

Menasha aldermen occasionally attend meetings of this body. It is possible that a quorum of Common Council, Board of Public Works, Administration Committee, Personnel Committee may be attending this meeting. (No official action of any of those bodies will be taken).

**CITY OF MENASHA
PARKS AND RECREATION BOARD
Council Chambers, 3RD Floor City Hall
140 Main Street, Menasha**

April 8, 2013

6:00 PM

AGENDA

A. CALL TO ORDER

B. ROLL CALL/EXCUSED ABSENCES

C. MINUTES TO APPROVE

1. [Minutes of the March 11, 2013 Park Board Meeting](#)

D. PUBLIC COMMENT ON ANY MATTER RELATED TO CITY PARKS AND RECREATION

Five (5) minute time limit for each person

E. COMMUNICATION

1. [Correspondence from Jack Fry – 318 Willow Lane](#)

F. REPORT OF DEPARTMENT HEAD/STAFF/OR CONSULTANTS

1. Department Report – PRD Tungate
2. Park, Pool and Vandalism Report – PS Maas

G. DISCUSSION

1. [Pool Analysis/Future Options \(draft document available at meeting\) – PRD Tungate, PS Maas](#)
2. [Gilbert Site Plan/Grant Update – PRD Tungate](#)
3. New Neighborhood Park Planning – PRD Tungate

H. ACTION ITEMS

1. [PFD Station – Memorandum of Understanding Between City of Menasha and U.S. Coast Guard](#)
(updated copy may be available at meeting)

I. PUBLIC COMMENT ON ANY MATTER LISTED ON THE AGENDA

Five (5) minute time limit for each person

J. ADJOURNMENT

CITY OF MENASHA
Parks and Recreation Board
Council Chambers, 3rd Floor City Hall – 140 Main Street
March 11, 2013
DRAFT MINUTES

A. CALL TO ORDER

The meeting was called to order by Chr. Dick Sturm at 6:05 p.m.

B. ROLL CALL/EXCUSED ABSENCES

MEMBERS PRESENT: Chr. Dick Sturm, Nancy Barker, Lisa Hopwood, Cindy Schaefer-Kemps, Ald. Kevin Benner

MEMBERS EXCUSED: Luke Schiller, Sue Pawlowski

OTHERS PRESENT: PRD Tungate, PS Maas,

C. MINTUES TO APPROVE

1. **Minutes of the February 11, 2013 Park Board Meeting**

Moved by L. Hopwood seconded by N. Barker to approve the February 11, 2013 Park Board minutes. Motion carried.

D. PUBLIC COMMENT ON ANY ITEM OF CONCERN ON THIS AGENDA

Five (5) minute time limit for each person.

No one spoke.

E. REPORT OF DEPARTMENT HEADS/STAFF/ OR CONSULTANTS

1. **Department Report – PRD Tungate**

PRD Tungate reported on the status of designing and purchasing a handful of directional signs that would complement the wayfinding signs recently installed. There are a couple park directional signs and ones for the Police Department, etc. scattered throughout the city. This came about by the request from the VFW to have an Isle of Valor sign place near Smith Park. ActiveNet recreation software is very close to going live. The speed of transactions has been sporadically slow and this issue needs to be addressed by the IT Department. PRD Tungate has started working on the Gilbert site grant. He is confident that the City's application will be very strong and stands a good chance of receiving funding.

2. **Park, Pool and Vandalism Report – PS Maas**

PS Maas reported a small amount of bench vandalism at Smith Park. Repairs were also made to the fountain in Smith Park. Pool filters have been installed and a dramatic improvement in the amount of backwashing and overall chemical performance is expected. Ski trails have received compliments this year. Ice rink flooding has stopped for the season. Tree trimming is occurring. ADA issues will be addressed by CVMIC staff that plan to visit the department this spring. New scoring structure will be built this spring for the west diamond.

F. DISCUSSION

1. **Format Date for Presenting Pool Analysis/Options to the Public**

PRD Tungate updated the Board on the status of the pool study. Water Technologies, Inc. is close to finishing up. It was determined that, if possible, staff should present Water Tech's study at the April meeting and then schedule a public presentation by Water Tech staff at the May meeting at the library.

2. **Gilbert Site Preliminary Design Plan Presentation – March 20, 2013 – 6:00 p.m. – Menasha Library, Company E Room**
PRD Tungate encouraged the Board to attend what should be an informative meeting about plans for the shoreline along the old Gilbert Mill site.
3. **New Park Update**
PRD Tungate explained that a CSM is being done and that closing on the property for the new park is expected to occur by April. Some discussion was held on how the area could be initially opened up for public use pending the development of permanent plans.
4. **PFD Loaner Station Update**
The WDNR has agreed to reimburse the city for all supply costs towards the construction of a youth life jacket loaner station at the Jefferson Park boat landing. PRD Tungate will work with CA Captain on an agreement to allow the small station to be placed on park property.

G. ACTION ITEMS

1. **None.**

H. PUBLIC COMMENT ON ANY MATTER LISTED ON THE AGENDA

Five (5) minute time limit for each person

1. Chr. D. Sturm requested that for next month's meeting, staff bring back plans for making the new park open for some limited public use while developing a master plan for park continues.

I. ADJOURNMENT

Moved by Ald. K. Benner, seconded by L. Hopwood, to adjourn at 7:40 p.m. Motion carried.

April 1, 2013

Members of Menasha Parks and Recreation Board

Friends,

I have been a frequent visitor to the Menasha Conservancy over the past few years, as a hiker, birdwatcher, and cross-country skier. I have come to love this small and unknown treasure of our City. While enjoying solitary walks, I often found myself noting a need for clearing some of the remaining evidence of the Conservancy's previous existence as a casual dump, and how I might help make that happen.

Last year, I mentioned it to fellow members of the Northeast Wisconsin Birding Club as a possible service project for members. Several immediately expressed interest in doing something for the Conservancy.

I discussed a project with Director Brian Tungate, who expressed interest. As I thought more about the Conservancy, I became increasingly aware of several issues:

1. The Conservancy is part of a larger wetland ecosystem stretching from Heckrodt Wetland Reserve through the Conservancy and along much of the North Shore area including privately and publicly owned properties, many "undevelopable" in conventional building terms – and some already developed, but incorporating ponds, wetlands and wooded areas.
2. The City has done some effective work to: remove substantial amounts of waste materials; cap some areas with clay; and create and maintain a system of trails in a portion of the property. The City has also provided a parking area, and during winter months groomed an excellent cross-country ski trail.
3. There are tentative plans for future construction of a portion of the Friendship Bike Trail across a portion of the wetland.
4. The presence of new residential developments to the east and north of the property demonstrate an interest in the land either as developable or simply as a value enhancer for the properties already developed.
5. The City has, to my knowledge, no published long-range plan or conceptual documentation for the Conservancy.

I began to widen the number of people and organizations who might be able to contribute expertise to resolve my questions. At this point, Joe Henry of the DNR, Tracey Koenig of Heckrodt, Steve Petznick of Mosquito Hill Nature Center (and President of the Northeast Wisconsin Birding Club), Denny Simon and Jim Klinkert of the Northeast Wisconsin Land Trust and several members of the NWBC have expressed interest in helping evaluate the site relative to flora and fauna – particularly bird life. Brian Tungate and Greg Keil have been kept informed and have contributed valuable information. We are considering widening the participation to other groups that might have an interest including the Winnebago County chapter of the National Audubon Society and the Wild Ones.

I am organizing a meeting and evaluative tour of the area for May 15. Our hope is that we can provide members of the Board with at least a rough preliminary evaluation of the property for flora and fauna preservation and enhancement. It is possible that there will be suggestions for further study.

It is my hope that any report and information from this effort will assist the Board in developing a mission statement and long range plans for our Conservancy. In the meanwhile, I am hoping that a small group of well-qualified avian experts will begin a survey of birdlife in the Conservancy. None of the above activities will incur any costs for the City. Besides providing information for the Board's own planning activities, any documentation generated could provide supporting evidence for future grant requests in support of potential habitat expansion or improvement projects which might be identified.

Thank you very much for your foresight in acquiring and caring for this valuable ecological resource. And thank you for any input and support you may provide.

Sincerely,

Jack E. Fry
318 Willow Lane
Menasha

TABLE OF CONTENTS

Introduction 2

Methodology 2

Facility Evaluations 3

Recommended Options..... 9

Recommended Options – Estimate of Probable Costs 11

Recommended Options – Conceptual Plans 14

Appendix A –Photos 17

Appendix B – Deterioration Mechanisms 38

Appendix C – ADA Accessibility 40

Appendix D – Trends..... 43

Appendix E – Magic Makeovers for Less 46

Appendix F – Intergenerational Aquatic Use 49

Introduction

The purpose of this report is the evaluation of the constraints and opportunities of the existing structures located within the City of Menasha Swimming Pool Complex in Menasha, WI. This evaluation includes the following areas:

- Swimming Pools
- Administration/Change Facilities, Concessions and Equipment Building
- Site Considerations

Each of the evaluation areas will include the following:

- Overview
- ADA compliance
- Compatibility with proposed uses
- Compliance with current codes
- Aesthetics

The intent of the facility evaluation is to determine the present conditions of the Menasha, WI swimming pool complex.

This report summarizes the existing condition of the facility and recommended short-term and long-term repairs or replacements. Each recommendation has been given a level of priority and an associated probable cost range.

Methodology

The facility evaluation consisted of an on-site visual inspection of the pool and mechanical room, gutter system, exposed piping, filters, chemical control and feed systems, deck and deck equipment. In addition, Vince Maas - Superintendent, for The City of Menasha Parks and Recreation Department provided information regarding systems' performance and specific areas of concern.

Dean Mueller of WTI conducted the site review.

The following record drawings were reviewed as part of the analysis:

Thirty-three (33) Drawing sheets dated July 31, 1989 - Prepared by Gremmer Bablitch.

Facility Evaluations

OBSERVATIONS

The general, overall condition of the facility is exceptional for a facility celebrating its 55th season in 2012. The facility underwent a major renovation in 1991. Pool and building structures appear generally sound. The location of the park makes it easily accessible to the community residents and area visitors. There is ample space on site to upgrade the facility by extending its life through continued recreational appeal and programmatic use. Specific areas of concern are the pool mechanical systems, pool leaks, roof leaks, and the potential for expanded programming and recreational usage with additional features. At the pool's peak usage times, current vehicular and bike parking space is adequate in handling new demands.

General Site:

The adjacent land uses are residential and municipal. The entrance to the facility is on the northwest side of the facility.

Aquatic Site:

The admission control, lifeguard office, bather preparation, and concessions are housed in one (1) main building that forms the northern boundary of the pool facility. Once through the building, the pools and deck occupy the southern end of the facility site. Pool mechanicals are housed in one (1) building located at the western corner of the facility.

