8 S. 2ND STREET

Temple, Texas I May 2020

** Not for regulatory approval, permitting, or construction*

TEXAS MAIN STREET
TEXAS HISTORICAL COMMISSION

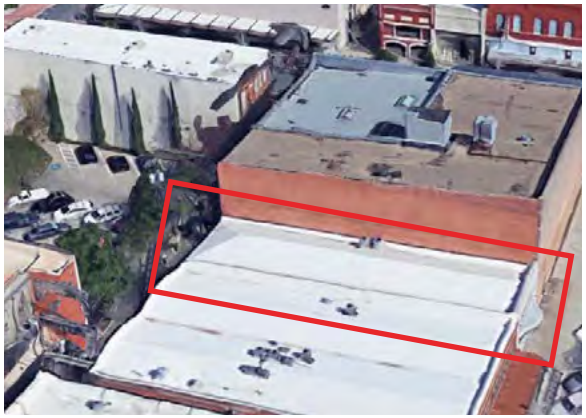
EXISTING - REAR FACADE

EXISTING - REAR FACADE

PROJECT SCOPE

This report addresses signage, pedestrian accessibility and strategies to make the rear (alley) entry to the Second Street Emporium more inviting. The alley connects to the Main Street Courtyard, a widely used public gathering space, thus making the rear entrance of the Emporium equally important to the front (Main) entrance on 2nd Street.
Design concepts explore a range of solutions, from considering only the building and given $1000 budget, to an alleywide approach.

SITE LOCATION



AERIAL VIEW

CONTEXTUAL OVERVIEW

PROJECT CONTEXT

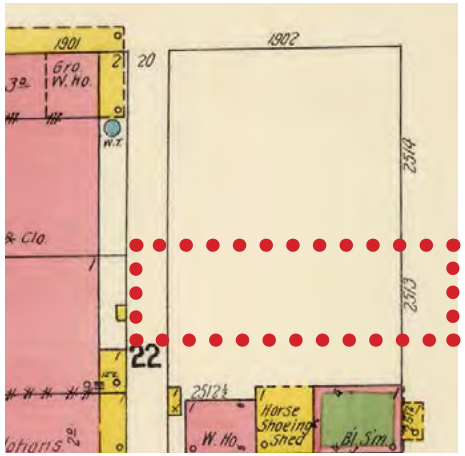
According to the Main Street Manager, this project is eligible for a Temple Strategic Investment Zone (SIZ) Grant, and the contents of this report will likely be considered during the grant request and decision process.

This project may be considered a catalytic project, as it addresses pedestrian connections between the two most busy pedestrian nodes in downtown: Main Street and 2nd Street. Dumpsters are staggered along the alley and present an eyesore and other associated unpleasantness. It is recommended that discussions be initiated with the Solid Waste Management to explore alternative solutions, such as smaller rolling carts, alternative bin types, or recycling solutions.

FRONT FACADE - 2ND Street

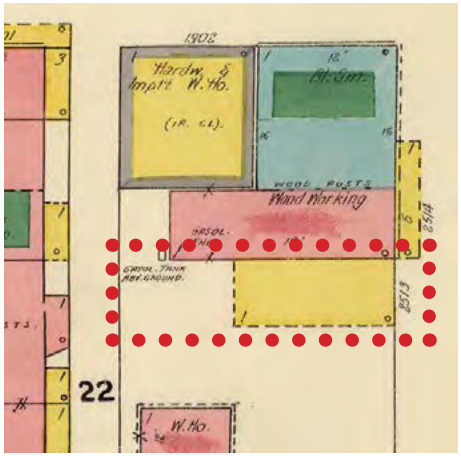
SANBORN FIRE INSURANCE MAPS

1900



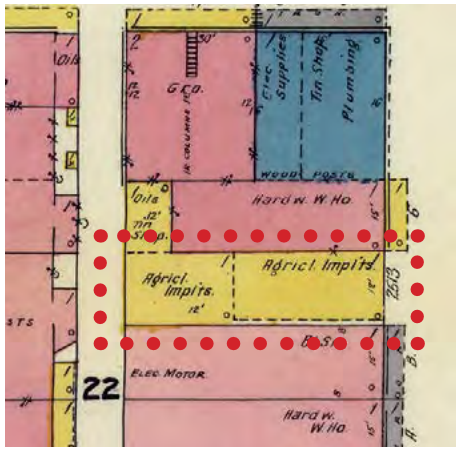
Vacant

1905



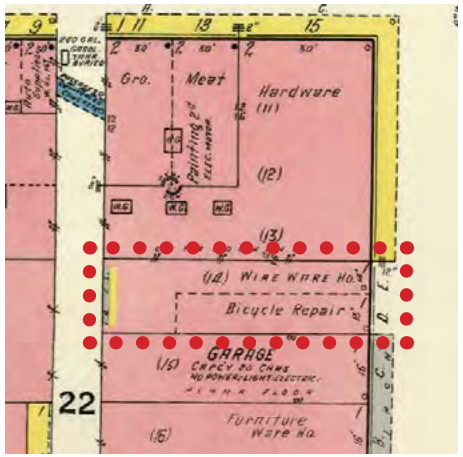
Wood frame, 1 story building

1910



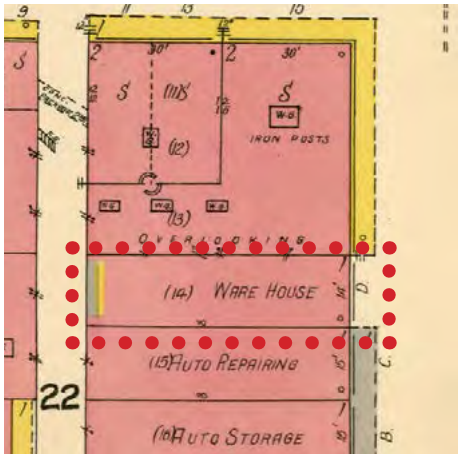
The wood structure added on to complete the current footprint. Former rear exterior wall remains as interior wall. Noted use is Agricultural Imports.

1915



The building becomes masonry and is divided into a wire warehouse and bicycle repair shop. A metal shop door is shown in back.

1922



The building is combined and used as warehouse space.

CURRENT

A hipped roof on back is shown and a curved awning exists on front facade.

FACADE ANALYSIS & RECOMMENDATIONS

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1. **CLEAN** masonry, windows and other architectural features to remove dirt and grime.
2. **SEAL** crack on fascia top behind gutter on top right corner under gutter
3. **DOWNSPOUTS** appear to be in good, working condition. Ensure that they are not leaking or clogged and that they are securely attached. Consider extending closer to the ground to reduce splashing.
4. **PAINT** surfaces that have already been painted. **Do not paint brick or masonry that has not already been painted**.
5. **WINDOWS:** Consider removing blinds. Although on the interior, the horizontal slats add a texture to the facade that competes with the window mullions and brick. A shade or translucent vinyl on the inside of the window can block sun and lend a cleaner appearance.
6. **LIGHTING:** Current lighting is industrial and is not welcoming. Consider replacing fixture.
7. **SIGNAGE** is lacking and is recommended. Budget is considered in proposed design concepts.
8. **STREETSCAPE:** Existing streetscape/allyscape consists of dumpsters, utility poles, meters and wires. These are typical and often necessary in an alley. Using paint to blend, minimize, or distract from these elements can be a cost effective solution.
9. **ACCESSIBILITY:** Consult with local building official to ensure that entry and material transitions are compliant with Texas Accessibility Standards.

INCORPORATING ART

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DUMPSTER

A dumpster art program could turn these eyesores in to something more attractive. Treating them as canvases and giving the art a social media presence can be ways to engage both the local community. Using hashtags such as #keeptemplebeautiful, #dumpsterart, and #alleyart, could foster growth in Temple's on line media exposure.

When it comes to the content of dumpster art, it can be abstract, informative, or anywhere in between. Strategies used for utility boxes could also work for dumpsters. Refer to the TXMS Resource Library: Utility Boxes article.

