CITY OF PFLUGERVILLE

DOWNTOWN PFLUGERVILLE STREETSCAPE MASTER PLAN

September 2024

The Downtown Streetscape Master Plan outlines a vision for enhancing Downtown Pflugerville's streetscapes, focusing on creating a cohesive, walkable, and vibrant urban landscape. This plan, developed through public engagement, includes guidelines for expanded pedestrian spaces, improved accessibility, decorative elements, and other streetscape improvements. While it provides a comprehensive overview of opportunities and best practices, the Plan is not a set of construction documents or detailed engineering designs. It includes background information, community feedback, existing streetscape analysis, recommended improvements, cost estimates, potential funding sources, and phased implementation strategies, with further detailed design and engineering required for execution

Downtown Pflugerville Streetscape Master Plan

ACKNOWLEDGMENTS

The following individuals are recognized for their significant contributions to the preparation of the City of Pflugerville Downtown Streetscape Master Plan.

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CHAPTER 1: INTRODUCTION

Plan Purpose

The Downtown Streetscape Master Plan (this Plan) provides a comprehensive overview of sidewalk and streetscape improvement opportunities throughout the Pflugerville Downtown District Overlay (pictured below), which includes the Western Gateway, the Downtown Core, Downtown East/Pfluger Tract, and South Downtown.

The purpose of this Plan is to provide the vision for enhancements to Downtown Pflugerville's streetscapes that may be achieved through the use of cohesive design elements. This vision for a walkable, accessible, scenic, and cohesive urban landscape includes expanded pedestrian spaces, sidewalks, accessibility, decorative pavement, street and pedestrian-scale lighting, landscaping, on-street and alley-loaded parking, wayfinding, and gateway improvements.

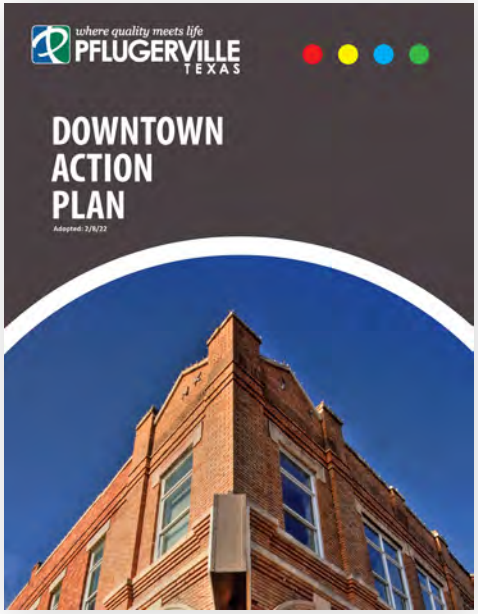
The Pflugerville Downtown District.

Plan Background

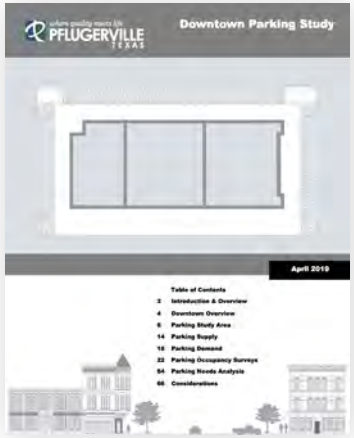
By the time the process of developing this Plan began, the City of Pflugerville had already completed several studies and initiatives relating to the Downtown District. An understanding of these documents is critical to the development of the Plan to ensure any determinations previously attained and adopted were considered. The following documents influenced the development of this Plan.

Downtown Action Plan

The Downtown Action Plan (DAP) was developed and adopted by the City Council in 2018 as a strategic plan and was subsequently updated in 2022. The DAP expanded upon the 2009 Old Town Report's action items by further defining desired characteristics and establishing a schedule for their execution through immediate, short-term, mid-range, and long-range goals. The DAP identifies the Downtown Streetscape Master Plan as a project, as well as other complementary elements, such as undergrounding overhead utilities, gateway, and wayfinding improvements, all of which influenced the development of this Plan. These characteristics of the Downtown Action Plan functioned as a starting point for the community engagement effort in this Plan.



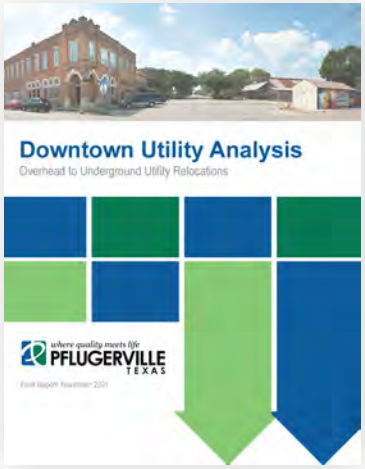
Downtown Parking Study



Conducted by City of Pflugerville staff and adopted by City Council in 2019 pursuant to the Downtown Action Plan, this study analyzed existing parking conditions, estimated future parking demands based on anticipated development and redevelopment, and identified recommendations for potential parking improvements in Downtown Pflugerville. This study proposed maximizing opportunities for additional on-street parking in the study area to minimize impacts on adjacent residential areas and provide flexibility for land uses that require more parking. The study also advised that the City consider developing a City-owned parking garage if a more densely built Downtown is envisioned.

The parking study influences this Plan by encouraging the inclusion of on-street parking where feasible.

2021 Utility Analysis



Pursuant to the Downtown Action Plan, the Utility Analysis was developed to identify costs and methods associated with relocating overhead utilities to underground within the Downtown Core. The report divides the Downtown area into eight phases to relocate the utilities and prioritizes phasing based on cost and needs. The report, and its proposed utility phases, is instrumental to successful implementation of streetscapes by removing pedestrian and visual obstructions from the Downtown Core in the most cost-effective manner.

Benefits of this Plan

Downtown districts are often referred to as a City's "heart" for their role in facilitating both daily life activities and special events. Downtown Pflugerville is the central place where all residents can come together and celebrate what it means to live in Pflugerville. This Plan is a crucial step in realizing those aspirations and building a strong sense of place for the community.

What this Plan is

This Plan is a high-level plan for how the streets, sidewalks, parking, and furnishings should be improved and constructed within the Downtown District. The Plan shall serve as a guide for the next steps, funding, and targets that City staff and designers should follow when developing plans for each phase of implementation. The Plan should also be utilized as new development and redevelopment occur within the limits of this Plan.

What this Plan is not

This Plan is neither a set of construction documents nor a detailed design. It does not provide solutions to potential issues related to utility conflicts, sizing, grading, drainage, and Americans with Disabilities Act (ADA) accessibility requirements. Additional detailed analysis and design should be conducted through preliminary engineering reports to strategize the implementation of the Plan more accurately.

Plan Contents

This Plan contains background information, a community engagement summary, overall best management practices for streetscape design, existing streetscape inventory and analysis, recommended cross sections and improvements, cost estimates, funding sources, and potential phasing for implementation.

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CHAPTER 2: UNCOVERING THE COMMUNITY VISION

Summary of Public Input

During the development of this Plan, the City and consultant team facilitated two group stakeholder meetings, two community engagement open houses, and one pop-up event. These sessions fostered collaborative dialogue, ensuring the voices of the Pflugerville community were heard.

STAKEHOLDER MEETINGS

Two community stakeholder meetings were conducted on January 5, 2023, and included residents and business owners within the Downtown area. The overall feedback received from these meetings included the desire for additional sidewalks throughout the Downtown area and that the City should prioritize investing in the Downtown Core area over other sub-districts within Downtown.

OPEN HOUSE #1

Prior to developing any concepts, the community was invited to participate in an open house on March 1, 2023 at 6:30 PM at the Pflugerville Library. The scope of the Downtown Streetscape Master Plan, project goals, exhibits of existing conditions, and interactive exercises were presented, allowing participants to provide feedback and prioritize streetscape amenities they would like to see in Downtown Pflugerville.

Similar to the input from the stakeholder meetings described above, a significant number of attendees expressed their desire for the City to prioritize improvements within the Downtown Core. The residents who attended this open house voiced their support for improving the walkability and elevating the appearance of the downtown streetscapes. The most common concern that came out of this group was the inability to cross Pecan Street due to a lack of pedestrian crossings and a high volume of traffic. Additionally, there was a desire among residents to incorporate walkways into their neighborhood streetscapes.

Attendees of the first community open house being welcomed and signing up for future notifications, laying the foundation for collaborative planning.

Members of the community exploring project boundaries with informative boards that visually demonstrate the scope of the Master Plan.

Candid discussion regarding the vision, goals, and study area of the Master Plan.

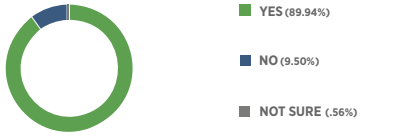
> "PLEASE ENSURE THIS IS DONE WITH AN EYE TO FUNCTION FIRST. I'D LOVE TO SEE AN INTEGRATED DESTINATION, FREE AND OPEN TO ALL THE PUBLIC..."
>
> - SURVEY RESPONDENT

ONLINE SURVEY

An online community survey was administered to gather community input for this Plan. The 19-question survey was available from March 1 to March 31, 2023 and solicited 179 responses. Key takeaways from the online community survey are summarized on the following page.

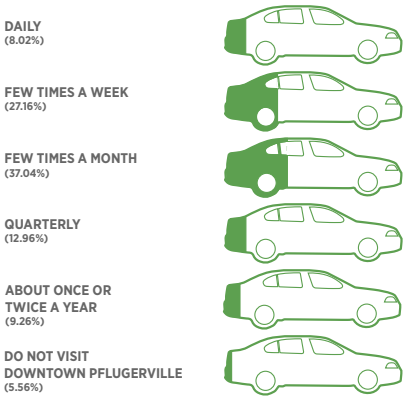
Demographics of participants showed that nearly 90% surveyed live within the City of Pflugerville; most reside, own property, or operate businesses Downtown, and most visit frequently, a few times each month. The majority of the participants preferred a traditional arch style for a gateway type, modern street furniture, and traditional brick pavers for decorative pavement at street intersections.

DO YOU LIVE WITHIN THE CITY OF PFLUGERVILLE?

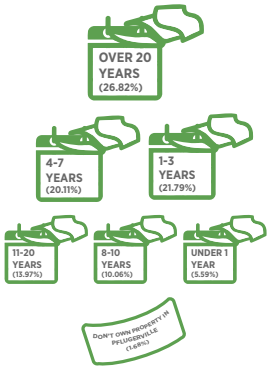


DO YOU LIVE, OWN PROPERTY, OR HAVE A BUSINESS DOWNTOWN?

HOW OFTEN DO YOU VISIT DOWNTOWN PFLUGERVILLE?

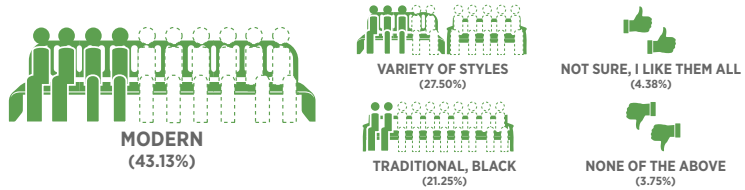


HOW LONG HAVE YOU LIVED IN PFLUGERVILLE?

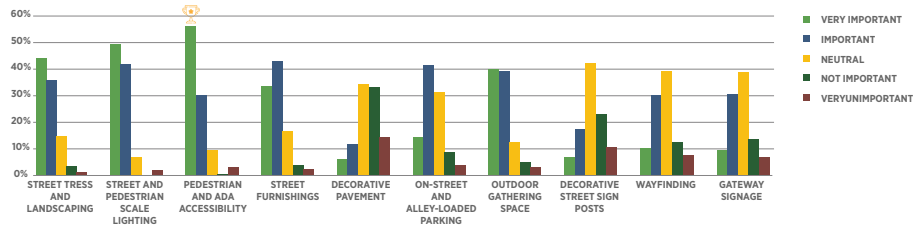


WHICH GATEWAY TYPE DO YOU PREFER FOR DOWNTOWN PFLUGERVILLE?

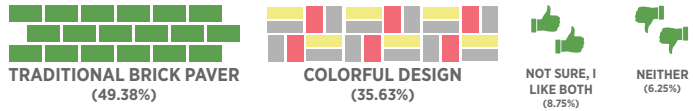
WHICH STREET FURNITURE DESIGN TYPE DO YOU PREFER FOR DOWNTOWN PFLUGERVILLE?



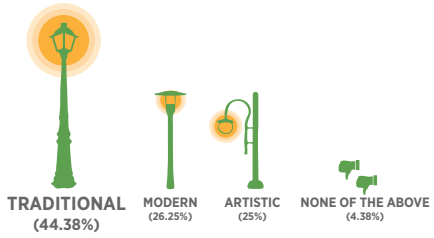
HOW IMPORTANT IS IT TO ADD THE FOLLOWING STREETSCAPE ELEMENTS IN DOWNTOWN PFLUGERVILLE?



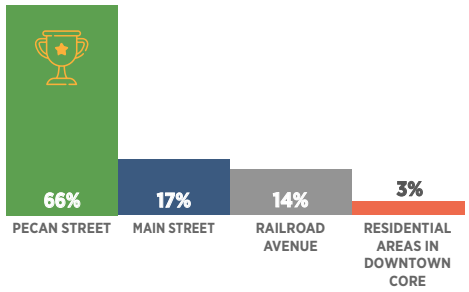
PREFERRED STREET INTERSECTION PAVEMENT DESIGN TYPE FOR DOWNTOWN PFLUGERVILLE?



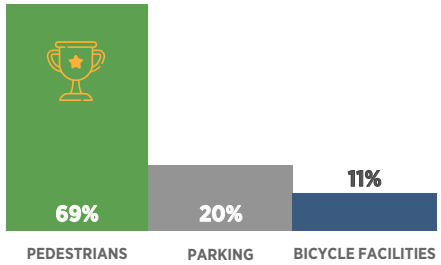
WHICH STREET LIGHT POLE AND FIXTURE TYPE DO YOU PREFER FOR DOWNTOWN PFLUGERVILLE?



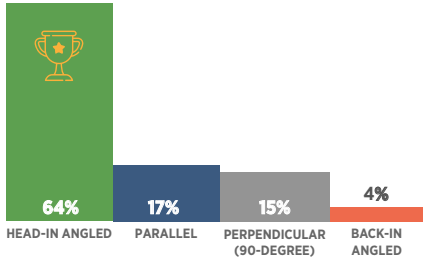
WHICH DOWNTOWN AREA SHOULD BE PRIORITIZED FOR STREETSCAPE IMPROVEMENTS?



WHICH ACCOMMODATION SHOULD BE PRIORITIZED ALONG RAILROAD AVENUE?



WHICH ON-STREET PARKING METHOD DO YOU PREFER?

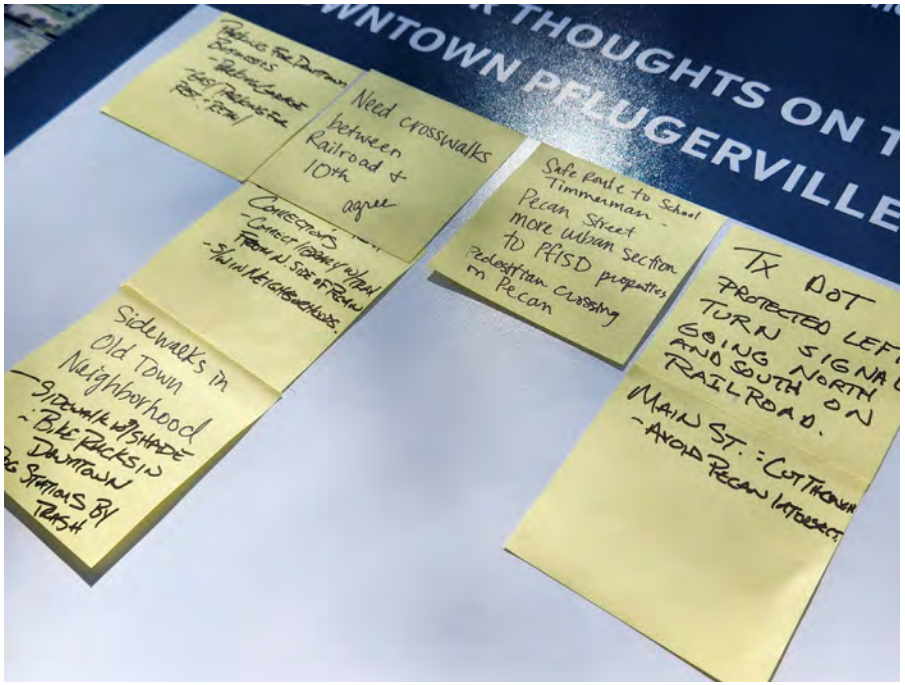


POP-UP EVENT

After Open House #1, a preliminary schematic illustrating improvement opportunities, street cross sections, and perspectives illustrating the proposed streetscape improvements were developed. On October 21, 2023, a pop-up event was held during Deutschen Pfest at Pfluger Park. The engagement event provided the opportunity to discuss the draft vision plan and project with attendees and allowed for additional feedback.

The feedback and insights gathered from the pop-up event indicated support for the Plan, with a majority of the comments expressing support of the improvements. Concerns raised during this event included responses to colored pavement and how improvements would impact existing properties.

Gathering insights and ideas at the pop-up event for the Master Plan.



A sample of the input received during the pop-up event.

COMMUNITY ENGAGEMENT MEETING #2

A second open house was held on November 16, 2023, at 6:00 PM at the City of Pflugerville's Justice Center for the community to provide feedback on the proposed streetscape improvements. Boards and posters showcasing the proposed Downtown streetscape design were featured, as well as photos, proposed street cross sections, improvement opportunities, and illustrations of the proposed design.

An interactive board allowed the public to provide valuable feedback regarding potential innovative and creative solutions to enhance aspects of the streetscape, including pedestrian barriers, stormwater management, power infrastructure, habitats, alley beautification, and interactive art.

Attendees were encouraged to place stickers on up to five preferred solutions. This activity facilitated conversation, with most of the stickers being placed on the alley beautification category, which included examples and conceptual ideas for furnished alleys, murals, creative lighting and green alleys. The majority of feedback received and discussions held were positive, with many attendees expressing excitement regarding proposed trees, artwork, and walkability. Some of the concerns received included traffic lighting and visibility at intersections, along with noise pollution.

"LOVE THE ABILITY TO WALK TO EVENTS. LOVE HOW COLORFUL THE DESIGN IS!"

"LOVE THE DESIGNS! ...GREAT JOB Y'ALL!"

Attendees providing feedback through an interactive, sticker-based exercise on innovative solutions.

CHAPTER 3: PLACEMAKING ELEMENTS

Placemaking Elements

Materials, finishes, fixtures and furnishings are important elements in downtown areas that help create an identity or branding that is recognizable to visitors and influences the use of the space. Downtown Pflugerville is currently absent of a cohesive palette that creates an identity. However, the unique quality of Downtown Pflugerville and its potential improvements offer an opportunity for branding to indicate to residents and visitors that they have arrived in Downtown Pflugerville.

The proposed improvements discussed in the following chapter already lend themselves to the creation of a brand, and any future land use changes that occur could incorporate the recommended changes. This Plan provides placemaking considerations through the remainder of this chapter, including opportunities to create a unified palette through consideration and selection of pavement, gathering spaces, public art, wayfinding and signage, lighting, plantings, furnishings, and innovative features.

A cohesive materials palette helps create a brand or identity for a downtown district.

OUTDOOR GATHERING SPACES

Gathering spaces and pocket parks are recommended throughout Downtown. These spaces can be utilized to provide small, unprogrammed gathering spaces along the streetscape or larger City events. Additional gathering space can be accommodated within alleys. Regardless of where these spaces occur, they will be activated by providing shade, vegetation, seating, art, lighting, and sound.

Outdoor gathering space

Streetscape plaza and gathering space

PUBLIC ART

Public art installations are often an expression of the community as they create conversations, serve as photo opportunities, and provide excitement along the streetscape. Public art can provide more than just aesthetics to a space. An essential element in placemaking, art may:

- Act as a node for gathering as a landmark;
- Mark terminal vistas;
- Act as a gateway or frame a prominent public place;
- Provide embellishment to structures such as bridges or tunnels;
- Function as a structure; or
- Be used to theme or emphasize a unified district.

Public art may be permanent or temporary and can potentially bring about economic benefit as a destination. Permanent installations may include fountains, sculptures of steel, stone, concrete, or other durable materials, murals or interactive works using light, fog and/or water, while temporary works may include rotating art installations or objects designed to transform over time through exposure to the elements.

WAYFINDING AND SIGNAGE

(Including decorative street signposts)

Signage is a key component to maintaining an active Downtown District. Signage can be static or interactive, and permanent or temporary depending on its purpose. Permanent signage is recommended for items that do not intend to change, such as gateway signs, street names, maps, and locations of buildings. Temporary signage is intended to be interchangeable or only displayed for a short period of time. This includes banners for events, temporary installations and pop-ups, or signs providing temporary traffic information to the public.

Signage may be installed in different applications throughout Downtown. Gateway signs are recommended to be located at the key roadway entrances along Pecan Street and Railroad Avenue to signify the edges of the District. Light poles should incorporate banner arms to allow for interchangeable banners throughout the year. These may be used for holiday themes, city services and advertising for City events. Pedestrian-scale signage includes interactive kiosks and wayfinding signage.

Decorative signs and posts may be used for Downtown identification.

Public art

Digital Kiosk

Permanent wayfinding signage

Temporary information banners

GATEWAY SIGNAGE

Gateway signage serves as an important element in defining the identity and character of a downtown district. These signs signal to visitors and residents that they are entering a unique district. By strategically placing gateway signage at key entry points, such as major roads or intersections, cities can create a memorable first impression and establish a sense of place. These signs often feature distinctive designs, incorporating elements that reflect the cultural, historical, or architectural heritage of the downtown area. This not only improves the overall visitor experience but also serves as a powerful promotional tool, communicating the experience of the downtown area and encouraging exploration and discovery of the various attractions and amenities that a downtown district has to offer, effectively playing a role in economic development by attracting tourists and encouraging spending at local shops, restaurants, and entertainment venues.

Ultimately, gateway signage fosters a sense of community pride and identity, reinforcing Downtown Pflugerville as a central hub for residents and businesses. By symbolizing the collective spirit and vitality of the area, these signs help to strengthen the bonds between community members and create a shared sense of belonging.

Overhead gateway signs can span across the entire roadway.

Small monument signs identify specific features within a district.

Large monument signs function to identify districts within a city.

Subdivisions often use gateways at primary entrances.

Gateways can set design tones that may be replicated in smaller site features.

Tall columns create significant gateways without potential overhead obstructions.

Gateway signage is often used to inform motorists that they are entering city limits.

LIGHTING

Lighting can be provided to accommodate the use of spaces during nighttime hours or be used for artistic and architectural purposes. Functional lighting must meet accepted standard levels of light for vehicle, bicycle and pedestrian areas and provide for a safe and comfortable environment from dusk to dawn. Lights will typically be denser in areas of potential conflicts between differing modes of travel, such as driveways and intersections, and may consist of either vehicle-scaled street lighting or pedestrian-scaled lighting, or both. Typical spacing for pedestrian light fixtures is anywhere from 50 to 100 feet depending on the height of the pole and the fixture selected. Vehicle light fixtures may have similar spacing, or may only be present at intersections.

Similar to the other common corridor elements, lighting contributes to the sense of place that attracts and supports bicycle and pedestrian travel and activity. Poles should coordinate with other furnishings and street materials, and may support street lighting, pedestrian lighting, vertical post banners, banners between multiple posts, hanging planters, speakers, and power receptacles.

As determined through public feedback, the use of classically-styled lighting throughout Downtown for both vehicular and pedestrian spaces is recommended. Black metal poles and fixtures will remain timeless through the years and can include a variety of attachments and accessories like hooks for wreaths or flower planters, and poles for banners. All light poles shall include a receptacle box placed near the top of the pole to allow for temporary and seasonal electrical needs for events and holiday lighting. Receptacle boxes may be placed lower on the pole for use during events but is recommended that the box be locked or put on a circuit that can be switched off.

Within public gathering spaces, light poles should include a hook at the top of the pole to allow for festoon lights to extend from the poles throughout the pedestrian space. Festoon lighting may also be explored over streets or alleys. Festoon lighting adds an overhead plane and provides a sense of comfort within a space.

LED fixtures are preferred over incandescent fixtures for their efficiency in lumens produced per watt of energy, longer life, lower maintenance, better uniformity, and long-term cost savings. Ideally, all lighting will be LED for low operating costs and dark sky compliance, and have color temperatures no greater than 3,000 kelvin to minimize potential health and environmental effects. It may also be beneficial to consider using lighting whose BUG rating is appropriate for the area. BUG rating is a system of values developed by the Illuminating Engineering Society (IES) and International Dark Sky Association (IDA) to calculate the stray light that escapes from an outdoor light fixture as back-light, up-light, and glare, and identifies luminaires appropriate for given situations. Additionally, photometric studies of lighting should be conducted during final design to ensure proper levels of lighting for pedestrian and vehicle surfaces will be provided.

Street lighting

Fluted light pole bases with power receptacles

Festoon lighting

Illuminated bollards

PLANTINGS

Similar to other common corridor elements, vegetation may be used to create a familiar theme along the corridor. The installation of trees, shrubs, ornamental shrubs, and turf may be used to delineate spaces, like separating vehicular traffic from shared-use pathways. Plants also create a more welcoming environment and promote gathering by providing shade, color, texture, aroma, and even historical or educational opportunities. By using seasonal plantings mixed with low-maintenance and evergreen plantings, the streetscape can be emphasized to create a more hospitable, comfortable environment for pedestrians.

The plant palette for the corridor will ideally consist of low-maintenance native plants and may function as xeriscapes and stormwater treatment systems. Simple planting palettes and mass plantings provide visual impact to traffic, but care should be taken not to block sightlines and sight triangles within corridors or at intersections.

Trees, in particular, provide substantial significance in downtown environments. Street trees are generally recommended to be planted approximately 25-30 feet apart when planted in gateway areas, depending on the tree species. The placement of street trees in high-activity areas or proximity to buildings will vary based on the site context. Trees should be set back from the curb by a minimum of 4 feet.

Tree grates with removeable center rings allow tree trunks to grow.

Lush, native plantings provide barriers and color along the street .

Tree species should be carefully considered for the urban environment to ensure the long-term health of planted trees and prevention of conflicts with adjacent improvements. The following are important considerations when selecting tree species:

- The possible impact on pedestrians, vehicles, and maintenance to sidewalks and stormwater inlets as a result of tree debris should be considered.
- Available soil volume for planting should be considered to ensure mature trees will have adequate space for healthy root systems. If adequate soil volume cannot be provided in unpaved areas or a tree is placed within paved areas, structural soil or soil cells should be considered to allow for healthy development.
- Mature canopy dimensions should be considered so as not to impede into travel lanes and conflict with tall vehicles or crowd adjacent structures. Species with taller, narrower mature canopies may be preferred in certain areas.
- If a tree is planted close to paved improvements like sidewalks or on-street parking, root barriers are recommended to prevent heaving or settling of pavement, if adequate soil volume is still available for root development.
- Appropriate spacing between trees should also be considered to promote healthy growth and prevent overcrowding when trees have reached maturity.
- Above all, shade should be the primary function of plantings in a Texas streetscape.

