500	\$500,000 to \$999,999
\$2,500	\$1,000,000 or more

IRS Requirements

To be eligible for the 20% rehabilitation tax credit, a project must also meet the following basic tax requirements of the Internal Revenue Code:

- The building must be *depreciable*. That is, it must be used in a trade or business or held for the production of income. It may be used for offices, for commercial, industrial or agricultural enterprises, or for rental housing. It may not serve exclusively as the owner's private residence.
- The rehabilitation must be *substantial*. That is, during a 24-month period selected by the taxpayer, rehabilitation expenditures must exceed the greater of \$5,000 or the adjusted basis of the building and its structural components. The adjusted basis is generally the purchase price, minus the cost of land, plus improvements already made, minus depreciation already taken. Once the substantial rehabilitation test is met, all qualified expenditures, including those incurred outside of the measuring period, qualify for the credit.
- The property must be placed in service (that is, returned to use). The rehabilitation tax credit is generally allowed in the taxable year the rehabilitated property is placed in service.
- The building must be a *certified historic structure* when placed in service; if it is not yet a *certified historic structure* when placed in service, the owner must have requested on or before the date that the building was placed in service a determination from the NPS that the building is a *certified historic structure*, and have a reasonable expectation that the determination will be granted.

- Qualified rehabilitation expenditures include costs of the work on the historic building, as well as architectural and engineering fees, site survey fees, legal expenses, development fees, and other construction-related costs, if such costs are added to the property's basis and are determined to be reasonable and related to the services performed. They do not include costs of acquiring or furnishing the building, new additions that expand the existing building, new building construction, or parking lots, sidewalks, landscaping, or other related facilities.

The Secretary of the Interior's Standards for Rehabilitation

Rehabilitation projects must meet the following Standards, as interpreted by the National Park Service, to qualify as "certified rehabilitations" eligible for the 20% rehabilitation tax credit. The Standards are applied to projects in a reasonable manner, taking into consideration economic and technical feasibility.

Note: Fire Station No. 11 will essentially be required to meet these Standards with or without a Federal Tax Credit. City of San Antonio Ordinances are very similar and apply to Fire Station No. 11 because it is locally listed as "historic exceptional."

The Standards (36 CFR Part 67) apply to historic buildings of all periods, styles, types, materials, and sizes. The Standards also encompass related landscape features and the building's site and environment as well as attached, adjacent, or related new construction.

- A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
- Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
- Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials.

Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Claiming the 20% Rehabilitation Tax Credit

Generally, the tax credit is claimed on IRS form 3468 for the tax year in which the rehabilitated building is placed in service. For phased projects, the tax credit may be claimed before completion of the entire project provided that the substantial rehabilitation test has been met. If a building remains in service throughout the rehabilitation, then the credit may be claimed when the substantial rehabilitation test has been met. Unused tax credit can be “carried back” one year and “carried forward” 20 years.

The IRS requires that the NPS certification of completed work (Application Part 3) be filed with the tax return claiming the tax credit. If final certification has not yet been received when the taxpayer files the tax return claiming the credit, a copy of the first page of the Historic Preservation Certification Application-Part 2 must be filed with the tax return. The copy of the application filed must show evidence that it has been received by either the SHPO or the NPS (date-stamped receipt or other notice is sufficient). If the taxpayer then fails to receive final certification within 30 months after claiming the credit, the taxpayer must agree to extend the period of assessment. If the NPS denies certification to a rehabilitation project, the credit will be disallowed.

Rehabilitations Involving Governments and Other Tax-Exempt Entities

Property used by governmental bodies, nonprofit organizations, or other tax-exempt entities is not eligible for the rehabilitation tax credit if the tax-exempt entity enters into a disqualified lease (as the lessee) for more than 35% of the property. A disqualified lease occurs when:

- Part or all of the property was financed directly or indirectly by an obligation in which the interest is tax-exempt under Internal Revenue Code Section 103(a) and such entity (or related entity) participated in such financing; or,
- Under the lease there is a fixed or determinable price for purchase or an option to buy which involves such entity (or related entity); or,
- The lease term is in excess of 20 years; or,
- The lease occurs after a sale or lease of the property and the lessee used the property before the sale or lease.

Important Owner Information

- The Steves family, as owners of the fire station, is qualified to receive the tax credit so long as any lease with UTSA does not exceed 20 years.
- UTSA is not eligible for the tax credit because the University is a tax-exempt entity.
- A private investor may be able to put money into the project (along with UTSA funds) and claim tax credits so long as there is a separate, for-profit entity that controls the property. The value of the credit, though, is too low to stimulate the interest of private investors for such a complicated legal arrangement.

Charitable Contributions for Historic Preservation Purposes

Section 6 of the Tax Treatment Extension Act of 1980 (IRC Section 170) established income and estate tax deductions for charitable contributions of partial interests in historic property (i.e., principally easements). The Tax Reform Act of 1986 retains these provisions. Generally, the IRS considers that a donation of a qualified real property interest to preserve a historically important land area or a certified historic structure meets the test of a charitable contribution for conservation purposes. For purposes of the charitable contribution provisions only, a certified historic structure need not be depreciable to qualify, may be a structure other than a building and may also be a portion of a building such as a façade, if that is all that remains, and may include the land area on which it is located.

The IRS definition of historically important land areas includes:

- Independently significant land areas, including any related historic resources that meet National Register Criteria for Evaluation;
- land areas within registered historic districts, including buildings, that contribute to the significance of the historic district; and
- Land areas adjacent to a property individually listed in the National Register of Historic Places (but not within a historic district) where physical or environmental features of the land area contribute to the historic or cultural integrity of the historic property.

Grants

San Antonio Conservation Society – Historic Structures Restoration or Rehabilitation Grant

Grant Policies

A structure must be more than 50 years old to be considered for a grant. However, priority is given to structures that are architecturally significant and endangered.²

Approval by the Conservation Society of grants for structures located in historic districts, or individually designated structures, does not take the place of approval of the project by the Historic and Design Review Commission.

Interior work does not qualify for a grant, with the exception of those interiors that are of landmark quality (such as the interior of the Majestic Theater).

Funding will not be awarded for new construction, landscaping, sidewalks, driveways, garages, fences, retaining walls, patios, patio covers, air conditioning systems, electrical work, or ADA/handicapped projects. Maintenance, such as painting, is considered to be the responsibility of the property owner and is generally not eligible for grant funding.

All work must be done according to the “Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.” A link to the guidelines can be found on the Society’s Website at www.saconsevation.org/programs, or on the Web at www.cr.nps.gov/hps/tps/tax/rhb.

Requests over \$15,000 are seldom granted under this program. The most commonly granted amount is in the \$5,000 range.

Texas Preservation Trust Fund Grants

For eligible historic structures, archeological sites, archeological curatorial facilities, and heritage education projects:³

The Texas Historical Commission (THC) awards grants for preservation projects from the Texas Preservation Trust Fund (TPTF). Created by the Texas Legislature in 1989, the TPTF is an interest-earning pool of public and private monies. The earned interest and designated gifts are distributed yearly as matching grants to qualified applicants for the acquisition, survey, restoration, preservation or for the planning and educational activities leading to the preservation of historic properties, archeological sites and associated collections of the State of Texas. Competitive grants are awarded on a one-to-one match basis and are paid as reimbursement of eligible expenses incurred during the project. Applications will be available early each year.

Historic Preservation Fund Grants-in-Aid for State, Tribal, and Local Government Programs

Federal Agency: National Park Service

Recipients: State and Tribal Historic Preservation Offices (with subgrants to Certified Local Governments)

Federal Grants

Funds for National Park Service Preservation Programs:⁴

In addition to managing the HPF (see above), NPS also provides support to the national preservation program by maintaining a national inventory of historic properties, setting standards for historic preservation, and providing technical preservation assistance.

