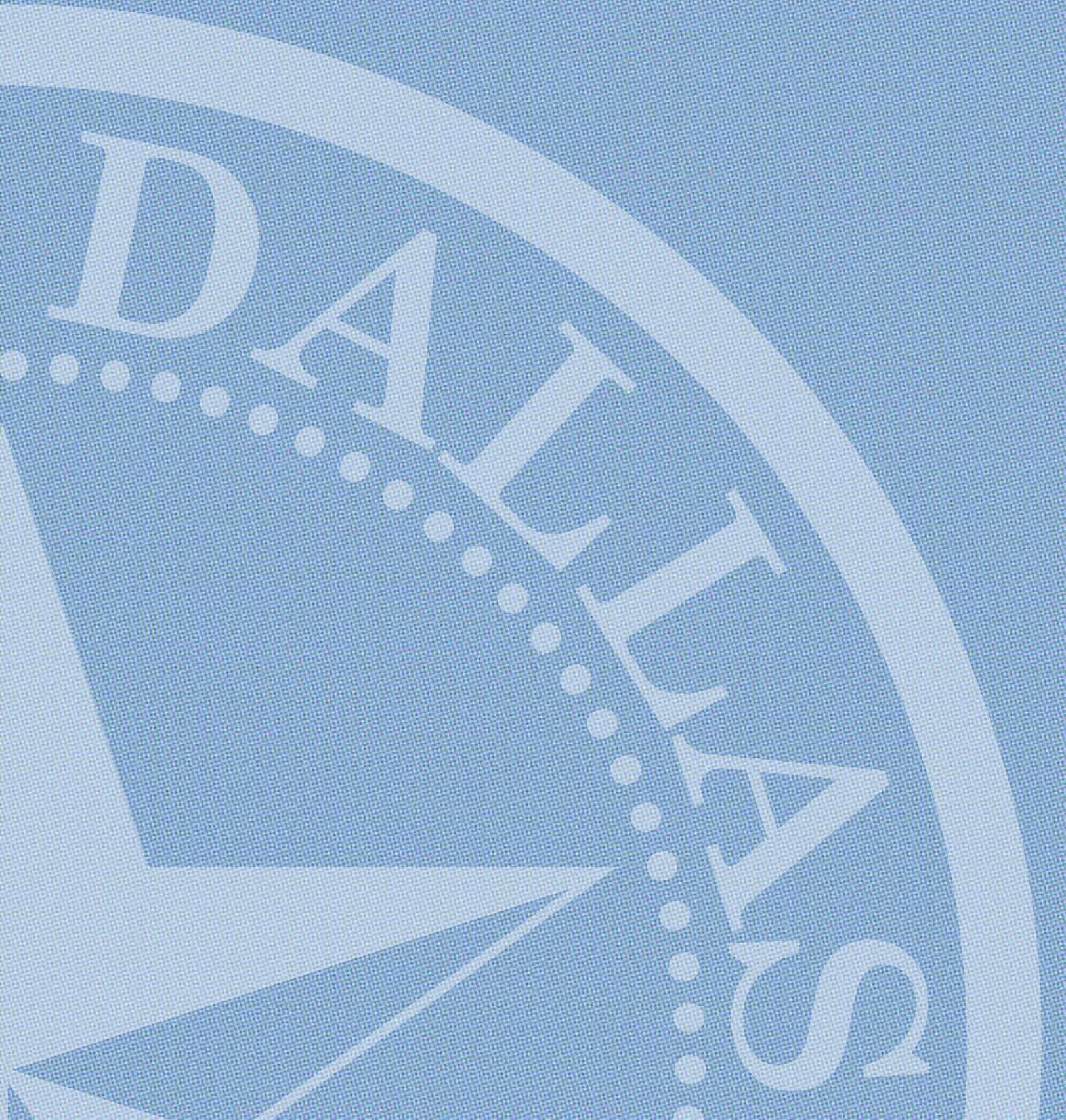


# STREET PROCESS MANUAL

CITY OF DALLAS

SEPTEMBER 2019





**City of Dallas**  
**STREET PROCESS MANUAL**

**SEPTEMBER 2019**



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## SECTION 1

# Introduction



# 1.1

## PURPOSE

This manual is intended to guide design teams through the process of planning and designing a street in the City of Dallas, and is guided by the policy established in the Dallas Complete Streets Manual as adopted by City Council in January 2016.

A street is among the most complex things we build. Its program is as multi-functional as that of any building. A street creates a path for people to connect to each other in cars, on transit, on bikes, on foot, and in wheelchairs. It links goods to homes and businesses. It provides a place to park cars and bikes, to load trucks, and to board buses or trains. It speeds police and fire responders to their destinations. A street is also a vital conduit for public utilities including electricity, water, gas, data, and sewage: it is the manifold a building “plugs in” to sustain its functions. When it rains, the street must drain the city, collecting, holding, and conveying the water to a river or stream. Therefore, the street is also an essential part of maintaining public health and economic vitality and must be properly constructed and maintained.

A street is also a place. It is where we open our front doors to, where we meet our friends, where we shop and dine, what we see when we look out the window. A street is an ecosystem, a place where trees clean the air and birds find homes. Streets define the City and the experience of living in it. There is no such thing as a great city without great streets.

Because streets are so complex, a well-built, well-designed street requires a multitude of experts. There are traffic engineers to sort out vehicular flows, civil engineers to design utilities, pavements, and drainage systems, landscape architects to select plants and make sure they have the resources to grow, urban designers to shape the public space, artists to add character, and graphic designers for branding. A good street design interacts with the buildings that surround it, which requires architects to play an essential role. Finally, finance experts are needed to ensure the City’s tax revenues are well spent. Building and maintaining a street is an inherently multidisciplinary endeavor.

Street projects can be initiated in many different ways. Some begin with the need to rebuild a street that is beyond its useful life, and some with the need to upgrade utilities. Some are rebuilt as part of a transit project or a highway project. Some are rebuilt as part of district urban design improvements. Some are built – or rebuilt – as part of a private development project. Thus, street projects can be initiated by multiple city departments, by other public entities like Dallas Area Rapid Transit (DART), Texas Department of Transportation (TxDOT), North Central Texas Council of Governments/Regional Transportation Council (NCTCOG/RTC), Dallas County, or an improvement district, or by private developers.

Regardless of who leads the effort to redesign a street, the same principles apply.

Every street project is an opportunity to improve the street and its surrounding neighborhood. The designer must consider all the uses of a street; how it fits into larger vehicular, transit, bicycle, and pedestrian transportation networks. Designs must consider the surrounding land uses and the character of the neighborhood. In all these areas, the designer must also think about how the street might change over its design life.

The design of a street is a statement of values as much as it is an engineering exercise. To get a great street, the design team must start by clearly identifying the goals of that street, and then must keep these goals in mind every step of the way as the design progresses.

To do all this well, four items are essential:

1. Involve all the necessary disciplines.
2. Involve all the necessary public agencies.
3. Involve the public and stakeholders.
4. Document the process.

This manual is a guide to satisfying these items.

# 1.2

## GUIDING DOCUMENTS FOR STREET DESIGN

### 1.2.1 Comprehensive Plan

ForwardDallas!, the City's Comprehensive Plan, is the document that sets forth policies to govern the future physical development of the City of Dallas. The purpose of this Comprehensive Plan is to promote sound development of the City and promote public health, safety and welfare. This is a comprehensive plan for the long range development of the City. It defines the character of districts and corridors and contains general guidance.

### 1.2.2 Thoroughfare Plan

The Thoroughfare Plan identifies the role of a particular street in the citywide roadway network, including its classification (thoroughfare, collector, local), its desired lane count, and its desired right-of-way. This is a starting point for street design. However, in the planning process for an individual street segment, the team may determine that the Thoroughfare Plan designations do not reflect current conditions and anticipated needs. In that case, the Thoroughfare Plan can be amended. Amendments are handled by the Transportation Department.

### 1.2.3 Complete Streets Design Manual

The Complete Streets Design Manual is a conceptual guiding document for all streets in the City of Dallas. It is an essential tool in the planning process of any city street improvement program and infrastructure modification.

### 1.2.4 Street Design Manual

The Street Design Manual (formerly known as the Paving Design Manual) is the design document that complements the Complete Streets Design Manual. It contains design guidelines and requirements that apply to all City of Dallas streets.

### 1.2.5 Drainage Design Manual

The Drainage Design Manual is the design document that governs the design of storm water infrastructure in the City of Dallas for both streets and private development projects.