Decorative landscaping separates pedestrians from vehicles and frames crosswalks.

STREET FURNISHINGS

Beyond serving obvious functions such as providing seating, or a receptacle for trash disposal, street furnishings also contribute to the sense of place in which they are found and help establish a common theme. By creating this sense of familiarity, users are more apt to make use of furnishings, and when appropriately arranged, furnishings should cater to the activities of all users by enhancing social encounters and offering a place to rest or occupy time. Furnishings should be durable and comfortable, and each type of furnishing (e.g., bench, trash receptacle, bicycle rack, etc.) should offer similar aesthetic qualities. Furnishings should be arranged according to current and anticipated uses and not block the flow of travel along roadways, or present other safety hazards.

Furnishing should be concentrated in gathering areas and areas adjacent to high-activity land uses and near building entrances. Furnishings, such as seating, might even be used to promote gathering in key areas to enhance safety and visibility. Typical street furnishings may include benches, trash/recycling receptacles, bike racks, bollards, shelters, planters, lighting, and loose tables and chairs.

Classic streetscape bench

Artistic seating

Solar trash compactor

A combination of classically styled metal benches placed throughout the streetscape, with carefully placed artistic seating like custom benches, seat walls, or loungers, in key locations is recommended based on public feedback. Following the same reasoning as the lighting selection, classically styled black steel benches will be timeless and can be easily replicated and replaced.

Trash receptacles should complement seating and be regularly placed throughout the streetscapes. Trash receptacles should be uniform for ease of maintenance and changing of waste bins. In these situations, a traditional black metal single bin trash receptacle is recommended. All receptacles should have a hood to prevent rainwater from entering. However, solar-powered trash and recycling compactors may be considered. Trash compactors will be most practical in commercial areas due to a higher volume of pedestrian movement. Solar-powered trash and recycling compactors can hold a greater volume of trash and can alert maintenance staff when it needs to be emptied, reducing unnecessary visits. Custom graphics may be applied to the face of receptacles as an additional opportunity for branding and art.

Combination trash and recycling bins

Planters that also function as seating

Traditional black metal trash receptacle with hood

PAVED SURFACES

Through the use of various paving methods, the purposes of spaces throughout Downtown will be apparent to visitors through pavement color, texture, pattern, and material. Colors may contribute to the microclimate and comfort of the streetscape and should be carefully selected, considering both heat and glare. Contrasting colors and patterns may help define boundaries of active versus passive pedestrian zones, bicycle zones, and vehicular zones, and heavy textures may help regulate the speed of motorists and cyclists or help prevent cyclists from using specific areas to promote pedestrian safety. Preventing cyclists and other forms of transportation from riding in pedestrian only areas is difficult to enforce, but frequent conflicts may be avoided by providing cyclists comfortable facilities that consist of smooth, uninterrupted surfaces. Potential paving materials for pedestrian areas include concrete, which may or may not have integral color, stamped texture and/ or sandblasted patterns, asphalt, which also may or may not be colored, and textured, clay brick, concrete, stone, porcelain and/or ceramic pavers.

Due to their durability and low maintenance requirements, the use of a variety of concrete finishes and pavers to enhance the experience of those passing through and visiting Downtown Pflugerville is recommended.

Concrete is the most cost-effective hard surface for pedestrian spaces, which is evident through its prolific use. There are several options to enhance concrete that this Plan considers:

Pavement can be used to define spaces through use of color, texture, pattern and material.

Broom finish concrete

Integral colored concrete with control joints

Stamped Integral Color Concrete

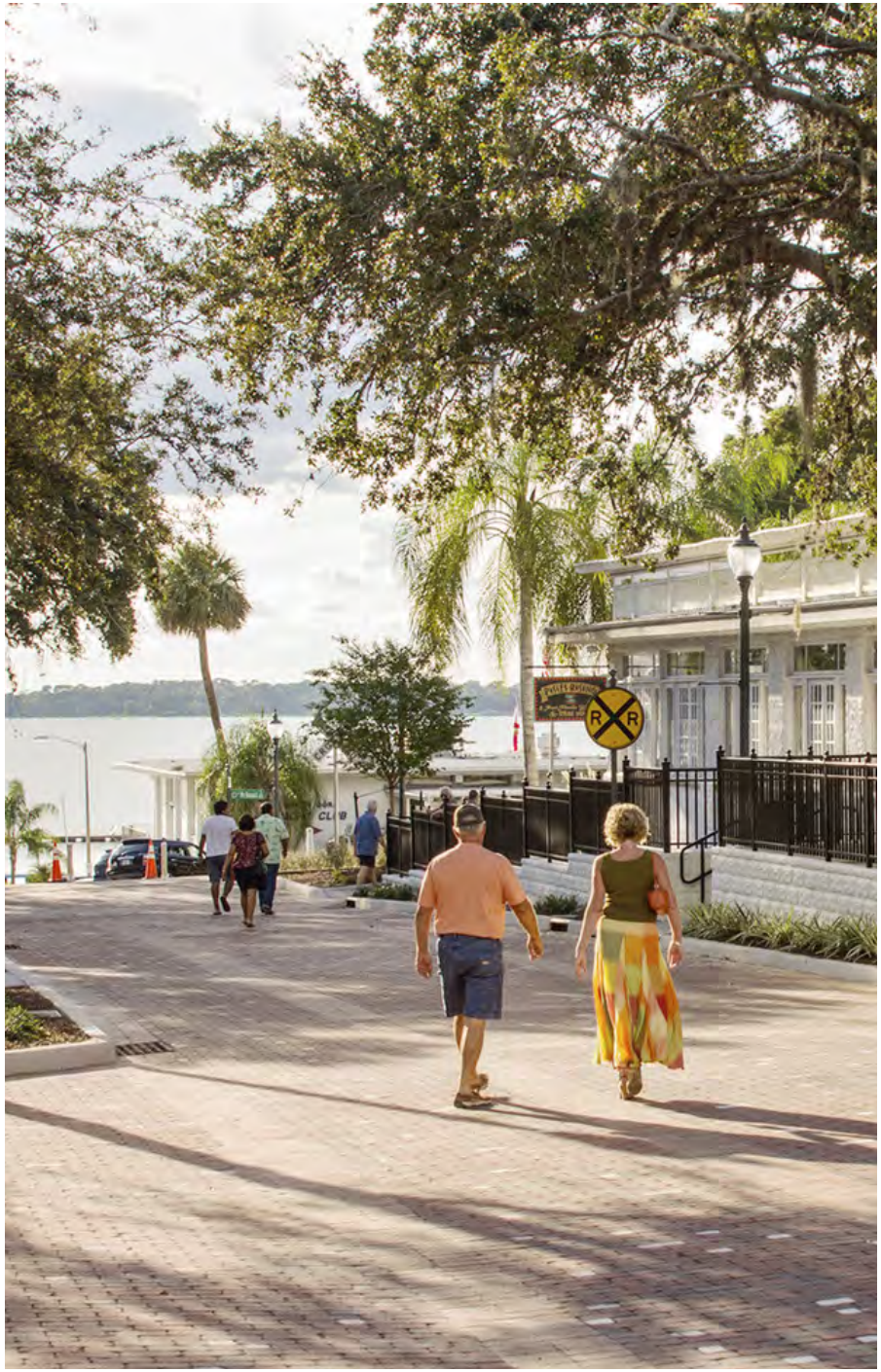
- **Broom Finished Concrete**
  This type of concrete finish is the most common of all concrete finishes as it is the simplest texture to apply to concrete that provides a slip-resistant surface. When the concrete is poured and formed, a broom is dragged across the surface leaving a pattern in the concrete. Broom finished concrete is recommended for sidewalks, shared-use paths, and any walking surface.
- **Integral Colored Concrete**
  Unlike surface stained concrete that fades over time, integral colored concrete uses pigments mixed into the concrete prior to installation. This ensures that the color finish is through the entire depth of the concrete, so as the concrete surface wears, cracks, or is chipped over time, the newly exposed surfaces match the rest of the concrete surfaces. This type of finish is recommended to be placed at crossings, key intersections, gateways, and nodes throughout Downtown. A cost-effective way to introduce color into pavement, it should be noted that integral colored concrete should be ordered in large quantities to guarantee consistent color matching. Small batches may be less cost-effective and cause difficulty matching existing or previously poured areas.
- **Control Joints**
  Control joints provide a place for cracks to form in concrete surfaces and can either be placed in wet concrete with hand tools, or dry concrete with saws. The addition of patterns by using control joints can be easily added to give the concrete a unique aesthetic and design and can be used to accentuate items found in the streetscape or adjacent structures.
- **Stamps**
  Freshly poured concrete can be stamped with large plastic, metal or rubber patterns that will either make the concrete look like another material (stone, brick, etc.) or apply a unique pattern or texture to the concrete to provide interest.

While concrete is the most cost-effective surfacing for pedestrian space, there are several alternative options that may be considered:

- **Pavers**
  Pavers are modular units that can be made from either stone, clay, or concrete. Pavers in pedestrian spaces should be compliant with the Americans with Disabilities Act (ADA) regulations, preventing the collection of water on walking surfaces, and providing a durable and slip-resistant surface in all weather conditions. The integration of pavers in Downtown Pflugerville can contribute to the historical identity created by the existing buildings. Pavers provide aesthetics to the space and can serve as a traffic calming enhancement as well. Changes in paver colors on vehicular surfaces can indicate pedestrian crossings, parking stalls and loading zones. Although more expensive, the use of pavers in lieu of integral colored concrete at crossings, key intersections, gateways, and nodes is recommended, as pavers can be pulled up and re-placed to accommodate construction activities or repairs, and replacements may be purchased. Maintenance considerations include regular sweeping and occasional rinsing.
- **Colored Thermoplastic**
  To achieve a colorful intersection treatment, the use of thermoplastic surfacing may be considered. However, based on public feedback, traditional “brick paver” styles are preferred. Thermoplastic surfacing is the same application used for roadway striping and markings. This can be customized and applied to any shape or size of intersection. The thermoplastic is applied to the top of a finished roadway surface through a heated application. It is important to note that tire marks will show on the application, and regular cleaning will be needed to maintain the appearance. Although thermoplastic markings are engineered for durability, they generally have a lifespan of three to five years. However, consistent maintenance can extend their longevity up to 10 years.

Pavers intermixed with concrete pavement.

Colored Thermoplastics application at an intersection.



This brick road, when combined with signage, gives pedestrians the right-of-way.

This concrete sidewalk has been treated with rock salt and control joints.

INNOVATION FEATURES

Because this Plan is intended to guide streetscape improvements over the next 10+ years, the implementation of innovative solutions may assist in creating more adaptable solutions as Downtown continues to redevelop.

Our world is more connected now with smart technology. Wi-Fi and 5g hubs may be provided for public use and to monitor streetlight functions, trash receptacle capacity, parking availability and more. Bluetooth speakers may be incorporated into the streetscape for music and/or public annoucements, and may be placed in either landscape beds or on light poles.

Renewable energy is becoming a model in the transportation world. The next generation may see more electric vehicles sold than gas-powered vehicles, and preparation for this growth may include electric vehicle charging stations in public spaces.

Streetscape bio-swales; Image via Flickr by Erica Fischer.

Pollinator Plantings

Art on a low barrier wall

Urban bird houses

5G antenna on light pole

Solar panels can be used to power lighting, provide for personal electronic device charging and power Wi-Fi hubs. Solar panels may be presented visibly to the public in an artistic way or used in a functional manner, like a shade structure.

Stormwater management may be a growing concern as development increases and brings additional stormwater runoff. To help mitigate this, the implementation of bioswales and permeable surfaces throughout Downtown can capture and filter, store and absorb, and slow runoff.

The integration of pollinator-friendly plants could provide an educational component and address critical habitat loss. These can be integrated with insect hotels, bird houses, and native plant species. Signage adjacent to these items will inform the public of the vital role that habitat provides.

Solutions such as pollinator gardens and rain gardens could be targeted at key intersections and pocket parks where larger landscape beds may be present to provide adequate space for these solutions.

Artistic solar panels

Alley lighting

Murals

EV charging stations

Alley art installations

Interactive kiosks

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CHAPTER 4: MASTER PLAN SITE ANALYSIS AND RECOMMENDATIONS

Analysis Process

The Downtown Streetscape Master Plan (Plan) is the result of a high-level analysis of existing conditions, a review of relevant studies, master plans and other background data, and current development requirements for Downtown. It is also heavily informed by business and resident feedback and preferences, as well as industry best practices.

The conceptual streetscape designs in this Plan are laid out based on GIS parcel data, aerial imagery, and on-site photography. The designs may be modified over time based on changes in land uses between the time this Plan is adopted and the time of implementation. The next step toward implementation of this Plan would be to complete a Preliminary Engineering Report to identify permitting and design recommendations to assist in the detailed design and construction. Upon implementation, modifications to the design are expected to account for unexpected site conditions discovered through a survey, including grade changes and subsurface utility findings.

The Plan recommendations are not intended to be fully implemented in one phase, but rather a series of phases based on critical needs and opportunities to make streetscape improvements in conjunction with other capital improvement projects. (E.g., undergrounding of overhead utility lines, water and wastewater improvement projects, drainage improvement projects, etc.) Chapter 5 of this Plan provides recommendations for priorities, phasing, and their respective planning level order of magnitude opinions of probable construction costs.

This chapter discusses opportunities, challenges, and rationale for the recommended improvements. To respond to specific existing conditions and proposed improvements along Pecan Street, Main Street and Railroad Avenue, each street has been divided into multiple sections.

The conceptual streetscape designs should consider the programming and events that will take place during special events, like the Slice of Pflugerville festival.

The diverse and historic architecture of Pflugerville's Downtown District provides a welcoming atmosphere for both residents and visitors.

Pecan Street

Pecan Street, also referred to as FM 1825, is the primary east/west corridor through the Plan area and carries over 15,000 vehicles per day to and through the Downtown District, including residents, business owners, and visitors. As such, it has significant potential to impact travelers and inform them that they are within the Downtown District. The aesthetic enhancement of Pecan Street to benefit both vehicular and pedestrian traffic was identified as a high priority streetscape project in Downtown through a community survey and has the potential to support economic development and tourism in the Downtown District.

Adopted in November 2019 and updated in November 2020, the Transportation Master Plan (TMP) identifies improvements needed to the transportation network within Pflugerville. Included in these solutions is the recommendation that Pecan Street through Downtown be reclassified to an "Urban 3-Lane." Per the TMP, this street section has an 80-foot right-of-way with three 11-foot vehicle lanes, optional parallel parking, and 6-foot sidewalks separated from vehicle lanes with 7-foot buffers. This Plan, which is based on existing conditions, physical constraints, and opportunities, supersedes the cross-section recommendation of the TMP.

The biggest challenges in making streetscaping improvements along Pecan Street will be overcoming the physical constraints due to the limited right-of-way, the existing built environment, and the design criteria enforced by the Texas Department of Transportation (TxDOT) because it is a TxDOT operated roadway. Pecan Street conceptual cross sections were reviewed by the TxDOT North Austin Area Office during the development of this Plan for compliance with design criteria.

While TxDOT design manuals indicate that the existing speed and traffic volume of Pecan would permit 11-foot-wide lanes for both travel lanes and the center turn lane, further consultation with TxDOT determined that 11-foot travel lanes and a 12-foot center turn lane are preferable. The following pages include a summary of existing conditions, site analysis, and recommendations for each segment of Pecan Street.

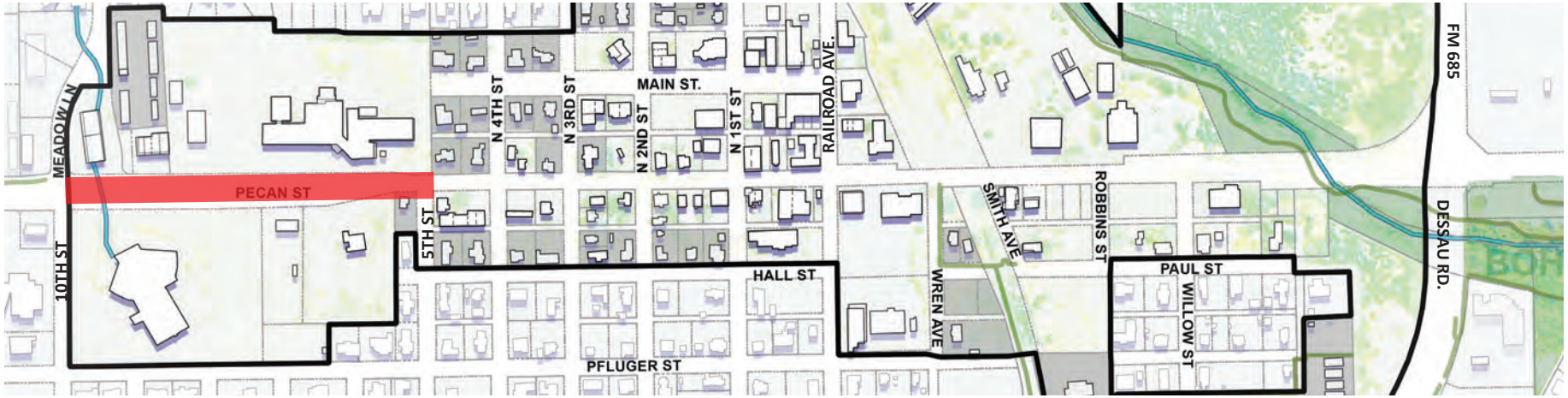
Pecan Street is divided into four sections for analysis and recommendations.

Summary of Pecan Street Recommendations:

- Improvements include a combination of 80', 100', and 120' wide street cross sections based on location;
- Reduce vehicular travel lane widths;
- Acquire additional right-of-way between 5th Street and Robbins Street along Pecan Street to accommodate landscaping and a more pedestrian-friendly environment;
- Install street trees and landscaping;
- Provide shared-use paths on both sides of the road;
- If required, provide decorative, traffic-rated pedestrian barriers only when shared-use paths are directly adjacent to curbs;
- Install decorative pavement in the intersection of Pecan Street and Railroad Avenue;
- Expand pedestrian spaces at the intersection of Pecan Street and Railroad Avenue;
- Install pedestrian-scale lighting every 50'-100';
- Install vehicle-scale street lighting at intersections and pedestrian crossings;
- Remove excessive driveways to Pecan Street;
- Explore opportunities for pedestrian islands along Pecan Street within the median (e.g., mid-block crossings); and
- Relocate overhead utility lines underground in conjunction with streetscape improvements.

Pecan Street, west of Railroad Avenue, looking west.

Pecan Street approaching Railroad Avenue from the west.



Pecan Street Section One.

Pecan Street: Section One Analysis

(10th Street/Meadow Lane to 5th Street)

Pecan Street Section One begins on the east side of the 10th Street/ Meadow Lane intersection and is approximately 1,230 linear feet in length, ending at 5th Street. The majority of the right-of-way is approximately 120 feet in width but tapers from 120 feet to approximately 60 feet from the school site to 5th Street, before transitioning to Section Two.

The majority of Section One has a 45-mph speed limit and consists of a 12-foot center turn lane, two 11-foot westbound lanes, and two 11-foot eastbound lanes with 18-inch-wide shoulders on the outside lanes. Five to six-foot-wide sidewalks are provided either within or outside of the right- of-way and are separated from vehicle lanes with a 16 to 40-foot-wide vegetated (grass) buffer/open bar ditch.

As the right-of-way reduces to 60 feet, the roadway section transitions to one westbound lane, one eastbound lane, and a center turn lane, each 14 feet in width. A two-foot-wide curb and gutter is found on both sides of the roadway section. Sidewalks are found on back-of-curb on both sides of the roadway section and vary in width from five to six feet in width. The posted speed limit also reduces to 30 mph just as Section One transitions to Section Two.

Land uses adjacent to Section One include commercial, institutional [First Baptist Church, and Pflugerville Academic and Career Education (PACE) School], and one residence at the corner of 5th Street. All improvements on adjacent properties are set back from the front property line, with the residential structure placed approximately 15 feet from the right-of-way line and all other structures occurring more than 45 feet from the right-of-way line.

View of 10th Street/Meadow Lane and Pecan Street intersection looking east.

Travel lanes reduce from four to two as travelers move eastward through Pecan Street Section One.

PECAN STREET: SECTION ONE IMPROVEMENTS

There are two viable alternatives for Pecan Street Section One.

Proposed improvements for Alternative A consist of a 12-foot-wide center turn lane, two 11-foot-wide westbound lanes, and two 11-foot-wide eastbound lanes with a 2-foot-wide curb and gutter on both outside lanes. Per TxDOT recommended width, 10-foot-wide shared-use paths for both pedestrians and cyclists are provided on both sides of the roadway and are separated from back-of-curb with a continuous, 16-foot-wide landscape bed. This large landscape bed will meet the City's current spatial standards for landscape medians to allow the planting of shade trees with more soil volume to improve tree health and lower maintenance frequency and risks, and provide the opportunity to notify travelers that they are entering Downtown Pflugerville by the use of plant massing with a palette that is unique from adjacent areas and developments. Refer to the landscaping section of Chapter 3 for recommendations for tree planting. The remaining 4-foot-wide landscape beds between shared-use paths and edge of right-of-way and abutting easements could accommodate the undergrounding of utilities.

Proposed improvements for Alternative B consist of the same vehicular section from curb to curb, but the shared-use paths shift closer to the curbs to provide continuous, 9-foot-wide landscape buffers with shade trees between the shared-use paths and curbs, providing safety and comfort for both cyclists and pedestrians. Additional flexible landscape buffers with trees are provided between shared-use paths and adjacent properties.

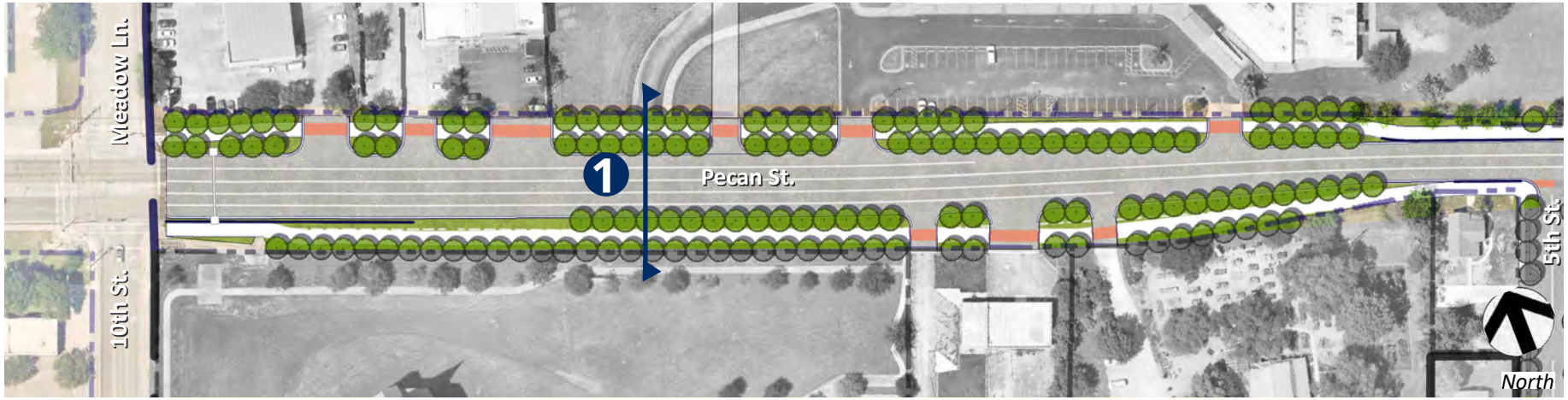
Right-of-way acquisition is not anticipated as the proposed improvements are expected to be accommodated within the existing 120-foot street cross section.

There is an existing 10'-20' public utility easement along the north side of the roadway to accommodate the undergrounding of utilities as described in Phase 4 of the Downtown Utility Analysis. For this reason, Alternative A is a strong candidate for consideration as any potential disturbances required by utility maintenance could be limited to the outer 4-foot-wide landscape bed and the existing easements.

Existing drainage patterns are not anticipated to be altered, although the addition of curbs between the PACE campus and 10th Street may require curb cuts or inlets with underground drainage to capture surface flows.

As Section One approaches Section Two, travel lanes reduce to one in each direction and the shared-use paths move to back-of curb, eliminating the landscape buffers on both sides of the roadway.

Example of a shared-use path parallel to an active roadway.



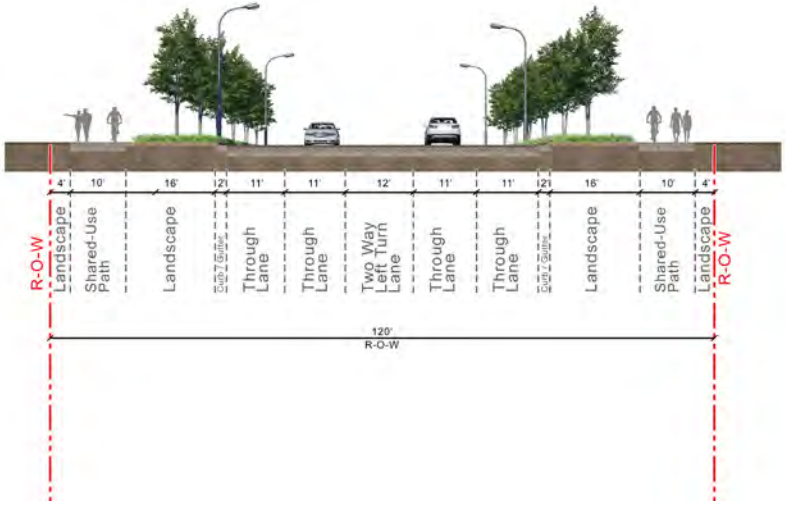
Pecan Street Section One - Plan view.

1 PECAN STREET SECTION ONE

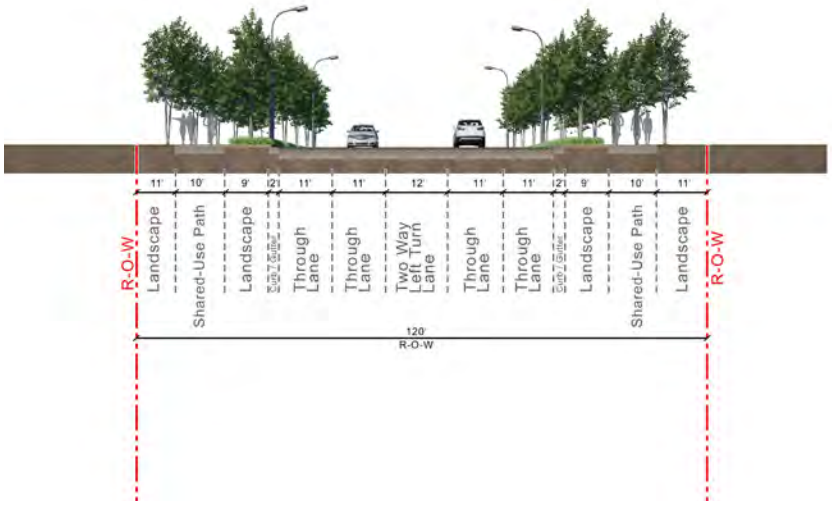
Existing 120’ right-of-way.