DUMPSTER PROGRAM EXAMPLES

(THESE LINKS ARE PROVIDED FOR REFERENCE ONLY AND ARE NOT ENDORSED BY OR AFFILIATED WITH TEXAS MAIN STREET)

City of Borger, TX Dumpster Art Contest

Environmental themed dumpster art at Lamar University

Dallas Sanitation Services- Dumpster Competition

ALLEY ART PROGRAM EXAMPLES

Many alley art programs focus on murals. In this case the historic brick is unpainted, so a wall mural is inappropriate. Rather than further cluttering the alley with paneled murals, consider painting the ground. A stencil could be repeated and reused, for a relatively easy and inexpensive impact. Color and pattern on the ground gives a nice contrast to the unpainted historic brick.

Music Alley - Louisville KY

RECOMMENDATIONS AND RESOURCES

** Not for regulatory approval, permitting, or construction*

REFER TO THESE RESOURCES AND GUIDELINES WHEN EXECUTING ALL SUGGESTIONS IN THIS REPORT

RECOMMENDATION

When rehabilitating a historic building, the Secretary of the Interior's Standards for the Treatment of Historic Properties should be considered. The Standards for Rehabilitation are a series of concepts about maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. They provide a framework and guidance for decision-making about work or changes to a historic property.

Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved. Should historic features not discussed in this report be uncovered at any point during the building's renovation or occupancy, please consult with Main Street staff before proceeding with any further alterations. A more thorough architectural investigation may be required.

MAINTENANCE RECOMMENDATIONS - PRIORITY

- **Clean:** Clean windows, masonry and other architectural features to remove dirt and grime. Refer to: Dangers of Abrasive Cleaning to Historic Structures.
- **Seal:** Crack in topright of facade behind gutter should be reapired and sealed.
- **Downspouts:** Ensure that they are not leaking or clogged and that they are securely attached. Consider extending closer to the ground to avoid splashing.
- **Paint**: surfaces that have already been painted. **DO NOT PAINT BRICK OR MASONRY THAT HAS NOT ALREADY BEEN PAINTED.** Clean and prepare all surfaces prior to painting. Read and follow manufacturers recommendations.
- **Refer to:** Maintaining the Exterior of Small and Medium Size Historic Buildings for additional maintenance guidelines.
- **Accessibility**- Consult with local building official to ensure that entry and material transitions are compliant with Texas Accessibility Standards. including compliance for any entry mats (refer to design recommendations).

DESIGN RECOMMENDATIONS - GENERAL

- **Paint:** Updated painted surfaces on building with a slightly warm, light shade of white. Consider decorative paint on the ground.
- **Entry Mat**: denotes a welcoming entry and can help keep the interior clean. A custom mat can act as secondary signage.
- **Lighting:** Consider replacing the lighting fixture in the entry. It is industrial and unwelcoming. Consider fixtures with a warm light that will fill the entry space. String lighting along the top edge of the facade is an inexpensive option.
- **Windows:** Consider removing blinds. A shade can or translucent vinyl can diffuse sunlight without the residential feel of horizontal blinds.
- **Signage:** An illuminated sign ablve the door would be ideal, but likely not within budget. Consider a hanging panel sign and window vinyl. See Included TSMP Design Guide
  Refer to: New Signs and Historic Buildings.
- **Planters-:** Tall planters with a small footprint can give the eyes a place to rest, and distract from the dumpster, without further crowding the space.
- **Activate the Alley:** Refer to the TXMS Resource Library for activated Alleys.

DESIGN CONCEPT A

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1. **Paint -** Clean and repaint already painted surfaces. Paint ground to accceuntate entry and resonate with front entry.
2. **Signage -** Vinyl on glass is a cost effective solution, as is incorporating signage it to the painted entry ground. A reusable stencil is recommended for maintenance.
3. **Lighting -** Add String lighting on top edge and change fixture in entry.
4. **Street/Alleyscape** - Add planters and a doormat. Doormat could double as secondary signge.

DESIGN CONCEPT B

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1. **Paint -** already painted surfaces.
2. **Signage -** White Painted lettering or vinyl on glass, use translucent vinyl graphic to create visual interest and screening on windows.
3. **Lighting - C**hange fixture in entry. COnsider a slightly warm light temperature for a welcoming feel.
4. **Street/Alleyscape** - Add planters and and a welcoming doormat
5. **Dumpster Art -** Initiate a civic dumpster art program to customize the dumpsters individually, via paint or printed and applied graphics.

DESIGN CONCEPT C

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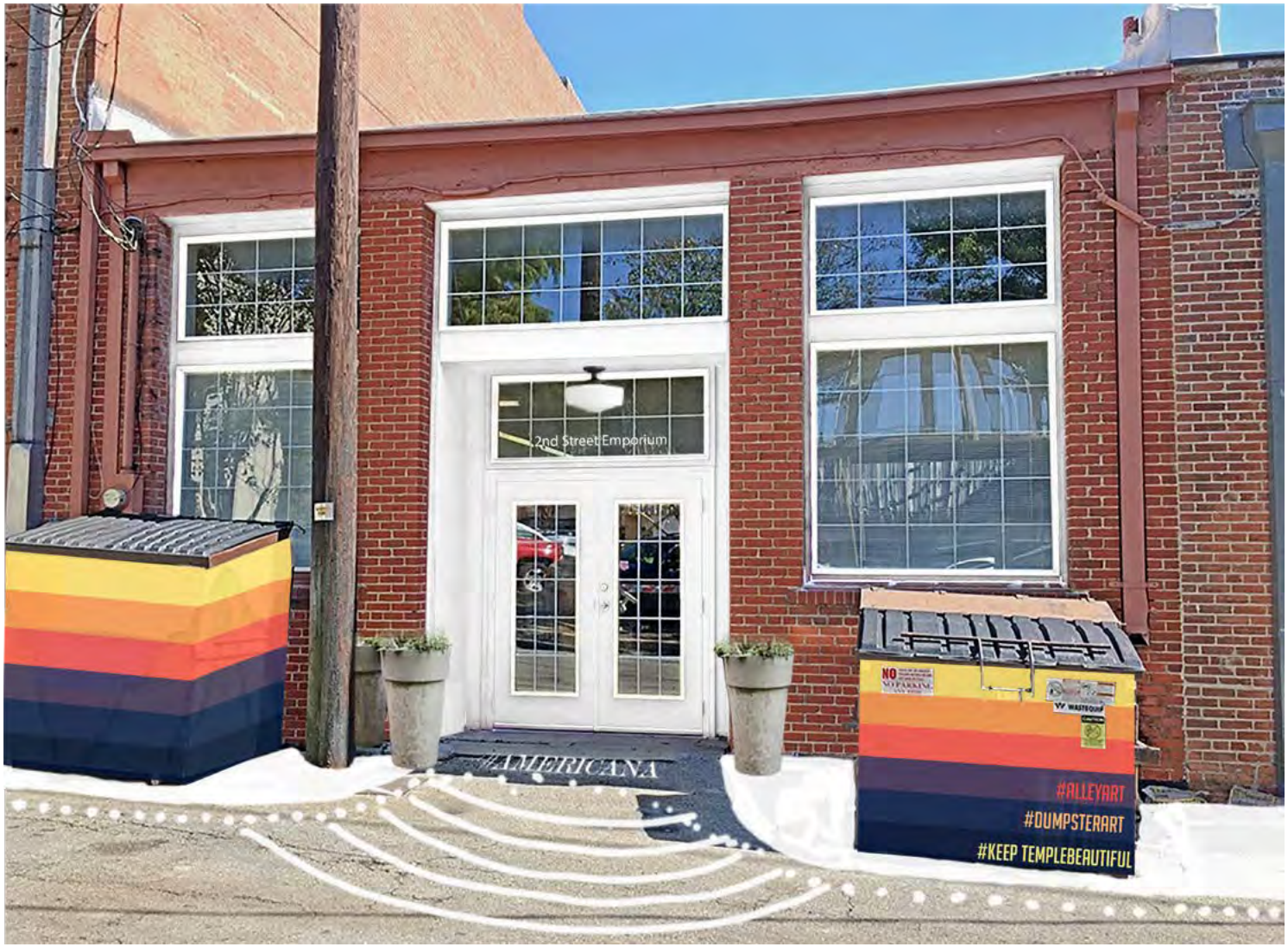

1. **Paint -** already painted surfaces, ground to accceuntate entry and resonate with front entry
2. **Signage -** White Painted lettering on glass and on ground at entry.
3. **Lighting -** Change fixture in entry.
4. **Street/Alleyscape** - Add planters. Work with City and neighbors to initiate an alleywide theme to paint the ground and dumpsters with cohesive theme along alley. (See following page)

DESIGN CONCEPT -ALLEY

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1. **Alleyscape - (To follow scheme C, showing alternate ground color)** The repeditive utility poles along the alley are a striking feature that speak to the function and history of the alley. Consider
celebrating them with banners and using a a combination of banners, dumpster art and painted ground to add visual interst to the alley and create a cohesive and welcoming place.

