
Assessment and Project Study

- For -

Windom Municipal Pool Windom, MN



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- By -

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Executive Summary

Statement of Understanding

The City of Windom owns and operates an existing outdoor swimming pool that is aging and has a number of code, accessibility and operational concerns. The majority of the equipment being utilized is likely original to the facility and a study is clearly warranted to determine the condition of the existing equipment, as well as to provide some information and recommendations for renovation, replacement and/or improvement options.

Assessment Process

Tom Schaffer and Ryan Johnson of USAquatics, along with City staff, completed an on-site evaluation of the existing outdoor swimming pool facility on April 6, 2016 to determine its condition and feasibility of repair and/or renovation. Additionally, on July 18, 2016 – Tom Schaffer from USAquatics had a follow-up facility assessment while the pool was in operation with City Staff.

Scope of Study

The scope of this study covers the following areas of the facility:

- Swimming pool structure, recirculation, filtration, pool deck area and sanitation equipment
- Compliance with new Federal and State Main Drain Laws
- Compliance with new Americans with Disabilities Act Laws
- Review of MN Department of Health swimming pool code
- Provide recommendations for repairs, renovations and upgrades
- Provide associated budget estimates

Study Criteria

The criteria used in our assessment include:

- Facility condition and other observable conditions
- Facility code requirements and compliance
- Existing Pool Facility plans provided by City
- Community Survey results
- Soils boring report from Existing Facility
- An understanding of cause and effect associated with various aquatic designs and operating procedures as presented to us through the assessment, review, and design of several thousand aquatic facilities

Intent of Report

The intent is to present a summary of necessary repairs and improvements, as well as expenses associated with those repairs and improvements. The goal of this study is to aid in the making of important decisions concerning the future of the swimming pool and related equipment by providing options for repairs, renovations and/or upgrades.

In order to determine the best course of action, additional evaluations and inspections should take place. A soils testing is warranted and should be conducted to confirm the viability of using the existing pool structure as a form for construction. Based on USAquatics recommendation to perform soils testing, the Park and Recreation board agreed and proposed a request to City Council to authorize soils testing. This request was approved and the City commissioned Geo-tek Engineering and Testing to perform soils testing and evaluate

the results of the testing. Soils samples, through borings, were taken on October 3, 2016 and a soils report was submitted on October 28, 2016. The report is attached for review and consideration.

Summary

Based on discussions with staff, a physical assessment of the existing facility which was constructed in 1965 and renovated in 1980 and analysis of the existing condition at the Windom municipal outdoor pool, USAquatics has determined that the facility warrants major renovations with upgrades or replacement. Replacement could be on the existing site, with demolition and soils corrections, or a new site. Several recommendations are offered in this study for review, discussion and consideration by the Windom community. Hopefully, this process will build a consensus within the community of Windom on a directive moving forward a the future of outdoor aquatics in Windom. The options given provide a range of major facility improvements and upgrades that would address operational, safety, code issues and added amenities.

As a whole, the pool structure is in poor to failing condition, given its age. This is also true and even more evident for the bathhouse and mechanical areas. The open air bathhouse is exposed to the harsh winter atmosphere in Minnesota. Moisture from rain snow and condensation penetrate the blocks and freeze thaw cycles have led to the destruction of the CMU walls. The pool equipment is in fair to poor condition. It is our opinion that the main reason this facility has been able to serve the needs of the Community for the past 50+ years is largely due to the quality maintenance and daily operation the pool has received. In review of the soils report, the deterioration condition of the facility is mostly likely related to poor soils and improper soils support of the facility.

The condition of the swimming pool, equipment and bathhouse will continue to deteriorate, at an accelerated rate, and require additional upkeep and more maintenance and eventual failure. The existing pool equipment is out of date and very inefficient in terms of operation and maintenance. Currently the Swimming Pool and Wading Pool do not meet Federal requirements for ADA accessibility. A pool with a perimeter of over 300 linear feet requires two means of ingress/egress, one of which must be a ramp or zero-depth entry. A “fixed” ADA lift located near the shallow end of the pool or walk-out stairs with a safety rail would account for a second means. In order to meet the requirements for accessibility, the Swimming Pool would require two means of ingress/egress to be added while the Wading Pool would require one. Incorporating the wading pool into the main pool, via a zero depth entry, would meet the ADA requirement for a ramped entry.

Information provided by the City noted that the Wading Pool was completely dry (void of any water) at opening one day during the regular season. The origin of the leak is unknown. The Wading Pool was re-filled and water levels maintained or decreased slightly. The bathhouse is in very poor condition. Settling and shifting has resulted in cracks, broken block and voids to the foundation walls. There is no roof over the change areas which is very harsh on the facility and fixtures.

According to City Staff, the existing pool facility costs approximately \$80,000-\$85,000 annually to operate while only generating approximately \$40,000 annually. The result is an operational subsidy of around \$40,000 – which is currently covered by a tax amount applied toward the budget of around \$70,000. As the facility continues to deteriorate, the operating costs will rise proportionally.

In our opinion, there are essentially four options for the City of Windom to consider in regard to the existing municipal outdoor swimming pool. **Option-1** would be to simply repair the existing facility while making no upgrades or major changes. However, this option is short sighted and given the condition of the facility, this option will not add to deference of eventual failure. We’ve provided **Option-2** for making all required repairs while also expanding the facility and amenities offered. Given the results of the soils testing, this option may not be viable. **Option-3** is demolition of the existing facility and construction of a new appropriately sized facility at the same location. This will require substantial soils corrections. **Option-4** is to close the existing pool due to the soils corrections required for new construction and repurpose the area. **Option-5** is to design and build a new outdoor family aquatic facility at a new location. The new location would depend on soils conditions and acceptance to the service area of Windom. Based on the information gathered in this study

and evaluation of such, it is our opinion that the most beneficial and cost effective option for the Windom community is either **Option-3 and Option-5**.

Option-3 would require complete demolition and major soils corrections to support reconstruction in the same location. **Option-5** would be a new design, based on community aquatic needs, at a new location. A new facility is a valid option; however, due to project costs - it would require the City to have a partnership in order to make the project affordable and feasible. Another possibility would be a bond referendum or fundraising with City matching funds. This would be more of a private/public partnership. Any decision made regarding the future of the pool should be made with input from City Staff, as well as the Pool Committee and/or Public input.

- **Option – 1:** Repair Existing Facility. Make only the repairs necessary to bring the Swimming Pool, Wading Pools and entire facility up to code, while also addressing health and safety concerns and operational issues. This option would include the addition of a ramp in the Swimming Pool for ADA accessibility, as well as a fixed ADA lift. No other amenities or play features would be added. Programming would be limited to current levels. The women's and men's change area would be renovated to provide an adequate ADA stall that includes a shower/bench. There would be no additional revenue created by this Option and no family change rooms would be added. Based on information regarding the Wading Pool, the severe leaking, at an unknown location, the pool has been shut down and is no longer usable and requires replacement. Poor soils and improper soils support cause differential settlement, which is likely the cause of the wading pool failure. At a minimum, the estimated cost for this option would be higher with the unknown conditions. Based on evaluation of the information, it is our opinion, that this option is costly, with little to no added value, and is not recommended.

