

Belle Plaine Commercial Boulevard District Guidelines

The Belle Plaine Commercial Boulevard District connects the Downtown District with the US Highway 169 Corridor District by a series of urban design features. The intent of the Boulevard is embrace the two commercial areas and to provide easy access locally and from US Highway 169.

Objectives

- To link the spatially separated commercial districts of Belle Plaine through a common identity imparted by a designated connecting loop with unique signage and other wayfinding techniques.

Policies

- The City of Belle Plaine will designate a Commercial Boulevard District that connects key commercial districts within the City. The designated loop will serve as a wayfinding mechanism that guides local residents and visitors to and between these spatially separated commercial districts. The loop will be identified in the public realm through unique signage and streetscape treatments at key intersections and appropriate intervals along the route.

Additional Notes

- Recognizing that each project is unique in it's relationship to the site and surroundings, the Urban Design Review Committee will endeavor to interpret the guidelines within the Design Manual for the most appropriate application.

Guidelines

- The Commercial Boulevard District will be identified in the public and private realm with complimentary design elements.

Signage - Signage plays an important part in the creation of “pedestrian friendly” streets by establishing a visual guide and orientational tool for pedestrians and vehicular users of the downtown. Lack of wayfinding tools such as signs and graphics can cause confusion, and most importantly discourage walking. Specific images and recommendations for street signage would be developed further in a future detailed signage study. Generally however, signage for the Commercial Boulevard District should meet the following criteria:

- In developing the signage system, Identification Signs (naming signs to identify areas within the Commercial Boulevard District, important buildings etc.), Directional Signs (used to guide the motorist or pedestrian in and

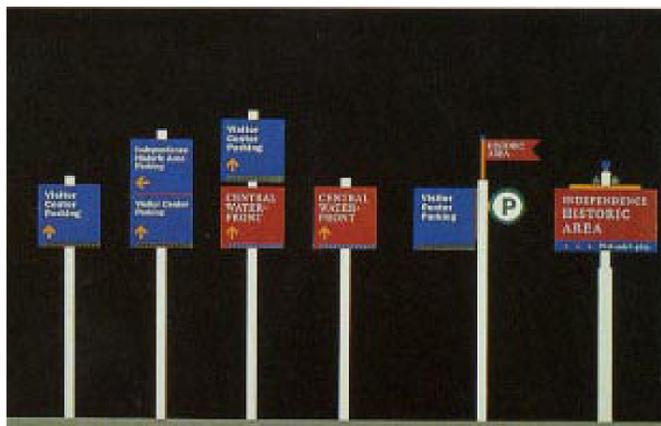
around the district) and Regulatory Signs (signs that set the rules for travel and parking within the district) should be included.

- Signs should communicate required information effectively. Information should be presented in a visually comprehensive manner. The sequence in which information is communicated should be logical and should correspond to user needs.
- Signs should reinforce the overall visual image and character of the Commercial Boulevard District. The design of the signage system should be consistent throughout the Commercial Boulevard District. It should be coordinated with the design of any site furniture and lighting.
- The signage system should provide flexibility. It should be adaptable to changes and additions over time. Consideration might be given to a modular system to facilitate this requirement.
- Signage should include consistent and usable mapping that is coordinated with Identification and Directional Signs.



Figure 8. Example Signage, St. Louis Downtown Streetscape Design Guidelines, 2000.

The sign system for New York City is consistent through a wide variety of sign types. The clearly defined hierarchy communicates a sense of security. The pedestrian intuitively knows where to look for information.



Philadelphia's signage system is clear and graphically simple in design

Figure 9. Example Signage, Philadelphia Downtown Streetscape Design Guidelines, 2000.