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION

The purpose of this report is to provide ideas and schematic designs for projects. Main Street Staff works with the plans of business and property owners to provide designs that meet their objectives while still respecting the historic building. For official tax credit review, a separate process must be followed and may involve modified design plans to meet the criteria.

Prior to making any improvements to the building façade(s), the building owner should perform a thorough review of the major structural components including the roof, walls, and foundation. All mechanical and electrical systems should be well maintained in conformity with applicable codes and ordinances. Building uses and interior arrangements of program spaces should also be in conformity with applicable codes and ordinances.

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PAINT

OVERVIEW

In Texas Main Street communities, one of the most frequently asked questions from building owners is "What color should I paint my building?" **For those brick and stone buildings that have not been painted or have less than 50% painted, the answer is easy. DO NOT PAINT!** Remove the paint that is there, then give your entire building a good washing. The results will surprise you when all the years of dirt and smog are removed. But, if your building is already painted and/or the paint will not come off without further deteriorating the brick, you have a range of paint color options for stone, brick, wood and metal trim.

The selection of paint colors is a personal decision, as future changes can be made to the palette without impacting the integrity of the historic building. It's a common rule of thumb to select 3 colors or less to compose the palette and in these general proportions: **body color (60%), major trim (30%), minor trim / accent (10%).** To select colors, a handful of factors can guide the decision-making process.

Consider the history of the building and the historic context. Research on the building era will reveal a range of commonly used colors. Historic photographs may indicate the original palette and/or color relationships if the images are black-and-white. On-site investigation, including scraping of a small area to uncover hidden layers, may reveal the original color. Look closely at the natural landscape and street your building is a part of, noticing the larger color palette. **Your final paint selections will impact your neighbors and the visual appearance of the area.** Identify any local guidance and/or regulation in your community regarding paint colors in the historic district.

With a historical perspective in-hand, consider your priorities and the starting point for the selection process. If exposed building materials, such as brick or stone, or roof materials are a visual component of the facade, these static colors and textures should be considered at the start. For example, the color of a brick facade would automatically be the body color to base the selection of the other colors on. Other starting points from your process might be a business logo or an awning fabric that you'd like to incorporate into the facade.

A strong palette pulls together the visual appearance of the building, connecting the facade design with the current use and interior space. The body color, the largest proportion of the facade, is likely a neutral or color similar to the original facade material. This background allows the trim and accent colors to highlight notable elements on the facade or signage to stand out. In general, a lighter body color causes a building to appear visually larger, while a darker color causes a building to appear smaller. The body color also impacts heat gain, as the darker colors will cause heat to be absorbed, rather than reflected by lighter colors. The accent color, the smallest portion of the facade, is commonly the visual pop or color used to highlight smaller elements on the facade. In some cases, an accent color is not used - allowing the body and trim color to compose the palette.

There are many resources available to assist in your color selection. Roger Moss in his book "Paint in America: The Color of Historic Buildings" surveys 250 years of paint history. Many major paint companies have composed historic paint palettes for use by consumers, as well as tools to visualize paint colors on your building's facades. You may consider hiring a design or historic preservation professional to provide a color consultation for more complex projects.

To test your selections, purchase a quart or smaller quantities of paint to cover a portion of the facade. Review the selections over several days in natural light, both in full sun and shade, to determine any differences. Remember, colors can't be seen in isolation. When selecting colors with paint chips, you'll be visually influenced by other colors on the surrounding chips, light conditions, etc. Similarly, the colors and materials around your building will impact the way your building is seen – such as the sky, sidewalk, street, plants, neighboring buildings, etc. You'll likely need to adjust your selections once you've tested the palette in place.

10% minor trim | 30% major trim | 60% body color

Above: 26 Main Street in Elgin, Texas.
Below: Georgetown Palace Theatre in Georgetown, Texas.

10% minor trim | 30% major trim | 60% body color

Above: Thatcher in Buda, Texas. Your final paint selections will impact your neighbors and the visual appearance of the area.
Below: Main Street, Denison,Texas

PAINTING THE BUILDING

Painting can be one of the most impactful improvements you can make to your building. Understanding the proper process is necessary before you begin, to ensure the paint is long lasting and visually appealing. In your planning, consider the time of year and temperature to identify the best times to undertake the project.

To prepare for painting, all needed repairs should be addressed first, such as replacing rotten wood, repointing brick mortar, and repairing window glazing putty. On all surfaces to be painted, peeling and loose paint should be removed. A wire brush, scraper, or heat gun can be used carefully and with the appropriate safety precautions. If the building was painted before 1978 years old, the paint may contain lead and should be tested. The Environment Protection Agency's website provides guidance on the appropriate removal of lead-based paint.

Following any paint removal, the surfaces should be washed by hand or with a pressure washer set to less than 400 psi. Historic buildings should never be sandblasted.

If possible, all surfaces should be primed to increase the likelihood the new paint will properly adhere. In selecting the paint, consider the advantages and disadvantages of oil and latex paints. Oil paints are more durable and may adhere better, yet they are more difficult to clean up. Latex paints are less durable, easier to apply, and easier to clean up. Problems can arise in switching back and forth between the different types of paint, so it is important to investigate the previous type of paint used. Also, consider the level of shine: gloss, semi-gloss, eggshell, or matte. Follow all manufacturer's instructions when applying.

COLOR INTERACTIONS

Color, either found inherently in building materials or applied with paint, can never be viewed in isolation. Our eyes always see color in combination and our perception is affected. It's helpful to have a basic understanding of complementary colors and the way they interact. The basic color wheel sets up **three complementary color pairings: red + green, orange + blue, purple + yellow**. If a red swatch is placed next to a blue-green swatch - because red and green are complementary - the blue-green will appear more green, as our eye pulls the green out. Also, our eyes prefer to view each of the complementary colors in varying portions.

For example, **our eyes prefer 5 parts red to 5 parts green, yet only one part yellow to 9 parts purple**. These interactions and proportions explain why we prefer certain color schemes over others.

ADDITIONAL RESOURCES

The guides below provided detailed instructions on how to clean and protect your brick building. They also include tools and products to use in the process.

- Exterior Paint Problems on Historic Woodwork
- Exterior Paint - Finishes

ACCESSIBILITY

OVERVIEW

In Main Street districts, confusion is common when applying contemporary accessibility standards to historic downtowns. There are multiple design standards for accessibility, which can overlap and differ, so it's important to understand which standard you are required to follow in particular situations. **Contrary to a widely held belief, historic buildings and sites are not exempt from compliance with accessibility standards.** In most cases, the spirit of the accessibility standards can be met, if carefully planned, without destroying the historic characteristics of a property. A design professional can assist you to preserve the historic character, while complying with applicable standards.

The most common questions about accessibility covers a wide range of building and site elements:

- Parking
- Entrances
- Door Widths
- Restrooms
- Service Counters
- Water Fountains

The US Department of the Interior Preservation Brief 32: Making Historic Properties Accessible provides a broad overview on how to balance historic preservation with accessibility. The resource lays out a process for planning accessibility modifications and finding accessibility solutions. Common upgrades and retrofitting are discussed without discussion of the detailed regulations.

At the Federal regulatory level, the Americans with Disabilities Act (ADA), enacted by Congress in 1990, is a broad civil rights statute, of which only a portion deals with building and site design. The law is meant to eliminate, as much as possible, unnecessary barriers encountered by persons with disabilities, whose ability to engage in gainful occupations or to achieve maximum personal independence is un-needlessly restricted. The U.S. Department of Justice enforces ADA requirements at the federal level. In Texas, the **Texas Department of Licensing and Regulation (TDLR) enforces ADA as it relates to building design for the public.**

Rather than use the federal design guidelines, Texas adopted its own version, **the Texas Accessibility Standards (TAS) to implement the Texas Architectural Barriers Act for building alterations, additions, and new construction projects.** Please note that the **2012 TAS became effective on March 15, 2012 and supersedes the previous 1994 version of the TAS**. Both versions can be found on the Texas Department of Licensing and Regulation website.

