

# Burt Township Marina Master Plan

## Burt Township Grand Marais, Michigan

21783 Coast Guard Point  
Grand Marais, MI, 49839



*Aerial photo of West Bay in Grand Marais, MI. (n.d.) marinas.com*

Prepared For:  
Burt Township

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## **I. INTRODUCTION**

### **A. PURPOSE**

The purpose of creating the Marina Master Plan is to establish a long-term vision and framework for future decision-making and strategic planning for the Burt Township Marina. The Marina Master Plan outlines existing facilities at the Burt Township Marina located within West Bay Harbor in Grand Marais, Alger County and provides recommendations for potential improvements to ensure the marina continues to effectively serve the needs and demands of the community.

### **B. SCOPE OF STUDY**

In May of 2025, Burt Township contracted with U.P. Engineers & Architects, Inc. to develop a Marina Master Plan for the Burt Township Marina. The study includes an evaluation of the existing marina facilities, current harbor configuration, general marina operations, and historic marina usage, along with community engagement to identify the shortcomings, issues, and challenges that the marina currently experiences. The objective of the Marina Master Plan was to develop a guidance document to assist Burt Township with the strategic long-term planning and community development in relation to the marina. The Marina Master Plan provides recommendations for the township to consider for potential marina development and expansion projects to ensure that the marina can continue to effectively serve the needs of the community.

## **II. EXISTING SITE CONDITIONS**

The first step in developing the Marina Master Plan was to gather inventory of the existing marina facilities and to evaluate their condition. All existing marina facilities and amenities were documented, recorded, and inspected and the findings of the observations are summarized below.

### **A. SITE DESCRIPTION**

The Burt Township Marina is located along the western end of West Bay Harbor in Grand Marais. West Bay is a sheltered portion of the Harbor of Refuge that is located along the southern Lake Superior shoreline. The marina provides direct access to West Bay and Lake Superior. The Burt Township Marina is zoned within the “Bay District” and is in close proximity to the commercial district of Grand Marais. Location maps are provided in **Appendix A**.

West Bay is a part of the Harbor of Refuge, which is one of two existing harbors along the expansive Lake Superior shoreline between Grand Island and Whitefish Point. The Harbor of Refuge is a crucial naturally sheltered area along the vast Lake Superior shoreline that provides an extremely important safety area for ships during inclement weather and in case of emergencies. West Bay is separated from the Harbor of Refuge with a rock pier that forms the navigation channel connecting West Bay to Lake Superior.

Directly adjacent to the marina is the Burt Township Bayshore Park. Bayshore Park is a public community beach access site located southwest of the marina. The park provides parking, public beach access, a playground, and restroom/changing room facilities that are open to the public. While Bayshore Park is not directly associated with the marina, the public park is located directly adjacent to the marina and provides easy access for marina users to enjoy the sandy beaches within West Bay.

## B. MARINA FACILITIES

The Burt Township Marina offers a wide range of amenities, including a boat launch, transient dockage, fuel services, sanitary pump-out station, electrical and water utility pedestals, fish cleaning station, and restroom facilities. The marina also features a picnic area with tables and benches. A site plan and photos of the Marina can be found in **Appendix B** and **Appendix C**, respectively.

The existing marina has seven (7) transient slips located along the sheet-pile marina wall. Each slip has utility services available, including electrical and water hookups at the utility pedestals. Each utility pedestal offers 50-amp and 2-30-amp electrical hookups with one pedestal offering a 20-amp hookup. Fuel and sanitary pump-out services are also available at the marina near the end of the sheet-pile wall by the harbormaster building. There is a \$20.00 fee for pump-out services, while fuel costs variable to match current industry and economic trends. Transient slip rates are currently \$1.75 per foot of boat length, which corresponds to the Michigan DNR slip rate schedule for 2025. As an example, a 30-foot boat would cost \$52.50 per day ( $\$1.75/\text{ft} \times 30\text{ft} = \$52.50/\text{day}$ ). The marina currently only has transient slips available. There are no seasonal slips that can be rented out for the entire summer or an extended period of time. In times of inclement weather, West Bay is a safe harbor, and the marina can be utilized as a resting place for ships in need.

The existing sheet-pile wall, concrete sidewalks, utility pedestals, boat cleats, access ladders, and timber bumper posts for the transient dockage are all in good condition. The fuel pumps and sanitary pump-out station are also in good condition. The marina has a harbormaster building located near the fuel and sanitary pump-out

stations that serves to oversee the daily operations of the marina and the utility services. The existing harbormaster building is old and is very small and congested.

The existing boat launch is one of the most heavily used amenities provided at the Burt Township Marina. The township marina provides a convenient access point for recreational boaters, anglers, and charters to access West Bay and Lake Superior. The existing boat launch is a single-width boat launch that is approximately 24 feet wide. The boat launch can become overcrowded at times, especially during the prime fishing season and hot summer days when boat traffic typically peaks at the marina. With only a single boat launch access, users often have to wait their turn to utilize the launch. Although the boat launch and dock is in fair condition, it is undersized during peak marina traffic. Boat launch fees are currently \$60 for an annual permit or \$10 for a daily launch fee, which are comparable to other similar municipal marinas along the southern Lake Superior shoreline.

The marina has a facilities building that offers several amenities for marina users, including restrooms and a fish cleaning. The facility building was constructed in 2016 and is in great condition. The fish cleaning station has been a highly valued marina feature since its construction. As a result of its high demand and usage, the fish cleaning station encountered some minor issues and service disruptions during the summer of 2025. Repairs were completed and the fish cleaning station was fully operational by October. The temporary service disruption of the fish cleaning station helped verify the importance and value of the fish cleaning station for marina users and community members. The building provides universal accessibility to both the men's and women's restrooms, along with accessible parking and access to the marina transient dockage.

The marina provides on-site parking for both regular passenger vehicles and boat trailers. The parking lot has sufficient capacity to support the current demand of the marina, but is not in great condition. The parking lot is currently a gravel surface, with poor site drainage and limited accessibility. With the traffic volume, tight turning areas, and heavy boat trailers, the gravel parking lot often has issues with site drainage, grading, rutting, potholes, and puddles. The current issues with the parking lot can make for a poor experience and provides accessibility concerns for marina users, especially when users have to navigate potholes and puddles to cross the parking area.

## C. ACCESSIBILITY

The Burt Township Marina provides accessible marina facilities throughout much of the marina, but is still lacking in some critical areas. Burt Township has been aiming to improve the overall accessibility of the marina in recent years, with previous

marina upgrades completed to address general accessibility concerns. Accessible marina restroom facilities, accessible parking spaces, and sidewalk improvements were completed in 2016 to address some of the accessibility concerns at the marina. The marina parking lot is a gravel surface that is not compliant with universal accessible design standards, but the marina does provide two (2) accessible concrete parking spaces located at the marina facilities building. The marina building facilities are accessible, including the restrooms. The marina also provides accessible picnic areas and tables within the marina greenspace.

#### **D. MARKETING, EVENTS, AND PARTNERSHIP**

Burt Township actively works to promote community engagement and usage of the Burt Township Marina and West Bay Harbor. Grand Marais is host to several annual community events located in West Bay, which are coordinated in conjunction with Burt Township and the marina. The Great Lakes Sea Kayak Symposium is held each year in Grand Marais and promotes community engagement, learning, and adventure on Lake Superior and is open to the general public. Grand Marais is also host to the annual “Splash-In on the Bay” event, which is a multiple day seaplane event that is held in the West Bay Harbor and at the Burt Township Marina. The Burt Township Marina also hosts a youth fishing tournament in June and an annual fishing tournament on the last week of June, sponsored by the Grand Marais Sportsman’s Club. Supporting these annual events helps to raise awareness of the Burt Township Marina and helps to increase marina demand and usage throughout the year.

#### **E. MAINTENANCE AND REPLACEMENT**

Burt Township owns and provides the operational oversight of the municipal marina. Burt Township provides the regular upkeep and routine maintenance necessary to ensure marina services and amenities are kept clean, accessible, and functional. Normal marina upkeep includes general site cleanliness, restroom facility maintenance, trash disposal, and lawn care, which are typically completed on a weekly or monthly basis during the busy summer months at the marina. The annual routine marina maintenance includes seasonal startup, winterization, utility service upkeep, and general harbormaster tasks. Burt Township completes the replacement of marina amenities and components that are subject to regular wear and usage on an as-needed basis. Burt Township maintains a general Department of Public Works (DPW) operating budget that includes the routine operational and maintenance expenses for the marina.

Marina maintenance also includes long-term upkeep measures, including minor and large-scale marina infrastructure improvements and replacements. The minor infrastructure replacement schedule includes items subject to normal wear, such as light fixture replacements, fish cleaning station fixtures, sheet-pile painting, harbormaster building replacement, pavement markings, and the pumping of the septic tanks. Larger marina maintenance and replacement items include the more substantial marina projects, including the parking lot improvements, maintenance dredging, and the replacement/expansion of the boat launch and skid pier dock. **Table 1** below provides a general summary of the marina operational, maintenance, repairs, and replacement schedule based on existing marina facilities and some of the proposed marina improvements. Burt Township maintains an operational budget to ensure funds are available for marina infrastructure improvements and replacement projects anticipated to be required in the future.

**TABLE 1: MAINTENANCE, REPAIRS, AND REPLACEMENTS**

<u>MARINA MAINTENANCE, REPAIRS, AND REPLACEMENT SCHEDULE</u>		
<b>ANNUAL MAINTENANCE SCHEDULE</b>		\$22,000
REPAIRS & MAINTENANCE		
BUILDING UPKEEP		
STARTUP/WINTERIZATION		
TIMBER BUMPER POST REPLACEMENTS		
CONCRETE SIDEWALK MAINTENANCE		
TIMBER DOCK DECKING		
UTILITY SERVICE FEE		
<b>ANNUAL SUPPLIES</b>		\$8,000
HARBORMASTER BUILDING SUPPLIES		
CLEANING & TOILETRY PRODUCTS		
<b>ANNUAL SERVICES</b>		\$20,000
LAWN CARE		
TRASH DISPOSAL		
SEPTIC TANK PUMPING (AS NEEDED)		
<b>MINOR INFRASTRUCTURE IMPROVEMENTS &amp; REPAIRS</b>		
	ESTIMATED YEAR	ESTIMATED COST
SHEET-PILE PAINTING	2026	\$10,000
WAYFINDING SIGNAGE	2027	\$10,000
NEW HARBORMASTER BUILDING	2028	\$7,500
FISH CLEANING STATION FIXTURES	2030	\$5,000
PAVEMENT MARKINGS	2031	\$5,000
<b>LARGE-SCALE MAINTENANCE &amp; REPLACEMENTS</b>		
	ESTIMATED YEAR	ESTIMATED COST
PARKING LOT IMPROVEMENTS	2026	\$275,000
MAINTENANCE DREDGING	2028	\$150,000
BOAT LAUNCH EXPANSION	2029	\$150,000

### **III. DREDGING**

#### **A. WEST BAY DREDGING**

The Burt Township Marina located on the western end of West Bay Harbor provides a stable and protective area for transient dockage. The marina is located in a sheltered area of the West Bay Harbor and provides good protection against harsh weather conditions, waves, and strong currents. Due to the location of the marina, sediment buildup and accumulation is generally not a major concern for vessel navigability at the marina.

Although dredging has not been a major historical issue at the marina, West Bay Harbor has a history of sedimentation buildup and material deposits along the southern shoreline of West Bay Harbor. Since the construction of the eastern rock pier extension in West Bay in 2013, there has been a major issue with sedimentation along the southeastern shoreline of West Bay. Strong west winds and shoreline currents have resulted in the accumulation of sediment along the existing shoreline all the way out to the start of the rock pier. Over the past several decades, the sandy beach shoreline along the south side of West Bay has seen a vast expansion due to sedimentation buildup near the existing rock pier. The increased material deposits have expanded into West Bay and have decreased the navigable depth within the bay. The main navigation channel from West Bay into Lake Superior has also started to see navigability concerns with the increasing migration of sediment deposits. While the general sedimentation concerns within West Bay Harbor are not directly concerned with the Burt Township Marina, the issues are valid to consider and are indirectly associated with the marina and marine traffic in West Bay.