Street Lighting - Street lighting performs a number of important functions and may have additional impacts on the visual environment. Due to these factors and the prevalence of lighting fixtures on all streets, lighting should be used as a unifying streetscape element. Although levels of illumination are important for safety and security, other aesthetic aspects of lighting design including color rendition, luminaire design and lighting patterns should be given equal consideration in the overall lighting system. Additionally, consideration for energy conservation must be included in the site lighting design process. LED street lamps should be pursued when the technology becomes available, both to improve lighting levels and save operation and maintenance costs. LED technology also offers the opportunity to achieve a “friendlier” roadway lighting that could better coexist with new, pedestrian-scale lighting on the sidewalks. Cobra head light fixtures and sidewalk lighting should be considered jointly in determining the optimum lighting quality for the Commercial Boulevard District. One feature to consider in creating an optimum lighting quality is the addition of cut-off shields on the roadway lights. Such shields would diminish the glare from the cobra head fixtures, allowing the eye to better focus on storefronts and other sidewalk amenities.

- Lights should consist of a coordinated family of luminaires and poles with regard to design, materials and color.
- Lighting should define and reinforce the hierarchy of street systems to promote a sense of site orientation and organization.
- Use light fixtures of durable materials to discourage vandalism.
- Use lighting sources that provide good color recognition appropriate for the use.
- Provide illumination levels and lighting sources that minimize areas or points of glare while providing adequate levels of light for safety and security.
- Construction should be of steel or aluminum.
- Use a partial lens over the luminaire (as opposed to fully exposed globe) to reduce glare and light pollution.
- Luminaire design should provide a vandal resistant lens.
- Luminaire design should provide easy serviceability.
- Light source mounting height shall not exceed 12 feet.
- In some locations pedestrian lighting may be strictly supplemental and spacing will depend on the specific situation. In all cases, however, lighting design will focus on pedestrian usability and safety.

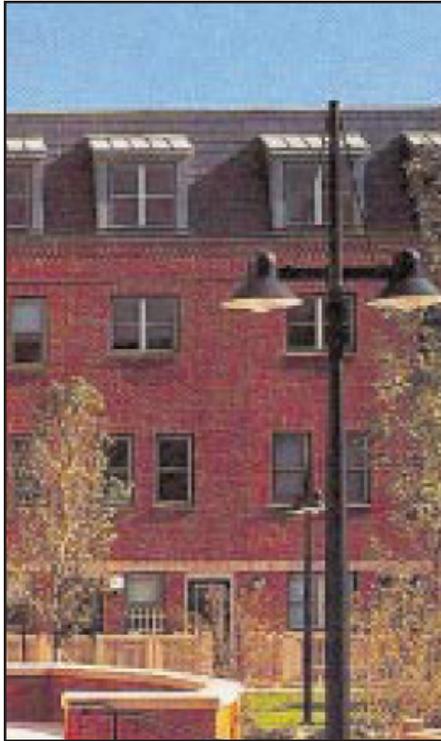


Figure 10. Examples of pedestrian lighting, St. Louis Downtown Streetscape Design Guidelines, 2000.

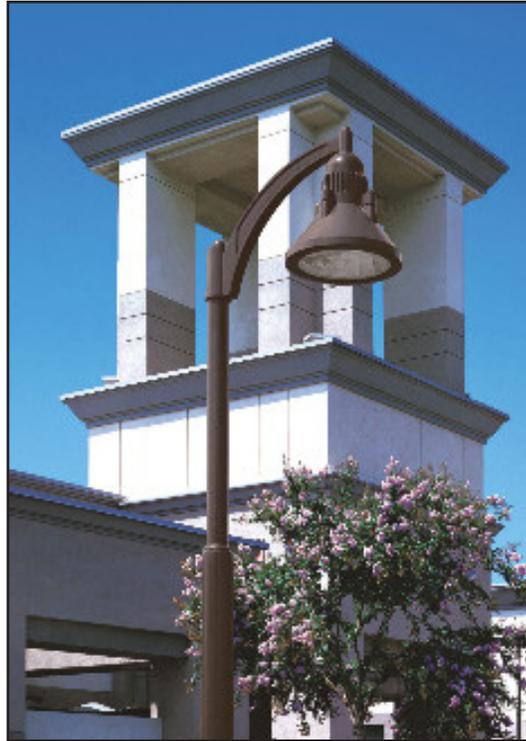


Figure 11. Examples of pedestrian lighting, Wamco Electric Online Resource.



Figure 12. Example of pedestrian lighting, International Dark-Sky Association Online Resource.

