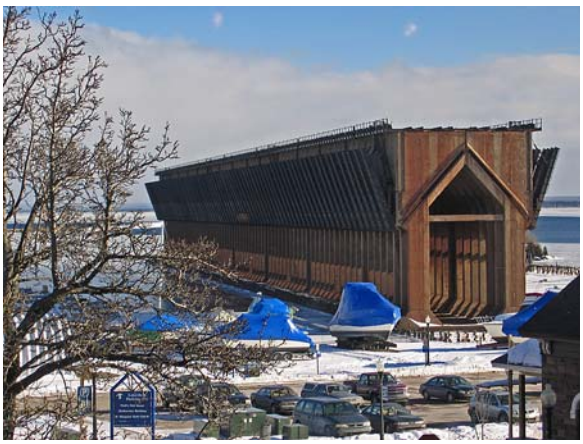
ICF INTERNATIONAL

DOWNTOWN WATERFRONT FORM-BASED CODE WORKSHOP



With
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AN OPPORTUNITY FOR MARQUETTE

Marquette has an exciting opportunity before it. Communities across the country have found that creating distinctive places where people want to be, which offer choices in housing and transportation while respecting the natural environment, can lead to economic success. People want to move to these places, tourist want to visit, and businesses locate there because they know they will find customers and employees nearby. Marquette can reap economic benefits by transforming its downtown and waterfront into a vibrant walkable neighborhood that embraces Lake Superior and the waterfront.

Exhibit 0.1: Marquette Michigan

The City of Marquette is located in the central region of Michigan's Upper Peninsula (UP). With a population of over 20,000, it is the UP's largest community. Formerly a primarily mining and industrial port, it currently serves as a regional center for education, health care, recreation, and retail. The Northern Michigan University and Marquette General Hospital enhance Marquette's regional importance.

Source: Screen shot from Mapquest at the City of Marquette website *www.mqtcty.org/city_website/WebsiteGeneral/Images/MapQuestMQT.png*

Recognizing this opportunity, the City of Marquette and Michigan Sea Grant applied to the U.S Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration's Smart Growth Implementation Assistance for Coastal Communities to help create options the City could use to redevelop its downtown and waterfront areas while protecting water resources in Marquette Bay. The city was specifically interested in exploring the option of form-based coding to promote redevelopment.

A design workshop was held in Marquette December 15-17, 2006, to help develop the design and code options. The design workshop was organized to:

- Listen to what Marquette's residents want for their waterfront and downtown;
- Look at road and building design for the downtown and waterfront area;
- Explore options to improve parking and walkability downtown and along the waterfront; and
- Investigate the use of form-base coding to create a diverse, accessible, and walkable Downtown Waterfront District.

Over the course of the design workshop the city, Michigan Sea Grant, the EPA consulting team and local host committee held two public meetings with a wide range of stakeholders, including city and planning commissioners, local landowners, downtown business owners, and interested residents. In general, Marquette residents said they wanted to:

- Connect downtown and the waterfront with paths and views;
- Create walkable streets and improve pedestrian connections;
- Provide public access to the water;
- Maintain a working waterfront;
- Encourage a mix of uses and bring more housing downtown;
- Control the scale and fit of new development;
- Reconfigure parking; and
- Preserve and increase greenery in the district.

The consultant team responded to these citizen ideas with a model for a walkable, mixed-use Downtown Waterfront District with features to help achieve these goals. The proposed form-based code and other recommended strategies would give Marquette the tools to make the citizens ideas a reality by:

- Proposing new paths to and along the waterfront and new streets that preserve water views from public spaces;
- Suggesting standards that manage building scale and fit but give developers the flexibility to meet the markets demand for housing and commercial space;
- Recommending street and path designs that make the area pleasant to walk in;
- Proposing changes to parking standards and design that create a better balance between parking demand and supply and enhance walkability; and
- Suggesting the city explore the use of both rain gardens to managed storm water runoff and street tree planting that improve greenery in the downtown and waterfront.

Communities across the country are finding that redeveloping their waterfronts into Mixed-use walkable districts, similar to the Downtown Waterfront District envisioned for Marquette, can create economic opportunities. This approach can generate a positive development cycle. It has been shown that communities that are more compact and walkable can be more economically successful that those that are more dispersed[1]. This economic vitality attracts additional private and public investment that leads to more redevelopment and better pedestrian amenities.

This report discusses a variety of code, parking and street design strategies the city could implement to achieve its economic development, quality of life, and environmental goals. Although any one of these strategies could be implemented on its own, each would be more effective if implemented as part of a bundle of complementary policies. For example, combining parking lot design strategies with street and sidewalk design strategies would create a more pleasant walking environment on downtown streets than the adoption of either strategy by itself.

[1] For example, see Mark Muro and Robert Puentes, "Investing in a better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns," 2004, and International Economic Development Council's, "Economic Development and Smart Growth: 8 Case Studies," 2006.

In addition to bundling strategies, the city could consider which strategies to address first. The city could prioritize the strategies based on which ones will best create, or lay the foundation for, the results the residents want.

The consultant team proposes the following four strategies for the city to consider as top priorities. The first two strategies lay the groundwork for the development of walkable mixed-use district, the second two strategies focus on areas that, if improved, will greatly affect visitors' impression of downtown and make the area more pleasant for walking.

1. Marquette could adopt the draft form-based code for the Downtown Waterfront District. Form-based codes can help the city meet its goals in mixed-used or commercial zones. They allow developers flexibility to meet market demand while ensuring a consistent vision for the area that will be developed incrementally.

2. The city could revisit the Downtown Development Authority's (DDA) parking program to explore options for balancing the supply and demand for parking, reducing private parking lots, and encouraging the development of housing downtown. The DDA could develop parking design standards that encourage structured parking, smaller lots, and screening of surface lots.

3. The city may want to encourage development on parking lots in key parts of downtown to remove gaps in the streetscape. Marquette could explore using public/private partnerships to develop on the northwest corner of Front Street and Baraga Avenue and the southwest corner of Front and Main Streets. Filling these gaps will help reconnect Washington Street with Baraga Avenue.

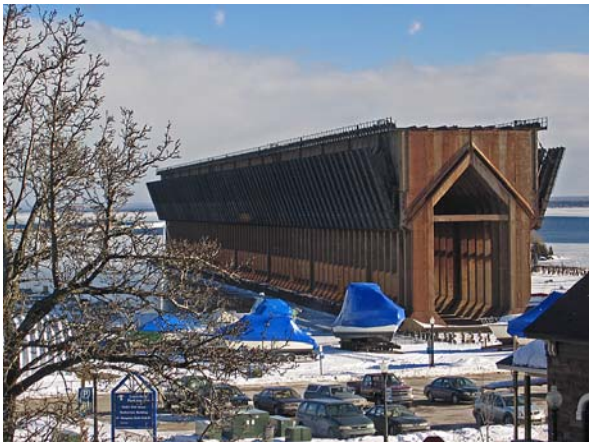
4. Marquette could conduct design charrettes for Baraga Avenue and Main Street. Improving the pedestrian environment of these two streets would significantly improve the walkability of the entire downtown.

Using codes, planning documents, and policies, the city can establish expectations about what type of development it wants as properties change ownership or are redeveloped. The clearer the city is about the type of development it wants (as opposed to focusing on what it does not want) the more likely desirable development will be built, enabling Marquette to seize the opportunity before it.

1 BACKGROUND AND INTRODUCTION

Located on the shores of Lake Superior in Michigan's Upper Peninsula, Marquette became a significant industrial port community during the late 19th and early 20th centuries. The iconic iron ore dock dominates Marquette's Lower Harbor waterfront and is a testament to the past importance of mining in the region's economy (Exhibit 1.1). In recent decades, Marquette's economy has shifted away from mining to service industries, including education and health care. This economic transformation led to the abandonment of the industrial port in Marquette's Lower Harbor and the start of its transformation into a recreational amenity. Part of this transition included the 2002 transfer of the abandoned Wisconsin Central rail yards to the city of Marquette.

Exhibit 1.1: Lower Harbor Ore Dock



As part of the city's 2003 update of its master plan, community residents participated in a series of meetings to define the vision for the city. Three of the many themes that came from those meetings are:

- Protect Marquette's natural resources;
- Revitalize downtown and connect it to the waterfront; and
- Discourage sprawling development patterns.[2]

These three themes are interconnected. Growth in Marquette followed a common national pattern. Retail development west of the city along Highway 41 had weakened downtown businesses. New housing was built in outer townships and on environmentally sensitive terrain south of the city. This housing growth has the potential to affect water quality in Whetstone Brook and Oriana Creek and, therefore, Marquette Bay. By redeveloping downtown and the waterfront, Marquette can increase its tax base and create jobs and more housing while using existing infrastructure.

Exhibit 1.2: How Development Affects Water Quality

When development occurs in previously undeveloped areas, the resulting alterations to the land can dramatically change the quality of nearby streams and rivers. New impervious surfaces such as roofs, roads, and compacted soils filter less water increasing surface runoff. These changes increase the frequency and severity of flooding which erodes stream banks and increase the amount of sediment and pollutants in the water. Conversely, dynamic redevelopment of under used property such as parking lots can help protect regional water resources by absorbing development pressure from other, more environmentally sensitive areas.

[2] For the full list of general themes see: City of Marquette, *Marquette Master Plan 2003,* Chapter Six, Public Participation, p.71.

Downtown and waterfront redevelopment will absorb some of the pressure for sprawling growth on the edge. More redevelopment in Marquette means less demand for housing on the steep slopes of the Oriana Creek and Whetstone Brook watersheds south of town. Diverting development from these sensitive lands preserves the quality of water in these waters.

During the 2003 master planning process, citizens were asked identify elements of a preferred future for the waterfront. Their ideas included:

- Extending the downtown to the waterfront with public access along the entire shore;
- Reusing/removing vacant or underutilized buildings;
- Developing new commercial, retail, residential and mixed-use space;
- Incorporating open space, parkland, and public pathways along the shore; and
- Protecting the water quality and fisheries of Lake Superior. [3]

The 2003 master plan preferred future covers the two parts of the waterfront. The city owns the southern half, Founders Landing, and plans to redevelop it through a public bidding process under the city's Planned Unit Development (PUD) code. The PUD code is designed for large properties with one owner. The northern half has multiple landowners so it is not amenable to PUD zoning. The Planning Commission and the Community Development Department felt that none of their current regulatory tools could achieve the citizens' vision in the northern half of the waterfront, so they recommended the city explore a form-based code for this area.

Exhibit 1.3: What is a Form-Based Code?

A form-based code is a method of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use, through city or county regulations. See the Form-Based Codes Institute at http://www.formbasedcodes.org for more information.

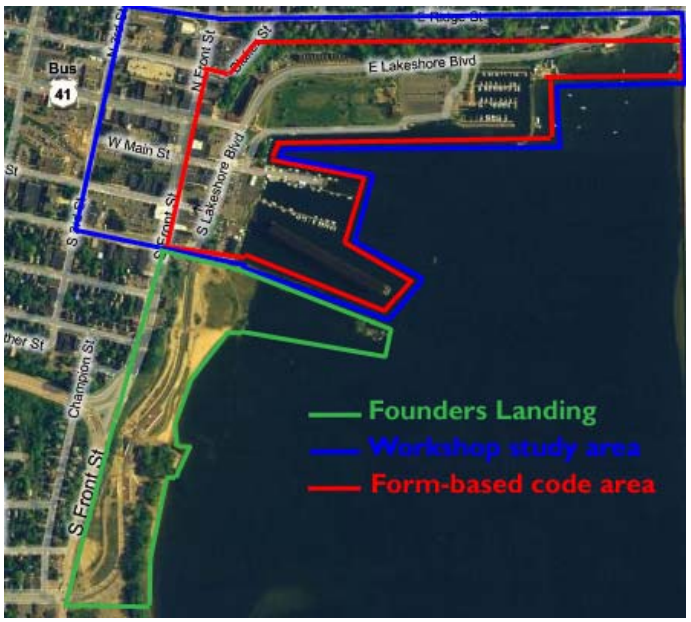
To develop a form-based code for this area, Marquette city officials, with the help of Michigan State University Sea Grant Extension, requested that an EPA technical assistance team work with the city to produce a draft form-based code. At the same time, the city wanted to use the public process for waterfront design to help inform developers' proposals for development of Founders Landing, just south of the study area. The final product of this technical assistance would be draft form-based code language for the planning and city commissions to review and evaluate for possible adoption.

The study area is roughly eight square blocks, bounded by Front Street on the west, by Bluff Street on the north, by Baraga Avenue on the south, and by Lake Superior on the east (Exhibit 1.4). The team also used an area slightly larger than the proposed district in the workshop modeling to ensure that design solutions in the neighborhoods outside the Downtown Waterfront District would help the community achieve its goals. This larger

[3] For the full list of elements, see City of Marquette, *Marquette Master Plan 2003*, Chapter 12, Waterfront Opportunities, p. 209.

workshop study area extended the western boundary to Third Street and the northern boundary to Ridge Street.

Exhibit 1.4: Study Area



The team worked with city officials, staff, local residents, property owners, and business leaders to:

- Listen to what Marquette's citizens want for their waterfront;
- Develop a conceptual plan for the Waterfront Development District;
- Identify important elements to cover in the proposed form-based code language;
- Discuss ways to link the new district with the existing downtown;
- Promote redevelopment in an environmentally sound manner to reduce growth pressures on sensitive lands; and
- Identify potential barriers to redevelopment and their solutions.

The EPA team led some 50 Marquette residents and business owners in a public, hands-on design session on how Marquette could achieve these objectives. (See Appendix B for more information.) Several broad themes emerged. Marquette residents want to:

- Connect downtown and the waterfront with paths and views;
- Create walkable streets and improve pedestrian connections;
- Provide public access to the water;
- Maintain a working waterfront;
- Encourage a mix of uses and bring more housing downtown;
- Control the scale and fit of new development;
- Reconfigure parking; and
- Preserve and increase greenery in the district.

The EPA team developed the draft form-based code in Appendix F based on the themes identified above. This report will discuss how the form-based code meets the community's desires for the Downtown Waterfront District. However, it will first discuss the market for development in the downtown and on the waterfront. The report concludes with a discussion of options for parking management and street design in downtown areas that surround the proposed Downtown Waterfront District.

2 MARKET ANALYSIS AND ECONOMIC OPPORTUNITIES

Marquette residents have continually expressed a desire to redevelop their downtown and waterfront areas. However, this redevelopment will depend on private investment. While the community will define what is desirable for these areas, the market defines what is possible. This section identifies some important market opportunities and limitations by:

- Discussing Marquette's income and demographic trends;
- Exploring the market opportunities for Marquette; and
- Analyzing the implications of these new market opportunities.

2.1 MARQUETTE'S INCOME AND DEMOGRAPHIC TRENDS[4]

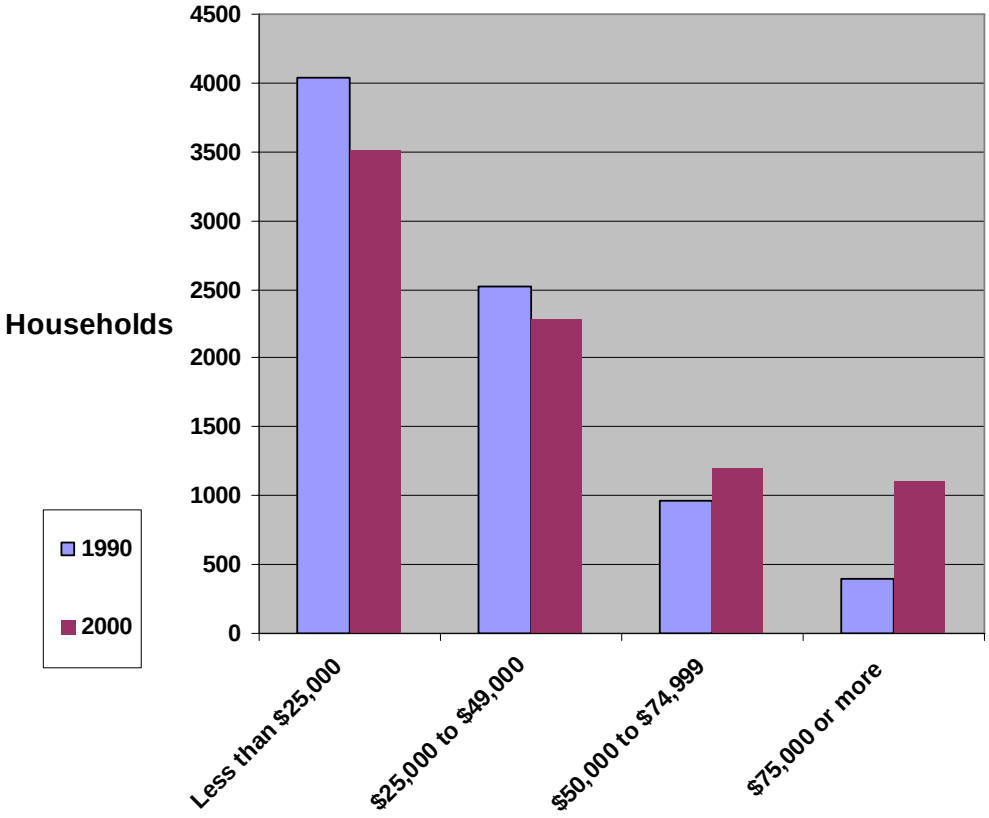
In 2000, Marquette's median household income of $29,918 was significantly lower than the state average of $44,667 (Exhibit 2.1). One reason for this difference is that a large number of very low-income households are university students and postgraduates. This does not reflect the impact students' spending has on Marquette's economy, including their demand for housing, goods and other services. Since the closing of Sawyer Air Force Base in 1995 and the increase in employment in health care and at the university, the distribution of household income in Marquette has changed. The base closure has reduced the number of jobs for moderate-income households. Increases in jobs in health and education have brought in a more educated workforce and increased the number of higher income households in the city. While students, postgraduates, and professionals have very different incomes, they share an interest in distinctive retail experiences that are as much about socializing as they are about consumption. This creates an opportunity for what is known as "lifestyle" retail in the downtown and waterfront.[5]

Members of the baby boom generation are a second important market for the downtown waterfront area. Like many parts of the country, Marquette, the state of Michigan, and surrounding states have a high percentage of baby boomers whose incomes are at their peak and who are looking toward retirement. Many of these empty nesters are looking to downsize their homes to reduce the demand home maintenance imposes on their time. Others are looking for vacation homes that could evolve into retirement housing. Waterfront housing could help meet this demand.

[4] Developed off site by Strategic Economics, Berkeley, California.

[5] Lifestyle retail is less consumption and more experience oriented than conventional shopping centers. It usually contains more entertainment, restaurants, and service opportunities and fewer retailers of everyday goods.

Exhibit 2.1: Household income distribution in Marquette, 1990 and 2000



The median home price in the Marquette area jumped from $113,250 in 2003 to $130,000 in 2004, well above the median home price of $90,000 in Michigan's Upper Peninsula. Despite this rise in home prices, housing remains relatively affordable. The income needed to afford a median-priced home is approximately $30,000, similar to Marquette's median household income. Marquette does offer a variety of price points for housing, so there is no specific need for housing at any specific price point.

2.2 Exploring the New Market Opportunities for Marquette

Marquette's demographics clearly point to two separate markets: young professionals and baby boomers nearing retirement.

2.2.1 Attracting Young Professionals

The first market is the post-university age group of 22 to 27 years. Northern Michigan University (NMU) attracts top students from Michigan's Upper Peninsula. Enrollment at the university has been steadily increasing, despite declining high-school graduating classes in the Upper Peninsula.[6] However, NMU graduates do not necessary stay in Marquette. By retaining a larger percentage of the university students, Marquette has an opportunity to make its workforce and economy more competitive by cultivating these academics and alumni as the burgeoning "creative class."

Exhibit 2.2: On Retaining Brainpower

"… (K)eeping New York State's college-educated students is critical to maintaining our economic and cultural vitality… If we can continue to develop initiatives to keep more of our graduates, we will provide New York with a highly skilled and educated work force that has learned to solve problems and think creatively, a must for all jobs…."

Source: Lisa Marsh Ryerson
President, Wells College in Aurora New York
Chair, Commission on Independent Colleges and Universities Board of Trustees. "Solutions for New York's Future: Retaining Brainpower," 2007, www.cicu.org/publicationReports/article.php?Article_ID=23

Recent studies have shown that cities with a high quality of life attract the "creative class," those who work in creative or knowledge-intensive industries, such as technology, education, arts, financial services, and health care. Cities compete for these workers because they attract businesses looking for talented workers, and they often put their creative energy into improving their community. In *The Rise of the Creative Class*, Richard Florida argues that a city should focus on attracting and retaining talent rather than spending its efforts on attracting particular businesses or sectors. The talent creates jobs and strengthens the economy. More important, an April 2007 study highlights that these benefits can also apply more rural and smaller communities, such as Marquette.[7]

As Richard Florida notes, creative people crave stimulation and unique experiences. They are drawn to a place with an "indigenous street-level culture – a teeming blend of cafes, sidewalk musicians, and small galleries and bistros." Conversely, chain stores and restaurants repel them.[8] This desire for a distinctive experience explains why urban design and zoning are important to drawing the creative class. Marquette's Community Master Plan claims the downtown area has lost its vibrancy as chain retailers have moved onto "The Strip." However, the lack of chain retailers downtown creates an opportunity for a "cool" environment by leaving space for independently owned stores. Marquette has capitalized on these desires, as shown with the recent announcement of Redfella Records' expansion of its studio space.[9] The city could also help accelerate this process by

[6] Northern Michigan University, "NMU Enrollment Hits All-Time High." News Release, January 5, 2007. http://newsbureau.nmu.edu/printrelease.cfm?storyid=3597
[7] From McGranahan, David A. and Wojan, Timothy R, "The Creative Class. A Key to Rural Growth," *Amber Waves*, April 2007, pp. 17-21.
[8] Florida, Richard. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*. Basic Books: 2002.
[9] "Local Record Company Launched," *Mining Journal*, Marquette MI, April 8, 2007.

encouraging, in downtown, the development of large customizable upper-story space. [10] These actions make downtown and the waterfront an accessible, affordable area, building on the best characteristics of Marquette for NMU graduates in other parts of the city.

Exhibit 2.3: Partnership with the University

A joint study by the Initiative for a Competitive Inner City and CEOs for Cities found that "(l)everaging academic assets in urban economic growth strategies remain one of the greatest untapped urban revitalization opportunities in the country." Mayors should "incorporate college and university leadership to advise on future direction and bring to bear their considerable purchasing, employment, real estate development, business incubation, advising, and workforce development resources." The Virginia Commonwealth University (VCU) formed a joint venture with the state of Virginia and the city of Richmond to create the Virginia Bio-Technology Research Park. With advice from the business school, the center has sparked new businesses and new jobs. Twenty-six companies have been born – 75 percent of those from VCU faculty research – a powerful tool in attracting the best faculty and brightest students. The university also stands to gain from building on the existing partnership.

Following are four suggestions for potential partnerships between Marquette and NMU:

1. Promote NMU to offer housing incentives to faculty and staff in the downtown and waterfront areas, such as mortgage assistance or a university shuttle.[1]
2. Encourage NMU to launch a local purchasing initiative. New York's Columbia University is making its purchasing more small-business friendly through a local vendor base listing for procurement officials to use.[1]
3. Work with NMU to develop business incubators and joint ventures in the downtown and waterfront areas.[1]
4. Convene the leadership of the city, NMU, and the business community regularly to identify and further economic development partnerships and opportunities benefiting the local and university community.[1]

Source: Leveraging Colleges and Universities for Urban Economic Revitalization: An Action Agenda

2.2.2 Attracting the Baby Boom Generation

The second target market for downtown/waterfront living and working is the baby boom generation, who are looking for second homes in which they can later retire. According to a 2006 survey of boomers by the National Association of Realtors, half of the baby boom generation in urban areas wants to retire in a small town or rural area[11]. People in this group want a retirement community with a lower cost of living, near their families, good health care, and a body of water. A National Association of Home Builders 2005 survey concurred and mentioned additional desirable features including freshwater access,

[10] Cooltown Studios is a web site/blog dedicated to the creation and promotion of these types of places. You can find out more about what makes a cool town at *www.cooltownstudios.com/files/cooltownprogram.pdf*.