Estimated cost range: \$2,700,000 - \$2,900,000

- **Option – 2:** Renovate and Expansion of the Existing Facility. This Option would address all of the items listed in Option-1, while also adding play features and amenities for expanded programming. In place of a ramp, the shallow end of the Swimming Pool would be expanded and a zero-depth entry would be added. The Wading Pool, which is problematic with a leak at an unknown location, would be demolished and would essentially be incorporated into the main Swimming Pool. The bathhouse would be completely replaced with a new structure that would provide ADA accessible and Family Changes rooms. The Men's and Women's change areas would be reconfigured within a new layout, which would include a roof. The condition of the pool merits making renovations and upgrades to keep the pool back into good operation. There is definitely a community need for existing and expanded aquatic programs for Windom and the surrounding area. Needed soils corrections can be done for the new bathhouse, however, if using the existing pool as a form to support the new pool, no soils corrections can be completed, without demolition of the existing pool structure. This would result in a new pool, with improper sub straight support, and would likely be susceptible be the same differential settlement as the existing pool and decks. Based on evaluation of the available information, it is our opinion, that this option is costly, with added value, but no guaranty of life span of the new pool, and is not recommended.

Estimated cost range: \$3,100,000 – \$3,300,000

- **Option – 3:** New Facility on existing site. This Option is presented to allow stakeholders and decision makers with all of the necessary information to determine which Option is in the best interest of Windom. This Option would require the existing pool to be closed and demolished. This option also requires major soils corrections. All soils down to the glacial till, approximately 20 feet and 80,000 yards, would have to be replaced with engineered fill. Soils corrections alone could likely cost in excess \$1,000,000. A new adequately sized facility including bathhouse would be designed to meet the needs of the community – with input from the community and stakeholders. To determine an estimated cost range, we've compared the needs of the City of Windom with other Municipal Projects we have completed for Cities with populations close to 5,000 people. Final cost could be decreased or increased based on final design and amenities chosen by the City and Pool Committee.

Estimated cost range: \$4,100,000 - \$4,300,000

- **Option – 4:** Close the existing pool and re-purpose the area. The pool and decks would be demolished and removed and returned to useable green space. The bathhouse and public restrooms could potentially be renovated to allow for additional change areas to help service the needs of the park and campground. As with any project regarding the assessment of an existing facility – closing the facility is always an option.

Estimated cost range: \$180,000 - \$200,000

- **Option – 5:** New Facility on a new site. This could be constructed on current City owned land if available, or possibly through donation of private land to the City. While this Option would close the existing facility, it would be possible to utilize the existing facility during construction on a new facility to avoid the loss of a swim season. Depending on the land selected for construction, we are anticipating soils corrections of approximately \$100,000. As with Option 3, a new adequately sized facility including bathhouse would be designed to meet the needs of the community – with input from the community and stakeholders. To determine an estimated cost range, we've compared the needs of the City of Windom with other Municipal Projects we have completed for Cities with populations close to 5,000 people. Final cost could be decreased or increased based on final design and amenities chosen by the City and Pool Committee.

Estimated cost range: \$3,100,000 - \$3,300,000

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SECTION ONE: ASSESSMENT

Swimming Pool

The main Swimming Pool consists of a lap swim area with a diving ell. The swimming pool has an epoxy painted finish and varies in depth from 3'-0" at the shallow end to 12'-0" at the deep end. The structure consists of a cast-in place shell, as well as a stainless steel perimeter recirculation system that was added in 1980. The painted finish is in poor condition with several areas of spalling resulting in bare concrete. Currently, the only means of ingress/egress to the Swimming Pool are via ladders. The swimming pool lacks a "fixed" ADA lift near the shallow end and the required second means of accessibility required for a pool of this size.

The painted finish is in very poor condition. The swimming pool has anchors for a safety rope with floats to separate the shallow water area from the deep water area; however, the floats were not in place at the time of our visit. The Swimming Pool offers minimal features. A spiral drop slide and 1M diving board are located at the deep end of the diving ell. The Swimming Pool does lack additional play features that would appeal to younger patrons that are too big for the Wading Pool, yet not old enough to handle the play features in deep water. The pool has several underwater lights which were not operating at the time of our visit.

According to Staff there were issues with the repair work done on the construction joint between the shallow and deep water that resulted in caulking being removed by patrons. The pool structure shows evidence of shifting at construction joints and cold joints, with some concrete spalling. Additionally, Staff reported pipe repairs were completed on the Swimming Pool suction line under the deck where it enters into the equipment room. The pool has six sets of ladders for ingress/egress. Shifting and settling of decks has resulted in ladder anchors that move slightly and make installation/removal of ladders difficult. The movement of the decks creates toe stubbers for pool patrons and any miss alignment over 3/8 of an inch is a safety concern, per health code.

The Swimming Pool also lacks appropriate depth marking. Code requires depth to be accurately marked in feet and inches – as well as to be accompanied by "No Diving" markers where diving is not permitted. Several locations around the pool list depths that are off by several inches from what actual depth is. There are also a few locations where depth marker spacing exceeds the 25' maximum allowed by code.

One solution for the swimming pool would be to construct a new pool shell within the existing pool structure using the existing pool walls as a form for new walls. This would ensure a leak-free structure from which to start. The pool wall in the shallow end of the Swimming Pool would be demolished to allow for expansion and the addition of a connected zero-depth entry. This would include the addition of a stainless steel perimeter gutter with integral inlets and drop-outs, and a new quartz aggregate plaster with ceramic tile accents for a pool finish. These solution would include demolition of decks and pool walls as needed for installation of the new recirculation gutter, as well as addition of the zero-depth expansion. Lastly, if desired the underwater lighting should be updated with energy efficient LED lighting for which retro-fits are available and offer payback scenarios. Age appropriate play features such as basketball hoops, interactive water features and embedded ground sprays would be added. Do to soils testing revealing improper soils to support the pool structure, this option is not recommended.

Wading Pool

The Wading Pool original to the facility is shaped like a horseshoe and varies in depth from 1'-0" to 2'-0". The Wading Pool does not offer any features for patron use and lacks water shallower than 12". Additionally, the facility lacks water depths from 2'-0" to 3'-0" which are important to younger patrons. Without a shallow water pool that provides age appropriate activities, the facility lacks areas for younger swimmers who are not ready for the depth of water in the existing pool.

Similar to the main Swimming Pool, the Wading Pool also lacks required ADA access. Depth markers surrounding the Wading Pool should be listed in feet and inches and also require “No Diving” markers.

Our solution is to add a zero-depth entry onto the existing pool. While a shallow water pool with zero-depth entry could be constructed as a separate body of water, there are several benefits to having the pools connect to create a single body of water such as only having one set of operating equipment. Connecting the bodies of water would allow the zero-depth entry to work as a means of ADA access for the existing pool and the pool could operate with a single operating system. As noted earlier, the Wading Pool has a leak at an unknown location. This option would include complete demolition of the Wading Pool, decks and all related equipment and replacement with new. Again, due to pool soils conditions, this option is not recommended.