The perimeter fencing on all sides of the pool is a 6 foot high chain link. This is in fair condition.

Internal to the pool complex is a wood rail barrier system separating the landscape areas from the pool area.

There are shade structures provided around the pool complex.

Building:

EXISTING ADMINISTRATION/CHANGE FACILITIES/CONCESSIONS AND EQUIPMENT BUILDING

The existing buildings were designed and constructed in 1957. The buildings underwent subsequent modifications in 1990. They are constructed with concrete block exterior walls, steel roof structure with membrane cover and metal fascia/soffit elements. These one-story buildings house administration, reception counter, men's and women's locker rooms, men's and women's restrooms, storage, and mechanical rooms. These structures are at the same level as the pools. The walls are epoxy coated concrete block with some tile finishes. There are many areas that exhibit spalling and have been patched and painted over.

This condition is generally due to moisture inside the block which becomes trapped behind the paint. Once this type of deterioration begins it is difficult to deal with it in terms of maintenance and appearance. The ceilings in general will require some replacement, paint and resealing. No signs of gross deterioration in the roof structure were noticed. In general, lighting in the rooms was considered adequate. Light fixtures in all areas were surface mounted, steel fixtures with plastic shields. The fixtures are rusted which generally indicates potential electrical problems in the future from moisture. Also there are wall louvers in the locker areas that are deteriorated, indicating a lack of humidity control and fresh air. It is suspected that during periods of use the locker area may be humid and it is probably difficult to dry the floors. In the locker room areas there are lockers and benches provided. As a general note we can see that the quality of maintenance is good. Age, freeze/thaw cycles and humidity have taken a toll on the facility. The building is certainly up-gradable for extended life.

Admissions/Change Building Code Review:

- Building is well maintained and appears structurally sound.
- Hazardous construction materials are suspected.
- Counter heights and concession window heights are not ADA compliant.
- Doors and door hardware do not comply with ADA requirements.
- Lavatories do not meet ADA requirements.
- Toilet fixtures do not meet ADA requirements.
- Urinals do not meet ADA requirements.
- Showers do not meet ADA requirements.
- Shower drains do not comply with the current plumbing code.
- Existing fixture counts table:

<u>Fixtures</u>	<u>Men</u>	<u>Women</u>
Water Closet	3/1	5/3
Urinal	3/2	--
Lavatory	5	4
Shower	8	8

Based upon the above fixture count, the facility's capacity under the current Wisconsin Public Swimming Pool Code is 7500-8999 square feet of total pool water surface area. The limiting factor is the number of toilet fixtures.

Based upon the facility's pool size of greater than 15,000 square feet under the current Wisconsin Public Swimming Pool Code, the numbers of fixtures required are:

- Required fixture counts table:

<u>Fixtures</u>	<u>Men</u>	<u>Women</u>
Water Closet	4	18
Urinal	5	--
Lavatory	4	6

Shower 11 11

A fixture requirement comparison per Wisconsin Department of Safety and Professional Services 9SPS 390) is shown below. The following represents how many fixtures are required by SPS 390 (additional based upon the existing vs. current Code). It is as follows:

PLUMBING FIXTURES

	Existing	Current Code	Addl. Req'd
1. Showers (women)	8	11	3
(men)	8	11	3
2. Toilets (women)	7	18	8
(men)	5	4	0
3. Urinals (men)	5	4	0
4. Lavatories (women)	6	6	0
(men)	5	4	0

Aesthetic Considerations:

The existing building is a typical example of concrete masonry structures built in the 1950/1960's. The interior and the exterior of the building are dated and should be upgraded to provide a facility that represents a "state of the art" aquatic recreational facility and to correctly represent the character of the surrounding community of Menasha. This facility will require a significant renovation. This type of remodel will allow for an upgrade in the appearance of the interior and exterior of the building.

Compatibility with Proposed Uses:

While the proposed uses are similar to those currently in the facility, the space requirements dictated by new programs require new spaces be provided (i.e. Family change rooms, first aid room) Additionally, the current codes, ADA and facility requirements dictate renovation of the restrooms and shower facilities. The building is a concrete masonry structure; the roof framing members are steel. Substantial portions of the exterior concrete masonry walls will need to be maintained as these walls are bearing walls required to provide roof support. This renovation of the facilities combined with the age of the existing plumbing will require the construction of new supply and drain lines throughout the structure. These new lines will need to tie into the existing sewer and water supply.

Deck and Deck Equipment:

The pool decks are in fair condition, but have many patches and repairs. The most significant problem is the tripping hazards caused by uneven deck where the frost has heaved it.

- The deck has a few areas that do not drain properly.
- Guard chairs are in fair condition.
- Pool ladders are in fair condition.

Pools:

The facility has a 14,380 square foot L-shaped lap/diving pool, (Main Pool) and an 690 square foot waterslide plunge pool (Plunge Pool).

The L-shaped lap/diving pool (Main Pool) has a water depth at the shallow end of 0'-0" and slopes down to a 5'-0" at the diving hopper transition. The depth of the hopper is 11'-0". The diving well floor then slopes back up to a 7-foot depth at the pool's deep end wall. The calculated pool volume is 425,000 +/- gallons.

The Plunge Pool depth at the shallow end is 3'-0" and slopes down to 3'- 3". The calculated pool volume is 28,000 +/- gallons.

The investigation of the pools included an examination of the pool structures, gutter systems, surge tank, exposed piping, filters, heaters, chemical feed systems, deck areas and equipment and any major Wisconsin Department of Safety and Professional Services compliance violations. At the time of the site visit both pools were completely filled.

SWIMMING POOLS:

The swimming pools are concrete structures. The pools have the renovated concrete gutter and return supply systems that were installed in 1991.

- Pool finishes are painted concrete with painted lane markings provided. The finish will require replacement in the near future. Replacement of paint is an ongoing expense.
- The construction/expansion joints leak and are in need of repair/replacement.

POOL GUTTERS:

The gutter consists of a concrete gutter system. The gutter system is the renovation that was installed in 1991 and appears well maintained. There is no freeboard.

- Gutter appears level and well maintained.
- The gutter system is a concrete trough with a PVC grate cover with handhold. This type of system can handle large volumes of water.

POOL ACCESSIBILITY:

Americans with Disabilities Act (ADA) Requirements:

- The Perimeter of this main pool is 515.42 feet. Per the current design requirements of the ADA, this pool requires two (2) means of access. The requirements state the main means of access needs to be either an ADA approved pool lift or a sloped entry. The requirements state

the secondary means of access can be either a fixed ADA approved pool stair or transfer system.

- The Perimeter of this plunge pool is 126 feet. Per the current design requirements of the ADA, this pool requires two (2) means of access. The requirements state the main means of access needs to be either a fixed ADA approved pool lift or a sloped entry.

POOL MECHANICAL SYSTEMS

The pool mechanical room and equipment appeared to be very well maintained and in very good condition. There were no major problems that were observed during the site visit. The following items should be considered as future improvements to the existing mechanical system:

- **FILTERS**

Filtration is provided by a vacuum DE system. The system consists of one concrete tank with vertical filter elements that are combined in the tank to filter the pool water. The filtered water is returned to the main pool with one return line through a combination of wall and floor inlets. It is returned to the plunge pool with a separate return line through wall inlets.

Currently both pool share this system. Current code requires that each pool have its own mechanical system. This type of filter system requires a fair amount of work and time in upkeep, start-up and shut-down. Also, there is concern that in the future the Environmental Protection Agency may impose restrictions to the discharge and disposal of materials from D.E. filters.

Future filter replacements will be required to comply with the current code. Under current code the main pool is required to be divided into two zones – water depth less than 24 inches and water depth over 24 inches. The filtered water to the water depth less than 24 inches is required to be returned at a rate of 2-hours turnover. The filtered water to the water depth over 24 inches is required to be returned at a rate of 4-hours turnover. Furthermore, the current code requires the plunge pool filtered water to be returned at a rate of 1-hour turnover.

- **FILTRATION PUMPS**

The existing transfer pump has a 25 horsepower motor and a 12" diameter impeller. The existing circulation pump has a 20 horsepower motor and a 10" diameter impeller. There are spare pumps at the City shop. One set of these pumps was rebuilt in 2004/2005.

The calculated volume of the main pool and its surge tank is 425,000 +/- gallons of water. The calculated volume of the plunge pool and its surge tank is 28,000 +/- gallons of water. The combined volume of both pools and surge tanks is volume 453,000 gallons of water. The operators stated the filtration pump will produce only 1100 GPM of water to the filter. Currently 800 GPM of flow is returned to the main pool and 300 GPM of flow is returned to the plunge pool. Given this flow rate and volume the main pool will only be turned over once every 8.8 hours and the plunge pool will only be turned over once every 1.5 hours. These flow rates are sub-standard and will not meet code.

This is causing some turbidity issues with the pool water. In order to meet the current code, a flow rate of 1885 GPM would be required for the main pool and a flow rate of 467 GPM for the plunge pool.

- **PUMP STRAINERS**

The original design provided one strainer located on the suction side of the pump. This pump loses prime when ever it is shut-off. Therefore a second strainer was added in 2000 to allow the pump to continue operation when the strainer is cleaned. A foot valve with a protective screen has also been added to aide in maintaining prime. The strainers are cast iron and were rebuilt in 2010. The lids are heavy and require a large wrench to remove the cover clamps. Strainers of stainless steel construction with clear, hinge type lids should be considered as they are easier to operate.

- **PIPING**

The pool piping consists of cast iron and PVC piping. The wall inlets and floor inlets are all made of PVC plastic. All piping to and from the pool mechanical room is heavy duty schedule 40 or 80 PVC. Piping inside the mechanical room is made out of cast iron. Currently there is one 10" and one 6" diameter gutter line that returns water to the D.E. filter tank from the main pool and plunge pool respectively. These pipes are not capable of meeting the minimum code requirement.

- **POOL HEATER**

The existing heater was installed in 1998/1999. It is a Lochinvar natural gas heater. The heater is cleaned every spring. It is beginning to show wear – the heat exchanger is sagging. According to the heater's name plates they are 80% efficient. This efficiency has probably declined over the years due to age.

- **DISINFECTANT SYSTEM**

The combined pool's chemical balance is monitored and controlled by a single Strantrol System 5 automatic chemical controller. Disinfection is accomplished with Calcium hypochlorite and feed with a PPG 3140 AT Accutab chlorine system. It was installed in 2002.

- **pH SYSTEM**

Liquid muriatic acid is used to control pH levels in the pool. This is feed into the pools filtered water return line with a LMI pump.

