

Streetscape Guidelines: Introduction



Milwaukee Streetscapes

Milwaukee's streets play an important role in the livability, vitality, and character of its neighborhoods and commercial areas. With a network of 1,450 miles of streets, this system forms an efficient walkable arterial grid that is an asset to the City of Milwaukee and its citizens.

These streets not only provide vehicular access to the homes, businesses and office buildings, they also provide for safe pedestrian and bicycle access throughout the city. This pedestrian access is provided on the many miles of sidewalks that line both sides of the streets.

The elements within the street right-of-way, including the roadway, trees, sidewalks, lighting and more, all combine to establish the character of an area, commonly referred to as the streetscape. A well designed streetscape improves the quality of life for residents and serves as a catalyst to strengthen the economy for area businesses.

Mission

The mission of Milwaukee's city government is to enhance the safety, prosperity and quality of life of all of our citizens working directly and through partnerships with our community stakeholders. The Department of Public Works (DPW) and the Department of City Development (DCD) work in partnership on streetscape projects to provide enhanced design and engineering, which contributes toward an improved quality of life and provides a catalyst to strengthen the economy. When the quality of life improves, more residents and visitors come to the neighborhoods. This increased pedestrian traffic can result in enhanced business opportunities and economic development.



Figure 1-1: Historic Third District

While well-designed streetscapes can look good and enliven a neighborhood, they can also provide a positive environmental effect. Trees and plantings, key elements in the streetscape, improve air quality by producing oxygen and removing carbon dioxide and particulate matter. Trees and plantings also increase storm water retention and shade can help to mitigate the urban heat island effect.



Figure 1-2: Milwaukee Medians

Tools for Streetscape Design

These Streetscape Guidelines are intended to assist the Business Improvement Districts (BIDs), elected officials, community groups, and developers in beautifying their commercial districts now and keeping them attractive well into the future. Streetscapes require consistent maintenance to remain appealing, especially considering the adverse environmental conditions and heavy usage in the City of Milwaukee. By establishing the guidelines in this booklet, the City of Milwaukee seeks to standardize a design process that will create streetscapes that are both beautiful and functional, relatively easy to repair and maintain, and in the long run, a cost-effective investment in the public realm.



Figure 1-3: Planter Detail

A Guide

This guide provides the tools necessary to plan a successful streetscape and offers helpful information about the streetscape planning process, the major building blocks and standard elements that compose a streetscape, the special circumstances that should be considered, and a variety of streetscape design examples. It also includes the City of Milwaukee palette of standard streetscape elements. These concepts and standards are guideposts for navigating the path from the initial desire for streetscape improvements to the successful realization of an actual, implemented streetscape project. In consultation with staff from various City Departments, this guide represents the best knowledge to date. This knowledge will continue to develop and change as more streetscapes are implemented and as the City's Streetscape program continues to improve and grow.



Figure 1-4: Milwaukee Sidewalks

Streetscapes and the Private Sector

Frequently, developers of new buildings and major rehabilitation projects are required to include improvements in the public way as part of the project. This typically includes the sidewalks and parkways immediately adjacent to the property being developed.

This is a good example of public-private cooperation that improves livability, amenities, and enhances Milwaukee for everyone. Maintenance is essential to the success of a streetscape project, regardless of whether the project is a result of private or public sector investment. While this guide does not attempt to outline the process developers use to obtain the various permits required for construction, many aspects of these guidelines may be helpful for developers. The chapters Organizing a Streetscape (Chapter 2), Functional Requirements (Chapter 3), and Streetscape Elements (Chapter 4) contain pertinent information about how developers should go about planning and constructing in the public way.

Although property owners are responsible for maintaining the public way adjacent to their property, after the developer is gone the City is often requested to participate in the long term repair and maintenance of the infrastructure installed in the public way.

Trees die, tree grates break, benches and sidewalks eventually require repairs or replacement. It is important to recognize that developers and property owners may install streetscape elements that are not city standard items. However, they also need to stock those custom items so that the City can repair or replace elements within these unique areas. If the custom items are not available, standard elements from City stock will be used, unless prior arrangements have been made.