The Texas Accessibility Standards are very specific to ensure access to spaces designed for the public. For example, a retail store, public library, and park are places intended for the public and must be designed to meet TAS. In contrast, places not intended for the public, such as a residential apartment, must meet the acce ssibility standards contained with the locally adopted ordinances and building codes, rather than TAS. It's important to understand which standard is applicable for a particular project, as these standards differ and at times contradict each other.

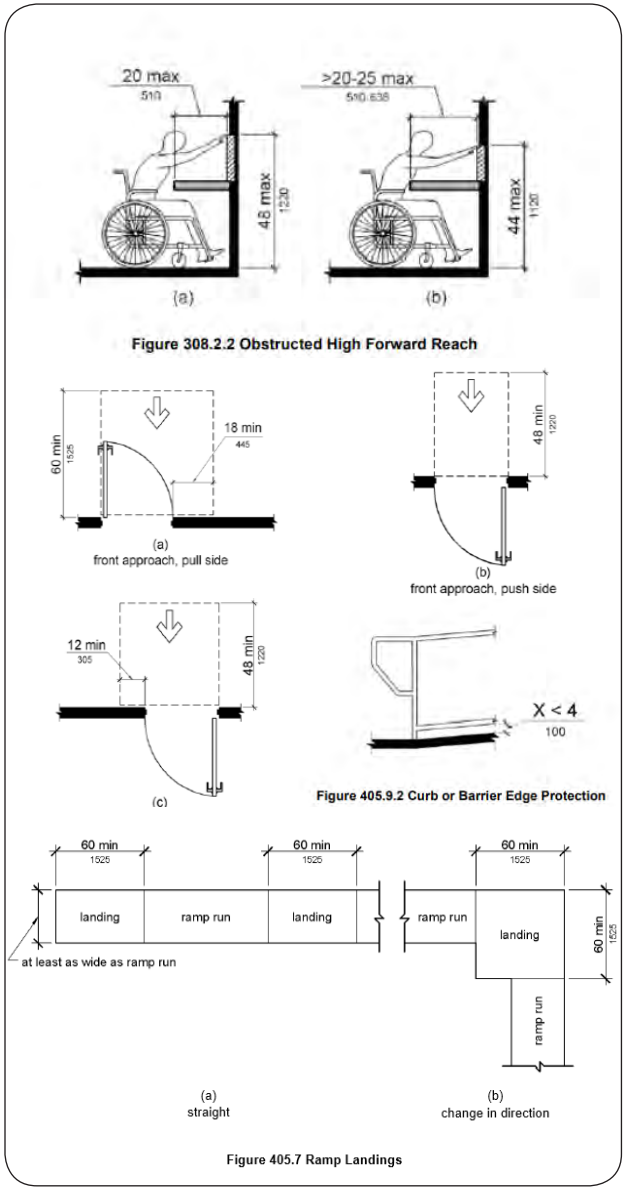
When TAS is applicable, the **State of Texas requires new construction projects or alterations to existing buildings over $50,000 must be registered with TDLR and drawings,** plus the necessary fees, be submitted to a Registered Accessibility Specialist to review and inspect the project. All projects less than this amount must meet the same Texas Accessibility Standards, but a review is not required.

In most cases, **a professional is needed to assist a building owner to design a solution within the existing conditions and provide the stamped drawings required for TAS review and local permitting.** For example, the design of a ramp providing access to a historic building requires consideration of approach, width, height, slope, material, etc, which can be challenging for those not familiar with accessibility design and construction. When interfacing with the public right-of-way, such as streets, sidewalks, and alleys, it's also important to communicate with your local municipal staff and/or the Texas Department of Transportation to ensure you understand the requirements and approval process before beginning construction on publicly owned land.

Above: Bistro 108, La Grange, Texas. The image above demonstrates the modification to an existing building entry in order to provide an accessible route for restaurant guests and employees.
Below: Amarillo,Texas. Access from the sidewalk to the building are one component of an 'accessible route',

Above/Below: New Braunfels, Texas. Historic elements such as the entries shown, should be carefully preserved, while complying with applicable standards.

Right: Illustrations shown are from the 2012 Texas Accessibility Standards. They identify specific requirements for certain areas such as, ramp landings and maneuvering clearance for doors.



Above/Below: Modifications, such as the ones shown, are not compliant per the 2012 Texas Accessibility Standards. For example, the image above shows the addition of a ramp without considering the required slope or barrier edge protection.

Additional Resources:

- Texas Accessibility Standards
- The US Department of the Interior Preservation Brief 32: Making Historic Properties Accessible

SIDEWALKS

OVERVIEW

An essential element of Texas Main Streets, sidewalks connect us to our historic downtowns and its many businesses, office spaces, schools, and parks. As a component of urban design, sidewalk design has a direct impact on the downtown experience, resident quality of life, and public health. Integrating physical activity into our everyday lives, sidewalks enable us to travel safely on foot from home to downtown, or to travel from a parked car or bus stop to our final destination. Sidewalks are the most fundamental of public spaces, working as connective tissue and gathering spaces for local residents and downtown visitors alike.

Sidewalks are defined by four edges: street edge, building edge, canopy, and ground surface. The street edge could be a simple curb or defined by a protected bike path, or planting strip. In a downtown commercial district, the building edge should come up to the sidewalk edge, rather than being setback. An inviting building edge with views to interiors spaces, architectural detailing, and attractive signage draws pedestrians along and through the downtown. The canopy, or overhead plane, is composed of tree foliage, awnings, and building canopies. The ground plane of sidewalks is commonly concrete, yet some are composed of brick, concrete pavers, and/or steel components. **Sidewalks are typically 4' wide in residential areas and a minimum of 6' wide in commercial downtowns. When adjacent to traffic, a 8' minimum provides a 2' buffer for plantings.** In urban areas, **sidewalks can reach 15' or wider with the integration of street trees, furniture, planting strips, and other amenities**. Within the ground plane, fire hydrants, lighting, utility access, and similar elements should be carefully placed to maintain a clear path of travel.

Within the sidewalk and larger streetscape, it's important to preserve historic fabric, such as lighting, sidewalk materials, storefront elements, signage, public art, or parking patterns. Total replacement can cause a sense of homogeneity and erase the unique or quirky elements that make a downtown distinct. A main street rich in variety will be more visually interesting and remain timeless, rather than being associated with a single style or era.

PARKING + INFRASTRUCTURE

Many communities are too focused on providing adequate car parking and they neglect to recognize the importance of sidewalks. This pedestrian infrastructure supports safe, active transportation, while combating obesity and other public health concerns. At the very least, sidewalks are essential for traveling safely from a parked car or bus stop to a business. In all cases, a negative experience walking to / from a local business will deter the visitor from making return trips to the area.

This component of public infrastructure should be carefully coordinated with other public improvements and private investment to create a healthy, downtown environment. If utility lines, drainage systems, or streets are being improved, it's likely the sidewalks will be impacted or could be improved at a lower cost while construction is already underway. Municipalities typically have adopted standard details for sidewalks, curbs, etc, which are implemented by local public works departments. For state highways, The Texas Department of Transportation has adopted a context-sensitive approach to throughfare design, which includes sidewalks and other pedestrian infrastructure (Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, Institute of Transportation Engineers). This approach provides the opportunity to consider existing conditions, like historic streetscapes, and pedestrian activity into design proposals.

ACCESSIBILITY

Accessibility is a primary concern in the design of sidewalks and their ability to connect spaces. Sidewalks are one component of an 'accessible route', a term used to describe the complete path from an ADA parking space or bus stop to the main entry of a building. **In Texas, the design of this accessible route should follow ADA accessibility guidelines and/or the Texas Accessibility Standards**, dependent on project specifics. When traversing city streets and sidewalks, curb ramps are an important component of public sidewalks, easing movement from the street surface onto the curb. Curb ramps should align with crosswalks and not be blocked by other elements, such as street furniture, lighting, signage, or trees.