#### **B. MARINA DREDGING**

The Burt Township Marina does not have a significant history of dredging and sedimentation concerns, but regular maintenance dredging is still periodically necessary to maintain navigability depth at the boat launch and near the marina dockage. The Burt Township Marina was most recently dredged in 2013, as a part of an emergency dredging project to ensure adequate marina navigability. Work was completed with assistance from the Michigan Department of Natural Resources Waterways Commission, with work funded through a \$525,000 grant from the MDNR Grant-in-Aid Program. The project included the dredging of approximately 1,200 cubic yards of material from the boat launch area and along the transient dockage at the marina. Since the dredging project was completed, there have not been any significant issues with material sedimentation deposits and buildup at the

marina. The marina has maintained sufficient navigability depth with no immediate concerns or needs for additional dredging at this time.

## **IV. PUBLIC INVOLVEMENT**

To better understand the needs and demands of the community, an online public survey was created and advertised around Burt Township and the Grand Marais area. The survey encouraged public comment and involvement in the evaluation of existing marina facilities and helped to identify potential areas for improvements at the marina. The survey included questions on how frequently the survey participants utilized the marina, what facilities they used, issues encountered, and what improvements they would like to see at the Burt Township Marina.

A total of 78 survey responses were received, with 49 responses being full-time residents and 23 being seasonal residents of Burt Township. Results of the survey show many residents would like an improved parking lot, additional boat launch access, the addition of seasonal slips, and increased capacity for larger watercrafts at the marina. These survey responses and requests were taken into account when developing the Marina Master Plan and the proposed marina improvements. A detailed summary of the survey questions and results can be found in **Appendix D**.

## **V. PROPOSED SITE PLAN**

### **A. PROPOSED MARINA IMPROVEMENTS**

The Marina Master Plan was developed to provide a vision for future development at the Burt Township Marina. The master plan addresses the challenges that the marina currently experiences and provides a guide and plan for future marina development and expansion to meet the needs of the community.

The existing marina is in need of both minor repairs and improvements, along with major improvements to address the issues and shortcomings with the existing marina. Some of the minor marina improvements include adding storm drainage and paving the parking lot, increasing site accessibility, replacing the harbormaster building, increasing boat launch access, and installing an accessible kayak launch. Along with the minor marina upgrades, a major marina expansion project would also be beneficial at the Burt Township Marina. The major marina improvement project would include the installation of a new marina dock to provide 34 total marina slips suitable for both larger and smaller watercrafts.

As many community members identified in the survey, the existing gravel parking lot has poor drainage and doesn't provide accessibility for all users. In order to address the draining issues, it is proposed to install additional drainage structures and pave the entire parking lot. Since this is one of the most urgent marina needs identified by the community and the township, Burt Township is planning to complete this work as a part of an infrastructure improvements project that is anticipated to be completed during the summer of 2026. The parking lot will be resurfaced with asphalt to provide a parking surface that promotes positive drainage and increases the overall accessibility at the marina. The parking lot improvements will include pavement markings and new concrete sidewalk to provide additional points of accessibility to the greenspace and transient dockage at the marina.

The community also identified a need for a kayak launch site, so it is proposed to install an accessible seasonal kayak launch at the Burt Township Bayshore Park. The kayak launch would include an accessible path from the existing parking lot across the sandy beach area to the launch site. The kayak launch would be located away from the marina boat launch to increase public safety and avoid potential conflicts with larger marine traffic near the marina. The seasonal kayak launch and beach path could be removed at the end of each boating season to minimize the risk for ice damage and increase the overall longevity of the kayak launch.

The proposed marina expansion project would include the installation of a new marina pier to provide increased marina capacity for both larger and smaller vessels. The existing marina has very limited capacity, with only (7) transient slips available. As marina demand increases, many users have not had the option to utilize dockage at the marina due to the limited availability and full marina capacity. Many residents have requested the option for seasonal marina slips, which is not currently available at the marina. To address the limited marina capacity and available slips, it is proposed to install a new marina pier to provide (28) 30-foot slips, (6) 50-foot slips, and (2) transient slips along the original marina dock. Additional dockage for smaller watercrafts will be available with the remaining space along the original dock. The proposed pier will include a wave attenuator wall positioned to provide increased protection for the marina from southern/eastern winds across West Bay. The existing marina transient dockage at the marina is exposed to the natural environment and the strong winds in West Bay, which results in docked boats being pushed into the sheet pile wall. The lacking protection at the marina provides increased wear on the timber dockage elements and provides an increased risk for damage to the docked vessels. The proposed marina expansion project would significantly increase the total marina capacity and provide much needed protection for the marina and docked vessels.

## B. PHASING OF IMPROVEMENTS

Phasing the proposed marina improvements will likely be necessary to complete the projects based on the availability of grant and local match funding. Addressing the marina improvements in phases is likely the best way to ensure that funding and resources will be sufficiently available to complete the proposed marina improvements in a timely manner. The suggested phasing for the proposed Marina Master Plan improvements are outlined herein, but may be subject to change. These improvements could be further separated into smaller sub-phases if deemed necessary based on available construction funding. The recommended marina improvements could likely be completed in any sequence and are not necessarily dependent on previous project phases. The proposed Marina Master Plan improvements, along with the recommended project phasing, are detailed in **Appendix E**.

### Phase I – Parking Lot Improvements

Phase I of the Marina Master Plan proposed improvements will address issues with the current gravel parking lot. Phase I will include the installation of additional storm drainage and paving the parking lot to increase site accessibility. This project is already in the process of being completed and is anticipated to be constructed during the summer of 2026.

### Phase II – Minor Marina Upgrades

Phase II of the Marina Master Plan proposed improvements will address the minor marina improvements and upgrades, which are not anticipated to be a major financial investment for Burt Township. Phase II includes replacing the harbormaster building, upgrading the boat launch to provide additional launch access, the installation of an accessible kayak launch, and miscellaneous site improvements such as wayfinding signs, walking paths, benches, tables, grills, lighting, and utility services. These projects are generally independent of one each other and could be completed under several different projects (i.e. Phase II.a, Phase II.b, Phase II.c, etc.). Some of these projects may be eligible for grant funding, which could initiate the necessity for multiple “Phase II” projects to optimize township funding with any available supplemental funding.

### Phase III – Marina Expansion

Phase III of the Marina Master Plan proposed improvements would consist of the proposed marina development and expansion project. The proposed marina expansion project would provide increased capacity and provide seasonal slips for small watercrafts, recreational boats, and larger charter vessels. The increased

marina capacity and the various slip lengths would allow for an increased range of marina users and would help to promote marina usage for boaters of all types. This project would be the most extensive marina improvement project and will likely be dependent on the availability of grant funding to assist the township with the funding of the project.

### C. FEASIBILITY

Burt Township would benefit from pursuing and obtaining grant funding to assist in the project construction. Pursuing a grant that provides at least a 50-50 grant/local funding match would significantly increase the feasibility of a marina improvement project. Burt Township has funding available to provide a local match with grant funding, which would be extremely beneficial to optimize township funding in order to complete a large marina improvement project of this scale.

The “phased” marina improvement options are currently presented with detailed estimates included in **Appendix F**. The project estimates, including engineering and contingency, for each phase are as follows:

- Phase I – Parking Lot Improvements: \$275,000
- Phase II – Minor Marina Upgrades: \$375,000
- Phase III – Marina Expansion: \$2,000,000

**TOTAL MARINA MASTER PLAN COST = \$2,650,000**

Burt Township currently has funds available that could finance the proposed marina improvements if completed in multiple phases as recommended herein. Burt Township has already set aside funds to complete the proposed Phase I Marina Improvement Project (Parking Lot Improvements), which is anticipated to be completed during the summer of 2026. Burt Township can reasonably anticipate that approximately \$150,000-\$200,000 should be available to set aside each year for future marina improvement projects, so the proposed marina improvements should be feasible if properly planned and scheduled. The township could save their annual marina budget over multiple years to support a larger marina improvement project (i.e. Phase III). Burt Township has also discussed the possibility of a loan funding package, as their annual marina budget could be utilized to support an annual principal and interest payment instead of a direct cash funding match. The utilization of township funding may be dependent on potential grant opportunities in order to complete future marina improvement projects to best serve the needs and demands of the community at the marina, while still maintaining a positive township budget.

## D. GRANT OPPORTUNITIES

Burt Township is anticipated to be eligible for several potential grant opportunities that are available for public entities and rural communities. Grant funding assistance is critical for large scale marina improvement projects and will likely be the key factor that determines the scope and schedule for future marina development projects. Although the township is anticipated to be eligible for several potential grant sources, grant availability and eligibility requirements are subject to change and may vary from the opportunities that are currently available at the time of this study. **Table 2** below provide a brief summary of some potential grant options that Burt Township may be eligible for to seek funding assistance for marina improvement projects.

**TABLE 2: POTENTIAL GRANT OPPORTUNITIES**

<b>Michigan Department of Natural Resources - Waterways Grant Program</b>	Provides funding for engineering studies and infrastructure improvement projects
<b>US Fish and Wildlife Service (MI DNR) Boating Infrastructure Grant Program</b>	Provides funding for infrastructure improvements at harbors for transient boaters
<b>United States Department of Agriculture Rural Development Grant</b>	Provides funding for infrastructure that benefits rural communities
<b>Michigan Economic Development Corporation - Public Spaces Community Places</b>	Provides funding for strategic projects in local communities

Burt Township is encouraged to actively seek grant funding assistance to support future marina development and expansion projects. The local community has identified a clear need for several improvements and upgrades to the marina, which are anticipated to be addressed over a multi-phased construction schedule based on project funding. Seeking grant funding from different sources could help to optimize township funding to complete the proposed marina improvements in a timely and cost-effective manner.

## E. CONCLUSION

The Burt Township Marina is a highly valued community resource that provides access to Lake Superior and supports numerous recreational opportunities for residents and visitors of Grand Marais. Through community engagement, site inspection and evaluation, and conceptual planning, this report brings together a phased Marina Master Plan to address the existing shortcomings and downfalls of the existing marina and its associated facilities and amenities. The Burt Township Marina currently provides many accessible facilities and amenities for marina users, including a boat launch and parking, transient dockage, utility connections, fuel and sanitary pump-out services, fish cleaning station, restroom facilities, and greenspace

areas. Although many of these facilities are generally in good condition and used on a regular basis by community members, there is a need for critical improvements and upgrades and the marina to meet the needs and demands of the community.

The Burt Township Marina Master Plan outlines a clear vision for the future development and potential expansion of the marina that aims to improve the overall marina experience for community members and visitors alike. The proposed phased marina improvements outlined herein provide a strategic plan for future marina improvements to address the downfalls of the existing marina facilities and the demands and recommendations of regular marina users and community members. The proposed marina improvements and expansion would be beneficial for Burt Township and could help to increase traffic at the marina and spark community growth and development within Grand Marais and the local community. The Burt Township Marina Master Plan provides an initial planning schedule and guidance document to assist the township with the long-term outlook of the Burt Township Marina to help ensure that the marina can continue to effectively serve the needs of the community in the future.