[11] Harney, "Kenneth R. Baby Boomers Planning Big Splashes in Next 60 Months." *Realty Times*, January 23, 2006.

greenspace views, and acceptable walking distances to fitness centers and outdoor trails.[12] The NAHB survey also found that 50 percent of those surveyed were looking to buy housing for vacations, retirement, or investment in the next five years.

Marquette's downtown and waterfront areas have many assets to appeal to baby boomers, such as Lake Superior, small-town living, lower cost of living, a superior health care system with the Marquette General Medical Center, access to hiking and biking trails, a vibrant food cooperative for healthy eating, and consistent winter snow cover for winter sport enthusiasts. The Downtown Waterfront District has a distinct opportunity to provide a good quality of life for baby boomers in a relatively affordable area in the upper Midwest. Currently there are not enough housing options in the Downtown Waterfront District. The city should consider efforts to increase the availability of vacation and retirement housing in this area.

2.3 Implications of New Market Opportunities

If the city chooses to target these two markets, there would be significant effects on housing, commercial, and retail in the Downtown Waterfront District.

2.3.1 Housing

Marquette currently has a wide variety of housing at a broad range of price points. The Lower Harbor waterfront housing market would need to differentiate itself by appealing to the new market segments and their respective lifestyles. The target audiences of the "young and hip" and the "older and active" are looking for housing in an interesting environment that is convenient to social gathering places, such as coffee shops, restaurants, or pubs.

The "young and hip" and "older and active" will occupy different niches of the downtown/waterfront market. Waterfront residences and water views command a premium which the "older and active" are typically more able to afford. These would be new projects and upscale retrofits in the form-based code zone. While these residences satisfy the desire of some older adults to move to smaller units, the units are still spacious and have high-quality amenities. Further from the waterfront and generally lacking water views, there is a market for smaller, more affordable urban units. Good design is still important to this market but with smaller sizes and fewer luxury amenities. A good way to test this market would be to retrofit underused upper stories of historic buildings. One barrier to affordable housing downtown is the residential parking requirements. Reducing or removing these requirements would help create nice-looking, affordable housing. (See Section 4.1.3 for more information.)

2.3.2 Commercial

Unlike residential users, office and business users are less likely to pay a premium for water views. The two target markets for downtown will occupy only a limited amount of conventional commercial space. They are looking for atypical working environments. A two-prong strategy might be useful to address each market. One strategy is to create low–

[12] Ibid.

cost, flexible office space on the underutilized upper stories of downtown buildings. The city could acquire space to create incubator space for start-up businesses. A second option is to build live/work units in the waterfront area. A live/work unit, as the name implies, is a building that functions as both a home and a place to work with the workspace in front on the first floor and the living space in back or above. The workspace is larger and more public than a typical home office. According to the National Association of Realtors survey of the baby boom generation, over 35 percent said they might retire from their current jobs to work part time or to run their own businesses.[13] The live/work space fills their needs and can contribute to both the economy and the liveliness of the waterfront because it brings both residents and customers to the area. This type of building is appealing to architects, consultants, and other professionals who spend much of their time outside the office at their clients' sites, as well as businesses like accounting and hairdressing that schedule visits for a limited number of patrons.[14]

2.3.3 Retail

To draw these new markets, Marquette will need to continue to create a distinctive and memorable retail area. Affordable entertainment and places where people can converse (coffee houses, bars, and other public places) are important to those in the creative class, who need to create networks to succeed. Marquette's existing food cooperative is a good anchor for the downtown. The city could consider building on it by encouraging services such as fitness centers, hair stylists, yoga studios, and dry cleaners to enhance downtown waterfront living.

The waterfront also supports specialized retail services. Marinas, boat rentals, and recreational fishing help maintain a working waterfront. One potential waterfront service is a banquet or events hall with water views for weddings and other social events. In Marquette's design workshop, a participant mentioned that the yacht club was tentatively exploring building such a venue, similar to those in other waterfront communities (Exhibit 2.4).

Exhibit 2.4: In Port Washington, Wisconsin, this waterfront yacht club building hosts weddings and other events.

Potential markets in for real estate in the downtown and waterfront include:

- Vacation/retirement housing for older adults;
- Hip loft-style housing for young professionals;
- Lifestyle retail creating a distinctive social/shopping environment;
- Live-work units for second career start-up businesses; and
- Specialized marine services to support recreational boating.

[13] Molony, Walter, "Baby Boomer Study Shows Changing Housing Needs, Uncertain Retirement," National Association of Realtors, October 16, 2006.
[14] For more information on live/work units and suggested building code standards, see: *www.newurbannews.com/flexhouse.html*.

The strength of each of these markets will vary over time. It is important for the code in the Downtown Waterfront District to allow developers the flexibility to respond to changes in the market. A form-based code could provide the flexibility developers need to change the mix of uses in their buildings to meet the changing market demand.

3 MARQUETTE WATERFRONT FORM-BASED CODE

During the form-based code workshop in December 2007, Marquette's citizens expressed a vision for the Downtown Waterfront District. Appendix B summarizes their ideas, which fit the following themes:

- Connect downtown and waterfront with paths and view corridors;
- Create walkable streets and improve pedestrian connections;
- Provide public access to the water;
- Control the scale and fit of new development;
- Maintain a working waterfront;
- Encourage a mix of uses—bring more housing downtown;
- Reconfigure parking; and
- Preserve and increase greenery in the district.

This chapter will discuss how the suggested draft form-based code addresses these goals by:

- Creating a series of new streets and paths to connect downtown with the waterfront;
- Designating the location and size of buildings and parking lots to preserve view corridors and community character;
- Proposing a street design that is comfortable for all users, especially pedestrians; and
- Allowing developers flexibility in the types of uses allowed in each building so they can meet the changing demands of the market.

Exhibit 3.1: How Form-Based Codes Work

Form-based codes differ from conventional zoning by primarily controlling physical form, with a lesser focus on the type of uses allowed. In contrast, conventional zoning focuses on the types of uses on a site and the control of development intensity through abstract parameters (e.g., dwellings per acre, setbacks, parking ratios, traffic level of service).

The draft form-based code contains three major components:

- *The Regulating Plan* is a map that shows the location of streets, paths, and public spaces. It defines which building form standard applies to any given lot and illustrates where aboveground parking can be located.
- *Building Form Standards* regulate buildings' height, location on lots, design, and uses.
- *Illustrative Street Specifications* create a basic template for street design in the waterfront district.

Form-based codes should not be confused with design guidelines or general statements of policy; they are regulatory, not advisory

3.1 Connecting the Waterfront to Downtown

As industrial port uses have declined, many cities have recognized the appeal of attractive, welcoming waterfronts and the economic benefits a thriving, easily accessible waterfront can provide. Marquette is no exception; the city has decided to re-orient itself toward the water and embrace the waterfront. Participants in the design workshop said they wanted to be able to reach the water and walk along the waterfront, as well as to view the water from downtown.

Historically, downtown Marquette faced away from the waterfront to avoid viewing its unattractive industrial activity. As a result, the unattractive backs of many buildings face the water. In addition to this alignment issue, public access to the waterfront is limited. Roads and paths do not reach the water (Exhibit 3.2). Private landowners, who can restrict access, hold the waterfront property. The launching and service needs of the recreational boating community also block public access to the water in this area (Exhibits 3.3 and 3.4).

Exhibit 3.2: The existing street system does not connect downtown with the water's edge.

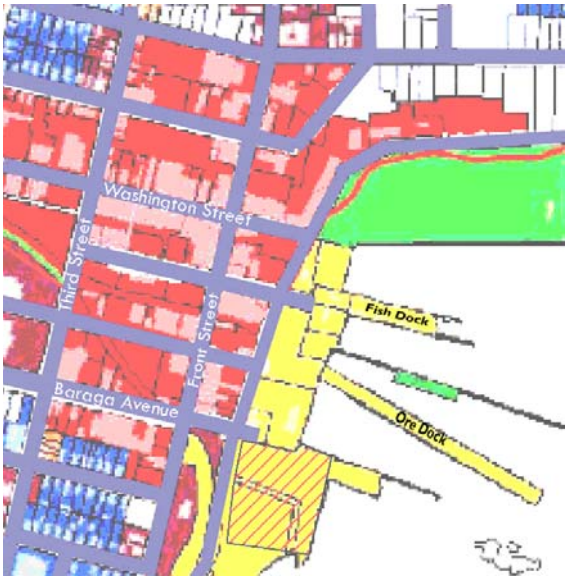


Exhibit 3.3: Private marine services and boat storage block access to the water in Marquette

Exhibit 3.4: Corrugated metal shanties line the privately owned Fish Dock.

The draft form-based code uses the regulating plan to turn the downtown around to embrace the waterfront. It illustrates the location of new public spaces as a network of streets, pedestrian paths, and parks and open space. The proposed regulating plan extends Baraga Avenue, Spring Street, and Main Street to the water. The plan lays out pedestrian pathways that connect Washington Street to the water and connect the Fish Dock with Founders Landing along the water's edge, providing a nearly continuous path from downtown through the entire Waterfront District. This pathway links to a similarly planned path on the Founders Landing site, allowing public access to water along a significant section of the waterfront. A public pathway also extends onto the center of the Fish Dock to allow public access to future commercial development on the pier (Exhibit 3.5 and 3.6).

The draft form-based code does not mandate the construction of the waterfront pathway. It only states that landowners should provide public access to the water along the pathway if they want to build on their property. At the workshop, many of the recreational boating landowners expressed concern that public access would affect the quality of marine services; as a result, they were reluctant to build on their sites. Boardwalk design, however, can gracefully accommodate both commercial marine uses and public access, as seen in an example in Sheboygan, Wisconsin (Exhibit 3.7).

The public streets and paths in the regulating plan indicate where the front of each building should be. This ensures that new buildings will face the waterfront

Exhibit 3.5:The dark blue shows where public access would exist under redevelopment.

Exhibit 3.6:The regulating plan would allow public access down the center of the Fish Dock and allow new shanties for tourist amenities

Exhibit 3.7 In Sheboygan Wisconsin, the boardwalk has little impact on marine activities.

3.2 Preserving Water Views and Community Character

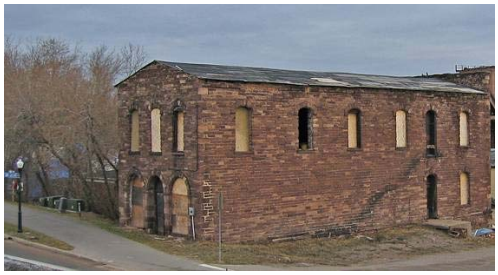
A view of the water is a major component of Marquette's community vision. Many people expressed concern that excessively tall buildings would not fit the character of the waterfront area and would block the views from businesses on Front Street. However, the current code allows the construction of buildings up to 60 feet high on parcels west of Lakeshore Boulevard between Washington Street and Baraga Avenue. If the owners of these parcels were to construct buildings to that height, all the views from Front Street could disappear. On the other hand, if the zoning on these parcels allowed only one- or two-story buildings, it would affect the plans landowners might have for their properties.

To preserve and improve water views from public areas, the regulating plan creates view corridors by extending streets all the way to the water; it also steps up the height of buildings the farther they are from the water. The regulating plan uses simple color codes for streets and paths. Each color delineates the increasing number of stories that can be built on that part of the street as you leave the water. The natural topography of the area enhances the code's increased building heights as you move further inland. The form-based code creates building standards and defines street layout all the way to the waterfront so waterfront development will preserve view corridors along public rights-of-way. The progression in building form standards creates a smooth transition from the look and feel of a working waterfront at the water's edge to a typical downtown building along Front Street.

The location, size, and placement of buildings on their lots also affect community character. In the workshop, the community wanted to avoid having long, monotonous rows of buildings at the same height. Oversized buildings separated from the street by large parking lots do not fit the downtown character of the waterfront

The form-based code's form standards ensure that buildings are an appropriate scale and orientation on the lot (Exhibit 3.8). The building form standards regulate height in stories rather than total feet, thus allowing for variety in actual building height.

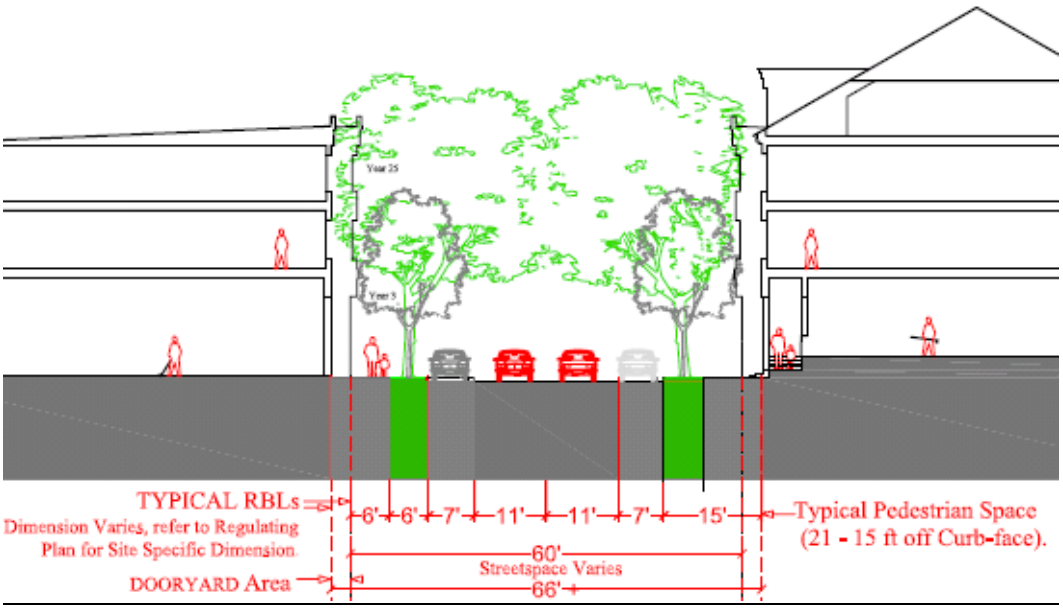
Exhibit 3.8 The form-based code's building form standards manage the fit and scale of buildings so that the abandoned building in the left image can be rehabilitated and new buildings can be built to fit together seamlessly along Lakeshore Boulevard as visualized in the right.



3.3 CREATING STREETS THAT ARE COMFORTABLE FOR PEDESTRIANS

Workshop participants wanted the new district to be a comfortable place to walk and expressed concern over high-speed traffic, and trucks, on Lakeshore Boulevard. The form-based code's illustrative street specification (see Appendix F) creates a basic template for pedestrian-friendly street design in the Downtown Waterfront District. The illustrated design reflects a 66-foot right-of-way, which creates a 36-foot-wide

Exhibit 3.9:The cross section of the form-based code illustrative street design standard



roadway, which is a narrower road than is typically found in Marquette (Exhibit 3.9). A narrow road instills caution and slows the driver. There is an inverse relationship between the speed of an automobile and the likelihood of a pedestrian surviving a collision. For example, a pedestrian struck by an automobile traveling at 30 miles per hour has a 55 percent chance of surviving the accident; however, the survival rate increases to 95 percent if the car decreases its speed by just 10 miles per hour. The form-based code's street specifications meet the pedestrian-friendly needs of the Downtown Waterfront District while accommodating the expected volume of vehicle traffic in the area.

The Institute of Transportation Engineers (ITE) found that a 36-foot-wide roadway in a 60-foot wide right-of-way performed best in a case study of roadway designs for a retail-oriented Main Street.[15] Alternative #3, illustrated in Exhibit 3.10, is similar to the illustrative street design in the draft form-based code. It accommodates commercial and car traffic while enhancing the pedestrian experience. It also does a good job of accommodating large delivery trucks and boat trailers, just at a slower speed. The weaknesses of this design – decreased vehicle capacity and absence of dedicated left-turn lanes – are not as important for streets in the Downtown Waterfront District since they are not major through streets.

[15] Design Example 1: Creating a Retail Oriented Main Street, *Context Sensitive Solutions For Designing Major Urban Thoroughfares*, An ITE Proposed Recommended Practice, Institute of Transportation Engineers, Washington D.C., 2006, p. 71. Online at: http://www.ite.org/bookstore/RP036.pdf.

Exhibit 3.10: Relative performance of form-based code design alternatives for pedestrian-oriented Main Street with 60-foot right of way.

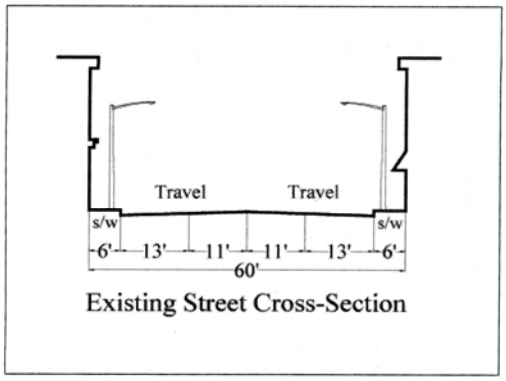


Figure 6.1B Existing street cross section. Source: Kimley-Horn and Associates Inc.

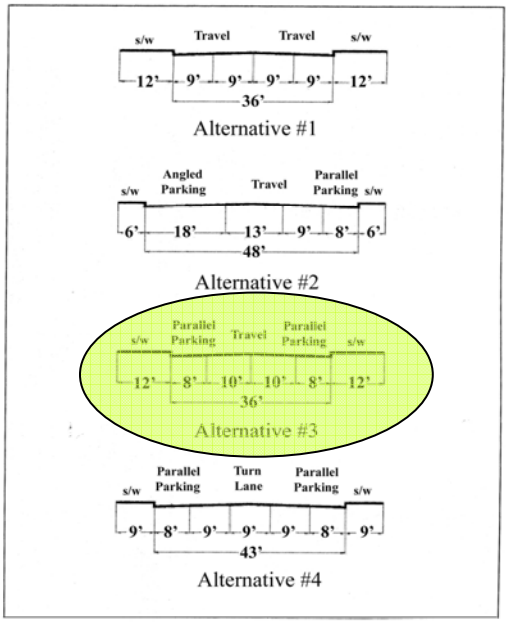


Figure 6.1C Alternative street cross sections. Source: Kimley-Horn and Associates Inc.

Relative Comparison of Trade-Offs

Alternative	Parking	Sidewalk Width	Vehicular Capacity	Large Vehicle Accommodation	Pedestrian Crossing Width	Left Turn Lanes	Bike Accommodation	Ped. Amenity Accommodation	Speed Reduction
Existing	- -	- -	+ +	+ +	- -	- -	- -	- -	- -
1	- -	+ +	+ +	- -	- -	-	- -	+ +	+
2	+ +	- -	-	+	+ +	+ +	- -	- -	-
3	+	+ +	-	+ +	+ +	-	- -	+ +	+
4	+	-	+	- -	+	+ +	- -	-	+ +

Score (relative to other alternatives)

+ +	Good (achieves objectives)
+	Fair
-	Poor
- -	Fails to meet achieve objectives

Figure 6.1D Relative comparison of alternative trade-offs. Source: Kimley-Horn and Associates Inc.

The form-based code illustrative street standard also has generous areas for tree planting. Healthy street trees are an important part of a pleasant, attractive urban environment and tall trees, can reduce urban traffic speeds; create a safety buffer between pedestrians and vehicles; improve the income streams of businesses along tree-lined streets; increase apartment and office building occupancy rates; and shelter pedestrians from rain, sun, and heat. More sustainable features can be included in these tree-planting strips by adding site-specific stormwater management strategies (see Appendix C.)

Exhibit 3.11: More Trees Mean Better Water Quality, Plus Many Other Benefits

Marquette citizens expressed a desire to see more trees in Marquette's central areas. The benefits to the city would be multi-fold. In a study conducted by the U.S. Forest Service in Salt Lake City, the urban forest's "interception" of a 1-inch rainstorm over the course of 12 hours reduced surface runoff by about 11.3 million gallons, a number that would increase with greater tree canopy. The tree canopy reduces pollutant releases to waterways and stormwater runoff by some 2 percent each time that a community's tree cover increases by 5 percent. Over its lifetime, a street tree delivers more than $90,000 of direct benefits in return for the initial investment of $250 to $600 in planting costs and three years of maintenance. The qualitative benefits — the aesthetic, social, and ecological value — may be even greater. Environmental benefits of a tree canopy include carbon sequestration and absorption of other air pollutants, including up to a 60 percent reduction in street-level particulates, the tiny particles emitted from burning diesel and other fuel and cause respiratory problems. A broad tree canopy can reduce energy use by shading buildings and blocking winter winds.

Source: American Forests, "How Trees Fight Climate Change", 1999, in Benefits of Trees in Urban Areas," www.coloradotrees.org/benefits.htm
Dr. Kim D. Coder., "Identified Benefits of Community Trees and Forests," University of Georgia, October 1996, in "Benefits of Trees in Urban Areas," www.coloradotrees.org/benefits.htm.
Dan Burden, "Urban Street Trees: 22 Benefits. Specific Applications." Summer 2006. www.walkable.org/download/22_benefits.pdf

3.4 Allowing Flexibility Through Simplified Code

A key component of a form-based code is its focus on building design rather than use. The code uses many illustrations to show the acceptable type of building. Unlike conventional zoning, which primarily regulates what type of business or housing can occupy the site, a form-based code allows much broader choices on building use. This makes it easier for building owners to adapt to changing markets without requesting a variance from the planning and zoning commission. This built-in flexibility of form-based codes increases a property's long-term viability.

The form-base code's focus on building design rather than use would allow Marquette to achieve its vision for the Lower Harbor waterfront incrementally. At the same time, it does not restrict landowners' ability to supply buildings that meet the market demand for specific uses. As such, the code would help revitalize Marquette's waterfront and integrate it with the downtown.

4 INTEGRATION STRATEGIES

During the form-based code workshop, Marquette residents said that they wanted the design benefits of the form-based code to include areas surrounding the Downtown Waterfront District. In these areas, they specifically wanted to:

- Reconfigure parking;
- Connect downtown with rest of community;
- Create walkable streets and improve pedestrian connections;
- Encourage a mix of uses and bring more housing downtown; and
- Preserve and increase greenery in the district.

In areas not regulated by the form base code, Marquette could use public incentives, policy changes, and infrastructure investment to implement many of the designs citizens want. This section will examine options for bringing the citizens' vision for the waterfront to a wider downtown area.

4.1 PARKING DESIGN AND MANAGEMENT

Reconfiguring the design and management of parking can help Marquette advance many of its other goals for downtown. A properly designed and executed parking program can remove barriers between downtown and the surrounding community, improve walkability, increase housing availability, and increase the amount of greenery downtown. The key to a good parking program is to find a balance of supply and demand for parking. Marquette has taken positive steps to address this imbalance. The DDA's centralized parking management program has innovative features, including:

- The elimination of minimum parking standards for commercial uses allows landowners to redevelop historical structures and small lots without having to identify a minimum number of parking spaces for the retail and commercial tenants.

- The DDA's employee parking leasing program on public parking lots creates a flexible alternative for businesses that do not have on-site parking spaces for employees.

While these efforts are a good start for managing the supply and demand for parking, many attendees of the design workshop felt that the cities large surface parking lots make downtown an unattractive place to walk with few trees and other greenery. Some tables of participants recommended hiding the parking lots behind landscaping or rows of buildings. Several tables proposed building unobtrusive parking structures with first-floor retail space, housing on top, or some other use. Some people were concerned with the loss of parking spaces. This section presents some options for a parking management and design strategy that can support a walkable, economically healthy downtown Marquette.