Above: This illustration identifies the integration of 15' sidewalks with the street trees, furniture, planting strips and the seperation from bike lane to road. Below: Furnishings, signage, and other moveable elements should be placed to maintain a clear path for pedestrians.

Above: Corsicana, Texas. Historic materials, such as this mosaic tile on Corsicana's Beaton Street within a recessed entry, should be carefully preserved during sidewalk repair or construction.
Below: Another type of extension is a 'bus bulb', where the sidewalk extends to 1 to 2 feet of the parking lane to create space for the bus stop.

SIDEWALKS CONSTRUCTION

For the protection and longevity of historic structures, its essential to carefully coordinate and communicate about any sidewalk improvements with state or local governmental agencies. Improper design and installation can damage historic masonry, cause water problems, and impact access to interior spaces. When new sidewalks are to be installed, an expansion joint should be installed up against historic masonry to allow the building to move freely from the sidewalk. If not, the expansion and contraction of the different elements will vary and cause cracking. Weep holes or crawl space vents should not be blocked by newly installed sidewalks or accessibility ramps.

During construction, the lower sections of the building should be protected from concrete slosh and damage by materials and tools. Upon completion, proper sidewalk slope should meet accessibility requirements and direct water away from the building and into drainage systems. **The entry threshold from the sidewalk into the building should be carefully considered to maintain the historic fabric and increase the level of accessibility**. Ramps are commonly used to address elevation differences between the sidewalk and interior floor elevation.

CONTROLLING TRAFFIC

Many communities have begun to implement sidewalk design strategies to limit car speed, increase safety, and reclaim space for pedestrians. High volumes of car traffic, leading to unwanted noise, smells, and busy-ness, have a negative impact on the pedestrian experience and deter downtown visitors from spending extended periods of time in the area. Curb extensions are one technique proven to reduce speed and enlarge the pedestrian zone. When done at intersections, these curb extensions are called 'gateways', as the curb extends to within 1 to 2 feet of the parking lane and narrows the space between the curbs. The 'gateway' decreases the length of the crosswalk, making the area safer for drivers and pedestrians.

Another type of extension is a **'bus bulb'**, where the sidewalk extends to 1 to 2 feet of the parking lane to create space for the bus stop. Bus drivers can remain in the travel lane and riders exit / enter from the curb, rather than walking through a parking lane.

STREET TREES

Street trees are often integrated into or adjacent to sidewalks, providing much needed shade for pedestrians, paved surfaces, and buildings. The tree placement should be carefully considered to maintain accessibility and movement, while ensuring the tree has the proper soil volume for growth. While defining the pedestrian zone from the car's domain, trees can provide additional shading to historic buildings and their storefronts when strategically placed. Along side streets, trees add interest and definition where facades are less articulated or active. The height of the tree canopy in maturity is a key variable in the selection of trees, as the goal is to create a canopy for pedestrians to move under rather than fill space along the sidewalk. **To integrate trees within the sidewalk surface, tree grates provide a permeable surface for water to reach tree routes and can be traversed over more easily.**

ADDITIONAL RESOURCES:

National Association of City Transportation Officials' Urban Street Design Guide

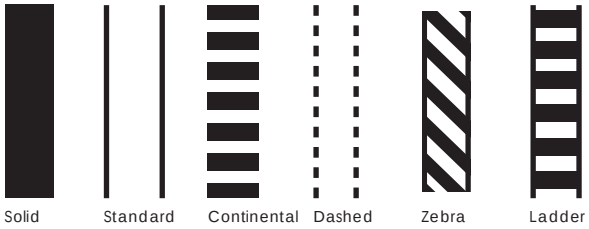
Active Design: Shaping the Sidewalk Experience, City of New York

CROSSWALKS

OVERVIEW

Crosswalks are part of a safe, pedestrian-friendly routes to our historic downtowns, local businesses, schools, and park space. Crosswalks are used in conjunction with other traffic safety measures, including signaling, signage, and traffic calming, to create enjoyable streetscapes for downtown visitors. Per transportation industry standards, crosswalks are typically installed on roadways with speeds higher than 20 miles per hour and more than 2 lanes. In addition, crosswalks are installed for crossings near many civic uses, including hospitals, schools, parks, and libraries, regardless of the road size or speed.

Referred to as the 'continental' design, crosswalks are most commonly composed of a series of white bands in the form of highly durable painted or thermoplastic, and installed using the same method and materials used by the local public works department to install other traffic markings. **Each band is typically 2' wide and between 6' and 10' feet long.** The spacing between the stripes ranges per community. The white on dark paving materials provides the needed contrast for drivers and creates a clear zone for pedestrian crossings. Alternatively, some communities are exploring other materials and more creative means to construct them, such as reclaimed brick, concrete pavers, colored thermoplastic, stamped asphalt, and artist-designapplications. These applications bring color to the roadway and have the potential to celebrate local arts, culture, and history.



The longevity of these treatments is dependent on the material and quality of the application. In all cases, damaged roadways cause the lifespan to decrease. Dependent on jurisdiction, contact your state agency or local public works department to review the pros and cons and the type of equipment, tools, and capability of the crew who will be completing the installation.

There are four primary approaches to coloring roadway pavement.

1. ***Paint is the most commonly used method, yet is considered a non-durable pavement marking due to an expected lifespan of 6 months to 2 years. Paint can be applied in many ways, including sprayers and rollers, making it more accessible for volunteers. (Untitled, Santa Monica, CA. Artist: Here LA)***

2. ***Durable Liquid Pavement Markings, including epoxies and resins, is a durable, economical approach that requires special equipment for application and has a life span of 3 to 6 years.***

3. ***Thermoplastic can be applied as a liquid through spraying from specialized equipment or in sheets that are heated in place to create a single surface. The average lifespan is 5 years.***

4. ***Colored pavement, including asphalt and concrete, utilizes colored pigment within the material mix. For asphalt, the pigment is mixed into a thin layer on the surface. For concrete, pigment is added to the concrete mix, with color going all the way through ensuring color will not fade or chip.***

In addition to coloring, some communities are installing materials of a different color within the pavement surface, such as concrete pavers or red brick, to create the visual contrast required for crosswalks. Reclaimed historic brick or pavers of a similar scale provide a unique texture and pattern within the roadway that is more attuned to pedestrian traffic.

CREATIVE CROSSWALKS

'Creative Crosswalks' is a term used to refer to artist-designed crosswalks. They can be designed to celebrate local culture or capture a neighborhood's unique character. This form of public art is increasingly popular, as costs are relatively low and most communities have the equipment and capability to have them installed by city staff. With successful examples from across the US, this type of public art can be both functional and celebrate unique downtown districts.

The **two most common materials used to install these artists' designs are durable pavement paint and thermoplastics.** When using paint, stencils or taping are used to mask areas to install each color individually. Small, more intricate details are difficult to execute with these methods. For thermoplastics, the design is installed in a series of rectangular sheets and torched permanently into place. Irrespective of materials, the most successful crosswalks have bold colors and simple patterns.

Communities select artists to design Creative Crosswalks through a range of processes, which are overseen by public art programs, transportation departments, or similar organizations. If a community has an existing public art program, program staff typically release a Request for Qualifications from artists, which outlines a project scope, location, budget, and timeline. Artists are asked to submit a project statement, resume, and examples of completed projects for selection. In this process, an artist would not produce any artwork until being selected for the project. Alternatively, some communities request project proposals from artists for review and selection, including visuals to communicate their crosswalk ideas. The first option is more common in public art programs, is fair to artists earning a living, and typically yields more professional public art projects. In either case, it is important to set guidelines for selection before the process begins, as art is subjective. Selection panels should always include local arts professionals, such as a high school art instructor, museum curator, and full time practicing artist. **When planning for a creative crosswalk project, a range of questions are common when creating design guidelines and a 'call to artists'.**

Who will do the installation work and what materials will they use?
If the crosswalk will be installed by city staff, it is important to research how other traffic markings are currently installed, including the equipment available, the typical material of choice, and costs. Their approach will dictate color options, lifespan of the project, and budget. For example, if the design will be installed using paint, the designer should assume that the design will be implemented with stencils, which does not allow for very small details. In general, many communities do not allow crosswalks to be painted by the hand, as the paint required is not durable.