Street Trees

- Provide a minimum 6'x4' by 3.5' deep tree pits in existing or new sidewalks.
- Consider the use of continuous street tree pits to provide maximum soil area for roots to spread, and water and air to penetrate.
- Allow sufficient room for tree canopies to grow and develop without conflict with other building or sidewalk elements.
- Install tree grates to protect soil compaction over the root ball.
- Install tree guards to protect tree trunks from damage in high pedestrian use areas.
- Street trees should be spaced 20 to 40 feet apart depending on underground vaults and utilities.



Figure 13. Boulevard tree planting, Wilsonville, Oregon

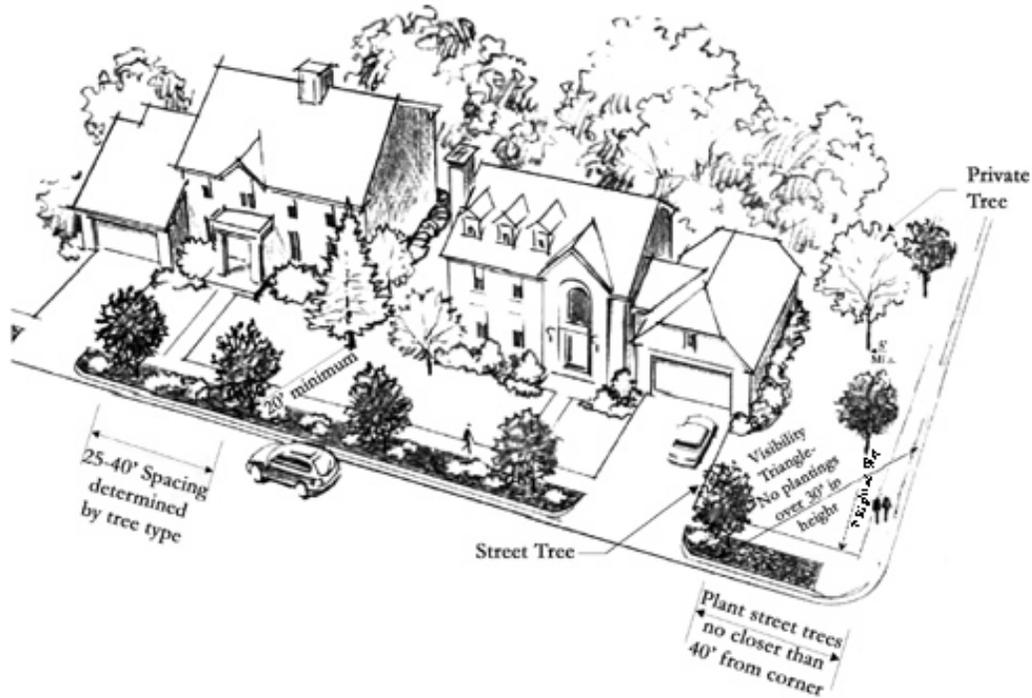


Figure 14. Conceptual street tree planting, Colorado Springs

Recommended Plant List

Native species:

- | | |
|--|----------------------------|
| Acer saccharum | Tilia americanus |
| Betula (Varieties) | Sugar Maple |
| Celtis occidentalis | Birch |
| Fraxinus pennsylvancia lanceolata | Hackberry |
| Gleditsia triacanthos | Honeylocust |
| (Imperial, Majestic, Skyline,
Sunburst and Thornless) | Kentucky Coffee Tree |
| Gymnocladus dioicus | Oak |
| Quercus (Varieties) | Basswood (American Linden) |

Non-native species:

- | | |
|----------------------------------|----------------------------|
| Acer platanoides (and varieties) | Ginkgo |
| Ginkgo biloba (male tree only) | Little Leaf Linden |
| Tilia cordata (and varieties) | (Redmond Greenspire, etc.) |
| Norway Maple | |
| (Schwedler, Emerald Queen, etc.) | |

And all other varieties as approved by the City Council.

Above list extracted from Belle Plaine City Code, 1107.03 Subd 6.

Multiple Use Path - The Commercial Boulevard District will incorporate a multiple use path that connects to local and regional trail systems. This multiple use path may include both on-road bicycle lanes and off-road shared use paths.