### 1.2.6 Bike Plan

The Bike Plan is the guiding document for the City's bike network. It sets out a citywide bike network which shows required connectivity and an intent on how to accomplish it.

However, the exact alignment of bike facilities may be adjusted in the planning process as long as the same connections are created. Thus, the Bike Plan plays a similar role as the Thoroughfare Plan does for vehicular traffic but with less specificity. The Bike Plan also includes specific facility designs, but these design guidelines have been updated in the Street Design Manual.

### 1.2.7 Neighborhood and District Specific Plan

Some areas of Dallas have specific plans, including regulatory Planned Development plans as well as general community plans. These plans will guide street design in these areas.

### 1.2.8 Dallas Code of Ordinances

The City's Code incorporate aspects and requirements of street design in several chapters - Chapter 51A regarding the development and use of land, Chapter 43 for streets and sidewalks, Chapter 28 regarding motor vehicle and traffic, and Chapter 9 for bicycles and their use.

### 1.2.9 Water and Wastewater Procedures and Design Manual

The Water & Wastewater Procedures and Design Manual is the design document that governs the design of water and wastewater infrastructure in the City of Dallas.

# 1.3

## CITY DEPARTMENTS INVOLVED IN STREET DESIGN

### 1.3.1 Public Works

The Public Works Department is responsible for the design, construction and maintenance of the City's mobility infrastructure in the City's right-of-way.

Public Works is the lead agency in city street design and construction projects in public rights-of-way.

### 1.3.2 Transportation

The Transportation Department is responsible for the design, evaluation, repair, fabrication and installation of traffic signals, signs and pavement markings and traffic controls in the City's right-of-way.

In addition, this department provides planning and technical analysis for transportation projects related to thoroughfares, bicycle and pedestrian facilities, transit, freeways/tollways and Central Business District Streets.

### 1.3.3 Planning & Urban Design

The Planning & Urban Design Department focuses on creating a more livable Dallas by coordinating city efforts on the scale of streets, neighborhoods, and the entire city.

This department reviews projects for compliance with City Council adopted plans such as the comprehensive plan, various area plans and applicable City policies. As policy documents are adopted by the Dallas City Council, Planning & Urban Design works to ensure that streets are designed as contextually responsive public spaces that are properly integrated into the city.

### 1.3.4 Sustainable Development and Construction

Sustainable Development and Construction provides permit and plan review, approval and inspection services for private development.

Since all private development in the City of Dallas connects to city streets, since private developers often rebuild streets and sidewalks, and since buildings define the feel of streets, Sustainable Development and Construction plays an essential role in any street project involving private development.

### 1.3.5 Water Utilities

Water Utilities provides treated water to residential and commercial properties across the City of Dallas and portions of other municipalities, and collects and treats wastewater from those same areas. The vast majority of the pipes that carry this water and wastewater are underneath City of Dallas streets and alleys.

In a street design project, Water Utilities must be involved in the design of water and wastewater mains.

#### 1.3.5.1 Floodplain and Drainage Management

Dallas Water Utilities builds, operates, and regulates the drainage and stormwater system in the system of Dallas, including street drainage, storm drainage pipes, waterways, pumping plants, levees, and the Trinity River. The department must approve the drainage design on all projects within the City of Dallas, public or private. City of Dallas Streets are an essential part of this drainage system, carrying surface runoff to storm drainage pipes and providing a right-of-way for those storm drainage systems.

In a street design project, Floodplain and Drainage Management must be involved in the design of drainage systems.

### 1.3.6 Dallas Fire-Rescue Department

The Fire-Rescue Department responds to fires, crashes, medical emergencies, and other incidents across the City of Dallas. Streets are essential to its mission as a path to respond quickly to emergencies and as a working area at the site of emergencies. The Fire-Rescue department's fundamental mission of keeping Dallas residents safe also means it has a strong interest in making streets safer for all users.

The needs of the Fire-Rescue Department are taken into account in city street standards for efficient movement of their vehicles and for connection to fire hydrants and access to private properties including building fire department connectors. Deviations of these standards that may affect

fire-rescue operations must be approved by the department. In addition, the department must be consulted on the design of streets immediately surrounding fire stations.

### **1.3.7 Dallas Police Department**

The Police Department works to reduce crime and provide a safe city. The department plays a key role in street operations, enforcing traffic laws, managing traffic at special events, and responding to incidents. Streets are also vital to the department's ability to respond to crimes across Dallas.

The needs of the Police Department are reflected in city street standards. The department can also be a valuable resource in understanding existing safety issues and traffic flows that can be addressed through street design.

### **1.3.8 Dallas Park & Recreation**

Park & Recreation builds and operates parks and trails across the city. All of these parks connect to city streets, and the trail system integrates with streets to provide a connected pedestrian and bicycle network.

Park & Recreation must be involved in any street project that borders a city park or connects to a city trail.

### **1.3.9 Office of Economic Development**

The Office of Economic Development uses a variety of tools to attract business and development to Dallas. Streets can be a key part of these strategies. The department will be involved in projects funded by City incentives, Tax Increment Financing (TIF), or Public Improvement Districts (PID)s to track schedule, funding, and expenditures.

### **1.3.10 Housing & Neighborhood Revitalization**

Housing & Neighborhood Revitalization manages a variety of programs that support affordable housing and support communities. Based on this work, the department may identify needs for street improvements. It may also be involved in projects that use federal funds.

### **1.3.11 Sanitation Services**

Sanitation Services collects trash, recycling, and household hazardous waste from residents and businesses across Dallas. Streets are essential to providing these services.

City street standards are designed to allow for efficient sanitation operations.

### **1.3.12 Other Local Entities**

Other local entities may be involved in some street projects based on local factors. These include:

- Dallas Redevelopment Authority
- Dallas Groundwater Trust
- Dallas Conservation Commission
- Dallas Landmark Commission
- Dallas Arts Commission

Note that referenced manuals and additional information are available through the City of Dallas website.

# 1.4

## OTHER AGENCIES INVOLVED IN OR AFFECTED BY STREET DESIGN

### 1.4.1 Dallas Area Rapid Transit (DART) / Transit Agencies

DART operates rail, bus, and paratransit across Dallas and twelve surrounding cities. DART also operates the Dallas Streetcar, which is owned by the City of Dallas. The McKinney Avenue Trolley is operated by the McKinney Avenue Transit Authority.

DART must be involved in street projects that include or cross light rail lines, cross right-of-way which is owned by DART, connect to transit centers or light rail stations, or have bus routes on them. DART should also be consulted to see if a street might be used for future service so provisions can be made. DART coordination should not be limited to maintaining current conditions; street projects are an opportunity to improve transit through higher quality stops, better stop locations, transit priority measures, and better pedestrian and bike access to transit.

### 1.4.2 Railroads

Several private railroads – Union Pacific (UP), Burlington Northern Santa Fe (BNSF), Kansas City Southern (KCS), Dallas, Garland & Northeastern Railroad (DGNO), and Fort Worth and Western Railroad (FWWR) operate freight trains in Dallas, carrying long distance loads and serving local customers. In addition, Amtrak and Trinity Railway Express (TRE) operate passenger trains on some of the same rail lines. Some of these tracks are owned by the railroads themselves, and some by public agencies like DART. Tracks can be in private right-of-way or in city streets, and there are hundreds of places where railroad tracks intersect city streets.

Railroads must be consulted on any street project that crosses or is within the railroad right-of-way or includes a railroad crossing, track, or overpass.

### 1.4.3 Texas Department of Transportation (TxDOT)

TxDOT manages, builds, and maintains the statewide highway system, including freeways, feeder roads, state highways, and farm-to-market roads. TxDOT also provides funding for a variety of transportation projects and can serve as a conduit for federal funding.

TxDOT must be involved in any street project that includes a segment of state or federal highway or connects to any state or federal highway. These segments can be identified using the statewide planning map. TxDOT must review and approve the design plans for federally funded construction projects once an agreement is in place.

### 1.4.4 North Texas Tollway Authority (NTTA)

NTTA operates toll roads, including the Dallas North Tollway and the President George Bush Turnpike.

NTTA must be involved in any street project that connects to a NTTA facility.

### 1.4.5 Texas Department of Licensing and Regulation (TDLR)

TDLR is one of several licensing agencies of Texas. Among its responsibilities is the Texas Accessibility Standards (TAS), which ensure projects are accessible to the disabled.

All construction projects in the State of Texas, including streets, are subject to TAS and must be registered with TDLR if the accessibility improvements exceed \$50,000.