What colors can be used in the crosswalk design?
The material and approach will determine the available colors. The artist should also be aware that certain colors and symbols have been designated for certain uses in the transportation industry. For example, blue is commonly used for accessible parking. Green has become the most common color for bikeways. The design should not include symbols or shapes common in traffic control, as they will cause confusion for drivers.

How long will the art work remain in place?
The range of coloring options are associated with varying costs and lifespans. For temporary installations, paint is a common selection, but other less expensive options and more temporary options include chalk, paper applied with wheat paste, and vinyl sheets.

What are the crosswalk design requirements of the applicable governmental agency?
Design requirement vary. Some communities require artist add create elements to existing Continental or Standard crosswalk striping. Other communities allow the artist to eliminate the striping and create an entirely original design.

What elements or symbols should not be allowed in the artist designs?
Designs should not include: political or promotional messaging; logos or text; any content that infringes on copyrights or trademarks; common traffic symbols, such as arrows, triangles, or octagons; yellow, red,white, and orange as primary colors in the design.

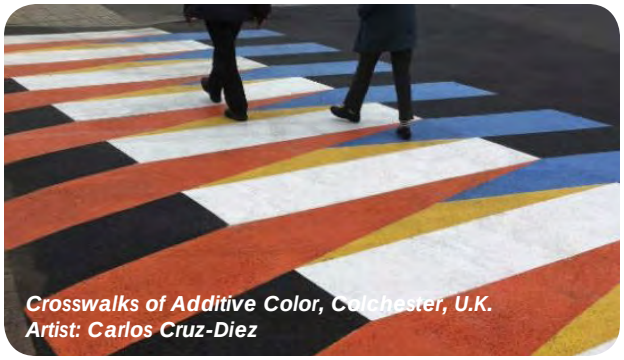

Crosswalks of Additive Color, Colchester, U.K.
Artist: Carlos Cruz-Diez


Untitled, Virginia Beach, VA.
Artist: Mensah Bey

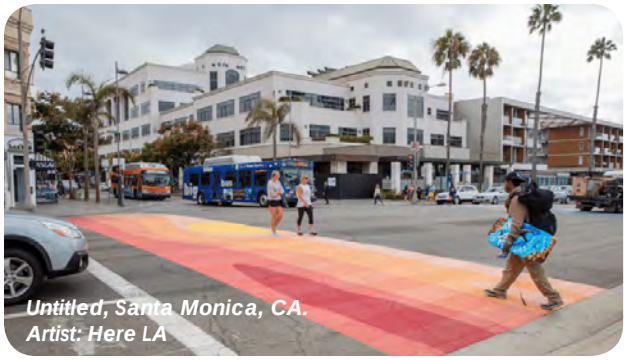

Moonwalk, Pasadena, CA.
Artist: Cynthia Luna


Inside Out, New York, NY.
Artist: J.R.


Untitled, Kansas City, MO.
Artist: Better Block KC



Crosswalks of Additive Color, Colchester, U.K.
Artist: Carlos Cruz-Diez



Untitled, Santa Monica, CA.
Artist: Here LA

Moonwalk, Pasadena, CA.
Artist: Cynthia Luna

Crosswalks of Additive Color, Panama City, Panama.
Artist: Carlos Cruz-Diez

Untitled, Virginia Beach, VA.
Artist: Mensah Bey

Untitled, Kansas City, MO.
Artist: Better Block KC

Sunset Crosswalk, Austin, TX.
Artists: Anna Fields + Joel Weber

Inside Out, New York, NY.
Artist: J.R.

BRICK

OVERVIEW

In Texas, most historic commercial buildings found in a Main Street District are constructed with **load-bearing masonry**, meaning the walls support themselves, the roof, the floors, and everything in between. Each brick wall is several wythes (layers) thick and does not rely on an underlying framework or stud system. In load bearing masonry walls, typically, a header course (a row of rotated bricks with the short side faced outward) was used every 7-9 courses to tie the wythes of brick together.

Unlike the very uniform bricks produced today, **historic bricks range in size, quality, and hardness.** Before 1870, brick clays were pressed into molds and were often unevenly fired in a kiln on site or within the surrounding area. The quality of brick depended on the type of clay available in the region and its location within the kiln during firing. Bricks exposed to higher heat would be harder. Experienced masons sorted the brick into grades, using the softer ones inside the building and the harder ones on the exterior. After the 1870s, the extrusion process was perfected making bricks more uniform and durable, although not as strong as contemporary bricks.

Historic brick walls were also designed to breath, taking in moisture and allowing it to evaporate. Therefore, painting, sealing, or coating brick that is in good condition will prevent the brick wall from breathing, causing it to retain water and lead to deterioration. Sometimes, stucco or certain kinds of coatings can be used to protect already damaged masonry. This approach should only be done as a last resort and in collaboration with a preservation professional.

INVESTIGATION

Regular inspection of load-bearing brick walls ensures required maintenance and/or problems can be addressed quickly. Cracks in the wall between bricks and brick deterioration are two common problems, which can be caused by building movement, moisture, unstable soils, or mortar issues. A structural engineer or masonry specialist with experience in historic, load-bearing masonry will be able to verify the integrity of the structure and provide solutions to problems that arise.

CLEANING

Periodic cleaning of brick walls will help remove stains, dirt, and biological growth. Cleaning can improve the overall appearance of your building and prevent future deterioration. Cleaning must be undertaken using the **gentlest means possible by a qualified professional** to ensure that the historic building will not be damaged.

Investigation: Before cleaning can be completed, the source of the staining or deterioration must be understood. Smoke or stains caused by pollution require a different kind of cleaning agent to remove than biological growth such as mold or mildew.

Test Panels: Before selecting a cleaning method, test several methods on a small patch of brick in an inconspicuous location to verify that the selected approach will not damage the brick.

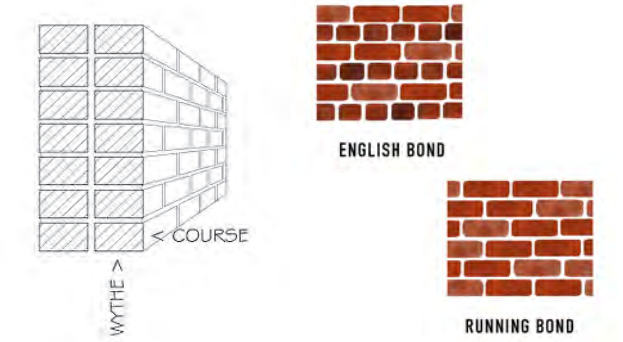
Mechanical Cleaning: Manually scrubbing the brick with plain water and a soft bristle brush should be attempted first to remove dirt, grim, and other substances that may stain or discolor the brick.

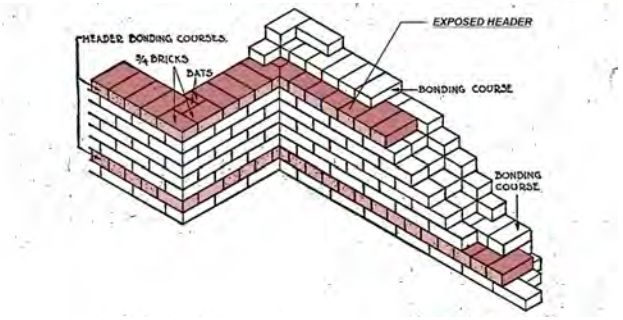
Power Washing: If manual scrubbing is not sufficient, power washing with a mild detergent or chemical cleaner can be considered. **Power washing should NOT exceed 400 PSI** (pounds per square inch), as higher pressures can damage the hard exterior of each brick and leave the softer interior exposed. **Similarly, brick should NEVER be sandblasted.**

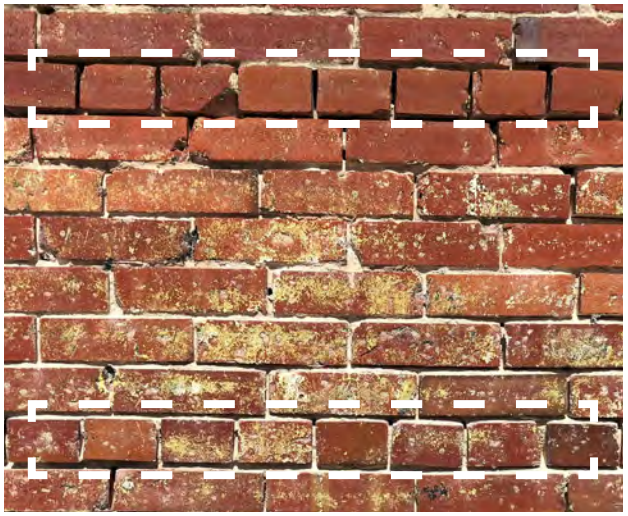
Chemical Cleaning: Many types of chemicals are available for different types of staining and paint removal. Chemicals can be harmful to people and the environment, so follow manufacturer instructions carefully to ensure that the correct safety precautions are taken in advance. After cleaning, thoroughly rinse the treated masonry with water in order to prevent bleaching, staining, or other adverse effects. In all cases, it's best to clean masonry during the spring and summer to avoid freezing temperatures.

