Sustainable Small Harbors Project

New Baltimore Charrette Final Report

PROJECT GOAL

To identify the key barriers to small harbor economic, social and environmental sustainability and provide a toolkit to help small harbor managers create more stability in their communities.

MI Sea Grant

Sustainable Harbor Design Charrette

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New Baltimore Charrette Final Report
2015

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1.0 Executive Summary of Project

Administered by the state, county, and local units of government, there are over 80 small public harbors and marinas throughout the State of Michigan. These harbors are a critical component of the state's blue economy with impacts from Great Lakes recreational boating in the billions of dollars. Unfortunately, a decade-long trend of lower water levels, at least temporarily reversed in 2014, combined with increasingly severe economic constraints have resulted in strained local economies. Most significantly, state and federal funding for public harbors maintenance is increasingly limited. Accordingly, by 2015, public harbors will be required to develop five-year master plans in order to receive financial support from the Waterways Commission of the Michigan Department of Natural Resources (MDNR). Therefore, research is needed to inform both the development and the content of these plans as harbors seek a more sustainable future.

The *Sustainable Small Harbor Management Strategy* project entails developing a strategy for small harbors to become economically, socially, and environmentally sustainable. A key feature includes documenting the value these small harbors provide to various stakeholders including boaters, anglers, property owners, and businesses and identifying potential revenue streams for the future. Project findings will inform the development of a toolkit of best practices, resources, and funding opportunities to support small harbor planning.

The research is being conducted by Lawrence Technological University, Environmental Consulting & Technology, Inc., David Knight LLC, and Veritas Economic Consulting along with representatives of government agencies who are sponsoring the project. Funding for the project is coming from a unique collaboration of agencies including Michigan Sea Grant (MSG), Michigan Department of Natural Resources (MDNR), Michigan Department of Environmental Quality (MDEQ) Office of the Great Lakes (OGL), and Michigan State Housing Development Authority (MSHDA). Finally, a state-wide Advisory Board has been engaged to guide the project and inform the research team on challenges small harbors face. The Advisory Board is comprised of key partners and stakeholders including policy makers, managers, harbor masters, industry representatives and lobbying organizations that deal with this topic (see project website for additional details http://www.miseagrant.umich.edu/smallharborsustainability/). As such, there is a tremendous amount of experience and organizational capacity being applied to this problem.

Communities were selected on a criteria system that included diverse location, the harbor type (small shallow draft), harbor position relative to the community type (suburban, city, downtown), population size, current organizational capacity, and economic condition. New Baltimore was selected as one of four case study communities.

In support of the process, information gathered and analyzed for New Baltimore included:

- Organizational and leadership charts of the community
- Marina statistics such as boats berthed, launched, demand, etc.
- Employment data and other related census data
- Master planning efforts (existing or in progress) or special assessment districts
- Zoning for harbor and downtown/adjacent land areas
- Any recent planning or improvement grants received
- Specific challenges New Baltimore is experiencing (regulation, policy, laws, water levels, maintenance, etc.)
- Economic information (budget for community, budget for harbor operations, funding mechanisms, grants received, etc.)
- Existing tourist information (flyers, magazines, etc.) and existing tourist way finding signage
- Aerial photograph/maps & GIS information

Developing a vision for a sustainable harbor requires input from a wide range of stakeholders, including landowners, waterfront users, planning officials, and local citizens. As such, the charrette design team engaged the New Baltimore community in a multi-day community visioning and collaborative design exercise (also known as a design charrette) to identify opportunities to secure the economic, social, and environmental sustainability of public waterfront facilities. The team followed the National Charrette Institute (NCI) Charrette System™ for this phase of the project. An NCI charrette is a five day rapid design process involving public interaction. The charrette design team hosted an initial meeting on February 5. Those who attend the initial meeting weighed in on the future of New Baltimore's waterfront and identified assets linked to existing and potential public waterfront facilities. A three-day public planning meeting or "community design charrette" to garner feedback, develop ideas and create a sustainable vision for New Baltimore's waterfront was conducted from March 5 through 7 (Table 1). In the community design charrette participants assessed and prioritized design and planning options, resulting in three alternatives for the public waterfront as an asset to the community. Those alternatives were further refined into a preferred alternative that represents the vision for New Baltimore in 2035. The charrette design compiled community input to develop a harbor sustainability plan specific to New Baltimore. The final vision, as well as the process for development, for New Baltimore is documented in this report and was presented to City Council on April 25, 2015.

The goal of the charrette design process is to facilitate regular stakeholder involvement and feedback which builds trust in the process and builds support for the project. This allows the charrette team to quickly gain consensuses and reduce the time to implement a sustainability plan. These meetings inform the toolkit which provides a roadmap for other communities to engage in a similar process.

Table 1 - New Baltimore Charrette Schedule

	Thursday, 3/5	Friday, 3/6		Saturday, 3/7
9:00 a.m.	Set up studio	Debrief on Public Input Workshop		Finalization
10:00		Refine Vision		Team Pin Up Meeting
11:00	Meet with stakeholder team to present results of preliminary meeting (2/5) and base data	Team Pin Up Meeting		Production of Preferred Plan
12:00 p.m.		Develop Alternatives		
1:00			*Technical meeting:* Historic commission	
2:00	Site tour	Develop Alternatives	*Technical meeting:* DDA	
3:00			*Technical meeting:* Parks & Rec	Final check with community leaders
4:00	Set up for evening	Set up for Open House		Prepare for final presentation
5:00	Facilitator briefing			
6:00	**Public Input Workshop** (vision preference and route identification)	**Open House: Selecting a Preferred Vision** (preferred vision, alternative preference)		**"Work in Progress" Session for New Baltimore Waterfront** (final work in progress presentation)
8:00		Preferred concepts synthesis		Break down studio
9:00 p.m.	Close for day	Close for day		

2.0 Design Alternatives Overview

Each alternative was “driven” by a unique harbor/waterfront edge feature and developed/evaluated on four additional criteria (Land-Use, Connectivity, Economic Development, and Natural Systems) as represented in the Alternative Content Matrix. The Alternative Content Matrix was completed as part of the charrette process to succinctly disseminate the unique, but parallel alternative concept plans.

2.1 Design Alternative 1: High Density Harbor at Schmid Marina

Design Alternative 1 is formed by a private-public partnership at Schmid Marina and redevelopment of key downtown areas. Table 2Table 4 lists the main aspects of this design and Figure 1 is the display board from community voting. The marina design maintains the same amount of slips as the existing Schmid Marina, but has slips designated for transient boaters. A hotel or marina shuttle system would provide transportation between downtown area and the marina. Additional retail and welcome center provide boating amenities for transients. A lakefront restaurant and park space draw people from downtown as well. Both the park space and a wetland improve the natural systems of the marina development. Townhomes near Taylor Street bring permanent residents to the marina development along with the transients in the marina and hotel guests. Figure 2 is a plan view and Figure 3 shows a section of the development on the marina. This shuttle service also would include a water taxi between the marina and Burke Park during summer months.

Table 2 - Alternative 1 Content Matrix

Alternative 1: High Density Harbor at Schmid Marina	
Harbor/Waterfront Edge Driver	Private/Public Marina @ Schmid
Land-use	Schmid Marina: • Hotel; Conference/Banquet Center; Townhouses; Lakefront Restaurant; Welcome Center; Retail Downtown: • Library Block: Event Plaza; Washington Street: Mixed Use In-Fill
Connectivity	Hotel Shuttle; Water Taxi; Walkable Streets Downtown
Economic Development	Schmid Marina: • Increased Tax Base; Increased Local Spending; Increase Tourist Spending Downtown: • Mixed Use Downtown (Increased Tax Base; Increase Spending)
Natural Systems	Lakefront Park/Promenade & Natural Stormwater Systems at “Schmid” Development; Greening of Burke Park; Wetlands & Submerged Habitat
Local Precedent(s)	MacRay Harbor
Engineering Consideration	• Major Road Improvements to Marina • New Bridge • Major Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site • IT/Cable/Electrical Improvements to Site