Often called “external programs” because they serve needs outside of the National Park System, key program areas are: the National Register of Historic Places; the National Historic Landmarks Program; the Archeology and Ethnography Program; Heritage Preservation Services (including historic preservation tax credit certification); the Historic American Buildings Survey/Historic American Engineering Record; the National Center for Preservation Technology and Training; and the National Native American Graves Protection and Repatriation Act Program.

Through these programs, the Federal Government assists, reviews, and coordinates the work of other Federal agencies and non-Federal partners in identifying and protecting historic properties. The NPS external programs are funded through Congressional appropriation for Cultural Programs in the NPS National Recreation and Preservation account. In FY 2003, Cultural Programs received an estimated \$19.918 million.

Initiatives

Public Works and Economic Development Initiative

Federal Agency: Economic Development Administration

Recipients: States; local governments; Indian tribes; institutions of higher learning
http://www.osec.doc.gov/eda/html/1d_fund_prog.htm

Grants from this program help communities to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and support the generation or retention of jobs and investments. Rehabilitation of historic buildings is an eligible activity.

UTSA, as an institution of higher learning, can utilize this initiative to a business enterprise.

Loans

Certified Development Company Guaranteed Loan Program (Section 504 Loans)

Federal Agency: Small Business Administration

Recipients: Small businesses

<http://www.sba.gov/financing/frcdc504.html>

These guaranteed loans can be used for modernizing, renovating, or converting existing small business facilities.

This may be applicable for the business enterprise or coffee shop that will be utilizing the fire station.

Inner-City Ventures Loan Fund

Organization: Community Partners, National Trust for Historic Preservation

Recipients: Preservation organizations, local governments, community development corporations

http://www.nationaltrust.org/loan_funds/index.html

Fund offers loans to nonprofit organizations and public agencies to support historic preservation projects that stimulate economic development in low- and moderate-income neighborhoods.

This may be applicable for UTSA, as a non-profit organization, to stimulate economic growth.

Small Business Guaranteed Loans (Section 7(a) Loans)

Federal Agency: Small Business Administration

Recipients: Small businesses

<http://www.sba.gov/financing/fr7aloan.html>

These guaranteed loans can be used for renovation of business facilities.

Notes

¹ The text of the following sections is from the National Park Service, Historic Preservation Tax Incentives website at <http://www.nps.gov/history/hps/tps/tax/brochure1.htm>. What Is a Tax Credit?; Processing Fees; IRS Requirements; The Secretary of the Interior's Standards for Rehabilitation; Claiming the 20% Rehabilitation Tax Credit; Rehabilitations Involving Governments and Other Tax-Exempt Entities; and Charitable Contributions for Historic Preservation Purposes.

² Information on The San Antonio Conservation Community Grant Program policies is from the San Antonio Conservation website at <http://www.saconservation.org/pdf/GrantAp2008.pdf>

³ Information on Texas Preservation Trust Fund Grants is from the Texas Historical Commission website at <http://www.thc.state.tx.us/grantsincent/gratptf.shtml>

⁴ Information on Grants, Initiatives and Loans is from the Advisory Council on Historic Preservation website at <http://www.achp.gov/funding-nhpa.html>

GLOSSARY OF TERMS

A

ADA-Americans with Disabilities Act of 1990 in the US to prohibit discrimination against people with disabilities and to guarantee them equal access to employment, public services, public accommodations, and telecommunications.

Aluminum- A lustrous, silver-white, nonmagnetic, lightweight metal which is very malleable; has good thermal and electrical conductivity; a good reflector of both heat and light. In construction, most aluminum used in alloy form because of added strength; further strengthened by heat treatment; used in extrusions, castings, and sheets. Excellent resistance to oxidation; often anodized for better corrosion resistance, surface hardness, and/or architectural color requirements.

Apparatus Bay- Drive-thru garage where the fire fighting and emergency response vehicles are stored.

B

Baroque- A European style of architecture and decoration which developed in the 17th cent. In Italy from late Renaissance and Manerist forms, and culminated in the churches, monasteries, and places of southern Germany and Austria in the early 18th cent. It is characterized by interpretation of oval spaces, curved surfaces, and conspicuous use of decoration, sculpture and color.

Base-The lower part of a pillar, wall, etc. The division of a column on which the shaft is placed. The lowest and often widest visible part of a building, often distinctively treated. A base is distinguished from a foundation or footing in being visible rather than buried.

Basement- 1. Usually the lowest story of a building, either partly or entirely below grade. 2. The lower part of the wall or walls of any building. 3. The substructure of a column or arch.

Blocking- Pieces of wood used to secure, join, or reinforce members or fill spaces between them.

Bracket- An ornamental projection from the face of a wall, to support a statue or balcony; they are sometimes nearly plain, or ornamented only with moldings, but are generally carved whether into heads, foliage, angels, or animals.

Buttress- An exterior mass of masonry set at an angle to or bonded into a wall which it strengthens or supports; buttresses often absorb lateral thrusts from roof vaults.

C

Cabinet Work- Joinery, often of fine quality, as in the construction of built-in cabinets and shelves.

Cast- Anything poured into a mould and then set, like cast iron or artificial stone. In joinery, casting means warping or bending; in metal work it means the pouring of molten metal into a mould, or the result of such a pouring when set.

Cement- A material or a mixture of materials (without aggregate) which, when in a plastic state, possesses adhesive and cohesive properties and hardens in place.

Concrete- A composite stone-like material formed by mixing an aggregate (such as stones of irregular shape or crushed rock) with cement (which acts as the binding material) and water, then allowing the mixture to dry and harden.

Cornerstone- 1. A stone that forms a corner or angle in a structure. 2. A stone prominently situated near the base of a corner in a building, carrying information recording the dedicatory ceremonies, and in some instances containing or capping a vault in which contemporary memorabilia are preserved; a foundation stone.

D

Dado- 1. The middle portion of a pedestal between the base (or the plinth) and the surbase (or the cornice, cap, or entablature) also called die. 2. The middle part (sometimes all parts) of a protective, ornamental paneling applied to the lower walls of a room above the baseboard. 3. A rectangular groove cut across the full width of a piece of wood to receive the end of another piece.

Door Closer- Also called door check, a device, usually hydraulic or pneumatic, for controlling the closing of a door and preventing it from slamming.

Double hung sash- Window with two sashes hung with pulleys, lines, and weights, each capable of being moved up and down in the same frame.

E

Eclecticism- Design drawing freely on forms. Motifs and details selected from historical styles and different periods.

F

Façade- The exterior face of a building can be any side but or the architectural front, sometimes distinguished from the other faces by elaboration of architectural or ornamental details.

Foundation- The ground prepared for the footings of a wall. The concrete and footings are now called foundations, together with piling. A foundation stone is a cornerstone or one inscribed. A foundation is the fundamentum or buried substructure of a building. The Greeks called it euthynteria as a leveling course joining the foundation to the crepidoma.

Frame- Skeletal structure of concrete, steel, or timber on which floors, roof, and external cladding are placed to form the building, as opposed to a structure of heavy load bearing walls.

G

Grating- A fixed frame of bars or the like covering an opening to exclude persons, animals, coarse material, or objects while admitting light, air, or fine material.

Grout- A semi-liquid mortar poured or forced into joints of masonry or rubble to consolidate the material.

Gutter- A shallow channel of metal or wood set immediately below and along the eaves of a building to catch and carry off rainwater from the roof, also called eaves gutter, eaves through, roof gutter.