- **MAKE-UP WATER**

Currently the make-up water is added to the pool with a Cla-valve automatic fill valve.

RECOMMENDATIONED OPTIONS

Following are recommended options for long term repairs/renovations based on the above evaluations. All items will be associated with estimated cost represented following this section.

Option A includes the demolition and removal of the existing leisure pool and plunge pool and the replacement of one leisure pool. This leisure pool consists of a Zero Depth Entry, Sun Ledge, Water Walk, Lap Lanes with a deep well, a Lazy River, and a plunge pool with an inner tube flume slide. Each of these elements are listed individually in the cost opinion and would be able to be removed. These areas are all connected by an area of pool 3'-6" deep, but not listed in the removable items of the pool.

The zero depth entry is an area where younger patrons will like to dwell. This area usually is divided up into two sections, an active and a passive area. The active area is where you would place spray features and climbable structures for use by patrons 4 to 12 years of age. The passive area is a place where toddlers will be comfortable acclimating to the water.

The sun ledge is a shelf with 6" to 12" of water depth. This is a place where chaise lounges may be set so that patrons may sit in the water and continue to sunbathe.

The water walk is an area that provides a challenge for tweens and teens. Patrons attempt to cross the pool on floatation devises and are assisted by a cargo net stretched above.

This option incorporates four 25 yard lap lanes. The depth of this area begins and 3'-6" and transitions into a dive well 12'-6" deep. This is WTI's recommended depth for a 1 meter diving board. This area also hosts a climbing wall for any patron capable of attempting it.

The lazy river is a relaxing water channel that patrons are able to float in their own tube at a relaxing pace. The channel is 3'-6" deep and 10'-0" wide. With this depth the channel would also be capable of being used for therapeutic assisted and resistance walking.

The plunge pool is 3'-6" deep. Upon entering from the slide the patron has a choice between exiting by stair and going back up the slide tower or continuing the ride in the Lazy River.

Option B includes the partial demolition and replacement of the existing leisure pool, the demolition of the existing slide tower and plunge pool, and the demolition and replacement of the existing deck, and the demolition and replacement of the bathhouse and concession building.

The leisure pool has been reduced in size to 8,900 SF from 14,000 SF. The pool has been subdivided into four zones, the zero depth entry and sun ledge, the therapy area, the lap lane area, and the dive well.

The zero depth entry and sun ledge would slope at 1:24 down to a depth of 1'-0". Currently the only feature programmed for this area is a themed tot slide. A set of stairs allow patrons to transfer from this zone into the therapy area.

The therapy area has three means of entrance and egress. The first was mentioned above in the zero depth entry. The second is from an accessible ramp that slopes at 1:20. The third is in an opening in the common wall that separates the therapy zone and the lap lanes.

The therapy area slopes from 3'-0" to 3'-6". This area is capable of being programmed for aerobics and lap swimming. There are two 60'-0" long lap lanes.

The lap lanes area has four 25 Yard lanes. This area slopes from 3'-6" down to 12'-0". If desired foam floatables would be able to be added. These features are difficult to move on a regular basis, so if they are desired, they would need to be located so that at least two lanes could always be operational for lap swimming.

The dive well has been designed so that it will accept a 1 Meter diving board, a 3 Meter rock jump, and a climbing wall. The water depth slopes from 12'-0" to 13'-0"

A separate Spray Pad and Dry Play area would be added on the southeast side of the site. The spray pad would have a few upright features and several ground sprays. The dry play area would have a climbable play structure. This entire area would have a fence around it with gates into the pool area on one side and a second gate open to the park. When the pool is operational, the gate into the pool area would be open, and when the pool is close for the season the gate to the park would be unlocked.

A new slide tower with two body flumes are designed for this option. The tower for this option has been enlarged and a zip line has been indicated show from the tower running over to the spray pad area. The zip line is completely enclosed is the pool area.

All deck would be removed and replaced due to damage which would occur during pool demo and construction. This allows for expansion of areas that may be desirable for better patron use.

Option C includes the partial demolition and replacement of the existing leisure pool, the demolition of the existing slide tower and plunge pool, and the partial demolition and replacement of the existing deck, and the refurbishment of the existing bathhouse.

The leisure pool has been reduced in size to 8,900 SF from 14,000 SF. The pool has been subdivided into four zones, the zero depth entry and sun ledge, the therapy area, the lap lane area, and the dive well.

The zero depth entry and sun ledge would slope at 1:24 down to a depth of 1'-0". There are several play features programmed for this area. A set of stairs allow patrons to transfer from this zone into the therapy area.

The therapy area has three means of entrance and egress. The first was mentioned above in the zero depth entry. The second is from an accessible ramp that slopes at 1:20. The third is in an opening in the common wall that separates the therapy zone and the lap lanes.

The therapy area slopes from 3'-0" to 3'-6". This area is capable of being programmed for aerobics and lap swimming. There are two 60'-0" long lap lanes.

The lap lanes area has four 25 Yard lanes. This area slopes from 3'-6" down to 12'-0". If desired foam floatables would be able to be added. These features are difficult to move on a regular basis, so if they are desired, they would need to be located so that at least two lanes could always be operational for lap swimming.

The dive well has been designed so that it will accept a 1 Meter diving board, a 3 Meter rock jump, and a climbing wall. The water depth slopes from 12'-0" to 13'-0"

A large sand play area has been added to the southeast side of the aquatic area. This area includes a large play structure, as well as several smaller play elements. The area is completely enclosed by a fence, with a gate to allow access to the aquatic area while the pool is open, and a gate open to the park. The path leading from the aquatic area to the sand play requires patrons to pass through a shower area to wash sand off before they get back to the pool.

A single body slide flume and tower shall replace the existing tower and plunge pool. This slide will terminate in a deceleration, or run-out lane. This run-out lane has a little over 1'-0" of water. The benefit of a run-out is that patrons that are shorter than 3'-6" who would like to ride the slide are capable.

As much of the existing deck as possible will be saved for this option. New concrete will be poured around the reduced pool and where the existing plunge pool was once located.

**Menasha, WI Family Aquatic Center
Option A
Estimate of Probable Cost
4/3/2013**

ELEMENT	QUANTITY	COST
<u>Site Development</u>		
Soils Mitigation	Allowance x \$5,000.00	\$5,000
Demolition/Earthwork	Allowance x \$100,000.00	\$100,000
Site Utilities (Excavation & Backfill)	Allowance x \$50,000.00	\$50,000
Site Improvements	Allowance x \$0.00	\$0
Site Parking	50 EA x \$3,000.00	\$150,000
Shade Structures	2 EA x \$7,000.00	\$14,000
Walkways (outside the fence)	0 SF x \$0.00	\$0
Decks/ Deck Drainage (within the fence)	32,370 SF x \$7.00	\$226,590
Turf (By City)	14,900 SF x \$0.00	\$0
Landscape / Berms (By City)	12,625 SF x \$0.00	\$0
Sound System / Lighting	1 EA x \$45,000.00	\$45,000
Fence- Perimeter	800 LF x \$60.00	\$48,000
Fence- Barrier	250 LF x \$80.00	\$20,000
Sand Play Area & Elements	0 SF x \$0.00	\$0
Site Signage	Allowance x \$0.00	\$0
Subtotal		\$658,590
<u>Architecture</u>		
Bathhouse	3,450 SF x \$175.00	\$603,750
Guard House / Concessions / Rentable Area	1,600 SF x \$175.00	\$280,000
Guard House / Concessions / Rentable Area	2,650 SF x \$80.00	\$212,000
Mechanical	1,680 SF x \$50.00	\$84,000
Subtotal		\$1,179,750
<u>Aquatics</u>		
Leisure Pool		
Slide Tower and Two Flume Ride	13,250 SF x \$185.00	\$2,451,250
Play Structure	1 LS x \$280,000.00	\$280,000
Play Structure	1 LS x \$150,000.00	\$150,000
Pool 1 Component	0 x \$0.00	\$0
Pool 1 Component	0 x \$0.00	\$0
Whirlpool		
Whirlpool	1 LS x \$150,000.00	\$150,000
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 3		
Pool 3	0 SF x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Subtotal		\$3,031,250
Subtotal - Estimated Construction Cost		\$4,869,590
Contractor General Conditions	5% x \$4,869,590.00	\$243,480
Contractor Markup (Overhead & Profit)	10% x \$4,869,590.00	\$486,959
Contingency	10% x \$4,869,590.00	\$486,959
Total Estimated Construction Cost		\$6,086,988
<u>Owner Expenses & Project Fees</u>		
Project Fees (A&E, Permits, Testing, Surveys)	8% x \$6,086,987.50	\$486,959
Owner's F.F. & E. (Furniture, Fixtures & Equipment)	5% x \$6,086,987.50	\$304,349
TOTAL ESTIMATED PROJECT COST		\$6,878,296

Notes:

1. Estimate includes pool excavation and structure, pool gutter, pool finishes, deck equipment, safety ropes, pool mechanical systems, waterslides, tower and stair (installed), waterslide mechanical system and piping, and water activities with mechanical systems and piping.
2. Estimate assumes all utilities & infrastructure to be brought to within 5 feet of the facility and does not include additional contingencies for unusual soil conditions or unknown development risk items.