Figure 1 - Alternative 1 Presentation Board

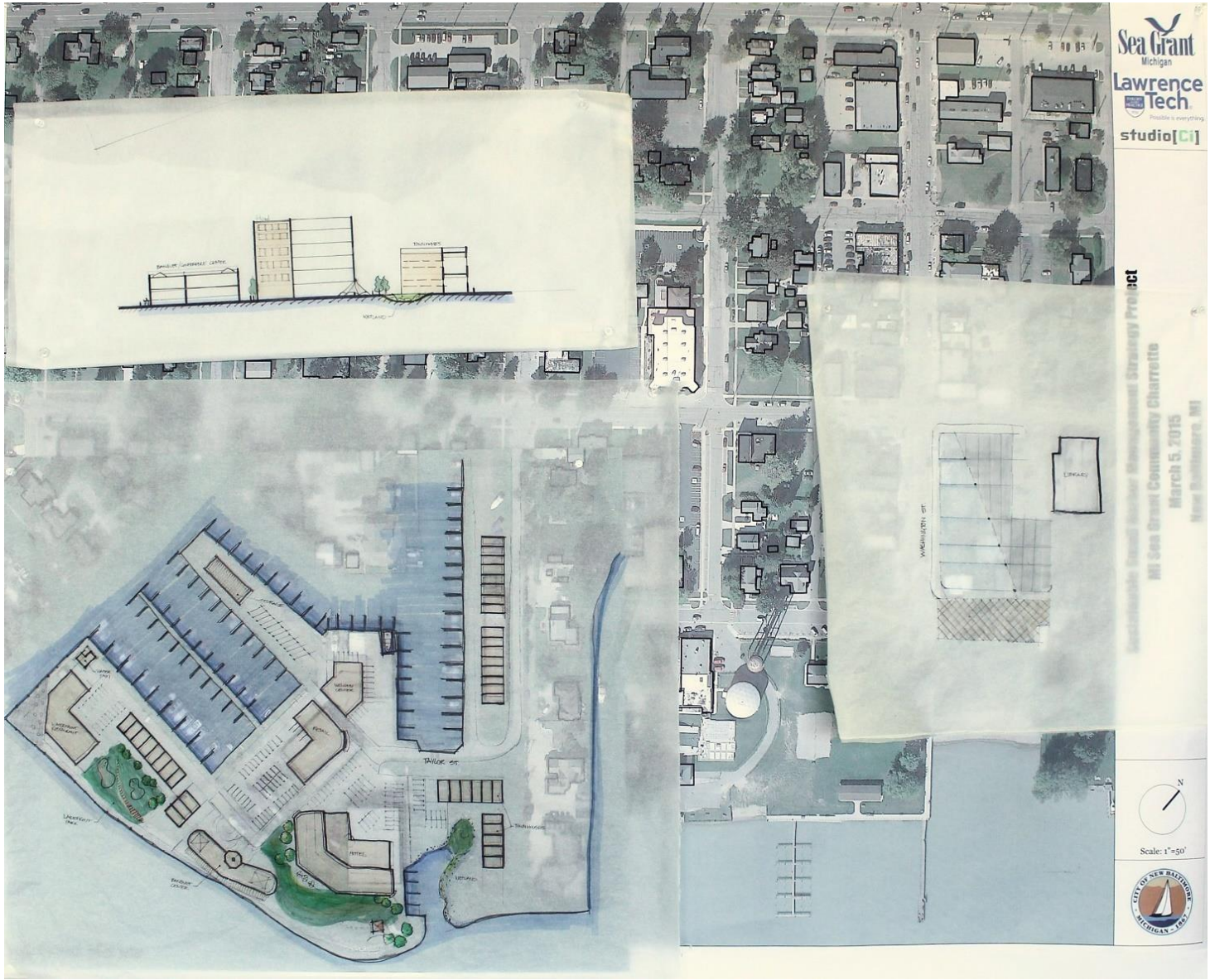


Figure 2 - Alternative 1 Marina Plan

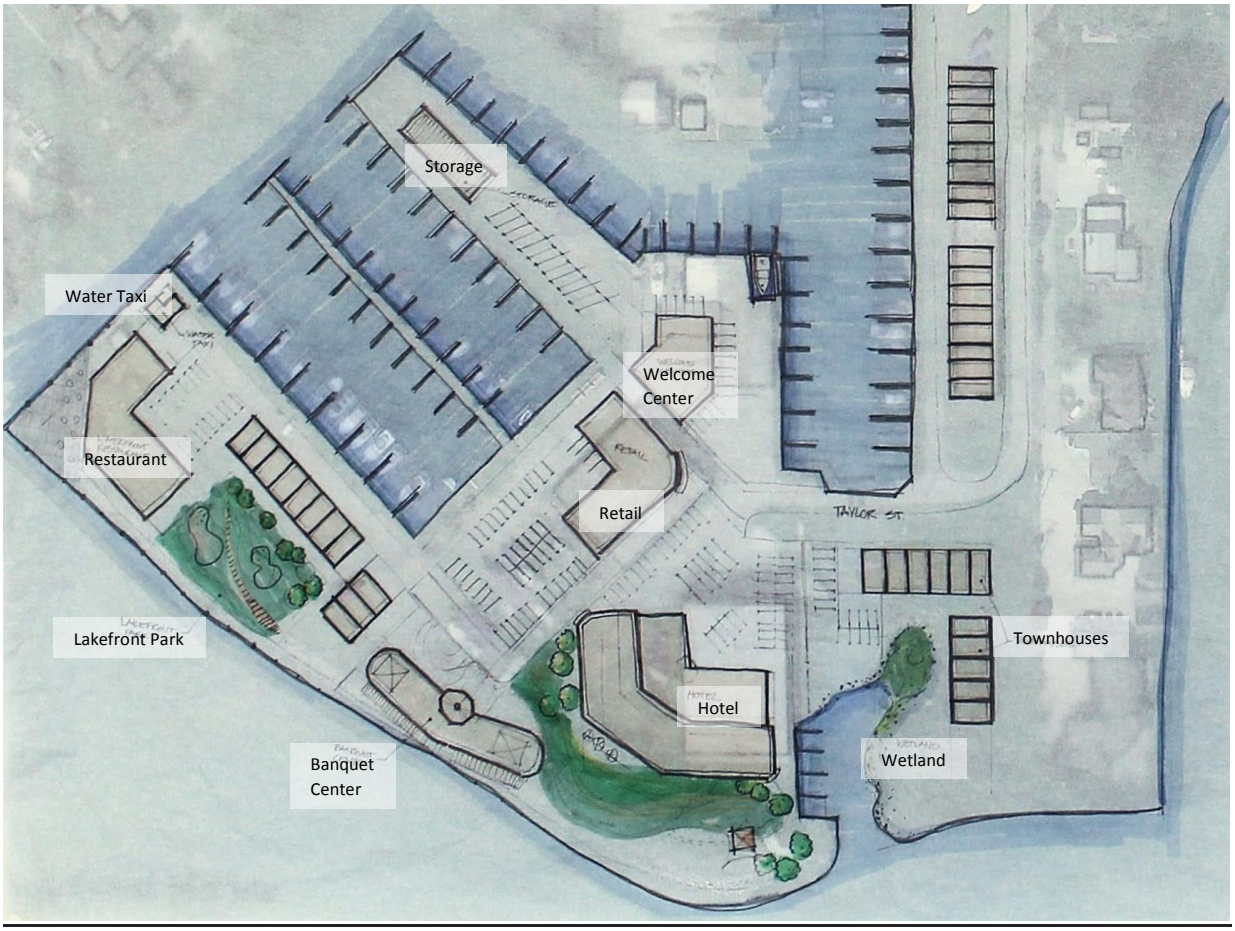
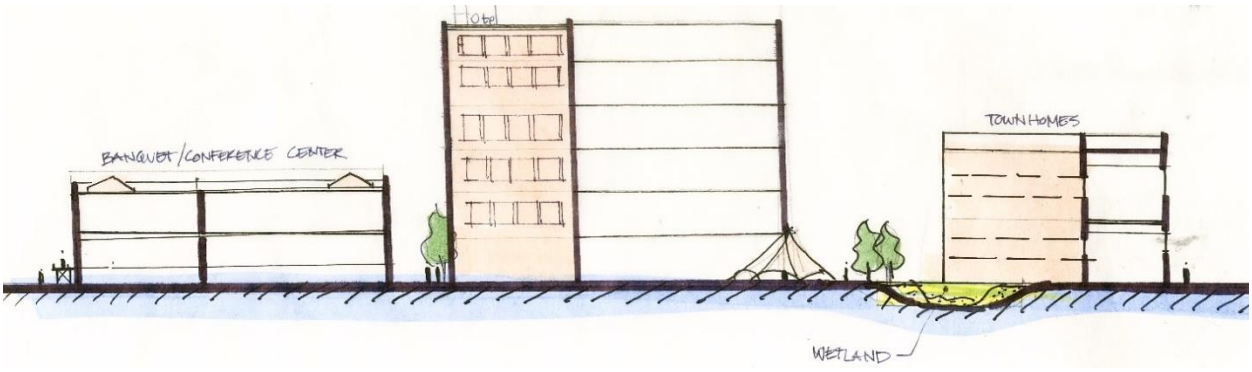
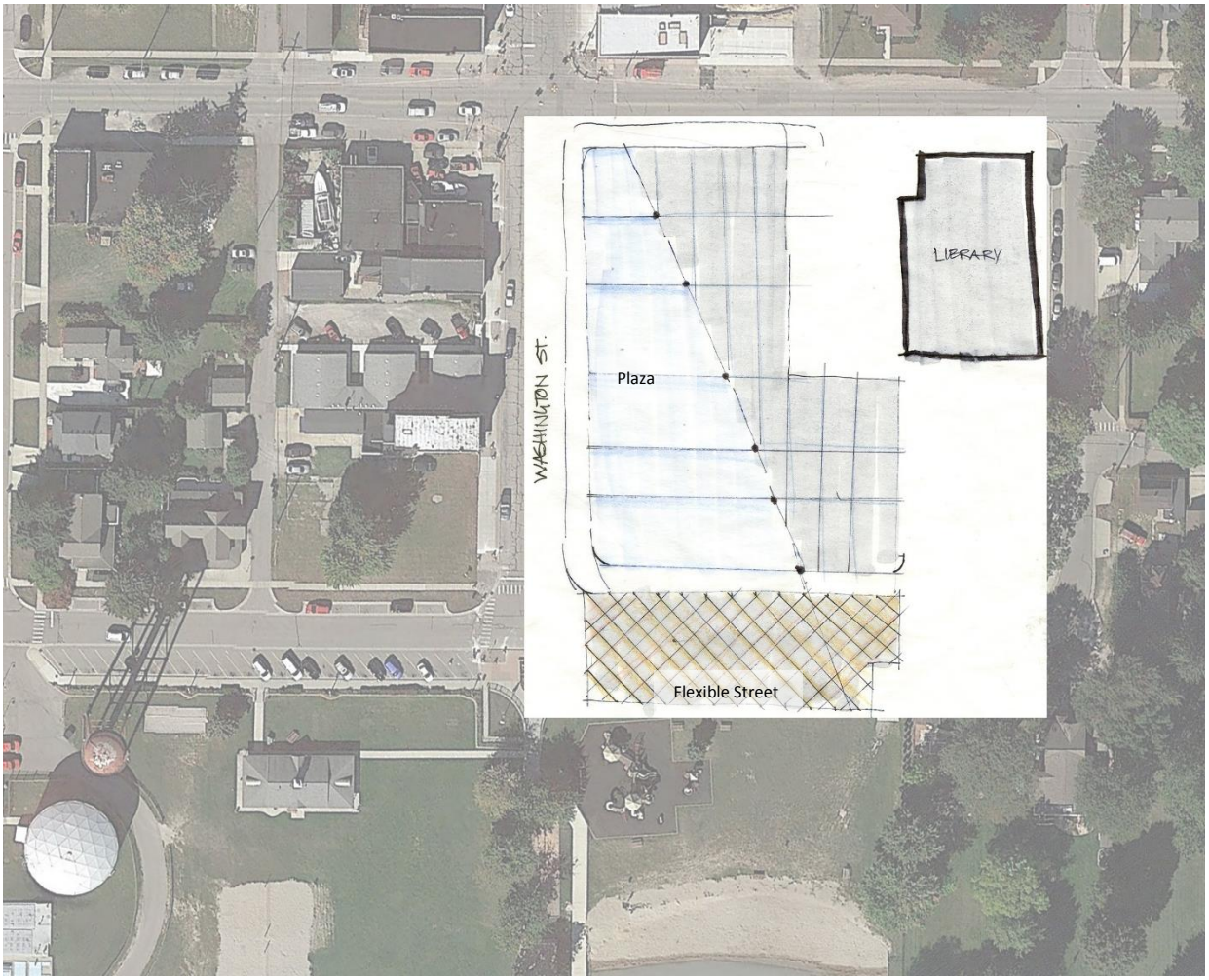