For more information on cleaning methods, please visit:

- Preservation Brief #1: Assessing, Cleaning, and Water-Repellent Treatments for Masonry
- General Cleaning of Exterior Brick Masonry







Above: Van Zandt Abstract Company in Canton, Texas carefully removed layers of paint from their front facade using Dumond Peel Away Poultice system. Below: This process revealed the natural color of the brick and a ghost sign.

DO NOT PAINT OR SEAL MASONRY

When painted or sealed on the interior or exterior, brick walls are unable to breath, causing moisture to be trapped in the wall. This leads to severe damage to the historic building. Therefore, **unpainted masonry should never be painted.** Similarly, water repellent coatings are typically not necessary if the building is kept in good repair. If brick buildings are inappropriately sealed, condensation and mold can form on interior surfaces, which will cause indoor air quality issues. Water trapped within a wall expands when frozen, causing stress cracks between bricks and spalling of individual brick units. This can eventually lead to structural failure. If masonry has been painted in the past, repainting the same area does not cause increased risk for damage. Removing the paint should be carefully considered. In rare cases, paint or a water repellent can be used to protect soft brick that was incompletely fired during the manufacturing process or bricks that have been severally damaged. This decision should be made in consultation with a qualified professional.

REMOVE VINES AND VEGETATION

Vines and other vegetation growing on building exteriors can cause damage to masonry and mortar. Branches and tendrils can erode mortar, grow into mortar joints, hold in unwanted moisture, block gutters and downspouts, and scour soft wall surfaces.

To remove the vegetation, it's best NOT to pull off the live plant. Sever the plant near the ground or apply a natural / chemical plant killer near the roots, while protecting the building. Wait for the plant to die, and then remove the dried tendrils and branches gently. The General Services Administration tech note to the right can provide additional direction.

MORTAR

Mortar is essential to hold a brick wall together and for the overall structural stability of a historic building. The mortar allows for contraction and expansion of the masonry wall in varying weather conditions, making the appropriate mortar type to be very important. If mortar joints are deteriorated or empty, the owner should consider repointing the joints. **See the Mortar tech note for additional information on how to properly repoint mortar joints.**

ADDITIONAL RESOURCES

Content in this document was drawn from the resources listed below. These guides provide detailed instructions on how to clean and protect your brick building, including tools and products to use in the process.

- Chemically Removing Paint
- Paint Removal in Paris, Texas (page 6)
- Monitoring and Evaluating Cracks in Masonry
- Removing and Replacing Deteriorated Brick
- Removing Salts/Efflorescence
- Preservation Brief #38: Removing Graffiti
- Removing Vines and Creepers

Cleaned and repointed brick on the Goodman Building in Downtown Austin, Texas.

Common Types of Brick Deterioration

While brick is one of the most durable of historic building materials, it is susceptible to damage from a range of causes, including building movement, trapped moisture, improper maintenance or repair, and harsh cleaning techniques. The following images highlight the most common problems with load bearing masonry brick structures found in Texas's historic downtown districts. Structures should be examined at least twice per year and after freezing weather. If problems are detected, consult Main Street design staff and/or a qualified mason with experience in historic structures.

Efflorescence: excessive moisture within the masonry wall causes salt to seep to the surface, leaving white deposits known as efflorescence.

Vines and Vegetation: Plant life growing on exterior walls causes a range of problems, including mortar deterioration and blocking of gutters and downspouts.

Cracking: Structural cracks between and through bricks may result from building settling, excessive loading, or incorrect mortar proportions.

Painting: Brick walls are unable to breath when painted, causing moisture to be trapped and leading to damage. Individual bricks begin to deteriorate and cause structural instability.

Missing Mortar: Mortar should be repointed every 10 years. If mortar is not repointed, loose bricks begin to fall out of the wall construction.

Rising Damp: Excessive moisture in the ground, crawl space, or basement is visible on wall surfaces, as the brick appears visibly darker when damp (above left). Moisture causes brick deterioration (above right). Additional drainage around the building or drying of interior spaces is needed.

Improper Mortar Mixture: Mortar ingredients should be carefully proportioned to match the original mix. Too much Portland cement in the mix causes the mortar to be too strong, and leads to structural cracks.

Abrasive Cleaning: The exterior brick surfaces have been destroyed due to sandblasting or harsh chemicals, leaving the softer, brick interior exposed.

Missing Downspouts, Gutters, or Roof Flashing: Excessive water running down the face of brick walls quickly causes eroded joints and structural failure.

MORTAR

OVERVIEW

Mortar is essential for the overall structural stability of a brick or stone building. Mortar allows for contraction and expansion of the masonry wall during different weather conditions. Mortar waterproofs the brick wall while allowing for the free evaporation of moisture preventing it from being trapped within the system. Mortar beds the bricks, which accounts for the difference in the size and shape of each brick unit making the wall system stronger. Mortar can be repaired and was designed to be the weak link in the natural weathering of the building to reduce the deterioration of the brick. Mortar may seem insignificant, but it plays an important role in the health of a masonry building. This is why the appropriate mortar mixture is very important.

Early mortar formulas were primarily lime, sand, and water. Other ingredients that were available locally were sometimes added to strengthen the mixture. These ingredients could include clay, shells, animal hair. The standard mortar mixture remained largely unchanged until the creation of Portland cement, which was first used in the United States in 1872 as a minor ingredient to accelerate mortar set time. According to the National Park Service, most masons used a 1:1 ratio of Portland Cement and lime putty, by the 1930s. Because of this, mortar mixes found in masonry buildings throughout a historic downtown can vary greatly.

REPOINTING

Repointing is the process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar. Properly done, repointing restores the visual and physical integrity of the masonry.

Using a compatible mortar mixture when repointing a historic building is one of the most important things a building owner can do to ensure the life of their building. Today, mortar is rated by type based on strength and can be purchased in ready-mix bags from any home improvement or construction supply store. However, these ready-mix bags are often filled with a high concentration of Portland cement, which creates mortar that is too strong for soft, handmade bricks found in historic buildings and will damage the brick if used to repoint. To repoint a historic building properly, the age of the building and original mortar mixture must be understood first. Follow these steps to ensure that the appropriate mortar mixture is used:

1. Consult an architect, architectural conservator, mason, or lime mortar company that specializes in historic properties. These experts can help determine the composition of the original mortar.
2. Base the new mortar mixture off the analysis of the original mortar formula when possible.
3. Produce mock up samples of the mortar mixture before embarking on a full-scale repointing project.
4. Only work with qualified historic restoration mason to repoint your historic building. They must understand the intricacies of the work and will take extreme care when repointing.
5. When in doubt, consult your local Main Street program or Texas Main Street Design Staff, who can advise you on your rehabilitation.

The chart to the right was developed by the National Park Service to outline when and where specific types of mortar can be used on a historic building. This chart should be used as guidance in the mortar analysis process but should not replace the crucial step of determining the original composition of the historic mortar.