4.1.1 Parking Barriers

An excess amount of unscreened surface parking lots is a significant barrier to creating a downtown that is linked to the rest of the community; has lots of stores, restaurants, and jobs; and is a pleasant place to work. Studies on downtown parking by the DDA and Carl Walker Inc. identified a proliferation of private parking lots that, when added to city lots, provide one-third more parking spots than are needed downtown. At the same time, surveys show a public perception that parking is scarce downtown because on-street parking, which customers value most, is difficult to find for several reasons:

- People who work downtown occupy on-street parking spaces.
- Downtown blocks lack alleys, which typically provide access for delivery trucks. These blocks require on-street loading zones, which displace valuable parking spaces.
- The reserved employee-parking program run by the DDA confuses retail customers. They are unsure if certain parking spaces and lots are off limits.
- Private lots do not allow shared parking. Only customers of the businesses served by the private lot may park there, and they are discouraged from leaving their cars there while they walk to other nearby businesses. When the business is closed, the private lot is unused, which is inefficient.

Exhibit 4.1: Retail customers value on-street parking on Front Street in Downtown Marquette

While excess free and under-priced parking might sound good to an individual driver, there are costs to the community.

- The surface parking lots create a greybelt of "pedestrian dead zones"[16] that separate the vibrant blocks of downtown along Washington and Front Streets from the waterfront, the rest of downtown, and neighboring residential areas, preventing the expansion of downtown and its integration with the rest of Marquette (Exhibit 4.2).

- Large surface parking lots create an auto-oriented environment in which patrons must drive from place to place instead of being able to park once and walk.

- Excess parking ties up valuable land and can discourage the development of a dynamic downtown with new housing, parks, and businesses.

- Parking lots are large areas of impervious surfaces that generate stormwater runoff contaminated with dirt, dust, oil, and other pollutants that can affect water quality in Marquette Bay every time it rains.

Exhibit 4.2: A greybelt of parking lots surrounds vibrant core of downtown Marquette, separating it from the waterfront and the rest of the community

[16] People like to walk on streets that are lively and full of interesting things. They enjoy window-shopping and meeting people along the way. All this activity creates a sense of security that others are looking out for them. Walkers see empty lots, boarded-up buildings, and surface parking lots as boring and unsafe. These "pedestrian dead zones" destroy the vitality of a commercial district because pedestrians will not walk across them to get from one store to another.

4.1.2 Parking Management Options

Proper management and design of downtown parking could break up the greybelt. Reconnecting the vibrant parts of downtown with the rest of the community would make walking to and around downtown a more inviting and pleasant experience.

Manage Supply and Demand of On-Street Parking. On-street parking is important to downtown retail viability. Retail customers consider these spots the most desirable parking places. In parking surveys mentioned earlier, respondents connected the lack of on-street parking to a belief that there is no parking downtown. Businesses need sufficient convenient and inexpensive on-street parking for shoppers who want to make a quick trip. It is important to manage the on-street parking supply so that visitors can expect to find reasonably convenient parking. Some employees of downtown businesses use convenient, on-street parking spots, displacing and discouraging customers.

Increase Parking Incentives/Disincentives for Downtown Workers. Marquette may want to consider options that increase incentives for using parking lots and price on street parking to make more spaces available.

- Provide inexpensive or free employee parking in convenient, weather-protected structures to entice some employees from parking on the street.
- Consider charging all businesses a flat fee for public parking regardless of whether they supply their own parking (see Exhibit 4.3).
- Install on-street meters with rates that increase the longer you stay. Some parking meters allow free parking with a push of a button, as in the Pentagon Row development in Arlington, Virginia. If you want to stay longer, you have to pay. Other parking meters have sensors that prevent people from re-feeding the meter or reusing the free-time button, as in Bethesda, Maryland. The sensors require the movement of the vehicle before you can add any additional time to the meter.

Exhibit 4.3: Alternative Model for Public Parking Management

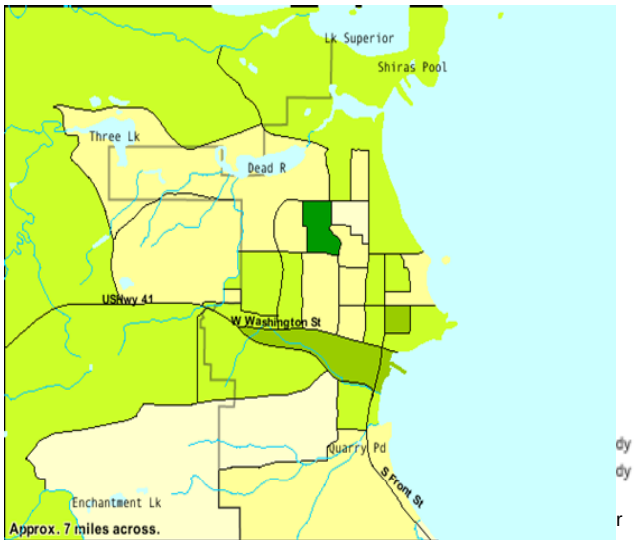
Boulder, Colorado, views parking as a public good. The city charges all downtown businesses a fee for public parking and uses the funds to provide public parking structures that are free to everyone. This model reduces the incentive and need for private lots because businesses that have private lots would pay for parking twice, once for the monthly fee and once for the cost of their lot. This encourages the redevelopment of private parking lots into useful buildings. The free parking in Boulder's public lots also encourages employees to use the lots rather than on-street parking. Unlike Marquette's current system, Boulder's parking utility fee structure does not require a monthly rental program and the associated reserved parking places. Everyone coming to downtown Boulder can access all the public parking lots at any time. This allows the sharing of parking spaces over different times of the day, reducing total need for parking and the public confusion over the use of reserved parking spots.

4.1.3 Residential Parking Options

In the design workshop, Marquette residents said they wanted to increase the amount of housing downtown. The city's current residential parking requirements can make that difficult. Many building lots do not have available space for surface parking, so if the owners decide to develop them into housing, they would need to provide residents with either expensive structured parking or off-site parking using the leasing program in city lots. Research has shown that minimum residential parking requirements can increase the cost of housing by 20 percent.[17] Requiring property owners to find two parking spots for each unit increases the cost of housing and discourages redevelopment of the upper floors of existing buildings into loft-style apartments. The city can consider a variety of approaches to cost of residential parking downtown.

- Consider reducing the parking requirements for residential units in the downtown area below the current level of two parking places per unit. Census data in Exhibit 4.4 demonstrates that the downtown area has lower rates of household car ownership. People who choose to live in walkable mixed-use communities often own fewer cars. In Milwaukee, Wisconsin, only very high-density housing has any parking requirement at all, and then only a low two-thirds of a space per unit.

Exhibit 4.4: Marquette's Downtown has a higher percentage of car-free households than does the rest of the city.



- Separate the cost of parking from the cost of housing. Arlington, Virginia, requires some developers in walkable, mixed-use districts to charge for parking separately from the cost of housing. This separation allows tenants to choose how much parking they need. When the parking cost is not buried in the rent, many choose less parking, reducing overall demand for parking in the district.

- Allow on-street parking to count as part of parking requirements. Milwaukee and Boulder allow developers to count on-street parking that fronts their property as part of their parking totals. On blocks that do not have many businesses, Marquette may want to consider allowing developers the same option.

[17] Shoup, Donald, *High Cost of Free Parking*, American Planning Association, 2005.

4.1.4 Parking Design

While parking management programs can better balance the supply and demand for parking downtown and along the waterfront, the footprint, location, and design of parking lots determine whether the citizens' goal of a walkable, green downtown is achieved.

The form-based code manages parking by requiring all aboveground parking to be placed back from the front of the building line. This parking setback line is found on the regulating plan for each lot. Residents participating in the design workshop instinctively understood the need to reconfigure parking throughout the downtown and waterfront. They suggested a variety of methods for structuring and screening parking lots throughout the Downtown Waterfront District and the surrounding areas. Marquette could use a variety of these options throughout the downtown.

- Use structured parking lots. Structured parking lots can be an attractive way to accommodate parking while minimizing its impact on the vitality of downtown. Marquette can consider building parking structures to encourage the redevelopment of key parcels in the downtown. Structured parking costs significantly more than surface parking. To finance these structures, Marquette may consider public-private partnerships to develop apartments or condominiums on the top floors of these parking structures.

  Exhibit 4.5: Art studios line the first floor of this parking structure at the Belmar development in Lakewood, Colorado.

  While building a parking structure helps reduce the footprint of parking, the structure itself, unless properly designed, can still have a negative impact on the downtown environment. Small storefront spaces on the first floor of the lot allow passers-by to interact with people rather than with cars. These spaces are generally shallow and wide and therefore are not very desirable as traditional retail spaces. Alternative uses for this space include lobby space and elevators for housing located above parking, tourist and other public information space, and art studios (Exhibit 4.5).

- Decrease the size and increase the number of surface parking lots. More, smaller parking lots in lieu of fewer, larger parking lots create smaller dead zones for pedestrians to cross and provide a more pleasant walking environment.

- Place parking behind, above, or below the buildings it serves. This makes the streetscape more attractive and safer for pedestrians and bicyclists. Parking lots in front of buildings and on corner lots look unappealing, take up economically valuable space, and create more places where pedestrians have to dodge cars (Exhibit 4.6)

Exhibit 4.6: This small lot on Rock Street is an appropriate size and has a brick wall and vegetation screen, but its corner location affects the walking environment on two streets rather than one.

- If structured parking is not feasible and no space is available behind a building, a narrow and deep parking lot alongside the building is acceptable. Narrow and deep parking lots maximize parking space while reducing the amount of dead space experienced by passing pedestrians.

- Screen all sides of parking lots that face sidewalks and pedestrian paths. Placing structures and plantings between the cars and the sidewalk creates a better environment for people. Portland, Oregon, requires the screening of all surface parking lots in the downtown. Screening appropriately sized and located parking lots from people walking along the street can improve the overall environment in a downtown. Communities have used a variety of methods to create screens between pedestrians and parking lots. These include:

Exhibit 4.7: In Sheboygan, Wisconsin, grade separation and a long hedge cannot overcome the impact of this over-sized parking lot. Breaking the parking lot into smaller sections and using a variety of plant types could make the street more attractive.

  - Changing the grade between the sidewalk and parking lot. Lowering the level of the parking lot allows pedestrians to look over parked cars (Exhibit 4.7).

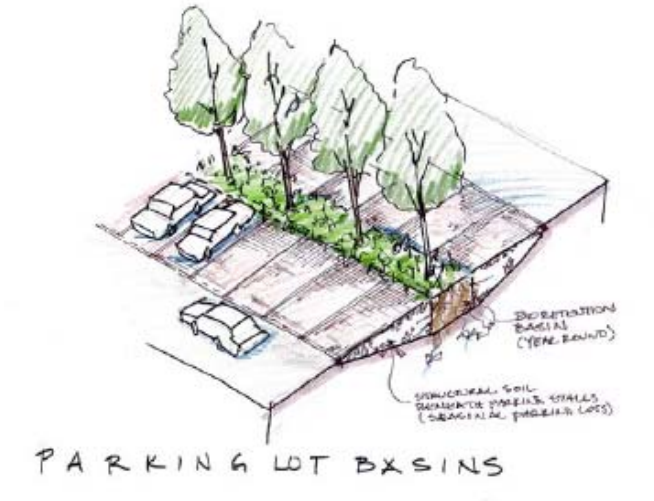
- Using walls and vegetative screens. The best vegetative screens use a variety of materials and plantings. These reduce the perceived size of the parking lot and make it a more interesting place to walk by (Exhibit 4.7).

- Using historic education as a screen. Signs and displays about the local heritage can educate pedestrians and create a pleasant distraction from the parking facility (Exhibit 4.8).

Exhibit 4.8: In Port Washington, Wisconsin, a display about the history of the commercial fishing industry screens a waterfront parking lot.

- Retrofit parking lots with rain gardens and permeable paving to infiltrate stormwater runoff (see Exhibit 4.9). Low-impact development strategies such as rain gardens and permeable paving could further reduce stormwater runoff on these sites by infiltrating, evapotranspirating, and/or reusing rain. These strategies are visually attractive and can reduce costs. They can dramatically reduce pollution, decrease runoff volume, reduce runoff temperature, recharge groundwater, protect aquatic habitat, and create more interesting places to walk, ride, drive, or visit.

Exhibit: 4.9: This parking lot retrofit (upper image) and parking lot basin (lower), demonstrate how adding infiltration basins requires little space and adds more greenery to the streetscape



Proper location, reduced footprint, and good design can turn parking into an asset in downtown Marquette.

4.2 OPTIONS FOR SPECIFIC SITES

During the workshop, many participants identified the Lakeshore Boulevard parking lot as well as the public and private parking lots on the northwest corner of Baraga Avenue and Front Street as areas of the downtown that are significant eyesores. These two locations are extremely important, as they are the gateways to downtown from the waterfront and from south of town via highways 28 and 41. This section will explore design options to address these two locations.

4.2.1 Lakeshore Boulevard Parking Lot

Many participants in the form-based code workshop wanted to improve the look of the city-owned Lakeshore Boulevard parking lot (Exhibit 4.10). They felt the large paved surface created an unattractive first impression of Marquette for visitors who approach the city from the water. They also wanted to ensure that residents have access to the water at this site. Conversely, many landowners wanted to preserve the parking lot, citing a consent decree that creates a permanent easement for parking on that parcel.[18] They also need to locate a crane on the lot in the fall to lift boats out of the water and place them on trailers and to re-launch them in the spring.

Exhibit 4.10: Downtown Marquette as approached from Lake Superior. The city's Lakeshore Boulevard parking lot dominates the landscape.

The draft form-based code provides a plan for future redevelopment of the parking lot. In the meantime, the technical assistance team noted that design solutions could promote the community's broader vision for downtown as well as address the parking and boat launch needs of the sailors and boaters. Interim options for this parking lot include:

- Building an extension of Spring Street from Lakeshore Boulevard to the water. The road extension would provide public access to the water's edge, and the

[18] This report does not comment on the legal issues surrounding the consent decree.

landscaping on both sides of the street would provide a green relief from the monotonous pavement of the parking lot. The combination of street parking on the new street extension and existing parking in remaining part of the Lakeshore Boulevard parking lot would provide sufficient parking for the area.

- Providing the boating community with a new launch facility at the end of a new Spring Street extension in exchange for building a waterfront pathway from Spring Street to the Fish Dock (Exhibits 4.11 and 4.12). Using McKeesport, Pennsylvania, as a model, the city could incorporate the new launch facility into the waterfront path. This would preserve trailer access to the water.

Exhibit 4.11: In McKeesport, Pennsylvania, this boat launch doubles as a public walkway when the lift below is not in use

Exhibit 4.12:This boatlift works with the launch site above to provide launch services while retaining public access to the water.

4.2.2 Baraga Avenue and Front Street

Marquette residents want to improve the walking connections between downtown and the waterfront. The unsightly surface parking lots at the corner of Baraga Avenue and Front Street make walking to Founders Landing unpleasant and create a negative first impression of Marquette for those arriving from the south and east. This portion of Marquette's parking greybelt stretches over three blocks (Exhibit 4.13). The city could help promote the redevelopment of this parcel through a public-private partnership that would include the parcel currently occupied by the Spring Street parking lot. This redevelopment could include structured parking, first-floor retail or arts space, and office or residential space on the upper floors. A project similar to the one illustrated in Exhibit 4.13 would significantly improve the visual appeal of Front Street, the gateway to downtown from the south and Founders Landing. Any parking spaces lost by redeveloping these two lots as well as any demand for new parking generated by redevelopment could easily be accommodated in the parking structure incorporated into this new development.

Exhibit 4.13: The top image is a view of Baraga Avenue and Front Street in downtown Marquette. The bottom is a design possibility that emulates a well-designed parking structure from Staunton, Virginia, which would break up the large greybelt and make the area a nicer place to walk.

4.3 STREET AND SIDEWALK DESIGN IN THE DOWNTOWN

Participants in the design workshop expressed strong support for making the downtown and the waterfront attractive and safe places to walk. While off-street paths are a critical component of the waterfront area, a walkable downtown depends on good street and sidewalk design.

Exhibit 4.14: A visitor walking through downtown would find it difficult to distinguish Main Street from a parking lot.

Most of the streets in downtown Marquette are local streets serving downtown businesses and pedestrians and if designed similar the illustrative street section in the waterfront form-based code would create an excellent walking environment downtown. Most downtown streets are already designed reasonably well and would only benefit from improvement in sidewalk design. Main Street and Baraga Avenue, however, have rights-of-way that are much wider than the form-based code illustrative street section and would require significant redesign to improve their walkability.

4.3.1 Components of Walkable Streets

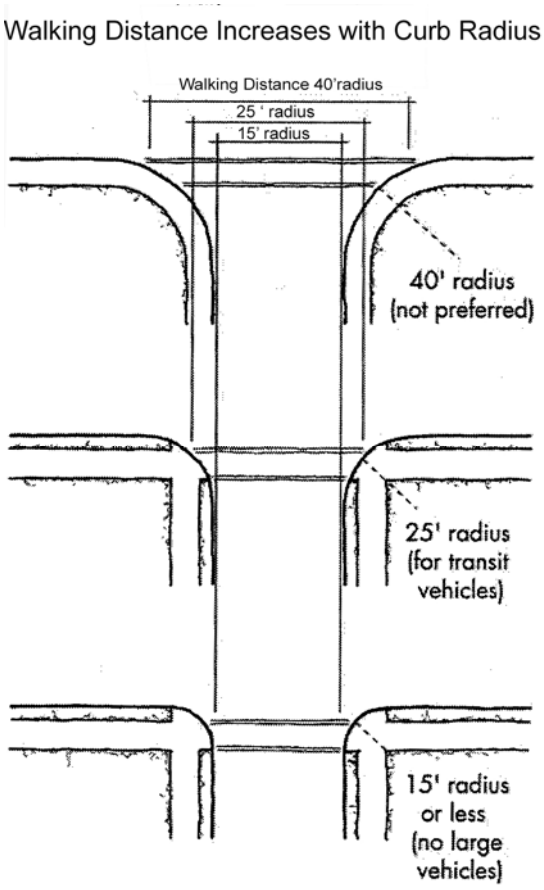
Components of walkable street design include:

Street width. Wider streets mean wider crosswalks and extend the time it will take people to cross. More time in the crosswalk means a great chance of a car hitting a pedestrian. Wide streets also encourage speeding. In spite of posted speed limits, people drive at a speed they feel comfortable. Wider streets feel like highways and encourage highway speeds. With more time in crosswalks and faster cars, wide streets are a recipe for fatal accidents. The form-based code suggested street section proposes a street width of 36 feet—11 feet for each travel lane and 7 feet for parking lanes on each side of the street.

Curb radii. Another factor in designing streets for safe walking is how sharp the corners are. Wide turning radii like those at the intersection of Baraga Avenue and Lakeshore Boulevard encourage vehicles to speed around corners while at the same time lengthen the time it takes pedestrians to cross the street, increasing their exposure to accidents See Exhibit 4.15). Extending the sidewalk into the parking lane at the intersection creates a curb extension that can also reduce the time pedestrians are exposed to traffic.

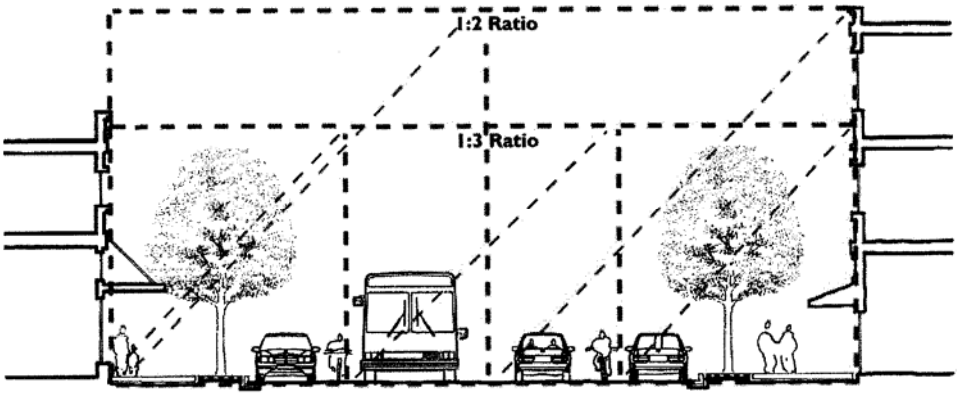
Building location and height. A street width to building height ratio of between 1:3 and 1:2 creates a human-scaled street by evoking a sense of enclosure as well as reinforcing the sense of place (Exhibit 4.16). The treatment of the right-of-way (street and sidewalks), good design of attached building façades, and ornamentation (such as street lamps or banners) work with the building-to-street ratio to create distinctive surroundings that people like to visit. When existing building are too short, a row of trees along the roadway can help enclose the street.

Exhibit 4.15:Wide turning radii increase pedestrian crossing distance.



Source: Community Design Associates

Exhibit 4.16: Taller buildings and trees enclose a street, causing traffic to slow and creating a comfortable pedestrian environment.



Source: Community Design Associates

*Sidewalk design***.** A key component of downtown walkability is sidewalk design. In commercial districts, sidewalks have three components (Exhibit 4.17). The "dooryard area" is the 1 to 2 feet of space nearest the building. People naturally walk outside this zone to avoid rubbing their arms and shoulders against the building. Doors that open out from shops also infringe on the dooryard area, creating obstacles for pedestrians. The middle 5 to 8 feet of the sidewalk is the "walk zone." Pedestrians should be able to walk in this area without encountering any fixed obstacles. The 4 to 8 feet of sidewalk closest to the curb is the "furniture zone." Streetlights, street signs, parking meters, tree wells, bike racks, and all street furniture should be in the furniture zone so as not to infringe on the walk zone.

Exhibit 4.17: Walk Zones in Maryland and Oregon.

Bethesda, Maryland, and Portland, Oregon, are among the many communities that vary the paving of their sidewalks to highlight these three zones. The walk zones are made of different paving surfaces than the dooryard and furniture zones. This subtly sends the message that these areas are safe for walking. Although these two communities use brick paving in the walk zones, it is not necessary to do so. Different colored concrete paving—e.g., tan in the walk zone, gray in the furniture zone and dooryard area —works just as well, and its smooth surface facilitates snow removal.

Well-designed sidewalk in Bethesda, Maryland.

4.4 Improving Walkability of Baraga Avenue and Main Street

Baraga Avenue and Main Street have much wider rights-of-way than most streets downtown and need different design options.

Exhibit 4.18: Baraga Avenue is nearly 100 feet wide, too wide to be crossed safely

Baraga Avenue. During the design workshop, Marquette residents said Baraga Avenue was too wide and unsafe to cross. They also said the large surface parking lots on the north side of the street are unattractive and not a pleasant place to walk (Exhibit 4.18). As mentioned above, a comfortable street to walk down has a ratio of at least 1:3 between street width and building and tree heights. Baraga Avenue currently does not meet this ratio. Four options can help address this problem:

1. Build taller buildings on the empty lots;
2. Plant tall street trees;
3. Narrow the street; or
4. Do all of the above.

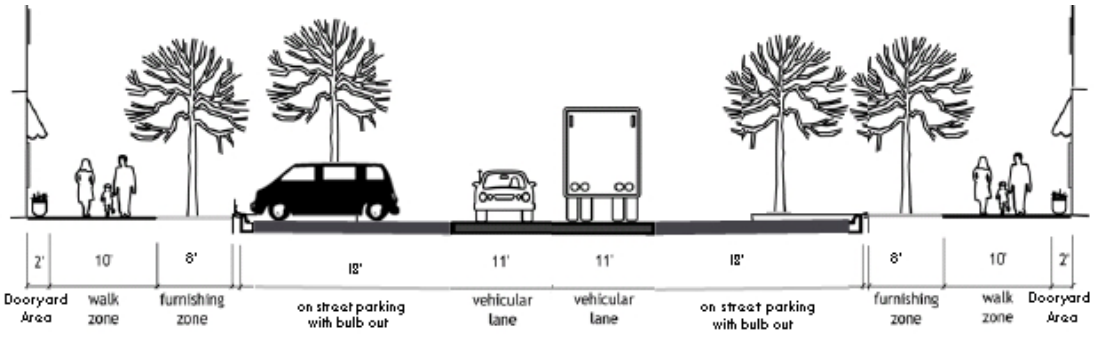
1. Build taller building on empty lots. As mentioned in Section 4.2.2, the city of Marquette may want to collaborate with landowners and developers to develop the northwest corner of Front Street and Baraga Avenue and the Spring Street parking lot. Buildings of four or five stories would do a better job of enclosing the wide street, making it more appealing to walk down. Redeveloping the lot on the northwestern corner of Front and Baraga is particularly important as it would help frame both Front Street and Baraga Avenue and make them more attractive to pedestrians.