I

Iron- There are two basic types: cast iron, which is strong in compression, but weak in tension, so is used for columns, bollards, railings, and decorative features; and wrought iron, which is employed for gates, ornamental scrolls, filigree-work, and the like.

J

Joker stand- Also called the “sounder,” was used to relay run data to fire stations via a tapping system using numbers. The fire alarm box on a corner was "pulled". A trip lever on the inside started a series of cogwheels to turn. Each wheel was so designed to send a signal to the "Fire Tower" (Fire Alarm office), which caused a series of holes to be punched into a tape, each time a hole was punched, a horn sounded, this was known as the “Joker system” and the man who stood watch at the desk, was nicknamed the "Joker Stand".

K

Keystone- 1. In masonry, the central, often embellished, voussoir of an arch. Until the keystone is in place, no true arch action is incurred. 2. An element resembling a keystone in function or in shape.

L

Lintel- A horizontal structural member (such as a beam) over an opening which carries the weight of the wall above it; often steel or stone in exterior applications.

LEED- Leadership in Energy and Environmental Design (United States Green Building Council) encourages and accelerates global adoption of sustainable green building and development practices,

M

Mission Architecture- Church and monastery architecture of the Spanish religious orders in Mexico and California, mainly in the 18th century.

Mortar- Plastic material to bond stones and bricks together. Before C20 it was usually made from crushed burnt limestone mixed with sand and water, often with additional brick-or stone-dust. Today, Portland cement is used with sand and water, sometimes with lime or other additives.

Mullion- The division between the lights of windows, screens, in Gothic architecture the styles, or upright divisions, in wainscoting are also called by the same name.

Muntin- 1. A secondary framing member to hold panes within a window, window wall, or glazed door. 2. An intermediate vertical member that divides the panels of a door.

P

Pane- Applied to windows, the spaces between the timbers in wooden partitions, and other similar subdivisions; synonymous with the term panel.

Panel- A portion of a flat surface recessed or sunk below the surrounding area, distinctly set off by molding or some other decorative device.

Parapet- 1. A low guarding wall at any point of sudden drop, as at the edge of a terrace, roof, battlement, balcony, etc. 2. A defense wall. 3. In an exterior wall, the part entirely above the roof.

Patina- 1. A greenish brown crust that forms on bronze. 2. Any thin oxide film which forms in a metal; often multicolored. 3. A film, similar in color, which forms on a material other than metal. 4. Such effects artificially induced, or imitated.

Point- To fill up and carefully finish, as in the mortar joints in brickwork or masonry. Its purpose is to preserve the material from the weather as well as create an aesthetically pleasing effect.

Portland Cement- A cementitious binder used in most modern structural concrete; manufactured by grinding and burning a mixture of limestone with clay or shale with a small amount of gypsum. It is mixed with water and an aggregate (such as sand and/or gravel) to form a thick, heavy liquid that dries as a monolithic product.

Q

Quoin- (Coign, Coin) In masonry, a hard stone or brick used, with similar ones, to reinforce an external corner or edge of a wall or the like; often distinguished decoratively from adjacent masonry; may be imitated in non-load bearing materials.

R

Rafter- The inclined timbers forming the sides of a roof, which meet in an angle at the top, and on which the laths or boards are fixed to carry the external covering.

Rainwater head- An enlarged receptacle attached to a wall at the top of a downpipe, to collect a concentrated discharge of rainwater from the roof and direct it into the pipe. There is usually provision for water to overflow harmlessly from the top, or from a slot partway down the rainwater head In the event of a blockage.

S

Sash- Window sash; Any framework of a window; may be movable or fixed; may slide in a vertical plane (as in a double hung window) or may be pivoted (as in a casement window).

Sill- 1. A horizontal timber, at the bottom of the frame of a wood structure, which rests on the foundation. 2. A doorsill. 3. The horizontal bottom member of a window frame or other frame.

Skirting- A finishing board that covers the joint between the wall and the floor of a room. (also called baseboard.)

Spanish Colonial Revival- Spanish Colonial revival is really a catalog of styles, unified by the use of arches, courtyards, form as mass, plain wall surfaces, and tile roofs, all derived from the Mediterranean world.

Spanish Tile- Mission tile; A clay roofing tile, approximately semi cylindrical in shape; laid in courses with the units having their convex side alternately up and down.

Soffit- A ceiling, the word is seldom used except in reference to the subordinate parts and members of buildings, such as staircases, entablatures, archways, cornices, the undersides if which are called the soffit.

Stringcourse- Belt course; A horizontal band of masonry, generally narrower than other courses, extending across the façade of a structure and in some instances encircling such decorative features as pillars or engaged columns; may be flush or projecting, and flat-surfaced, molded or richly carved.

T

Transom- 1. A horizontal bar of wood or stone across a window. 2. The cross-bar separating a door from the fanlight above it. 3. A window divided by a transom bar.

W

Wrought Iron Work- Iron that is hammered forged or extruded into shape, usually decorative, either when the metal is hot or cold.

BIBLIOGRAPHY

Adams & Adams vertical file. Daughters of the Republic of Texas Library. Bexar County 1837 - 1963 Historical Records. Book 113: 26, 6/30/1892.<http://www.countyclerk.bexar.landata.com/>

Ashurst, John, and Nicola Ashurst. *Practical Building Conservation: Brick, Terracotta, and Earth*. New York: Halsted Press, 1988.

Ashurst, John, and Nicola Ashurst. *Practical Building Conservation: Wood, Glass, and Resin*. New York: Gower Technical Press, 1988.

Bexar County 1837 -1963 Historical Records. Book 113: 26, 6/30/1892.
<http://www.countyclerk.bexar.landata.com/>

Bowser, David. *San Antonio's Old Red-Light District: A History 1890-1941*. San Antonio, Texas: self-published, 1992.

Cardenas, Hector J. *San Antonio Fire Department History, 1891-2000*. Paducah, Kentucky: Turner Pub. Co., 2000.

Carson, Chris and William B. McDonald, eds., *A Guide to San Antonio Architecture*, San Antonio Chapter, American Institute of Architects, 1986.

Chabot, Frederick C. *With the Makers of San Antonio*, San Antonio, Texas, A G, 1937.

City of San Antonio. City Council Agenda and supporting documents for 1/31/2008.
<http://epay.sanantonio.gov/agendabuilder/eagendalist.aspx>

Cowan, Henry J. *Dictionary of Architectural & Building Technology*. London & New York: Spon Press, 2004.

Curl, James Stevens. *Encyclopedia of Architectural Terms. United Kingdom*: Donhead Publishing, 1993.

Curl, James Stevens, *A Dictionary of Architecture*. New York: Oxford University Press, 1999.

Department of Planning, Historic Preservation and Design Division. June 2003. Files of the San Antonio Conservation Society.

Eckhardt, C.F. "San Antonio's Blue Book." *Texas Escapes Online Magazine*, June 14, 2006.
<http://www.texasescapes.com/CFEckhardt/San-Antonios-Blue-Book.htm> (accessed 1/26/2008).

Fidler, John. "Tile, Slate and Stone Roofs." *Traditional Homes Technical Information Leaflet*. No. 1. 1991.

Gale, Frances. "Cast Stone." *Historic Building Façades: The Manual for Maintenance and Rehabilitation*. Ed. William G. Foulks. New York: John Wiley & Sons, 1997.