**Menasha, WI Family Aquatic Center
Option B
Estimate of Probable Cost
4/3/2013**

ELEMENT	QUANTITY	COST
Site Development		
Soils Mitigation	Allowance x \$5,000.00	\$5,000
Demolition/Earthwork	Allowance x \$100,000.00	\$100,000
Site Utilities (Excavation & Backfill)	Allowance x \$50,000.00	\$50,000
Site Improvements	Allowance x \$0.00	\$0
Site Parking	50 EA x \$3,000.00	\$150,000
Shade Structures	2 EA x \$7,000.00	\$14,000
Walkways (outside the fence)	0 SF x \$0.00	\$0
Decks/ Deck Drainage (within the fence)	31,300 SF x \$7.00	\$219,100
Turf (By City)	16,900 SF x \$0.00	\$0
Landscape / Berms (By City)	3,750 SF x \$0.00	\$0
Sound System / Lighting	1 EA x \$45,000.00	\$45,000
Fence- Perimeter	910 LF x \$60.00	\$54,600
Fence- Barrier	200 LF x \$80.00	\$16,000
Dry Play Elements	1 LS x \$50,000.00	\$50,000
Zip Line (By City)	1 LS x \$0.00	\$0
Site Signage	Allowance x \$0.00	\$0
Subtotal		\$703,700
Architecture		
Bathhouse	5,000 SF x \$175.00	\$875,000
Party Room/Shelter	700 SF x \$80.00	\$56,000
Mechanical	1,780 SF x \$50.00	\$89,000
Subtotal		\$1,020,000
Aquatics		
Leisure Pool		
Slide Tower and Two Flume Ride	8,900 SF x \$75.00	\$667,500
Tot Slide	1 LS x \$250,000.00	\$250,000
Diving Board	1 LS x \$15,000.00	\$15,000
Rock Jump	1 LS x \$17,500.00	\$17,500
Climbing Wall	1 LS x \$15,000.00	\$15,000
	1 LS x \$25,000.00	\$25,000
Spray Pad		
Spray Features	700 SF x \$100.00	\$70,000
Pool 2 Component	1 LS x \$40,000.00	\$40,000
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 3		
Pool 3 Component	0 SF x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Subtotal		\$1,100,000
Subtotal - Estimated Construction Cost		\$2,823,700
Contractor General Conditions	5% x \$2,823,700.00	\$141,185
Contractor Markup (Overhead & Profit)	10% x \$2,823,700.00	\$282,370
Contingency	10% x \$2,823,700.00	\$282,370
Total Estimated Construction Cost		\$3,529,625
Owner Expenses & Project Fees		
Project Fees (A&E, Permits, Testing, Surveys)	8% x \$3,529,625.00	\$282,370
Owner's F.F. & E. (Furniture, Fixtures & Equipment)	5% x \$3,529,625.00	\$176,481
TOTAL ESTIMATED PROJECT COST		\$3,988,476

Notes:

1. Estimate includes pool excavation and structure, pool gutter, pool finishes, deck equipment, safety ropes, waterslides, tower and stair (installed), waterslide mechanical system and piping, and water activities with mechanical systems and piping. Existing pool mechanical systems will be reused.

2. Estimate assumes all utilities & infrastructure to be brought to within 5 feet of the facility and does not include additional contingencies for unusual soil conditions or unknown development risk items.



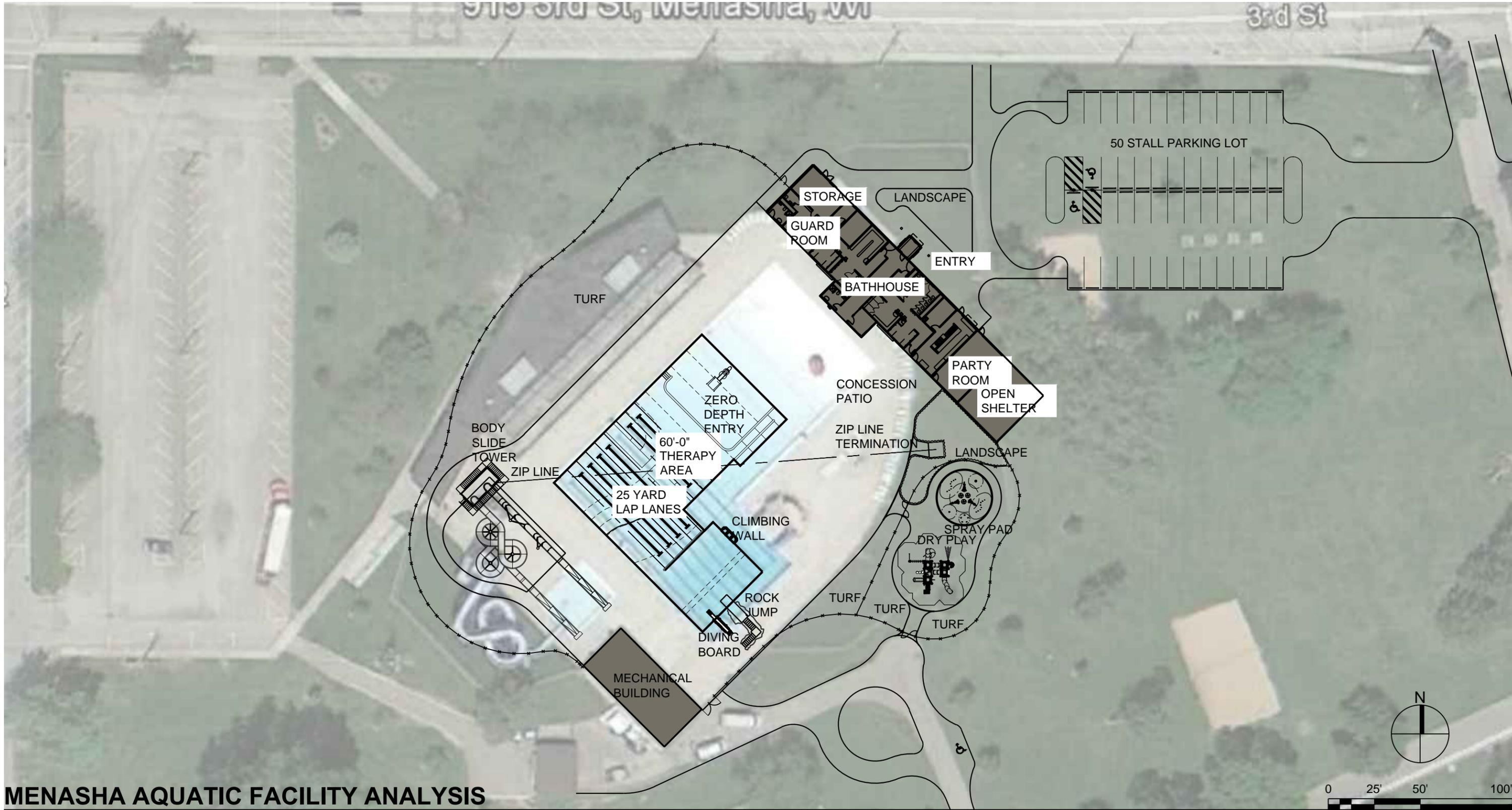
**Menasha, WI Family Aquatic Center
Option C
Estimate of Probable Cost
4/3/2013**

ELEMENT	QUANTITY	COST
Site Development		
Soils Mitigation	Allowance x \$5,000.00	\$5,000
Demolition/Earthwork	Allowance x \$100,000.00	\$100,000
Site Utilities (Excavation & Backfill)	Allowance x \$50,000.00	\$50,000
Site Improvements	Allowance x \$0.00	\$0
Site Parking	0 EA x \$3,000.00	\$0
Shade Structures	2 EA x \$7,000.00	\$14,000
Walkways (outside the fence)	0 SF x \$0.00	\$0
Decks/ Deck Drainage (within the fence)	7,100 SF x \$7.00	\$49,700
Turf (By City)	21,250 SF x \$0.00	\$0
Landscape / Berms (By City)	2,350 SF x \$0.00	\$0
Sound System / Lighting	1 EA x \$45,000.00	\$45,000
Fence- Perimeter	960 LF x \$60.00	\$57,600
Fence- Barrier	200 LF x \$80.00	\$16,000
Sand Area and Play Elements	1 LS x \$75,000.00	\$75,000
Zip Line (By City)	1 LS x \$0.00	\$0
Site Signage	Allowance x \$0.00	\$0
Subtotal		\$412,300
Architecture		
Bathroom Renovations	6,150 SF x \$75.00	\$461,250
Mechanical	1,780 SF x \$50.00	\$89,000
Subtotal		\$550,250
Aquatics		
Leisure Pool		
Slide Tower and Two Flume Ride	8,900 SF x \$70.00	\$623,000
Water Activities-Shallow	1 LS x \$180,000.00	\$180,000
Diving Board	1 LS x \$50,000.00	\$50,000
Rock Jump	1 LS x \$17,500.00	\$17,500
Climbing Wall	1 LS x \$15,000.00	\$15,000
	1 LS x \$25,000.00	\$25,000
Spray Pad		
Spray Features	0 SF x \$100.00	\$0
Pool 2 Component	0 LS x \$40,000.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 2 Component	0 x \$0.00	\$0
Pool 3		
Pool 3 Component	0 SF x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Pool 3 Component	0 x \$0.00	\$0
Subtotal		\$910,500
Subtotal - Estimated Construction Cost		\$1,873,050
Contractor General Conditions	5% x \$1,873,050.00	\$93,653
Contractor Markup (Overhead & Profit)	10% x \$1,873,050.00	\$187,305
Contingency	10% x \$1,873,050.00	\$187,305
Total Estimated Construction Cost		\$2,341,313
Owner Expenses & Project Fees		
Project Fees (A&E, Permits, Testing, Surveys)	8% x \$2,341,312.50	\$187,305
Owner's F.F. & E. (Furniture, Fixtures & Equipment)	5% x \$2,341,312.50	\$117,066
TOTAL ESTIMATED PROJECT COST		\$2,645,683

Notes:

1. Estimate includes pool excavation and structure, pool gutter, pool finishes, deck equipment, safety ropes, waterslides, tower and stair (installed), waterslide mechanical system and piping, and water activities with mechanical systems and piping. Existing pool mechanical systems will be reused.
2. Estimate assumes all utilities & infrastructure to be brought to within 5 feet of the facility and does not include additional contingencies for unusual soil conditions or unknown development risk items.