## **APPENDIX A**

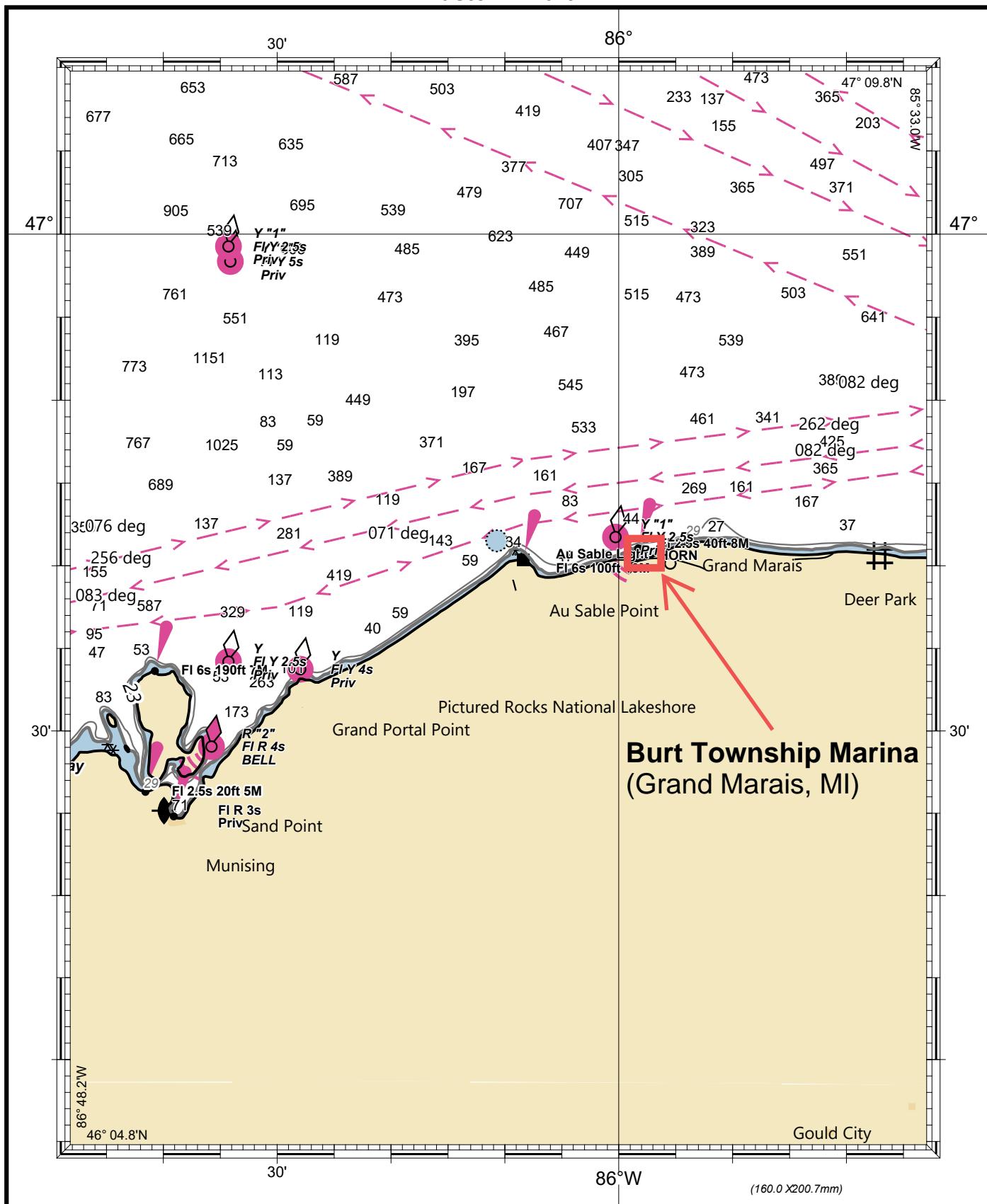
### Location Maps

## LOCATION OVERVIEW

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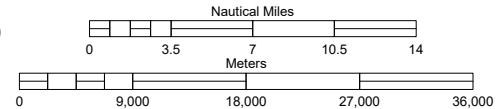
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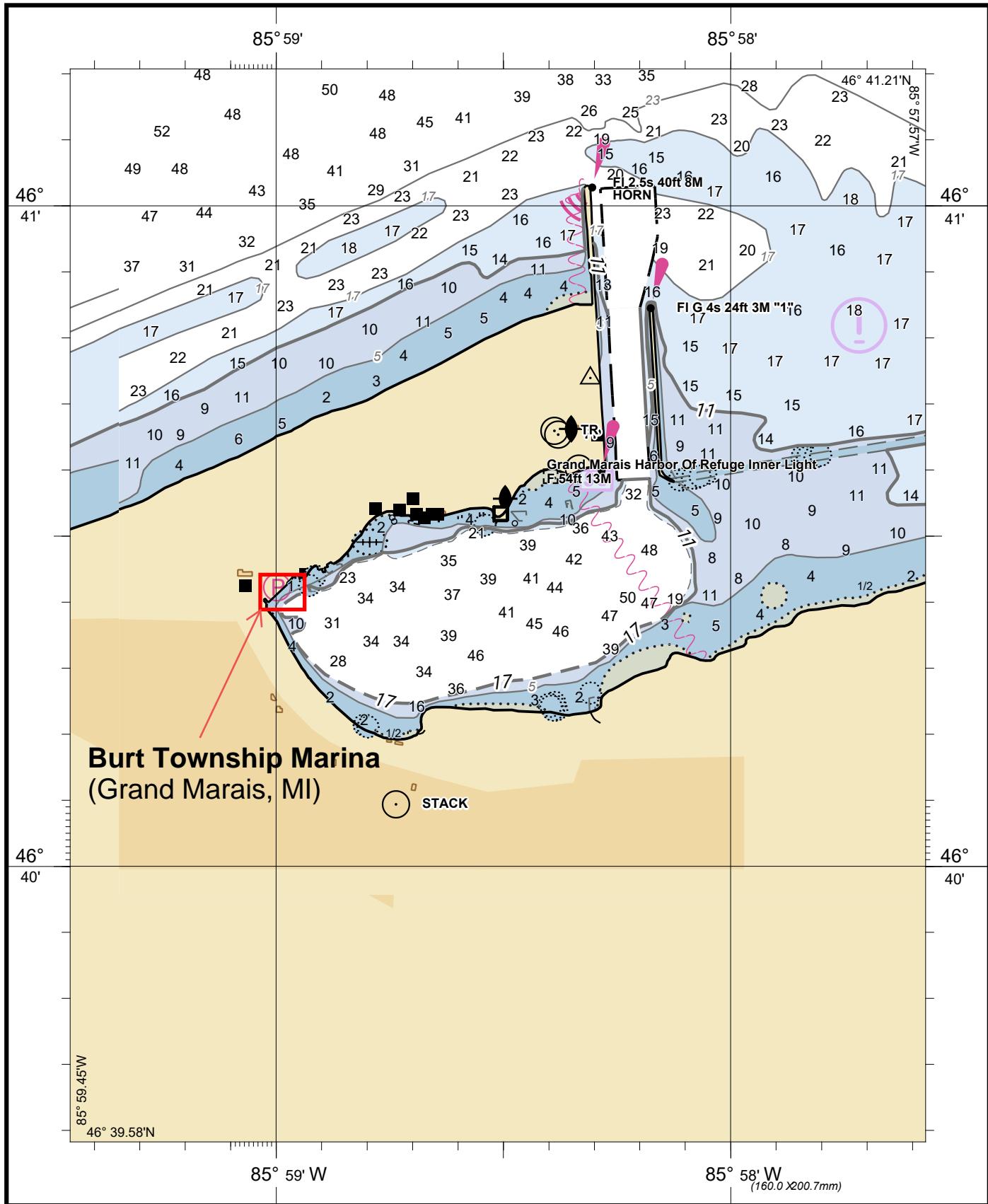
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## View of West Bay

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## Custom Chart

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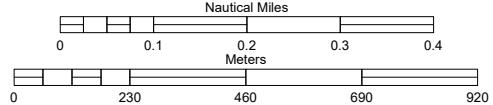


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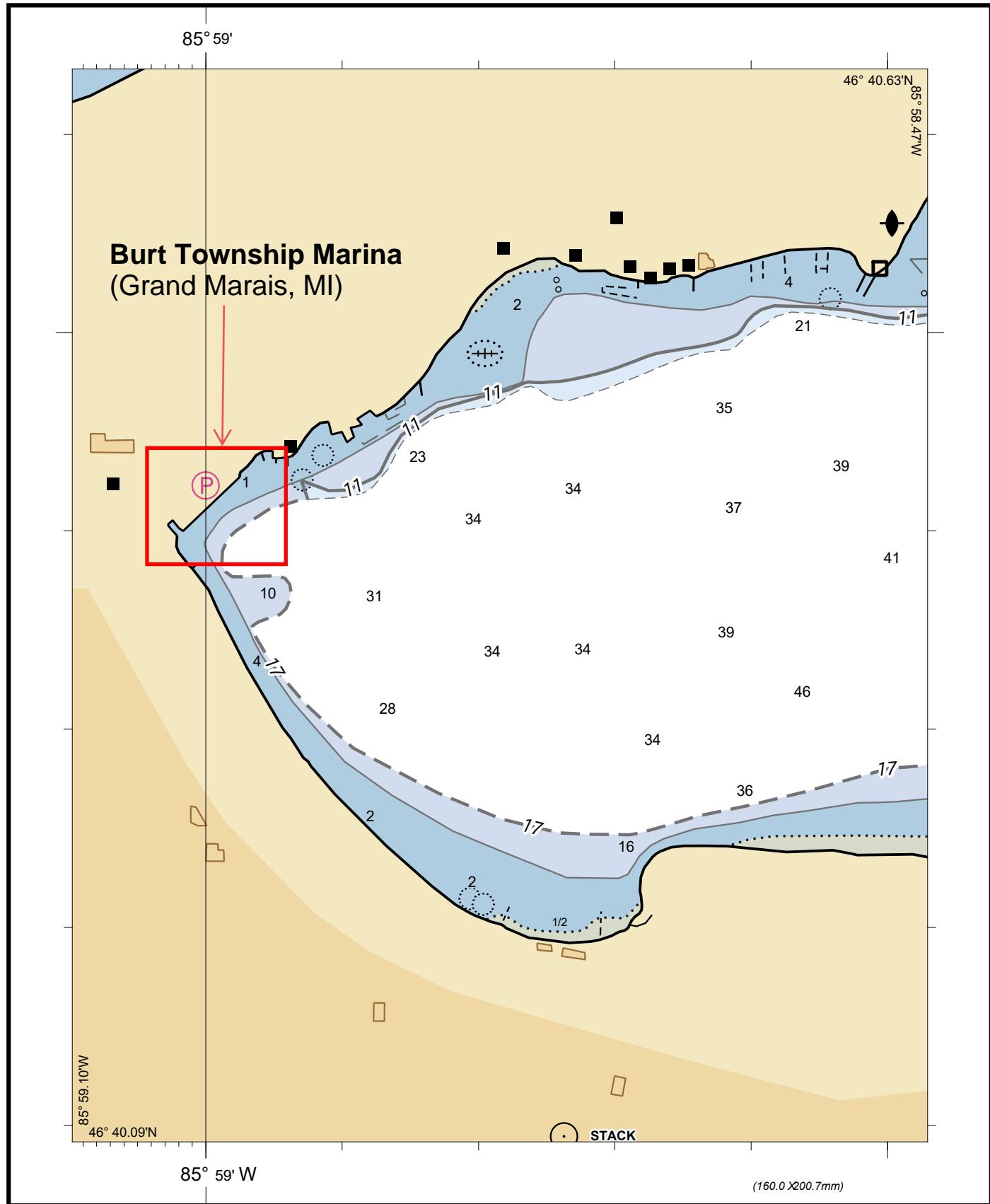
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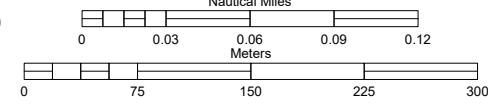