### 1.4.6 Adjacent Cities

Wherever the City of Dallas borders another city, the street system continues across the city limit line. Both cities, and all their residents, benefit if this continuation is as seamless as possible.

All street projects which connect to another city should be coordinated with that city.

## 1.4.7 Private Utilities

A variety of private utilities, including electric, natural gas, cable television and telecom, use City of Dallas street rights-of-way to serve their customers. This is governed through franchise agreements. It is essential to the City that these utilities operate properly, but it is also essential that their impacts and presence within the right-of-way are minimized. Badly located poles, utility boxes, and manholes can block pedestrian access, restrict visibility, inhibit the growth of landscaping, block businesses, and make a street unattractive.

All street projects must coordinate with private utilities within their project limits.

## 1.4.8 Counties

Portions of the City of Dallas are in five different counties: Dallas, Collin, Denton, Rockwall, and Kaufman. Counties play a minimal role in most street design projects, except where they fund projects. However, Dallas does border unincorporated areas, where counties are responsible for streets, and connections need to be coordinated. In addition, there are county owned and operated facilities within cities limits.

Dallas County regularly funds and builds projects within the Dallas city limits. Through the Major Capital Improvement Program (MCIP), Dallas County partners with the City to provide funds for some street and trail projects. On these projects, Dallas County will be involved in reviewing and approving construction. Dallas County also serves as the lead design and construction agency for some projects, particularly trails. On these projects the County will organize and lead the process and the City will review and approve.

Street projects must coordinate with the appropriate county where they connect to county-maintained streets, where they are funded by counties, or where the streets serve county facilities.

## 1.4.9 Public Improvement Districts (PID)

PIDs, and other improvement districts serve some areas of Dallas, where they can build projects ranging from complete street reconstruction to signage, maintain the public realm, and do other things to improve their districts.

Any project within the limits of a public improvement district should be coordinated with that district to make sure it coordinates with district projects and to determine if the district is interested in partnering on the project.

## 1.4.10 School Districts

Dallas ISD, other school districts, and private schools provide education within the City of Dallas. Streets are essential to these districts as a way for children to get to school. Streets can make it easier and safer for children to walk or bike to school. Schools can also cause particular traffic issues for the surrounding neighborhood.

Any street project that borders a school, and provides access to the school from the nearest arterials, or is within ¼ mile walking distance of the school should be coordinated with the school district. If possible, construction should be performed during school breaks.

# 1.5

## STAKEHOLDERS AND THE PUBLIC

In designing a street, we must always remember that nobody knows a neighborhood as well, or cares about its future as much, as the people who live, work, play, and spend time there.

### 1.5.1 Land Owners

The landowners whose property adjoins a street will be affected by both the final design of the street and its construction. Adjacent landowners are important stakeholders to be considered during the street design process. It is important for a design team to understand land owner's needs and their vision for a corridor. On a practical level, coordination is required for access, driveways, loading areas, connections to front doors, trash pickup and utilities. However, it is important to understand that land owners do not have the final say on a street, which serves all of the public and belongs to all landowners in the City of Dallas.

### 1.5.2 Businesses

Businesses on a street, or nearby, are dependent on that street for their livelihood. A well-designed street will help businesses thrive. Early coordination with businesses and their employees will be very helpful in understanding how a street functions today and how it might be improved. It is also critical to coordinate with businesses during construction. It is important to remember that businesses who are leasing their premises are important stakeholders and may have different interests than the property owners who hold these leases.

### 1.5.3 Residents

Residents on a street and in the surrounding areas will live with the results of a street project every day. They are essential stakeholders in the design process. It is important to remember that residents who do not live immediately on a street are still stakeholders, and that renters should be considered along with property owners.

Every public outreach process should make an effort to reach all residents, not just those with the time, money, or political clout to be easily heard.

### 1.5.4 Neighborhood / Homeowners Associations

Neighborhood associations are a valuable conduit to residents and should always be engaged. However, it should not be assumed that these associations speak for all residents, so this outreach does not substitute for direct resident contact.

### 1.5.5 Institutions

Schools, colleges, hospitals, religious institutions, and social service organizations depend on streets to perform their mission and serve as important social anchors for neighborhoods. They should be involved in any street projects that directly borders their facilities or nearby projects that provide access for cars, pedestrians, or bicyclists. Some vehicle types, like school buses or ambulances, have special requirements and should be specifically considered.

### 1.5.6 General Public

Any street in the City belongs to all of the City's residents, and they must be given an opportunity to participate in the design process.

### 1.5.7 Advocacy Organizations

Advocacy organizations can be invaluable as a source of information about a street and as a conduit to the public.





A blue-tinted photograph of a street scene. In the foreground, there is a utility pole with a transformer and a street sign. The background shows trees and a building. The text is overlaid on the left side of the image.

**SECTION 2**

# Initiating a Street Project

# 2.1

## STREET PROJECT INITIATION

Most City street projects are initiated by the City as part of the Capital Improvement Program (CIP) process. The City has maintained an inventory of Capital Needs since 1995 that is commonly referred to as the Needs Inventory. These are unfunded projects. Projects identified in the Needs Inventory become candidates for funding consideration in future capital improvement bond programs. Streets may be placed on a CIP because of:

- poor pavement condition,
- the need to rebuild or expand storm drainage systems,
- a need to address transportation congestion or connectivity,
- to address safety issues, or
- to revitalize a neighborhood or business district.

Street projects may also be initiated by citizen petition, Council authorization, or City, County and/or State interagency collaboration.

# 2.2

## PRIVATE DEVELOPMENT PROJECTS

New development projects can include new streets, either to add a street network in a previously undeveloped area or to add more streets to allow denser development on an infill site. These streets will be funded and constructed by a private developer, but will need to meet City of Dallas standards and may be taken over by the City of Dallas when development is complete. They will also connect to existing City of Dallas streets. While these street projects are originated by a private developer, it is still important to follow a complete, well-documented design process and to involve the public in decisions that impact them. These private development projects are coordinated with the City of Dallas, Engineering Division of Sustainable Development & Construction Department.

For street design projects initiated as part of a private development, the due-diligence and thought process to achieve a well designed street is much the same as that required for public projects. It is the developer and design team's responsibility to provide in-depth due-diligence research and manage their project schedule, including private funding stipulations. Leveraging the information captured in the Street Design Project Development Form (Appendix A) will support a consistent approach to street design across public and private projects and will provide City staff with a consistent set of information to review private development projects.

Currently, private developers have two formal meeting opportunities with the City to discuss their projects: the Pre-development Meeting, and the Submittal Meeting.

The City's "Dallas Development Guide" includes detailed information on legal, permit, and approval requirements that will also apply to private street projects.

## 2.2.1 Pre-development Meeting

The Pre-development Meeting is not required for developers or designers, but is strongly recommended. The Pre-development Meeting is a route that allows for initial feedback to the developer, that can result in cost savings in time, schedule, and budget through gaining knowledge of City requirements early at the planning stages of the project.

The developer or designer shall bring a completed copy of the Project Development Form in Appendix A as their initial due-diligence to the optional Pre-development meeting.

## 2.2.2 Submittal

The developer or designer shall provide a copy of the completed Project Development Form with any revisions noted as a proof of due-diligence (Appendix A) to the required Submittal meeting. This will aid in the review process and ensure projects consider issues that otherwise may result in lengthier review processes and rework.

Note: For projects that are not standard City of Dallas CIP projects, design team should coordinate with City staff to develop approach that adheres as close as possible to the approach defined in this manual.

Early coordination on these project will ensure a consistent approach and outcome on various street projects.

Street Design Project Development Form A shall be submitted with each plan submittal as part of all projects.

# 2.3

## PUBLIC / PRIVATE COORDINATION

Private development projects may involve connecting to existing streets, rebuilding or upgrading portions of City of Dallas streets, or building new streets. This may involve intersection improvements, new median cuts or turn lanes, public realm improvements, or even complete reconstruction. These projects can have great benefits to the City as well as the developer. Because existing streets are involved, the level of public input and coordination required is very similar to that of a City of Dallas project.

# 2.4

## PARTNERSHIP PROJECTS

Other public agencies frequently originate projects that involve reconstruction of sections of City of Dallas streets. This can include reconstruction of streets to accommodate new transit lines, rebuilt intersections where city streets meet state highways, or street improvements in a Public Improvement District. Often in these cases, other public agencies, not the City of Dallas, will lead the design and public outreach process. The City may also serve as the lead agency for the partnership project. The agreement will ultimately outline the roles and responsibilities of each agency involved. It is critical, though, that the City play an active role to ensure that the same standards and level of thoughtfulness that would be applied to a city project are applied here as well.