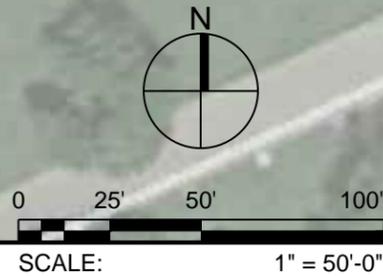


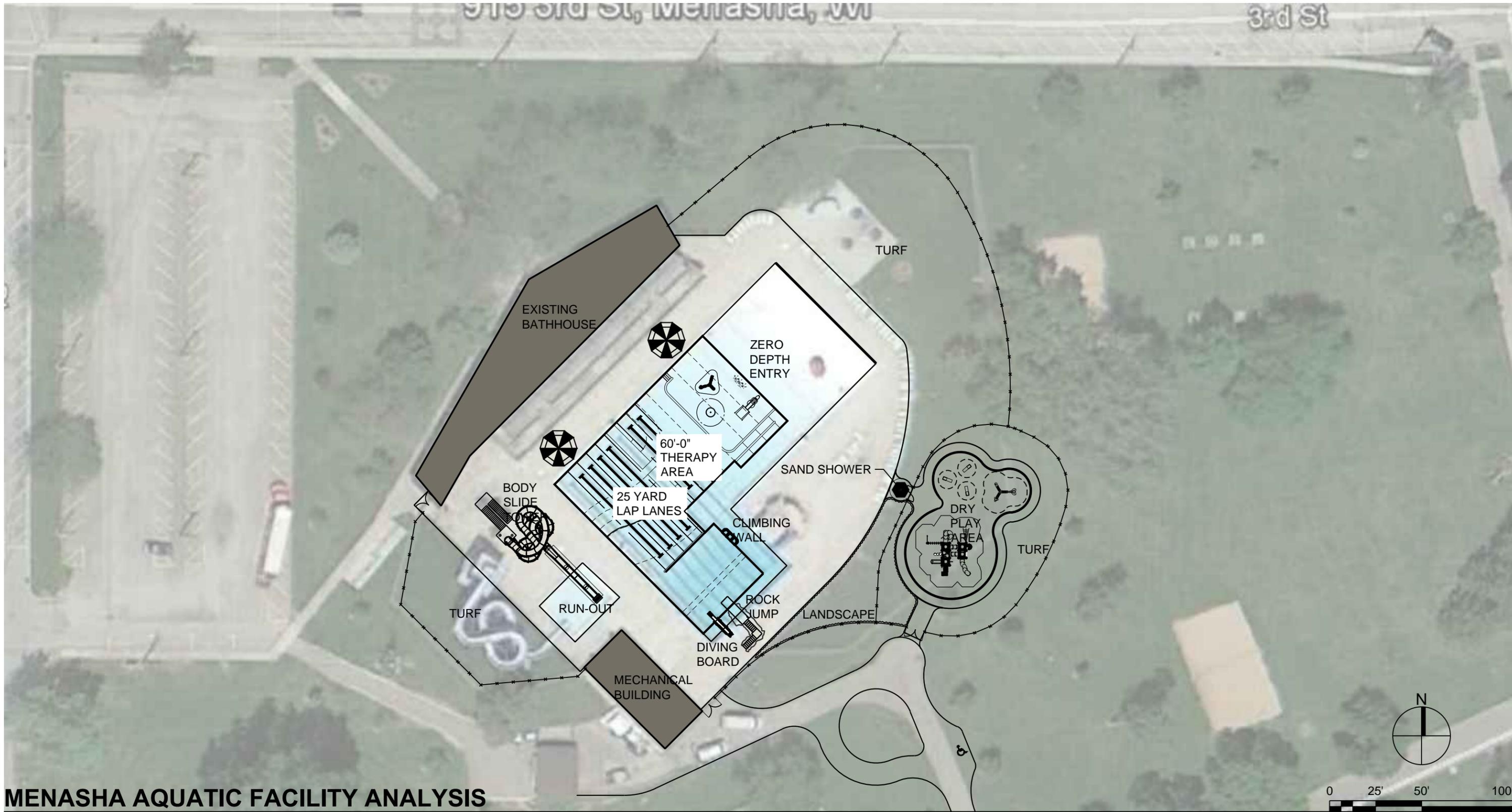


MENASHA AQUATIC FACILITY ANALYSIS

**OPTION B
MENASHA, WI**

Project No.: 01118
 Date: APRIL 3, 2013
 Drawn By: APP



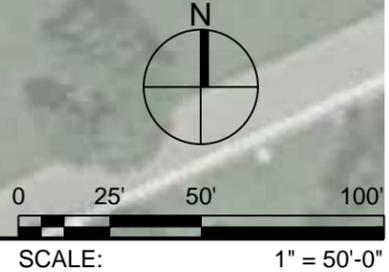


MENASHA AQUATIC FACILITY ANALYSIS

**OPTION C
MENASHA, WI**

Project No.: 01118
 Date: APRIL 3, 2013
 Drawn By: APP

Date: Wednesday, April 03, 2013 Plotted by: Adam Pfister Drawing location: P:\2011\01118 Menasha WI Family Aquatic Center\Drawings\Design\2013.04.01\Concept C.dwg