Accessibility

According to Federal accessibility regulations, large pools (those with more than 300 linear feet of pool wall) must provide at least two accessible means of entry/exit, one of which must be a ramp or zero depth sloped entry. There are several ingress/egress ladders surrounding the Swimming Pool. Neither pool offers any means of ADA access.

At a minimum, we recommend the addition of a ramped entry into the Swimming Pool and Wading Pool. The Swimming Pool should also have an ingress/egress stairs with ADA safety rail or a fixed ADA lift added to the shallow end.

Deck Area

The concrete deck finish is in very poor condition. The pool has area deck drains and there do not appear to be areas of ponding water. There are several areas where extensive cracking is present. Additionally, there are areas of broken concrete and raised edges from deck area settling. The deck was replaced in 1980 at the time the work on the gutters was completed. The concrete band immediately surrounding the gutter is in very poor condition. There are several areas of sharp, broken concrete and raised toe-stubbers. There are also areas with shale rock within the grout.

One amenity lacking at the facility is ample shade. Adequate shade allows patrons to stay at the facility for longer spans, which in turn results in greater revenues. The fence surrounding the deck/facility has a barbed-wire top. Due to the potential for injury out-weighting security needs, the fencing needs to be replaced. The deck area around the drop-slide should be stanchioned and roped off to prevent patrons from entering areas with head clearances under 7’.

Our recommendation is to remove rail goods and related deck anchors. New anchors and rail goods should be installed. New depth markers should be added to ensure proper spacing. We recommend the addition of new ceramic tile depth markers and “no diving” tiles when the concrete decks are replaced. The fencing should be replaced with black vinyl fencing with a maximum 2” mesh spacing. New linear trench drains would also be added when decks are replaced. Stanchion posts and rope should be added around the drop-slide. We also recommend the addition of several shade umbrellas around the deck area. Often times local community organizations can be found to donate these shade umbrellas.

Swimming Pool Recirculation System

The swimming pool has a semi-recessed open stainless steel gutter with built in surge-weirs. The gutters were installed at the same time much of the concrete deck was replaced in 1980. The pool was in operation during the time of the visit, which limited our ability to inspect the main drains. The pool has dual main drains that appeared to be grated main drains, assumed to be connected in parallel.

According to Federal Law, the “Virginia Graeme Baker Pool and Spa Safety Act” requires that all public pools and spas have ASME/ANSI compliant stamped Drain Covers. This has been indicated in a guidance

document prepared by the U.S. Consumer Product Safety Commission and was recently confirmed by our office in a Q&A phone conference with officials regarding interpretation of the new law.

The recommendations listed above in the Swimming Pool section lays out work which includes a new stainless steel recirculation gutter with grating. As part of constructing a new pool structure within the existing pool, the main drains and covers/grating would be replaced. The main drain covers would be ASME/ANSI compliant, per the Federal Law requirements. Demolition in this area would be limited to what is necessary to replace main drains and all related piping.

Pool Equipment - General

The pool equipment is largely original to the facility. The equipment has met the needs of the facility for several years; however, for the most part it is outdated and very inefficient in terms of operation. Valves and gauges are in fair condition. Many of the pipes are cast iron, rusting and are in poor condition. As noted earlier, suction piping to the Swimming Pool recirculation pump was replaced this season. This resulted in a section of deck just outside of the equipment room to be torn up, piping fixed, and new decks to be poured.

We recommend select replacement of valves, gauges and re-routing of tubing and piping located in walkways that do not provide 7' of clearance above finished floor. Cast iron piping and any non-functioning valves and or gauges should be replaced. All replacement items would be non-metallic.

Pumps

The Swimming Pool has a single horizontal Baldor 20hp, 1760rpm recirculation pump with an integral strainer that is in extremely poor condition and has well exceeded its useful lifespan. The pump is located just below water level, which can cause issues when priming and this style of pump is inherently more difficult to service. The pump has an integral strainer that lacks a clear cover that would allow the operator to see potential blockages without opening the strainer. The pump also lacks a flow meter and vacuum limit switch.

The Wading Pool recirculation pump is a Pac-Fab 3hp pump of residential quality. This pump will likely need to be replaced within the next 5 years.

We recommend replacing the existing pump with a new pump with premium efficient motor with appropriate gauges, as well as adding a variable frequency drive to the motor. This provides significant energy cost savings and efficiency while extending the life of the pump and reducing required maintenance. This equipment also frequently has rebates available through the City's power provider. If Option-2 is selected, the Wading Pool would be demolished and the Swimming Pool would incorporate a zero-depth entry. The new Swimming Pool pump would be sized appropriately to handle the increased volume.

Heaters

Heating for the Swimming Pool is completed using dual Energy-Rite2 Lochinvar heaters, which put out 399k btus. These heaters were new to the facility within the past 10 years and appeared to be in good working order. The Wading Pool heater is no longer working, despite being replaced at the same time as the other heaters. Thermometers are lacking on the influent and effluent lines from the heater. Staff reported no current operational issues or concerns with the heating system for the main Swimming Pool.

We recommend the addition of thermometers located appropriately on the pre-heat and post-heat pipe runs. Again, if Option-2 was a viable option, there would be no need to replace the Wading Pool heater. Calculations would be run to verify if the existing heaters could handle the load/demand of the renovated Swimming Pool.

Filter

Swimming Pool filtration is handled by two commercial quality hi-rate pressure sand filters from 1993. The operator reported he backwashes the current filter system once a week. The filters are in average condition and likely have a very short remaining lifespan before replacement is required. The Wading Pool filter is a small, residential quality pressure sand filter. It is unknown when the sand media was last changed in either filter.

We recommend replacing the existing sand media filters with a new, more efficient Regenerative media filter. Regenerative media filters would take approximately 1/3 of the current footprint. They are also green friendly using 1/50th of the water used by traditional sand media filters. With either Option-1 or Option-2, the filters would need to be replaced. With Option-2, if viable, they would be sized to handle the additional volume of the added zero depth entry.

Chemicals/ Controls

Both pools operate using gas chlorine and caustic soda. The gas chlorine storage is secured located off the side of the building, while the caustic soda is stored in a large bulk tank located within the equipment room. The chemical control system has an outdated controller that handles the chemical injection. This controller is also very inefficient in terms of operation. Staff reported ongoing problems with controls for the gas chlorine. Vacuum solenoids are problematic and tend to wear out too quickly.

We recommend replacing the existing chemical controller with a user friendly web-based chemical controller that is up to date technology that can adequately meet the needs of the facility. Web-based chemical controllers require minimal attention and adjustments that can be completed remotely on a smart-phone or from a computer.

Bathhouse

The structural integrity of the bathhouse, including the mechanical areas, is a concern, and the bathhouse is lacking in many other areas. Shifting and settling has resulted in numerous cracks, breaks and heaving of blocks within the walls. Additionally, there are several areas where the blocks do not cover the edge of the foundation, resulting in voids where water can easily enter the foundation walls and cause major issues with the freeze/thaw cycle of different seasons.