**SECTION 3**

**Project Definition**

This form should continue to be used and updated at each stage of the process, and be included in every submittal to the City. It captures both the goals for a street and the design features intended to achieve those goals. At each submittal, it will have a greater level of detail.

# 3.1

## FEASIBILITY STUDY

The City of Dallas Street Design Manual sets forth guidelines and standards that give project design teams and City staff tools to develop street projects that address goals for multimodal mobility, urban design, safety, accessibility, drainage, utilities, and economic development. These build on the Complete Streets Manual and other reference documents to provide a new baseline for what can and should be achieved in any scale of street project, from local intersection upgrades to the reimagining of major corridors.

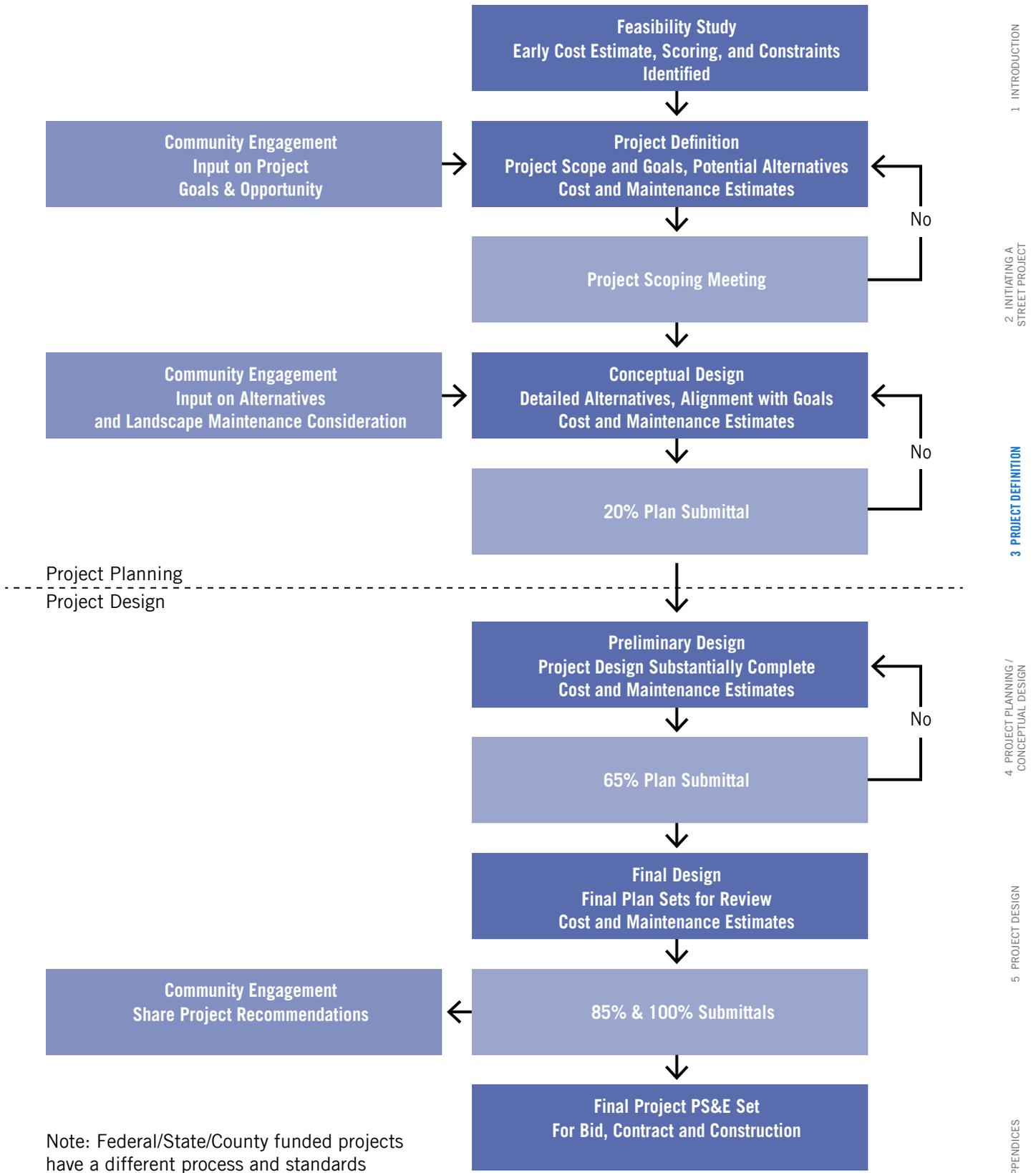
Figure 3.1 shows the overall project development process recommended for projects in the City of Dallas to support the achievement of the City's desired outcomes.

A key first step in developing the right project is a Feasibility Study and Project Definition. A well-defined project will address questions upfront and allow work to focus on delivering the best possible outcome.

Project definition generally occurs before a design team is selected as part of the City's long-term budgeting process. It is important to be clear on the expectations for the street to appropriately set a budget. A feasibility study for a proposed project or roadway corridor should be developed and include an overview of the proposed project, general design characteristics, approximate cost, and potential funding source or implementation approach. It should identify any major implementation challenges or dependent projects to support future prioritization. For City projects, this is done before the preliminary scope and serves as the basis for project scoring, prioritization and budgeting.

While a feasibility study is typically conducted at a fairly high-level so as not to invest too many resources in projects that may not rise to the level to be competitive for scoring and implementation, it is worthwhile to collect meaningful background data about the project. This should include utilizing the Project Development Form (Appendix A). This form captures many of the key questions that will form a thoughtful project design process. At the feasibility stage, the form may only be developed at a high-level but will support a comprehensive look at the issues and opportunities for each project.

Figure 3.1 Project Development Process



## 3.2

### SCORING / RANKING

The City, as part of its bond and CIP program, has a process and criteria for ranking projects.

Projects shall be scored and ranked based on the approved prioritization criteria and added to the needs inventory database for funding in a future capital bond program.

Projects initiated by others do not require scoring if funding will be provided by sources outside of the City's CIP.

## 3.3

### BUDGETING

Many projects require multiple years of planning, project development and design. Given the long lead time, budgeting becomes a critical element to match project expenditure to the time when funding is available. This includes funding from multiple sources, and should consider the life-cycle of a project from design, to construction, to maintenance.

To create a reliable street planning, design, and construction process, each City of Dallas project should be assessed at each project phase to understand the estimated project cost. Project cost estimate should be broken down to understand key drivers.

- Right-of-Way
- Street Infrastructure (e.g., pavement, base layers, sidewalks, traffic control)
- Landscape, urban design and lighting
- Stormwater
- Aesthetic expectations (level of finishes, street furniture, gateways, public art)
- Other cost drivers

Where possible, design teams should identify opportunities to deliver project goals more efficiently and effectively for the best use of public funds. This should include estimated costs to the City as well as the potential for maintenance agreements for entities other than the City of Dallas to maintain projects.

Every City of Dallas project shall be designed to be a complete street that accommodates all appropriate modes of transportation. However, the level of finishes, street furniture, landscaping, and amenities will vary based on context, and it is critical to identify those expectations at this stage.

# 3.4

## DEFINING THE PRELIMINARY SCOPE

Scope Definition is paramount to a successful street design. A project must begin with a clear definition of purpose and need before identifying the scope. A good process requires defining the problem before developing a solution. In this phase, the project manager or design lead needs to accurately identify the needs and goals of the project and then define the scope. Starting with a precise purpose and need will greatly help to refine the project scope. It also goes a long way to protecting a project from budget overruns and schedule delays. The scope can include the various modes that need to be accommodated in a complete street design or the approach for managing water quality and drainage issues. This should be articulated clearly and in writing. This way, the whole team can understand and approve it from the beginning. This will help focus resources, identify who needs to be involved, keep the project focused, and avoid scope creep or the compromises, which work against the original goal.

Project purposes may include:

- Relieve congestion
- Alleviate flooding
- Increase safety for any mode
- Improve the environment in front of businesses

Project scopes may include:

- Expand capacity or reduce delays for any mode
- Improve drainage
- Reconstruct failing pavement
- Create new connections for any mode

A scoping meeting with City staff and any other local agencies at this stage is recommended to identify issues that should be addressed in the project. This should focus on issues to be addressed, so that a well-defined project can be developed. This will minimize scope changes in later phases. Scope changes past this phase are often costly – both in time and budget, and in negative public perception.