2. Plant tall trees. Tall trees planted near the road could also help frame the street in front of existing buildings. This is a particularly useful approach when a street has wide sidewalks and/or the market cannot support tall buildings. Planting trees in curb extensions that bulb out into the parking lane of the street further enhance the sense of

enclosure. More information on street trees can be found in Appendix E. The tree canopy creates a pleasant walking environment and provides shade.

3. Narrow the street. Marquette can consider two options for reconfiguring Baraga Avenue to improve the pedestrian experience. Both options narrow the street by widening the sidewalk. Both also frame the street with tree plantings, which help slow traffic.

Exhibit 4.19: Alternative Baraga Avenue street section (Option A) with angled parking, curb extensions, and two rows of street trees

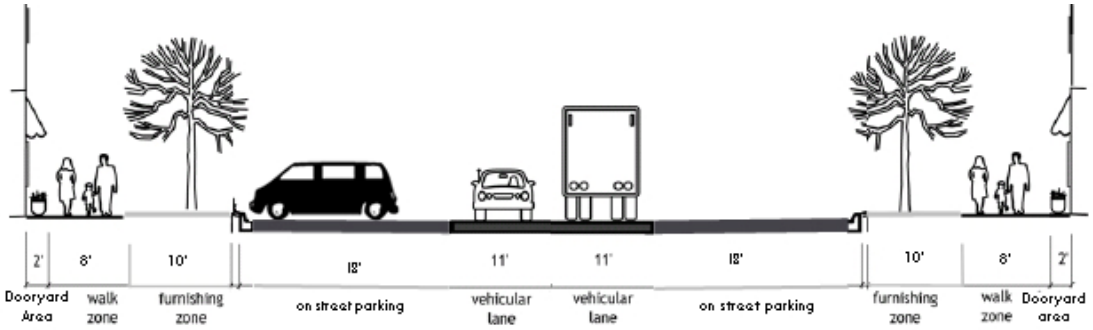


Option A (Exhibit 4.19) narrows the street by placing a second row of street trees in planting wells that extend the curb into the parking bays every 40 feet. Curb extensions are placed on the corners to shorten the crosswalks. The trees planted in the curb extensions alternate with the trees planted curbside. In each row, the trees are roughly 40 feet apart. The parking wells between these curb extensions create a traffic-free place for loading and unloading vehicles.

If Marquette chooses this design, the curb extensions offer an opportunity for stormwater infiltration. For example, Portland, Oregon, created curb extensions (Exhibit 4.20) to manage runoff. Rain picks up oil, dirt, brake dust, animal waste, and other pollutants as it washes off streets. If this storm water reaches Lake Superior untreated, it can affect the water in Marquette Bay. These infiltration curb extensions filter the water through the ground before it reaches the lake.

Exhibit 4.20: Stormwater curb extensions are functional and attractive additions to a streetscape. Street runoff flows into the landscaping and soaks into the ground.

Exhibit 4.21: Alternative Baraga Avenue street section (Option B) with angled parking, no bulb-outs, and one row of street trees.



Option B (Exhibit 4.21) is a simpler design without the curb extensions. The street trees are 30 feet apart. This design is less expensive to build and would be easier to clear of snow. However, the street would still be more than 58 feet wide at the crosswalks. Experience suggests this is still too wide for pedestrians to cross safely. The city of Crested Butte, Colorado, addressed such a problem by using planters to create temporary summer curb extensions to shorten the crosswalks (Exhibit 4.22). When snow season begins, the planters are stored to let plows run through.

Exhibit 4.22: Temporary summer curb bulb-outs in Crested Butte, Colorado, improve pedestrian crossings on wide streets.[19]

[19]EPA, *Connecting McCall: Concepts for Lardo and West Valley*. 2005. Available at www.epa.gov/smartgrowth/pdf/mccall.pdf.

In both options, widening the sidewalk narrows Baraga Avenue. The sidewalk's extra-wide furniture zone allows retailers to create a lively outdoor entertainment and dining zone in summer. This zone could be similar to the one in the Bethesda Row development in Bethesda, Maryland (Exhibit 4.23).

The city could further enhance this outdoor entertainment zone by allowing retailers to use the on-street parking spaces in front of their stores.

On Castro Street in downtown Mountain View, California, retailers control the parking spaces in front of their buildings (Exhibit 4.24). They can let customers park there or extend their outdoor services into the parking well. For example, a restaurant or café may choose to fill the space with tables during the summer so that customers may enjoy outdoor dining, but at other times leave the space for parking. Movable planters separate the outdoor service space from the street traffic.

Exhibit 4.23: Bethesda's Outdoor Experience

The Bethesda Row development in Bethesda, Maryland, uses wide sidewalks to its advantage by extending the restaurant dining experience to the outdoors. When restaurants place tables in the furniture zone, they create an active street scene where people go to meet friends and enjoy being outside. Reconfiguring Baraga Avenue in such a manner would help link downtown to Founders Landing.

Exhibit 4.24: Parking on Castro Street in Mountain View, California. Business owners can choose to turn on-street parking into outdoor business space.

Photo Credit: Ian Fuller

Exhibit 4.25: Pocket Parks – Small Sized and a Great Idea.

Pocket parks provide a meeting place for people, a habitat for birds, a permeable surface for stormwater infiltration, and a home for trees and other plants. These parks are the type of public and private gathering spaces that the creative class values for social interaction. These small urban parks typically range from one to three lots in size.

Marquette's one downtown pocket park (aptly named "Pocket Park") connects the Bluff Street parking structure with Washington Street. This pocket park provides a small green space for customers and workers taking a break on Washington Street. The sheltered space with southern exposure provides a warmer outdoor spot on brisk sunny days. As the trees grow, they will provide shade on hot summer days.

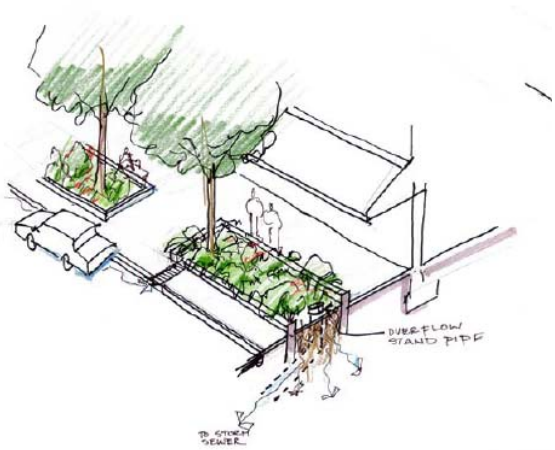
Since pocket parks' size restricts the number of functions that can built into them, and users are usually walking from a distance of only one to two blocks, Marquette may want to explore creating new pocket parks. Possible sites include the north side of Baraga Avenue between Front and Third Streets and, if the city chooses to narrow Main Street, a tree-lined plaza in front of the old Railroad Depot using roughly 15 feet of Main Street's existing right-of-way.

Main Street. Main Street has many of the same design challenges as Baraga Avenue. The street configuration and an abundance of surface parking make nearly the entire block between Front and Third Streets a pedestrian dead zone. The approximately 75-foot right-of-way makes it difficult to create a safe walking experience. Marquette could consider narrowing the street to the lanes north of the current central median. Replacing the angle parking with parallel parking on both sides and two travel lanes would create a street that is more attractive to pedestrians. The extra fifteen feet of right-of–way on the south side of the street could be used as an incentive to encourage redevelopment of the parking lots south of Main Street. The city could install a tree-lined plaza in the extra space in front of the depot.

Exhibit 4.26: Main Street (left), with unusual centerline angled parking and two surface parking lots on either side of the Historic Depot, looks like a parking lot. Right is a visualization of a possible street design change for Main Street

A newly configured Main Street with a new plaza in front of the depot, as well as new streets in the waterfront area and Baraga Avenue, would offer opportunities to install infiltration facilities, such as rainwater gardens or sidewalk planter gardens. Exhibit 4.27 demonstrates what a planter garden could look like in the Downtown Waterfront District.

Exhibit 4.27: An example of a sidewalk planter garden. These can be either raised or at ground level.



5 NEXT STEPS

The options discussed in this report should spur further conversation on what downtown and the waterfront will look like in the future. As the city and its residents work together to determine Marquette's future and which strategies to pursue, there are some effective approaches the city may wish to consider as it continues the dialogue about how Marquette can spur redevelopment downtown and along the waterfront.

Gathering community input. Marquette could consider holding a series of workshops or outreach meetings to get feedback on approaches discussed in the report and to encourage public input into the bundling and prioritization processes discussed below. Communities that have made investments in public participation have found that they have recovered these extra costs in the form of more attractive, livable, sustainable communities.

Bundling approaches. Although Marquette could implement single approaches on its own, any single option will be more effective if implemented as part of a bundle of complementary approaches. For example, managing the supply and demand for parking, encouraging housing downtown, building parking structures, and screening existing surface parking lots could individually make downtown more lively and walkable, but each will have a greater effect when combined with supporting approaches.

Prioritizing strategies. The city could also consider prioritizing the strategies or the bundles of approaches it chooses to undertake. While implementing complementary programs can increase the effectiveness of each approach, prioritizing strategies can help Marquette get the best results for its investments. The consultant team proposes the following four strategies for the city to consider as top priorities. The first two strategies lay the groundwork for the development of walkable mixed-use district, the second two strategies focus on areas that, if improved, will greatly affect visitors' impression of downtown and make the area more pleasant for walking.

1. Marquette could adopt the draft form-based code for the Downtown Waterfront District. Form-based codes can help the city meet its goals in mixed-used or commercial zones. They allow developers flexibility to meet market demand while ensuring a consistent vision for the area that will be developed incrementally.

2. The city could revisit the DDA's parking program to explore options for balancing the supply and demand for parking, reducing private parking lots, and encouraging the development of housing downtown. The DDA could develop parking design standards that encourage structured parking, smaller lots, and screening of surface lots.

3. The city may want to encourage development on parking lots in key parts of downtown to remove gaps in the streetscape. Marquette could explore using public/private partnerships to develop on the northwest corner of Front Street and Baraga Avenue and the southwest corner of Front and Main Streets. Filling these gaps will help reconnect Washington Street with Baraga Avenue.

4. Marquette could conduct design charrettes for Baraga Avenue and Main Street. Improving the pedestrian environment of these two streets would significantly improve the walkability of the entire downtown.

If development responds to Marquette's vision of community, it can create great places to live, work, and play. Articulating this vision, however, can be a challenge because the vision should reflect the needs of a wide range of stakeholders and community members. This challenge can be an opportunity if stakeholders and community members work together to develop creative solutions to the most troublesome problems. This collaboration can help make development decisions more timely, cost effective, and predictable.

5.1 Opportunity for Marquette

Marquette has the resources to reclaim the downtown and waterfront areas for redevelopment, and to build a vibrant community with thriving businesses. Market analysis identifies demand for development that targets older adults and young professionals. Using a new zoning structure to frame the private investment in the waterfront will help incrementally achieve the community's vision. The city could also leverage its own infrastructure investments to integrate the downtown and waterfront areas.

5.2 Conclusion

The ideas outlined in this report can help direct Marquette and its residents as they decide where and how they want to grow. The city's investments and zoning codes create guidelines and predictability for developers and help ensure that the city will get the development its residents want.

Appendices

Appendix A: Smart Growth Implementation Assistance for Coastal Communities Program

Appendix B: On-Site Visit Plan and Workshop Comments

Appendix C: Stormwater Management Resources

Appendix D: Street Design Resources

Appendix E: Urban Trees and Planting Suggestions Native to Marquette

Appendix F: Draft Marquette Waterfront Form-Based Code

APPENDIX A: SMART GROWTH IMPLEMENTATION ASSISTANCE FOR COASTAL COMMUNITIES PROGRAM

Populations and built environments in coastal watersheds are growing rapidly, with 55 percent of the U.S. population already living within 50 miles of the coasts. The environmental impacts of development directly affect the ability of communities to balance natural resource protection with sustainable economic growth. The pressures of coastal growth profoundly affect the ability of the National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA) to achieve national goals for sustainable management of coastal resources and protection of human health and the environment. The U.S. Commission on Ocean Policy's report highlights this challenge, calling for improvements in program planning, coordination, and implementation to manage coastal growth effectively. [20]

One key approach to addressing this challenge must be more integrated and coordinated partnerships among all levels of government. In January 2005, EPA and NOAA agreed to work together to help coastal communities grow in ways that benefit the economy, public health, and the environment. The two agencies signed a Memorandum of Agreement (MOA) that created a formal partnership between the two agencies supporting state and local development innovations. The EPA-NOAA partnership will provide training for local government staff and officials; outreach and education on successful policies, ordinances, and initiatives; and assessments of local development rules and policies.[21]

Exhibit A.1: Smart Growth Principles

Based on the experience of communities around the nation, the Smart Growth Network developed a set of ten basic principles:

- Mix land uses.
- Take advantage of compact building design.
- Create range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, farmland, natural beauty, and critical environmental areas.
- Strengthen and direct development toward existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost effective.
- Encourage community and stakeholder collaboration in development decisions.

Source: www.smartgrowth.org/about/principles/default.asp

As part of this MOA, EPA and NOAA agreed to work together to provide smart growth implementation assistance to coastal communities. Through a competitive selection process, NOAA and EPA selected six communities. Working with the Sea Grant partner, the local community host, and its prime contractor, ICF International, EPA assembled contractor teams whose members have expertise that meets a particular community's

[20] U.S. Commission on Ocean Policy. *An Ocean Blueprint for the 21st Century*. 2004. Available at www.oceancommission.gov.

[21] For more information on the EPA-NOAA partnership, please see www.epa.gov/smartgrowth/noaamoa.html.

needs. While working with Sea Grant and community participants to understand their aspirations for their community's future, the teams bring experience from working in other parts of the country to provide best practices for consideration by the assisted community. The goal of the program is to help participating communities attain their goals while producing a report that can be useful to a broad range of communities facing similar challenges.

The EPA-NOAA Smart Growth Implementation Assistance for Coastal Communities Program helps communities achieve growth that supports economic, community, public health, and environmental goals. People in communities around the country are frustrated by development that gives them no choice about driving long distances between where they work, live, and shop; that requires costly public expenditures to extend sewers, roads, and public services to support new development; that uses up natural areas and farmland for development while land and buildings lie empty in already developed areas; and that makes it difficult for working people to rent or buy a home because of development that provides only one or two costly housing types. Smart growth strategies create new neighborhoods and maintain existing ones that are attractive, convenient, safe, and healthy. They foster design that encourages social, civic, and physical activity. They protect the environment while stimulating economic growth. Most of all, they create more choices for residents, workers, visitors, children, families, single people, and older adults—choices in where to live, how to get around, and how to interact with the people around them. When communities undertake this kind of planning, they preserve the best of their past while creating a bright future for generations to come.

APPENDIX B: ON-SITE VISIT PLAN AND WORKSHOP COMMENTS

On the morning of Saturday, December 16, Geoff Ferrell and Mary Madden of Ferrell Madden Associates led some 50 Marquette residents and business owners in a public hands-on design session in the Citizens' Forum Room of Marquette's Lakeview Arena. Each participant wrote down one word that best described for him or her Marquette's downtown and waterfront areas for both now and in the future. In general, citizens expressed a great appreciation for their waterfront, but also a vision of a more accessible and vibrant natural area.

After this initial exercise, participants gathered in small groups around maps of the downtown and waterfront to discuss their likes, dislikes, and visions for these areas of the city. The participants drew on the maps to denote their thoughts and to demonstrate where they would like to see future development. At the end of the workshop, a representative of each group presented its marked-up map and a summary of the group's ideas to the whole audience. That afternoon, the consultants met with a group of waterfront property owners and potential developers to hear their ideas and concerns.

Exhibit B.1:Citizen teams working on a vision for the waterfront

On Sunday afternoon, the team presented a preliminary set of ideas to a re-gathered group of community members. In addition to providing input through a question-and-answer period, attendees provided written feedback on the presented ideas.

In the days after the meeting, City Planner Dennis Stachewicz solicited comments from property owners who had not been available for the weekend's meetings. The consulting team considered those comments along with the other insights provided by the community.

Exhibit B.2: One of the maps created by citizen participant groups during the Saturday design session.

Below is a summary of the prevalent comments and suggestions that the team received from the public.

Connect downtown and waterfront with paths and views

- Avoid creating obstructions that would reduce the existing views of the water from downtown.
- Create "postcard shots" from Washington Street to the water and from land to the ore dock.
- The backs of the lake-facing Lakeshore buildings are unappealing.
- The dockside marina and the boat storage are eyesores.
- Use downcast lighting in the waterfront area.
- The parking lots on Baraga, Main, and Lakeshore are unappealing.
- Increase pedestrian and biking connections to the waterfront.

Create walkable streets and improve pedestrian connections

- The new walkway and bike path are hard to use. Allow halfway points/structures in the middle of the streets.
- Improve pedestrian access and design on Washington, Main, and Baraga (e.g., narrow Baraga).
- Add a sidewalk to the landside of Lakeshore.
- Slow traffic on Lakeshore.
- Create a pedestrian crosswalk into the park from condominiums.

Provide public access to the water

- Waterfront is the center of the community. Maintain it as an open space.
- Ensure that the waterfront is accessible to people in wheelchairs.
- Provide place for kayakers and canoers on the waterfront beach.
- Build a public promenade.
- Allow ore dock to be used for residences and docking tour boats.
- Provide public access to and through future development.

Control the scale and fit of new development

- The fish dock character can provide a model for any new waterfront development.
- New development should complement the look of architecture and character of the waterfront and downtown areas.
- Use a variety of traditional building materials such as sandstone, brick, iron, and Jacobsville rubble. Do not use vinyl siding.
- Build mixed-use, multi-story buildings of varying heights along Lakeshore.
- Filling in missing gaps in the urban fabric in the downtown and waterfront areas. Baraga, in particular, is a "dead zone."
- Avoid building detached single houses in the downtown and waterfront areas.
- Limit building heights to avoid obstructing existing views.

Maintain a working waterfront

- Marquette residents enjoy the sights, sounds, and smells of a working waterfront.
- Maintain private fishing and boating enterprises on the waterfront.
- Much of the waterfront area in the Lower Harbor is a service area for the boating community. The people who own the properties generally prefer to minimize additional development and activity in this area.
- The community generally supports mixed-use development in the waterfront area, with retail at the street level and office and residential uses on upper levels.
- There is support for limited niche-retail on the waterfront, but there is also concern that waterfront retail could detract from downtown businesses.
- Create live-work residential space.
- Accessible residential spaces will also be needed on the ground floor.

Encourage a mix of uses—bring more housing downtown

- As residential use develops, need supporting retail.
- Marquette needs more people downtown to revitalize the area. A busier waterfront will bring visitors who will shop downtown.
- Create buildings and use existing buildings for living and working downtown.
- Add 24-hour destinations and affordable housing.

Reconfigure parking

- A covenant on the parking lot on the east side of Lakeshore Boulevard restricts the property to its current use.
- Parking along Lakeshore Boulevard detracts from the appeal of the waterfront. Move parking spaces elsewhere or hide them behind a row of buildings.
- Add on-street parking along the north side of Lakeshore Boulevard for traffic calming and to support residences and businesses in the area.
- Surface parking is a loss of valuable space. Minimize surface parking (particularly that on Baraga, Main, and Lakeshore) and replace it with less obtrusive parking.
- Do not reduce the total number of parking spaces in the downtown area.

Preserve and increase greenery in the district

- Maintain current greenspace (e.g., Father Marquette Park).
- Add trees to parking lots.
- Plant additional trees along roadways and paths.
- Plant larger trees on city streets (as opposed to crabapples).
- Buffer hazards and habitat with greenery.
- Add landscaping to Baraga.

APPENDIX C: STORMWATER MANAGEMENT RESOURCES

The following resources can help communities implement innovative stormwater management approaches at the regional, community, and site levels.

The city of Emeryville, California, created *Stormwater Guidelines for Green, Dense Redevelopment* in 2006. The guidelines, and an accompanying spreadsheet model, help to manage stormwater on site during redevelopment activities. It is available at *www.epa.gov/smartgrowth/emeryville.htm*.

In 2006, EPA published *Protecting Water Resources with Higher-Density Development*. This report helps communities better understand the impacts of higher and lower density development on water resources. The findings indicate that low-density development may not always be the preferred strategy for protecting water resources. It is available at *www.epa.gov/smartgrowth/water_density.htm*.

In 2006, EPA published *Using Smart Growth Techniques as Stormwater Best Management Practices*. This report reviews nine common smart growth techniques and examines their ability to prevent or manage stormwater runoff. It is available at *www.epa.gov/smartgrowth/stormwater.htm*.

In 2004, EPA published *Protecting Water Resources with Smart Growth*. This report is for audiences already familiar with smart growth concepts who seek specific ideas on how techniques for smarter growth can protect water resources. The report describes 75 policies that communities can use to grow in the way that they want while protecting their water quality. It is available at *www.epa.gov/smartgrowth/water_resource.htm*.

In 2006, the Local Government Commission published *The Ahwahnee Water Principles: A Blueprint for Regional Sustainability*. This report provides a practical blueprint for sustainable land-use practices that can improve the reliability and quality of water resources and reduce some of the financial liabilities that new development places on local government. It is available at *www.water.lgc.org/announcements/water-guidebook*.

In 2006, NRDC published *Rooftops to Rivers: Green Strategies for Controlling Stormwater and Combined Sewer Overflows*. This report is a policy guide for decision makers looking to implement green strategies in their own area, including nine case studies of cities that have successfully used green techniques to create a healthier urban environment. It is available at *www.nrdc.org/water/pollution/rooftops/contents.asp*.

In 2004, American Rivers published *Catching the Rain: A Great Lakes Resource Guide for Natural Stormwater Management*. The publication describes a wide range of low impact development strategies for a wide range of built environments. It is available at *www.americanrivers.org/site/DocServer/CatchingTheRain.pdf?docID=163*.

Portland Metro (Oregon) created *Green Streets: Innovative Solutions for Stormwater and Stream Crossings* in 2002. The handbook describes stormwater management strategies and includes detailed illustrations of "green" street designs that allow infiltration and

limit stormwater runoff. It is available at *www.metro-region.org/article.cfm?articleID=262*.

Portland also published *Trees for Green Streets: An Illustrated Guide* in 2002. The guidebook helps communities' select street trees that reduce stormwater runoff from streets and improve water quality. It is available at *www.metro-region.org/article.cfm?articleID=263*.

Seattle's pilot Street Edge Alternatives Project (SEA Streets) provides drainages that mimic the natural landscape prior to development than traditional piped systems. Good information is at *www.seattle.gov/util/About_SPU/Drainage_&_Sewer_System/Natural_Drainage_Systems/Street_Edge_Alternatives/index.asp*.

APPENDIX D: STREET DESIGN RESOURCES

Beyard, Michael D. and Michael Pawlukiewicz, *Ten Principles for Reinventing America's Suburban Strips*, Urban Land Institute, 2001. *www.uli.org*. Illustrates how communities can make commercial strips more neighborhood-oriented.

Burden, Dan, et al., *Street Design Guidelines for Healthy Neighborhoods*, Center for Livable Communities, Local Government Commission, January 1999. *www.lgc.org*. Helps communities implement designs for streets that are safe, efficient, and aesthetically pleasing for both people and cars. It features helpful guidelines that specify street widths and implementation strategies.