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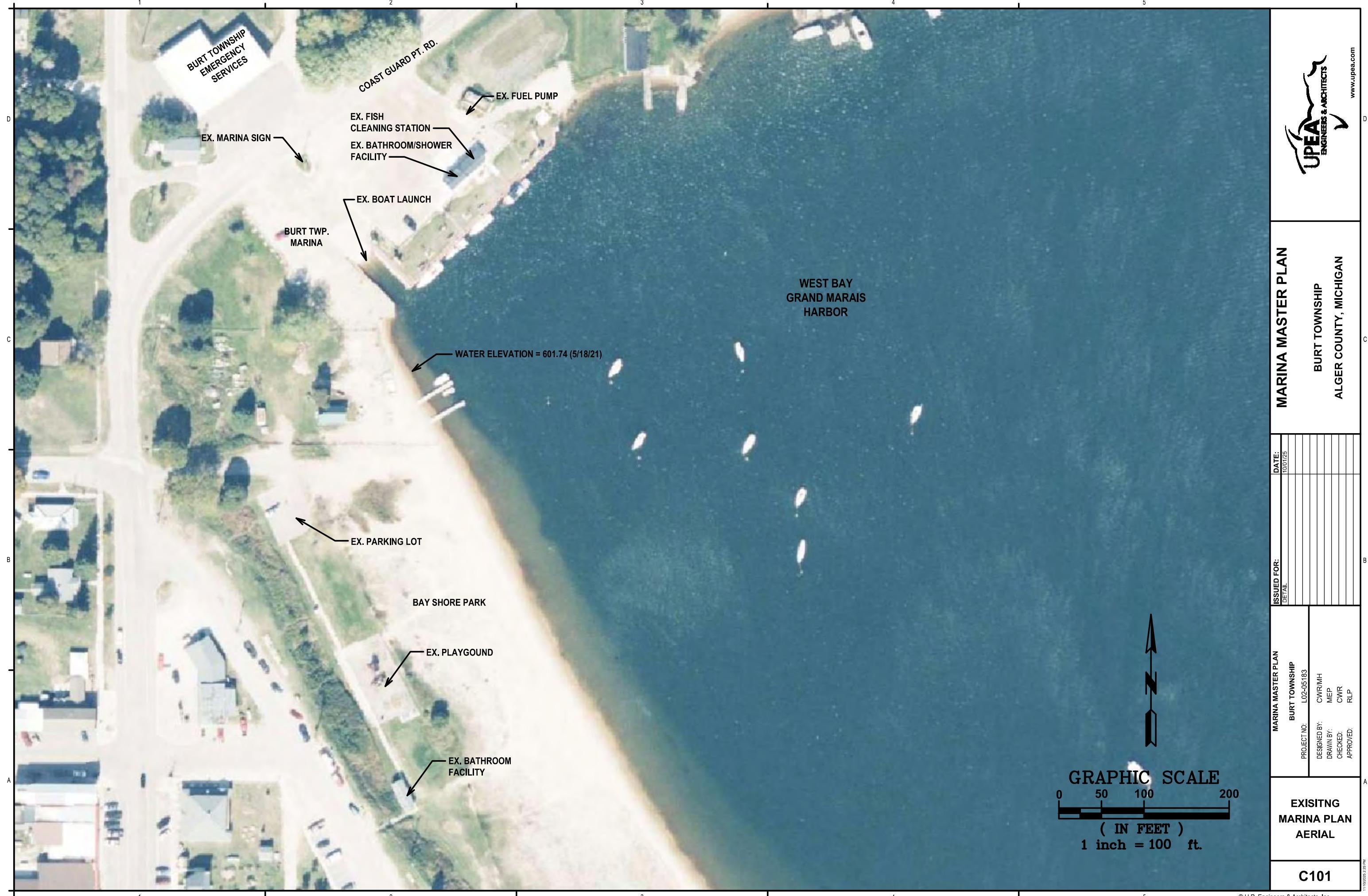


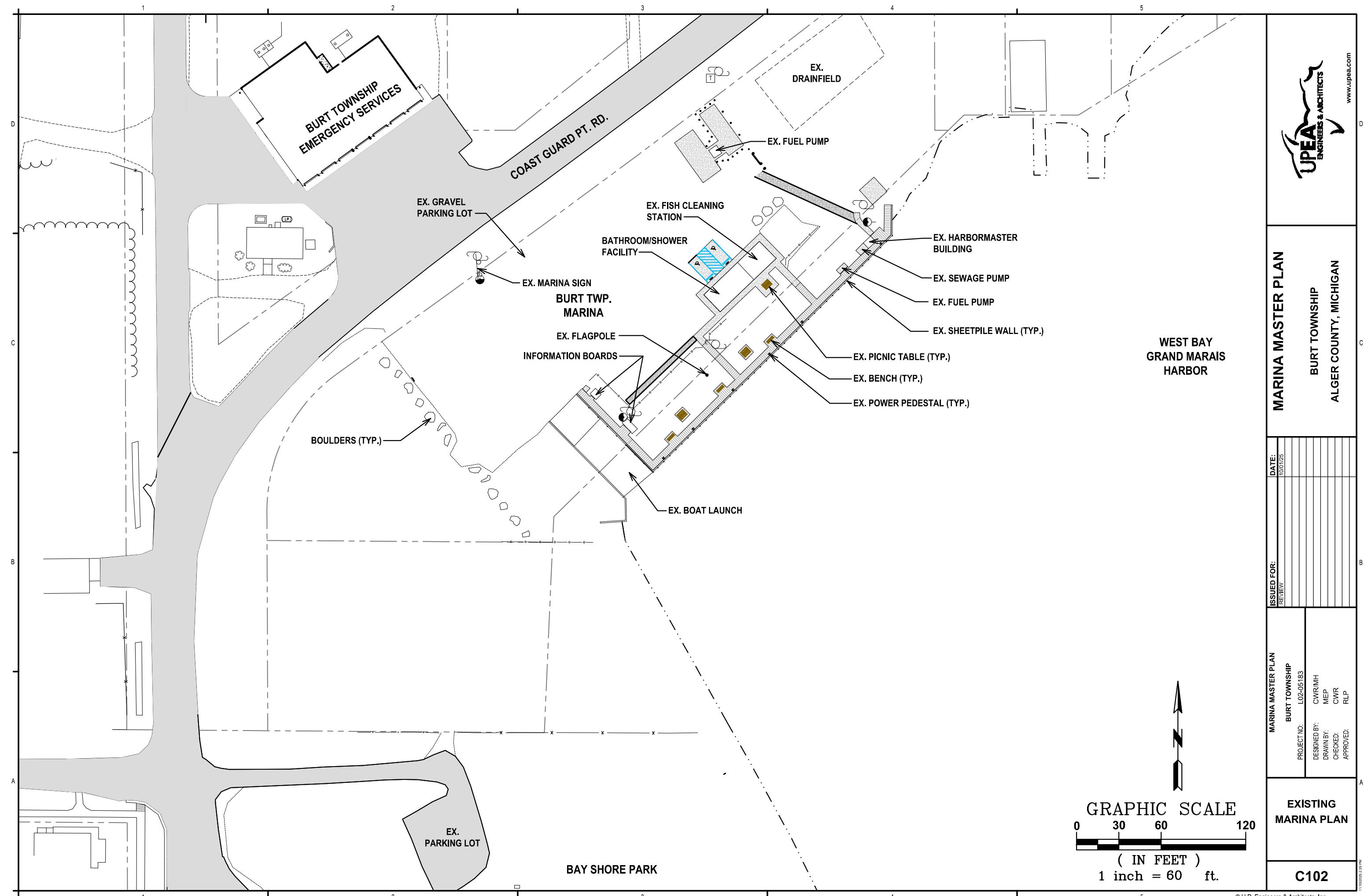
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## **APPENDIX B**

### Existing Site Plan





## **APPENDIX C**

### **Site Photos**

## Site Photos:



Photo 1: Grand Marias West Bay Harbor  
*Photo courtesy of Petersen Photography*

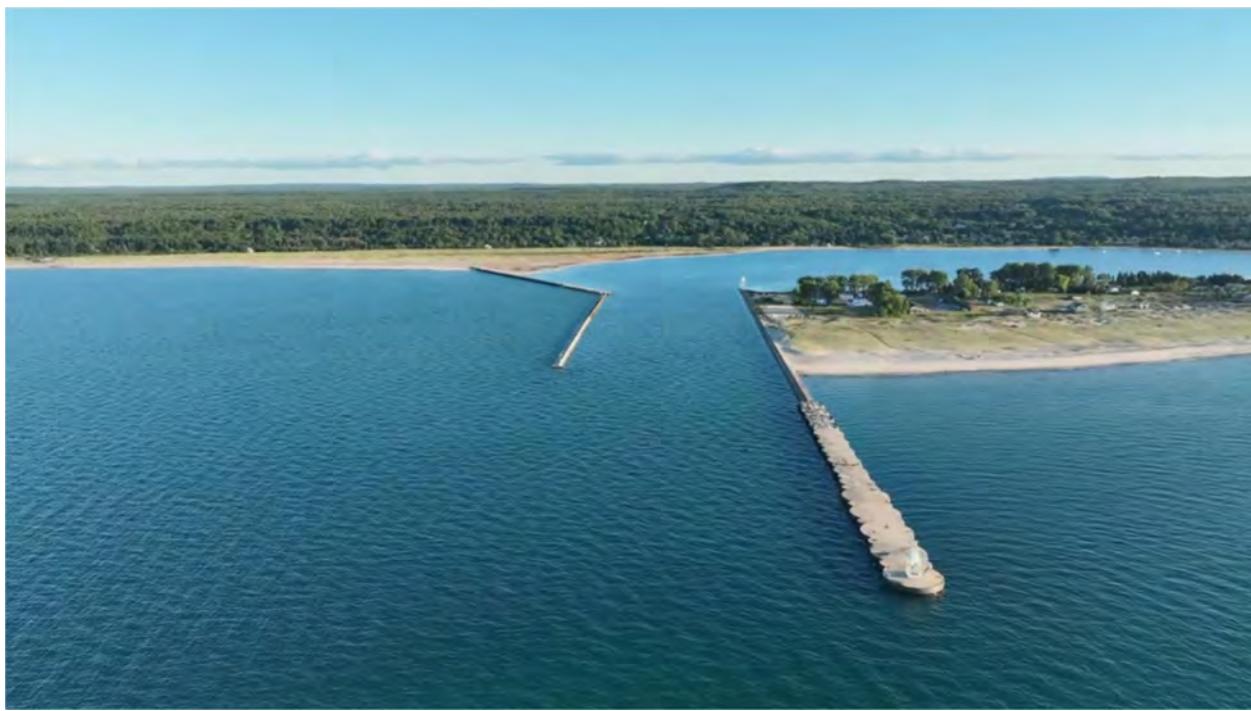


Photo 2: Grand Marias West Bay Harbor Navigation Channel  
*Photo courtesy of Petersen Photography*

## Site Photos:



**Photo 3: Grand Marais West Bay Harbor**  
*Photo courtesy of Petersen Photography*



**Photo 4: Grand Marais West Bay Harbor Rock Pier**  
*Photo courtesy of Petersen Photography*



**Photo 5: Grand Marais West Bay Harbor Rock Pier**  
*Photo courtesy of Petersen Photography*

## Site Photos:



Photo 6: Marina Fuel and Sanitary Utility Services



Photo 7: Marina Harbormaster Building

## Site Photos:



Photo 8: Marina Greenspace Area

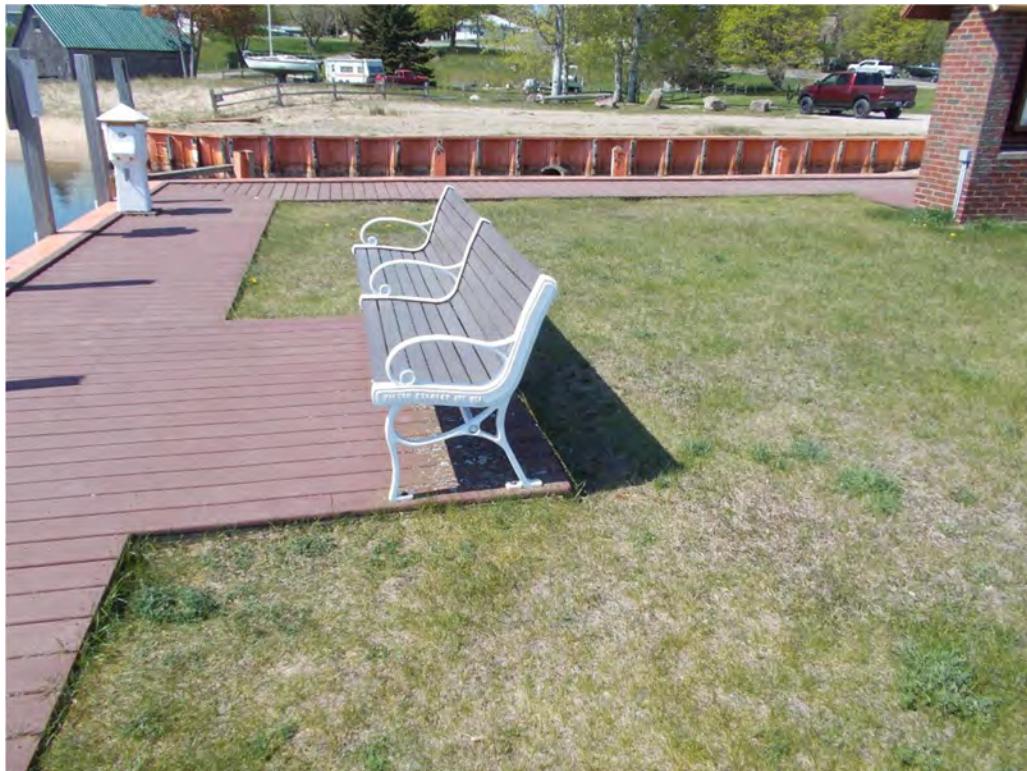


Photo 9: Typical Park Bench

## Site Photos:



Photo 10: Marina Boat Launch



Photo 11: Marina Boat Launch

## Site Photos:



Photo 12: Marina Restroom Facility



Photo 13: Fish Cleaning Station

## Site Photos:



Photo 14: Fish Cleaning Station



Photo 15: Burt Township Fuel Pump

## Site Photos:



Photo 16: Burt Township Fuel Pump



Photo 17: Proposed Marina Harbormaster Building Slab

## Site Photos:



Photo 18: Burt Township Bay Shore Park



Photo 19: Burt Township Bay Shore Park

## **APPENDIX D**

### **Survey and Results**

# Survey Questions



## Burt Township Marina and Harbor Master Plan

We're creating a long-term vision for the marina and harbor, and your input is essential! This is your chance to share what you love, what could be improved, and your ideas for making it an even better place for the community and visitors alike.