Figure 3 - Alternative 1 Marina Section



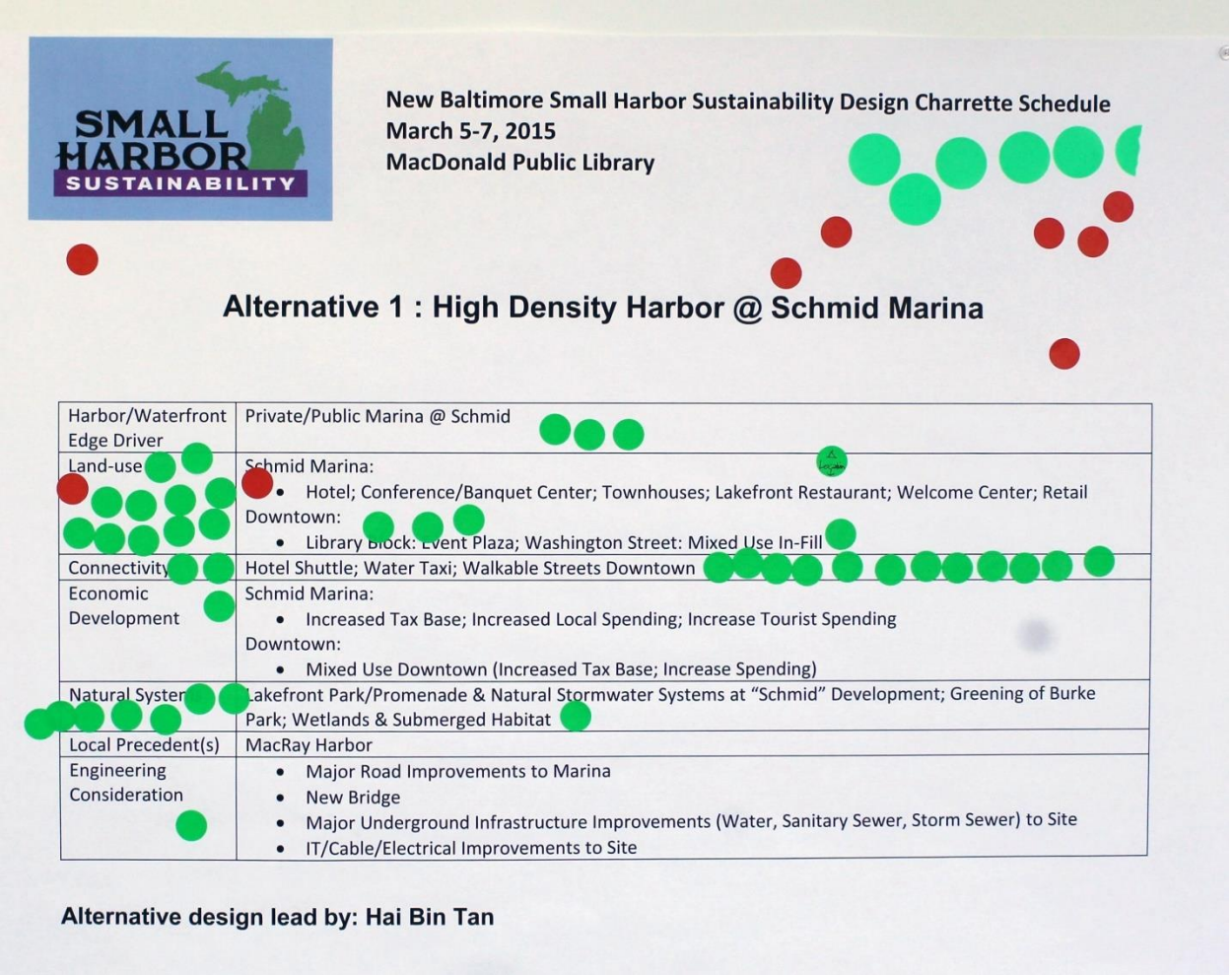
In this alternative, the "Library Block" downtown is transformed into a plaza for the farmer's market and other public events (Figure 4). The existing recreation center would be moved out of the downtown area and the other buildings on that part of the block removed for clear views to the beach and Lake St. Clair. The area of Front Street between the plaza and beach is transformed into a flexible street that can function as additional plaza space or as a roadway depending on community needs.

Figure 4 - Alternative 1 Downtown Plan



Alternative 1 received five overall approval votes (large green dots) and seven rejection votes (small red dots) by community members on the second night of the charrette. This was the least popular design of the three alternatives. The voting is shown in Figure 5 with overall votes on the top and votes for individual elements within the table.

Figure 5 - Alternative 1 Community Vote



New Baltimore Small Harbor Sustainability Design Charrette Schedule
March 5-7, 2015
MacDonald Public Library

Alternative 1 : High Density Harbor @ Schmid Marina

Harbor/Waterfront Edge Driver	Private/Public Marina @ Schmid
Land-use	Schmid Marina: • Hotel; Conference/Banquet Center; Townhouses; Lakefront Restaurant; Welcome Center; Retail Downtown: • Library Block: Event Plaza; Washington Street: Mixed Use In-Fill
Connectivity	Hotel Shuttle; Water Taxi; Walkable Streets Downtown
Economic Development	Schmid Marina: • Increased Tax Base; Increased Local Spending; Increase Tourist Spending Downtown: • Mixed Use Downtown (Increased Tax Base; Increase Spending)
Natural Syster	Lakefront Park/Promenade & Natural Stormwater Systems at "Schmid" Development; Greening of Burke Park; Wetlands & Submerged Habitat
Local Precedent(s)	MacRay Harbor
Engineering Consideration	• Major Road Improvements to Marina • New Bridge • Major Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site • IT/Cable/Electrical Improvements to Site

Alternative design lead by: Hai Bin Tan

2.2 Design Alternative 2: Downtown on the Bay

Alternative 2 design was driven by creating a harbor in downtown by cutting into the existing land to either Front Street (version 1) or up to Main Street (version 2. Table 3 lists the main aspects of this design and Figure 6 is the display board from community voting. In this alternative, Schmid Marina would be privately developed into mixed-use residential. The marina would not contain any public boat launches or slips.

Table 3 - Alternative 2 Content Matrix

Alternative 2: Downtown on the Bay	
Harbor/Waterfront Edge Driver	Public Marina at Washington Street
Land-use	Schmid Marina: • Private Mixed Use Residential Downtown: • Library Block: Mixed Use In-Fill – 5 Stories (harbor amenities); Washington Street: Mixed Use In-Fill
Connectivity	Walking & Bikes
Economic Development	Schmid Marina: • Mixed Density Residential Tax Base Downtown: • Library Block: Mixed Use Adjacent to New Harbor (Tax Base & Business Sales);
Natural Systems	Greening of Burke Park; Relocation of Burke Park Beach; Naturalization of Schmid Shoreline Adjacent to New Residential
Local Precedent(s)	Harbor Springs; Boyne City
Engineering Considerations	• Floating Wave Energy Dissipation Dockage • Significant Dredging of New Harbor • Reconfiguration of Burke Park and Public Waterfront/Beach Area • Minor Road Improvements to Marina • New Bridge • Minor Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site • IT/Cable/Electrical Improvements

Figure 6 - Alternative 2 Presentation Board

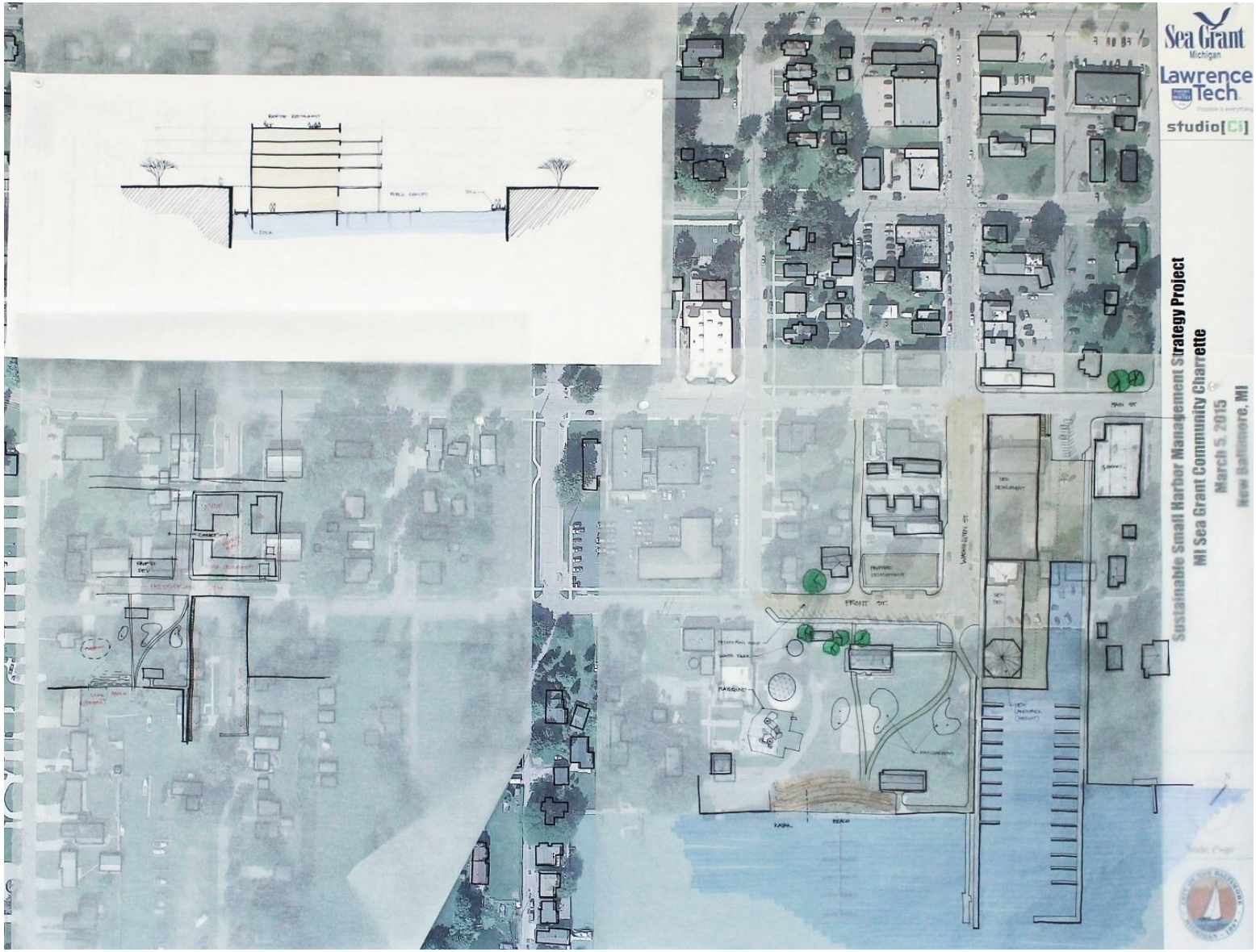
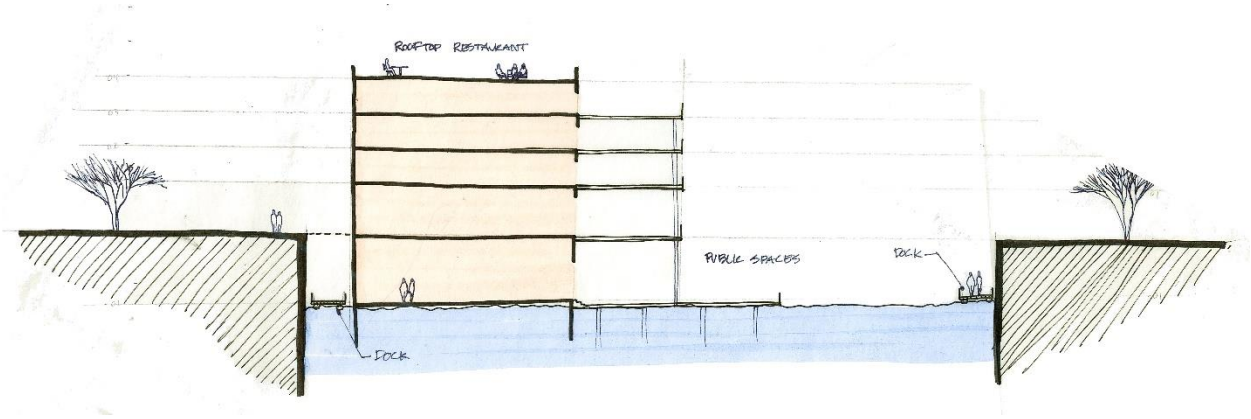


Figure 7 shows how the harbor is cut into the downtown area and new, mixed-use development is designed with interaction at the water level and street level. Rooftop restaurant and residential on the upper floors of the building take advantage of the waterfront location. The ground floor would contain retail and harbor amenities.