Context Sensitive Solutions, *www.contextsensitivesolutions.org*. Includes resources about designing transportation projects in a way that fits the physical setting, maintains safety and mobility, and preserves scenic, aesthetic, historic, and environmental resources.

Freedman, Michael, Freedman Tung & Bottomley, "Retrofitting the Commercial Strip," presented at the New Partners for Smart Growth Conference, January 2006. *www.cmcgc.com/media/handouts/260126/SAT-PDF/460-Freedman.pdf*. Ideas for turning commercial highway strips into neighborhood centers.

Institute of Transportation Engineers, *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities: An ITE Proposed Recommended Practice*, 2005. *www.ite.org*. Guidance for traffic engineers on designing roadway improvement projects in places where community objectives support walkable communities, compact development, mixed land uses, and support for pedestrians and bicyclists.

Institute of Transportation Engineers, *Guidelines for Neighborhood Street Design*, 2001. *www.ite.org*. Information for traffic engineers on how to build more neighborhood-scaled streets.

Oregon Department of Transportation, *Main Street… When a Highway Runs Through It: A Handbook for Oregon Communities*, 1999. *www.oregon.gov/ODOT/HWY/BIKEPED/docs/mainstreethandbook.pdf*. Techniques for dealing with state highways in towns, using Oregon examples.

Pulleyblank, Sarah, *Civilizing Downtown Highways*, Congress for the New Urbanism, 2002. Shows how state highways that function as main streets as they run through town.

Sucher, David, *City Comforts*, 1994. His Three Rules for Urban Design and numerous detailed insights are a perfect tool for those not formally trained in planning. Excellent resource for Planning Commissioners.

APPENDIX E: URBAN TREES AND PLANTING SUGGESTIONS NATIVE TO MARQUETTE

When procuring trees and shrubs, Marquette may want to consider whether the selected plants contribute to species diversity and are native to the Marquette area. Native trees not only support wildlife, but they can also reduce maintenance costs.

Recommended Urban Trees: Site Assessment and Tree Selection for Stress Tolerance, published by the Urban Horticultural Institute at Cornell University[22], suggests many trees that are native to the Marquette area, including those in the lists below. Marquette can ask local nurseries and other plant suppliers about the availability of the trees in these lists. If they are not currently available, the city or local experts may be able to procure them.

Small trees (under 30' for under utility wires or in other restricted spaces)

Amelanchier arborea, Downy serviceberry (as noted in Marquette's Master Plan, this has interesting bark, providing it with a nice feature in winter)

Amelanchier laevis, Allegheny serviceberry

Carpinus caroliniana, Ironwood, American hornbeam

Crataegus crusgalli var. *inermis*, Thornless cockspur hawthorn

Malus coronaria, Sweet crabapple, Garland crabapple

Malus ioensis, Prairie crabapple

Medium to large trees (taller than 30')

Acer rubrum, Red maple

Catalpa speciosa, Northern catalpa

Celtis occidentalis, Common hackberry

Gleditsia triacanthos var. *inermis*, Thornless common honeylocust

Gymnocladus dioicus, Kentucky coffeetree

Nyssa sylvatica, Black tupelo, Black gum, Sour gum

[22] Bassuk, Nina, Deanna F. Curtis, BZ Marranca, and Barb Neal, *Recommended Urban Trees: Site Assessment and Tree Selection for Stress Tolerance*, Urban Horticultural Institute, Ithaca, 2003. www.hort.cornell.edu/department/faculty/bassuk/uhi/outreach/recurbtree/index.html

Ostrya virginiana, American hophornbeam serviceberry (as noted in Marquette's Master Plan, this has interesting bark, providing it with a nice feature in winter)

Quercus bicolor, Swamp white oak

Quercus coccinea, Scarlet oak

Quercus macrocarpa, Bur oak, Mossycup oak

Quercus muehlenbergii, Chinkapin oak

Robinia pseudoacacia, Black locust

Tilia americana, Basswood

Crucial to supporting diversity and the native population of plants is avoiding the selection and planting of invasive species. *Acer platanoides*, the Norway maple, for example, due to its extreme shade tolerance, shallow roots, and readily spread and germinated seeds, is well positioned to compete against vegetation in suburban settings and native forests, thus causing losses in diversity. *Tilia americana* and *Acer rubrum* have been recommended as possible alternatives to *Acer platanoides* for landscape use.[23,24]

Tree spacing and wells

Urban street trees rarely have access to sufficient areas of permeable, uncompacted soil to allow them to reach their full growth potential. So, to create a dense urban forest, it becomes necessary to places the trees close together, being careful, however, not to block views of storefronts in retail stores.

Ideally, trees will be planted in a trench that is dug along the full length furniture zone.[25] Whether or not a trench can be built, it is important to maximize the amount of usable soil volume around the tree, i.e., maximize the size of the tree well. In Washington, D.C., city arborists aim to provide 750 cubic feet of soil volume per tree. Six feet of depth allows for adequate moisture holding capacity, leaving 125 square feet covered on the surface. This is not always achievable, but is used as a goal.

[23] Rhoads, Ann F. and Timothy A. Block, "Norway maple. Acer platanoides L.," *DCNR Invasive Exotic Plant Tutorial for Natural Lands Managers*, April 2002, www.dcnr.state.pa.us/forestry/invasivetutorial/norway_maple.htm.
[24] Toronto Urban Forestry Services, "Help Our Urban Forest Keep Growing. Let Us Plant A Tree," February 2002, www.toronto.ca/trees/pdfs/FreeTree_Final.pdf
[25] For more detailed information on structural soil use, see Grabosky et al, "Growing Trees in a Cement Forest," *Land Development Today*, October 6, 2004, www.landdevelopmenttoday.com/Article106.htm

APPENDIX F: DRAFT MARQUETTE WATERFRONT FORM-BASED CODE

Marquette Downtown Waterfront District

A form-based code is a *method of regulating development to achieve a specific urban form.* Form-based codes create a predictable public realm by controlling physical form primarily, and land uses secondarily, through city or county regulations.

-- Form-Based Codes Institute definition

1.0 Introduction

The *Marquette Waterfront Form-Based Code* (also referred to herein as "the Code") is a legal document that regulates land-development by setting careful and coherent controls on building form—while employing more flexible parameters relative to building use and density. The *Waterfront Form-Based Code* uses simple and clear graphic prescriptions and parameters for height, siting, and building elements to address the necessities for defining good public space; and broad parameters for regulating use.

The standards provided in this Code were built on the foundation established in the Lower Harbor Redevelopment Plan adopted by the City in its Master Plan of May 2004, and further refined by the input received during the Public Participation Urban Design Charrette held on December 16, 2006 as well as principles of traditional place-making and urban design. The expectation is that these traditional urban standards will provide the foundation for long-term redevelopment, and accommodate change over time. Form standards recognize that the economy/market may support and/or demand different types of uses at different times, but with a sound development and building pattern—much like the historic central business district along Front and Washington Streets—the building life-cycle will be sustainable.

The proposed Marquette *Downtown Waterfront District* is roughly bounded by Lake Superior/Marquette Bay on the east, Front Street on the west, Lakeshore to the north and Baraga Street to the south. (See the REGULATING PLAN on p. 7 for specific boundaries.) *However, the principles and standards that appear herein may easily be adapted to regulate development in the greater downtown and waterfront areas.*

1.1 Guiding Principles

With proper urban form, a greater integration of building uses is natural and comfortable.

A. Buildings are aligned and close to the street. Buildings form the space of the street.
B. The street is a coherent space, with consistent building forms on both sides. This agreement of buildings facing across the street-space contributes to a clear public space and street-space identity.
C. Buildings oversee the street-space with active fronts. This overview of the street-space contributes to vital and safe public space.
D. Property lines are physically defined by buildings, walls, or fences. Land should be clearly public or private—in public view and under surveillance or private and protected.
E. Buildings are designed for towns and cities. Rather than being simply pushed closer together, as in many suburban developments, buildings must be designed for the urban situation within towns and cities. Views are directed to the street-space and interior gardens/court-yards, not into neighboring lots.
F. Vehicle storage/parking, (not including on-street parking), garbage and mechanical equipment are kept away from the street-space.

1.2 Intent

A. The *Waterfront Form-Based Code* is designed to foster infill redevelopment in a sustainable mixed-use pattern as part of a vibrant, diverse urban district around the downtown waterfront. This Code is intended to promote traditional urban form and a lively mix of uses, allowing for shopfronts, sidewalk cafes, and other

commercial uses at the street level, with wide sidewalks and canopy shade trees, overlooked by upper story residences and offices, while maintaining a working waterfront. Physical access and a sense of connection to Lake Superior are very important to the future of the historic downtown.

B. Redevelopment within the *Downtown Waterfront District* shall be regulated as set forth below in order to achieve the vision set forth during the Public Participation Charrette in December 2006 and as previously adopted in the *Lower Harbor Redevelopment Plan* for the designated area.

1.3 Conflicting Provisions

Wherever there appears to be a conflict between the *Waterfront Form-Based Code* and other sections of the *Marquette City Zoning Ordinance*, the requirements specifically set forth in the *Waterfront Form-Based Code* shall prevail. For development standards not covered by the *Downtown Waterfront Code*, the other applicable sections in the *Marquette City Zoning Ordinance* shall be used as the requirement. *Similarly, all development must comply with all relative Federal, State or local regulations and ordinances regarding health and safety.*

1.4 Components of a Form-Based Code

The primary components of this form-based code are: the REGULATING PLAN, the BUILDING FORM STANDARDS, Streetscape Principles, illustrative STREET TYPE SPECIFICATIONS**,** and DEFINITIONS, all of which are included in this Handbook. Many codes also include detailed *Streetscape and Architectural Standards*.

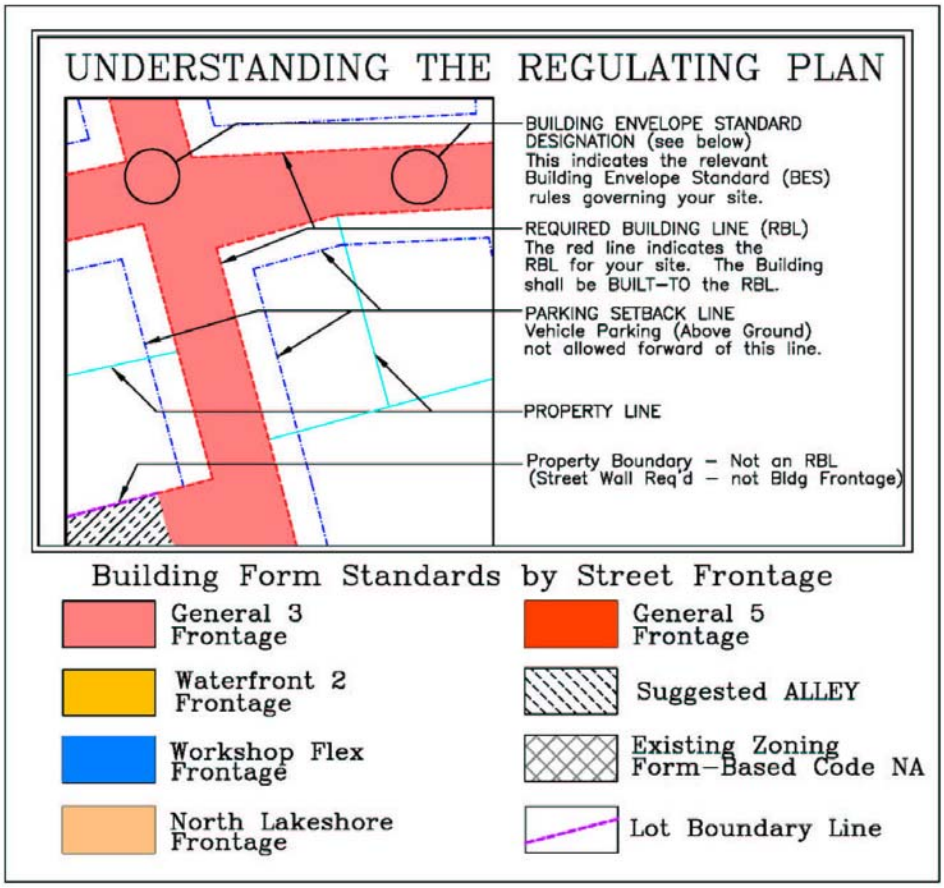
In addition, in order to fully implement the proposed Code, *Administrative Procedures* will be needed to incorporate the new standards with existing City processes and procedures.

1.4.1 The Regulating Plan

A. Building on the *Lower Harbor Redevelopment Plan* and the public participation charrette, a REGULATING PLAN, has been produced for the *Marquette Downtown Waterfront District.*

B. The REGULATING PLAN is the coding key for the *Downtown Waterfront District* that provides a public space master plan with specific information on permitted development for each parcel within the district. It provides standards for the disposition of each property or lot and illustrates how each relates to the adjacent properties and street-space.

C. The REGULATING PLAN identifies the BUILDING FORM STANDARDS for all building sites within the Waterfront District. It shows how each lot relates to public spaces (STREET-SPACE, CIVIC GREENS, PEDESTRIAN PATHWAYS, etc.) and the surrounding neighborhoods. There may be additional regulations for special locations as identified on the REGULATING PLAN. The key below explains the elements of the REGULATING PLAN and serves as a reference when examining the REGULATING PLAN.



Building Sites are coded by their Street Frontage

D. A fully scalable REGULATING PLAN is available for review at the Marquette Community Development Department.

1.4.2 Building Form Standards

A. The intent of the BUILDING FORM STANDARDS is to shape the public space—its specific physical and functional character—for the *Downtown Waterfront District* through controls on building form in order to frame the STREET-SPACE. They aim for the minimum level of control necessary to meet that goal.

B. The BUILDING FORM STANDARDS establish basic parameters governing building form, including the envelope for building placement (in three dimensions) and certain permitted/required building elements, such as shopfronts, balconies, and STREET WALLS. The BUILDING FORM STANDARDS establish both the boundaries within which things may be done and specific things that must be done. The applicable standard for a building is determined by its STREET FRONTAGE, as identified on the REGULATING PLAN. This produces a coherent STREET-SPACE and allows the building greater latitude behind its street FACADE.

1.4.3 The Street-Space Principles

The purpose of the STREET-SPACE Principles is to define coherent street-space and to assist owners and builders with understanding the relationship between the public space of the Downtown Waterfront District and their own building/lot. These principles describe the parameters for the placement of STREET TREES and other amenities or appurtenances (e.g., benches, signs, street lights, etc.) on or near each building site. They also describe the general physical characteristics of a STREET-SPACE to establish an environment that encourages and facilitates pedestrian activity.

1.4.4 The Street-Type Specifications

A. The *Street-Type Specifications* illustrate typical configurations for streets within the *Downtown Waterfront District*. *Specifications* address vehicular traffic lane widths, curb radii, sidewalk and tree planting area dimensions, and on-street parking configurations. They also provide a comparative pedestrian crossing distance as a gauge of pedestrian comfort. (The City will configure and adjust these as necessary for unique conditions.)

B. Streets must balance the needs of all forms of traffic—auto, bicycle and pedestrian—to maximize mobility and convenience for all the citizens of Marquette and all users of the Downtown Waterfront District. While all streets will appropriately balance pedestrian and automobile needs, their character will vary with their location. Some streets will carry a large volume of traffic and provide a more active and intense urban pedestrian experience while others will provide a less active and more intimately scaled street-space.

1.4.5 Definitions

Some words used in this Code are used in a more specific way than that found in common usage, and have been defined herein. Wherever a word is in SMALL CAPITAL format, consult the *Definitions* (**Sec. 5.0** on p. 23) for the specific meaning. Words used in the *Downtown Waterfront Code***,** but not defined by the *Downtown Waterfront Code***,** which are defined in the *Marquette City Zoning Ordinance*, shall have the meanings set forth therein.

1.5 How to Use this Code

In order to understand what the Code allows on property within the *Downtown Waterfront District* there are two basic steps. The Code will explain where the building will sit on the site, the parameters for its three-dimensional form, both required and allowed architectural/functional elements and the range of allowable uses. (For exact dimensions specific to your property, consult with City Staff.)

1.5.1 Initial Steps

A. Look at the REGULATING PLAN. Find the property in question. Note the REQUIRED BUILDING LINE (RBL) and the parking setback line. Note the color of the fronting street-space—this determines the applicable BUILDING FORM STANDARD. (See the key at the lower right of the REGULATING PLAN,.)

B. Find the appropriate BUILDING FORM STANDARD (BFS) page in the Code. The BFS will tell you the basic parameters for building on this site in terms of *height, siting, elements*, and *use*.

1.5.2 Additional Information

Additional information regarding the street-space is located in **Sec. 4.1**, the *Street-Space Principles* and **Sec. 4.2**, *Street-Type Specifications*. These sections will show the general parameters for the character of the street-space including vehicular traffic lane widths, curb radii, sidewalk and tree planting area dimensions, and on-street parking configurations.

2.0 The Downtown Waterfront District Regulating Plan

2.1 Understanding the Regulating Plan

The REGULATING PLAN is the controlling document and principal tool for implementing the *Downtown Waterfront Code*. It identifies the BUILDING FORM STANDARD (BFS) for the building site, which provides standards for the disposition of each property or lot, and illustrates how each relates to the adjacent properties and the street-space.

2.2 Rules for New Development

New development in the *Downtown Waterfront District* shall integrate street (roadway) design and land development to create a complementary and connected pattern for growth and development. The rules below will establish/create a compact, mixed-use district and provide flexible opportunities for residential, employment, commerce, and recreational uses.

2.2.1 Streets, Blocks and Alleys

A. Connectivity of the street grid throughout the *Downtown Waterfront District*, specifically intersection alignments, is regulated by this Code. Where a street stub-out is shown on the REGULATING PLAN, no other curb cut/intersecting street is permitted within 75 feet.

B. Curb cuts shall be limited to no more than one per 150 feet of street frontage (minimum centerline separation distance of 75 feet).

C. All lots shall share a frontage line with a STREET-SPACE.

D. All lots and/or all contiguous lots shall be considered to be part of a BLOCK for this purpose. No block face shall have a length greater than 400 feet without an ALLEY, common drive or access easement, or PEDESTRIAN PATHWAY providing through-access to another street, ALLEY or common access easement, STREET-SPACE, or conservation restricted land. Individual lots with less than 75 feet of frontage are exempt from the requirement to interrupt the block face; those with over 250 feet of frontage shall meet the requirement within their lot, unless already satisfied within that block face.

E. Where designated on the REGULATING PLAN, except where lots are on a perimeter common to non-developable, lakeshore, or conservation lands:

1. ALLEYS shall provide access to the rear of all lots. ALLEY construction is required as part of the redevelopment project within the rear setback, unless an ALLEY already exists. ALLEYS shall be constructed to meet the City construction standards in order to be suitable for emergency and service vehicle access.
2. ALLEYS shown on the REGULATING PLAN represent suggested & approximate configurations. Access through the BLOCK and to the rear of lots within the BLOCK is required. The specific configuration may include shared parking areas and other uses so long as reasonable service access is relatively unimpeded.
3. Where an alley does not exist and is not feasible to construct at the time of redevelopment of any property, the applicant is required to dedicate the ALLEY right of way within the rear setback to the City and maintain the area within the rear setback by, at a minimum:
    a. Sodding and providing routine landscape maintenance to the area.
    b. Keeping the area clear of debris, stored materials, and vehicles.

2.2.2 Buildings

A. The maximum building floor-plate (footprint) is 25,000 square feet; beyond that limit a conditional use permit is necessary.

B. Building FACADES are the public "face" of every building. (The private, interior portions of the lots allow commercial operators to utilize these spaces as efficient working environments unseen by the public and

allow residents to have private and semi-private (for apartment and condominium buildings) gardens and courtyards.)

C. For each block face within the Waterfront District, building(s) along the RBL shall present a complete and discrete vertical FAÇADE composition (i.e., a new façade design) at an average street frontage length of no greater than 70 feet. Each FAÇADE composition shall include a functioning, primary street-space entry. The entry requirement may be satisfied through the use of liner shops—small shops with direct access onto the fronting sidewalk—wrapping large floor-plate/footprint buildings. Individual infill projects on lots with frontage of less than 100 feet are exempted from the FAÇADE composition requirement.

D. When the BUILDING FORM STANDARD (BFS) designation changes along the street frontage of a lot, the property owner has the option of applying either BFS for a maximum additional distance of 50 feet in either direction along the frontage of that lot.

2.2.3 Streetscape Requirements

At the time of, and within, new or infill development:

A. STREET TREES shall be planted at an average spacing of no greater than 30 feet on the side(s) of the STREET-SPACE being developed.

B. The developer is required to install sidewalks.

2.2.4 Parking

A. Parking goals for the *Downtown Waterfront District* are to:

1. Promote a "park once" environment that will enable people to conveniently park and access a variety of commercial and civic enterprises in pedestrian friendly environments by encouraging shared parking.
2. Reduce fragmented, uncoordinated, inefficient, single-purpose reserved parking.
3. Avoid adverse parking impacts on neighborhoods adjacent to the Waterfront District
4. Maximize on-street parking
5. Increase visibility and accessibility of publicly available parking.
6. Provide flexibility for redevelopment of small sites.
7. Promote early prototype projects using flexible and creative incentives.
8. Incorporate convenient bicycle parking.

B. Parking standards for the *Downtown Waterfront District*:

C. Achieving parking requirements:

2.3 Regulating Plan

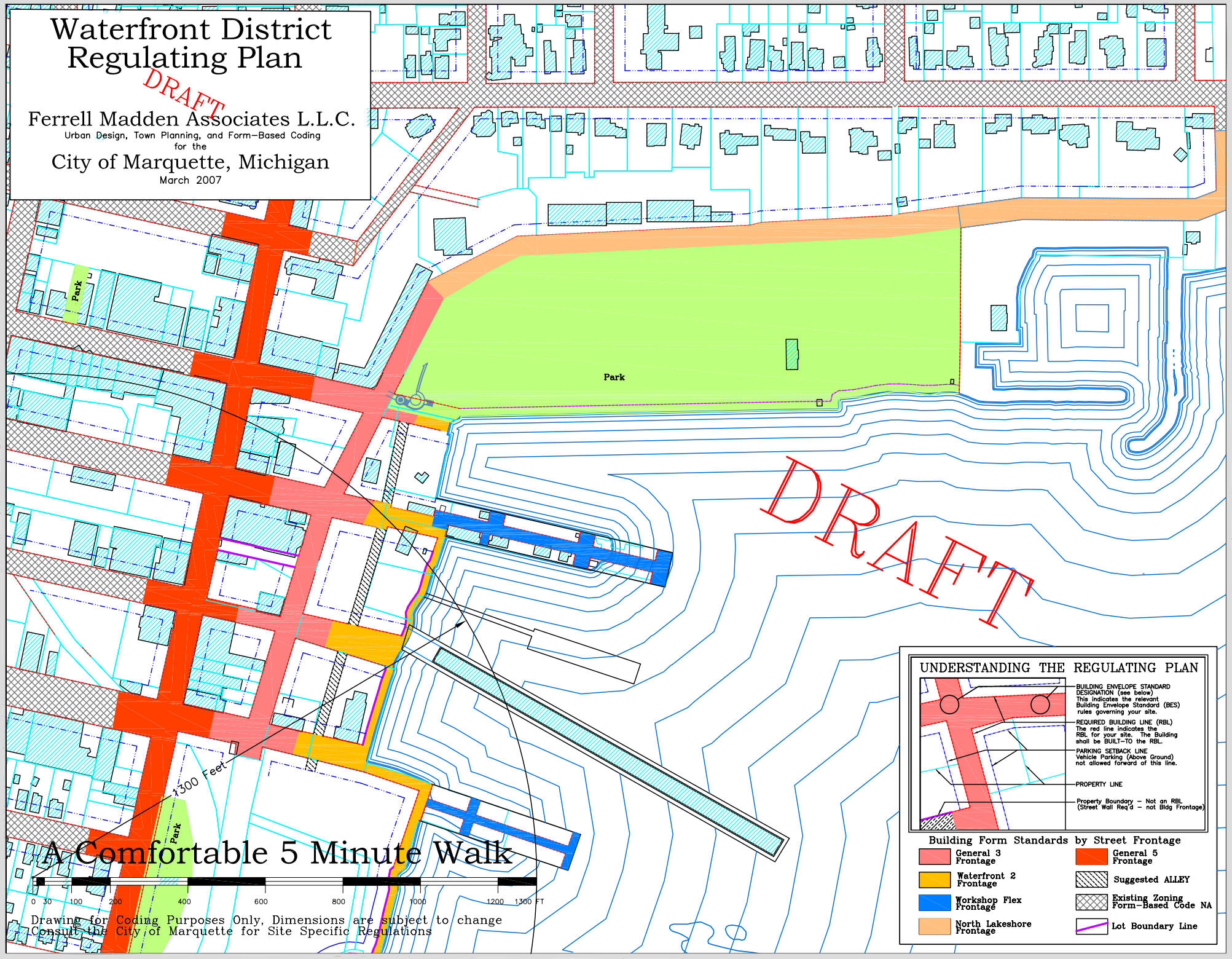
The following page contains the REGULATING PLAN for the *Downtown Waterfront District.*

Waterfront District Regulating Plan

DRAFT

Ferrell Madden Associates L.L.C.
Urban Design, Town Planning, and Form-Based Coding
for the
City of Marquette, Michigan

March 2007



3.0 Building Form Standards

The REGULATING PLAN identifies the BUILDING FORM STANDARD (BFS) for all building sites within the *Downtown Waterfront District*. The goal of the BFS is the creation of a healthy and vital public realm through good STREET-SPACE. Deviations from the BFS can be approved only through a *special exception process* as provided for in **XXXX** of the Marquette City Zoning Ordinance. The BFS set the basic parameters governing building construction, including the building envelope (in three dimensions) and certain required and/or permitted elements, such as stoops, balconies, porches, and STREET WALLS. (If elements encroach upon the public right-of-way, an easement may be required. Check with City staff.)