\* Indicates required question

Connection to Burt Township: \*

- Year-round resident
- Seasonal resident
- Visitor/ non-resident

Marina:

How often do you use the Burt Township Marina? \*

- Daily
- Weekly
- Monthly
- A few times a season
- Rarely/ Never

What services do you use at the marina?

- Fuel
- Pump-outs
- Electrical
- Fish cleaning
- Boat launch
- Picnic area
- Showers
- Transient dockage day use
- Transient dockage overnight stay
- Other: \_\_\_\_\_

What do you value most about the marina?

Your answer \_\_\_\_\_

What improvements or future services would you like to see at the marina?

- Upgraded/ additional docks
- Seasonal dockage
- Improved parking
- Outdoor boat storage
- Indoor boat storage
- Improved green space (Picnic areas, landscaping)
- Community events and improved gathering spaces
- Food and beverage options (food trucks, concessions, etc.)
- Kayak and paddleboard rentals
- Charter services
- Other: \_\_\_\_\_

What issues or challenges do you currently experience at the marina?

- Limited slip availability
- Condition of docks/ facilities
- Parking/ vehicle access
- Other: \_\_\_\_\_

Please share any additional comments or ideas for the marina:

Your answer \_\_\_\_\_

Harbor:

What do you currently enjoy most about West Bay?

Your answer \_\_\_\_\_

What improvements or changes would you like to see in West Bay's future?

Your answer \_\_\_\_\_

What should be number 1 priority for improving the West Bay Harbor area?

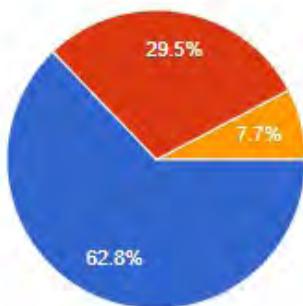
- Add more docks or slips
- Improve/ extend the breakwall
- Address dredging, water depth, and navigation concerns
- Improve restrooms, showers, and public amenities
- Increase accessibility (Improve pedestrian and bike paths, ADA-compliant walkways)
- Expand recreational opportunities (Kayak launch, fishing, swimming access)
- Other: \_\_\_\_\_

## Survey Responses

Connection to Burt Township:

78 responses

 Copy chart



Year-round = 49 people

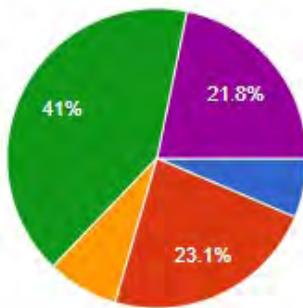
Seasonal = 23

Visitor = 6

How often do you use the Burt Township Marina?

78 responses

 Copy chart



Daily = 5 people

Weekly=18

Monthly=6

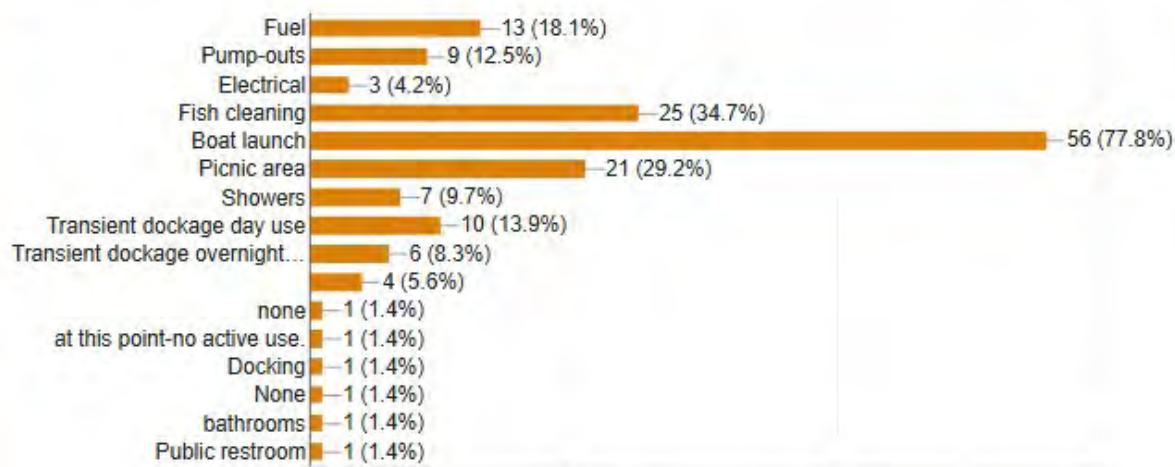
Few=32

Rarely=17

What services do you use at the marina?

72 responses

 Copy chart



0

20

40

60

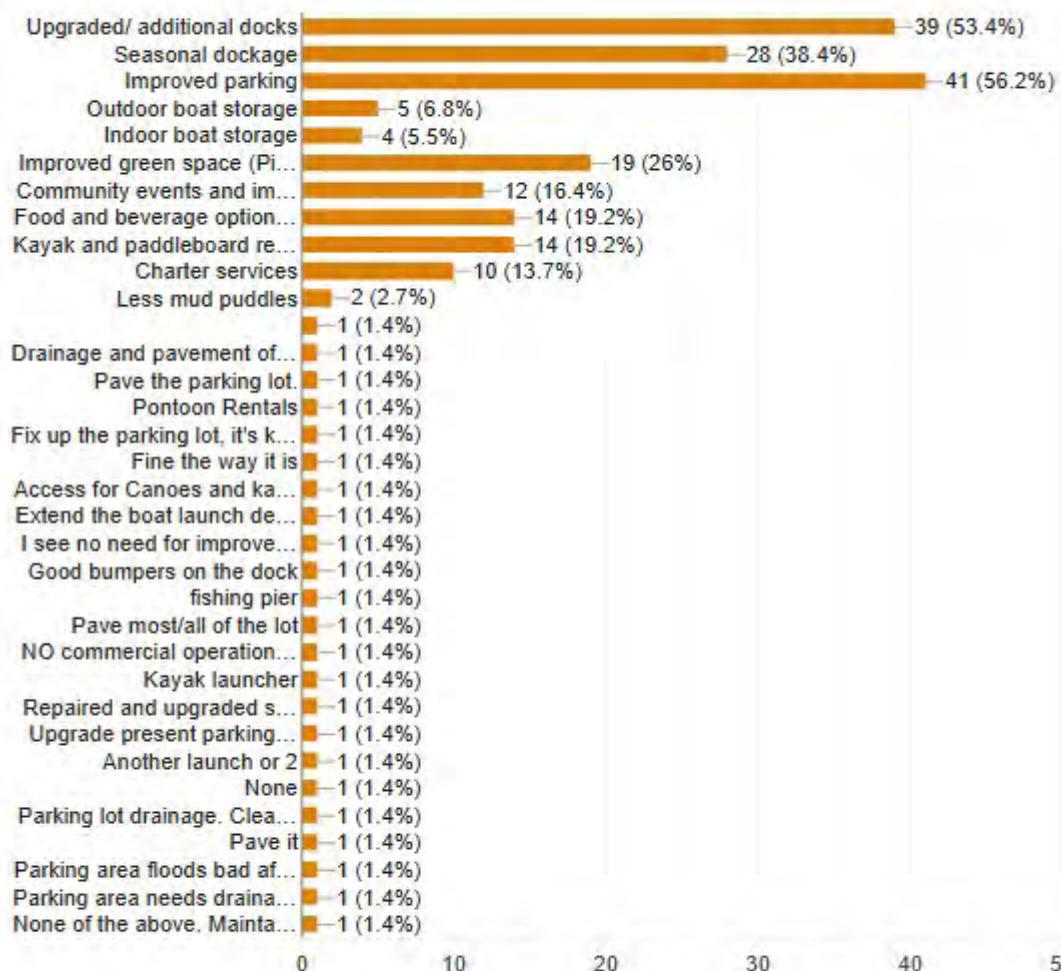
## **What do you value most about the marina?**

- Launch
- Location
- Nothing
- I value the potential to support economic development in Burt Township
- It's value to our community
- The view and the peace and quiet
- A deep well
- Easy bay access and parking.
- Location.
- Nice to have services for transient boaters
- Fish cleaning station
- Enable people using the bay to dock and process fish in an environmentally responsible way
- Visitors to Grand Marais
- All of it
- Access and fishing opportunity
- Enjoy seeing the expensive yachts coming and going through the summer
- Cleaning fish, easy launching
- How well it's maintained
- The green space and benches to sit on to look over water
- The ease of launching
- Locale. Can safely launch
- That when you need the bathrooms and cleaning station in the spring they aren't open. You are required to pay for them through a \$10 launch fee for a bad launch and dock
- Picturesque view from the dock and bathrooms
- Convenient bathrooms
- Access to lake Superior
- It offers valuable service to our visitors
- Working bathrooms
- Boat launch and fish cleaning
- I love that it's an open space for all to park, launch boats or water vehicles, clean fish, use bathrooms whether you're at the beach, marina, or stopping by and it's just an integral part of GM as it's the launching point in our harbor.
- Boat launch and docking
- Getting boat in the water quickly and safely tying up to use to facility
- Harbor of refuge for recreational boaters
- Ther it is there, really need slips so we can put our boat here instead of out of town
- Transient boats
- The bathrooms
- The opportunity for marine traffic to stop and/or stay in our wonderful, small town to bring commerce to our businesses
- The launch and restrooms
- The launch
- Being able to launch a boat
- That is has lots of potential for locals, transient and seasonal boaters
- The boat launch and fish cleaning station
- That it is a harbor of refuge
- Being able to pick up customers
- Docks
- Nothing. It sucks only having one launch
- Cleanliness
- Easy access
- Nature in abundance
- Bring able to launch the boat. Ideally dock all season
- It's harbor of refuge! Boats need to get of the water if storms pop up.

What improvements or future services would you like to see at the marina?

 Copy chart

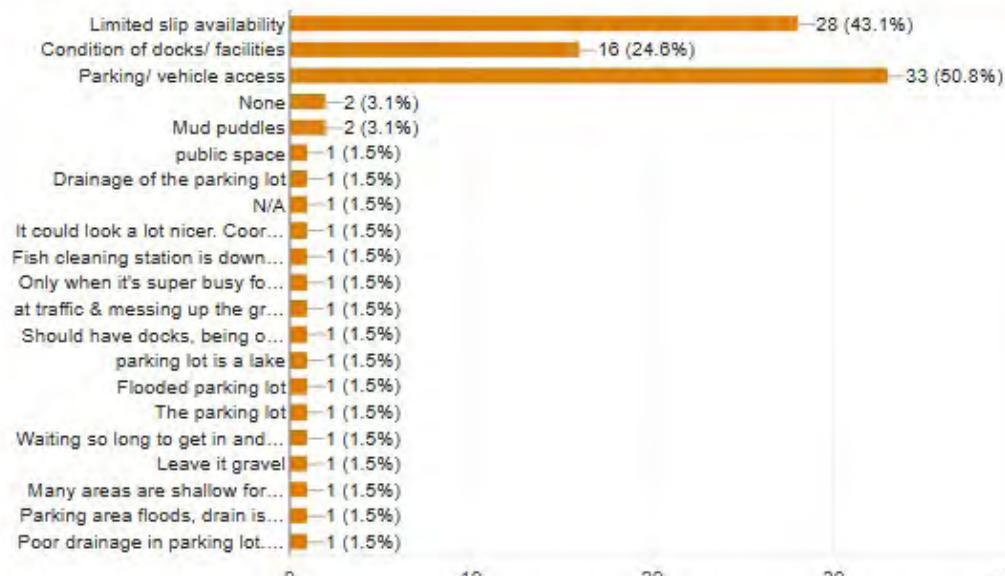
73 responses



What issues or challenges do you currently experience at the marina?