There is no roof over either change room or bathrooms. This allows rain, snow and ice to build up in the concrete block walls and further contributes to the deterioration of the structure. A family change room is a must have for facilities. This feature allows parents to bring children of the opposite sex with them rather than take them into the locker room or send them alone into the other locker room.

The Men's locker room has three urinals and three toilets, one of which was modified to be ADA accessible. The Women's locker room has three toilet stalls, none of which are ADA accessible. None of the stalls have privacy doors or screens. The showers in Men's locker room is the older style "community showers" rather than individual showers. The facility lacks the proper ADA requirements within the Women's locker room. Furthermore, there are no ADA accessible showers that provide a bench and grab rails accommodate all patrons.

The bathhouse has a concession area that doubles as the admissions and lifeguard areas. The concessions area is centrally located within the middle of the bathhouse. Ideally, the concessions would be located on one end of the bathhouse and provide a dedicated seating/eating area adjacent to it that helps keep patrons and food/drink off of the pool deck. Currently, patrons must walk around the pool deck to get to the assigned eating area. The majority of the facilities we've worked with report that between 30-40% of their revenue is derived from concession sales.

Both of the changing/locker rooms are in need of major renovations and updates.

We recommend complete replacement of the bathhouse. This would include a new design layout complete with proper fixture counts, ADA accessible restrooms and showers, family change rooms and a dedicated admission, storage, staff and concession area. Do to the poor soils supporting the bathhouse, replacement of the bathhouse would necessary include replacement of the foundation and footings.

SECTION TWO: EXISTING FACILITY PHOTOGRAPHS

Swimming Pool



Swimming Pool lacking amenities/features



1M diving board lacks 5' walk behind



Swimming Pool lacks accessibility



Pool slide could be re-used



Diving Ell in poor condition



Wading Pool in very poor condition



Code required 5' clear walkway not met



Extensive cracking in deck, lacks proper sub-grade



Stainless Steel Gutter and deck conditions



Toe stubbers in numerous areas



Painted Depth Markers, not permanent per code



Failing concrete conditions behind SS gutter

Bathhouse



Existing Bathhouse in poor condition



“Community” shower conditions, shared drain



Bathhouse access, slopes exceed maximums



Locker room conditions in poor condition



Changing room conditions – lacks basic privacy



Sub-standard locker room conditions



Exposed foundation block cores – failed condition



Doors in very poor condition



Barbed wire fence does not meet code for safety



Unsafe fence conditions



Lacking stanchion/rope to block off under slide



Patio/Eating area – lacks shade for comfort

Pool Mechanical



Swimming Pool Filters designed for wastewater



Pump Pit in very poor/failing condition



Residential quality Wading Pool Filter



Chem. Controller connected to wrong side



Failing Swimming Pool recirculation pump



Residential quality Wading Pool recirc. pump

SECTION THREE: REPAIR & RENOVATION OPTIONS. NON-RECOMMENDED. BUT SHOWN AS AN OPINION OF PROBABLE COST.

Option-1 (Repair)

Based on our review and analysis, it is our opinion that this Option is not the most cost effective for the City of Windom. This opinion is further supported by the soils report that the subsurface soils can no longer support the existing facility. The following repair work would be necessary for the facility; however, simply making repairs without adding amenities and a shallow water area prevents this facility from becoming sustainable by making costly repairs and creating no additional revenue streams. Basically, for consideration of this option, one would have to completely ignore the soils report.

Main Pool

- Cut off top of existing pool wall to allow for new stainless steel gutter to be installed. This would also address the issue of the deteriorating condition of the grout around the stainless steel gutter.
Probable cost estimate: \$ 80,000
- Installation of new walls and floor within existing shell, to include stainless steel gutter and new quartz aggregate diamond brite pool finish.
Probable cost estimate: \$820,000
- Installation of ADA access ramp and fixed ADA lift to meet accessibility requirements.
Probable cost estimate: \$ 220,000
- Addition of new depth marking tile and no diving tile per code.
Probable cost estimate: \$ 28,500
- Add necessary upgrades to recirculation, disinfection and chemical control system.
Probable cost estimate: \$58,000

<i>Subtotal:</i>	<i>\$1,206,500.</i>
<u><i>Soft Costs (20%)</i></u>	<u><i>\$ 241,300.</i></u>

Estimated Swimming Pool Renovation Total: \$1,447,800

Wading Pool

- Demolition of top of pool wall/decks to allow for new coping/deck edge.
Probable cost estimate: \$ 65,000
- Installation of a fixed ADA lift to meet accessibility requirements.
Probable cost estimate: \$ 7,500
- Addition of new depth marking tile and no diving tile per code.
Probable cost estimate: \$ 5,500
- Leak detection and associated repair work.
Probable cost estimate: \$75,500

<i>Subtotal:</i>	<i>\$153,500</i>
<u><i>Soft Costs (20%)</i></u>	<u><i>\$ 30,700</i></u>

Estimated Wading Pool Renovation Total: \$184,200

Mechanical

- Replace Wading Pool heater with new high-efficiency model.
Probable cost estimate: \$35,000
- Replace piping and valves as needed.
Probable cost estimate: \$25,000
- Remove and replace both filters with regenerative media filtration.
Probable cost estimate: \$92,000
- Remove and replace both recirculation pumps to include VFD.
Probable cost estimate: \$66,000

Subtotal: \$ 218,000
Soft Costs (20%) \$ 43,600

Estimated Mechanical Renovation Total: \$ 261,600

Bathhouse

- Complete renovation of bathhouse including reconfigure bathhouse including both locker rooms to allow for ADA access to showers and toilet facilities, addition of a roof to building.
Probable cost estimate: \$580,000

Subtotal: \$ 580,000
Soft Costs (20%) \$ 116,000

Estimated Bathhouse Renovation Total: \$696,000

Site

- Demo and replacement of concrete decking.
Probable cost estimate: \$135,000
- Demo & remove existing barb-wire fence and replace with chain link.
Probable cost estimate: \$ 22,500
- Addition of stanchion posts and rope around drop-slide.
Probable cost estimate: \$3,500

Subtotal: \$ 161,000
Soft Costs (20%) \$ 32,200

Estimated Site Renovation Total: \$ 193,200

Option-1 Total: \$2,782,800

Option-2 (Repair/Renovate & Upgrade)

Based on our review and analysis, this Option is not the most cost-effective choice for the City of Windom. The following includes repair work as well as renovation and facility upgrades. This Option includes the addition of a zero-depth entry and the removal of the Wading Pool. These additions/upgrades give the facility the best chance of becoming sustainable by making additional revenue streams.