Figure 7 - Alternative 2 Downtown Harbor Section

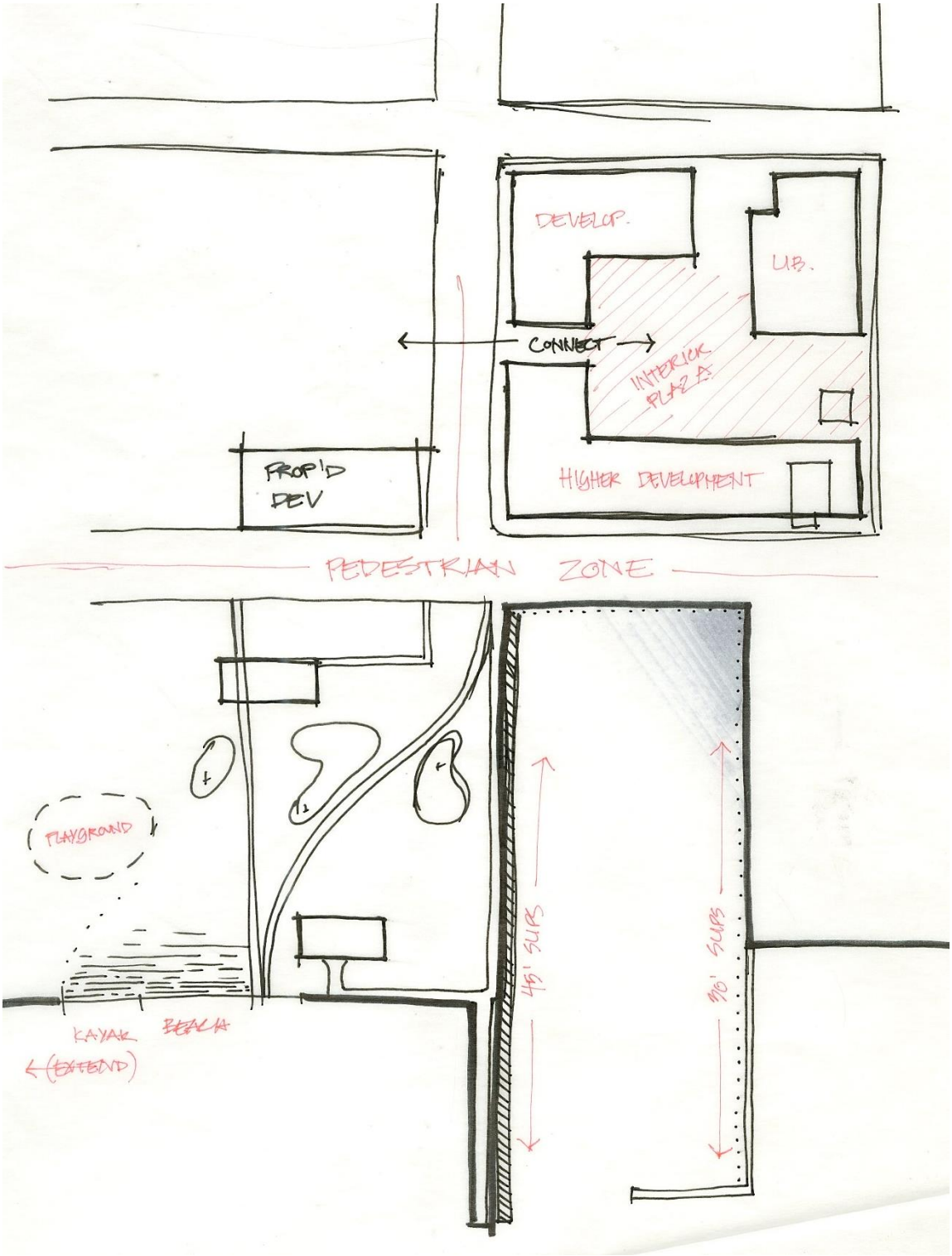


The two different versions of this concept include version 1 (Figure 8), inserting the harbor up to Main Street and version 2 (Figure 9), inserting the harbor to Front Street. Both versions of the design would include slips for different sized boats to dock, including 30' and 45' slips as well as broad side docking in a few areas. However, the downtown harbor would be targeted towards smaller boats due to larger boats needing a deeper dredged channel. Wave energy dissipaters around the end of the harbor would create a protected docking area that the current boat slips at Burke Park lack. New boat docks should also adjust for fluctuations in water levels within Lake St. Clair.

The harbor displaces the current beach area, so the beach is relocated near the current kayak landing where it historically was. The playground would also be moved to another location in Burke Park and the current boat slips removed since they will be replaced with new, protected slips in the new harbor.

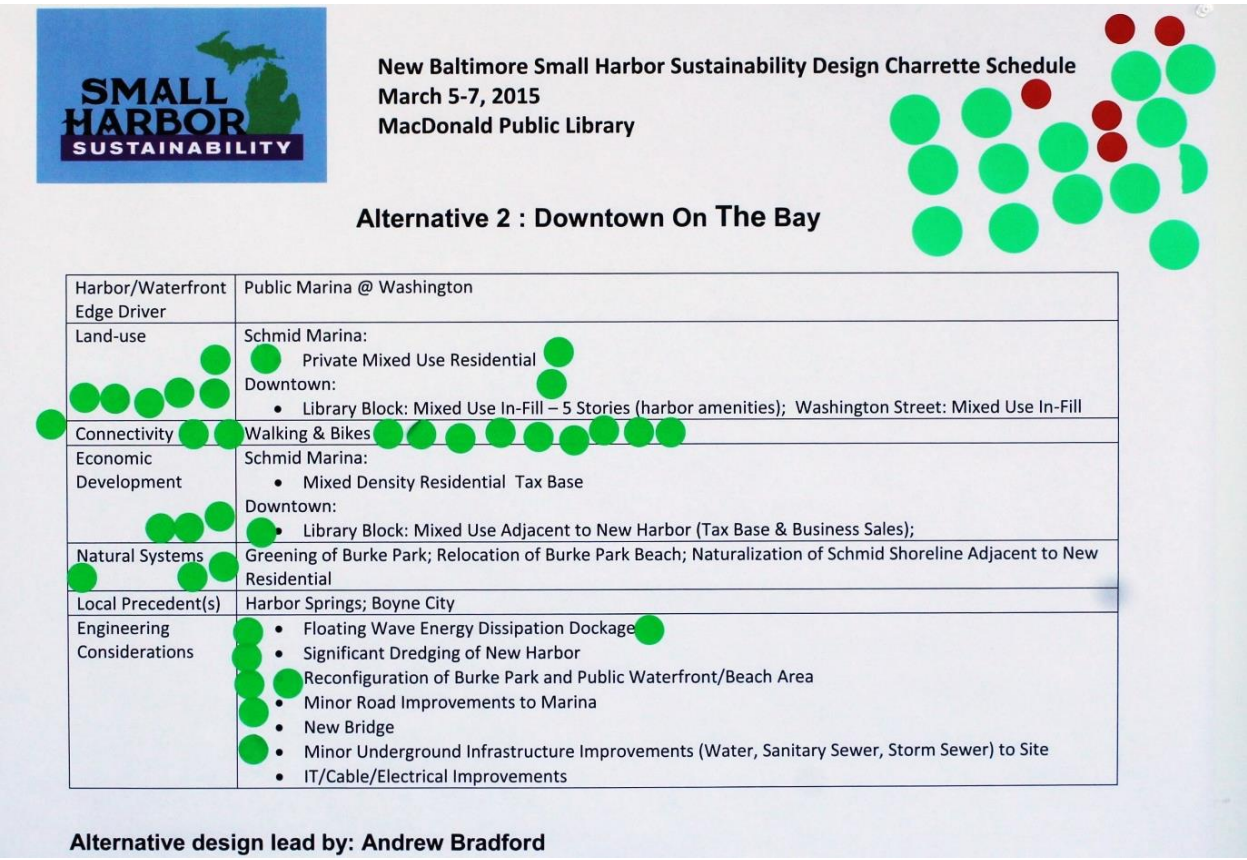
Figure 8 - Alternative 2 Downtown Plan Version 1

Figure 9 - Alternative 2 Downtown Plan Version 2



Alternative 2 received 13 overall approval votes (large green dots) and five rejection votes (small red dots) by community members on the second night of the charrette. This design had the largest number of large green dots and the most negative votes based on version 1. Oral feedback suggested that version 2 would be acceptable to most in attendance.

Figure 10 - Alternative 2 Community Vote



2.3 Design Alternative 3: Public Harbor at Schmid Marina

The third alternative includes moving the Recreation Center from downtown to a publically owned Schmid Marina and redeveloping a portion of the downtown. Table 4 lists the main aspects of this design and Figure 11 is the presentation board for community voting. Downtown redevelopment includes the library block, except the library building, and the house labeled as existing residential in Figure 12. The block redevelopment is adjacent mixed-use, two to three story buildings fitting with the current downtown character. The area behind the buildings is open plaza for farmer's market and events.

Table 4 - Alternative 3 Content Matrix

Alternative 3: Public Harbor at Schmid Marina	
Harbor/Waterfront Edge Driver	Public Marina @ Schmid
Land-use	Schmid Marina: • Public Facilities; Recreation Center; Sailing Club Downtown: • Library Block: Fine Grain Mixed Use In-Fill – no more than 3 stories
Connectivity	"Complete" Front Street; e-Cart; Paddle Trail
Economic Development	Schmid Marina: • Launch Fees; Marina/Boat Amenities Downtown: • Mixed Use (Increased Tax Base; Increase Spending)
Natural Systems	Naturalized Shoreline; Smaller Footprint Buildings
Local Precedent(s)	Lexington
Engineering Considerations	• New Bridge • Minor Road Improvements to Marina • Minor Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site • IT/Cable/Electrical Improvements