No additional right-of-way required within the 120’ section.

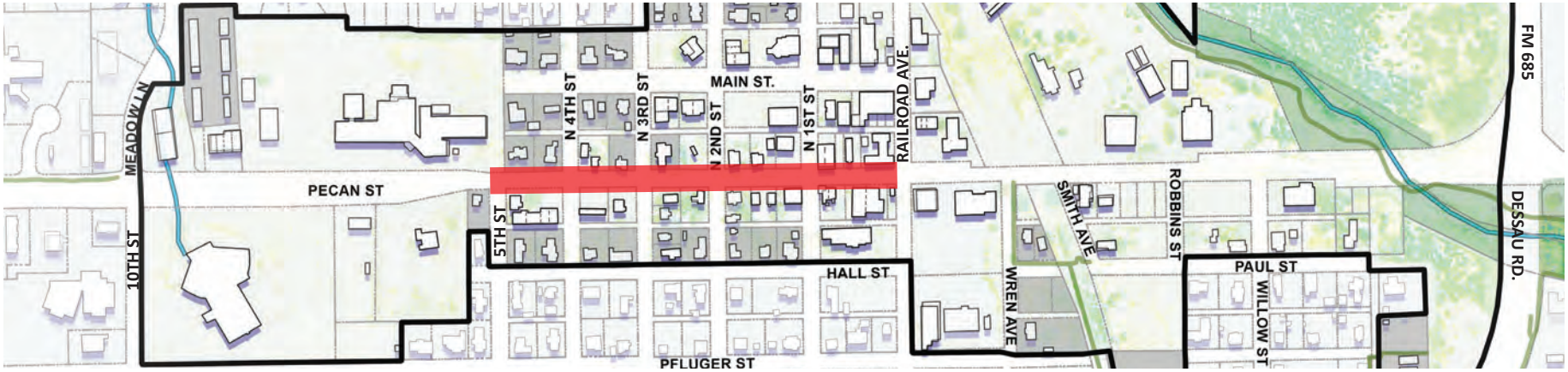
Extends from 10th Street/Meadow Lane to 5th street.



Pecan Street Section One - Alternative A



Pecan Street Section One - Alternative B



Pecan Street Section Two.

PECAN STREET: SECTION TWO ANALYSIS

(5th Street to Railroad Avenue)

Section Two begins at 5th Street and extends eastward approximately 1,450 feet to Railroad Avenue. The right-of-way is approximately 60 feet in width. The speed limit is 30 mph, and the roadway section consists of one westbound lane, one eastbound lane, and one center turn lane, each 14 feet in width. A 2-foot-wide curb and gutter are found on both sides of the roadway section. There are 6-foot-wide sidewalks on back-of- curb on both sides of the roadway section.

The properties adjacent to Section Two, generally from 5th Street to 1st Street, include both commercial and residential uses, and most structures are set back from the property line by several feet or more which would allow for right-of-way acquisition without removing structures to accommodate future improvements, if deemed necessary. However, generally between 1st Street and Railroad Avenue, existing structures are built close to or, in some cases, on the property line. This presents a challenge to acquiring additional right-of-way to create a more comfortable pedestrian experience.

This section of roadway has multiple grade changes with retaining walls running along the northern side of the roadway between 4th Street and 2nd Street and the southern side of the roadway between 2nd Street and Railroad Avenue. There are multiple driveways off of Pecan Street, and, in some cases, with very short separation distances. There are a few trees within or in proximity to the right-of-way. In this section, there are overhead utilities running parallel to the roadway between 4th Street and 5th Street and extensions across Pecan Street at 1st Street and Railroad Avenue.

One of the most challenging locations within the Downtown District is the intersection at Pecan Street and Railroad Avenue, as it is a significant intersection of two major corridors with physical constraints of the existing right-of-way and the built environment surrounding this intersection, constraining opportunities to create a pedestrian-friendly environment. There are narrow or nonexistent sidewalks and non-compliant ADA accessible curb ramps. There is substantial overhead utility infrastructure, grade changes along Pecan Street and Railroad Avenue, nearby signage, a traffic signal box, and multiple driveways in proximity to the intersection.

For example, the gas station at the northwest corner of the intersection has a pylon sign, canopy, and gas pumps in proximity to the right-of-way line. Pedestrian comfort is severely limited within the existing right-of-way at this location, forcing people to stand uncomfortably close to vehicular travel lanes while waiting to cross the street.

Despite limitations, there is an opportunity to improve the pedestrian experience at this intersection. Relocation or removal of nearby free-standing private signage and the undergrounding of overhead utilities should be considered with future streetscape improvements.

The multiple driveway entrances could be reconfigured. This would allow for vehicular maneuverability and fuel deliveries within the property while providing for more pedestrian space along Pecan Street and Railroad Avenue.

Bird's eye view of Pecan Street and Railroad Avenue intersection looking east.

View from northeast corner of Pecan Street and Railroad Avenue looking west.

View from Railroad facing west along Pecan Street.

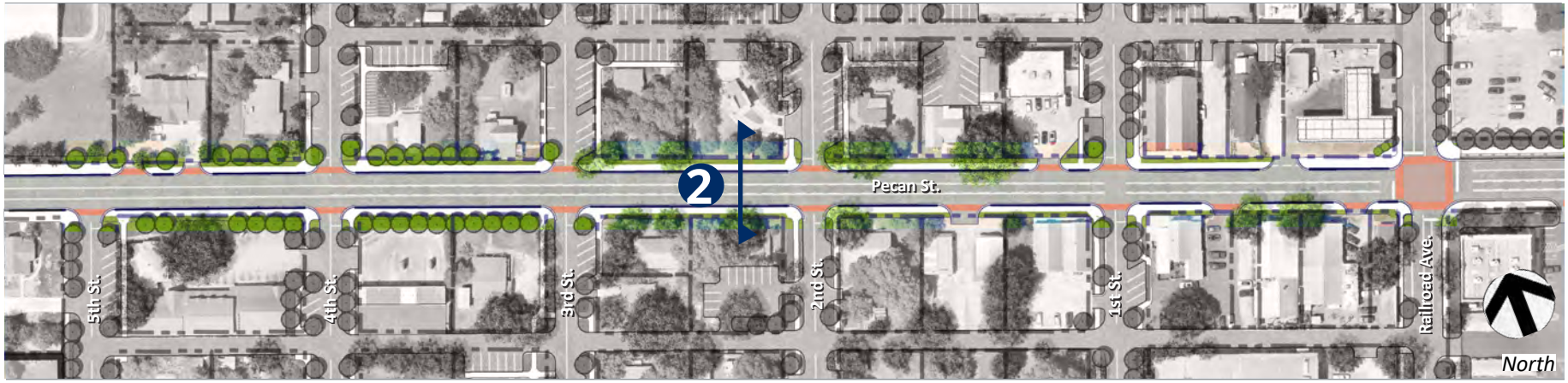
PECAN STREET: SECTION TWO IMPROVEMENTS

Proposed improvements to Pecan Street Section Two include reducing the center turn lane to 12 feet in width and the travel lanes to 11 feet in width. 10-foot-wide shared-use paths are separated from curbs by 4-foot-wide landscape buffers on both sides of the roadway, and 7-foot-wide landscape buffers with shade trees separate the shared-use paths from adjacent properties. Refer to the landscaping section of Chapter 3 for recommendations for tree planting. The landscape areas may incorporate additional pedestrian space with amenities and/or furnishings.

This section requires 80 feet of right-of-way; however, if there are significant physical constraints, such as buildings on either side of the roadway that prevent the full cross-section, the right-of-way acquisition may be reduced in those areas, at the City's discretion. In the event of constrained right-of-way, an alternative section may be utilized in which 30-inch-wide combined gutter and optional concrete traffic barriers on both sides of the roadway protect pedestrians and cyclists on 9-and-a-half-foot wide shared-use paths from vehicles.

Pecan Street Section Two is crowned and follows a ridge, allowing runoff from the north half of Pecan Street to flow north, and runoff from the south half of Pecan Street to flow south. The drainage pattern is not anticipated to be altered, although surface flows could potentially be captured with additional curb inlets and tied into the subsurface drainage. Due to the drainage along the roadway, the undergrounding of utilities in Phases 1 and 6 of the Downtown Utility Analysis would be best accommodated in new public utility easements but may be placed underneath shared-use paths.

Narrow sidewalks that are directly adjacent to curbs in Section Two do not encourage pedestrian activity.



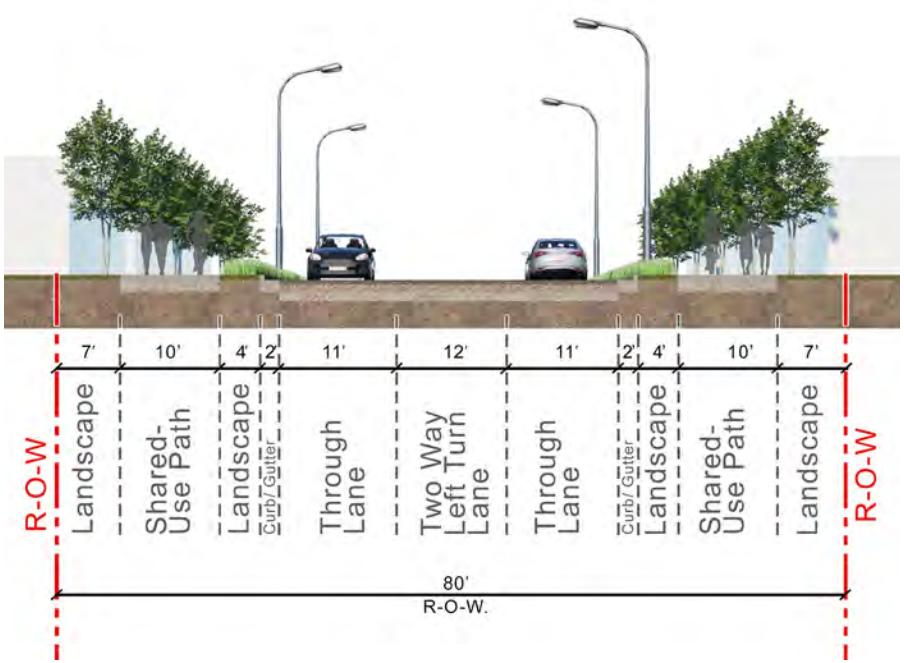
Pecan Street Section Two - Plan view.

2 PECAN STREET SECTION TWO (PREFERRED)

Existing 60’ right-of-way.

Proposed 80’ right-of-way.

Extends from 5th Street to Railroad Avenue.

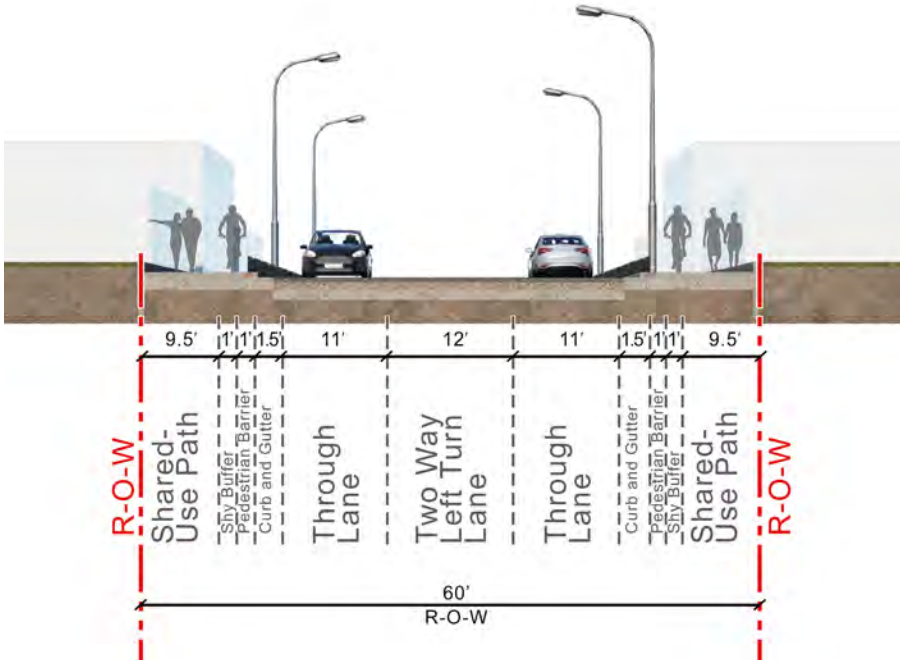


PECAN STREET SECTION TWO (ALTERNATE)

Existing 60’ right-of-way.

If 80’ of R-O-W unattainable due to physical constraints.

Extends from 5th Street to Railroad Avenue.



PEDESTRIAN ISLANDS

While there is nearly a mile of Pecan Street in the Plan area, there currently are only two intersections that accommodate pedestrian opportunities to cross Pecan Street. Pedestrians may cross at 10th Street/Meadow Lane, but only after crossing to the west side of the intersection. Pedestrians may also cross Pecan Street at Railroad Avenue utilizing typical “traverse” style crosswalks to each corner of the intersection. Although there is a crosswalk at Pecan Street and FM 685/Dessau Road, the crosswalk is on the east side of the intersection and there are no crosswalks for pedestrians to cross FM 685/Dessau Road. Public engagement results echoed this issue, indicating that respondents have difficulty crossing Pecan Street due to a lack of safe options.

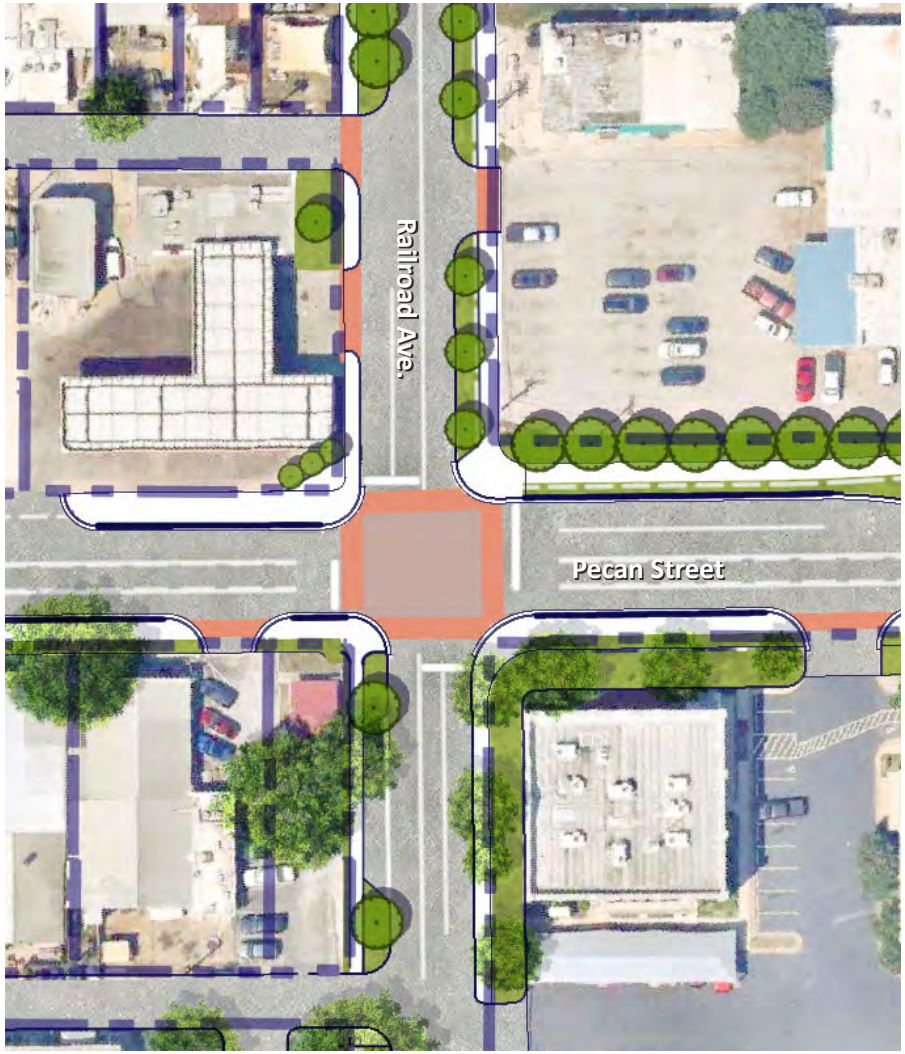
One or more pedestrian hybrid beacons (PHB), traffic control devices with flashing lights that help pedestrians cross roadways at mid-block crossings or un-signalized intersection, should be placed along Pecan Street between Railroad and 5th Street to resolve this issue. If placed at intersections, PHBs could easily be upgraded to traffic signals if Pecan is ever taken off system from TxDOT. Alternatively, PHBs could be paired with pedestrian islands in the median with mid-bock crossings. Pedestrian islands function as traffic calming devices that provide a place of refuge within the roadway for pedestrians with curbed areas that deter vehicles and also provide an opportunity for ornamental landscaping to soften the streetscape (refer image). Although beneficial to pedestrians, these islands could potentially conflict with left turn movements for drivers. Additional studies with traffic and pedestrian counts will need to be conducted in order to justify PHBs with TxDOT.

Vehicular point of view of a pedestrian island.

Example of a landscaped pedestrian island.

The intersection at Pecan Street and Railroad Avenue is the busiest intersection within the Downtown District and is the only intersection with a traffic light in the Downtown Core. The plan enlargement shown here illustrates potential improvements for the intersection to allow for higher visibility and awareness for both vehicles and pedestrians.

Refer to the following spread for before and after illustrations on how these intersection improvements may appear when complete.



Proposed intersection improvements at Pecan Street and Railroad Avenue.

Pecan Street at Railroad Avenue is the busiest intersection in the study area.

Pedestrian crossing facilities meet minimum standards.

The photo to the right shows the existing conditions at the northwest corner of the intersection of Pecan Street and Railroad Avenue. This photo shows the vast sprawl of roadway and limited pedestrian areas. The gas station overtakes the opposing corner, leaving minimal space for pedestrians. The overhead space is cluttered with utility lines and poles. The lack of landscaping and color creates a stark and uncomfortable place to cross the road.

Existing view from south corner of Pecan Street and Railroad Avenue viewing north.

Suggested improvements are shown to the right, which include placing all utilities underground as stated in the Downtown Utility Analysis and improving the traffic signal mast arms. Repaving the intersection with pavers and decorative paving creates a heightened sense of awareness when vehicles approach the intersection. Enhancing the space with the installation of planters, vegetation, and color will provide the area with a more comfortable environment for pedestrians. Right-of-way acquisition is required at the northwest corner of this intersection to achieve a desirable pedestrian-friendly environment.

Proposed view from south corner of Pecan St. and Railroad Ave. viewing north.

Existing view from east corner of Pecan St. and Railroad Ave. viewing west.

This view faces west on Pecan Street, approaching the gas station. The northeast corner, shown here on the right side of the picture, contains a large traffic control box, traffic pole, electric and telecommunication poles and respective guy wires making the space challenging for pedestrians to navigate safely.

Proposed view from east corner of Pecan St. and Railroad Ave. viewing west.

This view highlights the ways that the intersection can be reconfigured to provide more safety and comfort for pedestrians. Removing the above ground utilities and creating more separation from the roadway creates a safer and more comfortable crossing location.

Pecan Street Section Three.

PECAN STREET: SECTION THREE ANALYSIS

(Railroad Avenue to Robbins Street)

Section Three begins at the Railroad Avenue intersection and extends eastward approximately 960 feet to Robbins Street. Existing right-of-way within this section of Pecan Street varies between 50 and 80 feet in width. Similar to Section Two, Section Three has a speed limit of 30 mph and consists of one westbound lane, one eastbound lane, and one center turn lane, each 14 feet in width. There is also a dedicated right turn lane for westbound to northbound traffic at Railroad Avenue. A two-foot curb and gutter are found on both sides of the roadway section. Sidewalks are found on back-of-curb on both sides of the roadway section and are five feet in width.

The adjacent properties on the north side of Section Three include institutional and commercial uses, as well as the abandoned Missouri-Kansas-Texas Railroad (MoKan) right-of-way that is owned and controlled by TxDOT. Along the north side, some private improvements abut the property line, such as parking, but no structure is closer than 50 feet to the Pecan Street right-of-way. Adjacent properties on the south side of Section Three include governmental and commercial uses. Improvements are generally setback 12 feet or more from the property line, with the exception of one structure that is approximately two feet away from the Pecan Street right-of-way. The MoKan right-of-way is also found on the south side of Section Three. The MoKan right-of-way on the south side includes the Pfairways Trail, which does not connect to Pecan Street.

View at Smith Avenue looking west along Pecan Street.

View at Willow Street looking west along Pecan Street.

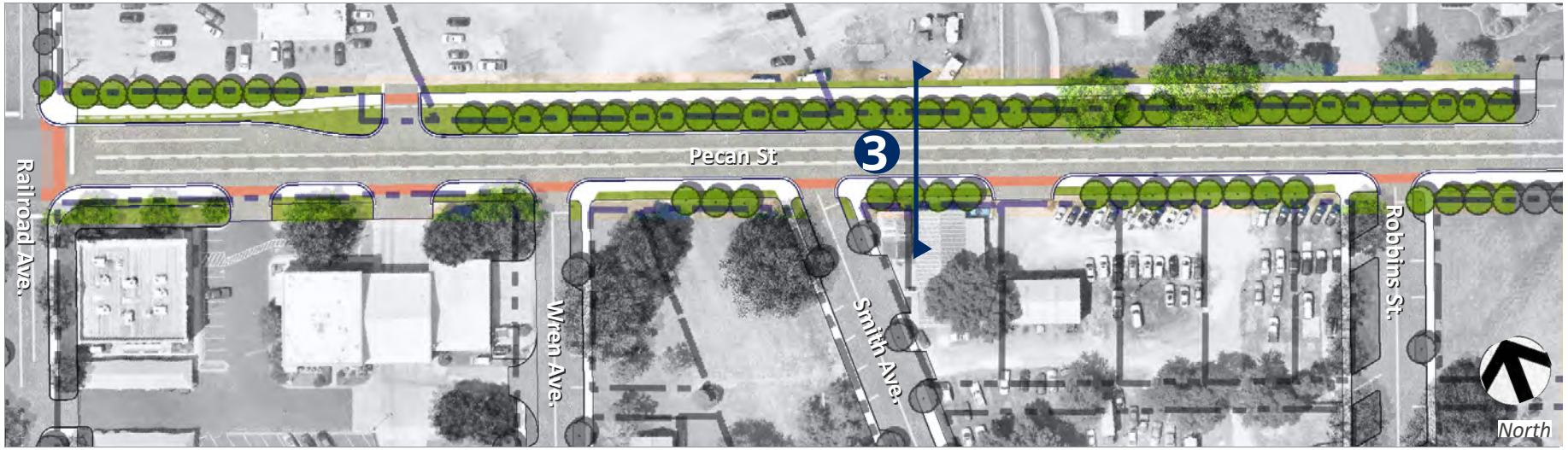
PECAN STREET: SECTION THREE IMPROVEMENTS

Proposed improvements to Pecan Street Section Three includes reducing the center turn lane to 12 feet in width and the travel lanes to 11 feet in width. A two-foot curb and gutter is proposed on both sides of the roadway. On the south side of Pecan Street, a 10-foot-wide shared-use path for pedestrians and cyclists is separated from the roadway by a 2-foot-wide paved buffer. A 6-foot-wide landscape buffer with trees is proposed between the shared-use path and adjacent property line. The north side of the roadway includes a 10-foot-wide shared-use path adjacent to the right-of-way line and is separated from curb and gutter by a 14-foot-wide continuous landscape buffer with shade trees.

Alternative sections may explore options that reduce the width of the southern shared-use path and/or rearrange elements on the south side of the roadway to reduce the landscape bed width adjacent to private property and replace the paved buffer with a wider landscape buffer that includes ornamental plants.

This section requires 80 feet of right-of-way, which will necessitate right-of-way acquisition in some locations along the north side of Pecan Street to accommodate the proposed improvements; however, additional public easement(s) may be required to accommodate all the utilities.

The undergrounding of utilities as described in Phases 1 and 3 of the Downtown Utility Analysis would be best accommodated underneath the shared-use path on the north side of the roadway or within new easements. Similar to Pecan Street Section Two, Section Three is crowned and follows a ridge, allowing runoff from the north half of Pecan Street to flow north, and runoff from the south half of Pecan Street to flow south. This drainage pattern is not anticipated to be altered.



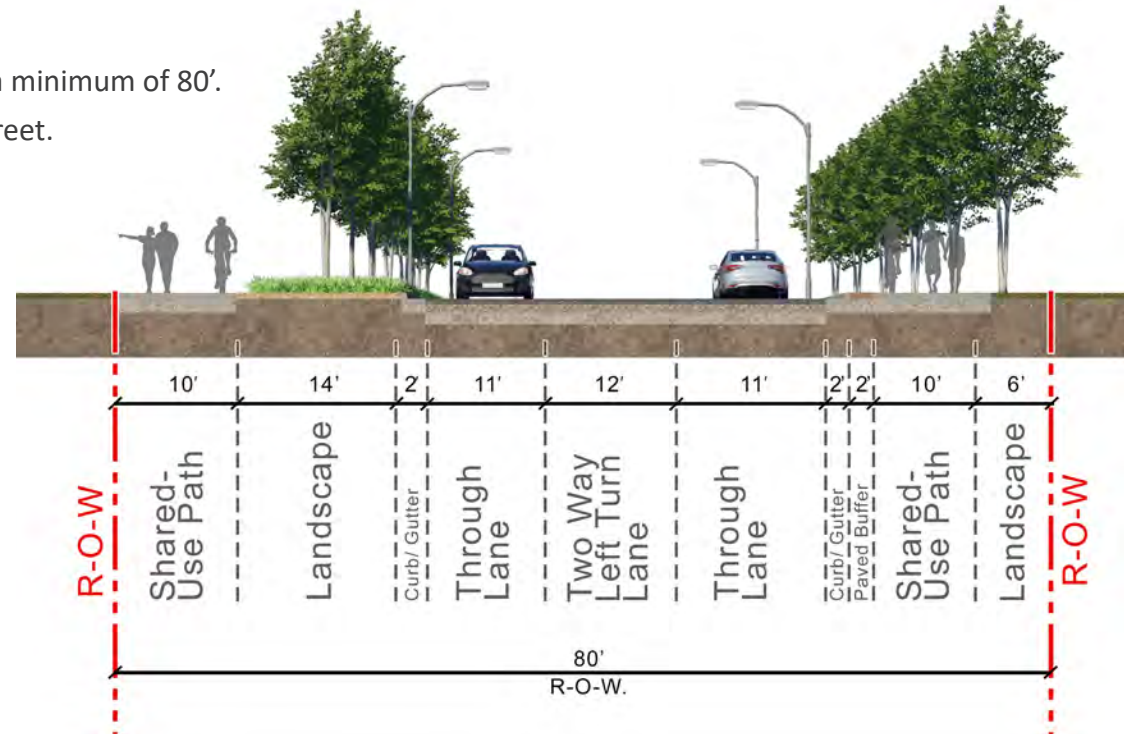
Pecan Street Section Three - Plan view.