Grimmer, Anne E. and Paul K. Williams. "The Preservation and Repair of Historic Clay Tile Roofs." *Preservation Brief 30*. <http://www.nps.gov/history/hps/tps/briefs/brief30.htm>

Handbook of Texas Online. <http://www.tsha.utexas.edu/handbook/online/>

Harris, Cyril M. *Dictionary of Architecture and Construction Fourth Edition*. United States: McGraw Hill Companies, 2006

Haynes, Wesley, Hansen, Harry, and Mark A. Weber, eds. *Repairing Old and Historic Windows: A Manual for Architects and Homeowners*. Washington DC: The Preservation Press, 1992.

Historic American Buildings Survey. "San Antonio City Hall"
http://memory.loc.gov/ammem/collections/habs_haer/

Koch, Augustus. *Bird's Eye View of San Antonio Bexar Co. Texas 1886 Looking East*, 1886. Amon Carter Museum.

Kruse, Karen. *A Chicago Firehouse, Stories of Wrigleyvilles Engine 78*. Arcadia Publishing, 2001.

Lamoureux, Gloria. "San Antonio, Texas Historic Fire Stations." Prepared for the Department of Planning, Historic Preservation and Design Division. June 2003. Files of the San Antonio Conservation Society.

Lerner, Shirley. "San Antonio Fire Department History 1848-1900," 1986. Posted on the City of San Antonio Fire Department website.
http://www.sanantonio.gov/safd/History/History_1848_1900.asp

Long, Christopher, "Adams and Adams," *Texas Architect*, November-December 1989.

MacDonald, Mary Lee. "Repairing Historic Flat Plaster Walls and Ceilings," *Preservation Brief 21*. <http://www.cr.nps.gov/hps/TPS/briefs/brief21.htm>,

Monte Vista Historical Association Home Database. "Architects: Adams & Adams"
<http://www.montevista-sa.org/district/viewArchitect.php?architectId=2462>

MSN Encarta, "*Americans with Disabilities Act*" *Encarta Encyclopedia*.
http://encarta.msn.com/encyclopedia_761586309/Americans_with_Disabilities_Act.html
(accessed March 22, 2008).

Myers, John H. "The Repair of Historic Wooden Windows," *Preservation Brief 9* (20 March 2008), <http://www.cr.nps.gov/hps/TPS/briefs/brief09.htm>.

National Park Service. "The Secretary of the Interior's Standards for the Treatment of Historic Properties." <http://www.nps.gov/history/hps/tps/standguide/>

National Park Service. "The Secretary of the Interior's Standards for Rehabilitation." <http://www.nps.gov/history/hps/tps/tax/rhb/stand.htm>

"\$100,000 in Fine New Firehouses Help Make Life Safe in San Antonio." *San Antonio Light*, June 7, 1925.

Parker, John Henry. *A Concise Glossary of Term*. London: James Parker & Co. 1910.

Pieper, Richard. "The Maintenance, Repair, and Replacement of Historic Cast Stone." *Preservation Brief 42* (14 February 2008) <http://www.nps.gov/history/hps/tps/briefs/brief42.htm>.

Robinson, Willard B. *The People's Architecture: Texas Courthouses, Jails and Municipal Buildings*. Austin, Texas: Texas State Historical Association, 1983.

San Antonio Conservation Society. "Preservation Programs - Federal & Texas State Funds for Historic Preservation." (26 April 2008) <http://www.saconservation.org/programs/funding.htm>.

Sanborn Map Company online database. Digital Sanborn Maps of San Antonio, 1892: sheet 2; 1896: sheet 5; 1904: vol. 1, sheet 39; 1912: vol. 4., sheet 404; 1951: vol. 4, sheets 404, 412.

Slaton, Deborah. "The Preparation and Use of Historic Structure Reports." *Preservation Brief 43*. <http://www.nps.gov/history/hps/tps/briefs/brief43.htm>

Steinfeldt, Cecilia. *San Antonio Was: Seen Through a Magic Lantern, Views from the Slide Collection of Albert Steves, Sr.*, San Antonio, Texas: San Antonio Museum Association, 1978.

Steves Lumber Company vertical file. San Antonio Conservation Society.

Texas Accessibility Standards of the Architectural Barriers Act. Article 9102, Texas Civil Statutes Effective April 1, 1994.

Texas Historical Commission. *Texas Historic Sites Atlas*, "Fire Station No. 11" <http://atlas.thc.state.tx.us/>

United States Department of the Interior. "Historic Preservation Tax Incentives," *National Park Service* (27 April 2008) < <http://www.nps.gov/history/hps/tps/tax/brochure1.htm>>.

U.S. Green Building Council. "*LEED for New Construction and Major Renovations, Version 2,2. October 2005.*" U.S. Green Building Council. Microsoft Corporation 1993-2007 <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19> (accessed March 22, 2008).

Weeks, Kay D., and David W. Look. "Exterior Paint Problems on Historic Woodwork." *Preservation Brief 10* (20 March 2008), <http://www.cr.nps.gov/hps/TPS/briefs/brief10.htm>.

THE STATE OF TEXAS, }
County of Bexar.

Know all Men by these Presents, THAT we Albert Steves and Ernest Steves

and State of Aforesaid for and in consideration of the sum of _____ of the County of Bexar

Acting for, and as Mayor of the City of Saw Antonio Bexar County Texas and in further consideration that the said City of Saw Antonio agrees to erect and maintain on the property herein conveyed an engine or hose house fully equipped with necessary apparatus, for fire protection, and that said engine or hose house be built and equipped on or before the last day of August 1892 -

have GRANTED, SOLD AND CONVEYED, and by these Presents do GRANT, SELL AND CONVEY, unto the said

City of Saw Antonio of the County of Bexar and State of Tex., all that certain lot of land, situated in the City of Saw Antonio, State and County aforesaid, on the west side of the Saw Pedro Creek, in Block No. Eighty Eight (88), on the north west corner of South Frio and Matamoros Streets said lot has a front on South Frio Street of fifty (50) feet, and a depth along Matamoros Street of one hundred and fifty (150) feet. In the event of the City of Saw Antonio failing to build and maintain an engine or hose house on the property or lot herein conveyed as herein stipulated, then this conveyance to become null and void and of no effect, but to remain absolute as long as the City of Saw Antonio maintain an engine or hose house fully equipped on the property herein conveyed.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in any wise belonging, unto the said

City of Saw Antonio heirs and assigns, forever. And we do hereby bind our heirs, executors and administrators, to WARRANT AND FOREVER DEFEND, all and singular, the said premises unto the said City of Saw Antonio heirs and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

WITNESS our hands at _____ this 23rd day of May A. D. 1892
Signed, Sealed and Delivered in Presence of

Albert Steves
Ernest Steves

THE STATE OF TEXAS, }
County of Bexar.

BEFORE ME, THAD. W. SMITH, County Clerk in and for Bexar County, Texas, on this day personally appeared Albert Steves & Ernest Steves

known to me to be the person whose name and subscribed to the foregoing Instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN under my hand and seal of office, this 23rd day of May A. D. 1892

Thad W. Smith
1432
10

Thad W. Smith
County Clerk Bexar County, Texas.
By A. B. Potts Deputy.

THE STATE OF TEXAS, }
County of Bexar.

BEFORE ME, THAD. W. SMITH, County Clerk for and within said State and County, on this day personally appeared _____

known to me to be the person whose name _____ subscribed to the foregoing Instrument, and acknowledged to me that _____ executed the same for the purposes and consideration therein expressed. And the said _____

having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____

deed, and declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it.

GIVEN under my hand and seal of office, this _____ day of _____ A. D. 188____

County Clerk Bexar County, Texas.

By _____ Deputy

THE STATE OF TEXAS, }
County of Bexar.