Figure 11 - Alternative 3 Presentation Board

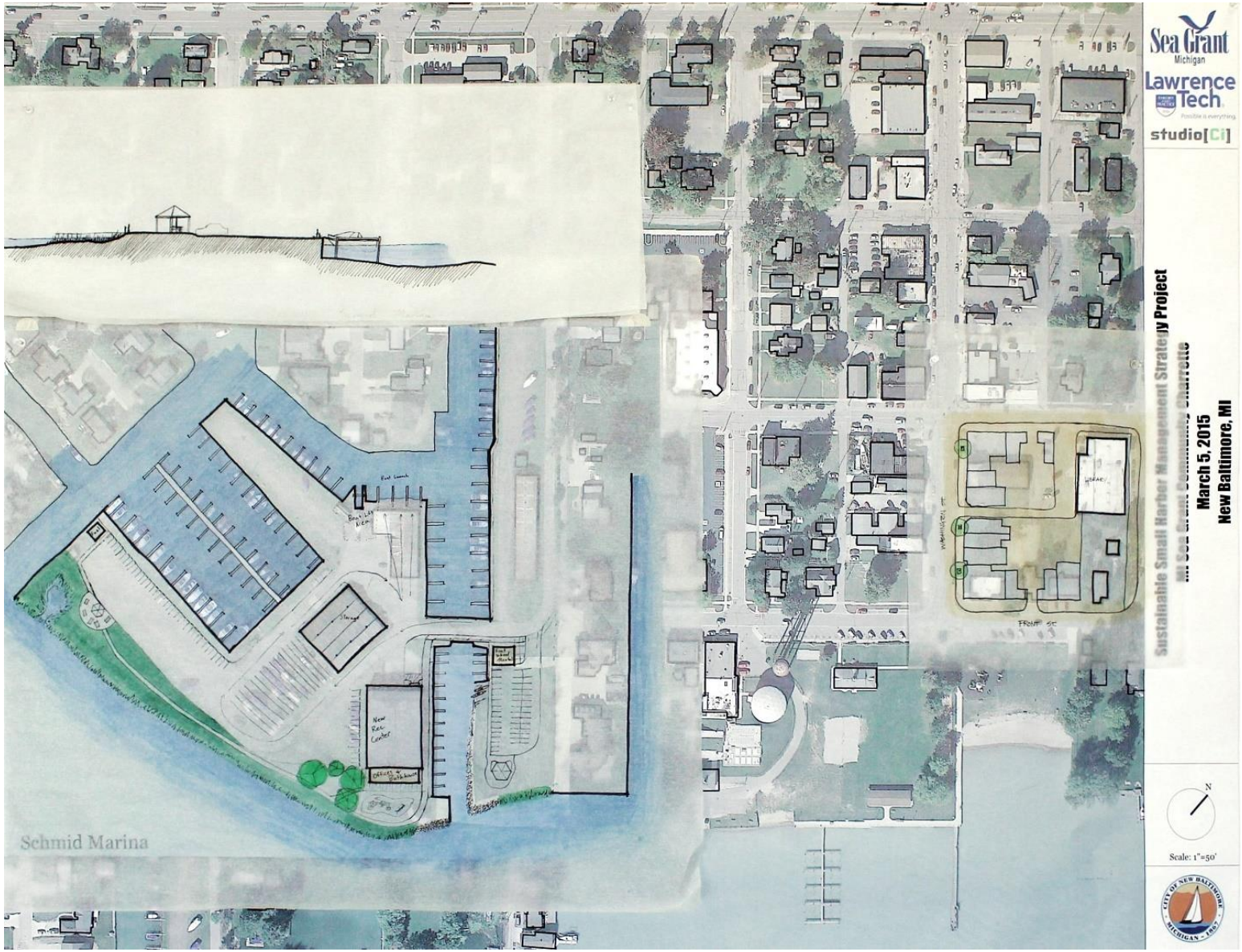


Figure 12 - Alternative 3 Downtown Plan

Schmid Marina is publically owned in this design and hosts a sailing school or boat rental, kayak launch, bathhouse, picnic areas, and naturalized shoreline. All of these elements are labeled in Figure 13. The parking and drive paths are designed to accommodate six boat launches and boat trailer parking. The existing boat lift, fueling, and one of the dry storage facilities were kept. The shoreline is naturalized to provide wildlife habitat and has pavilions and picnic areas for the public to sit near the waterfront. Figure 14 shows a section through one of these areas.

Figure 13 - Alternative 3 Marina Plan

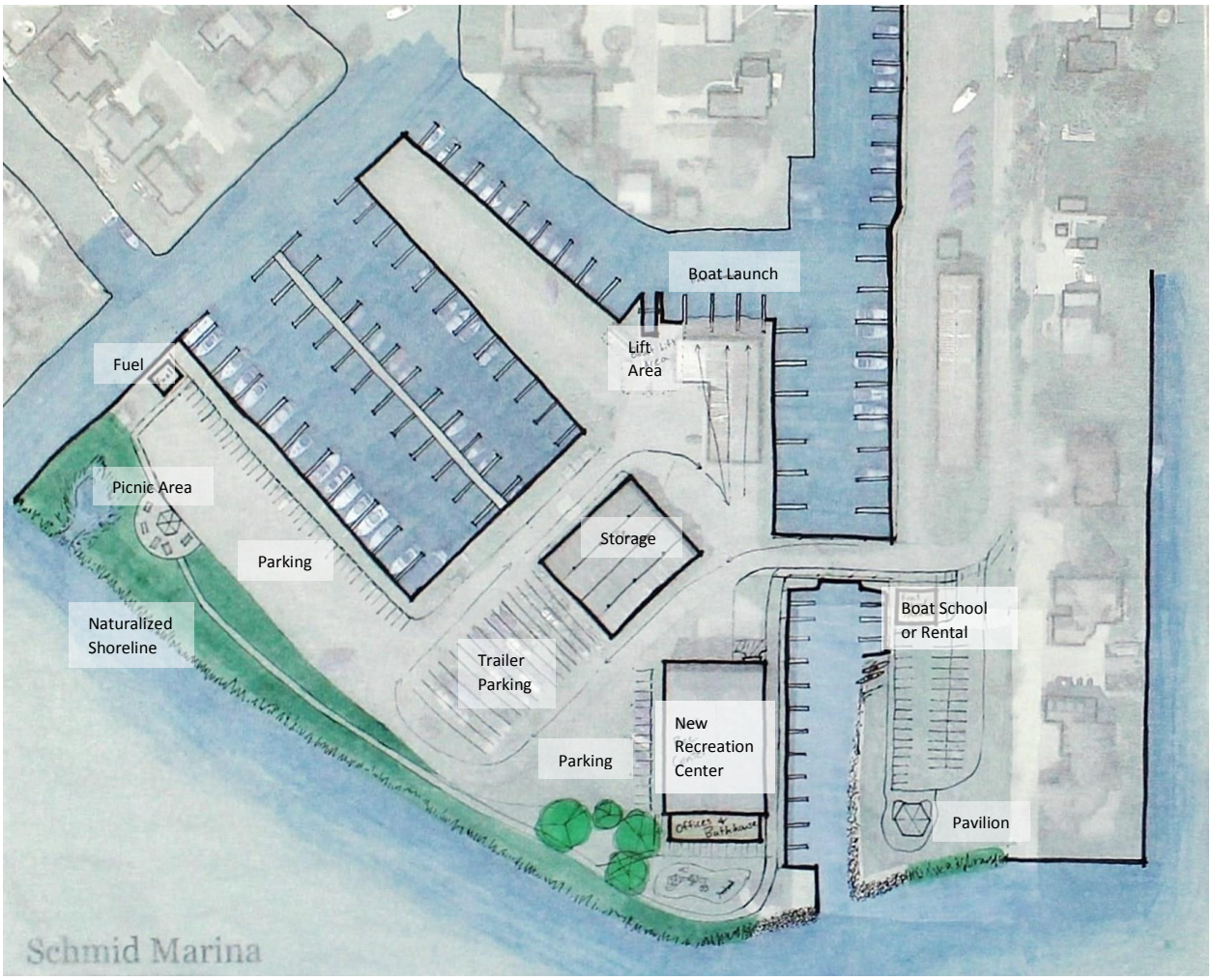
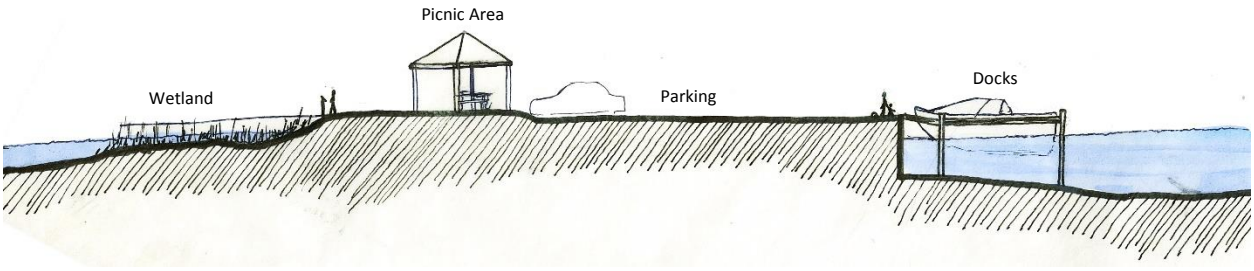
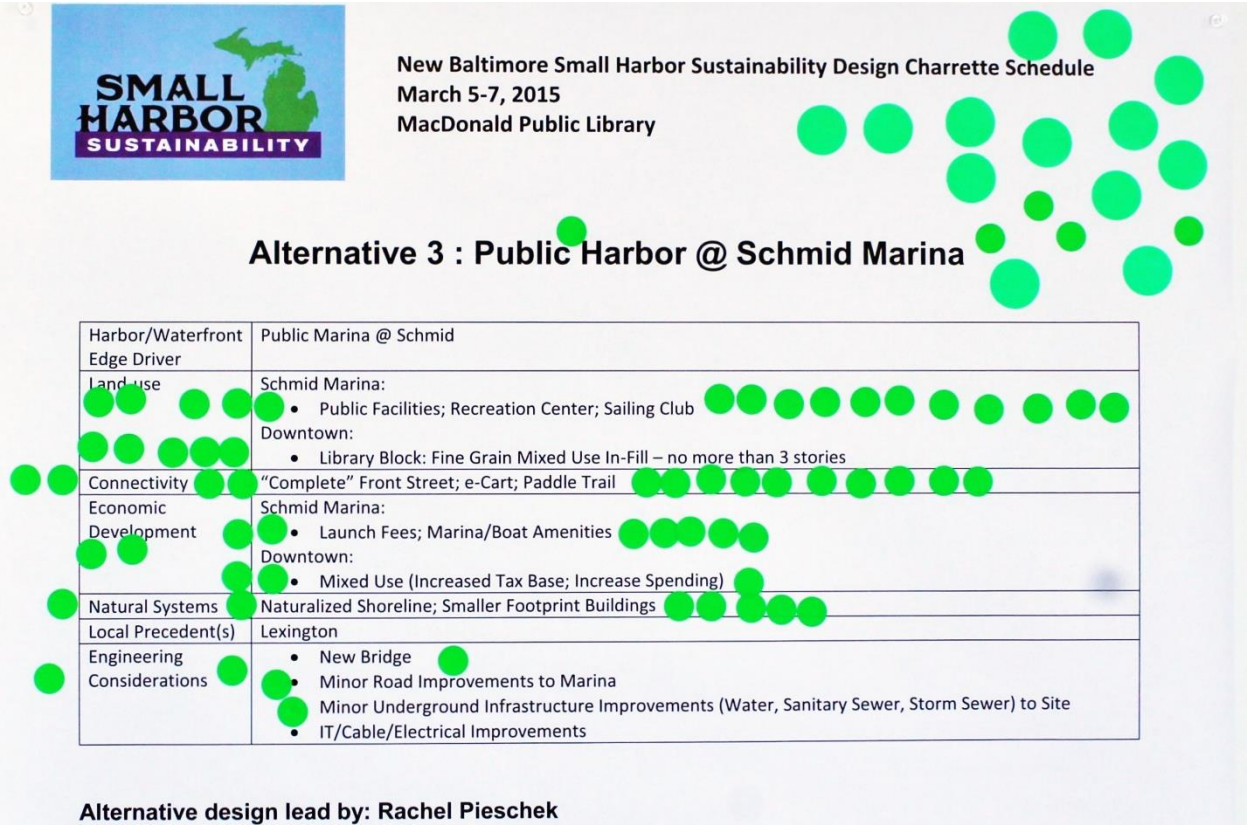


Figure 14 - Alternative 3 Marina Section



Alternative 3 received 13 overall approval votes (large green dots) and zero rejection votes (small red dots) by community members. Overall, this design received entirely positive feedback. The voting is shown in Figure 15 with overall votes on the top right corner and votes for individual elements within the table.

Figure 15 - Alternative 3 Community Vote



3.0 Preferred Alternative – New Baltimore 2035

New Baltimore 2035 represents the future vision for the community based on the charrette design process. Alternative 2 and Alternative 3 had strong community approval during voting, so the "preferred alternative" was developed to include aspects of both alternatives. The preferred alternative has Schmid Marina as public with a boat launch, downtown redevelopment, and a harbor inserted to Front Street. The preferred alternative includes the items in Table 5 and is illustrated in Figure 16.