Main Pool

- Cut off top of existing pool wall to allow for new stainless steel gutter to be installed.
Probable cost estimate: \$ 80,000
- Installation of new walls and floor within existing shell, to include stainless steel gutter and new quartz aggregate diamond brite pool finish.
Probable cost estimate: \$820,000
- Installation of fixed ADA lift to meet accessibility requirements.
Probable cost estimate: \$ 7,500
- Installation of approximately 1,500sf zero-depth entry on to Swimming Pool.
Probable cost estimate: \$337,500
- Addition of new depth marking tile and no diving tile per code.
Probable cost estimate: \$ 28,500
- Remove and replace all rail goods.
Probable cost estimate: \$ 15,500
- Add necessary upgrades to recirculation, disinfection and chemical control system.
Probable cost estimate: \$58,000

Subtotal: \$1,347,000
Soft Costs (20%) \$ 269,400

Estimated Swimming Pool Renovation Total: \$1,616,400

Wading Pool

- Complete demolition and removal of Wading Pool and related piping/equipment.
Probable cost estimate: \$ 45,000

Subtotal: \$ 45,000
Soft Costs (20%) \$ 9,000

Estimated Wading Pool Demolition Total: \$54,000

Mechanical

- Replace Swimming Pool sand filter with regenerative media filter.
Probable cost estimate: \$74,000
- Replace pump with vertical mount pump w/ premium high efficiency motor and VFD.
Probable cost estimate: \$45,000
- Replace all piping and valves in equipment room.
Probable cost estimate: \$26,000

Subtotal: \$145,000
Soft Costs (20%) \$ 29,000

Estimated Mechanical Renovation Total: \$174,000

Bathhouse

- Complete replacement of bathhouse with new design including both locker rooms, family change room, and provide for ADA access to showers and toilet facilities. New bathhouse would include a new mechanical area and the entire new bathhouse would be under roof.

Probable cost estimate: \$740,000

- Dedicated concessions added with eating area.

Probable cost estimate: \$148,000

<i>Subtotal:</i>	<i>\$ 888,000</i>
<i>Soft Costs (20%)</i>	<i>\$ 177,600</i>

Estimated Bathhouse Renovation Total: \$1,065,600

Site

- Demo and replacement of concrete decking.

Probable cost estimate: \$135,000

- Demo & remove existing barb-wire fence and replace with black vinyl chain link.

Probable cost estimate: \$ 28,500

- Addition of (5) shade umbrellas around deck area.

Probable cost estimate: \$20,500

- Addition of stanchion posts and rope around drop-slide.

Probable cost estimate: \$3,500

<i>Subtotal:</i>	<i>\$187,500</i>
<i>Soft Costs (20%)</i>	<i>\$ 37,500</i>

Estimated Site Renovation Total: \$225,000

Option-2 Total: \$3,135,000

Option-3 (New Aquatic Facility on Existing Site)

This option would be a new aquatic facility designed for community aquatic needs and built on the existing site. This option would require complete demolition of the existing facility and approximately 80,000 yards of soils corrections.

Pool

- The pool would likely be one body of water, or the community could opt for two bodies of water. The pool could vary in depths from zero depth to 12 feet deep. The surface area of the existing pool is 9,200sqft and the wading pool is 800sqft, which totals 10,000sqft. A new facility of approximately 8,000 square feet should be considered. The new facility should offer more aquatic amenities including water slides and interactive water play features.

Probable cost estimate: \$1,600,000

Bathhouse

- The new bathhouse would include men’s, women’s and family change rooms, admissions, staff, storage and mechanical spaces. The new bathhouse could, or should, include a concession stand with dedicated eating area, all under roof.

Probable cost estimate: \$ 800,000

Site

- The existing site, after demolition and soils corrections, would include ADA access.

Probable cost estimate: \$1,000,000

- Decks, shade structures, green area and fencing.

Probable cost estimate: \$ 160,000

<i>Subtotal:</i>	<i>\$3,560,000</i>
<i>Soft Costs (20%)</i>	<i>\$ 712,000</i>

Option-3 Total: \$4,272,000

Option-5 (New Aquatic Facility on New Site)

This option would be a new aquatic facility designed for community aquatic needs and built on a new site. Site selection would be very selective in finding a new site that is acceptable to the Windom Community and that has proper soils to support the new facility.

- The pool would likely be one body of water, or the community could opt for two bodies of water. The pool could vary in depths from zero depth to 12 feet deep. The surface area of the existing pool is 9,200sqft and the wading pool is 800sqft, which totals 10,000sqft. A new facility of approximately 8,000 square feet should be considered. The new facility should offer more aquatic amenities including water slides and interactive water play features.

Probable cost estimate: \$1,600,000

Bathhouse

- The new bathhouse would include men’s, women’s and family change rooms, admissions, staff, storage and mechanical spaces. The new bathhouse could, or should, include a concession stand with dedicated eating area, all under roof.

Probable cost estimate: \$ 800,000

Site

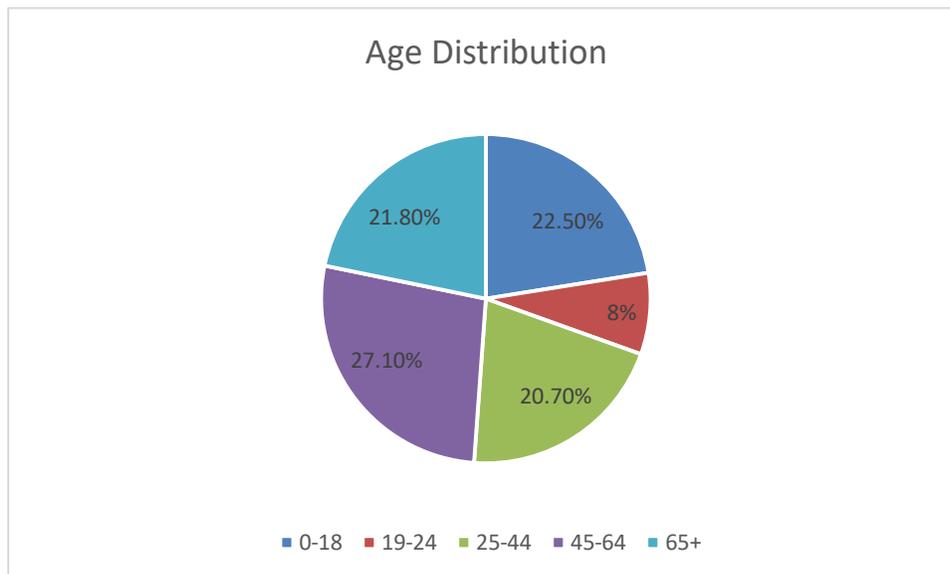
- A new site with soils corrections and prep work for construction, would include ADA access.