3.1 Individual Building Form Standard Pages

Each BFS provides parameters for *height, siting*, and *elements* as well as broad *use* categories. The *Waterfront Form-Based Code* includes five BUILDING FORM STANDARDS: GENERAL 5, GENERAL 3, WATERFRONT 2, WORKSHOP FLEX, and NORTH LAKESHORE. These standards appear on the following pages (pp.9-18).

3.2 Limited and Prohibited Uses *(within the Downtown Waterfront District)*

3.2.1 Uses permitted *By Right*

See the individual BFS pages.

3.2.2 Uses permitted with a Conditional Use Permit:

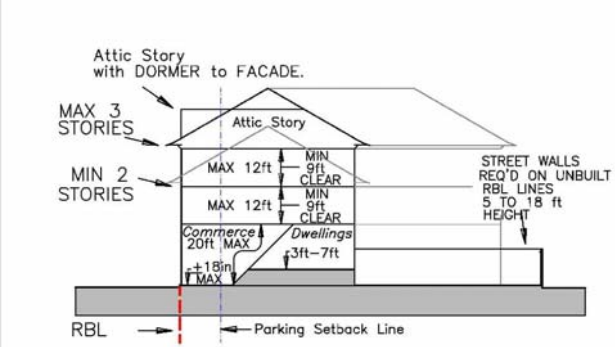
A.
B.
C.
D.
E.

3.2.3 Prohibited Uses:

A.
B.

Marquette Waterfront – General 3

HEIGHT



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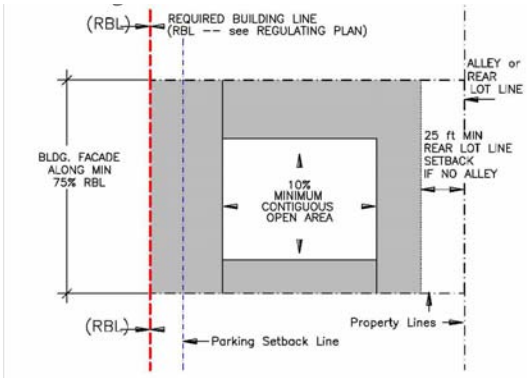


Building Height

1. The height of the principal building is measured in STORIES.
2. Each principal building shall be at least 2 STORIES in height, but no greater than 3 STORIES in height, except as otherwise provided on the REGULATING PLAN.
3. An ATTIC STORY shall not count against the maximum STORY HEIGHT.

TOWER STORY

4. An additional TOWER STORY is allowed above the maximum building STORY height, within the following parameters:

1. The footprint of the tower shall not exceed 300 square feet.
2. No horizontal FAÇADE dimension of the tower shall exceed 20 feet.
3. STORY HEIGHTS are the same as those for Upper Stories (see below.)
4. No ATTIC STORY is permitted above a TOWER STORY.

Parking Structure Height

Where a parking structure is within 40 feet of any principal building (built after 2007) that portion of the structure shall not exceed the building's eave or PARAPET HEIGHT.

GROUND STORY Height: COMMERCE Uses

1. The GROUND STORY finished floor elevation shall be equal to, or greater than the exterior sidewalk elevation in front of the building, to a maximum finished floor elevation of 18 inches above the sidewalk.
2. The GROUND STORY shall have at least 12 feet of clear interior height (floor to ceiling) contiguous to the REQUIRED BUILDING LINE frontage for a minimum depth of at least 25 feet.
3. The maximum STORY HEIGHT for the GROUND STORY is 20 feet.

GROUND STORY Height: Residential Units

1. The finished floor elevation shall be no less than 3 feet and no more than 7 feet above the exterior sidewalk elevation at the REQUIRED BUILDING LINE.

1. The first STORY shall have an interior clear height (floor to ceiling) of at least 9 feet and a maximum floor to floor STORY HEIGHT of 16 feet.

Upper STORY Height

2. The maximum floor-to-floor STORY HEIGHT for stories other than the GROUND STORY is 12 feet.
3. At least 80% of each upper STORY shall have an interior clear height (floor to ceiling) of at least 9 feet.

Mezzanines

Mezzanines having a floor area greater than 1/3 of the floor area of the story in which the mezzanine is situated shall be counted as full stories.

STREET WALL Height

1. A STREET WALL not less than 5 feet in height or greater than 18 feet in height shall be required along any REQUIRED BUILDING LINE frontage that is not otherwise occupied by the principal building on the lot.

Street FACADE

1. On each lot the building FAÇADE shall be built to the REQUIRED BUILDING LINE for at least 75% of the REQUIRED BUILDING LINE length.
2. The building FAÇADE shall be built to RBL within 30 feet of a BLOCK CORNER. The ground floor FAÇADE, within 7 feet of the BLOCK CORNER may be chamfered to form a corner entry.
3. These portions of the building FAÇADE (the required minimum build-to) may include jogs of not more than 18 inches in depth except as otherwise provided to allow bay windows, shopfronts, and balconies.

BUILDABLE AREA

1. Buildings may occupy the portion of the lot specified by these BUILDING FORM STANDARDS.
2. A contiguous OPEN AREA equal to at least 10% of the total BUILDABLE AREA shall be preserved on every lot. Such contiguous OPEN AREA may be located anywhere behind the PARKING SETBACK, at or above grade.
3. No part of any building, except overhanging EAVES, awnings, or balconies shall occupy the remaining lot area.

Side Lot Setbacks

There are no side lot setbacks.

Garage and Parking

1. GARAGE ENTRIES or driveways shall be located at least 75 feet away from any BLOCK CORNER or another GARAGE ENTRY on the same BLOCK, unless otherwise designated on the REGULATING PLAN.
2. GARAGE ENTRIES shall have neither a clear height greater than 16 feet nor a clear width exceeding 24 feet.
3. Vehicle parking areas on private property shall be located behind the PARKING SETBACK LINE, except where parking is provided below grade.
4. These requirements are not applicable to on-street parking.

ALLEYS

There is no required setback from ALLEYS. On lots having no ALLEY access, there shall be a minimum setback of 25 feet from the REAR LOT LINE.

Corner Lots

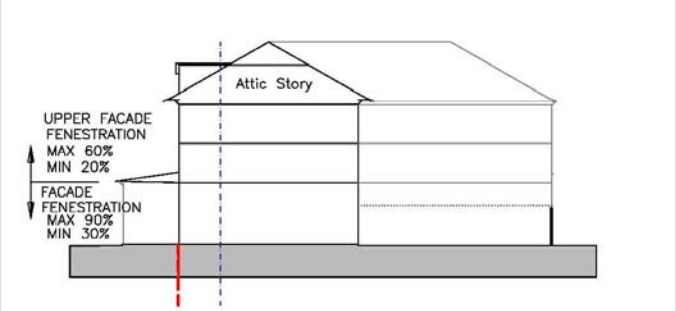
Corner lots shall satisfy the code requirements for the full RBL length – unless otherwise specified in this code.

Unbuilt REQUIRED BUILDING LINE and COMMON LOT LINE Treatment

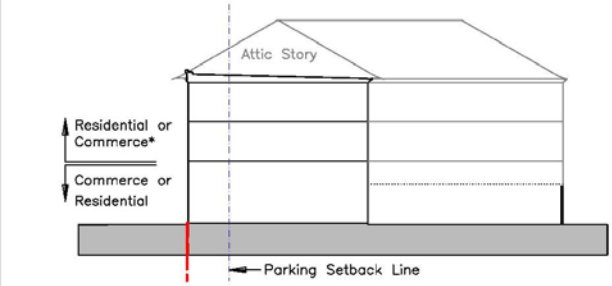
1. A STREET WALL shall be required along any RBL frontage that is not otherwise occupied by a building. The STREET WALL shall be located not more than 8 inches behind the REQUIRED BUILDING LINE.
2. PRIVACY FENCES may be constructed along that portion of a COMMON LOT LINE not otherwise occupied by a building.

Marquette Waterfront – General 3

ELEMENTS



USE



FENESTRATION

1. Blank lengths of wall exceeding 20 linear feet are prohibited on all REQUIRED BUILDING LINES (RBL).
2. FENESTRATION on the ground story FACADES shall comprise at least 30%, but not more than ninety 90%, of the FACADE (measured as a percentage of the FACADE between floor levels).
3. FENESTRATION on the upper STORY FACADES shall comprise at least 20%, but no more than 60%, of the FACADE area per STORY (measured as a percentage of the FACADE between floor levels).
4. No window may face or direct views toward a COMMON LOT LINE within 30 feet unless: that view is contained within the lot (e.g. by a PRIVACY FENCE/GARDEN WALL) or, its sill is at least 6 feet above its finished floor level.

Building Projections

1. Balconies and STOOPS shall not project closer than 5 feet to a COMMON LOT LINE.
2. No part of any building, except overhanging EAVES, awnings, balconies, bay windows, STOOPS, porches, and shopfronts as specified by the code, shall encroach beyond the REQUIRED BUILDING LINE.
3. Awnings shall project a minimum of 6 feet and a maximum of within 1 foot of back of curb (where there are no STREET TREES) or 1 foot into the tree lawn (where there are STREET TREES.)
4. Awnings that project over the sidewalk portion of a STREET-SPACE shall maintain a clear height of at least 10 feet.
5. Awnings may have supporting posts at their outer edge provided that they:
   - Have a minimum of 8 feet clear width between the FACADE and the support posts or columns of the awnings.
   - Provide for a continuous public access easement at least 4 feet wide running adjacent and parallel to the awning columns/posts.

Doors/Entries

At least one functioning entry door(s) shall be provided along the GROUND STORY FACADE of each building and at intervals not greater than 60 linear feet.

STREET WALLS

A vehicle entry gate no wider than 18 feet or a pedestrian entry gate no wider than 5 feet shall be permitted within any required STREET WALL.

Roofs

Where the roof is not hidden from the adjacent STREET-SPACE by a PARAPET wall, its pitch shall be between 4:12 and 12:12.

GROUND STORY

The GROUND STORY shall house COMMERCE or RESIDENTIAL uses. See height specifications above for specific requirements unique to each use.

Upper STORIES

The upper STORIES shall house RESIDENTIAL or COMMERCE uses. *No restaurant or retail sales uses shall be allowed in upper STORIES unless they are second STORY extensions equal to or less than the area of the GROUND STORY use.

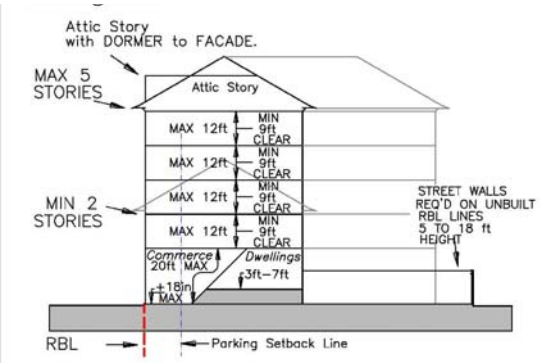
1. No COMMERCE use is permitted above a RESIDENTIAL use.
2. Additional habitable space is permitted within the roof where the roof is configured as an ATTIC STORY.
3. Additional habitable space is permitted within a TOWER STORY.

Permitted Uses

1. RESIDENTIAL uses shall be considered to encompass all of the Residential use categories, as defined in the Marquette City Zoning Ordinance.
2. COMMERCE uses shall be considered to encompass all of the Commercial use categories, and all of the CIVIC use categories except passenger terminals and social service institutions, as defined in the Marquette City Zoning Ordinance.

Marquette Waterfront – General 5

HEIGHT



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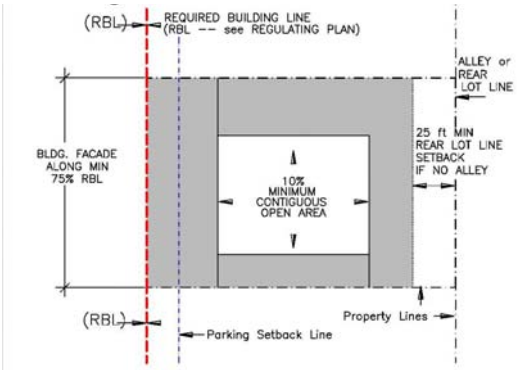


Building Height

1. The height of the building is measured in STORIES.
2. Each principal building shall be at least 2 STORIES in height, but no greater than 5 STORIES in height, except as otherwise provided on the REGULATING PLAN.
3. An ATTIC STORY shall not count against the maximum STORY HEIGHT.

TOWER STORY

4. An additional TOWER STORY is allowed above the maximum building STORY height, within the following parameters:

1. The footprint of the tower shall not exceed 400 square feet.
2. No horizontal FAÇADE dimension of the tower shall exceed 20 feet.
3. STORY HEIGHTS are the same as those for Upper Stories (see below.)
4. No ATTIC STORY is permitted above a TOWER STORY.

Parking Structure Height

Where a parking structure is within 40 feet of any principal building (built after 2007) that portion of the structure shall not exceed the building's eave or PARAPET HEIGHT.

GROUND STORY Height: COMMERCE Uses

1. The average GROUND STORY finished floor elevation shall be equal to, or greater than the exterior sidewalk elevation in front of the building, to a maximum finished floor elevation of 18 inches above the sidewalk.
2. The GROUND STORY shall have at least 12 feet of clear interior height (floor to ceiling) contiguous to the REQUIRED BUILDING LINE frontage for a minimum depth of at least 25 feet.
3. The maximum STORY HEIGHT for the GROUND STORY is 20 feet.

GROUND STORY HEIGHT: RESIDENTIAL Units

1. The average finished floor elevation shall be no less than 3 feet and no more than 7 feet above the exterior sidewalk elevation at the REQUIRED BUILDING LINE.
2. The first STORY shall have an interior clear height (floor to ceiling) of at least 9 feet and a maximum floor to floor STORY HEIGHT of 16 feet.

Upper STORY HEIGHT

5. The maximum floor-to-floor STORY HEIGHT for STORIES other than the GROUND STORY is 12 feet.

1. At least 80% of each upper story shall have an interior clear height (floor to ceiling) of at least 9 feet.

Mezzanines

Mezzanines having a floor area greater than 1/3 of the floor area of the STORY in which the mezzanine is situated shall be counted as full STORIES.

STREET WALL Height

1. A STREET WALL not less than 5 feet in height or greater than 18 feet in height shall be required along any REQUIRED BUILDING LINE frontage that is not otherwise occupied by a building on the lot.

STREET FACADE

1. On each lot the building FAÇADE shall be built to the REQUIRED BUILDING LINE for at least 75% of the REQUIRED BUILDING LINE (RBL) length.
2. The building FAÇADE shall be built to RBL within 30 feet of a BLOCK CORNER. The ground floor FAÇADE, within 7 feet of the BLOCK CORNER may be chamfered to form a corner entry.
3. These portions of the building FAÇADE (the required minimum build-to) may include jogs of not more than 18 inches in depth except as otherwise provided to allow bay windows, shopfronts, and balconies.

BUILDABLE AREA

1. Buildings may occupy the portion of the lot specified by these BUILDING FORM STANDARDS.
2. A contiguous OPEN AREA equal to at least 10% of the total BUILDABLE AREA shall be preserved on every lot. Such contiguous OPEN AREA may be located anywhere behind the PARKING SETBACK, at or above grade.
3. No part of any building, except overhanging EAVES, awnings, or balconies shall occupy the remaining lot area.

Side Lot Setbacks

There are no side lot setbacks.

Garage and Parking

1. GARAGE ENTRIES or driveways shall be located at least 75 feet away from any BLOCK CORNER or another GARAGE ENTRY on the same BLOCK, unless otherwise designated on the REGULATING PLAN.
2. GARAGE ENTRIES shall have neither a clear height greater than16 feet nor a clear width exceeding 24 feet.
3. Vehicle parking areas on private property shall be located behind the PARKING SETBACK LINE, except where parking is provided below grade.
4. These requirements are not applicable to on-street parking.

ALLEYS

There is no required setback from ALLEYS. On lots having no ALLEY access, there shall be a minimum setback of 25 feet from the REAR LOT LINE.

Corner Lots

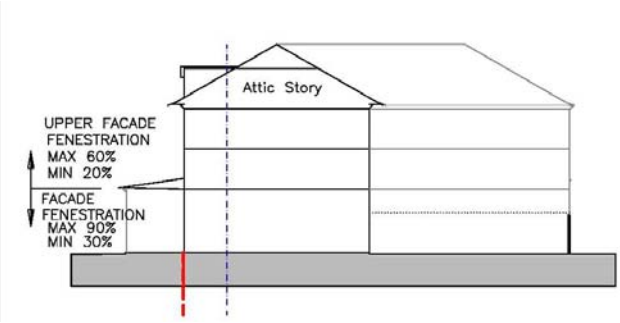
Corner lots shall satisfy the code requirements for the full RBL length – unless otherwise specified in this code.

Unbuilt REQUIRED BUILDING LINE and COMMON LOT LINE Treatment

1. A STREET WALL shall be required along any RBL frontage that is not otherwise occupied by a building. The STREET WALL shall be located not more than 8 inches behind the REQUIRED BUILDING LINE.
2. PRIVACY FENCES may be constructed along that portion of a COMMON LOT LINE not otherwise occupied by a building.

Marquette Waterfront – General 5

ELEMENTS



FENESTRATION

1. Blank lengths of wall exceeding 20 linear feet are prohibited on all REQUIRED BUILDING LINES (RBL).
2. FENESTRATION on the GROUND STORY FACADES shall comprise at least 30%, but not more than 90%, of the FACADE (measured as a percentage of the FACADE between floor levels).
1. FENESTRATION on the upper story FACADES shall comprise at least 20%, but no more than 60%, of the FACADE area per STORY (measured as a percentage of the FACADE between floor levels).
3. No window may face or direct views toward a COMMON LOT LINE within 30 feet unless: that view is contained within the lot (e.g. by a PRIVACY FENCE/GARDEN WALL) or, the sill is at least 6 feet above its finished floor level.

Building Projections

2. Balconies and STOOPS shall not project closer than 5 feet to a COMMON LOT LINE.
3. No part of any building, except overhanging EAVES, awnings, balconies, bay windows, STOOPS, and shopfronts as specified by the code, shall encroach beyond the REQUIRED BUILDING LINE.
4. Awnings shall project a minimum of 6 feet and a maximum of within 1 foot of back of curb (where there are no STREET TREES) or 1 foot into the tree lawn (where there are STREET TREES.)
5. Awnings that project over the sidewalk portion of a STREET-SPACE shall maintain a clear height of at least 10 feet.
6. Awnings may have supporting posts at their outer edge provided that they:
   - Have a minimum of 8 feet clear width between the FACADE and the support posts or columns of the awnings.
   - Provide for a continuous public access easement at least 4 feet wide running adjacent and parallel to the awning columns/posts.

Doors/Entries

At least one functioning entry door(s) shall be provided along the GROUND STORY FACADE of each building and at intervals not greater than 60 linear feet.

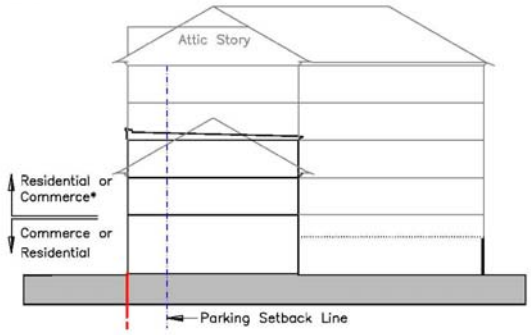
STREET WALLS

A vehicle entry gate no wider than 18 feet or a pedestrian entry gate no wider than 5 feet shall be permitted within any required STREET WALL.

Roofs

Where the roof is not hidden from the adjacent STREET-SPACE by a PARAPET wall, its pitch shall be between 4:12 and 12:12.

USE



GROUND STORY

The GROUND STORY shall house COMMERCE or RESIDENTIAL uses. See height specifications above for specific requirements unique to each use.

Upper Stories

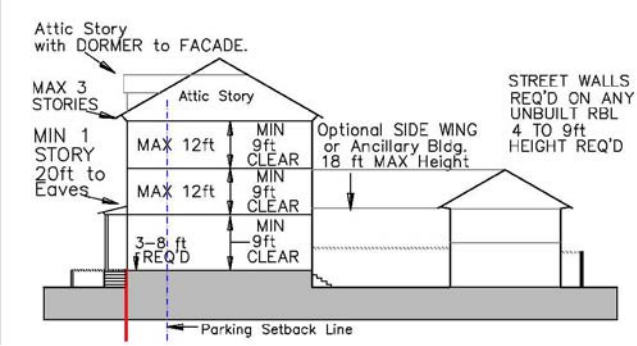
1. The upper STORIES shall house RESIDENTIAL or COMMERCE uses. *No restaurant or retail sales uses shall be allowed in upper STORIES unless they are second STORY extensions equal to or less than the area of the GROUND STORY use.
2. No COMMERCE use is permitted above a RESIDENTIAL use.
3. Additional habitable space is permitted within the roof where the roof is configured as an ATTIC STORY.
4. Additional habitable space is permitted within a TOWER STORY.

Permitted Uses

1. RESIDENTIAL uses shall be considered to encompass all of the Residential use categories, as defined in the Marquette City Zoning Ordinance.
2. COMMERCE uses shall be considered to encompass all of the Commercial use categories, and all of the CIVIC use categories except passenger terminals and social service institutions, as defined the Marquette City Zoning Ordinance.

Marquette Waterfront – North Lakeshore Frontages

HEIGHT



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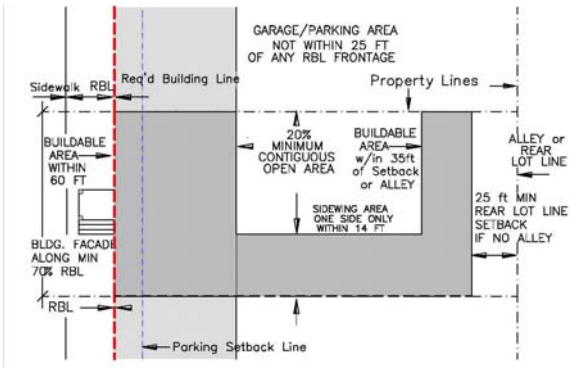


Building Height

1. The height of the principal building is measured in STORIES.
2. Each principal building shall be at least 1 STORY in height, but no greater than 3 STORIES in height, except as otherwise provided on the REGULATING PLAN.
3. An ATTIC STORY shall not count against the maximum STORY HEIGHT.