Before the scoping meeting with the City, the project design team should have walked the extent of the project, documented specific findings, and considered key questions relevant to the project. This should include but not be limited to establishing or recommending:

- Need and purpose for the project.
- Mobility modes the project needs to accommodate.
- Estimated project budget.
- Departments, agencies, or other stakeholders that should be coordinated with as part of the project.
- Applicable City or district urban design guidelines or standards for the project area.
- Current and projected site context, such as adjacent land uses, sidewalk widths, lane widths, bike lanes, buffers, the target speeds, on-street parking needs, lighting, etc. and how they might impact the project design.
- Other projects planned that may affect this project. This can include both public sector capital projects and private development that may impact the context of the project area.
- Fit of the project into the broader networks for mobility, drainage, and other utilities.
- When and how the public will be engaged in the project.

After meeting with City staff, the design team should develop a project definition that addresses these parameters and submit to the City for review and comment. The Project Definition should be finalized and help guide the project forward through development. To support project development, the project manager and design team should refer to the Project Development Form (Appendix A) as this provides a more detailed overview of what information will ultimately be required for the project as it moves forward through design. A copy of this form, filled out with the information known at this point in the process, should be followed to help guide design teams as the project moves forward.

# 3.5

## COMMUNITY ENGAGEMENT

Early in the Project Definition process, identify project stakeholders within the community that may be affected or impacted by the project. These stakeholders may include local neighborhood groups, chambers of commerce or merchant associations, or individual businesses or facilities with significant traffic demand.

While not every project requires a public input process, the City of Dallas and other initiators of street projects should consider providing opportunities for the community to provide input on goals and outcomes for a project. The approach for obtaining this input should be tailored to fit the project based on the scale, potential scope of the project and the potential impact to the various stakeholders. Stakeholders that may be considered for engagement are outlined in Sections 1.3 through 1.5 of this Manual.







**SECTION 4**

# **Project Planning / Conceptual Design**

# 4.1

## PROJECT PLANNING PHASES

The project planning process can greatly influence the development of a successful street project. Project planning and scoping at the start of a design process is the best approach to deliver a successful project from start to finish.

### 4.1.1 Project Definition

If a Project Definition, as described in Section 3 of this manual has been developed for the project, then the project definition may be reviewed with the City's project manager and relevant staff prior to the kick-off of the Conceptual Design Phase for the project. If the Project Definition has not been developed and approved by City staff, then the project should begin with Section 3 of this document.

### 4.1.2 Conceptual Design

Upon approval of the Project Definition for a project, the most important phase in Project Planning is Conceptual Design. In the Conceptual Design phase, the design team should develop a project to schematic level design. This must include cost estimates, project schedule and identify project specific issues that will need to be addressed along with any potential variances needed to meet the goals defined in Project Definition.

Where potential trade-offs may be required in a project design, such as where right-of-way is limited or where multiple modes would benefit from access to curb space, alternatives should be developed. They may be in the form of potential street cross-sections for challenging locations as well as schematic plan views showing various alternatives. Additional visual devices such as renderings may be developed to best communicate various alternatives.

The Street Design Project Development Form shall be developed and submitted at each phase of the project with updates made as more details are determined about a project. For submittals after the Conceptual Design phase, changes to the Form should be noted for the Project Review Team. This tool helps ensure the street design aligns with the overall purpose and needs for the project and the City's mobility and infrastructure goals.

# 4.2

## CITY OF DALLAS PROCESS STEPS TO SUPPORT PROJECT PLANNING / CONCEPTUAL DESIGN

### 4.2.1 Establish Interdepartmental Project Review Team (PRT)

A successful project will involve many departments in the City. Coordination between these stakeholders allows projects to fully address all the goals that would have otherwise been overlooked. Lack of communication results in significant missed opportunities. Goals assessed late in the design phase can lead to schedule delays, additional expense, and frustration for the design team.

For each project, an interdepartmental PRT is needed to provide feedback to the design team, and a specific project manager should be assigned to the project to manage correspondence. City Departments that should be included in each PRT include:

1. Public Works
2. Transportation
3. Sustainable Development & Construction
4. Planning & Urban Design
5. Water Utilities

At this stage, the project team should also identify all departments and agencies that need to be consulted on the project. See Sections 1.3 and 1.4.

### 4.2.2 Team Confirms Goal Definition

The PRT will play a key role in ensuring projects are developed to meet City of Dallas objectives. Early in the Project Planning phase, the PRT should review the Project Definition including defined goals through a lens of Complete Streets, Urban Design and stormwater planning. The team sets the tone for the build-out design that the designer will carry out. Teams should be well versed in current Dallas plans and process manuals, in order to advocate and enforce engineering measures that the designer may not be considering, or may be unaware of.

As project opportunities and coordination between agencies appear, the numbering of the project score/ranking should be adjusted to show the effect of the new opportunity, increased constructibility, and/or need of the project.

### 4.2.3 Issue / Opportunity Identification

Prior to the submittal of the Conceptual Design (20%) plans, the design team should develop a set of potential opportunities to be addressed as part of the project. The completed Street Design Project Development Form (Appendix A), shall be developed as an input and documentation of a holistic approach to the project design.

### 4.2.4 Alternative Development

One element of the Complete Street Design approach is that there is no simple “typical street section” that can easily be applied to an entire project or corridor. The potential land uses and available right-of-way may change along a corridor. Some sections of a street may have transit service while others may not. This requires careful consideration as street projects are being developed, often at the block level for both sides of a street.

At the Conceptual Design (20%) phase, the design team should develop necessary alternatives to meet the project definition and goals defined in Section 3. In some cases, there may be only one reasonable alternative. In others, several alternatives should be proposed and evaluated for factors such as multi-modal mobility, drainage, cost, and alignment with community feedback. These alternatives may cover the entire project scope or be developed separately for specific locations within a project.

## 4.3

### DESIGN RECOMMENDATION AND DECISION MAKING

The design team should provide an overview of the various project alternatives to the PRT. The design team should make a recommendation on the preferred alternative based on their assessment of priorities for the corridor as part of the Conceptual Design (20%) project submittal. As the decision may require trade-offs between desired outcomes, the PRT will provide the final decision on the preferred alternative to move forward into final design. The final recommendation along with the alternatives considered should be documented in a Basis of Design report as part of the Conceptual Design (20%) submittal.

## 4.4

### COMMUNITY ENGAGEMENT

The purpose of virtually every project is to benefit a community. Therefore, it is reasonable to view the community as stakeholders and seek their input. Although most members in a community are not experts in design, they can often provide useful design assistance. This assistance can be useful in properly refining the scope work and ensuring the success of a project. For most projects, it is beneficial for the community to be engaged and provide feedback on the preferred alternatives for a project. This is essential where a project will have a significant impact to a street, but it can also identify opportunities to use routine projects to improve a community. This engagement should provide input into the recommended alternatives for a project before entering the final design phase. This input should be evaluated as part of the PRT decision on the preferred alternative. Community engagement should be tailored to the project location, stakeholders and project specifics and should include at least one public meeting. Also, a decision about landscape, other amenities and their ongoing maintenance must be discussed with the community.

In addition to providing stakeholder input, community engagement provides other benefits that can make the engagement process worthwhile. Community members are given an opportunity to connect with their city government and their neighbors, and develop more ways to improve their community. For a well-designed project with good engagement, these community members can even become project proponents that help to facilitate support during the construction phase.

# 4.5

## CONCEPTUAL DESIGN SUBMITTAL

The design team should develop the Conceptual Design as the 20% design submittal for the project.

Upon completion, the design team should submit the 20% Conceptual Design plan documents to the City for review. One key requirement for the submittal is the inclusion of the Street Design Project Development Form found in Appendix A. This form covers the range of issues that may be addressed in a particular project to ensure the project delivers on the purpose and needs defined in the Scope Definition phase. The form is intended to ensure that each design team is thinking holistically about a range of issues that may be impacted by a project. For example, by ensuring that a design team working on a sidewalk assesses where bus stops are located, opportunities to improve accessibility and where to incorporate a bus stop shelter (or at least space for a shelter).