Table 5 - Preferred Alternative Content Matrix

Preferred Alternative – Final Design	
Harbor/Waterfront Edge Driver	Public Marina at Washington and at Schmid
Land-use	Schmid Marina: • Public Facilities; Recreation Center; Sailing Club Downtown: • "Library Block": Mixed Use In-Fill – 2 to 5 stories (harbor amenities) • "Brewery Block": Mixed Use In-Fill – 2 to 3 stories (downtown amenities and living)
Connectivity	Walking & Bikes; "Complete" Front Street; Paddle Trail
Economic Development	Schmid Marina: • Launch Fees; Marina/Boat Amenities Downtown: • Mixed Use Adjacent to New Harbor (Significant Increase in Tax Base & Business Sales) • Slip Rental Fees
Natural Systems	Greening of Burke Park; Relocation of Burke Park Beach; Naturalization of Schmid Shoreline; Stormwater capture on Taylor Street and Schmid parking lots
Engineering Considerations	• Floating Wave Energy Dissipation Dockage • Significant Dredging of New Harbor • Reconfiguration of Burke Park and Public Waterfront/Beach Area • Road Improvements to Marina • New Bridge • Minor Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site • IT/Cable/Electrical Improvements

In support of this alternative, an economic analysis of retail capacity was conducted by a member of the charrette team. Current downtown New Baltimore contains approximately 77,000 square feet of retail, both occupied and vacant. The primary retail trade area has an estimated population of approximately 120,000 with an estimated 45,000 households. Currently the downtown businesses captures between 1.5 and 1.6% of the retail trade area which is well below what a walkable historic downtown should capture. A comparison analysis of retail capture percentages of similar small downtowns in southeast Michigan showed retail capture percentages of 4% to 6%. A destination downtown like New Baltimore, further enhanced by waterfront improvements, should be able to capture up to 2.5% - 3% of the retail trade market. This would indicate a potential market for an additional 51,000 to 61,000 square feet of retail. Using the lower bound estimate (51,000 sq ft) this retail breaks down into various major categories:

- 17,500 square feet of full service, limited service restaurant, drinking places
- 18,000 square feet of general shopping goods
- 9,000 square feet of personal services
- 6,500 square feet of miscellaneous retail

The preferred design alternative illustrated new development. The “Brewery Block” infill to the west of Washington Street and redevelopment proposes initially 13,000 square feet of new retail. The “Library Block” infill to the east of Washington Street proposes 33,000 square feet of new retail, restaurant, and office. The newly designed Willy & Babbish Building (approved for construction on the northwest corner of Washington and Front) will provide 3,200 square feet of new retail.

Figure 16 - Final Design Full Site Plan

3.1 Schmid Marina

Schmid Marina in the preferred alternative is public and hosts six boat launches and parking for boat trailers. Existing indoor dry storage buildings may be retained should the community desire, but would reduce parking capacity. One of the existing storage buildings is converted into the New Baltimore Recreation Center (Figure 17). The marina hosts a kayak landing and storage racks, which may be rented, and the youth sailing club is also located in this improved basin (Figure 17).

The economic analysis for this alternative is supported by research conducted by Macomb County Department of Planning and Economic Development which reported during the process that the marina currently operates approximately 80 slips and could be modified to accommodate 160 slips. If 90% of the 160 slips are occupied that would potentially net over $300,000 which would offset capital improvements. Additional revenue would also come from boat launch fees, on-site storage, marina store improvements and leasing agreements with sailing club or similar entities.

Figure 17 - Final Design Marina Site Plan

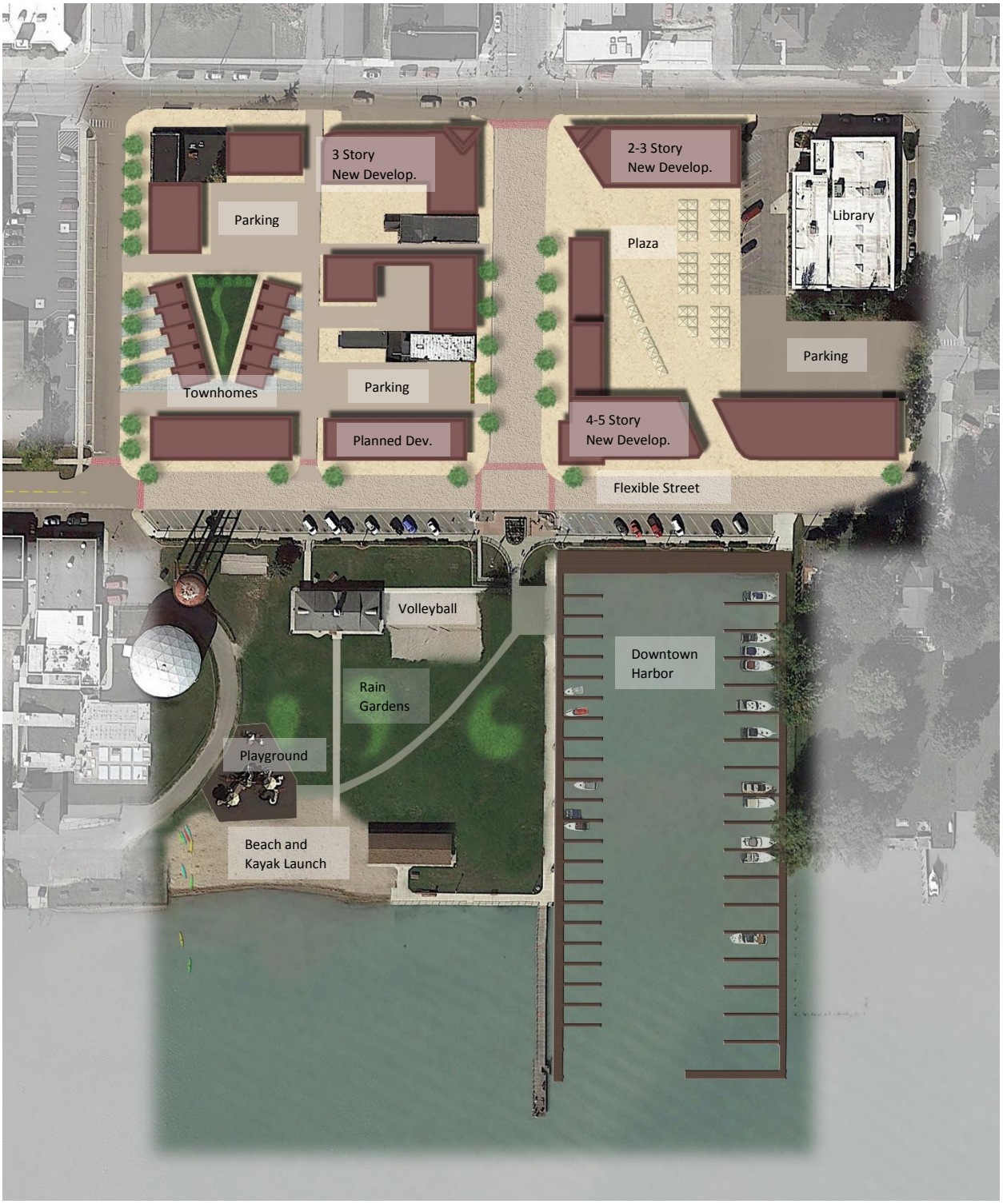
Access to the marina is improved by widening the existing bridge (Figure 18) and through improvements to Taylor Street (detailed in Section 4.0). The travel lanes are widened to 12 feet in each direction and a bike lane added. Stormwater runoff from Taylor Street and the adjacent parking lot drains into a swale and stormwater detention shown in Figure 17.

Figure 18 - Existing Condition (Google Earth 2013) and Final Design Artistic Rendering of Schmid Marina

3.2 Downtown

In the preferred alternative, existing residences within the two block redevelopment area are removed and replaced with mixed-use development and high density housing. The library remains along with three other buildings and the planned development on the corner of Washington and Front Street. The old mortuary building on the corner of Maria Street and Main Street and could be renovated into the brewery that gives this block its name (i.e. "Brewery Block"). Ten three-story townhouses with roof decks and drive-in garages are included and the townhouses have shared private green space. Finally, a portion of Front Street and Washington Street are flexible streets, which are described further in Section 4.0 Connectivity. The streets may be blocked off for festivals and farmer's market days.

Figure 19 - Burke Park Marina and Downtown Plan



On the library block mixed-use development lines make up the outside of the block with plaza space behind the buildings for farmer's market and other events. Restaurants and other activities from the mixed-use buildings can overflow into the plaza.

Figure 20 - Existing Condition (Google Earth 2013) and Final Design Artistic Rendering of Washington and Main Street Intersection

Figure 20 shows existing Washington Street and an artistic rendering of the area. Figure 21 is a massing diagram of some of the new downtown development to yield a visual representation. The massing diagram demonstrates the number of stories and the overall size (i.e. mass) of the proposed buildings for perspective of new development. The event plaza can be used as overflow for restaurants in the mixed-use development, as shown in Figure 22. A destination restaurant could also be located on the rooftop of the new development with views of the harbor, beach, and park. Figure 23 is a continuation of this section with Front Street and the new harbor.