TOWER STORY

An additional TOWER STORY is allowed above the maximum building STORY height, within the following parameters:

1. The footprint of the tower shall not exceed 250 feet.
2. No horizontal FAÇADE dimension of the tower shall exceed 20 feet.
3. The minimum and maximum STORY HEIGHTS are the same as those for Upper STORIES (see below.)
4. No ATTIC STORY is permitted above a TOWER STORY.

Parking Structure Height

Where a parking structure is within 40 feet of any principal building (built after 2007) that portion of the structure shall not exceed the building's EAVE or PARAPET HEIGHT.

GROUND STORY Height

1. The average finished floor elevation shall be no less than 3 feet and no more than 8 feet above the exterior sidewalk elevation at the REQUIRED BUILDING LINE.

The first STORY shall have an interior clear height (floor to ceiling) of at least 9 feet and a maximum floor to floor STORY HEIGHT of 12 feet.

Upper STORY HEIGHT

1. The maximum floor-to-floor STORY HEIGHT for stories other than the GROUND STORY is 12 feet.

At least 80% of each upper STORY shall have an interior clear height (floor to ceiling) of at least 9 feet.

STREET WALL Height

1. A STREET WALL not less than 4 feet in height or greater than 9 feet in height shall be required along any REQUIRED BUILDING LINE frontage that is not otherwise occupied by the principal building on the lot.

Street FACADE

1. On each lot the building FAÇADE shall be built to the REQUIRED BUILDING LINE for at least 70% of the REQUIRED BUILDING LINE (RBL) length.
2. The building FAÇADE shall be built to RBL within 30 feet of a BLOCK CORNER. The ground floor FAÇADE, within 7 feet of the BLOCK CORNER may be chamfered to form a corner entry.
3. These portions of the building FAÇADE (the required minimum build-to) may include jogs of not more than 18 inches in depth except as otherwise provided to allow bay windows, shopfronts, and balconies.

BUILDABLE AREA

1. Buildings may occupy the portion of the lot specified by these BUILDING FORM STANDARDS.
2. A contiguous OPEN AREA equal to at least 20% of the total BUILDABLE AREA shall be preserved on every lot. Such contiguous OPEN AREA may be located anywhere behind the PARKING SETBACK, at grade.
3. No part of any building, except overhanging EAVES or balconies shall occupy the remaining lot area.

Side Lot Setbacks

There are no required side lot setbacks.

Garage and Parking

1. GARAGE ENTRIES or driveways shall be located at least 75 feet away from any BLOCK CORNER or another GARAGE ENTRY on the same block, unless otherwise designated on the REGULATING PLAN.
2. GARAGE ENTRIES shall have neither a clear height greater than16 feet nor a clear width exceeding 24 feet.
3. Vehicle parking areas on private property shall be located behind the PARKING SETBACK LINE.
4. These requirements are not applicable to on-street parking.

ALLEYS

There is no required setback from ALLEYS. On lots having no ALLEY access, there shall be a minimum setback of 25 feet from the REAR LOT LINE.

Corner Lots

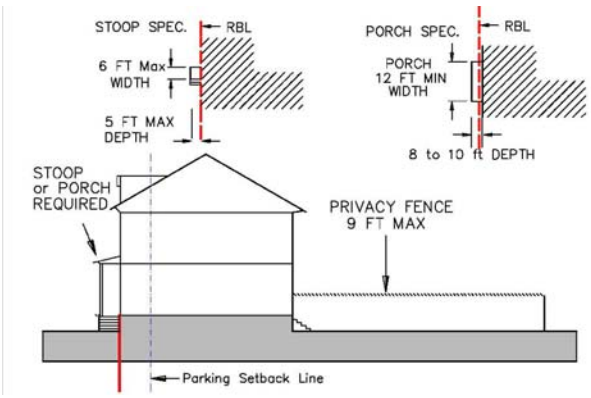
Corner lots shall satisfy the code requirements for the full RBL length – unless otherwise specified in this code.

Unbuilt REQUIRED BUILDING LINE and COMMON LOT LINE Treatment

1. A STREET WALL shall be required along any RBL frontage that is not otherwise occupied by a building. The STREET WALL shall be located not more than 8 inches behind the REQUIRED BUILDING LINE.
2. PRIVACY FENCES may be constructed along that portion of a COMMON LOT LINE not otherwise occupied by a building.

Marquette Waterfront – North Lakeshore Frontages

ELEMENTS



FENESTRATION

1. Blank lengths of wall exceeding 30 linear feet are prohibited on all REQUIRED BUILDING LINES (RBL).
2. FENESTRATION on all FACADES shall comprise at least 20%, but not more than 75%, of the FACADE (measured as a percentage of the FACADE between floor levels).
3. No window may face or direct views toward a COMMON LOT LINE within 30 feet unless: that view is contained within the lot (e.g. by a PRIVACY FENCE/GARDEN WALL) or, the sill is at least 6 feet above the finished floor level.

Building Projections

1. Balconies and STOOPS shall not project closer than 5 feet to a COMMON LOT LINE.
2. Each lot/unit shall include a STOOP of not more than 5 feet deep and 6 feet wide (plus steps) or a front PORCH, between 8 feet and 10 feet deep with a width not less than 12 feet shall be added forward of the RBL.
3. No part of any building, except overhanging EAVES, balconies, BAY WINDOWS, and STOOPS as specified by the code, shall encroach beyond the REQUIRED BUILDING LINE.

Doors/Entries

At least one functioning entry door(s) shall be provided along the GROUND STORY FACADE of each building and at intervals not greater than 75 linear feet.

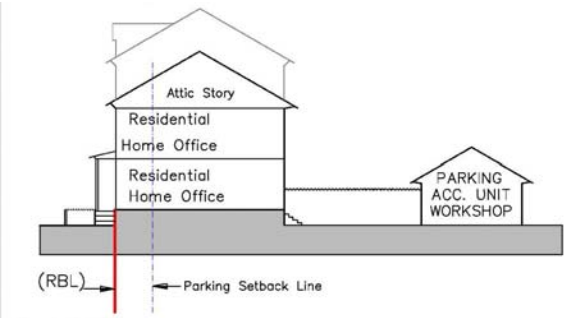
STREET WALLS

A vehicle entry gate no wider than 18 feet or a pedestrian entry gate no wider than 5 feet shall be permitted within any required STREET WALL.

Roofs

Where the roof is not hidden from the adjacent STREET-SPACE by a PARAPET wall, its pitch shall be between 4:12 and 12:12.

USE



GROUND STORY

The GROUND STORY shall house RESIDENTIAL uses.

Upper STORIES

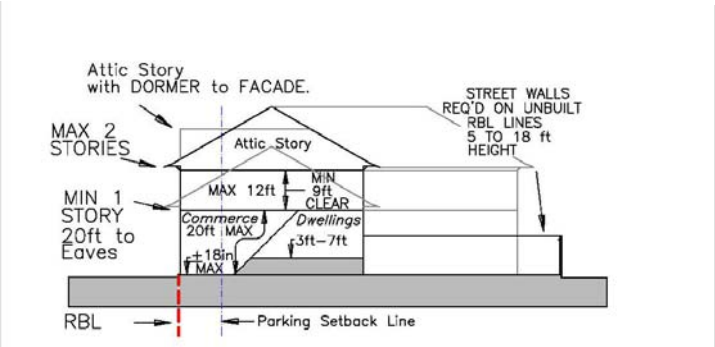
1. The upper stories shall house RESIDENTIAL uses.
2. Additional habitable space is permitted within the roof where the roof is configured as an ATTIC STORY.
3. Additional habitable space is permitted within a TOWER STORY.

Permitted Uses

RESIDENTIAL uses shall be considered to encompass all of the Residential use categories, as defined in the Marquette City Zoning Ordinance.

Marquette Waterfront – Waterfront 2 Frontages

HEIGHT



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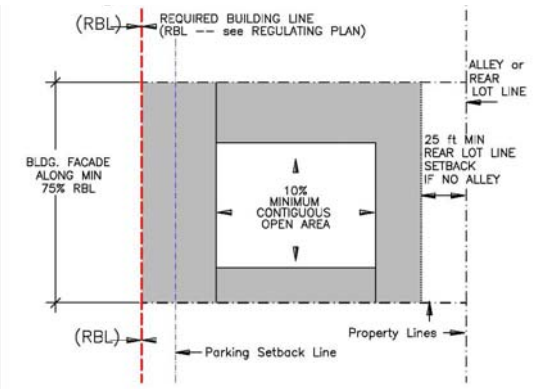


Building Height

1. The height of the building is measured in STORIES.
2. Each principal building shall be at least 1 STORY in height, but no greater than 2 STORIES in height, except as otherwise provided on the REGULATING PLAN.
3. An ATTIC STORY shall not count against the maximum STORY HEIGHT.

TOWER STORY

An additional TOWER STORY is allowed above the maximum building STORY HEIGHT, within the following parameters:

1. The footprint of the tower shall not exceed 300 feet.
2. No horizontal FAÇADE dimension of the tower shall exceed 20 feet.
3. STORY HEIGHTS are the same as those for Upper STORIES (see below.)
4. No ATTIC STORY is permitted above a TOWER STORY.

Parking Structure Height

Where a parking structure is within 40 feet of any principal building (built after 2007) that portion of the structure shall not exceed the building's EAVE or PARAPET HEIGHT.

GROUND STORY HEIGHT: COMMERCE USES

1. The average GROUND STORY finished floor elevation shall be equal to, or greater than the exterior sidewalk elevation in front of the building, to a maximum finished floor elevation of 18 inches above the sidewalk.
2. The GROUND STORY shall have at least 12 feet of clear interior height (floor to ceiling) contiguous to the REQUIRED BUILDING LINE frontage for a minimum depth of at least 25 feet.
3. The maximum STORY HEIGHT for the GROUND STORY is 20 feet.

GROUND STORY HEIGHT: Residential Units

1. The finished floor elevation shall be no less than 3 feet and no more than 7 feet above the exterior sidewalk elevation at the REQUIRED BUILDING LINE.
2. The first STORY shall have an interior clear height (floor to ceiling) of at least 9 feet and a maximum floor to floor height of 16 feet.

Upper STORY Height

1. The maximum floor-to-floor STORY HEIGHT for STORIES other than the GROUND STORY is 12 feet.
2. At least 80% of each upper STORY shall have an interior clear height (floor to ceiling) of at least 9 feet.

Mezzanines

Mezzanines having a floor area greater than 1/3 of the floor area of the STORY in which the mezzanine is situated shall be counted as full STORIES.

STREET WALL Height

1. A STREET WALL not less than 5 feet in height or greater than 18 feet in height shall be required along any REQUIRED BUILDING LINE frontage that is not otherwise occupied by a building on the lot.

STREET FACADE

1. On each lot the building FAÇADE shall be built to the REQUIRED BUILDING LINE (RBL) for at least 75% of the RBL length.
2. The building FAÇADE shall be built to RBL within 30 feet of a BLOCK CORNER. The GROUND STORY FAÇADE, within 7 feet of the BLOCK CORNER may be chamfered to form a corner entry.
3. These portions of the building FAÇADE (the required minimum build-to) may include jogs of not more than 18 inches in depth except as otherwise provided to allow bay windows, shopfronts, and balconies.

BUILDABLE AREA

1. Buildings may occupy the portion of the lot specified by these BUILDING FORM STANDARDS.
2. A contiguous open area equal to at least 10% of the total BUILDABLE AREA shall be preserved on every lot. Such contiguous OPEN AREA may be located anywhere behind the PARKING SETBACK LINE, either at or above grade.
3. No part of any building, except overhanging EAVES, awnings, or balconies shall occupy the remaining lot area.

Side Lot Setbacks

There are no side lot setbacks.

Garage and Parking

1. GARAGE ENTRIES or driveways shall be located at least 75 feet away from any BLOCK CORNER or 75 feet from another garage entry on the same BLOCK, unless otherwise designated on the REGULATING PLAN.
2. GARAGE ENTRIES shall have neither a clear height greater than16 feet nor a clear width exceeding 24 feet.
3. Vehicle parking areas on private property shall be located behind the PARKING SETBACK LINE except where it is below grade.
4. These requirements are not applicable to on-street parking.

ALLEYS

There is no required setback from ALLEYS. On lots having no ALLEY access, there shall be a minimum setback of 25 feet from the REAR LOT LINE.

Corner Lots

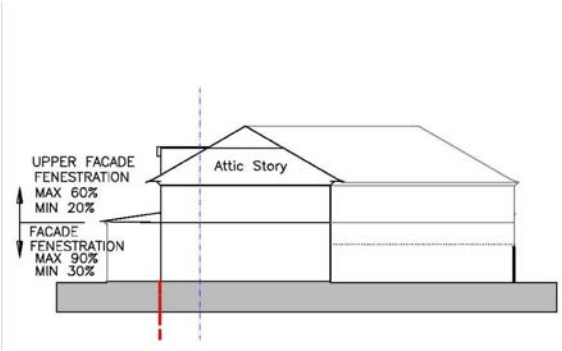
Corner lots shall satisfy the code requirements for the full RBL length – unless otherwise specified in this code.

Unbuilt REQUIRED BUILDING LINE and COMMON LOT LINE Treatment

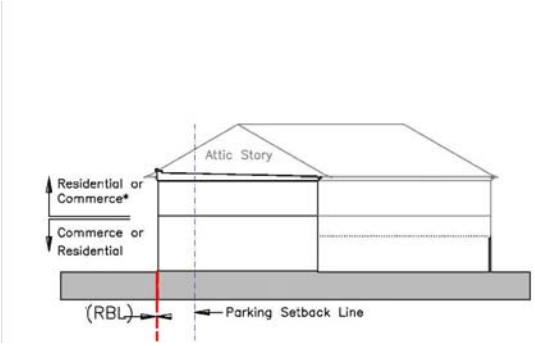
1. A STREET WALL shall be required along any RBL frontage that is not otherwise occupied by a building. The STREET WALL shall be located not more than 8 inches behind the REQUIRED BUILDING LINE.
2. PRIVACY FENCES may be constructed along that portion of a COMMON LOT LINE not otherwise occupied by a building.

Marquette Waterfront – Waterfront 2 Frontages

ELEMENTS



USE



FENESTRATION

1. Blank lengths of wall exceeding 20 linear feet are prohibited on all REQUIRED BUILDING LINES (RBL).
2. FENESTRATION on the GROUND STORY FACADES shall comprise at least 30%, but not more than 90%, of the FACADE (measured as a percentage of the FACADE between floor levels).
3. FENESTRATION on the upper STORY FACADES shall comprise at least 20%, but no more than 60%, of the FACADE area per STORY (measured as a percentage of the FACADE between floor levels).
4. No window may face or direct views toward a COMMON LOT LINE within 30 feet unless: that view is contained within the lot (e.g. by a PRIVACY FENCE/GARDEN WALL) or, the sill is at least 6 feet above its finished floor level.

Building Projections

1. Balconies and STOOPS shall not project closer than 5 feet to a COMMON LOT LINE.
2. No part of any building, except overhanging EAVES, awnings, balconies, bay windows, STOOPS, and shopfronts as specified by the code, shall encroach beyond the REQUIRED BUILDING LINE.
3. Awnings shall project a minimum of 6 feet and a maximum of within 1 foot of back of curb (where there are no STREET TREES) or 1 foot into the tree lawn (where there are STREET TREES.)
4. Awnings that project over the sidewalk portion of a STREET-SPACE shall maintain a clear height of at least 10 feet.
5. Awnings may have supporting posts at their outer edge provided that they:
   - Have a minimum of 8 feet clear width between the FACADE and the support posts or columns of the awnings.
   - Provide for a continuous public access easement at least 4 feet wide running adjacent and parallel to the awning columns/posts.

Doors/Entries

At least one functioning entry door(s) shall be provided along the GROUND STORY FACADE of each building and at intervals not greater than 75 linear feet.

STREET WALLS

A vehicle entry gate no wider than 18 feet or a pedestrian entry gate no wider than 6 feet shall be permitted within any required STREET WALL.

Roofs

Where the roof is not hidden from the adjacent STREET-SPACE by a PARAPET wall, its pitch shall be between 4:12 and 12:12.

GROUND STORY

The GROUND STORY shall house COMMERCE or residential uses. See height specifications above for specific requirements unique to each use.

Upper STORIES

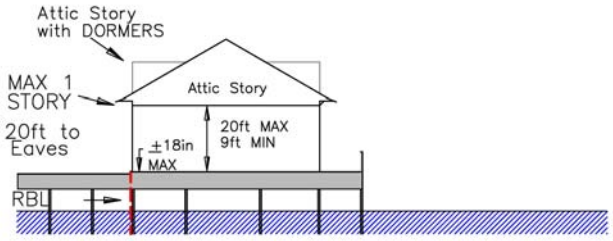
1. The upper STORIES shall house RESIDENTIAL or COMMERCE USES. *No restaurant or retail sales uses shall be allowed in upper STORIES unless they are second STORY extensions equal to or less than the area of the GROUND STORY use.
2. No COMMERCE USE is permitted above a residential use.
3. Additional habitable space is permitted within the roof where the roof is configured as an ATTIC STORY.
4. Additional habitable space is permitted within a TOWER STORY.

Permitted Uses

1. RESIDENTIAL uses shall be considered to encompass all of the Residential use categories, as defined in XXX of the City Zoning Ordinance.
2. COMMERCE USES shall be considered to encompass all of the Commercial use categories, and all of the CIVIC USE categories except passenger terminals and social service institutions, as defined in XXX of the City Zoning Ordinance.

Marquette – Workshop Flex

HEIGHT



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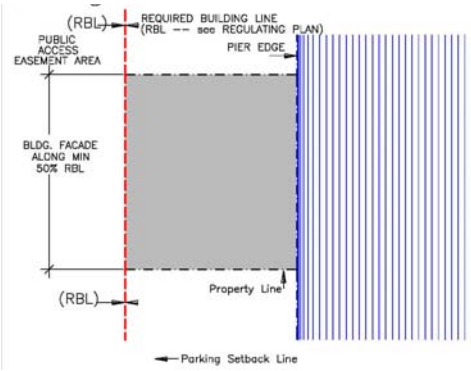


Building Height

1. The height of the building is measured in STORIES.
2. Buildings shall be no greater than 1 STORY or 20 feet, measured to the EAVE or top of parapet, except as otherwise provided on the REGULATING PLAN.

STORY HEIGHT

1. The GROUND STORY finished floor elevation shall be equal to, or greater than the STREET-SPACE elevation in front of the building, to a maximum finished floor elevation of 18 inches above the STREET-SPACE.
2. The GROUND STORY shall have at least 9 feet of clear interior height (floor to ceiling) contiguous to the REQUIRED BUILDING LINE frontage for a minimum depth of at least 12 feet.
3. The maximum STORY HEIGHT for the GROUND STORY is 20 feet.

Mezzanines

Mezzanines having a floor area greater than 1/3 of the floor area of the STORY in which the mezzanine is situated shall be counted as full STORIES.

Street FACADE

1. On each lot the building FAÇADE shall be built to the REQUIRED BUILDING LINE (RBL) for at least 50% of the RBL length.

BUILDABLE AREA

1. Buildings may occupy the portion of the lot specified by these BUILDING FORM STANDARDS.
2. No individual building footprint shall exceed 2000 square feet and no lot dimension shall exceed 60 feet.
3. No part of any building, except overhanging EAVES, awnings, or balconies shall occupy the remaining lot area.

Side Lot Setbacks

Each building shall be set back at least 3 feet from a COMMON LOT LINE.

Parking

There shall be no minimum vehicle parking requirements for WORKSHOP FLEX sites.

Corner Lots

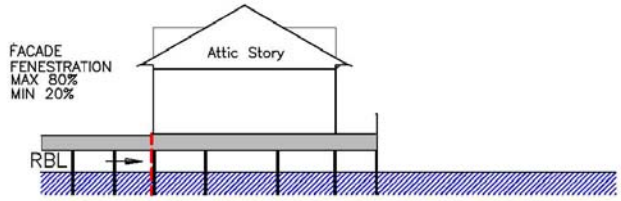
Corner lots shall satisfy the code requirements for their full RBL length – unless otherwise specified in this code.

COMMON LOT LINE Treatment

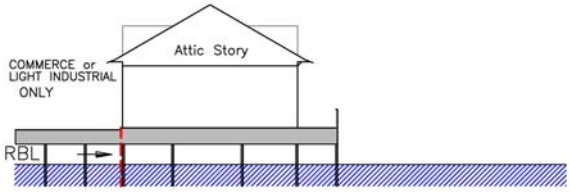
PRIVACY FENCES may be constructed along that portion of a COMMON LOT LINE not otherwise occupied by a building.

Marquette – Workshop Flex

ELEMENTS



USE



FENESTRATION

1. Blank lengths of wall exceeding 20 linear feet are prohibited on all REQUIRED BUILDING LINES (RBL).
2. FENESTRATION on the GROUND STORY FACADES shall comprise at least 20%, but not more than 80%, of the FACADE (measured as a percentage of the FACADE between floor levels).

Building Projections

1. No part of any building, except overhanging EAVES, awnings, balconies, bay windows, STOOPS, and shopfronts as specified by the code, shall encroach beyond the REQUIRED BUILDING LINE.
2. Awnings that project over the sidewalk portion of a STREET-SPACE shall maintain a clear height of at least 10 feet.

Doors/Entries

At least one functioning entry door(s) shall be provided along the GROUND STORY FACADE of each building.

Roofs

Where the roof is not hidden from the adjacent STREET-SPACE by a parapet wall, its pitch shall be between 3:12 and 12:12.

GROUND STORY

The GROUND STORY shall house COMMERCE or LIGHT INDUSTRIAL uses.

Permitted Uses

1. COMMERCE uses shall be considered to encompass all of the Commercial use categories, and all of the CIVIC USE categories except passenger terminals and social service institutions, as defined in XXX of the City Zoning Ordinance.
2. LIGHT INDUSTRIAL uses shall be considered to encompass XXXXX

4.0 Street-Space

Streets are a city's first and foremost public spaces and should therefore be just as carefully designed and planned for as any park or public building. The STREET-SPACE is that public domain between the building FACADES: the cartway or travel lanes between the curbs as well as the sidewalks; the public plazas as well as the urban parks and greens. The character of the STREET-SPACE—both its scale and its details—plays a significant role in determining the pedestrian quality of a given location. Streets must balance the needs of all forms of traffic—auto, bicycle and pedestrian—to maximize mobility and convenience for all the citizens of Marquette and all users of the *Downtown Waterfront District*.

4.1 General Principles

The *Street-Space Principles* define the coherence of the STREET-SPACE. They also serve to assist building owners and operators with understanding the relationship between the STREET-SPACE and their own lots. This Code requires that *Downtown Waterfront District* sites will be developed with buildings placed at the RBL, along the frontage of the lots they occupy. These principles also establish an environment that encourages and facilitates pedestrian activity. "Walkable" streets should be comfortable, efficient, safe, *and* interesting.

A. The BUILDING FORM STANDARDS provide the framework in which the STREET-SPACE occurs.
   1. The RBL frontages shape the STREET-SPACE.
   2. The required building *elements* will provide active building/shopfronts.

B. STREET TREES provide both form (canopy) and comfort (shade) to the STREET-SPACE. Native trees and plants contribute to the reduction of air and noise pollution, maintenance of natural habitat, the conservation of water, and rainwater management.
   1. STREET TREES give special character and coherence to each STREET-SPACE through their regular spacing (along the street tree alignment line) and species selection (see Waterfront District Street Tree List on p. 22.) Therefore, *species should be planted consistently along a given street-space. Provide species diversity by planting different streets with different trees.*
   2. Tree planting areas should be at grade (no raised or curbed planters) and maximize soil area to encourage healthy growth.
   3. STREET TREES must be maintained – watered regularly and "limbed up" as they gain appropriate maturity so as to not interfere with pedestrian or truck travel (minimum 7 feet clear over the sidewalk and 14 feet over the travel lanes of the street).
   4. Streetscape furniture (street lights, benches, bicycle racks, etc.) should contribute to the coherence and form of the street-space through its placement along the street tree alignment line.