The following are necessary to fully define the scope and to drive the design of a project. Therefore, these must be completed beforehand and included with the Conceptual Design (20%) Submittal:

- Street Design Project Development Form (Appendix A)
- Geotechnical Report
- Preliminary Subsurface Utility Engineering (SUE) - The location of subsurface utilities based upon record information. (Additional SUE may be required later in the design process.) Identify any high risk or high expense utilities that may affect the design or the construction.
- Topographic Survey/Right-of-Way Survey
- Preliminary Cost Estimate - Budget sources must also be well defined including any funding constraints that may affect the final cost. Examples of constraints might include schedule limitation of the funding source or limitation on how or where the funds may be used.

- A Design Basis Report, which includes:
  - Description of the project purpose and need along with work scope to fulfill the purpose and need. (In some cases, this may include a range of alternatives to be selected at the conclusion of the concept design)
  - Potential design conflict issues including issues that may require a design exception, potential utility conflicts, or right-of-way conflicts
  - Unusual or atypical cost impacts

If the process is timed well then:

1. Texas811 is called before any geotechnical boring.
2. The topographic survey is conducted following Texas811 markings so those markings are included in the survey.
3. The utility plats and survey of the Texas811 markings can be included in the Conceptual Design (20%) plan submittal
4. Known or suspected utility conflicts, if any, can be identified early in the design process.

# 4.6

## COMMUNITY CONFIRMATION

For some projects, the City may wish to hold a second step of community engagement to share the recommended alternative to move forward into Final Design. Once the City approves the Conceptual Design (20%) concept or any recommended design alternative, the engagement would begin.

# 4.7

## SCOPE DEFINITION

The Street Design Project Development Form (Appendix A) and any other scope information shall be updated based on the preferred project alternative and will serve as a basis for final design development.

# 4.8

## CONTRACT NEGOTIATION

If a partnership or coordination opportunity is available, a contract or Memorandum of Understanding should be written and signed by both parties before full design and construction. The City may also enter into contract negotiations with a design team to take the project from Conceptual Design (20%) to Completion. This may be the same design team that developed the preferred alternative or it may be different.

For federally funded projects, agreements will be required earlier in the process.

# 4.9

## PROJECT MANAGER

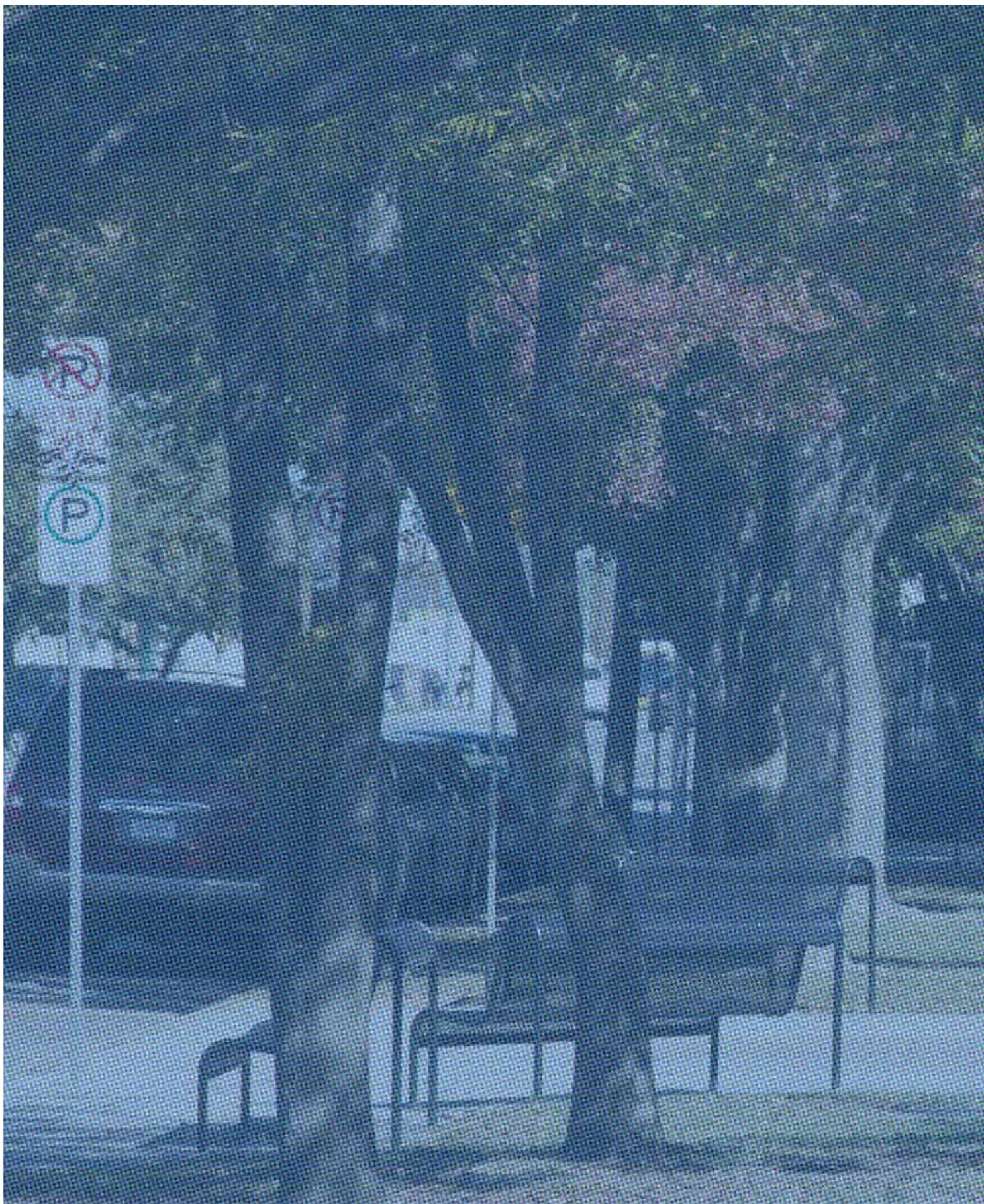
A City Project Manager (PM) shall be assigned to manage the scope, schedule, budget and ensure these are in alignment with the project goals. The PM shall also ensure all correspondence and decisions are documented and consistent throughout the project. The PM shall provide regular updates and notify the Assistant Director if proposed changes to the project arise that will substantially impact the outcomes for the project, either negatively or positively.

# 4.10

## THOROUGHFARE PLAN COORDINATION

Where necessary, the City's Thoroughfare Plan should be revised to align with the project scope that will move forward to the final design phase of the project. City staff will initiate a Thoroughfare Plan update if required. This process takes several months and requires City Council action.







SECTION 5

# Project Design

# 5.1

## DOCUMENTATION REQUIREMENTS

### 5.1.1 Project Submittal Phases

Once a project is approved at the Conceptual Design (20%) phase of development, it moves into final design. There are three phases of final design:

1. Preliminary – 65%
2. Pre-final – 85% (for review)
3. Final – 100% (for construction)

The specific requirements for each submittal are defined in the City of Dallas Street Design Manual. The form in Appendix A shall be included with each submittal.

It is recommended that on projects with community engagement, the City and design team conduct a final round of public information after the Pre-final Design (85%) is complete to share how final design reflects the scope, goals and community input developed through the earlier phases of the project development. This should be tailored by project and may include on-line or in person information.

For the Pre-final phase (85%), the consultant should progress to a point they believe is 85% complete. The Pre-final submittal can be reviewed by all relevant staff. The Pre-final plan set shall be denoted as required by Texas professional licensing rules and regulations, and shall indicate “Not for Construction.”

The Final phase (100%) would merely be for ensuring that all of the Pre-final comments were adequately addressed. This set shall be signed and sealed by the responsible design professional(s). In most cases, only the City’s Project Manager would need to conduct a review at this phase.

These requirements apply to city funded projects and are the minimum for any project lead by the City. However, projects with outside funding, including county and federal funding, will have separate requirements that must be followed.

For projects that are not standard City of Dallas CIP projects, the design team should coordinate with City staff to develop an approach that adheres closely to the approach defined in this manual.

Early coordination on these projects will ensure a consistent approach and outcome on various street projects.

Street Design Project Development Form A shall be submitted with each plan submittal as part of all projects.

Some simple projects may not require all of these phases, and some complex projects may require additional submittals.

### 5.1.2 Staff Review Period

The City PM for the PRT should coordinate with the Design team and communicate the expected review time for each submittal. This should be as streamlined as possible while still allowing a thorough review and will vary due to issues such as project complexity or overall project backlog. The expected review time should be discussed during contract negotiation. At any point, if a review period is expected to exceed the agreed to timeline, the City’s PM should notify the design team with an updated timeline.