Mortar Strengths

Hard, High Strength	M - 2,500 psi
	S - 1,800 psi
	N - 750 psi
	O - 350 psi
Soft, Flexible	K - 75 psi

Mortar Types (measured by volume)

Designation	Cement	Hydrated Lime or Lime Putty	Sand
M	1	1/4	3 - 3 3/4
S	1	1/2	4 - 4 1/2
N	1	1	5 - 6
O	1	2	8 - 9
K	1	3	10 - 12
“L”	1	1	2 1/4 - 3

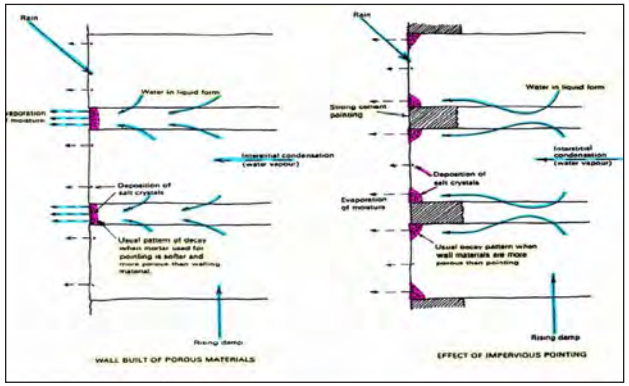
Suggested Mortar Types for Different Exposures

Masonry Material	Exposure:	Sheltered	Moderate	Severe
Very Durable Granite, Hard-Cored Brick		O	N	S
Moderately Durable Limestone, Durable Stone, Molded Brick		K	O	N
Minimally Durable Soft Hand-Made Brick		“L”	K	O

Chart Information Courtesy of National Park Service

BREATHABILITY

Although a masonry wall is strong, masonry units are porous. This means that ground water, rain water, condensation, etc. can be absorbed into the wall at any given time. Eventually, the water evaporates. This cycle is often referred to as "breathing." The diagram to the right illustrates this process. Historic mortar is soft and porous, which means water can also evaporate out of the joints as well as the brick unit. When soft mortar is replaced with new mortar that is too strong, the mortar joints' porosity is reduced, and the natural salt crystals within the system are deposited within the masonry unit instead of the mortar, which leads to deterioration of the brick, as seen in the image on the far right.



TOOLING

The tooling style is also very important. Mortar is not typically flush with the surface of the brick. It is recessed and shaped in various ways based on the chosen aesthetic. Examine the building for evidence of the original tooling style. Pointing styles may differ from one facade to another, as often front walls were given greater attention and detail than the sides or rear. The image to the right shows an example of messy repointing where the mortar was smeared over the brick. The diagram on the far right illustrates correct and incorrect tooling styles.

Repointing Detail Courtesy of International Masonry Institute

COLOR

Secondary to strength, the color of the new mortar should be considered, because the mortar color can greatly change the appearance of the building. Mortar that is too bright can visually draw the eye away from the brick and make the joints the focal point. Take note of color of the original mortar. The sand is the primary material that gives mortar its color. Typically, when mortar is analyzed and a mixture is created to match the strength of the original, the new mixture will also match in color and texture. When specifying sand for repointing, it may be necessary to obtain sand from several sources to create the correct color. Brick dust, crushed stone, or clay were sometimes added to the mixture, which would also affect the mortar's color. If a color match cannot be achieved through the use of natural sand or other aggregates, a modern mortar pigment can be considered.

ADDITIONAL RESOURCES

Content in this document was drawn from the resources listed below. Each of these resources provides additional detailed information about repointing and mortar mixtures.

- Preservation Brief #2 – Repointing Mortar Joints
- Preparing Lime Mortar for Repointing Masonry

SIGNAGE

Signage is an important component to every downtown building and business. The quality and location of the sign can influence the way consumers perceive downtown, its businesses, and the overall feeling of welcome in the district. An effective sign is easy to read, well-designed, and high quality. The message is clear and the sign is placed in a prominent location to make it visible for pedestrians and cars. A sign should be an extension of the business image/ brand, while complementing the building's design at the same time. When creating signage for your business, keep the following rules of thumb in mind:

1. Signage should be a full package of several signs that complement each other and attract people from different vantage points. The sign above the display windows or canopy should be large enough to be seen across the street and from passing cars. Tag lines or additional information about the business can be added to the façade using window signage. A pedestrian sign can be hung below the canopy so that the business is visible to people on the sidewalk. Fonts and colors should coordinate across all signs.

2. Carefully consider the size, shape, and location of your sign and verify that it meets city code requirements. Covering up significant architectural features with a sign not only detracts from the building, it also reduces the overall visual quality of the business.

Size: The size of a sign is directly related to the location of a sign. For example, a window sign should be large enough to be read by a pedestrian but should not obscure the display area. For the primary sign, it is not necessary for signage to have billboard size letters to be readable to passing motorists or pedestrians. Eight-inch letters can be read from a distance of 250' while 12" letters are readable from up to 400'.

Location: There are several options for the location of a sign. Lettering and graphics can be painted on storefront windows. Wooden or metal panels or 3-D letters can be flush-mounted above the storefront but below the second story windows. Projecting signs can also be attached to the facade. Canopies also provide an alternate location for signage.

3. Use quality materials and fabrication methods. A simple, high quality sign is more attractive than an extravagant but poorly made sign. Investing in a good quality sign will add to the appearance of your business and will last for years to come. Signs can be constructed of wood, metal, solid plastic, foam, stone, neon, canvas, paint or vinyl graphics on glass, etched or stained glass and many fabrication methods are available to choose from. Work with a local sign maker that can work through these details with you and ask to see sample of their work.

4. **The colors and fonts of your sign should be influenced your business brand.** For colors, inspiration may also be taken from your building materials. Generally, three colors or less should be used for the main portions of the signs. A graphic or illustration might allow for additional colors. Light colored letters on a dark background are easier for the human eye to read, while a solid white background can look unfinished. For window signs, light colors or gold leafed letters with a dark outline are very effective. Lettering should reinforce the personality of your business while maintaining readability. There are three basic type styles from which to chose from: serif, san serif, and script.

Serif	Traditional with decorative "serifs" or strokes at the edges of a letter
Sans Serif	Contemporary with bold, clean lines
Script	Decorative and/or handwritten, often used for painted signs or gold-leaf

5. Lighting must be coordinated with the design and installation of a sign to make the business visible at night. This not only helps your business, it adds security and ambiance to the entire downtown district. Signs can be illuminated from any angle using spotlights. Lighting can also be integrated into the design of your sign if it is planned at the beginning of the project. Remember to keep the light source as inconspicuous as possible and avoid flashy or gaudy techniques. These serve as distractions and lessen the effectiveness of the sign.

6. Limit clutter. Too many signs can send mixed signals and confuse potential customers. Limit signage to your business name, business hours on the doors, and a few other key words that tell people about what you do or sell. Limit flyers and promotion paper signs to one door or interior bulletin board.

7. Finally, remember to take care when installing the sign to prevent damage to the historic building and ensure the safety of pedestrians. Signage can be attached to the surface of the façade; however, architectural details should not be covered. Anchors and fittings should penetrate the mortar joints rather than brick to prevent irreparable damage to the masonry. If the sign is removed in the future, the mortar can then be repointed. Signage can also be attached to the top of the canopy; however, the structural soundness of the canopy should be determined first.

PANEL SIGNS

Materials: Wood, Metal, High Density Urethane Foam

Fabrication Methods: Panel signs can be printed or hand painted on a flat surface. Elements can also become three dimensional by layering material.

Metal Panel with Cutout Letters
Nashville, Tennessee

Panel with Stained Glass Medallion
Georgetown, Texas

Layered Metal
Canyon, Texas


Painted Sign
Taylor, Texas

Sandblasted Wood
Bastrop, Texas

Layered Wood and Metal
Paso Robles, California, Photo Credit

Cut out Metal
Buda, Texas

Painted Panel
Waco, Texas

INDIVIDUAL LETTERS

Materials: Wood, Metal, Solid Plastic

Fabrication Methods: Individual letters should be a solid material that can withstand the elements. Use letters that are clean and simple. Use spotlights or reverse halo lighting to illuminate letters. Plastic faced channel letters are low quality and reduce the overall appearance of a business.

Georgetown, Texas

Canyon, Texas

Bastrop, Texas

New Braunfels, Texas

Canyon, Texas

Charleston, South Carolina

Nacogdoches, Texas

Portland, Oregon