APPENDIX A

EXISTING FACILITY PHOTOS



BATHHOUSE ENTRY



BATHHOUSE – POOL SIDE



GUARD OFFICE



ADMISSIONS



LAVATORIES



WATER CLOSETS



SHOWERS



URINALS



LOCKERS



CHANGE AREA



SUN DECK



SUN DECK



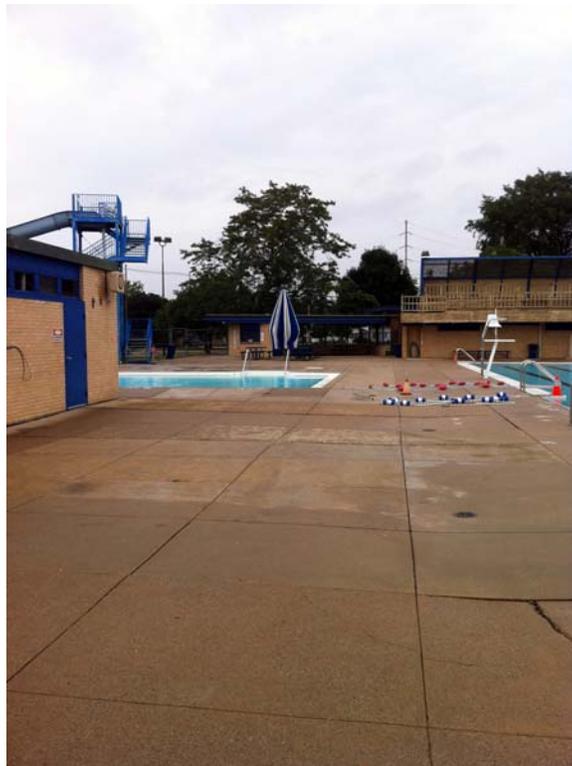
CONCESSIONS



LAP LANES



DEEP WELL



PLUNGE AREA



WATER SLIDE



WATER SLIDE EXIT



LAP LANES



ZERO DEPTH ENTRY



OPEN SWIM AREA



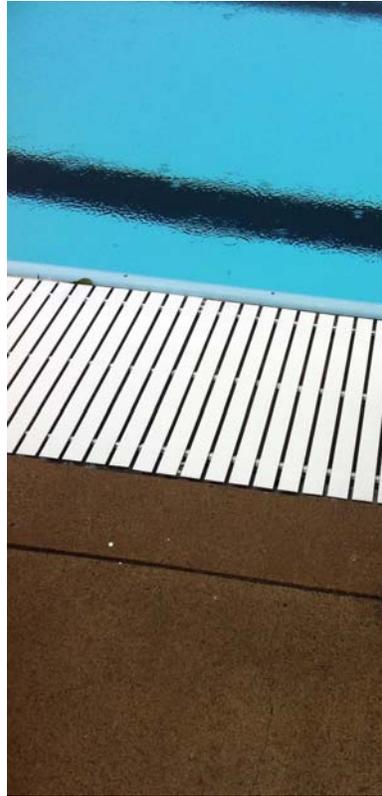
VIEW FROM SUN DECK



VIEW FROM SUN DECK



POOL LADDERS



GUTTER GRATE



WATER FEATURE



EQUIPMENT BUILDING



EQUIPMENT BUILDING



DOMESTIC WATER STORAGE



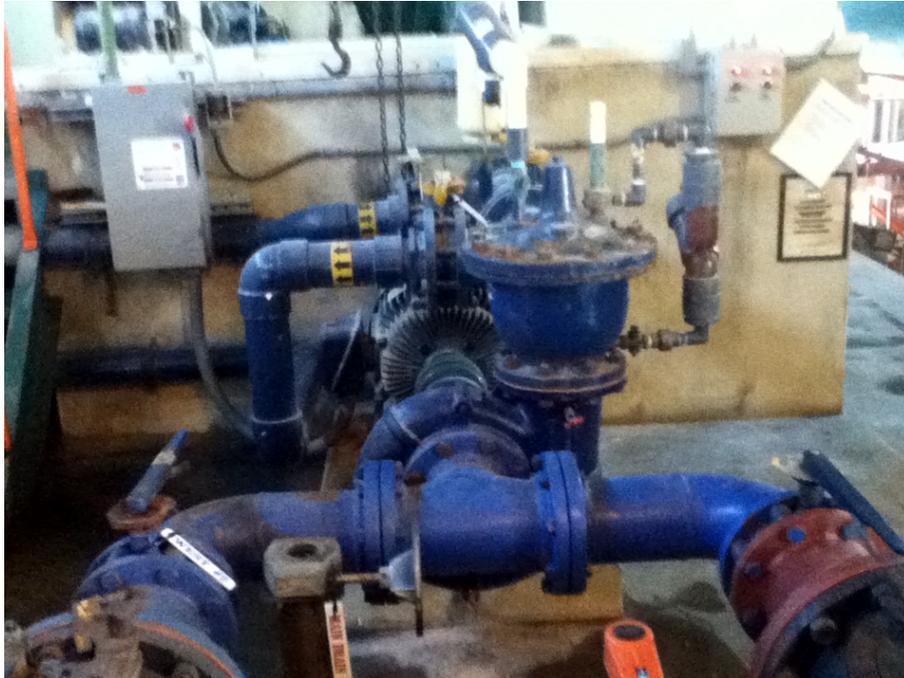
VACUUM DE FILTER



TRANSFER PUMP



TRANSFER PUMP STRAINERS



TRANSFER PUMP



ACCESS HATCH



AUTO FILL



POOL HEATER/ROOF LEAK



CIRCULATION PUMP



SLIDE PUMP



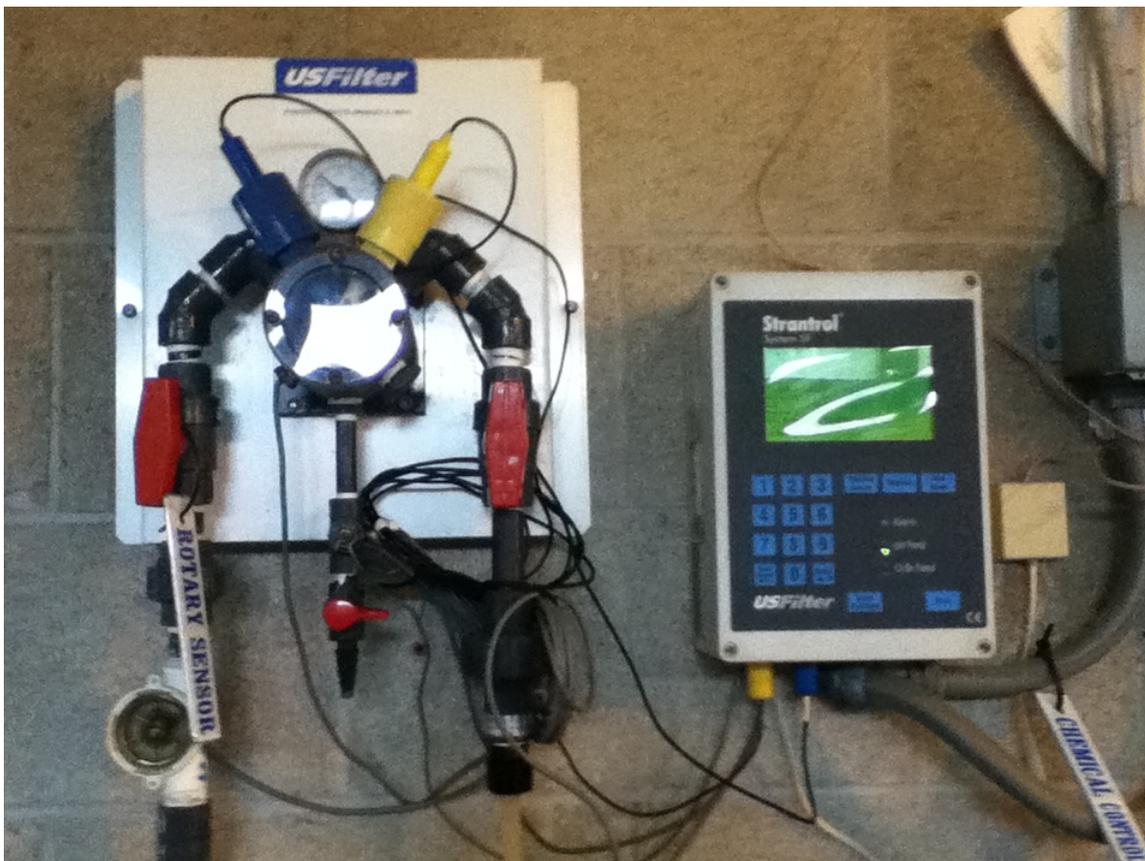
INLET SUPPLY



DAMAGED WINDOWS



FLOW METER



AUTOMATIC CHEMICAL CONTROLLER

APPENDIX B

DETERIORATION MECHANISMS

INTRODUCTION

Concrete deterioration is generally evident by cracking, delamination, spalling, and scaling. These signs of distress are the most common deterioration problems of reinforced concrete facilities.

CRACKING

Concrete cracking is caused by tensile stresses. These stresses may be due to load, as a flexural member, or other causes such as shrinkage or temperature drop. Some cracking is usually anticipated, and the effects can be minimized by reinforcement or joints. Properly positioned reinforcement arrests crack development by keeping cracks short and tightly closed. Control joints are positioned to keep cracking only where it is planned. It is common practice to provide sealed crack control joints in concrete members when exposure to water is expected. Cracking can be detrimental when it occurs to an extent and frequency not expected. If abnormal or uncontrolled cracking develops, steps are necessary to minimize the effect of cracking on long-term structure durability.

Uncontrolled construction cracking is usually caused by improper control joint detailing or concrete placement, insufficient consolidation, inadequate curing of the concrete, premature removal of form supports, or by plastic shrinkage of the concrete. Service-related cracking is usually due to temperature changes, load, settlement, or internal stress. Corrosion of reinforcing bars and aggregate chemical reactions are common causes of internal stress.

SPALLING

Most concrete spalling associated with concrete structures is the end result of corrosion-induced stress, but can also be caused by extensive freeze-thaw deterioration. It is preceded by internal horizontal fractures which eventually migrate to the nearest surface. When fractures reach the surface, the concrete breaks away leaving an open spall or pothole.

SCALING

Concrete scaling is deterioration which attacks the mortar portion (paste) of the concrete mix. It first appears as minor flaking and disintegration of the concrete surface. Scaling progresses deeper into the concrete, exposing the aggregate, which eventually breaks away. This aggravates the process by exposing more paste to the elements. In extreme cases, apparently sound concrete can be reduced to a gravel-like condition in a short period of time.

Concrete scaling is usually caused by freeze-thaw action. If concrete is frozen in a saturated state, excess water freezing in the concrete causes high stress and weakens the mortar. Cyclic exposure to freeze-thaw action is very destructive to concrete in a saturated state.

Air entrained concrete is much more resistant to scaling than non-air entrained types. Air entrainment consists of microscopic air bubbles in the concrete. These bubbles, created by the addition of an admixture at the time of mixing, when properly sized and distributed, can act as small shock absorbers to cushion internal stresses caused by freezing and thawing.

JOINT DETERIORATION

The most common method for providing crack control or relief of restraint in concrete slabs is control joints. Control joints deteriorate for reasons usually associated with failure of the sealant or failure of the adjacent concrete. Joint sealants which fail prematurely may not have the required degree of flexibility, bond strength, or durability for a particular application. If concrete adjacent to the joint is not sufficiently durable, local scaling will cause joint sealant failure.

SURFACE POPOUTS

Popouts in the concrete surface result from freezing of the coarse aggregate. Certain aggregates are porous and become saturated with water. Upon freezing, the water expands, fracturing the aggregate. A pit or spall up to several inches in diameter results on the concrete surface.

APPENDIX C **ADA Accessibility**

The U.S. Access Board has developed a summary document that specifically addresses accessibility of swimming pools and spas. The guideline presented establishes minimum accessibility requirements only and should not be looked to as the best design solution for a specific project. It is recommended that any individual or group undertaking the development or renovation of these types of facilities exceed these guidelines where possible. It is also recommended that any owner or operator contracting with design professionals consider the application of Universal Design principles (aka “Inclusive Design” and “Design for All”) within the approach and culture of said individuals or companies being contracted.

Accessible Routes

An accessible route (referred to as an Accessible Means of Egress) is defined by ADAAG as “A continuous and unobstructed way of egress travel from any point in a building or facility that provides an accessible route to an area of refuge, a horizontal exit, or a public way.” In regards to aquatic amenities, an accessible route is required to all swimming areas and supporting amenities. Raised diving boards, platforms and waterslides are not required to comply. This means that walking surface slopes are not to be greater than 1:20 and clear widths are to be a minimum of 36 inches except at turns and passing areas which require larger ‘openings’. Also included as part of an accessible route are ramps, curb ramps, doorways, elevators and platform lifts; all of which are required to comply with the applicable requirements stated in the technical documents.

Types of Facilities

Pool types are categorized into five (5) groups for defining the means of access. These categories are Swimming Pools, Aquatic Recreation Facilities, Catch Pools, and Spas. In addition, ADAAG identifies Water Play Components as a type with additional access guidelines.

Swimming Pools

Swimming pools require two (2) accessible means of entry if the perimeter of the pool is equal to or greater than 300 lineal feet. On pools that are less than 300 lineal feet, only one accessible means of entry is required. In either scenario one (1) of these means is to be either a pool lift or a sloped entry.

Aquatic Recreation Facilities (ARFs)

ARF is a designation to cover wave pools, rivers (lazy & action), sand bottom pools and other specialty pools where user access is limited to one area. These types require having only one accessible means provided that this method is a lift, sloped entry or transfer system.

Catch Pools

Catch pools, also known as Plunge Pools, do not require an accessible entrance/exit unless it is used for alternative purposes. An accessible route is required to the edge of the pool.

Wading Pools

A wading pool is required to have a sloped entry to the deepest part but is not required to have handrails. Additional forms may be provided. Most governing agencies limit wading pools to 1'-6" or 2'-0" of water depth.

Spas (Whirlpools)

A spa must provide one accessible means of entry. This method can be a pool lift, transfer wall or transfer system. If there are multiple spas arranged in a cluster at least one spa or 5% of the total in each cluster are to be made accessible. A footrest or retractable leg is not required but recommended.

Water Play Components

Water play components are required to comply with the play area guidelines as it pertains to accessible routes. However, if the component(s) are submerged, compliance is not required as it relates to floor or ground surfaces conditions and the slopes and cross slopes of walking surfaces and ramps.

Means of Access

The descriptions above indicated the various means of accessibility allowed. Below is a brief overview of each type.

Pool Lifts

Pool lifts are to be located in an area where the water depth does not exceed 48 inches. If the water depth for the entire pool is greater than 48 inches, this requirement is waived. The center of the seat, in the "dry" position, shall be a minimum of 16 inches from the edge of the pool and a clear space 36 inches wide from 12 inches behind the seat to 48 inches forward. The seat height shall be between 16 and 19 inches above the surface of the deck and the seat is to be 16 inches wide. Footrests and armrests are required and are to be removable or foldable. The lift needs to be capable of unassisted operation from both the deck and water. The seat needs to submerge a minimum of 18 inches below the static water level and capable of lifting 300 pounds.

Sloped Entries

Sloped entries need to comply with standard "ramp" definitions as stated in Chapter 4 of the ADAAG except for the following provisions. The surfaces are not required to be slip resistant. The sloped entry only needs to extend to a water depth between 24 and 30 inches or the deepest part of a wading pool. Two handrails are required with a spacing of between 33 and 38 inches except on wading pools which do not require handrails. Handrail extensions are not required at the bottom of the sloped entry. Handrails in those attractions designated as ARF are not required to follow the clear width requirements.

Transfer Walls

A transfer wall is a raised portion of the pool wall perimeter, along an accessible route, that provides for the person to move from their mobility device, onto the wall then into the pool. The top of the wall shall be between 16 and 19 inches above the deck and 12 to 16 inches wide for a distance length of 60 inches measured equal distance from the center of the grab bar(s). The grab bars themselves are required to extend the full width of the wall, have 24 inches clear to another obstruction and the gripping surface is to be between 4 and 6 inches above the wall.

Transfer Systems

A transfer system is comprised of a transfer wall and a series of transfer steps that allow for gradual descent into the pool. This is especially helpful in conditions with extended freeboards and upper body strength may be limited. Each system shall contain a platform on the deck that is 19 inches deep and 24 inches wide and between 16 and 19 inches above the deck. As with a transfer wall, this is to be located on an accessible route and have a clear space of 60 by 60 inches in front. The steps themselves are to have a maximum height (riser) of 8 inches and a depth (tread) of 14 to 17 inches and a minimum width of 24 inches. The steps are to extend to a water depth of 18 inches. Grab bar(s) are required on each step or along the entire length and shall be along at least one side and can not hinder movement.

Stairs

Accessible pool stairs offer assistance to individuals moving from the pool deck into the water and out by providing support and balance. The risers and treads are to be uniform in height and width, respectively to each other. Risers are to be closed and handrails must be provided between 20 and 24 inches apart. Handrail extensions required as per ADAAG 505.10 are required at the top (pool deck side) of the stairs but not at the bottom. The gripping surfaces are to be between 34 and 38 inches above the stair nosing and be clear of any sidewalls by 1.5 inches.

The Americans with Disabilities Act was initiated to extend civil rights protection to people with disabilities. The modifications to the ADAAG and its pending adoption by the Department of Justice extend and enhance these rights and ensure that it continues to meet the needs of people with disabilities.

APPENDIX D **TRENDS**

Many communities, large and small, across the country have reached a crossroads in their aquatics program. The declining physical condition of many community swimming pools, in addition to changes in aquatic leisure and programming needs, have contributed to the decision to take a new look at their aquatics program.