 Copy chart

65 responses



Please share any additional comments or ideas for the marina:

- Pave the parking lot add a few docks near launch.
- Figure out more docking
- Please add dock space for seasonal slips
- Lower fuel cost
- The Harbor Master's building needs improved, the sidewalks/pathways are narrow, the parking lot is flooded very often, there could be more restrooms and showers for marina guests, the fuel pumps need upgraded/ they are extremely slow & additional dockage added at the old coast guard docks, by the entrance of the harbor would be nice and helpful for boaters. The diesel fuel prices are too high. We don't have a designated kayak or canoe launch site or any dockage for fishing.
- Fish cleaning station is too expensive for the township. To high of maintenance and how often it has to be pumped. Get rid of it!
- More accessibility for individuals with disabilities.
- Pave the parking lot
- Full time harbor master
- The marina facilities need to be kept clean! They are always out of soap! Bathrooms are not clean. There are cob-webs and dirt/sand in corners of the floor/ walls... both inside and outside all season long. If you ask the staff they tell you they clean everyday, but checking to see if there's toilet paper and using toilet bowl cleaner isn't cleaning... the township needs to hold a higher standard. Use a checklist and have accountability.
- I think the launching fee for the marina is fair, however the town has a large expense in maintaining the fish cleaning station. It has been suggested that the launch fee be raised to help with the fish cleaning expense. I completely disagree with this. There are a lot of people who launch a boat at the marina and will never use the fish cleaning station and there are a lot of people who use the fish cleaning station who will never launch a boat , such as pier and inland lake fisherman. These are two different expenses and should be treated as such.
- paint the sea wall
- Lights
- Maybe a couple of dock extensions for still fishermen to use.
- Do not expand it. Keep the beach area free and open for residents and tourists
- Just spiff it up. Blend it in to the background.
- The marinas present design lacks in attractiveness - need to address parking surace, building material consistency, picnic area for general public and greenspace. present its pretty ugly - make it beautiful - the marina must be more attrative
- Needs to be paved
- We need drainage in the parking lot. Pavement too.
- Do not want to see a huge marina with additional docks and a break wall. There are far more important things our money should be used for locally. A huge marina will damage the Harbors aesthetics and become an eye sore. Current seawall needs to be painted/repaired and boat launch area needs improvements. Bathrooms are constantly filthy. Better maintenance overall is needed for the area and better management. A harbor master building is needed.
- Update the pumps. No fees for residents that live here and already pay taxes here in the community.
- Install correct drainage in parking lot and grade or pave the lot.
- Replace cutting boards on fish cleaning station.
- It would be a great attraction to add boat slips to the marina!
- I believe the local, tax paying residents, should have considerably less expensive access to the marina and launch than people coming in from other places. I have no issue paying the current fee, but I think there should be a significant disparity between the fee for residents and the cost for non residents.
- Have 2 boats and nowhere to keep them
- Docks would bring needed revenue to the marina
- Love our Marina
- Parking needs to get fixed
- The parking is bad whenever there has been rain.

## What do you currently enjoy most about West Bay?

- Swimming
- Beach marina fishing swimming
- The true Beauty
- The view, access and serenity
- The beaches
- Everything
- Warmer water
- I am very concerned about the rate at which West Bay is filling in with sand. The original breakwall project was never completed.
- The beach frontage
- Beach, swimming, kayaking. Water is calm and clean.
- Being able to get out to the big lake safely. Seeing the float planes using it. Watching larger boats come in to dock for the night.
- I love it all.
- That you can see the bay. We need set parking areas along the Bay Area for events like 4th of July, Splash in, Parades etc.
- The view
- Being in my boat.
- Access to Lake Superior
- Being able to moor my boat
- It's pretty, but confusing.
- Swimming and boating
- The view
- West Bay IS THE ABSOLUTE GEM of Grand Marais! Without the bay we would be nothing!
- The view and easy access.
- The water itself, the beauty, the shoreline etc...
- Grand Marais
- sunbathing
- Beach
- The fact it still exists
- Nothing
- Beach
- Open, unobstructed view.
- The open area & view
- scenery
- The view
- Looking at the dunes, beach, lighthouse and boats, planes, swimming occasionally. Watching the weather change... Appreciating its fabulous beauty. Try to think about how it can continue to attract visitors and turn them into residents! Keep it special in this world of big box boring.
- Beach access
- Scenery, harbor, kayaking.
- The visual appeal of the harbor is the center point for our community.
- Not much honestly, its hard to find parking... which should be much bigger down by the park. The beach is plenty big enough.. maybe there should be parking over on the east side where locals usually go ? It's a community on the water a large parking lot or boat ramp could go there with easy access docks etc.
- The cleanliness of the facilities
- Everything
- swimming
- More docks and fix the parking lot.
- It's beauty as the face of the town. The view.
- The view, sandy beaches, and plenty of beach space.
- Usually sheltered from the winds
- The peaceful and relatively quiet general atmosphere.
- Inlet to Superior
- beauty and protection from the lake
- The beach

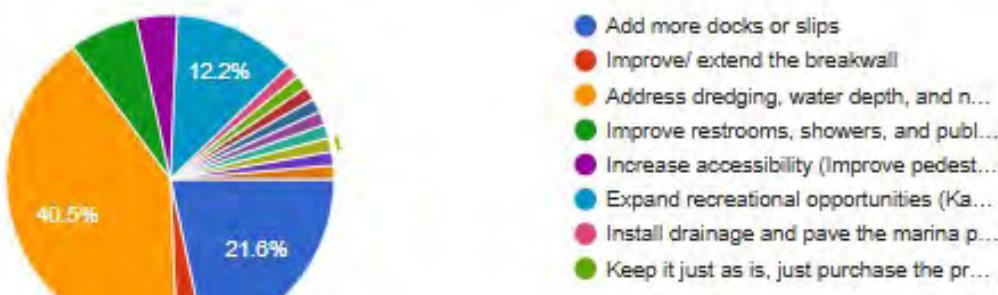
## What improvements or changes would you like to see in West Bay's future?

- Picnic area, walking area,
- Worried about sand infill.
- Protect the entrance to West Bay. The new breakwall looks like a big mistake
- Create a fishing pier and more docking
- Seasonal docking
- Please purchase the property being made available to the Township. I've been visiting for 50 years, and would gladly donate. Given the many returning visitors to Grand Marais, I can't imagine I'm the only one that would like it preserved.
- Finger docks would be great
- None. Let nature take its course
- Stop building houses that block the damn view
- Rope off swimming area
- The break wall needs extended to keep our Harbor from rapidly filling in with sand. Sand need dredged out to keep the Harbor open.
- Maintain its beach
- Swim platform near public beach. Additional docks added to marina (like maybe north/south finger docks)
- Make sure the sand doesn't take it over. Some more docks.
- I just want improvements made that will help protect and better the harbor and GM.
- Less building p
- More boat launches
- Fixing the fish cleaning station
- Dredging keeping the sand out
- docks and transient slips
- Dredging to keep bay open
- Completely dredged ASAP and the dredging maintained on a yearly basis.
- It will have to be dredged periodically.
- Slips
- Would like to see the septic tank polluting that is being done around the Bay STOPPED! The twp. Board could and should set up regulations for this that force property owners to UPDATE their systems!! Maybe the state should get involved as well.
- Volleyball net set up correctly
- erosion
- Dredging and removal of accreted sand from failure of breakwall to keep it out
- Better steps down to beach
- Dredging
- Nothing
- Better beach access
- maybe a couple of floating swim rafts anchored in front
- Water quality should be monitored regularly
- Protection of the water, beach, ability to walk and play. Places to eat and buy souvenirs.
- it is beautiful - we owe it to the community to make the marina beautiful
- New bathroom
- Please pave the marina parking lot and put in drainage.
- Harbor desperately needs to be dredged to its previous depth. Better fish sanctuary structures to create better recreation fishing. Proper studies to understand why the harbor is continuing to fill with sand. A 5 and 20 year plan for the harbor.
- See above (Not much honestly, its hard to find parking... which should be much bigger down by the park. The beach is plenty big enough.. maybe there should be parking over on the east side where locals usually go ? It's a community on the water a large parking lot or boat ramp could go there with easy access docks etc.)
- Parking lot that's not flooded
- no food trucks/fix the bathroom
- dredging
- A fishing pier for kids
- Maintaining the breakwall to not lose our harbor of refuge status.  
More fishing opportunities.
- Finding a solid solution to the sand filling it in
- Dredging is essential. Docs would be a close 2nd
- Going to have to address sand intrusion and possibly invest in some dredging equipment
- maintain and dredge
- Slips
- Make sure the bay does not fill in and it stays deep enough for boating!!

What should be number 1 priority for improving the West Bay Harbor area?