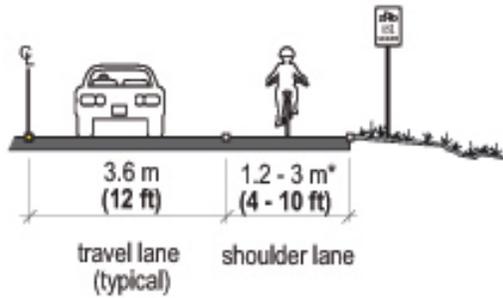
- **Bicycle Lane (Bike Lane):** A bike lane is a portion of the roadway or shoulder designated for exclusive or preferential use by people using bicycles. Bicycle lanes are distinguished from the portion of the roadway or shoulder used for motor vehicle traffic by striping, marking, or other similar techniques.
- Shared use paths, greenways, and state trails must be designed for users other than bicyclists. The design should take into account others on shared use paths such as inline skaters, adult tricycles, bicycle trailers, recumbent bicyclists, and wheelchair users. The dimensions and operational characteristics of bicyclists are important, other user types that are allowed to share the same space as bicyclists should be integrated into the initial planning stages and the design and selection of a bikeway type.
- All multiple use paths will follow the design standards outlined in the MN/DOT Bicycle Facility Manual, March 2007.



Figure 15. Bicycle lane, MN/DOT Bicycle Facility Manual, 2008.



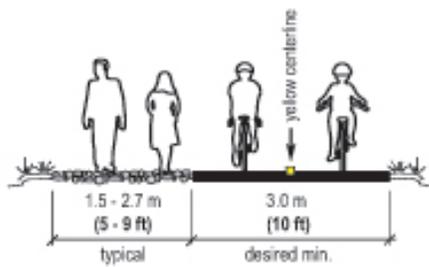
Figure 16. Shared use path, MN/DOT Bicycle Facility Manual, 2008.



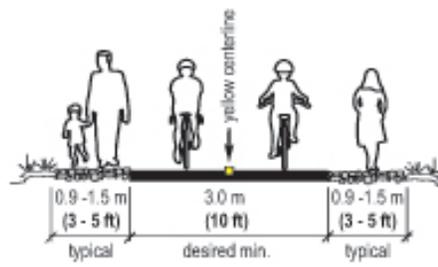
Design Requirements:

- * Shoulder width ranges from 1.2 m - 3 m (4 ft - 10 ft) (See Table 4-2)
- Minimum 1.5 m (5 ft) from right edge of rumble strip to the face of a guardrail, curb or other roadside barrier.
- Shoulders should be wider where higher volumes of bicyclists are expected.

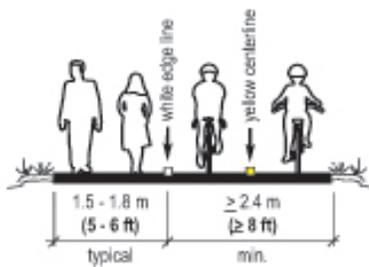
Figure 17. Example bike lane design criteria, MN/DOT Bicycle Facility Manual, 2008.



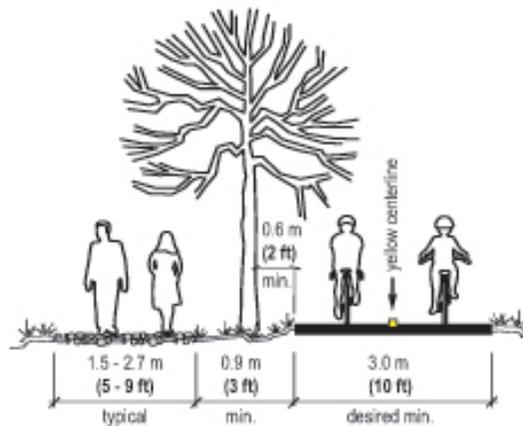
(a) DIFFERENT PAVING MATERIALS



(b) DIFFERENT PAVING MATERIALS



(c) PAINTED LINES WITH LANE SIGNS



(d) LANDSCAPED MEDIAN WITH LANE SIGNS

Figure 18. Example shared use path design criteria MN/DOT Bicycle Facility Manual, 2008.

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