Figure 21 - Downtown Massing Diagram

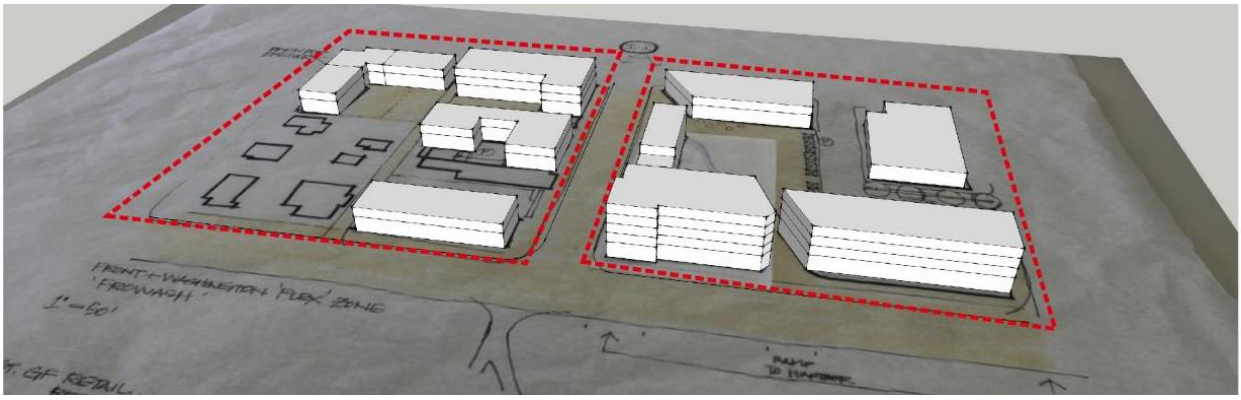


Figure 22 - Downtown and Plaza Section

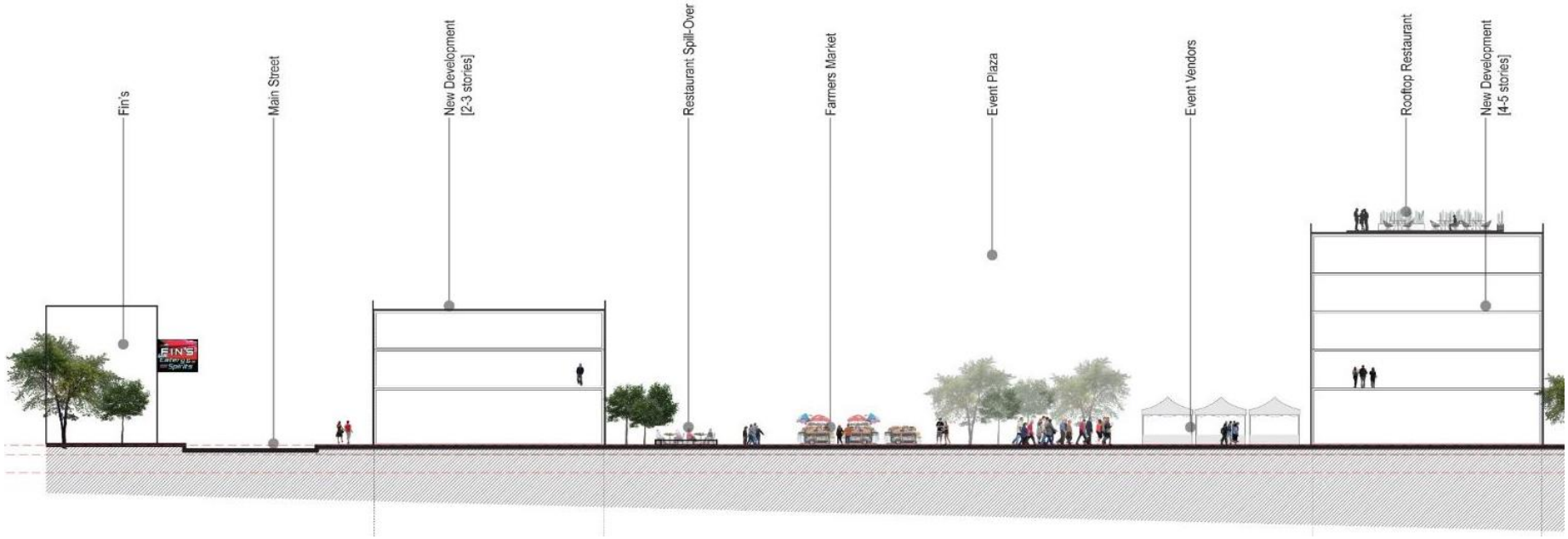
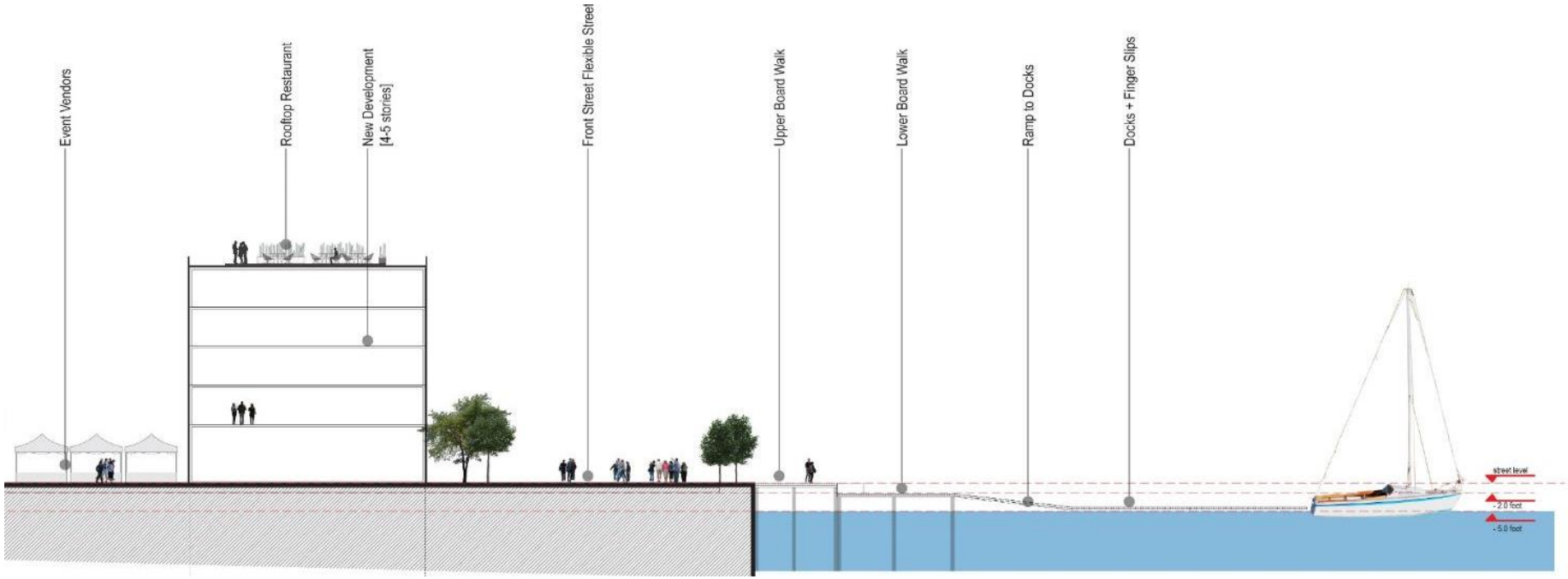


Figure 23 - Section through Plaza, Mixed-Use, Front Street and Harbor

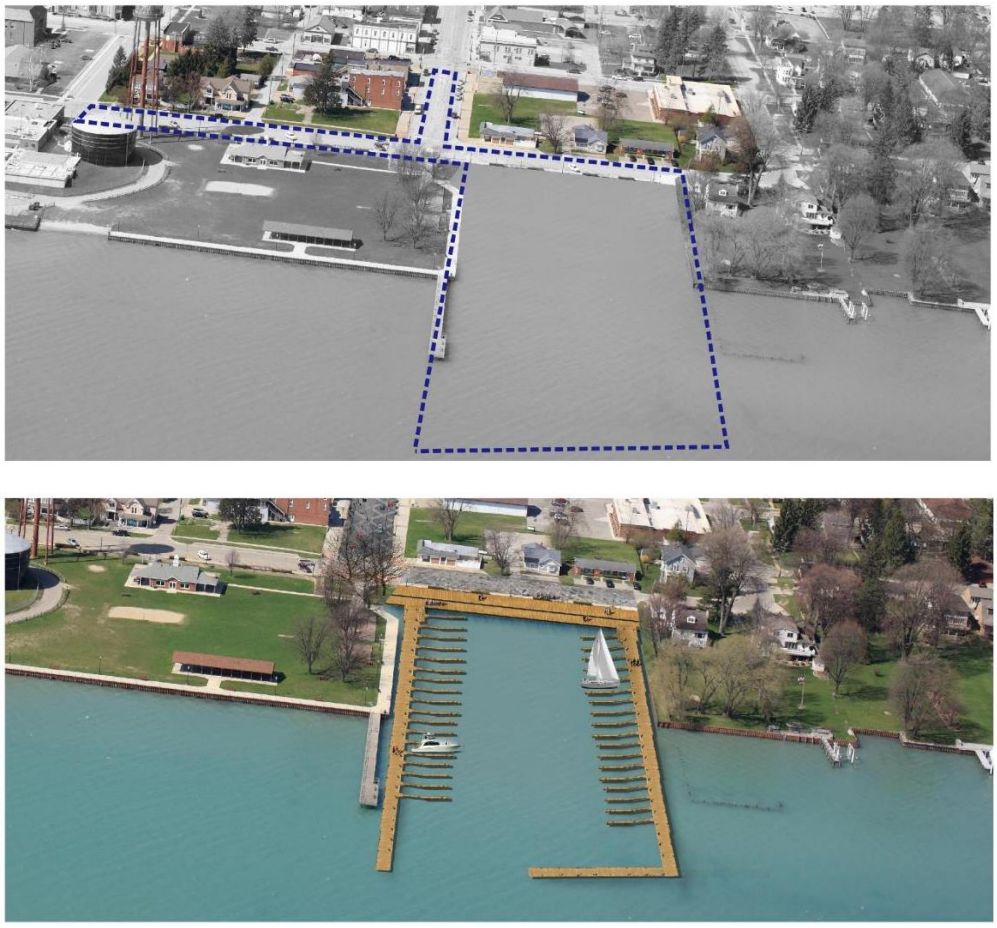


3.3 Burke Park Marina

The marina is brought to downtown by removing the current beach area and excavating to Front Street as rendered in Figure 24. The beach is relocated within Burke Park as well as the volleyball area and playground. Preliminary investigation of existing underground infrastructure suggests this is technically feasible although at a cost of more than $4 million. The synergistic redevelopment of downtown as described above provides the economic driver for this alternative through increased tax base and dockage fees.

Figure 24 outlines the main development area and shows the harbor layout. A floating dock system with wave dissipaters could provide an estimated 80 boat slips that are protected. The harbor is designed with 30 foot and 45 foot slips as well as a few broad side areas for larger boats.