In the past ten to fifteen years, the typical public swimming pool has evolved from a rectangular tank of deep water surrounded by concrete deck and chain-link fence to a facility that combines lap swimming, zero-depth, exciting water play features, concessions, sun turf berms and sand play, all encompassed within aesthetic landscaping. This shift has been done due to the popularity and increased growth of the commercial waterpark industry. As waterparks were being built all over the country, they offered individuals an aquatic experience unlike any they could have at a traditional public pool. While waterparks offered guests pleasant surroundings, and a wide variety of activities to fit many needs and tastes, the traditional pool had an institutional feel and offered limited activities. The traditional public pool became a place for parents to drop off the kids. As a result, the average patron's expectations of what an aquatic facility should offer increased. Although the traditional public pool still functioned as an excellent facility for swimming lessons, exercise and safety classes, and competitive swimming, people were going elsewhere for the leisure aquatic experience. This phenomenon identified a pent up demand for leisure aquatics.

Many of the features and activities of commercial waterparks have been scaled down and implemented into the public swimming pool. These trends have proven not only popular in the design of the public pool but a necessity in order to fulfill revenue, attendance and patron expectations. The zero depth beach entry is probably one of the most well-known features of the family aquatic center. In fact, we have seen a decline in a separate wading pool area because of the zero depth pool.



We find that adults with toddlers would prefer to be in the main pool shallow water rather than being roped off in a separate wading pool, especially if they want to keep an eye on older children playing in other parts of the pool.



The popularity of waterslides is obvious evidence of the influence of waterparks and probably equals the zero depth area in popularity and usage. Where the zero depth pool is almost standard when designing a family aquatic center,

waterslides are next on list of necessary features.

The public has demonstrated their desire for water play features through their increased usage and popularity. The industry has responded by developing a variety of creative and highly entertaining water features. Items such as the interactive water play structures, kiddie slides and floatable features are common in the FAC. This area of water amusements has become very competitive, which has resulted in an increased quality and creativity of products.

We have found that people enjoy spraying, squirting, bubbling and falling water. Currently available are less expensive, but no less popular, features such as bubblers, geysers, fountains and spraying water. These are especially popular and add excitement to the zero depth area for children (and adults) who love interacting with the moving water. Small waterfalls have also been designed into many of our Family Aquatic Centers.



In the old days of the public swimming pool, if an individual didn't want to be in the water, they often had to turn to the hot concrete and a beach towel. Shade is an essential element for today's Family Aquatic Center. Shade structures are a popular item that protects the patron from the sun. There

are some shade umbrellas and shade pavilions that currently exist, however today's consumer prefers to have a multitude of options and significantly more shade would be highly effective in appealing to pool users. There are many other equally effective shade structures on the market that may be placed around the pool.

Sand has been a very natural addition to the Family Aquatic Center. Sand volleyball is one area that has been found to be very popular for families and teenage users. Sand play areas are an alternative activity which offers kids, as well as adults, many different types of play structures made especially for sand play. Access to fresh water for sand molding has also been incorporated as an added feature.



To combat the problem of people carrying the sand into the pool water, special shower control areas are placed outside of the sand areas where individuals

are required to wash off the sand before exiting the area. The sand must be a finer sieve size for more comfort on smaller users' feet.

Another essential element to the Family Aquatic Center is concessions. We have found that people expect to be able to buy a soft drink, a hot dog, chips or a candy bar when they go to the swimming pool. Patrons almost always bring money to spend and a facility benefits by providing some type of separate concession area. Usually made available are less labor intensive finger food such as popcorn, nachos, pretzels, hotdogs, candy, and soda.



To keep up with the changing expectations of the pool patron, today's public aquatic facility must address the multi-use and multi-purpose demands of modern society. The first step is to examine the present situation and condition of a community's aquatic program and supporting facilities. WTI takes a holistic approach to design. We feel it is important to review the entire goals and objectives of the aquatic program. We need to answer questions like:

- Which existing facilities are involved in the aquatics program?
- Where is the existing facility located?
- What sections of the community are experiencing growth or decline?
- What type of aquatic activities will the facility need?
- Should the facility be consolidated for more efficient operation?

The public swimming pool is no longer just a place to drop off the kids for the day. The incorporation of these new trends adds up to a very complete experience to be had by the public pool patron. The Family Aquatic Center is now a destination point for the entire family. Likewise, the Village has the advantage of being able to offer the patron the "waterpark" experience at a public pool cost.



APPENDIX E **MAGIC MAKEOVERS FOR LESS**

Makeover mania has hit America by storm. Whether it's plastic surgery to crown a makeover beauty queen in Fox's "The Swan" or outrageous home makeovers on a budget while neighbors are "Trading Spaces" on TLC, Americans have gone crazy with low cost improvements. But, you may not have embraced that same "lots for less" attitude when it comes to your facility. Is your aquatic center starting to show its age, but your capital budget is hitting an all time low? Can your family aquatic center use a face-lift, but you just can't afford a new attraction? There are plenty of ways to infuse some new fun, excitement and drama into your facility without breaking the budget. Some subtle changes will go a long way with your members and help to keep your facility viable, exciting and attractive.

The first step in an affordable makeover is to "think small". Our usual reaction to improving an aquatic facility is to "think big". Add an attraction, expand a concession, or create a new area are themes that immediately come to mind. But, most customer service complaints arise from some of the smaller issues of cleanliness and perception. Start thinking small to get a big bang from some small bucks.

Create a New Arrival

First impressions are everything. Take a good hard look at your entrance and take it up a notch. A new entrance sign, planter boxes and banners are affordable solutions that make a big statement. Have a boring cinder block wall? A larger than life mural or a simple layered plywood sign painted with high gloss paint makes a real statement. Do your guests feel a real sense of arrival? Razzle-dazzle them from the entrance and you have already made a new friend.



Ready made banners are a quick and inexpensive way to add color and can also be used to redirect the visitor's eye away from big vistas of blacktop in our parking lots. That sea of asphalt will feel a bit cooler with fabric blowing in the wind. Keep the costs down by making your own flagpoles out of concrete forms, metal poles and some hardware. Fabric is an inexpensive way to add color and the illusion of soft breezes on a hot and humid day.

Affordable planters with a different color scheme each year can make a big difference. Work with the local garden club or better yet, form a partnership with a local grower in exchange for a sponsorship. The cost saving secret here is to maintain them. Create flowerbeds throughout the facility using several local farm stands and nursery houses as corporate sponsors. There is nothing like some healthy competition to make each flowerbed just a little nicer.

Color

Everything looks good with a new coat of paint. Attack painting the interiors and exteriors of your facility like you would if you were painting your home. Learn the psychology of color and use it to your advantage. Select a new color palette for the facility and it can create a whole new atmosphere. Do you have a children's area that needs some new punch? A new fresh color palette that entices children can add new excitement. Yellows and reds can make your guests feel hungry while blues will turn off that appetite. Your bathhouse can look fabulous with a wall full of fun murals. Use local high school and college artists to get the job done inexpensively. There are products on the market that make murals easy and affordable. Borders peel and stick characters are readily available in your local home improvement and craft stores. Rent an overhead projector and project clip art onto walls. It's readily available on every computer today. Can't afford to paint the entire bathhouse? Why not just do a mural at kid's height? It will add a new perspective and cover up most of the mess.



Explore the views that your guests have while they are inside your facility. There may be eyesores that you have never noticed before. A fresh coat of paint on garbage receptacles, fence materials, pumps and other amenities just outside your facility can make a difference. The most creative applications I have seen that make a real difference were the most wonderful garbage dumpsters painted by local artists along the beaches of the Florida Keys. A small community in Central NJ painted the railroad trestle right outside of their facility with a beautiful mural with thanks to a Boy Scout troop. The view is now lovely as you lounge by the pool looking away from the facility.

Shade

The consistent lament of management and guests alike is that there is never enough shade. When it comes to customer satisfaction, shade ranks quite highly. Focus your attention and available funds here. Work with your manufacturer to select the right colors for your facility's palette but focus on colors that best handle the UV rays. Look at fabric sails, linear shade and creating new shaded areas like a stroller parking area along a bath house wall. Use awnings to add color and shade.



Signage

One of the most neglected areas in most family aquatic centers is signage. The right approach to your sign plan can create a themed, customer friendly environment without breaking the bank. If



you can't afford an entirely new sign plan, have a master plan and attack an area of your park at a time. Colors have a way of dating a facility, just as it can date the look of your home. Certain colors that were prominent in the 70's and 80's now give a dated appearance to your facility.

Seek out inexpensive ways to theme your park. Visit local auctions for nautical décor, or personalize your park for your region. Adopt a farming theme, industrial theme using regional influences and surplus equipment to create a fun environment. Recycle objects from garage sales and auctions to compliment your flowerbeds.



Create new entrances to each of your attractions. Why not incorporate archways with names of your attractions? A simple treated and painted plywood arch with planters can add a whole new sense of arrival. The arch will direct your guest's view upward and could cause higher use of an attraction that was not prominent before.

Programming

One of the most cost-effective ways to add new life to your facility is a constant improvement on services and programs. Look outside of the box for this one and you are sure to surprise your members and entice new ones. Story hours, free reading libraries, social events, parties, product and services demonstrations and membership incentives are low cost ways to keep the members interest. A season pass to your facility should carry with it special savings on goods and services throughout your community.



So, makeover magic isn't just for reality television. It's coming to your facility soon. It only takes some imagination and a little bit of effort.

APPENDIX F **INTERGENERATIONAL AQUATIC USE**

Play /pleɪ / :to engage in (a game, pastime, etc.)

Play is a dynamic process that develops and changes as humans grow and evolve. The simple act of play actually becomes increasingly more varied and complex. It is an essential and integral part of a child's development and physical growth. The demands on today's children are much different from previous generations and consequently there is less play time in their lives. It is our responsibility as "professionals of fun" to understand this important lifelong skill and how to integrate play into our designs, facilities, and programming.

Youth at Risk

Watch the news. "Studies show early signs of heart disease found in US children. One in seven school aged children has three or more risk factors predisposing them to deadly cardiovascular conditions. 65% of all children 10 to 18 years cannot pass a minimum standard of fitness. One out of every four teenagers is dangerously overweight!" Additionally, drowning remains the second-leading cause of unintentional injury-related death for children ages 1 to 14 years, according to the U.S. Centers for Disease Control and Prevention. This is largely due to a lack of access to recreational water activities.

We continuously preach exercise, but how do we "force" children to exercise? Perhaps we simply make it more fun. Humans have a natural affinity to water and it is associated with fun in many instances; bubble baths, open fire hydrants on a hot day, running through the sprinkler, and spending time at the lake or the ocean. This may account for census results that have proven swimming is only second to walking over all other recreation activities.