Probable cost estimate: \$ 100,000

SECTION FOUR: CENSUS/DEMOGRAPHICS

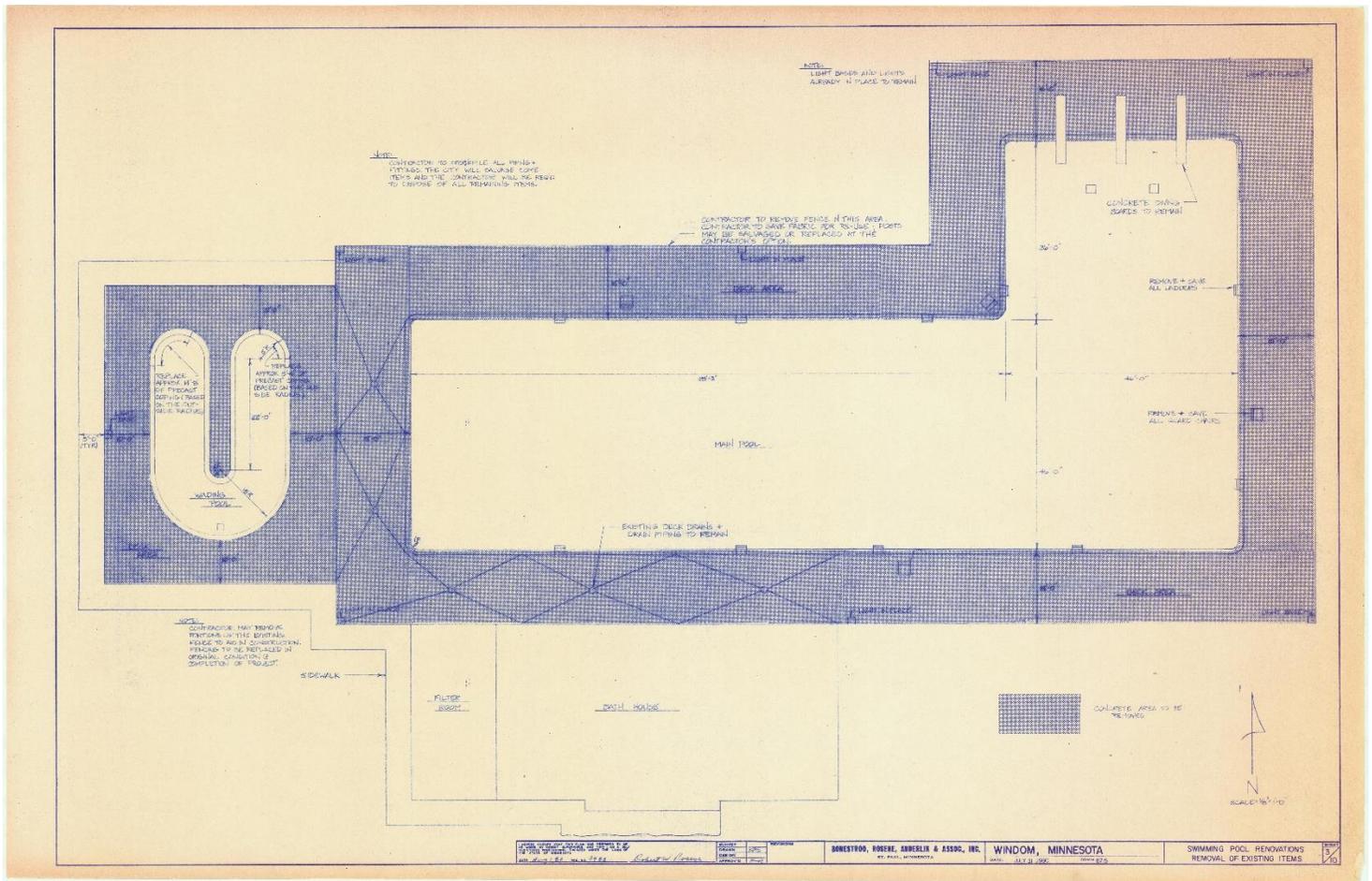
Windom Census Information:

- Total Population: 4,583 (2014 estimate)
- Families with children under 18 = 26.9%
- Population distribution by age:
 - 18 & under 23.2%
 - 19-24 6.8%
 - 25-44 23.1%
 - 45-64 25.8%
 - 65+ 21.2%



- When analyzing the estimated 2014 Windom Census information the following information was determined:
 - The highest percentage of the population is those between the ages of 45-64 at 25.8%. The second highest age range is 18 and under that accounted for 23.2% of the population while the third largest population distribution is the age range of 25-44 at 23.1%.
 - This suggests an aquatic facility and added amenities that provide for all age groups.
 - The aquatic need is for a facility that offers a wider range of aquatic activities and amenities than are currently being offered.
- The existing Windom pool has grown stale to the local participants. It has become routine serving a smaller segment of the local population instead of reaching the broader aquatic community and aquatic needs.

SECTION FIVE: EXISTING POOL PLANS (1965/1980)



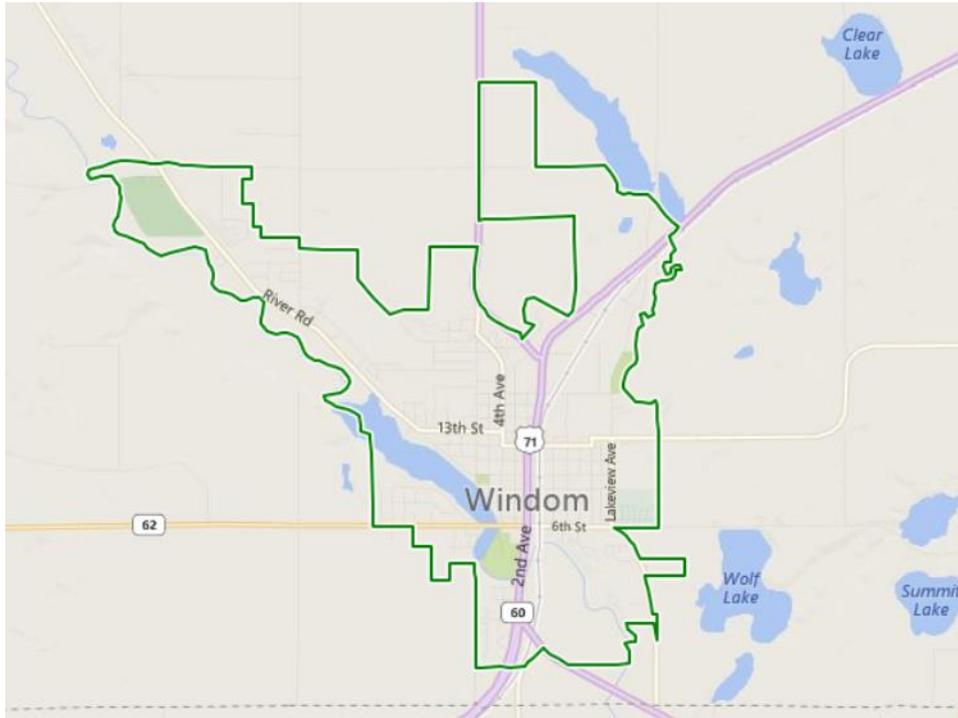
SECTION SIX: NEW AQUATIC FACILITY ANALYSIS

The following are approximate construction costs for outdoor facilities constructed or designed within the past several years that have populations similar to that of Windom. These numbers should be used for planning purposes only as a guide in determining the relative cost of a new facility.