I, THAD. W. SMITH, Clerk of the County Court of Said County, do hereby certify that the above instrument of writing, dated on the 30th day of July 1892 with its Certificate of Authentication, was filed for record in my office, this

30th day of July A. D. 1892 at 11 1/2 o'clock AM, and duly recorded the 1st day of July A. D. 1892 at 11 1/2 o'clock AM, in the records of said County, in Vol. No. 113 on Page 26

WITNESS my hand and the seal of the County Court of said County, at office in San Antonio, Texas, the day and year last above written.

Thad W. Smith

Thad W. Smith
County Clerk Bexar County, Texas.
By John Starkebeck Deputy.

San Antonio, Texas Historic Fire Stations

**Prepared for
The Department of Planning
Historic Preservation and Design Division
June 2003**

By Gloria Lamoureux

Table of Contents

Background: History of the San Antonio Fire Companies	3
Fire Districts	5
Fire Stations	6
Fire Apparatus	9
EMS Units	10
Fire Hydrants	11
Fire Station Funding.	12
References.....	13
Web Sites.....	14

Attachments:

1. San Antonio Fire Station Excel Spreadsheet
2. San Antonio Fire Apparatus Excel Workbook
3. Sanborn Maps
4. Fire Station Photos
5. Fire Station Apparatus

Background: History of the San Antonio Fire Companies

San Antonio fire fighting services began in 1854 with emergence of volunteer fire companies under the patronage of the companies who owned the volunteer companies. The first of these volunteer companies was the **Ben Milam #1** which was organized on June 6, 1854 by A.A. Lockwood and C.G. Krempan of the Milam Organization. This 20 volunteer member, bucket brigade company was *headquartered at the old market on Main Plaza near the present Market Street* and operated on the west side of San Antonio River. In 1856, the Milam Company obtained the first 2-wheeled, hand-drawn ladder truck with a variety of ladders and leather buckets. This apparatus was *housed in a one-story adobe shed on a part of the old Spanish presidio on Military Plaza*. It was typical during this period for fire apparatus to be stored in buildings of opportunity.

On March 22, 1857, Ben Milam #1 became **Fire Company #1** when it reorganized as a Hook and Ladder Company. Then on February 8, 1858, Fire Company #1 received its official charter from state naming it "The Fire Company of the City of San Antonio." Fire Company #1 also received a hand-pump fire engine and hose reel. Funds for the apparatus were obtained from subscriptions, donations, and concerts. In 1866, it put its hand-pumper, hose reel, and ladder truck into service and also purchased a second steamer, a 700-gallon per minute (gpm) apparatus with a weight of 6,700 pounds, from the Ahrens Manufacturing Company. Fire Company #1 *moved to its new station located on Market Street* in 1870. Then in 1875, the city purchased a second hand-drawn steam pumper for Fire Company #1. This brought about yet another name change, this time to Milam Steam Fire Engine Company #1 (**Milam #1**). Around 1886 Milam #1 received a horse-drawn 700 gpm Ahrens Steamer with a weight of 6,700 pounds.

On December 22, 1859, the **Alamo Fire Association #2** (Alamo #2) was placed in service as Fire Company #1 was deemed too small to handle major fires in city of greater than 8,000 residents. Alamo #2 was well equipped to handle its operations east of the San Antonio River and was *located on Broadway at the site of what eventually became the Commonwealth Bank Building*. It had a horse-drawn, manually operated Delaware manual hand pumper with hose reel. The cost of this pumper including shipping was \$1795.25 with \$900 paid from "script" and contributions and \$1,047 raised from citizens. In fact the association's first bill was approved for the purchase of this engine. This apparatus was *housed in a shed located on the corner of Elm and St. Joseph Street* belonging to Fire Company #2's Chief Menger. Then on June 12, 1868, Chief Menger gave San Antonio its first hand-pulled steam pumper ("The Alamo"), a Silsby Rotary Steamer. He bought it for \$4,000 from the Phillips & Rhea Company in New York. This steamer was *housed in a building at Crockett and Bonham Streets and later moved to the engine house on Avenue C*. Though designed to be hand-pulled, horses, cowboys with lariats, or oxen often pulled these steamers. The new steamer was *housed at the company's engine hotel on Avenue C between Houston and Travis Streets*. In 1891, Alamo #2 obtained an 1873 Silsby horse-drawn steamer.

Alamo #2 was chartered on February 11, 1860. By 1868, the association's firehouse was *located on Avenue C between Houston and Travis* on a lot donated by Mrs. Mary Maverick. James H Kampmann built an engine house in 1873. Shortly thereafter an addition to the building was erected on and over the public alley commencing at Avenue D at the corner of the old Maverick homestead site on the east and running west to

Navarro and laying between Houston and Travis Streets and parallel to them. The addition was built to accommodate the old Turner Hook and Ladder Company. The original building was erected to accommodate the first steam engine. This firehouse was demolished in 1905, and when it was torn down, care was taken to preserve the historic fire bell that served as the first fire alarm system. In early 1881, Alamo #2 became the first San Antonio fire company to receive the first horse-drawn apparatus. This then ultra-modern fire engine was a 3-hitch system built by Silsby Manufacturing Company of Seneca Falls, NY with an engine rating of 700 gpm and a weight of 7,200 pounds. By 1893 Alamo #2 was *located at what later became the Commonwealth Bank Building on Broadway*.

During the Civil War period from 1861 to 1865, San Antonio fire services were depleted as volunteers joined Texas Confederate Army. As such fire support for the city was drawn from Texas Confederate Army and black slaves. This ultimately led to the formation of the Colored Fire Companies, which had no city funding and fought fires using hand pumps and hose reels. In 1865, **Company #3** was formed and in 1873 it received its charter. It was located on the *west side of Presidio between East and West Streets*. Unfortunately it was disbanded in 1888 as could not obtain city funding. **Company #4** was formed in 1866 and was *located on the south side of Martinus Street between Alamo and Presa*. In 1878 its firehouse was *relocated to Lavaca and Second Streets*. It was disbanded in 1881.

At the end of the Civil War in 1866, the San Antonio Fire Department once again reorganized by reforming the department and recruiting to full strength. In early 1869, however, a need again arose for additional fire fighting capability, and on January 29, 1869, the San Antonio Turn Verein athletic club organized the **5th Fire Company**, a volunteer hook and ladder company. The 5th Company was organized to work with Fire Company #1. Its firehouse was *located on Nacogdoches Street*, and in 1870, it acquired its first hook and ladder truck. This truck was a 2-wheeled, hand-drawn ladder apparatus built by Stephan Davenhauer, a San Antonio wagon builder. It was *housed in a building on Nacogdoches Street although one reference places the location on Blum Street*. . It was later moved to central park, and finally to the Alamo #2 addition to the engine house on Avenue C. The following year, it was chartered as the Turner Hook and Ladder Company #1 and began its work with Alamo #2 on the east side of the river.

Over the course of the next several years, San Antonio fire companies continued to grow. In 1873, the City Council funded horses and drivers for hauling equipment to fire scenes. Then in the spring of 1878, the City Council organized the San Antonio Volunteer Fire Department. By 1880 the San Antonio Fire Department had obtained 2 horse-drawn steamers, 5 horse-drawn cars, and 4500 feet hose for its seven fire companies.

As San Antonio continued to grow, so did the San Antonio Fire Department. During the 1880s, three new volunteer fire companies were established. The first of these new companies was the **Second Ward Hose Company** (often erroneously called the Fourth Ward Hose Company), which was founded on April 14, 1883 to serve the west side of the San Antonio River. It's *station on San Pedro and Main* was built in 1888. This new fire company was closely followed by the **Sunset Hose Company #1**, which was established in early 1885 and was *headquartered at Grand Avenue near Maverick Square on Avenue D (now North Alamo)* when its new station was built, also in 1888. Of note, the Sunset

Fire Station by 1927 had been converted into a private residence on its original site. Then on October 16, 1885, the **Mission Hose Company #4** was formed. This fire company was located in its 1888 station at the corner of Alamo and Water Streets opposite old Mission Garden near the site of the present Fire Station #7 at 604 South Alamo. When San Antonio changed wards, it was unofficially named the 7th Ward Hose Company.