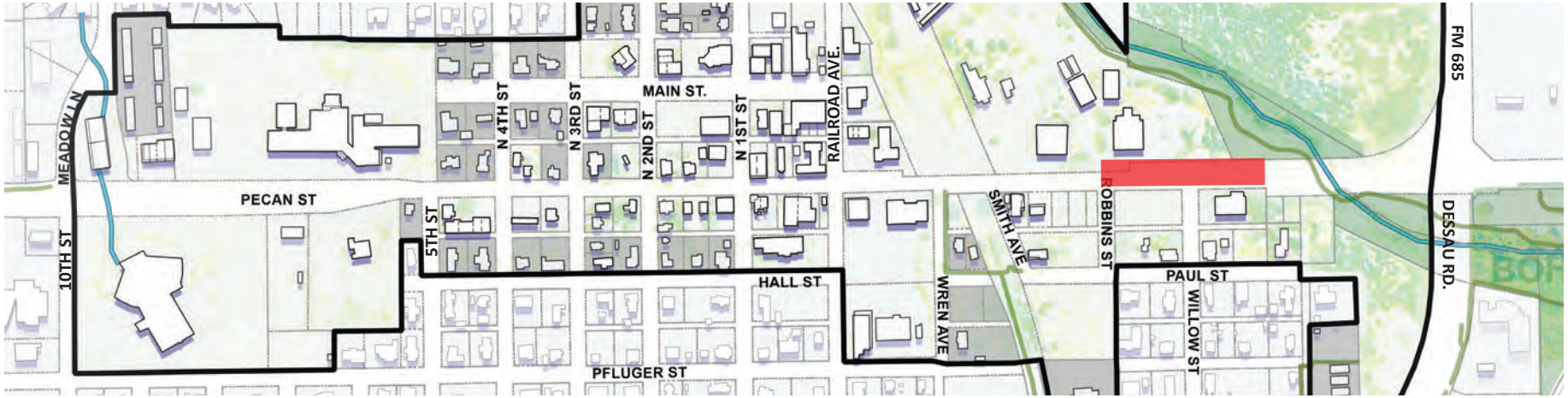
3 PECAN STREET SECTION THREE

Existing 50’ to 80’ right-of-way (varies).

Acquire additional right-of-way to maintain a minimum of 80’.

Extends from Railroad Avenue to Robbins Street.





Pecan Street Section Three.

PECAN STREET: SECTION FOUR ANALYSIS

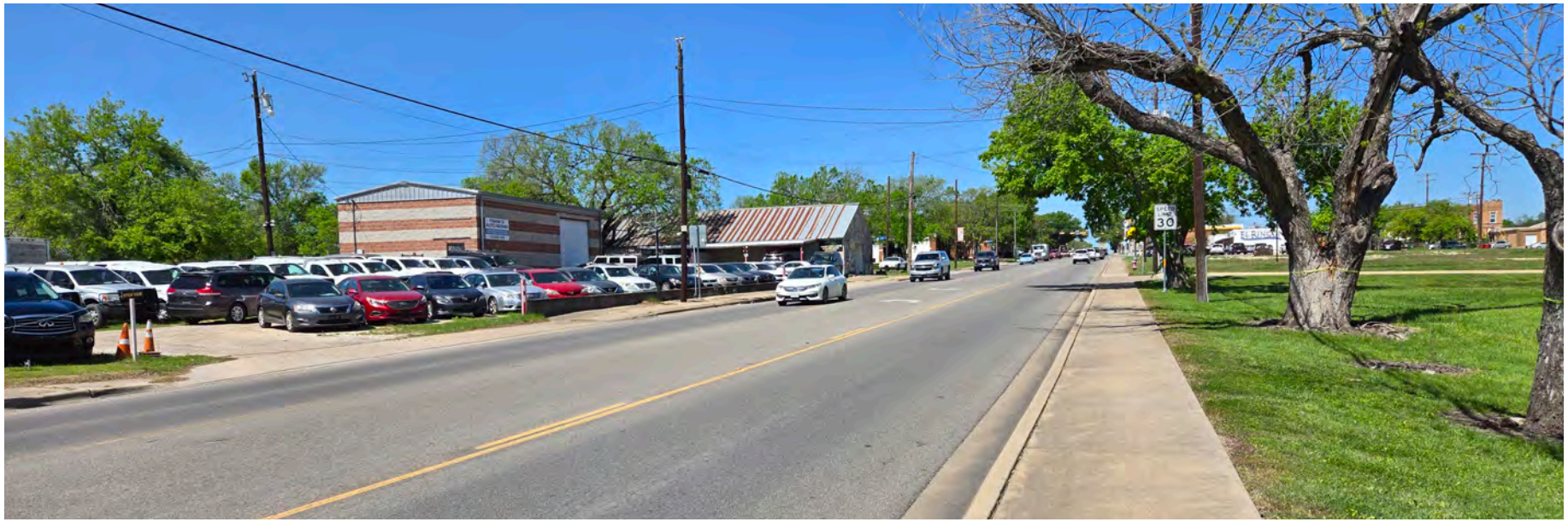
(Robbins Street to FM 685/Dessau Road Intersection Improvements)

Section Four begins at the Robbins Street intersection and extends eastward approximately 500 feet to the existing Pecan Street bridge, which ends approximately 680 feet from the FM 685/Dessau Road intersection. The existing right-of-way within this section is 100 feet in width. Just like Sections Two and Three, Section Four has a speed limit of 30 mph and consists of one westbound lane, one eastbound lane, and one center turn lane, each 14-feet in width. A two-foot curb and gutter is located along both sides of the roadway section. Five-foot wide sidewalks are also found on both sides of the roadway section, but the sidewalk on the south side of the road ends before the bridge over Gilleland Creek, and the sidewalk on the north connects to the Heritage Loop Trail that passes underneath Pecan Street along the creek. This is a significant limitation to pedestrians, requiring all eastbound and westbound pedestrians to utilize the trail along Gilleland Creek instead of crossing at the intersection. This is further complicated because access to the trail from Pecan Street exists a quarter mile east of FM 685/Dessau Road, at the Immanuel Road intersection.

One block east of Robbins Street, before Pecan Street crosses Gilleland Creek, eastbound traffic intending to travel northbound on FM 685 is diverted to the north side of the roadway, resulting in one westbound lane in the middle of four eastbound lanes. The City of Pflugerville has approved a resolution adopting the recently completed FM 685 Corridor Study which proposes long term improvements that will enhance the intersection of FM 685/Dessau Road at Pecan Street intersection for vehicles, pedestrians, and bicyclists. This Plan proposes improvements and connection to the improvements described in the FM 685 Corridor Study.

Land uses adjacent to Section Four include a church, a law office, and parks and open space. The northeastern portion of Section Four is adjacent to vacant land, referred to as the Downtown East/Pfluger Tract, that is owned by the City of Pflugerville and is intended to be developed with future City facilities and commercial space.

View near Willow Street viewing west along Pecan Street.



View near Robbins Street viewing west along Pecan Street.

PECAN STREET: SECTION FOUR IMPROVEMENTS

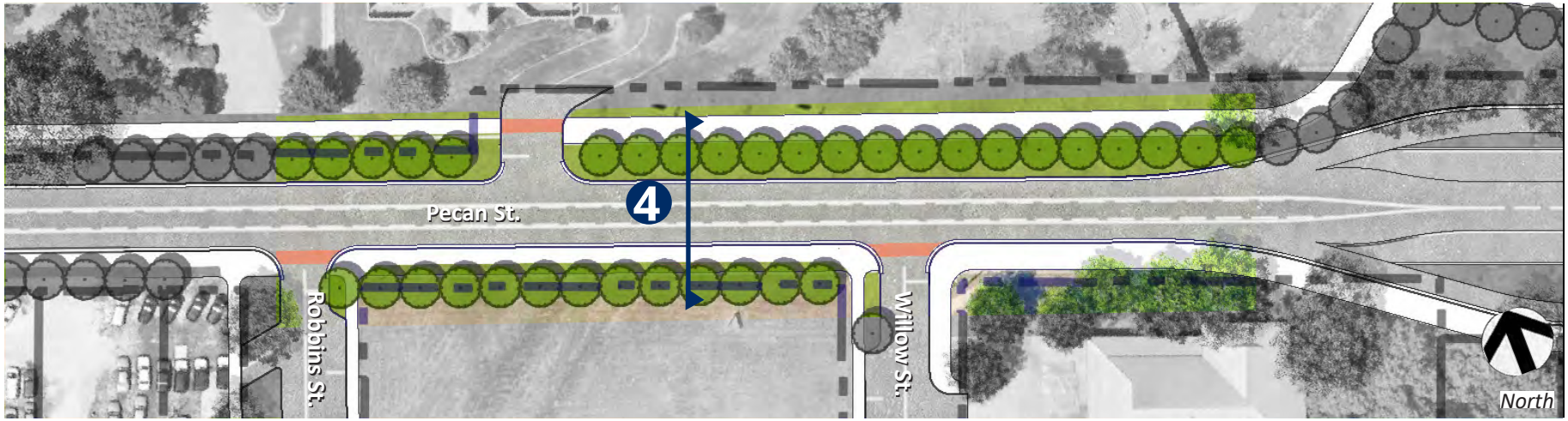
Proposed improvements to Pecan Street Section Four include reducing the center turn lane to 12 feet in width and the travel lanes to 11 feet in width. A two-foot curb and gutter is proposed on both sides of the roadway. On the south side of Pecan Street, a 10-foot-wide shared-use path for pedestrians and cyclists is separated from the roadway by a 2-foot-wide paved buffer. An 11-foot-wide landscape buffer with trees is proposed between the shared-use path and adjacent property line. The north side of the roadway includes a 16-foot-wide landscape buffer separating the 10-foot-wide shared-use path from the gutter and a 13-foot-wide landscape buffer separating the shared-use path from the northern right-of-way line.

Alternative sections may explore options that reduce the width of the southern shared-use path and/or rearrange elements on the south side of the roadway to reduce the-wide landscape bed width adjacent to private property and replace the paved buffer with a wider landscape buffer that includes ornamental plants.

This section requires 100 feet of right-of-way to accommodate proposed improvements, so right-of-way acquisition is not anticipated unless necessary to accommodate intersection improvements at FM 685/Dessau Road.

The undergrounding of utilities as described in Phase 3 of the Downtown Utility Analysis would be best accommodated underneath the shared-use path or landscape buffer on the north side of the roadway, or within new easements. Similar to Pecan Street Section Two and Three, Section Four is crowned and follows a ridge, allowing runoff from the north half of Pecan Street to flow north, and runoff from the south half of Pecan Street to flow south. This drainage pattern is not anticipated to be altered.

Example of shared-use path separated from roadway with ornamental plantings.



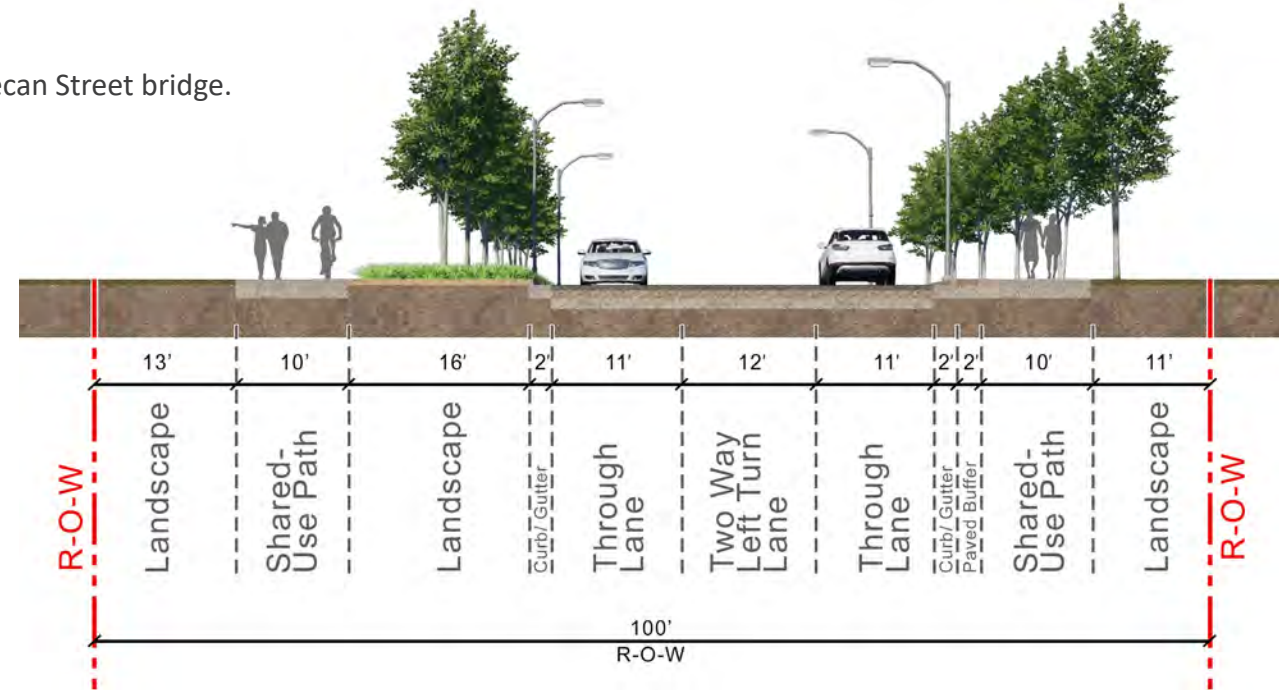
Pecan Street Section Four - Plan view.

4 PECAN STREET SECTION FOUR

Existing 100’ right-of-way.

No additional right-of-way required unless additional right-of-way is necessary to accommodate intersection improvements at FM 685/Dessau Road.

Extends from Robbins Street to Pecan Street bridge.



Main Street

Main Street extends from the western extent of Main Street, approximately 200 feet west of the 4th Street intersection to Railroad Avenue and supports residential, commercial, and municipal uses. The bars, restaurants, municipal and office buildings bring both vehicular and pedestrian traffic to a somewhat confined space. This location is also home to some of the original Downtown Pflugerville buildings, which have an iconic Texas downtown architectural appearance.

Adopted in November 2019 and updated in November 2020, the Transportation Master Plan (TMP) identifies improvements needed to the transportation network within Pflugerville. Included in these solutions is the reclassification of Main Street to an "Urban Main Street." This street section has a 100-foot right-of-way with two 11-foot travel lanes, diagonal parking on both sides, and 10-foot sidewalks separated from parking by 11-foot buffers. An extension to connect Main street eastward to FM 685 and westward to connect to Pecan is also reflected in the TMP.

The City is currently in the preliminary engineering design phase for the eastern extension of Main Street to FM 685 through a separate study. The eastern extension will link the Downtown Core to the Downtown East/Pfluger Tract, a 29-acre parcel on the east side of Gilleland Creek. This connection creates the opportunity for a new City Hall location along with a recreation center and mixed-use development.

The westward extension to Main Street through the PACE campus is discussed within this chapter.

The key challenge, along Main Street between 3rd Street and Railroad, is accommodating the high volume of vehicular and pedestrian traffic with space to drive, park, load and unload, walk, and congregate comfortably within 100 feet of right-of-way. Unless alternative solutions are provided in the future, Main Street between 1st Street and Railroad Avenue should be able to accommodate delivery trucks to stop while not impeding the flow of traffic, provide diagonal head-in parking on both sides of the street, and accommodate pedestrians with wide walkways, furnishings and shade.

Main Street, divided into three sections.

While the Downtown section of Main Street provides for more intensive land uses, residential land uses are in close proximity and require significantly different accommodations within the streetscape.

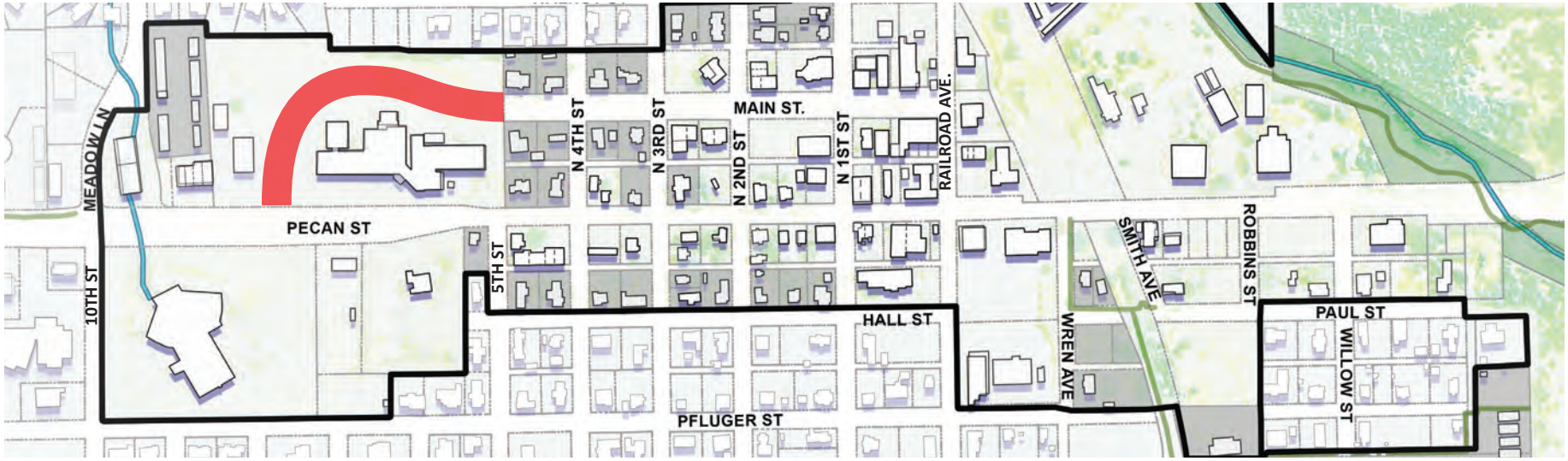
In this Plan, Main Street includes 4 separate cross sections from Railroad Avenue west through the PACE campus based on land uses and contextual considerations. To the right, there is a summary of Main Street recommendations.

Refer to the following pages for a more detailed analysis and overview of Main Street recommendations.

Existing view of Main St. at 1st St looking toward Railroad Ave.

Summary of Main Street Recommendations:

- **Improvements include a combination of 48' and 100' wide street cross sections based on location;**
- **Connect Main Street directly to Pecan Street;**
- **Include shared-use paths through the PACE Campus;**
- **Extend sidewalks from Pace Campus to Railroad Avenue;**
- **Reduce the width of vehicular travel lanes and expand sidewalks from 1st to 3rd Street;**
- **Install street trees and landscaping;**
- **Install decorative pavement in the intersections from Railroad Avenue to 4th Street;**
- **Install pedestrian crossings at all intersections;**
- **Create a plaza space extending to the streetscape at the northwest corner of Main Street and 1st Street at the City offices building, remove the excessively wide driveway currently in place, and add on-street parking;**
- **Install pedestrian-scale lighting every 50'-100';**
- **Install vehicle-scale street lighting at intersections and pedestrian crossings;**
- **Install curb bulb-outs for increased safety at intersections;**
- **Improve traffic control at Main Street and Railroad Avenue;**
- **Evaluate other locations for a loading/delivery zone (Currently, Main Street between Railroad Avenue and 1st functions as a loading zone); and**
- **Relocate overhead utility lines underground in conjunction with streetscape improvements.**



Main Street Section One.

Main Street: West Extension Analysis

(Through the PACE Campus)

The Main Street West Extension conceptualizes the connection of the west end of Main Street through the Pflugerville Academic and Career Education (PACE) campus to connect to Pecan Street.

The PACE Campus is owned and operated by the Pflugerville Independent School District (PfISD), and is fronted by over 900 feet of Pecan Street on its southern border, commercial and multi-family developments to the west, and single-family housing to the north and east. The campus includes approximately 70,000 square feet of academic buildings and associated parking, playgrounds, and a tenth-mile running track. The west side of the property includes the Rock Gym, a historic building that was built by the Works Progress Administration in 1934 and includes a Texas historical marker.

The campus was renovated in 2014 to house the PACE program, and there are currently no alternative uses proposed for the campus.

Main Street:
West Extension Improvements

This Plan illustrates an extension to Main Street going west around the north and west sides of the PACE campus building, connecting Main Street to Pecan Street. Proposed improvements to the West Extension include a 12-foot-wide westbound lane and a 12-foot-wide eastbound lane, bordered on the outside by a 2-foot- wide concrete curb and gutter. A 10-foot-wide shared-use path for both pedestrians and bicycles is proposed at the back-of-curb on both sides of the roadway. These improvements are the minimum recommended for the extension, and could be improved upon with parallel parking, and separating the shared-use path from the curb using wide buffers with street trees. The alignment is based on recommendations within the Transportation Master Plan and will need to be furthered through more detailed engineering study.

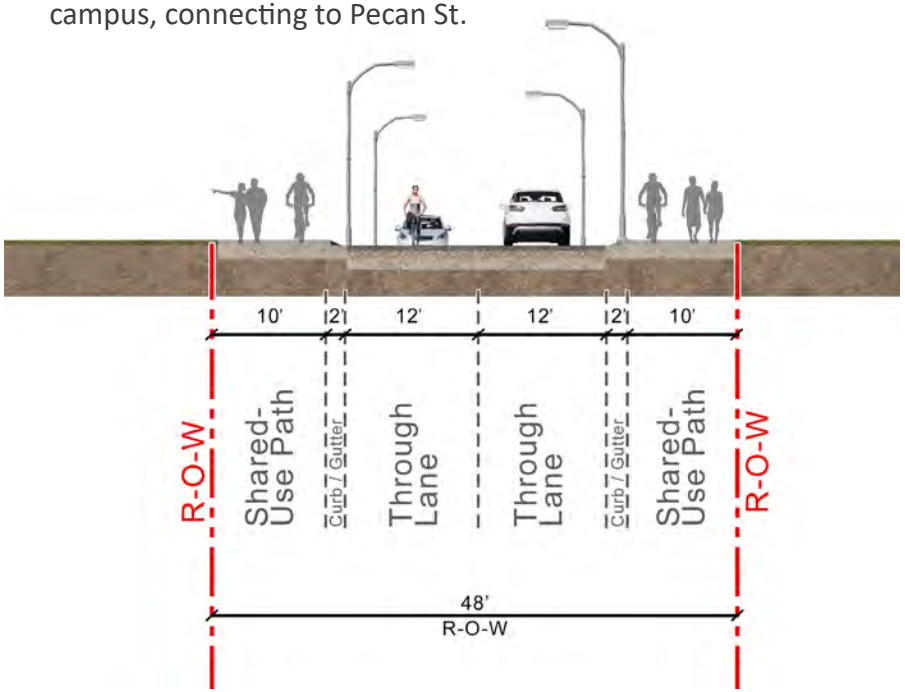
This section requires 48 feet of right-of-way minimum to accommodate the proposed improvements. The proposed improvements and connection are contingent on agreement with PfISD, or with alternative owners in any future redevelopment scenarios.

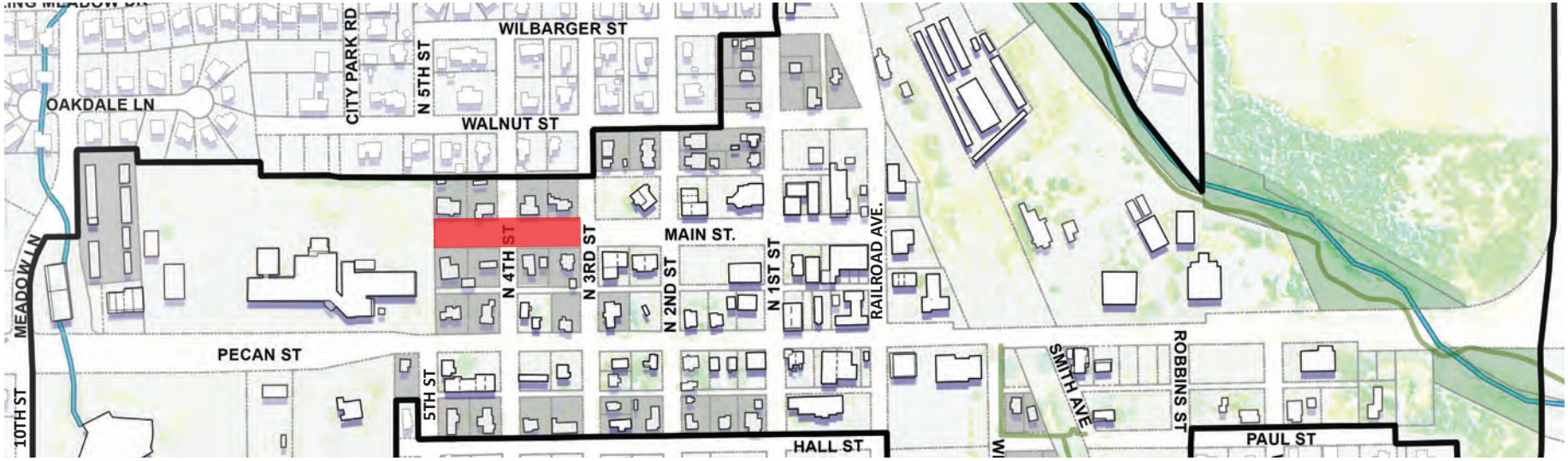
Drainage would be accommodated via curb inlets and proposed sub-surface stormwater conveyance, flowing into the existing watershed.

MAIN STREET WEST EXTENSION

Need to acquire right-of-way for this extension

Extends from the end of west Main St. through the PACE campus, connecting to Pecan St.





Main Street Section One.

Main Street: Section One Analysis

(PACE Campus to 3rd Street)

Section One begins one block west of 4th Street at the PACE campus and extends east two blocks to 3rd Street. The existing right-of-way within this section is 100 feet in width. While not posted, per City Ordinance, the speed limit for this Section is 30 mph. The roadway consists of one westbound lane, one eastbound lane, and parallel parking along the curb. As is typical on local roads, there is no lane striping, so designated lane and parking widths are not defined, but the overall pavement width is 26 feet. A two-foot-wide curb and gutter is found along both sides of the roadway section, and an inlet is found on the southeasternmost corner within this section. There are no existing walkways along this section of Main Street, which is a significant limitation to pedestrians, requiring all pedestrian traffic to either walk in the grass or roadway. Lack of a dedicated sidewalk also provides greater challenges to the mobility impaired.

This section of Main Street contains residential uses only. Homes are set back 15 feet or more from the edge of right-of-way giving the street an even more substantial appearance.

A single streetlight is found at each of the intersections of 4th Street and 3rd Street.

West Main Street viewing toward 3rd Street.

West Main Street viewing toward 4th Street.