Implementation Process

The successful planning and implementation of a streetscape project must follow a specific process to bring the vision into reality. Typically, an elected official, community group, private sector entity, or Business Improvement District (BID) will bring projects to the attention of DPW and DCD. In order to obtain funding, projects must typically meet certain criteria:

- Fifty percent or more of the property surrounding the right-of-way must be an existing or planned commercial area.
- The BID, elected officials, businesses, and the community must support the project.
- Public art installations or historic markers, are planned for the public way and require streetscape intervention.

If the criteria are met, the streetscape process can begin. The process can be roughly broken into two phases, the design phase and the construction phase.

Special Design Considerations

It is important to be aware of budgetary considerations at the beginning of the streetscape process. The costs for designing and installing a streetscape can vary widely depending on the width of the sidewalk zone, the length of the project, the extent of streetscape elements, and the level of customization being used for community identifiers and other special aspects of the streetscape. As a general rule of thumb, streetscapes cost approximately \$350,000 per 360-foot long block. However, costs can range between \$300,000-\$450,000 (2010 costs) per block, depending on the scope of the streetscape and the length of the block. It is important to keep these costs in mind throughout the design of the project.

Maintenance concerns must also be addressed early in the streetscape design process. These issues often drive the type of amenities to be included since certain streetscape elements require a significant community commitment to ongoing maintenance. For example, the BID is responsible for maintaining all plant material, except trees. This includes weeding, watering (if irrigation is not provided), plant replacement, and litter pickup. It is the policy of DPW to provide these elements in the streetscape only if the BID is committed to an active and ongoing role in maintenance.

The BID's responsibility will be accepted in a maintenance agreement that must be approved by the City and passed by the BID Board.

Therefore, clarifying the BID's level of commitment is a key component of the streetscape design process. The BID must assess its ability to provide maintenance and the associated maintenance costs and assign individuals to be responsible for it. This information becomes a critical input to the design process as it will influence the amount, material, and location of all streetscape elements. Balancing costs and public amenities can be managed by setting priorities, for example, prioritizing between pedestrian area enhancements and roadway intersection enhancements.

Design Phase

The project begins with designing the streetscape, which typically takes from eight to 12 months. Usually, a landscape architect works with the BID to arrive at an affordable sustainable design solution. Streetscape projects tend to be organized by districts or corridors. The typical length of a streetscape corridor project is five 360-foot blocks. District projects can vary from as few as two or three blocks to as many as twenty blocks. If a project is much larger than this, it will be subdivided into phases to be constructed over consecutive years, as funding becomes available.

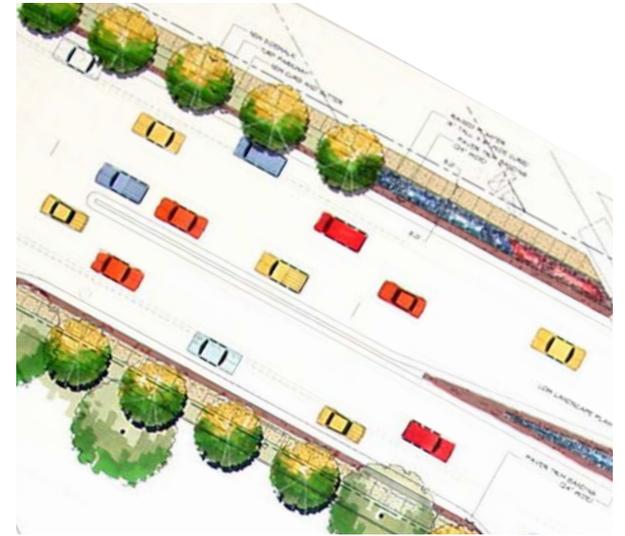


Figure 1-5: Design begins with concepts

Step One: Initial Streetscape Design

- BID submits a preliminary scope for the streetscape work (based on the Streetscape Guidelines) that DPW approves
- Establish an initial budget based on the scope of work
- Establish an initial maintenance budget and expectation
- Secure a funding source for the project design fees
- Retain the services of a design consultant and engineer
- Hire a surveyor to prepare a topographic survey of the proposed project site
- Review codes and standards, including lighting, parking, landscape, and various other considerations, that will impact the streetscape design
- Develop streetscape design concepts

Figure 1-6: Estimates are a critical part of the process

Step Two: BID and Community Support

This step is critical in gaining consensus on the proposed streetscape improvements.