The 1880s also saw other growth within the fire department. On July 27, 1885, the City Council adopted its first fire directory, which divided San Antonio into five districts with a signal code used to pinpoint fire locations to indicate which district would respond. Then on April 30, 1887, the City Council provided \$10,000 from a \$150,000 bond issue for 4-wheeled hose carriages, replacement of the Milam #1 engine, and a larger hook & ladder truck capable of reaching higher than 2 stories. The City Council additionally approved on September 15, 1890 the installation of Gagnor Electric Fire Alarm System, a belt line telephone system with a central office at a cost of \$17,225. Prior to this, the fire alarm system for San Antonio had been four tower bells and a telephone connection with each firehouse.

By 1891 the era of volunteer fire services in San Antonio came to an end when the volunteer services were disbanded and the San Antonio Fire Departments was officially established. This occurred primarily because that a paid fire department staffed by professional fire fighters was determined to be a necessity to successfully combat fires and lessen the fire danger for a “modern” city. During the first two decades of the department, it expanded from 8 to 13 fire stations and included the installation on June 1, 1911 of the most up-to-date Gamewell Fire Alarm System. It was housed at *Fire Station #2 located at the corner of South St. Mary’s and Market Streets*. In 1915 the Fire Alarm Office moved from City Hall to its new location at the Central Fire Department, *Market and St. Mary’s*, home to the new police and fire building. Over the course of the next several decades, the department grew from 18 fire stations and 21 fire companies in 1927 to 24 stations and 29 companies in 1948 to 29 fire stations and 29 companies in 1968. Today San Antonio has 49 fire stations including the airport fire station and 48 pumper companies and 19 ladder companies.

Fire Districts

In San Antonio’s early fire fighting days, the city was basically divided into two districts, the west side of the San Antonio River and the east side of the river. When Fire Company #1 was founded in 1854, it operated on the west side of San Antonio. However, by 1859 Fire Company #1 was considered too small to handle major fires in such as fast growing city, which brought about the establishment of Alamo #2 to handle operations east of the river. Then in 1869, the 5th Fire Company was organized to work with Fire Company #1 on the west side of the river. But when after it was chartered as the Turner Hook and Ladder Company #1, it began its work with Alamo #2 on the east side of the river. Additional support followed for Milam #1 in 1883 when the Second Ward Hose Company was founded on to serve support Milam #1 on the west side of the river.

The first true system geographical fire limits was implemented in 1885 when San Antonio was divided into five districts. According to Texas statutes the purpose of a fire district is to "protect life and property from fire and to conserve natural and human

resources" through the provision of fire fighting services. According to San Antonio Fire Chief Robert Ojeda, the fire districts are nothing more than a management area with a District Chief who oversees district administration for a specific area and the fire stations in that area. Under each District Chief are the Station Chiefs for that District. District Chiefs may be Station Chiefs as well even if the fire station is in another district. District 1 which is responsible for downtown San Antonio is the only district with geographical boundaries. By the 1970's, the number of districts in San Antonio had grown to six and has remained essentially unchanged since that time except for the addition of a seventh district in latter portion of the 20th century. Of the 10 remaining active fire stations within the original 36 square mile area of the city of San Antonio, the fire districts as they exist today are as follows:

- District 1: Stations 1, 4, 6, 7, 11
- District 2: Stations 13
- District 3: Stations 10
- District 6: Station 3, 9
- District 7: Station 5 (moved to District 7 in 2003 from District 6)

There were an additional five locations that were once active fire stations within the original square mile area. According to data from the 1970's, these included Fire Station #12 (District 1), Fire Station #16 (District 2), Fire Stations #8 and #15 (District 3), and Fire Station #20 (District 6).

Fire Stations

The first true fire station was built on the site of the Central Police Station around 1870. Over the course of the next 60 years many new fire stations were built in the original 36 square miles of San Antonio. Several of these fire stations still stand today and many of them still serve as active fire fighting locations. Each of these fire stations are rich in history and architectural detail and fortunately many hold landmark status which will help the city preserve the heritage of San Antonio's classic fire stations. Today the construction and location of new fire stations supports the department's goal of having the first arriving pumper company located within 4.25 minutes travel time of 90 percent of all city blocks. The following provides specific information on these fire stations while the attached spreadsheet provides additional details:

- Fire Station #1: This **Landmark Status** fire station located at 801 East Houston was built in 1938 of fireproof construction at a cost of \$200,000. It was built in the Greek Revival style with concrete front, floors, and roof, street side stone facing, suspended metal lath and plaster ceiling. A second floor was added during renovations in 1973/1974. It is currently awaiting renovation, total capital cost of \$1,324,000.
- Fire Station #3: This fire station located at 1425 East Commerce Street was built in 1921 of fireproof construction at a cost of \$33,365.95. It was built in the eclectic style (Italian Renaissance and Spanish Eclectic Revival Influence) with concrete front, floors, and walls. Historical Fire Department information as well

as Sanborn maps dating back to 1921 show the original address listed as 923-925 East Commerce, however period photographs compared to those recently taken and Bexar County Appraisal District maps all show the 1425 E. Commerce location. It is possible that at some point in time, E. Commerce was renumbered, which would account for the differences historically and today. In 1912 Engine Company # 3 was located at 722 E. Commerce. However it is unlikely that another fire station was built between 1912 and 1921.

- Fire Station #4: This fire station is currently located at 1430 North St. Mary's. It was built in 1970 in the Auto Box style as a replacement for the late 1950's era fire station located on Austin Street at the intersection of I-35 and I-37. Prior to that the fire station was located at 301-303 Camden. Historically, the Camden fire station was built in 1921 at a cost of \$106,100 with fireproof construction except for exposed steel in roof. It was renovated around 1940 when new roofing and a new floor for the dormitory were added. The Camden fire station was a replacement for the fire station that housed Engine Company #4/Hook & Ladder Company #4 and was located at E. Romana and Main.
- Fire Station #5: This fire station, which was erected on the site of the original firehouse, is located at 1011 Mason. It was built in 1929 at a cost of \$27,011.94. The building was constructed with concrete frame, floors and roof with brick curtain walls and reflected Spanish and Prairie influences. It is currently under renovation at a cost of \$693,000. Historically, Fire Station #5 was located at 1005 Mason essentially adjacent to its present location.
- Fire Station #6: This fire station is located at 503 Russell and was built in 1929 at a cost of \$26,667.12 replacing the station located at 421 West Russell Place. It was built of fireproof construction with concrete floors and brick curtain front and rear. The building is a two-part commercial block reflective of the Prairie influence. Complete renovation of the building is currently in progress.
- Fire Station #7: This **Landmark Status** fire station is located at 604 South Alamo, is the oldest active fire fighting location and is reputed to have the busiest Emergency Medical Services unit in San Antonio. It was built in 1925 at a cost of \$32,012.92 on the site of the original firehouse, which was built in 1901. The building has fireproof construction with reinforced concrete front, floors, and roof and brick walls. It was built in the Mission/Spanish Colonial Revival style with a 3-bayed station. As a fire station it has one of the richest histories in San Antonio. In 1885 the first station housed the Mission Hose Company. Then in 1901 the second station located on Lavaca between Alamo and Waters was built. A new fire station is under construction a few blocks away from its current location at St. Mary's and Florida. Once Fire Station #7 relocates, the current location will be reassigned as the San Antonio Fire Department Museum.
- Fire Station #8: This former fire station located at 2323 Buena Vista currently houses the Mobile Food Vending Permit Station for the San Antonio Health District with its original station plaque held by Fire Station #19. The station was built in 1929 in the Spanish Colonial style at a cost of \$32,525.52 of fireproof construction with concrete frame, floors and roof, brick and tile curtain walls, and false front wood ornamental in front of the building. In the early 1900's, Station #8 was located at 2411 Buena Vista. Today Station #8 is located on Hamilton