Main Street:
Section One Improvements

Proposed improvements to Section One include a 12-foot-wide westbound lane and a 12-foot-wide eastbound lane. These through lanes include shared lane markings indicating to roadway users that bicycles are allowed and encouraged to use the roadway. 8-foot parallel parking is proposed outside of the lanes on each side of the street and is bordered by a 2-foot- wide concrete curb and gutter. A 10-foot-wide sidewalk is proposed at the back-of-curb on both sides of the roadway to accommodate vehicle doors opening into pedestrian space, and an 18-foot-wide landscape buffer with shade trees is proposed between sidewalks and edges of right-of-way for shade and to help define public versus private right-of-way. Intersection corners are to include bulb outs to slow vehicle turning movements, prevent vehicles from parking in sight triangles, reduce the distance of active roadway to be crossed by pedestrians, and provide space for landscaping to soften street edges (refer image below). The turning radii for bulb outs will need to meet Street Design Requirements as described in the City of Pflugerville Engineering and Design Manual.

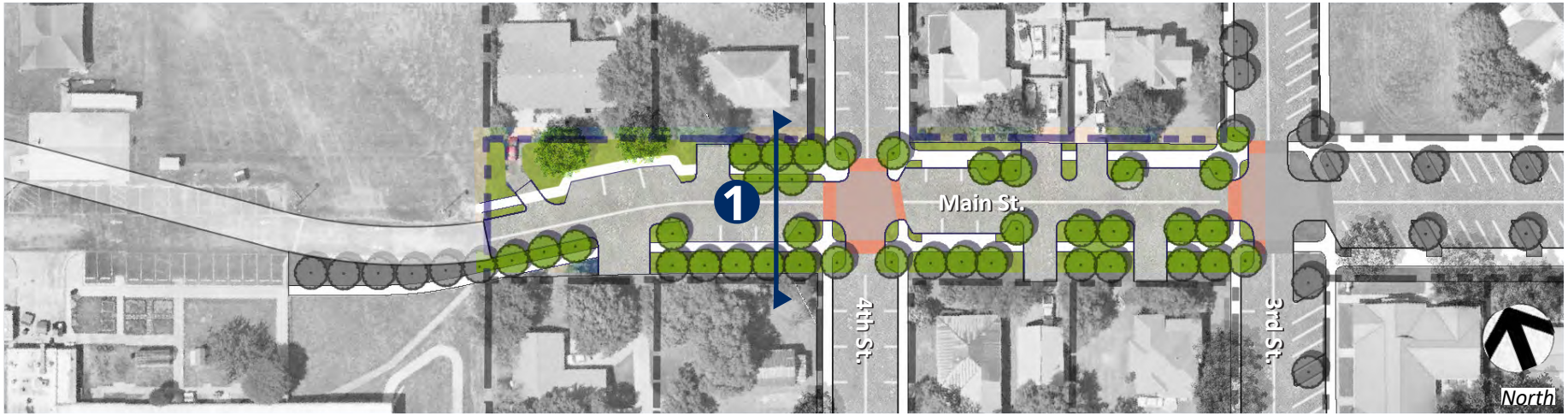
The proposed improvements are contingent on residential uses remaining along this section of roadway. If the residential uses transition to commercial, the proposed improvements should follow the model for Section Two improvements. Alternatively, if the optional Main Street West Extension is not pursued, Main Street Section One should follow the improvements as described within the Context Sensitive Streets (refer page 100).

This section requires 100 feet of right-of-way to accommodate the proposed improvements. Because the existing right-of-way is 100 feet in width, right-of-way acquisition is not required to accommodate the proposed improvements.

Drainage would be accommodated via curb inlets and sub-surface stormwater conveyance, flowing east along Main Street and the Main Street east extension to Gilleland Creek.

Example of a planted intersection bulb out.

Example of a paved intersection bulb out.



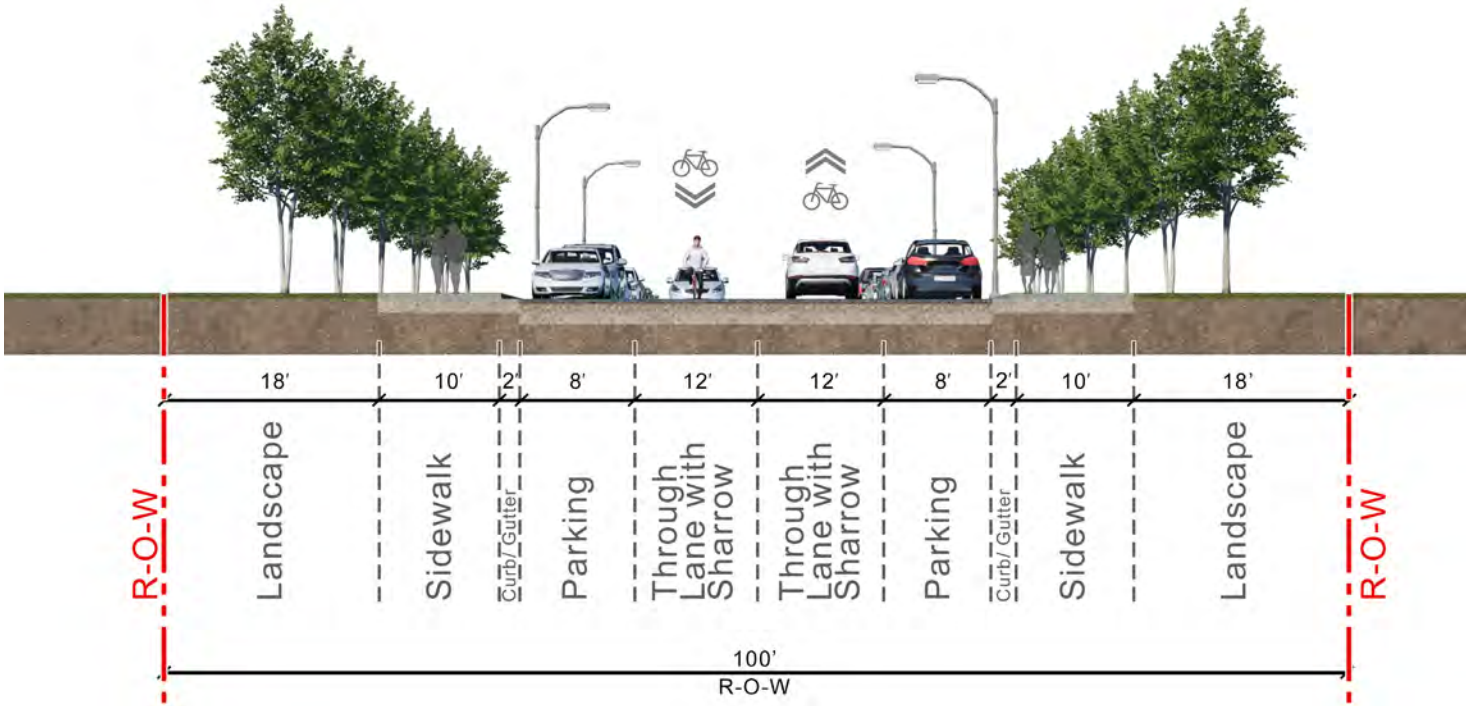
Main Street Section One - Plan view.

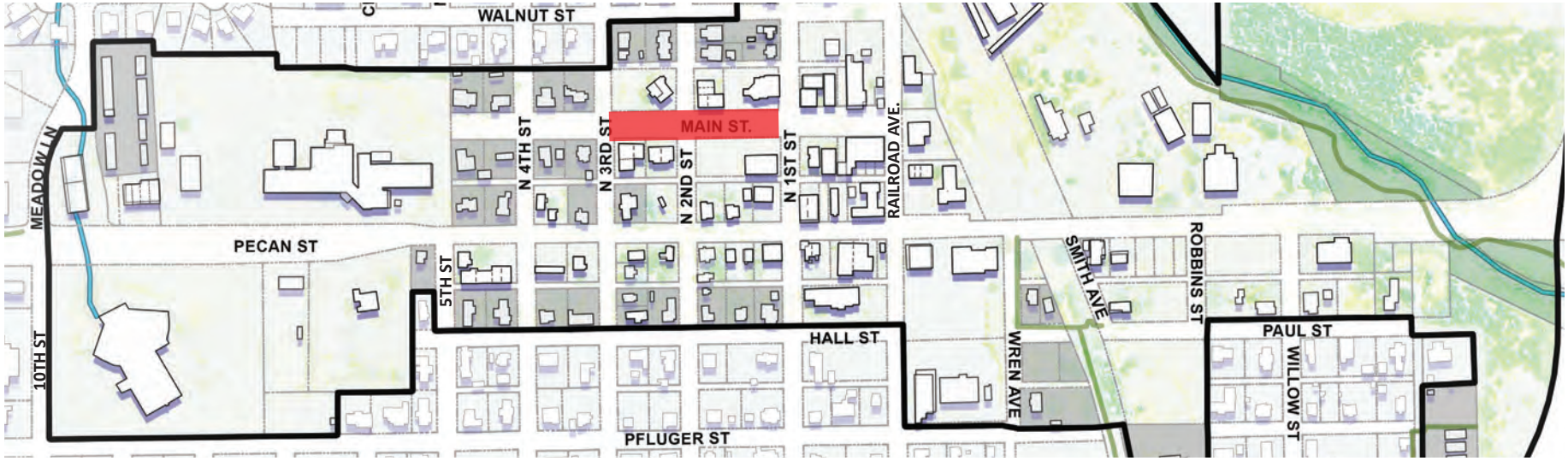
1 MAIN STREET SECTION ONE

Existing 100’ right-of-way.

No additional right-of-way required.

Extends from the PACE campus to 3rd Street.





Main Street Section Two.

MAIN STREET: SECTION TWO ANALYSIS

(3rd Street to 1st Street)

Section Two begins at 3rd Street and extends east two blocks to 1st Street. The existing right-of-way within this section is 100 feet in width. While not posted, per City Ordinance, the speed limit for this section is 30-mph. The roadway consists of one westbound lane, one eastbound lane, and head-in angled parking outside of the travel lanes. No handicap accessible parking stalls are provided within the public right-of-way; however, accessible parking is located on-site at the individual establishments. As is typical on local roads, there is no lane striping, so designated lane widths are not defined, but the overall travel lane pavement width is approximately 30 feet in width. This, along with available space to parallel park on the west end of Main Street Section Two, indicates that the angled parking was likely added to a residential style street with parallel parking like currently exists in Main Street Section One. The angled parking is occasionally interrupted by landscape islands, some of which include shade trees. A two-foot-wide curb and gutter is found along both sides of the roadway section.

There are 6-foot-wide sidewalks with curb ramps against the back-of-curb on both sides of the roadway, except for the north side of Main Street between 1st and 2nd Streets which is occupied primarily by a large driveway in front of City offices. This driveway is a significant limitation to pedestrians to navigate a large expanse of pavement that has neither pavement markings nor signage.

View of Main Street looking east from 2nd Street.

This section of Main Street contains commercial offices, including City offices, on both sides of the street as well as some vacant lots. Buildings are set back from the right-of-way eight (8) feet or more. Recently developed properties within this section of Main Street have accessible walkways leading from the parking to the entrance. Older developments, like the City office building, do not have an accessible route from the right-of-way to the building entrance. For this property, the entrance is set far back from the primary roadway and requires visitors to travel down a steep slope to the entrance. Providing an accessible route from the public right-of-way to businesses is a necessary component of this Plan.

Streetlights are found only at the intersections with 3rd Street, 2nd Street and 1st Street. Only one light per intersection is provided, delivering only minimal security lighting that is not conducive to safe pedestrian and vehicular movement and interaction. Traditional acorn style pedestrian lighting is provided approximately every 50 feet between 2nd Street and 1st Street although only two (2) lights are provided on the north side of Main Street before the large driveway in front of City offices.

Main Street:
Section Two Improvements

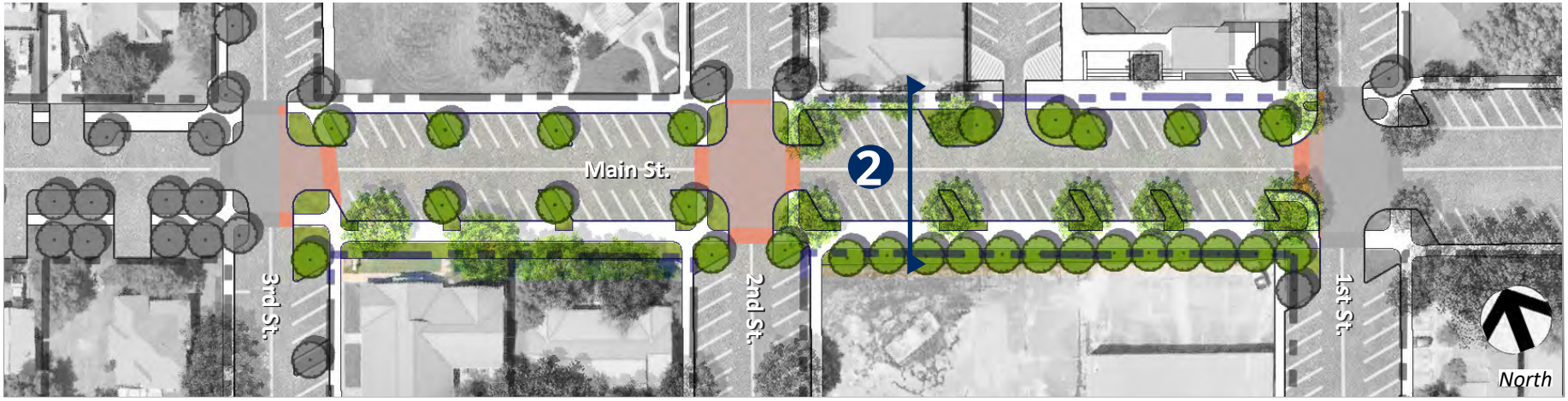
Proposed improvements to Main Street Section Two include one 12-foot-wide westbound lane and one 12-foot-wide eastbound lane. Head-in angled parking is proposed outside of the lanes on each side of the street and is bordered by a 2-foot-wide concrete curb and gutter.

Parking spaces are interrupted with landscape islands to accommodate both existing and proposed shade trees. A 10-foot-wide sidewalk is proposed on back-of-curb on both sides of the roadway. The sidewalk on the north side of the roadway is directly adjacent to edge of right-of-way, but an 18-foot-wide landscape buffer with shade trees is provided on the south side of the roadway between the sidewalk and edge of right-of-way to shade sidewalks.

Proposed bulb outs are proposed at intersection corners to slow vehicle turning movements, prevent vehicles from parking in sight triangles, reduce the pavement distance pedestrians are required to cross, and provide space for landscaping to soften street edges. The turning radii for bulb outs will need to meet Street Design Requirements as described in the City of Pflugerville Engineering and Design Manual.

This section requires 100 feet of right-of-way to accommodate the proposed improvements. Because existing right-of-way is 100-feet in width, right-of- way acquisition will not be required.

Drainage would be accommodated via curb inlets and sub-surface stormwater conveyance, flowing east along Main Street and the Main Street east extension to Gilleland Creek.



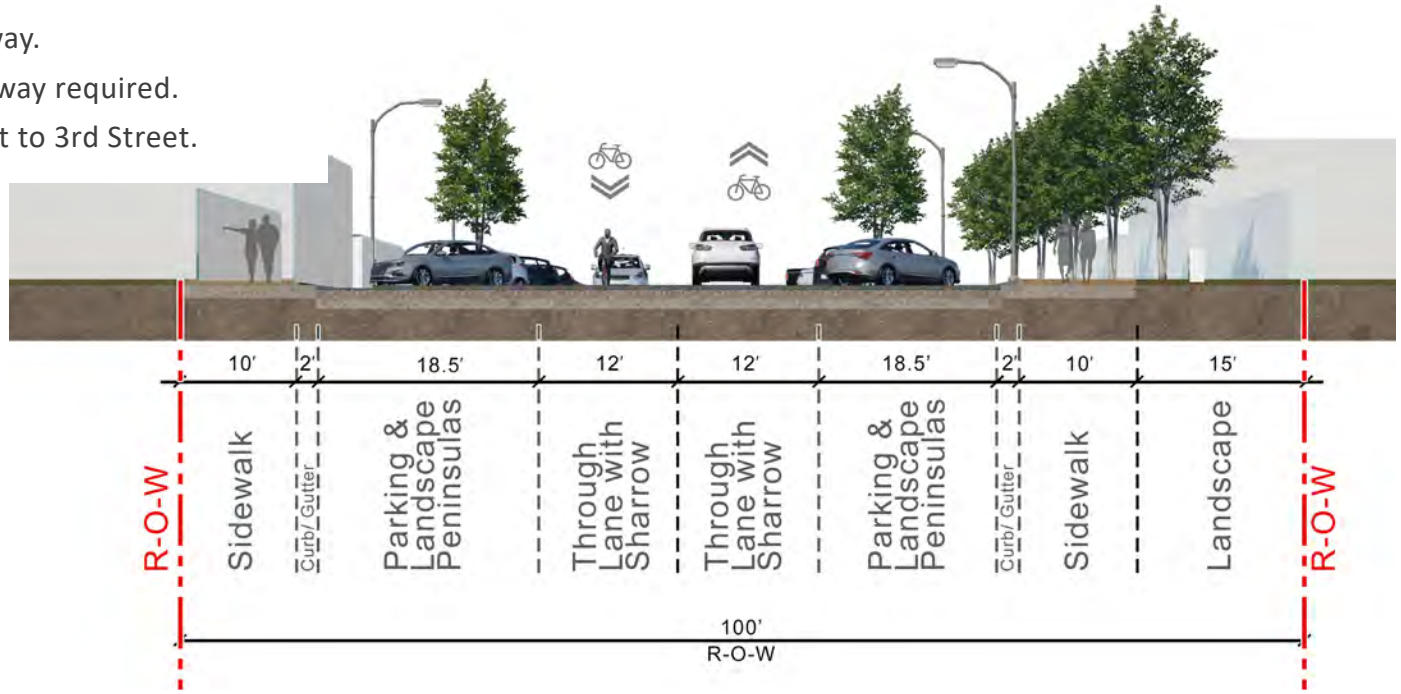
Main Street Section Two - Plan view.

2 MAIN ST. SECTION TWO

Existing 100’ right-of-way.

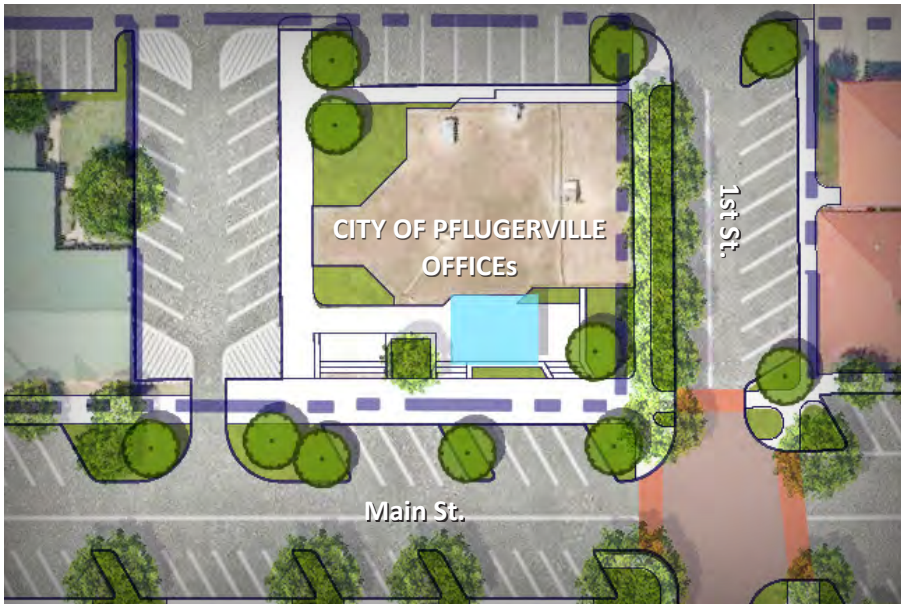
No additional right-of-way required.

Extends from 1st Street to 3rd Street.



The enlarged plan view of the Pflugerville Planning Office shows how the site may be improved to allow for a better streetscape frontage and circulation. The concept site plan shows that the space between the building and the street is large enough to allow for a small plaza and improved parking.

The following pages contain illustrative before and after images.



The intersection at Main Street and 1st Street presents a unique issue due to the elevation changes in the setback of the City offices building. Shown are illustrations of how this intersection may be improved to create a more comfortable and walkable space along Main Street.

As shown on the image to the right, the City office building is set far back and lower than the street elevation. This causes the space to feel disconnected from the right-of-way and there is not a clear, accessible route to continue along Main Street.

Parking spots are located against the building, which impact the way motorists interact with the proposed pedestrian path. The intersection does not have a defined crossing location or treatment to make motorists aware of a pedestrian space.

Existing view from southeast corner of Main Street and 1st Street, viewing northwest.

The proposed improvements shown in the illustration to the right represent ways that the intersection can be treated to enhance pedestrian and vehicular safety.

Installing pavers of different colors at the intersection to define the crossing areas and bring awareness to the motorists is recommended. Pavers will also serve to break up the vast asphalt paving area and introduce additional colors and textures along Main Street.

Proposed view from southeast corner of Main Street and 1st Street, viewing northwest.

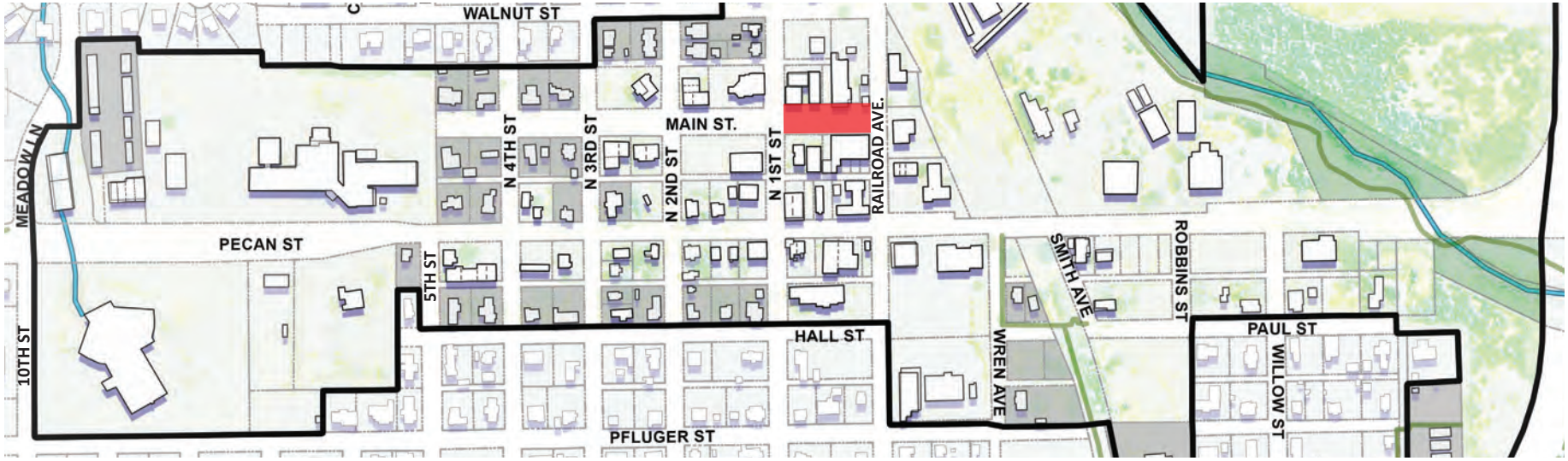
Existing view from southeast entrance of the City office.

Proposed view from southeast entrance of the City office.

The City offices located at the corner of Main Street and 1st Street present a particular challenge and opportunity due to the grade changes between the roadway and the entrance.

The creation of a plaza space between the parking and the building entrance, as well as moving the parking to be directly off the road is recommended. This provides more public space and opportunity to traverse the grade change.

The illustration shown to the left serves as a representation of the possibility for this gathering space. The concept shows how the space may potentially be used to add shade, plantings and art to a new plaza space, while still allowing for the streetscape to function for pedestrian and vehicular traffic.



Main Street Section Three.

MAIN STREET: SECTION THREE ANALYSIS

(1st Street to Railroad Avenue)

Section Three begins at 1st Street and extends east one block to Railroad Avenue. While not posted, per City Ordinance, the speed limit for this section is 30-mph. The roadway consists of one westbound lane, one eastbound lane, and head-in angled parking on both sides of the roadway. As is typical on local roads, there is no lane striping, so designated travel lanes are approximately 15 feet in width which allows for delivery vehicles to temporarily park in the roadway while still allowing vehicles to navigate around. The angled parking is interrupted mid-block by large landscape islands with shade trees, decks with railings, and a 20-foot- wide pedestrian path that, although not indicated to vehicles by signage or pavement markings, functions as a mid-block pedestrian crossing. A variety of conditions are found on both sides of the roadway, including two-foot-wide curb and gutters, five-to-10-foot-wide sidewalks at back of curb, and sometimes a sidewalk at level with the roadway or elevated from roadway by up to 18 inches.

Delivery truck utilizing main street for loading and unloading.

This section of Main Street includes Pflugerville City Hall, commercial offices, and bars and restaurants. Some buildings are set back from the right-of-way while others are built to the property line. Pedestrian facilities are largely accessible except for the south corner of Main Street at Railroad Avenue which lacks a curb ramp. Although two parking stalls on the south side of Main Street are signed for handicap parking, these stalls lack an unloading zone and a curb ramp to the sidewalk, rendering the stalls inadequate for wheelchairs. Providing accessible accommodations to the streetscape is a necessary component of this Plan. The closest accessible parking stall that allows access to Main Street Section One is located behind City Hall.

Streetlights attached to electrical/telecommunication poles are found at the Main Street intersections of 1st Street and Railroad Avenue. Two (2) acorn style pedestrian lights are provided on each side of the roadway but spacing is greater than 100-feet and does not provide consistent lighting along pedestrian facilities.

View of Main Street looking east from 1st Street.

Main Street:
Section Three Improvements

Proposed improvements to Main Street Section Three include an 18-foot westbound lane and an 18-foot eastbound lane. These wide lanes allow for delivery vehicles to stop in the road and not impede flow of traffic. If the functional needs associated with deliveries change with redevelopment or changes in land use, or if delivery zones are established elsewhere, this section can more closely resemble Main Street Section Two with narrower vehicle lanes and wide landscape areas. Head-in angled parking is provided on each side of the street and is bordered by a two-foot-wide curb and gutter. The large mid-block islands remain to accommodate existing shade trees and the pedestrian crossing, although vehicles will now be alerted to the crossing with signage. A seven-foot-wide sidewalk is provided on back-of-curb on both sides of the roadway. Intersection corners include bulb outs to slow turning vehicles, prevent vehicles from parking in sight triangles, reduce the roadway distances pedestrians are required to cross, and provide landscaping to soften street edges. The turning radii for bulb outs will need to meet Street Design Requirements as described in the City of Pflugerville Engineering and Design Manual.