In order to understand what aquatic trends will become popular and how to design for multi-generational programming we must first look at the fundamentals and benefits of play, what motivates an individual to participate, and how each age group plays in the water.

Physical development

Swimming can improve strength, balance and improve flexibility. It provides an aerobic benefit that is relatively injury free in comparison to other sports. "The water's unique properties allow the pool to provide an environment for people of all abilities" states the Aquatic Exercise Association. "Buoyancy creates a reduced impact exercise alternative that is easy on the joints, while the water's resistance challenges all the muscles. Water lends itself to a well-balanced workout that improves all major components of physical fitness, aerobic training, muscular strength and endurance, flexibility and body composition." It is also a sport that can be a lifetime activity; participants may be 1 or 101 years old.

Social development

Through social play, children and adults learn to cooperate and appreciate the importance of taking others' needs and feelings into account. Playing together fosters awareness and understanding of a variety of values and attitudes. These great strides in development all happen while the person is laughing and

establishing friendships while they are having fun. Water is a safe sport for children of all ages and proficiency levels. Learn to swim and aqua classes can be socially enjoyable while at the same time provide fitness benefits.

Psychological and Emotional Development

A water sport promotes fitness and cultivates a positive attitude. An accomplishment of finally mastering the back float or competing in a swim meet can help to increase self esteem. Spend some time at a pool and count the times you hear “*Watch me mom!*” Playing in the water promotes increased energy levels and promotes children to strive for physical achievement.

Water is iconic to stress relief; soothing waterfalls, gentle rains, calm waters. Swimming forces you to regulate breathing and allows more oxygen to flow into muscles. The warm water of a wellness pool or whirlpool can help to calm nerves, stimulate cardiovascular circulation, and soothe the mind and body.

Age Groups – How They Play

Each age group plays and responds differently to areas of the pool and its amenities. An accomplished aquatic designer understands the “play needs” of each generation and translates this into their pool designs. This ensures that there are multiple options for everyone to engage users at the pool.

Understanding the needs for multiple programming spaces is another design consideration often overlooked by an inexperienced team. Knowing what areas can double as teaching spaces, training areas and recreational swim/buy outs and rentals, while still meeting guest’s needs is an acquired skill. For example, current channels or lazy rivers can be used for resistance or assistive walking classes during one time of the day and can then be used as a recreational river to serve another group. Warm water wellness pools provide a place for therapy and rehabilitation but also presents adequate and appropriate depth and temperature for learn-to-swim lessons.

Ultimately, it is important to provide a safe environment for any type of play, especially in the water. Supervision is imperative in any type of design. Understanding how these facilities operate help the design team to properly place offices, observation and seating areas for easy maintenance and safety.

0 to 3 Years

Concentrating on their own needs, infants play alone while toddlers will play side by side. They engage in activities that stimulate their senses. Playing involves physical activity and it is closely related to the development and refinement of a child’s motor skills and coordination process. Infants intuitively prefer high contrast edges and patterns and respond best to primary colors. The interactive play structures available today address to this theory and are popular within this age group. Modest sized water spray features initiate the quest for interacting with water in motion and stimulates rudimentary fantasy play. Infants respond visually and smaller toddlers will approach and interact.

Many babies learn to swim before they walk because of the buoyancy they encounter in the water. Infant and toddler swim classes are also often the first social experience outside of the home. The zero depth edge of the pool presents

a gradual, non-threatening entrance into warm water. Aquatic classes in the leisure and shallow water pools such as splash time and parent and tot classes are popular amongst this age group.

3 to 5 Years

This age group plays in small groups, uses props, pretend plays and does it passionately with no absolute goals in mind. Blissful. Individually they are building confidence and socially they are learning to share and cooperate. In the water they respond to interactive play including small dumping buckets, floatables and children's slides. Slides that accommodate several children at once are timeless. The 3-year-old initially rides with the assistance of a parent, as they become more daring they go down in pairs holding hands, and eventually they are racing their peers down the same slide.

Aquatic lessons should be fun and kept to smaller numbers, say five children per class. In the pre-school level skills will range from kicking their feet at the edge of the pool to swimming up to 25 yards on their front and back.

5 to 8 Years

At this age kids begin to play formal and informal games with their peers. There may be a winner, per se, or just the common goal of accomplishing a task (e.g. hopscotch). This play helps them to refine their social skills and understand cooperation, teamwork and competition. Role playing is popular amongst this age group and imitating their role models is a popular pastime (playing house). Providing a multi-level play structures with props such as ropes, ladders, cubby spaces, and interactive play will encourage their imagination.

It is imperative to a child of this age to be challenged and be provided the opportunity to demonstrate their talents and abilities (*"Watch me dad!"*). The leisure, activity pools and lazy rivers facilitate this type of play. It takes courage to ride the flume slide for the first time, engage in a game of water basketball, or hold your best friend's hand down the adventure channel and navigate an inflatable obstacle course.

Aquatic programming begins to take the form of children's masters and diving classes. Students begin to build upon their learned abilities moving onto the next level in their swimming abilities. It is still important to continue to offer learn-to-swim classes, especially in underserved populations where children have not had the benefit of aquatic recreation.

8 to 13 Years

At this age we become more organized and structured. Achievement becomes more important and we are starting to set goals and milestones for ourselves. The activity pool, with deeper water, provides the challenging environment. Flume slides, mat racer slides, activity pools, floatables, net walks, water basketball, aqua climbing walls, surf simulators, rope swings, etc. The more exciting and challenging the more appealing the activity becomes. Studies also show that playing can enhance the learning process – the more physical the play – moving, stretching, and resistive – the better.

Programming includes junior lifeguarding, advanced swimming and diving. These help to build endurance, strength, speed and increase overall fitness levels. An activity night or designated swim night with peers is attractive as this age group is beginning to thrive socially outside the family unit.

Teens

It is common knowledge that during our teenage years our socialization moves from our families to our peer groups. We channel our energy (fun) into specialized clubs, youth groups, volunteer activities, and team sports. The complexity has moved from blissful play to that of self awareness and social standing.

In addition to the entertainment value of the challenging environments of their previous peer group, teenagers desire separate social spaces. These often difficult-to-please demographics do not want to always hang out with mom and dad. An aquatic craze among those participants is the "Teen Zone". This is a separate, yet very visible, section of the deck or grass area that is programmed for this specific group. Within their "own space" they can socialize, enjoy popular music, engage in social interactive activities like 'rock and roll band, guitar hero or others and just hang out to be social.

Aquatic programming for this age group could include lifeguard and instructor training, and competitive swim groups.

Adults

We have a big lesson to relearn here. Play. Some where along the way we concluded that grown up play is viewed as a weakness and the successful people just work; we need permission to play again. We have just agreed that play is a mind and body integration and social necessity. Play is a relaxed spontaneity that should be embraced, even into adulthood.

Adults should revisit what fun was for them as a child. Many adults that were involved in competitive swim groups are seeking out adult swim master programs. Water exercise, aerobics, water polo, aqua jog and resistance walk programs translate into fun adult programming. Shhhhhh... adults have fun on waterslides too.

Parents

The pool is an ideal opportunity for parents of young children to meet like minded people who share common interests. Take a quick scan over the pool area and you will find moms and dads congregating in the zero depth area with their tots. It is also common to find parents floating down the lazy river with a baby or sleeping child strewn across their lap. It is also pretty cool to be able to tell your friends that you beat your dad down the mat racer slide.

Aquatic programming to support the parent network is important; parent/infant, parent/toddler and adult swim classes.

Active Senior Adults

Swimming is one of the best exercise and social environments available to seniors. It is safe and easy on the body, allowing people to move their bodies

without bearing their weight. It is an ideal way for seniors to get in shape and improve their overall well being. For some disabled and seniors, water gives them a sense of freedom as they freely move around in the water.

An aquatic fitness class is a great social outlet for seniors. Warm water lap lanes and wellness pools provide popular warm water activities such as silver sneakers, aqua restore (stay young with water) low impact aqua fitness, aqua walking, and underwater bikes. Vortex and lazy rivers offer assistive walking opportunities and whirlpools and social benches offer social spaces enjoyed by this age group.

Do not forget about the non-aquatic amenities in any age group, let alone seniors. Areas that promote socialization outside of class, a café or comfortable deck seating, is ideal. This is an attractive amenity that promotes return guests.

How People Play Together

Multi-generational recreation and fitness provide something for everyone under one roof; swimming is ageless. It is often said that families that play together, stay together. For example, recreational swimming provides seniors occasion to frequent the aquatic facility with their children and grandchildren. Teenagers can challenge their younger siblings or parents to a game of basketball in the water. Or we can just relax together floating down the lazy river.

It is interesting to watch the interaction between age groups; best friends, rivals, siblings, parents, and grandparents. This is where a cross over into each area of the pool occurs and where we find a social interaction between generations. Water brings together generations and allows everyone an opportunity to benefit individually and together.

Memorandum of Understanding (MOU)

Between
United States Coast Guard
and
City of Menasha

This is an agreement between “Party A”, hereinafter called Auxiliary and “Party B”, hereinafter called City.

I. Purpose and Scope

The purpose of the MOU is to clearly identify the roles and responsibilities of each party as they relate to the construction and placement of a Personal Floatation Device (PFD) Loaner Station at the Jefferson Park boat landing.

II. Background

The purpose of the Lifejacket Safety program is to promote safe boating practices and to reduce boating related fatalities among youth. The main sponsor of the program is the Wisconsin Department of Natural Resources (WDNR)

III. Auxiliary Responsibilities Under this MOU

Auxiliary shall undertake the following activities:

- Will provide routine checks of the station at a minimum from May 1 to October 15
- Is responsible for complete future maintenance and upkeep of the station, including the stocking of life jackets upon terms agreed to with WDNR

IV. City Responsibilities Under this MOU

City shall undertake the following activities:

- Build and install the station with reimbursable funds from the WNDR
- Agrees to allow a PFD Loaner Station to be placed near the Jefferson Park boat landing

V. It is Mutually Understood and Agreed by and Between the Parties That:

1. The City reserves the right to terminate this agreement at any time upon thirty (30) days written notice to the Auxiliary. This MOU shall automatically renew on an annual basis unless proper written notice is given
2. The City is under no obligation to perform any future maintenance of the station
3. The City assumes no liability for the loaner program or the station structure

VI. Effective Date and Signature

This MOU shall be effective upon the signature of Auxiliary and City authorized officials. It shall be in force from _____ to _____. Auxiliary and City indicate agreement with this MOU by their signatures.

U. S. Coast Guard Auxiliary

City of Menasha

Date

Date