- Fire Station #9: This fire station located at 649 Delmar was built in 1914 at a cost of \$17,581.92 of fireproof construction, with brick and reinforced concrete and is a two-part commercial block building with Prairie influence. It was considered at the time it was built to be one of the most modern and ornamental firehouse in San Antonio replacing the fire station located at Perez and 1701 North Salado. It was restored in 2000 at which time a new addition was constructed and replacement windows installed.
- Fire Station #10: This fire station is located at 1107 Culebra Road and was built in 1914 at a cost of \$17,396.41. It has fireproof construction with reinforced concrete roof and floors and front brick curtain walls and is a two-part commercial block building with Prairie influence. The second story provided sleeping quarters and meeting area and like Station #9 was considered at the time it was built to be one of the most modern and ornamental firehouses in San Antonio replacing the fire station located at Oak and Milam. It was restored in 1999 with minor alterations. The architect for this restoration was Emmett T. Jackson.
- Fire Station #11: This **Landmark Status** fire station located at 323 S. Frio according to "Firehouse.com" is the busiest station in San Antonio. It was built in 1925 on the site of the original firehouse at a cost of \$25,251.06 in the Spanish Colonial style. In the early 1900s the fire station was located at 522 W. Market, and prior to that it was located at 327 S. Frio at Matamoras and housed Motor Company #1. It has potential for reuse as a staging facility for water rescue and WMD equipment/vehicles.
- Fire Station #12: This **Landmark Status** fire station located at 1102 South Flores, which had been vacant for several years was recently sold, and because of its landmark designation will be maintained according to historical preservation requirements. The active fire station is now located at 407 Tinker Drive (Kelly USA). This fire station was built in 1925 on the site of original firehouse located at 1100 Flores at Rische at a cost of \$26,558. It is constructed of reinforced concrete with hollow tile and brick in the Mission Revival/Spanish styling with cast stone trim, wrought iron balconies, cast stone ventilators, and cast stone coping. At the time it was built, the two apparatus rooms plus office and storage rooms occupied the first floor while the dormitory, baths, lockers, chief's room, and two captain's rooms were located on the second floor. Richard Vander Straten was the architect for this fire station and E.W. Frishmuts, the general contractor. Currently the building at 1102 South Flores has structural, living conditions, and space limitations that preclude its use as a fire station. However the building is felt to have commercial potential.
- Fire Station #13: This fire station is located at 3203 South Presa and has been recently restored. It was built in 1920 on the site of original firehouse located at 2901 S. Presa at Hicks and at a cost of \$25,804.94. It was constructed in the Spanish style of fireproof construction with concrete front with brick and tile curtain walls, ornamentation, and wood on sides.
- Fire Station #15: This fire station is located at 807 North San Marcos and is currently vacant. The active fire station is now located at 3150 Ruiz. The North San Marcos fire station was built in 1921 at a cost of \$20,729 in the eclectic style

- reflecting Italian Renaissance and Spanish Eclectic Revival influences. It was constructed with concrete floors, brick bearing walls, and tile over wood roof.
- Fire Station #16: This recently sold **Landmark status** fire station built in 1921 is located at 1518 Nogalitos. The building was vacated in 2001 when the fire station was moved to its current location at 2110 Nogalitos. It was built in eclectic style reflecting Italian Renaissance and Spanish Eclectic Revival influences at a cost of \$17,065.96. Because of its landmark designation, it will be maintained according to historical preservation requirements. The building is considered to have commercial potential.
 - Fire Station #20: This fire station is located at 2903 South New Braunfels and has been vacant for several years. The active fire station is currently located on W.W. White Road. Fire Station #20 is a converted residence that was built in 1941 at a cost of \$10,400. The original residence reflects the Minimal Traditional Cottage style and then at some point after becoming a fire station, it was converted to a One-part Commercial Block building. This building is currently in extremely poor condition and is not considered a candidate for fire department renovation. It is considered to have reuse potential as a temporary breathing apparatus repair shop as well as future commercial potential.

Fire Apparatus

From Milam #1's first 2-wheeled, hand-drawn ladder truck equipped with a variety of ladders and leather buckets to the horse-drawn steamers of the late 1800s to the fire fighting vehicles of today, fire apparatus has become highly specialized. During the mid to late 1800's, the steam fire engine was widely used in many large cities across the United States with San Antonio receiving its first hand-drawn steamer in the 1860s and its first horse-drawn apparatus in early 1881. These vehicles were relatively light in weight averaging around 7,000 pounds and capable of pumping 700 gpm and because they were horse drawn could reach a fire location much more quickly and efficiently than manually drawn apparatus. However, it wasn't until 1927 when the last of San Antonio's horse-drawn pumpers were taken out of service. On April 4, 1927, the last of the fire horses were retired from *Fire Station #5 located at 1101 Mason Street*.

By the early 1900's with the development of the internal-combustion engine, pumpers became motorized with San Antonio acquiring its first Ahrens-Fox combination pumper and hose motorized fire engine in 1910. And in 1914, the "Joe Gunter," an American LaFrance 3-horse drawn hook and ladder engine with a 75 foot ladder was motorized. As fire apparatus modernization continued so did the capabilities as with San Antonio's acquisition in 1922 of a new 1000 gpm pumper and 2 Ahrens-Fox, 1,300 gpm, dual reciprocating piston pumpers in 1924, which even in those days met the minimal 750-gpm capacity required today, although modern diesel pumps deliver about 2,000 gpm. Over the years, these piston pumpers were gradually replaced by rotary pumps and ultimately by the centrifugal pumps in use today. And in keeping with trends in modern fire fighting, San Antonio converted to diesel trucks in the 1970s along with larger trucks to handle more fire equipment.

In the United States, the aerial ladder apparatus first appeared in 1870 with the hose elevator around 1871. San Antonio received its first 2-horse hitch hook and ladder truck,

the “Davy Crocket,” in 1888. This truck was assigned to Milam #1 and because of its 65-foot hand operated hoist was capable of reaching higher than 2 stories. It remained in use until 1917. In 1930, the city obtained an Ahrens-Fox 85 foot Air-hoist Aerial Ladder Truck equipped with 2,300-pound air tanks at a cost of \$18,000 and weight of 18,000 pounds. Twelve years later on May 6, 1942, a hook and ladder truck named the “Douglas Mc Arthur” was purchased for \$18,500. Then on June 17, 1965, San Antonio purchased its first 100-foot aerial ladder truck purchased at a cost of \$54,449. Five years later on May 6, 1970, a snorkel truck with 75-foot platform with a 360-revolution capability arrived. This snorkel truck was designed to handle fires for a 7-story building and was housed at the Central Fire Station #1.