### 5.1.3 Route for Review

The project should be reviewed by each member of the PRT, specifically to address issues relating to their field of expertise and oversight. These reviews should be completed within 3 weeks of project submittal to allow one week for the project manager to compile feedback.

### 5.1.4 Confirm and Compile Staff Comments

The City PM should compile the review comments from each reviewer at each stage of the project. Comments should be provided in a consistent format including redlines and comment table. Consultant should document changes made and address specifics at each submittal phase of the project.

### 5.1.5 Provide Comments to Designer

The City PM should submit comments to the Design Engineer.

# 5.2

## APPROVAL REQUIREMENTS

It is the responsibility of the Designer to ensure that all agency requirements are satisfied before approval of the final design is provided.

Plan seals shall include:

- The professional engineer (or other registered professional) having responsible charge for the project shall seal the title sheet and each of the plan sheets.
- Some sheets or portions of sheets may be sealed by other professionals as appropriate and are incorporated in the overall design. In these cases the sheet shall identify the appropriate limits of that responsibility as per the Texas Engineering Practice Act.

City approval signatures are not for approving a design, but for approving the project to move forward, and are based upon the professional recommendation of the professional sealing the plans.

All projects with signal work or changes to the road delineation (striping and signage) must be approved by the City.

All projects with work on water mains, sanitary sewer mains, or in creek beds must be approved by Dallas Water Utilities and any other applicable agencies.

Title sheets shall indicate what specifications and what standards (including date) are incorporated into the design.

# 5.3

## EXCEPTION PROCESS

It is inevitable that the best design for some projects may sometimes require deviation from the City standards. In these cases a design exception approved by the Director is required. Any pilot items, innovative measures used to address the project goals, and variances should be noted by the Designer, be fully documented, discussed with the City, and approved by the Director before the design is completed. It is anticipated that in most cases the design exception will be identified with the Conceptual Design (20%). Since design exceptions require engineering judgment, the exception shall be documented in a technical memorandum or engineering report prepared and sealed by the engineering consultant before seeking approval by the Director. The Design Exception request shall include at a minimum:

- The standard for which deviation approval is being sought
- Deviation that is being proposed in lieu of the standard
- Reasoning for the deviation approval request
- Any mitigating factors that support need and approval of the deviation

All required documents, as well as any additional documents that support the request, should be filed in the project folder. This process is intended to allow for innovative approaches, address unique contexts, and deal with constraints such as limited right-of-way. Reducing project costs does not typically provide adequate justification for a design exception. Exceptions should always be the result of a thoughtful discussion that considers all the needs and impacts of the project and the various alternative solutions.

A template for a Request for Design Exception is provided in the Appendix A.2.

# 5.4

## COST ESTIMATING

### 5.4.1 Cost Estimate and Project Scope

It is expected that an engineer designs a project that is consistent with the budget. Where a budget has been set too high or too low to achieve the intended scope, it is incumbent on the designer to inform the City Project Manager as soon as this becomes apparent. Adjustments to the scope, schedule, or budget will likely be needed.

Estimates that are too low result in budgets that are too low and can lead to significant project delays or possibly a project cancellation. Estimates that are too high can lead to budgets that are too high, which may also lead to either the project being canceled or cancellation of other projects due to a perceived lack of funding.

Project budgets shall be developed to reflect the intent and requirements of this manual. In addition to the roadway elements, the budget shall include appropriate urban design elements fitting the context of the street project in its neighborhood or proposed development. The budget figure shall include soft costs such as professional services and real estate for needed right-of-way or easements.

### 5.4.2 Anticipated Professional Level of Expertise

It should also be noted that a construction cost estimate by the designer or engineer cannot be a guarantee of the actual cost. Some of the factors affecting the final cost are unknown and may be beyond the project engineer's available knowledge at the time of design. Examples of these factors include:

- Underground obstacles not documented or readily anticipated
- Soil conditions not found in geotechnical report

- Unexpected soil contamination
- Unexpected utility conditions
- Changes in local market conditions for cost and availability of labor, materials, and equipment

It is expected that the project engineer use the best available information and their professional expertise when developing the cost estimate.

### 5.4.3 Comparing Cost Estimates to Bid Results

Comparing past bid results and cost estimates can be instructive when developing a project cost estimate. Although several bidders will also have their own opinion of the project cost, the actual cost will only be determined by the lowest responsive bidder. A good design with a clear set of plans and specifications will likely result in bids that are close together. Bid results that are far apart suggests that the bidders interpreted the plans and requirements differently.

### 5.4.4 Cost Estimate Contingencies

Contingencies are usually included in estimates to cover unforeseen circumstances that develop in virtually every project. It is typical to include a higher contingency at the beginning of a project. As the project progresses and more detail and information becomes known, a reasonable contingency is derived. A contingency may be as high as 40% in the early planning phase and is typically reduced to 10% by the time the design is completed.

### 5.4.5 Quantity Sheets

To better ensure a complete design and a successful bid, the final design must include quantity sheets (Q Sheets). Many disagreements and change orders during construction can be avoided by proper use of the Q sheets. The designer or engineer shall prepare Q sheets to cover each of the items in the bid (or on the bid sheets). The designer or engineer shall ensure that the Q sheets, the bid sheet, and the cost estimate are all consistent.

# 5.5

## SUBSURFACE UTILITY ENGINEERING

One of the most common causes for a project delay during construction and for contract change orders results from discovering that the subsurface utilities on the site are not as depicted on the plans. Most of the delays and change orders can be avoided through better Subsurface Utility Engineering (SUE).

Utility record information (as-builts) should be researched and indicated on the plans before completion of the Conceptual Design (20%). Often the location of these buried utilities can be confirmed by locating manholes, valve covers, utility vaults, markers and other associated surface features during the topographic survey.

Some utilities, if improperly located represent a high risk to construction delay or change order. Typically these may include:

- Large water mains
- Sewer mains and storm drains with a mild slope
- Fiber optic lines
- Petroleum lines
- Other utilities, if improperly located pose a high safety risk to the contractor or to the general public during construction. These may include:
  - High pressure gas lines
  - Underground electrical lines over 400 volts

In these cases, it is worthwhile to pothole and verify the depth and location of the utility in the field early in the design phase. Other means may be available to positively locate the utility without potholing.

Utility providers should not be requested to relocate their conflicting utilities until the available right-of-way can be confirmed, other potential road features are located, and when the project construction schedule is confirmed. Typically, this occurs late in the design phase.

# 5.6

## SPECIFICATIONS

Typically, the project engineer relies heavily on standard specifications and standard details provided by others. However, it is incumbent on the project engineer to ensure the final design is consistent with the standard specifications; particularly the technical specifications. Where necessary, the design or the specifications may need to be adjusted to fulfill the design intent.





# Appendices

# A.1

## PROJECT DEVELOPMENT FORM

The following forms are available as an editable document through the City website.

Street Design Project Development		% Design Submittal:
City of Dallas		Date:
General	Corridor:	Limits (From/To):
	Project Name:	Length (feet)
	Design Completion (%)	Estimated Cost
	Project Budget/CIP Funding	Existing Right-of-Way (ft.)
	Lead Agency/Entity	Proposed Right-of-Way (ft.)
	Partner Agencies/Entities (including funding)	Existing ADT
	Project Location (county, city council district, special district, TxDOT Highway Designation)	
	Street Typology: (Mixed Use, Commercial, Residential, Industrial, Parkway)	
	Existing Dallas Thoroughfare Plan Functional Classification	
	Proposed Dallas Thoroughfare Plan Functional Classification	
Project History		
Have any visions or plans for this project location been previously developed? Which ones?		
Major destinations on corridor or near project location - Describe any major sites, destinations, and trip generators within or proximate to the project area		
Neighborhood Context- Describe the context, history, and character of the corridor.		
Land Use- Describe the predominant land uses and densities within the project area, including any historic districts or special zoning districts		
Explain the project scope and goals for the corridor		
Any specific environmental issues		
Context Sensitive	Use the following table and identify which travel modes will be affected by this project. If "No", explain why in the explanation column.	
	Operations:	Yes or No If "No", provide explanation
Multimodal Mobility Impacts	Walk	
	Bike	
	Transit	
	Motor Vehicles	
	Trucks/Freight	
	Parking	
*Fill out the next tab. If an operation is deemed "No" in above table, skip that operation's section with N/A.		