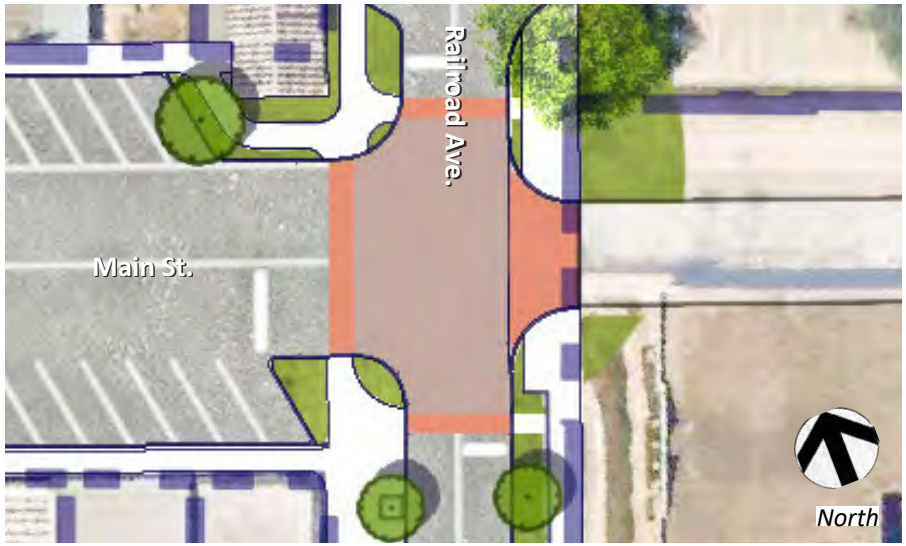
This section requires 100 feet of right-of-way to accommodate the proposed improvements, and thus, right-of-way acquisition is not anticipated.

Drainage would be accommodated via curb inlets and sub-surface stormwater conveyance, flowing east along Main Street and the Main Street east extension to Gilleland Creek.

The intersection at Main Street and Railroad Avenue will become one of the Downtown District's most highly used pedestrian intersections when the Main Street East extension occurs. The plan view on this page shows how the intersection may be improved with enhanced paving, landscaping and pedestrian connections. Traffic control at this intersection may be accomplished with either a traffic signal that is synced with the traffic signal at Railroad and Pecan, or pending traffic analysis, with a 4-way stop.

Alternatively, this intersection may be reconfigured as a roundabout. Benefits to roundabouts are plentiful, including the reduction of pedestrian fatalities, traffic delays and queue length; however, roundabouts require more space than traditional intersections, are less accommodating to longer vehicles like semi-trucks and recreational vehicles, and if used in this scenario may require alterations to adjacent properties.

Refer to the following page for illustrative before and after images of this intersection as a 4-way stop.



Plan view of proposed improvements at Main Street and Railroad Avenue.

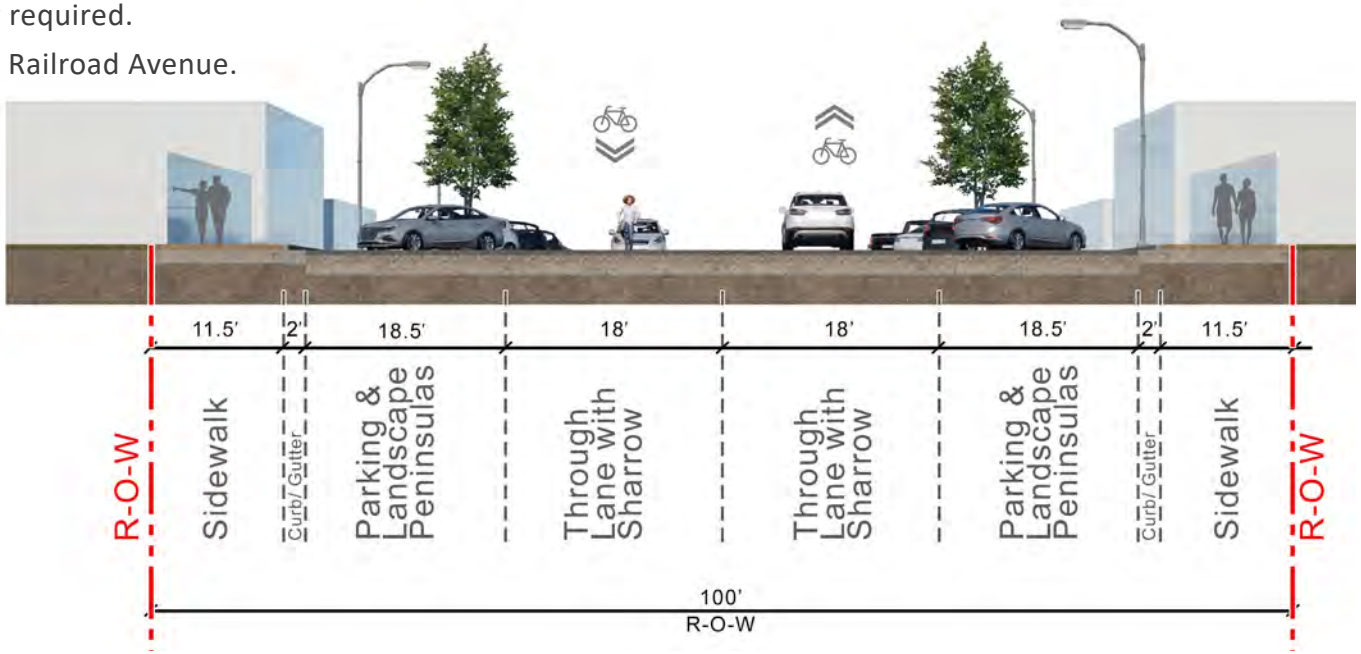
Plan view of proposed Main St. improvements between 1st St. and Railroad Ave.

3 MAIN ST. SECTION THREE

Existing 100’ right-of-way.

No additional right-of-way required.

Extends from 1st Street to Railroad Avenue.



The intersection at Main Street and Railroad Avenue will require significant attention to accommodate ADA accessibility and the eastern Main Street extension. To create a safe and comfortable experience for both pedestrians and vehicular traffic, intersection enhancements with decorative pavement applications, vegetation, grade adjustments, and creating a four-way stop is recommended.

Traffic codes do not restrict the implementation of a four-way stop at this intersection, but the completion of a traffic impact analysis will be necessary to show that the volume of traffic meets the criteria for a stop sign.

The existing elevation change between the existing buildings and street parking exceeds the typical vertical change of a 6” curb. Reconstruction of the intersection and portions of the streets is required to address ADA accessibility and ensure a more pedestrian-friendly environment. A detailed survey and design will need to be conducted to ensure that positive drainage is still provided in order to not impede storm water flow.

The illustrations on this page exemplify how this intersection may improve the pedestrian experience and safety through the addition of decorative paving, street furnishings, lighting, and landscaping.

Existing view from northeast corner of Main Street and Railroad Avenue.

Proposed view from northeast corner of Main Street and Railroad Avenue.

Existing view along the south side of Main Street viewing Railroad Avenue.

The eastern Main Street extension is expected to create connectivity from the historic Downtown Core to the new Downtown East development. The extension will require the removal of a building which is currently owned by the City.

The image to the left shows the current condition of Main Street and Railroad Avenue from the pedestrian experience. The old bank building, now offices and a tattoo shop, on the corner is beautiful, but the streetscape is lacking in pedestrian comfort.

Proposed view along the south side of Main Street viewing Railroad Avenue.

The proposed streetscape improvements include new paving treatments, furnishings, landscaping, shade, and lighting to bring together the existing and new Main Street.

Many of the proposed design elements for the Main Street extension shall also be applied to the existing Main Street commercial blocks.

Railroad Avenue

The Railroad Avenue portion of the Plan area extends from Gilleland Creek to Hall Street. It serves as a north/south collector into the Downtown Core and parallels MoKan which is currently unimproved and owned and managed by TxDOT. While Railroad Avenue provides access to the Downtown Core from the north and south, it directly supports residential, commercial, and municipal uses adjacent to its right-of-way.

Adopted in November 2019 and updated in November 2020, the Transportation Master Plan (TMP) identifies improvements needed to the transportation network within Pflugerville. The TMP classifies Railroad Avenue as a "Minor Collector" roadway with 60 feet of right-of-way. Per the TMP, the proposed street section includes two 11-foot vehicle lanes, and 5.5-foot bike lanes on each side separated from vehicle lanes by 4-foot buffers. 6-foot sidewalks are also proposed on both sides of the roadway, separated from bike lanes with 4-foot buffers, and separated from adjacent properties by a 2-foot buffer.

The key challenge within the commercial and municipal section of Railroad Avenue is accommodating the high volume of vehicular and pedestrian traffic with space to drive, park, walk, and congregate with comfort. Railroad Avenue has a right-of-way that varies in width from 55 to 80-feet, with some areas even larger as the right-of-way turns northwest and intersects the Downtown boundary.

While Railroad Avenue provides for more intensive land uses in the overall Downtown Core, the northern half is less intense in terms of the built environment.

In this Plan, Railroad Avenue includes 3 separate cross sections based on opportunities and contextual considerations to account for an urban setting and gateway features, which supercedes the recommendations of the TMP. Refer to the following pages for a more detailed analysis and overview of Railroad Avenue recommendations.

Railroad Avenue, divided into three sections.

Summary of Railroad Avenue Recommendations:

- Improvements include a combination of 64', 65' and 76' wide street cross sections based on location;
- Extend and expand sidewalks to create 10' shared-use paths from Gilleland Creek to Pecan Street;
- Reduce vehicular travel lane widths to 11' and 12' per Section recommendations;
- Include traffic control at Main Street and Railroad Avenue;
- Maintain existing dedicated turn lanes at the intersection of Railroad and Pecan Street;
- Adjust street elevation at Main and Railroad for standard 6" curb and accessibility improvements;
- Provide decorative pavement at the intersections with Pecan Street and Main Street, including and highlighting pedestrian crossings;
- Expand pedestrian spaces at the intersection of Pecan Street and Railroad Avenue;
- Acquire additional right-of-way on the east side of Railroad Avenue and remove parallel parking on the west side of Railroad Avenue between Pecan Street and Main Street to create an enhanced urban streetscape on both sides of the roadway, including street furniture, street trees and an expanded pedestrian space;
- Install street trees along roadways with low-profile landscaping at intersections;
- Install pedestrian-scale lighting every 50'-100';
- Install vehicle-scale street lighting at intersections and pedestrian crossings; and
- Relocate overhead utilities underground in conjunction with streetscape improvements.

Railroad Avenue and Wilbarger Street viewing north.

Railroad Avenue and Hall Street viewing north toward Pecan Avenue.

Railroad Avenue: Section One Analysis

(Gilleland Creek to Main Street)

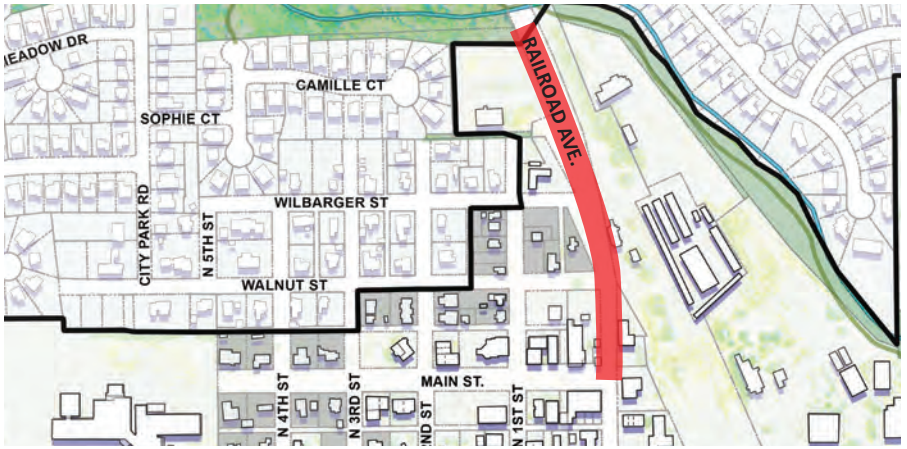
Section One begins on the south bank of Gilleland Creek and extends one quarter mile south to Main Street. The existing right-of-way within this section varies in width from 55-feet to 80-feet. The speed limit upon entering the Plan area is 40 mph but reduces to 35-mph only 400 feet south of Gilleland Creek. The roadway begins in the north with one 14-foot-wide northbound lane, one 14-foot-wide southbound lane, and one 12-foot-wide center turn lane. The center turn lane ends only 400 feet south of Gilleland Creek, and the remainder of the roadway in this section is two lanes, approximately 36 feet in width.

This wide street section accommodates on-street parallel parking, which is indicated with pavement markings on the west side of the roadway for approximately 150 feet north of Main Street. These stalls are frequently utilized, but when the stalls are all occupied, motorists often continue parallel parking along Railroad Avenue on the west side of the roadway. While there is adequate space to accommodate parking for additional vehicles, additional vehicles cause safety concerns by blocking views of oncoming traffic for motorists traveling north on Railroad Avenue from Walnut Street. A street curb begins 120 feet north of Wilbarger Street and continues south for the rest of this section with a gutter at the intersection of Walnut Street.

A six-foot-wide sidewalk is found on the west side of the roadway, connecting the Heritage Loop Trail at Gilleland Creek to Downtown Pflugerville. This sidewalk is separated from the roadway with a 25-foot-wide open bar ditch for the northern portion and a five-foot-wide vegetative buffer from the creek to Walnut Street. The five-foot-wide sidewalk is located on the back-of-curb from Walnut Street to Main Street. A six-foot-wide sidewalk is also found on the east side of the roadway between Walnut Street and Main Street for approximately 250 feet and between Pecan Street and Pfluger Street. Land uses on the west side of Railroad Avenue include Hanover's Draught House from Main Street to Walnut Street, an unimproved parcel from Walnut Street to Wilbarger Street, a church and the Lion's Club north of Wilbarger Street.

While improvements at Hanover's Draught House are built up to the right-of-way, the church and the Lion's Club are set back from the right-of-way. The east side of Railroad Avenue includes an office building between Main Street and Walnut Street, the MoKan corridor, and an AT&T equipment building.

Street lighting is provided at the intersections of Main Street and Wilbarger Street. Another streetlight is found at the driveway to the Lion's Club, but no streetlight is provided at the intersection with Walnut Street. Streetlights are also used to light the Heritage Loop Trail on each side of the roadway as it passes beneath the roadway.



Railroad Avenue Section One.

Looking south at Railroad Avenue and Gilleland Creek.

Looking south along Railroad Avenue at the intersection of Walnut Street.

Railroad Avenue: Section One Improvements

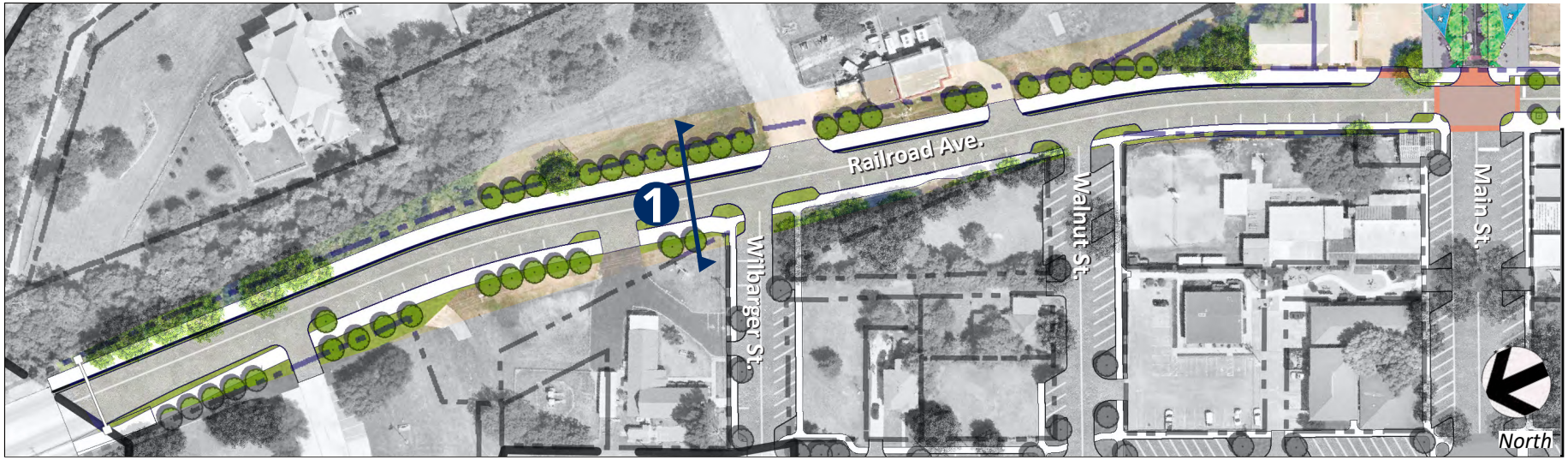
Proposed improvements to Section One begin on the north side with an improved and elevated bridge over Gilleland Creek as identified in the Drainage Master Plan. Immediately south of the bridge is an opportunity for gateway signage sign signifying the entrance to Downtown Pflugerville. Roadway improvements include reducing vehicle travel lanes to 12 feet in width.

On-street parallel parking may be provided on the west side of the Railroad Avenue beginning on the south side of the Lion's Club driveway and continuing south to Main Street, provided adequate line of sight is maintained at intersections. Bulb outs at intersection and driveway corners would be provided to slow vehicle turning movements, prevent vehicles from parking in sight triangles, reduce the distance pedestrians are required to cross, and provide space for landscaping to soften street edges. The turning radii for bulb outs will need to meet Street Design Requirements as described in the City of Pflugerville Engineering and Design Manual. A two-foot-wide concrete curb and gutter would be found at the edge of pavement on both sides of the roadway, immediately adjacent to a 10-foot-wide shared-use path for bicycles and pedestrians. The remainder of the right-of-way would include landscape strips adjacent to the shared-use paths.

This section requires 76 feet of right-of-way to accommodate the proposed improvements. However, if there are significant physical constraints, such as buildings on either side of the roadway that prevent the full cross-section, the right-of-way acquisition may be reduced, in those areas, at the City's discretion, but must maintain at least 60 feet of right-of-way. In lieu of right-of-way acquisition on the east side of the roadway, TxDOT may allow for a license agreement to allow for street trees and landscaping.

The undergrounding of utilities as described in Phases 1 and 5 of the Downtown Utility Analysis would be best accommodated underneath the shared-use paths or landscape buffers, or within new easements. Drainage would be accommodated via curb inlets and sub-surface stormwater conveyance.

Example of a shared-use path adjacent to parallel parking.



Railroad Avenue Section One - Plan view.

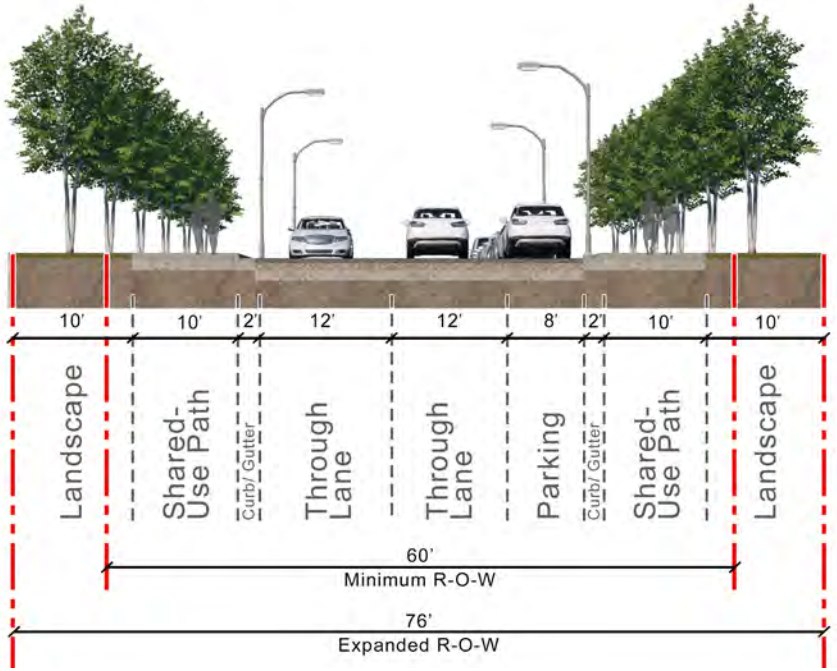
1

RAILROAD AVE. SECTION ONE

Existing 55’ to 80’ right-of-way (varies).

Right-of-way acquisition required to provide minimum 60’ right-of-way. Additional acquisition or agreements with TxDOT may expand right-of-way to 76’.

Extends from Gilleland Creek to Main Street.



Entering the Downtown District from the north, along Railroad, there is no sense of arrival. The crossing of Gilleland Creek is the beginning of the District and contains old guardrails and overhead utilities.

There is a trail connection which is difficult to access that connects from the right-of-way to the trail along the creek. The sides of the road are lined with mature trees which should be preserved.

At this location, the roadway begins to narrow from a two-lane road with a center turn lane, to a two-lane road without a turn lane.

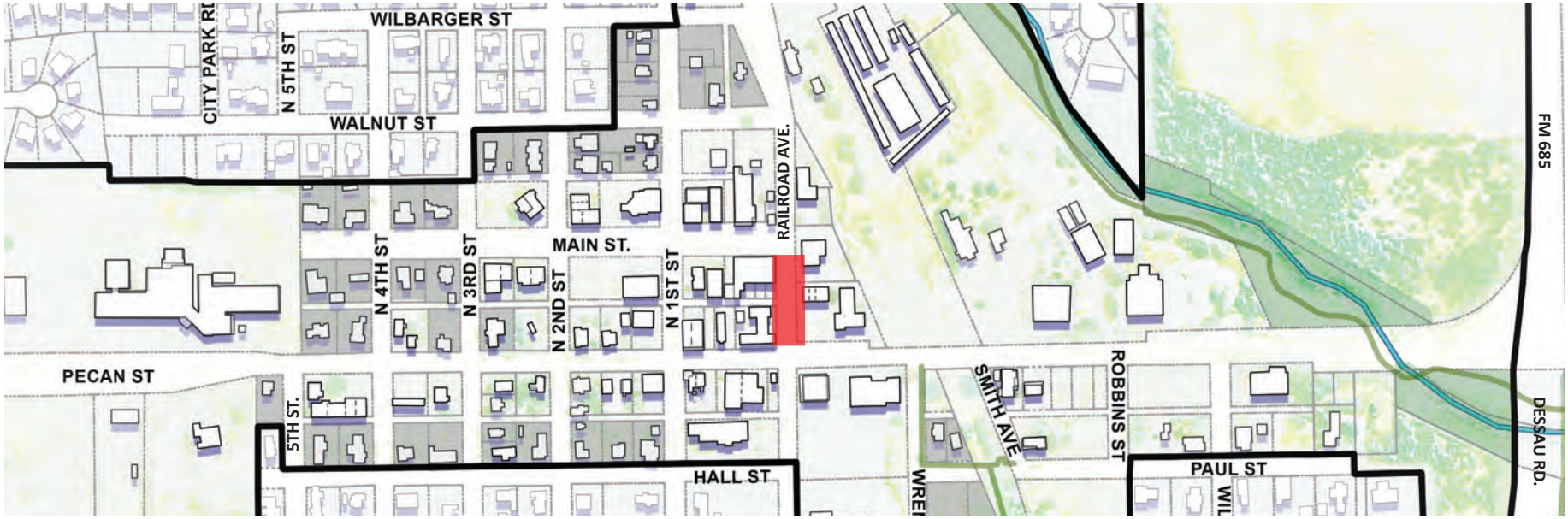
Existing view traveling south on Railroad Avenue, passing Gilleland Creek.

The proposed improvements at this location include a gateway sign signifying the entrance into the Downtown District. The gateway shown in this illustration is an example only, and the design of the gateway sign should be considered in more detail during the preliminary design phase of the streetscape improvements.

The improvements should include a reconstruction of the bridge to elevate it out of the new 100-year floodplain elevation as outlined in the Drainage Master Plan.

The sides of the roadway are recommended to be improved with shared-use paths connecting to the trail system and more decorative guardrails.

Proposed view traveling south on Railroad Avenue, passing Gilleland Creek.



Railroad Avenue Section Two.

RAILROAD AVENUE: SECTION TWO ANALYSIS

(Main Street to Pecan Street)

Section Two begins at Main Street and extends one block south to Pecan Street. The existing right-of-way is between 55 and 60-feet in width. The speed limit is 30 mph, and the roadway consists of one 14-foot-wide northbound lane and one 14-foot-wide southbound lane. 8-foot- wide parallel parking stalls are provided on the west side of the roadway between Main Street and the alley to the south. A two-foot concrete curb and gutter are provided on both sides of the roadway at the pavements edge between Main Street and the alley to the south.

South of the alley, the roadway section includes a dedicated right-turn lane for southbound vehicles on Railroad Avenue to turn westbound onto Pecan Street. Pedestrian accommodations are lacking as the only sidewalk is found on the west side back-of-curb between Main Street and the alley. There are driveways with no controlled access on both sides of Railroad Avenue between the alley and Pecan Street.

Land uses on both sides of the roadway are commercial, including the fuel station on the northwest corner of the Pecan Street/Railroad Avenue intersection. The City of Pflugerville owns the building at the terminus of Main Street, which will be removed to facilitate the extension of Main Street east to FM 685.

One streetlight is provided at the intersection of Main Street, one at the alley, and two at the intersection with Pecan Street. No freestanding pedestrian-scaled lighting is provided.

View of Railroad Ave. and Main Street intersection, looking south.

Railroad Avenue: Section Two Improvements

Proposed improvements in Section Two include one 12-foot-wide northbound and one 12-foot-wide southbound travel lane. On-street parallel parking is proposed to be removed, and a two-foot-wide curb and gutter is located outside of the travel lanes. Two 10-foot wide shared-use paths are proposed on both sides of the roadway between furnishing zones and the adjacent properties. Eight-foot-wide furnishing zones are found between back-of-curb and pedestrian paths to accommodate benches, bike racks, trash/recycling receptacles and shade trees in tree grates to both buffer pedestrian space from the vehicular roadway and improve walkability. Furnishings should be placed in line with street trees so as not to impede flow of sidewalk users. These wide pathways, paired with the furnishing zones allow for adjacent businesses to spill out onto the sidewalk with narrow furnishings (refer to illustrations later in this chapter). As discussed previously, traffic control at Main Street and Railroad with decorative pavement is recommended to enhance the pedestrian experience and improve safety.

This section requires 65 feet of right-of-way for proposed improvements. Because existing right-of-way is 55 to 60 feet, some right-of-way acquisition on the east side of the roadway will be required. Reconfiguration/re-striping of the parking lot with a retaining wall due to grade changes at the intersection of Pecan Street and Railroad Avenue may be necessary to accommodate the shared-use paths and street trees. The relocation of overhead utility lines is also anticipated along the east side of Railroad. A retaining wall is also expected at the northwest corner of Pecan Street and Railroad to accommodate a shared-use path.

The undergrounding of utilities as described in Phase 1 of the Downtown Utility Analysis would be best accommodated underneath the shared-use paths or in new easements.

Example of streetscape using benches and trees to buffer pedestrian space from vehicular roadway.