- DPW presents design concepts to the BID, the elected officials and the community for review and comment. At this point, which occurs at about the 30 percent milestone in the project, DPW and the community must determine the issues that are most important to the overall streetscape
- Refine concepts based on input from the BID, elected officials and the community.
- Generate a final concept, based on consensus that is consistent with the Streetscape Guidelines and budgetary constraints



Figure 1-7: Presentations to gain consensus

Step Three: Construction Documents

- Once a final concept is approved, develop specific details, drawings, and technical specifications in preparation for competitive bidding for the construction of the streetscape project
- If necessary, schedule another community meeting to review the streetscape's final details
- Confirm that final cost estimates are within the approved construction budget
- Complete final drawings and specifications

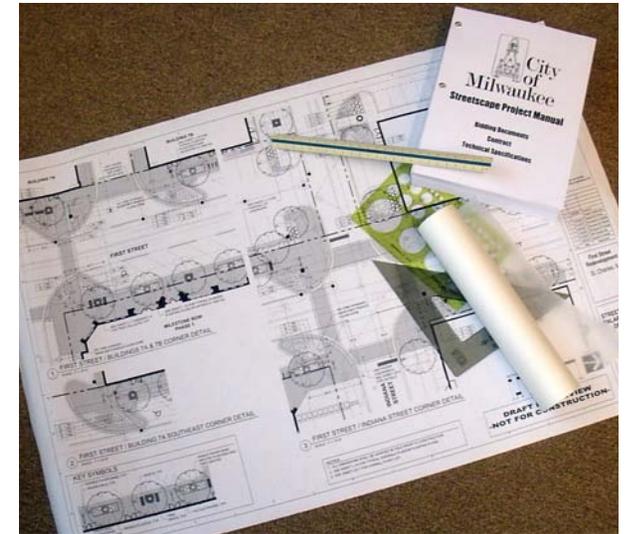


Figure 1-8: Final Plans and Specifications

Design and Construction Process

The figure below illustrates the process for establishing a streetscape project and developing a final streetscape plan. At this point, even though the construction plans are complete, the project is still only an idea on paper.

While the process appears to be linear, it can, at times, become an iterative process with numerous revisions and refinements that occur during the design development phase of the streetscape plan. Each phase adds to the amount of detail in the previous version of the plan, so that at the end of the design and engineering tasks, the project is ready to begin construction.