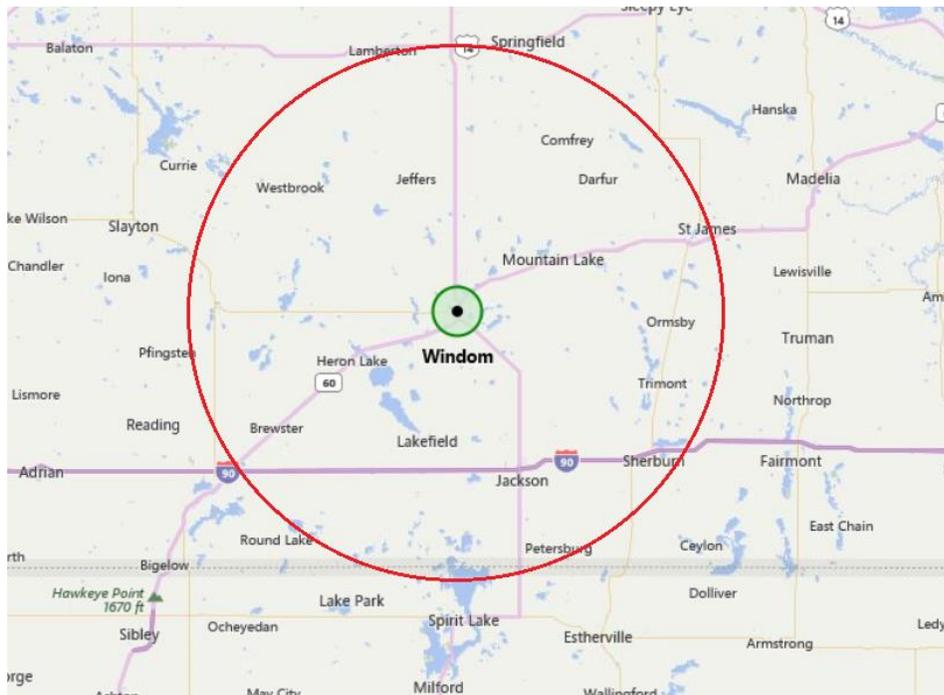
City:	Population:	Approx. Budget:	Year Built:
Sleepy Eye, MN	3,524	\$2,200,000	2009
Gaylord, MN	2,307	\$3,400,000	2009
La Crescent, MN	4,860	\$2,400,000	2010
Madison, MN	1,551	\$2,700,000	2014
Chamberlain, SD	2,387	\$3,200,000	2014
Caledonia, MN	2,868	\$2,000,000	2016-17
Parkers Prairie, MN	1,006	\$1,900,000	2016-17
Clara City, MN	1,360	\$2,300,000	2016-17

**When an Option is selected, estimated operational costs and revenues will be calculated at that time.

Primary Service Area



Secondary Service Area (25-30 miles)



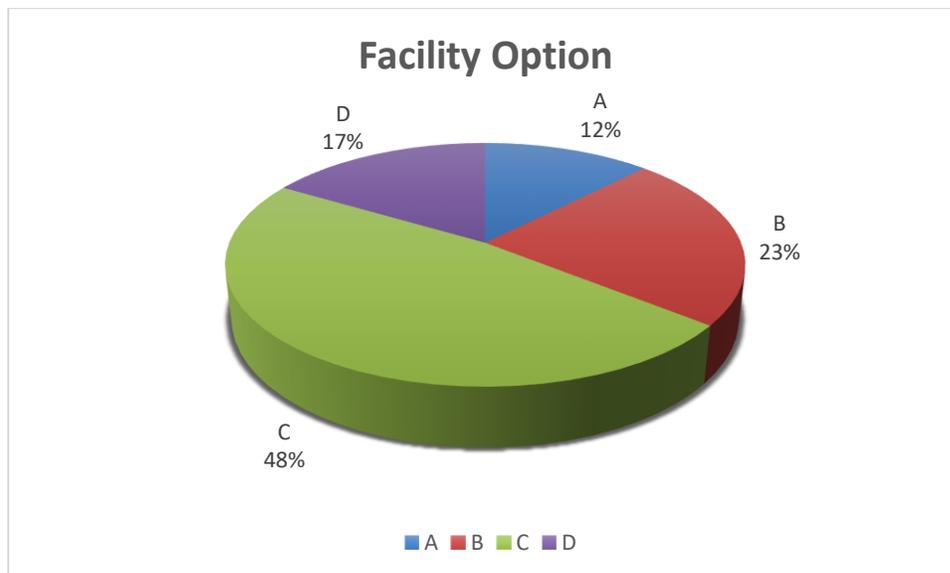
SECTION SEVEN: COMMUNITY SURVEY

In 2015, the City of Windom conducted a Community survey to gauge interest in various options related to the existing outdoor municipal pool. The City received 317 responses, which is the equivalent of approximately 7% of the population of Windom.

In summary, the majority of respondents favored a new indoor aquatic center, followed by a new outdoor aquatic center. It is our experience that for Cities with a population of under 15,000 an indoor aquatic center simply isn't feasible without a major project partner to help offset the annual subsidy required to maintain operation. The feature most desired at a new facility was waterslides, followed by shade structures and water sprays. Just over half of those polled stated they would be in favor of a partnership with a private hotel or similar. The vast majority of those responding answered favorably to keeping the location of the existing facility as the location for a new facility. Respondents were most favorable of funding through a combination of various methods including: grants, donations, loans and bonding. Lastly, most of those polled felt the project cost range should be \$2.0M – \$3.5M. The second highest response, was for a total project with a higher cost range at \$3.5M - \$4.0M. Based on the responses in the survey, it appears there is Community support for a project.

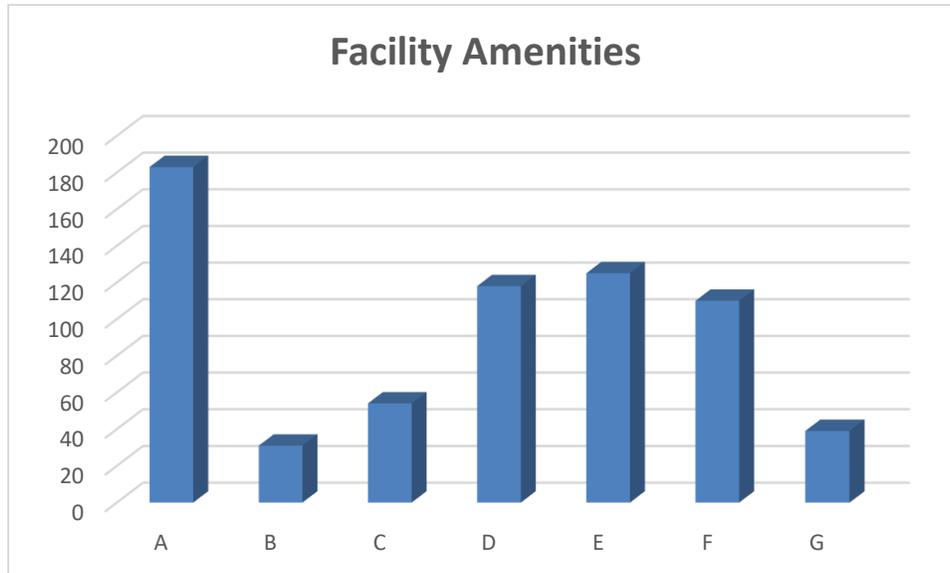
Both the original questions and top responses are listed below:

1. Which of the following choices would you like to see for the City of Windom Pool?
 - a. Renovation/ improvements of existing facility-
 - b. New outdoor aquatic center
 - c. Indoor family aquatic center
 - d. Continue to maintain existing facility



2. If a new facility or renovation would take place, what fixtures would you like to see in the new facility? (Circle All that Apply)

- a. New water slide
- b. Climbing wall
- c. Water geysers for wading pool or zero depth
- d. Spray fountains
- e. Sun shelter cabana
- f. Zero depth entry/NO wading pool
- g. Other (Please list below)

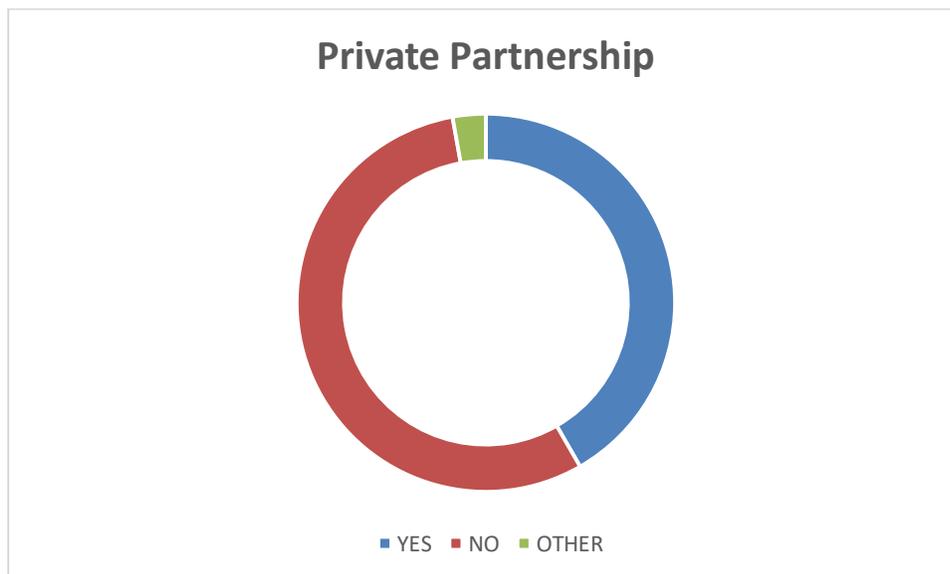


3. Should the City of Windom enter a partnership with a private entity, such as a motel, in the construction of an aquatic center.

YES-118

NO-157

OTHER- 8



4. Should the current site be reused or should a different location be considered?

A-176

A & B-15

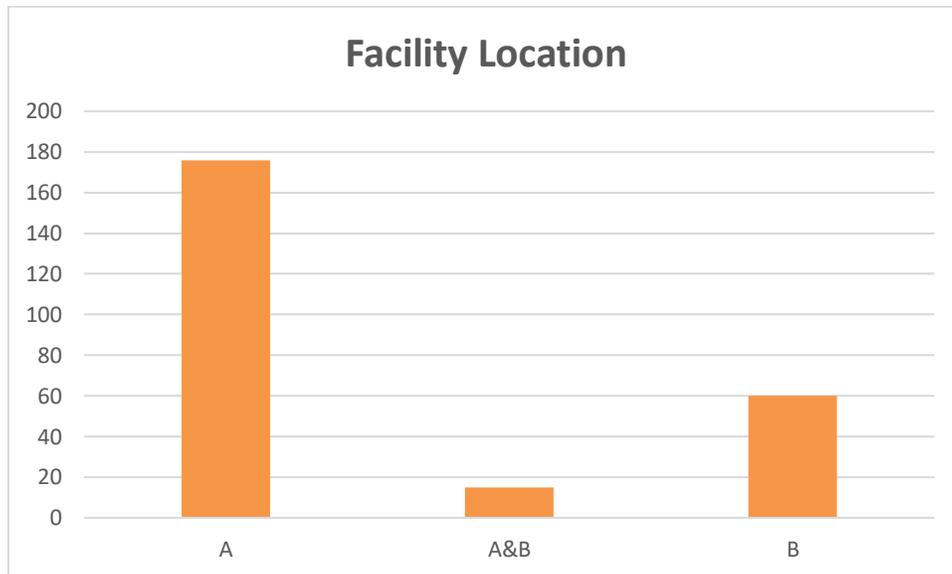
B-60

SITE LOCATIONS

22-COMMUNITY CENTER

19-SCHOOL

15- WINDOM RECREATION AREA



5. How should a new pool be financed?

- a. Sale of Bonds repaid over a number of years with property taxes
- b. City Sales Tax to repay bonds or loan
- c. Combination of public donations, grants, and/or Sale of Bonds or Loans

A-9

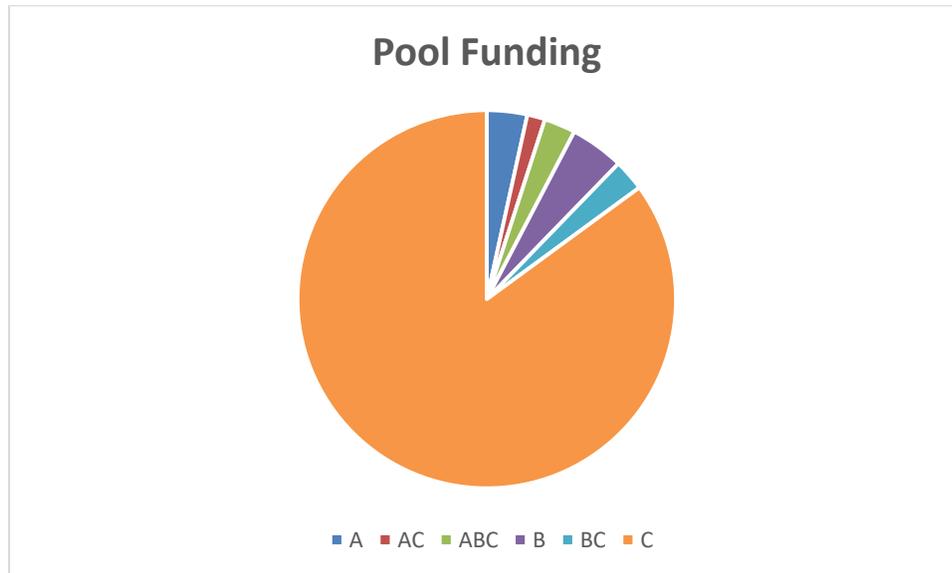
AC-4

ABC-7

B-12

BC-7

C-222



6. How much should be spent on renovation or new construction

- a. \$1,000,000- \$2,000,000
- b. \$2,000,000- \$3,500,000
- c. \$3,500,000- \$4,000,000

A-50

B-94

C-79