Although it is not documented, it stands to reason that much of the construction of replacement fire stations in the early to mid-20th century was due to the modernization of fire apparatus along with expanded functions. From bucket brigades to hand and horse drawn apparatus of the mid to late-1800s to motorized vehicles beginning in 1910 to today’s modern fire engines and aerial ladder trucks more efficient facilities that could handle the increased weight and cube were needed. Early fire engines weighed in around 7,000 pounds and most likely much shorter in height and length. Today most fire trucks weigh between 35,00 to 40,000 pounds, close to 50,000 pounds for an aerial ladder truck, have a length of approximately 30 to 40 feet, and can reach heights of 9 to 12 feet. In addition as fire vehicles became motorized in the early part of the 20th century, stables were no longer needed to house the fire horses. The attached spreadsheet provides greater detail on the types of fire apparatus in use over the years by the San Antonio Fire Department.

EMS Units

In the early 1970s, concerned San Antonio physicians identified the need for better prehospital patient care, and in October of 1972 a Task Force headed by the Bexar County Medical Society was organized to put a plan together that would result in enhanced prehospital care through an Emergency Medical System (EMS). The plan was endorsed by the City Council and ultimately it was decided that the Fire Department would be the logical choice to implement the system since it already had rescue and first-aid missions. In early 1973 the Fire Chief was authorized a budget of \$1.4 million to organize San Antonio’s EMS. Fire Station #1 was selected as the new EMS Division headquarters and 10 ambulances purchased from the Modulance Corporation in Dallas at a cost of \$12,000 each. Seven of these units would be first responders with the remaining three designated as spares. On March 1, 1974 at 12:01 AM the EMS was placed in service with 7 response vehicles. By 1999, the Fire Department had a budget of \$31 million 23 units in service and 8-peak hour units at a cost of \$90,000 per ambulance. Today the Fire Department has an EMS budget of \$36.6 million with 26 full-time and 9 peak period units with an anticipated response time of 8.76 minutes within the city limits.

Fire Hydrants

Historically acequias built in San Antonio in 1718 laid the foundation for the city's future fire hydrants. The Upper Labor Acequia built around 1778 was the main San Antonio water source for over 100 years. Early day fire fighters had to haul water by bucket or hose from these acequias as well as from the river, creeks, ponds, or irrigating canals to support their bucket brigades or hand and steam pumpers.

It wasn't until April 3, 1877 when a contract was let for the San Antonio water works system with mains and hydrants. J. B. Lacoste and Associates completed the system on July 3, 1878 with the first fire hydrant christened on July 4, 1879. The main reservoir and pump house was constructed at what today is Brackenridge Park. A support reservoir was constructed on hill at east end of Mahncke Park to insure adequate pressure. This area today is the amphitheater on the grounds of the San Antonio Botanical Gardens.

By 1879 the city realized that more fire hydrants were needed so another contract was let for an additional 100 curbside fire hydrants and 15 miles of water mains. At the end of the 1880's San Antonio had well over 400 hydrants (different sources vary from 420 to 460). Although some acequias and ditches were still in use for fire fighting into the 1920's, the primary source of water for fire response was the fire hydrant, since many of the springs which fed the acequias and ditches had dried up as San Antonio grew and became more dependent on the Edwards Aquifer. In 1948 San Antonio had 480 miles of water mains and 3,211 fire hydrants with a domestic fire pressure of 70 pounds and 120 pounds for businesses. Within 15 years, the number of fire hydrants had increased to 6,143. Today over 19,000 hydrants serve fire fighting efforts in San Antonio. Their location is not related to the location of the fire stations.

Fire Station Funding

Early San Antonio Fire Department history shows that funding for department necessities came from subscriptions, donations, and concerts, "script," and other contributions. In fact San Antonio's first hand-pulled steam pumper was given to the city by Chief Menger of Alamo #2 in 1868. The first documented funding by the San Antonio City Council was in 1873, when it funded horses and drivers for hauling equipment to fire scenes. Then in 1875, the city purchased a second hand-drawn steam pumper for Milam #1. Another historical account shows that on April 30, 1887, the City Council provided \$10,000 from a \$150,000 bond issue for 4-wheeled hose carriages, replacement of the Milam #1 engine, and a larger hook & ladder truck. Historical accounts also show that it was typical during the early days of the department to use buildings of opportunity to store fire apparatus rather than funding new construction for storage buildings. In 1914, funding for two new fire stations were paid for out of funds provided from a municipal bond issue. As of the early 1940's, the total value of the department's land, buildings, and equipment was \$1,709,558.89 with \$75,000 spent on new equipment without raising the department's budget. And in 1972, a \$2.5 million capital improvement program allowed for the purchase of nine new pieces of equipment in the amount of \$512,000 (\$142,000 from a 1970 bond issue, and \$425 from federal

revenue sharing), six new station houses at a cost of \$2 million, and use of bond monies for renovations to Station #1 and revamping of the department's communication system including replacement of antennae at 28 fire stations and installation of new transmitters. Today the San Antonio Fire Department receives its funding from city bond issues for construction and new apparatus and from its own budget for building and equipment maintenance.

References

- Cardenas, Hector, San Antonio Fire Department Historian, Personal communication, March 12, 2003
- City of San Antonio Fire Master Plan, FY 2002-2006
- Ojeda, Robert, San Antonio Fire Department Fire Chief, Personal communication, June 5, 2003
- San Antonio Daily Express*, "Story of a Historic Fire Bell," Jun 11, 1905
- San Antonio Evening News*, "Pioneers of 1854 Paved Way to San Antonio Fire Department," Jun 21, 1927, p.1
- San Antonio Express*, "Dreaded Cry of Fire," Wed, Mar 9, 1966, p. 12c
- San Antonio Fire Department, 1854-1976, Compiled by Frank and Gennie Myers, Intercollegiate Press, 1976
- San Antonio Fire Department History, 1891-2000, Hector Cardenas, Editor/Photographer, Turner Publishing Co., 2000
- The San Antonio Fire Department Takes on New Life, 1941 (brochure)
- San Antonio Fire Department, 1953 Annual Report, "Highlights From Department History"
- San Antonio Fire Department, "1963 Activities Report"
- San Antonio Light*, "First Building Under Bond Issue," Sunday, Feb 8, 1914, p. 31
- San Antonio Light*, "San Antonio's Central Fire and Police Station is Another High Mark of Municipal Achievement," Sunday May 28, 1915, p. 19-20
- San Antonio Light*, Mar 22, 1925 (photo of Fire Station #12)
- San Antonio Light*, "Responded to Fires at High Gallop," June 1930 (photo of Alamo #2)
- San Antonio Light*, "Fire Unit Recalled," June 13, 1940
- San Antonio Light*, "Fire Horses Were Faithful City Workers," Dec 22, 1941
- San Antonio Light*, Fire Department's Capital Improvements Aid Annexed Areas," Dec 25, 1972, p. 12b
- San Antonio Newspaper Clipping, "First Firemen Paid to Join Company," Jun 6, 1924
- The Texas Fireman, Vol. 10, #10, June 1952
- The Texas Fireman, Vol. 12, #10, June 1954

Web Sites

Bexar County Appraisal District: <http://www.bcad.org>

City of San Antonio: www.sanantonio.gov

City of San Antonio Planning Department, Historic Preservation Office:
http://www.sanantonio.gov/planning/survey_web/historic_survey.asp?res=800&ver=true

Firehouse.com: <http://www.firehouse.com>

San Antonio Fire Department: http://www.sanantoniofire.org/safd_main_menu.htm

San Antonio Fire Department - History 1848-1900:
http://www.sanantonio.gov/safd/History/History_1848_1900.asp

San Antonio Fire Department – History of Fire Chiefs:
<http://www.sanantonio.gov/safd/History/ChiefHistory.asp>

San Antonio Fire Department – Historical Equipment:
<http://www.sanantonio.gov/safd/History/fdequip.asp>