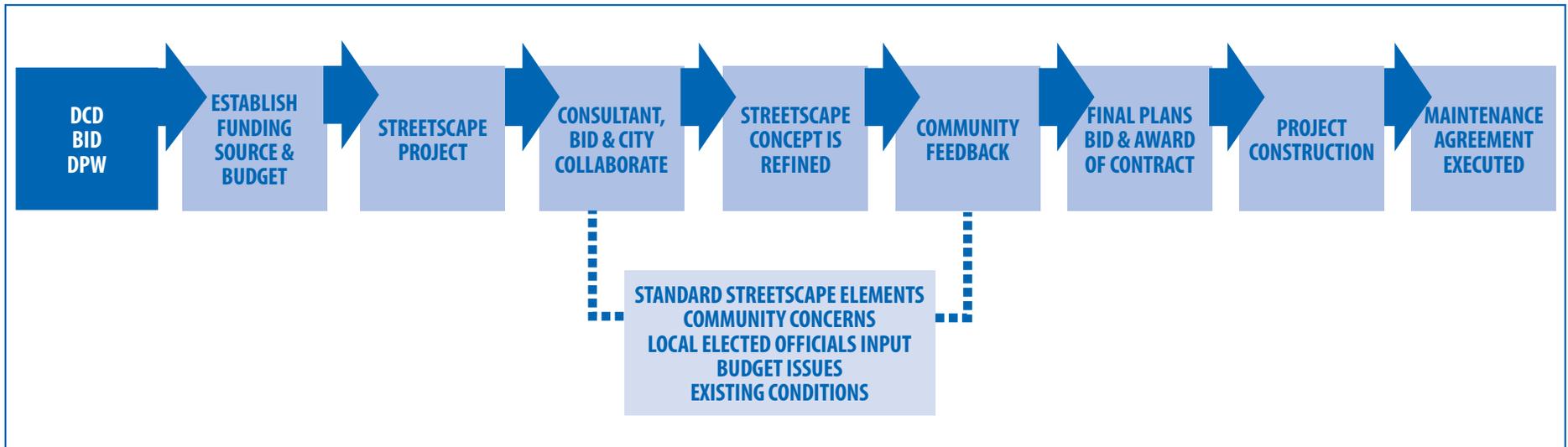


Figure 1-9: The Streetscape Implementation Process

Step Four: Bidding and Construction

In the bidding process, contractors are invited to pick up plans and specifications that were developed in Step 3 and prepare bids for construction of the streetscape improvements.

- Advertising for bids (printed legal advertisements)
- Pre-bid conferences to answer questions from bidders
- Bid opening and evaluations to determine lowest responsible bidder
- Award recommendations to City
- Award of bid by City to Contractor

The construction phase brings the project from idea into reality. Construction milestones include:

- Issue the notice to proceed to the contractor
- City holds a pre-construction meeting
- DPW and the BID distribute flyers to property owners along the streetscape notifying them of the upcoming construction
- Begin construction
- Issue final punch list of construction items
- Closeout construction

The construction of a streetscape may take from four to 12 months, depending on the size and complexity of the project. In order to ensure that projects are completed on schedule and within budget, DPW oversees day-to-day construction and makes all decisions with respect to material selection, staging, and schedule. DPW encourages BID and community input through weekly construction meetings where concerns may be aired.

Construction Phasing and Staging

Streetscape construction, like any construction activity in the public right-of-way, can be disruptive to residents and businesses. Good public information, ongoing communication, and special coordination is necessary to minimize the inconvenience.

Ideally, streetscape construction is performed in rolling phases. Work begins at one end of the job, on one side of the street, and proceeds to the opposite end of the project. It then flips to the other side of the street and moves back to the end it started from. Typically a contractor is given a three-block work zone from which construction cannot advance until the new sidewalk is installed. In this way, the job progresses in a controlled manner and keeps as much of the street intact for as long as possible.

Access to businesses and residents is maintained throughout the construction project. On projects with wide sidewalks, this is usually done by splitting the sidewalk in half. The section along the curb is removed and new curb and gutter and utilities are installed. When this is finished, the remaining half of the sidewalk is removed and the entire sidewalk is replaced within 48 hours, or less. This minimizes the impact to businesses and allows continuous access during construction. If the sidewalk is narrow, it cannot be split into two zones and a pedestrian lane is set up in the street, parallel to the curb line. This area is protected from traffic and has bridges over the work zone to the individual building addresses.

If possible, two-way traffic is maintained throughout construction. Parking may be removed from one or both sides of the street, depending on the width of the right-of-way and area needed for construction. Most projects do not require street closings, bus re-routings, or detours during construction unless extensive street work is involved.

Post-Construction and Beyond

Once construction is complete, the project goes into maintenance mode. For maintenance to be successful it must be a joint effort between the community and the City. Not only does the community play a direct role in maintaining plantings, it keeps eyes and ears on the project and is typically the source of alerting various City departments in charge of long term maintenance to problems in need of attention.

If planned and installed according to the standards described in this guide, the newly implemented streetscape should provide a functional and attractive community asset for years to come.



Figure 1-10: Construction requires special staging