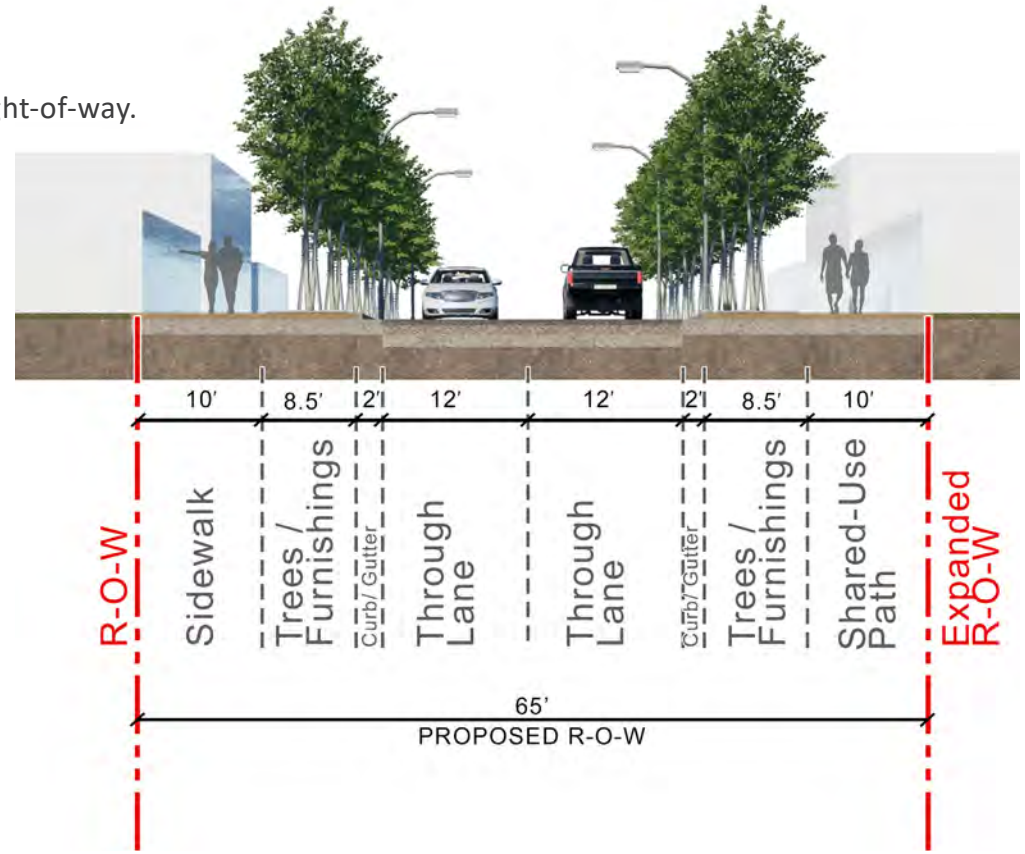
Railroad Avenue Section Two - Plan view.

2 RAILROAD AVE. SECTION TWO

Existing 55’ to 60’ right-of-way (varies).

Right-of-way acquisition required to provide 65’ right-of-way.

Extends from Main Street to Pecan Street.



Existing view traveling south on Railroad Avenue, passing Main Street, looking toward Pecan Avenue.

This view is along the side of the old bank building, just south of Main Street and in front of the commercial development fronting Railroad Avenue.

The sidewalk is wider in this area but should be widened in order to allow for both dining and pedestrian movement along the corridor.

Parallel parking here serves the Downtown businesses but also creates visibility issues with the turning movements from Main Street.

The overhead utilities create a visual clutter of the streetscape and limit the opportunities for street trees.

Proposed view traveling south on Railroad Avenue, passing Main Street, looking toward Pecan Avenue.

The proposed improvements include eliminating the parallel parking to create space for a wider walkway and street trees. To maintain more walking space, it is recommended to place trees in grates that match the style of the street furniture.

Relocating the overhead utilities underground will create for a more appealing streetscape with street trees and remove obstructions from pedestrian movements.

The wider walkway will also allow for outdoor dining, while allowing for ease of pedestrian movements around the area.

Another challenging area within the Downtown is the west side of the fuel station. The existing parking is placed on a steep slope which makes entering and exiting the vehicle difficult and prevents an accessible walkway from connecting to Pecan Street.

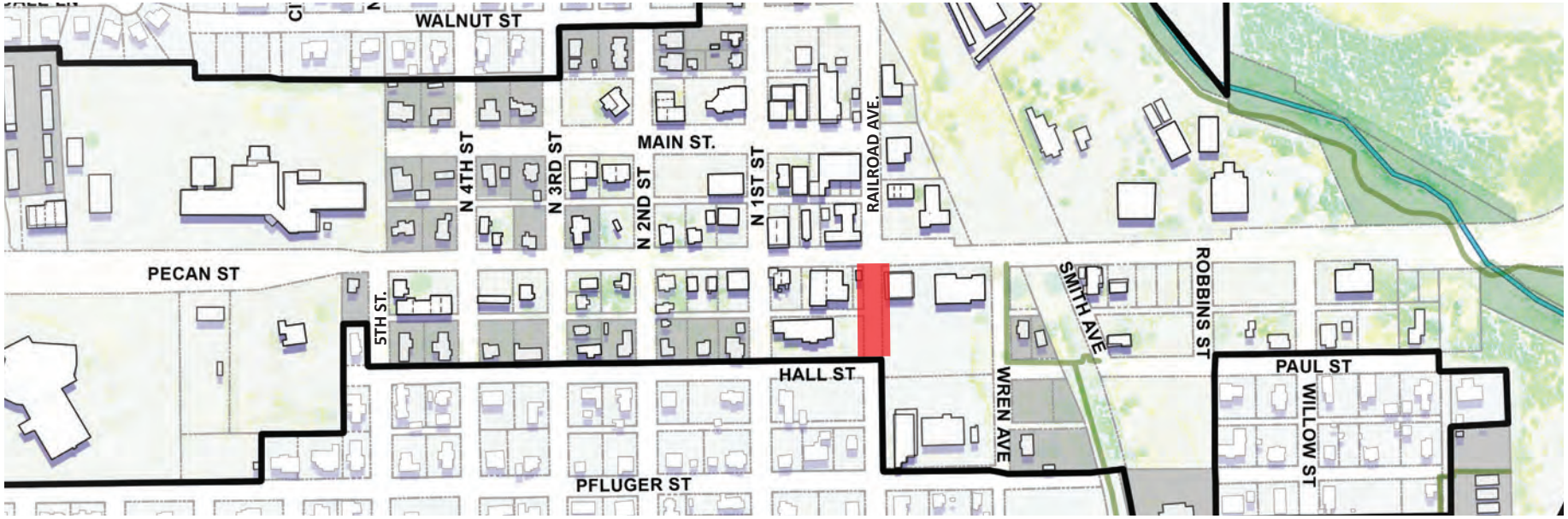
The existing alley and driveway entering the fuel station are not striped nor constructed for pedestrian mobility.

Existing view traveling south on Railroad Avenue approaching Pecan Street.

The proposed improvements include the extension of a sidewalk with accessibility improvements, a raised planter, and elimination of the on-site parking at the fuel station adjacent to Railroad. The existing driveway will be narrowed to create a more pedestrian-friendly environment.

Installing street trees, landscaping, and lighting leading to Pecan Street are also recommended. With the addition of landscaping, Additional right-of-way or easement may be required to achieve enhanced landscaping at this location.

Proposed view traveling south on Railroad Avenue, approaching Pecan Street.



Railroad Avenue Section Three.

RAILROAD AVENUE: SECTION THREE ANALYSIS

(Pecan Street to Hall Street)

Section Three begins at Pecan Street and travels one block south to Hall Street. The existing right-of-way is 55-feet in width. The speed limit is 30 mph and the roadway consists of one 18-foot-wide northbound lane and one 18-foot-wide southbound lane. The northbound lane becomes two lanes north of the alley to provide a dedicated right-turn lane. No parallel parking spaces are provided on the roadway, and parallel parking is specifically prohibited on the west side of the roadway via signage.

Two-foot concrete curb and gutters are found along the roadway at pavement's edge. A six-foot-wide sidewalk with curb ramps at driveways and intersections is provided for pedestrians on the east side of the roadway, but no pedestrian accommodations are provided on the west side of the roadway.

Land uses along the roadway include commercial, an equipment building owned by AT&T on the west side, and Travis County Emergency Services Building No. 2 offices and fire station on the east side.

One streetlight is provided at the southeast corner of the intersection with Pecan Street and one at the northeast corner of the intersection with Hall Street. No pedestrian-scale lighting is provided.

View of Railroad Avenue at Hall Street looking North.

Railroad Avenue: Section Three Improvements

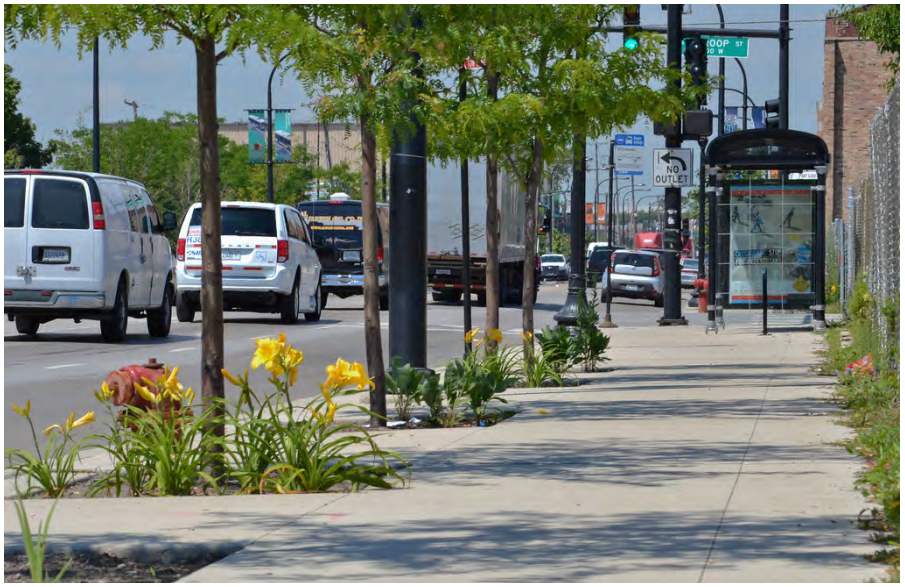
Proposed improvements in Section Three include one 11-foot-wide northbound travel lane and one 11-foot-wide southbound travel lane. North of the alley, Section Three includes a dedicated right turn lane for northbound vehicles on Railroad Avenue to turn eastbound onto Pecan Street. Optional on-street angled parking may be provided on the east side of the roadway, south of the alley.

An eight-foot-wide loading zone is provided on the west side of the roadway, north of the alley, for delivery vehicles and trucks to service the neighboring businesses. A two-foot-wide curb and gutter is located on the outside edge of all paved areas. Ten-foot-wide sidewalks are provided on both sides of the roadway between back-of-curb and adjacent property.

It is critical that the intersection of Pecan Street and Railroad Avenue accommodate pedestrians and cyclists. Pedestrians may cross from one corner to another, and cyclists may use the shared-use path that continues west, north, and east of the intersection. Decorative pavement is recommended to be used in the intersection to enhance the pedestrian experience and improve safety.

This section requires 64 feet of right-of-way for proposed improvements. Because the existing right-of-way is 55 feet in width, some right-of-way acquisition will be required.

The undergrounding of utilities as described in Phases 1 and 7 of the Downtown Utility Analysis may be accommodated underneath the sidewalks or in new easements.



Example of landscaping between the roadway and shared-use path.

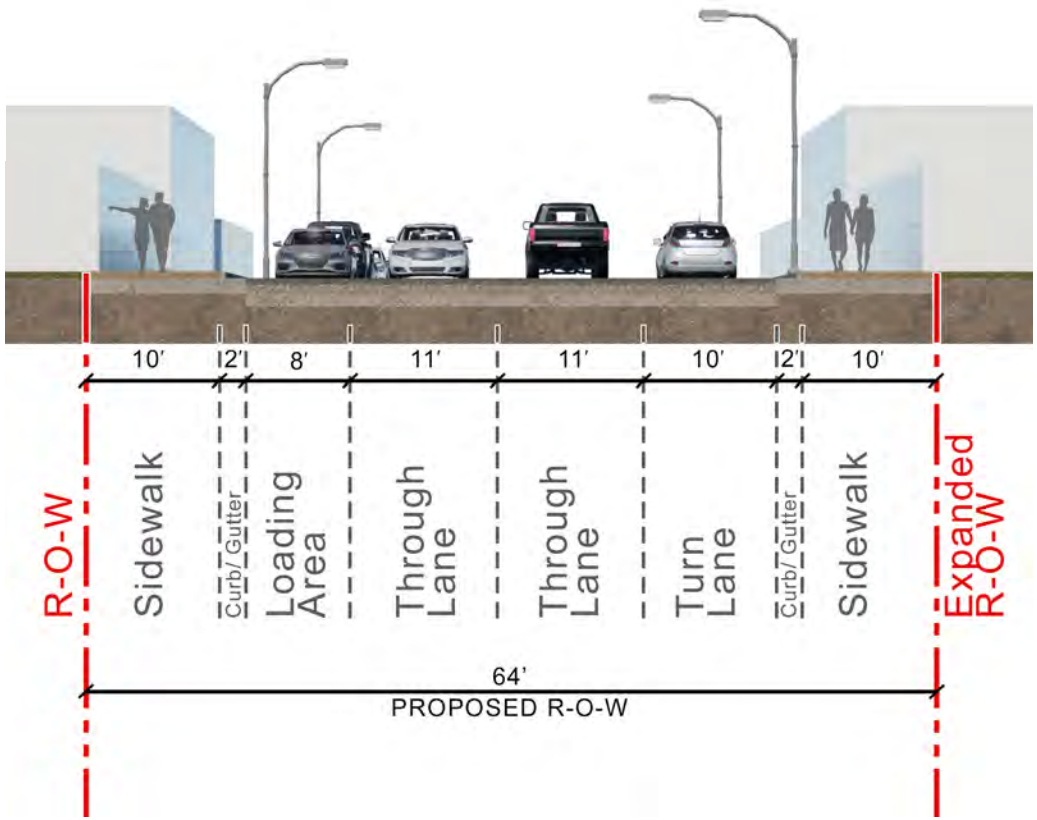
Railroad Avenue Section Three - Plan view.

3 RAILROAD AVE. SECTION THREE

Existing 55’ right-of-way.

64’ right-of-way required.

Extends from Pecan Street to Hall Street.



Alleys

Alleys in Downtown are multi-functional. The alley serves as a place for trash cans and dumpsters but also parking for many businesses. In this Plan, alleys are recommended to be maintained for their intended purpose. However, opportunities to enhance and activate alleys should be explored such as murals, accent lighting, landscaping, pedestrian pathways, and other features catering to pedestrians. Another example may include private development that encourages activation of alleys through design and enhanced pedestrian areas.

For residential streets, the alley contains utilities and, in some cases, driveway access for residences. The alleys should be paved to the full 20-foot right-of-way width, to cohesively connect with the rest of the Downtown Core.

Business owners utilize the alley for dumpsters, access to on-site parking, and overflow parking. In some cases, parking occurs along alleys in unmarked or improved areas. In these situations, it is critical that the alley is paved and maintained for parking access. All parking within the alley should be 90-degree head-in with a 21' depth to allow for maneuverability. Right-of-way acquisition along the alleys may be explored to provide for more public parking in the Downtown Core, as shown in the optional cross sections.

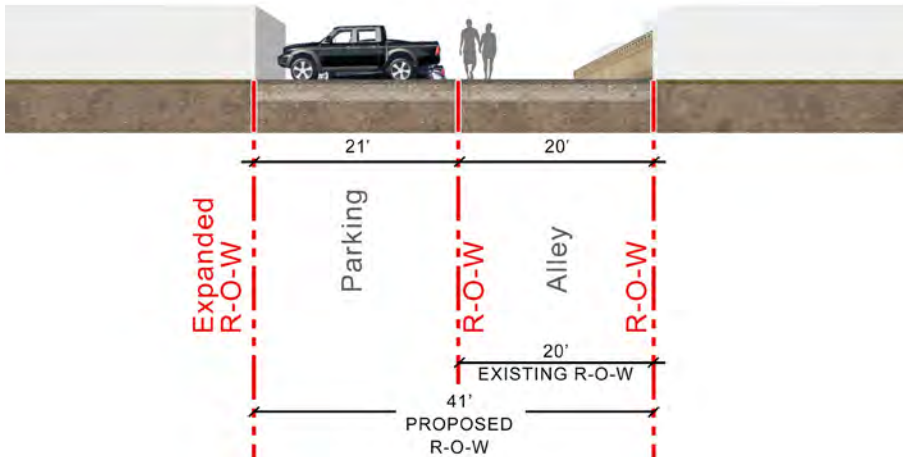
Alley between 1st and 2nd Street, across from City Hall

ALLEY OPTION 1

Existing 20’ right-of-way.

41’ right-of-way required.

Provides parking behind businesses.

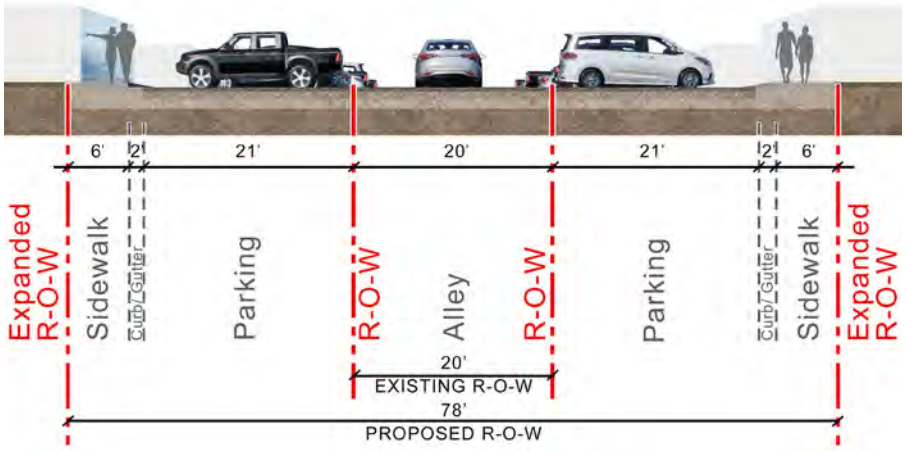


ALLEY OPTION 2

Existing 20’ right-of-way.

78’ right-of-way required.

Provides parking, curbs and gutters, and sidewalks behind businesses.



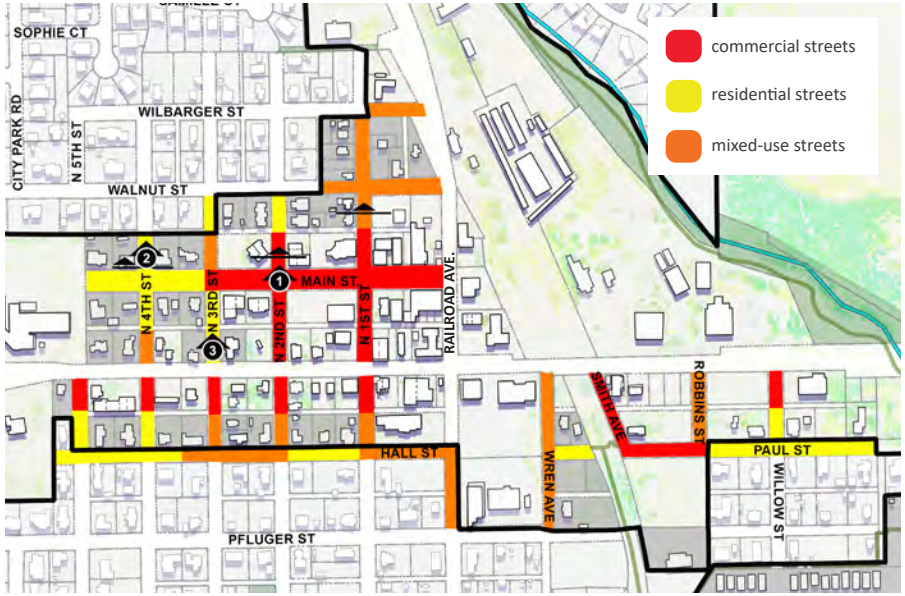
Context Sensitive Streets

The other streets within the Downtown District are classified as local roadways with 60’ of ROW and provide access to a mixture of residential and commercial land uses. In these areas, streetscape functions are recommended to be “context sensitive,” or designed based on existing land use and parking needs to ensure the character within the different areas of Downtown is maintained.

This Plan utilizes the general model provided within the Unified Development Code (UDC) for parking configurations, vehicular and pedestrian access, and street trees based on geographic location and existing land use (refer figure on opposite page).

Many of the existing residential lots utilize the streets in-front of their homes for parking. To maintain this condition, local streets with residential uses on both sides are recommended to have unstriped parallel parking and six-foot sidewalks within the existing right-of-way. This leaves parking for the residences and their visitors and creates a more walkable neighborhood.

Many of the existing businesses utilize parking along the streets as well as the alleys. However, the parking is inconsistent and does not provide adequate sidewalks or accessibility. Generally, 60-degree angled parking and wider sidewalks are recommended when abutting commercial uses. In many cases, the implementation of both parking and walkways within the existing 60-foot right-of-way will require either right-of-way acquisition or easements to accommodate the full recommended cross-section.



Map showing the streets which are considered Context Sensitive. These Streets contains a mix of commercial, business, and residential uses.

Summary of Context Sensitive Streets and Alley Recommendations:

- **Provide designated on-street parking, as needed;**
- **Provide sidewalks on both sides of streets;**
- **Make alleys more accessible with paving improvements and alley-loaded parking, and activate them with pedestrian facilities, outdoor gathering areas, and art; and**
- **Consider relocating overhead utility lines in conjuction with streetscape, paving, parking, and water and wastewater utility improvements.**

Near 1st and Walnut, this photo shows that there is angled parking on the left side of the street and parallel parking on the right.

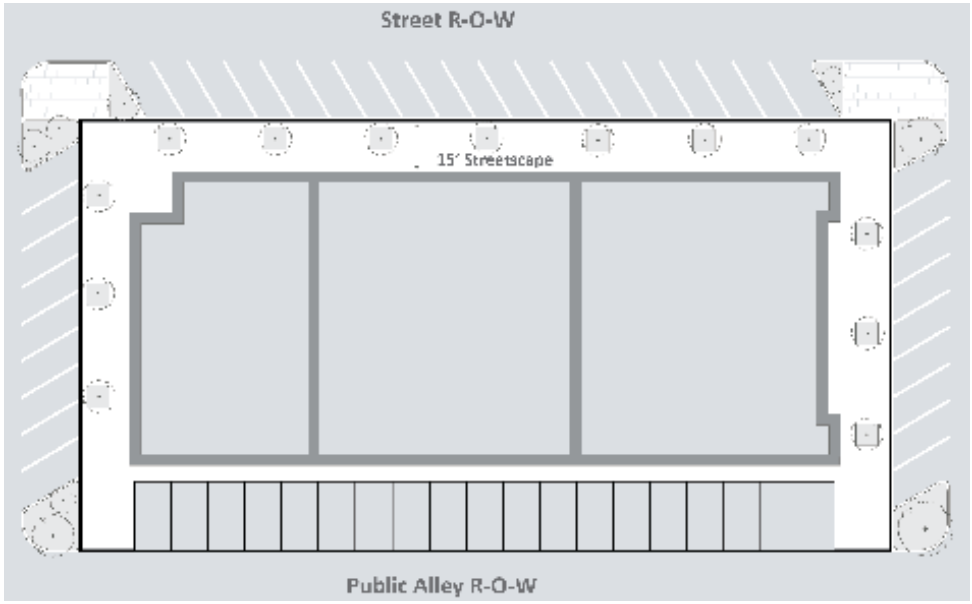


Figure from the Downtown District Overlay showing how parking and walkways shall be arranged in commercial areas.

View of 4th Street showing that there is a mix of angled and head-in parking. Per the Downtown code, only angled parking is permitted for these Streets.

Due to the mix of residential and commercial uses Downtown, the UDC specifies that as parcels transition to a commercial use, they shall follow the arrangement as illustrated in the following graphics.

For any parcel in which there is a change in land use from residential to commercial, the commercial establishment should implement 60-degree angled parking and sidewalks. When parking cannot be accommodated on the street due to existing conditions, alley-loaded parking shall be used, which may be either on-site private parking, or dedicated to the City as public parking.

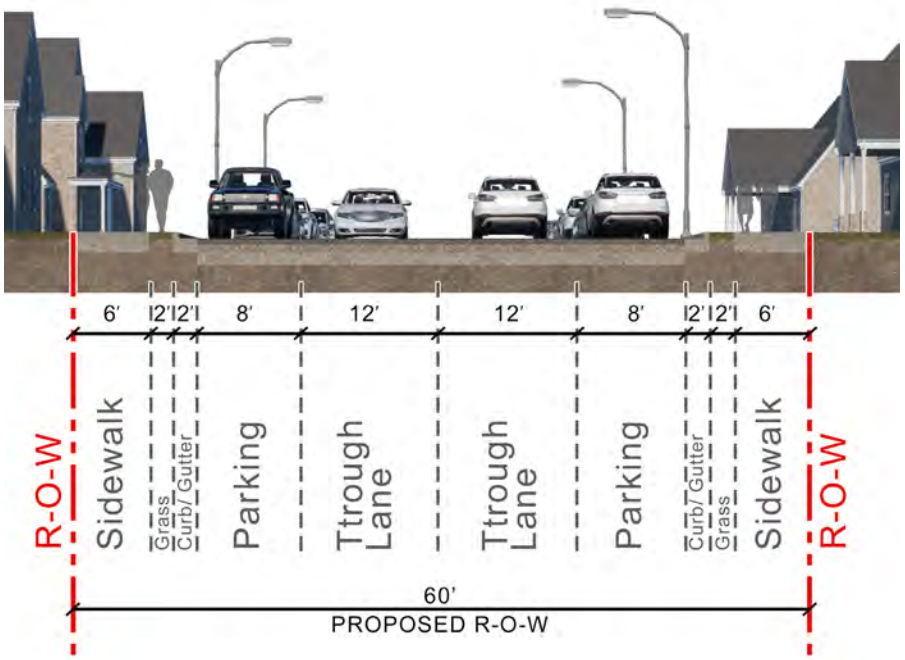
New buildings are to be set back from the property line by 15-feet and allow for 10-foot-wide sidewalks and five-feet of landscaping. This setback will contain walkways, street trees, lighting, and site furnishings along the streetscape. When an existing building is converted to a commercial use, per the UDC, the Planning and Development Services Director may allow for a sidewalk to be at a minimum six feet in width if the distance between the face of the building and the parking is less than 15 feet. When an alley is to be used for parking, the parking spaces shall be deeper to accommodate turning movements in a constrained space.

RESIDENTIAL SECTION

Existing 60’ right-of-way.

No additional right-of-way required.

Does not apply to Main Street.