Operations Page 1			
Walk	Existing Sidewalk Widths (ft.)		
	Proposed Sidewalk Width (ft.)		
	What would be the maximum distance between dedicated pedestrian crossings on corridor? (ft.)		
	Describe existing walking conditions within the project area		
	What considerations led to the proposed sidewalk width? (ped. safety, volumes, comfort and convenience of movement, important walking connections, and quality of the walking environment)		
Bike	Existing Bike Facilities (type, surface, width):		
	Bike Master Plan Designation:		
	Connections to Existing and Proposed Bicycle Facilities		
	Proposed Bike Facilities for Project (type, surface, width):		
	Adjacent Bike Share (# of station within 500' of project)? Is there plan to add additional station in the area?		
	Proposed Bike Parking Included in Project (# of Stalls)		
	What considerations led to the proposed bike facilities for the project? (bicyclist safety, volumes, comfort and convenience of movement, existing or proposed bike routes and other important bicycling connections)		
	Transit Route(s) on corridor (Route #s and Midday Headways) or within 1/4 mile of project:		
Transit	Weekday Boardings at Stops Along Corridors: within 200' either side of centerline		
	Existing Corridor Stops (#)	Existing Average Stop Spacing (ft.)	Existing Shelter Pads (#)
	Proposed Corridor Stops (#)	Proposed Average Stop Spacing (ft.)	Proposed Shelter Pads (#)
	Connecting Routes along Corridor:		
	Target Speed/Operational Speed Limit/Design Speed (mph)		
	What design decisions were influenced by designing to the above speeds?		
Motor Vehicles	What is the design vehicle? (e.g., WB-50)		
	Existing # of Lanes (Travel, Turn, Parking):		
	Proposed # of Lanes (Travel, Turn, Parking):		
	Existing Travel Lane Width(s) (ft.):		
	Proposed Travel Lane Width(s) (ft.):		
	What considerations led to the proposed number of lanes and lane widths?		
Trucks/ Freight	Is this a truck route?		
	What considerations led to the proposed truck conditions within the project area? (truck routes, safety, volumes, access, and mobility and reducing the negative impacts of truck traffic.)		

Access	<p>Is there a school zone in the project vicinity?</p> <p>School Zone Limits (To/From)</p> <p>Is this an area of increased access or mobility requirements?</p> <p>What considerations were made in regards to increased access or mobility requirements? (such as the disabled, elderly, and children, including ADA compliance and any school or senior safety zones)</p>
Curbside Conditions	<p>Existing Parking (North/East side of Street)      Proposed Parking (North/East side of Street)</p> <p>Existing Parking (South/West side of Street)      Proposed Parking (South/West side of Street)</p> <p>Are there opportunities to improve traffic flow and increase safety through driveway consolidation, driveway configuration, and reducing turn locations ("Access Management")?</p> <p>Is pedestrian access from parking to sidewalk adequate, including ADA access?</p> <p>How does the proposed design address curbside conditions? (such as demand and usage patterns, including allocation of space for parking, loading, and drop-off, and pedestrian space )</p>
Public Space	<p>Describe the existing public space conditions within the project area</p> <p>What new public space and any new pedestrian seating or other enhancements are being made to the public realm.</p> <p>How does the proposed design affect public space (ex. Trash cans, pedestrian seats, pocket parks, etc.)</p>
Drainage	<p>Describe potential disturbance to existing storm water flow patterns or existing catch basins, and /or the need for new sewer connections.</p>
Utilities	<p>Describe the existing project conditions (what type of utilities, underground/aboveground?)</p> <p>Are any utility upgrades desired?</p> <p>Are the new paving limits within 3 feet of an existing substandard (size/condition) water or wastewater main?</p> <p>Are there street trees within 10 feet of a water/wastewater main?</p>
Street Cuts	<p>Describe the observed frequency of utility "cuts" into the roadway within the project area</p> <p>Is a future signal possible on this corridor? Could underground service be coordinated for future signalization?</p> <p>Are their existing poles and utilities that could be relocated underground?</p> <p>Have all utilities in the project vicinity been notified of the upcoming project?</p> <p>How does the proposed design address street cut conditions, including improvement or consolidation of utility infrastructure</p>
Intersections	<p>Describe the existing project intersections (#, spacing, traffic control, geometric issues)</p> <p>Describe any changes to the proposed traffic control for the project.</p>

Greening/Sustainable Design	
Street Trees and Lighting	<p>Existing Street Trees</p> <p>Proposed Street Trees</p> <p>Is tree mitigation required?</p> <p>Describe how proposed street trees will impact shade, lighting, accessibility:</p> <p>Describe how street trees are included in the design</p> <p>Existing green streets or landscaped areas</p> <p>Proposed green street plan or landscaping</p> <p>Describe how green street or plantings/landscaping is included in design</p>
Green streets / Plantings	<p>Existing</p> <p>Proposed</p> <p>Describe the stormwater control of the project area</p>
Stormwater Control	<p>Existing flooding or ponding issues</p> <p>Proposed mitigation</p> <p>Describe the plan to address flooding or ponding in the project area</p>
Flooding	<p>Committed maintenance agents.</p> <p>Level of commitment (watering, pruning, etc.)</p> <p>Duration of agreement and additional details.</p> <p>Are any wetlands or protected areas within 100 feet of the project area?</p> <p>Where needed, have permits from the State of Texas or Army Corps of Engineers been submitted or approved?</p> <p>Additional Comments:</p>
Maintenance Partners	
Permits	

Street Design Manual	
Existing Street Material	
Proposed Street Material	
Existing lighting	
Proposed lighting	
Existing street furniture	
Proposed street furniture	
Describe how the materials, lighting and furniture match the current requirements and locally managed/neighborhood area design guidelines	
Describe how the proposed design follows the guidelines of the City of Dallas Street Design Manual in regards to overall policies and principles	
Do any other standards apply (based on funding source, etc.)? If so, describe how the design meets these standards.	
Explain where the design deviates from the guidelines or policies and principles of the manual, as well as any requested variances, and provide explanation.	
Describe and note any "pilot" treatments being proposed (including geometric or material treatments)	
<b>Materials, Lighting &amp; Furniture:</b>	
<b>Application of Manual Principles</b>	
<b>Major Deviations</b>	
<b>Pilot Treatments</b>	

# A.2

## DESIGN EXCEPTION TEMPLATE

### CITY OF DALLAS REQUEST FOR DESIGN EXCEPTION

Design Exception #: \_\_\_\_\_  
City Project #: \_\_\_\_\_  
Street / Project Name: \_\_\_\_\_  
Project Limits: \_\_\_\_\_

Refer to Section 5.3 Exception Process for more information on the process and when a Design Exception may be required.

- 1. Design Description.** Briefly describe the project. Provide a description of the proposed project elements related to the design exception.
- 2. Minimum Design Values.** What are the minimum design values or requirements that cannot be attained? What standards are they contained in?
- 3. Current Roadway or Street Condition.** Does the current roadway meet these standards? If not, describe.
- 4. Why Current Standards are Unattainable.** Explain why the minimum design values or requirements cannot be attained.
- 5. Design Values Achieved.** Describe and define the design criteria values that can be attained by the proposed design exception for this street design project.
- 6. Context of this Project.** Provide a summary of surrounding land uses and context in which this project is located, and how it relates to the proposed design exception.
- 7. Public Involvement.** Provide a summary of stakeholder involvement and public input, if any.
- 8. Public Safety.** Address aspects of public safety and welfare that would relate to this design exception. Provide summary and analysis of the accident history at this location. (A copy of accident data is not sufficient. An explanation of how accident history relates to design exception is required.)

**9. Alternatives Considered.** Provide brief description of alternatives considered and the reasons for eliminating each alternative. Explain whether the alternative was eliminated due to cost, neighborhood impacts, need for land acquisition, construction schedule, or functionality. Quantify impacts if possible.

**10. Cost Impacts or Savings.** Address any potential cost impacts or savings that would likely be incurred by the City or any other public entity if this exception is granted.

**11. Project Delay.** Discuss the consequences of project delay as a result of meeting the minimum values.

**12. Why grant this Design Exception.** Provide a short narrative of why you believe this design exception should be approved.

**As the design engineer of record for this project, I request approval of this design exception and believe it to be in the interest of the City of Dallas and the public.**

**Recommended:** *(signature)* \_\_\_\_\_ Date \_\_\_\_\_  
Engineer / Designer *(must be registered Texas PE)*

PE Name: \_\_\_\_\_  
Firm: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

**Concurred:** \_\_\_\_\_ Date \_\_\_\_\_  
City of Dallas Project Manager / Program Manager

**Approved:** \_\_\_\_\_ Date \_\_\_\_\_  
Director of Public Works

CITY OF