Copy chart

74 responses



▲ 1/2 ▼

Address Dredging... = 30 people

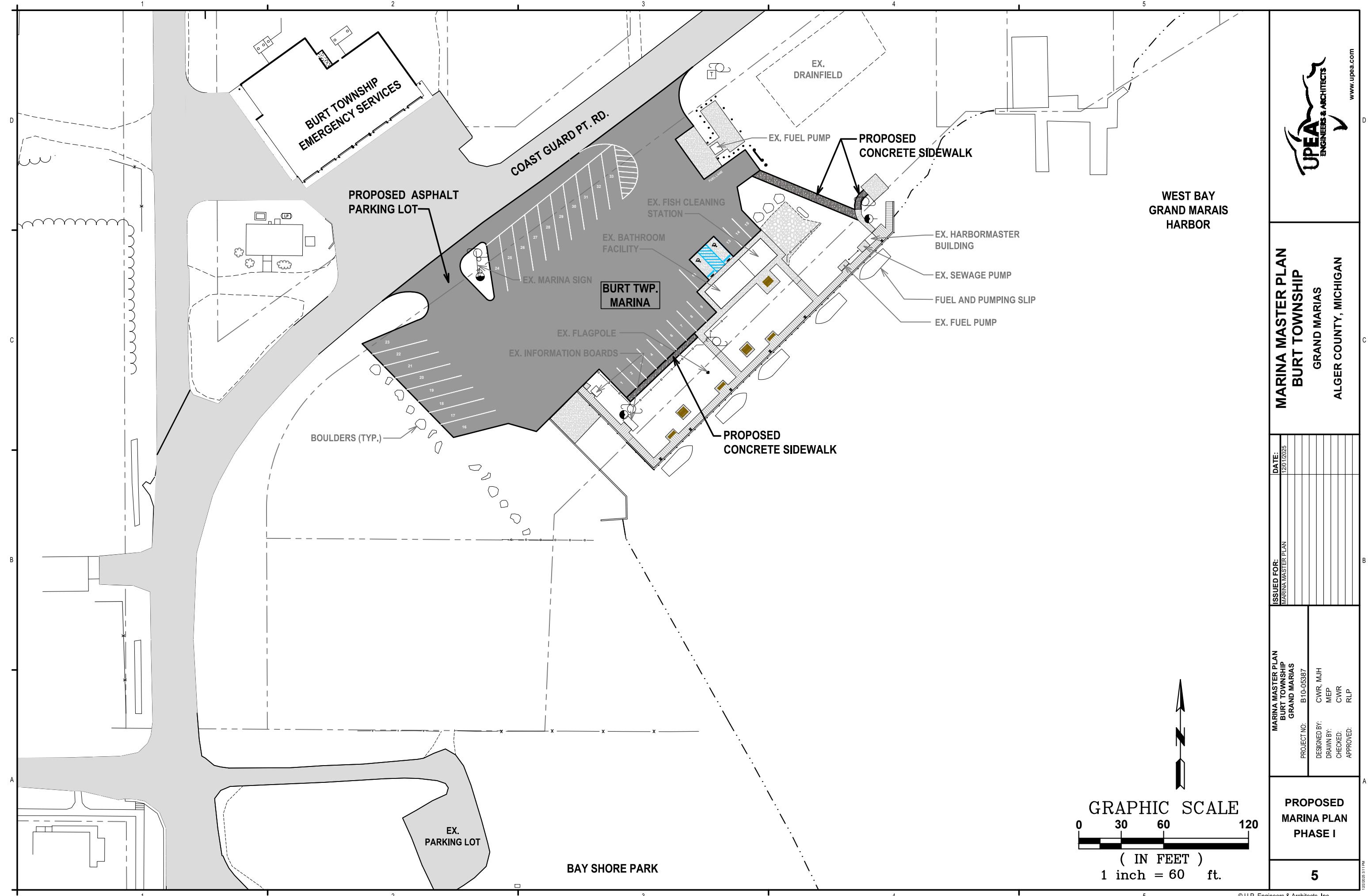
Add more docks and slips = 16

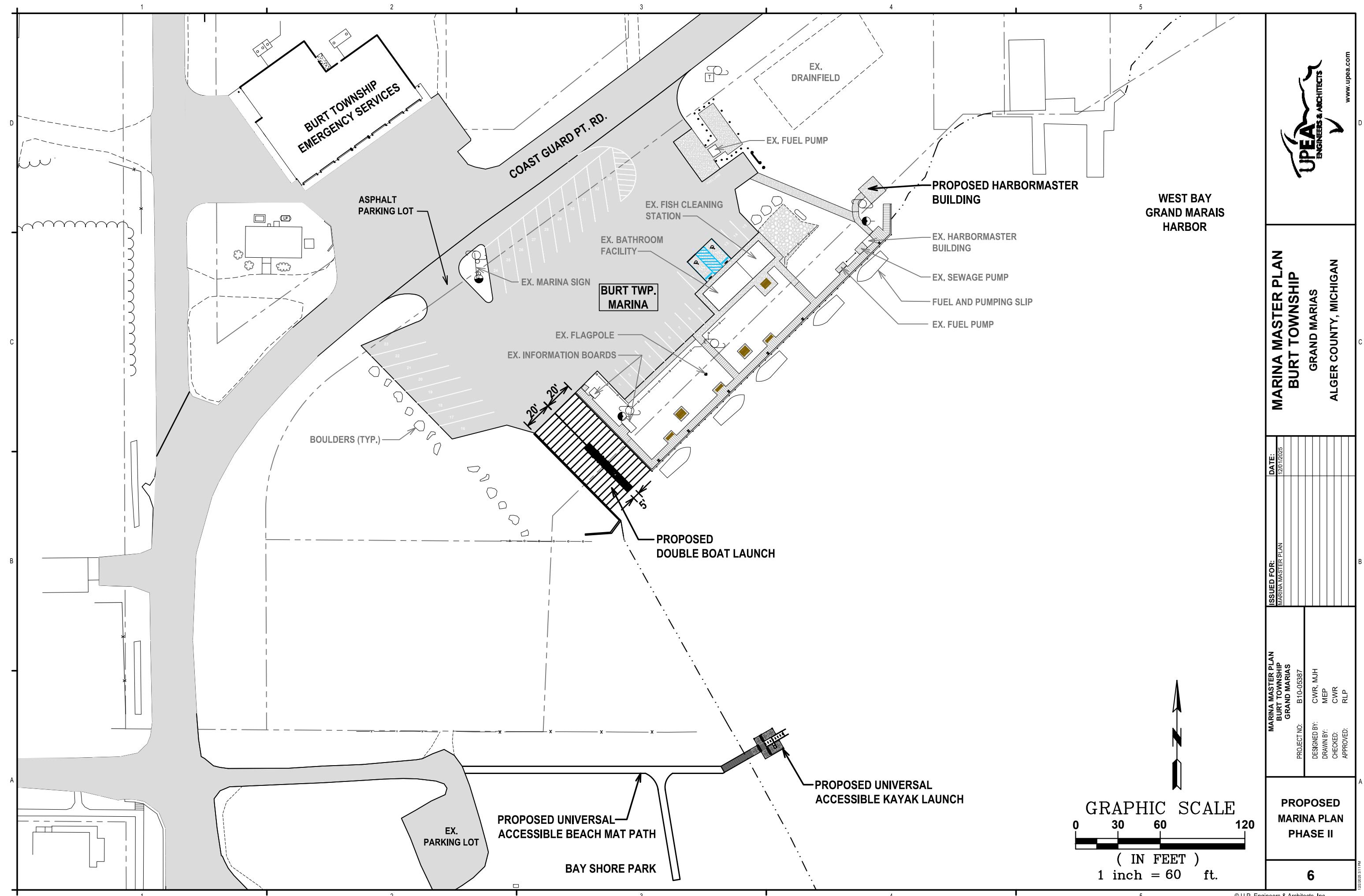
Expand recreational opportunities = 9

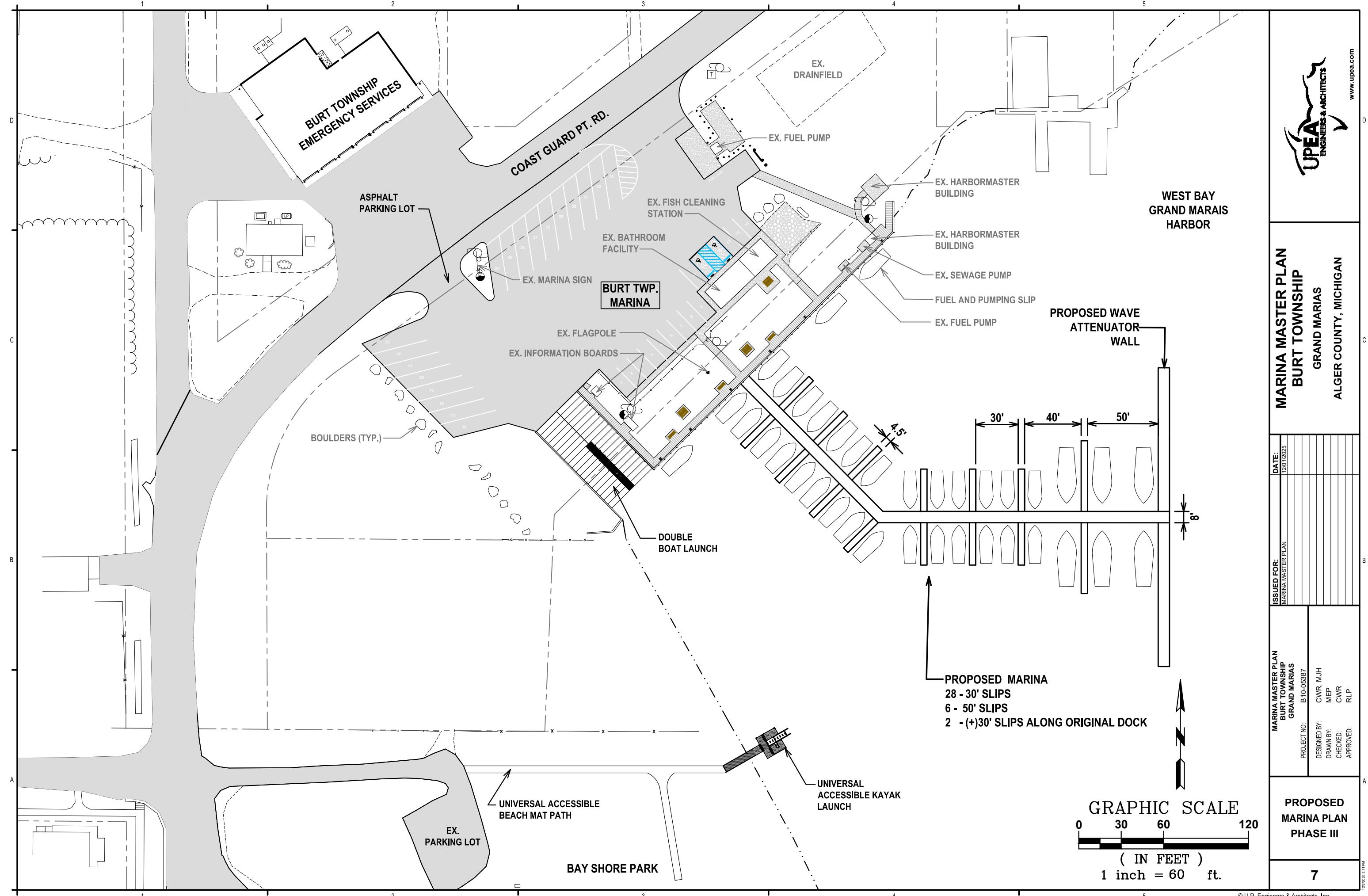
- Pave marina lot.
- fishing pier
- None of the above
- Level parking area
- A mooring field for people to moor their boats
- Another launch
- None

▲ 2/2 ▼

**APPENDIX E**  
Marina Master Plan Drawing and Phases







**APPENDIX F**  
Preliminary Estimates and Feasibility Analysis

## PRELIMINARY ESTIMATE

BURT TOWNSHIP

MARINA STUDY AND MASTER PLAN ESTIMATE



<b>PHASE I - PARKING LOT IMPROVEMENTS</b>				
<b>Item</b>	<b>Amount</b>	<b>Units</b>	<b>Cost</b>	<b>Total</b>
MOBILIZATION (\$10,000 MAX)	1	LSUM	\$10,000	\$10,000
HMA SURFACE REMOVAL	100	SYD	\$20	\$2,000
DR STRUCTURE, 48 INCH DIA.	3	EA	\$6,000	\$18,000
STORM SEWER, 12 INCH, RCP	155	FT	\$100	\$15,500
AGGREGATE BASE CONDITIONING	4100	SYD	\$10	\$41,000
CONCRETE SIDEWALK	100	SYD	\$80	\$8,000
3" ASPHALT PAVING	4100	SYD	\$30	\$123,000
PAVEMENT MARKINGS	1	LSUM	\$7,500	\$7,500
			<b>CONSTRUCTION SUBTOTAL</b>	<b>\$225,000</b>
			<b>10% CONTINGENCY</b>	<b>\$25,000</b>
			<b>ENGINEERING</b>	<b>\$25,000</b>
			<b>PHASE I TOTAL</b>	<b>\$275,000</b>

<b>PHASE II - MINOR MARINA UPGRADES</b>				
<b>Item</b>	<b>Amount</b>	<b>Units</b>	<b>Cost</b>	<b>Total</b>
MOBILIZATION (\$10,000 MAX)	1	LSUM	\$10,000	\$10,000
TURBIDITY CURTAIN, DEEP	500	FT	\$20	\$10,000
ACCESSIBLE KAYAK LAUNCH & BEACH MATTING	1	LSUM	\$125,000	\$125,000
HARBORMASTER BUILDING	1	LSUM	\$25,000	\$25,000
BOAT LAUNCH EXPANSION (SHEET PILE, PLANKS, SKID PIER, ETC.)	1	LSUM	\$110,000	\$110,000
MISC. SITE AMENITIES (BENCHES, TABLES, SIGNS, TRASH CANS, ETC.)	1	LSUM	\$5,000	\$5,000
			<b>CONSTRUCTION SUBTOTAL</b>	<b>\$285,000</b>
			<b>10% CONTINGENCY</b>	<b>\$35,000</b>
			<b>ENGINEERING</b>	<b>\$55,000</b>
			<b>PHASE II TOTAL</b>	<b>\$375,000</b>

<b>PHASE III - MARINA EXPANSION</b>				
<b>Item</b>	<b>Amount</b>	<b>Units</b>	<b>Cost</b>	<b>Total</b>
MOBILIZATION (\$100,000 MAX)	1	LSUM	\$100,000	\$100,000
TURBIDITY CURTAIN, DEEP	1500	FT	\$20	\$30,000
MARINA DREDGING	1500	CYD	\$50	\$75,000
BARGE & PILE DRIVING EQUIPMENT, FURN	1	LSUM	\$150,000	\$150,000
12x53 H-PILES - MAIN DOCK	2300	FT	\$120	\$276,000
12x53 H-PILES - SLIP DOCKS	1300	FT	\$120	\$156,000
8.0' WIDE MAIN DOCK	4300	SFT	\$80	\$344,000
4.5' WIDE SLIP DOCKS (INCL. DOCK, POSTS, CLEATS, ETC.)	2200	SFT	\$100	\$220,000
WAVE ATTENUATOR WALL	200	FT	\$300	\$60,000
MARINA DOCK LIGHT FIXTURES	10	EA	\$10,000	\$100,000
UTILITY PEDESTALS	20	EA	\$6,000	\$120,000
			<b>CONSTRUCTION SUBTOTAL</b>	<b>\$1,631,000</b>
			<b>10% CONTINGENCY</b>	<b>\$163,000</b>
			<b>ENGINEERING</b>	<b>\$206,000</b>
			<b>PHASE III TOTAL</b>	<b>\$2,000,000</b>

<b>MARINA MASTER PLAN TOTAL</b>	<b>\$2,650,000</b>
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## **APPENDIX G**

### **USACE Water Levels**



US Army Corps  
of Engineers  
Detroit District



DETROIT DISTRICT  
U.S. ARMY CORPS OF ENGINEERS  
CELRE-CDH-W  
477 MICHIGAN AVENUE  
DETROIT, MICHIGAN 48226

### **AUGUST 2025 GREAT LAKES WATER LEVEL SUMMARY**

Note: that all forecast water level comparisons are based on the center of the forecast band (green dashed line).