C. Sidewalks provide both access to the fronts of buildings and passage for pedestrians along the block.
   1. Sidewalk width should accommodate heavy pedestrian traffic, with a minimum of 6 feet clear unless otherwise specified.
   2. Clear pedestrian passage – not blocked by light poles, raised planters, café tables – is required.
   3. Dooryards provide a flexible space for periodic displays, cafes, or additional *urban* plantings such as flower boxes, as well as space for doors to swing open – all without impeding traffic.

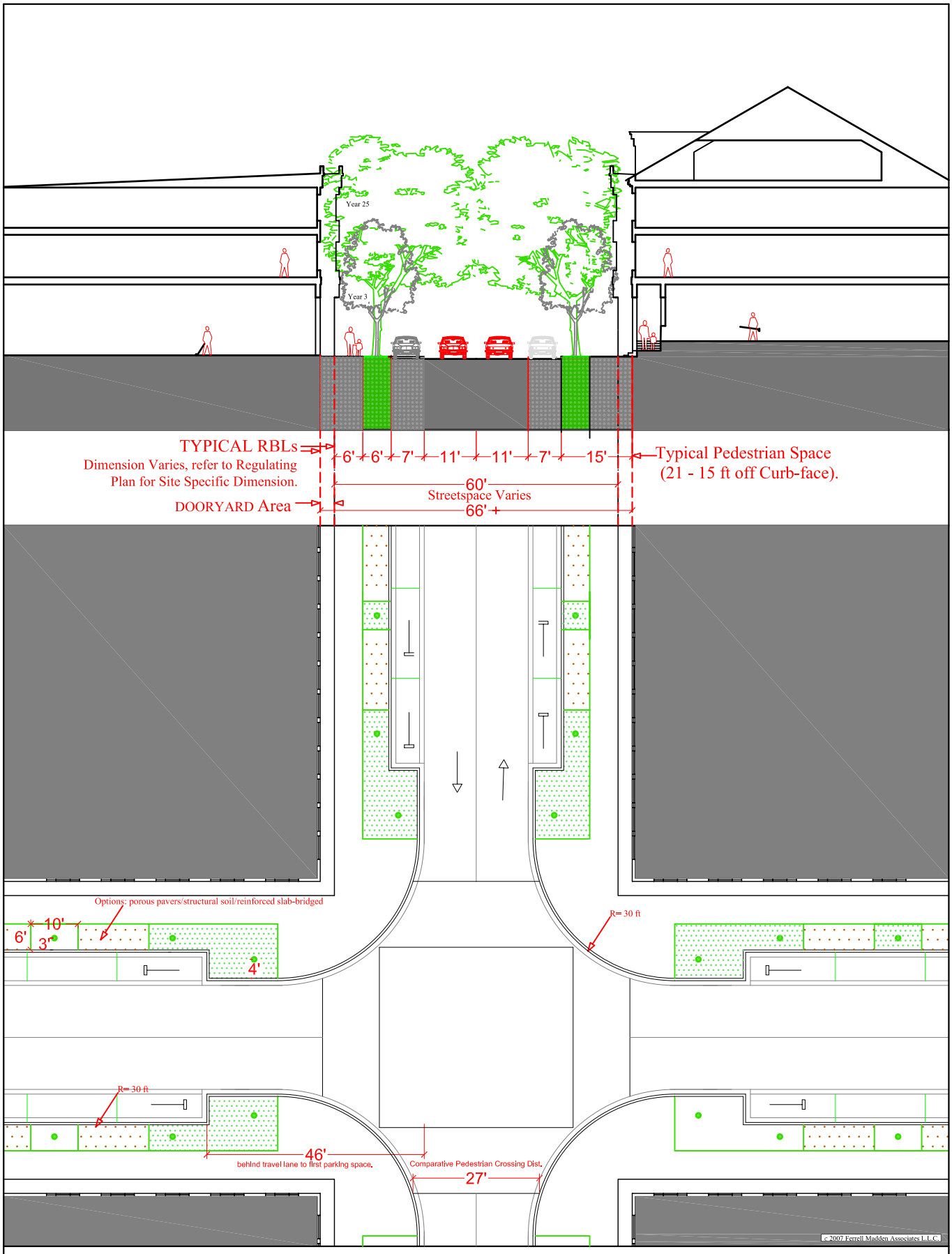
D. On-Street Parking is a fundamental component of a mixed-use district.
   1. It increases pedestrian comfort by providing a buffer between the pedestrian and the moving traffic.
   2. It supports retail and provides visitor parking for residences.

E. Mechanical and electrical equipment including, but not limited to, air compressors, pumps, exterior water heaters, water softeners, private garbage cans (not including public sidewalk waste bins), and storage tanks may not be stored or located within any STREET-SPACE.

4.2 Street-Type Specifications

An illustrative street specification for a typical pedestrian-friendly mixed-use street appears on the following page. (p. 21). The specifications address vehicular traffic lane widths, curb radii, sidewalk and tree planting area dimensions, and on-street parking configurations. The street section also provides a comparative pedestrian crossing distance as a gauge of pedestrian comfort.

These specifications provide a basic template for Lakeshore and other streets in the *Waterfront District*. Because the existing and proposed rights-of-way (ROW) vary, the *Specification* provides for both greater and lesser widths. For ROW widths greater than 66 feet, extra dimension should be given to the pedestrian areas; where the ROW is less, the Specification (and the STREET-SPACE Principles above) lists base minimums for pedestrian areas and other parts of the STREET-SPACE.



New Waterfront District Streets

STREETSPACE: Varies, 53 to >66 feet. Preferred Pedestrian Area width 15 ft (6 feet tree, sidewalks 6 feet clear, 3ft DOORYARD). Tree Planters: 6 x 6 feet exposed area, connected trench. Where variations in Streetspace occur: Extra dimension should be given to the pedestrian realm, for lesser dimensions retain Minimums; 6ft sidewalk, 6ft tree trench, one side parallel parking.

Comparative Pedestrian Crossing Distance 27 feet (all dimensions to face of curb).

Note: These drawings are for Illustrative Purposes Only. Refer to the Regulating Plan for the Situation Specific to your Site.

FMA:3/11/07

4.3 Downtown Waterfront District Tree List

The following list contains all species approved for use in the *Downtown Waterfront District*.** It contains native and acceptable adapted species. Other species may be used for planting within a lot. Invasive exotic species may not be used anywhere on lots or other areas within the *Downtown Waterfront District*. The use of alternate species may be permitted, if approved by the Planning Commission as provided in the Marquette City Zoning Ordinance.

STREET TREE List

First Preference

▪ *Platanus x acerfolia*	London Planetree
▪ *Acer rubrum*	Red Maple
▪ *Celtis laevigata*	Sugar Hackberry

Second Preferences

▪ *Quercus buckleyi shurmardi*	Red Oak
▪ *Quercus muhlenbergii*	Chinquapin Oak
▪ *Ulmus parvifolia*	Lacebark Elm
▪ *Gleditsia triacanthos var. inermis*	Thornless Honey Locust
▪ Taxodium distichum	Bald Cypress
▪ Taxodium ascendens	Pond Cypress

Public Space Tree List

(In addition to the above, species that may be placed within SQUARES, CIVIC GREENS, and parks.)

▪ *Carya illinoinensis*	Pecan
▪ *Quercus macrocarpa*	Bur Oak
▪ *Magnolia grandiflora*	Magnolia
▪ *Cercis canadensis*	Redbud
▪ *Cercis x texensis*	Oklahoma Redbud
▪ *Sophora affinis*	Eve's Necklace
▪ *Ilex vomitoria*	Yaupon Holly
▪ *Ginkgo biloba*	Ginkgo (male only)
▪ *Lagerstromia Indica*	Crepe Myrtle

** ***Note:*** *This is a model list – we have not done the research re: appropriate/viable UP street tree species. The City should edit this list with appropriate species (whether native or proven hardy adapted species). Our criteria for appropriate street trees, as urbanists, are:*

*a) **Structural** – how canopy shade trees shape and subdivide the streetspace, add to pedestrian comfort and add to the (literal) value of the street/community. Therefore we ask for "Canopy Shade Trees" species with a habit of growth favoring height in excess of 55 feet and broad canopy. The trees must grow high to clear traffic, pedestrians, and open a clear view of the street-space, shopfronts, etc.*

*b) **Pragmatic** – Life as a street tree is nasty and brutish, few species are tough (salt/soil compaction/ etc) and resistant enough to be sufficiently long-lived to reach an appropriate height.*

*c) **Design** – Species should be planted consistently along a given street-space. Provide species diversity by planting different streets with different trees.*

5.0 Definitions

5.1 Purpose

The following terms are defined for the purpose of the *Waterfront District Code*. Terms not defined here may be defined elsewhere in the *Marquette City Zoning Ordinance*. In such case, the definition contained in the *Marquette City Zoning Ordinance* will be used. Certain terms in the *Waterfront District Code* are used in very specific ways, often excluding some of the meanings of common usage. Wherever a word is printed in SMALL CAPITAL LETTERS, it is being used as defined herein.

5.2 Defined Terms

ALLEY/ALLEY ACCESS EASEMENT: The public right-of-way or easement for public access, for vehicles and pedestrians within a BLOCK that provides access to the rear of buildings, vehicle parking (e.g., garages), utility meters, and recycling and garbage bins. Access through the BLOCK and to the rear of lots within the BLOCK is required. The specific configuration may include shared parking areas and other uses so long as reasonable service access is relatively unimpeded.

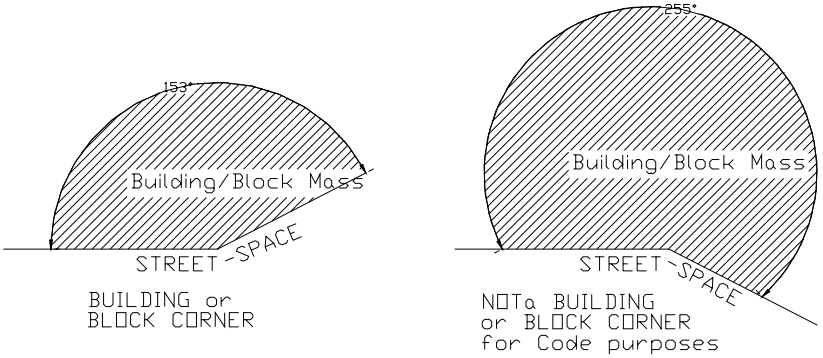
ATTIC STORY: Habitable space within a building situated within the structure of a pitched roof and above the uppermost regular STORY. ATTIC STORIES may have only DORMER windows on their RBL façade. ATTIC STORIES are permitted for all BFS sites and do not count against the maximum STORY limit of the BFS.

BLOCK: An increment of land comprised of lots, ALLEYS, and tracts circumscribed and not traversed by STREETS (ALLEYS, and PEDESTRIAN PATHWAYS excepted). BLOCKS shall be measured at the frontage lot lines (along the REQUIRED BUILDING LINE).

BLOCK CORNER: This refers to the outside corner of a BLOCK at the intersection of any two STREETS. Some of the requirements of the BUILDING FORM STANDARDS are specific to BLOCK CORNERS. Inside corners, where the resulting angle formed by the BLOCK face is less than 180 degrees (concave), are not considered BLOCK CORNERS for the purposes of this Code.

BUILDABLE AREA: The area of the lot that building(s) may occupy, which includes the entire area of the lot behind the RBL, exclusive of any setbacks. The BUILDABLE AREA sets the limits of the building footprint now and in the future—additions to structures must be within the designated area.

BUILDING CORNER: This refers to the outside corner of a building where the primary building mass is within an angle less than 180 degrees. Some of the proscriptions of the BUILDING FORM STANDARD are specific to BUILDING CORNERS. Inside corners, where the exterior space of the building mass forms an angle of more than 180 degrees, are not considered BUILDING CORNERS for the purposes of this Code.



BUILDING FORM STANDARDS (BFS): The part of the Code that establishes basic parameters regulating building form, including the envelope, placement (in three dimensions) and certain permitted/required building elements, such as storefronts, BALCONIES, and STREET WALLS. The BUILDING FORM STANDARD establishes both the boundaries within which things may be done and specific things that must be done. The applicable BFS for a site is determined by its STREET FRONTAGE as per the REGULATING PLAN. This produces a coherent STREET-SPACE and allows the building greater latitude behind its street FACADE.

COMMERCE (See USE)

COMMON LOT LINES: Lot lines shared by adjacent private lots *(See also REAR LOT LINES).*

DOORYARD: The area, within the STREET-SPACE, between the FAÇADE of the building (generally the RBL) and the property line. STOOPS, balconies, and for appropriate COMMERCE uses, temporary displays, café seating and other encroachments as specified by the City may be placed within the DOORYARD area.

DORMERS: Small, roofed ancillary structures with windows providing light and air to habitable space within the roof. DORMERS are permitted and do not constitute a STORY so long as they do not break the primary EAVE line, are individually less than 15 feet wide, and are collectively not more than 60% of the REQUIRED BUILDING LINE FAÇADE length. *(See also ATTIC STORY).*

EAVE HEIGHT: Where used to limit building height in the Code, EAVE HEIGHT shall be measured at the bottom of the top layer of roofing material at its outermost point from the building wall.

FAÇADE: Building face; the building elevation facing the STREET-SPACE. (Building walls facing interior courts, COMMON LOT LINES, and ALLEYS are not FACADES.)

FENESTRATION: Openings in the building wall, including windows and doors, allowing light and views between interior and exterior. FENESTRATION is measured as glass or open area (excluding muntins and similar window frame elements with a width dimension equal to or greater than 2 inches) for conditioned space and as open area for parking structures or other un-conditioned, enclosed space.

FIRST FLOOR (*See GROUND STORY.*)

GARAGE ENTRY: An opening (with curb cut) in the building FAÇADE and/or STREET WALL where vehicles may access the BLOCK interior for parking and business servicing. GARAGE ENTRIES shall not exceed 16 feet clear height and 24 feet clear width and shall not be sited within 75 feet of the BLOCK CORNER or another GARAGE ENTRY on the same BLOCK. GARAGE ENTRY portals may be set back up to 24 inches behind the surrounding FAÇADE.

GARDEN WALL: A masonry wall defining a property line or delineating a private area. Shall be set back (or forward) not more than 8 inches from the alignment specified in the REGULATING PLAN or BFS. A vehicle entry gate (opaque and maximum 18 feet wide) and a pedestrian entry gate (maximum 6 feet wide) are both allowed within any required GARDEN WALL length.

GENERAL FRONTAGE BUILDING: Building types as defined in the BUILDING FORM STANDARDS for both GENERAL 3 and GENERAL 5 Sites.

GROUND STORY: The first level of a building at or above grade. When a RESIDENTIAL use/unit occupies the GROUND STORY, the finished floor elevation shall be at least 3 feet and no more than 8 feet above the fronting sidewalk elevation, unless otherwise specified in the BUILDING FORM STANDARDS. The next STORY above the GROUND STORY is the second floor.

NORTH LAKESHORE FRONTAGE BUILDING: Building types as defined in the BUILDING FORM STANDARDS for NORTH LAKESHORE FRONTAGE Sites.

OPEN AREA: The area within the BUILDABLE AREA and behind the PARKING SETBACK LINE, accessible to all occupants of the particular building or site, and open to the sky. OPEN AREA shall *not* be: built-upon, parked or driven upon (except for emergency access).

PARAPET HEIGHT: Where used to limit building height in the Code, PARAPET HEIGHT shall be measured at the top of the parapet, including any coping. An additional 3 feet in height by 12 feet in width (or 15% of the subject façade, whichever is greater) is permitted for a section of the parapet emphasizing the building's primary STREET-SPACE entry or a BLOCK CORNER.

PARKING:

- RESERVED: Parking not available to the public, but only to specifically identified users (either a single user per space or a set of users for a group of spaces), whether for free or at a fee.
- SHARED: Parking available to the public on an unreserved basis for free or at the same fee for all users. Time limits may be imposed to ensure turn-over. Hours of public availability may also be restricted.

PARKING SETBACK LINE: A line/plane indicated on the REGULATING PLAN which generally extends vertically and parallel to the RBL. All parking shall be behind this line, excepting where it is below grade or is otherwise indicated on the REGULATING PLAN. The PARKING SETBACK LINE is a permissive minimum distance from the RBL and parking may be placed anywhere within the lot behind this line, except where otherwise specified in this code.

PEDESTRIAN PATHWAY: Interconnecting paved ways that provide pedestrian and bicycle passage through BLOCKS running from a STREET-SPACE to another STREET-SPACE, an ALLEY or a BLOCK interior parking area. The area within a PEDESTRIAN PATHWAY shall be a public access easement or public right-of-way. The easement width for these pathways shall not be less than 20 feet with a paved walkway not less than 10 feet wide, except where otherwise specified on the REGULATING PLAN, and shall provide an unobstructed view straight through their entire length.

PRIVACY FENCE: An opaque fence made of wood or masonry (not chain link or any other type of rolled fence) along ALLEYS and COMMON LOT LINES (where more than 10 feet away from the REQUIRED BUILDING LINE). It may be as high as 9 feet above the adjacent ground.

PORCH: The ground floor platform attached to the front or STREET-SPACE side of the main building. Required porches, as defined in the BUILDING FORM STANDARDS, must be roofed and enclosed by balustrades (railings) and posts that extend up to the roof and may not be otherwise enclosed except with insect screening.

PUBLIC ART: Art that is visually or physically accessible to the public (within the public realm e.g. a STREET-SPACE) and that is acquired by City funds, donated to the City, or provided by a private entity as a community benefit, including monuments and statues, building ornament, and visible public infrastructure such as bridges, etc.

REAR LOT LINES: Lot lines, generally COMMON LOT LINES parallel to the RBL and often along ALLEYS. For purposes of minimum rear setbacks prescribed in the BFS, lot lines more than 150 feet from the RBL are considered REAR LOT LINES.

REGULATING PLAN: Part of the Form-Based Code that is the coding key for the BUILDING FORM STANDARD that provides specific information for the disposition of each building. The REGULATING PLAN also shows how each site relates to adjacent STREET-SPACE, the overall *Waterfront District*, and the surrounding neighborhoods.

REQUIRED BUILDING LINE (RBL): A line/plane indicated on the REGULATING PLAN, defining the STREET FRONTAGE which extends vertically and generally parallel to the street, at which the building FAÇADE s hall be placed. The building shall be built-to the REQUIRED BUILDING LINE (RBL) as shown on the REGULATING PLAN. The RBL is a requirement, not a permissive minimum as is a set-back. The RBL for each site is shown on the *Waterfront District* REGULATING PLAN. The minimum length of building that is required to be built-to the RBL is shown on the appropriate BUILDING FORM STANDARD.

RETAIL (*See USE*)

SIDEWING: The portion of a building extending along a side lot line toward the ALLEY or rear of the lot.

STOOP: An entry platform on the RBL side of a building. STOOPS may be roofed, but they shall not be enclosed.

STORY/STORY HEIGHT: That space within a building, and above grade, that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above. STORY HEIGHT parameters are as specified by the appropriate BUILDING FORM STANDARD.

STREET FRONTAGE: That portion of the lot or building that is coincident with the RBL as required by the Code.

STREET LIGHT: A luminaire installed on both sides of streets, along the STREET TREE ALIGNMENT LINE, unless otherwise designated on the REGULATING PLAN, at intervals of no more than 75 feet measured parallel to the street. STREET LIGHTS shall be between 9 and 16 feet above ground in height. Lighting standards for STREET-SPACES and ALLEYs should be developed to meet the minimum standards of the *Illumination Engineering Society* (with the design criteria giving equal weight to the lighting of the pedestrian areas and the automobile areas).

STREET-SPACE: Includes all space between fronting RBLs (travel-lanes, sidewalks, SQUARES, PEDESTRIAN PATHWAYS, CIVIC GREENS, sidewalks, parks)—including any transit service operator passenger platform—but not GARAGE ENTRIES or ALLEYS.

STREET TREE: A required tree listed in the *Waterfront District* STREET TREE List, located in **Sec. 4.3** (p.15). STREET TREES shall be of a proven hardy and drought tolerant species, large enough to form a canopy with sufficient clear trunk to allow traffic to pass under unimpeded. STREET TREES shall be planted at an average no greater than 30 feet on center (measured per BLOCK face). Where necessary, spacing allowances may be made to accommodate curb cuts, fire hydrants and other infrastructure elements, however, at no location shall spacing exceed 45 feet on center.

STREET TREE ALIGNMENT LINE: A line along which STREET TREES are to be planted and STREET LIGHTs and other such infrastructure are to be placed. The STREET TREE ALIGNMENT LINE is parallel with the street or SQUARE right-of-way and, unless otherwise specified, is 3 feet behind the back-of-curb. (Existing trees are not required to be relocated by this requirement.)

STREET WALL: A masonry wall set along the RBL and built to the height specified in the BUILDING FORM STANDARDS. A vehicle entry gate and a pedestrian entry gate are both allowed within any required STREET WALL length. See individual BFS for exact specifications.

TOWER STORY: Within the *Waterfront District*, an allowable additional STORY above the maximum building story height. See individual BFS for exact specifications.

USE, CIVIC: Community uses including: meeting halls; libraries; schools; police and fire stations; post offices (retail operations only, no primary distribution facilities); places of worship; museums; cultural, visual and performing art centers; transit centers; government functions open to the public; and, other similar uses.

USE, COMMERCE: For the purpose of the *Waterfront District*, COMMERCE uses shall be considered to encompass all of the XXX use categories, and all of the Civic use categories except passenger terminals and social service institutions, as defined in XXXX of the Marquette City Zoning Ordinance (Use Categories).

USE, LIGHT INDUSTRIAL: For the purpose of the Waterfront District, LIGHT INDUSTRIAL uses shall be considered to encompass all of the uses for XXX as defined in the Marquette City Zoning Ordinance.

USE, RESIDENTIAL: For the purpose of the *Waterfront District*, RESIDENTIAL uses shall be considered to encompass all of the Residential use categories as defined in the Marquette City Zoning Ordinance. (Exceptions?)

USE, RETAIL: *(Includes the following)*

- RETAIL SERVICE: Establishments providing services, as opposed to products, to the general public, including restaurants, hotels and motels, finance, real estate and insurance, travel agencies, health and educational services, and galleries.
- RETAIL SPECIALTY: Include, but are not limited to the sale of gifts, antiques, flowers, books, jewelry, wearing apparel or craft shops making articles exclusively for sale at retail on the premises.
- RETAIL TRADE: Establishments engaged in selling new goods or merchandise to the general public for personal or household consumption and rendering services incidental to the sale of such goods.

WATERFRONT FRONTAGE BUILDING: Building types as defined in the BUILDING FORM STANDARDS for WATERFRONT 2 FRONTAGE Sites.

"WHERE CLEARLY VISIBLE FROM THE STREET-SPACE": Many requirements of the Code apply only where the subject is "CLEARLY VISIBLE FROM THE STREET-SPACE." Note that the definition of STREET-SPACE includes SQUARES, CIVIC GREENS, parks, and all public spaces except ALLEYS. A building element more than 40 feet from the RBL /STREET-SPACE (such as elements facing a COMMON LOT LINE more than 40 feet away from a RBL and/or street) is by definition *not* CLEARLY VISIBLE FROM THE STREET-SPACE. Also common and/or party walls are by definition *not* CLEARLY VISIBLE FROM THE STREET-SPACE. *This does not exempt vehicle parking spaces/lots from any BFS requirements.*

WORKSHOP FLEX FRONTAGE BUILDING: Building types as defined in the BUILDING FORM STANDARDS for WORKSHOP FLEX FRONTAGE Sites.