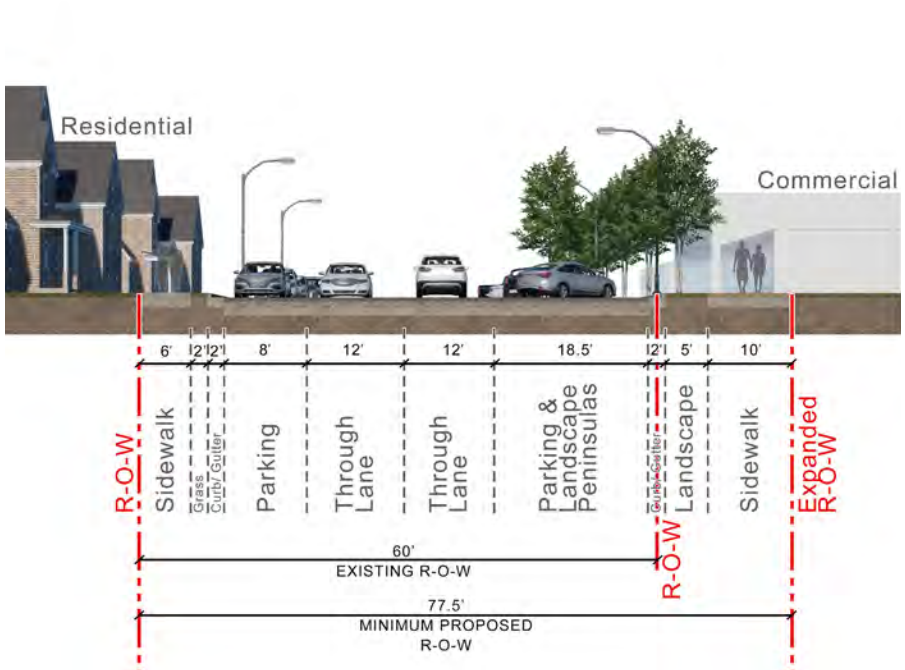


MIXED-USE SECTION (PREFERRED)

Existing 60’ right-of-way.

77.5’ right-of-way (minimum proposed with 6’ and 10’ sidewalks).

Per the UDC, 15’ sidewalks which includes 5’ landscape areas for street trees are required in certain areas, but may be reduced to 6’ if there are physical constraints.

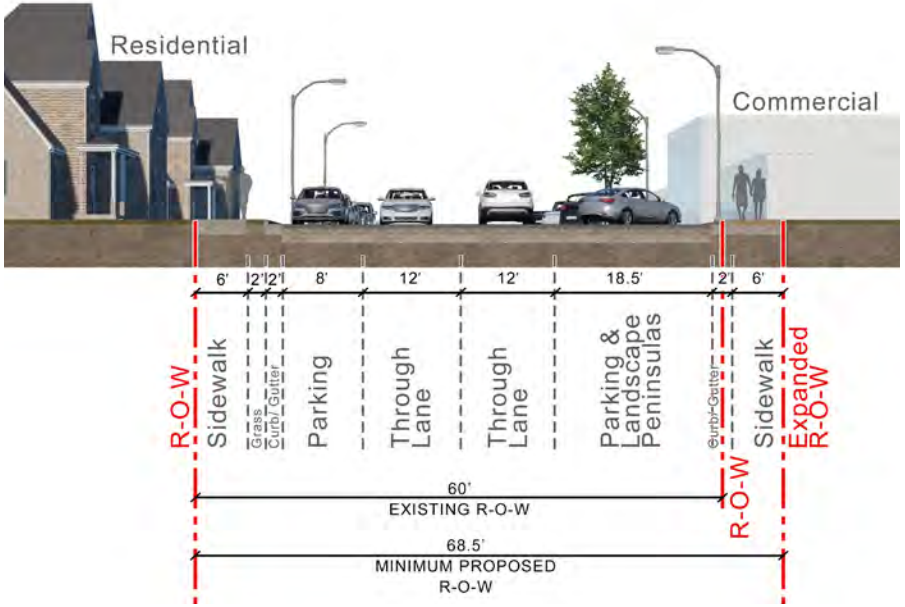


MIXED-USE SECTION (ALTERNATE)

Existing 60’ right-of-way.

68.5’ right-of-way (minimum proposed with 6’ sidewalks).

Per the UDC, 15’ sidewalks which includes 5’ landscape areas for street trees are required in certain areas, but may be reduced to 6’ if there are physical constraints.

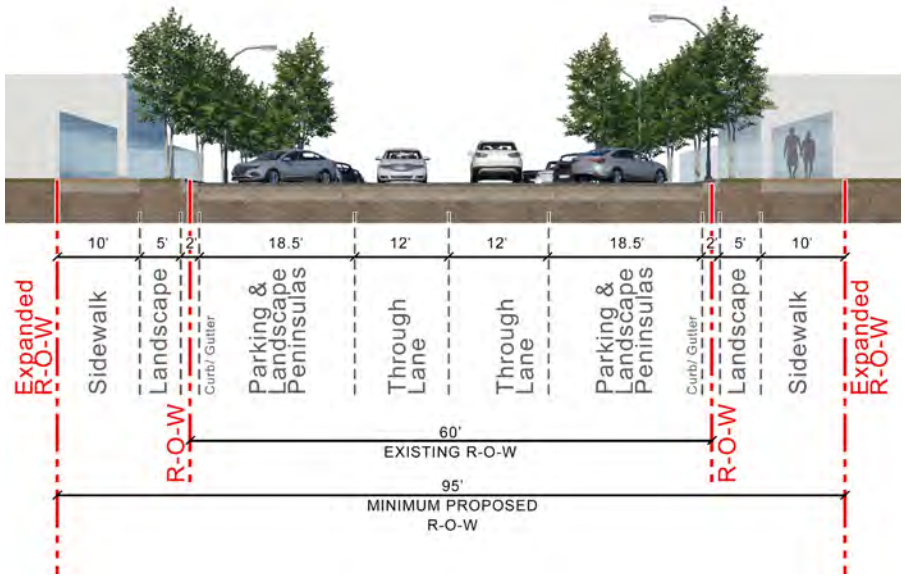


COMMERCIAL SECTION (PREFERRED)

Existing 60’ right-of-way.

95’ right-of-way (minimum proposed with 10’ sidewalks).

Per the UDC, 15’ sidewalks which includes 5’ landscape areas for street trees are required in certain areas, but may be reduced to 6’ if there are physical constraints.

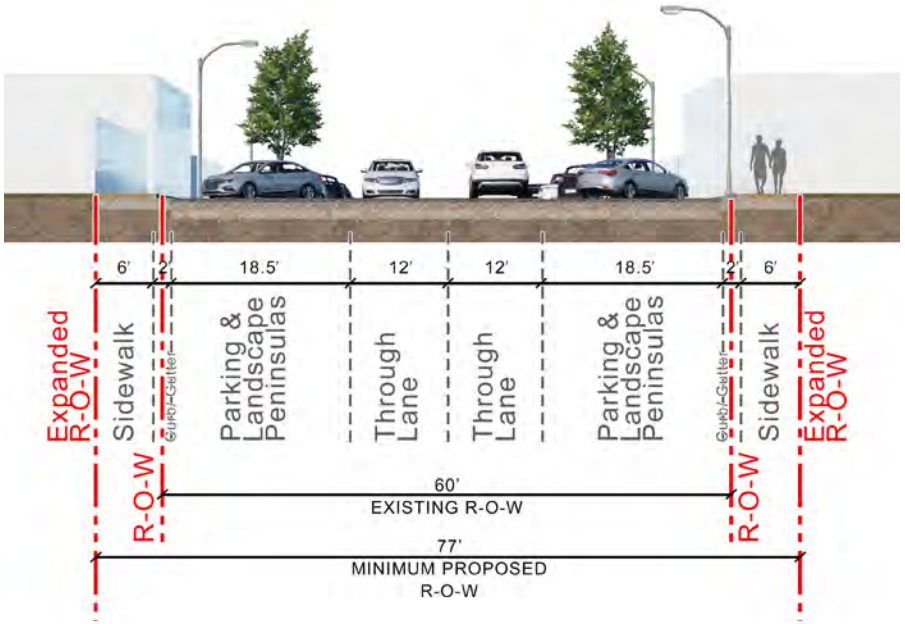


COMMERCIAL SECTION (ALTERNATE)

Existing 60’ right-of-way.

77’ right-of-way (minimum proposed with 6’ sidewalks).

Per the UDC, 15’ sidewalks which includes 5’ landscape areas for street trees are required in certain areas, but may be reduced to 6’ if there are physical constraints.



Summary of Improvements

The opportunities, challenges, and rationale for the recommended improvements identified are a response to feedback and preferences from Pflugerville residents and businesses, and are a result of a high-level analysis of existing conditions, a review of relevant studies, master plans and background data, current development requirements for Downtown, and industry best practices. Highlights of the recommended improvements are summarized in the chart below.

The recommendations in this Plan are intended to be flexible and responsive to changes in land uses and needs between the time this Plan is adopted and the time of implementation, as well as unexpected and unknown site conditions discovered through survey and subsurface utility engineering. However, the overall right-of-way cross-section dimensions shall be considered required minimums.

The next chapter of this Plan provides recommendations for next steps, including priorities, phasing, and their respective planning level order of magnitude opinions of probable construction costs.

Description of Improvements	Pecan Street	Main Street	Railroad Avenue	Neighborhood Streets
Improvements based on adjacent land uses	X	X	X	X
Expand vehicular network		X		
Reduce vehicular travel lane widths	X	X	X	
Consolidate, reduce, or remove excessive driveways	X	X	X	
Provide additional parking for businesses		X	X	
Improve traffic controls		X	X	
Expand pedestrian network		X	X	X
Enhance pedestrian safety	X	X	X	X
Provide pedestrian gathering space		X	X	
Expand bicycle network	X		X	
Install street trees and landscaping	X	X	X	
Install curb bulb-outs		X	X	
Install lighting for pedestrians and vehicles	X	X	X	X
Relocate overhead utilities underground	X	X	X	
Acquire additional right-of-way	X	X	X	

CHAPTER 5: CAPITAL IMPROVEMENT PLANNING

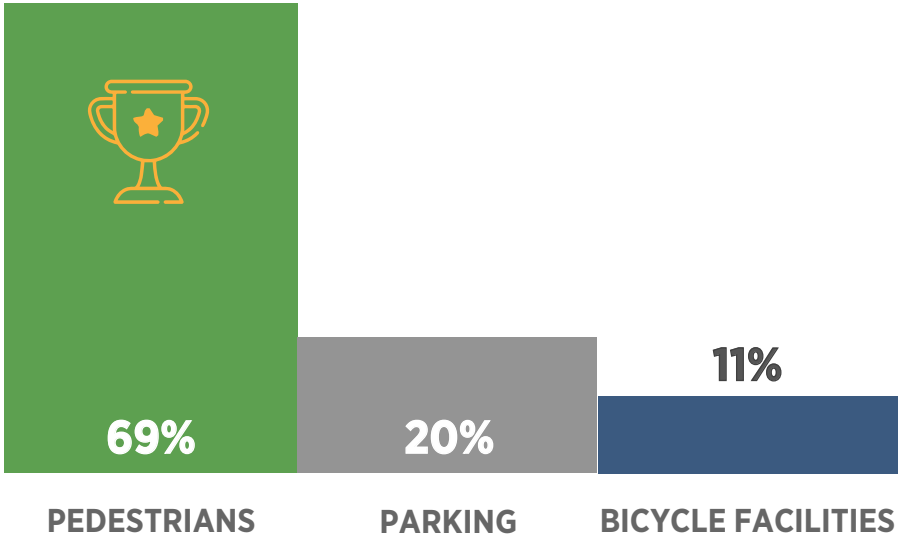
Project Prioritization

This chapter delineates the subsequent steps necessary to advance this Plan's design recommendations into a comprehensive design and construction phase. The information presented in this chapter aims to furnish estimated cost breakdowns and propose phased enhancements for the implementation of the streetscape design.

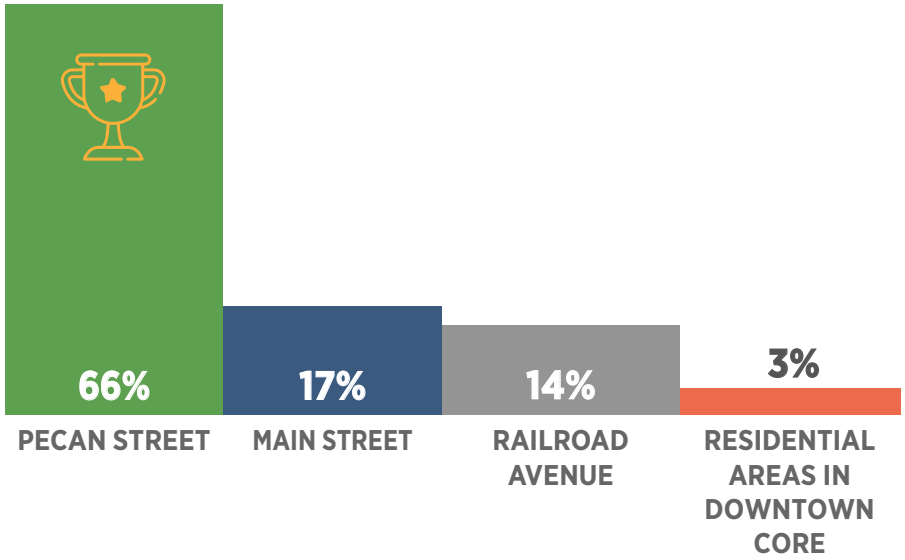
The insights garnered from public engagement have significantly influenced the phasing recommendations and considerations. Included on this page are the findings derived from a public survey, providing invaluable feedback on the community's priorities regarding various elements. The delineation of phases is predicated on alterations in right-of-way width and downtown utility phasing.

The cost analyses provided are conducted at a high level and are intended solely for further design planning and budgetary purposes. A more exhaustive design analysis is requisite to generate a detailed cost breakdown suitable for construction pricing.

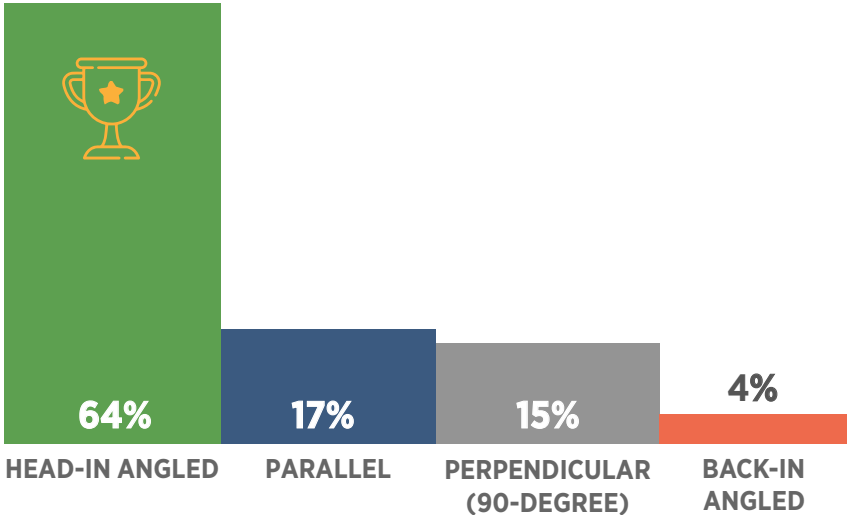
WHICH ACCOMMODATION SHOULD BE PRIORITIZED ALONG RAILROAD AVENUE?



WHICH DOWNTOWN AREA SHOULD BE PRIORITIZED FOR STREETSCAPE IMPROVEMENTS?



WHICH ON-STREET PARKING METHOD DO YOU PREFER?

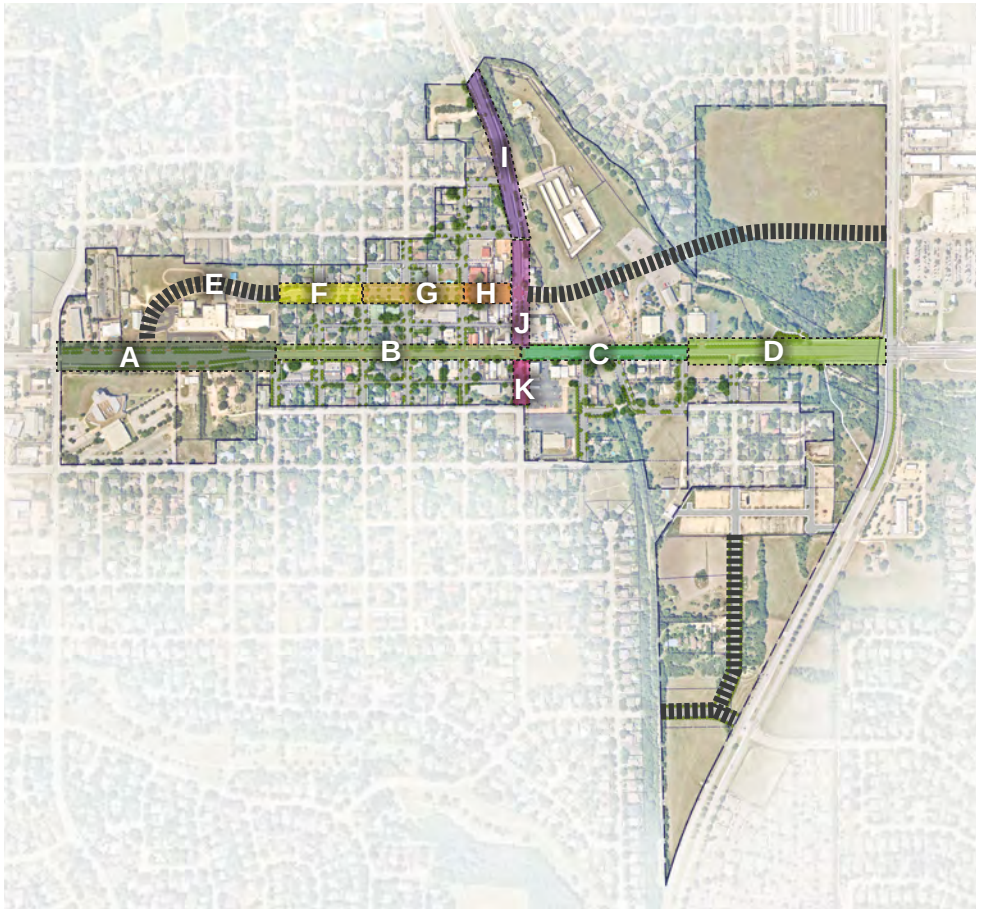


Project Phasing

Designing and building both the improvements recommended by the Downtown Utility Analysis and the streetscape improvements concurrently is recommended. The map to the right shows potential phases of construction that are generally consistent with phases proposed by the Downtown Utility Analysis that may be paired with other phases. Constructing utility and streetscape improvements in tandem has the following benefits:

1. Cost savings will be realized in both design and construction. Improvements may be designed based off one design survey, rather than two or more. Enabling the design of utility and streetscape improvements in sync will avoid constructability conflicts that may otherwise be experienced. Finally, rather than restoring the streetscape to its current form after moving utilities underground, the streetscape should be reconstructed to its final preferred form as illustrated in this Plan.
2. Public facilities (roadways, sidewalks, etc.) will be offline less and impact the public less if both the utility and streetscape projects are completed simultaneously.

Further breakdown of these costs are provided in the Appendix. Please note, these costs only consider the cost of streetscape improvements and do not consider costs from other studies (i.e. Downtown Utility Analysis, Parking Study, etc.). Prior to design, additional costs to develop a comprehensive cost analysis per phase is recommended based on the level of improvements anticipated within each phase and whether or not there is additional utility or roadway work to be completed.



Map showing potential streetscape project phasing aligning with overhead utility relocations. Each segment of roadway corresponds with the letter and color columns on the following page.

Project Phasing

The following table provides a summary of project phasing considerations; however, it does not represent a priority ranking of projects. These project phases may be paired for economy of scale.

Project ID (Letters on Map)	Project Name	Description	Project Costs*	Phasing Priority Considerations
A	Pecan 120' (Section 1)	10th St. to 5th St.	$3.1 million	Look for opportunities to underground utilities. Study drainage patterns to make sure the installation of curb and gutter does not adversely impact drainage.
B	Pecan 80' (Section 2)	5th St. to Railroad Ave.	$4.2 million	This is a challenging section with limited right-of-way and existing buildings built close to the roadway. This may be paired with **Project I** and/or **J** along Railroad Avenue..
C	Pecan 80' (Section 3)	Railroad Ave. to Robbins St.	$2.1 million	Explore opportunities to acquire additional R-O-W and install pedestrian islands to allow for easier pedestrian crossings. Placing utilities underground.
D	Pecan 100' (Section 4)	Robbins St. to FM 685/Dessau Rd.	$1.6 million	This roadway section should look for opportunities to shift the roadway north and create a wider pedestrian space on the south side. Placing utilities underground should also occur.
E	Main 48'	Pecan St. to western extent of Main St.	$5.9 million	This extension requires coordination and easement dedication with the PACE school or future redevelopment to implement extension.
F	Main 100' (Section 1)	PACE Campus to 3rd St.	$1.2 million	This roadway section is residential and may be paired with other improvements along residential streets. The streetscape improvements within this roadway section may be paired with storm sewer improvements.
G	Main 100' (Section 2)	3rd St to 1st St.	$2.8 million	The streetscape improvements within this roadway section may be paired with storm sewer improvements.
H	Main 100' (Section 3)	1st St. to Railroad Ave.	$2.9 million	Adjust roadway elevations to create ADA access. Study drainage as to not adversely impact flows.
I	Railroad 76' (Section 1)	Gilleland Creek to Main St.	$3.9 million	Consider constructing concurrently with a new bridge crossing at Gilleland Creek identified in the Drainage Master Plan. Underground utilities.
J	Railroad 65' (Section 2)	Main St. to Pecan St.	$700 thousand	To improve the intersection of Pecan Street & Railroad with ADA accessibility, the design should elevate street pavement of the intersection of Main Street & Railroad Ave. to make a more seamless streetscape with drainage improvements and eliminates need for split level ramp to provide ADA accessibility at the intersection of Railroad and Main.
K	Railroad 64' (Section 3)	Pecan St. to Hall St.	$765 thousand	Opportunity to address this section with **Project I** for economy of Scale, or it may be addressed separately if there is limited funding. Underground utilities.

Project Cost Estimates by Roadway

Street	Description	Project Costs*
Pecan Street	(10 Street/Meadow Lane to FM 685/Dessau Road)	$11 million
Main Street	PACE Campus to Railroad Ave.	$12.8 million
Railroad Ave.	Gilleland Creek to Hall St.	$5.4 million
1st Street	Wilbarger St. to Hall St.	$142,000
2nd Street	Wilbarger St. to Hall St.	$126,000
3rd Street	Wilbarger St. to Hall St.	$130,000
4th Street	Wilbarger St. to Hall St.	$120,000
5th Street	Pecan St. to Hall St.	$50,000
Main Street Eastern Extension	Railroad Ave. to FM 685	To be constructed through a public-private partnership with the development of Downtown East
Willow Street Ext.	Seeger Dr. to Oxford Dr.	To be constructed with development by others
Oxford Drive Ext.	Geyser Ave. to Dessau Rd.	To be constructed with development by others

The Downtown Streetscape Master Plan was developed using existing available GIS data, aerial imagery, and data presented in previous downtown studies. This data allowed for the plan to be drawn to scale and closely represent the current conditions. Upon approval of the Downtown Streetscape Master Plan, the probable construction costs were developed by taking measurements and areas from the plan drawings and applying recent average construction cost values to each quantity.

**Costs shown are in 2024 dollars and are an order of magnitude, pre-design level. Construction contingency and soft costs are included here. A full, detailed cost breakdown has been provided separately to the City and should be referenced for all additional design and contingency costs. All costs are prior to specific site assessments, survey, and detailed investigations and any design will require more detailed evaluations to determine specific costs for each specific section. Project costs do not include right-of-way acquisition, storm sewer improvements, relocation of overhead utilities underground, or street reconstruction if needed to address drainage improvements.*

Funding Sources & Next Steps

FUNDING

There are multiple fund sources that may be considered for streetscape improvements:

1. General Bond elections. The City may opt for a bond election to let the citizens vote on a tax rate increase to fund the streetscape design and construction.
2. Grant funding. Numerous grants are available through various resources that may be used to supplement funding of the Plan. Different grants have different stipulations, time constraints and methods in which they may be used.
   - TxDOT & AAMPO Transportation Alternatives Program - used for enhancing alternative transportation options. (i.e., pedestrian and bike facilities along with Safe Routes.)
   - US DOT| Reconnecting Communities Program - supports projects that reconnect communities through mobility, access, or economic development.
   - US DOT | Safe Streets for All (SS4A) - funding to help prevent roadway deaths by using a Safe System Approach.
   - Highway Safety Improvements Program (HSIP) - aimed to reduce roadway deaths and injuries by requiring data-driven, strategic approach to improving highway safety, with a focus on performance.
   - EDA Public Works & Economic Adjustment Assistance - provides funding for technical, planning, and public works and infrastructure projects in regions experiencing adverse economic changes.
   - TxDOT Green Ribbon Program - to enhance the visual characteristics of highway corridors and minimize the negative impacts of air pollution through planting trees and other vegetation.
3. Tax Increment Financing. A Tax Increment Reinvestment Zone (TIRZ) is a tool to finance public improvements within a defined area by using taxes collected to enhance the environment and attract new investment. In October 2022, City Council adopted ordinances expanding TIRZ No. 1 to include the Downtown area and is a potential funding source.
4. General Fund. The annual budget for individual phases of improvements could be established within each fiscal year (i.e., PER for individual phases).

NEXT STEPS

In conclusion, the Downtown Streetscape Master Plan sets the foundation to fundamentally improve how Pflugerville functions and serves the community through the use of key enhancements, including upgraded infrastructure, pedestrian facilities, and integrated art and technology. The City should pursue the following towards implementation of the Plan.

1. Identify other necessary improvements - Identify other desired or needed improvements within the Plan area that may be coupled with streetscape improvements (e.g., drainage, detention, and water and wastewater utility improvements.)
2. Identify funding - Identify funding sources to be used for PER, detailed design, and construction.
3. Pursue a Preliminary Engineering Report - A Preliminary Engineering Report (PER) is a thorough document that serves as a step in planning and executing a complex engineering project. A PER develops a detailed project description, scope of work, and defined objectives to set the stage. Technical considerations and alternatives analysis are conducted to evaluate different approaches and solutions, while cost estimates and schedules provide stakeholders with an understanding of the financial implications and timeline.

Regulatory and environmental factors are carefully assessed to ensure compliance and minimize adverse impacts. Additionally, a risk assessment is conducted to identify potential challenges, with recommended mitigation measures provided. Ultimately, a PER offers the City a comprehensive study and recommendations to avoid potential issues that may occur in the development and construction process. Due to the highly dynamic nature of construction in an urban environment, it is recommended to pursue a PER prior to securing all the funding for detailed design and construction, as cost estimates are highly variable in this context.

4. Pursue Subsurface Utility Engineering (SUE) - To prepare for streetscape improvements and lay a solid foundation for streetscape improvements, the City of Pflugerville will need to conduct Subsurface Utility Engineering (SUE) to locate all below ground utilities to avoid disruptions and additional costs incurred during construction. Using data acquired through SUE investigations will allow the City to finalize Preliminary Engineering Reports for each phase of the streetscape to identify infrastructure needs, ensuring that the project aligns with the technical requirements and budget.
5. Secure funding for detailed design and construction.