#### **LAKE SUPERIOR**

Lake Superior continued its seasonal rise from July to August, rising about 2 inches to a level of 602.00 feet. This level is 2 inches below its August long-term average (LTA) level, less than an inch above last August's level, 19 inches above its August record low level, and 15 inches below its August record high level. Precipitation was near average in August, but water supplies\* were below average likely due to above average evaporation. The current 6-month water level forecast projects Lake Superior will likely begin its seasonal decline next month. From September to February, levels are projected to be between 0 to 4 inches above last year's levels, about 3 inches below LTA, 13 to 17 inches above record low levels, and 16 to 19 inches below record high levels.

#### **LAKE MICHIGAN-HURON**

Lake Michigan-Huron likely began its seasonal decline from July to August by declining 1 inch to a level of 578.94 feet. This level is 5 inches below its August LTA level, 9 inches below last August's level, 27 inches above its August record low level, and 38 inches below its August record high level. Basin precipitation and water supplies\* were below average. Lake Michigan-Huron is forecast to continue its decline over the forecast horizon. The forecast projects water levels to be 3 to 8 inches below last year's levels from September to November, close to last year's levels in December and January, and 2 inches above last year's levels in February. Over the next 6 months, Lake Michigan-Huron levels are predicted to be 5 to 6 inches below LTA levels, 23 to 24 inches above record low levels, and 39 to 46 inches below record high levels.

#### **LAKE ST. CLAIR**

Lake St. Clair likely began its seasonal decline falling about 2 inches from July to August to a level of 575.00 feet. This level is 3 inches above August's LTA level, 9 inches below last August's level, 33 inches above its August record low level, and 28 inches below its August record high level. The current 6-month water level forecast projects Lake St. Clair will continue its decline through the fall months. From September to January, the forecast predicts Lake St. Clair water levels will be 2 to 10 inches below last year's levels, and then 10 inches above last February's level, which was impacted by ice. Over the next 6 months, the forecast projects water levels to be within 4 inches of LTA levels, 27 to 42 inches above record low levels, and 31 to 38 inches below record high levels.

#### **LAKE ERIE**

Lake Erie continued its seasonal decline from July to August, falling about 4 inches to a level of 572.05 feet. This water level is 3 inches above the August LTA level, 8 inches below last August's level, 37 inches above its August record low level, and 26 inches below its August record high level. Basin precipitation and water supplies\* were below average. The current 6-month water level forecast projects that Lake Erie will continue its seasonal decline into early winter. The 6-month forecast projects water levels to be 4 to 9 inches below last year's levels from September to January and then near its February level from last year. The forecast also indicates that water levels will be 0 to 2 inches above LTA levels, 31 to 35 inches above record low levels, and 26 to 34 inches below record high levels over the next 6 months.

#### **LAKE ONTARIO**

Lake Ontario continued its seasonal decline from July to August, falling 6 inches to a level of 245.67 feet. This level is 1 inch below the August LTA level, 2 inches below last August's level, 35 inches above its August record low level, and 28 inches below its August record high level. Precipitation and water supplies\* were below average in the basin. The current 6-month water level forecast projects that Lake Ontario will continue its seasonal decline through the fall months. Lake Ontario levels are forecast to be 3 inches below last year's level and 2 inches below its LTA level in September. From October to February, water levels are forecast to be 2 to 10 inches above last year's levels and 1 to 3 inches above LTA levels. Additionally, water levels are forecast to be 31 to 36 inches above record low levels, and 21 to 28 inches below record high levels.

\* "Water supplies" refers to the combined quantity of precipitation plus runoff minus evaporation. Also known as the net basin supply.

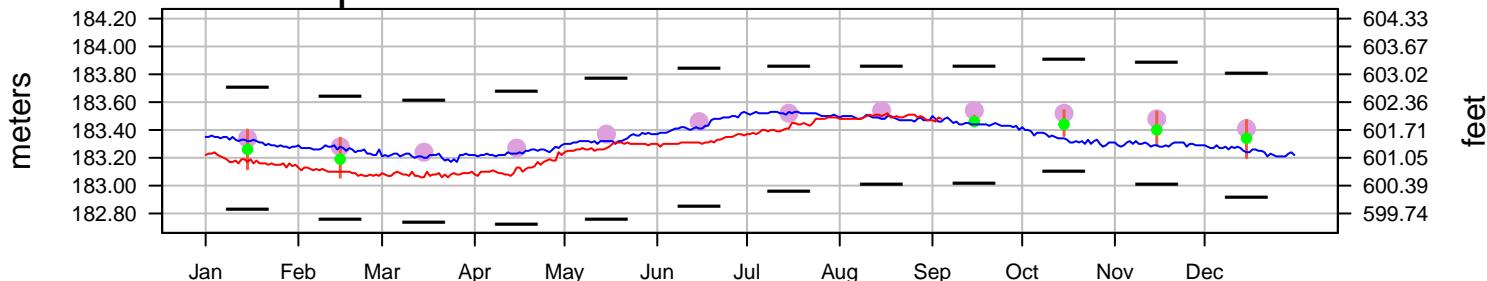


# Daily Great Lakes Water Levels

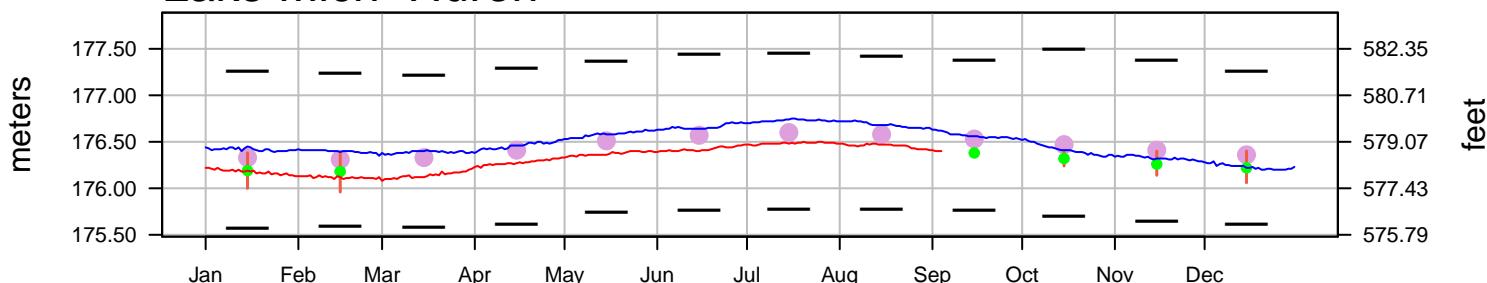
— 2025  
— 2024  
— Coordinated Forecast

● LTA Monthly Mean  
— Record High/Low Monthly Mean

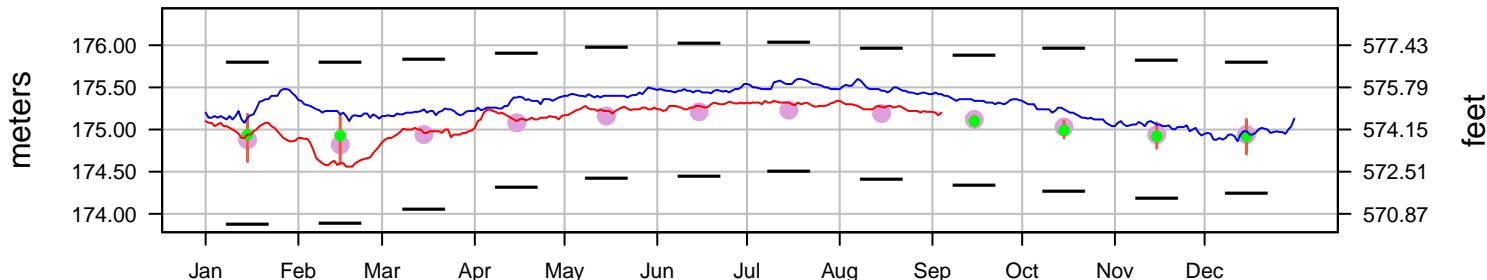
## Lake Superior



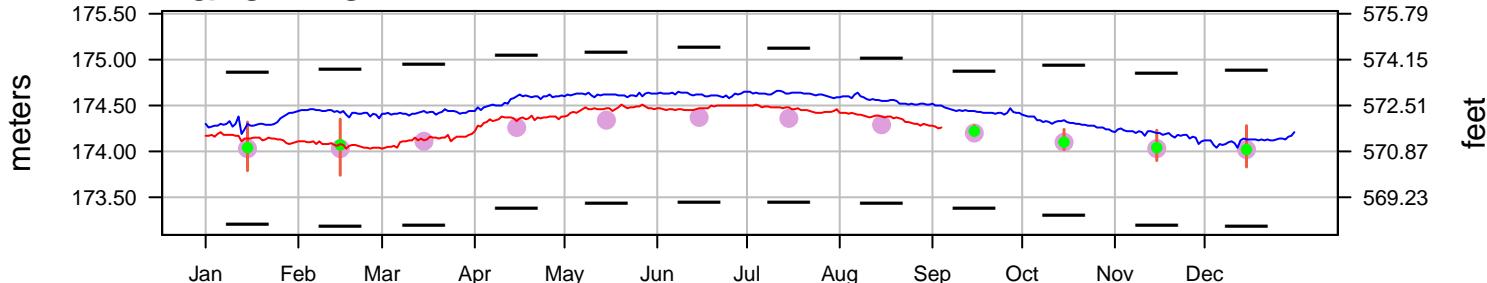
## Lake Mich–Huron



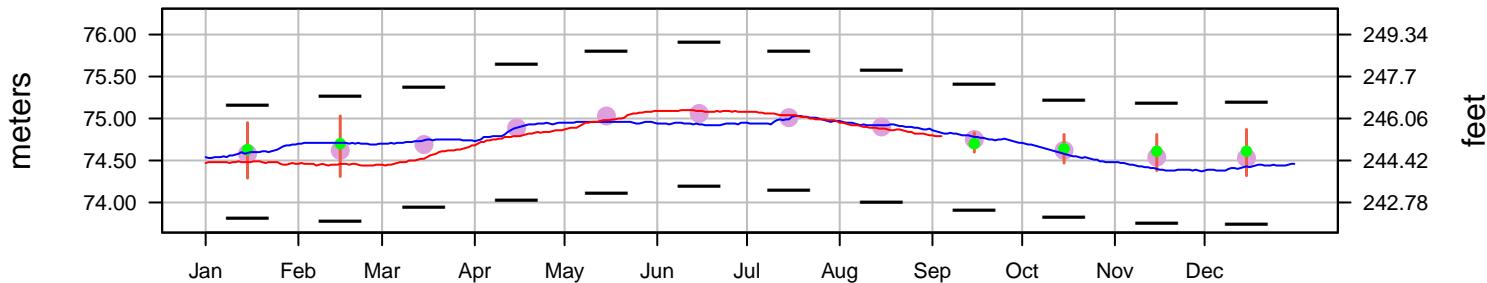
## Lake St. Clair



## Lake Erie



## Lake Ontario



Lakewide average levels are based on a network of water level gages located around the lakes.

LTA and record levels are computed from a period of record of 1918 to 2024

Elevations are referenced to the International Great Lakes Datum (1985).

Updated 2025-09-05