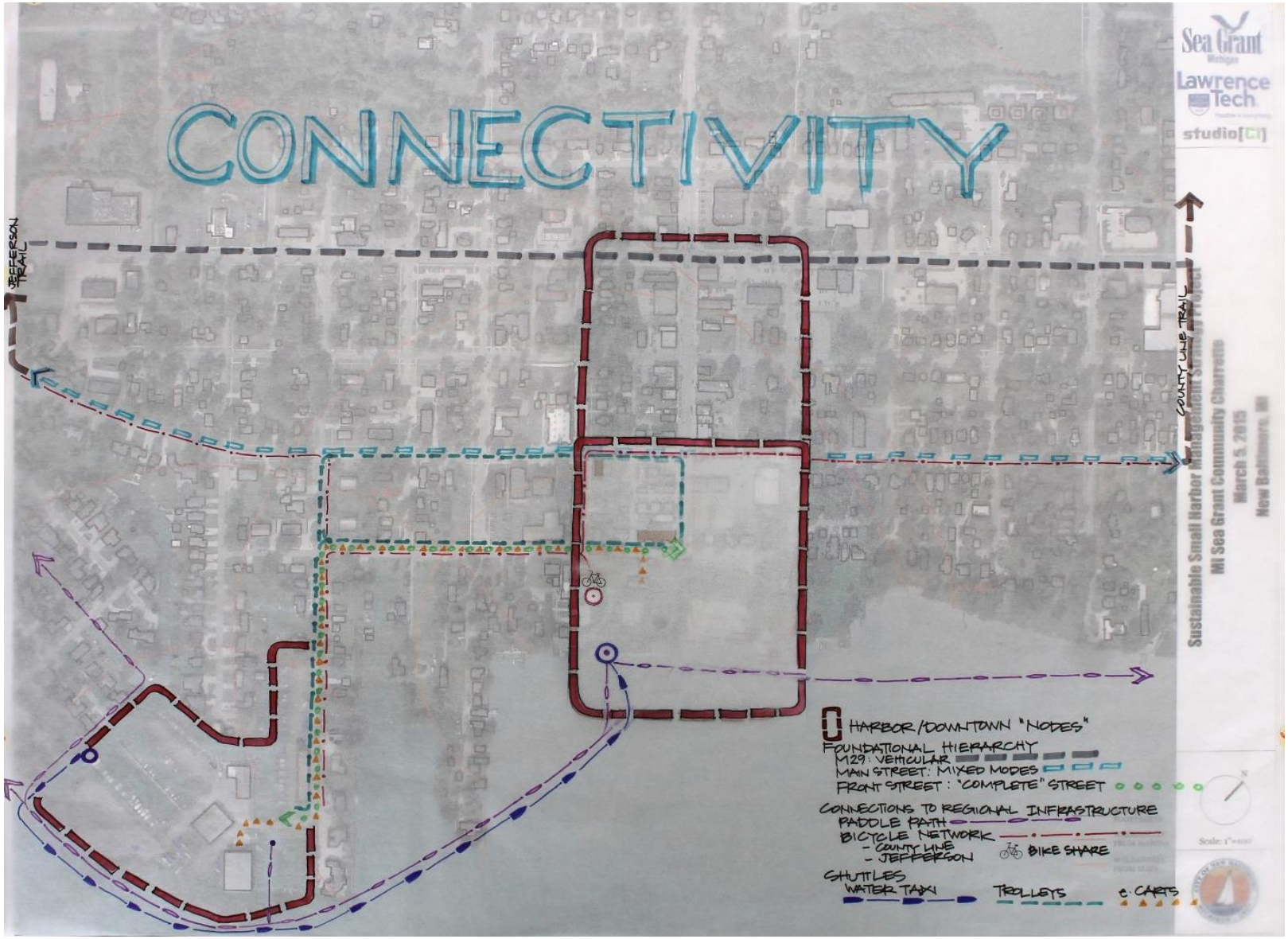
Figure 24 - Downtown and Harbor Area



4.0 Connectivity

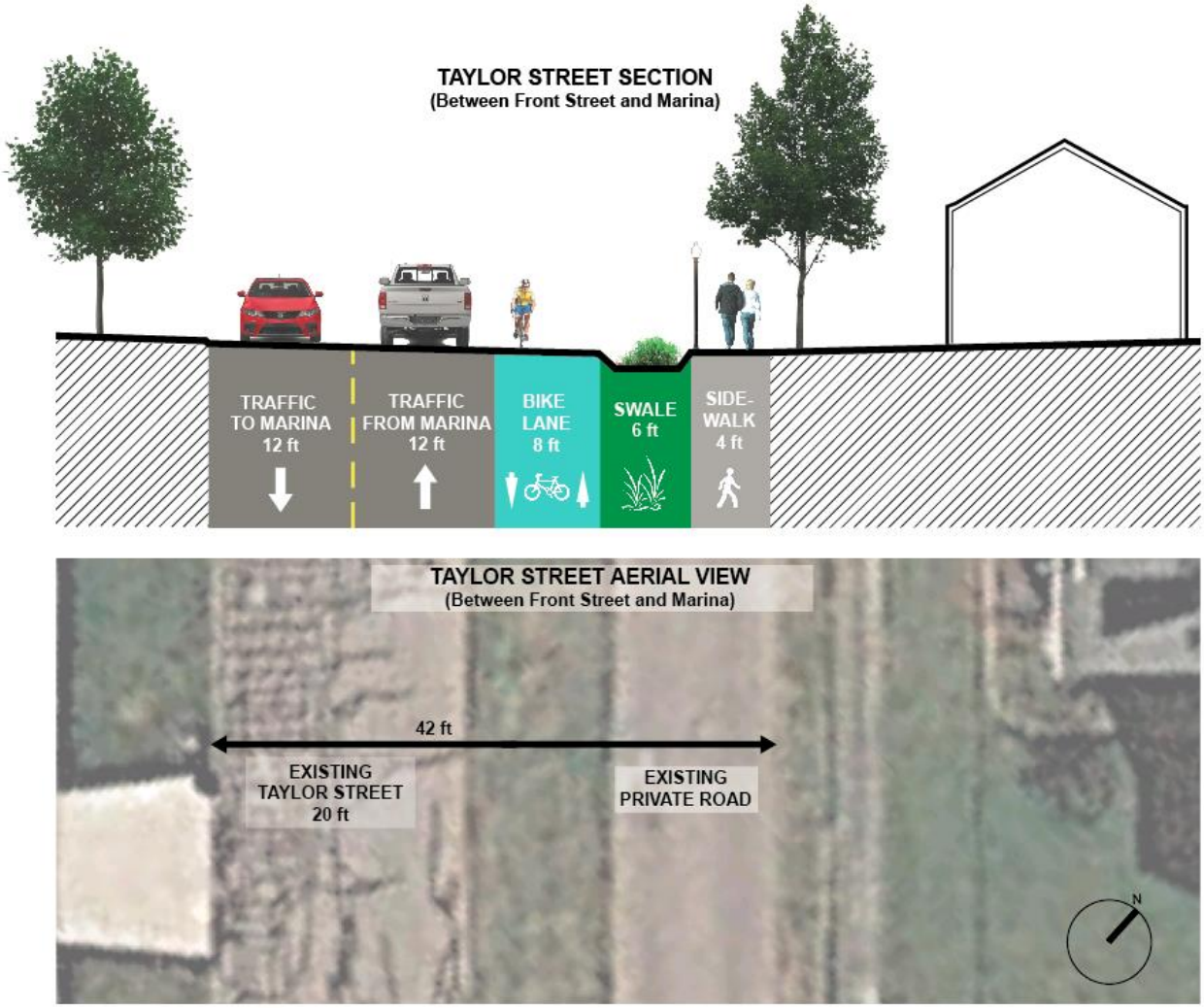
There are many modes of connectivity in this vision including vehicular, bicycle, kayak, pedestrian, water taxi, trolley, e-cart, or personal boats. All of these forms of transportation are labeled in Figure 25. Bicycle lanes striped on the roadway can connect bike traffic to County Line Street and Jefferson Street through the town and to the marina. Bike lanes are part of the design on Main Street and shifting over a block to Front Street between Taylor Street and Maria Street. Kayaking connectivity includes adding a launch site at the Schmid Marina site along with storage racks that can be rented. This launch site would be part of the existing Lake St. Clair paddle trail along the shore and connect with the Burke Park beach where there is another launch site. A water-taxi and personal boats are also drawn as potential transportation on the connection diagram (Figure 25). Pedestrian paths between Schmid Marina and downtown should have improved lighting along the walkways, defined crosswalks, and sidewalk on Taylor Street and Front Street. Additional transportation between the marina and downtown could be provided by an e-cart, or small electric vehicle/shuttle, used as needed to transport people between the new recreation center, marina, and downtown. Residents also expressed interest in a trolley circling town and connecting to nearby towns.

Figure 25 - Final Design Connectivity Diagram (courtesy of Joseph Demski)



Taylor Street (between Front Street and Schmid Marina) is widened in this design from 10 foot lanes to 12 foot lanes (Figure 26). The parallel private road is removed and a striped bike lane is also added. A new sidewalk that runs the entire length of the road is added and separated from the roadway by a 6 foot swale. The swale captures stormwater runoff from the roadway and sidewalk and transports it to the marina and a detention pond. Additional lighting and signage will help visitors navigate between downtown and the marina.

Figure 26 - Taylor Street Section and Existing Aerial



Several of the streets downtown are shown as flexible streets (Figure 27 and Figure 28) which allows for adaptable uses during different events. A flexible street can easily function as plaza space and pedestrian walkway instead of a road. A portion of Washington Street and Front Street are part of the vision shown in Figure 19 as flexible streets. The areas could be used as roadways on a normal basis and for special events, removable bollards block off the street to create more open space and pedestrian safety. A section of the roadway is drawn in Figure 27 and Figure 28 to demonstrate both functions.

Figure 27 - Flexible Street Section and Existing Aerial (as Roadway)

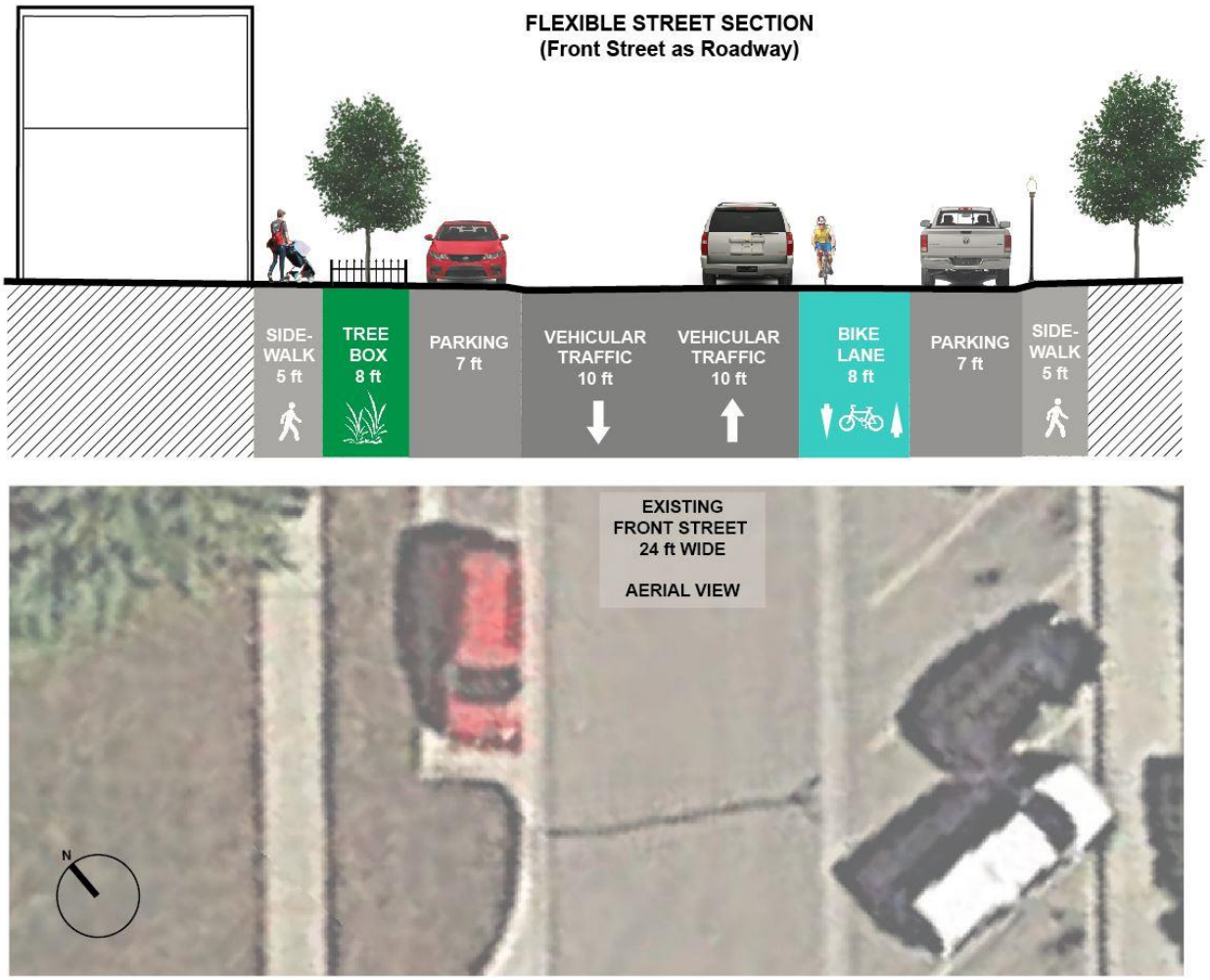


Figure 28 - Flexible Street Section and Existing Aerial (as Pedestrian)